



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 17, 2026 – 09:09 PM UTC

PDB ID : 4V52 / pdb_00004v52
Title : Crystal structure of the bacterial ribosome from Escherichia coli in complex with neomycin.
Authors : Borovinskaya, M.A.; Pai, R.D.; Zhang, W.; Schuwirth, B.-S.; Holton, J.M.; Hirokawa, G.; Kaji, H.; Kaji, A.; Cate, J.H.D.
Deposited on : 2007-06-15
Resolution : 3.21 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

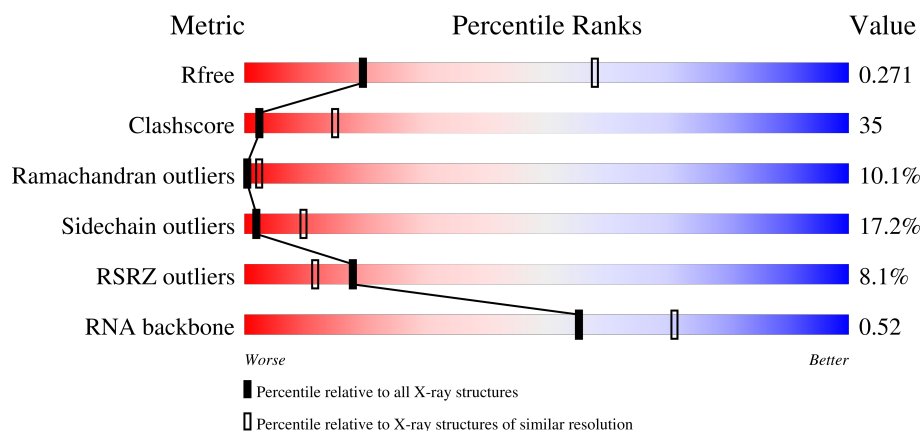
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.21 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	1768 (3.24-3.20)
Clashscore	190562	1879 (3.24-3.20)
Ramachandran outliers	187476	1844 (3.24-3.20)
Sidechain outliers	187428	1843 (3.24-3.20)
RSRZ outliers	180081	1768 (3.24-3.20)
RNA backbone	3983	1055 (3.50-2.94)

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 $\leq 5\%$. 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	1542	3% 27% 59% 12% ..
1	CA	1542	3% 28% 59% 11% ..
2	AC	232	9% 31% 46% 12% 11%

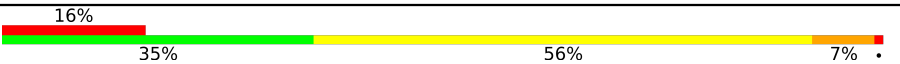
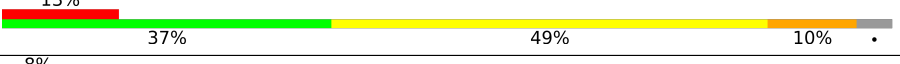
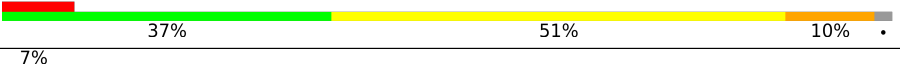
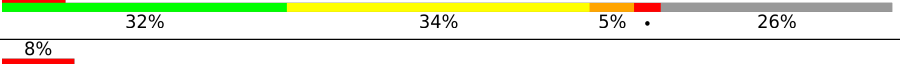
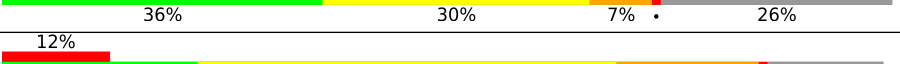
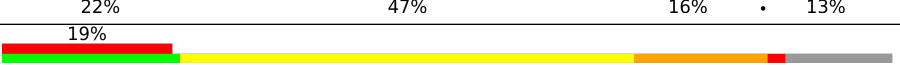
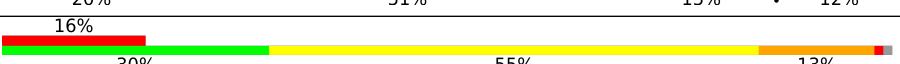
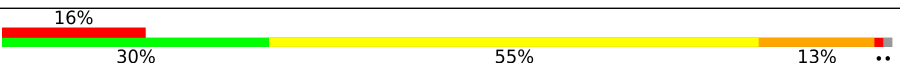
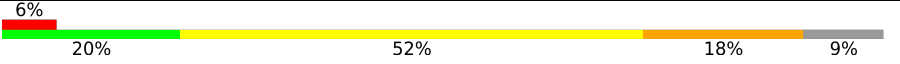
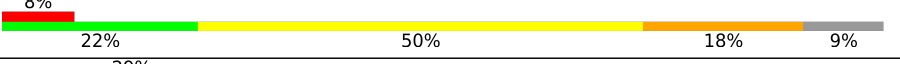
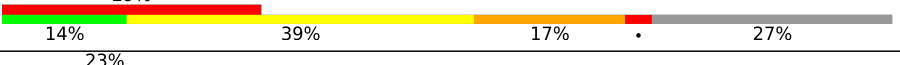
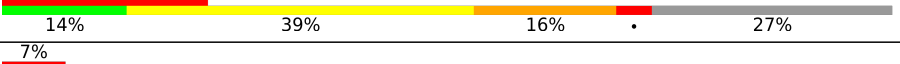
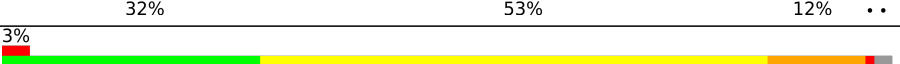
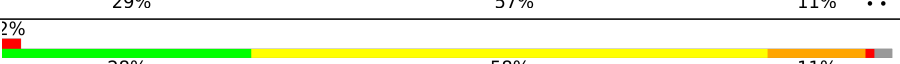
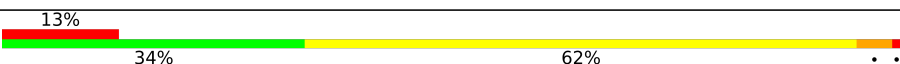
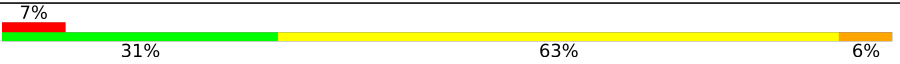
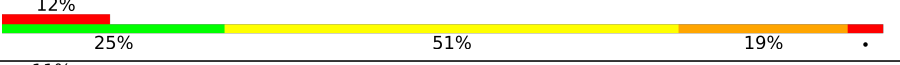
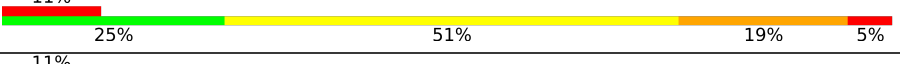
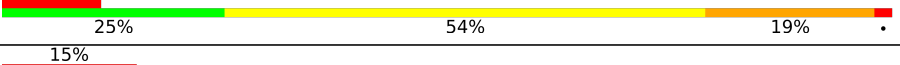
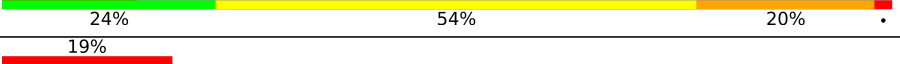
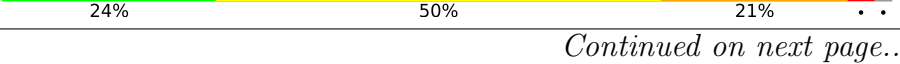
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
2	CC	232	
3	AD	205	
3	CD	205	
4	AE	166	
4	CE	166	
5	AF	135	
5	CF	135	
6	AG	178	
6	CG	178	
7	AH	129	
7	CH	129	
8	AI	129	
8	CI	129	
9	AJ	103	
9	CJ	103	
10	AK	128	
10	CK	128	
11	AL	123	
11	CL	123	
12	AM	117	
12	CM	117	
13	AN	100	
13	CN	100	
14	AO	89	
14	CO	89	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
15	AP	82	
15	CP	82	
16	AQ	83	
16	CQ	83	
17	AR	74	
17	CR	74	
18	AS	91	
18	CS	91	
19	AT	86	
19	CT	86	
20	AB	240	
20	CB	240	
21	AU	70	
21	CU	70	
22	BA	120	
22	DA	120	
23	BB	2904	
23	DB	2904	
24	BI	141	
24	DI	141	
25	BC	272	
25	DC	272	
26	BD	209	
26	DD	209	
27	BK	123	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
27	DK	123	
28	BP	114	
28	DP	114	
29	BE	201	
29	DE	201	
30	BY	58	
30	DY	58	
31	B0	56	
31	D0	56	
32	B4	38	
32	D4	38	
33	B1	54	
33	D1	54	
34	B3	64	
34	D3	64	
35	BV	94	
35	DV	94	
36	B2	46	
36	D2	46	
37	BL	144	
37	DL	144	
38	BM	136	
38	DM	136	
39	BX	63	
39	DX	63	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
40	BH	149	
40	DH	149	
41	BJ	142	
41	DJ	142	
42	BN	127	
42	DN	127	
43	BO	117	
43	DO	117	
44	BQ	117	
44	DQ	117	
45	BS	110	
45	DS	110	
46	BU	103	
46	DU	103	
47	BF	178	
47	DF	178	
48	BG	176	
48	DG	176	
49	BR	103	
49	DR	103	
50	BT	100	
50	DT	100	
51	BZ	78	
51	DZ	78	
52	BW	84	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
52	DW	84	

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
54	MG	AA	1660	-	-	-	X

2 Entry composition

There are 56 unique types of molecules in this entry. The entry contains 284172 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	1530	Total	C	N	O	P	0	0	0
			32831	14642	6024	10635	1530			
1	CA	1530	Total	C	N	O	P	0	0	0
			32831	14642	6024	10635	1530			

- Molecule 2 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	AC	206	Total	C	N	O	S	0	0	0
			1624	1028	305	288	3			
2	CC	206	Total	C	N	O	S	0	0	0
			1624	1028	305	288	3			

- Molecule 3 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	AD	205	Total	C	N	O	S	0	0	0
			1643	1026	315	298	4			
3	CD	205	Total	C	N	O	S	0	0	0
			1643	1026	315	298	4			

- Molecule 4 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	AE	150	Total	C	N	O	S	0	0	0
			1105	687	211	201	6			
4	CE	150	Total	C	N	O	S	0	0	0
			1105	687	211	201	6			

- Molecule 5 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	AF	100	Total	C	N	O	S	0	0	0
			817	515	148	148	6			
5	CF	100	Total	C	N	O	S	0	0	0
			817	515	148	148	6			

- Molecule 6 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	AG	150	Total	C	N	O	S	0	0	0
			1174	730	226	214	4			
6	CG	152	Total	C	N	O	S	0	0	0
			1196	745	230	217	4			

- Molecule 7 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	AH	129	Total	C	N	O	S	0	0	0
			979	616	173	184	6			
7	CH	129	Total	C	N	O	S	0	0	0
			979	616	173	184	6			

- Molecule 8 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	AI	127	Total	C	N	O	S	0	0	0
			1022	634	206	179	3			
8	CI	127	Total	C	N	O	S	0	0	0
			1022	634	206	179	3			

- Molecule 9 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	AJ	98	Total	C	N	O	S	0	0	0
			786	493	150	142	1			
9	CJ	98	Total	C	N	O	S	0	0	0
			786	493	150	142	1			

- Molecule 10 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	AK	117	Total	C	N	O	S	0	0	0
			877	540	174	160	3			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	CK	117	Total	C	N	O	S	0	0	0
			877	540	174	160	3			

- Molecule 11 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	AL	123	Total	C	N	O	S	0	0	0
			955	590	196	165	4			
11	CL	123	Total	C	N	O	S	0	0	0
			955	590	196	165	4			

- Molecule 12 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	AM	114	Total	C	N	O	S	0	0	0
			883	546	178	156	3			
12	CM	113	Total	C	N	O	S	0	0	0
			876	541	177	155	3			

- Molecule 13 is a protein called 30S ribosomal protein S14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	AN	96	Total	C	N	O	S	0	0	0
			774	483	160	128	3			
13	CN	96	Total	C	N	O	S	0	0	0
			774	483	160	128	3			

- Molecule 14 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	AO	88	Total	C	N	O	S	0	0	0
			714	439	144	130	1			
14	CO	88	Total	C	N	O	S	0	0	0
			714	439	144	130	1			

- Molecule 15 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	AP	82	Total	C	N	O	S	0	0	0
			649	406	128	114	1			
15	CP	80	Total	C	N	O	S	0	0	0
			638	400	126	111	1			

- Molecule 16 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	AQ	80	Total	C	N	O	S	0	0	0
			648	411	121	113	3			
16	CQ	81	Total	C	N	O	S	0	0	0
			657	417	122	115	3			

- Molecule 17 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
17	AR	55	Total	C	N	O	0	0	0
			455	288	86	81			
17	CR	55	Total	C	N	O	0	0	0
			455	288	86	81			

- Molecule 18 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	AS	79	Total	C	N	O	S	0	0	0
			637	408	120	107	2			
18	CS	80	Total	C	N	O	S	0	0	0
			644	413	121	108	2			

- Molecule 19 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AT	85	Total	C	N	O	S	0	0	0
			665	411	137	114	3			
19	CT	85	Total	C	N	O	S	0	0	0
			665	411	137	114	3			

- Molecule 20 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	AB	218	Total	C	N	O	S	0	0	0
			1704	1081	305	311	7			
20	CB	218	Total	C	N	O	S	0	0	0
			1704	1081	305	311	7			

- Molecule 21 is a protein called 30S ribosomal protein S21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	AU	51	Total	C	N	O	S	0	0	0
			425	265	86	73	1			
21	CU	51	Total	C	N	O	S	0	0	0
			425	265	86	73	1			

- Molecule 22 is a RNA chain called 5S rRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	BA	117	Total	C	N	O	P	0	0	0
			2507	1116	459	815	117			
22	DA	117	Total	C	N	O	P	0	0	0
			2507	1116	459	815	117			

- Molecule 23 is a RNA chain called 23S rRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	BB	2841	Total	C	N	O	P	0	0	0
			60995	27210	11229	19715	2841			
23	DB	2841	Total	C	N	O	P	0	0	0
			60995	27210	11229	19715	2841			

- Molecule 24 is a protein called 50S ribosomal protein L11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	BI	141	Total	C	N	O	S	0	0	0
			1032	651	179	196	6			
24	DI	141	Total	C	N	O	S	0	0	0
			1032	651	179	196	6			

- Molecule 25 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	BC	271	Total	C	N	O	S	0	0	0
			2082	1288	423	364	7			
25	DC	271	Total	C	N	O	S	0	0	0
			2082	1288	423	364	7			

- Molecule 26 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	BD	209	Total	C	N	O	S	0	0	0
			1565	979	288	294	4			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	DD	209	Total	C	N	O	S	0	0	0
			1565	979	288	294	4			

- Molecule 27 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	BK	121	Total	C	N	O	S	0	0	0
			930	582	179	164	5			
27	DK	121	Total	C	N	O	S	0	0	0
			930	582	179	164	5			

- Molecule 28 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	BP	114	Total	C	N	O	S	0	0	0
			917	574	179	163	1			
28	DP	114	Total	C	N	O	S	0	0	0
			917	574	179	163	1			

- Molecule 29 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	BE	201	Total	C	N	O	S	0	0	0
			1552	974	283	290	5			
29	DE	201	Total	C	N	O	S	0	0	0
			1552	974	283	290	5			

- Molecule 30 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	BY	58	Total	C	N	O	S	0	0	0
			449	281	87	79	2			
30	DY	58	Total	C	N	O	S	0	0	0
			449	281	87	79	2			

- Molecule 31 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	B0	56	Total	C	N	O	S	0	0	0
			444	269	94	80	1			
31	D0	56	Total	C	N	O	S	0	0	0
			444	269	94	80	1			

- Molecule 32 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	B4	38	Total	C	N	O	S	0	0	0
			302	185	65	48	4			
32	D4	38	Total	C	N	O	S	0	0	0
			302	185	65	48	4			

- Molecule 33 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
33	B1	50	Total	C	N	O	0	0	0
			409	263	75	71			
33	D1	50	Total	C	N	O	0	0	0
			409	263	75	71			

- Molecule 34 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	B3	64	Total	C	N	O	S	0	0	0
			504	323	105	74	2			
34	D3	64	Total	C	N	O	S	0	0	0
			504	323	105	74	2			

- Molecule 35 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	BV	94	Total	C	N	O	S	0	0	0
			753	479	137	134	3			
35	DV	94	Total	C	N	O	S	0	0	0
			753	479	137	134	3			

- Molecule 36 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	B2	46	Total	C	N	O	S	0	0	0
			377	228	90	57	2			
36	D2	46	Total	C	N	O	S	0	0	0
			377	228	90	57	2			

- Molecule 37 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	BL	143	Total	C	N	O	S	0	0	0
			1045	649	206	189	1			
37	DL	143	Total	C	N	O	S	0	0	0
			1045	649	206	189	1			

- Molecule 38 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	BM	136	Total	C	N	O	S	0	0	0
			1074	686	205	177	6			
38	DM	136	Total	C	N	O	S	0	0	0
			1074	686	205	177	6			

- Molecule 39 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	BX	63	Total	C	N	O	S	0	0	0
			509	313	99	95	2			
39	DX	63	Total	C	N	O	S	0	0	0
			509	313	99	95	2			

- Molecule 40 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	BH	149	Total	C	N	O	S	0	0	0
			1111	699	197	214	1			
40	DH	149	Total	C	N	O	S	0	0	0
			1111	699	197	214	1			

- Molecule 41 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	BJ	142	Total	C	N	O	S	0	0	0
			1129	714	212	199	4			
41	DJ	142	Total	C	N	O	S	0	0	0
			1129	714	212	199	4			

- Molecule 42 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	BN	120	Total	C	N	O	S	0	0	0
			960	593	196	166	5			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	DN	120	Total	C	N	O	S	0	0	0
			960	593	196	166	5			

- Molecule 43 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	BO	116	Total	C	N	O		0	0	0
			892	552	178	162				
43	DO	116	Total	C	N	O		0	0	0
			892	552	178	162				

- Molecule 44 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	BQ	117	Total	C	N	O		0	0	0
			947	604	192	151				
44	DQ	117	Total	C	N	O		0	0	0
			947	604	192	151				

- Molecule 45 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	BS	110	Total	C	N	O	S	0	0	0
			857	532	166	156	3			
45	DS	110	Total	C	N	O	S	0	0	0
			857	532	166	156	3			

- Molecule 46 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	BU	102	Total	C	N	O		0	0	0
			779	492	146	141				
46	DU	102	Total	C	N	O		0	0	0
			779	492	146	141				

- Molecule 47 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	BF	178	Total	C	N	O	S	0	0	0
			1420	905	251	258	6			
47	DF	178	Total	C	N	O	S	0	0	0
			1420	905	251	258	6			

- Molecule 48 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	BG	176	Total	C	N	O	S	0	0	0
			1323	832	243	246	2			
48	DG	176	Total	C	N	O	S	0	0	0
			1323	832	243	246	2			

- Molecule 49 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	BR	103	Total	C	N	O	S	0	0	0
			816	516	153	145	2			
49	DR	103	Total	C	N	O	S	0	0	0
			816	516	153	145	2			

- Molecule 50 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	BT	93	Total	C	N	O	S	0	0	0
			738	466	139	131	2			
50	DT	93	Total	C	N	O	S	0	0	0
			738	466	139	131	2			

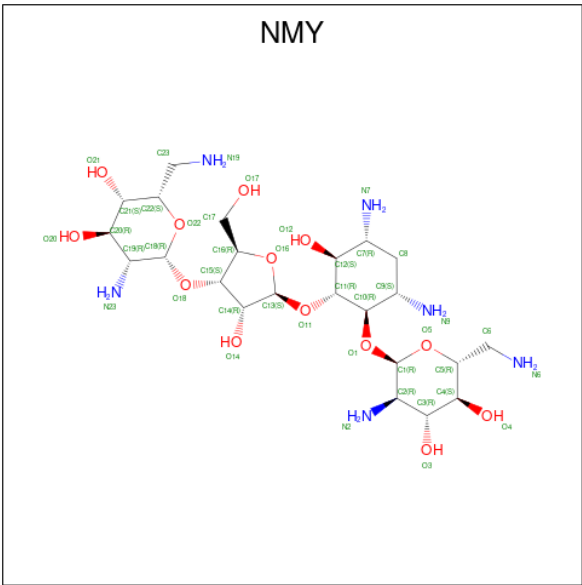
- Molecule 51 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	BZ	77	Total	C	N	O	S	0	0	0
			625	388	129	106	2			
51	DZ	77	Total	C	N	O	S	0	0	0
			625	388	129	106	2			

- Molecule 52 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	BW	79	Total	C	N	O	S	0	0	0
			596	367	120	108	1			
52	DW	79	Total	C	N	O	S	0	0	0
			596	367	120	108	1			

- Molecule 53 is NEOMYCIN (CCD ID: NMY) (formula: C₂₃H₄₆N₆O₁₃).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
53	AA	1	Total	C	N	O	0	0
			42	23	6	13		
53	BB	1	Total	C	N	O	0	0
			42	23	6	13		
53	CA	1	Total	C	N	O	0	0
			42	23	6	13		
53	DB	1	Total	C	N	O	0	0
			42	23	6	13		

- Molecule 54 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
54	AA	60	Total	Mg	0	0
			60	60		
54	BB	110	Total	Mg	0	0
			110	110		
54	CA	60	Total	Mg	0	0
			60	60		
54	CE	1	Total	Mg	0	0
			1	1		
54	CN	1	Total	Mg	0	0
			1	1		
54	DB	111	Total	Mg	0	0
			111	111		

- Molecule 55 is ZINC ION (CCD ID: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
55	B4	1	Total 1	Zn 1	0	0
55	D4	1	Total 1	Zn 1	0	0

- Molecule 56 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	AA	291	Total 291	O 291	0	0
56	AL	4	Total 4	O 4	0	0
56	AN	4	Total 4	O 4	0	0
56	AT	1	Total 1	O 1	0	0
56	BB	497	Total 497	O 497	0	0
56	BC	5	Total 5	O 5	0	0
56	BE	1	Total 1	O 1	0	0
56	BL	1	Total 1	O 1	0	0
56	BN	1	Total 1	O 1	0	0
56	BR	1	Total 1	O 1	0	0
56	CA	298	Total 298	O 298	0	0
56	CE	3	Total 3	O 3	0	0
56	CL	2	Total 2	O 2	0	0
56	CN	4	Total 4	O 4	0	0
56	CP	1	Total 1	O 1	0	0
56	CT	1	Total 1	O 1	0	0
56	DB	502	Total 502	O 502	0	0
56	DC	6	Total 6	O 6	0	0

Continued on next page...

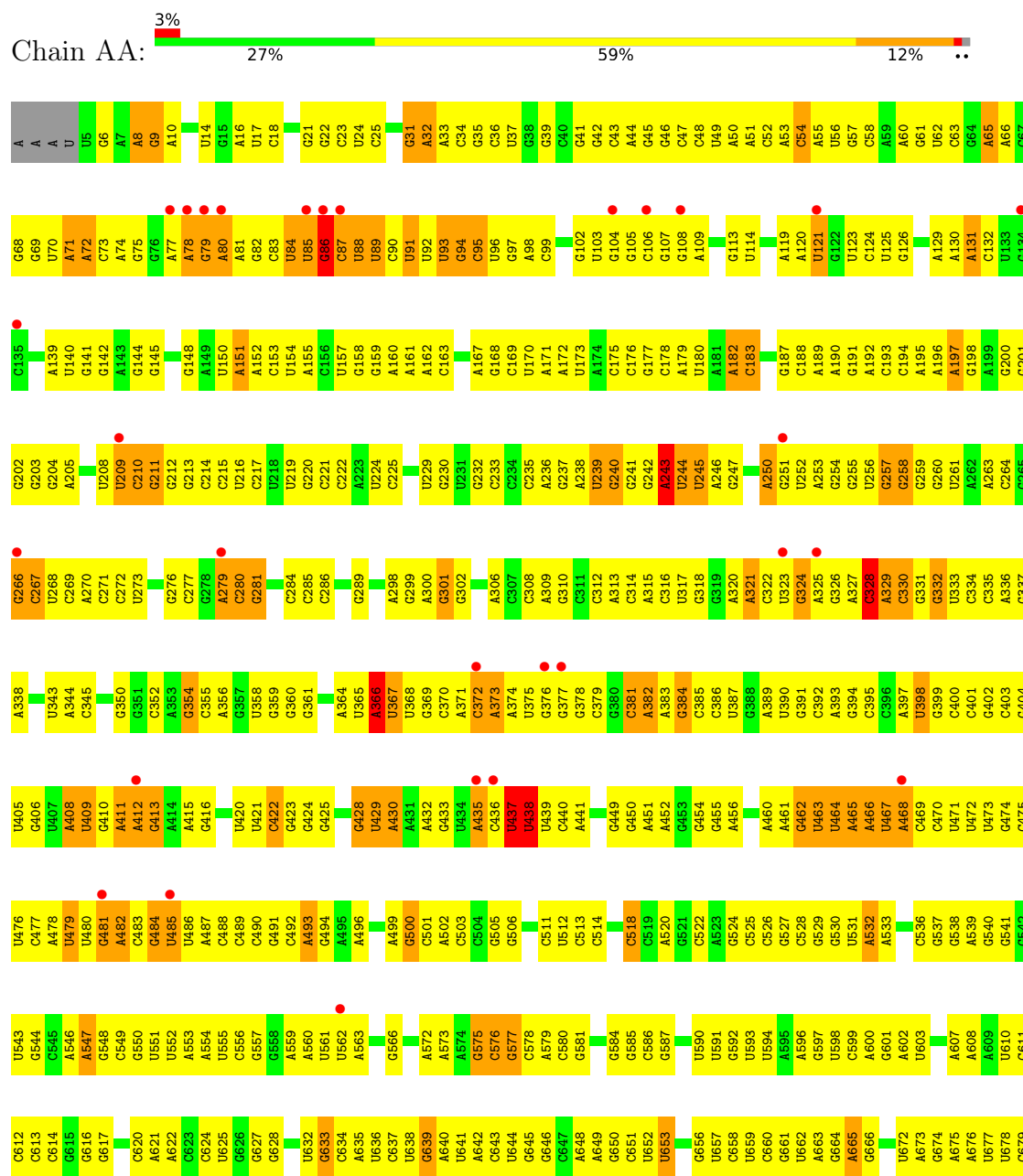
Continued from previous page...

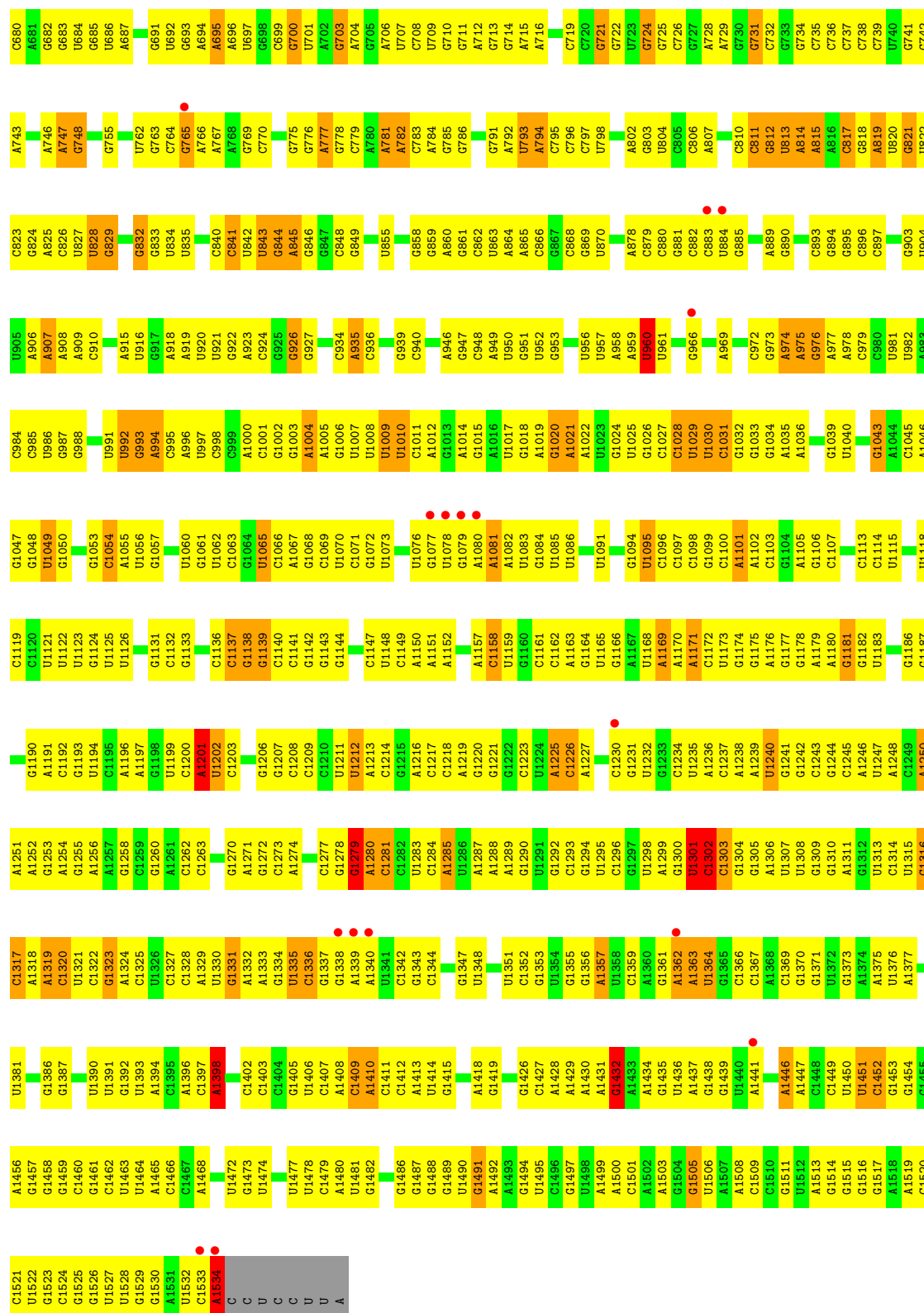
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	DE	1	Total	O	0	0
			1	1		
56	DL	2	Total	O	0	0
			2	2		
56	DR	1	Total	O	0	0
			1	1		

3 Residue-property plots

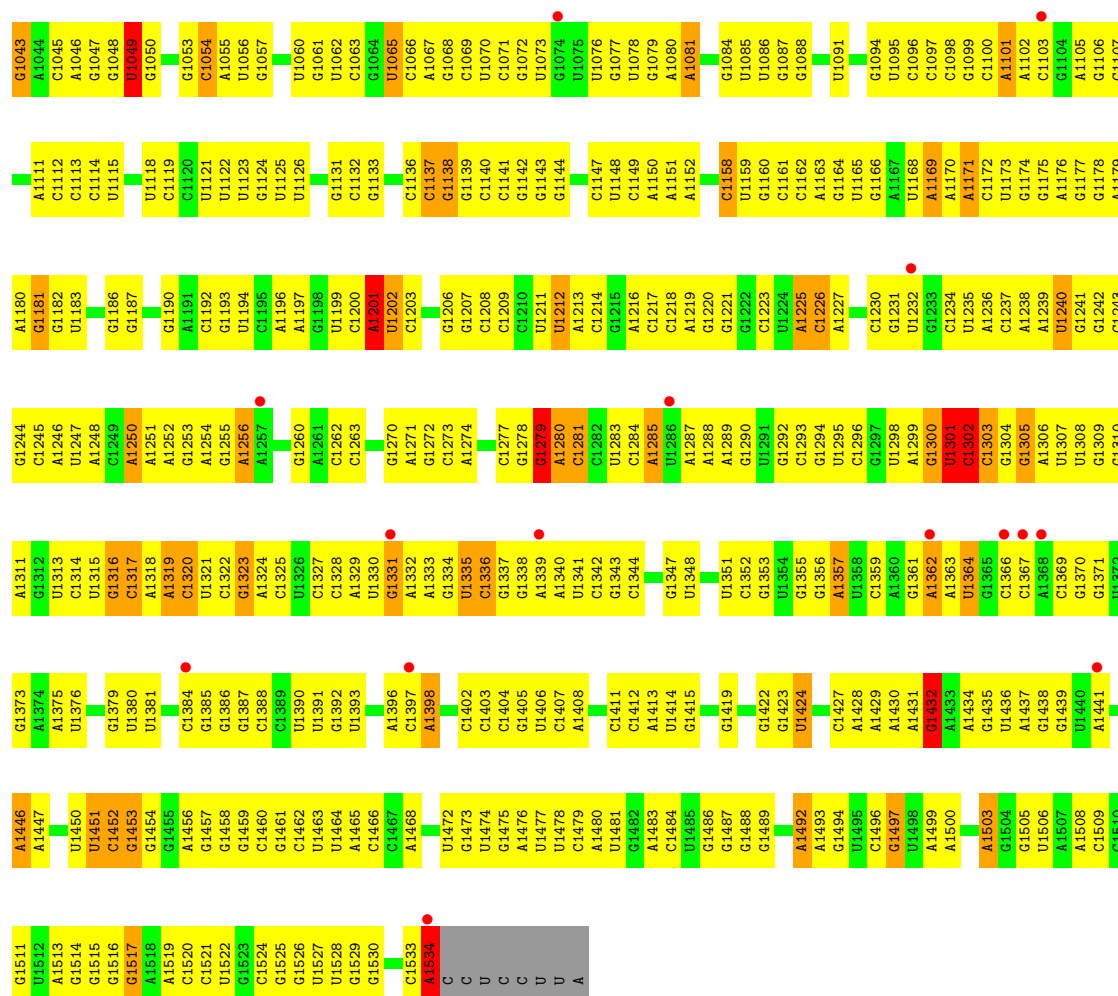
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. 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.

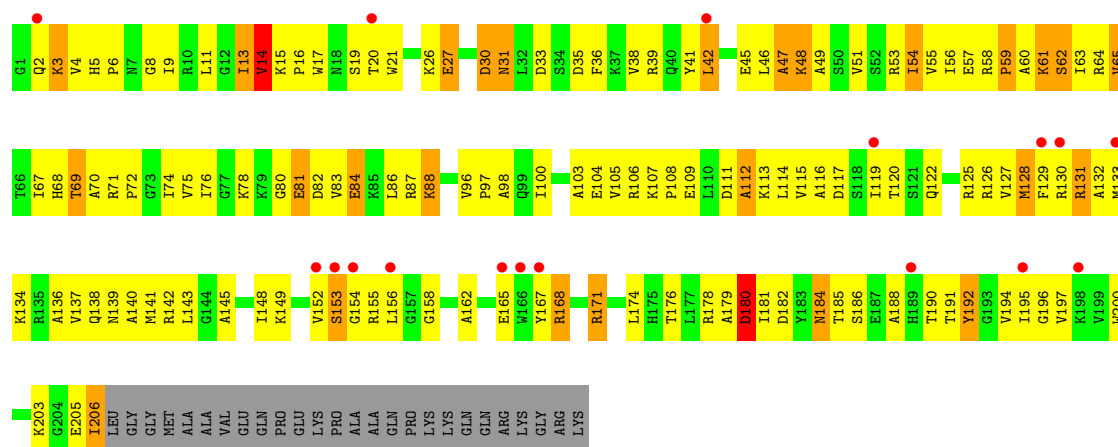
• Molecule 1: 16S rRNA



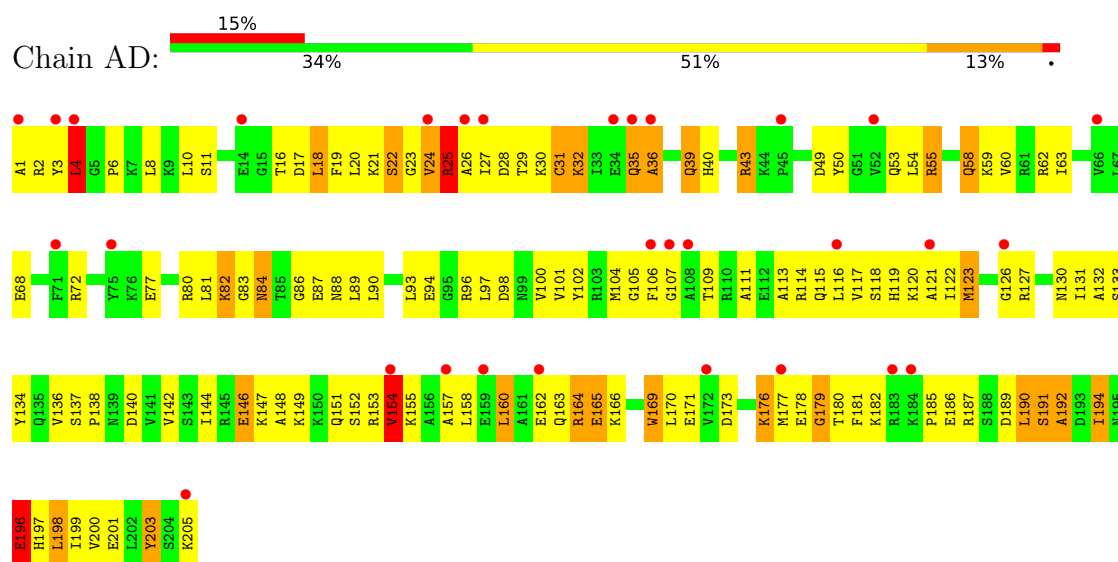


C979	C980	U981	U982	C983	C984	C985	U986	G987	G988	U991	U992	G993	A994	C995	A996	U997	C998	C999	A1000	C1001	G1002	G1003	A1004	A1005	G1006	U1007	U1008	U1009	U1010	C1011	A1012	G1013	U1014	G1015	A1016	U1017	G1018	A1019	G1020	A1021	A1022	U1025	C1027	U1028	U1029	U1030	C1031	G1032	G1033	U1034	A1035	A1036	U1039	U1040					
A908	A909	C910	C915	A916	G917	A918	A919	U920	U921	U922	A923	C924	G925	C926	G927	G928	G929	C932	G933	C934	A935	C936	G939	C940	G941	A946	C947	C948	U949	U950	G951	U952	G953	U956	U957	U958	A959	U960	U961	U965	C966	C967	U968	A969	C970	G971	C972	G973	A974	A975	G976	A977	A978						
U828	G829	G832	G833	U834	U835	C840	C841	U842	U843	U844	A845	G846	G847	C848	G849	U855	U858	A859	C860	G861	C862	U863	A864	C865	C866	G867	C868	G869	A872	A873	G874	A878	C879	C880	G881	C882	C883	U884	G885	C893	G894	G895	C896	C897	A901	G902	G903	U904	U905	A906	A907	A908							
A747	G748	G755	U762	G763	C764	G765	A766	A767	U768	G769	C770	G775	G776	A777	G778	C779	A780	U781	A782	C783	U784	G785	A792	U793	A794	C795	C796	U797	U798	A802	G803	U804	C805	U806	A807	C810	C811	G812	U813	A814	G815	A816	C817	G818	A819	U820	G821	U822	C823	G824	A825	C826	U827						
U684	G685	U686	A687	G691	U692	G693	A694	A695	U696	G697	G698	C699	G700	U701	A702	G703	A704	U705	A706	U707	C708	U709	G710	G711	A712	U713	G714	A715	U716	C719	U720	G721	G722	U723	G724	C725	G726	U727	A728	U729	A730	G731	C732	U733	G734	C735	U736	C737	U738	C739	U740	G741	U742	A743	C744	U745	A746		
A546	A547	G548	C549	U550	U551	U552	A553	A554	U555	C556	G557	G558	A559	U560	U561	A562	A563	G566	A572	C573	A574	G575	C576	G577	C578	A579	C580	G581	G584	C585	C586	G587	U590	U591	G592	U593	C594	U595	A596	G597	U598	C599	A600	G601	A602	U603	A607	G608	A609	U610	C611	C612	G613	C614					
A482	C483	G484	U485	U486	A487	C488	G489	C490	G491	C492	A493	G494	A495	A496	A499	G500	C501	A502	C503	G504	C505	G506	A509	A510	C511	U512	C513	C514	G515	U516	C517	C518	C519	A520	G521	C522	A523	G524	C525	U526	G527	C528	G529	C530	U531	A532	C536	G537	G538	A539	G540	A541	U542	U543	G544	C545			
A411	A412	C413	A414	A415	G416	U420	U421	C422	G423	G424	G425	U428	U429	U430	A431	A432	G433	U434	A435	C436	U437	U438	U439	C440	A441	G449	G450	A451	A452	G453	G454	C455	A456	A460	A461	G462	U463	U464	A465	A466	U467	A468	C469	C470	U471	U472	U473	G474	C475	U476	C477	A478	U479	U480	G481				
A349	G350	C351	C352	A353	G354	C355	A356	G357	U358	U359	A360	A361	A362	A363	A364	U365	A366	A367	C370	A371	C372	A373	U374	U375	G376	G377	C378	C379	G380	C381	A382	A383	G384	C385	C386	U387	G388	A389	U390	U391	C392	G393	A394	C395	C396	C397	U398	C399	G400	C401	G402	C403	G404	U405	U406	A407	A408	U409	C410
U273	A274	G275	G276	C277	G278	A279	A280	G281	C284	C285	U287	A288	G289	A298	G299	A300	G301	G302	A306	C307	C308	A309	G310	C311	C312	A313	C314	A315	C316	U317	C318	G319	A320	A321	C322	U323	G324	A325	G326	G327	C328	A329	C330	U331	G332	U333	C334	C335	A336	U337	A338	C345	G348						
G211	G212	G213	C214	C215	U216	U217	U218	U219	C220	C221	C222	A223	U224	U225	G226	U229	G230	U231	G232	C233	C234	C235	A236	G237	A238	U239	C240	G241	G242	A243	U244	U245	A246	G247	A250	G251	U252	U253	A254	G255	U256	G257	C258	G259	C260	U261	G262	A263	C264	C265	G266	U267	U268	C269	A270	U208	U209	C271	C272
U70	A71	A72	A77	A78	G79	A80	A81	G82	C83	U84	U85	G86	C87	U88	U89	C90	U91	U92	U93	G94	C95	U96	G97	A98	C99	G102	U103	G104	G105	C106	G107	G108	A109	G113	U114	A119	U120	U121	G122	U123	C124	A125	G126	A129	A130	A131	C132	G139	U140	G141	G142	A143	C144						
A	A	A	U	U5	G6	A7	A8	G9	A10	U14	G15	A16	U17	C18	G21	G22	G23	U24	C25	G31	A32	A33	C34	G35	C36	U37	G38	G39	C40	G41	G42	C43	A44	G45	G46	C47	C48	U49	A50	A51	C52	A53	C54	A55	U56	G57	C58	A59	G60	G61	U62	C63	G64	A65	G69				

