Full wwPDB X-ray Structure Validation Report ⓘ

Mar 30, 2026 – 01:42 PM EDT

PDB ID	:	4V5P / pdb_00004v5p
Title	:	The crystal structure of EF-Tu and A9C-tRNA-Trp bound to a near- cognate codon on the 70S ribosome
Authors	:	Schmeing, T.M.; Voorhees, R.M.; Ramakrishnan, V.
Deposited on	:	2010-12-07
Resolution	:	3.10 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/XrayValidationReportHelp
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

The following versions of software and data (see references ⓘ) were used in the production of this report:

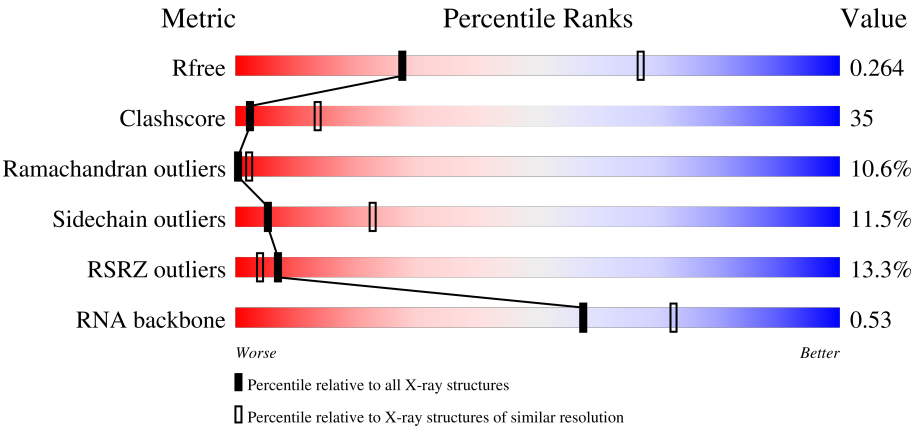
MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.010 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.49

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
X-RAY DIFFRACTION

The reported resolution of this entry is 3.10 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	180053	1456 (3.10-3.10)
Clashscore	190562	1539 (3.10-3.10)
Ramachandran outliers	187476	1467 (3.10-3.10)
Sidechain outliers	187428	1467 (3.10-3.10)
RSRZ outliers	180081	1456 (3.10-3.10)
RNA backbone	3983	1022 (3.32-2.88)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	AA	1522	11% 36% 49% 12%
1	CA	1522	6% 34% 51% 11%
2	AB	256	15% 27% 49% 14% 9%
2	CB	256	9% 24% 52% 14% 9%

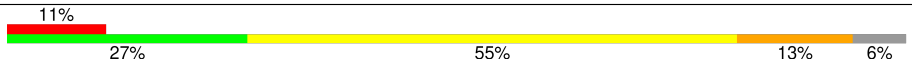
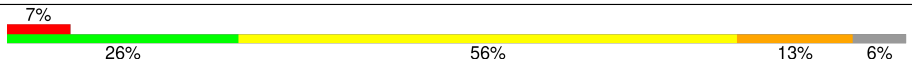
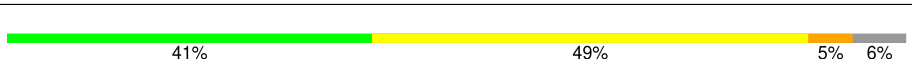
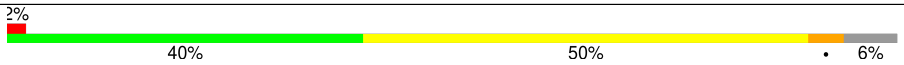
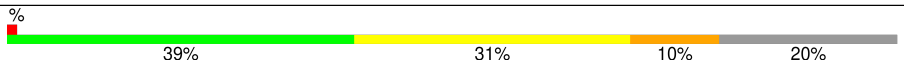
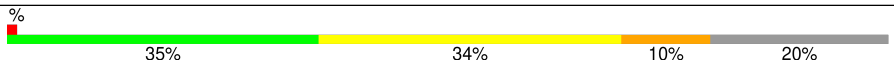
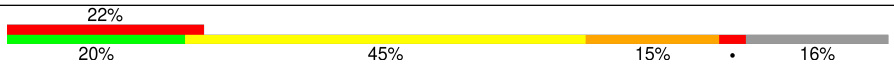
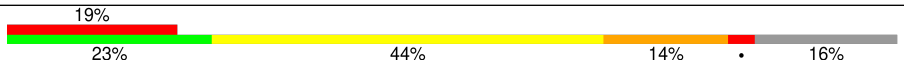
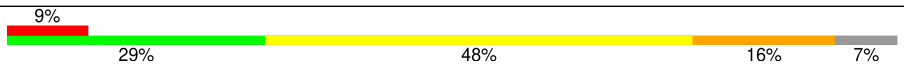
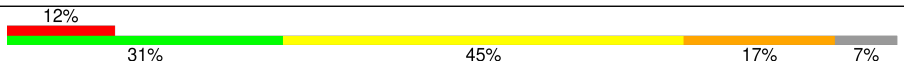
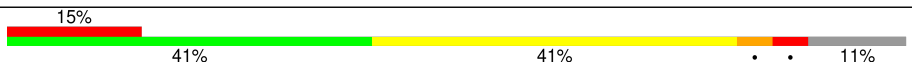
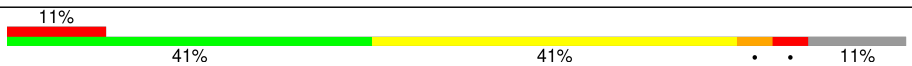
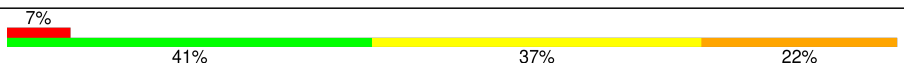
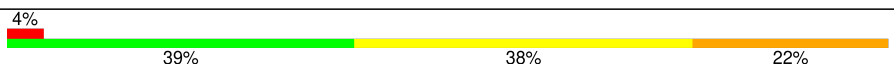
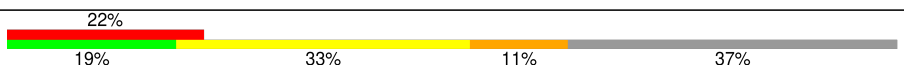
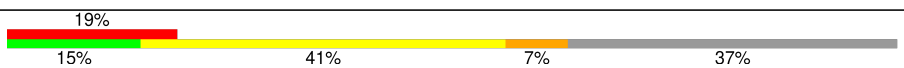
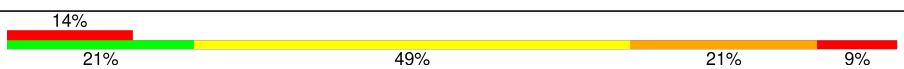
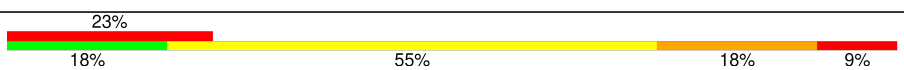
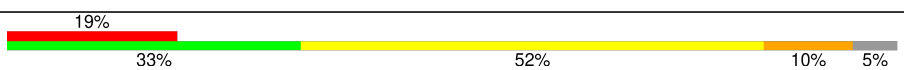
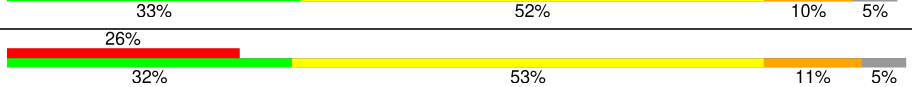
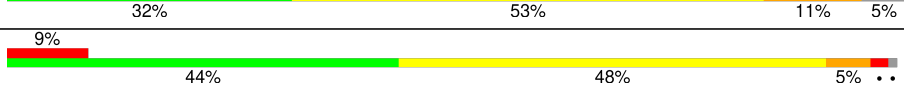
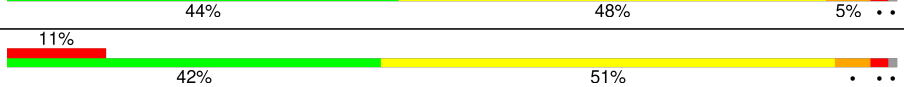
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
3	AC	239	5% 33% 37% 15% 14%
3	CC	239	2% 33% 40% 13% 14%
4	AD	209	28% 23% 57% 18%
4	CD	209	18% 23% 58% 16%
5	AE	162	% 42% 43% 7% 7%
5	CE	162	40% 42% 9% 7%
6	AF	101	4% 30% 58% 12%
6	CF	101	2% 29% 59% 12%
7	AG	156	8% 44% 48% 5%
7	CG	156	6% 44% 49% 5%
8	AH	138	% 51% 41% 7%
8	CH	138	% 49% 43% 7%
9	AI	128	27% 25% 56% 17%
9	CI	128	11% 26% 57% 16%
10	AJ	105	44% 22% 56% 15% 7%
10	CJ	105	32% 23% 55% 15% 7%
11	AK	129	7% 38% 46% 8% 8%
11	CK	129	2% 35% 49% 9% 8%
12	AL	135	10% 27% 49% 14% 8%
12	CL	135	4% 27% 49% 14% 8%
13	AM	126	17% 27% 52% 17%
13	CM	126	13% 24% 54% 19%
14	AN	61	16% 38% 33% 18% 10%
14	CN	61	5% 36% 34% 18% 10%
15	AO	89	49% 42% 8%

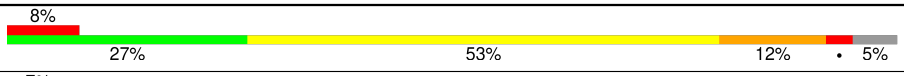
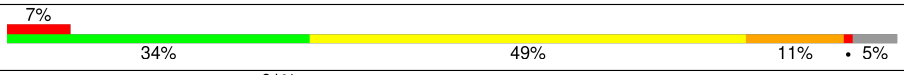
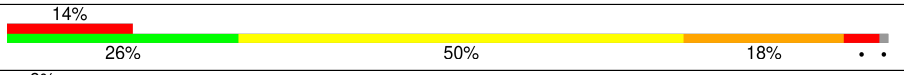
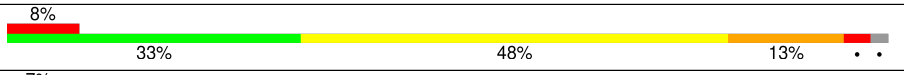
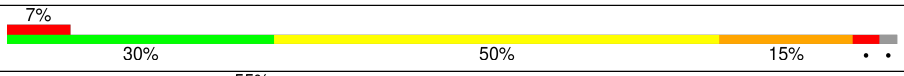
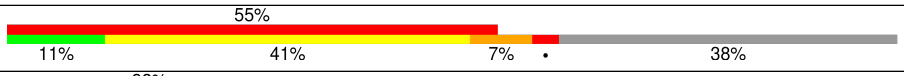
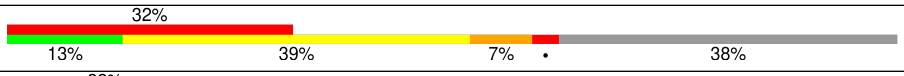
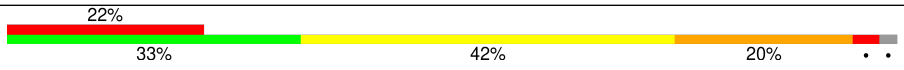
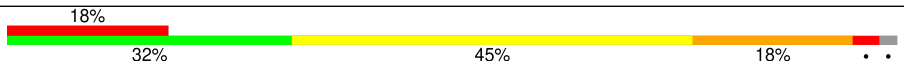
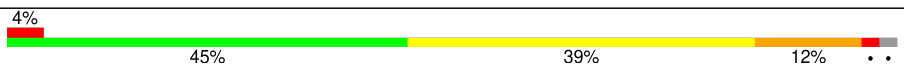
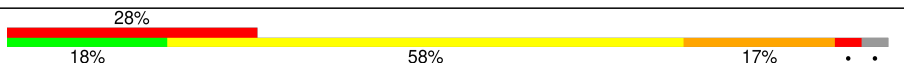
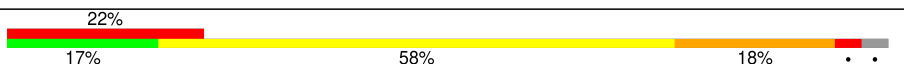
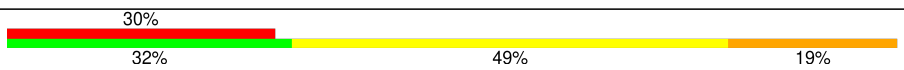
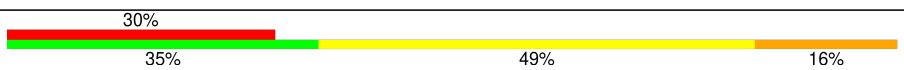
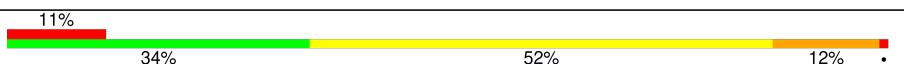
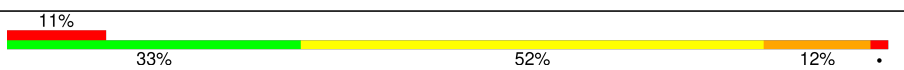
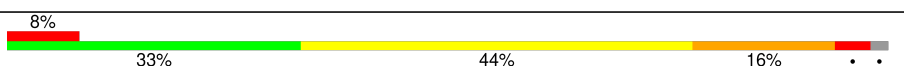
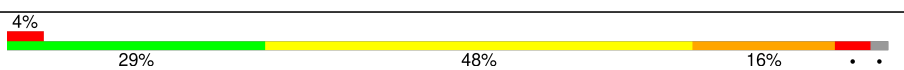
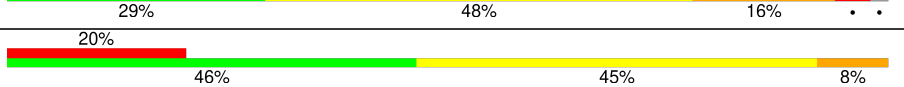
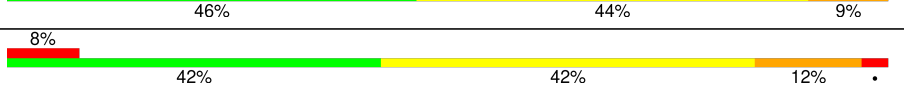
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
15	CO	89	
16	AP	88	
16	CP	88	
17	AQ	105	
17	CQ	105	
18	AR	88	
18	CR	88	
19	AS	93	
19	CS	93	
20	AT	106	
20	CT	106	
21	AU	27	
21	CU	27	
22	AV	76	
22	AW	76	
22	CV	76	
22	CW	76	
23	AX	27	
23	CX	27	
24	AY	77	
24	CY	77	
25	AZ	405	
25	CZ	405	
26	B0	85	
26	D0	85	

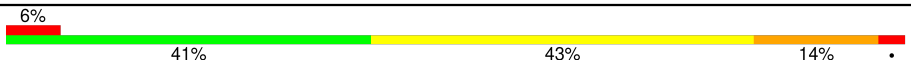
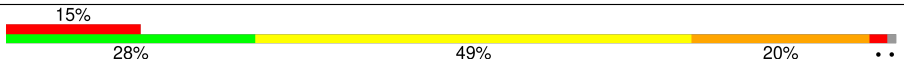
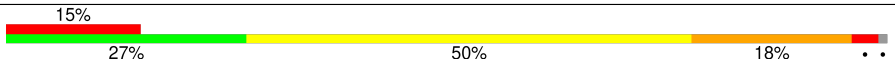
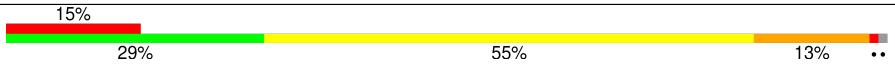
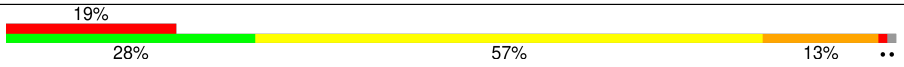
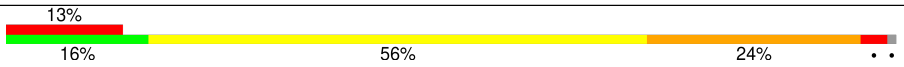
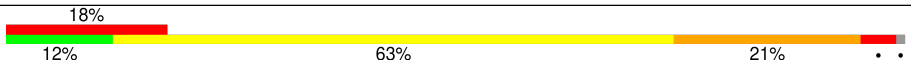
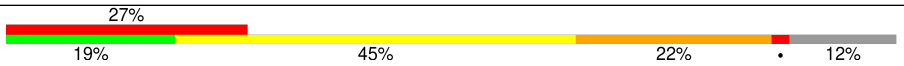
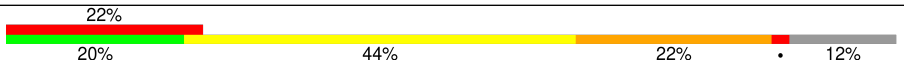
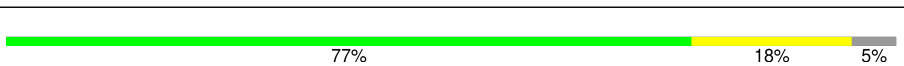
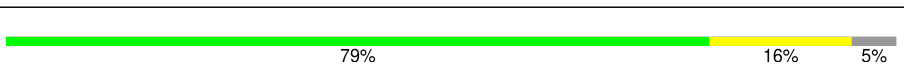
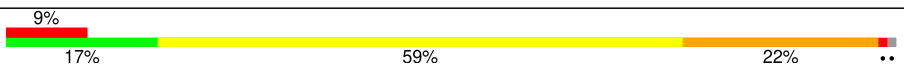
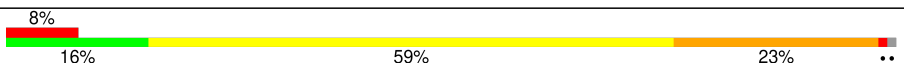
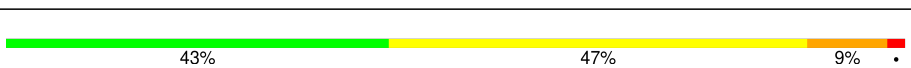
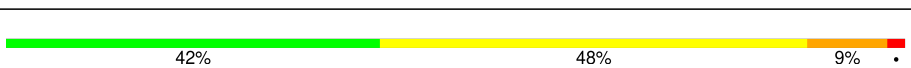
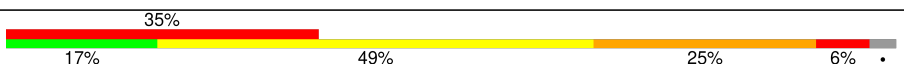
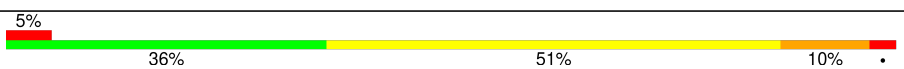
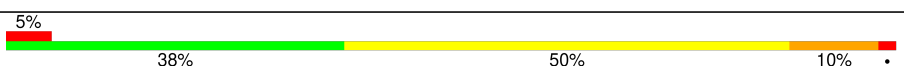
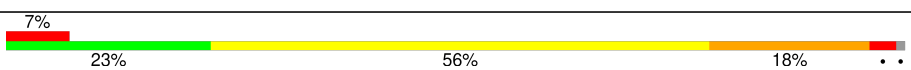
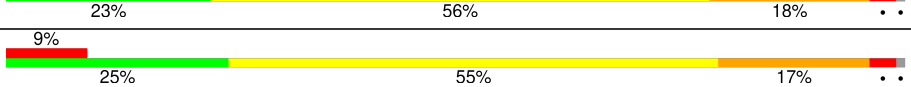
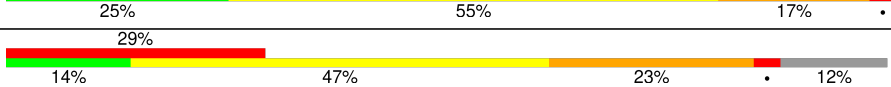
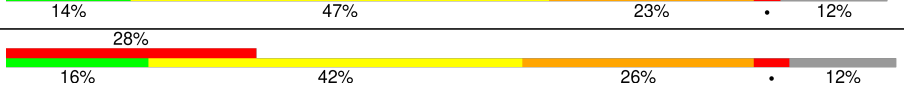
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
27	B1	98	
27	D1	98	
28	B2	72	
28	D2	72	
29	B3	60	
29	D3	60	
30	B4	71	
30	D4	71	
31	B5	60	
31	D5	60	
32	B6	54	
32	D6	54	
33	B7	49	
33	D7	49	
34	B8	65	
34	D8	65	
35	B9	37	
35	D9	37	
36	BA	2915	
36	DA	2915	
37	BB	122	
37	DB	122	
38	BC	229	
38	DC	229	
39	BD	276	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
39	DD	276	
40	BE	206	
40	DE	206	
41	BF	210	
41	DF	210	
42	BG	182	
42	DG	182	
43	BH	180	
43	DH	180	
44	BJ	173	
44	DJ	173	
45	BK	147	
45	DK	147	
46	BN	140	
46	DN	140	
47	BO	122	
47	DO	122	
48	BP	150	
48	DP	150	
49	BQ	141	
49	DQ	141	
50	BR	118	
50	DR	118	
51	BS	112	
51	DS	112	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
52	BT	146	15% 16% 50% 23% 5% 6%
52	DT	146	10% 18% 46% 25% 5% 6%
53	BU	118	8% 20% 64% 14%
53	DU	118	11% 23% 61% 14%
54	BV	101	21% 30% 47% 19% 5%
54	DV	101	16% 29% 48% 18% 6%
55	BW	113	6% 35% 54% 11%
55	DW	113	4% 35% 52% 12%
56	BX	96	17% 35% 47% 11%
56	DX	96	16% 35% 48% 10%
57	BY	110	52% 9% 52% 26% 9%
57	DY	110	36% 11% 50% 26% 9%
58	BZ	206	17% 14% 45% 23% 15%
58	DZ	206	10% 20% 49% 14% 15%

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
24	PSU	AY	55	X	-	-	-
24	PSU	CY	55	X	-	-	-

2 Entry composition (i)

There are 61 unique types of molecules in this entry. The entry contains 307322 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a RNA chain called 16S RRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	AA	1510	Total	C	N	O	P	0	0	0
			32451	14445	6010	10487	1509			
1	CA	1510	Total	C	N	O	P	0	0	0
			32451	14445	6010	10487	1509			

- Molecule 2 is a protein called 30S RIBOSOMAL PROTEIN S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	AB	234	Total	C	N	O	S	0	0	0
			1900	1213	341	341	5			
2	CB	234	Total	C	N	O	S	0	0	0
			1900	1213	341	341	5			

- Molecule 3 is a protein called 30S RIBOSOMAL PROTEIN S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	AC	206	Total	C	N	O	S	0	0	0
			1612	1016	314	281	1			
3	CC	206	Total	C	N	O	S	0	0	0
			1612	1016	314	281	1			

- Molecule 4 is a protein called 30S RIBOSOMAL PROTEIN S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	AD	208	Total	C	N	O	S	0	0	0
			1703	1066	339	291	7			
4	CD	208	Total	C	N	O	S	0	0	0
			1703	1066	339	291	7			

- Molecule 5 is a protein called 30S RIBOSOMAL PROTEIN S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	AE	150	Total	C	N	O	S	0	0	0
			1146	724	217	201	4			
5	CE	150	Total	C	N	O	S	0	0	0
			1146	724	217	201	4			

- Molecule 6 is a protein called 30S RIBOSOMAL PROTEIN S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	AF	101	Total	C	N	O	S	0	0	0
			843	531	155	154	3			
6	CF	101	Total	C	N	O	S	0	0	0
			843	531	155	154	3			

- Molecule 7 is a protein called 30S RIBOSOMAL PROTEIN S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	AG	155	Total	C	N	O	S	0	0	0
			1257	781	252	218	6			
7	CG	155	Total	C	N	O	S	0	0	0
			1257	781	252	218	6			

- Molecule 8 is a protein called 30S RIBOSOMAL PROTEIN S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	AH	138	Total	C	N	O	S	0	0	0
			1116	705	215	193	3			
8	CH	138	Total	C	N	O	S	0	0	0
			1116	705	215	193	3			

- Molecule 9 is a protein called 30S RIBOSOMAL PROTEIN S9.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
9	AI	127	Total	C	N	O	0	0	0
			1010	639	197	174			
9	CI	127	Total	C	N	O	0	0	0
			1010	639	197	174			

- Molecule 10 is a protein called 30S RIBOSOMAL PROTEIN S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	AJ	98	Total	C	N	O	S	0	0	0
			794	499	156	138	1			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	CJ	98	Total	C	N	O	S	0	0	0
			794	499	156	138	1			

- Molecule 11 is a protein called 30S RIBOSOMAL PROTEIN S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	AK	119	Total	C	N	O	S	0	0	0
			885	549	168	165	3			
11	CK	119	Total	C	N	O	S	0	0	0
			885	549	168	165	3			

- Molecule 12 is a protein called 30S RIBOSOMAL PROTEIN S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	AL	124	Total	C	N	O	S	0	0	0
			970	611	195	163	1			
12	CL	124	Total	C	N	O	S	0	0	0
			970	611	195	163	1			

There are 8 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
AL	1	MET	-	expression tag	UNP Q5SHN3
AL	2	VAL	-	expression tag	UNP Q5SHN3
AL	3	ALA	-	expression tag	UNP Q5SHN3
AL	4	LEU	-	expression tag	UNP Q5SHN3
CL	1	MET	-	expression tag	UNP Q5SHN3
CL	2	VAL	-	expression tag	UNP Q5SHN3
CL	3	ALA	-	expression tag	UNP Q5SHN3
CL	4	LEU	-	expression tag	UNP Q5SHN3

- Molecule 13 is a protein called 30S RIBOSOMAL PROTEIN S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	AM	124	Total	C	N	O	S	0	0	0
			987	611	205	169	2			
13	CM	124	Total	C	N	O	S	0	0	0
			987	611	205	169	2			

- Molecule 14 is a protein called 30S RIBOSOMAL PROTEIN S14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	AN	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			
14	CN	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			

- Molecule 15 is a protein called 30S RIBOSOMAL PROTEIN S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	AO	88	Total	C	N	O	S	0	0	0
			734	459	147	126	2			
15	CO	88	Total	C	N	O	S	0	0	0
			734	459	147	126	2			

- Molecule 16 is a protein called 30S RIBOSOMAL PROTEIN S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	AP	83	Total	C	N	O	S	0	0	0
			700	443	139	117	1			
16	CP	83	Total	C	N	O	S	0	0	0
			700	443	139	117	1			

- Molecule 17 is a protein called 30S RIBOSOMAL PROTEIN S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	AQ	99	Total	C	N	O	S	0	0	0
			823	528	151	142	2			
17	CQ	99	Total	C	N	O	S	0	0	0
			823	528	151	142	2			

- Molecule 18 is a protein called 30S RIBOSOMAL PROTEIN S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	AR	70	Total	C	N	O	0	0	0
			574	367	112	95			
18	CR	70	Total	C	N	O	0	0	0
			574	367	112	95			

- Molecule 19 is a protein called 30S RIBOSOMAL PROTEIN S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AS	78	Total	C	N	O	S	0	0	0
			629	403	114	110	2			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	CS	78	Total	C	N	O	S	0	0	0
			629	403	114	110	2			

- Molecule 20 is a protein called 30S RIBOSOMAL PROTEIN S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	AT	99	Total	C	N	O	S	0	0	0
			763	470	162	129	2			
20	CT	99	Total	C	N	O	S	0	0	0
			763	470	162	129	2			

- Molecule 21 is a protein called 30S RIBOSOMAL PROTEIN THX.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
21	AU	24	Total	C	N	O	0	0	0
			208	128	50	30			
21	CU	24	Total	C	N	O	0	0	0
			208	128	50	30			

- Molecule 22 is a RNA chain called E-SITE TRNA PHE OR P-SITE TRNA PHE.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	AV	76	Total	C	N	O	P	0	0	0
			1619	723	290	531	75			
22	AW	76	Total	C	N	O	P	0	0	0
			1619	723	290	531	75			
22	CV	76	Total	C	N	O	P	0	0	0
			1619	723	290	531	75			
22	CW	76	Total	C	N	O	P	0	0	0
			1619	723	290	531	75			

- Molecule 23 is a RNA chain called MRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	AX	17	Total	C	N	O	P	0	0	0
			361	164	68	113	16			
23	CX	17	Total	C	N	O	P	0	0	0
			361	164	68	113	16			

- Molecule 24 is a RNA chain called A-SITE TRNA A9C TRP-TRNA TRP.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
24	AY	77	Total	C	N	O	P	S	0	0	0
			1643	741	287	537	76	2			
24	CY	77	Total	C	N	O	P	S	0	0	0
			1643	741	287	537	76	2			

- Molecule 25 is a protein called ELONGATION FACTOR TU.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	AZ	385	Total	C	N	O	S	0	0	0
			2983	1886	522	563	12			
25	CZ	385	Total	C	N	O	S	0	0	0
			2983	1886	522	563	12			

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
AZ	6	ILE	VAL	conflict	UNP Q5SHN6
AZ	264	LYS	ARG	conflict	UNP Q5SHN6
CZ	6	ILE	VAL	conflict	UNP Q5SHN6
CZ	264	LYS	ARG	conflict	UNP Q5SHN6

- Molecule 26 is a protein called 50S RIBOSOMAL PROTEIN L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	B0	84	Total	C	N	O	S	0	0	0
			662	410	140	111	1			
26	D0	84	Total	C	N	O	S	0	0	0
			662	410	140	111	1			

- Molecule 27 is a protein called 50S RIBOSOMAL PROTEIN L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	B1	93	Total	C	N	O	S	0	0	0
			731	460	145	125	1			
27	D1	93	Total	C	N	O	S	0	0	0
			731	460	145	125	1			

- Molecule 28 is a protein called 50S RIBOSOMAL PROTEIN L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	B2	71	Total	C	N	O	S	0	0	0
			598	370	121	106	1			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	D2	71	Total	C	N	O	S	0	0	0
			598	370	121	106	1			

- Molecule 29 is a protein called 50S RIBOSOMAL PROTEIN L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	B3	59	Total	C	N	O	S	0	0	0
			467	298	90	78	1			
29	D3	59	Total	C	N	O	S	0	0	0
			467	298	90	78	1			

- Molecule 30 is a protein called 50S RIBOSOMAL PROTEIN L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	B4	44	Total	C	N	O	S	0	0	0
			340	218	57	61	4			
30	D4	44	Total	C	N	O	S	0	0	0
			340	218	57	61	4			

- Molecule 31 is a protein called 50S RIBOSOMAL PROTEIN L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	B5	59	Total	C	N	O	S	0	0	0
			459	288	90	76	5			
31	D5	59	Total	C	N	O	S	0	0	0
			459	288	90	76	5			

- Molecule 32 is a protein called 50S RIBOSOMAL PROTEIN L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	B6	50	Total	C	N	O	S	0	0	0
			433	270	88	71	4			
32	D6	50	Total	C	N	O	S	0	0	0
			433	270	88	71	4			

- Molecule 33 is a protein called 50S RIBOSOMAL PROTEIN L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	B7	48	Total	C	N	O	S	0	0	0
			418	257	104	55	2			
33	D7	48	Total	C	N	O	S	0	0	0
			418	257	104	55	2			

- Molecule 34 is a protein called 50S RIBOSOMAL PROTEIN L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	B8	63	Total	C	N	O	S	0	0	0
			507	326	101	78	2			
34	D8	63	Total	C	N	O	S	0	0	0
			507	326	101	78	2			

- Molecule 35 is a protein called 50S RIBOSOMAL PROTEIN L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	B9	37	Total	C	N	O	S	0	0	0
			307	188	68	47	4			
35	D9	37	Total	C	N	O	S	0	0	0
			307	188	68	47	4			

- Molecule 36 is a RNA chain called 23S RIBOSOMAL RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	BA	2901	Total	C	N	O	P	0	0	0
			62477	27807	11683	20087	2900			
36	DA	2901	Total	C	N	O	P	0	0	0
			62477	27807	11683	20087	2900			

- Molecule 37 is a RNA chain called 5S RIBOSOMAL RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	BB	119	Total	C	N	O	P	0	0	0
			2551	1136	471	826	118			
37	DB	119	Total	C	N	O	P	0	0	0
			2551	1136	471	826	118			

- Molecule 38 is a protein called 50S RIBOSOMAL PROTEIN L1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	BC	228	Total	C	N	O	S	0	0	0
			1742	1101	319	319	3			
38	DC	228	Total	C	N	O	S	0	0	0
			1742	1101	319	319	3			

- Molecule 39 is a protein called 50S RIBOSOMAL PROTEIN L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	BD	275	Total	C	N	O	S	0	0	0
			2145	1353	428	361	3			
39	DD	275	Total	C	N	O	S	0	0	0
			2145	1353	428	361	3			

- Molecule 40 is a protein called 50S RIBOSOMAL PROTEIN L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	BE	204	Total	C	N	O	S	0	0	0
			1563	988	299	270	6			
40	DE	204	Total	C	N	O	S	0	0	0
			1563	988	299	270	6			

- Molecule 41 is a protein called 50S RIBOSOMAL PROTEIN L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	BF	207	Total	C	N	O	S	0	0	0
			1623	1035	303	282	3			
41	DF	207	Total	C	N	O	S	0	0	0
			1623	1035	303	282	3			

- Molecule 42 is a protein called 50S RIBOSOMAL PROTEIN L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	BG	181	Total	C	N	O	S	0	0	0
			1474	942	268	260	4			
42	DG	181	Total	C	N	O	S	0	0	0
			1474	942	268	260	4			

- Molecule 43 is a protein called 50S RIBOSOMAL PROTEIN L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	BH	159	Total	C	N	O	S	0	0	0
			1222	773	228	220	1			
43	DH	159	Total	C	N	O	S	0	0	0
			1222	773	228	220	1			

- Molecule 44 is a protein called 50S RIBOSOMAL PROTEIN L10.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
44	BJ	130	Total	C	N	O	0	0	0
			651	391	130	130			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
44	DJ	130	Total 651	C 391	N 130	O 130	0	0	0

- Molecule 45 is a protein called 50S RIBOSOMAL PROTEIN L11.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
45	BK	140	Total 700	C 420	N 140	O 140	0	0	0
45	DK	140	Total 700	C 420	N 140	O 140	0	0	0

- Molecule 46 is a protein called 50S RIBOSOMAL PROTEIN L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	BN	138	Total 1104	C 712	N 206	O 182	S 4	0	0	0
46	DN	138	Total 1104	C 712	N 206	O 182	S 4	0	0	0

- Molecule 47 is a protein called 50S RIBOSOMAL PROTEIN L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	BO	122	Total 933	C 588	N 171	O 170	S 4	0	0	0
47	DO	122	Total 933	C 588	N 171	O 170	S 4	0	0	0

- Molecule 48 is a protein called 50S RIBOSOMAL PROTEIN L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	BP	146	Total 1114	C 692	N 227	O 193	S 2	0	0	0
48	DP	146	Total 1114	C 692	N 227	O 193	S 2	0	0	0

- Molecule 49 is a protein called 50S RIBOSOMAL PROTEIN L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	BQ	141	Total 1122	C 715	N 212	O 188	S 7	0	0	0
49	DQ	141	Total 1122	C 715	N 212	O 188	S 7	0	0	0

- Molecule 50 is a protein called 50S RIBOSOMAL PROTEIN L17.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
50	BR	117	Total	C	N	O	0	0	0
			960	599	202	159			
50	DR	117	Total	C	N	O	0	0	0
			960	599	202	159			

- Molecule 51 is a protein called 50S RIBOSOMAL PROTEIN L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
51	BS	98	Total	C	N	O	0	0	0
			770	486	154	130			
51	DS	98	Total	C	N	O	0	0	0
			770	486	154	130			

- Molecule 52 is a protein called 50S RIBOSOMAL PROTEIN L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	BT	137	Total	C	N	O	S	0	0	0
			1141	710	234	196	1			
52	DT	137	Total	C	N	O	S	0	0	0
			1141	710	234	196	1			

- Molecule 53 is a protein called 50S RIBOSOMAL PROTEIN L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	BU	117	Total	C	N	O	S	0	0	0
			958	604	202	151	1			
53	DU	117	Total	C	N	O	S	0	0	0
			958	604	202	151	1			

- Molecule 54 is a protein called 50S RIBOSOMAL PROTEIN L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	BV	101	Total	C	N	O	S	0	0	0
			779	501	142	135	1			
54	DV	101	Total	C	N	O	S	0	0	0
			779	501	142	135	1			

- Molecule 55 is a protein called 50S RIBOSOMAL PROTEIN L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
55	BW	113	Total	C	N	O	S	0	0	0
			896	563	176	155	2			
55	DW	113	Total	C	N	O	S	0	0	0
			896	563	176	155	2			

- Molecule 56 is a protein called 50S RIBOSOMAL PROTEIN L23.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
56	BX	92	Total	C	N	O	0	0	0
			725	471	131	123			
56	DX	92	Total	C	N	O	0	0	0
			725	471	131	123			

- Molecule 57 is a protein called 50S RIBOSOMAL PROTEIN L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
57	BY	100	Total	C	N	O	S	0	0	0
			775	500	148	123	4			
57	DY	100	Total	C	N	O	S	0	0	0
			775	500	148	123	4			

- Molecule 58 is a protein called 50S RIBOSOMAL PROTEIN L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
58	BZ	176	Total	C	N	O	S	0	0	0
			1403	897	252	252	2			
58	DZ	176	Total	C	N	O	S	0	0	0
			1403	897	252	252	2			

- Molecule 59 is ZINC ION (CCD ID: ZN) (formula: Zn).

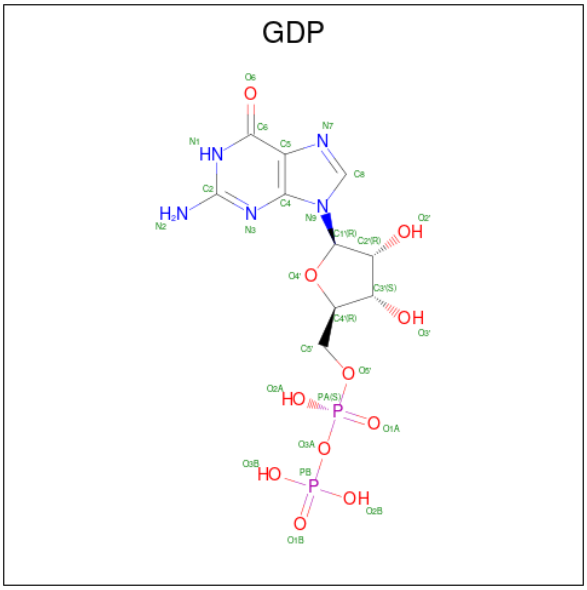
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
59	AD	1	Total	Zn	0	0
			1	1		
59	AN	1	Total	Zn	0	0
			1	1		
59	B4	1	Total	Zn	0	0
			1	1		
59	B9	1	Total	Zn	0	0
			1	1		
59	CD	1	Total	Zn	0	0
			1	1		

Continued on next page...

Continued from previous page...

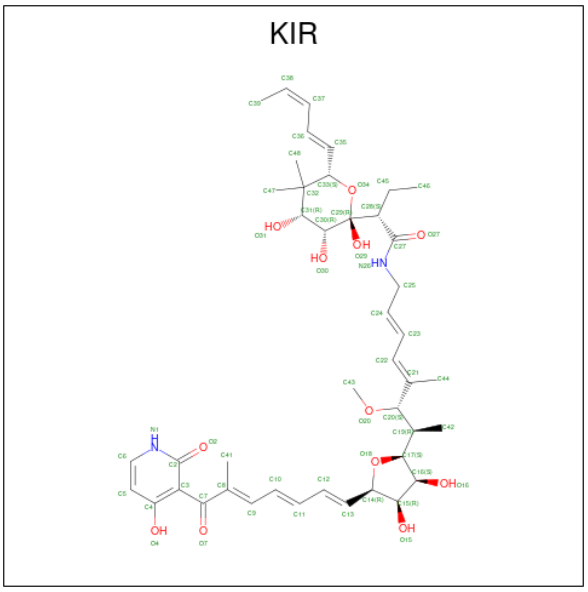
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	CN	1	Total Zn 1 1	0	0
59	D4	1	Total Zn 1 1	0	0
59	D9	1	Total Zn 1 1	0	0

- Molecule 60 is GUANOSINE-5'-DIPHOSPHATE (CCD ID: GDP) (formula: $C_{10}H_{15}N_5O_{11}P_2$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
60	AZ	1	Total C N O P 28 10 5 11 2	0	0
60	CZ	1	Total C N O P 28 10 5 11 2	0	0

- Molecule 61 is KIRROMYCIN (CCD ID: KIR) (formula: $C_{43}H_{60}N_2O_{12}$).



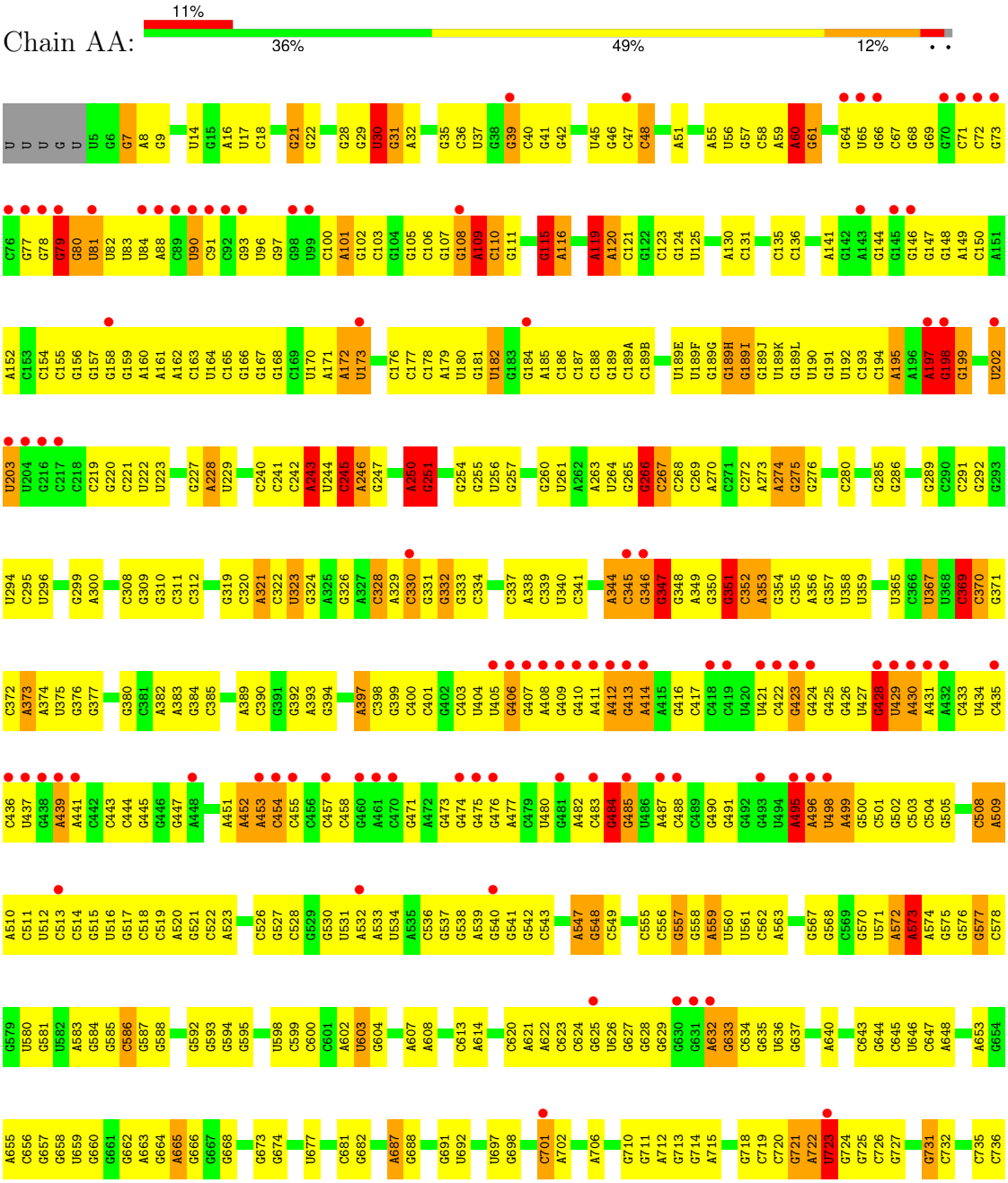
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
61	AZ	1	Total	C	N	O	0	0
			57	43	2	12		
61	CZ	1	Total	C	N	O	0	0
			57	43	2	12		

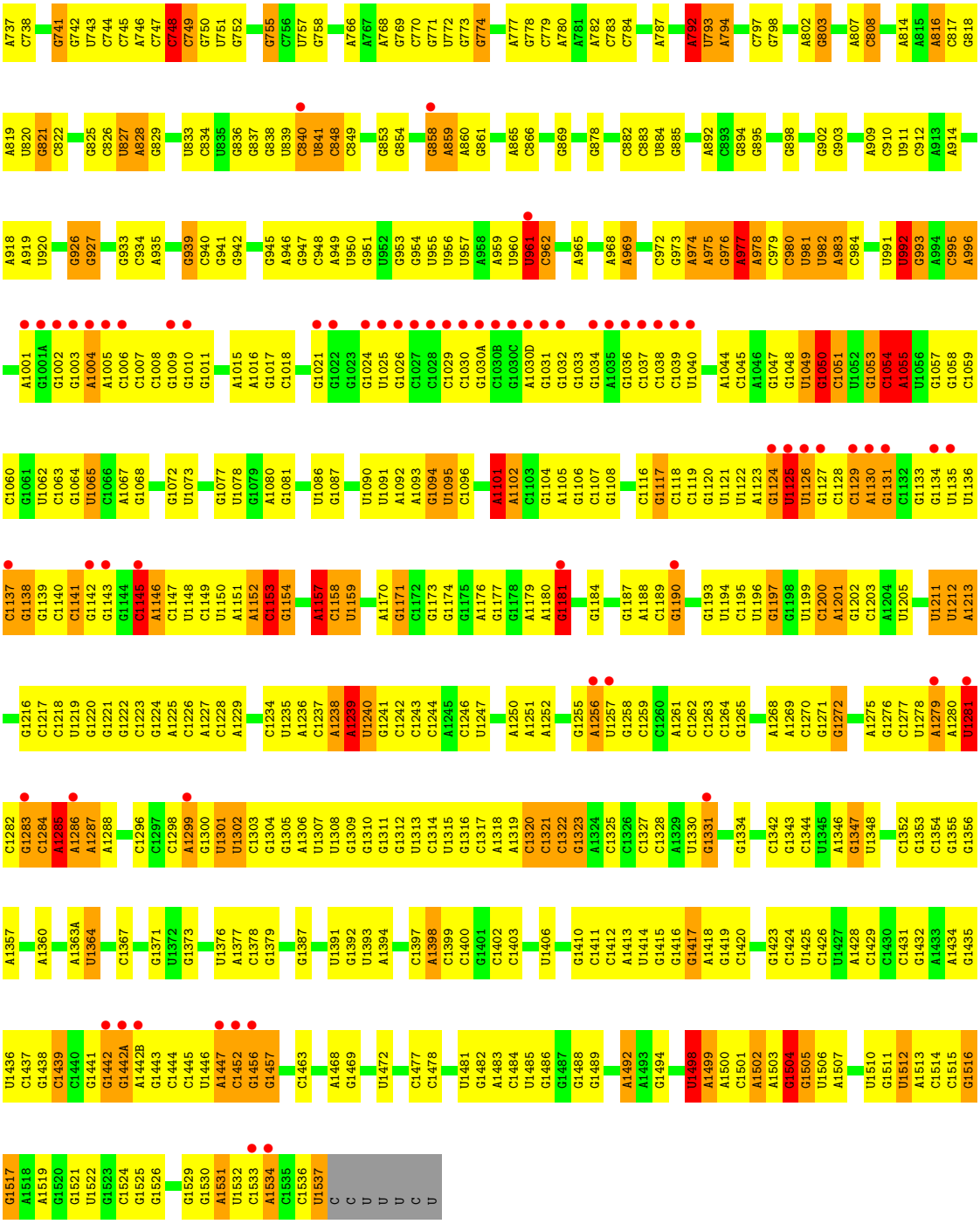
3 Residue-property plots (i)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red dot above a residue indicates a poor fit to the electron density (RSRZ > 2). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

- Molecule 1: 16S RRNA

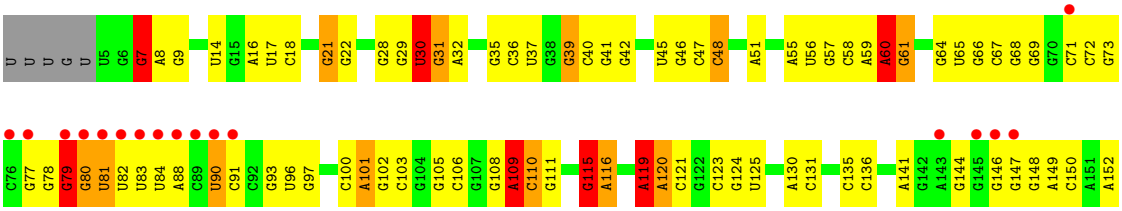
Chain AA:

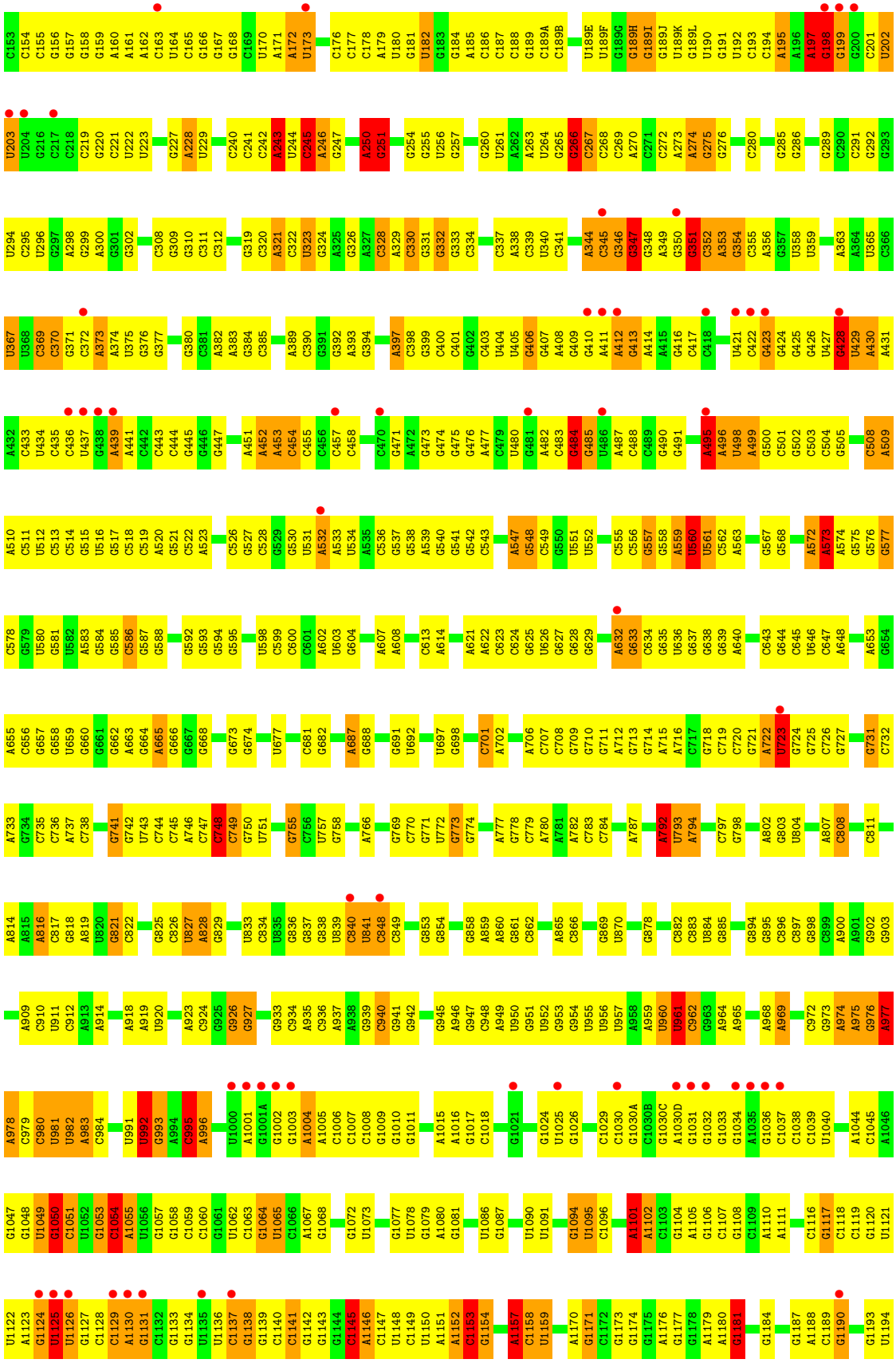


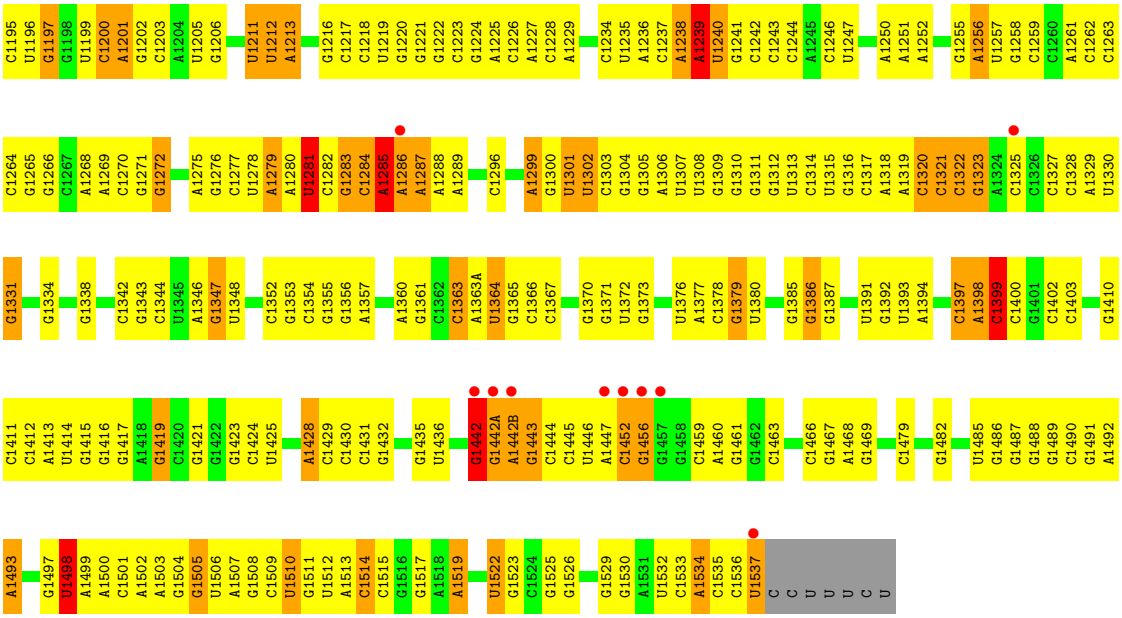


• Molecule 1: 16S RRNA

Chain CA:

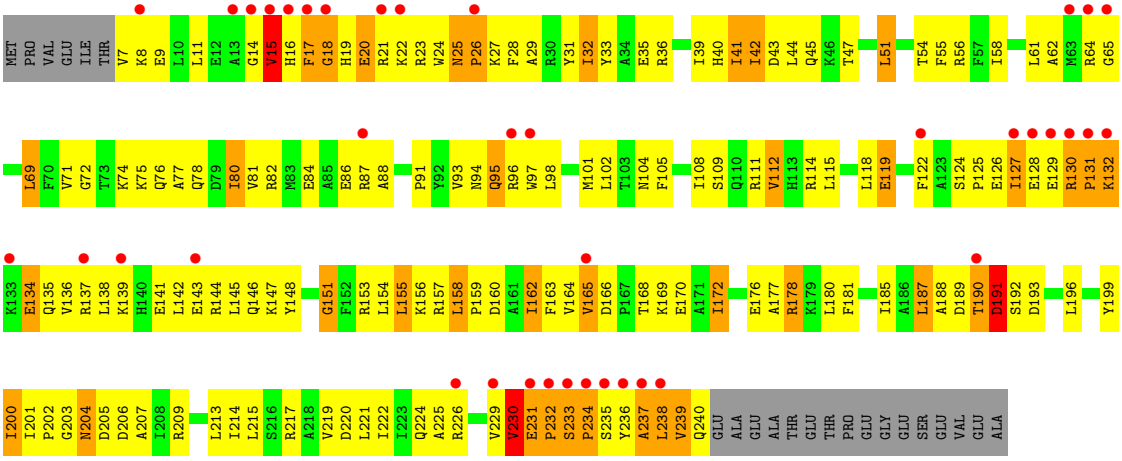






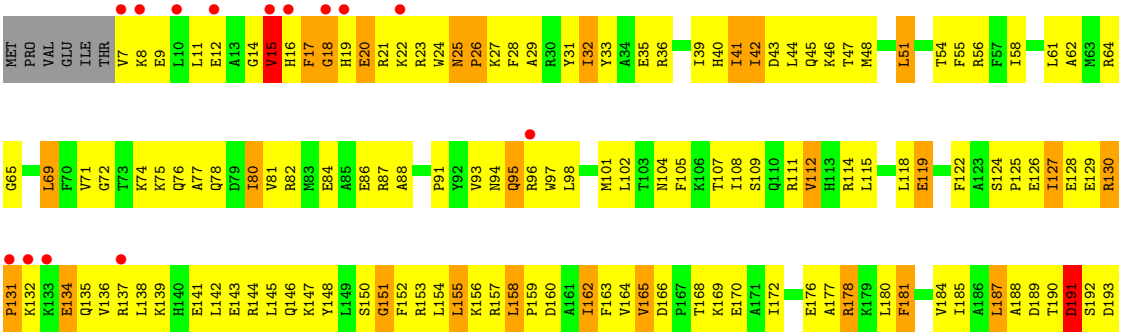
• Molecule 2: 30S RIBOSOMAL PROTEIN S2

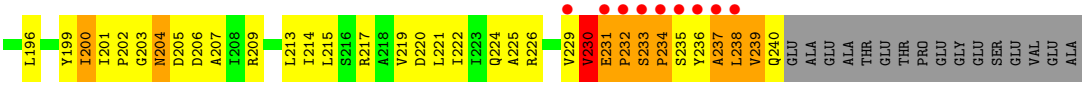
Chain AB:



• Molecule 2: 30S RIBOSOMAL PROTEIN S2

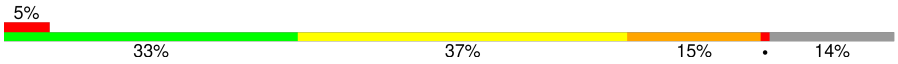
Chain CB:

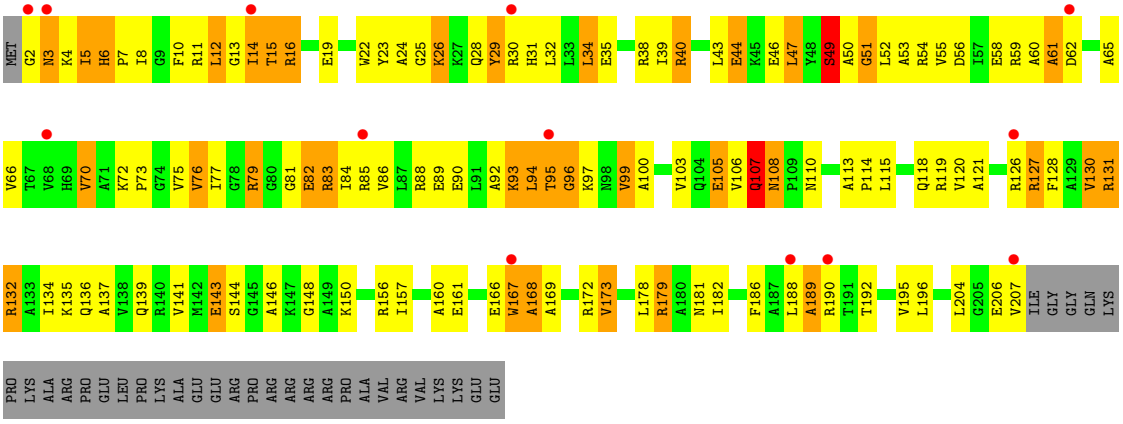




• Molecule 3: 30S RIBOSOMAL PROTEIN S3

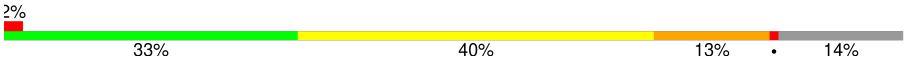
Chain AC:

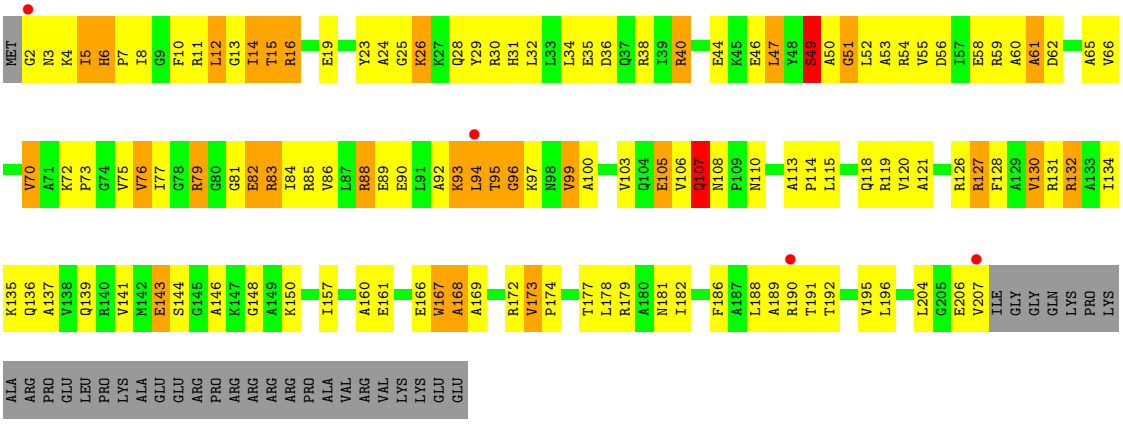




• Molecule 3: 30S RIBOSOMAL PROTEIN S3

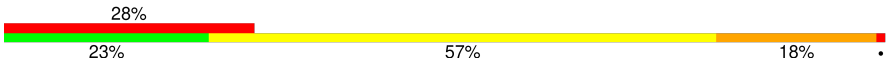
Chain CC:

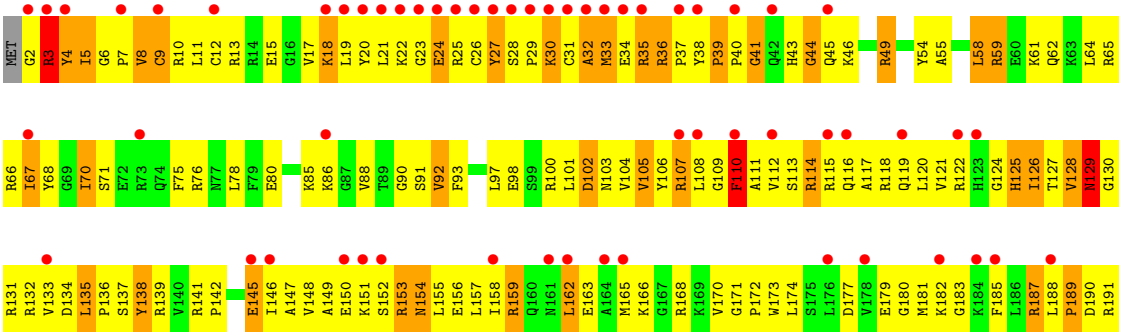


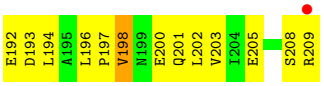


• Molecule 4: 30S RIBOSOMAL PROTEIN S4

Chain AD:

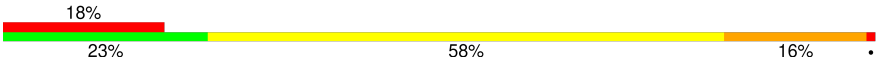


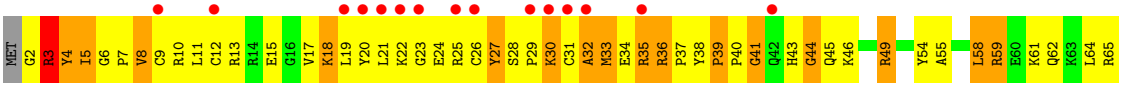


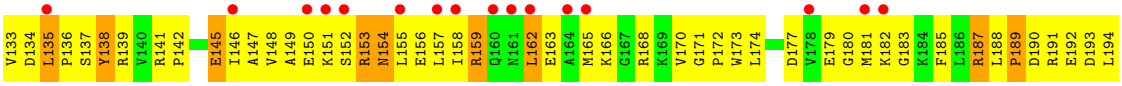


• Molecule 4: 30S RIBOSOMAL PROTEIN S4

Chain CD:

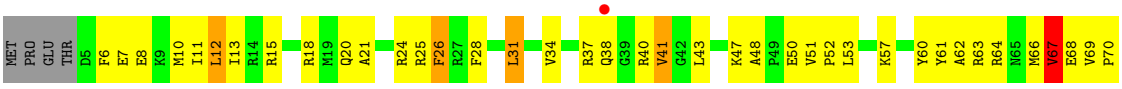






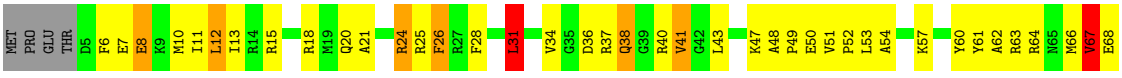
• Molecule 5: 30S RIBOSOMAL PROTEIN S5

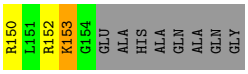
Chain AE:



• Molecule 5: 30S RIBOSOMAL PROTEIN S5

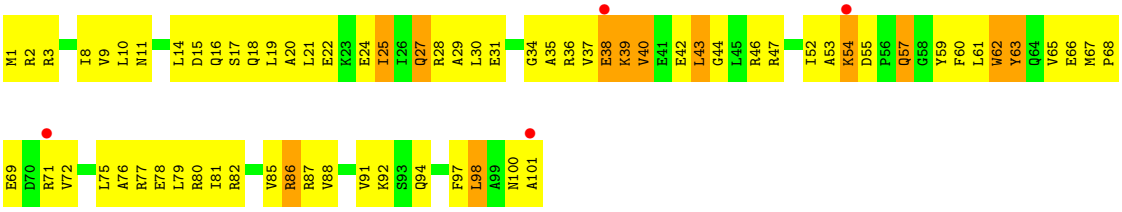
Chain CE:



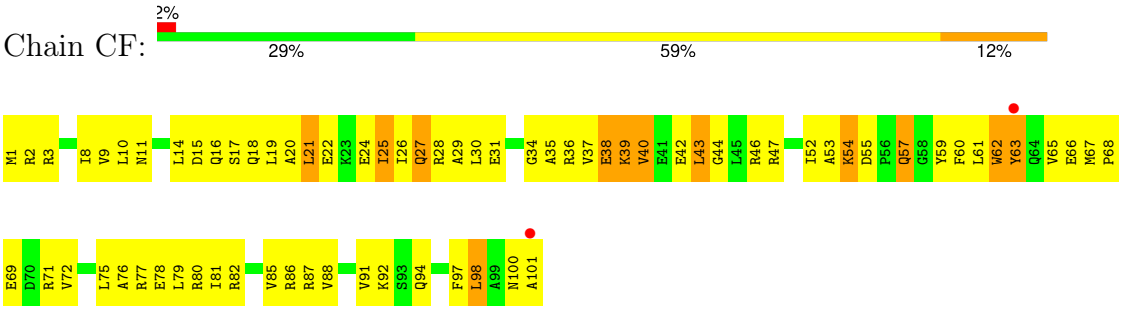


• Molecule 6: 30S RIBOSOMAL PROTEIN S6

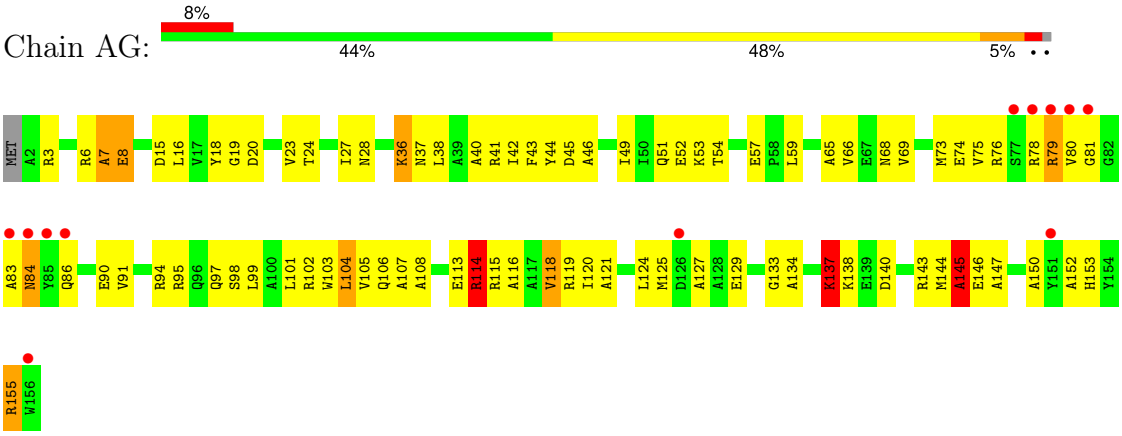
Chain AF:



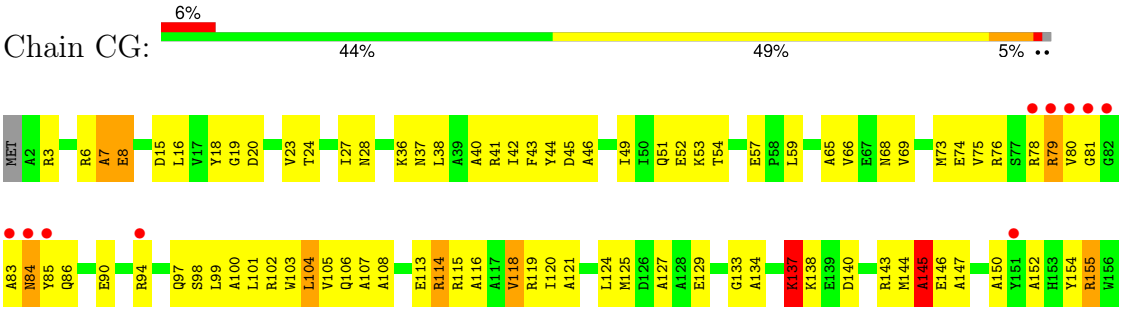
• Molecule 6: 30S RIBOSOMAL PROTEIN S6



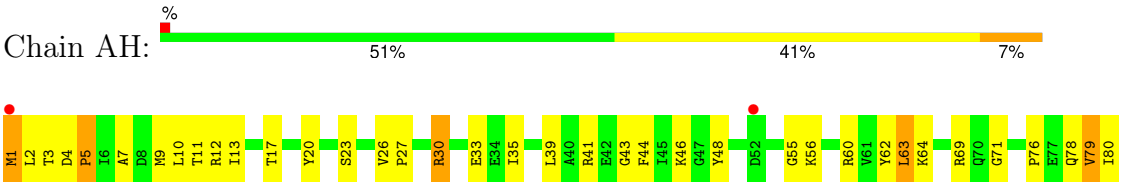
• Molecule 7: 30S RIBOSOMAL PROTEIN S7



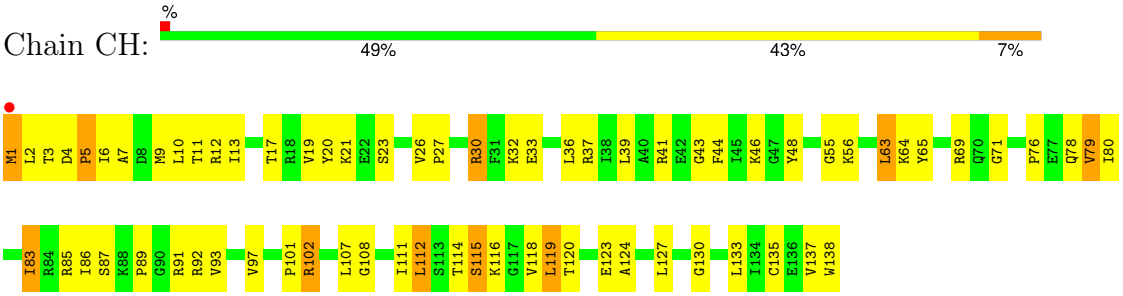
• Molecule 7: 30S RIBOSOMAL PROTEIN S7



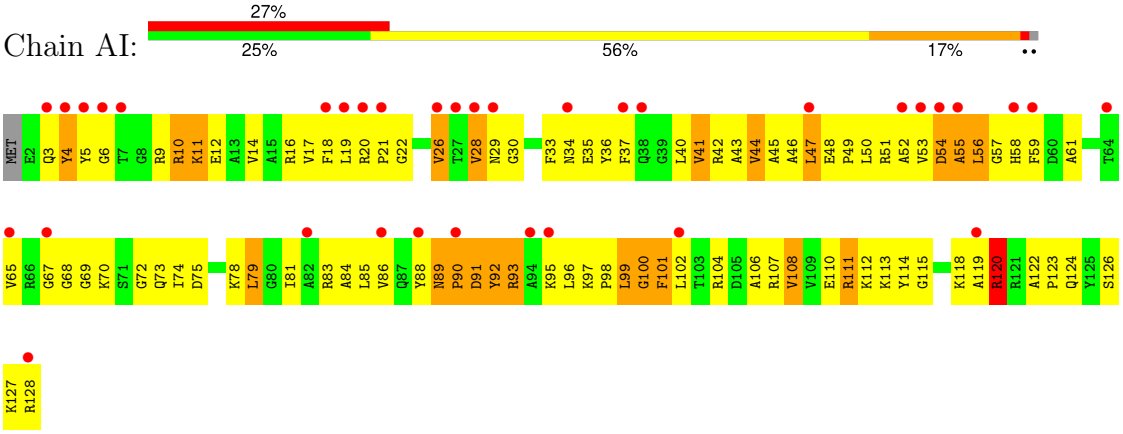
• Molecule 8: 30S RIBOSOMAL PROTEIN S8



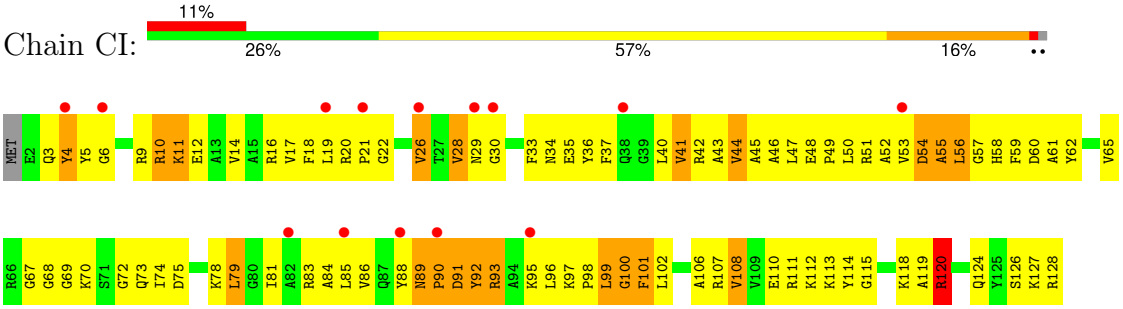
• Molecule 8: 30S RIBOSOMAL PROTEIN S8



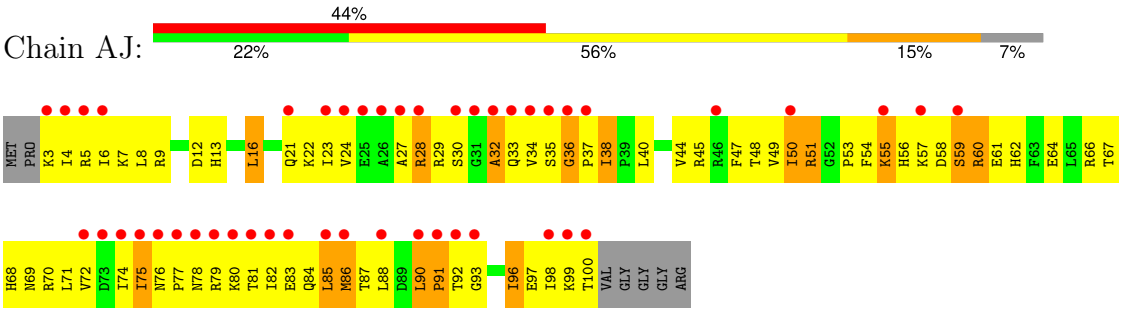
• Molecule 9: 30S RIBOSOMAL PROTEIN S9



• Molecule 9: 30S RIBOSOMAL PROTEIN S9

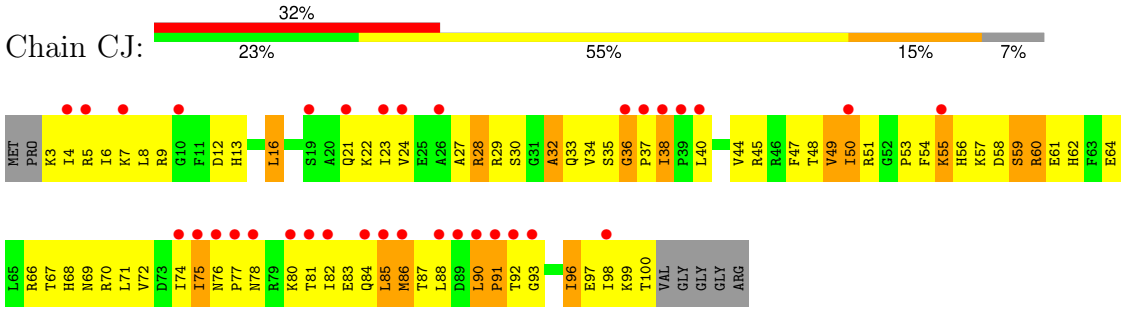


• Molecule 10: 30S RIBOSOMAL PROTEIN S10



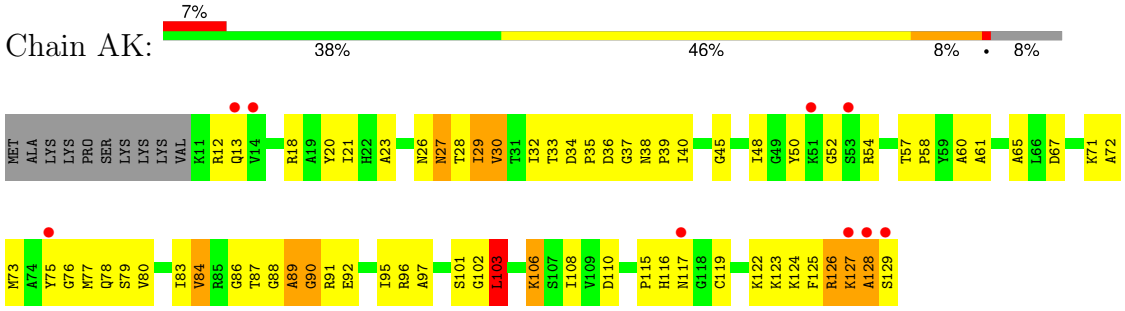
• Molecule 10: 30S RIBOSOMAL PROTEIN S10

Chain CJ:



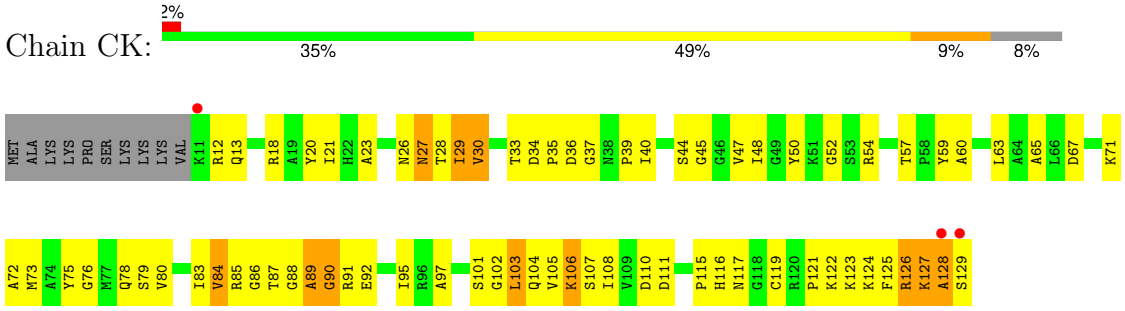
• Molecule 11: 30S RIBOSOMAL PROTEIN S11

Chain AK:



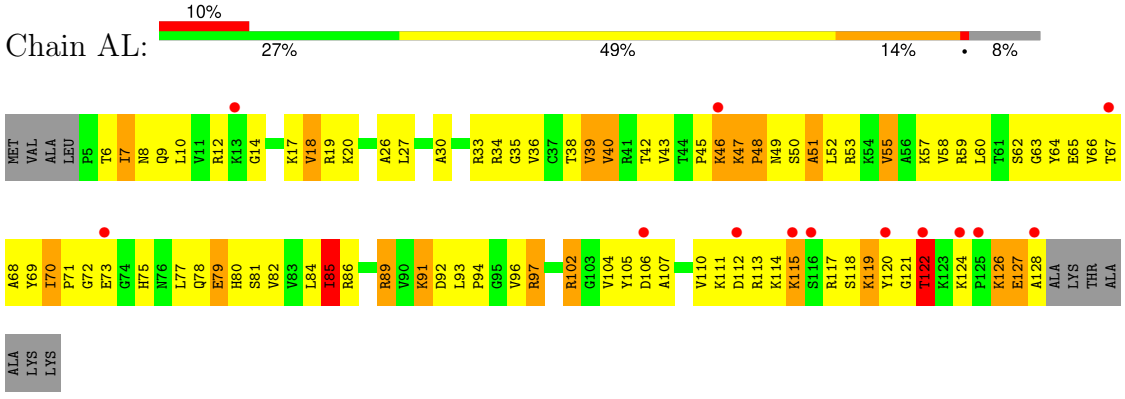
• Molecule 11: 30S RIBOSOMAL PROTEIN S11

Chain CK:



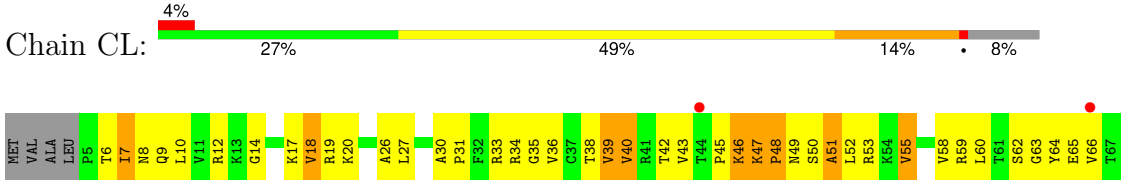
• Molecule 12: 30S RIBOSOMAL PROTEIN S12

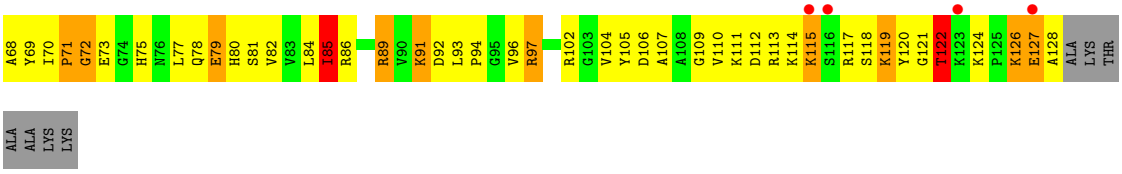
Chain AL:



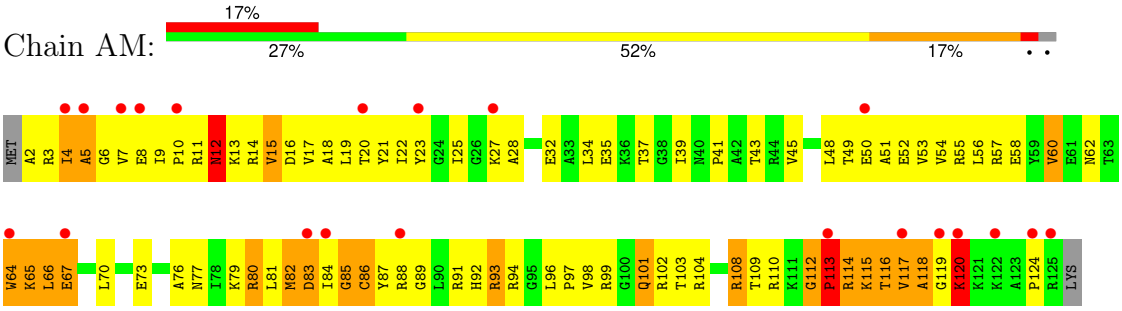
• Molecule 12: 30S RIBOSOMAL PROTEIN S12

Chain CL:

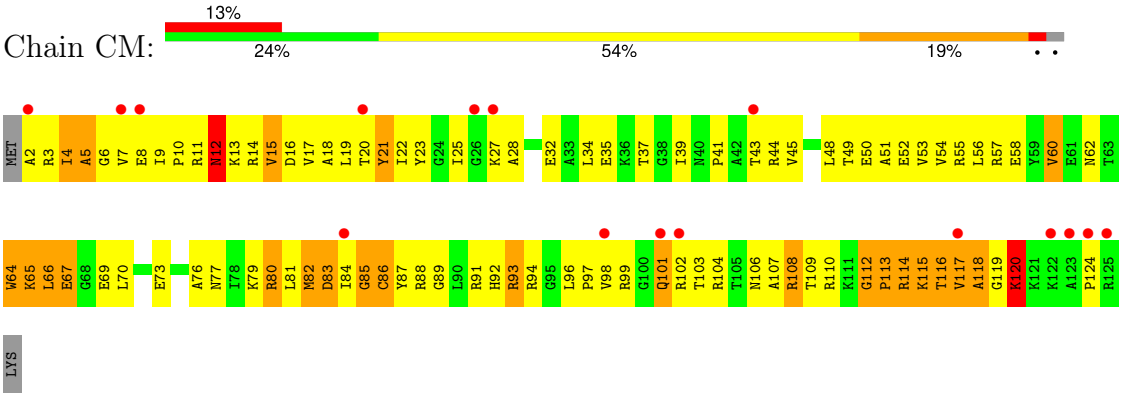




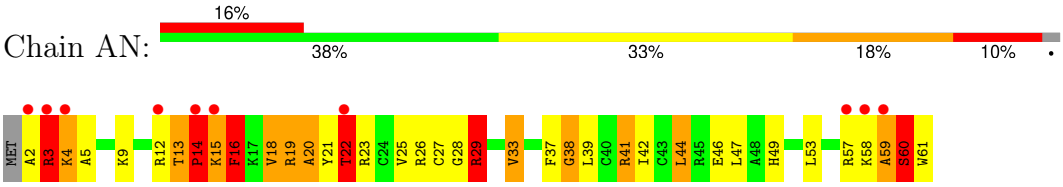
• Molecule 13: 30S RIBOSOMAL PROTEIN S13



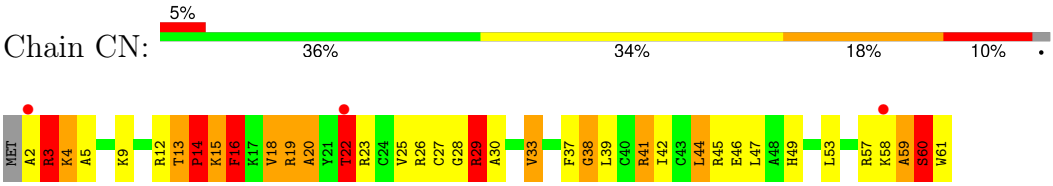
• Molecule 13: 30S RIBOSOMAL PROTEIN S13



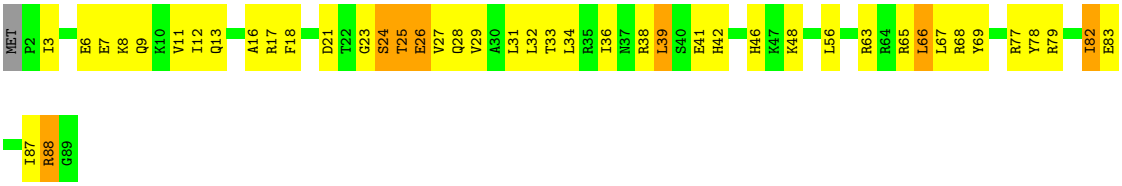
• Molecule 14: 30S RIBOSOMAL PROTEIN S14



• Molecule 14: 30S RIBOSOMAL PROTEIN S14

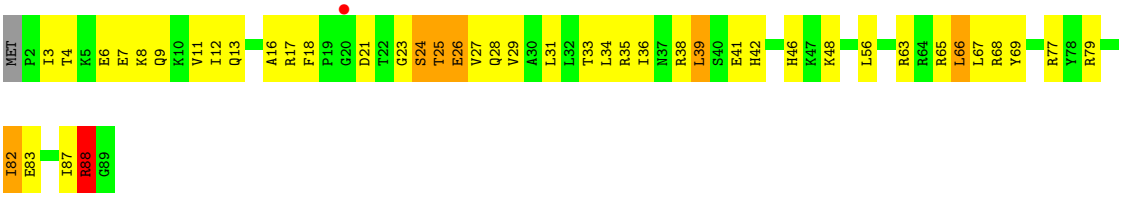


• Molecule 15: 30S RIBOSOMAL PROTEIN S15



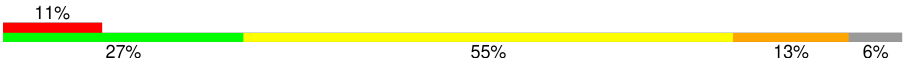
• Molecule 15: 30S RIBOSOMAL PROTEIN S15

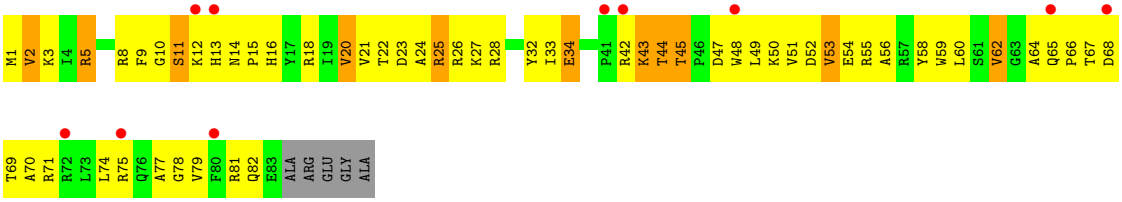
Chain CO:



• Molecule 16: 30S RIBOSOMAL PROTEIN S16

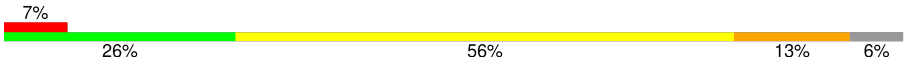
Chain AP:

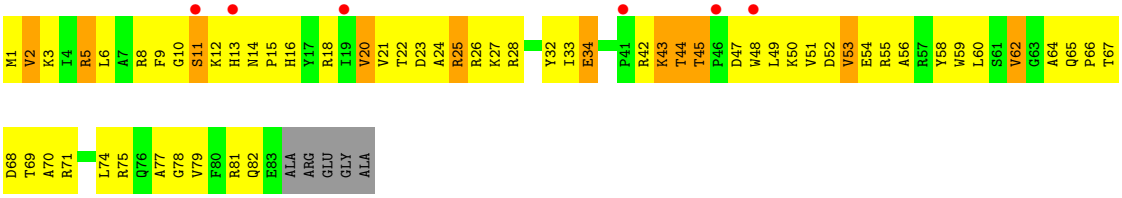




• Molecule 16: 30S RIBOSOMAL PROTEIN S16

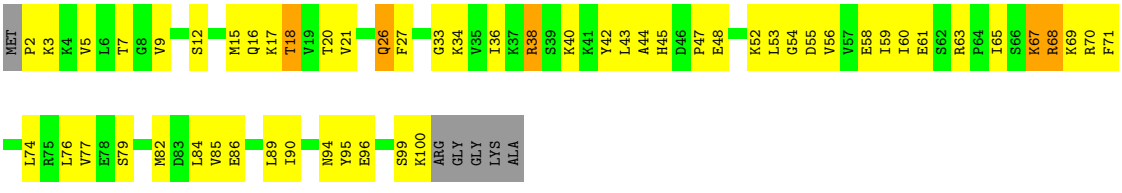
Chain CP:





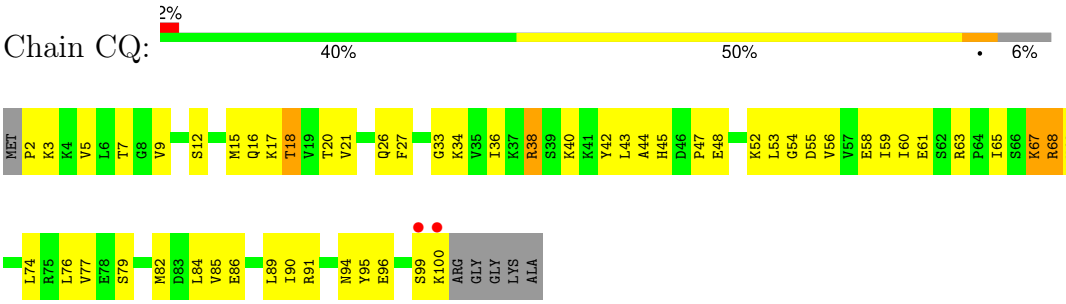
• Molecule 17: 30S RIBOSOMAL PROTEIN S17

Chain AQ:



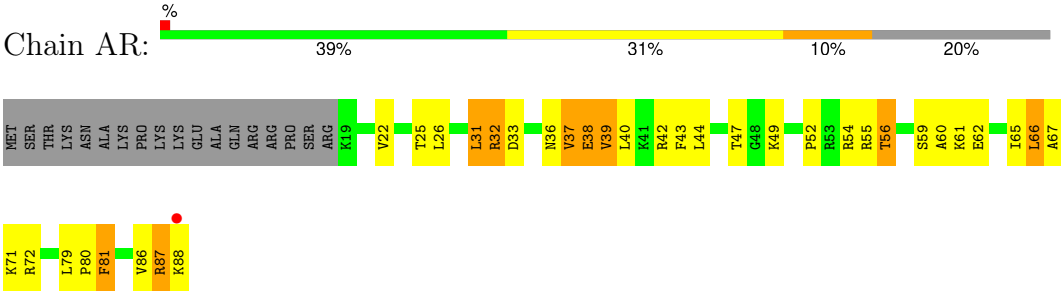
• Molecule 17: 30S RIBOSOMAL PROTEIN S17

Chain CQ:



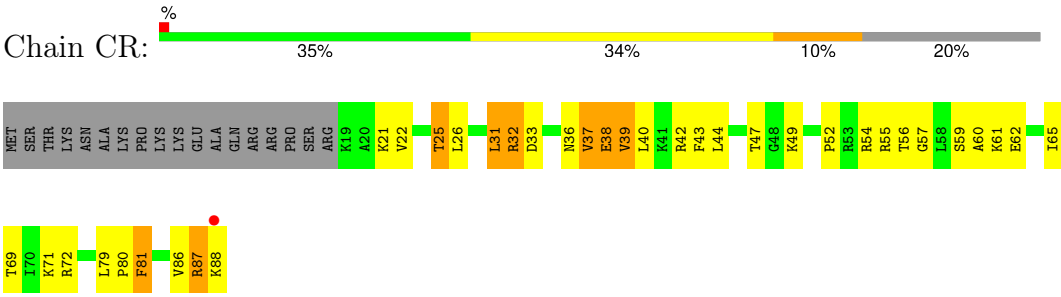
• Molecule 18: 30S RIBOSOMAL PROTEIN S18

Chain AR:



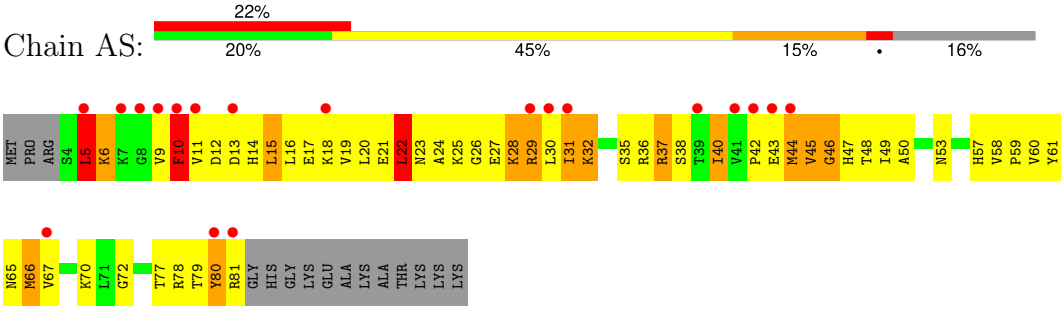
• Molecule 18: 30S RIBOSOMAL PROTEIN S18

Chain CR:



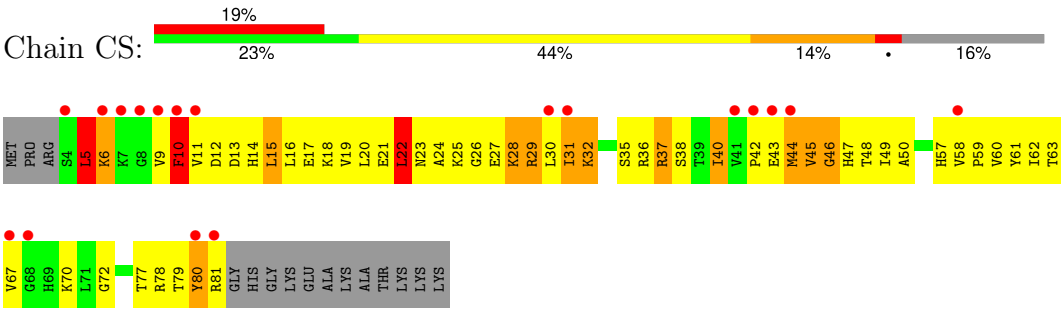
• Molecule 19: 30S RIBOSOMAL PROTEIN S19

Chain AS:



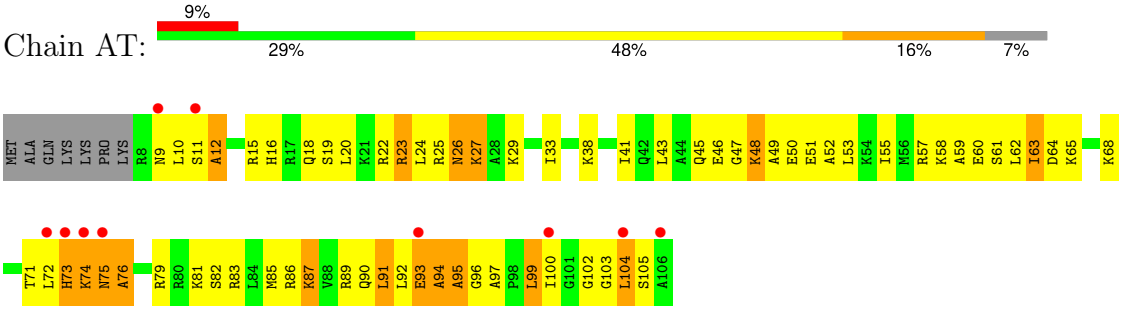
• Molecule 19: 30S RIBOSOMAL PROTEIN S19

Chain CS:



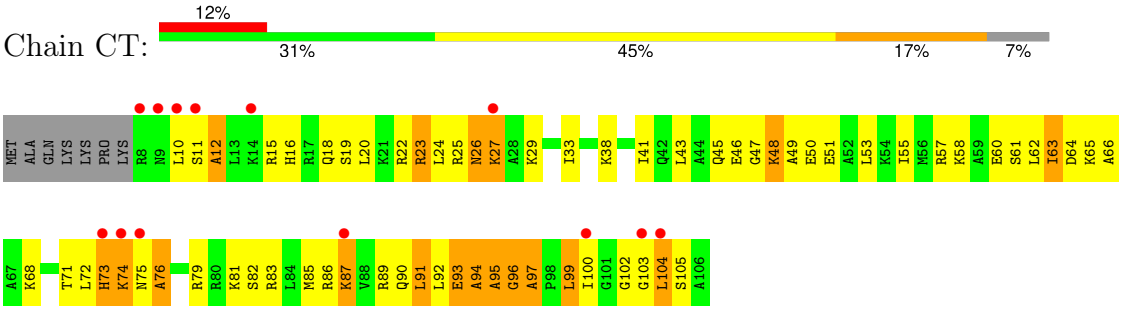
• Molecule 20: 30S RIBOSOMAL PROTEIN S20

Chain AT:



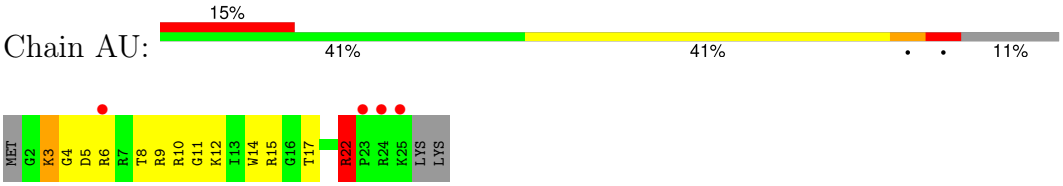
• Molecule 20: 30S RIBOSOMAL PROTEIN S20

Chain CT:



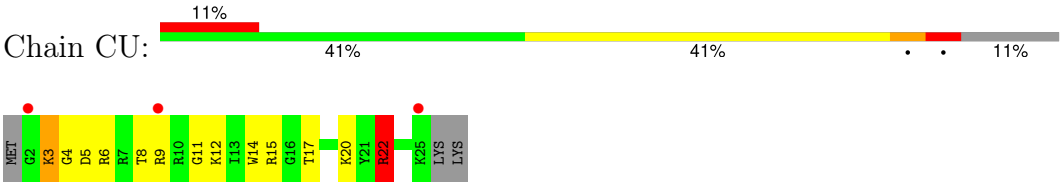
• Molecule 21: 30S RIBOSOMAL PROTEIN THX

Chain AU:



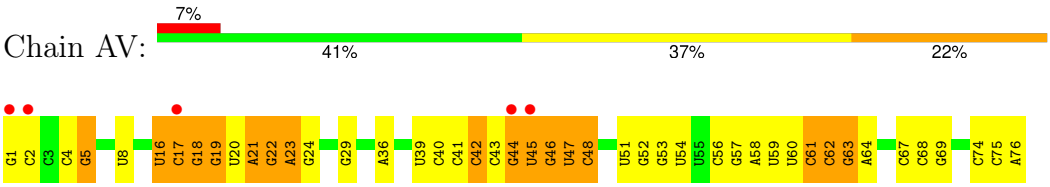
• Molecule 21: 30S RIBOSOMAL PROTEIN THX

Chain CU:



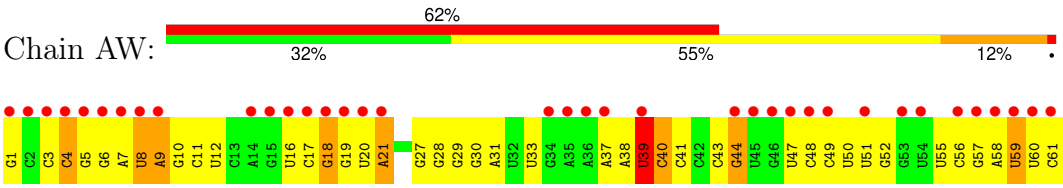
• Molecule 22: E-SITE TRNA PHE OR P-SITE TRNA PHE

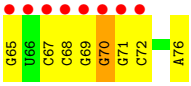
Chain AV:



• Molecule 22: E-SITE TRNA PHE OR P-SITE TRNA PHE

Chain AW:



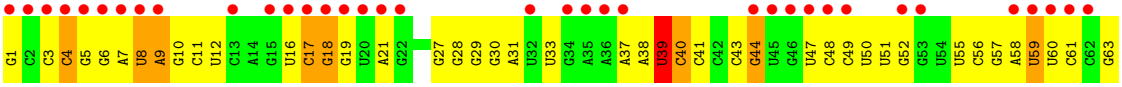


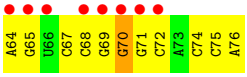
• Molecule 22: E-SITE TRNA PHE OR P-SITE TRNA PHE

Chain CV:

• Molecule 22: E-SITE TRNA PHE OR P-SITE TRNA PHE

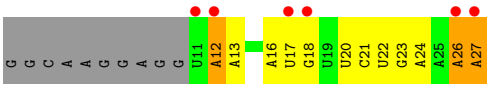
Chain CW:





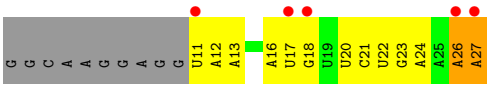
• Molecule 23: MRNA

Chain AX:



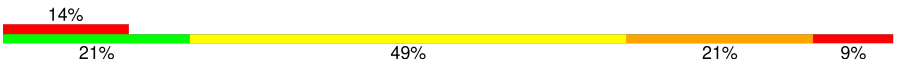
• Molecule 23: MRNA

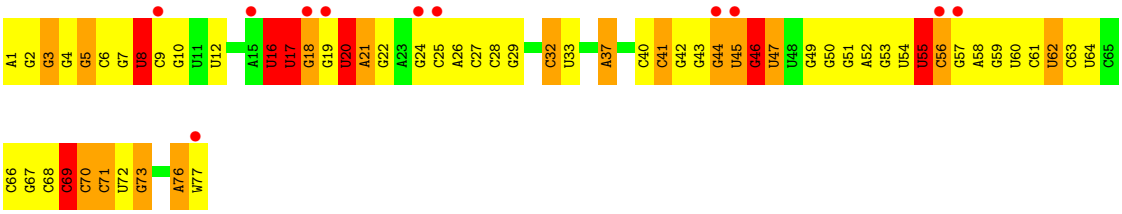
Chain CX:



• Molecule 24: A-SITE TRNA A9C TRP-TRNA TRP

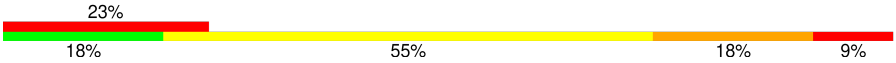
Chain AY:

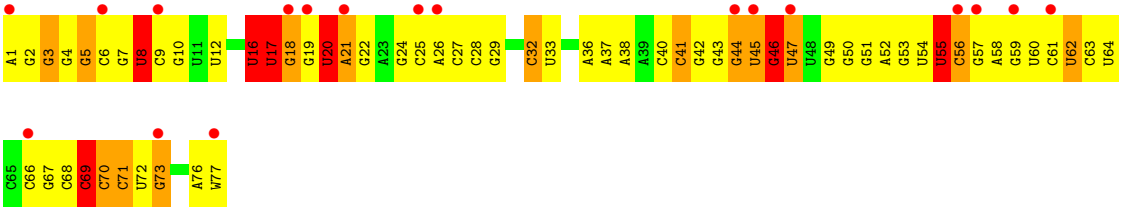




• Molecule 24: A-SITE TRNA A9C TRP-TRNA TRP

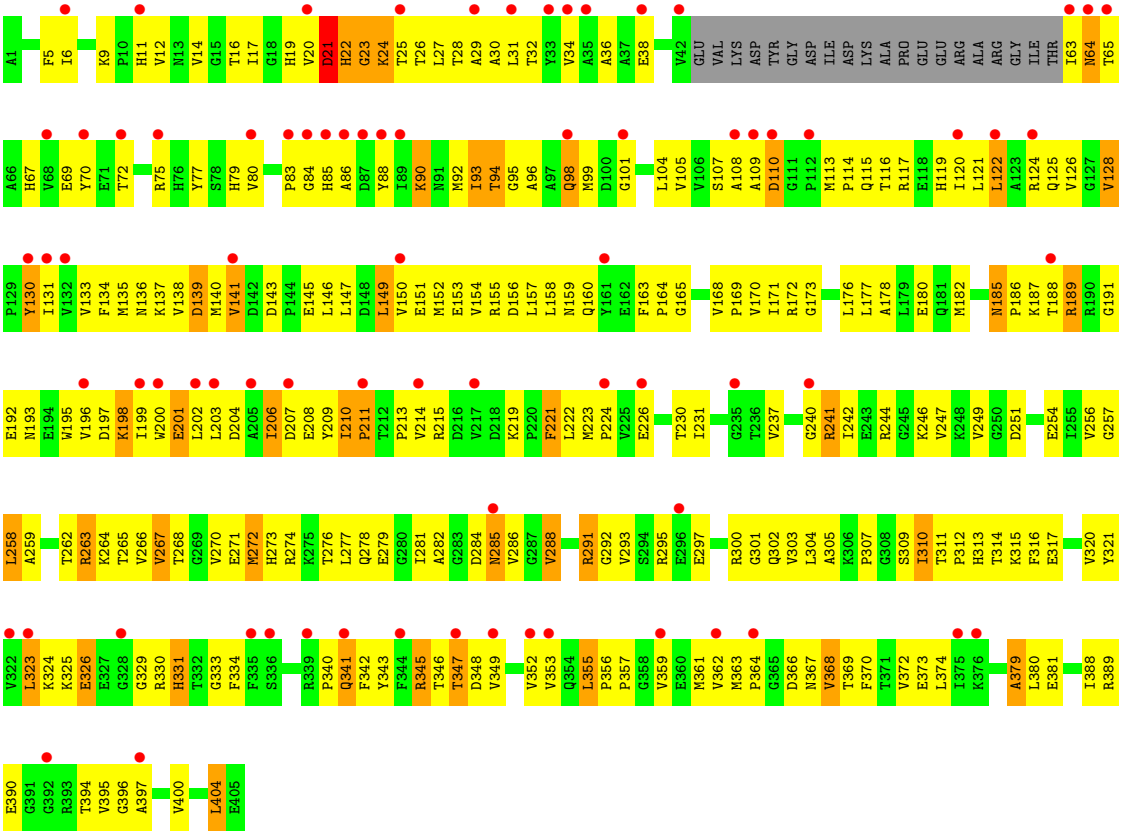
Chain CY:





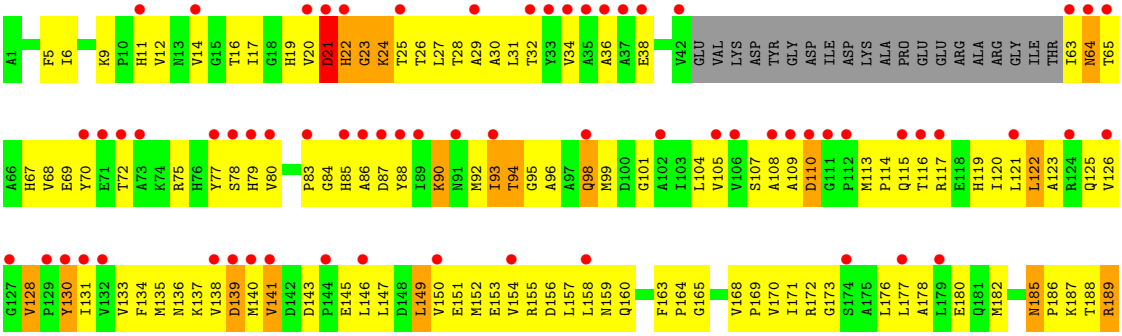
• Molecule 25: ELONGATION FACTOR TU

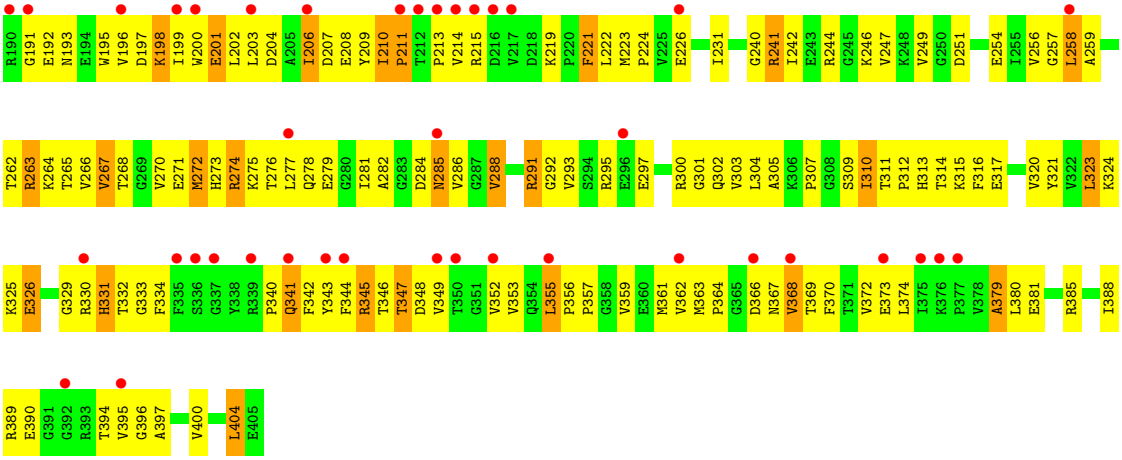
Chain AZ:



• Molecule 25: ELONGATION FACTOR TU

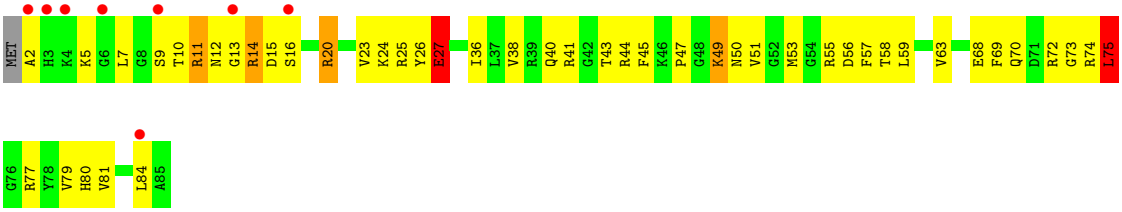
Chain CZ:





• Molecule 26: 50S RIBOSOMAL PROTEIN L27

Chain B0:

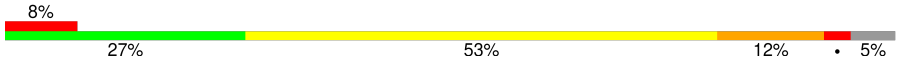


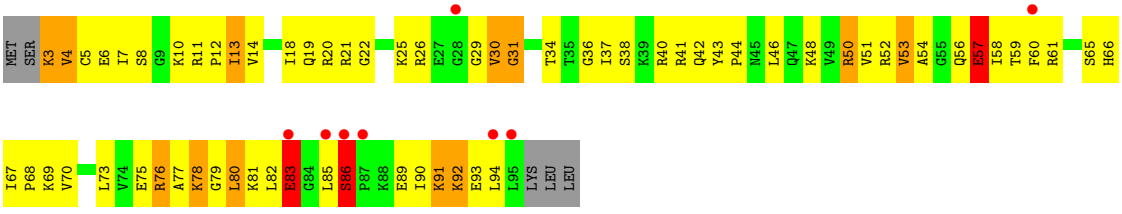
• Molecule 26: 50S RIBOSOMAL PROTEIN L27

Chain D0:

• Molecule 27: 50S RIBOSOMAL PROTEIN L28

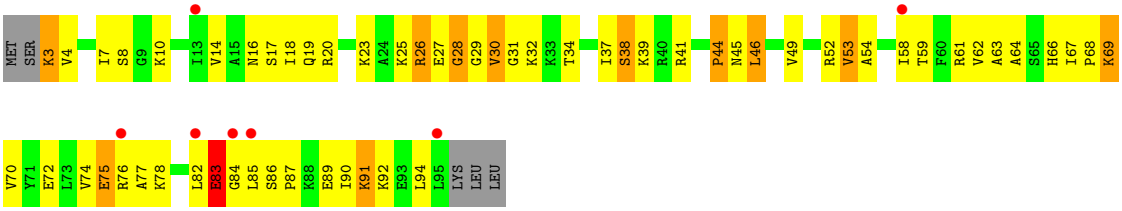
Chain B1:





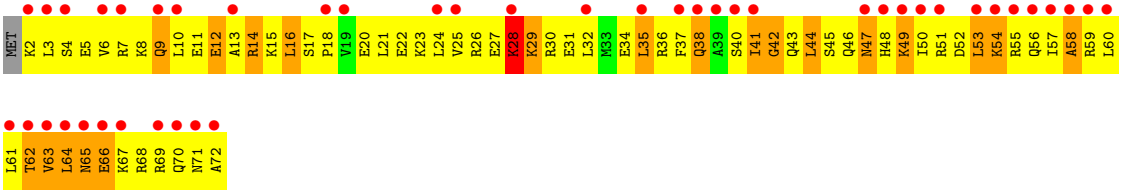
• Molecule 27: 50S RIBOSOMAL PROTEIN L28

Chain D1:



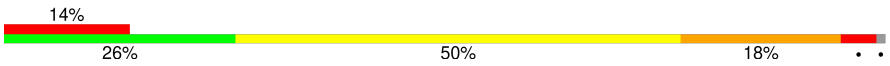
• Molecule 28: 50S RIBOSOMAL PROTEIN L29

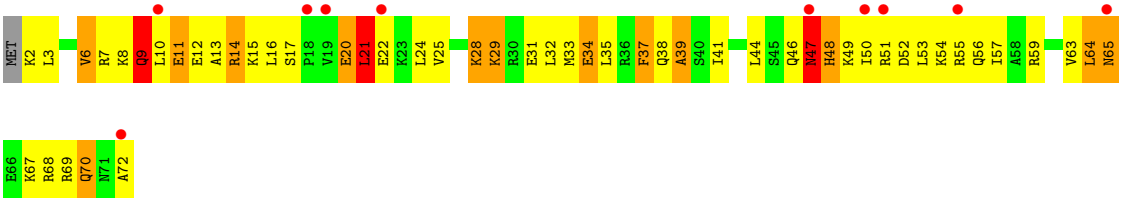
Chain B2:



• Molecule 28: 50S RIBOSOMAL PROTEIN L29

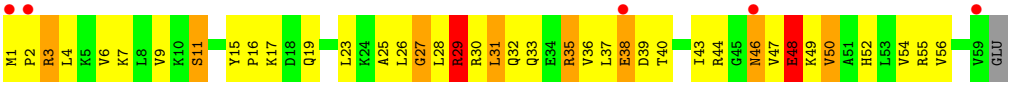
Chain D2:





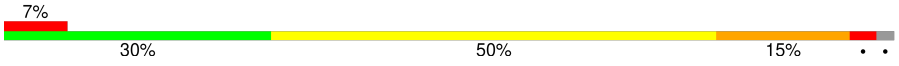
• Molecule 29: 50S RIBOSOMAL PROTEIN L30

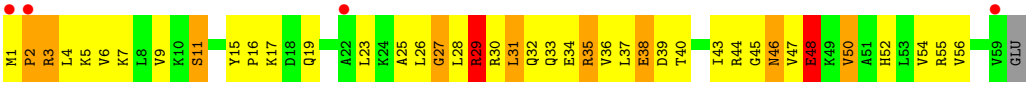
Chain B3:



• Molecule 29: 50S RIBOSOMAL PROTEIN L30

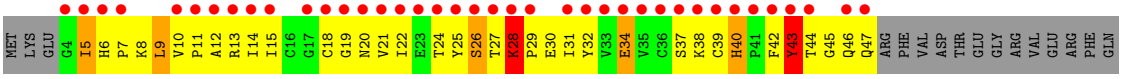
Chain D3:





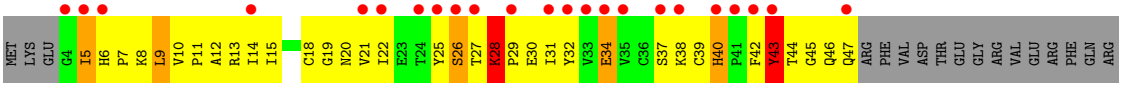
• Molecule 30: 50S RIBOSOMAL PROTEIN L31

Chain B4:



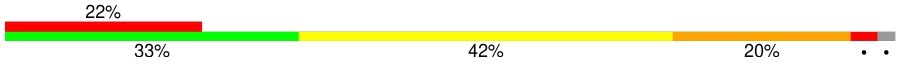
• Molecule 30: 50S RIBOSOMAL PROTEIN L31

Chain D4:



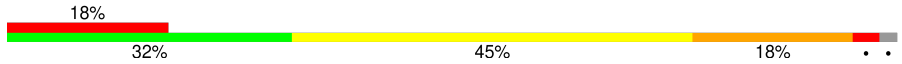
• Molecule 31: 50S RIBOSOMAL PROTEIN L32

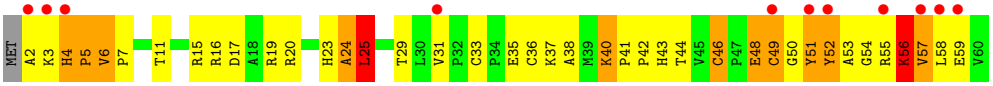
Chain B5:



• Molecule 31: 50S RIBOSOMAL PROTEIN L32

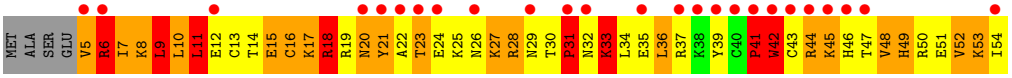
Chain D5:





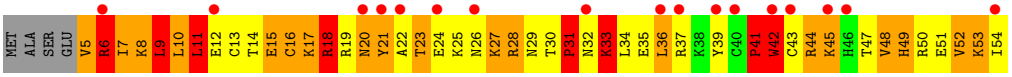
• Molecule 32: 50S RIBOSOMAL PROTEIN L33

Chain B6:



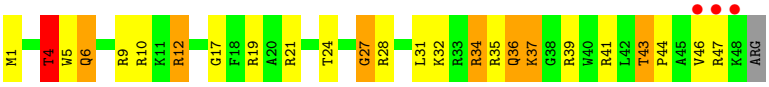
• Molecule 32: 50S RIBOSOMAL PROTEIN L33

Chain D6:



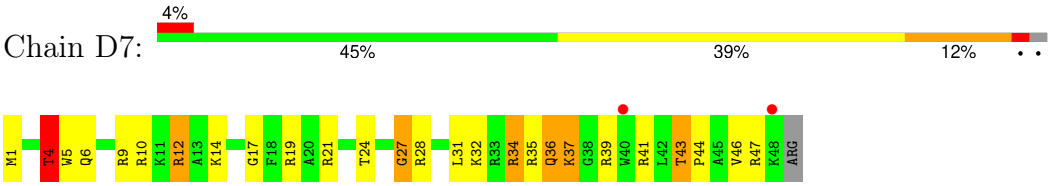
• Molecule 33: 50S RIBOSOMAL PROTEIN L34

Chain B7:



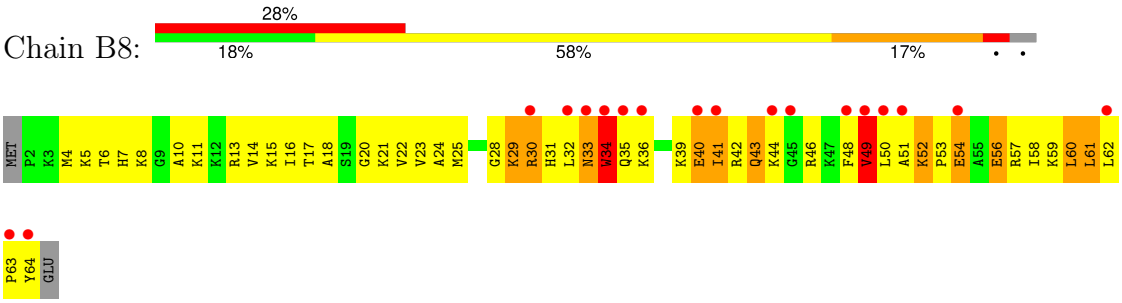
• Molecule 33: 50S RIBOSOMAL PROTEIN L34

Chain D7:



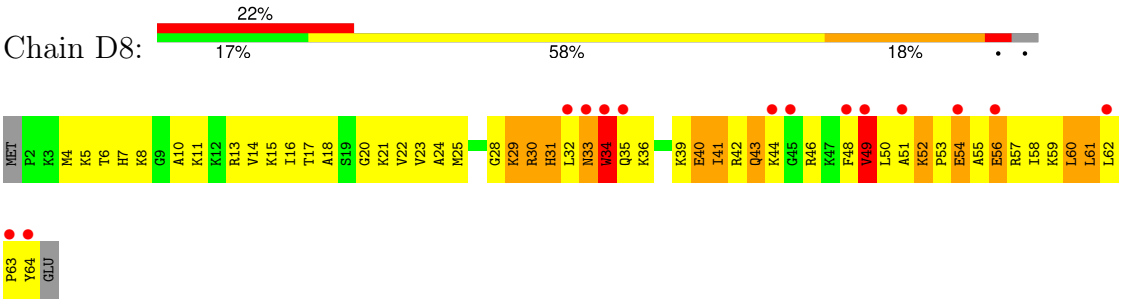
• Molecule 34: 50S RIBOSOMAL PROTEIN L35

Chain B8:



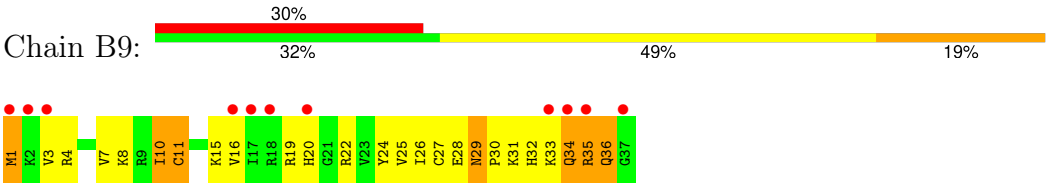
• Molecule 34: 50S RIBOSOMAL PROTEIN L35

Chain D8:



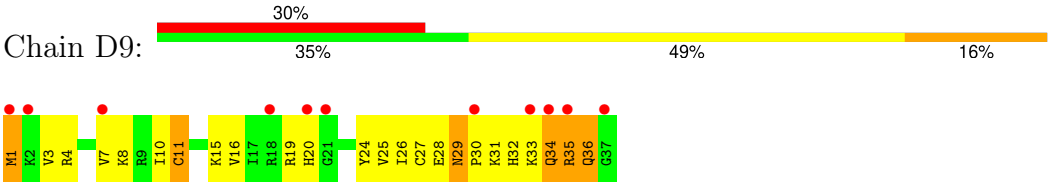
• Molecule 35: 50S RIBOSOMAL PROTEIN L36

Chain B9:



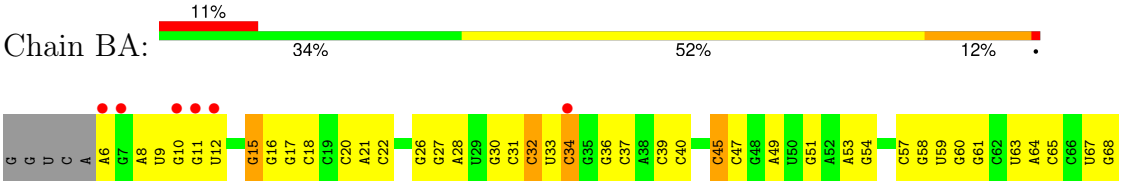
• Molecule 35: 50S RIBOSOMAL PROTEIN L36

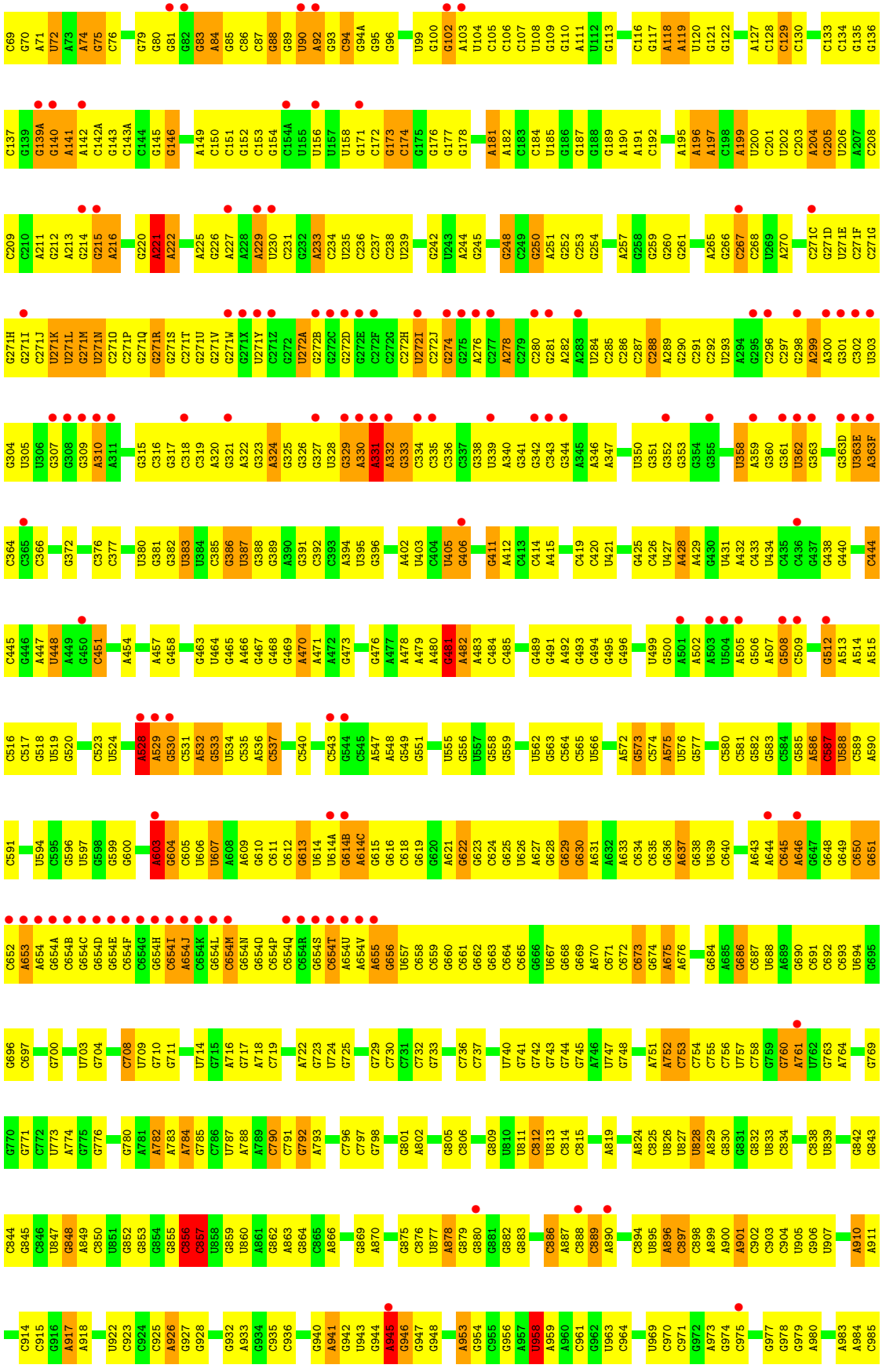
Chain D9:

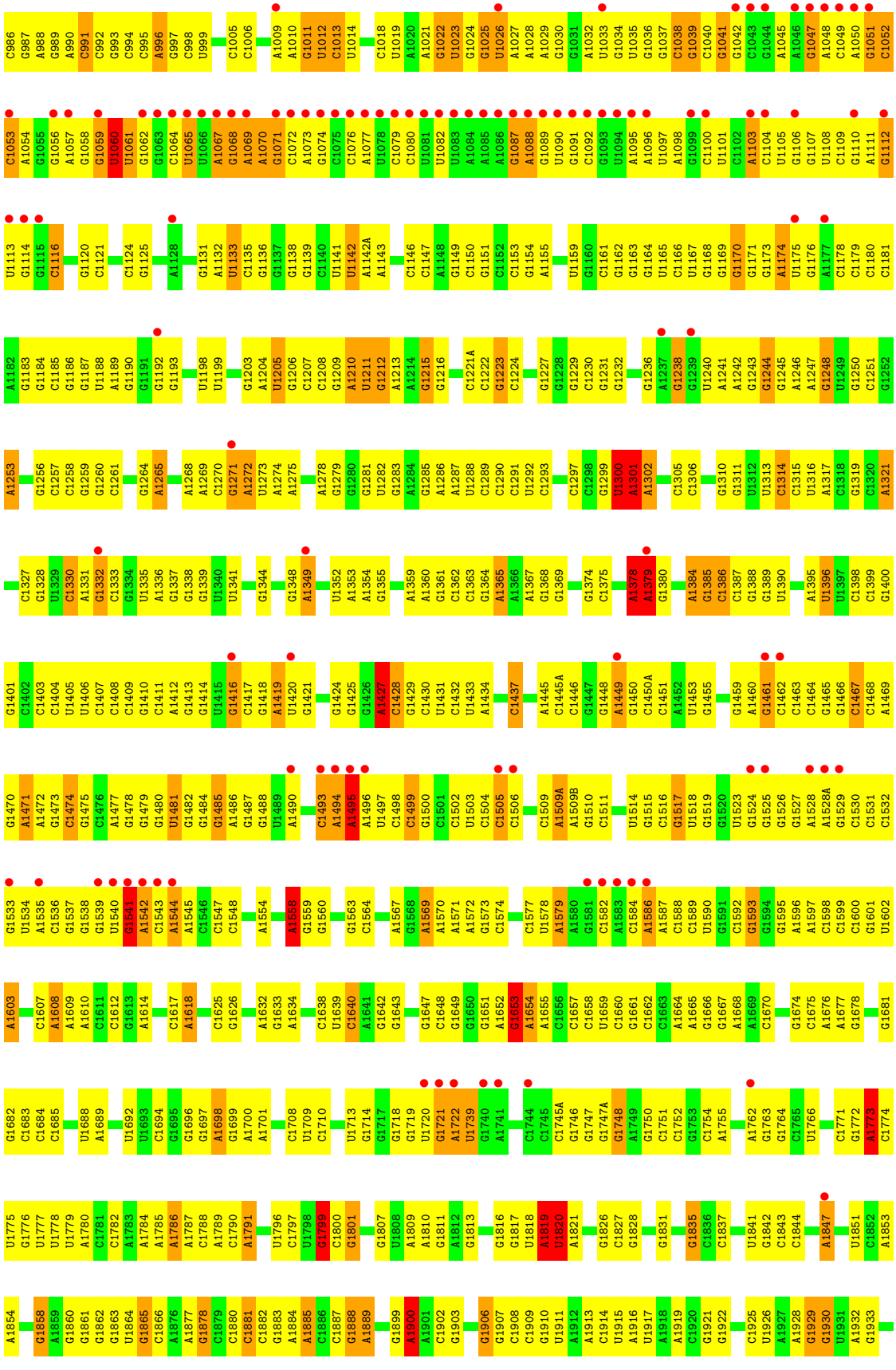


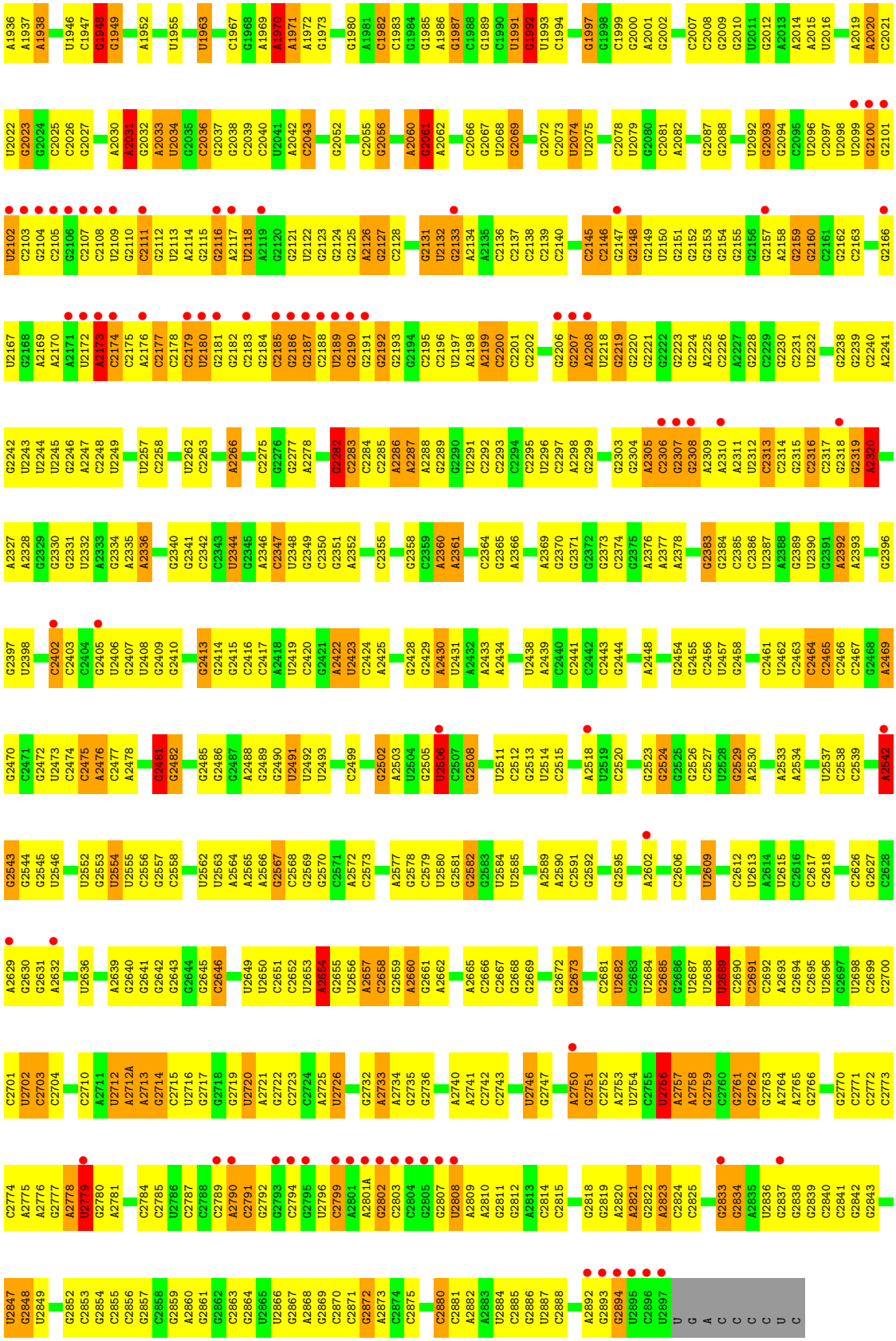
• Molecule 36: 23S RIBOSOMAL RNA

Chain BA:





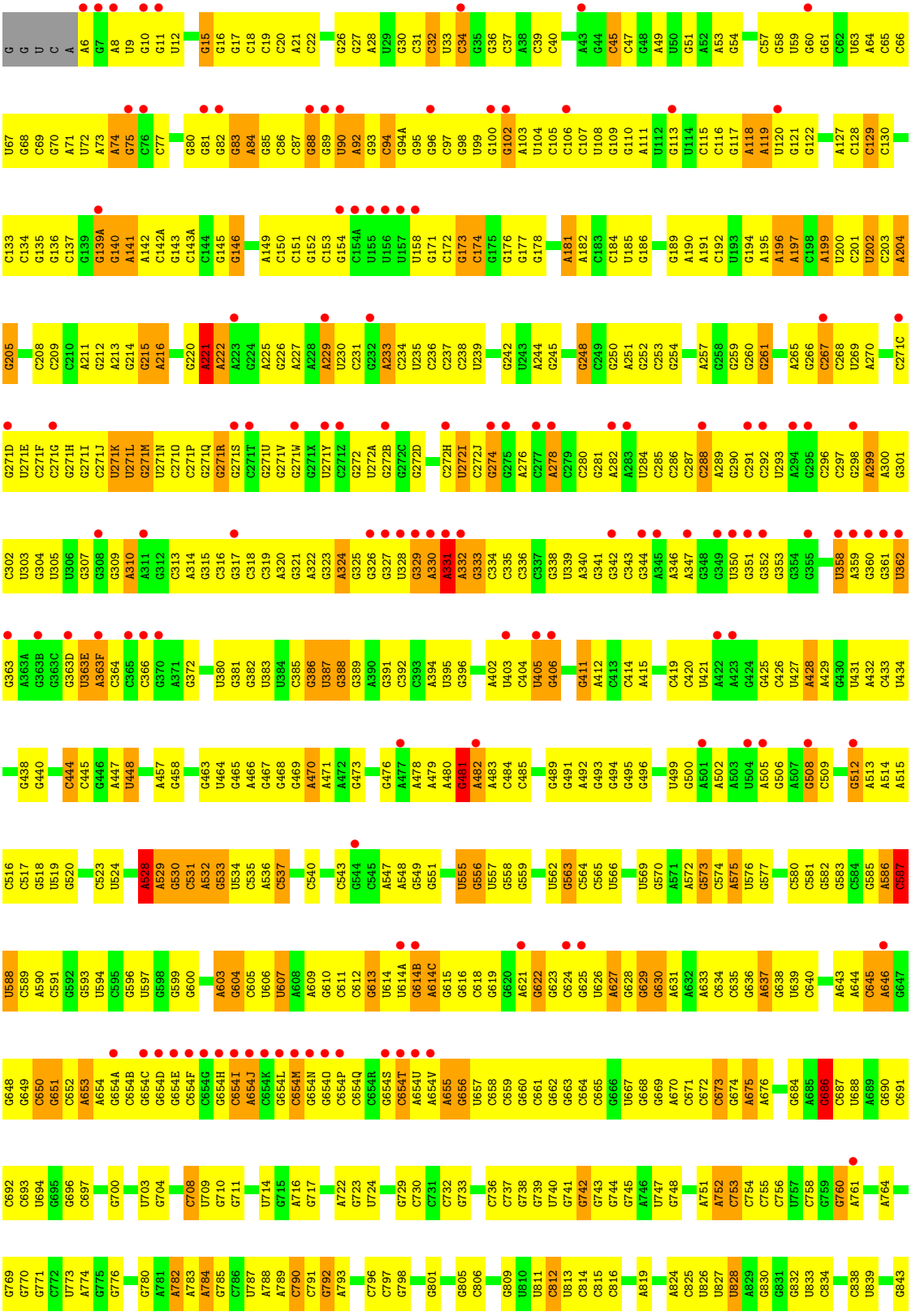

C986 G987 A988 G989 A990 C991 C992 G993 C994 C995 A996 G997 C998 U999 C1005 C1006 A1009 A1010 G1011 U1012 C1013 U1014 C1018 U1019 A1020 A1021 G1022 U1023 G1024 G1025 U1026 A1027 A1028 A1029 G1030 G1031 A1032 U1033 G1034 U1035 G1036 G1037 C1038 G1039 C1040 G1041 G1042 C1043 G1044 A1045 A1046 G1047 A1048 C1049 A1050 G1051 C1052
C1053 A1054 G1055 G1056 A1057 G1058 G1059 U1060 U1061 G1062 G1063 C1064 U1065 U1066 A1067 G1068 A1069 A1070 G1071 C1072 A1073 G1074 C1075 C1076 A1077 U1078 C1079 C1080 U1081 U1082 U1083 A1084 A1085 A1086 G1087 A1088 G1089 U1090 G1091 C1092 G1093 U1094 A1095 A1096 U1097 A1098 G1099 C1100 U1101 C1102 A1103 C1104 U1105 G1106 G1107 U1108 C1109 G1110 A1111 G1112
U1113 G1114 G1115 C1116 G1120 C1121 C1124 G1125 A1128 G1131 A1132 U1133 C1135 G1136 G1137 G1138 G1139 C1140 U1141 U1142 A1142A A1143 C1146 C1147 A1148 G1149 C1150 G1151 C1152 C1153 G1154 A1155 U1159 G1160 C1161 G1162 G1163 G1164 U1165 C1166 U1167 G1168 G1169 G1170 G1171 G1173 A1174 U1175 G1176 A1177 C1178 C1179 C1180 C1181
A1182 G1183 G1184 C1185 G1186 G1187 U1188 A1189 G1190 G1191 G1192 G1193 U1198 U1199 G1203 A1204 U1205 G1206 C1207 C1208 G1209 A1210 U1211 G1212 A1213 A1214 G1215 G1216 C1221A C1222 G1223 C1224 G1227 G1228 G1229 C1230 G1231 G1232 G1236 A1237 G1238 G1239 U1240 A1241 A1242 G1243 G1244 G1245 A1246 A1247 G1248 U1249 G1250 C1251 G1252
A1253 G1256 C1257 C1258 G1259 G1260 C1261 G1264 A1265 A1268 A1269 C1270 G1271 A1272 U1273 A1274 A1275 A1278 G1279 G1280 G1281 U1282 G1283 A1284 G1285 A1286 A1287 U1288 C1289 C1290 C1291 U1292 C1293 C1297 C1298 G1299 U1300 A1301 A1302 C1305 C1306 G1310 G1311 U1312 U1313 C1314 C1315 U1316 A1317 C1318 G1319 C1320 A1321
C1327 G1328 U1329 C1330 A1331 G1332 C1333 G1334 U1335 A1336 G1337 G1338 G1339 U1340 U1341 G1344 G1348 A1349 U1352 A1353 A1354 G1355 A1359 A1360 C1361 C1362 C1363 C1364 A1365 A1366 A1367 G1368 G1369 G1374 C1375 A1378 A1379 G1380 A1384 G1385 C1386 C1387 G1388 G1389 U1390 A1395 U1396 U1397 C1398 G1399 G1400
G1401 C1402 C1403 C1404 U1405 U1406 C1407 C1408 C1409 G1410 C1411 A1412 G1413 G1414 U1415 G1416 C1417 G1418 A1419 U1420 G1421 G1424 G1425 G1426 A1427 C1428 G1429 C1430 U1431 C1432 U1433 A1434 C1437 A1445 C1445A C1446 G1447 G1448 A1449 G1450 C1450A C1451 A1452 U1453 G1455 G1459 A1460 G1461 C1462 C1463 C1464 G1465 G1466 C1467 C1468 A1469
G1470 A1471 A1472 G1473 C1474 G1475 C1476 A1477 C1478 G1479 G1480 U1481 G1482 G1484 G1485 A1486 G1487 G1488 U1499 A1490 C1493 A1494 A1495 A1496 U1497 C1498 C1499 C1500 C1501 C1502 U1503 C1504 C1505 C1506 C1509 A1509A A1509B G1510 C1511 U1514 G1515 C1516 G1517 U1518 G1519 G1520 U1523 G1524 G1525 G1526 G1527 A1528 A1528A G1529 C1530 C1531 C1532
G1533 U1534 A1535 C1536 G1537 G1538 G1539 U1540 G1541 A1542 C1543 A1544 A1545 C1546 C1547 C1548 A1554 A1558 G1559 G1560 G1563 C1564 A1567 G1568 A1569 A1570 A1571 A1572 G1573 C1574 C1577 U1578 A1579 A1580 G1581 C1582 A1583 C1584 A1586 A1587 C1588 C1589 U1590 G1691 C1592 G1593 G1594 G1595 A1596 A1597 C1598 C1599 C1600 G1601 U1602
A1603 C1607 A1608 A1609 A1610 C1611 C1612 G1613 A1614 C1617 A1618 C1625 G1626 A1632 G1633 A1634 C1638 U1639 C1640 A1641 G1642 G1643 G1647 C1648 G1649 G1650 C1651 A1652 G1653 A1654 A1655 C1656 C1657 C1658 U1659 C1660 G1661 C1662 C1663 A1664 A1665 G1666 G1667 A1668 A1669 C1670 G1674 C1675 A1676 A1677 G1678 G1681
G1682 C1683 C1684 C1685 U1688 A1689 U1692 U1693 C1694 G1695 G1696 G1697 A1698 G1699 A1700 A1701 C1708 U1709 C1710 U1713 G1714 G1717 G1718 G1719 U1720 G1721 A1722 U1739 G1740 A1741 C1744 C1745 C1745A G1746 G1747 G1747A G1748 A1749 G1750 C1751 C1752 G1753 C1754 A1755 A1762 G1763 G1764 C1765 U1766 C1771 A1772 A1773 C1774
U1775 G1776 U1777 U1778 U1779 A1780 C1781 C1782 A1783 A1784 A1785 A1786 A1787 C1788 A1789 C1790 A1791 U1796 C1797 U1798 G1799 C1800 G1801 G1807 U1808 A1809 A1810 G1811 A1812 G1813 G1816 G1817 U1818 A1819 U1820 A1821 G1826 C1827 G1828 G1831 G1835 C1836 C1837 U1841 G1842 C1843 C1844 A1847 U1851 C1852 A1853
A1854 G1858 A1859 G1860 G1861 G1862 G1863 U1864 G1865 C1866 A1876 A1877 G1878 C1879 C1880 C1881 C1882 G1883 A1884 A1885 C1886 C1887 G1888 A1889 G1899 A1900 A1901 C1902 G1903 G1906 G1907 C1908 C1909 G1910 U1911 A1912 A1913 C1914 U1915 A1916 U1917 A1918 A1919 C1920 G1921 G1922 C1925 U1926 A1927 A1928 G1929 G1930 U1931 A1932 G1933

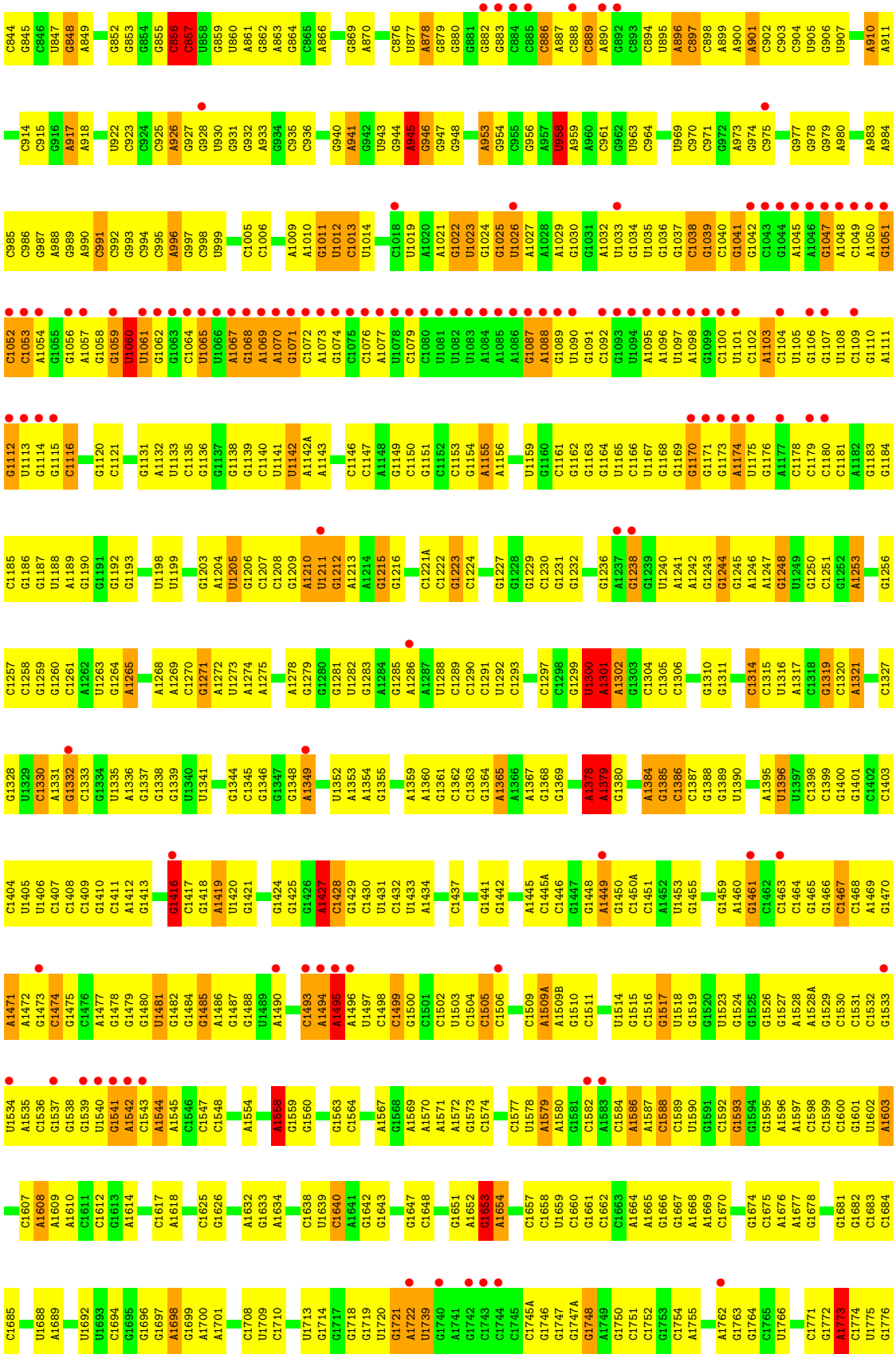


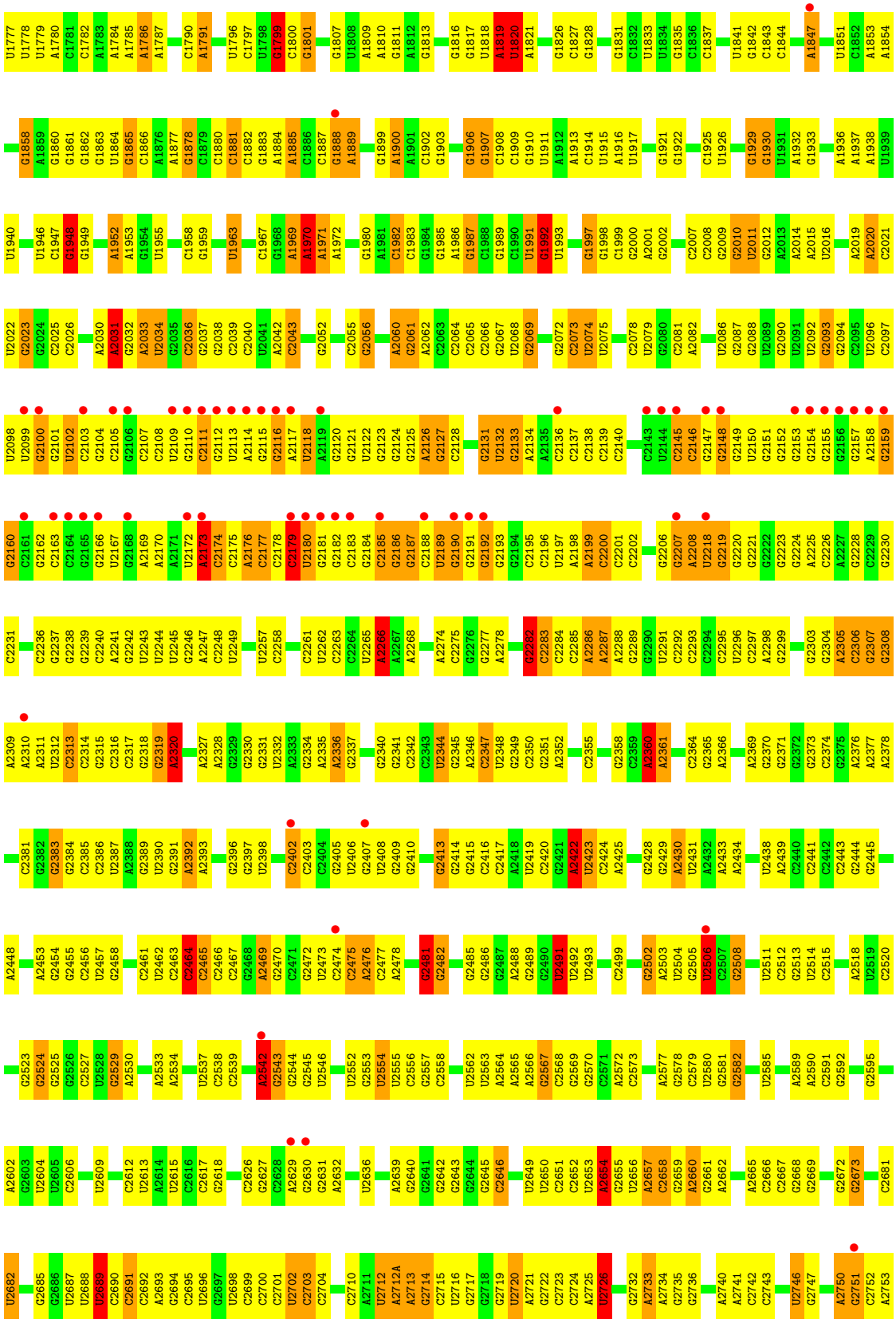
• Molecule 36: 23S RIBOSOMAL RNA

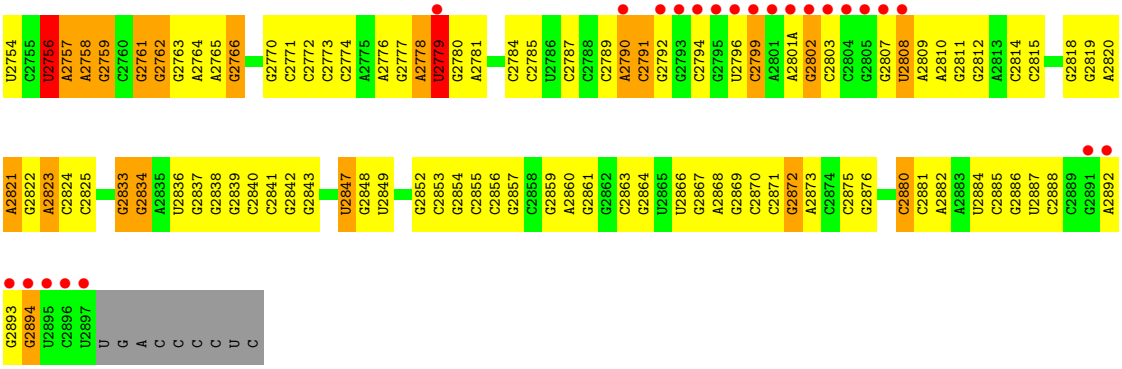
Chain DA:

11%
33%
52%
12%


G C U C A A6 G7 A8 U9 G10 G11 U12 G15 G16 G17 C18 C19 C20 A21 C22 G26 G27 A28 U29 G30 C31 C32 U33 C34 G35 G36 C37 A38 C39 C40 A43 G44 C45 C47 G48 A49 U50 G51 A52 A53 G54 C57 G58 U59 G60 G61 C62 U63 A64 C65 C66
U67 G68 C69 G70 A71 U72 A73 A74 G75 C76 C77 G80 G81 G82 G83 A84 G85 C86 C87 G88 G89 U90 A92 G93 C94 G94A G95 G96 C97 G98 U99 G100 G102 A103 U104 C105 C106 C107 U108 G109 G110 A111 U112 G113 U114 C115 C116 G117 A118 A119 U120 G121 G122 A127 C128 C129 C130
C133 C134 G135 G136 C137 G139 G139A G140 A141 A142 C142A G143 C143A C144 G145 G146 A149 C150 C151 G152 C153 G154 C154A U155 U156 U157 U158 G171 C172 G173 C174 G175 G176 G177 G178 A181 A182 C183 C184 U185 G186 G189 A190 A191 C192 U193 G194 A195 A196 A197 C198 A199 U200 C201 U202 C203 A204
G205 C208 C209 C210 A211 G212 A213 G214 G215 A216 G220 A221 A222 A223 G224 A225 G226 A227 A228 A229 U230 C231 G232 A233 C234 U235 C236 C237 C238 U239 G242 U243 A244 G245 G248 C249 G250 A251 G252 C253 G254 A257 G258 G259 G260 G261 A265 G266 C267 C268 U269 A270 C271C
G271D U271E C271F C271G G271H G271I C271J U271K U271L G271M U271N C271O C271P G271Q G271R G271S C271T C271U G271V G271W G271X U271Y C271Z G272 U272A G272B G272C G272D C272H U272I C272J G274 G275 A276 C277 A278 C279 C280 G281 A282 A283 U284 C285 C286 C287 C288 A289 G290 C291 C292 U293 A294 G295 C296 C297 G298 A299 A300 G301
C302 U303 G304 U305 U306 G307 G308 G309 A310 A311 G312 C313 A314 G315 C316 G317 C318 C319 A320 G321 A322 G323 A324 G325 G326 G327 U328 G329 A330 A331 A332 G333 C334 C335 C336 C337 G338 U339 A340 G341 G342 C343 G344 A345 A346 A347 G348 G349 U350 G351 G352 G353 G354 G355 U358 A359 G360 C361 U362
G363 A363A G363B G363C G363D U363E A363F C364 C365 C366 G370 A371 G372 U380 G381 G382 U383 U384 C385 G386 U387 G388 G389 A390 G391 C392 C393 A394 U395 G396 A402 U403 C404 U405 G406 G411 A412 C413 C414 A415 C419 C420 U421 A422 A423 G424 G425 C426 U427 A428 G429 G430 U431 A432 C433 U434
G438 G440 C444 C445 G446 A447 U448 A457 G458 G463 U464 G465 A466 G467 G468 G469 A470 A471 A472 G473 G476 A477 A478 A479 A480 G481 A482 A483 C484 C485 G489 G491 A492 G493 G494 G495 G496 U499 G500 A501 A502 A503 U504 A505 G506 A507 G508 C509 G512 A513 A514 A515
C516 C517 G518 U519 G520 C523 U524 A528 A529 G530 C531 A532 G533 U534 C535 A536 C537 C540 C543 G544 C545 A547 A548 G549 G551 U555 G556 U557 G558 G559 U562 G563 C564 C565 U566 U569 G570 A571 A572 G573 C574 A575 U576 G577 C580 C581 G582 G583 C584 G585 A586 C587
U588 C589 A590 C591 G592 G593 U594 C595 G596 U597 G598 G599 G600 A603 G604 C605 U606 U607 A608 A609 G610 C611 C612 G613 U614 U614A G614B A614C G615 G616 C618 G619 G620 A621 G622 G623 C624 G625 U626 A627 G628 G629 G630 A631 A632 A633 C634 C635 G636 A637 G638 U639 C640 A643 A644 C645 A646 G647
G648 G649 C650 G651 C652 A653 A654 G654A C654B G654C G654D G654E C654F C654G G654H C654I A654J G654K G654L C654M G654N G654O C654P G654Q G654R G654S C654T A654U A654V A655 G656 U657 C658 C659 G660 C661 G662 C663 C664 C665 G666 U667 G668 G669 A670 C671 C672 C673 G674 A675 A676 G684 A685 G686 C687 U688 A689 G690 C691
C692 C693 U694 G696 G696 C697 G700 U703 G704 C708 U709 G710 G711 U714 G715 A716 G717 A722 G723 U724 G729 C730 C731 C732 G733 C736 C737 G738 G739 U740 G741 G742 G743 G744 G745 A746 U747 G748 A751 A752 C753 C754 C755 C756 U757 C758 G759 G760 A761 A764
G769 G770 G771 C772 U773 A774 G775 G776 G780 A781 A782 A783 A784 G785 C786 U787 A788 A789 C790 C791 G792 A793 C796 C797 G798 G801 G805 C806 G809 U810 U811 C812 U813 C814 C815 C816 A819 A824 C825 U826 U827 U828 A829 G830 G831 G832 U833 C834 C838 U839 G843

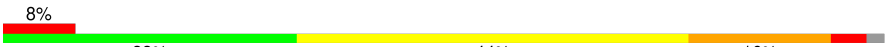


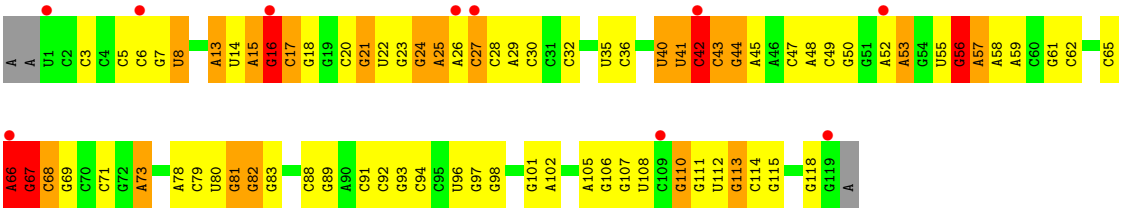




• Molecule 37: 5S RIBOSOMAL RNA

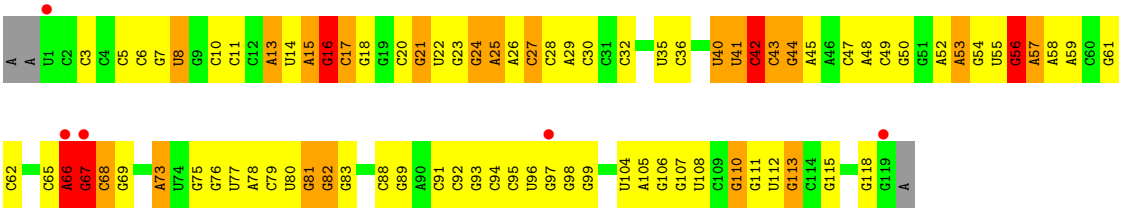
Chain BB:





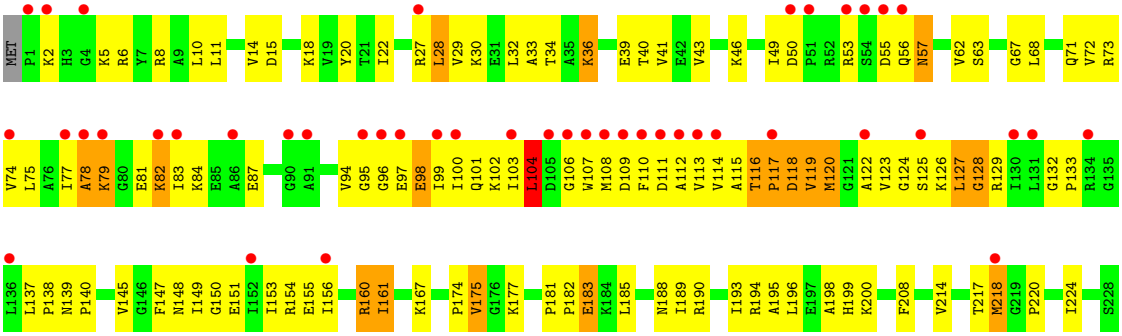
• Molecule 37: 5S RIBOSOMAL RNA

Chain DB:



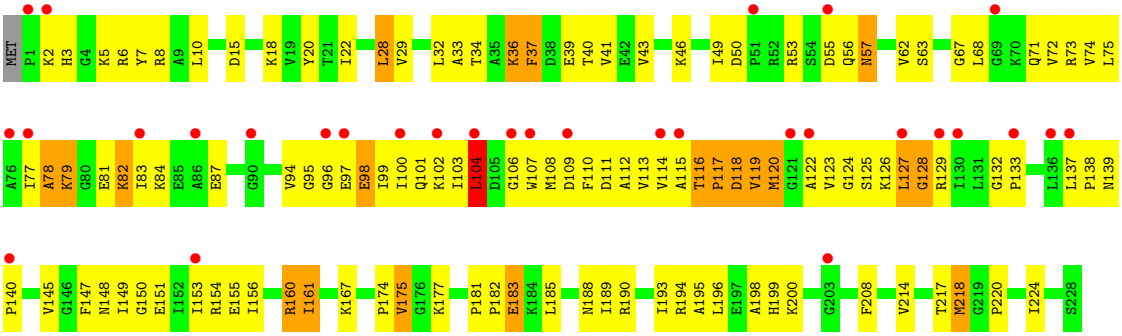
• Molecule 38: 50S RIBOSOMAL PROTEIN L1

Chain BC:



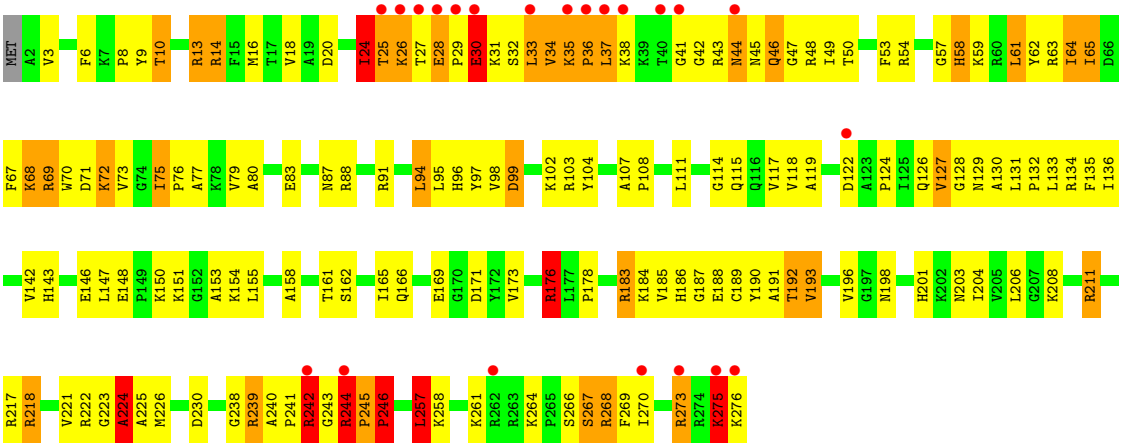
• Molecule 38: 50S RIBOSOMAL PROTEIN L1

Chain DC:



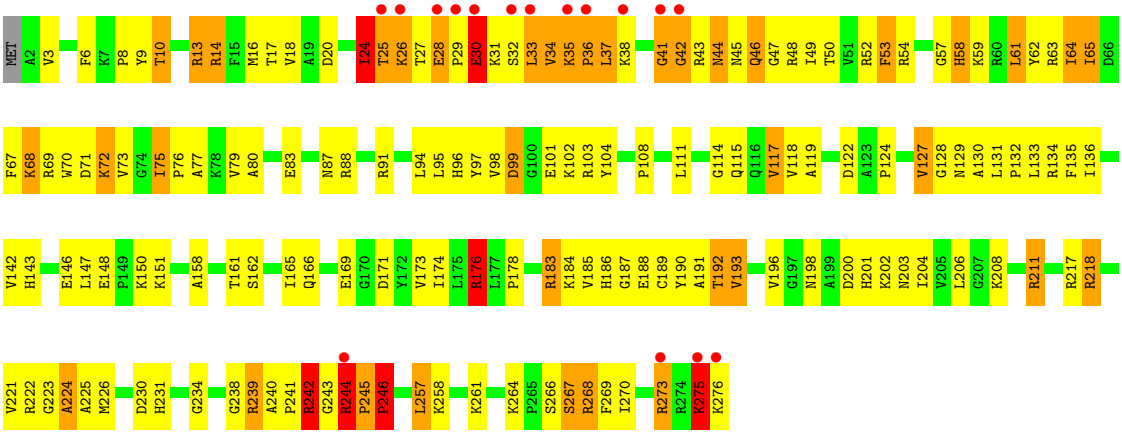
• Molecule 39: 50S RIBOSOMAL PROTEIN L2

Chain BD:



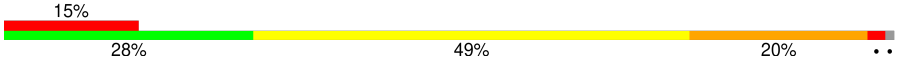
• Molecule 39: 50S RIBOSOMAL PROTEIN L2

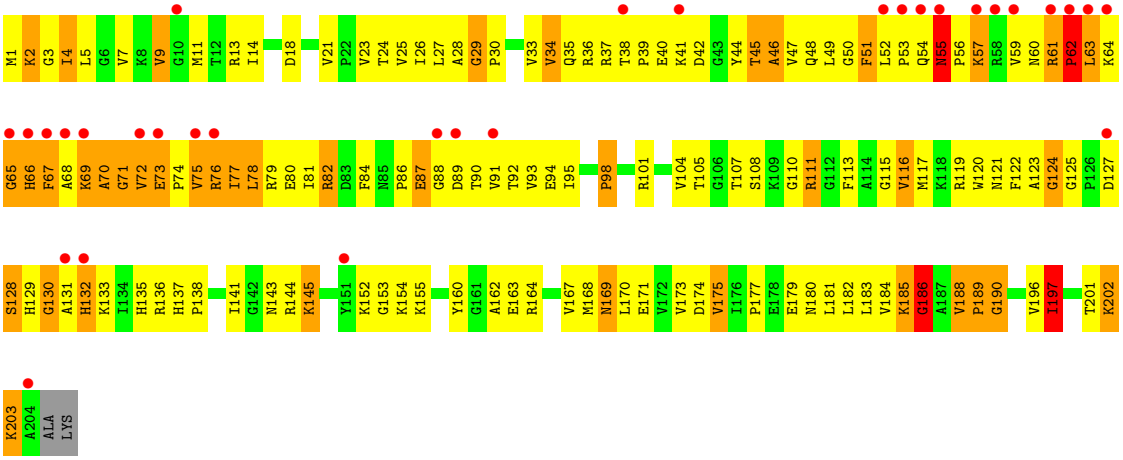
Chain DD:



• Molecule 40: 50S RIBOSOMAL PROTEIN L3

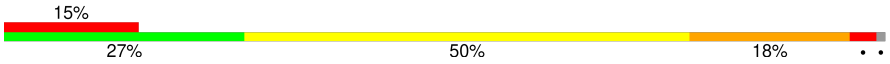
Chain BE:

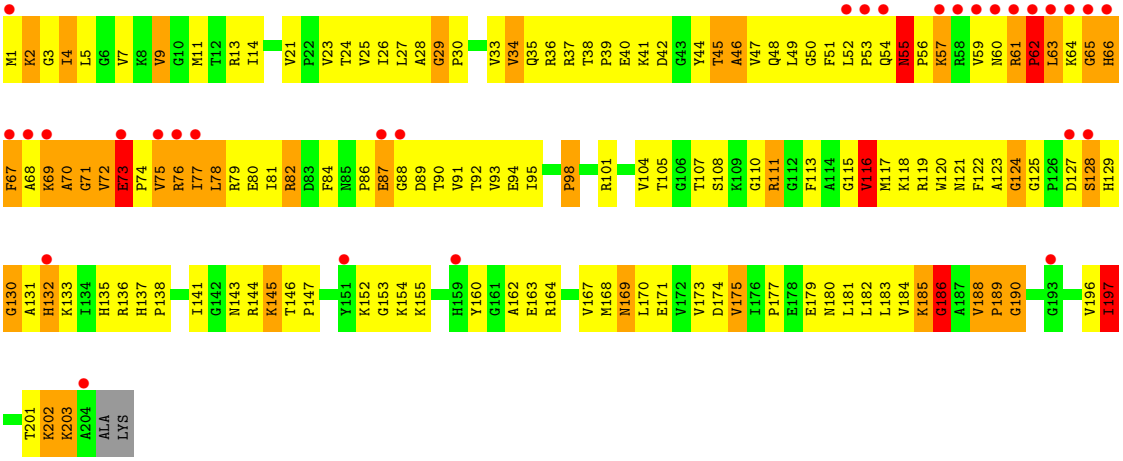




• Molecule 40: 50S RIBOSOMAL PROTEIN L3

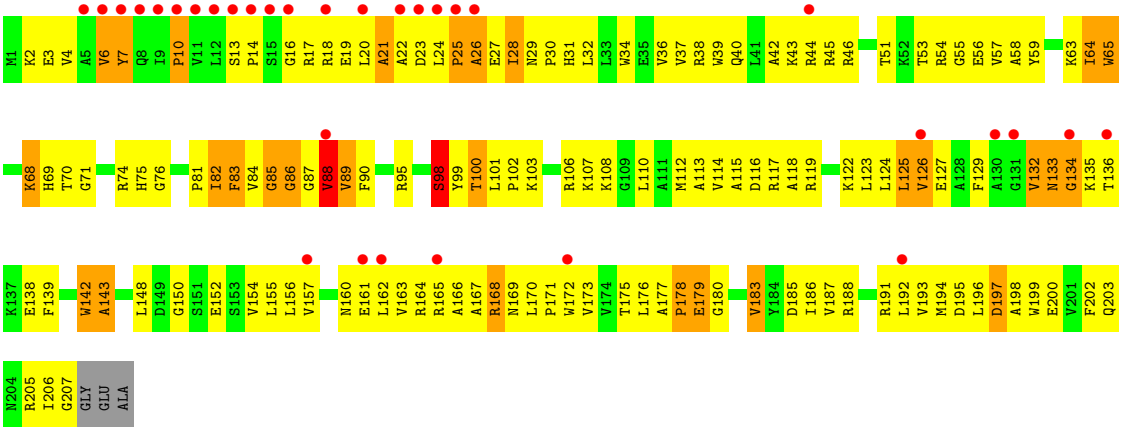
Chain DE:





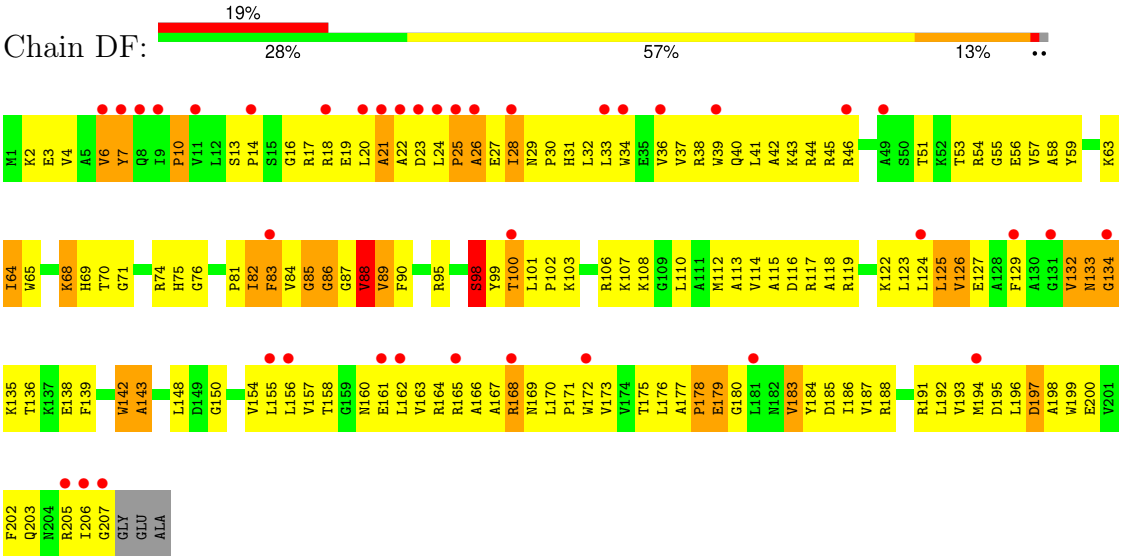
• Molecule 41: 50S RIBOSOMAL PROTEIN L4

Chain BF:



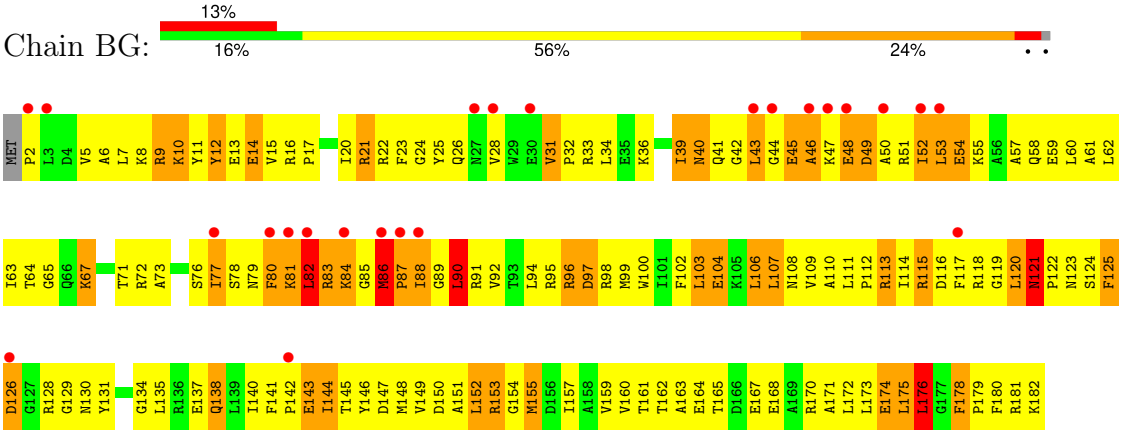
• Molecule 41: 50S RIBOSOMAL PROTEIN L4

Chain DF:



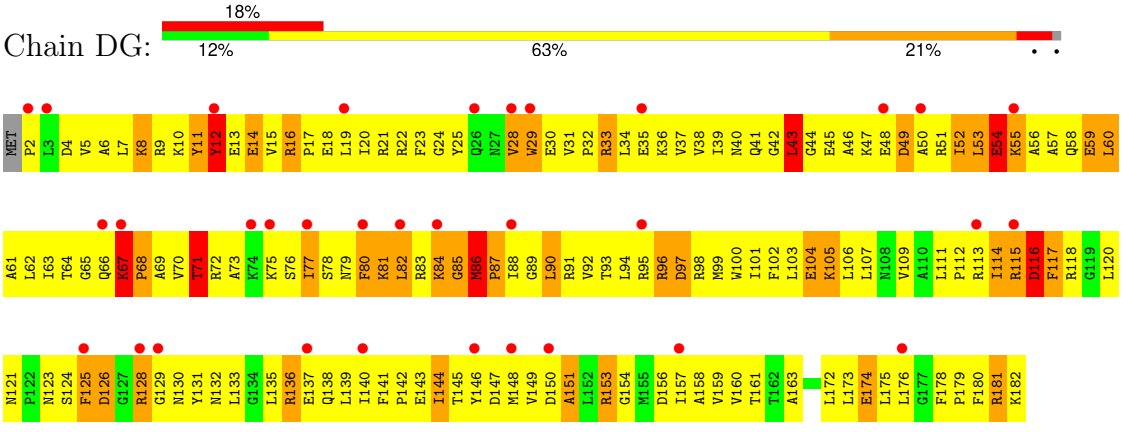
• Molecule 42: 50S RIBOSOMAL PROTEIN L5

Chain BG:



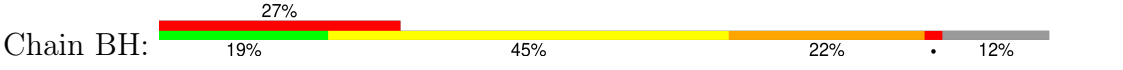
• Molecule 42: 50S RIBOSOMAL PROTEIN L5

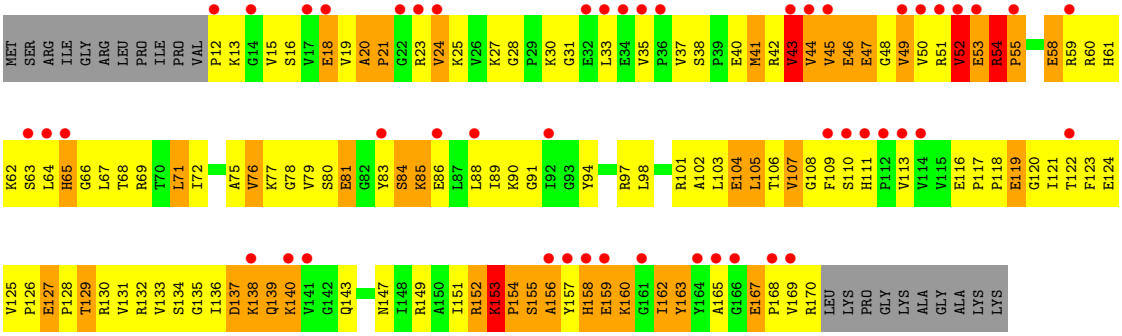
Chain DG:



• Molecule 43: 50S RIBOSOMAL PROTEIN L6

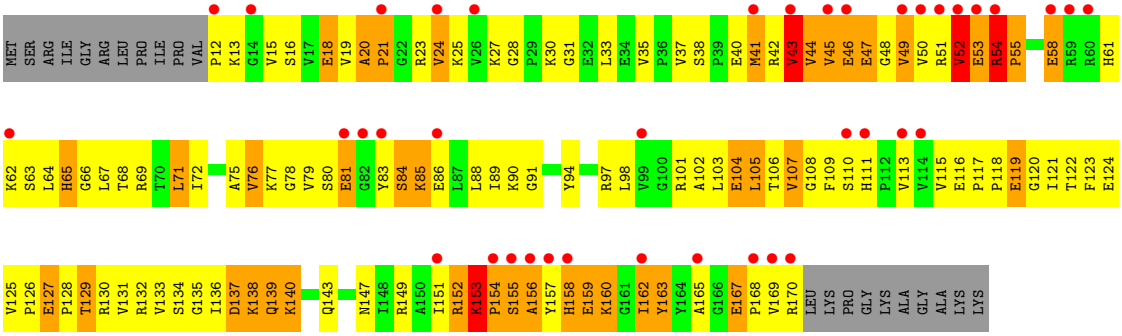
Chain BH:





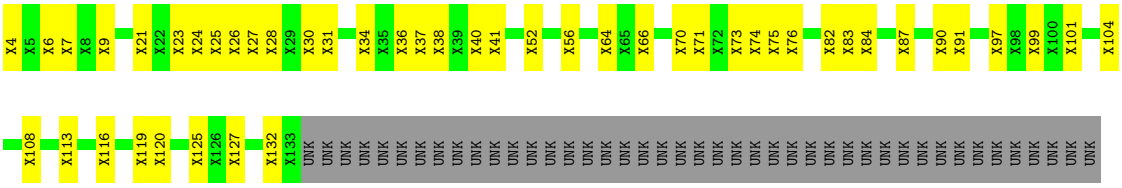
• Molecule 43: 50S RIBOSOMAL PROTEIN L6

Chain DH:



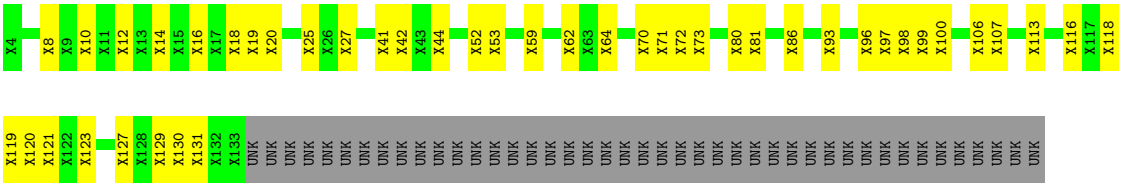
• Molecule 44: 50S RIBOSOMAL PROTEIN L10

Chain BJ:



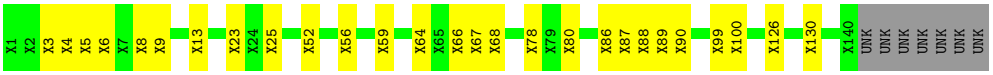
• Molecule 44: 50S RIBOSOMAL PROTEIN L10

Chain DJ:



• Molecule 45: 50S RIBOSOMAL PROTEIN L11

Chain BK:

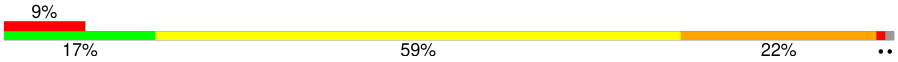


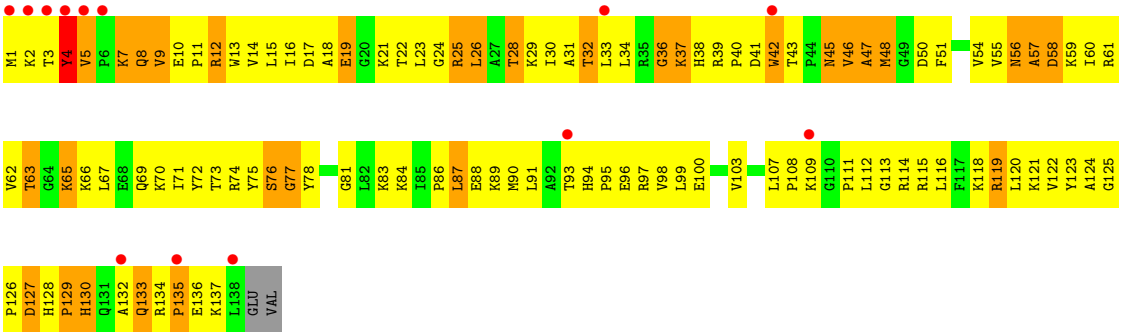
• Molecule 45: 50S RIBOSOMAL PROTEIN L11

Chain DK:

• Molecule 46: 50S RIBOSOMAL PROTEIN L13

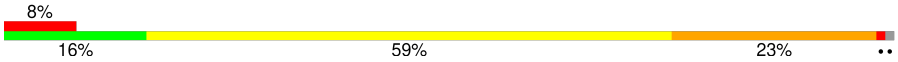
Chain BN:

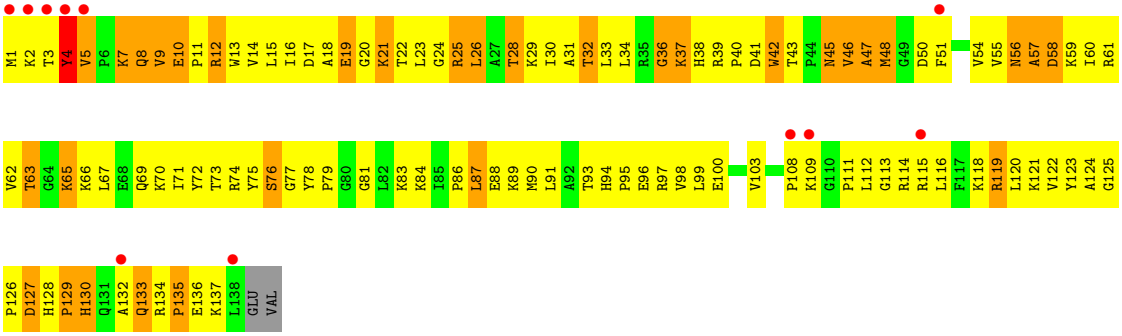




• Molecule 46: 50S RIBOSOMAL PROTEIN L13

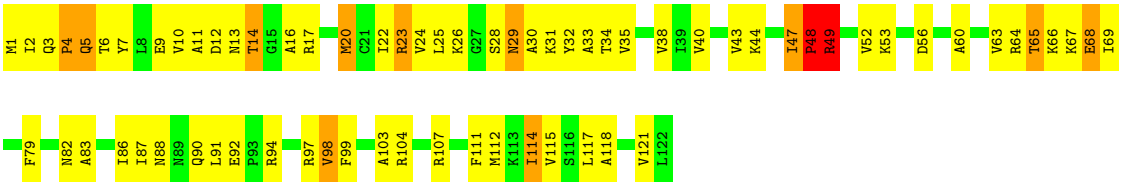
Chain DN:





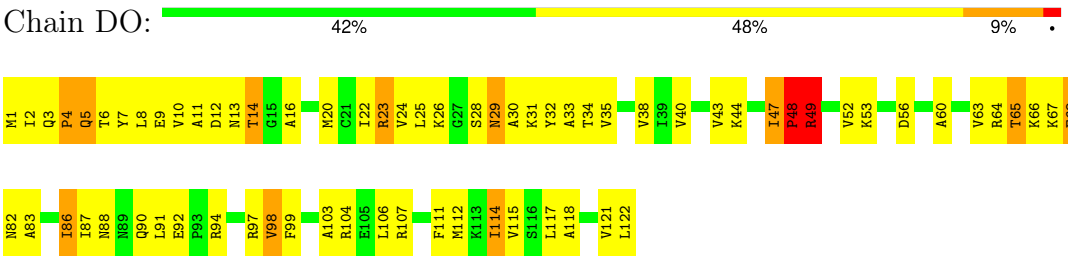
• Molecule 47: 50S RIBOSOMAL PROTEIN L14

Chain BO:



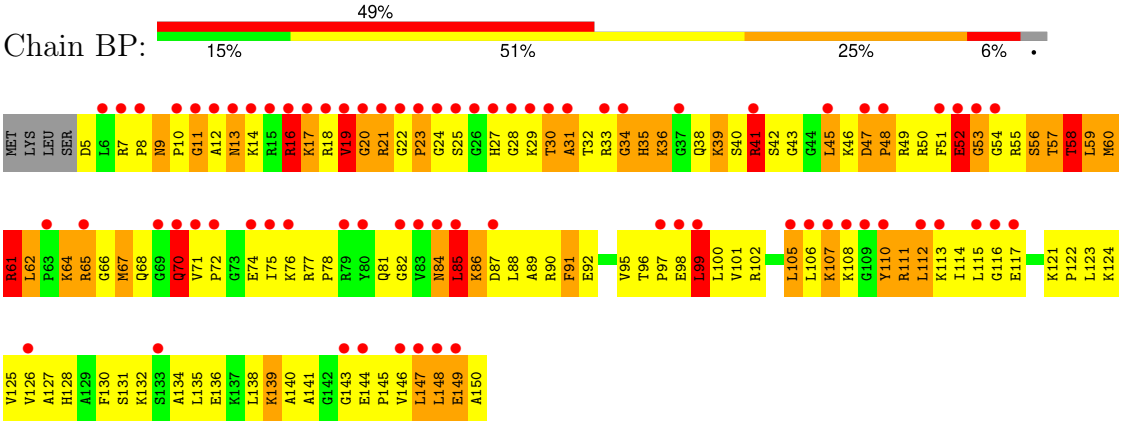
• Molecule 47: 50S RIBOSOMAL PROTEIN L14

Chain DO:



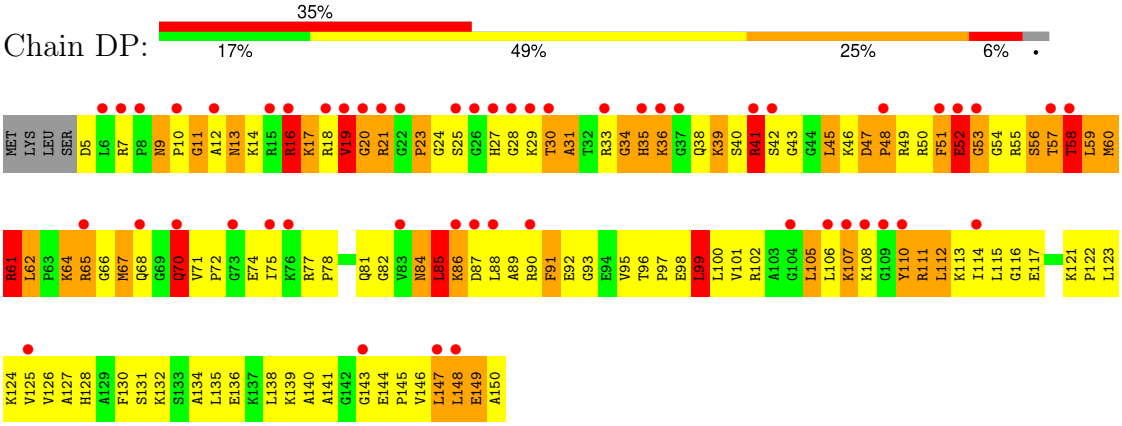
• Molecule 48: 50S RIBOSOMAL PROTEIN L15

Chain BP:



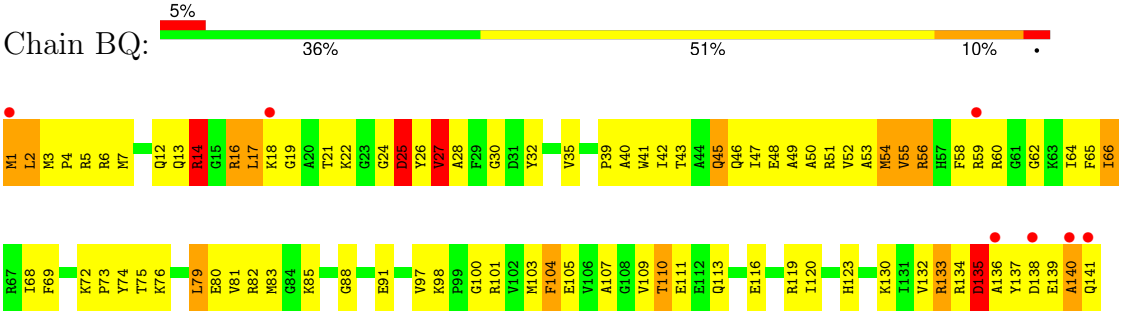
• Molecule 48: 50S RIBOSOMAL PROTEIN L15

Chain DP:



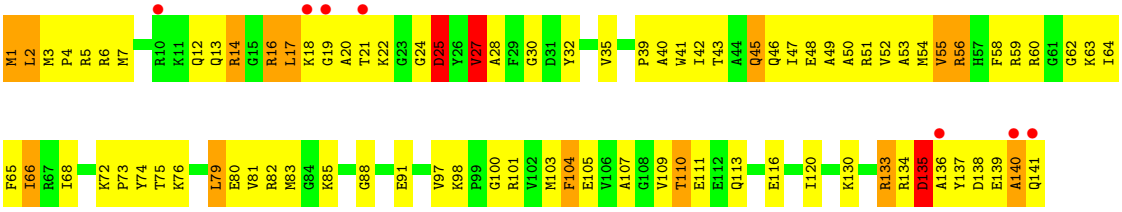
• Molecule 49: 50S RIBOSOMAL PROTEIN L16

Chain BQ:



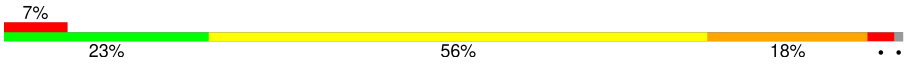
• Molecule 49: 50S RIBOSOMAL PROTEIN L16

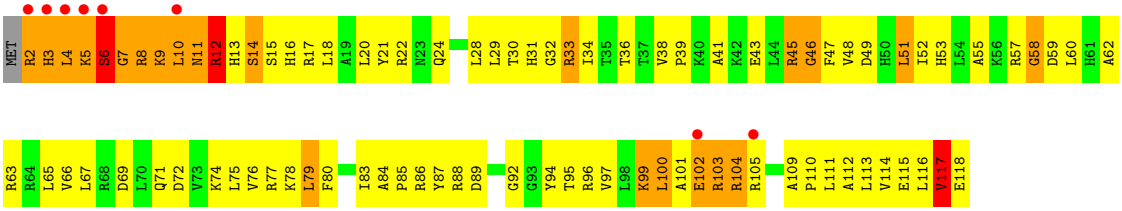
Chain DQ:



• Molecule 50: 50S RIBOSOMAL PROTEIN L17

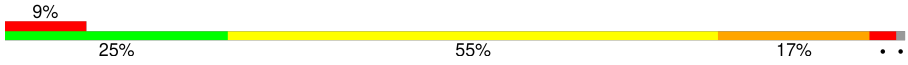
Chain BR:

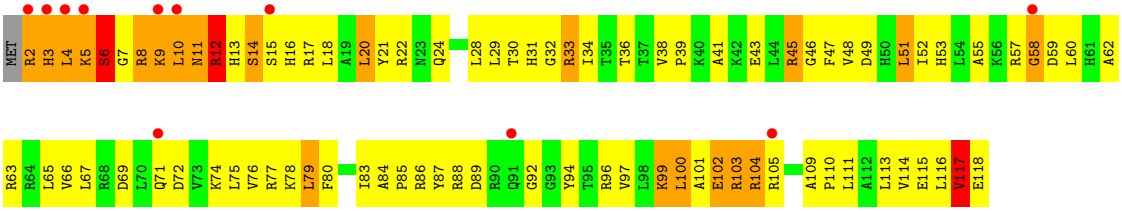




• Molecule 50: 50S RIBOSOMAL PROTEIN L17

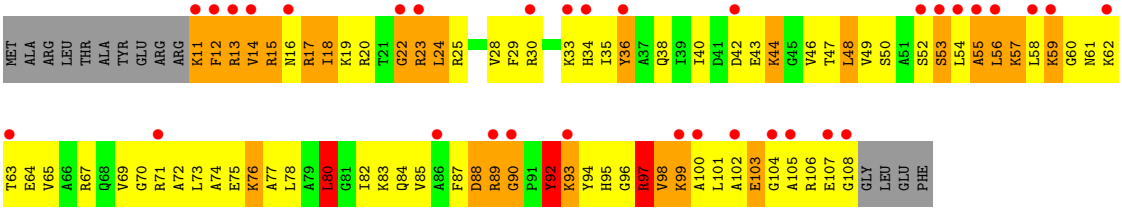
Chain DR:





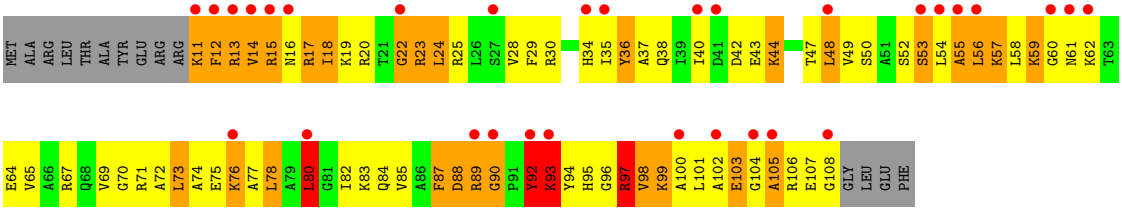
• Molecule 51: 50S RIBOSOMAL PROTEIN L18

Chain BS:



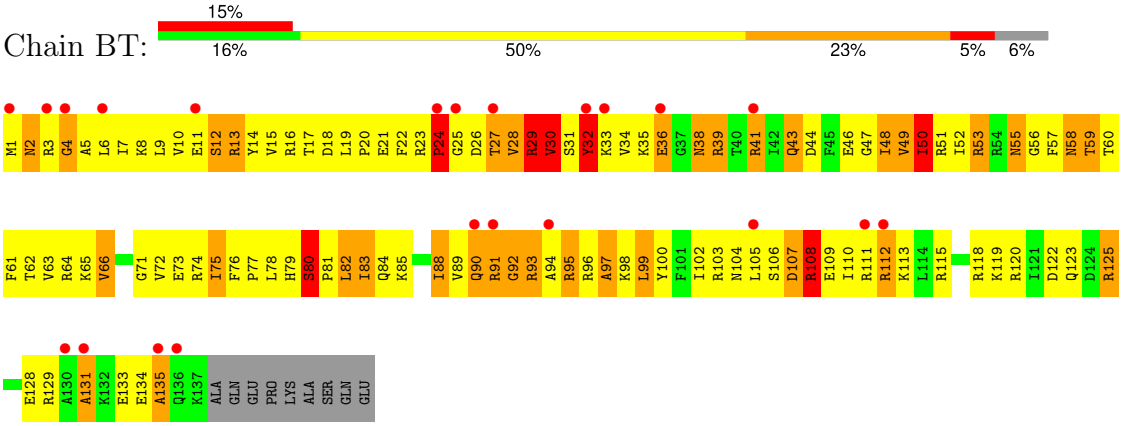
• Molecule 51: 50S RIBOSOMAL PROTEIN L18

Chain DS:



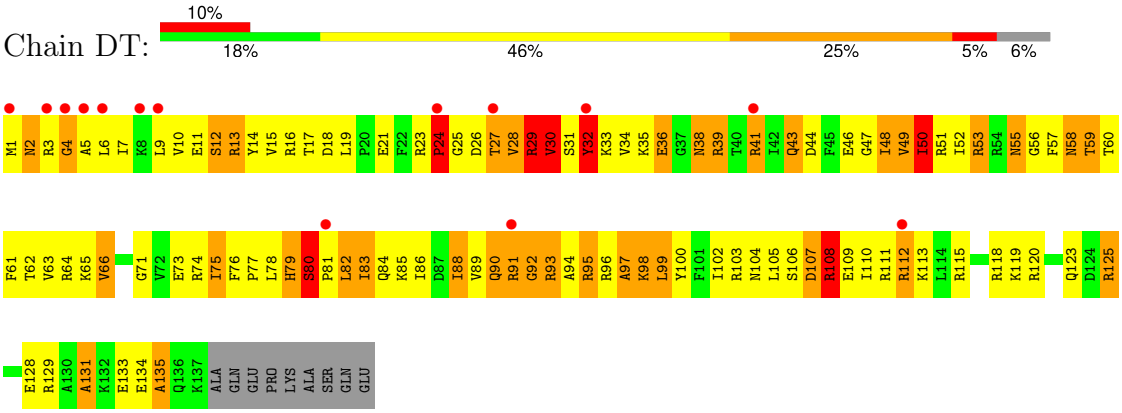
• Molecule 52: 50S RIBOSOMAL PROTEIN L19

Chain BT:



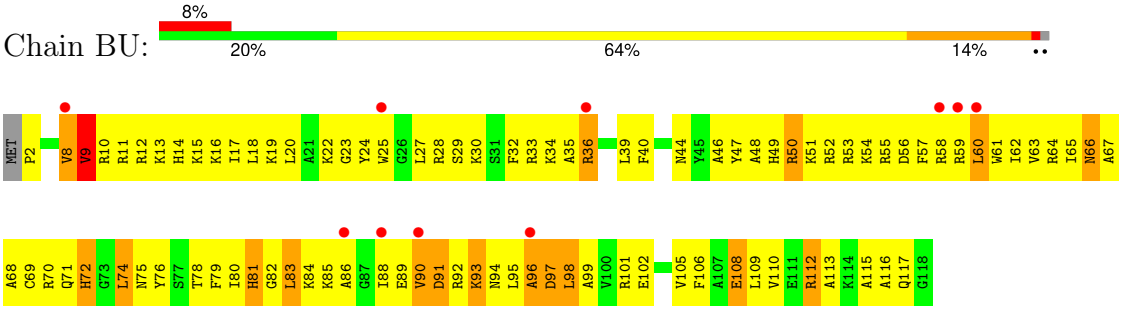
• Molecule 52: 50S RIBOSOMAL PROTEIN L19

Chain DT:



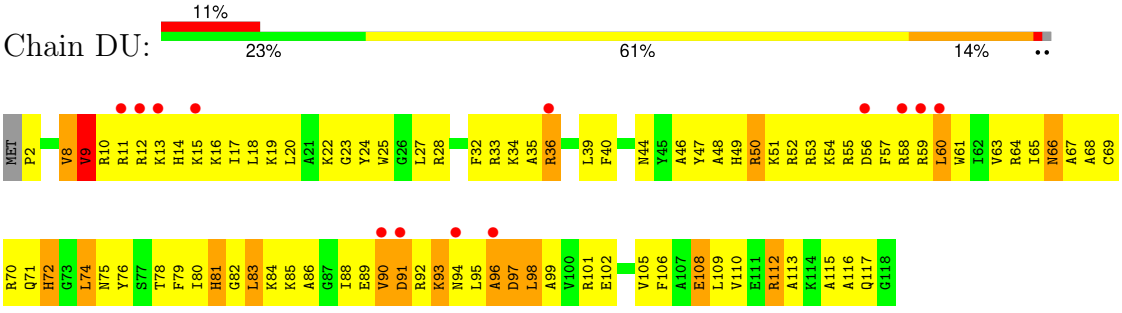
• Molecule 53: 50S RIBOSOMAL PROTEIN L20

Chain BU:



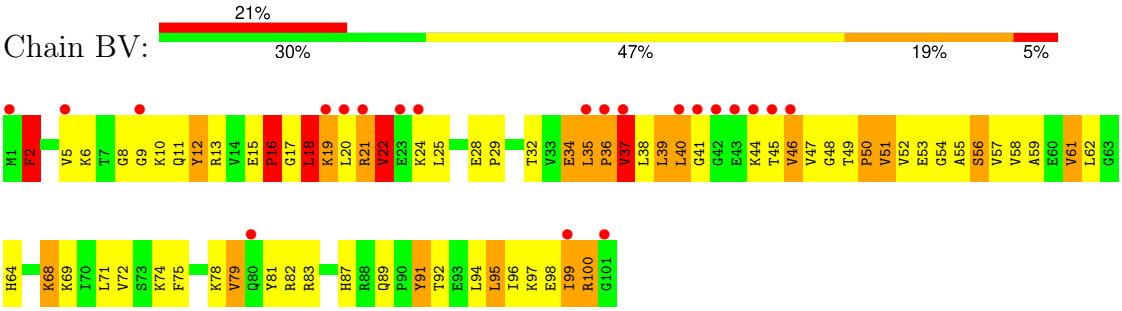
• Molecule 53: 50S RIBOSOMAL PROTEIN L20

Chain DU:



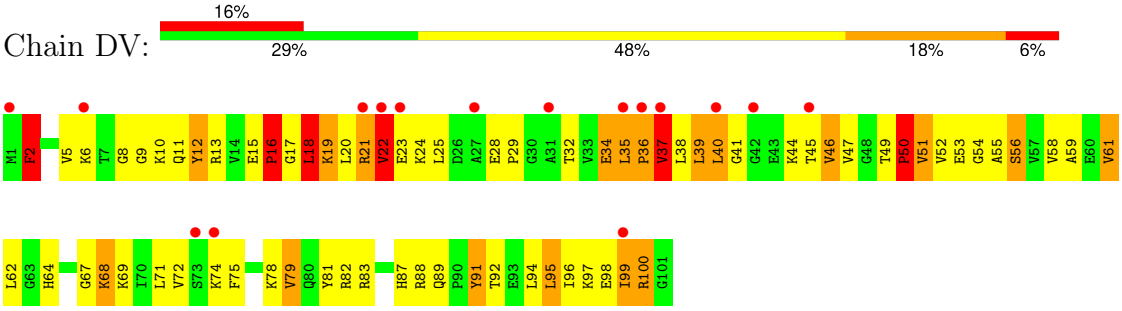
• Molecule 54: 50S RIBOSOMAL PROTEIN L21

Chain BV:



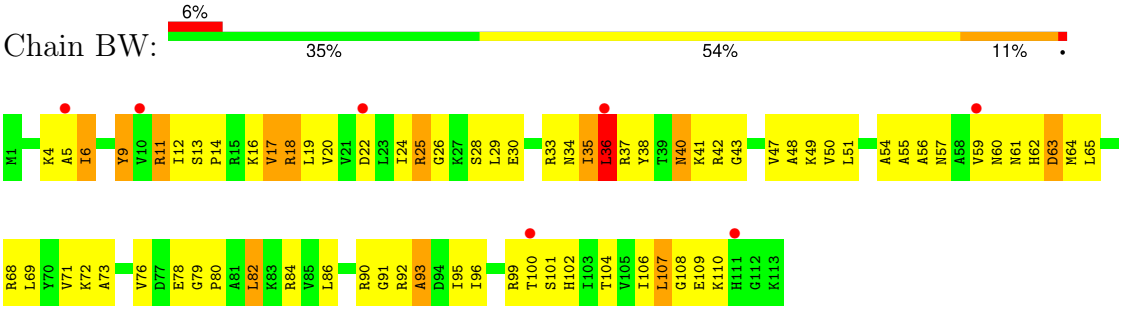
• Molecule 54: 50S RIBOSOMAL PROTEIN L21

Chain DV:



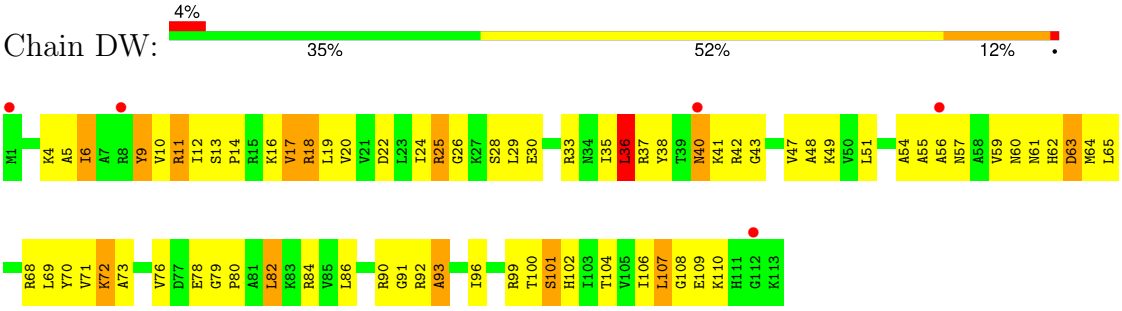
• Molecule 55: 50S RIBOSOMAL PROTEIN L22

Chain BW:



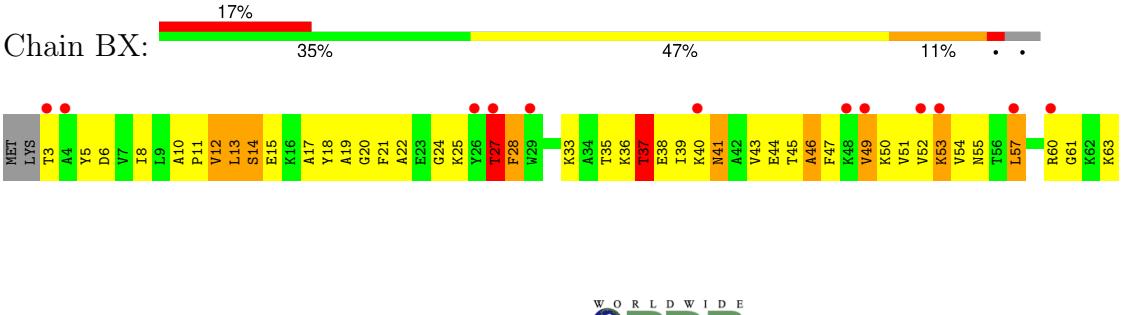
• Molecule 55: 50S RIBOSOMAL PROTEIN L22

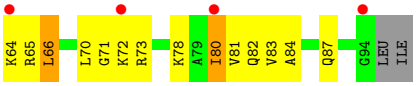
Chain DW:



• Molecule 56: 50S RIBOSOMAL PROTEIN L23

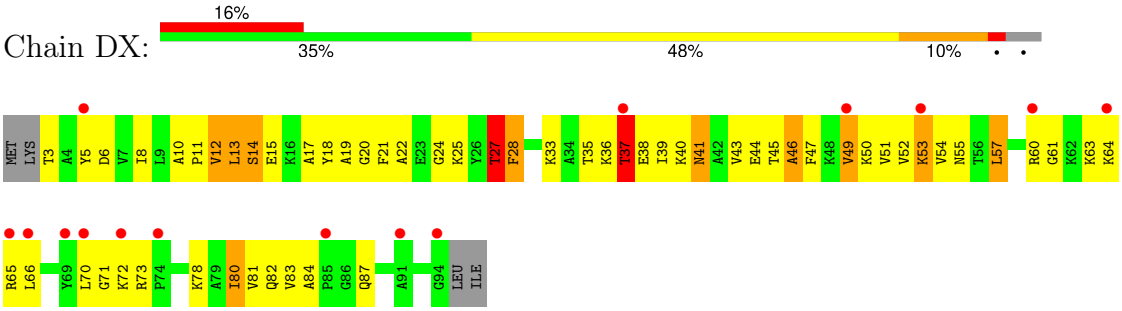
Chain BX:





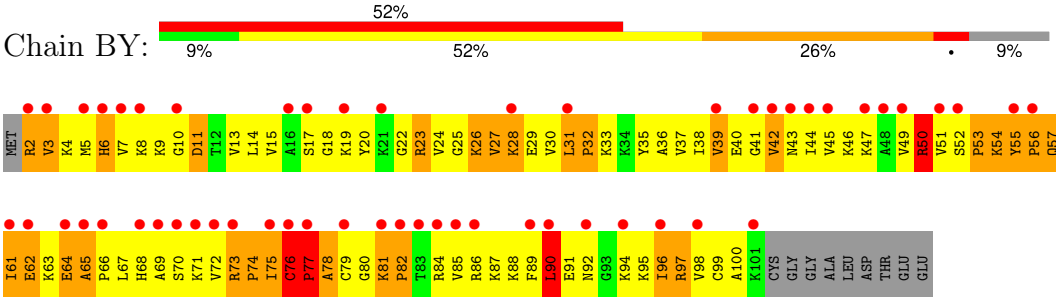
• Molecule 56: 50S RIBOSOMAL PROTEIN L23

Chain DX:



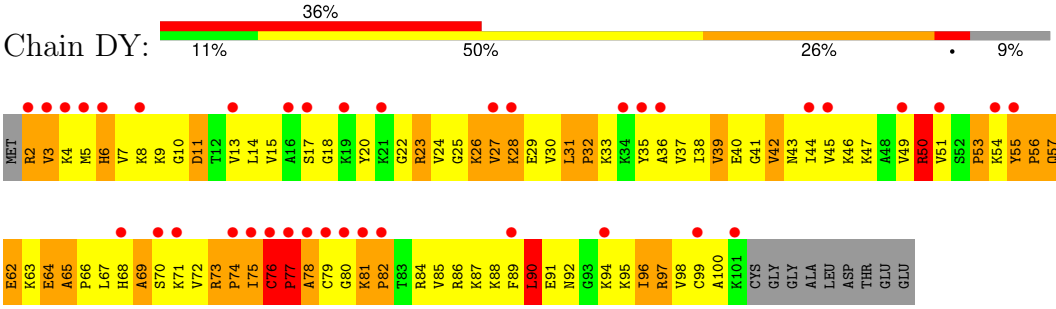
• Molecule 57: 50S RIBOSOMAL PROTEIN L24

Chain BY:



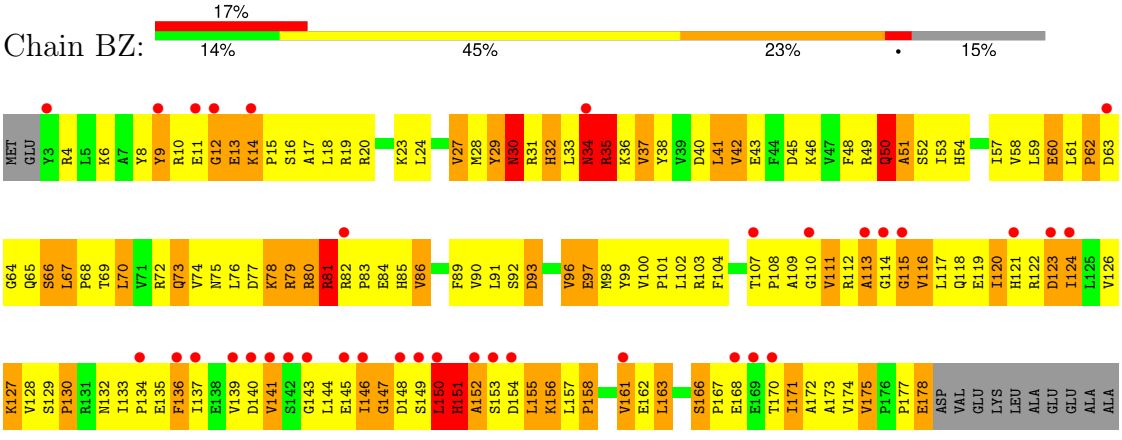
• Molecule 57: 50S RIBOSOMAL PROTEIN L24

Chain DY:



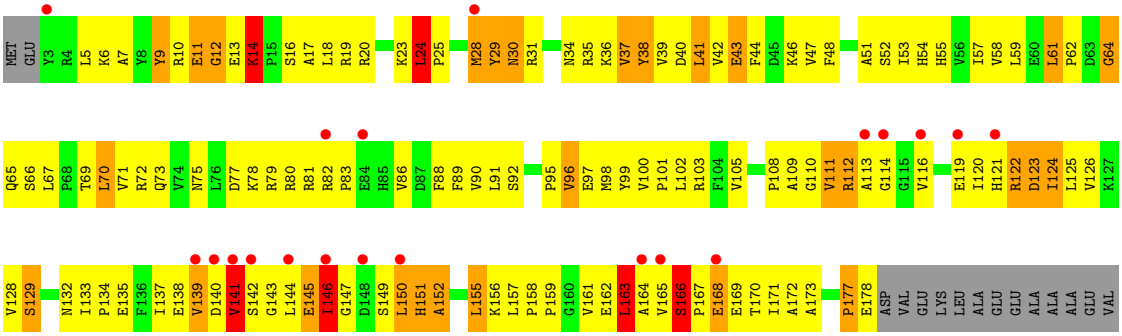
• Molecule 58: 50S RIBOSOMAL PROTEIN L25

Chain BZ:



• Molecule 58: 50S RIBOSOMAL PROTEIN L25

Chain DZ:



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α, β, γ	289.90Å 268.50Å 403.60Å 90.00° 91.62° 90.00°	Depositor
Resolution (Å)	50.00 – 3.10 50.00 – 3.10	Depositor EDS
% Data completeness (in resolution range)	98.0 (50.00-3.10) 97.9 (50.00-3.10)	Depositor EDS
R_{merge}	0.02	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.38 (at 2.91Å)	Xtriage
Refinement program	CNS 1.2	Depositor
R, R_{free}	0.243 , 0.267 0.240 , 0.264	Depositor DCC
R_{free} test set	59600 reflections (4.98%)	wwPDB-VP
Wilson B-factor (Å^2)	59.1	Xtriage
Anisotropy	0.077	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.29 , 70.2	EDS
L-test for twinning[2]	$< \|L\| > = 0.47$, $< L^2 > = 0.29$	Xtriage
Estimated twinning fraction	0.018 for h,-k,-l	Xtriage
F_o,F_c correlation	0.90	EDS
Total number of atoms	307322	wwPDB-VP
Average B, all atoms (Å^2)	77.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 8.42% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

[2] Theoretical values of $< |L| >$, $< L^2 >$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: PSU, KIR, OMC, H2U, 7MG, MIA, GDP, 4SU, ZN, 5MU

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|$ >5	RMSZ	#$\|Z\|$ >5
1	AA	0.46	1/36325 (0.0%)	0.72	64/56695 (0.1%)
1	CA	0.45	1/36325 (0.0%)	0.71	61/56695 (0.1%)
2	AB	0.58	0/1935	1.07	14/2609 (0.5%)
2	CB	0.51	0/1935	1.07	15/2609 (0.6%)
3	AC	0.66	0/1636	1.06	11/2205 (0.5%)
3	CC	0.52	0/1636	1.07	8/2205 (0.4%)
4	AD	0.45	0/1733	0.97	6/2318 (0.3%)
4	CD	0.44	0/1733	0.97	5/2318 (0.2%)
5	AE	0.71	0/1162	1.14	7/1564 (0.4%)
5	CE	0.63	0/1162	1.14	10/1564 (0.6%)
6	AF	0.50	0/856	0.98	2/1154 (0.2%)
6	CF	0.45	0/856	0.98	2/1154 (0.2%)
7	AG	0.57	0/1276	0.96	5/1709 (0.3%)
7	CG	0.48	0/1276	0.96	5/1709 (0.3%)
8	AH	0.62	0/1136	1.06	6/1527 (0.4%)
8	CH	0.56	0/1136	1.06	5/1527 (0.3%)
9	AI	0.54	0/1029	1.00	6/1379 (0.4%)
9	CI	0.47	0/1029	0.98	5/1379 (0.4%)
10	AJ	0.56	0/807	1.02	3/1085 (0.3%)
10	CJ	0.47	0/807	1.00	2/1085 (0.2%)
11	AK	0.64	0/900	1.08	8/1213 (0.7%)
11	CK	0.54	0/900	1.09	5/1213 (0.4%)
12	AL	0.51	0/986	1.04	6/1320 (0.5%)
12	CL	0.49	0/986	1.03	4/1320 (0.3%)
13	AM	0.55	0/998	1.09	8/1336 (0.6%)
13	CM	0.47	0/998	1.10	8/1336 (0.6%)
14	AN	0.59	0/501	1.18	4/664 (0.6%)
14	CN	0.52	0/501	1.17	5/664 (0.8%)
15	AO	0.57	0/745	0.94	2/992 (0.2%)
15	CO	0.54	0/745	0.91	1/992 (0.1%)
16	AP	0.48	0/716	0.94	3/963 (0.3%)
16	CP	0.45	0/716	0.94	3/963 (0.3%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
17	AQ	0.55	0/836	1.02	1/1117 (0.1%)
17	CQ	0.49	0/836	1.01	1/1117 (0.1%)
18	AR	0.51	0/579	1.02	5/768 (0.7%)
18	CR	0.48	0/579	1.02	5/768 (0.7%)
19	AS	0.53	0/642	1.06	5/865 (0.6%)
19	CS	0.46	0/642	1.05	5/865 (0.6%)
20	AT	0.47	0/765	1.15	8/1007 (0.8%)
20	CT	0.43	0/765	1.13	6/1007 (0.6%)
21	AU	0.54	0/212	1.03	2/277 (0.7%)
21	CU	0.50	0/212	0.98	2/277 (0.7%)
22	AV	0.45	0/1809	0.70	1/2819 (0.0%)
22	AW	0.39	0/1809	0.67	2/2819 (0.1%)
22	CV	0.44	0/1809	0.69	1/2819 (0.0%)
22	CW	0.40	0/1809	0.67	2/2819 (0.1%)
23	AX	0.49	0/405	0.72	0/629
23	CX	0.47	0/405	0.72	0/629
24	AY	0.42	0/1616	0.59	2/2511 (0.1%)
24	CY	0.43	0/1616	0.59	2/2511 (0.1%)
25	AZ	0.40	0/3041	0.89	6/4127 (0.1%)
25	CZ	0.41	0/3041	0.89	6/4127 (0.1%)
26	B0	0.47	0/671	1.02	3/892 (0.3%)
26	D0	0.45	0/671	1.01	2/892 (0.2%)
27	B1	0.55	0/738	1.11	3/981 (0.3%)
27	D1	0.48	0/738	0.98	3/981 (0.3%)
28	B2	0.43	0/600	1.09	6/793 (0.8%)
28	D2	0.41	0/600	1.07	5/793 (0.6%)
29	B3	0.50	0/472	0.98	3/634 (0.5%)
29	D3	0.43	0/472	0.97	3/634 (0.5%)
30	B4	0.48	0/349	0.93	1/474 (0.2%)
30	D4	0.46	0/349	0.92	1/474 (0.2%)
31	B5	0.53	0/473	1.06	2/639 (0.3%)
31	D5	0.53	0/473	1.06	1/639 (0.2%)
32	B6	0.64	0/440	1.16	5/586 (0.9%)
32	D6	0.60	0/440	1.14	4/586 (0.7%)
33	B7	0.57	0/426	1.10	5/561 (0.9%)
33	D7	0.51	0/426	1.08	5/561 (0.9%)
34	B8	0.62	0/515	1.21	5/679 (0.7%)
34	D8	0.56	0/515	1.19	5/679 (0.7%)
35	B9	0.53	0/310	0.96	0/407
35	D9	0.52	0/310	0.96	0/407
36	BA	0.44	1/69976 (0.0%)	0.68	60/109244 (0.1%)
36	DA	0.44	1/69976 (0.0%)	0.68	61/109244 (0.1%)
37	BB	0.41	0/2853	0.69	2/4451 (0.0%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
37	DB	0.42	0/2853	0.70	3/4451 (0.1%)
38	BC	0.53	3/1774 (0.2%)	0.94	5/2391 (0.2%)
38	DC	0.49	4/1774 (0.2%)	0.93	4/2391 (0.2%)
39	BD	0.66	0/2195	1.17	20/2955 (0.7%)
39	DD	0.61	0/2195	1.17	20/2955 (0.7%)
40	BE	0.54	0/1596	1.18	12/2153 (0.6%)
40	DE	0.53	0/1596	1.18	13/2153 (0.6%)
41	BF	0.46	0/1658	1.00	10/2244 (0.4%)
41	DF	0.44	0/1658	1.00	9/2244 (0.4%)
42	BG	0.51	0/1499	1.18	12/2016 (0.6%)
42	DG	0.45	0/1499	1.06	10/2016 (0.5%)
43	BH	0.44	0/1245	1.03	8/1682 (0.5%)
43	DH	0.43	0/1245	1.03	8/1682 (0.5%)
46	BN	0.46	0/1131	0.97	1/1525 (0.1%)
46	DN	0.43	0/1131	0.96	1/1525 (0.1%)
47	BO	0.57	0/943	1.02	1/1269 (0.1%)
47	DO	0.55	0/943	1.01	1/1269 (0.1%)
48	BP	0.55	0/1131	1.28	15/1504 (1.0%)
48	DP	0.52	0/1131	1.28	16/1504 (1.1%)
49	BQ	0.60	0/1143	1.07	6/1527 (0.4%)
49	DQ	0.56	0/1143	1.06	8/1527 (0.5%)
50	BR	0.50	0/974	0.96	2/1302 (0.2%)
50	DR	0.49	0/974	0.95	2/1302 (0.2%)
51	BS	0.46	0/778	1.11	4/1036 (0.4%)
51	DS	0.43	0/778	1.10	6/1036 (0.6%)
52	BT	0.55	0/1155	1.14	16/1542 (1.0%)
52	DT	0.53	0/1155	1.14	17/1542 (1.1%)
53	BU	0.49	0/975	1.11	10/1297 (0.8%)
53	DU	0.46	0/975	1.10	10/1297 (0.8%)
54	BV	0.47	0/790	0.92	2/1057 (0.2%)
54	DV	0.47	0/790	0.92	2/1057 (0.2%)
55	BW	0.47	0/907	0.96	1/1216 (0.1%)
55	DW	0.45	0/907	0.95	1/1216 (0.1%)
56	BX	0.45	0/739	1.01	5/993 (0.5%)
56	DX	0.44	0/739	1.01	5/993 (0.5%)
57	BY	0.47	0/788	1.11	5/1051 (0.5%)
57	DY	0.46	0/788	1.10	5/1051 (0.5%)
58	BZ	0.56	0/1435	1.15	9/1949 (0.5%)
58	DZ	0.49	0/1435	1.16	14/1949 (0.7%)
All	All	0.46	11/330268 (0.0%)	0.81	845/493444 (0.2%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand.A planarity outlier is detected

by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
1	AA	5	49
1	CA	4	49
22	AW	1	1
22	CW	1	1
24	AY	2	0
24	CY	2	0
36	BA	2	66
36	DA	2	67
37	BB	0	6
37	DB	0	6
All	All	19	245

All (11) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	BC	218	MET	SD-CE	7.06	1.97	1.79
38	DC	218	MET	CG-SD	6.65	1.97	1.80
36	BA	2173	A	O5'-C5'	6.38	1.52	1.42
38	DC	218	MET	SD-CE	6.37	1.95	1.79
36	DA	2173	A	O5'-C5'	6.15	1.52	1.42
38	DC	120	MET	CG-SD	5.86	1.95	1.80
38	BC	120	MET	CG-SD	5.84	1.95	1.80
38	DC	120	MET	SD-CE	5.68	1.93	1.79
1	AA	1125	U	O5'-C5'	5.60	1.50	1.42
1	CA	1125	U	O5'-C5'	5.18	1.50	1.42
38	BC	120	MET	SD-CE	5.09	1.92	1.79

All (845) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	CA	1498	U	C2'-C3'-O3'	15.95	133.42	109.50
1	AA	1498	U	C2'-C3'-O3'	15.66	132.99	109.50
1	AA	508	C	C2'-C3'-O3'	14.29	130.93	109.50
36	DA	1820	U	C2'-C3'-O3'	14.02	130.53	109.50
1	CA	508	C	C2'-C3'-O3'	14.01	130.51	109.50
22	AW	76	A	C4'-C3'-O3'	13.84	130.16	109.40
36	BA	1820	U	C2'-C3'-O3'	13.75	130.13	109.50
42	BG	86	MET	CA-C-N	-13.68	102.75	119.84
42	BG	86	MET	C-N-CA	-13.68	102.75	119.84
22	CW	76	A	C4'-C3'-O3'	13.58	129.77	109.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1239	A	C2'-C3'-O3'	12.93	128.90	109.50
1	CA	1239	A	C2'-C3'-O3'	12.92	128.89	109.50
1	CA	243	A	C2'-C3'-O3'	12.81	128.72	109.50
1	CA	1399	C	C2'-C3'-O3'	12.74	128.62	109.50
36	BA	1992	G	C2'-C3'-O3'	12.52	128.29	109.50
36	DA	1819	A	C2'-C3'-O3'	12.45	128.18	109.50
1	AA	687	A	C2'-C3'-O3'	12.45	128.17	109.50
1	AA	792	A	C2'-C3'-O3'	12.38	128.07	109.50
1	AA	1049	U	C2'-C3'-O3'	12.30	127.95	109.50
1	AA	243	A	C2'-C3'-O3'	12.25	127.88	109.50
36	BA	1819	A	C2'-C3'-O3'	12.24	127.86	109.50
36	DA	1992	G	C2'-C3'-O3'	12.15	127.73	109.50
1	CA	687	A	C2'-C3'-O3'	12.01	127.51	109.50
1	CA	1049	U	C2'-C3'-O3'	11.84	127.27	109.50
1	AA	109	A	C2'-C3'-O3'	11.83	127.24	109.50
1	CA	109	A	C2'-C3'-O3'	11.73	127.10	109.50
1	CA	792	A	C2'-C3'-O3'	11.63	126.94	109.50
1	AA	1504	G	C2'-C3'-O3'	11.55	126.83	109.50
1	AA	1101	A	C2'-C3'-O3'	11.21	126.32	109.50
1	CA	1101	A	C2'-C3'-O3'	11.19	126.29	109.50
42	BG	88	ILE	N-CA-C	11.19	125.87	108.87
1	AA	1504	G	C4'-C3'-O3'	11.13	126.10	109.40
20	AT	76	ALA	N-CA-C	-11.12	99.72	113.18
39	BD	244	ARG	C-N-CD	-11.04	96.32	120.60
36	BA	1799	G	C2'-C3'-O3'	11.00	125.99	109.50
40	DE	63	LEU	N-CA-C	-10.99	99.60	113.23
40	BE	63	LEU	N-CA-C	-10.97	99.62	113.23
39	DD	244	ARG	C-N-CD	-10.91	96.59	120.60
20	CT	76	ALA	N-CA-C	-10.87	100.03	113.18
36	DA	1799	G	C2'-C3'-O3'	10.69	125.53	109.50
22	CW	76	A	C2'-C3'-O3'	10.40	125.10	109.50
22	AW	76	A	C2'-C3'-O3'	10.38	125.07	109.50
36	BA	1653	G	C2'-C3'-O3'	10.28	124.91	109.50
20	AT	12	ALA	N-CA-C	-10.13	100.67	113.23
36	BA	1819	A	C4'-C3'-O3'	10.05	124.47	109.40
1	CA	1399	C	C4'-C3'-O3'	10.04	124.46	109.40
10	CJ	22	LYS	N-CA-C	-10.01	101.85	114.56
10	AJ	22	LYS	N-CA-C	-9.96	101.91	114.56
40	DE	65	GLY	N-CA-C	-9.92	103.76	114.67
19	AS	22	LEU	N-CA-C	-9.88	103.35	114.62
1	CA	60	A	C2'-C3'-O3'	9.84	124.26	109.50
32	D6	7	ILE	N-CA-C	-9.80	103.57	113.47

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	BA	2756	U	C2'-C3'-O3'	9.75	124.12	109.50
40	BE	65	GLY	N-CA-C	-9.71	103.99	114.67
19	CS	22	LEU	N-CA-C	-9.71	103.55	114.62
36	DA	1819	A	C4'-C3'-O3'	9.67	123.90	109.40
1	AA	60	A	C2'-C3'-O3'	9.64	123.97	109.50
20	CT	12	ALA	N-CA-C	-9.61	101.31	113.23
32	B6	7	ILE	N-CA-C	-9.60	103.78	113.47
36	DA	2756	U	C2'-C3'-O3'	9.52	123.78	109.50
36	DA	1653	G	C2'-C3'-O3'	9.52	123.78	109.50
53	BU	97	ASP	N-CA-C	-9.49	101.40	113.16
8	CH	79	VAL	N-CA-C	-9.45	101.56	111.58
48	DP	136	GLU	N-CA-C	-9.36	100.96	111.82
48	BP	52	GLU	N-CA-C	9.27	130.55	110.80
1	AA	982	U	C2'-C3'-O3'	9.23	123.35	109.50
11	CK	116	HIS	N-CA-C	-9.21	99.73	112.25
53	DU	97	ASP	N-CA-C	-9.20	101.76	113.16
1	AA	1239	A	C4'-C3'-O3'	9.19	123.19	109.40
1	CA	1054	C	C2'-C3'-O3'	9.19	123.28	109.50
1	AA	1054	C	C2'-C3'-O3'	9.18	123.28	109.50
48	BP	136	GLU	N-CA-C	-9.17	101.18	111.82
58	DZ	46	LYS	N-CA-C	-9.13	103.25	114.75
48	DP	52	GLU	N-CA-C	9.11	130.21	110.80
28	B2	62	THR	N-CA-C	-9.11	101.35	111.28
48	BP	54	GLY	N-CA-C	-9.04	102.53	115.27
36	BA	387	U	C2'-C3'-O3'	8.93	122.90	109.50
51	BS	55	ALA	N-CA-C	-8.93	101.82	112.89
24	AY	69	C	C2'-C3'-O3'	8.91	127.07	113.70
11	AK	116	HIS	N-CA-C	-8.91	100.14	112.25
24	CY	69	C	C2'-C3'-O3'	8.86	126.99	113.70
1	CA	508	C	C4'-C3'-O3'	8.81	122.62	109.40
36	BA	1820	U	C4'-C3'-O3'	8.78	122.57	109.40
36	DA	387	U	C2'-C3'-O3'	8.75	122.62	109.50
1	CA	982	U	C2'-C3'-O3'	8.73	122.59	109.50
4	AD	105	VAL	N-CA-C	-8.69	102.36	110.53
1	CA	1239	A	C4'-C3'-O3'	8.69	122.44	109.40
1	AA	508	C	C4'-C3'-O3'	8.68	122.42	109.40
19	CS	10	PHE	N-CA-C	8.66	121.41	109.54
56	BX	49	VAL	N-CA-C	8.66	121.21	108.65
51	DS	55	ALA	N-CA-C	-8.66	102.16	112.89
19	AS	10	PHE	N-CA-C	8.65	121.39	109.54
48	DP	54	GLY	N-CA-C	-8.64	103.09	115.27
14	CN	13	THR	CA-C-N	8.63	130.63	119.84

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	CN	13	THR	C-N-CA	8.63	130.63	119.84
57	BY	54	LYS	N-CA-C	-8.63	96.72	109.15
14	AN	13	THR	CA-C-N	8.62	130.62	119.84
14	AN	13	THR	C-N-CA	8.62	130.62	119.84
48	DP	53	GLY	N-CA-C	-8.58	92.84	113.18
52	BT	29	ARG	N-CA-C	8.57	129.05	110.80
48	BP	53	GLY	N-CA-C	-8.56	92.89	113.18
57	DY	54	LYS	N-CA-C	-8.55	96.84	109.15
8	AH	79	VAL	N-CA-C	-8.54	102.52	111.58
52	DT	29	ARG	N-CA-C	8.52	128.94	110.80
48	BP	59	LEU	N-CA-C	-8.50	103.03	112.72
56	DX	49	VAL	N-CA-C	8.49	120.97	108.65
1	CA	266	G	C2'-C3'-O3'	8.49	122.23	109.50
42	DG	59	GLU	N-CA-C	-8.48	102.94	113.28
48	DP	59	LEU	N-CA-C	-8.47	103.06	112.72
4	CD	105	VAL	N-CA-C	-8.39	102.65	110.53
36	DA	1820	U	C4'-C3'-O3'	8.37	121.96	109.40
2	AB	231	GLU	CA-C-N	8.33	130.26	119.84
2	AB	231	GLU	C-N-CA	8.33	130.26	119.84
11	CK	40	ILE	N-CA-C	-8.32	105.16	111.90
53	DU	96	ALA	N-CA-C	-8.30	104.17	112.97
48	DP	139	LYS	N-CA-C	-8.26	103.20	113.20
1	AA	266	G	C2'-C3'-O3'	8.25	121.88	109.50
48	BP	139	LYS	N-CA-C	-8.22	103.26	113.20
12	AL	58	VAL	N-CA-C	8.20	120.37	109.21
12	CL	58	VAL	N-CA-C	8.20	120.36	109.21
42	DG	54	GLU	N-CA-C	-8.14	102.80	112.89
2	CB	231	GLU	CA-C-N	8.13	130.00	119.84
2	CB	231	GLU	C-N-CA	8.13	130.00	119.84
1	AA	243	A	C4'-C3'-O3'	8.13	121.59	109.40
1	AA	1145	C	C2'-C3'-O3'	8.07	121.61	109.50
53	BU	96	ALA	N-CA-C	-8.06	104.43	112.97
52	DT	88	ILE	N-CA-C	8.04	118.06	110.74
2	AB	23	ARG	N-CA-C	-8.03	100.25	113.50
1	CA	1145	C	C2'-C3'-O3'	8.03	121.54	109.50
1	AA	115	G	C2'-C3'-O3'	8.02	121.53	109.50
52	BT	112	ARG	N-CA-C	-7.97	104.44	114.56
58	BZ	45	ASP	N-CA-C	-7.96	102.19	111.03
2	CB	23	ARG	N-CA-C	-7.95	100.19	112.99
13	CM	112	GLY	CA-C-N	7.94	129.76	119.84
13	CM	112	GLY	C-N-CA	7.94	129.76	119.84
50	BR	12	ARG	N-CA-C	-7.90	93.97	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	CA	115	G	C2'-C3'-O3'	7.84	121.27	109.50
39	BD	53	PHE	N-CA-C	7.83	122.27	112.24
52	DT	112	ARG	N-CA-C	-7.82	104.63	114.56
53	DU	50	ARG	N-CA-C	-7.80	102.37	111.03
49	DQ	140	ALA	N-CA-C	-7.80	104.29	113.88
36	BA	2542	A	C4'-C3'-O3'	-7.79	101.31	113.00
52	BT	88	ILE	N-CA-C	7.77	117.81	110.74
14	CN	5	ALA	N-CA-C	-7.75	103.08	112.54
1	CA	687	A	C4'-C3'-O3'	7.75	121.02	109.40
49	BQ	140	ALA	N-CA-C	-7.73	104.38	113.88
1	CA	1049	U	C4'-C3'-O3'	7.71	120.97	109.40
2	CB	112	VAL	N-CA-C	-7.71	101.41	111.05
10	CJ	58	ASP	N-CA-C	-7.71	100.64	110.19
36	DA	2542	A	C4'-C3'-O3'	-7.70	101.45	113.00
53	BU	50	ARG	N-CA-C	-7.70	102.49	111.03
50	DR	12	ARG	N-CA-C	-7.65	94.51	110.80
42	DG	56	ALA	N-CA-C	-7.63	104.20	113.97
28	D2	39	ALA	N-CA-C	-7.58	103.62	113.17
1	AA	1049	U	C4'-C3'-O3'	7.58	120.77	109.40
1	CA	243	A	C4'-C3'-O3'	7.58	120.76	109.40
48	BP	64	LYS	N-CA-C	-7.54	104.69	114.04
36	BA	1786	A	N9-C1'-C2'	7.54	125.30	114.00
58	DZ	96	VAL	N-CA-C	7.50	118.24	108.35
53	DU	89	GLU	N-CA-C	-7.47	103.03	113.20
53	BU	89	GLU	N-CA-C	-7.46	103.05	113.20
36	DA	1786	A	N9-C1'-C2'	7.46	125.20	114.00
18	CR	81	PHE	N-CA-C	-7.45	104.32	113.41
39	DD	53	PHE	N-CA-C	7.42	121.73	112.24
48	DP	64	LYS	N-CA-C	-7.41	104.86	114.04
1	AA	687	A	C4'-C3'-O3'	7.39	120.48	109.40
52	DT	80	SER	N-CA-C	7.38	126.12	109.81
58	DZ	24	LEU	CA-C-N	7.36	128.36	120.11
58	DZ	24	LEU	C-N-CA	7.36	128.36	120.11
40	BE	168	MET	N-CA-C	7.36	120.55	109.95
7	AG	133	GLY	N-CA-C	-7.36	102.82	113.86
5	AE	127	ASN	CA-C-N	7.35	126.89	119.24
5	AE	127	ASN	C-N-CA	7.35	126.89	119.24
1	AA	1498	U	C4'-C3'-O3'	7.33	120.40	109.40
48	DP	99	LEU	N-CA-C	-7.33	103.31	111.82
5	CE	127	ASN	CA-C-N	7.33	126.87	119.24
5	CE	127	ASN	C-N-CA	7.33	126.87	119.24
52	BT	80	SER	N-CA-C	7.31	125.96	109.81

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	AK	40	ILE	N-CA-C	-7.31	105.98	111.90
40	DE	168	MET	N-CA-C	7.30	120.46	109.95
14	AN	5	ALA	N-CA-C	-7.29	103.64	112.54
10	AJ	58	ASP	N-CA-C	-7.29	101.14	110.19
7	AG	81	GLY	N-CA-C	-7.29	104.53	115.32
36	BA	1300	U	C2'-C3'-O3'	7.28	120.42	109.50
3	CC	173	VAL	CA-C-N	7.25	128.90	119.84
3	CC	173	VAL	C-N-CA	7.25	128.90	119.84
3	AC	173	VAL	CA-C-N	7.24	128.89	119.84
3	AC	173	VAL	C-N-CA	7.24	128.89	119.84
38	DC	148	ASN	N-CA-C	-7.23	105.30	112.97
36	DA	1300	U	C2'-C3'-O3'	7.23	120.34	109.50
56	BX	43	VAL	N-CA-C	-7.22	106.05	111.90
20	AT	94	ALA	N-CA-C	-7.22	101.66	111.55
2	AB	112	VAL	N-CA-C	-7.21	102.08	111.09
43	BH	155	SER	N-CA-C	7.20	123.99	113.40
38	BC	148	ASN	N-CA-C	-7.20	105.34	112.97
20	CT	94	ALA	N-CA-C	-7.20	101.69	111.55
42	DG	8	LYS	N-CA-C	-7.18	103.38	111.14
1	CA	748	C	C2'-C3'-O3'	7.17	120.26	109.50
13	AM	112	GLY	CA-C-N	7.15	128.77	119.84
13	AM	112	GLY	C-N-CA	7.15	128.77	119.84
5	AE	48	ALA	N-CA-C	7.14	114.56	108.13
14	CN	38	GLY	N-CA-C	-7.13	104.09	115.08
40	DE	70	ALA	N-CA-C	-7.13	104.45	113.01
7	CG	133	GLY	N-CA-C	-7.12	103.18	113.86
48	BP	16	ARG	N-CA-C	-7.12	104.07	114.39
41	BF	69	HIS	N-CA-C	7.11	121.29	111.90
48	BP	99	LEU	N-CA-C	-7.10	103.59	111.82
1	AA	748	C	C2'-C3'-O3'	7.09	120.13	109.50
49	DQ	66	ILE	N-CA-C	-7.09	100.44	109.58
5	CE	48	ALA	N-CA-C	7.08	114.50	108.13
7	CG	81	GLY	N-CA-C	-7.08	104.84	115.32
41	DF	69	HIS	N-CA-C	7.08	121.25	111.90
48	DP	16	ARG	N-CA-C	-7.08	104.13	114.39
58	DZ	64	GLY	N-CA-C	-7.07	105.56	115.32
43	DH	155	SER	N-CA-C	7.07	123.79	113.40
57	BY	55	TYR	CA-C-N	7.06	128.66	119.84
57	BY	55	TYR	C-N-CA	7.06	128.66	119.84
40	BE	70	ALA	N-CA-C	-7.05	104.55	113.01
1	CA	1050	G	N9-C1'-C2'	-7.05	103.42	114.00
40	BE	127	ASP	N-CA-C	-7.04	103.79	112.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	484	G	C2'-C3'-O3'	7.04	120.05	109.50
41	DF	197	ASP	N-CA-C	-7.01	104.86	113.41
1	AA	772	U	C5'-C4'-C3'	-6.99	105.51	116.00
41	BF	197	ASP	N-CA-C	-6.99	104.88	113.41
28	D2	6	VAL	N-CA-C	-6.98	105.56	111.56
57	DY	55	TYR	CA-C-N	6.98	128.56	119.84
57	DY	55	TYR	C-N-CA	6.98	128.56	119.84
1	CA	772	U	C5'-C4'-C3'	-6.98	105.54	116.00
1	CA	30	U	C2'-C3'-O3'	6.97	119.96	109.50
48	BP	60	MET	N-CA-C	-6.96	104.53	113.16
36	DA	945	A	N9-C1'-C2'	6.95	124.42	114.00
14	AN	38	GLY	N-CA-C	-6.94	104.39	115.08
4	CD	33	MET	N-CA-C	-6.92	102.96	111.33
20	AT	52	ALA	N-CA-C	-6.88	103.39	111.03
1	CA	1498	U	C4'-C3'-O3'	6.88	119.71	109.40
39	DD	59	LYS	N-CA-C	-6.87	100.81	110.50
28	D2	29	LYS	N-CA-C	-6.86	103.83	111.71
1	AA	495	A	C2'-C3'-O3'	6.85	119.78	109.50
5	CE	148	VAL	N-CA-C	-6.85	104.32	111.58
1	CA	484	G	C2'-C3'-O3'	6.84	119.76	109.50
3	CC	161	GLU	N-CA-C	-6.83	105.08	113.41
34	D8	60	LEU	N-CA-C	-6.82	102.20	111.55
20	CT	27	LYS	N-CA-C	-6.82	103.91	111.82
5	AE	148	VAL	N-CA-C	-6.82	104.36	111.58
1	AA	30	U	C2'-C3'-O3'	6.81	119.72	109.50
34	D8	49	VAL	N-CA-C	-6.81	95.17	109.34
18	AR	81	PHE	N-CA-C	-6.79	105.12	113.41
20	AT	27	LYS	N-CA-C	-6.79	103.94	111.82
11	CK	126	ARG	N-CA-C	-6.78	105.41	113.21
36	DA	331	A	C2'-C3'-O3'	6.78	119.66	109.50
34	B8	60	LEU	N-CA-C	-6.77	102.28	111.55
1	AA	1181	G	N9-C1'-C2'	6.76	122.14	112.00
46	BN	25	ARG	N-CA-C	-6.76	103.99	111.36
25	AZ	149	LEU	N-CA-C	-6.75	105.57	113.88
54	BV	34	GLU	N-CA-C	-6.74	98.25	109.24
36	BA	331	A	C2'-C3'-O3'	6.74	119.61	109.50
36	BA	856	C	C2'-C3'-O3'	6.74	123.81	113.70
4	AD	33	MET	N-CA-C	-6.74	103.18	111.33
25	CZ	149	LEU	N-CA-C	-6.72	105.61	113.88
36	BA	945	A	N9-C1'-C2'	6.71	124.06	114.00
52	BT	30	VAL	N-CA-C	6.69	123.26	109.34
1	CA	495	A	C2'-C3'-O3'	6.68	119.52	109.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
58	BZ	175	VAL	CA-C-N	6.67	124.53	119.66
58	BZ	175	VAL	C-N-CA	6.67	124.53	119.66
54	DV	34	GLU	N-CA-C	-6.67	98.37	109.24
3	CC	6	HIS	N-CA-C	-6.66	101.38	109.57
34	D8	54	GLU	N-CA-C	-6.66	104.02	111.28
16	AP	25	ARG	N-CA-C	6.65	119.36	111.71
13	AM	12	ASN	N-CA-C	6.65	124.96	110.80
9	CI	93	ARG	N-CA-C	-6.65	103.52	111.69
36	DA	614(C)	A	C2'-C3'-O3'	6.63	119.45	109.50
49	BQ	66	ILE	N-CA-C	-6.62	101.05	109.58
34	B8	54	GLU	N-CA-C	-6.61	104.08	111.28
42	BG	104	GLU	N-CA-C	-6.60	104.16	111.82
28	D2	9	GLN	N-CA-C	-6.60	104.12	111.71
13	CM	12	ASN	N-CA-C	6.59	124.84	110.80
41	DF	68	LYS	N-CA-C	6.59	119.89	109.81
28	D2	28	LYS	N-CA-C	-6.58	96.78	110.80
39	BD	59	LYS	N-CA-C	-6.58	101.22	110.50
47	BO	40	VAL	N-CA-C	-6.58	99.11	108.58
1	CA	428	G	C2'-C3'-O3'	6.58	119.36	109.50
36	BA	1541	G	C2'-C3'-O3'	6.57	119.36	109.50
1	CA	1181	G	N9-C1'-C2'	6.57	121.85	112.00
36	BA	958	U	C4'-C3'-O3'	-6.56	103.15	113.00
28	B2	49	LYS	N-CA-C	-6.56	104.30	112.90
40	DE	127	ASP	N-CA-C	-6.55	104.38	112.38
11	AK	126	ARG	N-CA-C	-6.55	105.68	113.21
27	B1	22	GLY	N-CA-C	6.54	119.61	112.29
56	DX	43	VAL	N-CA-C	-6.53	106.61	111.90
36	DA	2654	A	N9-C1'-C2'	6.52	121.78	112.00
58	BZ	50	GLN	N-CA-C	-6.52	96.91	110.80
36	DA	1987	G	C5'-C4'-C3'	-6.52	106.22	116.00
56	DX	37	THR	N-CA-C	-6.51	104.03	112.23
42	BG	54	GLU	N-CA-C	-6.51	104.19	111.28
46	DN	25	ARG	N-CA-C	-6.50	104.27	111.36
1	AA	1050	G	N9-C1'-C2'	-6.48	104.27	114.00
9	AI	93	ARG	N-CA-C	-6.48	103.72	111.69
1	CA	1200	C	C2'-C3'-O3'	6.47	119.21	109.50
36	DA	958	U	C4'-C3'-O3'	-6.46	103.30	113.00
48	DP	60	MET	N-CA-C	-6.46	105.15	113.16
36	BA	614(C)	A	C2'-C3'-O3'	6.46	119.19	109.50
1	CA	792	A	C4'-C3'-O3'	6.45	119.08	109.40
36	DA	856	C	C2'-C3'-O3'	6.45	123.38	113.70
39	DD	240	ALA	CA-C-N	6.44	127.89	119.84

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	DD	240	ALA	C-N-CA	6.44	127.89	119.84
41	DF	198	ALA	N-CA-C	-6.42	104.36	111.36
2	AB	160	ASP	N-CA-C	-6.42	105.41	113.18
28	B2	40	SER	N-CA-C	6.42	117.09	108.23
52	DT	30	VAL	N-CA-C	6.41	122.68	109.34
18	CR	32	ARG	N-CA-C	-6.41	105.09	113.17
34	B8	49	VAL	N-CA-C	-6.41	96.02	109.34
36	BA	2654	A	N9-C1'-C2'	6.40	121.61	112.00
15	AO	78	TYR	N-CA-C	-6.39	103.94	111.03
1	AA	1200	C	C2'-C3'-O3'	6.37	119.05	109.50
16	CP	25	ARG	N-CA-C	6.36	119.02	111.71
18	AR	32	ARG	N-CA-C	-6.36	105.16	113.17
34	B8	29	LYS	N-CA-C	6.35	124.33	110.80
47	DO	40	VAL	N-CA-C	-6.34	99.45	108.58
36	BA	1378	A	C4'-C3'-O3'	6.33	118.90	109.40
2	CB	160	ASP	N-CA-C	-6.33	105.53	113.18
39	DD	193	VAL	N-CA-C	6.32	117.91	109.37
3	AC	49	SER	N-CA-C	-6.32	102.19	110.53
36	DA	1300	U	C4'-C3'-O3'	6.31	118.86	109.40
49	DQ	27	VAL	N-CA-C	6.30	122.45	109.34
7	CG	145	ALA	N-CA-C	-6.30	97.39	110.80
3	AC	161	GLU	N-CA-C	-6.29	105.73	113.41
37	DB	56	G	C2'-C3'-O3'	6.29	118.94	109.50
25	CZ	160	GLN	N-CA-C	-6.29	105.46	113.01
41	BF	198	ALA	N-CA-C	-6.29	104.51	111.36
37	BB	56	G	C2'-C3'-O3'	6.28	118.92	109.50
1	AA	792	A	C4'-C3'-O3'	6.28	118.81	109.40
58	DZ	47	VAL	N-CA-C	-6.28	106.41	111.81
1	AA	701	C	C4'-C3'-O3'	-6.27	103.59	113.00
49	BQ	136	ALA	N-CA-C	-6.27	105.91	112.93
56	BX	37	THR	N-CA-C	-6.27	104.33	112.23
39	DD	30	GLU	N-CA-C	6.26	118.11	110.41
58	DZ	29	TYR	N-CA-C	6.26	117.38	108.74
42	DG	67	LYS	CA-C-N	6.26	127.66	119.84
42	DG	67	LYS	C-N-CA	6.26	127.66	119.84
58	BZ	93	ASP	N-CA-C	-6.25	106.19	113.88
36	BA	1427	A	C2'-C3'-O3'	6.24	118.86	109.50
36	BA	1987	G	C5'-C4'-C3'	-6.24	106.64	116.00
1	AA	428	G	C2'-C3'-O3'	6.24	118.86	109.50
52	DT	108	ARG	N-CA-C	-6.24	105.50	113.23
25	AZ	160	GLN	N-CA-C	-6.23	105.53	113.01
42	DG	55	LYS	N-CA-C	-6.23	105.66	113.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
48	DP	58	THR	N-CA-C	-6.22	97.55	110.80
36	BA	958	U	N1-C1'-C2'	6.22	121.33	112.00
40	BE	125	GLY	CA-C-N	6.21	126.70	119.99
40	BE	125	GLY	C-N-CA	6.21	126.70	119.99
36	BA	1799	G	C4'-C3'-O3'	6.21	118.72	109.40
7	AG	145	ALA	N-CA-C	-6.20	97.59	110.80
36	DA	1799	G	C4'-C3'-O3'	6.20	118.71	109.40
36	BA	1300	U	C4'-C3'-O3'	6.20	118.70	109.40
39	BD	240	ALA	CA-C-N	6.20	127.59	119.84
39	BD	240	ALA	C-N-CA	6.20	127.59	119.84
42	BG	121	ASN	CA-C-N	6.20	125.76	119.19
42	BG	121	ASN	C-N-CA	6.20	125.76	119.19
41	BF	68	LYS	N-CA-C	6.20	119.29	109.81
36	BA	221	A	C2'-C3'-O3'	6.20	118.79	109.50
36	DA	1558	A	C2'-C3'-O3'	6.20	118.79	109.50
27	B1	76	ARG	N-CA-C	-6.18	105.56	113.23
39	DD	245	PRO	CA-C-N	6.18	127.57	119.84
39	DD	245	PRO	C-N-CA	6.18	127.57	119.84
36	DA	1427	A	C2'-C3'-O3'	6.17	118.76	109.50
8	AH	3	THR	N-CA-C	6.17	118.81	111.71
34	D8	29	LYS	N-CA-C	6.17	123.94	110.80
36	DA	1378	A	C4'-C3'-O3'	6.17	118.66	109.40
33	B7	6	GLN	CA-C-N	6.17	126.53	119.93
33	B7	6	GLN	C-N-CA	6.17	126.53	119.93
2	AB	45	GLN	N-CA-C	-6.15	104.58	111.28
2	AB	233	SER	CA-C-N	6.14	127.51	119.84
2	AB	233	SER	C-N-CA	6.14	127.51	119.84
58	BZ	29	TYR	N-CA-C	6.13	116.18	108.45
8	AH	43	GLY	N-CA-C	6.13	123.51	115.36
2	CB	45	GLN	N-CA-C	-6.13	104.60	111.28
36	BA	1558	A	C2'-C3'-O3'	6.12	118.69	109.50
58	BZ	115	GLY	N-CA-C	6.12	119.73	110.18
9	CI	26	VAL	N-CA-C	6.12	117.29	108.48
51	BS	44	LYS	N-CA-C	-6.11	106.36	113.88
36	DA	2360	A	N9-C1'-C2'	-6.11	104.83	114.00
6	CF	38	GLU	N-CA-C	-6.11	97.79	110.80
39	DD	114	GLY	N-CA-C	-6.10	107.43	114.69
48	BP	58	THR	N-CA-C	-6.08	97.86	110.80
1	CA	119	A	C2'-C3'-O3'	6.08	118.62	109.50
28	B2	28	LYS	N-CA-C	-6.08	104.72	111.71
39	BD	244	ARG	CA-C-N	6.07	141.57	127.00
39	BD	244	ARG	C-N-CA	6.07	141.57	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	CM	86	CYS	N-CA-C	-6.07	102.95	110.41
36	BA	2111	C	N1-C1'-C2'	6.07	121.10	112.00
1	CA	79	G	C2'-C3'-O3'	6.06	118.59	109.50
49	DQ	136	ALA	N-CA-C	-6.06	106.14	112.93
41	BF	98	SER	N-CA-C	6.06	118.59	108.96
49	BQ	27	VAL	N-CA-C	6.06	121.94	109.34
5	CE	113	ALA	N-CA-C	-6.05	104.60	112.23
33	B7	4	THR	N-CA-C	6.05	119.50	111.75
51	DS	44	LYS	N-CA-C	-6.05	106.44	113.88
36	DA	221	A	C2'-C3'-O3'	6.04	118.56	109.50
42	DG	60	LEU	N-CA-C	-6.04	104.78	111.36
52	DT	80	SER	CA-C-N	-6.03	112.30	119.84
52	DT	80	SER	C-N-CA	-6.03	112.30	119.84
1	AA	992	U	C2'-C3'-O3'	6.03	118.55	109.50
1	CA	992	U	C2'-C3'-O3'	6.03	118.55	109.50
40	DE	125	GLY	CA-C-N	6.03	126.50	119.99
40	DE	125	GLY	C-N-CA	6.03	126.50	119.99
1	AA	79	G	C2'-C3'-O3'	6.02	118.53	109.50
36	DA	587	C	C2'-C3'-O3'	6.01	118.51	109.50
3	CC	99	VAL	N-CA-C	6.01	116.51	107.80
42	DG	12	TYR	N-CA-C	6.01	118.62	111.71
3	CC	49	SER	N-CA-C	-6.00	102.61	110.53
32	D6	42	TRP	N-CA-C	-6.00	105.04	112.90
1	AA	1299	A	N9-C1'-C2'	6.00	120.99	112.00
36	BA	1970	A	C5'-C4'-C3'	5.99	124.18	115.20
32	D6	8	LYS	N-CA-C	-5.99	104.67	111.14
9	CI	36	TYR	N-CA-C	-5.98	104.76	111.28
53	BU	40	PHE	N-CA-C	-5.98	104.84	111.36
9	AI	26	VAL	N-CA-C	5.97	117.07	108.48
52	DT	125	ARG	N-CA-C	-5.97	104.41	111.03
36	DA	2111	C	N1-C1'-C2'	5.96	120.95	112.00
34	D8	34	TRP	N-CA-C	-5.96	98.10	110.80
11	CK	102	GLY	N-CA-C	-5.96	107.18	114.92
12	CL	39	VAL	CB-CA-C	-5.95	106.14	111.74
48	DP	41	ARG	N-CA-C	-5.95	98.12	110.80
1	CA	1054	C	N1-C1'-C2'	5.95	122.92	114.00
9	AI	36	TYR	N-CA-C	-5.95	104.80	111.28
39	DD	14	ARG	N-CA-C	-5.94	105.86	113.23
1	AA	563	A	C4'-C3'-O3'	-5.94	104.09	113.00
36	DA	2278	A	C5'-C4'-C3'	5.94	124.91	116.00
1	AA	351	G	C2'-C3'-O3'	5.93	118.40	109.50
36	BA	2654	A	C4'-C3'-O3'	-5.93	104.10	113.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
52	BT	80	SER	CA-C-N	-5.93	112.42	119.84
52	BT	80	SER	C-N-CA	-5.93	112.42	119.84
3	AC	6	HIS	N-CA-C	-5.92	102.28	109.57
27	D1	4	VAL	N-CA-C	5.92	117.00	108.48
39	DD	244	ARG	CA-C-N	5.92	141.20	127.00
39	DD	244	ARG	C-N-CA	5.92	141.20	127.00
39	BD	14	ARG	N-CA-C	-5.92	105.89	113.23
53	BU	81	HIS	N-CA-C	-5.91	104.92	111.36
53	BU	98	LEU	N-CA-C	-5.91	104.92	111.36
16	AP	27	LYS	N-CA-C	-5.91	101.78	110.52
25	AZ	29	ALA	N-CA-C	-5.91	106.42	113.21
25	CZ	29	ALA	N-CA-C	-5.90	106.42	113.21
1	AA	1190	G	N9-C1'-C2'	5.90	120.85	112.00
39	BD	193	VAL	N-CA-C	5.89	117.33	109.37
7	AG	114	ARG	N-CA-C	5.89	120.16	113.15
36	DA	1970	A	C5'-C4'-C3'	5.89	124.03	115.20
1	AA	1190	G	C4'-C3'-O3'	-5.88	104.17	113.00
34	B8	34	TRP	N-CA-C	-5.88	98.27	110.80
2	CB	233	SER	CA-C-N	5.88	127.19	119.84
2	CB	233	SER	C-N-CA	5.88	127.19	119.84
55	DW	101	SER	N-CA-C	5.87	119.13	109.85
48	BP	41	ARG	N-CA-C	-5.86	98.31	110.80
1	CA	563	A	C4'-C3'-O3'	-5.86	104.21	113.00
52	BT	108	ARG	N-CA-C	-5.86	105.62	112.89
38	DC	116	THR	CA-C-N	5.86	127.17	119.84
38	DC	116	THR	C-N-CA	5.86	127.17	119.84
51	BS	48	LEU	N-CA-C	5.86	117.47	111.14
32	B6	42	TRP	N-CA-C	-5.85	105.23	112.90
41	DF	98	SER	N-CA-C	5.85	118.26	108.96
19	AS	23	ASN	N-CA-C	-5.85	104.50	111.69
5	AE	18	ARG	N-CA-C	-5.84	101.09	110.14
2	CB	151	GLY	N-CA-C	-5.84	101.41	112.27
41	DF	154	VAL	N-CA-C	5.83	116.52	108.12
6	AF	38	GLU	N-CA-C	-5.83	98.38	110.80
36	BA	2278	A	C5'-C4'-C3'	5.83	124.74	116.00
27	D1	54	ALA	CB-CA-C	-5.83	109.87	116.63
4	CD	8	VAL	N-CA-C	5.83	117.75	111.58
41	BF	154	VAL	N-CA-C	5.82	116.50	108.12
36	BA	587	C	C2'-C3'-O3'	5.82	118.23	109.50
49	BQ	14	ARG	N-CA-C	5.82	117.62	111.28
1	CA	1299	A	N9-C1'-C2'	5.82	120.72	112.00
4	AD	41	GLY	N-CA-C	5.81	120.00	112.68