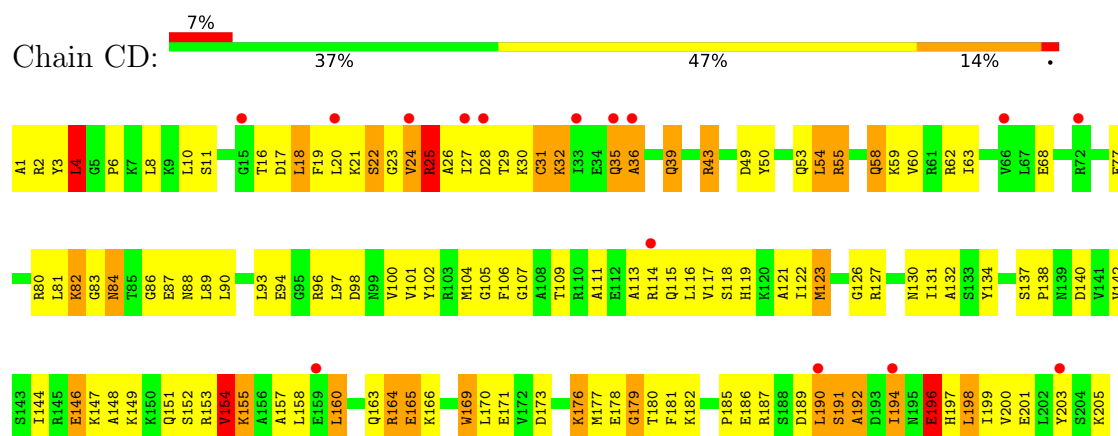




• Molecule 3: 30S ribosomal protein S4

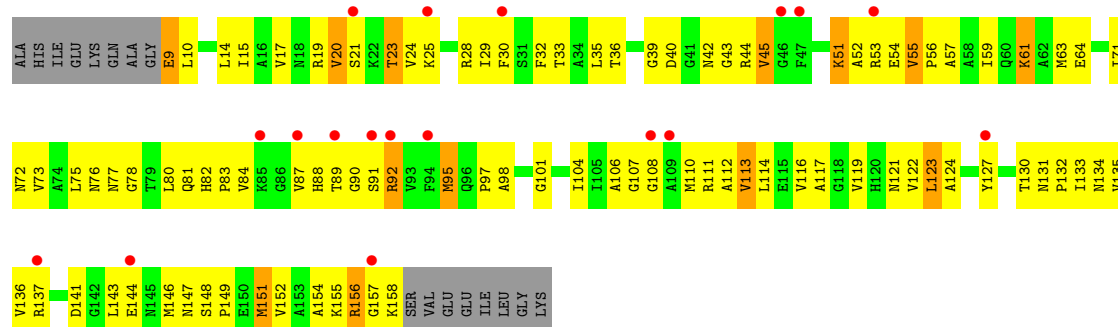


• Molecule 3: 30S ribosomal protein S4

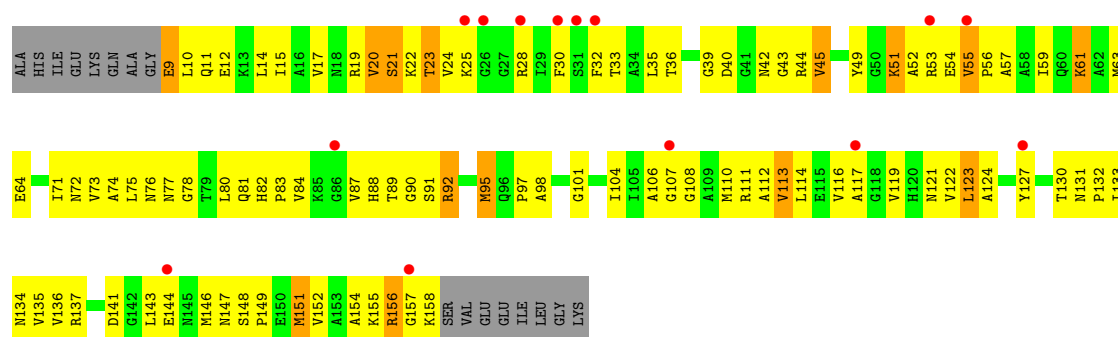


• Molecule 4: 30S ribosomal protein S5

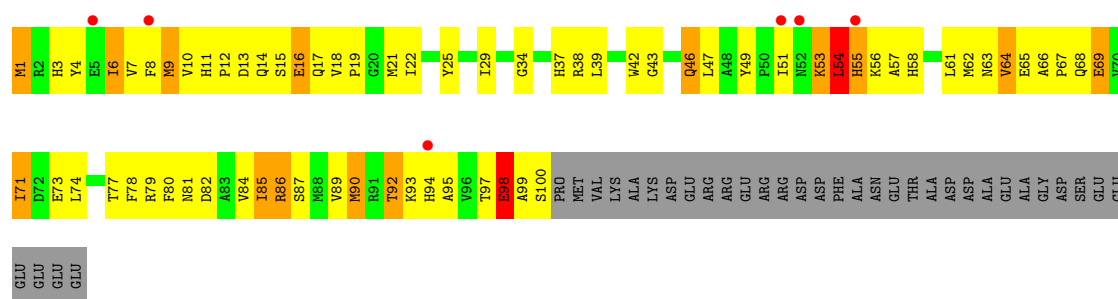
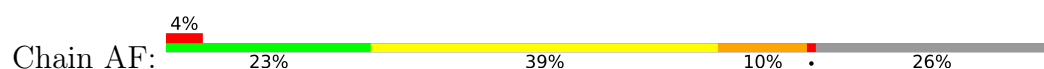




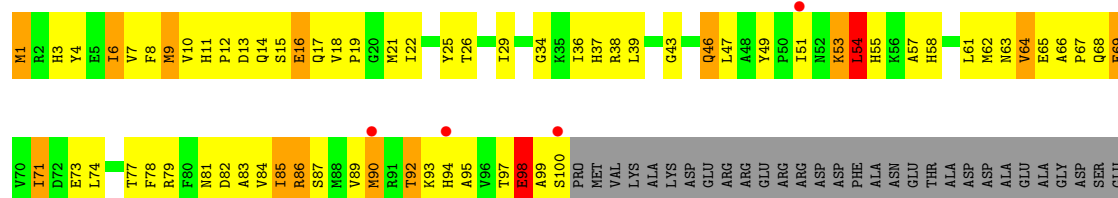
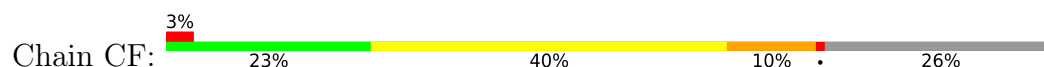
• Molecule 4: 30S ribosomal protein S5



• Molecule 5: 30S ribosomal protein S6

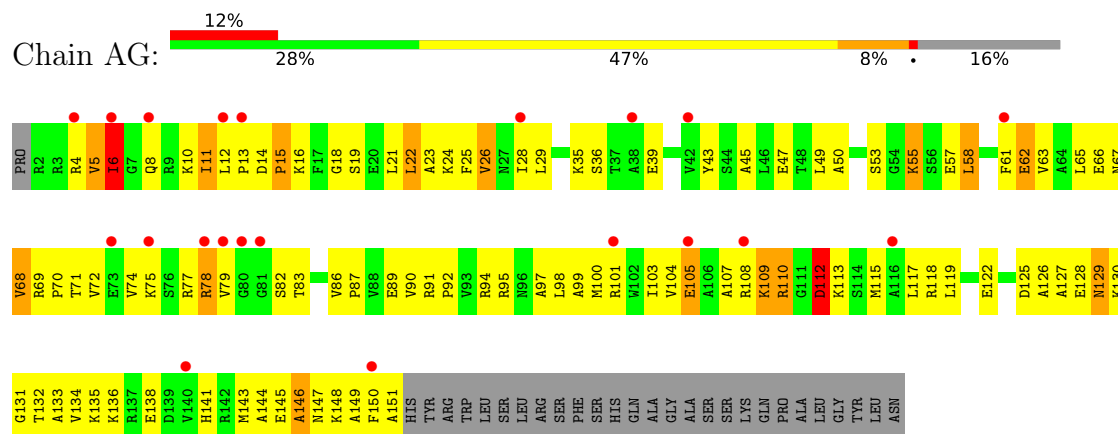


• Molecule 5: 30S ribosomal protein S6

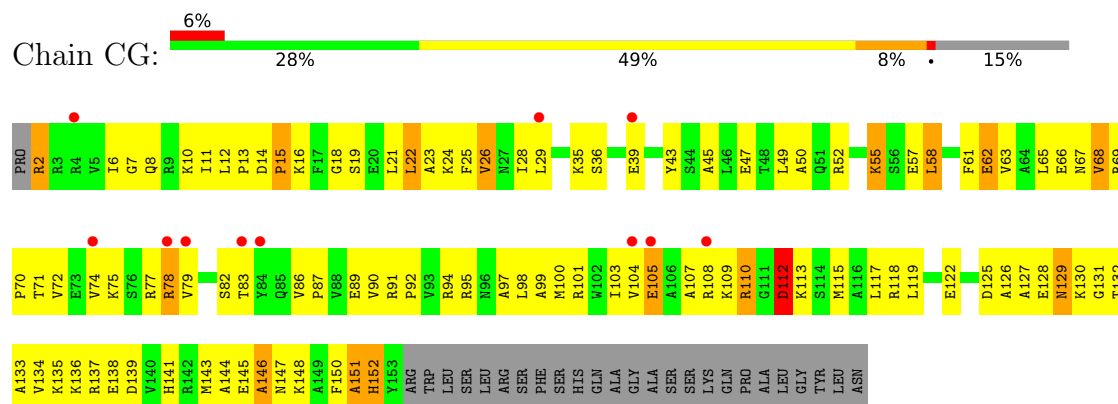


GLU
GLU
GLU
GLU
GLU

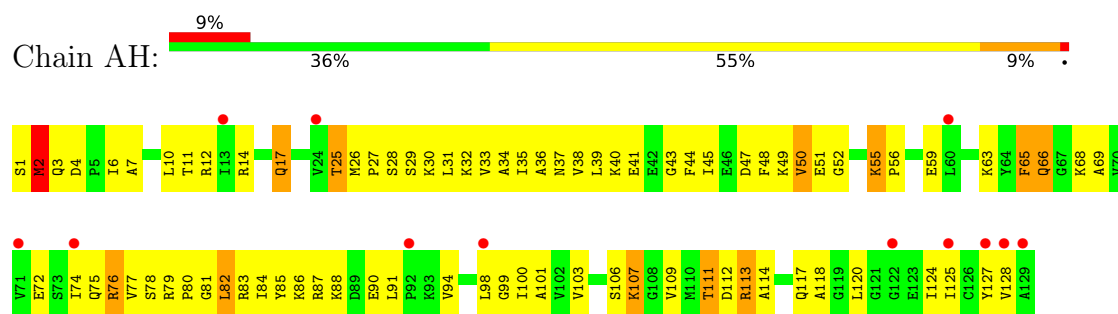
• Molecule 6: 30S ribosomal protein S7



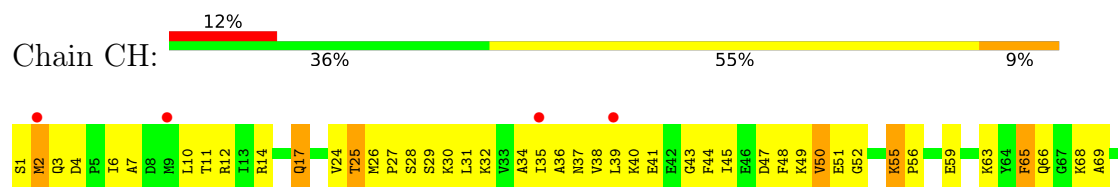
• Molecule 6: 30S ribosomal protein S7

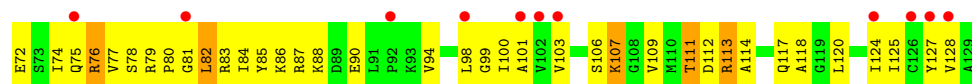


• Molecule 7: 30S ribosomal protein S8

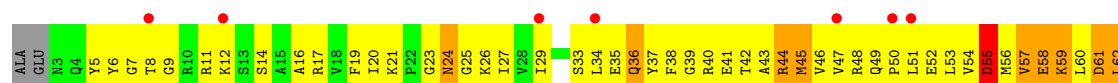


• Molecule 7: 30S ribosomal protein S8

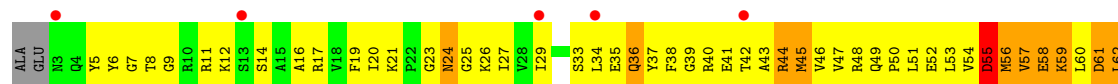




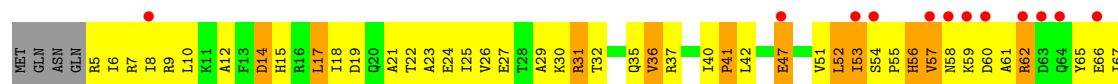
• Molecule 8: 30S ribosomal protein S9



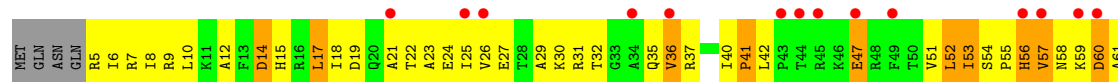
• Molecule 8: 30S ribosomal protein S9



• Molecule 9: 30S ribosomal protein S10

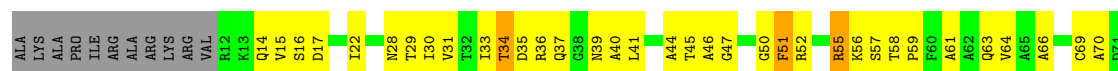


• Molecule 9: 30S ribosomal protein S10

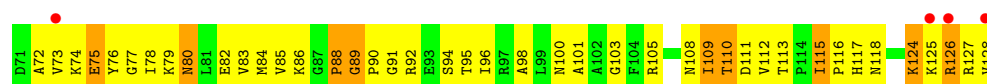
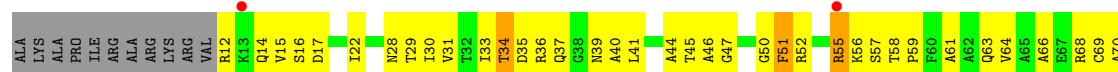


• Molecule 10: 30S ribosomal protein S11

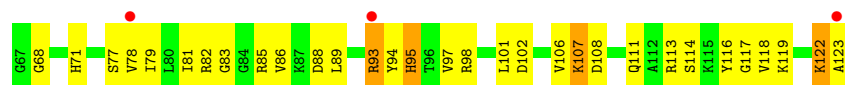




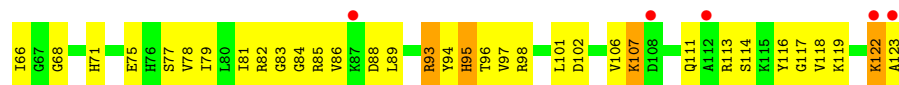
• Molecule 10: 30S ribosomal protein S11



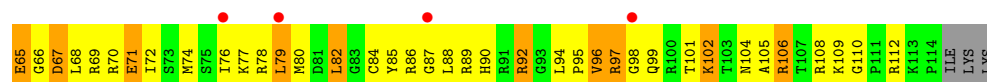
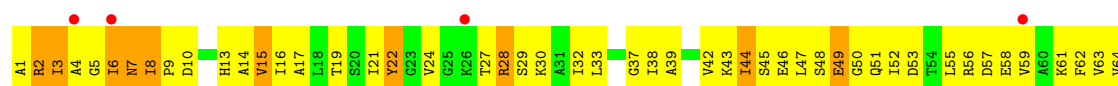
• Molecule 11: 30S ribosomal protein S12



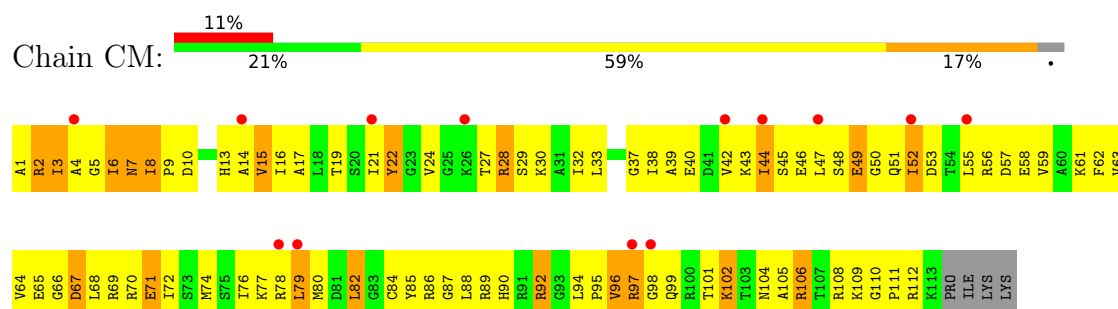
• Molecule 11: 30S ribosomal protein S12



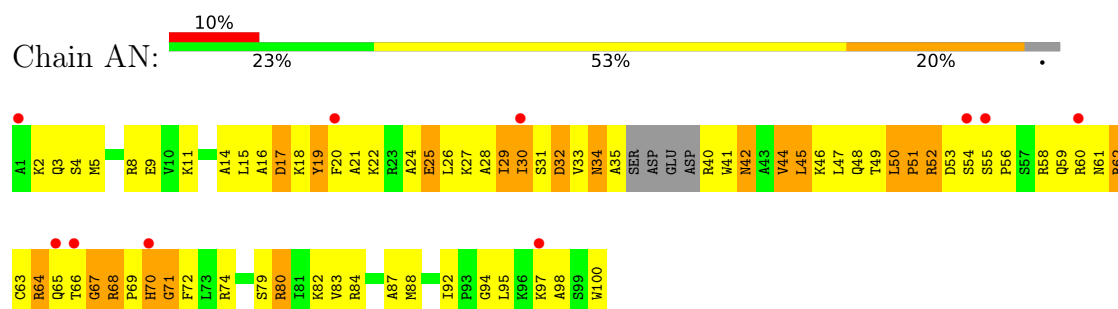
• Molecule 12: 30S ribosomal protein S13



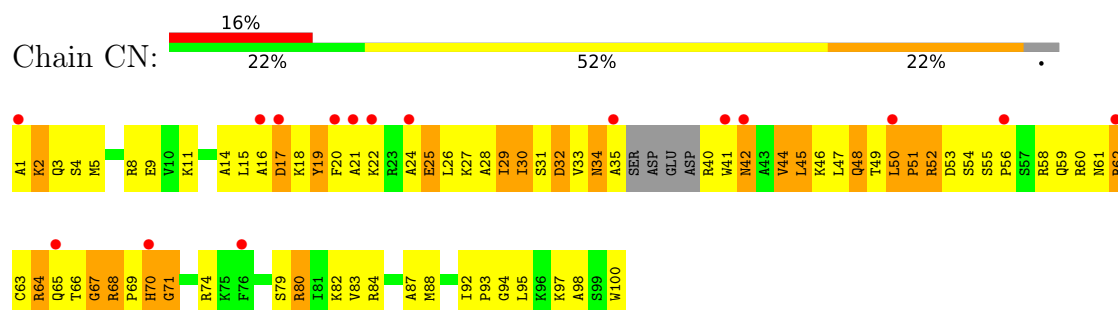
- Molecule 12: 30S ribosomal protein S13



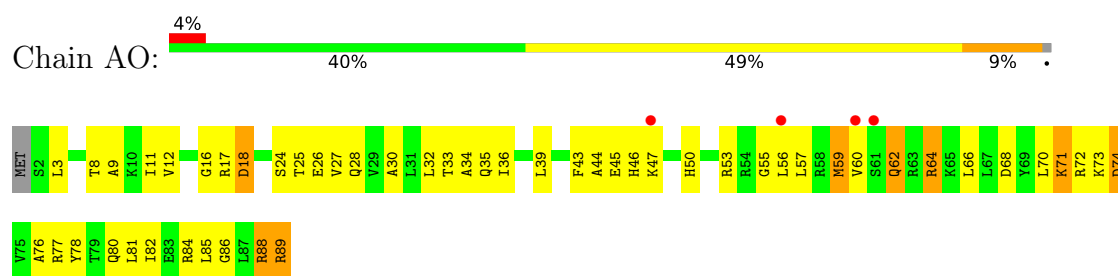
- Molecule 13: 30S ribosomal protein S14



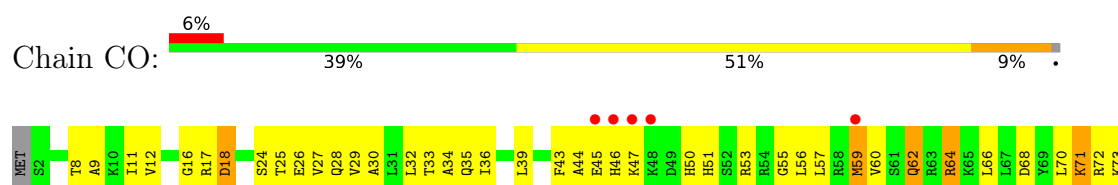
- Molecule 13: 30S ribosomal protein S14



- Molecule 14: 30S ribosomal protein S15

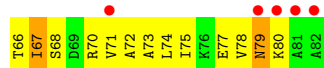
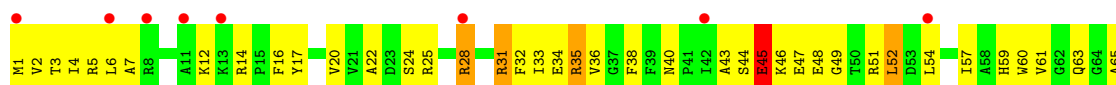


- Molecule 14: 30S ribosomal protein S15

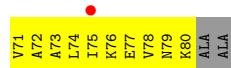
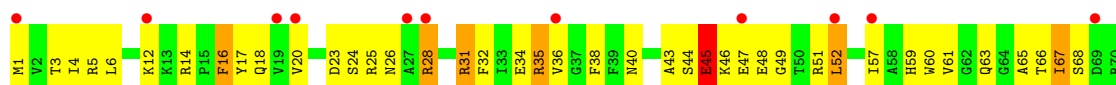




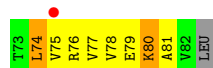
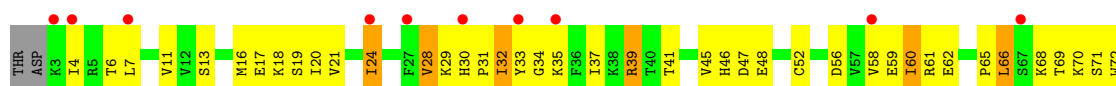
• Molecule 15: 30S ribosomal protein S16



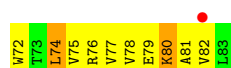
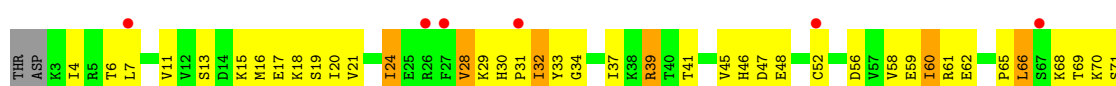
• Molecule 15: 30S ribosomal protein S16



• Molecule 16: 30S ribosomal protein S17

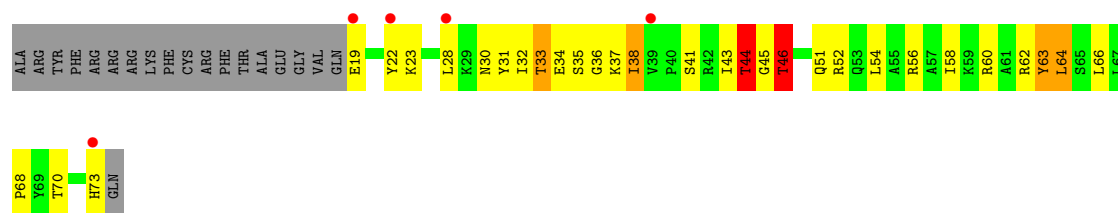


• Molecule 16: 30S ribosomal protein S17

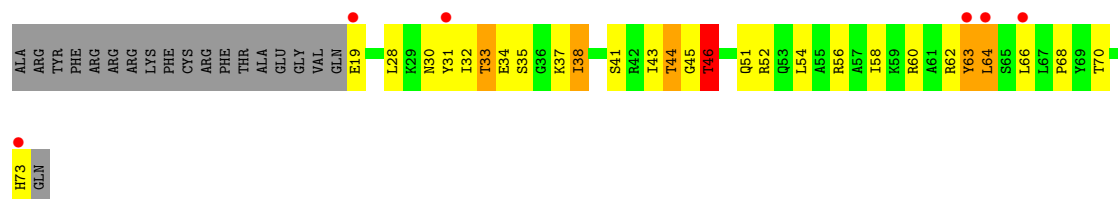


• Molecule 17: 30S ribosomal protein S18

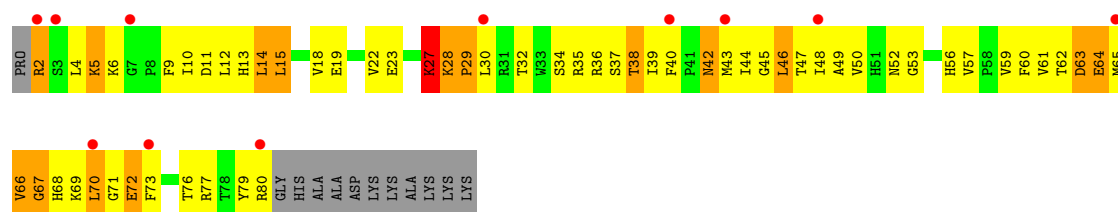
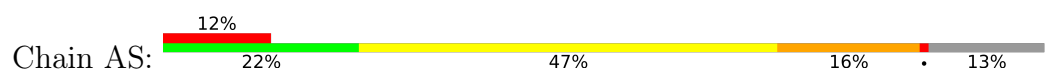




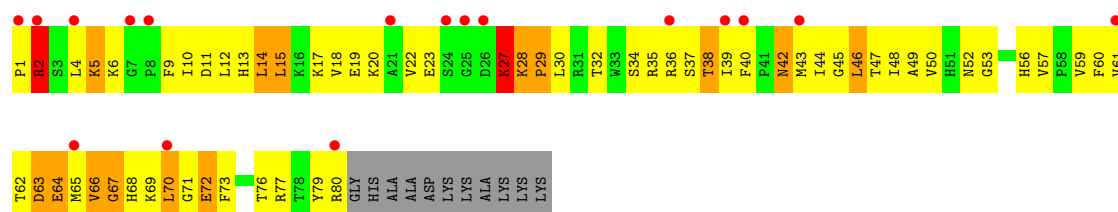
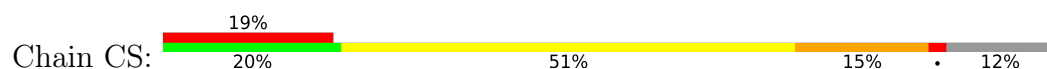
• Molecule 17: 30S ribosomal protein S18



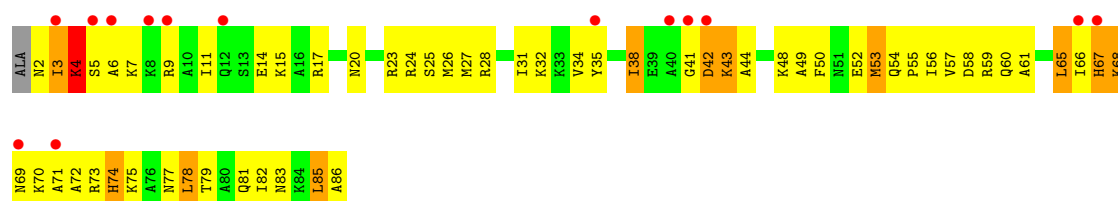
• Molecule 18: 30S ribosomal protein S19



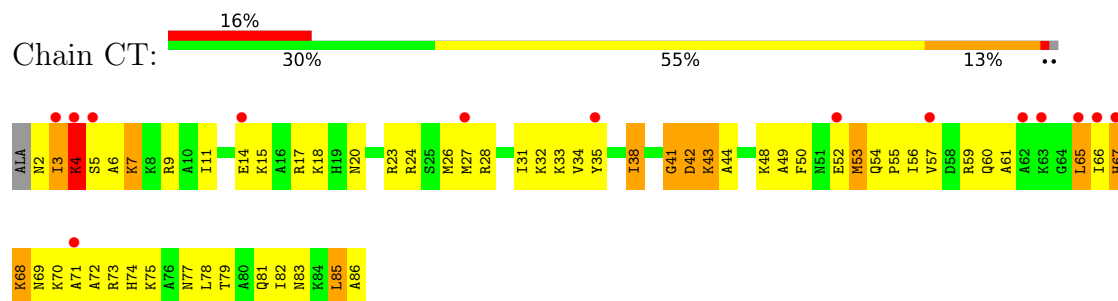
• Molecule 18: 30S ribosomal protein S19



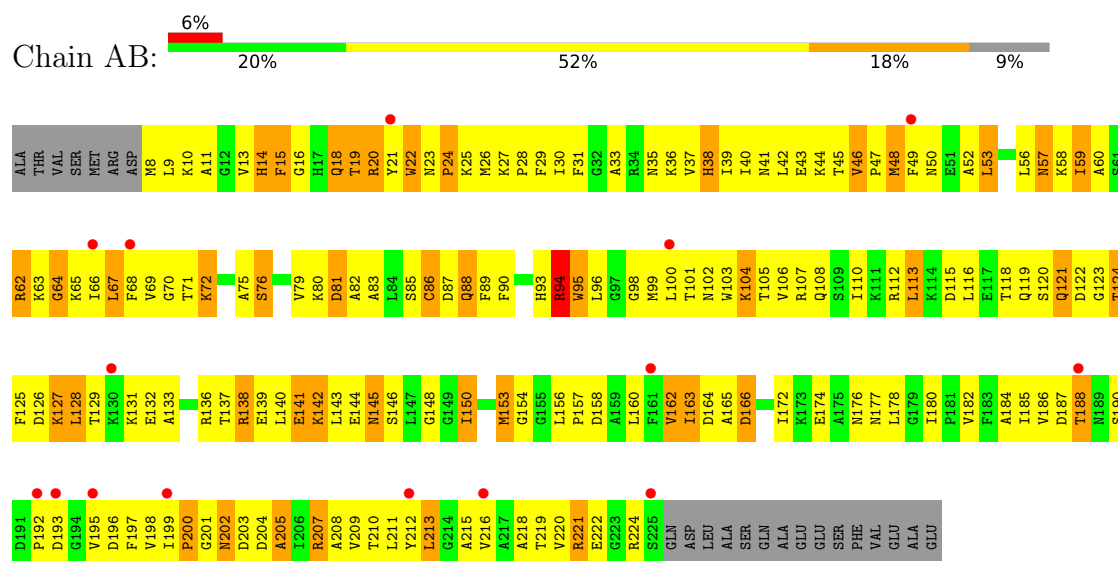
• Molecule 19: 30S ribosomal protein S20



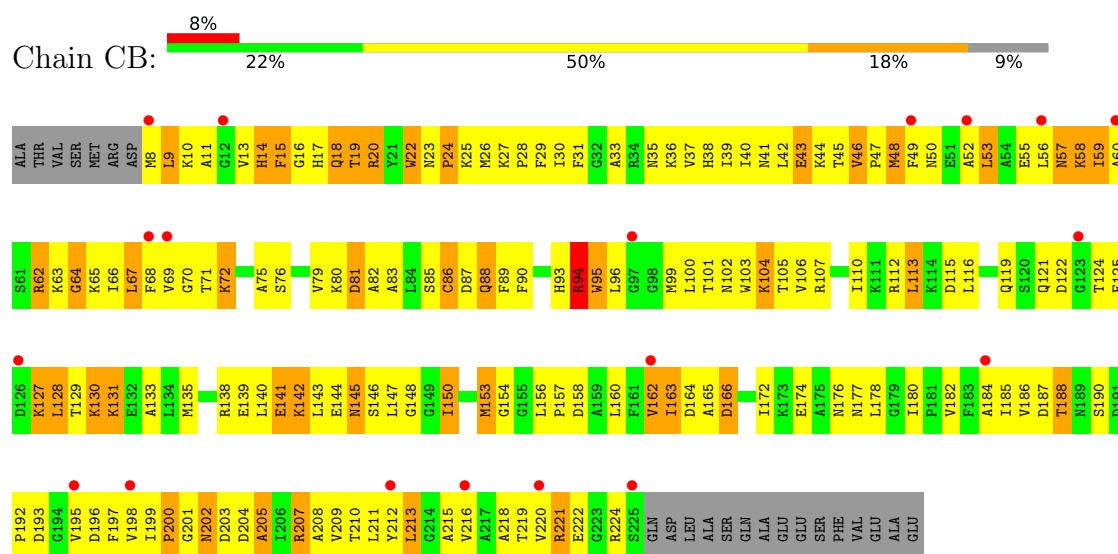
- Molecule 19: 30S ribosomal protein S20



- Molecule 20: 30S ribosomal protein S2

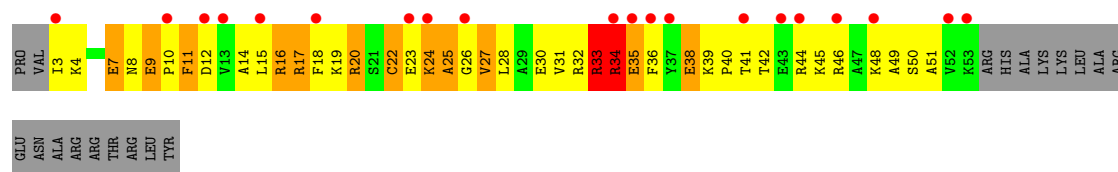


- Molecule 20: 30S ribosomal protein S2

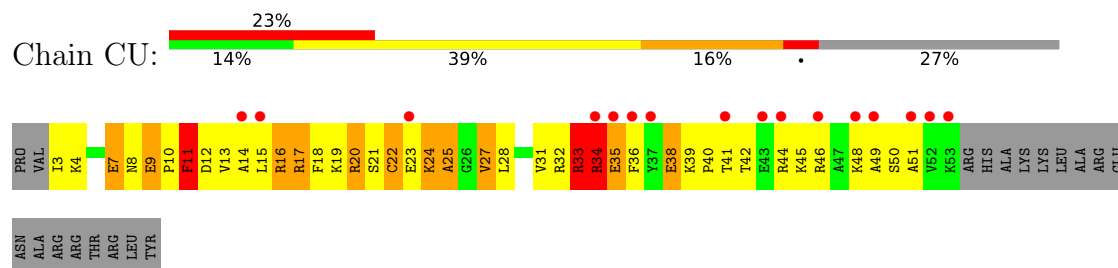


- Molecule 21: 30S ribosomal protein S21

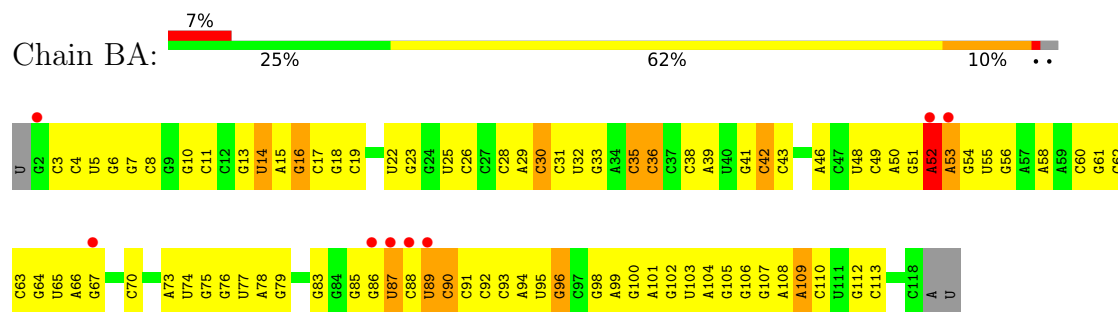




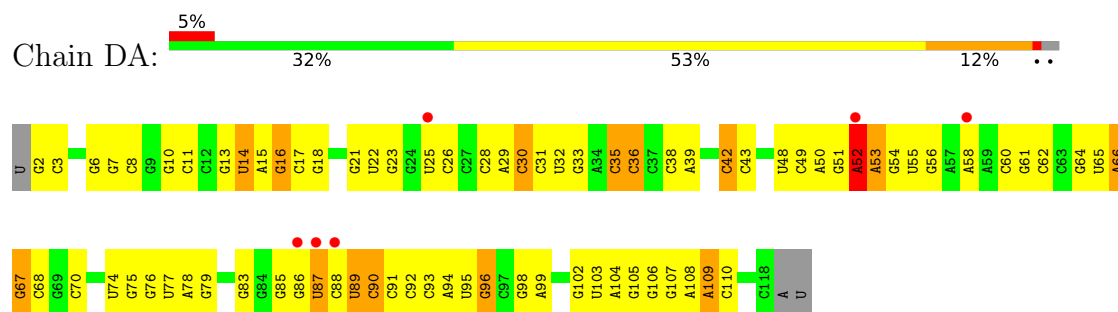
- Molecule 21: 30S ribosomal protein S21



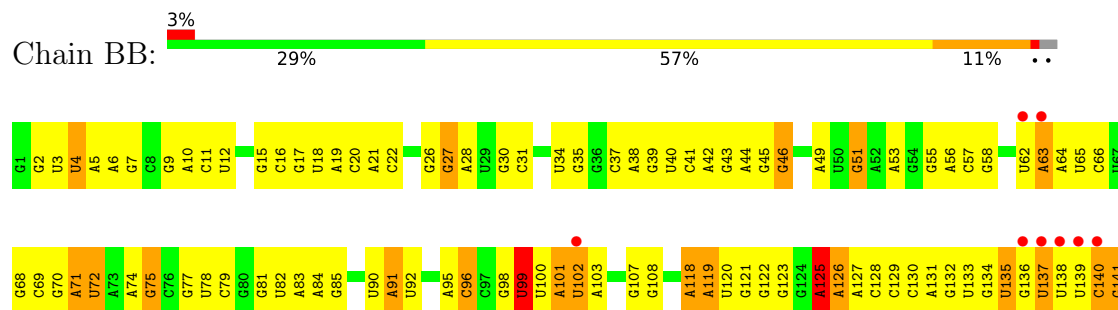
- Molecule 22: 5S rRNA

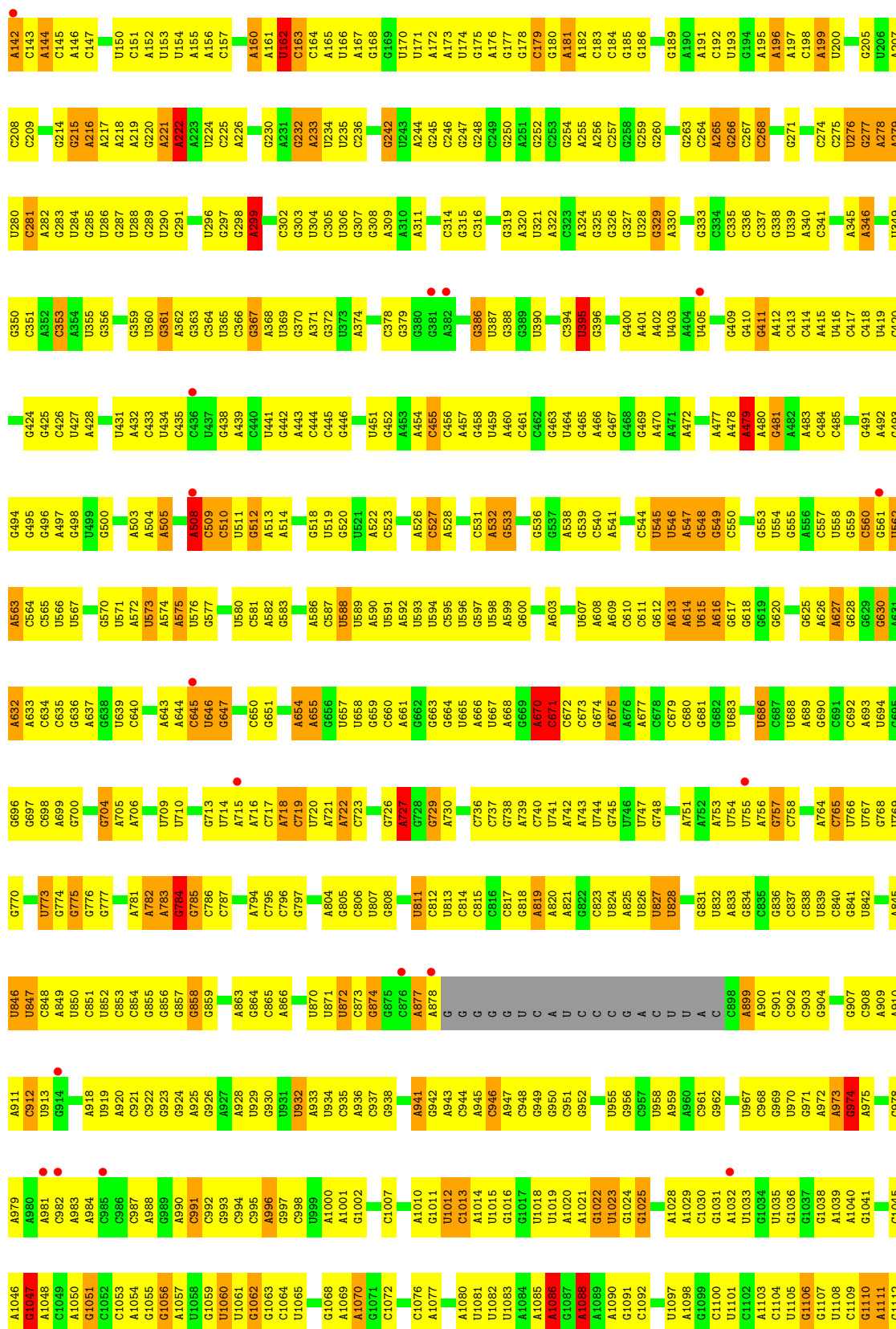


- Molecule 22: 5S rRNA



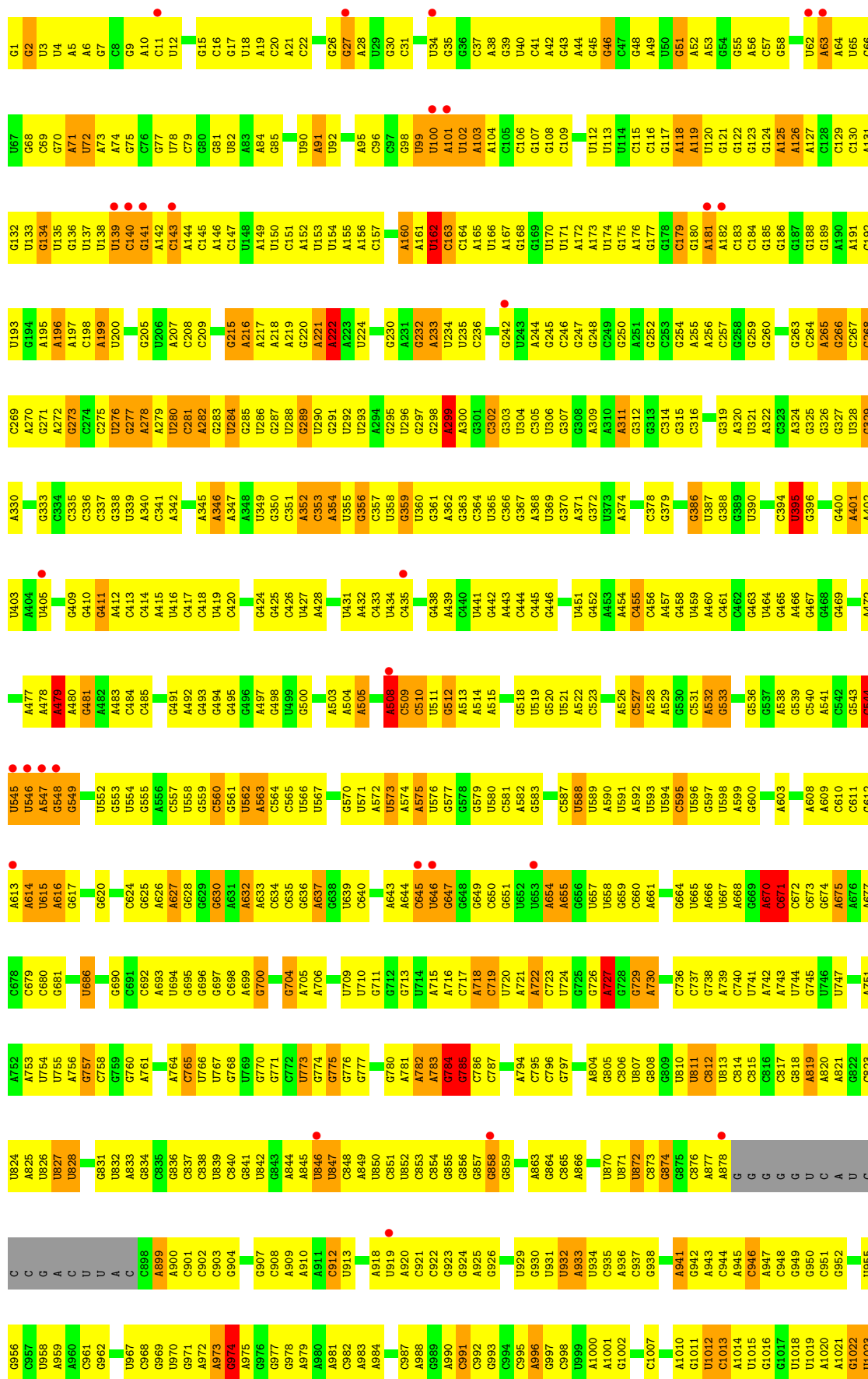
- Molecule 23: 23S rRNA







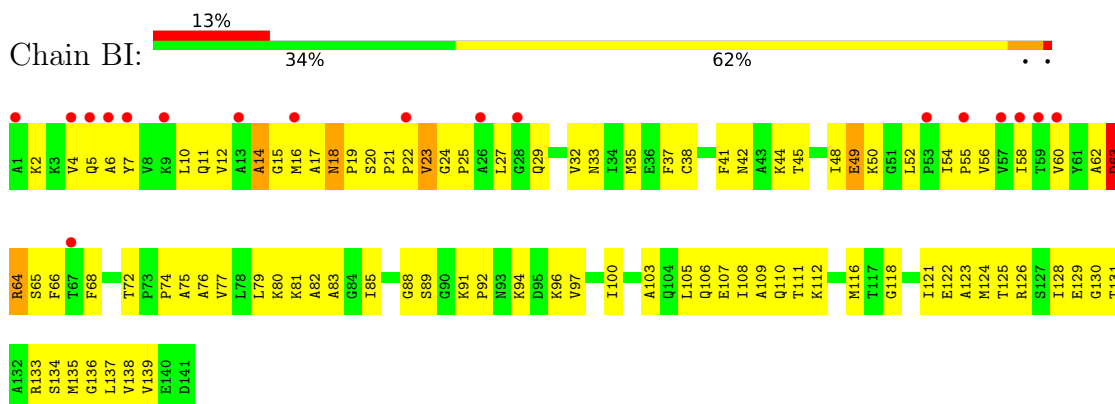




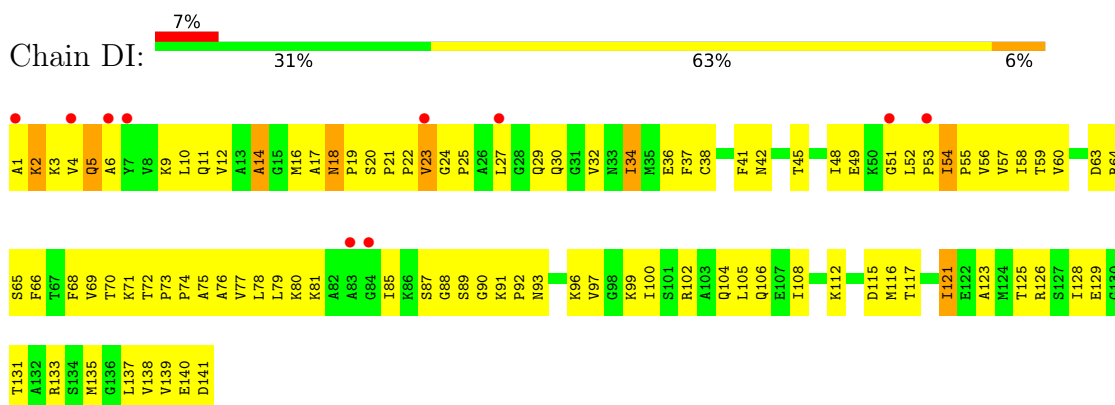
G1024	G1025	G1026	G1027	G1028	G1029	G1030	G1031	G1032	G1033	G1034	G1035	G1036	G1044	G1045	G1046	G1047	G1048	G1049	G1050	G1051	G1052	G1053	G1054	G1055	G1056	G1057	G1058	G1059	G1060	G1061	G1062	G1063	G1064	G1065	G1068	G1069	G1070	G1071	G1072	G1076	G1077	G1080	G1081	G1082	G1083	G1084	G1085	G1086	G1087	G1088	G1089	G1090	G1091	G1092	G1093			
U1094	U1097	U1097	A1098	A1098	G1099	G1100	U1101	G1102	G1103	G1104	U1105	G1106	G1107	G1110	A1111	G1112	U1113	G1114	G1115	G1116	G1117	G1118	U1119	G1120	C1121	G1124	G1125	A1126	A1127	G1131	U1132	U1132	G1136	U1137	G1138	G1139	G1140	U1141	A1142	A1143	A1144	G1145	G1146	U1147	U1148	G1149	G1150	A1151	G1152	C1153	G1154	A1155	A1156	U1159				
G1160	C1161	G1162	G1163	C1164	A1165	G1166	C1167	G1168	G1169	C1170	U1173	U1173	U1174	A1175	U1176	G1177	G1178	G1179	U1180	G1181	G1182	U1183	U1184	G1185	G1186	G1187	G1190	G1191	G1192	G1193	C1196	G1197	A1268	A1269	U1198	U1199	C1200	U1203	A1204	A1205	G1206	G1210	C1211	G1212	A1213	A1214	G1215	G1216	U1219	G1220	C1221	C1222	G1223	U1224	C1229			
A1230	U1231	G1236	A1237	G1238	G1239	U1240	A1241	U1242	U1243	A1244	A1245	A1246	A1247	A1248	U1249	G1250	C1251	G1252	A1253	A1254	U1255	U1256	G1257	U1258	G1259	A1260	A1261	A1262	U1263	G1266	U1267	A1268	A1269	G1270	G1271	U1272	U1273	A1274	A1275	A1276	G1280	G1283	A1284	A1285	A1286	A1287	G1288	C1289	C1290	C1291	G1292	C1293	U1294	G1296				
C1297	C1298	G1299	G1300	A1301	A1302	G1303	A1304	C1305	C1306	A1307	A1308	G1309	G1310	G1311	C1315	U1316	G1317	U1318	C1319	C1320	A1321	C1322	C1323	G1324	U1325	U1326	U1327	A1328	G1332	G1333	U1334	C1335	A1336	G1337	G1338	G1339	U1340	G1341	A1342	G1343	G1346	A1347	C1348	C1349	C1350	C1351	U1352	A1353	A1354	G1355	G1356	G1360	G1364	A1365				
G1368	U1372	U1373	A1373	G1374	U1375	C1376	U1379	G1380	G1381	G1382	A1383	A1384	A1385	C1386	A1387	G1388	G1389	U1390	U1391	A1395	U1396	U1397	C1398	G1399	U1400	G1401	U1402	U1405	U1406	G1407	G1408	U1409	G1410	U1411	U1412	U1413	G1416	C1417	G1418	A1419	A1420	G1421	G1422	G1423	G1424	A1425	G1426	A1427	A1428	G1429	G1430	A1431	A1432					
A1434	C1437	U1438	A1438	U1440	G1441	U1442	U1443	G1444	G1445	C1446	C1447	G1448	G1451	C1452	A1453	C1454	G1455	U1458	G1459	U1460	C1461	G1464	G1465	U1466	A1469	G1470	G1471	U1476	A1477	G1478	G1482	G1483	U1484	U1485	U1486	U1487	C1488	C1489	A1490	G1491	G1492	C1493	A1494	A1495	A1496	U1497	G1501	A1502	A1503	A1504	A1505	U1506						
C1507	A1508	A1509	G1510	U1513	G1514	A1515	G1516	G1517	G1518	G1519	U1520	G1521	A1522	U1523	G1524	A1525	C1526	G1527	U1534	U1535	U1536	G1537	G1538	U1539	G1540	C1541	U1542	A1545	G1546	G1547	A1548	A1549	C1550	A1551	A1552	A1553	U1554	G1555	C1558	U1559	G1560	C1561	U1562	U1563	A1564	C1565	A1566	G1567	A1569									
A1570	A1571	A1572	G1573	G1574	C1575	U1576	U1577	U1578	A1579	A1580	G1581	A1582	A1583	U1584	C1585	A1586	U1587	U1588	A1590	A1591	C1592	A1593	U1594	C1595	A1596	A1597	U1598	U1599	G1600	A1603	G1607	A1608	A1609	A1610	C1611	A1616	C1617	G1623	U1624	G1633	A1634	A1635	U1636	A1637	C1638	C1639	A1640	A1641	G1642	G1643	U1647	U1648						
G1651	A1652	G1653	A1654	A1655	C1656	U1657	C1658	G1661	U1662	G1663	A1664	A1665	G1666	G1667	A1672	G1673	G1674	C1675	A1676	A1677	A1678	A1679	U1680	G1681	U1682	U1683	G1684	C1685	A1689	A1690	C1691	U1692	U1693	U1700	A1701	G1704	A1705	C1706	U1709	U1710	A1713	U1714	G1715	U1716	A1717	G1718	G1719	U1720	U1721	A1722								
G1723	G1724	U1725	G1726	C1727	A1728	U1729	U1730	G1731	G1732	G1733	A1734	A1735	U1736	G1737	G1738	A1739	G1740	C1741	U1742	A1744	A1745	A1746	U1747	C1748	A1749	G1750	U1751	G1752	U1753	G1756	A1757	U1758	A1759	C1760	C1761	U1693	U1697	G1763	C1764	U1765	G1766	G1767	C1771	A1772	A1773	C1774	U1775	U1778	U1779	A1784	G1785	A1786	U1787	C1788	A1789			
C1790	A1791	G1792	C1793	G1794	U1795	G1796	U1797	G1798	G1799	C1800	A1801	A1802	A1803	A1804	A1805	A1806	A1807	A1808	A1809	G1810	G1811	G1812	G1813	A1814	A1815	C1816	U1817	U1818	A1819	U1820	G1821	C1822	G1823	U1824	G1825	G1826	U1827	G1828	A1829	C1830	G1831	A1832	C1833	C1838	U1841	G1842	C1843	C1844	G1845	G1846	A1847	A1848	U1849	U1850	G1851	U1852	A1853	U1854
U1855	U1856	A1857	A1858	U1859	G1860	G1863	U1864	U1865	A1866	G1867	C1868	G1869	C1870	A1871	A1872	A1873	C1873	C1874	A1875	A1876	A1877	G1878	C1879	U1880	C1881	U1882	U1883	G1884	G1888	A1889	A1890	C1893	C1894	G1895	G1896	U1897	U1898	C1902	G1903	G1904	C1905	G1906	U1971	C1908	C1909	G1910	U1911	U1912	A1913	C1914	U1915	C1916	U1917	G1918	U1919	A1919	C1920	
G1921	G1922	U1923	C1924	U1925	U1926	A1927	A1928	G1929	U1930	U1931	A1932	C1933	C1934	U1935	A1936	A1937	U1938	U1939	U1940	U1943	U1944	G1945	U1946	C1947	U1948	U1951	A1952	A1953	G1954	U1955	C1957	C1958	C1962	U1963	U1964	C1965	A1966	C1967	G1968	A1969	U1970	U1971	G1972	A1981	U1982	G1983	C1984	C1985	U1986	A1987	G1988	U1991	C1992					



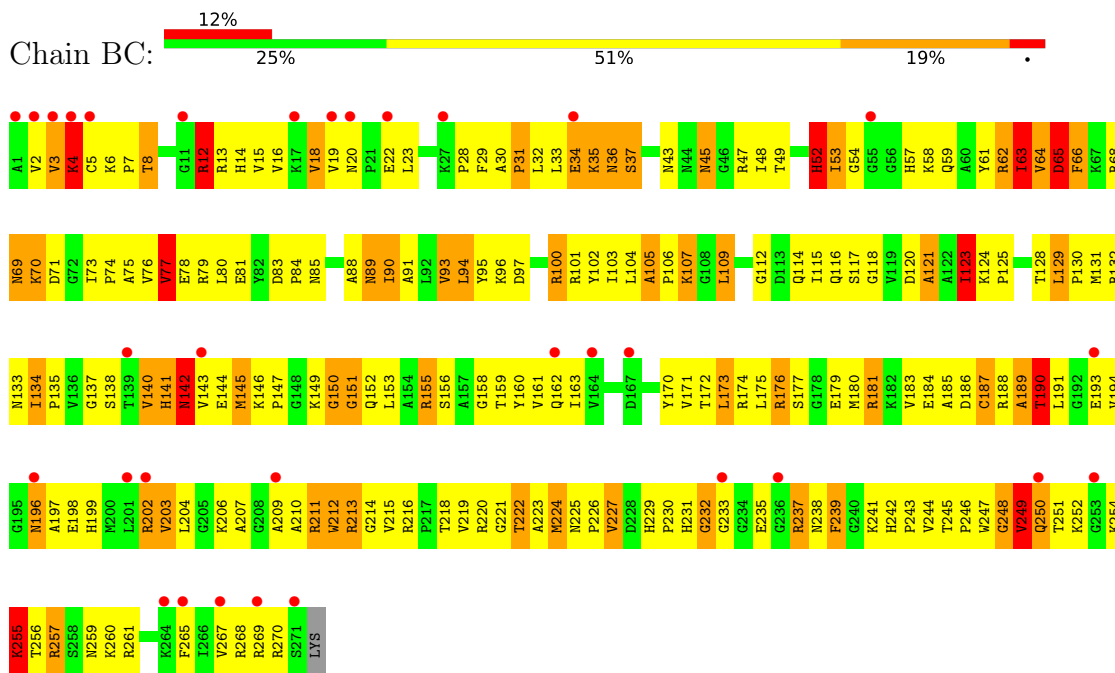
- Molecule 24: 50S ribosomal protein L11



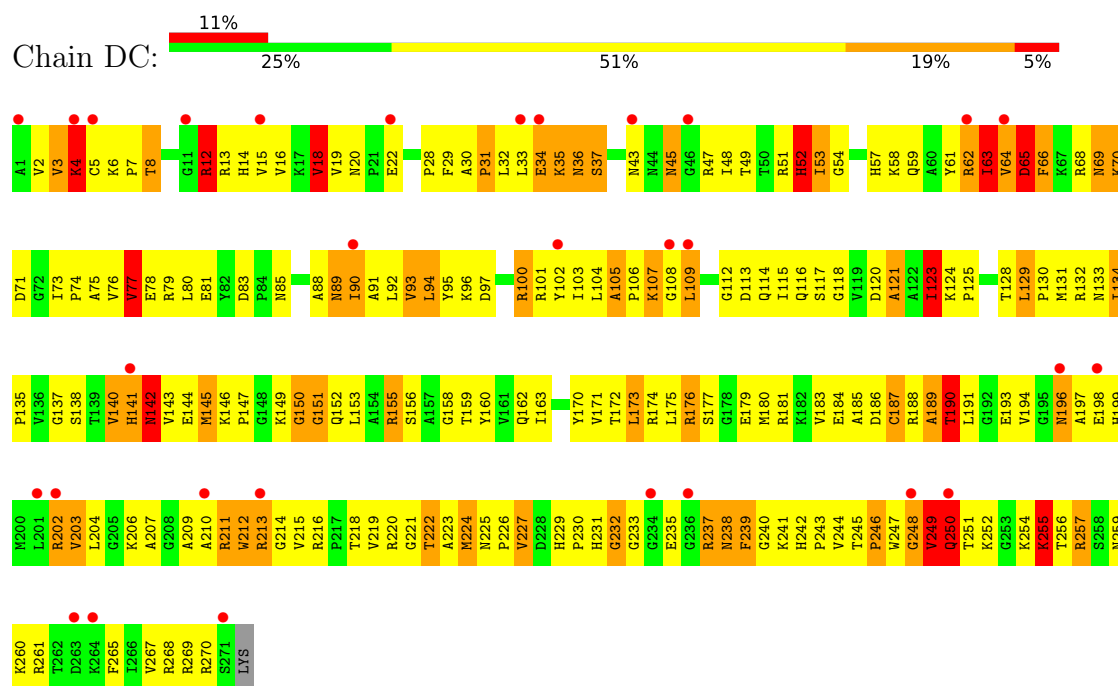
- Molecule 24: 50S ribosomal protein L11



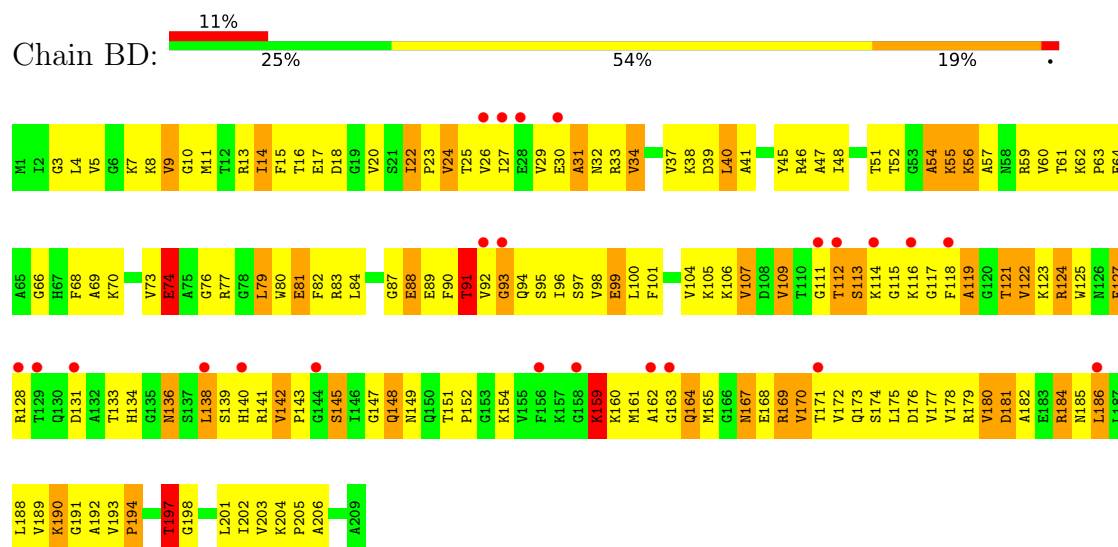
- Molecule 25: 50S ribosomal protein L2



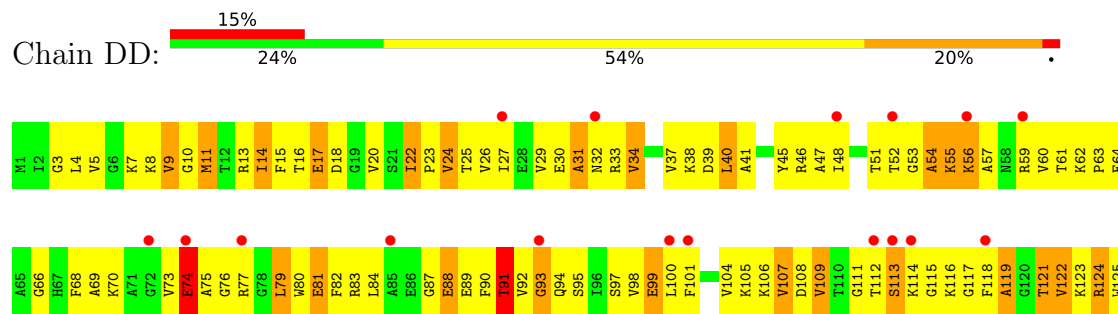
- Molecule 25: 50S ribosomal protein L2

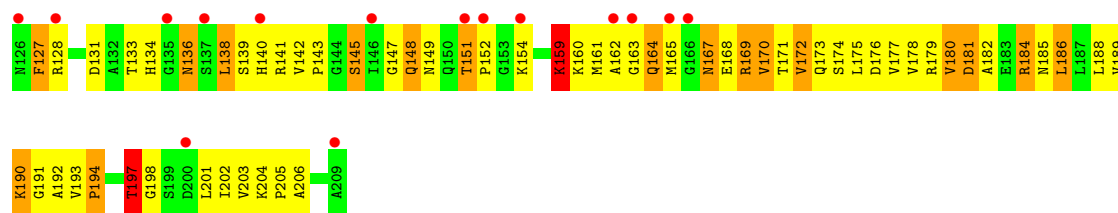


• Molecule 26: 50S ribosomal protein L3

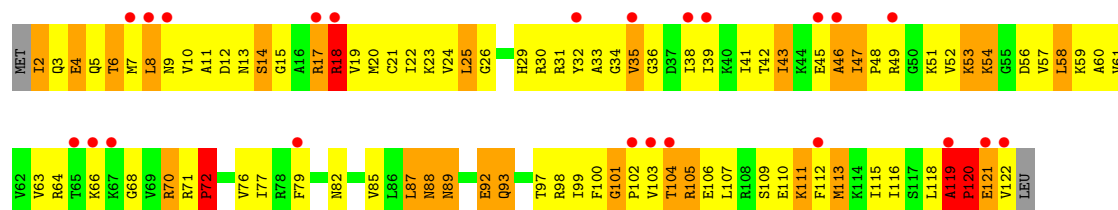


• Molecule 26: 50S ribosomal protein L3

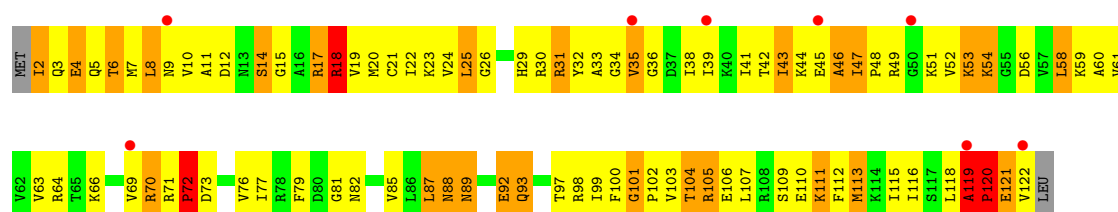




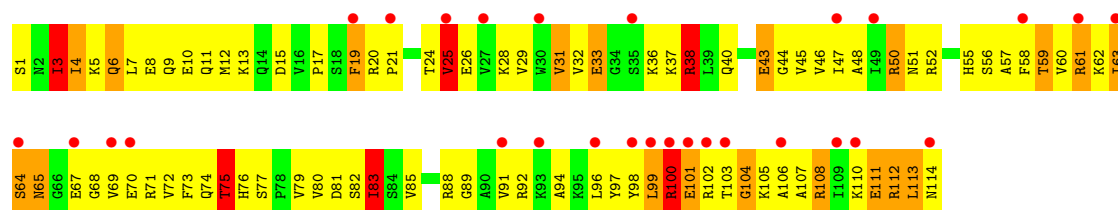
• Molecule 27: 50S ribosomal protein L14



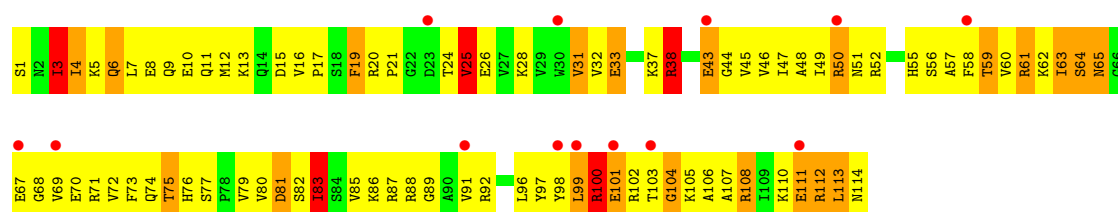
• Molecule 27: 50S ribosomal protein L14



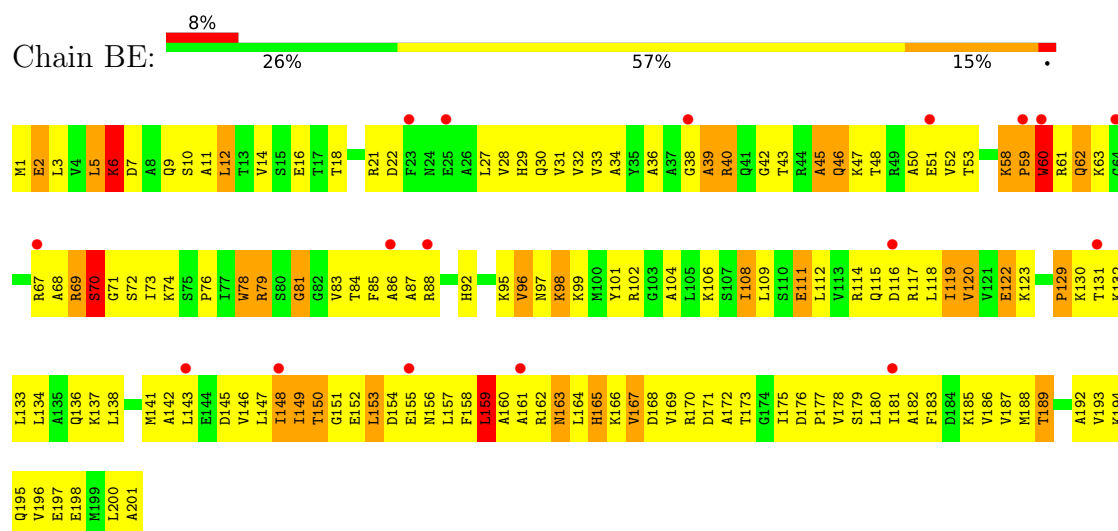
• Molecule 28: 50S ribosomal protein L19



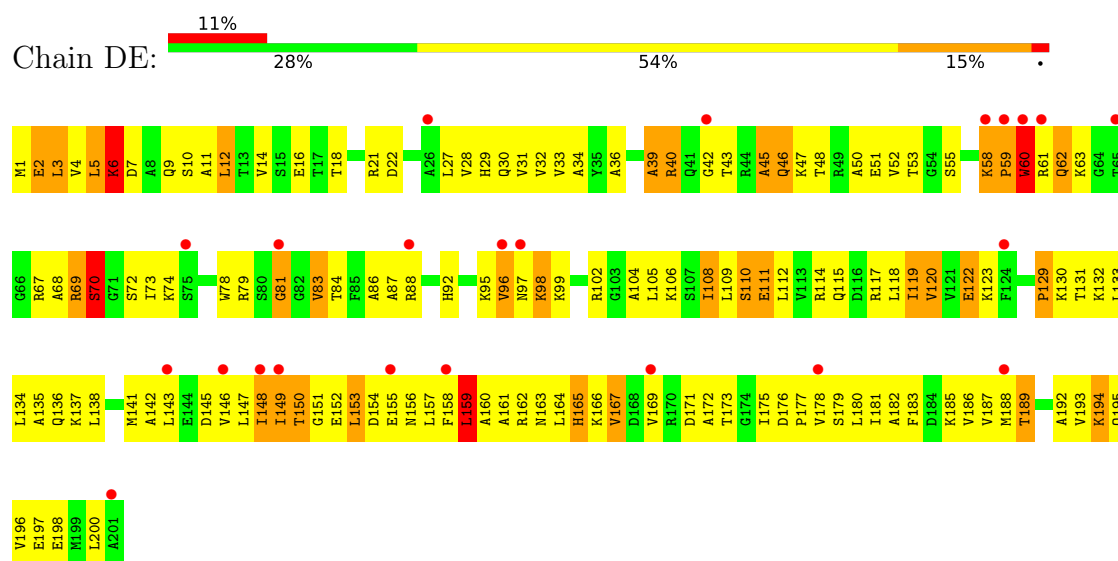
• Molecule 28: 50S ribosomal protein L19



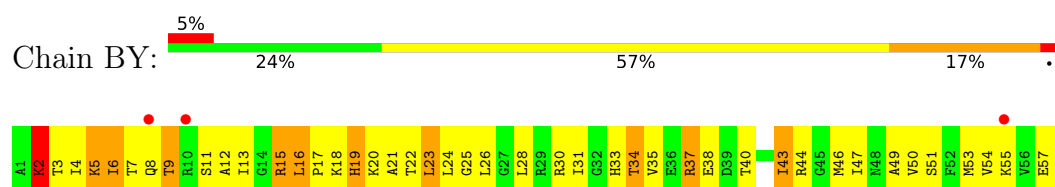
• Molecule 29: 50S ribosomal protein L4



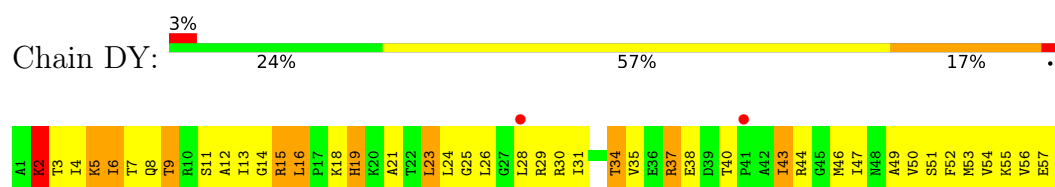
• Molecule 29: 50S ribosomal protein L4



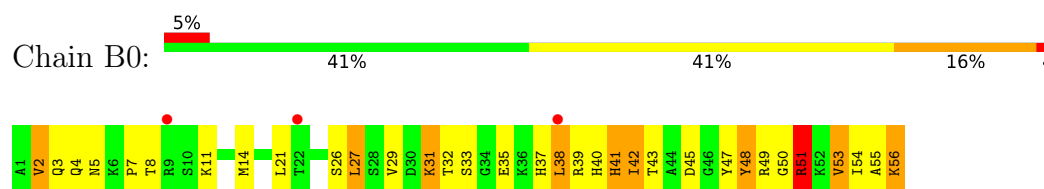
• Molecule 30: 50S ribosomal protein L30



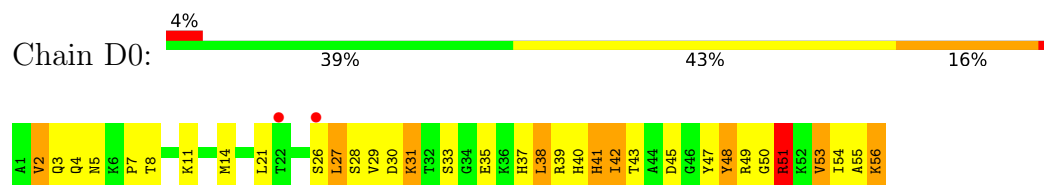
• Molecule 30: 50S ribosomal protein L30



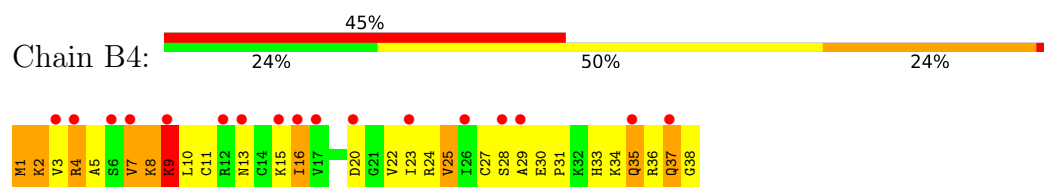
- Molecule 31: 50S ribosomal protein L32



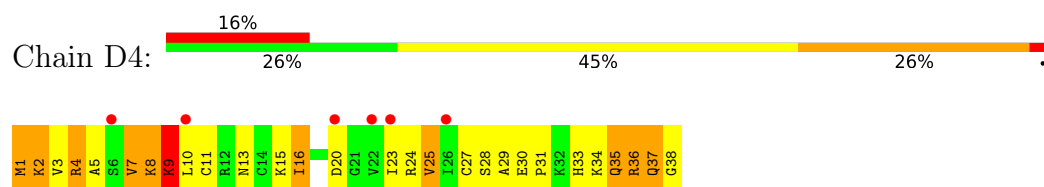
- Molecule 31: 50S ribosomal protein L32



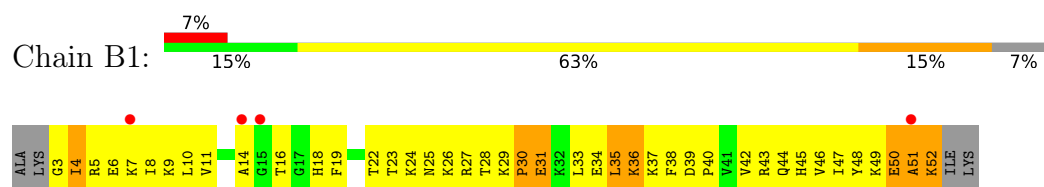
- Molecule 32: 50S ribosomal protein L36



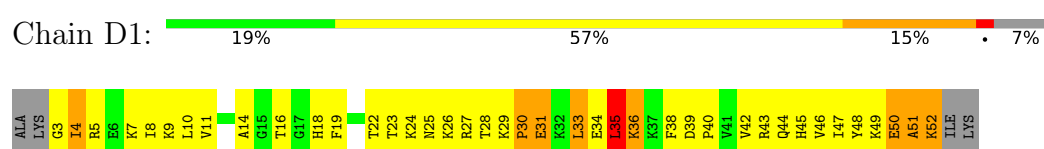
- Molecule 32: 50S ribosomal protein L36



- Molecule 33: 50S ribosomal protein L33

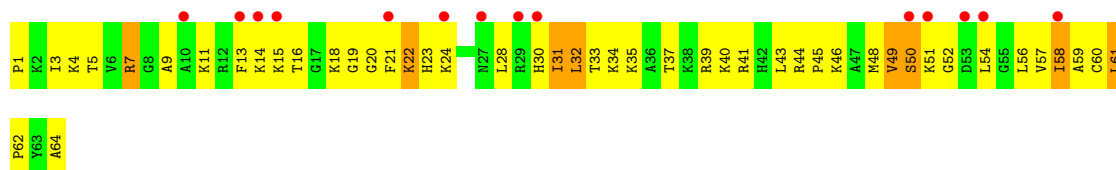


- Molecule 33: 50S ribosomal protein L33

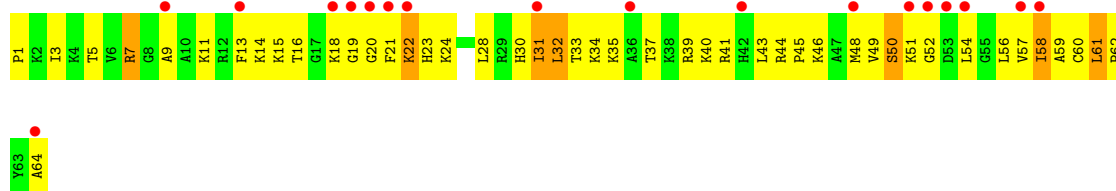


- Molecule 34: 50S ribosomal protein L35

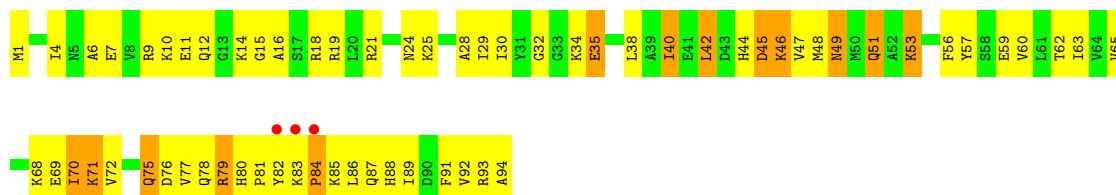




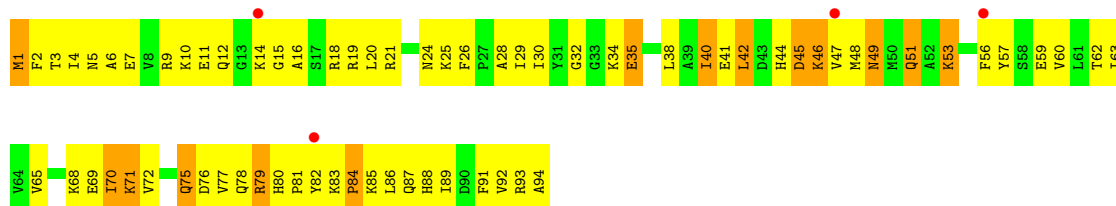
- Molecule 34: 50S ribosomal protein L35



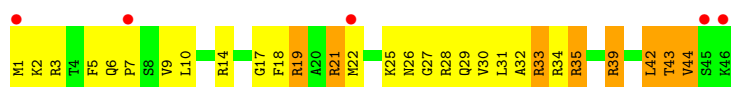
- Molecule 35: 50S ribosomal protein L25



- Molecule 35: 50S ribosomal protein L25



- Molecule 36: 50S ribosomal protein L34

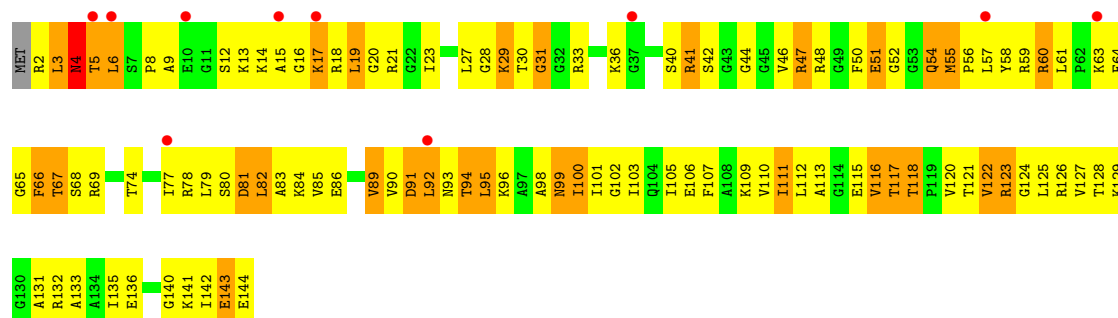


- Molecule 36: 50S ribosomal protein L34

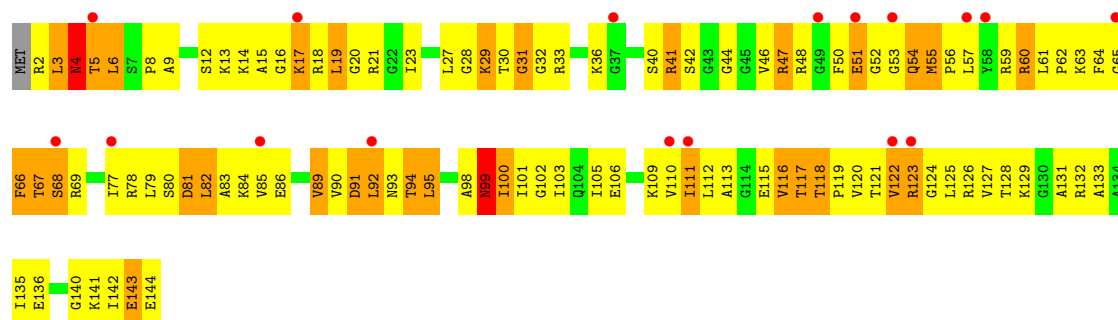




• Molecule 37: 50S ribosomal protein L15



• Molecule 37: 50S ribosomal protein L15



• Molecule 38: 50S ribosomal protein L16

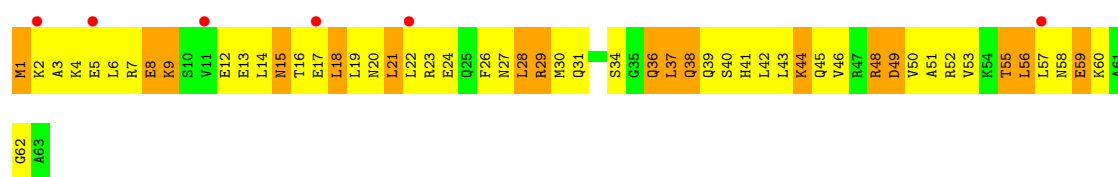
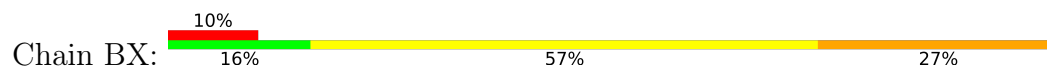


• Molecule 38: 50S ribosomal protein L16

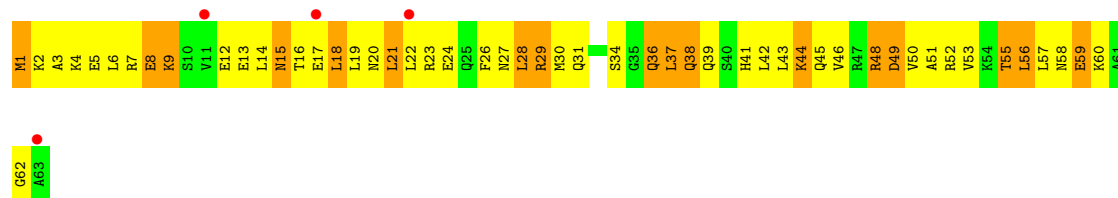
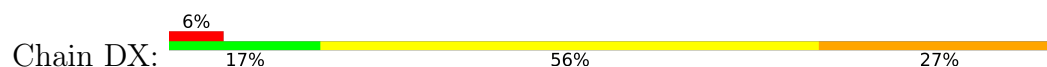




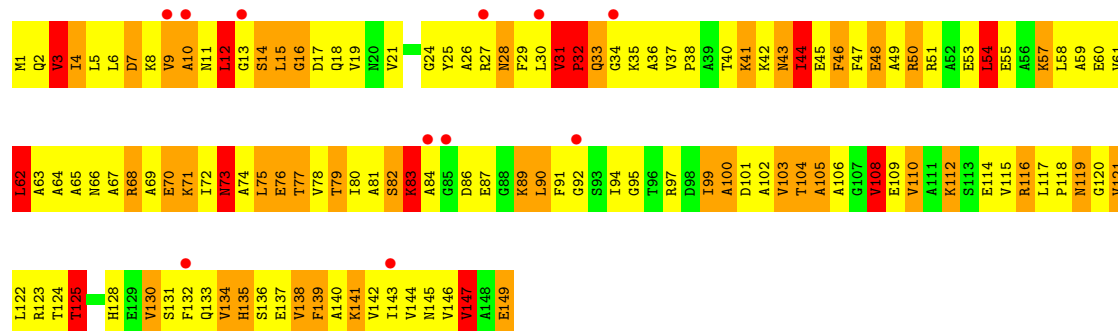
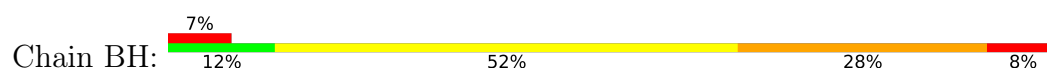
• Molecule 39: 50S ribosomal protein L29



• Molecule 39: 50S ribosomal protein L29

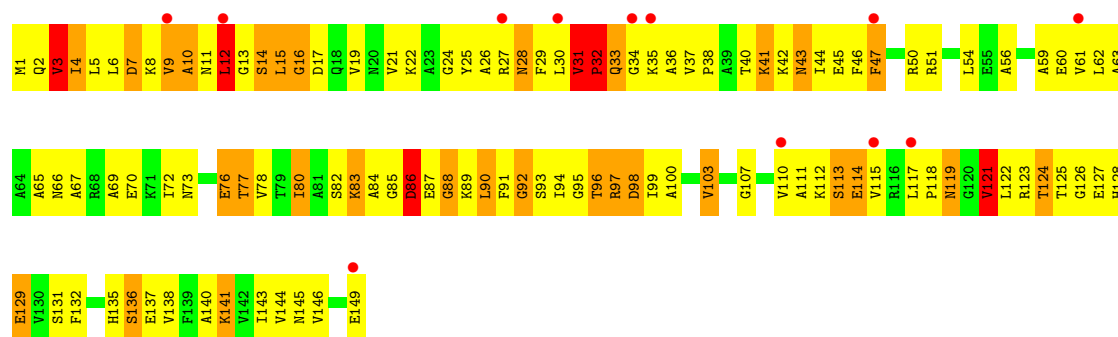


• Molecule 40: 50S ribosomal protein L9

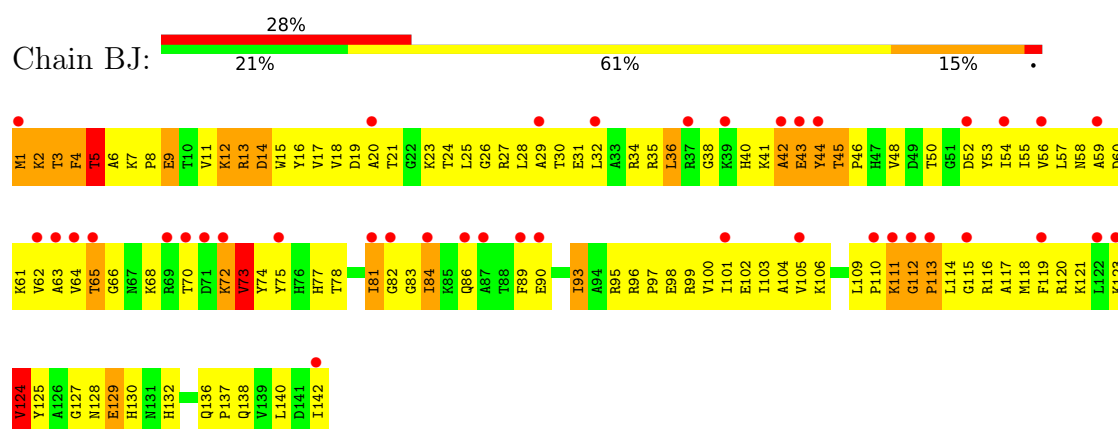


• Molecule 40: 50S ribosomal protein L9

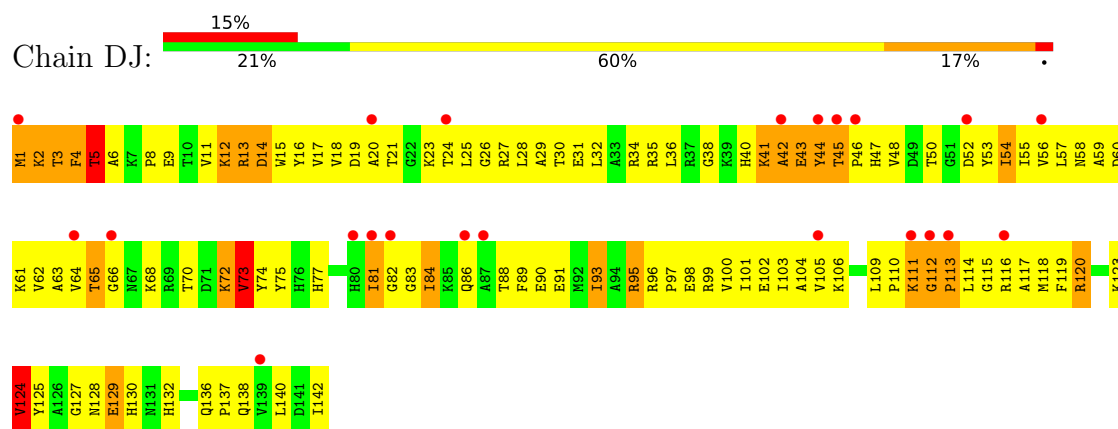




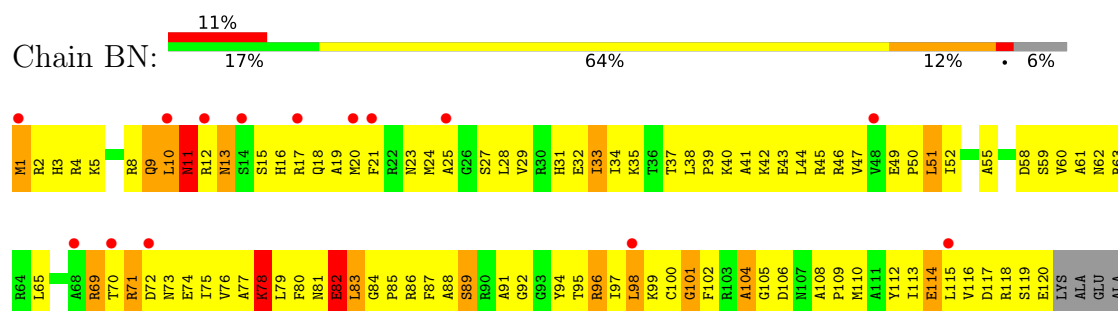
• Molecule 41: 50S ribosomal protein L13