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	B6	8	LYS	N-CA-C	-5.81	104.86	111.14
36	BA	1026	U	C2'-C3'-O3'	-5.81	104.98	113.70
1	CA	1514	C	C5'-C4'-C3'	-5.80	107.30	116.00
1	AA	1279	A	N9-C1'-C2'	5.79	120.69	112.00
13	AM	86	CYS	N-CA-C	-5.79	103.28	110.41
8	CH	120	THR	N-CA-C	-5.79	103.28	110.41
48	DP	30	THR	N-CA-C	5.79	118.03	109.69
38	BC	116	THR	CA-C-N	5.79	127.07	119.84
38	BC	116	THR	C-N-CA	5.79	127.07	119.84
12	AL	39	VAL	CB-CA-C	-5.78	106.30	111.74
19	AS	31	ILE	N-CA-C	5.78	116.32	107.77
8	CH	3	THR	N-CA-C	5.77	118.35	111.71
7	CG	114	ARG	N-CA-C	5.76	120.01	113.15
3	AC	99	VAL	N-CA-C	5.76	116.15	107.80
39	BD	221	VAL	N-CA-C	5.76	116.40	107.99
53	BU	8	VAL	N-CA-C	5.75	116.56	111.90
16	CP	27	LYS	N-CA-C	-5.75	102.00	110.52
43	DH	64	LEU	N-CA-C	-5.75	106.11	113.01
12	CL	119	LYS	N-CA-C	-5.75	100.92	110.17
19	CS	31	ILE	N-CA-C	5.75	116.27	107.77
53	DU	98	LEU	N-CA-C	-5.74	105.10	111.36
5	CE	24	ARG	N-CA-C	5.74	118.77	110.28
15	CO	24	SER	N-CA-C	-5.74	103.35	110.41
39	BD	245	PRO	CA-C-N	5.74	127.01	119.84
39	BD	245	PRO	C-N-CA	5.74	127.01	119.84
48	BP	30	THR	N-CA-C	5.73	117.94	109.69
36	BA	2481	G	C4'-C3'-O3'	-5.72	104.41	113.00
36	DA	2654	A	C4'-C3'-O3'	-5.72	104.42	113.00
5	AE	24	ARG	N-CA-C	5.72	118.54	109.96
36	DA	2221	G	C5'-C4'-C3'	-5.72	107.42	116.00
51	BS	56	LEU	N-CA-C	-5.72	103.67	111.56
33	D7	4	THR	N-CA-C	5.71	119.06	111.75
26	B0	27	GLU	N-CA-C	5.70	118.72	110.28
36	DA	784	A	C4'-C3'-O3'	-5.70	104.45	113.00
25	CZ	210	ILE	CA-C-N	5.69	126.96	119.84
25	CZ	210	ILE	C-N-CA	5.69	126.96	119.84
1	CA	1064	G	C2'-C3'-O3'	-5.69	100.97	109.50
1	AA	1054	C	N1-C1'-C2'	5.69	122.53	114.00
19	CS	23	ASN	N-CA-C	-5.69	104.69	111.69
2	CB	214	ILE	N-CA-C	5.68	116.33	110.36
36	DA	2405	G	N9-C1'-C2'	5.68	120.52	112.00
36	BA	2221	G	C5'-C4'-C3'	-5.68	107.48	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	245	C	C4'-C3'-O3'	5.68	117.92	109.40
36	DA	481	G	C4'-C3'-O3'	-5.68	104.49	113.00
51	DS	56	LEU	N-CA-C	-5.68	103.73	111.56
8	CH	43	GLY	N-CA-C	5.67	122.90	115.36
41	BF	143	ALA	N-CA-C	-5.67	105.19	111.36
3	CC	94	LEU	N-CA-C	-5.66	101.67	110.10
39	BD	30	GLU	N-CA-C	5.65	117.99	110.53
36	DA	906	G	C5'-C4'-C3'	-5.65	107.52	116.00
2	CB	134	GLU	N-CA-C	-5.65	106.52	113.41
2	AB	134	GLU	N-CA-C	-5.64	106.53	113.41
29	D3	48	GLU	N-CA-C	-5.64	105.13	111.28
1	AA	1285	A	C2'-C3'-O3'	5.64	117.96	109.50
9	AI	72	GLY	N-CA-C	-5.64	105.40	113.86
1	CA	701	C	C4'-C3'-O3'	-5.64	104.54	113.00
41	BF	71	GLY	N-CA-C	-5.63	107.47	115.30
1	AA	119	A	C2'-C3'-O3'	5.63	117.95	109.50
52	DT	29	ARG	CA-C-N	5.62	132.09	121.97
52	DT	29	ARG	C-N-CA	5.62	132.09	121.97
1	CA	1157	A	C2'-C3'-O3'	5.62	117.93	109.50
36	BA	2031	A	C4'-C3'-O3'	-5.62	104.58	113.00
5	CE	18	ARG	N-CA-C	-5.62	100.98	109.85
1	AA	1387	G	C5'-C4'-C3'	-5.61	107.59	116.00
1	CA	245	C	C4'-C3'-O3'	5.61	117.81	109.40
36	DA	1026	U	C2'-C3'-O3'	-5.61	105.29	113.70
53	DU	40	PHE	N-CA-C	-5.61	105.25	111.36
52	BT	50	ILE	N-CA-C	5.60	116.66	111.45
54	BV	9	GLY	N-CA-C	-5.60	107.53	115.43
55	BW	101	SER	N-CA-C	5.60	118.70	109.85
29	B3	48	GLU	N-CA-C	-5.59	105.19	111.28
33	D7	6	GLN	CA-C-N	5.58	125.59	119.90
33	D7	6	GLN	C-N-CA	5.58	125.59	119.90
32	B6	11	LEU	N-CA-C	5.58	115.64	108.34
41	DF	38	ARG	N-CA-C	-5.56	105.12	111.07
42	BG	118	ARG	N-CA-C	-5.55	106.86	113.97
1	CA	961	U	N1-C1'-C2'	-5.55	103.67	112.00
36	BA	1060	U	C2'-C3'-O3'	5.55	117.83	109.50
30	D4	43	TYR	N-CA-C	5.55	122.62	110.80
26	D0	27	GLU	N-CA-C	5.55	118.49	110.28
53	DU	81	HIS	N-CA-C	-5.55	104.86	111.69
30	B4	43	TYR	N-CA-C	5.55	122.62	110.80
43	DH	153	LYS	CA-C-N	5.55	126.78	119.84
43	DH	153	LYS	C-N-CA	5.55	126.78	119.84

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1157	A	C2'-C3'-O3'	5.54	117.82	109.50
27	D1	44	PRO	N-CA-C	-5.54	103.10	111.41
22	CV	36	A	C5'-C4'-C3'	-5.53	107.70	116.00
18	AR	39	VAL	CB-CA-C	-5.53	107.01	111.71
39	DD	231	HIS	CA-C-N	-5.53	113.98	119.56
39	DD	231	HIS	C-N-CA	-5.53	113.98	119.56
39	BD	114	GLY	N-CA-C	-5.53	108.11	114.69
1	CA	1285	A	C2'-C3'-O3'	5.53	117.79	109.50
26	B0	14	ARG	N-CA-C	5.52	117.66	108.99
38	BC	78	ALA	CB-CA-C	-5.52	110.19	116.54
58	DZ	129	SER	CA-C-N	5.52	126.73	119.84
58	DZ	129	SER	C-N-CA	5.52	126.73	119.84
28	B2	54	LYS	N-CA-C	-5.51	106.40	113.01
1	CA	1190	G	N9-C1'-C2'	5.51	120.27	112.00
36	DA	1060	U	C2'-C3'-O3'	5.51	117.77	109.50
3	AC	94	LEU	N-CA-C	-5.51	101.89	110.10
20	CT	91	LEU	N-CA-C	-5.50	107.21	114.04
2	AB	151	GLY	N-CA-C	-5.50	102.03	112.27
12	AL	85	ILE	N-CA-C	5.50	116.43	110.21
1	CA	347	G	N9-C1'-C2'	-5.50	103.75	112.00
7	AG	57	GLU	N-CA-C	-5.50	102.66	109.64
53	BU	112	ARG	N-CA-C	-5.50	106.08	112.89
41	DF	71	GLY	N-CA-C	-5.50	107.66	115.30
43	DH	54	ARG	N-CA-C	5.50	115.20	108.11
2	AB	158	LEU	CA-C-N	5.49	125.80	119.92
2	AB	158	LEU	C-N-CA	5.49	125.80	119.92
43	BH	64	LEU	N-CA-C	-5.49	106.42	113.01
52	BT	97	ALA	N-CA-C	-5.49	101.59	110.32
51	DS	48	LEU	N-CA-C	5.49	117.07	111.14
52	DT	50	ILE	N-CA-C	5.49	116.55	111.45
52	DT	59	THR	N-CA-C	-5.49	99.48	108.76
43	DH	140	LYS	N-CA-C	-5.49	106.43	113.01
18	AR	86	VAL	N-CA-C	5.49	117.21	108.87
36	BA	2405	G	N9-C1'-C2'	5.49	120.23	112.00
42	DG	144	ILE	N-CA-C	5.48	115.85	108.17
36	BA	1970	A	C5'-C4'-O4'	5.48	117.33	109.10
43	DH	65	HIS	N-CA-C	-5.48	102.41	110.52
58	DZ	92	SER	CB-CA-C	-5.48	109.18	117.07
52	BT	125	ARG	N-CA-C	-5.47	104.96	111.03
36	DA	1495	A	N9-C1'-C2'	5.47	120.21	112.00
2	AB	214	ILE	N-CA-C	5.47	116.10	110.36
25	AZ	210	ILE	CA-C-N	5.46	126.67	119.84

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	AZ	210	ILE	C-N-CA	5.46	126.67	119.84
1	CA	1279	A	N9-C1'-C2'	5.46	120.19	112.00
18	CR	86	VAL	N-CA-C	5.46	117.17	108.87
36	DA	2031	A	C4'-C3'-O3'	-5.46	104.81	113.00
38	BC	14	VAL	N-CA-C	5.46	115.82	108.17
49	DQ	14	ARG	N-CA-C	5.46	117.23	111.28
42	BG	31	VAL	N-CA-C	5.46	114.10	109.02
9	CI	115	GLY	N-CA-C	-5.46	108.59	115.08
26	D0	14	ARG	N-CA-C	5.46	117.56	108.99
29	B3	11	SER	CA-C-N	5.46	125.93	120.04
29	B3	11	SER	C-N-CA	5.46	125.93	120.04
1	CA	351	G	C2'-C3'-O3'	5.46	117.68	109.50
5	AE	26	PHE	N-CA-C	5.45	118.59	110.52
36	BA	1948	G	C5'-C4'-O4'	-5.45	101.63	109.80
20	CT	87	LYS	N-CA-C	-5.45	105.37	112.23
53	DU	112	ARG	N-CA-C	-5.44	106.14	112.89
1	AA	961	U	N1-C1'-C2'	-5.44	103.84	112.00
20	AT	91	LEU	N-CA-C	-5.44	107.29	114.04
52	BT	59	THR	N-CA-C	-5.44	99.56	108.76
36	DA	958	U	N1-C1'-C2'	5.44	120.16	112.00
4	AD	8	VAL	N-CA-C	5.44	117.34	111.58
42	BG	12	TYR	N-CA-C	5.44	116.89	111.07
36	BA	790	C	C2'-C3'-O3'	5.43	117.65	109.50
36	BA	528	A	C4'-C3'-O3'	-5.43	104.85	113.00
57	DY	11	ASP	N-CA-C	5.43	115.41	108.24
36	DA	1159	U	C5'-C4'-C3'	-5.43	107.86	116.00
58	DZ	150	LEU	N-CA-C	5.42	117.53	110.43
53	DU	8	VAL	N-CA-C	5.42	116.29	111.90
9	AI	115	GLY	N-CA-C	-5.42	108.64	115.08
48	DP	51	PHE	N-CA-C	5.41	117.31	110.33
4	CD	41	GLY	N-CA-C	5.41	119.49	112.68
13	AM	118	ALA	N-CA-C	5.40	118.36	109.72
33	B7	28	ARG	N-CA-C	-5.40	105.05	111.69
40	BE	132	HIS	N-CA-C	5.40	119.10	112.03
52	DT	104	ASN	N-CA-C	5.40	119.35	112.87
36	BA	2282	G	C4'-C3'-O3'	5.40	117.50	109.40
43	BH	54	ARG	N-CA-C	5.40	115.07	108.11
56	BX	27	THR	N-CA-C	5.40	118.01	108.24
19	AS	64	GLU	N-CA-C	-5.40	106.67	113.20
12	CL	85	ILE	N-CA-C	5.40	116.31	110.21
52	DT	97	ALA	N-CA-C	-5.39	101.75	110.32
21	AU	22	ARG	CA-C-N	5.38	125.29	119.85

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AU	22	ARG	C-N-CA	5.38	125.29	119.85
25	CZ	288	VAL	N-CA-C	5.38	115.64	108.11
52	BT	29	ARG	CA-C-N	5.38	131.65	121.97
52	BT	29	ARG	C-N-CA	5.38	131.65	121.97
43	BH	65	HIS	N-CA-C	-5.38	102.56	110.52
27	B1	67	ILE	CB-CA-C	-5.37	108.66	114.35
1	AA	1420	C	C5'-C4'-C3'	-5.37	107.95	116.00
43	BH	52	VAL	N-CA-C	5.37	120.51	109.34
1	CA	995	C	N1-C1'-C2'	-5.37	105.95	114.00
36	BA	1495	A	N9-C1'-C2'	5.36	120.05	112.00
1	CA	772	U	C2'-C3'-O3'	5.36	121.74	113.70
36	DA	2689	U	C2'-C3'-O3'	5.36	117.55	109.50
36	DA	790	C	C2'-C3'-O3'	5.36	117.54	109.50
10	AJ	51	ARG	N-CA-C	5.36	116.81	111.07
39	DD	171	ASP	N-CA-C	-5.36	106.71	113.20
22	AV	36	A	C5'-C4'-C3'	-5.36	107.96	116.00
43	BH	140	LYS	N-CA-C	-5.35	106.59	113.01
1	AA	772	U	C2'-C3'-O3'	5.35	121.73	113.70
12	AL	119	LYS	N-CA-C	-5.35	101.55	110.17
36	BA	906	G	C5'-C4'-C3'	-5.35	107.98	116.00
1	CA	243	A	C1'-C2'-O2'	-5.35	103.78	111.80
28	B2	29	LYS	N-CA-C	-5.34	104.91	111.75
36	BA	1159	U	C5'-C4'-C3'	-5.34	107.99	116.00
3	AC	189	ALA	N-CA-C	-5.34	99.81	108.52
37	BB	44	G	N9-C1'-C2'	5.34	120.00	112.00
36	DA	857	C	C5'-C4'-C3'	-5.33	108.00	116.00
18	CR	39	VAL	CB-CA-C	-5.33	107.18	111.71
36	BA	784	A	C4'-C3'-O3'	-5.33	105.00	113.00
1	AA	1531	A	C2'-C3'-O3'	5.33	121.69	113.70
1	AA	347	G	N9-C1'-C2'	-5.33	104.01	112.00
32	D6	11	LEU	N-CA-C	5.32	115.31	108.34
43	DH	52	VAL	N-CA-C	5.32	120.41	109.34
20	AT	87	LYS	N-CA-C	-5.32	105.52	112.23
41	DF	143	ALA	N-CA-C	-5.32	105.57	111.36
33	D7	27	GLY	N-CA-C	-5.31	108.07	114.66
36	DA	2506	U	C2'-C3'-O3'	5.31	117.46	109.50
37	DB	44	G	N9-C1'-C2'	5.31	119.96	112.00
13	AM	80	ARG	N-CA-C	-5.30	105.95	112.90
56	DX	27	THR	N-CA-C	5.30	117.84	108.24
36	BA	857	C	C5'-C4'-C3'	-5.30	108.06	116.00
57	BY	25	GLY	N-CA-C	5.30	118.85	110.96
13	CM	27	LYS	N-CA-C	-5.30	106.82	113.28

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
48	DP	85	LEU	N-CA-C	-5.29	106.52	112.87
51	DS	78	LEU	N-CA-C	-5.29	104.56	111.02
8	CH	69	ARG	N-CA-C	5.29	117.45	109.41
36	DA	1970	A	C5'-C4'-O4'	5.29	117.03	109.10
38	DC	78	ALA	CB-CA-C	-5.29	110.46	116.54
20	AT	9	ASN	N-CA-C	5.28	116.31	108.86
43	BH	153	LYS	CA-C-N	5.28	126.44	119.84
43	BH	153	LYS	C-N-CA	5.28	126.44	119.84
1	CA	560	U	C3'-C2'-O2'	5.28	118.62	110.70
29	D3	11	SER	CA-C-N	5.28	125.75	120.04
29	D3	11	SER	C-N-CA	5.28	125.75	120.04
36	BA	2506	U	C2'-C3'-O3'	5.28	117.42	109.50
36	DA	528	A	C4'-C3'-O3'	-5.28	105.08	113.00
36	DA	2282	G	C4'-C3'-O3'	5.28	117.32	109.40
7	CG	57	GLU	N-CA-C	-5.27	102.94	109.64
39	DD	221	VAL	N-CA-C	5.27	115.68	107.99
11	AK	103	LEU	N-CA-C	-5.26	101.70	110.17
17	AQ	67	LYS	N-CA-C	-5.26	101.57	109.15
1	AA	1502	A	N9-C1'-C2'	5.26	121.89	114.00
36	BA	2689	U	C2'-C3'-O3'	5.26	117.39	109.50
40	BE	29	GLY	CA-C-N	5.26	126.41	119.84
40	BE	29	GLY	C-N-CA	5.26	126.41	119.84
1	CA	723	U	N1-C1'-C2'	5.26	121.89	114.00
39	DD	174	ILE	N-CA-C	5.26	115.35	107.51
50	DR	20	LEU	N-CA-C	-5.26	105.46	111.14
36	DA	1948	G	C5'-C4'-O4'	-5.26	101.91	109.80
1	AA	977	A	C5'-C4'-C3'	-5.25	107.32	115.20
11	AK	102	GLY	N-CA-C	-5.25	108.10	114.92
41	BF	65	TRP	CB-CA-C	-5.25	103.18	110.37
52	DT	79	HIS	N-CA-C	5.25	117.79	109.50
8	AH	69	ARG	N-CA-C	5.24	117.38	109.41
24	CY	69	C	C4'-C3'-O3'	5.24	120.87	113.00
11	AK	52	GLY	N-CA-C	5.24	120.88	110.77
31	B5	50	GLY	N-CA-C	5.24	118.16	112.29
36	DA	2360	A	C4'-C3'-O3'	5.24	117.26	109.40
9	AI	111	ARG	N-CA-C	5.24	117.62	110.24
16	AP	20	VAL	N-CA-C	5.24	117.29	108.81
33	D7	28	ARG	N-CA-C	-5.24	105.25	111.69
1	AA	1153	C	N1-C1'-C2'	-5.23	106.15	114.00
36	DA	1301	A	C2'-C3'-O3'	5.23	117.35	109.50
36	DA	481	G	N9-C1'-C2'	5.23	119.84	112.00
1	CA	428	G	N9-C1'-C2'	5.23	121.84	114.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	D5	5	PRO	N-CA-C	5.23	119.78	111.26
58	BZ	62	PRO	N-CA-C	-5.22	107.05	113.84
8	AH	120	THR	N-CA-C	-5.22	103.64	110.53
36	DA	1379	A	C4'-C3'-O3'	-5.22	101.57	109.40
48	BP	45	LEU	N-CA-C	-5.22	99.69	110.80
40	DE	132	HIS	N-CA-C	5.22	118.86	112.03
36	DA	2464	C	N1-C1'-C2'	-5.21	106.19	114.00
1	CA	197	A	C2'-C3'-O3'	5.21	117.31	109.50
53	DU	28	ARG	N-CA-C	-5.21	106.88	113.18
25	AZ	288	VAL	N-CA-C	5.21	115.40	108.11
36	BA	481	G	C4'-C3'-O3'	-5.21	105.19	113.00
24	AY	69	C	C4'-C3'-O3'	5.21	120.81	113.00
31	B5	5	PRO	N-CA-C	5.21	119.74	111.26
54	DV	9	GLY	N-CA-C	-5.21	107.62	115.32
13	CM	82	MET	N-CA-C	-5.20	105.52	111.14
40	BE	186	GLY	N-CA-C	5.20	125.51	113.18
1	AA	197	A	C2'-C3'-O3'	5.20	117.30	109.50
39	BD	198	ASN	N-CA-C	-5.20	104.24	111.52
5	CE	26	PHE	N-CA-C	5.20	118.21	110.52
3	AC	108	ASN	CA-C-N	5.20	124.51	118.85
3	AC	108	ASN	C-N-CA	5.20	124.51	118.85
36	BA	481	G	N9-C1'-C2'	5.20	119.79	112.00
40	DE	73	GLU	CA-C-N	5.19	125.40	120.31
40	DE	73	GLU	C-N-CA	5.19	125.40	120.31
39	BD	257	LEU	N-CA-C	-5.19	98.82	107.80
49	BQ	17	LEU	N-CA-C	5.19	116.48	109.11
2	CB	181	PHE	CA-C-N	-5.19	118.85	122.59
2	CB	181	PHE	C-N-CA	-5.19	118.85	122.59
36	DA	2094	G	C5'-C4'-C3'	-5.19	108.22	116.00
12	AL	70	ILE	CA-C-N	5.18	126.31	119.84
12	AL	70	ILE	C-N-CA	5.18	126.31	119.84
33	B7	27	GLY	N-CA-C	-5.18	108.24	114.66
39	BD	176	ARG	N-CA-C	-5.18	98.83	107.99
50	BR	7	GLY	N-CA-C	5.18	120.00	112.60
5	CE	31	LEU	N-CA-C	-5.18	100.73	108.96
21	CU	22	ARG	CA-C-N	5.17	125.08	119.85
21	CU	22	ARG	C-N-CA	5.17	125.08	119.85
13	CM	118	ALA	N-CA-C	5.17	117.99	109.72
1	AA	961	U	C1'-C2'-O2'	5.17	116.15	108.40
1	AA	428	G	N9-C1'-C2'	5.17	121.75	114.00
1	CA	1153	C	N1-C1'-C2'	-5.16	106.25	114.00
16	CP	20	VAL	N-CA-C	5.16	117.17	108.81

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	723	U	N1-C1'-C2'	5.16	121.74	114.00
1	AA	939	G	C2'-C3'-O3'	-5.16	105.96	113.70
48	BP	85	LEU	N-CA-C	-5.15	106.69	112.87
57	BY	11	ASP	N-CA-C	5.15	115.04	108.24
14	CN	14	PRO	N-CA-C	5.15	123.08	112.47
13	AM	82	MET	N-CA-C	-5.14	105.58	111.14
36	BA	1835	G	C5'-C4'-C3'	-5.14	108.29	116.00
1	AA	1439	C	C5'-C4'-C3'	-5.14	108.29	116.00
57	DY	25	GLY	N-CA-C	5.14	118.61	110.96
2	CB	158	LEU	CA-C-N	5.13	125.41	119.92
2	CB	158	LEU	C-N-CA	5.13	125.41	119.92
15	AO	24	SER	N-CA-C	-5.13	104.10	110.41
1	AA	1050	G	C4'-C3'-O3'	5.13	117.09	109.40
36	BA	758	C	C5'-C4'-C3'	-5.13	108.31	116.00
36	DA	758	C	C5'-C4'-C3'	-5.13	108.31	116.00
9	CI	72	GLY	N-CA-C	-5.12	106.18	113.86
42	BG	178	PHE	CA-C-N	5.12	126.24	119.84
42	BG	178	PHE	C-N-CA	5.12	126.24	119.84
6	AF	94	GLN	N-CA-C	5.12	117.02	108.99
11	CK	52	GLY	N-CA-C	5.12	120.64	110.77
40	BE	51	PHE	N-CA-C	5.11	116.96	109.24
36	DA	2481	G	N9-C1'-C2'	5.11	119.67	112.00
39	DD	198	ASN	N-CA-C	-5.11	104.36	111.52
51	DS	93	LYS	N-CA-C	-5.11	99.91	110.80
36	DA	2481	G	C4'-C3'-O3'	-5.11	105.33	113.00
36	BA	2173	A	C4'-C3'-O3'	5.11	117.06	109.40
19	CS	64	GLU	N-CA-C	-5.11	107.02	113.20
40	DE	29	GLY	CA-C-N	5.11	126.22	119.84
40	DE	29	GLY	C-N-CA	5.11	126.22	119.84
41	BF	38	ARG	N-CA-C	-5.11	105.61	111.07
52	BT	32	TYR	N-CA-C	5.10	121.65	110.80
37	DB	67	G	N9-C1'-C2'	-5.09	104.36	112.00
2	AB	132	LYS	N-CA-C	-5.09	106.92	113.02
39	DD	176	ARG	N-CA-C	-5.08	98.99	107.99
52	BT	104	ASN	N-CA-C	5.08	118.97	112.87
53	BU	28	ARG	N-CA-C	-5.08	107.03	113.18
4	AD	9	CYS	N-CA-C	-5.08	106.78	112.87
8	AH	103	VAL	N-CA-C	5.07	115.64	109.30
58	BZ	35	ARG	N-CA-C	-5.07	100.77	109.24
48	DP	45	LEU	N-CA-C	-5.07	99.99	110.80
49	DQ	20	ALA	CB-CA-C	-5.07	109.75	115.79
1	CA	1387	G	C5'-C4'-C3'	-5.07	108.40	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	CQ	67	LYS	N-CA-C	-5.07	101.85	109.15
36	BA	603	A	C2'-C3'-O3'	5.07	117.10	109.50
39	BD	171	ASP	N-CA-C	-5.07	107.07	113.20
1	AA	1498	U	N1-C1'-C2'	5.06	121.59	114.00
36	BA	1301	A	C2'-C3'-O3'	5.05	117.08	109.50
49	DQ	17	LEU	N-CA-C	5.05	116.28	109.11
36	BA	1313	U	N1-C1'-C2'	5.05	119.58	112.00
1	CA	1537	U	C2'-C3'-O3'	5.05	121.27	113.70
11	AK	38	ASN	CA-C-N	5.04	125.32	119.93
11	AK	38	ASN	C-N-CA	5.04	125.32	119.93
56	BX	5	TYR	N-CA-C	-5.04	106.91	113.16
18	CR	25	THR	N-CA-C	-5.04	108.40	114.75
52	DT	32	TYR	N-CA-C	5.04	121.53	110.80
4	AD	198	VAL	N-CA-C	5.04	115.52	108.17
13	AM	27	LYS	N-CA-C	-5.04	107.14	113.28
26	B0	11	ARG	N-CA-C	-5.03	106.45	112.59
5	CE	85	GLY	N-CA-C	-5.03	102.82	111.47
13	CM	80	ARG	N-CA-C	-5.03	106.32	112.90
32	B6	46	HIS	N-CA-C	5.02	117.31	107.57
39	BD	224	ALA	N-CA-C	-5.02	100.10	110.80
58	DZ	123	ASP	N-CA-C	-5.02	104.66	108.78
56	DX	5	TYR	N-CA-C	-5.02	106.94	113.16
4	CD	198	VAL	N-CA-C	5.02	115.50	108.17
36	DA	2604	U	C5'-C4'-C3'	-5.02	108.47	116.00
6	CF	94	GLN	N-CA-C	5.01	116.86	108.99
18	AR	56	THR	N-CA-C	-5.01	107.17	113.28
36	BA	2094	G	C5'-C4'-C3'	-5.01	108.48	116.00
40	DE	186	GLY	N-CA-C	5.01	125.06	113.18
49	DQ	25	ASP	N-CA-C	5.01	121.48	110.80
36	BA	1994	C	C3'-C2'-O2'	5.01	118.21	110.70
39	BD	69	ARG	N-CA-C	5.01	118.16	111.75
1	CA	1190	G	C4'-C3'-O3'	-5.01	105.49	113.00
3	CC	88	ARG	N-CA-C	-5.01	105.90	111.36
36	DA	2179	C	C3'-C2'-O2'	5.01	118.21	110.70
58	DZ	14	LYS	CA-C-N	5.00	125.28	119.47
58	DZ	14	LYS	C-N-CA	5.00	125.28	119.47
3	AC	44	GLU	N-CA-C	-5.00	105.49	112.45

All (19) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	AA	508	C	C3'

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atom
1	AA	1239	A	C3'
1	AA	1498	U	C3'
1	AA	1504	G	C3'
1	AA	1531	A	C3'
22	AW	76	A	C3'
24	AY	55	PSU	C3'
24	AY	69	C	C3'
36	BA	1819	A	C3'
36	BA	1820	U	C3'
1	CA	508	C	C3'
1	CA	1239	A	C3'
1	CA	1399	C	C3'
1	CA	1498	U	C3'
22	CW	76	A	C3'
24	CY	55	PSU	C3'
24	CY	69	C	C3'
36	DA	1819	A	C3'
36	DA	1820	U	C3'

All (245) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	AA	1050	G	Sidechain
1	AA	1055	A	Sidechain
1	AA	1077	G	Sidechain
1	AA	108	G	Sidechain
1	AA	1153	C	Sidechain
1	AA	1157	A	Sidechain
1	AA	1181	G	Sidechain
1	AA	1278	U	Sidechain
1	AA	1281	U	Sidechain
1	AA	1283	G	Sidechain
1	AA	1299	A	Sidechain
1	AA	1348	U	Sidechain
1	AA	1397	C	Sidechain
1	AA	1398	A	Sidechain
1	AA	14	U	Sidechain
1	AA	1406	U	Sidechain
1	AA	1414	U	Sidechain
1	AA	1472	U	Sidechain
1	AA	1494	G	Sidechain
1	AA	1512	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	1516	G	Sidechain
1	AA	189(G)	G	Sidechain
1	AA	189(H)	G	Sidechain
1	AA	197	A	Sidechain
1	AA	198	G	Sidechain
1	AA	21	G	Sidechain
1	AA	245	C	Sidechain
1	AA	250	A	Sidechain
1	AA	251	G	Sidechain
1	AA	323	U	Sidechain
1	AA	347	G	Sidechain
1	AA	369	C	Sidechain
1	AA	428	G	Sidechain
1	AA	498	U	Sidechain
1	AA	557	G	Sidechain
1	AA	570	G	Sidechain
1	AA	571	U	Sidechain
1	AA	573	A	Sidechain
1	AA	586	C	Sidechain
1	AA	603	U	Sidechain
1	AA	727	G	Sidechain
1	AA	741	G	Sidechain
1	AA	774	G	Sidechain
1	AA	803	G	Sidechain
1	AA	808	C	Sidechain
1	AA	898	G	Sidechain
1	AA	961	U	Sidechain
1	AA	977	A	Sidechain
1	AA	995	C	Sidechain
22	AW	39	U	Sidechain
36	BA	1133	U	Sidechain
36	BA	1162	G	Sidechain
36	BA	1215	G	Sidechain
36	BA	1238	G	Sidechain
36	BA	1379	A	Sidechain
36	BA	140	G	Sidechain
36	BA	1416	G	Sidechain
36	BA	1427	A	Sidechain
36	BA	15	G	Sidechain
36	BA	1647	G	Sidechain
36	BA	1649	G	Sidechain
36	BA	1766	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
36	BA	1772	G	Sidechain
36	BA	1773	A	Sidechain
36	BA	1801	G	Sidechain
36	BA	1807	G	Sidechain
36	BA	1831	G	Sidechain
36	BA	1841	U	Sidechain
36	BA	1900	A	Sidechain
36	BA	1928	A	Sidechain
36	BA	1938	A	Sidechain
36	BA	1973	G	Sidechain
36	BA	1985	G	Sidechain
36	BA	2031	A	Sidechain
36	BA	2061	G	Sidechain
36	BA	2073	C	Sidechain
36	BA	2074	U	Sidechain
36	BA	2173	A	Sidechain
36	BA	2266	A	Sidechain
36	BA	2320	A	Sidechain
36	BA	2335	A	Sidechain
36	BA	2344	U	Sidechain
36	BA	2360	A	Sidechain
36	BA	2413	G	Sidechain
36	BA	2438	U	Sidechain
36	BA	2464	C	Sidechain
36	BA	250	G	Sidechain
36	BA	2506	U	Sidechain
36	BA	2508	G	Sidechain
36	BA	2542	A	Sidechain
36	BA	2564	A	Sidechain
36	BA	2569	G	Sidechain
36	BA	2581	G	Sidechain
36	BA	2582	G	Sidechain
36	BA	2595	G	Sidechain
36	BA	2609	U	Sidechain
36	BA	2685	G	Sidechain
36	BA	2746	U	Sidechain
36	BA	2758	A	Sidechain
36	BA	2779	U	Sidechain
36	BA	2848	G	Sidechain
36	BA	383	U	Sidechain
36	BA	463	G	Sidechain
36	BA	532	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
36	BA	630	G	Sidechain
36	BA	670	A	Sidechain
36	BA	675	A	Sidechain
36	BA	684	G	Sidechain
36	BA	700	G	Sidechain
36	BA	760	G	Sidechain
36	BA	763	G	Sidechain
36	BA	792	G	Sidechain
36	BA	945	A	Sidechain
36	BA	946	G	Sidechain
36	BA	958	U	Sidechain
36	BA	995	C	Sidechain
37	BB	16	G	Sidechain
37	BB	24	G	Sidechain
37	BB	40	U	Sidechain
37	BB	42	C	Sidechain
37	BB	66	A	Sidechain
37	BB	67	G	Sidechain
1	CA	1050	G	Sidechain
1	CA	1077	G	Sidechain
1	CA	1079	G	Sidechain
1	CA	1153	C	Sidechain
1	CA	1157	A	Sidechain
1	CA	1181	G	Sidechain
1	CA	1278	U	Sidechain
1	CA	1281	U	Sidechain
1	CA	1283	G	Sidechain
1	CA	1299	A	Sidechain
1	CA	1338	G	Sidechain
1	CA	1348	U	Sidechain
1	CA	1370	G	Sidechain
1	CA	1380	U	Sidechain
1	CA	1386	G	Sidechain
1	CA	14	U	Sidechain
1	CA	1414	U	Sidechain
1	CA	1428	A	Sidechain
1	CA	1442	G	Sidechain
1	CA	1498	U	Sidechain
1	CA	1505	G	Sidechain
1	CA	1510	U	Sidechain
1	CA	1522	U	Sidechain
1	CA	189(H)	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	CA	197	A	Sidechain
1	CA	198	G	Sidechain
1	CA	21	G	Sidechain
1	CA	245	C	Sidechain
1	CA	250	A	Sidechain
1	CA	251	G	Sidechain
1	CA	323	U	Sidechain
1	CA	347	G	Sidechain
1	CA	369	C	Sidechain
1	CA	428	G	Sidechain
1	CA	498	U	Sidechain
1	CA	557	G	Sidechain
1	CA	573	A	Sidechain
1	CA	586	C	Sidechain
1	CA	7	G	Sidechain
1	CA	727	G	Sidechain
1	CA	741	G	Sidechain
1	CA	773	G	Sidechain
1	CA	808	C	Sidechain
1	CA	898	G	Sidechain
1	CA	940	C	Sidechain
1	CA	952	U	Sidechain
1	CA	961	U	Sidechain
1	CA	977	A	Sidechain
1	CA	995	C	Sidechain
22	CW	39	U	Sidechain
36	DA	1133	U	Sidechain
36	DA	1156	A	Sidechain
36	DA	1162	G	Sidechain
36	DA	1215	G	Sidechain
36	DA	1238	G	Sidechain
36	DA	1379	A	Sidechain
36	DA	140	G	Sidechain
36	DA	1416	G	Sidechain
36	DA	1427	A	Sidechain
36	DA	15	G	Sidechain
36	DA	1647	G	Sidechain
36	DA	1766	U	Sidechain
36	DA	1772	G	Sidechain
36	DA	1773	A	Sidechain
36	DA	1801	G	Sidechain
36	DA	1807	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
36	DA	1831	G	Sidechain
36	DA	1841	U	Sidechain
36	DA	1907	G	Sidechain
36	DA	1940	U	Sidechain
36	DA	1952	A	Sidechain
36	DA	1985	G	Sidechain
36	DA	2010	G	Sidechain
36	DA	2011	U	Sidechain
36	DA	202	U	Sidechain
36	DA	2031	A	Sidechain
36	DA	2073	C	Sidechain
36	DA	2074	U	Sidechain
36	DA	2176	A	Sidechain
36	DA	2266	A	Sidechain
36	DA	2320	A	Sidechain
36	DA	2344	U	Sidechain
36	DA	2360	A	Sidechain
36	DA	2413	G	Sidechain
36	DA	2422	A	Sidechain
36	DA	2438	U	Sidechain
36	DA	2464	C	Sidechain
36	DA	2491	U	Sidechain
36	DA	2504	U	Sidechain
36	DA	2506	U	Sidechain
36	DA	2508	G	Sidechain
36	DA	2542	A	Sidechain
36	DA	2564	A	Sidechain
36	DA	2569	G	Sidechain
36	DA	2581	G	Sidechain
36	DA	2582	G	Sidechain
36	DA	2595	G	Sidechain
36	DA	2726	U	Sidechain
36	DA	2746	U	Sidechain
36	DA	2758	A	Sidechain
36	DA	2779	U	Sidechain
36	DA	463	G	Sidechain
36	DA	532	A	Sidechain
36	DA	555	U	Sidechain
36	DA	630	G	Sidechain
36	DA	670	A	Sidechain
36	DA	675	A	Sidechain
36	DA	684	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
36	DA	686	G	Sidechain
36	DA	700	G	Sidechain
36	DA	742	G	Sidechain
36	DA	760	G	Sidechain
36	DA	792	G	Sidechain
36	DA	945	A	Sidechain
36	DA	946	G	Sidechain
36	DA	958	U	Sidechain
36	DA	995	C	Sidechain
37	DB	16	G	Sidechain
37	DB	24	G	Sidechain
37	DB	40	U	Sidechain
37	DB	42	C	Sidechain
37	DB	66	A	Sidechain
37	DB	67	G	Sidechain

5.2 Too-close contacts (i)

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	AA	32451	0	16382	1017	0
1	CA	32451	0	16382	1043	0
2	AB	1900	0	1951	215	0
2	CB	1900	0	1951	215	0
3	AC	1612	0	1677	155	0
3	CC	1612	0	1677	165	0
4	AD	1703	0	1764	233	0
4	CD	1703	0	1763	237	0
5	AE	1146	0	1207	80	0
5	CE	1146	0	1207	91	0
6	AF	843	0	857	85	0
6	CF	843	0	857	84	0
7	AG	1257	0	1296	95	0
7	CG	1257	0	1296	93	0
8	AH	1116	0	1177	55	0
8	CH	1116	0	1177	59	0
9	AI	1010	0	1037	145	0
9	CI	1010	0	1037	145	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
10	AJ	794	0	840	117	0
10	CJ	794	0	840	120	0
11	AK	885	0	904	64	0
11	CK	885	0	904	67	0
12	AL	970	0	1057	111	0
12	CL	970	0	1057	115	0
13	AM	987	0	1059	144	0
13	CM	987	0	1059	146	0
14	AN	492	0	529	58	0
14	CN	492	0	529	60	0
15	AO	734	0	771	46	0
15	CO	734	0	771	46	0
16	AP	700	0	720	79	0
16	CP	700	0	720	79	0
17	AQ	823	0	891	56	0
17	CQ	823	0	891	60	0
18	AR	574	0	644	35	0
18	CR	574	0	644	39	0
19	AS	629	0	652	81	0
19	CS	629	0	652	82	0
20	AT	763	0	861	83	0
20	CT	763	0	861	83	0
21	AU	208	0	221	13	0
21	CU	208	0	221	13	0
22	AV	1619	0	822	59	0
22	AW	1619	0	822	65	0
22	CV	1619	0	822	62	0
22	CW	1619	0	822	69	0
23	AX	361	0	184	7	0
23	CX	361	0	184	11	0
24	AY	1643	0	853	75	0
24	CY	1643	0	853	75	0
25	AZ	2983	0	2999	294	0
25	CZ	2983	0	2999	299	0
26	B0	662	0	688	62	0
26	D0	662	0	688	64	0
27	B1	731	0	808	74	0
27	D1	731	0	808	72	0
28	B2	598	0	653	165	0
28	D2	598	0	653	73	0
29	B3	467	0	523	51	0
29	D3	467	0	523	51	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
30	B4	340	0	336	51	0
30	D4	340	0	336	55	0
31	B5	459	0	480	66	0
31	D5	459	0	480	68	0
32	B6	433	0	461	136	0
32	D6	433	0	461	136	0
33	B7	418	0	467	29	0
33	D7	418	0	467	27	0
34	B8	507	0	576	125	0
34	D8	507	0	576	123	0
35	B9	307	0	336	42	0
35	D9	307	0	335	42	0
36	BA	62477	0	31497	2136	0
36	DA	62477	0	31497	2207	0
37	BB	2551	0	1295	84	0
37	DB	2551	0	1295	94	0
38	BC	1742	0	1800	150	0
38	DC	1742	0	1800	140	0
39	BD	2145	0	2234	234	0
39	DD	2145	0	2234	242	0
40	BE	1563	0	1629	229	0
40	DE	1563	0	1629	230	0
41	BF	1623	0	1677	201	0
41	DF	1623	0	1677	207	0
42	BG	1474	0	1535	257	0
42	DG	1474	0	1535	246	0
43	BH	1222	0	1282	185	0
43	DH	1222	0	1282	191	0
44	BJ	651	0	164	27	0
44	DJ	651	0	164	31	0
45	BK	700	0	173	18	0
45	DK	700	0	173	15	0
46	BN	1104	0	1180	183	0
46	DN	1104	0	1180	179	0
47	BO	933	0	996	87	0
47	DO	933	0	996	87	0
48	BP	1114	0	1187	271	0
48	DP	1114	0	1187	272	0
49	BQ	1122	0	1179	121	0
49	DQ	1122	0	1179	113	0
50	BR	960	0	1021	138	0
50	DR	960	0	1021	133	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
51	BS	770	0	832	162	0
51	DS	770	0	832	160	0
52	BT	1141	0	1202	235	0
52	DT	1141	0	1202	227	0
53	BU	958	0	1015	141	0
53	DU	958	0	1015	141	0
54	BV	779	0	852	118	0
54	DV	779	0	852	121	0
55	BW	896	0	953	90	0
55	DW	896	0	953	89	0
56	BX	725	0	778	87	0
56	DX	725	0	778	88	0
57	BY	775	0	870	176	0
57	DY	775	0	870	167	0
58	BZ	1403	0	1432	224	0
58	DZ	1403	0	1432	208	0
59	AD	1	0	0	0	0
59	AN	1	0	0	0	0
59	B4	1	0	0	0	0
59	B9	1	0	0	0	0
59	CD	1	0	0	0	0
59	CN	1	0	0	0	0
59	D4	1	0	0	0	0
59	D9	1	0	0	0	0
60	AZ	28	0	12	2	0
60	CZ	28	0	12	6	0
61	AZ	57	0	58	3	0
61	CZ	57	0	59	2	0
All	All	307322	0	208715	18175	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 35.

All (18175) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:DC:123:VAL:CG2	38:DC:127:LEU:HD23	1.33	1.53
38:BC:123:VAL:CG2	38:BC:127:LEU:HD23	1.33	1.51
38:DC:123:VAL:HG23	38:DC:127:LEU:CD2	1.50	1.42
38:BC:123:VAL:HG23	38:BC:127:LEU:CD2	1.50	1.41
36:DA:1899:G:N2	36:DA:1902:C:H41	1.34	1.24

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1899:G:N2	36:BA:1902:C:H41	1.36	1.24
22:CV:41:C:H2'	22:CV:42:C:H5"	1.22	1.19
36:DA:2645:G:H3'	36:DA:2646:C:H5'	1.21	1.18
13:AM:10:PRO:HB2	13:AM:18:ALA:HB1	1.21	1.18
1:AA:1149:C:H2'	1:AA:1150:U:O2	1.42	1.17
56:BX:40:LYS:HG2	56:BX:51:VAL:HB	1.21	1.17
1:CA:1149:C:H2'	1:CA:1150:U:O2	1.41	1.17
1:AA:227:G:H2'	1:AA:228:A:H5"	1.22	1.17
36:BA:2645:G:H3'	36:BA:2646:C:H5'	1.22	1.17
1:AA:1053:G:H4'	1:AA:1054:C:H5'	1.25	1.17
1:CA:227:G:H2'	1:CA:228:A:H5"	1.21	1.16
13:CM:10:PRO:HB2	13:CM:18:ALA:HB1	1.22	1.16
34:D8:32:LEU:HG	34:D8:36:LYS:HZ3	1.01	1.16
42:BG:7:LEU:HD21	42:BG:176:LEU:HD21	1.24	1.16
52:DT:33:LYS:HE3	52:DT:43:GLN:HE21	1.06	1.16
28:B2:47:ASN:HA	28:B2:50:ILE:HB	1.29	1.15
41:DF:24:LEU:HB3	41:DF:25:PRO:HD2	1.28	1.14
22:AV:41:C:H2'	22:AV:42:C:H5"	1.21	1.14
43:BH:85:LYS:HE2	43:BH:133:VAL:N	1.61	1.13
43:DH:85:LYS:HE2	43:DH:133:VAL:N	1.61	1.13
7:AG:79:ARG:HG2	7:AG:84:ASN:HA	1.23	1.13
41:BF:24:LEU:HB3	41:BF:25:PRO:HD2	1.29	1.13
1:CA:1053:G:H4'	1:CA:1054:C:H5'	1.28	1.13
49:BQ:141:GLN:HE21	58:BZ:72:ARG:HA	0.99	1.13
7:CG:79:ARG:HG2	7:CG:84:ASN:HA	1.22	1.13
41:DF:167:ALA:HB1	41:DF:173:VAL:HG11	1.30	1.13
39:DD:30:GLU:HB2	39:DD:35:LYS:HD2	1.28	1.12
52:DT:53:ARG:HH11	52:DT:53:ARG:HB3	1.12	1.12
1:CA:1003:G:H2'	1:CA:1004:A:H4'	1.32	1.12
52:DT:55:ASN:H	52:DT:59:THR:HG22	1.12	1.12
28:B2:53:LEU:HA	28:B2:56:GLN:HG2	1.31	1.12
40:DE:47:VAL:HG21	40:DE:86:PRO:HD2	1.32	1.12
36:DA:1301:A:O2'	36:DA:1302:A:H2'	1.50	1.11
36:BA:2092:U:H4'	36:BA:2093:G:H5"	1.32	1.11
36:DA:31:C:H2'	36:DA:32:C:H5"	1.33	1.11
52:BT:53:ARG:HH11	52:BT:53:ARG:HB3	1.11	1.11
56:BX:12:VAL:HB	56:BX:17:ALA:HB1	1.15	1.11
56:DX:12:VAL:HB	56:DX:17:ALA:HB1	1.16	1.11
36:BA:1301:A:O2'	36:BA:1302:A:H2'	1.50	1.11
36:BA:1543:C:H3'	36:BA:1544:A:H5"	1.33	1.10
42:BG:82:LEU:HD13	42:BG:87:PRO:HB3	1.30	1.10

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:DX:12:VAL:HG23	56:DX:13:LEU:H	1.16	1.10
56:DX:40:LYS:HG2	56:DX:51:VAL:HB	1.18	1.10
1:AA:1003:G:H2'	1:AA:1004:A:H4'	1.33	1.10
36:DA:1543:C:H3'	36:DA:1544:A:H5"	1.32	1.10
32:B6:33:LYS:HE2	32:B6:33:LYS:HA	1.31	1.10
41:BF:25:PRO:HB3	41:BF:119:ARG:HB2	1.32	1.10
36:BA:628:G:H2'	36:BA:629:G:H5"	1.32	1.09
40:BE:47:VAL:HG21	40:BE:86:PRO:HD2	1.33	1.09
42:BG:67:LYS:HD3	42:BG:67:LYS:H	0.96	1.09
46:DN:9:VAL:HG12	46:DN:10:GLU:H	1.16	1.09
32:B6:35:GLU:HB3	32:B6:51:GLU:HB2	1.35	1.09
36:DA:1887:C:H2'	36:DA:1888:G:H5"	1.34	1.09
1:AA:1305:G:H22	1:AA:1331:G:H2'	1.07	1.09
34:B8:62:LEU:HD13	36:BA:242:G:H5"	1.33	1.09
49:BQ:141:GLN:NE2	58:BZ:72:ARG:HA	1.66	1.09
41:DF:37:VAL:HG11	48:DP:7:ARG:HH12	1.16	1.09
36:BA:1484:G:H2'	36:BA:1485:G:H5"	1.09	1.08
41:DF:25:PRO:HB3	41:DF:119:ARG:HB2	1.32	1.08
39:BD:30:GLU:HB2	39:BD:35:LYS:HD2	1.24	1.08
1:AA:954:G:H4'	13:AM:120:LYS:HD2	1.35	1.08
22:CV:46:G:H3'	22:CV:47:U:C5'	1.83	1.08
34:D8:62:LEU:HD13	36:DA:242:G:H5"	1.33	1.08
46:BN:9:VAL:HG12	46:BN:10:GLU:H	1.18	1.08
1:CA:1305:G:H22	1:CA:1331:G:H2'	1.06	1.08
1:CA:1305:G:N2	1:CA:1331:G:H2'	1.69	1.08
32:D6:35:GLU:HB3	32:D6:51:GLU:HB2	1.35	1.08
1:AA:1417:G:H8	1:AA:1417:G:H5'	0.97	1.08
19:AS:62:ILE:HA	19:AS:66:MET:HE2	1.36	1.08
39:BD:71:ASP:HB2	39:BD:103:ARG:HH22	1.19	1.08
41:BF:168:ARG:HG3	41:BF:175:THR:HG21	1.35	1.08
36:DA:628:G:H2'	36:DA:629:G:H5"	1.31	1.08
36:DA:925:C:H2'	36:DA:926:A:H5"	1.36	1.07
36:DA:1484:G:H2'	36:DA:1485:G:H5"	1.09	1.07
9:AI:53:VAL:HG22	9:AI:95:LYS:NZ	1.67	1.07
31:B5:4:HIS:HB3	31:B5:5:PRO:HD3	1.35	1.07
26:B0:10:THR:HG22	26:B0:12:ASN:H	1.18	1.07
58:BZ:151:HIS:HA	58:BZ:171:ILE:HD12	1.30	1.07
36:BA:2187:G:H2'	36:BA:2188:C:H5'	1.32	1.07
41:BF:143:ALA:HB1	41:BF:148:LEU:HB2	1.32	1.07
19:CS:62:ILE:HA	19:CS:66:MET:HE2	1.32	1.07
43:BH:85:LYS:CE	43:BH:133:VAL:H	1.68	1.07

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:CI:53:VAL:HG22	9:CI:95:LYS:NZ	1.69	1.07
58:DZ:51:ALA:HB1	58:DZ:57:ILE:HD11	1.35	1.07
1:AA:1417:G:H5'	1:AA:1417:G:C8	1.89	1.06
34:B8:32:LEU:HG	34:B8:36:LYS:HZ1	0.97	1.06
52:BT:33:LYS:HE3	52:BT:43:GLN:HE21	1.06	1.06
1:CA:954:G:H4'	13:CM:120:LYS:HD2	1.33	1.06
40:DE:57:LYS:HA	40:DE:57:LYS:HE3	1.32	1.06
43:DH:85:LYS:CE	43:DH:133:VAL:H	1.68	1.06
28:B2:57:ILE:HG22	28:B2:61:LEU:HG	1.36	1.06
36:BA:925:C:H2'	36:BA:926:A:H5"	1.36	1.06
22:AV:46:G:H3'	22:AV:47:U:C5'	1.83	1.06
28:B2:2:LYS:HD3	28:B2:59:ARG:HH12	0.94	1.06
32:D6:33:LYS:HE2	32:D6:33:LYS:HA	1.31	1.06
36:BA:31:C:H2'	36:BA:32:C:H5"	1.34	1.06
41:BF:37:VAL:HG11	48:BP:7:ARG:HH12	1.17	1.06
1:AA:1305:G:N2	1:AA:1331:G:H2'	1.69	1.05
42:BG:72:ARG:HH21	42:BG:86:MET:HG3	1.17	1.05
43:BH:85:LYS:HZ3	43:BH:132:ARG:HA	1.21	1.05
39:DD:71:ASP:HB2	39:DD:103:ARG:HH22	1.16	1.05
22:AW:71:G:H2'	22:AW:72:C:H5'	1.38	1.05
36:BA:271(L):U:H5"	36:BA:271(M):G:H5'	1.38	1.05
41:DF:143:ALA:HB1	41:DF:148:LEU:HB2	1.32	1.05
7:CG:79:ARG:HE	7:CG:84:ASN:HB2	1.22	1.05
42:DG:63:ILE:HA	42:DG:143:GLU:HG3	1.39	1.05
36:DA:2187:G:H2'	36:DA:2188:C:H5'	1.36	1.05
51:DS:59:LYS:HG2	51:DS:60:GLY:H	1.20	1.05
40:BE:57:LYS:HA	40:BE:57:LYS:HE3	1.33	1.05
36:DA:271(L):U:H5"	36:DA:271(M):G:H5'	1.37	1.04
36:DA:1024:G:H3'	36:DA:1025:G:H5"	1.38	1.04
41:DF:168:ARG:HG3	41:DF:175:THR:HG21	1.35	1.04
1:CA:227:G:C2'	1:CA:228:A:H5"	1.88	1.04
31:D5:4:HIS:HB3	31:D5:5:PRO:HD3	1.35	1.04
10:AJ:55:LYS:HZ2	10:AJ:55:LYS:HB2	1.16	1.04
38:BC:27:ARG:HD3	38:BC:182:PRO:CG	1.87	1.04
51:BS:59:LYS:HG2	51:BS:60:GLY:H	1.18	1.04
52:BT:55:ASN:H	52:BT:59:THR:HG22	1.13	1.04
24:AY:45:U:H3'	24:AY:46:7MG:C5'	1.86	1.04
29:B3:35:ARG:HH11	29:B3:35:ARG:HB2	1.21	1.04
36:BA:1887:C:H2'	36:BA:1888:G:H5"	1.38	1.04
36:BA:2101:G:H2'	36:BA:2102:U:H5"	1.38	1.04
12:AL:18:VAL:HG23	12:AL:19:ARG:H	1.19	1.03

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:AU:6:ARG:HD3	21:AU:15:ARG:CZ	1.88	1.03
1:CA:1271:G:H2'	1:CA:1272:G:H5"	1.39	1.03
43:DH:85:LYS:HZ3	43:DH:132:ARG:HA	1.23	1.03
36:BA:654(E):G:H22	36:BA:654(Q):C:H1'	1.21	1.03
43:DH:16:SER:HB2	43:DH:27:LYS:HB2	1.41	1.03
43:DH:153:LYS:HD3	43:DH:153:LYS:H	1.21	1.03
36:BA:1024:G:H3'	36:BA:1025:G:H5"	1.40	1.03
43:BH:16:SER:HB2	43:BH:27:LYS:HB2	1.40	1.03
56:BX:12:VAL:HG23	56:BX:13:LEU:H	1.18	1.03
24:CY:45:U:H3'	24:CY:46:7MG:C5'	1.87	1.03
43:DH:85:LYS:HE2	43:DH:133:VAL:H	0.88	1.03
43:BH:153:LYS:HD3	43:BH:153:LYS:H	1.23	1.03
1:CA:1533:C:H3'	1:CA:1534:A:H5"	1.37	1.03
5:CE:12:LEU:CD1	5:CE:31:LEU:HB2	1.89	1.03
22:CV:41:C:C2'	22:CV:42:C:H5"	1.89	1.03
36:DA:1484:G:C2'	36:DA:1485:G:H5"	1.89	1.03
22:AV:41:C:C2'	22:AV:42:C:H5"	1.88	1.03
28:B2:28:LYS:HZ3	28:B2:31:GLU:HG3	1.24	1.02
32:B6:15:GLU:CD	32:B6:18:ARG:CZ	2.32	1.02
50:BR:99:LYS:H	50:BR:99:LYS:HD2	1.20	1.02
10:CJ:55:LYS:HB2	10:CJ:55:LYS:HZ2	1.23	1.02
42:BG:51:ARG:HA	42:BG:51:ARG:HE	1.20	1.02
24:CY:4:G:H2'	24:CY:5:G:H5"	1.38	1.02
25:CZ:355:LEU:HB3	25:CZ:370:PHE:HB3	1.41	1.02
29:D3:35:ARG:HB2	29:D3:35:ARG:HH11	1.19	1.02
36:BA:2833:G:H3'	36:BA:2834:G:C5'	1.89	1.02
41:BF:167:ALA:HB1	41:BF:173:VAL:HG11	1.33	1.02
58:BZ:96:VAL:HG22	58:BZ:97:GLU:H	1.25	1.02
26:D0:10:THR:HG22	26:D0:12:ASN:H	1.18	1.02
36:DA:2092:U:H4'	36:DA:2093:G:H5"	1.36	1.02
36:DA:2101:G:H2'	36:DA:2102:U:H5"	1.37	1.02
36:DA:2833:G:H3'	36:DA:2834:G:C5'	1.88	1.02
36:BA:628:G:C2'	36:BA:629:G:H5"	1.90	1.02
40:BE:38:THR:HG22	40:BE:40:GLU:H	1.24	1.02
10:CJ:61:GLU:HG3	14:CN:58:LYS:HE2	1.41	1.02
22:CW:71:G:H2'	22:CW:72:C:H5'	1.38	1.02
36:BA:272(H):C:H2'	36:BA:272(I):U:H5"	1.41	1.02
52:BT:2:ASN:HD22	52:BT:7:ILE:HD11	1.23	1.02
1:AA:227:G:C2'	1:AA:228:A:H5"	1.89	1.01
24:AY:4:G:H2'	24:AY:5:G:H5"	1.37	1.01
25:AZ:355:LEU:HB3	25:AZ:370:PHE:HB3	1.42	1.01

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DG:144:ILE:HD11	42:DG:149:VAL:HG11	1.42	1.01
43:BH:85:LYS:HE2	43:BH:133:VAL:H	0.88	1.01
32:D6:18:ARG:HH11	32:D6:18:ARG:HG2	1.25	1.01
36:DA:628:G:C2'	36:DA:629:G:H5"	1.89	1.01
42:DG:73:ALA:HB3	42:DG:87:PRO:HG3	1.42	1.01
52:DT:2:ASN:HD22	52:DT:7:ILE:HD11	1.21	1.01
12:AL:20:LYS:HD3	12:AL:20:LYS:H	1.23	1.01
36:BA:612:C:H2'	36:BA:613:G:H5"	1.42	1.01
12:CL:18:VAL:HG23	12:CL:19:ARG:H	1.22	1.01
40:DE:38:THR:HG22	40:DE:40:GLU:H	1.25	1.01
57:DY:76:CYS:SG	57:DY:77:PRO:HD2	2.01	1.01
10:AJ:61:GLU:HG3	14:AN:58:LYS:HE2	1.43	1.01
36:DA:272(H):C:H2'	36:DA:272(I):U:H5"	1.42	1.01
1:AA:1271:G:H2'	1:AA:1272:G:H5"	1.38	1.01
27:B1:3:LYS:HZ3	27:B1:3:LYS:N	1.58	1.01
36:BA:1884:A:H2'	36:BA:1885:A:H5"	1.43	1.01
54:BV:15:GLU:HB3	54:BV:16:PRO:HD2	1.40	1.01
57:BY:9:LYS:HG2	57:BY:10:GLY:H	1.25	1.01
4:AD:189:PRO:HB2	4:AD:194:LEU:HD21	1.40	1.00
50:DR:99:LYS:HD2	50:DR:99:LYS:H	1.21	1.00
36:BA:1484:G:C2'	36:BA:1485:G:H5"	1.89	1.00
36:DA:654(E):G:H22	36:DA:654(Q):C:H1'	1.21	1.00
5:CE:76:ILE:HD11	5:CE:142:LEU:HD21	1.43	1.00
36:DA:31:C:C2'	36:DA:32:C:H5"	1.91	1.00
54:DV:15:GLU:HB3	54:DV:16:PRO:HD2	1.41	1.00
4:CD:189:PRO:HB2	4:CD:194:LEU:HD21	1.41	1.00
5:AE:76:ILE:HD11	5:AE:142:LEU:HD21	1.43	1.00
34:B8:23:VAL:HG12	34:B8:46:ARG:HH11	1.27	1.00
36:BA:2310:A:O2'	36:BA:2311:A:H5'	1.62	1.00
10:AJ:50:ILE:H	10:AJ:50:ILE:HD13	1.27	0.99
36:DA:2310:A:O2'	36:DA:2311:A:H5'	1.61	0.99
48:BP:146:VAL:HG22	48:BP:147:LEU:H	1.21	0.99
1:AA:1053:G:H4'	1:AA:1054:C:C5'	1.91	0.99
42:BG:67:LYS:H	42:BG:67:LYS:CD	1.75	0.99
11:CK:108:ILE:HG21	18:CR:88:LYS:HB2	1.44	0.99
34:D8:61:LEU:HD22	34:D8:62:LEU:HG	1.45	0.99
27:D1:34:THR:HG21	27:D1:37:ILE:HD11	1.45	0.99
36:BA:1499:C:H5'	36:BA:1499:C:H6	1.27	0.99
4:AD:28:SER:HB3	4:AD:29:PRO:HD2	1.43	0.99
21:CU:6:ARG:HD3	21:CU:15:ARG:CZ	1.92	0.99
1:CA:1053:G:H4'	1:CA:1054:C:C5'	1.92	0.99

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:D8:23:VAL:HG12	34:D8:46:ARG:HH11	1.28	0.99
36:DA:612:C:H2'	36:DA:613:G:H5"	1.41	0.99
38:DC:72:VAL:HG23	38:DC:111:ASP:HB3	1.45	0.99
1:AA:1277:C:HO2'	1:AA:1279:A:H8	1.10	0.99
25:AZ:241:ARG:HH11	25:AZ:241:ARG:HB3	1.27	0.98
11:AK:108:ILE:HG21	18:AR:88:LYS:HB2	1.44	0.98
36:BA:1279:G:H4'	50:BR:31:HIS:CD2	1.98	0.98
48:DP:146:VAL:HG22	48:DP:147:LEU:H	1.23	0.98
58:BZ:69:THR:HG22	58:BZ:90:VAL:HA	1.43	0.98
42:BG:67:LYS:HD3	42:BG:67:LYS:N	1.77	0.98
12:CL:20:LYS:HD3	12:CL:20:LYS:H	1.25	0.98
17:AQ:52:LYS:HD3	17:AQ:52:LYS:H	1.28	0.98
28:B2:62:THR:HG21	36:BA:76:C:O2'	1.62	0.98
1:CA:1271:G:C2'	1:CA:1272:G:H5"	1.94	0.98
22:CV:23:A:H8	22:CV:23:A:H5'	1.28	0.98
36:DA:1279:G:H4'	50:DR:31:HIS:CD2	1.98	0.98
38:DC:123:VAL:CG2	38:DC:127:LEU:CD2	2.23	0.98
10:CJ:50:ILE:HD13	10:CJ:50:ILE:H	1.29	0.98
17:CQ:52:LYS:HD3	17:CQ:52:LYS:H	1.26	0.98
1:AA:1271:G:C2'	1:AA:1272:G:H5"	1.94	0.97
22:AV:23:A:H5'	22:AV:23:A:H8	1.29	0.97
22:AV:46:G:H3'	22:AV:47:U:H5"	0.98	0.97
57:BY:76:CYS:SG	57:BY:77:PRO:HD2	2.03	0.97
14:CN:59:ALA:O	14:CN:60:SER:HB2	1.61	0.97
32:D6:15:GLU:CD	32:D6:18:ARG:CZ	2.38	0.97
53:DU:85:LYS:HD3	53:DU:117:GLN:HE22	1.29	0.97
2:AB:131:PRO:HG2	2:AB:134:GLU:HG2	1.44	0.97
34:B8:13:ARG:HD2	48:BP:61:ARG:HD2	1.46	0.97
5:AE:12:LEU:CD1	5:AE:31:LEU:HB2	1.93	0.97
3:CC:79:ARG:HB2	3:CC:79:ARG:HH11	1.30	0.97
22:CV:46:G:H3'	22:CV:47:U:H5"	0.98	0.97
36:DA:1899:G:H22	36:DA:1902:C:N4	1.61	0.97
32:B6:18:ARG:HH11	32:B6:18:ARG:HG2	1.28	0.97
34:B8:61:LEU:HD22	34:B8:62:LEU:HG	1.44	0.97
36:BA:259:G:H21	36:BA:621:A:H8	1.06	0.97
38:BC:123:VAL:CG2	38:BC:127:LEU:CD2	2.24	0.97
22:CV:46:G:C3'	22:CV:47:U:H5"	1.94	0.97
36:DA:1884:A:H2'	36:DA:1885:A:H5"	1.43	0.97
7:AG:79:ARG:HE	7:AG:84:ASN:HB2	1.24	0.97
36:BA:31:C:C2'	36:BA:32:C:H5"	1.93	0.97
51:DS:98:VAL:HG12	51:DS:100:ALA:H	1.30	0.97

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:165:VAL:HG23	2:AB:166:ASP:H	1.29	0.97
14:AN:59:ALA:O	14:AN:60:SER:HB2	1.64	0.97
48:BP:126:VAL:HA	48:BP:145:PRO:HB2	1.47	0.97
36:DA:655:A:H4'	36:DA:656:G:H5'	1.45	0.97
48:DP:126:VAL:HA	48:DP:145:PRO:HB2	1.47	0.97
57:DY:9:LYS:HG2	57:DY:10:GLY:H	1.26	0.97
54:BV:99:ILE:HD13	54:BV:99:ILE:H	1.28	0.96
20:CT:57:ARG:HH11	20:CT:102:GLY:HA2	1.30	0.96
25:CZ:241:ARG:HH11	25:CZ:241:ARG:HB3	1.29	0.96
1:AA:1502:A:H2	1:AA:1505:G:H1	1.08	0.96
36:BA:1899:G:H22	36:BA:1902:C:N4	1.64	0.96
48:BP:41:ARG:HD3	48:BP:45:LEU:HD23	1.47	0.96
53:BU:85:LYS:HD3	53:BU:117:GLN:HE22	1.30	0.96
36:DA:1141:U:H2'	46:DN:63:THR:HG21	1.43	0.96
22:AV:46:G:C3'	22:AV:47:U:H5"	1.94	0.96
4:CD:28:SER:HB3	4:CD:29:PRO:HD2	1.45	0.96
28:B2:2:LYS:HD3	28:B2:59:ARG:NH1	1.79	0.96
51:BS:98:VAL:HG12	51:BS:100:ALA:H	1.30	0.96
2:CB:131:PRO:HG2	2:CB:134:GLU:HG2	1.46	0.96
36:DA:2833:G:H3'	36:DA:2834:G:H5"	1.47	0.96
36:BA:2801(A):A:H4'	36:BA:2802:G:H5'	1.47	0.96
36:BA:27:G:H22	36:BA:512:G:H2'	1.29	0.96
36:DA:1499:C:H5'	36:DA:1499:C:H6	1.28	0.96
52:DT:53:ARG:HB3	52:DT:53:ARG:NH1	1.80	0.96
34:B8:32:LEU:HG	34:B8:36:LYS:NZ	1.80	0.96
42:BG:77:ILE:HD12	42:BG:82:LEU:O	1.66	0.96
42:BG:85:GLY:C	42:BG:87:PRO:HD3	1.91	0.95
36:DA:2801(A):A:H4'	36:DA:2802:G:H5'	1.47	0.95
20:AT:62:LEU:H	20:AT:62:LEU:HD12	1.30	0.95
36:BA:1948:G:H8	36:BA:1948:G:H5'	1.31	0.95
1:CA:975:A:H4'	1:CA:976:G:H5"	1.46	0.95
36:BA:266:G:H2'	36:BA:267:C:H5"	1.48	0.95
36:BA:1141:U:H2'	46:BN:63:THR:HG21	1.45	0.95
38:BC:72:VAL:HG23	38:BC:111:ASP:HB3	1.47	0.95
36:BA:2189:U:H2'	36:BA:2190:G:H4'	1.47	0.95
37:BB:20:C:H2'	37:BB:21:G:H5"	1.48	0.95
39:BD:44:ASN:HB3	39:BD:49:ILE:HA	1.46	0.95
52:BT:53:ARG:HB3	52:BT:53:ARG:NH1	1.80	0.95
2:CB:155:LEU:HD21	2:CB:159:PRO:HG3	1.46	0.95
54:DV:99:ILE:H	54:DV:99:ILE:HD13	1.27	0.95
36:BA:655:A:H4'	36:BA:656:G:H5'	1.45	0.95

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DB:20:C:H2'	37:DB:21:G:H5"	1.48	0.95
55:DW:5:ALA:HB2	55:DW:54:ALA:HB2	1.46	0.95
13:AM:120:LYS:HE3	13:AM:120:LYS:HA	1.49	0.95
26:D0:49:LYS:H	26:D0:80:HIS:HD1	1.04	0.95
51:DS:30:ARG:HH22	51:DS:62:LYS:HD3	1.30	0.95
43:BH:50:VAL:HG12	43:BH:51:ARG:H	1.31	0.95
13:AM:10:PRO:CB	13:AM:18:ALA:HB1	1.97	0.95
2:CB:71:VAL:HB	2:CB:164:VAL:HG12	1.47	0.95
34:D8:13:ARG:HD2	48:DP:61:ARG:HD2	1.46	0.95
46:DN:47:ALA:HB2	46:DN:112:LEU:HD11	1.49	0.95
29:B3:9:VAL:HG11	29:B3:55:ARG:HD3	1.47	0.95
48:BP:23:PRO:HB2	48:BP:33:ARG:HG3	1.46	0.95
41:DF:132:VAL:HG22	41:DF:133:ASN:H	1.30	0.95
51:BS:83:LYS:HG2	51:BS:105:ALA:HB3	1.49	0.95
42:DG:67:LYS:N	42:DG:67:LYS:HD3	1.82	0.95
1:AA:1003:G:C2'	1:AA:1004:A:H4'	1.97	0.94
39:DD:44:ASN:HB3	39:DD:49:ILE:HA	1.49	0.94
3:AC:79:ARG:HH11	3:AC:79:ARG:HB2	1.31	0.94
41:BF:6:VAL:HG12	41:BF:7:TYR:H	1.30	0.94
36:DA:27:G:H22	36:DA:512:G:H2'	1.32	0.94
34:B8:32:LEU:CG	34:B8:36:LYS:HZ1	1.80	0.94
36:BA:2185:C:H2'	36:BA:2186:G:H5'	1.48	0.94
41:DF:6:VAL:HG12	41:DF:7:TYR:H	1.30	0.94
36:DA:1022:G:H22	36:DA:1142(A):A:H2	1.12	0.94
51:DS:83:LYS:HG2	51:DS:105:ALA:HB3	1.50	0.94
40:BE:34:VAL:HG11	40:BE:78:LEU:HD22	1.50	0.94
13:CM:120:LYS:HA	13:CM:120:LYS:HE3	1.47	0.94
1:AA:1452:C:H4'	1:AA:1456:G:N2	1.82	0.94
9:AI:52:ALA:HB3	9:AI:95:LYS:HZ1	1.32	0.94
51:BS:78:LEU:HD11	51:BS:103:GLU:HG3	1.49	0.94
3:CC:132:ARG:HH11	3:CC:136:GLN:HE22	1.16	0.94
36:DA:676:A:H8	36:DA:2069:G:H21	1.16	0.94
52:BT:28:VAL:HG22	52:BT:47:GLY:N	1.83	0.94
1:CA:1003:G:C2'	1:CA:1004:A:H4'	1.97	0.94
2:CB:165:VAL:HG23	2:CB:166:ASP:H	1.31	0.94
36:DA:1494:A:H2'	36:DA:1495:A:H5"	1.49	0.94
43:DH:50:VAL:HG12	43:DH:51:ARG:H	1.31	0.94
4:AD:194:LEU:HB3	4:AD:196:LEU:HD13	1.50	0.94
36:DA:880:G:H1	36:DA:897:C:H42	1.14	0.94
2:AB:87:ARG:HH22	2:AB:232:PRO:C	1.76	0.94
48:DP:59:LEU:HA	48:DP:61:ARG:NE	1.82	0.94

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:980:C:H5'	1:CA:980:C:H6	1.31	0.93
20:CT:62:LEU:H	20:CT:62:LEU:HD12	1.33	0.93
36:DA:1948:G:H5'	36:DA:1948:G:H8	1.31	0.93
48:DP:23:PRO:HB2	48:DP:33:ARG:HG3	1.46	0.93
36:BA:676:A:H8	36:BA:2069:G:H21	1.14	0.93
36:BA:2317:C:H2'	36:BA:2318:G:H5'	1.49	0.93
4:CD:128:VAL:HG12	4:CD:129:ASN:H	1.34	0.93
42:DG:67:LYS:HD3	42:DG:67:LYS:H	1.33	0.93
1:AA:980:C:H5'	1:AA:980:C:H6	1.33	0.93
1:AA:1314:C:H5	1:AA:1323:G:H1	1.15	0.93
36:BA:673:C:H5'	36:BA:673:C:H6	1.34	0.93
48:DP:41:ARG:HD3	48:DP:45:LEU:HD23	1.50	0.93
26:B0:49:LYS:H	26:B0:80:HIS:HD1	1.04	0.93
58:BZ:108:PRO:HB3	58:BZ:141:VAL:HG12	1.49	0.93
4:AD:128:VAL:HG12	4:AD:129:ASN:H	1.33	0.93
28:B2:25:VAL:HB	28:B2:64:LEU:HD12	1.48	0.93
36:BA:1494:A:H2'	36:BA:1495:A:H5"	1.49	0.93
55:BW:5:ALA:HB2	55:BW:54:ALA:HB2	1.50	0.93
4:CD:18:LYS:HB2	4:CD:33:MET:HG2	1.46	0.93
36:DA:259:G:H21	36:DA:621:A:H8	1.08	0.93
2:AB:71:VAL:HB	2:AB:164:VAL:HG12	1.50	0.93
36:BA:1689:A:H62	36:BA:1698:A:H2	1.17	0.93
29:D3:9:VAL:HG11	29:D3:55:ARG:HD3	1.49	0.93
36:DA:2178:C:H2'	36:DA:2179:C:H5'	1.50	0.93
36:DA:2756:U:H1'	36:DA:2757:A:H5"	1.47	0.93
56:DX:52:VAL:HG12	56:DX:53:LYS:H	1.33	0.93
27:B1:80:LEU:HB3	27:B1:82:LEU:HD13	1.50	0.93
36:BA:2756:U:H1'	36:BA:2757:A:H5"	1.48	0.93
48:BP:47:ASP:HB3	48:BP:48:PRO:HA	1.50	0.93
36:DA:2189:U:H2'	36:DA:2190:G:H4'	1.47	0.93
49:BQ:135:ASP:H	49:BQ:137:TYR:HD1	1.14	0.93
13:CM:10:PRO:CB	13:CM:18:ALA:HB1	1.98	0.93
34:D8:61:LEU:HD12	34:D8:61:LEU:H	1.32	0.93
36:DA:2317:C:H2'	36:DA:2318:G:H5'	1.51	0.93
52:DT:28:VAL:HG22	52:DT:47:GLY:N	1.84	0.93
34:B8:61:LEU:H	34:B8:61:LEU:HD12	1.32	0.92
36:BA:1019:U:H3	36:BA:1142(A):A:H62	1.17	0.92
41:BF:29:ASN:HD22	41:BF:32:LEU:HB2	1.31	0.92
32:D6:6:ARG:HH11	32:D6:6:ARG:HB3	1.33	0.92
36:DA:1779:U:H5	36:DA:1784:A:N7	1.67	0.92
1:AA:858:G:C6	1:AA:869:G:N7	2.37	0.92

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2833:G:H3'	36:BA:2834:G:H5"	1.49	0.92
36:DA:2893:G:H5'	36:DA:2894:G:H5'	1.51	0.92
1:AA:975:A:H4'	1:AA:976:G:H5"	1.48	0.92
4:AD:18:LYS:HB2	4:AD:33:MET:HG2	1.48	0.92
48:BP:81:GLN:OE1	48:BP:106:LEU:HA	1.69	0.92
52:BT:13:ARG:HA	52:BT:13:ARG:NH1	1.83	0.92
58:BZ:123:ASP:O	58:BZ:124:ILE:HG12	1.68	0.92
36:DA:1747(A):G:C2'	36:DA:1748:G:H5"	1.99	0.92
4:CD:194:LEU:HB3	4:CD:196:LEU:HD13	1.52	0.92
46:DN:67:LEU:O	46:DN:88:GLU:HG3	1.70	0.92
2:AB:155:LEU:HD21	2:AB:159:PRO:HG3	1.49	0.92
36:BA:1865:G:H5'	36:BA:1866:C:OP2	1.69	0.92
48:BP:23:PRO:HD2	48:BP:33:ARG:HE	1.35	0.92
34:D8:32:LEU:HG	34:D8:36:LYS:NZ	1.84	0.92
36:DA:1540:U:H3'	36:DA:1541:G:H3'	1.51	0.92
41:DF:29:ASN:HD22	41:DF:32:LEU:HB2	1.32	0.92
41:BF:132:VAL:HG22	41:BF:133:ASN:H	1.31	0.92
1:AA:1416:G:H2'	1:AA:1417:G:H5"	1.52	0.92
30:D4:14:ILE:HG13	30:D4:31:ILE:HB	1.51	0.92
36:DA:1747(A):G:H2'	36:DA:1748:G:H5"	1.51	0.92
36:DA:2185:C:H2'	36:DA:2186:G:H5'	1.48	0.92
36:DA:27:G:N2	36:DA:512:G:H2'	1.85	0.92
36:DA:266:G:H2'	36:DA:267:C:H5"	1.50	0.92
20:AT:57:ARG:HH11	20:AT:102:GLY:HA2	1.32	0.92
36:BA:2178:C:H2'	36:BA:2179:C:H5'	1.50	0.92
46:BN:47:ALA:HB2	46:BN:112:LEU:HD11	1.49	0.92
52:BT:50:ILE:HD11	52:BT:102:ILE:HD11	1.52	0.92
48:DP:47:ASP:HB3	48:DP:48:PRO:HA	1.51	0.92
51:DS:15:ARG:HB2	51:DS:15:ARG:HH11	1.35	0.92
52:DT:55:ASN:N	52:DT:59:THR:HG22	1.83	0.92
36:BA:27:G:N2	36:BA:512:G:H2'	1.84	0.92
36:BA:2036:C:H5'	36:BA:2036:C:H6	1.34	0.92
27:B1:75:GLU:O	27:B1:78:LYS:HG2	1.69	0.91
28:B2:54:LYS:O	28:B2:58:ALA:HB2	1.70	0.91
42:BG:72:ARG:NE	42:BG:86:MET:HA	1.84	0.91
52:BT:33:LYS:HE3	52:BT:43:GLN:NE2	1.85	0.91
5:CE:50:GLU:HB2	5:CE:53:LEU:HD13	1.51	0.91
36:DA:1865:G:H5'	36:DA:1866:C:OP2	1.68	0.91
46:DN:13:TRP:O	46:DN:135:PRO:HD2	1.68	0.91
13:AM:11:ARG:HG2	13:AM:12:ASN:H	1.35	0.91
36:BA:650:C:H3'	36:BA:651:G:H5"	1.53	0.91

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BN:13:TRP:O	46:BN:135:PRO:HD2	1.70	0.91
51:BS:30:ARG:HH22	51:BS:62:LYS:HD3	1.31	0.91
56:BX:52:VAL:HG12	56:BX:53:LYS:H	1.35	0.91
4:CD:120:LEU:HB3	4:CD:126:ILE:HD11	1.52	0.91
52:BT:55:ASN:N	52:BT:59:THR:HG22	1.85	0.91
42:DG:139:LEU:HA	42:DG:144:ILE:HD13	1.51	0.91
1:CA:1502:A:H2	1:CA:1505:G:H1	1.08	0.91
36:DA:2415:G:O3'	48:DP:66:GLY:HA3	1.71	0.91
42:DG:52:ILE:HD13	42:DG:52:ILE:H	1.33	0.91
4:AD:120:LEU:HB3	4:AD:126:ILE:HD11	1.51	0.91
36:BA:2893:G:H5'	36:BA:2894:G:H5'	1.53	0.91
41:BF:28:ILE:H	41:BF:28:ILE:HD13	1.35	0.91
1:AA:1367:C:H5'	10:AJ:60:ARG:HH11	1.35	0.91
10:AJ:33:GLN:HB2	10:AJ:75:ILE:HD11	1.53	0.91
51:BS:15:ARG:HB2	51:BS:15:ARG:HH11	1.33	0.91
24:CY:45:U:H3'	24:CY:46:7MG:H5"	1.52	0.91
36:BA:2287:A:H62	36:BA:2344:U:H3	1.17	0.91
48:BP:16:ARG:NH1	48:BP:16:ARG:HB2	1.86	0.91
9:CI:53:VAL:HG13	9:CI:95:LYS:HD3	1.53	0.91
39:DD:147:LEU:HD11	39:DD:183:ARG:HH12	1.34	0.91
36:BA:1540:U:H3'	36:BA:1541:G:H3'	1.52	0.91
36:BA:1747(A):G:C2'	36:BA:1748:G:H5"	2.00	0.91
42:BG:44:GLY:H	42:BG:88:ILE:CG2	1.82	0.91
36:BA:612:C:H2'	36:BA:613:G:C5'	2.01	0.91
36:BA:2187:G:C2'	36:BA:2188:C:H5'	2.00	0.91
9:CI:53:VAL:HG22	9:CI:95:LYS:HZ1	1.31	0.91
24:CY:72:U:H2'	24:CY:73:G:H5"	1.53	0.91
36:DA:1517:G:H8	36:DA:1517:G:H5'	1.36	0.91
36:BA:1022:G:H22	36:BA:1142(A):A:H2	1.16	0.90
46:BN:67:LEU:O	46:BN:88:GLU:HG3	1.68	0.90
36:DA:2138:C:H2'	36:DA:2139:C:H6	1.36	0.90
51:DS:78:LEU:HD11	51:DS:103:GLU:HG3	1.49	0.90
26:B0:27:GLU:HB2	26:B0:68:GLU:HA	1.53	0.90
25:CZ:93:ILE:HG12	25:CZ:122:LEU:HD11	1.53	0.90
24:AY:45:U:H3'	24:AY:46:7MG:H5"	1.51	0.90
36:BA:1779:U:H5	36:BA:1784:A:N7	1.70	0.90
36:BA:2183:C:H2'	36:BA:2184:G:C8	2.07	0.90
48:BP:59:LEU:HA	48:BP:61:ARG:NE	1.86	0.90
52:BT:85:LYS:HB3	52:BT:85:LYS:NZ	1.87	0.90
36:DA:612:C:H2'	36:DA:613:G:C5'	2.01	0.90
9:AI:53:VAL:HG13	9:AI:95:LYS:HD3	1.53	0.90

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AN:13:THR:N	14:AN:14:PRO:HD2	1.84	0.90
51:BS:106:ARG:HH12	51:BS:108:GLY:CA	1.84	0.90
36:DA:31:C:H2'	36:DA:32:C:C5'	2.01	0.90
9:AI:28:VAL:HG12	9:AI:29:ASN:H	1.36	0.90
39:BD:43:ARG:NH1	39:BD:44:ASN:HD21	1.68	0.90
58:BZ:29:TYR:HB3	58:BZ:34:ASN:HB2	1.53	0.90
52:DT:13:ARG:NH1	52:DT:13:ARG:HA	1.86	0.90
36:BA:2139:C:H2'	36:BA:2140:C:H6	1.36	0.90
36:BA:2312:U:O3'	42:BG:71:THR:HG21	1.71	0.90
1:CA:1314:C:H5	1:CA:1323:G:H1	1.15	0.90
2:CB:87:ARG:HH22	2:CB:232:PRO:C	1.78	0.90
9:CI:17:VAL:HG11	9:CI:81:ILE:HD13	1.52	0.90
36:DA:1689:A:H62	36:DA:1698:A:H2	1.19	0.90
43:DH:19:VAL:HG12	43:DH:20:ALA:H	1.33	0.90
58:DZ:73:GLN:HE21	58:DZ:75:ASN:HD21	1.16	0.90
3:CC:46:GLU:O	3:CC:47:LEU:HB2	1.72	0.90
38:DC:175:VAL:HG12	38:DC:188:ASN:HB3	1.54	0.90
39:DD:70:TRP:CH2	39:DD:150:LYS:HA	2.07	0.90
12:AL:7:ILE:HD12	12:AL:8:ASN:H	1.37	0.90
25:AZ:263:ARG:HH21	25:AZ:297:GLU:HG2	1.37	0.90
51:BS:89:ARG:O	51:BS:92:TYR:HB3	1.72	0.90
52:DT:85:LYS:NZ	52:DT:85:LYS:HB3	1.86	0.90
57:DY:10:GLY:HA2	57:DY:27:VAL:HG13	1.54	0.90
1:AA:1238:A:H8	1:AA:1241:G:HO2'	0.91	0.90
48:BP:47:ASP:HB3	48:BP:48:PRO:CA	2.02	0.90
36:DA:2036:C:H5'	36:DA:2036:C:H6	1.33	0.90
36:DA:2287:A:H62	36:DA:2344:U:H3	1.18	0.90
39:DD:26:LYS:O	39:DD:27:THR:HG22	1.72	0.90
30:B4:14:ILE:HG13	30:B4:31:ILE:HB	1.52	0.90
52:BT:129:ARG:CZ	52:BT:131:ALA:HB3	2.01	0.90
39:DD:43:ARG:NH1	39:DD:44:ASN:HD21	1.70	0.90
40:DE:34:VAL:HG11	40:DE:78:LEU:HD22	1.51	0.90
47:DO:65:THR:HG23	47:DO:67:LYS:H	1.35	0.90
48:DP:81:GLN:OE1	48:DP:106:LEU:HA	1.69	0.90
36:BA:2138:C:H2'	36:BA:2139:C:H6	1.37	0.89
6:AF:30:LEU:O	6:AF:35:ALA:HB3	1.72	0.89
43:BH:19:VAL:HG12	43:BH:20:ALA:H	1.33	0.89
36:DA:2177:C:H4'	38:DC:46:LYS:HD3	1.52	0.89
36:DA:2414:G:H21	48:DP:67:MET:HE1	1.36	0.89
12:AL:110:VAL:H	12:AL:122:THR:HG22	1.36	0.89
36:BA:1517:G:H5'	36:BA:1517:G:H8	1.36	0.89

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2183:C:H2'	36:DA:2184:G:C8	2.08	0.89
3:AC:46:GLU:O	3:AC:47:LEU:HB2	1.71	0.89
12:AL:6:THR:OG1	12:AL:9:GLN:HG3	1.73	0.89
36:BA:1602:U:H3'	36:BA:1603:A:C5'	2.02	0.89
36:BA:2177:C:H4'	38:BC:46:LYS:HD3	1.54	0.89
42:BG:46:ALA:H	42:BG:47:LYS:HD2	1.37	0.89
51:BS:49:VAL:HG12	51:BS:50:SER:H	1.38	0.89
26:D0:27:GLU:HB2	26:D0:68:GLU:HA	1.54	0.89
36:DA:2134:A:N6	36:DA:2157:G:H1'	1.87	0.89
48:DP:47:ASP:HB3	48:DP:48:PRO:CA	2.00	0.89
52:DT:33:LYS:HE3	52:DT:43:GLN:NE2	1.85	0.89
36:BA:880:G:H1	36:BA:897:C:H42	1.16	0.89
36:BA:1019:U:HO2'	36:BA:1021:A:H2	0.89	0.89
36:BA:2317:C:C2'	36:BA:2318:G:H5'	2.02	0.89
51:DS:106:ARG:HH12	51:DS:108:GLY:CA	1.85	0.89
57:BY:10:GLY:HA2	57:BY:27:VAL:HG13	1.54	0.89
1:CA:1277:C:HO2'	1:CA:1279:A:H8	0.96	0.89
36:DA:860:U:H5	36:DA:917:A:N7	1.70	0.89
36:DA:1019:U:H3	36:DA:1142(A):A:H62	1.18	0.89
5:AE:50:GLU:HB2	5:AE:53:LEU:HD13	1.54	0.89
38:BC:27:ARG:CD	38:BC:182:PRO:HG2	2.03	0.89
52:BT:27:THR:O	52:BT:28:VAL:HB	1.72	0.89
50:DR:45:ARG:HG3	50:DR:46:GLY:H	1.38	0.89
51:DS:106:ARG:HH12	51:DS:108:GLY:HA3	1.35	0.89
36:BA:2657:A:H2'	36:BA:2658:C:H5'	1.55	0.89
39:BD:70:TRP:CH2	39:BD:150:LYS:HA	2.08	0.89
12:CL:110:VAL:H	12:CL:122:THR:HG22	1.38	0.89
32:B6:16:CYS:SG	32:B6:48:VAL:HG22	2.13	0.89
1:CA:1412:C:H2'	1:CA:1413:A:C8	2.06	0.89
9:CI:28:VAL:HG12	9:CI:29:ASN:H	1.38	0.89
36:DA:2068:U:H3	36:DA:2430:A:H2	1.17	0.89
39:DD:132:PRO:HG3	39:DD:190:TYR:CE1	2.08	0.89
52:DT:3:ARG:HD2	52:DT:6:LEU:HD12	1.55	0.89
36:BA:925:C:C2'	36:BA:926:A:H5"	2.03	0.88
57:BY:73:ARG:HH22	57:BY:82:PRO:HA	1.38	0.88
1:CA:1320:C:H5'	1:CA:1320:C:H6	1.38	0.88
41:DF:28:ILE:HD13	41:DF:28:ILE:H	1.35	0.88
24:AY:72:U:H2'	24:AY:73:G:H5"	1.53	0.88
10:CJ:5:ARG:HB3	10:CJ:99:LYS:HB2	1.53	0.88
36:DA:1771:C:HO2'	36:DA:1786:A:H8	1.20	0.88
48:DP:23:PRO:HD2	48:DP:33:ARG:HE	1.38	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:DS:89:ARG:O	51:DS:92:TYR:HB3	1.72	0.88
1:AA:452:A:HO2'	1:AA:453:A:H8	0.92	0.88
27:B1:50:ARG:HG3	27:B1:59:THR:HG22	1.53	0.88
28:B2:53:LEU:HA	28:B2:56:GLN:CG	2.04	0.88
36:BA:1747(A):G:H2'	36:BA:1748:G:H5"	1.54	0.88
1:CA:1238:A:H8	1:CA:1241:G:HO2'	0.93	0.88
1:CA:1367:C:H5'	10:CJ:60:ARG:HH11	1.36	0.88
1:CA:858:G:C6	1:CA:869:G:N7	2.41	0.88
16:CP:20:VAL:HG21	16:CP:32:TYR:HB2	1.55	0.88
36:DA:650:C:H3'	36:DA:651:G:H5"	1.53	0.88
36:DA:925:C:C2'	36:DA:926:A:H5"	2.02	0.88
42:DG:139:LEU:HA	42:DG:144:ILE:HG21	1.53	0.88
49:DQ:135:ASP:H	49:DQ:137:TYR:HD1	1.12	0.88
36:BA:860:U:H5	36:BA:917:A:N7	1.72	0.88
42:BG:165:THR:OG1	42:BG:168:GLU:HG3	1.74	0.88
5:CE:63:ARG:HA	5:CE:66:MET:HE1	1.54	0.88
32:D6:15:GLU:HB2	32:D6:20:ASN:HB3	1.55	0.88
9:AI:4:TYR:CD2	9:AI:88:TYR:HB2	2.08	0.88
10:AJ:96:ILE:H	10:AJ:96:ILE:HD13	1.38	0.88
32:B6:15:GLU:HG2	32:B6:18:ARG:NH1	1.88	0.88
38:BC:78:ALA:HA	38:BC:116:THR:H	1.39	0.88
6:CF:30:LEU:O	6:CF:35:ALA:HB3	1.73	0.88
36:DA:673:C:H5'	36:DA:673:C:H6	1.33	0.88
36:DA:1602:U:H3'	36:DA:1603:A:C5'	2.03	0.88
4:AD:114:ARG:HH11	4:AD:114:ARG:HG3	1.38	0.88
36:BA:1516:C:C2'	36:BA:1517:G:H5"	2.04	0.88
36:BA:2415:G:O3'	48:BP:66:GLY:HA3	1.73	0.88
2:CB:204:ASN:ND2	2:CB:206:ASP:H	1.71	0.88
34:D8:32:LEU:CG	34:D8:36:LYS:HZ3	1.85	0.88
12:AL:36:VAL:HG22	12:AL:82:VAL:HG22	1.54	0.88
10:CJ:33:GLN:HB2	10:CJ:75:ILE:HD11	1.54	0.88
33:D7:34:ARG:HH11	33:D7:34:ARG:HG3	1.39	0.88
36:DA:1049:C:H2'	36:DA:1050:A:H8	1.39	0.88
36:BA:2189:U:C2'	36:BA:2190:G:H4'	2.04	0.88
39:BD:132:PRO:HG3	39:BD:190:TYR:CE1	2.09	0.88
51:BS:106:ARG:HH12	51:BS:108:GLY:HA3	1.37	0.88
36:DA:2317:C:C2'	36:DA:2318:G:H5'	2.03	0.88
56:DX:11:PRO:HA	56:DX:28:PHE:HB3	1.56	0.88
25:AZ:93:ILE:HG12	25:AZ:122:LEU:HD11	1.53	0.88
38:BC:175:VAL:HG12	38:BC:188:ASN:HB3	1.55	0.88
2:CB:44:LEU:H	2:CB:44:LEU:HD12	1.39	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:AZ:193:ASN:HB2	25:AZ:196:VAL:HG12	1.56	0.87
36:BA:31:C:H2'	36:BA:32:C:C5'	2.03	0.87
36:BA:654(E):G:N2	36:BA:654(Q):C:H1'	1.89	0.87
36:BA:2068:U:H3	36:BA:2430:A:H2	1.18	0.87
36:BA:2134:A:N6	36:BA:2157:G:H1'	1.89	0.87
52:DT:129:ARG:CZ	52:DT:131:ALA:HB3	2.03	0.87
57:DY:73:ARG:HH22	57:DY:82:PRO:HA	1.38	0.87
36:BA:1899:G:N2	36:BA:1902:C:N4	2.21	0.87
1:CA:265:G:H2'	1:CA:266:G:H5"	1.56	0.87
36:DA:1403:C:H5"	36:DA:1471:A:H1'	1.56	0.87
36:DA:2139:C:H2'	36:DA:2140:C:H6	1.36	0.87
42:DG:47:LYS:HE3	42:DG:81:LYS:HB2	1.55	0.87
42:DG:114:ILE:HG23	42:DG:116:ASP:O	1.74	0.87
36:BA:2572:A:C8	40:BE:144:ARG:HG2	2.10	0.87
1:CA:228:A:H5'	1:CA:228:A:H8	1.38	0.87
3:CC:8:ILE:HG23	3:CC:16:ARG:HG2	1.56	0.87
14:CN:13:THR:N	14:CN:14:PRO:HD2	1.86	0.87
36:BA:2414:G:H21	48:BP:67:MET:HE1	1.39	0.87
39:BD:10:THR:HG23	39:BD:13:ARG:HB2	1.56	0.87
42:BG:44:GLY:H	42:BG:88:ILE:HG21	1.38	0.87
25:CZ:263:ARG:HH21	25:CZ:297:GLU:HG2	1.38	0.87
48:DP:16:ARG:HB2	48:DP:16:ARG:NH1	1.88	0.87
5:AE:10:MET:SD	5:AE:13:ILE:HD11	2.15	0.87
36:BA:1050:A:H2'	36:BA:1051:G:H5'	1.56	0.87
36:BA:1678:G:N2	36:BA:1989:G:H22	1.73	0.87
52:BT:56:GLY:O	52:BT:59:THR:HG23	1.75	0.87
12:CL:7:ILE:HD12	12:CL:8:ASN:H	1.35	0.87
49:DQ:133:ARG:HB2	49:DQ:133:ARG:HH11	1.38	0.87
25:AZ:198:LYS:HE3	25:AZ:198:LYS:HA	1.56	0.87
41:BF:3:GLU:HA	41:BF:24:LEU:HG	1.55	0.87
47:BO:65:THR:HG23	47:BO:67:LYS:H	1.36	0.87
9:CI:4:TYR:CD2	9:CI:88:TYR:HB2	2.09	0.87
35:D9:7:VAL:HG13	35:D9:34:GLN:HG2	1.57	0.87
36:DA:657:U:H2'	36:DA:658:C:C6	2.10	0.87
36:DA:2187:G:C2'	36:DA:2188:C:H5'	2.05	0.87
36:DA:2657:A:H2'	36:DA:2658:C:H5'	1.56	0.87
36:DA:2864:G:OP1	52:DT:119:LYS:HD2	1.74	0.87
28:B2:2:LYS:CD	28:B2:59:ARG:HH12	1.86	0.87
31:B5:24:ALA:O	31:B5:25:LEU:HB2	1.74	0.87
33:B7:34:ARG:HH11	33:B7:34:ARG:HG3	1.39	0.87
38:BC:123:VAL:HG23	38:BC:127:LEU:HD23	0.87	0.87

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BD:147:LEU:HD11	39:BD:183:ARG:HH12	1.38	0.87
50:BR:3:HIS:O	50:BR:5:LYS:N	2.07	0.87
56:BX:11:PRO:HA	56:BX:28:PHE:HB3	1.56	0.87
57:BY:28:LYS:HG2	57:BY:39:VAL:HG22	1.54	0.87
13:CM:11:ARG:HG2	13:CM:12:ASN:H	1.36	0.87
36:DA:1516:C:C2'	36:DA:1517:G:H5"	2.05	0.87
38:DC:78:ALA:HA	38:DC:116:THR:H	1.40	0.87
39:DD:35:LYS:HG3	39:DD:63:ARG:HG2	1.57	0.87
41:DF:3:GLU:HA	41:DF:24:LEU:HG	1.54	0.87
50:DR:3:HIS:O	50:DR:5:LYS:N	2.07	0.87
1:AA:265:G:H2'	1:AA:266:G:H5"	1.56	0.87
3:AC:132:ARG:HH11	3:AC:136:GLN:HE22	1.22	0.87
43:BH:105:LEU:HD23	43:BH:105:LEU:H	1.40	0.87
2:AB:204:ASN:ND2	2:AB:206:ASP:H	1.73	0.87
32:B6:6:ARG:HH11	32:B6:6:ARG:HB3	1.37	0.87
42:BG:76:SER:HA	42:BG:83:ARG:HB3	1.57	0.87
4:CD:114:ARG:HG3	4:CD:114:ARG:HH11	1.37	0.87
10:CJ:96:ILE:HD13	10:CJ:96:ILE:H	1.39	0.87
39:DD:30:GLU:HB2	39:DD:35:LYS:CD	2.05	0.87
40:DE:52:LEU:HD21	52:DT:1:MET:HE3	1.55	0.87
51:DS:49:VAL:HG12	51:DS:50:SER:H	1.38	0.87
2:AB:44:LEU:H	2:AB:44:LEU:HD12	1.39	0.86
4:AD:59:ARG:HE	4:AD:59:ARG:HA	1.40	0.86
36:BA:1494:A:C2'	36:BA:1495:A:H5"	2.05	0.86
40:BE:116:VAL:HG21	40:BE:122:PHE:CD2	2.10	0.86
25:AZ:246:LYS:HB3	25:AZ:281:ILE:HG22	1.56	0.86
12:CL:6:THR:OG1	12:CL:9:GLN:HG3	1.75	0.86
36:DA:654(E):G:N2	36:DA:654(Q):C:H1'	1.89	0.86
36:DA:1899:G:N2	36:DA:1902:C:N4	2.19	0.86
36:DA:2189:U:C2'	36:DA:2190:G:H4'	2.05	0.86
36:DA:2464:C:HO2'	36:DA:2465:C:H6	1.22	0.86
52:DT:27:THR:O	52:DT:28:VAL:HB	1.72	0.86
4:AD:18:LYS:H	4:AD:33:MET:HE2	1.39	0.86
36:BA:1516:C:H2'	36:BA:1517:G:H5"	1.57	0.86
48:BP:30:THR:HG22	48:BP:31:ALA:N	1.89	0.86
4:CD:150:GLU:CD	4:CD:151:LYS:H	1.82	0.86
12:CL:36:VAL:HG22	12:CL:82:VAL:HG22	1.56	0.86
57:DY:28:LYS:HG2	57:DY:39:VAL:HG22	1.55	0.86
1:AA:979:C:C3'	1:AA:980:C:H5"	2.05	0.86
5:AE:63:ARG:HA	5:AE:66:MET:HE1	1.54	0.86
16:AP:20:VAL:HG21	16:AP:32:TYR:HB2	1.55	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BD:30:GLU:HB2	39:BD:35:LYS:CD	2.03	0.86
58:BZ:130:PRO:HA	58:BZ:133:ILE:HD11	1.56	0.86
58:BZ:151:HIS:CB	58:BZ:170:THR:HA	2.05	0.86
31:D5:24:ALA:O	31:D5:25:LEU:HB2	1.75	0.86
38:DC:123:VAL:HG23	38:DC:127:LEU:HD23	0.88	0.86
39:DD:76:PRO:HG2	39:DD:98:VAL:HG21	1.57	0.86
57:DY:53:PRO:HB3	57:DY:56:PRO:HG3	1.57	0.86
57:DY:96:ILE:HG12	57:DY:99:CYS:HB2	1.55	0.86
4:AD:150:GLU:CD	4:AD:151:LYS:H	1.82	0.86
42:BG:47:LYS:HG2	42:BG:81:LYS:HD2	1.55	0.86
51:BS:54:LEU:HD13	51:BS:58:LEU:H	1.39	0.86
54:BV:24:LYS:HA	54:BV:92:THR:HG23	1.56	0.86
56:BX:27:THR:HG23	56:BX:80:ILE:HB	1.57	0.86
58:BZ:15:PRO:HA	58:BZ:18:LEU:HD23	1.57	0.86
1:CA:1086:U:H2'	1:CA:1087:G:H5'	1.58	0.86
36:DA:1494:A:C2'	36:DA:1495:A:H5"	2.05	0.86
54:DV:18:LEU:HD23	54:DV:19:LYS:H	1.38	0.86
36:BA:330:A:H2	36:BA:1210:A:H2'	1.39	0.86
50:BR:45:ARG:HG3	50:BR:46:GLY:H	1.38	0.86
52:BT:3:ARG:HD2	52:BT:6:LEU:HD12	1.57	0.86
32:D6:16:CYS:SG	32:D6:48:VAL:HG22	2.16	0.86
36:DA:271(C):C:H2'	36:DA:271(D):G:H8	1.40	0.86
1:AA:228:A:H8	1:AA:228:A:H5'	1.39	0.86
4:AD:138:TYR:HD1	4:AD:139:ARG:N	1.73	0.86
9:AI:17:VAL:HG11	9:AI:81:ILE:HD13	1.57	0.86
41:DF:110:LEU:HD12	41:DF:206:ILE:HD11	1.57	0.86
49:BQ:133:ARG:HB2	49:BQ:133:ARG:HH11	1.38	0.86
54:BV:18:LEU:HD23	54:BV:19:LYS:H	1.40	0.86
42:DG:47:LYS:HD3	42:DG:81:LYS:HG3	1.57	0.86
52:DT:80:SER:HB3	52:DT:81:PRO:HD3	1.56	0.86
54:DV:24:LYS:HA	54:DV:92:THR:HG23	1.57	0.86
9:AI:53:VAL:HG22	9:AI:95:LYS:HZ3	1.41	0.86
10:AJ:5:ARG:HB3	10:AJ:99:LYS:HB2	1.56	0.86
31:D5:33:CYS:HB3	31:D5:36:CYS:O	1.76	0.86
36:DA:1887:C:C2'	36:DA:1888:G:H5"	2.05	0.86
2:AB:25:ASN:C	2:AB:25:ASN:HD22	1.83	0.86
46:BN:51:PHE:CZ	46:BN:119:ARG:HD2	2.11	0.86
1:CA:452:A:HO2'	1:CA:453:A:H8	0.91	0.86
31:D5:41:PRO:HG2	31:D5:44:THR:OG1	1.75	0.86
36:DA:1050:A:H2'	36:DA:1051:G:H5'	1.56	0.86
39:DD:10:THR:HG23	39:DD:13:ARG:HB2	1.57	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:DO:111:PHE:HB3	47:DO:114:ILE:HD13	1.58	0.86
35:B9:7:VAL:HG13	35:B9:34:GLN:HG2	1.58	0.85
40:BE:52:LEU:HD21	52:BT:1:MET:HE3	1.57	0.85
58:BZ:126:VAL:HA	58:BZ:163:LEU:HA	1.57	0.85
1:CA:1536:C:H2'	1:CA:1537:U:O4'	1.75	0.85
25:CZ:277:LEU:HD13	25:CZ:278:GLN:N	1.91	0.85
36:DA:244:A:H4'	48:DP:74:GLU:HG3	1.58	0.85
36:DA:1190:G:H5'	48:DP:35:HIS:H	1.41	0.85
43:DH:105:LEU:HD23	43:DH:105:LEU:H	1.40	0.85
53:DU:92:ARG:O	53:DU:94:ASN:N	2.09	0.85
53:DU:92:ARG:NH1	53:DU:94:ASN:HD22	1.72	0.85
56:DX:27:THR:HG23	56:DX:80:ILE:HB	1.58	0.85
38:BC:77:ILE:HD13	38:BC:95:GLY:HA3	1.58	0.85
7:CG:79:ARG:CZ	22:CW:33:U:H4'	2.06	0.85
25:CZ:246:LYS:HB3	25:CZ:281:ILE:HG22	1.55	0.85
38:DC:77:ILE:HD13	38:DC:95:GLY:HA3	1.58	0.85
40:DE:61:ARG:HB3	40:DE:62:PRO:HD3	1.58	0.85
36:BA:2864:G:OP1	52:BT:119:LYS:HD2	1.75	0.85
4:CD:59:ARG:HA	4:CD:59:ARG:HE	1.39	0.85
27:D1:67:ILE:O	27:D1:70:VAL:HG12	1.76	0.85
36:DA:2159:G:H2'	36:DA:2160:G:H5"	1.58	0.85
51:DS:54:LEU:HD13	51:DS:58:LEU:H	1.40	0.85
36:BA:271(C):C:H2'	36:BA:271(D):G:H8	1.41	0.85
36:BA:1543:C:H3'	36:BA:1544:A:C5'	2.05	0.85
57:BY:53:PRO:HB3	57:BY:56:PRO:HG3	1.58	0.85
25:CZ:19:HIS:CD2	25:CZ:113:MET:HB3	2.12	0.85
40:DE:50:GLY:HA2	40:DE:78:LEU:HB3	1.58	0.85
56:DX:12:VAL:HG23	56:DX:13:LEU:N	1.91	0.85
58:DZ:40:ASP:HB3	58:DZ:43:GLU:HG3	1.58	0.85
13:AM:65:LYS:HD3	13:AM:65:LYS:H	1.42	0.85
36:BA:2464:C:HO2'	36:BA:2465:C:H6	1.24	0.85
36:DA:1543:C:H3'	36:DA:1544:A:C5'	2.05	0.85
48:DP:64:LYS:C	48:DP:66:GLY:H	1.84	0.85
57:DY:13:VAL:HG21	57:DY:72:VAL:HB	1.56	0.85
41:BF:25:PRO:CB	41:BF:119:ARG:HB2	2.06	0.85
42:BG:72:ARG:NH2	42:BG:86:MET:HG3	1.92	0.85
52:BT:80:SER:HB3	52:BT:81:PRO:HD3	1.57	0.85
53:BU:92:ARG:NH1	53:BU:94:ASN:HD22	1.75	0.85
1:CA:979:C:C3'	1:CA:980:C:H5"	2.05	0.85
20:CT:45:GLN:NE2	20:CT:46:GLU:HG3	1.92	0.85
32:D6:36:LEU:HD12	32:D6:50:ARG:CZ	2.07	0.85

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:64:A:H5'	56:DX:64:LYS:HD3	1.57	0.85
36:DA:2101:G:C2'	36:DA:2102:U:H5"	2.06	0.85
48:DP:30:THR:HG22	48:DP:31:ALA:N	1.89	0.85
15:AO:87:ILE:HG22	15:AO:88:ARG:H	1.41	0.85
32:B6:28:ARG:HA	32:B6:32:ASN:ND2	1.91	0.85
36:BA:657:U:H2'	36:BA:658:C:C6	2.12	0.85
1:CA:1367:C:H5'	10:CJ:60:ARG:NH1	1.91	0.85
2:CB:185:ILE:HG22	2:CB:199:TYR:HB2	1.59	0.85
4:CD:18:LYS:H	4:CD:33:MET:HE2	1.40	0.85
36:DA:654(H):G:H2'	36:DA:654(I):C:H5'	1.59	0.85
25:AZ:145:GLU:HG2	25:AZ:149:LEU:HB2	1.57	0.85
48:BP:64:LYS:C	48:BP:66:GLY:H	1.83	0.85
25:CZ:193:ASN:HB2	25:CZ:196:VAL:HG12	1.56	0.85
29:D3:29:ARG:HB2	29:D3:29:ARG:HH11	1.42	0.85
36:DA:330:A:H2	36:DA:1210:A:H2'	1.40	0.85
36:DA:997:G:OP1	53:DU:93:LYS:HD3	1.77	0.85
36:BA:244:A:H4'	48:BP:74:GLU:HG3	1.57	0.85
38:BC:79:LYS:HD3	38:BC:119:VAL:HB	1.59	0.85
25:CZ:198:LYS:HA	25:CZ:198:LYS:HE3	1.57	0.85
41:DF:25:PRO:CB	41:DF:119:ARG:HB2	2.07	0.85
1:AA:1152:A:H5"	10:AJ:13:HIS:CD2	2.12	0.85
28:B2:28:LYS:NZ	28:B2:31:GLU:HG3	1.90	0.85
32:B6:15:GLU:HB2	32:B6:20:ASN:HB3	1.57	0.85
36:BA:1190:G:H5'	48:BP:35:HIS:H	1.41	0.85
57:BY:13:VAL:HG21	57:BY:72:VAL:HB	1.58	0.85
4:CD:138:TYR:HD1	4:CD:139:ARG:N	1.73	0.85
25:CZ:323:LEU:HD13	25:CZ:396:GLY:HA2	1.57	0.85
36:DA:1047:G:H2'	36:DA:1110:G:H21	1.42	0.85
43:DH:103:LEU:HB2	43:DH:123:PHE:HD2	1.40	0.85
20:AT:45:GLN:NE2	20:AT:46:GLU:HG3	1.92	0.84
39:BD:35:LYS:HG3	39:BD:63:ARG:HG2	1.59	0.84
51:DS:13:ARG:HG3	51:DS:14:VAL:H	1.42	0.84
52:DT:28:VAL:HG13	52:DT:46:GLU:HA	1.57	0.84
31:B5:33:CYS:HB3	31:B5:36:CYS:O	1.77	0.84
36:BA:1067:A:H3'	36:BA:1068:G:H5"	1.58	0.84
40:BE:61:ARG:HB3	40:BE:62:PRO:HD3	1.59	0.84
2:CB:25:ASN:HD22	2:CB:25:ASN:C	1.83	0.84
31:D5:49:CYS:O	31:D5:56:LYS:HG3	1.77	0.84
38:DC:79:LYS:HD3	38:DC:119:VAL:HB	1.60	0.84
25:AZ:323:LEU:HD13	25:AZ:396:GLY:HA2	1.57	0.84
36:BA:1049:C:H2'	36:BA:1050:A:H8	1.40	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BE:111:ARG:HG3	40:BE:160:TYR:CD2	2.12	0.84
2:CB:80:ILE:H	2:CB:80:ILE:HD12	1.41	0.84
25:AZ:277:LEU:HD13	25:AZ:278:GLN:N	1.91	0.84
36:BA:2092:U:C4'	36:BA:2093:G:H5"	2.07	0.84
36:BA:2131:G:H1'	36:BA:2133:G:N2	1.92	0.84
42:BG:47:LYS:NZ	42:BG:88:ILE:HD11	1.92	0.84
43:BH:98:LEU:HB2	43:BH:125:VAL:HG21	1.60	0.84
31:D5:4:HIS:CB	31:D5:5:PRO:HD3	2.08	0.84
32:D6:28:ARG:HA	32:D6:32:ASN:ND2	1.93	0.84
56:DX:27:THR:CG2	56:DX:80:ILE:HB	2.07	0.84
1:AA:1086:U:H2'	1:AA:1087:G:H5'	1.57	0.84
36:BA:1539:G:C2	36:BA:1540:U:H1'	2.13	0.84
37:BB:48:A:H4'	51:BS:95:HIS:CD2	2.12	0.84
39:BD:26:LYS:O	39:BD:27:THR:HG22	1.76	0.84
1:CA:1363(A):A:H4'	1:CA:1364:U:H5"	1.59	0.84
46:DN:51:PHE:CZ	46:DN:119:ARG:HD2	2.13	0.84
58:DZ:73:GLN:NE2	58:DZ:75:ASN:HD21	1.75	0.84
1:AA:1417:G:H8	1:AA:1417:G:C5'	1.88	0.84
26:B0:49:LYS:HG3	26:B0:80:HIS:ND1	1.93	0.84
40:BE:38:THR:HB	40:BE:41:LYS:HG2	1.57	0.84
43:BH:103:LEU:HB2	43:BH:123:PHE:HD2	1.40	0.84
36:DA:1067:A:H3'	36:DA:1068:G:H5"	1.58	0.84
42:DG:16:ARG:HH22	42:DG:28:VAL:HG13	1.43	0.84
36:BA:1887:C:C2'	36:BA:1888:G:H5"	2.07	0.84
42:BG:119:GLY:HA3	42:BG:181:ARG:HB3	1.57	0.84
1:CA:1442(B):A:H5'	52:DT:118:ARG:NH1	1.92	0.84
2:CB:172:ILE:HD12	2:CB:172:ILE:H	1.41	0.84
13:CM:65:LYS:HD3	13:CM:65:LYS:H	1.42	0.84
28:D2:17:SER:OG	28:D2:20:GLU:HG2	1.78	0.84
36:DA:2131:G:H1'	36:DA:2133:G:N2	1.93	0.84
36:DA:2245:U:H5'	36:DA:2246:G:H5'	1.60	0.84
36:DA:2572:A:C8	40:DE:144:ARG:HG2	2.11	0.84
36:DA:2656:U:H3	36:DA:2665:A:H2	1.24	0.84
40:DE:111:ARG:HG3	40:DE:160:TYR:CD2	2.13	0.84
42:DG:73:ALA:H	42:DG:87:PRO:HG2	1.43	0.84
52:DT:56:GLY:O	52:DT:59:THR:HG23	1.78	0.84
52:DT:90:GLN:O	52:DT:92:GLY:N	2.10	0.84
29:B3:29:ARG:HB2	29:B3:29:ARG:HH11	1.43	0.84
31:B5:41:PRO:HG2	31:B5:44:THR:OG1	1.77	0.84
36:BA:2159:G:H2'	36:BA:2160:G:H5"	1.58	0.84
40:BE:36:ARG:NH2	40:BE:88:GLY:HA2	1.92	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:BZ:33:LEU:O	58:BZ:34:ASN:HB3	1.78	0.84
38:DC:123:VAL:HG22	38:DC:127:LEU:HD23	1.59	0.84
41:DF:24:LEU:HB3	41:DF:25:PRO:CD	2.08	0.84
52:DT:50:ILE:HD11	52:DT:102:ILE:HD11	1.58	0.84
1:AA:1416:G:C2'	1:AA:1417:G:H5"	2.08	0.84
36:BA:1403:C:H5"	36:BA:1471:A:H1'	1.56	0.84
36:BA:1434:A:H61	36:BA:1558:A:H62	1.26	0.84
50:BR:38:VAL:HB	50:BR:39:PRO:HD3	1.59	0.84
52:BT:39:ARG:HD2	52:BT:39:ARG:H	1.43	0.84
26:D0:49:LYS:HG3	26:D0:80:HIS:ND1	1.93	0.84
1:AA:573:A:H8	1:AA:573:A:H5'	1.43	0.83
28:B2:41:ILE:HG13	28:B2:42:GLY:H	1.42	0.83
36:BA:1378:A:O2'	36:BA:1379:A:H5'	1.77	0.83
36:BA:1899:G:H22	36:BA:1902:C:H41	0.84	0.83
48:BP:23:PRO:O	48:BP:33:ARG:HD2	1.78	0.83
48:BP:24:GLY:HA3	48:BP:33:ARG:NH1	1.92	0.83
52:BT:28:VAL:HG13	52:BT:46:GLU:HA	1.59	0.83
1:CA:573:A:H8	1:CA:573:A:H5'	1.43	0.83
1:CA:979:C:H3'	1:CA:980:C:H5"	1.58	0.83
32:D6:10:LEU:CD2	32:D6:10:LEU:H	1.91	0.83
36:DA:1539:G:C2	36:DA:1540:U:H1'	2.12	0.83
36:DA:1826:G:H4'	39:DD:242:ARG:HH21	1.42	0.83
40:DE:38:THR:HB	40:DE:41:LYS:HG2	1.58	0.83
10:AJ:55:LYS:HZ2	10:AJ:55:LYS:CB	1.90	0.83
36:BA:2131:G:N3	36:BA:2133:G:N2	2.25	0.83
5:CE:31:LEU:HD22	5:CE:43:LEU:HD11	1.60	0.83
16:CP:74:LEU:O	16:CP:79:VAL:HG23	1.78	0.83
40:DE:116:VAL:HG21	40:DE:122:PHE:CD2	2.13	0.83
3:AC:8:ILE:HG23	3:AC:16:ARG:HG2	1.59	0.83
31:B5:4:HIS:CB	31:B5:5:PRO:HD3	2.09	0.83
36:BA:2645:G:H3'	36:BA:2646:C:C5'	2.07	0.83
38:BC:27:ARG:HD3	38:BC:182:PRO:HG2	1.56	0.83
41:BF:110:LEU:HD12	41:BF:206:ILE:HD11	1.60	0.83
43:BH:44:VAL:HG12	43:BH:45:VAL:H	1.43	0.83
57:BY:96:ILE:HG12	57:BY:99:CYS:HB2	1.60	0.83
58:DZ:123:ASP:O	58:DZ:124:ILE:HG23	1.79	0.83
1:AA:1152:A:O2'	1:AA:1153:C:H5'	1.78	0.83
32:B6:10:LEU:CD2	32:B6:10:LEU:H	1.91	0.83
36:BA:2656:U:H3	36:BA:2665:A:H2	1.26	0.83
42:BG:47:LYS:HZ2	42:BG:82:LEU:HD12	1.39	0.83
56:BX:35:THR:HG22	56:BX:37:THR:H	1.43	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1533:C:C3'	1:CA:1534:A:H5"	2.08	0.83
10:CJ:38:ILE:HG13	10:CJ:71:LEU:HB3	1.58	0.83
38:DC:100:ILE:HG23	38:DC:127:LEU:HD13	1.60	0.83
56:DX:35:THR:HG22	56:DX:37:THR:H	1.42	0.83
27:B1:61:ARG:HH11	27:B1:61:ARG:HG2	1.44	0.83
41:BF:24:LEU:HB3	41:BF:25:PRO:CD	2.09	0.83
53:BU:92:ARG:O	53:BU:94:ASN:N	2.11	0.83
57:BY:95:LYS:HG3	57:BY:100:ALA:HA	1.59	0.83
40:DE:36:ARG:NH2	40:DE:88:GLY:HA2	1.92	0.83
42:DG:38:VAL:HG23	42:DG:158:ALA:HB3	1.60	0.83
58:DZ:10:ARG:HE	58:DZ:36:LYS:HD3	1.43	0.83
1:AA:1320:C:H5'	1:AA:1320:C:H6	1.39	0.83
36:BA:1053:C:H2'	36:BA:1054:A:H8	1.44	0.83
40:BE:50:GLY:HA2	40:BE:78:LEU:HB3	1.58	0.83
58:BZ:28:MET:HE3	58:BZ:37:VAL:HG11	1.61	0.83
4:CD:3:ARG:NH1	4:CD:118:ARG:HD3	1.93	0.83
6:CF:11:ASN:HB3	6:CF:14:LEU:HG	1.60	0.83
43:DH:156:ALA:C	43:DH:158:HIS:H	1.86	0.83
6:AF:11:ASN:HB3	6:AF:14:LEU:HG	1.58	0.83
36:BA:1884:A:C2'	36:BA:1885:A:H5"	2.09	0.83
1:CA:942:G:H21	9:CI:124:GLN:NE2	1.76	0.83
10:CJ:55:LYS:HZ2	10:CJ:55:LYS:CB	1.91	0.83
28:D2:51:ARG:HD3	28:D2:55:ARG:HH12	1.42	0.83
36:DA:2762:G:H8	36:DA:2762:G:H5'	1.43	0.83
46:DN:23:LEU:HB3	46:DN:60:ILE:HG21	1.60	0.83
58:DZ:152:ALA:HB2	58:DZ:168:GLU:HA	1.58	0.83
10:AJ:38:ILE:HG13	10:AJ:71:LEU:HB3	1.59	0.83
30:B4:12:ALA:CB	30:B4:29:PRO:HA	2.09	0.83
31:B5:49:CYS:O	31:B5:56:LYS:HG3	1.78	0.83
1:CA:1152:A:O2'	1:CA:1153:C:H5'	1.77	0.83
25:CZ:145:GLU:HG2	25:CZ:149:LEU:HB2	1.59	0.83
36:DA:761:A:H8	36:DA:761:A:O5'	1.61	0.83
36:DA:1019:U:HO2'	36:DA:1021:A:H2	0.84	0.83
57:DY:97:ARG:HH21	57:DY:98:VAL:HB	1.43	0.83
7:AG:45:ASP:O	7:AG:49:ILE:HG12	1.78	0.83
9:AI:53:VAL:HG22	9:AI:95:LYS:HZ2	1.40	0.83
19:AS:78:ARG:HB2	19:AS:81:ARG:HH11	1.44	0.83
28:B2:47:ASN:HA	28:B2:50:ILE:CB	2.08	0.83
36:BA:2875:C:H4'	52:BT:5:ALA:HB2	1.60	0.83
5:CE:10:MET:SD	5:CE:13:ILE:HD11	2.18	0.83
29:D3:35:ARG:HB2	29:D3:35:ARG:NH1	1.94	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2645:G:H3'	36:DA:2646:C:C5'	2.07	0.83
28:B2:18:PRO:CB	28:B2:72:ALA:HA	2.07	0.83
49:BQ:56:ARG:HH11	49:BQ:56:ARG:HG3	1.44	0.83
52:BT:90:GLN:O	52:BT:92:GLY:N	2.11	0.83
36:DA:89:G:OP2	36:DA:90:U:H2'	1.79	0.83
36:DA:1087:G:H8	36:DA:1088:A:H4'	1.44	0.83
2:AB:229:VAL:HG12	2:AB:230:VAL:H	1.44	0.82
14:AN:12:ARG:NH1	14:AN:14:PRO:HG2	1.94	0.82
32:B6:44:ARG:O	32:B6:45:LYS:HE3	1.78	0.82
36:BA:321:G:N2	41:BF:165:ARG:HE	1.76	0.82
39:DD:32:SER:O	39:DD:36:PRO:HG3	1.79	0.82
43:DH:98:LEU:HB2	43:DH:125:VAL:HG21	1.60	0.82
46:DN:30:ILE:O	46:DN:34:LEU:HB2	1.79	0.82
49:DQ:141:GLN:HE21	58:DZ:72:ARG:HA	1.44	0.82
1:AA:1128:C:O2'	1:AA:1129:C:H5"	1.78	0.82
4:AD:34:GLU:O	4:AD:35:ARG:HB2	1.78	0.82
46:BN:133:GLN:HG2	46:BN:135:PRO:HD3	1.61	0.82
57:BY:50:ARG:HD2	57:BY:53:PRO:HA	1.60	0.82
36:BA:89:G:OP2	36:BA:90:U:H2'	1.79	0.82
36:BA:2101:G:C2'	36:BA:2102:U:H5"	2.08	0.82
58:BZ:72:ARG:HG3	58:BZ:89:PHE:HB2	1.61	0.82
7:CG:45:ASP:O	7:CG:49:ILE:HG12	1.79	0.82
34:D8:8:LYS:HA	34:D8:11:LYS:HD3	1.59	0.82
43:DH:137:ASP:O	43:DH:138:LYS:HB2	1.78	0.82
58:DZ:73:GLN:HE21	58:DZ:75:ASN:ND2	1.76	0.82
5:AE:31:LEU:HD22	5:AE:43:LEU:HD11	1.59	0.82
12:AL:33:ARG:HD3	12:AL:62:SER:OG	1.78	0.82
20:AT:50:GLU:HG3	20:AT:100:ILE:HD13	1.60	0.82
25:AZ:271:GLU:HG2	25:AZ:276:THR:HA	1.62	0.82
47:BO:111:PHE:HB3	47:BO:114:ILE:HD13	1.60	0.82
1:CA:1128:C:O2'	1:CA:1129:C:H5"	1.80	0.82
36:DA:1207:C:H2'	36:DA:1208:C:H6	1.44	0.82
36:DA:2305:A:H3'	36:DA:2306:C:H5"	1.61	0.82
51:DS:99:LYS:NZ	51:DS:99:LYS:HB3	1.94	0.82
57:DY:28:LYS:O	57:DY:38:ILE:HG22	1.79	0.82
1:AA:1363(A):A:H4'	1:AA:1364:U:H5"	1.61	0.82
1:AA:1442(B):A:OP1	1:AA:1442(B):A:H3'	1.78	0.82
20:AT:16:HIS:O	20:AT:19:SER:HB3	1.79	0.82
25:AZ:241:ARG:HB3	25:AZ:241:ARG:NH1	1.93	0.82
46:BN:23:LEU:HB3	46:BN:60:ILE:HG21	1.62	0.82
57:BY:97:ARG:HH21	57:BY:98:VAL:HB	1.43	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1516:C:H2'	36:DA:1517:G:H5"	1.58	0.82
36:DA:2131:G:N3	36:DA:2133:G:N2	2.27	0.82
2:AB:178:ARG:NH1	8:AH:71:GLY:O	2.12	0.82
38:BC:123:VAL:HG22	38:BC:127:LEU:HD23	1.59	0.82
1:CA:1152:A:H5"	10:CJ:13:HIS:CD2	2.14	0.82
32:D6:44:ARG:O	32:D6:45:LYS:HE3	1.78	0.82
36:DA:621:A:H2'	36:DA:622:G:H5'	1.62	0.82
36:DA:1058:G:H2'	36:DA:1059:G:H5"	1.61	0.82
50:DR:38:VAL:HB	50:DR:39:PRO:HD3	1.60	0.82
2:AB:80:ILE:HD12	2:AB:80:ILE:H	1.42	0.82
2:AB:200:ILE:H	2:AB:200:ILE:HD12	1.44	0.82
36:BA:612:C:C2'	36:BA:613:G:H5"	2.09	0.82
36:BA:997:G:OP1	53:BU:93:LYS:HD3	1.79	0.82
51:BS:13:ARG:HG3	51:BS:14:VAL:H	1.44	0.82
41:DF:192:LEU:HD21	41:DF:194:MET:HG3	1.60	0.82
55:DW:26:GLY:H	55:DW:71:VAL:HG23	1.44	0.82
1:AA:547:A:H4'	1:AA:548:G:O5'	1.80	0.82
2:AB:172:ILE:H	2:AB:172:ILE:HD12	1.44	0.82
36:BA:2511:U:H4'	40:BE:124:GLY:HA2	1.62	0.82
58:BZ:30:ASN:HD22	58:BZ:30:ASN:C	1.86	0.82
58:BZ:96:VAL:HG22	58:BZ:97:GLU:N	1.94	0.82
17:CQ:69:LYS:C	17:CQ:70:ARG:HD2	2.05	0.82
20:CT:50:GLU:HG3	20:CT:100:ILE:HD13	1.59	0.82
25:CZ:271:GLU:HG2	25:CZ:276:THR:HA	1.62	0.82
48:DP:125:VAL:O	48:DP:145:PRO:HD2	1.79	0.82
58:DZ:149:SER:HB3	58:DZ:173:ALA:HA	1.61	0.82
1:AA:538:G:H2'	1:AA:539:A:H8	1.44	0.82
1:AA:1367:C:H5'	10:AJ:60:ARG:NH1	1.93	0.82
15:AO:17:ARG:HG3	15:AO:17:ARG:HH11	1.43	0.82
36:BA:1207:C:H2'	36:BA:1208:C:H6	1.44	0.82
56:BX:27:THR:CG2	56:BX:80:ILE:HB	2.09	0.82
36:DA:612:C:C2'	36:DA:613:G:H5"	2.08	0.82
36:DA:1378:A:O2'	36:DA:1379:A:H5'	1.80	0.82
46:DN:90:MET:HE2	46:DN:90:MET:HA	1.62	0.82
46:DN:133:GLN:HG2	46:DN:135:PRO:HD3	1.62	0.82
48:DP:64:LYS:O	48:DP:66:GLY:N	2.13	0.82
1:AA:80:G:N2	1:AA:90:U:H5'	1.93	0.82
18:AR:31:LEU:HD23	18:AR:31:LEU:H	1.45	0.82
34:B8:61:LEU:CD2	34:B8:62:LEU:HG	2.10	0.82
36:BA:621:A:H2'	36:BA:622:G:H5'	1.62	0.82
36:BA:1697:G:H3'	36:BA:1698:A:H5"	1.60	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BH:66:GLY:HA2	43:BH:69:ARG:HB3	1.61	0.82
36:DA:1899:G:H22	36:DA:1902:C:H41	0.83	0.82
43:DH:44:VAL:HG12	43:DH:45:VAL:H	1.44	0.82
57:DY:8:LYS:N	57:DY:8:LYS:HD2	1.95	0.82
58:DZ:103:ARG:HD3	58:DZ:138:GLU:HG3	1.62	0.82
28:B2:4:SER:HA	28:B2:7:ARG:HD3	1.61	0.81
38:BC:100:ILE:HG23	38:BC:127:LEU:HD13	1.60	0.81
54:BV:62:LEU:HD21	54:BV:95:LEU:HB2	1.62	0.81
5:CE:76:ILE:HD11	5:CE:142:LEU:CD2	2.09	0.81
19:CS:32:LYS:H	19:CS:32:LYS:HZ3	1.26	0.81
32:D6:15:GLU:HG2	32:D6:18:ARG:NH1	1.94	0.81
36:DA:272(H):C:C2'	36:DA:272(I):U:H5"	2.10	0.81
36:DA:614(A):U:H4'	36:DA:614(B):G:H5"	1.62	0.81
36:DA:2392:A:H2	36:DA:2424:C:H42	1.24	0.81
36:DA:2511:U:H4'	40:DE:124:GLY:HA2	1.62	0.81
57:DY:17:SER:HB2	57:DY:71:LYS:HE2	1.61	0.81
50:BR:24:GLN:NE2	50:BR:36:THR:HG21	1.95	0.81
1:CA:939:G:H5"	7:CG:102:ARG:HH12	1.45	0.81
25:CZ:20:VAL:O	25:CZ:21:ASP:HB2	1.80	0.81
36:DA:2138:C:H2'	36:DA:2139:C:C6	2.15	0.81
36:DA:2645:G:C3'	36:DA:2646:C:H5'	2.09	0.81
43:DH:156:ALA:HB3	43:DH:159:GLU:HB3	1.62	0.81
1:AA:538:G:H2'	1:AA:539:A:C8	2.15	0.81
13:AM:11:ARG:HG2	13:AM:12:ASN:ND2	1.95	0.81
28:B2:47:ASN:HB2	36:BA:94(A):G:O2'	1.80	0.81
34:B8:8:LYS:HA	34:B8:11:LYS:HD3	1.61	0.81
36:BA:272(H):C:C2'	36:BA:272(I):U:H5"	2.10	0.81
36:BA:654(H):G:H2'	36:BA:654(I):C:H5'	1.60	0.81
36:BA:1058:G:H2'	36:BA:1059:G:H5"	1.62	0.81
41:BF:192:LEU:HD21	41:BF:194:MET:HG3	1.62	0.81
43:BH:156:ALA:HB3	43:BH:159:GLU:HB3	1.62	0.81
43:BH:158:HIS:ND1	43:BH:168:PRO:HB2	1.95	0.81
49:BQ:22:LYS:H	58:BZ:78:LYS:HZ1	1.25	0.81
1:CA:1203:C:OP1	14:CN:3:ARG:HD3	1.80	0.81
3:CC:113:ALA:HB3	3:CC:114:PRO:HD3	1.63	0.81
4:CD:34:GLU:O	4:CD:35:ARG:HB2	1.79	0.81
4:CD:163:GLU:O	4:CD:166:LYS:HG2	1.81	0.81
9:CI:52:ALA:HB3	9:CI:95:LYS:HZ2	1.44	0.81
15:CO:87:ILE:HG22	15:CO:88:ARG:H	1.44	0.81
22:CW:71:G:C2'	22:CW:72:C:H5'	2.11	0.81
36:DA:1053:C:H2'	36:DA:1054:A:H8	1.44	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2784:C:H1'	40:DE:37:ARG:HH12	1.43	0.81
38:DC:123:VAL:HG21	38:DC:127:LEU:HD23	1.61	0.81
36:BA:2138:C:H2'	36:BA:2139:C:C6	2.15	0.81
40:BE:36:ARG:HH21	40:BE:88:GLY:HA2	1.45	0.81
48:BP:125:VAL:O	48:BP:145:PRO:HD2	1.80	0.81
57:BY:8:LYS:HD2	57:BY:8:LYS:N	1.95	0.81
57:DY:50:ARG:HD2	57:DY:53:PRO:HA	1.61	0.81
5:AE:76:ILE:HD11	5:AE:142:LEU:CD2	2.10	0.81
14:AN:26:ARG:HH11	14:AN:47:LEU:HD21	1.45	0.81
36:BA:1948:G:H5'	36:BA:1948:G:C8	2.16	0.81
36:BA:2287:A:H2	36:BA:2346:A:N1	1.79	0.81
1:CA:538:G:H2'	1:CA:539:A:H8	1.46	0.81
9:CI:52:ALA:HB1	9:CI:95:LYS:HD2	1.62	0.81
12:CL:33:ARG:HD3	12:CL:62:SER:OG	1.81	0.81
1:AA:353:A:H5'	1:AA:353:A:H8	1.44	0.81
1:AA:979:C:H3'	1:AA:980:C:H5"	1.63	0.81
1:AA:1533:C:H3'	1:AA:1534:A:H5"	1.61	0.81
36:BA:1019:U:O2'	36:BA:1021:A:H2	1.63	0.81
36:BA:1047:G:H2'	36:BA:1110:G:H21	1.43	0.81
46:BN:30:ILE:O	46:BN:34:LEU:HB2	1.78	0.81
55:BW:26:GLY:H	55:BW:71:VAL:HG23	1.46	0.81
55:BW:107:LEU:H	55:BW:107:LEU:HD12	1.45	0.81
2:CB:33:TYR:HB2	2:CB:43:ASP:HB2	1.62	0.81
19:CS:32:LYS:HZ3	19:CS:32:LYS:N	1.79	0.81
32:D6:18:ARG:HG2	32:D6:18:ARG:NH1	1.93	0.81
36:DA:321:G:N2	41:DF:165:ARG:HE	1.78	0.81
36:DA:1019:U:O2'	36:DA:1021:A:H2	1.63	0.81
36:DA:2875:C:H4'	52:DT:5:ALA:HB2	1.61	0.81
49:DQ:56:ARG:HH11	49:DQ:56:ARG:HG3	1.45	0.81
50:DR:24:GLN:NE2	50:DR:36:THR:HG21	1.95	0.81
55:DW:107:LEU:HD12	55:DW:107:LEU:H	1.46	0.81
1:AA:541:G:H2'	1:AA:542:G:H8	1.44	0.81
22:AW:71:G:C2'	22:AW:72:C:H5'	2.09	0.81
36:BA:761:A:H8	36:BA:761:A:O5'	1.62	0.81
36:BA:2305:A:H3'	36:BA:2306:C:H5"	1.61	0.81
47:BO:35:VAL:HG21	47:BO:103:ALA:HB3	1.62	0.81
56:BX:55:ASN:HB2	56:BX:80:ILE:HG23	1.63	0.81
36:DA:1434:A:H61	36:DA:1558:A:H62	1.27	0.81
36:DA:1543:C:C3'	36:DA:1544:A:H5"	2.10	0.81
36:DA:2524:G:H8	36:DA:2524:G:H5'	1.45	0.81
57:DY:49:VAL:O	57:DY:50:ARG:HB2	1.80	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:DZ:98:MET:HG2	58:DZ:99:TYR:N	1.94	0.81
27:B1:79:GLY:O	27:B1:80:LEU:HG	1.80	0.81
36:BA:64:A:H5'	56:BX:64:LYS:HD3	1.61	0.81
36:BA:896:A:C8	58:BZ:146:ILE:HD12	2.16	0.81
36:BA:2762:G:H5'	36:BA:2762:G:H8	1.44	0.81
1:CA:80:G:N2	1:CA:90:U:H5'	1.94	0.81
15:CO:17:ARG:HH11	15:CO:17:ARG:HG3	1.45	0.81
36:DA:34:C:H41	36:DA:447:A:H61	1.29	0.81
36:DA:271(C):C:H2'	36:DA:271(D):G:C8	2.16	0.81
48:DP:24:GLY:HA3	48:DP:33:ARG:NH1	1.95	0.81
54:DV:36:PRO:O	54:DV:37:VAL:HG13	1.80	0.81
4:AD:3:ARG:NH1	4:AD:118:ARG:HD3	1.95	0.81
9:AI:52:ALA:HB1	9:AI:95:LYS:HD2	1.62	0.81
25:AZ:23:GLY:O	25:AZ:26:THR:HG22	1.81	0.81
26:B0:50:ASN:HD22	26:B0:63:VAL:HG21	1.46	0.81
32:B6:36:LEU:HD12	32:B6:50:ARG:CZ	2.10	0.81
51:BS:99:LYS:NZ	51:BS:99:LYS:HB3	1.93	0.81
55:BW:11:ARG:HH11	55:BW:11:ARG:HG2	1.46	0.81
58:BZ:40:ASP:HB3	58:BZ:43:GLU:HB3	1.61	0.81
1:CA:1003:G:H2'	1:CA:1004:A:C4'	2.10	0.81
36:DA:2185:C:C2'	36:DA:2186:G:H5'	2.10	0.81
43:DH:66:GLY:HA2	43:DH:69:ARG:HB3	1.61	0.81
52:DT:23:ARG:O	52:DT:25:GLY:N	2.14	0.81
1:AA:1003:G:H2'	1:AA:1004:A:C4'	2.10	0.81
20:AT:26:ASN:HB2	20:AT:71:THR:HG23	1.63	0.81
25:AZ:20:VAL:O	25:AZ:21:ASP:HB2	1.79	0.81
31:B5:4:HIS:HB3	31:B5:5:PRO:CD	2.11	0.81
36:BA:1087:G:H8	36:BA:1088:A:H4'	1.44	0.81
41:BF:10:PRO:HD2	41:BF:13:SER:O	1.81	0.81
55:BW:82:LEU:H	55:BW:82:LEU:HD12	1.46	0.81
57:BY:17:SER:HB2	57:BY:71:LYS:HE2	1.62	0.81
2:CB:200:ILE:HD12	2:CB:200:ILE:H	1.46	0.81
39:DD:43:ARG:HB2	39:DD:54:ARG:HB2	1.61	0.81
58:DZ:89:PHE:HE2	58:DZ:96:VAL:HG21	1.46	0.81
3:AC:5:ILE:H	3:AC:5:ILE:CD1	1.94	0.80
16:AP:74:LEU:O	16:AP:79:VAL:HG23	1.80	0.80
22:AW:57:G:C2'	22:AW:58:A:H5'	2.11	0.80
36:BA:1826:G:H4'	39:BD:242:ARG:HH21	1.46	0.80
36:BA:2185:C:C2'	36:BA:2186:G:H5'	2.10	0.80
39:BD:32:SER:O	39:BD:36:PRO:HG3	1.81	0.80
39:BD:183:ARG:HH11	39:BD:183:ARG:HG2	1.45	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:CT:16:HIS:O	20:CT:19:SER:HB3	1.82	0.80
26:D0:50:ASN:HD22	26:D0:63:VAL:HG21	1.46	0.80
48:DP:7:ARG:O	48:DP:10:PRO:HD3	1.81	0.80
10:AJ:90:LEU:H	10:AJ:91:PRO:HD3	1.46	0.80
20:AT:23:ARG:O	20:AT:27:LYS:HB2	1.81	0.80
21:AU:6:ARG:HD3	21:AU:15:ARG:NH1	1.95	0.80
34:B8:61:LEU:H	34:B8:61:LEU:CD1	1.94	0.80
36:BA:2668:G:O2'	36:BA:2669:G:H5'	1.79	0.80
48:BP:7:ARG:O	48:BP:10:PRO:HD3	1.81	0.80
48:BP:64:LYS:O	48:BP:66:GLY:N	2.13	0.80
2:CB:229:VAL:HG12	2:CB:230:VAL:H	1.46	0.80
16:CP:53:VAL:HG23	16:CP:54:GLU:H	1.46	0.80
25:CZ:241:ARG:HB3	25:CZ:241:ARG:NH1	1.95	0.80
36:DA:1678:G:N2	36:DA:1989:G:H22	1.80	0.80
36:DA:1697:G:H3'	36:DA:1698:A:H5"	1.60	0.80
43:DH:118:PRO:HG2	43:DH:121:ILE:HD12	1.63	0.80
52:DT:39:ARG:H	52:DT:39:ARG:HD2	1.44	0.80
39:BD:43:ARG:HB2	39:BD:54:ARG:HB2	1.63	0.80
1:CA:1157:A:H4'	1:CA:1158:C:O5'	1.80	0.80
46:DN:70:LYS:HG2	46:DN:87:LEU:HD23	1.64	0.80
36:BA:614(A):U:H4'	36:BA:614(B):G:H5"	1.61	0.80
36:BA:1543:C:C3'	36:BA:1544:A:H5"	2.10	0.80
36:BA:2392:A:H2	36:BA:2424:C:H42	1.27	0.80
13:CM:11:ARG:HG2	13:CM:12:ASN:ND2	1.95	0.80
36:DA:1884:A:C2'	36:DA:1885:A:H5"	2.10	0.80
36:DA:2668:G:O2'	36:DA:2669:G:H5'	1.82	0.80
39:DD:30:GLU:HG3	39:DD:63:ARG:NE	1.97	0.80
42:DG:86:MET:HG2	42:DG:86:MET:O	1.79	0.80
49:DQ:60:ARG:HB3	49:DQ:60:ARG:NH1	1.96	0.80
36:BA:89:G:H3'	36:BA:90:U:H5'	1.61	0.80
37:BB:8:U:H5'	37:BB:8:U:H6	1.47	0.80
46:BN:90:MET:HE2	46:BN:90:MET:HA	1.63	0.80
49:BQ:60:ARG:HB3	49:BQ:60:ARG:NH1	1.97	0.80
1:CA:547:A:H4'	1:CA:548:G:O5'	1.80	0.80
36:DA:2801(A):A:C4'	36:DA:2802:G:H5'	2.12	0.80
43:DH:158:HIS:ND1	43:DH:168:PRO:HB2	1.96	0.80
44:DJ:42:UNK:C	44:DJ:44:UNK:H	1.92	0.80
56:DX:35:THR:HG22	56:DX:38:GLU:H	1.45	0.80
56:DX:40:LYS:HB2	56:DX:54:VAL:HG21	1.61	0.80
36:BA:1227:G:OP1	53:BU:13:LYS:HD2	1.82	0.80
42:BG:44:GLY:N	42:BG:88:ILE:HG21	1.96	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BY:49:VAL:O	57:BY:50:ARG:HB2	1.80	0.80
27:D1:69:LYS:HZ1	27:D1:76:ARG:HH22	1.27	0.80
36:DA:958:U:H5"	49:DQ:14:ARG:HD2	1.63	0.80
47:DO:35:VAL:HG21	47:DO:103:ALA:HB3	1.61	0.80
4:AD:163:GLU:O	4:AD:166:LYS:HG2	1.82	0.80
36:BA:2298:A:H62	36:BA:2318:G:H8	1.30	0.80
1:CA:1318:A:H4'	19:CS:10:PHE:CE2	2.16	0.80
24:CY:4:G:C2'	24:CY:5:G:H5"	2.12	0.80
25:CZ:34:VAL:HG21	25:CZ:199:ILE:HG21	1.64	0.80
27:D1:86:SER:O	27:D1:90:ILE:HG12	1.80	0.80
30:D4:12:ALA:CB	30:D4:29:PRO:HA	2.10	0.80
34:D8:61:LEU:CD2	34:D8:62:LEU:HG	2.10	0.80
46:DN:9:VAL:HG12	46:DN:10:GLU:N	1.96	0.80
50:DR:24:GLN:HE22	50:DR:36:THR:HG21	1.47	0.80
52:DT:55:ASN:H	52:DT:59:THR:CG2	1.94	0.80
24:AY:4:G:C2'	24:AY:5:G:H5"	2.12	0.80
26:B0:49:LYS:HG3	26:B0:80:HIS:HD1	1.47	0.80
31:B5:2:ALA:HA	36:BA:2015:A:H1'	1.64	0.80
36:DA:2092:U:C4'	36:DA:2093:G:H5"	2.10	0.80
42:DG:51:ARG:HD3	42:DG:53:LEU:HD21	1.64	0.80
47:DO:104:ARG:HE	52:DT:33:LYS:NZ	1.80	0.80
5:CE:12:LEU:HD13	5:CE:31:LEU:HB2	1.63	0.80
36:DA:89:G:H3'	36:DA:90:U:H5'	1.62	0.80
36:DA:2099:U:H2'	36:DA:2100:G:C8	2.17	0.80
49:DQ:141:GLN:NE2	58:DZ:72:ARG:HA	1.97	0.80
1:AA:939:G:H5"	7:AG:102:ARG:HH12	1.46	0.80
2:AB:134:GLU:C	2:AB:136:VAL:H	1.89	0.80
7:AG:145:ALA:O	7:AG:147:ALA:N	2.15	0.80
17:AQ:69:LYS:C	17:AQ:70:ARG:HD2	2.07	0.80
36:BA:2784:C:H1'	40:BE:37:ARG:HH12	1.45	0.80
42:BG:115:ARG:HH11	42:BG:115:ARG:HG2	1.47	0.80
53:DU:59:ARG:HH11	53:DU:59:ARG:HG2	1.47	0.80
55:DW:82:LEU:HD12	55:DW:82:LEU:H	1.47	0.80
38:BC:123:VAL:HG23	38:BC:127:LEU:HD22	1.61	0.79
40:BE:34:VAL:HG11	40:BE:78:LEU:CD2	2.12	0.79
47:BO:104:ARG:HE	52:BT:33:LYS:NZ	1.78	0.79
51:BS:52:SER:HB3	51:BS:55:ALA:HB3	1.63	0.79
53:BU:59:ARG:HH11	53:BU:59:ARG:HG2	1.47	0.79
57:BY:28:LYS:O	57:BY:38:ILE:HG22	1.80	0.79
2:CB:134:GLU:C	2:CB:136:VAL:H	1.88	0.79
13:CM:4:ILE:HG22	13:CM:5:ALA:H	1.46	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:CR:31:LEU:HD23	18:CR:31:LEU:H	1.45	0.79
36:DA:910:A:H62	49:DQ:12:GLN:HA	1.47	0.79
37:DB:80:U:H2'	37:DB:81:G:H21	1.47	0.79
57:DY:26:LYS:HG2	57:DY:27:VAL:H	1.45	0.79
29:B3:17:LYS:HG2	36:BA:969:U:OP1	1.82	0.79
43:BH:94:TYR:HD1	43:BH:107:VAL:HA	1.46	0.79
56:BX:35:THR:HG22	56:BX:38:GLU:H	1.46	0.79
57:BY:26:LYS:HG2	57:BY:27:VAL:H	1.44	0.79
1:CA:353:A:H8	1:CA:353:A:H5'	1.45	0.79
1:CA:538:G:H2'	1:CA:539:A:C8	2.17	0.79
1:CA:1321:C:H3'	1:CA:1322:C:H5"	1.63	0.79
4:CD:189:PRO:HB2	4:CD:194:LEU:CD2	2.12	0.79
9:CI:20:ARG:NH1	9:CI:20:ARG:HB2	1.96	0.79
10:CJ:24:VAL:HG12	10:CJ:28:ARG:HD2	1.64	0.79
10:CJ:50:ILE:HD13	10:CJ:50:ILE:N	1.97	0.79
13:CM:4:ILE:HG22	13:CM:5:ALA:N	1.98	0.79
34:D8:11:LYS:HZ1	34:D8:63:PRO:HG3	1.45	0.79
36:DA:1948:G:H5'	36:DA:1948:G:C8	2.17	0.79
36:DA:2287:A:H2	36:DA:2346:A:N1	1.80	0.79
49:DQ:141:GLN:HB3	58:DZ:99:TYR:CE1	2.18	0.79
36:BA:2524:G:H8	36:BA:2524:G:H5'	1.47	0.79
1:CA:706:A:O4'	11:CK:29:ILE:HD11	1.82	0.79
35:D9:1:MET:HE3	35:D9:31:LYS:HB3	1.64	0.79
39:DD:147:LEU:HD11	39:DD:183:ARG:NH1	1.97	0.79
46:DN:22:THR:HG22	46:DN:61:ARG:HB2	1.63	0.79
49:DQ:134:ARG:HD2	58:DZ:122:ARG:NH2	1.97	0.79
29:B3:35:ARG:HB2	29:B3:35:ARG:NH1	1.96	0.79
32:B6:15:GLU:CG	32:B6:47:THR:HG21	2.13	0.79
36:BA:2801(A):A:C4'	36:BA:2802:G:H5'	2.12	0.79
48:BP:39:LYS:HD2	48:BP:40:SER:H	1.48	0.79
9:CI:52:ALA:HB3	9:CI:95:LYS:NZ	1.98	0.79
24:CY:16:H2U:H5'	24:CY:17:H2U:H5'	1.64	0.79
36:DA:302:C:H2'	36:DA:303:U:C6	2.18	0.79
42:DG:131:TYR:HB3	42:DG:159:VAL:CG1	2.12	0.79
1:AA:1285:A:H4'	1:AA:1286:A:O5'	1.81	0.79
1:AA:1321:C:H3'	1:AA:1322:C:H5"	1.64	0.79
19:AS:43:GLU:O	19:AS:45:VAL:N	2.16	0.79
22:AW:18:G:H1	22:AW:55:U:H1'	1.48	0.79
28:B2:62:THR:HG22	28:B2:66:GLU:HB3	1.63	0.79
36:BA:271(C):C:H2'	36:BA:271(D):G:C8	2.17	0.79
48:BP:30:THR:CG2	48:BP:31:ALA:H	1.95	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:CW:57:G:C2'	22:CW:58:A:H5'	2.11	0.79
32:D6:14:THR:O	32:D6:49:HIS:HA	1.82	0.79
34:D8:61:LEU:H	34:D8:61:LEU:CD1	1.94	0.79
37:DB:8:U:H5'	37:DB:8:U:H6	1.46	0.79
48:DP:105:LEU:H	48:DP:105:LEU:HD12	1.47	0.79
57:DY:95:LYS:HG3	57:DY:100:ALA:HA	1.62	0.79
1:AA:1157:A:H4'	1:AA:1158:C:O5'	1.82	0.79
32:B6:14:THR:O	32:B6:49:HIS:HA	1.83	0.79
36:BA:654(A):G:H2'	36:BA:654(B):C:H5'	1.64	0.79
39:BD:30:GLU:HG3	39:BD:63:ARG:NE	1.97	0.79
43:BH:137:ASP:O	43:BH:138:LYS:HB2	1.80	0.79
54:BV:51:VAL:HG12	54:BV:52:VAL:H	1.47	0.79
56:BX:12:VAL:CG2	56:BX:13:LEU:H	1.92	0.79
39:DD:30:GLU:CD	39:DD:63:ARG:HE	1.91	0.79
9:AI:52:ALA:HB3	9:AI:95:LYS:NZ	1.97	0.79
13:AM:119:GLY:O	13:AM:120:LYS:HB2	1.83	0.79
36:BA:733:G:N7	36:BA:761:A:C6	2.50	0.79
41:BF:84:VAL:C	41:BF:86:GLY:H	1.91	0.79
42:BG:28:VAL:O	42:BG:31:VAL:HG12	1.81	0.79
42:BG:51:ARG:HA	42:BG:51:ARG:NE	1.98	0.79
14:CN:26:ARG:HH11	14:CN:47:LEU:HD21	1.47	0.79
36:DA:2415:G:H4'	48:DP:66:GLY:C	2.06	0.79
40:DE:36:ARG:HH21	40:DE:88:GLY:HA2	1.45	0.79
12:AL:18:VAL:HG23	12:AL:19:ARG:N	1.95	0.79
39:BD:76:PRO:HG2	39:BD:98:VAL:HG21	1.64	0.79
43:BH:42:ARG:O	43:BH:43:VAL:HG13	1.83	0.79
52:BT:23:ARG:O	52:BT:25:GLY:N	2.16	0.79
14:CN:12:ARG:NH1	14:CN:14:PRO:HG2	1.98	0.79
20:CT:26:ASN:HB2	20:CT:71:THR:HG23	1.63	0.79
20:CT:50:GLU:HB2	20:CT:99:LEU:HD12	1.63	0.79
41:DF:160:ASN:ND2	41:DF:162:LEU:H	1.81	0.79
48:DP:30:THR:CG2	48:DP:31:ALA:H	1.95	0.79
1:AA:424:G:H2'	1:AA:425:G:H8	1.48	0.79
9:AI:20:ARG:HB2	9:AI:20:ARG:NH1	1.97	0.79
28:B2:38:GLN:OE1	28:B2:44:LEU:HD22	1.82	0.79
36:BA:2245:U:H5'	36:BA:2246:G:H5'	1.64	0.79
39:BD:24:ILE:O	39:BD:26:LYS:N	2.13	0.79
39:BD:206:LEU:HD22	39:BD:211:ARG:HG2	1.64	0.79
42:BG:102:PHE:O	42:BG:103:LEU:HB2	1.83	0.79
43:BH:85:LYS:HZ1	43:BH:86:GLU:HA	1.48	0.79
48:BP:30:THR:HG22	48:BP:31:ALA:H	1.47	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:BP:101:VAL:HA	48:BP:105:LEU:O	1.83	0.79
51:BS:15:ARG:HB2	51:BS:15:ARG:NH1	1.97	0.79
53:BU:92:ARG:NH2	54:BV:10:LYS:HB3	1.97	0.79
1:CA:176:C:H2'	1:CA:177:C:H6	1.48	0.79
36:DA:2502:G:H5"	36:DA:2503:A:H5"	1.65	0.79
58:DZ:7:ALA:HB3	58:DZ:61:LEU:HD23	1.64	0.79
34:B8:11:LYS:NZ	34:B8:63:PRO:HG3	1.98	0.79
40:BE:14:ILE:HD11	40:BE:173:VAL:HG11	1.65	0.79
40:BE:107:THR:O	40:BE:190:GLY:HA2	1.83	0.79
41:BF:160:ASN:ND2	41:BF:162:LEU:H	1.80	0.79
54:BV:36:PRO:O	54:BV:37:VAL:HG13	1.81	0.79
1:CA:376:G:H4'	16:CP:5:ARG:NH1	1.97	0.79
1:CA:541:G:H2'	1:CA:542:G:H8	1.48	0.79
36:DA:605:C:H5	36:DA:623:G:H1	1.31	0.79
41:DF:10:PRO:HD2	41:DF:13:SER:O	1.82	0.79
3:AC:79:ARG:HB2	3:AC:79:ARG:NH1	1.98	0.78
20:AT:50:GLU:HB2	20:AT:99:LEU:HD12	1.64	0.78
28:B2:18:PRO:HB3	28:B2:71:ASN:O	1.83	0.78
36:BA:991:C:H5'	36:BA:991:C:H6	1.48	0.78
36:BA:2099:U:H2'	36:BA:2100:G:C8	2.18	0.78
42:BG:146:TYR:O	42:BG:149:VAL:HG22	1.83	0.78
56:BX:40:LYS:HB2	56:BX:54:VAL:HG21	1.63	0.78
3:CC:5:ILE:H	3:CC:5:ILE:CD1	1.95	0.78
41:DF:84:VAL:C	41:DF:86:GLY:H	1.91	0.78
4:AD:100:ARG:HH21	4:AD:118:ARG:HH12	1.30	0.78
24:AY:16:H2U:H5'	24:AY:17:H2U:H5'	1.64	0.78
25:AZ:34:VAL:HG21	25:AZ:199:ILE:HG21	1.65	0.78
28:B2:46:GLN:HB3	28:B2:48:HIS:HD1	1.47	0.78
36:BA:1567:A:H5'	39:BD:58:HIS:CD2	2.18	0.78
43:BH:118:PRO:HG2	43:BH:121:ILE:HD12	1.65	0.78
43:BH:156:ALA:C	43:BH:158:HIS:H	1.87	0.78
51:BS:101:LEU:O	51:BS:101:LEU:HD12	1.84	0.78
1:CA:1285:A:H4'	1:CA:1286:A:O5'	1.82	0.78
10:CJ:90:LEU:H	10:CJ:91:PRO:HD3	1.47	0.78
12:CL:18:VAL:HG23	12:CL:19:ARG:N	1.98	0.78
22:CV:23:A:H5'	22:CV:23:A:C8	2.17	0.78
26:D0:50:ASN:HD22	26:D0:63:VAL:CG2	1.96	0.78
29:D3:43:ILE:O	29:D3:47:VAL:HG23	1.84	0.78
36:DA:2298:A:H62	36:DA:2318:G:H8	1.31	0.78
46:DN:62:VAL:CG2	46:DN:66:LYS:HD2	2.12	0.78
48:DP:101:VAL:HA	48:DP:105:LEU:O	1.83	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:DS:52:SER:HB3	51:DS:55:ALA:HB3	1.65	0.78
55:DW:22:ASP:HA	55:DW:25:ARG:HH12	1.48	0.78
46:BN:22:THR:HG22	46:BN:61:ARG:HB2	1.65	0.78
46:BN:70:LYS:HG2	46:BN:87:LEU:HD23	1.65	0.78
1:CA:1367:C:C5'	10:CJ:60:ARG:HH11	1.95	0.78
9:CI:95:LYS:HG3	9:CI:96:LEU:HD13	1.64	0.78
36:DA:654(A):G:H2'	36:DA:654(B):C:H5'	1.64	0.78
36:DA:1227:G:OP1	53:DU:13:LYS:HD2	1.83	0.78
56:DX:35:THR:O	56:DX:39:ILE:HG12	1.84	0.78
58:DZ:24:LEU:HD12	58:DZ:41:LEU:HG	1.65	0.78
1:AA:1203:C:OP1	14:AN:3:ARG:HD3	1.83	0.78
19:AS:10:PHE:CG	19:AS:10:PHE:O	2.35	0.78
27:B1:3:LYS:HB2	36:BA:1365:A:OP2	1.82	0.78
36:BA:958:U:H5"	49:BQ:14:ARG:HD2	1.66	0.78
46:BN:9:VAL:HG12	46:BN:10:GLU:N	1.98	0.78
46:BN:62:VAL:CG2	46:BN:66:LYS:HD2	2.13	0.78
22:CW:18:G:H1	22:CW:55:U:H1'	1.48	0.78
31:D5:2:ALA:HA	36:DA:2015:A:H1'	1.63	0.78
39:DD:76:PRO:HG2	39:DD:98:VAL:CG2	2.13	0.78
1:AA:376:G:H5"	16:AP:5:ARG:HB2	1.65	0.78
15:AO:39:LEU:HD13	15:AO:56:LEU:HB2	1.65	0.78
36:BA:2098:U:H3	36:BA:2191:G:H1	1.31	0.78
37:BB:80:U:H2'	37:BB:81:G:H21	1.48	0.78
7:CG:79:ARG:NE	7:CG:84:ASN:HB2	1.97	0.78
20:CT:23:ARG:O	20:CT:27:LYS:HB2	1.83	0.78
25:CZ:23:GLY:O	25:CZ:26:THR:HG22	1.83	0.78
36:DA:2787:C:H1'	40:DE:61:ARG:HD3	1.65	0.78
48:DP:47:ASP:HB2	48:DP:51:PHE:HB2	1.65	0.78
54:DV:19:LYS:NZ	54:DV:20:LEU:H	1.80	0.78
58:DZ:166:SER:HB2	58:DZ:168:GLU:HG3	1.64	0.78
10:AJ:50:ILE:HD13	10:AJ:50:ILE:N	1.97	0.78
11:AK:27:ASN:HD22	11:AK:28:THR:N	1.82	0.78
13:AM:4:ILE:HG22	13:AM:5:ALA:H	1.48	0.78
26:B0:10:THR:HG22	26:B0:12:ASN:N	1.98	0.78
26:B0:50:ASN:HD22	26:B0:63:VAL:CG2	1.97	0.78
36:BA:2312:U:H4'	42:BG:71:THR:HG21	1.65	0.78
50:BR:24:GLN:HE22	50:BR:36:THR:HG21	1.47	0.78
58:BZ:141:VAL:HA	58:BZ:144:LEU:HD23	1.66	0.78
10:CJ:32:ALA:HB2	10:CJ:76:ASN:HB2	1.65	0.78
13:CM:49:THR:HG22	13:CM:51:ALA:H	1.49	0.78
54:DV:62:LEU:HD21	54:DV:95:LEU:HB2	1.63	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:19:LEU:O	4:AD:26:CYS:SG	2.42	0.78
25:AZ:222:LEU:HD13	25:AZ:305:ALA:HB2	1.66	0.78
34:B8:50:LEU:HD12	34:B8:51:ALA:N	1.99	0.78
34:B8:61:LEU:HD13	34:B8:62:LEU:H	1.49	0.78
48:BP:47:ASP:HB2	48:BP:51:PHE:HB2	1.66	0.78
3:CC:40:ARG:HG3	3:CC:40:ARG:HH11	1.49	0.78
12:CL:7:ILE:HD12	12:CL:8:ASN:N	1.98	0.78
13:CM:53:VAL:HG12	13:CM:57:ARG:HH21	1.48	0.78
19:CS:43:GLU:O	19:CS:45:VAL:N	2.15	0.78
19:CS:78:ARG:HB2	19:CS:81:ARG:HH11	1.48	0.78
26:D0:27:GLU:HB3	26:D0:69:PHE:HD1	1.49	0.78
32:D6:10:LEU:H	32:D6:10:LEU:HD23	1.49	0.78
38:DC:123:VAL:HG23	38:DC:127:LEU:HD22	1.60	0.78
43:DH:42:ARG:O	43:DH:43:VAL:HG13	1.82	0.78
53:DU:92:ARG:NH2	54:DV:10:LYS:HB3	1.98	0.78
56:DX:55:ASN:HB2	56:DX:80:ILE:HG23	1.64	0.78
58:DZ:18:LEU:H	58:DZ:18:LEU:HD12	1.49	0.78
7:AG:79:ARG:NE	7:AG:84:ASN:HB2	1.99	0.78
36:BA:302:C:H2'	36:BA:303:U:C6	2.19	0.78
36:BA:654(H):G:C2'	36:BA:654(I):C:H5'	2.14	0.78
3:CC:79:ARG:HB2	3:CC:79:ARG:NH1	1.98	0.78
27:D1:45:ASN:HD21	36:DA:2090:G:H21	1.32	0.78
36:DA:145:G:H2'	36:DA:146:G:H5"	1.64	0.78
36:DA:631:A:H5"	48:DP:65:ARG:HH11	1.49	0.78
36:DA:654(H):G:C2'	36:DA:654(I):C:H5'	2.14	0.78
36:DA:1210:A:H5"	36:DA:1212:G:O4'	1.83	0.78
9:AI:95:LYS:HG3	9:AI:96:LEU:HD13	1.64	0.78
36:BA:2147:G:H2'	36:BA:2148:G:O4'	1.84	0.78
36:BA:2334:G:H21	51:BS:18:ILE:HG23	1.49	0.78
36:BA:2726:U:O2	36:BA:2726:U:H5'	1.84	0.78
36:BA:2787:C:H1'	40:BE:61:ARG:HD3	1.66	0.78
9:CI:40:LEU:HD11	9:CI:70:LYS:HG2	1.65	0.78
36:DA:733:G:N7	36:DA:761:A:C6	2.52	0.78
36:DA:1076:C:H5"	58:DZ:111:VAL:HG12	1.64	0.78
38:DC:43:VAL:HG23	38:DC:175:VAL:HG21	1.63	0.78
43:DH:30:LYS:HB2	43:DH:79:VAL:HA	1.66	0.78
58:DZ:152:ALA:CB	58:DZ:168:GLU:HA	2.13	0.78
1:AA:1318:A:H4'	19:AS:10:PHE:CE2	2.19	0.78
22:AW:38:A:H2'	22:AW:39:U:H5"	1.66	0.78
27:B1:80:LEU:HB3	27:B1:82:LEU:CD1	2.14	0.78
36:BA:811:U:OP2	48:BP:30:THR:HG23	1.84	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:939:G:H5”	7:CG:102:ARG:HH22	1.48	0.78
36:DA:657:U:H2’	36:DA:658:C:H6	1.49	0.78
39:DD:183:ARG:HH11	39:DD:183:ARG:HG2	1.46	0.78
43:DH:94:TYR:HD1	43:DH:107:VAL:HA	1.48	0.78
54:DV:51:VAL:HG12	54:DV:52:VAL:H	1.48	0.78
10:AJ:57:LYS:HZ3	10:AJ:60:ARG:HH22	1.31	0.77
28:B2:25:VAL:CB	28:B2:64:LEU:HD12	2.12	0.77
28:B2:62:THR:O	28:B2:66:GLU:HG3	1.84	0.77
36:BA:259:G:N2	36:BA:621:A:H8	1.81	0.77
36:BA:1314:C:H5’	36:BA:1314:C:H6	1.46	0.77
36:BA:2415:G:H4’	48:BP:66:GLY:C	2.09	0.77
46:BN:55:VAL:HG22	46:BN:126:PRO:HA	1.65	0.77
54:BV:19:LYS:NZ	54:BV:20:LEU:H	1.81	0.77
58:BZ:149:SER:CB	58:BZ:173:ALA:HA	2.14	0.77
19:CS:48:THR:HG22	19:CS:61:TYR:HA	1.66	0.77
43:DH:54:ARG:HH11	43:DH:54:ARG:HG2	1.49	0.77
51:DS:15:ARG:HB2	51:DS:15:ARG:NH1	1.99	0.77
55:DW:11:ARG:HH11	55:DW:11:ARG:HG2	1.48	0.77
4:AD:67:ILE:HG22	4:AD:68:TYR:CD1	2.19	0.77
26:B0:27:GLU:HB3	26:B0:69:PHE:HD1	1.48	0.77
31:B5:29:THR:HG21	36:BA:2814:C:O2’	1.85	0.77
36:BA:34:C:H41	36:BA:447:A:H61	1.32	0.77
43:BH:18:GLU:HB2	43:BH:25:LYS:HB2	1.66	0.77
1:CA:269:C:H2’	1:CA:270:A:H8	1.49	0.77
4:CD:11:LEU:HD13	4:CD:66:ARG:HD3	1.66	0.77
4:CD:101:LEU:HD23	4:CD:121:VAL:HG11	1.66	0.77
13:CM:119:GLY:O	13:CM:120:LYS:HB2	1.83	0.77
34:D8:11:LYS:NZ	34:D8:63:PRO:HG3	1.99	0.77
49:DQ:74:TYR:HD2	49:DQ:91:GLU:HB2	1.48	0.77
10:AJ:80:LYS:O	10:AJ:83:GLU:HB3	1.85	0.77
28:B2:67:LYS:O	28:B2:70:GLN:HG2	1.84	0.77
32:B6:30:THR:O	32:B6:31:PRO:C	2.26	0.77
36:BA:910:A:H62	49:BQ:12:GLN:HA	1.49	0.77
41:BF:28:ILE:HG21	41:BF:116:ASP:HB2	1.66	0.77
48:BP:105:LEU:H	48:BP:105:LEU:HD12	1.48	0.77
49:BQ:74:TYR:HD2	49:BQ:91:GLU:HB2	1.48	0.77
26:D0:49:LYS:HG3	26:D0:80:HIS:HD1	1.48	0.77
39:DD:24:ILE:O	39:DD:26:LYS:N	2.14	0.77
40:DE:14:ILE:HD11	40:DE:173:VAL:HG11	1.66	0.77
48:DP:23:PRO:O	48:DP:33:ARG:HD2	1.83	0.77
48:DP:30:THR:HG22	48:DP:31:ALA:H	1.47	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:DP:39:LYS:HD2	48:DP:40:SER:H	1.48	0.77
34:B8:32:LEU:HD23	34:B8:36:LYS:HE2	1.65	0.77
36:BA:1087:G:H2'	36:BA:1088:A:H4'	1.66	0.77
56:BX:35:THR:O	56:BX:39:ILE:HG12	1.84	0.77
1:CA:424:G:H2'	1:CA:425:G:H8	1.49	0.77
9:CI:19:LEU:HD21	9:CI:59:PHE:CD2	2.19	0.77
34:D8:52:LYS:N	34:D8:53:PRO:HD2	2.00	0.77
54:DV:19:LYS:HG2	54:DV:94:LEU:HB2	1.67	0.77
1:AA:1533:C:C3'	1:AA:1534:A:H5"	2.14	0.77
2:AB:185:ILE:HG22	2:AB:199:TYR:HB2	1.66	0.77
4:AD:18:LYS:N	4:AD:33:MET:HE2	1.98	0.77
16:AP:53:VAL:HG23	16:AP:54:GLU:H	1.48	0.77
22:AV:23:A:H5'	22:AV:23:A:C8	2.18	0.77
36:BA:2645:G:C3'	36:BA:2646:C:H5'	2.09	0.77
56:BX:12:VAL:HG23	56:BX:13:LEU:N	1.94	0.77
1:CA:1238:A:H2	1:CA:1301:U:H3	1.31	0.77
2:CB:75:LYS:HA	2:CB:78:GLN:HE21	1.49	0.77
7:CG:145:ALA:O	7:CG:147:ALA:N	2.17	0.77
36:DA:1348:G:H2'	36:DA:1349:A:H5"	1.66	0.77
42:DG:73:ALA:H	42:DG:87:PRO:CG	1.97	0.77
58:DZ:108:PRO:HD3	58:DZ:141:VAL:HB	1.67	0.77
1:AA:1003:G:N2	1:AA:1039:C:H42	1.82	0.77
2:AB:22:LYS:HE2	2:AB:22:LYS:HA	1.67	0.77
35:B9:34:GLN:O	35:B9:35:ARG:HB2	1.84	0.77
36:BA:1210:A:H5"	36:BA:1212:G:O4'	1.84	0.77
36:BA:1681:G:O2'	36:BA:1762:A:H2'	1.84	0.77
4:CD:18:LYS:N	4:CD:33:MET:HE2	1.98	0.77
25:CZ:331:HIS:HA	25:CZ:364:PRO:HG2	1.67	0.77
32:D6:15:GLU:CG	32:D6:47:THR:HG21	2.15	0.77
36:DA:1567:A:H5'	39:DD:58:HIS:CD2	2.20	0.77
1:AA:706:A:O4'	11:AK:29:ILE:HD11	1.84	0.77
36:BA:181:A:H8	36:BA:181:A:H5'	1.49	0.77
52:BT:16:ARG:HD2	52:BT:18:ASP:OD1	1.85	0.77
52:BT:60:THR:HG22	52:BT:77:PRO:HA	1.66	0.77
36:DA:280:C:H3'	36:DA:281:G:H8	1.49	0.77
40:DE:34:VAL:HG11	40:DE:78:LEU:CD2	2.14	0.77
49:DQ:56:ARG:HH11	49:DQ:56:ARG:CG	1.97	0.77
52:DT:60:THR:HG22	52:DT:77:PRO:HA	1.67	0.77
1:AA:542:G:OP1	4:AD:10:ARG:NH2	2.18	0.77
13:AM:4:ILE:HG22	13:AM:5:ALA:N	1.99	0.77
34:B8:54:GLU:O	34:B8:58:ILE:HG12	1.85	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:B9:1:MET:HE3	35:B9:31:LYS:HB3	1.65	0.77
36:BA:658:C:H2'	36:BA:659:C:C6	2.19	0.77
41:BF:3:GLU:CA	41:BF:24:LEU:HG	2.15	0.77
43:BH:54:ARG:HH11	43:BH:54:ARG:HG2	1.50	0.77
44:BJ:56:UNK:HA	44:BJ:83:UNK:HA	1.66	0.77
49:BQ:141:GLN:HE21	58:BZ:72:ARG:CA	1.91	0.77
15:CO:39:LEU:HD13	15:CO:56:LEU:HB2	1.66	0.77
36:DA:658:C:H2'	36:DA:659:C:C6	2.19	0.77
41:DF:28:ILE:HG21	41:DF:116:ASP:HB2	1.65	0.77
13:AM:49:THR:HG22	13:AM:51:ALA:H	1.49	0.77
28:B2:20:GLU:OE1	28:B2:23:LYS:HB2	1.84	0.77
32:B6:36:LEU:HD12	32:B6:50:ARG:NH1	2.00	0.77
34:B8:52:LYS:N	34:B8:53:PRO:HD2	2.00	0.77
36:BA:307:G:H21	36:BA:330:A:H62	1.33	0.77
36:BA:1301:A:H4'	36:BA:1302:A:OP1	1.83	0.77
58:BZ:128:VAL:HG22	58:BZ:129:SER:H	1.50	0.77
1:CA:542:G:OP1	4:CD:10:ARG:NH2	2.17	0.77
1:CA:979:C:H3'	1:CA:980:C:C5'	2.15	0.77
25:CZ:355:LEU:HB3	25:CZ:370:PHE:CB	2.15	0.77
27:D1:76:ARG:HB3	36:DA:271(R):G:H5"	1.66	0.77
58:DZ:151:HIS:HB2	58:DZ:170:THR:HA	1.67	0.77
25:AZ:20:VAL:HG12	25:AZ:115:GLN:HG3	1.67	0.77
36:BA:886:C:H2'	36:BA:887:A:H4'	1.65	0.77
36:BA:1038:C:H2'	36:BA:1039:G:H5"	1.67	0.77
37:BB:17:C:H2'	37:BB:18:G:O4'	1.85	0.77
42:BG:153:ARG:HH11	42:BG:153:ARG:HB3	1.50	0.77
54:BV:15:GLU:HB3	54:BV:16:PRO:CD	2.15	0.77
1:CA:376:G:H5"	16:CP:5:ARG:HB2	1.65	0.77
36:DA:2147:G:H2'	36:DA:2148:G:O4'	1.85	0.77
39:DD:134:ARG:HG3	39:DD:187:GLY:HA3	1.67	0.77
40:DE:107:THR:O	40:DE:190:GLY:HA2	1.84	0.77
41:DF:164:ARG:HH11	41:DF:164:ARG:HG2	1.50	0.77
41:DF:185:ASP:HA	41:DF:188:ARG:HG2	1.67	0.77
31:B5:36:CYS:O	31:B5:38:ALA:N	2.19	0.76
39:BD:147:LEU:HD11	39:BD:183:ARG:NH1	1.99	0.76
43:BH:30:LYS:HB2	43:BH:79:VAL:HA	1.67	0.76
50:BR:99:LYS:HD2	50:BR:99:LYS:N	1.99	0.76
52:BT:85:LYS:HB3	52:BT:85:LYS:HZ2	1.49	0.76
2:CB:22:LYS:HE2	2:CB:22:LYS:HA	1.67	0.76
36:DA:1209:G:H21	36:DA:1210:A:H62	1.30	0.76
36:DA:1314:C:H5'	36:DA:1314:C:H6	1.49	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1880:C:C3'	36:DA:1881:C:H5"	2.16	0.76
36:DA:2098:U:H3	36:DA:2191:G:H1	1.31	0.76
53:DU:90:VAL:O	53:DU:92:ARG:N	2.19	0.76
22:AW:8:U:O2'	22:AW:9:A:H5"	1.85	0.76
28:B2:48:HIS:HA	36:BA:95:G:O3'	1.85	0.76
36:BA:605:C:H5	36:BA:623:G:H1	1.30	0.76
2:CB:130:ARG:HH21	2:CB:134:GLU:HG3	1.50	0.76
4:CD:187:ARG:HH11	4:CD:187:ARG:HB3	1.49	0.76
6:CF:8:ILE:HD11	6:CF:79:LEU:HD23	1.67	0.76
19:CS:10:PHE:O	19:CS:10:PHE:CG	2.36	0.76
25:CZ:222:LEU:HD13	25:CZ:305:ALA:HB2	1.67	0.76
32:D6:11:LEU:HD12	32:D6:26:ASN:HB2	1.67	0.76
36:DA:214:G:H1'	36:DA:216:A:O2'	1.85	0.76
36:DA:654:A:H3'	36:DA:654:A:OP1	1.85	0.76
36:DA:991:C:H5'	36:DA:991:C:H6	1.50	0.76
48:DP:106:LEU:HD21	48:DP:112:LEU:HB2	1.65	0.76
58:DZ:14:LYS:HE2	58:DZ:17:ALA:HB2	1.65	0.76
2:AB:75:LYS:HA	2:AB:78:GLN:HE21	1.47	0.76
10:AJ:34:VAL:HG22	10:AJ:74:ILE:HG22	1.67	0.76
28:B2:46:GLN:HB3	28:B2:48:HIS:ND1	1.99	0.76
36:BA:1880:C:C3'	36:BA:1881:C:H5"	2.15	0.76
39:BD:270:ILE:O	39:BD:270:ILE:HD12	1.86	0.76
49:BQ:141:GLN:HB3	58:BZ:99:TYR:HE1	1.48	0.76
1:CA:624:C:H2'	1:CA:625:G:H8	1.50	0.76
31:D5:54:GLY:H	31:D5:56:LYS:NZ	1.83	0.76
36:DA:1087:G:H2'	36:DA:1088:A:H4'	1.66	0.76
39:DD:270:ILE:HD12	39:DD:270:ILE:O	1.85	0.76
43:DH:46:GLU:OE1	43:DH:50:VAL:HG13	1.85	0.76
1:AA:176:C:H2'	1:AA:177:C:H6	1.48	0.76
1:AA:269:C:H2'	1:AA:270:A:H8	1.50	0.76
1:AA:274:A:O2'	1:AA:275:G:H8	1.69	0.76
9:AI:91:ASP:C	9:AI:93:ARG:H	1.94	0.76
13:AM:8:GLU:OE1	13:AM:22:ILE:HA	1.86	0.76
13:AM:82:MET:HG3	13:AM:83:ASP:N	1.99	0.76
19:AS:78:ARG:HB2	19:AS:81:ARG:NH1	2.00	0.76
25:AZ:355:LEU:HB3	25:AZ:370:PHE:CB	2.15	0.76
34:B8:62:LEU:CD1	36:BA:242:G:H5"	2.13	0.76
36:BA:145:G:H2'	36:BA:146:G:H5"	1.64	0.76
36:BA:1209:G:H21	36:BA:1210:A:H62	1.33	0.76
36:BA:2189:U:C3'	36:BA:2190:G:H4'	2.14	0.76
43:BH:50:VAL:HG12	43:BH:51:ARG:N	2.00	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:BR:2:ARG:HH11	50:BR:2:ARG:HG3	1.49	0.76
2:CB:25:ASN:HD22	2:CB:27:LYS:H	1.34	0.76
11:CK:79:SER:OG	11:CK:106:LYS:HD2	1.85	0.76
36:DA:811:U:OP2	48:DP:30:THR:HG23	1.85	0.76
36:DA:2726:U:H5'	36:DA:2726:U:O2	1.85	0.76
1:AA:627:G:O2'	1:AA:628:G:H5'	1.86	0.76
2:AB:33:TYR:HB2	2:AB:43:ASP:HB2	1.65	0.76
2:AB:229:VAL:HG12	2:AB:230:VAL:N	1.99	0.76
12:AL:7:ILE:HD12	12:AL:8:ASN:N	1.99	0.76
55:BW:20:VAL:HG23	55:BW:47:VAL:HG21	1.67	0.76
36:DA:259:G:N2	36:DA:621:A:H8	1.83	0.76
46:DN:55:VAL:HG22	46:DN:126:PRO:HA	1.68	0.76
57:DY:10:GLY:CA	57:DY:27:VAL:HG13	2.15	0.76
1:AA:979:C:H3'	1:AA:980:C:C5'	2.16	0.76
2:AB:87:ARG:HH22	2:AB:233:SER:N	1.84	0.76
9:AI:40:LEU:HD11	9:AI:70:LYS:HG2	1.67	0.76
10:AJ:24:VAL:HG12	10:AJ:28:ARG:HD2	1.67	0.76
36:BA:482:A:H4'	57:BY:47:LYS:HG2	1.68	0.76
36:BA:581:C:H2'	36:BA:582:G:H8	1.51	0.76
36:BA:1880:C:H3'	36:BA:1881:C:H5"	1.67	0.76
51:BS:36:TYR:N	51:BS:36:TYR:HD1	1.84	0.76
57:BY:95:LYS:HE3	57:BY:99:CYS:O	1.85	0.76
1:CA:1003:G:N2	1:CA:1039:C:H42	1.83	0.76
4:CD:17:VAL:HG11	4:CD:197:PRO:HB2	1.68	0.76
19:CS:17:GLU:O	19:CS:21:GLU:HG2	1.86	0.76
40:DE:4:ILE:HD13	40:DE:28:ALA:HB1	1.68	0.76
41:DF:160:ASN:HD21	41:DF:162:LEU:HD13	1.50	0.76
43:DH:50:VAL:HG12	43:DH:51:ARG:N	2.00	0.76
51:DS:96:GLY:O	51:DS:98:VAL:N	2.19	0.76
1:AA:1271:G:H2'	1:AA:1272:G:C5'	2.16	0.76
25:AZ:19:HIS:ND1	25:AZ:113:MET:HB3	2.00	0.76
52:BT:55:ASN:H	52:BT:59:THR:CG2	1.95	0.76
58:BZ:37:VAL:HG23	58:BZ:38:TYR:N	1.98	0.76
10:CJ:34:VAL:HG22	10:CJ:74:ILE:HG22	1.67	0.76
33:D7:34:ARG:HH11	33:D7:34:ARG:CG	1.99	0.76
36:DA:2137:C:H2'	36:DA:2138:C:C6	2.20	0.76
1:AA:376:G:H4'	16:AP:5:ARG:NH1	1.99	0.76
4:AD:189:PRO:HB2	4:AD:194:LEU:CD2	2.13	0.76
13:AM:53:VAL:HG12	13:AM:57:ARG:HH21	1.49	0.76
36:BA:325:G:H2'	36:BA:326:G:H8	1.51	0.76
36:BA:607:U:OP1	41:BF:102:PRO:HA	1.86	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BC:100:ILE:HG22	38:BC:104:LEU:HD23	1.68	0.76
44:BJ:36:UNK:HA	44:BJ:40:UNK:CB	2.15	0.76
1:CA:627:G:O2'	1:CA:628:G:H5'	1.85	0.76
13:CM:23:TYR:HB3	13:CM:67:GLU:HB3	1.65	0.76
34:D8:50:LEU:HD12	34:D8:51:ALA:N	2.01	0.76
36:DA:845:G:OP2	36:DA:845:G:H8	1.69	0.76
36:DA:2712:U:H1'	36:DA:2712(A):A:C8	2.21	0.76
39:DD:206:LEU:HD22	39:DD:211:ARG:HG2	1.66	0.76
42:DG:139:LEU:CA	42:DG:144:ILE:HD13	2.16	0.76
52:DT:85:LYS:HB3	52:DT:85:LYS:HZ2	1.48	0.76
58:DZ:70:LEU:HG	58:DZ:91:LEU:HD11	1.68	0.76
4:AD:17:VAL:HG11	4:AD:197:PRO:HB2	1.68	0.76
5:AE:76:ILE:HG13	5:AE:142:LEU:HD13	1.67	0.76
9:AI:19:LEU:HD21	9:AI:59:PHE:CD2	2.20	0.76
13:AM:23:TYR:HB3	13:AM:67:GLU:HB3	1.68	0.76
32:B6:11:LEU:HD12	32:B6:26:ASN:HB2	1.68	0.76
36:BA:2712:U:H1'	36:BA:2712(A):A:C8	2.21	0.76
39:BD:30:GLU:CD	39:BD:63:ARG:HE	1.94	0.76
38:DC:100:ILE:HG22	38:DC:104:LEU:HD23	1.68	0.76
46:DN:58:ASP:C	46:DN:60:ILE:H	1.93	0.76
58:DZ:37:VAL:HG23	58:DZ:38:TYR:N	2.01	0.76
32:B6:18:ARG:HG2	32:B6:18:ARG:NH1	1.96	0.76
36:BA:1602:U:H3'	36:BA:1603:A:H5'	1.68	0.76
43:BH:33:LEU:HD21	43:BH:136:ILE:HG22	1.67	0.76
48:BP:146:VAL:HG22	48:BP:147:LEU:N	2.00	0.76
58:BZ:59:LEU:O	58:BZ:66:SER:HA	1.86	0.76
1:CA:1435:G:H2'	1:CA:1436:U:C6	2.21	0.76
27:D1:30:VAL:HG23	27:D1:31:GLY:H	1.49	0.76
36:DA:363(F):A:HO2'	36:DA:364:C:H5	1.34	0.76
36:DA:888:C:H2'	36:DA:889:C:H4'	1.68	0.76
36:DA:2159:G:C2'	36:DA:2160:G:H5"	2.15	0.76
50:DR:58:GLY:HA2	50:DR:80:PHE:HE2	1.50	0.76
1:AA:1367:C:C5'	10:AJ:60:ARG:HH11	1.99	0.75
10:AJ:32:ALA:HB2	10:AJ:76:ASN:HB2	1.67	0.75
31:B5:54:GLY:H	31:B5:56:LYS:NZ	1.83	0.75
36:BA:280:C:H3'	36:BA:281:G:H8	1.50	0.75
41:BF:164:ARG:HH11	41:BF:164:ARG:HG2	1.52	0.75
54:BV:19:LYS:HG2	54:BV:94:LEU:HB2	1.68	0.75
5:CE:76:ILE:HG13	5:CE:142:LEU:HD13	1.68	0.75
22:CW:8:U:O2'	22:CW:9:A:H5"	1.86	0.75
32:D6:17:LYS:HB3	32:D6:18:ARG:HH12	1.50	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:D8:62:LEU:CD1	36:DA:242:G:H5"	2.12	0.75
40:DE:38:THR:HG22	40:DE:40:GLU:N	2.00	0.75
30:B4:30:GLU:C	30:B4:31:ILE:HD12	2.10	0.75
47:BO:4:PRO:O	47:BO:5:GLN:HB2	1.84	0.75
50:BR:58:GLY:HA2	50:BR:80:PHE:HE2	1.50	0.75
1:CA:367:U:H4'	25:CZ:291:ARG:HE	1.51	0.75
4:CD:67:ILE:HG22	4:CD:68:TYR:CD1	2.22	0.75
9:CI:91:ASP:C	9:CI:93:ARG:H	1.94	0.75
13:CM:64:TRP:O	13:CM:66:LEU:HD13	1.86	0.75
22:CV:52:G:H1	22:CV:62:C:H42	1.35	0.75
36:DA:1057:A:O2'	36:DA:1058:G:H5'	1.87	0.75
36:DA:2334:G:H21	51:DS:18:ILE:HG23	1.51	0.75
43:DH:167:GLU:HB3	43:DH:168:PRO:HD2	1.68	0.75
47:DO:114:ILE:H	47:DO:114:ILE:HD12	1.50	0.75
51:DS:12:PHE:C	51:DS:12:PHE:HD1	1.94	0.75
58:DZ:139:VAL:HG12	58:DZ:140:ASP:H	1.51	0.75
6:AF:35:ALA:HA	6:AF:67:MET:HB3	1.67	0.75
8:AH:55:GLY:C	8:AH:56:LYS:HD2	2.12	0.75
36:BA:284:U:H2'	36:BA:285:C:C6	2.22	0.75
36:BA:1348:G:H2'	36:BA:1349:A:H5"	1.67	0.75
1:CA:1442(B):A:H5'	52:DT:118:ARG:HH11	1.50	0.75
8:CH:64:LYS:HG2	8:CH:79:VAL:HG21	1.66	0.75
13:CM:82:MET:HG3	13:CM:83:ASP:N	2.00	0.75
22:CW:38:A:H2'	22:CW:39:U:H5"	1.68	0.75
36:DA:581:C:H2'	36:DA:582:G:C8	2.21	0.75
36:DA:1681:G:O2'	36:DA:1762:A:H2'	1.87	0.75
41:DF:3:GLU:CA	41:DF:24:LEU:HG	2.15	0.75
51:DS:36:TYR:N	51:DS:36:TYR:HD1	1.84	0.75
4:AD:101:LEU:HD23	4:AD:121:VAL:HG11	1.67	0.75
9:AI:4:TYR:CE2	9:AI:88:TYR:HB2	2.20	0.75
19:AS:48:THR:HG22	19:AS:61:TYR:HA	1.68	0.75
25:AZ:331:HIS:HA	25:AZ:364:PRO:HG2	1.67	0.75
32:B6:15:GLU:HG2	32:B6:47:THR:HG21	1.69	0.75
36:BA:631:A:H5"	48:BP:65:ARG:HH11	1.50	0.75
36:BA:654:A:OP1	36:BA:654:A:H3'	1.86	0.75
36:BA:2131:G:H1'	36:BA:2133:G:H21	1.51	0.75
36:BA:2159:G:C2'	36:BA:2160:G:H5"	2.16	0.75
39:BD:134:ARG:HG3	39:BD:187:GLY:HA3	1.67	0.75
51:BS:42:ASP:O	51:BS:43:GLU:HB3	1.85	0.75
57:BY:10:GLY:CA	57:BY:27:VAL:HG13	2.16	0.75
4:CD:100:ARG:HH21	4:CD:118:ARG:HH12	1.32	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:CF:35:ALA:HA	6:CF:67:MET:HB3	1.67	0.75
36:DA:1720:U:H3'	36:DA:1721:G:H5"	1.69	0.75
37:DB:17:C:H2'	37:DB:18:G:O4'	1.85	0.75
50:DR:116:LEU:O	50:DR:117:VAL:HG12	1.85	0.75
1:AA:939:G:H5"	7:AG:102:ARG:HH22	1.52	0.75
2:AB:8:LYS:HB2	2:AB:9:GLU:OE1	1.87	0.75
5:AE:12:LEU:HD13	5:AE:31:LEU:HB2	1.67	0.75
9:AI:28:VAL:HG12	9:AI:29:ASN:N	1.99	0.75
29:B3:43:ILE:O	29:B3:47:VAL:HG23	1.86	0.75
36:BA:1498:C:C2'	36:BA:1499:C:H5"	2.17	0.75
38:BC:43:VAL:HG23	38:BC:175:VAL:HG21	1.67	0.75
43:BH:46:GLU:OE1	43:BH:50:VAL:HG13	1.86	0.75
36:DA:581:C:H2'	36:DA:582:G:H8	1.50	0.75
36:DA:1022:G:N2	36:DA:1142(A):A:C2	2.53	0.75
36:DA:1880:C:H3'	36:DA:1881:C:H5"	1.69	0.75
51:DS:42:ASP:O	51:DS:43:GLU:HB3	1.85	0.75
51:DS:101:LEU:HD12	51:DS:101:LEU:O	1.86	0.75
1:AA:1053:G:C4'	1:AA:1054:C:H5'	2.12	0.75
8:AH:64:LYS:HG2	8:AH:79:VAL:HG21	1.69	0.75
15:AO:25:THR:O	15:AO:29:VAL:HG23	1.86	0.75
27:B1:58:ILE:HD12	27:B1:59:THR:H	1.52	0.75
36:BA:1498:C:H2'	36:BA:1499:C:H5"	1.68	0.75
39:BD:27:THR:CG2	39:BD:83:GLU:HG2	2.17	0.75
1:CA:274:A:O2'	1:CA:275:G:H8	1.70	0.75
1:CA:358:U:H2'	1:CA:359:U:C6	2.22	0.75
3:CC:15:THR:HG21	3:CC:181:ASN:HA	1.68	0.75
27:D1:67:ILE:HB	27:D1:68:PRO:HD3	1.69	0.75
30:D4:30:GLU:C	30:D4:31:ILE:HD12	2.11	0.75
36:DA:1039:G:H1	36:DA:1116:C:H42	1.35	0.75
36:DA:2208:A:H1'	36:DA:2219:G:C5	2.22	0.75
43:DH:18:GLU:HB2	43:DH:25:LYS:HB2	1.67	0.75
52:DT:16:ARG:HD2	52:DT:18:ASP:OD1	1.87	0.75
1:AA:1392:G:N2	1:AA:1502:A:H8	1.85	0.75
3:AC:113:ALA:HB3	3:AC:114:PRO:HD3	1.67	0.75
4:AD:187:ARG:HH11	4:AD:187:ARG:HB3	1.50	0.75
8:AH:114:THR:HG22	8:AH:130:GLY:O	1.87	0.75
36:BA:512:G:HO2'	36:BA:513:A:H8	1.34	0.75
36:BA:886:C:C2'	36:BA:887:A:H4'	2.16	0.75
48:BP:112:LEU:H	48:BP:128:HIS:HD2	1.34	0.75
53:BU:90:VAL:O	53:BU:92:ARG:N	2.19	0.75
2:CB:25:ASN:ND2	2:CB:27:LYS:H	1.85	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:19:LEU:O	4:CD:26:CYS:SG	2.44	0.75
7:CG:79:ARG:HG2	7:CG:84:ASN:CA	2.11	0.75
14:CN:22:THR:HB	14:CN:33:VAL:HG21	1.68	0.75
36:DA:1331:A:O2'	36:DA:1332:G:H8	1.69	0.75
36:DA:2189:U:C3'	36:DA:2190:G:H4'	2.15	0.75
39:DD:31:LYS:O	39:DD:35:LYS:HB3	1.86	0.75
42:DG:43:LEU:HB3	42:DG:45:GLU:HG2	1.67	0.75
52:DT:28:VAL:HG11	52:DT:46:GLU:HG3	1.69	0.75
53:DU:16:LYS:O	53:DU:20:LEU:HD23	1.86	0.75
54:DV:15:GLU:HB3	54:DV:16:PRO:CD	2.16	0.75
1:AA:624:C:H2'	1:AA:625:G:H8	1.50	0.75
1:AA:723:U:O4	1:AA:1537:U:H2'	1.85	0.75
1:AA:1238:A:H2	1:AA:1301:U:H3	1.32	0.75
3:AC:40:ARG:HH11	3:AC:40:ARG:HG3	1.50	0.75
3:AC:52:LEU:H	3:AC:52:LEU:HD23	1.51	0.75
39:BD:31:LYS:O	39:BD:35:LYS:HB3	1.87	0.75
40:BE:38:THR:HG22	40:BE:40:GLU:N	2.00	0.75
41:BF:185:ASP:HA	41:BF:188:ARG:HG2	1.67	0.75
42:BG:7:LEU:CD2	42:BG:176:LEU:HD21	2.12	0.75
50:BR:55:ALA:HB2	50:BR:79:LEU:HD11	1.69	0.75
58:BZ:151:HIS:HB3	58:BZ:170:THR:HA	1.69	0.75
36:DA:300:A:H2'	36:DA:334:C:O2'	1.87	0.75
36:DA:543:C:H42	36:DA:549:G:H1	1.34	0.75
48:DP:146:VAL:HG22	48:DP:147:LEU:N	2.02	0.75
1:AA:1104:G:O5'	2:AB:111:ARG:HD2	1.86	0.75
32:B6:15:GLU:OE1	32:B6:18:ARG:NE	2.20	0.75
36:BA:585:G:H2'	36:BA:1251:C:H42	1.52	0.75
36:BA:657:U:H2'	36:BA:658:C:H6	1.52	0.75
49:BQ:56:ARG:HH11	49:BQ:56:ARG:CG	2.00	0.75
49:BQ:66:ILE:HA	49:BQ:104:PHE:HB3	1.68	0.75
1:CA:176:C:H2'	1:CA:177:C:C6	2.22	0.75
16:CP:21:VAL:O	16:CP:33:ILE:HB	1.87	0.75
34:D8:52:LYS:H	34:D8:53:PRO:HD2	1.52	0.75
48:DP:112:LEU:H	48:DP:128:HIS:HD2	1.35	0.75
33:B7:34:ARG:HH11	33:B7:34:ARG:CG	2.00	0.74
36:BA:1331:A:O2'	36:BA:1332:G:H8	1.69	0.74
48:BP:106:LEU:HD21	48:BP:112:LEU:HB2	1.66	0.74
32:D6:36:LEU:HD12	32:D6:50:ARG:NH1	2.01	0.74
36:DA:325:G:H2'	36:DA:326:G:H8	1.52	0.74
36:DA:886:C:C2'	36:DA:887:A:H4'	2.17	0.74
36:DA:2189:U:H2'	36:DA:2190:G:C4'	2.17	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:188:LEU:HD12	3:AC:195:VAL:CG1	2.15	0.74
25:AZ:110:ASP:HB3	25:AZ:113:MET:CE	2.18	0.74
28:B2:30:ARG:O	28:B2:34:GLU:HB2	1.87	0.74
34:B8:49:VAL:HB	34:B8:53:PRO:HD3	1.68	0.74
36:BA:1057:A:O2'	36:BA:1058:G:H5'	1.87	0.74
39:BD:30:GLU:CB	39:BD:35:LYS:HD2	2.13	0.74
42:BG:79:ASN:O	42:BG:80:PHE:HB2	1.85	0.74
58:BZ:108:PRO:O	58:BZ:111:VAL:HG23	1.88	0.74
11:CK:110:ASP:HB2	18:CR:88:LYS:HE2	1.69	0.74
12:CL:55:VAL:HG23	12:CL:68:ALA:O	1.87	0.74
29:D3:17:LYS:HG2	36:DA:969:U:OP1	1.86	0.74
32:D6:15:GLU:HG2	32:D6:47:THR:HG21	1.68	0.74
34:D8:61:LEU:HD13	34:D8:62:LEU:H	1.52	0.74
34:D8:62:LEU:HD13	36:DA:242:G:C5'	2.15	0.74
36:DA:886:C:H2'	36:DA:887:A:H4'	1.66	0.74
36:DA:1301:A:H4'	36:DA:1302:A:OP1	1.86	0.74
36:DA:1602:U:H3'	36:DA:1603:A:H5'	1.67	0.74
1:AA:1432:G:OP1	52:BT:107:ASP:HB2	1.87	0.74
7:AG:73:MET:HG2	7:AG:90:GLU:HA	1.69	0.74
12:AL:55:VAL:HG23	12:AL:68:ALA:O	1.87	0.74
31:B5:36:CYS:C	31:B5:38:ALA:H	1.94	0.74
36:BA:845:G:H8	36:BA:845:G:OP2	1.70	0.74
36:BA:2853:C:H2'	36:BA:2854:G:C8	2.22	0.74
58:BZ:63:ASP:HB3	58:BZ:65:GLN:HG3	1.70	0.74
1:CA:192:U:H2'	1:CA:193:C:H6	1.52	0.74
36:DA:28:A:N6	36:DA:512:G:H1'	2.00	0.74
36:DA:1115:G:H2'	36:DA:1116:C:O4'	1.85	0.74
1:AA:1286:A:O2'	1:AA:1287:A:H5"	1.87	0.74
36:BA:1039:G:H1	36:BA:1116:C:H42	1.35	0.74
43:BH:40:GLU:OE1	43:BH:55:PRO:HG3	1.87	0.74
51:BS:59:LYS:HG2	51:BS:60:GLY:N	1.99	0.74
2:CB:87:ARG:HH22	2:CB:233:SER:N	1.83	0.74
34:D8:32:LEU:HD23	34:D8:36:LYS:HE2	1.68	0.74
36:DA:83:G:N2	36:DA:102:G:H2'	2.03	0.74
36:DA:181:A:H5'	36:DA:181:A:H8	1.52	0.74
54:DV:99:ILE:H	54:DV:99:ILE:CD1	2.01	0.74
58:DZ:150:LEU:HD21	58:DZ:172:ALA:HB3	1.68	0.74
34:B8:4:MET:O	34:B8:62:LEU:HD12	1.87	0.74
36:BA:214:G:H1'	36:BA:216:A:O2'	1.87	0.74
36:BA:1970:A:H5"	36:BA:1971:A:OP1	1.87	0.74
36:BA:2463:C:O2'	36:BA:2464:C:H5'	1.87	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:BR:116:LEU:O	50:BR:117:VAL:HG12	1.86	0.74
53:BU:91:ASP:O	53:BU:95:LEU:HB2	1.88	0.74
54:BV:29:PRO:HA	54:BV:61:VAL:HG22	1.69	0.74
58:BZ:81:ARG:CZ	58:BZ:81:ARG:HB2	2.16	0.74
58:BZ:108:PRO:HB3	58:BZ:141:VAL:CG1	2.17	0.74
9:CI:85:LEU:HD11	9:CI:96:LEU:HD21	1.68	0.74
31:D5:36:CYS:C	31:D5:38:ALA:H	1.95	0.74
33:D7:34:ARG:HG3	33:D7:34:ARG:NH1	1.98	0.74
36:DA:307:G:H21	36:DA:330:A:H62	1.32	0.74
36:DA:482:A:H4'	57:DY:47:LYS:HG2	1.69	0.74
41:DF:157:VAL:HG12	41:DF:176:LEU:HB3	1.68	0.74
52:DT:28:VAL:HG22	52:DT:47:GLY:H	1.51	0.74
11:AK:110:ASP:HB2	18:AR:88:LYS:HE2	1.68	0.74
16:AP:21:VAL:O	16:AP:33:ILE:HB	1.88	0.74
36:BA:203:C:H3'	36:BA:204:A:H5"	1.69	0.74
31:D5:29:THR:HG21	36:DA:2814:C:O2'	1.87	0.74
34:D8:54:GLU:O	34:D8:58:ILE:HG12	1.86	0.74
35:D9:34:GLN:O	35:D9:35:ARG:HB2	1.84	0.74
36:DA:996:A:H4'	53:DU:92:ARG:NE	2.02	0.74
39:DD:71:ASP:CB	39:DD:103:ARG:HH22	2.00	0.74
43:DH:33:LEU:HD21	43:DH:136:ILE:HG22	1.67	0.74
48:DP:61:ARG:O	48:DP:62:LEU:HB3	1.88	0.74
51:DS:74:ALA:HB1	51:DS:103:GLU:HG2	1.69	0.74
36:BA:1051:G:H2'	36:BA:1052:C:C5	2.23	0.74
4:CD:30:LYS:C	4:CD:32:ALA:H	1.93	0.74
25:CZ:96:ALA:HA	25:CZ:99:MET:HE3	1.70	0.74
26:D0:10:THR:HG22	26:D0:12:ASN:N	2.00	0.74
34:D8:49:VAL:HB	34:D8:53:PRO:HD3	1.68	0.74
36:DA:1279:G:H4'	50:DR:31:HIS:HD2	1.50	0.74
40:DE:51:PHE:O	40:DE:74:PRO:HB2	1.87	0.74
1:AA:176:C:H2'	1:AA:177:C:C6	2.22	0.74
20:AT:26:ASN:ND2	20:AT:26:ASN:H	1.85	0.74
34:B8:11:LYS:HZ1	34:B8:63:PRO:HG3	1.50	0.74
34:B8:43:GLN:O	34:B8:44:LYS:HD2	1.87	0.74
36:BA:654(C):G:H2'	36:BA:654(D):G:H5'	1.70	0.74
36:BA:1450(A):C:H2'	36:BA:1451:C:C6	2.23	0.74
36:BA:2126:A:H4'	36:BA:2127:G:O5'	1.88	0.74
38:BC:79:LYS:HA	38:BC:97:GLU:OE1	1.88	0.74
39:BD:267:SER:C	39:BD:269:PHE:H	1.95	0.74
53:BU:56:ASP:O	53:BU:60:LEU:HG	1.87	0.74
58:BZ:9:TYR:HE1	58:BZ:35:ARG:HG3	1.52	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:CY:6:C:H42	24:CY:67:G:H1	1.35	0.74
27:D1:34:THR:HG21	27:D1:37:ILE:CD1	2.16	0.74
36:DA:99:U:H4'	36:DA:102:G:H1'	1.70	0.74
36:DA:607:U:OP1	41:DF:102:PRO:HA	1.88	0.74
36:DA:1528(A):A:H62	36:DA:1541:G:N2	1.85	0.74
47:DO:4:PRO:O	47:DO:5:GLN:HB2	1.88	0.74
55:DW:20:VAL:HG23	55:DW:47:VAL:HG21	1.69	0.74
58:DZ:29:TYR:HB3	58:DZ:34:ASN:HB2	1.68	0.74
13:AM:120:LYS:HA	13:AM:120:LYS:CE	2.18	0.74
24:AY:6:C:H42	24:AY:67:G:H1	1.36	0.74
36:BA:300:A:H2'	36:BA:334:C:O2'	1.87	0.74
36:BA:481:G:OP2	57:BY:47:LYS:HD3	1.88	0.74
36:BA:888:C:H2'	36:BA:889:C:H4'	1.68	0.74
40:BE:51:PHE:O	40:BE:74:PRO:HB2	1.87	0.74
51:BS:36:TYR:N	51:BS:36:TYR:CD1	2.56	0.74
53:BU:16:LYS:O	53:BU:20:LEU:HD23	1.88	0.74
7:CG:113:GLU:HG2	7:CG:119:ARG:HG2	1.69	0.74
22:CV:61:C:H5'	22:CV:62:C:OP2	1.87	0.74
25:CZ:20:VAL:HG12	25:CZ:115:GLN:HG3	1.69	0.74
31:D5:36:CYS:O	31:D5:38:ALA:N	2.21	0.74
36:DA:2131:G:H1'	36:DA:2133:G:H21	1.52	0.74
43:DH:40:GLU:OE1	43:DH:55:PRO:HG3	1.87	0.74
43:DH:85:LYS:HZ1	43:DH:86:GLU:HA	1.52	0.74
4:AD:23:GLY:HA3	4:AD:112:VAL:HG22	1.68	0.74
13:AM:112:GLY:O	13:AM:114:ARG:N	2.21	0.74
16:AP:20:VAL:HG21	16:AP:32:TYR:CG	2.23	0.74
25:AZ:96:ALA:HA	25:AZ:99:MET:HE3	1.70	0.74
28:B2:46:GLN:O	28:B2:50:ILE:HD13	1.87	0.74
32:B6:10:LEU:H	32:B6:10:LEU:HD23	1.51	0.74
36:BA:1434:A:H61	36:BA:1558:A:N6	1.85	0.74
39:BD:45:ASN:CG	39:BD:46:GLN:H	1.95	0.74
2:CB:61:LEU:O	2:CB:64:ARG:HG2	1.87	0.74
21:CU:6:ARG:HD3	21:CU:15:ARG:NH1	2.01	0.74
32:D6:30:THR:O	32:D6:31:PRO:C	2.28	0.74
36:DA:203:C:H3'	36:DA:204:A:H5"	1.69	0.74
43:DH:83:TYR:HB2	43:DH:134:SER:HA	1.70	0.74
51:DS:19:LYS:HB3	51:DS:20:ARG:HH22	1.53	0.74
11:AK:79:SER:OG	11:AK:106:LYS:HD2	1.87	0.73
13:AM:82:MET:CG	13:AM:83:ASP:N	2.50	0.73
28:B2:7:ARG:HA	28:B2:10:LEU:CD1	2.18	0.73
42:BG:95:ARG:O	42:BG:96:ARG:O	2.05	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:BV:99:ILE:H	54:BV:99:ILE:CD1	2.01	0.73
7:CG:73:MET:HG2	7:CG:90:GLU:HA	1.68	0.73
9:CI:4:TYR:CE2	9:CI:88:TYR:HB2	2.22	0.73
10:CJ:75:ILE:HG13	10:CJ:76:ASN:H	1.53	0.73
25:CZ:110:ASP:HB3	25:CZ:113:MET:CE	2.18	0.73
34:D8:4:MET:O	34:D8:62:LEU:HD12	1.88	0.73
36:DA:284:U:H2'	36:DA:285:C:C6	2.23	0.73
36:DA:1516:C:H2'	36:DA:1517:G:C5'	2.17	0.73
36:DA:2134:A:H62	36:DA:2157:G:H1'	1.53	0.73
39:DD:45:ASN:CG	39:DD:46:GLN:H	1.95	0.73
56:DX:35:THR:HG22	56:DX:37:THR:N	2.02	0.73
13:AM:12:ASN:H	13:AM:12:ASN:HD22	1.36	0.73
13:AM:88:ARG:HG2	13:AM:88:ARG:HH11	1.53	0.73
24:AY:26:A:H2'	24:AY:27:C:O4'	1.88	0.73
36:BA:760:G:C2'	36:BA:761:A:H5'	2.18	0.73
36:BA:2189:U:H2'	36:BA:2190:G:C4'	2.17	0.73
41:BF:4:VAL:HA	41:BF:19:GLU:HB3	1.69	0.73
41:BF:25:PRO:HB3	41:BF:119:ARG:CB	2.16	0.73
43:BH:167:GLU:HB3	43:BH:168:PRO:HD2	1.68	0.73
50:BR:3:HIS:C	50:BR:5:LYS:H	1.97	0.73
9:CI:53:VAL:HG22	9:CI:95:LYS:HZ3	1.52	0.73
36:DA:330:A:O2'	36:DA:331:A:H8	1.71	0.73
36:DA:2303:G:O2'	42:DG:132:ASN:HB2	1.88	0.73
49:DQ:66:ILE:HA	49:DQ:104:PHE:HB3	1.69	0.73
52:DT:58:ASN:ND2	52:DT:58:ASN:H	1.84	0.73
54:DV:29:PRO:HA	54:DV:61:VAL:HG22	1.69	0.73
32:B6:17:LYS:HB3	32:B6:18:ARG:HH12	1.53	0.73
36:BA:330:A:O2'	36:BA:331:A:H8	1.72	0.73
38:BC:79:LYS:HG2	38:BC:118:ASP:OD2	1.88	0.73
39:BD:134:ARG:HH12	39:BD:135:PHE:HE1	1.36	0.73
42:BG:144:ILE:O	42:BG:144:ILE:HG23	1.87	0.73
1:CA:572:A:H5'	1:CA:573:A:OP2	1.89	0.73
3:CC:5:ILE:N	3:CC:5:ILE:HD13	2.03	0.73
15:CO:25:THR:O	15:CO:29:VAL:HG23	1.88	0.73
48:DP:23:PRO:HB2	48:DP:33:ARG:CG	2.18	0.73
1:AA:1435:G:H2'	1:AA:1436:U:C6	2.23	0.73
22:AW:38:A:H3'	22:AW:39:U:H5"	1.71	0.73
26:B0:40:GLN:HE22	26:B0:45:PHE:H	1.33	0.73
36:BA:84:A:H2'	57:BY:9:LYS:HZ3	1.52	0.73
36:BA:760:G:H2'	36:BA:761:A:H5'	1.69	0.73
36:BA:1720:U:H3'	36:BA:1721:G:H5"	1.70	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BC:120:MET:HA	38:BC:123:VAL:HG12	1.70	0.73
42:BG:46:ALA:HB3	42:BG:88:ILE:CD1	2.18	0.73
51:BS:49:VAL:HG12	51:BS:50:SER:N	2.04	0.73
2:CB:8:LYS:HB2	2:CB:9:GLU:OE1	1.88	0.73
6:CF:87:ARG:HH11	6:CF:87:ARG:HG2	1.53	0.73
34:D8:43:GLN:O	34:D8:44:LYS:HD2	1.88	0.73
16:AP:20:VAL:HG21	16:AP:32:TYR:CB	2.18	0.73
36:BA:89:G:H3'	36:BA:90:U:C5'	2.18	0.73
36:BA:363(F):A:HO2'	36:BA:364:C:H5	1.34	0.73
36:BA:969:U:H2'	36:BA:970:C:C6	2.23	0.73
38:BC:27:ARG:CD	38:BC:182:PRO:CG	2.61	0.73
40:BE:4:ILE:HD13	40:BE:28:ALA:HB1	1.70	0.73
42:BG:47:LYS:CG	42:BG:81:LYS:HD2	2.18	0.73
48:BP:58:THR:O	48:BP:61:ARG:NE	2.21	0.73
51:BS:12:PHE:C	51:BS:12:PHE:HD1	1.97	0.73
51:BS:96:GLY:O	51:BS:98:VAL:N	2.20	0.73
57:BY:42:VAL:HG12	57:BY:65:ALA:HB3	1.70	0.73
32:D6:11:LEU:CD1	32:D6:26:ASN:HB2	2.18	0.73
34:D8:14:VAL:HG23	34:D8:24:ALA:HB2	1.71	0.73
34:D8:50:LEU:C	34:D8:52:LYS:H	1.95	0.73
36:DA:2287:A:C2	36:DA:2346:A:N1	2.57	0.73
36:DA:2491:U:H5'	36:DA:2570:G:H5"	1.69	0.73
41:DF:185:ASP:HA	41:DF:188:ARG:CG	2.19	0.73
57:DY:95:LYS:HE3	57:DY:99:CYS:O	1.87	0.73
9:AI:85:LEU:HD11	9:AI:96:LEU:HD21	1.71	0.73
13:AM:64:TRP:O	13:AM:66:LEU:HD13	1.88	0.73
36:BA:2137:C:H2'	36:BA:2138:C:C6	2.24	0.73
42:BG:82:LEU:HD13	42:BG:87:PRO:CB	2.12	0.73
48:BP:23:PRO:HB2	48:BP:33:ARG:CG	2.17	0.73
36:DA:84:A:H2'	57:DY:9:LYS:HZ3	1.53	0.73
36:DA:1434:A:H61	36:DA:1558:A:N6	1.85	0.73
36:DA:1747(A):G:H2'	36:DA:1748:G:C5'	2.19	0.73
39:DD:30:GLU:CG	39:DD:63:ARG:HE	2.01	0.73
43:DH:91:GLY:HA3	43:DH:94:TYR:CD2	2.23	0.73
48:DP:105:LEU:HD12	48:DP:105:LEU:N	2.03	0.73
50:DR:4:LEU:C	50:DR:6:SER:H	1.96	0.73
51:DS:59:LYS:HG2	51:DS:60:GLY:N	2.01	0.73
58:DZ:151:HIS:CB	58:DZ:170:THR:HA	2.18	0.73
1:AA:1015:A:H2'	1:AA:1016:A:C8	2.23	0.73
2:AB:130:ARG:HH21	2:AB:134:GLU:HG3	1.52	0.73
3:AC:5:ILE:N	3:AC:5:ILE:HD13	2.03	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:B2:57:ILE:O	28:B2:61:LEU:HG	1.89	0.73
34:B8:62:LEU:HD13	36:BA:242:G:C5'	2.15	0.73
36:BA:83:G:N2	36:BA:102:G:H2'	2.03	0.73
36:BA:320:A:C5	41:BF:136:THR:HG21	2.24	0.73
50:BR:4:LEU:C	50:BR:6:SER:H	1.96	0.73
29:D3:6:VAL:HG12	29:D3:56:VAL:HG22	1.71	0.73
36:DA:585:G:H2'	36:DA:1251:C:H42	1.53	0.73
36:DA:1038:C:H2'	36:DA:1039:G:H5"	1.68	0.73
36:DA:1779:U:C5	36:DA:1784:A:N7	2.56	0.73
42:DG:79:ASN:O	42:DG:80:PHE:HB2	1.89	0.73
56:DX:44:GLU:HG3	56:DX:50:LYS:HA	1.71	0.73
28:B2:6:VAL:O	28:B2:10:LEU:HG	1.89	0.73
36:BA:761:A:O5'	36:BA:761:A:C8	2.41	0.73
36:BA:2287:A:C2	36:BA:2346:A:N1	2.56	0.73
36:BA:2502:G:H5"	36:BA:2503:A:H5"	1.69	0.73
46:BN:58:ASP:C	46:BN:60:ILE:H	1.95	0.73
47:BO:87:ILE:CG2	47:BO:91:LEU:HA	2.18	0.73
52:BT:28:VAL:HG11	52:BT:46:GLU:HG3	1.70	0.73
1:CA:1104:G:O5'	2:CB:111:ARG:HD2	1.87	0.73
34:D8:33:ASN:CG	34:D8:34:TRP:H	1.97	0.73
36:DA:1051:G:H2'	36:DA:1052:C:C5	2.23	0.73
6:AF:43:LEU:HD22	6:AF:43:LEU:H	1.54	0.73
7:AG:79:ARG:HG2	7:AG:84:ASN:CA	2.12	0.73
34:B8:52:LYS:H	34:B8:53:PRO:HD2	1.51	0.73
42:BG:153:ARG:HB3	42:BG:153:ARG:NH1	2.04	0.73
43:BH:85:LYS:NZ	43:BH:86:GLU:HA	2.04	0.73
52:BT:28:VAL:HG22	52:BT:47:GLY:H	1.50	0.73
55:BW:22:ASP:HA	55:BW:25:ARG:HH12	1.54	0.73
3:CC:83:ARG:O	3:CC:86:VAL:HG22	1.88	0.73
10:CJ:80:LYS:O	10:CJ:83:GLU:HB3	1.87	0.73
13:CM:120:LYS:HA	13:CM:120:LYS:CE	2.18	0.73
36:DA:1450(A):C:H2'	36:DA:1451:C:C6	2.22	0.73
36:DA:2853:C:H2'	36:DA:2854:G:C8	2.22	0.73
42:DG:84:LYS:H	42:DG:84:LYS:HD2	1.53	0.73
50:DR:3:HIS:C	50:DR:5:LYS:H	1.97	0.73
53:DU:56:ASP:O	53:DU:60:LEU:HG	1.88	0.73
1:AA:977:A:H2'	1:AA:977:A:N3	2.04	0.73
28:B2:43:GLN:C	28:B2:45:SER:H	1.94	0.73
34:B8:50:LEU:C	34:B8:52:LYS:H	1.95	0.73
36:BA:1022:G:N2	36:BA:1142(A):A:H2	1.87	0.73
39:BD:30:GLU:HG3	39:BD:63:ARG:HE	1.52	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:BP:112:LEU:H	48:BP:128:HIS:CD2	2.07	0.73
1:CA:977:A:N3	1:CA:977:A:H2'	2.03	0.73
2:CB:14:GLY:O	2:CB:15:VAL:HG13	1.88	0.73
11:CK:33:THR:HG22	11:CK:39:PRO:HA	1.69	0.73
36:DA:328:U:H4'	57:DY:68:HIS:ND1	2.04	0.73
36:DA:654(C):G:H2'	36:DA:654(D):G:H5'	1.70	0.73
36:DA:761:A:O5'	36:DA:761:A:C8	2.41	0.73
41:DF:185:ASP:OD1	41:DF:188:ARG:HD3	1.89	0.73
50:DR:2:ARG:HG3	50:DR:2:ARG:HH11	1.53	0.73
53:DU:91:ASP:O	53:DU:95:LEU:HB2	1.89	0.73
9:AI:118:LYS:O	9:AI:119:ALA:HB3	1.89	0.72
24:AY:8:4SU:H5"	24:AY:8:4SU:H6	1.70	0.72
34:B8:6:THR:HB	34:B8:11:LYS:HZ1	1.54	0.72
34:B8:14:VAL:HG23	34:B8:24:ALA:HB2	1.69	0.72
36:BA:581:C:H2'	36:BA:582:G:C8	2.22	0.72
40:BE:105:THR:HB	40:BE:197:ILE:HG23	1.71	0.72
42:BG:106:LEU:O	42:BG:110:ALA:HB3	1.88	0.72
58:BZ:102:LEU:HD23	58:BZ:137:ILE:HB	1.69	0.72
1:CA:1502:A:H2	1:CA:1505:G:N1	1.84	0.72
3:CC:58:GLU:H	3:CC:65:ALA:HB3	1.54	0.72
8:CH:114:THR:HG22	8:CH:130:GLY:O	1.89	0.72
24:CY:8:4SU:H6	24:CY:8:4SU:H5"	1.71	0.72
24:CY:26:A:H2'	24:CY:27:C:O4'	1.89	0.72
36:DA:760:G:C2'	36:DA:761:A:H5'	2.19	0.72
36:DA:1368:G:O2'	36:DA:1369:G:H5'	1.89	0.72
42:DG:9:ARG:HG3	42:DG:13:GLU:OE2	1.89	0.72
48:DP:30:THR:CG2	48:DP:31:ALA:N	2.51	0.72
48:DP:112:LEU:H	48:DP:128:HIS:CD2	2.07	0.72
50:DR:99:LYS:HD2	50:DR:99:LYS:N	2.01	0.72
57:DY:28:LYS:HB3	57:DY:37:VAL:HB	1.71	0.72
1:AA:624:C:H4'	16:AP:11:SER:H	1.54	0.72
22:AV:42:C:H5'	22:AV:42:C:H6	1.54	0.72
22:AV:61:C:H5'	22:AV:62:C:OP2	1.89	0.72
36:BA:28:A:N6	36:BA:512:G:H1'	2.03	0.72
38:BC:123:VAL:HG21	38:BC:127:LEU:HD23	1.61	0.72
41:BF:160:ASN:HD21	41:BF:162:LEU:HD13	1.53	0.72
58:BZ:67:LEU:HD23	58:BZ:90:VAL:HG11	1.71	0.72
1:CA:520:A:N1	1:CA:536:C:H1'	2.04	0.72
1:CA:1271:G:H2'	1:CA:1272:G:C5'	2.17	0.72
4:CD:121:VAL:O	4:CD:134:ASP:HA	1.89	0.72
8:CH:112:LEU:HD23	8:CH:112:LEU:N	2.04	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:CI:28:VAL:HG12	9:CI:29:ASN:N	2.02	0.72
19:CS:78:ARG:HB2	19:CS:81:ARG:NH1	2.04	0.72
28:D2:8:LYS:HG2	28:D2:11:GLU:OE2	1.89	0.72
36:DA:89:G:H3'	36:DA:90:U:C5'	2.18	0.72
36:DA:1639:U:C2'	36:DA:1640:C:H5"	2.19	0.72
46:DN:86:PRO:HG2	46:DN:89:LYS:HG2	1.70	0.72
53:DU:66:ASN:ND2	53:DU:76:TYR:H	1.87	0.72
2:AB:165:VAL:HG23	2:AB:166:ASP:N	2.04	0.72
13:AM:91:ARG:HD3	13:AM:97:PRO:O	1.89	0.72
16:AP:14:ASN:N	16:AP:15:PRO:HD3	2.04	0.72
19:AS:17:GLU:O	19:AS:21:GLU:HG2	1.90	0.72
28:B2:18:PRO:HB2	28:B2:72:ALA:HA	1.68	0.72
28:B2:25:VAL:CG2	28:B2:64:LEU:HD12	2.18	0.72
36:BA:543:C:H42	36:BA:549:G:H1	1.36	0.72
49:BQ:141:GLN:HB3	58:BZ:99:TYR:CE1	2.24	0.72
56:BX:35:THR:HG22	56:BX:37:THR:N	2.03	0.72
58:BZ:69:THR:CG2	58:BZ:90:VAL:HA	2.19	0.72
1:CA:538:G:OP2	12:CL:115:LYS:HG3	1.90	0.72
2:CB:229:VAL:HG12	2:CB:230:VAL:N	2.02	0.72
13:CM:101:GLN:N	13:CM:101:GLN:HE21	1.87	0.72
36:DA:1022:G:N2	36:DA:1142(A):A:H2	1.84	0.72
36:DA:1087:G:O2'	36:DA:1089:G:H5'	1.89	0.72
39:DD:71:ASP:HB2	39:DD:103:ARG:NH2	2.00	0.72
54:DV:19:LYS:HB2	54:DV:96:ILE:HD11	1.72	0.72
4:AD:11:LEU:HD13	4:AD:66:ARG:HD3	1.70	0.72
4:AD:30:LYS:C	4:AD:32:ALA:H	1.95	0.72
32:B6:28:ARG:HA	32:B6:32:ASN:HD22	1.54	0.72
56:BX:10:ALA:O	56:BX:28:PHE:HB2	1.89	0.72
57:BY:73:ARG:NH2	57:BY:82:PRO:HA	2.04	0.72
9:CI:19:LEU:HD23	9:CI:20:ARG:N	2.04	0.72
9:CI:58:HIS:O	9:CI:58:HIS:CD2	2.42	0.72
13:CM:83:ASP:CG	13:CM:84:ILE:H	1.97	0.72
22:CW:38:A:H3'	22:CW:39:U:H5"	1.71	0.72
1:AA:407:G:O2'	4:AD:116:GLN:HG3	1.89	0.72
36:BA:328:U:H4'	57:BY:68:HIS:ND1	2.04	0.72
36:BA:1104:C:H2'	36:BA:1105:U:H6	1.53	0.72
36:BA:1517:G:H5'	36:BA:1517:G:C8	2.24	0.72
47:BO:1:MET:HG3	47:BO:67:LYS:HG2	1.72	0.72
51:BS:89:ARG:CG	51:BS:92:TYR:HA	2.19	0.72
3:CC:188:LEU:HD12	3:CC:195:VAL:CG1	2.18	0.72
13:CM:88:ARG:HH11	13:CM:88:ARG:HG2	1.55	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:CV:41:C:H2'	22:CV:42:C:C5'	2.13	0.72
32:D6:15:GLU:HB2	32:D6:20:ASN:CB	2.19	0.72
36:DA:481:G:OP2	57:DY:47:LYS:HD3	1.90	0.72
36:DA:2126:A:H4'	36:DA:2127:G:O5'	1.89	0.72
39:DD:27:THR:CG2	39:DD:83:GLU:HG2	2.19	0.72
39:DD:267:SER:C	39:DD:269:PHE:H	1.94	0.72
41:DF:132:VAL:HG13	41:DF:133:ASN:ND2	2.05	0.72
47:DO:87:ILE:CG2	47:DO:91:LEU:HA	2.19	0.72
53:DU:108:GLU:HG3	54:DV:44:LYS:HD3	1.70	0.72
56:DX:57:LEU:HD22	56:DX:57:LEU:O	1.89	0.72
13:AM:83:ASP:CG	13:AM:84:ILE:H	1.97	0.72
20:AT:57:ARG:HH11	20:AT:102:GLY:CA	2.02	0.72
29:B3:6:VAL:HG12	29:B3:56:VAL:HG22	1.70	0.72
36:BA:1210:A:H5'	36:BA:1210:A:H8	1.54	0.72
54:BV:47:VAL:HG12	54:BV:52:VAL:HB	1.71	0.72
6:CF:61:LEU:HB3	6:CF:63:TYR:HE1	1.54	0.72
28:D2:21:LEU:HB3	28:D2:64:LEU:HD12	1.69	0.72
36:DA:2579:C:O2'	40:DE:131:ALA:HB2	1.88	0.72
5:AE:101:ILE:O	5:AE:120:THR:HB	1.89	0.72
32:B6:15:GLU:HB2	32:B6:20:ASN:CB	2.20	0.72
36:BA:328:U:H4'	57:BY:68:HIS:CE1	2.23	0.72
53:BU:108:GLU:HG3	54:BV:44:LYS:HD3	1.70	0.72
57:BY:28:LYS:HB3	57:BY:37:VAL:HB	1.72	0.72
7:CG:16:LEU:CD1	9:CI:42:ARG:HA	2.19	0.72
36:DA:500:G:N2	36:DA:502:A:H3'	2.05	0.72
36:DA:1498:C:H2'	36:DA:1499:C:H5"	1.71	0.72
40:DE:54:GLN:O	40:DE:75:VAL:HG23	1.88	0.72
50:DR:52:ILE:HB	50:DR:94:TYR:HD2	1.54	0.72
50:DR:117:VAL:O	50:DR:118:GLU:HB2	1.89	0.72
1:AA:537:G:H2'	1:AA:538:G:C8	2.25	0.72
9:AI:19:LEU:HD23	9:AI:20:ARG:N	2.03	0.72
22:AV:52:G:H1	22:AV:62:C:H42	1.37	0.72
48:BP:56:SER:O	48:BP:58:THR:N	2.22	0.72
50:BR:117:VAL:O	50:BR:118:GLU:HB2	1.89	0.72
9:CI:114:TYR:HE1	10:CJ:59:SER:HA	1.55	0.72
13:CM:81:LEU:HD12	13:CM:86:CYS:SG	2.29	0.72
36:DA:760:G:H2'	36:DA:761:A:H5'	1.70	0.72
36:DA:1498:C:C2'	36:DA:1499:C:H5"	2.18	0.72
38:DC:79:LYS:HA	38:DC:97:GLU:OE1	1.90	0.72
1:AA:280:C:O2	17:AQ:38:ARG:HG3	1.88	0.72
6:AF:46:ARG:HH22	18:AR:37:VAL:CG1	2.03	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AJ:6:ILE:HG22	10:AJ:98:ILE:HD12	1.72	0.72
13:AM:97:PRO:HA	13:AM:110:ARG:HD3	1.72	0.72
26:B0:27:GLU:HB3	26:B0:69:PHE:CD1	2.25	0.72
36:BA:1516:C:H2'	36:BA:1517:G:C5'	2.18	0.72
36:BA:1747(A):G:H2'	36:BA:1748:G:C5'	2.20	0.72
40:BE:24:THR:HG22	40:BE:186:GLY:HA2	1.72	0.72
43:BH:85:LYS:HD3	43:BH:133:VAL:HB	1.71	0.72
43:BH:89:ILE:O	43:BH:89:ILE:HG13	1.88	0.72
51:BS:19:LYS:HB3	51:BS:20:ARG:HH22	1.55	0.72
26:D0:27:GLU:HB3	26:D0:69:PHE:CD1	2.25	0.72
34:D8:61:LEU:HD22	34:D8:62:LEU:H	1.55	0.72
36:DA:958:U:H5"	49:DQ:14:ARG:CD	2.18	0.72
48:DP:97:PRO:O	48:DP:98:GLU:HB3	1.89	0.72
49:DQ:134:ARG:HD2	58:DZ:122:ARG:HH22	1.52	0.72
51:DS:17:ARG:HA	51:DS:20:ARG:NH1	2.05	0.72
11:AK:33:THR:HG22	11:AK:39:PRO:HA	1.71	0.72
11:AK:57:THR:HG23	11:AK:60:ALA:H	1.55	0.72
12:AL:38:THR:HG21	12:AL:59:ARG:HG3	1.70	0.72
34:B8:6:THR:HB	34:B8:11:LYS:NZ	2.05	0.72
36:BA:2208:A:H1'	36:BA:2219:G:C5	2.24	0.72
40:BE:101:ARG:NE	40:BE:171:GLU:HB2	2.05	0.72
48:BP:30:THR:CG2	48:BP:31:ALA:N	2.52	0.72
48:BP:84:ASN:N	48:BP:84:ASN:HD22	1.88	0.72
51:BS:12:PHE:C	51:BS:12:PHE:CD1	2.67	0.72
58:BZ:29:TYR:HB3	58:BZ:34:ASN:CB	2.18	0.72
1:CA:1504:G:OP1	1:CA:1507:A:H4'	1.90	0.72
8:CH:55:GLY:C	8:CH:56:LYS:HD2	2.15	0.72
16:CP:20:VAL:HG21	16:CP:32:TYR:CB	2.19	0.72
32:D6:33:LYS:HA	32:D6:33:LYS:CE	2.14	0.72
36:DA:611:C:H2'	36:DA:612:C:H6	1.55	0.72
36:DA:969:U:H2'	36:DA:970:C:C6	2.25	0.72
36:DA:1104:C:H2'	36:DA:1105:U:H6	1.52	0.72
48:DP:64:LYS:C	48:DP:66:GLY:N	2.48	0.72
1:AA:192:U:C1'	20:AT:103:GLY:HA2	2.19	0.71
1:AA:942:G:H21	9:AI:124:GLN:NE2	1.86	0.71
8:AH:7:ALA:HB2	8:AH:85:ARG:HD3	1.71	0.71
22:AW:69:G:H2'	22:AW:70:G:H5"	1.71	0.71
36:BA:1528(A):A:H62	36:BA:1541:G:N2	1.88	0.71
39:BD:35:LYS:HG2	39:BD:36:PRO:N	2.04	0.71
41:BF:185:ASP:HA	41:BF:188:ARG:CG	2.20	0.71
48:BP:24:GLY:CA	48:BP:33:ARG:NH1	2.53	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:BS:17:ARG:HA	51:BS:20:ARG:NH1	2.05	0.71
58:BZ:101:PRO:O	58:BZ:136:PHE:HA	1.89	0.71
1:CA:192:U:C1'	20:CT:103:GLY:HA2	2.20	0.71
1:CA:1053:G:C4'	1:CA:1054:C:H5'	2.15	0.71
8:CH:7:ALA:HB2	8:CH:85:ARG:HD3	1.70	0.71
26:D0:7:LEU:HD13	49:DQ:85:LYS:HG3	1.71	0.71
31:D5:2:ALA:N	36:DA:747:U:C4	2.58	0.71
36:DA:1378:A:H4'	36:DA:1379:A:OP1	1.88	0.71
40:DE:105:THR:HB	40:DE:197:ILE:HG23	1.72	0.71
46:DN:58:ASP:O	46:DN:60:ILE:N	2.21	0.71
1:AA:358:U:H2'	1:AA:359:U:C6	2.25	0.71
1:AA:498:U:HO2'	1:AA:499:A:H8	1.38	0.71
4:AD:59:ARG:HH21	4:AD:62:GLN:HG3	1.54	0.71
8:AH:112:LEU:N	8:AH:112:LEU:HD23	2.04	0.71
25:AZ:295:ARG:HH11	25:AZ:295:ARG:HG2	1.54	0.71
42:BG:76:SER:CA	42:BG:83:ARG:HB3	2.19	0.71
3:CC:134:ILE:HG22	3:CC:168:ALA:HB3	1.71	0.71
5:CE:12:LEU:HD12	5:CE:31:LEU:HB2	1.70	0.71
9:CI:19:LEU:HD21	9:CI:59:PHE:HD2	1.53	0.71
52:DT:3:ARG:O	52:DT:5:ALA:N	2.23	0.71
56:DX:10:ALA:O	56:DX:28:PHE:HB2	1.89	0.71
31:B5:2:ALA:N	36:BA:747:U:C4	2.58	0.71
34:B8:33:ASN:CG	34:B8:34:TRP:N	2.49	0.71
40:BE:54:GLN:O	40:BE:75:VAL:HG23	1.89	0.71
43:BH:91:GLY:HA3	43:BH:94:TYR:CD2	2.25	0.71
52:BT:3:ARG:O	52:BT:5:ALA:N	2.22	0.71
56:BX:57:LEU:HD22	56:BX:57:LEU:O	1.90	0.71
1:CA:228:A:H5'	1:CA:228:A:C8	2.24	0.71
1:CA:405:U:H3'	1:CA:406:G:H5'	1.72	0.71
2:CB:204:ASN:HD22	2:CB:205:ASP:N	1.87	0.71
22:CW:56:C:O4'	38:DC:132:GLY:HA3	1.91	0.71
25:CZ:188:THR:HG21	25:CZ:193:ASN:HD22	1.55	0.71
36:DA:143:G:O4'	56:DX:37:THR:HG21	1.89	0.71
39:DD:30:GLU:HG3	39:DD:63:ARG:HE	1.53	0.71
41:DF:4:VAL:HA	41:DF:19:GLU:HB3	1.70	0.71
42:DG:77:ILE:HG12	42:DG:82:LEU:O	1.89	0.71
48:DP:105:LEU:O	48:DP:106:LEU:HB2	1.90	0.71
1:AA:192:U:H2'	1:AA:193:C:H6	1.52	0.71
7:AG:16:LEU:CD1	9:AI:42:ARG:HA	2.20	0.71
10:AJ:75:ILE:HG13	10:AJ:76:ASN:H	1.54	0.71
13:AM:101:GLN:N	13:AM:101:GLN:HE21	1.87	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BD:30:GLU:CG	39:BD:63:ARG:HE	2.03	0.71
41:BF:36:VAL:O	41:BF:40:GLN:HG3	1.91	0.71
13:CM:8:GLU:OE1	13:CM:22:ILE:HA	1.90	0.71
13:CM:91:ARG:HD3	13:CM:97:PRO:O	1.90	0.71
16:CP:20:VAL:HG21	16:CP:32:TYR:CG	2.25	0.71
36:DA:1970:A:H5"	36:DA:1971:A:OP1	1.90	0.71
52:DT:2:ASN:ND2	52:DT:7:ILE:HD11	2.03	0.71
52:DT:58:ASN:H	52:DT:58:ASN:HD22	1.37	0.71
54:DV:21:ARG:O	54:DV:22:VAL:HG13	1.89	0.71
57:DY:13:VAL:HG23	57:DY:73:ARG:O	1.91	0.71
57:DY:42:VAL:HG12	57:DY:65:ALA:HB3	1.73	0.71
5:AE:12:LEU:HD12	5:AE:31:LEU:HB2	1.70	0.71
11:AK:27:ASN:HD22	11:AK:28:THR:H	1.35	0.71
13:AM:89:GLY:O	13:AM:93:ARG:HD2	1.89	0.71
28:B2:35:LEU:CD2	28:B2:50:ILE:HG13	2.20	0.71
41:BF:157:VAL:HG12	41:BF:176:LEU:HB3	1.69	0.71
48:BP:97:PRO:O	48:BP:98:GLU:HB3	1.91	0.71
48:BP:105:LEU:O	48:BP:106:LEU:HB2	1.90	0.71
53:BU:88:ILE:C	53:BU:90:VAL:H	1.99	0.71
4:CD:23:GLY:HA3	4:CD:112:VAL:HG22	1.73	0.71
11:CK:27:ASN:HD22	11:CK:28:THR:N	1.88	0.71
20:CT:45:GLN:HE22	20:CT:46:GLU:HG3	1.55	0.71
20:CT:57:ARG:HH11	20:CT:102:GLY:CA	2.02	0.71
36:DA:328:U:H4'	57:DY:68:HIS:CE1	2.25	0.71
36:DA:1409:C:H2'	36:DA:1410:G:C8	2.26	0.71
38:DC:79:LYS:HG2	38:DC:118:ASP:OD2	1.90	0.71
41:DF:84:VAL:O	41:DF:86:GLY:N	2.23	0.71
43:DH:85:LYS:NZ	43:DH:86:GLU:HA	2.05	0.71
50:DR:55:ALA:HB2	50:DR:79:LEU:HD11	1.71	0.71
51:DS:12:PHE:C	51:DS:12:PHE:CD1	2.66	0.71
51:DS:49:VAL:HG12	51:DS:50:SER:N	2.05	0.71
1:AA:1392:G:N2	1:AA:1502:A:C8	2.59	0.71
2:AB:204:ASN:HD22	2:AB:205:ASP:N	1.89	0.71
3:AC:58:GLU:H	3:AC:65:ALA:HB3	1.54	0.71
38:BC:27:ARG:HE	38:BC:182:PRO:CB	2.03	0.71
42:BG:44:GLY:CA	42:BG:88:ILE:HG21	2.20	0.71
42:BG:47:LYS:HZ3	42:BG:88:ILE:HD11	1.52	0.71
43:BH:121:ILE:HG23	43:BH:133:VAL:HG13	1.72	0.71
47:BO:114:ILE:H	47:BO:114:ILE:HD12	1.54	0.71
48:BP:105:LEU:HD12	48:BP:105:LEU:N	2.04	0.71
50:BR:14:SER:HA	50:BR:17:ARG:HH12	1.55	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:BV:17:GLY:C	54:BV:18:LEU:HD13	2.16	0.71
10:CJ:57:LYS:HZ3	10:CJ:60:ARG:HH22	1.38	0.71
13:CM:97:PRO:HA	13:CM:110:ARG:HD3	1.72	0.71
27:D1:89:GLU:HA	27:D1:92:LYS:HE2	1.70	0.71
36:DA:1210:A:H8	36:DA:1210:A:H5'	1.55	0.71
43:DH:85:LYS:HD3	43:DH:133:VAL:HB	1.71	0.71
58:DZ:152:ALA:O	58:DZ:155:LEU:HD22	1.90	0.71
2:AB:87:ARG:NH2	2:AB:232:PRO:HA	2.06	0.71
3:AC:15:THR:HG21	3:AC:181:ASN:HA	1.72	0.71
3:AC:83:ARG:O	3:AC:86:VAL:HG22	1.91	0.71
30:B4:12:ALA:HB2	30:B4:29:PRO:HA	1.73	0.71
36:BA:99:U:H4'	36:BA:102:G:H1'	1.73	0.71
36:BA:143:G:O4'	56:BX:37:THR:HG21	1.90	0.71
36:BA:914:C:H2'	36:BA:915:C:H5'	1.72	0.71
36:BA:1087:G:O2'	36:BA:1089:G:H5'	1.89	0.71
51:BS:40:ILE:HG22	51:BS:47:THR:HA	1.72	0.71
51:BS:74:ALA:HB1	51:BS:103:GLU:HG2	1.71	0.71
56:BX:44:GLU:HG3	56:BX:50:LYS:HA	1.73	0.71
1:CA:407:G:O2'	4:CD:116:GLN:HG3	1.91	0.71
3:CC:134:ILE:HG21	3:CC:167:TRP:O	1.89	0.71
32:D6:6:ARG:HB3	32:D6:6:ARG:NH1	2.05	0.71
36:DA:523:C:C2'	36:DA:524:U:H5'	2.21	0.71
36:DA:2139:C:H2'	36:DA:2140:C:C6	2.24	0.71
39:DD:35:LYS:HG2	39:DD:36:PRO:N	2.06	0.71
40:DE:4:ILE:CD1	40:DE:28:ALA:HB1	2.20	0.71
40:DE:7:VAL:HG12	40:DE:27:LEU:HB3	1.71	0.71
42:DG:69:ALA:O	42:DG:71:THR:HG22	1.91	0.71
50:DR:14:SER:HA	50:DR:17:ARG:HH12	1.54	0.71
7:AG:113:GLU:HG2	7:AG:119:ARG:HG2	1.72	0.71
54:BV:21:ARG:O	54:BV:22:VAL:HG13	1.90	0.71
1:CA:194:C:H2'	1:CA:195:A:H5"	1.73	0.71
1:CA:280:C:O2	17:CQ:38:ARG:HG3	1.90	0.71
4:CD:5:ILE:HA	4:CD:115:ARG:HH12	1.54	0.71
22:CW:69:G:H2'	22:CW:70:G:H5"	1.71	0.71
36:DA:833:U:H5"	48:DP:48:PRO:HB3	1.73	0.71
36:DA:1221(A):C:H2'	36:DA:1222:C:H6	1.55	0.71
36:DA:2577:A:H5"	36:DA:2578:G:H5'	1.73	0.71
38:DC:120:MET:HA	38:DC:123:VAL:HG12	1.71	0.71
39:DD:30:GLU:N	39:DD:35:LYS:HZ2	1.88	0.71
25:AZ:152:MET:HE3	25:AZ:156:ASP:HB2	1.73	0.71
25:AZ:263:ARG:NH1	25:AZ:263:ARG:HB2	2.06	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:266:G:C2'	36:BA:267:C:H5"	2.19	0.71
37:BB:91:C:H5'	49:BQ:17:LEU:O	1.90	0.71
40:BE:105:THR:HG21	40:BE:164:ARG:NH1	2.05	0.71
48:BP:126:VAL:HA	48:BP:145:PRO:CB	2.21	0.71
1:CA:1218:C:H2'	1:CA:1219:U:C6	2.25	0.71
13:CM:82:MET:CG	13:CM:83:ASP:N	2.53	0.71
20:CT:26:ASN:ND2	20:CT:26:ASN:H	1.88	0.71
30:D4:26:SER:HB3	42:DG:105:LYS:HZ1	1.56	0.71
31:D5:4:HIS:HB3	31:D5:5:PRO:CD	2.12	0.71
48:DP:58:THR:HG22	48:DP:58:THR:O	1.91	0.71
48:DP:147:LEU:HG	48:DP:148:LEU:H	1.55	0.71
28:B2:47:ASN:CA	28:B2:50:ILE:HB	2.14	0.71
40:BE:7:VAL:HG12	40:BE:27:LEU:HB3	1.73	0.71
41:BF:29:ASN:ND2	41:BF:32:LEU:HB2	2.06	0.71
46:BN:86:PRO:HG2	46:BN:89:LYS:HG2	1.71	0.71
54:BV:25:LEU:H	54:BV:92:THR:HG21	1.55	0.71
58:BZ:152:ALA:HB1	58:BZ:167:PRO:HB2	1.72	0.71
2:CB:165:VAL:HG23	2:CB:166:ASP:N	2.06	0.71
13:CM:23:TYR:CE2	13:CM:70:LEU:HD22	2.26	0.71
36:DA:2145:C:H5"	36:DA:2146:C:OP2	1.91	0.71
50:DR:7:GLY:O	50:DR:8:ARG:NE	2.24	0.71
51:DS:89:ARG:CG	51:DS:92:TYR:HA	2.21	0.71
12:AL:82:VAL:H	12:AL:106:ASP:CG	1.99	0.70
33:B7:34:ARG:HG3	33:B7:34:ARG:NH1	1.99	0.70
34:B8:4:MET:HE3	34:B8:61:LEU:HG	1.72	0.70
36:BA:611:C:H2'	36:BA:612:C:H6	1.55	0.70
37:BB:20:C:C2'	37:BB:21:G:H5"	2.21	0.70
39:BD:71:ASP:CB	39:BD:103:ARG:HH22	2.02	0.70
41:BF:84:VAL:O	41:BF:86:GLY:N	2.24	0.70
43:BH:83:TYR:HB2	43:BH:134:SER:HA	1.72	0.70
48:BP:96:THR:HG22	48:BP:126:VAL:HB	1.71	0.70
48:BP:147:LEU:HG	48:BP:148:LEU:H	1.56	0.70
6:CF:91:VAL:HG11	18:CR:72:ARG:NH1	2.05	0.70
16:CP:14:ASN:N	16:CP:15:PRO:HD3	2.05	0.70
22:CV:42:C:H5'	22:CV:42:C:H6	1.54	0.70
34:D8:6:THR:HB	34:D8:11:LYS:NZ	2.06	0.70
36:DA:292:C:H2'	36:DA:293:U:C6	2.26	0.70
36:DA:637:A:OP2	48:DP:115:LEU:HB2	1.91	0.70
36:DA:2136:C:H2'	36:DA:2137:C:C6	2.25	0.70
36:DA:2779:U:H1'	36:DA:2781:A:C5	2.26	0.70
54:DV:19:LYS:HG3	54:DV:20:LEU:N	2.05	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:59:A:H3'	1:AA:331:G:H22	1.55	0.70
36:BA:1223:G:H8	36:BA:1223:G:H5'	1.56	0.70
36:BA:2455:G:H2'	36:BA:2456:C:C6	2.25	0.70
40:BE:81:ILE:HG22	40:BE:81:ILE:O	1.90	0.70
41:BF:185:ASP:OD1	41:BF:188:ARG:HD3	1.91	0.70
43:BH:94:TYR:CD1	43:BH:107:VAL:HA	2.27	0.70
46:BN:62:VAL:HG22	46:BN:66:LYS:HD2	1.72	0.70
48:BP:16:ARG:O	48:BP:16:ARG:HD3	1.91	0.70
58:BZ:157:LEU:HD21	58:BZ:163:LEU:HD22	1.73	0.70
6:CF:46:ARG:HH22	18:CR:37:VAL:CG1	2.03	0.70
19:CS:11:VAL:CG1	19:CS:16:LEU:HD11	2.22	0.70
30:D4:25:TYR:CE2	42:DG:2:PRO:HB3	2.26	0.70
36:DA:1103:A:H5'	36:DA:1104:C:OP2	1.91	0.70
48:DP:84:ASN:HD22	48:DP:84:ASN:N	1.88	0.70
57:DY:45:VAL:HG12	57:DY:60:PHE:CD1	2.26	0.70
1:AA:572:A:H5'	1:AA:573:A:OP2	1.90	0.70
3:AC:40:ARG:O	3:AC:44:GLU:HG3	1.91	0.70
4:AD:145:GLU:CD	4:AD:145:GLU:H	2.00	0.70
22:AV:41:C:H2'	22:AV:42:C:C5'	2.12	0.70
30:B4:12:ALA:HB1	30:B4:29:PRO:HA	1.72	0.70
36:BA:363(F):A:O2'	36:BA:364:C:H5	1.75	0.70
36:BA:523:C:C2'	36:BA:524:U:H5'	2.20	0.70
41:BF:132:VAL:HG13	41:BF:133:ASN:ND2	2.05	0.70
58:BZ:70:LEU:HD23	58:BZ:70:LEU:H	1.56	0.70
1:CA:59:A:H3'	1:CA:331:G:H22	1.55	0.70
1:CA:1286:A:O2'	1:CA:1287:A:H5"	1.91	0.70
22:CW:57:G:H2'	22:CW:58:A:H5'	1.71	0.70
36:DA:1517:G:H5'	36:DA:1517:G:C8	2.23	0.70
51:DS:106:ARG:NH1	51:DS:108:GLY:HA3	2.06	0.70
53:DU:34:LYS:HA	53:DU:34:LYS:HE2	1.72	0.70
1:AA:520:A:N1	1:AA:536:C:H1'	2.07	0.70
6:AF:55:ASP:HB3	6:AF:57:GLN:NE2	2.05	0.70
15:AO:87:ILE:HG22	15:AO:88:ARG:N	2.05	0.70
26:B0:7:LEU:HD13	49:BQ:85:LYS:HG3	1.72	0.70
28:B2:57:ILE:HG22	28:B2:61:LEU:CG	2.19	0.70
31:B5:40:LYS:HE2	31:B5:44:THR:O	1.92	0.70
36:BA:833:U:H5"	48:BP:48:PRO:HB3	1.72	0.70
36:BA:1141:U:C2'	46:BN:63:THR:HG21	2.20	0.70
36:BA:1378:A:H4'	36:BA:1379:A:OP1	1.91	0.70
41:BF:178:PRO:HG2	41:BF:179:GLU:OE1	1.91	0.70
3:CC:52:LEU:HD23	3:CC:52:LEU:H	1.54	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:162:LEU:HG	4:CD:181:MET:HE3	1.72	0.70
11:CK:57:THR:HG23	11:CK:60:ALA:H	1.56	0.70
12:CL:38:THR:HG21	12:CL:59:ARG:HG3	1.71	0.70
30:D4:12:ALA:HB1	30:D4:29:PRO:HA	1.73	0.70
36:DA:548:A:H2'	36:DA:549:G:H5'	1.73	0.70
43:DH:89:ILE:O	43:DH:89:ILE:HG13	1.89	0.70
46:DN:3:THR:HG22	46:DN:4:TYR:H	1.55	0.70
46:DN:62:VAL:HG22	46:DN:66:LYS:HD2	1.72	0.70
52:DT:53:ARG:HH11	52:DT:53:ARG:CB	1.99	0.70
1:AA:299:G:H2'	1:AA:300:A:C8	2.27	0.70
13:AM:10:PRO:HB2	13:AM:18:ALA:CB	2.13	0.70
25:AZ:188:THR:HG21	25:AZ:193:ASN:HD22	1.55	0.70
36:BA:271(L):U:H5"	36:BA:271(M):G:C5'	2.19	0.70
36:BA:1103:A:H5'	36:BA:1104:C:OP2	1.92	0.70
37:BB:48:A:H4'	51:BS:95:HIS:HD2	1.54	0.70
40:BE:117:MET:HE1	40:BE:136:ARG:HA	1.73	0.70
51:BS:89:ARG:HH11	51:BS:89:ARG:HG2	1.55	0.70
2:CB:25:ASN:HD21	2:CB:27:LYS:HG3	1.54	0.70
25:CZ:150:VAL:O	25:CZ:154:VAL:HG23	1.92	0.70
41:DF:25:PRO:HB3	41:DF:119:ARG:CB	2.17	0.70
48:DP:147:LEU:HG	48:DP:148:LEU:N	2.06	0.70
1:AA:80:G:O2'	1:AA:81:U:H5'	1.90	0.70
1:AA:1129:C:O5'	1:AA:1130:A:H5'	1.92	0.70
36:BA:500:G:N2	36:BA:502:A:H3'	2.07	0.70
36:BA:935:C:H2'	36:BA:936:C:C6	2.27	0.70
36:BA:1301:A:O2'	36:BA:1302:A:C2'	2.34	0.70
42:BG:55:LYS:O	42:BG:59:GLU:HG3	1.92	0.70
53:BU:69:CYS:O	53:BU:74:LEU:HD12	1.90	0.70
54:BV:19:LYS:HG3	54:BV:20:LEU:N	2.06	0.70
55:BW:6:ILE:HG12	55:BW:104:THR:CG2	2.21	0.70
58:BZ:155:LEU:HD23	58:BZ:155:LEU:H	1.56	0.70
1:CA:358:U:H2'	1:CA:359:U:H6	1.54	0.70
1:CA:1015:A:H2'	1:CA:1016:A:C8	2.26	0.70
36:DA:708:C:H42	36:DA:723:G:H1	1.39	0.70
39:DD:24:ILE:HD13	39:DD:25:THR:H	1.57	0.70
42:DG:28:VAL:O	42:DG:31:VAL:HG12	1.91	0.70
51:DS:36:TYR:N	51:DS:36:TYR:CD1	2.56	0.70
2:AB:14:GLY:O	2:AB:15:VAL:HG13	1.90	0.70
4:AD:109:GLY:O	4:AD:111:ALA:N	2.24	0.70
20:AT:63:ILE:HG21	20:AT:81:LYS:HG3	1.74	0.70
28:B2:47:ASN:O	28:B2:51:ARG:HB3	1.92	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:B5:48:GLU:O	31:B5:49:CYS:SG	2.49	0.70
36:BA:292:C:H2'	36:BA:293:U:C6	2.26	0.70
36:BA:1169:G:H1	36:BA:1180:C:H42	1.40	0.70
36:BA:2145:C:H5"	36:BA:2146:C:OP2	1.92	0.70
37:BB:13:A:O2'	37:BB:14:U:H3'	1.92	0.70
46:BN:61:ARG:HH11	46:BN:61:ARG:HG3	1.56	0.70
47:BO:86:ILE:HG22	47:BO:94:ARG:HB2	1.73	0.70
52:BT:27:THR:O	52:BT:28:VAL:CB	2.39	0.70
52:BT:58:ASN:H	52:BT:58:ASN:ND2	1.88	0.70
1:CA:434:U:H2'	1:CA:435:C:C6	2.27	0.70
10:CJ:50:ILE:H	10:CJ:50:ILE:CD1	1.96	0.70
13:CM:12:ASN:H	13:CM:12:ASN:HD22	1.39	0.70
31:D5:48:GLU:O	31:D5:49:CYS:SG	2.50	0.70
32:D6:28:ARG:HA	32:D6:32:ASN:HD22	1.56	0.70
36:DA:363(F):A:O2'	36:DA:364:C:H5	1.72	0.70
36:DA:1141:U:C2'	46:DN:63:THR:HG21	2.20	0.70
39:DD:24:ILE:C	39:DD:26:LYS:H	1.99	0.70
48:DP:16:ARG:HD3	48:DP:16:ARG:O	1.92	0.70
36:BA:628:G:H2'	36:BA:629:G:C5'	2.18	0.70
36:BA:935:C:H2'	36:BA:936:C:H6	1.57	0.70
36:BA:2139:C:H2'	36:BA:2140:C:C6	2.25	0.70
39:BD:108:PRO:HG2	39:BD:111:LEU:HB2	1.72	0.70
41:BF:37:VAL:HG11	48:BP:7:ARG:NH1	2.01	0.70
1:CA:537:G:H2'	1:CA:538:G:C8	2.25	0.70
3:CC:40:ARG:O	3:CC:44:GLU:HG3	1.92	0.70
4:CD:12:CYS:HA	4:CD:19:LEU:HD13	1.73	0.70
13:CM:89:GLY:O	13:CM:93:ARG:HD2	1.92	0.70
13:CM:112:GLY:O	13:CM:114:ARG:N	2.24	0.70
16:CP:67:THR:HB	16:CP:70:ALA:HB2	1.72	0.70
36:DA:1223:G:H5'	36:DA:1223:G:H8	1.56	0.70
39:DD:176:ARG:HH11	39:DD:176:ARG:HG2	1.56	0.70
43:DH:121:ILE:HG23	43:DH:133:VAL:HG13	1.73	0.70
52:DT:27:THR:O	52:DT:28:VAL:CB	2.39	0.70
2:AB:118:LEU:HB3	2:AB:142:LEU:HD12	1.74	0.70
6:AF:61:LEU:HB3	6:AF:63:TYR:HE1	1.56	0.70
7:AG:79:ARG:CZ	22:AW:33:U:H4'	2.22	0.70
31:B5:55:ARG:O	31:B5:56:LYS:HD3	1.92	0.70
57:BY:45:VAL:HG12	57:BY:60:PHE:CD1	2.27	0.70
1:CA:80:G:O2'	1:CA:81:U:H5'	1.91	0.70
1:CA:1305:G:H5'	21:CU:4:GLY:HA3	1.73	0.70
2:CB:118:LEU:HB3	2:CB:142:LEU:HD12	1.72	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CC:7:PRO:O	3:CC:11:ARG:HG2	1.92	0.70
3:CC:95:THR:HG23	3:CC:97:LYS:HD2	1.73	0.70
6:CF:43:LEU:H	6:CF:43:LEU:HD22	1.55	0.70
25:CZ:263:ARG:NH1	25:CZ:263:ARG:HB2	2.07	0.70
34:D8:33:ASN:CG	34:D8:34:TRP:N	2.48	0.70
36:DA:18:C:O3'	53:DU:23:GLY:HA2	1.92	0.70
36:DA:1058:G:C2'	36:DA:1059:G:H5"	2.22	0.70
1:AA:538:G:OP2	12:AL:115:LYS:HG3	1.92	0.70
1:AA:1036:G:H5"	1:AA:1037:C:C5	2.26	0.70
4:AD:59:ARG:NH2	4:AD:62:GLN:HG3	2.06	0.70
22:AW:38:A:C3'	22:AW:39:U:H5"	2.22	0.70
36:BA:1279:G:H4'	50:BR:31:HIS:HD2	1.51	0.70
39:BD:129:ASN:O	39:BD:193:VAL:HG12	1.92	0.70
58:BZ:17:ALA:O	58:BZ:20:ARG:HG2	1.91	0.70
58:BZ:96:VAL:CG2	58:BZ:97:GLU:H	1.98	0.70
58:BZ:151:HIS:HB2	58:BZ:170:THR:HA	1.74	0.70
3:CC:49:SER:C	3:CC:51:GLY:H	1.99	0.70
13:CM:15:VAL:O	13:CM:19:LEU:HD23	1.92	0.70
24:CY:2:G:C2'	24:CY:3:G:H5"	2.22	0.70
36:DA:272(J):C:H2'	36:DA:274:G:H5'	1.74	0.70
36:DA:631:A:H5"	48:DP:65:ARG:NH1	2.07	0.70
36:DA:1639:U:H2'	36:DA:1640:C:H5"	1.73	0.70
40:DE:101:ARG:NE	40:DE:171:GLU:HB2	2.07	0.70
54:DV:47:VAL:HG12	54:DV:52:VAL:HB	1.71	0.70
4:AD:121:VAL:O	4:AD:134:ASP:HA	1.92	0.69
19:AS:11:VAL:CG1	19:AS:16:LEU:HD11	2.22	0.69
24:AY:2:G:C2'	24:AY:3:G:H5"	2.22	0.69
36:BA:244:A:H4'	48:BP:74:GLU:CG	2.22	0.69
39:BD:76:PRO:HG2	39:BD:98:VAL:CG2	2.21	0.69
39:BD:176:ARG:HH11	39:BD:176:ARG:HG2	1.57	0.69
41:BF:89:VAL:HG12	41:BF:90:PHE:N	2.07	0.69
48:BP:147:LEU:HG	48:BP:148:LEU:N	2.06	0.69
53:BU:34:LYS:HE2	53:BU:34:LYS:HA	1.73	0.69
57:BY:9:LYS:CG	57:BY:10:GLY:H	2.04	0.69
1:CA:227:G:H2'	1:CA:228:A:C5'	2.13	0.69
1:CA:841:U:H3'	1:CA:848:C:O4'	1.91	0.69
1:CA:940:C:P	7:CG:102:ARG:HH21	2.15	0.69
1:CA:1036:G:H5"	1:CA:1037:C:C5	2.27	0.69
5:CE:101:ILE:O	5:CE:120:THR:HB	1.92	0.69
26:D0:40:GLN:HE22	26:D0:45:PHE:H	1.39	0.69
36:DA:1169:G:H1	36:DA:1180:C:H42	1.39	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DB:13:A:O2'	37:DB:14:U:H3'	1.91	0.69
48:DP:126:VAL:HA	48:DP:145:PRO:CB	2.20	0.69
51:DS:85:VAL:HG23	51:DS:106:ARG:HD3	1.72	0.69
52:DT:28:VAL:HG21	52:DT:46:GLU:HG3	1.74	0.69
57:DY:73:ARG:NH2	57:DY:82:PRO:HA	2.06	0.69
1:AA:405:U:H3'	1:AA:406:G:H5'	1.73	0.69
1:AA:434:U:H2'	1:AA:435:C:C6	2.27	0.69
2:AB:82:ARG:O	2:AB:86:GLU:HG3	1.92	0.69
9:AI:19:LEU:HD21	9:AI:59:PHE:HD2	1.56	0.69
12:AL:47:LYS:C	12:AL:49:ASN:H	2.00	0.69
14:AN:44:LEU:O	14:AN:44:LEU:HD12	1.91	0.69
28:B2:12:GLU:HA	28:B2:15:LYS:HE3	1.73	0.69
30:B4:13:ARG:C	30:B4:14:ILE:HD12	2.17	0.69
36:BA:272(J):C:H2'	36:BA:274:G:H5'	1.74	0.69
36:BA:1396:U:H2'	36:BA:1396:U:O2	1.93	0.69
36:BA:2377:A:H4'	51:BS:107:GLU:O	1.91	0.69
48:BP:61:ARG:O	48:BP:62:LEU:HB3	1.92	0.69
50:BR:7:GLY:O	50:BR:8:ARG:NE	2.25	0.69
51:BS:106:ARG:NH1	51:BS:108:GLY:HA3	2.06	0.69
4:CD:133:VAL:HG12	4:CD:135:LEU:H	1.55	0.69
5:CE:100:VAL:HG12	5:CE:118:ILE:HG22	1.75	0.69
10:CJ:86:MET:HG2	10:CJ:86:MET:O	1.92	0.69
13:CM:53:VAL:CG1	13:CM:57:ARG:HH21	2.03	0.69
36:DA:310:A:P	57:DY:18:GLY:HA2	2.32	0.69
36:DA:1107:G:H4'	44:DJ:81:UNK:CB	2.22	0.69
36:DA:1403:C:H5"	36:DA:1471:A:C1'	2.22	0.69
36:DA:1796:U:H2'	36:DA:1797:C:C6	2.27	0.69
40:DE:117:MET:HE1	40:DE:136:ARG:HA	1.72	0.69
1:AA:191:G:N3	20:AT:105:SER:HB3	2.08	0.69
1:AA:841:U:H3'	1:AA:848:C:O4'	1.91	0.69
1:AA:1238:A:H8	1:AA:1241:G:O2'	1.70	0.69
4:AD:64:LEU:HB2	4:AD:198:VAL:HG11	1.74	0.69
5:AE:80:ILE:HD12	5:AE:138:ALA:HB1	1.75	0.69
6:AF:8:ILE:HD11	6:AF:79:LEU:HD23	1.74	0.69
24:AY:57:G:H2'	24:AY:58:A:H5'	1.73	0.69
28:B2:28:LYS:C	28:B2:57:ILE:HD11	2.16	0.69
36:BA:1022:G:N2	36:BA:1142(A):A:C2	2.55	0.69
36:BA:2134:A:H62	36:BA:2157:G:H1'	1.55	0.69
40:BE:4:ILE:CD1	40:BE:28:ALA:HB1	2.22	0.69
51:BS:85:VAL:HG23	51:BS:106:ARG:HD3	1.72	0.69
1:CA:1129:C:O5'	1:CA:1130:A:H5'	1.92	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:CE:51:VAL:HB	5:CE:52:PRO:HD3	1.75	0.69
36:DA:266:G:C2'	36:DA:267:C:H5"	2.20	0.69
37:DB:20:C:C2'	37:DB:21:G:H5"	2.21	0.69
41:DF:39:TRP:CH2	41:DF:106:ARG:HD3	2.28	0.69
41:DF:178:PRO:HG2	41:DF:179:GLU:OE1	1.92	0.69
56:DX:49:VAL:HG12	56:DX:87:GLN:HE21	1.57	0.69
14:AN:57:ARG:HB2	14:AN:57:ARG:HH11	1.57	0.69
34:B8:61:LEU:HD22	34:B8:62:LEU:H	1.57	0.69
36:BA:1403:C:H5"	36:BA:1471:A:C1'	2.23	0.69
36:BA:1639:U:C2'	36:BA:1640:C:H5"	2.21	0.69
36:BA:1639:U:H2'	36:BA:1640:C:H5"	1.73	0.69
36:BA:2136:C:H2'	36:BA:2137:C:C6	2.27	0.69
36:BA:2160:G:H8	36:BA:2160:G:H5'	1.56	0.69
39:BD:69:ARG:NH2	39:BD:128:GLY:O	2.24	0.69
42:BG:20:ILE:C	42:BG:22:ARG:H	1.98	0.69
47:BO:24:VAL:HG12	47:BO:33:ALA:HB2	1.75	0.69
2:CB:82:ARG:O	2:CB:86:GLU:HG3	1.92	0.69
17:CQ:70:ARG:HD2	17:CQ:70:ARG:N	2.07	0.69
36:DA:935:C:H2'	36:DA:936:C:C6	2.28	0.69
36:DA:2377:A:O2'	36:DA:2378:A:H5'	1.93	0.69
40:DE:116:VAL:HG22	40:DE:117:MET:N	2.06	0.69
47:DO:65:THR:HG23	47:DO:67:LYS:N	2.07	0.69
1:AA:1218:C:H2'	1:AA:1219:U:C6	2.27	0.69
36:BA:548:A:H2'	36:BA:549:G:H5'	1.73	0.69
36:BA:1771:C:H1'	36:BA:1786:A:C8	2.28	0.69
36:BA:1932:A:H2'	36:BA:1933:G:O4'	1.92	0.69
2:CB:44:LEU:HA	2:CB:47:THR:HB	1.75	0.69
25:CZ:152:MET:HE3	25:CZ:156:ASP:HB2	1.74	0.69
25:CZ:251:ASP:O	25:CZ:267:VAL:HG12	1.92	0.69
25:CZ:361:MET:HE2	25:CZ:363:MET:HG2	1.73	0.69
42:DG:82:LEU:HD13	42:DG:87:PRO:HB2	1.75	0.69
46:DN:66:LYS:O	46:DN:70:LYS:HB3	1.91	0.69
47:DO:114:ILE:HD12	47:DO:114:ILE:N	2.07	0.69
51:DS:40:ILE:HG22	51:DS:47:THR:HA	1.74	0.69
3:AC:95:THR:HG23	3:AC:97:LYS:HD2	1.74	0.69
13:AM:23:TYR:CE2	13:AM:70:LEU:HD22	2.27	0.69
13:AM:53:VAL:CG1	13:AM:57:ARG:HH21	2.05	0.69
22:AW:57:G:H2'	22:AW:58:A:H5'	1.71	0.69
36:BA:672:C:O2'	36:BA:673:C:H5"	1.93	0.69
36:BA:1060:U:C1'	36:BA:1061:U:H5"	2.22	0.69
38:BC:81:GLU:O	38:BC:84:LYS:HD3	1.92	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BE:117:MET:O	40:BE:121:ASN:HA	1.93	0.69
42:BG:173:LEU:HB3	42:BG:178:PHE:CD2	2.27	0.69
3:CC:135:LYS:HZ3	5:CE:53:LEU:HD11	1.57	0.69
4:CD:149:ALA:HB3	4:CD:152:SER:OG	1.92	0.69
17:CQ:67:LYS:O	17:CQ:68:ARG:HB2	1.91	0.69
30:D4:13:ARG:C	30:D4:14:ILE:HD12	2.17	0.69
34:D8:42:ARG:O	34:D8:44:LYS:N	2.25	0.69
36:DA:559:G:H22	53:DU:49:HIS:CD2	2.10	0.69
36:DA:1480:G:H2'	36:DA:1481:U:H5'	1.73	0.69
36:DA:1932:A:H2'	36:DA:1933:G:O4'	1.92	0.69
38:DC:73:ARG:HE	38:DC:110:PHE:HD1	1.40	0.69
39:DD:108:PRO:HG2	39:DD:111:LEU:HB2	1.72	0.69
47:DO:86:ILE:HG22	47:DO:94:ARG:HB2	1.75	0.69
51:DS:15:ARG:O	51:DS:18:ILE:HG13	1.93	0.69
57:DY:9:LYS:HG2	57:DY:10:GLY:N	2.04	0.69
1:AA:664:G:H22	1:AA:741:G:H1	1.40	0.69
6:AF:87:ARG:HH11	6:AF:87:ARG:HG2	1.56	0.69
19:AS:32:LYS:HZ3	19:AS:32:LYS:N	1.91	0.69
32:B6:11:LEU:CD1	32:B6:26:ASN:HB2	2.21	0.69
36:BA:2312:U:H4'	42:BG:71:THR:CG2	2.21	0.69
39:BD:30:GLU:N	39:BD:35:LYS:NZ	2.40	0.69
44:BJ:97:UNK:HA	44:BJ:132:UNK:HA	1.73	0.69
2:CB:87:ARG:NH2	2:CB:232:PRO:HA	2.08	0.69
3:CC:14:ILE:CG1	3:CC:15:THR:N	2.56	0.69
15:CO:87:ILE:HG22	15:CO:88:ARG:N	2.07	0.69
36:DA:604:G:H2'	36:DA:605:C:O2	1.92	0.69
38:DC:5:LYS:HA	38:DC:8:ARG:HE	1.57	0.69
48:DP:56:SER:O	48:DP:58:THR:N	2.25	0.69
1:AA:194:C:H2'	1:AA:195:A:H5"	1.74	0.69
1:AA:1306:A:H61	1:AA:1331:G:H1'	1.58	0.69
3:AC:32:LEU:HD22	3:AC:59:ARG:NH1	2.08	0.69
6:AF:77:ARG:HH11	6:AF:77:ARG:HG2	1.57	0.69
10:AJ:61:GLU:CG	14:AN:58:LYS:HE2	2.22	0.69
12:AL:18:VAL:CG2	12:AL:19:ARG:H	2.02	0.69
20:AT:45:GLN:HE22	20:AT:46:GLU:HG3	1.55	0.69
24:AY:41:C:H5'	24:AY:41:C:H6	1.58	0.69
25:AZ:251:ASP:O	25:AZ:267:VAL:HG12	1.93	0.69
25:AZ:361:MET:HE2	25:AZ:363:MET:HG2	1.73	0.69
35:B9:25:VAL:HB	35:B9:34:GLN:HB2	1.75	0.69
36:BA:197:A:H5'	36:BA:197:A:C8	2.27	0.69
37:BB:7:G:H2'	37:BB:8:U:H5"	1.75	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BD:27:THR:HG23	39:BD:83:GLU:HG2	1.74	0.69
40:BE:111:ARG:HB3	50:BR:2:ARG:HH12	1.58	0.69
41:BF:132:VAL:HG22	41:BF:133:ASN:N	2.07	0.69
46:BN:46:VAL:HG13	46:BN:48:MET:HG3	1.75	0.69
52:BT:28:VAL:HG12	52:BT:29:ARG:HD3	1.75	0.69
1:CA:197:A:H4'	1:CA:198:G:O5'	1.93	0.69
1:CA:664:G:H22	1:CA:741:G:H1	1.40	0.69
1:CA:858:G:C5'	1:CA:858:G:H8	2.06	0.69
6:CF:91:VAL:HG11	18:CR:72:ARG:HH12	1.57	0.69
30:D4:12:ALA:HB2	30:D4:29:PRO:HA	1.74	0.69
32:D6:15:GLU:OE1	32:D6:18:ARG:NE	2.25	0.69
32:D6:42:TRP:CE3	32:D6:42:TRP:HA	2.26	0.69
33:D7:34:ARG:HD2	33:D7:39:ARG:HG3	1.74	0.69
36:DA:359:A:H2'	36:DA:360:G:O4'	1.93	0.69
36:DA:590:A:H2'	36:DA:591:C:C6	2.27	0.69
36:DA:914:C:H2'	36:DA:915:C:H5'	1.74	0.69
36:DA:2304:G:H22	36:DA:2312:U:H3	1.39	0.69
38:DC:81:GLU:O	38:DC:84:LYS:HD3	1.91	0.69
39:DD:129:ASN:O	39:DD:193:VAL:HG12	1.93	0.69
40:DE:105:THR:HG21	40:DE:164:ARG:NH1	2.07	0.69
40:DE:111:ARG:HB3	50:DR:2:ARG:NH1	2.08	0.69
41:DF:37:VAL:HG11	48:DP:7:ARG:NH1	2.00	0.69
41:DF:53:THR:HG23	41:DF:55:GLY:H	1.57	0.69
42:DG:51:ARG:NE	42:DG:51:ARG:HA	2.07	0.69
43:DH:94:TYR:CD1	43:DH:107:VAL:HA	2.28	0.69
48:DP:58:THR:O	48:DP:61:ARG:NE	2.22	0.69
52:DT:38:ASN:O	52:DT:38:ASN:ND2	2.26	0.69
54:DV:25:LEU:H	54:DV:92:THR:HG21	1.56	0.69
57:DY:8:LYS:HE2	57:DY:72:VAL:HG23	1.74	0.69
2:AB:61:LEU:O	2:AB:64:ARG:HG2	1.91	0.69
4:AD:5:ILE:HA	4:AD:115:ARG:HH12	1.57	0.69
4:AD:162:LEU:HG	4:AD:181:MET:HE3	1.73	0.69
16:AP:20:VAL:CG2	16:AP:32:TYR:HB2	2.23	0.69
32:B6:42:TRP:HA	32:B6:42:TRP:CE3	2.26	0.69
34:B8:33:ASN:CG	34:B8:34:TRP:H	1.98	0.69
36:BA:271(J):C:H2'	36:BA:271(J):C:O2	1.92	0.69
36:BA:419:C:H2'	36:BA:420:C:H6	1.58	0.69
36:BA:708:C:H42	36:BA:723:G:H1	1.41	0.69
36:BA:1071:G:H1'	36:BA:1089:G:H2'	1.75	0.69
48:BP:64:LYS:C	48:BP:66:GLY:N	2.47	0.69
49:BQ:32:TYR:O	49:BQ:105:GLU:HB2	1.92	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:452:A:O2'	1:CA:453:A:H8	1.71	0.69
22:CW:38:A:C3'	22:CW:39:U:H5"	2.23	0.69
25:CZ:295:ARG:HH11	25:CZ:295:ARG:HG2	1.57	0.69
36:DA:999:U:H5"	36:DA:1154:G:O6	1.93	0.69
40:DE:111:ARG:HB3	50:DR:2:ARG:HH12	1.58	0.69
40:DE:117:MET:O	40:DE:121:ASN:HA	1.93	0.69
41:DF:32:LEU:O	41:DF:36:VAL:HG23	1.93	0.69
4:AD:12:CYS:HA	4:AD:19:LEU:HD13	1.73	0.69
34:B8:42:ARG:O	34:B8:44:LYS:N	2.25	0.69
36:BA:1141:U:H2'	46:BN:63:THR:CG2	2.23	0.69
36:BA:1314:C:H5'	36:BA:1314:C:C6	2.28	0.69
36:BA:1409:C:H2'	36:BA:1410:G:C8	2.27	0.69
36:BA:2304:G:H22	36:BA:2312:U:H3	1.39	0.69
38:BC:27:ARG:HD3	38:BC:182:PRO:HG3	1.73	0.69
40:BE:111:ARG:HB3	50:BR:2:ARG:NH1	2.08	0.69
43:BH:42:ARG:HG2	43:BH:43:VAL:H	1.57	0.69
52:BT:62:THR:HG22	52:BT:75:ILE:HG13	1.73	0.69
54:BV:19:LYS:HB2	54:BV:96:ILE:HD11	1.74	0.69
1:CA:1234:C:H1'	1:CA:1364:U:O2	1.93	0.69
6:CF:34:GLY:N	6:CF:71:ARG:HH21	1.91	0.69
16:CP:20:VAL:CG2	16:CP:32:TYR:HB2	2.23	0.69
24:CY:2:G:H2'	24:CY:3:G:H5"	1.73	0.69
28:D2:10:LEU:HD11	28:D2:14:ARG:NH2	2.08	0.69
31:D5:55:ARG:O	31:D5:56:LYS:HD3	1.92	0.69
35:D9:25:VAL:HB	35:D9:34:GLN:HB2	1.75	0.69
36:DA:2291:U:H2'	36:DA:2292:C:C6	2.27	0.69
36:DA:2852:G:H2'	36:DA:2853:C:C6	2.28	0.69
48:DP:24:GLY:CA	48:DP:33:ARG:NH1	2.56	0.69
48:DP:96:THR:HG22	48:DP:126:VAL:HB	1.74	0.69
50:DR:75:LEU:HD13	50:DR:75:LEU:O	1.92	0.69
1:AA:1190:G:OP1	3:AC:5:ILE:HD12	1.93	0.68
1:AA:1305:G:H5'	21:AU:4:GLY:HA3	1.75	0.68
3:AC:73:PRO:HG3	3:AC:105:GLU:HB2	1.75	0.68
4:AD:133:VAL:HG12	4:AD:135:LEU:H	1.57	0.68
25:AZ:150:VAL:O	25:AZ:154:VAL:HG23	1.92	0.68
25:AZ:271:GLU:O	25:AZ:286:VAL:HG23	1.93	0.68
36:BA:18:C:O3'	53:BU:23:GLY:HA2	1.93	0.68
36:BA:106:C:H2'	36:BA:107:C:C6	2.28	0.68
36:BA:310:A:P	57:BY:18:GLY:HA2	2.33	0.68
36:BA:1221(A):C:H2'	36:BA:1222:C:H6	1.58	0.68
39:BD:30:GLU:H	39:BD:35:LYS:HZ1	1.40	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BH:89:ILE:HG12	43:BH:129:THR:O	1.93	0.68
46:BN:58:ASP:O	46:BN:60:ILE:N	2.24	0.68
47:BO:88:ASN:HD21	47:BO:92:GLU:HB2	1.58	0.68
2:CB:87:ARG:HH22	2:CB:232:PRO:HA	1.58	0.68
4:CD:3:ARG:HG2	4:CD:118:ARG:HE	1.58	0.68
24:CY:41:C:H5'	24:CY:41:C:H6	1.58	0.68
25:CZ:271:GLU:O	25:CZ:286:VAL:HG23	1.92	0.68
27:D1:69:LYS:NZ	27:D1:76:ARG:HH22	1.91	0.68
36:DA:271(J):C:O2	36:DA:271(J):C:H2'	1.92	0.68
36:DA:2160:G:H8	36:DA:2160:G:H5'	1.57	0.68
39:DD:69:ARG:NH2	39:DD:128:GLY:O	2.27	0.68
42:DG:85:GLY:C	42:DG:87:PRO:HD3	2.18	0.68
46:DN:46:VAL:HG13	46:DN:48:MET:HG3	1.75	0.68
2:AB:87:ARG:HH22	2:AB:232:PRO:HA	1.57	0.68
6:AF:91:VAL:HG11	18:AR:72:ARG:NH1	2.08	0.68
31:B5:40:LYS:HE3	31:B5:46:CYS:HB3	1.75	0.68
36:BA:296:C:O2'	36:BA:297:C:H5'	1.92	0.68
36:BA:1170:G:H1	36:BA:1179:C:H42	1.40	0.68
42:BG:11:TYR:OH	42:BG:33:ARG:HG3	1.91	0.68
50:BR:52:ILE:HB	50:BR:94:TYR:HD2	1.58	0.68
50:BR:62:ALA:O	50:BR:66:VAL:HG23	1.93	0.68
57:BY:75:ILE:HG23	57:BY:76:CYS:N	2.07	0.68
1:CA:1347:G:N2	1:CA:1373:G:H2'	2.08	0.68
5:CE:107:ARG:HG3	5:CE:108:ALA:N	2.07	0.68
27:D1:84:GLY:O	27:D1:86:SER:N	2.22	0.68
36:DA:1762:A:H8	36:DA:1762:A:O5'	1.74	0.68
36:DA:2377:A:H4'	51:DS:107:GLU:O	1.93	0.68
41:DF:36:VAL:O	41:DF:40:GLN:HG3	1.93	0.68
50:DR:100:LEU:HD11	50:DR:113:LEU:HB2	1.75	0.68
9:AI:114:TYR:HE1	10:AJ:59:SER:HA	1.57	0.68
10:AJ:86:MET:O	10:AJ:86:MET:HG2	1.91	0.68
14:AN:22:THR:HB	14:AN:33:VAL:HG21	1.73	0.68
22:AV:56:C:O2'	42:BG:78:SER:HB2	1.93	0.68
24:AY:2:G:H2'	24:AY:3:G:H5"	1.73	0.68
36:BA:359:A:H2'	36:BA:360:G:O4'	1.94	0.68
36:BA:1058:G:C2'	36:BA:1059:G:H5"	2.22	0.68
36:BA:2852:G:H2'	36:BA:2853:C:C6	2.28	0.68
39:BD:24:ILE:HD13	39:BD:25:THR:H	1.58	0.68
39:BD:34:VAL:HG23	39:BD:35:LYS:H	1.58	0.68
52:BT:13:ARG:HA	52:BT:13:ARG:CZ	2.24	0.68
54:BV:39:LEU:HD12	54:BV:47:VAL:HG11	1.75	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:953:G:H5'	1:CA:965:A:H61	1.57	0.68
3:CC:73:PRO:HG3	3:CC:105:GLU:HB2	1.75	0.68
5:CE:80:ILE:HD12	5:CE:138:ALA:HB1	1.74	0.68
6:CF:55:ASP:HB3	6:CF:57:GLN:NE2	2.09	0.68
7:CG:7:ALA:O	7:CG:8:GLU:HB2	1.92	0.68
36:DA:419:C:H2'	36:DA:420:C:H6	1.59	0.68
36:DA:1301:A:O2'	36:DA:1302:A:C2'	2.35	0.68
36:DA:1396:U:O2	36:DA:1396:U:H2'	1.92	0.68
36:DA:2463:C:O2'	36:DA:2464:C:H5'	1.92	0.68
40:DE:33:VAL:HG12	40:DE:89:ASP:O	1.94	0.68
43:DH:42:ARG:HG2	43:DH:43:VAL:H	1.58	0.68
43:DH:89:ILE:HG12	43:DH:129:THR:O	1.92	0.68
51:DS:13:ARG:CG	51:DS:14:VAL:H	2.06	0.68
55:DW:6:ILE:HG12	55:DW:104:THR:CG2	2.23	0.68
4:AD:126:ILE:HD12	4:AD:126:ILE:N	2.08	0.68
5:AE:107:ARG:HG3	5:AE:108:ALA:N	2.07	0.68
17:AQ:67:LYS:O	17:AQ:68:ARG:HB2	1.93	0.68
24:AY:16:H2U:H5'	24:AY:17:H2U:C5'	2.23	0.68
36:BA:1331:A:HO2'	36:BA:1332:G:H8	1.41	0.68
36:BA:1541:G:H1'	36:BA:1542:A:C4	2.28	0.68
41:BF:160:ASN:OD1	41:BF:163:VAL:HG23	1.93	0.68
46:BN:126:PRO:O	46:BN:127:ASP:HB2	1.93	0.68
53:BU:66:ASN:O	53:BU:70:ARG:HB2	1.92	0.68
58:BZ:115:GLY:HA3	58:BZ:174:VAL:HG12	1.76	0.68
4:CD:64:LEU:HB2	4:CD:198:VAL:HG11	1.74	0.68
25:CZ:143:ASP:HB3	25:CZ:146:LEU:HB3	1.74	0.68
25:CZ:277:LEU:HD13	25:CZ:278:GLN:H	1.56	0.68
36:DA:259:G:H1'	36:DA:621:A:O2'	1.93	0.68
36:DA:2305:A:C3'	36:DA:2306:C:H5"	2.23	0.68
37:DB:25:A:H2'	37:DB:25:A:N3	2.07	0.68
39:DD:134:ARG:HH12	39:DD:135:PHE:HE1	1.41	0.68
1:AA:540:G:H2'	1:AA:541:G:H8	1.58	0.68
1:AA:625:G:H2'	1:AA:626:U:C6	2.28	0.68
2:AB:25:ASN:HD21	2:AB:27:LYS:HG3	1.58	0.68
36:BA:672:C:H2'	36:BA:673:C:H5'	1.75	0.68
36:BA:2779:U:H1'	36:BA:2781:A:C5	2.27	0.68
36:BA:2853:C:H2'	36:BA:2854:G:H8	1.58	0.68
41:BF:32:LEU:O	41:BF:36:VAL:HG23	1.94	0.68
46:BN:3:THR:HG22	46:BN:4:TYR:H	1.58	0.68
56:BX:49:VAL:HG12	56:BX:87:GLN:HE21	1.57	0.68
57:BY:13:VAL:CG2	57:BY:72:VAL:HB	2.23	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:BZ:54:HIS:HB3	58:BZ:101:PRO:HD3	1.73	0.68
1:CA:351:G:H4'	1:CA:352:C:OP1	1.93	0.68
3:CC:5:ILE:CD1	3:CC:5:ILE:N	2.56	0.68
12:CL:47:LYS:C	12:CL:49:ASN:H	2.01	0.68
15:CO:82:ILE:HD11	15:CO:88:ARG:HB2	1.74	0.68
34:D8:14:VAL:HG21	34:D8:22:VAL:CG1	2.23	0.68
36:DA:271(L):U:H5"	36:DA:271(M):G:C5'	2.19	0.68
36:DA:296:C:O2'	36:DA:297:C:H5'	1.93	0.68
36:DA:2178:C:H2'	36:DA:2179:C:C5'	2.23	0.68
36:DA:2455:G:H2'	36:DA:2456:C:C6	2.28	0.68
39:DD:30:GLU:N	39:DD:35:LYS:NZ	2.41	0.68
39:DD:30:GLU:HB3	39:DD:83:GLU:OE1	1.93	0.68
49:DQ:51:ARG:O	49:DQ:55:VAL:HG12	1.94	0.68
3:AC:134:ILE:HG21	3:AC:167:TRP:O	1.94	0.68
9:AI:83:ARG:O	9:AI:86:VAL:HG12	1.93	0.68
13:AM:5:ALA:HB2	13:AM:66:LEU:HD23	1.76	0.68
36:BA:74:A:H5"	36:BA:75:G:O4'	1.93	0.68
36:BA:654(P):C:H2'	36:BA:654(Q):C:O4'	1.94	0.68
36:BA:958:U:H5"	49:BQ:14:ARG:CD	2.23	0.68
36:BA:2377:A:O2'	36:BA:2378:A:H5'	1.93	0.68
39:BD:99:ASP:OD1	39:BD:99:ASP:C	2.37	0.68
42:BG:34:LEU:O	42:BG:34:LEU:HD12	1.93	0.68
43:BH:103:LEU:HB2	43:BH:123:PHE:CD2	2.27	0.68
50:BR:58:GLY:HA2	50:BR:80:PHE:CE2	2.29	0.68
11:CK:27:ASN:HD22	11:CK:28:THR:H	1.41	0.68
22:CV:63:G:H2'	22:CV:64:A:O4'	1.94	0.68
25:CZ:265:THR:HG21	25:CZ:293:VAL:CG2	2.23	0.68
36:DA:320:A:C5	41:DF:136:THR:HG21	2.28	0.68
38:DC:75:LEU:HD11	38:DC:113:VAL:HG13	1.76	0.68
39:DD:34:VAL:HG23	39:DD:35:LYS:H	1.58	0.68
39:DD:158:ALA:HB3	39:DD:161:THR:HG21	1.75	0.68
50:DR:62:ALA:O	50:DR:66:VAL:HG23	1.93	0.68
52:DT:62:THR:HG22	52:DT:75:ILE:HG13	1.74	0.68
57:DY:13:VAL:CG2	57:DY:72:VAL:HB	2.23	0.68
57:DY:46:LYS:HB3	57:DY:62:GLU:HG2	1.76	0.68
4:AD:3:ARG:HG2	4:AD:118:ARG:HE	1.58	0.68
10:AJ:32:ALA:H	10:AJ:78:ASN:ND2	1.92	0.68
13:AM:5:ALA:CB	13:AM:66:LEU:HD23	2.24	0.68
28:B2:25:VAL:O	28:B2:29:LYS:HG2	1.94	0.68
34:B8:50:LEU:O	34:B8:51:ALA:HB3	1.93	0.68
36:BA:321:G:H21	41:BF:165:ARG:HE	1.37	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1589:C:H2'	36:BA:1590:U:C6	2.28	0.68
43:BH:117:PRO:HB3	43:BH:123:PHE:CE1	2.28	0.68
53:BU:66:ASN:ND2	53:BU:76:TYR:H	1.90	0.68
9:CI:79:LEU:HD23	9:CI:101:PHE:O	1.94	0.68
22:CW:7:A:C5	22:CW:49:C:H5	2.12	0.68
22:CW:65:G:H4'	32:D6:28:ARG:NH2	2.09	0.68
24:CY:57:G:H2'	24:CY:58:A:H5'	1.75	0.68
29:D3:1:MET:HE1	29:D3:40:THR:HG22	1.76	0.68
35:D9:10:ILE:HG22	35:D9:10:ILE:O	1.93	0.68
36:DA:1188:U:O2'	36:DA:1189:A:H5'	1.93	0.68
36:DA:2188:C:H2'	36:DA:2189:U:C5	2.29	0.68
36:DA:2396:G:O2'	36:DA:2397:G:H5'	1.93	0.68
47:DO:88:ASN:HD21	47:DO:92:GLU:HB2	1.59	0.68
52:DT:94:ALA:C	52:DT:96:ARG:H	2.01	0.68
2:AB:25:ASN:HD22	2:AB:27:LYS:H	1.40	0.68
7:AG:78:ARG:O	7:AG:78:ARG:HG3	1.92	0.68
16:AP:43:LYS:HA	16:AP:48:TRP:CB	2.24	0.68
22:AW:7:A:C5	22:AW:49:C:H5	2.11	0.68
22:AW:38:A:C2'	22:AW:39:U:H5"	2.24	0.68
25:AZ:277:LEU:HD13	25:AZ:278:GLN:H	1.56	0.68
30:B4:39:CYS:O	30:B4:40:HIS:HB2	1.92	0.68
34:B8:50:LEU:HD12	34:B8:51:ALA:H	1.59	0.68
36:BA:631:A:H5"	48:BP:65:ARG:NH1	2.08	0.68
36:BA:2305:A:C3'	36:BA:2306:C:H5"	2.22	0.68
41:BF:39:TRP:CH2	41:BF:106:ARG:HD3	2.28	0.68
50:BR:75:LEU:HD13	50:BR:75:LEU:O	1.94	0.68
1:CA:498:U:HO2'	1:CA:499:A:H8	1.42	0.68
1:CA:625:G:H2'	1:CA:626:U:C6	2.28	0.68
1:CA:1490:C:O2'	1:CA:1491:G:H5'	1.92	0.68
9:CI:118:LYS:O	9:CI:119:ALA:HB3	1.92	0.68
10:CJ:32:ALA:CB	10:CJ:76:ASN:HB2	2.23	0.68
12:CL:80:HIS:HB2	24:CY:68:C:H4'	1.75	0.68
27:D1:18:ILE:HD12	36:DA:380:U:H5'	1.75	0.68
36:DA:191:A:O2'	36:DA:192:C:H5'	1.94	0.68
36:DA:1170:G:H1	36:DA:1179:C:H42	1.40	0.68
36:DA:2777:G:H5"	36:DA:2778:A:H5'	1.76	0.68
57:DY:75:ILE:HG23	57:DY:76:CYS:N	2.07	0.68
2:AB:96:ARG:HD3	2:AB:148:TYR:CE1	2.29	0.68
10:AJ:32:ALA:CB	10:AJ:76:ASN:HB2	2.24	0.68
16:AP:67:THR:HB	16:AP:70:ALA:HB2	1.74	0.68
24:AY:1:A:H5'	25:AZ:300:ARG:NH1	2.09	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:B9:10:ILE:HG22	35:B9:10:ILE:O	1.92	0.68
36:BA:996:A:H4'	53:BU:92:ARG:NE	2.08	0.68
36:BA:1748:G:H8	36:BA:1748:G:H5'	1.59	0.68
39:BD:24:ILE:C	39:BD:26:LYS:H	2.00	0.68
1:CA:784:C:H4'	36:DA:1837:C:OP1	1.93	0.68
9:CI:42:ARG:HH22	9:CI:75:ASP:CG	2.02	0.68
10:CJ:6:ILE:HG22	10:CJ:98:ILE:HD12	1.74	0.68
14:CN:44:LEU:HD12	14:CN:44:LEU:O	1.94	0.68
34:D8:61:LEU:CD1	34:D8:61:LEU:N	2.56	0.68
46:DN:61:ARG:HG3	46:DN:61:ARG:HH11	1.58	0.68
49:DQ:32:TYR:O	49:DQ:105:GLU:HB2	1.94	0.68
52:DT:35:LYS:HZ3	52:DT:41:ARG:HD2	1.59	0.68
54:DV:17:GLY:C	54:DV:18:LEU:HD13	2.18	0.68
1:AA:187:C:H2'	1:AA:188:C:C6	2.29	0.68
1:AA:953:G:H5'	1:AA:965:A:H61	1.59	0.68
2:AB:25:ASN:ND2	2:AB:27:LYS:H	1.91	0.68
25:AZ:64:ASN:H	25:AZ:64:ASN:HD22	1.41	0.68
36:BA:139(A):G:N2	56:BX:44:GLU:OE1	2.27	0.68
36:BA:604:G:H2'	36:BA:605:C:O2	1.94	0.68
36:BA:1005:C:H2'	36:BA:1006:C:C6	2.29	0.68
36:BA:1005:C:H2'	36:BA:1006:C:H6	1.59	0.68
43:BH:16:SER:CB	43:BH:27:LYS:HB2	2.22	0.68
43:BH:118:PRO:CG	43:BH:121:ILE:HD12	2.24	0.68
43:BH:158:HIS:HD1	43:BH:168:PRO:HB2	1.59	0.68
3:CC:5:ILE:HG12	3:CC:10:PHE:HB2	1.76	0.68
7:CG:78:ARG:NH1	7:CG:80:VAL:HG21	2.07	0.68
14:CN:57:ARG:HB2	14:CN:57:ARG:HH11	1.59	0.68
27:D1:16:ASN:HD22	27:D1:37:ILE:CG2	2.07	0.68
31:D5:16:ARG:HD2	31:D5:20:ARG:HH12	1.58	0.68
36:DA:813:U:H2'	36:DA:814:C:C6	2.29	0.68
36:DA:1589:C:H2'	36:DA:1590:U:C6	2.28	0.68
36:DA:2111:C:H1'	36:DA:2118:U:C4'	2.24	0.68
36:DA:2485:G:H5"	49:DQ:46:GLN:HE21	1.59	0.68
43:DH:76:VAL:C	43:DH:78:GLY:H	2.02	0.68
50:DR:58:GLY:HA2	50:DR:80:PHE:CE2	2.29	0.68
55:DW:4:LYS:HG2	55:DW:5:ALA:N	2.09	0.68
58:DZ:151:HIS:HA	58:DZ:171:ILE:HG12	1.76	0.68
32:B6:33:LYS:HA	32:B6:33:LYS:CE	2.14	0.67
36:BA:2491:U:H5'	36:BA:2570:G:H5"	1.74	0.67
51:BS:34:HIS:HB3	51:BS:53:SER:HB3	1.76	0.67
51:BS:99:LYS:HB3	51:BS:99:LYS:HZ2	1.57	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:585:G:H4'	12:CL:8:ASN:HD21	1.58	0.67
1:CA:628:G:O2'	1:CA:629:G:H5'	1.94	0.67
1:CA:939:G:H5"	7:CG:102:ARG:NH1	2.09	0.67
1:CA:1316:G:N2	1:CA:1318:A:H3'	2.09	0.67
2:CB:80:ILE:HD12	2:CB:80:ILE:N	2.09	0.67
9:CI:83:ARG:O	9:CI:86:VAL:HG12	1.94	0.67
20:CT:63:ILE:HG21	20:CT:81:LYS:HG3	1.75	0.67
25:CZ:64:ASN:HD22	25:CZ:64:ASN:H	1.41	0.67
36:DA:614(A):U:H4'	36:DA:614(B):G:C5'	2.25	0.67
36:DA:654(P):C:H2'	36:DA:654(Q):C:O4'	1.94	0.67
36:DA:672:C:O2'	36:DA:673:C:H5"	1.93	0.67
36:DA:1071:G:H1'	36:DA:1089:G:H2'	1.75	0.67
36:DA:1242:A:H5'	36:DA:1243:G:OP2	1.93	0.67
40:DE:81:ILE:HG22	40:DE:81:ILE:O	1.93	0.67
53:DU:66:ASN:O	53:DU:70:ARG:HB2	1.93	0.67
1:AA:624:C:H2'	1:AA:625:G:C8	2.29	0.67
1:AA:1468:A:H2'	1:AA:1469:G:O4'	1.94	0.67
3:AC:50:ALA:HA	3:AC:72:LYS:HB2	1.75	0.67
3:AC:95:THR:HG22	3:AC:95:THR:O	1.94	0.67
4:AD:149:ALA:HB3	4:AD:152:SER:OG	1.94	0.67
28:B2:3:LEU:O	28:B2:3:LEU:HD23	1.94	0.67
36:BA:172:C:H2'	36:BA:173:G:O4'	1.95	0.67
36:BA:1242:A:H5'	36:BA:1243:G:OP2	1.94	0.67
36:BA:2133:G:H2'	36:BA:2157:G:N2	2.09	0.67
39:BD:71:ASP:HB2	39:BD:103:ARG:NH2	2.02	0.67
40:BE:33:VAL:HG12	40:BE:89:ASP:O	1.93	0.67
40:BE:101:ARG:HH11	40:BE:169:ASN:ND2	1.93	0.67
41:BF:53:THR:HG23	41:BF:55:GLY:H	1.59	0.67
46:BN:96:GLU:CD	46:BN:96:GLU:H	2.02	0.67
51:BS:52:SER:CB	51:BS:55:ALA:HB3	2.24	0.67
57:BY:13:VAL:HG23	57:BY:73:ARG:O	1.94	0.67
16:CP:49:LEU:HD12	16:CP:50:LYS:N	2.09	0.67
34:D8:15:LYS:HB2	48:DP:65:ARG:HH21	1.59	0.67
36:DA:1314:C:H5'	36:DA:1314:C:C6	2.30	0.67
36:DA:2118:U:H5'	36:DA:2147:G:H21	1.60	0.67
46:DN:134:ARG:O	46:DN:136:GLU:N	2.28	0.67
51:DS:89:ARG:HH11	51:DS:89:ARG:HG2	1.57	0.67
7:AG:7:ALA:O	7:AG:8:GLU:HB2	1.94	0.67
22:AV:44:G:C3'	22:AV:45:U:H5'	2.25	0.67
24:AY:72:U:C2'	24:AY:73:G:H5"	2.23	0.67
36:BA:1899:G:O2'	36:BA:1900:A:H5"	1.94	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2200:C:H42	36:BA:2223:G:H1	1.42	0.67
36:BA:2485:G:H5"	49:BQ:46:GLN:HE21	1.59	0.67
43:BH:76:VAL:C	43:BH:78:GLY:H	2.02	0.67
43:BH:153:LYS:HD3	43:BH:153:LYS:N	2.04	0.67
47:BO:65:THR:HG23	47:BO:67:LYS:N	2.09	0.67
7:CG:78:ARG:HG3	7:CG:78:ARG:O	1.94	0.67
13:CM:65:LYS:H	13:CM:65:LYS:CD	2.07	0.67
25:CZ:24:LYS:HG3	25:CZ:25:THR:H	1.59	0.67
26:D0:16:SER:HB2	36:DA:2262:U:H5	1.59	0.67
36:DA:476:G:H4'	36:DA:502:A:N1	2.09	0.67
36:DA:491:G:H2'	36:DA:492:A:H8	1.57	0.67
37:DB:66:A:H61	37:DB:108:U:H2'	1.59	0.67
20:AT:92:LEU:C	20:AT:94:ALA:H	2.02	0.67
25:AZ:265:THR:HG21	25:AZ:293:VAL:CG2	2.23	0.67
31:B5:16:ARG:NH1	31:B5:17:ASP:OD1	2.28	0.67
36:BA:1762:A:H8	36:BA:1762:A:O5'	1.77	0.67
36:BA:1771:C:HO2'	36:BA:1786:A:H8	1.41	0.67
39:BD:62:TYR:HE1	39:BD:64:ILE:HA	1.60	0.67
40:BE:77:ILE:HG22	40:BE:78:LEU:H	1.60	0.67
46:BN:66:LYS:O	46:BN:70:LYS:HB3	1.93	0.67
49:BQ:51:ARG:O	49:BQ:55:VAL:HG12	1.95	0.67
57:BY:81:LYS:HD2	57:BY:96:ILE:CG1	2.24	0.67
1:CA:1211:U:H5'	1:CA:1212:U:OP1	1.95	0.67
6:CF:62:TRP:C	6:CF:63:TYR:HD1	2.03	0.67
11:CK:127:LYS:O	11:CK:129:SER:N	2.27	0.67
15:CO:79:ARG:O	15:CO:82:ILE:HG22	1.95	0.67
24:CY:16:H2U:H5'	24:CY:17:H2U:C5'	2.23	0.67
36:DA:321:G:H21	41:DF:165:ARG:HE	1.40	0.67
38:DC:10:LEU:HD12	38:DC:32:LEU:HA	1.77	0.67
40:DE:128:SER:OG	40:DE:129:HIS:N	2.22	0.67
42:DG:16:ARG:HH22	42:DG:28:VAL:CG1	2.07	0.67
47:DO:1:MET:HG3	47:DO:67:LYS:HG2	1.77	0.67
52:DT:28:VAL:HG12	52:DT:29:ARG:HD3	1.75	0.67
1:AA:197:A:H4'	1:AA:198:G:O5'	1.94	0.67
1:AA:858:G:H8	1:AA:858:G:C5'	2.07	0.67
16:AP:49:LEU:HD12	16:AP:50:LYS:N	2.09	0.67
24:AY:6:C:O2'	24:AY:7:G:H5'	1.94	0.67
36:BA:271(K):U:H3'	36:BA:271(L):U:H5'	1.77	0.67
36:BA:287:C:H2'	36:BA:288:C:C6	2.30	0.67
37:BB:42:C:H4'	42:BG:67:LYS:HG2	1.76	0.67
38:BC:75:LEU:HD11	38:BC:113:VAL:HG13	1.77	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BE:63:LEU:O	40:BE:63:LEU:HD23	1.94	0.67
48:BP:23:PRO:CD	48:BP:33:ARG:HE	2.08	0.67
51:BS:13:ARG:CG	51:BS:14:VAL:H	2.07	0.67
58:BZ:178:GLU:N	58:BZ:178:GLU:OE1	2.28	0.67
1:CA:1486:G:H2'	1:CA:1487:G:O4'	1.95	0.67
1:CA:1513:A:H2'	1:CA:1514:C:C6	2.30	0.67
2:CB:96:ARG:HD3	2:CB:148:TYR:CE1	2.28	0.67
2:CB:204:ASN:HD22	2:CB:206:ASP:H	1.42	0.67
4:CD:145:GLU:CD	4:CD:145:GLU:H	2.00	0.67
12:CL:89:ARG:NH1	12:CL:91:LYS:HG2	2.10	0.67
24:CY:40:C:H2'	24:CY:41:C:H5"	1.76	0.67
34:D8:61:LEU:HD22	34:D8:62:LEU:N	2.09	0.67
36:DA:1005:C:H2'	36:DA:1006:C:C6	2.30	0.67
36:DA:2133:G:H2'	36:DA:2157:G:N2	2.09	0.67
46:DN:74:ARG:HH21	46:DN:83:LYS:HD2	1.59	0.67
58:DZ:126:VAL:HA	58:DZ:163:LEU:HA	1.76	0.67
1:AA:1416:G:H2'	1:AA:1417:G:C5'	2.23	0.67
2:AB:96:ARG:HD3	2:AB:148:TYR:HE1	1.59	0.67
22:AV:63:G:H2'	22:AV:64:A:O4'	1.95	0.67
36:BA:559:G:H22	53:BU:49:HIS:CD2	2.13	0.67
36:BA:943:U:OP2	48:BP:38:GLN:CD	2.38	0.67
38:BC:5:LYS:HA	38:BC:8:ARG:HE	1.59	0.67
42:BG:34:LEU:HB3	42:BG:161:THR:HG22	1.76	0.67
46:BN:3:THR:CG2	46:BN:5:VAL:HG23	2.24	0.67
52:BT:28:VAL:HG21	52:BT:46:GLU:HG3	1.74	0.67
52:BT:78:LEU:O	52:BT:79:HIS:HD2	1.77	0.67
54:BV:2:PHE:CD1	54:BV:2:PHE:C	2.73	0.67
1:CA:624:C:H4'	16:CP:11:SER:H	1.60	0.67
9:CI:53:VAL:H	9:CI:95:LYS:HZ3	1.43	0.67
16:CP:43:LYS:HA	16:CP:48:TRP:CB	2.25	0.67
27:D1:75:GLU:O	27:D1:78:LYS:HG2	1.93	0.67
30:D4:26:SER:HB3	42:DG:105:LYS:NZ	2.09	0.67
36:DA:935:C:H2'	36:DA:936:C:H6	1.58	0.67
36:DA:1060:U:C1'	36:DA:1061:U:H5"	2.23	0.67
36:DA:2563:U:H4'	47:DO:28:SER:HA	1.77	0.67
36:DA:2853:C:H2'	36:DA:2854:G:H8	1.59	0.67
40:DE:201:THR:C	40:DE:202:LYS:HD2	2.19	0.67
53:DU:76:TYR:CE1	53:DU:80:ILE:HG13	2.30	0.67
1:AA:344:A:H4'	1:AA:345:C:OP2	1.93	0.67
3:AC:3:ASN:CG	3:AC:4:LYS:H	2.02	0.67
12:AL:47:LYS:O	12:AL:49:ASN:N	2.27	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:491:G:H2'	36:BA:492:A:H8	1.60	0.67
36:BA:1480:G:H2'	36:BA:1481:U:H5'	1.74	0.67
41:BF:28:ILE:H	41:BF:28:ILE:CD1	2.06	0.67
52:BT:94:ALA:C	52:BT:96:ARG:H	2.03	0.67
57:BY:8:LYS:HE2	57:BY:72:VAL:HG23	1.75	0.67
57:BY:9:LYS:HG2	57:BY:10:GLY:N	2.03	0.67
1:CA:80:G:C2	1:CA:90:U:H5'	2.30	0.67
1:CA:1272:G:H8	1:CA:1272:G:H5'	1.60	0.67
4:CD:28:SER:HB3	4:CD:29:PRO:CD	2.23	0.67
13:CM:5:ALA:CB	13:CM:66:LEU:HD23	2.25	0.67
17:CQ:15:MET:HE1	17:CQ:43:LEU:HD22	1.75	0.67
20:CT:47:GLY:O	20:CT:49:ALA:N	2.24	0.67
36:DA:860:U:C5	36:DA:917:A:N7	2.60	0.67
36:DA:1484:G:H2'	36:DA:1485:G:C5'	2.05	0.67
36:DA:2110:G:N1	36:DA:2178:C:H5	1.93	0.67
51:DS:52:SER:CB	51:DS:55:ALA:HB3	2.24	0.67
53:DU:69:CYS:O	53:DU:74:LEU:HD12	1.94	0.67
57:DY:81:LYS:HD2	57:DY:96:ILE:HG13	1.75	0.67
2:AB:44:LEU:HA	2:AB:47:THR:HB	1.76	0.67
13:AM:81:LEU:HD12	13:AM:86:CYS:SG	2.35	0.67
15:AO:82:ILE:HD11	15:AO:88:ARG:HB2	1.75	0.67
32:B6:6:ARG:HB3	32:B6:6:ARG:NH1	2.10	0.67
41:BF:65:TRP:CZ3	41:BF:75:HIS:HD2	2.13	0.67
43:BH:98:LEU:HB2	43:BH:125:VAL:CG2	2.25	0.67
46:BN:32:THR:C	46:BN:34:LEU:H	2.03	0.67
49:BQ:27:VAL:H	49:BQ:137:TYR:HD2	1.41	0.67
52:BT:82:LEU:HD12	52:BT:82:LEU:N	2.09	0.67
58:BZ:128:VAL:HG22	58:BZ:129:SER:N	2.08	0.67
1:CA:191:G:N3	20:CT:105:SER:HB3	2.10	0.67
1:CA:376:G:H4'	16:CP:5:ARG:HH11	1.59	0.67
1:CA:975:A:H4'	1:CA:976:G:C5'	2.21	0.67
1:CA:1352:C:H2'	1:CA:1353:G:C8	2.30	0.67
3:CC:32:LEU:HD22	3:CC:59:ARG:NH1	2.10	0.67
4:CD:18:LYS:H	4:CD:33:MET:CE	2.07	0.67
22:CW:37:A:H3'	22:CW:38:A:C8	2.30	0.67
31:D5:25:LEU:HD12	55:DW:19:LEU:HG	1.76	0.67
36:DA:796:C:H2'	36:DA:797:C:C6	2.29	0.67
52:DT:6:LEU:HD23	52:DT:9:LEU:HD12	1.76	0.67
52:DT:13:ARG:HA	52:DT:13:ARG:CZ	2.25	0.67
52:DT:89:VAL:CG1	52:DT:91:ARG:HG3	2.25	0.67
58:DZ:23:LYS:O	58:DZ:24:LEU:HB3	1.95	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:190:U:H2'	1:AA:191:G:H8	1.60	0.67
1:AA:403:C:O2'	1:AA:404:U:H5'	1.94	0.67
1:AA:979:C:C2'	1:AA:980:C:H5"	2.25	0.67
1:AA:1502:A:H2	1:AA:1505:G:N1	1.87	0.67
13:AM:15:VAL:O	13:AM:19:LEU:HD23	1.94	0.67
25:AZ:153:GLU:O	25:AZ:157:LEU:HD13	1.95	0.67
34:B8:61:LEU:HD22	34:B8:62:LEU:N	2.10	0.67
36:BA:637:A:OP2	48:BP:115:LEU:HB2	1.95	0.67
42:BG:106:LEU:HD12	42:BG:141:PHE:HE1	1.59	0.67
1:CA:423:G:H2'	1:CA:424:G:H5'	1.77	0.67
1:CA:1442(A):G:H3'	1:CA:1442(B):A:C5'	2.24	0.67
2:CB:47:THR:HA	2:CB:202:PRO:HG2	1.76	0.67
31:D5:40:LYS:HE2	31:D5:44:THR:O	1.94	0.67
36:DA:197:A:C8	36:DA:197:A:H5'	2.30	0.67
36:DA:1541:G:H1'	36:DA:1542:A:C4	2.29	0.67
38:DC:214:VAL:CG2	38:DC:224:ILE:HD13	2.25	0.67
41:DF:29:ASN:ND2	41:DF:32:LEU:HB2	2.07	0.67
41:DF:65:TRP:CZ3	41:DF:75:HIS:HD2	2.13	0.67
42:DG:12:TYR:HA	42:DG:16:ARG:HG2	1.77	0.67
43:DH:118:PRO:CG	43:DH:121:ILE:HD12	2.23	0.67
46:DN:126:PRO:O	46:DN:127:ASP:HB2	1.93	0.67
58:DZ:29:TYR:HB3	58:DZ:34:ASN:CB	2.25	0.67
1:AA:80:G:C2	1:AA:90:U:H5'	2.29	0.67
1:AA:628:G:O2'	1:AA:629:G:H5'	1.95	0.67
1:AA:1272:G:H5'	1:AA:1272:G:H8	1.60	0.67
1:AA:1306:A:N6	1:AA:1331:G:H1'	2.09	0.67
3:AC:49:SER:C	3:AC:51:GLY:H	2.01	0.67
3:AC:134:ILE:HG22	3:AC:168:ALA:HB3	1.76	0.67
17:AQ:70:ARG:HD2	17:AQ:70:ARG:N	2.09	0.67
25:AZ:143:ASP:HB3	25:AZ:146:LEU:HB3	1.75	0.67
25:AZ:145:GLU:OE2	25:AZ:149:LEU:HD22	1.95	0.67
36:BA:272(D):G:H1	36:BA:364:C:H42	1.41	0.67
36:BA:1796:U:H2'	36:BA:1797:C:C6	2.30	0.67
36:BA:2178:C:H2'	36:BA:2179:C:C5'	2.24	0.67
40:BE:116:VAL:HG22	40:BE:117:MET:N	2.09	0.67
46:BN:74:ARG:HH21	46:BN:83:LYS:HD2	1.60	0.67
47:BO:88:ASN:ND2	47:BO:92:GLU:HB2	2.10	0.67
52:BT:6:LEU:HD23	52:BT:9:LEU:HD12	1.76	0.67
53:BU:90:VAL:HG12	53:BU:91:ASP:N	2.10	0.67
54:BV:39:LEU:HA	54:BV:47:VAL:CG1	2.25	0.67
55:BW:4:LYS:HG2	55:BW:5:ALA:N	2.09	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:190:U:H2'	1:CA:191:G:H8	1.60	0.67
1:CA:1306:A:N6	1:CA:1331:G:H1'	2.10	0.67
3:CC:50:ALA:HA	3:CC:72:LYS:HB2	1.77	0.67
17:CQ:58:GLU:HB2	17:CQ:74:LEU:HB3	1.77	0.67
25:CZ:145:GLU:OE2	25:CZ:149:LEU:HD22	1.95	0.67
27:D1:26:ARG:HG2	27:D1:27:GLU:HG3	1.75	0.67
34:D8:50:LEU:HD12	34:D8:51:ALA:H	1.60	0.67
36:DA:943:U:OP2	48:DP:38:GLN:CD	2.38	0.67
36:DA:1190:G:H5'	48:DP:35:HIS:N	2.09	0.67
36:DA:1331:A:HO2'	36:DA:1332:G:H8	1.41	0.67
37:DB:7:G:H2'	37:DB:8:U:H5"	1.77	0.67
39:DD:27:THR:HG23	39:DD:83:GLU:HG2	1.76	0.67
41:DF:133:ASN:O	41:DF:135:LYS:N	2.28	0.67
46:DN:3:THR:HG22	46:DN:4:TYR:N	2.09	0.67
48:DP:59:LEU:HA	48:DP:61:ARG:HE	1.60	0.67
53:DU:92:ARG:NH2	54:DV:11:GLN:H	1.93	0.67
58:DZ:99:TYR:HD2	58:DZ:123:ASP:HB3	1.59	0.67
1:AA:1039:C:H2'	1:AA:1040:U:C5	2.30	0.66
1:AA:1316:G:N2	1:AA:1318:A:H3'	2.10	0.66
3:AC:7:PRO:O	3:AC:11:ARG:HG2	1.95	0.66
5:AE:100:VAL:HG12	5:AE:118:ILE:HG22	1.77	0.66
14:AN:12:ARG:HH11	14:AN:14:PRO:HG2	1.57	0.66
20:AT:49:ALA:O	20:AT:53:LEU:HD13	1.95	0.66
36:BA:1161:C:H1'	54:BV:8:GLY:O	1.95	0.66
36:BA:1464:C:HO2'	36:BA:1528:A:H8	1.42	0.66
36:BA:2308:G:O6	36:BA:2310:A:H2'	1.95	0.66
39:BD:30:GLU:HB3	39:BD:83:GLU:OE1	1.95	0.66
39:BD:118:VAL:HG22	39:BD:119:ALA:N	2.10	0.66
40:BE:201:THR:C	40:BE:202:LYS:HD2	2.20	0.66
41:BF:133:ASN:O	41:BF:135:LYS:N	2.29	0.66
46:BN:46:VAL:O	46:BN:47:ALA:HB3	1.95	0.66
51:BS:89:ARG:HG2	51:BS:92:TYR:HA	1.76	0.66
52:BT:2:ASN:ND2	52:BT:7:ILE:HD11	2.05	0.66
57:BY:2:ARG:CD	57:BY:3:VAL:HG23	2.24	0.66
58:BZ:115:GLY:HA2	58:BZ:175:VAL:O	1.95	0.66
1:CA:250:A:H4'	1:CA:251:G:O5'	1.95	0.66
1:CA:975:A:H8	1:CA:975:A:H5'	1.60	0.66
10:CJ:24:VAL:HG21	10:CJ:37:PRO:HG3	1.76	0.66
20:CT:10:LEU:HD12	20:CT:11:SER:H	1.59	0.66
36:DA:628:G:H2'	36:DA:629:G:C5'	2.18	0.66
36:DA:862:G:H2'	36:DA:863:A:O4'	1.95	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DB:40:U:H3'	37:DB:41:U:H5"	1.78	0.66
40:DE:63:LEU:O	40:DE:63:LEU:HD23	1.94	0.66
40:DE:137:HIS:HB3	40:DE:138:PRO:HD2	1.77	0.66
42:DG:51:ARG:HH11	42:DG:53:LEU:CD2	2.08	0.66
46:DN:3:THR:CG2	46:DN:5:VAL:HG23	2.25	0.66
47:DO:24:VAL:HG12	47:DO:33:ALA:HB2	1.77	0.66
53:DU:88:ILE:C	53:DU:90:VAL:H	2.02	0.66
54:DV:18:LEU:CD2	54:DV:19:LYS:H	2.07	0.66
54:DV:39:LEU:HD12	54:DV:47:VAL:HG11	1.78	0.66
57:DY:81:LYS:HD2	57:DY:96:ILE:CG1	2.24	0.66
3:AC:14:ILE:CG1	3:AC:15:THR:N	2.58	0.66
13:AM:11:ARG:HG2	13:AM:12:ASN:HD22	1.58	0.66
19:AS:16:LEU:O	19:AS:19:VAL:N	2.28	0.66
26:B0:49:LYS:N	26:B0:80:HIS:HD1	1.87	0.66
28:B2:35:LEU:CG	28:B2:53:LEU:HD13	2.25	0.66
36:BA:2174:C:H1'	38:BC:217:THR:O	1.95	0.66
36:BA:2577:A:H5"	36:BA:2578:G:H5'	1.77	0.66
36:BA:2758:A:N6	43:BH:67:LEU:HD11	2.10	0.66
38:BC:82:LYS:HA	38:BC:82:LYS:HE2	1.77	0.66
57:BY:81:LYS:HD2	57:BY:96:ILE:HG13	1.76	0.66
58:BZ:119:GLU:HG2	58:BZ:122:ARG:NH1	2.10	0.66
1:CA:1432:G:OP1	52:DT:107:ASP:HB2	1.95	0.66
10:CJ:61:GLU:CG	14:CN:58:LYS:HE2	2.22	0.66
14:CN:12:ARG:HH11	14:CN:14:PRO:HG2	1.59	0.66
25:CZ:317:GLU:HG3	25:CZ:404:LEU:HD21	1.78	0.66
27:D1:25:LYS:HG3	36:DA:388:G:OP1	1.94	0.66
56:DX:13:LEU:HA	56:DX:18:TYR:CE1	2.30	0.66
1:AA:227:G:H2'	1:AA:228:A:C5'	2.14	0.66
1:AA:977:A:O2'	1:AA:978:A:C5'	2.42	0.66
1:AA:979:C:H2'	1:AA:980:C:H5"	1.77	0.66
1:AA:1277:C:O2'	1:AA:1279:A:H8	1.78	0.66
5:AE:51:VAL:HB	5:AE:52:PRO:HD3	1.76	0.66
27:B1:73:LEU:HD22	27:B1:94:LEU:HB3	1.77	0.66
31:B5:36:CYS:SG	31:B5:48:GLU:O	2.53	0.66
36:BA:877:U:O2'	36:BA:878:A:H5"	1.95	0.66
39:BD:118:VAL:HG22	39:BD:119:ALA:H	1.60	0.66
54:BV:18:LEU:CD2	54:BV:19:LYS:H	2.09	0.66
1:CA:722:A:H2'	1:CA:722:A:N3	2.10	0.66
1:CA:946:A:H2'	1:CA:947:G:C8	2.29	0.66
1:CA:977:A:O2'	1:CA:978:A:C5'	2.43	0.66
2:CB:204:ASN:HD22	2:CB:204:ASN:C	2.02	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CC:189:ALA:HB3	3:CC:196:LEU:HB2	1.77	0.66
17:CQ:59:ILE:HG23	17:CQ:71:PHE:HB3	1.76	0.66
20:CT:92:LEU:C	20:CT:94:ALA:H	2.02	0.66
22:CW:31:A:N1	22:CW:39:U:O4	2.28	0.66
25:CZ:16:THR:HG23	25:CZ:79:HIS:NE2	2.10	0.66
36:DA:271(K):U:H3'	36:DA:271(L):U:H5'	1.77	0.66
36:DA:272(D):G:H1	36:DA:364:C:H42	1.42	0.66
36:DA:523:C:H2'	36:DA:524:U:H5'	1.78	0.66
36:DA:672:C:C2'	36:DA:673:C:H5"	2.25	0.66
36:DA:2174:C:H1'	38:DC:217:THR:O	1.94	0.66
43:DH:19:VAL:HG12	43:DH:20:ALA:N	2.09	0.66
57:DY:2:ARG:CD	57:DY:3:VAL:HG23	2.24	0.66
1:AA:351:G:H4'	1:AA:352:C:OP1	1.95	0.66
1:AA:848:C:O2'	1:AA:849:C:H5'	1.94	0.66
1:AA:1211:U:H5'	1:AA:1212:U:OP1	1.95	0.66
2:AB:151:GLY:O	2:AB:153:ARG:N	2.27	0.66
28:B2:9:GLN:OE1	28:B2:60:LEU:HD21	1.95	0.66
36:BA:729:G:OP2	39:BD:13:ARG:NH1	2.28	0.66
39:BD:28:GLU:HB2	39:BD:29:PRO:CD	2.26	0.66
42:BG:103:LEU:O	42:BG:107:LEU:HD22	1.94	0.66
49:BQ:1:MET:HE1	49:BQ:45:GLN:HA	1.78	0.66
1:CA:1086:U:H2'	1:CA:1087:G:C5'	2.25	0.66
4:CD:126:ILE:HD12	4:CD:126:ILE:N	2.11	0.66
6:CF:67:MET:HB2	6:CF:68:PRO:HD2	1.77	0.66
24:CY:51:G:H1	24:CY:63:C:H42	1.43	0.66
36:DA:1076:C:H5"	58:DZ:111:VAL:CG1	2.26	0.66
41:DF:89:VAL:HG12	41:DF:90:PHE:N	2.10	0.66
48:DP:146:VAL:O	48:DP:148:LEU:HG	1.96	0.66
2:AB:204:ASN:HD22	2:AB:204:ASN:C	2.02	0.66
2:AB:215:LEU:O	2:AB:219:VAL:HG23	1.96	0.66
4:AD:129:ASN:N	4:AD:129:ASN:HD22	1.94	0.66
13:AM:57:ARG:NH1	30:B4:34:GLU:HG3	2.11	0.66
22:AW:69:G:C2'	22:AW:70:G:H5"	2.26	0.66
25:AZ:24:LYS:HG3	25:AZ:25:THR:H	1.60	0.66
32:B6:25:LYS:HE2	34:B8:34:TRP:HE1	1.61	0.66
36:BA:614(A):U:H4'	36:BA:614(B):G:C5'	2.24	0.66
36:BA:709:U:H2'	36:BA:710:G:C8	2.29	0.66
36:BA:2563:U:H4'	47:BO:28:SER:HA	1.77	0.66
37:BB:25:A:H2'	37:BB:25:A:N3	2.09	0.66
50:BR:100:LEU:HD11	50:BR:113:LEU:HB2	1.77	0.66
51:BS:15:ARG:O	51:BS:18:ILE:HG13	1.95	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:BU:92:ARG:NH2	54:BV:11:GLN:H	1.92	0.66
9:CI:9:ARG:CG	9:CI:14:VAL:HG13	2.26	0.66
22:CV:51:U:H2'	22:CV:52:G:C8	2.30	0.66
28:D2:38:GLN:OE1	28:D2:44:LEU:HD13	1.95	0.66
31:D5:16:ARG:HD2	31:D5:20:ARG:NH1	2.10	0.66
36:DA:172:C:H2'	36:DA:173:G:O4'	1.95	0.66
36:DA:287:C:H2'	36:DA:288:C:C6	2.30	0.66
36:DA:709:U:H2'	36:DA:710:G:C8	2.31	0.66
36:DA:2485:G:H5"	49:DQ:46:GLN:NE2	2.11	0.66
42:DG:51:ARG:HA	42:DG:51:ARG:CZ	2.26	0.66
51:DS:54:LEU:CD1	51:DS:58:LEU:H	2.09	0.66
51:DS:88:ASP:OD1	51:DS:89:ARG:N	2.28	0.66
1:AA:149:A:H2'	1:AA:150:C:C6	2.30	0.66
1:AA:452:A:O2'	1:AA:453:A:H8	1.72	0.66
11:AK:127:LYS:O	11:AK:129:SER:N	2.28	0.66
13:AM:65:LYS:H	13:AM:65:LYS:CD	2.07	0.66
17:AQ:58:GLU:HB2	17:AQ:74:LEU:HB3	1.78	0.66
31:B5:40:LYS:HG2	31:B5:46:CYS:HB2	1.78	0.66
32:B6:35:GLU:CB	32:B6:51:GLU:HB2	2.21	0.66
36:BA:1600:C:O2'	36:BA:1601:G:H5'	1.95	0.66
36:BA:2108:C:H2'	36:BA:2108:C:O2	1.94	0.66
36:BA:2291:U:H2'	36:BA:2292:C:C6	2.30	0.66
38:BC:73:ARG:HE	38:BC:110:PHE:HD1	1.41	0.66
1:CA:8:A:H62	4:CD:208:SER:HB2	1.60	0.66
6:CF:82:ARG:HB2	6:CF:85:VAL:HG23	1.76	0.66
9:CI:53:VAL:N	9:CI:95:LYS:HZ3	1.92	0.66
22:CV:44:G:C3'	22:CV:45:U:H5'	2.26	0.66
36:DA:212:G:O2'	36:DA:213:A:H5'	1.96	0.66
36:DA:2308:G:O6	36:DA:2310:A:H2'	1.96	0.66
36:DA:2472:G:H5'	36:DA:2473:U:H5"	1.77	0.66
39:DD:62:TYR:HE1	39:DD:64:ILE:HA	1.60	0.66
41:DF:132:VAL:HG22	41:DF:133:ASN:N	2.07	0.66
41:DF:160:ASN:ND2	41:DF:162:LEU:HD13	2.09	0.66
42:DG:82:LEU:HD13	42:DG:87:PRO:CB	2.25	0.66
43:DH:117:PRO:HB3	43:DH:123:PHE:CE1	2.31	0.66
48:DP:66:GLY:O	48:DP:67:MET:HB2	1.96	0.66
58:DZ:40:ASP:HB3	58:DZ:43:GLU:CG	2.24	0.66
1:AA:228:A:H5'	1:AA:228:A:C8	2.25	0.66
1:AA:426:G:P	4:AD:36:ARG:HH21	2.18	0.66
3:AC:5:ILE:HG12	3:AC:10:PHE:HB2	1.76	0.66
3:AC:76:VAL:HG21	3:AC:103:VAL:HG21	1.78	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AF:46:ARG:HH22	18:AR:37:VAL:HG11	1.61	0.66
7:AG:78:ARG:NH1	7:AG:80:VAL:HG21	2.11	0.66
17:AQ:15:MET:HE1	17:AQ:43:LEU:HD22	1.78	0.66
35:B9:10:ILE:O	35:B9:11:CYS:HB3	1.95	0.66
36:BA:1059:G:H1'	45:BK:126:UNK:O	1.96	0.66
36:BA:2206:G:N2	36:BA:2207:G:H5'	2.10	0.66
40:BE:128:SER:OG	40:BE:129:HIS:N	2.23	0.66
43:BH:98:LEU:HD12	43:BH:102:ALA:O	1.96	0.66
48:BP:114:ILE:HD13	48:BP:127:ALA:HB2	1.78	0.66
48:BP:124:LYS:HD3	48:BP:143:GLY:HA3	1.77	0.66
55:BW:6:ILE:HG12	55:BW:104:THR:HG22	1.75	0.66
57:BY:95:LYS:HE3	57:BY:100:ALA:HB2	1.76	0.66
1:CA:426:G:P	4:CD:36:ARG:HH21	2.19	0.66
12:CL:82:VAL:H	12:CL:106:ASP:CG	2.04	0.66
20:CT:49:ALA:O	20:CT:53:LEU:HD13	1.96	0.66
25:CZ:153:GLU:O	25:CZ:157:LEU:HD13	1.96	0.66
25:CZ:163:PHE:HD1	25:CZ:164:PRO:HD2	1.61	0.66
31:D5:36:CYS:SG	31:D5:48:GLU:O	2.54	0.66
32:D6:19:ARG:HD3	32:D6:20:ASN:H	1.59	0.66
36:DA:106:C:H2'	36:DA:107:C:C6	2.30	0.66
36:DA:1005:C:H2'	36:DA:1006:C:H6	1.61	0.66
38:DC:82:LYS:HE2	38:DC:82:LYS:HA	1.78	0.66
39:DD:99:ASP:OD1	39:DD:99:ASP:C	2.37	0.66
41:DF:160:ASN:OD1	41:DF:163:VAL:HG23	1.94	0.66
3:AC:58:GLU:HB2	3:AC:65:ALA:HB2	1.78	0.66
3:AC:94:LEU:O	3:AC:95:THR:HB	1.95	0.66
10:AJ:50:ILE:H	10:AJ:50:ILE:CD1	1.95	0.66
17:AQ:5:VAL:HG22	17:AQ:60:ILE:HD12	1.77	0.66
19:AS:43:GLU:O	19:AS:45:VAL:HG13	1.95	0.66
29:B3:35:ARG:HH11	29:B3:35:ARG:CB	2.05	0.66
36:BA:271(L):U:C5'	36:BA:271(M):G:H5'	2.21	0.66
36:BA:1190:G:H5'	48:BP:35:HIS:N	2.10	0.66
36:BA:2777:G:H5"	36:BA:2778:A:H5'	1.78	0.66
39:BD:267:SER:O	39:BD:269:PHE:N	2.29	0.66
42:BG:42:GLY:O	42:BG:44:GLY:N	2.28	0.66
47:BO:114:ILE:HD12	47:BO:114:ILE:N	2.09	0.66
48:BP:146:VAL:O	48:BP:148:LEU:HG	1.96	0.66
49:BQ:12:GLN:HG2	49:BQ:73:PRO:HD2	1.78	0.66
51:BS:106:ARG:HH12	51:BS:108:GLY:N	1.94	0.66
52:BT:89:VAL:CG1	52:BT:91:ARG:HG3	2.26	0.66
58:BZ:114:GLY:O	58:BZ:146:ILE:HG22	1.96	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:624:C:H2'	1:CA:625:G:C8	2.30	0.66
13:CM:5:ALA:HB2	13:CM:66:LEU:HD23	1.77	0.66
13:CM:10:PRO:HB2	13:CM:18:ALA:CB	2.14	0.66
15:CO:3:ILE:O	15:CO:3:ILE:HG13	1.95	0.66
36:DA:74:A:H5"	36:DA:75:G:O4'	1.96	0.66
36:DA:2173:A:O2'	38:DC:218:MET:HE1	1.95	0.66
39:DD:28:GLU:HB2	39:DD:29:PRO:CD	2.26	0.66
57:DY:17:SER:HB2	57:DY:71:LYS:CE	2.25	0.66
4:AD:28:SER:HB3	4:AD:29:PRO:CD	2.22	0.66
14:AN:29:ARG:HH11	14:AN:29:ARG:HG3	1.61	0.66
28:B2:55:ARG:HH11	28:B2:55:ARG:HG3	1.61	0.66
29:B3:1:MET:HE1	29:B3:40:THR:HG22	1.77	0.66
36:BA:1332:G:H21	36:BA:1610:A:H8	1.40	0.66
36:BA:1598:C:H5'	56:BX:36:LYS:HG2	1.78	0.66
36:BA:2579:C:O2'	40:BE:131:ALA:HB2	1.96	0.66
42:BG:46:ALA:HB3	42:BG:88:ILE:HD13	1.78	0.66
42:BG:138:GLN:NE2	42:BG:152:LEU:HA	2.10	0.66
43:BH:159:GLU:CD	43:BH:159:GLU:C	2.64	0.66
52:BT:109:GLU:HG2	52:BT:112:ARG:NH2	2.10	0.66
53:BU:15:LYS:O	53:BU:19:LYS:HG2	1.96	0.66
56:BX:24:GLY:O	56:BX:82:GLN:HA	1.96	0.66
1:CA:848:C:O2'	1:CA:849:C:H5'	1.96	0.66
21:CU:12:LYS:HG2	21:CU:22:ARG:HB3	1.77	0.66
22:CW:38:A:C2'	22:CW:39:U:H5"	2.26	0.66
36:DA:1534:U:H2'	36:DA:1535:A:O4'	1.96	0.66
36:DA:2108:C:H2'	36:DA:2108:C:O2	1.94	0.66
42:DG:5:VAL:HB	42:DG:8:LYS:HB2	1.76	0.66
42:DG:70:VAL:HG11	42:DG:72:ARG:HH21	1.61	0.66
51:DS:99:LYS:HB3	51:DS:99:LYS:HZ2	1.58	0.66
1:AA:187:C:H2'	1:AA:188:C:H6	1.61	0.66
1:AA:975:A:H8	1:AA:975:A:H5'	1.59	0.66
1:AA:1256:A:H2	1:AA:1277:C:C6	2.14	0.66
1:AA:1330:U:H5'	1:AA:1331:G:OP2	1.96	0.66
1:AA:1533:C:H2'	1:AA:1534:A:H5"	1.78	0.66
22:AV:17:C:H2'	22:AV:18:G:H5"	1.78	0.66
32:B6:19:ARG:HD3	32:B6:20:ASN:H	1.60	0.66
36:BA:862:G:H2'	36:BA:863:A:O4'	1.95	0.66
36:BA:1278:A:OP1	50:BR:36:THR:HG22	1.95	0.66
41:BF:156:LEU:HD21	41:BF:163:VAL:HG12	1.78	0.66
58:BZ:96:VAL:HG13	58:BZ:97:GLU:N	2.10	0.66
13:CM:54:VAL:O	13:CM:58:GLU:HG2	1.95	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:CV:17:C:H2'	22:CV:18:G:H5"	1.78	0.66
29:D3:19:GLN:HE22	29:D3:52:HIS:HE1	1.44	0.66
30:D4:39:CYS:O	30:D4:40:HIS:HB2	1.94	0.66
36:DA:280:C:H3'	36:DA:281:G:C8	2.30	0.66
36:DA:402:A:O2'	36:DA:403:U:H5'	1.96	0.66
36:DA:1902:C:H4'	39:DD:244:ARG:HA	1.78	0.66
36:DA:2206:G:N2	36:DA:2207:G:H5'	2.11	0.66
36:DA:2219:G:O2'	36:DA:2220:G:H5'	1.96	0.66
40:DE:57:LYS:HA	40:DE:57:LYS:CE	2.18	0.66
42:DG:106:LEU:O	42:DG:111:LEU:HG	1.96	0.66
43:DH:12:PRO:O	43:DH:15:VAL:HG22	1.96	0.66
43:DH:85:LYS:NZ	43:DH:132:ARG:HA	2.07	0.66
43:DH:103:LEU:HB2	43:DH:123:PHE:CD2	2.28	0.66
51:DS:106:ARG:HH11	51:DS:106:ARG:HG2	1.61	0.66
52:DT:23:ARG:HH21	52:DT:120:ARG:HD3	1.61	0.66
52:DT:80:SER:CB	52:DT:81:PRO:HD3	2.26	0.66
1:AA:444:C:H2'	1:AA:445:G:H8	1.61	0.65
10:AJ:24:VAL:HG21	10:AJ:37:PRO:HG3	1.77	0.65
24:AY:27:C:O2'	24:AY:28:C:H5'	1.97	0.65
24:AY:40:C:C2'	24:AY:41:C:H5"	2.26	0.65
36:BA:476:G:H4'	36:BA:502:A:N1	2.11	0.65
36:BA:672:C:C2'	36:BA:673:C:H5"	2.26	0.65
36:BA:813:U:H2'	36:BA:814:C:C6	2.31	0.65
36:BA:944:G:H5'	36:BA:945:A:O5'	1.95	0.65
38:BC:27:ARG:NE	38:BC:182:PRO:HG2	2.10	0.65
42:BG:120:LEU:HB2	42:BG:179:PRO:O	1.95	0.65
42:BG:137:GLU:HG3	42:BG:138:GLN:H	1.61	0.65
51:BS:88:ASP:OD1	51:BS:89:ARG:N	2.28	0.65
53:BU:52:ARG:HB3	53:BU:52:ARG:NH1	2.11	0.65
54:BV:35:LEU:O	54:BV:37:VAL:N	2.28	0.65
57:BY:14:LEU:HD12	57:BY:15:VAL:H	1.59	0.65
1:CA:444:C:H2'	1:CA:445:G:H8	1.60	0.65
4:CD:109:GLY:O	4:CD:111:ALA:N	2.28	0.65
36:DA:886:C:O2'	36:DA:887:A:H4'	1.97	0.65
36:DA:2111:C:H1'	36:DA:2118:U:H4'	1.77	0.65
36:DA:2672:G:H2'	36:DA:2673:G:H5"	1.78	0.65
41:DF:43:LYS:HA	41:DF:98:SER:HB3	1.78	0.65
43:DH:159:GLU:CD	43:DH:159:GLU:C	2.63	0.65
49:DQ:12:GLN:HG2	49:DQ:73:PRO:HD2	1.77	0.65
56:DX:24:GLY:O	56:DX:82:GLN:HA	1.96	0.65
58:DZ:18:LEU:H	58:DZ:18:LEU:CD1	2.08	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1234:C:H1'	1:AA:1364:U:O2	1.96	0.65
1:AA:1512:U:H2'	1:AA:1513:A:C8	2.30	0.65
9:AI:9:ARG:CG	9:AI:14:VAL:HG13	2.26	0.65
19:AS:32:LYS:HZ3	19:AS:32:LYS:H	1.41	0.65
36:BA:796:C:H2'	36:BA:797:C:C6	2.31	0.65
39:BD:158:ALA:HB3	39:BD:161:THR:HG21	1.77	0.65
48:BP:65:ARG:HB3	48:BP:68:GLN:HE22	1.61	0.65
52:BT:53:ARG:HH11	52:BT:53:ARG:CB	1.97	0.65
57:BY:46:LYS:HB3	57:BY:62:GLU:HG2	1.79	0.65
1:CA:149:A:H2'	1:CA:150:C:C6	2.31	0.65
1:CA:299:G:H2'	1:CA:300:A:C8	2.31	0.65
1:CA:961:U:HO2'	1:CA:962:C:H6	1.45	0.65
1:CA:1412:C:H2'	1:CA:1413:A:H8	1.58	0.65
1:CA:1535:C:H2'	1:CA:1536:C:C5	2.31	0.65
4:CD:3:ARG:HG2	4:CD:118:ARG:NE	2.12	0.65
9:CI:20:ARG:O	9:CI:22:GLY:N	2.29	0.65
17:CQ:27:PHE:CZ	17:CQ:36:ILE:HD11	2.31	0.65
22:CW:69:G:C2'	22:CW:70:G:H5"	2.25	0.65
36:DA:195:A:H5"	36:DA:196:A:OP2	1.95	0.65
36:DA:391:G:O2'	36:DA:392:C:H5'	1.97	0.65
36:DA:654(A):G:C2'	36:DA:654(B):C:H5'	2.25	0.65
41:DF:125:LEU:HD23	41:DF:125:LEU:N	2.12	0.65
43:DH:158:HIS:HD1	43:DH:168:PRO:HB2	1.61	0.65
52:DT:82:LEU:HD12	52:DT:82:LEU:N	2.12	0.65
58:DZ:166:SER:CB	58:DZ:168:GLU:HG3	2.26	0.65
2:AB:95:GLN:HE21	2:AB:147:LYS:HE2	1.60	0.65
4:AD:128:VAL:HG12	4:AD:129:ASN:N	2.08	0.65
25:AZ:16:THR:HG23	25:AZ:79:HIS:NE2	2.10	0.65
25:AZ:152:MET:CE	25:AZ:156:ASP:HB2	2.26	0.65
25:AZ:163:PHE:HD1	25:AZ:164:PRO:HD2	1.62	0.65
27:B1:81:LYS:HG2	27:B1:81:LYS:O	1.94	0.65
28:B2:51:ARG:HD2	36:BA:94(A):G:H21	1.60	0.65
34:B8:15:LYS:HB2	48:BP:65:ARG:HH21	1.60	0.65
36:BA:234:C:H2'	36:BA:235:U:C6	2.31	0.65
36:BA:328:U:H4'	57:BY:68:HIS:HD1	1.59	0.65
36:BA:654(A):G:C2'	36:BA:654(B):C:H5'	2.25	0.65
36:BA:2523:G:H2'	36:BA:2524:G:H5'	1.78	0.65
46:BN:3:THR:HG22	46:BN:4:TYR:N	2.11	0.65
48:BP:58:THR:O	48:BP:58:THR:HG22	1.95	0.65
52:BT:80:SER:CB	52:BT:81:PRO:HD3	2.26	0.65
2:CB:96:ARG:HD3	2:CB:148:TYR:HE1	1.59	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:CZ:143:ASP:HB3	25:CZ:146:LEU:CB	2.26	0.65
34:D8:4:MET:HE3	34:D8:61:LEU:HG	1.77	0.65
36:DA:2201:C:O2'	36:DA:2202:C:H5'	1.96	0.65
36:DA:2313:C:H5'	36:DA:2313:C:H6	1.60	0.65
39:DD:130:ALA:C	39:DD:131:LEU:HD12	2.21	0.65
39:DD:267:SER:O	39:DD:269:PHE:N	2.30	0.65
46:DN:32:THR:C	46:DN:34:LEU:H	2.05	0.65
48:DP:115:LEU:HA	48:DP:134:ALA:HB3	1.76	0.65
49:DQ:19:GLY:HA3	58:DZ:79:ARG:HH12	1.60	0.65
51:DS:92:TYR:CG	51:DS:93:LYS:N	2.58	0.65
53:DU:90:VAL:HG12	53:DU:91:ASP:N	2.11	0.65
54:DV:2:PHE:C	54:DV:2:PHE:CD1	2.74	0.65
57:DY:14:LEU:HD12	57:DY:15:VAL:H	1.60	0.65
58:DZ:40:ASP:OD1	58:DZ:42:VAL:HG12	1.96	0.65
1:AA:1443:G:H5'	1:AA:1444:C:OP2	1.96	0.65
3:AC:166:GLU:OE1	3:AC:166:GLU:HA	1.96	0.65
4:AD:138:TYR:HD1	4:AD:138:TYR:C	2.04	0.65
6:AF:91:VAL:HG11	18:AR:72:ARG:HH12	1.61	0.65
7:AG:79:ARG:NH2	22:AW:33:U:H4'	2.11	0.65
9:AI:53:VAL:N	9:AI:95:LYS:HZ2	1.94	0.65
32:B6:43:CYS:O	32:B6:44:ARG:HB2	1.96	0.65
36:BA:272(I):U:H5'	36:BA:272(I):U:H6	1.61	0.65
36:BA:402:A:O2'	36:BA:403:U:H5'	1.96	0.65
36:BA:1786:A:C2	36:BA:2606:C:H1'	2.32	0.65
36:BA:2110:G:N1	36:BA:2178:C:H5	1.94	0.65
40:BE:77:ILE:HG22	40:BE:78:LEU:HD12	1.79	0.65
42:BG:52:ILE:HG12	42:BG:54:GLU:HB2	1.79	0.65
49:BQ:21:THR:O	49:BQ:22:LYS:HB3	1.95	0.65
52:BT:38:ASN:O	52:BT:38:ASN:ND2	2.28	0.65
52:BT:62:THR:CG2	52:BT:75:ILE:HG13	2.27	0.65
57:BY:27:VAL:HG12	57:BY:29:GLU:OE1	1.95	0.65
1:CA:1039:C:H2'	1:CA:1040:U:C5	2.30	0.65
6:CF:46:ARG:HH22	18:CR:37:VAL:HG11	1.59	0.65
25:CZ:215:ARG:HH11	25:CZ:215:ARG:HG3	1.60	0.65
31:D5:16:ARG:NH1	31:D5:17:ASP:OD1	2.30	0.65
36:DA:45:C:H2'	36:DA:47:C:C6	2.31	0.65
36:DA:244:A:H4'	48:DP:74:GLU:CG	2.24	0.65
36:DA:328:U:H4'	57:DY:68:HIS:HD1	1.61	0.65
36:DA:614(B):G:H1'	41:DF:44:ARG:HG3	1.79	0.65
36:DA:1141:U:H2'	46:DN:63:THR:CG2	2.21	0.65
36:DA:1592:C:H2'	36:DA:1593:G:H8	1.61	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2195:C:O2'	36:DA:2196:C:H5'	1.96	0.65
40:DE:24:THR:HG22	40:DE:186:GLY:HA2	1.79	0.65
52:DT:19:LEU:HD22	52:DT:85:LYS:HD3	1.78	0.65
54:DV:34:GLU:O	54:DV:36:PRO:HD3	1.96	0.65
54:DV:35:LEU:O	54:DV:37:VAL:N	2.30	0.65
54:DV:39:LEU:HA	54:DV:47:VAL:CG1	2.26	0.65
4:AD:3:ARG:HG2	4:AD:118:ARG:NE	2.11	0.65
12:AL:119:LYS:O	12:AL:120:TYR:HB2	1.97	0.65
25:AZ:143:ASP:HB3	25:AZ:146:LEU:CB	2.26	0.65
31:B5:56:LYS:O	31:B5:57:VAL:C	2.40	0.65
34:B8:16:ILE:HD12	34:B8:57:ARG:HG2	1.79	0.65
36:BA:2111:C:H1'	36:BA:2118:U:C4'	2.27	0.65
39:BD:242:ARG:HH11	39:BD:242:ARG:CG	2.09	0.65
40:BE:11:MET:HB2	40:BE:23:VAL:O	1.96	0.65
42:BG:154:GLY:O	42:BG:155:MET:HB3	1.95	0.65
53:BU:76:TYR:CE1	53:BU:80:ILE:HG13	2.31	0.65
58:BZ:156:LYS:O	58:BZ:158:PRO:HD3	1.95	0.65
1:CA:344:A:H4'	1:CA:345:C:OP2	1.96	0.65
1:CA:1277:C:O2'	1:CA:1279:A:H8	1.75	0.65
1:CA:1313:U:H2'	1:CA:1314:C:O2	1.96	0.65
4:CD:59:ARG:NH2	4:CD:62:GLN:HG3	2.10	0.65
11:CK:30:VAL:HG21	11:CK:65:ALA:HA	1.77	0.65
18:CR:36:ASN:OD1	18:CR:38:GLU:HG2	1.96	0.65
19:CS:32:LYS:H	19:CS:32:LYS:NZ	1.94	0.65
28:D2:47:ASN:O	28:D2:49:LYS:N	2.30	0.65
36:DA:1352:U:O2'	36:DA:1353:A:H5'	1.96	0.65
36:DA:2580:U:O3'	40:DE:130:GLY:HA3	1.97	0.65
37:DB:106:G:H5"	58:DZ:31:ARG:HG2	1.77	0.65
40:DE:11:MET:HB2	40:DE:23:VAL:O	1.97	0.65
48:DP:124:LYS:HD3	48:DP:143:GLY:HA3	1.77	0.65
51:DS:89:ARG:HG2	51:DS:92:TYR:HA	1.78	0.65
1:AA:353:A:H5'	1:AA:353:A:C8	2.31	0.65
1:AA:657:G:O2'	1:AA:658:G:H5'	1.97	0.65
17:AQ:40:LYS:HD3	17:AQ:42:TYR:CZ	2.32	0.65
21:AU:12:LYS:HG2	21:AU:22:ARG:HB3	1.77	0.65
25:AZ:295:ARG:HG2	25:AZ:295:ARG:NH1	2.11	0.65
28:B2:2:LYS:HE3	28:B2:59:ARG:HH22	1.61	0.65
36:BA:833:U:H5"	48:BP:48:PRO:CB	2.26	0.65
36:BA:970:C:H2'	36:BA:971:C:H6	1.62	0.65
36:BA:1053:C:H2'	36:BA:1054:A:C8	2.31	0.65
36:BA:1352:U:O2'	36:BA:1353:A:H5'	1.97	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BD:24:ILE:HD13	39:BD:25:THR:N	2.11	0.65
39:BD:43:ARG:NH1	39:BD:44:ASN:ND2	2.44	0.65
40:BE:4:ILE:HD12	40:BE:92:THR:O	1.96	0.65
48:BP:16:ARG:HB2	48:BP:16:ARG:HH11	1.62	0.65
52:BT:75:ILE:HD12	52:BT:75:ILE:N	2.12	0.65
1:CA:1124:G:H5'	10:CJ:35:SER:HB2	1.77	0.65
2:CB:22:LYS:HE2	2:CB:22:LYS:CA	2.27	0.65
3:CC:58:GLU:HB2	3:CC:65:ALA:HB2	1.79	0.65
9:CI:26:VAL:HG22	9:CI:61:ALA:HB3	1.78	0.65
17:CQ:40:LYS:HD3	17:CQ:42:TYR:CZ	2.31	0.65
36:DA:1051:G:H2'	36:DA:1052:C:C6	2.32	0.65
36:DA:1278:A:OP1	50:DR:36:THR:HG22	1.96	0.65
36:DA:1971:A:C4	39:DD:241:PRO:HD3	2.32	0.65
38:DC:96:GLY:H	38:DC:99:ILE:CG1	2.09	0.65
38:DC:114:VAL:HG23	38:DC:149:ILE:HD11	1.79	0.65
40:DE:77:ILE:HG22	40:DE:78:LEU:H	1.62	0.65
46:DN:132:ALA:O	46:DN:133:GLN:HB3	1.96	0.65
48:DP:58:THR:C	48:DP:61:ARG:HE	2.05	0.65
50:DR:14:SER:HA	50:DR:17:ARG:NH1	2.11	0.65
51:DS:24:LEU:HB3	51:DS:85:VAL:HG12	1.77	0.65
1:AA:437:U:OP1	4:AD:155:LEU:HD22	1.96	0.65
1:AA:940:C:P	7:AG:102:ARG:HH21	2.20	0.65
2:AB:22:LYS:HE2	2:AB:22:LYS:CA	2.26	0.65
28:B2:21:LEU:HB3	28:B2:64:LEU:HG	1.78	0.65
32:B6:5:VAL:N	32:B6:8:LYS:HB3	2.12	0.65
36:BA:259:G:H1'	36:BA:621:A:O2'	1.96	0.65
36:BA:1952:A:C6	47:BO:22:ILE:HD12	2.31	0.65
39:BD:223:GLY:C	39:BD:224:ALA:O	2.36	0.65
41:BF:160:ASN:ND2	41:BF:162:LEU:HD13	2.11	0.65
47:BO:107:ARG:O	47:BO:112:MET:HE1	1.96	0.65
51:BS:98:VAL:CG1	51:BS:100:ALA:H	2.08	0.65
54:BV:19:LYS:HZ3	54:BV:20:LEU:H	1.43	0.65
58:BZ:119:GLU:O	58:BZ:121:HIS:N	2.30	0.65
2:CB:97:TRP:HZ3	2:CB:176:GLU:OE2	1.80	0.65
14:CN:19:ARG:O	14:CN:20:ALA:C	2.40	0.65
31:D5:40:LYS:HE3	31:D5:46:CYS:HB3	1.78	0.65
36:DA:106:C:H1'	57:DY:2:ARG:NH2	2.11	0.65
36:DA:234:C:H2'	36:DA:235:U:C6	2.31	0.65
36:DA:644:A:C2	36:DA:2369:A:H1'	2.32	0.65
36:DA:672:C:H2'	36:DA:673:C:H5'	1.77	0.65
36:DA:1771:C:H1'	36:DA:1786:A:C8	2.30	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:DD:24:ILE:HD13	39:DD:25:THR:N	2.12	0.65
39:DD:118:VAL:HG22	39:DD:119:ALA:H	1.62	0.65
54:DV:49:THR:HB	54:DV:50:PRO:CD	2.27	0.65
1:AA:309:G:H1'	1:AA:608:A:C2	2.31	0.65
2:AB:84:GLU:HB3	2:AB:219:VAL:HG21	1.79	0.65
3:AC:49:SER:O	3:AC:50:ALA:HB3	1.97	0.65
31:B5:4:HIS:CB	31:B5:5:PRO:CD	2.72	0.65
36:BA:280:C:H3'	36:BA:281:G:C8	2.30	0.65
36:BA:1042:G:H1'	36:BA:1114:G:H22	1.61	0.65
36:BA:1810:A:H2'	36:BA:1811:G:O4'	1.97	0.65
37:BB:40:U:H3'	37:BB:41:U:H5"	1.79	0.65
42:BG:131:TYR:HB3	42:BG:159:VAL:CG1	2.26	0.65
1:CA:939:G:H5"	7:CG:102:ARG:NH2	2.12	0.65
1:CA:1255:G:H3'	1:CA:1279:A:N6	2.12	0.65
3:CC:76:VAL:HG21	3:CC:103:VAL:HG21	1.79	0.65
5:CE:31:LEU:CD2	5:CE:43:LEU:HD11	2.27	0.65
12:CL:47:LYS:O	12:CL:49:ASN:N	2.30	0.65
35:D9:10:ILE:O	35:D9:11:CYS:HB3	1.94	0.65
36:DA:479:A:O2'	36:DA:481:G:H5'	1.96	0.65
36:DA:2758:A:C2	36:DA:2759:G:H1'	2.32	0.65
39:DD:223:GLY:C	39:DD:224:ALA:O	2.39	0.65
46:DN:96:GLU:CD	46:DN:96:GLU:H	2.05	0.65
48:DP:114:ILE:HD13	48:DP:127:ALA:HB2	1.78	0.65
53:DU:15:LYS:O	53:DU:19:LYS:HG2	1.97	0.65
54:DV:19:LYS:HZ3	54:DV:20:LEU:H	1.43	0.65
56:DX:35:THR:CG2	56:DX:37:THR:H	2.09	0.65
58:DZ:69:THR:HG22	58:DZ:90:VAL:HA	1.78	0.65
58:DZ:166:SER:H	58:DZ:167:PRO:HA	1.61	0.65
1:AA:250:A:H4'	1:AA:251:G:O5'	1.95	0.65
1:AA:946:A:H2'	1:AA:947:G:C8	2.32	0.65
12:AL:38:THR:CG2	12:AL:59:ARG:HG3	2.26	0.65
19:AS:32:LYS:H	19:AS:32:LYS:NZ	1.94	0.65
36:BA:479:A:O2'	36:BA:481:G:H5'	1.97	0.65
36:BA:1779:U:C5	36:BA:1784:A:N7	2.59	0.65
36:BA:2649:U:H2'	36:BA:2650:U:C6	2.31	0.65
40:BE:137:HIS:HB3	40:BE:138:PRO:HD2	1.79	0.65
40:BE:202:LYS:HD2	40:BE:202:LYS:N	2.12	0.65
43:BH:19:VAL:HG12	43:BH:20:ALA:N	2.09	0.65
2:CB:95:GLN:HE21	2:CB:147:LYS:HE2	1.62	0.65
2:CB:151:GLY:O	2:CB:153:ARG:N	2.27	0.65
4:CD:59:ARG:HH21	4:CD:62:GLN:HG3	1.59	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:180:GLY:O	4:CD:182:LYS:HG3	1.96	0.65
22:CW:59:U:H2'	22:CW:60:U:H5'	1.79	0.65
36:DA:1332:G:H21	36:DA:1610:A:H8	1.42	0.65
36:DA:1348:G:C2'	36:DA:1349:A:H5"	2.25	0.65
36:DA:1786:A:C2	36:DA:2606:C:H1'	2.32	0.65
37:DB:3:C:H42	37:DB:118:G:H1	1.45	0.65
39:DD:35:LYS:HA	39:DD:63:ARG:HA	1.79	0.65
48:DP:65:ARG:HB3	48:DP:68:GLN:HE22	1.61	0.65
58:DZ:72:ARG:CG	58:DZ:89:PHE:HB2	2.26	0.65
1:AA:8:A:H62	4:AD:208:SER:HB2	1.62	0.65
1:AA:423:G:H2'	1:AA:424:G:H5'	1.77	0.65
1:AA:540:G:H2'	1:AA:541:G:C8	2.32	0.65
1:AA:585:G:H4'	12:AL:8:ASN:HD21	1.61	0.65
1:AA:1117:G:H8	1:AA:1117:G:H5'	1.62	0.65
22:AV:51:U:H2'	22:AV:52:G:C8	2.32	0.65
24:AY:40:C:H2'	24:AY:41:C:H5"	1.77	0.65
25:AZ:27:LEU:O	25:AZ:31:LEU:HG	1.97	0.65
36:BA:191:A:O2'	36:BA:192:C:H5'	1.97	0.65
36:BA:267:C:H2'	36:BA:268:C:H6	1.62	0.65
36:BA:1534:U:H2'	36:BA:1535:A:O4'	1.96	0.65
36:BA:1642:G:O2'	36:BA:1643:G:H5'	1.97	0.65
36:BA:2111:C:H1'	36:BA:2118:U:H4'	1.78	0.65
36:BA:2801(A):A:H5'	36:BA:2802:G:H8	1.62	0.65
39:BD:35:LYS:HA	39:BD:63:ARG:HA	1.78	0.65
42:BG:7:LEU:HD22	42:BG:100:TRP:CE3	2.32	0.65
42:BG:34:LEU:CB	42:BG:161:THR:HG22	2.26	0.65
42:BG:170:ARG:O	42:BG:174:GLU:HB2	1.97	0.65
42:BG:171:ALA:O	42:BG:175:LEU:HG	1.95	0.65
43:BH:120:GLY:O	43:BH:135:GLY:HA2	1.97	0.65
49:BQ:137:TYR:CE2	58:BZ:81:ARG:NH2	2.65	0.65
50:BR:14:SER:HA	50:BR:17:ARG:NH1	2.12	0.65
51:BS:92:TYR:CG	51:BS:93:LYS:N	2.57	0.65
54:BV:5:VAL:HG21	54:BV:35:LEU:HD23	1.79	0.65
1:CA:187:C:H2'	1:CA:188:C:C6	2.31	0.65
1:CA:1216:G:O2'	1:CA:1217:C:H5'	1.97	0.65
14:CN:13:THR:N	14:CN:14:PRO:CD	2.60	0.65
17:CQ:59:ILE:HG22	17:CQ:71:PHE:CD2	2.31	0.65
25:CZ:152:MET:CE	25:CZ:156:ASP:HB2	2.27	0.65
32:D6:5:VAL:N	32:D6:8:LYS:HB3	2.12	0.65
36:DA:225:A:O2'	36:DA:257:A:H4'	1.96	0.65
36:DA:886:C:H2'	36:DA:887:A:C4'	2.27	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1042:G:H1'	36:DA:1114:G:H22	1.61	0.65
36:DA:1087:G:H2'	36:DA:1088:A:C4'	2.26	0.65
36:DA:1161:C:H1'	54:DV:8:GLY:O	1.97	0.65
36:DA:1748:G:H5'	36:DA:1748:G:H8	1.60	0.65
36:DA:1877:A:H5'	36:DA:1878:G:OP2	1.97	0.65
39:DD:30:GLU:HG3	39:DD:63:ARG:CZ	2.27	0.65
40:DE:59:VAL:HG13	40:DE:60:ASN:H	1.62	0.65
53:DU:85:LYS:HD3	53:DU:117:GLN:NE2	2.06	0.65
1:AA:522:C:H41	12:AL:53:ARG:HH22	1.46	0.64
1:AA:1124:G:H5'	10:AJ:35:SER:HB2	1.79	0.64
1:AA:1442(B):A:H3'	1:AA:1442(B):A:P	2.37	0.64
2:AB:80:ILE:HD12	2:AB:80:ILE:N	2.11	0.64
4:AD:18:LYS:H	4:AD:33:MET:CE	2.07	0.64
12:AL:33:ARG:HG2	12:AL:60:LEU:HD12	1.78	0.64
15:AO:79:ARG:O	15:AO:82:ILE:HG22	1.97	0.64
22:AW:37:A:H3'	22:AW:38:A:C8	2.31	0.64
36:BA:271(Q):G:H1'	36:BA:271(R):G:C8	2.32	0.64
36:BA:2287:A:N6	36:BA:2344:U:H3	1.92	0.64
36:BA:2886:G:H2'	36:BA:2887:U:H6	1.62	0.64
39:BD:131:LEU:HB2	39:BD:136:ILE:HD11	1.79	0.64
49:BQ:111:GLU:OE1	49:BQ:133:ARG:NH2	2.29	0.64
1:CA:1306:A:H61	1:CA:1331:G:H1'	1.60	0.64
4:CD:155:LEU:O	4:CD:159:ARG:HG2	1.97	0.64
10:CJ:32:ALA:H	10:CJ:78:ASN:ND2	1.94	0.64
12:CL:33:ARG:HG2	12:CL:60:LEU:HD12	1.78	0.64
19:CS:11:VAL:HG11	19:CS:16:LEU:HD11	1.79	0.64
24:CY:40:C:H2'	24:CY:41:C:C5'	2.27	0.64
25:CZ:385:ARG:HD3	61:CZ:502:KIR:H301	1.79	0.64
26:D0:49:LYS:N	26:D0:80:HIS:HD1	1.87	0.64
36:DA:496:G:H1'	55:DW:61:ASN:ND2	2.12	0.64
36:DA:1221(A):C:H2'	36:DA:1222:C:C6	2.31	0.64
43:DH:16:SER:CB	43:DH:27:LYS:HB2	2.23	0.64
58:DZ:81:ARG:HB3	58:DZ:81:ARG:NH1	2.11	0.64
58:DZ:157:LEU:HD11	58:DZ:163:LEU:HD22	1.78	0.64
1:AA:645:C:H2'	1:AA:646:U:H6	1.63	0.64
1:AA:666:G:H5'	1:AA:726:C:H1'	1.80	0.64
1:AA:939:G:H5"	7:AG:102:ARG:NH1	2.12	0.64
19:AS:40:ILE:HG23	19:AS:62:ILE:HD11	1.78	0.64
25:AZ:198:LYS:HA	25:AZ:198:LYS:CE	2.26	0.64
36:BA:225:A:O2'	36:BA:257:A:H4'	1.96	0.64
36:BA:654(V):A:OP2	36:BA:655:A:H3'	1.97	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1087:G:H2'	36:BA:1088:A:C4'	2.26	0.64
36:BA:1579:A:H8	36:BA:1579:A:H5'	1.61	0.64
36:BA:1902:C:H1'	39:BD:244:ARG:HG3	1.80	0.64
36:BA:1980:G:O2'	36:BA:1982:C:OP2	2.14	0.64
36:BA:2852:G:H2'	36:BA:2853:C:H6	1.63	0.64
46:BN:134:ARG:O	46:BN:136:GLU:N	2.29	0.64
51:BS:106:ARG:HH11	51:BS:106:ARG:HG2	1.62	0.64
58:BZ:70:LEU:HD22	58:BZ:91:LEU:HD11	1.78	0.64
1:CA:1190:G:OP1	3:CC:5:ILE:HD12	1.98	0.64
4:CD:129:ASN:N	4:CD:129:ASN:HD22	1.95	0.64
5:CE:7:GLU:HG2	5:CE:112:LEU:HD21	1.78	0.64
12:CL:7:ILE:CD1	12:CL:8:ASN:N	2.60	0.64
12:CL:51:ALA:C	12:CL:52:LEU:HD22	2.22	0.64
26:D0:40:GLN:HE22	26:D0:44:ARG:N	1.95	0.64
30:D4:7:PRO:CG	42:DG:61:ALA:HB1	2.27	0.64
36:DA:267:C:H2'	36:DA:268:C:H6	1.62	0.64
36:DA:1059:G:H1'	45:DK:126:UNK:O	1.97	0.64
42:DG:46:ALA:HB2	42:DG:88:ILE:HG13	1.79	0.64
42:DG:114:ILE:C	42:DG:116:ASP:H	2.04	0.64
42:DG:114:ILE:O	42:DG:116:ASP:N	2.30	0.64
43:DH:98:LEU:HB2	43:DH:125:VAL:CG2	2.26	0.64
46:DN:46:VAL:O	46:DN:47:ALA:HB3	1.97	0.64
47:DO:88:ASN:ND2	47:DO:92:GLU:HB2	2.12	0.64
57:DY:95:LYS:HE3	57:DY:100:ALA:HB2	1.78	0.64
1:AA:1086:U:H2'	1:AA:1087:G:C5'	2.25	0.64
14:AN:13:THR:N	14:AN:14:PRO:CD	2.58	0.64
20:AT:10:LEU:HD12	20:AT:11:SER:H	1.61	0.64
26:B0:50:ASN:ND2	26:B0:63:VAL:HG21	2.12	0.64
35:B9:19:ARG:O	35:B9:20:HIS:HB2	1.97	0.64
36:BA:496:G:H1'	55:BW:61:ASN:ND2	2.12	0.64
41:BF:148:LEU:HD23	41:BF:191:ARG:NH1	2.12	0.64
42:BG:55:LYS:HA	42:BG:58:GLN:HG2	1.79	0.64
49:BQ:60:ARG:HB3	49:BQ:60:ARG:HH11	1.63	0.64
51:BS:54:LEU:CD1	51:BS:58:LEU:H	2.09	0.64
58:BZ:28:MET:CE	58:BZ:37:VAL:HG11	2.26	0.64
58:BZ:119:GLU:HG3	58:BZ:122:ARG:HD3	1.78	0.64
1:CA:723:U:C4	1:CA:1537:U:H2'	2.32	0.64
1:CA:1442:G:H1	1:CA:1461:G:H21	1.45	0.64
3:CC:34:LEU:HD22	3:CC:38:ARG:NE	2.12	0.64
4:CD:138:TYR:HD1	4:CD:138:TYR:C	2.04	0.64
5:CE:20:GLN:NE2	5:CE:25:ARG:NH2	2.44	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:CN:29:ARG:HG3	14:CN:29:ARG:HH11	1.60	0.64
24:CY:27:C:O2'	24:CY:28:C:H5'	1.97	0.64
36:DA:2113:U:H2'	36:DA:2114:A:H8	1.63	0.64
36:DA:2758:A:N6	43:DH:67:LEU:HD11	2.12	0.64
43:DH:120:GLY:O	43:DH:135:GLY:HA2	1.97	0.64
47:DO:98:VAL:HG12	47:DO:117:LEU:HB3	1.79	0.64
51:DS:98:VAL:CG1	51:DS:100:ALA:H	2.08	0.64
55:DW:6:ILE:HG12	55:DW:104:THR:HG22	1.79	0.64
56:DX:12:VAL:HB	56:DX:17:ALA:CB	2.10	0.64
1:AA:975:A:H4'	1:AA:976:G:C5'	2.25	0.64
5:AE:41:VAL:HG13	5:AE:113:ALA:HA	1.79	0.64
6:AF:62:TRP:C	6:AF:63:TYR:HD1	2.04	0.64
6:AF:67:MET:HB2	6:AF:68:PRO:HD2	1.79	0.64
9:AI:79:LEU:HD23	9:AI:101:PHE:O	1.97	0.64
24:AY:40:C:H2'	24:AY:41:C:C5'	2.28	0.64
24:AY:51:G:H1	24:AY:63:C:H42	1.43	0.64
31:B5:16:ARG:HD2	31:B5:20:ARG:HH12	1.61	0.64
32:B6:15:GLU:CD	32:B6:18:ARG:NE	2.55	0.64
32:B6:15:GLU:OE2	32:B6:18:ARG:NH2	2.30	0.64
36:BA:886:C:O2'	36:BA:887:A:H4'	1.97	0.64
36:BA:2228:G:OP1	39:BD:261:LYS:HE3	1.97	0.64
36:BA:2312:U:C4'	42:BG:71:THR:HG21	2.27	0.64
38:BC:96:GLY:H	38:BC:99:ILE:CG1	2.10	0.64
46:BN:10:GLU:OE2	46:BN:11:PRO:HD2	1.96	0.64
48:BP:115:LEU:HA	48:BP:134:ALA:HB3	1.78	0.64
57:BY:97:ARG:HH21	57:BY:98:VAL:CB	2.10	0.64
58:BZ:9:TYR:CE1	58:BZ:35:ARG:HG3	2.33	0.64
1:CA:269:C:H2'	1:CA:270:A:C8	2.32	0.64
3:CC:3:ASN:CG	3:CC:4:LYS:H	2.04	0.64
12:CL:59:ARG:HG2	12:CL:65:GLU:HG3	1.79	0.64
24:CY:40:C:C2'	24:CY:41:C:H5"	2.26	0.64
24:CY:72:U:C2'	24:CY:73:G:H5"	2.23	0.64
31:D5:56:LYS:O	31:D5:57:VAL:C	2.39	0.64
36:DA:271(Q):G:H1'	36:DA:271(R):G:C8	2.32	0.64
36:DA:654(V):A:OP2	36:DA:655:A:H3'	1.97	0.64
36:DA:877:U:O2'	36:DA:878:A:H5"	1.97	0.64
36:DA:944:G:H5'	36:DA:945:A:O5'	1.97	0.64
40:DE:101:ARG:HD2	40:DE:169:ASN:O	1.97	0.64
43:DH:94:TYR:HE1	43:DH:108:GLY:N	1.96	0.64
51:DS:34:HIS:HB3	51:DS:53:SER:HB3	1.78	0.64
1:AA:1127:G:O2'	1:AA:1128:C:H5'	1.98	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:135:LYS:NZ	5:AE:50:GLU:HG2	2.12	0.64
17:AQ:59:ILE:HG23	17:AQ:71:PHE:HB3	1.79	0.64
22:AW:59:U:H2'	22:AW:60:U:H5'	1.79	0.64
25:AZ:98:GLN:HE22	25:AZ:346:THR:HG22	1.62	0.64
30:B4:10:VAL:HG23	30:B4:11:PRO:HD2	1.78	0.64
36:BA:614(B):G:H1'	41:BF:44:ARG:HG3	1.80	0.64
36:BA:672:C:H2'	36:BA:673:C:C5'	2.28	0.64
36:BA:1499:C:H5'	36:BA:1499:C:C6	2.20	0.64
43:BH:94:TYR:HE1	43:BH:108:GLY:N	1.96	0.64
47:BO:47:ILE:O	47:BO:48:PRO:O	2.15	0.64
1:CA:540:G:H2'	1:CA:541:G:H8	1.61	0.64
3:CC:5:ILE:H	3:CC:5:ILE:HD13	1.60	0.64
5:CE:20:GLN:HE21	5:CE:25:ARG:NH2	1.95	0.64
39:DD:16:MET:HE1	39:DD:208:LYS:HE2	1.78	0.64
42:DG:181:ARG:HG2	42:DG:181:ARG:O	1.97	0.64
51:DS:38:GLN:O	51:DS:40:ILE:HG23	1.97	0.64
1:AA:358:U:H2'	1:AA:359:U:H6	1.59	0.64
2:AB:204:ASN:HD22	2:AB:206:ASP:H	1.44	0.64
9:AI:53:VAL:H	9:AI:95:LYS:HZ2	1.46	0.64
22:AW:51:U:H2'	22:AW:52:G:H8	1.62	0.64
25:AZ:317:GLU:HG3	25:AZ:404:LEU:HD21	1.78	0.64
36:BA:999:U:H5"	36:BA:1154:G:O6	1.97	0.64
36:BA:2758:A:C2	36:BA:2759:G:H1'	2.32	0.64
40:BE:59:VAL:HG13	40:BE:60:ASN:H	1.62	0.64
41:BF:125:LEU:N	41:BF:125:LEU:HD23	2.13	0.64
42:BG:34:LEU:HA	42:BG:161:THR:HG22	1.79	0.64
43:BH:85:LYS:HZ3	43:BH:132:ARG:CA	2.06	0.64
54:BV:34:GLU:O	54:BV:36:PRO:HD3	1.97	0.64
57:BY:17:SER:HB2	57:BY:71:LYS:CE	2.26	0.64
1:CA:45:U:H2'	1:CA:46:G:C8	2.32	0.64
1:CA:192:U:H2'	1:CA:193:C:C6	2.32	0.64
1:CA:1221:G:H4'	19:CS:77:THR:HG21	1.79	0.64
1:CA:1228:C:OP1	13:CM:115:LYS:HE3	1.98	0.64
4:CD:5:ILE:HA	4:CD:115:ARG:NH1	2.12	0.64
6:CF:19:LEU:O	6:CF:19:LEU:HD23	1.97	0.64
13:CM:12:ASN:H	13:CM:12:ASN:ND2	1.95	0.64
25:CZ:198:LYS:HA	25:CZ:198:LYS:CE	2.27	0.64
30:D4:10:VAL:HG23	30:D4:11:PRO:HD2	1.80	0.64
32:D6:17:LYS:HE2	32:D6:17:LYS:HA	1.79	0.64
36:DA:99:U:C4'	36:DA:102:G:H1'	2.27	0.64
36:DA:833:U:H5"	48:DP:48:PRO:CB	2.27	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1286:A:H2'	36:DA:1288:U:OP2	1.97	0.64
36:DA:2523:G:H2'	36:DA:2524:G:H5'	1.80	0.64
39:DD:118:VAL:HG22	39:DD:119:ALA:N	2.12	0.64
40:DE:202:LYS:HD2	40:DE:202:LYS:N	2.12	0.64
41:DF:24:LEU:O	41:DF:26:ALA:N	2.31	0.64
53:DU:64:ARG:HH11	53:DU:64:ARG:HG2	1.63	0.64
54:DV:5:VAL:HG23	54:DV:37:VAL:O	1.98	0.64
54:DV:19:LYS:HB3	54:DV:94:LEU:O	1.96	0.64
1:AA:72:C:H2'	1:AA:73:G:C8	2.33	0.64
1:AA:376:G:H4'	16:AP:5:ARG:HH11	1.62	0.64
1:AA:1412:C:H2'	1:AA:1413:A:C8	2.32	0.64
3:AC:5:ILE:H	3:AC:5:ILE:HD13	1.58	0.64
5:AE:31:LEU:CD2	5:AE:43:LEU:HD11	2.28	0.64
9:AI:20:ARG:O	9:AI:22:GLY:N	2.30	0.64
13:AM:54:VAL:O	13:AM:58:GLU:HG2	1.97	0.64
15:AO:3:ILE:O	15:AO:3:ILE:HG13	1.96	0.64
20:AT:47:GLY:O	20:AT:49:ALA:N	2.24	0.64
25:AZ:171:ILE:HG22	25:AZ:172:ARG:H	1.63	0.64
29:B3:19:GLN:HE22	29:B3:52:HIS:HE1	1.44	0.64
36:BA:523:C:H2'	36:BA:524:U:H5'	1.78	0.64
36:BA:886:C:H2'	36:BA:887:A:C4'	2.27	0.64
5:CE:41:VAL:HG13	5:CE:113:ALA:HA	1.80	0.64
7:CG:79:ARG:NH2	22:CW:33:U:H4'	2.12	0.64
19:CS:43:GLU:O	19:CS:45:VAL:HG13	1.96	0.64
27:D1:69:LYS:NZ	27:D1:76:ARG:NH2	2.46	0.64
36:DA:613:G:H5'	36:DA:613:G:H8	1.62	0.64
36:DA:1058:G:H3'	36:DA:1059:G:C5'	2.28	0.64
36:DA:1598:C:H5'	56:DX:36:LYS:HG2	1.78	0.64
42:DG:25:TYR:CE2	42:DG:32:PRO:HD2	2.32	0.64
49:DQ:1:MET:HE1	49:DQ:45:GLN:HA	1.79	0.64
52:DT:94:ALA:O	52:DT:96:ARG:N	2.30	0.64
1:AA:192:U:H2'	1:AA:193:C:C6	2.33	0.64
1:AA:266:G:C5'	1:AA:267:C:C5	2.81	0.64
2:AB:17:PHE:CD2	2:AB:44:LEU:HD11	2.32	0.64
4:AD:180:GLY:O	4:AD:182:LYS:HG3	1.98	0.64
22:AV:1:G:H1'	26:B0:5:LYS:HZ2	1.63	0.64
28:B2:7:ARG:HA	28:B2:10:LEU:HD12	1.78	0.64
36:BA:2036:C:H5'	36:BA:2036:C:C6	2.25	0.64
36:BA:2762:G:H5'	36:BA:2762:G:C8	2.30	0.64
43:BH:12:PRO:O	43:BH:15:VAL:HG22	1.97	0.64
1:CA:254:G:OP1	17:CQ:67:LYS:O	2.15	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:CZ:98:GLN:HE22	25:CZ:346:THR:HG22	1.61	0.64
34:D8:50:LEU:O	34:D8:51:ALA:HB3	1.98	0.64
36:DA:298:G:H5'	36:DA:299:A:OP1	1.98	0.64
36:DA:1264:G:H3'	36:DA:1265:A:H5"	1.80	0.64
36:DA:1899:G:O2'	36:DA:1900:A:H5"	1.97	0.64
36:DA:2308:G:N7	36:DA:2310:A:H5'	2.13	0.64
36:DA:2886:G:H2'	36:DA:2887:U:H6	1.62	0.64
39:DD:242:ARG:HH11	39:DD:242:ARG:CG	2.11	0.64
41:DF:28:ILE:H	41:DF:28:ILE:CD1	2.06	0.64
55:DW:29:LEU:HG	55:DW:33:ARG:HD2	1.80	0.64
1:AA:797:C:OP1	11:AK:124:LYS:HE2	1.97	0.64
1:AA:1513:A:H2'	1:AA:1514:C:C6	2.33	0.64
2:AB:47:THR:HA	2:AB:202:PRO:HG2	1.79	0.64
3:AC:135:LYS:HZ2	5:AE:50:GLU:HG2	1.61	0.64
4:AD:145:GLU:HA	4:AD:183:GLY:O	1.97	0.64
22:AW:43:C:H2'	22:AW:44:G:H1'	1.80	0.64
33:B7:34:ARG:HD2	33:B7:39:ARG:HG3	1.79	0.64
36:BA:45:C:H2'	36:BA:47:C:C6	2.32	0.64
36:BA:644:A:C2	36:BA:2369:A:H1'	2.33	0.64
36:BA:1348:G:C2'	36:BA:1349:A:H5"	2.27	0.64
36:BA:1368:G:O2'	36:BA:1369:G:H5'	1.96	0.64
36:BA:1991:U:H2'	36:BA:1992:G:H5"	1.80	0.64
36:BA:2110:G:H1	36:BA:2178:C:H5	1.46	0.64
36:BA:2184:G:H2'	36:BA:2185:C:C1'	2.28	0.64
36:BA:2472:G:H5'	36:BA:2473:U:H5"	1.79	0.64
40:BE:33:VAL:HG23	40:BE:47:VAL:HG13	1.80	0.64
46:BN:132:ALA:O	46:BN:133:GLN:HB3	1.96	0.64
49:BQ:68:ILE:HG23	49:BQ:103:MET:HA	1.80	0.64
56:BX:13:LEU:HA	56:BX:18:TYR:CE1	2.32	0.64
56:BX:35:THR:CG2	56:BX:37:THR:H	2.10	0.64
1:CA:72:C:H2'	1:CA:73:G:C8	2.33	0.64
1:CA:1047:G:H5"	14:CN:4:LYS:HE2	1.80	0.64
2:CB:215:LEU:O	2:CB:219:VAL:HG23	1.97	0.64
4:CD:148:VAL:HG12	4:CD:149:ALA:H	1.63	0.64
13:CM:11:ARG:HG2	13:CM:12:ASN:HD22	1.60	0.64
17:CQ:52:LYS:HD3	17:CQ:52:LYS:N	2.07	0.64
22:CW:43:C:H2'	22:CW:44:G:H1'	1.80	0.64
36:DA:547:A:H2'	36:DA:548:A:C8	2.32	0.64
36:DA:1053:C:H2'	36:DA:1054:A:C8	2.31	0.64
36:DA:2443:C:O2'	36:DA:2444:G:H5'	1.97	0.64
37:DB:106:G:C5'	58:DZ:31:ARG:HG2	2.28	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:DD:30:GLU:CB	39:DD:35:LYS:HD2	2.16	0.64
40:DE:101:ARG:CZ	40:DE:171:GLU:HB2	2.28	0.64
49:DQ:109:VAL:HG12	49:DQ:113:GLN:HB2	1.78	0.64
52:DT:62:THR:CG2	52:DT:75:ILE:HG13	2.28	0.64
58:DZ:139:VAL:HG12	58:DZ:140:ASP:N	2.13	0.64
1:AA:1533:C:C2'	1:AA:1534:A:H5"	2.27	0.64
4:AD:155:LEU:O	4:AD:159:ARG:HG2	1.98	0.64
5:AE:20:GLN:NE2	5:AE:25:ARG:NH2	2.46	0.64
19:AS:45:VAL:HG23	19:AS:46:GLY:N	2.13	0.64
36:BA:278:A:H61	36:BA:362:U:H3	1.45	0.64
36:BA:1902:C:H4'	39:BD:244:ARG:HA	1.79	0.64
38:BC:27:ARG:HE	38:BC:182:PRO:HB2	1.63	0.64
38:BC:214:VAL:CG2	38:BC:224:ILE:HD13	2.28	0.64
43:BH:85:LYS:NZ	43:BH:132:ARG:HA	2.06	0.64
54:BV:19:LYS:HB3	54:BV:94:LEU:O	1.98	0.64
1:CA:1442(B):A:C8	52:DT:118:ARG:HD3	2.33	0.64
3:CC:49:SER:O	3:CC:50:ALA:HB3	1.98	0.64
12:CL:112:ASP:O	12:CL:114:LYS:HG2	1.98	0.64
17:CQ:5:VAL:HG22	17:CQ:60:ILE:HD12	1.79	0.64
29:D3:35:ARG:HD3	29:D3:37:LEU:HD11	1.80	0.64
31:D5:54:GLY:N	31:D5:56:LYS:HZ2	1.95	0.64
36:DA:2200:C:H42	36:DA:2223:G:H1	1.44	0.64
36:DA:2713:A:OP1	50:DR:14:SER:HB3	1.98	0.64
52:DT:109:GLU:HG2	52:DT:112:ARG:NH2	2.13	0.64
58:DZ:124:ILE:O	58:DZ:124:ILE:HG13	1.98	0.64
1:AA:447:G:H2'	1:AA:485:G:N2	2.14	0.63
1:AA:961:U:HO2'	1:AA:962:C:H6	1.44	0.63
12:AL:51:ALA:C	12:AL:52:LEU:HD22	2.23	0.63
22:AW:31:A:N1	22:AW:39:U:O4	2.30	0.63
26:B0:20:ARG:HH11	26:B0:20:ARG:HG2	1.63	0.63
36:BA:533:G:H5'	53:BU:24:TYR:CE1	2.33	0.63
36:BA:1187:G:H5"	54:BV:81:TYR:CE1	2.33	0.63
36:BA:1264:G:H3'	36:BA:1265:A:H5"	1.80	0.63
42:BG:82:LEU:HD23	42:BG:83:ARG:H	1.63	0.63
42:BG:121:ASN:HD22	42:BG:121:ASN:C	2.05	0.63
57:BY:46:LYS:HD3	57:BY:47:LYS:N	2.12	0.63
58:BZ:70:LEU:HD11	58:BZ:98:MET:HG2	1.79	0.63
1:CA:865:A:H5'	1:CA:1078:U:O4	1.98	0.63
1:CA:1054:C:O2'	1:CA:1055:A:C5'	2.45	0.63
8:CH:89:PRO:HA	8:CH:92:ARG:NH1	2.13	0.63
9:CI:4:TYR:HB2	9:CI:19:LEU:HB3	1.80	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:CI:51:ARG:HG2	9:CI:56:LEU:HD22	1.78	0.63
22:CW:1:G:N3	22:CW:1:G:H2'	2.13	0.63
22:CW:65:G:H4'	32:D6:28:ARG:HH21	1.61	0.63
25:CZ:93:ILE:CG1	25:CZ:122:LEU:HD11	2.27	0.63
36:DA:1188:U:H4'	54:DV:79:VAL:CG2	2.28	0.63
36:DA:2110:G:H1	36:DA:2178:C:H5	1.44	0.63
39:DD:161:THR:O	39:DD:196:VAL:HG23	1.99	0.63
40:DE:101:ARG:HB3	40:DE:201:THR:HG21	1.79	0.63
51:DS:106:ARG:HG2	51:DS:106:ARG:O	1.98	0.63
58:DZ:123:ASP:O	58:DZ:124:ILE:HG12	1.99	0.63
2:AB:75:LYS:HA	2:AB:78:GLN:NE2	2.13	0.63
3:AC:16:ARG:HB2	3:AC:16:ARG:NH1	2.13	0.63
12:AL:112:ASP:O	12:AL:114:LYS:HG2	1.98	0.63
22:AW:1:G:H2'	22:AW:1:G:N3	2.13	0.63
24:AY:18:G:OP1	24:AY:18:G:H3'	1.98	0.63
27:B1:41:ARG:NH2	36:BA:1365:A:OP1	2.30	0.63
30:B4:5:ILE:HG12	30:B4:5:ILE:O	1.98	0.63
36:BA:970:C:H2'	36:BA:971:C:C6	2.34	0.63
36:BA:1058:G:H3'	36:BA:1059:G:C5'	2.28	0.63
36:BA:2396:G:O2'	36:BA:2397:G:H5'	1.99	0.63
38:BC:10:LEU:HD12	38:BC:32:LEU:HA	1.80	0.63
38:BC:118:ASP:C	38:BC:120:MET:H	2.04	0.63
50:BR:2:ARG:HG3	50:BR:2:ARG:NH1	2.14	0.63
52:BT:82:LEU:HD12	52:BT:82:LEU:H	1.63	0.63
1:CA:403:C:O2'	1:CA:404:U:H5'	1.97	0.63
4:CD:128:VAL:HG12	4:CD:129:ASN:N	2.09	0.63
6:CF:77:ARG:HH11	6:CF:77:ARG:HG2	1.61	0.63
41:DF:6:VAL:HG12	41:DF:7:TYR:N	2.09	0.63
42:DG:116:ASP:O	42:DG:117:PHE:HB2	1.97	0.63
46:DN:26:LEU:O	46:DN:26:LEU:HD12	1.96	0.63
47:DO:104:ARG:HE	52:DT:33:LYS:HZ2	1.45	0.63
48:DP:77:ARG:HD3	48:DP:78:PRO:HD2	1.80	0.63
50:DR:10:LEU:O	50:DR:11:ASN:HB2	1.99	0.63
52:DT:75:ILE:HD12	52:DT:75:ILE:N	2.12	0.63
1:AA:521:G:H4'	12:AL:73:GLU:HG2	1.80	0.63
2:AB:44:LEU:HA	2:AB:47:THR:CB	2.28	0.63
4:AD:5:ILE:HA	4:AD:115:ARG:NH1	2.14	0.63
6:AF:82:ARG:HB2	6:AF:85:VAL:HG23	1.80	0.63
9:AI:42:ARG:HH22	9:AI:75:ASP:CG	2.05	0.63
13:AM:17:VAL:O	13:AM:20:THR:HB	1.99	0.63
31:B5:16:ARG:HD2	31:B5:20:ARG:NH1	2.12	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:195:A:H5"	36:BA:196:A:OP2	1.99	0.63
36:BA:302:C:H2'	36:BA:303:U:H6	1.63	0.63
36:BA:1051:G:H2'	36:BA:1052:C:C6	2.32	0.63
39:BD:30:GLU:HG3	39:BD:63:ARG:CZ	2.27	0.63
40:BE:101:ARG:HD2	40:BE:169:ASN:O	1.97	0.63
47:BO:104:ARG:HE	52:BT:33:LYS:HZ3	1.43	0.63
48:BP:58:THR:C	48:BP:61:ARG:HE	2.05	0.63
48:BP:102:ARG:HH11	48:BP:102:ARG:HB2	1.64	0.63
50:BR:103:ARG:HG3	55:BW:40:ASN:OD1	1.97	0.63
51:BS:106:ARG:HG2	51:BS:106:ARG:O	1.98	0.63
1:CA:447:G:H2'	1:CA:485:G:N2	2.13	0.63
13:CM:101:GLN:HE21	13:CM:101:GLN:H	1.46	0.63
32:D6:17:LYS:HB3	32:D6:18:ARG:NH1	2.13	0.63
32:D6:25:LYS:HD2	36:DA:2285:C:H41	1.64	0.63
32:D6:43:CYS:O	32:D6:44:ARG:HB2	1.98	0.63
36:DA:672:C:H2'	36:DA:673:C:C5'	2.28	0.63
36:DA:1024:G:C3'	36:DA:1025:G:H5"	2.21	0.63
36:DA:1499:C:H5'	36:DA:1499:C:C6	2.21	0.63
36:DA:1718:G:H2'	36:DA:1719:G:H8	1.63	0.63
36:DA:1952:A:C6	47:DO:22:ILE:HD12	2.33	0.63
39:DD:148:GLU:HB2	39:DD:151:LYS:HD2	1.80	0.63
40:DE:77:ILE:HG22	40:DE:78:LEU:HD12	1.80	0.63
9:AI:26:VAL:HG22	9:AI:61:ALA:HB3	1.79	0.63
11:AK:30:VAL:HG21	11:AK:65:ALA:HA	1.80	0.63
12:AL:59:ARG:HG2	12:AL:65:GLU:HG3	1.80	0.63
19:AS:11:VAL:HG11	19:AS:16:LEU:HD11	1.80	0.63
25:AZ:215:ARG:HG3	25:AZ:215:ARG:HH11	1.63	0.63
36:BA:590:A:H2'	36:BA:591:C:C6	2.33	0.63
36:BA:1718:G:H2'	36:BA:1719:G:H8	1.63	0.63
36:BA:2790:A:H2'	36:BA:2791:C:H5"	1.81	0.63
38:BC:161:ILE:HG21	38:BC:174:PRO:HG2	1.80	0.63
53:BU:88:ILE:HD12	53:BU:109:LEU:HD22	1.80	0.63
57:BY:74:PRO:O	57:BY:75:ILE:HB	1.99	0.63
1:CA:35:G:H2'	1:CA:36:C:C6	2.34	0.63
10:CJ:4:ILE:HB	10:CJ:74:ILE:CG1	2.28	0.63
16:CP:43:LYS:HG3	16:CP:48:TRP:CE3	2.33	0.63
19:CS:40:ILE:HG23	19:CS:62:ILE:HD11	1.80	0.63
22:CW:51:U:H2'	22:CW:52:G:H8	1.62	0.63
24:CY:6:C:O2'	24:CY:7:G:H5'	1.96	0.63
24:CY:18:G:OP1	24:CY:18:G:H3'	1.98	0.63
26:D0:20:ARG:HH11	26:D0:20:ARG:HG2	1.63	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:D3:35:ARG:HH11	29:D3:35:ARG:CB	2.03	0.63
30:D4:27:THR:O	30:D4:28:LYS:HB3	1.98	0.63
32:D6:25:LYS:HE2	34:D8:34:TRP:HE1	1.63	0.63
36:DA:221:A:H4'	36:DA:222:A:O5'	1.97	0.63
36:DA:2389:G:H5"	36:DA:2390:U:H5'	1.80	0.63
38:DC:118:ASP:C	38:DC:120:MET:H	2.04	0.63
39:DD:275:LYS:O	39:DD:276:LYS:HB2	1.97	0.63
43:DH:91:GLY:HA3	43:DH:94:TYR:HD2	1.64	0.63
48:DP:102:ARG:HB2	48:DP:102:ARG:HH11	1.64	0.63
51:DS:20:ARG:HH11	51:DS:20:ARG:HG2	1.63	0.63
57:DY:27:VAL:HG12	57:DY:29:GLU:OE1	1.98	0.63
1:AA:269:C:H2'	1:AA:270:A:C8	2.33	0.63
9:AI:4:TYR:HB2	9:AI:19:LEU:HB3	1.80	0.63
9:AI:51:ARG:HG2	9:AI:56:LEU:HD22	1.79	0.63
22:AV:47:U:H3'	22:AV:48:C:H5'	1.81	0.63
22:AW:65:G:H4'	32:B6:28:ARG:HH21	1.64	0.63
34:B8:14:VAL:HG21	34:B8:22:VAL:CG1	2.27	0.63
36:BA:32:C:O2'	36:BA:33:U:H5'	1.98	0.63
38:BC:114:VAL:HG23	38:BC:149:ILE:HD11	1.81	0.63
43:BH:41:MET:HG3	43:BH:42:ARG:O	1.99	0.63
55:BW:82:LEU:HD12	55:BW:82:LEU:N	2.12	0.63
1:CA:645:C:H2'	1:CA:646:U:H6	1.64	0.63
1:CA:677:U:H3	1:CA:713:G:H22	1.46	0.63
1:CA:797:C:OP1	11:CK:124:LYS:HE2	1.99	0.63
1:CA:977:A:N3	1:CA:977:A:C2'	2.62	0.63
2:CB:178:ARG:NH1	8:CH:71:GLY:O	2.32	0.63
4:CD:145:GLU:HA	4:CD:183:GLY:O	1.96	0.63
4:CD:158:ILE:O	4:CD:162:LEU:HB2	1.99	0.63
36:DA:278:A:H61	36:DA:362:U:H3	1.47	0.63
36:DA:414:C:H1'	36:DA:1864:U:O2'	1.99	0.63
36:DA:814:C:H2'	36:DA:815:C:H6	1.64	0.63
36:DA:2228:G:OP1	39:DD:261:LYS:HE3	1.99	0.63
36:DA:2502:G:H5"	36:DA:2503:A:C5'	2.28	0.63
37:DB:82:G:O2'	37:DB:83:G:H5'	1.97	0.63
42:DG:6:ALA:HB3	42:DG:104:GLU:OE2	1.99	0.63
49:DQ:35:VAL:HG12	49:DQ:130:LYS:O	1.99	0.63
52:DT:78:LEU:C	52:DT:79:HIS:HD2	2.07	0.63
54:DV:5:VAL:HG21	54:DV:35:LEU:HD23	1.81	0.63
1:AA:17:U:H2'	1:AA:18:C:C6	2.33	0.63
13:AM:12:ASN:H	13:AM:12:ASN:ND2	1.95	0.63
25:AZ:263:ARG:HH21	25:AZ:297:GLU:CG	2.10	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:B2:60:LEU:O	28:B2:63:VAL:HB	1.97	0.63
28:B2:60:LEU:HA	28:B2:63:VAL:HG21	1.81	0.63
36:BA:654(E):G:H22	36:BA:654(Q):C:C1'	2.06	0.63
36:BA:2580:U:O3'	40:BE:130:GLY:HA3	1.98	0.63
42:BG:134:GLY:O	42:BG:135:LEU:HD12	1.97	0.63
46:BN:26:LEU:HD12	46:BN:26:LEU:O	1.98	0.63
47:BO:60:ALA:HA	47:BO:87:ILE:HG12	1.81	0.63
47:BO:98:VAL:HG12	47:BO:117:LEU:HB3	1.79	0.63
48:BP:66:GLY:O	48:BP:67:MET:HB2	1.96	0.63
49:BQ:42:ILE:HD13	49:BQ:97:VAL:CG2	2.29	0.63
51:BS:24:LEU:HB3	51:BS:85:VAL:HG12	1.79	0.63
58:BZ:151:HIS:HA	58:BZ:171:ILE:CD1	2.17	0.63
1:CA:657:G:O2'	1:CA:658:G:H5'	1.98	0.63
1:CA:1048:G:H5"	14:CN:2:ALA:HB1	1.79	0.63
1:CA:1256:A:H2	1:CA:1277:C:C6	2.16	0.63
6:CF:43:LEU:HD22	6:CF:43:LEU:N	2.14	0.63
11:CK:67:ASP:OD2	11:CK:71:LYS:HE3	1.99	0.63
12:CL:38:THR:CG2	12:CL:59:ARG:HG3	2.27	0.63
22:CW:71:G:H2'	22:CW:72:C:C5'	2.23	0.63
36:DA:272(I):U:H5'	36:DA:272(I):U:H6	1.64	0.63
36:DA:2649:U:H2'	36:DA:2650:U:C6	2.33	0.63
41:DF:32:LEU:O	41:DF:32:LEU:HD23	1.99	0.63
41:DF:156:LEU:HD21	41:DF:163:VAL:HG12	1.79	0.63
43:DH:153:LYS:HD3	43:DH:153:LYS:N	2.02	0.63
47:DO:104:ARG:NH2	52:DT:33:LYS:HD3	2.14	0.63
48:DP:23:PRO:CD	48:DP:33:ARG:HE	2.10	0.63
55:DW:4:LYS:HA	55:DW:106:ILE:HG22	1.80	0.63
1:AA:1116:C:H2'	1:AA:1117:G:C5'	2.29	0.63
1:AA:1116:C:H2'	1:AA:1117:G:H5"	1.81	0.63
3:AC:114:PRO:O	3:AC:118:GLN:HG3	1.99	0.63
34:B8:61:LEU:HD13	34:B8:62:LEU:N	2.12	0.63
36:BA:547:A:H2'	36:BA:548:A:C8	2.33	0.63
42:BG:11:TYR:O	42:BG:15:VAL:HB	1.98	0.63
48:BP:24:GLY:N	48:BP:33:ARG:CZ	2.61	0.63
49:BQ:109:VAL:HG12	49:BQ:113:GLN:HB2	1.79	0.63
52:BT:94:ALA:O	52:BT:96:ARG:N	2.31	0.63
54:BV:5:VAL:HG23	54:BV:37:VAL:O	1.97	0.63
56:BX:40:LYS:O	56:BX:40:LYS:HD2	1.98	0.63
1:CA:274:A:O2'	1:CA:275:G:C8	2.51	0.63
1:CA:1127:G:O2'	1:CA:1128:C:H5'	1.99	0.63
20:CT:25:ARG:HH11	20:CT:25:ARG:HG3	1.64	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:D5:54:GLY:H	31:D5:56:LYS:HZ2	1.45	0.63
35:D9:29:ASN:HD22	35:D9:29:ASN:H	1.46	0.63
36:DA:654(E):G:H2'	36:DA:654(F):C:H5'	1.81	0.63
36:DA:661:C:O3'	48:DP:18:ARG:HD2	1.98	0.63
36:DA:1103:A:H5"	36:DA:1104:C:H5	1.63	0.63
36:DA:1398:C:O2'	36:DA:1399:C:H5'	1.98	0.63
36:DA:2100:G:H2'	36:DA:2101:G:C8	2.33	0.63
46:DN:3:THR:C	46:DN:4:TYR:CG	2.77	0.63
46:DN:10:GLU:OE2	46:DN:11:PRO:HD2	1.98	0.63
48:DP:148:LEU:O	48:DP:149:GLU:HB2	1.98	0.63
54:DV:74:LYS:HB2	54:DV:83:ARG:HB2	1.79	0.63
58:DZ:28:MET:HE3	58:DZ:59:LEU:CD1	2.29	0.63
1:AA:722:A:H2'	1:AA:722:A:N3	2.13	0.63
6:AF:46:ARG:NH2	18:AR:37:VAL:HG11	2.14	0.63
28:B2:35:LEU:HD21	28:B2:50:ILE:HG13	1.79	0.63
36:BA:8:A:H2'	36:BA:9:U:C5	2.34	0.63
36:BA:221:A:H4'	36:BA:222:A:O5'	1.98	0.63
36:BA:1592:C:H2'	36:BA:1593:G:H8	1.63	0.63
36:BA:2023:G:H5'	36:BA:2617:C:H4'	1.81	0.63
36:BA:2061:G:H5"	36:BA:2503:A:C2	2.34	0.63
36:BA:2502:G:H5"	36:BA:2503:A:C5'	2.29	0.63
37:BB:3:C:H42	37:BB:118:G:H1	1.45	0.63
44:BJ:25:UNK:HA	44:BJ:116:UNK:HA	1.79	0.63
48:BP:101:VAL:HG12	48:BP:106:LEU:CB	2.29	0.63
54:BV:74:LYS:HB2	54:BV:83:ARG:HB2	1.80	0.63
57:BY:46:LYS:HD3	57:BY:47:LYS:H	1.63	0.63
1:CA:77:G:H5'	1:CA:78:G:OP2	1.98	0.63
1:CA:1065:U:C5	1:CA:1190:G:H1'	2.33	0.63
10:CJ:96:ILE:H	10:CJ:96:ILE:CD1	2.10	0.63
25:CZ:27:LEU:O	25:CZ:31:LEU:HG	1.97	0.63
26:D0:50:ASN:ND2	26:D0:63:VAL:HG21	2.12	0.63
36:DA:2762:G:H5'	36:DA:2762:G:C8	2.29	0.63
40:DE:4:ILE:HD12	40:DE:92:THR:O	1.99	0.63
42:DG:116:ASP:O	42:DG:117:PHE:CB	2.46	0.63
49:DQ:21:THR:O	49:DQ:22:LYS:HB3	1.99	0.63
49:DQ:111:GLU:OE1	49:DQ:133:ARG:NH2	2.32	0.63
50:DR:45:ARG:HG3	50:DR:46:GLY:N	2.12	0.63
57:DY:46:LYS:HD3	57:DY:47:LYS:H	1.64	0.63
1:AA:266:G:H5'	1:AA:267:C:C5	2.34	0.63
1:AA:1016:A:H2'	1:AA:1017:G:O4'	1.99	0.63
2:AB:29:ALA:HA	2:AB:32:ILE:CG2	2.29	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:80:ILE:H	2:AB:80:ILE:CD1	2.11	0.63
6:AF:43:LEU:HD22	6:AF:43:LEU:N	2.13	0.63
16:AP:49:LEU:HD12	16:AP:50:LYS:H	1.64	0.63
18:AR:32:ARG:HA	18:AR:69:THR:HG21	1.81	0.63
25:AZ:93:ILE:CG1	25:AZ:122:LEU:HD11	2.28	0.63
36:BA:674:G:H1'	41:BF:74:ARG:HD2	1.80	0.63
36:BA:2672:G:H2'	36:BA:2673:G:H5"	1.81	0.63
37:BB:66:A:H61	37:BB:108:U:H2'	1.62	0.63
40:BE:101:ARG:HB3	40:BE:201:THR:HG21	1.80	0.63
41:BF:24:LEU:O	41:BF:26:ALA:N	2.31	0.63
47:BO:104:ARG:NH2	52:BT:33:LYS:HD3	2.13	0.63
52:BT:57:PHE:HE1	52:BT:79:HIS:HD1	1.47	0.63
53:BU:83:LEU:HG	53:BU:88:ILE:CD1	2.28	0.63
55:BW:4:LYS:HA	55:BW:106:ILE:HG22	1.81	0.63
55:BW:29:LEU:HG	55:BW:33:ARG:HD2	1.81	0.63
1:CA:108:G:H5'	1:CA:109:A:C5'	2.28	0.63
1:CA:1250:A:H4'	9:CI:68:GLY:N	2.14	0.63
2:CB:44:LEU:HA	2:CB:47:THR:CB	2.28	0.63
11:CK:97:ALA:O	11:CK:101:SER:HB3	1.98	0.63
25:CZ:171:ILE:HG22	25:CZ:172:ARG:H	1.64	0.63
36:DA:106:C:H2'	36:DA:107:C:H6	1.64	0.63
36:DA:2307:G:H21	36:DA:2308:G:H5"	1.64	0.63
39:DD:30:GLU:CA	39:DD:35:LYS:HZ2	2.11	0.63
43:DH:98:LEU:HD12	43:DH:102:ALA:O	1.98	0.63
46:DN:1:MET:C	46:DN:2:LYS:HD2	2.24	0.63
46:DN:43:THR:HB	46:DN:46:VAL:CG1	2.29	0.63
48:DP:101:VAL:HG12	48:DP:106:LEU:CB	2.29	0.63
50:DR:103:ARG:HG3	55:DW:40:ASN:OD1	1.99	0.63
3:AC:34:LEU:O	3:AC:38:ARG:HG2	1.99	0.62
10:AJ:96:ILE:H	10:AJ:96:ILE:CD1	2.09	0.62
22:AW:59:U:H5'	22:AW:60:U:C5	2.34	0.62
27:B1:78:LYS:HE2	27:B1:78:LYS:HA	1.81	0.62
28:B2:57:ILE:CG2	28:B2:61:LEU:HG	2.22	0.62
36:BA:650:C:C3'	36:BA:651:G:H5"	2.28	0.62
36:BA:956:G:H4'	49:BQ:83:MET:HE1	1.80	0.62
36:BA:1877:A:H5'	36:BA:1878:G:OP2	1.98	0.62
46:BN:1:MET:HE1	46:BN:3:THR:OG1	1.99	0.62
1:CA:437:U:OP1	4:CD:155:LEU:HD22	1.99	0.62
1:CA:979:C:C2'	1:CA:980:C:H5"	2.28	0.62
1:CA:1050:G:HO2'	1:CA:1051:C:H6	1.45	0.62
2:CB:109:SER:C	2:CB:111:ARG:H	2.07	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CC:94:LEU:O	3:CC:95:THR:HB	1.99	0.62
6:CF:46:ARG:NH2	18:CR:37:VAL:HG11	2.13	0.62
8:CH:17:THR:HB	8:CH:78:GLN:OE1	2.00	0.62
36:DA:1409:C:H2'	36:DA:1410:G:H8	1.63	0.62
36:DA:1786:A:H2	36:DA:2606:C:H1'	1.64	0.62
36:DA:2036:C:H5'	36:DA:2036:C:C6	2.24	0.62
37:DB:65:C:O2'	37:DB:66:A:H5'	1.99	0.62
38:DC:18:LYS:HD3	38:DC:20:TYR:CE2	2.34	0.62
46:DN:72:TYR:CD2	46:DN:90:MET:HG3	2.34	0.62
49:DQ:43:THR:OG1	49:DQ:45:GLN:HG2	1.99	0.62
49:DQ:79:LEU:HD23	49:DQ:80:GLU:H	1.64	0.62
52:DT:106:SER:O	52:DT:107:ASP:CG	2.42	0.62
53:DU:17:ILE:HG23	53:DU:39:LEU:HD12	1.80	0.62
1:AA:108:G:H5'	1:AA:109:A:C5'	2.29	0.62
22:AW:71:G:H2'	22:AW:72:C:C5'	2.23	0.62
25:AZ:145:GLU:O	25:AZ:149:LEU:N	2.32	0.62
29:B3:35:ARG:HD3	29:B3:37:LEU:HD11	1.81	0.62
31:B5:11:THR:OG1	36:BA:1264:G:H5'	1.99	0.62
32:B6:15:GLU:HG3	32:B6:47:THR:HG21	1.81	0.62
36:BA:1335:U:H2'	36:BA:1336:A:H8	1.64	0.62
36:BA:2313:C:H5'	36:BA:2313:C:H6	1.63	0.62
37:BB:65:C:O2'	37:BB:66:A:H5'	1.99	0.62
40:BE:117:MET:CE	40:BE:136:ARG:HA	2.29	0.62
42:BG:159:VAL:O	42:BG:159:VAL:HG13	2.00	0.62
49:BQ:109:VAL:HG12	49:BQ:110:THR:N	2.12	0.62
51:BS:30:ARG:NH2	51:BS:62:LYS:HD3	2.11	0.62
52:BT:106:SER:O	52:BT:107:ASP:CG	2.42	0.62
2:CB:29:ALA:HA	2:CB:32:ILE:CG2	2.30	0.62
4:CD:138:TYR:CD1	4:CD:139:ARG:N	2.64	0.62
26:D0:12:ASN:O	26:D0:14:ARG:N	2.31	0.62
36:DA:1187:G:H5"	54:DV:81:TYR:CE1	2.33	0.62
36:DA:1540:U:H3'	36:DA:1541:G:C3'	2.29	0.62
36:DA:2790:A:H2'	36:DA:2791:C:H5"	1.81	0.62
38:DC:132:GLY:N	38:DC:133:PRO:HD2	2.14	0.62
1:AA:1255:G:H3'	1:AA:1279:A:N6	2.14	0.62
2:AB:111:ARG:HH11	2:AB:111:ARG:HG2	1.65	0.62
17:AQ:59:ILE:HG22	17:AQ:71:PHE:CD2	2.35	0.62
19:AS:45:VAL:O	19:AS:47:HIS:N	2.26	0.62
32:B6:17:LYS:HB3	32:B6:18:ARG:NH1	2.13	0.62
36:BA:1038:C:C2'	36:BA:1039:G:H5"	2.29	0.62
36:BA:2187:G:H2'	36:BA:2188:C:C5'	2.19	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2422:A:H4'	36:BA:2423:U:OP1	1.99	0.62
37:BB:82:G:O2'	37:BB:83:G:H5'	1.98	0.62
40:BE:52:LEU:HD23	40:BE:75:VAL:HB	1.81	0.62
41:BF:206:ILE:HG22	41:BF:207:GLY:H	1.63	0.62
42:BG:76:SER:CB	42:BG:83:ARG:HB3	2.29	0.62
46:BN:1:MET:C	46:BN:2:LYS:HD2	2.23	0.62
53:BU:14:HIS:CD2	53:BU:36:ARG:HH22	2.17	0.62
1:CA:187:C:H2'	1:CA:188:C:H6	1.63	0.62
1:CA:266:G:C5'	1:CA:267:C:C5	2.82	0.62
1:CA:537:G:H2'	1:CA:538:G:H8	1.64	0.62
1:CA:1005:A:H4'	1:CA:1037:C:O2'	1.99	0.62
2:CB:77:ALA:O	2:CB:81:VAL:HG23	1.99	0.62
34:D8:10:ALA:HB3	34:D8:60:LEU:HD21	1.81	0.62
36:DA:970:C:H2'	36:DA:971:C:H6	1.64	0.62
36:DA:1579:A:H5'	36:DA:1579:A:H8	1.64	0.62
36:DA:1810:A:H2'	36:DA:1811:G:O4'	1.99	0.62
36:DA:2523:G:H2'	36:DA:2524:G:C5'	2.29	0.62
36:DA:2852:G:H2'	36:DA:2853:C:H6	1.64	0.62
47:DO:107:ARG:O	47:DO:112:MET:HE1	1.99	0.62
49:DQ:27:VAL:H	49:DQ:137:TYR:HD2	1.46	0.62
52:DT:78:LEU:O	52:DT:79:HIS:HD2	1.81	0.62
57:DY:28:LYS:CB	57:DY:37:VAL:HB	2.29	0.62
58:DZ:72:ARG:HG3	58:DZ:89:PHE:HB2	1.80	0.62
1:AA:192:U:H1'	20:AT:103:GLY:HA2	1.81	0.62
1:AA:1003:G:H21	1:AA:1039:C:H42	1.47	0.62
14:AN:25:VAL:HG23	14:AN:38:GLY:O	1.99	0.62
25:AZ:291:ARG:HH11	25:AZ:291:ARG:HB2	1.64	0.62
39:BD:275:LYS:O	39:BD:276:LYS:HB2	1.98	0.62
43:BH:44:VAL:HG12	43:BH:45:VAL:N	2.13	0.62
1:CA:17:U:H2'	1:CA:18:C:C6	2.33	0.62
1:CA:376:G:OP2	16:CP:67:THR:HG21	1.98	0.62
1:CA:539:A:H2'	1:CA:540:G:C8	2.35	0.62
2:CB:80:ILE:H	2:CB:80:ILE:CD1	2.09	0.62
2:CB:97:TRP:CZ3	2:CB:176:GLU:OE2	2.52	0.62
3:CC:34:LEU:O	3:CC:38:ARG:HG2	1.98	0.62
8:CH:2:LEU:HD21	8:CH:5:PRO:HA	1.80	0.62
19:CS:16:LEU:O	19:CS:19:VAL:N	2.32	0.62
27:D1:82:LEU:HD21	27:D1:90:ILE:HG23	1.80	0.62
34:D8:61:LEU:HD13	34:D8:62:LEU:N	2.14	0.62
35:D9:19:ARG:O	35:D9:20:HIS:HB2	1.97	0.62
36:DA:8:A:H2'	36:DA:9:U:C5	2.34	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1092:C:H42	36:DA:1100:C:H42	1.47	0.62
36:DA:2068:U:N3	36:DA:2430:A:H2	1.93	0.62
46:DN:129:PRO:O	46:DN:130:HIS:HB3	1.98	0.62
48:DP:66:GLY:O	48:DP:67:MET:CB	2.47	0.62
53:DU:101:ARG:HH11	53:DU:101:ARG:HG3	1.64	0.62
57:DY:9:LYS:CG	57:DY:10:GLY:H	2.04	0.62
57:DY:17:SER:CB	57:DY:71:LYS:HE2	2.29	0.62
57:DY:46:LYS:HD3	57:DY:47:LYS:N	2.14	0.62
1:AA:537:G:H2'	1:AA:538:G:H8	1.63	0.62
1:AA:1221:G:H4'	19:AS:77:THR:HG21	1.81	0.62
6:AF:28:ARG:HH11	6:AF:28:ARG:HG3	1.64	0.62
12:AL:7:ILE:CD1	12:AL:8:ASN:N	2.62	0.62
13:AM:3:ARG:HD3	42:BG:113:ARG:NH1	2.14	0.62
36:BA:106:C:H1'	57:BY:2:ARG:NH2	2.14	0.62
36:BA:1221(A):C:H2'	36:BA:1222:C:C6	2.34	0.62
36:BA:2199:A:H3'	36:BA:2200:C:H6	1.64	0.62
36:BA:2485:G:H5"	49:BQ:46:GLN:NE2	2.13	0.62
36:BA:2712:U:O2'	36:BA:2713:A:H5'	1.98	0.62
38:BC:132:GLY:N	38:BC:133:PRO:HD2	2.15	0.62
51:BS:38:GLN:O	51:BS:40:ILE:HG23	1.98	0.62
53:BU:64:ARG:HH11	53:BU:64:ARG:HG2	1.63	0.62
58:BZ:62:PRO:C	58:BZ:64:GLY:H	2.04	0.62
58:BZ:108:PRO:CB	58:BZ:141:VAL:HG12	2.27	0.62
4:CD:189:PRO:CB	4:CD:194:LEU:HD21	2.22	0.62
25:CZ:69:GLU:HG2	25:CZ:70:TYR:N	2.14	0.62
36:DA:302:C:H2'	36:DA:303:U:H6	1.63	0.62
36:DA:603:A:H1'	36:DA:604:G:OP2	1.99	0.62
36:DA:2184:G:H2'	36:DA:2185:C:C1'	2.28	0.62
38:DC:139:ASN:OD1	38:DC:140:PRO:HD2	1.99	0.62
39:DD:30:GLU:H	39:DD:35:LYS:NZ	1.98	0.62
39:DD:224:ALA:C	39:DD:226:MET:H	2.07	0.62
43:DH:44:VAL:HG12	43:DH:45:VAL:N	2.14	0.62
47:DO:47:ILE:O	47:DO:48:PRO:O	2.18	0.62
48:DP:24:GLY:N	48:DP:33:ARG:CZ	2.63	0.62
52:DT:23:ARG:HG2	52:DT:120:ARG:NH1	2.14	0.62
53:DU:83:LEU:HG	53:DU:88:ILE:CD1	2.28	0.62
57:DY:2:ARG:HD3	57:DY:3:VAL:HG23	1.81	0.62
9:AI:53:VAL:O	9:AI:55:ALA:N	2.33	0.62
16:AP:43:LYS:HG3	16:AP:48:TRP:CE3	2.35	0.62
32:B6:36:LEU:HD23	32:B6:36:LEU:C	2.24	0.62
34:B8:61:LEU:CD1	34:B8:61:LEU:N	2.57	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:298:G:H5'	36:BA:299:A:OP1	1.99	0.62
36:BA:2009:G:O2'	36:BA:2010:G:H5'	2.00	0.62
36:BA:2019:A:H2'	36:BA:2020:A:O5'	2.00	0.62
36:BA:2162:G:O2'	36:BA:2163:C:H5'	2.00	0.62
39:BD:148:GLU:HB2	39:BD:151:LYS:HD2	1.81	0.62
46:BN:45:ASN:HD22	46:BN:45:ASN:H	1.47	0.62
48:BP:95:VAL:HG23	48:BP:125:VAL:HA	1.81	0.62
50:BR:45:ARG:HG3	50:BR:46:GLY:N	2.12	0.62
53:BU:92:ARG:HH21	54:BV:10:LYS:HB3	1.63	0.62
1:CA:950:U:H2'	1:CA:951:G:H8	1.64	0.62
1:CA:1296:C:H4'	1:CA:1302:U:C5	2.35	0.62
1:CA:1532:U:H2'	1:CA:1533:C:O4'	1.99	0.62
2:CB:84:GLU:HB3	2:CB:219:VAL:HG21	1.80	0.62
12:CL:8:ASN:O	12:CL:12:ARG:HG3	1.99	0.62
13:CM:17:VAL:O	13:CM:20:THR:HB	1.99	0.62
22:CW:59:U:H5'	22:CW:60:U:C5	2.33	0.62
26:D0:73:GLY:O	26:D0:75:LEU:N	2.32	0.62
32:D6:42:TRP:HA	32:D6:42:TRP:HE3	1.64	0.62
36:DA:16:G:O2'	36:DA:17:G:H5'	2.00	0.62
36:DA:2152:G:O2'	36:DA:2153:G:H5'	1.99	0.62
43:DH:41:MET:HG3	43:DH:42:ARG:O	2.00	0.62
50:DR:30:THR:HG22	50:DR:31:HIS:ND1	2.14	0.62
52:DT:28:VAL:O	52:DT:29:ARG:CB	2.47	0.62
57:DY:97:ARG:HH21	57:DY:98:VAL:CB	2.12	0.62
1:AA:45:U:H2'	1:AA:46:G:C8	2.34	0.62
3:AC:16:ARG:HB2	3:AC:16:ARG:HH11	1.65	0.62
4:AD:19:LEU:HD12	4:AD:19:LEU:N	2.14	0.62
5:AE:20:GLN:HE21	5:AE:25:ARG:NH2	1.96	0.62
14:AN:19:ARG:O	14:AN:20:ALA:C	2.40	0.62
30:B4:27:THR:O	30:B4:28:LYS:HB3	1.99	0.62
36:BA:99:U:C4'	36:BA:102:G:H1'	2.30	0.62
36:BA:1332:G:N2	36:BA:1610:A:C8	2.67	0.62
36:BA:2099:U:H2'	36:BA:2100:G:H8	1.64	0.62
36:BA:2118:U:H5'	36:BA:2147:G:H21	1.64	0.62
36:BA:2201:C:O2'	36:BA:2202:C:H5'	2.00	0.62
36:BA:2443:C:O2'	36:BA:2444:G:H5'	2.00	0.62
42:BG:52:ILE:HD13	42:BG:53:LEU:N	2.14	0.62
46:BN:3:THR:C	46:BN:4:TYR:CG	2.77	0.62
48:BP:66:GLY:O	48:BP:67:MET:CB	2.47	0.62
49:BQ:109:VAL:HG13	49:BQ:113:GLN:OE1	2.00	0.62
51:BS:35:ILE:H	51:BS:53:SER:HB2	1.62	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BT:11:GLU:CD	52:BT:11:GLU:H	2.07	0.62
55:BW:5:ALA:O	55:BW:6:ILE:HB	2.00	0.62
1:CA:180:U:H2'	1:CA:181:G:H5'	1.82	0.62
1:CA:1142:G:H2'	1:CA:1143:G:O4'	2.00	0.62
9:CI:53:VAL:C	9:CI:55:ALA:H	2.08	0.62
10:CJ:28:ARG:HH11	10:CJ:28:ARG:HB3	1.64	0.62
16:CP:67:THR:HB	16:CP:70:ALA:CB	2.30	0.62
36:DA:661:C:H4'	48:DP:16:ARG:NH1	2.14	0.62
36:DA:848:G:N3	36:DA:933:A:H1'	2.14	0.62
36:DA:1064:C:H2'	36:DA:1065:U:H5"	1.81	0.62
36:DA:2199:A:H3'	36:DA:2200:C:H6	1.65	0.62
36:DA:2801(A):A:H5'	36:DA:2802:G:H8	1.64	0.62
40:DE:33:VAL:HG23	40:DE:47:VAL:HG13	1.82	0.62
42:DG:45:GLU:O	42:DG:51:ARG:HG3	2.00	0.62
43:DH:50:VAL:CG1	43:DH:51:ARG:H	2.10	0.62
49:DQ:109:VAL:HG12	49:DQ:110:THR:N	2.15	0.62
1:AA:1005:A:H4'	1:AA:1037:C:O2'	1.99	0.62
1:AA:1116:C:C2'	1:AA:1117:G:H5"	2.30	0.62
9:AI:33:PHE:C	9:AI:35:GLU:H	2.07	0.62
12:AL:6:THR:H	12:AL:9:GLN:HE21	1.48	0.62
22:AW:38:A:H2'	22:AW:39:U:C5'	2.29	0.62
35:B9:30:PRO:HB2	36:BA:2527:C:H5'	1.81	0.62
36:BA:654(E):G:H2'	36:BA:654(F):C:H5'	1.82	0.62
36:BA:2308:G:N7	36:BA:2310:A:H5'	2.14	0.62
39:BD:70:TRP:O	39:BD:73:VAL:HG23	1.99	0.62
42:BG:46:ALA:C	42:BG:47:LYS:HD2	2.24	0.62
49:BQ:109:VAL:CG1	49:BQ:113:GLN:HB2	2.30	0.62
52:BT:78:LEU:C	52:BT:79:HIS:HD2	2.07	0.62
52:BT:93:ARG:NH2	52:BT:95:ARG:HD3	2.14	0.62
55:BW:11:ARG:HG2	55:BW:11:ARG:NH1	2.13	0.62
57:BY:81:LYS:HD3	57:BY:97:ARG:O	1.99	0.62
1:CA:393:A:O2'	1:CA:394:G:H5'	1.99	0.62
14:CN:25:VAL:HG23	14:CN:38:GLY:O	1.99	0.62
17:CQ:67:LYS:O	17:CQ:68:ARG:CB	2.47	0.62
27:D1:7:ILE:HG22	27:D1:8:SER:N	2.14	0.62
28:D2:68:ARG:HG3	28:D2:72:ALA:HB2	1.81	0.62
32:D6:36:LEU:C	32:D6:36:LEU:HD23	2.24	0.62
36:DA:582:G:H2'	36:DA:583:G:C8	2.35	0.62
36:DA:1991:U:H2'	36:DA:1992:G:H5"	1.82	0.62
39:DD:70:TRP:O	39:DD:73:VAL:HG23	1.99	0.62
40:DE:57:LYS:HE3	40:DE:57:LYS:CA	2.19	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:DQ:68:ILE:HG23	49:DQ:103:MET:HA	1.81	0.62
2:AB:7:VAL:O	2:AB:11:LEU:HB2	2.00	0.62
4:AD:189:PRO:CB	4:AD:194:LEU:HD21	2.23	0.62
10:AJ:90:LEU:N	10:AJ:91:PRO:HD3	2.15	0.62
25:AZ:104:LEU:HD23	25:AZ:133:VAL:HG22	1.82	0.62
26:B0:73:GLY:O	26:B0:75:LEU:N	2.32	0.62
28:B2:3:LEU:O	28:B2:7:ARG:HG3	1.99	0.62
36:BA:956:G:OP2	49:BQ:14:ARG:NH2	2.32	0.62
36:BA:1024:G:C3'	36:BA:1025:G:H5"	2.22	0.62
36:BA:2309:A:H2'	36:BA:2310:A:C5'	2.30	0.62
42:BG:10:LYS:O	42:BG:15:VAL:HG23	1.99	0.62
46:BN:99:LEU:O	46:BN:103:VAL:HG23	2.00	0.62
50:BR:2:ARG:O	50:BR:2:ARG:HD2	2.00	0.62
50:BR:21:TYR:HB3	50:BR:47:PHE:CD2	2.35	0.62
54:BV:49:THR:HB	54:BV:50:PRO:CD	2.28	0.62
57:BY:73:ARG:HH22	57:BY:82:PRO:CA	2.12	0.62
58:BZ:33:LEU:HD12	58:BZ:34:ASN:H	1.64	0.62
1:CA:423:G:C2'	1:CA:424:G:H5'	2.29	0.62
3:CC:40:ARG:HG3	3:CC:40:ARG:NH1	2.14	0.62
25:CZ:295:ARG:HG2	25:CZ:295:ARG:NH1	2.12	0.62
36:DA:693:C:O2'	36:DA:694:U:H5'	2.00	0.62
36:DA:1058:G:C3'	36:DA:1059:G:C5'	2.78	0.62
36:DA:1335:U:H2'	36:DA:1336:A:H8	1.65	0.62
36:DA:1419:A:O2'	36:DA:1420:U:H5"	1.99	0.62
36:DA:2811:G:OP1	40:DE:60:ASN:HB2	1.99	0.62
48:DP:16:ARG:HB2	48:DP:16:ARG:HH11	1.65	0.62
52:DT:28:VAL:O	52:DT:29:ARG:CG	2.48	0.62
56:DX:12:VAL:CG2	56:DX:13:LEU:H	1.90	0.62
57:DY:81:LYS:HD3	57:DY:97:ARG:O	2.00	0.62
1:AA:77:G:H5'	1:AA:78:G:OP2	1.99	0.62
2:AB:47:THR:O	2:AB:51:LEU:HB2	2.00	0.62
13:AM:116:THR:O	13:AM:118:ALA:N	2.33	0.62
28:B2:35:LEU:HG	28:B2:53:LEU:HD13	1.82	0.62
32:B6:15:GLU:OE1	32:B6:18:ARG:CG	2.48	0.62
36:BA:212:G:O2'	36:BA:213:A:H5'	1.99	0.62
36:BA:495:G:H21	55:BW:61:ASN:HD21	1.46	0.62
36:BA:528:A:H2	36:BA:2043:C:C5'	2.13	0.62
36:BA:1064:C:H2'	36:BA:1065:U:H5"	1.82	0.62
36:BA:1771:C:C1'	36:BA:1786:A:H8	2.11	0.62
36:BA:2195:C:O2'	36:BA:2196:C:H5'	1.99	0.62
40:BE:101:ARG:CZ	40:BE:171:GLU:HB2	2.29	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BF:139:PHE:HB2	41:BF:166:ALA:HB1	1.82	0.62
46:BN:129:PRO:O	46:BN:130:HIS:HB3	1.99	0.62
57:BY:2:ARG:HD3	57:BY:3:VAL:HG23	1.81	0.62
58:BZ:19:ARG:NH1	58:BZ:84:GLU:O	2.33	0.62
1:CA:731:G:OP1	1:CA:766:A:H1'	2.00	0.62
1:CA:1006:C:N4	1:CA:1024:G:H21	1.98	0.62
3:CC:70:VAL:HG13	3:CC:72:LYS:H	1.65	0.62
4:CD:36:ARG:C	4:CD:38:TYR:H	2.07	0.62
10:CJ:61:GLU:OE2	14:CN:49:HIS:HE1	1.82	0.62
34:D8:16:ILE:HD12	34:D8:57:ARG:HG2	1.80	0.62
36:DA:90:U:O4'	36:DA:92:A:H8	1.83	0.62
36:DA:1771:C:C1'	36:DA:1786:A:H8	2.13	0.62
40:DE:37:ARG:HA	40:DE:42:ASP:OD2	1.99	0.62
41:DF:139:PHE:HB2	41:DF:166:ALA:HB1	1.82	0.62
47:DO:35:VAL:HG21	47:DO:103:ALA:CB	2.28	0.62
49:DQ:109:VAL:HG13	49:DQ:113:GLN:OE1	2.00	0.62
56:DX:40:LYS:HG2	56:DX:51:VAL:CB	2.12	0.62
56:DX:40:LYS:O	56:DX:40:LYS:HD2	2.00	0.62
1:AA:541:G:H2'	1:AA:542:G:C8	2.32	0.61
1:AA:627:G:H2'	1:AA:628:G:H8	1.65	0.61
1:AA:1347:G:N2	1:AA:1373:G:H2'	2.15	0.61
4:AD:148:VAL:HG12	4:AD:149:ALA:H	1.63	0.61
22:AW:43:C:H2'	22:AW:44:G:C1'	2.29	0.61
26:B0:16:SER:HB2	36:BA:2262:U:H5	1.65	0.61
34:B8:6:THR:CG2	34:B8:63:PRO:HD3	2.29	0.61
36:BA:1188:U:O2'	36:BA:1189:A:H5'	2.00	0.61
36:BA:1286:A:H2'	36:BA:1288:U:OP2	2.00	0.61
36:BA:1409:C:H2'	36:BA:1410:G:H8	1.64	0.61
36:BA:1598:C:H5'	56:BX:36:LYS:CG	2.30	0.61
36:BA:1782:C:H1'	36:BA:2609:U:H5"	1.81	0.61
36:BA:2219:G:O2'	36:BA:2220:G:H5'	2.00	0.61
58:BZ:162:GLU:O	58:BZ:163:LEU:O	2.17	0.61
1:CA:633:G:H5'	1:CA:634:C:OP2	2.00	0.61
2:CB:7:VAL:O	2:CB:11:LEU:HB2	2.00	0.61
10:CJ:4:ILE:HB	10:CJ:74:ILE:HD11	1.82	0.61
22:CV:47:U:H3'	22:CV:48:C:H5'	1.81	0.61
28:D2:69:ARG:HB2	28:D2:70:GLN:HE22	1.64	0.61
31:D5:40:LYS:HG2	31:D5:46:CYS:HB2	1.81	0.61
35:D9:30:PRO:HB2	36:DA:2527:C:H5'	1.81	0.61
40:DE:44:TYR:O	40:DE:45:THR:HB	1.99	0.61
40:DE:101:ARG:HH11	40:DE:169:ASN:ND2	1.98	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DE:120:TRP:CE3	40:DE:155:LYS:HE3	2.34	0.61
41:DF:206:ILE:HG22	41:DF:207:GLY:H	1.64	0.61
50:DR:21:TYR:HB3	50:DR:47:PHE:CD2	2.35	0.61
53:DU:14:HIS:CD2	53:DU:36:ARG:HH22	2.18	0.61
1:AA:1250:A:H4'	9:AI:68:GLY:N	2.15	0.61
1:AA:1463:C:H5'	52:BT:115:ARG:HH12	1.65	0.61
9:AI:65:VAL:HG21	9:AI:73:GLN:HB3	1.82	0.61
12:AL:89:ARG:NH1	12:AL:91:LYS:HG2	2.14	0.61
25:AZ:309:SER:O	25:AZ:310:ILE:HG22	2.00	0.61
32:B6:17:LYS:HE2	32:B6:17:LYS:HA	1.82	0.61
36:BA:197:A:H5'	36:BA:197:A:H8	1.65	0.61
36:BA:2523:G:H2'	36:BA:2524:G:C5'	2.30	0.61
39:BD:24:ILE:HG23	39:BD:25:THR:H	1.65	0.61
41:BF:43:LYS:HA	41:BF:98:SER:HB3	1.83	0.61
52:BT:58:ASN:H	52:BT:58:ASN:HD22	1.45	0.61
53:BU:47:TYR:HA	53:BU:50:ARG:NH1	2.14	0.61
57:BY:28:LYS:CB	57:BY:37:VAL:HB	2.29	0.61
1:CA:666:G:H5'	1:CA:726:C:H1'	1.82	0.61
5:CE:81:GLU:OE1	5:CE:88:LYS:HE3	2.01	0.61
10:CJ:55:LYS:CB	10:CJ:55:LYS:NZ	2.63	0.61
13:CM:15:VAL:HG22	13:CM:43:THR:O	2.00	0.61
15:CO:17:ARG:HD3	15:CO:26:GLU:CD	2.25	0.61
22:CW:43:C:H2'	22:CW:44:G:C1'	2.30	0.61
36:DA:1614:A:N1	55:DW:91:GLY:HA2	2.15	0.61
36:DA:1747(A):G:O2'	36:DA:1748:G:H5"	2.00	0.61
36:DA:1782:C:H1'	36:DA:2609:U:H5"	1.82	0.61
36:DA:2009:G:O2'	36:DA:2010:G:H5'	2.00	0.61
36:DA:2309:A:H2'	36:DA:2310:A:C5'	2.29	0.61
36:DA:2422:A:H4'	36:DA:2423:U:OP1	1.99	0.61
53:DU:47:TYR:HA	53:DU:50:ARG:NH1	2.15	0.61
53:DU:55:ARG:HA	53:DU:58:ARG:HD2	1.82	0.61
55:DW:5:ALA:O	55:DW:6:ILE:HB	2.00	0.61
57:DY:7:VAL:HB	57:DY:8:LYS:HZ3	1.65	0.61
1:AA:423:G:C2'	1:AA:424:G:H5'	2.29	0.61
1:AA:1423:G:H5'	47:BO:49:ARG:HH22	1.65	0.61
5:AE:7:GLU:HG2	5:AE:112:LEU:HD21	1.81	0.61
6:AF:25:ILE:HD13	6:AF:25:ILE:O	1.99	0.61
12:AL:45:PRO:HG3	12:AL:53:ARG:HD3	1.83	0.61
13:AM:101:GLN:HE21	13:AM:101:GLN:H	1.46	0.61
22:AV:4:C:H2'	22:AV:5:G:H5"	1.82	0.61
36:BA:1103:A:H5"	36:BA:1104:C:H5	1.63	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2173:A:O2'	38:BC:218:MET:HE1	2.00	0.61
43:BH:50:VAL:CG1	43:BH:51:ARG:H	2.10	0.61
53:BU:55:ARG:HA	53:BU:58:ARG:HD2	1.81	0.61
1:CA:256:U:H2'	1:CA:257:G:C8	2.35	0.61
1:CA:573:A:H5'	1:CA:573:A:C8	2.31	0.61
1:CA:1016:A:H2'	1:CA:1017:G:O4'	2.00	0.61
2:CB:9:GLU:OE1	2:CB:9:GLU:N	2.32	0.61
7:CG:150:ALA:HB2	11:CK:50:TYR:OH	2.00	0.61
9:CI:28:VAL:CG2	9:CI:33:PHE:HA	2.30	0.61
12:CL:119:LYS:O	12:CL:120:TYR:HB2	2.01	0.61
19:CS:16:LEU:H	19:CS:16:LEU:HD12	1.64	0.61
25:CZ:145:GLU:O	25:CZ:149:LEU:N	2.33	0.61
26:D0:40:GLN:NE2	26:D0:44:ARG:H	1.98	0.61
35:D9:10:ILE:HG23	36:DA:2477:C:N4	2.14	0.61
36:DA:1600:C:O2'	36:DA:1601:G:H5'	1.99	0.61
36:DA:2153:G:O2'	36:DA:2154:G:H5'	2.01	0.61
38:DC:40:THR:HG22	38:DC:177:LYS:HD2	1.81	0.61
41:DF:148:LEU:HD23	41:DF:191:ARG:NH1	2.15	0.61
47:DO:60:ALA:HA	47:DO:87:ILE:HG12	1.80	0.61
49:DQ:56:ARG:CG	49:DQ:56:ARG:NH1	2.62	0.61
1:AA:96:U:H2'	1:AA:97:G:N7	2.16	0.61
1:AA:382:A:H2'	1:AA:383:A:H8	1.65	0.61
1:AA:444:C:H2'	1:AA:445:G:C8	2.35	0.61
1:AA:673:G:H2'	1:AA:674:G:C8	2.36	0.61
1:AA:1142:G:H2'	1:AA:1143:G:O4'	2.00	0.61
1:AA:1313:U:H2'	1:AA:1314:C:O2	2.00	0.61
2:AB:109:SER:C	2:AB:111:ARG:H	2.06	0.61
4:AD:114:ARG:HG3	4:AD:114:ARG:NH1	2.14	0.61
17:AQ:27:PHE:CZ	17:AQ:36:ILE:HD11	2.35	0.61
22:AW:65:G:H4'	32:B6:28:ARG:NH2	2.15	0.61
32:B6:53:LYS:CD	32:B6:54:ILE:H	2.13	0.61
36:BA:855:G:H1	36:BA:922:U:H3	1.46	0.61
36:BA:860:U:C5	36:BA:917:A:N7	2.62	0.61
36:BA:1335:U:H2'	36:BA:1336:A:C8	2.35	0.61
36:BA:1813:G:H1'	39:BD:50:THR:OG1	1.99	0.61
36:BA:2307:G:H21	36:BA:2308:G:H5"	1.66	0.61
36:BA:2464:C:O2'	36:BA:2465:C:H6	1.82	0.61
36:BA:2537:U:H2'	36:BA:2538:C:C6	2.35	0.61
37:BB:61:G:O2'	37:BB:62:C:H5'	2.00	0.61
40:BE:182:LEU:C	40:BE:183:LEU:HD12	2.24	0.61
54:BV:99:ILE:O	54:BV:99:ILE:HG12	2.01	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:521:G:H4'	12:CL:73:GLU:HG2	1.81	0.61
1:CA:673:G:H2'	1:CA:674:G:C8	2.35	0.61
1:CA:1331:G:OP2	13:CM:23:TYR:HD1	1.83	0.61
2:CB:44:LEU:HD12	2:CB:44:LEU:N	2.13	0.61
2:CB:75:LYS:HA	2:CB:78:GLN:NE2	2.14	0.61
3:CC:95:THR:HG22	3:CC:95:THR:O	1.99	0.61
9:CI:106:ALA:O	9:CI:108:VAL:HG23	2.01	0.61
18:CR:36:ASN:HD21	18:CR:39:VAL:HG21	1.66	0.61
22:CW:38:A:H2'	22:CW:39:U:C5'	2.30	0.61
32:D6:15:GLU:CD	32:D6:18:ARG:NE	2.58	0.61
36:DA:996:A:O3'	53:DU:92:ARG:HG2	2.00	0.61
36:DA:1061:U:H4'	36:DA:1070:A:O4'	2.00	0.61
36:DA:1718:G:H2'	36:DA:1719:G:C8	2.35	0.61
41:DF:177:ALA:HB1	41:DF:178:PRO:HD2	1.82	0.61
57:DY:74:PRO:O	57:DY:75:ILE:HB	1.99	0.61
2:AB:109:SER:C	2:AB:111:ARG:N	2.58	0.61
4:AD:11:LEU:HD22	4:AD:66:ARG:NH1	2.15	0.61
4:AD:131:ARG:HD3	4:AD:131:ARG:H	1.66	0.61
6:AF:34:GLY:N	6:AF:71:ARG:HH21	1.97	0.61
7:AG:137:LYS:O	7:AG:138:LYS:C	2.44	0.61
9:AI:53:VAL:C	9:AI:55:ALA:H	2.07	0.61
11:AK:97:ALA:O	11:AK:101:SER:HB3	2.00	0.61
36:BA:106:C:H2'	36:BA:107:C:H6	1.63	0.61
36:BA:145:G:C2'	36:BA:146:G:H5"	2.30	0.61
36:BA:1019:U:H3	36:BA:1142(A):A:N6	1.93	0.61
36:BA:1092:C:H42	36:BA:1100:C:H42	1.49	0.61
36:BA:1419:A:O2'	36:BA:1420:U:H5"	2.00	0.61
36:BA:1747(A):G:O2'	36:BA:1748:G:H5"	1.99	0.61
38:BC:139:ASN:OD1	38:BC:140:PRO:HD2	2.00	0.61
39:BD:224:ALA:C	39:BD:226:MET:H	2.08	0.61
46:BN:72:TYR:CD2	46:BN:90:MET:HG3	2.36	0.61
48:BP:148:LEU:O	48:BP:149:GLU:HB2	1.98	0.61
49:BQ:43:THR:OG1	49:BQ:45:GLN:HG2	1.99	0.61
54:BV:39:LEU:HA	54:BV:47:VAL:HG13	1.82	0.61
1:CA:191:G:C4	20:CT:105:SER:HB3	2.36	0.61
3:CC:166:GLU:HA	3:CC:166:GLU:OE1	2.00	0.61
25:CZ:193:ASN:HB2	25:CZ:196:VAL:CG1	2.30	0.61
25:CZ:263:ARG:HH21	25:CZ:297:GLU:CG	2.11	0.61
36:DA:729:G:OP2	39:DD:13:ARG:NH1	2.33	0.61
36:DA:896:A:N1	58:DZ:113:ALA:O	2.34	0.61
36:DA:1332:G:N2	36:DA:1609:A:O2'	2.33	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1720:U:C3'	36:DA:1721:G:H5"	2.30	0.61
36:DA:2512:C:H2'	36:DA:2513:G:O4'	2.00	0.61
37:DB:68:C:H2'	37:DB:69:G:O4'	2.01	0.61
39:DD:94:LEU:HB2	39:DD:104:TYR:HE1	1.65	0.61
51:DS:106:ARG:HH12	51:DS:108:GLY:N	1.98	0.61
52:DT:93:ARG:NH2	52:DT:95:ARG:HD3	2.15	0.61
3:AC:81:GLY:HA3	3:AC:85:ARG:CZ	2.31	0.61
6:AF:19:LEU:O	6:AF:19:LEU:HD23	1.99	0.61
9:AI:99:LEU:N	9:AI:99:LEU:HD22	2.16	0.61
19:AS:16:LEU:H	19:AS:16:LEU:HD12	1.65	0.61
30:B4:24:THR:HB	42:BG:104:GLU:OE2	2.01	0.61
36:BA:325:G:H2'	36:BA:326:G:C8	2.35	0.61
36:BA:1013:C:O2'	36:BA:1014:U:H5'	2.00	0.61
36:BA:2713:A:OP1	50:BR:14:SER:HB3	2.00	0.61
36:BA:2886:G:H2'	36:BA:2887:U:C6	2.36	0.61
41:BF:6:VAL:HG12	41:BF:7:TYR:N	2.09	0.61
46:BN:32:THR:HG22	46:BN:37:LYS:HD3	1.83	0.61
2:CB:42:ILE:HD11	2:CB:202:PRO:HB2	1.83	0.61
3:CC:15:THR:CG2	3:CC:181:ASN:HA	2.28	0.61
3:CC:114:PRO:O	3:CC:118:GLN:HG3	2.01	0.61
12:CL:20:LYS:H	12:CL:20:LYS:CD	2.04	0.61
19:CS:45:VAL:HG23	19:CS:46:GLY:N	2.15	0.61
36:DA:855:G:H1	36:DA:922:U:H3	1.48	0.61
36:DA:1592:C:H2'	36:DA:1593:G:C8	2.35	0.61
36:DA:1598:C:H5'	56:DX:36:LYS:CG	2.30	0.61
36:DA:2533:A:H2'	36:DA:2534:A:O4'	2.00	0.61
36:DA:2537:U:H2'	36:DA:2538:C:C6	2.36	0.61
38:DC:29:VAL:HG11	38:DC:214:VAL:HG12	1.81	0.61
38:DC:75:LEU:C	38:DC:75:LEU:HD12	2.24	0.61
41:DF:22:ALA:HB1	41:DF:26:ALA:HB2	1.81	0.61
48:DP:40:SER:O	48:DP:41:ARG:HD3	2.00	0.61
51:DS:54:LEU:HD13	51:DS:57:LYS:HA	1.83	0.61
52:DT:57:PHE:HE1	52:DT:79:HIS:HD1	1.47	0.61
1:AA:382:A:H2'	1:AA:383:A:C8	2.36	0.61
1:AA:539:A:H2'	1:AA:540:G:C8	2.35	0.61
1:AA:950:U:H2'	1:AA:951:G:H8	1.66	0.61
1:AA:992:U:H4'	1:AA:993:G:O5'	1.99	0.61
1:AA:1442(B):A:H2'	1:AA:1442(B):A:N3	2.15	0.61
3:AC:189:ALA:HB3	3:AC:196:LEU:HB2	1.82	0.61
8:AH:102:ARG:HD3	8:AH:102:ARG:N	2.15	0.61
36:BA:361:G:N2	36:BA:362:U:H1'	2.15	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:582:G:H2'	36:BA:583:G:C8	2.36	0.61
36:BA:1503:U:H2'	36:BA:1504:C:C6	2.36	0.61
36:BA:2068:U:N3	36:BA:2430:A:H2	1.94	0.61
36:BA:2148:G:O2'	36:BA:2149:G:H5'	2.01	0.61
36:BA:2555:U:H2'	36:BA:2556:C:H5'	1.82	0.61
37:BB:112:U:H2'	37:BB:113:G:H8	1.64	0.61
38:BC:18:LYS:HD3	38:BC:20:TYR:CE2	2.36	0.61
39:BD:30:GLU:H	39:BD:35:LYS:NZ	1.97	0.61
39:BD:43:ARG:HB2	39:BD:54:ARG:CB	2.30	0.61
42:BG:41:GLN:CD	42:BG:60:LEU:HD21	2.25	0.61
46:BN:18:ALA:HB3	46:BN:56:ASN:O	2.01	0.61
48:BP:23:PRO:CB	48:BP:33:ARG:HG3	2.25	0.61
48:BP:24:GLY:HA3	48:BP:33:ARG:HH12	1.65	0.61
48:BP:34:GLY:O	48:BP:35:HIS:HB2	2.01	0.61
57:BY:84:ARG:CZ	57:BY:97:ARG:HB3	2.31	0.61
58:BZ:108:PRO:HA	58:BZ:141:VAL:O	2.00	0.61
1:CA:266:G:H5'	1:CA:267:C:C5	2.35	0.61
1:CA:353:A:H5'	1:CA:353:A:C8	2.31	0.61
3:CC:11:ARG:NH2	3:CC:182:ILE:HD12	2.16	0.61
3:CC:23:TYR:CD1	3:CC:24:ALA:N	2.69	0.61
4:CD:88:VAL:O	4:CD:92:VAL:HG23	2.01	0.61
7:CG:27:ILE:HD13	7:CG:40:ALA:HA	1.82	0.61
36:DA:59:U:H3	36:DA:68:G:H1	1.48	0.61
36:DA:136:G:H2'	36:DA:137:C:H6	1.65	0.61
36:DA:141:A:H1'	36:DA:1408:C:O2'	2.00	0.61
36:DA:674:G:H1'	41:DF:74:ARG:HD2	1.81	0.61
41:DF:167:ALA:HB1	41:DF:173:VAL:CG1	2.20	0.61
56:DX:12:VAL:HG12	56:DX:27:THR:O	2.01	0.61
56:DX:63:LYS:HG3	56:DX:72:LYS:HG2	1.82	0.61
58:DZ:142:SER:C	58:DZ:144:LEU:H	2.06	0.61
8:AH:89:PRO:HA	8:AH:92:ARG:NH1	2.15	0.61
13:AM:11:ARG:O	13:AM:13:LYS:N	2.33	0.61
25:AZ:69:GLU:HG2	25:AZ:70:TYR:N	2.15	0.61
35:B9:1:MET:CE	35:B9:31:LYS:HB3	2.30	0.61
36:BA:271(K):U:H3'	36:BA:271(L):U:C5'	2.30	0.61
36:BA:671:C:H2'	36:BA:672:C:C6	2.35	0.61
36:BA:1058:G:C3'	36:BA:1059:G:C5'	2.78	0.61
36:BA:1718:G:H2'	36:BA:1719:G:C8	2.36	0.61
39:BD:30:GLU:N	39:BD:35:LYS:HZ2	1.97	0.61
40:BE:37:ARG:HA	40:BE:42:ASP:OD2	2.00	0.61
40:BE:94:GLU:OE2	40:BE:177:PRO:HB3	2.01	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BF:22:ALA:HB1	41:BF:26:ALA:HB2	1.82	0.61
42:BG:121:ASN:HB3	42:BG:124:SER:HB2	1.81	0.61
53:BU:95:LEU:O	53:BU:98:LEU:HG	2.01	0.61
57:BY:13:VAL:HG11	57:BY:28:LYS:HD3	1.83	0.61
3:CC:79:ARG:HH11	3:CC:79:ARG:CB	2.09	0.61
9:CI:33:PHE:C	9:CI:35:GLU:H	2.08	0.61
10:CJ:90:LEU:N	10:CJ:91:PRO:HD3	2.16	0.61
13:CM:116:THR:O	13:CM:118:ALA:N	2.34	0.61
18:CR:31:LEU:H	18:CR:31:LEU:CD2	2.12	0.61
25:CZ:200:TRP:O	25:CZ:204:ASP:HB2	2.00	0.61
30:D4:5:ILE:O	30:D4:5:ILE:HG12	1.99	0.61
36:DA:491:G:H2'	36:DA:492:A:C8	2.36	0.61
36:DA:1385:G:H4'	36:DA:1386:C:OP1	2.00	0.61
36:DA:2591:C:H2'	36:DA:2592:G:C8	2.35	0.61
39:DD:102:LYS:O	39:DD:103:ARG:HG2	2.01	0.61
46:DN:9:VAL:HG21	46:DN:48:MET:HB2	1.80	0.61
46:DN:32:THR:HG22	46:DN:37:LYS:HD3	1.82	0.61
50:DR:4:LEU:O	50:DR:4:LEU:HG	2.00	0.61
1:AA:939:G:H5"	7:AG:102:ARG:NH2	2.16	0.61
3:AC:15:THR:CG2	3:AC:181:ASN:HA	2.30	0.61
17:AQ:85:VAL:O	17:AQ:89:LEU:HG	2.01	0.61
25:AZ:193:ASN:HB2	25:AZ:196:VAL:CG1	2.29	0.61
36:BA:470:A:OP1	41:BF:59:TYR:HE1	1.83	0.61
36:BA:1786:A:H2	36:BA:2606:C:H1'	1.64	0.61
40:BE:44:TYR:O	40:BE:45:THR:HB	2.00	0.61
51:BS:20:ARG:HH11	51:BS:20:ARG:HG2	1.66	0.61
53:BU:85:LYS:HD3	53:BU:117:GLN:NE2	2.08	0.61
58:BZ:10:ARG:NH2	58:BZ:36:LYS:HB2	2.16	0.61
58:BZ:23:LYS:HD3	58:BZ:38:TYR:CE1	2.34	0.61
1:CA:72:C:H2'	1:CA:73:G:H8	1.66	0.61
1:CA:1116:C:H2'	1:CA:1117:G:C5'	2.31	0.61
4:CD:22:LYS:HB2	4:CD:26:CYS:CB	2.30	0.61
4:CD:70:ILE:HG22	4:CD:71:SER:O	2.00	0.61
6:CF:21:LEU:C	6:CF:21:LEU:HD13	2.26	0.61
13:CM:83:ASP:CG	13:CM:84:ILE:N	2.58	0.61
25:CZ:291:ARG:HB2	25:CZ:291:ARG:HH11	1.65	0.61
34:D8:6:THR:HB	34:D8:11:LYS:HZ1	1.66	0.61
36:DA:2019:A:H2'	36:DA:2020:A:O5'	2.00	0.61
36:DA:2023:G:H5'	36:DA:2617:C:H4'	1.82	0.61
39:DD:62:TYR:CE1	39:DD:64:ILE:HA	2.36	0.61
41:DF:187:VAL:HG12	48:DP:7:ARG:HA	1.83	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:DQ:109:VAL:CG1	49:DQ:113:GLN:HB2	2.30	0.61
51:DS:93:LYS:O	51:DS:95:HIS:N	2.34	0.61
52:DT:30:VAL:CG2	52:DT:83:ILE:HG12	2.31	0.61
52:DT:35:LYS:NZ	52:DT:41:ARG:HD2	2.16	0.61
52:DT:82:LEU:HD12	52:DT:82:LEU:H	1.66	0.61
1:AA:376:G:OP2	16:AP:67:THR:HG21	2.01	0.61
1:AA:1048:G:H5"	14:AN:2:ALA:HB1	1.83	0.61
2:AB:87:ARG:HH22	2:AB:232:PRO:CA	2.14	0.61
17:AQ:67:LYS:O	17:AQ:68:ARG:CB	2.48	0.61
36:BA:611:C:H2'	36:BA:612:C:C6	2.36	0.61
36:BA:613:G:H8	36:BA:613:G:H5'	1.65	0.61
36:BA:1592:C:H2'	36:BA:1593:G:C8	2.36	0.61
37:BB:7:G:C2'	37:BB:8:U:H5"	2.31	0.61
43:BH:83:TYR:CB	43:BH:135:GLY:H	2.14	0.61
1:CA:155:C:H2'	1:CA:156:G:H8	1.66	0.61
1:CA:382:A:H2'	1:CA:383:A:H8	1.66	0.61
1:CA:433:C:H2'	1:CA:434:U:C6	2.36	0.61
1:CA:939:G:O3'	7:CG:102:ARG:NH2	2.34	0.61
1:CA:1536:C:H42	23:CX:11:U:H3	1.47	0.61
3:CC:52:LEU:HD12	3:CC:55:VAL:CG2	2.31	0.61
3:CC:60:ALA:O	3:CC:61:ALA:HB2	2.01	0.61
19:CS:49:ILE:O	19:CS:60:VAL:HG12	2.01	0.61
29:D3:39:ASP:OD1	29:D3:44:ARG:HD2	2.01	0.61
34:D8:6:THR:CG2	34:D8:63:PRO:HD3	2.31	0.61
36:DA:496:G:H1'	55:DW:61:ASN:HD22	1.66	0.61
36:DA:528:A:H2	36:DA:2043:C:C5'	2.13	0.61
36:DA:611:C:H2'	36:DA:612:C:C6	2.36	0.61
36:DA:654(C):G:C2'	36:DA:654(D):G:H5'	2.31	0.61
36:DA:1013:C:O2'	36:DA:1014:U:H5'	2.00	0.61
38:DC:50:ASP:OD2	38:DC:53:ARG:HG3	2.01	0.61
46:DN:43:THR:HB	46:DN:46:VAL:HG11	1.82	0.61
48:DP:126:VAL:HG22	48:DP:145:PRO:HG2	1.82	0.61
51:DS:97:ARG:NE	51:DS:97:ARG:C	2.59	0.61
55:DW:59:VAL:O	55:DW:59:VAL:HG12	2.01	0.61
58:DZ:10:ARG:HB3	58:DZ:36:LYS:HG3	1.82	0.61
58:DZ:163:LEU:HD12	58:DZ:165:VAL:HG21	1.83	0.61
1:AA:56:U:H2'	1:AA:57:G:C8	2.36	0.60
1:AA:390:C:O3'	16:AP:28:ARG:NH2	2.34	0.60
1:AA:882:C:O2'	1:AA:883:C:H5'	2.00	0.60
2:AB:151:GLY:C	2:AB:153:ARG:H	2.09	0.60
3:AC:40:ARG:HG3	3:AC:40:ARG:NH1	2.16	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AS:49:ILE:O	19:AS:60:VAL:HG12	2.01	0.60
25:AZ:258:LEU:O	25:AZ:259:ALA:HB3	2.01	0.60
30:B4:9:LEU:HD13	30:B4:10:VAL:H	1.65	0.60
36:BA:141:A:H1'	36:BA:1408:C:O2'	2.01	0.60
36:BA:661:C:O3'	48:BP:18:ARG:HD2	2.01	0.60
1:CA:992:U:H4'	1:CA:993:G:O5'	2.00	0.60
1:CA:1117:G:H5'	1:CA:1117:G:H8	1.64	0.60
1:CA:1258:G:O2'	1:CA:1259:C:H5'	2.00	0.60
4:CD:124:GLY:O	4:CD:126:ILE:N	2.33	0.60
5:CE:152:ARG:O	5:CE:153:LYS:C	2.43	0.60
13:CM:11:ARG:O	13:CM:13:LYS:N	2.33	0.60
31:D5:4:HIS:CB	31:D5:5:PRO:CD	2.72	0.60
36:DA:26:G:OP1	55:DW:80:PRO:HB3	2.01	0.60
36:DA:361:G:N2	36:DA:362:U:H1'	2.16	0.60
36:DA:495:G:H21	55:DW:61:ASN:HD21	1.47	0.60
36:DA:658:C:H2'	36:DA:659:C:H6	1.64	0.60
36:DA:671:C:H2'	36:DA:672:C:C6	2.36	0.60
36:DA:774:A:H2	36:DA:787:U:O2'	1.84	0.60
36:DA:1077:A:OP2	58:DZ:111:VAL:HG11	2.01	0.60
36:DA:1109:C:H2'	36:DA:1110:G:O4'	2.01	0.60
36:DA:1503:U:H2'	36:DA:1504:C:C6	2.35	0.60
36:DA:2682:U:C6	40:DE:11:MET:HE2	2.35	0.60
36:DA:2784:C:H1'	40:DE:37:ARG:NH1	2.16	0.60
37:DB:112:U:H2'	37:DB:113:G:H8	1.66	0.60
40:DE:61:ARG:CB	40:DE:62:PRO:HD3	2.30	0.60
44:DJ:118:UNK:O	44:DJ:119:UNK:C	2.48	0.60
48:DP:23:PRO:CB	48:DP:33:ARG:HG3	2.25	0.60
49:DQ:42:ILE:HD13	49:DQ:97:VAL:CG2	2.31	0.60
53:DU:88:ILE:HD12	53:DU:109:LEU:HD22	1.83	0.60
54:DV:39:LEU:HA	54:DV:47:VAL:HG13	1.82	0.60
1:AA:346:G:H2'	1:AA:346:G:N3	2.16	0.60
1:AA:1125:U:O4	10:AJ:5:ARG:HG3	2.00	0.60
1:AA:1221:G:O2'	1:AA:1222:G:H5'	2.01	0.60
4:AD:138:TYR:CD1	4:AD:139:ARG:N	2.64	0.60
18:AR:36:ASN:OD1	18:AR:38:GLU:HG2	2.01	0.60
22:AW:7:A:C4	22:AW:49:C:H5	2.19	0.60
22:AW:44:G:H2'	22:AW:44:G:N3	2.16	0.60
27:B1:51:VAL:O	27:B1:57:GLU:HA	2.01	0.60
32:B6:42:TRP:HA	32:B6:42:TRP:HE3	1.64	0.60
35:B9:29:ASN:H	35:B9:29:ASN:HD22	1.47	0.60
36:BA:469:G:C2'	36:BA:470:A:H5"	2.31	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:852:G:O2'	36:BA:853:G:H5'	2.02	0.60
36:BA:1061:U:H4'	36:BA:1070:A:O4'	2.00	0.60
36:BA:1517:G:H2'	36:BA:1518:U:O4'	2.02	0.60
36:BA:1540:U:H3'	36:BA:1541:G:C3'	2.29	0.60
41:BF:32:LEU:O	41:BF:32:LEU:HD23	2.00	0.60
42:BG:7:LEU:HD22	42:BG:100:TRP:CZ3	2.36	0.60
42:BG:40:ASN:HB2	42:BG:91:ARG:HB2	1.81	0.60
46:BN:9:VAL:HG21	46:BN:48:MET:HB2	1.83	0.60
48:BP:59:LEU:HA	48:BP:61:ARG:HE	1.64	0.60
1:CA:1004:A:H5'	1:CA:1005:A:OP2	2.02	0.60
1:CA:1238:A:H8	1:CA:1241:G:O2'	1.74	0.60
3:CC:14:ILE:HD11	3:CC:179:ARG:HA	1.83	0.60
8:CH:102:ARG:HD3	8:CH:102:ARG:N	2.15	0.60
12:CL:18:VAL:CG2	12:CL:19:ARG:H	2.04	0.60
18:CR:59:SER:OG	18:CR:62:GLU:HG3	2.01	0.60
31:D5:48:GLU:O	31:D5:49:CYS:CB	2.48	0.60
36:DA:197:A:H5'	36:DA:197:A:H8	1.66	0.60
36:DA:271(K):U:H3'	36:DA:271(L):U:C5'	2.30	0.60
36:DA:1335:U:H2'	36:DA:1336:A:C8	2.36	0.60
36:DA:2668:G:HO2'	36:DA:2669:G:H5'	1.66	0.60
36:DA:2733:A:O2'	36:DA:2734:A:H5'	2.01	0.60
36:DA:2854:G:H2'	36:DA:2855:C:C6	2.36	0.60
41:DF:164:ARG:HG2	41:DF:164:ARG:NH1	2.15	0.60
46:DN:1:MET:HE1	46:DN:3:THR:OG1	2.00	0.60
48:DP:57:THR:OG1	48:DP:59:LEU:HB3	2.02	0.60
51:DS:54:LEU:HD13	51:DS:58:LEU:N	2.15	0.60
58:DZ:162:GLU:HG3	58:DZ:162:GLU:O	1.99	0.60
1:AA:274:A:O2'	1:AA:275:G:C8	2.50	0.60
1:AA:433:C:H2'	1:AA:434:U:C6	2.36	0.60
1:AA:1417:G:C8	1:AA:1417:G:C5'	2.74	0.60
4:AD:138:TYR:C	4:AD:138:TYR:CD1	2.76	0.60
4:AD:150:GLU:CD	4:AD:151:LYS:N	2.58	0.60
4:AD:158:ILE:O	4:AD:162:LEU:HB2	2.01	0.60
12:AL:47:LYS:C	12:AL:49:ASN:N	2.57	0.60
31:B5:33:CYS:HG	31:B5:36:CYS:HG	1.49	0.60
35:B9:35:ARG:O	35:B9:36:GLN:O	2.19	0.60
36:BA:1363:C:H2'	36:BA:1364:G:H8	1.67	0.60
36:BA:2206:G:H21	36:BA:2207:G:H4'	1.66	0.60
42:BG:102:PHE:O	42:BG:102:PHE:CD1	2.54	0.60
43:BH:58:GLU:O	43:BH:62:LYS:HB2	2.02	0.60
43:BH:91:GLY:HA3	43:BH:94:TYR:HD2	1.65	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:542:G:H2'	1:CA:543:C:H6	1.67	0.60
1:CA:1221:G:O2'	1:CA:1222:G:H5'	2.01	0.60
1:CA:1356:G:H2'	1:CA:1357:A:C8	2.36	0.60
2:CB:47:THR:O	2:CB:51:LEU:HB2	2.02	0.60
35:D9:1:MET:CE	35:D9:31:LYS:HB3	2.31	0.60
36:DA:650:C:C3'	36:DA:651:G:H5"	2.29	0.60
36:DA:1332:G:N2	36:DA:1610:A:C8	2.69	0.60
36:DA:2101:G:H2'	36:DA:2102:U:C5'	2.24	0.60
36:DA:2208:A:H1'	36:DA:2219:G:C4	2.36	0.60
43:DH:83:TYR:CB	43:DH:135:GLY:H	2.13	0.60
46:DN:9:VAL:CG1	46:DN:10:GLU:H	2.01	0.60
46:DN:133:GLN:CG	46:DN:135:PRO:HD3	2.30	0.60
48:DP:34:GLY:O	48:DP:35:HIS:HB2	2.00	0.60
3:AC:79:ARG:HH11	3:AC:79:ARG:CB	2.10	0.60
24:AY:61:C:O2'	24:AY:62:U:H5"	2.01	0.60
25:AZ:263:ARG:HB2	25:AZ:263:ARG:CZ	2.31	0.60
41:BF:187:VAL:HG12	48:BP:7:ARG:HA	1.83	0.60
53:BU:17:ILE:HG23	53:BU:39:LEU:HD12	1.84	0.60
57:BY:27:VAL:HG12	57:BY:29:GLU:H	1.66	0.60
1:CA:346:G:H2'	1:CA:346:G:N3	2.17	0.60
1:CA:882:C:O2'	1:CA:883:C:H5'	2.01	0.60
1:CA:1003:G:H21	1:CA:1039:C:H42	1.47	0.60
5:CE:40:ARG:NH2	5:CE:66:MET:HG2	2.16	0.60
12:CL:80:HIS:CB	24:CY:68:C:H4'	2.32	0.60
16:CP:53:VAL:HG23	16:CP:54:GLU:HG2	1.82	0.60
22:CV:56:C:C1'	42:DG:76:SER:HB2	2.31	0.60
25:CZ:263:ARG:HB2	25:CZ:263:ARG:CZ	2.32	0.60
26:D0:16:SER:HB2	36:DA:2262:U:C5	2.36	0.60
32:D6:53:LYS:CD	32:D6:54:ILE:H	2.14	0.60
36:DA:654(U):A:H2'	36:DA:654(V):A:C8	2.36	0.60
36:DA:1363:C:H2'	36:DA:1364:G:H8	1.66	0.60
36:DA:1448:G:N3	36:DA:1528(A):A:H2	1.99	0.60
39:DD:224:ALA:O	39:DD:226:MET:N	2.34	0.60
40:DE:52:LEU:HD23	40:DE:75:VAL:HB	1.83	0.60
46:DN:72:TYR:HD2	46:DN:90:MET:HG3	1.65	0.60
48:DP:85:LEU:HA	48:DP:88:LEU:CB	2.31	0.60
52:DT:11:GLU:CD	52:DT:11:GLU:H	2.09	0.60
53:DU:66:ASN:HD21	53:DU:76:TYR:H	1.48	0.60
54:DV:40:LEU:HD22	54:DV:46:VAL:HA	1.84	0.60
54:DV:49:THR:HB	54:DV:50:PRO:HD2	1.83	0.60
57:DY:44:ILE:HD12	57:DY:44:ILE:N	2.16	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:DZ:18:LEU:HD12	58:DZ:18:LEU:N	2.14	0.60
1:AA:961:U:O2'	1:AA:962:C:O5'	2.19	0.60
7:AG:37:ASN:O	7:AG:41:ARG:HG3	2.01	0.60
10:AJ:28:ARG:HH11	10:AJ:28:ARG:HB3	1.66	0.60
28:B2:18:PRO:CG	28:B2:72:ALA:HA	2.31	0.60
28:B2:65:ASN:O	28:B2:67:LYS:N	2.34	0.60
36:BA:136:G:H2'	36:BA:137:C:H6	1.65	0.60
36:BA:496:G:H1'	55:BW:61:ASN:HD22	1.67	0.60
36:BA:636:G:OP1	48:BP:132:LYS:HE2	2.01	0.60
36:BA:2092:U:H4'	36:BA:2093:G:C5'	2.20	0.60
38:BC:96:GLY:HA3	38:BC:99:ILE:HD11	1.84	0.60
48:BP:40:SER:O	48:BP:41:ARG:HD3	2.00	0.60
51:BS:85:VAL:O	51:BS:106:ARG:HG3	1.99	0.60
57:BY:17:SER:CB	57:BY:71:LYS:HE2	2.30	0.60
1:CA:444:C:H2'	1:CA:445:G:C8	2.35	0.60
1:CA:522:C:H41	12:CL:53:ARG:HH22	1.48	0.60
1:CA:540:G:H2'	1:CA:541:G:C8	2.35	0.60
1:CA:1125:U:O4	10:CJ:5:ARG:HG3	2.02	0.60
2:CB:42:ILE:CD1	2:CB:202:PRO:HB2	2.31	0.60
5:CE:147:ASP:HB3	5:CE:150:ARG:HH12	1.66	0.60
12:CL:69:TYR:HB2	12:CL:96:VAL:HG11	1.84	0.60
24:CY:61:C:O2'	24:CY:62:U:H5"	2.02	0.60
24:CY:70:C:O2'	24:CY:71:C:H5'	2.02	0.60
25:CZ:104:LEU:HD23	25:CZ:133:VAL:HG22	1.83	0.60
32:D6:5:VAL:HB	36:DA:2284:C:OP2	2.01	0.60
34:D8:39:LYS:HG3	34:D8:43:GLN:NE2	2.17	0.60
36:DA:271(R):G:O2'	36:DA:271(S):G:H5'	2.01	0.60
36:DA:898:C:H2'	36:DA:899:A:O4'	2.02	0.60
36:DA:970:C:H2'	36:DA:971:C:C6	2.36	0.60
36:DA:2061:G:H5"	36:DA:2503:A:C2	2.37	0.60
39:DD:142:VAL:HG21	39:DD:191:ALA:HB1	1.84	0.60
41:DF:185:ASP:HA	41:DF:188:ARG:HD3	1.83	0.60
52:DT:32:TYR:CD1	52:DT:32:TYR:N	2.69	0.60
54:DV:55:ALA:O	54:DV:56:SER:HB3	2.01	0.60
57:DY:84:ARG:CZ	57:DY:97:ARG:HB3	2.32	0.60
58:DZ:34:ASN:O	58:DZ:35:ARG:HD2	2.01	0.60
2:AB:142:LEU:HD21	2:AB:146:GLN:NE2	2.16	0.60
4:AD:100:ARG:O	4:AD:104:VAL:HG23	2.01	0.60
5:AE:64:ARG:CZ	5:AE:64:ARG:HB2	2.30	0.60
7:AG:38:LEU:HD12	7:AG:38:LEU:O	2.01	0.60
16:AP:75:ARG:O	16:AP:78:GLY:N	2.26	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AS:16:LEU:HD12	19:AS:16:LEU:N	2.17	0.60
36:BA:654(C):G:C2'	36:BA:654(D):G:H5'	2.32	0.60
36:BA:1499:C:H6	36:BA:1499:C:C5'	2.10	0.60
40:BE:120:TRP:CE3	40:BE:155:LYS:HE3	2.36	0.60
46:BN:133:GLN:CG	46:BN:135:PRO:HD3	2.30	0.60
48:BP:97:PRO:HD3	48:BP:126:VAL:O	2.02	0.60
49:BQ:5:ARG:CZ	49:BQ:5:ARG:HB2	2.30	0.60
50:BR:30:THR:HG22	50:BR:31:HIS:ND1	2.16	0.60
52:BT:35:LYS:HZ3	52:BT:41:ARG:HD2	1.67	0.60
52:BT:106:SER:C	52:BT:107:ASP:OD1	2.44	0.60
58:BZ:28:MET:O	58:BZ:34:ASN:HA	2.01	0.60
1:CA:56:U:H2'	1:CA:57:G:C8	2.36	0.60
1:CA:96:U:H2'	1:CA:97:G:N7	2.17	0.60
1:CA:194:C:C2'	1:CA:195:A:H5"	2.31	0.60
1:CA:627:G:H2'	1:CA:628:G:H8	1.66	0.60
1:CA:736:C:H2'	1:CA:737:A:C8	2.36	0.60
1:CA:927:G:OP2	1:CA:927:G:H4'	2.01	0.60
3:CC:135:LYS:HZ2	5:CE:50:GLU:HG2	1.67	0.60
4:CD:138:TYR:C	4:CD:138:TYR:CD1	2.77	0.60
6:CF:25:ILE:HD13	6:CF:25:ILE:O	2.01	0.60
7:CG:137:LYS:O	7:CG:138:LYS:C	2.45	0.60
36:DA:1499:C:H6	36:DA:1499:C:C5'	2.11	0.60
36:DA:1921:G:O2'	36:DA:1922:G:H5'	2.02	0.60
36:DA:2248:C:H2'	36:DA:2249:U:H5'	1.83	0.60
36:DA:2523:G:C2'	36:DA:2524:G:H5"	2.32	0.60
38:DC:96:GLY:HA3	38:DC:99:ILE:HD11	1.83	0.60
42:DG:57:ALA:HA	42:DG:90:LEU:HD21	1.83	0.60
42:DG:87:PRO:O	42:DG:88:ILE:HG12	2.01	0.60
43:DH:105:LEU:HD23	43:DH:105:LEU:N	2.14	0.60
44:DJ:97:UNK:HA	44:DJ:131:UNK:O	2.02	0.60
49:DQ:19:GLY:O	49:DQ:98:LYS:HD3	2.02	0.60
51:DS:35:ILE:H	51:DS:53:SER:HB2	1.67	0.60
1:AA:1096:C:H5"	2:AB:137:ARG:HH21	1.66	0.60
5:AE:80:ILE:HG13	5:AE:91:LEU:HB2	1.83	0.60
6:AF:10:LEU:HD11	6:AF:61:LEU:HD11	1.84	0.60
9:AI:90:PRO:HG2	9:AI:91:ASP:H	1.67	0.60
13:AM:3:ARG:NH2	13:AM:7:VAL:HG13	2.16	0.60
28:B2:35:LEU:HD13	28:B2:36:ARG:N	2.16	0.60
29:B3:29:ARG:HH22	36:BA:1183:G:H4'	1.66	0.60
29:B3:39:ASP:OD1	29:B3:44:ARG:HD2	2.02	0.60
36:BA:603:A:H1'	36:BA:604:G:OP2	2.01	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1398:C:O2'	36:BA:1399:C:H5'	2.02	0.60
36:BA:1678:G:H22	36:BA:1989:G:H22	1.45	0.60
36:BA:2074:U:H2'	36:BA:2075:U:C6	2.37	0.60
52:BT:28:VAL:O	52:BT:29:ARG:CB	2.48	0.60
53:BU:101:ARG:HG3	53:BU:101:ARG:HH11	1.67	0.60
1:CA:390:C:O3'	16:CP:28:ARG:NH2	2.35	0.60
9:CI:53:VAL:O	9:CI:55:ALA:N	2.34	0.60
22:CW:44:G:H2'	22:CW:44:G:N3	2.17	0.60
34:D8:15:LYS:HB2	48:DP:65:ARG:NH2	2.17	0.60
36:DA:1038:C:C2'	36:DA:1039:G:H5"	2.31	0.60
36:DA:2681:C:H5	36:DA:2725:A:H62	1.49	0.60
52:DT:23:ARG:HG2	52:DT:120:ARG:HH12	1.65	0.60
56:DX:8:ILE:H	56:DX:8:ILE:HD12	1.66	0.60
58:DZ:58:VAL:HA	58:DZ:67:LEU:O	2.02	0.60
1:AA:1065:U:C5	1:AA:1190:G:H1'	2.37	0.60
1:AA:1234:C:O2'	1:AA:1235:U:H5'	2.02	0.60
1:AA:1258:G:O2'	1:AA:1259:C:H5'	2.02	0.60
4:AD:36:ARG:C	4:AD:38:TYR:H	2.07	0.60
10:AJ:4:ILE:HB	10:AJ:74:ILE:CG1	2.31	0.60
12:AL:26:ALA:HA	12:AL:64:TYR:CD2	2.37	0.60
20:AT:74:LYS:HD3	20:AT:74:LYS:N	2.16	0.60
32:B6:53:LYS:O	32:B6:54:ILE:OXT	2.20	0.60
36:BA:28:A:H61	36:BA:512:G:H1'	1.67	0.60
36:BA:140:G:H1'	36:BA:141:A:H2	1.67	0.60
36:BA:271(R):G:O2'	36:BA:271(S):G:H5'	2.01	0.60
36:BA:676:A:H8	36:BA:2069:G:N2	1.94	0.60
36:BA:814:C:H2'	36:BA:815:C:H6	1.66	0.60
36:BA:996:A:O3'	53:BU:92:ARG:HG2	2.02	0.60
36:BA:1188:U:H4'	54:BV:79:VAL:CG2	2.31	0.60
36:BA:1448:G:N3	36:BA:1528(A):A:H2	2.00	0.60
36:BA:2113:U:H2'	36:BA:2114:A:H8	1.66	0.60
36:BA:2115:G:N3	36:BA:2117:A:N7	2.50	0.60
36:BA:2866:U:C6	36:BA:2868:A:H1'	2.36	0.60
38:BC:128:GLY:HA2	38:BC:137:LEU:HD23	1.83	0.60
39:BD:62:TYR:CE1	39:BD:64:ILE:HA	2.36	0.60
41:BF:157:VAL:CG2	41:BF:194:MET:HG2	2.32	0.60
49:BQ:35:VAL:HG12	49:BQ:130:LYS:O	2.02	0.60
52:BT:19:LEU:HD22	52:BT:85:LYS:HD3	1.82	0.60
52:BT:28:VAL:HG22	52:BT:46:GLU:HA	1.84	0.60
52:BT:33:LYS:CE	52:BT:43:GLN:HE21	1.98	0.60
54:BV:55:ALA:O	54:BV:56:SER:HB3	2.00	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:BX:12:VAL:HG12	56:BX:27:THR:O	2.01	0.60
58:BZ:6:LYS:HD3	58:BZ:60:GLU:HB2	1.84	0.60
58:BZ:30:ASN:C	58:BZ:30:ASN:ND2	2.57	0.60
58:BZ:119:GLU:C	58:BZ:121:HIS:H	2.08	0.60
1:CA:59:A:H5'	1:CA:60:A:H5"	1.83	0.60
1:CA:1072:G:H2'	1:CA:1073:U:C6	2.36	0.60
7:CG:78:ARG:O	7:CG:80:VAL:N	2.35	0.60
18:CR:32:ARG:HA	18:CR:69:THR:HG21	1.83	0.60
25:CZ:258:LEU:O	25:CZ:259:ALA:HB3	2.00	0.60
26:D0:70:GLN:NE2	26:D0:80:HIS:NE2	2.50	0.60
36:DA:848:G:N9	36:DA:933:A:H8	2.00	0.60
36:DA:2312:U:H2'	36:DA:2313:C:H5"	1.84	0.60
38:DC:116:THR:HG22	38:DC:147:PHE:HA	1.84	0.60
50:DR:3:HIS:C	50:DR:3:HIS:HD1	2.10	0.60
52:DT:30:VAL:HG12	52:DT:44:ASP:CG	2.26	0.60
52:DT:65:LYS:HG3	52:DT:66:VAL:N	2.17	0.60
53:DU:48:ALA:O	53:DU:52:ARG:HG3	2.02	0.60
1:AA:254:G:OP1	17:AQ:67:LYS:O	2.20	0.60
1:AA:748:C:H4'	1:AA:749:C:O5'	2.02	0.60
1:AA:1456:G:C2	1:AA:1457:G:H1'	2.37	0.60
2:AB:17:PHE:HD2	2:AB:44:LEU:HD11	1.66	0.60
2:AB:42:ILE:HD11	2:AB:202:PRO:HB2	1.83	0.60
12:AL:77:LEU:HD11	12:AL:107:ALA:HA	1.82	0.60
16:AP:43:LYS:O	16:AP:45:THR:N	2.35	0.60
16:AP:67:THR:HB	16:AP:70:ALA:CB	2.32	0.60
18:AR:26:LEU:CD2	18:AR:39:VAL:HG13	2.31	0.60
20:AT:25:ARG:HH11	20:AT:25:ARG:HG3	1.65	0.60
25:AZ:263:ARG:HG3	25:AZ:264:LYS:N	2.17	0.60
32:B6:25:LYS:HD2	36:BA:2285:C:H41	1.67	0.60
36:BA:16:G:O2'	36:BA:17:G:H5'	2.01	0.60
36:BA:391:G:O2'	36:BA:392:C:H5'	2.02	0.60
36:BA:1332:G:N2	36:BA:1609:A:O2'	2.34	0.60
36:BA:1750:G:O2'	36:BA:1751:C:H5'	2.01	0.60
38:BC:29:VAL:HG11	38:BC:214:VAL:HG12	1.84	0.60
38:BC:40:THR:HG22	38:BC:177:LYS:HD2	1.84	0.60
40:BE:44:TYR:O	40:BE:45:THR:CB	2.49	0.60
42:BG:111:LEU:O	42:BG:114:ILE:HG22	2.01	0.60
47:BO:35:VAL:HG21	47:BO:103:ALA:CB	2.31	0.60
48:BP:77:ARG:HD3	48:BP:78:PRO:HD2	1.81	0.60
48:BP:85:LEU:HA	48:BP:88:LEU:HB2	1.84	0.60
53:BU:44:ASN:ND2	54:BV:75:PHE:HB3	2.17	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:BV:40:LEU:HD22	54:BV:46:VAL:HA	1.83	0.60
1:CA:57:G:H2'	1:CA:58:C:C6	2.37	0.60
5:CE:80:ILE:HG13	5:CE:91:LEU:HB2	1.82	0.60
10:CJ:34:VAL:CG2	10:CJ:74:ILE:HG22	2.32	0.60
22:CW:30:G:H2'	22:CW:31:A:H8	1.67	0.60
25:CZ:226:GLU:O	25:CZ:300:ARG:HD2	2.02	0.60
27:D1:8:SER:OG	27:D1:10:LYS:HG3	2.01	0.60
32:D6:15:GLU:OE2	32:D6:18:ARG:NH2	2.35	0.60
36:DA:956:G:H4'	49:DQ:83:MET:HE1	1.83	0.60
36:DA:2779:U:H1'	36:DA:2781:A:C6	2.37	0.60
36:DA:2886:G:H2'	36:DA:2887:U:C6	2.37	0.60
42:DG:54:GLU:OE1	42:DG:55:LYS:N	2.35	0.60
42:DG:77:ILE:HB	42:DG:80:PHE:O	2.02	0.60
46:DN:2:LYS:HZ1	54:DV:13:ARG:H	1.50	0.60
52:DT:29:ARG:CB	52:DT:85:LYS:HA	2.32	0.60
52:DT:106:SER:C	52:DT:107:ASP:OD1	2.44	0.60
1:AA:339:C:OP2	47:BO:97:ARG:NH1	2.35	0.60
2:AB:86:GLU:C	2:AB:88:ALA:H	2.09	0.60
4:AD:70:ILE:HG22	4:AD:71:SER:O	2.01	0.60
7:AG:27:ILE:HD13	7:AG:40:ALA:HA	1.83	0.60
13:AM:57:ARG:HH12	30:B4:34:GLU:HG3	1.66	0.60
19:AS:44:MET:SD	19:AS:44:MET:N	2.75	0.60
27:B1:60:PHE:CE1	27:B1:91:LYS:HG3	2.37	0.60
28:B2:52:ASP:O	28:B2:56:GLN:HG2	2.02	0.60
36:BA:654(U):A:H2'	36:BA:654(V):A:C8	2.37	0.60
49:BQ:141:GLN:CD	58:BZ:72:ARG:NE	2.60	0.60
50:BR:103:ARG:O	50:BR:104:ARG:HB2	2.02	0.60
51:BS:58:LEU:HG	51:BS:59:LYS:H	1.66	0.60
51:BS:89:ARG:HG3	51:BS:92:TYR:CA	2.31	0.60
57:BY:79:CYS:SG	57:BY:80:GLY:N	2.74	0.60
58:BZ:150:LEU:HD23	58:BZ:171:ILE:HD11	1.82	0.60
1:CA:192:U:H1'	20:CT:103:GLY:HA2	1.82	0.60
1:CA:382:A:H2'	1:CA:383:A:C8	2.37	0.60
1:CA:559:A:P	5:CE:126:ARG:HH22	2.24	0.60
1:CA:1039:C:H2'	1:CA:1040:U:C6	2.37	0.60
2:CB:111:ARG:HH11	2:CB:111:ARG:HG2	1.67	0.60
9:CI:90:PRO:HG2	9:CI:91:ASP:H	1.67	0.60
13:CM:65:LYS:O	13:CM:70:LEU:HD12	2.02	0.60
17:CQ:45:HIS:CD2	17:CQ:47:PRO:HD3	2.37	0.60
22:CV:4:C:H2'	22:CV:5:G:H5"	1.84	0.60
22:CW:30:G:H2'	22:CW:31:A:C8	2.37	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:CZ:121:LEU:O	25:CZ:125:GLN:HG2	2.02	0.60
29:D3:29:ARG:HH22	36:DA:1183:G:H4'	1.67	0.60
36:DA:2099:U:H2'	36:DA:2100:G:H8	1.62	0.60
36:DA:2162:G:O2'	36:DA:2163:C:H5'	2.01	0.60
36:DA:2572:A:N7	40:DE:145:LYS:HB2	2.16	0.60
41:DF:100:THR:HG22	41:DF:100:THR:O	2.00	0.60
41:DF:101:LEU:HD12	41:DF:102:PRO:HD2	1.83	0.60
57:DY:27:VAL:HG12	57:DY:29:GLU:H	1.67	0.60
1:AA:191:G:C4	20:AT:105:SER:HB3	2.35	0.59
1:AA:559:A:P	5:AE:126:ARG:HH22	2.24	0.59
8:AH:12:ARG:NH1	8:AH:27:PRO:HD3	2.17	0.59
13:AM:15:VAL:HG22	13:AM:43:THR:O	2.02	0.59
24:AY:70:C:O2'	24:AY:71:C:H5'	2.02	0.59
25:AZ:200:TRP:O	25:AZ:204:ASP:HB2	2.02	0.59
36:BA:2312:U:H2'	36:BA:2313:C:C5'	2.32	0.59
38:BC:10:LEU:HD11	38:BC:34:THR:OG1	2.02	0.59
42:BG:47:LYS:HE3	42:BG:81:LYS:HB3	1.84	0.59
46:BN:12:ARG:HB3	46:BN:50:ASP:OD1	2.02	0.59
50:BR:4:LEU:O	50:BR:4:LEU:HG	2.01	0.59
57:BY:98:VAL:O	57:BY:99:CYS:SG	2.59	0.59
58:BZ:76:LEU:HD23	58:BZ:83:PRO:HA	1.84	0.59
1:CA:227:G:C3'	1:CA:228:A:H5"	2.31	0.59
1:CA:228:A:H8	1:CA:228:A:C5'	2.14	0.59
1:CA:1429:C:H2'	1:CA:1430:C:C6	2.37	0.59
2:CB:86:GLU:C	2:CB:88:ALA:H	2.10	0.59
5:CE:64:ARG:CZ	5:CE:64:ARG:HB2	2.32	0.59
6:CF:10:LEU:HD11	6:CF:61:LEU:HD11	1.84	0.59
13:CM:49:THR:HB	13:CM:52:GLU:HG3	1.84	0.59
14:CN:59:ALA:O	14:CN:60:SER:CB	2.45	0.59
16:CP:49:LEU:HD12	16:CP:50:LYS:H	1.66	0.59
22:CW:7:A:C4	22:CW:49:C:H5	2.20	0.59
22:CW:74:C:H4'	27:D1:23:LYS:HE2	1.84	0.59
25:CZ:355:LEU:HD23	25:CZ:368:VAL:HG11	1.84	0.59
36:DA:118:A:N3	36:DA:178:G:H1'	2.17	0.59
36:DA:325:G:H2'	36:DA:326:G:C8	2.35	0.59
36:DA:1642:G:O2'	36:DA:1643:G:H5'	2.02	0.59
39:DD:43:ARG:HB2	39:DD:54:ARG:CB	2.32	0.59
40:DE:33:VAL:O	40:DE:33:VAL:HG13	2.02	0.59
42:DG:77:ILE:HG22	42:DG:79:ASN:O	2.02	0.59
46:DN:12:ARG:HB3	46:DN:50:ASP:OD1	2.02	0.59
49:DQ:60:ARG:HB3	49:DQ:60:ARG:HH11	1.63	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:DR:2:ARG:HG3	50:DR:2:ARG:NH1	2.17	0.59
52:DT:28:VAL:HG22	52:DT:46:GLU:HA	1.84	0.59
52:DT:50:ILE:HD13	52:DT:64:ARG:HB3	1.84	0.59
54:DV:99:ILE:HG12	54:DV:99:ILE:O	2.01	0.59
1:AA:977:A:N3	1:AA:977:A:C2'	2.64	0.59
1:AA:1004:A:H5'	1:AA:1005:A:OP2	2.01	0.59
1:AA:1006:C:N4	1:AA:1024:G:H21	1.99	0.59
1:AA:1499:A:O2'	1:AA:1500:A:H5'	2.02	0.59
8:AH:2:LEU:HD21	8:AH:5:PRO:HA	1.84	0.59
20:AT:57:ARG:HD3	20:AT:102:GLY:HA2	1.83	0.59
28:B2:27:GLU:O	28:B2:30:ARG:HB3	2.01	0.59
32:B6:9:LEU:HD22	32:B6:10:LEU:N	2.17	0.59
34:B8:6:THR:HG21	34:B8:63:PRO:HD3	1.84	0.59
36:BA:848:G:N3	36:BA:933:A:H1'	2.17	0.59
36:BA:1720:U:C3'	36:BA:1721:G:H5"	2.31	0.59
36:BA:2682:U:C6	40:BE:11:MET:HE2	2.37	0.59
38:BC:75:LEU:C	38:BC:75:LEU:HD12	2.27	0.59
39:BD:130:ALA:C	39:BD:131:LEU:HD12	2.27	0.59
39:BD:183:ARG:HG2	39:BD:183:ARG:NH1	2.16	0.59
39:BD:267:SER:C	39:BD:269:PHE:N	2.59	0.59
47:BO:20:MET:HE3	47:BO:44:LYS:HE3	1.84	0.59
50:BR:2:ARG:HD2	50:BR:2:ARG:C	2.26	0.59
50:BR:99:LYS:H	50:BR:99:LYS:CD	2.01	0.59
50:BR:103:ARG:HG3	55:BW:40:ASN:CG	2.27	0.59
51:BS:89:ARG:HG3	51:BS:92:TYR:HA	1.83	0.59
1:CA:979:C:H2'	1:CA:980:C:H5"	1.83	0.59
1:CA:1005:A:H5'	1:CA:1037:C:O2	2.02	0.59
1:CA:1330:U:H5'	1:CA:1331:G:OP2	2.02	0.59
2:CB:17:PHE:CD2	2:CB:44:LEU:HD11	2.36	0.59
9:CI:99:LEU:N	9:CI:99:LEU:HD22	2.16	0.59
25:CZ:326:GLU:H	25:CZ:326:GLU:CD	2.09	0.59
27:D1:62:VAL:HG22	27:D1:63:ALA:O	2.02	0.59
31:D5:11:THR:OG1	36:DA:1264:G:H5'	2.01	0.59
36:DA:145:G:C2'	36:DA:146:G:H5"	2.30	0.59
36:DA:1188:U:H4'	54:DV:79:VAL:HG22	1.84	0.59
36:DA:2312:U:H2'	36:DA:2313:C:C5'	2.32	0.59
38:DC:128:GLY:HA2	38:DC:137:LEU:HD23	1.84	0.59
41:DF:185:ASP:HA	41:DF:188:ARG:CD	2.31	0.59
50:DR:2:ARG:O	50:DR:2:ARG:HD2	2.00	0.59
57:DY:81:LYS:O	57:DY:82:PRO:O	2.20	0.59
1:AA:858:G:C5	1:AA:869:G:N7	2.70	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1039:C:H2'	1:AA:1040:U:C6	2.37	0.59
1:AA:1319:A:H5'	1:AA:1320:C:OP1	2.02	0.59
3:AC:14:ILE:HG12	3:AC:15:THR:N	2.17	0.59
12:AL:81:SER:HA	12:AL:106:ASP:OD2	2.02	0.59
20:AT:26:ASN:HD22	20:AT:26:ASN:N	2.00	0.59
24:AY:57:G:C2'	24:AY:58:A:H5'	2.33	0.59
28:B2:6:VAL:HG12	28:B2:10:LEU:HD21	1.83	0.59
31:B5:25:LEU:HD12	55:BW:19:LEU:HG	1.83	0.59
32:B6:15:GLU:CD	32:B6:18:ARG:NH2	2.60	0.59
36:BA:898:C:H2'	36:BA:899:A:O4'	2.02	0.59
36:BA:2032:G:OP2	36:BA:2454:G:O2'	2.20	0.59
38:BC:116:THR:HG22	38:BC:147:PHE:HA	1.84	0.59
41:BF:114:VAL:HG21	41:BF:202:PHE:CE1	2.37	0.59
1:CA:198:G:O2'	1:CA:199:G:H8	1.85	0.59
1:CA:1096:C:H5"	2:CB:137:ARG:HH21	1.67	0.59
1:CA:1354:C:H2'	1:CA:1355:G:H8	1.66	0.59
1:CA:1376:U:H2'	1:CA:1377:A:C8	2.37	0.59
3:CC:81:GLY:HA3	3:CC:85:ARG:CZ	2.31	0.59
21:CU:3:LYS:HB3	21:CU:14:TRP:CD1	2.37	0.59
32:D6:15:GLU:OE1	32:D6:18:ARG:CG	2.50	0.59
36:DA:32:C:O2'	36:DA:33:U:H5'	2.02	0.59
36:DA:848:G:H8	36:DA:848:G:H5'	1.67	0.59
36:DA:1019:U:H3	36:DA:1142(A):A:N6	1.94	0.59
36:DA:2555:U:H2'	36:DA:2556:C:H5'	1.83	0.59
36:DA:2712:U:O2'	36:DA:2713:A:H5'	2.01	0.59
43:DH:54:ARG:HG2	43:DH:54:ARG:NH1	2.17	0.59
48:DP:95:VAL:HG23	48:DP:125:VAL:HA	1.83	0.59
51:DS:30:ARG:NH2	51:DS:62:LYS:HD3	2.11	0.59
57:DY:77:PRO:O	57:DY:99:CYS:SG	2.61	0.59
57:DY:81:LYS:HD3	57:DY:97:ARG:HG3	1.85	0.59
1:AA:542:G:H2'	1:AA:543:C:H6	1.68	0.59
1:AA:1054:C:O2'	1:AA:1055:A:C5'	2.50	0.59
4:AD:4:TYR:O	4:AD:5:ILE:HB	2.01	0.59
16:AP:8:ARG:NH2	16:AP:15:PRO:HG3	2.17	0.59
16:AP:53:VAL:HG23	16:AP:54:GLU:HG2	1.85	0.59
25:AZ:131:ILE:O	25:AZ:168:VAL:HG13	2.02	0.59
25:AZ:226:GLU:O	25:AZ:300:ARG:HD2	2.02	0.59
34:B8:41:ILE:HD12	36:BA:2419:U:OP1	2.02	0.59
36:BA:140:G:H1'	36:BA:141:A:C2	2.37	0.59
36:BA:661:C:H4'	48:BP:16:ARG:NH1	2.18	0.59
36:BA:1480:G:H2'	36:BA:1481:U:C5'	2.31	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:BP:23:PRO:C	48:BP:33:ARG:NE	2.60	0.59
49:BQ:19:GLY:HA3	58:BZ:79:ARG:HH22	1.68	0.59
54:BV:38:LEU:C	54:BV:39:LEU:HD13	2.27	0.59
57:BY:77:PRO:O	57:BY:99:CYS:SG	2.61	0.59
1:CA:265:G:C2'	1:CA:266:G:H5"	2.31	0.59
1:CA:665:A:H2'	1:CA:732:C:O2	2.02	0.59
1:CA:1030(D):A:H2'	1:CA:1031:G:H5'	1.84	0.59
1:CA:1319:A:H5'	1:CA:1320:C:OP1	2.02	0.59
4:CD:19:LEU:HD12	4:CD:19:LEU:N	2.16	0.59
6:CF:28:ARG:HG3	6:CF:28:ARG:HH11	1.67	0.59
22:CV:51:U:H2'	22:CV:52:G:H8	1.66	0.59
25:CZ:26:THR:HG21	60:CZ:501:GDP:C8	2.37	0.59
32:D6:13:CYS:O	32:D6:21:TYR:HA	2.02	0.59
36:DA:271(L):U:C5'	36:DA:271(M):G:H5'	2.21	0.59
36:DA:1192:G:O2'	36:DA:1193:G:H5'	2.02	0.59
36:DA:1480:G:H2'	36:DA:1481:U:C5'	2.30	0.59
36:DA:2101:G:C3'	36:DA:2102:U:H5"	2.32	0.59
36:DA:2115:G:N3	36:DA:2117:A:N7	2.50	0.59
38:DC:161:ILE:HG21	38:DC:174:PRO:HG2	1.83	0.59
39:DD:24:ILE:HG23	39:DD:25:THR:H	1.67	0.59
39:DD:183:ARG:NH1	39:DD:183:ARG:HG2	2.17	0.59
46:DN:45:ASN:H	46:DN:45:ASN:HD22	1.50	0.59
1:AA:1158:C:C2'	1:AA:1158:C:O2	2.49	0.59
3:AC:60:ALA:O	3:AC:61:ALA:HB2	2.01	0.59
10:AJ:61:GLU:OE2	14:AN:49:HIS:HE1	1.86	0.59
25:AZ:126:VAL:HG13	61:AZ:502:KIR:C47	2.33	0.59
28:B2:22:GLU:O	28:B2:26:ARG:HB2	2.03	0.59
31:B5:48:GLU:O	31:B5:49:CYS:CB	2.50	0.59
32:B6:52:VAL:HG12	32:B6:53:LYS:H	1.68	0.59
36:BA:30:G:H2'	36:BA:31:C:C6	2.38	0.59
36:BA:693:C:O2'	36:BA:694:U:H5'	2.03	0.59
36:BA:1058:G:C3'	36:BA:1059:G:H5"	2.32	0.59
36:BA:1082:U:O2'	44:BJ:38:UNK:HA	2.03	0.59
36:BA:1210:A:H5'	36:BA:1210:A:C8	2.37	0.59
36:BA:1270:C:H5"	36:BA:1271:G:O5'	2.03	0.59
36:BA:1678:G:N2	36:BA:1989:G:N2	2.47	0.59
36:BA:2186:G:H2'	36:BA:2187:G:C8	2.38	0.59
36:BA:2591:C:H2'	36:BA:2592:G:C8	2.37	0.59
36:BA:2884:U:H2'	36:BA:2885:C:H5'	1.84	0.59
48:BP:16:ARG:HH11	48:BP:16:ARG:CB	2.16	0.59
53:BU:92:ARG:HH21	54:BV:10:LYS:CB	2.16	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:178:C:O2'	1:CA:179:A:H5'	2.03	0.59
13:CM:3:ARG:NH2	13:CM:7:VAL:HG13	2.17	0.59
17:CQ:9:VAL:HG11	17:CQ:84:LEU:HD12	1.85	0.59
36:DA:34:C:H41	36:DA:447:A:N6	2.00	0.59
36:DA:330:A:HO2'	36:DA:331:A:H8	1.49	0.59
36:DA:1207:C:H2'	36:DA:1208:C:C6	2.33	0.59
36:DA:1450(A):C:H2'	36:DA:1451:C:C5	2.38	0.59
36:DA:2148:G:O2'	36:DA:2149:G:H5'	2.02	0.59
40:DE:44:TYR:O	40:DE:45:THR:CB	2.51	0.59
42:DG:37:VAL:HG21	42:DG:103:LEU:HD11	1.84	0.59
43:DH:84:SER:O	43:DH:85:LYS:HB3	2.02	0.59
46:DN:18:ALA:HB3	46:DN:56:ASN:O	2.02	0.59
50:DR:72:ASP:HB3	50:DR:75:LEU:HB3	1.84	0.59
53:DU:92:ARG:HH21	54:DV:10:LYS:HB3	1.65	0.59
55:DW:82:LEU:HD12	55:DW:82:LEU:N	2.14	0.59
1:AA:180:U:H2'	1:AA:181:G:H5'	1.82	0.59
1:AA:393:A:O2'	1:AA:394:G:H5'	2.03	0.59
3:AC:23:TYR:CD1	3:AC:24:ALA:N	2.71	0.59
19:AS:78:ARG:O	19:AS:81:ARG:HD3	2.02	0.59
28:B2:60:LEU:HA	28:B2:63:VAL:CG2	2.33	0.59
33:B7:9:ARG:NE	36:BA:1310:G:OP2	2.31	0.59
36:BA:176:G:O2'	36:BA:177:G:H5'	2.03	0.59
36:BA:297:C:H2'	36:BA:298:G:O4'	2.02	0.59
36:BA:1095:A:H2'	36:BA:1096:A:H8	1.67	0.59
36:BA:2389:G:H5"	36:BA:2390:U:H5'	1.84	0.59
36:BA:2681:C:H5	36:BA:2725:A:H62	1.51	0.59
41:BF:168:ARG:CG	41:BF:175:THR:HG21	2.23	0.59
41:BF:206:ILE:HG22	41:BF:207:GLY:N	2.17	0.59
42:BG:7:LEU:O	42:BG:8:LYS:C	2.45	0.59
52:BT:32:TYR:N	52:BT:32:TYR:CD1	2.70	0.59
4:CD:55:ALA:O	4:CD:59:ARG:HG2	2.03	0.59
5:CE:64:ARG:HG3	5:CE:64:ARG:HH11	1.68	0.59
7:CG:113:GLU:O	7:CG:119:ARG:HD3	2.03	0.59
16:CP:8:ARG:NH2	16:CP:15:PRO:HG3	2.18	0.59
20:CT:74:LYS:HD3	20:CT:74:LYS:N	2.17	0.59
22:CV:44:G:H2'	22:CV:45:U:H5'	1.85	0.59
36:DA:139(A):G:N2	56:DX:44:GLU:OE1	2.30	0.59
36:DA:852:G:O2'	36:DA:853:G:H5'	2.02	0.59
36:DA:1058:G:C3'	36:DA:1059:G:H5"	2.32	0.59
36:DA:2358:G:H22	48:DP:55:ARG:HH21	1.49	0.59
36:DA:2631:G:N2	40:DE:61:ARG:NH1	2.50	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2632:A:O2'	40:DE:61:ARG:NH2	2.35	0.59
36:DA:2833:G:H3'	36:DA:2834:G:H5'	1.82	0.59
40:DE:117:MET:CE	40:DE:136:ARG:HA	2.32	0.59
51:DS:42:ASP:C	51:DS:44:LYS:H	2.11	0.59
55:DW:11:ARG:HG2	55:DW:11:ARG:NH1	2.15	0.59
1:AA:437:U:C5'	4:AD:155:LEU:HD13	2.32	0.59
1:AA:633:G:H5'	1:AA:634:C:OP2	2.03	0.59
1:AA:1151:A:HO2'	1:AA:1152:A:H8	1.49	0.59
5:AE:40:ARG:NH2	5:AE:66:MET:HG2	2.17	0.59
6:AF:11:ASN:HB3	6:AF:14:LEU:CG	2.31	0.59
13:AM:83:ASP:C	13:AM:85:GLY:H	2.10	0.59
20:AT:26:ASN:H	20:AT:26:ASN:HD22	1.50	0.59
22:AV:1:G:H1'	26:B0:5:LYS:NZ	2.16	0.59
22:AW:30:G:H2'	22:AW:31:A:C8	2.38	0.59
27:B1:61:ARG:HG2	27:B1:61:ARG:NH1	2.15	0.59
28:B2:69:ARG:H	28:B2:69:ARG:HD2	1.68	0.59
32:B6:20:ASN:C	32:B6:21:TYR:CG	2.80	0.59
36:BA:2153:G:O2'	36:BA:2154:G:H5'	2.02	0.59
36:BA:2312:U:C3'	42:BG:71:THR:HG21	2.32	0.59
52:BT:30:VAL:CG2	52:BT:83:ILE:HG12	2.32	0.59
57:BY:81:LYS:O	57:BY:82:PRO:O	2.20	0.59
58:BZ:149:SER:HB3	58:BZ:173:ALA:HA	1.84	0.59
1:CA:37:U:OP1	12:CL:124:LYS:HB3	2.02	0.59
1:CA:748:C:H4'	1:CA:749:C:O5'	2.02	0.59
9:CI:53:VAL:HG13	9:CI:95:LYS:CD	2.30	0.59
12:CL:47:LYS:C	12:CL:49:ASN:N	2.58	0.59
13:CM:15:VAL:HG11	13:CM:48:LEU:HD11	1.84	0.59
13:CM:108:ARG:HH11	13:CM:108:ARG:HG3	1.68	0.59
17:CQ:3:LYS:HB3	17:CQ:61:GLU:HB3	1.84	0.59
17:CQ:85:VAL:O	17:CQ:89:LEU:HG	2.03	0.59
25:CZ:126:VAL:O	25:CZ:128:VAL:HG23	2.02	0.59
28:D2:31:GLU:HB3	28:D2:53:LEU:HD11	1.84	0.59
34:D8:33:ASN:HD22	36:DA:2419:U:H5"	1.66	0.59
36:DA:925:C:H2'	36:DA:926:A:C5'	2.24	0.59
36:DA:2840:C:H2'	36:DA:2841:C:C6	2.37	0.59
38:DC:10:LEU:HD11	38:DC:34:THR:OG1	2.02	0.59
40:DE:59:VAL:CG2	40:DE:63:LEU:HA	2.33	0.59
42:DG:32:PRO:HB2	42:DG:172:LEU:HD12	1.84	0.59
44:DJ:120:UNK:O	44:DJ:121:UNK:CB	2.50	0.59
48:DP:65:ARG:CB	48:DP:68:GLN:HE22	2.16	0.59
48:DP:85:LEU:HA	48:DP:88:LEU:HB2	1.84	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:DP:97:PRO:HD3	48:DP:126:VAL:O	2.02	0.59
52:DT:58:ASN:HD22	52:DT:58:ASN:N	1.96	0.59
58:DZ:163:LEU:HD12	58:DZ:165:VAL:CG2	2.32	0.59
1:AA:731:G:OP1	1:AA:766:A:H1'	2.03	0.59
2:AB:7:VAL:O	2:AB:11:LEU:HD12	2.03	0.59
4:AD:55:ALA:O	4:AD:59:ARG:HG2	2.03	0.59
4:AD:124:GLY:O	4:AD:126:ILE:N	2.35	0.59
17:AQ:9:VAL:HG11	17:AQ:84:LEU:HD12	1.85	0.59
17:AQ:45:HIS:CD2	17:AQ:47:PRO:HD3	2.38	0.59
25:AZ:110:ASP:HB3	25:AZ:113:MET:HE1	1.84	0.59
27:B1:80:LEU:CB	27:B1:82:LEU:HD13	2.29	0.59
30:B4:42:PHE:O	30:B4:43:TYR:O	2.21	0.59
34:B8:10:ALA:HB3	34:B8:60:LEU:HD21	1.83	0.59
36:BA:331:A:H1'	36:BA:332:A:OP1	2.03	0.59
36:BA:414:C:H1'	36:BA:1864:U:O2'	2.01	0.59
36:BA:1009:A:H1'	53:BU:59:ARG:NH1	2.18	0.59
36:BA:1109:C:H2'	36:BA:1110:G:O4'	2.02	0.59
36:BA:2152:G:O2'	36:BA:2153:G:H5'	2.01	0.59
37:BB:68:C:H2'	37:BB:69:G:O4'	2.02	0.59
42:BG:86:MET:N	42:BG:87:PRO:HD3	2.18	0.59
48:BP:85:LEU:HA	48:BP:88:LEU:CB	2.32	0.59
50:BR:72:ASP:HB3	50:BR:75:LEU:HB3	1.84	0.59
52:BT:23:ARG:HG2	52:BT:120:ARG:NH1	2.17	0.59
58:BZ:152:ALA:C	58:BZ:167:PRO:HB2	2.28	0.59
1:CA:613:C:H2'	1:CA:614:A:H8	1.68	0.59
1:CA:722:A:HO2'	1:CA:724:G:H8	1.50	0.59
1:CA:1158:C:C2'	1:CA:1158:C:O2	2.50	0.59
4:CD:11:LEU:HD22	4:CD:66:ARG:NH1	2.18	0.59
6:CF:57:GLN:H	6:CF:57:GLN:HE21	1.51	0.59
9:CI:111:ARG:O	9:CI:119:ALA:HB2	2.03	0.59
12:CL:6:THR:H	12:CL:9:GLN:HE21	1.49	0.59
13:CM:12:ASN:HD22	13:CM:12:ASN:N	1.96	0.59
19:CS:16:LEU:HD12	19:CS:16:LEU:N	2.17	0.59
20:CT:57:ARG:HD3	20:CT:102:GLY:HA2	1.84	0.59
27:D1:82:LEU:HD11	27:D1:90:ILE:CD1	2.33	0.59
32:D6:15:GLU:OE2	32:D6:41:PRO:HB2	2.03	0.59
36:DA:272(I):U:H2'	36:DA:272(J):C:H6	1.66	0.59
36:DA:832:G:OP1	48:DP:40:SER:HB3	2.01	0.59
36:DA:1060:U:H1'	36:DA:1061:U:OP2	2.02	0.59
36:DA:1809:A:H2'	36:DA:1810:A:C8	2.38	0.59
36:DA:1887:C:C3'	36:DA:1888:G:H5"	2.33	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1902:C:H1'	39:DD:244:ARG:HG3	1.84	0.59
36:DA:2464:C:O2'	36:DA:2465:C:H6	1.84	0.59
37:DB:56:G:H4'	37:DB:57:A:O5'	2.03	0.59
39:DD:65:ILE:H	39:DD:65:ILE:HD13	1.67	0.59
48:DP:24:GLY:HA3	48:DP:33:ARG:HH12	1.68	0.59
52:DT:3:ARG:HB2	52:DT:6:LEU:HB2	1.85	0.59
57:DY:13:VAL:HG11	57:DY:28:LYS:HD3	1.85	0.59
1:AA:37:U:OP1	12:AL:124:LYS:HB3	2.02	0.59
4:AD:88:VAL:O	4:AD:92:VAL:HG23	2.02	0.59
15:AO:82:ILE:CD1	15:AO:87:ILE:HB	2.32	0.59
20:AT:104:LEU:C	20:AT:104:LEU:HD23	2.28	0.59
26:B0:70:GLN:NE2	26:B0:80:HIS:NE2	2.50	0.59
28:B2:27:GLU:O	28:B2:30:ARG:CB	2.51	0.59
29:B3:31:LEU:HD23	29:B3:32:GLN:H	1.67	0.59
36:BA:330:A:HO2'	36:BA:331:A:H8	1.50	0.59
36:BA:2248:C:H2'	36:BA:2249:U:H5'	1.85	0.59
41:BF:127:GLU:OE1	41:BF:196:LEU:HD12	2.02	0.59
42:BG:52:ILE:HG12	42:BG:54:GLU:H	1.68	0.59
44:BJ:28:UNK:HA	44:BJ:82:UNK:HA	1.85	0.59
48:BP:17:LYS:C	48:BP:19:VAL:H	2.10	0.59
51:BS:42:ASP:C	51:BS:44:LYS:H	2.11	0.59
52:BT:13:ARG:HA	52:BT:13:ARG:HH11	1.62	0.59
56:BX:8:ILE:HD12	56:BX:8:ILE:H	1.68	0.59
57:BY:29:GLU:OE1	57:BY:29:GLU:N	2.36	0.59
58:BZ:72:ARG:CG	58:BZ:89:PHE:HB2	2.31	0.59
1:CA:1116:C:C2'	1:CA:1117:G:H5"	2.32	0.59
1:CA:1151:A:HO2'	1:CA:1152:A:H8	1.50	0.59
29:D3:25:ALA:C	29:D3:27:GLY:H	2.10	0.59
34:D8:61:LEU:C	34:D8:63:PRO:HD2	2.28	0.59
36:DA:1510:G:O2'	36:DA:1511:C:H5'	2.03	0.59
46:DN:48:MET:C	46:DN:48:MET:HE3	2.28	0.59
50:DR:2:ARG:HD2	50:DR:2:ARG:C	2.28	0.59
50:DR:84:ALA:HB3	50:DR:85:PRO:HD3	1.85	0.59
51:DS:89:ARG:HG3	51:DS:92:TYR:CA	2.33	0.59
53:DU:70:ARG:HA	53:DU:74:LEU:O	2.03	0.59
58:DZ:98:MET:O	58:DZ:125:LEU:HA	2.03	0.59
1:AA:35:G:H2'	1:AA:36:C:C6	2.37	0.59
1:AA:155:C:H2'	1:AA:156:G:H8	1.67	0.59
1:AA:858:G:C6	1:AA:869:G:C8	2.89	0.59
1:AA:1228:C:OP1	13:AM:115:LYS:HE3	2.02	0.59
2:AB:114:ARG:HH12	2:AB:118:LEU:HD21	1.66	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:229:VAL:CG1	2:AB:230:VAL:H	2.15	0.59
6:AF:75:LEU:O	6:AF:78:GLU:HB3	2.03	0.59
25:AZ:355:LEU:HD23	25:AZ:368:VAL:HG11	1.84	0.59
27:B1:3:LYS:N	27:B1:3:LYS:NZ	2.43	0.59
28:B2:62:THR:HG21	36:BA:76:C:HO2'	1.68	0.59
34:B8:33:ASN:HD22	36:BA:2419:U:H5"	1.67	0.59
36:BA:848:G:H5'	36:BA:848:G:H8	1.68	0.59
36:BA:1060:U:H1'	36:BA:1061:U:OP2	2.02	0.59
36:BA:2533:A:H2'	36:BA:2534:A:O4'	2.02	0.59
36:BA:2811:G:OP1	40:BE:60:ASN:HB2	2.03	0.59
39:BD:65:ILE:HD13	39:BD:65:ILE:H	1.66	0.59
39:BD:142:VAL:HG21	39:BD:191:ALA:HB1	1.85	0.59
40:BE:5:LEU:HD12	40:BE:51:PHE:HB2	1.84	0.59
41:BF:28:ILE:HD13	41:BF:28:ILE:N	2.12	0.59
42:BG:42:GLY:HA2	42:BG:89:GLY:HA2	1.85	0.59
42:BG:45:GLU:N	42:BG:45:GLU:OE1	2.36	0.59
47:BO:10:VAL:HG21	47:BO:16:ALA:O	2.03	0.59
50:BR:3:HIS:C	50:BR:3:HIS:HD1	2.10	0.59
52:BT:35:LYS:NZ	52:BT:41:ARG:HD2	2.18	0.59
52:BT:58:ASN:HD22	52:BT:58:ASN:N	2.01	0.59
4:CD:4:TYR:O	4:CD:5:ILE:HB	2.02	0.59
10:CJ:4:ILE:HD12	10:CJ:4:ILE:N	2.18	0.59
11:CK:18:ARG:HH21	11:CK:37:GLY:N	2.01	0.59
25:CZ:131:ILE:O	25:CZ:168:VAL:HG13	2.03	0.59
26:D0:36:ILE:HD11	36:DA:2355:C:H4'	1.84	0.59
36:DA:469:G:C2'	36:DA:470:A:H5"	2.32	0.59
36:DA:528:A:C2	36:DA:2042:A:H2'	2.38	0.59
36:DA:848:G:O6	36:DA:928:G:H2'	2.02	0.59
36:DA:1095:A:H2'	36:DA:1096:A:H8	1.67	0.59
36:DA:1208:C:O2	36:DA:1208:C:H2'	2.03	0.59
40:DE:9:VAL:HG12	40:DE:25:VAL:O	2.02	0.59
41:DF:21:ALA:HB3	41:DF:23:ASP:OD1	2.02	0.59
41:DF:114:VAL:HG21	41:DF:202:PHE:CE1	2.38	0.59
42:DG:93:THR:O	42:DG:94:LEU:HD23	2.02	0.59
48:DP:92:GLU:HG2	48:DP:121:LYS:NZ	2.18	0.59
52:DT:96:ARG:HB2	52:DT:96:ARG:CZ	2.33	0.59
54:DV:12:TYR:N	54:DV:12:TYR:CD1	2.70	0.59
4:AD:22:LYS:HB2	4:AD:26:CYS:CB	2.31	0.58
6:AF:61:LEU:O	6:AF:62:TRP:HB3	2.03	0.58
10:AJ:55:LYS:CB	10:AJ:55:LYS:NZ	2.58	0.58
25:AZ:121:LEU:O	25:AZ:125:GLN:HG2	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:AZ:139:ASP:CG	25:AZ:177:LEU:HD11	2.27	0.58
36:BA:90:U:O4'	36:BA:92:A:H8	1.86	0.58
36:BA:1023:U:H5'	36:BA:1023:U:H6	1.67	0.58
36:BA:2312:U:H2'	36:BA:2313:C:H5"	1.85	0.58
36:BA:2632:A:O2'	40:BE:61:ARG:NH2	2.36	0.58
40:BE:59:VAL:CG2	40:BE:63:LEU:HA	2.33	0.58
40:BE:75:VAL:O	40:BE:77:ILE:N	2.36	0.58
41:BF:185:ASP:HA	41:BF:188:ARG:HD3	1.84	0.58
43:BH:105:LEU:HD23	43:BH:105:LEU:N	2.13	0.58
50:BR:10:LEU:O	50:BR:11:ASN:HB2	2.02	0.58
51:BS:20:ARG:HA	51:BS:20:ARG:NE	2.18	0.58
52:BT:32:TYR:CD2	52:BT:81:PRO:HB2	2.38	0.58
53:BU:108:GLU:CG	54:BV:44:LYS:HD3	2.33	0.58
55:BW:84:ARG:HB2	55:BW:96:ILE:HG22	1.85	0.58
56:BX:52:VAL:HG12	56:BX:53:LYS:N	2.13	0.58
1:CA:592:G:H2'	1:CA:593:G:H8	1.67	0.58
1:CA:1309:G:OP1	13:CM:92:HIS:HE1	1.86	0.58
12:CL:91:LYS:NZ	12:CL:91:LYS:HB3	2.18	0.58
16:CP:43:LYS:O	16:CP:45:THR:N	2.36	0.58
25:CZ:110:ASP:HB3	25:CZ:113:MET:HE1	1.84	0.58
25:CZ:113:MET:HG3	25:CZ:114:PRO:HD2	1.84	0.58
25:CZ:139:ASP:CG	25:CZ:177:LEU:HD11	2.28	0.58
28:D2:51:ARG:HB2	28:D2:55:ARG:NH1	2.17	0.58
36:DA:419:C:H2'	36:DA:420:C:C6	2.38	0.58
36:DA:953:A:O2'	36:DA:954:G:H5'	2.02	0.58
36:DA:1071:G:H2'	36:DA:1072:C:O4'	2.03	0.58
36:DA:2753:A:O2'	36:DA:2754:U:H5'	2.02	0.58
37:DB:7:G:C2'	37:DB:8:U:H5"	2.33	0.58
48:DP:17:LYS:C	48:DP:19:VAL:H	2.09	0.58
50:DR:94:TYR:N	50:DR:94:TYR:CD1	2.69	0.58
52:DT:28:VAL:HG13	52:DT:46:GLU:CA	2.32	0.58
53:DU:44:ASN:ND2	54:DV:75:PHE:HB3	2.18	0.58
53:DU:65:ILE:HG12	53:DU:96:ALA:HB1	1.85	0.58
53:DU:92:ARG:HH21	54:DV:10:LYS:CB	2.16	0.58
1:AA:1309:G:OP1	13:AM:92:HIS:HE1	1.86	0.58
5:AE:81:GLU:OE1	5:AE:88:LYS:HE3	2.03	0.58
32:B6:13:CYS:O	32:B6:21:TYR:HA	2.03	0.58
34:B8:41:ILE:HD12	36:BA:2419:U:P	2.43	0.58
36:BA:272(I):U:H2'	36:BA:272(J):C:H6	1.66	0.58
36:BA:1040:C:H2'	36:BA:1041:G:C8	2.38	0.58
36:BA:1809:A:H2'	36:BA:1810:A:C8	2.37	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2101:G:H2'	36:BA:2102:U:C5'	2.25	0.58
36:BA:2512:C:H2'	36:BA:2513:G:O4'	2.03	0.58
36:BA:2688:U:H1'	36:BA:2721:A:N6	2.19	0.58
36:BA:2753:A:O2'	36:BA:2754:U:H5'	2.03	0.58
40:BE:179:GLU:O	40:BE:180:ASN:HB2	2.03	0.58
41:BF:21:ALA:HB3	41:BF:23:ASP:OD1	2.03	0.58
46:BN:43:THR:HB	46:BN:46:VAL:CG1	2.33	0.58
48:BP:65:ARG:CB	48:BP:68:GLN:HE22	2.15	0.58
52:BT:96:ARG:CZ	52:BT:96:ARG:HB2	2.33	0.58
57:BY:44:ILE:HD12	57:BY:44:ILE:N	2.17	0.58
2:CB:189:ASP:HB3	2:CB:203:GLY:O	2.03	0.58
5:CE:148:VAL:HG21	8:CH:107:LEU:HD13	1.85	0.58
7:CG:37:ASN:O	7:CG:41:ARG:HG3	2.03	0.58
9:CI:48:GLU:N	9:CI:49:PRO:CD	2.66	0.58
19:CS:31:ILE:HG23	19:CS:49:ILE:HG23	1.83	0.58
27:D1:86:SER:OG	27:D1:89:GLU:HB2	2.02	0.58
36:DA:189:G:H2'	36:DA:205:G:N2	2.17	0.58
36:DA:297:C:H2'	36:DA:298:G:O4'	2.03	0.58
36:DA:322:A:OP2	41:DF:169:ASN:HB2	2.03	0.58
36:DA:636:G:OP1	48:DP:132:LYS:HE2	2.03	0.58
36:DA:1311:G:N2	36:DA:1603:A:H62	2.01	0.58
36:DA:1517:G:H2'	36:DA:1518:U:O4'	2.02	0.58
36:DA:2206:G:H21	36:DA:2207:G:H4'	1.67	0.58
36:DA:2524:G:H5'	36:DA:2524:G:C8	2.32	0.58
46:DN:58:ASP:O	46:DN:60:ILE:HG13	2.03	0.58
47:DO:20:MET:HE3	47:DO:44:LYS:HE3	1.83	0.58
49:DQ:5:ARG:CZ	49:DQ:5:ARG:HB2	2.32	0.58
50:DR:103:ARG:HG3	55:DW:40:ASN:CG	2.29	0.58
58:DZ:113:ALA:HB1	58:DZ:146:ILE:HD13	1.84	0.58
1:AA:266:G:H5"	1:AA:267:C:H5	1.67	0.58
3:AC:5:ILE:CD1	3:AC:5:ILE:N	2.56	0.58
3:AC:52:LEU:HD12	3:AC:55:VAL:CG2	2.33	0.58
3:AC:95:THR:O	3:AC:97:LYS:N	2.36	0.58
8:AH:17:THR:HB	8:AH:78:GLN:OE1	2.03	0.58
9:AI:91:ASP:C	9:AI:93:ARG:N	2.60	0.58
36:BA:621:A:H2'	36:BA:622:G:C5'	2.32	0.58
36:BA:657:U:C2	36:BA:658:C:C5	2.91	0.58
36:BA:1331:A:O2'	36:BA:1332:G:H5"	2.03	0.58
36:BA:1385:G:H4'	36:BA:1386:C:OP1	2.02	0.58
36:BA:1614:A:N1	55:BW:91:GLY:HA2	2.18	0.58
36:BA:2720:U:O2	36:BA:2720:U:H2'	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BD:43:ARG:HH11	39:BD:44:ASN:HD21	1.49	0.58
42:BG:9:ARG:O	42:BG:10:LYS:C	2.47	0.58
43:BH:84:SER:O	43:BH:85:LYS:HB3	2.02	0.58
52:BT:23:ARG:HH21	52:BT:120:ARG:HD3	1.67	0.58
52:BT:50:ILE:HD13	52:BT:64:ARG:HB3	1.85	0.58
54:BV:12:TYR:N	54:BV:12:TYR:CD1	2.71	0.58
57:BY:95:LYS:CE	57:BY:100:ALA:HB2	2.33	0.58
1:CA:662:G:H2'	1:CA:663:A:C8	2.38	0.58
1:CA:980:C:H5'	1:CA:980:C:C6	2.23	0.58
22:CW:71:G:O2'	36:DA:1851:U:H1'	2.03	0.58
30:D4:9:LEU:HD13	30:D4:10:VAL:H	1.67	0.58
31:D5:49:CYS:O	31:D5:56:LYS:HE2	2.02	0.58
32:D6:53:LYS:HD3	32:D6:53:LYS:H	1.69	0.58
36:DA:28:A:H61	36:DA:512:G:H1'	1.65	0.58
36:DA:548:A:C2'	36:DA:549:G:H5'	2.34	0.58
36:DA:654(E):G:H22	36:DA:654(Q):C:C1'	2.07	0.58
36:DA:956:G:OP2	49:DQ:14:ARG:NH2	2.36	0.58
36:DA:1720:U:H2'	36:DA:1721:G:C4'	2.32	0.58
36:DA:2092:U:H4'	36:DA:2093:G:C5'	2.23	0.58
36:DA:2187:G:H2'	36:DA:2188:C:C5'	2.23	0.58
41:DF:157:VAL:CG2	41:DF:194:MET:HG2	2.33	0.58
42:DG:111:LEU:N	42:DG:112:PRO:HD2	2.17	0.58
48:DP:101:VAL:HG12	48:DP:106:LEU:HB3	1.85	0.58
53:DU:108:GLU:CG	54:DV:44:LYS:HD3	2.33	0.58
54:DV:68:LYS:HE2	54:DV:68:LYS:HA	1.85	0.58
56:DX:33:LYS:HE2	56:DX:33:LYS:HA	1.85	0.58
58:DZ:166:SER:N	58:DZ:167:PRO:HA	2.17	0.58
1:AA:1512:U:H2'	1:AA:1513:A:H8	1.65	0.58
13:AM:49:THR:HB	13:AM:52:GLU:HG3	1.83	0.58
18:AR:36:ASN:HD21	18:AR:39:VAL:HG21	1.67	0.58
19:AS:12:ASP:HB2	19:AS:38:SER:OG	2.04	0.58
28:B2:62:THR:HG22	28:B2:66:GLU:CB	2.32	0.58
36:BA:153:C:H2'	36:BA:154:G:C8	2.39	0.58
36:BA:811:U:O2'	36:BA:812:C:H5"	2.03	0.58
36:BA:2733:A:O2'	36:BA:2734:A:H5'	2.03	0.58
41:BF:101:LEU:HD12	41:BF:102:PRO:HD2	1.84	0.58
41:BF:185:ASP:HA	41:BF:188:ARG:CD	2.33	0.58
43:BH:149:ARG:HA	43:BH:162:ILE:CD1	2.32	0.58
48:BP:57:THR:OG1	48:BP:59:LEU:HB3	2.03	0.58
51:BS:54:LEU:HD13	51:BS:57:LYS:HA	1.85	0.58
52:BT:106:SER:O	52:BT:107:ASP:CB	2.51	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:BU:91:ASP:OD1	53:BU:96:ALA:HB2	2.04	0.58
1:CA:309:G:H1'	1:CA:608:A:C2	2.38	0.58
1:CA:443:C:H2'	1:CA:444:C:H6	1.69	0.58
1:CA:1201:A:H5'	1:CA:1203:C:OP2	2.03	0.58
2:CB:114:ARG:HH12	2:CB:118:LEU:HD21	1.68	0.58
2:CB:142:LEU:HD21	2:CB:146:GLN:NE2	2.17	0.58
4:CD:22:LYS:HB2	4:CD:26:CYS:HB3	1.85	0.58
25:CZ:137:LYS:HG2	60:CZ:501:GDP:C2	2.38	0.58
25:CZ:309:SER:O	25:CZ:310:ILE:HG22	2.03	0.58
25:CZ:366:ASP:HB3	25:CZ:368:VAL:HG23	1.84	0.58
29:D3:31:LEU:HD23	29:D3:32:GLN:H	1.68	0.58
36:DA:335:C:H2'	36:DA:336:C:C6	2.38	0.58
36:DA:2115:G:C2	36:DA:2117:A:N7	2.72	0.58
36:DA:2179:C:H1'	36:DA:2180:U:C5	2.39	0.58
36:DA:2186:G:H2'	36:DA:2187:G:C8	2.38	0.58
36:DA:2636:U:H4'	40:DE:80:GLU:OE1	2.04	0.58
39:DD:61:LEU:O	39:DD:63:ARG:NH1	2.36	0.58
42:DG:16:ARG:O	42:DG:20:ILE:HG13	2.04	0.58
43:DH:67:LEU:O	43:DH:71:LEU:HB2	2.03	0.58
51:DS:20:ARG:HA	51:DS:20:ARG:NE	2.17	0.58
52:DT:28:VAL:CG1	52:DT:46:GLU:HG3	2.33	0.58
52:DT:32:TYR:CD2	52:DT:81:PRO:HB2	2.38	0.58
52:DT:33:LYS:CE	52:DT:43:GLN:HE21	1.98	0.58
53:DU:95:LEU:O	53:DU:98:LEU:HG	2.02	0.58
58:DZ:109:ALA:CB	58:DZ:145:GLU:OE1	2.51	0.58
1:AA:1047:G:H5"	14:AN:4:LYS:HE2	1.84	0.58
1:AA:1452:C:C4'	1:AA:1456:G:N2	2.61	0.58
7:AG:113:GLU:O	7:AG:119:ARG:HD3	2.03	0.58
13:AM:15:VAL:HG11	13:AM:48:LEU:HD11	1.86	0.58
15:AO:26:GLU:OE2	15:AO:77:ARG:NH1	2.36	0.58
15:AO:27:VAL:O	15:AO:31:LEU:HD13	2.03	0.58
18:AR:31:LEU:H	18:AR:31:LEU:CD2	2.14	0.58
24:AY:70:C:H2'	24:AY:71:C:C6	2.38	0.58
30:B4:20:ASN:HD22	30:B4:21:VAL:N	2.02	0.58
32:B6:15:GLU:CG	32:B6:18:ARG:CZ	2.81	0.58
35:B9:10:ILE:HD12	35:B9:10:ILE:N	2.18	0.58
36:BA:1071:G:H2'	36:BA:1072:C:O4'	2.03	0.58
36:BA:1887:C:C3'	36:BA:1888:G:H5"	2.33	0.58
37:BB:56:G:H4'	37:BB:57:A:O5'	2.04	0.58
39:BD:102:LYS:O	39:BD:103:ARG:HG2	2.04	0.58
40:BE:9:VAL:HG12	40:BE:25:VAL:O	2.04	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BG:7:LEU:HD13	42:BG:100:TRP:HE3	1.69	0.58
42:BG:172:LEU:CD2	42:BG:176:LEU:HD12	2.33	0.58
47:BO:2:ILE:HD12	47:BO:6:THR:HG21	1.85	0.58
57:BY:81:LYS:HD3	57:BY:97:ARG:HG3	1.85	0.58
58:BZ:81:ARG:HB2	58:BZ:81:ARG:NH1	2.19	0.58
2:CB:87:ARG:HH22	2:CB:232:PRO:CA	2.16	0.58
3:CC:14:ILE:HG12	3:CC:15:THR:N	2.19	0.58
4:CD:121:VAL:HA	4:CD:126:ILE:HD13	1.86	0.58
4:CD:128:VAL:O	4:CD:130:GLY:N	2.37	0.58
19:CS:12:ASP:HB2	19:CS:38:SER:OG	2.02	0.58
19:CS:29:ARG:N	19:CS:29:ARG:HD2	2.19	0.58
28:D2:29:LYS:HE2	28:D2:57:ILE:HG21	1.84	0.58
32:D6:53:LYS:HD3	32:D6:53:LYS:N	2.18	0.58
36:DA:30:G:H2'	36:DA:31:C:C6	2.38	0.58
36:DA:84:A:H5"	57:DY:9:LYS:HD2	1.85	0.58
36:DA:1141:U:H6	46:DN:63:THR:HB	1.69	0.58
36:DA:2314:C:H5'	42:DG:38:VAL:HG21	1.85	0.58
36:DA:2777:G:H5"	36:DA:2778:A:C5'	2.32	0.58
36:DA:2866:U:C6	36:DA:2868:A:H1'	2.38	0.58
36:DA:2867:G:C5	52:DT:23:ARG:NH1	2.72	0.58
39:DD:136:ILE:HB	39:DD:165:ILE:CD1	2.34	0.58
41:DF:160:ASN:HD21	41:DF:162:LEU:CD1	2.15	0.58
42:DG:172:LEU:O	42:DG:172:LEU:HD23	2.03	0.58
47:DO:10:VAL:HG21	47:DO:16:ALA:O	2.04	0.58
51:DS:17:ARG:O	51:DS:20:ARG:HG2	2.03	0.58
51:DS:58:LEU:HG	51:DS:59:LYS:H	1.67	0.58
52:DT:4:GLY:O	52:DT:7:ILE:HB	2.04	0.58
52:DT:92:GLY:O	52:DT:93:ARG:C	2.47	0.58
52:DT:106:SER:O	52:DT:107:ASP:CB	2.51	0.58
57:DY:2:ARG:C	57:DY:4:LYS:H	2.12	0.58
1:AA:1030(D):A:H2'	1:AA:1031:G:H5'	1.85	0.58
1:AA:1216:G:O2'	1:AA:1217:C:H5'	2.03	0.58
2:AB:97:TRP:HZ3	2:AB:176:GLU:OE2	1.86	0.58
4:AD:190:ASP:HB3	4:AD:193:ASP:OD2	2.04	0.58
6:AF:57:GLN:HE21	6:AF:57:GLN:H	1.51	0.58
20:AT:12:ALA:O	20:AT:15:ARG:HB2	2.03	0.58
22:AW:38:A:H2'	22:AW:39:U:C4'	2.34	0.58
25:AZ:326:GLU:CD	25:AZ:326:GLU:H	2.10	0.58
34:B8:39:LYS:HG3	34:B8:43:GLN:NE2	2.19	0.58
36:BA:323:G:H2'	41:BF:169:ASN:ND2	2.19	0.58
36:BA:1902:C:O2'	39:BD:244:ARG:HB2	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2298:A:H2'	36:BA:2299:G:O4'	2.03	0.58
36:BA:2854:G:H2'	36:BA:2855:C:C6	2.38	0.58
42:BG:115:ARG:NH2	42:BG:137:GLU:OE1	2.37	0.58
48:BP:126:VAL:HG22	48:BP:145:PRO:HG2	1.84	0.58
53:BU:48:ALA:O	53:BU:52:ARG:HG3	2.02	0.58
1:CA:542:G:P	4:CD:10:ARG:HH21	2.27	0.58
1:CA:681:C:O2'	1:CA:682:G:H5'	2.03	0.58
1:CA:1038:C:O5'	1:CA:1038:C:H6	1.87	0.58
1:CA:1236:A:H2'	1:CA:1237:C:C6	2.38	0.58
2:CB:151:GLY:C	2:CB:153:ARG:H	2.10	0.58
3:CC:32:LEU:HD22	3:CC:59:ARG:HH11	1.68	0.58
3:CC:181:ASN:ND2	3:CC:204:LEU:HB2	2.19	0.58
4:CD:131:ARG:HD3	4:CD:131:ARG:H	1.69	0.58
5:CE:41:VAL:HG23	5:CE:67:VAL:HG13	1.86	0.58
7:CG:113:GLU:CG	7:CG:119:ARG:HG2	2.34	0.58
16:CP:20:VAL:HG22	16:CP:21:VAL:N	2.18	0.58
20:CT:45:GLN:HB3	20:CT:91:LEU:HD22	1.84	0.58
22:CV:52:G:H1	22:CV:62:C:N4	2.00	0.58
25:CZ:222:LEU:HD11	25:CZ:303:VAL:HB	1.84	0.58
28:D2:53:LEU:O	28:D2:57:ILE:HG12	2.03	0.58
30:D4:7:PRO:HG2	42:DG:61:ALA:HB1	1.85	0.58
36:DA:252:G:OP2	48:DP:50:ARG:NH2	2.34	0.58
36:DA:323:G:H2'	41:DF:169:ASN:ND2	2.19	0.58
36:DA:590:A:H2'	36:DA:591:C:H6	1.69	0.58
36:DA:811:U:O2'	36:DA:812:C:H5"	2.03	0.58
36:DA:1009:A:H1'	53:DU:59:ARG:NH1	2.18	0.58
36:DA:1683:C:H2'	36:DA:1684:C:H6	1.68	0.58
36:DA:2688:U:H1'	36:DA:2721:A:N6	2.19	0.58
36:DA:2712:U:OP1	36:DA:2714:G:H4'	2.04	0.58
40:DE:203:LYS:O	40:DE:203:LYS:HD2	2.03	0.58
43:DH:149:ARG:HA	43:DH:162:ILE:CD1	2.33	0.58
51:DS:15:ARG:HH12	51:DS:18:ILE:HD11	1.67	0.58
52:DT:39:ARG:H	52:DT:39:ARG:CD	2.13	0.58
53:DU:91:ASP:OD1	53:DU:96:ALA:HB2	2.03	0.58
58:DZ:102:LEU:HD21	58:DZ:124:ILE:HD13	1.85	0.58
1:AA:681:C:O2'	1:AA:682:G:H5'	2.04	0.58
1:AA:711:G:O2'	1:AA:712:A:H5'	2.03	0.58
9:AI:40:LEU:C	9:AI:42:ARG:H	2.12	0.58
13:AM:83:ASP:CG	13:AM:84:ILE:N	2.58	0.58
15:AO:17:ARG:HD3	15:AO:26:GLU:CD	2.29	0.58
25:AZ:202:LEU:O	25:AZ:206:ILE:HB	2.04	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:AZ:222:LEU:HD11	25:AZ:303:VAL:HB	1.85	0.58
34:B8:15:LYS:HB2	48:BP:65:ARG:NH2	2.17	0.58
36:BA:1056:G:N2	36:BA:1104:C:H42	2.02	0.58
36:BA:1060:U:O4'	36:BA:1061:U:H5"	2.04	0.58
36:BA:2248:C:C2'	36:BA:2249:U:H5'	2.34	0.58
36:BA:2631:G:N2	40:BE:61:ARG:NH1	2.51	0.58
39:BD:30:GLU:HG3	39:BD:63:ARG:NH2	2.19	0.58
40:BE:61:ARG:HB3	40:BE:62:PRO:CD	2.33	0.58
52:BT:28:VAL:O	52:BT:29:ARG:CG	2.51	0.58
53:BU:66:ASN:HD21	53:BU:76:TYR:H	1.51	0.58
53:BU:70:ARG:HA	53:BU:74:LEU:O	2.03	0.58
58:BZ:10:ARG:HH21	58:BZ:36:LYS:HB2	1.69	0.58
58:BZ:80:ARG:O	58:BZ:82:ARG:N	2.37	0.58
1:CA:180:U:C2'	1:CA:181:G:H5'	2.34	0.58
1:CA:1226:C:H4'	1:CA:1227:A:OP1	2.04	0.58
1:CA:1255:G:H5"	3:CC:26:LYS:HE2	1.85	0.58
3:CC:95:THR:O	3:CC:97:LYS:N	2.37	0.58
4:CD:100:ARG:O	4:CD:104:VAL:HG23	2.03	0.58
5:CE:90:VAL:C	5:CE:91:LEU:HD22	2.29	0.58
36:DA:140:G:H1'	36:DA:141:A:C2	2.39	0.58
36:DA:331:A:H1'	36:DA:332:A:OP1	2.03	0.58
36:DA:565:C:H4'	36:DA:1253:A:C6	2.39	0.58
36:DA:1087:G:H2'	36:DA:1088:A:C5'	2.33	0.58
36:DA:1210:A:H5'	36:DA:1210:A:C8	2.37	0.58
36:DA:1817:G:H2'	36:DA:1818:U:H5'	1.85	0.58
37:DB:61:G:O2'	37:DB:62:C:H5'	2.03	0.58
39:DD:8:PRO:HB3	39:DD:14:ARG:HB3	1.85	0.58
41:DF:126:VAL:HG11	41:DF:142:TRP:HH2	1.69	0.58
41:DF:127:GLU:OE1	41:DF:196:LEU:HD12	2.04	0.58
50:DR:55:ALA:HB2	50:DR:79:LEU:CD1	2.34	0.58
1:AA:559:A:OP1	5:AE:126:ARG:NH2	2.36	0.58
1:AA:1005:A:H5'	1:AA:1037:C:O2	2.04	0.58
1:AA:1536:C:H2'	1:AA:1537:U:O4'	2.03	0.58
2:AB:9:GLU:OE1	2:AB:9:GLU:N	2.32	0.58
2:AB:42:ILE:CD1	2:AB:202:PRO:HB2	2.33	0.58
2:AB:130:ARG:NH1	2:AB:138:LEU:HD11	2.18	0.58
7:AG:78:ARG:O	7:AG:80:VAL:N	2.36	0.58
11:AK:27:ASN:ND2	11:AK:28:THR:N	2.48	0.58
14:AN:12:ARG:HH11	14:AN:12:ARG:HB3	1.68	0.58
19:AS:16:LEU:HA	19:AS:19:VAL:HB	1.85	0.58
25:AZ:366:ASP:HB3	25:AZ:368:VAL:HG23	1.85	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:B2:55:ARG:HA	28:B2:58:ALA:HB3	1.86	0.58
29:B3:1:MET:O	29:B3:3:ARG:N	2.37	0.58
33:B7:19:ARG:HH11	33:B7:19:ARG:HG2	1.69	0.58
35:B9:10:ILE:HG23	36:BA:2477:C:N4	2.19	0.58
36:BA:110:G:O2'	36:BA:111:A:H5'	2.03	0.58
36:BA:2188:C:H2'	36:BA:2189:U:C6	2.39	0.58
44:BJ:27:UNK:HA	44:BJ:113:UNK:CB	2.34	0.58
51:BS:54:LEU:HD13	51:BS:58:LEU:N	2.15	0.58
52:BT:28:VAL:CG1	52:BT:46:GLU:HG3	2.34	0.58
54:BV:81:TYR:C	54:BV:82:ARG:HD2	2.28	0.58
58:BZ:152:ALA:CA	58:BZ:167:PRO:HB2	2.34	0.58
1:CA:202:U:H4'	1:CA:203:U:OP2	2.03	0.58
1:CA:697:U:H2'	1:CA:698:G:H5'	1.86	0.58
4:CD:150:GLU:CD	4:CD:151:LYS:N	2.58	0.58
15:CO:26:GLU:OE2	15:CO:77:ARG:NH1	2.37	0.58
19:CS:16:LEU:HA	19:CS:19:VAL:HB	1.85	0.58
29:D3:35:ARG:HD3	29:D3:37:LEU:HD21	1.86	0.58
32:D6:20:ASN:C	32:D6:21:TYR:CG	2.82	0.58
36:DA:110:G:O2'	36:DA:111:A:H5'	2.03	0.58
36:DA:140:G:H1'	36:DA:141:A:H2	1.69	0.58
36:DA:470:A:OP1	41:DF:59:TYR:HE1	1.87	0.58
36:DA:1813:G:H1'	39:DD:50:THR:OG1	2.04	0.58
36:DA:2162:G:O2'	36:DA:2173:A:N6	2.37	0.58
36:DA:2248:C:C2'	36:DA:2249:U:H5'	2.33	0.58
36:DA:2303:G:H4'	42:DG:124:SER:O	2.04	0.58
36:DA:2579:C:O2'	40:DE:131:ALA:CB	2.52	0.58
40:DE:182:LEU:C	40:DE:183:LEU:HD12	2.29	0.58
41:DF:101:LEU:HD12	41:DF:102:PRO:CD	2.34	0.58
42:DG:145:THR:HB	42:DG:148:MET:HB2	1.84	0.58
44:DJ:12:UNK:C	44:DJ:14:UNK:N	2.67	0.58
46:DN:1:MET:C	46:DN:1:MET:SD	2.87	0.58
48:DP:23:PRO:C	48:DP:33:ARG:NE	2.62	0.58
53:DU:52:ARG:NH1	53:DU:52:ARG:HB3	2.19	0.58
53:DU:95:LEU:CD1	54:DV:11:GLN:HG3	2.33	0.58
57:DY:8:LYS:N	57:DY:8:LYS:CD	2.66	0.58
57:DY:29:GLU:OE1	57:DY:29:GLU:N	2.37	0.58
58:DZ:163:LEU:CD2	58:DZ:163:LEU:H	2.17	0.58
1:AA:1356:G:H2'	1:AA:1357:A:C8	2.38	0.58
3:AC:34:LEU:HD22	3:AC:38:ARG:NE	2.19	0.58
4:AD:34:GLU:O	4:AD:35:ARG:CB	2.50	0.58
17:AQ:52:LYS:HD3	17:AQ:52:LYS:N	2.09	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:AZ:113:MET:HG3	25:AZ:114:PRO:HD2	1.84	0.58
25:AZ:126:VAL:O	25:AZ:128:VAL:HG23	2.02	0.58
27:B1:29:GLY:HA3	36:BA:2396:G:O2'	2.02	0.58
31:B5:54:GLY:H	31:B5:56:LYS:HZ1	1.49	0.58
36:BA:189:G:H2'	36:BA:205:G:N2	2.19	0.58
36:BA:1023:U:H2'	36:BA:1024:G:H5'	1.86	0.58
36:BA:1060:U:H1'	36:BA:1061:U:H5"	1.84	0.58
36:BA:1721:G:C6	36:BA:1739:U:H5'	2.39	0.58
36:BA:2162:G:O2'	36:BA:2173:A:N6	2.37	0.58
36:BA:2756:U:H1'	36:BA:2757:A:C5'	2.30	0.58
40:BE:185:LYS:O	40:BE:186:GLY:O	2.22	0.58
50:BR:87:TYR:O	50:BR:89:ASP:N	2.37	0.58
52:BT:65:LYS:HG3	52:BT:66:VAL:N	2.18	0.58
58:BZ:74:VAL:HG22	58:BZ:86:VAL:HG12	1.86	0.58
1:CA:433:C:H2'	1:CA:434:U:H6	1.69	0.58
1:CA:961:U:O2'	1:CA:962:C:O5'	2.21	0.58
1:CA:975:A:C4'	1:CA:976:G:H5"	2.28	0.58
1:CA:1269:A:C2	1:CA:1313:U:O4'	2.57	0.58
2:CB:130:ARG:NH1	2:CB:138:LEU:HD11	2.18	0.58
7:CG:65:ALA:HB1	7:CG:127:ALA:HB3	1.85	0.58
12:CL:77:LEU:HD11	12:CL:107:ALA:HA	1.86	0.58
13:CM:83:ASP:C	13:CM:85:GLY:H	2.11	0.58
19:CS:78:ARG:O	19:CS:81:ARG:HD3	2.04	0.58
32:D6:53:LYS:O	32:D6:54:ILE:OXT	2.22	0.58
36:DA:657:U:C2	36:DA:658:C:C5	2.92	0.58
36:DA:1040:C:H2'	36:DA:1041:G:C8	2.38	0.58
36:DA:1056:G:N2	36:DA:1104:C:H42	2.02	0.58
36:DA:1209:G:H21	36:DA:1210:A:N6	2.01	0.58
36:DA:1268:A:H2'	36:DA:1269:A:O4'	2.03	0.58
36:DA:2020:A:O2'	36:DA:2021:C:H5'	2.03	0.58
36:DA:2492:U:O2'	36:DA:2493:U:H5'	2.03	0.58
36:DA:2884:U:H2'	36:DA:2885:C:H5'	1.85	0.58
43:DH:85:LYS:HE3	43:DH:85:LYS:O	2.04	0.58
51:DS:89:ARG:HG3	51:DS:92:TYR:HA	1.85	0.58
52:DT:28:VAL:CG1	52:DT:46:GLU:HA	2.31	0.58
53:DU:59:ARG:HG2	53:DU:59:ARG:NH1	2.17	0.58
54:DV:82:ARG:N	54:DV:82:ARG:HD2	2.19	0.58
55:DW:37:ARG:HH11	55:DW:37:ARG:HG3	1.69	0.58
55:DW:69:LEU:HA	55:DW:108:GLY:O	2.04	0.58
1:AA:1314:C:OP2	19:AS:6:LYS:HG3	2.04	0.58
4:AD:22:LYS:HB2	4:AD:26:CYS:HB3	1.85	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AF:55:ASP:HB3	6:AF:57:GLN:HE22	1.68	0.58
11:AK:18:ARG:HH21	11:AK:37:GLY:N	2.02	0.58
16:AP:43:LYS:HA	16:AP:48:TRP:HB2	1.85	0.58
16:AP:43:LYS:HA	16:AP:48:TRP:HB3	1.85	0.58
31:B5:57:VAL:C	31:B5:58:LEU:HD12	2.29	0.58
32:B6:13:CYS:HA	32:B6:50:ARG:O	2.04	0.58
32:B6:28:ARG:CA	32:B6:32:ASN:HD22	2.16	0.58
36:BA:26:G:OP1	55:BW:80:PRO:HB3	2.04	0.58
36:BA:565:C:H4'	36:BA:1253:A:C6	2.38	0.58
36:BA:1198:U:H2'	36:BA:1199:U:C6	2.39	0.58
36:BA:1336:A:H2'	36:BA:1337:G:C8	2.39	0.58
36:BA:1510:G:O2'	36:BA:1511:C:H5'	2.04	0.58
36:BA:1720:U:H2'	36:BA:1721:G:C4'	2.33	0.58
36:BA:2115:G:C2	36:BA:2117:A:N7	2.72	0.58
36:BA:2179:C:H1'	36:BA:2180:U:C5	2.39	0.58
36:BA:2572:A:N7	40:BE:145:LYS:HB2	2.18	0.58
36:BA:2807:G:H3'	36:BA:2808:U:H5"	1.85	0.58
55:BW:14:PRO:HG2	55:BW:78:GLU:HG3	1.86	0.58
58:BZ:48:PHE:CZ	58:BZ:74:VAL:HG21	2.39	0.58
1:CA:108:G:H5'	1:CA:109:A:H5"	1.86	0.58
1:CA:437:U:C5'	4:CD:155:LEU:HD13	2.34	0.58
1:CA:865:A:C2	1:CA:918:A:H4'	2.38	0.58
1:CA:950:U:H2'	1:CA:951:G:C8	2.39	0.58
1:CA:1120:G:H2'	1:CA:1121:U:C6	2.39	0.58
2:CB:97:TRP:CZ2	2:CB:102:LEU:HD13	2.39	0.58
3:CC:16:ARG:NH1	3:CC:16:ARG:HB2	2.18	0.58
4:CD:114:ARG:HG3	4:CD:114:ARG:NH1	2.13	0.58
18:CR:36:ASN:HD21	18:CR:39:VAL:CG2	2.17	0.58
36:DA:266:G:H2'	36:DA:267:C:C5'	2.29	0.58
36:DA:271(E):U:H2'	36:DA:271(F):C:C6	2.39	0.58
36:DA:533:G:H5'	53:DU:24:TYR:CE1	2.39	0.58
36:DA:1051:G:H2'	36:DA:1052:C:C4	2.39	0.58
36:DA:1060:U:H1'	36:DA:1061:U:H5"	1.85	0.58
36:DA:1257:C:H2'	36:DA:1258:C:H6	1.69	0.58
36:DA:1331:A:O2'	36:DA:1332:G:H5"	2.04	0.58
36:DA:2287:A:N6	36:DA:2344:U:H3	1.94	0.58
36:DA:2712:U:H5'	36:DA:2712:U:O2	2.04	0.58
36:DA:2840:C:H2'	36:DA:2841:C:H6	1.67	0.58
43:DH:19:VAL:O	43:DH:20:ALA:HB2	2.04	0.58
43:DH:58:GLU:O	43:DH:62:LYS:HB2	2.02	0.58
46:DN:121:LYS:HB3	46:DN:123:TYR:HE1	1.69	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:DZ:11:GLU:CD	58:DZ:11:GLU:H	2.12	0.58
58:DZ:98:MET:O	58:DZ:125:LEU:HD12	2.03	0.58
1:AA:227:G:C3'	1:AA:228:A:H5"	2.33	0.57
9:AI:28:VAL:CG2	9:AI:33:PHE:HA	2.33	0.57
16:AP:67:THR:HG22	16:AP:68:ASP:N	2.19	0.57
17:AQ:3:LYS:HB3	17:AQ:61:GLU:HB3	1.84	0.57
20:AT:29:LYS:O	20:AT:33:ILE:HG13	2.04	0.57
20:AT:53:LEU:O	20:AT:57:ARG:HB2	2.04	0.57
25:AZ:206:ILE:C	25:AZ:208:GLU:H	2.12	0.57
31:B5:54:GLY:C	31:B5:56:LYS:HZ2	2.12	0.57
32:B6:15:GLU:OE1	32:B6:18:ARG:CD	2.52	0.57
32:B6:20:ASN:O	32:B6:21:TYR:CD2	2.57	0.57
36:BA:491:G:H2'	36:BA:492:A:C8	2.38	0.57
36:BA:814:C:H2'	36:BA:815:C:C6	2.39	0.57
36:BA:1450(A):C:H2'	36:BA:1451:C:C5	2.38	0.57
40:BE:33:VAL:O	40:BE:33:VAL:HG13	2.04	0.57
42:BG:85:GLY:C	42:BG:87:PRO:CD	2.73	0.57
43:BH:19:VAL:O	43:BH:20:ALA:HB2	2.04	0.57
50:BR:84:ALA:HB3	50:BR:85:PRO:HD3	1.85	0.57
51:BS:17:ARG:O	51:BS:20:ARG:HG2	2.03	0.57
52:BT:3:ARG:HB2	52:BT:6:LEU:HB2	1.85	0.57
55:BW:64:MET:O	55:BW:65:LEU:HB3	2.04	0.57
56:BX:63:LYS:HG3	56:BX:72:LYS:HG2	1.85	0.57
57:BY:2:ARG:C	57:BY:4:LYS:H	2.12	0.57
57:BY:89:PHE:C	57:BY:90:LEU:HD23	2.29	0.57
58:BZ:67:LEU:HD12	58:BZ:67:LEU:N	2.19	0.57
19:CS:45:VAL:O	19:CS:47:HIS:N	2.28	0.57
25:CZ:84:GLY:O	25:CZ:85:HIS:HB3	2.04	0.57
27:D1:41:ARG:HH22	36:DA:1365:A:H5"	1.68	0.57
30:D4:22:ILE:HD12	30:D4:22:ILE:N	2.20	0.57
36:DA:621:A:H2'	36:DA:622:G:C5'	2.32	0.57
36:DA:2111:C:N3	36:DA:2145:C:H2'	2.19	0.57
36:DA:2327:A:H2'	36:DA:2328:A:C8	2.39	0.57
43:DH:85:LYS:HZ3	43:DH:132:ARG:CA	2.08	0.57
47:DO:43:VAL:HG21	47:DO:52:VAL:CG1	2.34	0.57
48:DP:71:VAL:HG12	48:DP:72:PRO:HD3	1.86	0.57
51:DS:85:VAL:O	51:DS:106:ARG:HG3	2.03	0.57
1:AA:228:A:H8	1:AA:228:A:C5'	2.14	0.57
1:AA:613:C:H2'	1:AA:614:A:H8	1.70	0.57
1:AA:632:A:C8	1:AA:633:G:C8	2.93	0.57
1:AA:722:A:HO2'	1:AA:724:G:H8	1.52	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1331:G:OP2	13:AM:23:TYR:HD1	1.87	0.57
1:AA:1442(B):A:O2'	1:AA:1443:G:C8	2.58	0.57
11:AK:67:ASP:OD2	11:AK:71:LYS:HE3	2.05	0.57
12:AL:20:LYS:H	12:AL:20:LYS:CD	2.02	0.57
28:B2:53:LEU:HG	28:B2:56:GLN:HG3	1.85	0.57
36:BA:672:C:C2'	36:BA:673:C:C5'	2.82	0.57
36:BA:2712:U:O2	36:BA:2712:U:H5'	2.04	0.57
38:BC:50:ASP:OD2	38:BC:53:ARG:HG3	2.03	0.57
39:BD:16:MET:HE1	39:BD:208:LYS:HE2	1.86	0.57
40:BE:61:ARG:CB	40:BE:62:PRO:HD3	2.31	0.57
41:BF:25:PRO:CG	41:BF:119:ARG:HB2	2.34	0.57
46:BN:48:MET:C	46:BN:48:MET:HE3	2.29	0.57
48:BP:101:VAL:HG12	48:BP:106:LEU:HB3	1.85	0.57
50:BR:79:LEU:HA	50:BR:83:ILE:HG13	1.86	0.57
52:BT:85:LYS:NZ	52:BT:85:LYS:CB	2.66	0.57
56:BX:3:THR:HA	56:BX:6:ASP:OD1	2.05	0.57
58:BZ:101:PRO:HG2	58:BZ:136:PHE:H	1.68	0.57
1:CA:135:C:H2'	1:CA:136:C:H5'	1.86	0.57
1:CA:1116:C:H2'	1:CA:1117:G:H5"	1.84	0.57
2:CB:229:VAL:CG1	2:CB:230:VAL:H	2.16	0.57
4:CD:30:LYS:C	4:CD:32:ALA:N	2.62	0.57
8:CH:12:ARG:NH1	8:CH:27:PRO:HD3	2.19	0.57
11:CK:124:LYS:HD2	11:CK:125:PHE:CZ	2.39	0.57
31:D5:36:CYS:SG	31:D5:46:CYS:SG	3.01	0.57
32:D6:35:GLU:CB	32:D6:51:GLU:HB2	2.20	0.57
36:DA:752:A:O2'	36:DA:753:C:OP2	2.19	0.57
36:DA:2074:U:H2'	36:DA:2075:U:C6	2.39	0.57
39:DD:43:ARG:NH1	39:DD:44:ASN:ND2	2.47	0.57
41:DF:64:ILE:HG22	41:DF:76:GLY:O	2.04	0.57
42:DG:77:ILE:O	42:DG:78:SER:C	2.46	0.57
46:DN:14:VAL:HG13	46:DN:137:LYS:HG3	1.86	0.57
52:DT:134:GLU:O	52:DT:135:ALA:HB3	2.04	0.57
54:DV:81:TYR:C	54:DV:82:ARG:HD2	2.28	0.57
57:DY:2:ARG:N	57:DY:4:LYS:HE3	2.18	0.57
57:DY:87:LYS:O	57:DY:88:LYS:HB2	2.03	0.57
58:DZ:165:VAL:HG12	58:DZ:166:SER:N	2.18	0.57
2:AB:77:ALA:O	2:AB:81:VAL:HG23	2.03	0.57
4:AD:128:VAL:O	4:AD:130:GLY:N	2.37	0.57
5:AE:64:ARG:HH11	5:AE:64:ARG:HG3	1.68	0.57
9:AI:79:LEU:O	9:AI:79:LEU:HD22	2.04	0.57
10:AJ:6:ILE:HG13	10:AJ:72:VAL:HB	1.86	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AK:26:ASN:O	11:AK:27:ASN:HB2	2.04	0.57
12:AL:91:LYS:NZ	12:AL:91:LYS:HB3	2.19	0.57
23:AX:20:U:O2'	23:AX:21:C:H5'	2.03	0.57
25:AZ:171:ILE:HG22	25:AZ:172:ARG:N	2.19	0.57
28:B2:49:LYS:HB2	28:B2:49:LYS:NZ	2.20	0.57
36:BA:59:U:H3	36:BA:68:G:H1	1.49	0.57
36:BA:548:A:C2'	36:BA:549:G:H5'	2.34	0.57
36:BA:848:G:N9	36:BA:933:A:H8	2.03	0.57
36:BA:1051:G:H2'	36:BA:1052:C:C4	2.38	0.57
36:BA:1192:G:O2'	36:BA:1193:G:H5'	2.04	0.57
36:BA:1268:A:H2'	36:BA:1269:A:O4'	2.04	0.57
36:BA:2111:C:N3	36:BA:2145:C:H2'	2.20	0.57
36:BA:2208:A:H1'	36:BA:2219:G:C4	2.38	0.57
36:BA:2523:G:C2'	36:BA:2524:G:H5"	2.34	0.57
39:BD:224:ALA:O	39:BD:226:MET:N	2.38	0.57
43:BH:54:ARG:HG2	43:BH:54:ARG:NH1	2.18	0.57
52:BT:23:ARG:HG2	52:BT:120:ARG:HH12	1.68	0.57
55:BW:59:VAL:HG12	55:BW:59:VAL:O	2.04	0.57
1:CA:189(A):C:H2'	1:CA:189(B):C:C6	2.39	0.57
1:CA:266:G:H5"	1:CA:267:C:H5	1.69	0.57
1:CA:476:G:H2'	1:CA:477:A:H8	1.70	0.57
1:CA:939:G:H2'	1:CA:940:C:C6	2.39	0.57
2:CB:7:VAL:O	2:CB:11:LEU:HD12	2.04	0.57
4:CD:11:LEU:O	4:CD:12:CYS:C	2.47	0.57
4:CD:34:GLU:O	4:CD:35:ARG:CB	2.52	0.57
19:CS:47:HIS:O	19:CS:62:ILE:HG22	2.04	0.57
22:CW:38:A:H2'	22:CW:39:U:C4'	2.33	0.57
25:CZ:19:HIS:HD2	25:CZ:113:MET:HB3	1.65	0.57
34:D8:33:ASN:ND2	36:DA:2419:U:H5"	2.19	0.57
46:DN:111:PRO:HA	46:DN:114:ARG:NH1	2.19	0.57
47:DO:23:ARG:HG3	47:DO:24:VAL:N	2.19	0.57
48:DP:127:ALA:HB3	48:DP:130:PHE:CZ	2.39	0.57
52:DT:23:ARG:NH2	52:DT:120:ARG:HD3	2.19	0.57
1:AA:72:C:H2'	1:AA:73:G:H8	1.66	0.57
1:AA:178:C:O2'	1:AA:179:A:H5'	2.03	0.57
1:AA:542:G:P	4:AD:10:ARG:NH2	2.77	0.57
1:AA:1038:C:H6	1:AA:1038:C:O5'	1.87	0.57
1:AA:1352:C:H2'	1:AA:1353:G:C8	2.38	0.57
12:AL:69:TYR:HB2	12:AL:96:VAL:HG11	1.85	0.57
14:AN:57:ARG:HH11	14:AN:57:ARG:CB	2.16	0.57
26:B0:56:ASP:OD2	36:BA:2364:C:H5'	2.04	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:B1:58:ILE:HD12	27:B1:59:THR:N	2.18	0.57
36:BA:1257:C:H2'	36:BA:1258:C:H6	1.69	0.57
36:BA:1498:C:H2'	36:BA:1499:C:C5'	2.34	0.57
36:BA:2133:G:H2'	36:BA:2157:G:H22	1.68	0.57
37:BB:35:U:O2'	37:BB:36:C:H5'	2.05	0.57
39:BD:218:ARG:HG3	39:BD:218:ARG:HH11	1.69	0.57
41:BF:37:VAL:CG1	48:BP:7:ARG:HH12	2.04	0.57
53:BU:59:ARG:HG2	53:BU:59:ARG:NH1	2.19	0.57
54:BV:82:ARG:HD2	54:BV:82:ARG:N	2.19	0.57
55:BW:69:LEU:HA	55:BW:108:GLY:O	2.04	0.57
57:BY:14:LEU:HD13	57:BY:24:VAL:HG22	1.85	0.57
57:BY:88:LYS:O	57:BY:90:LEU:HD23	2.04	0.57
1:CA:161:A:H2'	1:CA:162:A:C8	2.38	0.57
1:CA:457:C:H2'	1:CA:458:C:C6	2.40	0.57
1:CA:1003:G:C3'	1:CA:1004:A:H4'	2.34	0.57
1:CA:1221:G:H4'	19:CS:77:THR:CG2	2.34	0.57
1:CA:1487:G:O2'	1:CA:1488:G:H5'	2.04	0.57
1:CA:1508:G:O2'	1:CA:1509:C:H5'	2.05	0.57
3:CC:95:THR:CG2	3:CC:97:LYS:HD2	2.34	0.57
10:CJ:3:LYS:C	10:CJ:4:ILE:HD12	2.29	0.57
15:CO:27:VAL:O	15:CO:31:LEU:HD13	2.04	0.57
19:CS:24:ALA:O	19:CS:25:LYS:HB2	2.05	0.57
20:CT:62:LEU:H	20:CT:62:LEU:CD1	2.14	0.57
24:CY:43:G:H5'	24:CY:44:G:OP2	2.04	0.57
24:CY:57:G:C2'	24:CY:58:A:H5'	2.34	0.57
27:D1:44:PRO:HG2	27:D1:46:LEU:HD23	1.86	0.57
31:D5:57:VAL:C	31:D5:58:LEU:HD12	2.29	0.57
36:DA:612:C:C2'	36:DA:613:G:C5'	2.77	0.57
36:DA:1709:U:H2'	36:DA:1710:C:C6	2.39	0.57
36:DA:1762:A:O5'	36:DA:1762:A:C8	2.57	0.57
36:DA:2720:U:H2'	36:DA:2720:U:O2	2.04	0.57
42:DG:52:ILE:H	42:DG:52:ILE:CD1	2.12	0.57
43:DH:83:TYR:HB2	43:DH:134:SER:CA	2.33	0.57
48:DP:33:ARG:O	48:DP:34:GLY:C	2.47	0.57
54:DV:52:VAL:HG13	54:DV:55:ALA:HB3	1.85	0.57
56:DX:8:ILE:HD12	56:DX:8:ILE:N	2.18	0.57
1:AA:194:C:C2'	1:AA:195:A:H5"	2.33	0.57
1:AA:677:U:H3	1:AA:713:G:H22	1.52	0.57
1:AA:1072:G:H2'	1:AA:1073:U:C6	2.39	0.57
1:AA:1158:C:O2	1:AA:1158:C:H2'	2.03	0.57
1:AA:1296:C:H4'	1:AA:1302:U:C5	2.39	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1376:U:H2'	1:AA:1377:A:C8	2.39	0.57
3:AC:32:LEU:HD22	3:AC:59:ARG:HH11	1.66	0.57
4:AD:30:LYS:C	4:AD:32:ALA:N	2.62	0.57
16:AP:20:VAL:HG22	16:AP:21:VAL:N	2.19	0.57
22:AV:44:G:H2'	22:AV:45:U:H5'	1.85	0.57
22:AV:52:G:H1	22:AV:62:C:N4	2.02	0.57
28:B2:8:LYS:C	28:B2:10:LEU:H	2.10	0.57
36:BA:118:A:N3	36:BA:178:G:H1'	2.19	0.57
36:BA:322:A:OP2	41:BF:169:ASN:HB2	2.04	0.57
36:BA:774:A:H2	36:BA:787:U:O2'	1.86	0.57
36:BA:832:G:OP1	48:BP:40:SER:HB3	2.04	0.57
36:BA:1748:G:H5'	36:BA:1748:G:C8	2.40	0.57
36:BA:2777:G:H5"	36:BA:2778:A:C5'	2.33	0.57
36:BA:2779:U:H1'	36:BA:2781:A:C6	2.37	0.57
36:BA:2867:G:C5	52:BT:23:ARG:NH1	2.72	0.57
40:BE:2:LYS:HD3	40:BE:95:ILE:HG22	1.86	0.57
46:BN:1:MET:C	46:BN:1:MET:SD	2.88	0.57
47:BO:64:ARG:NH1	47:BO:83:ALA:HB2	2.19	0.57
58:BZ:14:LYS:HB2	58:BZ:17:ALA:CB	2.34	0.57
58:BZ:155:LEU:HD23	58:BZ:155:LEU:N	2.19	0.57
1:CA:390:C:H4'	16:CP:28:ARG:HH21	1.69	0.57
1:CA:1086:U:C2'	1:CA:1087:G:H5'	2.33	0.57
1:CA:1127:G:H1'	1:CA:1147:C:H42	1.70	0.57
1:CA:1533:C:H3'	1:CA:1534:A:C5'	2.24	0.57
3:CC:173:VAL:O	3:CC:173:VAL:HG12	2.04	0.57
4:CD:150:GLU:CG	4:CD:151:LYS:N	2.68	0.57
20:CT:57:ARG:NH1	20:CT:102:GLY:HA2	2.12	0.57
22:CV:44:G:H2'	22:CV:44:G:N3	2.19	0.57
25:CZ:202:LEU:O	25:CZ:206:ILE:HB	2.04	0.57
29:D3:1:MET:O	29:D3:3:ARG:N	2.38	0.57
34:D8:25:MET:HG3	48:DP:64:LYS:HB2	1.86	0.57
36:DA:528:A:H2	36:DA:2043:C:O5'	1.87	0.57
36:DA:814:C:H2'	36:DA:815:C:C6	2.39	0.57
36:DA:1104:C:H2'	36:DA:1105:U:C6	2.36	0.57
36:DA:1750:G:O2'	36:DA:1751:C:H5'	2.04	0.57
36:DA:2691:C:H5'	36:DA:2691:C:H6	1.67	0.57
39:DD:30:GLU:H	39:DD:35:LYS:HZ1	1.51	0.57
40:DE:94:GLU:OE2	40:DE:177:PRO:HB3	2.03	0.57
42:DG:20:ILE:O	42:DG:24:GLY:HA2	2.05	0.57
43:DH:85:LYS:CD	43:DH:133:VAL:HB	2.34	0.57
50:DR:55:ALA:HB1	50:DR:84:ALA:HB2	1.86	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:DT:28:VAL:HG22	52:DT:46:GLU:C	2.30	0.57
58:DZ:105:VAL:O	58:DZ:140:ASP:HA	2.04	0.57
1:AA:980:C:H5'	1:AA:980:C:C6	2.25	0.57
1:AA:1120:G:H2'	1:AA:1121:U:C6	2.39	0.57
2:AB:17:PHE:O	2:AB:18:GLY:O	2.22	0.57
4:AD:9:CYS:O	4:AD:12:CYS:HB2	2.05	0.57
9:AI:48:GLU:N	9:AI:49:PRO:CD	2.68	0.57
12:AL:113:ARG:HB3	12:AL:122:THR:HG21	1.87	0.57
19:AS:24:ALA:O	19:AS:25:LYS:HB2	2.05	0.57
28:B2:25:VAL:HB	28:B2:64:LEU:CD1	2.29	0.57
36:BA:612:C:C2'	36:BA:613:G:C5'	2.77	0.57
36:BA:1087:G:H2'	36:BA:1088:A:C5'	2.33	0.57
36:BA:1106:G:H2'	36:BA:1107:G:O4'	2.05	0.57
36:BA:1188:U:H4'	54:BV:79:VAL:HG22	1.86	0.57
38:BC:120:MET:O	38:BC:124:GLY:N	2.35	0.57
42:BG:9:ARG:O	42:BG:12:TYR:N	2.38	0.57
42:BG:47:LYS:NZ	42:BG:82:LEU:HD12	2.15	0.57
52:BT:28:VAL:HG22	52:BT:46:GLU:C	2.29	0.57
54:BV:49:THR:HB	54:BV:50:PRO:HD2	1.84	0.57
56:BX:8:ILE:HD12	56:BX:8:ILE:N	2.19	0.57
2:CB:236:TYR:O	2:CB:237:ALA:C	2.46	0.57
19:CS:32:LYS:HG2	19:CS:32:LYS:O	2.04	0.57
20:CT:12:ALA:O	20:CT:15:ARG:HB2	2.04	0.57
32:D6:52:VAL:HG12	32:D6:53:LYS:H	1.69	0.57
35:D9:10:ILE:HD12	35:D9:10:ILE:N	2.19	0.57
36:DA:1523:U:H2'	36:DA:1524:G:C8	2.39	0.57
39:DD:30:GLU:HG3	39:DD:63:ARG:NH2	2.19	0.57
40:DE:26:ILE:HG23	40:DE:196:VAL:HG21	1.87	0.57
42:DG:148:MET:HA	42:DG:148:MET:HE3	1.87	0.57
43:DH:66:GLY:CA	43:DH:69:ARG:HB3	2.34	0.57
50:DR:101:ALA:O	50:DR:102:GLU:HB2	2.05	0.57
58:DZ:10:ARG:NE	58:DZ:36:LYS:HB2	2.19	0.57
58:DZ:166:SER:HB2	58:DZ:168:GLU:N	2.20	0.57
1:AA:57:G:H2'	1:AA:58:C:C6	2.40	0.57
1:AA:198:G:O2'	1:AA:199:G:H8	1.87	0.57
2:AB:97:TRP:CZ2	2:AB:102:LEU:HD13	2.40	0.57
4:AD:150:GLU:CG	4:AD:151:LYS:N	2.68	0.57
5:AE:90:VAL:C	5:AE:91:LEU:HD22	2.30	0.57
10:AJ:32:ALA:H	10:AJ:78:ASN:HD21	1.52	0.57
15:AO:21:ASP:OD2	15:AO:24:SER:HB3	2.05	0.57
25:AZ:19:HIS:CE1	25:AZ:113:MET:HB3	2.39	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:266:G:H2'	36:BA:267:C:C5'	2.28	0.57
36:BA:271(E):U:H2'	36:BA:271(F):C:C6	2.39	0.57
36:BA:848:G:O6	36:BA:928:G:H2'	2.04	0.57
36:BA:1523:U:H2'	36:BA:1524:G:C8	2.39	0.57
36:BA:2358:G:H22	48:BP:55:ARG:HH21	1.52	0.57
39:BD:8:PRO:HB3	39:BD:14:ARG:HB3	1.86	0.57
40:BE:203:LYS:O	40:BE:203:LYS:HD2	2.05	0.57
43:BH:67:LEU:O	43:BH:71:LEU:HB2	2.03	0.57
46:BN:72:TYR:HD2	46:BN:90:MET:HG3	1.68	0.57
48:BP:92:GLU:HG2	48:BP:121:LYS:NZ	2.20	0.57
58:BZ:10:ARG:HG2	58:BZ:12:GLY:H	1.69	0.57
1:CA:1270:C:H2'	1:CA:1271:G:H8	1.70	0.57
1:CA:1347:G:C6	9:CI:107:ARG:NH2	2.73	0.57
2:CB:31:TYR:O	2:CB:42:ILE:HG13	2.05	0.57
3:CC:134:ILE:CG2	3:CC:168:ALA:HB3	2.34	0.57
4:CD:9:CYS:O	4:CD:12:CYS:HB2	2.05	0.57
8:CH:41:ARG:HH12	8:CH:123:GLU:CD	2.12	0.57
9:CI:97:LYS:HB3	9:CI:98:PRO:HD3	1.85	0.57
13:CM:56:LEU:HD13	13:CM:56:LEU:C	2.28	0.57
16:CP:43:LYS:HA	16:CP:48:TRP:HB2	1.86	0.57
16:CP:43:LYS:HA	16:CP:48:TRP:HB3	1.85	0.57
30:D4:7:PRO:HG2	42:DG:65:GLY:HA2	1.87	0.57
33:D7:19:ARG:HH11	33:D7:19:ARG:HG2	1.69	0.57
34:D8:6:THR:OG1	34:D8:11:LYS:HE3	2.05	0.57
34:D8:23:VAL:CG1	34:D8:46:ARG:HB3	2.35	0.57
36:DA:330:A:C2	36:DA:1210:A:H2'	2.32	0.57
36:DA:1023:U:H5'	36:DA:1023:U:H6	1.68	0.57
36:DA:1677:A:H2'	36:DA:1678:G:C8	2.40	0.57
36:DA:2188:C:H2'	36:DA:2189:U:C6	2.39	0.57
38:DC:214:VAL:HG23	38:DC:224:ILE:HD13	1.86	0.57
41:DF:168:ARG:CG	41:DF:175:THR:HG21	2.23	0.57
47:DO:87:ILE:HG21	47:DO:91:LEU:HA	1.85	0.57
55:DW:64:MET:O	55:DW:65:LEU:HB3	2.04	0.57
56:DX:52:VAL:HG12	56:DX:53:LYS:N	2.11	0.57
57:DY:53:PRO:CB	57:DY:56:PRO:HG3	2.31	0.57
58:DZ:44:PHE:C	58:DZ:44:PHE:CD1	2.83	0.57
1:AA:135:C:H2'	1:AA:136:C:H5'	1.86	0.57
1:AA:256:U:H2'	1:AA:257:G:C8	2.39	0.57
1:AA:433:C:H2'	1:AA:434:U:H6	1.70	0.57
1:AA:1286:A:O2'	1:AA:1287:A:C5'	2.53	0.57
8:AH:41:ARG:HH12	8:AH:123:GLU:CD	2.13	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:91:ARG:CB	13:AM:98:VAL:HG12	2.35	0.57
19:AS:32:LYS:HG2	19:AS:32:LYS:O	2.04	0.57
22:AW:27:G:O2'	22:AW:28:G:H5'	2.05	0.57
30:B4:14:ILE:HG13	30:B4:31:ILE:CB	2.32	0.57
31:B5:31:VAL:HG13	31:B5:42:PRO:HG3	1.86	0.57
31:B5:49:CYS:O	31:B5:56:LYS:HE2	2.05	0.57
36:BA:326:G:H2'	36:BA:327:G:H8	1.69	0.57
36:BA:1184:G:O2'	36:BA:1185:C:H5'	2.04	0.57
36:BA:1207:C:H2'	36:BA:1208:C:C6	2.34	0.57
36:BA:1417:C:H2'	36:BA:1418:G:O4'	2.04	0.57
36:BA:2020:A:O2'	36:BA:2021:C:H5'	2.05	0.57
39:BD:35:LYS:HG3	39:BD:63:ARG:CG	2.34	0.57
39:BD:72:LYS:HG3	39:BD:103:ARG:NH2	2.20	0.57
41:BF:177:ALA:HB1	41:BF:178:PRO:HD2	1.85	0.57
42:BG:32:PRO:HA	42:BG:162:THR:OG1	2.05	0.57
46:BN:14:VAL:HG13	46:BN:137:LYS:HG3	1.87	0.57
52:BT:30:VAL:HG12	52:BT:44:ASP:CG	2.29	0.57
1:CA:542:G:P	4:CD:10:ARG:NH2	2.77	0.57
11:CK:84:VAL:HG11	11:CK:95:ILE:HD11	1.87	0.57
11:CK:88:GLY:O	11:CK:89:ALA:C	2.48	0.57
25:CZ:206:ILE:C	25:CZ:208:GLU:H	2.12	0.57
34:D8:13:ARG:HD2	48:DP:61:ARG:CD	2.28	0.57
36:DA:1721:G:C6	36:DA:1739:U:H5'	2.40	0.57
36:DA:1861:G:O2'	36:DA:1862:G:H5'	2.05	0.57
36:DA:2833:G:C3'	36:DA:2834:G:H5"	2.31	0.57
37:DB:91:C:OP1	49:DQ:16:ARG:HD2	2.05	0.57
39:DD:31:LYS:HZ1	39:DD:33:LEU:HD11	1.67	0.57
44:DJ:106:UNK:O	44:DJ:107:UNK:CB	2.53	0.57
52:DT:13:ARG:HA	52:DT:13:ARG:HH11	1.65	0.57
57:DY:14:LEU:HD13	57:DY:24:VAL:HG22	1.85	0.57
57:DY:47:LYS:HE3	57:DY:60:PHE:HZ	1.70	0.57
1:AA:490:G:H2'	1:AA:491:G:C8	2.40	0.57
1:AA:573:A:H5'	1:AA:573:A:C8	2.32	0.57
1:AA:1201:A:H5'	1:AA:1203:C:OP2	2.04	0.57
10:AJ:4:ILE:HB	10:AJ:74:ILE:HD11	1.87	0.57
36:BA:882:G:H2'	36:BA:883:G:H8	1.70	0.57
36:BA:956:G:C4'	49:BQ:83:MET:HE1	2.34	0.57
36:BA:1166:C:H2'	36:BA:1167:U:C6	2.40	0.57
36:BA:1208:C:H2'	36:BA:1208:C:O2	2.03	0.57
36:BA:1677:A:H2'	36:BA:1678:G:C8	2.40	0.57
36:BA:1858:G:H1'	36:BA:1884:A:N6	2.20	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2712:U:OP1	36:BA:2714:G:H4'	2.05	0.57
39:BD:30:GLU:CA	39:BD:35:LYS:HZ2	2.18	0.57
42:BG:115:ARG:HG2	42:BG:115:ARG:NH1	2.11	0.57
43:BH:85:LYS:CD	43:BH:133:VAL:HB	2.34	0.57
47:BO:87:ILE:HG21	47:BO:91:LEU:HA	1.86	0.57
50:BR:28:LEU:HD23	50:BR:28:LEU:C	2.30	0.57
52:BT:28:VAL:CG1	52:BT:46:GLU:HA	2.32	0.57
52:BT:50:ILE:HA	52:BT:99:LEU:CD1	2.35	0.57
54:BV:38:LEU:O	54:BV:39:LEU:HD13	2.05	0.57
55:BW:64:MET:HE2	55:BW:109:GLU:HG3	1.86	0.57
56:BX:12:VAL:HB	56:BX:17:ALA:CB	2.10	0.57
1:CA:858:G:H8	1:CA:858:G:H5"	1.70	0.57
1:CA:1428:A:H2'	1:CA:1429:C:C6	2.40	0.57
5:CE:6:PHE:CB	5:CE:34:VAL:HG22	2.35	0.57
9:CI:4:TYR:CG	9:CI:88:TYR:HB2	2.40	0.57
9:CI:40:LEU:C	9:CI:42:ARG:H	2.10	0.57
9:CI:99:LEU:HD22	9:CI:99:LEU:H	1.70	0.57
20:CT:53:LEU:O	20:CT:57:ARG:HB2	2.05	0.57
24:CY:55:PSU:H2'	24:CY:56:C:OP2	2.05	0.57
24:CY:70:C:H2'	24:CY:71:C:C6	2.39	0.57
30:D4:42:PHE:O	30:D4:43:TYR:O	2.22	0.57
36:DA:93:G:H2'	36:DA:94:C:C6	2.40	0.57
36:DA:176:G:O2'	36:DA:177:G:H5'	2.05	0.57
36:DA:326:G:H2'	36:DA:327:G:H8	1.69	0.57
36:DA:1858:G:H1'	36:DA:1884:A:N6	2.19	0.57
36:DA:2298:A:H2'	36:DA:2299:G:O4'	2.05	0.57
39:DD:35:LYS:HG3	39:DD:63:ARG:CG	2.33	0.57
40:DE:179:GLU:O	40:DE:180:ASN:HB2	2.03	0.57
52:DT:10:VAL:O	52:DT:13:ARG:NE	2.35	0.57
53:DU:32:PHE:CB	53:DU:36:ARG:NH2	2.68	0.57
58:DZ:23:LYS:O	58:DZ:24:LEU:CB	2.51	0.57
58:DZ:77:ASP:HB3	58:DZ:80:ARG:O	2.05	0.57
58:DZ:166:SER:HB2	58:DZ:167:PRO:C	2.29	0.57
1:AA:161:A:H2'	1:AA:162:A:C8	2.40	0.57
1:AA:413:G:H1'	1:AA:428:G:H21	1.70	0.57
1:AA:697:U:H2'	1:AA:698:G:H5'	1.86	0.57
2:AB:139:LYS:O	2:AB:143:GLU:HG3	2.04	0.57
18:AR:59:SER:OG	18:AR:62:GLU:HG3	2.05	0.57
28:B2:51:ARG:CD	36:BA:94(A):G:H21	2.17	0.57
28:B2:67:LYS:HA	28:B2:70:GLN:HG2	1.87	0.57
32:B6:9:LEU:HD13	32:B6:9:LEU:O	2.04	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:B8:23:VAL:CG1	34:B8:46:ARG:HB3	2.34	0.57
39:BD:94:LEU:HB2	39:BD:104:TYR:HE1	1.69	0.57
39:BD:111:LEU:HD22	39:BD:115:GLN:OE1	2.05	0.57
40:BE:26:ILE:HG23	40:BE:196:VAL:HG21	1.85	0.57
42:BG:36:LYS:HD3	42:BG:95:ARG:HH12	1.70	0.57
48:BP:33:ARG:O	48:BP:34:GLY:C	2.47	0.57
50:BR:45:ARG:CG	50:BR:46:GLY:H	2.13	0.57
51:BS:97:ARG:C	51:BS:97:ARG:NE	2.63	0.57
52:BT:28:VAL:HG13	52:BT:46:GLU:CA	2.32	0.57
54:BV:47:VAL:O	54:BV:47:VAL:HG23	2.05	0.57
56:BX:33:LYS:HE2	56:BX:33:LYS:HA	1.86	0.57
57:BY:28:LYS:HB3	57:BY:39:VAL:H	1.69	0.57
57:BY:86:ARG:NH2	57:BY:95:LYS:HE2	2.19	0.57
58:BZ:132:ASN:C	58:BZ:134:PRO:HD3	2.30	0.57
3:CC:70:VAL:O	3:CC:105:GLU:HA	2.04	0.57
5:CE:60:TYR:CE1	5:CE:64:ARG:NH2	2.73	0.57
10:CJ:3:LYS:HD2	10:CJ:77:PRO:HG3	1.87	0.57
11:CK:80:VAL:HG13	11:CK:103:LEU:HD11	1.86	0.57
20:CT:50:GLU:HB2	20:CT:99:LEU:CD1	2.33	0.57
20:CT:62:LEU:HA	20:CT:65:LYS:HB2	1.86	0.57
25:CZ:315:LYS:HA	25:CZ:372:VAL:O	2.04	0.57
27:D1:53:VAL:HG22	27:D1:74:VAL:HG13	1.85	0.57
34:D8:6:THR:HG21	34:D8:63:PRO:HD3	1.86	0.57
36:DA:956:G:C4'	49:DQ:83:MET:HE1	2.35	0.57
36:DA:1722:A:O2'	36:DA:1739:U:C5'	2.53	0.57
39:DD:45:ASN:CG	39:DD:46:GLN:N	2.63	0.57
40:DE:5:LEU:HD12	40:DE:51:PHE:HB2	1.86	0.57
42:DG:68:PRO:HG3	42:DG:92:VAL:HB	1.85	0.57
42:DG:131:TYR:HB3	42:DG:159:VAL:HG13	1.84	0.57
46:DN:99:LEU:O	46:DN:103:VAL:HG23	2.04	0.57
49:DQ:134:ARG:CD	58:DZ:122:ARG:NH2	2.68	0.57
51:DS:11:LYS:HG2	51:DS:11:LYS:O	2.05	0.57
55:DW:84:ARG:HB2	55:DW:96:ILE:HG22	1.85	0.57
57:DY:31:LEU:HB2	57:DY:32:PRO:HA	1.87	0.57
1:AA:189(A):C:H2'	1:AA:189(B):C:C6	2.40	0.56
1:AA:390:C:H4'	16:AP:28:ARG:HH21	1.70	0.56
1:AA:443:C:H2'	1:AA:444:C:H6	1.70	0.56
1:AA:457:C:H2'	1:AA:458:C:C6	2.40	0.56
1:AA:961:U:O2'	1:AA:962:C:P	2.63	0.56
1:AA:1378:C:H4'	7:AG:94:ARG:HH22	1.70	0.56
6:AF:21:LEU:C	6:AF:21:LEU:HD13	2.29	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AI:9:ARG:HG3	9:AI:14:VAL:HG13	1.87	0.56
25:AZ:26:THR:HB	60:AZ:501:GDP:O2A	2.05	0.56
31:B5:54:GLY:N	31:B5:56:LYS:NZ	2.51	0.56
36:BA:533:G:H5'	53:BU:24:TYR:CD1	2.40	0.56
36:BA:672:C:O3'	41:BF:81:PRO:HG3	2.05	0.56
36:BA:2524:G:H5'	36:BA:2524:G:C8	2.35	0.56
36:BA:2691:C:H5'	36:BA:2691:C:H6	1.69	0.56
36:BA:2761:G:C2'	36:BA:2762:G:H5"	2.35	0.56
42:BG:51:ARG:HE	42:BG:51:ARG:CA	2.08	0.56
42:BG:86:MET:HG2	42:BG:86:MET:O	2.05	0.56
42:BG:152:LEU:H	42:BG:152:LEU:HD23	1.70	0.56
46:BN:10:GLU:CD	46:BN:11:PRO:HD2	2.30	0.56
50:BR:55:ALA:HB1	50:BR:84:ALA:HB2	1.85	0.56
51:BS:106:ARG:HB3	51:BS:106:ARG:CZ	2.35	0.56
52:BT:85:LYS:HB3	52:BT:85:LYS:HZ3	1.67	0.56
2:CB:72:GLY:O	2:CB:94:ASN:HA	2.04	0.56
2:CB:134:GLU:C	2:CB:136:VAL:N	2.57	0.56
2:CB:139:LYS:O	2:CB:143:GLU:HG3	2.04	0.56
3:CC:135:LYS:NZ	5:CE:50:GLU:HG2	2.20	0.56
10:CJ:33:GLN:O	10:CJ:75:ILE:HG12	2.05	0.56
18:CR:26:LEU:CD2	18:CR:39:VAL:HG13	2.35	0.56
23:CX:20:U:O2'	23:CX:21:C:H5'	2.05	0.56
25:CZ:108:ALA:HB3	25:CZ:137:LYS:O	2.05	0.56
26:D0:56:ASP:OD1	26:D0:58:THR:OG1	2.20	0.56
32:D6:15:GLU:O	32:D6:17:LYS:N	2.38	0.56
34:D8:30:ARG:HE	34:D8:30:ARG:HA	1.70	0.56
36:DA:530:G:C5	36:DA:2022:U:H5"	2.40	0.56
36:DA:769:G:H4'	36:DA:1379:A:N1	2.20	0.56
36:DA:1106:G:H2'	36:DA:1107:G:O4'	2.04	0.56
36:DA:2807:G:H3'	36:DA:2808:U:H5"	1.86	0.56
39:DD:131:LEU:HB2	39:DD:136:ILE:HD11	1.86	0.56
40:DE:61:ARG:HB3	40:DE:62:PRO:CD	2.33	0.56
57:DY:86:ARG:NH2	57:DY:95:LYS:HE2	2.18	0.56
1:AA:345:C:H4'	52:BT:41:ARG:HH21	1.70	0.56
1:AA:975:A:H5'	1:AA:975:A:C8	2.40	0.56
1:AA:1003:G:C3'	1:AA:1004:A:H4'	2.34	0.56
1:AA:1354:C:H2'	1:AA:1355:G:H8	1.69	0.56
5:AE:152:ARG:O	5:AE:153:LYS:C	2.48	0.56
7:AG:113:GLU:CG	7:AG:119:ARG:HG2	2.35	0.56
9:AI:4:TYR:CG	9:AI:88:TYR:HB2	2.39	0.56
10:AJ:33:GLN:O	10:AJ:75:ILE:HG12	2.05	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:AR:36:ASN:HD21	18:AR:39:VAL:CG2	2.18	0.56
26:B0:16:SER:HB2	36:BA:2262:U:C5	2.39	0.56
27:B1:7:ILE:HG22	27:B1:8:SER:N	2.20	0.56
28:B2:28:LYS:O	28:B2:57:ILE:HD11	2.05	0.56
28:B2:69:ARG:HD2	28:B2:69:ARG:N	2.19	0.56
36:BA:1683:C:H2'	36:BA:1684:C:C6	2.40	0.56
36:BA:1683:C:H2'	36:BA:1684:C:H6	1.70	0.56
38:BC:106:GLY:O	38:BC:107:TRP:HB3	2.05	0.56
40:BE:38:THR:HB	40:BE:41:LYS:CG	2.32	0.56
40:BE:63:LEU:O	40:BE:64:LYS:C	2.47	0.56
41:BF:160:ASN:HD21	41:BF:162:LEU:CD1	2.17	0.56
47:BO:23:ARG:HG3	47:BO:24:VAL:N	2.18	0.56
47:BO:35:VAL:HG11	47:BO:69:ILE:HD13	1.87	0.56
50:BR:94:TYR:N	50:BR:94:TYR:CD1	2.70	0.56
52:BT:29:ARG:CB	52:BT:85:LYS:HA	2.36	0.56
52:BT:134:GLU:O	52:BT:135:ALA:HB3	2.04	0.56
54:BV:52:VAL:HG13	54:BV:55:ALA:HB3	1.86	0.56
57:BY:51:VAL:O	57:BY:53:PRO:HD3	2.05	0.56
1:CA:858:G:C5	1:CA:869:G:N7	2.73	0.56
1:CA:953:G:C5'	1:CA:965:A:H61	2.18	0.56
1:CA:1242:C:O2'	1:CA:1243:C:H5'	2.06	0.56
6:CF:11:ASN:HB3	6:CF:14:LEU:CG	2.32	0.56
9:CI:88:TYR:O	9:CI:89:ASN:HB2	2.05	0.56
14:CN:27:CYS:SG	14:CN:29:ARG:HB2	2.46	0.56
16:CP:20:VAL:HG23	16:CP:34:GLU:C	2.30	0.56
20:CT:104:LEU:HD23	20:CT:104:LEU:C	2.29	0.56
22:CW:67:C:H2'	22:CW:68:C:C6	2.40	0.56
33:D7:9:ARG:NE	36:DA:1310:G:OP2	2.30	0.56
36:DA:672:C:O3'	41:DF:81:PRO:HG3	2.05	0.56
36:DA:691:C:O2'	36:DA:692:C:H5'	2.05	0.56
36:DA:1523:U:H2'	36:DA:1524:G:H8	1.70	0.56
36:DA:2376:A:H2'	36:DA:2377:A:O4'	2.05	0.56
38:DC:190:ARG:O	38:DC:194:ARG:HG3	2.05	0.56
40:DE:87:GLU:OE2	40:DE:89:ASP:HB3	2.05	0.56
46:DN:96:GLU:O	46:DN:100:GLU:HG3	2.04	0.56
47:DO:2:ILE:HD12	47:DO:6:THR:HG21	1.87	0.56
48:DP:135:LEU:HD13	48:DP:135:LEU:O	2.05	0.56
56:DX:3:THR:HA	56:DX:6:ASP:OD1	2.04	0.56
57:DY:27:VAL:HA	57:DY:28:LYS:HE2	1.88	0.56
57:DY:90:LEU:HG	57:DY:91:GLU:H	1.70	0.56
1:AA:59:A:H5'	1:AA:60:A:H5"	1.85	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:260:G:H2'	1:AA:261:U:C6	2.40	0.56
2:AB:18:GLY:H	2:AB:42:ILE:HG23	1.70	0.56
2:AB:31:TYR:O	2:AB:42:ILE:HG13	2.06	0.56
2:AB:95:GLN:NE2	2:AB:147:LYS:HE2	2.20	0.56
3:AC:82:GLU:O	3:AC:86:VAL:HG13	2.05	0.56
4:AD:191:ARG:HD3	4:AD:200:GLU:OE2	2.05	0.56
6:AF:3:ARG:HH11	6:AF:3:ARG:HG3	1.70	0.56
7:AG:99:LEU:O	7:AG:102:ARG:HG2	2.06	0.56
9:AI:53:VAL:HG13	9:AI:95:LYS:CD	2.31	0.56
9:AI:106:ALA:O	9:AI:108:VAL:HG23	2.05	0.56
13:AM:56:LEU:C	13:AM:56:LEU:HD13	2.30	0.56
19:AS:29:ARG:HD2	19:AS:29:ARG:N	2.19	0.56
22:AV:44:G:H2'	22:AV:44:G:N3	2.20	0.56
22:AW:30:G:H2'	22:AW:31:A:H8	1.69	0.56
25:AZ:84:GLY:O	25:AZ:85:HIS:HB3	2.04	0.56
26:B0:20:ARG:HH11	26:B0:20:ARG:CG	2.18	0.56
31:B5:7:PRO:HG2	36:BA:2016:U:O2	2.05	0.56
34:B8:50:LEU:N	34:B8:53:PRO:HD3	2.20	0.56
36:BA:93:G:H2'	36:BA:94:C:C6	2.41	0.56
36:BA:108:U:H2'	36:BA:109:G:H8	1.70	0.56
36:BA:528:A:H2	36:BA:2043:C:O5'	1.88	0.56
36:BA:1709:U:H2'	36:BA:1710:C:C6	2.40	0.56
36:BA:2101:G:C3'	36:BA:2102:U:H5"	2.34	0.56
36:BA:2761:G:H2'	36:BA:2762:G:H5"	1.87	0.56
36:BA:2836:U:O5'	36:BA:2836:U:H6	1.88	0.56
37:BB:56:G:O2'	37:BB:57:A:OP2	2.21	0.56
39:BD:36:PRO:O	39:BD:37:LEU:HB2	2.04	0.56
41:BF:164:ARG:HG2	41:BF:164:ARG:NH1	2.17	0.56
42:BG:6:ALA:O	42:BG:10:LYS:HD3	2.05	0.56
42:BG:150:ASP:O	42:BG:151:ALA:HB3	2.04	0.56
46:BN:43:THR:HB	46:BN:46:VAL:HG11	1.86	0.56
48:BP:16:ARG:HB2	48:BP:16:ARG:CZ	2.35	0.56
48:BP:23:PRO:HD2	48:BP:33:ARG:NE	2.14	0.56
48:BP:23:PRO:C	48:BP:33:ARG:CZ	2.77	0.56
50:BR:101:ALA:O	50:BR:102:GLU:HB2	2.04	0.56
52:BT:4:GLY:O	52:BT:7:ILE:HB	2.05	0.56
56:BX:57:LEU:N	56:BX:57:LEU:HD13	2.19	0.56
57:BY:27:VAL:HA	57:BY:28:LYS:HE2	1.87	0.56
57:BY:31:LEU:HB2	57:BY:32:PRO:HA	1.86	0.56
57:BY:81:LYS:HD2	57:BY:96:ILE:HD11	1.86	0.56
1:CA:260:G:H2'	1:CA:261:U:C6	2.40	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:498:U:O2'	1:CA:499:A:H8	1.88	0.56
1:CA:580:U:H2'	1:CA:581:G:O4'	2.05	0.56
1:CA:751:U:H4'	15:CO:24:SER:HA	1.87	0.56
1:CA:858:G:C6	1:CA:869:G:C8	2.94	0.56
1:CA:1158:C:O2	1:CA:1158:C:H2'	2.04	0.56
2:CB:18:GLY:H	2:CB:42:ILE:HG23	1.69	0.56
2:CB:109:SER:C	2:CB:111:ARG:N	2.58	0.56
3:CC:76:VAL:HG21	3:CC:103:VAL:CG2	2.35	0.56
5:CE:41:VAL:HG23	5:CE:67:VAL:CG1	2.34	0.56
7:CG:113:GLU:HG3	7:CG:118:VAL:HG23	1.86	0.56
9:CI:65:VAL:HG21	9:CI:73:GLN:HB3	1.86	0.56
9:CI:114:TYR:CE1	10:CJ:59:SER:HA	2.39	0.56
16:CP:21:VAL:HG12	16:CP:34:GLU:O	2.05	0.56
24:CY:49:G:O2'	24:CY:50:G:H5'	2.06	0.56
25:CZ:11:HIS:O	25:CZ:12:VAL:HG13	2.05	0.56
25:CZ:171:ILE:HG22	25:CZ:172:ARG:N	2.19	0.56
25:CZ:320:VAL:HG13	25:CZ:397:ALA:O	2.05	0.56
27:D1:29:GLY:O	27:D1:31:GLY:N	2.38	0.56
27:D1:66:HIS:O	27:D1:67:ILE:C	2.49	0.56
32:D6:9:LEU:HD22	32:D6:10:LEU:N	2.20	0.56
34:D8:14:VAL:HG21	34:D8:22:VAL:HG13	1.87	0.56
34:D8:23:VAL:HG12	34:D8:46:ARG:NH1	2.11	0.56
35:D9:16:VAL:HG11	36:DA:1032:A:O3'	2.05	0.56
35:D9:35:ARG:O	35:D9:36:GLN:O	2.22	0.56
36:DA:31:C:O2'	36:DA:32:C:H5"	2.05	0.56
36:DA:549:G:O2'	36:DA:551:G:H5'	2.05	0.56
36:DA:621:A:C2'	36:DA:622:G:H5'	2.35	0.56
36:DA:648:G:H2'	36:DA:649:G:H8	1.71	0.56
36:DA:1013:C:H2'	36:DA:1014:U:C6	2.41	0.56
36:DA:1112:G:O2'	36:DA:1113:U:H5'	2.04	0.56
36:DA:1184:G:O2'	36:DA:1185:C:H5'	2.05	0.56
36:DA:1231:G:H2'	36:DA:1232:G:C8	2.41	0.56
36:DA:1417:C:H2'	36:DA:1418:G:O4'	2.04	0.56
36:DA:1464:C:HO2'	36:DA:1528:A:H8	1.49	0.56
36:DA:1827:C:O2'	36:DA:1828:G:H5'	2.06	0.56
36:DA:2297:C:O2'	36:DA:2298:A:H5'	2.05	0.56
36:DA:2544:G:H8	36:DA:2544:G:O5'	1.88	0.56
38:DC:5:LYS:HB3	38:DC:8:ARG:HH21	1.70	0.56
39:DD:31:LYS:HG3	39:DD:33:LEU:HG	1.87	0.56
40:DE:75:VAL:O	40:DE:77:ILE:N	2.38	0.56
40:DE:101:ARG:NH2	40:DE:171:GLU:HB2	2.20	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DE:116:VAL:CG2	40:DE:117:MET:N	2.68	0.56
40:DE:116:VAL:O	40:DE:117:MET:CB	2.52	0.56
42:DG:51:ARG:NH1	42:DG:53:LEU:HD22	2.21	0.56
46:DN:71:ILE:HG21	46:DN:84:LYS:HB3	1.87	0.56
46:DN:94:HIS:N	46:DN:95:PRO:CD	2.68	0.56
47:DO:88:ASN:OD1	47:DO:90:GLN:N	2.38	0.56
47:DO:114:ILE:H	47:DO:114:ILE:CD1	2.18	0.56
49:DQ:116:GLU:O	49:DQ:120:ILE:HG12	2.05	0.56
50:DR:79:LEU:HA	50:DR:83:ILE:HG13	1.86	0.56
50:DR:103:ARG:NH1	50:DR:110:PRO:HB3	2.20	0.56
53:DU:76:TYR:O	53:DU:80:ILE:HG12	2.04	0.56
54:DV:59:ALA:HA	54:DV:95:LEU:O	2.05	0.56
57:DY:81:LYS:HD2	57:DY:96:ILE:HD11	1.87	0.56
57:DY:95:LYS:CE	57:DY:100:ALA:HB2	2.35	0.56
1:AA:580:U:H2'	1:AA:581:G:O4'	2.05	0.56
1:AA:736:C:H2'	1:AA:737:A:C8	2.39	0.56
8:AH:20:TYR:CE2	8:AH:76:PRO:HG2	2.40	0.56
8:AH:56:LYS:HD2	8:AH:56:LYS:N	2.20	0.56
12:AL:8:ASN:O	12:AL:12:ARG:HG3	2.05	0.56
22:AV:41:C:C3'	22:AV:42:C:H5"	2.36	0.56
25:AZ:315:LYS:HA	25:AZ:372:VAL:O	2.04	0.56
29:B3:25:ALA:C	29:B3:27:GLY:H	2.12	0.56
30:B4:7:PRO:CG	42:BG:61:ALA:HB1	2.36	0.56
32:B6:10:LEU:CD2	32:B6:10:LEU:N	2.67	0.56
34:B8:61:LEU:C	34:B8:63:PRO:HD2	2.31	0.56
36:BA:84:A:H5"	57:BY:9:LYS:HD2	1.87	0.56
36:BA:137:C:H2'	36:BA:137:C:O2	2.04	0.56
36:BA:335:C:H2'	36:BA:336:C:C6	2.40	0.56
36:BA:419:C:H2'	36:BA:420:C:C6	2.39	0.56
36:BA:926:A:H5'	36:BA:926:A:H8	1.71	0.56
36:BA:1049:C:H2'	36:BA:1050:A:C8	2.30	0.56
36:BA:1784:A:H4'	36:BA:1785:A:O5'	2.05	0.56
36:BA:1947:C:C2'	36:BA:1948:G:H5"	2.35	0.56
36:BA:2240:C:O2'	36:BA:2241:A:H5'	2.05	0.56
40:BE:59:VAL:O	40:BE:60:ASN:CG	2.49	0.56
43:BH:76:VAL:O	43:BH:79:VAL:HG22	2.06	0.56
50:BR:4:LEU:C	50:BR:6:SER:N	2.62	0.56
51:BS:90:GLY:C	51:BS:92:TYR:H	2.14	0.56
57:BY:8:LYS:N	57:BY:8:LYS:CD	2.65	0.56
58:BZ:6:LYS:HG2	58:BZ:8:TYR:OH	2.06	0.56
58:BZ:114:GLY:H	58:BZ:146:ILE:CG2	2.18	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:BZ:115:GLY:HA3	58:BZ:174:VAL:CG1	2.35	0.56
1:CA:443:C:H2'	1:CA:444:C:C6	2.40	0.56
1:CA:1378:C:H4'	7:CG:94:ARG:HH22	1.71	0.56
13:CM:35:GLU:C	13:CM:37:THR:H	2.12	0.56
28:D2:46:GLN:HB3	28:D2:48:HIS:HE1	1.71	0.56
32:D6:15:GLU:HG3	32:D6:47:THR:HG21	1.86	0.56
36:DA:153:C:H2'	36:DA:154:G:C8	2.40	0.56
36:DA:744:G:OP1	40:DE:132:HIS:HB3	2.06	0.56
36:DA:1166:C:H2'	36:DA:1167:U:C6	2.40	0.56
36:DA:1542:A:C8	36:DA:1544:A:H5'	2.40	0.56
36:DA:2341:G:H2'	36:DA:2342:C:C6	2.39	0.56
36:DA:2703:C:O2'	36:DA:2704:C:H5'	2.05	0.56
40:DE:63:LEU:O	40:DE:64:LYS:C	2.49	0.56
42:DG:86:MET:N	42:DG:87:PRO:CD	2.68	0.56
47:DO:35:VAL:HG11	47:DO:69:ILE:HD13	1.87	0.56
48:DP:16:ARG:HD3	48:DP:16:ARG:C	2.30	0.56
56:DX:18:TYR:O	56:DX:20:GLY:N	2.38	0.56
57:DY:51:VAL:O	57:DY:53:PRO:HD3	2.05	0.56
2:AB:44:LEU:HD12	2:AB:44:LEU:N	2.14	0.56
2:AB:88:ALA:HB2	2:AB:219:VAL:HG13	1.86	0.56
2:AB:97:TRP:CZ3	2:AB:176:GLU:OE2	2.58	0.56
20:AT:50:GLU:HB2	20:AT:99:LEU:CD1	2.34	0.56
28:B2:65:ASN:HB3	36:BA:72:U:C5	2.41	0.56
32:B6:53:LYS:N	32:B6:53:LYS:HD3	2.19	0.56
34:B8:25:MET:HG3	48:BP:64:LYS:HB2	1.88	0.56
36:BA:658:C:H2'	36:BA:659:C:H6	1.66	0.56
38:BC:149:ILE:HG23	38:BC:150:GLY:N	2.20	0.56
39:BD:31:LYS:HG3	39:BD:33:LEU:HG	1.88	0.56
39:BD:161:THR:O	39:BD:196:VAL:HG23	2.06	0.56
41:BF:101:LEU:HD12	41:BF:102:PRO:CD	2.35	0.56
41:BF:126:VAL:HG11	41:BF:142:TRP:HH2	1.69	0.56
48:BP:135:LEU:HD13	48:BP:135:LEU:O	2.06	0.56
49:BQ:19:GLY:O	49:BQ:98:LYS:HD3	2.05	0.56
49:BQ:59:ARG:O	49:BQ:59:ARG:HD2	2.06	0.56
51:BS:53:SER:C	51:BS:55:ALA:H	2.14	0.56
54:BV:28:GLU:HB3	54:BV:29:PRO:HD2	1.87	0.56
1:CA:659:U:O2'	1:CA:660:G:H5'	2.06	0.56
1:CA:1148:U:H2'	1:CA:1149:C:O4'	2.05	0.56
20:CT:73:HIS:HB3	20:CT:74:LYS:HD3	1.87	0.56
20:CT:74:LYS:C	20:CT:76:ALA:H	2.13	0.56
26:D0:43:THR:HG22	36:DA:2331:G:O2'	2.05	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:D1:27:GLU:O	27:D1:28:GLY:C	2.48	0.56
28:D2:64:LEU:O	28:D2:68:ARG:HB2	2.06	0.56
36:DA:882:G:H2'	36:DA:883:G:H8	1.70	0.56
36:DA:1572:A:O2'	36:DA:1573:G:H5'	2.05	0.56
36:DA:2657:A:O2'	43:DH:160:LYS:HE2	2.06	0.56
36:DA:2836:U:H6	36:DA:2836:U:O5'	1.88	0.56
38:DC:32:LEU:HD13	38:DC:220:PRO:HG2	1.86	0.56
38:DC:106:GLY:O	38:DC:107:TRP:HB3	2.05	0.56
46:DN:25:ARG:HH11	46:DN:25:ARG:HG2	1.71	0.56
52:DT:31:SER:OG	52:DT:32:TYR:CE1	2.59	0.56
53:DU:92:ARG:HD3	53:DU:94:ASN:HB3	1.87	0.56
56:DX:57:LEU:N	56:DX:57:LEU:HD13	2.20	0.56
57:DY:17:SER:OG	57:DY:18:GLY:N	2.37	0.56
1:AA:192:U:O4'	20:AT:103:GLY:HA2	2.06	0.56
1:AA:202:U:H4'	1:AA:203:U:OP2	2.04	0.56
3:AC:95:THR:CG2	3:AC:97:LYS:HD2	2.35	0.56
4:AD:152:SER:O	4:AD:154:ASN:N	2.39	0.56
10:AJ:34:VAL:CG2	10:AJ:74:ILE:HG22	2.34	0.56
28:B2:10:LEU:O	28:B2:14:ARG:HG3	2.06	0.56
30:B4:22:ILE:HD12	30:B4:22:ILE:N	2.19	0.56
31:B5:3:LYS:O	31:B5:4:HIS:C	2.49	0.56
36:BA:252:G:OP2	48:BP:50:ARG:NH2	2.34	0.56
36:BA:1077:A:P	58:BZ:111:VAL:HG11	2.45	0.56
36:BA:2376:A:H2'	36:BA:2377:A:O4'	2.05	0.56
38:BC:27:ARG:NE	38:BC:182:PRO:CB	2.68	0.56
39:BD:134:ARG:NH1	39:BD:135:PHE:CE1	2.73	0.56
39:BD:223:GLY:O	39:BD:224:ALA:O	2.24	0.56
42:BG:131:TYR:HB3	42:BG:159:VAL:HG12	1.88	0.56
50:BR:55:ALA:HB2	50:BR:79:LEU:CD1	2.33	0.56
52:BT:32:TYR:HB3	52:BT:81:PRO:HB3	1.87	0.56
52:BT:96:ARG:HB2	52:BT:96:ARG:NH1	2.21	0.56
57:BY:7:VAL:HB	57:BY:8:LYS:HZ3	1.71	0.56
58:BZ:150:LEU:HD23	58:BZ:150:LEU:C	2.30	0.56
1:CA:115:G:H1'	1:CA:116:A:N7	2.21	0.56
1:CA:490:G:H2'	1:CA:491:G:C8	2.40	0.56
1:CA:946:A:H2'	1:CA:947:G:H8	1.68	0.56
1:CA:1264:C:H2'	1:CA:1265:G:C8	2.40	0.56
2:CB:154:LEU:O	2:CB:156:LYS:HG3	2.04	0.56
6:CF:63:TYR:HD1	6:CF:63:TYR:N	2.04	0.56
13:CM:3:ARG:HH21	13:CM:7:VAL:HG22	1.71	0.56
13:CM:49:THR:O	13:CM:53:VAL:HG23	2.05	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:CN:15:LYS:HB3	14:CN:16:PHE:CE2	2.41	0.56
20:CT:26:ASN:N	20:CT:26:ASN:HD22	2.04	0.56
25:CZ:64:ASN:H	25:CZ:64:ASN:ND2	2.02	0.56
29:D3:26:LEU:HB2	29:D3:28:LEU:CD2	2.36	0.56
31:D5:31:VAL:HG13	31:D5:42:PRO:HG3	1.87	0.56
33:D7:43:THR:HG23	33:D7:44:PRO:HD2	1.87	0.56
36:DA:519:U:H2'	36:DA:520:G:H8	1.70	0.56
36:DA:2133:G:H2'	36:DA:2157:G:H22	1.68	0.56
36:DA:2206:G:H3'	36:DA:2206:G:N3	2.21	0.56
41:DF:206:ILE:HG22	41:DF:207:GLY:N	2.19	0.56
46:DN:10:GLU:CD	46:DN:11:PRO:HD2	2.31	0.56
50:DR:87:TYR:O	50:DR:89:ASP:N	2.38	0.56
54:DV:38:LEU:C	54:DV:39:LEU:HD13	2.30	0.56
1:AA:476:G:H2'	1:AA:477:A:C8	2.41	0.56
1:AA:476:G:H2'	1:AA:477:A:H8	1.69	0.56
1:AA:662:G:H2'	1:AA:663:A:C8	2.41	0.56
1:AA:713:G:H2'	1:AA:714:G:C8	2.40	0.56
1:AA:865:A:C2	1:AA:918:A:H4'	2.41	0.56
1:AA:950:U:H2'	1:AA:951:G:C8	2.40	0.56
2:AB:87:ARG:NH2	2:AB:232:PRO:C	2.56	0.56
8:AH:1:MET:HE2	8:AH:2:LEU:H	1.70	0.56
13:AM:108:ARG:HG3	13:AM:108:ARG:HH11	1.71	0.56
16:AP:20:VAL:HG23	16:AP:34:GLU:C	2.31	0.56
24:AY:43:G:H5'	24:AY:44:G:OP2	2.05	0.56
26:B0:56:ASP:OD1	26:B0:58:THR:OG1	2.21	0.56
28:B2:66:GLU:OE2	28:B2:67:LYS:HB2	2.06	0.56
36:BA:363(E):U:H2'	36:BA:363(F):A:H1'	1.87	0.56
36:BA:1013:C:H2'	36:BA:1014:U:C6	2.41	0.56
36:BA:1328:G:H2'	36:BA:1330:C:C5	2.40	0.56
36:BA:1412:A:O2'	36:BA:1413:G:H5'	2.05	0.56
36:BA:2544:G:H8	36:BA:2544:G:O5'	1.88	0.56
36:BA:2822:G:H2'	36:BA:2823:A:H5"	1.87	0.56
38:BC:189:ILE:O	38:BC:193:ILE:HG13	2.05	0.56
46:BN:24:GLY:O	46:BN:28:THR:HB	2.05	0.56
58:BZ:4:ARG:HG2	58:BZ:58:VAL:HB	1.87	0.56
1:CA:940:C:P	7:CG:102:ARG:NH2	2.78	0.56
1:CA:961:U:O2'	1:CA:962:C:P	2.64	0.56
6:CF:61:LEU:O	6:CF:62:TRP:HB3	2.03	0.56
25:CZ:182:MET:SD	25:CZ:196:VAL:HG21	2.46	0.56
30:D4:14:ILE:HG13	30:D4:31:ILE:CB	2.31	0.56
35:D9:4:ARG:O	35:D9:36:GLN:HA	2.05	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:321:G:N3	41:DF:165:ARG:HD3	2.21	0.56
36:DA:672:C:C2'	36:DA:673:C:C5'	2.83	0.56
36:DA:1060:U:O4'	36:DA:1061:U:H5"	2.04	0.56
36:DA:1270:C:H5"	36:DA:1271:G:O5'	2.06	0.56
36:DA:1328:G:H2'	36:DA:1330:C:C5	2.41	0.56
36:DA:1494:A:C3'	36:DA:1495:A:H5"	2.36	0.56
36:DA:1498:C:H2'	36:DA:1499:C:C5'	2.35	0.56
36:DA:2310:A:O2'	36:DA:2311:A:C5'	2.47	0.56
36:DA:2466:C:O2'	36:DA:2467:C:H5'	2.06	0.56
40:DE:185:LYS:O	40:DE:186:GLY:O	2.23	0.56
44:DJ:41:UNK:O	44:DJ:53:UNK:HA	2.06	0.56
48:DP:16:ARG:HB2	48:DP:16:ARG:CZ	2.35	0.56
54:DV:58:VAL:O	54:DV:97:LYS:HB2	2.06	0.56
55:DW:14:PRO:HG2	55:DW:78:GLU:HG3	1.87	0.56
58:DZ:163:LEU:N	58:DZ:163:LEU:HD23	2.21	0.56
1:AA:189(H):G:O2'	1:AA:189(I):G:H8	1.89	0.56
1:AA:416:G:O2'	1:AA:417:C:H5'	2.06	0.56
1:AA:437:U:H5"	4:AD:155:LEU:HD13	1.87	0.56
1:AA:625:G:H2'	1:AA:626:U:H6	1.71	0.56
9:AI:126:SER:O	9:AI:127:LYS:HB3	2.04	0.56
12:AL:34:ARG:HG2	12:AL:35:GLY:N	2.21	0.56
17:AQ:45:HIS:HB2	17:AQ:65:ILE:CD1	2.36	0.56
17:AQ:53:LEU:HD21	17:AQ:85:VAL:HG11	1.88	0.56
20:AT:62:LEU:HA	20:AT:65:LYS:HB2	1.87	0.56
22:AV:51:U:H2'	22:AV:52:G:H8	1.69	0.56
24:AY:62:U:H5'	24:AY:62:U:H6	1.71	0.56
25:AZ:64:ASN:H	25:AZ:64:ASN:ND2	2.03	0.56
32:B6:53:LYS:CG	32:B6:54:ILE:H	2.19	0.56
34:B8:23:VAL:HG13	34:B8:46:ARG:HB3	1.86	0.56
36:BA:1523:U:H2'	36:BA:1524:G:H8	1.70	0.56
36:BA:2327:A:H2'	36:BA:2328:A:C8	2.40	0.56
37:BB:52:A:O2'	37:BB:53:A:C8	2.53	0.56
40:BE:65:GLY:O	40:BE:67:PHE:N	2.39	0.56
53:BU:95:LEU:CD1	54:BV:11:GLN:HG3	2.35	0.56
1:CA:1536:C:O2'	1:CA:1537:U:H5'	2.05	0.56
2:CB:233:SER:O	2:CB:235:SER:N	2.38	0.56
6:CF:1:MET:HE3	6:CF:66:GLU:HG2	1.88	0.56
7:CG:38:LEU:HD12	7:CG:38:LEU:O	2.05	0.56
9:CI:40:LEU:O	9:CI:42:ARG:N	2.38	0.56
12:CL:75:HIS:HD2	12:CL:77:LEU:HB2	1.70	0.56
19:CS:48:THR:HG22	19:CS:61:TYR:CA	2.34	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:CW:37:A:H3'	22:CW:38:A:H8	1.71	0.56
25:CZ:313:HIS:HB2	25:CZ:380:LEU:HB2	1.88	0.56
29:D3:29:ARG:HB2	29:D3:29:ARG:NH1	2.18	0.56
30:D4:20:ASN:HD22	30:D4:21:VAL:N	2.03	0.56
32:D6:15:GLU:OE1	32:D6:18:ARG:CD	2.54	0.56
32:D6:53:LYS:CG	32:D6:54:ILE:H	2.19	0.56
33:D7:12:ARG:HG2	33:D7:46:VAL:HG22	1.88	0.56
36:DA:137:C:O2	36:DA:137:C:H2'	2.04	0.56
36:DA:1683:C:H2'	36:DA:1684:C:C6	2.41	0.56
52:DT:50:ILE:HA	52:DT:99:LEU:CD1	2.36	0.56
57:DY:89:PHE:C	57:DY:90:LEU:HD23	2.30	0.56
1:AA:443:C:H2'	1:AA:444:C:C6	2.41	0.56
2:AB:188:ALA:O	2:AB:202:PRO:HA	2.06	0.56
3:AC:76:VAL:HG21	3:AC:103:VAL:CG2	2.35	0.56
7:AG:65:ALA:HB1	7:AG:127:ALA:HB3	1.88	0.56
7:AG:69:VAL:HG23	7:AG:134:ALA:O	2.06	0.56
11:AK:80:VAL:HG13	11:AK:103:LEU:HD11	1.87	0.56
12:AL:126:LYS:HE2	12:AL:126:LYS:HA	1.88	0.56
15:AO:24:SER:O	15:AO:28:GLN:HG3	2.06	0.56
21:AU:3:LYS:HB3	21:AU:14:TRP:CD1	2.41	0.56
22:AV:16:U:H3	22:AV:59:U:H3	1.53	0.56
25:AZ:320:VAL:HG13	25:AZ:397:ALA:O	2.06	0.56
25:AZ:324:LYS:HA	25:AZ:364:PRO:HB3	1.88	0.56
28:B2:62:THR:OG1	36:BA:76:C:H4'	2.06	0.56
32:B6:53:LYS:H	32:B6:53:LYS:HD3	1.71	0.56
36:BA:108:U:H2'	36:BA:109:G:C8	2.41	0.56
36:BA:1060:U:H1'	36:BA:1061:U:C5'	2.36	0.56
36:BA:1163:G:O2'	36:BA:1164:G:H5'	2.06	0.56
36:BA:1817:G:H2'	36:BA:1818:U:H5'	1.86	0.56
36:BA:2833:G:H3'	36:BA:2834:G:H5'	1.82	0.56
46:BN:9:VAL:CG1	46:BN:10:GLU:H	2.03	0.56
46:BN:121:LYS:HB3	46:BN:123:TYR:HE1	1.71	0.56
47:BO:43:VAL:HG21	47:BO:52:VAL:CG1	2.36	0.56
50:BR:103:ARG:NH1	50:BR:110:PRO:HB3	2.21	0.56
52:BT:106:SER:O	52:BT:107:ASP:OD1	2.24	0.56
54:BV:68:LYS:HE2	54:BV:68:LYS:HA	1.88	0.56
57:BY:13:VAL:CG1	57:BY:28:LYS:HD3	2.36	0.56
1:CA:475:G:O2'	1:CA:476:G:H5'	2.06	0.56
1:CA:865:A:H2	1:CA:918:A:H4'	1.71	0.56
2:CB:236:TYR:O	2:CB:238:LEU:N	2.39	0.56
5:CE:102:ALA:HB1	5:CE:106:PRO:HG2	1.88	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:CK:33:THR:HG22	11:CK:39:PRO:CA	2.36	0.56
11:CK:108:ILE:CG2	18:CR:88:LYS:HB2	2.29	0.56
12:CL:45:PRO:HG3	12:CL:53:ARG:HD3	1.87	0.56
16:CP:20:VAL:HG23	16:CP:34:GLU:O	2.05	0.56
32:D6:15:GLU:OE1	32:D6:18:ARG:HG3	2.06	0.56
35:D9:7:VAL:HG22	35:D9:34:GLN:HG2	1.88	0.56
36:DA:1069:A:H1'	36:DA:1070:A:OP2	2.06	0.56
36:DA:1151:G:H5"	53:DU:81:HIS:CE1	2.41	0.56
36:DA:1169:G:H1	36:DA:1180:C:N4	2.04	0.56
36:DA:1485:G:H22	36:DA:1505:C:H5'	1.71	0.56
36:DA:2206:G:H21	36:DA:2207:G:C5'	2.19	0.56
38:DC:149:ILE:HG23	38:DC:150:GLY:N	2.20	0.56
41:DF:25:PRO:CG	41:DF:119:ARG:HB2	2.36	0.56
44:DJ:8:UNK:C	44:DJ:10:UNK:H	2.18	0.56
48:DP:16:ARG:HH11	48:DP:16:ARG:CB	2.18	0.56
50:DR:28:LEU:C	50:DR:28:LEU:HD23	2.30	0.56
53:DU:76:TYR:CZ	53:DU:80:ILE:HG13	2.40	0.56
54:DV:24:LYS:HA	54:DV:92:THR:CG2	2.33	0.56
55:DW:64:MET:HE2	55:DW:109:GLU:HG3	1.88	0.56
58:DZ:99:TYR:CE1	58:DZ:125:LEU:HD13	2.41	0.56
1:AA:180:U:C2'	1:AA:181:G:H5'	2.35	0.56
1:AA:265:G:C2'	1:AA:266:G:H5"	2.32	0.56
2:AB:233:SER:O	2:AB:235:SER:N	2.38	0.56
5:AE:76:ILE:HG23	5:AE:93:PRO:HG3	1.88	0.56
5:AE:147:ASP:HB3	5:AE:150:ARG:HH12	1.71	0.56
11:AK:21:ILE:HG13	11:AK:30:VAL:HG12	1.88	0.56
22:AV:67:C:H2'	22:AV:68:C:C6	2.41	0.56
25:AZ:270:VAL:HG12	25:AZ:286:VAL:HG21	1.88	0.56
29:B3:26:LEU:HB2	29:B3:28:LEU:CD2	2.36	0.56
30:B4:34:GLU:HG2	42:BG:113:ARG:NH1	2.21	0.56
32:B6:15:GLU:O	32:B6:17:LYS:N	2.39	0.56
36:BA:549:G:O2'	36:BA:551:G:H5'	2.06	0.56
36:BA:1141:U:H6	46:BN:63:THR:HB	1.71	0.56
36:BA:2096:U:H2'	36:BA:2097:C:C6	2.41	0.56
36:BA:2840:C:H2'	36:BA:2841:C:C6	2.41	0.56
43:BH:83:TYR:HB2	43:BH:134:SER:CA	2.35	0.56
46:BN:76:SER:HB3	46:BN:81:GLY:HA3	1.88	0.56
54:BV:58:VAL:O	54:BV:97:LYS:HB2	2.06	0.56
1:CA:490:G:H2'	1:CA:491:G:H8	1.71	0.56
1:CA:1001:A:H2'	1:CA:1001:A:N3	2.21	0.56
1:CA:1241:G:H2'	1:CA:1242:C:C6	2.41	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:CF:3:ARG:HH11	6:CF:3:ARG:HG3	1.71	0.56
7:CG:79:ARG:CG	7:CG:84:ASN:HA	2.15	0.56
10:CJ:24:VAL:HG21	10:CJ:37:PRO:CG	2.35	0.56
14:CN:12:ARG:HH11	14:CN:12:ARG:HB3	1.71	0.56
15:CO:82:ILE:CD1	15:CO:87:ILE:HB	2.35	0.56
22:CW:27:G:O2'	22:CW:28:G:H5'	2.06	0.56
32:D6:13:CYS:HA	32:D6:50:ARG:O	2.06	0.56
36:DA:1678:G:N2	36:DA:1989:G:N2	2.53	0.56
36:DA:1947:C:C2'	36:DA:1948:G:H5"	2.36	0.56
36:DA:2590:A:H5"	39:DD:239:ARG:HE	1.70	0.56
36:DA:2776:A:H4'	36:DA:2777:G:H5"	1.88	0.56
38:DC:40:THR:HG22	38:DC:177:LYS:CE	2.36	0.56
53:DU:79:PHE:CE1	53:DU:83:LEU:HD11	2.41	0.56
56:DX:13:LEU:HA	56:DX:18:TYR:CZ	2.40	0.56
58:DZ:10:ARG:CZ	58:DZ:36:LYS:HB2	2.36	0.56
4:AD:145:GLU:OE1	4:AD:145:GLU:O	2.25	0.55
9:AI:91:ASP:O	9:AI:93:ARG:N	2.39	0.55
11:AK:21:ILE:HG13	11:AK:30:VAL:CG1	2.36	0.55
13:AM:65:LYS:O	13:AM:70:LEU:HD12	2.06	0.55
16:AP:20:VAL:HG23	16:AP:34:GLU:O	2.06	0.55
24:AY:55:PSU:H2'	24:AY:56:C:OP2	2.05	0.55
25:AZ:86:ALA:C	25:AZ:88:TYR:H	2.14	0.55
25:AZ:108:ALA:HB3	25:AZ:137:LYS:O	2.06	0.55
25:AZ:361:MET:HG3	25:AZ:363:MET:HG3	1.87	0.55
30:B4:5:ILE:O	42:BG:67:LYS:HD2	2.05	0.55
32:B6:5:VAL:HB	36:BA:2284:C:OP2	2.06	0.55
36:BA:1056:G:H22	36:BA:1104:C:H42	1.54	0.55
36:BA:1104:C:H2'	36:BA:1105:U:C6	2.37	0.55
36:BA:1209:G:H21	36:BA:1210:A:N6	2.03	0.55
36:BA:1528:A:N1	36:BA:1542:A:H2	2.03	0.55
39:BD:31:LYS:HZ1	39:BD:33:LEU:HD11	1.69	0.55
39:BD:32:SER:O	39:BD:36:PRO:CG	2.53	0.55
40:BE:87:GLU:OE2	40:BE:89:ASP:HB3	2.05	0.55
41:BF:7:TYR:OH	41:BF:10:PRO:HB3	2.06	0.55
41:BF:100:THR:HG22	41:BF:100:THR:O	2.04	0.55
48:BP:16:ARG:HD3	48:BP:16:ARG:C	2.30	0.55
48:BP:23:PRO:HB2	48:BP:33:ARG:CD	2.36	0.55
55:BW:43:GLY:O	55:BW:47:VAL:HG23	2.06	0.55
56:BX:50:LYS:H	56:BX:87:GLN:HE22	1.54	0.55
57:BY:90:LEU:HG	57:BY:91:GLU:H	1.72	0.55
58:BZ:152:ALA:CB	58:BZ:167:PRO:HB2	2.36	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:711:G:O2'	1:CA:712:A:H5'	2.06	0.55
1:CA:713:G:H2'	1:CA:714:G:C8	2.40	0.55
2:CB:119:GLU:O	2:CB:122:PHE:HB3	2.06	0.55
4:CD:190:ASP:HB3	4:CD:193:ASP:OD2	2.06	0.55
7:CG:152:ALA:O	7:CG:155:ARG:HG3	2.06	0.55
11:CK:21:ILE:HG13	11:CK:30:VAL:CG1	2.35	0.55
24:CY:62:U:H5'	24:CY:62:U:H6	1.70	0.55
25:CZ:361:MET:HG3	25:CZ:363:MET:HG3	1.87	0.55
26:D0:20:ARG:HH11	26:D0:20:ARG:CG	2.19	0.55
36:DA:184:C:H2'	36:DA:185:U:C6	2.41	0.55
36:DA:1311:G:H21	36:DA:1603:A:H62	1.53	0.55
36:DA:1678:G:H22	36:DA:1989:G:H22	1.52	0.55
38:DC:40:THR:HG22	38:DC:177:LYS:CD	2.35	0.55
46:DN:24:GLY:O	46:DN:28:THR:HB	2.06	0.55
48:DP:87:ASP:O	48:DP:90:ARG:HB2	2.05	0.55
52:DT:96:ARG:HB2	52:DT:96:ARG:NH1	2.21	0.55
1:AA:141:A:H1'	1:AA:182:U:O2	2.07	0.55
1:AA:592:G:H2'	1:AA:593:G:H8	1.70	0.55
1:AA:1442(B):A:H5'	52:BT:122:ASP:OD1	2.06	0.55
2:AB:21:ARG:HB3	2:AB:39:ILE:HG12	1.88	0.55
2:AB:134:GLU:C	2:AB:136:VAL:N	2.58	0.55
4:AD:121:VAL:HA	4:AD:126:ILE:HD13	1.86	0.55
10:AJ:55:LYS:HB2	10:AJ:55:LYS:NZ	1.99	0.55
11:AK:88:GLY:O	11:AK:89:ALA:C	2.49	0.55
25:AZ:324:LYS:HE3	25:AZ:326:GLU:OE2	2.07	0.55
29:B3:35:ARG:HD3	29:B3:37:LEU:HD21	1.89	0.55
32:B6:15:GLU:OE1	32:B6:18:ARG:HG3	2.06	0.55
32:B6:15:GLU:OE2	32:B6:41:PRO:HB2	2.06	0.55
36:BA:181:A:H5'	36:BA:181:A:C8	2.38	0.55
36:BA:654(I):C:H5"	36:BA:654(J):A:OP1	2.06	0.55
36:BA:1246:A:OP1	48:BP:16:ARG:NH2	2.39	0.55
36:BA:2720:U:H5'	36:BA:2721:A:OP2	2.06	0.55
40:BE:57:LYS:HE3	40:BE:57:LYS:CA	2.21	0.55
41:BF:183:VAL:O	41:BF:187:VAL:HG23	2.07	0.55
42:BG:11:TYR:HA	42:BG:15:VAL:CG2	2.35	0.55
46:BN:111:PRO:HA	46:BN:114:ARG:NH1	2.22	0.55
48:BP:16:ARG:CZ	48:BP:18:ARG:HG2	2.36	0.55
51:BS:15:ARG:HH12	51:BS:18:ILE:HD11	1.71	0.55
51:BS:85:VAL:C	51:BS:106:ARG:HG3	2.31	0.55
54:BV:59:ALA:HA	54:BV:95:LEU:O	2.05	0.55
57:BY:81:LYS:HD2	57:BY:96:ILE:CD1	2.37	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CC:136:GLN:O	3:CC:139:GLN:HB3	2.07	0.55
9:CI:40:LEU:CD1	9:CI:70:LYS:HG2	2.34	0.55
9:CI:46:ALA:HB2	9:CI:74:ILE:HG23	1.88	0.55
14:CN:57:ARG:HH11	14:CN:57:ARG:CB	2.19	0.55
25:CZ:24:LYS:H	25:CZ:105:VAL:HG11	1.72	0.55
27:D1:3:LYS:HB2	27:D1:3:LYS:HZ2	1.70	0.55
27:D1:29:GLY:HA3	36:DA:2396:G:O2'	2.06	0.55
36:DA:84:A:H2'	57:DY:9:LYS:NZ	2.19	0.55
36:DA:2756:U:H1'	36:DA:2757:A:C5'	2.29	0.55
36:DA:2822:G:O6	50:DR:4:LEU:HB3	2.05	0.55
37:DB:48:A:H4'	51:DS:95:HIS:CD2	2.41	0.55
39:DD:36:PRO:O	39:DD:37:LEU:HB2	2.06	0.55
41:DF:183:VAL:O	41:DF:187:VAL:HG23	2.06	0.55
42:DG:71:THR:HG23	42:DG:89:GLY:C	2.30	0.55
43:DH:156:ALA:C	43:DH:158:HIS:N	2.61	0.55
44:DJ:96:UNK:O	44:DJ:100:UNK:N	2.39	0.55
50:DR:34:ILE:HB	50:DR:114:VAL:CG2	2.37	0.55
50:DR:103:ARG:O	50:DR:104:ARG:HB2	2.06	0.55
53:DU:95:LEU:HD12	54:DV:11:GLN:HG3	1.88	0.55
1:AA:1269:A:C2	1:AA:1313:U:O4'	2.58	0.55
2:AB:118:LEU:HD13	2:AB:142:LEU:HB2	1.88	0.55
2:AB:236:TYR:O	2:AB:237:ALA:C	2.48	0.55
5:AE:63:ARG:CA	5:AE:66:MET:HE1	2.33	0.55
9:AI:83:ARG:C	9:AI:86:VAL:HG12	2.31	0.55
9:AI:97:LYS:HB3	9:AI:98:PRO:HD3	1.88	0.55
10:AJ:92:THR:HG23	10:AJ:93:GLY:N	2.22	0.55
22:AW:3:C:H2'	22:AW:4:C:O4'	2.06	0.55
22:AW:67:C:H2'	22:AW:68:C:C6	2.41	0.55
27:B1:78:LYS:HE2	27:B1:78:LYS:CA	2.36	0.55
35:B9:4:ARG:O	35:B9:36:GLN:HA	2.06	0.55
36:BA:1131:G:HO2'	36:BA:1132:A:H8	1.52	0.55
38:BC:5:LYS:HB3	38:BC:8:ARG:HH21	1.72	0.55
39:BD:44:ASN:OD1	39:BD:44:ASN:N	2.38	0.55
40:BE:57:LYS:HA	40:BE:57:LYS:CE	2.21	0.55
41:BF:4:VAL:HG11	41:BF:17:ARG:NE	2.21	0.55
42:BG:20:ILE:C	42:BG:22:ARG:N	2.64	0.55
42:BG:130:ASN:OD1	42:BG:160:VAL:HA	2.06	0.55
43:BH:16:SER:HB2	43:BH:27:LYS:CB	2.27	0.55
43:BH:66:GLY:CA	43:BH:69:ARG:HB3	2.34	0.55
43:BH:105:LEU:CD2	43:BH:113:VAL:HB	2.35	0.55
46:BN:96:GLU:O	46:BN:100:GLU:HG3	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BT:92:GLY:O	52:BT:93:ARG:C	2.48	0.55
53:BU:76:TYR:CZ	53:BU:80:ILE:HG13	2.41	0.55
56:BX:52:VAL:O	56:BX:53:LYS:C	2.49	0.55
57:BY:77:PRO:O	57:BY:78:ALA:HB2	2.06	0.55
57:BY:87:LYS:O	57:BY:88:LYS:HB2	2.04	0.55
1:CA:189(I):G:O2'	1:CA:189(J):G:H5'	2.06	0.55
1:CA:266:G:H5'	1:CA:268:C:H41	1.71	0.55
1:CA:424:G:O2'	1:CA:425:G:H5'	2.06	0.55
1:CA:626:U:H2'	1:CA:627:G:H8	1.70	0.55
1:CA:1157:A:H1'	1:CA:1181:G:N2	2.20	0.55
1:CA:1282:C:O2'	1:CA:1283:G:H5'	2.06	0.55
3:CC:16:ARG:HB2	3:CC:16:ARG:HH11	1.71	0.55
3:CC:50:ALA:HB1	3:CC:70:VAL:CG1	2.37	0.55
9:CI:28:VAL:CG1	9:CI:29:ASN:H	2.10	0.55
11:CK:27:ASN:ND2	11:CK:28:THR:N	2.55	0.55
12:CL:81:SER:HA	12:CL:106:ASP:OD2	2.06	0.55
16:CP:67:THR:HG22	16:CP:68:ASP:N	2.20	0.55
19:CS:20:LEU:C	19:CS:22:LEU:H	2.14	0.55
22:CW:39:U:OP1	22:CW:39:U:H4'	2.07	0.55
25:CZ:262:THR:HG21	25:CZ:312:PRO:HD3	1.89	0.55
31:D5:3:LYS:O	31:D5:4:HIS:C	2.48	0.55
36:DA:282:A:N6	36:DA:359:A:H1'	2.22	0.55
36:DA:1060:U:H1'	36:DA:1061:U:C5'	2.36	0.55
36:DA:1494:A:H3'	36:DA:1494:A:N3	2.20	0.55
36:DA:1567:A:C5'	39:DD:58:HIS:CD2	2.89	0.55
36:DA:1790:C:H5"	36:DA:1791:A:OP1	2.06	0.55
36:DA:2870:C:H5"	50:DR:65:LEU:HD21	1.89	0.55
37:DB:44:G:H1'	37:DB:47:C:N4	2.22	0.55
38:DC:181:PRO:HB2	38:DC:183:GLU:OE2	2.06	0.55
41:DF:37:VAL:CG1	48:DP:7:ARG:HH12	2.03	0.55
42:DG:36:LYS:HD3	42:DG:95:ARG:HH12	1.69	0.55
42:DG:77:ILE:HB	42:DG:81:LYS:O	2.06	0.55
42:DG:88:ILE:HG22	42:DG:89:GLY:N	2.22	0.55
57:DY:3:VAL:C	57:DY:5:MET:H	2.14	0.55
57:DY:88:LYS:O	57:DY:90:LEU:HD23	2.05	0.55
58:DZ:65:GLN:HB3	58:DZ:67:LEU:CD1	2.36	0.55
1:AA:475:G:O2'	1:AA:476:G:H5'	2.06	0.55
1:AA:769:G:H4'	1:AA:1513:A:H4'	1.88	0.55
1:AA:939:G:H2'	1:AA:940:C:C6	2.41	0.55
2:AB:154:LEU:O	2:AB:156:LYS:HG3	2.07	0.55
4:AD:101:LEU:C	4:AD:103:ASN:N	2.63	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AF:1:MET:HE3	6:AF:66:GLU:HG2	1.88	0.55
15:AO:36:ILE:HG23	15:AO:56:LEU:HD11	1.89	0.55
20:AT:45:GLN:HB3	20:AT:91:LEU:HD22	1.87	0.55
20:AT:73:HIS:HB3	20:AT:74:LYS:HD3	1.87	0.55
32:B6:41:PRO:HG2	32:B6:44:ARG:O	2.06	0.55
36:BA:227:A:C2	36:BA:2407:G:H1'	2.41	0.55
36:BA:523:C:O2'	36:BA:524:U:H5'	2.06	0.55
36:BA:1069:A:H1'	36:BA:1070:A:OP2	2.05	0.55
36:BA:1169:G:H1	36:BA:1180:C:N4	2.05	0.55
36:BA:2360:A:O2'	36:BA:2361:A:O4'	2.20	0.55
43:BH:52:VAL:HB	43:BH:69:ARG:HD3	1.88	0.55
46:BN:94:HIS:N	46:BN:95:PRO:CD	2.69	0.55
49:BQ:42:ILE:HD13	49:BQ:97:VAL:HG21	1.87	0.55
50:BR:111:LEU:HD12	50:BR:111:LEU:N	2.21	0.55
58:BZ:69:THR:HB	58:BZ:89:PHE:O	2.07	0.55
2:CB:95:GLN:NE2	2:CB:147:LYS:HE2	2.22	0.55
4:CD:152:SER:O	4:CD:154:ASN:N	2.39	0.55
11:CK:48:ILE:HD11	11:CK:67:ASP:CB	2.36	0.55
11:CK:115:PRO:C	11:CK:117:ASN:H	2.13	0.55
12:CL:34:ARG:HG2	12:CL:35:GLY:N	2.21	0.55
13:CM:2:ALA:HB3	13:CM:9:ILE:HG23	1.88	0.55
22:CV:67:C:H2'	22:CV:68:C:C6	2.42	0.55
25:CZ:86:ALA:C	25:CZ:88:TYR:H	2.14	0.55
25:CZ:368:VAL:HG12	25:CZ:369:THR:N	2.20	0.55
34:D8:11:LYS:HD2	34:D8:11:LYS:H	1.71	0.55
34:D8:18:ALA:HB2	36:DA:628:G:H5"	1.88	0.55
34:D8:41:ILE:HD12	36:DA:2419:U:OP1	2.07	0.55
36:DA:134:C:H2'	36:DA:135:G:H8	1.71	0.55
36:DA:363(E):U:H2'	36:DA:363(F):A:H1'	1.87	0.55
36:DA:1784:A:H4'	36:DA:1785:A:O5'	2.06	0.55
36:DA:2160:G:H5'	36:DA:2160:G:C8	2.40	0.55
38:DC:167:LYS:O	38:DC:167:LYS:HD2	2.06	0.55
39:DD:108:PRO:HB3	39:DD:143:HIS:CE1	2.41	0.55
42:DG:18:GLU:HG2	42:DG:175:LEU:HD13	1.88	0.55
42:DG:87:PRO:C	42:DG:88:ILE:HG12	2.32	0.55
48:DP:86:LYS:HB2	48:DP:117:GLU:O	2.07	0.55
48:DP:147:LEU:O	48:DP:148:LEU:HB2	2.07	0.55
49:DQ:133:ARG:HH11	49:DQ:133:ARG:CB	2.16	0.55
50:DR:9:LYS:C	50:DR:10:LEU:HG	2.30	0.55
53:DU:27:LEU:O	53:DU:34:LYS:HB2	2.06	0.55
54:DV:61:VAL:HG22	54:DV:61:VAL:O	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:DX:27:THR:HG22	56:DX:80:ILE:HB	1.88	0.55
57:DY:47:LYS:HG3	57:DY:60:PHE:CZ	2.41	0.55
57:DY:73:ARG:HH22	57:DY:82:PRO:CA	2.14	0.55
1:AA:16:A:N1	1:AA:919:A:H2	2.03	0.55
1:AA:166:G:O2'	1:AA:167:G:H5'	2.07	0.55
1:AA:516:U:C4	1:AA:517:G:C6	2.94	0.55
1:AA:977:A:O2'	1:AA:978:A:H5"	2.06	0.55
3:AC:14:ILE:HD11	3:AC:179:ARG:HA	1.88	0.55
3:AC:167:TRP:O	3:AC:168:ALA:HB3	2.06	0.55
4:AD:157:LEU:H	4:AD:157:LEU:HD12	1.71	0.55
7:AG:79:ARG:CG	7:AG:84:ASN:HA	2.16	0.55
9:AI:40:LEU:O	9:AI:42:ARG:N	2.40	0.55
13:AM:2:ALA:HB3	13:AM:9:ILE:HG23	1.88	0.55
25:AZ:262:THR:HG21	25:AZ:312:PRO:HD3	1.88	0.55
36:BA:84:A:H2'	57:BY:9:LYS:NZ	2.21	0.55
36:BA:519:U:H2'	36:BA:520:G:H8	1.71	0.55
36:BA:675:A:OP1	41:BF:63:LYS:HE2	2.07	0.55
36:BA:1112:G:O2'	36:BA:1113:U:H5'	2.06	0.55
36:BA:2807:G:C3'	36:BA:2808:U:H5"	2.36	0.55
37:BB:106:G:O2'	37:BB:107:G:H5'	2.06	0.55
42:BG:77:ILE:HG22	42:BG:79:ASN:O	2.06	0.55
48:BP:17:LYS:O	48:BP:17:LYS:HG2	2.07	0.55
48:BP:97:PRO:O	48:BP:98:GLU:CB	2.55	0.55
1:CA:1065:U:C4	1:CA:1190:G:H1'	2.41	0.55
5:CE:41:VAL:O	5:CE:67:VAL:HG12	2.07	0.55
12:CL:70:ILE:HG22	12:CL:102:ARG:HH12	1.72	0.55
12:CL:113:ARG:HB3	12:CL:122:THR:HG21	1.88	0.55
19:CS:44:MET:N	19:CS:44:MET:SD	2.79	0.55
25:CZ:19:HIS:HA	25:CZ:115:GLN:HB2	1.89	0.55
36:DA:2078:C:H2'	36:DA:2079:U:C6	2.41	0.55
36:DA:2386:C:H2'	36:DA:2387:U:C6	2.42	0.55
37:DB:7:G:C3'	37:DB:8:U:H5"	2.37	0.55
38:DC:75:LEU:HG	38:DC:112:ALA:O	2.06	0.55
39:DD:218:ARG:HH11	39:DD:218:ARG:HG3	1.71	0.55
40:DE:65:GLY:O	40:DE:67:PHE:N	2.38	0.55
42:DG:49:ASP:CG	42:DG:50:ALA:H	2.13	0.55
48:DP:92:GLU:HG2	48:DP:121:LYS:HZ1	1.70	0.55
49:DQ:59:ARG:O	49:DQ:59:ARG:HD2	2.07	0.55
53:DU:101:ARG:HG3	53:DU:101:ARG:NH1	2.21	0.55
54:DV:34:GLU:O	54:DV:36:PRO:CD	2.54	0.55
55:DW:22:ASP:HA	55:DW:25:ARG:NH1	2.19	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:DZ:77:ASP:O	58:DZ:78:LYS:HB2	2.05	0.55
1:AA:392:G:H2'	1:AA:393:A:H8	1.72	0.55
1:AA:490:G:H2'	1:AA:491:G:H8	1.70	0.55
1:AA:784:C:H4'	36:BA:1837:C:OP1	2.07	0.55
1:AA:1150:U:O2	1:AA:1150:U:O4'	2.23	0.55
4:AD:11:LEU:O	4:AD:12:CYS:C	2.49	0.55
4:AD:17:VAL:O	4:AD:18:LYS:C	2.48	0.55
9:AI:99:LEU:HD22	9:AI:99:LEU:H	1.70	0.55
13:AM:116:THR:O	13:AM:116:THR:HG22	2.07	0.55
19:AS:20:LEU:C	19:AS:22:LEU:H	2.14	0.55
20:AT:74:LYS:C	20:AT:76:ALA:H	2.15	0.55
26:B0:40:GLN:HE22	26:B0:45:PHE:N	2.02	0.55
28:B2:48:HIS:NE2	28:B2:49:LYS:HE3	2.22	0.55
36:BA:134:C:H2'	36:BA:135:G:H8	1.72	0.55
36:BA:310:A:OP1	57:BY:17:SER:O	2.25	0.55
36:BA:324:A:H2'	36:BA:325:G:O4'	2.07	0.55
36:BA:1485:G:H22	36:BA:1505:C:H5'	1.72	0.55
36:BA:1503:U:C4	36:BA:1504:C:N4	2.74	0.55
36:BA:2341:G:H2'	36:BA:2342:C:C6	2.41	0.55
36:BA:2822:G:O6	50:BR:4:LEU:HB3	2.06	0.55
37:BB:7:G:C3'	37:BB:8:U:H5"	2.36	0.55
39:BD:61:LEU:O	39:BD:63:ARG:NH1	2.40	0.55
39:BD:142:VAL:HG22	39:BD:143:HIS:N	2.20	0.55
43:BH:85:LYS:HE3	43:BH:85:LYS:O	2.06	0.55
46:BN:57:ALA:O	46:BN:58:ASP:C	2.50	0.55
48:BP:39:LYS:CD	48:BP:40:SER:H	2.18	0.55
48:BP:45:LEU:CD1	48:BP:46:LYS:H	2.20	0.55
48:BP:56:SER:HB3	48:BP:60:MET:HG2	1.89	0.55
48:BP:62:LEU:N	48:BP:62:LEU:HD23	2.22	0.55
49:BQ:22:LYS:H	58:BZ:78:LYS:NZ	1.99	0.55
56:BX:13:LEU:HA	56:BX:18:TYR:CZ	2.42	0.55
1:CA:189(H):G:O2'	1:CA:189(I):G:H8	1.89	0.55
1:CA:1535:C:H2'	1:CA:1536:C:C6	2.42	0.55
2:CB:124:SER:O	2:CB:127:ILE:HG12	2.07	0.55
4:CD:9:CYS:SG	4:CD:31:CYS:O	2.64	0.55
6:CF:8:ILE:HG23	6:CF:85:VAL:HG13	1.89	0.55
9:CI:53:VAL:CG1	9:CI:95:LYS:HD3	2.32	0.55
9:CI:54:ASP:C	9:CI:56:LEU:H	2.14	0.55
9:CI:126:SER:O	9:CI:127:LYS:HB3	2.06	0.55
20:CT:47:GLY:C	20:CT:49:ALA:H	2.12	0.55
25:CZ:69:GLU:HB2	25:CZ:273:HIS:CE1	2.42	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:CZ:178:ALA:HB1	25:CZ:199:ILE:CD1	2.37	0.55
32:D6:28:ARG:CA	32:D6:32:ASN:HD22	2.19	0.55
34:D8:41:ILE:HD12	36:DA:2419:U:P	2.46	0.55
36:DA:654(T):C:O2'	36:DA:654(U):A:O4'	2.17	0.55
36:DA:1411:C:H2'	36:DA:1412:A:C8	2.41	0.55
36:DA:1496:A:H8	36:DA:1577:C:HO2'	1.55	0.55
36:DA:2096:U:H2'	36:DA:2097:C:C6	2.41	0.55
36:DA:2373:G:H2'	36:DA:2374:C:C6	2.42	0.55
36:DA:2408:U:H2'	36:DA:2409:G:C8	2.42	0.55
37:DB:35:U:O2'	37:DB:36:C:H5'	2.06	0.55
37:DB:67:G:O2'	37:DB:68:C:H6	1.89	0.55
38:DC:96:GLY:H	38:DC:99:ILE:HG13	1.71	0.55
39:DD:44:ASN:OD1	39:DD:44:ASN:N	2.38	0.55
47:DO:12:ASP:C	47:DO:14:THR:H	2.13	0.55
48:DP:56:SER:HB3	48:DP:60:MET:HG2	1.88	0.55
50:DR:28:LEU:CD2	50:DR:29:LEU:HD12	2.37	0.55
54:DV:38:LEU:HD23	54:DV:39:LEU:N	2.21	0.55
54:DV:47:VAL:HG23	54:DV:47:VAL:O	2.07	0.55
56:DX:35:THR:HB	56:DX:38:GLU:HB3	1.87	0.55
56:DX:50:LYS:H	56:DX:87:GLN:HE22	1.55	0.55
57:DY:28:LYS:HB3	57:DY:39:VAL:H	1.70	0.55
58:DZ:141:VAL:HA	58:DZ:144:LEU:HD23	1.89	0.55
1:AA:542:G:P	4:AD:10:ARG:HH21	2.28	0.55
3:AC:50:ALA:HB1	3:AC:70:VAL:CG1	2.37	0.55
7:AG:152:ALA:O	7:AG:155:ARG:HG3	2.06	0.55
13:AM:12:ASN:HD22	13:AM:12:ASN:N	1.95	0.55
19:AS:48:THR:HG22	19:AS:61:TYR:CA	2.36	0.55
25:AZ:24:LYS:H	25:AZ:105:VAL:HG11	1.71	0.55
25:AZ:330:ARG:NH1	25:AZ:334:PHE:HB3	2.22	0.55
25:AZ:349:VAL:HG21	25:AZ:374:LEU:HD13	1.89	0.55
25:AZ:368:VAL:HG12	25:AZ:369:THR:N	2.21	0.55
35:B9:7:VAL:HG22	35:B9:34:GLN:HG2	1.88	0.55
35:B9:29:ASN:HD22	35:B9:29:ASN:N	2.03	0.55
36:BA:321:G:N3	41:BF:165:ARG:HD3	2.22	0.55
36:BA:643:A:H2'	36:BA:644:A:O4'	2.07	0.55
36:BA:888:C:H2'	36:BA:889:C:C4'	2.36	0.55
36:BA:910:A:H2'	36:BA:911:A:C8	2.42	0.55
36:BA:1493:C:C4	36:BA:2206:G:O2'	2.59	0.55
36:BA:1493:C:O2	36:BA:1493:C:H2'	2.07	0.55
36:BA:1516:C:O2'	36:BA:1517:G:H5"	2.06	0.55
36:BA:1722:A:O2'	36:BA:1739:U:C5'	2.54	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1971:A:C4	39:BD:241:PRO:HD3	2.42	0.55
36:BA:2125:G:OP1	38:BC:40:THR:HG21	2.07	0.55
36:BA:2160:G:H5'	36:BA:2160:G:C8	2.38	0.55
37:BB:111:G:O2'	37:BB:112:U:H5'	2.07	0.55
41:BF:103:LYS:HG3	41:BF:106:ARG:HH21	1.71	0.55
42:BG:43:LEU:N	42:BG:43:LEU:HD22	2.21	0.55
43:BH:149:ARG:HG3	43:BH:162:ILE:HG12	1.87	0.55
48:BP:87:ASP:O	48:BP:90:ARG:HB2	2.07	0.55
49:BQ:79:LEU:HD23	49:BQ:80:GLU:H	1.70	0.55
50:BR:9:LYS:C	50:BR:10:LEU:HG	2.31	0.55
51:BS:93:LYS:O	51:BS:95:HIS:N	2.40	0.55
52:BT:30:VAL:HG21	52:BT:83:ILE:HG12	1.88	0.55
53:BU:65:ILE:HG12	53:BU:96:ALA:HB1	1.87	0.55
58:BZ:62:PRO:C	58:BZ:64:GLY:N	2.63	0.55
58:BZ:119:GLU:C	58:BZ:121:HIS:N	2.64	0.55
1:CA:516:U:C4	1:CA:517:G:C6	2.95	0.55
1:CA:769:G:H4'	1:CA:1513:A:H4'	1.89	0.55
1:CA:1314:C:OP2	19:CS:6:LYS:HG3	2.06	0.55
4:CD:150:GLU:C	4:CD:152:SER:H	2.13	0.55
9:CI:20:ARG:HB2	9:CI:20:ARG:CZ	2.36	0.55
16:CP:23:ASP:O	16:CP:24:ALA:C	2.49	0.55
17:CQ:52:LYS:HD3	17:CQ:55:ASP:OD2	2.07	0.55
19:CS:40:ILE:HG22	19:CS:40:ILE:O	2.06	0.55
22:CV:62:C:H2'	22:CV:62:C:O2	2.06	0.55
27:D1:3:LYS:HB2	27:D1:3:LYS:NZ	2.21	0.55
32:D6:15:GLU:CD	32:D6:18:ARG:NH2	2.64	0.55
34:D8:50:LEU:N	34:D8:53:PRO:HD3	2.21	0.55
36:DA:483:A:H5"	57:DY:49:VAL:HG22	1.89	0.55
36:DA:612:C:H2'	36:DA:613:G:H5'	1.86	0.55
36:DA:1400:G:H2'	36:DA:1401:G:C8	2.42	0.55
36:DA:1412:A:O2'	36:DA:1413:G:H5'	2.07	0.55
36:DA:1708:C:O2'	36:DA:1709:U:H5'	2.06	0.55
39:DD:6:PHE:HE1	39:DD:18:VAL:HG12	1.71	0.55
40:DE:107:THR:O	40:DE:190:GLY:CA	2.54	0.55
41:DF:39:TRP:CB	41:DF:101:LEU:HD22	2.37	0.55
42:DG:6:ALA:O	42:DG:10:LYS:HD3	2.07	0.55
43:DH:85:LYS:HE3	43:DH:85:LYS:C	2.32	0.55
43:DH:126:PRO:O	43:DH:127:GLU:HB2	2.07	0.55
47:DO:4:PRO:O	47:DO:5:GLN:CB	2.55	0.55
48:DP:16:ARG:CZ	48:DP:18:ARG:HG2	2.37	0.55
48:DP:144:GLU:N	48:DP:145:PRO:HD3	2.22	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:DS:90:GLY:C	51:DS:92:TYR:H	2.14	0.55
57:DY:81:LYS:HD2	57:DY:96:ILE:CD1	2.36	0.55
58:DZ:11:GLU:OE1	58:DZ:12:GLY:N	2.38	0.55
1:AA:1157:A:H1'	1:AA:1181:G:N2	2.22	0.55
1:AA:1221:G:H4'	19:AS:77:THR:CG2	2.37	0.55
2:AB:119:GLU:O	2:AB:122:PHE:HB3	2.07	0.55
2:AB:124:SER:O	2:AB:127:ILE:HG12	2.06	0.55
3:AC:70:VAL:HG13	3:AC:72:LYS:H	1.71	0.55
5:AE:41:VAL:HG23	5:AE:67:VAL:CG1	2.36	0.55
6:AF:61:LEU:O	6:AF:62:TRP:CB	2.55	0.55
7:AG:113:GLU:HG3	7:AG:118:VAL:HG23	1.88	0.55
9:AI:54:ASP:C	9:AI:56:LEU:H	2.14	0.55
11:AK:48:ILE:HD11	11:AK:67:ASP:CB	2.37	0.55
16:AP:21:VAL:HG12	16:AP:34:GLU:O	2.07	0.55
25:AZ:25:THR:HB	60:AZ:501:GDP:O2B	2.06	0.55
28:B2:9:GLN:OE1	28:B2:60:LEU:HD11	2.07	0.55
32:B6:15:GLU:HG2	32:B6:18:ARG:CZ	2.36	0.55
33:B7:12:ARG:HG2	33:B7:46:VAL:HG22	1.89	0.55
34:B8:23:VAL:HG12	34:B8:46:ARG:NH1	2.10	0.55
36:BA:8:A:H2'	36:BA:9:U:C6	2.41	0.55
36:BA:530:G:C5	36:BA:2022:U:H5"	2.41	0.55
36:BA:1494:A:C3'	36:BA:1495:A:H5"	2.36	0.55
36:BA:1547:C:O2'	36:BA:1548:C:H5'	2.07	0.55
36:BA:2206:G:H21	36:BA:2207:G:C5'	2.19	0.55
38:BC:103:ILE:O	38:BC:104:LEU:C	2.50	0.55
41:BF:160:ASN:ND2	41:BF:160:ASN:C	2.63	0.55
43:BH:155:SER:O	43:BH:157:TYR:N	2.37	0.55
45:BK:66:UNK:O	45:BK:67:UNK:C	2.55	0.55
48:BP:127:ALA:HB3	48:BP:130:PHE:CZ	2.42	0.55
51:BS:28:VAL:HG12	51:BS:29:PHE:N	2.22	0.55
54:BV:24:LYS:HA	54:BV:92:THR:CG2	2.32	0.55
54:BV:38:LEU:HD23	54:BV:39:LEU:N	2.21	0.55
55:BW:55:ALA:C	55:BW:57:ASN:H	2.15	0.55
57:BY:62:GLU:N	57:BY:62:GLU:OE1	2.40	0.55
1:CA:1030(A):G:H1'	1:CA:1031:G:H1	1.71	0.55
3:CC:167:TRP:O	3:CC:168:ALA:HB3	2.07	0.55
4:CD:17:VAL:O	4:CD:18:LYS:C	2.50	0.55
5:CE:76:ILE:HG23	5:CE:93:PRO:HG3	1.89	0.55
12:CL:26:ALA:HA	12:CL:64:TYR:CD2	2.41	0.55
22:CW:3:C:H2'	22:CW:4:C:O4'	2.06	0.55
25:CZ:343:TYR:CE1	25:CZ:389:ARG:HD3	2.42	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:D8:25:MET:CG	48:DP:64:LYS:HB2	2.36	0.55
36:DA:676:A:H8	36:DA:2069:G:N2	1.97	0.55
36:DA:1198:U:H2'	36:DA:1199:U:C6	2.41	0.55
36:DA:1980:G:O2'	36:DA:1982:C:OP2	2.20	0.55
38:DC:103:ILE:O	38:DC:104:LEU:C	2.49	0.55
39:DD:147:LEU:CD1	39:DD:183:ARG:HH12	2.15	0.55
41:DF:4:VAL:HG11	41:DF:17:ARG:NE	2.22	0.55
43:DH:155:SER:O	43:DH:157:TYR:N	2.38	0.55
43:DH:157:TYR:O	43:DH:157:TYR:HD1	1.90	0.55
47:DO:26:LYS:HB3	47:DO:30:ALA:HB2	1.89	0.55
50:DR:96:ARG:NH2	50:DR:117:VAL:HG23	2.22	0.55
1:AA:424:G:O2'	1:AA:425:G:H5'	2.07	0.55
1:AA:1255:G:H5"	3:AC:26:LYS:HE2	1.89	0.55
3:AC:81:GLY:O	3:AC:82:GLU:C	2.50	0.55
4:AD:70:ILE:HG22	4:AD:71:SER:N	2.22	0.55
5:AE:40:ARG:HH11	5:AE:40:ARG:HG2	1.71	0.55
6:AF:19:LEU:HD11	6:AF:59:TYR:CZ	2.42	0.55
9:AI:114:TYR:CE1	10:AJ:59:SER:HA	2.39	0.55
11:AK:18:ARG:HH21	11:AK:36:ASP:C	2.14	0.55
11:AK:115:PRO:C	11:AK:117:ASN:H	2.14	0.55
13:AM:35:GLU:C	13:AM:37:THR:H	2.15	0.55
25:AZ:11:HIS:O	25:AZ:12:VAL:HG13	2.06	0.55
32:B6:15:GLU:CG	32:B6:18:ARG:NH1	2.65	0.55
32:B6:28:ARG:CA	32:B6:32:ASN:ND2	2.68	0.55
34:B8:52:LYS:N	34:B8:53:PRO:CD	2.70	0.55
36:BA:234:C:H2'	36:BA:235:U:H6	1.69	0.55
36:BA:2025:C:H2'	36:BA:2026:C:H6	1.71	0.55
36:BA:2037:G:H2'	36:BA:2038:G:C8	2.41	0.55
36:BA:2317:C:H2'	36:BA:2318:G:C5'	2.30	0.55
36:BA:2892:A:H62	36:BA:2893:G:N2	2.05	0.55
38:BC:96:GLY:H	38:BC:99:ILE:HG13	1.71	0.55
41:BF:160:ASN:HD21	41:BF:162:LEU:HB2	1.72	0.55
42:BG:103:LEU:HA	42:BG:106:LEU:HB3	1.89	0.55
47:BO:88:ASN:OD1	47:BO:90:GLN:N	2.38	0.55
47:BO:104:ARG:HE	52:BT:33:LYS:HZ2	1.53	0.55
50:BR:18:LEU:HD13	50:BR:18:LEU:C	2.32	0.55
55:BW:37:ARG:HG3	55:BW:37:ARG:HH11	1.72	0.55
58:BZ:96:VAL:HG12	58:BZ:128:VAL:O	2.06	0.55
1:CA:255:G:O6	1:CA:266:G:O6	2.25	0.55
9:CI:9:ARG:HG3	9:CI:14:VAL:HG13	1.88	0.55
10:CJ:6:ILE:HG13	10:CJ:72:VAL:HB	1.87	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:CJ:6:ILE:HG13	10:CJ:6:ILE:O	2.07	0.55
22:CV:1:G:H1'	26:D0:5:LYS:NZ	2.21	0.55
25:CZ:72:THR:HG22	25:CZ:203:LEU:HD21	1.89	0.55
25:CZ:324:LYS:HA	25:CZ:364:PRO:HB3	1.89	0.55
26:D0:40:GLN:NE2	26:D0:44:ARG:HB2	2.22	0.55
32:D6:41:PRO:HG2	32:D6:44:ARG:O	2.06	0.55
36:DA:272(I):U:O2'	36:DA:272(J):C:H5'	2.07	0.55
36:DA:1503:U:C4	36:DA:1504:C:N4	2.75	0.55
36:DA:1820:U:O2	39:DD:201:HIS:HB3	2.06	0.55
36:DA:2010:G:H5"	55:DW:42:ARG:HB2	1.89	0.55
36:DA:2125:G:OP1	38:DC:40:THR:HG21	2.06	0.55
36:DA:2240:C:O2'	36:DA:2241:A:H5'	2.06	0.55
36:DA:2720:U:H5'	36:DA:2721:A:OP2	2.07	0.55
36:DA:2761:G:H2'	36:DA:2762:G:H5"	1.88	0.55
36:DA:2893:G:H5'	36:DA:2894:G:C5'	2.33	0.55
38:DC:120:MET:HA	38:DC:123:VAL:CG1	2.37	0.55
40:DE:21:VAL:HG23	40:DE:21:VAL:O	2.06	0.55
48:DP:23:PRO:C	48:DP:33:ARG:CZ	2.80	0.55
1:AA:266:G:H5'	1:AA:268:C:H41	1.72	0.55
2:AB:18:GLY:H	2:AB:42:ILE:CG2	2.20	0.55
2:AB:142:LEU:HD23	2:AB:142:LEU:C	2.32	0.55
4:AD:150:GLU:C	4:AD:152:SER:H	2.14	0.55
25:AZ:69:GLU:HB2	25:AZ:273:HIS:CE1	2.42	0.55
25:AZ:171:ILE:HD12	25:AZ:201:GLU:OE1	2.07	0.55
28:B2:13:ALA:C	28:B2:15:LYS:H	2.15	0.55
30:B4:5:ILE:H	30:B4:5:ILE:HD13	1.72	0.55
32:B6:26:ASN:ND2	32:B6:32:ASN:OD1	2.39	0.55
34:B8:33:ASN:ND2	36:BA:2419:U:H5"	2.22	0.55
35:B9:16:VAL:HG11	36:BA:1032:A:O3'	2.07	0.55
36:BA:612:C:H2'	36:BA:613:G:H5'	1.86	0.55
36:BA:1059:G:H2'	36:BA:1060:U:H5	1.72	0.55
36:BA:1427:A:O2'	36:BA:1428:C:OP2	2.24	0.55
36:BA:1451:C:N4	36:BA:1461:G:H1	2.05	0.55
36:BA:1496:A:H8	36:BA:1577:C:HO2'	1.53	0.55
36:BA:1542:A:C8	36:BA:1544:A:H5'	2.41	0.55
36:BA:2393:A:H4'	48:BP:61:ARG:O	2.07	0.55
36:BA:2870:C:H5"	50:BR:65:LEU:HD21	1.88	0.55
47:BO:12:ASP:C	47:BO:14:THR:H	2.13	0.55
53:BU:92:ARG:HD3	53:BU:94:ASN:HB3	1.89	0.55
1:CA:66:G:H4'	1:CA:173:U:C5	2.42	0.55
11:CK:18:ARG:HH21	11:CK:36:ASP:C	2.14	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:CM:4:ILE:O	13:CM:5:ALA:C	2.50	0.55
25:CZ:263:ARG:HG3	25:CZ:264:LYS:N	2.20	0.55
28:D2:31:GLU:CB	28:D2:53:LEU:HD11	2.37	0.55
30:D4:12:ALA:HB1	30:D4:29:PRO:O	2.07	0.55
36:DA:1528:A:N1	36:DA:1542:A:H2	2.04	0.55
36:DA:1547:C:O2'	36:DA:1548:C:H5'	2.07	0.55
38:DC:119:VAL:HG22	38:DC:119:VAL:O	2.07	0.55
48:DP:16:ARG:NH1	48:DP:16:ARG:CB	2.67	0.55
53:DU:112:ARG:NH1	54:DV:46:VAL:HG11	2.22	0.55
57:DY:62:GLU:N	57:DY:62:GLU:OE1	2.40	0.55
57:DY:79:CYS:SG	57:DY:80:GLY:N	2.80	0.55
58:DZ:54:HIS:HB2	58:DZ:55:HIS:CD2	2.42	0.55
58:DZ:150:LEU:CD2	58:DZ:172:ALA:HB3	2.36	0.55
1:AA:115:G:H1'	1:AA:116:A:N7	2.21	0.54
1:AA:626:U:H2'	1:AA:627:G:H8	1.71	0.54
2:AB:236:TYR:O	2:AB:238:LEU:N	2.40	0.54
4:AD:43:HIS:O	4:AD:45:GLN:N	2.40	0.54
9:AI:33:PHE:O	9:AI:35:GLU:N	2.40	0.54
9:AI:50:LEU:HB3	9:AI:56:LEU:HA	1.88	0.54
9:AI:88:TYR:O	9:AI:89:ASN:HB2	2.06	0.54
20:AT:64:ASP:OD1	20:AT:81:LYS:HD2	2.07	0.54
25:AZ:72:THR:HG22	25:AZ:203:LEU:HD21	1.88	0.54
26:B0:12:ASN:O	26:B0:14:ARG:N	2.36	0.54
26:B0:40:GLN:HE22	26:B0:44:ARG:N	2.05	0.54
26:B0:40:GLN:NE2	26:B0:44:ARG:HB2	2.21	0.54
27:B1:48:LYS:HG2	27:B1:50:ARG:NH2	2.22	0.54
33:B7:34:ARG:HD3	36:BA:467:G:OP2	2.07	0.54
36:BA:332:A:O2'	36:BA:333:G:O5'	2.24	0.54
36:BA:414:C:O2'	36:BA:415:A:H5'	2.06	0.54
36:BA:1411:C:H2'	36:BA:1412:A:C8	2.42	0.54
36:BA:2358:G:H22	48:BP:55:ARG:NH2	2.05	0.54
36:BA:2657:A:O2'	43:BH:160:LYS:HE2	2.07	0.54
36:BA:2776:A:H4'	36:BA:2777:G:H5"	1.89	0.54
42:BG:52:ILE:HD13	42:BG:52:ILE:H	1.73	0.54
42:BG:64:THR:CG2	42:BG:94:LEU:HD11	2.37	0.54
43:BH:94:TYR:HE2	43:BH:160:LYS:HB3	1.72	0.54
46:BN:61:ARG:HG3	46:BN:61:ARG:NH1	2.21	0.54
50:BR:28:LEU:CD2	50:BR:29:LEU:HD12	2.37	0.54
51:BS:58:LEU:CG	51:BS:59:LYS:H	2.20	0.54
52:BT:31:SER:OG	52:BT:32:TYR:CE1	2.60	0.54
52:BT:48:ILE:C	52:BT:48:ILE:HD12	2.32	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BY:3:VAL:C	57:BY:5:MET:H	2.14	0.54
57:BY:36:ALA:HB1	57:BY:67:LEU:O	2.07	0.54
1:CA:437:U:H5"	4:CD:155:LEU:HD13	1.88	0.54
1:CA:585:G:H4'	12:CL:8:ASN:ND2	2.22	0.54
1:CA:939:G:C5'	7:CG:102:ARG:HH22	2.19	0.54
1:CA:992:U:H1'	1:CA:993:G:C2	2.43	0.54
1:CA:1125:U:C5'	1:CA:1126:U:H5	2.21	0.54
2:CB:88:ALA:HB2	2:CB:219:VAL:HG13	1.87	0.54
6:CF:63:TYR:N	6:CF:63:TYR:CD1	2.75	0.54
9:CI:50:LEU:HB3	9:CI:56:LEU:HA	1.88	0.54
17:CQ:53:LEU:HD23	17:CQ:54:GLY:N	2.22	0.54
17:CQ:53:LEU:HD21	17:CQ:85:VAL:HG11	1.89	0.54
30:D4:5:ILE:HD13	30:D4:5:ILE:H	1.72	0.54
31:D5:57:VAL:O	31:D5:58:LEU:HD12	2.07	0.54
36:DA:234:C:H2'	36:DA:235:U:H6	1.71	0.54
36:DA:270:A:N1	36:DA:366:C:O2'	2.36	0.54
36:DA:583:G:OP2	53:DU:10:ARG:HD2	2.06	0.54
36:DA:1411:C:H2'	36:DA:1412:A:H8	1.72	0.54
36:DA:2319:G:H4'	36:DA:2319:G:OP2	2.07	0.54
36:DA:2761:G:C2'	36:DA:2762:G:H5"	2.36	0.54
39:DD:223:GLY:O	39:DD:224:ALA:O	2.25	0.54
43:DH:76:VAL:O	43:DH:79:VAL:HG22	2.08	0.54
43:DH:105:LEU:CD2	43:DH:113:VAL:HB	2.37	0.54
51:DS:58:LEU:CG	51:DS:59:LYS:H	2.20	0.54
51:DS:97:ARG:NH2	51:DS:98:VAL:HA	2.22	0.54
56:DX:52:VAL:O	56:DX:53:LYS:C	2.50	0.54
58:DZ:14:LYS:O	58:DZ:14:LYS:HD2	2.08	0.54
1:AA:1127:G:H1'	1:AA:1147:C:H42	1.72	0.54
1:AA:1148:U:H2'	1:AA:1149:C:O4'	2.06	0.54
4:AD:152:SER:C	4:AD:154:ASN:H	2.15	0.54
5:AE:28:PHE:O	5:AE:47:LYS:HA	2.07	0.54
6:AF:63:TYR:HD1	6:AF:63:TYR:N	2.05	0.54
11:AK:124:LYS:HD2	11:AK:125:PHE:CZ	2.43	0.54
16:AP:14:ASN:N	16:AP:15:PRO:CD	2.70	0.54
24:AY:45:U:H3'	24:AY:46:7MG:H5'	1.84	0.54
30:B4:12:ALA:HB1	30:B4:29:PRO:O	2.07	0.54
36:BA:573:G:O2'	36:BA:574:C:H3'	2.07	0.54
36:BA:925:C:H2'	36:BA:926:A:C5'	2.25	0.54
39:BD:45:ASN:OD1	39:BD:46:GLN:N	2.40	0.54
42:BG:39:ILE:HD11	42:BG:64:THR:HG21	1.88	0.54
42:BG:46:ALA:N	42:BG:47:LYS:HD2	2.16	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BG:72:ARG:HE	42:BG:86:MET:HA	1.68	0.54
43:BH:157:TYR:HD1	43:BH:157:TYR:O	1.90	0.54
46:BN:25:ARG:HH11	46:BN:25:ARG:HG2	1.73	0.54
49:BQ:133:ARG:HB2	49:BQ:133:ARG:NH1	2.17	0.54
58:BZ:61:LEU:HD12	58:BZ:67:LEU:HD13	1.88	0.54
58:BZ:77:ASP:O	58:BZ:79:ARG:N	2.40	0.54
1:CA:416:G:O2'	1:CA:417:C:H5'	2.07	0.54
1:CA:487:A:H2'	1:CA:488:C:O4'	2.07	0.54
2:CB:17:PHE:O	2:CB:18:GLY:O	2.25	0.54
2:CB:17:PHE:HD2	2:CB:44:LEU:HD11	1.71	0.54
2:CB:188:ALA:O	2:CB:202:PRO:HA	2.07	0.54
3:CC:25:GLY:O	3:CC:26:LYS:C	2.51	0.54
4:CD:110:PHE:N	4:CD:110:PHE:CD1	2.75	0.54
4:CD:191:ARG:HD3	4:CD:200:GLU:OE2	2.06	0.54
9:CI:58:HIS:O	9:CI:58:HIS:CG	2.61	0.54
10:CJ:61:GLU:HG3	14:CN:58:LYS:CE	2.27	0.54
12:CL:126:LYS:HE2	12:CL:126:LYS:HA	1.88	0.54
30:D4:11:PRO:HB3	30:D4:25:TYR:CE2	2.42	0.54
34:D8:32:LEU:HD13	36:DA:2392:A:OP1	2.07	0.54
35:D9:29:ASN:HD22	35:D9:29:ASN:N	2.03	0.54
36:DA:108:U:H2'	36:DA:109:G:C8	2.42	0.54
36:DA:470:A:H2'	36:DA:471:A:O4'	2.07	0.54
36:DA:984:A:H5"	36:DA:985:C:H5	1.71	0.54
36:DA:1469:A:H2'	36:DA:1470:G:C8	2.42	0.54
36:DA:2317:C:H2'	36:DA:2318:G:C5'	2.30	0.54
36:DA:2693:A:H2'	36:DA:2694:G:H8	1.72	0.54
39:DD:6:PHE:CE1	39:DD:18:VAL:HG12	2.42	0.54
40:DE:59:VAL:O	40:DE:60:ASN:CG	2.50	0.54
41:DF:126:VAL:O	41:DF:196:LEU:HG	2.07	0.54
42:DG:43:LEU:HD21	42:DG:90:LEU:HB2	1.88	0.54
44:DJ:127:UNK:HA	44:DJ:130:UNK:CB	2.38	0.54
46:DN:57:ALA:O	46:DN:58:ASP:C	2.50	0.54
46:DN:76:SER:N	46:DN:81:GLY:O	2.35	0.54
51:DS:53:SER:C	51:DS:55:ALA:H	2.14	0.54
52:DT:24:PRO:HD3	52:DT:52:ILE:HD12	1.90	0.54
54:DV:28:GLU:HB3	54:DV:29:PRO:HD2	1.89	0.54
1:AA:645:C:H2'	1:AA:646:U:C6	2.41	0.54
1:AA:665:A:H2'	1:AA:732:C:O2	2.06	0.54
1:AA:992:U:H1'	1:AA:993:G:C2	2.42	0.54
1:AA:1001:A:N3	1:AA:1001:A:H2'	2.22	0.54
1:AA:1211:U:H1'	1:AA:1213:A:C2	2.42	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1225:A:H2'	1:AA:1226:C:C5	2.43	0.54
2:AB:144:ARG:HG3	2:AB:145:LEU:N	2.22	0.54
3:AC:19:GLU:O	3:AC:56:ASP:HA	2.07	0.54
12:AL:117:ARG:O	12:AL:118:SER:C	2.51	0.54
16:AP:5:ARG:HH11	16:AP:5:ARG:HG3	1.71	0.54
24:AY:10:G:N2	24:AY:26:A:H1'	2.22	0.54
25:AZ:19:HIS:HA	25:AZ:115:GLN:HB2	1.90	0.54
25:AZ:172:ARG:O	25:AZ:198:LYS:HD3	2.07	0.54
29:B3:15:TYR:HD2	29:B3:19:GLN:HE22	1.55	0.54
34:B8:62:LEU:N	34:B8:63:PRO:HD2	2.23	0.54
36:BA:267:C:H2'	36:BA:268:C:C6	2.43	0.54
36:BA:470:A:H2'	36:BA:471:A:O4'	2.08	0.54
36:BA:984:A:H5"	36:BA:985:C:H5	1.72	0.54
36:BA:1171:G:N7	36:BA:1173:G:H1'	2.22	0.54
36:BA:1354:A:H2'	36:BA:1355:G:O4'	2.07	0.54
36:BA:1494:A:H3'	36:BA:1494:A:N3	2.21	0.54
36:BA:2199:A:H3'	36:BA:2200:C:C6	2.43	0.54
36:BA:2386:C:H2'	36:BA:2387:U:C6	2.42	0.54
36:BA:2408:U:H2'	36:BA:2409:G:C8	2.42	0.54
37:BB:105:A:H2'	37:BB:106:G:O4'	2.07	0.54
38:BC:120:MET:HA	38:BC:123:VAL:CG1	2.36	0.54
43:BH:158:HIS:CE1	43:BH:169:VAL:HG12	2.42	0.54
47:BO:4:PRO:O	47:BO:5:GLN:CB	2.52	0.54
51:BS:17:ARG:HA	51:BS:20:ARG:HH11	1.72	0.54
54:BV:5:VAL:HG21	54:BV:35:LEU:CD2	2.37	0.54
56:BX:18:TYR:O	56:BX:20:GLY:N	2.40	0.54
57:BY:47:LYS:HG3	57:BY:60:PHE:CZ	2.43	0.54
1:CA:429:U:H1'	1:CA:430:A:H5"	1.90	0.54
1:CA:977:A:O2'	1:CA:978:A:H5"	2.08	0.54
1:CA:1017:G:H2'	1:CA:1018:C:C6	2.43	0.54
1:CA:1310:G:O2'	1:CA:1311:G:H5'	2.07	0.54
2:CB:144:ARG:HG3	2:CB:145:LEU:N	2.21	0.54
2:CB:172:ILE:HD12	2:CB:172:ILE:N	2.19	0.54
3:CC:19:GLU:O	3:CC:56:ASP:HA	2.08	0.54
4:CD:126:ILE:HG22	4:CD:127:THR:N	2.21	0.54
5:CE:63:ARG:CA	5:CE:66:MET:HE1	2.32	0.54
7:CG:99:LEU:O	7:CG:102:ARG:HG2	2.07	0.54
17:CQ:45:HIS:HB2	17:CQ:65:ILE:CD1	2.37	0.54
22:CV:48:C:OP2	22:CV:48:C:H6	1.91	0.54
25:CZ:137:LYS:HA	60:CZ:501:GDP:N1	2.22	0.54
25:CZ:189:ARG:HH11	25:CZ:189:ARG:HG2	1.72	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:D3:4:LEU:O	29:D3:36:VAL:HA	2.08	0.54
36:DA:8:A:H2'	36:DA:9:U:C6	2.41	0.54
36:DA:39:C:H2'	36:DA:40:C:C6	2.42	0.54
36:DA:191:A:H2'	36:DA:192:C:C6	2.42	0.54
36:DA:267:C:H2'	36:DA:268:C:C6	2.42	0.54
36:DA:559:G:N2	53:DU:49:HIS:CD2	2.75	0.54
36:DA:708:C:N4	36:DA:723:G:H1	2.04	0.54
36:DA:2001:A:H4'	36:DA:2689:U:H2'	1.90	0.54
36:DA:2392:A:H2	36:DA:2424:C:N4	1.99	0.54
37:DB:81:G:O6	37:DB:96:U:O2	2.25	0.54
38:DC:116:THR:HB	38:DC:147:PHE:CD1	2.43	0.54
42:DG:15:VAL:C	42:DG:17:PRO:HD2	2.33	0.54
42:DG:125:PHE:O	42:DG:126:ASP:O	2.26	0.54
46:DN:29:LYS:C	46:DN:31:ALA:N	2.65	0.54
46:DN:46:VAL:CG1	46:DN:48:MET:HG3	2.38	0.54
49:DQ:42:ILE:HD13	49:DQ:97:VAL:HG21	1.90	0.54
50:DR:99:LYS:H	50:DR:99:LYS:CD	2.03	0.54
51:DS:22:GLY:O	51:DS:23:ARG:O	2.25	0.54
51:DS:106:ARG:CZ	51:DS:106:ARG:HB3	2.37	0.54
58:DZ:108:PRO:C	58:DZ:110:GLY:H	2.15	0.54
1:AA:1347:G:C6	9:AI:107:ARG:NH2	2.76	0.54
9:AI:20:ARG:HB2	9:AI:20:ARG:CZ	2.37	0.54
10:AJ:4:ILE:HD12	10:AJ:4:ILE:N	2.21	0.54
10:AJ:33:GLN:HB2	10:AJ:75:ILE:CD1	2.33	0.54
11:AK:84:VAL:HG11	11:AK:95:ILE:HD11	1.88	0.54
22:AV:44:G:C2'	22:AV:45:U:H5'	2.36	0.54
24:AY:70:C:H2'	24:AY:71:C:H6	1.72	0.54
26:B0:36:ILE:HD11	36:BA:2355:C:H4'	1.88	0.54
26:B0:43:THR:HG22	36:BA:2331:G:O2'	2.08	0.54
36:BA:39:C:H2'	36:BA:40:C:C6	2.42	0.54
36:BA:528:A:C2	36:BA:2042:A:H2'	2.41	0.54
36:BA:1567:A:C5'	39:BD:58:HIS:CD2	2.89	0.54
36:BA:1572:A:O2'	36:BA:1573:G:H5'	2.07	0.54
36:BA:2019:A:C2'	36:BA:2020:A:O5'	2.54	0.54
36:BA:2206:G:H3'	36:BA:2206:G:N3	2.22	0.54
36:BA:2784:C:H1'	40:BE:37:ARG:NH1	2.18	0.54
40:BE:49:LEU:O	40:BE:78:LEU:CB	2.56	0.54
40:BE:77:ILE:HG22	40:BE:78:LEU:N	2.22	0.54
40:BE:101:ARG:HE	40:BE:171:GLU:HB2	1.71	0.54
40:BE:116:VAL:O	40:BE:117:MET:CB	2.54	0.54
41:BF:167:ALA:HB1	41:BF:173:VAL:CG1	2.23	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BH:126:PRO:O	43:BH:127:GLU:CB	2.56	0.54
1:CA:187:C:H4'	20:CT:85:MET:O	2.08	0.54
1:CA:625:G:H2'	1:CA:626:U:H6	1.72	0.54
6:CF:75:LEU:O	6:CF:78:GLU:HB3	2.06	0.54
8:CH:89:PRO:HA	8:CH:92:ARG:HH11	1.71	0.54
9:CI:91:ASP:O	9:CI:93:ARG:N	2.40	0.54
12:CL:117:ARG:O	12:CL:119:LYS:O	2.26	0.54
22:CW:55:U:H5	22:CW:58:A:OP2	1.91	0.54
25:CZ:221:PHE:HA	25:CZ:244:ARG:O	2.07	0.54
35:D9:1:MET:CG	36:DA:2478:A:OP2	2.56	0.54
36:DA:227:A:C2	36:DA:2407:G:H1'	2.42	0.54
36:DA:414:C:O2'	36:DA:415:A:H5'	2.08	0.54
36:DA:1314:C:C2	36:DA:1339:G:N2	2.76	0.54
36:DA:1748:G:H5'	36:DA:1748:G:C8	2.40	0.54
36:DA:2360:A:C2	36:DA:2361:A:H1'	2.43	0.54
39:DD:32:SER:O	39:DD:36:PRO:CG	2.53	0.54
39:DD:45:ASN:OD1	39:DD:46:GLN:N	2.41	0.54
40:DE:2:LYS:HD3	40:DE:95:ILE:HG22	1.88	0.54
42:DG:38:VAL:CG2	42:DG:158:ALA:HB3	2.36	0.54
42:DG:173:LEU:O	42:DG:178:PHE:HB2	2.07	0.54
43:DH:52:VAL:HB	43:DH:69:ARG:HD3	1.89	0.54
43:DH:94:TYR:HE2	43:DH:160:LYS:HB3	1.73	0.54
48:DP:112:LEU:HD13	48:DP:112:LEU:O	2.07	0.54
51:DS:19:LYS:HB3	51:DS:20:ARG:NH2	2.21	0.54
51:DS:49:VAL:CG1	51:DS:50:SER:H	2.16	0.54
1:AA:266:G:H5"	1:AA:267:C:C5	2.42	0.54
1:AA:585:G:H4'	12:AL:8:ASN:ND2	2.21	0.54
4:AD:12:CYS:HA	4:AD:19:LEU:CD1	2.38	0.54
4:AD:126:ILE:HG22	4:AD:127:THR:N	2.23	0.54
5:AE:41:VAL:HG23	5:AE:67:VAL:HG13	1.89	0.54
9:AI:40:LEU:CD1	9:AI:70:LYS:HG2	2.37	0.54
16:AP:50:LYS:HD3	16:AP:51:VAL:N	2.22	0.54
17:AQ:82:MET:O	17:AQ:86:GLU:HG2	2.07	0.54
22:AW:39:U:H4'	22:AW:39:U:OP1	2.07	0.54
36:BA:282:A:N6	36:BA:359:A:H1'	2.22	0.54
36:BA:744:G:OP1	40:BE:132:HIS:HB3	2.07	0.54
38:BC:167:LYS:O	38:BC:167:LYS:HD2	2.07	0.54
39:BD:136:ILE:HB	39:BD:165:ILE:CD1	2.36	0.54
40:BE:45:THR:O	40:BE:46:ALA:HB2	2.07	0.54
40:BE:81:ILE:O	40:BE:82:ARG:O	2.26	0.54
48:BP:147:LEU:O	48:BP:148:LEU:HB2	2.08	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:BS:11:LYS:HG2	51:BS:11:LYS:O	2.06	0.54
53:BU:101:ARG:HG3	53:BU:101:ARG:NH1	2.23	0.54
58:BZ:51:ALA:CB	58:BZ:57:ILE:HD11	2.37	0.54
1:CA:186:C:H2'	1:CA:187:C:C6	2.43	0.54
1:CA:413:G:H1'	1:CA:428:G:H21	1.71	0.54
1:CA:541:G:H2'	1:CA:542:G:C8	2.35	0.54
1:CA:735:C:H2'	1:CA:736:C:H6	1.72	0.54
18:CR:22:VAL:O	18:CR:25:THR:HB	2.08	0.54
22:CW:71:G:N3	36:DA:1851:U:H4'	2.23	0.54
24:CY:10:G:N2	24:CY:26:A:H1'	2.22	0.54
31:D5:7:PRO:HG2	36:DA:2016:U:O2	2.07	0.54
36:DA:332:A:O2'	36:DA:333:G:O5'	2.25	0.54
36:DA:1023:U:H2'	36:DA:1024:G:H5'	1.89	0.54
36:DA:1336:A:H2'	36:DA:1337:G:C8	2.41	0.54
36:DA:2032:G:OP2	36:DA:2454:G:O2'	2.22	0.54
36:DA:2312:U:OP1	42:DG:73:ALA:HB1	2.08	0.54
41:DF:19:GLU:O	41:DF:20:LEU:HG	2.08	0.54
41:DF:103:LYS:HG3	41:DF:106:ARG:HH21	1.72	0.54
42:DG:172:LEU:HD23	42:DG:176:LEU:HD12	1.90	0.54
46:DN:34:LEU:HD13	46:DN:34:LEU:C	2.32	0.54
48:DP:50:ARG:HH11	48:DP:50:ARG:HG2	1.72	0.54
52:DT:50:ILE:CD1	52:DT:64:ARG:HB3	2.37	0.54
52:DT:78:LEU:C	52:DT:79:HIS:CD2	2.86	0.54
54:DV:38:LEU:O	54:DV:39:LEU:HD13	2.08	0.54
57:DY:6:HIS:N	57:DY:6:HIS:CD2	2.75	0.54
57:DY:13:VAL:CG1	57:DY:28:LYS:HD3	2.37	0.54
1:AA:1007:C:O2'	1:AA:1008:C:H5'	2.08	0.54
1:AA:1030(A):G:H1'	1:AA:1031:G:H1	1.72	0.54
1:AA:1320:C:O2'	1:AA:1321:C:H5'	2.08	0.54
3:AC:23:TYR:CD1	3:AC:23:TYR:C	2.86	0.54
4:AD:76:ARG:O	4:AD:80:GLU:HG2	2.07	0.54
8:AH:10:LEU:HD22	8:AH:83:ILE:HD11	1.90	0.54
14:AN:15:LYS:HB3	14:AN:16:PHE:CE2	2.41	0.54
25:AZ:135:MET:HE2	25:AZ:150:VAL:HB	1.89	0.54
28:B2:48:HIS:HA	36:BA:95:G:H4'	1.90	0.54
30:B4:28:LYS:O	30:B4:31:ILE:HD11	2.07	0.54
32:B6:29:ASN:O	32:B6:30:THR:C	2.50	0.54
32:B6:45:LYS:HG3	36:BA:2371:G:H4'	1.89	0.54
35:B9:1:MET:CG	36:BA:2478:A:OP2	2.55	0.54
36:BA:1341:U:H4'	56:BX:57:LEU:HB3	1.90	0.54
36:BA:1469:A:H2'	36:BA:1470:G:C8	2.43	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2693:A:H2'	36:BA:2694:G:H8	1.71	0.54
37:BB:81:G:O6	37:BB:96:U:O2	2.25	0.54
39:BD:48:ARG:HG3	39:BD:48:ARG:HH11	1.73	0.54
41:BF:157:VAL:HG21	41:BF:194:MET:HG2	1.89	0.54
49:BQ:66:ILE:C	49:BQ:66:ILE:HD12	2.33	0.54
1:CA:818:G:O2'	1:CA:819:A:H5'	2.07	0.54
1:CA:1150:U:O2	1:CA:1150:U:O4'	2.25	0.54
8:CH:2:LEU:O	8:CH:2:LEU:HD23	2.08	0.54
9:CI:91:ASP:C	9:CI:93:ARG:N	2.60	0.54
11:CK:21:ILE:HG13	11:CK:30:VAL:HG12	1.90	0.54
14:CN:39:LEU:HD11	14:CN:47:LEU:HD12	1.90	0.54
15:CO:82:ILE:CD1	15:CO:88:ARG:HB2	2.37	0.54
16:CP:50:LYS:HD3	16:CP:51:VAL:N	2.22	0.54
20:CT:64:ASP:OD1	20:CT:81:LYS:HD2	2.08	0.54
25:CZ:64:ASN:ND2	25:CZ:64:ASN:N	2.55	0.54
25:CZ:135:MET:HE2	25:CZ:150:VAL:HB	1.89	0.54
32:D6:15:GLU:CG	32:D6:18:ARG:CZ	2.85	0.54
34:D8:23:VAL:HG11	34:D8:46:ARG:HD3	1.90	0.54
36:DA:108:U:H2'	36:DA:109:G:H8	1.71	0.54
36:DA:654(H):G:C3'	36:DA:654(I):C:H5'	2.37	0.54
36:DA:1516:C:O2'	36:DA:1517:G:H5"	2.06	0.54
36:DA:1771:C:C1'	36:DA:1786:A:C8	2.90	0.54
36:DA:2030:A:H4'	36:DA:2031:A:H8	1.72	0.54
36:DA:2892:A:H62	36:DA:2893:G:N2	2.05	0.54
40:DE:45:THR:O	40:DE:46:ALA:HB2	2.08	0.54
40:DE:52:LEU:HB3	40:DE:75:VAL:HB	1.90	0.54
50:DR:59:ASP:O	50:DR:60:LEU:HB3	2.07	0.54
54:DV:18:LEU:HD23	54:DV:19:LYS:N	2.18	0.54
55:DW:5:ALA:HB2	55:DW:54:ALA:CB	2.29	0.54
1:AA:1264:C:H2'	1:AA:1265:G:C8	2.42	0.54
2:AB:61:LEU:HD23	2:AB:61:LEU:C	2.33	0.54
2:AB:189:ASP:HB3	2:AB:203:GLY:O	2.08	0.54
6:AF:63:TYR:N	6:AF:63:TYR:CD1	2.76	0.54
9:AI:53:VAL:CG1	9:AI:95:LYS:HD3	2.32	0.54
12:AL:39:VAL:HG12	12:AL:40:VAL:N	2.23	0.54
22:AW:37:A:H3'	22:AW:38:A:H8	1.72	0.54
24:AY:49:G:O2'	24:AY:50:G:H5'	2.07	0.54
25:AZ:27:LEU:C	25:AZ:27:LEU:HD12	2.33	0.54
25:AZ:133:VAL:HG23	25:AZ:168:VAL:HG11	1.90	0.54
32:B6:5:VAL:O	32:B6:6:ARG:CB	2.56	0.54
36:BA:607:U:H3	36:BA:621:A:H2	1.56	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1068:G:H1'	36:BA:1069:A:H5'	1.90	0.54
36:BA:1210:A:H4'	36:BA:1211:U:O5'	2.08	0.54
36:BA:1361:G:O2'	36:BA:1362:C:H5'	2.08	0.54
36:BA:2179:C:H4'	36:BA:2180:U:N3	2.22	0.54
36:BA:2319:G:OP2	36:BA:2319:G:H4'	2.07	0.54
36:BA:2360:A:O2'	36:BA:2361:A:P	2.66	0.54
36:BA:2466:C:O2'	36:BA:2467:C:H5'	2.08	0.54
36:BA:2523:G:O2'	36:BA:2524:G:H5"	2.07	0.54
38:BC:40:THR:HG22	38:BC:177:LYS:CD	2.38	0.54
39:BD:35:LYS:CB	39:BD:36:PRO:CD	2.85	0.54
40:BE:48:GLN:HE21	40:BE:78:LEU:HD22	1.72	0.54
40:BE:68:ALA:C	40:BE:70:ALA:H	2.16	0.54
40:BE:101:ARG:NH2	40:BE:171:GLU:HB2	2.22	0.54
41:BF:39:TRP:CB	41:BF:101:LEU:HD22	2.38	0.54
43:BH:126:PRO:O	43:BH:127:GLU:HB2	2.07	0.54
50:BR:83:ILE:HG22	50:BR:87:TYR:HE2	1.73	0.54
51:BS:49:VAL:CG1	51:BS:50:SER:H	2.15	0.54
52:BT:27:THR:OG1	52:BT:28:VAL:N	2.40	0.54
52:BT:129:ARG:NE	52:BT:131:ALA:HB3	2.22	0.54
53:BU:61:TRP:CH2	53:BU:94:ASN:HB2	2.43	0.54
57:BY:2:ARG:N	57:BY:4:LYS:HE3	2.22	0.54
22:CV:44:G:C2'	22:CV:45:U:H5'	2.37	0.54
28:D2:8:LYS:HA	28:D2:11:GLU:HG3	1.90	0.54
30:D4:18:CYS:SG	30:D4:19:GLY:N	2.81	0.54
32:D6:9:LEU:O	32:D6:9:LEU:HD13	2.07	0.54
32:D6:29:ASN:O	32:D6:30:THR:C	2.50	0.54
36:DA:15:G:O2'	36:DA:16:G:H5'	2.08	0.54
36:DA:654(I):C:H5"	36:DA:654(J):A:OP1	2.07	0.54
36:DA:674:G:N3	41:DF:74:ARG:NH1	2.55	0.54
36:DA:1163:G:O2'	36:DA:1164:G:H5'	2.07	0.54
36:DA:1171:G:N7	36:DA:1173:G:H1'	2.22	0.54
36:DA:2358:G:H22	48:DP:55:ARG:NH2	2.04	0.54
38:DC:41:VAL:HG21	38:DC:185:LEU:HD22	1.88	0.54
42:DG:83:ARG:HB2	42:DG:84:LYS:HD2	1.90	0.54
48:DP:131:SER:OG	48:DP:134:ALA:HB3	2.08	0.54
49:DQ:30:GLY:HA2	49:DQ:107:ALA:HB2	1.90	0.54
49:DQ:43:THR:OG1	49:DQ:46:GLN:HG3	2.08	0.54
50:DR:111:LEU:N	50:DR:111:LEU:HD12	2.23	0.54
52:DT:30:VAL:HG21	52:DT:83:ILE:HG12	1.89	0.54
52:DT:32:TYR:HB3	52:DT:81:PRO:HB3	1.88	0.54
54:DV:38:LEU:C	54:DV:38:LEU:HD23	2.33	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:DZ:98:MET:HG2	58:DZ:99:TYR:H	1.68	0.54
1:AA:267:C:H2'	1:AA:268:C:H6	1.73	0.54
1:AA:961:U:O2'	1:AA:962:C:H6	1.90	0.54
1:AA:1342:C:O2'	9:AI:124:GLN:HG3	2.08	0.54
6:AF:79:LEU:H	6:AF:79:LEU:HD12	1.72	0.54
19:AS:40:ILE:HG23	19:AS:62:ILE:CD1	2.38	0.54
25:AZ:5:PHE:C	25:AZ:5:PHE:CD1	2.85	0.54
25:AZ:313:HIS:HB2	25:AZ:380:LEU:HB2	1.89	0.54
34:B8:32:LEU:HD13	36:BA:2392:A:OP1	2.07	0.54
36:BA:84:A:H3'	57:BY:9:LYS:HG3	1.90	0.54
36:BA:272(I):U:O2'	36:BA:272(J):C:H5'	2.08	0.54
36:BA:621:A:C2'	36:BA:622:G:H5'	2.36	0.54
36:BA:752:A:O2'	36:BA:753:C:OP2	2.25	0.54
40:BE:21:VAL:O	40:BE:21:VAL:HG23	2.08	0.54
41:BF:19:GLU:O	41:BF:20:LEU:HG	2.06	0.54
46:BN:4:TYR:N	46:BN:4:TYR:CD1	2.75	0.54
53:BU:76:TYR:O	53:BU:80:ILE:HG12	2.08	0.54
53:BU:79:PHE:CE1	53:BU:83:LEU:HD11	2.42	0.54
53:BU:112:ARG:NH1	54:BV:46:VAL:HG11	2.22	0.54
54:BV:34:GLU:O	54:BV:36:PRO:CD	2.56	0.54
58:BZ:14:LYS:O	58:BZ:17:ALA:HB3	2.07	0.54
58:BZ:29:TYR:O	58:BZ:30:ASN:HB3	2.08	0.54
1:CA:476:G:H2'	1:CA:477:A:C8	2.41	0.54
4:CD:157:LEU:HD12	4:CD:157:LEU:H	1.71	0.54
8:CH:85:ARG:HG3	8:CH:85:ARG:HH11	1.73	0.54
22:CV:1:G:H1'	26:D0:5:LYS:HZ2	1.73	0.54
25:CZ:324:LYS:HE3	25:CZ:326:GLU:OE2	2.08	0.54
26:D0:56:ASP:OD2	36:DA:2364:C:H5'	2.08	0.54
34:D8:62:LEU:N	34:D8:63:PRO:HD2	2.23	0.54
36:DA:2025:C:H2'	36:DA:2026:C:H6	1.72	0.54
36:DA:2179:C:H1'	36:DA:2180:U:C4	2.42	0.54
39:DD:27:THR:HG23	39:DD:27:THR:O	2.08	0.54
39:DD:267:SER:C	39:DD:269:PHE:N	2.60	0.54
41:DF:7:TYR:OH	41:DF:10:PRO:HB3	2.08	0.54
48:DP:23:PRO:HB2	48:DP:33:ARG:CD	2.37	0.54
54:DV:19:LYS:HE2	54:DV:19:LYS:HA	1.90	0.54
13:AM:4:ILE:O	13:AM:5:ALA:C	2.51	0.54
19:AS:47:HIS:O	19:AS:62:ILE:HG22	2.07	0.54
22:AV:62:C:O2	22:AV:62:C:H2'	2.06	0.54
30:B4:5:ILE:HD13	30:B4:5:ILE:N	2.23	0.54
31:B5:54:GLY:N	31:B5:56:LYS:HZ2	2.06	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:B8:6:THR:OG1	34:B8:11:LYS:HE3	2.07	0.54
34:B8:11:LYS:HD2	34:B8:11:LYS:H	1.72	0.54
36:BA:918:A:H5"	37:BB:98:G:O2'	2.08	0.54
36:BA:1827:C:O2'	36:BA:1828:G:H5'	2.08	0.54
36:BA:2636:U:H4'	40:BE:80:GLU:OE1	2.07	0.54
38:BC:87:GLU:CG	38:BC:94:VAL:HG11	2.38	0.54
40:BE:23:VAL:HA	40:BE:186:GLY:H	1.73	0.54
42:BG:91:ARG:HD2	42:BG:91:ARG:C	2.33	0.54
47:BO:114:ILE:H	47:BO:114:ILE:CD1	2.21	0.54
58:BZ:49:ARG:O	58:BZ:50:GLN:HB2	2.07	0.54
58:BZ:119:GLU:HG2	58:BZ:122:ARG:HH11	1.72	0.54
1:CA:192:U:O4'	20:CT:103:GLY:HA2	2.08	0.54
1:CA:392:G:H2'	1:CA:393:A:H8	1.72	0.54
1:CA:1397:C:OP2	5:CE:24:ARG:NH2	2.39	0.54
6:CF:19:LEU:HD11	6:CF:59:TYR:CZ	2.43	0.54
7:CG:75:VAL:HG23	7:CG:75:VAL:O	2.08	0.54
7:CG:79:ARG:NE	22:CW:33:U:H4'	2.23	0.54
12:CL:92:ASP:O	12:CL:94:PRO:HD3	2.08	0.54
19:CS:50:ALA:HB1	19:CS:57:HIS:HB3	1.89	0.54
20:CT:29:LYS:O	20:CT:33:ILE:HG13	2.08	0.54
28:D2:35:LEU:O	28:D2:39:ALA:N	2.41	0.54
28:D2:35:LEU:HB3	28:D2:50:ILE:HG13	1.90	0.54
28:D2:69:ARG:HB2	28:D2:70:GLN:NE2	2.23	0.54
29:D3:15:TYR:HD2	29:D3:19:GLN:HE22	1.56	0.54
32:D6:20:ASN:O	32:D6:21:TYR:CD2	2.61	0.54
36:DA:363(E):U:H2'	36:DA:363(F):A:C1'	2.38	0.54
36:DA:910:A:H2'	36:DA:911:A:C8	2.42	0.54
36:DA:1826:G:H4'	39:DD:242:ARG:NH2	2.19	0.54
36:DA:1880:C:H2'	36:DA:1881:C:H5"	1.90	0.54
36:DA:2019:A:C2'	36:DA:2020:A:O5'	2.55	0.54
36:DA:2682:U:H5'	36:DA:2682:U:H6	1.73	0.54
39:DD:148:GLU:CB	39:DD:151:LYS:HD2	2.38	0.54
40:DE:107:THR:HA	40:DE:163:GLU:O	2.08	0.54
41:DF:85:GLY:O	41:DF:86:GLY:O	2.26	0.54
42:DG:149:VAL:O	42:DG:149:VAL:HG23	2.08	0.54
46:DN:76:SER:HB3	46:DN:81:GLY:HA3	1.90	0.54
49:DQ:74:TYR:CD2	49:DQ:91:GLU:HB2	2.38	0.54
52:DT:85:LYS:HB3	52:DT:85:LYS:HZ3	1.68	0.54
54:DV:91:TYR:H	54:DV:91:TYR:HD1	1.56	0.54
1:AA:31:G:N1	1:AA:48:C:H5"	2.23	0.54
1:AA:78:G:N2	1:AA:91:C:H41	2.06	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:108:G:H5'	1:AA:109:A:H5"	1.89	0.54
1:AA:186:C:H2'	1:AA:187:C:C6	2.43	0.54
1:AA:1423:G:C5'	47:BO:49:ARG:HH22	2.20	0.54
1:AA:1437:C:H2'	1:AA:1438:G:H8	1.73	0.54
3:AC:134:ILE:CG2	3:AC:168:ALA:HB3	2.38	0.54
4:AD:18:LYS:HE3	4:AD:31:CYS:SG	2.48	0.54
5:AE:6:PHE:CB	5:AE:34:VAL:HG22	2.37	0.54
13:AM:83:ASP:OD1	13:AM:84:ILE:N	2.40	0.54
14:AN:27:CYS:SG	14:AN:29:ARG:HB2	2.48	0.54
15:AO:17:ARG:HG3	15:AO:17:ARG:NH1	2.19	0.54
15:AO:82:ILE:CD1	15:AO:88:ARG:HB2	2.38	0.54
25:AZ:189:ARG:HH11	25:AZ:189:ARG:HG2	1.73	0.54
26:B0:40:GLN:NE2	26:B0:44:ARG:H	2.06	0.54
31:B5:49:CYS:SG	31:B5:50:GLY:N	2.81	0.54
36:BA:15:G:O2'	36:BA:16:G:H5'	2.07	0.54
36:BA:142(A):C:O2'	36:BA:143:G:H5'	2.08	0.54
36:BA:629:G:H1'	36:BA:639:U:O2'	2.08	0.54
36:BA:1142(A):A:H8	36:BA:1142(A):A:H5'	1.73	0.54
36:BA:1314:C:C2	36:BA:1339:G:N2	2.76	0.54
36:BA:1400:G:H2'	36:BA:1401:G:C8	2.43	0.54
36:BA:1573:G:H2'	36:BA:1574:C:H5'	1.90	0.54
36:BA:2406:U:N3	48:BP:72:PRO:HB2	2.23	0.54
36:BA:2750:A:H4'	36:BA:2751:G:OP1	2.08	0.54
37:BB:44:G:H1'	37:BB:47:C:N4	2.23	0.54
38:BC:119:VAL:HG22	38:BC:119:VAL:O	2.08	0.54
39:BD:77:ALA:HA	39:BD:97:TYR:HA	1.90	0.54
41:BF:53:THR:O	41:BF:57:VAL:HG23	2.08	0.54
42:BG:44:GLY:HA2	42:BG:88:ILE:HG21	1.90	0.54
43:BH:85:LYS:HE3	43:BH:85:LYS:C	2.33	0.54
47:BO:97:ARG:HG3	47:BO:97:ARG:HH11	1.73	0.54
48:BP:50:ARG:HH11	48:BP:50:ARG:HG2	1.73	0.54
51:BS:58:LEU:O	51:BS:59:LYS:O	2.26	0.54
55:BW:12:ILE:HD13	55:BW:17:VAL:HG22	1.90	0.54
55:BW:71:VAL:HG23	55:BW:71:VAL:O	2.08	0.54
57:BY:47:LYS:HE3	57:BY:60:PHE:HZ	1.73	0.54
1:CA:78:G:N2	1:CA:91:C:H41	2.06	0.54
1:CA:266:G:H5"	1:CA:267:C:C5	2.43	0.54
1:CA:1402:C:O2	1:CA:1500:A:N1	2.40	0.54
4:CD:145:GLU:O	4:CD:145:GLU:OE1	2.26	0.54
7:CG:115:ARG:O	7:CG:118:VAL:HG22	2.08	0.54
9:CI:79:LEU:HD22	9:CI:79:LEU:O	2.08	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:CQ:82:MET:O	17:CQ:86:GLU:HG2	2.08	0.54
22:CV:45:U:H2'	22:CV:45:U:OP2	2.08	0.54
24:CY:38:A:H5'	36:DA:1913:A:C6	2.43	0.54
24:CY:70:C:H2'	24:CY:71:C:H6	1.73	0.54
25:CZ:178:ALA:CB	25:CZ:199:ILE:HD11	2.38	0.54
30:D4:28:LYS:O	30:D4:31:ILE:HD11	2.07	0.54
36:DA:310:A:OP1	57:DY:17:SER:O	2.26	0.54
36:DA:832:G:H21	48:DP:53:GLY:CA	2.21	0.54
36:DA:1059:G:H2'	36:DA:1060:U:H5	1.71	0.54
36:DA:1451:C:N4	36:DA:1461:G:H1	2.05	0.54
36:DA:1453:U:H5'	50:DR:63:ARG:NE	2.23	0.54
36:DA:1652:A:C2'	36:DA:1653:G:H5'	2.38	0.54
36:DA:2179:C:H4'	36:DA:2180:U:N3	2.23	0.54
39:DD:68:LYS:HD3	39:DD:70:TRP:CZ2	2.42	0.54
43:DH:30:LYS:HE2	43:DH:30:LYS:HA	1.90	0.54
43:DH:149:ARG:HG3	43:DH:162:ILE:HG12	1.90	0.54
52:DT:27:THR:HG23	52:DT:28:VAL:H	1.73	0.54
52:DT:28:VAL:CG2	52:DT:46:GLU:HG3	2.38	0.54
53:DU:61:TRP:CH2	53:DU:94:ASN:HB2	2.43	0.54
1:AA:858:G:H8	1:AA:858:G:H5"	1.71	0.53
1:AA:1242:C:O2'	1:AA:1243:C:H5'	2.08	0.53
7:AG:15:ASP:OD1	7:AG:44:TYR:OH	2.26	0.53
7:AG:102:ARG:O	7:AG:106:GLN:HG3	2.08	0.53
10:AJ:50:ILE:HG23	10:AJ:60:ARG:HH21	1.73	0.53
11:AK:108:ILE:CG2	18:AR:88:LYS:HB2	2.28	0.53
22:AW:57:G:O2'	22:AW:58:A:H5'	2.08	0.53
25:AZ:70:TYR:O	25:AZ:77:TYR:HB2	2.07	0.53
25:AZ:168:VAL:O	25:AZ:170:VAL:HG23	2.07	0.53
31:B5:24:ALA:O	31:B5:25:LEU:CB	2.53	0.53
34:B8:50:LEU:C	34:B8:53:PRO:HD2	2.33	0.53
36:BA:99:U:C6	36:BA:102:G:N2	2.76	0.53
36:BA:1013:C:H2'	36:BA:1014:U:H6	1.72	0.53
36:BA:1820:U:O2	39:BD:201:HIS:HB3	2.08	0.53
42:BG:34:LEU:CA	42:BG:161:THR:HG22	2.38	0.53
42:BG:47:LYS:HZ2	42:BG:82:LEU:CD1	2.18	0.53
42:BG:72:ARG:HB3	42:BG:86:MET:H	1.73	0.53
46:BN:29:LYS:C	46:BN:31:ALA:N	2.65	0.53
48:BP:144:GLU:N	48:BP:145:PRO:HD3	2.23	0.53
49:BQ:19:GLY:HA3	58:BZ:79:ARG:NH2	2.22	0.53
50:BR:13:HIS:HE1	50:BR:15:SER:OG	1.91	0.53
50:BR:96:ARG:NH2	50:BR:117:VAL:HG23	2.23	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BT:78:LEU:C	52:BT:79:HIS:CD2	2.86	0.53
1:CA:559:A:OP1	5:CE:126:ARG:NH2	2.38	0.53
1:CA:755:G:OP2	15:CO:65:ARG:HD2	2.07	0.53
1:CA:1371:G:O3'	9:CI:69:GLY:HA3	2.08	0.53
3:CC:23:TYR:CD1	3:CC:23:TYR:C	2.85	0.53
4:CD:152:SER:C	4:CD:154:ASN:H	2.16	0.53
4:CD:157:LEU:HD12	4:CD:157:LEU:N	2.23	0.53
7:CG:6:ARG:HH21	7:CG:94:ARG:HH12	1.56	0.53
7:CG:69:VAL:HG23	7:CG:134:ALA:O	2.08	0.53
10:CJ:40:LEU:HB2	10:CJ:69:ASN:HB2	1.90	0.53
12:CL:40:VAL:HG11	12:CL:77:LEU:O	2.08	0.53
13:CM:91:ARG:CB	13:CM:98:VAL:HG12	2.38	0.53
15:CO:21:ASP:OD2	15:CO:24:SER:HB3	2.07	0.53
25:CZ:171:ILE:HD12	25:CZ:201:GLU:OE1	2.07	0.53
30:D4:28:LYS:HA	30:D4:28:LYS:HE3	1.90	0.53
36:DA:142:A:H5"	36:DA:142(A):C:H5	1.72	0.53
36:DA:222:A:H5"	36:DA:421:U:OP1	2.08	0.53
36:DA:324:A:H2'	36:DA:325:G:O4'	2.07	0.53
36:DA:335:C:H2'	36:DA:336:C:H6	1.74	0.53
36:DA:341:G:O2'	36:DA:342:G:H5'	2.08	0.53
36:DA:1049:C:H2'	36:DA:1050:A:C8	2.29	0.53
36:DA:1131:G:HO2'	36:DA:1132:A:H8	1.56	0.53
36:DA:1354:A:H2'	36:DA:1355:G:O4'	2.08	0.53
36:DA:1860:G:H1	36:DA:1882:C:H42	1.54	0.53
36:DA:1880:C:C2'	36:DA:1881:C:H5"	2.38	0.53
36:DA:2392:A:H1'	48:DP:60:MET:HB3	1.90	0.53
37:DB:106:G:O2'	37:DB:107:G:H5'	2.07	0.53
38:DC:87:GLU:CG	38:DC:94:VAL:HG11	2.38	0.53
39:DD:111:LEU:HD22	39:DD:115:GLN:OE1	2.07	0.53
41:DF:3:GLU:HA	41:DF:24:LEU:CG	2.35	0.53
41:DF:28:ILE:HD13	41:DF:28:ILE:N	2.13	0.53
41:DF:157:VAL:HG21	41:DF:194:MET:HG2	1.90	0.53
42:DG:73:ALA:CB	42:DG:87:PRO:HG3	2.28	0.53
42:DG:118:ARG:HG2	42:DG:118:ARG:HH11	1.73	0.53
48:DP:9:ASN:H	48:DP:10:PRO:CD	2.22	0.53
51:DS:17:ARG:HA	51:DS:20:ARG:HH11	1.73	0.53
52:DT:29:ARG:HB3	52:DT:85:LYS:HA	1.89	0.53
55:DW:17:VAL:O	55:DW:20:VAL:HG22	2.08	0.53
57:DY:62:GLU:N	57:DY:62:GLU:CD	2.67	0.53
1:AA:377:G:OP1	16:AP:3:LYS:HD2	2.08	0.53
4:AD:9:CYS:SG	4:AD:31:CYS:O	2.61	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:205:GLU:OE2	5:AE:100:VAL:HG22	2.08	0.53
12:AL:40:VAL:HG11	12:AL:77:LEU:O	2.08	0.53
36:BA:184:C:H2'	36:BA:185:U:C6	2.43	0.53
36:BA:330:A:C2	36:BA:1210:A:H2'	2.31	0.53
36:BA:1039:G:H1	36:BA:1116:C:N4	2.05	0.53
36:BA:1231:G:H2'	36:BA:1232:G:C8	2.42	0.53
36:BA:1292:U:H2'	36:BA:1293:C:C6	2.43	0.53
36:BA:1608:A:H1'	36:BA:1610:A:OP2	2.08	0.53
36:BA:2735:G:H2'	36:BA:2736:G:H8	1.73	0.53
37:BB:42:C:O2'	37:BB:43:C:P	2.66	0.53
39:BD:34:VAL:HG23	39:BD:35:LYS:N	2.24	0.53
42:BG:111:LEU:N	42:BG:112:PRO:HD2	2.23	0.53
42:BG:138:GLN:CG	42:BG:153:ARG:O	2.56	0.53
43:BH:30:LYS:HA	43:BH:30:LYS:HE2	1.91	0.53
47:BO:115:VAL:HG13	47:BO:121:VAL:HG21	1.88	0.53
58:BZ:37:VAL:CG2	58:BZ:38:TYR:N	2.68	0.53
1:CA:377:G:OP1	16:CP:3:LYS:HD2	2.09	0.53
1:CA:725:G:O2'	1:CA:726:C:H5'	2.08	0.53
1:CA:738:C:H5"	6:CF:69:GLU:HB2	1.90	0.53
2:CB:18:GLY:H	2:CB:42:ILE:CG2	2.20	0.53
2:CB:101:MET:C	2:CB:102:LEU:HD12	2.33	0.53
2:CB:142:LEU:HD23	2:CB:142:LEU:C	2.33	0.53
2:CB:162:ILE:O	2:CB:185:ILE:HG12	2.07	0.53
4:CD:121:VAL:N	4:CD:126:ILE:HD13	2.23	0.53
10:CJ:4:ILE:HD11	10:CJ:77:PRO:HB3	1.91	0.53
10:CJ:16:LEU:HD11	10:CJ:70:ARG:HG2	1.90	0.53
31:D5:54:GLY:C	31:D5:56:LYS:HZ2	2.16	0.53
34:D8:52:LYS:N	34:D8:53:PRO:CD	2.70	0.53
36:DA:1013:C:H2'	36:DA:1014:U:H6	1.72	0.53
36:DA:1331:A:O2'	36:DA:1332:G:C8	2.58	0.53
36:DA:1493:C:H2'	36:DA:1493:C:O2	2.07	0.53
36:DA:1586:A:H5"	36:DA:1587:A:C8	2.44	0.53
36:DA:1722:A:O2'	36:DA:1739:U:H5"	2.08	0.53
36:DA:1999:C:H4'	36:DA:2723:C:O2	2.08	0.53
37:DB:105:A:H2'	37:DB:106:G:O4'	2.08	0.53
39:DD:70:TRP:O	39:DD:71:ASP:C	2.49	0.53
39:DD:91:ARG:HH11	39:DD:91:ARG:HG2	1.73	0.53
40:DE:48:GLN:HE21	40:DE:78:LEU:HD22	1.73	0.53
40:DE:59:VAL:HG23	40:DE:63:LEU:HA	1.90	0.53
43:DH:20:ALA:HB1	43:DH:21:PRO:CD	2.39	0.53
49:DQ:63:LYS:HB2	58:DZ:116:VAL:HG11	1.90	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:DR:67:LEU:HD13	50:DR:76:VAL:HG21	1.91	0.53
57:DY:98:VAL:O	57:DY:99:CYS:SG	2.66	0.53
1:AA:825:G:O2'	1:AA:826:C:H5'	2.08	0.53
1:AA:1320:C:H5"	19:AS:70:LYS:HG3	1.90	0.53
4:AD:200:GLU:HG2	4:AD:201:GLN:N	2.24	0.53
13:AM:93:ARG:HG3	36:BA:888:C:OP2	2.09	0.53
14:AN:59:ALA:O	14:AN:60:SER:CB	2.46	0.53
19:AS:31:ILE:HG23	19:AS:49:ILE:HG23	1.90	0.53
28:B2:35:LEU:HB2	28:B2:53:LEU:HD13	1.90	0.53
34:B8:23:VAL:HG11	34:B8:46:ARG:HD3	1.90	0.53
36:BA:142:A:H5"	36:BA:142(A):C:H5	1.73	0.53
36:BA:480:A:H3'	36:BA:481:G:H5"	1.90	0.53
36:BA:673:C:H5'	36:BA:673:C:C6	2.27	0.53
36:BA:686:G:N2	36:BA:788:A:H61	2.07	0.53
36:BA:1602:U:H3'	36:BA:1603:A:H5"	1.88	0.53
36:BA:1880:C:H2'	36:BA:1881:C:H5"	1.91	0.53
36:BA:2492:U:O2'	36:BA:2493:U:H5'	2.09	0.53
36:BA:2840:C:H2'	36:BA:2841:C:H6	1.73	0.53
38:BC:87:GLU:HG3	38:BC:94:VAL:HG11	1.91	0.53
38:BC:99:ILE:HG22	38:BC:99:ILE:O	2.08	0.53
41:BF:3:GLU:HB2	41:BF:24:LEU:HD23	1.90	0.53
41:BF:64:ILE:HG22	41:BF:76:GLY:O	2.08	0.53
41:BF:160:ASN:C	41:BF:160:ASN:HD22	2.16	0.53
46:BN:34:LEU:C	46:BN:34:LEU:HD13	2.33	0.53
46:BN:71:ILE:HG21	46:BN:84:LYS:HB3	1.89	0.53
53:BU:102:GLU:HB2	53:BU:105:VAL:HB	1.89	0.53
54:BV:58:VAL:HG12	54:BV:97:LYS:HB2	1.89	0.53
55:BW:5:ALA:HB2	55:BW:54:ALA:CB	2.32	0.53
58:BZ:30:ASN:ND2	58:BZ:33:LEU:H	2.07	0.53
1:CA:401:C:H1'	1:CA:622:A:H1'	1.90	0.53
3:CC:81:GLY:HA3	3:CC:85:ARG:NE	2.23	0.53
4:CD:101:LEU:C	4:CD:103:ASN:N	2.63	0.53
9:CI:20:ARG:HH11	9:CI:20:ARG:CB	2.21	0.53
9:CI:46:ALA:O	9:CI:78:LYS:HA	2.08	0.53
10:CJ:32:ALA:H	10:CJ:78:ASN:HD21	1.54	0.53
25:CZ:168:VAL:O	25:CZ:170:VAL:HG23	2.09	0.53
32:D6:14:THR:HG23	32:D6:16:CYS:H	1.73	0.53
34:D8:15:LYS:HD2	34:D8:16:ILE:H	1.73	0.53
34:D8:61:LEU:CD1	34:D8:62:LEU:H	2.21	0.53
36:DA:99:U:C6	36:DA:102:G:N2	2.77	0.53
36:DA:1056:G:H22	36:DA:1104:C:H42	1.54	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1506:C:O2	36:DA:1506:C:H2'	2.09	0.53
36:DA:2219:G:C2'	36:DA:2220:G:H5'	2.39	0.53
36:DA:2741:A:H2'	36:DA:2742:C:O4'	2.08	0.53
38:DC:87:GLU:HG3	38:DC:94:VAL:HG11	1.91	0.53
49:DQ:6:ARG:O	49:DQ:7:MET:HG3	2.07	0.53
54:DV:5:VAL:HG21	54:DV:35:LEU:CD2	2.38	0.53
1:AA:77:G:H2'	1:AA:77:G:N3	2.23	0.53
1:AA:189(I):G:O2'	1:AA:189(J):G:H5'	2.08	0.53
1:AA:1050:G:O2'	1:AA:1051:C:P	2.65	0.53
1:AA:1525:G:O2'	1:AA:1526:G:H5'	2.09	0.53
4:AD:110:PHE:N	4:AD:110:PHE:CD1	2.75	0.53
6:AF:15:ASP:OD1	6:AF:18:GLN:NE2	2.41	0.53
9:AI:58:HIS:O	9:AI:58:HIS:CG	2.61	0.53
10:AJ:3:LYS:HD2	10:AJ:77:PRO:HG3	1.89	0.53
12:AL:75:HIS:HD2	12:AL:77:LEU:HB2	1.73	0.53
15:AO:9:GLN:O	15:AO:13:GLN:HG3	2.08	0.53
28:B2:20:GLU:O	28:B2:21:LEU:C	2.51	0.53
29:B3:28:LEU:HD23	29:B3:28:LEU:H	1.73	0.53
34:B8:61:LEU:CD1	34:B8:62:LEU:H	2.18	0.53
36:BA:1861:G:O2'	36:BA:1862:G:H5'	2.08	0.53
36:BA:2179:C:H1'	36:BA:2180:U:C4	2.43	0.53
36:BA:2682:U:H5'	36:BA:2682:U:H6	1.74	0.53
36:BA:2695:C:H2'	36:BA:2696:U:C6	2.43	0.53
39:BD:108:PRO:HB3	39:BD:143:HIS:CE1	2.44	0.53
39:BD:264:LYS:HG2	39:BD:266:SER:HB3	1.90	0.53
42:BG:16:ARG:O	42:BG:20:ILE:HG13	2.08	0.53
42:BG:109:VAL:O	42:BG:112:PRO:HG2	2.08	0.53
42:BG:138:GLN:HE21	42:BG:152:LEU:CB	2.21	0.53
48:BP:61:ARG:C	48:BP:62:LEU:CD2	2.81	0.53
49:BQ:133:ARG:HG2	49:BQ:134:ARG:N	2.23	0.53
56:BX:40:LYS:HG2	56:BX:51:VAL:CB	2.15	0.53
58:BZ:15:PRO:C	58:BZ:17:ALA:H	2.15	0.53
1:CA:1211:U:H1'	1:CA:1213:A:C2	2.44	0.53
1:CA:1536:C:C2'	1:CA:1537:U:H5'	2.39	0.53
4:CD:12:CYS:HA	4:CD:19:LEU:CD1	2.38	0.53
6:CF:15:ASP:OD1	6:CF:18:GLN:NE2	2.41	0.53
22:CV:16:U:H3	22:CV:59:U:H3	1.54	0.53
31:D5:54:GLY:N	31:D5:56:LYS:NZ	2.51	0.53
34:D8:23:VAL:HG13	34:D8:46:ARG:HB3	1.89	0.53
34:D8:33:ASN:OD1	34:D8:35:GLN:N	2.41	0.53
34:D8:50:LEU:C	34:D8:53:PRO:HD2	2.34	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:480:A:H3'	36:DA:481:G:H5"	1.90	0.53
36:DA:796:C:H2'	36:DA:797:C:H6	1.72	0.53
36:DA:1404:C:O2'	36:DA:1405:U:H5'	2.08	0.53
36:DA:2320:A:N3	36:DA:2320:A:H2'	2.22	0.53
36:DA:2360:A:O2'	36:DA:2361:A:P	2.67	0.53
36:DA:2360:A:O2'	36:DA:2361:A:O4'	2.22	0.53
36:DA:2523:G:O2'	36:DA:2524:G:H5"	2.09	0.53
36:DA:2545:G:N3	36:DA:2565:A:H2	2.06	0.53
42:DG:109:VAL:O	42:DG:112:PRO:HG2	2.09	0.53
43:DH:88:LEU:HD13	43:DH:130:ARG:HG2	1.90	0.53
45:DK:66:UNK:O	45:DK:67:UNK:C	2.55	0.53
47:DO:104:ARG:HE	52:DT:33:LYS:HZ3	1.54	0.53
48:DP:17:LYS:HG2	48:DP:17:LYS:O	2.07	0.53
58:DZ:10:ARG:NH2	58:DZ:36:LYS:HB2	2.23	0.53
1:AA:321:A:O2'	1:AA:322:C:H5'	2.09	0.53
1:AA:939:G:O3'	7:AG:102:ARG:NH2	2.40	0.53
3:AC:136:GLN:O	3:AC:139:GLN:HB3	2.08	0.53
5:AE:41:VAL:O	5:AE:67:VAL:HG12	2.08	0.53
7:AG:43:PHE:O	7:AG:46:ALA:HB3	2.09	0.53
9:AI:118:LYS:O	9:AI:119:ALA:CB	2.56	0.53
12:AL:70:ILE:HG22	12:AL:102:ARG:HH12	1.73	0.53
17:AQ:45:HIS:HB2	17:AQ:65:ILE:HD13	1.90	0.53
17:AQ:53:LEU:HD23	17:AQ:54:GLY:N	2.24	0.53
25:AZ:263:ARG:NH2	25:AZ:297:GLU:HG2	2.14	0.53
35:B9:10:ILE:HD12	35:B9:10:ILE:H	1.72	0.53
36:BA:832:G:O2'	48:BP:52:GLU:HB3	2.09	0.53
36:BA:953:A:O2'	36:BA:954:G:H5'	2.09	0.53
36:BA:1925:C:O2'	36:BA:1926:U:H5'	2.08	0.53
36:BA:2116:G:N7	36:BA:2117:A:C2	2.76	0.53
36:BA:2320:A:H2'	36:BA:2320:A:N3	2.23	0.53
36:BA:2579:C:O2'	40:BE:131:ALA:CB	2.56	0.53
36:BA:2590:A:H5"	39:BD:239:ARG:HE	1.74	0.53
39:BD:79:VAL:HG21	39:BD:111:LEU:HD11	1.90	0.53
42:BG:39:ILE:HG12	42:BG:92:VAL:CG1	2.38	0.53
51:BS:95:HIS:CG	51:BS:96:GLY:N	2.76	0.53
53:BU:32:PHE:CB	53:BU:36:ARG:NH2	2.72	0.53
54:BV:6:LYS:O	54:BV:37:VAL:HG21	2.09	0.53
54:BV:39:LEU:N	54:BV:39:LEU:HD22	2.24	0.53
54:BV:91:TYR:H	54:BV:91:TYR:HD1	1.57	0.53
55:BW:86:LEU:HD22	55:BW:96:ILE:HD12	1.91	0.53
57:BY:43:ASN:CB	57:BY:64:GLU:HA	2.38	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BY:53:PRO:CB	57:BY:56:PRO:HG3	2.32	0.53
58:BZ:99:TYR:HB3	58:BZ:123:ASP:OD2	2.09	0.53
58:BZ:104:PHE:CE2	58:BZ:119:GLU:HB3	2.43	0.53
1:CA:645:C:H2'	1:CA:646:U:C6	2.42	0.53
1:CA:1053:G:H4'	1:CA:1054:C:H5"	1.85	0.53
3:CC:82:GLU:O	3:CC:86:VAL:HG13	2.07	0.53
11:CK:26:ASN:O	11:CK:27:ASN:HB2	2.07	0.53
13:CM:116:THR:O	13:CM:116:THR:HG22	2.09	0.53
17:CQ:18:THR:HG23	17:CQ:69:LYS:HE3	1.91	0.53
17:CQ:21:VAL:HG21	17:CQ:59:ILE:HD11	1.90	0.53
22:CV:68:C:O2'	22:CV:69:G:H5'	2.08	0.53
25:CZ:139:ASP:CG	25:CZ:139:ASP:O	2.51	0.53
25:CZ:270:VAL:HG12	25:CZ:286:VAL:HG21	1.89	0.53
34:D8:61:LEU:CD2	34:D8:62:LEU:H	2.21	0.53
36:DA:49:A:H5"	36:DA:51:G:O4'	2.07	0.53
36:DA:67:U:H2'	36:DA:68:G:H8	1.73	0.53
36:DA:607:U:H3	36:DA:621:A:H2	1.57	0.53
36:DA:622:G:O2'	36:DA:623:G:H5'	2.09	0.53
36:DA:1058:G:H3'	36:DA:1059:G:H5'	1.91	0.53
36:DA:2179:C:H4'	36:DA:2180:U:C2	2.44	0.53
36:DA:2406:U:N3	48:DP:72:PRO:HB2	2.24	0.53
36:DA:2777:G:C5'	36:DA:2778:A:H5'	2.38	0.53
46:DN:4:TYR:N	46:DN:4:TYR:CD1	2.76	0.53
46:DN:12:ARG:O	46:DN:14:VAL:HG23	2.09	0.53
58:DZ:24:LEU:C	58:DZ:24:LEU:HD23	2.33	0.53
58:DZ:108:PRO:HB3	58:DZ:141:VAL:HG12	1.90	0.53
1:AA:429:U:H1'	1:AA:430:A:H5"	1.90	0.53
1:AA:1009:G:H2'	1:AA:1010:G:H8	1.73	0.53
1:AA:1510:U:H2'	1:AA:1511:G:C8	2.44	0.53
3:AC:79:ARG:O	3:AC:82:GLU:OE1	2.26	0.53
8:AH:89:PRO:HA	8:AH:92:ARG:HH11	1.73	0.53
12:AL:92:ASP:O	12:AL:94:PRO:HD3	2.09	0.53
13:AM:49:THR:O	13:AM:53:VAL:HG23	2.07	0.53
16:AP:71:ARG:HA	16:AP:74:LEU:HD23	1.91	0.53
17:AQ:52:LYS:HD3	17:AQ:55:ASP:OD2	2.09	0.53
30:B4:22:ILE:HD12	30:B4:22:ILE:H	1.73	0.53
34:B8:18:ALA:HB2	36:BA:628:G:H5"	1.90	0.53
35:B9:7:VAL:HG13	35:B9:34:GLN:CG	2.36	0.53
36:BA:654(H):G:C3'	36:BA:654(I):C:H5'	2.38	0.53
36:BA:654(N):G:H2'	36:BA:654(O):G:O4'	2.08	0.53
36:BA:1050:A:H2'	36:BA:1051:G:C5'	2.35	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1058:G:H3'	36:BA:1059:G:H5'	1.91	0.53
36:BA:1245:G:H5"	41:BF:34:TRP:HZ2	1.74	0.53
36:BA:1331:A:O2'	36:BA:1332:G:C8	2.58	0.53
36:BA:1389:G:H2'	36:BA:1390:U:C6	2.43	0.53
36:BA:1771:C:C1'	36:BA:1786:A:C8	2.89	0.53
36:BA:1888:G:H5'	36:BA:1888:G:N3	2.23	0.53
36:BA:1947:C:H2'	36:BA:1948:G:H5"	1.90	0.53
36:BA:2848:G:C8	52:BT:97:ALA:HB2	2.43	0.53
37:BB:3:C:N4	37:BB:118:G:H1	2.07	0.53
40:BE:59:VAL:HG23	40:BE:63:LEU:HA	1.91	0.53
43:BH:85:LYS:NZ	43:BH:86:GLU:CA	2.72	0.53
47:BO:1:MET:HE2	47:BO:32:TYR:CD2	2.43	0.53
47:BO:111:PHE:O	47:BO:115:VAL:HG23	2.08	0.53
57:BY:23:ARG:HH11	57:BY:23:ARG:HG2	1.74	0.53
1:CA:979:C:C3'	1:CA:980:C:C5'	2.80	0.53
1:CA:1176:A:H2'	1:CA:1177:G:C8	2.44	0.53
1:CA:1234:C:O2'	1:CA:1235:U:H5'	2.07	0.53
1:CA:1327:C:O2'	1:CA:1328:C:H5'	2.09	0.53
6:CF:37:VAL:HG12	6:CF:38:GLU:O	2.08	0.53
9:CI:111:ARG:O	9:CI:119:ALA:CB	2.57	0.53
25:CZ:27:LEU:O	25:CZ:30:ALA:HB3	2.09	0.53
25:CZ:70:TYR:O	25:CZ:77:TYR:HB2	2.08	0.53
25:CZ:133:VAL:HG23	25:CZ:168:VAL:HG11	1.89	0.53
25:CZ:349:VAL:HG21	25:CZ:374:LEU:HD13	1.91	0.53
27:D1:3:LYS:NZ	27:D1:3:LYS:CB	2.71	0.53
28:D2:20:GLU:HG3	28:D2:21:LEU:N	2.23	0.53
31:D5:36:CYS:C	31:D5:38:ALA:N	2.60	0.53
36:DA:84:A:H3'	57:DY:9:LYS:HG3	1.91	0.53
36:DA:710:G:H2'	36:DA:711:G:C8	2.43	0.53
36:DA:1528(A):A:H62	36:DA:1541:G:H21	1.57	0.53
36:DA:2523:G:C2'	36:DA:2524:G:C5'	2.87	0.53
37:DB:80:U:H2'	37:DB:81:G:N2	2.21	0.53
37:DB:96:U:H2'	37:DB:97:G:C8	2.44	0.53
41:DF:197:ASP:O	41:DF:200:GLU:HB3	2.08	0.53
47:DO:97:ARG:HH11	47:DO:97:ARG:HG3	1.74	0.53
48:DP:57:THR:OG1	48:DP:59:LEU:CB	2.56	0.53
51:DS:95:HIS:CG	51:DS:96:GLY:N	2.76	0.53
3:AC:70:VAL:O	3:AC:105:GLU:HA	2.09	0.53
6:AF:69:GLU:O	6:AF:72:VAL:HG12	2.09	0.53
10:AJ:3:LYS:C	10:AJ:4:ILE:HD12	2.33	0.53
25:AZ:138:VAL:C	25:AZ:140:MET:H	2.17	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:B6:14:THR:HG23	32:B6:16:CYS:H	1.74	0.53
32:B6:41:PRO:HD2	32:B6:45:LYS:HA	1.91	0.53
34:B8:33:ASN:OD1	34:B8:35:GLN:N	2.41	0.53
36:BA:118:A:OP2	36:BA:119:A:H5"	2.09	0.53
36:BA:361:G:H2'	36:BA:362:U:H4'	1.90	0.53
36:BA:654(T):C:O2'	36:BA:654(U):A:O4'	2.17	0.53
36:BA:690:G:H2'	36:BA:691:C:C6	2.44	0.53
36:BA:1708:C:O2'	36:BA:1709:U:H5'	2.08	0.53
36:BA:2787:C:H1'	40:BE:61:ARG:CD	2.37	0.53
37:BB:67:G:O2'	37:BB:68:C:H6	1.92	0.53
39:BD:70:TRP:O	39:BD:71:ASP:C	2.51	0.53
39:BD:72:LYS:HZ2	39:BD:75:ILE:HG13	1.74	0.53
41:BF:126:VAL:O	41:BF:196:LEU:HG	2.09	0.53
44:BJ:30:UNK:O	44:BJ:31:UNK:CB	2.56	0.53
46:BN:63:THR:O	46:BN:66:LYS:HE3	2.08	0.53
48:BP:71:VAL:HG12	48:BP:72:PRO:HD3	1.91	0.53
49:BQ:4:PRO:HG2	49:BQ:7:MET:HE2	1.91	0.53
49:BQ:81:VAL:HG22	49:BQ:82:ARG:N	2.24	0.53
49:BQ:110:THR:HG23	49:BQ:113:GLN:OE1	2.09	0.53
50:BR:59:ASP:O	50:BR:60:LEU:HB3	2.08	0.53
51:BS:22:GLY:O	51:BS:23:ARG:O	2.26	0.53
54:BV:61:VAL:HG22	54:BV:61:VAL:O	2.08	0.53
58:BZ:116:VAL:O	58:BZ:117:LEU:HB3	2.08	0.53
1:CA:632:A:C8	1:CA:633:G:C8	2.96	0.53
2:CB:87:ARG:NH2	2:CB:232:PRO:C	2.58	0.53
2:CB:118:LEU:HD13	2:CB:142:LEU:HB2	1.89	0.53
5:CE:50:GLU:HB2	5:CE:53:LEU:CD1	2.33	0.53
6:CF:79:LEU:H	6:CF:79:LEU:HD12	1.74	0.53
8:CH:10:LEU:HD22	8:CH:83:ILE:HD11	1.89	0.53
8:CH:20:TYR:CE2	8:CH:76:PRO:HG2	2.44	0.53
10:CJ:55:LYS:HG3	10:CJ:56:HIS:H	1.74	0.53
30:D4:5:ILE:HD13	30:D4:5:ILE:N	2.23	0.53
36:DA:31:C:C2'	36:DA:32:C:C5'	2.72	0.53
36:DA:239:U:H1'	36:DA:259:G:N2	2.24	0.53
36:DA:1210:A:H4'	36:DA:1211:U:O5'	2.09	0.53
36:DA:1582:C:O2'	36:DA:1586:A:C8	2.62	0.53
46:DN:61:ARG:HG3	46:DN:61:ARG:NH1	2.22	0.53
48:DP:17:LYS:C	48:DP:19:VAL:N	2.66	0.53
49:DQ:81:VAL:HG22	49:DQ:82:ARG:N	2.23	0.53
52:DT:85:LYS:HZ2	52:DT:85:LYS:CB	2.20	0.53
53:DU:102:GLU:HB2	53:DU:105:VAL:HB	1.89	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:DX:35:THR:HG22	56:DX:38:GLU:N	2.21	0.53
58:DZ:151:HIS:O	58:DZ:152:ALA:HB3	2.08	0.53
1:AA:512:U:H2'	1:AA:513:C:H6	1.74	0.53
1:AA:1434:A:H2'	1:AA:1435:G:O4'	2.08	0.53
3:AC:81:GLY:HA3	3:AC:85:ARG:NE	2.23	0.53
4:AD:121:VAL:N	4:AD:126:ILE:HD13	2.24	0.53
6:AF:27:GLN:HE21	6:AF:27:GLN:CA	2.20	0.53
9:AI:46:ALA:O	9:AI:78:LYS:HA	2.09	0.53
16:AP:23:ASP:O	16:AP:24:ALA:C	2.50	0.53
18:AR:22:VAL:O	18:AR:25:THR:HB	2.09	0.53
25:AZ:178:ALA:HB1	25:AZ:199:ILE:CD1	2.38	0.53
25:AZ:221:PHE:HA	25:AZ:244:ARG:O	2.09	0.53
27:B1:13:ILE:HD12	27:B1:14:VAL:N	2.24	0.53
36:BA:1054:A:O2'	44:BJ:31:UNK:HA	2.09	0.53
36:BA:1762:A:O5'	36:BA:1762:A:C8	2.59	0.53
36:BA:2373:G:H2'	36:BA:2374:C:C6	2.43	0.53
36:BA:2649:U:O2'	36:BA:2650:U:H5'	2.08	0.53
36:BA:2754:U:H2'	36:BA:2756:U:OP1	2.09	0.53
36:BA:2892:A:H62	36:BA:2893:G:H21	1.57	0.53
38:BC:116:THR:HB	38:BC:147:PHE:CD1	2.44	0.53
39:BD:147:LEU:CD1	39:BD:183:ARG:HH12	2.18	0.53
40:BE:52:LEU:HB3	40:BE:75:VAL:HB	1.90	0.53
46:BN:58:ASP:O	46:BN:60:ILE:HG13	2.08	0.53
54:BV:39:LEU:CD1	54:BV:47:VAL:HG11	2.37	0.53
56:BX:27:THR:HG22	56:BX:80:ILE:HB	1.91	0.53
57:BY:62:GLU:N	57:BY:62:GLU:CD	2.66	0.53
58:BZ:58:VAL:HA	58:BZ:67:LEU:O	2.08	0.53
1:CA:267:C:H2'	1:CA:268:C:H6	1.73	0.53
1:CA:367:U:H4'	25:CZ:291:ARG:NE	2.23	0.53
1:CA:532:A:N6	1:CA:1206:G:O2'	2.41	0.53
1:CA:1063:C:H5	1:CA:1064:G:HO2'	1.56	0.53
1:CA:1225:A:H2'	1:CA:1226:C:C5	2.44	0.53
9:CI:3:GLN:HA	9:CI:19:LEU:O	2.08	0.53
25:CZ:98:GLN:HE22	25:CZ:346:THR:CG2	2.22	0.53
25:CZ:330:ARG:NH1	25:CZ:334:PHE:HB3	2.23	0.53
26:D0:26:TYR:CE2	36:DA:857:C:H1'	2.44	0.53
36:DA:142(A):C:O2'	36:DA:143:G:H5'	2.08	0.53
36:DA:654(N):G:H2'	36:DA:654(O):G:O4'	2.09	0.53
36:DA:1050:A:H2'	36:DA:1051:G:C5'	2.35	0.53
36:DA:1573:G:H2'	36:DA:1574:C:H5'	1.90	0.53
36:DA:2097:C:O2'	36:DA:2098:U:H5'	2.09	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2750:A:H4'	36:DA:2751:G:OP1	2.08	0.53
36:DA:2807:G:C3'	36:DA:2808:U:H5"	2.38	0.53
39:DD:72:LYS:HG3	39:DD:103:ARG:NH2	2.24	0.53
39:DD:142:VAL:HG22	39:DD:143:HIS:N	2.24	0.53
42:DG:31:VAL:O	42:DG:33:ARG:HG3	2.09	0.53
43:DH:126:PRO:O	43:DH:127:GLU:CB	2.56	0.53
49:DQ:140:ALA:HB1	58:DZ:99:TYR:CE2	2.43	0.53
50:DR:28:LEU:HD12	50:DR:114:VAL:CG2	2.39	0.53
52:DT:106:SER:O	52:DT:107:ASP:OD1	2.27	0.53
57:DY:77:PRO:O	57:DY:78:ALA:HB2	2.07	0.53
58:DZ:119:GLU:O	58:DZ:121:HIS:N	2.39	0.53
58:DZ:123:ASP:O	58:DZ:124:ILE:CG2	2.53	0.53
10:AJ:4:ILE:HD11	10:AJ:77:PRO:HB3	1.91	0.53
10:AJ:24:VAL:HG21	10:AJ:37:PRO:CG	2.38	0.53
12:AL:10:LEU:O	12:AL:14:GLY:N	2.42	0.53
24:AY:2:G:O2'	24:AY:3:G:H5"	2.09	0.53
25:AZ:333:GLY:HA3	25:AZ:363:MET:HA	1.91	0.53
27:B1:68:PRO:C	27:B1:70:VAL:N	2.66	0.53
31:B5:36:CYS:C	31:B5:38:ALA:N	2.59	0.53
31:B5:57:VAL:O	31:B5:58:LEU:HD12	2.08	0.53
32:B6:12:GLU:HA	32:B6:23:THR:HA	1.91	0.53
34:B8:25:MET:CG	48:BP:64:LYS:HB2	2.39	0.53
36:BA:1087:G:C8	36:BA:1088:A:H4'	2.35	0.53
36:BA:1411:C:H2'	36:BA:1412:A:H8	1.73	0.53
36:BA:2334:G:H21	51:BS:18:ILE:CG2	2.20	0.53
36:BA:2703:C:O2'	36:BA:2704:C:H5'	2.09	0.53
38:BC:190:ARG:O	38:BC:194:ARG:HG3	2.08	0.53
38:BC:214:VAL:HG23	38:BC:224:ILE:HD13	1.91	0.53
40:BE:107:THR:HA	40:BE:163:GLU:O	2.09	0.53
42:BG:9:ARG:O	42:BG:11:TYR:N	2.41	0.53
43:BH:50:VAL:CG1	43:BH:52:VAL:HG23	2.39	0.53
46:BN:126:PRO:O	46:BN:127:ASP:CB	2.57	0.53
52:BT:10:VAL:O	52:BT:13:ARG:NE	2.37	0.53
58:BZ:114:GLY:H	58:BZ:146:ILE:HG22	1.72	0.53
1:CA:28:G:O2'	1:CA:296:U:OP1	2.25	0.53
1:CA:1010:G:O2'	1:CA:1011:G:H5'	2.09	0.53
1:CA:1157:A:H1'	1:CA:1181:G:C2	2.44	0.53
2:CB:141:GLU:O	2:CB:144:ARG:HG2	2.09	0.53
3:CC:92:ALA:O	3:CC:96:GLY:HA2	2.09	0.53
3:CC:172:ARG:O	3:CC:173:VAL:HG23	2.09	0.53
4:CD:43:HIS:O	4:CD:45:GLN:N	2.41	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:CF:69:GLU:O	6:CF:72:VAL:HG12	2.09	0.53
6:CF:87:ARG:HH11	6:CF:87:ARG:CG	2.21	0.53
9:CI:83:ARG:C	9:CI:86:VAL:HG12	2.32	0.53
13:CM:7:VAL:O	13:CM:9:ILE:HG13	2.09	0.53
13:CM:23:TYR:HD2	13:CM:67:GLU:HA	1.72	0.53
36:DA:88:G:H5'	36:DA:89:G:OP2	2.09	0.53
36:DA:2199:A:H3'	36:DA:2200:C:C6	2.43	0.53
38:DC:49:ILE:HB	38:DC:56:GLN:HB3	1.91	0.53
39:DD:79:VAL:HG21	39:DD:111:LEU:HD11	1.89	0.53
41:DF:53:THR:O	41:DF:57:VAL:HG23	2.08	0.53
42:DG:61:ALA:O	42:DG:65:GLY:N	2.42	0.53
42:DG:64:THR:HG23	42:DG:65:GLY:N	2.24	0.53
42:DG:85:GLY:C	42:DG:87:PRO:CD	2.81	0.53
52:DT:27:THR:OG1	52:DT:28:VAL:N	2.41	0.53
58:DZ:65:GLN:HB3	58:DZ:67:LEU:HD11	1.90	0.53
58:DZ:155:LEU:CD2	58:DZ:155:LEU:H	2.22	0.53
1:AA:953:G:C5'	1:AA:965:A:H61	2.22	0.53
1:AA:1236:A:H2'	1:AA:1237:C:C6	2.44	0.53
2:AB:209:ARG:NH1	2:AB:239:VAL:HG11	2.24	0.53
5:AE:102:ALA:HB1	5:AE:106:PRO:HG2	1.91	0.53
7:AG:84:ASN:ND2	7:AG:84:ASN:C	2.67	0.53
10:AJ:6:ILE:HG13	10:AJ:6:ILE:O	2.09	0.53
10:AJ:29:ARG:HH11	10:AJ:29:ARG:HG2	1.74	0.53
13:AM:108:ARG:HG3	13:AM:108:ARG:NH1	2.24	0.53
14:AN:29:ARG:HH11	14:AN:29:ARG:CG	2.21	0.53
25:AZ:189:ARG:HB2	25:AZ:192:GLU:OE2	2.09	0.53
27:B1:30:VAL:O	27:B1:30:VAL:HG23	2.09	0.53
29:B3:43:ILE:HD11	36:BA:927:G:O2'	2.09	0.53
36:BA:341:G:O2'	36:BA:342:G:H5'	2.09	0.53
36:BA:469:G:H2'	36:BA:470:A:H5"	1.91	0.53
36:BA:1682:G:H5'	36:BA:1762:A:O2'	2.08	0.53
36:BA:2179:C:H4'	36:BA:2180:U:C2	2.43	0.53
37:BB:80:U:H2'	37:BB:81:G:N2	2.21	0.53
42:BG:83:ARG:HB2	42:BG:84:LYS:HD2	1.91	0.53
47:BO:26:LYS:HB3	47:BO:30:ALA:HB2	1.91	0.53
49:BQ:30:GLY:HA2	49:BQ:107:ALA:HB2	1.90	0.53
51:BS:89:ARG:HG2	51:BS:89:ARG:NH1	2.24	0.53
53:BU:52:ARG:HB3	53:BU:52:ARG:HH11	1.74	0.53
53:BU:88:ILE:C	53:BU:90:VAL:N	2.64	0.53
56:BX:35:THR:HB	56:BX:38:GLU:HB3	1.90	0.53
1:CA:166:G:O2'	1:CA:167:G:H5'	2.09	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:825:G:O2'	1:CA:826:C:H5'	2.09	0.53
1:CA:1007:C:O2'	1:CA:1008:C:H5'	2.09	0.53
1:CA:1270:C:H2'	1:CA:1271:G:C8	2.43	0.53
3:CC:5:ILE:H	3:CC:5:ILE:HD12	1.72	0.53
3:CC:49:SER:C	3:CC:51:GLY:N	2.66	0.53
3:CC:76:VAL:CG2	3:CC:103:VAL:HG21	2.38	0.53
8:CH:56:LYS:HD2	8:CH:56:LYS:N	2.24	0.53
10:CJ:50:ILE:HG23	10:CJ:60:ARG:HH21	1.72	0.53
28:D2:69:ARG:NH2	36:DA:111:A:H4'	2.24	0.53
29:D3:19:GLN:NE2	29:D3:52:HIS:HE1	2.07	0.53
32:D6:12:GLU:HA	32:D6:23:THR:HA	1.91	0.53
36:DA:888:C:H2'	36:DA:889:C:C4'	2.36	0.53
36:DA:902:C:H2'	36:DA:903:C:C6	2.44	0.53
36:DA:1246:A:OP1	48:DP:16:ARG:NH2	2.41	0.53
36:DA:2133:G:C5	36:DA:2157:G:N1	2.77	0.53
36:DA:2649:U:H2'	36:DA:2650:U:H6	1.73	0.53
36:DA:2672:G:C2'	36:DA:2673:G:H5"	2.38	0.53
37:DB:3:C:N4	37:DB:118:G:H1	2.07	0.53
37:DB:56:G:O2'	37:DB:57:A:OP2	2.25	0.53
39:DD:24:ILE:C	39:DD:26:LYS:N	2.66	0.53
39:DD:77:ALA:HA	39:DD:97:TYR:HA	1.91	0.53
40:DE:49:LEU:O	40:DE:78:LEU:CB	2.57	0.53
44:DJ:18:UNK:O	44:DJ:19:UNK:C	2.57	0.53
44:DJ:96:UNK:C	44:DJ:98:UNK:N	2.70	0.53
47:DO:64:ARG:NH1	47:DO:83:ALA:HB2	2.23	0.53
55:DW:43:GLY:O	55:DW:47:VAL:HG23	2.08	0.53
1:AA:78:G:O2'	1:AA:79:G:H4'	2.08	0.52
1:AA:187:C:H4'	20:AT:85:MET:O	2.09	0.52
1:AA:1226:C:H4'	1:AA:1227:A:OP1	2.10	0.52
1:AA:1270:C:H2'	1:AA:1271:G:H8	1.74	0.52
3:AC:11:ARG:NH2	3:AC:182:ILE:HD12	2.24	0.52
4:AD:12:CYS:CA	4:AD:19:LEU:HD13	2.39	0.52
10:AJ:90:LEU:H	10:AJ:91:PRO:CD	2.21	0.52
13:AM:23:TYR:HD2	13:AM:67:GLU:HA	1.74	0.52
18:AR:26:LEU:HD21	18:AR:39:VAL:HG13	1.90	0.52
25:AZ:64:ASN:ND2	25:AZ:64:ASN:N	2.56	0.52
30:B4:11:PRO:HB3	30:B4:25:TYR:CE2	2.44	0.52
34:B8:50:LEU:O	34:B8:51:ALA:CB	2.57	0.52
36:BA:648:G:H2'	36:BA:649:G:H8	1.73	0.52
36:BA:769:G:H4'	36:BA:1379:A:N1	2.24	0.52
36:BA:1910:G:O2'	36:BA:1911:U:H5'	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2472:G:H5'	36:BA:2473:U:C5'	2.40	0.52
36:BA:2508:G:O3'	36:BA:2555:U:H5'	2.09	0.52
36:BA:2854:G:H1	36:BA:2863:C:H42	1.57	0.52
38:BC:6:ARG:HH11	38:BC:34:THR:HB	1.74	0.52
40:BE:116:VAL:CG2	40:BE:117:MET:N	2.72	0.52
50:BR:67:LEU:HD13	50:BR:76:VAL:HG21	1.91	0.52
55:BW:40:ASN:O	55:BW:41:LYS:HG2	2.09	0.52
1:CA:78:G:O2'	1:CA:79:G:H4'	2.08	0.52
1:CA:975:A:H5'	1:CA:975:A:C8	2.42	0.52
1:CA:1054:C:O2'	1:CA:1055:A:H5"	2.09	0.52
2:CB:61:LEU:HD23	2:CB:61:LEU:C	2.35	0.52
2:CB:98:LEU:O	2:CB:101:MET:HG3	2.09	0.52
4:CD:59:ARG:HE	4:CD:59:ARG:CA	2.11	0.52
18:CR:31:LEU:HD23	18:CR:31:LEU:N	2.21	0.52
24:CY:2:G:H4'	25:CZ:88:TYR:CE1	2.44	0.52
25:CZ:12:VAL:HG23	25:CZ:77:TYR:CD1	2.44	0.52
36:DA:654(M):C:H2'	36:DA:654(N):G:N7	2.24	0.52
36:DA:848:G:C4	36:DA:933:A:H8	2.27	0.52
36:DA:926:A:H8	36:DA:926:A:H5'	1.73	0.52
36:DA:1034:G:H2'	36:DA:1035:U:O4'	2.09	0.52
36:DA:1341:U:H4'	56:DX:57:LEU:HB3	1.90	0.52
36:DA:1843:C:H2'	36:DA:1844:C:C6	2.44	0.52
36:DA:2393:A:H4'	48:DP:61:ARG:O	2.09	0.52
36:DA:2416:C:H2'	36:DA:2417:C:C6	2.44	0.52
37:DB:52:A:O2'	37:DB:53:A:C8	2.54	0.52
39:DD:268:ARG:NH1	39:DD:268:ARG:HB3	2.24	0.52
41:DF:27:GLU:N	41:DF:27:GLU:OE1	2.42	0.52
41:DF:129:PHE:O	41:DF:132:VAL:HB	2.09	0.52
42:DG:91:ARG:HD2	42:DG:92:VAL:N	2.24	0.52
43:DH:50:VAL:CG1	43:DH:52:VAL:HG23	2.39	0.52
46:DN:55:VAL:HG22	46:DN:56:ASN:N	2.24	0.52
46:DN:63:THR:O	46:DN:66:LYS:HE3	2.09	0.52
46:DN:126:PRO:O	46:DN:127:ASP:CB	2.57	0.52
48:DP:9:ASN:H	48:DP:10:PRO:HD3	1.74	0.52
50:DR:4:LEU:O	50:DR:4:LEU:CG	2.57	0.52
53:DU:92:ARG:NH1	53:DU:94:ASN:ND2	2.50	0.52
54:DV:39:LEU:CD1	54:DV:47:VAL:HG11	2.39	0.52
58:DZ:123:ASP:C	58:DZ:124:ILE:HG12	2.34	0.52
2:AB:114:ARG:NH1	2:AB:118:LEU:HG	2.25	0.52
3:AC:49:SER:C	3:AC:51:GLY:N	2.67	0.52
3:AC:181:ASN:ND2	3:AC:204:LEU:HB2	2.24	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:60:TYR:CE1	5:AE:64:ARG:NH2	2.74	0.52
8:AH:30:ARG:HB3	8:AH:30:ARG:NH1	2.25	0.52
9:AI:111:ARG:O	9:AI:119:ALA:HB2	2.10	0.52
10:AJ:55:LYS:HG3	10:AJ:56:HIS:H	1.74	0.52
10:AJ:90:LEU:N	10:AJ:91:PRO:CD	2.72	0.52
13:AM:11:ARG:HG2	13:AM:12:ASN:N	2.16	0.52
13:AM:22:ILE:HB	13:AM:25:ILE:HD12	1.91	0.52
22:AV:47:U:H3'	22:AV:48:C:C5'	2.39	0.52
27:B1:25:LYS:HE2	36:BA:2396:G:OP1	2.09	0.52
28:B2:15:LYS:HG3	28:B2:16:LEU:N	2.25	0.52
34:B8:62:LEU:N	34:B8:63:PRO:CD	2.72	0.52
36:BA:49:A:H5"	36:BA:51:G:O4'	2.09	0.52
36:BA:2078:C:H2'	36:BA:2079:U:C6	2.45	0.52
40:BE:52:LEU:HD23	40:BE:75:VAL:CB	2.38	0.52
41:BF:197:ASP:O	41:BF:200:GLU:HB3	2.09	0.52
42:BG:119:GLY:HA3	42:BG:181:ARG:CB	2.35	0.52
43:BH:90:LYS:O	43:BH:94:TYR:HD2	1.92	0.52
43:BH:122:THR:HB	43:BH:134:SER:HB2	1.91	0.52
46:BN:2:LYS:HZ1	54:BV:13:ARG:H	1.57	0.52
47:BO:1:MET:HE2	47:BO:32:TYR:CG	2.45	0.52
48:BP:45:LEU:HD12	48:BP:46:LYS:H	1.74	0.52
51:BS:99:LYS:HB3	51:BS:99:LYS:HZ3	1.73	0.52
52:BT:26:ASP:HB3	52:BT:89:VAL:O	2.10	0.52
54:BV:19:LYS:HE2	54:BV:19:LYS:HA	1.91	0.52
54:BV:38:LEU:C	54:BV:38:LEU:HD23	2.34	0.52
56:BX:38:GLU:HG2	56:BX:38:GLU:O	2.07	0.52
1:CA:45:U:H2'	1:CA:46:G:H8	1.75	0.52
1:CA:77:G:N3	1:CA:77:G:H2'	2.24	0.52
4:CD:17:VAL:O	4:CD:17:VAL:HG12	2.08	0.52
5:CE:7:GLU:HG2	5:CE:112:LEU:CD2	2.39	0.52
9:CI:28:VAL:HG23	9:CI:33:PHE:HA	1.91	0.52
10:CJ:45:ARG:O	10:CJ:64:GLU:HA	2.09	0.52
14:CN:29:ARG:HH11	14:CN:29:ARG:CG	2.21	0.52
36:DA:199:A:N6	36:DA:2433:A:H2'	2.24	0.52
36:DA:221:A:O2'	36:DA:222:A:OP2	2.26	0.52
36:DA:523:C:O2'	36:DA:524:U:H5'	2.08	0.52
36:DA:535:C:O2'	36:DA:536:A:H5'	2.09	0.52
36:DA:654(E):G:C2'	36:DA:654(F):C:H5'	2.38	0.52
36:DA:710:G:H2'	36:DA:711:G:H8	1.74	0.52
36:DA:814:C:H4'	36:DA:1224:C:O2	2.09	0.52
36:DA:832:G:O2'	48:DP:52:GLU:HB3	2.10	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1493:C:C4	36:DA:2206:G:O2'	2.62	0.52
36:DA:1541:G:OP2	36:DA:1541:G:O3'	2.28	0.52
36:DA:1652:A:O2'	36:DA:1653:G:H5'	2.09	0.52
36:DA:2037:G:H2'	36:DA:2038:G:C8	2.44	0.52
36:DA:2060:A:N6	41:DF:74:ARG:HH21	2.07	0.52
36:DA:2485:G:O2'	36:DA:2486:G:H5'	2.10	0.52
37:DB:27:C:H5'	37:DB:28:C:OP2	2.09	0.52
38:DC:120:MET:O	38:DC:124:GLY:N	2.35	0.52
42:DG:73:ALA:O	42:DG:85:GLY:HA2	2.09	0.52
50:DR:74:LYS:CD	50:DR:77:ARG:HH11	2.21	0.52
1:AA:255:G:O6	1:AA:266:G:O6	2.26	0.52
1:AA:624:C:H4'	16:AP:11:SER:N	2.22	0.52
1:AA:1176:A:H2'	1:AA:1177:G:C8	2.44	0.52
1:AA:1533:C:H3'	1:AA:1534:A:C5'	2.35	0.52
3:AC:58:GLU:HB2	3:AC:65:ALA:CB	2.39	0.52
3:AC:92:ALA:O	3:AC:96:GLY:HA2	2.08	0.52
19:AS:16:LEU:O	19:AS:17:GLU:C	2.51	0.52
22:AW:59:U:C2'	22:AW:60:U:H5'	2.40	0.52
27:B1:68:PRO:O	27:B1:70:VAL:N	2.43	0.52
28:B2:46:GLN:HB3	28:B2:48:HIS:CE1	2.45	0.52
28:B2:47:ASN:HB3	28:B2:51:ARG:HB2	1.91	0.52
36:BA:710:G:H2'	36:BA:711:G:C8	2.44	0.52
36:BA:747:U:O2	36:BA:2014:A:H1'	2.09	0.52
36:BA:1120:G:H2'	36:BA:1121:C:C6	2.44	0.52
36:BA:1453:U:H5'	50:BR:63:ARG:NE	2.24	0.52
36:BA:1484:G:H2'	36:BA:1485:G:C5'	2.06	0.52
36:BA:1722:A:O2'	36:BA:1739:U:H5"	2.09	0.52
36:BA:2297:C:O2'	36:BA:2298:A:H5'	2.09	0.52
39:BD:72:LYS:NZ	39:BD:75:ILE:HG13	2.24	0.52
39:BD:268:ARG:HB3	39:BD:268:ARG:NH1	2.25	0.52
42:BG:107:LEU:HD22	42:BG:107:LEU:H	1.73	0.52
42:BG:107:LEU:HD23	42:BG:108:ASN:N	2.24	0.52
48:BP:38:GLN:HG3	48:BP:39:LYS:H	1.74	0.52
48:BP:114:ILE:HD13	48:BP:127:ALA:CB	2.39	0.52
51:BS:61:ASN:OD1	51:BS:64:GLU:HB2	2.09	0.52
52:BT:23:ARG:HA	52:BT:52:ILE:CD1	2.39	0.52
1:CA:256:U:H2'	1:CA:257:G:H8	1.74	0.52
1:CA:1320:C:H5"	19:CS:70:LYS:HG3	1.91	0.52
1:CA:1452:C:H4'	1:CA:1456:G:N2	2.25	0.52
1:CA:1513:A:H2'	1:CA:1514:C:H6	1.72	0.52
2:CB:24:TRP:CZ3	2:CB:26:PRO:HA	2.44	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:111:ALA:HB2	4:CD:120:LEU:HD12	1.92	0.52
13:CM:108:ARG:HG3	13:CM:108:ARG:NH1	2.24	0.52
16:CP:14:ASN:N	16:CP:15:PRO:CD	2.71	0.52
27:D1:61:ARG:HH11	27:D1:61:ARG:HG2	1.74	0.52
31:D5:49:CYS:SG	31:D5:50:GLY:N	2.82	0.52
36:DA:629:G:H1'	36:DA:639:U:O2'	2.10	0.52
36:DA:947:G:H2'	36:DA:948:G:C8	2.44	0.52
36:DA:1518:U:H2'	36:DA:1519:G:O4'	2.09	0.52
36:DA:2840:C:H5"	50:DR:53:HIS:CD2	2.44	0.52
36:DA:2892:A:H62	36:DA:2893:G:H21	1.56	0.52
37:DB:93:G:H2'	37:DB:94:C:H6	1.74	0.52
41:DF:116:ASP:OD2	48:DP:5:ASP:N	2.43	0.52
41:DF:160:ASN:HD21	41:DF:162:LEU:HB2	1.74	0.52
44:DJ:121:UNK:O	44:DJ:123:UNK:N	2.43	0.52
51:DS:12:PHE:HD1	51:DS:13:ARG:N	2.06	0.52
52:DT:129:ARG:NE	52:DT:131:ALA:HB3	2.23	0.52
53:DU:88:ILE:C	53:DU:90:VAL:N	2.67	0.52
53:DU:102:GLU:HG3	54:DV:2:PHE:HE2	1.74	0.52
54:DV:39:LEU:N	54:DV:39:LEU:HD22	2.25	0.52
57:DY:57:GLN:HA	57:DY:57:GLN:OE1	2.09	0.52
1:AA:498:U:O2'	1:AA:499:A:H8	1.91	0.52
1:AA:626:U:H2'	1:AA:627:G:C8	2.45	0.52
1:AA:751:U:H4'	15:AO:24:SER:HA	1.91	0.52
1:AA:1241:G:H2'	1:AA:1242:C:C6	2.44	0.52
2:AB:15:VAL:H	2:AB:16:HIS:CE1	2.27	0.52
3:AC:188:LEU:HD12	3:AC:195:VAL:HG11	1.91	0.52
7:AG:16:LEU:HD12	9:AI:42:ARG:HA	1.92	0.52
10:AJ:44:VAL:HG21	10:AJ:66:ARG:HH21	1.73	0.52
34:B8:13:ARG:HD2	48:BP:61:ARG:CD	2.31	0.52
36:BA:31:C:O2'	36:BA:32:C:H5"	2.08	0.52
36:BA:36:G:H2'	36:BA:37:C:H6	1.74	0.52
36:BA:610:G:N2	36:BA:619:G:H1'	2.25	0.52
36:BA:902:C:H2'	36:BA:903:C:C6	2.44	0.52
36:BA:1068:G:H1'	36:BA:1069:A:C5'	2.40	0.52
36:BA:1506:C:H2'	36:BA:1506:C:O2	2.09	0.52
36:BA:1651:G:H2'	36:BA:1652:A:O4'	2.10	0.52
36:BA:2060:A:N6	41:BF:74:ARG:HH21	2.07	0.52
36:BA:2649:U:H2'	36:BA:2650:U:H6	1.71	0.52
46:BN:46:VAL:CG1	46:BN:48:MET:HG3	2.38	0.52
48:BP:9:ASN:H	48:BP:10:PRO:HD3	1.74	0.52
48:BP:102:ARG:CB	48:BP:102:ARG:NH1	2.73	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BT:12:SER:C	52:BT:13:ARG:CZ	2.83	0.52
1:CA:509:A:H5'	4:CD:54:TYR:HD2	1.74	0.52
1:CA:512:U:H2'	1:CA:513:C:H6	1.74	0.52
1:CA:961:U:H5'	1:CA:984:C:H1'	1.91	0.52
1:CA:1261:A:C2'	1:CA:1262:C:H5'	2.40	0.52
1:CA:1308:U:OP1	13:CM:98:VAL:HG22	2.10	0.52
1:CA:1402:C:H2'	1:CA:1403:C:O4'	2.10	0.52
1:CA:1510:U:H2'	1:CA:1511:G:C8	2.43	0.52
6:CF:27:GLN:CA	6:CF:27:GLN:HE21	2.22	0.52
7:CG:144:MET:C	7:CG:145:ALA:O	2.50	0.52
11:CK:20:TYR:O	11:CK:30:VAL:HA	2.09	0.52
13:CM:14:ARG:NH2	13:CM:16:ASP:OD2	2.41	0.52
13:CM:22:ILE:HB	13:CM:25:ILE:HD12	1.91	0.52
19:CS:13:ASP:O	19:CS:15:LEU:N	2.42	0.52
25:CZ:92:MET:HE3	25:CZ:119:HIS:CD2	2.44	0.52
25:CZ:388:ILE:HB	25:CZ:395:VAL:HG23	1.91	0.52
32:D6:41:PRO:HD2	32:D6:45:LYS:HA	1.91	0.52
34:D8:28:GLY:C	34:D8:32:LEU:HD22	2.35	0.52
36:DA:484:C:H2'	36:DA:485:C:C6	2.45	0.52
36:DA:643:A:H2'	36:DA:644:A:O4'	2.08	0.52
36:DA:901:A:H5'	36:DA:902:C:OP2	2.09	0.52
36:DA:2000:G:O2'	36:DA:2001:A:H5'	2.10	0.52
39:DD:34:VAL:HG23	39:DD:35:LYS:N	2.23	0.52
39:DD:35:LYS:CB	39:DD:36:PRO:CD	2.87	0.52
39:DD:70:TRP:CZ3	39:DD:150:LYS:HA	2.44	0.52
43:DH:158:HIS:CE1	43:DH:169:VAL:HG12	2.44	0.52
46:DN:39:ARG:C	46:DN:41:ASP:H	2.17	0.52
48:DP:107:LYS:O	48:DP:107:LYS:HG3	2.10	0.52
52:DT:23:ARG:HA	52:DT:52:ILE:CD1	2.39	0.52
53:DU:52:ARG:O	53:DU:55:ARG:N	2.43	0.52
54:DV:58:VAL:HB	54:DV:98:GLU:HG2	1.91	0.52
55:DW:71:VAL:HG23	55:DW:71:VAL:O	2.10	0.52
57:DY:36:ALA:HB1	57:DY:67:LEU:O	2.09	0.52
57:DY:43:ASN:CB	57:DY:64:GLU:HA	2.39	0.52
58:DZ:163:LEU:CD2	58:DZ:163:LEU:N	2.73	0.52
1:AA:154:C:H2'	1:AA:155:C:C6	2.44	0.52
1:AA:755:G:OP2	15:AO:65:ARG:HD2	2.10	0.52
1:AA:865:A:H2'	1:AA:866:C:C6	2.43	0.52
1:AA:940:C:P	7:AG:102:ARG:NH2	2.82	0.52
1:AA:946:A:H2'	1:AA:947:G:H8	1.73	0.52
1:AA:1030(D):A:N7	1:AA:1031:G:N3	2.57	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1498:U:H4'	1:AA:1519:A:C2	2.44	0.52
2:AB:204:ASN:HD21	2:AB:206:ASP:H	1.56	0.52
5:AE:7:GLU:HG2	5:AE:112:LEU:CD2	2.39	0.52
7:AG:101:LEU:O	7:AG:105:VAL:HG23	2.09	0.52
8:AH:116:LYS:HD3	8:AH:127:LEU:HD12	1.92	0.52
24:AY:68:C:H2'	24:AY:69:C:C6	2.44	0.52
25:AZ:63:ILE:HG13	25:AZ:64:ASN:N	2.25	0.52
25:AZ:178:ALA:CB	25:AZ:199:ILE:HD11	2.40	0.52
25:AZ:388:ILE:HB	25:AZ:395:VAL:HG23	1.91	0.52
28:B2:25:VAL:CG1	28:B2:29:LYS:HE2	2.40	0.52
36:BA:67:U:H2'	36:BA:68:G:H8	1.75	0.52
36:BA:583:G:OP2	53:BU:10:ARG:HD2	2.10	0.52
36:BA:2097:C:O2'	36:BA:2098:U:H5'	2.09	0.52
38:BC:49:ILE:HB	38:BC:56:GLN:HB3	1.90	0.52
39:BD:148:GLU:CB	39:BD:151:LYS:HD2	2.40	0.52
42:BG:2:PRO:HG2	42:BG:98:ARG:HH12	1.74	0.52
48:BP:57:THR:OG1	48:BP:59:LEU:CB	2.58	0.52
52:BT:23:ARG:NH2	52:BT:120:ARG:HD3	2.24	0.52
58:BZ:75:ASN:O	58:BZ:84:GLU:HB3	2.09	0.52
1:CA:80:G:H22	1:CA:90:U:H5'	1.74	0.52
1:CA:148:G:H2'	1:CA:149:A:H8	1.75	0.52
1:CA:158:G:O2'	1:CA:159:G:H5'	2.09	0.52
1:CA:626:U:H2'	1:CA:627:G:C8	2.44	0.52
1:CA:807:A:H2'	1:CA:808:C:C6	2.44	0.52
1:CA:977:A:O2'	1:CA:978:A:H5'	2.09	0.52
1:CA:1120:G:H2'	1:CA:1121:U:H6	1.75	0.52
1:CA:1442(A):G:H3'	1:CA:1442(B):A:H5"	1.90	0.52
7:CG:102:ARG:O	7:CG:106:GLN:HG3	2.09	0.52
9:CI:33:PHE:O	9:CI:35:GLU:N	2.41	0.52
10:CJ:33:GLN:HB2	10:CJ:75:ILE:CD1	2.33	0.52
12:CL:117:ARG:O	12:CL:118:SER:C	2.50	0.52
20:CT:91:LEU:O	20:CT:94:ALA:HB3	2.10	0.52
22:CV:41:C:C3'	22:CV:42:C:H5"	2.37	0.52
22:CV:56:C:H1'	42:DG:76:SER:HB2	1.90	0.52
25:CZ:213:PRO:HG2	25:CZ:215:ARG:HE	1.74	0.52
25:CZ:345:ARG:NH1	25:CZ:379:ALA:O	2.43	0.52
28:D2:7:ARG:O	28:D2:10:LEU:HB3	2.10	0.52
28:D2:33:MET:O	28:D2:37:PHE:HB2	2.08	0.52
36:DA:1389:G:H2'	36:DA:1390:U:C6	2.44	0.52
36:DA:2848:G:C8	52:DT:97:ALA:HB2	2.45	0.52
40:DE:68:ALA:C	40:DE:70:ALA:H	2.16	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DE:77:ILE:HG22	40:DE:78:LEU:N	2.24	0.52
42:DG:91:ARG:HD2	42:DG:91:ARG:C	2.35	0.52
42:DG:150:ASP:O	42:DG:151:ALA:HB2	2.09	0.52
42:DG:180:PHE:C	42:DG:182:LYS:H	2.18	0.52
46:DN:87:LEU:CD1	46:DN:91:LEU:HG	2.40	0.52
47:DO:115:VAL:HG13	47:DO:121:VAL:HG21	1.90	0.52
48:DP:23:PRO:HD2	48:DP:33:ARG:NE	2.16	0.52
1:AA:865:A:H2	1:AA:918:A:H4'	1.74	0.52
1:AA:975:A:C4'	1:AA:976:G:H5"	2.31	0.52
3:AC:29:TYR:O	3:AC:30:ARG:C	2.53	0.52
3:AC:50:ALA:HA	3:AC:72:LYS:CB	2.39	0.52
3:AC:139:GLN:NE2	3:AC:143:GLU:OE2	2.42	0.52
3:AC:173:VAL:HG12	3:AC:173:VAL:O	2.09	0.52
4:AD:157:LEU:HD12	4:AD:157:LEU:N	2.23	0.52
4:AD:190:ASP:O	4:AD:194:LEU:HD23	2.10	0.52
9:AI:65:VAL:HG21	9:AI:73:GLN:CG	2.40	0.52
10:AJ:85:LEU:C	10:AJ:87:THR:H	2.17	0.52
12:AL:59:ARG:NH2	12:AL:63:GLY:HA2	2.24	0.52
19:AS:15:LEU:O	19:AS:19:VAL:HG23	2.09	0.52
22:AW:55:U:H5	22:AW:58:A:OP2	1.92	0.52
22:AW:56:C:O4'	38:BC:132:GLY:HA3	2.10	0.52
25:AZ:27:LEU:O	25:AZ:30:ALA:HB3	2.10	0.52
25:AZ:343:TYR:CE1	25:AZ:389:ARG:HD3	2.44	0.52
26:B0:40:GLN:HE21	26:B0:44:ARG:HB2	1.74	0.52
28:B2:43:GLN:C	28:B2:45:SER:N	2.61	0.52
29:B3:19:GLN:NE2	29:B3:52:HIS:HE1	2.07	0.52
30:B4:28:LYS:HA	30:B4:28:LYS:HE3	1.91	0.52
36:BA:278:A:N6	36:BA:362:U:H3	2.08	0.52
36:BA:801:G:O4'	41:BF:54:ARG:HD3	2.09	0.52
36:BA:1192:G:N7	48:BP:29:LYS:NZ	2.39	0.52
36:BA:1681:G:O2'	36:BA:1762:A:C2'	2.57	0.52
36:BA:2314:C:O2'	36:BA:2315:G:H5'	2.10	0.52
36:BA:2741:A:H2'	36:BA:2742:C:O4'	2.09	0.52
36:BA:2807:G:H2'	36:BA:2808:U:H5"	1.90	0.52
42:BG:91:ARG:C	42:BG:91:ARG:CD	2.83	0.52
42:BG:167:GLU:CD	42:BG:167:GLU:H	2.17	0.52
46:BN:57:ALA:HB3	46:BN:124:ALA:HA	1.90	0.52
50:BR:28:LEU:HD12	50:BR:114:VAL:CG2	2.39	0.52
52:BT:2:ASN:HB2	52:BT:7:ILE:HD11	1.92	0.52
52:BT:28:VAL:HG11	52:BT:46:GLU:CG	2.39	0.52
53:BU:92:ARG:NH1	53:BU:94:ASN:ND2	2.52	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:BU:95:LEU:HD12	54:BV:11:GLN:HG3	1.90	0.52
53:BU:102:GLU:HG3	54:BV:2:PHE:HE2	1.74	0.52
1:CA:961:U:O2'	1:CA:962:C:H6	1.92	0.52
1:CA:973:G:O3'	14:CN:41:ARG:NH1	2.42	0.52
1:CA:1320:C:O2'	1:CA:1321:C:H5'	2.10	0.52
1:CA:1321:C:C3'	1:CA:1322:C:H5"	2.38	0.52
1:CA:1391:U:H2'	1:CA:1392:G:C8	2.45	0.52
2:CB:21:ARG:HB3	2:CB:39:ILE:HG12	1.90	0.52
9:CI:65:VAL:HG21	9:CI:73:GLN:CG	2.39	0.52
19:CS:16:LEU:O	19:CS:17:GLU:C	2.53	0.52
19:CS:36:ARG:HB2	19:CS:72:GLY:HA3	1.92	0.52
25:CZ:27:LEU:C	25:CZ:27:LEU:HD12	2.34	0.52
25:CZ:185:ASN:N	25:CZ:185:ASN:HD22	2.07	0.52
28:D2:38:GLN:HA	28:D2:41:ILE:HG12	1.92	0.52
29:D3:43:ILE:HD11	36:DA:927:G:O2'	2.10	0.52
30:D4:6:HIS:HB3	42:DG:67:LYS:HZ1	1.75	0.52
32:D6:52:VAL:HG12	32:D6:53:LYS:CD	2.39	0.52
34:D8:22:VAL:HB	34:D8:53:PRO:HB3	1.92	0.52
36:DA:588:U:H2'	36:DA:589:C:C6	2.45	0.52
36:DA:780:G:OP1	39:DD:218:ARG:NH2	2.41	0.52
36:DA:1445(A):C:O2'	36:DA:1446:C:H5'	2.10	0.52
36:DA:1771:C:H1'	36:DA:1786:A:H8	1.70	0.52
36:DA:2508:G:O3'	36:DA:2555:U:H5'	2.10	0.52
36:DA:2822:G:H2'	36:DA:2823:A:H5"	1.90	0.52
41:DF:22:ALA:HB1	41:DF:26:ALA:CB	2.39	0.52
43:DH:41:MET:HG3	43:DH:42:ARG:N	2.24	0.52
52:DT:77:PRO:C	52:DT:79:HIS:H	2.17	0.52
54:DV:58:VAL:HG12	54:DV:97:LYS:HB2	1.90	0.52
1:AA:158:G:O2'	1:AA:159:G:H5'	2.10	0.52
1:AA:328:C:H4'	1:AA:329:A:H5'	1.92	0.52
1:AA:927:G:H4'	1:AA:927:G:OP2	2.10	0.52
2:AB:69:LEU:HD23	2:AB:91:PRO:HB2	1.92	0.52
3:AC:25:GLY:O	3:AC:26:LYS:C	2.52	0.52
3:AC:50:ALA:HB2	3:AC:75:VAL:HB	1.92	0.52
3:AC:76:VAL:CG2	3:AC:103:VAL:HG21	2.39	0.52
11:AK:20:TYR:O	11:AK:30:VAL:HA	2.10	0.52
12:AL:20:LYS:HD3	12:AL:20:LYS:N	2.08	0.52
19:AS:13:ASP:O	19:AS:15:LEU:N	2.43	0.52
28:B2:48:HIS:CG	28:B2:49:LYS:H	2.27	0.52
36:BA:405:U:H3'	36:BA:406:G:H5'	1.91	0.52
36:BA:1466:G:H2'	36:BA:1547:C:N4	2.25	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1499:C:C2'	36:BA:1500:G:H5'	2.40	0.52
38:BC:73:ARG:H	38:BC:111:ASP:CG	2.18	0.52
40:BE:30:PRO:HD3	40:BE:180:ASN:CG	2.34	0.52
42:BG:31:VAL:O	42:BG:33:ARG:HD3	2.10	0.52
43:BH:85:LYS:HG2	43:BH:86:GLU:N	2.25	0.52
50:BR:34:ILE:HB	50:BR:114:VAL:CG2	2.40	0.52
51:BS:89:ARG:CG	51:BS:92:TYR:CA	2.88	0.52
55:BW:68:ARG:O	55:BW:109:GLU:HA	2.10	0.52
57:BY:17:SER:OG	57:BY:18:GLY:N	2.37	0.52
1:CA:436:C:H2'	1:CA:437:U:C6	2.44	0.52
1:CA:1392:G:N2	1:CA:1502:A:C8	2.78	0.52
3:CC:50:ALA:HB2	3:CC:75:VAL:HB	1.91	0.52
7:CG:7:ALA:O	7:CG:8:GLU:CB	2.57	0.52
7:CG:15:ASP:OD1	7:CG:44:TYR:OH	2.26	0.52
9:CI:69:GLY:O	9:CI:73:GLN:HG3	2.10	0.52
10:CJ:90:LEU:N	10:CJ:91:PRO:CD	2.73	0.52
15:CO:9:GLN:O	15:CO:13:GLN:HG3	2.09	0.52
24:CY:28:C:H2'	24:CY:29:G:C8	2.45	0.52
24:CY:45:U:H3'	24:CY:46:7MG:H5'	1.84	0.52
31:D5:57:VAL:HG12	31:D5:58:LEU:N	2.25	0.52
36:DA:1103:A:H5"	36:DA:1104:C:C5	2.43	0.52
36:DA:1245:G:H5"	41:DF:34:TRP:HZ2	1.74	0.52
36:DA:1947:C:H2'	36:DA:1948:G:H5"	1.91	0.52
36:DA:2735:G:H2'	36:DA:2736:G:H8	1.75	0.52
36:DA:2807:G:H2'	36:DA:2808:U:H5"	1.92	0.52
39:DD:91:ARG:HG2	39:DD:91:ARG:NH1	2.25	0.52
39:DD:201:HIS:O	39:DD:204:ILE:HG12	2.10	0.52
42:DG:19:LEU:O	42:DG:22:ARG:HB2	2.10	0.52
43:DH:90:LYS:O	43:DH:94:TYR:HD2	1.92	0.52
48:DP:98:GLU:HA	48:DP:101:VAL:HG22	1.92	0.52
50:DR:83:ILE:HG22	50:DR:87:TYR:HE2	1.74	0.52
52:DT:84:GLN:O	52:DT:85:LYS:HG3	2.10	0.52
53:DU:95:LEU:C	53:DU:97:ASP:H	2.17	0.52
58:DZ:108:PRO:C	58:DZ:110:GLY:N	2.67	0.52
1:AA:1017:G:H2'	1:AA:1018:C:C6	2.44	0.52
1:AA:1327:C:O2'	1:AA:1328:C:H5'	2.10	0.52
2:AB:141:GLU:O	2:AB:144:ARG:HG2	2.09	0.52
3:AC:46:GLU:O	3:AC:47:LEU:CB	2.52	0.52
25:AZ:209:TYR:O	25:AZ:211:PRO:HD3	2.10	0.52
28:B2:24:LEU:O	28:B2:28:LYS:HB2	2.10	0.52
36:BA:271(U):G:O2'	36:BA:271(V):G:H5'	2.10	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:335:C:H2'	36:BA:336:C:H6	1.75	0.52
36:BA:814:C:H4'	36:BA:1224:C:O2	2.10	0.52
36:BA:832:G:H21	48:BP:53:GLY:CA	2.22	0.52
36:BA:1363:C:H2'	36:BA:1364:G:C8	2.45	0.52
36:BA:1479:G:H5"	36:BA:1560:G:H4'	1.92	0.52
36:BA:2001:A:H4'	36:BA:2689:U:H2'	1.92	0.52
36:BA:2461:C:H2'	36:BA:2462:U:C6	2.45	0.52
36:BA:2523:G:C2'	36:BA:2524:G:C5'	2.87	0.52
39:BD:45:ASN:CG	39:BD:46:GLN:N	2.62	0.52
39:BD:68:LYS:HD3	39:BD:70:TRP:CZ2	2.45	0.52
40:BE:70:ALA:O	40:BE:71:GLY:C	2.53	0.52
41:BF:116:ASP:OD2	48:BP:5:ASP:N	2.43	0.52
42:BG:9:ARG:HD3	42:BG:13:GLU:OE2	2.09	0.52
48:BP:86:LYS:HB2	48:BP:117:GLU:O	2.10	0.52
50:BR:3:HIS:C	50:BR:5:LYS:N	2.63	0.52
57:BY:6:HIS:CD2	57:BY:6:HIS:N	2.75	0.52
57:BY:7:VAL:HB	57:BY:8:LYS:NZ	2.25	0.52
1:CA:67:C:O2'	1:CA:171:A:H1'	2.10	0.52
1:CA:291:C:O2'	1:CA:292:G:H5'	2.10	0.52
1:CA:1268:A:H2'	1:CA:1269:A:C8	2.45	0.52
1:CA:1342:C:O2'	9:CI:124:GLN:HG3	2.08	0.52
2:CB:69:LEU:HD23	2:CB:91:PRO:HB2	1.92	0.52
2:CB:141:GLU:O	2:CB:145:LEU:HD23	2.10	0.52
5:CE:28:PHE:O	5:CE:47:LYS:HA	2.09	0.52
13:CM:11:ARG:CG	13:CM:12:ASN:H	2.11	0.52
16:CP:59:TRP:HA	16:CP:62:VAL:HG23	1.91	0.52
25:CZ:28:THR:C	25:CZ:30:ALA:H	2.18	0.52
26:D0:11:ARG:O	26:D0:14:ARG:NH2	2.42	0.52
30:D4:22:ILE:HD12	30:D4:22:ILE:H	1.73	0.52
35:D9:7:VAL:HG13	35:D9:34:GLN:CG	2.34	0.52
36:DA:291:C:H2'	36:DA:292:C:C6	2.44	0.52
36:DA:361:G:H2'	36:DA:362:U:H4'	1.91	0.52
36:DA:747:U:O2	36:DA:2014:A:H1'	2.10	0.52
36:DA:1204:A:N1	36:DA:1241:A:H2	2.08	0.52
36:DA:1751:C:O2'	36:DA:1752:C:H5'	2.09	0.52
36:DA:1902:C:O2'	39:DD:244:ARG:HB2	2.09	0.52
38:DC:6:ARG:HH11	38:DC:34:THR:HB	1.74	0.52
39:DD:275:LYS:HD2	39:DD:276:LYS:N	2.25	0.52
42:DG:64:THR:HG23	42:DG:65:GLY:H	1.74	0.52
47:DO:31:LYS:HB3	47:DO:32:TYR:CE1	2.45	0.52
48:DP:146:VAL:HG13	48:DP:147:LEU:N	2.25	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:DR:33:ARG:HG3	50:DR:115:GLU:HG3	1.92	0.52
51:DS:61:ASN:OD1	51:DS:64:GLU:HB2	2.09	0.52
51:DS:85:VAL:C	51:DS:106:ARG:HG3	2.34	0.52
52:DT:83:ILE:HG13	52:DT:84:GLN:N	2.24	0.52
56:DX:64:LYS:HG2	56:DX:65:ARG:N	2.24	0.52
57:DY:74:PRO:HG2	57:DY:81:LYS:O	2.10	0.52
1:AA:757:U:O2'	1:AA:758:G:H5'	2.10	0.52
1:AA:1086:U:C2'	1:AA:1087:G:H5'	2.33	0.52
2:AB:72:GLY:O	2:AB:94:ASN:HA	2.10	0.52
3:AC:206:GLU:O	3:AC:207:VAL:C	2.52	0.52
4:AD:126:ILE:N	4:AD:126:ILE:CD1	2.72	0.52
24:AY:28:C:H2'	24:AY:29:G:C8	2.45	0.52
25:AZ:231:ILE:HD12	25:AZ:231:ILE:N	2.25	0.52
29:B3:29:ARG:HB2	29:B3:29:ARG:NH1	2.19	0.52
32:B6:9:LEU:HD13	32:B6:9:LEU:C	2.35	0.52
33:B7:43:THR:HG23	33:B7:44:PRO:HD2	1.90	0.52
34:B8:22:VAL:HB	34:B8:53:PRO:HB3	1.91	0.52
36:BA:518:G:H4'	55:BW:18:ARG:NH1	2.25	0.52
36:BA:654(E):G:C2'	36:BA:654(F):C:H5'	2.39	0.52
36:BA:1450(A):C:H2'	36:BA:1451:C:H6	1.75	0.52
36:BA:2199:A:H5'	36:BA:2200:C:OP2	2.10	0.52
39:BD:10:THR:HG23	39:BD:13:ARG:CB	2.36	0.52
40:BE:54:GLN:O	40:BE:55:ASN:HB2	2.10	0.52
41:BF:22:ALA:HB1	41:BF:26:ALA:CB	2.40	0.52
42:BG:20:ILE:O	42:BG:22:ARG:N	2.43	0.52
42:BG:146:TYR:C	42:BG:148:MET:H	2.18	0.52
43:BH:37:VAL:HG12	43:BH:38:SER:N	2.25	0.52
46:BN:76:SER:N	46:BN:81:GLY:O	2.35	0.52
48:BP:75:ILE:HD12	48:BP:75:ILE:N	2.25	0.52
48:BP:84:ASN:C	48:BP:86:LYS:N	2.66	0.52
49:BQ:116:GLU:O	49:BQ:120:ILE:HG12	2.10	0.52
57:BY:41:GLY:O	57:BY:42:VAL:O	2.28	0.52
1:CA:272:C:O2'	1:CA:273:A:H5'	2.10	0.52
1:CA:995:C:HO2'	1:CA:996:A:H8	1.57	0.52
2:CB:97:TRP:HH2	2:CB:176:GLU:CD	2.18	0.52
4:CD:111:ALA:HB2	4:CD:120:LEU:CD1	2.40	0.52
4:CD:114:ARG:HH11	4:CD:114:ARG:CG	2.14	0.52
4:CD:127:THR:HG23	4:CD:130:GLY:O	2.10	0.52
6:CF:43:LEU:H	6:CF:43:LEU:CD2	2.23	0.52
6:CF:61:LEU:O	6:CF:62:TRP:CB	2.57	0.52
10:CJ:90:LEU:H	10:CJ:91:PRO:CD	2.21	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:CZ:244:ARG:HA	25:CZ:282:ALA:HB2	1.92	0.52
36:DA:36:G:H2'	36:DA:37:C:H6	1.74	0.52
36:DA:57:C:H2'	36:DA:58:G:O4'	2.10	0.52
36:DA:575:A:OP2	36:DA:2499:C:O2'	2.28	0.52
36:DA:1139:G:H5"	46:DN:70:LYS:NZ	2.25	0.52
36:DA:1231:G:H2'	36:DA:1232:G:H8	1.75	0.52
36:DA:1385:G:O2'	36:DA:1396:U:C6	2.62	0.52
36:DA:1754:C:OP1	52:DT:96:ARG:NH1	2.42	0.52
36:DA:2022:U:O2'	36:DA:2617:C:H5'	2.10	0.52
36:DA:2672:G:C3'	36:DA:2673:G:H5"	2.40	0.52
39:DD:134:ARG:NH1	39:DD:135:PHE:CE1	2.77	0.52
42:DG:59:GLU:HA	42:DG:62:LEU:HD13	1.92	0.52
42:DG:82:LEU:CD2	42:DG:86:MET:HE2	2.40	0.52
51:DS:58:LEU:O	51:DS:59:LYS:O	2.28	0.52
55:DW:62:HIS:O	55:DW:63:ASP:C	2.53	0.52
58:DZ:152:ALA:HB2	58:DZ:168:GLU:CA	2.35	0.52
1:AA:266:G:C5'	1:AA:267:C:H5	2.22	0.52
1:AA:427:U:OP1	4:AD:13:ARG:NH2	2.43	0.52
1:AA:487:A:H2'	1:AA:488:C:O4'	2.09	0.52
3:AC:5:ILE:H	3:AC:5:ILE:HD12	1.72	0.52
3:AC:50:ALA:HB1	3:AC:70:VAL:HG13	1.92	0.52
20:AT:92:LEU:C	20:AT:94:ALA:N	2.66	0.52
21:AU:17:THR:O	21:AU:22:ARG:NH1	2.43	0.52
24:AY:2:G:H2'	24:AY:3:G:C5'	2.40	0.52
25:AZ:19:HIS:CG	25:AZ:115:GLN:HB2	2.45	0.52
25:AZ:92:MET:HE3	25:AZ:119:HIS:CD2	2.45	0.52
29:B3:29:ARG:NH2	36:BA:1183:G:H4'	2.25	0.52
36:BA:1270:C:H5"	36:BA:1271:G:C5'	2.39	0.52
36:BA:1311:G:N2	36:BA:1603:A:H62	2.06	0.52
36:BA:1771:C:H1'	36:BA:1786:A:H8	1.68	0.52
40:BE:93:VAL:C	40:BE:95:ILE:H	2.18	0.52
41:BF:185:ASP:CA	41:BF:188:ARG:HG2	2.40	0.52
42:BG:33:ARG:O	42:BG:162:THR:HG23	2.10	0.52
43:BH:20:ALA:HB1	43:BH:21:PRO:CD	2.39	0.52
43:BH:136:ILE:HD12	43:BH:136:ILE:N	2.25	0.52
49:BQ:43:THR:OG1	49:BQ:46:GLN:HG3	2.10	0.52
51:BS:20:ARG:NH1	51:BS:20:ARG:HG2	2.25	0.52
56:BX:64:LYS:HG2	56:BX:65:ARG:N	2.24	0.52
2:CB:209:ARG:NH1	2:CB:239:VAL:HG11	2.24	0.52
3:CC:81:GLY:O	3:CC:82:GLU:C	2.52	0.52
8:CH:23:SER:HA	8:CH:63:LEU:HD22	1.91	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:CJ:44:VAL:HG21	10:CJ:66:ARG:HH21	1.75	0.52
12:CL:127:GLU:O	12:CL:128:ALA:C	2.53	0.52
13:CM:83:ASP:OD1	13:CM:84:ILE:N	2.43	0.52
15:CO:7:GLU:O	15:CO:11:VAL:HG23	2.10	0.52
15:CO:17:ARG:HG3	15:CO:17:ARG:NH1	2.21	0.52
25:CZ:333:GLY:HA3	25:CZ:363:MET:HA	1.92	0.52
27:D1:72:GLU:CG	27:D1:76:ARG:HH21	2.23	0.52
28:D2:68:ARG:HG3	28:D2:72:ALA:CB	2.40	0.52
32:D6:26:ASN:ND2	32:D6:32:ASN:OD1	2.42	0.52
36:DA:118:A:H1'	36:DA:178:G:O4'	2.10	0.52
36:DA:320:A:H2'	41:DF:136:THR:OG1	2.09	0.52
36:DA:979:G:H3'	36:DA:980:A:C5'	2.40	0.52
36:DA:1049:C:O2	36:DA:1113:U:H4'	2.11	0.52
36:DA:1203:G:H3'	36:DA:1204:A:H5"	1.91	0.52
36:DA:1450(A):C:H2'	36:DA:1451:C:H6	1.73	0.52
36:DA:1539:G:H2'	36:DA:1540:U:O4'	2.10	0.52
36:DA:1910:G:O2'	36:DA:1911:U:H5'	2.10	0.52
36:DA:2631:G:N2	40:DE:61:ARG:HH12	2.08	0.52
36:DA:2695:C:H2'	36:DA:2696:U:C6	2.45	0.52
38:DC:40:THR:HA	38:DC:177:LYS:HA	1.92	0.52
39:DD:275:LYS:HD2	39:DD:275:LYS:C	2.34	0.52
48:DP:20:GLY:O	48:DP:21:ARG:HB2	2.10	0.52
52:DT:48:ILE:C	52:DT:48:ILE:HD12	2.34	0.52
58:DZ:100:VAL:O	58:DZ:124:ILE:HG12	2.10	0.52
2:AB:98:LEU:O	2:AB:101:MET:HG3	2.10	0.51
7:AG:78:ARG:O	7:AG:78:ARG:CG	2.57	0.51
9:AI:20:ARG:HH11	9:AI:20:ARG:CB	2.22	0.51
10:AJ:92:THR:HG23	10:AJ:93:GLY:H	1.74	0.51
16:AP:5:ARG:NE	16:AP:22:THR:CG2	2.73	0.51
16:AP:59:TRP:HA	16:AP:62:VAL:HG23	1.91	0.51
20:AT:60:GLU:HG2	20:AT:60:GLU:O	2.09	0.51
22:AV:45:U:OP2	22:AV:45:U:H2'	2.09	0.51
25:AZ:98:GLN:HE22	25:AZ:346:THR:CG2	2.23	0.51
25:AZ:126:VAL:O	25:AZ:126:VAL:HG12	2.10	0.51
25:AZ:345:ARG:NH1	25:AZ:379:ALA:O	2.44	0.51
34:B8:4:MET:HE2	34:B8:61:LEU:HD23	1.92	0.51
36:BA:57:C:H2'	36:BA:58:G:O4'	2.10	0.51
36:BA:363(E):U:H2'	36:BA:363(F):A:C1'	2.39	0.51
36:BA:753:C:O2'	36:BA:754:C:H5'	2.10	0.51
36:BA:838:C:O2'	36:BA:839:U:H5'	2.10	0.51
36:BA:1259:G:O2'	36:BA:1260:G:H5'	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1518:U:H2'	36:BA:1519:G:O4'	2.09	0.51
36:BA:2840:C:H5"	50:BR:53:HIS:CD2	2.45	0.51
40:BE:104:VAL:HG11	40:BE:188:VAL:HG21	1.92	0.51
42:BG:125:PHE:CZ	42:BG:170:ARG:HA	2.45	0.51
42:BG:172:LEU:HD23	42:BG:176:LEU:HD12	1.91	0.51
49:BQ:43:THR:HB	49:BQ:45:GLN:HE21	1.75	0.51
55:BW:9:TYR:CD1	55:BW:9:TYR:N	2.78	0.51
57:BY:57:GLN:HA	57:BY:57:GLN:OE1	2.09	0.51
58:BZ:14:LYS:O	58:BZ:18:LEU:HD22	2.10	0.51
58:BZ:70:LEU:HD23	58:BZ:70:LEU:N	2.23	0.51
1:CA:1158:C:O2'	1:CA:1159:U:H4'	2.10	0.51
1:CA:1429:C:H2'	1:CA:1430:C:H6	1.74	0.51
10:CJ:85:LEU:O	10:CJ:87:THR:N	2.43	0.51
20:CT:86:ARG:O	20:CT:90:GLN:HG3	2.09	0.51
25:CZ:5:PHE:C	25:CZ:5:PHE:CD1	2.88	0.51
26:D0:40:GLN:HE21	26:D0:44:ARG:HB2	1.75	0.51
27:D1:52:ARG:NH2	36:DA:2218:U:O4'	2.43	0.51
29:D3:28:LEU:HD23	29:D3:28:LEU:H	1.75	0.51
36:DA:92:A:H2'	36:DA:92:A:N3	2.25	0.51
36:DA:389:G:H1	48:DP:72:PRO:HD3	1.75	0.51
36:DA:405:U:H3'	36:DA:406:G:H5'	1.92	0.51
36:DA:1638:C:H4'	36:DA:2710:C:O2	2.10	0.51
36:DA:2092:U:H5	36:DA:2226:C:OP2	1.94	0.51
36:DA:2369:A:O2'	36:DA:2370:G:H5'	2.10	0.51
37:DB:111:G:O2'	37:DB:112:U:H5'	2.10	0.51
41:DF:3:GLU:HB2	41:DF:24:LEU:HD23	1.91	0.51
42:DG:144:ILE:HD11	42:DG:149:VAL:CG1	2.29	0.51
42:DG:172:LEU:O	42:DG:176:LEU:HB2	2.10	0.51
43:DH:124:GLU:HG3	43:DH:132:ARG:HG3	1.92	0.51
54:DV:6:LYS:O	54:DV:37:VAL:HG21	2.10	0.51
55:DW:9:TYR:N	55:DW:9:TYR:CD1	2.77	0.51
57:DY:60:PHE:O	57:DY:61:ILE:HG13	2.10	0.51
58:DZ:66:SER:C	58:DZ:67:LEU:HD12	2.35	0.51
58:DZ:149:SER:CB	58:DZ:173:ALA:HA	2.37	0.51
58:DZ:165:VAL:HG12	58:DZ:168:GLU:H	1.76	0.51
1:AA:108:G:H5'	1:AA:109:A:H5'	1.92	0.51
1:AA:501:C:OP1	12:AL:117:ARG:NH2	2.43	0.51
1:AA:979:C:C3'	1:AA:980:C:C5'	2.78	0.51
1:AA:1010:G:O2'	1:AA:1011:G:H5'	2.10	0.51
2:AB:114:ARG:NH1	2:AB:118:LEU:HD21	2.25	0.51
2:AB:172:ILE:HD12	2:AB:172:ILE:N	2.21	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:17:VAL:O	4:AD:17:VAL:HG12	2.10	0.51
9:AI:11:LYS:O	9:AI:12:GLU:HB2	2.10	0.51
9:AI:53:VAL:C	9:AI:55:ALA:N	2.68	0.51
11:AK:33:THR:HG22	11:AK:39:PRO:CA	2.38	0.51
13:AM:88:ARG:HG2	13:AM:88:ARG:NH1	2.24	0.51
19:AS:50:ALA:HB1	19:AS:57:HIS:HB3	1.92	0.51
28:B2:32:LEU:O	28:B2:35:LEU:HB3	2.10	0.51
29:B3:4:LEU:O	29:B3:36:VAL:HA	2.10	0.51
36:BA:271(F):C:O2'	36:BA:271(G):C:H5'	2.10	0.51
36:BA:291:C:H2'	36:BA:292:C:C6	2.45	0.51
36:BA:1638:C:H4'	36:BA:2710:C:O2	2.10	0.51
36:BA:1880:C:C2'	36:BA:1881:C:H5"	2.39	0.51
36:BA:2000:G:O2'	36:BA:2001:A:H5'	2.09	0.51
36:BA:2219:G:C2'	36:BA:2220:G:H5'	2.40	0.51
38:BC:40:THR:HG22	38:BC:177:LYS:CE	2.39	0.51
39:BD:48:ARG:HG3	39:BD:48:ARG:NH1	2.25	0.51
40:BE:183:LEU:HD12	40:BE:183:LEU:N	2.25	0.51
41:BF:29:ASN:HD22	41:BF:32:LEU:CB	2.14	0.51
42:BG:16:ARG:CD	42:BG:31:VAL:HG11	2.40	0.51
48:BP:16:ARG:NH1	48:BP:16:ARG:CB	2.65	0.51
53:BU:83:LEU:HG	53:BU:88:ILE:HD11	1.92	0.51
58:BZ:151:HIS:ND1	58:BZ:152:ALA:N	2.53	0.51
4:CD:70:ILE:HG22	4:CD:71:SER:N	2.25	0.51
4:CD:149:ALA:O	4:CD:153:ARG:HG3	2.10	0.51
8:CH:1:MET:HE2	8:CH:2:LEU:H	1.75	0.51
13:CM:16:ASP:HA	13:CM:34:LEU:HD11	1.92	0.51
22:CV:47:U:H3'	22:CV:48:C:C5'	2.40	0.51
24:CY:68:C:H2'	24:CY:69:C:C6	2.44	0.51
25:CZ:19:HIS:CG	25:CZ:115:GLN:HB2	2.45	0.51
36:DA:576:U:H2'	36:DA:577:G:C8	2.45	0.51
36:DA:910:A:C5	49:DQ:13:GLN:HG3	2.45	0.51
36:DA:979:G:H3'	36:DA:980:A:H5"	1.92	0.51
36:DA:1068:G:H1'	36:DA:1069:A:H5'	1.91	0.51
36:DA:2520:C:C6	36:DA:2567:G:H1'	2.46	0.51
43:DH:88:LEU:CD1	43:DH:130:ARG:HG2	2.40	0.51
46:DN:29:LYS:C	46:DN:31:ALA:H	2.19	0.51
46:DN:57:ALA:HB3	46:DN:124:ALA:HA	1.92	0.51
48:DP:114:ILE:HD13	48:DP:127:ALA:CB	2.39	0.51
50:DR:74:LYS:HD2	50:DR:77:ARG:HD2	1.92	0.51
51:DS:28:VAL:HG12	51:DS:29:PHE:N	2.25	0.51
53:DU:90:VAL:HG12	53:DU:91:ASP:H	1.74	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:DX:49:VAL:CG1	56:DX:87:GLN:HE21	2.23	0.51
1:AA:66:G:H4'	1:AA:173:U:C5	2.45	0.51
1:AA:421:U:C6	3:AC:127:ARG:NH1	2.78	0.51
1:AA:632:A:H8	1:AA:633:G:C8	2.28	0.51
1:AA:738:C:H5"	6:AF:69:GLU:HB2	1.93	0.51
1:AA:1534:A:N7	23:AX:12:A:H2	2.09	0.51
2:AB:101:MET:C	2:AB:102:LEU:HD12	2.35	0.51
2:AB:239:VAL:O	2:AB:240:GLN:HB3	2.11	0.51
4:AD:75:PHE:CE1	4:AD:93:PHE:HZ	2.28	0.51
4:AD:173:TRP:CD1	4:AD:174:LEU:HG	2.45	0.51
4:AD:188:LEU:O	4:AD:189:PRO:O	2.28	0.51
6:AF:43:LEU:H	6:AF:43:LEU:CD2	2.22	0.51
9:AI:3:GLN:HA	9:AI:19:LEU:O	2.10	0.51
22:AV:68:C:O2'	22:AV:69:G:H5'	2.10	0.51
28:B2:23:LYS:HA	28:B2:26:ARG:HB3	1.93	0.51
30:B4:8:LYS:O	30:B4:9:LEU:CB	2.59	0.51
32:B6:52:VAL:HG12	32:B6:53:LYS:CD	2.41	0.51
34:B8:30:ARG:HA	34:B8:30:ARG:HE	1.75	0.51
36:BA:39:C:O2'	36:BA:40:C:H5'	2.10	0.51
36:BA:191:A:H2'	36:BA:192:C:C6	2.45	0.51
36:BA:745:G:OP1	40:BE:133:LYS:HE3	2.11	0.51
36:BA:1316:U:O2'	36:BA:1317:A:H5'	2.10	0.51
36:BA:1921:G:O2'	36:BA:1922:G:H5'	2.10	0.51
36:BA:2469:A:O2'	49:BQ:56:ARG:HD2	2.10	0.51
39:BD:30:GLU:HG2	39:BD:35:LYS:HZ1	1.75	0.51
39:BD:44:ASN:HB2	39:BD:48:ARG:O	2.11	0.51
41:BF:82:ILE:O	41:BF:83:PHE:HB2	2.09	0.51
42:BG:47:LYS:CD	42:BG:81:LYS:HD2	2.39	0.51
42:BG:58:GLN:O	42:BG:62:LEU:HD13	2.10	0.51
42:BG:114:ILE:O	42:BG:115:ARG:C	2.54	0.51
43:BH:42:ARG:HG2	43:BH:43:VAL:N	2.25	0.51
46:BN:45:ASN:O	46:BN:45:ASN:CG	2.52	0.51
51:BS:97:ARG:NH2	51:BS:98:VAL:HA	2.25	0.51
52:BT:91:ARG:O	52:BT:92:GLY:C	2.53	0.51
53:BU:69:CYS:HB2	53:BU:74:LEU:HD11	1.92	0.51
53:BU:90:VAL:HG12	53:BU:91:ASP:H	1.72	0.51
54:BV:58:VAL:HB	54:BV:98:GLU:HG2	1.92	0.51
1:CA:22:G:H4'	1:CA:885:G:C8	2.45	0.51
1:CA:924:C:H5'	1:CA:1399:C:OP2	2.10	0.51
1:CA:1269:A:H2	1:CA:1312:G:N3	2.09	0.51
2:CB:33:TYR:HB3	2:CB:41:ILE:HG22	1.91	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:229:VAL:O	2:CB:230:VAL:HG13	2.09	0.51
3:CC:84:ILE:O	3:CC:88:ARG:HG3	2.09	0.51
6:CF:55:ASP:HB3	6:CF:57:GLN:HE22	1.73	0.51
9:CI:128:ARG:HD2	9:CI:128:ARG:H	1.76	0.51
25:CZ:138:VAL:C	25:CZ:140:MET:H	2.18	0.51
27:D1:75:GLU:HA	27:D1:75:GLU:OE1	2.10	0.51
34:D8:36:LYS:HE3	34:D8:40:GLU:OE2	2.10	0.51
34:D8:48:PHE:O	34:D8:49:VAL:HG22	2.10	0.51
36:DA:265:A:H1'	36:DA:266:G:O4'	2.10	0.51
36:DA:433:C:O2'	36:DA:434:U:H5'	2.09	0.51
36:DA:465:G:H2'	36:DA:466:A:C8	2.45	0.51
36:DA:610:G:N2	36:DA:619:G:H1'	2.24	0.51
36:DA:1265:A:OP2	36:DA:2615:U:OP1	2.29	0.51
36:DA:1639:U:O2'	36:DA:1640:C:H5"	2.08	0.51
36:DA:2087:G:O2'	36:DA:2088:G:H5'	2.10	0.51
36:DA:2472:G:H5'	36:DA:2473:U:C5'	2.38	0.51
39:DD:65:ILE:HD11	39:DD:67:PHE:CE2	2.45	0.51
39:DD:238:GLY:O	39:DD:239:ARG:C	2.52	0.51
40:DE:23:VAL:HA	40:DE:186:GLY:H	1.76	0.51
40:DE:38:THR:HB	40:DE:41:LYS:CG	2.34	0.51
41:DF:125:LEU:HD23	41:DF:125:LEU:H	1.75	0.51
43:DH:163:TYR:N	43:DH:163:TYR:CD1	2.79	0.51
46:DN:121:LYS:HB3	46:DN:123:TYR:CE1	2.46	0.51
48:DP:61:ARG:C	48:DP:62:LEU:CD2	2.83	0.51
49:DQ:110:THR:HG23	49:DQ:113:GLN:HG3	1.92	0.51
50:DR:103:ARG:HH11	50:DR:110:PRO:HB3	1.75	0.51
51:DS:15:ARG:NH1	51:DS:18:ILE:HD11	2.25	0.51
53:DU:110:VAL:O	53:DU:113:ALA:HB3	2.10	0.51
55:DW:9:TYR:N	55:DW:9:TYR:HD1	2.08	0.51
1:AA:80:G:C2'	1:AA:81:U:H5'	2.41	0.51
1:AA:228:A:H2'	1:AA:229:U:O4'	2.11	0.51
1:AA:421:U:H6	3:AC:127:ARG:NH1	2.08	0.51
1:AA:502:G:OP1	12:AL:118:SER:HB3	2.10	0.51
1:AA:977:A:O2'	1:AA:978:A:H5'	2.09	0.51
2:AB:54:THR:HG21	2:AB:201:ILE:HD11	1.92	0.51
4:AD:101:LEU:O	4:AD:103:ASN:N	2.43	0.51
5:AE:102:ALA:CB	5:AE:120:THR:HG21	2.39	0.51
7:AG:144:MET:C	7:AG:145:ALA:O	2.50	0.51
13:AM:3:ARG:HH21	13:AM:7:VAL:HG22	1.74	0.51
13:AM:73:GLU:O	13:AM:76:ALA:HB3	2.10	0.51
16:AP:5:ARG:NE	16:AP:22:THR:HG21	2.25	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AT:58:LYS:O	20:AT:61:SER:HB3	2.10	0.51
25:AZ:9:LYS:HB3	25:AZ:75:ARG:HA	1.93	0.51
27:B1:11:ARG:HB2	27:B1:12:PRO:HD2	1.92	0.51
28:B2:20:GLU:O	28:B2:23:LYS:N	2.44	0.51
32:B6:18:ARG:HH11	32:B6:18:ARG:CG	2.09	0.51
32:B6:30:THR:CG2	32:B6:31:PRO:HD2	2.40	0.51
34:B8:15:LYS:HD2	34:B8:16:ILE:H	1.75	0.51
36:BA:92:A:N3	36:BA:92:A:H2'	2.25	0.51
36:BA:1997:G:OP1	40:BE:123:ALA:HB1	2.09	0.51
36:BA:1999:C:H4'	36:BA:2723:C:O2	2.09	0.51
36:BA:2383:G:O2'	36:BA:2384:G:H5'	2.11	0.51
38:BC:32:LEU:HD13	38:BC:220:PRO:HG2	1.92	0.51
38:BC:41:VAL:HG21	38:BC:185:LEU:HD22	1.92	0.51
39:BD:30:GLU:C	39:BD:35:LYS:HD2	2.36	0.51
39:BD:133:LEU:HB3	39:BD:173:VAL:HG11	1.93	0.51
39:BD:222:ARG:O	39:BD:224:ALA:O	2.29	0.51
39:BD:275:LYS:HD2	39:BD:276:LYS:N	2.26	0.51
40:BE:35:GLN:HG2	40:BE:36:ARG:N	2.26	0.51
42:BG:45:GLU:N	42:BG:45:GLU:CD	2.68	0.51
43:BH:163:TYR:N	43:BH:163:TYR:CD1	2.78	0.51
46:BN:12:ARG:O	46:BN:50:ASP:HB3	2.11	0.51
50:BR:4:LEU:O	50:BR:4:LEU:CG	2.58	0.51
52:BT:24:PRO:HD3	52:BT:52:ILE:HD12	1.92	0.51
52:BT:27:THR:HG22	52:BT:49:VAL:HB	1.92	0.51
52:BT:77:PRO:C	52:BT:79:HIS:H	2.18	0.51
52:BT:128:GLU:O	52:BT:129:ARG:C	2.54	0.51
54:BV:69:LYS:HA	54:BV:87:HIS:O	2.10	0.51
55:BW:17:VAL:O	55:BW:20:VAL:HG22	2.10	0.51
55:BW:65:LEU:HD23	55:BW:68:ARG:NE	2.26	0.51
58:BZ:145:GLU:O	58:BZ:147:GLY:N	2.43	0.51
1:CA:1009:G:H2'	1:CA:1010:G:H8	1.75	0.51
1:CA:1030(D):A:N7	1:CA:1031:G:N3	2.58	0.51
2:CB:44:LEU:H	2:CB:44:LEU:CD1	2.18	0.51
3:CC:14:ILE:HG13	3:CC:15:THR:H	1.76	0.51
4:CD:3:ARG:HH11	4:CD:118:ARG:HD3	1.74	0.51
4:CD:12:CYS:CA	4:CD:19:LEU:HD13	2.39	0.51
8:CH:30:ARG:HH11	8:CH:30:ARG:CB	2.24	0.51
10:CJ:48:THR:HG23	10:CJ:62:HIS:CE1	2.45	0.51
11:CK:125:PHE:C	11:CK:127:LYS:H	2.18	0.51
13:CM:83:ASP:OD1	13:CM:85:GLY:N	2.43	0.51
15:CO:24:SER:O	15:CO:28:GLN:HG3	2.10	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:CP:5:ARG:HH11	16:CP:5:ARG:HG3	1.74	0.51
20:CT:60:GLU:HG2	20:CT:60:GLU:O	2.11	0.51
21:CU:17:THR:O	21:CU:22:ARG:NH1	2.44	0.51
25:CZ:163:PHE:CD1	25:CZ:164:PRO:HD2	2.44	0.51
29:D3:31:LEU:HD12	36:DA:989:G:P	2.51	0.51
36:DA:142:A:H1'	36:DA:1408:C:H1'	1.93	0.51
36:DA:266:G:C3'	36:DA:267:C:H5"	2.40	0.51
36:DA:469:G:H2'	36:DA:470:A:H5"	1.92	0.51
36:DA:523:C:H5"	36:DA:540:C:O2'	2.10	0.51
36:DA:675:A:OP1	41:DF:63:LYS:HE2	2.10	0.51
36:DA:1361:G:O2'	36:DA:1362:C:H5'	2.10	0.51
36:DA:2031:A:O2'	36:DA:2455:G:H4'	2.11	0.51
36:DA:2811:G:H4'	40:DE:61:ARG:HH21	1.75	0.51
38:DC:99:ILE:HG22	38:DC:99:ILE:O	2.11	0.51
39:DD:30:GLU:HG3	39:DD:35:LYS:HE3	1.93	0.51
40:DE:104:VAL:HG11	40:DE:188:VAL:HG21	1.91	0.51
48:DP:59:LEU:CA	48:DP:61:ARG:HE	2.23	0.51
50:DR:79:LEU:HA	50:DR:83:ILE:CG1	2.41	0.51
55:DW:73:ALA:HB3	55:DW:106:ILE:HD11	1.92	0.51
57:DY:85:VAL:HG12	57:DY:86:ARG:N	2.25	0.51
58:DZ:114:GLY:HA3	58:DZ:146:ILE:HG21	1.91	0.51
1:AA:186:C:O3'	20:AT:82:SER:HB3	2.09	0.51
1:AA:735:C:H2'	1:AA:736:C:H6	1.76	0.51
1:AA:737:A:H2'	1:AA:738:C:C6	2.46	0.51
14:AN:15:LYS:O	14:AN:16:PHE:O	2.29	0.51
14:AN:57:ARG:CB	14:AN:57:ARG:NH1	2.73	0.51
18:AR:52:PRO:O	18:AR:56:THR:HG23	2.11	0.51
20:AT:47:GLY:C	20:AT:49:ALA:H	2.14	0.51
25:AZ:28:THR:C	25:AZ:30:ALA:H	2.19	0.51
31:B5:40:LYS:HG2	31:B5:46:CYS:CB	2.40	0.51
36:BA:84:A:H61	36:BA:102:G:C2'	2.24	0.51
36:BA:564:C:O2'	36:BA:565:C:H5'	2.11	0.51
36:BA:654(M):C:H2'	36:BA:654(N):G:N7	2.25	0.51
36:BA:1203:G:H3'	36:BA:1204:A:H5"	1.91	0.51
36:BA:2010:G:H5"	55:BW:42:ARG:HB2	1.91	0.51
36:BA:2031:A:O2'	36:BA:2455:G:H4'	2.10	0.51
36:BA:2771:C:H2'	36:BA:2772:C:C6	2.46	0.51
38:BC:27:ARG:HD3	38:BC:182:PRO:CB	2.40	0.51
38:BC:75:LEU:HG	38:BC:112:ALA:O	2.10	0.51
40:BE:3:GLY:O	40:BE:4:ILE:HB	2.10	0.51
41:BF:126:VAL:HG21	41:BF:129:PHE:CZ	2.46	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BH:103:LEU:CB	43:BH:123:PHE:HD2	2.19	0.51
49:BQ:137:TYR:CE2	58:BZ:81:ARG:CZ	2.93	0.51
52:BT:28:VAL:HG11	52:BT:88:ILE:HD11	1.93	0.51
55:BW:62:HIS:O	55:BW:63:ASP:C	2.53	0.51
57:BY:60:PHE:O	57:BY:61:ILE:HG13	2.11	0.51
1:CA:154:C:H2'	1:CA:155:C:C6	2.45	0.51
1:CA:542:G:H5'	4:CD:41:GLY:HA2	1.93	0.51
9:CI:100:GLY:O	9:CI:102:LEU:N	2.43	0.51
10:CJ:4:ILE:HB	10:CJ:74:ILE:CD1	2.40	0.51
10:CJ:92:THR:HG23	10:CJ:93:GLY:N	2.25	0.51
11:CK:54:ARG:O	11:CK:57:THR:HG22	2.10	0.51
12:CL:39:VAL:HG12	12:CL:40:VAL:N	2.25	0.51
22:CV:42:C:C5'	22:CV:42:C:H6	2.23	0.51
25:CZ:195:TRP:C	25:CZ:197:ASP:H	2.19	0.51
30:D4:31:ILE:HD12	30:D4:31:ILE:N	2.26	0.51
31:D5:24:ALA:O	31:D5:25:LEU:CB	2.54	0.51
32:D6:9:LEU:HD13	32:D6:9:LEU:C	2.35	0.51
34:D8:13:ARG:CD	48:DP:61:ARG:HD2	2.31	0.51
35:D9:1:MET:HG3	36:DA:2478:A:OP2	2.11	0.51
36:DA:1068:G:H1'	36:DA:1069:A:C5'	2.40	0.51
36:DA:1120:G:H2'	36:DA:1121:C:C6	2.45	0.51
36:DA:1292:U:H2'	36:DA:1293:C:C6	2.45	0.51
36:DA:2052:G:H4'	40:DE:143:ASN:O	2.09	0.51
36:DA:2811:G:C4'	40:DE:61:ARG:HH21	2.24	0.51
41:DF:178:PRO:HG2	41:DF:179:GLU:H	1.75	0.51
41:DF:188:ARG:HA	48:DP:7:ARG:HB2	1.93	0.51
43:DH:51:ARG:HG3	43:DH:52:VAL:H	1.75	0.51
49:DQ:110:THR:HG23	49:DQ:113:GLN:OE1	2.10	0.51
51:DS:20:ARG:NH1	51:DS:20:ARG:HG2	2.23	0.51
58:DZ:140:ASP:C	58:DZ:141:VAL:HG22	2.36	0.51
1:AA:272:C:O2'	1:AA:273:A:H5'	2.10	0.51
1:AA:858:G:N1	1:AA:869:G:C8	2.78	0.51
1:AA:1050:G:O2'	1:AA:1051:C:H6	1.94	0.51
1:AA:1282:C:O2'	1:AA:1283:G:H5'	2.11	0.51
4:AD:149:ALA:O	4:AD:153:ARG:HG3	2.11	0.51
7:AG:75:VAL:O	7:AG:75:VAL:HG23	2.09	0.51
11:AK:54:ARG:O	11:AK:57:THR:HG22	2.11	0.51
19:AS:40:ILE:HG22	19:AS:40:ILE:O	2.09	0.51
25:AZ:12:VAL:HG23	25:AZ:77:TYR:CD1	2.45	0.51
25:AZ:139:ASP:CG	25:AZ:139:ASP:O	2.52	0.51
25:AZ:182:MET:SD	25:AZ:196:VAL:HG21	2.50	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:221:A:O2'	36:BA:222:A:OP2	2.27	0.51
36:BA:467:G:O2'	36:BA:468:G:H5'	2.10	0.51
36:BA:1222:C:H2'	36:BA:1223:G:C5'	2.40	0.51
36:BA:1541:G:O3'	36:BA:1541:G:OP2	2.28	0.51
39:BD:275:LYS:HD2	39:BD:275:LYS:C	2.35	0.51
40:BE:26:ILE:CG2	40:BE:196:VAL:HG21	2.40	0.51
40:BE:107:THR:O	40:BE:190:GLY:CA	2.54	0.51
41:BF:139:PHE:O	41:BF:142:TRP:HB3	2.10	0.51
43:BH:88:LEU:HD13	43:BH:130:ARG:HG2	1.92	0.51
47:BO:86:ILE:O	47:BO:87:ILE:HD13	2.10	0.51
48:BP:146:VAL:HG13	48:BP:147:LEU:N	2.24	0.51
49:BQ:1:MET:O	49:BQ:2:LEU:CB	2.58	0.51
55:BW:17:VAL:C	55:BW:19:LEU:N	2.66	0.51
55:BW:73:ALA:HB3	55:BW:106:ILE:HD11	1.93	0.51
58:BZ:166:SER:OG	58:BZ:167:PRO:HA	2.09	0.51
1:CA:323:U:H2'	1:CA:324:G:O4'	2.10	0.51
1:CA:797:C:O2'	1:CA:798:G:H5'	2.11	0.51
1:CA:1316:G:O3'	14:CN:18:VAL:HG22	2.10	0.51
9:CI:85:LEU:HD12	9:CI:86:VAL:N	2.26	0.51
19:CS:16:LEU:H	19:CS:16:LEU:CD1	2.23	0.51
25:CZ:189:ARG:HB2	25:CZ:192:GLU:OE2	2.11	0.51
25:CZ:208:GLU:O	25:CZ:209:TYR:HB3	2.10	0.51
26:D0:40:GLN:HE22	26:D0:45:PHE:N	2.08	0.51
32:D6:16:CYS:SG	32:D6:49:HIS:N	2.84	0.51
32:D6:28:ARG:CA	32:D6:32:ASN:ND2	2.71	0.51
34:D8:10:ALA:CB	34:D8:60:LEU:HD21	2.40	0.51
36:DA:230:U:H2'	36:DA:231:C:H6	1.74	0.51
36:DA:1142(A):A:H5'	36:DA:1142(A):A:H8	1.75	0.51
36:DA:1260:G:H2'	36:DA:1261:C:C6	2.45	0.51
36:DA:2116:G:N7	36:DA:2117:A:C2	2.78	0.51
36:DA:2159:G:H2'	36:DA:2160:G:C5'	2.36	0.51
36:DA:2649:U:O2'	36:DA:2650:U:H5'	2.10	0.51
42:DG:52:ILE:HB	42:DG:54:GLU:HG3	1.92	0.51
42:DG:83:ARG:O	42:DG:85:GLY:N	2.43	0.51
42:DG:136:ARG:HH11	42:DG:136:ARG:HB3	1.74	0.51
43:DH:85:LYS:NZ	43:DH:86:GLU:CA	2.73	0.51
46:DN:10:GLU:CG	46:DN:11:PRO:HD2	2.41	0.51
47:DO:1:MET:HE2	47:DO:32:TYR:CD2	2.44	0.51
48:DP:99:LEU:HD23	48:DP:99:LEU:C	2.36	0.51
48:DP:102:ARG:CB	48:DP:102:ARG:NH1	2.74	0.51
49:DQ:66:ILE:C	49:DQ:66:ILE:HD12	2.36	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:DR:4:LEU:C	50:DR:6:SER:N	2.63	0.51
51:DS:92:TYR:O	51:DS:93:LYS:CB	2.59	0.51
1:AA:337:C:H2'	1:AA:338:A:H8	1.75	0.51
1:AA:539:A:OP2	12:AL:115:LYS:HE3	2.11	0.51
1:AA:624:C:H4'	16:AP:10:GLY:HA2	1.92	0.51
1:AA:939:G:C5'	7:AG:102:ARG:HH22	2.22	0.51
3:AC:54:ARG:HG2	3:AC:55:VAL:N	2.26	0.51
10:AJ:6:ILE:CG1	10:AJ:72:VAL:HB	2.40	0.51
22:AV:42:C:H6	22:AV:42:C:C5'	2.22	0.51
27:B1:68:PRO:C	27:B1:70:VAL:H	2.18	0.51
30:B4:7:PRO:O	30:B4:8:LYS:HB3	2.11	0.51
31:B5:4:HIS:O	36:BA:2056:G:N2	2.44	0.51
32:B6:10:LEU:HD12	34:B8:34:TRP:HB2	1.93	0.51
32:B6:16:CYS:SG	32:B6:49:HIS:N	2.84	0.51
34:B8:15:LYS:CG	48:BP:65:ARG:NH2	2.74	0.51
35:B9:29:ASN:HD21	35:B9:32:HIS:CG	2.29	0.51
36:BA:11:G:H2'	36:BA:12:U:C6	2.46	0.51
36:BA:580:C:H2'	36:BA:581:C:H6	1.75	0.51
36:BA:659:C:H4'	41:BF:100:THR:O	2.10	0.51
36:BA:1204:A:N1	36:BA:1241:A:H2	2.08	0.51
36:BA:1265:A:OP2	36:BA:2615:U:OP1	2.28	0.51
36:BA:2060:A:H62	41:BF:74:ARG:HH21	1.59	0.51
38:BC:181:PRO:HB2	38:BC:183:GLU:OE2	2.10	0.51
39:BD:267:SER:O	39:BD:269:PHE:HD1	1.94	0.51
42:BG:52:ILE:O	42:BG:53:LEU:C	2.53	0.51
43:BH:52:VAL:HB	43:BH:69:ARG:CD	2.40	0.51
48:BP:9:ASN:H	48:BP:10:PRO:CD	2.22	0.51
52:BT:62:THR:HA	52:BT:74:ARG:O	2.10	0.51
54:BV:39:LEU:CD1	54:BV:51:VAL:HA	2.40	0.51
56:BX:40:LYS:HB2	56:BX:54:VAL:CG2	2.39	0.51
58:BZ:27:VAL:O	58:BZ:27:VAL:HG13	2.10	0.51
58:BZ:72:ARG:NH2	58:BZ:97:GLU:O	2.44	0.51
1:CA:328:C:C2'	1:CA:328:C:O2	2.58	0.51
1:CA:865:A:H2'	1:CA:866:C:C6	2.46	0.51
2:CB:97:TRP:HZ2	2:CB:102:LEU:HD13	1.76	0.51
3:CC:5:ILE:O	3:CC:6:HIS:C	2.52	0.51
4:CD:18:LYS:HE3	4:CD:31:CYS:SG	2.51	0.51
4:CD:45:GLN:C	4:CD:46:LYS:CG	2.84	0.51
6:CF:57:GLN:HE21	6:CF:57:GLN:N	2.09	0.51
7:CG:79:ARG:HA	7:CG:83:ALA:O	2.11	0.51
7:CG:84:ASN:C	7:CG:84:ASN:ND2	2.68	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:CI:43:ALA:HA	9:CI:74:ILE:HD13	1.93	0.51
10:CJ:6:ILE:CG1	10:CJ:72:VAL:HB	2.40	0.51
10:CJ:7:LYS:HB2	10:CJ:97:GLU:HB2	1.92	0.51
19:CS:43:GLU:O	19:CS:45:VAL:HG22	2.10	0.51
22:CW:57:G:O2'	22:CW:58:A:H5'	2.10	0.51
25:CZ:172:ARG:O	25:CZ:198:LYS:HD3	2.09	0.51
31:D5:43:HIS:HD2	36:DA:2815:C:O2'	1.93	0.51
32:D6:10:LEU:HD12	34:D8:34:TRP:HB2	1.93	0.51
36:DA:838:C:O2'	36:DA:839:U:H5'	2.10	0.51
36:DA:1682:G:H5'	36:DA:1762:A:O2'	2.10	0.51
36:DA:2200:C:N4	36:DA:2223:G:H1	2.08	0.51
38:DC:73:ARG:H	38:DC:111:ASP:CG	2.19	0.51
41:DF:139:PHE:O	41:DF:142:TRP:HB3	2.11	0.51
42:DG:130:ASN:OD1	42:DG:160:VAL:HA	2.10	0.51
48:DP:16:ARG:HD3	48:DP:18:ARG:H	1.75	0.51
52:DT:2:ASN:HB2	52:DT:7:ILE:HD11	1.92	0.51
52:DT:12:SER:C	52:DT:13:ARG:CZ	2.84	0.51
52:DT:128:GLU:O	52:DT:129:ARG:C	2.54	0.51
53:DU:69:CYS:HB2	53:DU:74:LEU:HD11	1.93	0.51
58:DZ:114:GLY:HA3	58:DZ:146:ILE:CG2	2.41	0.51
1:AA:797:C:O2'	1:AA:798:G:H5'	2.10	0.51
1:AA:1123:A:H2	1:AA:1150:U:C5	2.29	0.51
1:AA:1269:A:H2	1:AA:1312:G:N3	2.09	0.51
2:AB:191:ASP:OD1	2:AB:191:ASP:C	2.54	0.51
10:AJ:16:LEU:HD11	10:AJ:70:ARG:HG2	1.93	0.51
10:AJ:85:LEU:O	10:AJ:87:THR:N	2.41	0.51
13:AM:83:ASP:OD1	13:AM:85:GLY:N	2.44	0.51
27:B1:53:VAL:O	27:B1:54:ALA:HB3	2.10	0.51
28:B2:62:THR:HG22	28:B2:66:GLU:CG	2.40	0.51
31:B5:57:VAL:HG12	31:B5:58:LEU:N	2.26	0.51
36:BA:34:C:H41	36:BA:447:A:N6	2.04	0.51
36:BA:88:G:N3	36:BA:88:G:H2'	2.25	0.51
36:BA:118:A:H1'	36:BA:178:G:O4'	2.11	0.51
36:BA:1344:G:H4'	36:BA:1384:A:C5	2.45	0.51
36:BA:1445(A):C:O2'	36:BA:1446:C:H5'	2.10	0.51
36:BA:2107:C:C1'	36:BA:2182:G:H22	2.23	0.51
36:BA:2208:A:O2'	36:BA:2219:G:C8	2.64	0.51
36:BA:2286:A:H4'	36:BA:2287:A:O4'	2.10	0.51
36:BA:2837:G:H2'	36:BA:2838:G:H8	1.75	0.51
39:BD:30:GLU:HG3	39:BD:35:LYS:HE3	1.93	0.51
41:BF:129:PHE:O	41:BF:132:VAL:HB	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BH:51:ARG:HG3	43:BH:52:VAL:H	1.76	0.51
48:BP:16:ARG:HD3	48:BP:18:ARG:H	1.76	0.51
52:BT:28:VAL:O	52:BT:29:ARG:HB2	2.10	0.51
54:BV:38:LEU:O	54:BV:52:VAL:HG12	2.11	0.51
1:CA:35:G:H2'	1:CA:36:C:H6	1.75	0.51
1:CA:471:G:H21	16:CP:82:GLN:NE2	2.09	0.51
1:CA:523:A:N1	12:CL:92:ASP:OD2	2.44	0.51
1:CA:980:C:H6	1:CA:980:C:C5'	2.14	0.51
1:CA:1029:C:H2'	1:CA:1030(A):G:N7	2.26	0.51
2:CB:15:VAL:H	2:CB:16:HIS:CE1	2.29	0.51
2:CB:54:THR:HG21	2:CB:201:ILE:HD11	1.92	0.51
3:CC:188:LEU:HD12	3:CC:195:VAL:HG11	1.93	0.51
8:CH:30:ARG:HB3	8:CH:30:ARG:NH1	2.25	0.51
8:CH:64:LYS:CG	8:CH:79:VAL:HG21	2.39	0.51
17:CQ:27:PHE:CE2	17:CQ:36:ILE:HD11	2.45	0.51
17:CQ:55:ASP:HB3	17:CQ:76:LEU:CD1	2.41	0.51
20:CT:58:LYS:O	20:CT:61:SER:HB3	2.10	0.51
22:CV:75:C:H2'	22:CV:76:A:C1'	2.41	0.51
25:CZ:26:THR:HB	60:CZ:501:GDP:O2A	2.11	0.51
30:D4:15:ILE:HD13	30:D4:21:VAL:HG13	1.93	0.51
31:D5:4:HIS:O	36:DA:2056:G:N2	2.43	0.51
33:D7:5:TRP:CZ3	36:DA:464:U:H4'	2.45	0.51
34:D8:62:LEU:N	34:D8:63:PRO:CD	2.73	0.51
36:DA:88:G:H2'	36:DA:88:G:N3	2.25	0.51
36:DA:171:G:O2'	36:DA:172:C:H5'	2.11	0.51
36:DA:518:G:H4'	55:DW:18:ARG:NH1	2.25	0.51
36:DA:2107:C:C1'	36:DA:2182:G:H22	2.24	0.51
36:DA:2461:C:H2'	36:DA:2462:U:C6	2.46	0.51
36:DA:2469:A:H2	36:DA:2481:G:H21	1.58	0.51
36:DA:2754:U:H2'	36:DA:2756:U:OP1	2.11	0.51
40:DE:70:ALA:O	40:DE:71:GLY:C	2.54	0.51
41:DF:113:ALA:HB1	41:DF:186:ILE:HG21	1.93	0.51
41:DF:185:ASP:CA	41:DF:188:ARG:HG2	2.39	0.51
43:DH:122:THR:HB	43:DH:134:SER:HB2	1.93	0.51
46:DN:41:ASP:O	46:DN:42:TRP:C	2.54	0.51
46:DN:45:ASN:CG	46:DN:45:ASN:O	2.53	0.51
48:DP:62:LEU:HD23	48:DP:62:LEU:N	2.26	0.51
49:DQ:81:VAL:HG22	49:DQ:82:ARG:H	1.76	0.51
52:DT:26:ASP:HB3	52:DT:89:VAL:O	2.11	0.51
55:DW:55:ALA:C	55:DW:57:ASN:H	2.18	0.51
1:AA:471:G:H21	16:AP:82:GLN:NE2	2.09	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:542:G:H2'	1:AA:543:C:C6	2.46	0.51
1:AA:594:G:C2'	1:AA:595:G:H5'	2.41	0.51
1:AA:779:C:H2'	1:AA:780:A:O4'	2.10	0.51
1:AA:1320:C:H5'	1:AA:1320:C:C6	2.31	0.51
1:AA:1321:C:C3'	1:AA:1322:C:H5"	2.38	0.51
7:AG:79:ARG:HA	7:AG:83:ALA:O	2.11	0.51
10:AJ:57:LYS:HZ3	10:AJ:60:ARG:NH2	2.06	0.51
13:AM:65:LYS:HD3	13:AM:65:LYS:N	2.21	0.51
28:B2:47:ASN:HB3	28:B2:51:ARG:CB	2.40	0.51
28:B2:48:HIS:CG	28:B2:49:LYS:N	2.79	0.51
28:B2:67:LYS:O	28:B2:69:ARG:N	2.44	0.51
30:B4:9:LEU:HD13	30:B4:10:VAL:N	2.25	0.51
34:B8:39:LYS:HG3	34:B8:43:GLN:HE21	1.75	0.51
36:BA:266:G:C3'	36:BA:267:C:H5"	2.41	0.51
36:BA:270:A:N1	36:BA:366:C:O2'	2.38	0.51
36:BA:863:A:O2'	36:BA:864:G:H5'	2.10	0.51
36:BA:901:A:H5'	36:BA:902:C:OP2	2.11	0.51
36:BA:1059:G:H22	45:BK:130:UNK:CB	2.24	0.51
36:BA:1586:A:H5"	36:BA:1587:A:C8	2.46	0.51
36:BA:1688:U:H1'	36:BA:1701:A:C6	2.46	0.51
36:BA:2200:C:N4	36:BA:2223:G:H1	2.07	0.51
36:BA:2360:A:C2	36:BA:2361:A:H1'	2.46	0.51
37:BB:96:U:H2'	37:BB:97:G:C8	2.45	0.51
42:BG:114:ILE:O	42:BG:114:ILE:HG23	2.11	0.51
42:BG:173:LEU:HD13	42:BG:178:PHE:CD2	2.45	0.51
43:BH:65:HIS:C	43:BH:67:LEU:H	2.19	0.51
43:BH:121:ILE:HG23	43:BH:133:VAL:CG1	2.40	0.51
43:BH:124:GLU:HG3	43:BH:132:ARG:HG3	1.93	0.51
46:BN:39:ARG:C	46:BN:41:ASP:H	2.18	0.51
47:BO:31:LYS:HB3	47:BO:32:TYR:CE1	2.46	0.51
51:BS:19:LYS:HB3	51:BS:20:ARG:NH2	2.22	0.51
57:BY:74:PRO:HG2	57:BY:81:LYS:O	2.11	0.51
1:CA:1286:A:O2'	1:CA:1287:A:C5'	2.57	0.51
1:CA:1343:G:H2'	1:CA:1344:C:C6	2.46	0.51
2:CB:130:ARG:NH2	2:CB:134:GLU:HG3	2.23	0.51
4:CD:200:GLU:HG2	4:CD:201:GLN:N	2.25	0.51
7:CG:15:ASP:HB3	7:CG:20:ASP:H	1.76	0.51
9:CI:112:LYS:HA	9:CI:119:ALA:HB2	1.93	0.51
11:CK:67:ASP:O	11:CK:71:LYS:HG3	2.10	0.51
12:CL:27:LEU:HD23	12:CL:30:ALA:O	2.10	0.51
19:CS:13:ASP:C	19:CS:15:LEU:N	2.69	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:CT:92:LEU:C	20:CT:94:ALA:N	2.66	0.51
25:CZ:32:THR:HG22	25:CZ:70:TYR:HB3	1.93	0.51
25:CZ:64:ASN:HD22	25:CZ:64:ASN:N	2.04	0.51
26:D0:49:LYS:O	26:D0:50:ASN:HB2	2.09	0.51
27:D1:27:GLU:O	27:D1:29:GLY:N	2.44	0.51
27:D1:82:LEU:HD11	27:D1:90:ILE:HD12	1.92	0.51
28:D2:44:LEU:O	28:D2:44:LEU:HD23	2.10	0.51
30:D4:6:HIS:HB3	42:DG:67:LYS:NZ	2.26	0.51
32:D6:18:ARG:HH11	32:D6:18:ARG:CG	2.06	0.51
32:D6:30:THR:CG2	32:D6:31:PRO:HD2	2.41	0.51
35:D9:1:MET:HE2	36:DA:2478:A:OP2	2.11	0.51
36:DA:332:A:H4'	36:DA:333:G:OP1	2.11	0.51
36:DA:673:C:H6	36:DA:673:C:C5'	2.16	0.51
36:DA:996:A:H4'	53:DU:92:ARG:CD	2.40	0.51
36:DA:1059:G:H22	45:DK:130:UNK:CB	2.24	0.51
36:DA:1064:C:H4'	45:DK:87:UNK:CB	2.41	0.51
36:DA:1087:G:C8	36:DA:1088:A:H4'	2.35	0.51
36:DA:1344:G:H4'	36:DA:1384:A:C5	2.46	0.51
36:DA:2880:C:H1'	50:DR:92:GLY:O	2.10	0.51
38:DC:118:ASP:C	38:DC:120:MET:N	2.69	0.51
40:DE:52:LEU:HD23	40:DE:75:VAL:CB	2.41	0.51
43:DH:152:ARG:HH11	43:DH:152:ARG:HG3	1.76	0.51
48:DP:47:ASP:OD2	48:DP:50:ARG:HG2	2.10	0.51
48:DP:147:LEU:O	48:DP:148:LEU:CB	2.57	0.51
55:DW:69:LEU:HD23	55:DW:108:GLY:O	2.11	0.51
57:DY:86:ARG:HH22	57:DY:95:LYS:HE2	1.75	0.51
58:DZ:62:PRO:C	58:DZ:64:GLY:N	2.69	0.51
1:AA:1250:A:H4'	9:AI:68:GLY:H	1.76	0.51
1:AA:1394:A:C5	1:AA:1501:C:H4'	2.46	0.51
4:AD:45:GLN:C	4:AD:46:LYS:CG	2.84	0.51
9:AI:111:ARG:O	9:AI:113:LYS:HD2	2.10	0.51
12:AL:27:LEU:HD23	12:AL:30:ALA:O	2.11	0.51
22:AV:44:G:H3'	22:AV:45:U:H5'	1.92	0.51
24:AY:45:U:C3'	24:AY:46:7MG:H5"	2.33	0.51
24:AY:51:G:N2	24:AY:64:U:O2	2.44	0.51
33:B7:19:ARG:HG2	33:B7:19:ARG:NH1	2.26	0.51
35:B9:1:MET:HG3	36:BA:2478:A:OP2	2.11	0.51
36:BA:142:A:H1'	36:BA:1408:C:H1'	1.92	0.51
36:BA:171:G:O2'	36:BA:172:C:H5'	2.11	0.51
36:BA:405:U:H3'	36:BA:406:G:C5'	2.41	0.51
36:BA:483:A:H5"	57:BY:49:VAL:HG22	1.91	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:575:A:OP2	36:BA:2499:C:O2'	2.28	0.51
36:BA:1151:G:H5"	53:BU:81:HIS:CE1	2.47	0.51
36:BA:1231:G:H2'	36:BA:1232:G:H8	1.76	0.51
36:BA:2475:C:H42	36:BA:2529:G:H22	1.60	0.51
36:BA:2672:G:C2'	36:BA:2673:G:H5"	2.41	0.51
36:BA:2811:G:H4'	40:BE:61:ARG:HH21	1.76	0.51
39:BD:130:ALA:HA	39:BD:192:THR:HA	1.92	0.51
39:BD:241:PRO:O	39:BD:243:GLY:N	2.43	0.51
48:BP:131:SER:OG	48:BP:134:ALA:HB3	2.11	0.51
48:BP:147:LEU:O	48:BP:148:LEU:CB	2.58	0.51
51:BS:48:LEU:HD23	51:BS:82:ILE:HD11	1.93	0.51
51:BS:54:LEU:HD21	51:BS:58:LEU:O	2.11	0.51
52:BT:27:THR:HG23	52:BT:28:VAL:H	1.75	0.51
55:BW:6:ILE:HG12	55:BW:104:THR:HB	1.93	0.51
58:BZ:114:GLY:C	58:BZ:146:ILE:HG22	2.35	0.51
1:CA:190:U:H2'	1:CA:191:G:C8	2.43	0.51
1:CA:373:A:O2'	1:CA:374:A:H5'	2.11	0.51
1:CA:1005:A:H2'	1:CA:1006:C:H5'	1.92	0.51
1:CA:1466:C:H2'	1:CA:1467:G:O4'	2.11	0.51
2:CB:239:VAL:O	2:CB:240:GLN:HB3	2.10	0.51
3:CC:150:LYS:HG3	3:CC:169:ALA:HB2	1.92	0.51
4:CD:117:ALA:O	4:CD:121:VAL:HG23	2.11	0.51
6:CF:15:ASP:OD2	6:CF:17:SER:HB2	2.11	0.51
10:CJ:29:ARG:HH11	10:CJ:29:ARG:HG2	1.75	0.51
10:CJ:85:LEU:C	10:CJ:87:THR:H	2.18	0.51
22:CV:53:G:O2'	22:CV:54:U:H5'	2.10	0.51
22:CW:5:G:N2	22:CW:69:G:C5	2.79	0.51
25:CZ:231:ILE:HD12	25:CZ:231:ILE:N	2.26	0.51
25:CZ:249:VAL:HG13	25:CZ:268:THR:HA	1.94	0.51
25:CZ:404:LEU:HD22	25:CZ:404:LEU:H	1.76	0.51
31:D5:36:CYS:SG	31:D5:48:GLU:HB2	2.51	0.51
32:D6:45:LYS:HG3	36:DA:2371:G:H4'	1.91	0.51
36:DA:11:G:H2'	36:DA:12:U:C6	2.45	0.51
36:DA:118:A:OP2	36:DA:119:A:H5"	2.11	0.51
36:DA:467:G:O2'	36:DA:468:G:H5'	2.11	0.51
36:DA:2111:C:H1'	36:DA:2118:U:O4'	2.11	0.51
36:DA:2632:A:C2	40:DE:61:ARG:HD2	2.46	0.51
36:DA:2790:A:H2'	36:DA:2791:C:C5'	2.41	0.51
39:DD:124:PRO:HG2	39:DD:129:ASN:ND2	2.26	0.51
39:DD:130:ALA:HA	39:DD:192:THR:HA	1.92	0.51
39:DD:267:SER:O	39:DD:269:PHE:HD1	1.93	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DE:35:GLN:HG2	40:DE:36:ARG:N	2.26	0.51
40:DE:81:ILE:O	40:DE:82:ARG:O	2.28	0.51
41:DF:167:ALA:HA	41:DF:170:LEU:HD23	1.92	0.51
42:DG:125:PHE:CB	42:DG:130:ASN:O	2.59	0.51
42:DG:141:PHE:HB3	42:DG:142:PRO:HD2	1.93	0.51
43:DH:121:ILE:HG23	43:DH:133:VAL:CG1	2.40	0.51
46:DN:91:LEU:CD2	46:DN:98:VAL:HG21	2.41	0.51
46:DN:120:LEU:C	46:DN:120:LEU:HD13	2.36	0.51
47:DO:63:VAL:HG23	47:DO:64:ARG:HG3	1.92	0.51
52:DT:26:ASP:OD1	52:DT:26:ASP:C	2.53	0.51
52:DT:28:VAL:O	52:DT:29:ARG:HB2	2.10	0.51
53:DU:85:LYS:CD	53:DU:117:GLN:HE22	2.14	0.51
54:DV:69:LYS:HA	54:DV:87:HIS:O	2.11	0.51
55:DW:86:LEU:HD22	55:DW:96:ILE:HD12	1.93	0.51
4:AD:98:GLU:HG2	4:AD:189:PRO:HG3	1.93	0.50
9:AI:46:ALA:HB2	9:AI:74:ILE:HG23	1.93	0.50
13:AM:118:ALA:HB3	22:AV:29:G:C5'	2.42	0.50
22:AV:53:G:O2'	22:AV:54:U:H5'	2.11	0.50
25:AZ:222:LEU:HA	25:AZ:304:LEU:O	2.11	0.50
25:AZ:300:ARG:HH11	25:AZ:300:ARG:HG2	1.76	0.50
27:B1:81:LYS:O	27:B1:83:GLU:HG3	2.10	0.50
34:B8:14:VAL:HG21	34:B8:22:VAL:HG13	1.93	0.50
36:BA:534:U:O2'	53:BU:49:HIS:CD2	2.64	0.50
36:BA:643:A:O2'	36:BA:644:A:H5'	2.11	0.50
36:BA:1103:A:H5"	36:BA:1104:C:C5	2.44	0.50
36:BA:1499:C:O2'	36:BA:1500:G:H5'	2.11	0.50
36:BA:1799:G:H5'	36:BA:1819:A:N6	2.26	0.50
36:BA:1843:C:H2'	36:BA:1844:C:C6	2.46	0.50
36:BA:1860:G:H1	36:BA:1882:C:H42	1.58	0.50
36:BA:1884:A:C3'	36:BA:1885:A:H5"	2.40	0.50
36:BA:2131:G:H1'	36:BA:2133:G:C2	2.46	0.50
36:BA:2360:A:O2'	36:BA:2361:A:C5'	2.59	0.50
36:BA:2369:A:O2'	36:BA:2370:G:H5'	2.10	0.50
36:BA:2402:C:H2'	36:BA:2403:C:H5'	1.93	0.50
37:BB:48:A:H2'	37:BB:49:C:C6	2.46	0.50
38:BC:127:LEU:O	38:BC:129:ARG:N	2.44	0.50
39:BD:24:ILE:C	39:BD:26:LYS:N	2.66	0.50
39:BD:201:HIS:O	39:BD:204:ILE:HG12	2.11	0.50
40:BE:197:ILE:HG12	40:BE:197:ILE:O	2.11	0.50
41:BF:178:PRO:HG2	41:BF:179:GLU:H	1.75	0.50
42:BG:129:GLY:HA3	42:BG:163:ALA:HB3	1.92	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BH:41:MET:SD	43:BH:53:GLU:O	2.68	0.50
54:BV:5:VAL:HG22	54:BV:6:LYS:N	2.27	0.50
1:CA:1226:C:C5	13:CM:104:ARG:HB2	2.46	0.50
4:CD:101:LEU:O	4:CD:103:ASN:N	2.44	0.50
7:CG:101:LEU:O	7:CG:105:VAL:HG23	2.12	0.50
34:D8:4:MET:HE2	34:D8:61:LEU:HD23	1.93	0.50
36:DA:84:A:H61	36:DA:102:G:C2'	2.23	0.50
36:DA:383:U:H2'	36:DA:385:C:H5	1.76	0.50
36:DA:832:G:H21	48:DP:53:GLY:HA2	1.76	0.50
36:DA:1664:A:H1'	36:DA:2726:U:C5	2.46	0.50
36:DA:1997:G:OP1	40:DE:123:ALA:HB1	2.10	0.50
36:DA:2307:G:N2	36:DA:2308:G:H5"	2.26	0.50
36:DA:2659:G:H2'	36:DA:2660:A:H5"	1.93	0.50
37:DB:75:G:O3'	58:DZ:10:ARG:NH2	2.43	0.50
38:DC:18:LYS:HD3	38:DC:20:TYR:CZ	2.46	0.50
39:DD:43:ARG:HH11	39:DD:44:ASN:HD21	1.55	0.50
39:DD:72:LYS:HZ2	39:DD:75:ILE:HG13	1.76	0.50
40:DE:26:ILE:CG2	40:DE:196:VAL:HG21	2.41	0.50
41:DF:171:PRO:C	41:DF:173:VAL:H	2.20	0.50
54:DV:39:LEU:CD1	54:DV:51:VAL:HA	2.41	0.50
55:DW:17:VAL:C	55:DW:19:LEU:N	2.67	0.50
55:DW:29:LEU:CG	55:DW:33:ARG:HD2	2.41	0.50
57:DY:7:VAL:HB	57:DY:8:LYS:NZ	2.26	0.50
58:DZ:18:LEU:O	58:DZ:23:LYS:HB2	2.11	0.50
58:DZ:95:PRO:HA	58:DZ:129:SER:HA	1.93	0.50
58:DZ:145:GLU:OE1	58:DZ:145:GLU:HA	2.10	0.50
1:AA:1005:A:H2'	1:AA:1006:C:H5'	1.93	0.50
1:AA:1202:G:C2	14:AN:42:ILE:HG21	2.45	0.50
1:AA:1217:C:OP1	14:AN:9:LYS:HE3	2.11	0.50
1:AA:1392:G:H21	1:AA:1502:A:H8	1.41	0.50
2:AB:141:GLU:O	2:AB:145:LEU:HD23	2.11	0.50
9:AI:100:GLY:O	9:AI:102:LEU:N	2.45	0.50
10:AJ:61:GLU:HG3	14:AN:58:LYS:CE	2.28	0.50
13:AM:91:ARG:HB3	13:AM:98:VAL:HG12	1.93	0.50
22:AW:69:G:H2'	22:AW:70:G:C5'	2.41	0.50