• Molecule 41: 50S ribosomal protein L13

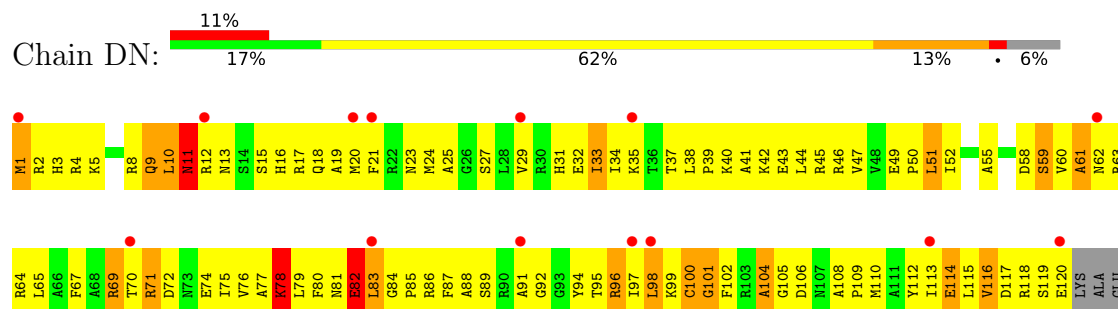


• Molecule 42: 50S ribosomal protein L17



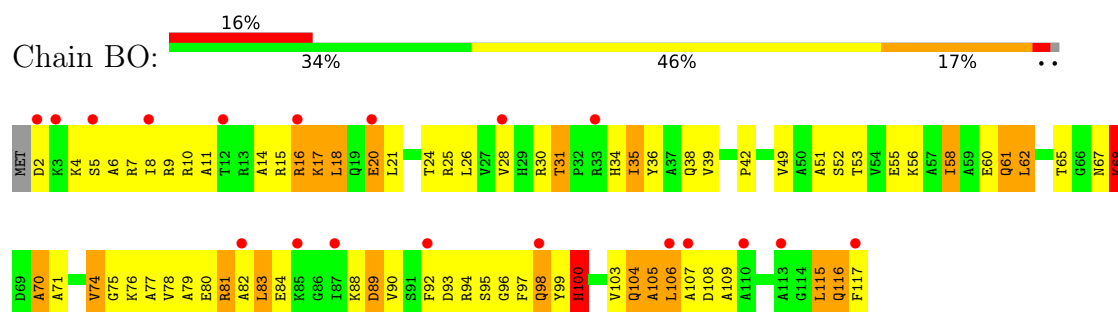
ALA
ALA
GLU

• Molecule 42: 50S ribosomal protein L17

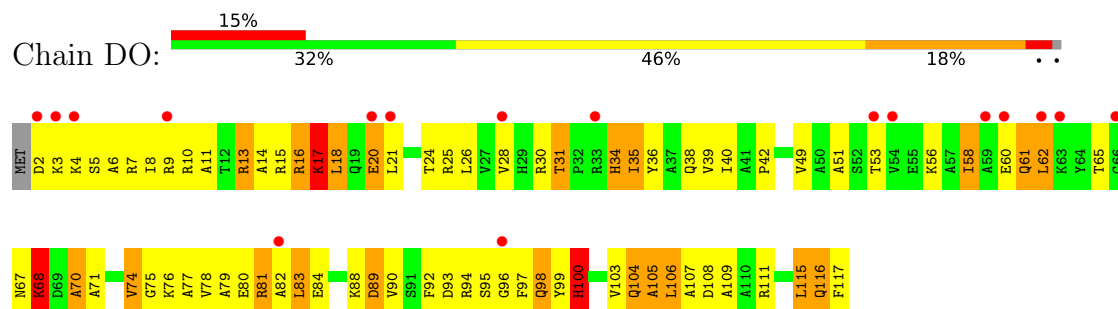


ALA
ALA
GLU

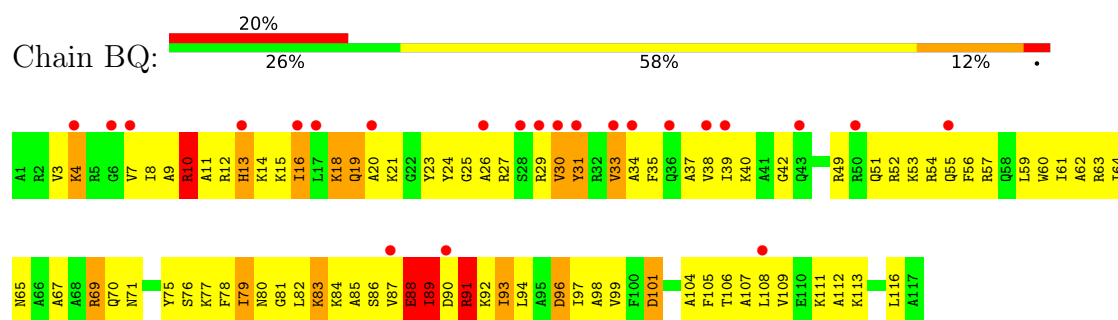
• Molecule 43: 50S ribosomal protein L18



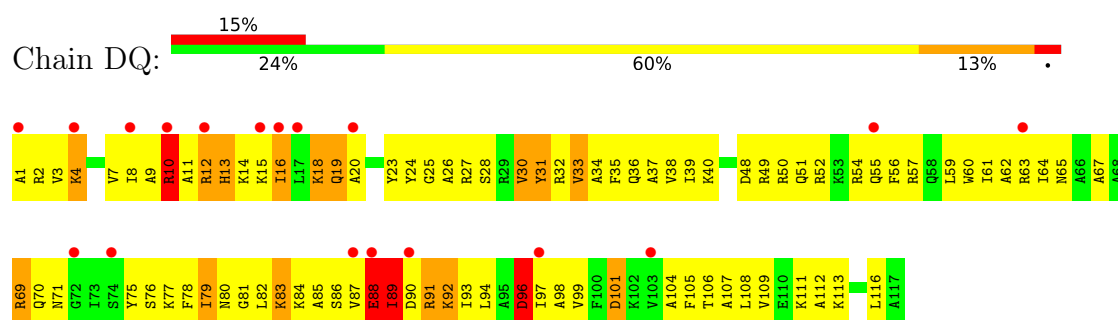
• Molecule 43: 50S ribosomal protein L18



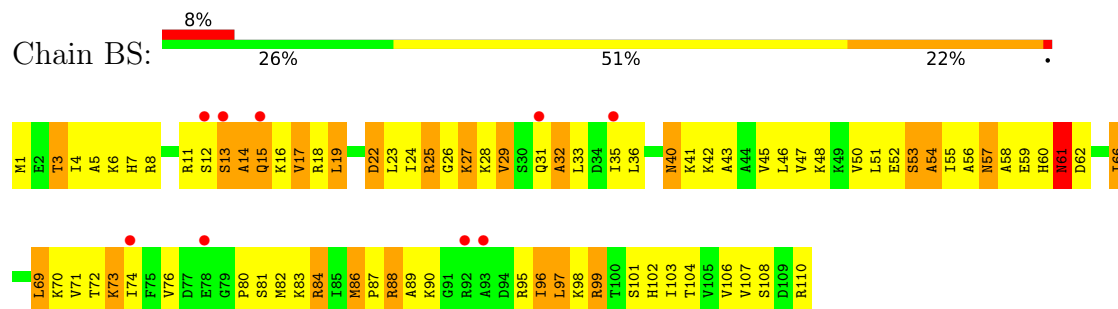
• Molecule 44: 50S ribosomal protein L20



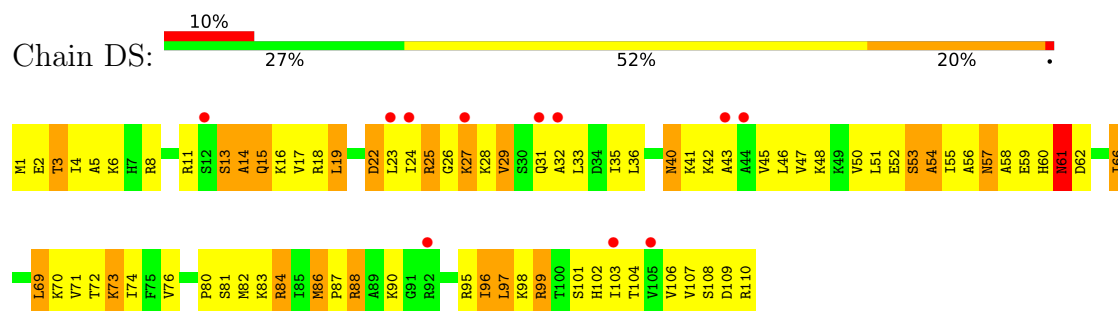
• Molecule 44: 50S ribosomal protein L20



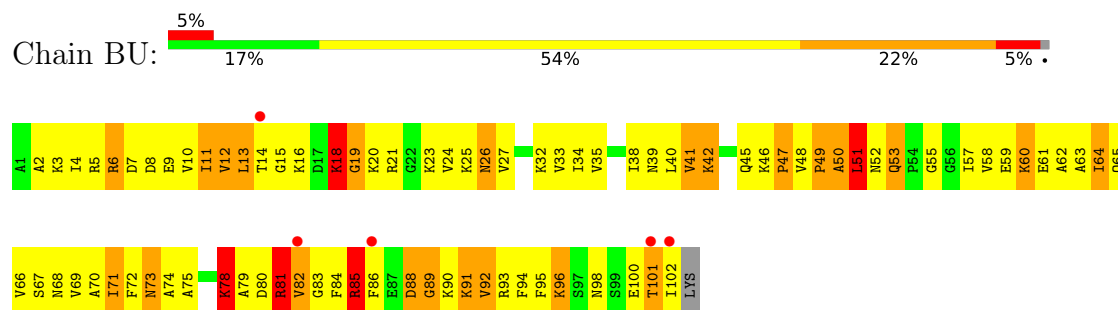
• Molecule 45: 50S ribosomal protein L22



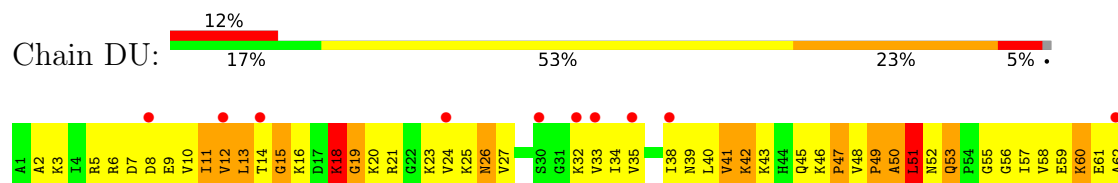
• Molecule 45: 50S ribosomal protein L22

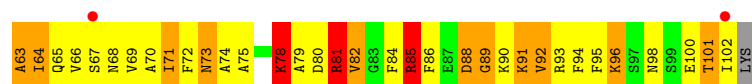


• Molecule 46: 50S ribosomal protein L24

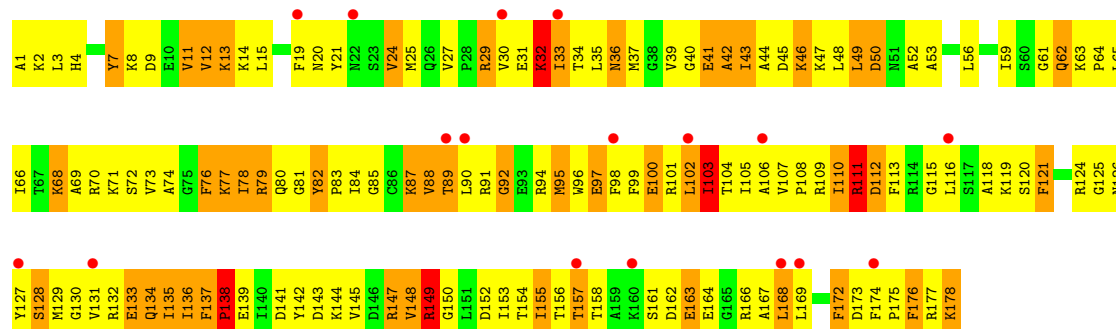
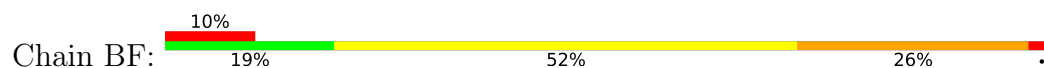


• Molecule 46: 50S ribosomal protein L24

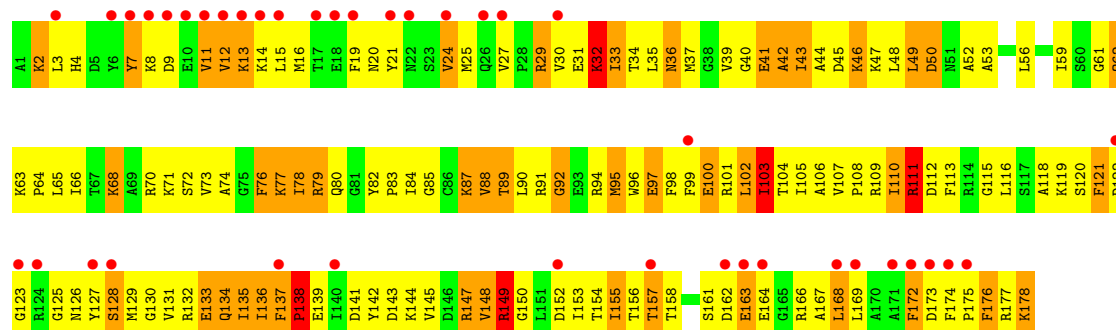
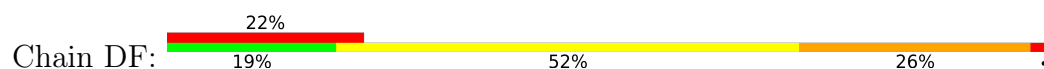




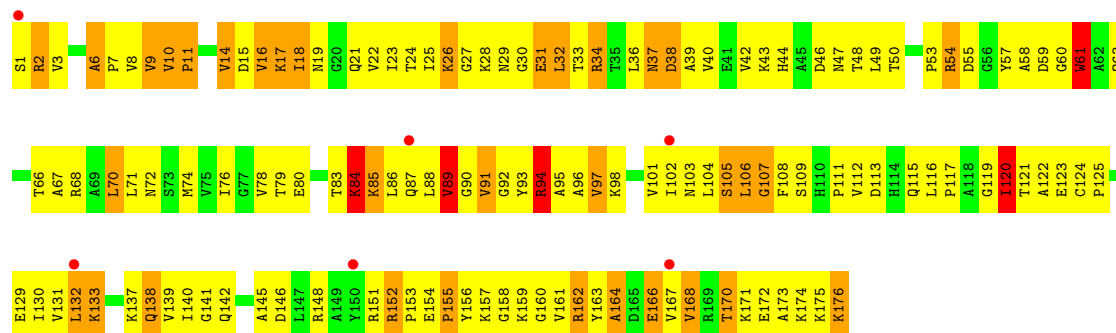
• Molecule 47: 50S ribosomal protein L5



• Molecule 47: 50S ribosomal protein L5

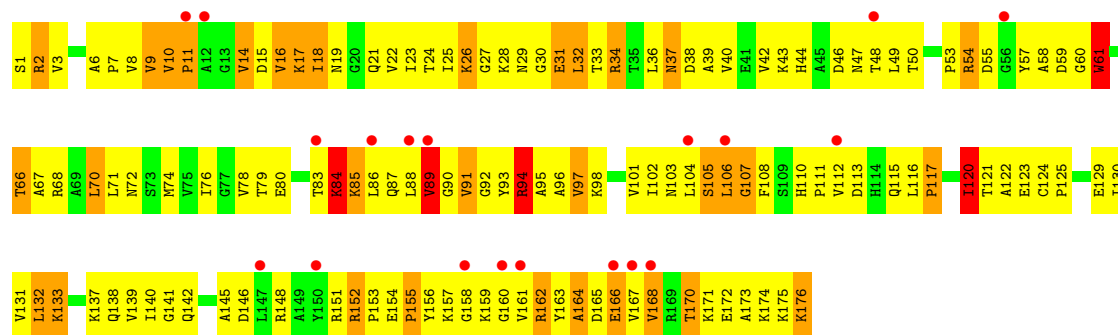


• Molecule 48: 50S ribosomal protein L6



• Molecule 48: 50S ribosomal protein L6





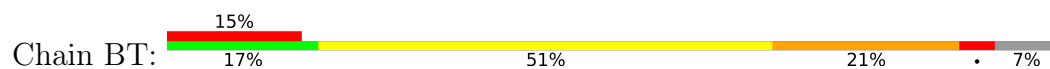
• Molecule 49: 50S ribosomal protein L21



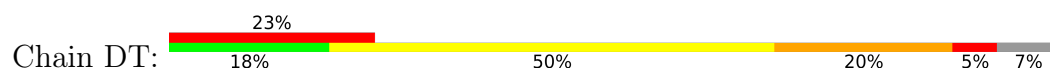
• Molecule 49: 50S ribosomal protein L21

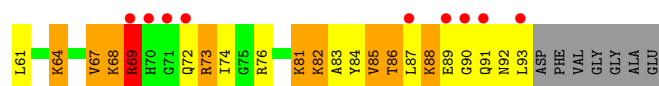


• Molecule 50: 50S ribosomal protein L23

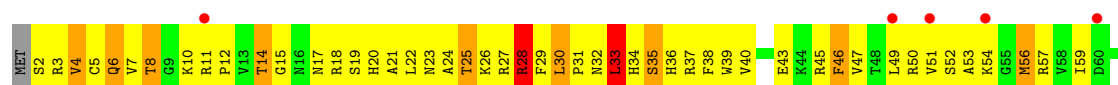


• Molecule 50: 50S ribosomal protein L23

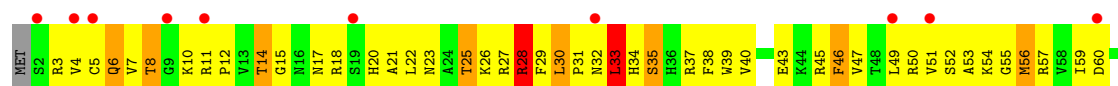




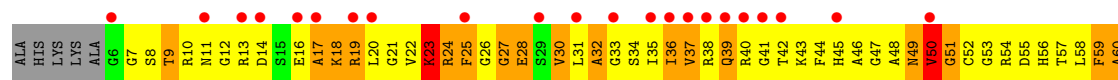
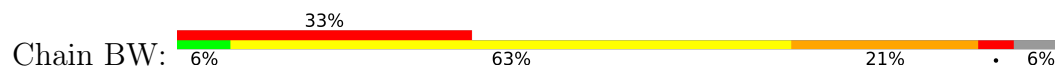
- Molecule 51: 50S ribosomal protein L28



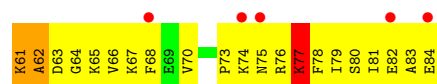
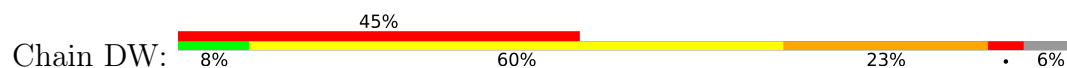
- Molecule 51: 50S ribosomal protein L28



- Molecule 52: 50S ribosomal protein L27



- Molecule 52: 50S ribosomal protein L27



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	208.85Å 379.20Å 739.28Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	70.00 – 3.21 70.00 – 3.22	Depositor EDS
% Data completeness (in resolution range)	(Not available) (70.00-3.21) 66.6 (70.00-3.22)	Depositor EDS
R_{merge}	0.11	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.54 (at 3.19Å)	Xtriage
Refinement program	CNS	Depositor
R, R_{free}	0.274 , 0.309 0.239 , 0.271	Depositor DCC
R_{free} test set	30053 reflections (4.80%)	wwPDB-VP
Wilson B-factor (Å ²)	93.7	Xtriage
Anisotropy	0.398	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.27 , 46.5	EDS
L-test for twinning ²	$\langle L \rangle = 0.49$, $\langle L^2 \rangle = 0.32$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.92	EDS
Total number of atoms	284172	wwPDB-VP
Average B, all atoms (Å ²)	72.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.47% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical values of $\langle |L| \rangle$, $\langle L^2 \rangle$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: NMY, ZN, MG

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	0.26	0/36762	0.62	35/57350 (0.1%)
1	CA	0.27	0/36762	0.62	39/57350 (0.1%)
2	AC	0.27	0/1651	0.69	0/2225
2	CC	0.28	0/1651	0.69	0/2225
3	AD	0.26	0/1665	0.70	1/2227 (0.0%)
3	CD	0.26	0/1665	0.69	1/2227 (0.0%)
4	AE	0.29	0/1118	0.79	0/1504
4	CE	0.29	0/1118	0.78	0/1504
5	AF	0.28	0/835	0.70	0/1128
5	CF	0.27	0/835	0.70	0/1128
6	AG	0.28	0/1187	0.79	2/1591 (0.1%)
6	CG	0.28	0/1211	0.80	3/1624 (0.2%)
7	AH	0.28	0/989	0.72	0/1326
7	CH	0.28	0/989	0.74	0/1326
8	AI	0.27	0/1034	0.67	0/1375
8	CI	0.27	0/1034	0.68	0/1375
9	AJ	0.29	0/796	0.77	0/1077
9	CJ	0.29	0/796	0.77	0/1077
10	AK	0.30	0/893	0.76	0/1205
10	CK	0.30	0/893	0.76	0/1205
11	AL	0.28	0/969	0.76	0/1300
11	CL	0.28	0/969	0.75	0/1300
12	AM	0.27	0/892	0.71	0/1193
12	CM	0.28	0/884	0.74	1/1181 (0.1%)
13	AN	0.27	0/785	0.75	1/1043 (0.1%)
13	CN	0.27	0/785	0.75	1/1043 (0.1%)
14	AO	0.27	0/722	0.79	3/964 (0.3%)
14	CO	0.26	0/722	0.78	3/964 (0.3%)
15	AP	0.29	0/659	0.77	1/884 (0.1%)
15	CP	0.28	0/648	0.79	1/870 (0.1%)
16	AQ	0.25	0/657	0.70	0/881
16	CQ	0.25	0/666	0.71	0/892

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	AR	0.29	0/462	0.71	0/621
17	CR	0.29	0/462	0.72	0/621
18	AS	0.27	0/652	0.69	0/877
18	CS	0.28	0/660	0.71	0/888
19	AT	0.29	0/671	0.72	0/888
19	CT	0.28	0/671	0.71	0/888
20	AB	0.29	0/1735	0.74	0/2338
20	CB	0.29	0/1735	0.75	0/2338
21	AU	0.29	0/430	0.90	1/570 (0.2%)
21	CU	0.29	0/430	0.90	1/570 (0.2%)
22	BA	0.27	0/2803	0.64	3/4371 (0.1%)
22	DA	0.27	0/2803	0.65	4/4371 (0.1%)
23	BB	0.27	1/68314 (0.0%)	0.64	70/106569 (0.1%)
23	DB	0.27	3/68314 (0.0%)	0.64	77/106569 (0.1%)
24	BI	0.32	0/1046	0.82	1/1410 (0.1%)
24	DI	0.36	0/1046	0.86	0/1410
25	BC	0.27	0/2121	0.77	2/2852 (0.1%)
25	DC	0.27	0/2121	0.77	2/2852 (0.1%)
26	BD	0.27	0/1586	0.73	1/2134 (0.0%)
26	DD	0.27	0/1586	0.74	1/2134 (0.0%)
27	BK	0.30	0/939	0.87	3/1258 (0.2%)
27	DK	0.30	0/939	0.86	3/1258 (0.2%)
28	BP	0.28	0/929	0.83	3/1242 (0.2%)
28	DP	0.28	0/929	0.85	4/1242 (0.3%)
29	BE	0.27	0/1571	0.85	6/2113 (0.3%)
29	DE	0.27	0/1571	0.85	6/2113 (0.3%)
30	BY	0.30	0/453	0.78	0/605
30	DY	0.30	0/453	0.79	0/605
31	B0	0.27	0/450	0.83	2/599 (0.3%)
31	D0	0.27	0/450	0.83	2/599 (0.3%)
32	B4	0.26	0/303	0.74	1/397 (0.3%)
32	D4	0.27	0/303	0.75	1/397 (0.3%)
33	B1	0.28	0/416	0.73	0/554
33	D1	0.28	0/416	0.72	0/554
34	B3	0.28	0/513	0.73	0/676
34	D3	0.28	0/513	0.73	0/676
35	BV	0.27	0/766	0.72	0/1025
35	DV	0.27	0/766	0.72	0/1025
36	B2	0.29	0/380	0.86	0/498
36	D2	0.29	0/380	0.85	0/498
37	BL	0.29	0/1054	0.82	0/1403
37	DL	0.28	0/1054	0.82	0/1403
38	BM	0.28	0/1093	0.79	1/1460 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
38	DM	0.29	0/1093	0.80	1/1460 (0.1%)
39	BX	0.26	0/510	0.87	3/677 (0.4%)
39	DX	0.26	0/510	0.87	3/677 (0.4%)
40	BH	0.29	0/1122	0.75	0/1515
40	DH	0.29	0/1122	0.77	1/1515 (0.1%)
41	BJ	0.28	0/1152	0.76	1/1551 (0.1%)
41	DJ	0.28	0/1152	0.76	1/1551 (0.1%)
42	BN	0.27	0/973	0.85	2/1301 (0.2%)
42	DN	0.27	0/973	0.85	2/1301 (0.2%)
43	BO	0.26	0/902	0.87	6/1209 (0.5%)
43	DO	0.26	0/902	0.87	7/1209 (0.6%)
44	BQ	0.28	0/960	0.93	6/1278 (0.5%)
44	DQ	0.28	0/960	0.93	6/1278 (0.5%)
45	BS	0.28	0/864	0.86	3/1156 (0.3%)
45	DS	0.28	0/864	0.87	3/1156 (0.3%)
46	BU	0.27	0/787	0.75	1/1051 (0.1%)
46	DU	0.27	0/787	0.75	1/1051 (0.1%)
47	BF	0.28	0/1444	0.87	4/1937 (0.2%)
47	DF	0.28	0/1444	0.88	4/1937 (0.2%)
48	BG	0.28	0/1343	0.75	4/1816 (0.2%)
48	DG	0.28	0/1343	0.75	2/1816 (0.1%)
49	BR	0.27	0/829	0.71	0/1107
49	DR	0.26	0/829	0.70	0/1107
50	BT	0.27	0/744	0.96	4/994 (0.4%)
50	DT	0.28	0/744	0.98	5/994 (0.5%)
51	BZ	0.28	0/635	0.88	2/848 (0.2%)
51	DZ	0.28	0/635	0.88	2/848 (0.2%)
52	BW	0.29	0/603	0.83	1/797 (0.1%)
52	DW	0.29	0/603	0.83	1/797 (0.1%)
All	All	0.27	4/306360 (0.0%)	0.68	363/457969 (0.1%)

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	0	13
1	CA	0	11
23	BB	0	43
23	DB	0	42
All	All	0	109

All (4) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	DB	2323	G	O3'-P	7.79	1.72	1.61
23	DB	1086	A	C5-C6	-7.32	1.26	1.41
23	BB	1086	A	C5-C6	-7.28	1.26	1.41
23	DB	2318	G	O3'-P	-5.83	1.52	1.61

All (363) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	DB	2204	G	O5'-P-OP1	-10.95	75.14	108.00
23	DB	508	A	C4'-C3'-O3'	-10.89	96.67	113.00
23	BB	2204	G	O5'-P-OP2	-10.38	76.86	108.00
23	BB	2791	G	O5'-P-OP1	-10.16	77.53	108.00
23	BB	2790	U	OP1-P-O3'	9.95	137.84	108.00
23	DB	2790	U	OP2-P-O3'	9.87	137.61	108.00
23	DB	2791	G	O5'-P-OP2	-9.86	78.42	108.00
14	CO	80	GLN	OE1-CD-NE2	-9.82	112.78	122.60
14	AO	80	GLN	OE1-CD-NE2	-9.79	112.81	122.60
23	DB	2203	U	OP1-P-O3'	9.59	136.76	108.00
47	DF	111	ARG	N-CA-C	-9.53	103.75	114.62
47	BF	111	ARG	N-CA-C	-9.49	103.80	114.62
23	BB	2203	U	OP2-P-O3'	9.40	136.19	108.00
50	DT	43	ILE	N-CA-C	-9.04	104.58	111.90
50	BT	43	ILE	N-CA-C	-9.00	104.61	111.90
29	DE	59	PRO	N-CA-C	-8.93	102.46	113.98
29	BE	59	PRO	N-CA-C	-8.93	102.47	113.98
23	DB	1397	U	C5'-C4'-C3'	-8.60	102.31	115.20
23	BB	508	A	C4'-C3'-O3'	-8.58	96.53	109.40
23	BB	1397	U	C5'-C4'-C3'	-8.50	102.46	115.20
23	DB	544	C	C4'-C3'-O3'	8.48	122.11	109.40
23	BB	2791	G	O5'-P-OP2	8.36	133.06	108.00
1	CA	1279	G	C4'-C3'-O3'	-8.36	100.47	113.00
23	DB	2791	G	O5'-P-OP1	8.33	132.98	108.00
1	AA	1279	G	C4'-C3'-O3'	-8.28	100.59	113.00
23	DB	1818	U	C4'-C3'-O3'	-8.25	100.62	113.00
51	DZ	69	ALA	N-CA-C	-8.09	102.41	111.07
1	CA	1534	A	C2'-C3'-O3'	-8.06	97.41	109.50
1	AA	328	C	C2'-C3'-O3'	8.05	121.57	109.50
1	CA	328	C	C2'-C3'-O3'	8.04	121.57	109.50
23	BB	1818	U	C4'-C3'-O3'	-8.02	100.97	113.00
23	BB	2204	G	O5'-P-OP1	8.00	132.00	108.00
23	DB	2204	G	O5'-P-OP2	7.99	131.96	108.00
23	BB	2790	U	O3'-P-O5'	-7.92	92.11	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	DB	1523	U	C4'-C3'-O3'	-7.85	101.22	113.00
23	DB	773	U	C5'-C4'-C3'	-7.84	104.23	116.00
23	BB	690	G	C5'-C4'-C3'	-7.80	104.30	116.00
51	BZ	69	ALA	N-CA-C	-7.79	102.48	110.97
23	DB	2790	U	O3'-P-O5'	-7.78	92.33	104.00
23	DB	704	G	C4'-C3'-O3'	-7.78	101.33	113.00
23	DB	2282	G	C2'-C3'-O3'	7.77	121.16	109.50
23	BB	479	A	C4'-C3'-O3'	-7.60	98.00	109.40
1	CA	232	G	C5'-C4'-C3'	-7.60	104.60	116.00
23	DB	690	G	C5'-C4'-C3'	-7.51	104.73	116.00
23	BB	2282	G	C2'-C3'-O3'	7.49	120.74	109.50
23	DB	2203	U	O3'-P-O5'	-7.48	92.79	104.00
47	DF	33	ILE	N-CA-C	-7.48	101.90	110.05
23	BB	2808	G	C4'-C3'-O3'	-7.43	101.86	113.00
1	CA	1201	A	C2'-C3'-O3'	7.36	120.54	109.50
23	DB	745	G	C5'-C4'-C3'	-7.36	104.96	116.00
23	DB	944	C	C5'-C4'-C3'	-7.34	104.99	116.00
45	BS	53	SER	N-CA-C	-7.31	103.34	114.16
1	AA	1201	A	C2'-C3'-O3'	7.28	120.42	109.50
45	DS	53	SER	N-CA-C	-7.28	103.39	114.16
23	DB	560	C	C5'-C4'-C3'	-7.26	105.11	116.00
23	DB	2501	C	C4'-C3'-O3'	-7.21	102.18	113.00
23	BB	773	U	C5'-C4'-C3'	-7.14	105.28	116.00
1	AA	855	U	C5'-C4'-C3'	-7.07	105.39	116.00
23	DB	670	A	C2'-C3'-O3'	7.05	120.08	109.50
1	AA	232	G	C5'-C4'-C3'	-7.02	105.47	116.00
23	BB	99	U	C4'-C3'-O3'	-7.00	102.51	113.00
23	BB	670	A	C2'-C3'-O3'	6.99	119.98	109.50
23	BB	745	G	C5'-C4'-C3'	-6.97	105.55	116.00
28	DP	49	ILE	N-CA-C	6.96	116.97	108.06
23	BB	784	G	C4'-C3'-O3'	-6.96	102.56	113.00
23	BB	1552	A	N9-C1'-C2'	-6.90	101.66	112.00
23	DB	479	A	C4'-C3'-O3'	-6.88	99.08	109.40
23	DB	1552	A	N9-C1'-C2'	-6.88	101.69	112.00
23	DB	2199	A	C5'-C4'-C3'	-6.87	105.69	116.00
1	AA	765	G	C4'-C3'-O3'	6.87	123.30	113.00
23	DB	2808	G	C4'-C3'-O3'	-6.84	102.74	113.00
1	AA	1301	U	N1-C1'-C2'	6.80	122.20	112.00
1	CA	765	G	C4'-C3'-O3'	6.78	123.17	113.00
1	CA	1301	U	N1-C1'-C2'	6.75	122.13	112.00
23	BB	2501	C	C4'-C3'-O3'	-6.71	102.93	113.00
1	CA	1424	U	C5'-C4'-C3'	-6.68	105.98	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	CO	80	GLN	CG-CD-NE2	6.66	126.40	116.40
43	BO	84	GLU	N-CA-C	-6.65	104.11	111.82
44	DQ	99	VAL	N-CA-C	-6.65	105.23	111.48
14	AO	80	GLN	CG-CD-NE2	6.65	126.37	116.40
23	BB	2203	U	O3'-P-O5'	-6.63	94.05	104.00
28	DP	3	ILE	N-CA-C	-6.63	104.30	110.53
44	BQ	99	VAL	N-CA-C	-6.62	105.25	111.48
28	BP	3	ILE	N-CA-C	-6.62	104.31	110.53
39	DX	55	THR	N-CA-C	-6.61	102.72	111.24
43	DO	84	GLU	N-CA-C	-6.60	104.11	111.71
23	BB	560	C	C5'-C4'-C3'	-6.59	106.11	116.00
23	DB	2894	G	C5'-C4'-C3'	-6.59	106.11	116.00
39	BX	55	THR	N-CA-C	-6.57	102.76	111.24
31	B0	41	HIS	N-CA-C	6.57	118.38	108.46
23	DB	671	C	C5'-C4'-C3'	-6.57	106.15	116.00
31	D0	41	HIS	N-CA-C	6.54	118.34	108.46
23	BB	1523	U	C4'-C3'-O3'	-6.49	103.27	113.00
1	AA	243	A	C4'-C3'-O3'	6.48	119.12	109.40
23	BB	704	G	C4'-C3'-O3'	-6.48	103.28	113.00
1	AA	1065	U	C2'-C3'-O3'	6.44	119.17	109.50
1	CA	1065	U	C2'-C3'-O3'	6.44	119.16	109.50
1	AA	960	U	C2'-C3'-O3'	6.43	119.14	109.50
23	BB	1552	A	C4'-C3'-O3'	6.42	122.64	113.00
1	CA	960	U	C2'-C3'-O3'	6.38	119.08	109.50
1	AA	481	G	C4'-C3'-O3'	-6.33	103.50	113.00
23	DB	242	G	C4'-C3'-O3'	-6.32	99.92	109.40
23	BB	242	G	C4'-C3'-O3'	-6.31	99.93	109.40
50	BT	85	VAL	N-CA-C	6.31	116.94	110.82
1	AA	1065	U	C4'-C3'-O3'	6.30	118.85	109.40
1	AA	366	A	C2'-C3'-O3'	6.30	118.94	109.50
12	CM	52	ILE	N-CA-C	-6.30	107.36	113.53
1	CA	366	A	C2'-C3'-O3'	6.29	118.94	109.50
23	BB	773	U	C4'-C3'-O3'	-6.29	103.57	113.00
23	BB	508	A	C2'-C3'-O3'	6.28	118.92	109.50
1	CA	811	C	C4'-C3'-O3'	-6.27	103.60	113.00
23	DB	1552	A	C4'-C3'-O3'	6.27	122.40	113.00
1	CA	243	A	C4'-C3'-O3'	6.26	118.79	109.40
50	DT	85	VAL	N-CA-C	6.25	116.89	110.82
45	DS	54	ALA	N-CA-C	-6.23	105.58	113.43
45	BS	54	ALA	N-CA-C	-6.22	105.59	113.43
23	BB	2894	G	C5'-C4'-C3'	-6.22	106.67	116.00
23	BB	2199	A	C5'-C4'-C3'	-6.20	106.70	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	CG	146	ALA	N-CA-C	-6.20	105.82	113.19
23	DB	369	U	C4'-C3'-O3'	-6.19	103.71	113.00
1	CA	855	U	C5'-C4'-C3'	-6.19	106.72	116.00
1	AA	1250	A	C5'-C4'-C3'	6.18	125.27	116.00
43	BO	104	GLN	N-CA-C	-6.17	104.46	111.07
6	AG	146	ALA	N-CA-C	-6.17	105.84	113.19
27	DK	5	GLN	CB-CA-C	-6.16	109.45	116.54
22	BA	52	A	C5'-C4'-C3'	6.16	125.23	116.00
23	DB	1251	C	C5'-C4'-C3'	-6.15	105.98	115.20
27	BK	5	GLN	CB-CA-C	-6.13	109.49	116.54
43	DO	104	GLN	N-CA-C	-6.13	104.51	111.07
1	CA	814	A	C5'-C4'-C3'	6.12	125.19	116.00
29	BE	39	ALA	N-CA-C	-6.11	105.68	113.01
1	CA	1432	G	C5'-C4'-C3'	-6.09	106.87	116.00
29	DE	39	ALA	N-CA-C	-6.08	105.71	113.01
46	DU	81	ARG	CB-CA-C	-6.04	109.59	116.54
23	DB	784	G	C4'-C3'-O3'	-6.02	103.97	113.00
23	BB	369	U	C4'-C3'-O3'	-6.00	103.99	113.00
46	BU	81	ARG	CB-CA-C	-6.00	109.64	116.54
23	DB	974	G	C4'-C3'-O3'	-5.98	100.43	109.40
25	DC	12	ARG	N-CA-C	-5.97	107.81	114.62
44	DQ	92	LYS	N-CA-C	-5.97	105.57	114.64
23	DB	783	A	C4'-C3'-O3'	5.97	121.95	113.00
25	BC	12	ARG	N-CA-C	-5.96	107.83	114.62
1	CA	765	G	N9-C1'-C2'	-5.96	103.07	112.00
44	BQ	92	LYS	N-CA-C	-5.95	105.59	114.64
1	AA	765	G	N9-C1'-C2'	-5.93	103.10	112.00
1	CA	1250	A	C5'-C4'-C3'	5.91	124.87	116.00
39	BX	56	LEU	N-CA-C	-5.91	102.86	110.19
23	DB	2612	C	C4'-C3'-O3'	-5.91	104.13	113.00
39	DX	56	LEU	N-CA-C	-5.91	102.87	110.19
23	DB	2790	U	C2'-C3'-O3'	-5.90	104.85	113.70
1	CA	1049	U	C2'-C3'-O3'	5.88	118.31	109.50
28	DP	81	ASP	CB-CA-C	-5.87	109.78	116.54
1	AA	811	C	C4'-C3'-O3'	-5.87	104.20	113.00
28	BP	81	ASP	CB-CA-C	-5.87	109.79	116.54
23	DB	2096	C	C5'-C4'-C3'	-5.87	107.20	116.00
1	CA	31	G	C5'-C4'-C3'	-5.85	106.42	115.20
1	CA	481	G	C4'-C3'-O3'	-5.85	104.23	113.00
23	DB	2716	C	C5'-C4'-C3'	5.83	124.74	116.00
6	AG	143	MET	N-CA-C	-5.83	104.83	111.07
23	DB	395	U	C4'-C3'-O3'	-5.83	104.26	113.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	BB	2716	C	C5'-C4'-C3'	5.82	124.72	116.00
26	BD	22	ILE	N-CA-C	5.82	114.28	107.77
26	DD	22	ILE	N-CA-C	5.80	114.27	107.77
6	CG	143	MET	N-CA-C	-5.79	104.87	111.07
23	BB	1382	G	C5'-C4'-C3'	5.78	124.66	116.00
22	DA	66	A	C4'-C3'-O3'	-5.76	104.36	113.00
23	DB	2619	C	C5'-C4'-C3'	-5.74	107.39	116.00
23	BB	2612	C	C4'-C3'-O3'	-5.74	104.39	113.00
1	CA	1065	U	C4'-C3'-O3'	5.74	118.01	109.40
23	BB	268	C	C5'-C4'-C3'	-5.73	107.40	116.00
31	D0	40	HIS	N-CA-C	5.71	120.19	113.23
23	BB	2430	A	C4'-C3'-O3'	-5.71	104.44	113.00
23	BB	162	U	C4'-C3'-O3'	5.70	117.95	109.40
31	B0	40	HIS	N-CA-C	5.70	120.18	113.23
1	CA	1279	G	N9-C1'-C2'	5.70	120.54	112.00
50	BT	35	ALA	CB-CA-C	-5.69	109.99	116.54
23	DB	773	U	C4'-C3'-O3'	-5.69	104.46	113.00
50	DT	35	ALA	CB-CA-C	-5.69	109.99	116.54
1	AA	1279	G	N9-C1'-C2'	5.68	120.52	112.00
23	BB	2014	A	C4'-C3'-O3'	-5.68	104.48	113.00
22	BA	14	U	C4'-C3'-O3'	-5.67	104.49	113.00
23	BB	675	A	C4'-C3'-O3'	-5.66	104.52	113.00
29	DE	6	LYS	CB-CA-C	-5.65	110.04	116.54
23	BB	974	G	C4'-C3'-O3'	-5.65	100.92	109.40
43	BO	16	ARG	N-CA-C	-5.65	106.31	113.43
6	CG	151	ALA	CB-CA-C	-5.65	110.04	116.54
22	DA	52	A	C5'-C4'-C3'	5.65	124.47	116.00
23	DB	1254	A	C4'-C3'-O3'	-5.64	104.54	113.00
1	AA	814	A	C5'-C4'-C3'	5.64	124.46	116.00
29	BE	6	LYS	CB-CA-C	-5.63	110.06	116.54
1	AA	960	U	C4'-C3'-O3'	5.63	117.85	109.40
1	CA	563	A	C4'-C3'-O3'	-5.63	104.55	113.00
43	DO	16	ARG	N-CA-C	-5.63	106.34	113.43
23	DB	134	G	C5'-C4'-C3'	-5.62	107.56	116.00
23	BB	2790	U	C4'-C3'-O3'	-5.61	104.58	113.00
23	DB	1382	G	C5'-C4'-C3'	5.61	124.42	116.00
38	DM	117	PHE	N-CA-C	-5.60	106.28	113.23
1	AA	1432	G	C5'-C4'-C3'	-5.58	107.63	116.00
14	AO	44	ALA	N-CA-C	-5.58	105.30	111.71
1	AA	368	U	C4'-C3'-O3'	-5.57	104.64	113.00
1	AA	1302	C	C2'-C3'-O3'	5.57	117.86	109.50
38	BM	117	PHE	N-CA-C	-5.57	106.33	113.23