24:AY:17:H2U:O2'	24:AY:18:G:OP1	2.30	0.50
26:B0:49:LYS:O	26:B0:50:ASN:HB2	2.11	0.50
28:B2:41:ILE:HG13	28:B2:42:GLY:N	2.19	0.50
30:B4:10:VAL:CG2	30:B4:11:PRO:HD2	2.41	0.50
32:B6:53:LYS:CG	32:B6:54:ILE:N	2.74	0.50
36:BA:1149:G:H2'	36:BA:1150:C:C6	2.46	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2133:G:H4'	36:BA:2133:G:OP1	2.12	0.50
40:BE:48:GLN:NE2	40:BE:78:LEU:HD22	2.26	0.50
42:BG:106:LEU:O	42:BG:106:LEU:HG	2.11	0.50
48:BP:122:PRO:HA	48:BP:141:ALA:O	2.12	0.50
49:BQ:1:MET:HE1	49:BQ:45:GLN:CA	2.40	0.50
56:BX:35:THR:HG22	56:BX:38:GLU:N	2.21	0.50
58:BZ:18:LEU:HB3	58:BZ:23:LYS:HB2	1.92	0.50
58:BZ:136:PHE:O	58:BZ:137:ILE:HD13	2.12	0.50
1:CA:397:A:H3'	1:CA:397:A:N3	2.27	0.50
2:CB:191:ASP:OD1	2:CB:191:ASP:C	2.55	0.50
2:CB:204:ASN:ND2	2:CB:207:ALA:H	2.10	0.50
4:CD:76:ARG:O	4:CD:80:GLU:HG2	2.11	0.50
7:CG:78:ARG:O	7:CG:78:ARG:CG	2.58	0.50
8:CH:116:LYS:HD3	8:CH:127:LEU:HD12	1.92	0.50
13:CM:34:LEU:HD13	13:CM:41:PRO:HA	1.93	0.50
17:CQ:45:HIS:HB2	17:CQ:65:ILE:HD13	1.92	0.50
29:D3:29:ARG:NH2	36:DA:1183:G:H4'	2.26	0.50
32:D6:25:LYS:HD2	36:DA:2285:C:N4	2.25	0.50
34:D8:15:LYS:CG	48:DP:65:ARG:NH2	2.74	0.50
35:D9:29:ASN:HD21	35:D9:32:HIS:CG	2.28	0.50
36:DA:45:C:H2'	36:DA:47:C:H6	1.72	0.50
36:DA:260:G:H1'	36:DA:621:A:H1'	1.93	0.50
36:DA:782:A:H5'	36:DA:783:A:C2	2.46	0.50
36:DA:1430:C:H2'	36:DA:1431:U:C6	2.46	0.50
36:DA:1479:G:H5"	36:DA:1560:G:H4'	1.94	0.50
36:DA:1799:G:H5'	36:DA:1819:A:N6	2.26	0.50
36:DA:1888:G:N3	36:DA:1888:G:H5'	2.26	0.50
36:DA:2206:G:N2	36:DA:2207:G:H4'	2.27	0.50
40:DE:47:VAL:HG12	40:DE:49:LEU:HD22	1.92	0.50
41:DF:155:LEU:HD23	41:DF:192:LEU:HD12	1.92	0.50
41:DF:160:ASN:ND2	41:DF:160:ASN:C	2.65	0.50
42:DG:30:GLU:O	42:DG:30:GLU:HG2	2.11	0.50
48:DP:75:ILE:N	48:DP:75:ILE:HD12	2.25	0.50
48:DP:112:LEU:HD22	48:DP:113:LYS:N	2.26	0.50
49:DQ:141:GLN:OXT	58:DZ:53:ILE:HD12	2.11	0.50
52:DT:27:THR:HG23	52:DT:28:VAL:N	2.26	0.50
52:DT:109:GLU:O	52:DT:112:ARG:HG2	2.12	0.50
54:DV:5:VAL:HG22	54:DV:6:LYS:N	2.26	0.50
54:DV:62:LEU:CD2	54:DV:95:LEU:HB2	2.39	0.50
57:DY:23:ARG:HH11	57:DY:23:ARG:HG2	1.76	0.50
58:DZ:128:VAL:HG22	58:DZ:129:SER:N	2.25	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:718:G:H5'	11:AK:117:ASN:OD1	2.11	0.50
1:AA:1065:U:C4	1:AA:1190:G:H1'	2.46	0.50
2:AB:204:ASN:ND2	2:AB:207:ALA:H	2.10	0.50
2:AB:213:LEU:HD23	2:AB:213:LEU:C	2.36	0.50
4:AD:45:GLN:C	4:AD:46:LYS:HG3	2.37	0.50
4:AD:117:ALA:O	4:AD:121:VAL:HG23	2.12	0.50
10:AJ:40:LEU:HB2	10:AJ:69:ASN:HB2	1.92	0.50
10:AJ:55:LYS:NZ	10:AJ:55:LYS:CA	2.75	0.50
11:AK:48:ILE:HD11	11:AK:67:ASP:HB2	1.94	0.50
13:AM:34:LEU:HD13	13:AM:41:PRO:HA	1.92	0.50
16:AP:64:ALA:O	16:AP:66:PRO:HD3	2.11	0.50
25:AZ:130:TYR:CD2	25:AZ:211:PRO:HD2	2.46	0.50
25:AZ:224:PRO:HD2	25:AZ:241:ARG:O	2.11	0.50
26:B0:26:TYR:CE2	36:BA:857:C:H1'	2.46	0.50
30:B4:31:ILE:HD12	30:B4:31:ILE:N	2.25	0.50
31:B5:50:GLY:O	31:B5:51:TYR:C	2.54	0.50
32:B6:52:VAL:HG12	32:B6:53:LYS:N	2.26	0.50
34:B8:30:ARG:NH2	36:BA:2419:U:O4	2.44	0.50
34:B8:48:PHE:O	34:B8:49:VAL:HG22	2.11	0.50
36:BA:1038:C:C3'	36:BA:1039:G:H5"	2.42	0.50
36:BA:1279:G:H4'	50:BR:31:HIS:NE2	2.26	0.50
36:BA:1999:C:H5"	36:BA:2723:C:O2'	2.12	0.50
36:BA:2206:G:N2	36:BA:2207:G:H4'	2.26	0.50
36:BA:2469:A:H2	36:BA:2481:G:H21	1.59	0.50
36:BA:2791:C:H4'	36:BA:2792:G:O5'	2.12	0.50
39:BD:142:VAL:HG22	39:BD:143:HIS:H	1.76	0.50
42:BG:134:GLY:C	42:BG:135:LEU:HD12	2.37	0.50
44:BJ:21:UNK:C	44:BJ:23:UNK:H	2.24	0.50
46:BN:55:VAL:HG22	46:BN:56:ASN:N	2.26	0.50
47:BO:24:VAL:CG1	47:BO:33:ALA:HB2	2.40	0.50
49:BQ:101:ARG:HG3	49:BQ:101:ARG:HH11	1.77	0.50
50:BR:74:LYS:HD2	50:BR:77:ARG:HD2	1.92	0.50
52:BT:28:VAL:CG2	52:BT:46:GLU:HG3	2.38	0.50
57:BY:10:GLY:C	57:BY:27:VAL:HG22	2.36	0.50
1:CA:31:G:N1	1:CA:48:C:H5"	2.25	0.50
1:CA:427:U:OP1	4:CD:13:ARG:NH2	2.45	0.50
1:CA:883:C:O2'	1:CA:884:U:H5'	2.11	0.50
3:CC:14:ILE:HG13	3:CC:15:THR:N	2.26	0.50
3:CC:50:ALA:HA	3:CC:72:LYS:CB	2.40	0.50
4:CD:188:LEU:O	4:CD:189:PRO:O	2.28	0.50
30:D4:8:LYS:O	30:D4:9:LEU:CB	2.59	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:D6:10:LEU:CD2	32:D6:10:LEU:N	2.67	0.50
32:D6:15:GLU:HG2	32:D6:18:ARG:CZ	2.40	0.50
32:D6:53:LYS:CG	32:D6:54:ILE:N	2.75	0.50
34:D8:33:ASN:HB2	34:D8:36:LYS:HD2	1.93	0.50
36:DA:151:C:H2'	36:DA:152:G:C8	2.46	0.50
36:DA:729:G:C5	39:DD:208:LYS:HB2	2.46	0.50
36:DA:826:U:H2'	36:DA:828:U:O4'	2.11	0.50
36:DA:1192:G:N7	48:DP:29:LYS:NZ	2.41	0.50
36:DA:1243:G:H2'	36:DA:1244:G:O4'	2.11	0.50
36:DA:1270:C:H5"	36:DA:1271:G:C5'	2.41	0.50
36:DA:1378:A:C4'	36:DA:1379:A:OP1	2.57	0.50
36:DA:2402:C:H2'	36:DA:2403:C:H5'	1.94	0.50
36:DA:2475:C:H42	36:DA:2529:G:H22	1.59	0.50
36:DA:2837:G:H2'	36:DA:2838:G:H8	1.76	0.50
37:DB:48:A:H2'	37:DB:49:C:C6	2.45	0.50
39:DD:62:TYR:HA	39:DD:87:ASN:HD21	1.76	0.50
39:DD:69:ARG:HG3	39:DD:130:ALA:CB	2.42	0.50
40:DE:101:ARG:HE	40:DE:171:GLU:HB2	1.74	0.50
40:DE:188:VAL:HG23	40:DE:189:PRO:HD2	1.92	0.50
42:DG:40:ASN:HB3	42:DG:156:ASP:HB2	1.92	0.50
42:DG:47:LYS:HD3	42:DG:81:LYS:CG	2.37	0.50
42:DG:51:ARG:NH1	42:DG:53:LEU:CD2	2.75	0.50
43:DH:45:VAL:C	43:DH:47:GLU:H	2.19	0.50
48:DP:39:LYS:CD	48:DP:40:SER:H	2.21	0.50
52:DT:28:VAL:HG11	52:DT:88:ILE:HD11	1.94	0.50
57:DY:44:ILE:HG22	57:DY:45:VAL:N	2.26	0.50
4:AD:20:TYR:HA	4:AD:26:CYS:SG	2.52	0.50
8:AH:7:ALA:HB2	8:AH:85:ARG:CD	2.41	0.50
15:AO:7:GLU:O	15:AO:11:VAL:HG23	2.11	0.50
16:AP:44:THR:O	16:AP:45:THR:CB	2.59	0.50
19:AS:43:GLU:O	19:AS:45:VAL:HG22	2.12	0.50
24:AY:20:H2U:H4'	24:AY:21:A:O5'	2.12	0.50
25:AZ:185:ASN:HD22	25:AZ:185:ASN:N	2.08	0.50
25:AZ:244:ARG:HA	25:AZ:282:ALA:HB2	1.92	0.50
31:B5:52:TYR:N	31:B5:52:TYR:CD1	2.80	0.50
32:B6:14:THR:C	32:B6:16:CYS:H	2.19	0.50
33:B7:5:TRP:CZ3	36:BA:464:U:H4'	2.46	0.50
36:BA:31:C:C2'	36:BA:32:C:C5'	2.74	0.50
36:BA:230:U:H2'	36:BA:231:C:H6	1.76	0.50
36:BA:729:G:C5	39:BD:208:LYS:HB2	2.46	0.50
36:BA:1049:C:O2	36:BA:1113:U:H4'	2.11	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2036:C:H6	36:BA:2036:C:C5'	2.17	0.50
36:BA:2811:G:C4'	40:BE:61:ARG:HH21	2.25	0.50
37:BB:48:A:OP1	51:BS:93:LYS:HB3	2.11	0.50
41:BF:27:GLU:N	41:BF:27:GLU:OE1	2.44	0.50
42:BG:120:LEU:H	42:BG:181:ARG:H	1.60	0.50
46:BN:120:LEU:C	46:BN:120:LEU:HD13	2.37	0.50
49:BQ:81:VAL:HG22	49:BQ:82:ARG:H	1.77	0.50
50:BR:33:ARG:HG3	50:BR:115:GLU:HG3	1.93	0.50
53:BU:95:LEU:C	53:BU:97:ASP:H	2.18	0.50
55:BW:9:TYR:N	55:BW:9:TYR:HD1	2.09	0.50
58:BZ:162:GLU:C	58:BZ:163:LEU:HD23	2.36	0.50
1:CA:267:C:H2'	1:CA:268:C:C6	2.46	0.50
1:CA:939:G:C5'	7:CG:102:ARG:HH12	2.21	0.50
3:CC:139:GLN:NE2	3:CC:143:GLU:OE2	2.44	0.50
4:CD:205:GLU:OE2	5:CE:100:VAL:HG22	2.11	0.50
5:CE:102:ALA:CB	5:CE:120:THR:HG21	2.42	0.50
12:CL:85:ILE:HG23	12:CL:86:ARG:N	2.27	0.50
22:CW:59:U:C2'	22:CW:60:U:H5'	2.40	0.50
25:CZ:209:TYR:O	25:CZ:211:PRO:HD3	2.11	0.50
25:CZ:224:PRO:HD2	25:CZ:241:ARG:O	2.11	0.50
34:D8:39:LYS:HG3	34:D8:43:GLN:HE21	1.76	0.50
36:DA:564:C:O2'	36:DA:565:C:H5'	2.12	0.50
36:DA:628:G:C3'	36:DA:629:G:H5"	2.41	0.50
36:DA:990:A:OP2	36:DA:991:C:OP2	2.29	0.50
36:DA:1466:G:H2'	36:DA:1547:C:N4	2.27	0.50
37:DB:68:C:O2'	37:DB:69:G:H5'	2.12	0.50
37:DB:75:G:H22	58:DZ:73:GLN:NE2	2.09	0.50
38:DC:96:GLY:H	38:DC:99:ILE:HG12	1.76	0.50
43:DH:24:VAL:O	43:DH:24:VAL:HG12	2.12	0.50
46:DN:65:LYS:NZ	46:DN:65:LYS:HB3	2.27	0.50
49:DQ:101:ARG:HH11	49:DQ:101:ARG:HG3	1.77	0.50
50:DR:18:LEU:C	50:DR:18:LEU:HD13	2.37	0.50
53:DU:83:LEU:HG	53:DU:88:ILE:HD11	1.92	0.50
58:DZ:54:HIS:HB3	58:DZ:101:PRO:HD3	1.93	0.50
58:DZ:89:PHE:CE2	58:DZ:96:VAL:HG21	2.36	0.50
1:AA:659:U:O2'	1:AA:660:G:H5'	2.11	0.50
1:AA:735:C:O2'	1:AA:736:C:H5'	2.12	0.50
1:AA:1310:G:O2'	1:AA:1311:G:H5'	2.12	0.50
8:AH:2:LEU:O	8:AH:2:LEU:HD23	2.11	0.50
12:AL:127:GLU:O	12:AL:128:ALA:C	2.53	0.50
13:AM:14:ARG:NH2	13:AM:16:ASP:OD2	2.44	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:AQ:55:ASP:HB3	17:AQ:76:LEU:CD1	2.42	0.50
20:AT:86:ARG:O	20:AT:90:GLN:HG3	2.12	0.50
22:AV:75:C:H2'	22:AV:76:A:C1'	2.41	0.50
25:AZ:64:ASN:HD22	25:AZ:64:ASN:N	2.04	0.50
36:BA:151:C:H2'	36:BA:152:G:C8	2.46	0.50
36:BA:979:G:H3'	36:BA:980:A:H5"	1.94	0.50
36:BA:1029:A:H2'	36:BA:1030:G:O4'	2.12	0.50
36:BA:1311:G:H21	36:BA:1603:A:H62	1.60	0.50
36:BA:1885:A:H8	36:BA:1885:A:H5'	1.76	0.50
36:BA:2087:G:O2'	36:BA:2088:G:H5'	2.11	0.50
36:BA:2175:C:N3	36:BA:2176:A:C2	2.80	0.50
36:BA:2464:C:O2'	36:BA:2465:C:O5'	2.29	0.50
40:BE:115:GLY:C	40:BE:116:VAL:O	2.52	0.50
42:BG:174:GLU:O	42:BG:176:LEU:N	2.45	0.50
43:BH:41:MET:O	43:BH:42:ARG:HB3	2.11	0.50
48:BP:10:PRO:O	48:BP:11:GLY:O	2.30	0.50
48:BP:99:LEU:HD23	48:BP:99:LEU:C	2.36	0.50
49:BQ:3:MET:HB2	49:BQ:4:PRO:HD2	1.93	0.50
52:BT:100:TYR:O	52:BT:103:ARG:HG3	2.12	0.50
53:BU:57:PHE:O	53:BU:58:ARG:C	2.53	0.50
56:BX:70:LEU:HD23	56:BX:71:GLY:N	2.27	0.50
57:BY:87:LYS:HG3	57:BY:88:LYS:H	1.77	0.50
1:CA:59:A:H3'	1:CA:331:G:N2	2.25	0.50
1:CA:328:C:H4'	1:CA:329:A:H5'	1.92	0.50
1:CA:719:C:O2'	18:CR:49:LYS:HB3	2.11	0.50
1:CA:737:A:H2'	1:CA:738:C:C6	2.46	0.50
1:CA:983:A:O2'	1:CA:1050:G:OP2	2.29	0.50
2:CB:56:ARG:HG3	2:CB:56:ARG:HH11	1.75	0.50
2:CB:168:THR:CG2	2:CB:192:SER:HA	2.42	0.50
6:CF:82:ARG:HB2	6:CF:85:VAL:CG2	2.42	0.50
10:CJ:16:LEU:CD1	10:CJ:70:ARG:HG2	2.41	0.50
15:CO:8:LYS:O	15:CO:12:ILE:HG13	2.11	0.50
25:CZ:122:LEU:HD13	25:CZ:122:LEU:O	2.12	0.50
26:D0:43:THR:O	26:D0:43:THR:HG23	2.12	0.50
29:D3:26:LEU:HB2	29:D3:28:LEU:HD22	1.94	0.50
32:D6:15:GLU:OE2	32:D6:41:PRO:CB	2.58	0.50
33:D7:10:ARG:NH1	36:DA:771:G:OP1	2.44	0.50
36:DA:363(E):U:H3'	36:DA:363(F):A:O4'	2.12	0.50
36:DA:686:G:N2	36:DA:788:A:H61	2.10	0.50
36:DA:1051:G:C4	36:DA:1052:C:N4	2.80	0.50
36:DA:1171:G:C8	36:DA:1173:G:H1'	2.47	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1274:A:N3	36:DA:1297:C:H1'	2.26	0.50
36:DA:1885:A:H5'	36:DA:1885:A:H8	1.75	0.50
36:DA:2096:U:H2'	36:DA:2097:C:H6	1.77	0.50
38:DC:189:ILE:O	38:DC:193:ILE:HG13	2.10	0.50
39:DD:35:LYS:O	39:DD:62:TYR:O	2.30	0.50
39:DD:43:ARG:HG2	39:DD:43:ARG:O	2.12	0.50
39:DD:133:LEU:HB3	39:DD:173:VAL:HG11	1.93	0.50
43:DH:41:MET:O	43:DH:42:ARG:HB3	2.12	0.50
48:DP:45:LEU:CD1	48:DP:46:LYS:H	2.24	0.50
49:DQ:43:THR:HB	49:DQ:45:GLN:HE21	1.76	0.50
49:DQ:134:ARG:HA	49:DQ:137:TYR:CD1	2.46	0.50
52:DT:100:TYR:O	52:DT:103:ARG:HG3	2.11	0.50
1:AA:190:U:H2'	1:AA:191:G:C8	2.43	0.50
1:AA:397:A:H3'	1:AA:397:A:N3	2.27	0.50
1:AA:436:C:H2'	1:AA:437:U:C6	2.47	0.50
1:AA:719:C:O2'	18:AR:49:LYS:HB3	2.12	0.50
1:AA:1029:C:H2'	1:AA:1030(A):G:N7	2.27	0.50
1:AA:1158:C:O2'	1:AA:1159:U:H4'	2.11	0.50
2:AB:25:ASN:O	2:AB:27:LYS:N	2.45	0.50
3:AC:130:VAL:O	3:AC:131:ARG:C	2.55	0.50
7:AG:6:ARG:HH21	7:AG:94:ARG:HH12	1.57	0.50
20:AT:93:GLU:N	20:AT:93:GLU:OE1	2.45	0.50
28:B2:52:ASP:O	28:B2:56:GLN:NE2	2.45	0.50
31:B5:43:HIS:HD2	36:BA:2815:C:O2'	1.94	0.50
36:BA:481:G:P	57:BY:47:LYS:HD3	2.51	0.50
36:BA:558:G:OP2	46:BN:111:PRO:HD2	2.11	0.50
36:BA:710:G:H2'	36:BA:711:G:H8	1.77	0.50
36:BA:733:G:C8	36:BA:761:A:N1	2.80	0.50
36:BA:796:C:H2'	36:BA:797:C:H6	1.75	0.50
36:BA:832:G:H21	48:BP:53:GLY:HA2	1.76	0.50
36:BA:1021:A:H3'	36:BA:1021:A:C8	2.47	0.50
36:BA:1243:G:H2'	36:BA:1244:G:O4'	2.11	0.50
36:BA:2030:A:H4'	36:BA:2031:A:H8	1.77	0.50
36:BA:2188:C:H2'	36:BA:2189:U:C5	2.47	0.50
36:BA:2310:A:O2'	36:BA:2311:A:C5'	2.48	0.50
36:BA:2416:C:H2'	36:BA:2417:C:C6	2.47	0.50
36:BA:2545:G:N3	36:BA:2565:A:H2	2.08	0.50
36:BA:2631:G:N2	40:BE:61:ARG:HH12	2.09	0.50
38:BC:96:GLY:C	38:BC:98:GLU:H	2.20	0.50
39:BD:65:ILE:HD11	39:BD:67:PHE:CE2	2.47	0.50
39:BD:162:SER:O	39:BD:178:PRO:HG3	2.11	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BG:61:ALA:O	42:BG:65:GLY:N	2.42	0.50
48:BP:16:ARG:NE	48:BP:18:ARG:HG2	2.26	0.50
48:BP:98:GLU:HA	48:BP:101:VAL:HG22	1.92	0.50
48:BP:122:PRO:HB3	48:BP:141:ALA:CB	2.42	0.50
49:BQ:16:ARG:HG3	49:BQ:17:LEU:N	2.26	0.50
49:BQ:133:ARG:HH11	49:BQ:133:ARG:CB	2.17	0.50
51:BS:97:ARG:NH1	51:BS:98:VAL:O	2.45	0.50
52:BT:26:ASP:OD1	52:BT:26:ASP:C	2.54	0.50
53:BU:52:ARG:O	53:BU:55:ARG:N	2.45	0.50
55:BW:69:LEU:HD23	55:BW:108:GLY:O	2.11	0.50
56:BX:41:ASN:O	56:BX:45:THR:HG23	2.12	0.50
57:BY:85:VAL:HG12	57:BY:86:ARG:N	2.25	0.50
1:CA:310:G:H2'	1:CA:311:C:H6	1.77	0.50
1:CA:1442(A):G:H5'	1:CA:1442(B):A:OP2	2.12	0.50
3:CC:126:ARG:O	3:CC:128:PHE:HD1	1.95	0.50
7:CG:16:LEU:HD12	9:CI:42:ARG:HA	1.91	0.50
10:CJ:81:THR:C	10:CJ:83:GLU:N	2.67	0.50
12:CL:59:ARG:NH2	12:CL:63:GLY:HA2	2.25	0.50
16:CP:1:MET:O	16:CP:24:ALA:HB2	2.11	0.50
19:CS:31:ILE:HG23	19:CS:49:ILE:HA	1.93	0.50
25:CZ:256:VAL:HA	25:CZ:262:THR:HG22	1.94	0.50
25:CZ:265:THR:HG21	25:CZ:293:VAL:HG22	1.93	0.50
26:D0:15:ASP:OD1	26:D0:16:SER:N	2.42	0.50
28:D2:14:ARG:HG2	28:D2:14:ARG:O	2.12	0.50
31:D5:54:GLY:CA	31:D5:56:LYS:HZ2	2.25	0.50
33:D7:19:ARG:HG2	33:D7:19:ARG:NH1	2.26	0.50
36:DA:547:A:H2'	36:DA:548:A:H8	1.75	0.50
36:DA:654(O):G:H2'	36:DA:654(P):C:C5	2.47	0.50
36:DA:696:G:O2'	36:DA:697:C:H5'	2.12	0.50
36:DA:801:G:O4'	41:DF:54:ARG:HD3	2.11	0.50
36:DA:1012:U:C5	46:DN:28:THR:HG21	2.47	0.50
36:DA:1021:A:H3'	36:DA:1021:A:C8	2.47	0.50
36:DA:1360:A:H5'	36:DA:1361:G:OP2	2.11	0.50
36:DA:1948:G:O2'	36:DA:1949:G:H5'	2.11	0.50
36:DA:2771:C:H2'	36:DA:2772:C:C6	2.47	0.50
39:DD:75:ILE:HG21	39:DD:99:ASP:HB3	1.92	0.50
40:DE:144:ARG:CG	40:DE:145:LYS:H	2.25	0.50
46:DN:56:ASN:H	46:DN:125:GLY:HA3	1.77	0.50
46:DN:129:PRO:O	46:DN:130:HIS:CB	2.60	0.50
47:DO:1:MET:HE2	47:DO:32:TYR:CG	2.46	0.50
47:DO:11:ALA:HB1	47:DO:99:PHE:O	2.12	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:DO:34:THR:O	47:DO:35:VAL:C	2.54	0.50
49:DQ:16:ARG:HG3	49:DQ:17:LEU:N	2.26	0.50
52:DT:31:SER:HG	52:DT:32:TYR:HE1	1.56	0.50
52:DT:129:ARG:O	52:DT:129:ARG:HG3	2.12	0.50
57:DY:10:GLY:C	57:DY:27:VAL:HG22	2.37	0.50
57:DY:13:VAL:HG22	57:DY:14:LEU:N	2.27	0.50
1:AA:45:U:H2'	1:AA:46:G:H8	1.77	0.50
1:AA:264:U:H4'	17:AQ:63:ARG:HD3	1.94	0.50
1:AA:323:U:H2'	1:AA:324:G:O4'	2.12	0.50
1:AA:973:G:O3'	14:AN:41:ARG:NH1	2.45	0.50
1:AA:1157:A:H1'	1:AA:1181:G:C2	2.46	0.50
9:AI:69:GLY:O	9:AI:73:GLN:HG3	2.12	0.50
19:AS:18:LYS:O	19:AS:22:LEU:HB2	2.12	0.50
25:AZ:14:VAL:HG23	25:AZ:79:HIS:HA	1.94	0.50
25:AZ:28:THR:HG23	25:AZ:79:HIS:CE1	2.46	0.50
25:AZ:208:GLU:O	25:AZ:209:TYR:HB3	2.10	0.50
25:AZ:213:PRO:HG2	25:AZ:215:ARG:HE	1.77	0.50
27:B1:4:VAL:HG23	27:B1:5:CYS:N	2.26	0.50
27:B1:6:GLU:OE1	27:B1:61:ARG:N	2.43	0.50
28:B2:62:THR:CG2	28:B2:66:GLU:HB3	2.38	0.50
34:B8:33:ASN:HB2	34:B8:36:LYS:HD2	1.93	0.50
36:BA:239:U:H1'	36:BA:259:G:N2	2.27	0.50
36:BA:431:U:O2'	36:BA:432:A:H5'	2.12	0.50
36:BA:481:G:H1'	36:BA:506:G:H21	1.76	0.50
36:BA:696:G:O2'	36:BA:697:C:H5'	2.11	0.50
36:BA:1171:G:C8	36:BA:1173:G:H1'	2.47	0.50
36:BA:2777:G:C5'	36:BA:2778:A:H5'	2.39	0.50
36:BA:2870:C:H2'	36:BA:2871:C:O4'	2.12	0.50
39:BD:226:MET:HB3	39:BD:230:ASP:HB2	1.94	0.50
40:BE:30:PRO:HD3	40:BE:180:ASN:ND2	2.26	0.50
40:BE:47:VAL:HG12	40:BE:49:LEU:HD22	1.94	0.50
42:BG:31:VAL:HG23	42:BG:32:PRO:HD2	1.93	0.50
42:BG:89:GLY:O	42:BG:90:LEU:HB3	2.12	0.50
43:BH:24:VAL:HG12	43:BH:24:VAL:O	2.11	0.50
43:BH:41:MET:HG3	43:BH:42:ARG:N	2.26	0.50
43:BH:88:LEU:CD1	43:BH:130:ARG:HG2	2.42	0.50
43:BH:109:PHE:CZ	43:BH:152:ARG:NH1	2.79	0.50
48:BP:84:ASN:C	48:BP:86:LYS:H	2.19	0.50
50:BR:103:ARG:HH11	50:BR:110:PRO:HB3	1.77	0.50
52:BT:50:ILE:CD1	52:BT:64:ARG:HB3	2.41	0.50
52:BT:128:GLU:CD	52:BT:129:ARG:N	2.69	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BT:129:ARG:HG3	52:BT:129:ARG:O	2.12	0.50
58:BZ:33:LEU:HD12	58:BZ:34:ASN:N	2.26	0.50
58:BZ:102:LEU:CD2	58:BZ:137:ILE:HB	2.42	0.50
58:BZ:123:ASP:O	58:BZ:124:ILE:CG1	2.50	0.50
1:CA:80:G:C2'	1:CA:81:U:H5'	2.41	0.50
1:CA:264:U:H4'	17:CQ:63:ARG:HD3	1.94	0.50
1:CA:655:A:H2'	1:CA:656:C:H6	1.76	0.50
1:CA:668:G:O2'	15:CO:46:HIS:HD2	1.95	0.50
1:CA:783:C:O2'	1:CA:784:C:H5'	2.11	0.50
14:CN:15:LYS:O	14:CN:16:PHE:O	2.29	0.50
24:CY:2:G:H2'	24:CY:3:G:C5'	2.40	0.50
27:D1:69:LYS:HD3	27:D1:69:LYS:O	2.11	0.50
30:D4:7:PRO:O	30:D4:8:LYS:HB3	2.12	0.50
30:D4:9:LEU:HD13	30:D4:10:VAL:N	2.26	0.50
35:D9:10:ILE:HD12	35:D9:10:ILE:H	1.74	0.50
36:DA:57:C:O2'	36:DA:58:G:H5'	2.11	0.50
36:DA:1029:A:H2'	36:DA:1030:G:O4'	2.11	0.50
36:DA:1168:G:H2'	36:DA:1169:G:C8	2.46	0.50
36:DA:1363:C:H2'	36:DA:1364:G:C8	2.45	0.50
36:DA:1427:A:O2'	36:DA:1428:C:OP2	2.25	0.50
36:DA:1688:U:H1'	36:DA:1701:A:C6	2.47	0.50
36:DA:1908:C:H2'	36:DA:1909:C:H6	1.77	0.50
36:DA:2052:G:C8	40:DE:141:ILE:HD11	2.47	0.50
36:DA:2081:C:H2'	36:DA:2082:A:H8	1.76	0.50
36:DA:2131:G:H1'	36:DA:2133:G:C2	2.47	0.50
36:DA:2854:G:H1	36:DA:2863:C:H42	1.58	0.50
36:DA:2869:G:H2'	36:DA:2870:C:H6	1.76	0.50
36:DA:2881:C:H2'	36:DA:2882:A:H8	1.77	0.50
36:DA:2882:A:H5'	50:DR:96:ARG:HG3	1.94	0.50
37:DB:65:C:C2'	37:DB:66:A:H5'	2.42	0.50
37:DB:91:C:H5'	49:DQ:17:LEU:O	2.10	0.50
40:DE:48:GLN:NE2	40:DE:78:LEU:HD22	2.27	0.50
41:DF:126:VAL:HG21	41:DF:129:PHE:CZ	2.47	0.50
42:DG:172:LEU:HD23	42:DG:172:LEU:C	2.36	0.50
43:DH:52:VAL:HB	43:DH:69:ARG:CD	2.41	0.50
49:DQ:133:ARG:HG2	49:DQ:134:ARG:N	2.26	0.50
52:DT:3:ARG:CB	52:DT:6:LEU:HB2	2.42	0.50
52:DT:61:PHE:CE1	52:DT:76:PHE:HB2	2.47	0.50
53:DU:57:PHE:O	53:DU:58:ARG:C	2.53	0.50
56:DX:70:LEU:HD23	56:DX:71:GLY:N	2.27	0.50
57:DY:87:LYS:HG3	57:DY:88:LYS:H	1.77	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:245:C:O2'	1:AA:246:A:P	2.69	0.50
1:AA:865:A:H5'	1:AA:1078:U:O4	2.12	0.50
1:AA:1270:C:H2'	1:AA:1271:G:C8	2.46	0.50
3:AC:11:ARG:O	3:AC:14:ILE:O	2.29	0.50
5:AE:50:GLU:HB2	5:AE:53:LEU:CD1	2.35	0.50
6:AF:37:VAL:HG12	6:AF:38:GLU:O	2.12	0.50
6:AF:53:ALA:O	6:AF:54:LYS:HB2	2.11	0.50
10:AJ:7:LYS:HB2	10:AJ:97:GLU:HB2	1.94	0.50
13:AM:4:ILE:CG2	13:AM:5:ALA:N	2.68	0.50
14:AN:28:GLY:O	14:AN:29:ARG:C	2.54	0.50
22:AV:48:C:H6	22:AV:48:C:OP2	1.94	0.50
25:AZ:113:MET:HG3	25:AZ:114:PRO:CD	2.42	0.50
25:AZ:163:PHE:CD1	25:AZ:164:PRO:HD2	2.45	0.50
27:B1:79:GLY:O	27:B1:80:LEU:CG	2.55	0.50
28:B2:35:LEU:C	28:B2:35:LEU:HD22	2.37	0.50
28:B2:48:HIS:CD2	28:B2:49:LYS:HG3	2.46	0.50
28:B2:49:LYS:HB2	28:B2:49:LYS:HZ2	1.76	0.50
34:B8:11:LYS:HZ3	34:B8:60:LEU:HA	1.77	0.50
36:BA:17:G:H2'	36:BA:18:C:C6	2.47	0.50
36:BA:576:U:H2'	36:BA:577:G:C8	2.46	0.50
36:BA:708:C:N4	36:BA:723:G:H1	2.06	0.50
36:BA:848:G:C4	36:BA:933:A:H8	2.30	0.50
36:BA:2133:G:C5	36:BA:2157:G:N1	2.80	0.50
36:BA:2672:G:C3'	36:BA:2673:G:H5"	2.41	0.50
36:BA:2747:G:C2	36:BA:2756:U:C5	3.00	0.50
39:BD:124:PRO:HG2	39:BD:129:ASN:ND2	2.27	0.50
41:BF:188:ARG:HA	48:BP:7:ARG:HB2	1.93	0.50
42:BG:43:LEU:HD22	42:BG:43:LEU:H	1.77	0.50
42:BG:72:ARG:CD	42:BG:86:MET:HA	2.42	0.50
46:BN:12:ARG:O	46:BN:14:VAL:HG23	2.12	0.50
46:BN:134:ARG:N	46:BN:135:PRO:HD3	2.27	0.50
48:BP:47:ASP:OD2	48:BP:50:ARG:HG2	2.11	0.50
53:BU:83:LEU:H	53:BU:83:LEU:CD1	2.25	0.50
55:BW:48:ALA:O	55:BW:49:LYS:C	2.55	0.50
57:BY:3:VAL:H	57:BY:5:MET:HE3	1.76	0.50
1:CA:453:A:O2'	1:CA:454:C:O4'	2.30	0.50
1:CA:858:G:C5'	1:CA:858:G:C8	2.93	0.50
3:CC:50:ALA:HB1	3:CC:70:VAL:HG13	1.93	0.50
3:CC:54:ARG:HG2	3:CC:55:VAL:N	2.26	0.50
4:CD:98:GLU:HG2	4:CD:189:PRO:HG3	1.93	0.50
6:CF:38:GLU:O	6:CF:39:LYS:C	2.52	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:CG:43:PHE:O	7:CG:46:ALA:HB3	2.12	0.50
25:CZ:19:HIS:CD2	25:CZ:115:GLN:HB2	2.47	0.50
25:CZ:215:ARG:HG3	25:CZ:215:ARG:NH1	2.25	0.50
25:CZ:223:MET:CB	25:CZ:242:ILE:HA	2.42	0.50
36:DA:271(F):C:O2'	36:DA:271(G):C:H5'	2.10	0.50
36:DA:648:G:H2'	36:DA:649:G:C8	2.46	0.50
36:DA:1459:G:N7	36:DA:1461:G:N3	2.60	0.50
36:DA:2314:C:O2'	36:DA:2315:G:H5'	2.11	0.50
36:DA:2562:U:H1'	47:DO:23:ARG:HH11	1.76	0.50
36:DA:2659:G:C3'	36:DA:2660:A:H5"	2.42	0.50
37:DB:42:C:O2'	37:DB:43:C:P	2.69	0.50
39:DD:30:GLU:C	39:DD:35:LYS:HD2	2.37	0.50
43:DH:13:LYS:C	43:DH:15:VAL:H	2.19	0.50
43:DH:65:HIS:C	43:DH:67:LEU:H	2.19	0.50
44:DJ:14:UNK:C	44:DJ:16:UNK:N	2.75	0.50
46:DN:12:ARG:O	46:DN:50:ASP:HB3	2.12	0.50
50:DR:55:ALA:HA	50:DR:80:PHE:CE2	2.46	0.50
55:DW:29:LEU:CD1	55:DW:33:ARG:HD2	2.42	0.50
57:DY:3:VAL:H	57:DY:5:MET:HE3	1.76	0.50
1:AA:189(J):G:O2'	1:AA:189(K):U:H5'	2.11	0.50
1:AA:267:C:H2'	1:AA:268:C:C6	2.46	0.50
1:AA:557:G:H2'	1:AA:558:G:O4'	2.12	0.50
1:AA:636:U:H2'	1:AA:637:G:C8	2.47	0.50
1:AA:1127:G:H1	1:AA:1145:C:N4	2.10	0.50
1:AA:1283:G:O2'	1:AA:1284:C:P	2.69	0.50
4:AD:106:TYR:HD2	4:AD:113:SER:O	1.95	0.50
12:AL:17:LYS:HD3	12:AL:18:VAL:H	1.77	0.50
20:AT:91:LEU:O	20:AT:94:ALA:HB3	2.11	0.50
28:B2:63:VAL:HG12	28:B2:64:LEU:N	2.26	0.50
29:B3:7:LYS:HE2	29:B3:32:GLN:OE1	2.12	0.50
34:B8:28:GLY:C	34:B8:32:LEU:HD22	2.37	0.50
36:BA:272(H):C:C3'	36:BA:272(I):U:H5"	2.42	0.50
36:BA:691:C:O2'	36:BA:692:C:H5'	2.11	0.50
36:BA:914:C:C2'	36:BA:915:C:H5'	2.40	0.50
36:BA:1403:C:C2'	36:BA:1404:C:O5'	2.60	0.50
36:BA:1754:C:OP1	52:BT:96:ARG:NH1	2.42	0.50
36:BA:2022:U:O2'	36:BA:2617:C:H5'	2.12	0.50
36:BA:2182:G:O2'	36:BA:2183:C:H5'	2.12	0.50
36:BA:2392:A:H2	36:BA:2424:C:N4	2.03	0.50
37:BB:112:U:H2'	37:BB:113:G:C8	2.45	0.50
41:BF:31:HIS:ND1	48:BP:13:ASN:HB2	2.27	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BG:71:THR:HG22	42:BG:72:ARG:N	2.26	0.50
46:BN:51:PHE:CE1	46:BN:119:ARG:HD2	2.46	0.50
50:BR:74:LYS:CD	50:BR:77:ARG:HH11	2.24	0.50
54:BV:5:VAL:CG2	54:BV:35:LEU:HD23	2.41	0.50
56:BX:24:GLY:O	56:BX:83:VAL:N	2.45	0.50
58:BZ:150:LEU:CD2	58:BZ:171:ILE:HD11	2.42	0.50
1:CA:186:C:O3'	20:CT:82:SER:HB3	2.12	0.50
1:CA:189(K):U:H2'	1:CA:189(L):G:C8	2.46	0.50
1:CA:501:C:OP1	12:CL:117:ARG:NH2	2.45	0.50
1:CA:1050:G:O2'	1:CA:1051:C:P	2.70	0.50
1:CA:1202:G:N2	14:CN:46:GLU:OE2	2.43	0.50
1:CA:1217:C:OP1	14:CN:9:LYS:HE3	2.12	0.50
1:CA:1452:C:H4'	1:CA:1456:G:C2	2.46	0.50
1:CA:1497:G:C2'	1:CA:1498:U:H5'	2.42	0.50
3:CC:14:ILE:O	3:CC:16:ARG:N	2.45	0.50
13:CM:97:PRO:CA	13:CM:110:ARG:HD3	2.39	0.50
19:CS:40:ILE:HG23	19:CS:62:ILE:CD1	2.40	0.50
25:CZ:344:PHE:O	61:CZ:502:KIR:H482	2.12	0.50
27:D1:72:GLU:HG3	27:D1:76:ARG:HH21	1.76	0.50
32:D6:52:VAL:HG12	32:D6:53:LYS:N	2.27	0.50
36:DA:271(U):G:O2'	36:DA:271(V):G:H5'	2.11	0.50
36:DA:481:G:H1'	36:DA:506:G:H21	1.77	0.50
36:DA:558:G:OP2	46:DN:111:PRO:HD2	2.12	0.50
36:DA:1608:A:H1'	36:DA:1610:A:OP2	2.12	0.50
36:DA:1853:A:H2'	36:DA:1854:A:C8	2.47	0.50
36:DA:2247:A:O2'	36:DA:2248:C:H5'	2.12	0.50
36:DA:2722:G:H2'	36:DA:2723:C:C6	2.46	0.50
36:DA:2887:U:O2'	36:DA:2888:C:H5'	2.12	0.50
38:DC:127:LEU:O	38:DC:129:ARG:N	2.44	0.50
39:DD:142:VAL:CG2	39:DD:191:ALA:HB1	2.42	0.50
42:DG:82:LEU:HD22	42:DG:87:PRO:HA	1.94	0.50
42:DG:137:GLU:O	42:DG:140:ILE:HG23	2.11	0.50
43:DH:42:ARG:HG2	43:DH:43:VAL:N	2.26	0.50
43:DH:83:TYR:CB	43:DH:135:GLY:N	2.75	0.50
51:DS:65:VAL:O	51:DS:69:VAL:HG12	2.12	0.50
52:DT:28:VAL:C	52:DT:29:ARG:HD3	2.37	0.50
52:DT:62:THR:HG22	52:DT:75:ILE:HG23	1.94	0.50
53:DU:8:VAL:O	53:DU:9:VAL:C	2.54	0.50
53:DU:90:VAL:CG1	53:DU:91:ASP:H	2.23	0.50
1:AA:1004:A:H5"	1:AA:1025:U:C2	2.47	0.49
1:AA:1050:G:O2'	1:AA:1051:C:C6	2.65	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:44:LEU:HA	2:AB:47:THR:OG1	2.12	0.49
3:AC:99:VAL:O	3:AC:99:VAL:HG23	2.12	0.49
4:AD:111:ALA:HB2	4:AD:120:LEU:HD12	1.94	0.49
6:AF:77:ARG:HH11	6:AF:77:ARG:CG	2.24	0.49
8:AH:20:TYR:HE2	8:AH:76:PRO:HG2	1.77	0.49
36:BA:88:G:H5'	36:BA:89:G:OP2	2.11	0.49
36:BA:628:G:C3'	36:BA:629:G:H5"	2.41	0.49
36:BA:652:C:O2'	36:BA:653:A:O5'	2.29	0.49
36:BA:755:C:H2'	36:BA:756:C:C6	2.46	0.49
36:BA:1051:G:C4	36:BA:1052:C:N4	2.80	0.49
39:BD:131:LEU:HB2	39:BD:136:ILE:CD1	2.42	0.49
41:BF:107:LYS:O	41:BF:110:LEU:N	2.44	0.49
48:BP:34:GLY:O	48:BP:35:HIS:CB	2.60	0.49
48:BP:112:LEU:HD13	48:BP:112:LEU:O	2.12	0.49
52:BT:27:THR:HG23	52:BT:28:VAL:N	2.27	0.49
52:BT:30:VAL:O	52:BT:31:SER:HB3	2.11	0.49
52:BT:83:ILE:HG13	52:BT:84:GLN:N	2.26	0.49
53:BU:86:ALA:HB2	53:BU:116:ALA:HB2	1.94	0.49
1:CA:152:A:N6	1:CA:170:U:C2	2.80	0.49
1:CA:337:C:H2'	1:CA:338:A:H8	1.78	0.49
1:CA:1150:U:C5	1:CA:1151:A:C5	3.00	0.49
3:CC:35:GLU:CD	3:CC:95:THR:HG23	2.37	0.49
4:CD:43:HIS:O	4:CD:45:GLN:HG2	2.12	0.49
4:CD:190:ASP:O	4:CD:194:LEU:HD23	2.12	0.49
16:CP:44:THR:O	16:CP:45:THR:CB	2.60	0.49
25:CZ:63:ILE:HG13	25:CZ:64:ASN:N	2.26	0.49
36:DA:122:G:H1	36:DA:129:C:H42	1.60	0.49
36:DA:405:U:H3'	36:DA:406:G:C5'	2.42	0.49
36:DA:863:A:O2'	36:DA:864:G:H5'	2.11	0.49
36:DA:1536:C:H2'	36:DA:1537:G:H4'	1.94	0.49
36:DA:1999:C:H5"	36:DA:2723:C:O2'	2.11	0.49
36:DA:2286:A:H4'	36:DA:2287:A:O4'	2.12	0.49
36:DA:2415:G:H2'	36:DA:2416:C:C6	2.47	0.49
36:DA:2791:C:H4'	36:DA:2792:G:O5'	2.12	0.49
43:DH:103:LEU:CB	43:DH:123:PHE:HD2	2.19	0.49
46:DN:46:VAL:O	46:DN:47:ALA:CB	2.60	0.49
50:DR:3:HIS:C	50:DR:5:LYS:N	2.63	0.49
50:DR:18:LEU:HD11	50:DR:22:ARG:CZ	2.42	0.49
52:DT:89:VAL:HG12	52:DT:91:ARG:HG3	1.93	0.49
55:DW:37:ARG:HG3	55:DW:37:ARG:NH1	2.27	0.49
56:DX:41:ASN:O	56:DX:45:THR:HG23	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:DZ:5:LEU:O	58:DZ:59:LEU:HA	2.12	0.49
1:AA:148:G:H2'	1:AA:149:A:H8	1.75	0.49
1:AA:285:G:O2'	1:AA:286:G:H5'	2.13	0.49
1:AA:1423:G:OP1	47:BO:49:ARG:NH2	2.45	0.49
1:AA:1446:U:O2'	1:AA:1447:A:H3'	2.12	0.49
1:AA:1481:U:H2'	1:AA:1482:G:C8	2.47	0.49
2:AB:162:ILE:O	2:AB:185:ILE:HG12	2.12	0.49
3:AC:16:ARG:HH11	3:AC:16:ARG:CB	2.24	0.49
6:AF:38:GLU:O	6:AF:39:LYS:C	2.54	0.49
6:AF:40:VAL:O	6:AF:40:VAL:HG13	2.12	0.49
6:AF:57:GLN:HE21	6:AF:57:GLN:N	2.10	0.49
7:AG:118:VAL:CG2	7:AG:119:ARG:N	2.75	0.49
8:AH:23:SER:HA	8:AH:63:LEU:HD22	1.93	0.49
10:AJ:45:ARG:O	10:AJ:64:GLU:HA	2.12	0.49
13:AM:82:MET:CG	13:AM:83:ASP:H	2.25	0.49
17:AQ:18:THR:HG23	17:AQ:69:LYS:HE3	1.93	0.49
25:AZ:90:LYS:HB2	25:AZ:90:LYS:NZ	2.27	0.49
25:AZ:193:ASN:C	25:AZ:195:TRP:H	2.20	0.49
25:AZ:355:LEU:HB2	25:AZ:356:PRO:HD2	1.94	0.49
34:B8:15:LYS:CB	48:BP:65:ARG:HH21	2.25	0.49
36:BA:57:C:O2'	36:BA:58:G:H5'	2.11	0.49
36:BA:492:A:H2'	36:BA:493:G:O4'	2.12	0.49
36:BA:1076:C:H5"	58:BZ:111:VAL:CG1	2.42	0.49
36:BA:2175:C:N3	36:BA:2176:A:N1	2.60	0.49
36:BA:2790:A:H2'	36:BA:2791:C:C5'	2.41	0.49
36:BA:2887:U:O2'	36:BA:2888:C:H5'	2.12	0.49
37:BB:8:U:O3'	51:BS:25:ARG:NH2	2.46	0.49
37:BB:93:G:H2'	37:BB:94:C:H6	1.76	0.49
41:BF:53:THR:HG22	41:BF:56:GLU:HG3	1.93	0.49
46:BN:10:GLU:CG	46:BN:11:PRO:HD2	2.42	0.49
46:BN:22:THR:HG22	46:BN:61:ARG:CB	2.40	0.49
46:BN:96:GLU:OE1	46:BN:96:GLU:N	2.41	0.49
48:BP:107:LYS:HG3	48:BP:107:LYS:O	2.10	0.49
50:BR:2:ARG:C	50:BR:2:ARG:CD	2.85	0.49
50:BR:3:HIS:C	50:BR:3:HIS:ND1	2.69	0.49
50:BR:55:ALA:HA	50:BR:80:PHE:CE2	2.47	0.49
51:BS:34:HIS:HB2	51:BS:36:TYR:HE1	1.76	0.49
51:BS:65:VAL:O	51:BS:69:VAL:HG12	2.12	0.49
51:BS:92:TYR:O	51:BS:93:LYS:CB	2.60	0.49
52:BT:78:LEU:O	52:BT:78:LEU:HD23	2.13	0.49
52:BT:106:SER:HA	52:BT:110:ILE:HG12	1.94	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BT:109:GLU:O	52:BT:112:ARG:HG2	2.12	0.49
55:BW:6:ILE:HG12	55:BW:104:THR:CB	2.42	0.49
56:BX:49:VAL:CG1	56:BX:87:GLN:HE21	2.24	0.49
57:BY:86:ARG:HH22	57:BY:95:LYS:HE2	1.76	0.49
1:CA:337:C:H2'	1:CA:338:A:C8	2.48	0.49
1:CA:636:U:H5"	17:CQ:2:PRO:HG3	1.93	0.49
1:CA:1317:C:H2'	1:CA:1318:A:O4'	2.11	0.49
2:CB:97:TRP:CH2	2:CB:176:GLU:CD	2.90	0.49
2:CB:114:ARG:NH1	2:CB:118:LEU:HD21	2.26	0.49
3:CC:58:GLU:HB2	3:CC:65:ALA:CB	2.42	0.49
13:CM:73:GLU:O	13:CM:76:ALA:HB3	2.12	0.49
19:CS:18:LYS:O	19:CS:22:LEU:HB2	2.11	0.49
20:CT:89:ARG:HD2	20:CT:104:LEU:HD11	1.94	0.49
25:CZ:9:LYS:HB3	25:CZ:75:ARG:HA	1.94	0.49
25:CZ:341:GLN:HE22	25:CZ:390:GLU:HA	1.77	0.49
25:CZ:355:LEU:HB2	25:CZ:356:PRO:HD2	1.94	0.49
35:D9:19:ARG:O	35:D9:20:HIS:CB	2.60	0.49
36:DA:321:G:O2'	36:DA:340:A:N3	2.46	0.49
36:DA:533:G:H5'	53:DU:24:TYR:CD1	2.47	0.49
36:DA:654(H):G:H2'	36:DA:654(I):C:C5'	2.38	0.49
36:DA:673:C:H5'	36:DA:673:C:C6	2.26	0.49
36:DA:994:C:O2'	36:DA:996:A:OP1	2.30	0.49
36:DA:1222:C:H2'	36:DA:1223:G:C5'	2.42	0.49
36:DA:1773:A:C2'	36:DA:1774:C:H5'	2.42	0.49
36:DA:2360:A:O2'	36:DA:2361:A:C5'	2.60	0.49
36:DA:2475:C:H5'	36:DA:2476:A:OP2	2.11	0.49
37:DB:54:G:H21	42:DG:29:TRP:HE1	1.61	0.49
37:DB:78:A:H2'	37:DB:79:C:O4'	2.12	0.49
38:DC:63:SER:HA	38:DC:160:ARG:HA	1.94	0.49
39:DD:34:VAL:CG2	39:DD:35:LYS:H	2.21	0.49
39:DD:224:ALA:C	39:DD:226:MET:N	2.70	0.49
39:DD:238:GLY:O	39:DD:239:ARG:O	2.30	0.49
40:DE:30:PRO:HD3	40:DE:180:ASN:CG	2.37	0.49
41:DF:107:LYS:O	41:DF:110:LEU:N	2.44	0.49
42:DG:46:ALA:O	42:DG:82:LEU:HD11	2.12	0.49
42:DG:79:ASN:O	42:DG:80:PHE:CB	2.59	0.49
43:DH:85:LYS:HG2	43:DH:86:GLU:N	2.26	0.49
48:DP:84:ASN:C	48:DP:86:LYS:H	2.20	0.49
48:DP:122:PRO:HB3	48:DP:141:ALA:CB	2.42	0.49
49:DQ:12:GLN:CG	49:DQ:73:PRO:HD2	2.42	0.49
51:DS:57:LYS:C	51:DS:57:LYS:HD2	2.37	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:DT:38:ASN:C	52:DT:38:ASN:HD22	2.16	0.49
53:DU:68:ALA:C	53:DU:70:ARG:H	2.20	0.49
55:DW:65:LEU:HD23	55:DW:68:ARG:NE	2.27	0.49
58:DZ:54:HIS:HB2	58:DZ:55:HIS:HD2	1.76	0.49
58:DZ:167:PRO:O	58:DZ:168:GLU:HB3	2.11	0.49
1:AA:333:G:O2'	1:AA:334:C:H5'	2.11	0.49
1:AA:349:A:O2'	1:AA:350:G:H5'	2.12	0.49
2:AB:33:TYR:HB3	2:AB:41:ILE:HG22	1.93	0.49
5:AE:11:ILE:HB	5:AE:31:LEU:HB3	1.94	0.49
7:AG:137:LYS:O	7:AG:140:ASP:N	2.45	0.49
9:AI:85:LEU:HD12	9:AI:86:VAL:N	2.28	0.49
13:AM:7:VAL:O	13:AM:9:ILE:HG13	2.11	0.49
14:AN:39:LEU:HD11	14:AN:47:LEU:HD12	1.94	0.49
19:AS:16:LEU:H	19:AS:16:LEU:CD1	2.24	0.49
20:AT:83:ARG:O	20:AT:87:LYS:HB2	2.12	0.49
22:AW:71:G:O2'	36:BA:1851:U:H1'	2.12	0.49
25:AZ:107:SER:HB2	25:AZ:137:LYS:HD2	1.94	0.49
25:AZ:122:LEU:HD13	25:AZ:122:LEU:O	2.12	0.49
35:B9:1:MET:HE2	36:BA:2478:A:OP2	2.12	0.49
36:BA:380:U:H2'	36:BA:381:G:H8	1.76	0.49
36:BA:465:G:H2'	36:BA:466:A:C8	2.46	0.49
36:BA:654(O):G:H2'	36:BA:654(P):C:C5	2.47	0.49
36:BA:994:C:O2'	36:BA:996:A:OP1	2.31	0.49
36:BA:1012:U:C5	46:BN:28:THR:HG21	2.47	0.49
36:BA:1034:G:H2'	36:BA:1035:U:O4'	2.11	0.49
36:BA:1459:G:N7	36:BA:1461:G:N3	2.60	0.49
36:BA:1539:G:H2'	36:BA:1540:U:O4'	2.11	0.49
36:BA:1664:A:H1'	36:BA:2726:U:C5	2.48	0.49
36:BA:1790:C:H5"	36:BA:1791:A:OP1	2.12	0.49
36:BA:2722:G:H2'	36:BA:2723:C:C6	2.48	0.49
43:BH:35:VAL:HG13	43:BH:71:LEU:HD22	1.93	0.49
43:BH:83:TYR:CB	43:BH:135:GLY:N	2.75	0.49
51:BS:74:ALA:CB	51:BS:103:GLU:HG2	2.42	0.49
51:BS:98:VAL:HG12	51:BS:99:LYS:N	2.25	0.49
52:BT:12:SER:C	52:BT:14:TYR:H	2.19	0.49
55:BW:12:ILE:HB	55:BW:42:ARG:HH12	1.76	0.49
55:BW:17:VAL:O	55:BW:19:LEU:N	2.44	0.49
1:CA:636:U:H2'	1:CA:637:G:C8	2.47	0.49
1:CA:779:C:H2'	1:CA:780:A:O4'	2.11	0.49
1:CA:1050:G:O2'	1:CA:1051:C:H6	1.94	0.49
1:CA:1229:A:OP2	13:CM:114:ARG:HD3	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1262:C:H2'	1:CA:1263:C:H6	1.77	0.49
1:CA:1330:U:H3'	1:CA:1331:G:O4'	2.12	0.49
2:CB:114:ARG:NH1	2:CB:118:LEU:HG	2.26	0.49
2:CB:221:LEU:HD13	2:CB:221:LEU:O	2.12	0.49
4:CD:31:CYS:O	4:CD:32:ALA:HB3	2.12	0.49
8:CH:46:LYS:HG3	8:CH:64:LYS:HB2	1.94	0.49
10:CJ:55:LYS:NZ	10:CJ:55:LYS:CA	2.76	0.49
13:CM:23:TYR:HE2	13:CM:70:LEU:HD22	1.75	0.49
22:CV:44:G:H3'	22:CV:45:U:H5'	1.93	0.49
28:D2:9:GLN:HG2	28:D2:56:GLN:NE2	2.27	0.49
30:D4:9:LEU:HD13	30:D4:26:SER:O	2.13	0.49
31:D5:40:LYS:HG2	31:D5:46:CYS:CB	2.41	0.49
32:D6:48:VAL:O	32:D6:49:HIS:O	2.30	0.49
33:D7:32:LYS:O	33:D7:36:GLN:HB2	2.12	0.49
36:DA:977:G:C6	36:DA:987:G:C6	3.01	0.49
36:DA:1149:G:H2'	36:DA:1150:C:C6	2.46	0.49
36:DA:1316:U:O2'	36:DA:1317:A:H5'	2.13	0.49
36:DA:1515:G:H2'	36:DA:1516:C:C6	2.47	0.49
36:DA:1651:G:H2'	36:DA:1652:A:O4'	2.12	0.49
36:DA:1713:U:O2'	36:DA:1714:G:H5'	2.13	0.49
36:DA:2033:A:O2'	36:DA:2034:U:P	2.70	0.49
36:DA:2134:A:H61	36:DA:2157:G:H1'	1.74	0.49
36:DA:2199:A:H5'	36:DA:2200:C:OP2	2.13	0.49
36:DA:2787:C:H1'	40:DE:61:ARG:CD	2.38	0.49
39:DD:176:ARG:HG2	39:DD:176:ARG:NH1	2.26	0.49
41:DF:7:TYR:HD2	41:DF:16:GLY:HA3	1.76	0.49
42:DG:101:ILE:O	42:DG:104:GLU:HB3	2.12	0.49
42:DG:138:GLN:HE21	42:DG:144:ILE:HD12	1.76	0.49
43:DH:35:VAL:HG13	43:DH:71:LEU:HD22	1.93	0.49
48:DP:34:GLY:O	48:DP:35:HIS:CB	2.60	0.49
48:DP:112:LEU:HD22	48:DP:112:LEU:C	2.38	0.49
48:DP:122:PRO:HA	48:DP:141:ALA:O	2.12	0.49
51:DS:98:VAL:HG12	51:DS:99:LYS:N	2.27	0.49
54:DV:52:VAL:HG22	54:DV:52:VAL:O	2.11	0.49
55:DW:68:ARG:O	55:DW:109:GLU:HA	2.12	0.49
57:DY:41:GLY:O	57:DY:42:VAL:O	2.30	0.49
1:AA:424:G:H2'	1:AA:425:G:C8	2.37	0.49
1:AA:983:A:O2'	1:AA:1050:G:OP2	2.30	0.49
1:AA:1057:G:H2'	1:AA:1058:G:O4'	2.12	0.49
1:AA:1190:G:OP1	3:AC:5:ILE:N	2.44	0.49
1:AA:1483:A:H2'	1:AA:1484:C:O4'	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:97:TRP:HZ2	2:AB:102:LEU:HD13	1.76	0.49
2:AB:166:ASP:HB3	2:AB:169:LYS:HB2	1.94	0.49
2:AB:189:ASP:O	2:AB:191:ASP:N	2.45	0.49
2:AB:238:LEU:HD23	2:AB:239:VAL:H	1.77	0.49
3:AC:52:LEU:H	3:AC:52:LEU:CD2	2.23	0.49
4:AD:31:CYS:O	4:AD:32:ALA:HB3	2.11	0.49
9:AI:53:VAL:H	9:AI:95:LYS:NZ	2.09	0.49
13:AM:16:ASP:HA	13:AM:34:LEU:HD11	1.94	0.49
15:AO:87:ILE:CG2	15:AO:88:ARG:H	2.17	0.49
16:AP:52:ASP:OD2	16:AP:55:ARG:HG3	2.13	0.49
17:AQ:27:PHE:CE2	17:AQ:36:ILE:HD11	2.47	0.49
22:AW:5:G:N2	22:AW:69:G:C5	2.80	0.49
25:AZ:31:LEU:HD23	25:AZ:199:ILE:HG23	1.95	0.49
28:B2:35:LEU:O	28:B2:36:ARG:C	2.54	0.49
28:B2:43:GLN:O	28:B2:45:SER:N	2.45	0.49
30:B4:15:ILE:HD13	30:B4:21:VAL:HG13	1.94	0.49
30:B4:45:GLY:O	30:B4:46:GLN:HB2	2.12	0.49
36:BA:21:A:O2'	36:BA:22:C:H5'	2.12	0.49
36:BA:301:G:H1'	36:BA:302:C:C6	2.47	0.49
36:BA:332:A:H4'	36:BA:333:G:OP1	2.12	0.49
36:BA:559:G:N2	53:BU:49:HIS:CD2	2.80	0.49
36:BA:634:C:H2'	36:BA:635:C:C6	2.48	0.49
36:BA:645:C:H5'	36:BA:646:A:OP1	2.13	0.49
36:BA:1360:A:H5'	36:BA:1361:G:OP2	2.12	0.49
36:BA:1853:A:H2'	36:BA:1854:A:C8	2.47	0.49
36:BA:2392:A:H1'	48:BP:60:MET:HB3	1.94	0.49
38:BC:40:THR:HA	38:BC:177:LYS:HA	1.94	0.49
42:BG:121:ASN:ND2	42:BG:123:ASN:H	2.09	0.49
42:BG:143:GLU:O	42:BG:144:ILE:C	2.55	0.49
43:BH:45:VAL:C	43:BH:47:GLU:H	2.19	0.49
44:BJ:74:UNK:O	44:BJ:76:UNK:N	2.45	0.49
1:CA:328:C:O2	1:CA:328:C:H2'	2.11	0.49
1:CA:399:G:H2'	1:CA:400:C:C6	2.47	0.49
1:CA:502:G:OP1	12:CL:118:SER:HB3	2.12	0.49
1:CA:603:U:H2'	1:CA:604:G:C8	2.47	0.49
1:CA:1057:G:H2'	1:CA:1058:G:O4'	2.12	0.49
1:CA:1152:A:H2'	1:CA:1153:C:C6	2.47	0.49
1:CA:1202:G:C2	14:CN:42:ILE:HG21	2.47	0.49
1:CA:1320:C:H6	1:CA:1320:C:C5'	2.18	0.49
2:CB:178:ARG:HH11	2:CB:178:ARG:CG	2.25	0.49
4:CD:8:VAL:C	4:CD:10:ARG:N	2.69	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:173:TRP:CD1	4:CD:174:LEU:HG	2.46	0.49
5:CE:107:ARG:HH11	5:CE:107:ARG:HG2	1.77	0.49
10:CJ:47:PHE:CE2	14:CN:37:PHE:HE2	2.30	0.49
11:CK:12:ARG:HG2	11:CK:13:GLN:N	2.27	0.49
17:CQ:59:ILE:CG2	17:CQ:71:PHE:HB3	2.40	0.49
18:CR:52:PRO:O	18:CR:56:THR:HG23	2.12	0.49
22:CW:57:G:H2'	22:CW:58:A:C5'	2.41	0.49
24:CY:20:H2U:H4'	24:CY:21:A:O5'	2.12	0.49
25:CZ:30:ALA:O	25:CZ:34:VAL:HG23	2.12	0.49
25:CZ:193:ASN:C	25:CZ:195:TRP:H	2.20	0.49
25:CZ:361:MET:HE2	25:CZ:363:MET:CG	2.40	0.49
26:D0:47:PRO:HG3	26:D0:53:MET:HB2	1.94	0.49
36:DA:271(V):G:H2'	36:DA:271(W):G:O4'	2.13	0.49
36:DA:473:G:P	36:DA:508:G:H22	2.36	0.49
36:DA:633:A:H2'	36:DA:634:C:H5'	1.94	0.49
36:DA:753:C:H2'	36:DA:754:C:H6	1.78	0.49
36:DA:755:C:H2'	36:DA:756:C:C6	2.48	0.49
36:DA:2001:A:H2'	36:DA:2002:G:C8	2.47	0.49
36:DA:2175:C:N3	36:DA:2176:A:N1	2.61	0.49
36:DA:2330:G:O2'	36:DA:2331:G:H5'	2.12	0.49
39:DD:70:TRP:HZ3	39:DD:146:GLU:OE2	1.95	0.49
40:DE:69:LYS:HD3	40:DE:89:ASP:C	2.37	0.49
43:DH:152:ARG:HG3	43:DH:152:ARG:NH1	2.26	0.49
48:DP:10:PRO:O	48:DP:11:GLY:O	2.31	0.49
51:DS:34:HIS:HB2	51:DS:36:TYR:HE1	1.76	0.49
55:DW:6:ILE:HG12	55:DW:104:THR:HB	1.93	0.49
55:DW:48:ALA:O	55:DW:49:LYS:C	2.55	0.49
56:DX:40:LYS:HB2	56:DX:54:VAL:CG2	2.38	0.49
57:DY:28:LYS:C	57:DY:38:ILE:HG22	2.37	0.49
57:DY:64:GLU:O	57:DY:65:ALA:HB2	2.12	0.49
58:DZ:9:TYR:OH	58:DZ:35:ARG:HG3	2.13	0.49
58:DZ:54:HIS:CG	58:DZ:101:PRO:HD3	2.48	0.49
1:AA:337:C:H2'	1:AA:338:A:C8	2.47	0.49
1:AA:426:G:H2'	1:AA:427:U:C6	2.48	0.49
1:AA:542:G:H5'	4:AD:41:GLY:HA2	1.93	0.49
1:AA:1153:C:O2'	1:AA:1154:G:C5'	2.60	0.49
1:AA:1261:A:C2'	1:AA:1262:C:H5'	2.42	0.49
1:AA:1521:G:H2'	1:AA:1522:U:C6	2.47	0.49
6:AF:8:ILE:HG23	6:AF:85:VAL:HG13	1.95	0.49
13:AM:94:ARG:NH2	36:BA:887:A:H5"	2.27	0.49
25:AZ:219:LYS:HB2	25:AZ:244:ARG:HB2	1.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:AZ:330:ARG:HH12	25:AZ:334:PHE:HB3	1.77	0.49
28:B2:29:LYS:HA	28:B2:57:ILE:HD12	1.93	0.49
30:B4:5:ILE:O	30:B4:5:ILE:CG1	2.61	0.49
34:B8:36:LYS:HE3	34:B8:40:GLU:OE2	2.12	0.49
36:BA:222:A:H5"	36:BA:421:U:OP1	2.13	0.49
36:BA:751:A:H5'	55:BW:90:ARG:HA	1.95	0.49
36:BA:947:G:H2'	36:BA:948:G:C8	2.47	0.49
36:BA:1064:C:H4'	45:BK:87:UNK:CB	2.42	0.49
36:BA:1168:G:H2'	36:BA:1169:G:C8	2.46	0.49
36:BA:2543:G:H2'	36:BA:2544:G:C8	2.48	0.49
36:BA:2659:G:C3'	36:BA:2660:A:H5"	2.42	0.49
36:BA:2822:G:O6	50:BR:4:LEU:HD23	2.12	0.49
37:BB:50:G:OP2	51:BS:62:LYS:HB2	2.12	0.49
39:BD:27:THR:HG23	39:BD:27:THR:O	2.11	0.49
41:BF:171:PRO:C	41:BF:173:VAL:H	2.21	0.49
47:BO:11:ALA:HB1	47:BO:99:PHE:O	2.13	0.49
47:BO:98:VAL:HG11	47:BO:118:ALA:N	2.27	0.49
48:BP:61:ARG:C	48:BP:62:LEU:HD23	2.38	0.49
49:BQ:56:ARG:CG	49:BQ:56:ARG:NH1	2.63	0.49
52:BT:29:ARG:HB3	52:BT:85:LYS:HA	1.92	0.49
53:BU:90:VAL:CG1	53:BU:91:ASP:H	2.21	0.49
1:CA:228:A:H2'	1:CA:229:U:O4'	2.13	0.49
1:CA:603:U:H2'	1:CA:604:G:H8	1.78	0.49
1:CA:636:U:H2'	1:CA:637:G:H8	1.77	0.49
1:CA:792:A:H4'	1:CA:793:U:O5'	2.12	0.49
1:CA:1190:G:OP1	3:CC:5:ILE:N	2.42	0.49
1:CA:1238:A:C2	1:CA:1301:U:N3	2.58	0.49
3:CC:51:GLY:O	3:CC:115:LEU:HD21	2.13	0.49
4:CD:20:TYR:HA	4:CD:26:CYS:SG	2.52	0.49
5:CE:76:ILE:CG1	5:CE:77:PRO:HD2	2.43	0.49
8:CH:108:GLY:HA3	8:CH:138:TRP:HB3	1.94	0.49
24:CY:2:G:O2'	24:CY:3:G:H5"	2.11	0.49
25:CZ:130:TYR:CD2	25:CZ:211:PRO:HD2	2.47	0.49
25:CZ:134:PHE:CG	25:CZ:202:LEU:HD22	2.48	0.49
25:CZ:311:THR:HB	25:CZ:312:PRO:HD2	1.95	0.49
28:D2:24:LEU:HD23	28:D2:24:LEU:C	2.38	0.49
28:D2:52:ASP:O	28:D2:55:ARG:N	2.45	0.49
32:D6:52:VAL:HG12	32:D6:53:LYS:HD3	1.94	0.49
36:DA:68:G:H2'	36:DA:69:C:C6	2.47	0.49
36:DA:323:G:H2'	41:DF:169:ASN:HD21	1.78	0.49
36:DA:536:A:H2'	36:DA:537:C:C6	2.47	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1290:C:H2'	36:DA:1291:C:C6	2.48	0.49
36:DA:2687:U:C4	36:DA:2688:U:C5	3.00	0.49
36:DA:2777:G:C4'	36:DA:2778:A:H5'	2.43	0.49
36:DA:2822:G:O6	50:DR:4:LEU:HD23	2.11	0.49
39:DD:241:PRO:C	39:DD:242:ARG:HG2	2.36	0.49
41:DF:53:THR:HG22	41:DF:56:GLU:HG3	1.95	0.49
46:DN:4:TYR:O	46:DN:5:VAL:C	2.55	0.49
46:DN:14:VAL:CG1	46:DN:137:LYS:HG3	2.43	0.49
46:DN:90:MET:HA	46:DN:90:MET:CE	2.39	0.49
47:DO:111:PHE:O	47:DO:115:VAL:HG23	2.12	0.49
49:DQ:1:MET:O	49:DQ:2:LEU:CB	2.60	0.49
51:DS:74:ALA:CB	51:DS:103:GLU:HG2	2.40	0.49
52:DT:27:THR:HG22	52:DT:49:VAL:HB	1.93	0.49
52:DT:62:THR:HA	52:DT:74:ARG:O	2.12	0.49
56:DX:33:LYS:HE2	56:DX:33:LYS:CA	2.42	0.49
58:DZ:17:ALA:O	58:DZ:20:ARG:HG2	2.11	0.49
1:AA:1442(B):A:C2	52:BT:118:ARG:NH2	2.80	0.49
2:AB:238:LEU:O	2:AB:239:VAL:C	2.56	0.49
4:AD:8:VAL:C	4:AD:10:ARG:N	2.68	0.49
4:AD:127:THR:HG23	4:AD:130:GLY:O	2.11	0.49
7:AG:115:ARG:O	7:AG:118:VAL:HG22	2.13	0.49
7:AG:140:ASP:OD1	7:AG:140:ASP:C	2.55	0.49
11:AK:12:ARG:HG2	11:AK:13:GLN:N	2.27	0.49
12:AL:79:GLU:O	12:AL:79:GLU:HG2	2.11	0.49
22:AW:39:U:O2	22:AW:39:U:H5'	2.12	0.49
24:AY:41:C:H2'	24:AY:42:G:O4'	2.13	0.49
25:AZ:195:TRP:C	25:AZ:197:ASP:H	2.19	0.49
25:AZ:215:ARG:HG3	25:AZ:215:ARG:NH1	2.28	0.49
25:AZ:249:VAL:HG13	25:AZ:268:THR:HA	1.94	0.49
25:AZ:404:LEU:H	25:AZ:404:LEU:HD22	1.77	0.49
32:B6:15:GLU:HG2	32:B6:18:ARG:HH12	1.75	0.49
32:B6:25:LYS:HE3	34:B8:35:GLN:OE1	2.13	0.49
36:BA:143:G:H4'	56:BX:35:THR:HG21	1.94	0.49
36:BA:2241:A:H2'	36:BA:2242:G:C8	2.47	0.49
38:BC:118:ASP:C	38:BC:120:MET:N	2.69	0.49
42:BG:73:ALA:H	42:BG:87:PRO:HD2	1.77	0.49
50:BR:86:ARG:HB3	50:BR:118:GLU:OE2	2.12	0.49
51:BS:106:ARG:HH11	51:BS:106:ARG:CG	2.24	0.49
57:BY:73:ARG:HA	57:BY:73:ARG:HE	1.78	0.49
1:CA:41:G:H2'	1:CA:42:G:C8	2.47	0.49
1:CA:349:A:O2'	1:CA:350:G:H5'	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1286:A:O2'	1:CA:1287:A:OP2	2.29	0.49
1:CA:1488:G:H2'	1:CA:1489:G:H8	1.76	0.49
4:CD:45:GLN:O	4:CD:46:LYS:HG2	2.13	0.49
4:CD:75:PHE:CE1	4:CD:93:PHE:HZ	2.29	0.49
12:CL:79:GLU:HG2	12:CL:79:GLU:O	2.13	0.49
14:CN:57:ARG:CB	14:CN:57:ARG:NH1	2.75	0.49
17:CQ:86:GLU:O	17:CQ:90:ILE:HG12	2.12	0.49
25:CZ:222:LEU:CD1	25:CZ:303:VAL:HB	2.42	0.49
25:CZ:263:ARG:NH2	25:CZ:297:GLU:HG2	2.16	0.49
33:D7:4:THR:CG2	36:DA:788:A:H1'	2.43	0.49
36:DA:39:C:O2'	36:DA:40:C:H5'	2.13	0.49
36:DA:272(H):C:C3'	36:DA:272(I):U:H5"	2.43	0.49
36:DA:315:G:H2'	36:DA:316:C:C6	2.48	0.49
36:DA:733:G:C8	36:DA:761:A:N1	2.80	0.49
36:DA:848:G:H5'	36:DA:848:G:C8	2.46	0.49
36:DA:1039:G:H1	36:DA:1116:C:N4	2.04	0.49
36:DA:1499:C:C2'	36:DA:1500:G:H5'	2.41	0.49
36:DA:1862:G:O2'	36:DA:1863:G:H5'	2.12	0.49
36:DA:2464:C:O2'	36:DA:2465:C:O5'	2.31	0.49
40:DE:9:VAL:HG13	40:DE:25:VAL:HB	1.94	0.49
41:DF:82:ILE:O	41:DF:83:PHE:HB2	2.13	0.49
42:DG:52:ILE:HG12	42:DG:53:LEU:N	2.26	0.49
42:DG:125:PHE:HB2	42:DG:130:ASN:O	2.13	0.49
47:DO:9:GLU:O	47:DO:83:ALA:HA	2.12	0.49
48:DP:84:ASN:C	48:DP:86:LYS:N	2.67	0.49
49:DQ:133:ARG:HB2	49:DQ:133:ARG:NH1	2.17	0.49
51:DS:74:ALA:HB2	51:DS:101:LEU:HD13	1.95	0.49
52:DT:91:ARG:O	52:DT:92:GLY:C	2.54	0.49
52:DT:106:SER:HA	52:DT:110:ILE:HG12	1.93	0.49
54:DV:5:VAL:CG2	54:DV:35:LEU:HD23	2.43	0.49
54:DV:38:LEU:O	54:DV:52:VAL:HG12	2.12	0.49
55:DW:17:VAL:O	55:DW:19:LEU:N	2.45	0.49
56:DX:12:VAL:CG2	56:DX:13:LEU:N	2.61	0.49
58:DZ:11:GLU:OE1	58:DZ:13:GLU:N	2.41	0.49
58:DZ:156:LYS:HG2	58:DZ:156:LYS:O	2.11	0.49
1:AA:189(K):U:H2'	1:AA:189(L):G:C8	2.48	0.49
1:AA:603:U:H2'	1:AA:604:G:C8	2.47	0.49
2:AB:97:TRP:HH2	2:AB:176:GLU:CD	2.21	0.49
3:AC:5:ILE:O	3:AC:6:HIS:C	2.54	0.49
4:AD:43:HIS:O	4:AD:45:GLN:HG2	2.12	0.49
9:AI:95:LYS:HG3	9:AI:96:LEU:CD1	2.39	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:4:ILE:CG2	13:AM:5:ALA:H	2.15	0.49
22:AW:6:G:O2'	22:AW:7:A:H5'	2.13	0.49
28:B2:41:ILE:HD11	28:B2:44:LEU:CD1	2.43	0.49
30:B4:18:CYS:SG	30:B4:19:GLY:N	2.85	0.49
32:B6:30:THR:O	32:B6:32:ASN:N	2.46	0.49
34:B8:13:ARG:CD	48:BP:61:ARG:HD2	2.32	0.49
36:BA:39:C:H2'	36:BA:40:C:H6	1.78	0.49
36:BA:904:C:H2'	36:BA:905:U:C6	2.47	0.49
36:BA:1427:A:H4'	36:BA:1428:C:O5'	2.13	0.49
36:BA:1582:C:O2'	36:BA:1586:A:C8	2.64	0.49
36:BA:2206:G:N2	36:BA:2207:G:C5'	2.76	0.49
38:BC:79:LYS:HA	38:BC:97:GLU:CD	2.38	0.49
40:BE:46:ALA:HB2	40:BE:82:ARG:HA	1.95	0.49
40:BE:105:THR:HG21	40:BE:164:ARG:HH12	1.76	0.49
41:BF:167:ALA:HA	41:BF:170:LEU:HD23	1.95	0.49
43:BH:35:VAL:HG21	43:BH:75:ALA:HB2	1.94	0.49
43:BH:50:VAL:HG12	43:BH:52:VAL:HG23	1.95	0.49
46:BN:19:GLU:O	46:BN:59:LYS:HB3	2.13	0.49
48:BP:61:ARG:O	48:BP:62:LEU:CB	2.60	0.49
50:BR:79:LEU:HA	50:BR:83:ILE:CG1	2.43	0.49
51:BS:12:PHE:HD1	51:BS:13:ARG:N	2.10	0.49
52:BT:62:THR:HG22	52:BT:75:ILE:HG23	1.94	0.49
55:BW:107:LEU:HD12	55:BW:107:LEU:N	2.22	0.49
58:BZ:67:LEU:HD23	58:BZ:90:VAL:CG1	2.40	0.49
1:CA:735:C:O2'	1:CA:736:C:H5'	2.12	0.49
1:CA:1228:C:OP1	13:CM:108:ARG:NH2	2.46	0.49
1:CA:1286:A:H1'	1:CA:1287:A:H4'	1.95	0.49
1:CA:1497:G:H2'	1:CA:1498:U:H5'	1.95	0.49
4:CD:102:ASP:OD2	4:CD:136:PRO:HB3	2.12	0.49
8:CH:30:ARG:HH11	8:CH:30:ARG:HB2	1.77	0.49
9:CI:10:ARG:HH11	9:CI:10:ARG:HG3	1.76	0.49
10:CJ:3:LYS:O	10:CJ:100:THR:HA	2.12	0.49
12:CL:50:SER:O	12:CL:51:ALA:HB2	2.13	0.49
13:CM:70:LEU:C	13:CM:70:LEU:HD23	2.38	0.49
18:CR:26:LEU:HD21	18:CR:39:VAL:HG13	1.95	0.49
25:CZ:300:ARG:HH11	25:CZ:300:ARG:HG2	1.78	0.49
28:D2:47:ASN:ND2	36:DA:94(A):G:H21	2.11	0.49
34:D8:15:LYS:CB	48:DP:65:ARG:HH21	2.24	0.49
35:D9:7:VAL:CG1	35:D9:34:GLN:HG2	2.37	0.49
35:D9:7:VAL:HG21	35:D9:36:GLN:H	1.78	0.49
36:DA:253:C:H2'	36:DA:254:G:O4'	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:610:G:H2'	36:DA:611:C:C6	2.48	0.49
36:DA:1290:C:H2'	36:DA:1291:C:H6	1.77	0.49
36:DA:2491:U:H4'	36:DA:2570:G:OP1	2.12	0.49
39:DD:264:LYS:HG2	39:DD:266:SER:HB3	1.92	0.49
40:DE:87:GLU:OE1	40:DE:89:ASP:N	2.46	0.49
40:DE:132:HIS:ND1	40:DE:132:HIS:O	2.45	0.49
42:DG:114:ILE:O	42:DG:114:ILE:HG12	2.13	0.49
43:DH:19:VAL:CG1	43:DH:20:ALA:H	2.15	0.49
43:DH:65:HIS:O	43:DH:67:LEU:N	2.42	0.49
46:DN:51:PHE:CE1	46:DN:119:ARG:HD2	2.47	0.49
48:DP:16:ARG:NE	48:DP:18:ARG:HG2	2.28	0.49
49:DQ:27:VAL:HG21	49:DQ:134:ARG:HG3	1.94	0.49
50:DR:75:LEU:HD13	50:DR:75:LEU:C	2.37	0.49
51:DS:54:LEU:HD21	51:DS:58:LEU:O	2.13	0.49
58:DZ:141:VAL:CG1	58:DZ:144:LEU:HG	2.43	0.49
1:AA:373:A:O2'	1:AA:374:A:H5'	2.12	0.49
1:AA:484:G:H4'	1:AA:485:G:O5'	2.13	0.49
1:AA:723:U:C4	1:AA:1537:U:H2'	2.47	0.49
1:AA:1268:A:H2'	1:AA:1269:A:C8	2.48	0.49
2:AB:168:THR:CG2	2:AB:192:SER:HA	2.43	0.49
4:AD:18:LYS:HE3	4:AD:31:CYS:CB	2.43	0.49
4:AD:19:LEU:HD23	4:AD:67:ILE:HD12	1.93	0.49
4:AD:110:PHE:N	4:AD:110:PHE:HD1	2.10	0.49
9:AI:128:ARG:H	9:AI:128:ARG:HD2	1.77	0.49
13:AM:12:ASN:ND2	13:AM:12:ASN:N	2.59	0.49
17:AQ:21:VAL:HG21	17:AQ:59:ILE:HD11	1.95	0.49
25:AZ:155:ARG:O	25:AZ:159:ASN:ND2	2.46	0.49
25:AZ:314:THR:HG23	25:AZ:374:LEU:O	2.13	0.49
25:AZ:361:MET:HE2	25:AZ:363:MET:CG	2.41	0.49
27:B1:30:VAL:H	36:BA:2396:G:H4'	1.77	0.49
34:B8:10:ALA:CB	34:B8:60:LEU:HD21	2.43	0.49
36:BA:17:G:H4'	53:BU:25:TRP:CH2	2.48	0.49
36:BA:142:A:H8	36:BA:1595:G:H21	1.60	0.49
36:BA:753:C:H2'	36:BA:754:C:H6	1.78	0.49
36:BA:979:G:H3'	36:BA:980:A:C5'	2.42	0.49
36:BA:1076:C:O3'	58:BZ:111:VAL:HG11	2.12	0.49
37:BB:65:C:C2'	37:BB:66:A:H5'	2.43	0.49
38:BC:27:ARG:NE	38:BC:182:PRO:CG	2.74	0.49
39:BD:6:PHE:CE1	39:BD:18:VAL:HG12	2.48	0.49
39:BD:75:ILE:HG21	39:BD:99:ASP:HB3	1.93	0.49
39:BD:224:ALA:C	39:BD:226:MET:N	2.71	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BF:155:LEU:HD23	41:BF:192:LEU:HD12	1.93	0.49
48:BP:147:LEU:CG	48:BP:148:LEU:N	2.70	0.49
49:BQ:14:ARG:HG2	49:BQ:41:TRP:HH2	1.78	0.49
49:BQ:25:ASP:HA	49:BQ:100:GLY:O	2.12	0.49
51:BS:57:LYS:HD2	51:BS:57:LYS:C	2.38	0.49
52:BT:28:VAL:C	52:BT:29:ARG:HD3	2.37	0.49
52:BT:28:VAL:HG23	52:BT:47:GLY:O	2.13	0.49
53:BU:99:ALA:HB2	53:BU:106:PHE:CE1	2.47	0.49
55:BW:36:LEU:HD11	55:BW:47:VAL:HG12	1.95	0.49
58:BZ:111:VAL:HG12	58:BZ:112:ARG:N	2.26	0.49
1:CA:141:A:H1'	1:CA:182:U:O2	2.12	0.49
1:CA:718:G:H5'	11:CK:117:ASN:OD1	2.13	0.49
1:CA:1095:U:P	1:CA:1108:G:H1	2.36	0.49
4:CD:112:VAL:HG12	4:CD:116:GLN:CD	2.38	0.49
5:CE:6:PHE:HB2	5:CE:34:VAL:HG22	1.94	0.49
6:CF:38:GLU:O	6:CF:39:LYS:O	2.30	0.49
6:CF:77:ARG:HH11	6:CF:77:ARG:CG	2.26	0.49
8:CH:30:ARG:CB	8:CH:30:ARG:NH1	2.76	0.49
17:CQ:33:GLY:O	17:CQ:34:LYS:C	2.56	0.49
20:CT:83:ARG:O	20:CT:87:LYS:HB2	2.12	0.49
29:D3:3:ARG:HG2	29:D3:38:GLU:OE2	2.12	0.49
36:DA:214:G:H1'	36:DA:216:A:HO2'	1.76	0.49
36:DA:301:G:H1'	36:DA:302:C:C6	2.48	0.49
36:DA:572:A:H5"	36:DA:573:G:OP2	2.13	0.49
36:DA:573:G:O2'	36:DA:574:C:H3'	2.12	0.49
36:DA:753:C:O2'	36:DA:754:C:H5'	2.13	0.49
36:DA:824:A:H1'	36:DA:2358:G:N7	2.28	0.49
36:DA:1403:C:C2'	36:DA:1404:C:O5'	2.61	0.49
36:DA:1884:A:C3'	36:DA:1885:A:H5"	2.41	0.49
36:DA:2023:G:H4'	36:DA:2617:C:O3'	2.12	0.49
36:DA:2383:G:O2'	36:DA:2384:G:H5'	2.13	0.49
36:DA:2747:G:C2	36:DA:2756:U:C5	3.00	0.49
37:DB:49:C:H2'	37:DB:50:G:C8	2.48	0.49
41:DF:199:TRP:HZ3	41:DF:203:GLN:OE1	1.96	0.49
42:DG:53:LEU:HD22	42:DG:53:LEU:N	2.27	0.49
43:DH:37:VAL:HG12	43:DH:38:SER:N	2.26	0.49
45:DK:59:UNK:HA	45:DK:64:UNK:O	2.13	0.49
48:DP:45:LEU:HD12	48:DP:46:LYS:H	1.78	0.49
49:DQ:64:ILE:HG22	49:DQ:65:PHE:N	2.28	0.49
53:DU:83:LEU:CD1	53:DU:83:LEU:H	2.26	0.49
54:DV:82:ARG:HG2	54:DV:82:ARG:HH11	1.78	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:DZ:139:VAL:O	58:DZ:140:ASP:HB3	2.13	0.49
1:AA:1515:C:O2'	1:AA:1516:G:H5'	2.12	0.49
5:AE:104:ALA:HA	5:AE:107:ARG:HG2	1.95	0.49
10:AJ:48:THR:HG23	10:AJ:62:HIS:CE1	2.47	0.49
11:AK:124:LYS:HD2	11:AK:125:PHE:CE2	2.47	0.49
25:AZ:101:GLY:HA3	25:AZ:210:ILE:HD12	1.95	0.49
25:AZ:254:GLU:CD	25:AZ:307:PRO:HA	2.37	0.49
27:B1:13:ILE:HD12	27:B1:14:VAL:C	2.38	0.49
28:B2:51:ARG:O	28:B2:51:ARG:HG3	2.13	0.49
33:B7:21:ARG:HB3	33:B7:27:GLY:O	2.13	0.49
36:BA:92:A:H3'	36:BA:93:G:H8	1.78	0.49
36:BA:1404:C:O2'	36:BA:1405:U:H5'	2.12	0.49
36:BA:2880:C:H1'	50:BR:92:GLY:O	2.13	0.49
37:BB:49:C:H2'	37:BB:50:G:C8	2.48	0.49
38:BC:132:GLY:N	38:BC:133:PRO:CD	2.76	0.49
39:BD:242:ARG:CG	39:BD:242:ARG:NH1	2.72	0.49
40:BE:69:LYS:HD3	40:BE:89:ASP:C	2.37	0.49
41:BF:108:LYS:O	41:BF:112:MET:HE3	2.12	0.49
41:BF:150:GLY:HA2	41:BF:172:TRP:CE3	2.47	0.49
42:BG:41:GLN:OE1	42:BG:60:LEU:HD21	2.13	0.49
43:BH:13:LYS:C	43:BH:15:VAL:H	2.20	0.49
46:BN:41:ASP:O	46:BN:42:TRP:C	2.55	0.49
47:BO:63:VAL:HG23	47:BO:64:ARG:HG3	1.94	0.49
48:BP:17:LYS:C	48:BP:19:VAL:N	2.67	0.49
49:BQ:42:ILE:HD13	49:BQ:97:VAL:HG22	1.93	0.49
52:BT:3:ARG:CB	52:BT:6:LEU:HB2	2.43	0.49
52:BT:28:VAL:HG12	52:BT:28:VAL:O	2.12	0.49
55:BW:82:LEU:H	55:BW:82:LEU:CD1	2.22	0.49
58:BZ:14:LYS:HB2	58:BZ:17:ALA:HB2	1.94	0.49
1:CA:108:G:H5'	1:CA:109:A:H5'	1.92	0.49
1:CA:539:A:OP2	12:CL:115:LYS:HE3	2.13	0.49
1:CA:1004:A:H5"	1:CA:1025:U:C2	2.47	0.49
1:CA:1221:G:OP1	1:CA:1321:C:N3	2.46	0.49
1:CA:1459:C:O2'	1:CA:1460:A:H5'	2.13	0.49
2:CB:44:LEU:HA	2:CB:47:THR:OG1	2.13	0.49
3:CC:206:GLU:O	3:CC:207:VAL:C	2.55	0.49
10:CJ:57:LYS:HZ3	10:CJ:60:ARG:NH2	2.09	0.49
12:CL:35:GLY:O	12:CL:82:VAL:HG13	2.13	0.49
13:CM:15:VAL:HG12	13:CM:45:VAL:HG22	1.95	0.49
16:CP:71:ARG:HA	16:CP:74:LEU:HD23	1.94	0.49
20:CT:26:ASN:H	20:CT:26:ASN:HD22	1.55	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:CT:48:LYS:HB3	20:CT:51:GLU:HG2	1.95	0.49
26:D0:23:VAL:HG11	26:D0:69:PHE:HZ	1.78	0.49
32:D6:14:THR:C	32:D6:16:CYS:H	2.20	0.49
33:D7:21:ARG:HB3	33:D7:27:GLY:O	2.12	0.49
36:DA:1052:C:H2'	36:DA:1053:C:C6	2.48	0.49
36:DA:1602:U:H3'	36:DA:1603:A:H5"	1.90	0.49
36:DA:2182:G:O2'	36:DA:2183:C:H5'	2.13	0.49
36:DA:2533:A:OP1	36:DA:2665:A:H1'	2.12	0.49
38:DC:96:GLY:C	38:DC:98:GLU:H	2.21	0.49
41:DF:160:ASN:C	41:DF:160:ASN:HD22	2.19	0.49
43:DH:50:VAL:HG12	43:DH:52:VAL:HG23	1.95	0.49
43:DH:85:LYS:CE	43:DH:85:LYS:C	2.86	0.49
46:DN:11:PRO:O	46:DN:13:TRP:N	2.45	0.49
48:DP:101:VAL:HG12	48:DP:106:LEU:HB2	1.95	0.49
49:DQ:42:ILE:HD13	49:DQ:97:VAL:HG22	1.94	0.49
49:DQ:141:GLN:NE2	58:DZ:72:ARG:HD3	2.28	0.49
50:DR:96:ARG:CZ	50:DR:117:VAL:HG23	2.43	0.49
51:DS:49:VAL:CG1	51:DS:50:SER:N	2.76	0.49
53:DU:86:ALA:HB2	53:DU:116:ALA:HB2	1.93	0.49
55:DW:12:ILE:HB	55:DW:42:ARG:HH12	1.77	0.49
56:DX:61:GLY:HA3	56:DX:73:ARG:O	2.13	0.49
57:DY:20:TYR:C	57:DY:22:GLY:H	2.21	0.49
58:DZ:48:PHE:CE1	58:DZ:52:SER:HA	2.48	0.49
1:AA:39:G:O2'	1:AA:40:C:H5'	2.12	0.49
1:AA:836:G:H2'	1:AA:837:G:H8	1.78	0.49
2:AB:24:TRP:CZ3	2:AB:26:PRO:HA	2.48	0.49
6:AF:87:ARG:HH11	6:AF:87:ARG:CG	2.25	0.49
9:AI:28:VAL:HG23	9:AI:33:PHE:HA	1.93	0.49
12:AL:8:ASN:HD22	17:AQ:34:LYS:NZ	2.11	0.49
12:AL:97:ARG:HH11	12:AL:97:ARG:CB	2.26	0.49
25:AZ:300:ARG:NH1	25:AZ:300:ARG:HG2	2.28	0.49
29:B3:29:ARG:HH11	29:B3:29:ARG:CB	2.19	0.49
31:B5:54:GLY:H	31:B5:56:LYS:HZ2	1.56	0.49
36:BA:260:G:H1'	36:BA:621:A:H1'	1.94	0.49
36:BA:523:C:H2'	36:BA:524:U:C5'	2.43	0.49
36:BA:610:G:H2'	36:BA:611:C:C6	2.48	0.49
36:BA:616:G:H2'	36:BA:618:C:O4'	2.13	0.49
36:BA:752:A:H4'	36:BA:753:C:O5'	2.13	0.49
36:BA:1515:G:H2'	36:BA:1516:C:C6	2.48	0.49
36:BA:2081:C:H2'	36:BA:2082:A:H8	1.77	0.49
36:BA:2159:G:H2'	36:BA:2160:G:C5'	2.37	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2307:G:N2	36:BA:2308:G:H5"	2.27	0.49
36:BA:2472:G:C5'	36:BA:2473:U:H5"	2.42	0.49
36:BA:2762:G:C2'	36:BA:2763:G:H5'	2.42	0.49
36:BA:2818:G:H4'	36:BA:2837:G:O4'	2.13	0.49
41:BF:44:ARG:HG2	41:BF:44:ARG:O	2.12	0.49
43:BH:147:ASN:HD22	43:BH:147:ASN:N	2.09	0.49
44:BJ:73:UNK:C	44:BJ:75:UNK:N	2.75	0.49
48:BP:20:GLY:O	48:BP:21:ARG:HB2	2.12	0.49
48:BP:48:PRO:O	48:BP:49:ARG:C	2.56	0.49
49:BQ:12:GLN:CG	49:BQ:73:PRO:HD2	2.43	0.49
49:BQ:74:TYR:CD2	49:BQ:91:GLU:HB2	2.39	0.49
54:BV:49:THR:O	54:BV:50:PRO:C	2.54	0.49
57:BY:28:LYS:CE	57:BY:28:LYS:N	2.76	0.49
1:CA:285:G:O2'	1:CA:286:G:H5'	2.12	0.49
1:CA:1067:A:N1	1:CA:1108:G:O2'	2.38	0.49
1:CA:1283:G:O2'	1:CA:1284:C:P	2.71	0.49
2:CB:71:VAL:HG13	2:CB:93:VAL:HG13	1.94	0.49
2:CB:122:PHE:O	2:CB:127:ILE:HD11	2.13	0.49
9:CI:11:LYS:O	9:CI:12:GLU:HB2	2.13	0.49
10:CJ:24:VAL:CG2	10:CJ:37:PRO:HG3	2.42	0.49
11:CK:72:ALA:O	11:CK:75:TYR:HB2	2.13	0.49
16:CP:44:THR:O	16:CP:45:THR:HB	2.13	0.49
25:CZ:101:GLY:HA3	25:CZ:210:ILE:HD12	1.95	0.49
27:D1:41:ARG:NH2	36:DA:1365:A:H5"	2.26	0.49
28:D2:35:LEU:HB3	28:D2:50:ILE:CD1	2.43	0.49
31:D5:52:TYR:N	31:D5:52:TYR:CD1	2.80	0.49
36:DA:158:U:H3'	36:DA:158:U:O2	2.13	0.49
36:DA:1499:C:O2'	36:DA:1500:G:H5'	2.12	0.49
36:DA:1747(A):G:C2'	36:DA:1748:G:C5'	2.81	0.49
36:DA:1827:C:C2'	36:DA:1828:G:H5'	2.43	0.49
36:DA:2230:G:H2'	36:DA:2231:C:H6	1.77	0.49
39:DD:48:ARG:HH11	39:DD:48:ARG:HG3	1.78	0.49
40:DE:54:GLN:O	40:DE:55:ASN:HB2	2.12	0.49
43:DH:16:SER:HB2	43:DH:27:LYS:CB	2.27	0.49
49:DQ:1:MET:HE1	49:DQ:45:GLN:CA	2.42	0.49
50:DR:38:VAL:HB	50:DR:39:PRO:CD	2.39	0.49
51:DS:17:ARG:C	51:DS:19:LYS:H	2.21	0.49
57:DY:31:LEU:N	57:DY:31:LEU:HD22	2.28	0.49
58:DZ:128:VAL:HG21	58:DZ:132:ASN:O	2.13	0.49
58:DZ:165:VAL:HG12	58:DZ:167:PRO:HA	1.95	0.49
1:AA:328:C:O2	1:AA:328:C:C2'	2.60	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:328:C:O2	1:AA:328:C:H2'	2.13	0.48
1:AA:346:G:O2'	1:AA:347:G:P	2.71	0.48
1:AA:542:G:H5'	4:AD:41:GLY:CA	2.43	0.48
1:AA:1371:G:O3'	9:AI:69:GLY:HA3	2.12	0.48
1:AA:1412:C:H2'	1:AA:1413:A:H8	1.77	0.48
2:AB:229:VAL:O	2:AB:230:VAL:HG13	2.13	0.48
3:AC:14:ILE:O	3:AC:16:ARG:N	2.46	0.48
4:AD:111:ALA:HB2	4:AD:120:LEU:CD1	2.43	0.48
4:AD:170:VAL:HG12	4:AD:171:GLY:N	2.27	0.48
9:AI:43:ALA:HA	9:AI:74:ILE:HD13	1.94	0.48
9:AI:65:VAL:HG21	9:AI:73:GLN:CB	2.43	0.48
15:AO:82:ILE:HD13	15:AO:87:ILE:HB	1.94	0.48
25:AZ:270:VAL:CG1	25:AZ:286:VAL:HG21	2.43	0.48
27:B1:3:LYS:HG2	27:B1:4:VAL:HG12	1.94	0.48
29:B3:31:LEU:HD12	36:BA:989:G:P	2.52	0.48
34:B8:61:LEU:CD2	34:B8:62:LEU:H	2.23	0.48
35:B9:19:ARG:O	35:B9:20:HIS:CB	2.60	0.48
36:BA:714:U:H2'	36:BA:716:A:OP2	2.13	0.48
36:BA:848:G:H5'	36:BA:848:G:C8	2.47	0.48
36:BA:1052:C:H2'	36:BA:1053:C:C6	2.48	0.48
36:BA:1139:G:H5"	46:BN:70:LYS:NZ	2.27	0.48
36:BA:1540:U:C3'	36:BA:1541:G:H3'	2.35	0.48
36:BA:1658:C:H2'	36:BA:1659:U:C6	2.48	0.48
36:BA:2641:G:OP1	46:BN:74:ARG:NE	2.46	0.48
37:BB:67:G:HO2'	37:BB:68:C:H6	1.61	0.48
40:BE:50:GLY:CA	40:BE:78:LEU:HB3	2.36	0.48
40:BE:75:VAL:HG12	40:BE:76:ARG:N	2.27	0.48
41:BF:118:ALA:HA	41:BF:123:LEU:HB3	1.95	0.48
43:BH:40:GLU:O	43:BH:41:MET:HB3	2.13	0.48
44:BJ:37:UNK:HA	44:BJ:41:UNK:CB	2.42	0.48
48:BP:84:ASN:HA	48:BP:115:LEU:O	2.12	0.48
54:BV:51:VAL:HG12	54:BV:52:VAL:N	2.23	0.48
56:BX:33:LYS:HE2	56:BX:33:LYS:CA	2.43	0.48
57:BY:2:ARG:HH11	57:BY:2:ARG:HG2	1.78	0.48
57:BY:20:TYR:C	57:BY:22:GLY:H	2.21	0.48
58:BZ:103:ARG:NH2	58:BZ:136:PHE:CE1	2.81	0.48
2:CB:151:GLY:C	2:CB:153:ARG:N	2.71	0.48
2:CB:172:ILE:H	2:CB:172:ILE:CD1	2.21	0.48
3:CC:99:VAL:O	3:CC:99:VAL:HG23	2.13	0.48
3:CC:148:GLY:HA3	3:CC:172:ARG:O	2.13	0.48
4:CD:126:ILE:N	4:CD:126:ILE:CD1	2.75	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:CJ:57:LYS:NZ	10:CJ:60:ARG:HH22	2.10	0.48
16:CP:52:ASP:OD2	16:CP:55:ARG:HG3	2.13	0.48
20:CT:93:GLU:N	20:CT:93:GLU:OE1	2.46	0.48
28:D2:68:ARG:CZ	28:D2:72:ALA:HB1	2.42	0.48
36:DA:142:A:H8	36:DA:1595:G:H21	1.59	0.48
36:DA:438:G:H2'	36:DA:440:G:H8	1.78	0.48
36:DA:860:U:O2	36:DA:860:U:O4'	2.31	0.48
36:DA:1038:C:C3'	36:DA:1039:G:H5"	2.43	0.48
36:DA:1504:C:O2'	36:DA:1505:C:C5'	2.61	0.48
36:DA:1651:G:C2	36:DA:2007:C:N3	2.81	0.48
36:DA:2543:G:H2'	36:DA:2544:G:C8	2.48	0.48
36:DA:2842:G:O2'	36:DA:2843:G:H5'	2.13	0.48
40:DE:93:VAL:C	40:DE:95:ILE:H	2.19	0.48
41:DF:119:ARG:HH11	41:DF:119:ARG:HG2	1.77	0.48
41:DF:150:GLY:HA2	41:DF:172:TRP:CE3	2.48	0.48
43:DH:41:MET:SD	43:DH:53:GLU:O	2.70	0.48
43:DH:147:ASN:N	43:DH:147:ASN:HD22	2.11	0.48
44:DJ:27:UNK:CB	44:DJ:113:UNK:HA	2.42	0.48
45:DK:13:UNK:O	45:DK:52:UNK:HA	2.14	0.48
46:DN:89:LYS:O	46:DN:93:THR:HG22	2.13	0.48
49:DQ:3:MET:HB2	49:DQ:4:PRO:HD2	1.95	0.48
50:DR:3:HIS:C	50:DR:3:HIS:ND1	2.69	0.48
51:DS:16:ASN:O	51:DS:18:ILE:N	2.46	0.48
51:DS:70:GLY:C	51:DS:72:ALA:N	2.71	0.48
51:DS:89:ARG:CG	51:DS:92:TYR:CA	2.89	0.48
51:DS:97:ARG:NH1	51:DS:98:VAL:O	2.46	0.48
52:DT:27:THR:H	52:DT:49:VAL:HG12	1.78	0.48
52:DT:78:LEU:O	52:DT:78:LEU:HD23	2.13	0.48
53:DU:47:TYR:O	53:DU:51:LYS:HG2	2.12	0.48
55:DW:6:ILE:HG12	55:DW:104:THR:CB	2.43	0.48
1:AA:310:G:H2'	1:AA:311:C:H6	1.77	0.48
1:AA:319:G:O2'	1:AA:320:C:H5'	2.13	0.48
1:AA:1504:G:OP1	1:AA:1507:A:H4'	2.12	0.48
3:AC:126:ARG:O	3:AC:128:PHE:HD1	1.96	0.48
7:AG:150:ALA:HB2	11:AK:50:TYR:OH	2.12	0.48
8:AH:85:ARG:HH11	8:AH:85:ARG:HG3	1.78	0.48
11:AK:76:GLY:O	11:AK:78:GLN:HG3	2.12	0.48
12:AL:85:ILE:HG23	12:AL:86:ARG:N	2.27	0.48
13:AM:70:LEU:HD23	13:AM:70:LEU:C	2.37	0.48
14:AN:44:LEU:HD12	14:AN:44:LEU:C	2.39	0.48
16:AP:1:MET:O	16:AP:24:ALA:HB2	2.12	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:AZ:223:MET:CB	25:AZ:242:ILE:HA	2.43	0.48
25:AZ:341:GLN:NE2	25:AZ:389:ARG:O	2.46	0.48
28:B2:44:LEU:C	28:B2:46:GLN:H	2.22	0.48
29:B3:3:ARG:HG2	29:B3:38:GLU:OE2	2.13	0.48
36:BA:271(V):G:H2'	36:BA:271(W):G:O4'	2.13	0.48
36:BA:590:A:H2'	36:BA:591:C:H6	1.78	0.48
36:BA:806:C:OP2	48:BP:39:LYS:HD2	2.13	0.48
36:BA:1061:U:H4'	36:BA:1070:A:C1'	2.44	0.48
36:BA:1378:A:C4'	36:BA:1379:A:OP1	2.59	0.48
36:BA:1899:G:C2'	36:BA:1900:A:OP2	2.62	0.48
36:BA:2096:U:H2'	36:BA:2097:C:H6	1.77	0.48
36:BA:2123:G:O2'	36:BA:2124:G:H5'	2.13	0.48
36:BA:2632:A:C2	40:BE:61:ARG:HD2	2.48	0.48
36:BA:2659:G:H2'	36:BA:2660:A:H5"	1.93	0.48
42:BG:6:ALA:HB3	42:BG:104:GLU:OE1	2.13	0.48
46:BN:90:MET:HA	46:BN:90:MET:CE	2.40	0.48
46:BN:121:LYS:HB3	46:BN:123:TYR:CE1	2.48	0.48
52:BT:13:ARG:HH12	52:BT:15:VAL:CG1	2.26	0.48
53:BU:79:PHE:O	53:BU:83:LEU:HD13	2.13	0.48
55:BW:5:ALA:O	55:BW:6:ILE:CB	2.61	0.48
56:BX:61:GLY:HA3	56:BX:73:ARG:O	2.12	0.48
1:CA:745:C:O2'	1:CA:746:A:H5'	2.13	0.48
1:CA:933:G:OP2	7:CG:3:ARG:HB3	2.12	0.48
1:CA:977:A:N6	1:CA:1224:G:O5'	2.46	0.48
1:CA:1002:G:H2'	1:CA:1003:G:O4'	2.13	0.48
1:CA:1536:C:N4	23:CX:11:U:H3	2.10	0.48
2:CB:155:LEU:HD13	2:CB:157:ARG:H	1.77	0.48
2:CB:213:LEU:HD23	2:CB:213:LEU:C	2.38	0.48
2:CB:238:LEU:HD23	2:CB:239:VAL:H	1.77	0.48
5:CE:11:ILE:HB	5:CE:31:LEU:HB3	1.95	0.48
9:CI:20:ARG:HB2	9:CI:20:ARG:HH11	1.72	0.48
9:CI:28:VAL:HG21	9:CI:33:PHE:HA	1.94	0.48
12:CL:10:LEU:O	12:CL:14:GLY:N	2.45	0.48
15:CO:36:ILE:HG23	15:CO:56:LEU:HD11	1.95	0.48
17:CQ:9:VAL:HG11	17:CQ:84:LEU:CD1	2.43	0.48
19:CS:15:LEU:O	19:CS:19:VAL:HG23	2.13	0.48
20:CT:94:ALA:O	20:CT:95:ALA:HB3	2.13	0.48
25:CZ:330:ARG:HH12	25:CZ:334:PHE:HB3	1.78	0.48
27:D1:91:LYS:O	27:D1:92:LYS:C	2.55	0.48
30:D4:10:VAL:CG2	30:D4:11:PRO:HD2	2.42	0.48
32:D6:7:ILE:HG21	32:D6:29:ASN:HD22	1.78	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:152:G:H1	36:DA:174:C:H42	1.60	0.48
36:DA:380:U:H2'	36:DA:381:G:H8	1.78	0.48
36:DA:519:U:H2'	36:DA:520:G:C8	2.48	0.48
36:DA:643:A:O2'	36:DA:644:A:H5'	2.13	0.48
36:DA:652:C:O2'	36:DA:653:A:O5'	2.31	0.48
36:DA:690:G:H2'	36:DA:691:C:C6	2.48	0.48
36:DA:1638:C:H5"	36:DA:2710:C:O2'	2.13	0.48
36:DA:2206:G:N2	36:DA:2207:G:C5'	2.76	0.48
38:DC:132:GLY:N	38:DC:133:PRO:CD	2.75	0.48
38:DC:175:VAL:HG12	38:DC:188:ASN:CB	2.37	0.48
46:DN:55:VAL:HG22	46:DN:56:ASN:H	1.78	0.48
46:DN:128:HIS:O	46:DN:128:HIS:CG	2.66	0.48
48:DP:131:SER:HG	48:DP:134:ALA:HB3	1.77	0.48
51:DS:48:LEU:HD23	51:DS:82:ILE:HD11	1.94	0.48
51:DS:87:PHE:CG	51:DS:88:ASP:N	2.81	0.48
52:DT:12:SER:C	52:DT:14:TYR:H	2.21	0.48
52:DT:107:ASP:CG	52:DT:108:ARG:H	2.20	0.48
55:DW:5:ALA:O	55:DW:6:ILE:CB	2.61	0.48
57:DY:39:VAL:HG12	57:DY:40:GLU:N	2.29	0.48
58:DZ:140:ASP:C	58:DZ:141:VAL:CG2	2.85	0.48
1:AA:453:A:O2'	1:AA:454:C:O4'	2.30	0.48
1:AA:636:U:H2'	1:AA:637:G:H8	1.77	0.48
1:AA:1053:G:H4'	1:AA:1054:C:H5"	1.85	0.48
1:AA:1437:C:H2'	1:AA:1438:G:C8	2.48	0.48
3:AC:94:LEU:O	3:AC:95:THR:CB	2.62	0.48
4:AD:8:VAL:C	4:AD:10:ARG:H	2.21	0.48
4:AD:17:VAL:HG11	4:AD:197:PRO:CB	2.42	0.48
4:AD:59:ARG:HE	4:AD:59:ARG:CA	2.10	0.48
4:AD:70:ILE:CG2	4:AD:71:SER:N	2.76	0.48
12:AL:46:LYS:H	12:AL:92:ASP:HB3	1.77	0.48
13:AM:97:PRO:CA	13:AM:110:ARG:HD3	2.41	0.48
13:AM:119:GLY:O	13:AM:120:LYS:CB	2.60	0.48
25:AZ:130:TYR:CE2	25:AZ:211:PRO:HD2	2.49	0.48
25:AZ:265:THR:HG21	25:AZ:293:VAL:HG22	1.93	0.48
32:B6:15:GLU:OE2	32:B6:41:PRO:CB	2.61	0.48
33:B7:4:THR:CG2	36:BA:788:A:H1'	2.43	0.48
36:BA:195:A:C8	36:BA:197:A:OP1	2.66	0.48
36:BA:438:G:O2'	36:BA:440:G:H5'	2.13	0.48
36:BA:648:G:H2'	36:BA:649:G:C8	2.48	0.48
36:BA:1120:G:H2'	36:BA:1121:C:H6	1.78	0.48
36:BA:1142(A):A:H5'	36:BA:1142(A):A:C8	2.49	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1215:G:O2'	36:BA:1216:G:H5'	2.13	0.48
36:BA:1260:G:H2'	36:BA:1261:C:C6	2.49	0.48
36:BA:1651:G:C2	36:BA:2007:C:N3	2.81	0.48
36:BA:1908:C:H2'	36:BA:1909:C:H6	1.78	0.48
36:BA:2839:G:H2'	36:BA:2840:C:C6	2.48	0.48
39:BD:6:PHE:HE1	39:BD:18:VAL:HG12	1.77	0.48
39:BD:241:PRO:C	39:BD:242:ARG:HG2	2.39	0.48
40:BE:116:VAL:CG2	40:BE:122:PHE:CG	2.96	0.48
41:BF:3:GLU:HA	41:BF:24:LEU:CG	2.35	0.48
42:BG:11:TYR:HA	42:BG:15:VAL:HG21	1.95	0.48
50:BR:38:VAL:HB	50:BR:39:PRO:CD	2.38	0.48
53:BU:27:LEU:O	53:BU:34:LYS:HB2	2.13	0.48
57:BY:22:GLY:O	57:BY:23:ARG:C	2.56	0.48
58:BZ:171:ILE:H	58:BZ:171:ILE:HD13	1.77	0.48
1:CA:333:G:O2'	1:CA:334:C:H5'	2.13	0.48
1:CA:826:C:H2'	1:CA:827:U:H6	1.78	0.48
1:CA:926:G:H5"	1:CA:927:G:O5'	2.13	0.48
1:CA:945:G:H2'	1:CA:945:G:N3	2.29	0.48
1:CA:1090:U:H2'	1:CA:1091:U:C6	2.49	0.48
1:CA:1424:C:H2'	1:CA:1425:U:O4'	2.13	0.48
2:CB:189:ASP:O	2:CB:191:ASP:N	2.47	0.48
2:CB:204:ASN:HD21	2:CB:206:ASP:H	1.54	0.48
3:CC:11:ARG:O	3:CC:14:ILE:O	2.30	0.48
4:CD:106:TYR:HD2	4:CD:113:SER:O	1.97	0.48
4:CD:107:ARG:HH21	4:CD:194:LEU:HD12	1.79	0.48
7:CG:118:VAL:O	7:CG:121:ALA:HB3	2.14	0.48
9:CI:86:VAL:CG2	9:CI:93:ARG:HG2	2.42	0.48
17:CQ:99:SER:C	17:CQ:100:LYS:HG3	2.39	0.48
20:CT:89:ARG:HB2	20:CT:104:LEU:HD12	1.96	0.48
24:CY:41:C:H2'	24:CY:42:G:O4'	2.13	0.48
24:CY:51:G:N2	24:CY:64:U:O2	2.46	0.48
27:D1:72:GLU:HA	27:D1:72:GLU:OE1	2.13	0.48
28:D2:35:LEU:HB3	28:D2:50:ILE:HD11	1.95	0.48
36:DA:17:G:H2'	36:DA:18:C:C6	2.47	0.48
36:DA:580:C:H2'	36:DA:581:C:H6	1.78	0.48
36:DA:1331:A:C2'	36:DA:1332:G:H5"	2.43	0.48
36:DA:1542:A:H5'	36:DA:1543:C:OP2	2.13	0.48
36:DA:2746:U:O2'	36:DA:2747:G:H5'	2.13	0.48
36:DA:2870:C:H2'	36:DA:2871:C:O4'	2.13	0.48
39:DD:241:PRO:O	39:DD:243:GLY:N	2.46	0.48
40:DE:75:VAL:HG12	40:DE:76:ARG:N	2.29	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DE:115:GLY:C	40:DE:116:VAL:O	2.53	0.48
41:DF:150:GLY:HA2	41:DF:172:TRP:CD2	2.49	0.48
42:DG:44:GLY:C	42:DG:47:LYS:HZ3	2.21	0.48
43:DH:35:VAL:HG21	43:DH:75:ALA:HB2	1.94	0.48
43:DH:80:SER:O	43:DH:81:GLU:HB2	2.13	0.48
47:DO:35:VAL:CG1	47:DO:69:ILE:HD13	2.44	0.48
47:DO:53:LYS:O	47:DO:56:ASP:HB2	2.13	0.48
50:DR:13:HIS:HE1	50:DR:15:SER:OG	1.96	0.48
51:DS:12:PHE:CD1	51:DS:13:ARG:N	2.81	0.48
52:DT:13:ARG:HH12	52:DT:15:VAL:CG1	2.26	0.48
52:DT:28:VAL:HB	52:DT:88:ILE:HG12	1.94	0.48
58:DZ:142:SER:C	58:DZ:144:LEU:N	2.71	0.48
1:AA:22:G:H4'	1:AA:885:G:C8	2.48	0.48
1:AA:434:U:H2'	1:AA:435:C:H6	1.78	0.48
1:AA:437:U:H5"	4:AD:155:LEU:CD1	2.42	0.48
1:AA:509:A:H5'	4:AD:54:TYR:HD2	1.79	0.48
1:AA:1124:G:C5'	10:AJ:35:SER:HB2	2.43	0.48
1:AA:1150:U:C5	1:AA:1151:A:C5	3.02	0.48
7:AG:7:ALA:O	7:AG:8:GLU:CB	2.59	0.48
9:AI:4:TYR:CE2	9:AI:88:TYR:CB	2.95	0.48
13:AM:22:ILE:CB	13:AM:25:ILE:HD12	2.43	0.48
15:AO:6:GLU:H	15:AO:6:GLU:CD	2.18	0.48
19:AS:13:ASP:C	19:AS:15:LEU:N	2.69	0.48
20:AT:62:LEU:HD12	20:AT:62:LEU:N	2.12	0.48
22:AW:57:G:H2'	22:AW:58:A:C5'	2.41	0.48
24:AY:37:MIA:O2'	36:BA:1913:A:N1	2.42	0.48
26:B0:47:PRO:HG3	26:B0:53:MET:HB2	1.95	0.48
36:BA:68:G:H2'	36:BA:69:C:C6	2.48	0.48
36:BA:484:C:H2'	36:BA:485:C:C6	2.48	0.48
36:BA:588:U:H2'	36:BA:589:C:C6	2.49	0.48
36:BA:633:A:H2'	36:BA:634:C:H5'	1.95	0.48
36:BA:1652:A:C2'	36:BA:1653:G:H5'	2.42	0.48
36:BA:1713:U:O2'	36:BA:1714:G:H5'	2.14	0.48
36:BA:2102:U:C5	36:BA:2103:C:N3	2.81	0.48
36:BA:2419:U:O2'	36:BA:2420:C:H5'	2.13	0.48
36:BA:2475:C:H5'	36:BA:2476:A:OP2	2.13	0.48
37:BB:27:C:H5'	37:BB:28:C:OP2	2.12	0.48
40:BE:65:GLY:HA2	40:BE:70:ALA:CB	2.44	0.48
40:BE:132:HIS:ND1	40:BE:132:HIS:O	2.46	0.48
46:BN:29:LYS:C	46:BN:31:ALA:H	2.19	0.48
50:BR:75:LEU:HD13	50:BR:75:LEU:C	2.38	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BT:61:PHE:CE1	52:BT:76:PHE:HB2	2.48	0.48
53:BU:47:TYR:O	53:BU:51:LYS:HG2	2.13	0.48
54:BV:62:LEU:CD2	54:BV:95:LEU:HB2	2.39	0.48
57:BY:44:ILE:HG22	57:BY:45:VAL:N	2.27	0.48
1:CA:484:G:H4'	1:CA:485:G:O5'	2.12	0.48
1:CA:1320:C:H5'	1:CA:1320:C:C6	2.31	0.48
2:CB:238:LEU:O	2:CB:239:VAL:C	2.55	0.48
3:CC:29:TYR:O	3:CC:30:ARG:C	2.56	0.48
3:CC:181:ASN:HD22	3:CC:204:LEU:HB2	1.77	0.48
7:CG:137:LYS:O	7:CG:140:ASP:N	2.46	0.48
8:CH:87:SER:HB2	8:CH:93:VAL:HB	1.95	0.48
8:CH:101:PRO:HG2	8:CH:133:LEU:HD21	1.95	0.48
10:CJ:92:THR:HG23	10:CJ:93:GLY:H	1.77	0.48
25:CZ:130:TYR:CE2	25:CZ:211:PRO:HD2	2.49	0.48
25:CZ:222:LEU:HA	25:CZ:304:LEU:O	2.13	0.48
26:D0:72:ARG:HD3	26:D0:75:LEU:HD13	1.95	0.48
28:D2:47:ASN:O	28:D2:48:HIS:C	2.56	0.48
30:D4:25:TYR:O	30:D4:26:SER:HB3	2.12	0.48
33:D7:12:ARG:NH2	36:DA:465:G:OP1	2.45	0.48
34:D8:30:ARG:NH2	36:DA:2419:U:O4	2.46	0.48
35:D9:35:ARG:O	35:D9:35:ARG:HG2	2.13	0.48
36:DA:86:C:H2'	36:DA:87:C:C6	2.48	0.48
36:DA:616:G:H2'	36:DA:618:C:O4'	2.12	0.48
36:DA:1675:C:H2'	36:DA:1676:A:O4'	2.13	0.48
36:DA:2123:G:O2'	36:DA:2124:G:H5'	2.12	0.48
36:DA:2416:C:H2'	36:DA:2417:C:H6	1.78	0.48
40:DE:116:VAL:CG2	40:DE:122:PHE:CG	2.97	0.48
42:DG:48:GLU:O	42:DG:49:ASP:HB3	2.13	0.48
46:DN:38:HIS:C	53:DU:67:ALA:HB1	2.37	0.48
48:DP:38:GLN:HG3	48:DP:39:LYS:H	1.78	0.48
48:DP:74:GLU:C	48:DP:75:ILE:HD12	2.38	0.48
51:DS:106:ARG:HH11	51:DS:106:ARG:CG	2.23	0.48
53:DU:92:ARG:HB2	54:DV:11:GLN:NE2	2.28	0.48
58:DZ:28:MET:HE3	58:DZ:59:LEU:HD13	1.95	0.48
1:AA:67:C:O2'	1:AA:171:A:H1'	2.13	0.48
1:AA:624:C:O3'	16:AP:10:GLY:HA2	2.13	0.48
1:AA:1120:G:H2'	1:AA:1121:U:H6	1.76	0.48
1:AA:1286:A:O2'	1:AA:1287:A:OP2	2.27	0.48
4:AD:102:ASP:OD2	4:AD:136:PRO:HB3	2.14	0.48
4:AD:112:VAL:HG12	4:AD:116:GLN:CD	2.39	0.48
9:AI:58:HIS:C	9:AI:59:PHE:HD1	2.20	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AL:50:SER:O	12:AL:51:ALA:HB2	2.13	0.48
12:AL:75:HIS:CD2	12:AL:77:LEU:H	2.31	0.48
15:AO:33:THR:HG23	15:AO:63:ARG:NH1	2.27	0.48
17:AQ:9:VAL:HG11	17:AQ:84:LEU:CD1	2.43	0.48
18:AR:31:LEU:HD23	18:AR:31:LEU:N	2.22	0.48
24:AY:72:U:C3'	24:AY:73:G:H5"	2.44	0.48
25:AZ:30:ALA:O	25:AZ:34:VAL:HG23	2.14	0.48
25:AZ:223:MET:HG3	25:AZ:223:MET:O	2.14	0.48
25:AZ:267:VAL:HG23	25:AZ:288:VAL:HG13	1.94	0.48
27:B1:19:GLN:OE1	27:B1:19:GLN:HA	2.14	0.48
30:B4:6:HIS:HB3	42:BG:67:LYS:NZ	2.28	0.48
34:B8:7:HIS:N	34:B8:11:LYS:HE2	2.28	0.48
35:B9:35:ARG:O	35:B9:35:ARG:HG2	2.13	0.48
36:BA:389:G:H1	48:BP:72:PRO:HD3	1.78	0.48
36:BA:755:C:H2'	36:BA:756:C:H6	1.78	0.48
36:BA:1948:G:O2'	36:BA:1949:G:H5'	2.14	0.48
36:BA:2052:G:H4'	40:BE:143:ASN:O	2.12	0.48
37:BB:78:A:H2'	37:BB:79:C:O4'	2.14	0.48
41:BF:160:ASN:HD21	41:BF:162:LEU:H	1.58	0.48
42:BG:39:ILE:HG12	42:BG:92:VAL:HG12	1.96	0.48
42:BG:107:LEU:HD12	42:BG:178:PHE:CD1	2.47	0.48
42:BG:114:ILE:CG2	42:BG:117:PHE:HB2	2.44	0.48
48:BP:92:GLU:HG2	48:BP:121:LYS:HZ1	1.78	0.48
57:BY:28:LYS:C	57:BY:38:ILE:HG22	2.38	0.48
57:BY:31:LEU:N	57:BY:31:LEU:HD22	2.28	0.48
57:BY:64:GLU:O	57:BY:65:ALA:HB2	2.13	0.48
1:CA:189(J):G:O2'	1:CA:189(K):U:H5'	2.13	0.48
1:CA:853:G:O2'	1:CA:854:G:H5'	2.13	0.48
1:CA:911:U:O2'	1:CA:912:C:H5'	2.13	0.48
3:CC:186:PHE:CE2	3:CC:188:LEU:HD22	2.48	0.48
4:CD:22:LYS:HB2	4:CD:26:CYS:HB2	1.95	0.48
7:CG:28:ASN:OD1	7:CG:36:LYS:HE2	2.14	0.48
7:CG:66:VAL:O	7:CG:69:VAL:HG12	2.13	0.48
9:CI:41:VAL:O	9:CI:41:VAL:HG12	2.14	0.48
9:CI:53:VAL:C	9:CI:55:ALA:N	2.69	0.48
9:CI:85:LEU:HD12	9:CI:85:LEU:C	2.39	0.48
9:CI:114:TYR:CD1	10:CJ:60:ARG:HG2	2.49	0.48
10:CJ:7:LYS:C	10:CJ:8:LEU:HD12	2.39	0.48
12:CL:97:ARG:HH11	12:CL:97:ARG:CB	2.26	0.48
20:CT:72:LEU:O	20:CT:74:LYS:N	2.46	0.48
25:CZ:31:LEU:HD23	25:CZ:199:ILE:HG23	1.95	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:CZ:155:ARG:O	25:CZ:159:ASN:ND2	2.45	0.48
25:CZ:352:VAL:HG12	25:CZ:353:VAL:N	2.28	0.48
30:D4:19:GLY:O	30:D4:21:VAL:HG23	2.14	0.48
33:D7:34:ARG:HD3	36:DA:467:G:OP2	2.12	0.48
36:DA:17:G:H4'	53:DU:25:TRP:CH2	2.48	0.48
36:DA:605:C:H1'	36:DA:657:U:O2'	2.14	0.48
36:DA:811:U:O2'	36:DA:812:C:C5'	2.61	0.48
36:DA:1773:A:H2'	36:DA:1774:C:H5'	1.95	0.48
36:DA:2201:C:H2'	36:DA:2202:C:C6	2.49	0.48
36:DA:2472:G:C5'	36:DA:2473:U:H5"	2.42	0.48
37:DB:93:G:H2'	37:DB:94:C:C6	2.48	0.48
39:DD:44:ASN:HB2	39:DD:48:ARG:O	2.13	0.48
48:DP:97:PRO:O	48:DP:98:GLU:CB	2.54	0.48
54:DV:19:LYS:HB2	54:DV:96:ILE:CD1	2.42	0.48
56:DX:38:GLU:HG2	56:DX:38:GLU:O	2.12	0.48
58:DZ:151:HIS:HB2	58:DZ:170:THR:CA	2.42	0.48
1:AA:8:A:C5	4:AD:209:ARG:HB2	2.48	0.48
1:AA:1316:G:O3'	14:AN:18:VAL:HG22	2.12	0.48
1:AA:1410:G:H2'	1:AA:1411:C:C6	2.49	0.48
2:AB:132:LYS:HA	2:AB:135:GLN:OE1	2.14	0.48
16:AP:3:LYS:HG2	16:AP:65:GLN:O	2.13	0.48
17:AQ:86:GLU:O	17:AQ:90:ILE:HG12	2.14	0.48
20:AT:50:GLU:CB	20:AT:99:LEU:HD12	2.41	0.48
20:AT:89:ARG:HD2	20:AT:104:LEU:HD11	1.94	0.48
22:AW:71:G:N3	36:BA:1851:U:H4'	2.29	0.48
25:AZ:134:PHE:HD1	25:AZ:171:ILE:HB	1.77	0.48
25:AZ:256:VAL:HA	25:AZ:262:THR:HG22	1.95	0.48
30:B4:9:LEU:HD13	30:B4:26:SER:O	2.13	0.48
36:BA:425:G:O2'	36:BA:426:C:H5'	2.14	0.48
36:BA:438:G:H2'	36:BA:440:G:H8	1.78	0.48
36:BA:566:U:O4	54:BV:78:LYS:HE2	2.14	0.48
36:BA:674:G:N3	41:BF:74:ARG:NH1	2.62	0.48
36:BA:761:A:C8	36:BA:761:A:H3'	2.49	0.48
36:BA:780:G:OP1	39:BD:218:ARG:NH2	2.44	0.48
36:BA:978:G:C2	36:BA:986:C:N3	2.81	0.48
36:BA:990:A:OP2	36:BA:991:C:OP2	2.31	0.48
36:BA:1274:A:N3	36:BA:1297:C:H1'	2.28	0.48
36:BA:1336:A:H2'	36:BA:1337:G:H8	1.78	0.48
36:BA:1782:C:H1'	36:BA:2609:U:C5'	2.44	0.48
36:BA:2023:G:H4'	36:BA:2617:C:O3'	2.13	0.48
36:BA:2762:G:H2'	36:BA:2763:G:H5'	1.94	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2842:G:O2'	36:BA:2843:G:H5'	2.14	0.48
40:BE:60:ASN:O	40:BE:61:ARG:C	2.55	0.48
41:BF:89:VAL:HG12	41:BF:90:PHE:H	1.76	0.48
41:BF:125:LEU:HD23	41:BF:125:LEU:H	1.76	0.48
43:BH:130:ARG:O	43:BH:131:VAL:HG23	2.13	0.48
54:BV:52:VAL:HG22	54:BV:52:VAL:O	2.14	0.48
55:BW:22:ASP:HA	55:BW:25:ARG:NH1	2.23	0.48
55:BW:37:ARG:HG2	55:BW:38:TYR:CD2	2.49	0.48
58:BZ:126:VAL:O	58:BZ:126:VAL:HG23	2.12	0.48
1:CA:814:A:H2'	1:CA:816:A:C5'	2.44	0.48
1:CA:1250:A:H4'	9:CI:68:GLY:H	1.78	0.48
1:CA:1305:G:C5'	21:CU:4:GLY:HA3	2.42	0.48
7:CG:37:ASN:HD21	9:CI:40:LEU:HA	1.77	0.48
7:CG:118:VAL:CG2	7:CG:119:ARG:N	2.77	0.48
17:CQ:52:LYS:H	17:CQ:52:LYS:CD	2.10	0.48
25:CZ:28:THR:HG23	25:CZ:79:HIS:CE1	2.48	0.48
32:D6:22:ALA:HB2	32:D6:39:TYR:CZ	2.49	0.48
32:D6:25:LYS:HE3	34:D8:35:GLN:OE1	2.14	0.48
36:DA:92:A:H3'	36:DA:93:G:H8	1.79	0.48
36:DA:481:G:P	57:DY:47:LYS:HD3	2.52	0.48
36:DA:492:A:H2'	36:DA:493:G:O4'	2.14	0.48
36:DA:623:G:H2'	36:DA:624:C:C6	2.49	0.48
36:DA:664:C:O4'	36:DA:940:G:H5"	2.14	0.48
36:DA:2257:U:O2'	36:DA:2258:C:H5'	2.14	0.48
36:DA:2692:C:H1'	36:DA:2847:U:O2'	2.13	0.48
40:DE:3:GLY:O	40:DE:4:ILE:HB	2.13	0.48
40:DE:81:ILE:O	40:DE:81:ILE:CG2	2.61	0.48
40:DE:144:ARG:HG3	40:DE:145:LYS:N	2.29	0.48
42:DG:38:VAL:HG12	42:DG:93:THR:HA	1.96	0.48
47:DO:24:VAL:CG1	47:DO:33:ALA:HB2	2.43	0.48
48:DP:84:ASN:N	48:DP:84:ASN:ND2	2.59	0.48
48:DP:102:ARG:HB2	48:DP:102:ARG:NH1	2.28	0.48
48:DP:105:LEU:H	48:DP:105:LEU:CD1	2.24	0.48
49:DQ:60:ARG:HB3	49:DQ:60:ARG:CZ	2.43	0.48
52:DT:30:VAL:O	52:DT:31:SER:HB3	2.12	0.48
1:AA:276:G:O2'	17:AQ:68:ARG:NH1	2.47	0.48
1:AA:369:C:O2'	1:AA:370:C:O5'	2.32	0.48
1:AA:807:A:H2'	1:AA:808:C:C6	2.49	0.48
1:AA:945:G:H2'	1:AA:945:G:N3	2.27	0.48
1:AA:1002:G:H2'	1:AA:1003:G:O4'	2.13	0.48
1:AA:1485:U:O2'	1:AA:1486:G:H5'	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:47:THR:HG23	2:AB:202:PRO:O	2.12	0.48
2:AB:56:ARG:HH11	2:AB:56:ARG:HG3	1.78	0.48
2:AB:127:ILE:HG22	2:AB:128:GLU:N	2.28	0.48
2:AB:130:ARG:NH2	2:AB:134:GLU:HG3	2.24	0.48
2:AB:221:LEU:HD13	2:AB:221:LEU:O	2.13	0.48
2:AB:224:GLN:C	2:AB:226:ARG:N	2.70	0.48
3:AC:84:ILE:O	3:AC:88:ARG:HG3	2.12	0.48
4:AD:145:GLU:C	4:AD:146:ILE:HD13	2.38	0.48
8:AH:30:ARG:HH11	8:AH:30:ARG:CB	2.25	0.48
9:AI:20:ARG:HB2	9:AI:20:ARG:HH11	1.72	0.48
10:AJ:86:MET:O	10:AJ:87:THR:HG23	2.13	0.48
13:AM:28:ALA:O	13:AM:32:GLU:HB2	2.14	0.48
19:AS:13:ASP:C	19:AS:15:LEU:H	2.22	0.48
20:AT:62:LEU:H	20:AT:62:LEU:CD1	2.12	0.48
20:AT:74:LYS:HB2	20:AT:75:ASN:H	1.44	0.48
25:AZ:187:LYS:HD2	25:AZ:187:LYS:N	2.29	0.48
28:B2:62:THR:O	28:B2:66:GLU:N	2.47	0.48
34:B8:15:LYS:HD3	48:BP:65:ARG:HH21	1.78	0.48
36:BA:86:C:H2'	36:BA:87:C:C6	2.48	0.48
36:BA:152:G:H1	36:BA:174:C:H42	1.60	0.48
36:BA:363(E):U:H3'	36:BA:363(F):A:O4'	2.14	0.48
36:BA:1315:C:O2'	36:BA:1316:U:H5'	2.13	0.48
36:BA:1403:C:H2'	36:BA:1404:C:O5'	2.14	0.48
36:BA:1504:C:O2'	36:BA:1505:C:C5'	2.61	0.48
36:BA:2881:C:H2'	36:BA:2882:A:H8	1.79	0.48
36:BA:2887:U:H2'	36:BA:2888:C:C6	2.49	0.48
40:BE:81:ILE:O	40:BE:81:ILE:CG2	2.59	0.48
41:BF:85:GLY:O	41:BF:86:GLY:O	2.31	0.48
41:BF:150:GLY:HA2	41:BF:172:TRP:CD2	2.48	0.48
44:BJ:99:UNK:C	44:BJ:101:UNK:N	2.71	0.48
46:BN:87:LEU:CD1	46:BN:91:LEU:HG	2.43	0.48
50:BR:28:LEU:HD12	50:BR:114:VAL:HG21	1.95	0.48
52:BT:94:ALA:HB1	52:BT:99:LEU:HD23	1.96	0.48
1:CA:46:G:O2'	1:CA:365:U:H1'	2.13	0.48
1:CA:345:C:H1'	1:CA:346:G:N2	2.29	0.48
1:CA:405:U:O2	1:CA:498:U:H2'	2.14	0.48
1:CA:632:A:H8	1:CA:633:G:C8	2.32	0.48
1:CA:939:G:H5"	7:CG:102:ARG:CZ	2.42	0.48
1:CA:1005:A:C3'	1:CA:1006:C:H5'	2.44	0.48
2:CB:142:LEU:CD2	2:CB:146:GLN:NE2	2.77	0.48
3:CC:79:ARG:O	3:CC:82:GLU:OE1	2.31	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:106:TYR:C	4:CD:108:LEU:H	2.22	0.48
4:CD:110:PHE:N	4:CD:110:PHE:HD1	2.11	0.48
9:CI:40:LEU:C	9:CI:42:ARG:N	2.70	0.48
10:CJ:12:ASP:OD1	10:CJ:12:ASP:C	2.57	0.48
13:CM:9:ILE:HD13	42:DG:146:TYR:CE2	2.49	0.48
22:CW:6:G:O2'	22:CW:7:A:H5'	2.13	0.48
22:CW:39:U:H5'	22:CW:39:U:O2	2.12	0.48
25:CZ:254:GLU:CD	25:CZ:307:PRO:HA	2.38	0.48
31:D5:50:GLY:O	31:D5:51:TYR:C	2.56	0.48
36:DA:189:G:H2'	36:DA:205:G:H22	1.77	0.48
36:DA:782:A:C6	39:DD:226:MET:HE2	2.48	0.48
36:DA:1750:G:H2'	36:DA:1751:C:C6	2.48	0.48
36:DA:2312:U:C2'	36:DA:2313:C:H5"	2.42	0.48
37:DB:73:A:C4	37:DB:105:A:C2	3.01	0.48
38:DC:74:VAL:HG11	38:DC:153:ILE:HG23	1.94	0.48
39:DD:222:ARG:O	39:DD:224:ALA:O	2.32	0.48
42:DG:145:THR:HB	42:DG:148:MET:CB	2.44	0.48
43:DH:76:VAL:C	43:DH:78:GLY:N	2.68	0.48
46:DN:15:LEU:O	46:DN:136:GLU:HA	2.14	0.48
46:DN:134:ARG:N	46:DN:135:PRO:HD3	2.28	0.48
47:DO:25:LEU:HB2	47:DO:38:VAL:HG23	1.96	0.48
48:DP:114:ILE:HB	48:DP:130:PHE:CD2	2.48	0.48
50:DR:86:ARG:HB3	50:DR:118:GLU:OE2	2.14	0.48
57:DY:28:LYS:CE	57:DY:28:LYS:N	2.76	0.48
1:AA:499:A:H4'	1:AA:500:G:H5'	1.96	0.48
1:AA:770:C:O2'	1:AA:771:G:H5'	2.14	0.48
1:AA:1003:G:H21	1:AA:1039:C:N4	2.10	0.48
1:AA:1229:A:OP2	13:AM:114:ARG:HD3	2.13	0.48
1:AA:1410:G:H2'	1:AA:1411:C:H6	1.78	0.48
1:AA:1511:G:C2'	1:AA:1512:U:H5'	2.44	0.48
1:AA:1536:C:C2'	1:AA:1537:U:O4'	2.60	0.48
10:AJ:16:LEU:CD1	10:AJ:70:ARG:HG2	2.44	0.48
12:AL:119:LYS:O	12:AL:120:TYR:CB	2.62	0.48
13:AM:11:ARG:CG	13:AM:12:ASN:H	2.10	0.48
15:AO:29:VAL:HG11	15:AO:67:LEU:HD21	1.96	0.48
19:AS:31:ILE:HG23	19:AS:49:ILE:HA	1.96	0.48
26:B0:15:ASP:OD1	26:B0:16:SER:N	2.42	0.48
36:BA:332:A:O2'	36:BA:333:G:P	2.72	0.48
36:BA:1537:G:H2'	36:BA:1538:G:H8	1.79	0.48
36:BA:1751:C:O2'	36:BA:1752:C:H5'	2.13	0.48
36:BA:2312:U:C2'	36:BA:2313:C:H5"	2.43	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2869:G:H2'	36:BA:2870:C:H6	1.78	0.48
39:BD:238:GLY:O	39:BD:239:ARG:C	2.56	0.48
41:BF:7:TYR:HD2	41:BF:16:GLY:HA3	1.78	0.48
41:BF:21:ALA:C	41:BF:23:ASP:H	2.21	0.48
47:BO:10:VAL:HG21	47:BO:16:ALA:C	2.39	0.48
50:BR:13:HIS:O	50:BR:14:SER:C	2.56	0.48
53:BU:19:LYS:O	53:BU:22:LYS:HG2	2.14	0.48
55:BW:4:LYS:HG2	55:BW:5:ALA:H	1.76	0.48
57:BY:13:VAL:HG22	57:BY:14:LEU:N	2.29	0.48
58:BZ:48:PHE:O	58:BZ:52:SER:N	2.47	0.48
58:BZ:120:ILE:HG22	58:BZ:120:ILE:O	2.12	0.48
1:CA:499:A:H4'	1:CA:500:G:H5'	1.95	0.48
1:CA:995:C:O2'	1:CA:996:A:H8	1.97	0.48
1:CA:1003:G:H21	1:CA:1039:C:N4	2.11	0.48
4:CD:114:ARG:NH1	4:CD:114:ARG:CG	2.75	0.48
6:CF:22:GLU:O	6:CF:25:ILE:HG22	2.13	0.48
13:CM:57:ARG:HH12	30:D4:34:GLU:HG3	1.78	0.48
13:CM:88:ARG:HG2	13:CM:88:ARG:NH1	2.25	0.48
20:CT:50:GLU:CB	20:CT:99:LEU:HD12	2.40	0.48
22:CV:63:G:H8	22:CV:63:G:H5'	1.79	0.48
25:CZ:219:LYS:HB2	25:CZ:244:ARG:HB2	1.96	0.48
27:D1:90:ILE:O	27:D1:94:LEU:HD13	2.14	0.48
29:D3:11:SER:HB3	36:DA:988:A:P	2.53	0.48
29:D3:29:ARG:HH11	29:D3:29:ARG:CB	2.19	0.48
35:D9:29:ASN:O	35:D9:29:ASN:ND2	2.46	0.48
36:DA:20:C:O2'	36:DA:21:A:H5'	2.14	0.48
36:DA:64:A:O2'	36:DA:65:C:H5'	2.14	0.48
36:DA:326:G:H2'	36:DA:327:G:C8	2.47	0.48
36:DA:500:G:H22	36:DA:502:A:H3'	1.79	0.48
36:DA:566:U:O4	54:DV:78:LYS:HE2	2.13	0.48
36:DA:630:G:H4'	36:DA:640:C:H4'	1.94	0.48
36:DA:645:C:H5'	36:DA:646:A:OP1	2.14	0.48
36:DA:723:G:H2'	36:DA:724:U:C6	2.49	0.48
36:DA:845:G:OP2	36:DA:845:G:C8	2.59	0.48
36:DA:1259:G:O2'	36:DA:1260:G:H5'	2.14	0.48
36:DA:1652:A:H2'	36:DA:1653:G:H5'	1.95	0.48
36:DA:2105:C:N3	36:DA:2184:G:N2	2.61	0.48
36:DA:2208:A:O2'	36:DA:2219:G:C8	2.63	0.48
39:DD:226:MET:HB3	39:DD:230:ASP:HB2	1.94	0.48
42:DG:34:LEU:HA	42:DG:161:THR:HA	1.95	0.48
42:DG:125:PHE:O	42:DG:126:ASP:C	2.57	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DN:34:LEU:HD13	46:DN:34:LEU:O	2.13	0.48
48:DP:16:ARG:O	48:DP:18:ARG:N	2.47	0.48
48:DP:110:TYR:O	48:DP:111:ARG:C	2.57	0.48
51:DS:74:ALA:O	51:DS:76:LYS:N	2.46	0.48
52:DT:13:ARG:HH12	52:DT:15:VAL:HG12	1.79	0.48
52:DT:28:VAL:HG22	52:DT:46:GLU:CA	2.43	0.48
55:DW:4:LYS:HG2	55:DW:5:ALA:H	1.78	0.48
55:DW:36:LEU:HD11	55:DW:47:VAL:HG12	1.96	0.48
1:AA:640:A:O2'	8:AH:115:SER:HB2	2.14	0.48
1:AA:1137:C:O2'	1:AA:1138:G:N2	2.45	0.48
1:AA:1330:U:H3'	1:AA:1331:G:O4'	2.14	0.48
2:AB:231:GLU:HA	2:AB:232:PRO:HD3	1.68	0.48
4:AD:106:TYR:C	4:AD:108:LEU:H	2.21	0.48
6:AF:15:ASP:OD2	6:AF:17:SER:HB2	2.14	0.48
9:AI:111:ARG:HG2	9:AI:112:LYS:N	2.29	0.48
13:AM:57:ARG:HH12	30:B4:34:GLU:CG	2.27	0.48
15:AO:66:LEU:O	15:AO:69:TYR:HB3	2.13	0.48
16:AP:44:THR:O	16:AP:45:THR:HB	2.13	0.48
19:AS:21:GLU:HG3	19:AS:21:GLU:O	2.14	0.48
19:AS:36:ARG:HB2	19:AS:72:GLY:HA3	1.94	0.48
20:AT:72:LEU:O	20:AT:74:LYS:N	2.47	0.48
22:AV:1:G:C1'	26:B0:5:LYS:NZ	2.76	0.48
24:AY:21:A:H5'	24:AY:22:G:OP1	2.13	0.48
24:AY:76:A:H5"	25:AZ:231:ILE:HD11	1.94	0.48
25:AZ:134:PHE:CG	25:AZ:202:LEU:HD22	2.49	0.48
25:AZ:349:VAL:HG23	25:AZ:374:LEU:HD22	1.96	0.48
32:B6:48:VAL:O	32:B6:49:HIS:O	2.32	0.48
36:BA:199:A:N6	36:BA:2433:A:H2'	2.28	0.48
36:BA:359:A:C2	36:BA:360:G:H1'	2.48	0.48
36:BA:383:U:H2'	36:BA:385:C:H5	1.78	0.48
36:BA:433:C:O2'	36:BA:434:U:H5'	2.14	0.48
36:BA:523:C:H5"	36:BA:540:C:O2'	2.14	0.48
36:BA:654(N):G:N7	36:BA:654(O):G:C4	2.81	0.48
36:BA:1257:C:H2'	36:BA:1258:C:C6	2.47	0.48
36:BA:1290:C:H2'	36:BA:1291:C:C6	2.49	0.48
36:BA:1677:A:H2'	36:BA:1678:G:H8	1.79	0.48
36:BA:1826:G:H4'	39:BD:242:ARG:NH2	2.24	0.48
36:BA:2415:G:H2'	36:BA:2416:C:C6	2.49	0.48
36:BA:2692:C:H1'	36:BA:2847:U:O2'	2.14	0.48
37:BB:68:C:O2'	37:BB:69:G:H5'	2.14	0.48
37:BB:91:C:OP1	49:BQ:16:ARG:HD2	2.14	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BD:35:LYS:HB3	39:BD:36:PRO:CD	2.42	0.48
39:BD:35:LYS:O	39:BD:62:TYR:O	2.32	0.48
40:BE:64:LYS:C	40:BE:66:HIS:H	2.22	0.48
42:BG:107:LEU:HD12	42:BG:178:PHE:CE1	2.49	0.48
43:BH:126:PRO:O	43:BH:127:GLU:HG3	2.13	0.48
45:BK:59:UNK:HA	45:BK:64:UNK:O	2.14	0.48
46:BN:46:VAL:O	46:BN:47:ALA:CB	2.60	0.48
46:BN:55:VAL:HG22	46:BN:56:ASN:H	1.78	0.48
46:BN:56:ASN:H	46:BN:125:GLY:HA3	1.79	0.48
48:BP:59:LEU:CA	48:BP:61:ARG:HE	2.27	0.48
48:BP:74:GLU:C	48:BP:75:ILE:HD12	2.39	0.48
49:BQ:134:ARG:HA	49:BQ:137:TYR:CD1	2.49	0.48
51:BS:99:LYS:NZ	51:BS:99:LYS:CB	2.70	0.48
52:BT:27:THR:H	52:BT:49:VAL:HG12	1.78	0.48
52:BT:84:GLN:O	52:BT:85:LYS:HG3	2.13	0.48
1:CA:173:U:H5"	1:CA:197:A:O4'	2.14	0.48
1:CA:319:G:O2'	1:CA:320:C:H5'	2.13	0.48
1:CA:1255:G:C5'	3:CC:26:LYS:HE2	2.43	0.48
2:CB:166:ASP:HB3	2:CB:169:LYS:HB2	1.95	0.48
8:CH:7:ALA:HB2	8:CH:85:ARG:CD	2.39	0.48
9:CI:99:LEU:O	9:CI:101:PHE:N	2.47	0.48
10:CJ:7:LYS:O	10:CJ:8:LEU:HD12	2.13	0.48
11:CK:108:ILE:O	18:CR:87:ARG:N	2.47	0.48
12:CL:111:LYS:O	12:CL:112:ASP:HB2	2.14	0.48
13:CM:2:ALA:N	13:CM:9:ILE:HG23	2.29	0.48
13:CM:52:GLU:HG2	13:CM:55:ARG:NH1	2.29	0.48
25:CZ:314:THR:HG23	25:CZ:374:LEU:O	2.13	0.48
27:D1:58:ILE:HD12	27:D1:59:THR:H	1.79	0.48
32:D6:5:VAL:O	32:D6:6:ARG:CB	2.61	0.48
34:D8:50:LEU:O	34:D8:51:ALA:CB	2.62	0.48
36:DA:90:U:O4'	36:DA:92:A:C8	2.67	0.48
36:DA:102:G:OP1	36:DA:102:G:H4'	2.14	0.48
36:DA:278:A:N6	36:DA:362:U:H3	2.09	0.48
36:DA:438:G:O2'	36:DA:440:G:H5'	2.13	0.48
36:DA:558:G:P	46:DN:111:PRO:HD2	2.53	0.48
36:DA:1315:C:O2'	36:DA:1316:U:H5'	2.13	0.48
36:DA:1607:C:H4'	36:DA:1608:A:O5'	2.14	0.48
36:DA:1899:G:C2'	36:DA:1900:A:OP2	2.61	0.48
36:DA:2175:C:N3	36:DA:2176:A:C2	2.82	0.48
36:DA:2248:C:H2'	36:DA:2249:U:C5'	2.44	0.48
36:DA:2555:U:C2'	36:DA:2556:C:H5'	2.44	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DE:30:PRO:HD3	40:DE:180:ASN:ND2	2.29	0.48
40:DE:33:VAL:HG12	40:DE:69:LYS:HD2	1.95	0.48
40:DE:76:ARG:O	40:DE:77:ILE:C	2.57	0.48
41:DF:44:ARG:HG2	41:DF:44:ARG:O	2.13	0.48
41:DF:108:LYS:HB3	41:DF:112:MET:HE3	1.96	0.48
42:DG:46:ALA:HB2	42:DG:88:ILE:CG1	2.42	0.48
42:DG:51:ARG:HH11	42:DG:53:LEU:HD21	1.79	0.48
42:DG:128:ARG:O	42:DG:130:ASN:N	2.47	0.48
42:DG:181:ARG:O	42:DG:182:LYS:OXT	2.32	0.48
43:DH:109:PHE:CZ	43:DH:152:ARG:NH1	2.82	0.48
48:DP:98:GLU:H	48:DP:101:VAL:HG13	1.79	0.48
51:DS:77:ALA:O	51:DS:78:LEU:C	2.57	0.48
54:DV:49:THR:O	54:DV:50:PRO:C	2.55	0.48
55:DW:4:LYS:CG	55:DW:5:ALA:N	2.77	0.48
57:DY:6:HIS:CD2	57:DY:6:HIS:H	2.32	0.48
57:DY:22:GLY:O	57:DY:23:ARG:C	2.57	0.48
57:DY:73:ARG:O	57:DY:74:PRO:O	2.31	0.48
1:AA:41:G:H2'	1:AA:42:G:C8	2.49	0.48
1:AA:46:G:O2'	1:AA:365:U:H1'	2.14	0.48
1:AA:109:A:O3'	1:AA:110:C:H6	1.96	0.48
1:AA:345:C:H1'	1:AA:346:G:N2	2.29	0.48
1:AA:933:G:OP2	7:AG:3:ARG:HB3	2.14	0.48
1:AA:1116:C:H2'	1:AA:1117:G:H5'	1.96	0.48
1:AA:1117:G:H5'	1:AA:1117:G:C8	2.46	0.48
4:AD:107:ARG:HH21	4:AD:194:LEU:HD12	1.79	0.48
9:AI:33:PHE:C	9:AI:35:GLU:N	2.72	0.48
16:AP:58:TYR:O	16:AP:62:VAL:HG22	2.14	0.48
22:AV:63:G:H5'	22:AV:63:G:H8	1.78	0.48
28:B2:51:ARG:HH21	28:B2:55:ARG:NH1	2.11	0.48
30:B4:25:TYR:O	30:B4:26:SER:HB3	2.13	0.48
35:B9:7:VAL:HG21	35:B9:36:GLN:H	1.78	0.48
36:BA:320:A:H2'	41:BF:136:THR:OG1	2.14	0.48
36:BA:473:G:P	36:BA:508:G:H22	2.37	0.48
36:BA:548:A:H2'	36:BA:549:G:C5'	2.44	0.48
36:BA:654(H):G:H2'	36:BA:654(I):C:C5'	2.39	0.48
36:BA:1658:C:H2'	36:BA:1659:U:H6	1.79	0.48
36:BA:2184:G:H2'	36:BA:2185:C:O4'	2.14	0.48
36:BA:2520:C:C6	36:BA:2567:G:H1'	2.49	0.48
36:BA:2651:C:O2'	36:BA:2652:C:H5'	2.13	0.48
37:BB:5:C:O2'	37:BB:6:C:H5'	2.13	0.48
39:BD:35:LYS:O	39:BD:36:PRO:C	2.55	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BD:70:TRP:CZ3	39:BD:150:LYS:HA	2.48	0.48
39:BD:146:GLU:HB2	39:BD:189:CYS:HB3	1.95	0.48
40:BE:9:VAL:HG13	40:BE:25:VAL:HB	1.95	0.48
41:BF:114:VAL:HG21	41:BF:202:PHE:HE1	1.78	0.48
42:BG:9:ARG:HB3	42:BG:13:GLU:OE2	2.14	0.48
45:BK:78:UNK:C	45:BK:80:UNK:N	2.76	0.48
46:BN:15:LEU:O	46:BN:136:GLU:HA	2.14	0.48
46:BN:22:THR:O	46:BN:25:ARG:HB2	2.14	0.48
46:BN:87:LEU:O	46:BN:88:GLU:C	2.57	0.48
47:BO:87:ILE:HG22	47:BO:88:ASN:O	2.14	0.48
50:BR:41:ALA:C	50:BR:43:GLU:N	2.72	0.48
50:BR:78:LYS:O	50:BR:83:ILE:HG12	2.14	0.48
51:BS:74:ALA:O	51:BS:76:LYS:N	2.47	0.48
54:BV:18:LEU:HD23	54:BV:19:LYS:N	2.18	0.48
1:CA:155:C:H2'	1:CA:156:G:C8	2.49	0.48
1:CA:542:G:H2'	1:CA:543:C:C6	2.45	0.48
3:CC:35:GLU:CG	3:CC:59:ARG:HH22	2.27	0.48
3:CC:79:ARG:O	3:CC:82:GLU:OE2	2.32	0.48
3:CC:190:ARG:HG3	3:CC:190:ARG:HH11	1.78	0.48
4:CD:121:VAL:CA	4:CD:126:ILE:HD13	2.44	0.48
25:CZ:134:PHE:HD1	25:CZ:171:ILE:HB	1.78	0.48
25:CZ:146:LEU:O	25:CZ:150:VAL:HG23	2.14	0.48
27:D1:20:ARG:HB2	27:D1:32:LYS:HG3	1.96	0.48
35:D9:31:LYS:HE2	36:DA:2478:A:H5'	1.95	0.48
36:DA:288:C:H2'	36:DA:289:A:H8	1.79	0.48
36:DA:1061:U:H4'	36:DA:1070:A:C1'	2.43	0.48
36:DA:1498:C:O4'	36:DA:1577:C:H4'	2.14	0.48
36:DA:1842:G:H2'	36:DA:1843:C:C6	2.48	0.48
36:DA:1902:C:C5'	39:DD:246:PRO:HD3	2.44	0.48
36:DA:2839:G:H2'	36:DA:2840:C:C6	2.48	0.48
38:DC:79:LYS:HA	38:DC:97:GLU:CD	2.39	0.48
39:DD:201:HIS:C	39:DD:203:ASN:H	2.21	0.48
42:DG:8:LYS:O	42:DG:11:TYR:HB3	2.13	0.48
42:DG:32:PRO:HB3	42:DG:163:ALA:HA	1.96	0.48
48:DP:46:LYS:HG2	48:DP:52:GLU:OE2	2.14	0.48
50:DR:13:HIS:O	50:DR:14:SER:C	2.57	0.48
51:DS:99:LYS:NZ	51:DS:99:LYS:CB	2.72	0.48
54:DV:21:ARG:HB3	54:DV:91:TYR:HB2	1.96	0.48
56:DX:24:GLY:O	56:DX:83:VAL:N	2.47	0.48
57:DY:94:LYS:O	57:DY:94:LYS:HG3	2.14	0.48
1:AA:814:A:H2'	1:AA:816:A:C5'	2.44	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1029:C:H4'	1:AA:1033:G:N2	2.29	0.47
1:AA:1142:G:C8	1:AA:1143:G:C8	3.02	0.47
1:AA:1202:G:O2'	1:AA:1203:C:H5'	2.13	0.47
1:AA:1228:C:OP1	13:AM:108:ARG:NH2	2.47	0.47
1:AA:1286:A:H1'	1:AA:1287:A:H4'	1.95	0.47
1:AA:1317:C:H2'	1:AA:1318:A:O4'	2.14	0.47
2:AB:122:PHE:O	2:AB:127:ILE:HD11	2.14	0.47
2:AB:142:LEU:CD2	2:AB:146:GLN:NE2	2.76	0.47
4:AD:120:LEU:HB3	4:AD:126:ILE:CD1	2.33	0.47
7:AG:15:ASP:HB3	7:AG:20:ASP:H	1.78	0.47
7:AG:118:VAL:HG23	7:AG:119:ARG:N	2.28	0.47
9:AI:5:TYR:O	9:AI:84:ALA:HA	2.14	0.47
9:AI:53:VAL:O	9:AI:53:VAL:HG23	2.14	0.47
11:AK:125:PHE:C	11:AK:127:LYS:H	2.20	0.47
12:AL:111:LYS:O	12:AL:112:ASP:HB2	2.13	0.47
19:AS:45:VAL:C	19:AS:47:HIS:H	2.18	0.47
25:AZ:32:THR:HG22	25:AZ:70:TYR:HB3	1.95	0.47
25:AZ:98:GLN:HG2	25:AZ:226:GLU:OE2	2.13	0.47
28:B2:58:ALA:O	28:B2:61:LEU:HB2	2.13	0.47
30:B4:19:GLY:O	30:B4:21:VAL:HG23	2.14	0.47
36:BA:326:G:H2'	36:BA:327:G:C8	2.47	0.47
36:BA:480:A:H1'	57:BY:44:ILE:HG21	1.95	0.47
36:BA:519:U:H2'	36:BA:520:G:C8	2.48	0.47
36:BA:1517:G:O2'	36:BA:1518:U:H5'	2.14	0.47
36:BA:1529:G:C2	36:BA:1541:G:N2	2.81	0.47
36:BA:2206:G:H21	36:BA:2207:G:C4'	2.27	0.47
36:BA:2777:G:C4'	36:BA:2778:A:H5'	2.43	0.47
36:BA:2882:A:H5'	50:BR:96:ARG:HG3	1.96	0.47
40:BE:87:GLU:O	40:BE:87:GLU:OE1	2.32	0.47
41:BF:124:LEU:O	41:BF:193:VAL:HA	2.14	0.47
42:BG:47:LYS:HZ1	42:BG:88:ILE:HD11	1.76	0.47
42:BG:106:LEU:HD12	42:BG:141:PHE:CE1	2.44	0.47
46:BN:91:LEU:CD2	46:BN:98:VAL:HG21	2.43	0.47
47:BO:66:LYS:H	47:BO:82:ASN:ND2	2.12	0.47
48:BP:112:LEU:HD22	48:BP:113:LYS:N	2.29	0.47
53:BU:92:ARG:NH1	54:BV:11:GLN:O	2.47	0.47
56:BX:49:VAL:HG12	56:BX:87:GLN:NE2	2.28	0.47
58:BZ:108:PRO:C	58:BZ:110:GLY:H	2.22	0.47
1:CA:21:G:H2'	1:CA:22:G:C8	2.49	0.47
1:CA:424:G:H2'	1:CA:425:G:C8	2.38	0.47
1:CA:1222:G:O2'	1:CA:1223:C:H5'	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:170:VAL:HG12	4:CD:171:GLY:N	2.29	0.47
5:CE:83:GLU:HG2	5:CE:88:LYS:HB2	1.96	0.47
7:CG:143:ARG:O	7:CG:145:ALA:O	2.32	0.47
13:CM:77:ASN:O	13:CM:81:LEU:CD2	2.62	0.47
13:CM:118:ALA:HB3	22:CV:29:G:C5'	2.44	0.47
16:CP:58:TYR:O	16:CP:62:VAL:HG22	2.14	0.47
16:CP:64:ALA:O	16:CP:66:PRO:HD3	2.13	0.47
19:CS:12:ASP:O	19:CS:15:LEU:HB2	2.14	0.47
22:CW:17:C:H42	36:DA:2110:G:H21	1.61	0.47
25:CZ:126:VAL:O	25:CZ:126:VAL:HG12	2.13	0.47
25:CZ:134:PHE:CD1	25:CZ:202:LEU:HD22	2.49	0.47
27:D1:82:LEU:HD12	27:D1:83:GLU:H	1.78	0.47
28:D2:16:LEU:N	28:D2:67:LYS:NZ	2.62	0.47
30:D4:5:ILE:O	30:D4:5:ILE:CG1	2.62	0.47
36:DA:431:U:O2'	36:DA:432:A:H5'	2.14	0.47
36:DA:605:C:H5	36:DA:623:G:N1	2.08	0.47
36:DA:669:G:N3	36:DA:669:G:H2'	2.29	0.47
36:DA:745:G:OP1	40:DE:133:LYS:HE3	2.13	0.47
36:DA:1097:U:H2'	36:DA:1098:A:C8	2.48	0.47
36:DA:1472:A:C2'	36:DA:1473:G:H5'	2.44	0.47
36:DA:2121:G:H2'	36:DA:2122:U:C6	2.49	0.47
36:DA:2133:G:OP1	36:DA:2133:G:H4'	2.13	0.47
36:DA:2309:A:H2'	36:DA:2310:A:H5'	1.96	0.47
36:DA:2818:G:H4'	36:DA:2837:G:O4'	2.14	0.47
40:DE:60:ASN:O	40:DE:61:ARG:C	2.56	0.47
41:DF:21:ALA:C	41:DF:23:ASP:H	2.20	0.47
48:DP:35:HIS:C	48:DP:36:LYS:HG3	2.39	0.47
50:DR:7:GLY:O	50:DR:8:ARG:CZ	2.62	0.47
1:AA:1153:C:O2'	1:AA:1154:G:H5"	2.14	0.47
2:AB:142:LEU:HD21	2:AB:146:GLN:HE21	1.79	0.47
4:AD:36:ARG:C	4:AD:38:TYR:N	2.72	0.47
14:AN:22:THR:O	14:AN:23:ARG:HB3	2.14	0.47
17:AQ:33:GLY:O	17:AQ:34:LYS:C	2.57	0.47
25:AZ:222:LEU:CD1	25:AZ:303:VAL:HB	2.44	0.47
27:B1:56:GLN:OE1	27:B1:56:GLN:HA	2.13	0.47
27:B1:85:LEU:O	27:B1:86:SER:HB3	2.14	0.47
31:B5:41:PRO:O	31:B5:44:THR:OG1	2.29	0.47
36:BA:102:G:H4'	36:BA:102:G:OP1	2.14	0.47
36:BA:391:G:C2'	36:BA:392:C:H5'	2.44	0.47
36:BA:558:G:P	46:BN:111:PRO:HD2	2.54	0.47
36:BA:907:U:OP1	49:BQ:24:GLY:N	2.47	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1485:G:O6	36:BA:1504:C:N3	2.46	0.47
36:BA:1607:C:H4'	36:BA:1608:A:O5'	2.14	0.47
36:BA:1675:C:H2'	36:BA:1676:A:O4'	2.13	0.47
36:BA:1720:U:H2'	36:BA:1721:G:O4'	2.14	0.47
36:BA:2187:G:C3'	36:BA:2188:C:H5'	2.44	0.47
36:BA:2692:C:H2'	36:BA:2693:A:H8	1.79	0.47
36:BA:2742:C:O2'	36:BA:2743:C:H5'	2.13	0.47
37:BB:115:G:O4'	51:BS:47:THR:HB	2.14	0.47
38:BC:63:SER:HA	38:BC:160:ARG:HA	1.95	0.47
39:BD:34:VAL:O	39:BD:35:LYS:C	2.55	0.47
41:BF:113:ALA:HB1	41:BF:186:ILE:HG21	1.95	0.47
43:BH:85:LYS:CE	43:BH:85:LYS:C	2.87	0.47
43:BH:94:TYR:CE1	43:BH:108:GLY:N	2.80	0.47
56:BX:25:LYS:HD3	56:BX:80:ILE:HD11	1.96	0.47
57:BY:73:ARG:O	57:BY:74:PRO:O	2.31	0.47
58:BZ:97:GLU:HA	58:BZ:127:LYS:HA	1.96	0.47
1:CA:437:U:H5"	4:CD:155:LEU:CD1	2.44	0.47
1:CA:473:G:H2'	1:CA:474:G:H8	1.79	0.47
4:CD:121:VAL:HG22	4:CD:126:ILE:HG12	1.95	0.47
6:CF:28:ARG:O	6:CF:31:GLU:HB3	2.13	0.47
7:CG:140:ASP:OD1	7:CG:140:ASP:C	2.57	0.47
9:CI:5:TYR:CG	9:CI:6:GLY:N	2.81	0.47
14:CN:27:CYS:SG	14:CN:28:GLY:N	2.87	0.47
16:CP:50:LYS:HD3	16:CP:50:LYS:C	2.38	0.47
18:CR:67:ALA:O	18:CR:71:LYS:HG3	2.14	0.47
25:CZ:113:MET:HG3	25:CZ:114:PRO:CD	2.43	0.47
30:D4:45:GLY:O	30:D4:46:GLN:HB2	2.13	0.47
32:D6:15:GLU:CG	32:D6:18:ARG:NH1	2.71	0.47
34:D8:30:ARG:HA	34:D8:30:ARG:NE	2.27	0.47
36:DA:609:A:H2'	36:DA:610:G:O4'	2.15	0.47
36:DA:654(N):G:N7	36:DA:654(O):G:C4	2.82	0.47
36:DA:1485:G:O6	36:DA:1504:C:N3	2.47	0.47
36:DA:1537:G:H2'	36:DA:1538:G:H8	1.79	0.47
36:DA:2060:A:H62	41:DF:74:ARG:HH21	1.62	0.47
36:DA:2282:G:H5"	36:DA:2283:C:O4'	2.12	0.47
36:DA:2632:A:H2	40:DE:61:ARG:HD2	1.79	0.47
36:DA:2700:C:O2'	36:DA:2701:C:H5'	2.13	0.47
36:DA:2742:C:O2'	36:DA:2743:C:H5'	2.14	0.47
36:DA:2762:G:H2'	36:DA:2763:G:H5'	1.96	0.47
37:DB:112:U:H2'	37:DB:113:G:C8	2.47	0.47
40:DE:105:THR:HG21	40:DE:164:ARG:HH12	1.78	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DF:31:HIS:ND1	48:DP:13:ASN:HB2	2.29	0.47
43:DH:94:TYR:CE1	43:DH:108:GLY:N	2.79	0.47
47:DO:49:ARG:CD	47:DO:49:ARG:H	2.27	0.47
49:DQ:135:ASP:N	49:DQ:137:TYR:CD1	2.78	0.47
58:DZ:168:GLU:O	58:DZ:168:GLU:CD	2.57	0.47
1:AA:519:C:H2'	1:AA:520:A:O4'	2.14	0.47
1:AA:539:A:H2'	1:AA:540:G:H8	1.79	0.47
1:AA:603:U:H2'	1:AA:604:G:H8	1.78	0.47
1:AA:858:G:C5'	1:AA:858:G:C8	2.94	0.47
1:AA:1250:A:H5'	9:AI:67:GLY:HA2	1.95	0.47
1:AA:1308:U:OP1	13:AM:98:VAL:HG22	2.14	0.47
1:AA:1314:C:O2	1:AA:1314:C:O4'	2.33	0.47
4:AD:75:PHE:CE1	4:AD:93:PHE:CZ	3.02	0.47
9:AI:16:ARG:HG3	9:AI:16:ARG:HH11	1.78	0.47
12:AL:59:ARG:HH22	12:AL:63:GLY:HA2	1.79	0.47
13:AM:2:ALA:N	13:AM:9:ILE:HG23	2.29	0.47
14:AN:26:ARG:NH1	14:AN:47:LEU:HD21	2.22	0.47
16:AP:2:VAL:O	16:AP:64:ALA:HA	2.14	0.47
16:AP:5:ARG:NH1	16:AP:5:ARG:HG3	2.28	0.47
25:AZ:363:MET:HB3	25:AZ:364:PRO:HD2	1.96	0.47
32:B6:7:ILE:HG21	32:B6:29:ASN:HD22	1.80	0.47
32:B6:52:VAL:HG12	32:B6:53:LYS:HD3	1.95	0.47
36:BA:547:A:H2'	36:BA:548:A:H8	1.76	0.47
36:BA:1222:C:C2'	36:BA:1223:G:H5"	2.43	0.47
36:BA:2111:C:H1'	36:BA:2118:U:O4'	2.14	0.47
36:BA:2801(A):A:H5'	36:BA:2802:G:C8	2.47	0.47
41:BF:119:ARG:HH11	41:BF:119:ARG:HG2	1.80	0.47
42:BG:48:GLU:O	42:BG:50:ALA:N	2.47	0.47
42:BG:96:ARG:O	42:BG:98:ARG:N	2.48	0.47
43:BH:152:ARG:HG3	43:BH:152:ARG:HH11	1.79	0.47
44:BJ:26:UNK:HA	44:BJ:84:UNK:HA	1.95	0.47
45:BK:13:UNK:O	45:BK:52:UNK:HA	2.14	0.47
46:BN:4:TYR:O	46:BN:5:VAL:C	2.57	0.47
51:BS:74:ALA:HB2	51:BS:101:LEU:HD13	1.94	0.47
52:BT:78:LEU:O	52:BT:79:HIS:CD2	2.62	0.47
52:BT:102:ILE:HB	52:BT:110:ILE:CD1	2.45	0.47
52:BT:107:ASP:CG	52:BT:108:ARG:H	2.22	0.47
55:BW:29:LEU:CD1	55:BW:33:ARG:HD2	2.44	0.47
1:CA:542:G:H5'	4:CD:41:GLY:CA	2.44	0.47
1:CA:1003:G:N2	1:CA:1039:C:N4	2.59	0.47
1:CA:1116:C:H2'	1:CA:1117:G:H5'	1.96	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1124:G:C5'	10:CJ:35:SER:HB2	2.41	0.47
1:CA:1221:G:C2'	1:CA:1222:G:H5'	2.44	0.47
1:CA:1314:C:C5	1:CA:1315:U:C4	3.03	0.47
4:CD:192:GLU:O	4:CD:193:ASP:C	2.57	0.47
6:CF:9:VAL:HG22	6:CF:60:PHE:CE2	2.50	0.47
6:CF:53:ALA:O	6:CF:54:LYS:HB2	2.13	0.47
11:CK:48:ILE:HD11	11:CK:67:ASP:HB2	1.96	0.47
11:CK:124:LYS:HD2	11:CK:125:PHE:CE2	2.48	0.47
13:CM:99:ARG:C	13:CM:101:GLN:NE2	2.72	0.47
14:CN:41:ARG:HG2	14:CN:42:ILE:N	2.29	0.47
14:CN:44:LEU:HD12	14:CN:44:LEU:C	2.39	0.47
17:CQ:40:LYS:HD3	17:CQ:42:TYR:OH	2.14	0.47
25:CZ:187:LYS:N	25:CZ:187:LYS:HD2	2.29	0.47
28:D2:32:LEU:HA	28:D2:53:LEU:HD13	1.95	0.47
31:D5:56:LYS:NZ	31:D5:59:GLU:OE2	2.48	0.47
32:D6:32:ASN:CG	32:D6:33:LYS:N	2.71	0.47
34:D8:15:LYS:CG	48:DP:65:ARG:HH21	2.28	0.47
36:DA:83:G:H22	36:DA:102:G:H2'	1.79	0.47
36:DA:359:A:C2	36:DA:360:G:H1'	2.48	0.47
36:DA:512:G:O2'	36:DA:513:A:H8	1.98	0.47
36:DA:752:A:H4'	36:DA:753:C:O5'	2.14	0.47
36:DA:904:C:H2'	36:DA:905:U:C6	2.49	0.47
36:DA:907:U:OP1	49:DQ:24:GLY:N	2.46	0.47
36:DA:1907:G:O2'	36:DA:1908:C:H5'	2.14	0.47
36:DA:1925:C:O2'	36:DA:1926:U:H5'	2.15	0.47
36:DA:2025:C:H2'	36:DA:2026:C:C6	2.48	0.47
36:DA:2241:A:H2'	36:DA:2242:G:C8	2.50	0.47
36:DA:2444:G:OP2	41:DF:68:LYS:NZ	2.48	0.47
38:DC:72:VAL:HG23	38:DC:111:ASP:CB	2.31	0.47
38:DC:122:ALA:O	38:DC:126:LYS:HB2	2.14	0.47
39:DD:10:THR:HG23	39:DD:13:ARG:CB	2.39	0.47
39:DD:62:TYR:CD1	39:DD:62:TYR:C	2.92	0.47
39:DD:72:LYS:NZ	39:DD:75:ILE:HG13	2.29	0.47
40:DE:144:ARG:HG3	40:DE:145:LYS:H	1.80	0.47
41:DF:108:LYS:O	41:DF:112:MET:HE3	2.15	0.47
42:DG:18:GLU:CG	42:DG:175:LEU:HD13	2.44	0.47
42:DG:88:ILE:CG2	42:DG:89:GLY:N	2.77	0.47
42:DG:107:LEU:HD21	42:DG:178:PHE:CD1	2.49	0.47
43:DH:40:GLU:O	43:DH:41:MET:HB3	2.13	0.47
43:DH:136:ILE:HD12	43:DH:136:ILE:N	2.29	0.47
46:DN:22:THR:O	46:DN:25:ARG:HB2	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DN:132:ALA:O	46:DN:133:GLN:CB	2.62	0.47
53:DU:59:ARG:HH11	53:DU:59:ARG:CG	2.21	0.47
57:DY:2:ARG:HH11	57:DY:2:ARG:HG2	1.79	0.47
57:DY:73:ARG:HA	57:DY:73:ARG:HE	1.79	0.47
58:DZ:51:ALA:HB1	58:DZ:57:ILE:CD1	2.26	0.47
1:AA:35:G:H2'	1:AA:36:C:H6	1.78	0.47
1:AA:345:C:O5'	52:BT:41:ARG:NH2	2.47	0.47
1:AA:473:G:H2'	1:AA:474:G:H8	1.79	0.47
1:AA:1399:C:H4'	1:AA:1400:C:O5'	2.14	0.47
2:AB:17:PHE:HB3	2:AB:44:LEU:HD21	1.97	0.47
5:AE:144:THR:O	5:AE:145:LYS:C	2.57	0.47
9:AI:99:LEU:O	9:AI:101:PHE:N	2.47	0.47
16:AP:44:THR:O	16:AP:45:THR:HG22	2.14	0.47
20:AT:43:LEU:HB3	20:AT:48:LYS:HB2	1.97	0.47
22:AV:75:C:H2'	22:AV:76:A:O4'	2.14	0.47
25:AZ:325:LYS:HB2	25:AZ:331:HIS:HB3	1.97	0.47
26:B0:51:VAL:CG2	26:B0:81:VAL:HG23	2.44	0.47
29:B3:26:LEU:HB2	29:B3:28:LEU:HD22	1.97	0.47
31:B5:43:HIS:HE1	36:BA:2884:U:OP2	1.98	0.47
32:B6:22:ALA:HB2	32:B6:39:TYR:CZ	2.49	0.47
34:B8:23:VAL:CG1	34:B8:46:ARG:HD3	2.44	0.47
36:BA:45:C:H2'	36:BA:47:C:H6	1.74	0.47
36:BA:265:A:H1'	36:BA:266:G:O4'	2.13	0.47
36:BA:826:U:H2'	36:BA:828:U:O4'	2.13	0.47
36:BA:926:A:H5'	36:BA:926:A:C8	2.50	0.47
36:BA:996:A:H4'	53:BU:92:ARG:CD	2.44	0.47
36:BA:1166:C:H2'	36:BA:1167:U:H6	1.80	0.47
36:BA:1477:A:C2	36:BA:1515:G:C2	3.03	0.47
36:BA:1536:C:H2'	36:BA:1537:G:H4'	1.94	0.47
36:BA:1632:A:C5	36:BA:1633:G:C6	3.02	0.47
36:BA:2131:G:O4'	36:BA:2133:G:N3	2.48	0.47
36:BA:2292:C:H2'	36:BA:2293:C:H6	1.79	0.47
36:BA:2777:G:H4'	36:BA:2778:A:H5'	1.97	0.47
39:BD:62:TYR:HA	39:BD:87:ASN:HD21	1.80	0.47
39:BD:176:ARG:HG2	39:BD:176:ARG:NH1	2.28	0.47
43:BH:19:VAL:CG1	43:BH:20:ALA:H	2.15	0.47
47:BO:35:VAL:CG1	47:BO:69:ILE:HD13	2.43	0.47
51:BS:16:ASN:O	51:BS:18:ILE:N	2.47	0.47
51:BS:87:PHE:CG	51:BS:88:ASP:N	2.82	0.47
53:BU:92:ARG:CZ	54:BV:11:GLN:H	2.27	0.47
56:BX:13:LEU:HD23	56:BX:18:TYR:HE1	1.80	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BY:47:LYS:HD2	57:BY:60:PHE:HE1	1.79	0.47
58:BZ:103:ARG:NH2	58:BZ:136:PHE:CZ	2.82	0.47
58:BZ:128:VAL:CG2	58:BZ:129:SER:H	2.23	0.47
1:CA:731:G:H5'	1:CA:766:A:H4'	1.95	0.47
1:CA:1101:A:H4'	1:CA:1102:A:O5'	2.15	0.47
1:CA:1250:A:H5'	9:CI:67:GLY:HA2	1.96	0.47
1:CA:1325:C:H4'	21:CU:17:THR:HG21	1.97	0.47
4:CD:120:LEU:HB3	4:CD:126:ILE:CD1	2.34	0.47
12:CL:20:LYS:HD3	12:CL:20:LYS:N	2.10	0.47
12:CL:46:LYS:H	12:CL:92:ASP:HB3	1.80	0.47
16:CP:5:ARG:NE	16:CP:22:THR:CG2	2.77	0.47
17:CQ:47:PRO:HG2	17:CQ:48:GLU:H	1.79	0.47
22:CV:75:C:H2'	22:CV:76:A:O4'	2.14	0.47
25:CZ:176:LEU:O	25:CZ:180:GLU:HG3	2.15	0.47
25:CZ:267:VAL:HG23	25:CZ:288:VAL:HG13	1.95	0.47
34:D8:59:LYS:HB2	34:D8:59:LYS:HE3	1.67	0.47
36:DA:272(D):G:H1	36:DA:364:C:N4	2.11	0.47
36:DA:793:A:OP2	36:DA:2072:G:H5'	2.14	0.47
36:DA:1529:G:C2	36:DA:1541:G:N2	2.82	0.47
36:DA:1668:A:N3	36:DA:1670:C:C4	2.82	0.47
36:DA:1720:U:H2'	36:DA:1721:G:O4'	2.13	0.47
36:DA:2262:U:O2'	36:DA:2263:C:H5'	2.13	0.47
36:DA:2334:G:H5'	51:DS:13:ARG:HD3	1.97	0.47
40:DE:14:ILE:HD11	40:DE:173:VAL:CG1	2.41	0.47
43:DH:98:LEU:CB	43:DH:125:VAL:HG21	2.40	0.47
43:DH:104:GLU:HA	43:DH:113:VAL:O	2.14	0.47
48:DP:48:PRO:O	48:DP:49:ARG:C	2.57	0.47
49:DQ:134:ARG:HA	49:DQ:137:TYR:CE1	2.49	0.47
52:DT:93:ARG:HA	52:DT:93:ARG:HD2	1.63	0.47
53:DU:92:ARG:NH1	54:DV:11:GLN:O	2.48	0.47
1:AA:173:U:H5"	1:AA:197:A:O4'	2.15	0.47
1:AA:399:G:H2'	1:AA:400:C:C6	2.49	0.47
1:AA:405:U:O2	1:AA:498:U:H2'	2.15	0.47
1:AA:1125:U:C5'	1:AA:1126:U:H5	2.27	0.47
1:AA:1152:A:H2'	1:AA:1153:C:C6	2.50	0.47
1:AA:1492:A:H1'	23:AX:23:G:O2'	2.15	0.47
4:AD:194:LEU:HB3	4:AD:196:LEU:CD1	2.35	0.47
5:AE:148:VAL:HG21	8:AH:107:LEU:HD13	1.97	0.47
8:AH:30:ARG:NH1	8:AH:30:ARG:CB	2.77	0.47
8:AH:86:ILE:HG12	8:AH:135:CYS:HA	1.96	0.47
9:AI:126:SER:O	9:AI:127:LYS:CB	2.62	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:32:GLU:C	13:AM:32:GLU:OE1	2.58	0.47
13:AM:91:ARG:HB2	13:AM:98:VAL:HG12	1.95	0.47
20:AT:89:ARG:HB2	20:AT:104:LEU:HD12	1.96	0.47
25:AZ:107:SER:CB	25:AZ:137:LYS:HD2	2.44	0.47
25:AZ:311:THR:HB	25:AZ:312:PRO:HD2	1.96	0.47
27:B1:7:ILE:CD1	27:B1:70:VAL:HG22	2.45	0.47
32:B6:32:ASN:O	32:B6:33:LYS:HB2	2.14	0.47
36:BA:90:U:O3'	36:BA:92:A:O4'	2.33	0.47
36:BA:253:C:H2'	36:BA:254:G:O4'	2.15	0.47
36:BA:535:C:O2'	36:BA:536:A:H5'	2.14	0.47
36:BA:580:C:H2'	36:BA:581:C:C6	2.48	0.47
36:BA:664:C:O2'	36:BA:665:C:H5'	2.15	0.47
36:BA:852:G:H2'	36:BA:853:G:C8	2.49	0.47
36:BA:1528(A):A:H62	36:BA:1541:G:H21	1.59	0.47
36:BA:2052:G:C8	40:BE:141:ILE:HD11	2.49	0.47
36:BA:2347:C:H2'	36:BA:2348:U:C6	2.50	0.47
39:BD:142:VAL:HG21	39:BD:191:ALA:CB	2.45	0.47
41:BF:3:GLU:O	41:BF:19:GLU:HG3	2.15	0.47
42:BG:97:ASP:H	42:BG:100:TRP:HD1	1.63	0.47
42:BG:182:LYS:HD2	42:BG:182:LYS:N	2.29	0.47
43:BH:104:GLU:HA	43:BH:113:VAL:O	2.14	0.47
43:BH:137:ASP:OD2	43:BH:140:LYS:HE3	2.14	0.47
46:BN:11:PRO:O	46:BN:13:TRP:N	2.47	0.47
48:BP:28:GLY:C	48:BP:29:LYS:HD2	2.39	0.47
49:BQ:60:ARG:HB3	49:BQ:60:ARG:CZ	2.44	0.47
55:BW:37:ARG:HG3	55:BW:37:ARG:NH1	2.29	0.47
56:BX:14:SER:H	56:BX:17:ALA:HB3	1.79	0.47
57:BY:39:VAL:HG12	57:BY:40:GLU:N	2.28	0.47
57:BY:75:ILE:HG13	57:BY:76:CYS:H	1.79	0.47
58:BZ:112:ARG:O	58:BZ:113:ALA:O	2.32	0.47
1:CA:189(K):U:H2'	1:CA:189(L):G:H8	1.79	0.47
1:CA:408:A:H4'	4:CD:112:VAL:HG11	1.96	0.47
1:CA:770:C:O2'	1:CA:771:G:H5'	2.13	0.47
2:CB:72:GLY:HA2	2:CB:165:VAL:HG22	1.95	0.47
4:CD:19:LEU:HD23	4:CD:67:ILE:HD12	1.96	0.47
4:CD:145:GLU:C	4:CD:146:ILE:HD13	2.39	0.47
5:CE:40:ARG:HG2	5:CE:40:ARG:HH11	1.79	0.47
6:CF:47:ARG:O	6:CF:47:ARG:HG3	2.14	0.47
6:CF:97:PHE:O	18:CR:31:LEU:HD23	2.14	0.47
9:CI:90:PRO:O	9:CI:91:ASP:O	2.32	0.47
12:CL:45:PRO:O	12:CL:46:LYS:O	2.33	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:CL:75:HIS:CD2	12:CL:77:LEU:H	2.32	0.47
13:CM:108:ARG:NH2	13:CM:114:ARG:HA	2.30	0.47
18:CR:25:THR:HG22	18:CR:42:ARG:HH11	1.79	0.47
19:CS:13:ASP:C	19:CS:15:LEU:H	2.21	0.47
25:CZ:90:LYS:HB2	25:CZ:90:LYS:NZ	2.29	0.47
25:CZ:107:SER:HB2	25:CZ:137:LYS:HD2	1.95	0.47
25:CZ:163:PHE:C	25:CZ:165:GLY:H	2.22	0.47
25:CZ:366:ASP:C	25:CZ:367:ASN:HD22	2.23	0.47
29:D3:7:LYS:HE2	29:D3:32:GLN:OE1	2.14	0.47
32:D6:11:LEU:HD11	32:D6:26:ASN:HB2	1.97	0.47
32:D6:20:ASN:OD1	32:D6:21:TYR:N	2.48	0.47
34:D8:17:THR:OG1	34:D8:21:LYS:HB2	2.14	0.47
35:D9:19:ARG:HG3	35:D9:20:HIS:ND1	2.30	0.47
36:DA:142:A:H1'	36:DA:1408:C:C1'	2.45	0.47
36:DA:425:G:O2'	36:DA:426:C:H5'	2.14	0.47
36:DA:672:C:HO2'	36:DA:673:C:H5"	1.78	0.47
36:DA:1288:U:C2	36:DA:1327:C:O2	2.67	0.47
36:DA:1681:G:O2'	36:DA:1762:A:C2'	2.59	0.47
36:DA:1747:G:H2'	36:DA:1747(A):G:C8	2.50	0.47
36:DA:2131:G:O4'	36:DA:2133:G:N3	2.47	0.47
36:DA:2801(A):A:H5'	36:DA:2802:G:C8	2.49	0.47
36:DA:2833:G:C3'	36:DA:2834:G:C5'	2.78	0.47
37:DB:28:C:O2'	37:DB:29:A:H5'	2.15	0.47
38:DC:83:ILE:HD11	38:DC:97:GLU:CD	2.39	0.47
39:DD:35:LYS:HB3	39:DD:36:PRO:CD	2.45	0.47
40:DE:98:PRO:HG3	40:DE:175:VAL:HG12	1.96	0.47
40:DE:108:SER:O	40:DE:162:ALA:HA	2.14	0.47
41:DF:118:ALA:HA	41:DF:123:LEU:HB3	1.96	0.47
47:DO:35:VAL:CG2	47:DO:103:ALA:HB3	2.40	0.47
48:DP:95:VAL:CG2	48:DP:125:VAL:HA	2.45	0.47
52:DT:78:LEU:O	52:DT:79:HIS:CD2	2.65	0.47
52:DT:128:GLU:CD	52:DT:129:ARG:N	2.72	0.47
53:DU:99:ALA:HB2	53:DU:106:PHE:CE1	2.49	0.47
58:DZ:57:ILE:N	58:DZ:69:THR:O	2.41	0.47
1:AA:69:G:H1	1:AA:100:C:H42	1.63	0.47
1:AA:71:C:H2'	1:AA:72:C:C6	2.49	0.47
1:AA:635:G:O2'	1:AA:636:U:H5'	2.13	0.47
1:AA:940:C:O2'	1:AA:941:G:H5'	2.14	0.47
1:AA:977:A:N6	1:AA:1224:G:O5'	2.47	0.47
1:AA:995:C:O2'	1:AA:996:A:H8	1.97	0.47
1:AA:1006:C:H2'	1:AA:1007:C:C5	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1286:A:O2'	1:AA:1287:A:P	2.72	0.47
1:AA:1303:C:H2'	1:AA:1304:G:H5'	1.95	0.47
2:AB:72:GLY:HA2	2:AB:165:VAL:HG22	1.96	0.47
2:AB:97:TRP:CH2	2:AB:176:GLU:CD	2.93	0.47
2:AB:131:PRO:CG	2:AB:134:GLU:HG2	2.31	0.47
2:AB:229:VAL:CG1	2:AB:230:VAL:N	2.69	0.47
3:AC:11:ARG:O	3:AC:12:LEU:C	2.57	0.47
3:AC:137:ALA:O	3:AC:141:VAL:HG23	2.14	0.47
4:AD:91:SER:O	4:AD:92:VAL:C	2.57	0.47
4:AD:106:TYR:HD2	4:AD:113:SER:C	2.22	0.47
5:AE:80:ILE:CD1	5:AE:142:LEU:HD21	2.44	0.47
10:AJ:3:LYS:O	10:AJ:100:THR:HA	2.14	0.47
19:AS:29:ARG:O	19:AS:31:ILE:HG22	2.13	0.47
25:AZ:139:ASP:OD2	25:AZ:177:LEU:HD11	2.15	0.47
25:AZ:352:VAL:HG12	25:AZ:353:VAL:N	2.29	0.47
25:AZ:366:ASP:C	25:AZ:367:ASN:HD22	2.22	0.47
26:B0:43:THR:HG23	26:B0:43:THR:O	2.15	0.47
26:B0:51:VAL:HG22	26:B0:81:VAL:HG23	1.97	0.47
28:B2:35:LEU:HD13	28:B2:35:LEU:C	2.38	0.47
36:BA:6:A:O2'	46:BN:130:HIS:HB2	2.15	0.47
36:BA:64:A:O2'	36:BA:65:C:H5'	2.15	0.47
36:BA:142:A:H1'	36:BA:1408:C:C1'	2.44	0.47
36:BA:189:G:H2'	36:BA:205:G:H22	1.80	0.47
36:BA:201:C:C2'	36:BA:202:U:H5'	2.45	0.47
36:BA:605:C:H1'	36:BA:657:U:O2'	2.15	0.47
36:BA:688:U:H5'	36:BA:1780:A:C2	2.49	0.47
36:BA:773:U:H4'	39:BD:47:GLY:HA3	1.96	0.47
36:BA:1498:C:O4'	36:BA:1577:C:H4'	2.14	0.47
36:BA:1773:A:H2'	36:BA:1774:C:H5'	1.97	0.47
36:BA:1952:A:C2	47:BO:22:ILE:HG23	2.49	0.47
36:BA:2056:G:H2'	36:BA:2056:G:N3	2.29	0.47
36:BA:2717:G:O2'	52:BT:96:ARG:HD3	2.15	0.47
37:BB:22:U:H2'	37:BB:23:G:C8	2.50	0.47
38:BC:72:VAL:HG11	38:BC:156:ILE:O	2.14	0.47
38:BC:83:ILE:HD11	38:BC:97:GLU:CD	2.40	0.47
40:BE:64:LYS:C	40:BE:66:HIS:N	2.73	0.47
42:BG:55:LYS:HG3	42:BG:58:GLN:NE2	2.29	0.47
46:BN:129:PRO:O	46:BN:130:HIS:CB	2.60	0.47
50:BR:18:LEU:HD11	50:BR:22:ARG:CZ	2.43	0.47
51:BS:25:ARG:HD2	51:BS:88:ASP:OD2	2.14	0.47
51:BS:75:GLU:O	51:BS:76:LYS:HB2	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:BU:92:ARG:HB2	54:BV:11:GLN:NE2	2.29	0.47
53:BU:110:VAL:O	53:BU:113:ALA:HB3	2.14	0.47
55:BW:29:LEU:CG	55:BW:33:ARG:HD2	2.43	0.47
55:BW:55:ALA:C	55:BW:57:ASN:N	2.71	0.47
1:CA:160:A:H1'	1:CA:344:A:C5	2.50	0.47
1:CA:263:A:OP2	20:CT:79:ARG:NH1	2.47	0.47
1:CA:495:A:O2'	1:CA:496:A:P	2.73	0.47
1:CA:1261:A:H2'	1:CA:1262:C:H5'	1.97	0.47
1:CA:1485:U:O2'	1:CA:1486:G:H5'	2.15	0.47
3:CC:130:VAL:HG21	3:CC:157:ILE:HG23	1.97	0.47
4:CD:25:ARG:C	4:CD:27:TYR:H	2.23	0.47
4:CD:85:LYS:HD3	4:CD:92:VAL:HG11	1.97	0.47
4:CD:106:TYR:HD2	4:CD:113:SER:C	2.22	0.47
4:CD:177:ASP:O	4:CD:181:MET:N	2.47	0.47
5:CE:36:ASP:OD1	5:CE:38:GLN:N	2.46	0.47
5:CE:144:THR:N	5:CE:147:ASP:OD1	2.42	0.47
6:CF:2:ARG:HD2	6:CF:69:GLU:HB3	1.97	0.47
16:CP:3:LYS:HG2	16:CP:65:GLN:O	2.15	0.47
20:CT:82:SER:O	20:CT:86:ARG:HB2	2.14	0.47
25:CZ:14:VAL:HG23	25:CZ:79:HIS:HA	1.96	0.47
25:CZ:333:GLY:CA	25:CZ:363:MET:HA	2.45	0.47
29:D3:1:MET:CE	29:D3:40:THR:HG22	2.44	0.47
32:D6:22:ALA:HB2	32:D6:39:TYR:CE2	2.50	0.47
34:D8:7:HIS:N	34:D8:11:LYS:HE2	2.29	0.47
35:D9:1:MET:HE3	35:D9:31:LYS:O	2.14	0.47
36:DA:236:C:H2'	36:DA:237:C:C6	2.49	0.47
36:DA:331:A:C1'	36:DA:332:A:OP1	2.63	0.47
36:DA:958:U:H5"	49:DQ:14:ARG:HD3	1.94	0.47
36:DA:1108:U:H3'	36:DA:1109:C:H6	1.80	0.47
36:DA:1257:C:H2'	36:DA:1258:C:C6	2.47	0.47
36:DA:1517:G:O2'	36:DA:1518:U:H5'	2.14	0.47
36:DA:2126:A:O2'	36:DA:2127:G:OP2	2.30	0.47
36:DA:2292:C:H2'	36:DA:2293:C:C6	2.49	0.47
36:DA:2292:C:H2'	36:DA:2293:C:H6	1.78	0.47
36:DA:2352:A:C4	36:DA:2366:A:C2	3.02	0.47
36:DA:2636:U:O5'	40:DE:80:GLU:HG3	2.14	0.47
38:DC:195:ALA:O	38:DC:198:ALA:HB3	2.15	0.47
39:DD:61:LEU:HD12	39:DD:61:LEU:HA	1.74	0.47
39:DD:169:GLU:OE1	39:DD:184:LYS:HD3	2.14	0.47
40:DE:14:ILE:HB	52:DT:14:TYR:CZ	2.50	0.47
40:DE:48:GLN:HA	40:DE:80:GLU:HA	1.96	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:DP:61:ARG:H	48:DP:61:ARG:HG3	1.46	0.47
51:DS:75:GLU:O	51:DS:76:LYS:HB2	2.15	0.47
57:DY:2:ARG:HD2	57:DY:3:VAL:HG23	1.97	0.47
58:DZ:72:ARG:HG2	58:DZ:89:PHE:HB2	1.95	0.47
1:AA:21:G:H2'	1:AA:22:G:C8	2.49	0.47
1:AA:28:G:O2'	1:AA:296:U:OP1	2.28	0.47
1:AA:59:A:H3'	1:AA:331:G:N2	2.25	0.47
1:AA:160:A:H1'	1:AA:344:A:C5	2.50	0.47
1:AA:222:U:H2'	1:AA:223:U:C6	2.50	0.47
1:AA:405:U:O2	1:AA:498:U:C6	2.68	0.47
1:AA:407:G:HO2'	4:AD:116:GLN:HG3	1.77	0.47
1:AA:792:A:H4'	1:AA:793:U:O5'	2.15	0.47
1:AA:1226:C:C5	13:AM:104:ARG:HB2	2.49	0.47
1:AA:1262:C:H2'	1:AA:1263:C:H6	1.79	0.47
1:AA:1417:G:N2	1:AA:1482:G:H2'	2.30	0.47
3:AC:108:ASN:ND2	3:AC:144:SER:OG	2.48	0.47
3:AC:150:LYS:HG3	3:AC:169:ALA:HB2	1.97	0.47
6:AF:9:VAL:HG22	6:AF:60:PHE:CE2	2.50	0.47
6:AF:22:GLU:O	6:AF:25:ILE:HG22	2.15	0.47
9:AI:41:VAL:HG12	9:AI:41:VAL:O	2.13	0.47
12:AL:35:GLY:O	12:AL:82:VAL:HG13	2.15	0.47
12:AL:60:LEU:C	12:AL:62:SER:H	2.23	0.47
16:AP:12:LYS:HG2	16:AP:13:HIS:CD2	2.50	0.47
20:AT:22:ARG:O	20:AT:26:ASN:ND2	2.48	0.47
20:AT:57:ARG:NH1	20:AT:102:GLY:HA2	2.13	0.47
22:AW:39:U:H2'	22:AW:40:C:H5'	1.96	0.47
25:AZ:171:ILE:HG13	25:AZ:202:LEU:HA	1.97	0.47
28:B2:12:GLU:O	28:B2:15:LYS:HG2	2.14	0.47
29:B3:11:SER:HB3	36:BA:988:A:P	2.54	0.47
32:B6:10:LEU:H	32:B6:10:LEU:HD22	1.76	0.47
34:B8:50:LEU:C	34:B8:52:LYS:N	2.63	0.47
34:B8:59:LYS:O	34:B8:61:LEU:HD12	2.15	0.47
36:BA:118:A:H5'	36:BA:119:A:H8	1.79	0.47
36:BA:315:G:H2'	36:BA:316:C:C6	2.50	0.47
36:BA:323:G:H2'	41:BF:169:ASN:HD21	1.77	0.47
36:BA:623:G:H2'	36:BA:624:C:C6	2.49	0.47
36:BA:664:C:O4'	36:BA:940:G:H5"	2.15	0.47
36:BA:733:G:N7	36:BA:761:A:C5	2.83	0.47
36:BA:742:G:O2'	36:BA:743:G:H5'	2.15	0.47
36:BA:824:A:H1'	36:BA:2358:G:N7	2.28	0.47
36:BA:896:A:H5"	58:BZ:146:ILE:HG13	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1222:C:H2'	36:BA:1223:G:H5'	1.97	0.47
36:BA:1665:A:H2'	36:BA:1666:G:O4'	2.15	0.47
36:BA:1963:U:H2'	36:BA:1963:U:O2	2.14	0.47
36:BA:2033:A:O2'	36:BA:2034:U:P	2.73	0.47
36:BA:2247:A:O2'	36:BA:2248:C:H5'	2.14	0.47
36:BA:2282:G:H5"	36:BA:2283:C:O4'	2.14	0.47
36:BA:2485:G:O2'	36:BA:2486:G:H5'	2.15	0.47
36:BA:2811:G:C2'	36:BA:2812:G:H5'	2.44	0.47
40:BE:14:ILE:HD11	40:BE:173:VAL:CG1	2.40	0.47
43:BH:152:ARG:NH1	43:BH:152:ARG:HG3	2.29	0.47
46:BN:7:LYS:O	46:BN:8:GLN:C	2.57	0.47
46:BN:34:LEU:HD13	46:BN:34:LEU:O	2.14	0.47
46:BN:43:THR:HG22	46:BN:45:ASN:HD22	1.80	0.47
46:BN:65:LYS:HB3	46:BN:65:LYS:NZ	2.29	0.47
48:BP:35:HIS:C	48:BP:36:LYS:HG3	2.40	0.47
48:BP:101:VAL:HG12	48:BP:106:LEU:HB2	1.95	0.47
49:BQ:6:ARG:O	49:BQ:7:MET:HG3	2.15	0.47
50:BR:28:LEU:HD23	50:BR:29:LEU:HD12	1.97	0.47
50:BR:51:LEU:HG	50:BR:66:VAL:HG13	1.95	0.47
57:BY:17:SER:HA	57:BY:71:LYS:HD2	1.96	0.47
58:BZ:171:ILE:HD13	58:BZ:172:ALA:N	2.30	0.47
1:CA:69:G:H1	1:CA:100:C:H42	1.63	0.47
1:CA:71:C:H2'	1:CA:72:C:C6	2.49	0.47
1:CA:276:G:O3'	17:CQ:68:ARG:NH1	2.45	0.47
1:CA:434:U:H2'	1:CA:435:C:H6	1.77	0.47
1:CA:577:G:O2'	1:CA:578:C:H5'	2.14	0.47
1:CA:674:G:H4'	18:CR:81:PHE:CD2	2.50	0.47
1:CA:825:G:N2	8:CH:11:THR:HG21	2.30	0.47
1:CA:828:A:H4'	1:CA:828:A:OP1	2.15	0.47
1:CA:920:U:O4'	1:CA:1080:A:C2	2.67	0.47
1:CA:955:U:O2'	1:CA:956:U:H5'	2.14	0.47
1:CA:1118:C:H1'	1:CA:1179:A:C4	2.50	0.47
1:CA:1316:G:O2'	14:CN:18:VAL:HG21	2.14	0.47
2:CB:71:VAL:O	2:CB:164:VAL:HA	2.15	0.47
2:CB:126:GLU:O	2:CB:129:GLU:HB2	2.15	0.47
2:CB:178:ARG:NH1	2:CB:178:ARG:HG3	2.29	0.47
3:CC:16:ARG:HH11	3:CC:16:ARG:CB	2.28	0.47
3:CC:130:VAL:O	3:CC:131:ARG:C	2.58	0.47
3:CC:132:ARG:O	3:CC:136:GLN:HB2	2.14	0.47
4:CD:6:GLY:O	4:CD:8:VAL:HG13	2.15	0.47
4:CD:45:GLN:C	4:CD:46:LYS:HG3	2.38	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:CE:15:ARG:HD2	5:CE:26:PHE:CG	2.50	0.47
8:CH:10:LEU:CD2	8:CH:83:ILE:HD11	2.45	0.47
8:CH:86:ILE:HG12	8:CH:135:CYS:HA	1.97	0.47
9:CI:118:LYS:O	9:CI:119:ALA:CB	2.59	0.47
12:CL:17:LYS:HD3	12:CL:18:VAL:H	1.78	0.47
12:CL:59:ARG:HH22	12:CL:63:GLY:HA2	1.80	0.47
13:CM:28:ALA:O	13:CM:32:GLU:HB2	2.14	0.47
13:CM:37:THR:O	13:CM:39:ILE:HG13	2.15	0.47
18:CR:26:LEU:HD12	18:CR:26:LEU:N	2.30	0.47
22:CW:59:U:H3'	22:CW:60:U:C6	2.50	0.47
24:CY:40:C:H2'	24:CY:41:C:H5'	1.96	0.47
24:CY:72:U:C3'	24:CY:73:G:H5"	2.44	0.47
25:CZ:98:GLN:HG2	25:CZ:226:GLU:OE2	2.14	0.47
25:CZ:341:GLN:NE2	25:CZ:389:ARG:O	2.47	0.47
30:D4:25:TYR:HE2	42:DG:2:PRO:HB3	1.79	0.47
31:D5:41:PRO:O	31:D5:44:THR:OG1	2.29	0.47
36:DA:21:A:O2'	36:DA:22:C:H5'	2.14	0.47
36:DA:27:G:N2	36:DA:512:G:C2'	2.69	0.47
36:DA:32:C:H5'	36:DA:32:C:H6	1.78	0.47
36:DA:80:G:O2'	36:DA:81:G:H5'	2.14	0.47
36:DA:208:C:H2'	36:DA:209:C:C6	2.50	0.47
36:DA:480:A:H1'	57:DY:44:ILE:HG21	1.97	0.47
36:DA:580:C:H2'	36:DA:581:C:C6	2.50	0.47
36:DA:664:C:O2'	36:DA:665:C:H5'	2.15	0.47
36:DA:1142(A):A:H5'	36:DA:1142(A):A:C8	2.50	0.47
36:DA:1543:C:C3'	36:DA:1544:A:C5'	2.81	0.47
36:DA:1632:A:C5	36:DA:1633:G:C6	3.03	0.47
36:DA:1658:C:H2'	36:DA:1659:U:C6	2.50	0.47
36:DA:2186:G:H2'	36:DA:2187:G:N9	2.29	0.47
36:DA:2364:C:H2'	36:DA:2365:G:O4'	2.15	0.47
36:DA:2554:U:H2'	36:DA:2555:U:C6	2.50	0.47
36:DA:2651:C:O2'	36:DA:2652:C:H5'	2.15	0.47
36:DA:2762:G:H2'	36:DA:2763:G:C5'	2.45	0.47
36:DA:2762:G:C2'	36:DA:2763:G:H5'	2.44	0.47
36:DA:2818:G:O2'	36:DA:2837:G:H5'	2.15	0.47
36:DA:2887:U:H2'	36:DA:2888:C:C6	2.49	0.47
39:DD:48:ARG:HG3	39:DD:48:ARG:NH1	2.29	0.47
39:DD:130:ALA:HB2	39:DD:192:THR:HB	1.97	0.47
40:DE:49:LEU:HD11	40:DE:91:VAL:HG21	1.97	0.47
40:DE:65:GLY:HA2	40:DE:70:ALA:CB	2.44	0.47
41:DF:132:VAL:HG13	41:DF:133:ASN:N	2.30	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DG:133:LEU:CD2	42:DG:157:ILE:HB	2.44	0.47
42:DG:149:VAL:C	42:DG:151:ALA:H	2.22	0.47
43:DH:101:ARG:O	43:DH:117:PRO:HG3	2.14	0.47
43:DH:104:GLU:OE1	43:DH:106:THR:HG23	2.15	0.47
46:DN:3:THR:CG2	46:DN:4:TYR:N	2.78	0.47
46:DN:62:VAL:O	46:DN:62:VAL:HG13	2.15	0.47
46:DN:62:VAL:HG23	46:DN:66:LYS:HD2	1.93	0.47
47:DO:10:VAL:HG21	47:DO:16:ALA:C	2.40	0.47
47:DO:66:LYS:H	47:DO:82:ASN:ND2	2.13	0.47
48:DP:71:VAL:CG1	48:DP:72:PRO:HD3	2.44	0.47
50:DR:2:ARG:C	50:DR:2:ARG:CD	2.87	0.47
50:DR:17:ARG:O	50:DR:20:LEU:HB3	2.14	0.47
50:DR:28:LEU:HD12	50:DR:114:VAL:HG21	1.95	0.47
50:DR:118:GLU:HA	50:DR:118:GLU:OE1	2.15	0.47
51:DS:99:LYS:HB3	51:DS:99:LYS:HZ3	1.77	0.47
52:DT:33:LYS:HD2	52:DT:43:GLN:CB	2.45	0.47
54:DV:49:THR:CB	54:DV:50:PRO:CD	2.92	0.47
54:DV:100:ARG:O	54:DV:100:ARG:HG3	2.15	0.47
56:DX:13:LEU:HD23	56:DX:18:TYR:HE1	1.79	0.47
58:DZ:29:TYR:CB	58:DZ:34:ASN:CB	2.92	0.47
58:DZ:150:LEU:O	58:DZ:151:HIS:HB3	2.15	0.47
1:AA:401:C:H1'	1:AA:622:A:H1'	1.96	0.47
1:AA:821:G:H2'	1:AA:822:C:H6	1.80	0.47
1:AA:961:U:H5'	1:AA:984:C:H1'	1.97	0.47
1:AA:1005:A:C3'	1:AA:1006:C:H5'	2.44	0.47
2:AB:86:GLU:C	2:AB:88:ALA:N	2.73	0.47
3:AC:86:VAL:O	3:AC:89:GLU:HB3	2.15	0.47
4:AD:6:GLY:O	4:AD:8:VAL:HG13	2.15	0.47
4:AD:192:GLU:O	4:AD:193:ASP:C	2.58	0.47
5:AE:72:GLN:O	5:AE:75:THR:HG22	2.15	0.47
8:AH:111:ILE:C	8:AH:112:LEU:HD23	2.40	0.47
18:AR:26:LEU:HD12	18:AR:26:LEU:N	2.30	0.47
20:AT:82:SER:O	20:AT:86:ARG:HB2	2.14	0.47
20:AT:94:ALA:O	20:AT:95:ALA:HB3	2.15	0.47
22:AW:5:G:N2	22:AW:68:C:C2	2.83	0.47
25:AZ:133:VAL:O	25:AZ:170:VAL:HA	2.14	0.47
25:AZ:146:LEU:O	25:AZ:150:VAL:HG23	2.15	0.47
25:AZ:164:PRO:O	25:AZ:168:VAL:HG23	2.14	0.47
27:B1:52:ARG:NH1	27:B1:57:GLU:HB2	2.29	0.47
27:B1:81:LYS:HE2	36:BA:156:U:H5'	1.97	0.47
29:B3:48:GLU:H	29:B3:48:GLU:HG2	1.52	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:214:G:H1'	36:BA:216:A:HO2'	1.80	0.47
36:BA:855:G:H2'	36:BA:856:C:C6	2.50	0.47
36:BA:1472:A:C2'	36:BA:1473:G:H5'	2.45	0.47
36:BA:1484:G:C3'	36:BA:1485:G:H5"	2.43	0.47
36:BA:1773:A:C2'	36:BA:1774:C:H5'	2.45	0.47
36:BA:2186:G:H2'	36:BA:2187:G:N9	2.29	0.47
36:BA:2262:U:H4'	36:BA:2328:A:C2	2.50	0.47
36:BA:2292:C:H2'	36:BA:2293:C:C6	2.50	0.47
36:BA:2555:U:C2'	36:BA:2556:C:H5'	2.44	0.47
36:BA:2632:A:H2	40:BE:61:ARG:HD2	1.80	0.47
36:BA:2746:U:O2'	36:BA:2747:G:H5'	2.14	0.47
36:BA:2772:C:H2'	36:BA:2773:C:H6	1.80	0.47
37:BB:93:G:H2'	37:BB:94:C:C6	2.50	0.47
37:BB:114:C:O2'	51:BS:46:VAL:HG13	2.15	0.47
38:BC:18:LYS:HD3	38:BC:20:TYR:CZ	2.49	0.47
39:BD:97:TYR:C	39:BD:99:ASP:N	2.71	0.47
40:BE:13:ARG:O	52:BT:57:PHE:HE2	1.98	0.47
41:BF:129:PHE:CD2	41:BF:163:VAL:HG21	2.50	0.47
46:BN:128:HIS:O	46:BN:128:HIS:CG	2.68	0.47
48:BP:62:LEU:O	48:BP:62:LEU:HG	2.15	0.47
48:BP:102:ARG:HH11	48:BP:102:ARG:CB	2.28	0.47
48:BP:102:ARG:HB2	48:BP:102:ARG:NH1	2.28	0.47
51:BS:15:ARG:NH1	51:BS:18:ILE:HD11	2.29	0.47
52:BT:28:VAL:HB	52:BT:88:ILE:HG12	1.95	0.47
52:BT:89:VAL:HG12	52:BT:91:ARG:HG3	1.94	0.47
57:BY:6:HIS:CD2	57:BY:6:HIS:H	2.33	0.47
58:BZ:14:LYS:HB2	58:BZ:17:ALA:HB3	1.97	0.47
58:BZ:128:VAL:CG2	58:BZ:129:SER:N	2.78	0.47
1:CA:39:G:O2'	1:CA:40:C:H5'	2.14	0.47
1:CA:59:A:C5'	1:CA:60:A:H5"	2.45	0.47
1:CA:245:C:O2'	1:CA:246:A:P	2.73	0.47
1:CA:426:G:P	4:CD:36:ARG:NH2	2.86	0.47
1:CA:1522:U:O2'	1:CA:1523:G:H5'	2.15	0.47
2:CB:27:LYS:HD2	2:CB:193:ASP:OD1	2.15	0.47
4:CD:5:ILE:O	4:CD:5:ILE:HG22	2.13	0.47
4:CD:126:ILE:CG2	4:CD:127:THR:N	2.78	0.47
5:CE:36:ASP:OD1	5:CE:36:ASP:C	2.58	0.47
7:CG:97:GLN:O	7:CG:101:LEU:HG	2.15	0.47
10:CJ:71:LEU:HD12	10:CJ:72:VAL:H	1.78	0.47
14:CN:39:LEU:CD1	14:CN:47:LEU:HD12	2.44	0.47
15:CO:82:ILE:HD13	15:CO:87:ILE:HB	1.96	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:CY:61:C:C2'	24:CY:62:U:H5"	2.45	0.47
25:CZ:22:HIS:O	25:CZ:137:LYS:HE2	2.15	0.47
25:CZ:270:VAL:CG1	25:CZ:286:VAL:HG21	2.44	0.47
26:D0:55:ARG:HE	26:D0:55:ARG:HB3	1.34	0.47
31:D5:43:HIS:CD2	36:DA:2815:C:O2'	2.68	0.47
36:DA:391:G:C2'	36:DA:392:C:H5'	2.45	0.47
36:DA:603:A:N3	36:DA:604:G:H1'	2.29	0.47
36:DA:978:G:C2	36:DA:986:C:N3	2.83	0.47
36:DA:1097:U:H2'	36:DA:1098:A:H8	1.80	0.47
36:DA:1485:G:H1'	36:DA:1505:C:N4	2.30	0.47
36:DA:2100:G:H1	36:DA:2189:U:H3	1.62	0.47
36:DA:2543:G:H8	36:DA:2543:G:H5'	1.80	0.47
37:DB:22:U:H2'	37:DB:23:G:C8	2.50	0.47
41:DF:162:LEU:HA	41:DF:165:ARG:NH1	2.30	0.47
46:DN:19:GLU:O	46:DN:59:LYS:HB3	2.14	0.47
48:DP:108:LYS:N	48:DP:108:LYS:HD2	2.30	0.47
51:DS:54:LEU:HD11	51:DS:58:LEU:O	2.15	0.47
53:DU:93:LYS:O	53:DU:96:ALA:HB3	2.15	0.47
1:AA:152:A:N6	1:AA:170:U:C2	2.83	0.47
1:AA:526:C:OP2	12:AL:91:LYS:HE3	2.15	0.47
1:AA:714:G:H2'	1:AA:715:A:C8	2.50	0.47
1:AA:1095:U:P	1:AA:1108:G:H1	2.38	0.47
1:AA:1261:A:H2'	1:AA:1262:C:H5'	1.97	0.47
1:AA:1320:C:H6	1:AA:1320:C:C5'	2.18	0.47
4:AD:45:GLN:O	4:AD:46:LYS:HG2	2.15	0.47
5:AE:40:ARG:HG2	5:AE:40:ARG:NH1	2.30	0.47
6:AF:86:ARG:H	6:AF:86:ARG:HG2	1.39	0.47
7:AG:37:ASN:HD21	9:AI:40:LEU:HA	1.79	0.47
8:AH:108:GLY:HA3	8:AH:138:TRP:HB3	1.96	0.47
9:AI:5:TYR:CG	9:AI:6:GLY:N	2.83	0.47
11:AK:67:ASP:O	11:AK:71:LYS:HG3	2.14	0.47
17:AQ:59:ILE:CG2	17:AQ:71:PHE:HB3	2.45	0.47
26:B0:38:VAL:HB	26:B0:59:LEU:HD12	1.96	0.47
26:B0:40:GLN:NE2	26:B0:44:ARG:N	2.63	0.47
28:B2:46:GLN:O	28:B2:48:HIS:ND1	2.48	0.47
28:B2:63:VAL:O	28:B2:66:GLU:OE2	2.33	0.47
30:B4:37:SER:O	30:B4:38:LYS:CB	2.63	0.47
32:B6:25:LYS:HD2	36:BA:2285:C:N4	2.28	0.47
34:B8:61:LEU:N	34:B8:63:PRO:HD2	2.30	0.47
35:B9:29:ASN:ND2	35:B9:29:ASN:O	2.48	0.47
36:BA:83:G:H22	36:BA:102:G:H2'	1.79	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:158:U:H3'	36:BA:158:U:O2	2.15	0.47
36:BA:299:A:N1	36:BA:322:A:O2'	2.37	0.47
36:BA:876:C:H2'	36:BA:877:U:O4'	2.14	0.47
36:BA:1542:A:H5'	36:BA:1543:C:OP2	2.15	0.47
36:BA:1668:A:N3	36:BA:1670:C:C4	2.83	0.47
36:BA:1817:G:OP1	39:BD:88:ARG:NH2	2.42	0.47
36:BA:2025:C:H2'	36:BA:2026:C:C6	2.48	0.47
36:BA:2352:A:C4	36:BA:2366:A:C2	3.02	0.47
36:BA:2473:U:H5	36:BA:2474:C:C5	2.33	0.47
36:BA:2477:C:O5'	36:BA:2477:C:H6	1.97	0.47
36:BA:2488:A:O2'	36:BA:2489:G:H5'	2.15	0.47
36:BA:2543:G:H8	36:BA:2543:G:H5'	1.80	0.47
36:BA:2687:U:C4	36:BA:2688:U:C5	3.03	0.47
37:BB:58:A:H2'	37:BB:59:A:O4'	2.15	0.47
39:BD:169:GLU:OE1	39:BD:184:LYS:HD3	2.15	0.47
40:BE:129:HIS:O	40:BE:130:GLY:C	2.58	0.47
41:BF:199:TRP:HZ3	41:BF:203:GLN:OE1	1.97	0.47
42:BG:109:VAL:HG12	42:BG:142:PRO:HD3	1.97	0.47
43:BH:101:ARG:O	43:BH:117:PRO:HG3	2.15	0.47
48:BP:16:ARG:O	48:BP:18:ARG:N	2.47	0.47
48:BP:114:ILE:HB	48:BP:130:PHE:CD2	2.50	0.47
51:BS:49:VAL:HG22	51:BS:80:LEU:HD13	1.96	0.47
52:BT:28:VAL:HG22	52:BT:46:GLU:CA	2.44	0.47
52:BT:35:LYS:HZ1	52:BT:41:ARG:HE	1.63	0.47
52:BT:74:ARG:C	52:BT:75:ILE:HD12	2.40	0.47
53:BU:68:ALA:C	53:BU:70:ARG:H	2.22	0.47
57:BY:94:LYS:O	57:BY:94:LYS:HG3	2.15	0.47
58:BZ:150:LEU:HD23	58:BZ:150:LEU:O	2.14	0.47
1:CA:294:U:H2'	1:CA:295:C:C6	2.50	0.47
1:CA:409:G:H3'	1:CA:410:G:H8	1.80	0.47
1:CA:503:C:O2'	1:CA:504:C:H5'	2.15	0.47
1:CA:556:C:O2'	1:CA:557:G:H5'	2.15	0.47
1:CA:1296:C:H4'	1:CA:1302:U:C4	2.50	0.47
1:CA:1411:C:H2'	1:CA:1412:C:C6	2.49	0.47
3:CC:52:LEU:H	3:CC:52:LEU:CD2	2.26	0.47
3:CC:65:ALA:O	3:CC:100:ALA:O	2.33	0.47
3:CC:86:VAL:O	3:CC:89:GLU:HB3	2.15	0.47
4:CD:3:ARG:HH12	4:CD:118:ARG:HD3	1.78	0.47
4:CD:6:GLY:O	4:CD:7:PRO:C	2.58	0.47
4:CD:36:ARG:C	4:CD:38:TYR:N	2.72	0.47
5:CE:68:GLU:O	5:CE:68:GLU:HG3	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:CF:40:VAL:O	6:CF:40:VAL:HG13	2.15	0.47
9:CI:9:ARG:HG2	9:CI:14:VAL:HG22	1.97	0.47
15:CO:21:ASP:OD1	15:CO:21:ASP:C	2.58	0.47
16:CP:20:VAL:HG21	16:CP:32:TYR:CD1	2.50	0.47
19:CS:31:ILE:HG23	19:CS:31:ILE:O	2.15	0.47
20:CT:73:HIS:HB3	20:CT:74:LYS:NZ	2.30	0.47
22:CV:39:U:H2'	22:CV:40:C:H6	1.80	0.47
24:CY:17:H2U:O2'	24:CY:18:G:OP1	2.30	0.47
25:CZ:164:PRO:O	25:CZ:168:VAL:HG23	2.15	0.47
25:CZ:185:ASN:ND2	25:CZ:185:ASN:O	2.48	0.47
27:D1:84:GLY:O	27:D1:90:ILE:HD11	2.14	0.47
29:D3:6:VAL:HB	29:D3:54:VAL:HG11	1.97	0.47
35:D9:15:LYS:NZ	35:D9:15:LYS:HB3	2.30	0.47
35:D9:27:CYS:SG	35:D9:28:GLU:N	2.88	0.47
36:DA:11:G:H2'	36:DA:12:U:H6	1.80	0.47
36:DA:130:C:O3'	36:DA:1349:A:H1'	2.15	0.47
36:DA:1036:G:O2'	36:DA:1037:G:H5'	2.15	0.47
36:DA:1722:A:O2'	36:DA:1739:U:H5'	2.15	0.47
36:DA:1843:C:H2'	36:DA:1844:C:H6	1.80	0.47
36:DA:1902:C:H5'	39:DD:246:PRO:HD3	1.97	0.47
36:DA:2131:G:H4'	36:DA:2132:U:OP2	2.15	0.47
36:DA:2392:A:H2'	36:DA:2393:A:O4'	2.15	0.47
36:DA:2477:C:O5'	36:DA:2477:C:H6	1.98	0.47
36:DA:2666:C:H5'	36:DA:2667:C:OP2	2.14	0.47
37:DB:105:A:H4'	58:DZ:89:PHE:CE1	2.49	0.47
38:DC:15:ASP:OD1	38:DC:15:ASP:C	2.57	0.47
40:DE:116:VAL:HG22	40:DE:117:MET:H	1.79	0.47
41:DF:127:GLU:HB2	41:DF:196:LEU:HD12	1.96	0.47
43:DH:137:ASP:OD2	43:DH:140:LYS:HE3	2.15	0.47
46:DN:58:ASP:C	46:DN:60:ILE:N	2.61	0.47
51:DS:13:ARG:CG	51:DS:14:VAL:N	2.77	0.47
52:DT:28:VAL:HG11	52:DT:46:GLU:CG	2.39	0.47
52:DT:125:ARG:O	52:DT:128:GLU:HG3	2.15	0.47
55:DW:40:ASN:O	55:DW:41:LYS:HG2	2.15	0.47
1:AA:291:C:O2'	1:AA:292:G:H5'	2.15	0.47
1:AA:338:A:H2	1:AA:351:G:H22	1.61	0.47
1:AA:367:U:H4'	25:AZ:291:ARG:HE	1.80	0.47
1:AA:384:G:O2'	1:AA:385:C:H5'	2.15	0.47
1:AA:1126:U:OP2	1:AA:1281:U:O2	2.33	0.47
1:AA:1391:U:H2'	1:AA:1392:G:C8	2.49	0.47
2:AB:224:GLN:O	2:AB:226:ARG:N	2.48	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:3:ASN:CG	3:AC:4:LYS:N	2.70	0.47
5:AE:57:LYS:HG2	5:AE:61:TYR:CE2	2.50	0.47
12:AL:117:ARG:O	12:AL:119:LYS:O	2.32	0.47
16:AP:20:VAL:HG21	16:AP:32:TYR:CD1	2.49	0.47
19:AS:27:GLU:O	19:AS:28:LYS:O	2.33	0.47
28:B2:55:ARG:HG3	28:B2:55:ARG:NH1	2.28	0.47
29:B3:44:ARG:O	29:B3:48:GLU:HG2	2.15	0.47
31:B5:3:LYS:O	31:B5:4:HIS:O	2.33	0.47
32:B6:36:LEU:C	32:B6:36:LEU:CD2	2.88	0.47
34:B8:32:LEU:CD2	34:B8:36:LYS:HE2	2.41	0.47
36:BA:304:G:O2'	36:BA:305:U:H5'	2.15	0.47
36:BA:1389:G:H2'	36:BA:1390:U:H6	1.79	0.47
36:BA:1639:U:O2'	36:BA:1640:C:H5"	2.15	0.47
36:BA:1750:G:H2'	36:BA:1751:C:C6	2.49	0.47
36:BA:2105:C:N3	36:BA:2184:G:N2	2.61	0.47
36:BA:2567:G:H2'	36:BA:2568:C:C6	2.50	0.47
40:BE:77:ILE:CG2	40:BE:78:LEU:H	2.23	0.47
46:BN:23:LEU:HB3	46:BN:60:ILE:CG2	2.41	0.47
48:BP:90:ARG:HB3	48:BP:91:PHE:CD1	2.50	0.47
48:BP:110:TYR:O	48:BP:111:ARG:C	2.58	0.47
49:BQ:52:VAL:O	49:BQ:56:ARG:HB2	2.14	0.47
49:BQ:110:THR:HG23	49:BQ:113:GLN:HG3	1.96	0.47
51:BS:54:LEU:HD11	51:BS:58:LEU:O	2.15	0.47
51:BS:70:GLY:C	51:BS:72:ALA:N	2.72	0.47
1:CA:836:G:H2'	1:CA:837:G:H8	1.80	0.47
1:CA:1508:G:H2'	1:CA:1509:C:C6	2.50	0.47
3:CC:77:ILE:HA	3:CC:84:ILE:HB	1.96	0.47
5:CE:72:GLN:O	5:CE:73:ASN:HB2	2.15	0.47
5:CE:72:GLN:O	5:CE:75:THR:HG22	2.15	0.47
5:CE:80:ILE:CD1	5:CE:142:LEU:HD21	2.45	0.47
13:CM:35:GLU:C	13:CM:37:THR:N	2.73	0.47
23:CX:26:A:H3'	23:CX:27:A:O4'	2.14	0.47
25:CZ:107:SER:CB	25:CZ:137:LYS:HD2	2.45	0.47
29:D3:44:ARG:O	29:D3:48:GLU:HG2	2.15	0.47
30:D4:37:SER:O	30:D4:38:LYS:CB	2.63	0.47
34:D8:23:VAL:CG1	34:D8:46:ARG:HD3	2.44	0.47
36:DA:143:G:H2'	36:DA:143(A):C:H6	1.80	0.47
36:DA:143:G:H4'	56:DX:35:THR:HG21	1.97	0.47
36:DA:747:U:C5	36:DA:2613:U:C5	3.03	0.47
36:DA:914:C:C2'	36:DA:915:C:H5'	2.43	0.47
36:DA:2064:C:H2'	36:DA:2065:C:C6	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2262:U:H4'	36:DA:2328:A:C2	2.50	0.47
36:DA:2808:U:O2'	36:DA:2809:A:H5'	2.15	0.47
36:DA:2836:U:H2'	36:DA:2837:G:C8	2.50	0.47
39:DD:142:VAL:HG21	39:DD:191:ALA:CB	2.43	0.47
40:DE:13:ARG:O	52:DT:57:PHE:HE2	1.98	0.47
41:DF:4:VAL:HA	41:DF:19:GLU:CB	2.43	0.47
43:DH:105:LEU:N	43:DH:105:LEU:CD2	2.78	0.47
43:DH:169:VAL:HG22	43:DH:170:ARG:N	2.30	0.47
48:DP:61:ARG:C	48:DP:62:LEU:HD23	2.40	0.47
49:DQ:52:VAL:O	49:DQ:56:ARG:HB2	2.15	0.47
53:DU:115:ALA:C	53:DU:117:GLN:N	2.73	0.47
54:DV:16:PRO:O	54:DV:96:ILE:O	2.33	0.47
58:DZ:110:GLY:HA2	58:DZ:114:GLY:O	2.14	0.47
1:AA:542:G:N2	1:AA:543:C:C2	2.83	0.46
1:AA:926:G:H5"	1:AA:927:G:O5'	2.16	0.46
2:AB:111:ARG:HG2	2:AB:111:ARG:NH1	2.29	0.46
4:AD:148:VAL:HG12	4:AD:149:ALA:N	2.29	0.46
14:AN:3:ARG:O	14:AN:3:ARG:NE	2.47	0.46
16:AP:50:LYS:HD3	16:AP:50:LYS:C	2.39	0.46
22:AV:39:U:H2'	22:AV:40:C:H6	1.81	0.46
28:B2:35:LEU:HD23	28:B2:50:ILE:HG13	1.94	0.46
28:B2:66:GLU:CD	28:B2:66:GLU:C	2.83	0.46
29:B3:28:LEU:HD23	29:B3:28:LEU:N	2.30	0.46
32:B6:53:LYS:HD3	32:B6:54:ILE:H	1.78	0.46
36:BA:80:G:O2'	36:BA:81:G:H5'	2.15	0.46
36:BA:669:G:H2'	36:BA:669:G:N3	2.30	0.46
36:BA:815:C:H41	48:BP:27:HIS:CE1	2.33	0.46
36:BA:1010:A:H1'	36:BA:1153:C:H1'	1.97	0.46
36:BA:1827:C:C2'	36:BA:1828:G:H5'	2.45	0.46
36:BA:1858:G:H2'	36:BA:1883:G:H22	1.80	0.46
36:BA:1952:A:C5	47:BO:22:ILE:HD12	2.50	0.46
36:BA:2110:G:H5"	36:BA:2145:C:N4	2.31	0.46
36:BA:2206:G:H21	36:BA:2207:G:H5'	1.76	0.46
36:BA:2700:C:O2'	36:BA:2701:C:H5'	2.14	0.46
36:BA:2808:U:O2'	36:BA:2809:A:H5'	2.15	0.46
42:BG:85:GLY:O	42:BG:87:PRO:HG3	2.15	0.46
43:BH:159:GLU:HG3	43:BH:160:LYS:HG3	1.98	0.46
46:BN:21:LYS:HD3	46:BN:22:THR:H	1.80	0.46
48:BP:131:SER:HG	48:BP:134:ALA:HB3	1.80	0.46
48:BP:131:SER:O	48:BP:132:LYS:C	2.59	0.46
49:BQ:109:VAL:CG1	49:BQ:110:THR:N	2.77	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:BR:96:ARG:CZ	50:BR:117:VAL:HG23	2.45	0.46
52:BT:85:LYS:HZ2	52:BT:85:LYS:CB	2.23	0.46
53:BU:51:LYS:HA	53:BU:54:LYS:HE2	1.97	0.46
58:BZ:63:ASP:CG	58:BZ:65:GLN:HE21	2.23	0.46
58:BZ:132:ASN:O	58:BZ:133:ILE:HD13	2.16	0.46
1:CA:59:A:H1'	1:CA:354:G:N2	2.30	0.46
1:CA:109:A:O3'	1:CA:110:C:H6	1.98	0.46
1:CA:266:G:C5'	1:CA:267:C:H5	2.24	0.46
1:CA:501:C:H2'	1:CA:502:G:H8	1.80	0.46
1:CA:539:A:H2'	1:CA:540:G:H8	1.79	0.46
1:CA:720:C:H2'	1:CA:721:G:C8	2.50	0.46
1:CA:1318:A:H1'	19:CS:37:ARG:HH21	1.80	0.46
4:CD:3:ARG:HH21	4:CD:5:ILE:CG1	2.28	0.46
4:CD:148:VAL:HG12	4:CD:149:ALA:N	2.29	0.46
9:CI:58:HIS:C	9:CI:59:PHE:HD1	2.23	0.46
10:CJ:6:ILE:HG12	10:CJ:72:VAL:O	2.16	0.46
15:CO:87:ILE:CG2	15:CO:88:ARG:H	2.19	0.46
18:CR:59:SER:O	18:CR:60:ALA:C	2.58	0.46
24:CY:77:TRP:O	25:CZ:273:HIS:HA	2.14	0.46
25:CZ:133:VAL:O	25:CZ:170:VAL:HA	2.15	0.46
26:D0:40:GLN:NE2	26:D0:44:ARG:N	2.57	0.46
28:D2:64:LEU:O	28:D2:64:LEU:HD23	2.15	0.46
36:DA:534:U:O2'	53:DU:49:HIS:CD2	2.68	0.46
36:DA:1563:G:H2'	36:DA:1564:C:O4'	2.15	0.46
36:DA:2184:G:H2'	36:DA:2185:C:O4'	2.14	0.46
36:DA:2481:G:O2'	36:DA:2482:G:P	2.73	0.46
36:DA:2537:U:H2'	36:DA:2538:C:H6	1.80	0.46
36:DA:2657:A:H5'	36:DA:2657:A:N3	2.31	0.46
36:DA:2872:G:C2	36:DA:2873:A:N6	2.84	0.46
39:DD:242:ARG:HH11	39:DD:242:ARG:HG3	1.78	0.46
41:DF:114:VAL:HG21	41:DF:202:PHE:HE1	1.79	0.46
42:DG:114:ILE:C	42:DG:116:ASP:N	2.73	0.46
48:DP:28:GLY:C	48:DP:29:LYS:HD2	2.39	0.46
48:DP:84:ASN:HA	48:DP:115:LEU:O	2.14	0.46
50:DR:117:VAL:HG22	50:DR:118:GLU:H	1.80	0.46
51:DS:17:ARG:C	51:DS:19:LYS:N	2.73	0.46
51:DS:40:ILE:HG22	51:DS:47:THR:HG23	1.96	0.46
52:DT:3:ARG:CD	52:DT:6:LEU:HD12	2.36	0.46
52:DT:28:VAL:HG12	52:DT:28:VAL:O	2.15	0.46
52:DT:102:ILE:HB	52:DT:110:ILE:CD1	2.45	0.46
53:DU:112:ARG:HH11	54:DV:46:VAL:HG11	1.80	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:DW:12:ILE:HD13	55:DW:17:VAL:HG22	1.96	0.46
55:DW:55:ALA:C	55:DW:57:ASN:N	2.73	0.46
1:AA:636:U:H5"	17:AQ:2:PRO:HG3	1.97	0.46
1:AA:892:A:O2'	1:AA:1415:G:H4'	2.15	0.46
1:AA:1003:G:N2	1:AA:1039:C:N4	2.58	0.46
1:AA:1238:A:C2	1:AA:1301:U:N3	2.60	0.46
2:AB:19:HIS:NE2	2:AB:206:ASP:HB2	2.31	0.46
2:AB:126:GLU:O	2:AB:129:GLU:HB2	2.15	0.46
5:AE:6:PHE:HB2	5:AE:34:VAL:HG22	1.97	0.46
8:AH:87:SER:HB2	8:AH:93:VAL:HB	1.97	0.46
10:AJ:53:PRO:HA	14:AN:42:ILE:HD11	1.98	0.46
12:AL:26:ALA:O	12:AL:33:ARG:HD2	2.15	0.46
15:AO:11:VAL:HG21	15:AO:34:LEU:HD22	1.96	0.46
19:AS:37:ARG:H	19:AS:37:ARG:HG3	1.39	0.46
20:AT:48:LYS:HB3	20:AT:51:GLU:HG2	1.96	0.46
25:AZ:34:VAL:C	25:AZ:36:ALA:H	2.23	0.46
28:B2:51:ARG:HH21	28:B2:55:ARG:HH12	1.64	0.46
32:B6:22:ALA:HB2	32:B6:39:TYR:CE2	2.50	0.46
32:B6:32:ASN:CG	32:B6:33:LYS:N	2.73	0.46
33:B7:32:LYS:O	33:B7:36:GLN:HB2	2.14	0.46
36:BA:143:G:H2'	36:BA:143(A):C:C6	2.50	0.46
36:BA:288:C:H2'	36:BA:289:A:H8	1.80	0.46
36:BA:572:A:H5"	36:BA:573:G:OP2	2.16	0.46
36:BA:761:A:C8	36:BA:761:A:C3'	2.98	0.46
36:BA:994:C:OP1	53:BU:53:ARG:NH2	2.48	0.46
36:BA:1097:U:H2'	36:BA:1098:A:C8	2.48	0.46
36:BA:1331:A:C2'	36:BA:1332:G:H5"	2.44	0.46
36:BA:1543:C:C3'	36:BA:1544:A:C5'	2.81	0.46
36:BA:1722:A:O2'	36:BA:1739:U:H5'	2.16	0.46
36:BA:1902:C:H2'	36:BA:1903:G:O5'	2.14	0.46
36:BA:2039:C:O2'	36:BA:2040:C:H5'	2.15	0.46
36:BA:2108:C:O2	36:BA:2108:C:C2'	2.63	0.46
37:BB:73:A:C4	37:BB:105:A:C2	3.02	0.46
38:BC:72:VAL:HG23	38:BC:111:ASP:CB	2.33	0.46
38:BC:114:VAL:CG2	38:BC:149:ILE:HD11	2.45	0.46
40:BE:76:ARG:O	40:BE:77:ILE:C	2.58	0.46
42:BG:137:GLU:CG	42:BG:138:GLN:H	2.25	0.46
43:BH:94:TYR:CD1	43:BH:107:VAL:CA	2.98	0.46
46:BN:14:VAL:CG1	46:BN:137:LYS:HG3	2.45	0.46
47:BO:24:VAL:O	47:BO:24:VAL:HG23	2.15	0.46
50:BR:4:LEU:O	50:BR:6:SER:N	2.48	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:BR:57:ARG:O	50:BR:58:GLY:C	2.59	0.46
53:BU:88:ILE:CD1	53:BU:109:LEU:HD22	2.44	0.46
53:BU:112:ARG:HH11	54:BV:46:VAL:HG11	1.80	0.46
54:BV:100:ARG:O	54:BV:100:ARG:HG3	2.14	0.46
55:BW:13:SER:HA	55:BW:99:ARG:HB2	1.97	0.46
1:CA:77:G:H3'	1:CA:78:G:C8	2.50	0.46
1:CA:242:C:H2'	1:CA:243:A:H5'	1.98	0.46
1:CA:338:A:H2	1:CA:351:G:H22	1.63	0.46
1:CA:940:C:O2'	1:CA:941:G:H5'	2.16	0.46
1:CA:1006:C:H2'	1:CA:1007:C:C5	2.50	0.46
1:CA:1126:U:OP2	1:CA:1281:U:O2	2.34	0.46
1:CA:1305:G:H5"	21:CU:4:GLY:C	2.39	0.46
2:CB:95:GLN:HA	2:CB:95:GLN:OE1	2.14	0.46
2:CB:112:VAL:O	2:CB:115:LEU:HB3	2.16	0.46
2:CB:132:LYS:O	2:CB:136:VAL:HG23	2.14	0.46
3:CC:53:ALA:HB2	3:CC:115:LEU:HG	1.98	0.46
4:CD:58:LEU:HD23	4:CD:62:GLN:HG2	1.98	0.46
9:CI:5:TYR:O	9:CI:84:ALA:HA	2.14	0.46
10:CJ:84:GLN:O	10:CJ:88:LEU:N	2.45	0.46
12:CL:78:GLN:O	12:CL:80:HIS:N	2.48	0.46
13:CM:9:ILE:HG21	42:DG:146:TYR:CZ	2.50	0.46
25:CZ:325:LYS:HB2	25:CZ:331:HIS:HB3	1.96	0.46
25:CZ:363:MET:HB3	25:CZ:364:PRO:HD2	1.96	0.46
26:D0:7:LEU:HD13	49:DQ:85:LYS:CG	2.42	0.46
32:D6:53:LYS:HG2	32:D6:54:ILE:N	2.31	0.46
34:D8:11:LYS:HZ3	34:D8:60:LEU:HA	1.80	0.46
36:DA:605:C:H2'	36:DA:606:U:H6	1.79	0.46
36:DA:990:A:C6	36:DA:1186:G:H1'	2.50	0.46
36:DA:1279:G:H4'	50:DR:31:HIS:NE2	2.26	0.46
36:DA:1403:C:H2'	36:DA:1404:C:O5'	2.15	0.46
36:DA:1472:A:O2'	36:DA:1473:G:H5'	2.15	0.46
36:DA:2109:U:O2	36:DA:2180:U:H5	1.97	0.46
36:DA:2122:U:H2'	36:DA:2123:G:C8	2.50	0.46
36:DA:2149:G:O2'	36:DA:2150:U:H5'	2.16	0.46
36:DA:2265:U:H3'	36:DA:2266:A:H5"	1.97	0.46
36:DA:2334:G:H21	51:DS:18:ILE:CG2	2.22	0.46
36:DA:2473:U:H5	36:DA:2474:C:C5	2.33	0.46
36:DA:2777:G:H4'	36:DA:2778:A:H5'	1.97	0.46
36:DA:2860:A:C8	36:DA:2861:G:H1'	2.50	0.46
38:DC:114:VAL:CG2	38:DC:149:ILE:HD11	2.44	0.46
39:DD:62:TYR:HA	39:DD:87:ASN:ND2	2.30	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:DD:131:LEU:HB2	39:DD:136:ILE:CD1	2.45	0.46
40:DE:49:LEU:HD22	40:DE:49:LEU:N	2.31	0.46
42:DG:16:ARG:N	42:DG:17:PRO:HD2	2.30	0.46
42:DG:52:ILE:HD13	42:DG:52:ILE:N	2.15	0.46
46:DN:22:THR:HG22	46:DN:61:ARG:CB	2.38	0.46
46:DN:42:TRP:CD1	53:DU:63:VAL:HG11	2.50	0.46
56:DX:65:ARG:HH11	56:DX:65:ARG:HG2	1.79	0.46
58:DZ:29:TYR:CB	58:DZ:34:ASN:HB3	2.45	0.46
58:DZ:178:GLU:N	58:DZ:178:GLU:OE1	2.48	0.46
1:AA:428:G:O2'	1:AA:429:U:P	2.74	0.46
3:AC:106:VAL:O	3:AC:107:GLN:C	2.58	0.46
4:AD:101:LEU:HD23	4:AD:121:VAL:CG1	2.43	0.46
4:AD:177:ASP:O	4:AD:181:MET:N	2.48	0.46
6:AF:97:PHE:O	18:AR:31:LEU:HD23	2.14	0.46
9:AI:85:LEU:HD12	9:AI:85:LEU:C	2.39	0.46
9:AI:86:VAL:CG2	9:AI:93:ARG:HG2	2.45	0.46
10:AJ:54:PHE:O	10:AJ:55:LYS:HB3	2.16	0.46
11:AK:20:TYR:CZ	11:AK:83:ILE:HD12	2.50	0.46
16:AP:8:ARG:HB3	16:AP:28:ARG:HH12	1.80	0.46
17:AQ:99:SER:C	17:AQ:100:LYS:HG3	2.41	0.46
23:AX:26:A:H3'	23:AX:27:A:O4'	2.16	0.46
31:B5:36:CYS:SG	31:B5:48:GLU:HB2	2.55	0.46
36:BA:122:G:H1	36:BA:129:C:H42	1.63	0.46
36:BA:605:C:C4	36:BA:606:U:C5	3.03	0.46
36:BA:852:G:H2'	36:BA:853:G:H8	1.80	0.46
36:BA:1213:A:N3	36:BA:1238:G:H1'	2.30	0.46
36:BA:1902:C:C5'	39:BD:246:PRO:HD3	2.45	0.46
36:BA:2201:C:H2'	36:BA:2202:C:C6	2.51	0.46
37:BB:111:G:C2'	37:BB:112:U:H5'	2.45	0.46
38:BC:96:GLY:H	38:BC:99:ILE:HG12	1.78	0.46
39:BD:9:TYR:CD1	39:BD:10:THR:HG22	2.51	0.46
39:BD:30:GLU:H	39:BD:30:GLU:HG2	1.42	0.46
39:BD:243:GLY:O	39:BD:244:ARG:HB3	2.15	0.46
40:BE:188:VAL:HG23	40:BE:189:PRO:HD2	1.97	0.46
41:BF:160:ASN:HD22	41:BF:161:GLU:N	2.12	0.46
42:BG:48:GLU:O	42:BG:49:ASP:C	2.59	0.46
43:BH:159:GLU:CG	43:BH:160:LYS:N	2.78	0.46
45:BK:8:UNK:O	45:BK:9:UNK:C	2.63	0.46
48:BP:112:LEU:HD22	48:BP:112:LEU:C	2.41	0.46
51:BS:17:ARG:C	51:BS:19:LYS:H	2.22	0.46
51:BS:77:ALA:O	51:BS:78:LEU:C	2.59	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:BW:4:LYS:CG	55:BW:5:ALA:N	2.76	0.46
56:BX:46:ALA:C	56:BX:47:PHE:CD1	2.93	0.46
56:BX:65:ARG:HH11	56:BX:65:ARG:HG2	1.80	0.46
58:BZ:137:ILE:HD12	58:BZ:158:PRO:HG2	1.98	0.46
1:CA:59:A:H2'	1:CA:59:A:N3	2.31	0.46
1:CA:105:G:H2'	1:CA:106:C:C6	2.49	0.46
1:CA:426:G:H2'	1:CA:427:U:C6	2.50	0.46
1:CA:436:C:H5"	4:CD:156:GLU:CD	2.40	0.46
1:CA:583:A:H2'	1:CA:584:G:O4'	2.16	0.46
1:CA:746:A:O2'	1:CA:747:C:H5'	2.15	0.46
1:CA:1152:A:OP1	10:CJ:68:HIS:CD2	2.68	0.46
1:CA:1511:G:H8	1:CA:1511:G:O5'	1.99	0.46
2:CB:17:PHE:HB3	2:CB:44:LEU:HD21	1.96	0.46
4:CD:70:ILE:CG2	4:CD:71:SER:N	2.78	0.46
6:CF:87:ARG:CG	6:CF:87:ARG:NH1	2.78	0.46
8:CH:111:ILE:C	8:CH:112:LEU:HD23	2.39	0.46
20:CT:43:LEU:HB3	20:CT:48:LYS:HB2	1.97	0.46
20:CT:58:LYS:O	20:CT:62:LEU:HD12	2.15	0.46
20:CT:89:ARG:HD2	20:CT:104:LEU:CD1	2.45	0.46
24:CY:52:A:C2'	24:CY:53:G:H5'	2.46	0.46
26:D0:37:LEU:N	26:D0:59:LEU:O	2.35	0.46
28:D2:3:LEU:HB3	36:DA:98:G:OP1	2.15	0.46
29:D3:23:LEU:CD2	29:D3:50:VAL:HG11	2.45	0.46
31:D5:43:HIS:HE1	36:DA:2884:U:OP2	1.98	0.46
34:D8:15:LYS:HD3	48:DP:65:ARG:HH21	1.81	0.46
35:D9:35:ARG:HD3	36:DA:2742:C:OP1	2.16	0.46
36:DA:143:G:H2'	36:DA:143(A):C:C6	2.50	0.46
36:DA:195:A:C8	36:DA:197:A:OP1	2.69	0.46
36:DA:332:A:O2'	36:DA:333:G:P	2.73	0.46
36:DA:523:C:H2'	36:DA:524:U:C5'	2.42	0.46
36:DA:755:C:H2'	36:DA:756:C:H6	1.81	0.46
36:DA:869:G:C2'	36:DA:870:A:H5'	2.45	0.46
36:DA:876:C:H2'	36:DA:877:U:O4'	2.15	0.46
36:DA:1480:G:C2'	36:DA:1481:U:C5'	2.93	0.46
36:DA:1658:C:OP1	40:DE:132:HIS:CE1	2.69	0.46
36:DA:1889:A:O2'	36:DA:2087:G:H5'	2.16	0.46
36:DA:2131:G:H5'	36:DA:2133:G:O4'	2.15	0.46
36:DA:2457:U:C2'	36:DA:2458:G:H5'	2.46	0.46
36:DA:2733:A:H2'	36:DA:2734:A:O4'	2.15	0.46
36:DA:2811:G:C2'	36:DA:2812:G:H5'	2.44	0.46
38:DC:2:LYS:HG2	38:DC:2:LYS:O	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:DC:72:VAL:HG11	38:DC:156:ILE:O	2.16	0.46
42:DG:35:GLU:HG2	42:DG:36:LYS:N	2.30	0.46
46:DN:75:TYR:O	46:DN:76:SER:O	2.33	0.46
48:DP:99:LEU:HD23	48:DP:99:LEU:O	2.15	0.46
55:DW:24:ILE:HG21	55:DW:36:LEU:HD21	1.96	0.46
56:DX:46:ALA:C	56:DX:47:PHE:CD1	2.93	0.46
58:DZ:132:ASN:O	58:DZ:133:ILE:HD13	2.14	0.46
1:AA:720:C:H2'	1:AA:721:G:C8	2.51	0.46
1:AA:1305:G:H5"	21:AU:4:GLY:C	2.41	0.46
1:AA:1423:G:C5	1:AA:1424:C:C5	3.03	0.46
6:AF:82:ARG:HB2	6:AF:85:VAL:CG2	2.43	0.46
9:AI:28:VAL:CG1	9:AI:29:ASN:H	2.08	0.46
10:AJ:4:ILE:HB	10:AJ:74:ILE:HG13	1.98	0.46
10:AJ:9:ARG:HH21	10:AJ:97:GLU:HG3	1.80	0.46
24:AY:61:C:C2'	24:AY:62:U:H5"	2.45	0.46
25:AZ:163:PHE:C	25:AZ:165:GLY:H	2.22	0.46
25:AZ:176:LEU:O	25:AZ:180:GLU:HG3	2.15	0.46
25:AZ:341:GLN:HE22	25:AZ:390:GLU:HA	1.79	0.46
32:B6:5:VAL:O	32:B6:6:ARG:HB2	2.16	0.46
33:B7:10:ARG:NH1	36:BA:771:G:OP1	2.48	0.46
34:B8:17:THR:OG1	34:B8:21:LYS:HB2	2.14	0.46
36:BA:32:C:H5'	36:BA:32:C:H6	1.80	0.46
36:BA:654(N):G:H2'	36:BA:654(O):G:H5'	1.98	0.46
36:BA:1142(A):A:H3'	36:BA:1142(A):A:OP2	2.15	0.46
36:BA:1652:A:H2'	36:BA:1653:G:H5'	1.98	0.46
36:BA:2312:U:H2'	36:BA:2313:C:H5'	1.98	0.46
36:BA:2360:A:O2'	36:BA:2361:A:O5'	2.34	0.46
36:BA:2715:C:O2'	36:BA:2716:U:H5'	2.15	0.46
39:BD:196:VAL:HG12	39:BD:196:VAL:O	2.14	0.46
40:BE:144:ARG:CG	40:BE:145:LYS:H	2.27	0.46
41:BF:132:VAL:HG13	41:BF:133:ASN:N	2.30	0.46
42:BG:2:PRO:HG2	42:BG:98:ARG:NH1	2.31	0.46
42:BG:16:ARG:N	42:BG:17:PRO:HD2	2.29	0.46
42:BG:16:ARG:NH1	42:BG:16:ARG:HG3	2.29	0.46
42:BG:144:ILE:O	42:BG:144:ILE:CG2	2.60	0.46
42:BG:146:TYR:O	42:BG:148:MET:N	2.49	0.46
47:BO:9:GLU:O	47:BO:83:ALA:HA	2.15	0.46
47:BO:28:SER:O	47:BO:29:ASN:HB3	2.14	0.46
48:BP:40:SER:O	48:BP:41:ARG:CD	2.64	0.46
51:BS:24:LEU:HD11	51:BS:48:LEU:HD22	1.97	0.46
1:CA:557:G:H2'	1:CA:558:G:O4'	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1431:C:C2'	1:CA:1432:G:H5'	2.46	0.46
3:CC:34:LEU:HD22	3:CC:38:ARG:HE	1.80	0.46
5:CE:126:ARG:O	5:CE:127:ASN:C	2.58	0.46
8:CH:9:MET:O	8:CH:13:ILE:HG12	2.16	0.46
12:CL:8:ASN:HD22	17:CQ:34:LYS:NZ	2.14	0.46
13:CM:22:ILE:CB	13:CM:25:ILE:HD12	2.45	0.46
13:CM:65:LYS:HD3	13:CM:65:LYS:N	2.20	0.46
14:CN:28:GLY:O	14:CN:29:ARG:C	2.58	0.46
17:CQ:44:ALA:HB2	17:CQ:59:ILE:HD12	1.96	0.46
22:CW:5:G:N2	22:CW:68:C:C2	2.84	0.46
22:CW:39:U:C5'	22:CW:39:U:O2	2.63	0.46
22:CW:69:G:H2'	22:CW:70:G:C5'	2.41	0.46
24:CY:21:A:H5'	24:CY:22:G:OP1	2.15	0.46
25:CZ:107:SER:OG	25:CZ:137:LYS:HD2	2.15	0.46
25:CZ:206:ILE:C	25:CZ:208:GLU:N	2.74	0.46
25:CZ:300:ARG:HG2	25:CZ:300:ARG:NH1	2.30	0.46
26:D0:51:VAL:HG21	26:D0:79:VAL:O	2.16	0.46
28:D2:52:ASP:O	28:D2:53:LEU:C	2.57	0.46
33:D7:4:THR:HG21	36:DA:788:A:H1'	1.97	0.46
33:D7:5:TRP:O	36:DA:1612:C:H4'	2.15	0.46
35:D9:1:MET:HB2	35:D9:31:LYS:O	2.15	0.46
36:DA:118:A:H5'	36:DA:119:A:H8	1.80	0.46
36:DA:181:A:H5'	36:DA:181:A:C8	2.41	0.46
36:DA:304:G:O2'	36:DA:305:U:H5'	2.14	0.46
36:DA:782:A:N1	39:DD:226:MET:HE2	2.30	0.46
36:DA:855:G:H2'	36:DA:856:C:C6	2.49	0.46
36:DA:996:A:H4'	53:DU:92:ARG:HE	1.79	0.46
36:DA:1010:A:H1'	36:DA:1153:C:H1'	1.96	0.46
36:DA:1107:G:OP1	44:DJ:59:UNK:N	2.49	0.46
36:DA:1166:C:H2'	36:DA:1167:U:H6	1.80	0.46
36:DA:1281:G:H2'	36:DA:1282:U:H6	1.81	0.46
36:DA:1389:G:H2'	36:DA:1390:U:H6	1.79	0.46
36:DA:1684:C:O2'	36:DA:1685:C:H5'	2.15	0.46
36:DA:2102:U:C5	36:DA:2103:C:N3	2.83	0.46
36:DA:2557:G:H2'	36:DA:2558:C:C6	2.51	0.46
37:DB:66:A:H61	37:DB:108:U:C2'	2.27	0.46
38:DC:10:LEU:CD1	38:DC:32:LEU:HA	2.45	0.46
38:DC:78:ALA:HA	38:DC:116:THR:N	2.21	0.46
41:DF:3:GLU:O	41:DF:19:GLU:HG3	2.15	0.46
41:DF:24:LEU:HD12	41:DF:118:ALA:HB1	1.97	0.46
42:DG:7:LEU:HD22	42:DG:176:LEU:CD2	2.45	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DG:66:GLN:HB3	42:DG:92:VAL:HG21	1.97	0.46
43:DH:83:TYR:HB3	43:DH:135:GLY:N	2.29	0.46
45:DK:78:UNK:C	45:DK:80:UNK:N	2.77	0.46
50:DR:11:ASN:O	50:DR:11:ASN:OD1	2.32	0.46
51:DS:24:LEU:HD11	51:DS:48:LEU:HD22	1.97	0.46
51:DS:29:PHE:HD1	51:DS:30:ARG:N	2.13	0.46
51:DS:56:LEU:O	51:DS:57:LYS:O	2.34	0.46
52:DT:10:VAL:C	52:DT:12:SER:N	2.73	0.46
52:DT:94:ALA:HB1	52:DT:99:LEU:HD23	1.98	0.46
55:DW:14:PRO:HG2	55:DW:78:GLU:CG	2.45	0.46
58:DZ:120:ILE:HG13	58:DZ:170:THR:HG22	1.97	0.46
1:AA:77:G:H3'	1:AA:78:G:C8	2.50	0.46
1:AA:263:A:OP2	20:AT:79:ARG:NH1	2.49	0.46
1:AA:408:A:H4'	4:AD:112:VAL:HG11	1.97	0.46
1:AA:583:A:H2'	1:AA:584:G:O4'	2.16	0.46
1:AA:647:C:O2'	1:AA:648:A:H5'	2.16	0.46
1:AA:853:G:O2'	1:AA:854:G:H5'	2.15	0.46
1:AA:1442(B):A:C2	52:BT:118:ARG:CZ	2.98	0.46
2:AB:71:VAL:HG13	2:AB:93:VAL:HG13	1.98	0.46
2:AB:114:ARG:NH1	2:AB:118:LEU:CG	2.78	0.46
3:AC:77:ILE:HA	3:AC:84:ILE:HB	1.96	0.46
4:AD:101:LEU:C	4:AD:103:ASN:H	2.23	0.46
4:AD:121:VAL:CA	4:AD:126:ILE:HD13	2.44	0.46
8:AH:44:PHE:HB3	8:AH:80:ILE:HG12	1.98	0.46
9:AI:18:PHE:O	9:AI:19:LEU:HB2	2.15	0.46
10:AJ:71:LEU:HD12	10:AJ:72:VAL:H	1.79	0.46
11:AK:73:MET:C	11:AK:75:TYR:H	2.24	0.46
12:AL:43:VAL:HG23	12:AL:93:LEU:HD22	1.98	0.46
13:AM:5:ALA:HB1	13:AM:66:LEU:HD23	1.98	0.46
24:AY:6:C:N4	24:AY:67:G:H1	2.10	0.46
25:AZ:134:PHE:CD1	25:AZ:202:LEU:HD22	2.50	0.46
32:B6:27:LYS:O	32:B6:29:ASN:N	2.48	0.46
36:BA:27:G:N2	36:BA:512:G:C2'	2.68	0.46
36:BA:331:A:C1'	36:BA:332:A:OP1	2.63	0.46
36:BA:528:A:H2	36:BA:2043:C:H5'	1.81	0.46
36:BA:586:A:N1	36:BA:809:G:O2'	2.47	0.46
36:BA:603:A:N3	36:BA:604:G:H1'	2.31	0.46
36:BA:609:A:H2'	36:BA:610:G:O4'	2.15	0.46
36:BA:2092:U:H5	36:BA:2226:C:OP2	1.97	0.46
36:BA:2121:G:H2'	36:BA:2122:U:C6	2.50	0.46
40:BE:101:ARG:HA	40:BE:101:ARG:HD3	1.68	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BE:111:ARG:HG2	40:BE:160:TYR:O	2.16	0.46
41:BF:53:THR:HG22	41:BF:56:GLU:CG	2.45	0.46
43:BH:66:GLY:HA2	43:BH:69:ARG:CB	2.41	0.46
46:BN:16:ILE:CG2	46:BN:54:VAL:HG22	2.46	0.46
47:BO:32:TYR:CD1	47:BO:32:TYR:N	2.83	0.46
50:BR:79:LEU:C	50:BR:79:LEU:HD13	2.41	0.46
50:BR:117:VAL:HG22	50:BR:118:GLU:H	1.81	0.46
52:BT:13:ARG:HH12	52:BT:15:VAL:HG12	1.79	0.46
54:BV:41:GLY:HA3	54:BV:45:THR:OG1	2.16	0.46
54:BV:49:THR:CB	54:BV:50:PRO:CD	2.93	0.46
1:CA:371:G:H1'	1:CA:482:A:H1'	1.97	0.46
1:CA:430:A:H2'	1:CA:431:A:O4'	2.16	0.46
1:CA:640:A:O2'	8:CH:115:SER:HB2	2.16	0.46
1:CA:1415:G:O2'	1:CA:1416:G:H5'	2.16	0.46
1:CA:1417:G:C6	1:CA:1482:G:C6	3.03	0.46
4:CD:101:LEU:O	4:CD:102:ASP:C	2.59	0.46
6:CF:10:LEU:HB2	6:CF:59:TYR:HB3	1.98	0.46
12:CL:93:LEU:HD13	12:CL:96:VAL:HG21	1.98	0.46
13:CM:15:VAL:CG1	13:CM:45:VAL:HG22	2.46	0.46
13:CM:79:LYS:O	13:CM:82:MET:HG2	2.16	0.46
16:CP:8:ARG:HB3	16:CP:28:ARG:HH12	1.81	0.46
17:CQ:16:GLN:O	17:CQ:17:LYS:HB2	2.15	0.46
20:CT:20:LEU:O	20:CT:23:ARG:HB3	2.16	0.46
25:CZ:223:MET:O	25:CZ:223:MET:HG3	2.15	0.46
29:D3:11:SER:HB3	36:DA:988:A:OP2	2.16	0.46
32:D6:53:LYS:HD3	32:D6:54:ILE:H	1.80	0.46
34:D8:15:LYS:HG2	48:DP:65:ARG:NH2	2.31	0.46
34:D8:22:VAL:HB	34:D8:53:PRO:CB	2.46	0.46
34:D8:56:GLU:O	34:D8:57:ARG:C	2.58	0.46
36:DA:16:G:H2'	36:DA:17:G:H8	1.80	0.46
36:DA:894:C:O2'	36:DA:895:U:H5'	2.15	0.46
36:DA:1902:C:OP1	39:DD:242:ARG:NH1	2.49	0.46
39:DD:97:TYR:C	39:DD:99:ASP:N	2.74	0.46
40:DE:132:HIS:HA	40:DE:135:HIS:CE1	2.51	0.46
40:DE:183:LEU:HD12	40:DE:183:LEU:N	2.30	0.46
43:DH:147:ASN:O	43:DH:151:ILE:HG12	2.16	0.46
46:DN:87:LEU:O	46:DN:88:GLU:C	2.58	0.46
49:DQ:4:PRO:HG2	49:DQ:7:MET:HE2	1.97	0.46
50:DR:78:LYS:O	50:DR:83:ILE:HG12	2.15	0.46
50:DR:97:VAL:HA	50:DR:113:LEU:O	2.16	0.46
53:DU:14:HIS:CD2	53:DU:36:ARG:NH2	2.84	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:DW:13:SER:HA	55:DW:99:ARG:HB2	1.97	0.46
58:DZ:177:PRO:O	58:DZ:178:GLU:HB3	2.16	0.46
1:AA:219:C:H2'	1:AA:220:G:O4'	2.15	0.46
1:AA:319:G:C2'	1:AA:320:C:H5'	2.46	0.46
1:AA:436:C:H5"	4:AD:156:GLU:CD	2.40	0.46
1:AA:503:C:O2'	1:AA:504:C:H5'	2.16	0.46
1:AA:523:A:N1	12:AL:92:ASP:OD2	2.49	0.46
1:AA:674:G:H4'	18:AR:81:PHE:CD2	2.50	0.46
1:AA:828:A:OP1	1:AA:828:A:H4'	2.15	0.46
1:AA:945:G:C2	1:AA:946:A:C8	3.04	0.46
2:AB:132:LYS:O	2:AB:136:VAL:HG23	2.15	0.46
9:AI:4:TYR:HA	9:AI:88:TYR:CD1	2.51	0.46
16:AP:8:ARG:C	16:AP:9:PHE:HD1	2.24	0.46
19:AS:42:PRO:O	19:AS:44:MET:SD	2.73	0.46
19:AS:79:THR:O	19:AS:80:TYR:CB	2.63	0.46
22:AW:59:U:H3'	22:AW:60:U:C6	2.51	0.46
25:AZ:124:ARG:HG2	61:AZ:502:KIR:H421	1.98	0.46
25:AZ:333:GLY:CA	25:AZ:363:MET:HA	2.45	0.46
25:AZ:355:LEU:HB2	25:AZ:356:PRO:CD	2.45	0.46
27:B1:37:ILE:O	27:B1:37:ILE:HG13	2.14	0.46
27:B1:56:GLN:O	27:B1:57:GLU:CB	2.63	0.46
31:B5:6:VAL:HG13	36:BA:2016:U:H1'	1.96	0.46
35:B9:15:LYS:HB3	35:B9:15:LYS:NZ	2.31	0.46
36:BA:116:C:H2'	36:BA:117:G:O4'	2.16	0.46
36:BA:236:C:H2'	36:BA:237:C:C6	2.50	0.46
36:BA:271(D):G:O2'	36:BA:271(E):U:H5'	2.16	0.46
36:BA:869:G:C2'	36:BA:870:A:H5'	2.46	0.46
36:BA:1097:U:H2'	36:BA:1098:A:H8	1.80	0.46
36:BA:1240:U:O2'	36:BA:1241:A:H5'	2.15	0.46
36:BA:1288:U:C2	36:BA:1327:C:O2	2.68	0.46
36:BA:1337:G:H2'	36:BA:1338:G:C8	2.50	0.46
36:BA:1657:C:H2'	36:BA:1658:C:C6	2.51	0.46
36:BA:2533:A:OP1	36:BA:2665:A:H1'	2.16	0.46
36:BA:2762:G:H2'	36:BA:2763:G:C5'	2.45	0.46
36:BA:2836:U:H2'	36:BA:2837:G:C8	2.51	0.46
36:BA:2860:A:C8	36:BA:2861:G:H1'	2.50	0.46
36:BA:2893:G:H5'	36:BA:2894:G:C5'	2.34	0.46
38:BC:83:ILE:HD11	38:BC:97:GLU:CG	2.45	0.46
40:BE:33:VAL:HG12	40:BE:69:LYS:HD2	1.96	0.46
43:BH:23:ARG:O	43:BH:24:VAL:HG23	2.16	0.46
46:BN:3:THR:HG22	46:BN:5:VAL:H	1.81	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:BO:86:ILE:C	47:BO:87:ILE:HD13	2.40	0.46
48:BP:99:LEU:HD23	48:BP:99:LEU:O	2.15	0.46
48:BP:108:LYS:HD2	48:BP:108:LYS:N	2.30	0.46
49:BQ:134:ARG:HA	49:BQ:137:TYR:CE1	2.51	0.46
52:BT:10:VAL:C	52:BT:12:SER:N	2.73	0.46
52:BT:110:ILE:C	52:BT:112:ARG:H	2.24	0.46
52:BT:125:ARG:O	52:BT:128:GLU:HG3	2.15	0.46
53:BU:46:ALA:O	53:BU:50:ARG:HG3	2.15	0.46
57:BY:30:VAL:HG12	57:BY:31:LEU:N	2.31	0.46
1:CA:93:G:H2'	1:CA:96:U:O4'	2.16	0.46
1:CA:123:C:OP1	1:CA:312:C:H5'	2.16	0.46
1:CA:392:G:H2'	1:CA:393:A:C8	2.50	0.46
1:CA:1123:A:H2	1:CA:1150:U:C5	2.33	0.46
1:CA:1365:G:O2'	1:CA:1366:C:H5'	2.16	0.46
2:CB:25:ASN:O	2:CB:27:LYS:N	2.48	0.46
2:CB:127:ILE:HG22	2:CB:128:GLU:N	2.30	0.46
3:CC:11:ARG:O	3:CC:12:LEU:C	2.58	0.46
4:CD:2:GLY:O	4:CD:3:ARG:C	2.58	0.46
5:CE:6:PHE:HB2	5:CE:34:VAL:CG2	2.46	0.46
7:CG:76:ARG:HH11	7:CG:76:ARG:HG2	1.81	0.46
9:CI:113:LYS:HD3	9:CI:119:ALA:HA	1.97	0.46
13:CM:32:GLU:OE1	13:CM:32:GLU:C	2.59	0.46
13:CM:91:ARG:HB2	13:CM:98:VAL:HG12	1.96	0.46
19:CS:36:ARG:HB2	19:CS:72:GLY:CA	2.45	0.46
22:CW:49:C:H42	22:CW:65:G:H1	1.63	0.46
34:D8:15:LYS:HD2	34:D8:16:ILE:N	2.31	0.46
36:DA:201:C:C2'	36:DA:202:U:H5'	2.46	0.46
36:DA:673:C:P	41:DF:81:PRO:HG3	2.56	0.46
36:DA:832:G:P	48:DP:40:SER:HB3	2.56	0.46
36:DA:852:G:H2'	36:DA:853:G:C8	2.51	0.46
36:DA:958:U:OP2	49:DQ:14:ARG:HD3	2.16	0.46
36:DA:1427:A:H4'	36:DA:1428:C:O5'	2.16	0.46
36:DA:2031:A:N3	36:DA:2455:G:O2'	2.44	0.46
36:DA:2178:C:O2	36:DA:2178:C:O4'	2.34	0.46
36:DA:2469:A:H2'	36:DA:2470:G:H5'	1.98	0.46
36:DA:2809:A:H2'	36:DA:2810:A:C8	2.49	0.46
40:DE:1:MET:O	40:DE:2:LYS:O	2.34	0.46
41:DF:4:VAL:HG13	41:DF:19:GLU:OE1	2.16	0.46
41:DF:24:LEU:O	41:DF:115:ALA:HB1	2.15	0.46
41:DF:103:LYS:CG	41:DF:106:ARG:HH21	2.28	0.46
41:DF:129:PHE:CD2	41:DF:163:VAL:HG21	2.51	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DF:160:ASN:HD22	41:DF:161:GLU:N	2.14	0.46
42:DG:125:PHE:HD1	42:DG:126:ASP:N	2.13	0.46
46:DN:16:ILE:CG2	46:DN:54:VAL:HG22	2.46	0.46
46:DN:21:LYS:HD3	46:DN:22:THR:H	1.80	0.46
47:DO:65:THR:HA	47:DO:82:ASN:HD22	1.79	0.46
48:DP:126:VAL:HG22	48:DP:145:PRO:CG	2.46	0.46
1:AA:59:A:H2'	1:AA:59:A:N3	2.30	0.46
1:AA:59:A:C5'	1:AA:60:A:H5"	2.45	0.46
1:AA:156:G:C6	1:AA:166:G:C6	3.04	0.46
1:AA:371:G:H1'	1:AA:482:A:H1'	1.97	0.46
1:AA:409:G:H3'	1:AA:410:G:H8	1.80	0.46
1:AA:495:A:O2'	1:AA:496:A:P	2.74	0.46
1:AA:542:G:C2	1:AA:543:C:C5	3.04	0.46
1:AA:655:A:H2'	1:AA:656:C:H6	1.81	0.46
1:AA:746:A:O2'	1:AA:747:C:H5'	2.15	0.46
1:AA:883:C:O2'	1:AA:884:U:H5'	2.16	0.46
3:AC:148:GLY:HA3	3:AC:172:ARG:O	2.14	0.46
8:AH:46:LYS:HG3	8:AH:64:LYS:HB2	1.97	0.46
9:AI:90:PRO:O	9:AI:91:ASP:O	2.34	0.46
11:AK:72:ALA:O	11:AK:75:TYR:HB2	2.16	0.46
16:AP:42:ARG:C	16:AP:44:THR:H	2.24	0.46
17:AQ:47:PRO:HG2	17:AQ:48:GLU:H	1.81	0.46
22:AV:20:U:H2'	22:AV:21:A:C5'	2.46	0.46
24:AY:1:A:H5'	25:AZ:300:ARG:HH12	1.78	0.46
28:B2:43:GLN:C	28:B2:44:LEU:HD12	2.40	0.46
30:B4:7:PRO:HG3	42:BG:61:ALA:HB1	1.97	0.46
30:B4:37:SER:O	30:B4:38:LYS:HB3	2.15	0.46
36:BA:208:C:H2'	36:BA:209:C:C6	2.51	0.46
36:BA:605:C:H2'	36:BA:606:U:H6	1.79	0.46
36:BA:622:G:O2'	36:BA:623:G:H5'	2.14	0.46
36:BA:1069:A:H1'	36:BA:1070:A:P	2.56	0.46
36:BA:1385:G:O2'	36:BA:1396:U:C6	2.60	0.46
36:BA:1755:A:P	52:BT:113:LYS:HZ1	2.39	0.46
36:BA:2126:A:O2'	36:BA:2127:G:OP2	2.34	0.46
36:BA:2303:G:H4'	42:BG:125:PHE:O	2.15	0.46
36:BA:2545:G:O2'	36:BA:2546:U:H5'	2.16	0.46
36:BA:2639:A:H2'	36:BA:2640:G:O4'	2.16	0.46
36:BA:2809:A:H2'	36:BA:2810:A:C8	2.50	0.46
37:BB:16:G:O2'	37:BB:17:C:H6	1.98	0.46
39:BD:130:ALA:HB2	39:BD:192:THR:HB	1.97	0.46
39:BD:242:ARG:NH1	39:BD:242:ARG:HG2	2.30	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BF:167:ALA:O	41:BF:168:ARG:C	2.59	0.46
42:BG:16:ARG:NE	42:BG:31:VAL:HG11	2.31	0.46
42:BG:116:ASP:O	42:BG:117:PHE:HB3	2.15	0.46
42:BG:120:LEU:O	42:BG:121:ASN:C	2.58	0.46
43:BH:104:GLU:OE1	43:BH:106:THR:HG23	2.16	0.46
43:BH:105:LEU:HD21	43:BH:113:VAL:HB	1.97	0.46
46:BN:38:HIS:C	53:BU:67:ALA:HB1	2.41	0.46
46:BN:57:ALA:C	46:BN:58:ASP:O	2.58	0.46
48:BP:23:PRO:O	48:BP:33:ARG:CD	2.57	0.46
50:BR:22:ARG:NE	50:BR:69:ASP:HA	2.31	0.46
51:BS:19:LYS:O	51:BS:19:LYS:HG2	2.15	0.46
51:BS:56:LEU:O	51:BS:57:LYS:O	2.34	0.46
51:BS:61:ASN:O	51:BS:65:VAL:HG23	2.15	0.46
52:BT:56:GLY:O	52:BT:57:PHE:C	2.59	0.46
53:BU:115:ALA:C	53:BU:117:GLN:N	2.73	0.46
57:BY:33:LYS:C	57:BY:35:TYR:H	2.23	0.46
1:CA:383:A:H2'	1:CA:384:G:H5'	1.97	0.46
1:CA:599:C:O2'	1:CA:600:C:H5'	2.16	0.46
1:CA:1152:A:H2'	1:CA:1153:C:H6	1.79	0.46
1:CA:1264:C:H2'	1:CA:1265:G:H8	1.79	0.46
1:CA:1314:C:O2'	1:CA:1315:U:H5'	2.15	0.46
3:CC:3:ASN:CG	3:CC:4:LYS:N	2.73	0.46
4:CD:147:ALA:HA	4:CD:181:MET:O	2.16	0.46
20:CT:82:SER:O	20:CT:86:ARG:CB	2.64	0.46
25:CZ:258:LEU:O	25:CZ:259:ALA:CB	2.64	0.46
25:CZ:291:ARG:O	25:CZ:293:VAL:HG23	2.16	0.46
27:D1:67:ILE:N	27:D1:68:PRO:CD	2.78	0.46
30:D4:26:SER:OG	30:D4:27:THR:N	2.48	0.46
30:D4:37:SER:O	30:D4:38:LYS:HB3	2.15	0.46
31:D5:42:PRO:O	31:D5:43:HIS:HB2	2.16	0.46
31:D5:54:GLY:H	31:D5:56:LYS:HZ1	1.60	0.46
36:DA:90:U:O3'	36:DA:92:A:O4'	2.33	0.46
36:DA:360:G:O2'	36:DA:361:G:H5'	2.16	0.46
36:DA:581:C:OP1	53:DU:33:ARG:HG3	2.15	0.46
36:DA:811:U:HO2'	36:DA:812:C:H5"	1.81	0.46
36:DA:1164:G:H2'	36:DA:1165:U:C6	2.51	0.46
36:DA:1222:C:C2'	36:DA:1223:G:H5"	2.45	0.46
37:DB:58:A:H2'	37:DB:59:A:O4'	2.15	0.46
38:DC:83:ILE:HD11	38:DC:97:GLU:CG	2.45	0.46
40:DE:35:GLN:CG	40:DE:36:ARG:N	2.79	0.46
42:DG:29:TRP:HA	42:DG:29:TRP:CE3	2.51	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:DH:23:ARG:O	43:DH:24:VAL:HG23	2.16	0.46
47:DO:86:ILE:O	47:DO:87:ILE:HD13	2.15	0.46
48:DP:40:SER:O	48:DP:41:ARG:CD	2.63	0.46
51:DS:89:ARG:HG2	51:DS:89:ARG:NH1	2.27	0.46
53:DU:88:ILE:CD1	53:DU:109:LEU:HD22	2.46	0.46
54:DV:71:LEU:HD23	54:DV:71:LEU:HA	1.75	0.46
55:DW:10:VAL:HG23	55:DW:101:SER:O	2.16	0.46
56:DX:18:TYR:C	56:DX:20:GLY:N	2.74	0.46
56:DX:21:PHE:O	56:DX:22:ALA:C	2.59	0.46
57:DY:30:VAL:HG12	57:DY:31:LEU:N	2.30	0.46
58:DZ:113:ALA:HB1	58:DZ:146:ILE:CD1	2.45	0.46
1:AA:119:A:O2'	1:AA:120:A:OP2	2.30	0.46
1:AA:338:A:H2'	1:AA:339:C:C6	2.50	0.46
1:AA:426:G:P	4:AD:36:ARG:NH2	2.87	0.46
1:AA:909:A:H2'	1:AA:910:C:O4'	2.16	0.46
1:AA:1006:C:H2'	1:AA:1007:C:C6	2.50	0.46
1:AA:1090:U:H2'	1:AA:1091:U:C6	2.51	0.46
1:AA:1180:A:H5"	1:AA:1181:G:OP2	2.15	0.46
1:AA:1314:C:C5	1:AA:1315:U:C4	3.03	0.46
4:AD:31:CYS:C	4:AD:33:MET:H	2.24	0.46
8:AH:9:MET:O	8:AH:13:ILE:HG12	2.16	0.46
10:AJ:4:ILE:HB	10:AJ:74:ILE:CD1	2.45	0.46
12:AL:78:GLN:O	12:AL:80:HIS:N	2.48	0.46
13:AM:3:ARG:HH21	13:AM:7:VAL:HG13	1.79	0.46
13:AM:52:GLU:HG2	13:AM:55:ARG:NH1	2.31	0.46
17:AQ:40:LYS:HD3	17:AQ:42:TYR:OH	2.16	0.46
18:AR:22:VAL:HG23	18:AR:55:ARG:O	2.16	0.46
25:AZ:22:HIS:O	25:AZ:137:LYS:HE2	2.15	0.46
26:B0:11:ARG:O	26:B0:14:ARG:NH2	2.47	0.46
26:B0:49:LYS:H	26:B0:49:LYS:HG3	1.55	0.46
28:B2:47:ASN:C	28:B2:51:ARG:H	2.23	0.46
28:B2:53:LEU:C	28:B2:55:ARG:N	2.72	0.46
32:B6:32:ASN:O	32:B6:33:LYS:CB	2.64	0.46
34:B8:22:VAL:HB	34:B8:53:PRO:CB	2.45	0.46
35:B9:1:MET:HB2	35:B9:31:LYS:O	2.15	0.46
36:BA:843:G:O2'	36:BA:844:C:H5'	2.15	0.46
36:BA:1286:A:OP1	50:BR:105:ARG:NH1	2.49	0.46
36:BA:1472:A:O2'	36:BA:1473:G:H5'	2.15	0.46
36:BA:2100:G:H1	36:BA:2189:U:H3	1.62	0.46
36:BA:2109:U:O2	36:BA:2180:U:H5	1.99	0.46
36:BA:2469:A:H2'	36:BA:2470:G:H5'	1.96	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BC:99:ILE:C	38:BC:101:GLN:N	2.72	0.46
38:BC:103:ILE:O	38:BC:106:GLY:N	2.48	0.46
40:BE:48:GLN:HA	40:BE:80:GLU:HA	1.97	0.46
41:BF:127:GLU:HB2	41:BF:196:LEU:HD12	1.97	0.46
42:BG:102:PHE:CZ	42:BG:106:LEU:HD13	2.50	0.46
43:BH:80:SER:O	43:BH:81:GLU:HB2	2.15	0.46
43:BH:105:LEU:N	43:BH:105:LEU:CD2	2.78	0.46
46:BN:34:LEU:CD1	46:BN:116:LEU:HB3	2.46	0.46
48:BP:98:GLU:H	48:BP:101:VAL:HG13	1.80	0.46
48:BP:112:LEU:HD11	48:BP:114:ILE:CD1	2.46	0.46
1:CA:59:A:H5'	1:CA:60:A:C5'	2.46	0.46
1:CA:519:C:H2'	1:CA:520:A:O4'	2.15	0.46
1:CA:957:U:O2	1:CA:959:A:H8	1.99	0.46
1:CA:1105:A:O2'	1:CA:1106:G:H5'	2.15	0.46
1:CA:1243:C:H2'	1:CA:1244:C:H6	1.81	0.46
2:CB:51:LEU:HD21	2:CB:55:PHE:CZ	2.51	0.46
2:CB:69:LEU:HD13	2:CB:71:VAL:CG2	2.46	0.46
2:CB:105:PHE:CE1	2:CB:155:LEU:HD12	2.51	0.46
2:CB:224:GLN:O	2:CB:226:ARG:N	2.49	0.46
4:CD:18:LYS:HE3	4:CD:31:CYS:CB	2.45	0.46
4:CD:75:PHE:CE1	4:CD:93:PHE:CZ	3.04	0.46
4:CD:151:LYS:HG2	4:CD:151:LYS:O	2.16	0.46
9:CI:53:VAL:O	9:CI:53:VAL:HG23	2.14	0.46
12:CL:26:ALA:O	12:CL:33:ARG:HD2	2.16	0.46
15:CO:66:LEU:O	15:CO:69:TYR:HB3	2.15	0.46
19:CS:29:ARG:O	19:CS:31:ILE:HG22	2.15	0.46
22:CW:39:U:H2'	22:CW:40:C:H5'	1.97	0.46
25:CZ:313:HIS:CB	25:CZ:380:LEU:HD12	2.46	0.46
31:D5:3:LYS:O	31:D5:4:HIS:O	2.34	0.46
31:D5:6:VAL:HG13	36:DA:2016:U:H1'	1.98	0.46
32:D6:36:LEU:C	32:D6:36:LEU:CD2	2.89	0.46
35:D9:3:VAL:HG21	36:DA:2539:C:H4'	1.98	0.46
36:DA:26:G:C6	36:DA:27:G:N1	2.84	0.46
36:DA:587:C:O2'	36:DA:588:U:OP2	2.32	0.46
36:DA:589:C:H2'	36:DA:590:A:C8	2.50	0.46
36:DA:605:C:C4	36:DA:606:U:C5	3.04	0.46
36:DA:634:C:H2'	36:DA:635:C:C6	2.51	0.46
36:DA:963:U:H2'	36:DA:964:C:C6	2.51	0.46
36:DA:1286:A:OP1	50:DR:105:ARG:NH1	2.48	0.46
36:DA:1542:A:H2'	36:DA:1544:A:C4'	2.46	0.46
36:DA:1833:U:O2'	36:DA:1969:A:N1	2.45	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2196:C:H2'	36:DA:2197:U:C6	2.50	0.46
36:DA:2652:C:H42	36:DA:2668:G:H1	1.64	0.46
36:DA:2715:C:O2'	36:DA:2716:U:H5'	2.16	0.46
36:DA:2756:U:C1'	36:DA:2757:A:H5"	2.34	0.46
38:DC:103:ILE:O	38:DC:106:GLY:N	2.48	0.46
39:DD:34:VAL:O	39:DD:35:LYS:C	2.58	0.46
40:DE:101:ARG:CB	40:DE:201:THR:HG21	2.45	0.46
42:DG:96:ARG:O	42:DG:97:ASP:C	2.58	0.46
43:DH:130:ARG:O	43:DH:131:VAL:HG23	2.15	0.46
43:DH:159:GLU:HG3	43:DH:160:LYS:HG3	1.98	0.46
46:DN:9:VAL:HG21	46:DN:48:MET:CB	2.45	0.46
48:DP:61:ARG:O	48:DP:62:LEU:CB	2.57	0.46
48:DP:105:LEU:N	48:DP:105:LEU:CD1	2.75	0.46
49:DQ:48:GLU:O	49:DQ:49:ALA:C	2.59	0.46
50:DR:4:LEU:O	50:DR:6:SER:N	2.49	0.46
52:DT:28:VAL:HG23	52:DT:47:GLY:O	2.16	0.46
53:DU:19:LYS:O	53:DU:22:LYS:HG2	2.15	0.46
55:DW:82:LEU:H	55:DW:82:LEU:CD1	2.23	0.46
56:DX:49:VAL:HG12	56:DX:87:GLN:HB3	1.98	0.46
58:DZ:172:ALA:O	58:DZ:173:ALA:HB2	2.16	0.46
1:AA:256:U:H2'	1:AA:257:G:H8	1.80	0.46
1:AA:375:U:O2'	16:AP:28:ARG:HD2	2.16	0.46
1:AA:540:G:O2'	1:AA:541:G:H5'	2.16	0.46
1:AA:826:C:H2'	1:AA:827:U:H6	1.81	0.46
1:AA:1054:C:O2'	1:AA:1055:A:P	2.74	0.46
1:AA:1127:G:C2'	1:AA:1128:C:H5'	2.46	0.46
1:AA:1133:G:C4	1:AA:1142:G:N2	2.84	0.46
1:AA:1152:A:OP1	10:AJ:68:HIS:CD2	2.69	0.46
3:AC:34:LEU:HG	14:AN:25:VAL:HG11	1.98	0.46
4:AD:152:SER:C	4:AD:154:ASN:N	2.74	0.46
4:AD:174:LEU:HD23	4:AD:185:PHE:HA	1.98	0.46
5:AE:76:ILE:CG1	5:AE:77:PRO:HD2	2.46	0.46
6:AF:47:ARG:O	6:AF:47:ARG:HG3	2.15	0.46
7:AG:118:VAL:O	7:AG:121:ALA:HB3	2.16	0.46
10:AJ:96:ILE:HD13	10:AJ:96:ILE:N	2.17	0.46
14:AN:12:ARG:HH11	14:AN:12:ARG:CB	2.29	0.46
22:AW:39:U:C5'	22:AW:39:U:O2	2.64	0.46
25:AZ:258:LEU:O	25:AZ:259:ALA:CB	2.64	0.46
27:B1:82:LEU:C	27:B1:83:GLU:HG3	2.41	0.46
29:B3:11:SER:HB3	36:BA:988:A:OP2	2.15	0.46
33:B7:12:ARG:NH2	36:BA:465:G:OP1	2.46	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:B8:15:LYS:CG	48:BP:65:ARG:HH21	2.28	0.46
36:BA:143:G:H2'	36:BA:143(A):C:H6	1.81	0.46
36:BA:176:G:C2'	36:BA:177:G:H5'	2.45	0.46
36:BA:658:C:C2	36:BA:659:C:C5	3.04	0.46
36:BA:673:C:P	41:BF:81:PRO:HG3	2.56	0.46
36:BA:1480:G:C2'	36:BA:1481:U:C5'	2.94	0.46
36:BA:1862:G:O2'	36:BA:1863:G:H5'	2.16	0.46
36:BA:2257:U:O2'	36:BA:2258:C:H5'	2.15	0.46
36:BA:2330:G:O2'	36:BA:2331:G:H5'	2.15	0.46
36:BA:2562:U:H4'	47:BO:25:LEU:HD21	1.98	0.46
36:BA:2666:C:H5'	36:BA:2667:C:OP2	2.16	0.46
36:BA:2875:C:O2'	52:BT:5:ALA:HB3	2.15	0.46
37:BB:105:A:OP1	58:BZ:72:ARG:NH1	2.49	0.46
39:BD:24:ILE:CG1	39:BD:25:THR:N	2.77	0.46
40:BE:24:THR:HG22	40:BE:186:GLY:CA	2.45	0.46
40:BE:108:SER:O	40:BE:162:ALA:HA	2.16	0.46
41:BF:4:VAL:HA	41:BF:19:GLU:CB	2.42	0.46
43:BH:83:TYR:HB3	43:BH:135:GLY:N	2.31	0.46
46:BN:9:VAL:O	46:BN:10:GLU:OE1	2.34	0.46
46:BN:55:VAL:CG2	46:BN:126:PRO:HA	2.40	0.46
49:BQ:58:PHE:HD1	49:BQ:58:PHE:O	1.99	0.46
51:BS:98:VAL:C	51:BS:100:ALA:N	2.73	0.46
52:BT:31:SER:HG	52:BT:32:TYR:HE1	1.62	0.46
53:BU:8:VAL:O	53:BU:9:VAL:C	2.58	0.46
53:BU:14:HIS:CD2	53:BU:36:ARG:NH2	2.83	0.46
53:BU:95:LEU:HD11	54:BV:11:GLN:O	2.16	0.46
53:BU:115:ALA:C	53:BU:117:GLN:H	2.24	0.46
55:BW:78:GLU:OE2	55:BW:99:ARG:HD2	2.15	0.46
1:CA:156:G:O2'	1:CA:157:G:H5'	2.16	0.46
1:CA:308:C:H2'	1:CA:309:G:H8	1.81	0.46
1:CA:346:G:N3	1:CA:346:G:C2'	2.79	0.46
1:CA:778:G:H1'	11:CK:119:CYS:HB3	1.98	0.46
1:CA:1153:C:O2'	1:CA:1154:G:C5'	2.64	0.46
1:CA:1220:G:O2'	1:CA:1221:G:H5'	2.15	0.46
2:CB:47:THR:HG23	2:CB:202:PRO:O	2.16	0.46
2:CB:169:LYS:O	2:CB:169:LYS:HD3	2.16	0.46
2:CB:236:TYR:C	2:CB:238:LEU:N	2.73	0.46
7:CG:120:ILE:HG22	7:CG:124:LEU:HD12	1.98	0.46
9:CI:65:VAL:HG21	9:CI:73:GLN:CB	2.45	0.46
11:CK:110:ASP:HB2	18:CR:88:LYS:CE	2.44	0.46
12:CL:112:ASP:O	12:CL:113:ARG:C	2.59	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:CM:20:THR:C	13:CM:22:ILE:H	2.24	0.46
13:CM:84:ILE:HG13	19:CS:66:MET:SD	2.55	0.46
14:CN:22:THR:O	14:CN:23:ARG:HB3	2.14	0.46
14:CN:37:PHE:CE1	14:CN:53:LEU:HD13	2.51	0.46
15:CO:18:PHE:CD1	15:CO:18:PHE:C	2.94	0.46
16:CP:5:ARG:NE	16:CP:22:THR:HG21	2.31	0.46
19:CS:21:GLU:O	19:CS:21:GLU:HG3	2.14	0.46
22:CV:20:U:H2'	22:CV:21:A:C5'	2.46	0.46
36:DA:687:C:H2'	36:DA:688:U:O4'	2.15	0.46
36:DA:761:A:C8	36:DA:761:A:C3'	2.99	0.46
36:DA:761:A:C8	36:DA:761:A:H3'	2.51	0.46
36:DA:815:C:H41	48:DP:27:HIS:CE1	2.33	0.46
36:DA:1215:G:O2'	36:DA:1216:G:H5'	2.15	0.46
36:DA:1222:C:H2'	36:DA:1223:G:H5'	1.98	0.46
36:DA:1658:C:OP1	40:DE:132:HIS:ND1	2.49	0.46
36:DA:1889:A:H1'	36:DA:2087:G:O4'	2.16	0.46
36:DA:1902:C:H2'	36:DA:1903:G:O5'	2.16	0.46
36:DA:2110:G:H5"	36:DA:2145:C:N4	2.31	0.46
36:DA:2819:G:H2'	36:DA:2821:A:N7	2.30	0.46
38:DC:196:LEU:O	38:DC:199:HIS:N	2.49	0.46
39:DD:70:TRP:HZ3	39:DD:146:GLU:CD	2.24	0.46
39:DD:102:LYS:C	39:DD:103:ARG:HG2	2.41	0.46
39:DD:131:LEU:HD12	39:DD:131:LEU:N	2.30	0.46
39:DD:243:GLY:O	39:DD:244:ARG:HB3	2.15	0.46
40:DE:34:VAL:CG1	40:DE:48:GLN:HE21	2.28	0.46
40:DE:46:ALA:HB2	40:DE:82:ARG:HA	1.96	0.46
40:DE:120:TRP:HB3	40:DE:155:LYS:HD3	1.98	0.46
42:DG:87:PRO:O	42:DG:88:ILE:CG1	2.63	0.46
43:DH:157:TYR:O	43:DH:158:HIS:CG	2.68	0.46
46:DN:7:LYS:O	46:DN:8:GLN:C	2.59	0.46
48:DP:31:ALA:C	48:DP:33:ARG:N	2.70	0.46
51:DS:61:ASN:O	51:DS:65:VAL:HG23	2.16	0.46
52:DT:56:GLY:O	52:DT:57:PHE:C	2.58	0.46
53:DU:59:ARG:NH1	53:DU:59:ARG:CG	2.79	0.46
58:DZ:23:LYS:O	58:DZ:39:VAL:O	2.34	0.46
58:DZ:29:TYR:O	58:DZ:30:ASN:HB3	2.15	0.46
58:DZ:98:MET:CG	58:DZ:99:TYR:N	2.69	0.46
1:AA:100:C:H2'	1:AA:101:A:O4'	2.16	0.46
1:AA:156:G:O2'	1:AA:157:G:H5'	2.16	0.46
1:AA:392:G:H2'	1:AA:393:A:C8	2.49	0.46
1:AA:725:G:O2'	1:AA:726:C:H5'	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:911:U:O2'	1:AA:912:C:H5'	2.16	0.46
1:AA:1067:A:N1	1:AA:1108:G:O2'	2.40	0.46
2:AB:178:ARG:HH11	2:AB:178:ARG:CG	2.29	0.46
4:AD:2:GLY:O	4:AD:3:ARG:C	2.59	0.46
4:AD:3:ARG:HE	4:AD:5:ILE:HG13	1.81	0.46
4:AD:22:LYS:HB2	4:AD:26:CYS:HB2	1.97	0.46
4:AD:25:ARG:C	4:AD:27:TYR:H	2.23	0.46
7:AG:51:GLN:C	7:AG:53:LYS:H	2.24	0.46
7:AG:97:GLN:O	7:AG:101:LEU:HG	2.16	0.46
10:AJ:24:VAL:CG2	10:AJ:37:PRO:HG3	2.45	0.46
22:AW:49:C:H42	22:AW:65:G:H1	1.64	0.46
25:AZ:107:SER:OG	25:AZ:137:LYS:HD2	2.15	0.46
27:B1:92:LYS:O	27:B1:92:LYS:HG3	2.16	0.46
28:B2:51:ARG:CD	36:BA:94(A):G:N2	2.79	0.46
28:B2:51:ARG:HD3	36:BA:94(A):G:N2	2.30	0.46
28:B2:66:GLU:CD	28:B2:67:LYS:N	2.74	0.46
30:B4:26:SER:OG	30:B4:27:THR:N	2.46	0.46
33:B7:47:ARG:NH2	56:BX:60:ARG:NH1	2.65	0.46
34:B8:15:LYS:HG2	48:BP:65:ARG:NH2	2.31	0.46
36:BA:127:A:H5"	36:BA:128:C:O4'	2.15	0.46
36:BA:512:G:O2'	36:BA:513:A:H8	1.97	0.46
36:BA:2110:G:C2	36:BA:2178:C:H5	2.34	0.46
36:BA:2309:A:H2'	36:BA:2310:A:H5'	1.96	0.46
36:BA:2848:G:H8	52:BT:97:ALA:HB2	1.81	0.46
39:BD:69:ARG:HG3	39:BD:130:ALA:CB	2.46	0.46
40:BE:1:MET:O	40:BE:2:LYS:O	2.33	0.46
40:BE:7:VAL:CG1	40:BE:27:LEU:HB3	2.45	0.46
40:BE:35:GLN:CG	40:BE:36:ARG:N	2.78	0.46
40:BE:87:GLU:OE1	40:BE:89:ASP:N	2.46	0.46
42:BG:42:GLY:O	42:BG:88:ILE:HG22	2.16	0.46
46:BN:62:VAL:HG23	46:BN:66:LYS:HD2	1.95	0.46
47:BO:49:ARG:CD	47:BO:49:ARG:H	2.28	0.46
48:BP:95:VAL:CG2	48:BP:125:VAL:HA	2.44	0.46
48:BP:105:LEU:H	48:BP:105:LEU:CD1	2.25	0.46
50:BR:16:HIS:O	50:BR:17:ARG:C	2.58	0.46
50:BR:17:ARG:O	50:BR:20:LEU:HB3	2.16	0.46
51:BS:40:ILE:HG22	51:BS:47:THR:HG23	1.97	0.46
52:BT:14:TYR:N	52:BT:14:TYR:CD1	2.84	0.46
58:BZ:104:PHE:CE2	58:BZ:119:GLU:CB	2.98	0.46
1:CA:276:G:O2'	17:CQ:68:ARG:NH1	2.49	0.46
1:CA:384:G:O2'	1:CA:385:C:H5'	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:628:G:C2'	1:CA:629:G:H5'	2.46	0.46
1:CA:1394:A:C5	1:CA:1501:C:H4'	2.51	0.46
1:CA:1397:C:O2	1:CA:1397:C:O4'	2.33	0.46
2:CB:166:ASP:HB3	2:CB:169:LYS:CB	2.46	0.46
9:CI:53:VAL:H	9:CI:95:LYS:NZ	2.11	0.46
25:CZ:69:GLU:CG	25:CZ:70:TYR:N	2.80	0.46
25:CZ:93:ILE:HD11	25:CZ:122:LEU:HD21	1.97	0.46
25:CZ:171:ILE:HG13	25:CZ:202:LEU:HA	1.97	0.46
28:D2:53:LEU:O	28:D2:53:LEU:HD23	2.16	0.46
34:D8:20:GLY:O	34:D8:57:ARG:HD3	2.16	0.46
36:DA:176:G:C2'	36:DA:177:G:H5'	2.46	0.46
36:DA:334:C:P	36:DA:335:C:H41	2.38	0.46
36:DA:444:C:H2'	36:DA:445:C:C6	2.50	0.46
36:DA:644:A:N1	36:DA:2369:A:H1'	2.30	0.46
36:DA:736:C:O2'	36:DA:737:C:H5'	2.16	0.46
36:DA:1484:G:C3'	36:DA:1485:G:H5"	2.43	0.46
36:DA:1782:C:H1'	36:DA:2609:U:C5'	2.45	0.46
36:DA:2036:C:H6	36:DA:2036:C:C5'	2.15	0.46
37:DB:76:G:O3'	58:DZ:19:ARG:NH2	2.49	0.46
40:DE:89:ASP:CG	40:DE:90:THR:H	2.24	0.46
40:DE:197:ILE:HG12	40:DE:197:ILE:O	2.15	0.46
43:DH:80:SER:O	43:DH:81:GLU:CB	2.63	0.46
46:DN:65:LYS:HD3	46:DN:69:GLN:NE2	2.30	0.46
51:DS:25:ARG:HD2	51:DS:88:ASP:OD2	2.16	0.46
52:DT:35:LYS:HZ1	52:DT:41:ARG:HE	1.63	0.46
53:DU:51:LYS:HA	53:DU:54:LYS:HE2	1.97	0.46
53:DU:115:ALA:C	53:DU:117:GLN:H	2.24	0.46
57:DY:47:LYS:HE3	57:DY:60:PHE:CZ	2.51	0.46
1:AA:163:C:O2'	1:AA:164:U:H5'	2.16	0.45
1:AA:1054:C:O2'	1:AA:1055:A:H5"	2.16	0.45
1:AA:1101:A:H4'	1:AA:1102:A:O5'	2.15	0.45
1:AA:1221:G:C2'	1:AA:1222:G:H5'	2.46	0.45
1:AA:1399:C:C2	1:AA:1502:A:N6	2.84	0.45
2:AB:224:GLN:C	2:AB:226:ARG:H	2.23	0.45
4:AD:6:GLY:O	4:AD:7:PRO:C	2.59	0.45
4:AD:9:CYS:HA	4:AD:12:CYS:HB2	1.99	0.45
4:AD:107:ARG:HD2	4:AD:173:TRP:CZ2	2.51	0.45
5:AE:76:ILE:HG13	5:AE:142:LEU:CD1	2.44	0.45
5:AE:99:GLY:O	5:AE:117:ASP:HA	2.16	0.45
7:AG:28:ASN:OD1	7:AG:36:LYS:HE2	2.16	0.45
13:AM:15:VAL:HG12	13:AM:45:VAL:HG22	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:AR:25:THR:HG22	18:AR:42:ARG:HH11	1.80	0.45
20:AT:89:ARG:HD2	20:AT:104:LEU:CD1	2.46	0.45
24:AY:2:G:H4'	25:AZ:88:TYR:CE1	2.51	0.45
25:AZ:17:ILE:HG13	25:AZ:104:LEU:HA	1.98	0.45
25:AZ:203:LEU:O	25:AZ:203:LEU:HD23	2.16	0.45
26:B0:23:VAL:HG11	26:B0:69:PHE:HZ	1.81	0.45
28:B2:23:LYS:HA	28:B2:26:ARG:CB	2.46	0.45
32:B6:28:ARG:C	32:B6:32:ASN:HD22	2.24	0.45
34:B8:48:PHE:N	34:B8:48:PHE:CD1	2.85	0.45
35:B9:1:MET:HE3	35:B9:31:LYS:O	2.16	0.45
36:BA:589:C:H2'	36:BA:590:A:C8	2.51	0.45
36:BA:811:U:O2'	36:BA:812:C:C5'	2.63	0.45
36:BA:1485:G:H1'	36:BA:1505:C:N4	2.32	0.45
36:BA:1842:G:H2'	36:BA:1843:C:C6	2.51	0.45
36:BA:2653:U:H3'	36:BA:2654:A:C8	2.51	0.45
37:BB:66:A:H61	37:BB:108:U:C2'	2.28	0.45
38:BC:74:VAL:HG11	38:BC:153:ILE:HG23	1.98	0.45
40:BE:101:ARG:HD3	40:BE:170:LEU:O	2.16	0.45
40:BE:116:VAL:CG2	40:BE:122:PHE:CD2	2.90	0.45
41:BF:162:LEU:HA	41:BF:165:ARG:NH1	2.31	0.45
42:BG:42:GLY:CA	42:BG:89:GLY:HA2	2.46	0.45
42:BG:57:ALA:C	42:BG:59:GLU:H	2.24	0.45
42:BG:138:GLN:HG2	42:BG:153:ARG:H	1.80	0.45
44:BJ:64:UNK:C	44:BJ:66:UNK:N	2.77	0.45
49:BQ:135:ASP:O	49:BQ:138:ASP:OD2	2.33	0.45
53:BU:35:ALA:O	53:BU:36:ARG:C	2.59	0.45
55:BW:55:ALA:O	55:BW:57:ASN:N	2.50	0.45
1:CA:124:G:C6	1:CA:125:U:C4	3.04	0.45
1:CA:243:A:C2	1:CA:246:A:C8	3.05	0.45
1:CA:858:G:C8	1:CA:869:G:O6	2.69	0.45
1:CA:909:A:H2'	1:CA:910:C:O4'	2.16	0.45
1:CA:945:G:C2	1:CA:946:A:C8	3.04	0.45
1:CA:954:G:H4'	13:CM:120:LYS:CD	2.25	0.45
1:CA:1029:C:H4'	1:CA:1033:G:N2	2.30	0.45
1:CA:1031:G:O2'	1:CA:1032:G:H5'	2.16	0.45
1:CA:1142:G:C8	1:CA:1143:G:C8	3.04	0.45
3:CC:70:VAL:O	3:CC:106:VAL:N	2.44	0.45
4:CD:105:VAL:HG21	4:CD:121:VAL:CG2	2.46	0.45
7:CG:75:VAL:CG1	7:CG:145:ALA:HA	2.45	0.45
9:CI:11:LYS:O	9:CI:11:LYS:HG2	2.16	0.45
9:CI:95:LYS:HG3	9:CI:96:LEU:CD1	2.39	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:CI:111:ARG:O	9:CI:113:LYS:HD2	2.15	0.45
10:CJ:54:PHE:O	10:CJ:55:LYS:HB3	2.15	0.45
11:CK:27:ASN:HD21	11:CK:45:GLY:H	1.64	0.45
11:CK:73:MET:C	11:CK:75:TYR:H	2.23	0.45
13:CM:25:ILE:HD11	13:CM:60:VAL:CG1	2.46	0.45
15:CO:31:LEU:O	15:CO:35:ARG:HG3	2.16	0.45
22:CW:29:G:O2'	22:CW:30:G:H5'	2.16	0.45
24:CY:24:G:H2'	24:CY:25:C:O4'	2.17	0.45
25:CZ:277:LEU:HD13	25:CZ:279:GLU:N	2.31	0.45
29:D3:48:GLU:HG2	29:D3:48:GLU:H	1.54	0.45
33:D7:47:ARG:NH2	56:DX:60:ARG:NH1	2.64	0.45
36:DA:1059:G:H2'	36:DA:1060:U:C5	2.50	0.45
36:DA:1659:U:C4	36:DA:1660:C:C5	3.04	0.45
36:DA:1952:A:C5	47:DO:22:ILE:HD12	2.51	0.45
36:DA:2154:G:C2	36:DA:2155:G:C4	3.04	0.45
36:DA:2348:U:O2'	36:DA:2349:G:H5'	2.16	0.45
36:DA:2408:U:H2'	36:DA:2409:G:H8	1.81	0.45
38:DC:149:ILE:CG2	38:DC:150:GLY:N	2.80	0.45
39:DD:94:LEU:HB2	39:DD:104:TYR:CE1	2.49	0.45
40:DE:9:VAL:CG1	40:DE:25:VAL:O	2.64	0.45
41:DF:124:LEU:O	41:DF:193:VAL:HA	2.16	0.45
47:DO:87:ILE:HG22	47:DO:88:ASN:O	2.16	0.45
49:DQ:25:ASP:HA	49:DQ:100:GLY:O	2.16	0.45
49:DQ:52:VAL:O	49:DQ:53:ALA:C	2.59	0.45
51:DS:98:VAL:C	51:DS:100:ALA:N	2.73	0.45
56:DX:14:SER:H	56:DX:17:ALA:HB3	1.81	0.45
58:DZ:51:ALA:CB	58:DZ:57:ILE:HD11	2.26	0.45
1:AA:542:G:N3	1:AA:543:C:C6	2.84	0.45
1:AA:814:A:H2'	1:AA:816:A:H5"	1.99	0.45
1:AA:1202:G:N2	14:AN:46:GLU:OE2	2.44	0.45
2:AB:109:SER:O	2:AB:111:ARG:N	2.49	0.45
3:AC:172:ARG:O	3:AC:173:VAL:HG23	2.15	0.45
4:AD:18:LYS:CA	4:AD:33:MET:HE2	2.46	0.45
4:AD:121:VAL:HG22	4:AD:126:ILE:HG12	1.98	0.45
6:AF:28:ARG:O	6:AF:31:GLU:HB3	2.16	0.45
7:AG:115:ARG:O	7:AG:116:ALA:C	2.59	0.45
8:AH:101:PRO:HG2	8:AH:133:LEU:HD21	1.98	0.45
9:AI:81:ILE:O	9:AI:85:LEU:HG	2.16	0.45
13:AM:15:VAL:O	13:AM:16:ASP:C	2.59	0.45
14:AN:26:ARG:HH11	14:AN:47:LEU:CD2	2.23	0.45
16:AP:9:PHE:CE2	16:AP:18:ARG:CZ	2.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:AR:59:SER:O	18:AR:60:ALA:C	2.59	0.45
27:B1:30:VAL:O	27:B1:31:GLY:O	2.35	0.45
28:B2:2:LYS:HG2	28:B2:5:GLU:OE2	2.16	0.45
28:B2:35:LEU:HD22	28:B2:35:LEU:O	2.17	0.45
29:B3:26:LEU:O	29:B3:28:LEU:HD22	2.16	0.45
33:B7:31:LEU:O	33:B7:35:ARG:HB2	2.17	0.45
36:BA:922:U:H2'	36:BA:923:C:C6	2.52	0.45
36:BA:1206:G:C6	36:BA:1207:C:C4	3.04	0.45
36:BA:1544:A:O2'	36:BA:1545:A:H5'	2.17	0.45
36:BA:2181:G:N2	36:BA:2182:G:C2	2.84	0.45
36:BA:2514:U:H2'	36:BA:2515:C:C6	2.52	0.45
36:BA:2801(A):A:C3'	36:BA:2802:G:H5'	2.46	0.45
36:BA:2824:C:H2'	36:BA:2825:C:O4'	2.17	0.45
39:BD:57:GLY:O	39:BD:58:HIS:C	2.59	0.45
46:BN:89:LYS:O	46:BN:93:THR:HG22	2.16	0.45
48:BP:31:ALA:C	48:BP:33:ARG:N	2.73	0.45
48:BP:38:GLN:HG3	48:BP:39:LYS:N	2.31	0.45
50:BR:7:GLY:O	50:BR:8:ARG:CZ	2.64	0.45
50:BR:118:GLU:HA	50:BR:118:GLU:OE1	2.16	0.45
52:BT:50:ILE:HA	52:BT:99:LEU:HD11	1.98	0.45
52:BT:66:VAL:HA	52:BT:71:GLY:HA2	1.98	0.45
53:BU:102:GLU:HG3	54:BV:2:PHE:CE2	2.51	0.45
58:BZ:77:ASP:C	58:BZ:79:ARG:H	2.25	0.45
58:BZ:85:HIS:ND1	58:BZ:85:HIS:C	2.74	0.45
58:BZ:118:GLN:HG2	58:BZ:120:ILE:HD13	1.98	0.45
1:CA:56:U:H2'	1:CA:57:G:H8	1.79	0.45
1:CA:265:G:H2'	1:CA:267:C:H5	1.81	0.45
1:CA:594:G:C2'	1:CA:595:G:H5'	2.45	0.45
1:CA:782:A:H2'	1:CA:783:C:H5'	1.98	0.45
1:CA:858:G:N1	1:CA:869:G:C8	2.84	0.45
1:CA:1193:G:O2'	1:CA:1194:U:H5'	2.16	0.45
2:CB:58:ILE:CG2	2:CB:222:ILE:CD1	2.94	0.45
2:CB:114:ARG:NH1	2:CB:118:LEU:CG	2.80	0.45
3:CC:34:LEU:HG	14:CN:25:VAL:HG11	1.97	0.45
4:CD:104:VAL:HA	4:CD:107:ARG:HB2	1.98	0.45
5:CE:41:VAL:HG13	5:CE:113:ALA:CA	2.45	0.45
6:CF:44:GLY:HA2	6:CF:59:TYR:CE1	2.51	0.45
9:CI:4:TYR:HA	9:CI:88:TYR:CD1	2.51	0.45
9:CI:20:ARG:NH1	9:CI:20:ARG:CB	2.72	0.45
9:CI:48:GLU:N	9:CI:49:PRO:HD3	2.31	0.45
13:CM:3:ARG:HH21	13:CM:7:VAL:HG13	1.80	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:CP:20:VAL:CG2	16:CP:21:VAL:N	2.78	0.45
16:CP:45:THR:O	16:CP:45:THR:HG23	2.15	0.45
16:CP:75:ARG:O	16:CP:78:GLY:N	2.28	0.45
24:CY:16:H2U:C5'	24:CY:17:H2U:H5'	2.42	0.45
32:D6:18:ARG:HE	32:D6:43:CYS:HB3	1.81	0.45
34:D8:48:PHE:C	34:D8:49:VAL:CG2	2.88	0.45
36:DA:6:A:O2'	46:DN:130:HIS:HB2	2.16	0.45
36:DA:127:A:H5"	36:DA:128:C:O4'	2.16	0.45
36:DA:580:C:O2'	36:DA:581:C:H5'	2.16	0.45
36:DA:606:U:H4'	36:DA:658:C:H4'	1.98	0.45
36:DA:667:U:H2'	36:DA:668:G:O4'	2.15	0.45
36:DA:773:U:H4'	39:DD:47:GLY:HA3	1.98	0.45
36:DA:1106:G:C2'	36:DA:1107:G:H5'	2.46	0.45
36:DA:1697:G:C3'	36:DA:1698:A:H5"	2.38	0.45
36:DA:2127:G:H2'	36:DA:2128:C:C6	2.51	0.45
36:DA:2692:C:H2'	36:DA:2693:A:H8	1.80	0.45
38:DC:99:ILE:C	38:DC:101:GLN:N	2.72	0.45
39:DD:162:SER:O	39:DD:178:PRO:HG3	2.16	0.45
43:DH:139:GLN:HE21	43:DH:140:LYS:HA	1.81	0.45
45:DK:5:UNK:O	45:DK:6:UNK:C	2.64	0.45
45:DK:8:UNK:O	45:DK:9:UNK:C	2.63	0.45
47:DO:98:VAL:HG11	47:DO:118:ALA:N	2.31	0.45
48:DP:84:ASN:CG	48:DP:116:GLY:HA2	2.41	0.45
48:DP:138:LEU:HD12	48:DP:138:LEU:N	2.31	0.45
51:DS:25:ARG:NH1	51:DS:42:ASP:OD2	2.49	0.45
53:DU:10:ARG:C	53:DU:12:ARG:N	2.74	0.45
57:DY:33:LYS:C	57:DY:35:TYR:H	2.24	0.45
57:DY:50:ARG:O	57:DY:53:PRO:HG3	2.16	0.45
57:DY:75:ILE:HG13	57:DY:76:CYS:H	1.81	0.45
58:DZ:155:LEU:H	58:DZ:155:LEU:HD23	1.80	0.45
1:AA:369:C:HO2'	1:AA:370:C:H6	1.62	0.45
1:AA:1193:G:O2'	1:AA:1194:U:H5'	2.16	0.45
1:AA:1488:G:H2'	1:AA:1489:G:C8	2.52	0.45
2:AB:114:ARG:HH11	2:AB:118:LEU:HG	1.81	0.45
2:AB:166:ASP:HB3	2:AB:169:LYS:CB	2.46	0.45
3:AC:167:TRP:O	3:AC:168:ALA:CB	2.63	0.45
4:AD:150:GLU:C	4:AD:152:SER:N	2.74	0.45
5:AE:41:VAL:HG13	5:AE:113:ALA:CA	2.45	0.45
6:AF:87:ARG:HG2	6:AF:87:ARG:NH1	2.29	0.45
13:AM:35:GLU:C	13:AM:37:THR:N	2.74	0.45
20:AT:65:LYS:O	20:AT:68:LYS:HB2	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:AZ:5:PHE:CD1	25:AZ:277:LEU:HD23	2.51	0.45
29:B3:6:VAL:HB	29:B3:54:VAL:HG11	1.97	0.45
31:B5:56:LYS:NZ	31:B5:59:GLU:OE2	2.49	0.45
33:B7:46:VAL:HG12	33:B7:47:ARG:H	1.82	0.45
34:B8:11:LYS:H	34:B8:11:LYS:CD	2.29	0.45
35:B9:31:LYS:HE2	36:BA:2478:A:H5'	1.99	0.45
36:BA:272(D):G:H1	36:BA:364:C:N4	2.10	0.45
36:BA:524:U:H4'	36:BA:555:U:H4'	1.98	0.45
36:BA:644:A:N1	36:BA:2369:A:H1'	2.31	0.45
36:BA:1204:A:N1	36:BA:1241:A:C2	2.84	0.45
36:BA:1300:U:H4'	36:BA:1301:A:O5'	2.17	0.45
36:BA:2001:A:H2'	36:BA:2002:G:C8	2.51	0.45
36:BA:2230:G:H2'	36:BA:2231:C:H6	1.81	0.45
36:BA:2693:A:H2'	36:BA:2694:G:C8	2.50	0.45
36:BA:2740:A:H2'	36:BA:2741:A:C8	2.51	0.45
39:BD:91:ARG:HH11	39:BD:91:ARG:HG2	1.82	0.45
40:BE:4:ILE:HG12	40:BE:5:LEU:O	2.17	0.45
40:BE:105:THR:HB	40:BE:197:ILE:CG2	2.43	0.45
43:BH:54:ARG:HB2	43:BH:55:PRO:HD2	1.98	0.45
48:BP:33:ARG:O	48:BP:34:GLY:O	2.35	0.45
49:BQ:27:VAL:O	49:BQ:28:ALA:HB3	2.17	0.45
49:BQ:52:VAL:O	49:BQ:53:ALA:C	2.60	0.45
51:BS:84:GLN:HB3	51:BS:105:ALA:O	2.15	0.45
52:BT:39:ARG:H	52:BT:39:ARG:CD	2.12	0.45
52:BT:105:LEU:HD22	52:BT:109:GLU:OE2	2.17	0.45
54:BV:21:ARG:HB3	54:BV:91:TYR:HB2	1.98	0.45
58:BZ:42:VAL:HG22	58:BZ:43:GLU:N	2.31	0.45
58:BZ:119:GLU:CG	58:BZ:122:ARG:NH1	2.78	0.45
1:CA:219:C:H2'	1:CA:220:G:O4'	2.16	0.45
1:CA:624:C:H4'	16:CP:11:SER:N	2.30	0.45
1:CA:655:A:H2'	1:CA:656:C:C6	2.51	0.45
1:CA:706:A:C5	1:CA:707:C:C5	3.05	0.45
1:CA:814:A:H2'	1:CA:816:A:H5"	1.98	0.45
1:CA:1151:A:O2'	1:CA:1152:A:H8	1.98	0.45
1:CA:1277:C:H1'	1:CA:1282:C:O2	2.16	0.45
2:CB:224:GLN:C	2:CB:226:ARG:H	2.24	0.45
7:CG:69:VAL:HG11	7:CG:104:LEU:HD22	1.99	0.45
12:CL:43:VAL:HG23	12:CL:93:LEU:HD22	1.98	0.45
13:CM:11:ARG:HG2	13:CM:12:ASN:N	2.17	0.45
22:CW:8:U:OP2	22:CW:8:U:C6	2.69	0.45
25:CZ:355:LEU:HB2	25:CZ:356:PRO:CD	2.46	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:D2:20:GLU:C	28:D2:22:GLU:N	2.72	0.45
32:D6:32:ASN:O	32:D6:33:LYS:HB2	2.16	0.45
35:D9:32:HIS:O	35:D9:33:LYS:C	2.59	0.45
36:DA:271(Q):G:H1'	36:DA:271(R):G:H8	1.81	0.45
36:DA:659:C:H4'	41:DF:100:THR:O	2.16	0.45
36:DA:742:G:O2'	36:DA:743:G:H5'	2.15	0.45
36:DA:1528:A:O2'	36:DA:1528(A):A:H5'	2.17	0.45
36:DA:1541:G:O2'	36:DA:1542:A:H5"	2.17	0.45
36:DA:1916:A:H2'	36:DA:1917:U:O4'	2.17	0.45
36:DA:2392:A:H5'	36:DA:2392:A:N3	2.31	0.45
36:DA:2552:U:C2	36:DA:2554:U:H5'	2.51	0.45
36:DA:2585:U:H5'	36:DA:2585:U:O2	2.16	0.45
38:DC:41:VAL:HG21	38:DC:185:LEU:CD2	2.47	0.45
38:DC:113:VAL:O	38:DC:138:PRO:HG3	2.17	0.45
40:DE:64:LYS:C	40:DE:66:HIS:H	2.21	0.45
41:DF:42:ALA:O	41:DF:45:ARG:HB2	2.16	0.45
42:DG:5:VAL:HG12	42:DG:7:LEU:H	1.81	0.45
42:DG:34:LEU:HD12	42:DG:34:LEU:O	2.17	0.45
46:DN:112:LEU:O	46:DN:115:ARG:N	2.49	0.45
48:DP:38:GLN:CG	48:DP:39:LYS:H	2.30	0.45
48:DP:140:ALA:O	48:DP:141:ALA:HB3	2.16	0.45
51:DS:49:VAL:HG22	51:DS:80:LEU:HD13	1.99	0.45
52:DT:19:LEU:HD22	52:DT:85:LYS:CD	2.46	0.45
53:DU:82:GLY:O	53:DU:84:LYS:N	2.50	0.45
54:DV:15:GLU:O	54:DV:16:PRO:C	2.60	0.45
55:DW:62:HIS:O	55:DW:63:ASP:O	2.33	0.45
58:DZ:62:PRO:C	58:DZ:64:GLY:H	2.23	0.45
1:AA:668:G:O2'	15:AO:46:HIS:HD2	1.99	0.45
1:AA:825:G:N2	8:AH:11:THR:HG21	2.31	0.45
1:AA:1226:C:O2'	13:AM:103:THR:O	2.28	0.45
2:AB:44:LEU:H	2:AB:44:LEU:CD1	2.18	0.45
2:AB:151:GLY:C	2:AB:153:ARG:N	2.71	0.45
4:AD:101:LEU:O	4:AD:102:ASP:C	2.59	0.45
7:AG:76:ARG:HH11	7:AG:76:ARG:HG2	1.80	0.45
13:AM:101:GLN:HB3	13:AM:102:ARG:H	1.58	0.45
19:AS:61:TYR:HD1	19:AS:62:ILE:N	2.14	0.45
22:AV:60:U:H5"	22:AV:61:C:H5	1.81	0.45
25:AZ:24:LYS:HG3	25:AZ:25:THR:N	2.30	0.45
26:B0:43:THR:CG2	36:BA:2336:A:H61	2.29	0.45
28:B2:70:GLN:CD	28:B2:70:GLN:N	2.74	0.45
31:B5:20:ARG:HA	31:B5:23:HIS:ND1	2.32	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:B8:30:ARG:HA	34:B8:30:ARG:NE	2.31	0.45
36:BA:1131:G:O6	36:BA:2040:C:H1'	2.17	0.45
36:BA:1270:C:H5"	36:BA:1271:G:H5'	1.98	0.45
36:BA:1290:C:H2'	36:BA:1291:C:H6	1.81	0.45
36:BA:1709:U:H1'	36:BA:2860:A:N3	2.31	0.45
36:BA:1982:C:C5'	36:BA:1983:C:OP2	2.65	0.45
36:BA:2128:C:P	38:BC:36:LYS:HB2	2.56	0.45
36:BA:2364:C:H2'	36:BA:2365:G:O4'	2.17	0.45
36:BA:2656:U:N3	36:BA:2665:A:H2	2.04	0.45
38:BC:117:PRO:O	38:BC:118:ASP:HB3	2.16	0.45
39:BD:43:ARG:HG2	39:BD:43:ARG:O	2.15	0.45
39:BD:97:TYR:C	39:BD:99:ASP:H	2.24	0.45
40:BE:93:VAL:C	40:BE:95:ILE:N	2.74	0.45
42:BG:138:GLN:HG2	42:BG:153:ARG:O	2.16	0.45
43:BH:28:GLY:HA3	43:BH:79:VAL:HB	1.98	0.45
46:BN:112:LEU:O	46:BN:115:ARG:N	2.50	0.45
48:BP:24:GLY:CA	48:BP:33:ARG:CZ	2.95	0.45
48:BP:46:LYS:HB3	48:BP:52:GLU:HG2	1.98	0.45
48:BP:123:LEU:N	48:BP:123:LEU:HD23	2.31	0.45
49:BQ:132:VAL:HG11	58:BZ:81:ARG:HD2	1.97	0.45
50:BR:97:VAL:HA	50:BR:113:LEU:O	2.15	0.45
51:BS:16:ASN:C	51:BS:18:ILE:N	2.75	0.45
1:CA:706:A:C1'	11:CK:29:ILE:HD11	2.45	0.45
1:CA:865:A:H5'	1:CA:1078:U:C4	2.50	0.45
1:CA:1006:C:H2'	1:CA:1007:C:C6	2.50	0.45
2:CB:132:LYS:HA	2:CB:135:GLN:OE1	2.16	0.45
6:CF:27:GLN:O	6:CF:31:GLU:HB2	2.16	0.45
7:CG:51:GLN:HA	7:CG:51:GLN:OE1	2.16	0.45
9:CI:16:ARG:HH11	9:CI:16:ARG:HG3	1.82	0.45
9:CI:17:VAL:HG11	9:CI:81:ILE:CD1	2.36	0.45
11:CK:76:GLY:O	11:CK:78:GLN:HG3	2.16	0.45
18:CR:61:LYS:O	18:CR:65:ILE:HG13	2.16	0.45
22:CV:22:G:C2'	22:CV:23:A:H5"	2.47	0.45
25:CZ:315:LYS:HG2	25:CZ:373:GLU:HG3	1.98	0.45
28:D2:35:LEU:HB3	28:D2:50:ILE:CG1	2.46	0.45
34:D8:61:LEU:N	34:D8:63:PRO:HD2	2.31	0.45
36:DA:39:C:H2'	36:DA:40:C:H6	1.80	0.45
36:DA:301:G:C6	36:DA:317:G:C6	3.05	0.45
36:DA:825:C:H4'	36:DA:2428:G:N7	2.32	0.45
36:DA:847:U:OP2	36:DA:928:G:O6	2.35	0.45
36:DA:1107:G:H4'	44:DJ:81:UNK:CA	2.45	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1213:A:N3	36:DA:1238:G:H1'	2.31	0.45
36:DA:1463:C:H2'	36:DA:1464:C:H6	1.81	0.45
36:DA:1666:G:C2'	36:DA:1667:G:H5'	2.46	0.45
36:DA:1710:C:H1'	36:DA:2859:G:N2	2.31	0.45
36:DA:2110:G:C2	36:DA:2178:C:H5	2.32	0.45
36:DA:2488:A:O2'	36:DA:2489:G:H5'	2.16	0.45
36:DA:2553:G:H3'	36:DA:2554:U:H5"	1.98	0.45
43:DH:163:TYR:CE2	43:DH:168:PRO:HD3	2.52	0.45
46:DN:3:THR:HG22	46:DN:5:VAL:H	1.81	0.45
46:DN:57:ALA:C	46:DN:58:ASP:O	2.59	0.45
46:DN:97:ARG:O	46:DN:98:VAL:C	2.59	0.45
49:DQ:12:GLN:NE2	49:DQ:72:LYS:HG3	2.31	0.45
49:DQ:109:VAL:CG1	49:DQ:110:THR:N	2.79	0.45
49:DQ:135:ASP:O	49:DQ:138:ASP:OD2	2.34	0.45
50:DR:57:ARG:O	50:DR:58:GLY:C	2.58	0.45
57:DY:35:TYR:HD2	57:DY:68:HIS:NE2	2.14	0.45
58:DZ:137:ILE:HD12	58:DZ:158:PRO:CD	2.47	0.45
58:DZ:169:GLU:O	58:DZ:171:ILE:HG23	2.17	0.45
1:AA:265:G:H2'	1:AA:267:C:H5	1.82	0.45
1:AA:902:G:H2'	1:AA:903:G:H8	1.81	0.45
2:AB:27:LYS:HD2	2:AB:193:ASP:OD1	2.17	0.45
3:AC:35:GLU:CG	3:AC:59:ARG:HH22	2.29	0.45
4:AD:61:LYS:HB2	4:AD:203:VAL:HG13	1.97	0.45
9:AI:28:VAL:HG21	9:AI:33:PHE:HA	1.97	0.45
10:AJ:6:ILE:HG12	10:AJ:72:VAL:O	2.16	0.45
10:AJ:81:THR:C	10:AJ:83:GLU:N	2.68	0.45
10:AJ:86:MET:O	10:AJ:86:MET:CG	2.62	0.45
12:AL:112:ASP:O	12:AL:113:ARG:C	2.59	0.45
12:AL:126:LYS:HE2	12:AL:127:GLU:N	2.32	0.45
13:AM:83:ASP:C	13:AM:85:GLY:N	2.74	0.45
14:AN:37:PHE:CE1	14:AN:53:LEU:HD13	2.52	0.45
20:AT:58:LYS:O	20:AT:62:LEU:HD12	2.16	0.45
25:AZ:93:ILE:HD11	25:AZ:122:LEU:HD21	1.99	0.45
25:AZ:258:LEU:HD12	25:AZ:258:LEU:N	2.32	0.45
26:B0:72:ARG:O	26:B0:73:GLY:C	2.59	0.45
26:B0:72:ARG:HD3	26:B0:75:LEU:HD13	1.97	0.45
28:B2:67:LYS:CA	28:B2:70:GLN:HG2	2.47	0.45
29:B3:1:MET:CE	29:B3:40:THR:HG22	2.44	0.45
29:B3:31:LEU:C	29:B3:33:GLN:H	2.25	0.45
36:BA:130:C:O3'	36:BA:1349:A:H1'	2.15	0.45
36:BA:860:U:O2	36:BA:860:U:O4'	2.34	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:894:C:O2'	36:BA:895:U:H5'	2.16	0.45
36:BA:958:U:O4	49:BQ:17:LEU:HG	2.17	0.45
36:BA:1059:G:H2'	36:BA:1060:U:C5	2.51	0.45
36:BA:1275:A:C8	50:BR:16:HIS:CD2	3.04	0.45
36:BA:1573:G:C2'	36:BA:1574:C:H5'	2.46	0.45
36:BA:1638:C:H5"	36:BA:2710:C:O2'	2.16	0.45
36:BA:2122:U:H2'	36:BA:2123:G:C8	2.52	0.45
36:BA:2334:G:H5'	51:BS:13:ARG:HD3	1.98	0.45
36:BA:2554:U:H2'	36:BA:2555:U:C6	2.51	0.45
36:BA:2733:A:H2'	36:BA:2734:A:O4'	2.16	0.45
38:BC:2:LYS:O	38:BC:2:LYS:HG2	2.17	0.45
38:BC:74:VAL:HG12	38:BC:75:LEU:N	2.31	0.45
38:BC:150:GLY:C	38:BC:154:ARG:NH1	2.75	0.45
39:BD:127:VAL:HA	39:BD:193:VAL:HG13	1.97	0.45
39:BD:142:VAL:CG2	39:BD:191:ALA:HB1	2.45	0.45
40:BE:49:LEU:HD11	40:BE:91:VAL:HG21	1.97	0.45
41:BF:4:VAL:HG13	41:BF:19:GLU:OE1	2.16	0.45
41:BF:108:LYS:HB3	41:BF:112:MET:HE3	1.98	0.45
41:BF:160:ASN:ND2	41:BF:162:LEU:N	2.58	0.45
42:BG:121:ASN:HD22	42:BG:122:PRO:N	2.13	0.45
43:BH:139:GLN:HE21	43:BH:140:LYS:HA	1.81	0.45
44:BJ:90:UNK:O	44:BJ:91:UNK:C	2.64	0.45
48:BP:147:LEU:CG	48:BP:148:LEU:H	2.21	0.45
49:BQ:21:THR:O	49:BQ:22:LYS:CB	2.63	0.45
49:BQ:39:PRO:O	49:BQ:40:ALA:HB2	2.15	0.45
49:BQ:48:GLU:O	49:BQ:49:ALA:C	2.60	0.45
50:BR:87:TYR:C	50:BR:89:ASP:N	2.74	0.45
54:BV:82:ARG:HH11	54:BV:82:ARG:HG2	1.81	0.45
55:BW:14:PRO:HG2	55:BW:78:GLU:CG	2.45	0.45
57:BY:26:LYS:HG2	57:BY:27:VAL:N	2.24	0.45
58:BZ:101:PRO:HG2	58:BZ:136:PHE:N	2.30	0.45
58:BZ:146:ILE:HG13	58:BZ:147:GLY:N	2.31	0.45
1:CA:1031:G:H2'	1:CA:1032:G:O4'	2.16	0.45
1:CA:1117:G:H5'	1:CA:1117:G:C8	2.49	0.45
1:CA:1127:G:H1	1:CA:1145:C:N4	2.14	0.45
1:CA:1275:A:O2'	1:CA:1276:G:H5'	2.17	0.45
1:CA:1328:C:O2'	1:CA:1329:A:H5'	2.17	0.45
3:CC:132:ARG:NH1	3:CC:136:GLN:HE22	1.98	0.45
5:CE:12:LEU:HD13	5:CE:12:LEU:O	2.17	0.45
10:CJ:50:ILE:HG12	14:CN:41:ARG:CD	2.46	0.45
16:CP:68:ASP:C	16:CP:70:ALA:N	2.74	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:CT:62:LEU:HD12	20:CT:62:LEU:N	2.16	0.45
22:CV:60:U:H5"	22:CV:61:C:H5	1.81	0.45
26:D0:24:LYS:HA	26:D0:24:LYS:HD3	1.84	0.45
26:D0:38:VAL:HB	26:D0:59:LEU:HD12	1.97	0.45
32:D6:35:GLU:HB3	32:D6:51:GLU:CB	2.26	0.45
35:D9:24:TYR:CE2	35:D9:35:ARG:HG3	2.52	0.45
36:DA:134:C:H2'	36:DA:135:G:C8	2.50	0.45
36:DA:662:G:P	48:DP:18:ARG:HD2	2.57	0.45
36:DA:825:C:H4'	36:DA:2428:G:C5	2.52	0.45
36:DA:1344:G:O2'	36:DA:1385:G:H2'	2.17	0.45
36:DA:1665:A:H2'	36:DA:1666:G:O4'	2.16	0.45
36:DA:1817:G:OP1	39:DD:88:ARG:NH2	2.46	0.45
36:DA:1858:G:H2'	36:DA:1883:G:H22	1.82	0.45
36:DA:2056:G:N3	36:DA:2056:G:H2'	2.30	0.45
36:DA:2506:U:H5'	36:DA:2506:U:C6	2.52	0.45
36:DA:2639:A:H2'	36:DA:2640:G:O4'	2.16	0.45
37:DB:16:G:O2'	37:DB:17:C:H6	1.99	0.45
39:DD:24:ILE:CG1	39:DD:25:THR:N	2.78	0.45
39:DD:35:LYS:O	39:DD:36:PRO:C	2.59	0.45
40:DE:4:ILE:HG12	40:DE:5:LEU:O	2.17	0.45
41:DF:170:LEU:HB2	41:DF:173:VAL:HB	1.99	0.45
43:DH:105:LEU:HD21	43:DH:113:VAL:HB	1.99	0.45
46:DN:108:PRO:O	46:DN:113:GLY:HA3	2.16	0.45
48:DP:90:ARG:HB3	48:DP:91:PHE:CD1	2.52	0.45
51:DS:16:ASN:C	51:DS:18:ILE:N	2.75	0.45
51:DS:37:ALA:O	51:DS:38:GLN:HG3	2.17	0.45
52:DT:50:ILE:HG22	52:DT:51:ARG:N	2.31	0.45
53:DU:35:ALA:O	53:DU:36:ARG:C	2.60	0.45
57:DY:27:VAL:HG12	57:DY:28:LYS:N	2.32	0.45
1:AA:80:G:H22	1:AA:90:U:H5'	1.74	0.45
1:AA:501:C:H2'	1:AA:502:G:H8	1.80	0.45
1:AA:1031:G:H2'	1:AA:1032:G:O4'	2.17	0.45
2:AB:104:ASN:O	2:AB:108:ILE:HG12	2.17	0.45
2:AB:204:ASN:ND2	2:AB:204:ASN:C	2.73	0.45
3:AC:3:ASN:ND2	3:AC:4:LYS:H	2.14	0.45
4:AD:5:ILE:HG22	4:AD:5:ILE:O	2.16	0.45
9:AI:10:ARG:HH11	9:AI:10:ARG:HG3	1.81	0.45
13:AM:82:MET:HG2	13:AM:83:ASP:H	1.80	0.45
15:AO:21:ASP:OD1	15:AO:21:ASP:C	2.58	0.45
20:AT:82:SER:O	20:AT:86:ARG:CB	2.65	0.45
24:AY:52:A:C2'	24:AY:53:G:H5'	2.46	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:B2:35:LEU:CB	28:B2:53:LEU:HD13	2.45	0.45
36:BA:133:C:O5'	36:BA:133:C:H6	2.00	0.45
36:BA:444:C:H2'	36:BA:445:C:C6	2.52	0.45
36:BA:654(L):G:H2'	36:BA:654(M):C:H4'	1.99	0.45
36:BA:654(U):A:C6	36:BA:654(V):A:N6	2.85	0.45
36:BA:703:U:C2'	36:BA:704:G:H5'	2.47	0.45
36:BA:806:C:C5	48:BP:39:LYS:HE2	2.51	0.45
36:BA:1036:G:O2'	36:BA:1037:G:H5'	2.17	0.45
36:BA:1106:G:C2'	36:BA:1107:G:H5'	2.47	0.45
36:BA:1108:U:H3'	36:BA:1109:C:H6	1.80	0.45
36:BA:1142:U:H5'	36:BA:1142(A):A:C8	2.51	0.45
36:BA:1289:C:O2	36:BA:1289:C:H2'	2.16	0.45
36:BA:1563:G:H2'	36:BA:1564:C:O4'	2.15	0.45
36:BA:1710:C:H1'	36:BA:2859:G:N2	2.32	0.45
36:BA:2463:C:C2'	36:BA:2464:C:H5'	2.46	0.45
40:BE:132:HIS:HA	40:BE:135:HIS:CE1	2.52	0.45
40:BE:184:VAL:O	40:BE:186:GLY:N	2.50	0.45
41:BF:24:LEU:HD12	41:BF:118:ALA:HB1	1.98	0.45
42:BG:82:LEU:HD22	42:BG:87:PRO:HG3	1.99	0.45
42:BG:88:ILE:HG22	42:BG:89:GLY:N	2.31	0.45
47:BO:107:ARG:NH1	52:BT:36:GLU:HG2	2.31	0.45
53:BU:85:LYS:CD	53:BU:117:GLN:HE22	2.16	0.45
55:BW:28:SER:C	55:BW:30:GLU:N	2.73	0.45
57:BY:27:VAL:HG12	57:BY:28:LYS:N	2.31	0.45
58:BZ:73:GLN:OE1	58:BZ:75:ASN:OD1	2.35	0.45
1:CA:100:C:H2'	1:CA:101:A:O4'	2.16	0.45
1:CA:319:G:C2'	1:CA:320:C:H5'	2.47	0.45
1:CA:332:G:H2'	1:CA:333:G:H8	1.82	0.45
1:CA:369:C:O2'	1:CA:370:C:O5'	2.35	0.45
1:CA:421:U:C6	3:CC:127:ARG:NH1	2.84	0.45
1:CA:1303:C:H2'	1:CA:1304:G:H5'	1.97	0.45
1:CA:1468:A:H2'	1:CA:1469:G:O4'	2.15	0.45
2:CB:33:TYR:HB2	2:CB:43:ASP:CB	2.41	0.45
2:CB:224:GLN:C	2:CB:226:ARG:N	2.71	0.45
3:CC:167:TRP:O	3:CC:168:ALA:CB	2.64	0.45
4:CD:150:GLU:C	4:CD:152:SER:N	2.74	0.45
5:CE:144:THR:O	5:CE:145:LYS:C	2.60	0.45
13:CM:4:ILE:CG2	13:CM:5:ALA:H	2.14	0.45
13:CM:66:LEU:O	13:CM:67:GLU:O	2.35	0.45
13:CM:82:MET:CG	13:CM:83:ASP:H	2.27	0.45
14:CN:15:LYS:HB3	14:CN:16:PHE:CD2	2.52	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:CP:42:ARG:C	16:CP:44:THR:H	2.25	0.45
25:CZ:5:PHE:CD1	25:CZ:277:LEU:HD23	2.52	0.45
25:CZ:17:ILE:HG13	25:CZ:104:LEU:HA	1.99	0.45
28:D2:51:ARG:HD3	28:D2:55:ARG:NH1	2.22	0.45
36:DA:925:C:C3'	36:DA:926:A:H5"	2.46	0.45
36:DA:1204:A:N1	36:DA:1241:A:C2	2.85	0.45
36:DA:1536:C:H2'	36:DA:1537:G:C4'	2.47	0.45
36:DA:2261:C:O2'	36:DA:2262:U:H5'	2.17	0.45
36:DA:2347:C:H2'	36:DA:2348:U:C6	2.51	0.45
36:DA:2567:G:H2'	36:DA:2568:C:C6	2.51	0.45
36:DA:2824:C:H2'	36:DA:2825:C:O4'	2.16	0.45
38:DC:125:SER:C	38:DC:127:LEU:H	2.25	0.45
38:DC:150:GLY:C	38:DC:154:ARG:NH1	2.74	0.45
39:DD:57:GLY:O	39:DD:58:HIS:C	2.59	0.45
39:DD:186:HIS:CD2	39:DD:188:GLU:HB2	2.52	0.45
42:DG:7:LEU:HB3	42:DG:100:TRP:CE3	2.51	0.45
42:DG:121:ASN:HB3	42:DG:124:SER:OG	2.16	0.45
42:DG:125:PHE:CD2	42:DG:131:TYR:HD1	2.34	0.45
46:DN:9:VAL:O	46:DN:10:GLU:OE1	2.34	0.45
48:DP:12:ALA:O	48:DP:13:ASN:O	2.35	0.45
48:DP:149:GLU:O	48:DP:150:ALA:HB2	2.17	0.45
49:DQ:14:ARG:HG2	49:DQ:41:TRP:HH2	1.80	0.45
58:DZ:57:ILE:N	58:DZ:57:ILE:HD12	2.30	0.45
1:AA:341:C:O2	1:AA:349:A:C2	2.70	0.45
1:AA:436:C:OP1	4:AD:156:GLU:OE2	2.33	0.45
1:AA:691:G:H2'	1:AA:692:U:C6	2.52	0.45
1:AA:745:C:O2'	1:AA:746:A:H5'	2.17	0.45
1:AA:980:C:H2'	1:AA:981:U:H5'	1.99	0.45
1:AA:1428:A:H2'	1:AA:1429:C:C6	2.51	0.45
1:AA:1477:C:H2'	1:AA:1478:C:H6	1.81	0.45
3:AC:132:ARG:O	3:AC:136:GLN:HB2	2.16	0.45
4:AD:104:VAL:HA	4:AD:107:ARG:HB2	1.97	0.45
4:AD:151:LYS:HG2	4:AD:151:LYS:O	2.17	0.45
7:AG:41:ARG:O	7:AG:42:ILE:C	2.60	0.45
15:AO:39:LEU:HD13	15:AO:56:LEU:CB	2.43	0.45
20:AT:53:LEU:HD11	20:AT:92:LEU:HD11	1.99	0.45
25:AZ:254:GLU:HG3	25:AZ:307:PRO:HA	1.97	0.45
28:B2:62:THR:O	28:B2:63:VAL:C	2.58	0.45
32:B6:17:LYS:O	32:B6:17:LYS:HD3	2.16	0.45
32:B6:53:LYS:HG2	32:B6:54:ILE:N	2.31	0.45
34:B8:50:LEU:N	34:B8:53:PRO:CD	2.80	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:B8:56:GLU:O	34:B8:57:ARG:C	2.60	0.45
36:BA:963:U:H2'	36:BA:964:C:C6	2.51	0.45
36:BA:2131:G:H5'	36:BA:2133:G:O4'	2.17	0.45
36:BA:2169:A:O2'	36:BA:2170:A:H5'	2.17	0.45
36:BA:2636:U:O5'	40:BE:80:GLU:HG3	2.17	0.45
36:BA:2657:A:C2'	36:BA:2658:C:H5'	2.38	0.45
36:BA:2688:U:H1'	36:BA:2721:A:H62	1.82	0.45
38:BC:122:ALA:O	38:BC:126:LYS:HB2	2.16	0.45
38:BC:149:ILE:CG2	38:BC:150:GLY:N	2.79	0.45
40:BE:34:VAL:CG1	40:BE:48:GLN:HE21	2.30	0.45
41:BF:162:LEU:N	41:BF:162:LEU:HD12	2.32	0.45
47:BO:53:LYS:O	47:BO:56:ASP:HB2	2.17	0.45
48:BP:12:ALA:O	48:BP:13:ASN:O	2.34	0.45
49:BQ:140:ALA:O	49:BQ:141:GLN:HB2	2.17	0.45
51:BS:12:PHE:CD1	51:BS:13:ARG:N	2.83	0.45
52:BT:3:ARG:CD	52:BT:6:LEU:HD12	2.37	0.45
54:BV:99:ILE:CD1	54:BV:99:ILE:N	2.73	0.45
55:BW:9:TYR:H	55:BW:102:HIS:HD2	1.65	0.45
58:BZ:109:ALA:C	58:BZ:111:VAL:H	2.23	0.45
1:CA:82:U:O2'	1:CA:83:U:H5'	2.17	0.45
1:CA:190:U:O2'	1:CA:191:G:H5'	2.16	0.45
1:CA:369:C:HO2'	1:CA:370:C:H6	1.64	0.45
1:CA:542:G:C2	1:CA:543:C:C5	3.05	0.45
1:CA:567:G:H2'	1:CA:568:G:O4'	2.17	0.45
1:CA:635:G:O2'	1:CA:636:U:H5'	2.16	0.45
1:CA:723:U:O2'	1:CA:724:G:H5'	2.17	0.45
1:CA:1062:U:O4	3:CC:2:GLY:HA3	2.16	0.45
1:CA:1170:A:H2'	1:CA:1171:G:O4'	2.16	0.45
1:CA:1431:C:H2'	1:CA:1432:G:H5'	1.97	0.45
2:CB:104:ASN:O	2:CB:108:ILE:HG12	2.16	0.45
2:CB:131:PRO:CG	2:CB:134:GLU:HG2	2.33	0.45
3:CC:32:LEU:O	3:CC:35:GLU:HB3	2.17	0.45
3:CC:108:ASN:ND2	3:CC:144:SER:OG	2.50	0.45
5:CE:64:ARG:HH11	5:CE:64:ARG:CG	2.29	0.45
5:CE:104:ALA:HA	5:CE:107:ARG:HG2	1.99	0.45
9:CI:126:SER:O	9:CI:127:LYS:CB	2.65	0.45
10:CJ:4:ILE:HB	10:CJ:74:ILE:HG13	1.96	0.45
10:CJ:45:ARG:HD3	10:CJ:47:PHE:CZ	2.51	0.45
22:CV:19:G:H4'	22:CV:20:U:OP2	2.17	0.45
24:CY:45:U:C3'	24:CY:46:7MG:H5"	2.34	0.45
25:CZ:19:HIS:HA	25:CZ:115:GLN:CB	2.47	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:D1:30:VAL:HG23	27:D1:31:GLY:N	2.23	0.45
32:D6:17:LYS:O	32:D6:18:ARG:HB3	2.17	0.45
32:D6:30:THR:O	32:D6:32:ASN:N	2.50	0.45
34:D8:59:LYS:O	34:D8:61:LEU:HD12	2.17	0.45
36:DA:528:A:H2	36:DA:2043:C:H5'	1.80	0.45
36:DA:604:G:C6	36:DA:605:C:N4	2.85	0.45
36:DA:638:G:C6	36:DA:639:U:N3	2.85	0.45
36:DA:654(C):G:C3'	36:DA:654(D):G:H5'	2.47	0.45
36:DA:736:C:H2'	36:DA:737:C:H6	1.81	0.45
36:DA:994:C:OP1	53:DU:53:ARG:NH2	2.49	0.45
36:DA:1165:U:H2'	36:DA:1166:C:C6	2.52	0.45
36:DA:1188:U:C2'	36:DA:1189:A:H5'	2.47	0.45
36:DA:1278:A:O2'	36:DA:1279:G:H5'	2.17	0.45
36:DA:1288:U:C2	36:DA:1327:C:C2	3.04	0.45
36:DA:1289:C:O2	36:DA:1289:C:H2'	2.16	0.45
36:DA:1349:A:N6	36:DA:1598:C:N4	2.64	0.45
36:DA:2514:U:H2'	36:DA:2515:C:C6	2.51	0.45
36:DA:2626:C:H2'	36:DA:2627:G:O4'	2.16	0.45
36:DA:2801(A):A:C3'	36:DA:2802:G:H5'	2.47	0.45
36:DA:2869:G:H2'	36:DA:2870:C:C6	2.51	0.45
37:DB:7:G:H4'	51:DS:29:PHE:CD2	2.52	0.45
37:DB:91:C:O2'	37:DB:92:C:H5'	2.17	0.45
38:DC:117:PRO:HG3	38:DC:145:VAL:HG12	1.99	0.45
39:DD:158:ALA:HB3	39:DD:161:THR:CG2	2.45	0.45
40:DE:14:ILE:HG12	40:DE:21:VAL:HG23	1.98	0.45
40:DE:59:VAL:HG13	40:DE:60:ASN:N	2.30	0.45
40:DE:116:VAL:CG2	40:DE:117:MET:H	2.29	0.45
42:DG:45:GLU:HA	42:DG:45:GLU:OE1	2.16	0.45
42:DG:49:ASP:CG	42:DG:50:ALA:N	2.74	0.45
43:DH:83:TYR:HB3	43:DH:135:GLY:O	2.17	0.45
46:DN:26:LEU:HD12	46:DN:26:LEU:C	2.41	0.45
47:DO:24:VAL:HG23	47:DO:24:VAL:O	2.17	0.45
47:DO:107:ARG:NH1	52:DT:36:GLU:HG2	2.32	0.45
49:DQ:140:ALA:O	49:DQ:141:GLN:HB2	2.17	0.45
51:DS:19:LYS:HG2	51:DS:19:LYS:O	2.16	0.45
52:DT:28:VAL:O	52:DT:29:ARG:HG2	2.17	0.45
55:DW:9:TYR:H	55:DW:102:HIS:HD2	1.65	0.45
55:DW:107:LEU:HD12	55:DW:107:LEU:N	2.23	0.45
57:DY:80:GLY:O	57:DY:81:LYS:O	2.35	0.45
58:DZ:28:MET:HB3	58:DZ:88:PHE:HB2	1.98	0.45
1:AA:346:G:N3	1:AA:346:G:C2'	2.80	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:792:A:O2'	1:AA:794:A:N7	2.44	0.45
1:AA:1188:A:H2'	1:AA:1189:C:H5'	1.98	0.45
1:AA:1264:C:H2'	1:AA:1265:G:H8	1.81	0.45
1:AA:1316:G:O2'	14:AN:18:VAL:HG21	2.17	0.45
3:AC:130:VAL:HG21	3:AC:157:ILE:HG23	1.99	0.45
4:AD:3:ARG:HH21	4:AD:5:ILE:CG1	2.29	0.45
8:AH:30:ARG:HH11	8:AH:30:ARG:HB2	1.82	0.45
11:AK:34:ASP:C	11:AK:36:ASP:H	2.24	0.45
25:AZ:263:ARG:HG3	25:AZ:264:LYS:H	1.81	0.45
25:AZ:277:LEU:HD13	25:AZ:279:GLU:N	2.31	0.45
36:BA:655:A:C4'	36:BA:656:G:H5'	2.32	0.45
36:BA:856:C:H5"	36:BA:856:C:H6	1.82	0.45
36:BA:1053:C:H42	36:BA:1108:U:H3	1.64	0.45
36:BA:1213:A:H1'	36:BA:1238:G:N3	2.31	0.45
36:BA:1652:A:O2'	36:BA:1653:G:H5'	2.17	0.45
36:BA:1747:G:H2'	36:BA:1747(A):G:C8	2.52	0.45
36:BA:2585:U:O2	36:BA:2585:U:H5'	2.16	0.45
36:BA:2661:G:H2'	36:BA:2662:A:C8	2.52	0.45
36:BA:2695:C:H2'	36:BA:2696:U:H6	1.81	0.45
36:BA:2833:G:C3'	36:BA:2834:G:H5"	2.32	0.45
37:BB:49:C:OP1	51:BS:96:GLY:HA3	2.16	0.45
38:BC:99:ILE:HG22	38:BC:102:LYS:HB2	1.99	0.45
38:BC:151:GLU:HA	38:BC:154:ARG:HH11	1.82	0.45
39:BD:30:GLU:HG3	39:BD:63:ARG:HH21	1.82	0.45
40:BE:77:ILE:C	40:BE:78:LEU:HG	2.41	0.45
41:BF:24:LEU:O	41:BF:115:ALA:HB1	2.17	0.45
44:BJ:7:UNK:C	44:BJ:9:UNK:N	2.80	0.45
46:BN:57:ALA:O	46:BN:58:ASP:O	2.35	0.45
46:BN:118:LYS:C	46:BN:120:LEU:H	2.25	0.45
49:BQ:119:ARG:O	49:BQ:123:HIS:HD2	2.00	0.45
51:BS:13:ARG:O	51:BS:15:ARG:HG3	2.17	0.45
52:BT:93:ARG:HD2	52:BT:93:ARG:HA	1.60	0.45
54:BV:64:HIS:ND1	54:BV:92:THR:HG22	2.32	0.45
56:BX:49:VAL:HG12	56:BX:87:GLN:HB3	1.98	0.45
58:BZ:96:VAL:CG2	58:BZ:97:GLU:N	2.64	0.45
1:CA:163:C:O2'	1:CA:164:U:H5'	2.17	0.45
1:CA:751:U:C4'	15:CO:24:SER:HA	2.46	0.45
1:CA:833:U:H2'	1:CA:834:C:C6	2.52	0.45
1:CA:1180:A:H5"	1:CA:1181:G:OP2	2.17	0.45
1:CA:1463:C:H5'	52:DT:115:ARG:HH12	1.82	0.45
2:CB:236:TYR:HA	2:CB:239:VAL:HG23	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:8:VAL:C	4:CD:10:ARG:H	2.23	0.45
4:CD:31:CYS:C	4:CD:33:MET:H	2.25	0.45
7:CG:118:VAL:HG23	7:CG:119:ARG:N	2.30	0.45
13:CM:57:ARG:NH1	30:D4:34:GLU:HG3	2.32	0.45
16:CP:5:ARG:NH1	16:CP:5:ARG:HG3	2.31	0.45
19:CS:27:GLU:O	19:CS:28:LYS:O	2.35	0.45
25:CZ:203:LEU:O	25:CZ:203:LEU:HD23	2.16	0.45
32:D6:37:ARG:HD3	32:D6:37:ARG:HA	1.78	0.45
36:DA:142:A:N6	36:DA:1596:A:H5'	2.31	0.45
36:DA:330:A:O2'	36:DA:331:A:C8	2.61	0.45
36:DA:1141:U:OP2	46:DN:63:THR:OG1	2.31	0.45
36:DA:1248:G:OP1	53:DU:2:PRO:HD2	2.16	0.45
36:DA:1540:U:C3'	36:DA:1541:G:H3'	2.35	0.45
36:DA:2863:C:O2	36:DA:2863:C:H2'	2.16	0.45
39:DD:68:LYS:O	39:DD:68:LYS:HG3	2.17	0.45
39:DD:117:VAL:HG21	39:DD:128:GLY:O	2.17	0.45
41:DF:2:LYS:O	41:DF:25:PRO:HG2	2.17	0.45
42:DG:4:ASP:HA	42:DG:8:LYS:HD3	1.98	0.45
46:DN:14:VAL:HG21	46:DN:137:LYS:HE3	1.98	0.45
46:DN:34:LEU:CD1	46:DN:116:LEU:HB3	2.47	0.45
46:DN:96:GLU:OE1	46:DN:96:GLU:N	2.46	0.45
48:DP:50:ARG:HG2	48:DP:50:ARG:NH1	2.32	0.45
48:DP:98:GLU:O	48:DP:101:VAL:HG22	2.16	0.45
50:DR:51:LEU:HG	50:DR:66:VAL:HG13	1.97	0.45
57:DY:17:SER:HA	57:DY:71:LYS:HD2	1.97	0.45
58:DZ:24:LEU:C	58:DZ:24:LEU:CD2	2.90	0.45
1:AA:741:G:H2'	1:AA:742:G:O4'	2.17	0.45
1:AA:1325:C:H4'	21:AU:17:THR:HG21	1.98	0.45
6:AF:98:LEU:HD12	6:AF:98:LEU:O	2.16	0.45
7:AG:66:VAL:O	7:AG:69:VAL:HG12	2.17	0.45
8:AH:97:VAL:HG21	8:AH:128:GLY:C	2.42	0.45
9:AI:9:ARG:HG2	9:AI:14:VAL:HG22	1.98	0.45
9:AI:40:LEU:C	9:AI:42:ARG:N	2.71	0.45
10:AJ:12:ASP:OD1	10:AJ:12:ASP:C	2.59	0.45
10:AJ:50:ILE:HG12	14:AN:41:ARG:CD	2.47	0.45
15:AO:8:LYS:O	15:AO:12:ILE:HG13	2.16	0.45
15:AO:18:PHE:C	15:AO:18:PHE:CD1	2.94	0.45
19:AS:10:PHE:O	19:AS:10:PHE:CD2	2.69	0.45
19:AS:32:LYS:H	19:AS:32:LYS:CE	2.30	0.45
20:AT:73:HIS:HB3	20:AT:74:LYS:NZ	2.32	0.45
24:AY:47:U:O2'	24:AY:50:G:H5"	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:AZ:291:ARG:O	25:AZ:293:VAL:HG23	2.16	0.45
36:BA:309:G:N3	36:BA:329:G:O2'	2.50	0.45
36:BA:606:U:H4'	36:BA:658:C:H4'	1.97	0.45
36:BA:910:A:C5	49:BQ:13:GLN:HG3	2.52	0.45
36:BA:925:C:C3'	36:BA:926:A:H5"	2.47	0.45
36:BA:941:A:H4'	48:BP:35:HIS:CE1	2.52	0.45
36:BA:958:U:OP2	49:BQ:14:ARG:HD3	2.17	0.45
36:BA:1165:U:H2'	36:BA:1166:C:C6	2.52	0.45
36:BA:1299:G:H3'	36:BA:1639:U:O4	2.16	0.45
36:BA:1684:C:O2'	36:BA:1685:C:H5'	2.17	0.45
36:BA:2060:A:N6	41:BF:74:ARG:NH2	2.65	0.45
36:BA:2262:U:O2'	36:BA:2263:C:H5'	2.16	0.45
36:BA:2444:G:OP2	41:BF:68:LYS:NZ	2.48	0.45
36:BA:2692:C:H2'	36:BA:2693:A:C8	2.52	0.45
36:BA:2716:U:O2'	36:BA:2717:G:H5'	2.17	0.45
36:BA:2869:G:H2'	36:BA:2870:C:O4'	2.17	0.45
38:BC:15:ASP:OD1	38:BC:15:ASP:C	2.60	0.45
39:BD:70:TRP:HZ3	39:BD:146:GLU:OE2	1.99	0.45
47:BO:34:THR:OG1	47:BO:35:VAL:N	2.49	0.45
52:BT:28:VAL:HG12	52:BT:29:ARG:CD	2.45	0.45
52:BT:50:ILE:HA	52:BT:99:LEU:HD12	1.98	0.45
56:BX:18:TYR:C	56:BX:20:GLY:N	2.74	0.45
57:BY:3:VAL:C	57:BY:5:MET:N	2.75	0.45
57:BY:11:ASP:H	57:BY:28:LYS:NZ	2.15	0.45
58:BZ:123:ASP:C	58:BZ:124:ILE:HG23	2.42	0.45
1:CA:411:A:H62	1:CA:413:G:N2	2.15	0.45
1:CA:436:C:OP1	4:CD:156:GLU:OE2	2.35	0.45
1:CA:811:C:H4'	1:CA:900:A:N6	2.32	0.45
1:CA:980:C:H2'	1:CA:981:U:H5'	1.99	0.45
1:CA:1117:G:H21	1:CA:1180:A:H1'	1.81	0.45
3:CC:12:LEU:O	3:CC:13:GLY:C	2.60	0.45
3:CC:173:VAL:N	3:CC:174:PRO:HD3	2.32	0.45
7:CG:125:MET:O	7:CG:129:GLU:HG3	2.17	0.45
7:CG:150:ALA:HB2	11:CK:50:TYR:CZ	2.52	0.45
10:CJ:53:PRO:HA	14:CN:42:ILE:HD11	1.99	0.45
10:CJ:55:LYS:HB2	10:CJ:55:LYS:NZ	2.07	0.45
10:CJ:86:MET:O	10:CJ:87:THR:HG23	2.16	0.45
13:CM:101:GLN:HB3	13:CM:102:ARG:H	1.56	0.45
17:CQ:12:SER:HB3	17:CQ:20:THR:HB	1.98	0.45
17:CQ:59:ILE:HG22	17:CQ:71:PHE:HD2	1.80	0.45
19:CS:10:PHE:O	19:CS:10:PHE:CD2	2.70	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:CZ:34:VAL:C	25:CZ:36:ALA:H	2.24	0.45
25:CZ:258:LEU:HD12	25:CZ:258:LEU:N	2.31	0.45
27:D1:49:VAL:O	27:D1:59:THR:HA	2.16	0.45
28:D2:16:LEU:H	28:D2:67:LYS:NZ	2.15	0.45
36:DA:648:G:O4'	36:DA:2351:G:H5"	2.16	0.45
36:DA:654(N):G:H2'	36:DA:654(O):G:H5'	1.98	0.45
36:DA:806:C:OP2	48:DP:39:LYS:HD2	2.16	0.45
36:DA:1069:A:H1'	36:DA:1070:A:P	2.56	0.45
36:DA:1142:U:H5'	36:DA:1142(A):A:C8	2.52	0.45
36:DA:1142(A):A:OP2	36:DA:1142(A):A:H3'	2.17	0.45
36:DA:2340:G:H2'	36:DA:2341:G:H8	1.82	0.45
36:DA:2692:C:H2'	36:DA:2693:A:C8	2.52	0.45
37:DB:30:C:H1'	37:DB:57:A:H61	1.82	0.45
38:DC:22:ILE:HD13	38:DC:190:ARG:HG2	1.98	0.45
39:DD:146:GLU:HB2	39:DD:189:CYS:HB3	1.98	0.45
40:DE:38:THR:HG23	40:DE:39:PRO:HD2	1.98	0.45
40:DE:116:VAL:CG2	40:DE:122:PHE:CD2	2.94	0.45
40:DE:132:HIS:CG	40:DE:135:HIS:CE1	3.05	0.45
41:DF:157:VAL:O	41:DF:157:VAL:HG23	2.17	0.45
43:DH:126:PRO:O	43:DH:127:GLU:HG3	2.17	0.45
49:DQ:39:PRO:O	49:DQ:40:ALA:HB2	2.16	0.45
50:DR:74:LYS:CD	50:DR:77:ARG:NH1	2.80	0.45
50:DR:113:LEU:C	50:DR:113:LEU:HD23	2.42	0.45
53:DU:46:ALA:O	53:DU:50:ARG:HG3	2.17	0.45
58:DZ:163:LEU:HB2	58:DZ:165:VAL:HG23	1.98	0.45
1:AA:242:C:H2'	1:AA:243:A:H5'	1.98	0.45
1:AA:430:A:H2'	1:AA:431:A:O4'	2.16	0.45
1:AA:556:C:O2'	1:AA:557:G:H5'	2.16	0.45
1:AA:1044:A:H2'	1:AA:1045:C:O5'	2.17	0.45
1:AA:1220:G:O2'	1:AA:1221:G:H5'	2.16	0.45
2:AB:19:HIS:O	2:AB:20:GLU:O	2.35	0.45
2:AB:163:PHE:HA	2:AB:185:ILE:O	2.17	0.45
2:AB:236:TYR:HA	2:AB:239:VAL:HG23	1.99	0.45
3:AC:51:GLY:O	3:AC:115:LEU:HD21	2.17	0.45
3:AC:52:LEU:HD23	3:AC:52:LEU:N	2.26	0.45
3:AC:79:ARG:O	3:AC:82:GLU:OE2	2.34	0.45
3:AC:190:ARG:HH11	3:AC:190:ARG:HG3	1.80	0.45
4:AD:147:ALA:HA	4:AD:181:MET:O	2.16	0.45
4:AD:171:GLY:C	4:AD:173:TRP:H	2.25	0.45
13:AM:94:ARG:N	13:AM:94:ARG:HD2	2.32	0.45
17:AQ:12:SER:HB3	17:AQ:20:THR:HB	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:AR:67:ALA:O	18:AR:71:LYS:HG3	2.17	0.45
19:AS:50:ALA:HA	19:AS:59:PRO:HA	1.99	0.45
24:AY:42:G:N2	24:AY:43:G:H1'	2.32	0.45
25:AZ:38:GLU:CD	25:AZ:38:GLU:H	2.25	0.45
25:AZ:204:ASP:C	25:AZ:206:ILE:H	2.25	0.45
27:B1:77:ALA:O	27:B1:78:LYS:C	2.60	0.45
28:B2:3:LEU:HD23	28:B2:3:LEU:C	2.42	0.45
31:B5:54:GLY:CA	31:B5:56:LYS:HZ2	2.30	0.45
32:B6:20:ASN:OD1	32:B6:21:TYR:N	2.50	0.45
34:B8:8:LYS:CA	34:B8:11:LYS:HD3	2.41	0.45
34:B8:59:LYS:HB2	34:B8:59:LYS:HE3	1.68	0.45
36:BA:141:A:H8	36:BA:1408:C:HO2'	1.55	0.45
36:BA:142:A:N6	36:BA:1596:A:H5'	2.32	0.45
36:BA:220:G:H2'	36:BA:427:U:O4	2.16	0.45
36:BA:330:A:O2'	36:BA:331:A:C8	2.61	0.45
36:BA:438:G:H2'	36:BA:440:G:C8	2.52	0.45
36:BA:1288:U:C2	36:BA:1327:C:C2	3.05	0.45
36:BA:1337:G:H2'	36:BA:1338:G:H8	1.82	0.45
36:BA:1463:C:H2'	36:BA:1464:C:H6	1.81	0.45
36:BA:2012:G:OP2	55:BW:16:LYS:HE3	2.17	0.45
36:BA:2136:C:H2'	36:BA:2137:C:H6	1.81	0.45
36:BA:2392:A:H2'	36:BA:2393:A:O4'	2.17	0.45
36:BA:2572:A:N7	40:BE:144:ARG:HG2	2.28	0.45
36:BA:2572:A:O2'	40:BE:144:ARG:NH1	2.50	0.45
36:BA:2626:C:H2'	36:BA:2627:G:O4'	2.17	0.45
38:BC:83:ILE:HD11	38:BC:97:GLU:HG2	1.99	0.45
39:BD:94:LEU:HB2	39:BD:104:TYR:CE1	2.51	0.45
40:BE:9:VAL:CG1	40:BE:25:VAL:O	2.64	0.45
40:BE:49:LEU:O	40:BE:78:LEU:HB2	2.17	0.45
42:BG:131:TYR:O	42:BG:159:VAL:HG12	2.17	0.45
43:BH:169:VAL:HG22	43:BH:170:ARG:N	2.32	0.45
45:BK:23:UNK:C	45:BK:25:UNK:N	2.80	0.45
47:BO:65:THR:HA	47:BO:82:ASN:HD22	1.80	0.45
50:BR:5:LYS:N	50:BR:5:LYS:HD2	2.32	0.45
58:BZ:153:SER:C	58:BZ:154:ASP:OD1	2.59	0.45
58:BZ:155:LEU:N	58:BZ:155:LEU:CD2	2.80	0.45
1:CA:8:A:C5	4:CD:209:ARG:HB2	2.52	0.45
1:CA:526:C:OP2	12:CL:91:LYS:HE3	2.16	0.45
1:CA:542:G:N3	1:CA:543:C:C6	2.84	0.45
1:CA:1305:G:N2	1:CA:1331:G:C2'	2.60	0.45
1:CA:1525:G:O2'	1:CA:1526:G:H5'	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:142:LEU:HD21	2:CB:146:GLN:HE21	1.81	0.45
2:CB:178:ARG:NH1	2:CB:178:ARG:CG	2.79	0.45
3:CC:29:TYR:C	3:CC:31:HIS:N	2.75	0.45
4:CD:9:CYS:HA	4:CD:12:CYS:HB2	1.99	0.45
7:CG:107:ALA:O	7:CG:108:ALA:C	2.59	0.45
9:CI:42:ARG:NH2	9:CI:75:ASP:OD1	2.50	0.45
12:CL:121:GLY:O	12:CL:122:THR:C	2.60	0.45
25:CZ:254:GLU:HG3	25:CZ:307:PRO:HA	1.98	0.45
26:D0:51:VAL:CG2	26:D0:81:VAL:HG23	2.47	0.45
31:D5:29:THR:CG2	36:DA:2814:C:O2'	2.63	0.45
33:D7:10:ARG:O	33:D7:14:LYS:HG2	2.17	0.45
36:DA:61:G:H8	36:DA:61:G:O5'	1.99	0.45
36:DA:203:C:C3'	36:DA:204:A:H5"	2.44	0.45
36:DA:363(D):G:H2'	36:DA:363(D):G:N3	2.31	0.45
36:DA:382:G:C2'	36:DA:383:U:H5'	2.47	0.45
36:DA:662:G:OP1	48:DP:18:ARG:HD2	2.17	0.45
36:DA:714:U:H2'	36:DA:716:A:OP2	2.17	0.45
36:DA:732:C:O2'	36:DA:733:G:H5'	2.17	0.45
36:DA:918:A:H5"	37:DB:98:G:O2'	2.17	0.45
36:DA:1223:G:H5'	36:DA:1223:G:C8	2.45	0.45
36:DA:1654:A:OP1	50:DR:2:ARG:HA	2.17	0.45
36:DA:2181:G:N2	36:DA:2182:G:C2	2.85	0.45
36:DA:2717:G:O2'	52:DT:96:ARG:HD3	2.17	0.45
36:DA:2732:G:O2'	36:DA:2733:A:H5'	2.17	0.45
36:DA:2747:G:C2	36:DA:2756:U:H5	2.35	0.45
36:DA:2770:G:H5"	36:DA:2771:C:OP2	2.16	0.45
36:DA:2875:C:O2'	52:DT:5:ALA:HB3	2.17	0.45
37:DB:5:C:O2'	37:DB:6:C:H5'	2.16	0.45
40:DE:184:VAL:O	40:DE:186:GLY:N	2.50	0.45
41:DF:107:LYS:HE3	41:DF:205:ARG:HG2	1.99	0.45
42:DG:83:ARG:CB	42:DG:84:LYS:HD2	2.47	0.45
48:DP:46:LYS:HB3	48:DP:52:GLU:HG2	1.98	0.45
48:DP:112:LEU:HD11	48:DP:114:ILE:CD1	2.46	0.45
48:DP:135:LEU:HD13	48:DP:135:LEU:C	2.42	0.45
50:DR:16:HIS:O	50:DR:17:ARG:C	2.60	0.45
50:DR:87:TYR:C	50:DR:89:ASP:N	2.75	0.45
52:DT:23:ARG:HA	52:DT:52:ILE:HD12	1.98	0.45
52:DT:29:ARG:HG2	52:DT:86:ILE:O	2.17	0.45
53:DU:92:ARG:CZ	54:DV:11:GLN:H	2.29	0.45
1:AA:56:U:H2'	1:AA:57:G:H8	1.78	0.44
1:AA:82:U:O2'	1:AA:83:U:H5'	2.16	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:184:G:O2'	1:AA:185:A:H5'	2.17	0.44
3:AC:132:ARG:HH11	3:AC:136:GLN:NE2	2.02	0.44
5:AE:72:GLN:O	5:AE:73:ASN:HB2	2.17	0.44
15:AO:17:ARG:NH1	15:AO:77:ARG:NH1	2.64	0.44
16:AP:75:ARG:C	16:AP:77:ALA:N	2.75	0.44
27:B1:44:PRO:HB2	27:B1:46:LEU:HD21	1.98	0.44
28:B2:17:SER:HB2	28:B2:20:GLU:HB3	1.99	0.44
28:B2:61:LEU:O	28:B2:62:THR:C	2.55	0.44
32:B6:45:LYS:CB	36:BA:2371:G:H4'	2.47	0.44
36:BA:11:G:H2'	36:BA:12:U:H6	1.82	0.44
36:BA:61:G:H8	36:BA:61:G:O5'	1.99	0.44
36:BA:248:G:H5"	36:BA:386:G:N2	2.31	0.44
36:BA:321:G:O2'	36:BA:340:A:N3	2.47	0.44
36:BA:648:G:O4'	36:BA:2351:G:H5"	2.17	0.44
36:BA:654(C):G:C3'	36:BA:654(D):G:H5'	2.47	0.44
36:BA:659:C:O2'	36:BA:660:G:H5'	2.17	0.44
36:BA:2107:C:H1'	36:BA:2182:G:N2	2.32	0.44
36:BA:2248:C:H2'	36:BA:2249:U:C5'	2.47	0.44
36:BA:2807:G:C2'	36:BA:2808:U:H5"	2.46	0.44
38:BC:33:ALA:HA	38:BC:39:GLU:OE2	2.17	0.44
39:BD:37:LEU:O	39:BD:38:LYS:C	2.60	0.44
39:BD:62:TYR:C	39:BD:62:TYR:CD1	2.94	0.44
40:BE:14:ILE:HB	52:BT:14:TYR:CZ	2.52	0.44
43:BH:157:TYR:O	43:BH:158:HIS:CG	2.71	0.44
48:BP:38:GLN:CG	48:BP:39:LYS:H	2.28	0.44
51:BS:30:ARG:NH2	51:BS:62:LYS:HB3	2.32	0.44
52:BT:82:LEU:N	52:BT:82:LEU:CD1	2.80	0.44
56:BX:27:THR:HG23	56:BX:80:ILE:CB	2.39	0.44
56:BX:84:ALA:HB3	56:BX:87:GLN:CD	2.42	0.44
1:CA:647:C:O2'	1:CA:648:A:H5'	2.17	0.44
1:CA:1378:C:OP1	7:CG:7:ALA:HB2	2.17	0.44
1:CA:1385:G:O2'	1:CA:1386:G:H5'	2.17	0.44
1:CA:1397:C:H1'	23:CX:26:A:H62	1.82	0.44
1:CA:1445:C:O2'	1:CA:1446:U:H5'	2.17	0.44
1:CA:1508:G:H2'	1:CA:1509:C:H6	1.82	0.44
2:CB:87:ARG:CZ	2:CB:233:SER:HB3	2.48	0.44
10:CJ:8:LEU:HB3	10:CJ:16:LEU:HD21	1.99	0.44
13:CM:4:ILE:O	13:CM:6:GLY:N	2.51	0.44
13:CM:94:ARG:HD2	13:CM:94:ARG:N	2.31	0.44
13:CM:108:ARG:HH11	13:CM:108:ARG:CG	2.29	0.44
15:CO:82:ILE:HD11	15:CO:87:ILE:C	2.42	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:CQ:9:VAL:HG12	17:CQ:56:VAL:HG22	1.98	0.44
17:CQ:70:ARG:HH11	17:CQ:70:ARG:HG2	1.81	0.44
19:CS:42:PRO:O	19:CS:44:MET:SD	2.75	0.44
20:CT:25:ARG:HG3	20:CT:25:ARG:NH1	2.32	0.44
23:CX:22:U:O2'	23:CX:23:G:H5'	2.17	0.44
24:CY:47:U:O2'	24:CY:50:G:H5"	2.17	0.44
25:CZ:19:HIS:CE1	36:DA:2661:G:OP1	2.70	0.44
25:CZ:210:ILE:O	25:CZ:210:ILE:HG23	2.17	0.44
25:CZ:281:ILE:C	25:CZ:281:ILE:HD12	2.42	0.44
28:D2:2:LYS:O	28:D2:6:VAL:HG23	2.18	0.44
28:D2:34:GLU:HA	28:D2:34:GLU:OE1	2.17	0.44
30:D4:34:GLU:HB2	42:DG:113:ARG:HD2	1.99	0.44
36:DA:220:G:H2'	36:DA:427:U:O4	2.17	0.44
36:DA:769:G:O2'	36:DA:770:G:H5'	2.17	0.44
36:DA:1240:U:O2'	36:DA:1241:A:H5'	2.17	0.44
36:DA:1337:G:H2'	36:DA:1338:G:C8	2.52	0.44
36:DA:1367:A:H2'	36:DA:1368:G:H5'	1.99	0.44
36:DA:1419:A:H2'	36:DA:1421:G:N7	2.32	0.44
36:DA:1469:A:H2'	36:DA:1470:G:H8	1.82	0.44
36:DA:1596:A:O2'	36:DA:1597:A:H5'	2.17	0.44
36:DA:1688:U:O2	36:DA:1700:A:H5"	2.17	0.44
36:DA:2039:C:O2'	36:DA:2040:C:H5'	2.17	0.44
36:DA:2617:C:O2'	36:DA:2618:G:H5'	2.16	0.44
36:DA:2869:G:H2'	36:DA:2870:C:O4'	2.17	0.44
39:DD:101:GLU:OE2	39:DD:103:ARG:HD3	2.18	0.44
39:DD:127:VAL:HA	39:DD:193:VAL:HG13	1.99	0.44
40:DE:47:VAL:HG21	40:DE:86:PRO:CD	2.24	0.44
40:DE:132:HIS:ND1	40:DE:135:HIS:HE1	2.16	0.44
41:DF:89:VAL:HG12	41:DF:90:PHE:H	1.80	0.44
41:DF:108:LYS:HB3	41:DF:112:MET:CE	2.47	0.44
42:DG:102:PHE:CE2	42:DG:106:LEU:HD22	2.51	0.44
43:DH:28:GLY:HA3	43:DH:79:VAL:HB	1.99	0.44
44:DJ:62:UNK:C	44:DJ:64:UNK:N	2.78	0.44
46:DN:43:THR:HG22	46:DN:45:ASN:HD22	1.82	0.44
52:DT:83:ILE:CG1	52:DT:84:GLN:N	2.80	0.44
53:DU:102:GLU:HG3	54:DV:2:PHE:CE2	2.52	0.44
57:DY:60:PHE:C	57:DY:61:ILE:HG13	2.42	0.44
58:DZ:10:ARG:HD3	58:DZ:37:VAL:O	2.18	0.44
1:AA:189(H):G:O2'	1:AA:189(I):G:O5'	2.35	0.44
1:AA:723:U:C4	1:AA:1537:U:O2	2.70	0.44
3:AC:108:ASN:OD1	3:AC:110:ASN:N	2.50	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:85:LYS:HD3	4:AD:92:VAL:HG11	2.00	0.44
4:AD:141:ARG:HB3	4:AD:142:PRO:CD	2.47	0.44
6:AF:38:GLU:O	6:AF:39:LYS:O	2.35	0.44
9:AI:20:ARG:NH1	9:AI:20:ARG:CB	2.72	0.44
12:AL:113:ARG:CB	12:AL:122:THR:HG21	2.48	0.44
14:AN:27:CYS:SG	14:AN:28:GLY:N	2.88	0.44
15:AO:17:ARG:HH11	15:AO:17:ARG:CG	2.21	0.44
24:AY:40:C:H2'	24:AY:41:C:H5'	1.98	0.44
25:AZ:185:ASN:HD22	25:AZ:185:ASN:H	1.65	0.44
25:AZ:185:ASN:O	25:AZ:185:ASN:ND2	2.50	0.44
25:AZ:214:VAL:O	25:AZ:214:VAL:HG13	2.16	0.44
27:B1:34:THR:HG22	27:B1:36:GLY:H	1.82	0.44
32:B6:54:ILE:HD13	36:BA:2398:U:O2	2.17	0.44
36:BA:53:A:H2'	36:BA:54:G:H5'	1.99	0.44
36:BA:363(D):G:N3	36:BA:363(D):G:H2'	2.32	0.44
36:BA:1222:C:H2'	36:BA:1223:G:H5"	1.99	0.44
36:BA:1517:G:C2'	36:BA:1518:U:H5'	2.47	0.44
36:BA:1526:G:O2'	36:BA:1527:G:H5'	2.17	0.44
36:BA:1540:U:H3'	36:BA:1541:G:O3'	2.18	0.44
36:BA:1542:A:H2'	36:BA:1544:A:C4'	2.47	0.44
36:BA:1697:G:C3'	36:BA:1698:A:H5"	2.38	0.44
36:BA:2199:A:H2'	36:BA:2199:A:N3	2.32	0.44
36:BA:2413:G:N3	48:BP:70:GLN:NE2	2.65	0.44
39:BD:201:HIS:C	39:BD:203:ASN:H	2.26	0.44
43:BH:163:TYR:CE2	43:BH:168:PRO:HD3	2.52	0.44
46:BN:26:LEU:HD12	46:BN:26:LEU:C	2.42	0.44
46:BN:56:ASN:HD22	46:BN:56:ASN:HA	1.57	0.44
47:BO:98:VAL:CG1	47:BO:117:LEU:C	2.91	0.44
48:BP:107:LYS:O	48:BP:108:LYS:HB2	2.17	0.44
48:BP:126:VAL:HG22	48:BP:145:PRO:CG	2.47	0.44
50:BR:113:LEU:HD23	50:BR:113:LEU:C	2.42	0.44
51:BS:17:ARG:NH2	51:BS:90:GLY:H	2.16	0.44
51:BS:103:GLU:OE1	51:BS:103:GLU:N	2.38	0.44
54:BV:18:LEU:CD2	54:BV:19:LYS:N	2.79	0.44
54:BV:19:LYS:HB2	54:BV:96:ILE:CD1	2.45	0.44
57:BY:85:VAL:HG12	57:BY:86:ARG:H	1.82	0.44
58:BZ:70:LEU:HD21	58:BZ:91:LEU:HD21	1.99	0.44
1:CA:115:G:H4'	1:CA:116:A:O5'	2.17	0.44
1:CA:160:A:O2'	1:CA:161:A:H5'	2.18	0.44
1:CA:502:G:OP1	12:CL:118:SER:N	2.47	0.44
1:CA:748:C:H6	1:CA:748:C:OP2	2.00	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:836:G:H2'	1:CA:837:G:C8	2.53	0.44
1:CA:948:C:O2'	1:CA:949:A:H5'	2.16	0.44
1:CA:1306:A:OP2	21:CU:6:ARG:NH2	2.49	0.44
2:CB:25:ASN:C	2:CB:25:ASN:ND2	2.56	0.44
3:CC:172:ARG:C	3:CC:173:VAL:HG23	2.43	0.44
4:CD:150:GLU:OE1	4:CD:150:GLU:N	2.50	0.44
12:CL:60:LEU:C	12:CL:62:SER:H	2.25	0.44
16:CP:44:THR:O	16:CP:45:THR:HG22	2.17	0.44
17:CQ:76:LEU:HG	17:CQ:77:VAL:N	2.31	0.44
19:CS:16:LEU:O	19:CS:20:LEU:N	2.50	0.44
25:CZ:143:ASP:HB3	25:CZ:146:LEU:HB2	1.97	0.44
25:CZ:221:PHE:CG	25:CZ:247:VAL:HG13	2.52	0.44
25:CZ:316:PHE:CE1	25:CZ:372:VAL:HB	2.52	0.44
25:CZ:334:PHE:CD1	25:CZ:334:PHE:N	2.85	0.44
26:D0:10:THR:CG2	26:D0:12:ASN:HB2	2.47	0.44
32:D6:19:ARG:CD	32:D6:20:ASN:H	2.27	0.44
33:D7:43:THR:HG23	33:D7:44:PRO:CD	2.47	0.44
36:DA:36:G:C5	36:DA:37:C:C5	3.05	0.44
36:DA:236:C:H2'	36:DA:237:C:H6	1.82	0.44
36:DA:438:G:H2'	36:DA:440:G:C8	2.52	0.44
36:DA:654(L):G:H2'	36:DA:654(M):C:H4'	1.98	0.44
36:DA:658:C:C2	36:DA:659:C:C5	3.04	0.44
36:DA:1213:A:H1'	36:DA:1238:G:N3	2.32	0.44
36:DA:1570:A:H2'	36:DA:1571:A:C8	2.53	0.44
36:DA:1755:A:P	52:DT:113:LYS:HZ1	2.40	0.44
36:DA:1952:A:C2	47:DO:22:ILE:HG23	2.52	0.44
36:DA:2066:C:O2'	36:DA:2067:G:H5'	2.18	0.44
36:DA:2199:A:H2'	36:DA:2199:A:N3	2.33	0.44
36:DA:2206:G:H21	36:DA:2207:G:C4'	2.28	0.44
36:DA:2307:G:H3'	36:DA:2307:G:N3	2.32	0.44
36:DA:2315:G:O2'	42:DG:128:ARG:HD2	2.17	0.44
37:DB:111:G:C2'	37:DB:112:U:H5'	2.47	0.44
38:DC:78:ALA:O	38:DC:79:LYS:HB2	2.17	0.44
38:DC:99:ILE:HG22	38:DC:102:LYS:HB2	1.99	0.44
40:DE:50:GLY:CA	40:DE:78:LEU:HB3	2.37	0.44
43:DH:157:TYR:O	43:DH:158:HIS:CD2	2.71	0.44
44:DJ:72:UNK:O	44:DJ:73:UNK:CB	2.64	0.44
46:DN:133:GLN:HG2	46:DN:135:PRO:CD	2.40	0.44
47:DO:32:TYR:CD1	47:DO:32:TYR:N	2.85	0.44
48:DP:24:GLY:CA	48:DP:33:ARG:CZ	2.95	0.44
48:DP:46:LYS:HG2	48:DP:52:GLU:CD	2.42	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:DP:58:THR:O	48:DP:58:THR:CG2	2.63	0.44
50:DR:5:LYS:N	50:DR:5:LYS:HD2	2.32	0.44
57:DY:11:ASP:H	57:DY:28:LYS:NZ	2.15	0.44
58:DZ:81:ARG:HB3	58:DZ:81:ARG:CZ	2.47	0.44
58:DZ:101:PRO:HG2	58:DZ:135:GLU:O	2.17	0.44
1:AA:256:U:P	17:AQ:17:LYS:HZ2	2.40	0.44
1:AA:939:G:H5"	7:AG:102:ARG:CZ	2.46	0.44
1:AA:1305:G:O2'	1:AA:1331:G:N2	2.49	0.44
1:AA:1343:G:H2'	1:AA:1344:C:C6	2.52	0.44
4:AD:3:ARG:HH11	4:AD:118:ARG:HD3	1.73	0.44
5:AE:131:ILE:HD13	5:AE:131:ILE:HA	1.89	0.44
11:AK:34:ASP:O	11:AK:36:ASP:N	2.50	0.44
13:AM:108:ARG:N	13:AM:108:ARG:HD2	2.32	0.44
14:AN:15:LYS:HB3	14:AN:16:PHE:CD2	2.52	0.44
19:AS:12:ASP:O	19:AS:15:LEU:HB2	2.16	0.44
20:AT:25:ARG:HG3	20:AT:25:ARG:NH1	2.32	0.44
20:AT:26:ASN:HB3	20:AT:71:THR:OG1	2.18	0.44
22:AV:43:C:H5'	22:AV:44:G:OP2	2.17	0.44
24:AY:61:C:H2'	24:AY:62:U:H5'	1.99	0.44
25:AZ:115:GLN:HA	25:AZ:115:GLN:HE21	1.81	0.44
25:AZ:158:LEU:O	25:AZ:163:PHE:HB2	2.17	0.44
29:B3:38:GLU:HB3	29:B3:40:THR:HG23	1.99	0.44
34:B8:23:VAL:CG1	34:B8:46:ARG:HH11	2.15	0.44
36:BA:20:C:O2'	36:BA:21:A:H5'	2.16	0.44
36:BA:667:U:H2'	36:BA:668:G:O4'	2.17	0.44
36:BA:748:G:O6	36:BA:751:A:H4'	2.17	0.44
36:BA:793:A:OP2	36:BA:2072:G:H5'	2.17	0.44
36:BA:1076:C:H5"	58:BZ:111:VAL:HG12	1.99	0.44
36:BA:1281:G:H2'	36:BA:1282:U:H6	1.82	0.44
36:BA:1659:U:C4	36:BA:1660:C:C5	3.05	0.44
36:BA:2114:A:C2'	36:BA:2115:G:H5'	2.48	0.44
36:BA:2652:C:H42	36:BA:2668:G:H1	1.66	0.44
37:BB:28:C:O2'	37:BB:29:A:H5'	2.16	0.44
37:BB:55:U:H2'	37:BB:56:G:C8	2.53	0.44
38:BC:78:ALA:O	38:BC:79:LYS:HB2	2.16	0.44
38:BC:125:SER:C	38:BC:127:LEU:H	2.25	0.44
39:BD:68:LYS:O	39:BD:68:LYS:HG3	2.17	0.44
40:BE:14:ILE:HG12	40:BE:21:VAL:HG23	1.99	0.44
40:BE:76:ARG:HH11	40:BE:76:ARG:HG2	1.82	0.44
43:BH:80:SER:O	43:BH:81:GLU:CB	2.65	0.44
45:BK:5:UNK:O	45:BK:6:UNK:C	2.65	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BN:58:ASP:C	46:BN:60:ILE:N	2.62	0.44
48:BP:9:ASN:N	48:BP:10:PRO:CD	2.80	0.44
48:BP:135:LEU:HD13	48:BP:135:LEU:C	2.42	0.44
48:BP:140:ALA:O	48:BP:141:ALA:HB3	2.16	0.44
50:BR:10:LEU:HB3	50:BR:17:ARG:HE	1.82	0.44
51:BS:17:ARG:C	51:BS:19:LYS:N	2.74	0.44
57:BY:50:ARG:O	57:BY:53:PRO:HG3	2.17	0.44
58:BZ:70:LEU:CD2	58:BZ:91:LEU:HD21	2.47	0.44
1:CA:149:A:H2'	1:CA:150:C:H6	1.81	0.44
1:CA:370:C:O2'	1:CA:371:G:H5'	2.17	0.44
1:CA:376:G:H5"	16:CP:5:ARG:CB	2.41	0.44
1:CA:624:C:H4'	16:CP:10:GLY:HA2	1.99	0.44
1:CA:714:G:H2'	1:CA:715:A:C8	2.52	0.44
1:CA:827:U:H5'	1:CA:828:A:OP2	2.18	0.44
1:CA:1127:G:C2'	1:CA:1128:C:H5'	2.48	0.44
2:CB:111:ARG:HG2	2:CB:111:ARG:NH1	2.32	0.44
8:CH:118:VAL:C	8:CH:119:LEU:HD23	2.43	0.44
10:CJ:55:LYS:HZ2	10:CJ:55:LYS:CA	2.30	0.44
13:CM:91:ARG:HB3	13:CM:98:VAL:HG12	1.98	0.44
13:CM:119:GLY:O	13:CM:120:LYS:CB	2.61	0.44
18:CR:22:VAL:HG23	18:CR:55:ARG:O	2.17	0.44
18:CR:55:ARG:HH11	18:CR:55:ARG:HG3	1.83	0.44
22:CV:76:A:N7	26:D0:2:ALA:HB1	2.32	0.44
24:CY:61:C:H2'	24:CY:62:U:H5'	2.00	0.44
25:CZ:26:THR:HG21	60:CZ:501:GDP:H8	1.81	0.44
25:CZ:357:PRO:O	25:CZ:359:VAL:HG23	2.18	0.44
26:D0:51:VAL:HG22	26:D0:81:VAL:HG23	1.99	0.44
27:D1:61:ARG:HG2	27:D1:61:ARG:NH1	2.32	0.44
32:D6:54:ILE:HD13	36:DA:2398:U:O2	2.16	0.44
34:D8:14:VAL:CG2	34:D8:22:VAL:HG13	2.47	0.44
36:DA:237:C:H2'	36:DA:238:C:H6	1.82	0.44
36:DA:524:U:H4'	36:DA:555:U:H4'	2.00	0.44
36:DA:664:C:H4'	36:DA:941:A:OP1	2.18	0.44
36:DA:703:U:C2'	36:DA:704:G:H5'	2.47	0.44
36:DA:877:U:C2'	36:DA:878:A:H5"	2.48	0.44
36:DA:1270:C:H5"	36:DA:1271:G:H5'	1.99	0.44
36:DA:1485:G:O2'	36:DA:1486:A:H5'	2.17	0.44
36:DA:1573:G:C2'	36:DA:1574:C:H5'	2.46	0.44
36:DA:1790:C:H2'	36:DA:1791:A:C5	2.53	0.44
36:DA:2772:C:H2'	36:DA:2773:C:H6	1.83	0.44
39:DD:37:LEU:O	39:DD:38:LYS:C	2.60	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:DD:79:VAL:CG2	39:DD:111:LEU:HD11	2.47	0.44
40:DE:152:LYS:HG2	46:DN:78:TYR:CE1	2.52	0.44
41:DF:53:THR:HG22	41:DF:56:GLU:CG	2.47	0.44
42:DG:144:ILE:CD1	42:DG:149:VAL:HG11	2.31	0.44
43:DH:154:PRO:HB2	43:DH:155:SER:H	1.64	0.44
43:DH:159:GLU:CG	43:DH:160:LYS:N	2.77	0.44
44:DJ:18:UNK:O	44:DJ:20:UNK:N	2.50	0.44
44:DJ:25:UNK:HA	44:DJ:116:UNK:CB	2.47	0.44
44:DJ:93:UNK:HA	44:DJ:96:UNK:CB	2.47	0.44
45:DK:23:UNK:C	45:DK:25:UNK:N	2.80	0.44
46:DN:41:ASP:C	53:DU:64:ARG:HH12	2.25	0.44
48:DP:123:LEU:HD23	48:DP:123:LEU:N	2.32	0.44
51:DS:17:ARG:NH2	51:DS:90:GLY:H	2.15	0.44
51:DS:42:ASP:C	51:DS:44:LYS:N	2.76	0.44
52:DT:32:TYR:O	52:DT:33:LYS:HB2	2.17	0.44
55:DW:70:TYR:OH	55:DW:72:LYS:HG2	2.18	0.44
58:DZ:137:ILE:O	58:DZ:138:GLU:C	2.60	0.44
1:AA:105:G:H2'	1:AA:106:C:C6	2.52	0.44
1:AA:514:C:H2'	1:AA:515:G:H8	1.83	0.44
1:AA:710:G:O2'	1:AA:711:G:H5'	2.16	0.44
1:AA:743:U:H2'	1:AA:744:C:C6	2.53	0.44
1:AA:948:C:O2'	1:AA:949:A:H5'	2.17	0.44
1:AA:1152:A:H2'	1:AA:1153:C:H6	1.82	0.44
1:AA:1255:G:C5'	3:AC:26:LYS:HE2	2.46	0.44
1:AA:1305:G:C5'	21:AU:4:GLY:HA3	2.44	0.44
2:AB:15:VAL:C	2:AB:16:HIS:CG	2.95	0.44
2:AB:158:LEU:HA	2:AB:159:PRO:HD3	1.86	0.44
2:AB:172:ILE:H	2:AB:172:ILE:CD1	2.23	0.44
3:AC:49:SER:O	3:AC:50:ALA:CB	2.63	0.44
5:AE:6:PHE:HB2	5:AE:34:VAL:CG2	2.47	0.44
7:AG:51:GLN:OE1	7:AG:51:GLN:HA	2.17	0.44
12:AL:104:VAL:HG12	12:AL:105:TYR:CD1	2.53	0.44
13:AM:108:ARG:NH2	13:AM:114:ARG:HA	2.32	0.44
14:AN:29:ARG:CG	14:AN:29:ARG:NH1	2.80	0.44
16:AP:20:VAL:CG2	16:AP:21:VAL:N	2.80	0.44
17:AQ:44:ALA:HB2	17:AQ:59:ILE:HD12	2.00	0.44
24:AY:24:G:H2'	24:AY:25:C:O4'	2.17	0.44
25:AZ:343:TYR:CE2	25:AZ:348:ASP:HB3	2.53	0.44
26:B0:50:ASN:ND2	26:B0:63:VAL:CG2	2.75	0.44
28:B2:53:LEU:CG	28:B2:56:GLN:HG3	2.47	0.44
29:B3:23:LEU:CD2	29:B3:50:VAL:HG11	2.47	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:B3:46:ASN:O	29:B3:50:VAL:HG22	2.17	0.44
32:B6:25:LYS:O	36:BA:2286:A:N1	2.50	0.44
36:BA:36:G:C5	36:BA:37:C:C5	3.06	0.44
36:BA:636:G:H4'	36:BA:638:G:O3'	2.17	0.44
36:BA:1528:A:N1	36:BA:1542:A:C2	2.85	0.44
36:BA:1528:A:O2'	36:BA:1528(A):A:H5'	2.18	0.44
36:BA:1536:C:H2'	36:BA:1537:G:C4'	2.47	0.44
36:BA:1666:G:C2'	36:BA:1667:G:H5'	2.47	0.44
36:BA:1688:U:O2	36:BA:1700:A:H5"	2.17	0.44
36:BA:2348:U:O2'	36:BA:2349:G:H5'	2.18	0.44
36:BA:2818:G:O2'	36:BA:2837:G:H5'	2.17	0.44
36:BA:2863:C:H2'	36:BA:2863:C:O2	2.18	0.44
36:BA:2869:G:H2'	36:BA:2870:C:C6	2.52	0.44
37:BB:91:C:O2'	37:BB:92:C:H5'	2.17	0.44
39:BD:28:GLU:HB2	39:BD:29:PRO:HD3	1.99	0.44
40:BE:77:ILE:HG22	40:BE:78:LEU:CD1	2.47	0.44
41:BF:17:ARG:HH11	41:BF:17:ARG:HG3	1.82	0.44
42:BG:114:ILE:O	42:BG:114:ILE:CG2	2.64	0.44
42:BG:121:ASN:C	42:BG:121:ASN:ND2	2.75	0.44
43:BH:43:VAL:HG11	43:BH:46:GLU:OE2	2.18	0.44
47:BO:34:THR:O	47:BO:35:VAL:C	2.60	0.44
48:BP:111:ARG:HA	48:BP:128:HIS:CD2	2.53	0.44
48:BP:121:LYS:O	48:BP:123:LEU:HD23	2.18	0.44
49:BQ:27:VAL:HG21	49:BQ:134:ARG:HG3	1.99	0.44
50:BR:11:ASN:OD1	50:BR:11:ASN:O	2.35	0.44
51:BS:53:SER:C	51:BS:55:ALA:N	2.75	0.44
51:BS:70:GLY:C	51:BS:101:LEU:HB3	2.42	0.44
54:BV:97:LYS:HD3	54:BV:97:LYS:HA	1.83	0.44
1:CA:222:U:H2'	1:CA:223:U:C6	2.52	0.44
1:CA:338:A:H2'	1:CA:339:C:C6	2.52	0.44
1:CA:346:G:O2'	1:CA:347:G:P	2.75	0.44
1:CA:974:A:OP1	1:CA:974:A:H8	2.00	0.44
2:CB:28:PHE:CZ	2:CB:189:ASP:HA	2.52	0.44
2:CB:118:LEU:HD21	2:CB:138:LEU:HD22	1.98	0.44
4:CD:148:VAL:HG23	4:CD:181:MET:HB3	1.99	0.44
4:CD:174:LEU:HD23	4:CD:185:PHE:HA	1.99	0.44
7:CG:99:LEU:HA	7:CG:102:ARG:HD2	1.99	0.44
8:CH:112:LEU:N	8:CH:112:LEU:CD2	2.75	0.44
11:CK:107:SER:C	11:CK:108:ILE:HD12	2.43	0.44
13:CM:15:VAL:HA	13:CM:18:ALA:HB3	1.98	0.44
27:D1:62:VAL:HG22	27:D1:63:ALA:N	2.32	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:D2:63:VAL:C	28:D2:65:ASN:N	2.75	0.44
29:D3:38:GLU:HB3	29:D3:40:THR:HG23	1.99	0.44
31:D5:23:HIS:O	31:D5:24:ALA:C	2.60	0.44
32:D6:27:LYS:O	32:D6:29:ASN:N	2.50	0.44
32:D6:36:LEU:HD23	32:D6:37:ARG:N	2.32	0.44
33:D7:10:ARG:HH11	33:D7:10:ARG:HG2	1.82	0.44
36:DA:748:G:O6	36:DA:751:A:H4'	2.16	0.44
36:DA:1275:A:C8	50:DR:16:HIS:CD2	3.06	0.44
36:DA:1514:U:H2'	36:DA:1515:G:C8	2.53	0.44
36:DA:2184:G:H2'	36:DA:2185:C:C6	2.53	0.44
36:DA:2312:U:OP1	42:DG:73:ALA:CB	2.65	0.44
36:DA:2330:G:C2'	36:DA:2331:G:H5'	2.47	0.44
36:DA:2469:A:O2'	49:DQ:56:ARG:HD2	2.17	0.44
36:DA:2653:U:H3'	36:DA:2654:A:C8	2.53	0.44
39:DD:173:VAL:HG12	39:DD:185:VAL:O	2.16	0.44
40:DE:77:ILE:C	40:DE:78:LEU:HG	2.42	0.44
40:DE:77:ILE:CG2	40:DE:78:LEU:H	2.25	0.44
40:DE:78:LEU:C	40:DE:79:ARG:HG3	2.43	0.44
40:DE:111:ARG:HG2	40:DE:160:TYR:O	2.17	0.44
42:DG:52:ILE:O	42:DG:54:GLU:N	2.50	0.44
42:DG:96:ARG:N	42:DG:99:MET:HE2	2.32	0.44
42:DG:123:ASN:O	42:DG:126:ASP:HB2	2.18	0.44
42:DG:125:PHE:HB3	42:DG:131:TYR:HD1	1.83	0.44
43:DH:23:ARG:O	43:DH:24:VAL:CG2	2.66	0.44
43:DH:83:TYR:HB3	43:DH:135:GLY:H	1.83	0.44
48:DP:23:PRO:O	48:DP:33:ARG:CD	2.61	0.44
48:DP:59:LEU:CA	48:DP:61:ARG:NE	2.68	0.44
50:DR:28:LEU:HD23	50:DR:29:LEU:HD12	1.98	0.44
51:DS:106:ARG:NH1	51:DS:106:ARG:CG	2.80	0.44
52:DT:110:ILE:C	52:DT:112:ARG:H	2.26	0.44
53:DU:52:ARG:HB3	53:DU:52:ARG:HH11	1.83	0.44
58:DZ:133:ILE:O	58:DZ:134:PRO:C	2.61	0.44
58:DZ:142:SER:OG	58:DZ:143:GLY:N	2.50	0.44
1:AA:383:A:H2'	1:AA:384:G:H5'	2.00	0.44
1:AA:411:A:H62	1:AA:413:G:N2	2.15	0.44
1:AA:1032:G:H2'	1:AA:1033:G:C8	2.52	0.44
1:AA:1053:G:C4'	1:AA:1054:C:C5'	2.80	0.44
1:AA:1123:A:C2	1:AA:1150:U:C5	3.06	0.44
1:AA:1517:G:H1'	36:BA:1919:A:O3'	2.18	0.44
2:AB:33:TYR:HB2	2:AB:43:ASP:CB	2.43	0.44
2:AB:124:SER:OG	2:AB:125:PRO:HD2	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:79:ARG:O	3:AC:82:GLU:CD	2.60	0.44
4:AD:100:ARG:HG2	4:AD:102:ASP:OD1	2.18	0.44
4:AD:126:ILE:CG2	4:AD:127:THR:N	2.79	0.44
4:AD:128:VAL:CG1	4:AD:129:ASN:H	2.11	0.44
5:AE:144:THR:N	5:AE:147:ASP:OD1	2.44	0.44
6:AF:29:ALA:O	6:AF:30:LEU:C	2.61	0.44
7:AG:75:VAL:CG1	7:AG:145:ALA:HA	2.48	0.44
8:AH:64:LYS:CG	8:AH:79:VAL:HG21	2.42	0.44
9:AI:114:TYR:CD1	10:AJ:60:ARG:HG2	2.53	0.44
10:AJ:7:LYS:HG2	10:AJ:71:LEU:HD13	1.98	0.44
12:AL:52:LEU:HD22	12:AL:52:LEU:N	2.32	0.44
19:AS:11:VAL:HG13	19:AS:16:LEU:HD11	2.00	0.44
19:AS:36:ARG:HB2	19:AS:72:GLY:CA	2.47	0.44
20:AT:45:GLN:OE1	20:AT:45:GLN:N	2.45	0.44
25:AZ:19:HIS:HA	25:AZ:115:GLN:CB	2.47	0.44
25:AZ:141:VAL:HG23	25:AZ:146:LEU:CD2	2.47	0.44
25:AZ:173:GLY:HA2	25:AZ:195:TRP:HZ3	1.82	0.44
25:AZ:334:PHE:CD1	25:AZ:334:PHE:N	2.85	0.44
33:B7:37:LYS:O	36:BA:458:G:H8	2.01	0.44
34:B8:48:PHE:C	34:B8:49:VAL:CG2	2.89	0.44
36:BA:687:C:H2'	36:BA:688:U:O4'	2.18	0.44
36:BA:878:A:H2'	36:BA:879:G:O4'	2.17	0.44
36:BA:1419:A:H2'	36:BA:1421:G:N7	2.33	0.44
36:BA:1430:C:H2'	36:BA:1431:U:C6	2.52	0.44
36:BA:1541:G:O2'	36:BA:1542:A:H5"	2.18	0.44
36:BA:1661:G:H2'	36:BA:1662:C:H6	1.83	0.44
36:BA:1788:C:O2'	36:BA:1789:A:H5'	2.17	0.44
36:BA:1907:G:O2'	36:BA:1908:C:H5'	2.18	0.44
36:BA:2457:U:C2'	36:BA:2458:G:H5'	2.47	0.44
36:BA:2481:G:C2'	36:BA:2482:G:OP2	2.66	0.44
36:BA:2552:U:C2	36:BA:2554:U:H5'	2.53	0.44
36:BA:2654:A:H1'	36:BA:2656:U:C6	2.52	0.44
40:BE:98:PRO:HG3	40:BE:175:VAL:HG12	1.98	0.44
40:BE:116:VAL:HG22	40:BE:117:MET:H	1.81	0.44
40:BE:120:TRP:HB3	40:BE:155:LYS:HD3	1.99	0.44
41:BF:110:LEU:C	41:BF:110:LEU:HD13	2.42	0.44
42:BG:64:THR:HG22	42:BG:94:LEU:HD11	2.00	0.44
43:BH:18:GLU:CB	43:BH:25:LYS:HB2	2.43	0.44
46:BN:32:THR:C	46:BN:34:LEU:N	2.70	0.44
46:BN:133:GLN:HG2	46:BN:135:PRO:CD	2.40	0.44
47:BO:7:TYR:CE1	47:BO:20:MET:HB2	2.52	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:BP:89:ALA:HB1	48:BP:121:LYS:HD3	1.99	0.44
50:BR:12:ARG:HH11	50:BR:12:ARG:CG	2.30	0.44
53:BU:8:VAL:CG1	53:BU:12:ARG:HE	2.30	0.44
53:BU:62:ILE:HG23	53:BU:76:TYR:CE2	2.53	0.44
1:CA:80:G:C3'	1:CA:81:U:H5'	2.48	0.44
1:CA:340:U:C2	1:CA:350:G:N2	2.85	0.44
1:CA:743:U:H2'	1:CA:744:C:C6	2.53	0.44
1:CA:860:A:H2'	1:CA:861:G:O4'	2.17	0.44
1:CA:972:C:OP2	10:CJ:57:LYS:HG2	2.16	0.44
1:CA:1015:A:C6	1:CA:1016:A:C6	3.06	0.44
1:CA:1053:G:O6	1:CA:1199:U:H2'	2.17	0.44
2:CB:239:VAL:O	2:CB:240:GLN:CB	2.65	0.44
3:CC:11:ARG:HH22	3:CC:182:ILE:HD12	1.81	0.44
3:CC:52:LEU:HD12	3:CC:55:VAL:HG23	2.00	0.44
4:CD:18:LYS:CA	4:CD:33:MET:HE2	2.47	0.44
5:CE:36:ASP:O	5:CE:38:GLN:N	2.50	0.44
10:CJ:81:THR:O	10:CJ:83:GLU:N	2.50	0.44
14:CN:26:ARG:NH1	14:CN:47:LEU:HD21	2.23	0.44
22:CW:38:A:H2'	22:CW:39:U:O4'	2.18	0.44
24:CY:67:G:H2'	24:CY:68:C:C6	2.52	0.44
25:CZ:38:GLU:CD	25:CZ:38:GLU:H	2.26	0.44
25:CZ:115:GLN:HE21	25:CZ:115:GLN:HA	1.82	0.44
26:D0:25:ARG:HH11	26:D0:25:ARG:HG2	1.83	0.44
33:D7:46:VAL:HG12	33:D7:47:ARG:H	1.81	0.44
34:D8:50:LEU:N	34:D8:53:PRO:CD	2.81	0.44
35:D9:26:ILE:HG22	35:D9:27:CYS:N	2.33	0.44
36:DA:116:C:H2'	36:DA:117:G:C8	2.52	0.44
36:DA:274:G:H3'	36:DA:274:G:OP2	2.18	0.44
36:DA:303:U:H2'	36:DA:304:G:C8	2.53	0.44
36:DA:514:A:O2'	36:DA:515:A:H5'	2.18	0.44
36:DA:852:G:H2'	36:DA:853:G:H8	1.82	0.44
36:DA:1283:G:N2	36:DA:1285:G:H3'	2.32	0.44
36:DA:1336:A:H2'	36:DA:1337:G:H8	1.80	0.44
36:DA:1658:C:H2'	36:DA:1659:U:H6	1.81	0.44
36:DA:2389:G:C5'	36:DA:2390:U:H5'	2.45	0.44
37:DB:24:G:H1'	37:DB:26:A:H62	1.83	0.44
38:DC:43:VAL:HG23	38:DC:175:VAL:CG2	2.40	0.44
38:DC:83:ILE:HD11	38:DC:97:GLU:HG2	1.99	0.44
39:DD:28:GLU:HB2	39:DD:29:PRO:HD3	1.99	0.44
39:DD:142:VAL:HG22	39:DD:143:HIS:H	1.82	0.44
41:DF:17:ARG:HG3	41:DF:17:ARG:HH11	1.82	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DG:130:ASN:OD1	42:DG:160:VAL:HG13	2.18	0.44
42:DG:139:LEU:HA	42:DG:144:ILE:CG2	2.37	0.44
48:DP:47:ASP:HB3	48:DP:48:PRO:C	2.42	0.44
54:DV:32:THR:HG23	54:DV:59:ALA:O	2.18	0.44
55:DW:28:SER:C	55:DW:30:GLU:N	2.74	0.44
1:AA:115:G:H4'	1:AA:116:A:O5'	2.16	0.44
1:AA:160:A:O2'	1:AA:161:A:H5'	2.17	0.44
1:AA:276:G:O3'	17:AQ:68:ARG:NH1	2.48	0.44
1:AA:836:G:H2'	1:AA:837:G:C8	2.53	0.44
1:AA:939:G:C5'	7:AG:102:ARG:HH12	2.24	0.44
1:AA:1015:A:O3'	14:AN:15:LYS:NZ	2.48	0.44
1:AA:1129:C:O3'	1:AA:1131:G:OP2	2.36	0.44
2:AB:51:LEU:HD21	2:AB:55:PHE:CZ	2.53	0.44
2:AB:105:PHE:CE1	2:AB:155:LEU:HD12	2.52	0.44
2:AB:219:VAL:O	2:AB:220:ASP:C	2.59	0.44
3:AC:14:ILE:HG13	3:AC:15:THR:N	2.32	0.44
3:AC:120:VAL:O	3:AC:121:ALA:C	2.59	0.44
5:AE:126:ARG:O	5:AE:127:ASN:C	2.60	0.44
7:AG:143:ARG:O	7:AG:145:ALA:O	2.36	0.44
9:AI:28:VAL:O	9:AI:30:GLY:N	2.48	0.44
10:AJ:6:ILE:HD12	10:AJ:23:ILE:HG21	2.00	0.44
13:AM:4:ILE:O	13:AM:6:GLY:N	2.50	0.44
17:AQ:9:VAL:HG12	17:AQ:56:VAL:HG22	1.99	0.44
19:AS:31:ILE:HG23	19:AS:31:ILE:O	2.18	0.44
22:AV:20:U:H2'	22:AV:21:A:H5'	1.98	0.44
24:AY:3:G:O6	24:AY:70:C:N3	2.50	0.44
24:AY:32:OMC:HM22	24:AY:33:U:H5'	2.00	0.44
24:AY:60:U:H2'	24:AY:61:C:C5	2.53	0.44
24:AY:67:G:H2'	24:AY:68:C:C6	2.53	0.44
25:AZ:23:GLY:O	25:AZ:24:LYS:C	2.61	0.44
34:B8:4:MET:O	34:B8:62:LEU:CD1	2.62	0.44
35:B9:19:ARG:HG3	35:B9:20:HIS:ND1	2.32	0.44
35:B9:26:ILE:HG22	35:B9:27:CYS:N	2.33	0.44
36:BA:26:G:C6	36:BA:27:G:N1	2.85	0.44
36:BA:90:U:O4'	36:BA:92:A:C8	2.69	0.44
36:BA:1012:U:C4	46:BN:28:THR:HG21	2.53	0.44
36:BA:1495:A:H2'	36:BA:1495:A:N3	2.32	0.44
36:BA:1654:A:OP1	50:BR:2:ARG:HA	2.18	0.44
36:BA:1946:U:H2'	36:BA:1947:C:C6	2.53	0.44
36:BA:2392:A:N3	36:BA:2392:A:H5'	2.33	0.44
37:BB:21:G:H2'	37:BB:22:U:H5'	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BH:139:GLN:HG3	43:BH:140:LYS:N	2.33	0.44
49:BQ:64:ILE:HG22	49:BQ:65:PHE:N	2.32	0.44
53:BU:59:ARG:C	53:BU:61:TRP:N	2.75	0.44
54:BV:61:VAL:HA	54:BV:94:LEU:HD23	2.00	0.44
55:BW:62:HIS:O	55:BW:63:ASP:O	2.36	0.44
56:BX:57:LEU:N	56:BX:57:LEU:CD1	2.80	0.44
1:CA:102:G:O2'	1:CA:103:C:H5'	2.18	0.44
1:CA:156:G:C6	1:CA:166:G:C6	3.05	0.44
1:CA:198:G:O2'	1:CA:199:G:O5'	2.34	0.44
1:CA:228:A:C8	1:CA:228:A:C5'	2.96	0.44
1:CA:439:A:H2'	1:CA:441:A:O4'	2.18	0.44
1:CA:624:C:O3'	16:CP:10:GLY:HA2	2.17	0.44
1:CA:1030(D):A:C2'	1:CA:1031:G:H5'	2.47	0.44
1:CA:1050:G:O2'	1:CA:1051:C:C6	2.66	0.44
1:CA:1188:A:H2'	1:CA:1189:C:H5'	2.00	0.44
2:CB:11:LEU:CD1	2:CB:217:ARG:NH2	2.81	0.44
2:CB:219:VAL:O	2:CB:220:ASP:C	2.59	0.44
4:CD:3:ARG:HE	4:CD:5:ILE:HG13	1.82	0.44
5:CE:57:LYS:HG2	5:CE:61:TYR:CE2	2.52	0.44
5:CE:76:ILE:HG13	5:CE:77:PRO:HD2	1.98	0.44
8:CH:44:PHE:HB3	8:CH:80:ILE:HG12	2.00	0.44
16:CP:75:ARG:C	16:CP:77:ALA:N	2.76	0.44
24:CY:6:C:N4	24:CY:67:G:H1	2.09	0.44
25:CZ:204:ASP:C	25:CZ:206:ILE:H	2.25	0.44
26:D0:36:ILE:HD11	36:DA:2355:C:C4'	2.46	0.44
32:D6:36:LEU:O	32:D6:37:ARG:NE	2.51	0.44
34:D8:11:LYS:H	34:D8:11:LYS:CD	2.30	0.44
36:DA:548:A:H2'	36:DA:549:G:C5'	2.43	0.44
36:DA:562:U:C4	36:DA:2036:C:O4'	2.70	0.44
36:DA:671:C:C5	48:DP:36:LYS:NZ	2.85	0.44
36:DA:751:A:H5'	55:DW:90:ARG:HA	1.98	0.44
36:DA:833:U:H2'	36:DA:834:C:C6	2.53	0.44
36:DA:922:U:H2'	36:DA:923:C:C6	2.52	0.44
36:DA:992:C:H2'	36:DA:993:G:H8	1.83	0.44
36:DA:1473:G:H2'	36:DA:1474:C:O4'	2.18	0.44
36:DA:1914:C:H2'	36:DA:1915:U:O4'	2.17	0.44
36:DA:2107:C:H1'	36:DA:2182:G:N2	2.32	0.44
36:DA:2128:C:P	38:DC:36:LYS:HB2	2.58	0.44
36:DA:2317:C:O2'	36:DA:2318:G:H5'	2.17	0.44
36:DA:2360:A:O2'	36:DA:2361:A:O5'	2.36	0.44
37:DB:43:C:H3'	37:DB:44:G:C5'	2.47	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:DC:33:ALA:HA	38:DC:39:GLU:OE2	2.17	0.44
38:DC:75:LEU:HD21	38:DC:113:VAL:HG22	1.99	0.44
38:DC:151:GLU:HA	38:DC:154:ARG:HH11	1.82	0.44
39:DD:35:LYS:CG	39:DD:63:ARG:HG2	2.38	0.44
40:DE:174:ASP:OD1	40:DE:175:VAL:N	2.51	0.44
42:DG:52:ILE:HB	42:DG:54:GLU:CG	2.47	0.44
42:DG:64:THR:OG1	42:DG:94:LEU:HD11	2.16	0.44
43:DH:139:GLN:CD	43:DH:139:GLN:C	2.85	0.44
44:DJ:16:UNK:C	44:DJ:18:UNK:H	2.29	0.44
51:DS:67:ARG:O	51:DS:71:ARG:HG3	2.18	0.44
51:DS:84:GLN:HB3	51:DS:105:ALA:O	2.18	0.44
52:DT:105:LEU:HD22	52:DT:109:GLU:OE2	2.18	0.44
53:DU:17:ILE:HG23	53:DU:39:LEU:CD1	2.47	0.44
53:DU:79:PHE:O	53:DU:83:LEU:HD13	2.17	0.44
56:DX:25:LYS:HD3	56:DX:80:ILE:HD11	1.99	0.44
58:DZ:24:LEU:HA	58:DZ:25:PRO:HD2	1.73	0.44
1:AA:83:U:H2'	1:AA:84:U:C5	2.53	0.44
1:AA:190:U:O2'	1:AA:191:G:H5'	2.18	0.44
1:AA:340:U:C2	1:AA:350:G:N2	2.85	0.44
1:AA:722:A:O3'	1:AA:723:U:H2'	2.18	0.44
1:AA:731:G:H5'	1:AA:766:A:H4'	1.99	0.44
1:AA:1145:C:O2'	1:AA:1146:A:O5'	2.34	0.44
1:AA:1275:A:O2'	1:AA:1276:G:H5'	2.18	0.44
2:AB:95:GLN:OE1	2:AB:95:GLN:HA	2.18	0.44
2:AB:176:GLU:O	2:AB:177:ALA:C	2.60	0.44
3:AC:14:ILE:HG13	3:AC:15:THR:H	1.82	0.44
4:AD:105:VAL:HG21	4:AD:121:VAL:CG2	2.48	0.44
11:AK:57:THR:CG2	11:AK:60:ALA:H	2.27	0.44
13:AM:19:LEU:O	13:AM:22:ILE:HD13	2.17	0.44
17:AQ:45:HIS:CB	17:AQ:65:ILE:HD13	2.47	0.44
25:AZ:143:ASP:HB3	25:AZ:146:LEU:HB2	1.97	0.44
25:AZ:210:ILE:O	25:AZ:210:ILE:HG23	2.18	0.44
27:B1:50:ARG:CG	27:B1:59:THR:HG22	2.38	0.44
27:B1:90:ILE:O	27:B1:91:LYS:C	2.60	0.44
28:B2:31:GLU:HA	28:B2:31:GLU:OE1	2.18	0.44
29:B3:15:TYR:CD2	29:B3:19:GLN:NE2	2.85	0.44
33:B7:43:THR:CG2	33:B7:44:PRO:N	2.81	0.44
35:B9:32:HIS:O	35:B9:33:LYS:C	2.61	0.44
36:BA:611:C:O5'	36:BA:611:C:H6	2.00	0.44
36:BA:651:G:H2'	36:BA:652:C:H5'	2.00	0.44
36:BA:848:G:H2'	36:BA:849:A:C8	2.53	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:856:C:C6	36:BA:856:C:H5”	2.53	0.44
36:BA:1164:G:H2’	36:BA:1165:U:C6	2.52	0.44
36:BA:2206:G:C2	36:BA:2207:G:H5’	2.51	0.44
36:BA:2506:U:H5’	36:BA:2506:U:C6	2.53	0.44
36:BA:2553:G:H3’	36:BA:2554:U:H5”	2.00	0.44
40:BE:33:VAL:CG1	40:BE:69:LYS:HE3	2.48	0.44
41:BF:2:LYS:O	41:BF:25:PRO:HG2	2.18	0.44
42:BG:96:ARG:H	42:BG:99:MET:HE2	1.83	0.44
43:BH:61:HIS:C	43:BH:63:SER:N	2.76	0.44
46:BN:3:THR:CG2	46:BN:4:TYR:N	2.80	0.44
46:BN:132:ALA:O	46:BN:133:GLN:CB	2.62	0.44
47:BO:10:VAL:O	47:BO:10:VAL:HG23	2.18	0.44
47:BO:66:LYS:H	47:BO:82:ASN:HD21	1.65	0.44
50:BR:32:GLY:O	50:BR:115:GLU:HA	2.18	0.44
54:BV:38:LEU:HD22	54:BV:52:VAL:HG11	2.00	0.44
55:BW:29:LEU:CD1	55:BW:51:LEU:HD11	2.48	0.44
58:BZ:123:ASP:O	58:BZ:124:ILE:HG23	2.18	0.44
1:CA:83:U:H2’	1:CA:84:U:C5	2.53	0.44
1:CA:184:G:O2’	1:CA:185:A:H5’	2.17	0.44
1:CA:894:G:O2’	1:CA:895:G:H5’	2.18	0.44
1:CA:1044:A:H2’	1:CA:1045:C:O5’	2.17	0.44
1:CA:1129:C:O2’	1:CA:1131:G:C8	2.71	0.44
1:CA:1133:G:C4	1:CA:1142:G:N2	2.85	0.44
2:CB:109:SER:O	2:CB:111:ARG:N	2.51	0.44
2:CB:115:LEU:HD13	2:CB:145:LEU:HB3	2.00	0.44
3:CC:50:ALA:CA	3:CC:72:LYS:HB2	2.46	0.44
4:CD:100:ARG:HG2	4:CD:102:ASP:OD1	2.17	0.44
11:CK:23:ALA:O	11:CK:86:GLY:HA3	2.18	0.44
12:CL:34:ARG:HG3	12:CL:105:TYR:CE2	2.53	0.44
12:CL:52:LEU:HD22	12:CL:52:LEU:N	2.32	0.44
14:CN:12:ARG:HH11	14:CN:12:ARG:CB	2.29	0.44
22:CW:68:C:H2’	22:CW:69:G:C8	2.53	0.44
25:CZ:86:ALA:C	25:CZ:88:TYR:N	2.76	0.44
33:D7:31:LEU:O	33:D7:35:ARG:HB2	2.18	0.44
36:DA:185:U:H2’	36:DA:186:G:C8	2.53	0.44
36:DA:492:A:C2	36:DA:493:G:H1’	2.53	0.44
36:DA:878:A:H2’	36:DA:879:G:O4’	2.17	0.44
36:DA:926:A:H5’	36:DA:926:A:C8	2.52	0.44
36:DA:1131:G:O6	36:DA:2040:C:H1’	2.18	0.44
36:DA:1206:G:C6	36:DA:1207:C:C4	3.05	0.44
36:DA:1495:A:N3	36:DA:1495:A:H2’	2.33	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2319:G:OP2	36:DA:2319:G:C4'	2.65	0.44
36:DA:2716:U:O2'	36:DA:2717:G:H5'	2.17	0.44
38:DC:100:ILE:O	38:DC:104:LEU:HB2	2.18	0.44
39:DD:275:LYS:CD	39:DD:276:LYS:N	2.81	0.44
40:DE:7:VAL:CG1	40:DE:27:LEU:HB3	2.44	0.44
40:DE:64:LYS:C	40:DE:66:HIS:N	2.72	0.44
42:DG:63:ILE:HG21	42:DG:141:PHE:CD2	2.53	0.44
42:DG:67:LYS:O	42:DG:68:PRO:O	2.36	0.44
42:DG:151:ALA:HB3	42:DG:153:ARG:NH1	2.32	0.44
43:DH:94:TYR:CD1	43:DH:107:VAL:CA	2.99	0.44
48:DP:121:LYS:O	48:DP:123:LEU:HD23	2.17	0.44
50:DR:22:ARG:NE	50:DR:69:ASP:HA	2.33	0.44
50:DR:74:LYS:HE3	50:DR:77:ARG:HH11	1.83	0.44
52:DT:35:LYS:O	52:DT:38:ASN:ND2	2.51	0.44
52:DT:38:ASN:ND2	52:DT:38:ASN:C	2.73	0.44
53:DU:70:ARG:C	53:DU:72:HIS:H	2.24	0.44
54:DV:41:GLY:HA3	54:DV:45:THR:OG1	2.18	0.44
56:DX:84:ALA:HB3	56:DX:87:GLN:CD	2.43	0.44
57:DY:47:LYS:HD2	57:DY:60:PHE:HE1	1.83	0.44
1:AA:93:G:H2'	1:AA:96:U:O4'	2.17	0.44
1:AA:411:A:H62	1:AA:413:G:H21	1.66	0.44
1:AA:439:A:H2'	1:AA:441:A:O4'	2.18	0.44
1:AA:512:U:C2	1:AA:513:C:C5	3.05	0.44
1:AA:577:G:O2'	1:AA:578:C:H5'	2.18	0.44
1:AA:628:G:C2'	1:AA:629:G:H5'	2.48	0.44
1:AA:860:A:H2'	1:AA:861:G:O4'	2.17	0.44
1:AA:1222:G:O2'	1:AA:1223:C:H5'	2.17	0.44
1:AA:1392:G:O2'	1:AA:1393:U:H5'	2.18	0.44
2:AB:39:ILE:CG2	2:AB:40:HIS:N	2.81	0.44
4:AD:10:ARG:HH11	4:AD:10:ARG:HG2	1.83	0.44
5:AE:80:ILE:HG12	5:AE:142:LEU:HD21	2.00	0.44
11:AK:58:PRO:HD3	11:AK:89:ALA:HB1	2.00	0.44
16:AP:14:ASN:OD1	16:AP:16:HIS:CE1	2.71	0.44
16:AP:68:ASP:C	16:AP:70:ALA:N	2.75	0.44
18:AR:79:LEU:HB3	18:AR:80:PRO:HD2	1.99	0.44
19:AS:60:VAL:O	19:AS:60:VAL:HG13	2.18	0.44
20:AT:18:GLN:O	20:AT:19:SER:C	2.60	0.44
20:AT:99:LEU:O	20:AT:100:ILE:C	2.61	0.44
22:AW:8:U:C6	22:AW:8:U:OP2	2.70	0.44
25:AZ:315:LYS:HG2	25:AZ:373:GLU:HG3	1.99	0.44
25:AZ:342:PHE:CD2	25:AZ:388:ILE:HG12	2.53	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:AZ:357:PRO:O	25:AZ:359:VAL:HG23	2.18	0.44
32:B6:15:GLU:HG2	32:B6:15:GLU:O	2.18	0.44
35:B9:3:VAL:HG21	36:BA:2539:C:H4'	2.00	0.44
36:BA:360:G:O2'	36:BA:361:G:H5'	2.18	0.44
36:BA:536:A:H2'	36:BA:537:C:C6	2.53	0.44
36:BA:580:C:O2'	36:BA:581:C:H5'	2.18	0.44
36:BA:723:G:H2'	36:BA:724:U:C6	2.53	0.44
36:BA:828:U:C5	36:BA:829:A:N6	2.86	0.44
36:BA:1052:C:O2'	36:BA:1053:C:P	2.76	0.44
36:BA:2416:C:H2'	36:BA:2417:C:H6	1.83	0.44
36:BA:2491:U:H4'	36:BA:2570:G:OP1	2.18	0.44
36:BA:2819:G:H2'	36:BA:2821:A:N7	2.32	0.44
40:BE:144:ARG:HG3	40:BE:145:LYS:N	2.32	0.44
41:BF:157:VAL:O	41:BF:157:VAL:HG23	2.17	0.44
46:BN:14:VAL:HG21	46:BN:137:LYS:HE3	1.99	0.44
48:BP:146:VAL:CG2	48:BP:147:LEU:H	1.99	0.44
49:BQ:137:TYR:CZ	58:BZ:81:ARG:CZ	3.00	0.44
52:BT:33:LYS:HD2	52:BT:43:GLN:CB	2.48	0.44
54:BV:32:THR:HG23	54:BV:59:ALA:O	2.18	0.44
57:BY:2:ARG:HD2	57:BY:3:VAL:HG23	1.97	0.44
58:BZ:34:ASN:O	58:BZ:34:ASN:CG	2.61	0.44
1:CA:792:A:O2'	1:CA:794:A:N7	2.45	0.44
1:CA:1346:A:OP1	9:CI:120:ARG:NH2	2.51	0.44
1:CA:1392:G:N2	1:CA:1502:A:H8	2.16	0.44
1:CA:1442(B):A:H2'	52:DT:118:ARG:HH12	1.83	0.44
3:CC:46:GLU:O	3:CC:47:LEU:CB	2.54	0.44
4:CD:49:ARG:H	4:CD:49:ARG:HG2	1.65	0.44
10:CJ:6:ILE:CD1	10:CJ:23:ILE:HG21	2.47	0.44
11:CK:59:TYR:CE2	11:CK:63:LEU:HD11	2.53	0.44
20:CT:99:LEU:O	20:CT:100:ILE:C	2.60	0.44
25:CZ:139:ASP:OD2	25:CZ:177:LEU:HD11	2.16	0.44
25:CZ:141:VAL:HG23	25:CZ:146:LEU:CD2	2.47	0.44
25:CZ:214:VAL:O	25:CZ:214:VAL:HG13	2.18	0.44
25:CZ:404:LEU:H	25:CZ:404:LEU:CD2	2.30	0.44
26:D0:26:TYR:CD2	36:DA:857:C:H1'	2.53	0.44
36:DA:104:U:H2'	36:DA:105:C:H5'	2.00	0.44
36:DA:843:G:O2'	36:DA:844:C:H5'	2.17	0.44
36:DA:910:A:N1	36:DA:2277:G:H1'	2.33	0.44
36:DA:1012:U:C4	46:DN:28:THR:HG21	2.53	0.44
36:DA:1291:C:H2'	36:DA:1292:U:C6	2.53	0.44
36:DA:1299:G:H3'	36:DA:1639:U:O4	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2189:U:H3'	36:DA:2190:G:H4'	1.99	0.44
36:DA:2206:G:C2	36:DA:2207:G:H5'	2.52	0.44
36:DA:2572:A:N7	40:DE:144:ARG:HG2	2.31	0.44
36:DA:2724:C:OP1	40:DE:118:LYS:NZ	2.51	0.44
36:DA:2770:G:C5'	36:DA:2771:C:OP2	2.65	0.44
37:DB:21:G:H2'	37:DB:22:U:H5'	1.99	0.44
37:DB:77:U:P	58:DZ:19:ARG:HH21	2.40	0.44
39:DD:9:TYR:CD1	39:DD:10:THR:HG22	2.52	0.44
40:DE:69:LYS:C	40:DE:71:GLY:N	2.74	0.44
41:DF:99:TYR:CD1	41:DF:99:TYR:N	2.85	0.44
42:DG:47:LYS:CE	42:DG:81:LYS:HB2	2.37	0.44
42:DG:66:GLN:O	42:DG:92:VAL:HG21	2.18	0.44
43:DH:110:SER:O	43:DH:111:HIS:HB2	2.18	0.44
47:DO:67:LYS:O	47:DO:68:GLU:C	2.61	0.44
48:DP:85:LEU:HA	48:DP:88:LEU:HB3	2.00	0.44
50:DR:74:LYS:HD2	50:DR:77:ARG:HH11	1.82	0.44
51:DS:103:GLU:OE1	51:DS:103:GLU:N	2.39	0.44
52:DT:53:ARG:O	52:DT:59:THR:HB	2.18	0.44
52:DT:95:ARG:NH1	52:DT:95:ARG:HB3	2.32	0.44
53:DU:52:ARG:O	53:DU:53:ARG:C	2.60	0.44
58:DZ:132:ASN:ND2	58:DZ:159:PRO:O	2.51	0.44
1:AA:1031:G:O2'	1:AA:1032:G:H5'	2.16	0.44
1:AA:1378:C:OP1	7:AG:7:ALA:HB2	2.18	0.44
1:AA:1402:C:O2	1:AA:1500:A:N1	2.50	0.44
1:AA:1513:A:H2'	1:AA:1514:C:H6	1.78	0.44
2:AB:236:TYR:C	2:AB:238:LEU:N	2.74	0.44
7:AG:18:TYR:CD2	7:AG:59:LEU:HD13	2.52	0.44
12:AL:45:PRO:O	12:AL:46:LYS:O	2.36	0.44
12:AL:53:ARG:HB3	12:AL:69:TYR:HE1	1.83	0.44
12:AL:97:ARG:HH11	12:AL:97:ARG:CG	2.30	0.44
14:AN:41:ARG:HG2	14:AN:42:ILE:N	2.30	0.44
22:AV:19:G:H4'	22:AV:20:U:OP2	2.18	0.44
25:AZ:86:ALA:O	25:AZ:88:TYR:N	2.45	0.44
32:B6:17:LYS:O	32:B6:18:ARG:HB3	2.17	0.44
33:B7:10:ARG:HH11	33:B7:10:ARG:HG2	1.83	0.44
36:BA:116:C:H2'	36:BA:117:G:C8	2.53	0.44
36:BA:470:A:OP1	41:BF:59:TYR:CE1	2.68	0.44
36:BA:630:G:H4'	36:BA:640:C:H4'	1.99	0.44
36:BA:692:C:H2'	36:BA:693:C:C6	2.53	0.44
36:BA:825:C:H4'	36:BA:2428:G:C5	2.53	0.44
36:BA:1485:G:O2'	36:BA:1486:A:H5'	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1902:C:H5'	39:BD:246:PRO:HD3	2.00	0.44
36:BA:2243:U:H2'	36:BA:2244:U:C6	2.53	0.44
36:BA:2307:G:H3'	36:BA:2307:G:N3	2.33	0.44
36:BA:2659:G:C2'	36:BA:2660:A:H5"	2.48	0.44
37:BB:43:C:H3'	37:BB:44:G:C5'	2.48	0.44
38:BC:30:LYS:HE3	38:BC:30:LYS:HB3	1.83	0.44
39:BD:91:ARG:HG2	39:BD:91:ARG:NH1	2.33	0.44
39:BD:158:ALA:HB3	39:BD:161:THR:CG2	2.45	0.44
48:BP:149:GLU:O	48:BP:150:ALA:HB2	2.18	0.44
49:BQ:27:VAL:HG23	49:BQ:137:TYR:CE2	2.53	0.44
51:BS:89:ARG:HB3	51:BS:92:TYR:HB3	1.99	0.44
52:BT:38:ASN:C	52:BT:38:ASN:HD22	2.18	0.44
57:BY:31:LEU:HD23	57:BY:36:ALA:O	2.18	0.44
1:CA:722:A:O2'	1:CA:724:G:H8	2.00	0.44
1:CA:1005:A:C2'	1:CA:1006:C:H5'	2.47	0.44
1:CA:1048:G:OP1	14:CN:4:LYS:HB2	2.18	0.44
2:CB:15:VAL:C	2:CB:16:HIS:CG	2.96	0.44
2:CB:114:ARG:HH11	2:CB:118:LEU:HG	1.83	0.44
2:CB:152:PHE:O	2:CB:155:LEU:N	2.51	0.44
3:CC:172:ARG:O	3:CC:173:VAL:CG2	2.65	0.44
5:CE:131:ILE:HD13	5:CE:131:ILE:HA	1.87	0.44
6:CF:29:ALA:O	6:CF:30:LEU:C	2.60	0.44
7:CG:51:GLN:C	7:CG:53:LYS:H	2.26	0.44
7:CG:78:ARG:HH11	7:CG:80:VAL:HG21	1.80	0.44
7:CG:115:ARG:O	7:CG:116:ALA:C	2.60	0.44
9:CI:4:TYR:CE2	9:CI:88:TYR:CB	2.96	0.44
10:CJ:44:VAL:CG2	10:CJ:66:ARG:HH21	2.31	0.44
11:CK:34:ASP:C	11:CK:36:ASP:H	2.25	0.44
25:CZ:67:HIS:ND1	25:CZ:80:VAL:HG22	2.32	0.44
25:CZ:140:MET:CG	60:CZ:501:GDP:HN21	2.31	0.44
29:D3:31:LEU:C	29:D3:33:GLN:H	2.25	0.44
36:DA:9:U:O4	36:DA:2629:A:N7	2.51	0.44
36:DA:85:G:N3	36:DA:103:A:C2	2.85	0.44
36:DA:150:C:O2'	36:DA:151:C:H5'	2.18	0.44
36:DA:265:A:H4'	36:DA:266:G:O5'	2.18	0.44
36:DA:833:U:H5"	48:DP:48:PRO:HB2	2.00	0.44
36:DA:1665:A:H4'	47:DO:67:LYS:HB2	1.99	0.44
36:DA:1885:A:H5'	36:DA:1885:A:C8	2.52	0.44
36:DA:1929:G:H4'	36:DA:1930:G:OP1	2.16	0.44
36:DA:2101:G:H1	36:DA:2189:U:H3	1.60	0.44
36:DA:2295:C:O2'	36:DA:2296:U:H5'	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DB:55:U:H2'	37:DB:56:G:C8	2.52	0.44
38:DC:82:LYS:HG3	38:DC:116:THR:HG21	2.00	0.44
39:DD:243:GLY:O	39:DD:244:ARG:CB	2.65	0.44
40:DE:47:VAL:HG23	40:DE:84:PHE:O	2.18	0.44
40:DE:93:VAL:C	40:DE:95:ILE:N	2.75	0.44
42:DG:72:ARG:HB2	42:DG:87:PRO:HD2	2.00	0.44
43:DH:43:VAL:HG11	43:DH:46:GLU:OE2	2.17	0.44
46:DN:3:THR:CG2	46:DN:4:TYR:H	2.26	0.44
48:DP:41:ARG:CD	48:DP:45:LEU:HD23	2.36	0.44
48:DP:131:SER:O	48:DP:132:LYS:C	2.61	0.44
52:DT:107:ASP:CG	52:DT:108:ARG:N	2.75	0.44
56:DX:49:VAL:HG12	56:DX:87:GLN:NE2	2.28	0.44
1:AA:8:A:N6	4:AD:205:GLU:O	2.51	0.43
1:AA:109:A:C6	1:AA:326:G:C6	3.06	0.43
1:AA:155:C:H2'	1:AA:156:G:C8	2.50	0.43
1:AA:240:C:H2'	1:AA:241:C:C6	2.52	0.43
1:AA:294:U:H2'	1:AA:295:C:C6	2.52	0.43
1:AA:341:C:O5'	1:AA:341:C:H6	2.01	0.43
1:AA:1202:G:C2'	1:AA:1203:C:H5'	2.48	0.43
1:AA:1238:A:H2'	1:AA:1239:A:H5'	2.00	0.43
3:AC:3:ASN:O	3:AC:4:LYS:HB2	2.17	0.43
4:AD:163:GLU:C	4:AD:165:MET:N	2.76	0.43
7:AG:153:HIS:CE1	11:AK:58:PRO:HD2	2.53	0.43
13:AM:15:VAL:CG1	13:AM:45:VAL:HG22	2.48	0.43
13:AM:104:ARG:O	13:AM:104:ARG:HG2	2.17	0.43
20:AT:72:LEU:O	20:AT:73:HIS:C	2.60	0.43
25:AZ:257:GLY:O	25:AZ:302:GLN:HG2	2.18	0.43
25:AZ:363:MET:HB3	25:AZ:364:PRO:CD	2.48	0.43
25:AZ:404:LEU:H	25:AZ:404:LEU:CD2	2.32	0.43
33:B7:4:THR:HG21	36:BA:788:A:H1'	1.98	0.43
33:B7:34:ARG:HD2	33:B7:34:ARG:HA	1.77	0.43
35:B9:22:ARG:NH1	36:BA:2741:A:OP1	2.51	0.43
36:BA:581:C:OP1	53:BU:33:ARG:HG3	2.17	0.43
36:BA:847:U:OP2	36:BA:928:G:O6	2.35	0.43
36:BA:977:G:C6	36:BA:987:G:C6	3.05	0.43
36:BA:1067:A:H3'	36:BA:1068:G:C5'	2.41	0.43
36:BA:1885:A:H5'	36:BA:1885:A:C8	2.53	0.43
36:BA:2154:G:C2	36:BA:2155:G:C4	3.06	0.43
36:BA:2319:G:OP2	36:BA:2319:G:C4'	2.66	0.43
38:BC:99:ILE:C	38:BC:101:GLN:H	2.26	0.43
39:BD:35:LYS:CG	39:BD:63:ARG:HG2	2.41	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BD:102:LYS:C	39:BD:103:ARG:HG2	2.44	0.43
40:BE:38:THR:HG23	40:BE:39:PRO:HD2	1.99	0.43
40:BE:79:ARG:HH11	40:BE:79:ARG:HG2	1.83	0.43
42:BG:16:ARG:HG3	42:BG:16:ARG:HH11	1.83	0.43
42:BG:138:GLN:HE21	42:BG:152:LEU:HB3	1.83	0.43
43:BH:31:GLY:O	43:BH:79:VAL:HG12	2.18	0.43
43:BH:116:GLU:HA	43:BH:116:GLU:OE1	2.18	0.43
46:BN:17:ASP:OD1	46:BN:56:ASN:HB3	2.18	0.43
46:BN:75:TYR:O	46:BN:76:SER:O	2.35	0.43
51:BS:89:ARG:HG3	51:BS:92:TYR:N	2.33	0.43
51:BS:97:ARG:O	51:BS:98:VAL:C	2.61	0.43
56:BX:10:ALA:O	56:BX:28:PHE:CB	2.64	0.43
56:BX:21:PHE:O	56:BX:22:ALA:C	2.59	0.43
1:CA:8:A:N6	4:CD:205:GLU:O	2.51	0.43
1:CA:240:C:H2'	1:CA:241:C:C6	2.53	0.43
1:CA:332:G:O2'	1:CA:333:G:H5'	2.17	0.43
1:CA:724:G:O2'	1:CA:725:G:H5'	2.18	0.43
1:CA:1493:A:C8	23:CX:23:G:H1'	2.53	0.43
3:CC:90:GLU:O	3:CC:93:LYS:HB3	2.18	0.43
3:CC:106:VAL:O	3:CC:107:GLN:C	2.61	0.43
4:CD:98:GLU:C	4:CD:100:ARG:H	2.26	0.43
5:CE:12:LEU:HD12	5:CE:31:LEU:CB	2.42	0.43
6:CF:76:ALA:O	6:CF:80:ARG:HG3	2.18	0.43
9:CI:111:ARG:HG2	9:CI:112:LYS:N	2.29	0.43
10:CJ:4:ILE:CB	10:CJ:74:ILE:HD11	2.47	0.43
10:CJ:47:PHE:CE2	14:CN:37:PHE:CE2	3.06	0.43
17:CQ:45:HIS:CB	17:CQ:65:ILE:HD13	2.48	0.43
27:D1:14:VAL:HG11	27:D1:39:LYS:CE	2.48	0.43
29:D3:26:LEU:O	29:D3:28:LEU:HD22	2.18	0.43
31:D5:2:ALA:N	36:DA:2015:A:N3	2.66	0.43
32:D6:25:LYS:O	36:DA:2286:A:N1	2.51	0.43
32:D6:53:LYS:HG2	32:D6:54:ILE:H	1.82	0.43
34:D8:6:THR:C	34:D8:11:LYS:HE2	2.43	0.43
36:DA:1120:G:H2'	36:DA:1121:C:H6	1.80	0.43
36:DA:1651:G:C2	36:DA:2007:C:C2	3.06	0.43
36:DA:1866:C:O5'	36:DA:1866:C:H6	2.00	0.43
36:DA:2150:U:H2'	36:DA:2151:G:C8	2.53	0.43
36:DA:2659:G:C2'	36:DA:2660:A:H5"	2.48	0.43
40:DE:47:VAL:HG12	40:DE:49:LEU:CD2	2.48	0.43
41:DF:24:LEU:CD1	41:DF:118:ALA:HB1	2.48	0.43
41:DF:107:LYS:HE3	41:DF:205:ARG:CG	2.48	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DG:23:PHE:N	42:DG:23:PHE:CD1	2.86	0.43
46:DN:10:GLU:HG3	46:DN:11:PRO:HD2	1.99	0.43
46:DN:18:ALA:O	46:DN:19:GLU:C	2.61	0.43
47:DO:104:ARG:HH21	52:DT:33:LYS:HD3	1.81	0.43
50:DR:100:LEU:N	50:DR:100:LEU:CD1	2.81	0.43
1:AA:60:A:H4'	1:AA:61:G:O5'	2.17	0.43
1:AA:102:G:O2'	1:AA:103:C:H5'	2.18	0.43
1:AA:165:C:H2'	1:AA:166:G:H8	1.83	0.43
1:AA:309:G:O2'	1:AA:607:A:N1	2.51	0.43
1:AA:757:U:H2'	1:AA:758:G:O4'	2.18	0.43
1:AA:778:G:H1'	11:AK:119:CYS:HB3	1.99	0.43
1:AA:920:U:O4'	1:AA:1080:A:C2	2.72	0.43
1:AA:1039:C:C6	1:AA:1040:U:H5	2.36	0.43
1:AA:1190:G:P	3:AC:5:ILE:HD12	2.57	0.43
1:AA:1306:A:OP2	21:AU:6:ARG:NH2	2.51	0.43
3:AC:3:ASN:O	3:AC:4:LYS:CB	2.66	0.43
4:AD:98:GLU:C	4:AD:100:ARG:H	2.26	0.43
4:AD:145:GLU:CD	4:AD:145:GLU:N	2.70	0.43
9:AI:11:LYS:O	9:AI:11:LYS:HG2	2.17	0.43
10:AJ:37:PRO:HA	10:AJ:72:VAL:HG22	1.99	0.43
11:AK:27:ASN:HD21	11:AK:45:GLY:H	1.66	0.43
12:AL:42:THR:HA	12:AL:53:ARG:O	2.18	0.43
13:AM:37:THR:O	13:AM:39:ILE:HG13	2.17	0.43
14:AN:39:LEU:CD1	14:AN:47:LEU:HD12	2.47	0.43
17:AQ:94:ASN:O	17:AQ:96:GLU:N	2.51	0.43
18:AR:55:ARG:HG3	18:AR:55:ARG:HH11	1.84	0.43
22:AW:68:C:H2'	22:AW:69:G:C8	2.53	0.43
26:B0:51:VAL:HG21	26:B0:79:VAL:O	2.18	0.43
28:B2:13:ALA:C	28:B2:15:LYS:N	2.76	0.43
32:B6:27:LYS:O	32:B6:28:ARG:C	2.61	0.43
32:B6:27:LYS:HE3	32:B6:30:THR:OG1	2.18	0.43
32:B6:45:LYS:CG	36:BA:2371:G:H4'	2.48	0.43
36:BA:140:G:C1'	36:BA:141:A:H2	2.31	0.43
36:BA:271(Q):G:H1'	36:BA:271(R):G:H8	1.81	0.43
36:BA:274:G:H3'	36:BA:274:G:OP2	2.18	0.43
36:BA:303:U:H2'	36:BA:304:G:C8	2.53	0.43
36:BA:358:U:C2'	36:BA:359:A:H5'	2.48	0.43
36:BA:990:A:C6	36:BA:1186:G:H1'	2.52	0.43
36:BA:1146:C:O2'	36:BA:1147:C:H5'	2.18	0.43
36:BA:1446:C:H42	36:BA:1465:G:H1	1.66	0.43
36:BA:1817:G:C2'	36:BA:1818:U:H5'	2.49	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2389:G:C5’	36:BA:2390:U:H5’	2.47	0.43
36:BA:2770:G:H5”	36:BA:2771:C:OP2	2.18	0.43
37:BB:13:A:O2’	37:BB:15:A:H5’	2.18	0.43
37:BB:24:G:H1’	37:BB:26:A:H62	1.83	0.43
39:BD:28:GLU:CB	39:BD:29:PRO:CD	2.95	0.43
39:BD:173:VAL:HG12	39:BD:185:VAL:O	2.18	0.43
39:BD:257:LEU:HD23	39:BD:257:LEU:C	2.43	0.43
40:BE:78:LEU:C	40:BE:79:ARG:HG3	2.43	0.43
42:BG:141:PHE:O	42:BG:144:ILE:HG22	2.17	0.43
46:BN:31:ALA:O	46:BN:34:LEU:HB3	2.18	0.43
47:BO:79:PHE:CD2	52:BT:72:VAL:HG12	2.53	0.43
48:BP:98:GLU:CA	48:BP:101:VAL:HG22	2.48	0.43
48:BP:115:LEU:N	48:BP:115:LEU:HD23	2.33	0.43
50:BR:41:ALA:C	50:BR:43:GLU:H	2.25	0.43
52:BT:93:ARG:HH22	52:BT:95:ARG:HD3	1.81	0.43
52:BT:107:ASP:CG	52:BT:108:ARG:N	2.76	0.43
53:BU:93:LYS:O	53:BU:96:ALA:HB3	2.17	0.43
54:BV:15:GLU:O	54:BV:16:PRO:C	2.61	0.43
54:BV:16:PRO:O	54:BV:96:ILE:O	2.35	0.43
58:BZ:135:GLU:O	58:BZ:136:PHE:O	2.35	0.43
1:CA:600:C:OP1	8:CH:97:VAL:HG12	2.18	0.43
1:CA:878:G:H5’	8:CH:89:PRO:HG2	1.99	0.43
1:CA:1039:C:C6	1:CA:1040:U:H5	2.35	0.43
1:CA:1202:G:O2’	1:CA:1203:C:H5’	2.18	0.43
1:CA:1536:C:H2’	1:CA:1537:U:C4’	2.47	0.43
2:CB:176:GLU:O	2:CB:177:ALA:C	2.58	0.43
4:CD:127:THR:HG22	4:CD:128:VAL:O	2.18	0.43
4:CD:159:ARG:NH1	4:CD:159:ARG:HG3	2.33	0.43
9:CI:33:PHE:C	9:CI:35:GLU:N	2.73	0.43
9:CI:99:LEU:O	9:CI:100:GLY:C	2.61	0.43
10:CJ:6:ILE:HD12	10:CJ:23:ILE:HG21	2.00	0.43
10:CJ:9:ARG:HH21	10:CJ:97:GLU:HG3	1.84	0.43
13:CM:77:ASN:O	13:CM:80:ARG:HB3	2.18	0.43
22:CV:20:U:H2’	22:CV:21:A:H5’	1.98	0.43
25:CZ:173:GLY:HA2	25:CZ:195:TRP:HZ3	1.83	0.43
25:CZ:185:ASN:N	25:CZ:185:ASN:ND2	2.66	0.43
32:D6:16:CYS:SG	32:D6:48:VAL:CG2	3.00	0.43
32:D6:28:ARG:C	32:D6:32:ASN:HD22	2.25	0.43
36:DA:600:G:H5’	41:DF:32:LEU:HD12	2.01	0.43
36:DA:813:U:H2’	36:DA:814:C:H6	1.81	0.43
36:DA:941:A:H4’	48:DP:35:HIS:CE1	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1208:C:C2	36:DA:1209:G:C8	3.06	0.43
36:DA:1300:U:H4'	36:DA:1301:A:O5'	2.18	0.43
36:DA:1817:G:C2'	36:DA:1818:U:H5'	2.48	0.43
36:DA:1963:U:O2	36:DA:1963:U:H2'	2.18	0.43
37:DB:13:A:H8	37:DB:13:A:H5'	1.82	0.43
38:DC:117:PRO:O	38:DC:118:ASP:HB3	2.16	0.43
39:DD:30:GLU:HG2	39:DD:35:LYS:HZ1	1.84	0.43
39:DD:242:ARG:CG	39:DD:242:ARG:NH1	2.72	0.43
40:DE:76:ARG:HH11	40:DE:76:ARG:HG2	1.83	0.43
42:DG:136:ARG:HH11	42:DG:136:ARG:CB	2.31	0.43
49:DQ:137:TYR:CE2	58:DZ:81:ARG:CZ	3.01	0.43
50:DR:41:ALA:C	50:DR:43:GLU:N	2.74	0.43
52:DT:29:ARG:HB2	52:DT:85:LYS:HA	1.98	0.43
55:DW:9:TYR:HE1	55:DW:102:HIS:HE2	1.63	0.43
55:DW:24:ILE:HG21	55:DW:36:LEU:CD2	2.48	0.43
1:AA:80:G:C3'	1:AA:81:U:H5'	2.47	0.43
1:AA:622:A:C8	1:AA:623:C:C6	3.06	0.43
1:AA:858:G:C8	1:AA:869:G:O6	2.70	0.43
1:AA:1126:U:P	1:AA:1281:U:O2	2.76	0.43
2:AB:88:ALA:HB2	2:AB:219:VAL:CG1	2.47	0.43
2:AB:239:VAL:O	2:AB:240:GLN:CB	2.65	0.43
4:AD:88:VAL:HG12	4:AD:90:GLY:H	1.82	0.43
4:AD:148:VAL:HG23	4:AD:181:MET:HB3	1.99	0.43
9:AI:47:LEU:H	9:AI:47:LEU:HG	1.58	0.43
12:AL:126:LYS:HE2	12:AL:126:LYS:CA	2.48	0.43
13:AM:99:ARG:C	13:AM:101:GLN:NE2	2.76	0.43
16:AP:28:ARG:HH11	16:AP:28:ARG:HG2	1.84	0.43
17:AQ:26:GLN:HA	17:AQ:36:ILE:O	2.18	0.43
19:AS:35:SER:HB2	19:AS:37:ARG:HD2	1.99	0.43
22:AW:38:A:H2'	22:AW:39:U:O4'	2.18	0.43
25:AZ:133:VAL:HB	25:AZ:170:VAL:HG22	2.00	0.43
25:AZ:178:ALA:HB1	25:AZ:199:ILE:HD11	2.00	0.43
26:B0:20:ARG:CG	26:B0:20:ARG:NH1	2.78	0.43
28:B2:9:GLN:HB3	28:B2:60:LEU:HD22	2.01	0.43
31:B5:33:CYS:C	31:B5:35:GLU:H	2.26	0.43
31:B5:43:HIS:CD2	36:BA:2815:C:O2'	2.71	0.43
32:B6:18:ARG:HE	32:B6:43:CYS:HB3	1.83	0.43
32:B6:53:LYS:HG2	32:B6:54:ILE:H	1.83	0.43
34:B8:43:GLN:C	34:B8:44:LYS:HD2	2.43	0.43
36:BA:205:G:O2'	36:BA:206:U:OP2	2.33	0.43
36:BA:237:C:O2'	36:BA:238:C:H5'	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:237:C:H2'	36:BA:238:C:H6	1.81	0.43
36:BA:877:U:C2'	36:BA:878:A:H5"	2.47	0.43
36:BA:1843:C:H2'	36:BA:1844:C:H6	1.83	0.43
36:BA:2150:U:H2'	36:BA:2151:G:C8	2.52	0.43
36:BA:2184:G:H2'	36:BA:2185:C:C6	2.54	0.43
36:BA:2872:G:C2	36:BA:2873:A:N6	2.86	0.43
38:BC:82:LYS:HG3	38:BC:116:THR:HG21	2.01	0.43
38:BC:117:PRO:HG3	38:BC:145:VAL:HG12	1.99	0.43
42:BG:152:LEU:HD23	42:BG:152:LEU:N	2.31	0.43
47:BO:35:VAL:CG1	47:BO:35:VAL:O	2.66	0.43
48:BP:50:ARG:HG2	48:BP:50:ARG:NH1	2.33	0.43
52:BT:23:ARG:HB2	52:BT:24:PRO:HD2	2.00	0.43
52:BT:89:VAL:HG11	52:BT:91:ARG:HG3	2.00	0.43
53:BU:8:VAL:HG12	53:BU:12:ARG:HG3	2.00	0.43
53:BU:70:ARG:C	53:BU:72:HIS:H	2.25	0.43
56:BX:63:LYS:HE3	56:BX:63:LYS:HB2	1.89	0.43
57:BY:31:LEU:HD23	57:BY:36:ALA:C	2.43	0.43
57:BY:87:LYS:O	57:BY:88:LYS:CB	2.67	0.43
58:BZ:81:ARG:CZ	58:BZ:81:ARG:CB	2.90	0.43
58:BZ:135:GLU:O	58:BZ:136:PHE:CG	2.71	0.43
1:CA:668:G:O2'	15:CO:46:HIS:CD2	2.71	0.43
1:CA:821:G:H2'	1:CA:822:C:H6	1.82	0.43
1:CA:918:A:H2'	1:CA:919:A:O4'	2.18	0.43
1:CA:1060:C:H5"	10:CJ:51:ARG:HG2	1.99	0.43
1:CA:1194:U:H2'	1:CA:1195:C:C6	2.53	0.43
1:CA:1205:U:O2'	3:CC:195:VAL:HG23	2.18	0.43
1:CA:1227:A:C2	1:CA:1228:C:C2	3.06	0.43
1:CA:1346:A:H5"	9:CI:120:ARG:NH2	2.33	0.43
2:CB:19:HIS:NE2	2:CB:206:ASP:HB2	2.32	0.43
4:CD:17:VAL:HG11	4:CD:197:PRO:CB	2.42	0.43
4:CD:150:GLU:HG2	4:CD:151:LYS:N	2.33	0.43
4:CD:194:LEU:HB3	4:CD:196:LEU:CD1	2.36	0.43
5:CE:99:GLY:O	5:CE:117:ASP:HA	2.18	0.43
6:CF:30:LEU:HD11	6:CF:63:TYR:CD2	2.53	0.43
7:CG:99:LEU:HA	7:CG:102:ARG:CD	2.48	0.43
9:CI:110:GLU:OE2	9:CI:113:LYS:NZ	2.51	0.43
10:CJ:48:THR:HG23	10:CJ:62:HIS:ND1	2.32	0.43
11:CK:20:TYR:CZ	11:CK:83:ILE:HD12	2.53	0.43
13:CM:58:GLU:O	13:CM:62:ASN:HB2	2.18	0.43
13:CM:104:ARG:HG2	13:CM:104:ARG:O	2.18	0.43
20:CT:10:LEU:HG	20:CT:12:ALA:N	2.32	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:CT:26:ASN:HB3	20:CT:71:THR:OG1	2.17	0.43
22:CV:22:G:O2'	22:CV:23:A:H5"	2.18	0.43
24:CY:40:C:C2'	24:CY:41:C:C5'	2.93	0.43
25:CZ:257:GLY:O	25:CZ:302:GLN:HG2	2.18	0.43
25:CZ:342:PHE:CD2	25:CZ:388:ILE:HG12	2.53	0.43
25:CZ:349:VAL:HG23	25:CZ:374:LEU:HD22	2.00	0.43
25:CZ:363:MET:HB3	25:CZ:364:PRO:CD	2.48	0.43
26:D0:43:THR:CG2	36:DA:2336:A:H61	2.31	0.43
30:D4:7:PRO:HG3	42:DG:61:ALA:HB1	1.99	0.43
31:D5:20:ARG:HA	31:D5:23:HIS:ND1	2.33	0.43
32:D6:32:ASN:O	32:D6:33:LYS:CB	2.66	0.43
36:DA:271(D):G:O2'	36:DA:271(E):U:H5'	2.17	0.43
36:DA:309:G:N3	36:DA:329:G:O2'	2.51	0.43
36:DA:391:G:H1'	36:DA:411:G:O4'	2.18	0.43
36:DA:655:A:C4'	36:DA:656:G:H5'	2.32	0.43
36:DA:688:U:H5'	36:DA:1780:A:C2	2.53	0.43
36:DA:692:C:H2'	36:DA:693:C:C6	2.53	0.43
36:DA:1229:G:H3'	36:DA:1230:C:C6	2.54	0.43
36:DA:2114:A:C2'	36:DA:2115:G:H5'	2.48	0.43
36:DA:2166:G:H2'	36:DA:2167:U:C6	2.53	0.43
36:DA:2414:G:C2	36:DA:2415:G:C8	3.07	0.43
36:DA:2463:C:C2'	36:DA:2464:C:H5'	2.48	0.43
36:DA:2481:G:C2'	36:DA:2482:G:OP2	2.66	0.43
36:DA:2545:G:O2'	36:DA:2546:U:H5'	2.18	0.43
36:DA:2661:G:H2'	36:DA:2662:A:C8	2.52	0.43
38:DC:74:VAL:HG12	38:DC:75:LEU:N	2.33	0.43
40:DE:87:GLU:OE1	40:DE:87:GLU:O	2.36	0.43
40:DE:101:ARG:HD3	40:DE:170:LEU:O	2.17	0.43
41:DF:167:ALA:O	41:DF:168:ARG:C	2.59	0.43
42:DG:22:ARG:HB3	42:DG:23:PHE:CD1	2.53	0.43
43:DH:31:GLY:O	43:DH:79:VAL:HG12	2.18	0.43
45:DK:88:UNK:O	45:DK:89:UNK:C	2.66	0.43
46:DN:17:ASP:OD1	46:DN:56:ASN:HB3	2.18	0.43
46:DN:118:LYS:C	46:DN:120:LEU:H	2.26	0.43
48:DP:62:LEU:O	48:DP:62:LEU:HG	2.17	0.43
52:DT:50:ILE:HA	52:DT:99:LEU:HD12	1.99	0.43
54:DV:39:LEU:HD12	54:DV:50:PRO:O	2.19	0.43
56:DX:44:GLU:OE2	56:DX:50:LYS:HG3	2.18	0.43
57:DY:85:VAL:HG12	57:DY:86:ARG:H	1.83	0.43
1:AA:167:G:O2'	1:AA:168:G:H5'	2.18	0.43
1:AA:599:C:O2'	1:AA:600:C:H5'	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:782:A:H2'	1:AA:783:C:H5'	1.99	0.43
1:AA:783:C:O2'	1:AA:784:C:H5'	2.19	0.43
1:AA:961:U:OP2	1:AA:1223:C:H4'	2.18	0.43
2:AB:28:PHE:CZ	2:AB:189:ASP:HA	2.54	0.43
2:AB:32:ILE:HD11	2:AB:40:HIS:CD2	2.54	0.43
4:AD:8:VAL:HB	4:AD:21:LEU:HD12	2.01	0.43
5:AE:68:GLU:O	5:AE:68:GLU:HG3	2.17	0.43
12:AL:17:LYS:CD	12:AL:18:VAL:HG22	2.48	0.43
12:AL:45:PRO:HG3	12:AL:53:ARG:CD	2.48	0.43
12:AL:126:LYS:HE2	12:AL:127:GLU:H	1.82	0.43
16:AP:14:ASN:HA	16:AP:42:ARG:NH2	2.34	0.43
25:AZ:188:THR:CG2	25:AZ:193:ASN:HD22	2.27	0.43
27:B1:56:GLN:O	27:B1:57:GLU:HB3	2.18	0.43
28:B2:28:LYS:O	28:B2:31:GLU:N	2.51	0.43
29:B3:16:PRO:HB2	29:B3:19:GLN:HG3	2.00	0.43
31:B5:4:HIS:C	36:BA:2056:G:H22	2.27	0.43
34:B8:15:LYS:HD2	34:B8:16:ILE:N	2.33	0.43
36:BA:587:C:O2'	36:BA:588:U:OP2	2.29	0.43
36:BA:1596:A:O2'	36:BA:1597:A:H5'	2.18	0.43
36:BA:2657:A:N3	36:BA:2657:A:H5'	2.33	0.43
37:BB:16:G:C6	37:BB:69:G:C2	3.06	0.43
38:BC:195:ALA:O	38:BC:198:ALA:HB3	2.18	0.43
39:BD:44:ASN:CB	39:BD:48:ARG:O	2.67	0.43
40:BE:49:LEU:HD22	40:BE:49:LEU:N	2.32	0.43
40:BE:89:ASP:CG	40:BE:90:THR:H	2.25	0.43
41:BF:3:GLU:O	41:BF:3:GLU:HG3	2.17	0.43
41:BF:107:LYS:HE3	41:BF:205:ARG:HG2	2.01	0.43
41:BF:170:LEU:HB2	41:BF:173:VAL:HB	2.00	0.43
42:BG:57:ALA:C	42:BG:59:GLU:N	2.76	0.43
42:BG:104:GLU:O	42:BG:108:ASN:HB2	2.17	0.43
44:BJ:52:UNK:CB	44:BJ:87:UNK:HA	2.49	0.43
48:BP:65:ARG:O	48:BP:66:GLY:C	2.61	0.43
50:BR:74:LYS:HE3	50:BR:77:ARG:HH11	1.84	0.43
53:BU:83:LEU:HA	53:BU:88:ILE:CG1	2.48	0.43
55:BW:24:ILE:HG21	55:BW:36:LEU:HD21	2.01	0.43
57:BY:61:ILE:HG22	57:BY:62:GLU:N	2.33	0.43
58:BZ:67:LEU:HD12	58:BZ:67:LEU:H	1.84	0.43
1:CA:393:A:H5'	1:CA:483:C:O2'	2.19	0.43
1:CA:427:U:C4	1:CA:428:G:C6	3.06	0.43
1:CA:1202:G:H2'	1:CA:1203:C:O4'	2.18	0.43
4:CD:20:TYR:HD1	4:CD:26:CYS:O	2.01	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:171:GLY:C	4:CD:173:TRP:H	2.26	0.43
5:CE:34:VAL:HG12	5:CE:62:ALA:HB1	2.00	0.43
6:CF:80:ARG:NH1	6:CF:88:VAL:HB	2.33	0.43
7:CG:102:ARG:CG	7:CG:103:TRP:N	2.80	0.43
10:CJ:7:LYS:HG2	10:CJ:71:LEU:HD13	2.00	0.43
11:CK:121:PRO:HG2	11:CK:126:ARG:HG3	2.00	0.43
12:CL:97:ARG:HH11	12:CL:97:ARG:CG	2.30	0.43
16:CP:55:ARG:O	16:CP:56:ALA:C	2.61	0.43
18:CR:21:LYS:HD2	18:CR:57:GLY:CA	2.49	0.43
19:CS:32:LYS:H	19:CS:32:LYS:CE	2.31	0.43
22:CV:43:C:H5'	22:CV:44:G:OP2	2.19	0.43
22:CW:11:C:O2'	22:CW:12:U:H5'	2.18	0.43
25:CZ:133:VAL:HB	25:CZ:170:VAL:HG22	1.99	0.43
25:CZ:138:VAL:HG21	25:CZ:173:GLY:N	2.33	0.43
25:CZ:178:ALA:HB1	25:CZ:199:ILE:HD11	1.99	0.43
25:CZ:317:GLU:O	25:CZ:400:VAL:HA	2.18	0.43
26:D0:43:THR:CG2	36:DA:2332:U:H5'	2.48	0.43
27:D1:53:VAL:CG2	27:D1:74:VAL:HG13	2.48	0.43
28:D2:59:ARG:HH21	36:DA:77:C:P	2.41	0.43
35:D9:35:ARG:CD	36:DA:2742:C:OP1	2.66	0.43
36:DA:116:C:H2'	36:DA:117:G:O4'	2.18	0.43
36:DA:654(E):G:N2	36:DA:654(Q):C:O2'	2.52	0.43
36:DA:709:U:H2'	36:DA:710:G:H8	1.80	0.43
36:DA:1052:C:O2'	36:DA:1053:C:P	2.76	0.43
36:DA:1337:G:H2'	36:DA:1338:G:H8	1.84	0.43
36:DA:1544:A:O2'	36:DA:1545:A:H5'	2.17	0.43
36:DA:1787:A:O4'	36:DA:2589:A:H4'	2.18	0.43
36:DA:2122:U:H2'	36:DA:2123:G:H8	1.81	0.43
36:DA:2330:G:H2'	36:DA:2331:G:O4'	2.17	0.43
36:DA:2491:U:C5'	36:DA:2570:G:H5"	2.45	0.43
36:DA:2572:A:O2'	40:DE:144:ARG:NH1	2.50	0.43
37:DB:29:A:C2	37:DB:56:G:C2	3.07	0.43
38:DC:127:LEU:C	38:DC:129:ARG:N	2.76	0.43
39:DD:49:ILE:HG13	39:DD:49:ILE:O	2.19	0.43
39:DD:70:TRP:CH2	39:DD:150:LYS:CA	2.92	0.43
41:DF:164:ARG:HD2	41:DF:176:LEU:O	2.19	0.43
43:DH:54:ARG:HB2	43:DH:55:PRO:HD2	1.99	0.43
43:DH:66:GLY:HA2	43:DH:69:ARG:CB	2.40	0.43
43:DH:72:ILE:O	43:DH:75:ALA:N	2.52	0.43
46:DN:3:THR:O	46:DN:4:TYR:CD2	2.71	0.43
46:DN:56:ASN:HD22	46:DN:56:ASN:HA	1.57	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DN:73:THR:HA	46:DN:83:LYS:O	2.18	0.43
50:DR:79:LEU:HD13	50:DR:79:LEU:C	2.43	0.43
52:DT:35:LYS:O	52:DT:36:GLU:HB2	2.18	0.43
54:DV:64:HIS:ND1	54:DV:92:THR:HG22	2.33	0.43
55:DW:17:VAL:O	55:DW:18:ARG:C	2.62	0.43
55:DW:37:ARG:HG2	55:DW:38:TYR:CD2	2.53	0.43
55:DW:78:GLU:OE2	55:DW:99:ARG:HD2	2.17	0.43
56:DX:57:LEU:N	56:DX:57:LEU:CD1	2.80	0.43
1:AA:513:C:H2'	1:AA:514:C:H6	1.83	0.43
1:AA:1005:A:C2'	1:AA:1006:C:H5'	2.48	0.43
1:AA:1153:C:O2'	1:AA:1154:G:P	2.76	0.43
1:AA:1305:G:N2	1:AA:1331:G:C2'	2.60	0.43
1:AA:1346:A:OP1	9:AI:120:ARG:NH2	2.51	0.43
1:AA:1402:C:C5	1:AA:1403:C:C5	3.06	0.43
1:AA:1416:G:C3'	1:AA:1417:G:H5"	2.47	0.43
2:AB:69:LEU:HD13	2:AB:71:VAL:CG2	2.49	0.43
2:AB:74:LYS:NZ	2:AB:166:ASP:HB2	2.33	0.43
2:AB:93:VAL:HG13	2:AB:93:VAL:O	2.19	0.43
2:AB:226:ARG:O	2:AB:226:ARG:HD2	2.19	0.43
7:AG:6:ARG:O	7:AG:7:ALA:O	2.36	0.43
7:AG:78:ARG:HH11	7:AG:80:VAL:HG21	1.83	0.43
10:AJ:47:PHE:CE2	14:AN:37:PHE:HE2	2.37	0.43
11:AK:124:LYS:O	11:AK:127:LYS:HG2	2.19	0.43
13:AM:58:GLU:O	13:AM:62:ASN:HB2	2.19	0.43
13:AM:108:ARG:HH11	13:AM:108:ARG:CG	2.31	0.43
26:B0:10:THR:CG2	26:B0:12:ASN:HB2	2.47	0.43
26:B0:43:THR:CG2	36:BA:2332:U:H5'	2.49	0.43
30:B4:14:ILE:HD12	30:B4:14:ILE:N	2.34	0.43
31:B5:23:HIS:O	31:B5:24:ALA:C	2.61	0.43
36:BA:278:A:N1	36:BA:362:U:C4	2.87	0.43
36:BA:391:G:H1'	36:BA:411:G:O4'	2.19	0.43
36:BA:492:A:C2	36:BA:493:G:H1'	2.53	0.43
36:BA:832:G:P	48:BP:40:SER:HB3	2.58	0.43
36:BA:1344:G:O2'	36:BA:1385:G:H2'	2.19	0.43
36:BA:1473:G:H2'	36:BA:1474:C:O4'	2.18	0.43
36:BA:1538:G:H2'	36:BA:1539:G:H8	1.83	0.43
36:BA:1916:A:H2'	36:BA:1917:U:O4'	2.18	0.43
36:BA:1991:U:C2'	36:BA:1992:G:H5"	2.47	0.43
36:BA:2166:G:H2'	36:BA:2167:U:C6	2.53	0.43
36:BA:2461:C:H2'	36:BA:2462:U:H6	1.83	0.43
36:BA:2529:G:H5"	36:BA:2530:A:H5"	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2747:G:C2	36:BA:2756:U:H5	2.36	0.43
38:BC:62:VAL:O	38:BC:160:ARG:HA	2.18	0.43
38:BC:127:LEU:C	38:BC:129:ARG:N	2.76	0.43
39:BD:243:GLY:O	39:BD:244:ARG:CB	2.66	0.43
40:BE:24:THR:CG2	40:BE:186:GLY:HA2	2.47	0.43
43:BH:167:GLU:HB3	43:BH:168:PRO:CD	2.45	0.43
44:BJ:119:UNK:O	44:BJ:120:UNK:CB	2.66	0.43
48:BP:84:ASN:N	48:BP:84:ASN:ND2	2.59	0.43
50:BR:53:HIS:ND1	50:BR:53:HIS:O	2.51	0.43
51:BS:106:ARG:NH1	51:BS:106:ARG:CG	2.80	0.43
52:BT:63:VAL:O	52:BT:73:GLU:HA	2.18	0.43
53:BU:68:ALA:C	53:BU:70:ARG:N	2.77	0.43
1:CA:321:A:O2'	1:CA:322:C:H5'	2.18	0.43
1:CA:622:A:C8	1:CA:623:C:C6	3.06	0.43
1:CA:741:G:H2'	1:CA:742:G:O4'	2.18	0.43
1:CA:923:A:O4'	1:CA:1398:A:C2	2.70	0.43
1:CA:1116:C:C2'	1:CA:1117:G:C5'	2.96	0.43
1:CA:1505:G:H2'	23:CX:18:G:OP2	2.19	0.43
2:CB:86:GLU:C	2:CB:88:ALA:N	2.74	0.43
4:CD:101:LEU:HD23	4:CD:121:VAL:CG1	2.42	0.43
4:CD:163:GLU:C	4:CD:165:MET:N	2.75	0.43
6:CF:100:ASN:O	6:CF:101:ALA:C	2.61	0.43
8:CH:101:PRO:C	8:CH:102:ARG:HD3	2.44	0.43
12:CL:104:VAL:HG12	12:CL:105:TYR:CD1	2.54	0.43
13:CM:116:THR:O	13:CM:117:VAL:C	2.61	0.43
16:CP:12:LYS:HG2	16:CP:13:HIS:CD2	2.53	0.43
16:CP:53:VAL:HG23	16:CP:54:GLU:N	2.25	0.43
22:CW:75:C:C5'	27:D1:30:VAL:HG11	2.48	0.43
25:CZ:86:ALA:O	25:CZ:88:TYR:N	2.44	0.43
25:CZ:223:MET:HE3	25:CZ:240:GLY:HA3	1.99	0.43
27:D1:75:GLU:C	27:D1:77:ALA:H	2.26	0.43
28:D2:8:LYS:O	28:D2:11:GLU:HB2	2.18	0.43
34:D8:34:TRP:HA	36:DA:2420:C:OP1	2.19	0.43
34:D8:43:GLN:C	34:D8:44:LYS:HD2	2.43	0.43
36:DA:31:C:H2'	36:DA:32:C:H5'	1.95	0.43
36:DA:60:G:C4	36:DA:63:U:C4	3.05	0.43
36:DA:151:C:H2'	36:DA:152:G:H8	1.83	0.43
36:DA:338:G:N2	36:DA:339:U:H1'	2.33	0.43
36:DA:448:U:H1'	41:DF:84:VAL:HG13	1.99	0.43
36:DA:1441:G:O2'	36:DA:1442:G:H5'	2.19	0.43
36:DA:1469:A:O2'	36:DA:1470:G:H5'	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1517:G:C2'	36:DA:1518:U:H5'	2.48	0.43
36:DA:1528:A:N1	36:DA:1542:A:C2	2.85	0.43
36:DA:1885:A:H8	36:DA:1885:A:C5'	2.32	0.43
36:DA:2892:A:N6	36:DA:2893:G:H21	2.16	0.43
37:DB:13:A:O2'	37:DB:15:A:H5'	2.19	0.43
39:DD:257:LEU:C	39:DD:257:LEU:HD23	2.43	0.43
40:DE:60:ASN:OD1	40:DE:61:ARG:N	2.52	0.43
40:DE:61:ARG:CB	40:DE:62:PRO:CD	2.95	0.43
40:DE:68:ALA:O	40:DE:70:ALA:N	2.51	0.43
42:DG:60:LEU:HD22	42:DG:63:ILE:HD12	2.00	0.43
44:DJ:96:UNK:HA	44:DJ:99:UNK:CB	2.49	0.43
45:DK:56:UNK:O	45:DK:68:UNK:C	2.66	0.43
53:DU:95:LEU:HD11	54:DV:11:GLN:O	2.17	0.43
56:DX:35:THR:HG21	56:DX:37:THR:HG22	2.01	0.43
1:AA:833:U:H2'	1:AA:834:C:C6	2.52	0.43
1:AA:838:G:C6	1:AA:840:C:H1'	2.53	0.43
1:AA:1411:C:O2'	1:AA:1412:C:H5'	2.18	0.43
2:AB:25:ASN:C	2:AB:25:ASN:ND2	2.57	0.43
3:AC:35:GLU:CD	3:AC:95:THR:HG23	2.44	0.43
4:AD:58:LEU:HD23	4:AD:58:LEU:C	2.44	0.43
4:AD:159:ARG:NH1	4:AD:159:ARG:HG3	2.33	0.43
7:AG:99:LEU:HA	7:AG:102:ARG:HD2	2.01	0.43
7:AG:102:ARG:CG	7:AG:103:TRP:N	2.82	0.43
9:AI:110:GLU:OE2	9:AI:113:LYS:NZ	2.52	0.43
9:AI:113:LYS:HD3	9:AI:119:ALA:HA	2.00	0.43
10:AJ:44:VAL:CG2	10:AJ:66:ARG:HH21	2.30	0.43
10:AJ:96:ILE:CD1	10:AJ:96:ILE:N	2.76	0.43
11:AK:32:ILE:HG22	11:AK:77:MET:HE3	2.00	0.43
20:AT:55:ILE:O	20:AT:58:LYS:HB3	2.19	0.43
22:AV:46:G:C3'	22:AV:47:U:C5'	2.74	0.43
23:AX:22:U:O2'	23:AX:23:G:H5'	2.18	0.43
24:AY:16:H2U:C5'	24:AY:17:H2U:H5'	2.42	0.43
25:AZ:313:HIS:CB	25:AZ:380:LEU:HD12	2.49	0.43
27:B1:30:VAL:H	36:BA:2396:G:C4'	2.31	0.43
33:B7:43:THR:HG23	33:B7:44:PRO:CD	2.49	0.43
36:BA:301:G:C6	36:BA:317:G:C6	3.06	0.43
36:BA:381:G:O2'	36:BA:382:G:H5'	2.18	0.43
36:BA:500:G:H22	36:BA:502:A:H3'	1.81	0.43
36:BA:614:U:O2	36:BA:614:U:O4'	2.35	0.43
36:BA:782:A:C6	39:BD:226:MET:HE2	2.54	0.43
36:BA:1059:G:H3'	36:BA:1060:U:H6	1.84	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1068:G:H1'	36:BA:1069:A:O5'	2.19	0.43
36:BA:1787:A:O4'	36:BA:2589:A:H4'	2.17	0.43
36:BA:1929:G:H4'	36:BA:1930:G:OP1	2.18	0.43
36:BA:2126:A:HO2'	36:BA:2127:G:P	2.41	0.43
38:BC:100:ILE:O	38:BC:104:LEU:HB2	2.18	0.43
38:BC:127:LEU:C	38:BC:129:ARG:H	2.26	0.43
40:BE:144:ARG:HG3	40:BE:145:LYS:H	1.83	0.43
40:BE:153:GLY:O	40:BE:154:LYS:C	2.62	0.43
42:BG:39:ILE:HG22	42:BG:157:ILE:HG23	2.00	0.43
42:BG:138:GLN:HG2	42:BG:153:ARG:HG2	2.00	0.43
43:BH:83:TYR:HB3	43:BH:135:GLY:O	2.18	0.43
46:BN:115:ARG:HG3	46:BN:115:ARG:HH11	1.84	0.43
49:BQ:141:GLN:OXT	58:BZ:53:ILE:HD12	2.19	0.43
50:BR:76:VAL:O	50:BR:79:LEU:HB3	2.19	0.43
51:BS:14:VAL:HG12	51:BS:15:ARG:N	2.33	0.43
52:BT:106:SER:O	52:BT:107:ASP:HB3	2.19	0.43
54:BV:34:GLU:HA	54:BV:57:VAL:O	2.19	0.43
54:BV:39:LEU:HA	54:BV:47:VAL:HG11	1.99	0.43
57:BY:35:TYR:HD2	57:BY:68:HIS:NE2	2.16	0.43
57:BY:80:GLY:O	57:BY:81:LYS:O	2.36	0.43
58:BZ:114:GLY:N	58:BZ:146:ILE:HG22	2.33	0.43
1:CA:220:G:H2'	1:CA:221:C:H5'	2.00	0.43
1:CA:375:U:O2'	16:CP:28:ARG:HD2	2.18	0.43
1:CA:722:A:O3'	1:CA:723:U:H2'	2.18	0.43
1:CA:936:C:H2'	1:CA:937:A:H8	1.84	0.43
1:CA:1262:C:H2'	1:CA:1263:C:C6	2.54	0.43
2:CB:163:PHE:HA	2:CB:185:ILE:O	2.18	0.43
2:CB:168:THR:HG21	2:CB:192:SER:HA	1.99	0.43
3:CC:120:VAL:O	3:CC:121:ALA:C	2.60	0.43
5:CE:69:VAL:O	5:CE:71:LEU:N	2.47	0.43
5:CE:144:THR:O	5:CE:148:VAL:HG23	2.19	0.43
8:CH:83:ILE:HG13	8:CH:137:VAL:HG22	2.00	0.43
11:CK:124:LYS:O	11:CK:127:LYS:HG2	2.18	0.43
12:CL:33:ARG:HD3	12:CL:62:SER:HG	1.80	0.43
20:CT:18:GLN:O	20:CT:19:SER:C	2.62	0.43
20:CT:38:LYS:O	20:CT:41:ILE:HG12	2.18	0.43
22:CV:63:G:O2'	22:CV:64:A:H5'	2.19	0.43
22:CV:67:C:H2'	22:CV:68:C:H6	1.84	0.43
22:CW:40:C:H2'	22:CW:41:C:H6	1.84	0.43
25:CZ:94:THR:O	25:CZ:96:ALA:N	2.52	0.43
27:D1:69:LYS:HZ1	27:D1:76:ARG:NH2	2.01	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:D2:47:ASN:ND2	36:DA:95:G:H1'	2.34	0.43
30:D4:14:ILE:HD12	30:D4:14:ILE:N	2.33	0.43
30:D4:28:LYS:HE2	30:D4:29:PRO:HD2	1.99	0.43
32:D6:17:LYS:O	32:D6:17:LYS:HD3	2.19	0.43
34:D8:48:PHE:N	34:D8:48:PHE:CD1	2.85	0.43
34:D8:53:PRO:HA	34:D8:56:GLU:HB2	2.01	0.43
36:DA:614:U:O2	36:DA:614:U:O4'	2.35	0.43
36:DA:986:C:C2'	36:DA:987:G:H5'	2.48	0.43
36:DA:1053:C:H42	36:DA:1108:U:H3	1.65	0.43
36:DA:1510:G:C2'	36:DA:1511:C:H5'	2.48	0.43
36:DA:1530:C:H2'	36:DA:1531:C:C6	2.54	0.43
36:DA:2010:G:H2'	36:DA:2011:U:H6	1.83	0.43
36:DA:2012:G:OP2	55:DW:16:LYS:HE3	2.18	0.43
36:DA:2060:A:N6	41:DF:74:ARG:NH2	2.66	0.43
36:DA:2110:G:N2	36:DA:2178:C:C5	2.86	0.43
36:DA:2312:U:H2'	36:DA:2313:C:H5'	1.99	0.43
36:DA:2807:G:C2'	36:DA:2808:U:H5"	2.48	0.43
38:DC:98:GLU:O	38:DC:98:GLU:HG3	2.18	0.43
40:DE:33:VAL:CG1	40:DE:69:LYS:HE3	2.48	0.43
42:DG:12:TYR:HA	42:DG:16:ARG:CG	2.48	0.43
42:DG:52:ILE:C	42:DG:54:GLU:H	2.26	0.43
42:DG:145:THR:HG22	42:DG:147:ASP:H	1.82	0.43
43:DH:30:LYS:HG3	43:DH:79:VAL:C	2.43	0.43
43:DH:116:GLU:HA	43:DH:116:GLU:OE1	2.19	0.43
48:DP:9:ASN:N	48:DP:10:PRO:CD	2.80	0.43
50:DR:10:LEU:HB3	50:DR:17:ARG:HE	1.83	0.43
51:DS:14:VAL:HG12	51:DS:15:ARG:N	2.34	0.43
57:DY:3:VAL:C	57:DY:5:MET:N	2.76	0.43
57:DY:76:CYS:O	57:DY:99:CYS:SG	2.77	0.43
1:AA:123:C:OP1	1:AA:312:C:H5'	2.18	0.43
1:AA:750:G:N3	15:AO:23:GLY:HA3	2.33	0.43
1:AA:965:A:C2	1:AA:969:A:N1	2.86	0.43
4:AD:150:GLU:OE1	4:AD:150:GLU:N	2.51	0.43
7:AG:37:ASN:HD21	9:AI:41:VAL:H	1.65	0.43
8:AH:10:LEU:CD2	8:AH:83:ILE:HD11	2.47	0.43
9:AI:111:ARG:O	9:AI:119:ALA:CB	2.66	0.43
9:AI:112:LYS:HA	9:AI:119:ALA:HB2	2.00	0.43
13:AM:15:VAL:HA	13:AM:18:ALA:HB3	1.99	0.43
13:AM:77:ASN:O	13:AM:81:LEU:CD2	2.66	0.43
13:AM:84:ILE:HG13	19:AS:66:MET:SD	2.57	0.43
18:AR:33:ASP:O	18:AR:40:LEU:HD11	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AS:10:PHE:O	19:AS:10:PHE:CD1	2.71	0.43
20:AT:27:LYS:HD3	20:AT:27:LYS:O	2.17	0.43
25:AZ:86:ALA:C	25:AZ:88:TYR:N	2.77	0.43
25:AZ:94:THR:O	25:AZ:96:ALA:N	2.52	0.43
25:AZ:141:VAL:HG23	25:AZ:146:LEU:HD21	2.01	0.43
27:B1:5:CYS:HB3	27:B1:8:SER:OG	2.18	0.43
27:B1:25:LYS:HE2	36:BA:2396:G:H5'	2.01	0.43
30:B4:28:LYS:HE2	30:B4:29:PRO:HD2	2.00	0.43
32:B6:9:LEU:HD22	32:B6:9:LEU:C	2.43	0.43
32:B6:36:LEU:O	32:B6:37:ARG:NE	2.52	0.43
34:B8:34:TRP:HA	36:BA:2420:C:OP1	2.18	0.43
35:B9:27:CYS:SG	35:B9:28:GLU:N	2.92	0.43
36:BA:85:G:N3	36:BA:103:A:C2	2.86	0.43
36:BA:318:C:H2'	36:BA:319:C:H6	1.84	0.43
36:BA:334:C:P	36:BA:335:C:H41	2.41	0.43
36:BA:562:U:C4	36:BA:2036:C:O4'	2.72	0.43
36:BA:992:C:H2'	36:BA:993:G:H8	1.83	0.43
36:BA:1090:U:H2'	36:BA:1091:G:O4'	2.18	0.43
36:BA:1532:C:H2'	36:BA:1533:G:O4'	2.19	0.43
36:BA:2340:G:H2'	36:BA:2341:G:H8	1.83	0.43
36:BA:2774:C:H2'	36:BA:2775:A:O4'	2.19	0.43
38:BC:182:PRO:O	38:BC:183:GLU:C	2.61	0.43
39:BD:118:VAL:CG2	39:BD:119:ALA:N	2.80	0.43
39:BD:147:LEU:HA	39:BD:147:LEU:HD12	1.76	0.43
40:BE:11:MET:HB3	40:BE:24:THR:HA	2.00	0.43
40:BE:69:LYS:C	40:BE:71:GLY:N	2.74	0.43
41:BF:84:VAL:C	41:BF:86:GLY:N	2.61	0.43
41:BF:103:LYS:CG	41:BF:106:ARG:HH21	2.30	0.43
42:BG:5:VAL:O	42:BG:6:ALA:C	2.61	0.43
42:BG:63:ILE:HD13	42:BG:141:PHE:CD2	2.53	0.43
43:BH:98:LEU:CB	43:BH:125:VAL:HG21	2.39	0.43
43:BH:139:GLN:CD	43:BH:139:GLN:C	2.86	0.43
43:BH:153:LYS:HB2	43:BH:154:PRO:HD2	2.01	0.43
46:BN:42:TRP:CD1	53:BU:63:VAL:HG11	2.54	0.43
46:BN:108:PRO:O	46:BN:113:GLY:HA3	2.19	0.43
51:BS:13:ARG:CG	51:BS:14:VAL:N	2.77	0.43
51:BS:42:ASP:C	51:BS:44:LYS:N	2.76	0.43
51:BS:78:LEU:HD11	51:BS:103:GLU:CG	2.35	0.43
52:BT:32:TYR:O	52:BT:33:LYS:HB2	2.18	0.43
58:BZ:16:SER:O	58:BZ:20:ARG:HD2	2.19	0.43
1:CA:308:C:H2'	1:CA:309:G:C8	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:514:C:H2'	1:CA:515:G:H8	1.82	0.43
1:CA:1255:G:H3'	1:CA:1279:A:H61	1.84	0.43
1:CA:1288:A:H2'	1:CA:1289:A:C8	2.53	0.43
1:CA:1444:C:H2'	1:CA:1445:C:H6	1.82	0.43
6:CF:98:LEU:O	6:CF:98:LEU:HD12	2.18	0.43
7:CG:16:LEU:HD21	9:CI:45:ALA:HB2	2.01	0.43
10:CJ:37:PRO:HA	10:CJ:72:VAL:HG22	1.99	0.43
11:CK:48:ILE:HD11	11:CK:67:ASP:HB3	1.99	0.43
13:CM:96:LEU:C	13:CM:110:ARG:HE	2.26	0.43
16:CP:8:ARG:C	16:CP:9:PHE:HD1	2.27	0.43
19:CS:10:PHE:O	19:CS:10:PHE:CD1	2.71	0.43
20:CT:72:LEU:O	20:CT:73:HIS:C	2.61	0.43
32:D6:33:LYS:O	32:D6:34:LEU:HB2	2.18	0.43
34:D8:13:ARG:NH2	36:DA:250:G:OP2	2.52	0.43
36:DA:53:A:H2'	36:DA:54:G:H5'	2.01	0.43
36:DA:67:U:H2'	36:DA:68:G:C8	2.52	0.43
36:DA:225:A:C2'	36:DA:226:G:H5'	2.48	0.43
36:DA:251:A:H4'	48:DP:51:PHE:HZ	1.84	0.43
36:DA:318:C:H2'	36:DA:319:C:H6	1.83	0.43
36:DA:516:C:O2'	36:DA:517:C:H5'	2.18	0.43
36:DA:654(U):A:C6	36:DA:654(V):A:N6	2.87	0.43
36:DA:1286:A:OP1	50:DR:105:ARG:CZ	2.67	0.43
36:DA:1540:U:H3'	36:DA:1541:G:O3'	2.18	0.43
36:DA:1946:U:H2'	36:DA:1947:C:C6	2.53	0.43
36:DA:1991:U:C2'	36:DA:1992:G:H5"	2.48	0.43
36:DA:2081:C:H2'	36:DA:2082:A:C8	2.54	0.43
36:DA:2262:U:H2'	36:DA:2263:C:H6	1.83	0.43
36:DA:2315:G:N3	42:DG:128:ARG:HG3	2.33	0.43
36:DA:2842:G:C2	36:DA:2876:G:C2	3.07	0.43
38:DC:62:VAL:O	38:DC:160:ARG:HA	2.17	0.43
39:DD:134:ARG:HG3	39:DD:187:GLY:CA	2.44	0.43
40:DE:79:ARG:HH11	40:DE:79:ARG:HG2	1.83	0.43
41:DF:3:GLU:O	41:DF:3:GLU:HG3	2.18	0.43
46:DN:32:THR:C	46:DN:34:LEU:N	2.72	0.43
49:DQ:27:VAL:O	49:DQ:28:ALA:HB3	2.17	0.43
49:DQ:58:PHE:HD1	49:DQ:58:PHE:O	2.02	0.43
52:DT:63:VAL:O	52:DT:73:GLU:HA	2.18	0.43
52:DT:77:PRO:C	52:DT:79:HIS:N	2.77	0.43
53:DU:68:ALA:C	53:DU:70:ARG:N	2.75	0.43
58:DZ:99:TYR:CD2	58:DZ:123:ASP:HB3	2.46	0.43
1:AA:8:A:C4	4:AD:209:ARG:HB2	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:189(K):U:H2'	1:AA:189(L):G:H8	1.82	0.43
1:AA:894:G:O2'	1:AA:895:G:H5'	2.18	0.43
1:AA:1060:C:H5"	10:AJ:51:ARG:HG2	2.00	0.43
1:AA:1243:C:H2'	1:AA:1244:C:H6	1.83	0.43
1:AA:1314:C:O2'	1:AA:1315:U:H5'	2.19	0.43
1:AA:1425:U:H2'	1:AA:1426:C:C6	2.54	0.43
2:AB:118:LEU:HD21	2:AB:138:LEU:HD22	2.00	0.43
2:AB:200:ILE:HD12	2:AB:200:ILE:N	2.24	0.43
3:AC:186:PHE:CE2	3:AC:188:LEU:HD22	2.53	0.43
13:AM:23:TYR:HE2	13:AM:70:LEU:HD22	1.77	0.43
18:AR:61:LYS:O	18:AR:65:ILE:HG13	2.19	0.43
25:AZ:6:ILE:HD12	25:AZ:6:ILE:N	2.34	0.43
28:B2:46:GLN:C	28:B2:48:HIS:H	2.27	0.43
33:B7:9:ARG:HH11	33:B7:9:ARG:HG3	1.84	0.43
34:B8:6:THR:C	34:B8:11:LYS:HE2	2.43	0.43
36:BA:151:C:H2'	36:BA:152:G:H8	1.83	0.43
36:BA:448:U:H1'	41:BF:84:VAL:HG13	2.01	0.43
36:BA:654(E):G:N2	36:BA:654(Q):C:O2'	2.52	0.43
36:BA:1866:C:H6	36:BA:1866:C:O5'	2.01	0.43
36:BA:2414:G:C2	36:BA:2415:G:C8	3.06	0.43
36:BA:2537:U:H2'	36:BA:2538:C:H6	1.79	0.43
36:BA:2684:U:C4	36:BA:2685:G:C5	3.07	0.43
36:BA:2796:U:OP2	36:BA:2799:C:H5	2.02	0.43
38:BC:27:ARG:CD	38:BC:182:PRO:CB	2.96	0.43
39:BD:186:HIS:CD2	39:BD:188:GLU:HB2	2.54	0.43
40:BE:47:VAL:HG23	40:BE:84:PHE:O	2.19	0.43
42:BG:43:LEU:HD21	42:BG:90:LEU:HD22	1.99	0.43
42:BG:45:GLU:O	42:BG:46:ALA:HB2	2.19	0.43
43:BH:23:ARG:O	43:BH:24:VAL:CG2	2.66	0.43
48:BP:16:ARG:HH11	48:BP:16:ARG:CA	2.32	0.43
48:BP:98:GLU:O	48:BP:101:VAL:HG22	2.18	0.43
49:BQ:5:ARG:CZ	49:BQ:5:ARG:CB	2.97	0.43
50:BR:100:LEU:CD1	50:BR:100:LEU:N	2.82	0.43
51:BS:25:ARG:NH1	51:BS:42:ASP:OD2	2.52	0.43
52:BT:35:LYS:O	52:BT:38:ASN:ND2	2.51	0.43
52:BT:134:GLU:O	52:BT:135:ALA:CB	2.66	0.43
57:BY:7:VAL:HG12	57:BY:8:LYS:HD2	2.00	0.43
57:BY:81:LYS:NZ	57:BY:99:CYS:SG	2.80	0.43
1:CA:60:A:H4'	1:CA:61:G:O5'	2.19	0.43
1:CA:167:G:O2'	1:CA:168:G:H5'	2.18	0.43
1:CA:451:A:N6	1:CA:480:U:H2'	2.34	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:509:A:C6	1:CA:510:A:N1	2.87	0.43
1:CA:838:G:C6	1:CA:840:C:H1'	2.54	0.43
1:CA:939:G:C3'	7:CG:102:ARG:HH22	2.32	0.43
1:CA:1371:G:C6	1:CA:1372:U:C4	3.07	0.43
2:CB:74:LYS:NZ	2:CB:166:ASP:HB2	2.34	0.43
2:CB:229:VAL:CG1	2:CB:230:VAL:N	2.71	0.43
9:CI:81:ILE:O	9:CI:85:LEU:HG	2.19	0.43
10:CJ:5:ARG:CB	10:CJ:99:LYS:HB2	2.37	0.43
12:CL:38:THR:O	12:CL:39:VAL:HG23	2.18	0.43
15:CO:17:ARG:NH1	15:CO:77:ARG:NH1	2.67	0.43
18:CR:33:ASP:O	18:CR:40:LEU:HD11	2.19	0.43
19:CS:35:SER:HB2	19:CS:37:ARG:HD2	2.00	0.43
19:CS:37:ARG:H	19:CS:37:ARG:HG3	1.41	0.43
22:CW:10:G:O2'	22:CW:11:C:H5'	2.18	0.43
25:CZ:116:THR:O	25:CZ:120:ILE:HG13	2.19	0.43
28:D2:54:LYS:HE2	36:DA:73:A:P	2.59	0.43
28:D2:63:VAL:C	28:D2:65:ASN:H	2.27	0.43
29:D3:5:LYS:HE3	29:D3:34:GLU:OE1	2.19	0.43
36:DA:34:C:N4	36:DA:447:A:H61	2.05	0.43
36:DA:248:G:H5"	36:DA:386:G:N2	2.33	0.43
36:DA:285:C:H2'	36:DA:286:C:C6	2.54	0.43
36:DA:299:A:N1	36:DA:322:A:O2'	2.37	0.43
36:DA:900:A:H3'	36:DA:901:A:H8	1.84	0.43
36:DA:1097:U:O2'	36:DA:1098:A:H5'	2.19	0.43
36:DA:1530:C:H2'	36:DA:1531:C:H6	1.84	0.43
36:DA:2137:C:H2'	36:DA:2138:C:H6	1.80	0.43
36:DA:2693:A:H2'	36:DA:2694:G:C8	2.51	0.43
37:DB:42:C:O2	42:DG:66:GLN:NE2	2.52	0.43
37:DB:67:G:O2'	37:DB:68:C:O5'	2.37	0.43
38:DC:3:HIS:HB3	38:DC:7:TYR:HD2	1.84	0.43
39:DD:118:VAL:CG2	39:DD:119:ALA:N	2.82	0.43
41:DF:132:VAL:O	41:DF:138:GLU:OE1	2.37	0.43
42:DG:41:GLN:C	42:DG:43:LEU:H	2.26	0.43
43:DH:51:ARG:HG3	43:DH:52:VAL:N	2.34	0.43
43:DH:61:HIS:C	43:DH:63:SER:H	2.26	0.43
46:DN:23:LEU:HB3	46:DN:60:ILE:CG2	2.39	0.43
47:DO:7:TYR:CE1	47:DO:20:MET:HB2	2.54	0.43
47:DO:66:LYS:H	47:DO:82:ASN:HD21	1.67	0.43
48:DP:46:LYS:HG2	48:DP:52:GLU:HG2	2.01	0.43
48:DP:124:LYS:HD3	48:DP:124:LYS:HA	1.84	0.43
51:DS:70:GLY:C	51:DS:101:LEU:HB3	2.44	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:DT:18:ASP:OD1	52:DT:18:ASP:N	2.51	0.43
52:DT:74:ARG:C	52:DT:75:ILE:HD12	2.43	0.43
55:DW:29:LEU:CD1	55:DW:51:LEU:HD11	2.48	0.43
1:AA:66:G:N2	1:AA:172:A:C2	2.87	0.43
1:AA:78:G:H2'	1:AA:79:G:O4'	2.18	0.43
1:AA:427:U:C4	1:AA:428:G:C6	3.07	0.43
1:AA:1033:G:H2'	1:AA:1034:G:O4'	2.19	0.43
1:AA:1202:G:H2'	1:AA:1203:C:O4'	2.19	0.43
1:AA:1205:U:O2'	3:AC:195:VAL:HG23	2.19	0.43
2:AB:87:ARG:NH2	2:AB:233:SER:N	2.62	0.43
2:AB:112:VAL:O	2:AB:115:LEU:HB3	2.18	0.43
3:AC:28:GLN:O	3:AC:29:TYR:CB	2.66	0.43
6:AF:2:ARG:HD2	6:AF:69:GLU:HB3	2.01	0.43
7:AG:94:ARG:H	7:AG:94:ARG:HG3	1.62	0.43
7:AG:125:MET:O	7:AG:129:GLU:HG3	2.19	0.43
8:AH:118:VAL:C	8:AH:119:LEU:HD23	2.44	0.43
9:AI:97:LYS:N	9:AI:98:PRO:CD	2.82	0.43
17:AQ:76:LEU:HG	17:AQ:77:VAL:N	2.34	0.43
22:AV:22:G:C2'	22:AV:23:A:H5"	2.49	0.43
22:AW:40:C:H2'	22:AW:41:C:H6	1.84	0.43
24:AY:66:C:H2'	24:AY:67:G:C8	2.54	0.43
25:AZ:67:HIS:ND1	25:AZ:80:VAL:HG22	2.34	0.43
25:AZ:138:VAL:HG21	25:AZ:173:GLY:N	2.34	0.43
35:B9:35:ARG:HD3	36:BA:2742:C:OP1	2.18	0.43
36:BA:9:U:O4	36:BA:2629:A:N7	2.52	0.43
36:BA:203:C:C3'	36:BA:204:A:H5"	2.44	0.43
36:BA:318:C:O2'	36:BA:319:C:H5'	2.19	0.43
36:BA:625:G:O2'	36:BA:626:U:H5'	2.19	0.43
36:BA:742:G:H2'	36:BA:743:G:H8	1.84	0.43
36:BA:927:G:H3'	36:BA:928:G:H8	1.82	0.43
38:BC:79:LYS:HD2	38:BC:97:GLU:OE1	2.19	0.43
40:BE:60:ASN:OD1	40:BE:61:ARG:N	2.52	0.43
40:BE:116:VAL:CG2	40:BE:117:MET:H	2.32	0.43
41:BF:164:ARG:HD2	41:BF:176:LEU:O	2.19	0.43
42:BG:154:GLY:O	42:BG:155:MET:CB	2.66	0.43
43:BH:147:ASN:O	43:BH:151:ILE:HG12	2.18	0.43
44:BJ:25:UNK:HA	44:BJ:116:UNK:CA	2.49	0.43
46:BN:18:ALA:O	46:BN:19:GLU:C	2.62	0.43
46:BN:56:ASN:C	46:BN:57:ALA:O	2.62	0.43
46:BN:97:ARG:O	46:BN:98:VAL:C	2.61	0.43
52:BT:23:ARG:HA	52:BT:52:ILE:HD12	1.98	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:BX:18:TYR:C	56:BX:20:GLY:H	2.27	0.43
56:BX:28:PHE:CD1	56:BX:28:PHE:N	2.87	0.43
57:BY:22:GLY:O	57:BY:23:ARG:O	2.37	0.43
57:BY:51:VAL:C	57:BY:53:PRO:HD3	2.44	0.43
58:BZ:120:ILE:O	58:BZ:121:HIS:HB2	2.19	0.43
58:BZ:166:SER:HB2	58:BZ:167:PRO:C	2.44	0.43
1:CA:495:A:H61	4:CD:119:GLN:NE2	2.17	0.43
1:CA:716:A:N3	11:CK:117:ASN:O	2.51	0.43
1:CA:827:U:C5'	1:CA:828:A:OP2	2.67	0.43
1:CA:896:C:O2'	1:CA:897:C:H5'	2.18	0.43
3:CC:79:ARG:O	3:CC:82:GLU:CD	2.62	0.43
5:CE:20:GLN:O	5:CE:21:ALA:C	2.62	0.43
10:CJ:81:THR:O	10:CJ:82:ILE:C	2.61	0.43
19:CS:61:TYR:HD1	19:CS:62:ILE:N	2.17	0.43
22:CV:57:G:H2'	22:CV:58:A:H5'	2.00	0.43
24:CY:26:A:O2'	24:CY:27:C:H5'	2.19	0.43
25:CZ:24:LYS:HG3	25:CZ:25:THR:N	2.30	0.43
25:CZ:68:VAL:O	25:CZ:78:SER:O	2.37	0.43
25:CZ:120:ILE:O	25:CZ:123:ALA:HB3	2.19	0.43
25:CZ:141:VAL:HG23	25:CZ:146:LEU:HD21	2.00	0.43
25:CZ:158:LEU:O	25:CZ:163:PHE:HB2	2.19	0.43
25:CZ:185:ASN:HD22	25:CZ:185:ASN:H	1.64	0.43
25:CZ:340:PRO:HG2	25:CZ:342:PHE:CZ	2.54	0.43
28:D2:69:ARG:C	28:D2:70:GLN:CD	2.87	0.43
29:D3:15:TYR:CD2	29:D3:19:GLN:NE2	2.85	0.43
36:DA:20:C:H2'	36:DA:21:A:C8	2.53	0.43
36:DA:66:C:H2'	36:DA:67:U:H6	1.84	0.43
36:DA:343:C:C2'	36:DA:344:G:H5'	2.49	0.43
36:DA:636:G:H4'	36:DA:638:G:O3'	2.19	0.43
36:DA:747:U:C4	36:DA:2613:U:C5	3.07	0.43
36:DA:1332:G:N2	36:DA:1610:A:H8	2.11	0.43
36:DA:1775:U:H2'	36:DA:1776:G:H5'	2.01	0.43
36:DA:2262:U:H2'	36:DA:2263:C:C6	2.53	0.43
36:DA:2413:G:N3	48:DP:70:GLN:NE2	2.66	0.43
39:DD:242:ARG:HB2	39:DD:243:GLY:H	1.38	0.43
41:DF:46:ARG:HD2	41:DF:46:ARG:HA	1.73	0.43
42:DG:37:VAL:O	42:DG:94:LEU:HB2	2.19	0.43
42:DG:52:ILE:C	42:DG:54:GLU:N	2.77	0.43
42:DG:98:ARG:H	42:DG:98:ARG:HG2	1.62	0.43
43:DH:153:LYS:HB2	43:DH:154:PRO:HD2	1.99	0.43
46:DN:58:ASP:OD2	46:DN:59:LYS:HG2	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:DP:33:ARG:O	48:DP:34:GLY:O	2.37	0.43
48:DP:147:LEU:CG	48:DP:148:LEU:H	2.20	0.43
49:DQ:76:LYS:HB3	49:DQ:91:GLU:CG	2.49	0.43
51:DS:18:ILE:HG13	51:DS:18:ILE:H	1.52	0.43
51:DS:89:ARG:HB3	51:DS:92:TYR:HB3	2.00	0.43
52:DT:134:GLU:O	52:DT:135:ALA:CB	2.67	0.43
58:DZ:82:ARG:O	58:DZ:83:PRO:C	2.62	0.43
1:AA:197:A:C5	1:AA:221:C:H4'	2.54	0.43
1:AA:198:G:O2'	1:AA:199:G:O5'	2.37	0.43
1:AA:228:A:C5'	1:AA:228:A:C8	2.97	0.43
1:AA:522:C:H41	12:AL:53:ARG:NH2	2.14	0.43
1:AA:706:A:C1'	11:AK:29:ILE:HD11	2.49	0.43
1:AA:802:A:H3'	1:AA:803:G:H8	1.84	0.43
1:AA:878:G:H5'	8:AH:89:PRO:HG2	2.01	0.43
1:AA:1117:G:H21	1:AA:1180:A:H1'	1.83	0.43
1:AA:1298:C:C5	7:AG:114:ARG:NE	2.87	0.43
2:AB:15:VAL:N	2:AB:16:HIS:CE1	2.87	0.43
2:AB:21:ARG:HB3	2:AB:39:ILE:HA	2.01	0.43
2:AB:142:LEU:HD23	2:AB:142:LEU:O	2.19	0.43
4:AD:150:GLU:HG2	4:AD:151:LYS:N	2.34	0.43
7:AG:69:VAL:HG11	7:AG:104:LEU:HD22	2.01	0.43
15:AO:82:ILE:HD11	15:AO:87:ILE:C	2.44	0.43
24:AY:26:A:O2'	24:AY:27:C:H5'	2.19	0.43
25:AZ:185:ASN:N	25:AZ:185:ASN:ND2	2.67	0.43
25:AZ:223:MET:HB3	25:AZ:242:ILE:HA	2.01	0.43
27:B1:78:LYS:HE2	27:B1:78:LYS:N	2.34	0.43
28:B2:8:LYS:C	28:B2:10:LEU:N	2.76	0.43
34:B8:5:LYS:HG2	36:BA:242:G:C8	2.54	0.43
34:B8:13:ARG:NH2	36:BA:250:G:OP2	2.52	0.43
34:B8:50:LEU:HD12	34:B8:50:LEU:C	2.44	0.43
36:BA:134:C:H2'	36:BA:135:G:C8	2.51	0.43
36:BA:516:C:O2'	36:BA:517:C:H5'	2.19	0.43
36:BA:676:A:H2	36:BA:802:A:H61	1.67	0.43
36:BA:747:U:C5	36:BA:2613:U:C5	3.07	0.43
36:BA:1124:C:H2'	36:BA:1125:G:O4'	2.19	0.43
36:BA:1259:G:H2'	36:BA:1260:G:C8	2.54	0.43
36:BA:1283:G:N2	36:BA:1285:G:H3'	2.34	0.43
36:BA:1469:A:O2'	36:BA:1470:G:H5'	2.19	0.43
36:BA:2134:A:H61	36:BA:2157:G:H1'	1.76	0.43
36:BA:2188:C:C6	36:BA:2189:U:H5	2.37	0.43
36:BA:2316:C:O2'	42:BG:128:ARG:NH2	2.52	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BD:257:LEU:C	39:BD:257:LEU:CD2	2.91	0.43
41:BF:42:ALA:O	41:BF:45:ARG:HB2	2.18	0.43
41:BF:46:ARG:HD2	41:BF:46:ARG:HA	1.75	0.43
41:BF:107:LYS:HE3	41:BF:205:ARG:CG	2.49	0.43
43:BH:61:HIS:C	43:BH:63:SER:H	2.26	0.43
43:BH:65:HIS:O	43:BH:67:LEU:N	2.42	0.43
43:BH:72:ILE:O	43:BH:75:ALA:N	2.52	0.43
46:BN:65:LYS:HD3	46:BN:69:GLN:NE2	2.34	0.43
52:BT:27:THR:CG2	52:BT:28:VAL:H	2.30	0.43
55:BW:79:GLY:CA	55:BW:100:THR:HG23	2.49	0.43
56:BX:51:VAL:HG13	56:BX:81:VAL:HB	2.01	0.43
57:BY:60:PHE:C	57:BY:61:ILE:HG13	2.43	0.43
58:BZ:74:VAL:HG22	58:BZ:86:VAL:CG1	2.48	0.43
1:CA:341:C:H6	1:CA:341:C:O5'	2.01	0.43
1:CA:542:G:N2	1:CA:543:C:C2	2.87	0.43
1:CA:902:G:H2'	1:CA:903:G:H8	1.82	0.43
1:CA:1150:U:O2'	1:CA:1151:A:H5'	2.19	0.43
1:CA:1153:C:O2'	1:CA:1154:G:H5"	2.19	0.43
1:CA:1286:A:O2'	1:CA:1287:A:P	2.76	0.43
7:CG:41:ARG:O	7:CG:42:ILE:C	2.62	0.43
9:CI:5:TYR:CD2	9:CI:6:GLY:N	2.87	0.43
9:CI:18:PHE:O	9:CI:19:LEU:HB2	2.18	0.43
10:CJ:75:ILE:HG13	10:CJ:76:ASN:N	2.28	0.43
12:CL:126:LYS:HE2	12:CL:126:LYS:CA	2.49	0.43
13:CM:66:LEU:N	13:CM:66:LEU:CD1	2.82	0.43
15:CO:39:LEU:O	15:CO:42:HIS:HB3	2.18	0.43
16:CP:14:ASN:OD1	16:CP:16:HIS:CE1	2.71	0.43
24:CY:3:G:O6	24:CY:70:C:N3	2.51	0.43
24:CY:60:U:H2'	24:CY:61:C:C5	2.53	0.43
25:CZ:23:GLY:O	25:CZ:24:LYS:C	2.62	0.43
31:D5:7:PRO:HA	36:DA:2615:U:C2	2.54	0.43
36:DA:278:A:N1	36:DA:362:U:C4	2.87	0.43
36:DA:322:A:O4'	36:DA:340:A:H1'	2.19	0.43
36:DA:1021:A:C8	36:DA:1021:A:C3'	3.02	0.43
36:DA:1059:G:H3'	36:DA:1060:U:H6	1.83	0.43
36:DA:1431:U:H2'	36:DA:1432:C:O4'	2.19	0.43
36:DA:1625:C:H2'	36:DA:1626:G:H5'	2.01	0.43
36:DA:1709:U:H1'	36:DA:2860:A:N3	2.33	0.43
36:DA:1958:C:O2'	36:DA:1959:G:H5'	2.19	0.43
36:DA:2136:C:H2'	36:DA:2137:C:H6	1.80	0.43
36:DA:2314:C:C5'	42:DG:38:VAL:HG21	2.48	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2358:G:N2	48:DP:55:ARG:NH2	2.66	0.43
36:DA:2848:G:H8	52:DT:97:ALA:HB2	1.82	0.43
38:DC:155:GLU:OE1	38:DC:160:ARG:HD3	2.19	0.43
39:DD:13:ARG:HH11	39:DD:13:ARG:HG3	1.84	0.43
42:DG:4:ASP:OD2	42:DG:9:ARG:NH2	2.52	0.43
42:DG:120:LEU:HB2	42:DG:179:PRO:O	2.19	0.43
48:DP:96:THR:C	48:DP:97:PRO:O	2.61	0.43
48:DP:115:LEU:HD23	48:DP:115:LEU:N	2.34	0.43
50:DR:30:THR:HG22	50:DR:31:HIS:CE1	2.54	0.43
50:DR:52:ILE:O	50:DR:55:ALA:HB3	2.19	0.43
51:DS:97:ARG:O	51:DS:98:VAL:C	2.62	0.43
52:DT:13:ARG:CZ	52:DT:13:ARG:CA	2.97	0.43
52:DT:33:LYS:HD2	52:DT:43:GLN:HB3	2.01	0.43
53:DU:83:LEU:HA	53:DU:88:ILE:CG1	2.48	0.43
55:DW:25:ARG:NH1	55:DW:25:ARG:HB2	2.33	0.43
57:DY:60:PHE:O	57:DY:61:ILE:CG1	2.67	0.43
58:DZ:70:LEU:HD11	58:DZ:91:LEU:HD21	1.99	0.43
1:AA:35:G:H21	12:AL:118:SER:HB2	1.84	0.42
1:AA:346:G:O2'	1:AA:347:G:O5'	2.37	0.42
1:AA:416:G:H2'	1:AA:417:C:O4'	2.19	0.42
1:AA:555:C:OP1	12:AL:20:LYS:HE3	2.19	0.42
1:AA:918:A:H2'	1:AA:919:A:O4'	2.19	0.42
1:AA:1048:G:OP1	14:AN:4:LYS:HB2	2.18	0.42
1:AA:1238:A:H2	1:AA:1301:U:N3	2.09	0.42
1:AA:1441:G:H5"	1:AA:1442:G:H5'	2.00	0.42
2:AB:168:THR:HG21	2:AB:192:SER:HA	2.01	0.42
3:AC:65:ALA:O	3:AC:100:ALA:O	2.37	0.42
5:AE:15:ARG:HD2	5:AE:26:PHE:CG	2.54	0.42
5:AE:34:VAL:HG12	5:AE:62:ALA:HB1	2.01	0.42
5:AE:107:ARG:HG2	5:AE:107:ARG:HH11	1.83	0.42
6:AF:10:LEU:HB2	6:AF:59:TYR:HB3	2.00	0.42
6:AF:28:ARG:HG3	6:AF:28:ARG:NH1	2.31	0.42
7:AG:120:ILE:HG22	7:AG:124:LEU:HD12	2.00	0.42
9:AI:4:TYR:CZ	9:AI:88:TYR:CB	3.02	0.42
9:AI:43:ALA:O	9:AI:45:ALA:N	2.52	0.42
12:AL:60:LEU:HB2	12:AL:64:TYR:O	2.19	0.42
13:AM:66:LEU:N	13:AM:66:LEU:CD1	2.82	0.42
16:AP:55:ARG:O	16:AP:56:ALA:C	2.61	0.42
22:AW:51:U:H2'	22:AW:52:G:C8	2.48	0.42
28:B2:11:GLU:C	28:B2:13:ALA:N	2.76	0.42
36:BA:338:G:N2	36:BA:339:U:H1'	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2111:C:C2	36:BA:2147:G:N2	2.82	0.42
36:BA:2282:G:H4'	36:BA:2283:C:O5'	2.19	0.42
36:BA:2668:G:C2'	36:BA:2669:G:H5'	2.48	0.42
38:BC:117:PRO:HD2	38:BC:147:PHE:CD2	2.54	0.42
39:BD:258:LYS:HD3	39:BD:273:ARG:NH2	2.34	0.42
40:BE:72:VAL:O	40:BE:73:GLU:C	2.61	0.42
42:BG:170:ARG:NE	42:BG:180:PHE:CD2	2.87	0.42
43:BH:33:LEU:HD12	43:BH:75:ALA:O	2.19	0.42
43:BH:83:TYR:O	43:BH:84:SER:O	2.36	0.42
45:BK:90:UNK:HA	58:BZ:112:ARG:HH22	1.84	0.42
46:BN:3:THR:CG2	46:BN:4:TYR:H	2.28	0.42
46:BN:3:THR:C	46:BN:4:TYR:CD1	2.97	0.42
46:BN:12:ARG:HB3	46:BN:50:ASP:CG	2.43	0.42
47:BO:25:LEU:HB2	47:BO:38:VAL:HG23	2.00	0.42
48:BP:71:VAL:CG1	48:BP:72:PRO:HD3	2.49	0.42
49:BQ:12:GLN:NE2	49:BQ:72:LYS:HG3	2.34	0.42
49:BQ:134:ARG:NH1	58:BZ:122:ARG:HH21	2.17	0.42
56:BX:57:LEU:HD13	56:BX:78:LYS:O	2.19	0.42
57:BY:49:VAL:O	57:BY:50:ARG:CB	2.60	0.42
57:BY:67:LEU:HD23	57:BY:68:HIS:N	2.34	0.42
58:BZ:15:PRO:C	58:BZ:17:ALA:N	2.77	0.42
58:BZ:31:ARG:HB2	58:BZ:32:HIS:CE1	2.53	0.42
1:CA:29:G:O2'	1:CA:30:U:H5'	2.19	0.42
1:CA:256:U:H5'	17:CQ:17:LYS:HZ2	1.83	0.42
1:CA:341:C:O2	1:CA:349:A:C2	2.72	0.42
1:CA:691:G:H2'	1:CA:692:U:C6	2.54	0.42
1:CA:723:U:O4	1:CA:1537:U:H2'	2.19	0.42
1:CA:782:A:O3'	1:CA:1515:C:H4'	2.18	0.42
1:CA:961:U:OP2	1:CA:1223:C:H4'	2.19	0.42
1:CA:1124:G:H5'	10:CJ:35:SER:CB	2.49	0.42
1:CA:1240:U:OP1	7:CG:116:ALA:N	2.49	0.42
1:CA:1251:A:H2'	1:CA:1252:A:C8	2.54	0.42
1:CA:1536:C:H2'	1:CA:1537:U:C5'	2.49	0.42
4:CD:88:VAL:HG12	4:CD:90:GLY:H	1.84	0.42
7:CG:68:ASN:O	7:CG:138:LYS:HD2	2.19	0.42
14:CN:29:ARG:CG	14:CN:29:ARG:NH1	2.80	0.42
15:CO:3:ILE:HA	15:CO:7:GLU:OE1	2.19	0.42
15:CO:82:ILE:CG2	15:CO:83:GLU:N	2.81	0.42
16:CP:68:ASP:C	16:CP:70:ALA:H	2.26	0.42
18:CR:43:PHE:CG	18:CR:66:LEU:HD11	2.53	0.42
19:CS:11:VAL:HG13	19:CS:16:LEU:HD11	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:CY:32:OMC:HM22	24:CY:33:U:H5'	2.01	0.42
25:CZ:263:ARG:HG3	25:CZ:264:LYS:H	1.84	0.42
26:D0:72:ARG:O	26:D0:73:GLY:C	2.59	0.42
29:D3:45:GLY:C	29:D3:47:VAL:N	2.76	0.42
32:D6:17:LYS:O	32:D6:18:ARG:CB	2.67	0.42
36:DA:848:G:C4	36:DA:933:A:C8	3.07	0.42
36:DA:1021:A:H3'	36:DA:1021:A:H8	1.84	0.42
36:DA:1305:C:O2'	36:DA:1306:C:H5'	2.19	0.42
36:DA:1446:C:H42	36:DA:1465:G:H1	1.67	0.42
36:DA:2414:G:H21	48:DP:67:MET:CE	2.20	0.42
36:DA:2645:G:H4'	36:DA:2646:C:OP2	2.19	0.42
36:DA:2654:A:H1'	36:DA:2656:U:C6	2.54	0.42
38:DC:99:ILE:C	38:DC:101:GLN:H	2.26	0.42
39:DD:257:LEU:C	39:DD:257:LEU:CD2	2.92	0.42
40:DE:49:LEU:O	40:DE:78:LEU:HB2	2.19	0.42
41:DF:110:LEU:HD13	41:DF:110:LEU:C	2.44	0.42
41:DF:133:ASN:O	41:DF:134:GLY:C	2.62	0.42
41:DF:160:ASN:HD21	41:DF:162:LEU:CB	2.32	0.42
43:DH:76:VAL:O	43:DH:78:GLY:N	2.52	0.42
51:DS:89:ARG:HG3	51:DS:92:TYR:N	2.34	0.42
52:DT:106:SER:O	52:DT:107:ASP:HB3	2.18	0.42
53:DU:59:ARG:C	53:DU:61:TRP:N	2.76	0.42
54:DV:39:LEU:HA	54:DV:47:VAL:HG11	2.00	0.42
56:DX:12:VAL:O	56:DX:13:LEU:HB2	2.19	0.42
57:DY:43:ASN:C	57:DY:44:ILE:HD12	2.44	0.42
1:AA:502:G:OP1	12:AL:118:SER:N	2.49	0.42
1:AA:1030(D):A:C2'	1:AA:1031:G:H5'	2.48	0.42
1:AA:1062:U:H2'	1:AA:1063:C:C6	2.55	0.42
1:AA:1107:C:C4	1:AA:1108:G:C8	3.07	0.42
2:AB:169:LYS:HD3	2:AB:169:LYS:O	2.19	0.42
4:AD:58:LEU:C	4:AD:58:LEU:CD2	2.92	0.42
4:AD:98:GLU:OE1	4:AD:194:LEU:HD11	2.19	0.42
5:AE:64:ARG:HH11	5:AE:64:ARG:CG	2.29	0.42
6:AF:27:GLN:O	6:AF:31:GLU:HB2	2.19	0.42
6:AF:77:ARG:CG	6:AF:77:ARG:NH1	2.82	0.42
8:AH:33:GLU:HG2	8:AH:48:TYR:OH	2.19	0.42
8:AH:60:ARG:HG2	8:AH:62:TYR:CE1	2.54	0.42
10:AJ:81:THR:O	10:AJ:82:ILE:C	2.62	0.42
12:AL:91:LYS:HB3	12:AL:91:LYS:HZ3	1.85	0.42
13:AM:77:ASN:O	13:AM:80:ARG:HB3	2.19	0.42
13:AM:82:MET:O	13:AM:83:ASP:O	2.37	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:AY:77:TRP:O	25:AZ:273:HIS:HA	2.19	0.42
25:AZ:317:GLU:O	25:AZ:400:VAL:HA	2.19	0.42
27:B1:42:GLN:HA	36:BA:2231:C:OP1	2.19	0.42
36:BA:121:G:H4'	36:BA:149:A:H5'	2.00	0.42
36:BA:480:A:H2	36:BA:499:U:O2	2.02	0.42
36:BA:1142:U:H5"	36:BA:1142(A):A:H5"	2.01	0.42
36:BA:1499:C:H2'	36:BA:1500:G:C5'	2.49	0.42
36:BA:1514:U:H2'	36:BA:1515:G:C8	2.55	0.42
36:BA:1747(A):G:C2'	36:BA:1748:G:C5'	2.82	0.42
36:BA:1790:C:H2'	36:BA:1791:A:C5	2.54	0.42
36:BA:2206:G:N2	36:BA:2207:G:C4'	2.83	0.42
36:BA:2295:C:O2'	36:BA:2296:U:H5'	2.19	0.42
36:BA:2317:C:O2'	36:BA:2318:G:H5'	2.17	0.42
36:BA:2639:A:C2'	36:BA:2640:G:H5'	2.50	0.42
36:BA:2661:G:O2'	36:BA:2662:A:H5'	2.20	0.42
37:BB:67:G:O2'	37:BB:68:C:O5'	2.37	0.42
38:BC:28:LEU:O	38:BC:28:LEU:HD23	2.18	0.42
38:BC:196:LEU:O	38:BC:199:HIS:N	2.52	0.42
39:BD:70:TRP:HZ3	39:BD:146:GLU:CD	2.28	0.42
39:BD:80:ALA:HB2	39:BD:96:HIS:CD2	2.53	0.42
40:BE:101:ARG:HE	40:BE:171:GLU:CB	2.32	0.42
41:BF:195:ASP:CG	41:BF:196:LEU:H	2.26	0.42
42:BG:123:ASN:O	42:BG:126:ASP:OD2	2.37	0.42
43:BH:121:ILE:CG2	43:BH:133:VAL:HG13	2.46	0.42
47:BO:14:THR:HG23	47:BO:16:ALA:H	1.84	0.42
50:BR:49:ASP:OD1	50:BR:95:THR:HB	2.19	0.42
52:BT:77:PRO:C	52:BT:79:HIS:N	2.77	0.42
53:BU:13:LYS:HD3	53:BU:13:LYS:N	2.34	0.42
58:BZ:70:LEU:N	58:BZ:70:LEU:CD2	2.83	0.42
58:BZ:100:VAL:O	58:BZ:123:ASP:O	2.36	0.42
58:BZ:112:ARG:O	58:BZ:113:ALA:C	2.61	0.42
1:CA:78:G:H2'	1:CA:79:G:O4'	2.18	0.42
1:CA:405:U:O2	1:CA:498:U:C6	2.72	0.42
1:CA:602:A:H2'	1:CA:603:U:O4'	2.18	0.42
1:CA:858:G:C8	1:CA:858:G:OP2	2.72	0.42
1:CA:919:A:O2'	1:CA:920:U:H5'	2.19	0.42
1:CA:1121:U:H2'	1:CA:1122:U:C6	2.54	0.42
1:CA:1129:C:O3'	1:CA:1131:G:OP2	2.37	0.42
1:CA:1220:G:H2'	1:CA:1221:G:H8	1.83	0.42
1:CA:1276:G:C6	1:CA:1277:C:C4	3.07	0.42
1:CA:1283:G:O2'	1:CA:1284:C:OP2	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1442(B):A:H4'	1:CA:1443:G:OP1	2.19	0.42
2:CB:8:LYS:O	2:CB:12:GLU:HG3	2.20	0.42
3:CC:54:ARG:CG	3:CC:55:VAL:N	2.82	0.42
3:CC:132:ARG:HH11	3:CC:136:GLN:NE2	1.98	0.42
4:CD:91:SER:O	4:CD:92:VAL:C	2.61	0.42
6:CF:9:VAL:HG22	6:CF:60:PHE:CD2	2.54	0.42
7:CG:42:ILE:HD13	7:CG:116:ALA:CB	2.49	0.42
11:CK:85:ARG:HG2	11:CK:111:ASP:O	2.20	0.42
16:CP:14:ASN:OD1	16:CP:14:ASN:O	2.38	0.42
19:CS:9:VAL:HG12	19:CS:10:PHE:N	2.34	0.42
24:CY:1:A:H5'	25:CZ:300:ARG:NH1	2.34	0.42
25:CZ:343:TYR:CE2	25:CZ:348:ASP:HB3	2.53	0.42
27:D1:86:SER:O	27:D1:87:PRO:C	2.62	0.42
32:D6:42:TRP:CH2	36:DA:643:A:N7	2.88	0.42
36:DA:358:U:C2'	36:DA:359:A:H5'	2.49	0.42
36:DA:607:U:N3	36:DA:621:A:C2	2.87	0.42
36:DA:1142:U:H5"	36:DA:1142(A):A:H5"	2.01	0.42
36:DA:1416:G:HO2'	36:DA:1417:C:H5	1.63	0.42
36:DA:1952:A:C6	36:DA:1953:A:N1	2.87	0.42
36:DA:2199:A:C2	36:DA:2200:C:H1'	2.53	0.42
36:DA:2224:G:H4'	36:DA:2226:C:C2	2.54	0.42
36:DA:2542:A:O2'	36:DA:2543:G:H5'	2.19	0.42
40:DE:72:VAL:O	40:DE:73:GLU:C	2.61	0.42
40:DE:77:ILE:HG22	40:DE:78:LEU:CD1	2.48	0.42
41:DF:87:GLY:O	41:DF:88:VAL:O	2.37	0.42
41:DF:162:LEU:HD12	41:DF:162:LEU:N	2.34	0.42
41:DF:195:ASP:CG	41:DF:196:LEU:H	2.27	0.42
42:DG:11:TYR:OH	42:DG:33:ARG:HB3	2.19	0.42
42:DG:18:GLU:OE2	42:DG:21:ARG:NH2	2.52	0.42
42:DG:105:LYS:C	42:DG:107:LEU:N	2.77	0.42
47:DO:14:THR:HG23	47:DO:16:ALA:H	1.84	0.42
48:DP:84:ASN:OD1	48:DP:116:GLY:HA2	2.18	0.42
49:DQ:12:GLN:HE21	49:DQ:72:LYS:HG3	1.85	0.42
50:DR:4:LEU:CD1	50:DR:7:GLY:HA3	2.48	0.42
51:DS:13:ARG:O	51:DS:15:ARG:HG3	2.19	0.42
52:DT:14:TYR:CD1	52:DT:14:TYR:N	2.86	0.42
55:DW:20:VAL:CG2	55:DW:47:VAL:HG21	2.45	0.42
56:DX:51:VAL:HG13	56:DX:81:VAL:HB	2.00	0.42
57:DY:26:LYS:CG	57:DY:27:VAL:H	2.24	0.42
1:AA:135:C:C2'	1:AA:136:C:H5'	2.50	0.42
1:AA:751:U:C4'	15:AO:24:SER:HA	2.48	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1037:C:O5'	1:AA:1037:C:H6	2.03	0.42
1:AA:1092:A:C6	1:AA:1093:A:C6	3.07	0.42
1:AA:1315:U:O2	1:AA:1360:A:H2	2.02	0.42
2:AB:155:LEU:HD13	2:AB:157:ARG:H	1.84	0.42
4:AD:200:GLU:HG2	4:AD:201:GLN:H	1.84	0.42
8:AH:101:PRO:C	8:AH:102:ARG:HD3	2.44	0.42
12:AL:38:THR:O	12:AL:39:VAL:HG23	2.19	0.42
13:AM:66:LEU:O	13:AM:67:GLU:O	2.36	0.42
13:AM:79:LYS:O	13:AM:82:MET:HG2	2.18	0.42
20:AT:38:LYS:O	20:AT:41:ILE:HG12	2.19	0.42
22:AW:11:C:O2'	22:AW:12:U:H5'	2.19	0.42
24:AY:60:U:H2'	24:AY:61:C:H5	1.84	0.42
25:AZ:221:PHE:CG	25:AZ:247:VAL:HG13	2.53	0.42
26:B0:7:LEU:HD13	49:BQ:85:LYS:CG	2.44	0.42
26:B0:26:TYR:CD2	36:BA:857:C:H1'	2.54	0.42
28:B2:53:LEU:C	28:B2:55:ARG:H	2.26	0.42
28:B2:55:ARG:HA	28:B2:58:ALA:CB	2.48	0.42
32:B6:11:LEU:HD13	32:B6:24:GLU:O	2.19	0.42
34:B8:53:PRO:HA	34:B8:56:GLU:HB2	2.01	0.42
36:BA:289:A:H2'	36:BA:290:G:C8	2.55	0.42
36:BA:382:G:C2'	36:BA:383:U:H5'	2.49	0.42
36:BA:489:G:N2	36:BA:1321:A:OP1	2.49	0.42
36:BA:506:G:O3'	36:BA:507:A:H8	2.03	0.42
36:BA:514:A:O2'	36:BA:515:A:H5'	2.19	0.42
36:BA:833:U:H2'	36:BA:834:C:C6	2.54	0.42
36:BA:1021:A:C8	36:BA:1021:A:C3'	3.02	0.42
36:BA:1028:A:N3	36:BA:2486:G:O2'	2.48	0.42
36:BA:1133:U:O4	36:BA:2026:C:H1'	2.19	0.42
36:BA:1287:A:OP1	50:BR:105:ARG:O	2.37	0.42
36:BA:1431:U:H2'	36:BA:1432:C:O4'	2.20	0.42
36:BA:1469:A:H2'	36:BA:1470:G:H8	1.84	0.42
36:BA:1721:G:C2	36:BA:1739:U:OP2	2.72	0.42
36:BA:1777:U:O2'	36:BA:1778:U:H5'	2.19	0.42
36:BA:1914:C:H2'	36:BA:1915:U:O4'	2.19	0.42
36:BA:2127:G:H2'	36:BA:2128:C:C6	2.54	0.42
36:BA:2131:G:H4'	36:BA:2132:U:OP2	2.18	0.42
36:BA:2330:G:C2'	36:BA:2331:G:H5'	2.48	0.42
36:BA:2389:G:H5"	36:BA:2390:U:O4'	2.19	0.42
37:BB:7:G:C3'	37:BB:8:U:C5'	2.97	0.42
39:BD:238:GLY:O	39:BD:239:ARG:O	2.38	0.42
40:BE:47:VAL:CG2	40:BE:84:PHE:O	2.67	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BF:160:ASN:HD21	41:BF:162:LEU:CB	2.31	0.42
42:BG:31:VAL:CG2	42:BG:32:PRO:HD2	2.49	0.42
42:BG:52:ILE:O	42:BG:54:GLU:N	2.53	0.42
45:BK:88:UNK:O	45:BK:89:UNK:C	2.67	0.42
46:BN:9:VAL:HG21	46:BN:48:MET:CB	2.49	0.42
46:BN:28:THR:O	46:BN:31:ALA:HB3	2.19	0.42
48:BP:46:LYS:HG2	48:BP:52:GLU:OE2	2.19	0.42
49:BQ:5:ARG:CB	49:BQ:5:ARG:NH1	2.82	0.42
50:BR:10:LEU:C	50:BR:10:LEU:HD12	2.43	0.42
52:BT:96:ARG:NH1	52:BT:96:ARG:CB	2.82	0.42
52:BT:109:GLU:HG2	52:BT:112:ARG:CZ	2.49	0.42
58:BZ:29:TYR:HA	58:BZ:33:LEU:O	2.19	0.42
1:CA:35:G:H21	12:CL:118:SER:HB2	1.83	0.42
1:CA:66:G:N2	1:CA:172:A:C2	2.86	0.42
1:CA:710:G:O2'	1:CA:711:G:H5'	2.20	0.42
1:CA:723:U:N3	1:CA:1537:U:H2'	2.34	0.42
1:CA:858:G:H5"	1:CA:858:G:C8	2.52	0.42
1:CA:1246:C:H2'	1:CA:1247:U:H6	1.84	0.42
2:CB:55:PHE:N	2:CB:55:PHE:CD1	2.87	0.42
2:CB:231:GLU:HA	2:CB:232:PRO:HD3	1.69	0.42
3:CC:23:TYR:CG	3:CC:24:ALA:N	2.87	0.42
4:CD:10:ARG:HH11	4:CD:10:ARG:HG2	1.84	0.42
5:CE:7:GLU:O	5:CE:8:GLU:HB3	2.19	0.42
11:CK:105:VAL:O	11:CK:105:VAL:HG23	2.18	0.42
16:CP:14:ASN:HA	16:CP:42:ARG:NH2	2.33	0.42
28:D2:31:GLU:O	28:D2:35:LEU:HD23	2.20	0.42
31:D5:57:VAL:HG12	31:D5:58:LEU:H	1.85	0.42
32:D6:11:LEU:H	32:D6:11:LEU:HD13	1.85	0.42
33:D7:37:LYS:O	36:DA:458:G:H8	2.02	0.42
36:DA:133:C:H6	36:DA:133:C:O5'	2.02	0.42
36:DA:190:A:H3'	36:DA:204:A:H61	1.84	0.42
36:DA:194:G:H2'	36:DA:195:A:O4'	2.20	0.42
36:DA:318:C:O2'	36:DA:319:C:H5'	2.19	0.42
36:DA:1040:C:O5'	36:DA:1040:C:H6	2.02	0.42
36:DA:1146:C:O2'	36:DA:1147:C:H5'	2.19	0.42
36:DA:1170:G:N2	36:DA:1180:C:C2	2.87	0.42
36:DA:1304:C:O2'	36:DA:1305:C:H5'	2.19	0.42
36:DA:2881:C:H2'	36:DA:2882:A:C8	2.54	0.42
37:DB:10:C:O2'	37:DB:11:C:H5'	2.19	0.42
39:DD:28:GLU:CB	39:DD:29:PRO:CD	2.94	0.42
39:DD:41:GLY:O	39:DD:42:GLY:O	2.37	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DE:47:VAL:CG2	40:DE:84:PHE:O	2.67	0.42
41:DF:26:ALA:HB1	41:DF:27:GLU:OE1	2.20	0.42
41:DF:101:LEU:O	41:DF:102:PRO:C	2.62	0.42
41:DF:122:LYS:HB3	41:DF:191:ARG:HG3	2.00	0.42
43:DH:44:VAL:CG1	43:DH:45:VAL:H	2.17	0.42
43:DH:139:GLN:HG3	43:DH:140:LYS:N	2.34	0.42
46:DN:3:THR:C	46:DN:4:TYR:CD1	2.97	0.42
46:DN:36:GLY:O	46:DN:37:LYS:HB2	2.19	0.42
47:DO:35:VAL:CG1	47:DO:35:VAL:O	2.67	0.42
51:DS:58:LEU:HG	51:DS:59:LYS:N	2.33	0.42
51:DS:92:TYR:O	51:DS:93:LYS:HB3	2.19	0.42
53:DU:32:PHE:CB	53:DU:36:ARG:HH22	2.31	0.42
56:DX:63:LYS:HE3	56:DX:63:LYS:HB2	1.91	0.42
57:DY:31:LEU:HD23	57:DY:36:ALA:C	2.44	0.42
1:AA:59:A:H5'	1:AA:60:A:C5'	2.48	0.42
1:AA:96:U:H2'	1:AA:97:G:C8	2.54	0.42
1:AA:250:A:H5"	1:AA:251:G:OP1	2.19	0.42
1:AA:407:G:O2'	4:AD:116:GLN:CG	2.64	0.42
1:AA:656:C:O2'	1:AA:657:G:H5'	2.19	0.42
1:AA:828:A:H2'	1:AA:829:G:O4'	2.19	0.42
1:AA:1009:G:H2'	1:AA:1010:G:C8	2.53	0.42
1:AA:1271:G:C3'	1:AA:1272:G:H5"	2.49	0.42
1:AA:1477:C:H2'	1:AA:1478:C:C6	2.53	0.42
2:AB:11:LEU:CD1	2:AB:217:ARG:NH2	2.82	0.42
2:AB:178:ARG:NH1	2:AB:178:ARG:CG	2.82	0.42
3:AC:23:TYR:CG	3:AC:24:ALA:N	2.87	0.42
6:AF:67:MET:HE1	6:AF:75:LEU:HD22	2.02	0.42
9:AI:98:PRO:HB2	9:AI:99:LEU:HD22	2.02	0.42
12:AL:80:HIS:HB2	24:AY:68:C:H4'	2.01	0.42
13:AM:20:THR:C	13:AM:22:ILE:H	2.27	0.42
13:AM:25:ILE:HD11	13:AM:60:VAL:CG1	2.50	0.42
19:AS:11:VAL:HG23	19:AS:38:SER:HB3	2.00	0.42
20:AT:47:GLY:C	20:AT:49:ALA:N	2.76	0.42
20:AT:59:ALA:C	20:AT:61:SER:N	2.78	0.42
21:AU:5:ASP:O	21:AU:11:GLY:HA3	2.19	0.42
22:AV:61:C:O2	22:AV:61:C:H2'	2.20	0.42
22:AV:67:C:H2'	22:AV:68:C:H6	1.83	0.42
22:AW:10:G:O2'	22:AW:11:C:H5'	2.19	0.42
22:AW:51:U:H3	22:AW:63:G:H1	1.67	0.42
25:AZ:116:THR:O	25:AZ:120:ILE:HG13	2.19	0.42
25:AZ:362:VAL:O	25:AZ:362:VAL:HG12	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:B2:54:LYS:CB	36:BA:61:G:OP2	2.67	0.42
35:B9:7:VAL:CG1	35:B9:34:GLN:HG2	2.38	0.42
36:BA:322:A:O4'	36:BA:340:A:H1'	2.18	0.42
36:BA:478:A:C6	36:BA:480:A:C6	3.08	0.42
36:BA:825:C:H4'	36:BA:2428:G:N7	2.34	0.42
36:BA:877:U:O2'	36:BA:900:A:N6	2.52	0.42
36:BA:942:G:O2'	36:BA:943:U:H5'	2.19	0.42
36:BA:1021:A:H3'	36:BA:1021:A:H8	1.85	0.42
36:BA:1336:A:O2'	36:BA:1337:G:H5'	2.19	0.42
36:BA:1487:G:O2'	36:BA:1488:G:H5'	2.19	0.42
36:BA:1570:A:H2'	36:BA:1571:A:C8	2.54	0.42
36:BA:1947:C:C3'	36:BA:1948:G:H5"	2.49	0.42
36:BA:2224:G:H4'	36:BA:2226:C:C2	2.54	0.42
36:BA:2330:G:H2'	36:BA:2331:G:O4'	2.19	0.42
36:BA:2584:U:O2	36:BA:2584:U:O4'	2.38	0.42
36:BA:2617:C:O2'	36:BA:2618:G:H5'	2.20	0.42
36:BA:2892:A:N6	36:BA:2893:G:H21	2.16	0.42
38:BC:41:VAL:HG21	38:BC:185:LEU:CD2	2.49	0.42
39:BD:107:ALA:HA	39:BD:108:PRO:HD2	1.90	0.42
39:BD:242:ARG:HB2	39:BD:243:GLY:H	1.43	0.42
39:BD:266:SER:C	39:BD:267:SER:O	2.62	0.42
40:BE:101:ARG:CB	40:BE:201:THR:HG21	2.48	0.42
42:BG:123:ASN:C	42:BG:125:PHE:H	2.27	0.42
43:BH:23:ARG:C	43:BH:24:VAL:HG23	2.45	0.42
45:BK:99:UNK:O	45:BK:100:UNK:C	2.67	0.42
46:BN:76:SER:OG	46:BN:77:GLY:N	2.52	0.42
52:BT:75:ILE:N	52:BT:75:ILE:CD1	2.81	0.42
52:BT:80:SER:CB	52:BT:81:PRO:CD	2.96	0.42
53:BU:24:TYR:HB2	53:BU:29:SER:OG	2.20	0.42
56:BX:55:ASN:HB2	56:BX:80:ILE:CG2	2.43	0.42
57:BY:60:PHE:O	57:BY:61:ILE:CG1	2.67	0.42
58:BZ:79:ARG:O	58:BZ:79:ARG:CG	2.67	0.42
1:CA:130:A:C8	17:CQ:63:ARG:HG3	2.54	0.42
1:CA:411:A:H62	1:CA:413:G:H21	1.65	0.42
1:CA:528:C:H41	12:CL:49:ASN:ND2	2.17	0.42
1:CA:757:U:O2'	1:CA:758:G:H5'	2.19	0.42
1:CA:1039:C:H2'	1:CA:1040:U:H5	1.78	0.42
2:CB:124:SER:OG	2:CB:125:PRO:HD2	2.19	0.42
8:CH:20:TYR:HE2	8:CH:76:PRO:HG2	1.81	0.42
14:CN:26:ARG:HH11	14:CN:47:LEU:CD2	2.24	0.42
15:CO:29:VAL:HG11	15:CO:67:LEU:HD21	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:CS:79:THR:O	19:CS:80:TYR:CB	2.67	0.42
20:CT:53:LEU:HB3	20:CT:102:GLY:HA3	2.01	0.42
25:CZ:309:SER:O	25:CZ:310:ILE:O	2.38	0.42
28:D2:63:VAL:O	28:D2:65:ASN:N	2.52	0.42
29:D3:28:LEU:HD23	29:D3:28:LEU:N	2.33	0.42
30:D4:25:TYR:N	30:D4:25:TYR:CD1	2.88	0.42
32:D6:45:LYS:CB	36:DA:2371:G:H4'	2.49	0.42
34:D8:50:LEU:C	34:D8:52:LYS:N	2.63	0.42
36:DA:199:A:H61	36:DA:2433:A:H2'	1.84	0.42
36:DA:611:C:O5'	36:DA:611:C:H6	2.01	0.42
36:DA:733:G:N7	36:DA:761:A:C5	2.86	0.42
36:DA:740:U:H2'	36:DA:741:G:C8	2.55	0.42
36:DA:856:C:H6	36:DA:856:C:H5"	1.83	0.42
36:DA:998:C:H2'	36:DA:999:U:O5'	2.19	0.42
36:DA:1068:G:H1'	36:DA:1069:A:O5'	2.19	0.42
36:DA:1070:A:H5'	36:DA:1072:C:OP2	2.20	0.42
36:DA:1090:U:H2'	36:DA:1091:G:O4'	2.19	0.42
36:DA:1387:C:C2	36:DA:1388:G:C8	3.06	0.42
36:DA:1448:G:N3	36:DA:1528(A):A:C2	2.84	0.42
36:DA:1509(A):A:H2'	36:DA:1509(B):A:C8	2.53	0.42
36:DA:2073:C:O2'	36:DA:2074:U:H5'	2.19	0.42
36:DA:2196:C:O2'	36:DA:2197:U:H5'	2.19	0.42
36:DA:2282:G:H4'	36:DA:2283:C:O5'	2.19	0.42
36:DA:2464:C:O2'	36:DA:2465:C:P	2.78	0.42
37:DB:81:G:H2'	37:DB:82:G:H5'	2.02	0.42
37:DB:106:G:H5'	58:DZ:31:ARG:HG2	1.98	0.42
39:DD:24:ILE:CD1	39:DD:25:THR:N	2.81	0.42
40:DE:54:GLN:O	40:DE:75:VAL:CG2	2.62	0.42
41:DF:160:ASN:ND2	41:DF:162:LEU:N	2.59	0.42
42:DG:105:LYS:C	42:DG:107:LEU:H	2.27	0.42
42:DG:178:PHE:H	42:DG:178:PHE:HD1	1.67	0.42
43:DH:15:VAL:HG23	43:DH:16:SER:N	2.34	0.42
43:DH:23:ARG:C	43:DH:24:VAL:HG23	2.44	0.42
43:DH:85:LYS:NZ	43:DH:85:LYS:C	2.77	0.42
44:DJ:52:UNK:HA	44:DJ:86:UNK:O	2.20	0.42
46:DN:12:ARG:HB3	46:DN:50:ASP:CG	2.44	0.42
48:DP:38:GLN:HG3	48:DP:39:LYS:N	2.35	0.42
50:DR:45:ARG:CG	50:DR:46:GLY:H	2.13	0.42
53:DU:15:LYS:HA	53:DU:18:LEU:HD23	2.00	0.42
53:DU:82:GLY:C	53:DU:84:LYS:N	2.76	0.42
55:DW:17:VAL:C	55:DW:19:LEU:H	2.28	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:DX:45:THR:OG1	56:DX:46:ALA:N	2.53	0.42
57:DY:51:VAL:C	57:DY:53:PRO:HD3	2.45	0.42
57:DY:61:ILE:HG22	57:DY:62:GLU:N	2.34	0.42
57:DY:81:LYS:CD	57:DY:97:ARG:O	2.67	0.42
58:DZ:48:PHE:O	58:DZ:52:SER:N	2.48	0.42
1:AA:357:G:C2	1:AA:358:U:C5	3.07	0.42
1:AA:598:U:H2'	1:AA:599:C:C6	2.54	0.42
1:AA:1318:A:H1'	19:AS:37:ARG:HH21	1.85	0.42
6:AF:52:ILE:O	6:AF:53:ALA:HB3	2.19	0.42
9:AI:48:GLU:N	9:AI:49:PRO:HD3	2.34	0.42
10:AJ:6:ILE:CD1	10:AJ:23:ILE:HG21	2.49	0.42
11:AK:122:LYS:O	11:AK:123:LYS:C	2.62	0.42
15:AO:82:ILE:CG2	15:AO:83:GLU:N	2.83	0.42
17:AQ:45:HIS:CG	17:AQ:65:ILE:HD13	2.55	0.42
17:AQ:70:ARG:HH11	17:AQ:70:ARG:HG2	1.85	0.42
19:AS:36:ARG:NH1	19:AS:53:ASN:HA	2.35	0.42
20:AT:10:LEU:HG	20:AT:12:ALA:N	2.34	0.42
20:AT:20:LEU:O	20:AT:23:ARG:HB3	2.20	0.42
36:BA:67:U:O2'	36:BA:68:G:H5'	2.18	0.42
36:BA:271(J):C:O2	36:BA:271(J):C:C2'	2.62	0.42
36:BA:451:C:N4	36:BA:454:A:H5'	2.34	0.42
36:BA:733:G:C8	36:BA:761:A:C6	3.07	0.42
36:BA:740:U:H2'	36:BA:741:G:C8	2.55	0.42
36:BA:1278:A:O2'	36:BA:1279:G:H5'	2.19	0.42
36:BA:1349:A:N6	36:BA:1598:C:N4	2.67	0.42
36:BA:1509(A):A:H2'	36:BA:1509(B):A:C8	2.55	0.42
36:BA:1516:C:C2'	36:BA:1517:G:C5'	2.83	0.42
36:BA:2178:C:O2	36:BA:2178:C:O4'	2.35	0.42
36:BA:2199:A:C2	36:BA:2200:C:H1'	2.54	0.42
36:BA:2262:U:H2'	36:BA:2263:C:H6	1.84	0.42
36:BA:2810:A:H2'	40:BE:61:ARG:NH2	2.34	0.42
37:BB:30:C:H1'	37:BB:57:A:H61	1.84	0.42
41:BF:6:VAL:O	41:BF:7:TYR:HB2	2.20	0.42
42:BG:114:ILE:HG23	42:BG:117:PHE:HB2	1.99	0.42
45:BK:56:UNK:O	45:BK:68:UNK:C	2.67	0.42
49:BQ:24:GLY:O	49:BQ:26:TYR:N	2.50	0.42
50:BR:52:ILE:O	50:BR:55:ALA:N	2.52	0.42
50:BR:109:ALA:O	50:BR:111:LEU:HD12	2.19	0.42
51:BS:11:LYS:C	51:BS:13:ARG:H	2.27	0.42
51:BS:35:ILE:O	51:BS:35:ILE:HG23	2.19	0.42
53:BU:83:LEU:HD12	53:BU:83:LEU:N	2.35	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:BW:35:ILE:O	55:BW:36:LEU:C	2.63	0.42
56:BX:14:SER:N	56:BX:17:ALA:HB3	2.35	0.42
1:CA:7:G:O2'	5:CE:120:THR:O	2.36	0.42
1:CA:256:U:O2'	1:CA:257:G:H5'	2.19	0.42
1:CA:522:C:H41	12:CL:53:ARG:NH2	2.17	0.42
1:CA:773:G:O2'	1:CA:774:G:H5'	2.19	0.42
1:CA:954:G:H2'	1:CA:955:U:C6	2.54	0.42
1:CA:1032:G:H2'	1:CA:1033:G:C8	2.54	0.42
1:CA:1068:G:N7	1:CA:1094:G:H2'	2.34	0.42
2:CB:180:LEU:O	2:CB:181:PHE:HB2	2.19	0.42
4:CD:101:LEU:C	4:CD:103:ASN:H	2.25	0.42
4:CD:105:VAL:HG21	4:CD:121:VAL:HG22	2.01	0.42
6:CF:57:GLN:NE2	6:CF:57:GLN:H	2.17	0.42
9:CI:70:LYS:O	9:CI:73:GLN:HB2	2.20	0.42
10:CJ:8:LEU:HB3	10:CJ:16:LEU:CD2	2.50	0.42
11:CK:126:ARG:O	11:CK:127:LYS:C	2.62	0.42
15:CO:66:LEU:HD12	15:CO:66:LEU:HA	1.91	0.42
17:CQ:94:ASN:O	17:CQ:96:GLU:N	2.52	0.42
19:CS:48:THR:HG22	19:CS:61:TYR:CB	2.50	0.42
22:CW:37:A:H5'	22:CW:38:A:OP2	2.20	0.42
24:CY:17:H2U:OP2	24:CY:17:H2U:O3'	2.38	0.42
25:CZ:223:MET:HB3	25:CZ:242:ILE:HA	1.99	0.42
25:CZ:246:LYS:HB3	25:CZ:281:ILE:CG2	2.38	0.42
25:CZ:285:ASN:HD22	25:CZ:285:ASN:HA	1.65	0.42
32:D6:53:LYS:CD	32:D6:53:LYS:N	2.82	0.42
33:D7:34:ARG:HD2	33:D7:34:ARG:HA	1.77	0.42
36:DA:67:U:O2'	36:DA:68:G:H5'	2.19	0.42
36:DA:121:G:H4'	36:DA:149:A:H5'	2.00	0.42
36:DA:481:G:C2'	36:DA:482:A:OP2	2.67	0.42
36:DA:586:A:N1	36:DA:809:G:O2'	2.47	0.42
36:DA:671:C:H2'	36:DA:672:C:H6	1.84	0.42
36:DA:1499:C:H2'	36:DA:1500:G:H5'	2.01	0.42
36:DA:1721:G:C2	36:DA:1739:U:OP2	2.73	0.42
36:DA:1777:U:O2'	36:DA:1778:U:H5'	2.19	0.42
36:DA:1854:A:H62	36:DA:1888:G:H8	1.66	0.42
36:DA:2169:A:O2'	36:DA:2170:A:H5'	2.18	0.42
36:DA:2390:U:O2'	36:DA:2391:G:H5'	2.20	0.42
36:DA:2419:U:O2'	36:DA:2420:C:H5'	2.18	0.42
37:DB:7:G:C3'	37:DB:8:U:C5'	2.98	0.42
39:DD:70:TRP:CZ3	39:DD:146:GLU:OE2	2.72	0.42
40:DE:11:MET:HB3	40:DE:24:THR:HA	2.02	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DF:30:PRO:O	41:DF:33:LEU:HB2	2.20	0.42
41:DF:158:THR:HG21	41:DF:163:VAL:HB	2.01	0.42
42:DG:57:ALA:O	42:DG:60:LEU:HB3	2.19	0.42
46:DN:54:VAL:HG11	46:DN:99:LEU:CD2	2.49	0.42
46:DN:115:ARG:HH11	46:DN:115:ARG:HG3	1.84	0.42
48:DP:16:ARG:HH11	48:DP:16:ARG:CA	2.32	0.42
48:DP:98:GLU:CA	48:DP:101:VAL:HG22	2.48	0.42
48:DP:126:VAL:HA	48:DP:145:PRO:CG	2.49	0.42
49:DQ:50:ALA:O	49:DQ:51:ARG:C	2.61	0.42
49:DQ:110:THR:HG23	49:DQ:113:GLN:CG	2.49	0.42
50:DR:12:ARG:HE	50:DR:16:HIS:CE1	2.36	0.42
52:DT:2:ASN:C	52:DT:4:GLY:H	2.27	0.42
53:DU:91:ASP:O	53:DU:92:ARG:C	2.63	0.42
56:DX:45:THR:C	56:DX:47:PHE:H	2.28	0.42
57:DY:15:VAL:HG12	57:DY:17:SER:H	1.85	0.42
57:DY:68:HIS:C	57:DY:70:SER:H	2.27	0.42
58:DZ:69:THR:HG22	58:DZ:89:PHE:O	2.19	0.42
1:AA:768:A:H5’	1:AA:1524:C:H1’	2.02	0.42
1:AA:1118:C:OP1	9:AI:104:ARG:NE	2.46	0.42
1:AA:1194:U:H2’	1:AA:1195:C:C6	2.55	0.42
1:AA:1212:U:O2	1:AA:1212:U:O4’	2.37	0.42
1:AA:1431:C:C2’	1:AA:1432:G:H5’	2.50	0.42
4:AD:92:VAL:O	4:AD:93:PHE:C	2.63	0.42
4:AD:122:ARG:HA	4:AD:122:ARG:HD2	1.72	0.42
5:AE:144:THR:O	5:AE:147:ASP:OD1	2.37	0.42
6:AF:44:GLY:HA2	6:AF:59:TYR:CE1	2.54	0.42
7:AG:99:LEU:HA	7:AG:102:ARG:CD	2.50	0.42
7:AG:107:ALA:O	7:AG:108:ALA:C	2.62	0.42
10:AJ:48:THR:HG23	10:AJ:62:HIS:ND1	2.33	0.42
10:AJ:81:THR:O	10:AJ:83:GLU:N	2.53	0.42
11:AK:20:TYR:CE2	11:AK:83:ILE:HD12	2.55	0.42
12:AL:75:HIS:HA	12:AL:102:ARG:NH2	2.35	0.42
13:AM:82:MET:O	13:AM:83:ASP:C	2.62	0.42
15:AO:6:GLU:O	15:AO:7:GLU:C	2.61	0.42
17:AQ:12:SER:HB3	17:AQ:20:THR:CB	2.50	0.42
22:AV:57:G:H2’	22:AV:58:A:H5’	2.01	0.42
25:AZ:65:THR:HA	25:AZ:83:PRO:HD3	2.01	0.42
25:AZ:90:LYS:HB2	25:AZ:90:LYS:HZ2	1.84	0.42
25:AZ:281:ILE:C	25:AZ:281:ILE:HD12	2.45	0.42
26:B0:24:LYS:HD3	26:B0:24:LYS:HA	1.86	0.42
31:B5:41:PRO:HA	31:B5:42:PRO:HD3	1.83	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:B6:5:VAL:O	32:B6:6:ARG:CG	2.68	0.42
36:BA:20:C:H2'	36:BA:21:A:C8	2.55	0.42
36:BA:70:G:H2'	36:BA:113:G:O2'	2.20	0.42
36:BA:229:A:OP1	36:BA:229:A:H8	2.02	0.42
36:BA:251:A:H4'	48:BP:51:PHE:HZ	1.84	0.42
36:BA:910:A:N1	36:BA:2277:G:H1'	2.34	0.42
36:BA:998:C:H2'	36:BA:999:U:O5'	2.19	0.42
36:BA:1173:G:H5'	36:BA:1174:A:OP2	2.19	0.42
36:BA:1396:U:O2	36:BA:1396:U:C2'	2.65	0.42
36:BA:1429:G:H2'	36:BA:1430:C:C6	2.55	0.42
36:BA:1651:G:C2	36:BA:2007:C:C2	3.07	0.42
37:BB:15:A:H1'	37:BB:110:G:C5	2.55	0.42
38:BC:149:ILE:O	38:BC:153:ILE:HG13	2.19	0.42
39:BD:24:ILE:CD1	39:BD:25:THR:N	2.80	0.42
40:BE:132:HIS:CG	40:BE:135:HIS:CE1	3.07	0.42
41:BF:26:ALA:HB1	41:BF:27:GLU:OE1	2.19	0.42
41:BF:108:LYS:HB3	41:BF:112:MET:CE	2.50	0.42
42:BG:47:LYS:HD2	42:BG:47:LYS:N	2.34	0.42
42:BG:181:ARG:HB3	42:BG:181:ARG:HE	1.68	0.42
47:BO:11:ALA:O	47:BO:12:ASP:HB3	2.19	0.42
48:BP:35:HIS:O	48:BP:36:LYS:CB	2.68	0.42
51:BS:29:PHE:HD1	51:BS:30:ARG:N	2.17	0.42
52:BT:19:LEU:HD22	52:BT:85:LYS:CD	2.48	0.42
52:BT:119:LYS:O	52:BT:123:GLN:HG2	2.19	0.42
53:BU:52:ARG:O	53:BU:53:ARG:C	2.61	0.42
57:BY:47:LYS:HG3	57:BY:60:PHE:CE1	2.55	0.42
1:CA:309:G:O2'	1:CA:607:A:N1	2.52	0.42
1:CA:513:C:C2	1:CA:514:C:C6	3.08	0.42
1:CA:827:U:C2	1:CA:870:U:C4	3.07	0.42
1:CA:965:A:C2	1:CA:969:A:N1	2.87	0.42
1:CA:1287:A:H2'	1:CA:1288:A:C8	2.54	0.42
1:CA:1392:G:O2'	1:CA:1393:U:H5'	2.18	0.42
4:CD:58:LEU:CD2	4:CD:58:LEU:C	2.93	0.42
4:CD:98:GLU:OE1	4:CD:194:LEU:HD11	2.19	0.42
4:CD:107:ARG:HD2	4:CD:173:TRP:CZ2	2.55	0.42
9:CI:28:VAL:O	9:CI:30:GLY:N	2.49	0.42
11:CK:57:THR:HG22	11:CK:60:ALA:HB2	2.00	0.42
12:CL:45:PRO:HG3	12:CL:53:ARG:CD	2.50	0.42
12:CL:113:ARG:CB	12:CL:122:THR:HG21	2.50	0.42
12:CL:119:LYS:O	12:CL:120:TYR:CB	2.65	0.42
25:CZ:63:ILE:HG13	25:CZ:64:ASN:ND2	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:D8:5:LYS:HG2	36:DA:242:G:C8	2.55	0.42
34:D8:52:LYS:O	34:D8:55:ALA:HB3	2.19	0.42
36:DA:135:G:O2'	36:DA:136:G:H5'	2.20	0.42
36:DA:135:G:H2'	36:DA:136:G:H8	1.85	0.42
36:DA:237:C:O2'	36:DA:238:C:H5'	2.20	0.42
36:DA:659:C:O2'	36:DA:660:G:H5'	2.19	0.42
36:DA:856:C:C6	36:DA:856:C:H5"	2.53	0.42
36:DA:973:A:O4'	36:DA:1188:U:C6	2.72	0.42
36:DA:2126:A:H8	36:DA:2126:A:OP2	2.03	0.42
36:DA:2389:G:H5"	36:DA:2390:U:O4'	2.19	0.42
36:DA:2544:G:H1'	36:DA:2646:C:H4'	2.02	0.42
36:DA:2740:A:H2'	36:DA:2741:A:C8	2.54	0.42
37:DB:94:C:O2'	37:DB:95:C:H5'	2.20	0.42
37:DB:107:G:O2'	37:DB:108:U:H5'	2.19	0.42
38:DC:79:LYS:HD2	38:DC:97:GLU:OE1	2.19	0.42
38:DC:127:LEU:C	38:DC:129:ARG:H	2.26	0.42
42:DG:54:GLU:O	42:DG:58:GLN:HG2	2.20	0.42
50:DR:53:HIS:ND1	50:DR:53:HIS:O	2.52	0.42
53:DU:14:HIS:O	53:DU:18:LEU:HD23	2.20	0.42
58:DZ:53:ILE:HG22	58:DZ:71:VAL:O	2.20	0.42
1:AA:124:G:C6	1:AA:125:U:C4	3.07	0.42
1:AA:189(E):U:O2'	1:AA:189(F):U:H5'	2.19	0.42
1:AA:373:A:C2	1:AA:374:A:C8	3.08	0.42
1:AA:567:G:H2'	1:AA:568:G:O4'	2.19	0.42
1:AA:594:G:H2'	1:AA:595:G:H5'	2.02	0.42
1:AA:748:C:OP2	1:AA:748:C:H6	2.02	0.42
1:AA:974:A:H8	1:AA:974:A:OP1	2.02	0.42
1:AA:1053:G:O6	1:AA:1199:U:H2'	2.20	0.42
1:AA:1262:C:H2'	1:AA:1263:C:C6	2.54	0.42
1:AA:1296:C:H4'	1:AA:1302:U:C4	2.54	0.42
2:AB:71:VAL:O	2:AB:164:VAL:HA	2.19	0.42
2:AB:190:THR:O	2:AB:191:ASP:CB	2.67	0.42
4:AD:125:HIS:C	4:AD:126:ILE:HD12	2.45	0.42
6:AF:27:GLN:HA	6:AF:27:GLN:NE2	2.35	0.42
9:AI:42:ARG:NH2	9:AI:75:ASP:OD1	2.53	0.42
17:AQ:16:GLN:O	17:AQ:17:LYS:HB2	2.19	0.42
17:AQ:59:ILE:HG22	17:AQ:71:PHE:HD2	1.83	0.42
20:AT:26:ASN:CB	20:AT:71:THR:HG23	2.44	0.42
20:AT:104:LEU:HD23	20:AT:105:SER:N	2.34	0.42
21:AU:8:THR:O	21:AU:9:ARG:C	2.63	0.42
25:AZ:63:ILE:HG13	25:AZ:64:ASN:ND2	2.35	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:AZ:316:PHE:CE1	25:AZ:372:VAL:HB	2.54	0.42
28:B2:21:LEU:HB3	28:B2:64:LEU:CG	2.47	0.42
28:B2:65:ASN:O	28:B2:69:ARG:NH1	2.52	0.42
30:B4:25:TYR:CD1	30:B4:25:TYR:N	2.88	0.42
36:BA:135:G:O2'	36:BA:136:G:H5'	2.20	0.42
36:BA:1097:U:O2'	36:BA:1098:A:H5'	2.19	0.42
36:BA:1286:A:OP1	50:BR:105:ARG:CZ	2.67	0.42
36:BA:1424:G:H2'	36:BA:1425:G:O4'	2.19	0.42
36:BA:2262:U:H2'	36:BA:2263:C:C6	2.54	0.42
36:BA:2732:G:O2'	36:BA:2733:A:H5'	2.18	0.42
39:BD:239:ARG:HH11	39:BD:239:ARG:HG2	1.85	0.42
43:BH:30:LYS:HG3	43:BH:79:VAL:C	2.44	0.42
43:BH:65:HIS:C	43:BH:67:LEU:N	2.78	0.42
46:BN:58:ASP:O	46:BN:59:LYS:HB2	2.20	0.42
49:BQ:32:TYR:O	49:BQ:105:GLU:CB	2.64	0.42
49:BQ:75:THR:HG23	49:BQ:88:GLY:C	2.44	0.42
50:BR:7:GLY:O	50:BR:8:ARG:HB2	2.19	0.42
51:BS:89:ARG:HB3	51:BS:92:TYR:CB	2.50	0.42
54:BV:71:LEU:HD23	54:BV:71:LEU:HA	1.75	0.42
57:BY:28:LYS:O	57:BY:29:GLU:C	2.63	0.42
57:BY:76:CYS:O	57:BY:77:PRO:C	2.63	0.42
58:BZ:171:ILE:CD1	58:BZ:171:ILE:H	2.32	0.42
1:CA:428:G:O2'	1:CA:429:U:P	2.77	0.42
1:CA:454:C:H5"	1:CA:455:C:C5	2.55	0.42
1:CA:515:G:O2'	1:CA:516:U:H5'	2.19	0.42
1:CA:643:C:H2'	1:CA:644:G:H8	1.85	0.42
1:CA:975:A:N6	1:CA:1367:C:O4'	2.52	0.42
1:CA:1111:A:N1	3:CC:177:THR:OG1	2.51	0.42
1:CA:1314:C:O2	1:CA:1314:C:O4'	2.37	0.42
1:CA:1444:C:H2'	1:CA:1445:C:C6	2.54	0.42
2:CB:62:ALA:O	2:CB:65:GLY:N	2.43	0.42
2:CB:144:ARG:CG	2:CB:145:LEU:N	2.82	0.42
4:CD:141:ARG:HB3	4:CD:142:PRO:CD	2.49	0.42
6:CF:52:ILE:O	6:CF:53:ALA:HB3	2.20	0.42
7:CG:23:VAL:O	7:CG:27:ILE:HG13	2.19	0.42
8:CH:91:ARG:O	8:CH:91:ARG:HG2	2.20	0.42
8:CH:119:LEU:HD12	8:CH:124:ALA:HA	2.00	0.42
10:CJ:49:VAL:HG22	14:CN:41:ARG:HG3	2.02	0.42
13:CM:118:ALA:HB3	22:CV:29:G:H5"	2.01	0.42
16:CP:2:VAL:O	16:CP:64:ALA:HA	2.20	0.42
20:CT:27:LYS:O	20:CT:27:LYS:HD3	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:CY:60:U:H2'	24:CY:61:C:H5	1.84	0.42
36:DA:478:A:C6	36:DA:480:A:C6	3.07	0.42
36:DA:528:A:C2	36:DA:2043:C:O5'	2.70	0.42
36:DA:569:U:C4	36:DA:570:G:C6	3.08	0.42
36:DA:594:U:H3	36:DA:663:G:H1	1.68	0.42
36:DA:736:C:H2'	36:DA:737:C:C6	2.54	0.42
36:DA:848:G:H2'	36:DA:849:A:C8	2.54	0.42
36:DA:927:G:H3'	36:DA:928:G:H8	1.84	0.42
36:DA:1449:A:N7	36:DA:1450:G:C8	2.88	0.42
36:DA:1486:A:H61	36:DA:1504:C:H42	1.68	0.42
36:DA:1526:G:O2'	36:DA:1527:G:H5'	2.20	0.42
36:DA:2177:C:H2'	36:DA:2178:C:O2	2.20	0.42
36:DA:2529:G:H5"	36:DA:2530:A:H5"	2.02	0.42
36:DA:2740:A:C6	36:DA:2741:A:C6	3.08	0.42
39:DD:30:GLU:CG	39:DD:63:ARG:HH21	2.32	0.42
39:DD:258:LYS:HD3	39:DD:273:ARG:NH2	2.33	0.42
40:DE:120:TRP:CE3	40:DE:120:TRP:HA	2.54	0.42
41:DF:32:LEU:HD23	41:DF:32:LEU:C	2.45	0.42
43:DH:83:TYR:O	43:DH:84:SER:O	2.37	0.42
47:DO:28:SER:O	47:DO:29:ASN:HB3	2.19	0.42
49:DQ:109:VAL:HG12	49:DQ:110:THR:H	1.84	0.42
50:DR:109:ALA:O	50:DR:111:LEU:HD12	2.20	0.42
51:DS:74:ALA:HB1	51:DS:103:GLU:CG	2.47	0.42
52:DT:23:ARG:HB2	52:DT:24:PRO:HD2	2.01	0.42
52:DT:96:ARG:NH1	52:DT:96:ARG:CB	2.83	0.42
56:DX:8:ILE:H	56:DX:8:ILE:CD1	2.30	0.42
58:DZ:61:LEU:HB2	58:DZ:65:GLN:O	2.20	0.42
1:AA:130:A:C8	17:AQ:63:ARG:HG3	2.55	0.42
1:AA:380:G:C2	1:AA:384:G:C6	3.08	0.42
1:AA:451:A:N6	1:AA:480:U:H2'	2.35	0.42
1:AA:509:A:C6	1:AA:510:A:N1	2.88	0.42
1:AA:1118:C:H1'	1:AA:1179:A:C4	2.54	0.42
1:AA:1121:U:H2'	1:AA:1122:U:C6	2.55	0.42
1:AA:1221:G:OP1	1:AA:1321:C:N3	2.53	0.42
2:AB:28:PHE:O	2:AB:32:ILE:HG22	2.20	0.42
4:AD:17:VAL:O	4:AD:18:LYS:O	2.37	0.42
4:AD:127:THR:HG22	4:AD:128:VAL:O	2.19	0.42
7:AG:42:ILE:HD13	7:AG:116:ALA:CB	2.50	0.42
9:AI:122:ALA:O	9:AI:123:PRO:C	2.63	0.42
10:AJ:8:LEU:HB3	10:AJ:16:LEU:HD21	2.02	0.42
10:AJ:35:SER:O	10:AJ:36:GLY:O	2.37	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AL:93:LEU:HD13	12:AL:96:VAL:HG21	2.02	0.42
13:AM:94:ARG:HH22	36:BA:887:A:C5'	2.32	0.42
14:AN:12:ARG:NH1	14:AN:12:ARG:CB	2.83	0.42
19:AS:66:MET:H	19:AS:66:MET:HG2	1.67	0.42
24:AY:77:TRP:N	25:AZ:273:HIS:H	2.18	0.42
25:AZ:223:MET:HE3	25:AZ:240:GLY:HA3	2.00	0.42
25:AZ:301:GLY:HA2	25:AZ:347:THR:OG1	2.20	0.42
25:AZ:309:SER:O	25:AZ:310:ILE:O	2.38	0.42
29:B3:17:LYS:HD3	29:B3:17:LYS:HA	1.87	0.42
32:B6:10:LEU:HD23	32:B6:10:LEU:N	2.28	0.42
32:B6:11:LEU:C	32:B6:11:LEU:HD22	2.45	0.42
32:B6:33:LYS:O	32:B6:34:LEU:HB2	2.18	0.42
36:BA:104:U:H2'	36:BA:105:C:H5'	2.00	0.42
36:BA:201:C:O2'	36:BA:202:U:H5'	2.19	0.42
36:BA:265:A:H4'	36:BA:266:G:O5'	2.20	0.42
36:BA:600:G:H5'	41:BF:32:LEU:HD12	2.02	0.42
36:BA:671:C:H2'	36:BA:672:C:H6	1.82	0.42
36:BA:1095:A:H2'	36:BA:1096:A:C8	2.52	0.42
36:BA:1499:C:H2'	36:BA:1500:G:H5'	2.00	0.42
36:BA:1658:C:OP1	40:BE:132:HIS:ND1	2.53	0.42
36:BA:1906:G:C8	36:BA:1929:G:H2'	2.55	0.42
36:BA:2012:G:H4'	55:BW:96:ILE:HD11	2.00	0.42
36:BA:2476:A:C2	36:BA:2477:C:C2	3.08	0.42
36:BA:2807:G:H1	36:BA:2893:G:H1	1.67	0.42
39:BD:275:LYS:CD	39:BD:276:LYS:N	2.83	0.42
41:BF:24:LEU:CD1	41:BF:118:ALA:HB1	2.49	0.42
41:BF:99:TYR:N	41:BF:99:TYR:CD1	2.87	0.42
41:BF:192:LEU:C	41:BF:192:LEU:HD23	2.45	0.42
42:BG:173:LEU:HB3	42:BG:178:PHE:CG	2.55	0.42
43:BH:83:TYR:HB3	43:BH:135:GLY:H	1.84	0.42
46:BN:14:VAL:HG11	46:BN:137:LYS:HD2	2.01	0.42
49:BQ:141:GLN:CB	58:BZ:99:TYR:HE1	2.26	0.42
51:BS:67:ARG:NE	51:BS:98:VAL:HG11	2.35	0.42
51:BS:90:GLY:C	51:BS:92:TYR:N	2.78	0.42
52:BT:29:ARG:HB2	52:BT:85:LYS:HA	2.02	0.42
52:BT:35:LYS:O	52:BT:36:GLU:HB2	2.19	0.42
52:BT:125:ARG:HA	52:BT:125:ARG:HD3	1.89	0.42
53:BU:29:SER:HB2	53:BU:30:LYS:HE2	2.02	0.42
55:BW:17:VAL:O	55:BW:18:ARG:C	2.62	0.42
55:BW:17:VAL:C	55:BW:19:LEU:H	2.27	0.42
57:BY:81:LYS:CD	57:BY:97:ARG:O	2.66	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:BZ:108:PRO:C	58:BZ:110:GLY:N	2.75	0.42
1:CA:201:C:H2'	1:CA:202:U:H3'	2.02	0.42
1:CA:256:U:C5'	17:CQ:17:LYS:HZ2	2.33	0.42
1:CA:639:G:O2'	1:CA:640:A:H5'	2.20	0.42
1:CA:1104:G:O5'	2:CB:111:ARG:CD	2.63	0.42
1:CA:1421:G:H1	1:CA:1479:C:H42	1.67	0.42
2:CB:187:LEU:HD11	2:CB:204:ASN:O	2.20	0.42
4:CD:132:ARG:HD2	4:CD:132:ARG:C	2.45	0.42
12:CL:34:ARG:HG3	12:CL:105:TYR:HE2	1.85	0.42
15:CO:11:VAL:HG21	15:CO:34:LEU:HD22	2.02	0.42
16:CP:5:ARG:HB2	16:CP:6:LEU:H	1.69	0.42
17:CQ:45:HIS:CG	17:CQ:65:ILE:HD13	2.54	0.42
20:CT:53:LEU:HD11	20:CT:92:LEU:HD11	2.01	0.42
22:CV:42:C:H5'	22:CV:42:C:C6	2.44	0.42
23:CX:23:G:C5	24:CY:36:A:C2	3.08	0.42
25:CZ:136:ASN:HA	25:CZ:173:GLY:O	2.20	0.42
26:D0:53:MET:CG	26:D0:57:PHE:HA	2.49	0.42
34:D8:28:GLY:CA	34:D8:32:LEU:HD22	2.49	0.42
36:DA:70:G:H2'	36:DA:113:G:O2'	2.19	0.42
36:DA:141:A:C8	36:DA:1408:C:O2'	2.70	0.42
36:DA:651:G:H2'	36:DA:652:C:H5'	2.02	0.42
36:DA:990:A:N6	36:DA:1186:G:H1'	2.33	0.42
36:DA:1011:G:OP1	53:DU:75:ASN:HB2	2.20	0.42
36:DA:2086:U:H2'	36:DA:2087:G:C8	2.55	0.42
36:DA:2109:U:O2	36:DA:2180:U:C5	2.73	0.42
36:DA:2187:G:C3'	36:DA:2188:C:H5'	2.49	0.42
36:DA:2283:C:H2'	36:DA:2284:C:O4'	2.20	0.42
36:DA:2475:C:N4	36:DA:2529:G:H22	2.17	0.42
36:DA:2524:G:H2'	36:DA:2525:G:O4'	2.19	0.42
36:DA:2562:U:H4'	47:DO:25:LEU:HD21	2.00	0.42
36:DA:2695:C:H2'	36:DA:2696:U:H6	1.84	0.42
39:DD:27:THR:CG2	39:DD:27:THR:O	2.68	0.42
39:DD:52:ARG:HB3	39:DD:53:PHE:CE2	2.55	0.42
39:DD:242:ARG:HG2	39:DD:242:ARG:NH1	2.34	0.42
40:DE:110:GLY:HA3	40:DE:162:ALA:HB2	2.01	0.42
40:DE:116:VAL:HG21	40:DE:122:PHE:CG	2.54	0.42
40:DE:152:LYS:HG2	46:DN:78:TYR:CZ	2.55	0.42
41:DF:40:GLN:NE2	41:DF:184:TYR:HB2	2.34	0.42
41:DF:113:ALA:HB1	41:DF:186:ILE:CG2	2.49	0.42
41:DF:192:LEU:HD23	41:DF:192:LEU:C	2.45	0.42
42:DG:128:ARG:HD3	42:DG:128:ARG:HA	1.88	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:DH:122:THR:O	43:DH:133:VAL:HA	2.20	0.42
43:DH:139:GLN:NE2	43:DH:140:LYS:HA	2.35	0.42
48:DP:39:LYS:HD2	48:DP:40:SER:N	2.27	0.42
49:DQ:79:LEU:CD2	49:DQ:80:GLU:H	2.30	0.42
56:DX:18:TYR:C	56:DX:20:GLY:H	2.27	0.42
57:DY:39:VAL:HG12	57:DY:40:GLU:H	1.85	0.42
1:AA:111:G:O6	1:AA:330:C:N4	2.45	0.42
1:AA:345:C:O5'	52:BT:41:ARG:CZ	2.68	0.42
1:AA:495:A:H61	4:AD:119:GLN:NE2	2.18	0.42
1:AA:515:G:O2'	1:AA:516:U:H5'	2.20	0.42
1:AA:600:C:OP1	8:AH:97:VAL:HG12	2.19	0.42
1:AA:1104:G:O5'	2:AB:111:ARG:CD	2.62	0.42
1:AA:1442(A):G:N2	52:BT:119:LYS:HA	2.34	0.42
1:AA:1536:C:H2'	1:AA:1537:U:C6	2.54	0.42
3:AC:40:ARG:NH1	3:AC:40:ARG:CG	2.81	0.42
3:AC:54:ARG:CG	3:AC:55:VAL:N	2.83	0.42
5:AE:20:GLN:O	5:AE:21:ALA:C	2.63	0.42
8:AH:35:ILE:H	8:AH:35:ILE:HG12	1.69	0.42
10:AJ:30:SER:C	10:AJ:80:LYS:HD3	2.45	0.42
10:AJ:84:GLN:O	10:AJ:88:LEU:N	2.47	0.42
15:AO:48:LYS:HA	15:AO:48:LYS:HD3	1.79	0.42
25:AZ:136:ASN:HA	25:AZ:173:GLY:O	2.20	0.42
26:B0:25:ARG:HH11	26:B0:25:ARG:HG2	1.85	0.42
28:B2:57:ILE:O	28:B2:61:LEU:N	2.52	0.42
34:B8:20:GLY:O	34:B8:57:ARG:HD3	2.19	0.42
36:BA:60:G:C4	36:BA:63:U:C4	3.08	0.42
36:BA:236:C:H2'	36:BA:237:C:H6	1.85	0.42
36:BA:280:C:N4	36:BA:360:G:H1	2.18	0.42
36:BA:709:U:H2'	36:BA:710:G:H8	1.78	0.42
36:BA:1170:G:N2	36:BA:1180:C:C2	2.87	0.42
36:BA:2133:G:C2'	36:BA:2157:G:H22	2.33	0.42
36:BA:2358:G:N2	48:BP:55:ARG:NH2	2.68	0.42
36:BA:2370:G:C6	36:BA:2371:G:C6	3.07	0.42
36:BA:2464:C:O2'	36:BA:2465:C:P	2.77	0.42
38:BC:98:GLU:O	38:BC:98:GLU:HG3	2.20	0.42
40:BE:54:GLN:O	40:BE:75:VAL:CG2	2.65	0.42
40:BE:59:VAL:HG21	40:BE:63:LEU:HA	2.01	0.42
41:BF:87:GLY:O	41:BF:88:VAL:O	2.37	0.42
42:BG:52:ILE:C	42:BG:54:GLU:N	2.78	0.42
42:BG:138:GLN:HE21	42:BG:152:LEU:HA	1.84	0.42
43:BH:157:TYR:O	43:BH:158:HIS:CD2	2.73	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BN:10:GLU:HG3	46:BN:11:PRO:HD2	2.01	0.42
46:BN:42:TRP:O	53:BU:64:ARG:NH1	2.52	0.42
48:BP:126:VAL:HA	48:BP:145:PRO:CG	2.50	0.42
52:BT:2:ASN:C	52:BT:4:GLY:H	2.27	0.42
52:BT:34:VAL:HG22	52:BT:39:ARG:HA	2.01	0.42
52:BT:95:ARG:HB3	52:BT:95:ARG:NH1	2.35	0.42
53:BU:95:LEU:HD11	54:BV:11:GLN:HG3	2.02	0.42
56:BX:14:SER:O	56:BX:15:GLU:C	2.61	0.42
57:BY:39:VAL:HG12	57:BY:40:GLU:H	1.84	0.42
57:BY:97:ARG:C	57:BY:97:ARG:HE	2.27	0.42
1:CA:109:A:C6	1:CA:326:G:C6	3.07	0.42
1:CA:540:G:O2'	1:CA:541:G:H5'	2.20	0.42
1:CA:656:C:O2'	1:CA:657:G:H5'	2.20	0.42
1:CA:827:U:N3	1:CA:870:U:C4	2.88	0.42
1:CA:1033:G:H2'	1:CA:1034:G:O4'	2.20	0.42
1:CA:1145:C:O2'	1:CA:1146:A:O5'	2.37	0.42
4:CD:8:VAL:HB	4:CD:21:LEU:HD12	2.01	0.42
4:CD:58:LEU:HD23	4:CD:58:LEU:C	2.45	0.42
5:CE:36:ASP:C	5:CE:38:GLN:N	2.78	0.42
5:CE:51:VAL:O	5:CE:54:ALA:HB3	2.20	0.42
5:CE:144:THR:O	5:CE:147:ASP:OD1	2.37	0.42
6:CF:21:LEU:C	6:CF:21:LEU:CD1	2.93	0.42
9:CI:43:ALA:O	9:CI:45:ALA:N	2.52	0.42
10:CJ:21:GLN:O	10:CJ:21:GLN:CG	2.68	0.42
10:CJ:30:SER:C	10:CJ:80:LYS:HD3	2.45	0.42
13:CM:106:ASN:O	13:CM:107:ALA:HB3	2.20	0.42
15:CO:48:LYS:HD3	15:CO:48:LYS:HA	1.80	0.42
19:CS:11:VAL:HG23	19:CS:38:SER:HB3	2.01	0.42
19:CS:45:VAL:C	19:CS:47:HIS:H	2.20	0.42
22:CV:1:G:C1'	26:D0:5:LYS:NZ	2.83	0.42
25:CZ:325:LYS:HE3	25:CZ:331:HIS:HB2	2.02	0.42
26:D0:53:MET:HA	26:D0:58:THR:O	2.20	0.42
27:D1:16:ASN:HD22	27:D1:37:ILE:HG22	1.82	0.42
28:D2:12:GLU:HA	28:D2:15:LYS:HE2	2.01	0.42
32:D6:13:CYS:HB3	32:D6:49:HIS:HB3	2.02	0.42
34:D8:8:LYS:CA	34:D8:11:LYS:HD3	2.41	0.42
36:DA:265:A:C8	36:DA:266:G:H1'	2.55	0.42
36:DA:625:G:O2'	36:DA:626:U:H5'	2.20	0.42
36:DA:1107:G:H4'	44:DJ:81:UNK:HA	2.02	0.42
36:DA:1405:U:H2'	36:DA:1406:U:C6	2.55	0.42
36:DA:1432:C:H2'	36:DA:1433:U:O4'	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1450(A):C:C2	36:DA:1451:C:C5	3.08	0.42
36:DA:1477:A:C2	36:DA:1515:G:C2	3.08	0.42
36:DA:1579:A:H2'	36:DA:1580:A:O4'	2.20	0.42
36:DA:1666:G:H1'	47:DO:3:GLN:HE21	1.84	0.42
36:DA:1906:G:C8	36:DA:1929:G:H2'	2.55	0.42
36:DA:1982:C:C5'	36:DA:1983:C:OP2	2.67	0.42
36:DA:2735:G:H2'	36:DA:2736:G:C8	2.55	0.42
37:DB:43:C:H5'	37:DB:44:G:OP2	2.20	0.42
37:DB:48:A:OP1	51:DS:93:LYS:HB3	2.20	0.42
38:DC:147:PHE:C	38:DC:149:ILE:H	2.27	0.42
39:DD:44:ASN:CB	39:DD:48:ARG:O	2.68	0.42
42:DG:45:GLU:O	42:DG:47:LYS:N	2.51	0.42
42:DG:81:LYS:HB3	42:DG:82:LEU:H	1.68	0.42
42:DG:82:LEU:HB3	42:DG:87:PRO:HB3	2.01	0.42
42:DG:133:LEU:HD23	42:DG:133:LEU:N	2.34	0.42
43:DH:89:ILE:HG12	43:DH:129:THR:HA	2.01	0.42
46:DN:18:ALA:O	46:DN:20:GLY:N	2.53	0.42
46:DN:57:ALA:O	46:DN:58:ASP:O	2.37	0.42
50:DR:32:GLY:O	50:DR:115:GLU:HA	2.20	0.42
52:DT:92:GLY:O	52:DT:94:ALA:N	2.53	0.42
52:DT:119:LYS:O	52:DT:123:GLN:HG2	2.20	0.42
53:DU:13:LYS:N	53:DU:13:LYS:HD3	2.34	0.42
54:DV:52:VAL:HG13	54:DV:52:VAL:O	2.19	0.42
56:DX:13:LEU:HA	56:DX:18:TYR:OH	2.20	0.42
57:DY:47:LYS:HG3	57:DY:60:PHE:CE1	2.54	0.42
58:DZ:108:PRO:O	58:DZ:110:GLY:N	2.52	0.42
58:DZ:145:GLU:C	58:DZ:147:GLY:N	2.77	0.42
1:AA:623:C:C4	1:AA:624:C:C4	3.08	0.42
1:AA:1015:A:C6	1:AA:1016:A:C6	3.07	0.42
1:AA:1346:A:H5"	9:AI:120:ARG:NH2	2.34	0.42
1:AA:1498:U:H4'	1:AA:1519:A:N1	2.35	0.42
2:AB:29:ALA:HA	2:AB:32:ILE:HG21	2.01	0.42
2:AB:144:ARG:CG	2:AB:145:LEU:N	2.81	0.42
3:AC:12:LEU:O	3:AC:13:GLY:C	2.60	0.42
3:AC:50:ALA:CA	3:AC:72:LYS:HB2	2.45	0.42
4:AD:132:ARG:C	4:AD:132:ARG:HD2	2.44	0.42
9:AI:58:HIS:C	9:AI:59:PHE:CD1	2.97	0.42
12:AL:121:GLY:O	12:AL:122:THR:C	2.62	0.42
13:AM:116:THR:O	13:AM:117:VAL:C	2.61	0.42
19:AS:9:VAL:HG12	19:AS:10:PHE:N	2.34	0.42
20:AT:92:LEU:O	20:AT:94:ALA:N	2.52	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:AW:29:G:O2'	22:AW:30:G:H5'	2.20	0.42
25:AZ:143:ASP:O	25:AZ:147:LEU:HD23	2.19	0.42
27:B1:70:VAL:O	27:B1:73:LEU:HB2	2.20	0.42
29:B3:31:LEU:O	29:B3:32:GLN:HB2	2.18	0.42
29:B3:35:ARG:HG2	29:B3:37:LEU:HG	2.01	0.42
35:B9:34:GLN:HB3	35:B9:35:ARG:H	1.71	0.42
36:BA:208:C:H2'	36:BA:209:C:H6	1.84	0.42
36:BA:402:A:C2'	36:BA:403:U:H5'	2.49	0.42
36:BA:634:C:H2'	36:BA:635:C:H6	1.84	0.42
36:BA:638:G:C6	36:BA:639:U:N3	2.88	0.42
36:BA:1510:G:C2'	36:BA:1511:C:H5'	2.49	0.42
36:BA:1946:U:H2'	36:BA:1947:C:H6	1.85	0.42
37:BB:13:A:H2'	37:BB:14:U:H5"	2.02	0.42
37:BB:114:C:HO2'	51:BS:47:THR:H	1.66	0.42
38:BC:57:ASN:HD22	38:BC:57:ASN:HA	1.64	0.42
38:BC:75:LEU:HD21	38:BC:113:VAL:HG22	2.01	0.42
39:BD:30:GLU:CG	39:BD:63:ARG:HH21	2.33	0.42
40:BE:4:ILE:HD11	40:BE:28:ALA:O	2.20	0.42
40:BE:11:MET:CB	40:BE:24:THR:HA	2.50	0.42
40:BE:67:PHE:HD1	40:BE:67:PHE:HA	1.72	0.42
40:BE:68:ALA:O	40:BE:70:ALA:N	2.52	0.42
41:BF:28:ILE:O	41:BF:30:PRO:HD3	2.19	0.42
42:BG:40:ASN:OD1	42:BG:40:ASN:C	2.60	0.42
42:BG:102:PHE:O	42:BG:103:LEU:CB	2.59	0.42
43:BH:76:VAL:C	43:BH:78:GLY:N	2.68	0.42
43:BH:125:VAL:HG12	43:BH:125:VAL:O	2.19	0.42
44:BJ:125:UNK:C	44:BJ:127:UNK:N	2.82	0.42
46:BN:73:THR:HA	46:BN:83:LYS:O	2.19	0.42
46:BN:135:PRO:O	46:BN:136:GLU:C	2.63	0.42
48:BP:124:LYS:HD3	48:BP:124:LYS:HA	1.84	0.42
49:BQ:76:LYS:HB3	49:BQ:91:GLU:CG	2.49	0.42
50:BR:4:LEU:CD1	50:BR:7:GLY:HA3	2.50	0.42
51:BS:83:LYS:HE2	51:BS:83:LYS:HB3	1.91	0.42
52:BT:50:ILE:HG22	52:BT:51:ARG:N	2.34	0.42
53:BU:10:ARG:C	53:BU:12:ARG:N	2.76	0.42
53:BU:17:ILE:HG23	53:BU:39:LEU:CD1	2.49	0.42
54:BV:45:THR:CG2	54:BV:52:VAL:HG21	2.50	0.42
55:BW:92:ARG:O	55:BW:93:ALA:HB3	2.20	0.42
57:BY:33:LYS:C	57:BY:35:TYR:N	2.78	0.42
57:BY:81:LYS:HD3	57:BY:97:ARG:NE	2.34	0.42
57:BY:97:ARG:HH21	57:BY:98:VAL:CG2	2.32	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:BZ:79:ARG:O	58:BZ:79:ARG:HG3	2.18	0.42
1:CA:16:A:N1	1:CA:919:A:H2	2.18	0.42
1:CA:197:A:C5	1:CA:221:C:H4'	2.54	0.42
1:CA:298:A:H2'	1:CA:299:G:O4'	2.20	0.42
1:CA:412:A:H5'	1:CA:413:G:OP1	2.20	0.42
1:CA:416:G:H2'	1:CA:417:C:O4'	2.20	0.42
1:CA:1037:C:O5'	1:CA:1037:C:H6	2.03	0.42
1:CA:1107:C:C4	1:CA:1108:G:C8	3.07	0.42
1:CA:1442(A):G:C3'	1:CA:1442(B):A:H5"	2.50	0.42
3:CC:8:ILE:O	3:CC:11:ARG:N	2.52	0.42
4:CD:65:ARG:NH1	4:CD:70:ILE:O	2.53	0.42
4:CD:100:ARG:HH11	4:CD:100:ARG:HG3	1.85	0.42
7:CG:6:ARG:O	7:CG:7:ALA:O	2.38	0.42
9:CI:18:PHE:HD1	9:CI:62:TYR:O	2.03	0.42
14:CN:3:ARG:O	14:CN:3:ARG:NE	2.49	0.42
15:CO:39:LEU:CD1	15:CO:56:LEU:HB2	2.44	0.42
16:CP:9:PHE:CE2	16:CP:18:ARG:CZ	3.02	0.42
19:CS:35:SER:C	19:CS:37:ARG:H	2.28	0.42
21:CU:8:THR:O	21:CU:9:ARG:C	2.63	0.42
22:CV:24:G:C6	22:CV:25:C:C4	3.08	0.42
24:CY:26:A:C2'	24:CY:27:C:H5'	2.50	0.42
25:CZ:178:ALA:HB3	25:CZ:199:ILE:HD11	2.02	0.42
25:CZ:188:THR:CG2	25:CZ:193:ASN:HD22	2.28	0.42
29:D3:23:LEU:HD21	29:D3:50:VAL:HG11	2.02	0.42
31:D5:50:GLY:HA3	31:D5:56:LYS:HD2	2.01	0.42
32:D6:9:LEU:HD22	32:D6:9:LEU:C	2.45	0.42
32:D6:17:LYS:C	32:D6:18:ARG:HH11	2.27	0.42
36:DA:271(I):G:H2'	36:DA:271(J):C:O4'	2.20	0.42
36:DA:596:G:H2'	36:DA:597:U:O4'	2.19	0.42
36:DA:1499:C:H2'	36:DA:1500:G:C5'	2.50	0.42
36:DA:1657:C:H2'	36:DA:1658:C:C6	2.54	0.42
36:DA:1847:A:H2'	36:DA:1847:A:N3	2.35	0.42
36:DA:2308:G:N7	36:DA:2310:A:C5'	2.81	0.42
38:DC:117:PRO:HD2	38:DC:147:PHE:CD2	2.55	0.42
39:DD:147:LEU:HD12	39:DD:147:LEU:HA	1.74	0.42
41:DF:125:LEU:N	41:DF:125:LEU:CD2	2.83	0.42
43:DH:45:VAL:O	43:DH:47:GLU:N	2.53	0.42
45:DK:99:UNK:O	45:DK:100:UNK:C	2.67	0.42
46:DN:39:ARG:O	46:DN:41:ASP:N	2.53	0.42
46:DN:43:THR:HB	46:DN:46:VAL:HG12	2.00	0.42
48:DP:35:HIS:O	48:DP:36:LYS:HB2	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:DP:65:ARG:O	48:DP:66:GLY:C	2.62	0.42
48:DP:82:GLY:HA3	48:DP:115:LEU:HD21	2.01	0.42
49:DQ:75:THR:HG23	49:DQ:88:GLY:C	2.45	0.42
50:DR:58:GLY:CA	50:DR:80:PHE:HE2	2.28	0.42
52:DT:66:VAL:HA	52:DT:71:GLY:HA2	2.00	0.42
57:DY:76:CYS:O	57:DY:77:PRO:C	2.62	0.42
58:DZ:10:ARG:HE	58:DZ:36:LYS:HB2	1.85	0.42
1:AA:751:U:C2'	1:AA:752:G:H5'	2.50	0.41
1:AA:957:U:O2	1:AA:959:A:H8	2.02	0.41
1:AA:1063:C:H5	1:AA:1064:G:HO2'	1.65	0.41
1:AA:1505:G:H2'	23:AX:18:G:OP2	2.20	0.41
2:AB:102:LEU:HD12	2:AB:102:LEU:N	2.35	0.41
3:AC:90:GLU:O	3:AC:93:LYS:HB3	2.20	0.41
3:AC:172:ARG:C	3:AC:173:VAL:HG23	2.45	0.41
12:AL:60:LEU:CD2	12:AL:66:VAL:HG22	2.50	0.41
15:AO:32:LEU:O	15:AO:36:ILE:HG13	2.19	0.41
19:AS:6:LYS:N	19:AS:6:LYS:CD	2.83	0.41
19:AS:16:LEU:O	19:AS:20:LEU:N	2.51	0.41
22:AV:63:G:O2'	22:AV:64:A:H5'	2.18	0.41
24:AY:20:H2U:H2'	24:AY:20:H2U:H61	1.88	0.41
25:AZ:206:ILE:O	25:AZ:210:ILE:CG2	2.68	0.41
25:AZ:263:ARG:HE	25:AZ:297:GLU:CD	2.28	0.41
28:B2:18:PRO:HG2	28:B2:72:ALA:O	2.20	0.41
28:B2:29:LYS:O	28:B2:32:LEU:HB3	2.19	0.41
32:B6:16:CYS:SG	32:B6:48:VAL:CG2	2.98	0.41
36:BA:252:G:O2'	36:BA:253:C:H5'	2.20	0.41
36:BA:607:U:N3	36:BA:621:A:C2	2.87	0.41
36:BA:654(S):G:N7	36:BA:654(T):C:O2	2.53	0.41
36:BA:797:C:H2'	36:BA:798:G:H8	1.85	0.41
36:BA:1526:G:C6	36:BA:1527:G:C2	3.08	0.41
36:BA:1599:C:OP2	56:BX:36:LYS:HD2	2.19	0.41
36:BA:2110:G:N1	36:BA:2178:C:C5	2.74	0.41
36:BA:2122:U:H2'	36:BA:2123:G:H8	1.84	0.41
36:BA:2149:G:O2'	36:BA:2150:U:H5'	2.19	0.41
36:BA:2557:G:H2'	36:BA:2558:C:C6	2.54	0.41
38:BC:10:LEU:CD1	38:BC:32:LEU:HA	2.48	0.41
39:BD:242:ARG:HH11	39:BD:242:ARG:HG3	1.81	0.41
41:BF:24:LEU:CB	41:BF:25:PRO:HD2	2.21	0.41
41:BF:133:ASN:O	41:BF:134:GLY:C	2.62	0.41
43:BH:119:GLU:N	43:BH:119:GLU:OE1	2.53	0.41
46:BN:43:THR:HB	46:BN:46:VAL:HG12	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:BQ:52:VAL:C	49:BQ:54:MET:N	2.76	0.41
50:BR:52:ILE:O	50:BR:55:ALA:HB3	2.20	0.41
51:BS:67:ARG:O	51:BS:71:ARG:HG3	2.20	0.41
51:BS:92:TYR:O	51:BS:93:LYS:HB3	2.20	0.41
53:BU:59:ARG:NH1	53:BU:59:ARG:CG	2.79	0.41
58:BZ:104:PHE:HE2	58:BZ:119:GLU:HB3	1.85	0.41
1:CA:528:C:H41	12:CL:49:ASN:HD21	1.68	0.41
1:CA:665:A:H1'	1:CA:733:A:O4'	2.19	0.41
1:CA:1037:C:C5	1:CA:1038:C:N3	2.88	0.41
1:CA:1054:C:O2'	1:CA:1055:A:P	2.78	0.41
1:CA:1307:U:H2'	1:CA:1308:U:C6	2.54	0.41
1:CA:1312:G:O2'	1:CA:1313:U:H5'	2.20	0.41
1:CA:1423:G:H5'	47:DO:49:ARG:HH22	1.85	0.41
2:CB:102:LEU:HD12	2:CB:102:LEU:N	2.35	0.41
2:CB:142:LEU:HD23	2:CB:142:LEU:O	2.20	0.41
3:CC:62:ASP:O	3:CC:62:ASP:CG	2.63	0.41
3:CC:73:PRO:CG	3:CC:105:GLU:HB2	2.47	0.41
3:CC:186:PHE:HE2	3:CC:188:LEU:HD22	1.83	0.41
4:CD:104:VAL:HG12	4:CD:104:VAL:O	2.20	0.41
6:CF:24:GLU:HG2	6:CF:28:ARG:NH1	2.35	0.41
8:CH:6:ILE:HD12	8:CH:6:ILE:N	2.35	0.41
8:CH:20:TYR:HA	8:CH:65:TYR:CZ	2.55	0.41
11:CK:44:SER:OG	11:CK:47:VAL:HG23	2.20	0.41
11:CK:122:LYS:O	11:CK:123:LYS:C	2.62	0.41
12:CL:42:THR:HA	12:CL:53:ARG:O	2.19	0.41
12:CL:126:LYS:HE2	12:CL:127:GLU:N	2.34	0.41
13:CM:16:ASP:CA	13:CM:34:LEU:HD11	2.50	0.41
22:CV:44:G:H5"	22:CV:45:U:C5	2.55	0.41
24:CY:61:C:H2'	24:CY:62:U:C5'	2.50	0.41
25:CZ:272:MET:HB2	25:CZ:277:LEU:HB2	2.02	0.41
28:D2:47:ASN:HD22	36:DA:95:G:H1'	1.85	0.41
32:D6:10:LEU:H	32:D6:10:LEU:HD22	1.78	0.41
36:DA:105:C:O2'	57:DY:2:ARG:HG3	2.20	0.41
36:DA:142:A:H5"	36:DA:142(A):C:C5	2.54	0.41
36:DA:211:A:O2'	36:DA:212:G:H5'	2.20	0.41
36:DA:229:A:OP1	36:DA:229:A:H8	2.03	0.41
36:DA:250:G:H2'	36:DA:251:A:C8	2.55	0.41
36:DA:761:A:H8	36:DA:761:A:H3'	1.86	0.41
36:DA:1076:C:O2	45:DK:89:UNK:HA	2.20	0.41
36:DA:1470:G:N2	36:DA:1523:U:C4	2.88	0.41
36:DA:1516:C:C2'	36:DA:1517:G:C5'	2.82	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1986:A:H2'	36:DA:1986:A:N3	2.35	0.41
36:DA:2008:C:H2'	36:DA:2009:G:H8	1.85	0.41
37:DB:41:U:N3	42:DG:70:VAL:HB	2.35	0.41
38:DC:57:ASN:HD22	38:DC:57:ASN:HA	1.66	0.41
41:DF:28:ILE:O	41:DF:30:PRO:HD3	2.20	0.41
41:DF:37:VAL:HG12	41:DF:41:LEU:HD12	2.02	0.41
41:DF:107:LYS:O	41:DF:108:LYS:C	2.63	0.41
42:DG:43:LEU:HD22	42:DG:43:LEU:N	2.35	0.41
43:DH:49:VAL:C	43:DH:50:VAL:CG2	2.93	0.41
43:DH:139:GLN:HE21	43:DH:140:LYS:CA	2.33	0.41
47:DO:104:ARG:N	47:DO:122:LEU:OXT	2.49	0.41
48:DP:107:LYS:O	48:DP:108:LYS:HB2	2.20	0.41
52:DT:12:SER:C	52:DT:13:ARG:NH2	2.78	0.41
54:DV:51:VAL:HG12	54:DV:52:VAL:N	2.24	0.41
54:DV:97:LYS:HD3	54:DV:97:LYS:HA	1.84	0.41
56:DX:57:LEU:HD13	56:DX:78:LYS:O	2.20	0.41
1:AA:67:C:H2'	1:AA:68:G:C8	2.56	0.41
1:AA:1150:U:O2'	1:AA:1151:A:H5'	2.21	0.41
1:AA:1402:C:H2'	1:AA:1403:C:O4'	2.20	0.41
2:AB:58:ILE:CG2	2:AB:222:ILE:CD1	2.98	0.41
4:AD:49:ARG:H	4:AD:49:ARG:HG2	1.64	0.41
4:AD:59:ARG:HH21	4:AD:62:GLN:CG	2.28	0.41
6:AF:100:ASN:O	6:AF:101:ALA:C	2.62	0.41
7:AG:16:LEU:HD21	9:AI:45:ALA:HB2	2.02	0.41
7:AG:68:ASN:O	7:AG:138:LYS:HD2	2.20	0.41
11:AK:61:ALA:HB2	11:AK:90:GLY:HA2	2.02	0.41
13:AM:6:GLY:C	13:AM:8:GLU:N	2.78	0.41
28:B2:59:ARG:O	28:B2:63:VAL:HG23	2.20	0.41
32:B6:17:LYS:O	32:B6:18:ARG:CB	2.67	0.41
33:B7:5:TRP:O	36:BA:1612:C:H4'	2.20	0.41
36:BA:79:G:H2'	36:BA:80:G:H8	1.84	0.41
36:BA:833:U:H5"	48:BP:48:PRO:HB2	2.00	0.41
36:BA:1070:A:H5'	36:BA:1072:C:OP2	2.20	0.41
36:BA:1131:G:O2'	36:BA:1132:A:H8	2.03	0.41
36:BA:1171:G:H3'	36:BA:1173:G:O4'	2.20	0.41
36:BA:1387:C:C2	36:BA:1388:G:C8	3.08	0.41
36:BA:1655:A:H1'	40:BE:113:PHE:CE1	2.56	0.41
36:BA:1858:G:H8	36:BA:1858:G:OP2	2.02	0.41
36:BA:1889:A:H1'	36:BA:2087:G:O4'	2.19	0.41
36:BA:2489:G:C6	36:BA:2490:G:N1	2.89	0.41
36:BA:2856:C:O2'	36:BA:2857:G:H5'	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BC:200:LYS:HG3	38:BC:208:PHE:CD1	2.55	0.41
40:BE:110:GLY:HA3	40:BE:162:ALA:HB2	2.01	0.41
40:BE:120:TRP:CE3	40:BE:120:TRP:HA	2.55	0.41
41:BF:113:ALA:HB1	41:BF:186:ILE:CG2	2.51	0.41
41:BF:169:ASN:ND2	41:BF:169:ASN:O	2.52	0.41
43:BH:46:GLU:O	43:BH:48:GLY:N	2.54	0.41
44:BJ:104:UNK:HA	44:BJ:108:UNK:O	2.20	0.41
47:BO:17:ARG:HD3	47:BO:17:ARG:HA	1.93	0.41
48:BP:21:ARG:O	48:BP:22:GLY:C	2.63	0.41
48:BP:84:ASN:CG	48:BP:116:GLY:HA2	2.45	0.41
48:BP:96:THR:HG22	48:BP:126:VAL:CB	2.45	0.41
48:BP:107:LYS:HE3	48:BP:107:LYS:HB2	1.87	0.41
48:BP:138:LEU:HD12	48:BP:138:LEU:N	2.34	0.41
49:BQ:42:ILE:HG22	49:BQ:47:ILE:HG13	2.03	0.41
50:BR:74:LYS:CD	50:BR:77:ARG:NH1	2.83	0.41
52:BT:92:GLY:O	52:BT:94:ALA:N	2.53	0.41
53:BU:70:ARG:NH2	53:BU:75:ASN:HB2	2.34	0.41
56:BX:83:VAL:HG12	56:BX:87:GLN:HB2	2.01	0.41
1:CA:165:C:H2'	1:CA:166:G:H8	1.84	0.41
1:CA:548:G:H2'	1:CA:549:C:O4'	2.20	0.41
1:CA:555:C:OP1	12:CL:20:LYS:HE3	2.21	0.41
1:CA:1296:C:C4'	1:CA:1302:U:C4	3.03	0.41
2:CB:39:ILE:CG2	2:CB:40:HIS:N	2.82	0.41
3:CC:28:GLN:O	3:CC:29:TYR:CB	2.68	0.41
3:CC:76:VAL:O	3:CC:83:ARG:HG3	2.19	0.41
4:CD:190:ASP:O	4:CD:191:ARG:C	2.63	0.41
12:CL:38:THR:C	12:CL:39:VAL:HG23	2.45	0.41
15:CO:33:THR:HG23	15:CO:63:ARG:NH1	2.36	0.41
17:CQ:36:ILE:O	17:CQ:36:ILE:HG13	2.20	0.41
20:CT:22:ARG:O	20:CT:26:ASN:ND2	2.53	0.41
22:CV:75:C:H2'	22:CV:76:A:H1'	2.01	0.41
25:CZ:65:THR:HA	25:CZ:83:PRO:HD3	2.02	0.41
25:CZ:86:ALA:O	25:CZ:87:ASP:HB2	2.20	0.41
27:D1:23:LYS:CE	27:D1:28:GLY:HA3	2.51	0.41
28:D2:13:ALA:C	28:D2:15:LYS:H	2.27	0.41
28:D2:50:ILE:HG21	36:DA:61:G:H5'	2.02	0.41
35:D9:29:ASN:H	35:D9:29:ASN:ND2	2.17	0.41
36:DA:26:G:P	55:DW:80:PRO:HB3	2.61	0.41
36:DA:260:G:C6	36:DA:261:G:N7	2.88	0.41
36:DA:733:G:C8	36:DA:761:A:C6	3.08	0.41
36:DA:815:C:H2'	36:DA:816:C:C6	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:877:U:O2'	36:DA:900:A:N6	2.54	0.41
36:DA:930:U:H4'	36:DA:931:G:O5'	2.20	0.41
36:DA:1091:G:H22	36:DA:1101:U:H1'	1.85	0.41
36:DA:1424:G:H2'	36:DA:1425:G:O4'	2.20	0.41
36:DA:1534:U:C2'	36:DA:1535:A:H5'	2.50	0.41
36:DA:1588:C:H2'	36:DA:1589:C:C6	2.54	0.41
36:DA:1858:G:H8	36:DA:1858:G:OP2	2.04	0.41
36:DA:2108:C:O2	36:DA:2108:C:C2'	2.63	0.41
36:DA:2236:C:H2'	36:DA:2237:G:O4'	2.20	0.41
36:DA:2335:A:C8	36:DA:2337:G:C5	3.08	0.41
37:DB:48:A:H4'	51:DS:95:HIS:HD2	1.85	0.41
38:DC:28:LEU:HD23	38:DC:28:LEU:O	2.20	0.41
39:DD:266:SER:C	39:DD:267:SER:O	2.63	0.41
48:DP:17:LYS:O	48:DP:19:VAL:N	2.53	0.41
48:DP:59:LEU:HA	48:DP:61:ARG:CD	2.50	0.41
48:DP:111:ARG:HA	48:DP:128:HIS:CD2	2.54	0.41
53:DU:46:ALA:O	53:DU:47:TYR:C	2.62	0.41
56:DX:51:VAL:CG1	56:DX:81:VAL:HB	2.50	0.41
57:DY:56:PRO:O	57:DY:57:GLN:O	2.38	0.41
58:DZ:125:LEU:O	58:DZ:164:ALA:HB3	2.19	0.41
1:AA:16:A:N1	1:AA:919:A:C2	2.86	0.41
1:AA:124:G:H2'	1:AA:125:U:O4'	2.20	0.41
1:AA:220:G:H2'	1:AA:221:C:H5'	2.01	0.41
1:AA:355:C:C4	1:AA:356:A:N7	2.88	0.41
1:AA:376:G:N3	1:AA:389:A:C2	2.88	0.41
1:AA:409:G:H3'	1:AA:410:G:C8	2.56	0.41
1:AA:454:C:H5"	1:AA:455:C:C5	2.55	0.41
1:AA:586:C:O2'	1:AA:587:G:H5'	2.20	0.41
1:AA:1008:C:H42	1:AA:1021:G:H1	1.68	0.41
1:AA:1054:C:OP1	1:AA:1197:G:OP1	2.38	0.41
1:AA:1068:G:N7	1:AA:1094:G:H2'	2.35	0.41
1:AA:1151:A:O2'	1:AA:1152:A:H8	2.03	0.41
4:AD:58:LEU:HD23	4:AD:62:GLN:HG2	2.01	0.41
4:AD:106:TYR:C	4:AD:106:TYR:CD1	2.98	0.41
5:AE:76:ILE:HG13	5:AE:77:PRO:HD2	2.02	0.41
9:AI:19:LEU:HD23	9:AI:19:LEU:C	2.46	0.41
10:AJ:6:ILE:HG22	10:AJ:98:ILE:CD1	2.48	0.41
25:AZ:135:MET:CE	25:AZ:150:VAL:HB	2.50	0.41
25:AZ:182:MET:SD	25:AZ:188:THR:HB	2.60	0.41
27:B1:18:ILE:HG12	27:B1:37:ILE:HG22	2.02	0.41
27:B1:34:THR:CG2	27:B1:36:GLY:H	2.32	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:B4:5:ILE:N	30:B4:5:ILE:CD1	2.83	0.41
32:B6:36:LEU:HD23	32:B6:37:ARG:N	2.34	0.41
36:BA:211:A:O2'	36:BA:212:G:H5'	2.20	0.41
36:BA:271(D):G:H1	36:BA:271(T):C:H42	1.68	0.41
36:BA:319:C:O2'	36:BA:320:A:H5'	2.20	0.41
36:BA:1205:U:C5	41:BF:171:PRO:HA	2.55	0.41
36:BA:1208:C:C2	36:BA:1209:G:C8	3.09	0.41
36:BA:1305:C:O2'	36:BA:1306:C:H5'	2.20	0.41
36:BA:1348:G:C3'	36:BA:1349:A:H5"	2.50	0.41
36:BA:1432:C:H2'	36:BA:1433:U:O4'	2.20	0.41
36:BA:1658:C:OP1	40:BE:132:HIS:CE1	2.73	0.41
36:BA:2750:A:H5"	36:BA:2751:G:OP2	2.19	0.41
36:BA:2875:C:C4'	52:BT:5:ALA:HB2	2.43	0.41
38:BC:108:MET:O	38:BC:109:ASP:C	2.63	0.41
38:BC:155:GLU:OE1	38:BC:160:ARG:HD3	2.20	0.41
39:BD:79:VAL:CG2	39:BD:111:LEU:HD11	2.51	0.41
40:BE:59:VAL:HG13	40:BE:60:ASN:N	2.31	0.41
40:BE:132:HIS:ND1	40:BE:135:HIS:HE1	2.17	0.41
41:BF:28:ILE:O	41:BF:28:ILE:HG12	2.21	0.41
42:BG:46:ALA:CB	42:BG:88:ILE:CD1	2.94	0.41
42:BG:55:LYS:HA	42:BG:58:GLN:CG	2.48	0.41
42:BG:55:LYS:HG3	42:BG:58:GLN:CD	2.45	0.41
43:BH:122:THR:O	43:BH:133:VAL:HA	2.19	0.41
43:BH:147:ASN:N	43:BH:147:ASN:ND2	2.69	0.41
44:BJ:4:UNK:C	44:BJ:6:UNK:N	2.80	0.41
45:BK:86:UNK:O	45:BK:87:UNK:CB	2.68	0.41
48:BP:39:LYS:HD2	48:BP:40:SER:N	2.26	0.41
48:BP:45:LEU:CD1	48:BP:46:LYS:N	2.82	0.41
48:BP:82:GLY:HA3	48:BP:115:LEU:HD21	2.02	0.41
51:BS:58:LEU:HG	51:BS:59:LYS:N	2.32	0.41
51:BS:59:LYS:CG	51:BS:60:GLY:H	2.01	0.41
52:BT:6:LEU:HA	52:BT:9:LEU:HD12	2.02	0.41
52:BT:53:ARG:O	52:BT:59:THR:HB	2.21	0.41
54:BV:39:LEU:O	54:BV:40:LEU:HB2	2.20	0.41
55:BW:20:VAL:CG2	55:BW:47:VAL:HG21	2.42	0.41
55:BW:50:VAL:HG13	55:BW:51:LEU:N	2.36	0.41
57:BY:47:LYS:HE3	57:BY:60:PHE:CZ	2.54	0.41
58:BZ:121:HIS:HD2	58:BZ:123:ASP:H	1.69	0.41
1:CA:148:G:H2'	1:CA:149:A:C8	2.54	0.41
1:CA:376:G:N3	1:CA:389:A:C2	2.87	0.41
1:CA:512:U:C2	1:CA:513:C:C5	3.08	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:757:U:H2'	1:CA:758:G:O4'	2.20	0.41
1:CA:942:G:H21	9:CI:124:GLN:HE22	1.62	0.41
1:CA:1053:G:C4'	1:CA:1054:C:C5'	2.81	0.41
1:CA:1410:G:H2'	1:CA:1411:C:C6	2.55	0.41
5:CE:80:ILE:HG12	5:CE:142:LEU:HD21	2.02	0.41
8:CH:19:VAL:HG23	8:CH:21:LYS:HG3	2.02	0.41
9:CI:54:ASP:C	9:CI:56:LEU:N	2.77	0.41
10:CJ:35:SER:O	10:CJ:36:GLY:O	2.37	0.41
12:CL:17:LYS:CD	12:CL:18:VAL:HG22	2.51	0.41
13:CM:5:ALA:HB1	13:CM:66:LEU:HD23	2.00	0.41
13:CM:77:ASN:O	13:CM:81:LEU:HD23	2.20	0.41
13:CM:82:MET:HG2	13:CM:83:ASP:H	1.85	0.41
14:CN:14:PRO:O	14:CN:15:LYS:O	2.38	0.41
18:CR:79:LEU:HB3	18:CR:80:PRO:HD2	2.01	0.41
25:CZ:152:MET:HG3	25:CZ:153:GLU:N	2.34	0.41
28:D2:2:LYS:HB2	36:DA:97:C:H5"	2.01	0.41
28:D2:20:GLU:O	28:D2:22:GLU:N	2.53	0.41
28:D2:31:GLU:HA	28:D2:34:GLU:HB2	2.01	0.41
32:D6:11:LEU:HG	32:D6:51:GLU:HG3	2.02	0.41
32:D6:27:LYS:HE3	32:D6:30:THR:OG1	2.20	0.41
32:D6:45:LYS:CG	36:DA:2371:G:H4'	2.50	0.41
36:DA:586:A:H5'	41:DF:89:VAL:HG21	2.01	0.41
36:DA:604:G:C6	36:DA:605:C:C4	3.08	0.41
36:DA:752:A:HO2'	36:DA:753:C:P	2.41	0.41
36:DA:753:C:O5'	36:DA:753:C:H6	2.04	0.41
36:DA:1190:G:H5'	48:DP:35:HIS:CA	2.50	0.41
36:DA:1467:C:O2'	36:DA:1468:C:H5'	2.20	0.41
36:DA:1537:G:H2'	36:DA:1538:G:C8	2.56	0.41
36:DA:1947:C:C3'	36:DA:1948:G:H5"	2.49	0.41
36:DA:2289:G:H1'	36:DA:2346:A:H2	1.85	0.41
36:DA:2668:G:C2'	36:DA:2669:G:H5'	2.49	0.41
36:DA:2810:A:H2'	40:DE:61:ARG:NH2	2.34	0.41
36:DA:2885:C:H2'	36:DA:2886:G:O5'	2.21	0.41
38:DC:43:VAL:CG2	38:DC:175:VAL:HG21	2.43	0.41
38:DC:108:MET:O	38:DC:109:ASP:C	2.63	0.41
38:DC:139:ASN:CG	38:DC:140:PRO:HD2	2.45	0.41
39:DD:35:LYS:CG	39:DD:36:PRO:N	2.77	0.41
47:DO:12:ASP:C	47:DO:14:THR:N	2.78	0.41
47:DO:34:THR:OG1	47:DO:35:VAL:N	2.54	0.41
49:DQ:5:ARG:CZ	49:DQ:5:ARG:CB	2.98	0.41
50:DR:63:ARG:HA	50:DR:80:PHE:CZ	2.56	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:DS:97:ARG:C	51:DS:97:ARG:CZ	2.94	0.41
52:DT:89:VAL:HG11	52:DT:91:ARG:HG3	1.98	0.41
53:DU:95:LEU:HD11	54:DV:11:GLN:HG3	2.00	0.41
54:DV:18:LEU:CD2	54:DV:19:LYS:N	2.78	0.41
54:DV:61:VAL:HA	54:DV:94:LEU:HD23	2.01	0.41
56:DX:14:SER:N	56:DX:17:ALA:HB3	2.34	0.41
56:DX:82:GLN:O	56:DX:82:GLN:HG3	2.20	0.41
57:DY:75:ILE:O	57:DY:96:ILE:HD13	2.20	0.41
58:DZ:111:VAL:HB	58:DZ:112:ARG:H	1.73	0.41
1:AA:407:G:H4'	4:AD:115:ARG:O	2.20	0.41
1:AA:513:C:C2	1:AA:514:C:C6	3.08	0.41
1:AA:602:A:H2'	1:AA:603:U:O4'	2.19	0.41
1:AA:658:G:O2'	1:AA:659:U:H5'	2.21	0.41
1:AA:973:G:H3'	1:AA:974:A:H5"	2.01	0.41
1:AA:1037:C:C5	1:AA:1038:C:N3	2.89	0.41
1:AA:1116:C:C2'	1:AA:1117:G:C5'	2.94	0.41
3:AC:62:ASP:O	3:AC:62:ASP:CG	2.63	0.41
6:AF:53:ALA:O	6:AF:54:LYS:CB	2.67	0.41
6:AF:78:GLU:O	6:AF:81:ILE:HG13	2.20	0.41
7:AG:42:ILE:HD13	7:AG:116:ALA:HB1	2.02	0.41
9:AI:92:TYR:HA	9:AI:95:LYS:HG2	2.01	0.41
12:AL:34:ARG:HG3	12:AL:105:TYR:CE2	2.55	0.41
12:AL:57:LYS:HA	12:AL:67:THR:HA	2.03	0.41
13:AM:96:LEU:C	13:AM:110:ARG:HE	2.28	0.41
15:AO:16:ALA:C	15:AO:18:PHE:N	2.78	0.41
16:AP:45:THR:O	16:AP:45:THR:HG23	2.20	0.41
19:AS:61:TYR:CD1	19:AS:61:TYR:C	2.97	0.41
22:AV:76:A:N7	26:B0:2:ALA:HB1	2.35	0.41
22:AW:20:U:O2'	22:AW:21:A:H4'	2.20	0.41
24:AY:17:H2U:O3'	24:AY:17:H2U:OP2	2.39	0.41
25:AZ:340:PRO:HG2	25:AZ:342:PHE:CZ	2.55	0.41
27:B1:4:VAL:CG2	27:B1:5:CYS:N	2.81	0.41
27:B1:40:ARG:HH12	36:BA:2232:U:P	2.43	0.41
28:B2:61:LEU:HD23	28:B2:61:LEU:HA	1.73	0.41
32:B6:11:LEU:HD13	32:B6:11:LEU:H	1.85	0.41
34:B8:28:GLY:CA	34:B8:32:LEU:HD22	2.50	0.41
35:B9:35:ARG:CD	36:BA:2742:C:OP1	2.68	0.41
36:BA:346:A:H2'	36:BA:347:A:H5'	2.02	0.41
36:BA:604:G:C6	36:BA:605:C:N4	2.88	0.41
36:BA:761:A:H8	36:BA:761:A:H3'	1.85	0.41
36:BA:782:A:H5'	36:BA:783:A:C2	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:900:A:H3'	36:BA:901:A:H8	1.84	0.41
36:BA:1058:G:N2	36:BA:1080:C:H42	2.19	0.41
36:BA:1076:C:O2	45:BK:89:UNK:HA	2.20	0.41
36:BA:1291:C:H2'	36:BA:1292:U:C6	2.55	0.41
36:BA:1666:G:H1'	47:BO:3:GLN:HE21	1.85	0.41
36:BA:2177:C:H2'	36:BA:2178:C:O2	2.20	0.41
37:BB:13:A:H8	37:BB:13:A:H5'	1.85	0.41
37:BB:29:A:C2	37:BB:56:G:C2	3.08	0.41
38:BC:97:GLU:O	38:BC:98:GLU:HB3	2.21	0.41
38:BC:116:THR:HA	38:BC:117:PRO:HD3	1.89	0.41
39:BD:131:LEU:HD12	39:BD:131:LEU:N	2.34	0.41
46:BN:3:THR:O	46:BN:4:TYR:CD2	2.72	0.41
48:BP:46:LYS:HG2	48:BP:52:GLU:CD	2.46	0.41
48:BP:85:LEU:HA	48:BP:88:LEU:HB3	2.01	0.41
48:BP:130:PHE:CG	48:BP:135:LEU:HD23	2.55	0.41
51:BS:34:HIS:HB2	51:BS:36:TYR:CE1	2.54	0.41
52:BT:80:SER:HB3	52:BT:81:PRO:CD	2.39	0.41
58:BZ:29:TYR:CB	58:BZ:34:ASN:CB	2.94	0.41
58:BZ:35:ARG:HD2	58:BZ:36:LYS:N	2.35	0.41
1:CA:189:G:H2'	1:CA:189(A):C:C6	2.55	0.41
1:CA:241:C:H4'	12:CL:19:ARG:HH22	1.84	0.41
1:CA:250:A:H5"	1:CA:251:G:OP1	2.21	0.41
1:CA:586:C:O2'	1:CA:587:G:H5'	2.21	0.41
1:CA:964:A:H1'	10:CJ:55:LYS:HE2	2.01	0.41
1:CA:1243:C:H2'	1:CA:1244:C:C6	2.55	0.41
1:CA:1376:U:H2'	1:CA:1377:A:H8	1.85	0.41
1:CA:1419:G:H5"	1:CA:1419:G:H8	1.86	0.41
2:CB:19:HIS:O	2:CB:20:GLU:O	2.37	0.41
2:CB:93:VAL:HG13	2:CB:93:VAL:O	2.20	0.41
3:CC:94:LEU:O	3:CC:95:THR:CB	2.65	0.41
4:CD:11:LEU:C	4:CD:13:ARG:N	2.78	0.41
4:CD:38:TYR:HA	4:CD:39:PRO:HD3	1.96	0.41
4:CD:58:LEU:CD2	4:CD:62:GLN:CG	2.98	0.41
7:CG:42:ILE:HD13	7:CG:116:ALA:HB1	2.03	0.41
8:CH:33:GLU:HG2	8:CH:48:TYR:OH	2.20	0.41
11:CK:34:ASP:O	11:CK:36:ASP:N	2.53	0.41
12:CL:121:GLY:O	12:CL:122:THR:O	2.38	0.41
13:CM:97:PRO:CG	13:CM:103:THR:HG22	2.50	0.41
20:CT:50:GLU:CG	20:CT:100:ILE:HD13	2.40	0.41
20:CT:66:ALA:HB1	20:CT:71:THR:HB	2.02	0.41
20:CT:96:GLY:O	20:CT:97:ALA:O	2.38	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:CW:51:U:H3	22:CW:63:G:H1	1.67	0.41
24:CY:42:G:N2	24:CY:43:G:H1'	2.34	0.41
25:CZ:6:ILE:HD12	25:CZ:6:ILE:N	2.34	0.41
25:CZ:125:GLN:NE2	25:CZ:394:THR:HB	2.35	0.41
25:CZ:143:ASP:O	25:CZ:147:LEU:HD23	2.20	0.41
25:CZ:368:VAL:CG1	25:CZ:369:THR:N	2.83	0.41
29:D3:31:LEU:O	29:D3:32:GLN:HB2	2.20	0.41
36:DA:214:G:O2'	36:DA:215:G:O4'	2.36	0.41
36:DA:230:U:H2'	36:DA:231:C:C6	2.55	0.41
36:DA:489:G:N2	36:DA:1321:A:OP1	2.48	0.41
36:DA:582:G:H2'	36:DA:583:G:H8	1.83	0.41
36:DA:833:U:H2'	36:DA:834:C:H6	1.84	0.41
36:DA:1192:G:C2'	36:DA:1193:G:H5'	2.51	0.41
36:DA:1487:G:O2'	36:DA:1488:G:H5'	2.20	0.41
36:DA:1540:U:C4	36:DA:1541:G:N7	2.88	0.41
36:DA:1625:C:C2'	36:DA:1626:G:H5'	2.50	0.41
36:DA:1689:A:N6	36:DA:1698:A:H2	2.01	0.41
36:DA:2133:G:C2'	36:DA:2157:G:H22	2.33	0.41
36:DA:2642:G:O2'	36:DA:2643:G:H5'	2.20	0.41
36:DA:2873:A:H1'	50:DR:6:SER:OG	2.20	0.41
37:DB:16:G:C6	37:DB:69:G:C2	3.08	0.41
41:DF:169:ASN:ND2	41:DF:169:ASN:O	2.52	0.41
42:DG:25:TYR:CD2	42:DG:31:VAL:HG23	2.55	0.41
42:DG:61:ALA:O	42:DG:62:LEU:C	2.63	0.41
46:DN:14:VAL:CG2	46:DN:137:LYS:HE3	2.51	0.41
46:DN:58:ASP:O	46:DN:59:LYS:HB2	2.20	0.41
46:DN:112:LEU:O	46:DN:115:ARG:HB3	2.21	0.41
47:DO:98:VAL:CG1	47:DO:117:LEU:C	2.93	0.41
48:DP:89:ALA:HB1	48:DP:121:LYS:HD3	2.01	0.41
52:DT:50:ILE:HA	52:DT:99:LEU:HD11	2.01	0.41
52:DT:97:ALA:O	52:DT:98:LYS:HB2	2.21	0.41
53:DU:8:VAL:HG12	53:DU:12:ARG:HG3	2.03	0.41
54:DV:38:LEU:HD22	54:DV:52:VAL:HG11	2.02	0.41
57:DY:87:LYS:O	57:DY:88:LYS:CB	2.65	0.41
57:DY:97:ARG:C	57:DY:97:ARG:HE	2.28	0.41
58:DZ:109:ALA:HB3	58:DZ:145:GLU:OE1	2.19	0.41
1:AA:241:C:H4'	12:AL:19:ARG:HH22	1.85	0.41
1:AA:369:C:O2'	1:AA:370:C:H6	2.04	0.41
1:AA:376:G:H5"	16:AP:5:ARG:CB	2.41	0.41
1:AA:413:G:H1'	1:AA:428:G:N2	2.36	0.41
1:AA:621:A:H2'	1:AA:622:A:O4'	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:643:C:H2'	1:AA:644:G:H8	1.85	0.41
1:AA:655:A:H2'	1:AA:656:C:C6	2.55	0.41
1:AA:827:U:C5'	1:AA:828:A:OP2	2.69	0.41
1:AA:1105:A:O2'	1:AA:1106:G:H5'	2.20	0.41
1:AA:1134:G:C2	1:AA:1141:C:C2	3.09	0.41
1:AA:1170:A:H2'	1:AA:1171:G:O4'	2.20	0.41
1:AA:1240:U:OP1	7:AG:116:ALA:N	2.50	0.41
1:AA:1251:A:H5"	9:AI:12:GLU:OE1	2.20	0.41
1:AA:1417:G:H1'	1:AA:1483:A:N6	2.35	0.41
2:AB:62:ALA:O	2:AB:65:GLY:N	2.46	0.41
3:AC:29:TYR:C	3:AC:31:HIS:N	2.75	0.41
4:AD:85:LYS:HD3	4:AD:92:VAL:CG1	2.50	0.41
5:AE:69:VAL:O	5:AE:71:LEU:N	2.45	0.41
8:AH:112:LEU:N	8:AH:112:LEU:CD2	2.76	0.41
11:AK:48:ILE:HD11	11:AK:67:ASP:HB3	2.03	0.41
11:AK:126:ARG:O	11:AK:127:LYS:C	2.63	0.41
12:AL:121:GLY:O	12:AL:122:THR:O	2.38	0.41
13:AM:86:CYS:O	13:AM:87:TYR:C	2.63	0.41
19:AS:24:ALA:O	19:AS:25:LYS:CB	2.68	0.41
25:AZ:152:MET:HG3	25:AZ:153:GLU:N	2.35	0.41
31:B5:3:LYS:N	31:B5:3:LYS:HD2	2.36	0.41
36:BA:558:G:H1'	46:BN:45:ASN:HB3	2.01	0.41
36:BA:596:G:H2'	36:BA:597:U:O4'	2.20	0.41
36:BA:599:G:C6	36:BA:600:G:N7	2.89	0.41
36:BA:845:G:OP2	36:BA:845:G:C8	2.60	0.41
36:BA:1405:U:H2'	36:BA:1406:U:C6	2.54	0.41
36:BA:1414:G:C2	36:BA:1589:C:O2	2.73	0.41
36:BA:1665:A:H4'	47:BO:67:LYS:HB2	2.03	0.41
36:BA:2110:G:N2	36:BA:2178:C:C5	2.87	0.41
36:BA:2319:G:O4'	36:BA:2319:G:P	2.79	0.41
36:BA:2408:U:H2'	36:BA:2409:G:H8	1.83	0.41
36:BA:2475:C:N4	36:BA:2529:G:H22	2.18	0.41
36:BA:2645:G:H4'	36:BA:2646:C:OP2	2.20	0.41
36:BA:2785:C:H1'	40:BE:64:LYS:NZ	2.36	0.41
37:BB:22:U:H2'	37:BB:23:G:H8	1.85	0.41
38:BC:113:VAL:O	38:BC:138:PRO:HG3	2.20	0.41
42:BG:123:ASN:C	42:BG:125:PHE:N	2.79	0.41
43:BH:85:LYS:NZ	43:BH:85:LYS:C	2.79	0.41
43:BH:89:ILE:HG12	43:BH:129:THR:HA	2.02	0.41
46:BN:39:ARG:O	46:BN:41:ASP:N	2.54	0.41
46:BN:62:VAL:HG13	46:BN:62:VAL:O	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:BP:8:PRO:O	48:BP:9:ASN:HB2	2.20	0.41
49:BQ:50:ALA:O	49:BQ:51:ARG:C	2.62	0.41
50:BR:2:ARG:NH1	50:BR:2:ARG:CG	2.80	0.41
52:BT:133:GLU:O	52:BT:133:GLU:HG2	2.21	0.41
57:BY:77:PRO:O	57:BY:78:ALA:CB	2.69	0.41
1:CA:189(H):G:O2'	1:CA:189(I):G:O5'	2.37	0.41
1:CA:294:U:H2'	1:CA:295:C:H6	1.85	0.41
1:CA:369:C:O2'	1:CA:370:C:H6	2.03	0.41
1:CA:421:U:C5	3:CC:127:ARG:NH1	2.87	0.41
1:CA:542:G:O2'	1:CA:543:C:H5'	2.21	0.41
1:CA:926:G:C5'	1:CA:927:G:O5'	2.68	0.41
1:CA:1488:G:H2'	1:CA:1489:G:C8	2.55	0.41
2:CB:43:ASP:OD2	2:CB:46:LYS:HE3	2.20	0.41
3:CC:50:ALA:HB1	3:CC:70:VAL:HG11	2.01	0.41
4:CD:39:PRO:O	4:CD:44:GLY:HA3	2.20	0.41
4:CD:152:SER:C	4:CD:154:ASN:N	2.75	0.41
6:CF:24:GLU:HG2	6:CF:28:ARG:HH12	1.85	0.41
11:CK:126:ARG:O	11:CK:128:ALA:N	2.54	0.41
12:CL:47:LYS:HB3	12:CL:48:PRO:CD	2.51	0.41
12:CL:89:ARG:H	12:CL:89:ARG:HG3	1.70	0.41
12:CL:109:GLY:HA3	12:CL:122:THR:H	1.86	0.41
13:CM:15:VAL:O	13:CM:16:ASP:C	2.62	0.41
13:CM:49:THR:HB	13:CM:52:GLU:H	1.85	0.41
13:CM:83:ASP:C	13:CM:85:GLY:N	2.75	0.41
13:CM:87:TYR:CD1	19:CS:81:ARG:NH2	2.88	0.41
17:CQ:16:GLN:HE21	17:CQ:16:GLN:HB3	1.56	0.41
22:CW:51:U:H2'	22:CW:52:G:C8	2.48	0.41
25:CZ:301:GLY:HA2	25:CZ:347:THR:OG1	2.20	0.41
25:CZ:330:ARG:NH2	25:CZ:332:THR:OG1	2.49	0.41
33:D7:43:THR:CG2	33:D7:44:PRO:N	2.82	0.41
36:DA:86:C:H2'	36:DA:87:C:H6	1.84	0.41
36:DA:986:C:O2'	36:DA:987:G:H5'	2.21	0.41
36:DA:1173:G:H5'	36:DA:1174:A:OP2	2.20	0.41
36:DA:1259:G:H2'	36:DA:1260:G:C8	2.55	0.41
36:DA:1532:C:H2'	36:DA:1533:G:O4'	2.19	0.41
36:DA:1538:G:H2'	36:DA:1539:G:H8	1.85	0.41
36:DA:2111:C:C2	36:DA:2147:G:N2	2.82	0.41
36:DA:2149:G:H2'	36:DA:2150:U:O4'	2.20	0.41
36:DA:2186:G:H2'	36:DA:2187:G:C4	2.55	0.41
36:DA:2762:G:H2'	36:DA:2763:G:O4'	2.21	0.41
36:DA:2774:C:P	40:DE:164:ARG:HD3	2.60	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2854:G:H2'	36:DA:2855:C:H6	1.82	0.41
39:DD:8:PRO:C	39:DD:10:THR:H	2.29	0.41
39:DD:63:ARG:HG3	39:DD:63:ARG:HH11	1.86	0.41
39:DD:80:ALA:HB2	39:DD:96:HIS:CD2	2.55	0.41
39:DD:97:TYR:C	39:DD:99:ASP:H	2.28	0.41
39:DD:200:ASP:O	39:DD:203:ASN:HB2	2.20	0.41
40:DE:4:ILE:HD11	40:DE:28:ALA:O	2.20	0.41
43:DH:33:LEU:HD12	43:DH:75:ALA:O	2.20	0.41
46:DN:31:ALA:O	46:DN:34:LEU:HB3	2.21	0.41
47:DO:104:ARG:C	47:DO:106:LEU:N	2.79	0.41
48:DP:146:VAL:CG2	48:DP:147:LEU:N	2.71	0.41
51:DS:90:GLY:C	51:DS:92:TYR:N	2.79	0.41
54:DV:39:LEU:O	54:DV:40:LEU:HB2	2.20	0.41
55:DW:92:ARG:O	55:DW:93:ALA:HB3	2.19	0.41
57:DY:22:GLY:O	57:DY:23:ARG:O	2.37	0.41
57:DY:31:LEU:HD23	57:DY:36:ALA:O	2.20	0.41
1:AA:29:G:O2'	1:AA:30:U:H5'	2.20	0.41
1:AA:435:C:H2'	1:AA:436:C:H5'	2.03	0.41
1:AA:818:G:O2'	1:AA:819:A:H5'	2.20	0.41
1:AA:878:G:C5'	8:AH:89:PRO:HG2	2.51	0.41
1:AA:919:A:O2'	1:AA:920:U:H5'	2.21	0.41
1:AA:1129:C:O2'	1:AA:1131:G:C8	2.72	0.41
1:AA:1256:A:C2	1:AA:1277:C:C5	3.08	0.41
3:AC:43:LEU:HD22	3:AC:47:LEU:HD22	2.03	0.41
4:AD:187:ARG:HG2	4:AD:188:LEU:O	2.20	0.41
5:AE:12:LEU:HD12	5:AE:31:LEU:CB	2.44	0.41
6:AF:87:ARG:CG	6:AF:87:ARG:NH1	2.80	0.41
8:AH:123:GLU:O	8:AH:127:LEU:HD23	2.21	0.41
9:AI:70:LYS:O	9:AI:73:GLN:HB2	2.21	0.41
9:AI:99:LEU:O	9:AI:100:GLY:C	2.63	0.41
10:AJ:4:ILE:CD1	10:AJ:77:PRO:HB3	2.51	0.41
10:AJ:21:GLN:CG	10:AJ:21:GLN:O	2.68	0.41
11:AK:57:THR:HG22	11:AK:60:ALA:HB2	2.02	0.41
12:AL:47:LYS:HB3	12:AL:48:PRO:CD	2.50	0.41
19:AS:5:LEU:C	19:AS:6:LYS:HD2	2.45	0.41
19:AS:35:SER:C	19:AS:37:ARG:H	2.29	0.41
22:AV:16:U:HO2'	22:AV:17:C:H5	1.66	0.41
27:B1:89:GLU:O	27:B1:93:GLU:HB2	2.21	0.41
28:B2:35:LEU:HD23	28:B2:53:LEU:HD13	2.02	0.41
28:B2:57:ILE:O	28:B2:61:LEU:CG	2.66	0.41
32:B6:19:ARG:CD	32:B6:20:ASN:H	2.28	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:B6:53:LYS:CD	32:B6:53:LYS:N	2.83	0.41
33:B7:46:VAL:HG12	33:B7:47:ARG:N	2.36	0.41
36:BA:285:C:H2'	36:BA:286:C:C6	2.55	0.41
36:BA:394:A:C2'	36:BA:395:U:H5'	2.51	0.41
36:BA:732:C:O2'	36:BA:733:G:H5'	2.21	0.41
36:BA:736:C:H2'	36:BA:737:C:H6	1.85	0.41
36:BA:943:U:OP1	48:BP:38:GLN:HB3	2.21	0.41
36:BA:1169:G:N2	36:BA:1181:C:C2	2.89	0.41
36:BA:1286:A:N6	36:BA:1289:C:C2	2.88	0.41
36:BA:1449:A:N7	36:BA:1450:G:C8	2.88	0.41
36:BA:1525:G:O2'	36:BA:1526:G:H5'	2.20	0.41
36:BA:1530:C:H2'	36:BA:1531:C:H6	1.85	0.41
36:BA:1692:U:H2'	36:BA:1694:C:C5	2.55	0.41
36:BA:2033:A:H4'	36:BA:2034:U:OP1	2.20	0.41
36:BA:2081:C:H2'	36:BA:2082:A:C8	2.55	0.41
36:BA:2186:G:H2'	36:BA:2187:G:C4	2.55	0.41
36:BA:2698:U:H2'	36:BA:2699:C:C6	2.56	0.41
36:BA:2833:G:C3'	36:BA:2834:G:C5'	2.78	0.41
38:BC:87:GLU:CG	38:BC:94:VAL:HG21	2.51	0.41
38:BC:147:PHE:C	38:BC:149:ILE:H	2.27	0.41
39:BD:266:SER:O	39:BD:267:SER:O	2.38	0.41
40:BE:60:ASN:OD1	40:BE:62:PRO:HD2	2.20	0.41
43:BH:89:ILE:HD11	43:BH:128:PRO:O	2.20	0.41
43:BH:110:SER:O	43:BH:111:HIS:HB2	2.20	0.41
44:BJ:70:UNK:O	44:BJ:71:UNK:C	2.69	0.41
46:BN:30:ILE:O	46:BN:30:ILE:HG22	2.20	0.41
46:BN:120:LEU:CD1	46:BN:122:VAL:HG23	2.50	0.41
48:BP:35:HIS:O	48:BP:36:LYS:HB2	2.19	0.41
49:BQ:1:MET:HE1	49:BQ:45:GLN:N	2.36	0.41
50:BR:12:ARG:HE	50:BR:16:HIS:CE1	2.38	0.41
50:BR:63:ARG:HA	50:BR:80:PHE:CZ	2.56	0.41
51:BS:25:ARG:CZ	51:BS:40:ILE:HD11	2.50	0.41
51:BS:63:THR:O	51:BS:67:ARG:HG3	2.20	0.41
52:BT:13:ARG:CZ	52:BT:13:ARG:CA	2.95	0.41
53:BU:15:LYS:HA	53:BU:18:LEU:HD23	2.01	0.41
53:BU:74:LEU:C	53:BU:74:LEU:CD1	2.93	0.41
53:BU:82:GLY:C	53:BU:84:LYS:N	2.78	0.41
54:BV:52:VAL:HG13	54:BV:52:VAL:O	2.21	0.41
1:CA:1511:G:H2'	1:CA:1512:U:O4'	2.20	0.41
2:CB:29:ALA:HA	2:CB:32:ILE:HG21	2.01	0.41
2:CB:158:LEU:HA	2:CB:159:PRO:HD3	1.86	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:209:ARG:HH12	2:CB:239:VAL:HG11	1.86	0.41
3:CC:107:GLN:CD	3:CC:108:ASN:H	2.28	0.41
6:CF:55:ASP:C	6:CF:57:GLN:H	2.29	0.41
6:CF:77:ARG:CG	6:CF:77:ARG:NH1	2.84	0.41
8:CH:36:LEU:O	8:CH:37:ARG:C	2.64	0.41
11:CK:29:ILE:HB	11:CK:44:SER:HB3	2.02	0.41
12:CL:60:LEU:CD2	12:CL:66:VAL:HG22	2.51	0.41
22:CV:18:G:O2'	22:CV:57:G:N2	2.54	0.41
24:CY:53:G:C8	24:CY:54:5MU:H72	2.56	0.41
25:CZ:263:ARG:NH1	25:CZ:263:ARG:CB	2.81	0.41
27:D1:59:THR:O	27:D1:91:LYS:HE2	2.20	0.41
28:D2:32:LEU:O	28:D2:32:LEU:HD23	2.21	0.41
28:D2:65:ASN:HD22	28:D2:65:ASN:HA	1.59	0.41
29:D3:35:ARG:HG2	29:D3:37:LEU:HG	2.01	0.41
31:D5:3:LYS:N	31:D5:3:LYS:HD2	2.36	0.41
34:D8:32:LEU:CD2	34:D8:36:LYS:HE2	2.43	0.41
36:DA:19:C:O2'	36:DA:20:C:H5'	2.20	0.41
36:DA:201:C:O2'	36:DA:202:U:H5'	2.21	0.41
36:DA:233:A:C2'	36:DA:234:C:H5'	2.50	0.41
36:DA:428:A:H3'	36:DA:429:A:H8	1.85	0.41
36:DA:445:C:OP1	53:DU:2:PRO:HA	2.20	0.41
36:DA:480:A:H2	36:DA:499:U:O2	2.04	0.41
36:DA:599:G:C6	36:DA:600:G:N7	2.88	0.41
36:DA:1205:U:C5	41:DF:171:PRO:HA	2.55	0.41
36:DA:1258:C:C2	36:DA:1259:G:C8	3.08	0.41
36:DA:1345:C:O2'	36:DA:1346:G:H5'	2.20	0.41
36:DA:1486:A:N6	36:DA:1504:C:H42	2.18	0.41
36:DA:2120:G:O2'	36:DA:2121:G:H5'	2.20	0.41
36:DA:2691:C:H2'	36:DA:2692:C:H6	1.86	0.41
36:DA:2701:C:H2'	36:DA:2702:U:H2'	2.03	0.41
36:DA:2856:C:O2'	36:DA:2857:G:H5'	2.20	0.41
37:DB:96:U:H2'	37:DB:97:G:H8	1.85	0.41
38:DC:77:ILE:CD1	38:DC:95:GLY:HA3	2.40	0.41
38:DC:87:GLU:CG	38:DC:94:VAL:HG21	2.50	0.41
39:DD:124:PRO:HG2	39:DD:129:ASN:HD21	1.86	0.41
40:DE:129:HIS:O	40:DE:130:GLY:C	2.63	0.41
40:DE:153:GLY:O	40:DE:154:LYS:C	2.63	0.41
41:DF:81:PRO:C	41:DF:82:ILE:O	2.64	0.41
41:DF:184:TYR:O	41:DF:188:ARG:HG2	2.20	0.41
42:DG:176:LEU:O	42:DG:176:LEU:HD23	2.21	0.41
46:DN:90:MET:O	46:DN:93:THR:O	2.37	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DN:119:ARG:HH11	46:DN:119:ARG:CB	2.34	0.41
47:DO:10:VAL:O	47:DO:10:VAL:HG23	2.20	0.41
51:DS:67:ARG:NE	51:DS:98:VAL:HG11	2.35	0.41
51:DS:78:LEU:O	51:DS:80:LEU:N	2.48	0.41
53:DU:51:LYS:HG2	53:DU:51:LYS:H	1.67	0.41
54:DV:2:PHE:C	54:DV:2:PHE:HD1	2.27	0.41
55:DW:79:GLY:CA	55:DW:100:THR:HG23	2.51	0.41
57:DY:18:GLY:C	57:DY:20:TYR:H	2.29	0.41
57:DY:36:ALA:HA	57:DY:69:ALA:H	1.85	0.41
1:AA:160:A:H2'	1:AA:161:A:O4'	2.21	0.41
1:AA:189:G:H2'	1:AA:189(A):C:C6	2.56	0.41
1:AA:782:A:C2'	1:AA:783:C:H5'	2.51	0.41
1:AA:973:G:OP1	10:AJ:57:LYS:HD3	2.20	0.41
1:AA:1211:U:O2	1:AA:1211:U:O4'	2.38	0.41
1:AA:1330:U:H5'	1:AA:1331:G:P	2.60	0.41
2:AB:18:GLY:O	2:AB:19:HIS:HB2	2.20	0.41
2:AB:115:LEU:HD13	2:AB:145:LEU:HB3	2.02	0.41
3:AC:60:ALA:O	3:AC:61:ALA:CB	2.66	0.41
4:AD:3:ARG:HH12	4:AD:118:ARG:HD3	1.81	0.41
4:AD:20:TYR:HD1	4:AD:26:CYS:O	2.03	0.41
4:AD:159:ARG:HG3	4:AD:159:ARG:HH11	1.85	0.41
5:AE:127:ASN:HA	5:AE:128:PRO:HD3	1.90	0.41
6:AF:62:TRP:C	6:AF:63:TYR:CD1	2.93	0.41
6:AF:76:ALA:O	6:AF:77:ARG:C	2.64	0.41
6:AF:76:ALA:O	6:AF:80:ARG:HG3	2.21	0.41
6:AF:80:ARG:NH1	6:AF:88:VAL:HB	2.35	0.41
10:AJ:7:LYS:C	10:AJ:8:LEU:HD12	2.44	0.41
10:AJ:79:ARG:HA	10:AJ:79:ARG:HD3	1.93	0.41
11:AK:108:ILE:O	18:AR:87:ARG:N	2.50	0.41
13:AM:49:THR:HB	13:AM:52:GLU:H	1.86	0.41
15:AO:17:ARG:NH1	15:AO:17:ARG:CG	2.83	0.41
22:AW:55:U:C5	22:AW:57:G:H5"	2.56	0.41
24:AY:53:G:C8	24:AY:54:5MU:H72	2.55	0.41
25:AZ:206:ILE:O	25:AZ:210:ILE:HG22	2.20	0.41
25:AZ:272:MET:HB2	25:AZ:277:LEU:HB2	2.02	0.41
35:B9:24:TYR:CE2	35:B9:35:ARG:HG3	2.55	0.41
36:BA:16:G:H2'	36:BA:17:G:H8	1.85	0.41
36:BA:86:C:H2'	36:BA:87:C:H6	1.84	0.41
36:BA:343:C:C2'	36:BA:344:G:H5'	2.50	0.41
36:BA:419:C:C2	36:BA:420:C:C5	3.09	0.41
36:BA:605:C:H5	36:BA:623:G:N1	2.07	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:650:C:H3'	36:BA:651:G:C5'	2.37	0.41
36:BA:724:U:O2'	36:BA:725:G:H5'	2.21	0.41
36:BA:1534:U:C2'	36:BA:1535:A:H5'	2.51	0.41
36:BA:1986:A:N3	36:BA:1986:A:H2'	2.36	0.41
36:BA:2087:G:C2'	36:BA:2088:G:H5'	2.51	0.41
36:BA:2283:C:H2'	36:BA:2284:C:O4'	2.21	0.41
36:BA:2544:G:H1'	36:BA:2646:C:H4'	2.01	0.41
36:BA:2854:G:H2'	36:BA:2855:C:H6	1.83	0.41
39:BD:27:THR:CG2	39:BD:27:THR:O	2.69	0.41
41:BF:103:LYS:O	41:BF:106:ARG:N	2.53	0.41
41:BF:132:VAL:O	41:BF:138:GLU:OE1	2.39	0.41
42:BG:40:ASN:HA	42:BG:91:ARG:HA	2.02	0.41
42:BG:42:GLY:O	42:BG:88:ILE:CG2	2.69	0.41
42:BG:146:TYR:C	42:BG:148:MET:N	2.79	0.41
43:BH:76:VAL:O	43:BH:78:GLY:N	2.52	0.41
46:BN:34:LEU:HD11	46:BN:116:LEU:HB3	2.02	0.41
46:BN:36:GLY:O	46:BN:37:LYS:HB2	2.20	0.41
46:BN:54:VAL:HG11	46:BN:99:LEU:CD2	2.51	0.41
48:BP:110:TYR:O	48:BP:111:ARG:O	2.39	0.41
48:BP:110:TYR:HB3	48:BP:111:ARG:H	1.77	0.41
48:BP:122:PRO:HB3	48:BP:141:ALA:HB1	2.03	0.41
53:BU:14:HIS:O	53:BU:18:LEU:HD23	2.20	0.41
54:BV:39:LEU:HD12	54:BV:50:PRO:O	2.21	0.41
56:BX:45:THR:C	56:BX:47:PHE:H	2.28	0.41
57:BY:14:LEU:HD12	57:BY:15:VAL:N	2.31	0.41
57:BY:18:GLY:C	57:BY:20:TYR:H	2.28	0.41
57:BY:68:HIS:C	57:BY:70:SER:H	2.29	0.41
58:BZ:67:LEU:N	58:BZ:67:LEU:CD1	2.84	0.41
58:BZ:80:ARG:O	58:BZ:81:ARG:C	2.62	0.41
58:BZ:119:GLU:CG	58:BZ:122:ARG:HH11	2.32	0.41
58:BZ:126:VAL:HB	58:BZ:161:VAL:HG13	2.02	0.41
1:CA:79:G:H1'	1:CA:80:G:OP1	2.20	0.41
1:CA:363:A:C5	12:CL:31:PRO:HD2	2.55	0.41
1:CA:828:A:H2'	1:CA:829:G:O4'	2.21	0.41
1:CA:1110:A:H8	1:CA:1110:A:O5'	2.03	0.41
1:CA:1251:A:H5"	9:CI:12:GLU:OE1	2.20	0.41
1:CA:1271:G:C3'	1:CA:1272:G:H5"	2.50	0.41
1:CA:1411:C:H2'	1:CA:1412:C:H6	1.85	0.41
2:CB:32:ILE:HD11	2:CB:40:HIS:CD2	2.56	0.41
2:CB:162:ILE:HG21	2:CB:184:VAL:HG22	2.02	0.41
3:CC:35:GLU:HG3	3:CC:95:THR:OG1	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:58:LEU:CD2	4:CD:62:GLN:HG2	2.51	0.41
4:CD:92:VAL:O	4:CD:93:PHE:C	2.64	0.41
5:CE:82:VAL:HG21	5:CE:138:ALA:HA	2.03	0.41
8:CH:32:LYS:O	8:CH:33:GLU:C	2.64	0.41
12:CL:126:LYS:HE2	12:CL:127:GLU:H	1.86	0.41
13:CM:99:ARG:N	13:CM:101:GLN:HE22	2.18	0.41
22:CV:61:C:H2'	22:CV:61:C:O2	2.20	0.41
25:CZ:5:PHE:C	25:CZ:6:ILE:HD12	2.46	0.41
26:D0:20:ARG:CG	26:D0:20:ARG:NH1	2.79	0.41
28:D2:38:GLN:CD	28:D2:44:LEU:HD13	2.46	0.41
34:D8:4:MET:O	34:D8:62:LEU:CD1	2.62	0.41
34:D8:48:PHE:O	34:D8:49:VAL:CG2	2.69	0.41
36:DA:319:C:O2'	36:DA:320:A:H5'	2.21	0.41
36:DA:402:A:C2'	36:DA:403:U:H5'	2.50	0.41
36:DA:558:G:H1'	46:DN:45:ASN:HB3	2.02	0.41
36:DA:742:G:H2'	36:DA:743:G:H8	1.86	0.41
36:DA:797:C:H2'	36:DA:798:G:H8	1.86	0.41
36:DA:940:G:H2'	36:DA:941:A:C4'	2.50	0.41
36:DA:988:A:H4'	36:DA:1155:A:N1	2.36	0.41
36:DA:1024:G:H3'	36:DA:1025:G:C5'	2.29	0.41
36:DA:1171:G:H3'	36:DA:1173:G:O4'	2.21	0.41
36:DA:2030:A:H5"	36:DA:2031:A:OP1	2.20	0.41
36:DA:2409:G:H2'	36:DA:2410:G:O4'	2.20	0.41
36:DA:2631:G:H21	40:DE:61:ARG:HH12	1.68	0.41
36:DA:2698:U:H2'	36:DA:2699:C:C6	2.56	0.41
36:DA:2758:A:C2	36:DA:2759:G:C1'	3.02	0.41
36:DA:2785:C:H1'	40:DE:64:LYS:NZ	2.36	0.41
37:DB:98:G:C2'	37:DB:99:G:H5'	2.51	0.41
39:DD:158:ALA:O	39:DD:196:VAL:HG11	2.20	0.41
40:DE:93:VAL:O	40:DE:93:VAL:HG12	2.20	0.41
41:DF:6:VAL:O	41:DF:7:TYR:HB2	2.20	0.41
42:DG:16:ARG:CZ	42:DG:31:VAL:HG11	2.51	0.41
42:DG:18:GLU:HA	42:DG:18:GLU:OE1	2.21	0.41
43:DH:125:VAL:O	43:DH:125:VAL:HG12	2.20	0.41
43:DH:163:TYR:N	43:DH:163:TYR:HD1	2.17	0.41
46:DN:55:VAL:O	46:DN:56:ASN:C	2.63	0.41
50:DR:41:ALA:C	50:DR:43:GLU:H	2.28	0.41
51:DS:16:ASN:C	51:DS:18:ILE:H	2.29	0.41
51:DS:58:LEU:HD23	51:DS:65:VAL:HG13	2.02	0.41
52:DT:6:LEU:HA	52:DT:9:LEU:HD12	2.03	0.41
52:DT:28:VAL:HG12	52:DT:29:ARG:CD	2.45	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:191:G:C6	1:AA:192:U:C4	3.09	0.41
1:AA:548:G:H2'	1:AA:549:C:O4'	2.20	0.41
1:AA:981:U:H5'	14:AN:21:TYR:CE1	2.55	0.41
1:AA:1010:G:H2'	1:AA:1011:G:H8	1.86	0.41
1:AA:1053:G:O2'	1:AA:1054:C:P	2.79	0.41
1:AA:1058:G:H2'	1:AA:1059:C:C6	2.56	0.41
3:AC:179:ARG:HG3	3:AC:206:GLU:HG2	2.03	0.41
4:AD:105:VAL:HG21	4:AD:121:VAL:HG22	2.02	0.41
8:AH:83:ILE:O	8:AH:83:ILE:HG23	2.21	0.41
16:AP:21:VAL:HG21	16:AP:59:TRP:CD2	2.55	0.41
25:AZ:125:GLN:NE2	25:AZ:394:THR:HB	2.36	0.41
25:AZ:206:ILE:HD13	25:AZ:210:ILE:HG21	2.02	0.41
32:B6:30:THR:HG22	32:B6:31:PRO:HD2	2.02	0.41
36:BA:150:C:O2'	36:BA:151:C:H5'	2.21	0.41
36:BA:187:G:N3	36:BA:1365:A:H2	2.18	0.41
36:BA:350:U:O2'	36:BA:351:G:H5'	2.20	0.41
36:BA:528:A:C2	36:BA:2043:C:O5'	2.71	0.41
36:BA:654(N):G:C2'	36:BA:654(O):G:H5'	2.51	0.41
36:BA:662:G:OP1	48:BP:18:ARG:HD2	2.21	0.41
36:BA:842:G:H2'	36:BA:843:G:H8	1.85	0.41
36:BA:1011:G:OP1	53:BU:75:ASN:HB2	2.20	0.41
36:BA:1091:G:H22	36:BA:1101:U:H1'	1.85	0.41
36:BA:1272:A:C2	36:BA:1618:A:C2	3.08	0.41
36:BA:1353:A:O4'	36:BA:1569:A:H2	2.04	0.41
36:BA:1437:C:O2	36:BA:1437:C:H2'	2.21	0.41
36:BA:1775:U:H2'	36:BA:1776:G:H5'	2.02	0.41
36:BA:1902:C:C2'	36:BA:1903:G:O5'	2.69	0.41
36:BA:2774:C:P	40:BE:164:ARG:HD3	2.61	0.41
36:BA:2811:G:O2'	36:BA:2812:G:H5'	2.21	0.41
38:BC:77:ILE:CD1	38:BC:95:GLY:HA3	2.40	0.41
39:BD:63:ARG:HH11	39:BD:63:ARG:HG3	1.85	0.41
40:BE:61:ARG:CB	40:BE:62:PRO:CD	2.94	0.41
43:BH:15:VAL:HG23	43:BH:16:SER:N	2.36	0.41
43:BH:97:ARG:NH2	43:BH:104:GLU:OE2	2.54	0.41
46:BN:112:LEU:O	46:BN:115:ARG:HB3	2.21	0.41
50:BR:58:GLY:CA	50:BR:80:PHE:HE2	2.27	0.41
50:BR:99:LYS:HA	50:BR:112:ALA:HA	2.03	0.41
53:BU:91:ASP:O	53:BU:92:ARG:C	2.63	0.41
57:BY:28:LYS:H	57:BY:28:LYS:HE3	1.86	0.41
57:BY:52:SER:O	57:BY:54:LYS:N	2.49	0.41
58:BZ:145:GLU:O	58:BZ:146:ILE:C	2.64	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:96:U:H2'	1:CA:97:G:C8	2.55	0.41
1:CA:189(E):U:O2'	1:CA:189(F):U:H5'	2.21	0.41
1:CA:380:G:C2	1:CA:384:G:C6	3.09	0.41
1:CA:474:G:H2'	1:CA:475:G:H8	1.86	0.41
1:CA:598:U:H2'	1:CA:599:C:C6	2.56	0.41
1:CA:1030(A):G:N3	1:CA:1030(C):G:OP2	2.54	0.41
1:CA:1096:C:H5"	2:CB:137:ARG:NH2	2.34	0.41
1:CA:1190:G:P	3:CC:5:ILE:HD12	2.60	0.41
1:CA:1305:G:O2'	1:CA:1331:G:N2	2.54	0.41
1:CA:1360:A:O2'	1:CA:1361:G:H5'	2.21	0.41
2:CB:204:ASN:ND2	2:CB:206:ASP:N	2.54	0.41
3:CC:3:ASN:ND2	3:CC:4:LYS:H	2.19	0.41
3:CC:108:ASN:OD1	3:CC:110:ASN:N	2.52	0.41
4:CD:187:ARG:HG2	4:CD:188:LEU:O	2.21	0.41
5:CE:6:PHE:HB3	5:CE:34:VAL:HG22	2.03	0.41
5:CE:147:ASP:HB3	5:CE:150:ARG:NH1	2.34	0.41
6:CF:53:ALA:O	6:CF:54:LYS:CB	2.69	0.41
8:CH:97:VAL:O	8:CH:97:VAL:HG22	2.21	0.41
9:CI:97:LYS:N	9:CI:98:PRO:CD	2.83	0.41
10:CJ:30:SER:HB3	10:CJ:84:GLN:HE22	1.86	0.41
13:CM:87:TYR:CE1	19:CS:81:ARG:NH2	2.89	0.41
17:CQ:91:ARG:HB2	17:CQ:91:ARG:NH1	2.35	0.41
25:CZ:206:ILE:O	25:CZ:210:ILE:CG2	2.69	0.41
25:CZ:210:ILE:HA	25:CZ:211:PRO:HD2	1.94	0.41
27:D1:17:SER:HB2	27:D1:38:SER:HB2	2.03	0.41
32:D6:27:LYS:O	32:D6:28:ARG:C	2.63	0.41
34:D8:15:LYS:CB	48:DP:65:ARG:NH2	2.84	0.41
36:DA:142(A):C:C2'	36:DA:143:G:H5'	2.51	0.41
36:DA:271(G):C:O2'	36:DA:271(H):G:H5'	2.21	0.41
36:DA:280:C:N4	36:DA:360:G:H1	2.19	0.41
36:DA:380:U:H2'	36:DA:381:G:C8	2.55	0.41
36:DA:394:A:C2'	36:DA:395:U:H5'	2.50	0.41
36:DA:958:U:O4	49:DQ:17:LEU:HG	2.21	0.41
36:DA:1076:C:H5	36:DA:1077:A:C4	2.39	0.41
36:DA:1472:A:H2'	36:DA:1473:G:H5'	2.02	0.41
36:DA:1997:G:O2'	36:DA:1998:G:H5'	2.21	0.41
36:DA:2068:U:N3	36:DA:2430:A:C2	2.66	0.41
36:DA:2147:G:H2'	36:DA:2148:G:C4'	2.51	0.41
36:DA:2319:G:O4'	36:DA:2319:G:P	2.78	0.41
42:DG:106:LEU:O	42:DG:106:LEU:HG	2.19	0.41
44:DJ:80:UNK:O	44:DJ:81:UNK:C	2.69	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DN:29:LYS:O	46:DN:31:ALA:N	2.53	0.41
46:DN:30:ILE:O	46:DN:30:ILE:HG22	2.21	0.41
46:DN:56:ASN:C	46:DN:57:ALA:O	2.64	0.41
46:DN:120:LEU:CD1	46:DN:122:VAL:HG23	2.50	0.41
48:DP:35:HIS:O	48:DP:36:LYS:CB	2.68	0.41
48:DP:46:LYS:HG2	48:DP:52:GLU:CG	2.50	0.41
48:DP:122:PRO:HB3	48:DP:141:ALA:HB1	2.03	0.41
50:DR:7:GLY:O	50:DR:8:ARG:HB2	2.20	0.41
51:DS:73:LEU:O	51:DS:73:LEU:HD23	2.21	0.41
52:DT:32:TYR:HB2	52:DT:33:LYS:H	1.47	0.41
52:DT:80:SER:HB3	52:DT:81:PRO:CD	2.39	0.41
53:DU:9:VAL:O	53:DU:12:ARG:HB2	2.20	0.41
58:DZ:38:TYR:CD1	58:DZ:38:TYR:C	2.98	0.41
58:DZ:145:GLU:O	58:DZ:147:GLY:N	2.53	0.41
1:AA:79:G:H1'	1:AA:80:G:OP1	2.21	0.41
1:AA:108:G:C5'	1:AA:109:A:H5"	2.51	0.41
1:AA:198:G:O2'	1:AA:199:G:P	2.79	0.41
1:AA:332:G:H2'	1:AA:333:G:H8	1.86	0.41
1:AA:412:A:H5'	1:AA:413:G:OP1	2.21	0.41
1:AA:620:C:O2'	1:AA:621:A:H5'	2.21	0.41
1:AA:818:G:HO2'	1:AA:820:U:H6	1.68	0.41
1:AA:1062:U:O4	3:AC:2:GLY:HA3	2.21	0.41
1:AA:1116:C:O2'	1:AA:1117:G:H5"	2.20	0.41
1:AA:1124:G:H5'	10:AJ:35:SER:CB	2.50	0.41
1:AA:1423:G:C6	1:AA:1424:C:C4	3.09	0.41
1:AA:1533:C:C3'	1:AA:1534:A:C5'	2.92	0.41
2:AB:87:ARG:CZ	2:AB:233:SER:HB3	2.51	0.41
2:AB:97:TRP:HZ2	2:AB:102:LEU:CD1	2.33	0.41
2:AB:187:LEU:HD11	2:AB:204:ASN:O	2.20	0.41
2:AB:235:SER:O	2:AB:237:ALA:N	2.49	0.41
3:AC:35:GLU:HG2	3:AC:59:ARG:HH22	1.86	0.41
3:AC:50:ALA:HB1	3:AC:70:VAL:HG11	2.02	0.41
4:AD:194:LEU:N	4:AD:194:LEU:HD22	2.35	0.41
6:AF:20:ALA:O	6:AF:24:GLU:HB2	2.21	0.41
6:AF:24:GLU:HG2	6:AF:28:ARG:NH1	2.36	0.41
9:AI:28:VAL:CG1	9:AI:29:ASN:N	2.68	0.41
10:AJ:32:ALA:N	10:AJ:78:ASN:ND2	2.65	0.41
10:AJ:75:ILE:HG13	10:AJ:76:ASN:N	2.28	0.41
10:AJ:97:GLU:OE1	10:AJ:99:LYS:HE2	2.19	0.41
11:AK:34:ASP:C	11:AK:34:ASP:OD1	2.63	0.41
11:AK:61:ALA:CB	11:AK:90:GLY:HA2	2.51	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AL:75:HIS:HD2	12:AL:77:LEU:H	1.68	0.41
13:AM:11:ARG:CG	13:AM:12:ASN:N	2.81	0.41
14:AN:60:SER:O	14:AN:61:TRP:HB3	2.21	0.41
16:AP:14:ASN:OD1	16:AP:14:ASN:O	2.39	0.41
19:AS:16:LEU:C	19:AS:18:LYS:N	2.78	0.41
24:AY:55:PSU:O5'	24:AY:56:C:OP2	2.39	0.41
24:AY:61:C:H2'	24:AY:62:U:C5'	2.50	0.41
25:AZ:20:VAL:O	25:AZ:21:ASP:CB	2.57	0.41
25:AZ:230:THR:HG23	25:AZ:230:THR:O	2.21	0.41
25:AZ:241:ARG:N	25:AZ:285:ASN:HD22	2.19	0.41
25:AZ:315:LYS:HE2	25:AZ:315:LYS:HB3	1.87	0.41
26:B0:53:MET:HA	26:B0:58:THR:O	2.21	0.41
27:B1:8:SER:HB3	27:B1:66:HIS:CG	2.56	0.41
27:B1:10:LYS:NZ	27:B1:65:SER:OG	2.54	0.41
31:B5:2:ALA:N	36:BA:2015:A:N3	2.68	0.41
31:B5:57:VAL:HG12	31:B5:58:LEU:H	1.85	0.41
32:B6:14:THR:HB	32:B6:52:VAL:HG21	2.02	0.41
32:B6:42:TRP:CH2	36:BA:643:A:N7	2.89	0.41
34:B8:61:LEU:CG	34:B8:62:LEU:H	2.34	0.41
36:BA:105:C:O2'	57:BY:2:ARG:HG3	2.20	0.41
36:BA:142:A:H5"	36:BA:142(A):C:C5	2.54	0.41
36:BA:346:A:C2'	36:BA:347:A:H5'	2.51	0.41
36:BA:445:C:OP1	53:BU:2:PRO:HA	2.21	0.41
36:BA:529:A:H4'	36:BA:530:G:O5'	2.21	0.41
36:BA:582:G:H2'	36:BA:583:G:H8	1.86	0.41
36:BA:594:U:H3	36:BA:663:G:H1	1.69	0.41
36:BA:651:G:C2'	36:BA:652:C:H5'	2.51	0.41
36:BA:664:C:H4'	36:BA:941:A:OP1	2.21	0.41
36:BA:756:C:C2'	36:BA:757:U:H5'	2.51	0.41
36:BA:875:G:H2'	36:BA:876:C:C6	2.56	0.41
36:BA:1006:C:C2	36:BA:1138:G:N2	2.88	0.41
36:BA:1076:C:H5	36:BA:1077:A:C4	2.39	0.41
36:BA:1208:C:O2	36:BA:1208:C:C2'	2.69	0.41
36:BA:1248:G:OP1	53:BU:2:PRO:HD2	2.20	0.41
36:BA:1374:G:H2'	36:BA:1375:C:C6	2.56	0.41
36:BA:1453:U:H5'	50:BR:63:ARG:CZ	2.51	0.41
36:BA:1470:G:N2	36:BA:1523:U:C4	2.89	0.41
36:BA:1480:G:C2'	36:BA:1481:U:H5'	2.46	0.41
36:BA:1854:A:H62	36:BA:1888:G:H8	1.68	0.41
36:BA:2066:C:O2'	36:BA:2067:G:H5'	2.20	0.41
36:BA:2192:G:N3	36:BA:2192:G:H2'	2.35	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2409:G:H2'	36:BA:2410:G:O4'	2.21	0.41
36:BA:2489:G:C6	36:BA:2490:G:C6	3.09	0.41
36:BA:2631:G:H21	40:BE:61:ARG:HH12	1.69	0.41
36:BA:2712(A):A:H5"	36:BA:2713:A:OP2	2.20	0.41
36:BA:2756:U:C1'	36:BA:2757:A:H5"	2.34	0.41
36:BA:2758:A:O2'	36:BA:2759:G:P	2.79	0.41
37:BB:66:A:C2'	37:BB:67:G:OP2	2.68	0.41
38:BC:22:ILE:HD13	38:BC:190:ARG:HG2	2.01	0.41
38:BC:77:ILE:HB	38:BC:115:ALA:HB2	2.01	0.41
38:BC:82:LYS:H	38:BC:82:LYS:HG2	1.74	0.41
39:BD:43:ARG:HD3	39:BD:44:ASN:CG	2.45	0.41
39:BD:153:ALA:O	39:BD:154:LYS:HG2	2.21	0.41
40:BE:35:GLN:CG	40:BE:36:ARG:H	2.34	0.41
40:BE:152:LYS:HG2	46:BN:78:TYR:CE1	2.56	0.41
41:BF:178:PRO:C	41:BF:180:GLY:H	2.29	0.41
42:BG:47:LYS:HZ2	42:BG:82:LEU:HB2	1.86	0.41
42:BG:55:LYS:O	42:BG:58:GLN:HG2	2.21	0.41
42:BG:72:ARG:HE	42:BG:86:MET:CA	2.32	0.41
42:BG:150:ASP:O	42:BG:151:ALA:CB	2.68	0.41
43:BH:49:VAL:C	43:BH:50:VAL:CG2	2.93	0.41
45:BK:3:UNK:O	45:BK:4:UNK:C	2.69	0.41
46:BN:58:ASP:OD2	46:BN:59:LYS:HG2	2.21	0.41
46:BN:90:MET:O	46:BN:93:THR:O	2.38	0.41
46:BN:107:LEU:O	46:BN:108:PRO:C	2.64	0.41
47:BO:67:LYS:O	47:BO:68:GLU:C	2.64	0.41
49:BQ:25:ASP:OD2	58:BZ:78:LYS:HG2	2.21	0.41
49:BQ:69:PHE:CD1	49:BQ:69:PHE:C	2.99	0.41
50:BR:48:VAL:O	50:BR:49:ASP:C	2.63	0.41
52:BT:8:LYS:HA	52:BT:11:GLU:OE1	2.21	0.41
52:BT:19:LEU:HA	52:BT:20:PRO:HD3	1.92	0.41
52:BT:28:VAL:O	52:BT:29:ARG:HG2	2.21	0.41
52:BT:28:VAL:CG2	52:BT:46:GLU:HA	2.50	0.41
52:BT:83:ILE:CG1	52:BT:84:GLN:N	2.83	0.41
53:BU:68:ALA:O	53:BU:71:GLN:HG2	2.19	0.41
53:BU:80:ILE:O	53:BU:84:LYS:HB2	2.21	0.41
53:BU:92:ARG:CB	54:BV:11:GLN:NE2	2.84	0.41
54:BV:38:LEU:H	54:BV:51:VAL:HG13	1.85	0.41
55:BW:25:ARG:NH1	55:BW:25:ARG:HB2	2.36	0.41
55:BW:34:ASN:HD22	55:BW:34:ASN:HA	1.74	0.41
57:BY:13:VAL:O	57:BY:24:VAL:HG13	2.21	0.41
58:BZ:8:TYR:CD1	58:BZ:8:TYR:N	2.88	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:BZ:108:PRO:HD3	58:BZ:141:VAL:HG11	2.03	0.41
1:CA:41:G:H2'	1:CA:42:G:H8	1.86	0.41
1:CA:67:C:H2'	1:CA:68:G:C8	2.55	0.41
1:CA:302:G:O2'	1:CA:556:C:H5"	2.21	0.41
1:CA:637:G:O2'	1:CA:638:G:H5'	2.21	0.41
1:CA:708:C:O2'	1:CA:709:G:H5'	2.21	0.41
1:CA:937:A:C2	1:CA:1379:G:O6	2.73	0.41
1:CA:1015:A:H2'	1:CA:1016:A:H8	1.82	0.41
1:CA:1059:C:O3'	14:CN:45:ARG:NH2	2.54	0.41
1:CA:1134:G:C2	1:CA:1141:C:C2	3.09	0.41
1:CA:1216:G:H2'	1:CA:1217:C:H6	1.85	0.41
1:CA:1323:G:H4'	1:CA:1363:C:N3	2.36	0.41
1:CA:1411:C:O2'	1:CA:1412:C:H5'	2.21	0.41
1:CA:1498:U:H4'	1:CA:1519:A:C2	2.56	0.41
2:CB:28:PHE:O	2:CB:32:ILE:HG22	2.21	0.41
2:CB:88:ALA:HB2	2:CB:219:VAL:CG1	2.51	0.41
3:CC:40:ARG:NH1	3:CC:40:ARG:CG	2.80	0.41
4:CD:61:LYS:HB2	4:CD:203:VAL:HG13	2.01	0.41
4:CD:65:ARG:HD3	4:CD:75:PHE:CD2	2.56	0.41
4:CD:85:LYS:HD3	4:CD:92:VAL:CG1	2.50	0.41
4:CD:106:TYR:C	4:CD:106:TYR:CD1	2.99	0.41
4:CD:189:PRO:HB2	4:CD:190:ASP:H	1.76	0.41
6:CF:15:ASP:O	6:CF:17:SER:N	2.54	0.41
6:CF:24:GLU:C	6:CF:26:ILE:N	2.78	0.41
6:CF:34:GLY:CA	6:CF:71:ARG:HH21	2.34	0.41
6:CF:46:ARG:HH22	18:CR:37:VAL:HG13	1.84	0.41
7:CG:85:TYR:CD2	7:CG:154:TYR:HE2	2.38	0.41
8:CH:4:ASP:O	8:CH:5:PRO:C	2.64	0.41
8:CH:107:LEU:N	8:CH:107:LEU:HD23	2.35	0.41
9:CI:92:TYR:HA	9:CI:95:LYS:HG2	2.03	0.41
10:CJ:54:PHE:O	10:CJ:55:LYS:CB	2.68	0.41
11:CK:126:ARG:C	11:CK:128:ALA:N	2.79	0.41
13:CM:3:ARG:HG2	13:CM:9:ILE:HD11	2.02	0.41
13:CM:13:LYS:HA	13:CM:44:ARG:HH11	1.86	0.41
14:CN:23:ARG:NH1	14:CN:30:ALA:HB2	2.36	0.41
14:CN:60:SER:O	14:CN:61:TRP:HB3	2.21	0.41
15:CO:6:GLU:O	15:CO:7:GLU:C	2.64	0.41
16:CP:21:VAL:HG21	16:CP:59:TRP:CD2	2.56	0.41
19:CS:24:ALA:O	19:CS:25:LYS:CB	2.68	0.41
19:CS:50:ALA:HA	19:CS:59:PRO:HA	2.02	0.41
20:CT:10:LEU:HG	20:CT:12:ALA:H	1.86	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:CT:92:LEU:O	20:CT:94:ALA:N	2.54	0.41
21:CU:5:ASP:O	21:CU:11:GLY:HA3	2.21	0.41
22:CW:63:G:O2'	22:CW:64:A:H5'	2.21	0.41
23:CX:23:G:H2'	23:CX:24:A:C8	2.55	0.41
24:CY:3:G:H2'	24:CY:4:G:O4'	2.20	0.41
24:CY:20:H2U:H61	24:CY:20:H2U:H2'	1.88	0.41
25:CZ:135:MET:CE	25:CZ:150:VAL:HB	2.51	0.41
27:D1:19:GLN:C	27:D1:20:ARG:HG2	2.46	0.41
28:D2:38:GLN:HE21	28:D2:41:ILE:CD1	2.34	0.41
28:D2:52:ASP:C	28:D2:54:LYS:N	2.78	0.41
30:D4:20:ASN:HD22	30:D4:20:ASN:C	2.29	0.41
31:D5:20:ARG:O	31:D5:23:HIS:HB2	2.21	0.41
32:D6:17:LYS:HA	32:D6:17:LYS:CE	2.45	0.41
32:D6:19:ARG:O	32:D6:20:ASN:O	2.39	0.41
36:DA:118:A:C8	36:DA:119:A:C8	3.08	0.41
36:DA:272:G:H1	36:DA:404:C:H42	1.69	0.41
36:DA:289:A:H2'	36:DA:290:G:C8	2.55	0.41
36:DA:313:C:O2'	36:DA:314:A:H5'	2.21	0.41
36:DA:343:C:O2'	36:DA:344:G:H5'	2.21	0.41
36:DA:346:A:H2'	36:DA:347:A:H5'	2.03	0.41
36:DA:593:G:C2	36:DA:665:C:C2	3.09	0.41
36:DA:654(D):G:N1	36:DA:654(O):G:N1	2.69	0.41
36:DA:664:C:H4'	36:DA:940:G:O3'	2.21	0.41
36:DA:738:G:C6	36:DA:739:G:C2	3.08	0.41
36:DA:806:C:C5	48:DP:39:LYS:HE2	2.56	0.41
36:DA:918:A:H4'	37:DB:98:G:N3	2.36	0.41
36:DA:953:A:N1	36:DA:964:C:O2	2.54	0.41
36:DA:1101:U:O2'	36:DA:1102:C:H5'	2.21	0.41
36:DA:1189:A:H2'	36:DA:1190:G:O4'	2.21	0.41
36:DA:1263:U:C4	36:DA:1264:G:C6	3.09	0.41
36:DA:1286:A:N6	36:DA:1289:C:C2	2.89	0.41
36:DA:1332:G:H4'	36:DA:1333:C:OP2	2.21	0.41
36:DA:1509(B):A:H2'	36:DA:1510:G:O4'	2.21	0.41
36:DA:1526:G:C6	36:DA:1527:G:C2	3.09	0.41
36:DA:2012:G:H4'	55:DW:96:ILE:HD11	2.03	0.41
36:DA:2033:A:H4'	36:DA:2034:U:OP1	2.20	0.41
36:DA:2157:G:O2'	36:DA:2158:A:H8	2.04	0.41
36:DA:2186:G:P	36:DA:2187:G:OP1	2.79	0.41
36:DA:2192:G:N3	36:DA:2192:G:H2'	2.35	0.41
36:DA:2282:G:OP1	36:DA:2283:C:H1'	2.20	0.41
36:DA:2415:G:H2'	36:DA:2416:C:H6	1.86	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2465:C:O2'	36:DA:2466:C:H5'	2.21	0.41
36:DA:2492:U:H2'	36:DA:2493:U:C6	2.56	0.41
36:DA:2766:G:H2'	36:DA:2766:G:N3	2.36	0.41
36:DA:2796:U:OP2	36:DA:2799:C:H5	2.04	0.41
36:DA:2823:A:OP1	40:DE:113:PHE:HB2	2.21	0.41
37:DB:95:C:C4	37:DB:96:U:C5	3.09	0.41
37:DB:104:U:O3'	58:DZ:72:ARG:NH1	2.54	0.41
38:DC:77:ILE:HB	38:DC:115:ALA:HB2	2.02	0.41
38:DC:97:GLU:O	38:DC:98:GLU:HB3	2.21	0.41
38:DC:200:LYS:HE3	38:DC:208:PHE:HB2	2.03	0.41
39:DD:17:THR:O	39:DD:211:ARG:NH2	2.54	0.41
40:DE:69:LYS:C	40:DE:71:GLY:H	2.29	0.41
40:DE:146:THR:HA	40:DE:147:PRO:C	2.45	0.41
41:DF:171:PRO:C	41:DF:173:VAL:N	2.79	0.41
42:DG:84:LYS:HD2	42:DG:84:LYS:N	2.29	0.41
42:DG:115:ARG:HH22	42:DG:136:ARG:HB2	1.86	0.41
42:DG:125:PHE:HA	42:DG:131:TYR:HA	2.03	0.41
42:DG:136:ARG:HH11	42:DG:136:ARG:CG	2.34	0.41
43:DH:28:GLY:HA3	43:DH:79:VAL:CG2	2.50	0.41
43:DH:65:HIS:C	43:DH:67:LEU:N	2.78	0.41
43:DH:167:GLU:HB3	43:DH:168:PRO:CD	2.45	0.41
44:DJ:93:UNK:O	44:DJ:97:UNK:N	2.53	0.41
46:DN:34:LEU:C	46:DN:34:LEU:CD1	2.94	0.41
47:DO:22:ILE:HD13	47:DO:22:ILE:HA	1.79	0.41
47:DO:86:ILE:C	47:DO:87:ILE:HD13	2.45	0.41
48:DP:93:GLY:O	48:DP:123:LEU:HD12	2.21	0.41
50:DR:48:VAL:O	50:DR:49:ASP:C	2.64	0.41
51:DS:15:ARG:O	51:DS:18:ILE:CG1	2.67	0.41
51:DS:30:ARG:NH2	51:DS:62:LYS:HB3	2.34	0.41
52:DT:12:SER:O	52:DT:13:ARG:NH2	2.54	0.41
52:DT:12:SER:O	52:DT:13:ARG:CZ	2.69	0.41
52:DT:28:VAL:CG2	52:DT:46:GLU:HA	2.49	0.41
52:DT:109:GLU:HG2	52:DT:112:ARG:CZ	2.51	0.41
53:DU:68:ALA:O	53:DU:71:GLN:HG2	2.21	0.41
53:DU:74:LEU:HD12	53:DU:74:LEU:C	2.46	0.41
53:DU:92:ARG:CB	54:DV:11:GLN:NE2	2.84	0.41
54:DV:18:LEU:HD22	54:DV:96:ILE:HG13	2.02	0.41
54:DV:99:ILE:CD1	54:DV:99:ILE:N	2.73	0.41
56:DX:14:SER:O	56:DX:15:GLU:C	2.63	0.41
57:DY:28:LYS:HE2	57:DY:28:LYS:N	2.36	0.41
57:DY:76:CYS:CB	57:DY:77:PRO:HD2	2.50	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:DZ:48:PHE:CE1	58:DZ:71:VAL:HG21	2.55	0.41
1:AA:266:G:O2'	1:AA:267:C:OP2	2.33	0.41
1:AA:409:G:OP1	4:AD:24:GLU:HB3	2.21	0.41
1:AA:528:C:H41	12:AL:49:ASN:ND2	2.19	0.41
1:AA:723:U:O2'	1:AA:724:G:H5'	2.21	0.41
1:AA:980:C:H6	1:AA:980:C:C5'	2.17	0.41
1:AA:1039:C:H2'	1:AA:1040:U:H5	1.78	0.41
1:AA:1173:G:O2'	1:AA:1174:G:H5'	2.21	0.41
1:AA:1269:A:N1	1:AA:1312:G:O2'	2.53	0.41
1:AA:1288:A:N1	1:AA:1371:G:H1'	2.36	0.41
1:AA:1307:U:H2'	1:AA:1308:U:C6	2.56	0.41
1:AA:1354:C:O2'	1:AA:1355:G:H5'	2.21	0.41
3:AC:53:ALA:HB2	3:AC:115:LEU:HG	2.03	0.41
7:AG:18:TYR:CG	7:AG:59:LEU:HD13	2.56	0.41
9:AI:5:TYR:CD2	9:AI:6:GLY:N	2.89	0.41
11:AK:117:ASN:N	11:AK:117:ASN:HD22	2.17	0.41
12:AL:46:LYS:HB2	12:AL:92:ASP:HA	2.02	0.41
13:AM:108:ARG:HH11	13:AM:108:ARG:HA	1.85	0.41
21:AU:10:ARG:O	21:AU:11:GLY:C	2.64	0.41
22:AV:2:C:O2	22:AV:2:C:H2'	2.21	0.41
23:AX:23:G:H2'	23:AX:24:A:C8	2.56	0.41
25:AZ:69:GLU:CG	25:AZ:70:TYR:N	2.81	0.41
26:B0:55:ARG:HE	26:B0:55:ARG:HB3	1.33	0.41
27:B1:86:SER:O	27:B1:86:SER:OG	2.39	0.41
29:B3:25:ALA:C	29:B3:27:GLY:N	2.79	0.41
36:BA:18:C:H4'	53:BU:23:GLY:O	2.21	0.41
36:BA:26:G:P	55:BW:80:PRO:HB3	2.61	0.41
36:BA:233:A:C2'	36:BA:234:C:H5'	2.51	0.41
36:BA:271(H):G:O2'	36:BA:271(I):G:H8	2.04	0.41
36:BA:323:G:HO2'	36:BA:1205:U:H3	1.68	0.41
36:BA:385:C:O2	48:BP:71:VAL:HG21	2.21	0.41
36:BA:990:A:N6	36:BA:1186:G:H1'	2.36	0.41
36:BA:1467:C:O2'	36:BA:1468:C:H5'	2.21	0.41
36:BA:1638:C:H2'	36:BA:1639:U:O4'	2.21	0.41
36:BA:2008:C:H2'	36:BA:2009:G:H8	1.86	0.41
38:BC:73:ARG:HG3	38:BC:73:ARG:HH11	1.86	0.41
39:BD:8:PRO:C	39:BD:10:THR:H	2.28	0.41
40:BE:137:HIS:CB	40:BE:138:PRO:HD2	2.49	0.41
41:BF:178:PRO:HG2	41:BF:179:GLU:CD	2.45	0.41
44:BJ:24:UNK:O	44:BJ:116:UNK:HA	2.21	0.41
46:BN:32:THR:O	46:BN:34:LEU:N	2.54	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BN:41:ASP:C	53:BU:64:ARG:HH12	2.29	0.41
47:BO:104:ARG:HH21	52:BT:33:LYS:HD3	1.81	0.41
49:BQ:109:VAL:HG12	49:BQ:110:THR:H	1.83	0.41
50:BR:111:LEU:N	50:BR:111:LEU:CD1	2.83	0.41
52:BT:18:ASP:OD1	52:BT:18:ASP:N	2.53	0.41
52:BT:125:ARG:HG2	52:BT:125:ARG:NH1	2.36	0.41
55:BW:95:ILE:HG13	55:BW:95:ILE:O	2.21	0.41
56:BX:45:THR:OG1	56:BX:46:ALA:N	2.53	0.41
57:BY:15:VAL:HG12	57:BY:17:SER:H	1.86	0.41
1:CA:111:G:O6	1:CA:330:C:N4	2.46	0.41
1:CA:560:U:H4'	1:CA:561:U:H5"	2.03	0.41
1:CA:621:A:H2'	1:CA:622:A:O4'	2.21	0.41
1:CA:782:A:C2'	1:CA:783:C:H5'	2.50	0.41
1:CA:1119:C:OP2	9:CI:9:ARG:NH2	2.54	0.41
1:CA:1217:C:O2'	1:CA:1218:C:H5'	2.20	0.41
1:CA:1256:A:C2	1:CA:1277:C:C5	3.09	0.41
1:CA:1498:U:C5	23:CX:20:U:H5'	2.56	0.41
2:CB:48:MET:HA	2:CB:51:LEU:HB2	2.02	0.41
4:CD:17:VAL:O	4:CD:18:LYS:O	2.39	0.41
4:CD:36:ARG:HG2	4:CD:38:TYR:CZ	2.56	0.41
5:CE:118:ILE:HG13	5:CE:119:LEU:N	2.36	0.41
12:CL:46:LYS:HB2	12:CL:92:ASP:HA	2.02	0.41
13:CM:16:ASP:OD1	13:CM:16:ASP:N	2.54	0.41
16:CP:75:ARG:C	16:CP:77:ALA:H	2.29	0.41
20:CT:55:ILE:O	20:CT:58:LYS:HB3	2.20	0.41
20:CT:65:LYS:O	20:CT:68:LYS:HB2	2.21	0.41
22:CV:12:U:H4'	36:DA:1908:C:O2	2.20	0.41
25:CZ:182:MET:SD	25:CZ:188:THR:HB	2.61	0.41
25:CZ:263:ARG:HE	25:CZ:297:GLU:CD	2.28	0.41
25:CZ:274:ARG:O	25:CZ:275:LYS:HD2	2.21	0.41
25:CZ:321:TYR:HD1	25:CZ:367:ASN:ND2	2.19	0.41
28:D2:12:GLU:O	28:D2:16:LEU:HG	2.20	0.41
29:D3:16:PRO:HB2	29:D3:19:GLN:HG3	2.02	0.41
32:D6:14:THR:HB	32:D6:52:VAL:HG21	2.02	0.41
36:DA:82:G:H8	36:DA:82:G:OP2	2.04	0.41
36:DA:269:U:O2	36:DA:269:U:H2'	2.20	0.41
36:DA:284:U:H2'	36:DA:285:C:H6	1.81	0.41
36:DA:627:A:N1	36:DA:636:G:O2'	2.52	0.41
36:DA:654(S):G:N7	36:DA:654(T):C:O2	2.54	0.41
36:DA:691:C:H1'	39:DD:43:ARG:NH1	2.35	0.41
36:DA:806:C:O2'	36:DA:2445:G:H4'	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:869:G:O2'	36:DA:870:A:H5'	2.21	0.41
36:DA:1409:C:O2'	36:DA:1410:G:H5'	2.21	0.41
36:DA:1534:U:O2'	36:DA:1535:A:H5'	2.21	0.41
36:DA:2154:G:N2	36:DA:2155:G:H1'	2.36	0.41
36:DA:2206:G:H21	36:DA:2207:G:H5'	1.77	0.41
36:DA:2533:A:C2'	36:DA:2534:A:H5'	2.51	0.41
36:DA:2750:A:H5"	36:DA:2751:G:OP2	2.22	0.41
37:DB:115:G:O4'	51:DS:47:THR:HB	2.21	0.41
38:DC:149:ILE:O	38:DC:153:ILE:HG13	2.21	0.41
38:DC:182:PRO:O	38:DC:183:GLU:C	2.64	0.41
42:DG:5:VAL:HG12	42:DG:6:ALA:N	2.36	0.41
42:DG:25:TYR:CE2	42:DG:31:VAL:HG23	2.55	0.41
42:DG:70:VAL:O	42:DG:71:THR:C	2.62	0.41
42:DG:90:LEU:HD12	42:DG:90:LEU:HA	1.86	0.41
42:DG:174:GLU:C	42:DG:176:LEU:H	2.28	0.41
43:DH:154:PRO:O	43:DH:155:SER:HB2	2.20	0.41
44:DJ:129:UNK:C	44:DJ:131:UNK:H	2.34	0.41
46:DN:79:PRO:C	46:DN:81:GLY:H	2.29	0.41
48:DP:96:THR:HG22	48:DP:126:VAL:CB	2.48	0.41
48:DP:110:TYR:O	48:DP:111:ARG:O	2.38	0.41
50:DR:117:VAL:HG22	50:DR:118:GLU:N	2.36	0.41
51:DS:34:HIS:HB2	51:DS:36:TYR:CE1	2.54	0.41
51:DS:58:LEU:CG	51:DS:59:LYS:N	2.84	0.41
51:DS:67:ARG:HE	51:DS:98:VAL:HG11	1.86	0.41
54:DV:67:GLY:O	54:DV:88:ARG:HD2	2.21	0.41
56:DX:10:ALA:O	56:DX:28:PHE:CB	2.63	0.41
58:DZ:109:ALA:HB1	58:DZ:145:GLU:OE1	2.19	0.41
58:DZ:140:ASP:O	58:DZ:141:VAL:HG22	2.20	0.41
1:AA:106:C:O2'	1:AA:107:G:H5'	2.21	0.40
1:AA:308:C:H2'	1:AA:309:G:C8	2.57	0.40
1:AA:308:C:H2'	1:AA:309:G:H8	1.85	0.40
1:AA:1246:C:H2'	1:AA:1247:U:H6	1.86	0.40
2:AB:180:LEU:O	2:AB:181:PHE:HB2	2.21	0.40
5:AE:74:GLY:HA3	5:AE:116:THR:OG1	2.21	0.40
6:AF:15:ASP:OD1	6:AF:18:GLN:HG3	2.21	0.40
6:AF:27:GLN:CA	6:AF:27:GLN:NE2	2.83	0.40
8:AH:4:ASP:O	8:AH:5:PRO:C	2.64	0.40
8:AH:91:ARG:O	8:AH:91:ARG:HG2	2.20	0.40
11:AK:126:ARG:O	11:AK:128:ALA:N	2.54	0.40
12:AL:111:LYS:H	12:AL:111:LYS:HD3	1.86	0.40
13:AM:16:ASP:OD1	13:AM:16:ASP:N	2.53	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:AO:3:ILE:HA	15:AO:7:GLU:OE1	2.21	0.40
16:AP:68:ASP:C	16:AP:70:ALA:H	2.28	0.40
16:AP:75:ARG:C	16:AP:77:ALA:H	2.28	0.40
25:AZ:150:VAL:C	25:AZ:152:MET:N	2.79	0.40
25:AZ:151:GLU:CD	25:AZ:172:ARG:HH21	2.29	0.40
25:AZ:196:VAL:O	25:AZ:196:VAL:HG13	2.21	0.40
25:AZ:206:ILE:CG2	25:AZ:207:ASP:N	2.84	0.40
26:B0:53:MET:CG	26:B0:57:PHE:HA	2.51	0.40
27:B1:48:LYS:HG2	27:B1:50:ARG:HH21	1.83	0.40
28:B2:67:LYS:C	28:B2:70:GLN:HG2	2.44	0.40
29:B3:15:TYR:HD2	29:B3:19:GLN:NE2	2.17	0.40
36:BA:64:A:C8	56:BX:66:LEU:HD12	2.56	0.40
36:BA:190:A:H3'	36:BA:204:A:H61	1.86	0.40
36:BA:271(I):G:H2'	36:BA:271(J):C:O4'	2.21	0.40
36:BA:673:C:C2'	36:BA:674:G:H5'	2.52	0.40
36:BA:718:A:H2'	36:BA:719:C:O4'	2.21	0.40
36:BA:743:G:O2'	36:BA:744:G:H5'	2.20	0.40
36:BA:1018:C:O2'	36:BA:1019:U:H5'	2.21	0.40
36:BA:1461:G:C5	36:BA:1462:C:N3	2.89	0.40
36:BA:1509(B):A:H2'	36:BA:1510:G:O4'	2.20	0.40
36:BA:1902:C:OP1	39:BD:242:ARG:NH1	2.53	0.40
37:BB:7:G:O5'	51:BS:29:PHE:CE2	2.74	0.40
38:BC:139:ASN:CG	38:BC:140:PRO:HD2	2.47	0.40
42:BG:23:PHE:O	42:BG:24:GLY:C	2.64	0.40
42:BG:52:ILE:H	42:BG:52:ILE:CD1	2.33	0.40
46:BN:119:ARG:CB	46:BN:119:ARG:HH11	2.34	0.40
47:BO:3:GLN:O	47:BO:4:PRO:C	2.65	0.40
47:BO:12:ASP:C	47:BO:14:THR:N	2.79	0.40
51:BS:11:LYS:C	51:BS:13:ARG:N	2.79	0.40
51:BS:13:ARG:HG3	51:BS:14:VAL:N	2.23	0.40
53:BU:59:ARG:O	53:BU:61:TRP:N	2.55	0.40
54:BV:47:VAL:HG21	54:BV:50:PRO:O	2.21	0.40
57:BY:19:LYS:C	57:BY:20:TYR:CD1	2.99	0.40
58:BZ:68:PRO:HG2	58:BZ:68:PRO:O	2.21	0.40
58:BZ:114:GLY:N	58:BZ:146:ILE:CG2	2.83	0.40
1:CA:413:G:O6	4:CD:35:ARG:HD3	2.21	0.40
1:CA:513:C:H2'	1:CA:514:C:H6	1.86	0.40
1:CA:803:G:C6	1:CA:804:U:C4	3.09	0.40
1:CA:959:A:H2'	1:CA:960:U:C4'	2.51	0.40
1:CA:1137:C:O2'	1:CA:1138:G:N2	2.45	0.40
1:CA:1195:C:H2'	1:CA:1197:G:O4'	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1536:C:C4	1:CA:1537:U:C2	3.09	0.40
2:CB:18:GLY:O	2:CB:19:HIS:HB2	2.20	0.40
3:CC:137:ALA:O	3:CC:141:VAL:HG23	2.20	0.40
4:CD:38:TYR:HB2	4:CD:44:GLY:O	2.21	0.40
6:CF:18:GLN:C	6:CF:20:ALA:N	2.79	0.40
9:CI:4:TYR:CZ	9:CI:88:TYR:CB	3.03	0.40
9:CI:85:LEU:HD11	9:CI:96:LEU:CD2	2.45	0.40
13:CM:65:LYS:HB2	13:CM:69:GLU:HG2	2.02	0.40
13:CM:66:LEU:O	13:CM:67:GLU:C	2.64	0.40
16:CP:28:ARG:HH11	16:CP:28:ARG:HG2	1.86	0.40
16:CP:60:LEU:C	16:CP:62:VAL:H	2.29	0.40
17:CQ:5:VAL:HA	17:CQ:59:ILE:O	2.21	0.40
24:CY:66:C:H2'	24:CY:67:G:C8	2.55	0.40
25:CZ:151:GLU:CD	25:CZ:172:ARG:HH21	2.29	0.40
25:CZ:206:ILE:CG2	25:CZ:207:ASP:N	2.84	0.40
25:CZ:295:ARG:HG2	25:CZ:295:ARG:O	2.21	0.40
26:D0:10:THR:HG21	36:DA:2277:G:OP2	2.21	0.40
26:D0:50:ASN:HD22	26:D0:63:VAL:HG22	1.82	0.40
29:D3:52:HIS:CD2	29:D3:52:HIS:H	2.38	0.40
32:D6:11:LEU:HD13	32:D6:24:GLU:O	2.21	0.40
36:DA:191:A:H2'	36:DA:192:C:H6	1.83	0.40
36:DA:637:A:C6	36:DA:652:C:H4'	2.56	0.40
36:DA:751:A:C6	36:DA:789:A:C5	3.09	0.40
36:DA:1131:G:N7	46:DN:75:TYR:CD2	2.90	0.40
36:DA:2309:A:C2'	36:DA:2310:A:H5"	2.51	0.40
36:DA:2309:A:C2'	36:DA:2310:A:C5'	2.98	0.40
36:DA:2692:C:O2	36:DA:2847:U:O2'	2.39	0.40
36:DA:2873:A:O4'	50:DR:8:ARG:NH2	2.54	0.40
38:DC:78:ALA:CB	38:DC:116:THR:HG23	2.51	0.40
39:DD:76:PRO:HG2	39:DD:98:VAL:HG23	2.00	0.40
39:DD:196:VAL:O	39:DD:196:VAL:HG12	2.21	0.40
40:DE:24:THR:HG23	40:DE:184:VAL:HG22	2.02	0.40
42:DG:135:LEU:O	42:DG:154:GLY:HA3	2.21	0.40
45:DK:86:UNK:O	45:DK:87:UNK:CB	2.69	0.40
49:DQ:21:THR:O	49:DQ:22:LYS:CB	2.66	0.40
49:DQ:64:ILE:CG2	49:DQ:65:PHE:N	2.84	0.40
51:DS:29:PHE:C	51:DS:29:PHE:CD1	2.98	0.40
51:DS:35:ILE:C	51:DS:36:TYR:HD1	2.27	0.40
51:DS:53:SER:C	51:DS:55:ALA:N	2.75	0.40
52:DT:19:LEU:HD13	52:DT:78:LEU:HD23	2.02	0.40
52:DT:26:ASP:OD1	52:DT:26:ASP:O	2.39	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:DT:35:LYS:NZ	52:DT:41:ARG:CD	2.83	0.40
53:DU:70:ARG:NH2	53:DU:75:ASN:HB2	2.36	0.40
53:DU:82:GLY:O	53:DU:83:LEU:C	2.63	0.40
54:DV:19:LYS:CE	54:DV:20:LEU:H	2.34	0.40
54:DV:69:LYS:HB2	54:DV:88:ARG:HD3	2.03	0.40
56:DX:83:VAL:HG12	56:DX:87:GLN:HB2	2.03	0.40
57:DY:26:LYS:HG2	57:DY:27:VAL:N	2.25	0.40
57:DY:81:LYS:HD3	57:DY:97:ARG:NE	2.35	0.40
58:DZ:98:MET:CG	58:DZ:99:TYR:H	2.33	0.40
58:DZ:126:VAL:HB	58:DZ:161:VAL:HG13	2.03	0.40
1:AA:7:G:O2'	5:AE:120:THR:O	2.38	0.40
1:AA:500:G:H2'	1:AA:501:C:C6	2.57	0.40
1:AA:1119:C:OP2	9:AI:9:ARG:NH2	2.53	0.40
1:AA:1134:G:C2'	1:AA:1135:U:H5'	2.51	0.40
1:AA:1276:G:C6	1:AA:1277:C:C4	3.10	0.40
7:AG:23:VAL:O	7:AG:27:ILE:HG13	2.21	0.40
11:AK:23:ALA:O	11:AK:86:GLY:HA3	2.22	0.40
11:AK:48:ILE:HD13	11:AK:48:ILE:HA	1.82	0.40
13:AM:112:GLY:HA2	13:AM:113:PRO:HD2	1.89	0.40
17:AQ:16:GLN:HE21	17:AQ:16:GLN:HB3	1.57	0.40
19:AS:63:THR:HG1	19:AS:65:ASN:H	1.66	0.40
25:AZ:325:LYS:HE3	25:AZ:331:HIS:HB2	2.04	0.40
28:B2:11:GLU:HA	28:B2:14:ARG:HG3	2.03	0.40
29:B3:52:HIS:CD2	29:B3:52:HIS:H	2.39	0.40
32:B6:20:ASN:O	32:B6:21:TYR:CG	2.72	0.40
32:B6:35:GLU:OE1	32:B6:35:GLU:HA	2.21	0.40
34:B8:51:ALA:N	34:B8:53:PRO:HD2	2.36	0.40
36:BA:67:U:H2'	36:BA:68:G:C8	2.54	0.40
36:BA:214:G:O2'	36:BA:215:G:O4'	2.36	0.40
36:BA:271(M):G:H2'	36:BA:271(N):U:H5"	2.03	0.40
36:BA:380:U:H2'	36:BA:381:G:C8	2.55	0.40
36:BA:517:C:H6	36:BA:517:C:O5'	2.04	0.40
36:BA:1332:G:H4'	36:BA:1333:C:OP2	2.22	0.40
36:BA:1367:A:H2'	36:BA:1368:G:H5'	2.03	0.40
36:BA:1469:A:H2'	36:BA:1470:G:O4'	2.21	0.40
36:BA:1682:G:H2'	36:BA:1683:C:C6	2.56	0.40
36:BA:1847:A:N3	36:BA:1847:A:H2'	2.37	0.40
36:BA:2068:U:N3	36:BA:2430:A:C2	2.68	0.40
36:BA:2196:C:H2'	36:BA:2197:U:C6	2.57	0.40
36:BA:2291:U:H2'	36:BA:2292:C:H6	1.84	0.40
36:BA:2465:C:O2'	36:BA:2466:C:H5'	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2578:G:OP2	36:BA:2578:G:H4'	2.21	0.40
36:BA:2688:U:H2'	36:BA:2719:G:N2	2.35	0.40
36:BA:2735:G:H2'	36:BA:2736:G:C8	2.53	0.40
37:BB:81:G:H2'	37:BB:82:G:C5'	2.51	0.40
37:BB:101:G:H2'	37:BB:102:A:O4'	2.21	0.40
38:BC:11:LEU:O	38:BC:11:LEU:HD23	2.20	0.40
38:BC:175:VAL:HG12	38:BC:188:ASN:CB	2.39	0.40
39:BD:13:ARG:HG3	39:BD:13:ARG:HH11	1.86	0.40
39:BD:35:LYS:HB3	39:BD:36:PRO:HD2	2.03	0.40
40:BE:76:ARG:O	40:BE:77:ILE:O	2.39	0.40
41:BF:32:LEU:HD23	41:BF:32:LEU:C	2.47	0.40
42:BG:47:LYS:HG3	42:BG:82:LEU:HD12	2.03	0.40
43:BH:24:VAL:HG11	43:BH:72:ILE:HD12	2.03	0.40
43:BH:37:VAL:HG11	43:BH:68:THR:HG21	2.04	0.40
46:BN:14:VAL:CG2	46:BN:137:LYS:HE3	2.51	0.40
46:BN:125:GLY:HA2	46:BN:126:PRO:O	2.22	0.40
46:BN:130:HIS:O	46:BN:130:HIS:CG	2.74	0.40
48:BP:17:LYS:O	48:BP:19:VAL:N	2.54	0.40
48:BP:71:VAL:N	48:BP:72:PRO:CD	2.85	0.40
48:BP:96:THR:O	48:BP:97:PRO:C	2.64	0.40
48:BP:139:LYS:HG2	48:BP:139:LYS:O	2.22	0.40
51:BS:16:ASN:C	51:BS:18:ILE:H	2.29	0.40
52:BT:12:SER:C	52:BT:13:ARG:NH2	2.79	0.40
52:BT:22:PHE:CD1	52:BT:22:PHE:C	2.99	0.40
53:BU:70:ARG:NH2	53:BU:75:ASN:CB	2.84	0.40
56:BX:39:ILE:O	56:BX:41:ASN:N	2.52	0.40
57:BY:2:ARG:C	57:BY:4:LYS:N	2.79	0.40
57:BY:26:LYS:CG	57:BY:27:VAL:H	2.23	0.40
58:BZ:153:SER:N	58:BZ:167:PRO:HB2	2.36	0.40
1:CA:8:A:C4	4:CD:209:ARG:HB2	2.56	0.40
1:CA:119:A:O2'	1:CA:120:A:OP2	2.30	0.40
1:CA:124:G:H2'	1:CA:125:U:O4'	2.21	0.40
1:CA:355:C:C4	1:CA:356:A:N7	2.89	0.40
1:CA:621:A:O2'	1:CA:622:A:H5'	2.20	0.40
1:CA:1116:C:O2'	1:CA:1117:G:H5"	2.21	0.40
1:CA:1173:G:O2'	1:CA:1174:G:H5'	2.21	0.40
1:CA:1226:C:O2'	13:CM:103:THR:O	2.29	0.40
1:CA:1371:G:O2'	1:CA:1372:U:H5'	2.20	0.40
3:CC:49:SER:O	3:CC:50:ALA:CB	2.64	0.40
4:CD:3:ARG:HH21	4:CD:5:ILE:HG13	1.86	0.40
6:CF:78:GLU:O	6:CF:81:ILE:HG13	2.20	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:CH:83:ILE:HG23	8:CH:83:ILE:O	2.21	0.40
9:CI:20:ARG:O	9:CI:60:ASP:HB2	2.21	0.40
9:CI:58:HIS:C	9:CI:59:PHE:CD1	2.99	0.40
9:CI:98:PRO:HB2	9:CI:99:LEU:HD22	2.03	0.40
10:CJ:50:ILE:HG12	14:CN:41:ARG:HD2	2.03	0.40
10:CJ:97:GLU:OE1	10:CJ:99:LYS:HE2	2.20	0.40
11:CK:89:ALA:O	11:CK:90:GLY:C	2.64	0.40
12:CL:71:PRO:O	12:CL:72:GLY:O	2.39	0.40
12:CL:117:ARG:C	12:CL:119:LYS:N	2.76	0.40
14:CN:12:ARG:NH1	14:CN:12:ARG:CB	2.84	0.40
19:CS:61:TYR:C	19:CS:61:TYR:CD1	2.99	0.40
20:CT:104:LEU:HD23	20:CT:105:SER:N	2.36	0.40
24:CY:77:TRP:NE1	25:CZ:67:HIS:HD2	2.19	0.40
27:D1:58:ILE:HG13	27:D1:59:THR:N	2.35	0.40
27:D1:64:ALA:HA	27:D1:67:ILE:HG13	2.02	0.40
30:D4:5:ILE:N	30:D4:5:ILE:CD1	2.83	0.40
31:D5:16:ARG:O	31:D5:19:ARG:HB3	2.22	0.40
32:D6:15:GLU:HG2	32:D6:15:GLU:O	2.21	0.40
36:DA:271(H):G:O2'	36:DA:271(I):G:H8	2.05	0.40
36:DA:271(Q):G:N3	36:DA:271(R):G:N7	2.69	0.40
36:DA:346:A:C2'	36:DA:347:A:H5'	2.52	0.40
36:DA:605:C:O2	36:DA:605:C:O4'	2.38	0.40
36:DA:723:G:C6	36:DA:724:U:C4	3.09	0.40
36:DA:860:U:O2'	36:DA:861:A:H5'	2.21	0.40
36:DA:861:A:H2'	36:DA:862:G:O4'	2.21	0.40
36:DA:1142:U:H5"	36:DA:1142(A):A:C5'	2.51	0.40
36:DA:1169:G:N2	36:DA:1181:C:C2	2.89	0.40
36:DA:1480:G:C2'	36:DA:1481:U:H5'	2.46	0.40
36:DA:1692:U:H2'	36:DA:1694:C:C5	2.56	0.40
36:DA:2107:C:H1'	36:DA:2182:G:H22	1.86	0.40
36:DA:2206:G:N2	36:DA:2207:G:C4'	2.83	0.40
36:DA:2345:G:N3	36:DA:2381:C:H2'	2.36	0.40
36:DA:2453:A:O2'	36:DA:2454:G:H5'	2.21	0.40
36:DA:2685:G:O2'	36:DA:2726:U:H5	2.03	0.40
37:DB:13:A:H2'	37:DB:14:U:H5"	2.02	0.40
37:DB:79:C:H2'	37:DB:80:U:O4'	2.22	0.40
38:DC:119:VAL:HG13	38:DC:120:MET:CE	2.51	0.40
41:DF:18:ARG:HG2	41:DF:19:GLU:N	2.36	0.40
41:DF:196:LEU:HD23	41:DF:196:LEU:HA	1.90	0.40
42:DG:10:LYS:O	42:DG:14:GLU:HB2	2.21	0.40
42:DG:42:GLY:C	42:DG:43:LEU:HD22	2.46	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DG:46:ALA:CB	42:DG:88:ILE:CG1	2.98	0.40
43:DH:89:ILE:HD11	43:DH:128:PRO:O	2.20	0.40
51:DS:101:LEU:HD12	51:DS:101:LEU:C	2.46	0.40
54:DV:38:LEU:H	54:DV:51:VAL:HG13	1.86	0.40
54:DV:47:VAL:HG12	54:DV:52:VAL:CB	2.47	0.40
1:AA:393:A:H5'	1:AA:483:C:O2'	2.20	0.40
1:AA:414:A:C5	1:AA:431:A:C2	3.09	0.40
1:AA:416:G:C5	1:AA:417:C:C4	3.09	0.40
1:AA:474:G:H2'	1:AA:475:G:H8	1.86	0.40
1:AA:858:G:O2'	1:AA:859:A:H5'	2.22	0.40
1:AA:995:C:HO2'	1:AA:996:A:P	2.45	0.40
1:AA:1044:A:C2'	1:AA:1045:C:O5'	2.70	0.40
1:AA:1444:C:O2'	1:AA:1445:C:H5'	2.21	0.40
1:AA:1511:G:O2'	1:AA:1512:U:H5'	2.21	0.40
3:AC:22:TRP:CH2	3:AC:32:LEU:HB2	2.57	0.40
4:AD:39:PRO:O	4:AD:44:GLY:HA3	2.22	0.40
4:AD:65:ARG:HD3	4:AD:75:PHE:CD2	2.56	0.40
4:AD:98:GLU:C	4:AD:100:ARG:N	2.78	0.40
5:AE:102:ALA:HB1	5:AE:120:THR:HG21	2.03	0.40
5:AE:110:LEU:HD13	5:AE:118:ILE:HG21	2.03	0.40
7:AG:91:VAL:HG23	7:AG:95:ARG:HD3	2.04	0.40
9:AI:29:ASN:ND2	9:AI:65:VAL:O	2.55	0.40
11:AK:126:ARG:C	11:AK:128:ALA:N	2.80	0.40
14:AN:28:GLY:O	14:AN:29:ARG:O	2.39	0.40
15:AO:39:LEU:O	15:AO:42:HIS:HB3	2.21	0.40
16:AP:53:VAL:HG23	16:AP:54:GLU:N	2.26	0.40
16:AP:60:LEU:C	16:AP:62:VAL:H	2.29	0.40
22:AV:18:G:O2'	22:AV:57:G:N2	2.54	0.40
22:AW:37:A:H5'	22:AW:38:A:OP2	2.21	0.40
24:AY:26:A:C2'	24:AY:27:C:H5'	2.51	0.40
25:AZ:126:VAL:HG13	61:AZ:502:KIR:H473	2.02	0.40
25:AZ:193:ASN:O	25:AZ:195:TRP:N	2.46	0.40
25:AZ:321:TYR:HD1	25:AZ:367:ASN:ND2	2.20	0.40
30:B4:6:HIS:HB3	42:BG:67:LYS:HZ2	1.86	0.40
31:B5:42:PRO:O	31:B5:43:HIS:HB2	2.22	0.40
31:B5:55:ARG:C	31:B5:56:LYS:HD3	2.46	0.40
33:B7:6:GLN:O	36:BA:686:G:H1'	2.21	0.40
36:BA:34:C:N4	36:BA:447:A:H61	2.09	0.40
36:BA:127:A:H5"	36:BA:128:C:C6	2.56	0.40
36:BA:225:A:C2'	36:BA:226:G:H5'	2.52	0.40
36:BA:973:A:O4'	36:BA:1188:U:C6	2.75	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1229:G:H3'	36:BA:1230:C:C6	2.56	0.40
36:BA:1472:A:H2'	36:BA:1473:G:H5'	2.04	0.40
36:BA:2287:A:N6	36:BA:2344:U:N3	2.66	0.40
36:BA:2289:G:H1'	36:BA:2346:A:H2	1.87	0.40
36:BA:2526:G:H5'	36:BA:2742:C:O2'	2.21	0.40
36:BA:2642:G:O2'	36:BA:2643:G:H5'	2.21	0.40
36:BA:2701:C:H2'	36:BA:2702:U:H2'	2.02	0.40
38:BC:78:ALA:CB	38:BC:116:THR:HG23	2.51	0.40
39:BD:126:GLN:O	39:BD:127:VAL:C	2.63	0.40
42:BG:10:LYS:HA	42:BG:14:GLU:HG2	2.03	0.40
47:BO:22:ILE:HD13	47:BO:22:ILE:HA	1.77	0.40
48:BP:75:ILE:O	48:BP:76:LYS:C	2.64	0.40
48:BP:96:THR:C	48:BP:97:PRO:O	2.61	0.40
48:BP:121:LYS:HA	48:BP:122:PRO:HD3	1.90	0.40
51:BS:33:LYS:C	51:BS:34:HIS:HD2	2.29	0.40
55:BW:4:LYS:CG	55:BW:5:ALA:H	2.34	0.40
55:BW:4:LYS:CA	55:BW:106:ILE:HG22	2.50	0.40
56:BX:8:ILE:H	56:BX:8:ILE:CD1	2.31	0.40
56:BX:51:VAL:CG1	56:BX:81:VAL:HB	2.52	0.40
57:BY:20:TYR:C	57:BY:22:GLY:N	2.79	0.40
57:BY:28:LYS:HE2	57:BY:28:LYS:N	2.36	0.40
1:CA:551:U:H2'	1:CA:552:U:C6	2.56	0.40
1:CA:1002:G:O2'	1:CA:1003:G:H5'	2.21	0.40
1:CA:1125:U:C5'	1:CA:1126:U:C5	3.02	0.40
1:CA:1330:U:H5'	1:CA:1331:G:P	2.60	0.40
1:CA:1442(A):G:C3'	1:CA:1442(B):A:C5'	2.96	0.40
1:CA:1487:G:C6	1:CA:1488:G:N7	2.90	0.40
4:CD:192:GLU:HA	4:CD:192:GLU:OE1	2.20	0.40
5:CE:64:ARG:CG	5:CE:64:ARG:NH1	2.84	0.40
6:CF:20:ALA:O	6:CF:24:GLU:HB2	2.21	0.40
7:CG:69:VAL:HG13	7:CG:100:ALA:HB1	2.03	0.40
8:CH:48:TYR:CD1	8:CH:48:TYR:C	2.99	0.40
11:CK:57:THR:CG2	11:CK:60:ALA:H	2.28	0.40
12:CL:91:LYS:HB3	12:CL:91:LYS:HZ2	1.87	0.40
12:CL:111:LYS:HD3	12:CL:111:LYS:H	1.87	0.40
13:CM:6:GLY:C	13:CM:8:GLU:N	2.78	0.40
13:CM:108:ARG:N	13:CM:108:ARG:HD2	2.37	0.40
15:CO:4:THR:OG1	15:CO:7:GLU:HG3	2.21	0.40
18:CR:68:LYS:HE2	18:CR:68:LYS:HB2	1.91	0.40
19:CS:5:LEU:C	19:CS:6:LYS:HD2	2.46	0.40
19:CS:16:LEU:N	19:CS:16:LEU:CD1	2.83	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:CW:67:C:H2'	22:CW:68:C:H6	1.84	0.40
25:CZ:404:LEU:HD22	25:CZ:404:LEU:N	2.36	0.40
29:D3:46:ASN:O	29:D3:50:VAL:HG22	2.20	0.40
32:D6:30:THR:HG22	32:D6:31:PRO:HD2	2.04	0.40
35:D9:34:GLN:HB3	35:D9:35:ARG:H	1.71	0.40
36:DA:115:C:O2'	36:DA:116:C:H5'	2.22	0.40
36:DA:653:A:H2'	36:DA:653:A:N3	2.37	0.40
36:DA:654(L):G:N3	36:DA:654(L):G:H3'	2.37	0.40
36:DA:896:A:C8	58:DZ:146:ILE:HD12	2.56	0.40
36:DA:1006:C:C2	36:DA:1138:G:N2	2.90	0.40
36:DA:1131:G:O2'	36:DA:1132:A:H8	2.03	0.40
36:DA:1222:C:H2'	36:DA:1223:G:H5"	2.03	0.40
36:DA:1319:G:C6	36:DA:1320:C:N4	2.89	0.40
36:DA:1639:U:H2'	36:DA:1640:C:C5'	2.47	0.40
36:DA:2127:G:H4'	38:DC:37:PHE:CD1	2.56	0.40
36:DA:2243:U:H2'	36:DA:2244:U:C6	2.56	0.40
36:DA:2533:A:O2'	36:DA:2534:A:H5'	2.22	0.40
36:DA:2712:U:C1'	36:DA:2712(A):A:C8	3.01	0.40
37:DB:15:A:H1'	37:DB:110:G:C5	2.56	0.40
40:DE:68:ALA:C	40:DE:70:ALA:N	2.79	0.40
40:DE:76:ARG:O	40:DE:77:ILE:O	2.39	0.40
43:DH:46:GLU:O	43:DH:48:GLY:N	2.54	0.40
43:DH:115:VAL:O	43:DH:117:PRO:HD3	2.22	0.40
44:DJ:70:UNK:O	44:DJ:71:UNK:C	2.69	0.40
49:DQ:1:MET:HE1	49:DQ:45:GLN:N	2.36	0.40
49:DQ:27:VAL:HG23	49:DQ:137:TYR:CE2	2.56	0.40
49:DQ:42:ILE:HG22	49:DQ:47:ILE:HG13	2.03	0.40
52:DT:34:VAL:HG22	52:DT:39:ARG:HA	2.03	0.40
53:DU:8:VAL:CG1	53:DU:12:ARG:HE	2.34	0.40
53:DU:74:LEU:C	53:DU:74:LEU:CD1	2.94	0.40
55:DW:55:ALA:O	55:DW:57:ASN:N	2.54	0.40
56:DX:27:THR:HG23	56:DX:80:ILE:CB	2.39	0.40
1:AA:294:U:H2'	1:AA:295:C:H6	1.87	0.40
1:AA:773:G:O2'	1:AA:774:G:H5'	2.21	0.40
1:AA:826:C:C2	1:AA:827:U:C5	3.10	0.40
1:AA:955:U:O2'	1:AA:956:U:H5'	2.21	0.40
1:AA:972:C:OP2	10:AJ:57:LYS:HG2	2.22	0.40
1:AA:1251:A:H2'	1:AA:1252:A:C8	2.56	0.40
2:AB:25:ASN:C	2:AB:27:LYS:H	2.30	0.40
2:AB:25:ASN:HD22	2:AB:26:PRO:N	2.16	0.40
2:AB:178:ARG:NH1	2:AB:178:ARG:HG3	2.35	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:35:GLU:O	3:AC:39:ILE:HG13	2.22	0.40
10:AJ:32:ALA:N	10:AJ:78:ASN:HD21	2.17	0.40
10:AJ:51:ARG:H	10:AJ:60:ARG:HA	1.86	0.40
10:AJ:62:HIS:HB2	14:AN:59:ALA:HB3	2.03	0.40
12:AL:89:ARG:H	12:AL:89:ARG:HG3	1.67	0.40
13:AM:77:ASN:O	13:AM:81:LEU:HD23	2.21	0.40
16:AP:44:THR:C	16:AP:45:THR:HG22	2.46	0.40
18:AR:25:THR:HB	18:AR:26:LEU:HD12	2.03	0.40
18:AR:43:PHE:CG	18:AR:66:LEU:HD11	2.56	0.40
22:AV:4:C:C2'	22:AV:5:G:H5"	2.50	0.40
25:AZ:135:MET:O	25:AZ:138:VAL:HG23	2.21	0.40
25:AZ:178:ALA:HB3	25:AZ:199:ILE:HD11	2.04	0.40
25:AZ:266:VAL:HB	25:AZ:291:ARG:NH1	2.36	0.40
26:B0:77:ARG:NH2	36:BA:857:C:H5'	2.37	0.40
27:B1:29:GLY:C	27:B1:30:VAL:HG22	2.46	0.40
28:B2:2:LYS:CE	28:B2:59:ARG:HH22	2.31	0.40
29:B3:49:LYS:HE2	36:BA:850:C:O3'	2.22	0.40
32:B6:13:CYS:HB3	32:B6:49:HIS:HB3	2.03	0.40
36:BA:271(M):G:H2'	36:BA:271(N):U:C5'	2.51	0.40
36:BA:479:A:HO2'	36:BA:481:G:H5'	1.86	0.40
36:BA:671:C:C5	48:BP:36:LYS:NZ	2.90	0.40
36:BA:693:C:H2'	36:BA:694:U:C6	2.57	0.40
36:BA:1625:C:H2'	36:BA:1626:G:H5'	2.03	0.40
36:BA:1750:G:H2'	36:BA:1751:C:H6	1.87	0.40
36:BA:2026:C:N3	36:BA:2027:G:C8	2.89	0.40
36:BA:2147:G:H2'	36:BA:2148:G:C5'	2.51	0.40
36:BA:2186:G:P	36:BA:2187:G:OP1	2.80	0.40
36:BA:2309:A:C2'	36:BA:2310:A:C5'	2.99	0.40
36:BA:2762:G:H2'	36:BA:2763:G:O4'	2.21	0.40
36:BA:2823:A:OP1	40:BE:113:PHE:HB2	2.21	0.40
36:BA:2885:C:H2'	36:BA:2886:G:O5'	2.21	0.40
37:BB:14:U:OP2	37:BB:71:C:H5'	2.21	0.40
39:BD:62:TYR:HA	39:BD:87:ASN:ND2	2.35	0.40
41:BF:122:LYS:NZ	41:BF:152:GLU:OE2	2.55	0.40
49:BQ:27:VAL:HG23	49:BQ:137:TYR:CD2	2.57	0.40
49:BQ:58:PHE:O	49:BQ:58:PHE:CD1	2.75	0.40
52:BT:12:SER:O	52:BT:13:ARG:CZ	2.70	0.40
53:BU:8:VAL:HG11	53:BU:12:ARG:HE	1.87	0.40
58:BZ:99:TYR:HA	58:BZ:124:ILE:O	2.20	0.40
1:CA:221:C:O2'	1:CA:222:U:H5'	2.21	0.40
1:CA:623:C:C4	1:CA:624:C:C4	3.10	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:973:G:OP1	10:CJ:57:LYS:HD3	2.21	0.40
1:CA:1007:C:C2'	1:CA:1008:C:H5'	2.51	0.40
1:CA:1054:C:OP1	1:CA:1197:G:OP1	2.39	0.40
1:CA:1238:A:H2'	1:CA:1239:A:H5'	2.03	0.40
1:CA:1266:G:H2'	1:CA:1268:A:OP2	2.22	0.40
1:CA:1320:C:H42	19:CS:36:ARG:HG3	1.86	0.40
2:CB:21:ARG:HB3	2:CB:39:ILE:HA	2.02	0.40
2:CB:150:SER:C	2:CB:151:GLY:O	2.63	0.40
3:CC:54:ARG:O	3:CC:55:VAL:HG23	2.20	0.40
3:CC:76:VAL:HG21	3:CC:103:VAL:HG11	2.03	0.40
4:CD:7:PRO:HB2	4:CD:10:ARG:HD2	2.03	0.40
4:CD:107:ARG:HG2	4:CD:107:ARG:HH11	1.86	0.40
7:CG:18:TYR:CD2	7:CG:59:LEU:HD13	2.56	0.40
12:CL:60:LEU:HB2	12:CL:64:TYR:O	2.21	0.40
13:CM:19:LEU:O	13:CM:22:ILE:HD13	2.21	0.40
13:CM:82:MET:O	13:CM:83:ASP:C	2.64	0.40
19:CS:29:ARG:HB3	19:CS:47:HIS:HA	2.02	0.40
25:CZ:241:ARG:N	25:CZ:285:ASN:HD22	2.20	0.40
25:CZ:362:VAL:O	25:CZ:362:VAL:HG12	2.21	0.40
27:D1:14:VAL:HG11	27:D1:39:LYS:HE2	2.02	0.40
27:D1:52:ARG:NH2	36:DA:2218:U:C4'	2.85	0.40
28:D2:68:ARG:HG3	28:D2:68:ARG:NH1	2.36	0.40
29:D3:2:PRO:O	29:D3:3:ARG:C	2.64	0.40
36:DA:140:G:C1'	36:DA:141:A:H2	2.33	0.40
36:DA:529:A:H4'	36:DA:530:G:O5'	2.21	0.40
36:DA:743:G:O2'	36:DA:744:G:H5'	2.21	0.40
36:DA:1599:C:OP2	56:DX:36:LYS:HD2	2.20	0.40
36:DA:1661:G:H2'	36:DA:1662:C:H6	1.86	0.40
36:DA:1668:A:H4'	36:DA:1669:A:O5'	2.21	0.40
36:DA:2245:U:C5'	36:DA:2246:G:H5'	2.43	0.40
36:DA:2291:U:H2'	36:DA:2292:C:H6	1.80	0.40
36:DA:2364:C:O2'	36:DA:2365:G:H5'	2.21	0.40
36:DA:2461:C:H2'	36:DA:2462:U:H6	1.85	0.40
36:DA:2472:G:H2'	36:DA:2475:C:H42	1.86	0.40
36:DA:2688:U:H2'	36:DA:2719:G:N2	2.35	0.40
36:DA:2694:G:O2'	36:DA:2695:C:H5'	2.22	0.40
36:DA:2758:A:O2'	36:DA:2759:G:P	2.79	0.40
37:DB:80:U:O2'	37:DB:81:G:H5"	2.22	0.40
40:DE:93:VAL:HG12	40:DE:175:VAL:CG2	2.52	0.40
40:DE:120:TRP:CG	40:DE:155:LYS:HB3	2.57	0.40
41:DF:28:ILE:O	41:DF:28:ILE:HG12	2.22	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DF:178:PRO:C	41:DF:180:GLY:H	2.30	0.40
43:DH:37:VAL:HG11	43:DH:68:THR:HG21	2.03	0.40
49:DQ:5:ARG:CB	49:DQ:5:ARG:NH1	2.84	0.40
50:DR:105:ARG:HE	50:DR:105:ARG:H	1.69	0.40
52:DT:7:ILE:O	52:DT:10:VAL:HB	2.21	0.40
52:DT:133:GLU:O	52:DT:133:GLU:HG2	2.21	0.40
53:DU:83:LEU:HD12	53:DU:83:LEU:N	2.37	0.40
53:DU:109:LEU:HD23	53:DU:109:LEU:HA	1.84	0.40
55:DW:47:VAL:O	55:DW:51:LEU:HB2	2.22	0.40
57:DY:28:LYS:H	57:DY:28:LYS:HE3	1.86	0.40
57:DY:67:LEU:HD23	57:DY:68:HIS:N	2.36	0.40
58:DZ:61:LEU:HA	58:DZ:62:PRO:HD3	1.90	0.40
58:DZ:166:SER:H	58:DZ:167:PRO:CA	2.32	0.40
1:AA:189(H):G:O2'	1:AA:189(I):G:P	2.80	0.40
1:AA:370:C:O2'	1:AA:371:G:H5'	2.21	0.40
1:AA:1378:C:OP1	7:AG:7:ALA:CB	2.70	0.40
3:AC:156:ARG:O	3:AC:157:ILE:C	2.64	0.40
4:AD:88:VAL:HG12	4:AD:90:GLY:N	2.37	0.40
4:AD:192:GLU:OE1	4:AD:192:GLU:HA	2.21	0.40
6:AF:15:ASP:O	6:AF:17:SER:N	2.54	0.40
6:AF:24:GLU:HG2	6:AF:28:ARG:HH12	1.87	0.40
6:AF:55:ASP:C	6:AF:57:GLN:H	2.29	0.40
7:AG:15:ASP:HB3	7:AG:19:GLY:N	2.36	0.40
8:AH:119:LEU:HD12	8:AH:124:ALA:HA	2.03	0.40
12:AL:34:ARG:HG3	12:AL:105:TYR:HE2	1.86	0.40
13:AM:6:GLY:C	13:AM:8:GLU:H	2.29	0.40
20:AT:53:LEU:HB3	20:AT:102:GLY:HA3	2.03	0.40
22:AV:75:C:H2'	22:AV:76:A:H1'	2.03	0.40
24:AY:76:A:O4'	25:AZ:237:VAL:HG11	2.21	0.40
25:AZ:150:VAL:C	25:AZ:152:MET:H	2.29	0.40
25:AZ:210:ILE:HA	25:AZ:211:PRO:HD2	1.94	0.40
27:B1:4:VAL:HB	27:B1:11:ARG:HB3	2.02	0.40
27:B1:43:TYR:O	27:B1:44:PRO:C	2.65	0.40
27:B1:76:ARG:C	27:B1:78:LYS:N	2.79	0.40
28:B2:53:LEU:O	28:B2:56:GLN:HB2	2.21	0.40
34:B8:14:VAL:CG2	34:B8:22:VAL:HG13	2.51	0.40
34:B8:48:PHE:O	34:B8:49:VAL:CG2	2.69	0.40
36:BA:36:G:O2'	36:BA:37:C:H5'	2.22	0.40
36:BA:272(A):U:H6	36:BA:272(A):U:H3'	1.86	0.40
36:BA:376:C:H2'	36:BA:377:C:C6	2.57	0.40
36:BA:428:A:H3'	36:BA:429:A:H8	1.85	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:797:C:C2	36:BA:798:G:C8	3.09	0.40
36:BA:958:U:H5"	49:BQ:14:ARG:HD3	2.02	0.40
36:BA:1106:G:O6	36:BA:1107:G:N2	2.54	0.40
36:BA:1486:A:N6	36:BA:1504:C:H42	2.20	0.40
36:BA:1530:C:H2'	36:BA:1531:C:C6	2.56	0.40
36:BA:2305:A:C2'	36:BA:2306:C:H5"	2.52	0.40
36:BA:2364:C:O2'	36:BA:2365:G:H5'	2.20	0.40
36:BA:2383:G:C2'	36:BA:2384:G:H5'	2.52	0.40
36:BA:2542:A:O2'	36:BA:2543:G:H5'	2.21	0.40
39:BD:97:TYR:O	39:BD:99:ASP:N	2.55	0.40
39:BD:270:ILE:H	39:BD:270:ILE:HG13	1.79	0.40
40:BE:33:VAL:CG1	40:BE:89:ASP:O	2.66	0.40
40:BE:174:ASP:OD1	40:BE:175:VAL:N	2.54	0.40
41:BF:18:ARG:HG2	41:BF:19:GLU:N	2.37	0.40
41:BF:195:ASP:CG	41:BF:196:LEU:N	2.80	0.40
42:BG:52:ILE:HG12	42:BG:54:GLU:N	2.35	0.40
43:BH:51:ARG:HG3	43:BH:52:VAL:N	2.35	0.40
43:BH:59:ARG:O	43:BH:60:ARG:C	2.64	0.40
44:BJ:34:UNK:O	44:BJ:38:UNK:N	2.54	0.40
45:BK:23:UNK:O	45:BK:25:UNK:N	2.55	0.40
46:BN:91:LEU:HA	46:BN:91:LEU:HD23	1.81	0.40
50:BR:30:THR:HG22	50:BR:31:HIS:CE1	2.56	0.40
50:BR:51:LEU:HD12	50:BR:51:LEU:HA	1.90	0.40
52:BT:7:ILE:O	52:BT:10:VAL:HB	2.22	0.40
52:BT:10:VAL:O	52:BT:12:SER:N	2.54	0.40
52:BT:35:LYS:NZ	52:BT:41:ARG:CD	2.84	0.40
53:BU:82:GLY:O	53:BU:84:LYS:N	2.55	0.40
56:BX:80:ILE:O	56:BX:80:ILE:HG12	2.21	0.40
57:BY:40:GLU:HA	57:BY:64:GLU:OE2	2.22	0.40
57:BY:56:PRO:O	57:BY:57:GLN:O	2.39	0.40
58:BZ:11:GLU:C	58:BZ:13:GLU:H	2.30	0.40
1:CA:102:G:H2'	1:CA:103:C:H6	1.86	0.40
1:CA:750:G:N3	15:CO:23:GLY:HA3	2.37	0.40
1:CA:802:A:H3'	1:CA:803:G:H8	1.86	0.40
1:CA:861:G:O2'	1:CA:862:C:H5'	2.22	0.40
1:CA:1266:G:N2	1:CA:1269:A:OP2	2.49	0.40
1:CA:1315:U:O2	1:CA:1360:A:H2	2.04	0.40
1:CA:1327:C:OP1	21:CU:20:LYS:HB3	2.22	0.40
3:CC:35:GLU:O	3:CC:36:ASP:C	2.65	0.40
4:CD:8:VAL:HG11	4:CD:115:ARG:CZ	2.52	0.40
5:CE:50:GLU:HB3	5:CE:52:PRO:HD2	2.03	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:CG:15:ASP:HB3	7:CG:19:GLY:N	2.36	0.40
11:CK:117:ASN:N	11:CK:117:ASN:HD22	2.19	0.40
13:CM:21:TYR:N	13:CM:21:TYR:CD1	2.89	0.40
15:CO:16:ALA:C	15:CO:18:PHE:N	2.79	0.40
17:CQ:59:ILE:CG2	17:CQ:71:PHE:CD2	3.03	0.40
18:CR:25:THR:HB	18:CR:26:LEU:HD12	2.03	0.40
19:CS:36:ARG:H	19:CS:36:ARG:HG2	1.70	0.40
20:CT:74:LYS:C	20:CT:76:ALA:N	2.80	0.40
25:CZ:266:VAL:HB	25:CZ:291:ARG:NH1	2.37	0.40
26:D0:26:TYR:O	26:D0:29:GLN:HG3	2.21	0.40
27:D1:52:ARG:O	27:D1:53:VAL:O	2.40	0.40
28:D2:25:VAL:O	28:D2:28:LYS:HB2	2.21	0.40
28:D2:33:MET:HE3	28:D2:37:PHE:CE1	2.57	0.40
31:D5:33:CYS:C	31:D5:35:GLU:H	2.28	0.40
36:DA:350:U:N3	36:DA:351:G:C2	2.89	0.40
36:DA:350:U:O2'	36:DA:351:G:H5'	2.21	0.40
36:DA:515:A:C8	36:DA:516:C:C5	3.10	0.40
36:DA:531:C:N3	36:DA:563:G:C8	2.90	0.40
36:DA:556:G:H2'	36:DA:557:U:C6	2.57	0.40
36:DA:648:G:O2'	36:DA:649:G:H5'	2.20	0.40
36:DA:954:G:N3	36:DA:2274:A:C2	2.89	0.40
36:DA:1058:G:C8	36:DA:1059:G:H5'	2.57	0.40
36:DA:1108:U:H5'	36:DA:1109:C:OP2	2.22	0.40
36:DA:1140:C:H5"	46:DN:66:LYS:NZ	2.37	0.40
36:DA:1258:C:O2'	36:DA:1259:G:H5'	2.22	0.40
36:DA:1353:A:H2'	36:DA:1354:A:C8	2.56	0.40
36:DA:1429:G:H2'	36:DA:1430:C:C6	2.56	0.40
36:DA:2126:A:HO2'	36:DA:2127:G:P	2.44	0.40
36:DA:2370:G:C6	36:DA:2371:G:C6	3.09	0.40
38:DC:40:THR:HG22	38:DC:177:LYS:NZ	2.36	0.40
39:DD:270:ILE:H	39:DD:270:ILE:HG13	1.79	0.40
40:DE:59:VAL:HG21	40:DE:63:LEU:HA	2.01	0.40
40:DE:98:PRO:HD3	40:DE:175:VAL:CG1	2.52	0.40
41:DF:37:VAL:CG1	41:DF:41:LEU:HD12	2.51	0.40
41:DF:160:ASN:HD21	41:DF:162:LEU:H	1.61	0.40
42:DG:82:LEU:HD22	42:DG:87:PRO:CA	2.52	0.40
42:DG:91:ARG:C	42:DG:91:ARG:CD	2.95	0.40
43:DH:19:VAL:O	43:DH:20:ALA:CB	2.70	0.40
43:DH:24:VAL:HG11	43:DH:72:ILE:HD12	2.03	0.40
43:DH:97:ARG:NH2	43:DH:104:GLU:OE2	2.54	0.40
43:DH:119:GLU:N	43:DH:119:GLU:OE1	2.53	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:DO:2:ILE:HG13	47:DO:8:LEU:HD21	2.04	0.40
47:DO:31:LYS:HB3	47:DO:32:TYR:CD1	2.56	0.40
47:DO:49:ARG:H	47:DO:49:ARG:HD3	1.86	0.40
48:DP:96:THR:O	48:DP:97:PRO:C	2.65	0.40
50:DR:12:ARG:CG	50:DR:12:ARG:HH11	2.34	0.40
52:DT:93:ARG:HH22	52:DT:95:ARG:HD3	1.82	0.40
58:DZ:81:ARG:HB3	58:DZ:81:ARG:HH11	1.85	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	AB	232/256 (91%)	175 (75%)	39 (17%)	18 (8%)	1	4
2	CB	232/256 (91%)	173 (75%)	41 (18%)	18 (8%)	1	4
3	AC	204/239 (85%)	161 (79%)	23 (11%)	20 (10%)	0	3
3	CC	204/239 (85%)	159 (78%)	28 (14%)	17 (8%)	0	4
4	AD	206/209 (99%)	134 (65%)	46 (22%)	26 (13%)	0	1
4	CD	206/209 (99%)	133 (65%)	48 (23%)	25 (12%)	0	1
5	AE	148/162 (91%)	138 (93%)	5 (3%)	5 (3%)	3	16
5	CE	148/162 (91%)	138 (93%)	6 (4%)	4 (3%)	4	20
6	AF	99/101 (98%)	80 (81%)	12 (12%)	7 (7%)	1	5
6	CF	99/101 (98%)	81 (82%)	11 (11%)	7 (7%)	1	5
7	AG	153/156 (98%)	123 (80%)	22 (14%)	8 (5%)	1	10
7	CG	153/156 (98%)	123 (80%)	22 (14%)	8 (5%)	1	10
8	AH	136/138 (99%)	125 (92%)	10 (7%)	1 (1%)	18	49
8	CH	136/138 (99%)	125 (92%)	10 (7%)	1 (1%)	18	49

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
9	AI	125/128 (98%)	85 (68%)	23 (18%)	17 (14%)	0 1
9	CI	125/128 (98%)	84 (67%)	24 (19%)	17 (14%)	0 1
10	AJ	96/105 (91%)	75 (78%)	12 (12%)	9 (9%)	0 3
10	CJ	96/105 (91%)	75 (78%)	12 (12%)	9 (9%)	0 3
11	AK	117/129 (91%)	100 (86%)	10 (8%)	7 (6%)	1 7
11	CK	117/129 (91%)	101 (86%)	9 (8%)	7 (6%)	1 7
12	AL	122/135 (90%)	94 (77%)	15 (12%)	13 (11%)	0 2
12	CL	122/135 (90%)	91 (75%)	18 (15%)	13 (11%)	0 2
13	AM	122/126 (97%)	82 (67%)	26 (21%)	14 (12%)	0 1
13	CM	122/126 (97%)	84 (69%)	24 (20%)	14 (12%)	0 1
14	AN	58/61 (95%)	41 (71%)	6 (10%)	11 (19%)	0 0
14	CN	58/61 (95%)	40 (69%)	7 (12%)	11 (19%)	0 0
15	AO	86/89 (97%)	79 (92%)	7 (8%)	0	100 100
15	CO	86/89 (97%)	79 (92%)	6 (7%)	1 (1%)	10 37
16	AP	81/88 (92%)	52 (64%)	22 (27%)	7 (9%)	0 4
16	CP	81/88 (92%)	52 (64%)	22 (27%)	7 (9%)	0 4
17	AQ	97/105 (92%)	86 (89%)	9 (9%)	2 (2%)	5 25
17	CQ	97/105 (92%)	86 (89%)	9 (9%)	2 (2%)	5 25
18	AR	68/88 (77%)	56 (82%)	11 (16%)	1 (2%)	8 32
18	CR	68/88 (77%)	57 (84%)	10 (15%)	1 (2%)	8 32
19	AS	76/93 (82%)	50 (66%)	16 (21%)	10 (13%)	0 1
19	CS	76/93 (82%)	50 (66%)	16 (21%)	10 (13%)	0 1
20	AT	97/106 (92%)	64 (66%)	24 (25%)	9 (9%)	0 3
20	CT	97/106 (92%)	62 (64%)	26 (27%)	9 (9%)	0 3
21	AU	22/27 (82%)	18 (82%)	3 (14%)	1 (4%)	2 12
21	CU	22/27 (82%)	18 (82%)	3 (14%)	1 (4%)	2 12
25	AZ	381/405 (94%)	269 (71%)	82 (22%)	30 (8%)	1 4
25	CZ	381/405 (94%)	268 (70%)	83 (22%)	30 (8%)	1 4
26	B0	82/85 (96%)	69 (84%)	10 (12%)	3 (4%)	2 15
26	D0	82/85 (96%)	69 (84%)	10 (12%)	3 (4%)	2 15
27	B1	91/98 (93%)	70 (77%)	10 (11%)	11 (12%)	0 1