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	813	U	C4'-C3'-O3'	-5.57	104.65	113.00
23	BB	1439	A	N9-C1'-C2'	-5.56	103.66	112.00
1	CA	72	A	C5'-C4'-C3'	-5.56	107.66	116.00
1	CA	1302	C	C2'-C3'-O3'	5.55	117.82	109.50
23	BB	944	C	C5'-C4'-C3'	-5.55	107.68	116.00
23	DB	1439	A	N9-C1'-C2'	-5.55	103.68	112.00
50	DT	34	VAL	N-CA-C	5.54	114.79	106.42
23	DB	2718	G	C5'-C4'-C3'	5.53	124.30	116.00
23	BB	1240	U	C4'-C3'-O3'	-5.53	104.70	113.00
28	BP	6	GLN	N-CA-C	-5.53	104.89	111.69
22	BA	52	A	C4'-C3'-O3'	-5.53	104.71	113.00
23	DB	1350	C	C5'-C4'-C3'	-5.51	107.73	116.00
23	BB	2191	A	C5'-C4'-C3'	-5.51	107.73	116.00
28	DP	6	GLN	N-CA-C	-5.49	104.93	111.69
23	BB	125	A	C4'-C3'-O3'	-5.49	101.16	109.40
50	BT	26	LYS	N-CA-C	-5.49	106.42	113.01
15	CP	45	GLU	N-CA-C	-5.49	104.07	111.54
23	DB	268	C	C5'-C4'-C3'	-5.49	107.77	116.00
15	AP	45	GLU	N-CA-C	-5.47	104.09	111.54
50	DT	26	LYS	N-CA-C	-5.45	106.47	113.01
23	BB	1251	C	C5'-C4'-C3'	-5.44	107.04	115.20
23	DB	1240	U	C4'-C3'-O3'	-5.44	104.84	113.00
44	DQ	12	ARG	N-CA-C	-5.43	105.91	112.54
23	DB	2203	U	C4'-C3'-O3'	-5.43	104.85	113.00
44	BQ	12	ARG	N-CA-C	-5.42	105.93	112.54
1	AA	1398	A	C5'-C4'-C3'	-5.42	107.87	116.00
23	BB	127	A	C4'-C3'-O3'	-5.42	104.88	113.00
23	BB	1126	A	C5'-C4'-C3'	-5.41	107.08	115.20
47	BF	33	ILE	N-CA-C	-5.41	101.93	109.45
1	CA	63	C	C4'-C3'-O3'	-5.40	104.90	113.00
23	DB	675	A	C4'-C3'-O3'	-5.38	104.92	113.00
44	BQ	19	GLN	N-CA-C	-5.38	106.79	113.19
44	DQ	19	GLN	N-CA-C	-5.38	106.78	113.19
27	DK	119	ALA	N-CA-C	5.38	121.69	109.81
23	DB	162	U	C4'-C3'-O3'	5.38	117.46	109.40
23	DB	2014	A	C4'-C3'-O3'	-5.37	104.94	113.00
23	DB	1880	U	C5'-C4'-C3'	-5.37	107.95	116.00
23	BB	1565	C	C4'-C3'-O3'	-5.36	101.36	109.40
27	BK	119	ALA	N-CA-C	5.36	121.65	109.81
23	DB	1294	U	C5'-C4'-C3'	-5.34	107.99	116.00
41	DJ	42	ALA	N-CA-C	-5.34	103.92	110.65
23	DB	1340	U	C4'-C3'-O3'	-5.34	104.99	113.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
41	BJ	42	ALA	N-CA-C	-5.34	103.92	110.65
1	AA	80	A	C4'-C3'-O3'	-5.33	105.01	113.00
22	DA	14	U	C4'-C3'-O3'	-5.33	105.01	113.00
23	BB	2619	C	C5'-C4'-C3'	-5.32	108.02	116.00
29	BE	60	TRP	N-CA-C	5.32	122.14	110.80
29	DE	60	TRP	N-CA-C	5.32	122.13	110.80
1	CA	960	U	C4'-C3'-O3'	5.32	117.38	109.40
23	DB	1847	A	C4'-C3'-O3'	-5.32	105.03	113.00
1	AA	563	A	C4'-C3'-O3'	-5.30	105.04	113.00
23	BB	783	A	C4'-C3'-O3'	5.30	120.96	113.00
23	BB	2718	G	C5'-C4'-C3'	5.30	123.95	116.00
23	DB	2585	U	C4'-C3'-O3'	-5.29	101.47	109.40
48	BG	10	VAL	CA-C-N	5.29	126.45	119.84
48	BG	10	VAL	C-N-CA	5.29	126.45	119.84
23	BB	1880	U	C5'-C4'-C3'	-5.28	108.08	116.00
23	DB	1275	A	N9-C1'-C2'	5.27	119.91	112.00
25	BC	19	VAL	N-CA-C	5.27	115.55	108.17
23	DB	700	G	C5'-C4'-C3'	-5.26	108.11	116.00
23	BB	1254	A	C4'-C3'-O3'	-5.26	105.12	113.00
42	BN	96	ARG	N-CA-C	-5.25	102.42	110.14
42	DN	96	ARG	N-CA-C	-5.25	102.42	110.14
23	DB	1600	C	C5'-C4'-C3'	-5.25	108.13	116.00
23	DB	785	G	C5'-C4'-C3'	-5.25	108.13	116.00
23	BB	1275	A	N9-C1'-C2'	5.24	119.86	112.00
23	DB	1634	A	C5'-C4'-C3'	-5.24	107.34	115.20
23	DB	1808	A	C4'-C3'-O3'	-5.24	105.14	113.00
39	DX	44	LYS	N-CA-C	-5.23	104.64	111.02
24	BI	63	ASP	N-CA-C	-5.23	107.20	113.21
48	BG	6	ALA	CA-C-N	5.23	124.41	118.97
48	BG	6	ALA	C-N-CA	5.23	124.41	118.97
23	BB	562	U	N1-C1'-C2'	5.22	119.83	112.00
39	BX	44	LYS	N-CA-C	-5.22	104.65	111.02
25	DC	19	VAL	N-CA-C	5.22	115.48	108.17
48	DG	10	VAL	CA-C-N	5.21	126.36	119.84
48	DG	10	VAL	C-N-CA	5.21	126.36	119.84
43	BO	17	LYS	N-CA-C	-5.21	106.87	113.18
1	CA	832	G	C5'-C4'-C3'	5.21	123.82	116.00
23	BB	846	U	C4'-C3'-O3'	-5.21	105.19	113.00
52	DW	26	GLY	N-CA-C	-5.20	106.40	113.37
23	BB	671	C	C5'-C4'-C3'	-5.20	108.20	116.00
23	DB	1280	G	C5'-C4'-C3'	-5.20	108.20	116.00
40	DH	61	VAL	N-CA-C	-5.20	106.24	113.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
52	BW	26	GLY	N-CA-C	-5.19	106.42	113.37
1	CA	1301	U	C4'-C3'-O3'	-5.18	105.22	113.00
21	CU	14	ALA	N-CA-C	5.18	117.83	111.82
43	DO	105	ALA	N-CA-C	-5.18	104.03	110.41
32	D4	5	ALA	N-CA-C	-5.18	107.00	113.38
23	DB	1237	A	C4'-C3'-O3'	-5.17	105.24	113.00
32	B4	5	ALA	N-CA-C	-5.17	107.02	113.38
47	DF	172	PHE	CB-CA-C	-5.17	109.62	117.07
23	DB	562	U	N1-C1'-C2'	5.17	119.75	112.00
1	CA	785	G	C5'-C4'-C3'	-5.17	108.25	116.00
21	AU	14	ALA	N-CA-C	5.17	117.81	111.82
1	CA	350	G	C4'-C3'-O3'	-5.16	105.25	113.00
42	BN	78	LYS	N-CA-C	-5.16	105.77	111.71
47	BF	172	PHE	CB-CA-C	-5.16	109.64	117.07
22	DA	52	A	C4'-C3'-O3'	-5.16	105.26	113.00
23	BB	353	C	C5'-C4'-C3'	-5.15	108.27	116.00
23	BB	395	U	C4'-C3'-O3'	-5.15	105.27	113.00
13	AN	34	ASN	N-CA-C	-5.14	99.84	110.80
23	BB	2137	U	C4'-C3'-O3'	5.14	120.71	113.00
1	CA	437	U	N1-C1'-C2'	5.14	119.71	112.00
27	BK	121	GLU	N-CA-C	5.14	114.82	108.19
47	DF	99	PHE	N-CA-C	-5.14	106.84	113.01
43	BO	105	ALA	N-CA-C	-5.13	104.09	110.41
27	DK	121	GLU	N-CA-C	5.13	114.81	108.19
51	DZ	66	THR	N-CA-C	-5.13	105.77	111.36
1	AA	437	U	N1-C1'-C2'	5.13	119.69	112.00
23	DB	846	U	C4'-C3'-O3'	-5.12	105.32	113.00
42	DN	78	LYS	N-CA-C	-5.12	105.82	111.71
43	BO	70	ALA	N-CA-C	-5.12	106.29	112.54
1	CA	428	G	C4'-C3'-O3'	5.12	117.08	109.40
1	CA	1043	G	N9-C1'-C2'	5.12	119.67	112.00
13	CN	34	ASN	N-CA-C	-5.12	99.90	110.80
29	DE	159	LEU	N-CA-C	-5.12	106.14	112.38
43	DO	70	ALA	N-CA-C	-5.11	106.30	112.54
23	BB	1237	A	C4'-C3'-O3'	-5.11	105.33	113.00
29	BE	159	LEU	N-CA-C	-5.11	106.14	112.38
1	AA	832	G	C5'-C4'-C3'	5.11	123.67	116.00
29	DE	119	ILE	N-CA-C	5.11	111.68	106.21
1	AA	813	U	C4'-C3'-O3'	-5.11	105.34	113.00
1	AA	1043	G	N9-C1'-C2'	5.10	119.66	112.00
29	BE	119	ILE	N-CA-C	5.10	111.67	106.21
23	DB	1969	A	C4'-C3'-O3'	-5.10	105.35	113.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	DB	1565	C	C4'-C3'-O3'	-5.10	101.75	109.40
23	BB	2283	C	C5'-C4'-C3'	-5.10	108.35	116.00
47	BF	99	PHE	N-CA-C	-5.10	106.89	113.01
1	CA	258	G	C5'-C4'-C3'	-5.10	108.35	116.00
1	AA	31	G	C5'-C4'-C3'	-5.10	107.55	115.20
23	BB	2733	A	N9-C1'-C2'	-5.09	104.36	112.00
44	BQ	93	ILE	N-CA-C	-5.09	106.83	111.67
43	DO	17	LYS	N-CA-C	-5.09	106.90	113.01
51	BZ	66	THR	N-CA-C	-5.09	105.81	111.36
1	AA	1534	A	C4'-C3'-O3'	5.08	120.63	113.00
1	AA	243	A	C2'-C3'-O3'	5.08	117.12	109.50
44	BQ	101	ASP	N-CA-C	-5.08	104.88	111.74
23	DB	401	A	C5'-C4'-C3'	5.08	123.62	116.00
23	BB	2430	A	N9-C1'-C2'	5.08	119.61	112.00
43	DO	34	HIS	N-CA-C	5.07	116.52	108.96
23	DB	2430	A	N9-C1'-C2'	5.07	119.60	112.00
44	DQ	101	ASP	N-CA-C	-5.07	104.90	111.74
1	CA	1357	A	C4'-C3'-O3'	-5.06	105.40	113.00
45	DS	19	LEU	N-CA-C	-5.06	107.77	114.04
23	BB	2203	U	C2'-C3'-O3'	-5.06	106.11	113.70
3	CD	196	GLU	N-CA-C	5.05	116.48	111.07
23	BB	727	A	N9-C1'-C2'	5.05	119.58	112.00
1	CA	243	A	C2'-C3'-O3'	5.05	117.08	109.50
23	BB	2297	A	C5'-C4'-C3'	-5.05	108.43	116.00
45	BS	19	LEU	N-CA-C	-5.05	107.78	114.04
14	CO	44	ALA	N-CA-C	-5.05	105.29	111.75
23	DB	595	C	C5'-C4'-C3'	-5.05	108.43	116.00
3	AD	196	GLU	N-CA-C	5.04	116.47	111.07
23	DB	1663	G	C5'-C4'-C3'	-5.04	108.44	116.00
1	AA	1357	A	C4'-C3'-O3'	-5.04	105.45	113.00
1	AA	258	G	C5'-C4'-C3'	-5.03	108.45	116.00
23	DB	1187	G	C4'-C3'-O3'	-5.03	105.45	113.00
23	DB	1306	C	C5'-C4'-C3'	5.03	123.54	116.00
1	AA	350	G	C4'-C3'-O3'	-5.03	105.46	113.00
44	DQ	96	ASP	N-CA-C	-5.00	107.17	113.28

There are no chirality outliers.

All (109) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	AA	1331	G	Sidechain
1	AA	1432	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	1441	A	Sidechain
1	AA	187	G	Sidechain
1	AA	281	G	Sidechain
1	AA	324	G	Sidechain
1	AA	437	U	Sidechain
1	AA	438	U	Sidechain
1	AA	496	A	Sidechain
1	AA	575	G	Sidechain
1	AA	703	G	Sidechain
1	AA	78	A	Sidechain
1	AA	86	G	Sidechain
23	BB	1047	G	Sidechain
23	BB	1060	U	Sidechain
23	BB	1086	A	Sidechain
23	BB	1088	A	Sidechain
23	BB	1111	A	Sidechain
23	BB	1426	G	Sidechain
23	BB	1439	A	Sidechain
23	BB	1546	G	Sidechain
23	BB	1572	A	Sidechain
23	BB	1722	A	Sidechain
23	BB	1734	G	Sidechain
23	BB	1814	G	Sidechain
23	BB	1828	G	Sidechain
23	BB	2062	A	Sidechain
23	BB	2108	A	Sidechain
23	BB	221	A	Sidechain
23	BB	222	A	Sidechain
23	BB	2272	U	Sidechain
23	BB	2279	G	Sidechain
23	BB	232	G	Sidechain
23	BB	2454	G	Sidechain
23	BB	2471	A	Sidechain
23	BB	2503	A	Sidechain
23	BB	2508	G	Sidechain
23	BB	2587	A	Sidechain
23	BB	2638	G	Sidechain
23	BB	2733	A	Sidechain
23	BB	2770	G	Sidechain
23	BB	2834	G	Sidechain
23	BB	2848	G	Sidechain
23	BB	2857	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
23	BB	2868	A	Sidechain
23	BB	2883	A	Sidechain
23	BB	299	A	Sidechain
23	BB	361	G	Sidechain
23	BB	370	G	Sidechain
23	BB	500	G	Sidechain
23	BB	51	G	Sidechain
23	BB	562	U	Sidechain
23	BB	630	G	Sidechain
23	BB	727	A	Sidechain
23	BB	729	G	Sidechain
23	BB	757	G	Sidechain
1	CA	1331	G	Sidechain
1	CA	1432	G	Sidechain
1	CA	1441	A	Sidechain
1	CA	187	G	Sidechain
1	CA	281	G	Sidechain
1	CA	324	G	Sidechain
1	CA	437	U	Sidechain
1	CA	438	U	Sidechain
1	CA	496	A	Sidechain
1	CA	575	G	Sidechain
1	CA	703	G	Sidechain
23	DB	1047	G	Sidechain
23	DB	1060	U	Sidechain
23	DB	1086	A	Sidechain
23	DB	1088	A	Sidechain
23	DB	1426	G	Sidechain
23	DB	1439	A	Sidechain
23	DB	1546	G	Sidechain
23	DB	1572	A	Sidechain
23	DB	1722	A	Sidechain
23	DB	1734	G	Sidechain
23	DB	1814	G	Sidechain
23	DB	1828	G	Sidechain
23	DB	2062	A	Sidechain
23	DB	2135	A	Sidechain
23	DB	221	A	Sidechain
23	DB	222	A	Sidechain
23	DB	2272	U	Sidechain
23	DB	2279	G	Sidechain
23	DB	232	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
23	DB	2454	G	Sidechain
23	DB	2471	A	Sidechain
23	DB	2503	A	Sidechain
23	DB	2508	G	Sidechain
23	DB	2587	A	Sidechain
23	DB	2638	G	Sidechain
23	DB	2733	A	Sidechain
23	DB	2770	G	Sidechain
23	DB	2834	G	Sidechain
23	DB	2848	G	Sidechain
23	DB	2857	G	Sidechain
23	DB	2868	A	Sidechain
23	DB	2883	A	Sidechain
23	DB	299	A	Sidechain
23	DB	356	G	Sidechain
23	DB	370	G	Sidechain
23	DB	500	G	Sidechain
23	DB	51	G	Sidechain
23	DB	562	U	Sidechain
23	DB	630	G	Sidechain
23	DB	727	A	Sidechain
23	DB	729	G	Sidechain
23	DB	757	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	32831	0	16521	1154	0
1	CA	32831	0	16521	1153	0
2	AC	1624	0	1699	137	0
2	CC	1624	0	1699	139	0
3	AD	1643	0	1710	168	0
3	CD	1643	0	1710	161	0
4	AE	1105	0	1148	93	0
4	CE	1105	0	1148	98	0
5	AF	817	0	808	86	0
5	CF	817	0	808	85	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
6	AG	1174	0	1230	99	0
6	CG	1196	0	1246	96	0
7	AH	979	0	1034	91	0
7	CH	979	0	1034	86	0
8	AI	1022	0	1070	130	0
8	CI	1022	0	1070	126	0
9	AJ	786	0	828	88	0
9	CJ	786	0	828	90	0
10	AK	877	0	887	99	0
10	CK	877	0	887	100	0
11	AL	955	0	1019	80	0
11	CL	955	0	1019	79	0
12	AM	883	0	944	123	0
12	CM	876	0	937	120	0
13	AN	774	0	827	114	0
13	CN	774	0	827	114	0
14	AO	714	0	734	59	0
14	CO	714	0	734	53	0
15	AP	649	0	666	56	0
15	CP	638	0	656	53	0
16	AQ	648	0	691	48	0
16	CQ	657	0	702	49	0
17	AR	455	0	478	32	0
17	CR	455	0	478	30	0
18	AS	637	0	665	88	0
18	CS	644	0	675	92	0
19	AT	665	0	714	59	0
19	CT	665	0	714	58	0
20	AB	1704	0	1732	209	0
20	CB	1704	0	1732	210	0
21	AU	425	0	449	62	0
21	CU	425	0	449	62	0
22	BA	2507	0	1270	97	0
22	DA	2507	0	1270	90	0
23	BB	60995	0	30678	2153	0
23	DB	60995	0	30677	2257	0
24	BI	1032	0	1088	118	0
24	DI	1032	0	1088	202	0
25	BC	2082	0	2157	275	0
25	DC	2082	0	2157	259	0
26	BD	1565	0	1616	219	0
26	DD	1565	0	1616	227	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
27	BK	930	0	1000	121	0
27	DK	930	0	1000	126	0
28	BP	917	0	965	124	0
28	DP	917	0	965	119	0
29	BE	1552	0	1619	194	0
29	DE	1552	0	1619	178	0
30	BY	449	0	491	55	0
30	DY	449	0	491	50	0
31	B0	444	0	461	48	0
31	D0	444	0	461	46	0
32	B4	302	0	340	31	0
32	D4	302	0	341	29	0
33	B1	409	0	440	55	0
33	D1	409	0	440	45	0
34	B3	504	0	574	60	0
34	D3	504	0	574	57	0
35	BV	753	0	780	84	0
35	DV	753	0	780	88	0
36	B2	377	0	418	47	0
36	D2	377	0	418	49	0
37	BL	1045	0	1117	152	0
37	DL	1045	0	1117	160	0
38	BM	1074	0	1157	124	0
38	DM	1074	0	1157	125	0
39	BX	509	0	543	68	0
39	DX	509	0	543	61	0
40	BH	1111	0	1148	206	0
40	DH	1111	0	1148	160	0
41	BJ	1129	0	1162	149	0
41	DJ	1129	0	1162	151	0
42	BN	960	0	1000	127	0
42	DN	960	0	1000	129	0
43	BO	892	0	923	80	0
43	DO	892	0	923	97	0
44	BQ	947	0	1022	147	0
44	DQ	947	0	1022	152	0
45	BS	857	0	922	109	0
45	DS	857	0	922	106	0
46	BU	779	0	834	128	0
46	DU	779	0	834	121	0
47	BF	1420	0	1460	250	0
47	DF	1420	0	1460	251	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
48	BG	1323	0	1374	193	0
48	DG	1323	0	1374	192	0
49	BR	816	0	839	99	0
49	DR	816	0	839	104	0
50	BT	738	0	807	136	0
50	DT	738	0	807	127	0
51	BZ	625	0	652	85	0
51	DZ	625	0	652	84	0
52	BW	596	0	610	136	0
52	DW	596	0	610	143	0
53	AA	42	0	46	2	0
53	BB	42	0	46	0	0
53	CA	42	0	46	0	0
53	DB	42	0	46	1	0
54	AA	60	0	0	0	0
54	BB	110	0	0	0	0
54	CA	60	0	0	0	0
54	CE	1	0	0	0	0
54	CN	1	0	0	0	0
54	DB	111	0	0	0	0
55	B4	1	0	0	0	0
55	D4	1	0	0	0	0
56	AA	291	0	0	2	0
56	AL	4	0	0	0	0
56	AN	4	0	0	0	0
56	AT	1	0	0	0	0
56	BB	497	0	0	8	0
56	BC	5	0	0	0	0
56	BE	1	0	0	0	0
56	BL	1	0	0	0	0
56	BN	1	0	0	0	0
56	BR	1	0	0	0	0
56	CA	298	0	0	1	0
56	CE	3	0	0	0	0
56	CL	2	0	0	0	0
56	CN	4	0	0	0	0
56	CP	1	0	0	0	0
56	CT	1	0	0	0	0
56	DB	502	0	0	10	0
56	DC	6	0	0	0	0
56	DE	1	0	0	0	0
56	DL	2	0	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	DR	1	0	0	0	0
All	All	284172	0	190846	16549	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 (16549) 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)
23:DB:1099:G:H8	24:DI:3:LYS:N	1.38	1.21
21:CU:36:PHE:HB3	21:CU:40:PRO:HD3	1.32	1.11
40:DH:31:VAL:HB	40:DH:32:PRO:HD2	1.30	1.11
6:CG:2:ARG:HH11	6:CG:2:ARG:HB3	1.10	1.11
40:BH:31:VAL:HB	40:BH:32:PRO:HD2	1.29	1.10
46:BU:85:ARG:HD3	46:BU:86:PHE:H	1.17	1.09
9:CJ:9:ARG:HB2	9:CJ:99:GLN:HB3	1.35	1.08
20:AB:163:ILE:HG23	20:AB:164:ASP:H	1.18	1.08
23:BB:855:G:H21	52:BW:23:LYS:HG2	0.99	1.07
23:DB:1099:G:O5'	24:DI:4:VAL:N	1.86	1.06
6:AG:149:ALA:HB2	10:AK:55:ARG:HE	1.19	1.06
21:AU:36:PHE:HB3	21:AU:40:PRO:HD3	1.31	1.05
46:DU:85:ARG:HD3	46:DU:86:PHE:H	1.19	1.05
23:DB:1098:A:H3'	24:DI:3:LYS:CA	1.87	1.04
23:DB:1099:G:C8	24:DI:3:LYS:N	2.22	1.04
49:DR:60:LYS:H	49:DR:100:GLY:HA3	1.22	1.04
23:BB:126:A:H5'	36:B2:19:ARG:HG3	1.40	1.03
9:AJ:9:ARG:HB2	9:AJ:99:GLN:HB3	1.39	1.03
52:DW:51:GLY:HA3	52:DW:59:PHE:HB2	1.40	1.03
26:BD:10:GLY:HA3	26:BD:26:VAL:H	1.20	1.03
26:DD:10:GLY:HA3	26:DD:26:VAL:H	1.19	1.03
52:BW:17:ALA:HA	52:BW:35:ILE:HG23	1.39	1.02
23:DB:855:G:H21	52:DW:23:LYS:HG2	1.22	1.02
5:CF:29:ILE:HG21	5:CF:64:VAL:HG11	1.42	1.02
26:DD:106:LYS:HB3	26:DD:206:ALA:H	1.21	1.02
26:BD:24:VAL:HG21	26:BD:188:LEU:HB3	1.42	1.02
52:DW:17:ALA:HA	52:DW:35:ILE:HG23	1.37	1.02
26:BD:106:LYS:HB3	26:BD:206:ALA:H	1.20	1.01
44:DQ:30:VAL:HG13	44:DQ:31:TYR:H	1.20	1.01
20:CB:163:ILE:HG23	20:CB:164:ASP:H	1.20	1.01
8:AI:20:ILE:HA	8:AI:62:LEU:HD12	1.43	1.01
1:CA:1533:C:H2'	1:CA:1534:A:H3'	1.40	1.01

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:1098:A:H3'	24:DI:3:LYS:HA	1.40	1.01
44:BQ:30:VAL:HG13	44:BQ:31:TYR:H	1.18	1.00
5:CF:92:THR:HG22	5:CF:94:HIS:H	1.23	1.00
8:CI:20:ILE:HA	8:CI:62:LEU:HD12	1.42	1.00
28:DP:63:ILE:HA	28:DP:68:GLY:HA2	1.40	1.00
26:DD:24:VAL:HG21	26:DD:188:LEU:HB3	1.43	1.00
5:AF:92:THR:HG22	5:AF:94:HIS:H	1.23	1.00
48:BG:89:VAL:HB	48:BG:159:LYS:HA	1.41	0.99
27:BK:70:ARG:HB3	27:BK:76:VAL:HG22	1.45	0.99
5:AF:29:ILE:HG21	5:AF:64:VAL:HG11	1.40	0.99
49:BR:60:LYS:H	49:BR:100:GLY:HA3	1.23	0.99
52:BW:51:GLY:HA3	52:BW:59:PHE:HB2	1.42	0.99
50:BT:5:GLU:HA	50:BT:8:LEU:HB2	1.45	0.98
23:BB:855:G:N2	52:BW:23:LYS:HG2	1.78	0.98
23:BB:1458:U:H5''	23:BB:1459:G:H5'	1.45	0.98
42:DN:2:ARG:HA	42:DN:5:LYS:HD3	1.46	0.98
3:AD:22:SER:HB3	3:AD:164:ARG:HH22	1.28	0.98
42:BN:2:ARG:HA	42:BN:5:LYS:HD3	1.41	0.98
33:D1:33:LEU:H	33:D1:51:ALA:HB3	1.29	0.98
1:CA:243:A:H4'	1:CA:244:U:H5'	1.45	0.98
13:AN:40:ARG:NH2	18:AS:6:LYS:HB2	1.79	0.97
28:BP:63:ILE:HA	28:BP:68:GLY:HA2	1.42	0.97
48:DG:43:LYS:HB2	48:DG:50:THR:HB	1.47	0.97
42:DN:37:THR:HG22	42:DN:39:PRO:HD2	1.46	0.97
48:BG:43:LYS:HB2	48:BG:50:THR:HB	1.43	0.97
48:DG:89:VAL:HB	48:DG:159:LYS:HA	1.42	0.97
23:DB:2502:G:H5'	23:DB:2503:A:H5''	1.43	0.97
33:B1:33:LEU:H	33:B1:51:ALA:HB3	1.30	0.97
25:BC:77:VAL:HG23	25:BC:112:GLY:H	1.25	0.96
13:CN:51:PRO:HB2	13:CN:54:SER:HB3	1.47	0.96
51:DZ:5:CYS:HB3	51:DZ:10:LYS:H	1.29	0.96
13:CN:40:ARG:NH2	18:CS:6:LYS:HB2	1.79	0.96
40:BH:84:ALA:HA	40:BH:90:LEU:HA	1.46	0.96
37:DL:79:LEU:HB2	37:DL:113:ALA:H	1.31	0.96
38:BM:59:ARG:HH11	38:BM:60:GLN:HB3	1.29	0.96
25:DC:105:ALA:HB1	25:DC:109:LEU:HD12	1.47	0.96
23:BB:2502:G:H5'	23:BB:2503:A:H5''	1.45	0.95
49:DR:7:SER:HB2	49:DR:22:LEU:HB3	1.48	0.95
52:DW:9:THR:HG23	52:DW:10:ARG:HD3	1.45	0.95
39:DX:28:LEU:HD13	39:DX:37:LEU:HD11	1.47	0.95
2:CC:76:ILE:HA	2:CC:83:VAL:HG23	1.48	0.95

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:CT:43:LYS:HE2	19:CT:44:ALA:H	1.32	0.95
27:DK:70:ARG:HB3	27:DK:76:VAL:HG22	1.45	0.95
2:AC:76:ILE:HA	2:AC:83:VAL:HG23	1.48	0.95
29:DE:145:ASP:HA	29:DE:166:LYS:HB3	1.46	0.95
25:DC:77:VAL:HG23	25:DC:112:GLY:H	1.26	0.95
1:AA:243:A:H4'	1:AA:244:U:H5'	1.48	0.95
29:BE:145:ASP:HA	29:BE:166:LYS:HB3	1.46	0.95
3:CD:187:ARG:HH12	3:CD:191:SER:HA	1.32	0.95
50:DT:5:GLU:HA	50:DT:8:LEU:HB2	1.47	0.94
37:DL:123:ARG:HA	37:DL:143:GLU:HB3	1.48	0.94
3:CD:22:SER:HB3	3:CD:164:ARG:HH22	1.31	0.94
13:AN:51:PRO:HB2	13:AN:54:SER:HB3	1.49	0.94
1:AA:1086:U:H3	1:AA:1099:G:H22	1.11	0.94
2:AC:126:ARG:HH22	2:AC:190:THR:HG23	1.33	0.94
10:CK:22:ILE:HG21	10:CK:95:THR:HG21	1.49	0.94
23:DB:1420:A:H2'	23:DB:2211:A:H62	1.31	0.94
47:DF:43:ILE:HG23	47:DF:44:ALA:H	1.33	0.94
33:B1:34:GLU:HB3	33:B1:49:LYS:HD3	1.50	0.94
38:DM:59:ARG:HH11	38:DM:60:GLN:HB3	1.31	0.94
48:BG:34:ARG:H	48:BG:34:ARG:HH11	1.16	0.94
52:BW:9:THR:HG23	52:BW:10:ARG:HD3	1.46	0.94
10:CK:34:THR:HB	10:CK:40:ALA:HA	1.47	0.94
18:CS:48:ILE:HB	18:CS:59:VAL:HG23	1.50	0.94
23:DB:1458:U:H5''	23:DB:1459:G:H5'	1.48	0.94
26:BD:5:VAL:H	26:BD:32:ASN:HD21	1.12	0.94
39:BX:28:LEU:HD13	39:BX:37:LEU:HD11	1.49	0.94
10:AK:34:THR:HB	10:AK:40:ALA:HA	1.46	0.94
26:DD:5:VAL:H	26:DD:32:ASN:HD21	1.11	0.94
20:AB:198:VAL:HG12	20:AB:200:PRO:HD3	1.49	0.93
21:CU:16:ARG:HA	21:CU:16:ARG:HE	1.32	0.93
18:AS:48:ILE:HB	18:AS:59:VAL:HG23	1.51	0.93
40:BH:100:ALA:HB3	40:BH:112:LYS:HA	1.49	0.93
51:BZ:5:CYS:HB3	51:BZ:10:LYS:H	1.30	0.93
51:DZ:54:LYS:HA	51:DZ:57:ARG:HD3	1.50	0.93
20:AB:162:VAL:HG13	20:AB:184:ALA:HB2	1.51	0.93
1:AA:68:G:H5'	1:AA:171:A:H1'	1.49	0.93
20:AB:96:LEU:HD21	20:AB:146:SER:HB2	1.50	0.93
49:BR:7:SER:HB2	49:BR:22:LEU:HB3	1.47	0.93
13:AN:40:ARG:HH22	18:AS:6:LYS:HB2	1.34	0.93
23:BB:125:A:H5'	36:B2:19:ARG:HD2	1.50	0.93
23:BB:1420:A:H2'	23:BB:2211:A:H62	1.32	0.93

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:460:A:H4'	50:BT:72:GLN:HB2	1.51	0.93
37:BL:123:ARG:HA	37:BL:143:GLU:HB3	1.51	0.93
10:AK:22:ILE:HG21	10:AK:95:THR:HG21	1.50	0.93
42:BN:102:PHE:H	42:BN:109:PRO:HA	1.34	0.93
23:BB:850:U:H5''	30:BY:18:LYS:HD3	1.50	0.93
10:AK:124:LYS:HA	21:AU:34:ARG:HB3	1.50	0.92
42:BN:101:GLY:HA2	42:BN:110:MET:N	1.84	0.92
37:BL:81:ASP:HA	37:BL:84:LYS:HE2	1.51	0.92
51:DZ:40:VAL:HG21	51:DZ:43:GLU:HB3	1.51	0.92
21:AU:16:ARG:HA	21:AU:16:ARG:HE	1.32	0.92
51:BZ:54:LYS:HA	51:BZ:57:ARG:HD3	1.51	0.92
33:D1:34:GLU:HB3	33:D1:49:LYS:HD3	1.51	0.92
25:BC:4:LYS:HD2	25:BC:5:CYS:H	1.34	0.92
25:BC:105:ALA:HB1	25:BC:109:LEU:HD12	1.48	0.92
28:DP:4:ILE:HG22	28:DP:5:LYS:H	1.35	0.92
41:BJ:17:VAL:HG23	41:BJ:137:PRO:HB2	1.51	0.92
50:BT:57:VAL:HG22	50:BT:58:VAL:H	1.34	0.92
44:DQ:97:ILE:HD11	44:DQ:108:LEU:HD11	1.52	0.92
10:CK:124:LYS:HA	21:CU:34:ARG:HB3	1.48	0.92
42:DN:101:GLY:HA2	42:DN:110:MET:N	1.83	0.92
37:BL:79:LEU:HB2	37:BL:113:ALA:H	1.31	0.92
1:CA:1086:U:H3	1:CA:1099:G:H22	1.12	0.92
41:DJ:17:VAL:HG23	41:DJ:137:PRO:HB2	1.52	0.92
3:AD:187:ARG:HH12	3:AD:191:SER:HA	1.33	0.92
25:BC:130:PRO:HG2	25:BC:133:ASN:HD22	1.35	0.91
45:DS:76:VAL:HG12	45:DS:103:ILE:HA	1.50	0.91
25:DC:183:VAL:HG13	25:DC:185:ALA:H	1.34	0.91
27:DK:47:ILE:HG12	27:DK:48:PRO:HD2	1.51	0.91
20:CB:96:LEU:HD21	20:CB:146:SER:HB2	1.50	0.91
4:CE:33:THR:HG22	4:CE:51:LYS:HB3	1.52	0.91
39:DX:31:GLN:HG2	39:DX:37:LEU:HB2	1.50	0.91
23:BB:670:A:H4'	23:BB:671:C:H5'	1.53	0.91
25:DC:16:VAL:HB	25:DC:203:VAL:HB	1.53	0.91
25:DC:226:PRO:HG3	25:DC:233:GLY:H	1.36	0.91
48:DG:34:ARG:HH11	48:DG:34:ARG:H	1.15	0.91
44:BQ:97:ILE:HD11	44:BQ:108:LEU:HD11	1.53	0.91
4:AE:33:THR:HG22	4:AE:51:LYS:HB3	1.53	0.90
42:DN:102:PHE:H	42:DN:109:PRO:HA	1.33	0.90
25:DC:130:PRO:HG2	25:DC:133:ASN:HD22	1.34	0.90
43:DO:49:VAL:HG21	43:DO:82:ALA:HB2	1.53	0.90
47:DF:45:ASP:HB3	47:DF:48:LEU:HD22	1.51	0.90

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:BF:45:ASP:HB3	47:BF:48:LEU:HD22	1.52	0.90
25:DC:144:GLU:HA	25:DC:151:GLY:HA2	1.52	0.90
2:CC:48:LYS:HD3	2:CC:48:LYS:H	1.36	0.90
37:DL:79:LEU:HG	37:DL:112:LEU:HA	1.53	0.90
43:BO:49:VAL:HG21	43:BO:82:ALA:HB2	1.52	0.90
20:CB:162:VAL:HG13	20:CB:184:ALA:HB2	1.52	0.90
25:BC:183:VAL:HG13	25:BC:185:ALA:H	1.36	0.90
23:DB:1060:U:N3	23:DB:1088:A:N7	2.20	0.90
25:DC:129:LEU:HD23	25:DC:130:PRO:HD2	1.52	0.90
50:DT:57:VAL:HG22	50:DT:58:VAL:H	1.37	0.90
25:DC:4:LYS:HD2	25:DC:5:CYS:H	1.35	0.90
40:BH:116:ARG:HB2	40:BH:133:GLN:HB2	1.51	0.90
16:AQ:6:THR:HG22	16:AQ:61:ARG:HB3	1.54	0.90
40:DH:135:HIS:HB3	40:DH:138:VAL:HB	1.52	0.90
6:AG:145:GLU:HA	6:AG:148:LYS:HB2	1.53	0.89
23:BB:1060:U:N3	23:BB:1088:A:N7	2.20	0.89
20:CB:198:VAL:HG12	20:CB:200:PRO:HD3	1.52	0.89
20:CB:202:ASN:ND2	20:CB:204:ASP:H	1.69	0.89
23:BB:2305:U:H5''	47:BF:130:GLY:HA3	1.53	0.89
27:BK:47:ILE:HG12	27:BK:48:PRO:HD2	1.53	0.89
23:BB:2356:U:H5''	52:BW:16:GLU:HG3	1.51	0.89
39:BX:3:ALA:HA	39:BX:6:LEU:HD23	1.54	0.89
39:BX:31:GLN:HG2	39:BX:37:LEU:HB2	1.54	0.89
47:BF:43:ILE:HG23	47:BF:44:ALA:H	1.34	0.89
37:DL:81:ASP:HA	37:DL:84:LYS:HE2	1.52	0.89
39:DX:3:ALA:HA	39:DX:6:LEU:HD23	1.51	0.89
37:DL:6:LEU:H	37:DL:6:LEU:HD23	1.36	0.89
18:CS:28:LYS:HZ2	18:CS:28:LYS:H	1.20	0.89
4:AE:89:THR:HG22	4:AE:90:GLY:H	1.37	0.89
23:DB:2108:A:H5''	23:DB:2150:C:H4'	1.54	0.89
1:AA:1206:G:H4'	2:AC:192:TYR:HA	1.54	0.89
1:AA:72:A:H61	1:AA:98:A:H2	1.15	0.89
52:BW:58:LEU:HD12	52:BW:79:ILE:HD12	1.55	0.89
25:DC:144:GLU:HG3	25:DC:151:GLY:H	1.38	0.89
28:BP:4:ILE:HG22	28:BP:5:LYS:H	1.36	0.89
10:CK:33:ILE:HB	10:CK:73:VAL:HG11	1.55	0.89
20:AB:27:LYS:HA	20:AB:30:ILE:HD12	1.55	0.88
20:AB:202:ASN:ND2	20:AB:204:ASP:H	1.71	0.88
2:CC:126:ARG:HH22	2:CC:190:THR:HG23	1.36	0.88
1:AA:1236:A:H4'	1:AA:1304:G:H4'	1.55	0.88
23:BB:2108:A:H2'	23:BB:2109:U:H4'	1.55	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BK:35:VAL:HG23	27:BK:36:GLY:H	1.37	0.88
40:BH:80:ILE:HB	40:BH:144:VAL:HG13	1.53	0.88
23:DB:1080:A:H4'	24:DI:126:ARG:CD	2.03	0.88
33:D1:26:LYS:HD3	33:D1:52:LYS:HB3	1.53	0.88
2:AC:48:LYS:HD3	2:AC:48:LYS:H	1.36	0.88
6:CG:145:GLU:HA	6:CG:148:LYS:HB2	1.54	0.88
27:DK:35:VAL:HG23	27:DK:36:GLY:H	1.36	0.88
19:AT:43:LYS:HE2	19:AT:44:ALA:H	1.36	0.88
1:CA:1296:C:H4'	1:CA:1302:C:H41	1.38	0.88
23:DB:1244:A:H5''	37:DL:8:PRO:HD3	1.55	0.88
46:DU:95:PHE:HE1	46:DU:102:ILE:HB	1.38	0.88
51:DZ:6:GLN:HE21	51:DZ:50:ARG:H	1.18	0.88
21:AU:24:LYS:HD2	21:AU:25:ALA:H	1.37	0.88
23:BB:1203:U:H1'	37:BL:4:ASN:HD21	1.39	0.88
45:BS:76:VAL:HG12	45:BS:103:ILE:HA	1.54	0.88
13:CN:40:ARG:HH22	18:CS:6:LYS:HB2	1.35	0.88
10:AK:33:ILE:HB	10:AK:73:VAL:HG11	1.56	0.88
20:AB:67:LEU:HD12	20:AB:157:PRO:HG3	1.56	0.88
23:BB:27:G:H22	23:BB:512:G:H2'	1.37	0.88
23:DB:2267:A:H3'	23:DB:2267:A:H8	1.38	0.88
15:CP:40:ASN:HD21	15:CP:43:ALA:H	1.19	0.87
51:DZ:14:THR:HA	51:DZ:28:ARG:HA	1.56	0.87
1:AA:1296:C:H4'	1:AA:1302:C:H41	1.39	0.87
25:BC:16:VAL:HB	25:BC:203:VAL:HB	1.55	0.87
4:CE:52:ALA:HB2	4:CE:61:LYS:HE2	1.57	0.87
27:DK:19:VAL:HG12	27:DK:43:ILE:HA	1.56	0.87
27:DK:71:ARG:HG3	27:DK:105:ARG:NH2	1.89	0.87
52:DW:66:VAL:HA	52:DW:81:ILE:HG22	1.55	0.87
51:BZ:7:VAL:HG13	51:BZ:8:THR:HG23	1.57	0.87
21:CU:24:LYS:HD2	21:CU:25:ALA:H	1.35	0.87
23:DB:27:G:H22	23:DB:512:G:H2'	1.36	0.87
50:DT:11:LEU:HD22	50:DT:11:LEU:H	1.40	0.87
26:BD:29:VAL:HB	26:BD:98:VAL:HG22	1.56	0.87
37:BL:143:GLU:HG2	37:BL:144:GLU:H	1.39	0.87
40:BH:80:ILE:HD12	40:BH:144:VAL:HG22	1.55	0.87
48:BG:68:ARG:HH12	48:BG:72:ASN:HD22	1.21	0.87
23:DB:670:A:H4'	23:DB:671:C:H5'	1.55	0.87
23:DB:558:U:OP1	41:DJ:113:PRO:HG2	1.74	0.87
33:D1:49:LYS:HG3	33:D1:50:GLU:H	1.37	0.87
27:BK:25:LEU:HD13	27:BK:38:ILE:HG22	1.57	0.87
37:BL:79:LEU:HG	37:BL:112:LEU:HA	1.56	0.87