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
27	D1	91/98 (93%)	71 (78%)	14 (15%)	6 (7%)	1 6
28	B2	69/72 (96%)	40 (58%)	15 (22%)	14 (20%)	0 0
28	D2	69/72 (96%)	44 (64%)	18 (26%)	7 (10%)	0 3
29	B3	57/60 (95%)	47 (82%)	5 (9%)	5 (9%)	0 3
29	D3	57/60 (95%)	47 (82%)	5 (9%)	5 (9%)	0 3
30	B4	42/71 (59%)	20 (48%)	17 (40%)	5 (12%)	0 1
30	D4	42/71 (59%)	20 (48%)	17 (40%)	5 (12%)	0 1
31	B5	57/60 (95%)	39 (68%)	8 (14%)	10 (18%)	0 0
31	D5	57/60 (95%)	39 (68%)	8 (14%)	10 (18%)	0 0
32	B6	48/54 (89%)	24 (50%)	8 (17%)	16 (33%)	0 0
32	D6	48/54 (89%)	24 (50%)	8 (17%)	16 (33%)	0 0
33	B7	46/49 (94%)	42 (91%)	3 (6%)	1 (2%)	5 24
33	D7	46/49 (94%)	42 (91%)	3 (6%)	1 (2%)	5 24
34	B8	61/65 (94%)	34 (56%)	21 (34%)	6 (10%)	0 3
34	D8	61/65 (94%)	34 (56%)	21 (34%)	6 (10%)	0 3
35	B9	35/37 (95%)	25 (71%)	6 (17%)	4 (11%)	0 1
35	D9	35/37 (95%)	24 (69%)	8 (23%)	3 (9%)	0 4
38	BC	226/229 (99%)	170 (75%)	45 (20%)	11 (5%)	1 11
38	DC	226/229 (99%)	171 (76%)	43 (19%)	12 (5%)	1 10
39	BD	273/276 (99%)	219 (80%)	31 (11%)	23 (8%)	0 4
39	DD	273/276 (99%)	217 (80%)	31 (11%)	25 (9%)	0 3
40	BE	202/206 (98%)	134 (66%)	39 (19%)	29 (14%)	0 0
40	DE	202/206 (98%)	134 (66%)	39 (19%)	29 (14%)	0 0
41	BF	205/210 (98%)	148 (72%)	35 (17%)	22 (11%)	0 2
41	DF	205/210 (98%)	149 (73%)	34 (17%)	22 (11%)	0 2
42	BG	179/182 (98%)	118 (66%)	33 (18%)	28 (16%)	0 0
42	DG	179/182 (98%)	119 (66%)	31 (17%)	29 (16%)	0 0
43	BH	157/180 (87%)	93 (59%)	34 (22%)	30 (19%)	0 0
43	DH	157/180 (87%)	94 (60%)	33 (21%)	30 (19%)	0 0
46	BN	136/140 (97%)	93 (68%)	20 (15%)	23 (17%)	0 0
46	DN	136/140 (97%)	93 (68%)	20 (15%)	23 (17%)	0 0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
47	BO	120/122 (98%)	106 (88%)	8 (7%)	6 (5%)	1 11
47	DO	120/122 (98%)	106 (88%)	8 (7%)	6 (5%)	1 11
48	BP	144/150 (96%)	78 (54%)	36 (25%)	30 (21%)	0 0
48	DP	144/150 (96%)	77 (54%)	37 (26%)	30 (21%)	0 0
49	BQ	139/141 (99%)	114 (82%)	20 (14%)	5 (4%)	2 16
49	DQ	139/141 (99%)	114 (82%)	20 (14%)	5 (4%)	2 16
50	BR	115/118 (98%)	83 (72%)	16 (14%)	16 (14%)	0 1
50	DR	115/118 (98%)	83 (72%)	17 (15%)	15 (13%)	0 1
51	BS	96/112 (86%)	50 (52%)	24 (25%)	22 (23%)	0 0
51	DS	96/112 (86%)	49 (51%)	23 (24%)	24 (25%)	0 0
52	BT	135/146 (92%)	82 (61%)	30 (22%)	23 (17%)	0 0
52	DT	135/146 (92%)	82 (61%)	30 (22%)	23 (17%)	0 0
53	BU	115/118 (98%)	83 (72%)	25 (22%)	7 (6%)	1 7
53	DU	115/118 (98%)	83 (72%)	25 (22%)	7 (6%)	1 7
54	BV	99/101 (98%)	61 (62%)	23 (23%)	15 (15%)	0 0
54	DV	99/101 (98%)	62 (63%)	22 (22%)	15 (15%)	0 0
55	BW	111/113 (98%)	87 (78%)	12 (11%)	12 (11%)	0 2
55	DW	111/113 (98%)	85 (77%)	14 (13%)	12 (11%)	0 2
56	BX	90/96 (94%)	64 (71%)	20 (22%)	6 (7%)	1 6
56	DX	90/96 (94%)	65 (72%)	19 (21%)	6 (7%)	1 6
57	BY	98/110 (89%)	41 (42%)	31 (32%)	26 (26%)	0 0
57	DY	98/110 (89%)	43 (44%)	29 (30%)	26 (26%)	0 0
58	BZ	174/206 (84%)	109 (63%)	27 (16%)	38 (22%)	0 0
58	DZ	174/206 (84%)	109 (63%)	47 (27%)	18 (10%)	0 2
All	All	12256/13106 (94%)	8858 (72%)	2104 (17%)	1294 (11%)	0 2