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:BG:24:THR:HG22	48:BG:34:ARG:HB3	1.57	0.87
52:BW:66:VAL:HA	52:BW:81:ILE:HG22	1.57	0.87
26:DD:29:VAL:HB	26:DD:98:VAL:HG22	1.56	0.87
42:DN:72:ASP:HB3	42:DN:75:ILE:HG12	1.56	0.87
1:AA:79:G:H2'	1:AA:80:A:C8	2.10	0.87
5:AF:3:HIS:HB2	5:AF:92:THR:HA	1.56	0.87
51:BZ:40:VAL:HG21	51:BZ:43:GLU:HB3	1.54	0.87
20:CB:156:LEU:H	20:CB:156:LEU:HD12	1.40	0.87
40:DH:90:LEU:HD23	40:DH:94:ILE:HD13	1.55	0.87
46:DU:58:VAL:HG12	46:DU:59:GLU:H	1.39	0.87
24:BI:27:LEU:HD23	24:BI:27:LEU:H	1.39	0.87
20:CB:27:LYS:HA	20:CB:30:ILE:HD12	1.56	0.87
20:CB:67:LEU:HD12	20:CB:157:PRO:HG3	1.56	0.87
23:DB:1287:A:OP1	42:DN:104:ALA:HB3	1.75	0.87
25:BC:128:THR:HA	25:BC:190:THR:HA	1.55	0.86
33:B1:26:LYS:HD3	33:B1:52:LYS:HB3	1.56	0.86
33:B1:49:LYS:HG3	33:B1:50:GLU:H	1.37	0.86
42:BN:37:THR:HG22	42:BN:39:PRO:HD2	1.54	0.86
1:CA:120:A:H2'	1:CA:121:U:H5''	1.54	0.86
23:BB:2267:A:H3'	23:BB:2267:A:H8	1.37	0.86
1:AA:120:A:H2'	1:AA:121:U:H5''	1.57	0.86
51:BZ:71:LEU:HD13	51:BZ:76:GLU:HB3	1.56	0.86
25:BC:129:LEU:HD23	25:BC:130:PRO:HD2	1.55	0.86
25:BC:64:VAL:O	25:BC:65:ASP:HB3	1.75	0.86
46:BU:95:PHE:HE1	46:BU:102:ILE:HB	1.39	0.86
1:CA:1236:A:H4'	1:CA:1304:G:H4'	1.56	0.86
46:BU:58:VAL:HG12	46:BU:59:GLU:H	1.41	0.86
23:DB:2379:G:H4'	43:DO:21:LEU:HD11	1.58	0.86
25:DC:128:THR:HA	25:DC:190:THR:HA	1.58	0.86
37:DL:143:GLU:HG2	37:DL:144:GLU:H	1.38	0.86
40:DH:127:GLU:HA	40:DH:145:ASN:HA	1.57	0.86
5:CF:3:HIS:HB2	5:CF:92:THR:HA	1.55	0.86
6:CG:2:ARG:HB3	6:CG:2:ARG:NH1	1.90	0.86
23:DB:276:U:H2'	23:DB:278:A:C2	2.11	0.86
40:DH:7:ASP:HA	40:DH:15:LEU:HD22	1.57	0.86
41:DJ:81:ILE:HG23	41:DJ:82:GLY:H	1.41	0.86
21:AU:16:ARG:HA	21:AU:16:ARG:NE	1.91	0.86
38:BM:34:LYS:HB3	38:BM:129:THR:HG22	1.58	0.86
51:BZ:6:GLN:HE21	51:BZ:50:ARG:H	1.20	0.86
16:CQ:6:THR:HG22	16:CQ:61:ARG:HB3	1.55	0.86
23:DB:328:U:H4'	46:DU:65:GLN:HE22	1.40	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:BT:11:LEU:H	50:BT:11:LEU:HD22	1.40	0.86
18:CS:50:VAL:HG23	18:CS:59:VAL:HG21	1.58	0.86
48:DG:24:THR:HG22	48:DG:34:ARG:HB3	1.58	0.86
15:AP:40:ASN:HD21	15:AP:43:ALA:H	1.18	0.85
1:CA:1206:G:H4'	2:CC:192:TYR:HA	1.56	0.85
27:DK:25:LEU:HD13	27:DK:38:ILE:HG22	1.57	0.85
1:AA:411:A:H62	1:AA:413:G:H21	1.23	0.85
15:AP:40:ASN:HD21	15:AP:43:ALA:N	1.73	0.85
40:BH:7:ASP:HA	40:BH:15:LEU:HD22	1.57	0.85
24:DI:11:GLN:HG2	24:DI:55:PRO:HB3	1.59	0.85
35:DV:62:THR:HA	35:DV:71:LYS:HA	1.56	0.85
3:CD:25:ARG:HH11	3:CD:26:ALA:H	1.24	0.85
20:CB:99:MET:HA	20:CB:106:VAL:HG21	1.58	0.85
23:DB:850:U:H5''	30:DY:18:LYS:HD3	1.56	0.85
47:DF:87:LYS:HG3	47:DF:88:VAL:H	1.39	0.85
20:AB:156:LEU:H	20:AB:156:LEU:HD12	1.41	0.85
35:BV:62:THR:HA	35:BV:71:LYS:HA	1.58	0.85
10:CK:34:THR:HA	10:CK:41:LEU:HG	1.56	0.85
32:D4:7:VAL:HG13	32:D4:8:LYS:H	1.41	0.85
39:DX:39:GLN:HB3	39:DX:42:LEU:HD13	1.58	0.85
51:DZ:7:VAL:HG13	51:DZ:8:THR:HG23	1.56	0.85
25:BC:144:GLU:HA	25:BC:151:GLY:HA2	1.55	0.85
23:DB:142:A:H2'	23:DB:143:C:C6	2.11	0.85
51:DZ:64:ILE:H	51:DZ:64:ILE:HD12	1.40	0.85
23:BB:1287:A:OP1	42:BN:104:ALA:HB3	1.75	0.85
25:BC:226:PRO:HG3	25:BC:233:GLY:H	1.40	0.85
34:B3:31:ILE:HD11	34:B3:34:LYS:HD3	1.57	0.85
41:DJ:1:MET:HG2	41:DJ:2:LYS:HG2	1.57	0.85
1:AA:85:U:O3'	1:AA:86:G:H4'	1.77	0.85
12:AM:106:ARG:HH12	12:AM:109:LYS:HD2	1.42	0.85
23:BB:79:C:O2'	23:BB:346:A:H1'	1.76	0.85
23:BB:558:U:OP1	41:BJ:113:PRO:HG2	1.76	0.85
1:CA:203:G:H1'	1:CA:465:A:N6	1.92	0.85
15:CP:40:ASN:HD21	15:CP:43:ALA:N	1.73	0.85
23:DB:328:U:H4'	46:DU:65:GLN:NE2	1.92	0.85
23:DB:1080:A:H4'	24:DI:126:ARG:HD3	1.59	0.85
51:BZ:64:ILE:HD12	51:BZ:64:ILE:H	1.41	0.85
23:DB:1099:G:P	24:DI:3:LYS:HA	2.16	0.85
24:DI:27:LEU:H	24:DI:27:LEU:HD23	1.41	0.85
25:DC:64:VAL:O	25:DC:65:ASP:HB3	1.75	0.85
51:DZ:71:LEU:HD13	51:DZ:76:GLU:HB3	1.58	0.85