All (1294) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	AB	15	VAL
2	AB	18	GLY
2	AB	190	THR
2	AB	191	ASP
2	AB	230	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	AB	234	PRO
3	AC	15	THR
3	AC	61	ALA
3	AC	82	GLU
3	AC	93	LYS
4	AD	3	ARG
4	AD	18	LYS
4	AD	30	LYS
4	AD	35	ARG
4	AD	125	HIS
4	AD	189	PRO
5	AE	153	LYS
7	AG	7	ALA
7	AG	8	GLU
7	AG	79	ARG
8	AH	83	ILE
9	AI	21	PRO
9	AI	28	VAL
9	AI	54	ASP
9	AI	91	ASP
9	AI	101	PHE
10	AJ	36	GLY
10	AJ	75	ILE
10	AJ	85	LEU
11	AK	89	ALA
11	AK	128	ALA
12	AL	46	LYS
12	AL	71	PRO
12	AL	79	GLU
12	AL	91	LYS
12	AL	122	THR
13	AM	12	ASN
13	AM	67	GLU
13	AM	83	ASP
13	AM	113	PRO
13	AM	117	VAL
14	AN	14	PRO
14	AN	15	LYS
14	AN	16	PHE
14	AN	22	THR
14	AN	29	ARG
14	AN	59	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
14	AN	60	SER
16	AP	26	ARG
16	AP	44	THR
16	AP	45	THR
16	AP	53	VAL
17	AQ	68	ARG
19	AS	28	LYS
19	AS	44	MET
19	AS	67	VAL
19	AS	80	TYR
20	AT	48	LYS
20	AT	73	HIS
20	AT	99	LEU
25	AZ	24	LYS
25	AZ	189	ARG
25	AZ	310	ILE
26	B0	75	LEU
27	B1	53	VAL
27	B1	83	GLU
28	B2	16	LEU
28	B2	63	VAL
28	B2	66	GLU
28	B2	68	ARG
30	B4	26	SER
30	B4	43	TYR
31	B5	4	HIS
31	B5	24	ALA
31	B5	25	LEU
31	B5	37	LYS
31	B5	49	CYS
31	B5	52	TYR
31	B5	57	VAL
32	B6	6	ARG
32	B6	16	CYS
32	B6	18	ARG
32	B6	20	ASN
32	B6	23	THR
32	B6	28	ARG
32	B6	31	PRO
32	B6	33	LYS
32	B6	49	HIS
34	B8	29	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	B8	34	TRP
34	B8	43	GLN
34	B8	49	VAL
35	B9	35	ARG
35	B9	36	GLN
38	BC	98	GLU
39	BD	25	THR
39	BD	34	VAL
39	BD	35	LYS
39	BD	224	ALA
39	BD	239	ARG
39	BD	245	PRO
39	BD	246	PRO
39	BD	267	SER
39	BD	273	ARG
39	BD	275	LYS
40	BE	2	LYS
40	BE	4	ILE
40	BE	56	PRO
40	BE	66	HIS
40	BE	69	LYS
40	BE	75	VAL
40	BE	76	ARG
40	BE	82	ARG
40	BE	185	LYS
40	BE	186	GLY
40	BE	189	PRO
41	BF	10	PRO
41	BF	14	PRO
41	BF	21	ALA
41	BF	26	ALA
41	BF	86	GLY
41	BF	88	VAL
41	BF	89	VAL
41	BF	134	GLY
42	BG	25	TYR
42	BG	43	LEU
42	BG	46	ALA
42	BG	48	GLU
42	BG	49	ASP
42	BG	81	LYS
42	BG	87	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	BG	96	ARG
42	BG	103	LEU
42	BG	115	ARG
42	BG	125	PHE
42	BG	147	ASP
42	BG	176	LEU
43	BH	24	VAL
43	BH	46	GLU
43	BH	55	PRO
43	BH	81	GLU
43	BH	84	SER
43	BH	127	GLU
43	BH	137	ASP
43	BH	138	LYS
43	BH	158	HIS
43	BH	165	ALA
46	BN	19	GLU
46	BN	76	SER
46	BN	130	HIS
47	BO	29	ASN
47	BO	48	PRO
47	BO	68	GLU
48	BP	11	GLY
48	BP	13	ASN
48	BP	17	LYS
48	BP	21	ARG
48	BP	47	ASP
48	BP	56	SER
48	BP	57	THR
48	BP	58	THR
48	BP	61	ARG
48	BP	67	MET
48	BP	110	TYR
48	BP	111	ARG
48	BP	147	LEU
49	BQ	2	LEU
49	BQ	25	ASP
50	BR	4	LEU
50	BR	8	ARG
50	BR	9	LYS
50	BR	11	ASN
50	BR	45	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	BR	88	ARG
50	BR	104	ARG
50	BR	117	VAL
51	BS	23	ARG
51	BS	57	LYS
51	BS	59	LYS
51	BS	76	LYS
51	BS	92	TYR
51	BS	93	LYS
51	BS	94	TYR
51	BS	97	ARG
51	BS	98	VAL
51	BS	103	GLU
52	BT	2	ASN
52	BT	24	PRO
52	BT	27	THR
52	BT	28	VAL
52	BT	30	VAL
52	BT	32	TYR
52	BT	80	SER
52	BT	91	ARG
52	BT	95	ARG
52	BT	107	ASP
53	BU	91	ASP
53	BU	93	LYS
54	BV	16	PRO
54	BV	22	VAL
54	BV	46	VAL
54	BV	79	VAL
55	BW	6	ILE
55	BW	63	ASP
55	BW	110	LYS
56	BX	12	VAL
57	BY	23	ARG
57	BY	42	VAL
57	BY	50	ARG
57	BY	56	PRO
57	BY	57	GLN
57	BY	61	ILE
57	BY	63	LYS
57	BY	74	PRO
57	BY	75	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	BY	77	PRO
57	BY	78	ALA
57	BY	82	PRO
57	BY	90	LEU
58	BZ	30	ASN
58	BZ	34	ASN
58	BZ	50	GLN
58	BZ	78	LYS
58	BZ	80	ARG
58	BZ	81	ARG
58	BZ	96	VAL
58	BZ	97	GLU
58	BZ	111	VAL
58	BZ	113	ALA
58	BZ	120	ILE
58	BZ	136	PHE
58	BZ	140	ASP
58	BZ	146	ILE
58	BZ	152	ALA
58	BZ	163	LEU
58	BZ	166	SER
58	BZ	168	GLU
2	CB	15	VAL
2	CB	18	GLY
2	CB	190	THR
2	CB	191	ASP
2	CB	230	VAL
2	CB	234	PRO
3	CC	15	THR
3	CC	61	ALA
3	CC	82	GLU
3	CC	93	LYS
4	CD	3	ARG
4	CD	18	LYS
4	CD	30	LYS
4	CD	35	ARG
4	CD	125	HIS
4	CD	189	PRO
5	CE	153	LYS
6	CF	36	ARG
7	CG	7	ALA
7	CG	8	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	CG	79	ARG
8	CH	83	ILE
9	CI	21	PRO
9	CI	28	VAL
9	CI	54	ASP
9	CI	91	ASP
9	CI	101	PHE
10	CJ	36	GLY
10	CJ	75	ILE
10	CJ	85	LEU
11	CK	89	ALA
11	CK	128	ALA
12	CL	46	LYS
12	CL	71	PRO
12	CL	79	GLU
12	CL	91	LYS
12	CL	122	THR
13	CM	12	ASN
13	CM	67	GLU
13	CM	83	ASP
13	CM	113	PRO
13	CM	117	VAL
14	CN	14	PRO
14	CN	15	LYS
14	CN	16	PHE
14	CN	22	THR
14	CN	29	ARG
14	CN	59	ALA
14	CN	60	SER
16	CP	26	ARG
16	CP	44	THR
16	CP	45	THR
16	CP	53	VAL
17	CQ	68	ARG
19	CS	28	LYS
19	CS	44	MET
19	CS	67	VAL
19	CS	80	TYR
20	CT	48	LYS
20	CT	73	HIS
20	CT	99	LEU
25	CZ	24	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	CZ	189	ARG
25	CZ	310	ILE
26	D0	75	LEU
27	D1	30	VAL
27	D1	83	GLU
27	D1	85	LEU
28	D2	11	GLU
28	D2	47	ASN
28	D2	48	HIS
28	D2	70	GLN
30	D4	26	SER
30	D4	43	TYR
31	D5	4	HIS
31	D5	24	ALA
31	D5	25	LEU
31	D5	37	LYS
31	D5	49	CYS
31	D5	52	TYR
31	D5	57	VAL
32	D6	6	ARG
32	D6	16	CYS
32	D6	18	ARG
32	D6	20	ASN
32	D6	23	THR
32	D6	28	ARG
32	D6	31	PRO
32	D6	33	LYS
32	D6	49	HIS
34	D8	29	LYS
34	D8	34	TRP
34	D8	43	GLN
34	D8	49	VAL
35	D9	35	ARG
35	D9	36	GLN
38	DC	98	GLU
39	DD	25	THR
39	DD	34	VAL
39	DD	35	LYS
39	DD	224	ALA
39	DD	239	ARG
39	DD	245	PRO
39	DD	246	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	DD	273	ARG
39	DD	275	LYS
40	DE	2	LYS
40	DE	4	ILE
40	DE	66	HIS
40	DE	69	LYS
40	DE	75	VAL
40	DE	76	ARG
40	DE	82	ARG
40	DE	185	LYS
40	DE	186	GLY
40	DE	189	PRO
41	DF	10	PRO
41	DF	14	PRO
41	DF	21	ALA
41	DF	26	ALA
41	DF	86	GLY
41	DF	88	VAL
41	DF	89	VAL
41	DF	134	GLY
42	DG	11	TYR
42	DG	28	VAL
42	DG	68	PRO
42	DG	81	LYS
42	DG	82	LEU
42	DG	84	LYS
42	DG	86	MET
42	DG	114	ILE
42	DG	115	ARG
42	DG	117	PHE
42	DG	126	ASP
42	DG	129	GLY
43	DH	24	VAL
43	DH	46	GLU
43	DH	55	PRO
43	DH	81	GLU
43	DH	84	SER
43	DH	127	GLU
43	DH	137	ASP
43	DH	138	LYS
43	DH	158	HIS
43	DH	165	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	DN	19	GLU
46	DN	76	SER
46	DN	130	HIS
47	DO	29	ASN
47	DO	48	PRO
47	DO	68	GLU
48	DP	11	GLY
48	DP	13	ASN
48	DP	17	LYS
48	DP	21	ARG
48	DP	47	ASP
48	DP	57	THR
48	DP	58	THR
48	DP	61	ARG
48	DP	67	MET
48	DP	110	TYR
48	DP	111	ARG
48	DP	147	LEU
49	DQ	25	ASP
50	DR	4	LEU
50	DR	8	ARG
50	DR	9	LYS
50	DR	11	ASN
50	DR	45	ARG
50	DR	88	ARG
50	DR	103	ARG
50	DR	104	ARG
50	DR	117	VAL
51	DS	23	ARG
51	DS	57	LYS
51	DS	59	LYS
51	DS	76	LYS
51	DS	92	TYR
51	DS	93	LYS
51	DS	94	TYR
51	DS	97	ARG
51	DS	98	VAL
51	DS	103	GLU
52	DT	2	ASN
52	DT	24	PRO
52	DT	27	THR
52	DT	28	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
52	DT	30	VAL
52	DT	32	TYR
52	DT	80	SER
52	DT	91	ARG
52	DT	95	ARG
52	DT	107	ASP
53	DU	91	ASP
53	DU	93	LYS
54	DV	16	PRO
54	DV	22	VAL
54	DV	46	VAL
54	DV	79	VAL
55	DW	6	ILE
55	DW	63	ASP
55	DW	110	LYS
56	DX	12	VAL
56	DX	41	ASN
57	DY	23	ARG
57	DY	42	VAL
57	DY	50	ARG
57	DY	56	PRO
57	DY	57	GLN
57	DY	61	ILE
57	DY	63	LYS
57	DY	74	PRO
57	DY	75	ILE
57	DY	77	PRO
57	DY	78	ALA
57	DY	82	PRO
57	DY	90	LEU
58	DZ	14	LYS
58	DZ	124	ILE
58	DZ	163	LEU
58	DZ	168	GLU
2	AB	20	GLU
2	AB	237	ALA
3	AC	47	LEU
3	AC	51	GLY
3	AC	96	GLY
3	AC	107	GLN
3	AC	130	VAL
3	AC	146	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	AD	27	TYR
4	AD	44	GLY
4	AD	70	ILE
4	AD	110	PHE
4	AD	129	ASN
4	AD	153	ARG
6	AF	16	GLN
6	AF	36	ARG
6	AF	39	LYS
6	AF	40	VAL
6	AF	42	GLU
7	AG	146	GLU
9	AI	34	ASN
9	AI	41	VAL
9	AI	44	VAL
9	AI	56	LEU
9	AI	89	ASN
9	AI	100	GLY
10	AJ	32	ALA
10	AJ	59	SER
10	AJ	86	MET
12	AL	18	VAL
12	AL	72	GLY
13	AM	4	ILE
13	AM	116	THR
14	AN	4	LYS
16	AP	47	ASP
16	AP	81	ARG
17	AQ	95	TYR
19	AS	5	LEU
19	AS	26	GLY
19	AS	30	LEU
19	AS	46	GLY
25	AZ	21	ASP
25	AZ	110	ASP
25	AZ	141	VAL
25	AZ	221	PHE
25	AZ	274	ARG
25	AZ	323	LEU
25	AZ	329	GLY
25	AZ	331	HIS
26	B0	13	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	B0	74	ARG
27	B1	30	VAL
27	B1	31	GLY
27	B1	78	LYS
28	B2	9	GLN
28	B2	37	PHE
28	B2	41	ILE
28	B2	47	ASN
28	B2	65	ASN
29	B3	30	ARG
30	B4	44	THR
31	B5	51	TYR
32	B6	9	LEU
32	B6	17	LYS
32	B6	44	ARG
33	B7	17	GLY
34	B8	31	HIS
34	B8	33	ASN
35	B9	11	CYS
38	BC	67	GLY
38	BC	118	ASP
38	BC	128	GLY
38	BC	160	ARG
39	BD	37	LEU
39	BD	41	GLY
39	BD	42	GLY
39	BD	58	HIS
39	BD	127	VAL
39	BD	268	ARG
40	BE	29	GLY
40	BE	45	THR
40	BE	46	ALA
40	BE	71	GLY
40	BE	77	ILE
40	BE	124	GLY
40	BE	190	GLY
40	BE	197	ILE
41	BF	7	TYR
41	BF	85	GLY
41	BF	117	ARG
41	BF	126	VAL
41	BF	132	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	BG	9	ARG
42	BG	10	LYS
42	BG	21	ARG
42	BG	80	PHE
42	BG	82	LEU
42	BG	155	MET
43	BH	18	GLU
43	BH	43	VAL
43	BH	47	GLU
43	BH	49	VAL
43	BH	52	VAL
43	BH	160	LYS
46	BN	8	GLN
46	BN	36	GLY
46	BN	37	LYS
46	BN	57	ALA
46	BN	58	ASP
47	BO	5	GLN
47	BO	49	ARG
48	BP	9	ASN
48	BP	20	GLY
48	BP	25	SER
48	BP	31	ALA
48	BP	34	GLY
48	BP	52	GLU
48	BP	62	LEU
48	BP	65	ARG
48	BP	70	GLN
49	BQ	62	GLY
49	BQ	135	ASP
50	BR	5	LYS
50	BR	6	SER
50	BR	14	SER
50	BR	58	GLY
50	BR	103	ARG
51	BS	17	ARG
51	BS	80	LEU
51	BS	88	ASP
51	BS	102	ALA
52	BT	4	GLY
52	BT	17	THR
52	BT	41	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
52	BT	55	ASN
52	BT	92	GLY
52	BT	93	ARG
52	BT	135	ALA
53	BU	9	VAL
53	BU	90	VAL
54	BV	18	LEU
54	BV	53	GLU
55	BW	40	ASN
56	BX	19	ALA
56	BX	41	ASN
56	BX	53	LYS
57	BY	3	VAL
57	BY	69	ALA
57	BY	81	LYS
58	BZ	13	GLU
58	BZ	27	VAL
58	BZ	124	ILE
58	BZ	158	PRO
58	BZ	161	VAL
2	CB	20	GLU
2	CB	237	ALA
3	CC	12	LEU
3	CC	47	LEU
3	CC	51	GLY
3	CC	96	GLY
3	CC	130	VAL
3	CC	146	ALA
3	CC	160	ALA
4	CD	27	TYR
4	CD	44	GLY
4	CD	70	ILE
4	CD	110	PHE
4	CD	129	ASN
4	CD	153	ARG
6	CF	16	GLN
6	CF	39	LYS
6	CF	40	VAL
6	CF	42	GLU
7	CG	146	GLU
9	CI	34	ASN
9	CI	41	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	CI	44	VAL
9	CI	56	LEU
9	CI	89	ASN
9	CI	100	GLY
10	CJ	32	ALA
10	CJ	59	SER
10	CJ	86	MET
12	CL	18	VAL
12	CL	72	GLY
13	CM	4	ILE
13	CM	116	THR
14	CN	4	LYS
16	CP	47	ASP
16	CP	81	ARG
17	CQ	95	TYR
19	CS	5	LEU
19	CS	26	GLY
19	CS	30	LEU
19	CS	46	GLY
25	CZ	21	ASP
25	CZ	110	ASP
25	CZ	141	VAL
25	CZ	221	PHE
25	CZ	274	ARG
25	CZ	323	LEU
25	CZ	329	GLY
25	CZ	331	HIS
25	CZ	379	ALA
26	D0	13	GLY
26	D0	74	ARG
27	D1	28	GLY
27	D1	53	VAL
27	D1	91	LYS
29	D3	30	ARG
30	D4	44	THR
31	D5	51	TYR
32	D6	9	LEU
32	D6	17	LYS
32	D6	44	ARG
33	D7	17	GLY
34	D8	31	HIS
34	D8	33	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	D9	11	CYS
38	DC	67	GLY
38	DC	118	ASP
38	DC	128	GLY
38	DC	160	ARG
39	DD	37	LEU
39	DD	41	GLY
39	DD	42	GLY
39	DD	58	HIS
39	DD	127	VAL
39	DD	267	SER
39	DD	268	ARG
40	DE	29	GLY
40	DE	45	THR
40	DE	46	ALA
40	DE	56	PRO
40	DE	71	GLY
40	DE	77	ILE
40	DE	124	GLY
40	DE	190	GLY
40	DE	197	ILE
41	DF	7	TYR
41	DF	85	GLY
41	DF	117	ARG
41	DF	126	VAL
41	DF	132	VAL
42	DG	14	GLU
42	DG	29	TRP
42	DG	53	LEU
42	DG	75	LYS
42	DG	80	PHE
42	DG	87	PRO
42	DG	96	ARG
42	DG	97	ASP
43	DH	18	GLU
43	DH	43	VAL
43	DH	47	GLU
43	DH	49	VAL
43	DH	52	VAL
43	DH	160	LYS
46	DN	8	GLN
46	DN	9	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	DN	36	GLY
46	DN	37	LYS
46	DN	57	ALA
46	DN	58	ASP
47	DO	5	GLN
47	DO	49	ARG
48	DP	9	ASN
48	DP	20	GLY
48	DP	25	SER
48	DP	31	ALA
48	DP	34	GLY
48	DP	56	SER
48	DP	62	LEU
48	DP	65	ARG
48	DP	70	GLN
49	DQ	2	LEU
49	DQ	62	GLY
49	DQ	135	ASP
50	DR	5	LYS
50	DR	6	SER
50	DR	14	SER
50	DR	58	GLY
51	DS	17	ARG
51	DS	80	LEU
51	DS	88	ASP
51	DS	102	ALA
52	DT	4	GLY
52	DT	17	THR
52	DT	41	ARG
52	DT	55	ASN
52	DT	92	GLY
52	DT	93	ARG
52	DT	135	ALA
53	DU	9	VAL
53	DU	90	VAL
54	DV	18	LEU
54	DV	53	GLU
56	DX	13	LEU
56	DX	19	ALA
56	DX	53	LYS
57	DY	3	VAL
57	DY	69	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DY	81	LYS
58	DZ	152	ALA
58	DZ	166	SER
58	DZ	177	PRO
2	AB	26	PRO
2	AB	238	LEU
3	AC	12	LEU
3	AC	95	THR
3	AC	160	ALA
3	AC	168	ALA
4	AD	4	TYR
4	AD	102	ASP
4	AD	137	SER
5	AE	8	GLU
6	AF	54	LYS
6	AF	62	TRP
7	AG	52	GLU
7	AG	137	LYS
7	AG	145	ALA
7	AG	155	ARG
9	AI	90	PRO
9	AI	120	ARG
12	AL	47	LYS
12	AL	115	LYS
12	AL	127	GLU
13	AM	5	ALA
13	AM	21	TYR
13	AM	60	VAL
13	AM	85	GLY
13	AM	120	LYS
14	AN	3	ARG
14	AN	20	ALA
18	AR	87	ARG
19	AS	14	HIS
20	AT	75	ASN
20	AT	96	GLY
20	AT	97	ALA
21	AU	3	LYS
25	AZ	94	THR
25	AZ	169	PRO
25	AZ	186	PRO
25	AZ	258	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	AZ	326	GLU
25	AZ	379	ALA
25	AZ	381	GLU
25	AZ	404	LEU
27	B1	80	LEU
27	B1	92	LYS
28	B2	58	ALA
29	B3	3	ARG
38	BC	79	LYS
38	BC	82	LYS
38	BC	117	PRO
38	BC	127	LEU
39	BD	24	ILE
39	BD	36	PRO
40	BE	62	PRO
40	BE	72	VAL
40	BE	169	ASN
41	BF	25	PRO
41	BF	83	PHE
41	BF	133	ASN
41	BF	142	TRP
41	BF	168	ARG
41	BF	178	PRO
42	BG	53	LEU
42	BG	84	LYS
42	BG	86	MET
42	BG	97	ASP
42	BG	138	GLN
43	BH	20	ALA
43	BH	77	LYS
43	BH	129	THR
43	BH	154	PRO
43	BH	156	ALA
43	BH	167	GLU
46	BN	7	LYS
46	BN	9	VAL
46	BN	33	LEU
46	BN	42	TRP
46	BN	47	ALA
46	BN	135	PRO
48	BP	36	LYS
48	BP	107	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
48	BP	149	GLU
50	BR	3	HIS
51	BS	13	ARG
51	BS	14	VAL
51	BS	22	GLY
51	BS	53	SER
52	BT	12	SER
52	BT	29	ARG
52	BT	98	LYS
52	BT	111	ARG
53	BU	60	LEU
54	BV	2	PHE
54	BV	36	PRO
54	BV	50	PRO
54	BV	56	SER
54	BV	100	ARG
55	BW	18	ARG
55	BW	56	ALA
55	BW	60	ASN
56	BX	13	LEU
57	BY	66	PRO
57	BY	92	ASN
58	BZ	41	LEU
58	BZ	66	SER
58	BZ	148	ASP
58	BZ	151	HIS
58	BZ	156	LYS
58	BZ	177	PRO
2	CB	26	PRO
2	CB	238	LEU
3	CC	95	THR
3	CC	107	GLN
3	CC	168	ALA
4	CD	4	TYR
4	CD	137	SER
5	CE	8	GLU
5	CE	37	ARG
6	CF	54	LYS
6	CF	62	TRP
7	CG	52	GLU
7	CG	137	LYS
7	CG	155	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	CI	90	PRO
9	CI	120	ARG
12	CL	47	LYS
12	CL	115	LYS
12	CL	127	GLU
13	CM	5	ALA
13	CM	21	TYR
13	CM	85	GLY
13	CM	120	LYS
14	CN	3	ARG
14	CN	20	ALA
18	CR	87	ARG
19	CS	14	HIS
20	CT	75	ASN
20	CT	96	GLY
20	CT	97	ALA
21	CU	3	LYS
25	CZ	94	THR
25	CZ	169	PRO
25	CZ	186	PRO
25	CZ	258	LEU
25	CZ	326	GLU
25	CZ	381	GLU
25	CZ	404	LEU
29	D3	3	ARG
38	DC	79	LYS
38	DC	82	LYS
38	DC	117	PRO
38	DC	127	LEU
39	DD	24	ILE
39	DD	202	LYS
39	DD	225	ALA
40	DE	62	PRO
40	DE	72	VAL
40	DE	169	ASN
41	DF	25	PRO
41	DF	82	ILE
41	DF	83	PHE
41	DF	133	ASN
41	DF	142	TRP
41	DF	178	PRO
42	DG	49	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	DG	116	ASP
42	DG	151	ALA
43	DH	20	ALA
43	DH	76	VAL
43	DH	77	LYS
43	DH	129	THR
43	DH	154	PRO
43	DH	156	ALA
43	DH	167	GLU
46	DN	7	LYS
46	DN	42	TRP
46	DN	47	ALA
46	DN	135	PRO
48	DP	35	HIS
48	DP	36	LYS
48	DP	52	GLU
48	DP	107	LYS
48	DP	149	GLU
50	DR	3	HIS
51	DS	13	ARG
51	DS	14	VAL
51	DS	22	GLY
51	DS	53	SER
52	DT	12	SER
52	DT	29	ARG
52	DT	111	ARG
53	DU	83	LEU
54	DV	2	PHE
54	DV	36	PRO
54	DV	50	PRO
54	DV	56	SER
54	DV	100	ARG
55	DW	18	ARG
55	DW	25	ARG
55	DW	36	LEU
55	DW	40	ASN
55	DW	60	ASN
57	DY	27	VAL
57	DY	66	PRO
57	DY	92	ASN
58	DZ	112	ARG
2	AB	95	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	AB	225	ALA
4	AD	32	ALA
4	AD	40	PRO
4	AD	107	ARG
4	AD	159	ARG
9	AI	55	ALA
9	AI	92	TYR
10	AJ	27	ALA
11	AK	127	LYS
12	AL	48	PRO
12	AL	51	ALA
13	AM	114	ARG
19	AS	45	VAL
20	AT	93	GLU
20	AT	95	ALA
25	AZ	22	HIS
25	AZ	95	GLY
25	AZ	130	TYR
25	AZ	139	ASP
25	AZ	292	GLY
27	B1	57	GLU
27	B1	86	SER
28	B2	14	ARG
28	B2	38	GLN
29	B3	29	ARG
30	B4	28	LYS
30	B4	40	HIS
31	B5	53	ALA
31	B5	56	LYS
32	B6	52	VAL
38	BC	104	LEU
39	BD	3	VAL
39	BD	225	ALA
39	BD	244	ARG
41	BF	6	VAL
41	BF	82	ILE
42	BG	126	ASP
42	BG	144	ILE
42	BG	174	GLU
43	BH	76	VAL
43	BH	152	ARG
46	BN	40	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	BN	77	GLY
46	BN	127	ASP
46	BN	129	PRO
47	BO	13	ASN
48	BP	23	PRO
48	BP	35	HIS
48	BP	43	GLY
48	BP	148	LEU
50	BR	102	GLU
51	BS	104	GLY
52	BT	36	GLU
55	BW	25	ARG
55	BW	36	LEU
55	BW	72	LYS
56	BX	46	ALA
57	BY	27	VAL
57	BY	39	VAL
57	BY	64	GLU
58	BZ	150	LEU
2	CB	95	GLN
2	CB	225	ALA
4	CD	32	ALA
4	CD	40	PRO
4	CD	102	ASP
4	CD	107	ARG
4	CD	159	ARG
7	CG	145	ALA
9	CI	11	LYS
9	CI	55	ALA
9	CI	92	TYR
10	CJ	27	ALA
11	CK	127	LYS
12	CL	48	PRO
13	CM	60	VAL
13	CM	114	ARG
19	CS	45	VAL
20	CT	95	ALA
25	CZ	22	HIS
25	CZ	130	TYR
25	CZ	139	ASP
28	D2	14	ARG
28	D2	21	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	D3	29	ARG
30	D4	28	LYS
30	D4	40	HIS
31	D5	53	ALA
31	D5	56	LYS
32	D6	52	VAL
38	DC	104	LEU
39	DD	3	VAL
39	DD	36	PRO
39	DD	244	ARG
40	DE	116	VAL
41	DF	6	VAL
41	DF	168	ARG
42	DG	43	LEU
42	DG	128	ARG
42	DG	181	ARG
43	DH	41	MET
43	DH	152	ARG
46	DN	4	TYR
46	DN	33	LEU
46	DN	40	PRO
46	DN	77	GLY
46	DN	127	ASP
46	DN	129	PRO
47	DO	13	ASN
48	DP	43	GLY
48	DP	148	LEU
50	DR	102	GLU
51	DS	104	GLY
52	DT	36	GLU
52	DT	98	LYS
52	DT	131	ALA
55	DW	56	ALA
55	DW	72	LYS
57	DY	39	VAL
57	DY	64	GLU
58	DZ	16	SER
58	DZ	24	LEU
58	DZ	61	LEU
58	DZ	151	HIS
2	AB	232	PRO
2	AB	239	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	AC	26	LYS
3	AC	131	ARG
4	AD	5	ILE
4	AD	168	ARG
5	AE	37	ARG
9	AI	11	LYS
10	AJ	90	LEU
11	AK	27	ASN
11	AK	35	PRO
11	AK	91	ARG
12	AL	40	VAL
13	AM	124	PRO
16	AP	43	LYS
25	AZ	23	GLY
25	AZ	109	ALA
25	AZ	128	VAL
25	AZ	211	PRO
27	B1	69	LYS
27	B1	91	LYS
28	B2	44	LEU
29	B3	2	PRO
32	B6	15	GLU
32	B6	27	LYS
39	BD	242	ARG
40	BE	55	ASN
40	BE	61	ARG
40	BE	116	VAL
40	BE	119	ARG
41	BF	58	ALA
42	BG	90	LEU
43	BH	41	MET
46	BN	4	TYR
46	BN	133	GLN
51	BS	24	LEU
51	BS	89	ARG
52	BT	131	ALA
53	BU	83	LEU
55	BW	93	ALA
57	BY	26	LYS
57	BY	53	PRO
57	BY	65	ALA
58	BZ	46	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	BZ	51	ALA
2	CB	232	PRO
2	CB	239	VAL
3	CC	26	LYS
3	CC	83	ARG
4	CD	5	ILE
4	CD	168	ARG
10	CJ	90	LEU
11	CK	27	ASN
11	CK	35	PRO
11	CK	91	ARG
12	CL	51	ALA
13	CM	124	PRO
14	CN	19	ARG
15	CO	88	ARG
16	CP	43	LYS
20	CT	63	ILE
20	CT	93	GLU
25	CZ	23	GLY
25	CZ	95	GLY
25	CZ	109	ALA
25	CZ	128	VAL
25	CZ	211	PRO
25	CZ	292	GLY
28	D2	64	LEU
29	D3	2	PRO
32	D6	15	GLU
32	D6	27	LYS
38	DC	37	PHE
39	DD	242	ARG
40	DE	55	ASN
40	DE	61	ARG
40	DE	119	ARG
43	DH	58	GLU
46	DN	12	ARG
46	DN	133	GLN
48	DP	23	PRO
51	DS	24	LEU
51	DS	87	PHE
51	DS	89	ARG
51	DS	90	GLY
51	DS	105	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	DU	60	LEU
55	DW	35	ILE
55	DW	93	ALA
56	DX	46	ALA
57	DY	53	PRO
57	DY	65	ALA
58	DZ	30	ASN
58	DZ	139	VAL
2	AB	165	VAL
3	AC	3	ASN
3	AC	29	TYR
3	AC	66	VAL
3	AC	83	ARG
4	AD	128	VAL
14	AN	19	ARG
20	AT	63	ILE
25	AZ	368	VAL
39	BD	28	GLU
43	BH	21	PRO
43	BH	44	VAL
43	BH	58	GLU
46	BN	5	VAL
46	BN	12	ARG
51	BS	90	GLY
53	BU	11	ARG
54	BV	37	VAL
55	BW	35	ILE
2	CB	165	VAL
11	CK	90	GLY
12	CL	40	VAL
25	CZ	368	VAL
39	DD	28	GLU
41	DF	58	ALA
42	DG	67	LYS
42	DG	71	THR
43	DH	44	VAL
46	DN	5	VAL
53	DU	11	ARG
54	DV	23	GLU
54	DV	37	VAL
57	DY	26	LYS
4	AD	39	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	AJ	91	PRO
43	BH	107	VAL
48	BP	19	VAL
57	BY	31	LEU
58	BZ	130	PRO
58	BZ	147	GLY
3	CC	66	VAL
4	CD	128	VAL
10	CJ	91	PRO
39	DD	234	GLY
40	DE	98	PRO
43	DH	21	PRO
43	DH	107	VAL
49	DQ	27	VAL
57	DY	31	LEU
58	DZ	146	ILE
2	AB	127	ILE
4	AD	92	VAL
5	AE	67	VAL
11	AK	90	GLY
29	B3	27	GLY
43	BH	45	VAL
46	BN	46	VAL
49	BQ	27	VAL
54	BV	54	GLY
58	BZ	12	GLY
58	BZ	143	GLY
29	D3	27	GLY
46	DN	46	VAL
48	DP	19	VAL
54	DV	54	GLY
58	DZ	111	VAL
2	AB	130	ARG
4	AD	172	PRO
25	AZ	191	GLY
32	B6	41	PRO
40	BE	98	PRO
40	BE	130	GLY
54	BV	48	GLY
57	BY	76	CYS
2	CB	127	ILE
2	CB	130	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	CD	172	PRO
5	CE	67	VAL
25	CZ	191	GLY
40	DE	53	PRO
42	DG	85	GLY
43	DH	45	VAL
54	DV	35	LEU
57	DY	76	CYS
58	DZ	12	GLY
58	DZ	141	VAL
5	AE	70	PRO
28	B2	42	GLY
35	B9	10	ILE
38	BC	119	VAL
40	BE	53	PRO
50	BR	46	GLY
58	BZ	14	LYS
58	BZ	139	VAL
4	CD	37	PRO
4	CD	39	PRO
9	CI	57	GLY
32	D6	41	PRO
38	DC	119	VAL
40	DE	130	GLY
2	AB	131	PRO
4	AD	37	PRO
9	AI	57	GLY
54	BV	35	LEU
2	CB	131	PRO