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:DW:58:LEU:HD12	52:DW:79:ILE:HD12	1.58	0.85
18:AS:18:VAL:HG21	18:AS:43:MET:HB3	1.59	0.84
29:BE:108:ILE:HD11	29:BE:181:ILE:HB	1.59	0.84
37:BL:6:LEU:HD23	37:BL:6:LEU:H	1.38	0.84
42:BN:72:ASP:HB3	42:BN:75:ILE:HG12	1.56	0.84
48:BG:15:ASP:HB2	48:BG:26:LYS:H	1.41	0.84
52:BW:39:GLN:HE21	52:BW:42:THR:HB	1.42	0.84
23:DB:1024:G:H3'	23:DB:1025:G:H5''	1.57	0.84
40:DH:46:PHE:HA	40:DH:50:ARG:HH21	1.42	0.84
27:BK:19:VAL:HG12	27:BK:43:ILE:HA	1.59	0.84
8:CI:51:LEU:HD22	8:CI:56:MET:HE3	1.59	0.84
21:CU:16:ARG:HA	21:CU:16:ARG:NE	1.91	0.84
34:D3:31:ILE:HD11	34:D3:34:LYS:HD3	1.59	0.84
52:DW:37:VAL:HG12	52:DW:38:ARG:H	1.41	0.84
1:AA:203:G:H1'	1:AA:465:A:N6	1.91	0.84
10:AK:28:ASN:HD21	10:AK:47:GLY:H	1.26	0.84
15:AP:54:LEU:HD22	15:AP:80:LYS:HE3	1.59	0.84
20:AB:99:MET:HA	20:AB:106:VAL:HG21	1.59	0.84
45:DS:4:ILE:HG22	45:DS:106:VAL:HG13	1.58	0.84
2:CC:63:ILE:HD12	2:CC:98:ALA:HB2	1.57	0.84
23:DB:2769:U:H2'	23:DB:2770:G:H8	1.43	0.84
25:DC:144:GLU:HG3	25:DC:151:GLY:N	1.93	0.84
48:DG:15:ASP:HB2	48:DG:26:LYS:H	1.43	0.84
12:AM:76:ILE:HG22	12:AM:80:MET:HE2	1.60	0.84
23:BB:2769:U:H2'	23:BB:2770:G:H8	1.41	0.84
48:BG:17:LYS:HB3	48:BG:24:THR:H	1.41	0.84
23:DB:9:G:H21	23:DB:10:A:H62	1.25	0.84
25:BC:144:GLU:HG3	25:BC:151:GLY:H	1.43	0.84
26:BD:113:SER:HB2	26:BD:168:GLU:H	1.41	0.84
35:BV:4:ILE:HB	35:BV:63:ILE:HA	1.59	0.84
48:DG:17:LYS:HB3	48:DG:24:THR:H	1.43	0.84
32:B4:7:VAL:HG13	32:B4:8:LYS:H	1.42	0.84
1:CA:1323:G:H2'	1:CA:1324:A:C8	2.13	0.84
6:CG:14:ASP:HB3	6:CG:18:GLY:H	1.40	0.84
47:DF:137:PHE:HB2	47:DF:138:PRO:HD2	1.60	0.84
3:AD:24:VAL:HG23	3:AD:25:ARG:H	1.40	0.84
3:AD:165:GLU:HG3	3:AD:166:LYS:H	1.42	0.84
23:DB:1099:G:P	24:DI:4:VAL:H	2.00	0.84
23:DB:2306:C:H3'	23:DB:2307:G:C5'	2.08	0.84
51:DZ:31:PRO:HB2	51:DZ:33:LEU:HD11	1.60	0.84
1:AA:1412:C:H2'	1:AA:1413:A:C8	2.13	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BU:84:PHE:O	46:BU:85:ARG:HB2	1.78	0.84
51:BZ:14:THR:HA	51:BZ:28:ARG:HA	1.57	0.84
41:BJ:81:ILE:HG23	41:BJ:82:GLY:H	1.42	0.83
23:BB:1244:A:H5''	37:BL:8:PRO:HD3	1.60	0.83
39:BX:39:GLN:HB3	39:BX:42:LEU:HD13	1.58	0.83
47:BF:87:LYS:HG3	47:BF:88:VAL:H	1.43	0.83
3:CD:116:LEU:HB3	3:CD:122:ILE:HD11	1.60	0.83
21:AU:36:PHE:HA	21:AU:39:LYS:HE3	1.59	0.83
23:BB:2306:C:H3'	23:BB:2307:G:C5'	2.08	0.83
3:AD:116:LEU:HB3	3:AD:122:ILE:HD11	1.58	0.83
10:AK:34:THR:HA	10:AK:41:LEU:HG	1.59	0.83
5:CF:53:LYS:HD3	5:CF:54:LEU:HD13	1.61	0.83
10:CK:28:ASN:HD21	10:CK:47:GLY:H	1.27	0.83
26:DD:107:VAL:HG13	26:DD:203:VAL:HG23	1.61	0.83
23:BB:100:U:H2'	23:BB:100:U:O2	1.76	0.83
20:CB:46:VAL:HG13	20:CB:47:PRO:HD3	1.61	0.83
23:BB:1024:G:H3'	23:BB:1025:G:H5''	1.60	0.83
23:DB:137:U:H2'	23:DB:138:U:O4'	1.78	0.83
23:DB:1099:G:H8	24:DI:3:LYS:CA	1.90	0.83
27:BK:71:ARG:HG3	27:BK:105:ARG:NH2	1.93	0.83
21:CU:36:PHE:HA	21:CU:39:LYS:HE3	1.61	0.83
25:DC:80:LEU:HD11	25:DC:109:LEU:HG	1.59	0.83
2:AC:63:ILE:HD12	2:AC:98:ALA:HB2	1.59	0.83
23:BB:2267:A:H3'	23:BB:2267:A:C8	2.13	0.83
23:DB:2267:A:H3'	23:DB:2267:A:C8	2.13	0.83
52:DW:39:GLN:HE21	52:DW:42:THR:HB	1.41	0.83
1:AA:1323:G:H2'	1:AA:1324:A:C8	2.13	0.83
6:AG:14:ASP:HB3	6:AG:18:GLY:H	1.43	0.83
47:BF:137:PHE:HB2	47:BF:138:PRO:HD2	1.60	0.83
52:BW:37:VAL:HG12	52:BW:38:ARG:H	1.41	0.83
5:AF:53:LYS:HD3	5:AF:54:LEU:HD13	1.61	0.83
23:BB:1060:U:C2	23:BB:1088:A:N7	2.47	0.83
37:BL:30:THR:O	37:BL:33:ARG:HG2	1.79	0.83
23:DB:742:A:H2'	23:DB:743:A:C8	2.14	0.83
47:DF:163:GLU:HA	47:DF:166:ARG:HH11	1.43	0.83
1:AA:1361:G:H2'	1:AA:1362:A:H5''	1.61	0.82
20:AB:46:VAL:HG13	20:AB:47:PRO:HD3	1.61	0.82
47:BF:163:GLU:HA	47:BF:166:ARG:HH11	1.44	0.82
4:CE:89:THR:HG22	4:CE:90:GLY:H	1.43	0.82
18:AS:28:LYS:HZ2	18:AS:28:LYS:H	1.27	0.82
23:BB:2322:A:N6	23:BB:2333:A:H62	1.75	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BQ:91:ARG:CZ	49:BR:11:GLN:H	1.91	0.82
37:DL:30:THR:O	37:DL:33:ARG:HG2	1.78	0.82
14:AO:70:LEU:HD11	14:AO:77:ARG:HB2	1.61	0.82
18:AS:50:VAL:HG23	18:AS:59:VAL:HG21	1.61	0.82
40:BH:81:ALA:HA	40:BH:146:VAL:HA	1.61	0.82
40:BH:103:VAL:HG23	40:BH:110:VAL:HG21	1.61	0.82
41:BJ:25:LEU:HD22	41:BJ:26:GLY:H	1.43	0.82
1:CA:1361:G:H2'	1:CA:1362:A:H5''	1.60	0.82
30:BY:25:GLY:HA3	30:BY:46:MET:HE1	1.61	0.82
1:CA:411:A:H62	1:CA:413:G:H21	1.24	0.82
3:CD:146:GLU:HA	3:CD:149:LYS:HG2	1.62	0.82
10:CK:111:ASP:HB2	21:CU:19:LYS:HE3	1.61	0.82
38:DM:34:LYS:HB3	38:DM:129:THR:HG22	1.59	0.82
8:AI:56:MET:HA	8:AI:59:LYS:HB2	1.62	0.82
23:BB:161:A:H3'	23:BB:162:U:H5''	1.61	0.82
23:BB:2749:A:H3'	23:BB:2750:A:H5''	1.61	0.82
8:AI:51:LEU:HD22	8:AI:56:MET:HE3	1.61	0.82
36:B2:31:LEU:HD23	36:B2:42:LEU:HD12	1.62	0.82
24:DI:121:ILE:HD13	24:DI:121:ILE:H	1.44	0.82
23:BB:858:G:N3	23:BB:2268:A:H2'	1.94	0.82
23:BB:1141:U:H4'	23:BB:1142:A:O4'	1.79	0.82
25:BC:80:LEU:HD11	25:BC:109:LEU:HG	1.59	0.82
23:DB:1060:U:C2	23:DB:1088:A:N7	2.48	0.82
29:DE:108:ILE:HD11	29:DE:181:ILE:HB	1.60	0.82
40:DH:115:VAL:HB	40:DH:132:PHE:HD1	1.44	0.82
38:BM:38:ARG:HH11	38:BM:38:ARG:HB3	1.43	0.82
23:DB:161:A:H3'	23:DB:162:U:H5''	1.61	0.82
23:DB:2305:U:H4'	47:DF:132:ARG:HD3	1.62	0.82
6:AG:149:ALA:HB2	10:AK:55:ARG:NE	1.95	0.82
23:BB:141:G:H1	50:BT:2:ILE:HD12	1.42	0.82
12:CM:76:ILE:HG22	12:CM:80:MET:HE2	1.59	0.82
23:DB:1099:G:OP2	24:DI:3:LYS:HA	1.79	0.82
30:DY:25:GLY:HA3	30:DY:46:MET:HE1	1.61	0.82
21:AU:3:ILE:HD13	21:AU:19:LYS:HA	1.60	0.82
23:BB:1082:U:C4	23:BB:1086:A:C2	2.68	0.82
29:BE:143:LEU:HB3	29:BE:146:VAL:HG21	1.60	0.82
40:BH:131:SER:HA	40:BH:141:LYS:HA	1.60	0.82
50:BT:29:THR:HA	50:BT:86:THR:HA	1.62	0.82
8:CI:56:MET:HA	8:CI:59:LYS:HB2	1.61	0.82
14:CO:70:LEU:HD11	14:CO:77:ARG:HB2	1.62	0.82
38:DM:38:ARG:HH11	38:DM:38:ARG:HB3	1.43	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:DF:11:VAL:HG12	47:DF:12:VAL:H	1.43	0.82
21:CU:33:ARG:CZ	21:CU:34:ARG:HG2	2.10	0.81
8:AI:29:ILE:HA	8:AI:64:ILE:HB	1.61	0.81
47:BF:11:VAL:HG12	47:BF:12:VAL:H	1.45	0.81
23:DB:972:A:H3'	23:DB:973:A:H5''	1.60	0.81
40:DH:125:THR:HA	40:DH:146:VAL:HB	1.60	0.81
2:AC:69:THR:HG21	2:AC:75:VAL:HG21	1.62	0.81
6:AG:149:ALA:H	10:AK:55:ARG:HH21	1.25	0.81
8:AI:59:LYS:HB3	8:AI:60:LEU:HD23	1.62	0.81
23:BB:287:G:H2'	23:BB:288:U:C6	2.15	0.81
42:BN:101:GLY:HA2	42:BN:110:MET:H	1.44	0.81
1:CA:18:C:H4'	1:CA:1078:U:O2	1.79	0.81
3:CD:24:VAL:HG23	3:CD:25:ARG:H	1.44	0.81
8:CI:29:ILE:HA	8:CI:64:ILE:HB	1.60	0.81
8:CI:59:LYS:HB3	8:CI:60:LEU:HD23	1.61	0.81
23:DB:2886:A:H62	31:D0:39:ARG:NE	1.78	0.81
41:DJ:25:LEU:HD22	41:DJ:26:GLY:H	1.43	0.81
23:DB:1082:U:C4	23:DB:1086:A:C2	2.68	0.81
48:BG:17:LYS:HZ2	48:BG:18:ILE:H	1.29	0.81
23:DB:636:G:H3'	37:DL:128:THR:HG21	1.62	0.81
27:DK:71:ARG:HG3	27:DK:105:ARG:HH21	1.41	0.81
30:DY:8:GLN:HG2	30:DY:31:ILE:HA	1.62	0.81
4:AE:131:ASN:HD21	4:AE:133:ILE:HB	1.45	0.81
44:BQ:30:VAL:HG13	44:BQ:31:TYR:N	1.95	0.81
50:BT:11:LEU:HD21	50:BT:46:ALA:HB1	1.60	0.81
13:CN:63:CYS:HB2	13:CN:79:SER:HB3	1.62	0.81
23:DB:704:G:H2'	23:DB:726:G:H22	1.46	0.81
42:DN:101:GLY:HA2	42:DN:110:MET:H	1.43	0.81
40:BH:90:LEU:HD21	40:BH:146:VAL:HG11	1.63	0.81
1:CA:1412:C:H2'	1:CA:1413:A:C8	2.16	0.81
23:DB:1141:U:H4'	23:DB:1142:A:O4'	1.79	0.81
23:DB:1324:G:H1'	23:DB:1616:A:N6	1.95	0.81
25:DC:4:LYS:HD2	25:DC:5:CYS:N	1.95	0.81
40:DH:78:VAL:HB	40:DH:144:VAL:HG13	1.63	0.81
46:DU:46:LYS:HG2	46:DU:47:PRO:HD2	1.63	0.81
25:BC:144:GLU:HG3	25:BC:151:GLY:N	1.96	0.81
12:CM:106:ARG:HH12	12:CM:109:LYS:HD2	1.45	0.81
28:DP:20:ARG:HG3	28:DP:21:PRO:HD2	1.63	0.81
35:DV:9:ARG:NH2	35:DV:12:GLN:HA	1.95	0.81
50:DT:11:LEU:HD21	50:DT:46:ALA:HB1	1.60	0.81
3:AD:25:ARG:HH11	3:AD:26:ALA:H	1.26	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:141:G:N1	50:BT:2:ILE:HD12	1.95	0.81
24:BI:55:PRO:HD3	24:BI:74:PRO:HD3	1.62	0.81
25:BC:4:LYS:HD2	25:BC:5:CYS:N	1.94	0.81
25:BC:76:VAL:HG12	25:BC:114:GLN:HG2	1.61	0.81
23:DB:117:G:H5'	23:DB:126:A:H8	1.46	0.81
23:BB:9:G:H21	23:BB:10:A:H62	1.27	0.81
51:BZ:31:PRO:HB2	51:BZ:33:LEU:HD11	1.62	0.81
9:CJ:36:VAL:HG22	9:CJ:76:ILE:HG22	1.63	0.81
23:DB:1592:C:H2'	23:DB:1593:A:H8	1.46	0.81
48:DG:106:LEU:HD12	48:DG:151:ARG:HD3	1.61	0.81
23:BB:135:U:H2'	23:BB:136:G:C8	2.17	0.80
23:BB:1076:C:H4'	24:BI:94:LYS:HE3	1.61	0.80
45:BS:4:ILE:HG22	45:BS:106:VAL:HG13	1.62	0.80
18:CS:18:VAL:HG21	18:CS:43:MET:HB3	1.63	0.80
26:DD:91:THR:HG23	26:DD:92:VAL:H	1.46	0.80
47:DF:42:ALA:HA	47:DF:48:LEU:HD21	1.61	0.80
50:DT:29:THR:HA	50:DT:86:THR:HA	1.63	0.80
26:BD:105:LYS:HD2	26:BD:177:VAL:HG22	1.62	0.80
21:AU:33:ARG:CZ	21:AU:34:ARG:HG2	2.10	0.80
23:BB:62:U:H3'	23:BB:63:A:C8	2.17	0.80
23:BB:1381:G:H2'	23:BB:1382:G:H5'	1.63	0.80
38:BM:19:GLY:HA2	38:BM:97:GLN:HB2	1.61	0.80
23:DB:139:U:H3	50:DT:49:LYS:HZ1	1.25	0.80
26:DD:114:LYS:HE3	26:DD:116:LYS:NZ	1.96	0.80
38:DM:121:ALA:HA	38:DM:124:LEU:HD12	1.60	0.80
1:AA:411:A:N6	1:AA:413:G:H21	1.78	0.80
1:AA:1060:U:H4'	9:AJ:54:SER:HB2	1.63	0.80
9:AJ:36:VAL:HG22	9:AJ:76:ILE:HG22	1.61	0.80
21:CU:3:ILE:HD13	21:CU:19:LYS:HA	1.62	0.80
29:BE:188:MET:HE3	29:BE:193:VAL:HA	1.61	0.80
52:BW:18:LYS:HA	52:BW:36:ILE:HG12	1.64	0.80
23:DB:62:U:H3'	23:DB:63:A:C8	2.17	0.80
23:DB:138:U:O3'	23:DB:139:U:H3'	1.82	0.80
23:DB:858:G:N3	23:DB:2268:A:H2'	1.96	0.80
23:BB:775:G:H4'	23:BB:776:G:H5'	1.64	0.80
14:CO:24:SER:HB3	14:CO:27:VAL:HG23	1.64	0.80
4:AE:52:ALA:HB2	4:AE:61:LYS:HE2	1.64	0.80
35:BV:9:ARG:NH2	35:BV:12:GLN:HA	1.97	0.80
28:DP:110:LYS:HD2	28:DP:110:LYS:H	1.45	0.80
10:AK:111:ASP:HB2	21:AU:19:LYS:HE3	1.64	0.80
26:BD:148:GLN:HG3	26:BD:152:PRO:HG2	1.64	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:1381:G:H2'	23:DB:1382:G:H5'	1.64	0.80
24:DI:21:PRO:HB2	24:DI:22:PRO:HD3	1.64	0.80
46:DU:84:PHE:O	46:DU:85:ARG:HB2	1.79	0.80
47:DF:36:ASN:HA	47:DF:87:LYS:HA	1.64	0.80
22:BA:43:C:O2'	47:BF:91:ARG:HD2	1.81	0.80
23:BB:2311:A:H1'	47:BF:84:ILE:HD13	1.63	0.80
30:BY:8:GLN:HG2	30:BY:31:ILE:HA	1.62	0.80
47:BF:42:ALA:HA	47:BF:48:LEU:HD21	1.61	0.80
1:CA:411:A:N6	1:CA:413:G:H21	1.79	0.80
2:CC:69:THR:HG21	2:CC:75:VAL:HG21	1.64	0.80
49:DR:8:GLY:HA3	49:DR:23:GLU:HB2	1.64	0.80
13:AN:63:CYS:HB2	13:AN:79:SER:HB3	1.64	0.80
29:BE:46:GLN:HG3	29:BE:87:ALA:HB3	1.64	0.80
46:BU:46:LYS:HG2	46:BU:47:PRO:HD2	1.62	0.80
26:DD:113:SER:HB2	26:DD:168:GLU:H	1.45	0.80
2:AC:106:ARG:HD2	2:AC:106:ARG:H	1.47	0.79
14:AO:24:SER:HB3	14:AO:27:VAL:HG23	1.63	0.79
28:BP:110:LYS:H	28:BP:110:LYS:HD2	1.48	0.79
6:CG:12:LEU:HD22	6:CG:13:PRO:HD2	1.62	0.79
23:DB:1099:G:O4'	24:DI:3:LYS:C	2.24	0.79
25:DC:196:ASN:HD22	25:DC:199:HIS:HB2	1.47	0.79
29:DE:46:GLN:HG3	29:DE:87:ALA:HB3	1.64	0.79
52:DW:77:LYS:H	52:DW:77:LYS:HZ2	1.30	0.79
35:DV:4:ILE:HB	35:DV:63:ILE:HA	1.64	0.79
23:BB:1324:G:H1'	23:BB:1616:A:N6	1.96	0.79
23:BB:2148:G:H3'	23:BB:2149:U:O4'	1.83	0.79
6:CG:58:LEU:H	6:CG:58:LEU:HD23	1.47	0.79
29:DE:58:LYS:HE2	29:DE:60:TRP:HD1	1.46	0.79
43:BO:53:THR:HB	43:BO:65:THR:HG22	1.65	0.79
23:DB:855:G:N2	52:DW:23:LYS:HG2	1.97	0.79
49:BR:8:GLY:HA3	49:BR:23:GLU:HB2	1.65	0.79
3:CD:165:GLU:HG3	3:CD:166:LYS:H	1.46	0.79
20:CB:202:ASN:HD22	20:CB:204:ASP:H	1.29	0.79
22:DA:43:C:O2'	47:DF:91:ARG:HD2	1.81	0.79
23:DB:2264:C:H41	52:DW:11:ASN:HD21	1.30	0.79
2:AC:122:GLN:HB3	2:AC:127:VAL:HG21	1.64	0.79
24:BI:106:GLN:O	24:BI:110:GLN:HG3	1.83	0.79
4:CE:131:ASN:HD21	4:CE:133:ILE:HB	1.48	0.79
23:DB:354:A:H2'	23:DB:355:U:C6	2.17	0.79
43:DO:62:LEU:HD11	43:DO:70:ALA:HA	1.64	0.79
48:DG:17:LYS:HZ2	48:DG:17:LYS:HA	1.48	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AG:58:LEU:HD23	6:AG:58:LEU:H	1.48	0.79
26:BD:91:THR:HG23	26:BD:92:VAL:H	1.48	0.79
38:BM:121:ALA:HA	38:BM:124:LEU:HD12	1.63	0.79
40:DH:72:ILE:HD11	40:DH:140:ALA:HB3	1.64	0.79
48:DG:166:GLU:HG2	48:DG:168:VAL:HG23	1.65	0.79
24:BI:129:GLU:HB3	24:BI:133:ARG:HH12	1.46	0.79
25:BC:196:ASN:HD22	25:BC:199:HIS:HB2	1.48	0.79
27:BK:97:THR:C	27:BK:98:ARG:HE	1.91	0.79
41:BJ:1:MET:HG2	41:BJ:2:LYS:HG2	1.62	0.79
13:CN:68:ARG:HH11	13:CN:68:ARG:HB3	1.48	0.79
14:CO:89:ARG:HA	14:CO:89:ARG:HH11	1.48	0.79
23:DB:2471:A:HO2'	23:DB:2472:G:H8	1.31	0.79
25:DC:14:HIS:O	25:DC:203:VAL:HG11	1.83	0.79
25:DC:76:VAL:HG12	25:DC:114:GLN:HG2	1.63	0.79
29:BE:1:MET:HE3	29:BE:2:GLU:H	1.47	0.79
35:BV:42:LEU:HD12	35:BV:47:VAL:HG21	1.64	0.79
50:BT:39:THR:HG22	50:BT:42:GLU:HG2	1.63	0.79
52:BW:77:LYS:H	52:BW:77:LYS:NZ	1.81	0.79
2:CC:106:ARG:HD2	2:CC:106:ARG:H	1.48	0.79
20:CB:128:LEU:HD13	20:CB:129:THR:N	1.98	0.79
38:DM:19:GLY:HA2	38:DM:97:GLN:HB2	1.62	0.79
40:BH:27:ARG:HE	51:BZ:64:ILE:HD11	1.48	0.79
46:BU:85:ARG:HD3	46:BU:86:PHE:N	1.97	0.79
20:CB:62:ARG:HD2	20:CB:62:ARG:H	1.48	0.79
6:AG:149:ALA:H	10:AK:55:ARG:NH2	1.80	0.78
23:BB:280:U:H2'	23:BB:281:C:C6	2.18	0.78
23:BB:1019:U:H2'	23:BB:1020:A:C8	2.18	0.78
46:BU:39:ASN:HB3	46:BU:62:ALA:HB3	1.65	0.78
2:CC:122:GLN:HB3	2:CC:127:VAL:HG21	1.65	0.78
17:CR:19:GLU:HG3	17:CR:54:LEU:HD12	1.65	0.78
3:AD:146:GLU:HA	3:AD:149:LYS:HG2	1.64	0.78
6:AG:12:LEU:HD22	6:AG:13:PRO:HD2	1.65	0.78
23:BB:2073:C:H5''	25:BC:227:VAL:HG12	1.64	0.78
23:DB:742:A:H2'	23:DB:743:A:H8	1.46	0.78
27:DK:97:THR:C	27:DK:98:ARG:HE	1.91	0.78
23:BB:1176:U:H3'	23:BB:1177:G:H8	1.46	0.78
26:BD:107:VAL:HG13	26:BD:203:VAL:HG23	1.64	0.78
33:B1:46:VAL:HG22	33:B1:47:ILE:H	1.48	0.78
35:DV:42:LEU:HD12	35:DV:47:VAL:HG21	1.64	0.78
51:DZ:45:ARG:HE	51:DZ:47:VAL:HG12	1.49	0.78
2:AC:26:LYS:HG3	2:AC:27:GLU:H	1.47	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:742:A:H2'	23:BB:743:A:C8	2.18	0.78
24:BI:21:PRO:HB2	24:BI:22:PRO:HD3	1.63	0.78
40:BH:40:THR:H	40:BH:43:ASN:HD21	1.26	0.78
47:BF:36:ASN:HA	47:BF:87:LYS:HA	1.63	0.78
48:BG:166:GLU:HG2	48:BG:168:VAL:HG23	1.64	0.78
23:DB:1173:U:H2'	23:DB:1174:U:C6	2.18	0.78
40:DH:97:ARG:HB3	40:DH:112:LYS:HE2	1.65	0.78
18:AS:43:MET:HG3	18:AS:61:VAL:HG21	1.66	0.78
22:DA:98:G:H1	35:DV:14:LYS:HB2	1.48	0.78
37:DL:103:ILE:H	37:DL:103:ILE:HD12	1.47	0.78
44:DQ:91:ARG:CZ	49:DR:11:GLN:H	1.96	0.78
51:DZ:5:CYS:HB2	51:DZ:10:LYS:HB3	1.66	0.78
1:AA:1220:G:H21	18:AS:53:GLY:HA2	1.49	0.78
20:AB:202:ASN:HD22	20:AB:204:ASP:H	1.30	0.78
23:BB:2743:U:H2'	23:BB:2744:G:O4'	1.83	0.78
40:BH:94:ILE:HB	40:BH:121:VAL:HB	1.65	0.78
1:CA:203:G:H1'	1:CA:465:A:H61	1.49	0.78
10:CK:126:ARG:HB2	21:CU:33:ARG:HD2	1.65	0.78
20:CB:63:LYS:HA	20:CB:224:ARG:HH11	1.48	0.78
44:DQ:94:LEU:HD12	49:DR:13:ARG:HB2	1.66	0.78
13:AN:63:CYS:HB3	13:AN:67:GLY:H	1.48	0.78
17:AR:19:GLU:HG3	17:AR:54:LEU:HD12	1.65	0.78
23:BB:142:A:H2'	23:BB:143:C:C6	2.18	0.78
40:BH:82:SER:H	40:BH:146:VAL:HG13	1.47	0.78
1:CA:1412:C:H2'	1:CA:1413:A:H8	1.48	0.78
2:CC:26:LYS:HG3	2:CC:27:GLU:H	1.49	0.78
35:DV:16:ALA:HA	35:DV:19:ARG:HE	1.49	0.78
50:DT:39:THR:HG22	50:DT:42:GLU:HG2	1.65	0.78
10:AK:126:ARG:HB2	21:AU:33:ARG:HD2	1.63	0.78
40:BH:31:VAL:HB	40:BH:32:PRO:CD	2.11	0.78
48:BG:106:LEU:HD12	48:BG:151:ARG:HD3	1.65	0.78
25:DC:149:LYS:HD3	25:DC:152:GLN:HE22	1.49	0.78
29:DE:143:LEU:HB3	29:DE:146:VAL:HG21	1.62	0.78
52:DW:18:LYS:HA	52:DW:36:ILE:HG12	1.65	0.78
23:BB:972:A:H3'	23:BB:973:A:H5''	1.63	0.78
40:BH:130:VAL:HG21	40:BH:144:VAL:HG23	1.66	0.78
23:DB:2073:C:H5''	25:DC:227:VAL:HG12	1.66	0.78
24:DI:45:THR:HA	24:DI:48:ILE:HG22	1.66	0.78
47:DF:107:VAL:HG11	47:DF:175:PRO:HG3	1.65	0.78
34:B3:49:VAL:HG21	34:B3:54:LEU:HD13	1.64	0.78
40:BH:68:ARG:HH11	40:BH:134:VAL:HG21	1.48	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:DM:50:ARG:HA	38:DM:53:MET:HE3	1.65	0.78
40:DH:86:ASP:HB2	40:DH:89:LYS:HZ3	1.49	0.78
48:DG:68:ARG:HH12	48:DG:72:ASN:HD22	1.29	0.78
50:DT:48:GLN:HA	50:DT:48:GLN:HE21	1.48	0.78
52:DW:77:LYS:H	52:DW:77:LYS:NZ	1.82	0.78
36:D2:22:MET:HE2	36:D2:31:LEU:HD13	1.66	0.77
1:AA:337:G:H2'	1:AA:338:A:C8	2.19	0.77
48:BG:26:LYS:HB2	48:BG:32:LEU:HG	1.65	0.77
51:BZ:33:LEU:HG	51:BZ:52:SER:HB3	1.66	0.77
1:CA:1060:U:H4'	9:CJ:54:SER:HB2	1.65	0.77
35:DV:30:ILE:HD12	35:DV:38:LEU:HD23	1.64	0.77
23:BB:645:C:H4'	23:BB:646:U:OP2	1.84	0.77
23:BB:2264:C:H41	52:BW:11:ASN:HD21	1.32	0.77
1:CA:844:G:H2'	1:CA:845:A:C8	2.19	0.77
23:DB:62:U:H3'	23:DB:63:A:H8	1.47	0.77
23:DB:1019:U:H2'	23:DB:1020:A:C8	2.19	0.77
24:DI:72:THR:HG21	24:DI:112:LYS:HA	1.66	0.77
50:DT:67:VAL:HB	50:DT:76:ARG:HG2	1.66	0.77
23:BB:704:G:H2'	23:BB:726:G:H22	1.48	0.77
23:BB:1171:G:C4	23:BB:1172:C:H1'	2.20	0.77
27:BK:71:ARG:HG3	27:BK:105:ARG:HH21	1.48	0.77
28:BP:20:ARG:HG3	28:BP:21:PRO:HD2	1.64	0.77
1:CA:1343:G:H4'	8:CI:123:ARG:O	1.85	0.77
15:CP:52:LEU:HD21	15:CP:75:ILE:HG12	1.66	0.77
47:DF:8:LYS:HA	47:DF:12:VAL:HG21	1.65	0.77
47:DF:64:PRO:HA	47:DF:88:VAL:HG22	1.66	0.77
23:BB:1046:A:H3'	23:BB:1047:G:H5''	1.65	0.77
18:CS:5:LYS:C	18:CS:6:LYS:HD2	2.10	0.77
23:DB:668:A:H2'	23:DB:670:A:H62	1.49	0.77
23:DB:1099:G:H5''	24:DI:2:LYS:C	2.09	0.77
23:DB:2331:G:O2'	52:DW:40:ARG:HB2	1.85	0.77
20:AB:63:LYS:HA	20:AB:224:ARG:HH11	1.48	0.77
26:BD:106:LYS:HB3	26:BD:206:ALA:N	1.99	0.77
35:BV:72:VAL:HG12	35:BV:94:ALA:H	1.49	0.77
16:CQ:16:MET:HB2	16:CQ:19:SER:HB2	1.66	0.77
47:DF:72:SER:HB2	47:DF:80:GLN:HA	1.66	0.77
23:BB:1322:A:H4'	45:BS:82:MET:HE1	1.67	0.77
40:BH:40:THR:H	40:BH:43:ASN:ND2	1.82	0.77
42:BN:34:ILE:HB	42:BN:113:ILE:HG22	1.67	0.77
1:CA:108:G:H5'	1:CA:109:A:H5''	1.66	0.77
3:CD:90:LEU:HD21	3:CD:196:GLU:HB3	1.67	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:DK:54:LYS:H	27:DK:54:LYS:HD2	1.49	0.77
1:AA:1348:U:H4'	8:AI:121:ARG:HG3	1.67	0.77
23:BB:62:U:H3'	23:BB:63:A:H8	1.48	0.77
26:DD:105:LYS:HD2	26:DD:177:VAL:HG22	1.65	0.77
26:DD:114:LYS:HE3	26:DD:116:LYS:HZ2	1.49	0.77
51:DZ:33:LEU:HG	51:DZ:52:SER:HB3	1.66	0.77
24:BI:27:LEU:HD12	24:BI:32:VAL:HG11	1.65	0.77
11:CL:49:ARG:HG2	11:CL:89:LEU:HD21	1.66	0.77
23:DB:2615:U:H1'	31:D0:3:GLN:HB3	1.67	0.77
36:D2:31:LEU:HD23	36:D2:42:LEU:HD12	1.67	0.77
40:DH:131:SER:HB2	40:DH:141:LYS:HG3	1.67	0.77
42:DN:38:LEU:HB3	42:DN:39:PRO:HD3	1.66	0.77
12:AM:3:ILE:HA	12:AM:56:ARG:HG2	1.65	0.77
23:BB:27:G:N2	23:BB:512:G:H2'	2.00	0.77
25:BC:14:HIS:O	25:BC:203:VAL:HG11	1.84	0.77
36:B2:22:MET:HE2	36:B2:31:LEU:HD13	1.67	0.77
38:BM:19:GLY:N	38:BM:38:ARG:HH22	1.83	0.77
48:BG:16:VAL:HG13	48:BG:49:LEU:HD11	1.67	0.77
23:DB:1080:A:H2'	23:DB:1081:U:H6	1.49	0.77
26:DD:148:GLN:HG3	26:DD:152:PRO:HG2	1.67	0.77
1:AA:203:G:H1'	1:AA:465:A:H61	1.48	0.76
1:AA:239:U:OP1	1:AA:239:U:H4'	1.85	0.76
36:B2:19:ARG:HG2	36:B2:19:ARG:HH21	1.49	0.76
51:BZ:45:ARG:HE	51:BZ:47:VAL:HG12	1.50	0.76
24:DI:105:LEU:HD13	24:DI:129:GLU:HG2	1.65	0.76
23:BB:275:C:H2'	23:BB:276:U:O4'	1.86	0.76
23:BB:668:A:H2'	23:BB:670:A:H62	1.48	0.76
27:BK:105:ARG:HD3	27:BK:105:ARG:H	1.50	0.76
1:CA:1250:A:H4'	8:CI:69:GLY:H	1.50	0.76
37:DL:124:GLY:N	37:DL:143:GLU:HG3	2.01	0.76
43:DO:53:THR:HB	43:DO:65:THR:HG22	1.67	0.76
45:DS:66:ILE:HD13	45:DS:66:ILE:H	1.50	0.76
48:DG:26:LYS:HB2	48:DG:32:LEU:HG	1.67	0.76
1:AA:1323:G:H2'	1:AA:1324:A:H8	1.51	0.76
9:AJ:12:ALA:HB3	9:AJ:18:ILE:HB	1.68	0.76
23:BB:922:C:H1'	52:BW:22:VAL:HG21	1.67	0.76
23:BB:2769:U:H2'	23:BB:2770:G:C8	2.20	0.76
1:CA:337:G:H2'	1:CA:338:A:C8	2.19	0.76
34:D3:49:VAL:HG21	34:D3:54:LEU:HD13	1.66	0.76
40:DH:115:VAL:HB	40:DH:132:PHE:CD1	2.20	0.76
46:DU:39:ASN:HB3	46:DU:62:ALA:HB3	1.67	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AD:94:GLU:HG2	3:AD:185:PRO:HG3	1.66	0.76
14:AO:89:ARG:HA	14:AO:89:ARG:HH11	1.50	0.76
23:BB:2886:A:H62	31:B0:39:ARG:NE	1.84	0.76
32:B4:7:VAL:HG23	32:B4:35:GLN:HB2	1.68	0.76
40:BH:134:VAL:HG13	40:BH:135:HIS:H	1.49	0.76
47:BF:102:LEU:HD22	47:BF:103:ILE:H	1.50	0.76
23:DB:28:A:H61	23:DB:512:G:HI'	1.50	0.76
26:DD:106:LYS:HB3	26:DD:206:ALA:N	1.99	0.76
37:DL:23:ILE:H	37:DL:23:ILE:HD12	1.50	0.76
1:AA:108:G:H5'	1:AA:109:A:H5''	1.66	0.76
1:AA:1029:U:H2'	1:AA:1031:C:N3	2.01	0.76
43:BO:62:LEU:HD11	43:BO:70:ALA:HA	1.65	0.76
47:BF:72:SER:HB2	47:BF:80:GLN:HA	1.67	0.76
12:CM:3:ILE:HA	12:CM:56:ARG:HG2	1.66	0.76
23:DB:27:G:N2	23:DB:512:G:H2'	2.00	0.76
25:DC:196:ASN:ND2	25:DC:199:HIS:HB2	2.01	0.76
41:DJ:72:LYS:HB2	41:DJ:89:PHE:HB2	1.67	0.76
25:BC:143:VAL:HB	25:BC:153:LEU:HB2	1.67	0.76
27:BK:54:LYS:HD2	27:BK:54:LYS:H	1.50	0.76
35:DV:72:VAL:HG12	35:DV:94:ALA:H	1.49	0.76
40:DH:31:VAL:CB	40:DH:32:PRO:HD2	2.14	0.76
38:BM:50:ARG:HA	38:BM:53:MET:HE3	1.66	0.76
50:BT:53:VAL:HG11	50:BT:87:LEU:HD13	1.68	0.76
27:DK:76:VAL:H	28:DP:72:VAL:HG23	1.51	0.76
37:BL:103:ILE:HD12	37:BL:103:ILE:H	1.49	0.76
23:DB:845:A:H2'	23:DB:846:U:H5''	1.67	0.76
33:D1:46:VAL:HG22	33:D1:47:ILE:H	1.49	0.76
40:DH:90:LEU:HD11	40:DH:146:VAL:HG11	1.66	0.76
45:DS:52:GLU:HA	45:DS:55:ILE:HG22	1.68	0.76
5:AF:98:GLU:HG2	5:AF:99:ALA:N	1.99	0.76
23:BB:2269:G:H4'	52:BW:19:ARG:NH1	2.01	0.76
47:BF:8:LYS:HA	47:BF:12:VAL:HG21	1.67	0.76
47:BF:64:PRO:HA	47:BF:88:VAL:HG22	1.67	0.76
47:BF:107:VAL:HG11	47:BF:175:PRO:HG3	1.68	0.76
50:BT:67:VAL:HB	50:BT:76:ARG:HG2	1.66	0.76
1:CA:423:G:H2'	1:CA:424:G:O4'	1.85	0.76
23:DB:90:U:H3'	23:DB:91:A:H5''	1.67	0.76
42:DN:33:ILE:HG22	42:DN:114:GLU:HB2	1.68	0.76
46:DU:26:ASN:HD21	46:DU:34:ILE:HD12	1.51	0.76
3:AD:90:LEU:HD21	3:AD:196:GLU:HB3	1.67	0.76
23:BB:28:A:H61	23:BB:512:G:HI'	1.51	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BY:12:ALA:HA	30:BY:15:ARG:HD3	1.65	0.76
35:BV:16:ALA:HA	35:BV:19:ARG:HE	1.51	0.76
36:D2:19:ARG:HG2	36:D2:19:ARG:HH21	1.51	0.76
40:DH:31:VAL:HB	40:DH:32:PRO:CD	2.11	0.76
48:DG:9:VAL:HA	48:DG:48:THR:HG22	1.67	0.76
48:DG:16:VAL:HG13	48:DG:49:LEU:HD11	1.68	0.76
8:CI:51:LEU:HB3	8:CI:56:MET:HB2	1.68	0.75
9:CJ:57:VAL:HG22	9:CJ:58:ASN:H	1.51	0.75
23:DB:1437:C:H2'	23:DB:1438:U:C6	2.20	0.75
47:DF:62:GLN:HG3	47:DF:91:ARG:HH11	1.49	0.75
47:DF:64:PRO:HA	47:DF:88:VAL:CG2	2.16	0.75
23:BB:923:G:H1'	52:BW:23:LYS:HZ2	1.49	0.75
28:BP:61:ARG:HH21	28:BP:61:ARG:HB3	1.51	0.75
31:B0:42:ILE:HD11	42:BN:98:LEU:HD12	1.66	0.75
35:BV:30:ILE:HD12	35:BV:38:LEU:HD23	1.67	0.75
37:BL:89:VAL:HG23	37:BL:123:ARG:HG3	1.68	0.75
41:BJ:72:LYS:HB2	41:BJ:89:PHE:HB2	1.68	0.75
23:DB:775:G:H4'	23:DB:776:G:H5'	1.66	0.75
23:DB:1098:A:H2'	24:DI:4:VAL:N	2.02	0.75
27:DK:105:ARG:HD3	27:DK:105:ARG:H	1.50	0.75
29:DE:176:ASP:HB3	29:DE:179:SER:HB2	1.67	0.75
46:DU:85:ARG:HD3	46:DU:86:PHE:N	2.00	0.75
23:BB:90:U:H3'	23:BB:91:A:H5''	1.67	0.75
23:BB:1060:U:C5	24:BI:131:THR:HG22	2.21	0.75
40:BH:142:VAL:HG12	40:BH:143:ILE:H	1.48	0.75
48:DG:167:VAL:HG23	48:DG:168:VAL:H	1.51	0.75
23:BB:45:G:H5'	23:BB:46:G:H5'	1.69	0.75
37:BL:47:ARG:HB3	37:BL:47:ARG:HH21	1.50	0.75
3:CD:25:ARG:HD3	3:CD:26:ALA:N	2.02	0.75
8:CI:71:ILE:H	8:CI:71:ILE:HD12	1.51	0.75
13:CN:63:CYS:HB3	13:CN:67:GLY:H	1.49	0.75
26:DD:114:LYS:HB2	26:DD:116:LYS:HE3	1.68	0.75
37:DL:89:VAL:HG23	37:DL:123:ARG:HG3	1.68	0.75
1:AA:844:G:H2'	1:AA:845:A:C8	2.21	0.75
23:BB:856:G:H1'	52:BW:23:LYS:HB3	1.68	0.75
43:BO:51:ALA:HB3	43:BO:78:VAL:HG22	1.68	0.75
48:BG:167:VAL:HG23	48:BG:168:VAL:H	1.50	0.75
1:CA:1323:G:H2'	1:CA:1324:A:H8	1.50	0.75
23:DB:2531:A:H5'	48:DG:173:ALA:HB1	1.69	0.75
48:DG:26:LYS:HG2	48:DG:27:GLY:N	2.01	0.75
23:BB:955:U:OP1	38:BM:86:LYS:HE3	1.87	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BD:151:THR:HB	26:BD:152:PRO:HD3	1.69	0.75
42:BN:38:LEU:HB3	42:BN:39:PRO:HD3	1.66	0.75
1:CA:239:U:H4'	1:CA:239:U:OP1	1.85	0.75
23:DB:645:C:H4'	23:DB:646:U:OP2	1.84	0.75
23:DB:1168:G:H2'	23:DB:1169:A:C8	2.21	0.75
20:AB:60:ALA:HA	20:AB:64:GLY:HA3	1.69	0.75
1:CA:1220:G:H21	18:CS:53:GLY:HA2	1.51	0.75
29:DE:155:GLU:HA	29:DE:158:PHE:HB3	1.69	0.75
42:DN:34:ILE:HB	42:DN:113:ILE:HG22	1.67	0.75
44:DQ:77:LYS:HE2	44:DQ:116:LEU:HD23	1.69	0.75
3:AD:192:ALA:HB3	3:AD:194:ILE:HG22	1.67	0.75
16:AQ:16:MET:HB2	16:AQ:19:SER:HB2	1.68	0.75
23:BB:547:A:H3'	23:BB:548:G:C8	2.21	0.75
29:BE:176:ASP:HB3	29:BE:179:SER:HB2	1.67	0.75
35:BV:80:HIS:HD2	35:BV:82:TYR:H	1.34	0.75
37:BL:116:VAL:HG13	37:BL:117:THR:H	1.52	0.75
47:BF:128:SER:HB3	47:BF:154:THR:HG23	1.69	0.75
8:AI:20:ILE:HD13	8:AI:85:ALA:HB3	1.69	0.75
23:BB:845:A:H2'	23:BB:846:U:H5''	1.67	0.75
23:BB:1021:A:H61	23:BB:1142:A:N6	1.84	0.75
23:BB:2787:C:H1'	26:BD:63:PRO:HG3	1.69	0.75
44:BQ:93:ILE:HG23	44:BQ:94:LEU:HD22	1.67	0.75
45:BS:66:ILE:H	45:BS:66:ILE:HD13	1.51	0.75
3:CD:94:GLU:HG2	3:CD:185:PRO:HG3	1.68	0.75
20:CB:60:ALA:HA	20:CB:64:GLY:HA3	1.67	0.75
23:DB:281:C:H2'	23:DB:282:A:C8	2.22	0.75
23:DB:2723:C:H5''	42:DN:1:MET:HE2	1.67	0.75
29:DE:188:MET:HE3	29:DE:193:VAL:HA	1.67	0.75
22:BA:54:G:H21	47:BF:25:MET:HE3	1.51	0.74
26:BD:114:LYS:HE3	26:BD:116:LYS:NZ	2.01	0.74
33:B1:8:ILE:HD11	33:B1:52:LYS:HB2	1.69	0.74
48:BG:15:ASP:HB3	48:BG:25:ILE:HA	1.69	0.74
1:CA:1029:U:H2'	1:CA:1031:C:N3	2.02	0.74
23:DB:45:G:H5'	23:DB:46:G:H5'	1.67	0.74
30:DY:12:ALA:HA	30:DY:15:ARG:HD3	1.67	0.74
10:AK:22:ILE:HD12	10:AK:85:VAL:HG22	1.67	0.74
18:AS:18:VAL:HG21	18:AS:43:MET:HE2	1.68	0.74
23:BB:1019:U:H2'	23:BB:1020:A:H8	1.51	0.74
23:BB:2472:G:H2'	23:BB:2475:C:H42	1.51	0.74
26:BD:104:VAL:HA	26:BD:106:LYS:HZ1	1.51	0.74
49:BR:14:VAL:HG21	49:BR:98:ILE:HG12	1.66	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:1081:U:H5'	24:DI:126:ARG:NH1	2.02	0.74
18:AS:5:LYS:C	18:AS:6:LYS:HD2	2.11	0.74
35:BV:14:LYS:HE3	35:BV:18:ARG:HH22	1.52	0.74
3:CD:22:SER:HB2	3:CD:109:THR:HG22	1.69	0.74
18:CS:43:MET:O	18:CS:46:LEU:HB2	1.87	0.74
26:DD:105:LYS:HE3	26:DD:176:ASP:HB3	1.68	0.74
43:DO:5:SER:HA	43:DO:8:ILE:HD12	1.69	0.74
47:DF:31:GLU:O	47:DF:32:LYS:HD3	1.88	0.74
1:AA:1343:G:H4'	8:AI:123:ARG:O	1.86	0.74
20:AB:62:ARG:HD2	20:AB:62:ARG:H	1.51	0.74
23:BB:345:A:H1'	23:BB:346:A:H2	1.50	0.74
26:BD:62:LYS:H	26:BD:62:LYS:HD2	1.53	0.74
40:BH:44:ILE:HA	40:BH:51:ARG:HH22	1.51	0.74
41:BJ:23:LYS:HE3	41:BJ:142:ILE:HG23	1.70	0.74
3:CD:192:ALA:HB3	3:CD:194:ILE:HG22	1.69	0.74
18:CS:18:VAL:HG21	18:CS:43:MET:HE2	1.70	0.74
23:DB:1099:G:H5''	24:DI:3:LYS:N	2.03	0.74
24:DI:55:PRO:HD3	24:DI:74:PRO:HD3	1.68	0.74
38:DM:19:GLY:N	38:DM:38:ARG:HH22	1.85	0.74
23:BB:2185:U:H2'	23:BB:2186:G:C8	2.23	0.74
5:CF:79:ARG:NH2	5:CF:87:SER:HB3	2.02	0.74
10:CK:83:VAL:HB	10:CK:109:ILE:HG23	1.67	0.74
23:DB:1387:A:H2'	23:DB:1388:G:H8	1.52	0.74
32:D4:7:VAL:HG23	32:D4:35:GLN:HB2	1.69	0.74
47:DF:102:LEU:HD22	47:DF:103:ILE:H	1.52	0.74
1:AA:973:G:H3'	1:AA:974:A:H5''	1.70	0.74
20:AB:27:LYS:HB3	20:AB:28:PRO:HD3	1.70	0.74
23:BB:855:G:H21	52:BW:23:LYS:CG	1.91	0.74
26:BD:105:LYS:HE3	26:BD:176:ASP:HB3	1.68	0.74
33:B1:7:LYS:HA	33:B1:23:THR:HG22	1.70	0.74
35:BV:44:HIS:HE1	35:BV:86:LEU:H	1.33	0.74
40:BH:108:VAL:HG12	40:BH:109:GLU:H	1.53	0.74
1:CA:1348:U:H4'	8:CI:121:ARG:HG3	1.68	0.74
5:CF:98:GLU:HG2	5:CF:99:ALA:N	2.02	0.74
17:CR:34:GLU:HB2	21:CU:18:PHE:HZ	1.51	0.74
20:AB:87:ASP:HB2	20:AB:224:ARG:CZ	2.17	0.74
20:AB:95:TRP:HH2	20:AB:100:LEU:HB2	1.52	0.74
23:BB:2723:C:H5''	42:BN:1:MET:HE2	1.69	0.74
27:BK:112:PHE:O	27:BK:115:ILE:HG22	1.87	0.74
40:DH:27:ARG:NH1	51:DZ:60:ASP:HA	2.03	0.74
23:BB:125:A:H3'	23:BB:126:A:H5''	1.69	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:254:G:H22	34:B3:7:ARG:HH21	1.35	0.74
45:BS:84:ARG:HB3	45:BS:96:ILE:HG23	1.70	0.74
46:BU:26:ASN:HD21	46:BU:34:ILE:HD12	1.52	0.74
48:BG:26:LYS:HG2	48:BG:27:GLY:N	2.02	0.74
9:CJ:12:ALA:HB3	9:CJ:18:ILE:HB	1.69	0.74
23:DB:1021:A:H61	23:DB:1142:A:N6	1.86	0.74
37:DL:47:ARG:HB3	37:DL:47:ARG:HH21	1.53	0.74
44:DQ:63:ARG:HH22	44:DQ:96:ASP:HA	1.53	0.74
13:AN:27:LYS:HG3	13:AN:28:ALA:H	1.53	0.74
23:BB:2267:A:C8	23:BB:2267:A:C3'	2.71	0.74
25:BC:149:LYS:HD3	25:BC:152:GLN:HE22	1.50	0.74
29:BE:58:LYS:HE2	29:BE:60:TRP:HD1	1.52	0.74
39:BX:29:ARG:NH1	50:BT:12:ARG:HE	1.85	0.74
13:CN:27:LYS:HG3	13:CN:28:ALA:H	1.51	0.74
23:DB:28:A:N6	23:DB:512:G:H1'	2.03	0.74
23:DB:2743:U:H2'	23:DB:2744:G:H5''	1.68	0.74
46:DU:35:VAL:HB	46:DU:38:ILE:HG21	1.70	0.74
8:AI:51:LEU:HB3	8:AI:56:MET:HB2	1.69	0.74
23:BB:1082:U:N3	23:BB:1086:A:C2	2.56	0.74
23:BB:1107:G:H2'	23:BB:1108:U:C6	2.23	0.74
44:BQ:24:TYR:O	44:BQ:27:ARG:HB2	1.88	0.74
46:BU:35:VAL:HB	46:BU:38:ILE:HG21	1.69	0.74
50:BT:48:GLN:HE21	50:BT:48:GLN:HA	1.52	0.74
52:BW:77:LYS:H	52:BW:77:LYS:HZ2	1.35	0.74
18:CS:43:MET:HG3	18:CS:61:VAL:HG21	1.67	0.74
3:AD:25:ARG:HD3	3:AD:26:ALA:N	2.03	0.73
23:BB:1437:C:H2'	23:BB:1438:U:C6	2.23	0.73
23:BB:1592:C:H2'	23:BB:1593:A:H8	1.53	0.73
29:BE:155:GLU:HA	29:BE:158:PHE:HB3	1.68	0.73
23:DB:743:A:O2'	23:DB:744:U:H5'	1.88	0.73
23:DB:2148:G:H2'	23:DB:2148:G:N3	2.03	0.73
37:DL:116:VAL:HG13	37:DL:117:THR:H	1.53	0.73
42:DN:97:ILE:HD12	42:DN:98:LEU:N	2.03	0.73
52:DW:51:GLY:HA3	52:DW:59:PHE:CB	2.17	0.73
7:AH:11:THR:HG22	7:AH:14:ARG:HH12	1.52	0.73
21:AU:36:PHE:CB	21:AU:40:PRO:HD3	2.17	0.73
1:CA:373:A:H1'	1:CA:481:G:N3	2.03	0.73
23:DB:2039:U:H2'	23:DB:2040:G:H8	1.51	0.73
42:DN:85:PRO:HA	42:DN:88:ALA:HB2	1.70	0.73
47:DF:109:ARG:HB3	47:DF:135:ILE:HD12	1.68	0.73
49:DR:72:VAL:HG23	49:DR:89:HIS:HB3	1.70	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:743:A:O2'	23:BB:744:U:H5'	1.88	0.73
24:BI:122:GLU:O	24:BI:126:ARG:HG3	1.88	0.73
27:BK:99:ILE:HG12	27:BK:115:ILE:HG13	1.68	0.73
13:CN:25:GLU:HB2	13:CN:29:ILE:HD11	1.69	0.73
20:CB:202:ASN:HD22	20:CB:203:ASP:N	1.87	0.73
21:CU:24:LYS:HD2	21:CU:25:ALA:N	2.03	0.73
23:DB:717:C:H3'	23:DB:718:A:H5''	1.70	0.73
23:DB:2472:G:H2'	23:DB:2475:C:H42	1.53	0.73
24:DI:20:SER:HB3	24:DI:21:PRO:HD3	1.68	0.73
27:DK:99:ILE:HG12	27:DK:115:ILE:HG13	1.70	0.73
41:DJ:23:LYS:HE3	41:DJ:142:ILE:HG23	1.70	0.73
44:DQ:24:TYR:O	44:DQ:27:ARG:HB2	1.88	0.73
47:DF:128:SER:HB3	47:DF:154:THR:HG23	1.71	0.73
1:AA:373:A:H1'	1:AA:481:G:N3	2.03	0.73
5:AF:64:VAL:HG12	5:AF:65:GLU:H	1.52	0.73
5:AF:79:ARG:NH2	5:AF:87:SER:HB3	2.03	0.73
6:AG:149:ALA:N	10:AK:55:ARG:HH21	1.85	0.73
23:BB:2867:G:H2'	23:BB:2867:G:N3	2.04	0.73
1:CA:859:G:H2'	1:CA:860:A:C8	2.24	0.73
1:CA:1004:A:H2'	1:CA:1005:A:O4'	1.89	0.73
11:CL:78:VAL:HG12	11:CL:101:LEU:HD13	1.69	0.73
23:DB:616:A:H3'	23:DB:617:G:H8	1.54	0.73
23:DB:713:G:H21	23:DB:718:A:H2	1.36	0.73
23:DB:2267:A:C8	23:DB:2267:A:C3'	2.70	0.73
25:DC:250:GLN:CD	25:DC:250:GLN:H	1.96	0.73
45:DS:5:ALA:HB3	45:DS:54:ALA:HB2	1.71	0.73
23:BB:2108:A:H2'	23:BB:2109:U:C4'	2.17	0.73
24:BI:20:SER:HB3	24:BI:21:PRO:HD3	1.69	0.73
47:BF:61:GLY:HA3	47:BF:94:ARG:HD2	1.71	0.73
47:BF:109:ARG:HB3	47:BF:135:ILE:HD12	1.69	0.73
23:DB:2769:U:H2'	23:DB:2770:G:C8	2.22	0.73
26:DD:62:LYS:HD2	26:DD:62:LYS:H	1.54	0.73
43:DO:67:ASN:H	43:DO:70:ALA:HB3	1.52	0.73
9:AJ:57:VAL:HG22	9:AJ:58:ASN:H	1.53	0.73
23:BB:717:C:H3'	23:BB:718:A:H5''	1.69	0.73
23:BB:1485:U:H2'	23:BB:1486:U:C6	2.23	0.73
23:BB:2039:U:H2'	23:BB:2040:G:H8	1.53	0.73
32:B4:24:ARG:HG2	32:B4:36:ARG:HG3	1.71	0.73
51:BZ:5:CYS:HB2	51:BZ:10:LYS:HB3	1.69	0.73
23:DB:350:G:H2'	23:DB:351:C:O4'	1.89	0.73
23:DB:1176:U:H2'	23:DB:1177:G:C8	2.22	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:2496:C:OP1	38:DM:82:MET:HB2	1.89	0.73
28:DP:61:ARG:HB3	28:DP:61:ARG:HH21	1.53	0.73
44:DQ:26:ALA:O	44:DQ:30:VAL:HG12	1.89	0.73
48:DG:84:LYS:HG2	48:DG:85:LYS:H	1.54	0.73
10:AK:82:GLU:HG2	10:AK:108:ASN:HB2	1.69	0.73
23:BB:1486:U:H2'	23:BB:1487:U:C6	2.23	0.73
23:DB:1084:A:H1'	23:DB:1106:G:H5'	1.70	0.73
40:DH:46:PHE:HA	40:DH:50:ARG:NH2	2.03	0.73
40:DH:62:LEU:HG	40:DH:66:ASN:HD22	1.54	0.73
52:DW:23:LYS:NZ	52:DW:24:ARG:HG3	2.04	0.73
1:AA:922:G:H4'	4:AE:24:VAL:HA	1.70	0.73
1:AA:1004:A:H2'	1:AA:1005:A:O4'	1.88	0.73
1:AA:1250:A:H4'	8:AI:69:GLY:H	1.52	0.73
23:BB:320:A:H2'	29:BE:131:THR:OG1	1.89	0.73
37:BL:124:GLY:N	37:BL:143:GLU:HG3	2.03	0.73
52:BW:23:LYS:HZ3	52:BW:24:ARG:HG3	1.53	0.73
23:DB:1019:U:H2'	23:DB:1020:A:H8	1.52	0.73
33:D1:8:ILE:HD11	33:D1:52:LYS:HB2	1.70	0.73
49:DR:14:VAL:HG21	49:DR:98:ILE:HG12	1.70	0.73
1:AA:93:U:H3'	1:AA:94:G:H5''	1.69	0.73
18:AS:43:MET:O	18:AS:46:LEU:HB2	1.89	0.73
23:BB:1812:U:H2'	23:BB:1813:G:H8	1.53	0.73
26:BD:5:VAL:H	26:BD:32:ASN:ND2	1.87	0.73
42:BN:33:ILE:HG22	42:BN:114:GLU:HB2	1.69	0.73
43:BO:67:ASN:H	43:BO:70:ALA:HB3	1.54	0.73
52:BW:39:GLN:HG2	52:BW:40:ARG:N	2.04	0.73
1:CA:437:U:H2'	1:CA:438:U:O4'	1.89	0.73
1:CA:843:U:H5'	1:CA:844:G:N7	2.04	0.73
8:CI:51:LEU:HD13	8:CI:56:MET:HG2	1.71	0.73
20:CB:95:TRP:HH2	20:CB:100:LEU:HB2	1.54	0.73
23:DB:856:G:H1'	52:DW:23:LYS:HB3	1.71	0.73
23:DB:1082:U:N3	23:DB:1086:A:C2	2.57	0.73
23:DB:2144:G:O2'	23:DB:2145:C:H5'	1.89	0.73
31:D0:42:ILE:HD11	42:DN:98:LEU:HD12	1.69	0.73
1:AA:662:U:H2'	1:AA:663:A:C8	2.24	0.73
4:AE:44:ARG:HA	4:AE:71:ILE:O	1.89	0.73
13:AN:40:ARG:HH22	18:AS:6:LYS:CB	2.01	0.73
18:AS:48:ILE:HG22	18:AS:49:ALA:H	1.54	0.73
23:BB:2322:A:N6	23:BB:2333:A:N6	2.37	0.73
10:CK:28:ASN:ND2	10:CK:29:THR:H	1.86	0.73
10:CK:80:ASN:HD22	10:CK:80:ASN:H	1.35	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:90:U:H3'	23:DB:91:A:C5'	2.19	0.73
23:DB:1283:G:H22	23:DB:1286:A:H5'	1.54	0.73
23:DB:2867:G:H2'	23:DB:2867:G:N3	2.04	0.73
24:DI:105:LEU:HD11	24:DI:139:VAL:HG21	1.68	0.73
48:DG:15:ASP:HB3	48:DG:25:ILE:HA	1.71	0.73
1:AA:522:C:H41	11:AL:49:ARG:NH2	1.86	0.72
13:AN:68:ARG:HH11	13:AN:68:ARG:HB3	1.54	0.72
20:AB:128:LEU:HD13	20:AB:129:THR:H	1.52	0.72
38:BM:82:MET:HE3	38:BM:83:GLY:H	1.54	0.72
47:BF:62:GLN:HG3	47:BF:91:ARG:HH11	1.53	0.72
7:CH:11:THR:HG22	7:CH:14:ARG:HH12	1.53	0.72
41:DJ:117:ALA:HA	41:DJ:120:ARG:HD2	1.70	0.72
20:AB:65:LYS:HB2	20:AB:158:ASP:H	1.54	0.72
24:BI:33:ASN:HD21	24:BI:64:ARG:HH11	1.38	0.72
45:BS:52:GLU:HA	45:BS:55:ILE:HG22	1.71	0.72
47:BF:64:PRO:HA	47:BF:88:VAL:CG2	2.18	0.72
1:CA:764:C:H2'	1:CA:765:G:H5'	1.70	0.72
1:CA:973:G:H3'	1:CA:974:A:H5''	1.71	0.72
20:CB:87:ASP:HB2	20:CB:224:ARG:CZ	2.19	0.72
23:DB:919:U:H2'	23:DB:920:A:C8	2.24	0.72
23:DB:1486:U:H2'	23:DB:1487:U:C6	2.25	0.72
31:D0:38:LEU:HB3	31:D0:41:HIS:NE2	2.05	0.72
8:AI:25:GLY:HA2	8:AI:60:LEU:O	1.88	0.72
13:AN:25:GLU:HB2	13:AN:29:ILE:HD11	1.69	0.72
23:BB:704:G:H1'	23:BB:727:A:H61	1.54	0.72
23:BB:704:G:H1'	23:BB:727:A:N6	2.04	0.72
23:BB:1469:A:H2'	23:BB:1470:A:C8	2.24	0.72
23:BB:1785:A:H2'	23:BB:1787:A:N7	2.04	0.72
23:BB:2615:U:H1'	31:B0:3:GLN:HB3	1.71	0.72
43:BO:39:VAL:HB	43:BO:49:VAL:HG22	1.71	0.72
45:BS:5:ALA:HB3	45:BS:54:ALA:HB2	1.71	0.72
50:BT:54:GLU:HG3	50:BT:90:GLY:H	1.52	0.72
7:CH:51:GLU:HG2	7:CH:52:GLY:H	1.55	0.72
10:CK:82:GLU:HG2	10:CK:108:ASN:HB2	1.71	0.72
23:DB:71:A:H4'	23:DB:72:U:H5'	1.72	0.72
23:DB:2461:A:H2'	23:DB:2462:C:C6	2.24	0.72
32:D4:24:ARG:HG2	32:D4:36:ARG:HG3	1.69	0.72
44:DQ:109:VAL:HG12	44:DQ:113:LYS:HE3	1.71	0.72
1:AA:423:G:H2'	1:AA:424:G:O4'	1.88	0.72