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
2	AB	202/220 (92%)	177 (88%)	25 (12%)	4 19
2	CB	202/220 (92%)	177 (88%)	25 (12%)	4 19

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
3	AC	160/188 (85%)	141 (88%)	19 (12%)	5 21
3	CC	160/188 (85%)	142 (89%)	18 (11%)	5 23
4	AD	180/181 (99%)	157 (87%)	23 (13%)	4 18
4	CD	180/181 (99%)	157 (87%)	23 (13%)	4 18
5	AE	115/123 (94%)	103 (90%)	12 (10%)	7 27
5	CE	115/123 (94%)	101 (88%)	14 (12%)	5 20
6	AF	90/90 (100%)	81 (90%)	9 (10%)	7 29
6	CF	90/90 (100%)	80 (89%)	10 (11%)	6 24
7	AG	126/127 (99%)	115 (91%)	11 (9%)	9 34
7	CG	126/127 (99%)	116 (92%)	10 (8%)	11 37
8	AH	119/119 (100%)	109 (92%)	10 (8%)	10 35
8	CH	119/119 (100%)	109 (92%)	10 (8%)	10 35
9	AI	98/99 (99%)	89 (91%)	9 (9%)	8 31
9	CI	98/99 (99%)	89 (91%)	9 (9%)	8 31
10	AJ	88/92 (96%)	79 (90%)	9 (10%)	7 28
10	CJ	88/92 (96%)	79 (90%)	9 (10%)	7 28
11	AK	90/99 (91%)	82 (91%)	8 (9%)	9 33
11	CK	90/99 (91%)	82 (91%)	8 (9%)	9 33
12	AL	104/111 (94%)	95 (91%)	9 (9%)	9 34
12	CL	104/111 (94%)	96 (92%)	8 (8%)	12 38
13	AM	99/101 (98%)	87 (88%)	12 (12%)	5 20
13	CM	99/101 (98%)	87 (88%)	12 (12%)	5 20
14	AN	49/50 (98%)	39 (80%)	10 (20%)	1 5
14	CN	49/50 (98%)	39 (80%)	10 (20%)	1 5
15	AO	79/80 (99%)	70 (89%)	9 (11%)	5 23
15	CO	79/80 (99%)	70 (89%)	9 (11%)	5 23
16	AP	72/74 (97%)	65 (90%)	7 (10%)	8 30
16	CP	72/74 (97%)	65 (90%)	7 (10%)	8 30
17	AQ	94/97 (97%)	89 (95%)	5 (5%)	20 51
17	CQ	94/97 (97%)	89 (95%)	5 (5%)	20 51
18	AR	61/77 (79%)	54 (88%)	7 (12%)	5 23

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
18	CR	61/77 (79%)	54 (88%)	7 (12%)	5 23
19	AS	69/80 (86%)	57 (83%)	12 (17%)	2 9
19	CS	69/80 (86%)	57 (83%)	12 (17%)	2 9
20	AT	76/82 (93%)	71 (93%)	5 (7%)	15 43
20	CT	76/82 (93%)	71 (93%)	5 (7%)	15 43
21	AU	19/22 (86%)	18 (95%)	1 (5%)	20 51
21	CU	19/22 (86%)	18 (95%)	1 (5%)	20 51
25	AZ	322/338 (95%)	300 (93%)	22 (7%)	14 42
25	CZ	322/338 (95%)	300 (93%)	22 (7%)	14 42
26	B0	66/67 (98%)	59 (89%)	7 (11%)	6 26
26	D0	66/67 (98%)	59 (89%)	7 (11%)	6 26
27	B1	78/83 (94%)	67 (86%)	11 (14%)	3 15
27	D1	78/83 (94%)	71 (91%)	7 (9%)	9 33
28	B2	66/67 (98%)	61 (92%)	5 (8%)	12 39
28	D2	66/67 (98%)	59 (89%)	7 (11%)	6 26
29	B3	51/52 (98%)	44 (86%)	7 (14%)	3 15
29	D3	51/52 (98%)	44 (86%)	7 (14%)	3 15
30	B4	39/63 (62%)	32 (82%)	7 (18%)	2 9
30	D4	39/63 (62%)	32 (82%)	7 (18%)	2 9
31	B5	51/52 (98%)	44 (86%)	7 (14%)	3 15
31	D5	51/52 (98%)	44 (86%)	7 (14%)	3 15
32	B6	49/52 (94%)	34 (69%)	15 (31%)	0 0
32	D6	49/52 (94%)	34 (69%)	15 (31%)	0 0
33	B7	41/42 (98%)	32 (78%)	9 (22%)	1 4
33	D7	41/42 (98%)	32 (78%)	9 (22%)	1 4
34	B8	53/55 (96%)	44 (83%)	9 (17%)	2 10
34	D8	53/55 (96%)	43 (81%)	10 (19%)	1 7
35	B9	34/34 (100%)	30 (88%)	4 (12%)	5 21
35	D9	34/34 (100%)	30 (88%)	4 (12%)	5 21
38	BC	180/181 (99%)	170 (94%)	10 (6%)	19 49
38	DC	180/181 (99%)	170 (94%)	10 (6%)	19 49

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
39	BD	217/218 (100%)	185 (85%)	32 (15%)	3 14
39	DD	217/218 (100%)	187 (86%)	30 (14%)	3 15
40	BE	165/166 (99%)	145 (88%)	20 (12%)	5 20
40	DE	165/166 (99%)	145 (88%)	20 (12%)	5 20
41	BF	165/166 (99%)	154 (93%)	11 (7%)	15 43
41	DF	165/166 (99%)	154 (93%)	11 (7%)	15 43
42	BG	155/156 (99%)	130 (84%)	25 (16%)	2 11
42	DG	155/156 (99%)	136 (88%)	19 (12%)	4 20
43	BH	132/148 (89%)	118 (89%)	14 (11%)	6 26
43	DH	132/148 (89%)	118 (89%)	14 (11%)	6 26
46	BN	117/119 (98%)	105 (90%)	12 (10%)	7 27
46	DN	117/119 (98%)	103 (88%)	14 (12%)	5 21
47	BO	100/100 (100%)	90 (90%)	10 (10%)	7 29
47	DO	100/100 (100%)	90 (90%)	10 (10%)	7 29
48	BP	112/116 (97%)	94 (84%)	18 (16%)	2 11
48	DP	112/116 (97%)	95 (85%)	17 (15%)	3 13
49	BQ	111/111 (100%)	96 (86%)	15 (14%)	4 16
49	DQ	111/111 (100%)	97 (87%)	14 (13%)	4 19
50	BR	100/101 (99%)	89 (89%)	11 (11%)	6 24
50	DR	100/101 (99%)	89 (89%)	11 (11%)	6 24
51	BS	77/88 (88%)	67 (87%)	10 (13%)	4 18
51	DS	77/88 (88%)	67 (87%)	10 (13%)	4 18
52	BT	120/127 (94%)	99 (82%)	21 (18%)	2 9
52	DT	120/127 (94%)	99 (82%)	21 (18%)	2 9
53	BU	92/94 (98%)	85 (92%)	7 (8%)	12 39
53	DU	92/94 (98%)	85 (92%)	7 (8%)	12 39
54	BV	82/82 (100%)	64 (78%)	18 (22%)	1 4
54	DV	82/82 (100%)	63 (77%)	19 (23%)	1 4
55	BW	91/92 (99%)	84 (92%)	7 (8%)	12 38
55	DW	91/92 (99%)	84 (92%)	7 (8%)	12 38
56	BX	74/78 (95%)	67 (90%)	7 (10%)	8 30

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
56	DX	74/78 (95%)	67 (90%)	7 (10%)	8 30
57	BY	84/91 (92%)	71 (84%)	13 (16%)	2 12
57	DY	84/91 (92%)	71 (84%)	13 (16%)	2 12
58	BZ	155/179 (87%)	127 (82%)	28 (18%)	2 8
58	DZ	155/179 (87%)	136 (88%)	19 (12%)	4 20
All	All	10338/10860 (95%)	9147 (88%)	1191 (12%)	5 23

All (1191) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	AB	15	VAL
2	AB	17	PHE
2	AB	25	ASN
2	AB	32	ILE
2	AB	35	GLU
2	AB	36	ARG
2	AB	41	ILE
2	AB	42	ILE
2	AB	51	LEU
2	AB	69	LEU
2	AB	76	GLN
2	AB	80	ILE
2	AB	119	GLU
2	AB	155	LEU
2	AB	162	ILE
2	AB	170	GLU
2	AB	172	ILE
2	AB	178	ARG
2	AB	187	LEU
2	AB	191	ASP
2	AB	196	LEU
2	AB	200	ILE
2	AB	204	ASN
2	AB	230	VAL
2	AB	234	PRO
3	AC	5	ILE
3	AC	14	ILE
3	AC	16	ARG
3	AC	34	LEU
3	AC	40	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	AC	49	SER
3	AC	70	VAL
3	AC	76	VAL
3	AC	79	ARG
3	AC	105	GLU
3	AC	107	GLN
3	AC	119	ARG
3	AC	127	ARG
3	AC	132	ARG
3	AC	143	GLU
3	AC	167	TRP
3	AC	178	LEU
3	AC	179	ARG
3	AC	192	THR
4	AD	3	ARG
4	AD	15	GLU
4	AD	24	GLU
4	AD	36	ARG
4	AD	49	ARG
4	AD	58	LEU
4	AD	59	ARG
4	AD	67	ILE
4	AD	78	LEU
4	AD	86	LYS
4	AD	97	LEU
4	AD	110	PHE
4	AD	114	ARG
4	AD	126	ILE
4	AD	129	ASN
4	AD	135	LEU
4	AD	138	TYR
4	AD	145	GLU
4	AD	154	ASN
4	AD	162	LEU
4	AD	179	GLU
4	AD	187	ARG
4	AD	202	LEU
5	AE	12	LEU
5	AE	31	LEU
5	AE	38	GLN
5	AE	41	VAL
5	AE	67	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	AE	79	GLU
5	AE	80	ILE
5	AE	107	ARG
5	AE	116	THR
5	AE	120	THR
5	AE	143	ARG
5	AE	147	ASP
6	AF	25	ILE
6	AF	27	GLN
6	AF	43	LEU
6	AF	57	GLN
6	AF	63	TYR
6	AF	65	VAL
6	AF	86	ARG
6	AF	92	LYS
6	AF	98	LEU
7	AG	24	THR
7	AG	36	LYS
7	AG	54	THR
7	AG	74	GLU
7	AG	84	ASN
7	AG	86	GLN
7	AG	98	SER
7	AG	104	LEU
7	AG	114	ARG
7	AG	118	VAL
7	AG	137	LYS
8	AH	1	MET
8	AH	5	PRO
8	AH	26	VAL
8	AH	30	ARG
8	AH	39	LEU
8	AH	63	LEU
8	AH	102	ARG
8	AH	112	LEU
8	AH	115	SER
8	AH	119	LEU
9	AI	4	TYR
9	AI	10	ARG
9	AI	37	PHE
9	AI	44	VAL
9	AI	47	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	AI	79	LEU
9	AI	99	LEU
9	AI	108	VAL
9	AI	120	ARG
10	AJ	16	LEU
10	AJ	28	ARG
10	AJ	38	ILE
10	AJ	49	VAL
10	AJ	50	ILE
10	AJ	55	LYS
10	AJ	60	ARG
10	AJ	67	THR
10	AJ	96	ILE
11	AK	29	ILE
11	AK	30	VAL
11	AK	84	VAL
11	AK	87	THR
11	AK	92	GLU
11	AK	96	ARG
11	AK	103	LEU
11	AK	106	LYS
12	AL	7	ILE
12	AL	55	VAL
12	AL	84	LEU
12	AL	85	ILE
12	AL	89	ARG
12	AL	97	ARG
12	AL	102	ARG
12	AL	122	THR
12	AL	126	LYS
13	AM	15	VAL
13	AM	50	GLU
13	AM	64	TRP
13	AM	65	LYS
13	AM	66	LEU
13	AM	93	ARG
13	AM	101	GLN
13	AM	108	ARG
13	AM	109	THR
13	AM	113	PRO
13	AM	115	LYS
13	AM	120	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
14	AN	3	ARG
14	AN	14	PRO
14	AN	16	PHE
14	AN	18	VAL
14	AN	22	THR
14	AN	29	ARG
14	AN	33	VAL
14	AN	41	ARG
14	AN	44	LEU
14	AN	60	SER
15	AO	25	THR
15	AO	26	GLU
15	AO	38	ARG
15	AO	39	LEU
15	AO	41	GLU
15	AO	66	LEU
15	AO	68	ARG
15	AO	82	ILE
15	AO	88	ARG
16	AP	2	VAL
16	AP	5	ARG
16	AP	11	SER
16	AP	25	ARG
16	AP	34	GLU
16	AP	62	VAL
16	AP	69	THR
17	AQ	7	THR
17	AQ	18	THR
17	AQ	26	GLN
17	AQ	38	ARG
17	AQ	79	SER
18	AR	31	LEU
18	AR	37	VAL
18	AR	38	GLU
18	AR	44	LEU
18	AR	47	THR
18	AR	54	ARG
18	AR	66	LEU
19	AS	5	LEU
19	AS	6	LYS
19	AS	10	PHE
19	AS	15	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
19	AS	22	LEU
19	AS	29	ARG
19	AS	32	LYS
19	AS	37	ARG
19	AS	40	ILE
19	AS	58	VAL
19	AS	63	THR
19	AS	66	MET
20	AT	23	ARG
20	AT	24	LEU
20	AT	26	ASN
20	AT	74	LYS
20	AT	104	LEU
21	AU	22	ARG
25	AZ	21	ASP
25	AZ	64	ASN
25	AZ	90	LYS
25	AZ	93	ILE
25	AZ	98	GLN
25	AZ	117	ARG
25	AZ	122	LEU
25	AZ	185	ASN
25	AZ	198	LYS
25	AZ	201	GLU
25	AZ	206	ILE
25	AZ	241	ARG
25	AZ	263	ARG
25	AZ	267	VAL
25	AZ	272	MET
25	AZ	284	ASP
25	AZ	285	ASN
25	AZ	291	ARG
25	AZ	341	GLN
25	AZ	345	ARG
25	AZ	347	THR
25	AZ	355	LEU
26	B0	9	SER
26	B0	20	ARG
26	B0	27	GLU
26	B0	41	ARG
26	B0	49	LYS
26	B0	75	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	B0	84	LEU
27	B1	3	LYS
27	B1	4	VAL
27	B1	13	ILE
27	B1	20	ARG
27	B1	21	ARG
27	B1	26	ARG
27	B1	38	SER
27	B1	50	ARG
27	B1	57	GLU
27	B1	83	GLU
27	B1	86	SER
28	B2	12	GLU
28	B2	28	LYS
28	B2	35	LEU
28	B2	53	LEU
28	B2	64	LEU
29	B3	29	ARG
29	B3	31	LEU
29	B3	35	ARG
29	B3	38	GLU
29	B3	46	ASN
29	B3	48	GLU
29	B3	50	VAL
30	B4	5	ILE
30	B4	9	LEU
30	B4	28	LYS
30	B4	32	TYR
30	B4	34	GLU
30	B4	43	TYR
30	B4	47	GLN
31	B5	6	VAL
31	B5	15	ARG
31	B5	25	LEU
31	B5	40	LYS
31	B5	46	CYS
31	B5	48	GLU
31	B5	56	LYS
32	B6	5	VAL
32	B6	6	ARG
32	B6	9	LEU
32	B6	10	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	B6	11	LEU
32	B6	18	ARG
32	B6	21	TYR
32	B6	31	PRO
32	B6	33	LYS
32	B6	36	LEU
32	B6	41	PRO
32	B6	42	TRP
32	B6	45	LYS
32	B6	48	VAL
32	B6	53	LYS
33	B7	1	MET
33	B7	4	THR
33	B7	12	ARG
33	B7	24	THR
33	B7	34	ARG
33	B7	36	GLN
33	B7	37	LYS
33	B7	41	ARG
33	B7	43	THR
34	B8	30	ARG
34	B8	34	TRP
34	B8	40	GLU
34	B8	41	ILE
34	B8	49	VAL
34	B8	52	LYS
34	B8	56	GLU
34	B8	61	LEU
34	B8	64	TYR
35	B9	1	MET
35	B9	8	LYS
35	B9	29	ASN
35	B9	34	GLN
38	BC	28	LEU
38	BC	36	LYS
38	BC	55	ASP
38	BC	57	ASN
38	BC	68	LEU
38	BC	71	GLN
38	BC	104	LEU
38	BC	161	ILE
38	BC	175	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	BC	183	GLU
39	BD	10	THR
39	BD	13	ARG
39	BD	20	ASP
39	BD	24	ILE
39	BD	26	LYS
39	BD	30	GLU
39	BD	33	LEU
39	BD	44	ASN
39	BD	46	GLN
39	BD	61	LEU
39	BD	64	ILE
39	BD	65	ILE
39	BD	68	LYS
39	BD	72	LYS
39	BD	75	ILE
39	BD	94	LEU
39	BD	95	LEU
39	BD	99	ASP
39	BD	117	VAL
39	BD	122	ASP
39	BD	155	LEU
39	BD	166	GLN
39	BD	176	ARG
39	BD	183	ARG
39	BD	192	THR
39	BD	211	ARG
39	BD	217	ARG
39	BD	218	ARG
39	BD	242	ARG
39	BD	246	PRO
39	BD	257	LEU
39	BD	275	LYS
40	BE	9	VAL
40	BE	18	ASP
40	BE	34	VAL
40	BE	55	ASN
40	BE	57	LYS
40	BE	62	PRO
40	BE	67	PHE
40	BE	73	GLU
40	BE	78	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	BE	87	GLU
40	BE	111	ARG
40	BE	128	SER
40	BE	145	LYS
40	BE	167	VAL
40	BE	175	VAL
40	BE	181	LEU
40	BE	188	VAL
40	BE	197	ILE
40	BE	202	LYS
40	BE	203	LYS
41	BF	28	ILE
41	BF	51	THR
41	BF	64	ILE
41	BF	70	THR
41	BF	88	VAL
41	BF	95	ARG
41	BF	98	SER
41	BF	100	THR
41	BF	125	LEU
41	BF	179	GLU
41	BF	183	VAL
42	BG	14	GLU
42	BG	21	ARG
42	BG	26	GLN
42	BG	39	ILE
42	BG	40	ASN
42	BG	45	GLU
42	BG	52	ILE
42	BG	67	LYS
42	BG	77	ILE
42	BG	82	LEU
42	BG	83	ARG
42	BG	90	LEU
42	BG	106	LEU
42	BG	107	LEU
42	BG	113	ARG
42	BG	120	LEU
42	BG	121	ASN
42	BG	140	ILE
42	BG	143	GLU
42	BG	145	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	BG	152	LEU
42	BG	153	ARG
42	BG	164	GLU
42	BG	175	LEU
42	BG	176	LEU
43	BH	43	VAL
43	BH	53	GLU
43	BH	54	ARG
43	BH	71	LEU
43	BH	85	LYS
43	BH	104	GLU
43	BH	105	LEU
43	BH	119	GLU
43	BH	139	GLN
43	BH	143	GLN
43	BH	153	LYS
43	BH	159	GLU
43	BH	162	ILE
43	BH	163	TYR
46	BN	4	TYR
46	BN	26	LEU
46	BN	28	THR
46	BN	32	THR
46	BN	45	ASN
46	BN	48	MET
46	BN	56	ASN
46	BN	63	THR
46	BN	65	LYS
46	BN	87	LEU
46	BN	109	LYS
46	BN	119	ARG
47	BO	4	PRO
47	BO	14	THR
47	BO	20	MET
47	BO	23	ARG
47	BO	47	ILE
47	BO	48	PRO
47	BO	49	ARG
47	BO	65	THR
47	BO	98	VAL
47	BO	114	ILE
48	BP	14	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
48	BP	16	ARG
48	BP	19	VAL
48	BP	32	THR
48	BP	39	LYS
48	BP	41	ARG
48	BP	42	SER
48	BP	48	PRO
48	BP	61	ARG
48	BP	70	GLN
48	BP	84	ASN
48	BP	85	LEU
48	BP	86	LYS
48	BP	91	PHE
48	BP	99	LEU
48	BP	100	LEU
48	BP	105	LEU
48	BP	112	LEU
49	BQ	1	MET
49	BQ	14	ARG
49	BQ	16	ARG
49	BQ	18	LYS
49	BQ	25	ASP
49	BQ	45	GLN
49	BQ	54	MET
49	BQ	55	VAL
49	BQ	56	ARG
49	BQ	79	LEU
49	BQ	104	PHE
49	BQ	110	THR
49	BQ	133	ARG
49	BQ	135	ASP
49	BQ	139	GLU
50	BR	2	ARG
50	BR	6	SER
50	BR	10	LEU
50	BR	12	ARG
50	BR	33	ARG
50	BR	51	LEU
50	BR	71	GLN
50	BR	79	LEU
50	BR	99	LYS
50	BR	100	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	BR	117	VAL
51	BS	11	LYS
51	BS	12	PHE
51	BS	15	ARG
51	BS	18	ILE
51	BS	36	TYR
51	BS	73	LEU
51	BS	80	LEU
51	BS	92	TYR
51	BS	97	ARG
51	BS	99	LYS
52	BT	13	ARG
52	BT	21	GLU
52	BT	24	PRO
52	BT	29	ARG
52	BT	30	VAL
52	BT	32	TYR
52	BT	38	ASN
52	BT	39	ARG
52	BT	43	GLN
52	BT	48	ILE
52	BT	49	VAL
52	BT	50	ILE
52	BT	53	ARG
52	BT	58	ASN
52	BT	66	VAL
52	BT	75	ILE
52	BT	82	LEU
52	BT	83	ILE
52	BT	90	GLN
52	BT	99	LEU
52	BT	108	ARG
53	BU	9	VAL
53	BU	36	ARG
53	BU	66	ASN
53	BU	72	HIS
53	BU	74	LEU
53	BU	78	THR
53	BU	108	GLU
54	BV	2	PHE
54	BV	12	TYR
54	BV	16	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
54	BV	18	LEU
54	BV	19	LYS
54	BV	21	ARG
54	BV	22	VAL
54	BV	37	VAL
54	BV	39	LEU
54	BV	40	LEU
54	BV	51	VAL
54	BV	61	VAL
54	BV	68	LYS
54	BV	72	VAL
54	BV	89	GLN
54	BV	91	TYR
54	BV	95	LEU
54	BV	99	ILE
55	BW	9	TYR
55	BW	11	ARG
55	BW	17	VAL
55	BW	36	LEU
55	BW	76	VAL
55	BW	82	LEU
55	BW	107	LEU
56	BX	14	SER
56	BX	27	THR
56	BX	28	PHE
56	BX	37	THR
56	BX	57	LEU
56	BX	66	LEU
56	BX	80	ILE
57	BY	2	ARG
57	BY	6	HIS
57	BY	28	LYS
57	BY	32	PRO
57	BY	50	ARG
57	BY	55	TYR
57	BY	62	GLU
57	BY	73	ARG
57	BY	76	CYS
57	BY	77	PRO
57	BY	90	LEU
57	BY	96	ILE
57	BY	97	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	BZ	9	TYR
58	BZ	24	LEU
58	BZ	30	ASN
58	BZ	32	HIS
58	BZ	34	ASN
58	BZ	35	ARG
58	BZ	37	VAL
58	BZ	41	LEU
58	BZ	42	VAL
58	BZ	60	GLU
58	BZ	67	LEU
58	BZ	70	LEU
58	BZ	73	GLN
58	BZ	79	ARG
58	BZ	81	ARG
58	BZ	86	VAL
58	BZ	92	SER
58	BZ	93	ASP
58	BZ	107	THR
58	BZ	116	VAL
58	BZ	123	ASP
58	BZ	127	LYS
58	BZ	141	VAL
58	BZ	150	LEU
58	BZ	151	HIS
58	BZ	155	LEU
58	BZ	171	ILE
58	BZ	178	GLU
2	CB	15	VAL
2	CB	17	PHE
2	CB	25	ASN
2	CB	32	ILE
2	CB	35	GLU
2	CB	36	ARG
2	CB	41	ILE
2	CB	42	ILE
2	CB	51	LEU
2	CB	69	LEU
2	CB	76	GLN
2	CB	80	ILE
2	CB	107	THR
2	CB	119	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	CB	155	LEU
2	CB	162	ILE
2	CB	170	GLU
2	CB	178	ARG
2	CB	187	LEU
2	CB	191	ASP
2	CB	196	LEU
2	CB	200	ILE
2	CB	204	ASN
2	CB	230	VAL
2	CB	234	PRO
3	CC	5	ILE
3	CC	14	ILE
3	CC	16	ARG
3	CC	40	ARG
3	CC	49	SER
3	CC	70	VAL
3	CC	76	VAL
3	CC	79	ARG
3	CC	105	GLU
3	CC	107	GLN
3	CC	119	ARG
3	CC	127	ARG
3	CC	132	ARG
3	CC	143	GLU
3	CC	167	TRP
3	CC	178	LEU
3	CC	191	THR
3	CC	192	THR
4	CD	3	ARG
4	CD	15	GLU
4	CD	24	GLU
4	CD	36	ARG
4	CD	49	ARG
4	CD	58	LEU
4	CD	59	ARG
4	CD	67	ILE
4	CD	78	LEU
4	CD	86	LYS
4	CD	97	LEU
4	CD	110	PHE
4	CD	114	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	CD	126	ILE
4	CD	129	ASN
4	CD	135	LEU
4	CD	138	TYR
4	CD	145	GLU
4	CD	154	ASN
4	CD	162	LEU
4	CD	179	GLU
4	CD	187	ARG
4	CD	202	LEU
5	CE	12	LEU
5	CE	31	LEU
5	CE	38	GLN
5	CE	41	VAL
5	CE	49	PRO
5	CE	67	VAL
5	CE	76	ILE
5	CE	79	GLU
5	CE	80	ILE
5	CE	107	ARG
5	CE	116	THR
5	CE	120	THR
5	CE	143	ARG
5	CE	147	ASP
6	CF	21	LEU
6	CF	25	ILE
6	CF	27	GLN
6	CF	43	LEU
6	CF	57	GLN
6	CF	63	TYR
6	CF	65	VAL
6	CF	86	ARG
6	CF	92	LYS
6	CF	98	LEU
7	CG	24	THR
7	CG	54	THR
7	CG	74	GLU
7	CG	84	ASN
7	CG	86	GLN
7	CG	98	SER
7	CG	104	LEU
7	CG	114	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	CG	118	VAL
7	CG	137	LYS
8	CH	1	MET
8	CH	5	PRO
8	CH	26	VAL
8	CH	30	ARG
8	CH	39	LEU
8	CH	63	LEU
8	CH	102	ARG
8	CH	112	LEU
8	CH	115	SER
8	CH	119	LEU
9	CI	4	TYR
9	CI	10	ARG
9	CI	37	PHE
9	CI	44	VAL
9	CI	47	LEU
9	CI	79	LEU
9	CI	99	LEU
9	CI	108	VAL
9	CI	120	ARG
10	CJ	16	LEU
10	CJ	28	ARG
10	CJ	38	ILE
10	CJ	49	VAL
10	CJ	50	ILE
10	CJ	55	LYS
10	CJ	60	ARG
10	CJ	67	THR
10	CJ	96	ILE
11	CK	29	ILE
11	CK	30	VAL
11	CK	84	VAL
11	CK	87	THR
11	CK	92	GLU
11	CK	103	LEU
11	CK	104	GLN
11	CK	106	LYS
12	CL	7	ILE
12	CL	55	VAL
12	CL	84	LEU
12	CL	85	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	CL	89	ARG
12	CL	97	ARG
12	CL	122	THR
12	CL	126	LYS
13	CM	15	VAL
13	CM	50	GLU
13	CM	64	TRP
13	CM	65	LYS
13	CM	66	LEU
13	CM	93	ARG
13	CM	101	GLN
13	CM	108	ARG
13	CM	109	THR
13	CM	113	PRO
13	CM	115	LYS
13	CM	120	LYS
14	CN	3	ARG
14	CN	14	PRO
14	CN	16	PHE
14	CN	18	VAL
14	CN	22	THR
14	CN	29	ARG
14	CN	33	VAL
14	CN	41	ARG
14	CN	44	LEU
14	CN	60	SER
15	CO	25	THR
15	CO	26	GLU
15	CO	38	ARG
15	CO	39	LEU
15	CO	41	GLU
15	CO	66	LEU
15	CO	68	ARG
15	CO	82	ILE
15	CO	88	ARG
16	CP	2	VAL
16	CP	5	ARG
16	CP	11	SER
16	CP	25	ARG
16	CP	34	GLU
16	CP	62	VAL
16	CP	69	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	CQ	7	THR
17	CQ	18	THR
17	CQ	26	GLN
17	CQ	38	ARG
17	CQ	79	SER
18	CR	31	LEU
18	CR	37	VAL
18	CR	38	GLU
18	CR	44	LEU
18	CR	47	THR
18	CR	54	ARG
18	CR	66	LEU
19	CS	5	LEU
19	CS	6	LYS
19	CS	10	PHE
19	CS	15	LEU
19	CS	22	LEU
19	CS	29	ARG
19	CS	32	LYS
19	CS	37	ARG
19	CS	40	ILE
19	CS	58	VAL
19	CS	63	THR
19	CS	66	MET
20	CT	23	ARG
20	CT	24	LEU
20	CT	26	ASN
20	CT	74	LYS
20	CT	104	LEU
21	CU	22	ARG
25	CZ	21	ASP
25	CZ	64	ASN
25	CZ	90	LYS
25	CZ	93	ILE
25	CZ	98	GLN
25	CZ	117	ARG
25	CZ	122	LEU
25	CZ	185	ASN
25	CZ	198	LYS
25	CZ	201	GLU
25	CZ	206	ILE
25	CZ	241	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	CZ	263	ARG
25	CZ	267	VAL
25	CZ	272	MET
25	CZ	284	ASP
25	CZ	285	ASN
25	CZ	291	ARG
25	CZ	341	GLN
25	CZ	345	ARG
25	CZ	347	THR
25	CZ	355	LEU
26	D0	9	SER
26	D0	20	ARG
26	D0	27	GLU
26	D0	41	ARG
26	D0	49	LYS
26	D0	75	LEU
26	D0	84	LEU
27	D1	3	LYS
27	D1	26	ARG
27	D1	38	SER
27	D1	46	LEU
27	D1	69	LYS
27	D1	75	GLU
27	D1	83	GLU
28	D2	9	GLN
28	D2	20	GLU
28	D2	21	LEU
28	D2	34	GLU
28	D2	37	PHE
28	D2	47	ASN
28	D2	65	ASN
29	D3	29	ARG
29	D3	31	LEU
29	D3	35	ARG
29	D3	38	GLU
29	D3	46	ASN
29	D3	48	GLU
29	D3	50	VAL
30	D4	5	ILE
30	D4	9	LEU
30	D4	28	LYS
30	D4	32	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
30	D4	34	GLU
30	D4	43	TYR
30	D4	47	GLN
31	D5	6	VAL
31	D5	15	ARG
31	D5	25	LEU
31	D5	40	LYS
31	D5	46	CYS
31	D5	48	GLU
31	D5	56	LYS
32	D6	5	VAL
32	D6	6	ARG
32	D6	9	LEU
32	D6	10	LEU
32	D6	11	LEU
32	D6	18	ARG
32	D6	21	TYR
32	D6	31	PRO
32	D6	33	LYS
32	D6	36	LEU
32	D6	41	PRO
32	D6	42	TRP
32	D6	45	LYS
32	D6	48	VAL
32	D6	53	LYS
33	D7	1	MET
33	D7	4	THR
33	D7	12	ARG
33	D7	24	THR
33	D7	34	ARG
33	D7	36	GLN
33	D7	37	LYS
33	D7	41	ARG
33	D7	43	THR
34	D8	30	ARG
34	D8	31	HIS
34	D8	34	TRP
34	D8	40	GLU
34	D8	41	ILE
34	D8	49	VAL
34	D8	52	LYS
34	D8	56	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	D8	61	LEU
34	D8	64	TYR
35	D9	1	MET
35	D9	8	LYS
35	D9	29	ASN
35	D9	34	GLN
38	DC	28	LEU
38	DC	36	LYS
38	DC	55	ASP
38	DC	57	ASN
38	DC	68	LEU
38	DC	71	GLN
38	DC	104	LEU
38	DC	161	ILE
38	DC	175	VAL
38	DC	183	GLU
39	DD	10	THR
39	DD	13	ARG
39	DD	20	ASP
39	DD	24	ILE
39	DD	26	LYS
39	DD	30	GLU
39	DD	33	LEU
39	DD	44	ASN
39	DD	46	GLN
39	DD	61	LEU
39	DD	64	ILE
39	DD	65	ILE
39	DD	68	LYS
39	DD	72	LYS
39	DD	75	ILE
39	DD	95	LEU
39	DD	99	ASP
39	DD	117	VAL
39	DD	122	ASP
39	DD	166	GLN
39	DD	176	ARG
39	DD	183	ARG
39	DD	192	THR
39	DD	211	ARG
39	DD	217	ARG
39	DD	218	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	DD	242	ARG
39	DD	246	PRO
39	DD	257	LEU
39	DD	275	LYS
40	DE	9	VAL
40	DE	34	VAL
40	DE	55	ASN
40	DE	57	LYS
40	DE	62	PRO
40	DE	67	PHE
40	DE	73	GLU
40	DE	78	LEU
40	DE	87	GLU
40	DE	111	ARG
40	DE	116	VAL
40	DE	128	SER
40	DE	145	LYS
40	DE	167	VAL
40	DE	175	VAL
40	DE	181	LEU
40	DE	188	VAL
40	DE	197	ILE
40	DE	202	LYS
40	DE	203	LYS
41	DF	28	ILE
41	DF	51	THR
41	DF	64	ILE
41	DF	70	THR
41	DF	88	VAL
41	DF	95	ARG
41	DF	98	SER
41	DF	100	THR
41	DF	125	LEU
41	DF	179	GLU
41	DF	183	VAL
42	DG	12	TYR
42	DG	16	ARG
42	DG	33	ARG
42	DG	39	ILE
42	DG	43	LEU
42	DG	52	ILE
42	DG	54	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	DG	67	LYS
42	DG	71	THR
42	DG	77	ILE
42	DG	86	MET
42	DG	90	LEU
42	DG	104	GLU
42	DG	105	LYS
42	DG	116	ASP
42	DG	125	PHE
42	DG	136	ARG
42	DG	153	ARG
42	DG	174	GLU
43	DH	43	VAL
43	DH	53	GLU
43	DH	54	ARG
43	DH	71	LEU
43	DH	85	LYS
43	DH	104	GLU
43	DH	105	LEU
43	DH	119	GLU
43	DH	139	GLN
43	DH	143	GLN
43	DH	153	LYS
43	DH	159	GLU
43	DH	162	ILE
43	DH	163	TYR
46	DN	4	TYR
46	DN	10	GLU
46	DN	21	LYS
46	DN	26	LEU
46	DN	28	THR
46	DN	32	THR
46	DN	45	ASN
46	DN	48	MET
46	DN	56	ASN
46	DN	63	THR
46	DN	65	LYS
46	DN	87	LEU
46	DN	109	LYS
46	DN	119	ARG
47	DO	4	PRO
47	DO	14	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
47	DO	23	ARG
47	DO	47	ILE
47	DO	48	PRO
47	DO	49	ARG
47	DO	65	THR
47	DO	86	ILE
47	DO	98	VAL
47	DO	114	ILE
48	DP	14	LYS
48	DP	16	ARG
48	DP	19	VAL
48	DP	39	LYS
48	DP	41	ARG
48	DP	42	SER
48	DP	48	PRO
48	DP	61	ARG
48	DP	70	GLN
48	DP	84	ASN
48	DP	85	LEU
48	DP	86	LYS
48	DP	91	PHE
48	DP	99	LEU
48	DP	100	LEU
48	DP	105	LEU
48	DP	112	LEU
49	DQ	1	MET
49	DQ	16	ARG
49	DQ	18	LYS
49	DQ	25	ASP
49	DQ	45	GLN
49	DQ	54	MET
49	DQ	55	VAL
49	DQ	56	ARG
49	DQ	79	LEU
49	DQ	104	PHE
49	DQ	110	THR
49	DQ	133	ARG
49	DQ	135	ASP
49	DQ	139	GLU
50	DR	2	ARG
50	DR	6	SER
50	DR	10	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	DR	12	ARG
50	DR	33	ARG
50	DR	51	LEU
50	DR	71	GLN
50	DR	79	LEU
50	DR	99	LYS
50	DR	100	LEU
50	DR	117	VAL
51	DS	11	LYS
51	DS	12	PHE
51	DS	15	ARG
51	DS	18	ILE
51	DS	36	TYR
51	DS	73	LEU
51	DS	80	LEU
51	DS	92	TYR
51	DS	97	ARG
51	DS	99	LYS
52	DT	13	ARG
52	DT	21	GLU
52	DT	24	PRO
52	DT	29	ARG
52	DT	30	VAL
52	DT	32	TYR
52	DT	38	ASN
52	DT	39	ARG
52	DT	43	GLN
52	DT	48	ILE
52	DT	49	VAL
52	DT	50	ILE
52	DT	53	ARG
52	DT	58	ASN
52	DT	66	VAL
52	DT	75	ILE
52	DT	82	LEU
52	DT	83	ILE
52	DT	90	GLN
52	DT	99	LEU
52	DT	108	ARG
53	DU	9	VAL
53	DU	36	ARG
53	DU	66	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	DU	72	HIS
53	DU	74	LEU
53	DU	78	THR
53	DU	108	GLU
54	DV	2	PHE
54	DV	12	TYR
54	DV	16	PRO
54	DV	18	LEU
54	DV	19	LYS
54	DV	21	ARG
54	DV	22	VAL
54	DV	37	VAL
54	DV	39	LEU
54	DV	40	LEU
54	DV	50	PRO
54	DV	51	VAL
54	DV	61	VAL
54	DV	68	LYS
54	DV	72	VAL
54	DV	89	GLN
54	DV	91	TYR
54	DV	95	LEU
54	DV	99	ILE
55	DW	9	TYR
55	DW	11	ARG
55	DW	17	VAL
55	DW	36	LEU
55	DW	76	VAL
55	DW	82	LEU
55	DW	107	LEU
56	DX	14	SER
56	DX	27	THR
56	DX	28	PHE
56	DX	37	THR
56	DX	57	LEU
56	DX	66	LEU
56	DX	80	ILE
57	DY	2	ARG
57	DY	6	HIS
57	DY	28	LYS
57	DY	32	PRO
57	DY	50	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DY	55	TYR
57	DY	62	GLU
57	DY	73	ARG
57	DY	76	CYS
57	DY	77	PRO
57	DY	90	LEU
57	DY	96	ILE
57	DY	97	ARG
58	DZ	6	LYS
58	DZ	9	TYR
58	DZ	11	GLU
58	DZ	14	LYS
58	DZ	28	MET
58	DZ	37	VAL
58	DZ	38	TYR
58	DZ	41	LEU
58	DZ	43	GLU
58	DZ	70	LEU
58	DZ	86	VAL
58	DZ	97	GLU
58	DZ	122	ARG
58	DZ	141	VAL
58	DZ	145	GLU
58	DZ	146	ILE
58	DZ	155	LEU
58	DZ	163	LEU
58	DZ	166	SER

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (332) such sidechains are listed below:

Mol	Chain	Res	Type
2	AB	25	ASN
2	AB	37	ASN
2	AB	45	GLN
2	AB	78	GLN
2	AB	95	GLN
2	AB	146	GLN
2	AB	204	ASN
3	AC	37	GLN
3	AC	98	ASN
3	AC	118	GLN
3	AC	123	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	AC	136	GLN
3	AC	170	GLN
3	AC	181	ASN
4	AD	62	GLN
4	AD	129	ASN
4	AD	201	GLN
5	AE	20	GLN
5	AE	65	ASN
6	AF	13	ASN
6	AF	27	GLN
6	AF	32	ASN
6	AF	57	GLN
6	AF	84	ASN
6	AF	100	ASN
7	AG	13	GLN
7	AG	37	ASN
7	AG	84	ASN
7	AG	86	GLN
7	AG	106	GLN
9	AI	73	GLN
9	AI	124	GLN
10	AJ	13	HIS
10	AJ	56	HIS
10	AJ	68	HIS
10	AJ	78	ASN
10	AJ	84	GLN
11	AK	27	ASN
11	AK	38	ASN
11	AK	117	ASN
12	AL	8	ASN
12	AL	9	GLN
12	AL	49	ASN
12	AL	75	HIS
12	AL	78	GLN
12	AL	80	HIS
13	AM	12	ASN
13	AM	92	HIS
13	AM	101	GLN
14	AN	49	HIS
15	AO	46	HIS
15	AO	50	HIS
15	AO	53	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
16	AP	13	HIS
17	AQ	16	GLN
17	AQ	26	GLN
17	AQ	94	ASN
20	AT	16	HIS
20	AT	26	ASN
20	AT	42	GLN
20	AT	73	HIS
25	AZ	64	ASN
25	AZ	98	GLN
25	AZ	115	GLN
25	AZ	125	GLN
25	AZ	183	HIS
25	AZ	185	ASN
25	AZ	193	ASN
25	AZ	285	ASN
25	AZ	341	GLN
25	AZ	367	ASN
26	B0	12	ASN
26	B0	40	GLN
26	B0	50	ASN
26	B0	70	GLN
28	B2	43	GLN
28	B2	70	GLN
29	B3	19	GLN
29	B3	46	ASN
29	B3	52	HIS
30	B4	20	ASN
30	B4	47	GLN
31	B5	43	HIS
32	B6	29	ASN
32	B6	49	HIS
35	B9	29	ASN
38	BC	56	GLN
38	BC	57	ASN
38	BC	165	ASN
39	BD	96	HIS
39	BD	126	GLN
39	BD	164	GLN
39	BD	166	GLN
39	BD	186	HIS
39	BD	198	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	BD	227	ASN
40	BE	48	GLN
40	BE	54	GLN
40	BE	55	ASN
40	BE	129	HIS
40	BE	135	HIS
40	BE	169	ASN
40	BE	180	ASN
40	BE	192	ASN
41	BF	29	ASN
41	BF	40	GLN
41	BF	69	HIS
41	BF	75	HIS
41	BF	133	ASN
41	BF	160	ASN
41	BF	169	ASN
42	BG	26	GLN
42	BG	40	ASN
42	BG	58	GLN
42	BG	121	ASN
42	BG	138	GLN
43	BH	139	GLN
43	BH	147	ASN
46	BN	45	ASN
46	BN	56	ASN
46	BN	69	GLN
46	BN	133	GLN
47	BO	3	GLN
47	BO	5	GLN
47	BO	82	ASN
47	BO	89	ASN
48	BP	27	HIS
48	BP	38	GLN
48	BP	68	GLN
48	BP	84	ASN
48	BP	128	HIS
49	BQ	12	GLN
49	BQ	13	GLN
49	BQ	45	GLN
49	BQ	123	HIS
49	BQ	141	GLN
50	BR	11	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	BR	13	HIS
50	BR	16	HIS
50	BR	23	ASN
50	BR	24	GLN
50	BR	50	HIS
50	BR	71	GLN
52	BT	2	ASN
52	BT	38	ASN
52	BT	43	GLN
52	BT	58	ASN
52	BT	90	GLN
53	BU	44	ASN
53	BU	49	HIS
53	BU	66	ASN
53	BU	71	GLN
53	BU	81	HIS
53	BU	94	ASN
53	BU	117	GLN
54	BV	11	GLN
55	BW	34	ASN
55	BW	57	ASN
55	BW	61	ASN
56	BX	87	GLN
58	BZ	30	ASN
58	BZ	55	HIS
58	BZ	65	GLN
58	BZ	75	ASN
58	BZ	118	GLN
2	CB	25	ASN
2	CB	37	ASN
2	CB	45	GLN
2	CB	78	GLN
2	CB	95	GLN
2	CB	146	GLN
2	CB	204	ASN
3	CC	37	GLN
3	CC	98	ASN
3	CC	118	GLN
3	CC	123	GLN
3	CC	136	GLN
3	CC	170	GLN
3	CC	181	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	CD	62	GLN
4	CD	129	ASN
4	CD	201	GLN
5	CE	20	GLN
5	CE	65	ASN
6	CF	27	GLN
6	CF	32	ASN
6	CF	57	GLN
6	CF	84	ASN
6	CF	100	ASN
7	CG	13	GLN
7	CG	37	ASN
7	CG	56	GLN
7	CG	84	ASN
7	CG	86	GLN
9	CI	58	HIS
9	CI	124	GLN
10	CJ	13	HIS
10	CJ	56	HIS
10	CJ	68	HIS
10	CJ	78	ASN
10	CJ	84	GLN
11	CK	27	ASN
11	CK	38	ASN
11	CK	62	GLN
11	CK	93	GLN
11	CK	117	ASN
12	CL	8	ASN
12	CL	9	GLN
12	CL	49	ASN
12	CL	75	HIS
12	CL	78	GLN
13	CM	12	ASN
13	CM	62	ASN
13	CM	92	HIS
13	CM	101	GLN
14	CN	49	HIS
15	CO	37	ASN
15	CO	46	HIS
16	CP	13	HIS
17	CQ	16	GLN
17	CQ	26	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	CQ	94	ASN
20	CT	16	HIS
20	CT	26	ASN
20	CT	42	GLN
20	CT	73	HIS
25	CZ	19	HIS
25	CZ	64	ASN
25	CZ	85	HIS
25	CZ	98	GLN
25	CZ	115	GLN
25	CZ	125	GLN
25	CZ	183	HIS
25	CZ	185	ASN
25	CZ	193	ASN
25	CZ	285	ASN
25	CZ	341	GLN
25	CZ	367	ASN
26	D0	40	GLN
26	D0	50	ASN
26	D0	70	GLN
27	D1	16	ASN
27	D1	19	GLN
27	D1	45	ASN
28	D2	38	GLN
28	D2	43	GLN
28	D2	47	ASN
28	D2	70	GLN
29	D3	19	GLN
29	D3	46	ASN
29	D3	52	HIS
30	D4	20	ASN
30	D4	47	GLN
31	D5	43	HIS
32	D6	29	ASN
32	D6	49	HIS
35	D9	29	ASN
38	DC	56	GLN
38	DC	57	ASN
38	DC	165	ASN
39	DD	96	HIS
39	DD	126	GLN
39	DD	164	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	DD	166	GLN
39	DD	186	HIS
39	DD	198	ASN
39	DD	227	ASN
40	DE	48	GLN
40	DE	54	GLN
40	DE	55	ASN
40	DE	129	HIS
40	DE	135	HIS
40	DE	169	ASN
40	DE	180	ASN
40	DE	192	ASN
41	DF	29	ASN
41	DF	40	GLN
41	DF	69	HIS
41	DF	75	HIS
41	DF	133	ASN
41	DF	160	ASN
41	DF	169	ASN
42	DG	40	ASN
42	DG	79	ASN
43	DH	139	GLN
43	DH	147	ASN
46	DN	45	ASN
46	DN	56	ASN
46	DN	69	GLN
46	DN	133	GLN
47	DO	3	GLN
47	DO	82	ASN
47	DO	89	ASN
48	DP	9	ASN
48	DP	27	HIS
48	DP	38	GLN
48	DP	68	GLN
48	DP	84	ASN
48	DP	128	HIS
49	DQ	12	GLN
49	DQ	45	GLN
49	DQ	46	GLN
49	DQ	123	HIS
49	DQ	141	GLN
50	DR	11	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	DR	13	HIS
50	DR	16	HIS
50	DR	23	ASN
50	DR	24	GLN
50	DR	50	HIS
50	DR	71	GLN
52	DT	2	ASN
52	DT	38	ASN
52	DT	43	GLN
52	DT	58	ASN
52	DT	90	GLN
53	DU	44	ASN
53	DU	49	HIS
53	DU	66	ASN
53	DU	71	GLN
53	DU	81	HIS
53	DU	94	ASN
53	DU	117	GLN
54	DV	11	GLN
55	DW	34	ASN
55	DW	57	ASN
55	DW	61	ASN
56	DX	87	GLN
58	DZ	55	HIS
58	DZ	75	ASN
58	DZ	118	GLN
58	DZ	132	ASN

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	1509/1522 (99%)	244 (16%)	49 (3%)
1	CA	1509/1522 (99%)	238 (15%)	47 (3%)
22	AV	75/76 (98%)	20 (26%)	2 (2%)
22	AW	75/76 (98%)	17 (22%)	0
22	CV	75/76 (98%)	19 (25%)	1 (1%)
22	CW	75/76 (98%)	17 (22%)	0
23	AX	16/27 (59%)	6 (37%)	0
23	CX	16/27 (59%)	6 (37%)	0
24	AY	75/77 (97%)	25 (33%)	5 (6%)
24	CY	75/77 (97%)	25 (33%)	5 (6%)

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
36	BA	2900/2915 (99%)	515 (17%)	46 (1%)
36	DA	2900/2915 (99%)	513 (17%)	46 (1%)
37	BB	118/122 (96%)	25 (21%)	2 (1%)
37	DB	118/122 (96%)	25 (21%)	2 (1%)
All	All	9536/9630 (99%)	1695 (17%)	205 (2%)

All (1695) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	7	G
1	AA	9	G
1	AA	31	G
1	AA	32	A
1	AA	39	G
1	AA	47	C
1	AA	48	C
1	AA	51	A
1	AA	55	A
1	AA	60	A
1	AA	61	G
1	AA	64	G
1	AA	65	U
1	AA	79	G
1	AA	80	G
1	AA	81	U
1	AA	88	A
1	AA	90	U
1	AA	101	A
1	AA	109	A
1	AA	110	C
1	AA	116	A
1	AA	120	A
1	AA	121	C
1	AA	131	C
1	AA	144	G
1	AA	146	G
1	AA	147	G
1	AA	172	A
1	AA	173	U
1	AA	182	U
1	AA	189(I)	G
1	AA	195	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	197	A
1	AA	198	G
1	AA	199	G
1	AA	202	U
1	AA	203	U
1	AA	228	A
1	AA	244	U
1	AA	246	A
1	AA	247	G
1	AA	251	G
1	AA	267	C
1	AA	274	A
1	AA	275	G
1	AA	289	G
1	AA	321	A
1	AA	328	C
1	AA	330	C
1	AA	332	G
1	AA	344	A
1	AA	345	C
1	AA	346	G
1	AA	347	G
1	AA	348	G
1	AA	352	C
1	AA	353	A
1	AA	354	G
1	AA	367	U
1	AA	370	C
1	AA	372	C
1	AA	373	A
1	AA	397	A
1	AA	398	C
1	AA	406	G
1	AA	412	A
1	AA	413	G
1	AA	414	A
1	AA	422	C
1	AA	423	G
1	AA	428	G
1	AA	429	U
1	AA	430	A
1	AA	439	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	452	A
1	AA	453	A
1	AA	454	C
1	AA	484	G
1	AA	485	G
1	AA	495	A
1	AA	496	A
1	AA	499	A
1	AA	505	G
1	AA	508	C
1	AA	509	A
1	AA	511	C
1	AA	518	C
1	AA	527	G
1	AA	530	G
1	AA	531	U
1	AA	532	A
1	AA	533	A
1	AA	534	U
1	AA	548	G
1	AA	559	A
1	AA	561	U
1	AA	562	C
1	AA	572	A
1	AA	573	A
1	AA	574	A
1	AA	576	G
1	AA	577	G
1	AA	588	G
1	AA	632	A
1	AA	633	G
1	AA	653	A
1	AA	665	A
1	AA	688	G
1	AA	701	C
1	AA	702	A
1	AA	721	G
1	AA	722	A
1	AA	723	U
1	AA	731	G
1	AA	748	C
1	AA	749	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	755	G
1	AA	777	A
1	AA	787	A
1	AA	793	U
1	AA	794	A
1	AA	816	A
1	AA	817	C
1	AA	821	G
1	AA	827	U
1	AA	828	A
1	AA	839	U
1	AA	840	C
1	AA	841	U
1	AA	848	C
1	AA	858	G
1	AA	859	A
1	AA	914	A
1	AA	926	G
1	AA	927	G
1	AA	934	C
1	AA	935	A
1	AA	960	U
1	AA	961	U
1	AA	962	C
1	AA	968	A
1	AA	969	A
1	AA	974	A
1	AA	975	A
1	AA	976	G
1	AA	977	A
1	AA	978	A
1	AA	980	C
1	AA	981	U
1	AA	982	U
1	AA	983	A
1	AA	991	U
1	AA	992	U
1	AA	993	G
1	AA	996	A
1	AA	1004	A
1	AA	1026	G
1	AA	1030	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1050	G
1	AA	1051	C
1	AA	1054	C
1	AA	1055	A
1	AA	1065	U
1	AA	1081	G
1	AA	1094	G
1	AA	1095	U
1	AA	1101	A
1	AA	1102	A
1	AA	1117	G
1	AA	1124	G
1	AA	1125	U
1	AA	1126	U
1	AA	1129	C
1	AA	1130	A
1	AA	1131	G
1	AA	1136	U
1	AA	1137	C
1	AA	1138	G
1	AA	1139	G
1	AA	1140	C
1	AA	1141	C
1	AA	1146	A
1	AA	1152	A
1	AA	1154	G
1	AA	1158	C
1	AA	1159	U
1	AA	1171	G
1	AA	1181	G
1	AA	1184	G
1	AA	1187	G
1	AA	1196	U
1	AA	1197	G
1	AA	1200	C
1	AA	1201	A
1	AA	1212	U
1	AA	1213	A
1	AA	1238	A
1	AA	1240	U
1	AA	1256	A
1	AA	1257	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1272	G
1	AA	1280	A
1	AA	1281	U
1	AA	1284	C
1	AA	1285	A
1	AA	1286	A
1	AA	1287	A
1	AA	1300	G
1	AA	1301	U
1	AA	1302	U
1	AA	1320	C
1	AA	1321	C
1	AA	1322	C
1	AA	1323	G
1	AA	1331	G
1	AA	1334	G
1	AA	1347	G
1	AA	1364	U
1	AA	1379	G
1	AA	1398	A
1	AA	1417	G
1	AA	1418	A
1	AA	1419	G
1	AA	1439	C
1	AA	1442	G
1	AA	1442(A)	G
1	AA	1447	A
1	AA	1452	C
1	AA	1456	G
1	AA	1457	G
1	AA	1492	A
1	AA	1499	A
1	AA	1503	A
1	AA	1504	G
1	AA	1505	G
1	AA	1506	U
1	AA	1517	G
1	AA	1529	G
1	AA	1530	G
1	AA	1531	A
1	AA	1532	U
1	AA	1534	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1537	U
22	AV	5	G
22	AV	8	U
22	AV	16	U
22	AV	17	C
22	AV	18	G
22	AV	19	G
22	AV	21	A
22	AV	22	G
22	AV	23	A
22	AV	24	G
22	AV	42	C
22	AV	44	G
22	AV	45	U
22	AV	46	G
22	AV	47	U
22	AV	48	C
22	AV	61	C
22	AV	62	C
22	AV	63	G
22	AV	74	C
22	AW	4	C
22	AW	8	U
22	AW	9	A
22	AW	16	U
22	AW	17	C
22	AW	18	G
22	AW	19	G
22	AW	21	A
22	AW	39	U
22	AW	40	C
22	AW	44	G
22	AW	47	U
22	AW	48	C
22	AW	50	U
22	AW	59	U
22	AW	61	C
22	AW	70	G
23	AX	12	A
23	AX	13	A
23	AX	16	A
23	AX	17	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	AX	26	A
23	AX	27	A
24	AY	3	G
24	AY	5	G
24	AY	8	4SU
24	AY	9	C
24	AY	12	U
24	AY	16	H2U
24	AY	17	H2U
24	AY	18	G
24	AY	19	G
24	AY	20	H2U
24	AY	21	A
24	AY	41	C
24	AY	44	G
24	AY	45	U
24	AY	46	7MG
24	AY	47	U
24	AY	55	PSU
24	AY	56	C
24	AY	59	G
24	AY	62	U
24	AY	69	C
24	AY	70	C
24	AY	71	C
24	AY	73	G
24	AY	76	A
36	BA	10	G
36	BA	32	C
36	BA	34	C
36	BA	45	C
36	BA	71	A
36	BA	72	U
36	BA	74	A
36	BA	75	G
36	BA	83	G
36	BA	84	A
36	BA	88	G
36	BA	90	U
36	BA	92	A
36	BA	94	C
36	BA	96	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	100	G
36	BA	102	G
36	BA	118	A
36	BA	119	A
36	BA	120	U
36	BA	129	C
36	BA	139(A)	G
36	BA	141	A
36	BA	146	G
36	BA	173	G
36	BA	174	C
36	BA	181	A
36	BA	182	A
36	BA	196	A
36	BA	197	A
36	BA	199	A
36	BA	200	U
36	BA	204	A
36	BA	205	G
36	BA	215	G
36	BA	216	A
36	BA	221	A
36	BA	222	A
36	BA	229	A
36	BA	233	A
36	BA	245	G
36	BA	248	G
36	BA	261	G
36	BA	267	C
36	BA	271(K)	U
36	BA	271(L)	U
36	BA	271(M)	G
36	BA	271(N)	U
36	BA	271(O)	C
36	BA	271(P)	C
36	BA	271(R)	G
36	BA	271(Y)	U
36	BA	272(A)	U
36	BA	272(B)	G
36	BA	272(I)	U
36	BA	274	G
36	BA	276	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	278	A
36	BA	288	C
36	BA	299	A
36	BA	310	A
36	BA	324	A
36	BA	329	G
36	BA	330	A
36	BA	332	A
36	BA	333	G
36	BA	352	G
36	BA	353	G
36	BA	358	U
36	BA	362	U
36	BA	363	G
36	BA	363(E)	U
36	BA	363(F)	A
36	BA	372	G
36	BA	386	G
36	BA	387	U
36	BA	388	G
36	BA	396	G
36	BA	405	U
36	BA	406	G
36	BA	411	G
36	BA	412	A
36	BA	428	A
36	BA	444	C
36	BA	448	U
36	BA	451	C
36	BA	457	A
36	BA	470	A
36	BA	481	G
36	BA	482	A
36	BA	494	G
36	BA	505	A
36	BA	508	G
36	BA	509	C
36	BA	512	G
36	BA	528	A
36	BA	529	A
36	BA	530	G
36	BA	531	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	532	A
36	BA	533	G
36	BA	537	C
36	BA	556	G
36	BA	563	G
36	BA	573	G
36	BA	575	A
36	BA	586	A
36	BA	588	U
36	BA	603	A
36	BA	604	G
36	BA	607	U
36	BA	613	G
36	BA	614(B)	G
36	BA	615	G
36	BA	622	G
36	BA	627	A
36	BA	629	G
36	BA	637	A
36	BA	645	C
36	BA	646	A
36	BA	650	C
36	BA	651	G
36	BA	653	A
36	BA	654(I)	C
36	BA	654(J)	A
36	BA	654(M)	C
36	BA	654(T)	C
36	BA	655	A
36	BA	656	G
36	BA	673	C
36	BA	686	G
36	BA	708	C
36	BA	717	G
36	BA	722	A
36	BA	730	C
36	BA	753	C
36	BA	761	A
36	BA	764	A
36	BA	776	G
36	BA	782	A
36	BA	784	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	785	G
36	BA	790	C
36	BA	791	C
36	BA	792	G
36	BA	805	G
36	BA	812	C
36	BA	819	A
36	BA	827	U
36	BA	828	U
36	BA	830	G
36	BA	848	G
36	BA	857	C
36	BA	859	G
36	BA	866	A
36	BA	878	A
36	BA	886	C
36	BA	889	C
36	BA	890	A
36	BA	896	A
36	BA	897	C
36	BA	901	A
36	BA	910	A
36	BA	917	A
36	BA	926	A
36	BA	932	G
36	BA	941	A
36	BA	945	A
36	BA	946	G
36	BA	953	A
36	BA	958	U
36	BA	959	A
36	BA	961	C
36	BA	974	G
36	BA	975	C
36	BA	983	A
36	BA	991	C
36	BA	996	A
36	BA	1011	G
36	BA	1012	U
36	BA	1013	C
36	BA	1022	G
36	BA	1023	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	1025	G
36	BA	1026	U
36	BA	1027	A
36	BA	1033	U
36	BA	1038	C
36	BA	1039	G
36	BA	1041	G
36	BA	1045	A
36	BA	1047	G
36	BA	1048	A
36	BA	1051	G
36	BA	1053	C
36	BA	1059	G
36	BA	1061	U
36	BA	1062	G
36	BA	1065	U
36	BA	1067	A
36	BA	1068	G
36	BA	1069	A
36	BA	1070	A
36	BA	1071	G
36	BA	1073	A
36	BA	1074	G
36	BA	1079	C
36	BA	1087	G
36	BA	1088	A
36	BA	1103	A
36	BA	1111	A
36	BA	1112	G
36	BA	1116	C
36	BA	1135	C
36	BA	1136	G
36	BA	1142	U
36	BA	1143	A
36	BA	1155	A
36	BA	1170	G
36	BA	1174	A
36	BA	1175	U
36	BA	1176	G
36	BA	1178	C
36	BA	1205	U
36	BA	1210	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	1211	U
36	BA	1212	G
36	BA	1223	G
36	BA	1236	G
36	BA	1244	G
36	BA	1247	A
36	BA	1248	G
36	BA	1250	G
36	BA	1253	A
36	BA	1256	G
36	BA	1265	A
36	BA	1271	G
36	BA	1272	A
36	BA	1273	U
36	BA	1300	U
36	BA	1301	A
36	BA	1302	A
36	BA	1314	C
36	BA	1319	G
36	BA	1321	A
36	BA	1330	C
36	BA	1332	G
36	BA	1349	A
36	BA	1359	A
36	BA	1365	A
36	BA	1379	A
36	BA	1380	G
36	BA	1384	A
36	BA	1385	G
36	BA	1386	C
36	BA	1395	A
36	BA	1396	U
36	BA	1407	C
36	BA	1416	G
36	BA	1419	A
36	BA	1427	A
36	BA	1428	C
36	BA	1437	C
36	BA	1445	A
36	BA	1449	A
36	BA	1455	G
36	BA	1460	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	1461	G
36	BA	1467	C
36	BA	1471	A
36	BA	1474	C
36	BA	1475	G
36	BA	1478	G
36	BA	1481	U
36	BA	1482	G
36	BA	1485	G
36	BA	1490	A
36	BA	1493	C
36	BA	1494	A
36	BA	1495	A
36	BA	1497	U
36	BA	1499	C
36	BA	1502	C
36	BA	1505	C
36	BA	1509	C
36	BA	1509(A)	A
36	BA	1517	G
36	BA	1541	G
36	BA	1542	A
36	BA	1544	A
36	BA	1554	A
36	BA	1558	A
36	BA	1559	G
36	BA	1569	A
36	BA	1578	U
36	BA	1579	A
36	BA	1584	C
36	BA	1586	A
36	BA	1588	C
36	BA	1593	G
36	BA	1603	A
36	BA	1608	A
36	BA	1617	C
36	BA	1618	A
36	BA	1634	A
36	BA	1640	C
36	BA	1648	C
36	BA	1653	G
36	BA	1654	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	1674	G
36	BA	1696	G
36	BA	1698	A
36	BA	1699	G
36	BA	1721	G
36	BA	1722	A
36	BA	1739	U
36	BA	1745(A)	C
36	BA	1746	G
36	BA	1748	G
36	BA	1763	G
36	BA	1764	G
36	BA	1773	A
36	BA	1791	A
36	BA	1799	G
36	BA	1800	C
36	BA	1801	G
36	BA	1816	G
36	BA	1820	U
36	BA	1821	A
36	BA	1835	G
36	BA	1847	A
36	BA	1858	G
36	BA	1865	G
36	BA	1878	G
36	BA	1881	C
36	BA	1885	A
36	BA	1888	G
36	BA	1889	A
36	BA	1900	A
36	BA	1906	G
36	BA	1929	G
36	BA	1930	G
36	BA	1936	A
36	BA	1937	A
36	BA	1938	A
36	BA	1948	G
36	BA	1949	G
36	BA	1955	U
36	BA	1963	U
36	BA	1967	C
36	BA	1969	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	1970	A
36	BA	1971	A
36	BA	1972	A
36	BA	1982	C
36	BA	1987	G
36	BA	1991	U
36	BA	1992	G
36	BA	1993	U
36	BA	1997	G
36	BA	2020	A
36	BA	2023	G
36	BA	2031	A
36	BA	2033	A
36	BA	2034	U
36	BA	2036	C
36	BA	2043	C
36	BA	2055	C
36	BA	2056	G
36	BA	2060	A
36	BA	2061	G
36	BA	2062	A
36	BA	2069	G
36	BA	2093	G
36	BA	2100	G
36	BA	2102	U
36	BA	2104	G
36	BA	2112	G
36	BA	2116	G
36	BA	2118	U
36	BA	2126	A
36	BA	2127	G
36	BA	2131	G
36	BA	2132	U
36	BA	2133	G
36	BA	2146	C
36	BA	2148	G
36	BA	2158	A
36	BA	2159	G
36	BA	2160	G
36	BA	2172	U
36	BA	2173	A
36	BA	2174	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	2177	C
36	BA	2179	C
36	BA	2180	U
36	BA	2185	C
36	BA	2186	G
36	BA	2187	G
36	BA	2189	U
36	BA	2190	G
36	BA	2192	G
36	BA	2193	G
36	BA	2198	A
36	BA	2199	A
36	BA	2200	C
36	BA	2207	G
36	BA	2208	A
36	BA	2218	U
36	BA	2219	G
36	BA	2225	A
36	BA	2238	G
36	BA	2239	G
36	BA	2266	A
36	BA	2275	C
36	BA	2283	C
36	BA	2286	A
36	BA	2287	A
36	BA	2288	A
36	BA	2305	A
36	BA	2306	C
36	BA	2307	G
36	BA	2308	G
36	BA	2313	C
36	BA	2316	C
36	BA	2319	G
36	BA	2320	A
36	BA	2336	A
36	BA	2347	C
36	BA	2350	C
36	BA	2361	A
36	BA	2383	G
36	BA	2385	C
36	BA	2392	A
36	BA	2402	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	2423	U
36	BA	2425	A
36	BA	2429	G
36	BA	2430	A
36	BA	2431	U
36	BA	2434	A
36	BA	2439	A
36	BA	2441	C
36	BA	2448	A
36	BA	2465	C
36	BA	2469	A
36	BA	2475	C
36	BA	2476	A
36	BA	2482	G
36	BA	2491	U
36	BA	2502	G
36	BA	2505	G
36	BA	2518	A
36	BA	2524	G
36	BA	2529	G
36	BA	2543	G
36	BA	2554	U
36	BA	2566	A
36	BA	2567	G
36	BA	2573	C
36	BA	2582	G
36	BA	2602	A
36	BA	2612	C
36	BA	2630	G
36	BA	2646	C
36	BA	2654	A
36	BA	2655	G
36	BA	2657	A
36	BA	2658	C
36	BA	2660	A
36	BA	2673	G
36	BA	2682	U
36	BA	2690	C
36	BA	2691	C
36	BA	2702	U
36	BA	2703	C
36	BA	2712	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	2712(A)	A
36	BA	2713	A
36	BA	2714	G
36	BA	2720	U
36	BA	2726	U
36	BA	2733	A
36	BA	2750	A
36	BA	2751	G
36	BA	2752	C
36	BA	2756	U
36	BA	2757	A
36	BA	2759	G
36	BA	2761	G
36	BA	2762	G
36	BA	2764	A
36	BA	2765	A
36	BA	2766	G
36	BA	2778	A
36	BA	2779	U
36	BA	2780	G
36	BA	2789	C
36	BA	2790	A
36	BA	2791	C
36	BA	2794	C
36	BA	2799	C
36	BA	2802	G
36	BA	2803	C
36	BA	2808	U
36	BA	2820	A
36	BA	2821	A
36	BA	2823	A
36	BA	2833	G
36	BA	2834	G
36	BA	2847	U
36	BA	2849	U
36	BA	2872	G
36	BA	2880	C
36	BA	2894	G
37	BB	8	U
37	BB	13	A
37	BB	15	A
37	BB	16	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
37	BB	17	C
37	BB	21	G
37	BB	25	A
37	BB	27	C
37	BB	32	C
37	BB	41	U
37	BB	42	C
37	BB	43	C
37	BB	45	A
37	BB	53	A
37	BB	57	A
37	BB	66	A
37	BB	67	G
37	BB	68	C
37	BB	73	A
37	BB	81	G
37	BB	82	G
37	BB	88	C
37	BB	89	G
37	BB	110	G
37	BB	113	G
1	CA	7	G
1	CA	9	G
1	CA	31	G
1	CA	32	A
1	CA	39	G
1	CA	47	C
1	CA	48	C
1	CA	51	A
1	CA	55	A
1	CA	60	A
1	CA	61	G
1	CA	64	G
1	CA	65	U
1	CA	79	G
1	CA	80	G
1	CA	81	U
1	CA	88	A
1	CA	90	U
1	CA	101	A
1	CA	109	A
1	CA	110	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	116	A
1	CA	120	A
1	CA	121	C
1	CA	131	C
1	CA	144	G
1	CA	146	G
1	CA	147	G
1	CA	172	A
1	CA	173	U
1	CA	182	U
1	CA	189(I)	G
1	CA	195	A
1	CA	197	A
1	CA	198	G
1	CA	199	G
1	CA	202	U
1	CA	203	U
1	CA	228	A
1	CA	244	U
1	CA	246	A
1	CA	247	G
1	CA	251	G
1	CA	267	C
1	CA	274	A
1	CA	275	G
1	CA	289	G
1	CA	321	A
1	CA	328	C
1	CA	330	C
1	CA	332	G
1	CA	344	A
1	CA	345	C
1	CA	346	G
1	CA	347	G
1	CA	348	G
1	CA	352	C
1	CA	353	A
1	CA	354	G
1	CA	367	U
1	CA	370	C
1	CA	372	C
1	CA	373	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	397	A
1	CA	398	C
1	CA	406	G
1	CA	412	A
1	CA	413	G
1	CA	414	A
1	CA	422	C
1	CA	423	G
1	CA	428	G
1	CA	429	U
1	CA	430	A
1	CA	439	A
1	CA	452	A
1	CA	453	A
1	CA	454	C
1	CA	484	G
1	CA	485	G
1	CA	495	A
1	CA	496	A
1	CA	499	A
1	CA	505	G
1	CA	508	C
1	CA	509	A
1	CA	511	C
1	CA	518	C
1	CA	527	G
1	CA	530	G
1	CA	531	U
1	CA	532	A
1	CA	533	A
1	CA	534	U
1	CA	548	G
1	CA	559	A
1	CA	561	U
1	CA	562	C
1	CA	572	A
1	CA	573	A
1	CA	574	A
1	CA	576	G
1	CA	577	G
1	CA	588	G
1	CA	632	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	633	G
1	CA	653	A
1	CA	665	A
1	CA	688	G
1	CA	701	C
1	CA	702	A
1	CA	722	A
1	CA	723	U
1	CA	731	G
1	CA	748	C
1	CA	749	C
1	CA	755	G
1	CA	777	A
1	CA	787	A
1	CA	793	U
1	CA	794	A
1	CA	816	A
1	CA	817	C
1	CA	821	G
1	CA	827	U
1	CA	828	A
1	CA	839	U
1	CA	840	C
1	CA	841	U
1	CA	848	C
1	CA	859	A
1	CA	914	A
1	CA	926	G
1	CA	927	G
1	CA	934	C
1	CA	935	A
1	CA	960	U
1	CA	961	U
1	CA	962	C
1	CA	968	A
1	CA	969	A
1	CA	974	A
1	CA	975	A
1	CA	976	G
1	CA	977	A
1	CA	978	A
1	CA	980	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	981	U
1	CA	982	U
1	CA	983	A
1	CA	991	U
1	CA	992	U
1	CA	993	G
1	CA	996	A
1	CA	1004	A
1	CA	1026	G
1	CA	1030	C
1	CA	1050	G
1	CA	1051	C
1	CA	1054	C
1	CA	1055	A
1	CA	1065	U
1	CA	1081	G
1	CA	1094	G
1	CA	1095	U
1	CA	1101	A
1	CA	1102	A
1	CA	1117	G
1	CA	1124	G
1	CA	1125	U
1	CA	1126	U
1	CA	1129	C
1	CA	1130	A
1	CA	1131	G
1	CA	1136	U
1	CA	1137	C
1	CA	1138	G
1	CA	1139	G
1	CA	1140	C
1	CA	1141	C
1	CA	1146	A
1	CA	1152	A
1	CA	1154	G
1	CA	1158	C
1	CA	1159	U
1	CA	1171	G
1	CA	1181	G
1	CA	1184	G
1	CA	1187	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1196	U
1	CA	1197	G
1	CA	1200	C
1	CA	1201	A
1	CA	1212	U
1	CA	1213	A
1	CA	1238	A
1	CA	1240	U
1	CA	1256	A
1	CA	1257	U
1	CA	1272	G
1	CA	1280	A
1	CA	1281	U
1	CA	1284	C
1	CA	1285	A
1	CA	1286	A
1	CA	1287	A
1	CA	1300	G
1	CA	1301	U
1	CA	1302	U
1	CA	1320	C
1	CA	1321	C
1	CA	1322	C
1	CA	1323	G
1	CA	1331	G
1	CA	1334	G
1	CA	1347	G
1	CA	1363	C
1	CA	1364	U
1	CA	1379	G
1	CA	1397	C
1	CA	1398	A
1	CA	1400	C
1	CA	1419	G
1	CA	1442	G
1	CA	1442(B)	A
1	CA	1443	G
1	CA	1447	A
1	CA	1452	C
1	CA	1456	G
1	CA	1492	A
1	CA	1499	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1503	A
1	CA	1506	U
1	CA	1517	G
1	CA	1519	A
1	CA	1529	G
1	CA	1530	G
1	CA	1534	A
22	CV	5	G
22	CV	8	U
22	CV	16	U
22	CV	17	C
22	CV	18	G
22	CV	19	G
22	CV	21	A
22	CV	22	G
22	CV	23	A
22	CV	42	C
22	CV	44	G
22	CV	45	U
22	CV	46	G
22	CV	47	U
22	CV	48	C
22	CV	61	C
22	CV	62	C
22	CV	63	G
22	CV	74	C
22	CW	4	C
22	CW	8	U
22	CW	9	A
22	CW	16	U
22	CW	17	C
22	CW	18	G
22	CW	19	G
22	CW	21	A
22	CW	39	U
22	CW	40	C
22	CW	44	G
22	CW	47	U
22	CW	48	C
22	CW	50	U
22	CW	59	U
22	CW	61	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	CW	70	G
23	CX	12	A
23	CX	13	A
23	CX	16	A
23	CX	17	U
23	CX	26	A
23	CX	27	A
24	CY	3	G
24	CY	5	G
24	CY	8	4SU
24	CY	9	C
24	CY	12	U
24	CY	16	H2U
24	CY	17	H2U
24	CY	18	G
24	CY	19	G
24	CY	20	H2U
24	CY	21	A
24	CY	41	C
24	CY	44	G
24	CY	45	U
24	CY	46	7MG
24	CY	47	U
24	CY	55	PSU
24	CY	56	C
24	CY	59	G
24	CY	62	U
24	CY	69	C
24	CY	70	C
24	CY	71	C
24	CY	73	G
24	CY	76	A
36	DA	10	G
36	DA	32	C
36	DA	34	C
36	DA	45	C
36	DA	71	A
36	DA	72	U
36	DA	74	A
36	DA	75	G
36	DA	83	G
36	DA	84	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	88	G
36	DA	90	U
36	DA	92	A
36	DA	94	C
36	DA	96	G
36	DA	100	G
36	DA	102	G
36	DA	118	A
36	DA	119	A
36	DA	120	U
36	DA	129	C
36	DA	139(A)	G
36	DA	141	A
36	DA	146	G
36	DA	173	G
36	DA	174	C
36	DA	181	A
36	DA	182	A
36	DA	196	A
36	DA	197	A
36	DA	199	A
36	DA	200	U
36	DA	204	A
36	DA	205	G
36	DA	215	G
36	DA	216	A
36	DA	221	A
36	DA	222	A
36	DA	229	A
36	DA	233	A
36	DA	245	G
36	DA	248	G
36	DA	261	G
36	DA	267	C
36	DA	271(K)	U
36	DA	271(L)	U
36	DA	271(M)	G
36	DA	271(N)	U
36	DA	271(O)	C
36	DA	271(P)	C
36	DA	271(R)	G
36	DA	271(Y)	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	272(A)	U
36	DA	272(B)	G
36	DA	272(I)	U
36	DA	274	G
36	DA	276	A
36	DA	278	A
36	DA	288	C
36	DA	299	A
36	DA	310	A
36	DA	324	A
36	DA	329	G
36	DA	330	A
36	DA	332	A
36	DA	333	G
36	DA	352	G
36	DA	353	G
36	DA	358	U
36	DA	362	U
36	DA	363	G
36	DA	363(E)	U
36	DA	363(F)	A
36	DA	372	G
36	DA	386	G
36	DA	387	U
36	DA	388	G
36	DA	396	G
36	DA	405	U
36	DA	406	G
36	DA	411	G
36	DA	412	A
36	DA	428	A
36	DA	444	C
36	DA	448	U
36	DA	457	A
36	DA	470	A
36	DA	481	G
36	DA	482	A
36	DA	494	G
36	DA	505	A
36	DA	508	G
36	DA	509	C
36	DA	512	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	528	A
36	DA	529	A
36	DA	530	G
36	DA	531	C
36	DA	532	A
36	DA	533	G
36	DA	537	C
36	DA	556	G
36	DA	563	G
36	DA	573	G
36	DA	575	A
36	DA	586	A
36	DA	588	U
36	DA	603	A
36	DA	604	G
36	DA	607	U
36	DA	613	G
36	DA	614(B)	G
36	DA	614(C)	A
36	DA	615	G
36	DA	622	G
36	DA	627	A
36	DA	629	G
36	DA	637	A
36	DA	645	C
36	DA	646	A
36	DA	650	C
36	DA	651	G
36	DA	653	A
36	DA	654(I)	C
36	DA	654(J)	A
36	DA	654(M)	C
36	DA	654(T)	C
36	DA	655	A
36	DA	656	G
36	DA	673	C
36	DA	686	G
36	DA	708	C
36	DA	717	G
36	DA	722	A
36	DA	730	C
36	DA	753	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	764	A
36	DA	776	G
36	DA	782	A
36	DA	784	A
36	DA	785	G
36	DA	790	C
36	DA	791	C
36	DA	792	G
36	DA	805	G
36	DA	812	C
36	DA	819	A
36	DA	827	U
36	DA	828	U
36	DA	830	G
36	DA	848	G
36	DA	857	C
36	DA	859	G
36	DA	866	A
36	DA	878	A
36	DA	886	C
36	DA	889	C
36	DA	890	A
36	DA	896	A
36	DA	897	C
36	DA	901	A
36	DA	910	A
36	DA	917	A
36	DA	926	A
36	DA	932	G
36	DA	941	A
36	DA	945	A
36	DA	946	G
36	DA	953	A
36	DA	958	U
36	DA	959	A
36	DA	961	C
36	DA	974	G
36	DA	975	C
36	DA	983	A
36	DA	991	C
36	DA	996	A
36	DA	1011	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	1012	U
36	DA	1013	C
36	DA	1022	G
36	DA	1023	U
36	DA	1025	G
36	DA	1026	U
36	DA	1027	A
36	DA	1033	U
36	DA	1038	C
36	DA	1039	G
36	DA	1041	G
36	DA	1045	A
36	DA	1047	G
36	DA	1048	A
36	DA	1051	G
36	DA	1053	C
36	DA	1059	G
36	DA	1061	U
36	DA	1062	G
36	DA	1065	U
36	DA	1067	A
36	DA	1068	G
36	DA	1069	A
36	DA	1070	A
36	DA	1071	G
36	DA	1073	A
36	DA	1074	G
36	DA	1079	C
36	DA	1087	G
36	DA	1088	A
36	DA	1103	A
36	DA	1111	A
36	DA	1112	G
36	DA	1116	C
36	DA	1135	C
36	DA	1136	G
36	DA	1142	U
36	DA	1143	A
36	DA	1155	A
36	DA	1170	G
36	DA	1174	A
36	DA	1175	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	1176	G
36	DA	1178	C
36	DA	1205	U
36	DA	1210	A
36	DA	1211	U
36	DA	1212	G
36	DA	1223	G
36	DA	1236	G
36	DA	1244	G
36	DA	1247	A
36	DA	1248	G
36	DA	1250	G
36	DA	1253	A
36	DA	1256	G
36	DA	1265	A
36	DA	1271	G
36	DA	1272	A
36	DA	1273	U
36	DA	1300	U
36	DA	1301	A
36	DA	1302	A
36	DA	1314	C
36	DA	1319	G
36	DA	1321	A
36	DA	1330	C
36	DA	1332	G
36	DA	1349	A
36	DA	1359	A
36	DA	1365	A
36	DA	1379	A
36	DA	1380	G
36	DA	1384	A
36	DA	1385	G
36	DA	1386	C
36	DA	1395	A
36	DA	1396	U
36	DA	1407	C
36	DA	1416	G
36	DA	1419	A
36	DA	1427	A
36	DA	1428	C
36	DA	1437	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	1445	A
36	DA	1449	A
36	DA	1455	G
36	DA	1460	A
36	DA	1461	G
36	DA	1467	C
36	DA	1471	A
36	DA	1474	C
36	DA	1475	G
36	DA	1478	G
36	DA	1481	U
36	DA	1482	G
36	DA	1485	G
36	DA	1490	A
36	DA	1493	C
36	DA	1494	A
36	DA	1495	A
36	DA	1497	U
36	DA	1499	C
36	DA	1502	C
36	DA	1505	C
36	DA	1509	C
36	DA	1509(A)	A
36	DA	1517	G
36	DA	1541	G
36	DA	1542	A
36	DA	1544	A
36	DA	1554	A
36	DA	1558	A
36	DA	1559	G
36	DA	1569	A
36	DA	1578	U
36	DA	1579	A
36	DA	1584	C
36	DA	1586	A
36	DA	1588	C
36	DA	1593	G
36	DA	1603	A
36	DA	1608	A
36	DA	1617	C
36	DA	1618	A
36	DA	1634	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	1640	C
36	DA	1648	C
36	DA	1653	G
36	DA	1654	A
36	DA	1674	G
36	DA	1696	G
36	DA	1698	A
36	DA	1699	G
36	DA	1721	G
36	DA	1722	A
36	DA	1739	U
36	DA	1745(A)	C
36	DA	1746	G
36	DA	1748	G
36	DA	1763	G
36	DA	1764	G
36	DA	1773	A
36	DA	1791	A
36	DA	1799	G
36	DA	1800	C
36	DA	1801	G
36	DA	1816	G
36	DA	1820	U
36	DA	1821	A
36	DA	1835	G
36	DA	1847	A
36	DA	1858	G
36	DA	1865	G
36	DA	1878	G
36	DA	1881	C
36	DA	1885	A
36	DA	1888	G
36	DA	1889	A
36	DA	1900	A
36	DA	1906	G
36	DA	1929	G
36	DA	1930	G
36	DA	1936	A
36	DA	1937	A
36	DA	1938	A
36	DA	1948	G
36	DA	1955	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	1963	U
36	DA	1967	C
36	DA	1969	A
36	DA	1970	A
36	DA	1971	A
36	DA	1972	A
36	DA	1982	C
36	DA	1987	G
36	DA	1991	U
36	DA	1992	G
36	DA	1993	U
36	DA	1997	G
36	DA	2020	A
36	DA	2023	G
36	DA	2031	A
36	DA	2033	A
36	DA	2034	U
36	DA	2036	C
36	DA	2043	C
36	DA	2055	C
36	DA	2056	G
36	DA	2060	A
36	DA	2061	G
36	DA	2062	A
36	DA	2069	G
36	DA	2093	G
36	DA	2100	G
36	DA	2102	U
36	DA	2104	G
36	DA	2112	G
36	DA	2116	G
36	DA	2118	U
36	DA	2126	A
36	DA	2127	G
36	DA	2131	G
36	DA	2132	U
36	DA	2133	G
36	DA	2146	C
36	DA	2148	G
36	DA	2159	G
36	DA	2160	G
36	DA	2172	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	2173	A
36	DA	2174	C
36	DA	2177	C
36	DA	2179	C
36	DA	2180	U
36	DA	2185	C
36	DA	2186	G
36	DA	2187	G
36	DA	2189	U
36	DA	2190	G
36	DA	2192	G
36	DA	2193	G
36	DA	2198	A
36	DA	2199	A
36	DA	2200	C
36	DA	2207	G
36	DA	2208	A
36	DA	2218	U
36	DA	2219	G
36	DA	2225	A
36	DA	2238	G
36	DA	2239	G
36	DA	2266	A
36	DA	2268	A
36	DA	2275	C
36	DA	2283	C
36	DA	2286	A
36	DA	2287	A
36	DA	2288	A
36	DA	2305	A
36	DA	2306	C
36	DA	2307	G
36	DA	2308	G
36	DA	2313	C
36	DA	2316	C
36	DA	2319	G
36	DA	2320	A
36	DA	2336	A
36	DA	2347	C
36	DA	2350	C
36	DA	2361	A
36	DA	2383	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	2385	C
36	DA	2392	A
36	DA	2402	C
36	DA	2423	U
36	DA	2425	A
36	DA	2429	G
36	DA	2430	A
36	DA	2431	U
36	DA	2434	A
36	DA	2439	A
36	DA	2441	C
36	DA	2448	A
36	DA	2465	C
36	DA	2469	A
36	DA	2475	C
36	DA	2476	A
36	DA	2482	G
36	DA	2491	U
36	DA	2502	G
36	DA	2505	G
36	DA	2518	A
36	DA	2524	G
36	DA	2529	G
36	DA	2543	G
36	DA	2554	U
36	DA	2566	A
36	DA	2567	G
36	DA	2573	C
36	DA	2582	G
36	DA	2602	A
36	DA	2612	C
36	DA	2630	G
36	DA	2646	C
36	DA	2654	A
36	DA	2655	G
36	DA	2657	A
36	DA	2658	C
36	DA	2660	A
36	DA	2673	G
36	DA	2682	U
36	DA	2690	C
36	DA	2691	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	2702	U
36	DA	2703	C
36	DA	2712	U
36	DA	2712(A)	A
36	DA	2713	A
36	DA	2714	G
36	DA	2720	U
36	DA	2726	U
36	DA	2733	A
36	DA	2750	A
36	DA	2751	G
36	DA	2752	C
36	DA	2756	U
36	DA	2757	A
36	DA	2759	G
36	DA	2761	G
36	DA	2762	G
36	DA	2764	A
36	DA	2765	A
36	DA	2766	G
36	DA	2778	A
36	DA	2779	U
36	DA	2780	G
36	DA	2789	C
36	DA	2790	A
36	DA	2791	C
36	DA	2794	C
36	DA	2799	C
36	DA	2802	G
36	DA	2803	C
36	DA	2808	U
36	DA	2820	A
36	DA	2821	A
36	DA	2823	A
36	DA	2833	G
36	DA	2834	G
36	DA	2847	U
36	DA	2849	U
36	DA	2872	G
36	DA	2880	C
36	DA	2894	G
37	DB	8	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
37	DB	13	A
37	DB	15	A
37	DB	16	G
37	DB	17	C
37	DB	21	G
37	DB	25	A
37	DB	27	C
37	DB	32	C
37	DB	41	U
37	DB	42	C
37	DB	43	C
37	DB	45	A
37	DB	53	A
37	DB	57	A
37	DB	66	A
37	DB	67	G
37	DB	68	C
37	DB	73	A
37	DB	81	G
37	DB	82	G
37	DB	88	C
37	DB	89	G
37	DB	110	G
37	DB	113	G

All (205) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	AA	30	U
1	AA	60	A
1	AA	64	G
1	AA	79	G
1	AA	109	A
1	AA	115	G
1	AA	119	A
1	AA	197	A
1	AA	202	U
1	AA	243	A
1	AA	250	A
1	AA	266	G
1	AA	274	A
1	AA	344	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	347	G
1	AA	351	G
1	AA	369	C
1	AA	428	G
1	AA	429	U
1	AA	484	G
1	AA	495	A
1	AA	508	C
1	AA	547	A
1	AA	560	U
1	AA	573	A
1	AA	575	G
1	AA	687	A
1	AA	748	C
1	AA	792	A
1	AA	793	U
1	AA	980	C
1	AA	982	U
1	AA	992	U
1	AA	1049	U
1	AA	1053	G
1	AA	1054	C
1	AA	1101	A
1	AA	1145	C
1	AA	1157	A
1	AA	1200	C
1	AA	1211	U
1	AA	1239	A
1	AA	1285	A
1	AA	1320	C
1	AA	1417	G
1	AA	1498	U
1	AA	1504	G
1	AA	1529	G
1	AA	1531	A
22	AV	18	G
22	AV	23	A
24	AY	16	H2U
24	AY	17	H2U
24	AY	20	H2U
24	AY	55	PSU
24	AY	69	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	71	A
36	BA	181	A
36	BA	199	A
36	BA	221	A
36	BA	331	A
36	BA	332	A
36	BA	387	U
36	BA	481	G
36	BA	528	A
36	BA	587	C
36	BA	603	A
36	BA	614(C)	A
36	BA	752	A
36	BA	790	C
36	BA	856	C
36	BA	958	U
36	BA	1052	C
36	BA	1060	U
36	BA	1068	G
36	BA	1069	A
36	BA	1210	A
36	BA	1300	U
36	BA	1301	A
36	BA	1378	A
36	BA	1427	A
36	BA	1541	G
36	BA	1558	A
36	BA	1653	G
36	BA	1799	G
36	BA	1819	A
36	BA	1820	U
36	BA	1948	G
36	BA	1970	A
36	BA	1992	G
36	BA	2033	A
36	BA	2036	C
36	BA	2126	A
36	BA	2131	G
36	BA	2145	C
36	BA	2282	G
36	BA	2286	A
36	BA	2422	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	2481	G
36	BA	2689	U
36	BA	2750	A
36	BA	2756	U
37	BB	56	G
37	BB	66	A
1	CA	30	U
1	CA	60	A
1	CA	64	G
1	CA	79	G
1	CA	109	A
1	CA	115	G
1	CA	119	A
1	CA	197	A
1	CA	202	U
1	CA	243	A
1	CA	250	A
1	CA	266	G
1	CA	274	A
1	CA	344	A
1	CA	347	G
1	CA	351	G
1	CA	428	G
1	CA	429	U
1	CA	484	G
1	CA	495	A
1	CA	508	C
1	CA	547	A
1	CA	560	U
1	CA	573	A
1	CA	575	G
1	CA	687	A
1	CA	748	C
1	CA	792	A
1	CA	793	U
1	CA	980	C
1	CA	982	U
1	CA	992	U
1	CA	1049	U
1	CA	1053	G
1	CA	1054	C
1	CA	1101	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1145	C
1	CA	1157	A
1	CA	1200	C
1	CA	1211	U
1	CA	1239	A
1	CA	1285	A
1	CA	1320	C
1	CA	1399	C
1	CA	1442(A)	G
1	CA	1493	A
1	CA	1498	U
22	CV	18	G
24	CY	16	H2U
24	CY	17	H2U
24	CY	20	H2U
24	CY	55	PSU
24	CY	69	C
36	DA	71	A
36	DA	181	A
36	DA	199	A
36	DA	221	A
36	DA	331	A
36	DA	332	A
36	DA	387	U
36	DA	481	G
36	DA	528	A
36	DA	587	C
36	DA	603	A
36	DA	614(C)	A
36	DA	752	A
36	DA	790	C
36	DA	856	C
36	DA	958	U
36	DA	1052	C
36	DA	1060	U
36	DA	1068	G
36	DA	1069	A
36	DA	1210	A
36	DA	1300	U
36	DA	1301	A
36	DA	1378	A
36	DA	1427	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	1541	G
36	DA	1558	A
36	DA	1653	G
36	DA	1799	G
36	DA	1819	A
36	DA	1820	U
36	DA	1948	G
36	DA	1970	A
36	DA	1992	G
36	DA	2033	A
36	DA	2126	A
36	DA	2131	G
36	DA	2145	C
36	DA	2160	G
36	DA	2282	G
36	DA	2286	A
36	DA	2422	A
36	DA	2481	G
36	DA	2689	U
36	DA	2750	A
36	DA	2756	U
37	DB	56	G
37	DB	66	A

5.4 Non-standard residues in protein, DNA, RNA chains (i)

18 non-standard protein/DNA/RNA residues are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
24	H2U	AY	20	24	18,21,22	0.90	0	19,30,33	1.70	3 (15%)
24	4SU	CY	8	24	18,21,22	0.54	0	25,30,33	0.83	2 (8%)
24	5MU	CY	54	24	19,22,23	0.28	0	27,32,35	0.41	0
24	4SU	AY	8	24	18,21,22	0.52	0	25,30,33	0.85	2 (8%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
24	H2U	CY	17	24	18,21,22	0.89	0	19,30,33	1.86	5 (26%)
24	H2U	AY	16	24	18,21,22	0.91	1 (5%)	19,30,33	1.57	3 (15%)
24	PSU	AY	55	24	18,21,22	1.03	1 (5%)	21,30,33	1.75	4 (19%)
24	H2U	CY	16	24	18,21,22	0.97	1 (5%)	19,30,33	1.57	3 (15%)
24	H2U	CY	20	24	18,21,22	0.88	0	19,30,33	1.68	3 (15%)
24	7MG	AY	46	24	23,26,27	2.48	3 (13%)	27,39,42	1.69	3 (11%)
24	OMC	AY	32	24	19,22,23	0.35	0	25,31,34	0.70	1 (4%)
24	MIA	AY	37	24	28,31,32	0.97	1 (3%)	38,44,47	1.02	1 (2%)
24	OMC	CY	32	24	19,22,23	0.34	0	25,31,34	0.70	1 (4%)
24	MIA	CY	37	24	28,31,32	0.79	1 (3%)	38,44,47	1.02	1 (2%)
24	PSU	CY	55	24	18,21,22	1.02	2 (11%)	21,30,33	1.73	3 (14%)
24	H2U	AY	17	24	18,21,22	0.89	0	19,30,33	1.84	4 (21%)
24	5MU	AY	54	24	19,22,23	0.31	0	27,32,35	0.42	0
24	7MG	CY	46	24	23,26,27	2.48	3 (13%)	27,39,42	1.70	3 (11%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	H2U	AY	20	24	-	0/7/38/39	0/2/2/2
24	4SU	CY	8	24	-	0/7/25/26	0/2/2/2
24	5MU	CY	54	24	-	0/7/25/26	0/2/2/2
24	4SU	AY	8	24	-	1/7/25/26	0/2/2/2
24	H2U	CY	17	24	-	3/7/38/39	0/2/2/2
24	PSU	AY	55	24	1/1/5/5	2/7/25/26	0/2/2/2
24	H2U	AY	16	24	-	0/7/38/39	0/2/2/2
24	H2U	CY	16	24	-	0/7/38/39	0/2/2/2
24	H2U	CY	20	24	-	0/7/38/39	0/2/2/2
24	7MG	AY	46	24	-	1/7/37/38	0/3/3/3
24	OMC	AY	32	24	-	0/9/27/28	0/2/2/2
24	MIA	AY	37	24	-	2/15/33/34	0/3/3/3
24	OMC	CY	32	24	-	0/9/27/28	0/2/2/2
24	MIA	CY	37	24	-	2/15/33/34	0/3/3/3
24	PSU	CY	55	24	1/1/5/5	2/7/25/26	0/2/2/2
24	H2U	AY	17	24	-	3/7/38/39	0/2/2/2
24	5MU	AY	54	24	-	0/7/25/26	0/2/2/2

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	7MG	CY	46	24	-	1/7/37/38	0/3/3/3

All (13) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	CY	46	7MG	C8-N9	-11.14	1.38	1.45
24	AY	46	7MG	C8-N9	-11.13	1.38	1.45
24	AY	37	MIA	C2-S10	3.59	1.78	1.75
24	AY	46	7MG	C5-N7	3.09	1.39	1.35
24	CY	46	7MG	C5-N7	3.04	1.39	1.35
24	AY	55	PSU	C6-C5	2.91	1.38	1.35
24	CY	55	PSU	C6-C5	2.83	1.38	1.35
24	AY	46	7MG	C8-N7	-2.34	1.31	1.42
24	CY	46	7MG	C8-N7	-2.32	1.31	1.42
24	CY	37	MIA	C12-N6	-2.03	1.41	1.45
24	CY	55	PSU	C6-N1	2.03	1.39	1.36
24	AY	16	H2U	C1'-N1	2.02	1.50	1.46
24	CY	16	H2U	C1'-N1	2.02	1.50	1.46

All (42) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	CY	46	7MG	N9-C8-N7	6.70	112.85	103.37
24	AY	46	7MG	N9-C8-N7	6.67	112.81	103.37
24	CY	37	MIA	C11-S10-C2	5.58	106.44	102.25
24	AY	37	MIA	C11-S10-C2	5.50	106.38	102.25
24	AY	55	PSU	N1-C2-N3	4.98	120.43	115.17
24	CY	55	PSU	N1-C2-N3	4.90	120.33	115.17
24	CY	46	7MG	C4-C5-N7	4.56	110.77	105.38
24	AY	46	7MG	C4-C5-N7	4.55	110.76	105.38
24	AY	16	H2U	N3-C2-N1	4.43	121.10	116.65
24	CY	17	H2U	N3-C2-N1	4.40	121.07	116.65
24	CY	16	H2U	N3-C2-N1	4.35	121.02	116.65
24	AY	17	H2U	N3-C2-N1	4.33	121.00	116.65
24	AY	20	H2U	N3-C2-N1	4.10	120.77	116.65
24	CY	20	H2U	N3-C2-N1	4.08	120.75	116.65
24	CY	55	PSU	C4-N3-C2	-3.86	121.05	126.37
24	AY	55	PSU	C4-N3-C2	-3.83	121.09	126.37
24	CY	17	H2U	C5-C4-N3	3.74	120.67	116.69
24	AY	20	H2U	C5-C4-N3	3.72	120.64	116.69
24	AY	17	H2U	C5-C4-N3	3.70	120.63	116.69
24	CY	20	H2U	C5-C4-N3	3.70	120.62	116.69

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	CY	16	H2U	C5-C4-N3	3.69	120.61	116.69
24	AY	16	H2U	C5-C4-N3	3.56	120.47	116.69
24	AY	17	H2U	O3'-C3'-C2'	3.45	122.88	111.82
24	CY	17	H2U	O3'-C3'-C2'	3.41	122.73	111.82
24	AY	32	OMC	CM2-O2'-C2'	-2.74	107.45	114.47
24	AY	55	PSU	O2-C2-N1	-2.71	120.00	122.79
24	CY	32	OMC	CM2-O2'-C2'	-2.69	107.57	114.47
24	AY	8	4SU	S4-C4-N3	2.59	122.91	120.20
24	CY	55	PSU	O2-C2-N1	-2.55	120.16	122.79
24	CY	8	4SU	S4-C4-N3	2.49	122.81	120.20
24	AY	8	4SU	C5-C4-S4	-2.49	121.46	124.31
24	CY	8	4SU	C5-C4-S4	-2.44	121.51	124.31
24	AY	16	H2U	O2-C2-N1	-2.39	120.23	123.10
24	CY	17	H2U	O2-C2-N1	-2.32	120.31	123.10
24	CY	16	H2U	O2-C2-N1	-2.32	120.31	123.10
24	AY	17	H2U	O2-C2-N1	-2.27	120.37	123.10
24	AY	20	H2U	O2-C2-N1	-2.20	120.45	123.10
24	AY	46	7MG	C6-C5-C4	-2.17	118.58	122.40
24	CY	46	7MG	C6-C5-C4	-2.14	118.63	122.40
24	CY	20	H2U	O2-C2-N1	-2.09	120.59	123.10
24	AY	55	PSU	C6-N1-C2	-2.03	120.81	122.69
24	CY	17	H2U	O2'-C2'-C3'	2.02	118.30	111.82

All (2) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
24	AY	55	PSU	C3'
24	CY	55	PSU	C3'

All (17) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
24	AY	17	H2U	C4'-C5'-O5'-P
24	AY	37	MIA	C5-C6-N6-C12
24	AY	55	PSU	C2'-C1'-C5-C4
24	CY	17	H2U	C4'-C5'-O5'-P
24	CY	37	MIA	C5-C6-N6-C12
24	CY	55	PSU	C2'-C1'-C5-C4
24	AY	17	H2U	O4'-C4'-C5'-O5'
24	CY	17	H2U	O4'-C4'-C5'-O5'
24	AY	17	H2U	C3'-C4'-C5'-O5'
24	CY	17	H2U	C3'-C4'-C5'-O5'

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
24	AY	37	MIA	N1-C6-N6-C12
24	CY	37	MIA	N1-C6-N6-C12
24	AY	55	PSU	O4'-C1'-C5-C4
24	CY	55	PSU	O4'-C1'-C5-C4
24	AY	46	7MG	C4'-C5'-O5'-P
24	CY	46	7MG	C4'-C5'-O5'-P
24	AY	8	4SU	O4'-C4'-C5'-O5'

There are no ring outliers.

17 monomers are involved in 32 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	AY	20	H2U	2	0
24	CY	8	4SU	1	0
24	CY	54	5MU	1	0
24	AY	8	4SU	1	0
24	CY	17	H2U	5	0
24	AY	16	H2U	3	0
24	AY	55	PSU	2	0
24	CY	16	H2U	3	0
24	CY	20	H2U	2	0
24	AY	46	7MG	4	0
24	AY	32	OMC	1	0
24	AY	37	MIA	1	0
24	CY	32	OMC	1	0
24	CY	55	PSU	1	0
24	AY	17	H2U	5	0
24	AY	54	5MU	1	0
24	CY	46	7MG	4	0

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

Of 12 ligands modelled in this entry, 8 are monoatomic - leaving 4 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The

Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
61	KIR	AZ	502	-	56,59,59	3.72	23 (41%)	60,84,84	1.68	11 (18%)
60	GDP	CZ	501	-	29,30,30	1.08	2 (6%)	45,47,47	1.83	12 (26%)
61	KIR	CZ	502	-	56,59,59	3.67	24 (42%)	60,84,84	1.68	10 (16%)
60	GDP	AZ	501	-	29,30,30	1.09	1 (3%)	45,47,47	1.71	10 (22%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
61	KIR	AZ	502	-	-	7/54/98/98	0/3/3/3
60	GDP	CZ	501	-	-	0/16/32/32	0/3/3/3
61	KIR	CZ	502	-	-	5/54/98/98	0/3/3/3
60	GDP	AZ	501	-	-	0/16/32/32	0/3/3/3

All (50) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
61	AZ	502	KIR	O18-C17	-15.14	1.22	1.44
61	CZ	502	KIR	O18-C17	-14.86	1.22	1.44
61	AZ	502	KIR	O30-C30	-12.72	1.17	1.42
61	CZ	502	KIR	O30-C30	-12.66	1.17	1.42
61	AZ	502	KIR	O34-C33	-9.35	1.29	1.44
61	CZ	502	KIR	O34-C33	-9.11	1.29	1.44
61	AZ	502	KIR	C22-C21	5.78	1.39	1.33
61	CZ	502	KIR	C45-C28	5.67	1.62	1.53
61	AZ	502	KIR	C45-C28	5.58	1.62	1.53
61	CZ	502	KIR	C22-C21	5.25	1.38	1.33
61	CZ	502	KIR	C32-C31	5.03	1.61	1.54
61	AZ	502	KIR	C32-C31	5.02	1.61	1.54
61	AZ	502	KIR	C27-N26	4.27	1.43	1.33
61	CZ	502	KIR	O29-C29	4.24	1.48	1.40
61	AZ	502	KIR	O29-C29	4.20	1.48	1.40
61	AZ	502	KIR	C19-C17	4.16	1.64	1.54
61	CZ	502	KIR	C29-C28	4.15	1.62	1.54

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
61	CZ	502	KIR	C19-C17	4.09	1.64	1.54
61	AZ	502	KIR	C29-C28	4.01	1.62	1.54
61	CZ	502	KIR	C27-N26	3.98	1.43	1.33
61	CZ	502	KIR	C42-C19	3.61	1.60	1.53
61	AZ	502	KIR	C42-C19	3.58	1.60	1.53
61	CZ	502	KIR	C8-C7	3.58	1.56	1.48
61	AZ	502	KIR	C8-C7	3.47	1.55	1.48
61	AZ	502	KIR	C3-C4	3.45	1.48	1.41
61	CZ	502	KIR	C3-C4	3.36	1.48	1.41
61	AZ	502	KIR	O34-C29	3.17	1.48	1.43
61	CZ	502	KIR	O34-C29	3.14	1.48	1.43
61	AZ	502	KIR	C6-N1	3.05	1.40	1.36
61	CZ	502	KIR	C16-C17	2.97	1.59	1.53
61	CZ	502	KIR	C6-N1	2.84	1.40	1.36
60	AZ	501	GDP	C5-N7	-2.81	1.33	1.39
61	AZ	502	KIR	C16-C17	2.79	1.59	1.53
60	CZ	501	GDP	C5-N7	-2.63	1.33	1.39
61	CZ	502	KIR	O2-C2	2.58	1.28	1.23
61	AZ	502	KIR	O2-C2	2.54	1.28	1.23
61	CZ	502	KIR	C31-C30	2.49	1.58	1.54
61	AZ	502	KIR	C9-C8	2.37	1.41	1.34
61	AZ	502	KIR	C31-C30	2.36	1.58	1.54
61	AZ	502	KIR	C20-C21	2.34	1.55	1.51
61	CZ	502	KIR	C32-C33	2.32	1.58	1.55
61	CZ	502	KIR	C44-C21	2.29	1.54	1.50
61	CZ	502	KIR	C9-C8	2.28	1.40	1.34
61	AZ	502	KIR	C32-C33	2.26	1.58	1.55
61	CZ	502	KIR	C5-C4	2.17	1.47	1.42
61	CZ	502	KIR	C20-C21	2.16	1.55	1.51
61	AZ	502	KIR	C44-C21	2.16	1.54	1.50
61	CZ	502	KIR	C6-C5	2.12	1.39	1.35
61	AZ	502	KIR	C6-C5	2.06	1.39	1.35
60	CZ	501	GDP	PA-O3A	2.01	1.61	1.59

All (43) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
60	AZ	501	GDP	C2-N3-C4	5.69	122.10	112.30
60	CZ	501	GDP	C2-N3-C4	5.50	121.77	112.30
60	CZ	501	GDP	C5-C4-N3	-4.87	120.63	128.39
61	AZ	502	KIR	O29-C29-O34	-4.79	102.25	110.15
61	AZ	502	KIR	C48-C32-C47	-4.65	101.36	107.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
61	CZ	502	KIR	O29-C29-O34	-4.65	102.48	110.15
61	CZ	502	KIR	C48-C32-C47	-4.57	101.47	107.70
60	AZ	501	GDP	C5-C4-N3	-4.55	121.15	128.39
61	CZ	502	KIR	C11-C10-C9	-4.49	114.34	123.52
61	AZ	502	KIR	C11-C10-C9	-4.47	114.37	123.52
60	CZ	501	GDP	C2-N1-C6	-3.58	118.62	125.11
61	AZ	502	KIR	O34-C29-C28	3.19	112.76	104.55
61	CZ	502	KIR	O34-C29-C28	3.18	112.74	104.55
60	CZ	501	GDP	N9-C4-N3	3.12	132.20	125.95
60	AZ	501	GDP	N9-C4-N3	2.83	131.62	125.95
61	CZ	502	KIR	O20-C20-C21	-2.82	106.60	111.52
60	CZ	501	GDP	O4'-C1'-N9	2.78	114.66	108.36
60	AZ	501	GDP	C2-N1-C6	-2.70	120.21	125.11
60	CZ	501	GDP	C8-N7-C5	2.69	109.04	104.26
60	CZ	501	GDP	C4-C5-N7	-2.66	106.45	110.67
61	AZ	502	KIR	O20-C20-C21	-2.66	106.89	111.52
61	CZ	502	KIR	O18-C17-C16	2.61	109.07	104.21
61	AZ	502	KIR	O18-C17-C16	2.55	108.96	104.21
61	AZ	502	KIR	C29-C30-C31	-2.53	107.39	110.80
60	AZ	501	GDP	O4'-C1'-N9	2.50	114.02	108.36
60	CZ	501	GDP	C3'-C2'-C1'	-2.46	96.82	101.46
60	CZ	501	GDP	C5-C6-N1	2.43	119.44	113.25
60	CZ	501	GDP	N9-C8-N7	-2.42	108.92	113.40
61	CZ	502	KIR	C3-C2-N1	2.41	119.14	114.65
61	CZ	502	KIR	C29-C30-C31	-2.39	107.58	110.80
61	AZ	502	KIR	C48-C32-C31	2.38	113.59	109.28
61	CZ	502	KIR	C48-C32-C31	2.34	113.53	109.28
61	AZ	502	KIR	C3-C2-N1	2.33	119.00	114.65
60	AZ	501	GDP	N1-C2-N3	-2.32	119.08	123.32
60	CZ	501	GDP	O6-C6-C5	-2.25	120.59	126.53
60	CZ	501	GDP	C6-C5-N7	2.23	134.34	130.29
60	AZ	501	GDP	C3'-C2'-C1'	-2.20	97.30	101.46
60	AZ	501	GDP	C4-C5-N7	-2.19	107.19	110.67
61	CZ	502	KIR	O4-C4-C3	-2.13	119.39	121.83
60	AZ	501	GDP	C5-C6-N1	2.10	118.59	113.25
61	AZ	502	KIR	O4-C4-C3	-2.06	119.46	121.83
61	AZ	502	KIR	C14-C13-C12	-2.02	121.78	125.88
60	AZ	501	GDP	C6-C5-N7	2.00	133.93	130.29

There are no chirality outliers.

All (12) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
61	AZ	502	KIR	C2-C3-C7-C8
61	AZ	502	KIR	C4-C3-C7-C8
61	AZ	502	KIR	C11-C10-C9-C8
61	CZ	502	KIR	C2-C3-C7-C8
61	CZ	502	KIR	C4-C3-C7-C8
61	CZ	502	KIR	C11-C10-C9-C8
61	AZ	502	KIR	C36-C37-C38-C39
61	CZ	502	KIR	C36-C37-C38-C39
61	AZ	502	KIR	C19-C20-O20-C43
61	CZ	502	KIR	C19-C20-O20-C43
61	AZ	502	KIR	C21-C20-O20-C43
61	AZ	502	KIR	C16-C17-C19-C42

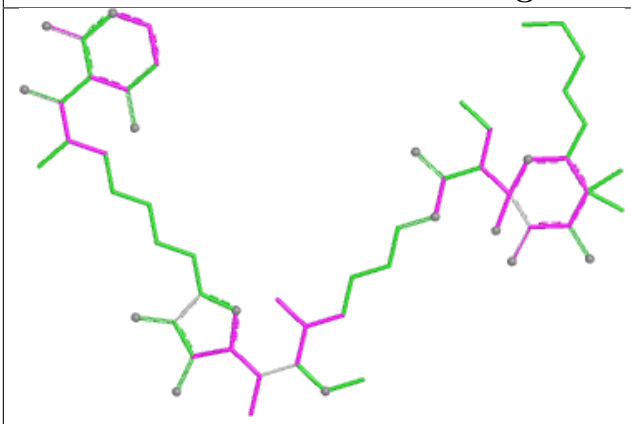
There are no ring outliers.

4 monomers are involved in 13 short contacts:

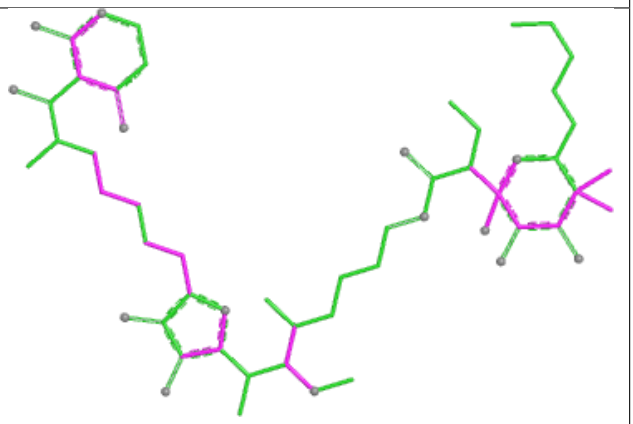
Mol	Chain	Res	Type	Clashes	Symm-Clashes
61	AZ	502	KIR	3	0
60	CZ	501	GDP	6	0
61	CZ	502	KIR	2	0
60	AZ	501	GDP	2	0

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less then 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

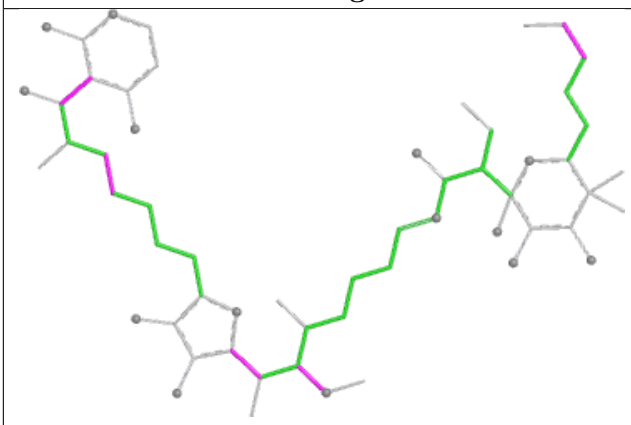
Ligand KIR AZ 502



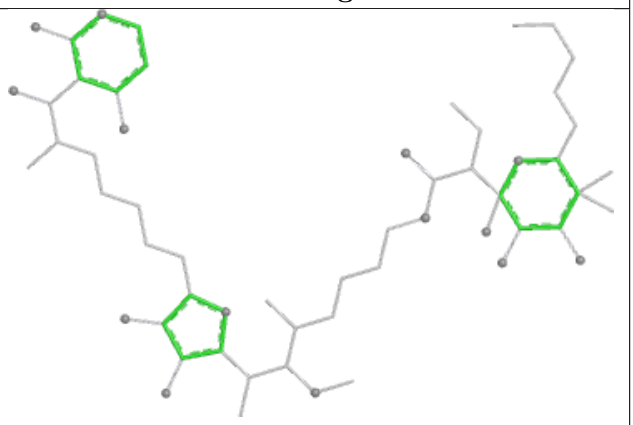
Bond lengths



Bond angles

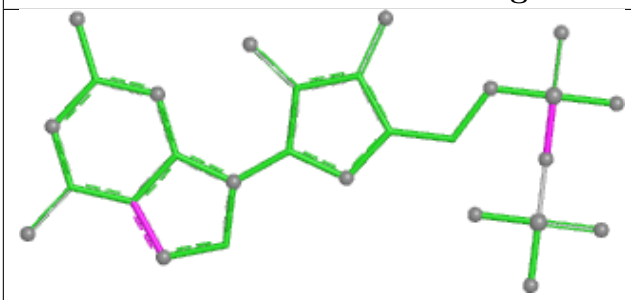


Torsions

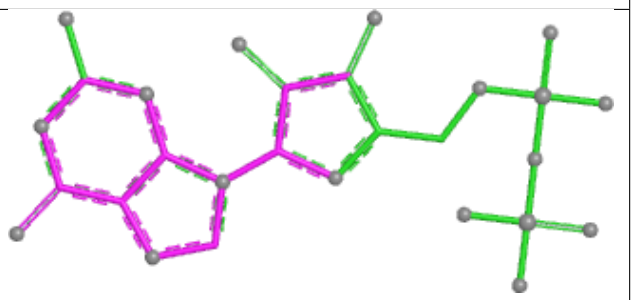


Rings

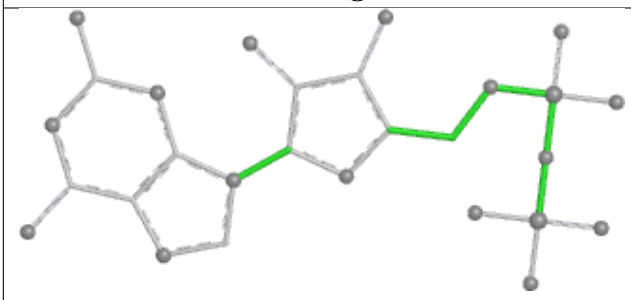
Ligand GDP CZ 501



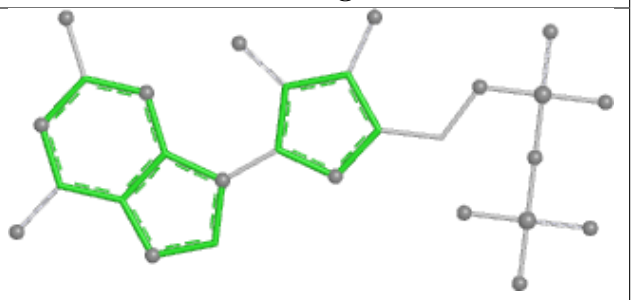
Bond lengths



Bond angles

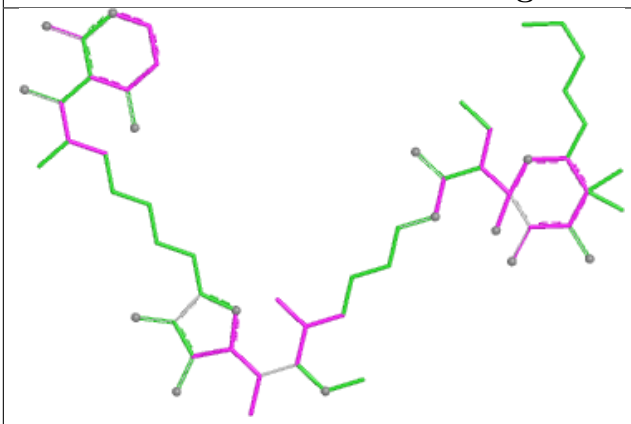


Torsions

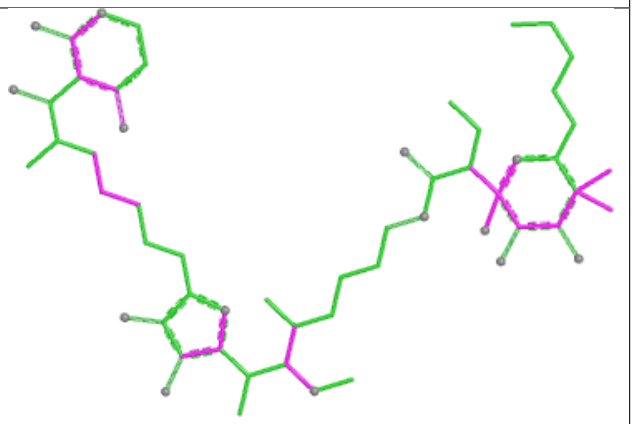


Rings

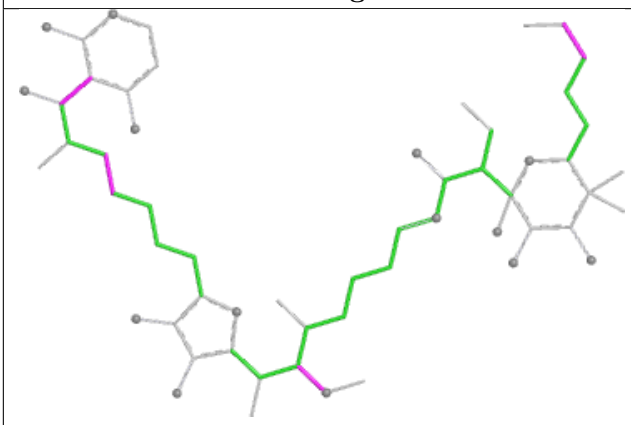
Ligand KIR CZ 502



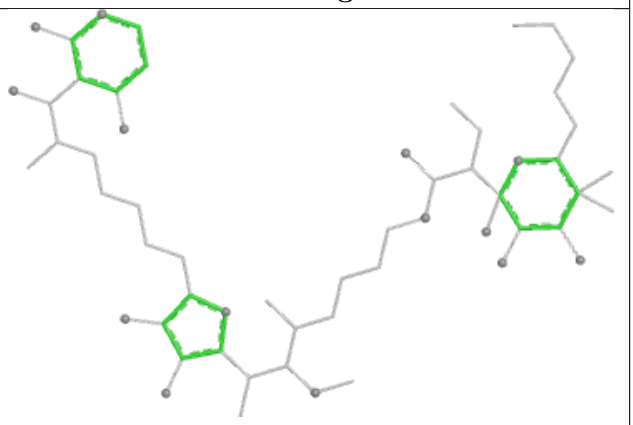
Bond lengths



Bond angles

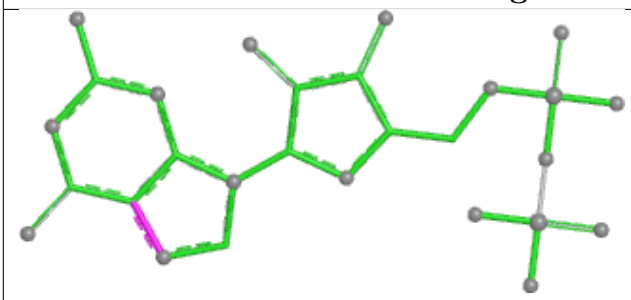


Torsions

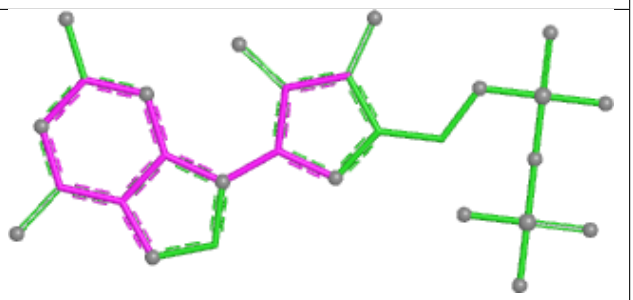


Rings

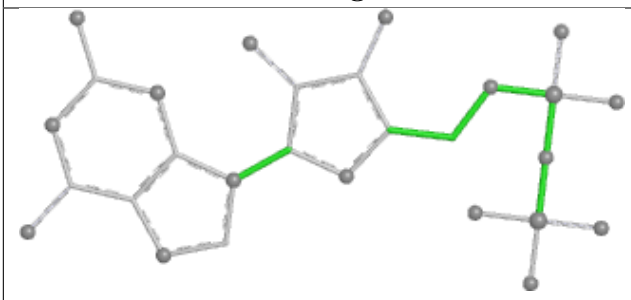
Ligand GDP AZ 501



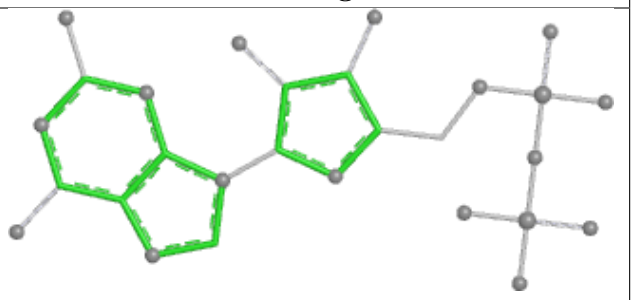
Bond lengths



Bond angles



Torsions



Rings

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

In the following table, the column labelled '#RSRZ> 2' contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95^{th} percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled 'Q< 0.9' lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
1	AA	1510/1522 (99%)	0.51	161 (10%) 11 6	17, 54, 143, 200	0
1	CA	1510/1522 (99%)	0.37	84 (5%) 30 16	26, 58, 145, 200	0
2	AB	234/256 (91%)	0.86	39 (16%) 4 2	34, 64, 130, 141	0
2	CB	234/256 (91%)	0.72	23 (9%) 13 7	36, 65, 130, 142	0
3	AC	206/239 (86%)	0.45	13 (6%) 26 14	27, 48, 81, 86	0
3	CC	206/239 (86%)	0.27	4 (1%) 66 45	32, 52, 82, 88	0
4	AD	208/209 (99%)	1.59	59 (28%) 1 1	55, 89, 119, 122	0
4	CD	208/209 (99%)	1.18	37 (17%) 4 2	55, 90, 119, 122	0
5	AE	150/162 (92%)	-0.14	1 (0%) 84 68	23, 41, 62, 84	0
5	CE	150/162 (92%)	-0.08	0 100 100	30, 44, 64, 86	0
6	AF	101/101 (100%)	0.70	4 (3%) 42 23	48, 72, 88, 94	0
6	CF	101/101 (100%)	0.71	2 (1%) 65 44	52, 74, 90, 95	0
7	AG	155/156 (99%)	0.70	12 (7%) 19 10	40, 64, 100, 115	0
7	CG	155/156 (99%)	0.59	10 (6%) 25 13	45, 67, 101, 115	0
8	AH	138/138 (100%)	0.06	2 (1%) 73 53	30, 44, 61, 71	0
8	CH	138/138 (100%)	-0.04	1 (0%) 84 68	31, 47, 62, 72	0
9	AI	127/128 (99%)	1.47	35 (27%) 1 1	33, 73, 113, 120	0
9	CI	127/128 (99%)	1.06	14 (11%) 10 5	40, 77, 114, 120	0
10	AJ	98/105 (93%)	1.86	46 (46%) 0 0	41, 80, 133, 136	0
10	CJ	98/105 (93%)	1.61	34 (34%) 1 0	44, 84, 134, 137	0
11	AK	119/129 (92%)	0.44	9 (7%) 20 11	28, 49, 80, 104	0
11	CK	119/129 (92%)	0.28	3 (2%) 58 37	32, 53, 82, 104	0
12	AL	124/135 (91%)	0.87	13 (10%) 11 6	28, 66, 87, 125	0
12	CL	124/135 (91%)	0.75	6 (4%) 35 19	30, 67, 88, 124	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	AM	124/126 (98%)	1.15	21 (16%) 4 2	50, 73, 100, 137	0
13	CM	124/126 (98%)	0.96	16 (12%) 7 4	53, 76, 101, 137	0
14	AN	60/61 (98%)	0.85	10 (16%) 4 2	33, 48, 76, 79	0
14	CN	60/61 (98%)	0.70	3 (5%) 34 18	39, 53, 76, 80	0
15	AO	88/89 (98%)	0.20	0 100 100	36, 51, 73, 81	0
15	CO	88/89 (98%)	0.21	1 (1%) 78 59	37, 53, 73, 81	0
16	AP	83/88 (94%)	1.14	10 (12%) 9 5	62, 78, 99, 125	0
16	CP	83/88 (94%)	0.87	6 (7%) 21 11	62, 80, 100, 124	0
17	AQ	99/105 (94%)	0.28	0 100 100	33, 55, 72, 83	0
17	CQ	99/105 (94%)	0.22	2 (2%) 65 44	39, 56, 73, 83	0
18	AR	70/88 (79%)	0.31	1 (1%) 73 53	37, 55, 87, 99	0
18	CR	70/88 (79%)	0.33	1 (1%) 73 53	43, 59, 88, 99	0
19	AS	78/93 (83%)	1.58	20 (25%) 1 1	61, 81, 116, 125	0
19	CS	78/93 (83%)	1.26	18 (23%) 2 1	63, 83, 117, 125	0
20	AT	99/106 (93%)	1.01	10 (10%) 12 6	49, 77, 112, 115	0
20	CT	99/106 (93%)	0.89	13 (13%) 7 4	52, 78, 113, 115	0
21	AU	24/27 (88%)	1.16	4 (16%) 4 2	43, 55, 76, 93	0
21	CU	24/27 (88%)	1.13	3 (12%) 8 5	46, 59, 78, 92	0
22	AV	76/76 (100%)	0.33	5 (6%) 24 13	34, 64, 95, 113	0
22	AW	76/76 (100%)	2.76	47 (61%) 0 0	60, 165, 193, 200	0
22	CV	76/76 (100%)	0.29	3 (3%) 43 24	38, 66, 97, 114	0
22	CW	76/76 (100%)	2.29	44 (57%) 0 0	63, 166, 193, 200	0
23	AX	17/27 (62%)	1.58	6 (35%) 1 0	27, 87, 137, 139	0
23	CX	17/27 (62%)	1.47	5 (29%) 1 1	32, 88, 137, 140	0
24	AY	68/77 (88%)	1.38	11 (16%) 4 2	70, 145, 175, 178	0
24	CY	68/77 (88%)	1.49	18 (26%) 1 1	72, 146, 174, 178	0
25	AZ	385/405 (95%)	1.35	77 (20%) 3 1	84, 129, 155, 177	0
25	CZ	385/405 (95%)	1.55	106 (27%) 1 1	85, 129, 155, 177	0
26	B0	84/85 (98%)	0.84	8 (9%) 14 7	47, 64, 95, 108	0
26	D0	84/85 (98%)	0.95	9 (10%) 11 6	50, 66, 95, 108	0
27	B1	93/98 (94%)	0.58	8 (8%) 16 9	38, 55, 114, 120	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
27	D1	93/98 (94%)	0.77	7 (7%) 20 11	54, 71, 121, 129	0
28	B2	71/72 (98%)	2.80	44 (61%) 0 0	108, 136, 147, 149	0
28	D2	71/72 (98%)	1.20	10 (14%) 6 3	88, 107, 126, 142	0
29	B3	59/60 (98%)	0.81	5 (8%) 16 9	50, 71, 91, 116	0
29	D3	59/60 (98%)	0.72	4 (6%) 23 12	51, 72, 91, 116	0
30	B4	44/71 (61%)	3.59	39 (88%) 0 0	109, 148, 172, 176	0
30	D4	44/71 (61%)	2.30	23 (52%) 0 0	110, 148, 172, 176	0
31	B5	59/60 (98%)	1.24	13 (22%) 2 1	45, 71, 131, 148	0
31	D5	59/60 (98%)	1.30	11 (18%) 3 1	46, 73, 130, 148	0
32	B6	50/54 (92%)	2.65	25 (50%) 0 0	50, 80, 106, 112	0
32	D6	50/54 (92%)	1.80	17 (34%) 1 0	54, 82, 106, 114	0
33	B7	48/49 (97%)	0.73	3 (6%) 26 14	45, 53, 90, 110	0
33	D7	48/49 (97%)	0.59	2 (4%) 40 22	47, 54, 89, 110	0
34	B8	63/65 (96%)	1.53	18 (28%) 1 1	49, 63, 79, 101	0
34	D8	63/65 (96%)	1.25	14 (22%) 2 1	51, 65, 80, 101	0
35	B9	37/37 (100%)	1.46	11 (29%) 1 1	62, 75, 95, 98	0
35	D9	37/37 (100%)	1.64	11 (29%) 1 1	61, 77, 96, 98	0
36	BA	2901/2915 (99%)	0.67	310 (10%) 11 6	21, 65, 173, 200	0
36	DA	2901/2915 (99%)	0.71	323 (11%) 10 5	26, 67, 173, 200	0
37	BB	119/122 (97%)	0.89	10 (8%) 17 9	52, 81, 104, 123	0
37	DB	119/122 (97%)	0.82	5 (4%) 40 22	55, 82, 104, 123	0
38	BC	228/229 (99%)	1.13	45 (19%) 3 1	47, 78, 152, 166	0
38	DC	228/229 (99%)	1.01	31 (13%) 7 4	51, 80, 152, 167	0
39	BD	275/276 (99%)	0.27	22 (8%) 18 10	27, 44, 71, 96	0
39	DD	275/276 (99%)	0.21	16 (5%) 29 16	29, 46, 71, 96	0
40	BE	204/206 (99%)	1.02	31 (15%) 5 3	40, 65, 114, 124	0
40	DE	204/206 (99%)	0.90	30 (14%) 6 3	41, 65, 114, 124	0
41	BF	207/210 (98%)	1.12	32 (15%) 5 2	45, 96, 152, 159	0
41	DF	207/210 (98%)	1.22	39 (18%) 3 1	45, 97, 152, 159	0
42	BG	181/182 (99%)	0.83	24 (13%) 7 4	50, 73, 111, 132	0
42	DG	181/182 (99%)	1.15	33 (18%) 3 1	78, 100, 124, 135	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
43	BH	159/180 (88%)	1.66	49 (30%) 1 1	84, 119, 144, 150	0
43	DH	159/180 (88%)	1.52	39 (24%) 2 1	83, 119, 144, 151	0
44	BJ	0/173	-	-	-	-
44	DJ	0/173	-	-	-	-
45	BK	0/147	-	-	-	-
45	DK	0/147	-	-	-	-
46	BN	138/140 (98%)	0.90	13 (9%) 14 8	51, 74, 118, 123	0
46	DN	138/140 (98%)	0.92	11 (7%) 18 10	51, 75, 118, 123	0
47	BO	122/122 (100%)	-0.01	0 100 100	35, 49, 62, 66	0
47	DO	122/122 (100%)	0.03	0 100 100	35, 50, 62, 65	0
48	BP	146/150 (97%)	2.17	74 (50%) 0 0	47, 92, 118, 139	0
48	DP	146/150 (97%)	1.81	52 (35%) 1 0	49, 95, 118, 138	0
49	BQ	141/141 (100%)	0.46	7 (4%) 34 18	35, 54, 75, 117	0
49	DQ	141/141 (100%)	0.59	7 (4%) 34 18	39, 54, 76, 117	0
50	BR	117/118 (99%)	0.83	8 (6%) 23 12	51, 70, 88, 93	0
50	DR	117/118 (99%)	0.82	11 (9%) 14 8	52, 71, 89, 93	0
51	BS	98/112 (87%)	1.87	33 (33%) 1 0	69, 89, 114, 118	0
51	DS	98/112 (87%)	1.59	31 (31%) 1 1	71, 90, 114, 117	0
52	BT	137/146 (93%)	1.08	22 (16%) 4 2	50, 71, 133, 164	0
52	DT	137/146 (93%)	0.98	14 (10%) 12 6	51, 72, 134, 164	0
53	BU	117/118 (99%)	0.85	10 (8%) 16 9	51, 68, 90, 112	0
53	DU	117/118 (99%)	0.96	13 (11%) 10 5	52, 69, 89, 112	0
54	BV	101/101 (100%)	1.47	21 (20%) 2 1	52, 98, 113, 116	0
54	DV	101/101 (100%)	1.36	16 (15%) 5 2	52, 98, 113, 116	0
55	BW	113/113 (100%)	0.71	7 (6%) 26 14	56, 71, 102, 133	0
55	DW	113/113 (100%)	0.73	5 (4%) 39 21	56, 72, 103, 134	0
56	BX	92/96 (95%)	1.44	16 (17%) 4 2	64, 83, 101, 111	0
56	DX	92/96 (95%)	1.26	15 (16%) 4 2	65, 84, 102, 112	0
57	BY	100/110 (90%)	2.43	57 (57%) 0 0	93, 114, 151, 160	0
57	DY	100/110 (90%)	2.03	40 (40%) 1 0	93, 114, 151, 160	0
58	BZ	176/206 (85%)	1.02	36 (20%) 2 1	44, 71, 117, 123	0
58	DZ	176/206 (85%)	0.99	20 (11%) 10 5	56, 78, 111, 119	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
All	All	21994/23376 (94%)	0.83	2933 (13%) 7 4	17, 69, 146, 200	0

All (2933) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
48	BP	107	LYS	11.3
49	DQ	141	GLN	10.9
36	BA	2173	A	10.4
32	B6	42	TRP	9.6
28	B2	64	LEU	9.3
49	BQ	141	GLN	8.6
36	BA	1541	G	8.4
14	AN	2	ALA	8.3
32	D6	42	TRP	8.2
28	B2	50	ILE	8.2
28	B2	54	LYS	8.0
22	AW	17	C	7.5
1	AA	1038	C	7.4
36	DA	1541	G	7.2
32	B6	46	HIS	7.2
19	AS	81	ARG	7.1
36	DA	2173	A	7.1
36	BA	654(T)	C	7.1
30	B4	47	GLN	7.0
1	AA	1036	G	7.0
57	BY	83	THR	7.0
1	AA	1125	U	6.8
2	CB	7	VAL	6.7
51	BS	54	LEU	6.7
13	AM	84	ILE	6.7
11	AK	129	SER	6.6
1	AA	1037	C	6.6
30	B4	26	SER	6.6
38	BC	1	PRO	6.6
30	B4	42	PHE	6.5
35	D9	1	MET	6.5
50	BR	3	HIS	6.5
57	DY	75	ILE	6.4
1	AA	1129	C	6.3
36	BA	1077	A	6.3
30	B4	27	THR	6.2
38	BC	109	ASP	6.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
35	B9	1	MET	6.2
30	B4	37	SER	6.2
22	CW	34	G	6.2
19	AS	10	PHE	6.1
32	B6	54	ILE	6.1
48	BP	51	PHE	6.0
14	CN	2	ALA	6.0
34	B8	48	PHE	6.0
40	BE	64	LYS	5.9
21	AU	25	LYS	5.9
22	AW	7	A	5.9
32	B6	39	TYR	5.9
4	CD	112	VAL	5.9
25	CZ	29	ALA	5.8
30	B4	25	TYR	5.8
20	AT	73	HIS	5.8
34	D8	64	TYR	5.8
58	DZ	113	ALA	5.7
28	B2	53	LEU	5.7
48	DP	107	LYS	5.7
43	BH	52	VAL	5.7
13	CM	125	ARG	5.6
48	DP	7	ARG	5.6
54	DV	36	PRO	5.6
28	B2	60	LEU	5.6
13	AM	7	VAL	5.6
41	BF	24	LEU	5.6
48	DP	27	HIS	5.6
30	D4	4	GLY	5.5
1	CA	88	A	5.5
28	B2	57	ILE	5.5
32	B6	45	LYS	5.5
22	AW	2	C	5.5
22	AW	1	G	5.5
19	AS	67	VAL	5.4
36	BA	2799	C	5.4
13	AM	125	ARG	5.4
1	AA	1126	U	5.4
22	CW	44	G	5.4
36	BA	2802	G	5.4
30	D4	42	PHE	5.4
36	BA	1540	U	5.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
50	DR	2	ARG	5.4
13	CM	7	VAL	5.3
36	BA	654(V)	A	5.3
25	CZ	72	THR	5.3
42	BG	2	PRO	5.3
57	BY	3	VAL	5.3
1	AA	1130	A	5.3
38	BC	107	TRP	5.3
20	CT	73	HIS	5.3
22	AW	34	G	5.2
40	BE	88	GLY	5.2
28	B2	65	ASN	5.2
22	AW	3	C	5.2
25	CZ	199	ILE	5.2
57	DY	79	CYS	5.2
25	AZ	203	LEU	5.1
52	DT	6	LEU	5.1
40	BE	132	HIS	5.1
34	D8	35	GLN	5.1
36	DA	352	G	5.1
1	AA	204	U	5.1
36	BA	1542	A	5.1
36	DA	2896	C	5.1
57	BY	2	ARG	5.1
34	D8	34	TRP	5.1
30	B4	4	GLY	5.1
43	DH	169	VAL	5.1
48	BP	27	HIS	5.1
42	DG	82	LEU	5.1
25	CZ	89	ILE	5.1
23	CX	26	A	5.1
57	DY	71	LYS	5.1
13	CM	123	ALA	5.0
30	B4	34	GLU	5.0
36	BA	2172	U	5.0
22	AW	5	G	5.0
1	AA	1039	C	5.0
22	AW	48	C	5.0
57	DY	2	ARG	5.0
20	AT	104	LEU	5.0
49	BQ	140	ALA	5.0
22	AW	4	C	5.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	CA	1036	G	5.0
22	AW	6	G	5.0
36	BA	2894	G	5.0
51	BS	104	GLY	5.0
22	CW	3	C	5.0
38	DC	1	PRO	5.0
54	BV	21	ARG	5.0
19	AS	43	GLU	5.0
4	AD	37	PRO	4.9
31	D5	4	HIS	4.9
4	AD	30	LYS	4.9
25	CZ	141	VAL	4.9
7	CG	84	ASN	4.9
30	B4	40	HIS	4.9
1	AA	89	C	4.9
22	CW	7	A	4.9
48	DP	26	GLY	4.9
1	CA	89	C	4.9
36	BA	1543	C	4.9
50	DR	3	HIS	4.9
48	BP	19	VAL	4.9
10	AJ	85	LEU	4.9
40	BE	10	GLY	4.9
32	B6	40	CYS	4.9
22	AW	62	C	4.9
43	DH	157	TYR	4.9
36	BA	2207	G	4.9
36	DA	654(E)	G	4.9
25	AZ	199	ILE	4.8
34	B8	34	TRP	4.8
23	CX	18	G	4.8
36	DA	2802	G	4.8
48	BP	28	GLY	4.8
41	BF	8	GLN	4.8
1	AA	1029	C	4.8
10	AJ	34	VAL	4.8
40	DE	64	LYS	4.8
4	AD	26	CYS	4.8
48	BP	110	TYR	4.8
24	AY	44	G	4.8
36	BA	2795	G	4.8
32	B6	23	THR	4.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
54	BV	37	VAL	4.8
4	AD	20	TYR	4.8
23	AX	11	U	4.8
36	BA	362	U	4.8
28	B2	51	ARG	4.8
38	BC	53	ARG	4.8
1	CA	1537	U	4.7
36	BA	2179	C	4.7
36	DA	1073	A	4.7
36	DA	1094	U	4.7
36	BA	654(K)	C	4.7
40	BE	69	LYS	4.7
25	CZ	65	THR	4.7
57	DY	5	MET	4.7
36	DA	1062	G	4.7
25	CZ	112	PRO	4.7
36	DA	654(V)	A	4.7
54	BV	36	PRO	4.7
23	CX	11	U	4.7
41	BF	9	ILE	4.7
36	DA	1095	A	4.7
7	AG	156	TRP	4.7
51	BS	105	ALA	4.7
28	B2	63	VAL	4.7
36	BA	1449	A	4.7
57	BY	51	VAL	4.7
58	BZ	114	GLY	4.6
7	CG	80	VAL	4.6
32	B6	24	GLU	4.6
10	AJ	82	ILE	4.6
46	BN	3	THR	4.6
48	BP	15	ARG	4.6
50	BR	4	LEU	4.6
4	CD	23	GLY	4.6
30	D4	34	GLU	4.6
48	DP	76	LYS	4.6
33	B7	48	LYS	4.6
36	BA	2801	A	4.6
22	AW	71	G	4.6
36	BA	654(S)	G	4.6
53	BU	58	ARG	4.6
34	B8	35	GLN	4.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
58	BZ	139	VAL	4.6
1	AA	1025	U	4.5
1	CA	81	U	4.5
13	CM	124	PRO	4.5
50	DR	4	LEU	4.5
36	DA	1495	A	4.5
48	DP	28	GLY	4.5
53	BU	60	LEU	4.5
2	CB	233	SER	4.5
7	AG	84	ASN	4.5
48	DP	51	PHE	4.5
57	BY	19	LYS	4.5
40	DE	76	ARG	4.5
36	DA	1099	G	4.5
36	DA	1033	U	4.5
21	CU	25	LYS	4.5
39	BD	35	LYS	4.5
53	DU	94	ASN	4.5
36	DA	2179	C	4.5
9	AI	59	PHE	4.5
1	AA	1026	G	4.5
22	CW	6	G	4.5
36	BA	1114	G	4.5
41	DF	165	ARG	4.5
42	BG	48	GLU	4.5
54	DV	37	VAL	4.5
36	BA	2801(A)	A	4.5
48	BP	65	ARG	4.5
46	BN	132	ALA	4.4
30	B4	24	THR	4.4
49	DQ	140	ALA	4.4
7	CG	85	TYR	4.4
36	BA	361	G	4.4
32	D6	26	ASN	4.4
4	AD	107	ARG	4.4
34	B8	64	TYR	4.4
58	BZ	113	ALA	4.4
36	DA	2506	U	4.4
52	BT	27	THR	4.4
19	CS	67	VAL	4.4
30	B4	32	TYR	4.4
1	AA	470	C	4.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	AB	139	LYS	4.4
56	DX	53	LYS	4.4
4	CD	152	SER	4.4
28	B2	47	ASN	4.4
9	AI	4	TYR	4.4
30	B4	29	PRO	4.4
36	BA	654(H)	G	4.3
50	BR	2	ARG	4.3
4	AD	31	CYS	4.3
4	AD	152	SER	4.3
57	BY	17	SER	4.3
52	DT	1	MET	4.3
25	CZ	35	ALA	4.3
28	D2	19	VAL	4.3
36	BA	352	G	4.3
57	BY	71	LYS	4.3
42	BG	77	ILE	4.3
46	DN	3	THR	4.3
52	DT	27	THR	4.3
56	BX	53	LYS	4.3
30	B4	22	ILE	4.3
30	B4	31	ILE	4.3
43	DH	82	GLY	4.3
48	BP	33	ARG	4.3
25	AZ	85	HIS	4.3
32	D6	46	HIS	4.3
56	BX	64	LYS	4.3
27	D1	95	LEU	4.3
25	AZ	63	ILE	4.3
52	DT	4	GLY	4.3
30	D4	41	PRO	4.2
35	D9	37	GLY	4.2
22	CW	1	G	4.2
36	BA	1091	G	4.2
36	BA	2896	C	4.2
13	AM	117	VAL	4.2
3	AC	2	GLY	4.2
46	BN	4	TYR	4.2
1	CA	1001	A	4.2
36	BA	655	A	4.2
36	DA	1449	A	4.2
28	B2	38	GLN	4.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
4	AD	29	PRO	4.2
10	AJ	36	GLY	4.2
31	B5	57	VAL	4.2
36	BA	1082	U	4.2
22	AW	21	A	4.2
40	DE	132	HIS	4.2
22	CW	71	G	4.2
13	AM	8	GLU	4.1
40	DE	67	PHE	4.1
31	B5	4	HIS	4.1
39	DD	276	LYS	4.1
58	DZ	114	GLY	4.1
1	CA	1129	C	4.1
22	CW	17	C	4.1
27	B1	85	LEU	4.1
27	D1	85	LEU	4.1
36	BA	1072	C	4.1
1	AA	1456	G	4.1
2	CB	132	LYS	4.1
28	B2	49	LYS	4.1
4	AD	23	GLY	4.1
28	B2	3	LEU	4.1
36	DA	1046	A	4.1
9	AI	21	PRO	4.1
10	AJ	78	ASN	4.1
28	B2	55	ARG	4.1
48	BP	7	ARG	4.1
43	BH	157	TYR	4.1
22	AW	59	U	4.1
50	DR	105	ARG	4.1
1	AA	1005	A	4.1
36	BA	2310	A	4.1
36	DA	330	A	4.1
1	AA	76	C	4.1
57	DY	17	SER	4.1
32	B6	47	THR	4.1
3	AC	85	ARG	4.1
10	AJ	5	ARG	4.1
36	BA	1062	G	4.1
36	BA	1087	G	4.1
36	DA	2894	G	4.1
9	AI	19	LEU	4.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	B8	32	LEU	4.0
34	B8	33	ASN	4.0
39	DD	38	LYS	4.0
51	BS	33	LYS	4.0
1	AA	197	A	4.0
4	CD	31	CYS	4.0
22	AW	61	C	4.0
25	CZ	375	ILE	4.0
36	BA	654(F)	C	4.0
38	DC	97	GLU	4.0
26	B0	2	ALA	4.0
7	CG	81	GLY	4.0
40	DE	66	HIS	4.0
57	BY	45	VAL	4.0
10	AJ	80	LYS	4.0
28	B2	41	ILE	4.0
57	BY	96	ILE	4.0
28	B2	59	ARG	4.0
46	DN	132	ALA	4.0
36	BA	2542	A	4.0
22	AW	56	C	4.0
36	DA	2111	C	4.0
57	BY	49	VAL	4.0
57	BY	94	LYS	4.0
41	BF	7	TYR	4.0
25	AZ	35	ALA	4.0
48	BP	98	GLU	4.0
22	AW	18	G	4.0
36	DA	1056	G	4.0
48	BP	71	VAL	4.0
36	BA	654(J)	A	4.0
36	BA	1495	A	4.0
25	AZ	89	ILE	4.0
30	B4	15	ILE	4.0
39	DD	35	LYS	4.0
30	B4	10	VAL	4.0
52	BT	25	GLY	4.0
1	AA	1124	G	4.0
36	BA	614(B)	G	4.0
37	DB	119	G	4.0
23	AX	26	A	4.0
36	BA	654(I)	C	4.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
38	BC	2	LYS	4.0
48	BP	117	GLU	4.0
4	CD	26	CYS	3.9
25	CZ	111	GLY	3.9
43	DH	170	ARG	3.9
48	DP	65	ARG	3.9
49	BQ	59	ARG	3.9
19	AS	7	LYS	3.9
36	DA	654(J)	A	3.9
36	DA	1542	A	3.9
48	BP	53	GLY	3.9
9	AI	18	PHE	3.9
36	DA	2172	U	3.9
27	B1	95	LEU	3.9
57	BY	92	ASN	3.9
57	DY	3	VAL	3.9
20	CT	103	GLY	3.9
1	AA	198	G	3.9
1	AA	438	G	3.9
1	AA	1286	A	3.9
36	BA	654(C)	G	3.9
36	BA	654(E)	G	3.9
36	BA	1722	A	3.9
36	BA	2106	G	3.9
36	DA	1059	G	3.9
56	DX	64	LYS	3.9
11	AK	128	ALA	3.9
28	B2	61	LEU	3.9
7	CG	79	ARG	3.9
21	CU	2	GLY	3.9
51	BS	108	GLY	3.9
57	BY	59	GLY	3.9
1	AA	1127	G	3.9
22	CW	53	G	3.9
36	BA	1093	G	3.9
36	DA	1051	G	3.9
10	AJ	83	GLU	3.9
58	BZ	11	GLU	3.9
4	AD	2	GLY	3.9
57	BY	75	ILE	3.9
11	CK	128	ALA	3.9
40	BE	61	ARG	3.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
25	AZ	80	VAL	3.8
19	AS	42	PRO	3.8
33	D7	48	LYS	3.8
57	BY	101	LYS	3.8
36	DA	1106	G	3.8
30	D4	40	HIS	3.8
28	B2	69	ARG	3.8
43	DH	59	ARG	3.8
49	DQ	136	ALA	3.8
43	BH	34	GLU	3.8
57	DY	4	LYS	3.8
26	B0	6	GLY	3.8
51	DS	104	GLY	3.8
56	BX	3	THR	3.8
38	DC	77	ILE	3.8
1	AA	1004	A	3.8
36	BA	1046	A	3.8
36	DA	1077	A	3.8
57	BY	52	SER	3.8
3	AC	167	TRP	3.8
36	BA	1079	C	3.8
36	BA	2506	U	3.8
36	BA	2897	U	3.8
22	AW	44	G	3.8
22	CW	5	G	3.8
24	AY	18	G	3.8
36	BA	275	G	3.8
29	B3	1	MET	3.8
54	BV	23	GLU	3.8
4	AD	21	LEU	3.8
4	AD	209	ARG	3.8
52	BT	3	ARG	3.8
57	DY	16	ALA	3.8
40	BE	72	VAL	3.8
36	DA	2119	A	3.8
1	AA	1452	C	3.8
32	D6	54	ILE	3.8
36	BA	654(G)	C	3.8
36	DA	888	C	3.8
2	CB	96	ARG	3.8
7	AG	79	ARG	3.8
19	CS	10	PHE	3.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	DA	1074	G	3.8
19	CS	41	VAL	3.8
30	B4	35	VAL	3.8
2	AB	96	ARG	3.8
30	B4	21	VAL	3.7
40	DE	75	VAL	3.7
4	AD	28	SER	3.7
40	DE	128	SER	3.7
24	CY	18	G	3.7
25	CZ	87	ASP	3.7
36	DA	2106	G	3.7
53	DU	58	ARG	3.7
48	DP	22	GLY	3.7
2	AB	15	VAL	3.7
22	AW	20	U	3.7
27	B1	86	SER	3.7
2	CB	234	PRO	3.7
19	AS	80	TYR	3.7
58	BZ	168	GLU	3.7
36	BA	1071	G	3.7
30	D4	6	HIS	3.7
42	BG	86	MET	3.7
13	CM	84	ILE	3.7
4	AD	108	LEU	3.7
23	AX	27	A	3.7
10	CJ	77	PRO	3.7
36	BA	2105	C	3.7
25	CZ	116	THR	3.7
7	AG	80	VAL	3.7
51	DS	14	VAL	3.7
36	BA	1089	G	3.7
36	DA	406	G	3.7
2	AB	18	GLY	3.7
42	BG	80	PHE	3.7
10	AJ	77	PRO	3.7
20	AT	11	SER	3.7
25	CZ	33	TYR	3.7
4	AD	32	ALA	3.7
36	DA	2892	A	3.7
57	BY	16	ALA	3.7
25	CZ	214	VAL	3.7
30	D4	27	THR	3.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	CW	72	C	3.7
36	BA	1080	C	3.7
32	B6	20	ASN	3.7
46	DN	2	LYS	3.7
48	BP	109	GLY	3.7
57	BY	82	PRO	3.6
7	AG	77	SER	3.6
1	AA	1030(A)	G	3.6
9	CI	4	TYR	3.6
24	CY	44	G	3.6
31	D5	52	TYR	3.6
1	CA	1447	A	3.6
22	AW	35	A	3.6
35	B9	17	ILE	3.6
36	DA	345	A	3.6
36	DA	1096	A	3.6
36	DA	2801(A)	A	3.6
42	DG	77	ILE	3.6
36	BA	34	C	3.6
58	BZ	12	GLY	3.6
43	BH	33	LEU	3.6
1	CA	1125	U	3.6
9	AI	58	HIS	3.6
36	BA	1740	G	3.6
36	DA	654(S)	G	3.6
36	BA	2629	A	3.6
36	DA	6	A	3.6
1	AA	1027	C	3.6
26	D0	2	ALA	3.6
30	B4	33	VAL	3.6
36	BA	365	C	3.6
36	DA	654(T)	C	3.6
10	AJ	73	ASP	3.6
2	CB	133	LYS	3.6
10	CJ	85	LEU	3.6
27	D1	82	LEU	3.6
54	BV	20	LEU	3.6
57	DY	28	LYS	3.6
37	DB	1	U	3.6
30	B4	7	PRO	3.6
36	BA	2308	G	3.6
36	DA	654(D)	G	3.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	DA	654(L)	G	3.6
36	DA	2893	G	3.6
43	BH	53	GLU	3.6
9	AI	95	LYS	3.6
36	DA	1494	A	3.6
41	BF	12	LEU	3.6
22	AW	72	C	3.6
36	BA	2107	C	3.6
40	BE	66	HIS	3.6
34	D8	63	PRO	3.6
1	AA	84	U	3.6
36	DA	2897	U	3.6
10	AJ	25	GLU	3.6
57	BY	47	LYS	3.6
32	B6	43	CYS	3.6
9	AI	27	THR	3.6
1	AA	460	G	3.5
1	AA	1028	C	3.5
19	AS	41	VAL	3.5
25	CZ	42	VAL	3.5
4	CD	151	LYS	3.5
28	B2	71	ASN	3.5
38	BC	77	ILE	3.5
22	AW	8	U	3.5
10	AJ	35	SER	3.5
25	AZ	124	ARG	3.5
32	B6	37	ARG	3.5
56	BX	27	THR	3.5
58	DZ	121	HIS	3.5
20	AT	74	LYS	3.5
28	B2	39	ALA	3.5
38	BC	78	ALA	3.5
41	DF	22	ALA	3.5
1	AA	1447	A	3.5
1	CA	1286	A	3.5
36	BA	1063	G	3.5
36	DA	1416	G	3.5
52	BT	1	MET	3.5
25	AZ	131	ILE	3.5
39	BD	30	GLU	3.5
25	AZ	64	ASN	3.5
46	DN	4	TYR	3.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
52	BT	32	TYR	3.5
19	CS	81	ARG	3.5
52	BT	112	ARG	3.5
32	D6	40	CYS	3.5
1	AA	1281	U	3.5
10	AJ	33	GLN	3.5
36	DA	1078	U	3.5
36	DA	1082	U	3.5
11	AK	127	LYS	3.5
53	DU	90	VAL	3.5
9	CI	21	PRO	3.5
57	BY	5	MET	3.5
25	CZ	63	ILE	3.5
43	DH	53	GLU	3.5
22	CW	21	A	3.5
24	CY	1	A	3.5
36	BA	654(U)	A	3.5
36	DA	1067	A	3.5
12	CL	115	LYS	3.5
20	CT	14	LYS	3.5
36	BA	1416	G	3.5
36	BA	2190	G	3.5
36	DA	1068	G	3.5
42	DG	67	LYS	3.5
51	BS	62	LYS	3.5
38	BC	56	GLN	3.5
11	CK	129	SER	3.5
51	DS	108	GLY	3.5
40	BE	63	LEU	3.5
36	DA	2099	U	3.5
57	DY	101	LYS	3.5
30	D4	35	VAL	3.5
36	BA	2117	A	3.5
36	DA	2117	A	3.5
40	BE	75	VAL	3.5
41	DF	134	GLY	3.5
57	BY	85	VAL	3.5
51	BS	52	SER	3.5
4	AD	33	MET	3.5
22	CW	2	C	3.5
36	BA	888	C	3.5
36	DA	1049	C	3.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	DA	2105	C	3.5
57	DY	77	PRO	3.5
32	B6	35	GLU	3.4
13	CM	27	LYS	3.4
20	AT	75	ASN	3.4
58	BZ	115	GLY	3.4
4	AD	19	LEU	3.4
25	CZ	108	ALA	3.4
40	DE	63	LEU	3.4
48	BP	8	PRO	3.4
1	AA	431	A	3.4
25	CZ	200	TRP	3.4
58	BZ	140	ASP	3.4
10	AJ	55	LYS	3.4
32	D6	24	GLU	3.4
43	DH	86	GLU	3.4
1	CA	1001(A)	G	3.4
22	CW	20	U	3.4
46	DN	138	LEU	3.4
10	AJ	32	ALA	3.4
41	DF	18	ARG	3.4
10	CJ	23	ILE	3.4
43	DH	21	PRO	3.4
30	D4	26	SER	3.4
31	D5	3	LYS	3.4
35	D9	33	LYS	3.4
1	AA	439	A	3.4
36	DA	331	A	3.4
36	DA	2310	A	3.4
25	AZ	141	VAL	3.4
40	BE	59	VAL	3.4
43	BH	169	VAL	3.4
2	AB	65	GLY	3.4
40	DE	88	GLY	3.4
25	CZ	86	ALA	3.4
38	BC	112	ALA	3.4
39	DD	244	ARG	3.4
41	BF	22	ALA	3.4
4	AD	42	GLN	3.4
36	BA	271(Y)	U	3.4
41	BF	136	THR	3.4
57	DY	82	PRO	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AA	1131	G	3.4
36	BA	81	G	3.4
36	BA	1106	G	3.4
36	DA	1087	G	3.4
36	DA	2112	G	3.4
48	DP	25	SER	3.4
10	CJ	88	LEU	3.4
43	DH	43	VAL	3.4
57	DY	51	VAL	3.4
25	CZ	392	GLY	3.4
48	DP	104	GLY	3.4
51	DS	90	GLY	3.4
36	BA	2892	A	3.4
54	BV	45	THR	3.4
54	DV	45	THR	3.4
10	CJ	91	PRO	3.4
39	BD	38	LYS	3.4
1	CA	90	U	3.4
1	CA	204	U	3.4
31	D5	57	VAL	3.4
43	BH	49	VAL	3.4
1	CA	1002	G	3.4
22	AW	15	G	3.4
24	CY	19	G	3.4
36	BA	10	G	3.4
36	DA	2751	G	3.4
30	B4	28	LYS	3.4
25	AZ	98	GLN	3.4
36	BA	761	A	3.3
40	BE	67	PHE	3.3
4	AD	3	ARG	3.3
36	BA	1493	C	3.3
42	DG	113	ARG	3.3
43	DH	26	VAL	3.3
53	DU	60	LEU	3.3
23	CX	17	U	3.3
36	DA	1097	U	3.3
56	BX	52	VAL	3.3
10	CJ	55	LYS	3.3
25	AZ	240	GLY	3.3
32	B6	22	ALA	3.3
48	BP	143	GLY	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
58	DZ	3	TYR	3.3
51	DS	11	LYS	3.3
41	BF	25	PRO	3.3
1	AA	1442(A)	G	3.3
4	CD	161	ASN	3.3
36	BA	298	G	3.3
36	DA	1044	G	3.3
36	DA	2181	G	3.3
25	AZ	344	PHE	3.3
51	DS	12	PHE	3.3
38	DC	107	TRP	3.3
41	DF	162	LEU	3.3
48	BP	105	LEU	3.3
1	AA	632	A	3.3
22	AW	9	A	3.3
36	BA	1073	A	3.3
36	BA	1103	A	3.3
4	AD	146	ILE	3.3
4	AD	158	ILE	3.3
30	B4	14	ILE	3.3
36	BA	1081	U	3.3
1	AA	1145	C	3.3
36	DA	654(K)	C	3.3
30	B4	41	PRO	3.3
42	DG	2	PRO	3.3
28	B2	62	THR	3.3
40	BE	76	ARG	3.3
3	AC	188	LEU	3.3
32	B6	26	ASN	3.3
25	AZ	362	VAL	3.3
25	CZ	105	VAL	3.3
39	DD	275	LYS	3.3
40	DE	69	LYS	3.3
25	CZ	140	MET	3.3
36	BA	1332	G	3.3
36	DA	274	G	3.3
36	DA	2207	G	3.3
30	B4	17	GLY	3.3
38	BC	130	ILE	3.3
7	AG	85	TYR	3.3
1	AA	1030(D)	A	3.3
23	AX	12	A	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	DA	229	A	3.3
36	DA	1048	A	3.3
43	BH	112	PRO	3.3
43	DH	12	PRO	3.3
36	BA	1094	U	3.3
36	DA	1065	U	3.3
50	DR	91	GLN	3.3
1	AA	1030(B)	C	3.3
38	BC	136	LEU	3.3
41	DF	181	LEU	3.3
51	BS	12	PHE	3.3
19	AS	11	VAL	3.3
43	BH	35	VAL	3.3
25	CZ	91	ASN	3.3
56	DX	72	LYS	3.3
12	CL	127	GLU	3.3
25	AZ	375	ILE	3.3
51	DS	100	ALA	3.3
48	DP	53	GLY	3.3
14	AN	3	ARG	3.3
25	AZ	224	PRO	3.3
22	AW	53	G	3.3
23	AX	18	G	3.3
36	BA	1056	G	3.3
36	DA	614(B)	G	3.3
34	D8	48	PHE	3.3
49	DQ	18	LYS	3.3
1	AA	81	U	3.3
22	AW	16	U	3.3
36	BA	1078	U	3.3
36	BA	1090	U	3.3
36	BA	1544	A	3.3
25	AZ	200	TRP	3.3
1	AA	1006	C	3.3
10	CJ	74	ILE	3.3
30	D4	14	ILE	3.3
36	BA	2103	C	3.3
57	BY	61	ILE	3.3
38	BC	96	GLY	3.3
48	DP	143	GLY	3.3
2	AB	235	SER	3.2
4	AD	9	CYS	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
9	AI	90	PRO	3.2
34	D8	32	LEU	3.2
42	BG	3	LEU	3.2
57	BY	79	CYS	3.2
4	AD	22	LYS	3.2
19	CS	7	LYS	3.2
58	DZ	140	ASP	3.2
8	CH	1	MET	3.2
2	CB	237	ALA	3.2
40	BE	204	ALA	3.2
1	AA	493	G	3.2
1	AA	723	U	3.2
1	AA	1331	G	3.2
36	BA	614(A)	U	3.2
36	DA	1047	G	3.2
36	DA	1740	G	3.2
40	DE	65	GLY	3.2
36	BA	1050	A	3.2
36	BA	1177	A	3.2
10	CJ	90	LEU	3.2
22	AW	49	C	3.2
30	D4	29	PRO	3.2
28	B2	9	GLN	3.2
3	AC	95	THR	3.2
25	AZ	109	ALA	3.2
38	BC	122	ALA	3.2
31	D5	59	GLU	3.2
32	B6	12	GLU	3.2
48	BP	17	LYS	3.2
22	CW	45	U	3.2
36	BA	1113	U	3.2
36	BA	2180	U	3.2
36	DA	405	U	3.2
10	CJ	37	PRO	3.2
25	AZ	112	PRO	3.2
40	DE	62	PRO	3.2
41	DF	25	PRO	3.2
1	AA	146	G	3.2
1	AA	423	G	3.2
1	CA	1034	G	3.2
2	AB	122	PHE	3.2
2	CB	235	SER	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
25	AZ	42	VAL	3.2
36	BA	654(D)	G	3.2
36	BA	654(L)	G	3.2
36	DA	1093	G	3.2
26	B0	3	HIS	3.2
4	CD	9	CYS	3.2
36	BA	654(Q)	C	3.2
38	BC	105	ASP	3.2
39	BD	25	THR	3.2
58	DZ	164	ALA	3.2
13	CM	26	GLY	3.2
32	D6	45	LYS	3.2
48	DP	29	LYS	3.2
31	B5	52	TYR	3.2
9	AI	53	VAL	3.2
43	DH	52	VAL	3.2
7	AG	78	ARG	3.2
10	AJ	75	ILE	3.2
54	DV	1	MET	3.2
36	DA	311	A	3.2
36	DA	2542	A	3.2
37	BB	26	A	3.2
1	AA	407	G	3.2
22	AW	19	G	3.2
36	BA	1721	G	3.2
36	DA	349	G	3.2
36	DA	654(C)	G	3.2
1	AA	457	C	3.2
20	CT	10	LEU	3.2
9	AI	65	VAL	3.2
12	CL	66	VAL	3.2
13	AM	124	PRO	3.2
35	B9	18	ARG	3.2
48	BP	18	ARG	3.2
50	DR	71	GLN	3.2
28	B2	58	ALA	3.2
51	BS	100	ALA	3.2
1	AA	203	U	3.1
40	DE	127	ASP	3.1
48	BP	52	GLU	3.1
1	AA	1256	A	3.1
4	AD	178	VAL	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
25	AZ	132	VAL	3.1
40	DE	59	VAL	3.1
57	BY	39	VAL	3.1
1	AA	78	G	3.1
1	AA	184	G	3.1
1	AA	413	G	3.1
1	CA	470	C	3.1
1	CA	1452	C	3.1
22	AW	57	G	3.1
36	BA	1533	G	3.1
36	DA	2110	G	3.1
36	DA	2156	G	3.1
36	DA	2402	C	3.1
46	BN	2	LYS	3.1
2	AB	190	THR	3.1
9	AI	64	THR	3.1
41	DF	24	LEU	3.1
1	AA	1257	U	3.1
22	CW	16	U	3.1
36	BA	504	U	3.1
43	BH	45	VAL	3.1
57	BY	60	PHE	3.1
25	CZ	213	PRO	3.1
28	B2	18	PRO	3.1
30	B4	43	TYR	3.1
32	B6	29	ASN	3.1
32	D6	20	ASN	3.1
52	BT	91	ARG	3.1
23	CX	27	A	3.1
36	BA	646	A	3.1
36	BA	1088	A	3.1
42	BG	52	ILE	3.1
43	BH	111	HIS	3.1
38	BC	91	ALA	3.1
40	BE	68	ALA	3.1
24	CY	56	C	3.1
36	DA	2474	C	3.1
43	DH	155	SER	3.1
54	DV	35	LEU	3.1
1	AA	1283	G	3.1
36	BA	363	G	3.1
36	DA	10	G	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
48	BP	26	GLY	3.1
25	CZ	366	ASP	3.1
56	BX	29	TRP	3.1
2	AB	87	ARG	3.1
41	DF	83	PHE	3.1
51	BS	30	ARG	3.1
32	D6	21	TYR	3.1
2	CB	8	LYS	3.1
9	AI	29	ASN	3.1
22	CW	47	U	3.1
36	BA	2779	U	3.1
38	BC	99	ILE	3.1
4	CD	157	LEU	3.1
1	CA	495	A	3.1
10	CJ	10	GLY	3.1
36	BA	1490	A	3.1
36	DA	1088	A	3.1
54	BV	101	GLY	3.1
48	BP	25	SER	3.1
1	CA	436	C	3.1
4	AD	25	ARG	3.1
22	CW	48	C	3.1
25	CZ	80	VAL	3.1
36	BA	1049	C	3.1
36	DA	1075	C	3.1
53	DU	91	ASP	3.1
58	BZ	82	ARG	3.1
43	DH	168	PRO	3.1
1	AA	145	G	3.1
1	AA	1032	G	3.1
1	CA	79	G	3.1
1	CA	1124	G	3.1
22	AW	46	G	3.1
36	BA	102	G	3.1
36	BA	140	G	3.1
36	BA	329	G	3.1
36	BA	1059	G	3.1
36	BA	2307	G	3.1
36	DA	275	G	3.1
36	DA	351	G	3.1
32	B6	32	ASN	3.1
1	CA	421	U	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	AW	54	U	3.1
38	BC	95	GLY	3.1
48	DP	41	ARG	3.1
51	BS	89	ARG	3.1
3	CC	207	VAL	3.1
25	CZ	352	VAL	3.1
42	DG	28	VAL	3.1
42	DG	80	PHE	3.1
1	CA	1130	A	3.1
10	AJ	99	LYS	3.1
10	AJ	6	ILE	3.1
38	BC	218	MET	3.1
39	BD	29	PRO	3.1
9	AI	88	TYR	3.1
52	DT	5	ALA	3.0
1	AA	1024	G	3.0
36	BA	274	G	3.0
36	BA	2133	G	3.0
2	AB	165	VAL	3.0
4	CD	178	VAL	3.0
36	BA	1065	U	3.0
36	DA	155	U	3.0
36	DA	504	U	3.0
36	DA	2144	U	3.0
36	DA	2808	U	3.0
32	B6	38	LYS	3.0
41	DF	129	PHE	3.0
31	B5	59	GLU	3.0
48	DP	52	GLU	3.0
54	DV	73	SER	3.0
8	AH	1	MET	3.0
10	AJ	91	PRO	3.0
34	B8	63	PRO	3.0
32	D6	39	TYR	3.0
42	BG	82	LEU	3.0
24	CY	21	A	3.0
36	BA	1095	A	3.0
36	DA	654(U)	A	3.0
9	AI	20	ARG	3.0
22	CW	4	C	3.0
36	BA	2789	C	3.0
36	DA	1100	C	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
48	BP	20	GLY	3.0
54	BV	42	GLY	3.0
9	CI	26	VAL	3.0
43	DH	45	VAL	3.0
43	DH	49	VAL	3.0
2	AB	63	MET	3.0
2	AB	127	ILE	3.0
10	CJ	75	ILE	3.0
51	BS	53	SER	3.0
51	DS	40	ILE	3.0
1	AA	421	U	3.0
2	AB	234	PRO	3.0
22	CW	8	U	3.0
22	AW	70	G	3.0
36	BA	406	G	3.0
36	DA	75	G	3.0
36	DA	139(A)	G	3.0
36	DA	271(S)	G	3.0
25	CZ	203	LEU	3.0
25	AZ	86	ALA	3.0
51	BS	55	ALA	3.0
57	BY	55	TYR	3.0
2	CB	16	HIS	3.0
32	D6	43	CYS	3.0
34	B8	45	GLY	3.0
41	DF	131	GLY	3.0
48	BP	14	LYS	3.0
48	BP	29	LYS	3.0
56	BX	94	GLY	3.0
36	BA	1048	A	3.0
36	BA	1494	A	3.0
22	AW	67	C	3.0
36	DA	1104	C	3.0
52	DT	24	PRO	3.0
38	DC	104	LEU	3.0
4	CD	209	ARG	3.0
25	CZ	330	ARG	3.0
32	B6	21	TYR	3.0
1	AA	173	U	3.0
23	AX	17	U	3.0
36	BA	2189	U	3.0
36	DA	2109	U	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
39	BD	122	ASP	3.0
35	B9	20	HIS	3.0
9	CI	6	GLY	3.0
1	AA	79	G	3.0
1	AA	428	G	3.0
3	AC	207	VAL	3.0
36	BA	1539	G	3.0
36	DA	654(A)	G	3.0
36	DA	892	G	3.0
10	CJ	86	MET	3.0
20	AT	100	ILE	3.0
34	B8	50	LEU	3.0
36	DA	1085	A	3.0
37	BB	52	A	3.0
39	DD	36	PRO	3.0
34	B8	30	ARG	3.0
57	BY	69	ALA	3.0
25	AZ	130	TYR	3.0
30	B4	38	LYS	3.0
30	D4	32	TYR	3.0
30	D4	43	TYR	3.0
36	BA	654(M)	C	3.0
36	BA	2108	C	3.0
51	BS	11	LYS	3.0
25	CZ	85	HIS	3.0
25	CZ	196	VAL	3.0
34	B8	49	VAL	3.0
41	BF	11	VAL	3.0
41	BF	88	VAL	3.0
41	DF	6	VAL	3.0
57	BY	42	VAL	3.0
1	AA	498	U	3.0
22	CW	59	U	3.0
43	BH	88	LEU	2.9
1	AA	410	G	2.9
1	CA	438	G	2.9
22	CW	69	G	2.9
24	CY	77	TRP	2.9
36	DA	295	G	2.9
36	DA	327	G	2.9
37	BB	119	G	2.9
39	DD	29	PRO	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
48	BP	48	PRO	2.9
2	CB	22	LYS	2.9
7	CG	83	ALA	2.9
14	AN	58	LYS	2.9
40	DE	204	ALA	2.9
42	BG	84	LYS	2.9
49	BQ	18	LYS	2.9
52	BT	94	ALA	2.9
2	AB	233	SER	2.9
20	CT	11	SER	2.9
1	AA	143	A	2.9
36	BA	332	A	2.9
36	BA	359	A	2.9
36	BA	1067	A	2.9
37	DB	66	A	2.9
36	DA	654(M)	C	2.9
36	DA	1180	C	2.9
10	CJ	76	ASN	2.9
1	CA	82	U	2.9
25	AZ	347	THR	2.9
48	DP	15	ARG	2.9
52	BT	111	ARG	2.9
12	AL	13	LYS	2.9
51	BS	99	LYS	2.9
57	BY	66	PRO	2.9
38	DC	115	ALA	2.9
10	CJ	19	SER	2.9
25	AZ	33	TYR	2.9
25	CZ	34	VAL	2.9
58	DZ	139	VAL	2.9
58	DZ	165	VAL	2.9
58	BZ	143	GLY	2.9
1	AA	476	G	2.9
1	AA	1031	G	2.9
42	BG	88	ILE	2.9
22	AW	36	A	2.9
24	CY	26	A	2.9
25	CZ	179	LEU	2.9
31	B5	58	LEU	2.9
36	DA	282	A	2.9
36	DA	359	A	2.9
36	DA	363(F)	A	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	DA	1050	A	2.9
46	BN	33	LEU	2.9
46	BN	138	LEU	2.9
48	DP	33	ARG	2.9
20	CT	75	ASN	2.9
25	AZ	285	ASN	2.9
57	BY	21	LYS	2.9
36	DA	1493	C	2.9
39	DD	30	GLU	2.9
57	BY	48	ALA	2.9
36	BA	2895	U	2.9
4	CD	20	TYR	2.9
31	B5	60	VAL	2.9
51	BS	14	VAL	2.9
57	DY	45	VAL	2.9
58	BZ	110	GLY	2.9
38	BC	110	PHE	2.9
28	D2	55	ARG	2.9
30	B4	5	ILE	2.9
38	BC	108	MET	2.9
39	DD	273	ARG	2.9
41	DF	205	ARG	2.9
56	BX	60	ARG	2.9
58	BZ	150	LEU	2.9
42	BG	126	ASP	2.9
57	DY	54	LYS	2.9
1	AA	77	G	2.9
1	AA	98	G	2.9
4	AD	164	ALA	2.9
9	AI	52	ALA	2.9
22	CW	22	G	2.9
25	CZ	64	ASN	2.9
36	BA	1074	G	2.9
36	DA	654(H)	G	2.9
36	BA	330	A	2.9
36	BA	528	A	2.9
36	DA	278	A	2.9
24	AY	25	C	2.9
36	DA	76	C	2.9
36	DA	1090	U	2.9
36	DA	1534	U	2.9
54	BV	41	GLY	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
54	DV	42	GLY	2.9
58	BZ	3	TYR	2.9
4	AD	35	ARG	2.9
7	CG	94	ARG	2.9
21	CU	9	ARG	2.9
30	B4	13	ARG	2.9
57	BY	70	SER	2.9
58	BZ	124	ILE	2.9
48	BP	108	LYS	2.9
56	BX	40	LYS	2.9
13	AM	10	PRO	2.9
40	BE	62	PRO	2.9
53	BU	96	ALA	2.9
27	B1	83	GLU	2.9
34	D8	54	GLU	2.9
2	AB	137	ARG	2.9
43	BH	59	ARG	2.9
10	CJ	4	ILE	2.9
22	CW	37	A	2.9
36	BA	654(A)	G	2.9
36	BA	2793	G	2.9
36	DA	361	G	2.9
36	DA	1071	G	2.9
36	DA	2166	G	2.9
36	DA	2795	G	2.9
51	DS	80	LEU	2.9
25	CZ	11	HIS	2.8
4	CD	160	GLN	2.8
36	DA	271(Y)	U	2.8
25	CZ	216	ASP	2.8
29	D3	2	PRO	2.8
49	BQ	136	ALA	2.8
10	AJ	24	VAL	2.8
10	AJ	76	ASN	2.8
2	AB	64	ARG	2.8
4	AD	184	LYS	2.8
11	CK	11	LYS	2.8
16	AP	12	LYS	2.8
19	CS	6	LYS	2.8
9	AI	102	LEU	2.8
25	AZ	323	LEU	2.8
26	D0	6	GLY	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
48	DP	20	GLY	2.8
10	AJ	74	ILE	2.8
56	DX	70	LEU	2.8
1	AA	495	A	2.8
22	AW	14	A	2.8
36	BA	653	A	2.8
36	BA	1086	A	2.8
43	BH	110	SER	2.8
43	DH	110	SER	2.8
25	AZ	205	ALA	2.8
25	CZ	102	ALA	2.8
1	CA	410	G	2.8
10	CJ	39	PRO	2.8
27	B1	87	PRO	2.8
32	B6	41	PRO	2.8
35	D9	30	PRO	2.8
36	DA	1042	G	2.8
36	DA	1332	G	2.8
36	DA	2115	G	2.8
36	DA	2190	G	2.8
39	BD	36	PRO	2.8
48	DP	87	ASP	2.8
56	DX	37	THR	2.8
1	AA	71	C	2.8
1	CA	840	C	2.8
3	AC	190	ARG	2.8
25	CZ	190	ARG	2.8
36	BA	2402	C	2.8
36	DA	2163	C	2.8
43	BH	23	ARG	2.8
53	BU	59	ARG	2.8
16	AP	48	TRP	2.8
42	DG	29	TRP	2.8
19	AS	8	GLY	2.8
30	B4	19	GLY	2.8
40	BE	52	LEU	2.8
48	BP	24	GLY	2.8
48	BP	148	LEU	2.8
57	BY	58	GLY	2.8
28	B2	70	GLN	2.8
40	DE	54	GLN	2.8
40	DE	68	ALA	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
50	BR	6	SER	2.8
48	BP	16	ARG	2.8
56	DX	65	ARG	2.8
57	BY	77	PRO	2.8
4	AD	34	GLU	2.8
14	AN	4	LYS	2.8
14	AN	22	THR	2.8
34	B8	40	GLU	2.8
38	BC	97	GLU	2.8
40	BE	73	GLU	2.8
41	DF	23	ASP	2.8
57	DY	34	LYS	2.8
58	DZ	168	GLU	2.8
36	BA	505	A	2.8
36	DA	2790	A	2.8
2	AB	238	LEU	2.8
36	BA	2099	U	2.8
42	DG	19	LEU	2.8
48	DP	148	LEU	2.8
10	CJ	36	GLY	2.8
38	BC	83	ILE	2.8
40	DE	77	ILE	2.8
49	DQ	19	GLY	2.8
1	CA	1442(A)	G	2.8
7	AG	151	TYR	2.8
7	CG	151	TYR	2.8
22	CW	46	G	2.8
22	CW	70	G	2.8
36	BA	1584	C	2.8
36	BA	2794	C	2.8
36	BA	2833	G	2.8
36	DA	654(G)	C	2.8
36	DA	654(I)	C	2.8
36	DA	1080	C	2.8
36	DA	1107	G	2.8
36	DA	2185	C	2.8
30	B4	6	HIS	2.8
25	CZ	98	GLN	2.8
48	BP	12	ALA	2.8
52	BT	130	ALA	2.8
38	BC	27	ARG	2.8
48	BP	41	ARG	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
25	AZ	196	VAL	2.8
25	AZ	322	VAL	2.8
38	DC	51	PRO	2.8
39	DD	32	SER	2.8
41	BF	14	PRO	2.8
43	BH	114	VAL	2.8
51	DS	76	LYS	2.8
57	BY	8	LYS	2.8
57	BY	56	PRO	2.8
3	CC	94	LEU	2.8
13	CM	8	GLU	2.8
48	BP	30	THR	2.8
51	BS	107	GLU	2.8
52	BT	6	LEU	2.8
38	DC	109	ASP	2.8
39	BD	270	ILE	2.8
43	DH	162	ILE	2.8
58	BZ	148	ASP	2.8
52	BT	4	GLY	2.8
1	AA	88	A	2.8
1	AA	90	U	2.8
1	AA	202	U	2.8
22	AW	47	U	2.8
36	BA	310	A	2.8
36	BA	1528	A	2.8
36	DA	890	A	2.8
2	AB	16	HIS	2.8
9	AI	128	ARG	2.8
16	AP	72	ARG	2.8
1	CA	76	C	2.8
25	AZ	397	ALA	2.8
51	BS	23	ARG	2.8
57	BY	73	ARG	2.8
10	AJ	57	LYS	2.8
36	BA	271(Z)	C	2.8
36	BA	2111	C	2.8
36	BA	2188	C	2.8
36	DA	654(F)	C	2.8
36	DA	1064	C	2.8
1	CA	1032	G	2.8
36	BA	2181	G	2.8
36	BA	2893	G	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	DA	363	G	2.8
36	DA	1089	G	2.8
36	DA	1539	G	2.8
4	CD	155	LEU	2.8
25	CZ	78	SER	2.8
48	BP	85	LEU	2.8
2	AB	129	GLU	2.8
42	DG	88	ILE	2.8
41	DF	172	TRP	2.7
55	DW	1	MET	2.7
7	CG	82	GLY	2.7
38	BC	55	ASP	2.7
51	DS	61	ASN	2.7
28	B2	67	LYS	2.7
38	DC	122	ALA	2.7
57	BY	65	ALA	2.7
1	AA	429	U	2.7
1	AA	1001	A	2.7
1	AA	1035	A	2.7
1	AA	1135	U	2.7
25	CZ	126	VAL	2.7
36	DA	223	A	2.7
36	DA	332	A	2.7
1	AA	345	C	2.7
1	AA	418	C	2.7
24	AY	56	C	2.7
25	AZ	336	SER	2.7
28	B2	66	GLU	2.7
28	D2	50	ILE	2.7
36	BA	654(B)	C	2.7
36	DA	1076	C	2.7
38	DC	130	ILE	2.7
25	AZ	235	GLY	2.7
41	DF	207	GLY	2.7
48	BP	116	GLY	2.7
1	AA	406	G	2.7
25	CZ	110	ASP	2.7
36	DA	1537	G	2.7
41	BF	18	ARG	2.7
25	CZ	285	ASN	2.7
48	DP	110	TYR	2.7
13	CM	2	ALA	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
25	CZ	73	ALA	2.7
43	BH	156	ALA	2.7
56	BX	4	ALA	2.7
25	CZ	349	VAL	2.7
25	CZ	395	VAL	2.7
35	D9	34	GLN	2.7
50	BR	10	LEU	2.7
52	BT	105	LEU	2.7
4	AD	185	PHE	2.7
38	BC	103	ILE	2.7
43	BH	92	ILE	2.7
54	BV	1	MET	2.7
36	BA	1069	A	2.7
39	BD	262	ARG	2.7
42	DG	55	LYS	2.7
43	DH	62	LYS	2.7
25	CZ	21	ASP	2.7
36	DA	1052	C	2.7
36	DA	1543	C	2.7
25	AZ	70	TYR	2.7
51	BS	86	ALA	2.7
19	CS	58	VAL	2.7
29	B3	59	VAL	2.7
10	AJ	37	PRO	2.7
36	BA	512	G	2.7
36	DA	82	G	2.7
36	DA	1171	G	2.7
40	BE	53	PRO	2.7
48	BP	10	PRO	2.7
38	DC	83	ILE	2.7
2	CB	12	GLU	2.7
25	AZ	101	GLY	2.7
25	CZ	124	ARG	2.7
27	D1	84	GLY	2.7
29	B3	38	GLU	2.7
43	BH	18	GLU	2.7
2	CB	137	ARG	2.7
19	AS	39	THR	2.7
48	BP	21	ARG	2.7
53	DU	36	ARG	2.7
1	AA	1040	U	2.7
24	AY	77	TRP	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
38	BC	125	SER	2.7
43	BH	138	LYS	2.7
58	BZ	142	SER	2.7
36	DA	1057	A	2.7
36	DA	1098	A	2.7
9	CI	88	TYR	2.7
30	D4	25	TYR	2.7
51	BS	42	ASP	2.7
10	AJ	90	LEU	2.7
25	AZ	353	VAL	2.7
58	BZ	141	VAL	2.7
58	DZ	116	VAL	2.7
1	AA	1137	C	2.7
1	CA	1030	C	2.7
36	BA	1582	C	2.7
36	DA	271(G)	C	2.7
36	DA	2103	C	2.7
37	BB	27	C	2.7
10	AJ	4	ILE	2.7
30	D4	31	ILE	2.7
57	DY	74	PRO	2.7
40	DE	61	ARG	2.7
20	CT	74	LYS	2.7
26	D0	4	LYS	2.7
35	B9	2	LYS	2.7
38	BC	90	GLY	2.7
38	DC	2	LYS	2.7
38	DC	96	GLY	2.7
39	DD	42	GLY	2.7
54	BV	43	GLU	2.7
1	AA	39	G	2.7
1	AA	1001(A)	G	2.7
22	AV	44	G	2.7
22	AW	63	G	2.7
22	AW	65	G	2.7
36	BA	308	G	2.7
36	BA	344	G	2.7
36	BA	2147	G	2.7
36	BA	2157	G	2.7
36	DA	1063	G	2.7
25	CZ	336	SER	2.7
28	B2	4	SER	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	D8	51	ALA	2.7
1	CA	723	U	2.7
22	AW	45	U	2.7
25	CZ	106	VAL	2.7
29	D3	59	VAL	2.7
31	D5	58	LEU	2.7
36	DA	1081	U	2.7
38	DC	136	LEU	2.7
43	DH	50	VAL	2.7
48	DP	19	VAL	2.7
57	BY	72	VAL	2.7
48	BP	87	ASP	2.7
9	AI	38	GLN	2.6
9	CI	38	GLN	2.6
10	CJ	82	ILE	2.6
22	AW	58	A	2.6
25	AZ	83	PRO	2.6
36	BA	229	A	2.6
36	BA	363(F)	A	2.6
36	BA	1085	A	2.6
36	DA	1237	A	2.6
48	DP	10	PRO	2.6
54	BV	99	ILE	2.6
56	DX	85	PRO	2.6
58	DZ	28	MET	2.6
32	D6	37	ARG	2.6
4	AD	18	LYS	2.6
13	AM	120	LYS	2.6
38	BC	79	LYS	2.6
2	AB	231	GLU	2.6
9	AI	67	GLY	2.6
13	AM	67	GLU	2.6
15	CO	20	GLY	2.6
25	CZ	71	GLU	2.6
51	BS	90	GLY	2.6
57	DY	80	GLY	2.6
36	BA	1092	C	2.6
36	DA	365	C	2.6
36	DA	1072	C	2.6
36	DA	2803	C	2.6
4	AD	12	CYS	2.6
4	AD	112	VAL	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
28	B2	35	LEU	2.6
28	B2	72	ALA	2.6
38	BC	113	VAL	2.6
51	DS	105	ALA	2.6
58	DZ	142	SER	2.6
52	DT	32	TYR	2.6
57	DY	55	TYR	2.6
43	BH	158	HIS	2.6
28	B2	7	ARG	2.6
36	BA	272(B)	G	2.6
36	BA	2116	G	2.6
36	DA	2192	G	2.6
1	AA	65	U	2.6
4	AD	161	ASN	2.6
4	CD	181	MET	2.6
5	AE	38	GLN	2.6
9	CI	29	ASN	2.6
10	CJ	78	ASN	2.6
28	B2	37	PHE	2.6
42	DG	75	LYS	2.6
43	BH	51	ARG	2.6
46	DN	109	LYS	2.6
48	DP	108	LYS	2.6
56	BX	72	LYS	2.6
57	BY	81	LYS	2.6
26	B0	13	GLY	2.6
1	CA	411	A	2.6
34	B8	54	GLU	2.6
36	BA	1057	A	2.6
36	BA	2518	A	2.6
36	DA	477	A	2.6
36	DA	2801	A	2.6
25	AZ	65	THR	2.6
25	AZ	188	THR	2.6
6	AF	101	ALA	2.6
9	AI	28	VAL	2.6
25	CZ	36	ALA	2.6
31	B5	24	ALA	2.6
31	D5	2	ALA	2.6
34	B8	51	ALA	2.6
41	DF	26	ALA	2.6
43	BH	24	VAL	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
48	BP	31	ALA	2.6
1	AA	91	C	2.6
22	AV	17	C	2.6
36	DA	271(Z)	C	2.6
57	DY	70	SER	2.6
56	BX	26	TYR	2.6
13	CM	102	ARG	2.6
33	B7	47	ARG	2.6
51	DS	35	ILE	2.6
57	BY	6	HIS	2.6
57	DY	94	LYS	2.6
19	CS	42	PRO	2.6
38	BC	51	PRO	2.6
38	BC	111	ASP	2.6
48	BP	47	ASP	2.6
40	BE	65	GLY	2.6
1	AA	437	U	2.6
36	DA	156	U	2.6
36	DA	2796	U	2.6
1	AA	216	G	2.6
1	CA	1003	G	2.6
24	AY	24	G	2.6
36	BA	544	G	2.6
36	DA	512	G	2.6
36	DA	1114	G	2.6
36	DA	1173	G	2.6
36	DA	2147	G	2.6
36	DA	2153	G	2.6
39	DD	25	THR	2.6
41	DF	20	LEU	2.6
25	CZ	14	VAL	2.6
25	CZ	217	VAL	2.6
43	BH	17	VAL	2.6
46	BN	42	TRP	2.6
57	DY	76	CYS	2.6
22	AW	37	A	2.6
22	CW	36	A	2.6
36	BA	1237	A	2.6
36	DA	1086	A	2.6
36	DA	2158	A	2.6
41	DF	9	ILE	2.6
52	DT	8	LYS	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
4	AD	4	TYR	2.6
43	DH	158	HIS	2.6
2	AB	131	PRO	2.6
25	CZ	129	PRO	2.6
43	BH	168	PRO	2.6
1	AA	330	C	2.6
1	CA	422	C	2.6
4	AD	45	GLN	2.6
10	CJ	89	ASP	2.6
25	CZ	341	GLN	2.6
36	DA	272(H)	C	2.6
38	BC	50	ASP	2.6
42	DG	150	ASP	2.6
28	D2	47	ASN	2.6
48	BP	74	GLU	2.6
51	BS	58	LEU	2.6
41	DF	49	ALA	2.6
57	DY	78	ALA	2.6
1	CA	203	U	2.6
11	AK	51	LYS	2.6
14	AN	15	LYS	2.6
14	AN	57	ARG	2.6
35	B9	35	ARG	2.6
36	BA	2102	U	2.6
36	DA	90	U	2.6
50	DR	5	LYS	2.6
42	DG	140	ILE	2.6
58	BZ	137	ILE	2.6
4	CD	165	MET	2.6
1	AA	108	G	2.6
1	AA	158	G	2.6
1	AA	630	G	2.6
1	AA	1021	G	2.6
1	AA	1442	G	2.6
1	CA	80	G	2.6
36	BA	1112	G	2.6
36	DA	102	G	2.6
36	DA	271(D)	G	2.6
36	DA	1112	G	2.6
36	DA	1533	G	2.6
58	BZ	121	HIS	2.6
30	B4	11	PRO	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
48	BP	63	PRO	2.6
1	AA	441	A	2.6
36	BA	300	A	2.6
36	DA	294	A	2.6
36	DA	1496	A	2.6
40	DE	60	ASN	2.6
41	BF	23	ASP	2.6
9	AI	47	LEU	2.6
1	AA	92	C	2.6
1	AA	217	C	2.6
1	AA	488	C	2.6
22	CW	68	C	2.6
36	BA	267	C	2.6
36	BA	1064	C	2.6
36	BA	1100	C	2.6
36	DA	1743	C	2.6
43	BH	86	GLU	2.6
10	CJ	26	ALA	2.6
25	CZ	37	ALA	2.6
38	BC	134	ARG	2.6
41	BF	6	VAL	2.6
43	BH	50	VAL	2.6
43	BH	165	ALA	2.6
54	DV	21	ARG	2.6
57	DY	27	VAL	2.6
57	DY	49	VAL	2.6
31	B5	3	LYS	2.6
39	BD	275	LYS	2.6
25	CZ	350	THR	2.6
25	CZ	335	PHE	2.5
1	CA	1025	U	2.5
36	DA	1540	U	2.5
36	DA	2779	U	2.5
42	BG	142	PRO	2.5
48	BP	72	PRO	2.5
25	CZ	191	GLY	2.5
43	BH	166	GLY	2.5
48	BP	34	GLY	2.5
19	CS	30	LEU	2.5
28	B2	10	LEU	2.5
1	AA	1009	G	2.5
3	AC	3	ASN	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
4	CD	122	ARG	2.5
8	AH	52	ASP	2.5
12	AL	106	ASP	2.5
25	CZ	132	VAL	2.5
25	CZ	150	VAL	2.5
29	B3	46	ASN	2.5
36	BA	301	G	2.5
36	BA	1099	G	2.5
36	BA	2191	G	2.5
36	DA	363(B)	G	2.5
36	DA	1115	G	2.5
38	DC	55	ASP	2.5
39	BD	273	ARG	2.5
52	DT	112	ARG	2.5
53	DU	12	ARG	2.5
36	BA	6	A	2.5
36	BA	311	A	2.5
36	BA	2790	A	2.5
41	BF	130	ALA	2.5
10	AJ	100	THR	2.5
10	CJ	38	ILE	2.5
58	BZ	107	THR	2.5
10	AJ	86	MET	2.5
36	BA	436	C	2.5
36	DA	884	C	2.5
36	DA	975	C	2.5
36	DA	2145	C	2.5
2	AB	236	TYR	2.5
31	B5	51	TYR	2.5
12	AL	116	SER	2.5
36	BA	2109	U	2.5
51	BS	22	GLY	2.5
51	BS	56	LEU	2.5
2	AB	22	LYS	2.5
32	D6	6	ARG	2.5
53	DU	59	ARG	2.5
35	D9	7	VAL	2.5
9	AI	55	ALA	2.5
31	B5	2	ALA	2.5
49	BQ	138	ASP	2.5
25	CZ	131	ILE	2.5
41	DF	28	ILE	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	CW	35	A	2.5
36	DA	761	A	2.5
1	AA	858	G	2.5
1	CA	1442	G	2.5
36	BA	82	G	2.5
36	BA	508	G	2.5
36	BA	1581	G	2.5
36	BA	2186	G	2.5
36	BA	2318	G	2.5
36	DA	329	G	2.5
36	DA	370	G	2.5
36	DA	2154	G	2.5
36	DA	2157	G	2.5
36	DA	2793	G	2.5
41	BF	10	PRO	2.5
43	DH	83	TYR	2.5
55	BW	111	HIS	2.5
57	DY	6	HIS	2.5
13	AM	122	LYS	2.5
25	CZ	121	LEU	2.5
27	B1	94	LEU	2.5
36	BA	2174	C	2.5
39	BD	276	LYS	2.5
41	DF	168	ARG	2.5
48	BP	79	ARG	2.5
48	DP	36	LYS	2.5
48	DP	147	LEU	2.5
22	AW	68	C	2.5
36	BA	271(C)	C	2.5
50	BR	5	LYS	2.5
52	DT	3	ARG	2.5
56	BX	48	LYS	2.5
26	B0	16	SER	2.5
35	B9	34	GLN	2.5
13	CM	117	VAL	2.5
25	AZ	68	VAL	2.5
53	BU	90	VAL	2.5
4	CD	111	ALA	2.5
9	CI	82	ALA	2.5
22	CV	47	U	2.5
36	BA	1066	U	2.5
41	BF	161	GLU	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
42	DG	137	GLU	2.5
58	BZ	169	GLU	2.5
34	D8	33	ASN	2.5
58	DZ	146	ILE	2.5
29	D3	1	MET	2.5
13	CM	43	THR	2.5
2	CB	232	PRO	2.5
17	CQ	100	LYS	2.5
30	D4	38	LYS	2.5
42	DG	128	ARG	2.5
48	DP	90	ARG	2.5
58	DZ	82	ARG	2.5
1	AA	532	A	2.5
1	CA	632	A	2.5
25	CZ	337	GLY	2.5
36	BA	1128	A	2.5
36	BA	1741	A	2.5
36	DA	1490	A	2.5
4	CD	42	GLN	2.5
48	DP	83	VAL	2.5
1	AA	70	G	2.5
1	AA	1003	G	2.5
1	AA	1030(C)	G	2.5
1	CA	146	G	2.5
2	AB	13	ALA	2.5
22	CW	15	G	2.5
28	B2	40	SER	2.5
30	D4	37	SER	2.5
36	BA	214	G	2.5
36	BA	1044	G	2.5
36	BA	1192	G	2.5
36	DA	326	G	2.5
36	DA	2792	G	2.5
36	DA	2807	G	2.5
38	DC	76	ALA	2.5
41	BF	5	ALA	2.5
53	BU	86	ALA	2.5
55	BW	5	ALA	2.5
4	CD	158	ILE	2.5
10	CJ	50	ILE	2.5
42	DG	35	GLU	2.5
58	BZ	146	ILE	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AA	436	C	2.5
1	AA	1030	C	2.5
1	CA	1137	C	2.5
36	DA	267	C	2.5
36	DA	654(P)	C	2.5
36	DA	1092	C	2.5
25	AZ	207	ASP	2.5
25	AZ	335	PHE	2.5
22	AW	66	U	2.5
22	CW	32	U	2.5
25	CZ	25	THR	2.5
33	D7	40	TRP	2.5
48	DP	57	THR	2.5
4	CD	30	LYS	2.5
4	CD	35	ARG	2.5
10	AJ	79	ARG	2.5
27	D1	76	ARG	2.5
28	D2	51	ARG	2.5
48	BP	76	LYS	2.5
21	AU	23	PRO	2.5
38	BC	131	LEU	2.5
51	DS	34	HIS	2.5
25	CZ	138	VAL	2.5
46	DN	5	VAL	2.5
9	AI	3	GLN	2.5
4	CD	32	ALA	2.4
25	AZ	108	ALA	2.4
1	AA	412	A	2.4
1	AA	448	A	2.4
1	CA	532	A	2.4
19	CS	43	GLU	2.4
36	DA	8	A	2.4
36	DA	1069	A	2.4
36	DA	1722	A	2.4
48	BP	149	GLU	2.4
10	CJ	92	THR	2.4
12	AL	112	ASP	2.4
21	AU	24	ARG	2.4
30	B4	20	ASN	2.4
43	DH	60	ARG	2.4
51	BS	71	ARG	2.4
54	DV	6	LYS	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
58	DZ	148	ASP	2.4
1	AA	455	C	2.4
1	AA	840	C	2.4
1	AA	1034	G	2.4
36	BA	281	G	2.4
36	BA	309	G	2.4
36	BA	321	G	2.4
36	BA	652	C	2.4
36	BA	2807	G	2.4
36	DA	544	G	2.4
36	DA	1506	C	2.4
36	DA	2136	C	2.4
36	DA	2794	C	2.4
36	DA	2805	G	2.4
51	DS	48	LEU	2.4
54	BV	40	LEU	2.4
29	B3	2	PRO	2.4
43	BH	12	PRO	2.4
48	DP	48	PRO	2.4
19	CS	80	TYR	2.4
36	BA	272(I)	U	2.4
36	BA	1026	U	2.4
36	DA	614(A)	U	2.4
36	DA	1101	U	2.4
36	DA	1175	U	2.4
9	CI	30	GLY	2.4
48	BP	22	GLY	2.4
48	BP	37	GLY	2.4
53	DU	96	ALA	2.4
54	DV	31	ALA	2.4
27	D1	58	ILE	2.4
48	DP	114	ILE	2.4
30	B4	23	GLU	2.4
43	BH	159	GLU	2.4
25	AZ	339	ARG	2.4
32	B6	6	ARG	2.4
52	BT	41	ARG	2.4
1	AA	414	A	2.4
10	AJ	92	THR	2.4
13	AM	64	TRP	2.4
22	CW	9	A	2.4
30	B4	44	THR	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
40	BE	55	ASN	2.4
53	BU	25	TRP	2.4
36	BA	227	A	2.4
58	BZ	154	ASP	2.4
4	AD	27	TYR	2.4
16	AP	13	HIS	2.4
19	CS	68	GLY	2.4
25	CZ	362	VAL	2.4
30	D4	33	VAL	2.4
38	DC	114	VAL	2.4
40	DE	193	GLY	2.4
41	BF	134	GLY	2.4
43	BH	43	VAL	2.4
43	BH	113	VAL	2.4
1	AA	72	C	2.4
1	AA	422	C	2.4
1	CA	1037	C	2.4
2	AB	237	ALA	2.4
12	AL	128	ALA	2.4
1	AA	64	G	2.4
1	AA	625	G	2.4
1	AA	1190	G	2.4
1	CA	77	G	2.4
1	CA	84	U	2.4
1	CA	145	G	2.4
16	CP	19	ILE	2.4
19	AS	31	ILE	2.4
24	CY	66	C	2.4
22	AW	69	G	2.4
22	CW	19	G	2.4
24	AY	19	G	2.4
24	AY	57	G	2.4
25	CZ	206	ILE	2.4
32	D6	22	ALA	2.4
36	BA	2306	C	2.4
36	DA	271(C)	C	2.4
36	DA	291	C	2.4
38	DC	86	ALA	2.4
36	BA	1271	G	2.4
36	BA	1420	U	2.4
36	BA	1720	U	2.4
36	DA	1113	U	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	DA	2180	U	2.4
48	BP	70	GLN	2.4
2	AB	8	LYS	2.4
3	AC	126	ARG	2.4
25	CZ	339	ARG	2.4
42	DG	48	GLU	2.4
42	DG	115	ARG	2.4
51	BS	59	LYS	2.4
53	DU	15	LYS	2.4
54	BV	19	LYS	2.4
4	CD	113	SER	2.4
10	AJ	88	LEU	2.4
48	BP	147	LEU	2.4
2	AB	232	PRO	2.4
48	DP	30	THR	2.4
49	DQ	21	THR	2.4
55	BW	100	THR	2.4
57	BY	98	VAL	2.4
25	AZ	11	HIS	2.4
50	DR	58	GLY	2.4
51	BS	102	ALA	2.4
1	AA	432	A	2.4
1	CA	1035	A	2.4
4	CD	76	ARG	2.4
10	AJ	46	ARG	2.4
20	CT	27	LYS	2.4
35	B9	33	LYS	2.4
51	DS	62	LYS	2.4
56	DX	60	ARG	2.4
57	DY	81	LYS	2.4
1	AA	701	C	2.4
25	CZ	373	GLU	2.4
36	BA	303	U	2.4
36	DA	885	C	2.4
36	DA	1179	C	2.4
36	DA	2799	C	2.4
25	CZ	174	SER	2.4
51	DS	27	SER	2.4
58	BZ	153	SER	2.4
1	AA	1142	G	2.4
30	B4	39	CYS	2.4
36	BA	272(D)	G	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	BA	363(D)	G	2.4
36	BA	1042	G	2.4
36	BA	1529	G	2.4
36	BA	2187	G	2.4
36	DA	2165	G	2.4
36	DA	2182	G	2.4
2	CB	15	VAL	2.4
25	AZ	25	THR	2.4
25	AZ	352	VAL	2.4
25	CZ	144	PRO	2.4
42	BG	28	VAL	2.4
51	BS	63	THR	2.4
38	DC	69	GLY	2.4
13	AM	5	ALA	2.4
25	CZ	88	TYR	2.4
40	BE	127	ASP	2.4
29	D3	22	ALA	2.4
56	DX	91	ALA	2.4
58	BZ	9	TYR	2.4
12	AL	115	LYS	2.4
14	CN	58	LYS	2.4
10	AJ	28	ARG	2.4
41	DF	194	MET	2.4
42	DG	95	ARG	2.4
50	BR	105	ARG	2.4
51	DS	89	ARG	2.4
7	AG	86	GLN	2.4
11	AK	13	GLN	2.4
9	CI	85	LEU	2.4
25	CZ	277	LEU	2.4
48	DP	88	LEU	2.4
1	AA	408	A	2.4
1	AA	430	A	2.4
1	AA	1299	A	2.4
1	AA	1442(B)	A	2.4
2	AB	128	GLU	2.4
4	AD	24	GLU	2.4
36	BA	283	A	2.4
36	BA	644	A	2.4
36	DA	1054	A	2.4
36	DA	1084	A	2.4
36	DA	2114	A	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
12	CL	116	SER	2.4
1	AA	961	U	2.4
22	AV	45	U	2.4
33	B7	46	VAL	2.4
36	BA	90	U	2.4
36	DA	403	U	2.4
36	DA	1026	U	2.4
38	DC	140	PRO	2.4
41	DF	39	TRP	2.4
46	DN	108	PRO	2.4
52	BT	24	PRO	2.4
58	BZ	134	PRO	2.4
1	AA	419	C	2.3
25	AZ	72	THR	2.3
36	DA	1053	C	2.3
39	DD	41	GLY	2.3
41	BF	16	GLY	2.3
4	AD	86	LYS	2.3
10	AJ	3	LYS	2.3
10	AJ	23	ILE	2.3
18	AR	88	LYS	2.3
30	B4	12	ALA	2.3
3	AC	62	ASP	2.3
32	B6	44	ARG	2.3
35	D9	18	ARG	2.3
40	BE	131	ALA	2.3
40	DE	58	ARG	2.3
42	DG	50	ALA	2.3
43	BH	164	TYR	2.3
48	DP	18	ARG	2.3
43	DH	41	MET	2.3
1	AA	474	G	2.3
1	CA	1190	G	2.3
36	BA	2101	G	2.3
36	BA	2405	G	2.3
36	DA	508	G	2.3
36	DA	883	G	2.3
36	DA	1742	G	2.3
9	AI	37	PHE	2.3
26	B0	84	LEU	2.3
41	DF	8	GLN	2.3
42	BG	43	LEU	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
57	BY	89	PHE	2.3
39	BD	28	GLU	2.3
41	DF	161	GLU	2.3
54	BV	46	VAL	2.3
32	B6	31	PRO	2.3
2	CB	18	GLY	2.3
12	AL	122	THR	2.3
13	AM	119	GLY	2.3
25	AZ	376	LYS	2.3
27	B1	28	GLY	2.3
28	B2	2	LYS	2.3
36	BA	1583	A	2.3
36	DA	646	A	2.3
43	DH	14	GLY	2.3
52	BT	33	LYS	2.3
57	DY	19	LYS	2.3
30	D4	5	ILE	2.3
48	DP	16	ARG	2.3
43	DH	156	ALA	2.3
48	DP	75	ILE	2.3
52	BT	131	ALA	2.3
4	AD	38	TYR	2.3
20	AT	9	ASN	2.3
25	AZ	88	TYR	2.3
36	DA	1066	U	2.3
37	BB	1	U	2.3
1	AA	513	C	2.3
22	CW	49	C	2.3
24	CY	9	C	2.3
34	B8	62	LEU	2.3
36	BA	280	C	2.3
36	BA	302	C	2.3
36	BA	1053	C	2.3
36	BA	1462	C	2.3
37	BB	6	C	2.3
58	DZ	144	LEU	2.3
30	D4	47	GLN	2.3
48	DP	70	GLN	2.3
20	AT	93	GLU	2.3
39	DD	28	GLU	2.3
48	BP	144	GLU	2.3
1	AA	424	G	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
9	AI	26	VAL	2.3
35	B9	3	VAL	2.3
36	BA	139(A)	G	2.3
36	BA	272(E)	G	2.3
36	BA	880	G	2.3
36	BA	1068	G	2.3
36	DA	89	G	2.3
36	DA	272(B)	G	2.3
36	DA	360	G	2.3
36	DA	1238	G	2.3
36	DA	2148	G	2.3
4	AD	40	PRO	2.3
4	AD	73	ARG	2.3
16	AP	75	ARG	2.3
25	CZ	377	PRO	2.3
40	BE	58	ARG	2.3
43	DH	154	PRO	2.3
3	AC	14	ILE	2.3
35	D9	21	GLY	2.3
43	BH	22	GLY	2.3
43	DH	151	ILE	2.3
13	AM	20	THR	2.3
25	CZ	212	THR	2.3
43	BH	122	THR	2.3
55	DW	56	ALA	2.3
19	AS	44	MET	2.3
46	DN	1	MET	2.3
48	DP	35	HIS	2.3
31	D5	49	CYS	2.3
28	D2	10	LEU	2.3
39	BD	37	LEU	2.3
41	BF	162	LEU	2.3
51	BS	16	ASN	2.3
51	DS	16	ASN	2.3
54	DV	40	LEU	2.3
1	AA	461	A	2.3
22	CW	64	A	2.3
36	BA	503	A	2.3
36	BA	890	A	2.3
36	BA	1349	A	2.3
36	DA	1045	A	2.3
36	DA	1762	A	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	CA	173	U	2.3
13	CM	101	GLN	2.3
22	CW	66	U	2.3
42	DG	26	GLN	2.3
25	AZ	226	GLU	2.3
1	CA	163	C	2.3
24	AY	9	C	2.3
28	B2	6	VAL	2.3
36	BA	154(A)	C	2.3
36	BA	277	C	2.3
36	BA	318	C	2.3
36	DA	271(T)	C	2.3
36	DA	1043	C	2.3
36	DA	2164	C	2.3
31	D5	55	ARG	2.3
41	BF	165	ARG	2.3
43	DH	51	ARG	2.3
16	CP	41	PRO	2.3
19	CS	31	ILE	2.3
38	DC	106	GLY	2.3
57	DY	61	ILE	2.3
46	BN	1	MET	2.3
26	B0	9	SER	2.3
28	B2	48	HIS	2.3
51	DS	54	LEU	2.3
57	DY	68	HIS	2.3
1	AA	1002	G	2.3
2	AB	17	PHE	2.3
24	CY	57	G	2.3
36	BA	1047	G	2.3
36	BA	1239	G	2.3
36	BA	2206	G	2.3
36	DA	355	G	2.3
36	DA	625	G	2.3
36	DA	2159	G	2.3
36	DA	2630	G	2.3
37	DB	97	G	2.3
41	DF	7	TYR	2.3
57	BY	43	ASN	2.3
10	CJ	84	GLN	2.3
25	AZ	110	ASP	2.3
1	CA	1442(B)	A	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
13	AM	88	ARG	2.3
21	AU	6	ARG	2.3
25	CZ	368	VAL	2.3
36	BA	103	A	2.3
36	BA	1379	A	2.3
36	BA	1496	A	2.3
36	BA	1535	A	2.3
36	BA	2171	A	2.3
41	DF	36	VAL	2.3
46	BN	5	VAL	2.3
48	DP	21	ARG	2.3
51	DS	15	ARG	2.3
1	AA	99	U	2.3
1	AA	405	U	2.3
22	AW	60	U	2.3
24	AY	45	U	2.3
24	CY	45	U	2.3
36	BA	1033	U	2.3
36	DA	358	U	2.3
36	DA	1061	U	2.3
2	AB	26	PRO	2.3
4	AD	7	PRO	2.3
9	CI	90	PRO	2.3
46	BN	135	PRO	2.3
38	DC	121	GLY	2.3
39	BD	41	GLY	2.3
48	DP	12	ALA	2.3
48	DP	37	GLY	2.3
2	AB	97	TRP	2.3
22	CW	62	C	2.3
36	DA	34	C	2.3
36	DA	106	C	2.3
36	DA	1018	C	2.3
36	DA	1463	C	2.3
37	BB	109	C	2.3
4	AD	188	LEU	2.3
9	CI	19	LEU	2.3
10	CJ	40	LEU	2.3
4	AD	123	HIS	2.3
14	CN	22	THR	2.3
25	AZ	122	LEU	2.3
50	DR	10	LEU	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
58	BZ	170	THR	2.3
58	DZ	150	LEU	2.3
40	DE	159	HIS	2.3
4	AD	110	PHE	2.3
2	AB	133	LYS	2.3
11	AK	117	ASN	2.3
20	CT	9	ASN	2.3
48	BP	84	ASN	2.3
2	AB	226	ARG	2.3
4	AD	115	ARG	2.3
4	AD	119	GLN	2.3
28	B2	56	GLN	2.3
57	BY	28	LYS	2.3
57	DY	99	CYS	2.3
32	B6	5	VAL	2.3
48	BP	146	VAL	2.3
25	CZ	296	GLU	2.2
1	AA	93	G	2.2
1	AA	1181	G	2.2
1	CA	1457	G	2.2
36	BA	171	G	2.2
36	BA	1115	G	2.2
36	DA	7	G	2.2
36	DA	81	G	2.2
36	DA	342	G	2.2
36	DA	1461	G	2.2
36	DA	2891	G	2.2
4	AD	67	ILE	2.2
10	AJ	50	ILE	2.2
34	B8	41	ILE	2.2
53	BU	88	ILE	2.2
14	AN	14	PRO	2.2
41	BF	131	GLY	2.2
43	BH	55	PRO	2.2
4	CD	164	ALA	2.2
42	DG	148	MET	2.2
43	BH	161	GLY	2.2
52	BT	135	ALA	2.2
1	AA	453	A	2.2
1	CA	1126	U	2.2
2	CB	238	LEU	2.2
36	BA	2750	A	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	DA	43	A	2.2
36	DA	423	A	2.2
36	DA	1083	U	2.2
36	DA	1583	A	2.2
38	DC	137	LEU	2.2
39	BD	33	LEU	2.2
41	BF	20	LEU	2.2
42	DG	3	LEU	2.2
43	BH	64	LEU	2.2
41	DF	34	TRP	2.2
10	CJ	81	THR	2.2
12	CL	123	LYS	2.2
19	AS	18	LYS	2.2
25	CZ	70	TYR	2.2
40	BE	151	TYR	2.2
42	DG	146	TYR	2.2
46	BN	109	LYS	2.2
48	BP	80	TYR	2.2
48	BP	133	SER	2.2
51	DS	93	LYS	2.2
58	BZ	14	LYS	2.2
1	CA	345	C	2.2
24	CY	25	C	2.2
31	B5	55	ARG	2.2
36	BA	1505	C	2.2
28	B2	19	VAL	2.2
39	BD	44	ASN	2.2
48	DP	68	GLN	2.2
2	AB	143	GLU	2.2
25	AZ	38	GLU	2.2
53	DU	56	ASP	2.2
58	DZ	119	GLU	2.2
27	D1	13	ILE	2.2
54	DV	99	ILE	2.2
57	DY	44	ILE	2.2
10	AJ	26	ALA	2.2
25	CZ	109	ALA	2.2
38	BC	117	PRO	2.2
41	DF	14	PRO	2.2
25	CZ	146	LEU	2.2
25	CZ	355	LEU	2.2
32	D6	36	LEU	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
42	BG	50	ALA	2.2
48	BP	11	GLY	2.2
48	BP	115	LEU	2.2
57	DY	36	ALA	2.2
42	BG	81	LYS	2.2
42	DG	125	PHE	2.2
1	AA	485	G	2.2
1	AA	1134	G	2.2
1	CA	350	G	2.2
13	CM	20	THR	2.2
26	D0	10	THR	2.2
30	D4	24	THR	2.2
36	BA	7	G	2.2
36	BA	11	G	2.2
36	BA	2104	G	2.2
36	BA	2837	G	2.2
36	DA	113	G	2.2
36	DA	928	G	2.2
36	DA	1170	G	2.2
37	DB	67	G	2.2
43	DH	111	HIS	2.2
4	CD	25	ARG	2.2
25	CZ	343	TYR	2.2
36	DA	120	U	2.2
40	DE	151	TYR	2.2
46	DN	115	ARG	2.2
51	BS	36	TYR	2.2
52	DT	91	ARG	2.2
57	DY	35	TYR	2.2
22	CW	58	A	2.2
36	BA	1096	A	2.2
36	BA	1847	A	2.2
36	DA	347	A	2.2
36	DA	505	A	2.2
36	DA	1286	A	2.2
36	DA	1847	A	2.2
36	DA	2629	A	2.2
51	DS	53	SER	2.2
3	AC	68	VAL	2.2
11	AK	14	VAL	2.2
43	BH	44	VAL	2.2
56	BX	49	VAL	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
25	AZ	341	GLN	2.2
4	CD	150	GLU	2.2
25	AZ	6	ILE	2.2
38	DC	100	ILE	2.2
42	BG	30	GLU	2.2
43	DH	58	GLU	2.2
50	BR	102	GLU	2.2
1	AA	483	C	2.2
1	CA	372	C	2.2
1	CA	848	C	2.2
22	CW	13	C	2.2
36	BA	335	C	2.2
36	BA	509	C	2.2
36	BA	1506	C	2.2
36	BA	2803	C	2.2
36	DA	292	C	2.2
4	CD	21	LEU	2.2
4	CD	29	PRO	2.2
19	CS	8	GLY	2.2
25	AZ	202	LEU	2.2
25	CZ	211	PRO	2.2
38	BC	106	GLY	2.2
41	BF	26	ALA	2.2
41	BF	192	LEU	2.2
48	DP	106	LEU	2.2
54	BV	35	LEU	2.2
55	BW	36	LEU	2.2
26	B0	4	LYS	2.2
34	B8	36	LYS	2.2
16	AP	80	PHE	2.2
7	CG	78	ARG	2.2
25	CZ	22	HIS	2.2
6	CF	63	TYR	2.2
25	CZ	130	TYR	2.2
42	DG	12	TYR	2.2
2	CB	229	VAL	2.2
19	AS	9	VAL	2.2
25	AZ	20	VAL	2.2
35	B9	16	VAL	2.2
43	DH	113	VAL	2.2
48	BP	83	VAL	2.2
48	BP	126	VAL	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
54	BV	5	VAL	2.2
41	BF	15	SER	2.2
36	BA	1175	U	2.2
36	DA	1211	U	2.2
52	BT	136	GLN	2.2
38	BC	100	ILE	2.2
38	DC	153	ILE	2.2
56	BX	80	ILE	2.2
57	BY	44	ILE	2.2
1	AA	73	G	2.2
1	AA	481	G	2.2
1	AA	540	G	2.2
1	AA	1143	G	2.2
1	CA	412	A	2.2
1	CA	439	A	2.2
1	CA	1031	G	2.2
24	AY	15	A	2.2
34	D8	56	GLU	2.2
36	BA	92	A	2.2
36	BA	295	G	2.2
36	BA	355	G	2.2
36	BA	1051	G	2.2
36	BA	1524	G	2.2
36	BA	1528(A)	A	2.2
36	BA	2208	A	2.2
36	DA	298	G	2.2
36	DA	317	G	2.2
36	DA	363(D)	G	2.2
36	DA	1070	A	2.2
36	DA	2168	G	2.2
42	BG	27	ASN	2.2
2	CB	10	LEU	2.2
4	CD	135	LEU	2.2
19	AS	30	LEU	2.2
41	DF	33	LEU	2.2
43	DH	46	GLU	2.2
51	DS	56	LEU	2.2
54	DV	23	GLU	2.2
58	BZ	145	GLU	2.2
9	AI	94	ALA	2.2
14	AN	59	ALA	2.2
25	AZ	328	GLY	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
25	AZ	364	PRO	2.2
25	AZ	392	GLY	2.2
31	B5	49	CYS	2.2
38	BC	86	ALA	2.2
42	BG	46	ALA	2.2
57	BY	10	GLY	2.2
13	AM	83	ASP	2.2
35	D9	2	LYS	2.2
2	AB	130	ARG	2.2
27	B1	60	PHE	2.2
51	BS	13	ARG	2.2
53	BU	36	ARG	2.2
1	AA	1533	C	2.2
36	BA	296	C	2.2
36	BA	343	C	2.2
36	BA	654(R)	C	2.2
36	BA	1043	C	2.2
36	BA	2183	C	2.2
36	DA	2188	C	2.2
41	BF	172	TRP	2.2
25	CZ	79	HIS	2.2
26	D0	3	HIS	2.2
51	BS	34	HIS	2.2
12	AL	120	TYR	2.2
25	AZ	34	VAL	2.2
54	DV	22	VAL	2.2
25	CZ	115	GLN	2.2
40	BE	54	GLN	2.2
41	BF	13	SER	2.2
41	DF	206	ILE	2.2
58	BZ	149	SER	2.2
39	DD	33	LEU	2.2
41	DF	156	LEU	2.2
48	BP	99	LEU	2.2
48	DP	6	LEU	2.2
52	DT	9	LEU	2.2
4	AD	145	GLU	2.2
4	AD	150	GLU	2.2
43	DH	81	GLU	2.2
49	BQ	1	MET	2.2
2	AB	132	LYS	2.2
12	AL	125	PRO	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
13	CM	122	LYS	2.2
16	CP	46	PRO	2.2
25	AZ	211	PRO	2.2
26	D0	5	LYS	2.2
28	B2	28	LYS	2.2
39	DD	26	LYS	2.2
40	BE	41	LYS	2.2
40	BE	57	LYS	2.2
43	DH	165	ALA	2.2
31	B5	47	PRO	2.2
48	BP	82	GLY	2.2
54	DV	74	LYS	2.2
36	BA	12	U	2.2
36	DA	158	U	2.2
36	DA	2113	U	2.2
56	DX	94	GLY	2.2
10	CJ	5	ARG	2.2
55	BW	22	ASP	2.2
1	CA	1030(D)	A	2.2
36	BA	276	A	2.2
36	BA	501	A	2.2
36	BA	603	A	2.2
36	DA	1174	A	2.2
1	AA	66	G	2.2
36	BA	215	G	2.2
36	BA	1525	G	2.2
36	BA	2166	G	2.2
36	DA	271(W)	G	2.2
43	BH	65	HIS	2.2
10	AJ	72	VAL	2.1
38	BC	114	VAL	2.1
43	DH	24	VAL	2.1
46	BN	93	THR	2.1
48	DP	125	VAL	2.1
57	BY	7	VAL	2.1
57	DY	13	VAL	2.1
2	CB	236	TYR	2.1
9	AI	5	TYR	2.1
11	AK	75	TYR	2.1
51	DS	92	TYR	2.1
1	AA	435	C	2.1
22	AV	2	C	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	CW	61	C	2.1
24	CY	6	C	2.1
36	BA	543	C	2.1
36	DA	1079	C	2.1
36	DA	2143	C	2.1
4	CD	162	LEU	2.1
10	CJ	21	GLN	2.1
16	AP	65	GLN	2.1
26	D0	62	LEU	2.1
41	DF	155	LEU	2.1
48	BP	112	LEU	2.1
54	BV	80	GLN	2.1
57	BY	90	LEU	2.1
12	AL	46	LYS	2.1
12	AL	124	LYS	2.1
38	BC	54	SER	2.1
42	DG	74	LYS	2.1
54	BV	24	LYS	2.1
57	DY	21	LYS	2.1
38	DC	133	PRO	2.1
39	BD	242	ARG	2.1
52	BT	36	GLU	2.1
9	AI	34	ASN	2.1
13	AM	113	PRO	2.1
25	AZ	84	GLY	2.1
34	D8	45	GLY	2.1
43	BH	36	PRO	2.1
51	DS	22	GLY	2.1
52	DT	81	PRO	2.1
53	DU	11	ARG	2.1
48	BP	13	ASN	2.1
56	DX	74	PRO	2.1
58	BZ	136	PHE	2.1
1	CA	437	U	2.1
24	CY	47	U	2.1
25	AZ	87	ASP	2.1
36	BA	156	U	2.1
36	DA	328	U	2.1
36	DA	362	U	2.1
31	D5	31	VAL	2.1
43	BH	141	VAL	2.1
43	DH	114	VAL	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
12	CL	44	THR	2.1
39	BD	27	THR	2.1
20	CT	100	ILE	2.1
25	AZ	120	ILE	2.1
25	CZ	77	TYR	2.1
36	BA	331	A	2.1
36	BA	1084	A	2.1
36	BA	1586	A	2.1
36	BA	2632	A	2.1
36	DA	482	A	2.1
36	DA	501	A	2.1
43	BH	83	TYR	2.1
56	DX	5	TYR	2.1
4	AD	151	LYS	2.1
6	AF	54	LYS	2.1
25	AZ	31	LEU	2.1
43	BH	140	LYS	2.1
53	DU	13	LYS	2.1
1	AA	346	G	2.1
1	AA	409	G	2.1
1	AA	475	G	2.1
1	AA	1010	G	2.1
1	CA	147	G	2.1
1	CA	198	G	2.1
1	CA	428	G	2.1
1	CA	481	G	2.1
1	CA	1456	G	2.1
3	AC	30	ARG	2.1
10	AJ	21	GLN	2.1
19	CS	44	MET	2.1
22	CW	52	G	2.1
36	BA	271(I)	G	2.1
36	DA	88	G	2.1
36	DA	96	G	2.1
36	DA	344	G	2.1
36	DA	2116	G	2.1
36	DA	2155	G	2.1
36	DA	2191	G	2.1
37	BB	16	G	2.1
52	BT	90	GLN	2.1
28	B2	13	ALA	2.1
51	DS	102	ALA	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
55	DW	8	ARG	2.1
2	AB	14	GLY	2.1
9	AI	6	GLY	2.1
10	AJ	59	SER	2.1
10	CJ	93	GLY	2.1
16	AP	41	PRO	2.1
28	D2	18	PRO	2.1
35	B9	37	GLY	2.1
48	DP	73	GLY	2.1
48	DP	109	GLY	2.1
22	CV	17	C	2.1
36	BA	334	C	2.1
36	BA	1104	C	2.1
36	BA	2185	C	2.1
36	BA	2804	C	2.1
36	DA	154(A)	C	2.1
37	BB	42	C	2.1
25	CZ	344	PHE	2.1
32	D6	32	ASN	2.1
58	BZ	34	ASN	2.1
4	CD	12	CYS	2.1
10	CJ	24	VAL	2.1
13	CM	98	VAL	2.1
16	AP	68	ASP	2.1
25	AZ	349	VAL	2.1
43	DH	99	VAL	2.1
55	BW	10	VAL	2.1
56	DX	49	VAL	2.1
57	BY	76	CYS	2.1
58	DZ	141	VAL	2.1
1	CA	83	U	2.1
9	CI	95	LYS	2.1
10	AJ	98	ILE	2.1
13	AM	27	LYS	2.1
18	CR	88	LYS	2.1
20	CT	104	LEU	2.1
25	CZ	258	LEU	2.1
28	B2	24	LEU	2.1
36	DA	157	U	2.1
36	DA	2218	U	2.1
38	DC	127	LEU	2.1
39	BD	26	LYS	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
48	BP	75	ILE	2.1
50	DR	9	LYS	2.1
56	BX	57	LEU	2.1
6	AF	71	ARG	2.1
25	AZ	75	ARG	2.1
25	CZ	117	ARG	2.1
41	DF	46	ARG	2.1
51	DS	55	ALA	2.1
58	BZ	152	ALA	2.1
1	AA	496	A	2.1
1	AA	1534	A	2.1
3	CC	2	GLY	2.1
13	AM	50	GLU	2.1
25	CZ	127	GLY	2.1
25	CZ	226	GLU	2.1
36	BA	2176	A	2.1
38	BC	4	GLY	2.1
48	BP	54	GLY	2.1
48	BP	97	PRO	2.1
48	DP	8	PRO	2.1
16	CP	11	SER	2.1
48	DP	42	SER	2.1
1	CA	423	G	2.1
1	CA	1021	G	2.1
25	AZ	214	VAL	2.1
36	BA	272(C)	G	2.1
36	BA	342	G	2.1
36	BA	1110	G	2.1
36	BA	2805	G	2.1
36	DA	654(O)	G	2.1
36	DA	882	G	2.1
1	CA	71	C	2.1
36	BA	1075	C	2.1
36	DA	1744	C	2.1
36	DA	2161	C	2.1
2	CB	19	HIS	2.1
10	CJ	7	LYS	2.1
48	DP	86	LYS	2.1
4	AD	162	LEU	2.1
4	CD	19	LEU	2.1
13	AM	4	ILE	2.1
20	AT	72	LEU	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
25	CZ	177	LEU	2.1
34	D8	62	LEU	2.1
48	BP	6	LEU	2.1
57	BY	31	LEU	2.1
10	AJ	81	THR	2.1
12	AL	67	THR	2.1
4	AD	165	MET	2.1
13	AM	23	TYR	2.1
25	AZ	161	TYR	2.1
48	DP	58	THR	2.1
7	AG	83	ALA	2.1
9	AI	119	ALA	2.1
25	AZ	29	ALA	2.1
22	AW	51	U	2.1
22	CW	60	U	2.1
30	B4	46	GLN	2.1
36	BA	230	U	2.1
36	BA	339	U	2.1
36	BA	2808	U	2.1
36	DA	2895	U	2.1
42	DG	66	GLN	2.1
10	AJ	31	GLY	2.1
43	BH	14	GLY	2.1
48	BP	69	GLY	2.1
57	BY	41	GLY	2.1
2	CB	231	GLU	2.1
12	AL	73	GLU	2.1
25	CZ	38	GLU	2.1
26	D0	27	GLU	2.1
28	D2	22	GLU	2.1
32	D6	12	GLU	2.1
40	DE	73	GLU	2.1
42	BG	87	PRO	2.1
48	BP	23	PRO	2.1
57	BY	64	GLU	2.1
10	AJ	30	SER	2.1
11	AK	53	SER	2.1
19	CS	4	SER	2.1
19	CS	9	VAL	2.1
25	CZ	154	VAL	2.1
1	CA	143	A	2.1
4	AD	182	LYS	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
4	CD	22	LYS	2.1
25	CZ	376	LYS	2.1
36	BA	142	A	2.1
36	BA	1009	A	2.1
36	BA	1762	A	2.1
36	DA	621	A	2.1
38	DC	102	LYS	2.1
40	DE	57	LYS	2.1
2	AB	21	ARG	2.1
4	AD	122	ARG	2.1
4	CD	146	ILE	2.1
14	AN	12	ARG	2.1
25	CZ	158	LEU	2.1
16	CP	13	HIS	2.1
35	D9	20	HIS	2.1
35	D9	35	ARG	2.1
48	BP	45	LEU	2.1
51	DS	13	ARG	2.1
57	BY	68	HIS	2.1
57	BY	84	ARG	2.1
19	AS	13	ASP	2.1
40	BE	89	ASP	2.1
9	AI	7	THR	2.1
25	CZ	32	THR	2.1
39	BD	40	THR	2.1
40	BE	38	THR	2.1
1	AA	631	G	2.1
1	CA	199	G	2.1
1	CA	1131	G	2.1
20	AT	106	ALA	2.1
36	DA	277	C	2.1
36	DA	2804	C	2.1
22	CV	1	G	2.1
24	CY	73	G	2.1
36	BA	271(W)	G	2.1
36	BA	271(X)	G	2.1
36	BA	327	G	2.1
36	BA	450	G	2.1
36	BA	1461	G	2.1
36	DA	11	G	2.1
36	DA	154	G	2.1
36	DA	232	G	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	DA	308	G	2.1
41	DF	21	ALA	2.1
42	BG	44	GLY	2.1
42	DG	129	GLY	2.1
40	DE	53	PRO	2.1
57	DY	60	PHE	2.1
58	DZ	84	GLU	2.1
1	CA	1000	U	2.0
2	AB	229	VAL	2.0
10	CJ	80	LYS	2.0
22	AW	39	U	2.0
25	AZ	150	VAL	2.0
25	AZ	217	VAL	2.0
30	D4	21	VAL	2.0
34	B8	44	LYS	2.0
34	D8	49	VAL	2.0
36	BA	363(E)	U	2.0
36	BA	1083	U	2.0
36	DA	350	U	2.0
38	BC	82	LYS	2.0
42	DG	84	LYS	2.0
51	BS	93	LYS	2.0
53	BU	8	VAL	2.0
43	BH	63	SER	2.0
3	CC	190	ARG	2.0
20	CT	8	ARG	2.0
28	D2	65	ASN	2.0
38	DC	129	ARG	2.0
42	BG	53	LEU	2.0
42	DG	157	ILE	2.0
49	DQ	10	ARG	2.0
1	AA	411	A	2.0
6	CF	101	ALA	2.0
25	CZ	139	ASP	2.0
28	D2	72	ALA	2.0
31	D5	51	TYR	2.0
36	BA	654	A	2.0
36	BA	945	A	2.0
36	DA	283	A	2.0
36	DA	1349	A	2.0
41	DF	100	THR	2.0
54	DV	27	ALA	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
56	DX	69	TYR	2.0
7	AG	81	GLY	2.0
10	AJ	93	GLY	2.0
2	CB	131	PRO	2.0
43	BH	109	PHE	2.0
51	DS	60	GLY	2.0
46	BN	6	PRO	2.0
40	DE	87	GLU	2.0
52	BT	11	GLU	2.0
54	BV	44	LYS	2.0
57	BY	62	GLU	2.0
1	AA	47	C	2.0
1	AA	454	C	2.0
1	CA	418	C	2.0
1	CA	457	C	2.0
1	CA	1325	C	2.0
4	CD	182	LYS	2.0
6	AF	38	GLU	2.0
9	AI	86	VAL	2.0
9	CI	53	VAL	2.0
25	AZ	359	VAL	2.0
25	CZ	20	VAL	2.0
28	B2	25	VAL	2.0
36	BA	1076	C	2.0
36	BA	1744	C	2.0
36	DA	288	C	2.0
36	DA	366	C	2.0
41	BF	126	VAL	2.0
41	BF	157	VAL	2.0
41	DF	11	VAL	2.0
58	BZ	161	VAL	2.0
1	AA	1022	G	2.0
1	CA	200	G	2.0
4	AD	176	LEU	2.0
16	AP	42	ARG	2.0
22	AV	1	G	2.0
22	CW	18	G	2.0
22	CW	65	G	2.0
24	CY	59	G	2.0
25	CZ	215	ARG	2.0
36	BA	307	G	2.0
36	BA	530	G	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	BA	2100	G	2.0
36	DA	60	G	2.0
36	DA	100	G	2.0
36	DA	654(N)	G	2.0
36	DA	1473	G	2.0
36	DA	1888	G	2.0
36	DA	2100	G	2.0
36	DA	2407	G	2.0
39	BD	244	ARG	2.0
41	DF	124	LEU	2.0
42	DG	176	LEU	2.0
43	DH	54	ARG	2.0
52	DT	41	ARG	2.0
56	DX	66	LEU	2.0
57	BY	86	ARG	2.0
17	CQ	99	SER	2.0
19	AS	62	ILE	2.0
50	DR	15	SER	2.0
1	CA	486	U	2.0
1	CA	1135	U	2.0
26	D0	12	ASN	2.0
40	DE	1	MET	2.0
55	DW	40	ASN	2.0
16	CP	48	TRP	2.0
9	AI	82	ALA	2.0
10	AJ	27	ALA	2.0
7	AG	126	ASP	2.0
9	AI	54	ASP	2.0
51	DS	41	ASP	2.0
58	BZ	63	ASP	2.0
58	BZ	123	ASP	2.0
20	CT	87	LYS	2.0
30	B4	18	CYS	2.0
30	B4	36	CYS	2.0
38	DC	90	GLY	2.0
38	DC	203	GLY	2.0
42	BG	117	PHE	2.0
46	DN	51	PHE	2.0
54	BV	9	GLY	2.0
55	DW	112	GLY	2.0
57	DY	89	PHE	2.0
4	AD	116	GLN	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
25	CZ	83	PRO	2.0
34	D8	44	LYS	2.0
42	BG	47	LYS	2.0
48	BP	113	LYS	2.0
57	DY	8	LYS	2.0
1	AA	487	A	2.0
1	AA	1279	A	2.0
4	AD	133	VAL	2.0
19	AS	29	ARG	2.0
19	CS	11	VAL	2.0
25	AZ	296	GLU	2.0
36	BA	529	A	2.0
36	BA	2119	A	2.0
36	BA	2602	A	2.0
36	DA	422	A	2.0
36	DA	1177	A	2.0
37	BB	66	A	2.0
38	BC	74	VAL	2.0
40	BE	91	VAL	2.0
43	BH	32	GLU	2.0
41	BF	44	ARG	2.0
55	BW	59	VAL	2.0
19	AS	5	LEU	2.0
28	B2	32	LEU	2.0
40	DE	52	LEU	2.0
48	BP	106	LEU	2.0
10	CJ	98	ILE	2.0
25	CZ	93	ILE	2.0
30	D4	22	ILE	2.0
38	BC	152	ILE	2.0
38	BC	156	ILE	2.0
1	CA	91	C	2.0
1	CA	217	C	2.0
24	CY	61	C	2.0
36	BA	272(F)	C	2.0
36	BA	975	C	2.0
36	DA	624	C	2.0
36	DA	1109	C	2.0
36	DA	1582	C	2.0
36	DA	2183	C	2.0

6.2 Non-standard residues in protein, DNA, RNA chains (i)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95^{th} percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
24	7MG	AY	46	24/25	0.26	0.19	170,172,175,176	0
24	7MG	CY	46	24/25	0.28	0.20	170,172,175,176	0
24	H2U	CY	16	20/21	0.32	0.18	170,173,173,174	0
24	H2U	CY	20	20/21	0.32	0.19	178,179,179,180	0
24	H2U	AY	20	20/21	0.32	0.19	178,179,179,179	0
24	H2U	AY	16	20/21	0.35	0.22	169,173,173,174	0
24	H2U	AY	17	20/21	0.41	0.20	170,174,175,176	0
24	H2U	CY	17	20/21	0.50	0.14	170,173,175,176	0
24	4SU	AY	8	20/21	0.56	0.17	145,147,149,149	0
24	PSU	CY	55	20/21	0.56	0.18	154,160,160,160	0
24	PSU	AY	55	20/21	0.58	0.17	154,159,160,161	0
24	4SU	CY	8	20/21	0.63	0.15	146,147,148,149	0
24	5MU	AY	54	21/22	0.65	0.14	145,149,150,153	0
24	5MU	CY	54	21/22	0.73	0.16	144,149,151,153	0
24	OMC	CY	32	21/22	0.78	0.19	107,112,121,122	0
24	MIA	AY	37	29/30	0.81	0.20	71,88,103,104	0
24	OMC	AY	32	21/22	0.81	0.15	107,112,120,121	0
24	MIA	CY	37	29/30	0.83	0.15	74,88,101,102	0

6.3 Carbohydrates (i)

There are no oligosaccharides in this entry.

6.4 Ligands (i)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95^{th} percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
60	GDP	AZ	501	28/28	0.80	0.12	130,136,140,141	0
60	GDP	CZ	501	28/28	0.80	0.12	129,136,140,140	0
61	KIR	CZ	502	57/57	0.82	0.18	118,120,121,123	0
61	KIR	AZ	502	57/57	0.85	0.20	117,119,121,122	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
59	ZN	D9	101	1/1	0.99	0.03	81,81,81,81	0
59	ZN	B4	101	1/1	0.99	0.07	90,90,90,90	0
59	ZN	B9	101	1/1	0.99	0.03	82,82,82,82	0
59	ZN	CD	301	1/1	0.99	0.16	72,72,72,72	0
59	ZN	D4	101	1/1	0.99	0.04	115,115,115,115	0
59	ZN	AN	101	1/1	1.00	0.02	34,34,34,34	0
59	ZN	AD	301	1/1	1.00	0.14	59,59,59,59	0
59	ZN	CN	101	1/1	1.00	0.02	60,60,60,60	0

6.5 Other polymers (i)

There are no such residues in this entry.