13:AN:30:ILE:HG22	13:AN:41:TRP:HB2	1.72	0.72
23:BB:1387:A:H5'	23:BB:1469:A:H1'	1.70	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:B0:27:LEU:H	31:B0:27:LEU:HD12	1.54	0.72
44:BQ:77:LYS:HE2	44:BQ:116:LEU:HD23	1.71	0.72
47:BF:149:ARG:HA	47:BF:149:ARG:HH11	1.52	0.72
23:DB:452:G:OP1	29:DE:53:THR:HG23	1.90	0.72
23:DB:2787:C:H1'	26:DD:63:PRO:HG3	1.71	0.72
23:DB:2859:G:H2'	23:DB:2860:A:C8	2.25	0.72
42:DN:29:VAL:HG13	42:DN:83:LEU:HD21	1.71	0.72
22:BA:32:U:H4'	22:BA:52:A:H62	1.55	0.72
23:BB:287:G:H2'	23:BB:288:U:H6	1.55	0.72
23:BB:458:G:N2	23:BB:469:G:H2'	2.04	0.72
23:BB:742:A:H2'	23:BB:743:A:H8	1.54	0.72
29:BE:58:LYS:C	29:BE:60:TRP:H	1.97	0.72
31:B0:38:LEU:HB3	31:B0:41:HIS:NE2	2.05	0.72
37:BL:51:GLU:HG3	37:BL:56:PRO:HA	1.69	0.72
44:BQ:63:ARG:HH22	44:BQ:96:ASP:HA	1.54	0.72
23:DB:172:A:H2'	23:DB:173:A:C8	2.25	0.72
23:DB:1301:A:O2'	23:DB:1302:A:H2'	1.89	0.72
23:DB:2269:G:H4'	52:DW:19:ARG:NH1	2.04	0.72
39:DX:37:LEU:HD23	39:DX:39:GLN:H	1.54	0.72
45:BS:24:ILE:HD11	45:BS:36:LEU:HD11	1.72	0.72
1:CA:522:C:H41	11:CL:49:ARG:NH2	1.88	0.72
1:CA:1137:C:H1'	1:CA:1138:G:C2	2.25	0.72
23:DB:141:G:H3'	23:DB:141:G:N3	2.05	0.72
37:DL:29:LYS:HG3	37:DL:30:THR:HG23	1.69	0.72
37:DL:51:GLU:HG3	37:DL:56:PRO:HA	1.70	0.72
23:BB:90:U:H3'	23:BB:91:A:C5'	2.19	0.72
23:DB:2498:C:O2'	23:DB:2499:C:H5'	1.89	0.72
45:DS:84:ARG:HB3	45:DS:96:ILE:HG23	1.72	0.72
51:DZ:6:GLN:NE2	51:DZ:50:ARG:H	1.87	0.72
8:AI:55:ASP:HB2	8:AI:59:LYS:HG3	1.72	0.72
20:AB:202:ASN:HD22	20:AB:203:ASP:N	1.87	0.72
23:BB:137:U:H2'	23:BB:138:U:C6	2.23	0.72
30:BY:16:LEU:HD22	30:BY:16:LEU:H	1.55	0.72
38:BM:67:VAL:HG11	38:BM:102:LEU:HD13	1.71	0.72
40:BH:31:VAL:CB	40:BH:32:PRO:HD2	2.14	0.72
41:BJ:117:ALA:HA	41:BJ:120:ARG:HD2	1.71	0.72
44:BQ:26:ALA:O	44:BQ:30:VAL:HG12	1.89	0.72
52:BW:51:GLY:HA3	52:BW:59:PHE:CB	2.19	0.72
8:CI:48:ARG:HA	8:CI:51:LEU:HD12	1.71	0.72
23:DB:704:G:H1'	23:DB:727:A:N6	2.04	0.72
25:DC:143:VAL:HB	25:DC:153:LEU:HB2	1.72	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DS:83:LYS:HD3	45:DS:97:LEU:HD11	1.71	0.72
50:DT:53:VAL:HG11	50:DT:87:LEU:HD13	1.70	0.72
1:AA:843:U:H5'	1:AA:844:G:N7	2.04	0.72
7:AH:118:ALA:HB3	7:AH:120:LEU:HD22	1.72	0.72
8:AI:51:LEU:HD13	8:AI:56:MET:HG2	1.71	0.72
13:AN:60:ARG:HE	13:AN:62:ARG:HG2	1.54	0.72
23:BB:28:A:N6	23:BB:512:G:H1'	2.05	0.72
24:BI:77:VAL:HA	24:BI:80:LYS:HE2	1.72	0.72
32:B4:3:VAL:HG23	32:B4:4:ARG:H	1.55	0.72
19:CT:2:ASN:ND2	19:CT:3:ILE:H	1.86	0.72
20:CB:185:ILE:HA	20:CB:199:ILE:HB	1.72	0.72
23:DB:126:A:H5'	36:D2:19:ARG:HG3	1.72	0.72
23:DB:704:G:H1'	23:DB:727:A:H61	1.55	0.72
23:DB:899:A:H3'	23:DB:900:A:H8	1.54	0.72
26:DD:14:ILE:HA	28:DP:11:GLN:HE22	1.55	0.72
29:DE:1:MET:HE3	29:DE:2:GLU:H	1.53	0.72
35:DV:80:HIS:HD2	35:DV:82:TYR:H	1.35	0.72
6:AG:78:ARG:HG2	6:AG:83:THR:HG22	1.72	0.72
8:AI:24:ASN:ND2	8:AI:25:GLY:H	1.88	0.72
9:AJ:55:PRO:HA	13:AN:80:ARG:NH2	2.04	0.72
10:AK:92:ARG:HH21	21:AU:24:LYS:HG2	1.55	0.72
23:BB:713:G:H21	23:BB:718:A:H2	1.36	0.72
23:BB:1655:A:H5'	26:BD:118:PHE:HB2	1.72	0.72
23:BB:2788:C:H2'	23:BB:2789:C:C6	2.25	0.72
40:BH:68:ARG:HD3	40:BH:134:VAL:HG11	1.71	0.72
44:BQ:109:VAL:HG12	44:BQ:113:LYS:HE3	1.72	0.72
47:BF:102:LEU:HD22	47:BF:103:ILE:N	2.03	0.72
52:BW:49:ASN:HB2	52:BW:61:LYS:H	1.55	0.72
20:CB:31:PHE:HB2	20:CB:41:ASN:HA	1.71	0.72
23:DB:1469:A:H2'	23:DB:1470:A:H8	1.55	0.72
35:DV:44:HIS:HE1	35:DV:86:LEU:H	1.33	0.72
40:DH:87:GLU:H	40:DH:89:LYS:HZ2	1.37	0.72
41:DJ:29:ALA:HA	41:DJ:32:LEU:HD12	1.72	0.72
1:AA:946:A:H2'	1:AA:947:G:C8	2.25	0.71
4:AE:106:ALA:HB1	4:AE:110:MET:HB3	1.72	0.71
23:BB:674:G:H5''	29:BE:71:GLY:N	2.05	0.71
26:BD:186:LEU:HD21	28:BP:3:ILE:HD11	1.70	0.71
40:BH:116:ARG:HB2	40:BH:116:ARG:HH11	1.55	0.71
10:CK:17:ASP:HB3	10:CK:80:ASN:ND2	2.05	0.71
12:CM:70:ARG:NH2	47:DF:142:TYR:HB3	2.05	0.71
23:DB:2720:U:H5''	28:DP:52:ARG:HH21	1.54	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AC:149:LYS:HB3	2:AC:200:TRP:HB2	1.71	0.71
20:AB:184:ALA:HB3	20:AB:195:VAL:HG21	1.73	0.71
23:BB:1387:A:H2'	23:BB:1388:G:H8	1.55	0.71
23:BB:2859:G:H2'	23:BB:2860:A:C8	2.25	0.71
27:BK:76:VAL:H	28:BP:72:VAL:HG23	1.54	0.71
45:BS:24:ILE:HG22	45:BS:71:VAL:HG11	1.71	0.71
13:CN:40:ARG:HH22	18:CS:6:LYS:CB	2.03	0.71
20:CB:19:THR:HG23	20:CB:20:ARG:H	1.54	0.71
23:DB:2078:C:H2'	23:DB:2079:U:C6	2.25	0.71
23:DB:2356:U:H5''	52:DW:16:GLU:HG3	1.70	0.71
41:DJ:45:THR:H	41:DJ:46:PRO:HD3	1.55	0.71
41:DJ:82:GLY:O	41:DJ:84:ILE:HG22	1.90	0.71
47:DF:149:ARG:HH11	47:DF:149:ARG:HA	1.55	0.71
1:AA:764:C:H2'	1:AA:765:G:H5'	1.71	0.71
11:AL:49:ARG:HG2	11:AL:89:LEU:HD21	1.72	0.71
19:AT:2:ASN:ND2	19:AT:3:ILE:H	1.88	0.71
19:AT:79:THR:HG22	19:AT:83:ASN:HD21	1.55	0.71
20:AB:31:PHE:HB2	20:AB:41:ASN:HA	1.72	0.71
23:BB:181:A:H2'	23:BB:182:A:C8	2.25	0.71
29:BE:29:HIS:NE2	37:BL:8:PRO:HG3	2.05	0.71
4:CE:44:ARG:HA	4:CE:71:ILE:O	1.90	0.71
8:CI:20:ILE:HD13	8:CI:85:ALA:HB3	1.72	0.71
12:CM:49:GLU:O	12:CM:52:ILE:HG22	1.90	0.71
20:CB:65:LYS:HB2	20:CB:158:ASP:H	1.55	0.71
23:DB:1046:A:H3'	23:DB:1047:G:H5'	1.72	0.71
23:DB:1469:A:H2'	23:DB:1470:A:C8	2.24	0.71
23:DB:2267:A:H61	23:DB:2272:U:H3	1.39	0.71
8:AI:26:LYS:H	8:AI:61:ASP:HB3	1.55	0.71
23:BB:307:G:N2	23:BB:309:A:H3'	2.05	0.71
23:BB:1412:U:H2'	23:BB:1413:A:C8	2.25	0.71
23:DB:307:G:N2	23:DB:309:A:H3'	2.06	0.71
23:DB:626:A:H2'	37:DL:78:ARG:NH1	2.05	0.71
23:DB:1060:U:C4	23:DB:1088:A:N6	2.59	0.71
26:DD:5:VAL:H	26:DD:32:ASN:ND2	1.86	0.71
26:DD:151:THR:HB	26:DD:152:PRO:HD3	1.71	0.71
41:DJ:99:ARG:O	41:DJ:103:ILE:HG13	1.90	0.71
47:DF:102:LEU:HD22	47:DF:103:ILE:N	2.05	0.71
12:AM:42:VAL:HB	12:AM:47:LEU:HD21	1.72	0.71
15:AP:52:LEU:HD21	15:AP:75:ILE:HG12	1.69	0.71
17:AR:34:GLU:HB2	21:AU:18:PHE:HZ	1.53	0.71
23:BB:321:U:OP2	29:BE:130:LYS:HA	1.90	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:1176:U:H3'	23:BB:1177:G:C8	2.25	0.71
26:BD:114:LYS:HB2	26:BD:116:LYS:HE3	1.73	0.71
33:B1:7:LYS:HD3	34:B3:33:THR:HG21	1.73	0.71
39:BX:17:GLU:HB3	39:BX:53:VAL:HG11	1.70	0.71
1:CA:922:G:H4'	4:CE:24:VAL:HA	1.73	0.71
23:DB:2591:C:H2'	23:DB:2592:G:C8	2.25	0.71
23:DB:2884:U:O4	31:D0:39:ARG:HD3	1.89	0.71
1:AA:591:U:OP1	7:AH:30:LYS:HE2	1.91	0.71
1:AA:920:U:H2'	1:AA:921:U:C6	2.25	0.71
8:AI:48:ARG:HA	8:AI:51:LEU:HD12	1.71	0.71
21:AU:24:LYS:HD2	21:AU:25:ALA:N	2.05	0.71
40:BH:57:LYS:HG3	40:BH:58:LEU:N	2.05	0.71
42:BN:83:LEU:HA	42:BN:86:ARG:HB2	1.71	0.71
43:BO:15:ARG:HH21	43:BO:95:SER:HB3	1.56	0.71
8:CI:26:LYS:H	8:CI:61:ASP:HB3	1.56	0.71
19:CT:79:THR:HG22	19:CT:83:ASN:HD21	1.55	0.71
20:CB:27:LYS:HB3	20:CB:28:PRO:HD3	1.71	0.71
23:DB:666:A:H4'	37:DL:48:ARG:HD2	1.70	0.71
23:DB:2602:A:N3	23:DB:2602:A:H2'	2.06	0.71
38:DM:67:VAL:HG11	38:DM:102:LEU:HD13	1.71	0.71
1:AA:1406:U:H2'	1:AA:1407:C:H5'	1.72	0.71
41:BJ:45:THR:H	41:BJ:46:PRO:HD3	1.55	0.71
48:BG:9:VAL:HA	48:BG:48:THR:HG22	1.70	0.71
48:BG:79:THR:HG22	48:BG:80:GLU:HG2	1.73	0.71
1:CA:1526:G:OP2	21:CU:38:GLU:HB3	1.91	0.71
5:CF:38:ARG:HH21	5:CF:63:ASN:HD21	1.35	0.71
12:CM:42:VAL:HB	12:CM:47:LEU:HD21	1.71	0.71
23:DB:1412:U:H2'	23:DB:1413:A:C8	2.25	0.71
26:DD:104:VAL:HA	26:DD:106:LYS:HZ1	1.55	0.71
27:DK:112:PHE:O	27:DK:115:ILE:HG22	1.89	0.71
43:DO:67:ASN:HB3	43:DO:70:ALA:HB2	1.72	0.71
50:DT:82:LYS:HD2	50:DT:84:TYR:HE1	1.55	0.71
52:DW:39:GLN:HG2	52:DW:40:ARG:N	2.03	0.71
1:AA:1412:C:H2'	1:AA:1413:A:H8	1.54	0.71
23:BB:1866:A:H2'	23:BB:1867:G:O4'	1.91	0.71
33:B1:33:LEU:N	33:B1:51:ALA:HB3	2.06	0.71
41:BJ:114:LEU:HG	41:BJ:118:MET:HE2	1.73	0.71
42:BN:87:PHE:HE1	42:BN:116:VAL:HG12	1.55	0.71
1:CA:920:U:H2'	1:CA:921:U:C6	2.26	0.71
18:CS:48:ILE:HG22	18:CS:49:ALA:H	1.55	0.71
23:DB:845:A:C2	23:DB:847:U:HI'	2.25	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:DE:58:LYS:C	29:DE:60:TRP:H	1.97	0.71
43:DO:51:ALA:HB3	43:DO:78:VAL:HG22	1.71	0.71
42:BN:85:PRO:HA	42:BN:88:ALA:HB2	1.72	0.71
44:BQ:57:ARG:NH1	44:BQ:61:ILE:HD11	2.05	0.71
48:BG:84:LYS:HG2	48:BG:85:LYS:H	1.54	0.71
51:BZ:6:GLN:NE2	51:BZ:50:ARG:H	1.89	0.71
1:CA:591:U:OP1	7:CH:30:LYS:HE2	1.90	0.71
23:DB:718:A:H2'	23:DB:719:C:H5'	1.73	0.71
41:DJ:114:LEU:HG	41:DJ:118:MET:HE2	1.71	0.71
1:AA:1526:G:OP2	21:AU:38:GLU:HB3	1.91	0.71
8:AI:71:ILE:H	8:AI:71:ILE:HD12	1.54	0.71
12:AM:49:GLU:O	12:AM:52:ILE:HG22	1.91	0.71
23:BB:355:U:H2'	23:BB:356:G:H8	1.55	0.71
23:BB:2498:C:O2'	23:BB:2499:C:H5'	1.90	0.71
37:BL:23:ILE:H	37:BL:23:ILE:HD12	1.55	0.71
45:BS:82:MET:HB2	45:BS:98:LYS:HB2	1.73	0.71
10:CK:28:ASN:HD22	10:CK:29:THR:H	1.39	0.71
20:CB:221:ARG:HH11	20:CB:221:ARG:HB3	1.56	0.71
23:DB:773:U:H5'	23:DB:774:G:OP2	1.91	0.71
23:DB:1485:U:H2'	23:DB:1486:U:C6	2.26	0.71
38:DM:19:GLY:HA2	38:DM:98:PRO:HD2	1.71	0.71
10:AK:28:ASN:ND2	10:AK:29:THR:H	1.88	0.70
23:BB:544:C:H2'	23:BB:545:U:C2	2.24	0.70
23:BB:1060:U:C4	23:BB:1088:A:N6	2.59	0.70
23:BB:1381:G:C2'	23:BB:1382:G:H5'	2.21	0.70
23:BB:1486:U:H2'	23:BB:1487:U:H6	1.56	0.70
23:BB:1798:U:H5''	25:BC:257:ARG:HB2	1.73	0.70
28:BP:91:VAL:HG11	28:BP:96:LEU:HD11	1.72	0.70
31:B0:41:HIS:HB3	42:BN:99:LYS:HB2	1.71	0.70
40:BH:83:LYS:HB3	40:BH:91:PHE:HB2	1.72	0.70
40:BH:116:ARG:HB3	40:BH:131:SER:HB2	1.73	0.70
45:BS:83:LYS:HD3	45:BS:97:LEU:HD11	1.73	0.70
22:DA:109:A:H2'	22:DA:110:C:C6	2.25	0.70
23:DB:365:U:H2'	23:DB:366:C:C6	2.26	0.70
23:DB:1387:A:H5'	23:DB:1469:A:H1'	1.73	0.70
44:DQ:57:ARG:NH1	44:DQ:61:ILE:HD11	2.06	0.70
1:AA:859:G:H2'	1:AA:860:A:C8	2.25	0.70
23:BB:616:A:H3'	23:BB:617:G:H8	1.54	0.70
41:BJ:99:ARG:O	41:BJ:103:ILE:HG13	1.91	0.70
12:CM:90:HIS:HA	12:CM:108:ARG:HH22	1.56	0.70
23:DB:543:G:H2'	23:DB:544:C:H4'	1.73	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:DK:15:GLY:HA3	27:DK:52:VAL:HG23	1.73	0.70
28:DP:91:VAL:HG11	28:DP:96:LEU:HD11	1.72	0.70
32:D4:3:VAL:HG23	32:D4:4:ARG:H	1.54	0.70
45:DS:24:ILE:HG22	45:DS:71:VAL:HG11	1.71	0.70
49:DR:61:ALA:HB2	49:DR:98:ILE:HA	1.73	0.70
1:AA:437:U:H2'	1:AA:438:U:O4'	1.91	0.70
1:AA:806:C:H2'	1:AA:807:A:C8	2.26	0.70
3:AD:84:ASN:ND2	4:AE:101:GLY:HA3	2.06	0.70
23:BB:172:A:H2'	23:BB:173:A:C8	2.26	0.70
23:BB:845:A:C2	23:BB:847:U:H1'	2.27	0.70
23:BB:1283:G:H22	23:BB:1286:A:H5'	1.56	0.70
34:B3:61:LEU:HB2	34:B3:64:ALA:HB2	1.74	0.70
38:BM:19:GLY:HA2	38:BM:98:PRO:HD2	1.72	0.70
23:DB:138:U:H2'	23:DB:140:C:N1	2.06	0.70
23:DB:458:G:N2	23:DB:469:G:H2'	2.05	0.70
23:DB:2720:U:H5''	28:DP:52:ARG:NH2	2.06	0.70
24:DI:85:ILE:HD13	24:DI:137:LEU:HD21	1.73	0.70
43:DO:39:VAL:HB	43:DO:49:VAL:HG22	1.73	0.70
47:DF:30:VAL:HG21	47:DF:96:TRP:HE1	1.56	0.70
8:AI:21:LYS:O	8:AI:60:LEU:HB2	1.92	0.70
22:BA:109:A:H2'	22:BA:110:C:C6	2.27	0.70
23:BB:71:A:H4'	23:BB:72:U:H5'	1.72	0.70
23:BB:2444:G:OP2	29:BE:63:LYS:HD2	1.92	0.70
28:BP:58:PHE:HB2	28:BP:73:PHE:HB2	1.74	0.70
31:B0:8:THR:HG23	31:B0:11:LYS:H	1.56	0.70
39:BX:37:LEU:HD23	39:BX:39:GLN:H	1.56	0.70
42:BN:97:ILE:HD12	42:BN:98:LEU:N	2.06	0.70
2:CC:149:LYS:HB3	2:CC:200:TRP:HB2	1.73	0.70
8:CI:21:LYS:O	8:CI:60:LEU:HB2	1.90	0.70
8:CI:25:GLY:HA2	8:CI:60:LEU:O	1.91	0.70
10:CK:22:ILE:HD12	10:CK:85:VAL:HG22	1.74	0.70
10:CK:124:LYS:HA	21:CU:34:ARG:CB	2.22	0.70
13:CN:30:ILE:H	13:CN:30:ILE:HD12	1.56	0.70
15:CP:57:ILE:O	15:CP:61:VAL:HG23	1.90	0.70
19:CT:68:LYS:HE2	19:CT:68:LYS:HA	1.74	0.70
35:DV:14:LYS:HE3	35:DV:18:ARG:HH22	1.56	0.70
45:DS:3:THR:HB	45:DS:62:ASP:HB2	1.74	0.70
52:DW:43:LYS:HB3	52:DW:58:LEU:HD11	1.73	0.70
4:AE:152:VAL:HG21	7:AH:98:LEU:HB3	1.73	0.70
11:AL:107:LYS:H	11:AL:107:LYS:NZ	1.88	0.70
12:AM:90:HIS:HA	12:AM:108:ARG:HH22	1.55	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AN:51:PRO:HB2	13:AN:54:SER:CB	2.21	0.70
21:AU:38:GLU:C	21:AU:40:PRO:HD2	2.16	0.70
23:BB:919:U:H2'	23:BB:920:A:C8	2.25	0.70
1:CA:1238:A:H5'	1:CA:1336:C:H41	1.57	0.70
7:CH:118:ALA:HB3	7:CH:120:LEU:HD22	1.73	0.70
23:DB:2271:G:H2'	23:DB:2272:U:C6	2.26	0.70
26:DD:11:MET:HE1	26:DD:192:ALA:H	1.56	0.70
35:DV:77:VAL:HG12	38:DM:136:MET:HE2	1.74	0.70
43:DO:11:ALA:HB2	43:DO:96:GLY:N	2.06	0.70
44:DQ:30:VAL:HG13	44:DQ:31:TYR:N	1.97	0.70
45:DS:29:VAL:HG11	45:DS:55:ILE:HD13	1.74	0.70
50:DT:54:GLU:HG3	50:DT:90:GLY:H	1.54	0.70
4:AE:71:ILE:HD11	4:AE:144:GLU:HG3	1.72	0.70
10:AK:80:ASN:H	10:AK:80:ASN:HD22	1.38	0.70
24:BI:105:LEU:HD11	24:BI:139:VAL:HG11	1.73	0.70
25:BC:90:ILE:HD12	25:BC:102:TYR:HB3	1.72	0.70
25:BC:103:ILE:HG22	25:BC:105:ALA:H	1.56	0.70
26:BD:106:LYS:CB	26:BD:206:ALA:H	2.00	0.70
47:BF:30:VAL:HG21	47:BF:96:TRP:HE1	1.57	0.70
1:CA:764:C:C2'	1:CA:765:G:H5'	2.22	0.70
3:CD:25:ARG:HH11	3:CD:26:ALA:N	1.90	0.70
6:CG:78:ARG:HG2	6:CG:83:THR:HG22	1.72	0.70
25:DC:90:ILE:HD12	25:DC:102:TYR:HB3	1.73	0.70
52:DW:37:VAL:HG12	52:DW:38:ARG:N	2.07	0.70
3:AD:29:THR:HB	3:AD:30:LYS:NZ	2.07	0.70
10:AK:83:VAL:HB	10:AK:109:ILE:HG23	1.74	0.70
23:BB:2271:G:H2'	23:BB:2272:U:C6	2.26	0.70
29:BE:58:LYS:HZ2	29:BE:58:LYS:H	1.40	0.70
42:BN:29:VAL:HG13	42:BN:83:LEU:HD21	1.72	0.70
43:BO:5:SER:HA	43:BO:8:ILE:HD12	1.74	0.70
47:BF:2:LYS:HD2	47:BF:100:GLU:HG2	1.72	0.70
47:BF:31:GLU:O	47:BF:32:LYS:HD3	1.90	0.70
48:BG:30:GLY:HA3	48:BG:78:VAL:HA	1.73	0.70
51:BZ:40:VAL:HG22	51:BZ:45:ARG:O	1.91	0.70
20:CB:163:ILE:HG23	20:CB:164:ASP:N	2.00	0.70
23:DB:1124:G:H1'	32:D4:38:GLY:OXT	1.91	0.70
23:DB:1381:G:C2'	23:DB:1382:G:H5'	2.22	0.70
23:DB:2788:C:H2'	23:DB:2789:C:C6	2.26	0.70
51:DZ:33:LEU:HA	51:DZ:52:SER:HA	1.72	0.70
23:BB:773:U:H5'	23:BB:774:G:OP2	1.92	0.70
25:BC:250:GLN:CD	25:BC:250:GLN:H	1.97	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BS:47:VAL:HG12	45:BS:103:ILE:HG21	1.73	0.70
49:BR:24:LYS:HA	49:BR:94:THR:HG23	1.72	0.70
51:BZ:33:LEU:HA	51:BZ:52:SER:HA	1.74	0.70
1:CA:946:A:H2'	1:CA:947:G:C8	2.27	0.70
23:DB:277:G:H4'	23:DB:278:A:C5	2.26	0.70
38:DM:82:MET:HE3	38:DM:83:GLY:H	1.56	0.70
42:DN:87:PHE:HE1	42:DN:116:VAL:HG12	1.56	0.70
47:DF:61:GLY:HA3	47:DF:94:ARG:HD2	1.73	0.70
13:AN:30:ILE:H	13:AN:30:ILE:HD12	1.57	0.70
23:BB:547:A:H2	23:BB:549:G:H1	1.40	0.70
23:BB:2461:A:H2'	23:BB:2462:C:C6	2.27	0.70
23:BB:2591:C:H2'	23:BB:2592:G:C8	2.27	0.70
11:CL:107:LYS:H	11:CL:107:LYS:NZ	1.89	0.70
52:DW:50:VAL:HG23	52:DW:61:LYS:HE3	1.73	0.70
3:AD:22:SER:HB2	3:AD:109:THR:HG22	1.74	0.70
9:AJ:24:GLU:HG2	9:AJ:90:LEU:HD21	1.74	0.70
20:AB:19:THR:HG23	20:AB:20:ARG:H	1.56	0.70
23:BB:1812:U:H1'	25:BC:43:ASN:HD21	1.56	0.70
47:BF:40:GLY:O	47:BF:41:GLU:C	2.35	0.70
4:CE:71:ILE:HD11	4:CE:144:GLU:HG3	1.74	0.70
9:CJ:6:ILE:HB	9:CJ:76:ILE:HD11	1.73	0.70
47:DF:42:ALA:HB1	47:DF:46:LYS:HZ3	1.56	0.70
25:BC:196:ASN:ND2	25:BC:199:HIS:HB2	2.06	0.69
40:BH:68:ARG:NH1	40:BH:134:VAL:HG21	2.06	0.69
41:BJ:58:ASN:HA	41:BJ:127:GLY:HA2	1.74	0.69
47:BF:147:ARG:HD2	47:BF:148:VAL:HG22	1.74	0.69
1:CA:1513:A:H2'	1:CA:1514:G:C8	2.27	0.69
14:CO:89:ARG:HH22	23:DB:715:A:H5''	1.57	0.69
28:DP:58:PHE:HB2	28:DP:73:PHE:HB2	1.73	0.69
1:AA:269:C:H2'	1:AA:270:A:C8	2.26	0.69
8:AI:46:VAL:O	8:AI:79:ARG:HG3	1.91	0.69
10:AK:86:LYS:HB3	10:AK:112:VAL:HG23	1.74	0.69
23:BB:1081:U:H5'	24:BI:126:ARG:HD2	1.74	0.69
37:BL:29:LYS:HG3	37:BL:30:THR:HG23	1.73	0.69
10:CK:86:LYS:HB3	10:CK:112:VAL:HG23	1.74	0.69
23:DB:364:C:H2'	23:DB:365:U:C6	2.27	0.69
23:DB:455:C:N3	23:DB:472:A:H2'	2.07	0.69
41:DJ:18:VAL:HG12	41:DJ:54:ILE:HD11	1.73	0.69
42:DN:83:LEU:HA	42:DN:86:ARG:HB2	1.73	0.69
23:BB:2181:U:H2'	23:BB:2182:U:H6	1.57	0.69
29:BE:147:LEU:HB3	29:BE:186:VAL:HG23	1.74	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BS:69:LEU:HG	45:BS:107:VAL:HG22	1.74	0.69
48:BG:98:LYS:HB2	48:BG:101:VAL:HG23	1.74	0.69
1:CA:981:U:H4'	13:CN:60:ARG:HD2	1.75	0.69
8:CI:55:ASP:HB2	8:CI:59:LYS:HG3	1.73	0.69
13:CN:30:ILE:HG22	13:CN:41:TRP:HB2	1.75	0.69
21:CU:24:LYS:CD	21:CU:25:ALA:H	2.05	0.69
23:DB:1097:U:H2'	23:DB:1098:A:O4'	1.91	0.69
23:DB:1785:A:H2'	23:DB:1787:A:N7	2.07	0.69
26:DD:10:GLY:HA3	26:DD:26:VAL:N	2.02	0.69
40:DH:59:ALA:O	40:DH:62:LEU:HD22	1.92	0.69
49:DR:24:LYS:HA	49:DR:94:THR:HG23	1.74	0.69
1:AA:93:U:H5''	1:AA:94:G:OP2	1.92	0.69
1:AA:1137:C:H1'	1:AA:1138:G:C2	2.27	0.69
23:BB:222:A:N6	23:BB:232:G:H1'	2.07	0.69
48:BG:9:VAL:HG12	48:BG:11:PRO:HD3	1.74	0.69
50:BT:11:LEU:HA	50:BT:34:VAL:HG12	1.74	0.69
1:CA:1296:C:H4'	1:CA:1302:C:N4	2.07	0.69
29:DE:59:PRO:HB2	29:DE:67:ARG:HH22	1.57	0.69
31:D0:8:THR:HG23	31:D0:11:LYS:H	1.58	0.69
37:DL:95:LEU:HA	37:DL:98:ALA:HB3	1.75	0.69
40:DH:31:VAL:O	40:DH:32:PRO:C	2.34	0.69
3:AD:123:MET:HE3	3:AD:126:GLY:HA2	1.74	0.69
16:AQ:59:GLU:O	16:AQ:75:VAL:HG22	1.93	0.69
20:AB:221:ARG:HH11	20:AB:221:ARG:HB3	1.58	0.69
23:BB:570:G:H2'	23:BB:2030:A:N7	2.07	0.69
23:BB:2849:U:H4'	23:BB:2850:A:H5'	1.72	0.69
43:BO:67:ASN:HB3	43:BO:70:ALA:HB2	1.74	0.69
52:BW:46:ALA:HB2	52:BW:78:PHE:HD1	1.57	0.69
11:CL:41:PRO:HB3	11:CL:49:ARG:NH1	2.08	0.69
23:DB:1812:U:H2'	23:DB:1813:G:H8	1.54	0.69
23:DB:1812:U:H1'	25:DC:43:ASN:HD21	1.57	0.69
50:DT:32:LEU:H	50:DT:83:ALA:HB3	1.57	0.69
1:AA:673:A:H2'	1:AA:674:G:C8	2.28	0.69
1:AA:1477:U:H2'	1:AA:1478:U:C6	2.28	0.69
20:AB:156:LEU:HD23	20:AB:178:LEU:HD13	1.74	0.69
20:AB:163:ILE:CG2	20:AB:164:ASP:H	2.02	0.69
23:BB:773:U:H4'	25:BC:45:ASN:O	1.93	0.69
42:BN:24:MET:HG2	42:BN:44:LEU:HD22	1.73	0.69
46:BU:81:ARG:HH21	46:BU:81:ARG:N	1.90	0.69
52:BW:49:ASN:HB3	52:BW:81:ILE:HG12	1.74	0.69
1:CA:662:U:H2'	1:CA:663:A:C8	2.26	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:1412:U:H2'	23:DB:1413:A:H8	1.58	0.69
28:DP:47:ILE:HD13	28:DP:61:ARG:HG2	1.75	0.69
29:DE:117:ARG:HA	29:DE:185:LYS:HE3	1.73	0.69
52:DW:49:ASN:HB2	52:DW:61:LYS:H	1.55	0.69
1:AA:1513:A:H2'	1:AA:1514:G:C8	2.27	0.69
23:BB:666:A:H4'	37:BL:48:ARG:HD2	1.72	0.69
23:BB:2635:A:H5'	26:BD:79:LEU:HD23	1.75	0.69
25:BC:66:PHE:HB2	25:BC:150:GLY:O	1.92	0.69
42:BN:106:ASP:C	42:BN:108:ALA:H	2.01	0.69
1:CA:763:G:H2'	1:CA:764:C:H6	1.58	0.69
1:CA:1328:C:H5''	12:CM:27:THR:HG21	1.73	0.69
4:CE:106:ALA:HB1	4:CE:110:MET:HB3	1.75	0.69
4:CE:152:VAL:HG21	7:CH:98:LEU:HB3	1.73	0.69
10:CK:31:VAL:HG21	10:CK:66:ALA:HA	1.74	0.69
14:CO:68:ASP:O	14:CO:72:ARG:HG3	1.93	0.69
21:CU:38:GLU:C	21:CU:40:PRO:HD2	2.17	0.69
23:DB:2365:G:H4'	52:DW:59:PHE:CE1	2.27	0.69
25:DC:66:PHE:HB2	25:DC:150:GLY:O	1.92	0.69
26:DD:8:LYS:HD3	26:DD:197:THR:H	1.55	0.69
29:DE:58:LYS:H	29:DE:58:LYS:NZ	1.90	0.69
48:DG:71:LEU:HA	48:DG:74:MET:SD	2.33	0.69
52:DW:67:LYS:O	52:DW:68:PHE:HB2	1.93	0.69
1:AA:85:U:H1'	1:AA:86:G:O4'	1.93	0.69
2:AC:137:VAL:HA	2:AC:148:ILE:HD13	1.75	0.69
4:AE:28:ARG:HH12	4:AE:30:PHE:HB3	1.57	0.69
6:AG:129:ASN:HA	6:AG:134:VAL:HG11	1.74	0.69
10:AK:31:VAL:HG21	10:AK:66:ALA:HA	1.75	0.69
10:AK:124:LYS:HA	21:AU:34:ARG:CB	2.23	0.69
14:AO:68:ASP:O	14:AO:72:ARG:HG3	1.93	0.69
22:BA:104:A:H2'	22:BA:105:G:O4'	1.93	0.69
23:BB:721:A:H2'	23:BB:722:A:C8	2.28	0.69
23:BB:1412:U:H2'	23:BB:1413:A:H8	1.56	0.69
23:BB:1469:A:H2'	23:BB:1470:A:H8	1.56	0.69
23:BB:1802:A:H2'	23:BB:1803:A:C8	2.28	0.69
23:BB:2305:U:H4'	47:BF:132:ARG:HD3	1.73	0.69
40:BH:31:VAL:O	40:BH:32:PRO:C	2.34	0.69
41:BJ:29:ALA:HA	41:BJ:32:LEU:HD12	1.73	0.69
46:BU:48:VAL:C	46:BU:53:GLN:HG3	2.18	0.69
49:BR:72:VAL:HG23	49:BR:89:HIS:HB3	1.72	0.69
1:CA:920:U:O2'	1:CA:1081:A:H4'	1.92	0.69
1:CA:1238:A:H5'	1:CA:1336:C:N4	2.07	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:CI:117:LEU:HD22	8:CI:123:ARG:HG2	1.75	0.69
20:CB:186:VAL:O	20:CB:200:PRO:HA	1.92	0.69
21:CU:36:PHE:CB	21:CU:40:PRO:HD3	2.17	0.69
22:DA:104:A:H2'	22:DA:105:G:O4'	1.93	0.69
23:DB:139:U:H3	50:DT:49:LYS:NZ	1.91	0.69
23:DB:163:C:H2'	23:DB:164:C:O4'	1.92	0.69
23:DB:570:G:H2'	23:DB:2030:A:N7	2.07	0.69
23:DB:1322:A:H4'	45:DS:82:MET:HE1	1.73	0.69
29:DE:60:TRP:O	29:DE:61:ARG:HB2	1.92	0.69
29:DE:192:ALA:HA	29:DE:195:GLN:HE21	1.58	0.69
30:DY:16:LEU:H	30:DY:16:LEU:HD22	1.55	0.69
40:DH:86:ASP:HB2	40:DH:89:LYS:NZ	2.07	0.69
47:DF:2:LYS:HD2	47:DF:100:GLU:HG2	1.75	0.69
3:AD:104:MET:HE2	3:AD:170:LEU:HD13	1.74	0.69
10:AK:105:ARG:NH2	21:AU:10:PRO:HB3	2.08	0.69
12:AM:52:ILE:HG23	12:AM:56:ARG:HH12	1.58	0.69
26:BD:98:VAL:HG12	26:BD:180:VAL:HG12	1.72	0.69
28:BP:57:ALA:HA	28:BP:73:PHE:O	1.93	0.69
29:BE:58:LYS:H	29:BE:58:LYS:NZ	1.89	0.69
1:CA:9:G:H5'	4:CE:107:GLY:HA3	1.75	0.69
1:CA:1158:C:H4'	20:CB:131:LYS:HD3	1.73	0.69
5:CF:64:VAL:HG12	5:CF:65:GLU:H	1.58	0.69
6:CG:72:VAL:HG12	6:CG:89:GLU:HA	1.74	0.69
13:CN:60:ARG:HE	13:CN:62:ARG:HG2	1.55	0.69
15:CP:67:ILE:HG13	15:CP:71:VAL:HG13	1.74	0.69
18:CS:27:LYS:HG3	18:CS:28:LYS:HD2	1.74	0.69
23:DB:181:A:H2'	23:DB:182:A:C8	2.28	0.69
23:DB:2849:U:H4'	23:DB:2850:A:H5'	1.75	0.69
23:DB:2866:U:H4'	23:DB:2867:G:H4'	1.75	0.69
25:DC:103:ILE:HG22	25:DC:105:ALA:H	1.58	0.69
25:DC:129:LEU:HB3	25:DC:134:ILE:HG22	1.75	0.69
43:DO:35:ILE:HG22	43:DO:53:THR:HG23	1.74	0.69
44:DQ:93:ILE:HG23	44:DQ:94:LEU:HD22	1.73	0.69
47:DF:40:GLY:O	47:DF:41:GLU:C	2.35	0.69
49:DR:49:ILE:HD13	49:DR:53:PHE:N	2.08	0.69
12:AM:39:ALA:HB3	12:AM:42:VAL:HG13	1.74	0.69
12:AM:53:ASP:HA	12:AM:56:ARG:NH2	2.07	0.69
23:BB:1558:C:H4'	23:BB:1559:U:H5'	1.75	0.69
23:BB:2773:C:H5''	26:BD:169:ARG:HB2	1.73	0.69
40:BH:84:ALA:HA	40:BH:90:LEU:CA	2.22	0.69
47:BF:126:ASN:HD22	47:BF:156:THR:HA	1.58	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:CI:9:GLY:HA2	8:CI:80:HIS:CD2	2.28	0.69
13:CN:51:PRO:HB2	13:CN:54:SER:CB	2.22	0.69
17:CR:52:ARG:HB3	17:CR:56:ARG:HH21	1.56	0.69
22:DA:32:U:H4'	22:DA:52:A:H62	1.55	0.69
23:DB:192:C:H2'	23:DB:193:U:H5'	1.74	0.69
23:DB:2108:A:H2'	23:DB:2109:U:O4'	1.93	0.69
40:DH:67:ALA:O	40:DH:70:GLU:HG3	1.93	0.69
46:DU:48:VAL:C	46:DU:53:GLN:HG3	2.18	0.69
48:DG:79:THR:HG22	48:DG:80:GLU:HG2	1.74	0.69
52:DW:49:ASN:HB3	52:DW:81:ILE:HG12	1.73	0.69
1:AA:734:G:H21	17:AR:63:TYR:HE1	1.41	0.68
1:AA:1073:U:H4'	20:AB:104:LYS:HE3	1.73	0.68
23:BB:455:C:N3	23:BB:472:A:H2'	2.08	0.68
23:BB:479:A:N3	23:BB:481:G:H5''	2.09	0.68
28:BP:50:ARG:HB3	28:BP:57:ALA:N	2.07	0.68
48:BG:71:LEU:HA	48:BG:74:MET:SD	2.33	0.68
52:BW:39:GLN:HG3	52:BW:42:THR:HB	1.74	0.68
5:CF:6:ILE:HG23	5:CF:62:MET:HB3	1.75	0.68
20:CB:184:ALA:HB3	20:CB:195:VAL:HG21	1.74	0.68
22:DA:28:C:H5	22:DA:56:G:H1	1.41	0.68
23:DB:27:G:H1'	23:DB:513:A:N6	2.08	0.68
23:DB:1406:U:H2'	23:DB:1407:G:H8	1.57	0.68
42:DN:24:MET:HE3	42:DN:44:LEU:HB2	1.74	0.68
44:DQ:71:ASN:HD22	44:DQ:109:VAL:HG11	1.58	0.68
51:DZ:10:LYS:O	51:DZ:31:PRO:HG2	1.93	0.68
1:AA:1238:A:H5'	1:AA:1336:C:H41	1.58	0.68
10:AK:17:ASP:HA	10:AK:80:ASN:O	1.93	0.68
23:BB:163:C:H2'	23:BB:164:C:O4'	1.92	0.68
23:BB:1993:U:H4'	26:BD:133:THR:CG2	2.23	0.68
23:BB:2039:U:H2'	23:BB:2040:G:C8	2.28	0.68
24:BI:25:PRO:O	24:BI:29:GLN:HG2	1.93	0.68
44:BQ:104:ALA:HA	49:BR:46:GLU:CD	2.19	0.68
10:CK:92:ARG:HH21	21:CU:24:LYS:HG2	1.58	0.68
23:DB:873:C:H4'	38:DM:64:TRP:HE1	1.57	0.68
23:DB:2804:U:H2'	23:DB:2805:C:C6	2.28	0.68
27:DK:8:LEU:H	27:DK:8:LEU:HD12	1.58	0.68
33:D1:7:LYS:HA	33:D1:23:THR:HG22	1.73	0.68
50:DT:2:ILE:HB	50:DT:3:ARG:HD3	1.75	0.68
1:AA:1296:C:H4'	1:AA:1302:C:N4	2.07	0.68
9:AJ:17:LEU:HD22	9:AJ:96:VAL:HG13	1.75	0.68
13:AN:26:LEU:HD11	13:AN:44:VAL:HG22	1.74	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AT:66:ILE:HG13	19:AT:70:LYS:HE3	1.73	0.68
23:BB:192:C:H2'	23:BB:193:U:H5'	1.75	0.68
23:BB:2150:C:H2'	23:BB:2151:U:C6	2.29	0.68
28:BP:31:VAL:HG12	28:BP:38:ARG:O	1.94	0.68
45:BS:3:THR:HB	45:BS:62:ASP:HB2	1.74	0.68
45:BS:24:ILE:HG12	45:BS:36:LEU:HD21	1.75	0.68
1:CA:909:A:H2'	1:CA:910:C:O4'	1.93	0.68
1:CA:1071:C:H2'	1:CA:1072:G:H8	1.58	0.68
6:CG:66:GLU:HA	6:CG:69:ARG:HD2	1.73	0.68
23:DB:222:A:N6	23:DB:232:G:H1'	2.08	0.68
23:DB:1798:U:H5''	25:DC:257:ARG:HB2	1.76	0.68
23:DB:1866:A:H2'	23:DB:1867:G:O4'	1.93	0.68
26:DD:98:VAL:HG12	26:DD:180:VAL:HG12	1.75	0.68
45:DS:24:ILE:HD11	45:DS:36:LEU:HD11	1.75	0.68
1:AA:763:G:H2'	1:AA:764:C:H6	1.58	0.68
2:AC:26:LYS:HG3	2:AC:27:GLU:HG3	1.74	0.68
7:AH:51:GLU:HG2	7:AH:52:GLY:H	1.57	0.68
20:AB:163:ILE:HG23	20:AB:164:ASP:N	1.98	0.68
20:AB:185:ILE:HA	20:AB:199:ILE:HB	1.75	0.68
23:BB:2602:A:H2'	23:BB:2602:A:N3	2.06	0.68
26:BD:114:LYS:HE3	26:BD:116:LYS:HZ2	1.56	0.68
27:BK:15:GLY:HA3	27:BK:52:VAL:HG23	1.75	0.68
29:BE:109:LEU:HD13	29:BE:180:LEU:HD13	1.76	0.68
40:BH:47:PHE:HA	40:BH:50:ARG:HH21	1.58	0.68
40:BH:75:LEU:HD23	40:BH:76:GLU:H	1.57	0.68
42:BN:24:MET:HE3	42:BN:44:LEU:HB2	1.75	0.68
44:BQ:94:LEU:HD12	49:BR:13:ARG:HB2	1.76	0.68
48:BG:8:VAL:HG11	48:BG:49:LEU:HB2	1.76	0.68
2:CC:26:LYS:HG3	2:CC:27:GLU:HG3	1.75	0.68
23:DB:2346:A:H3'	23:DB:2347:C:H5''	1.75	0.68
28:DP:50:ARG:HB3	28:DP:57:ALA:N	2.08	0.68
40:DH:70:GLU:HA	40:DH:73:ASN:HB2	1.75	0.68
42:DN:24:MET:HG2	42:DN:44:LEU:HD22	1.73	0.68
47:DF:101:ARG:NH1	47:DF:138:PRO:HB2	2.09	0.68
47:DF:147:ARG:HD2	47:DF:148:VAL:HG22	1.73	0.68
48:DG:30:GLY:HA3	48:DG:78:VAL:HA	1.74	0.68
1:AA:764:C:C2'	1:AA:765:G:H5'	2.24	0.68
9:AJ:10:LEU:HD11	9:AJ:25:ILE:HD12	1.74	0.68
23:BB:664:G:H2'	23:BB:665:U:H6	1.58	0.68
23:BB:1060:U:O2	23:BB:1088:A:N7	2.27	0.68
28:BP:50:ARG:HB3	28:BP:57:ALA:H	1.59	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BS:29:VAL:HA	45:BS:32:ALA:HB3	1.74	0.68
1:CA:806:C:H2'	1:CA:807:A:C8	2.28	0.68
1:CA:1081:A:OP1	4:CE:22:LYS:HB2	1.92	0.68
2:CC:13:ILE:HD13	2:CC:13:ILE:H	1.57	0.68
4:CE:76:ASN:HB2	4:CE:81:GLN:NE2	2.08	0.68
18:CS:47:THR:HG23	18:CS:60:PHE:HE1	1.58	0.68
23:DB:982:C:O2	23:DB:982:C:H5'	1.94	0.68
23:DB:2502:G:H5'	23:DB:2503:A:C5'	2.22	0.68
28:DP:57:ALA:HA	28:DP:73:PHE:O	1.94	0.68
39:DX:14:LEU:HD13	39:DX:57:LEU:HD21	1.75	0.68
8:AI:94:ARG:HH11	8:AI:94:ARG:HB3	1.56	0.68
23:BB:3:U:O2'	23:BB:4:U:H6	1.77	0.68
49:BR:61:ALA:HB2	49:BR:98:ILE:HA	1.75	0.68
8:CI:24:ASN:ND2	8:CI:25:GLY:H	1.91	0.68
9:CJ:10:LEU:HD11	9:CJ:25:ILE:HD12	1.75	0.68
9:CJ:77:VAL:HG12	9:CJ:78:GLU:HG3	1.75	0.68
16:CQ:59:GLU:O	16:CQ:75:VAL:HG22	1.94	0.68
23:DB:78:U:H2'	23:DB:79:C:C6	2.29	0.68
40:DH:90:LEU:HD12	40:DH:90:LEU:H	1.58	0.68
44:DQ:63:ARG:HH22	44:DQ:96:ASP:CA	2.07	0.68
52:DW:30:VAL:HA	52:DW:60:ALA:O	1.94	0.68
1:AA:408:A:OP1	3:AD:111:ALA:HB3	1.93	0.68
11:AL:17:LYS:H	11:AL:17:LYS:HE3	1.57	0.68
23:BB:718:A:H2'	23:BB:719:C:H5'	1.75	0.68
23:BB:877:A:H3'	23:BB:899:A:H61	1.58	0.68
23:BB:1301:A:O2'	23:BB:1302:A:H2'	1.93	0.68
23:BB:1508:A:H5'	23:BB:1509:A:C6	2.28	0.68
38:BM:35:ALA:CB	38:BM:100:LYS:H	2.06	0.68
39:BX:56:LEU:C	39:BX:58:ASN:H	2.02	0.68
47:BF:32:LYS:HA	47:BF:95:MET:HG3	1.76	0.68
6:CG:129:ASN:HA	6:CG:134:VAL:HG11	1.74	0.68
23:DB:2039:U:H2'	23:DB:2040:G:C8	2.27	0.68
31:D0:27:LEU:HD12	31:D0:27:LEU:H	1.59	0.68
37:DL:123:ARG:HH11	37:DL:123:ARG:HB3	1.59	0.68
48:DG:9:VAL:HG12	48:DG:11:PRO:HD3	1.74	0.68
1:AA:736:C:H5''	5:AF:90:MET:HE3	1.76	0.68
11:AL:51:VAL:HG12	11:AL:52:CYS:H	1.59	0.68
12:AM:38:ILE:HG22	12:AM:42:VAL:HG21	1.76	0.68
15:AP:75:ILE:HG22	15:AP:80:LYS:HD2	1.76	0.68
23:BB:1060:U:H5	24:BI:131:THR:HG22	1.57	0.68
23:BB:1178:C:H2'	23:BB:1179:G:C8	2.28	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BH:84:ALA:HB2	40:BH:147:VAL:O	1.94	0.68
52:BW:37:VAL:HG12	52:BW:38:ARG:N	2.08	0.68
52:BW:65:LYS:HG3	52:BW:84:GLU:HB3	1.76	0.68
1:CA:269:C:H2'	1:CA:270:A:C8	2.29	0.68
1:CA:1287:A:H2'	1:CA:1288:A:C8	2.28	0.68
22:DA:54:G:H21	47:DF:25:MET:HE3	1.59	0.68
23:DB:1437:C:H2'	23:DB:1438:U:H6	1.57	0.68
23:DB:2071:A:H2'	23:DB:2072:C:C6	2.29	0.68
30:DY:6:ILE:O	30:DY:34:THR:HA	1.94	0.68
38:DM:114:ARG:HB2	38:DM:114:ARG:HH21	1.58	0.68
45:DS:47:VAL:HG12	45:DS:103:ILE:HG21	1.76	0.68
45:DS:73:LYS:HE3	45:DS:74:ILE:H	1.59	0.68
1:AA:909:A:H2'	1:AA:910:C:O4'	1.94	0.68
1:AA:1071:C:H2'	1:AA:1072:G:H8	1.59	0.68
8:AI:117:LEU:HD22	8:AI:123:ARG:HG2	1.75	0.68
23:BB:2099:U:H2'	23:BB:2100:G:H8	1.58	0.68
26:BD:46:ARG:NH2	26:BD:87:GLY:H	1.92	0.68
37:BL:123:ARG:HH11	37:BL:123:ARG:HB3	1.59	0.68
38:BM:59:ARG:HE	38:BM:60:GLN:H	1.41	0.68
39:BX:20:ASN:O	39:BX:24:GLU:HB3	1.92	0.68
43:BO:11:ALA:HB2	43:BO:96:GLY:N	2.08	0.68
45:BS:24:ILE:HG23	45:BS:32:ALA:HB1	1.75	0.68
1:CA:493:A:H5'	1:CA:494:G:OP2	1.94	0.68
8:CI:46:VAL:O	8:CI:79:ARG:HG3	1.94	0.68
10:CK:17:ASP:HA	10:CK:80:ASN:O	1.94	0.68
23:DB:2810:A:H2'	23:DB:2811:G:O4'	1.94	0.68
40:DH:27:ARG:H	40:DH:31:VAL:CG2	2.07	0.68
50:DT:32:LEU:N	50:DT:83:ALA:HB3	2.09	0.68
52:DW:46:ALA:HB2	52:DW:78:PHE:HD1	1.59	0.68
52:DW:65:LYS:HG3	52:DW:84:GLU:HB3	1.76	0.68
6:AG:57:GLU:CD	6:AG:57:GLU:H	2.02	0.68
23:BB:675:A:H5'	29:BE:60:TRP:HE1	1.58	0.68
23:BB:1283:G:N2	23:BB:1285:A:H3'	2.09	0.68
25:BC:129:LEU:HB3	25:BC:134:ILE:HG22	1.75	0.68
25:BC:202:ARG:NH1	25:BC:213:ARG:HE	1.91	0.68
40:BH:67:ALA:O	40:BH:71:LYS:HB2	1.94	0.68
40:BH:114:GLU:HB3	40:BH:134:VAL:HA	1.75	0.68
43:BO:89:ASP:HA	43:BO:116:GLN:O	1.94	0.68
44:BQ:57:ARG:HH12	44:BQ:61:ILE:HD11	1.60	0.68
3:CD:29:THR:HB	3:CD:30:LYS:NZ	2.08	0.68
20:CB:44:LYS:C	20:CB:47:PRO:HD2	2.19	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:CB:156:LEU:HD23	20:CB:178:LEU:HD13	1.75	0.68
23:DB:96:C:H4'	39:DX:41:HIS:CE1	2.29	0.68
23:DB:543:G:C6	23:DB:544:C:H1'	2.29	0.68
45:DS:24:ILE:HG12	45:DS:36:LEU:HD21	1.75	0.68
23:BB:1338:G:H4'	50:BT:18:GLU:HG3	1.76	0.67
37:BL:95:LEU:HA	37:BL:98:ALA:HB3	1.76	0.67
52:BW:43:LYS:HB3	52:BW:58:LEU:HD11	1.76	0.67
1:CA:673:A:H2'	1:CA:674:G:C8	2.29	0.67
1:CA:1002:G:H2'	1:CA:1003:G:O4'	1.94	0.67
23:DB:1149:G:H2'	23:DB:1150:C:C6	2.29	0.67
23:DB:1911:U:H2'	23:DB:1918:A:N1	2.08	0.67
33:D1:33:LEU:N	33:D1:51:ALA:HB3	2.05	0.67
52:DW:23:LYS:HZ3	52:DW:24:ARG:HG3	1.57	0.67
23:BB:2804:U:H2'	23:BB:2805:C:C6	2.30	0.67
40:BH:69:ALA:HB2	40:BH:139:PHE:O	1.93	0.67
2:CC:137:VAL:HA	2:CC:148:ILE:HD13	1.76	0.67
3:CD:84:ASN:ND2	4:CE:101:GLY:HA3	2.09	0.67
4:CE:28:ARG:HH12	4:CE:30:PHE:HB3	1.59	0.67
11:CL:20:VAL:HB	11:CL:94:TYR:HE1	1.58	0.67
23:DB:125:A:H5'	36:D2:19:ARG:HD2	1.76	0.67
23:DB:1060:U:O2	23:DB:1088:A:N7	2.27	0.67
23:DB:1464:G:H2'	23:DB:1465:G:H8	1.58	0.67
26:DD:106:LYS:CB	26:DD:206:ALA:H	2.02	0.67
46:DU:81:ARG:N	46:DU:81:ARG:HH21	1.91	0.67
48:DG:98:LYS:HB2	48:DG:101:VAL:HG23	1.74	0.67
1:AA:981:U:H4'	13:AN:60:ARG:HD2	1.76	0.67
1:AA:1170:A:H2'	1:AA:1171:A:O4'	1.94	0.67
1:AA:1432:G:H1'	1:AA:1468:A:N6	2.09	0.67
3:AD:137:SER:HB2	3:AD:138:PRO:HD2	1.76	0.67
13:AN:52:ARG:HD2	13:AN:58:ARG:HH21	1.59	0.67
15:AP:67:ILE:HG13	15:AP:71:VAL:HG13	1.75	0.67
23:BB:328:U:H4'	46:BU:65:GLN:NE2	2.08	0.67
23:BB:594:U:H2'	23:BB:595:C:C6	2.30	0.67
23:BB:1012:U:O4	41:BJ:30:THR:HG21	1.94	0.67
23:BB:2734:A:H2'	23:BB:2735:G:H5'	1.76	0.67
30:BY:6:ILE:O	30:BY:34:THR:HA	1.94	0.67
1:CA:87:C:H2'	1:CA:88:U:H5''	1.77	0.67
23:DB:974:G:OP2	49:DR:78:ARG:HD3	1.94	0.67
26:DD:136:ASN:HD21	26:DD:139:SER:C	2.03	0.67
13:AN:5:MET:HB3	13:AN:62:ARG:HH12	1.59	0.67
13:AN:25:GLU:O	13:AN:29:ILE:HG13	1.93	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:1045:C:H5''	23:BB:1047:G:O4'	1.93	0.67
23:BB:1172:C:H3'	23:BB:1173:U:C6	2.29	0.67
26:BD:109:VAL:HG11	26:BD:193:VAL:HB	1.76	0.67
51:BZ:10:LYS:O	51:BZ:31:PRO:HG2	1.94	0.67
52:BW:30:VAL:HA	52:BW:60:ALA:O	1.94	0.67
20:CB:8:MET:HE2	20:CB:11:ALA:HB3	1.77	0.67
39:DX:17:GLU:HB3	39:DX:53:VAL:HG11	1.76	0.67
42:DN:106:ASP:C	42:DN:108:ALA:H	2.03	0.67
45:DS:82:MET:HB2	45:DS:98:LYS:HB2	1.76	0.67
47:DF:32:LYS:HA	47:DF:95:MET:HG3	1.76	0.67
1:AA:518:C:H2'	1:AA:530:G:H8	1.60	0.67
1:AA:1000:A:H2'	1:AA:1001:C:C6	2.28	0.67
1:AA:1273:C:H2'	1:AA:1274:A:O4'	1.95	0.67
6:AG:72:VAL:HG12	6:AG:89:GLU:HA	1.76	0.67
11:AL:78:VAL:HG12	11:AL:101:LEU:HD13	1.76	0.67
23:BB:784:G:C6	25:BC:227:VAL:HG11	2.29	0.67
23:BB:1594:U:H2'	23:BB:1595:C:C6	2.29	0.67
23:BB:2086:U:H2'	23:BB:2087:G:C8	2.30	0.67
27:BK:89:ASN:C	27:BK:89:ASN:HD22	2.03	0.67
37:BL:18:ARG:C	37:BL:19:LEU:HD12	2.20	0.67
1:CA:390:U:H2'	1:CA:391:G:C8	2.30	0.67
12:CM:39:ALA:HB3	12:CM:42:VAL:HG13	1.76	0.67
24:DI:25:PRO:O	24:DI:29:GLN:HG3	1.94	0.67
1:AA:1202:U:H1'	13:AN:68:ARG:HD2	1.76	0.67
29:BE:117:ARG:HA	29:BE:185:LYS:HE3	1.75	0.67
41:BJ:82:GLY:O	41:BJ:84:ILE:HG22	1.94	0.67
1:CA:41:G:H2'	1:CA:42:G:H8	1.59	0.67
1:CA:1006:G:H2'	1:CA:1007:U:H6	1.60	0.67
5:CF:16:GLU:CD	5:CF:16:GLU:H	2.01	0.67
23:DB:1180:U:H2'	23:DB:1181:U:C6	2.30	0.67
23:DB:1558:C:H4'	23:DB:1559:U:H5'	1.75	0.67
31:D0:41:HIS:HB3	42:DN:99:LYS:HB2	1.77	0.67
45:DS:29:VAL:HA	45:DS:32:ALA:HB3	1.77	0.67
1:AA:45:G:H2'	1:AA:46:G:H8	1.58	0.67
1:AA:1238:A:H5'	1:AA:1336:C:N4	2.09	0.67
1:AA:1328:C:H5''	12:AM:27:THR:HG21	1.77	0.67
1:AA:1477:U:H2'	1:AA:1478:U:H6	1.58	0.67
8:AI:9:GLY:HA2	8:AI:80:HIS:CD2	2.30	0.67
10:AK:17:ASP:HB3	10:AK:80:ASN:ND2	2.08	0.67
15:AP:68:SER:OG	15:AP:71:VAL:HG12	1.95	0.67
17:AR:52:ARG:HB3	17:AR:56:ARG:HH21	1.58	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:AS:27:LYS:HG3	18:AS:28:LYS:HD2	1.76	0.67
22:BA:107:G:O2'	22:BA:108:A:H5'	1.95	0.67
23:BB:2267:A:H61	23:BB:2272:U:H3	1.43	0.67
23:BB:2328:A:H2'	23:BB:2329:U:C6	2.30	0.67
26:BD:30:GLU:HG3	26:BD:52:THR:HG22	1.77	0.67
29:BE:60:TRP:O	29:BE:61:ARG:HB2	1.94	0.67
52:BW:49:ASN:HB2	52:BW:60:ALA:HA	1.76	0.67
1:CA:1316:G:H22	1:CA:1318:A:H3'	1.58	0.67
1:CA:1316:G:N2	1:CA:1318:A:H3'	2.09	0.67
1:CA:1488:G:H2'	1:CA:1489:G:H8	1.59	0.67
5:CF:3:HIS:CG	5:CF:92:THR:HG23	2.30	0.67
5:CF:3:HIS:CD2	5:CF:65:GLU:HG3	2.30	0.67
8:CI:94:ARG:HH11	8:CI:94:ARG:HB3	1.59	0.67
11:CL:24:GLU:HB2	11:CL:26:CYS:SG	2.35	0.67
12:CM:9:PRO:HB2	12:CM:17:ALA:HB1	1.77	0.67
23:DB:1802:A:H2'	23:DB:1803:A:C8	2.30	0.67
23:DB:2645:G:H3'	23:DB:2646:C:H5'	1.77	0.67
24:DI:73:PRO:HG2	24:DI:78:LEU:HD21	1.75	0.67
25:DC:202:ARG:NH1	25:DC:213:ARG:HE	1.92	0.67
26:DD:46:ARG:NH2	26:DD:87:GLY:H	1.93	0.67
41:DJ:99:ARG:HA	41:DJ:102:GLU:HB2	1.77	0.67
49:DR:49:ILE:HD13	49:DR:53:PHE:H	1.60	0.67
52:DW:49:ASN:HB2	52:DW:60:ALA:HA	1.77	0.67
1:AA:212:G:H2'	1:AA:213:G:H8	1.60	0.67
2:AC:154:GLY:HA3	2:AC:162:ALA:HB1	1.76	0.67
5:AF:3:HIS:CG	5:AF:92:THR:HG23	2.29	0.67
23:BB:2267:A:H8	23:BB:2267:A:O5'	1.77	0.67
51:BZ:6:GLN:HE22	51:BZ:77:LYS:NZ	1.92	0.67
1:CA:17:U:H2'	1:CA:18:C:C6	2.30	0.67
1:CA:1054:C:O2'	1:CA:1055:A:H5''	1.95	0.67
23:DB:1178:C:H2'	23:DB:1179:G:H8	1.60	0.67
23:DB:2294:G:P	43:DO:94:ARG:HH11	2.17	0.67
26:DD:9:VAL:HA	26:DD:197:THR:HG23	1.76	0.67
26:DD:30:GLU:HG3	26:DD:52:THR:HG22	1.76	0.67
1:AA:1002:G:H2'	1:AA:1003:G:O4'	1.95	0.67
6:AG:19:SER:OG	6:AG:22:LEU:HB2	1.95	0.67
9:AJ:80:THR:HB	9:AJ:83:THR:OG1	1.94	0.67
20:AB:209:VAL:O	20:AB:213:LEU:HB2	1.95	0.67
22:BA:28:C:H5	22:BA:56:G:H1	1.42	0.67
23:BB:27:G:H1'	23:BB:513:A:N6	2.09	0.67
23:BB:996:A:C4'	44:BQ:91:ARG:HH11	2.08	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:2151:U:H2'	23:BB:2152:G:H8	1.58	0.67
23:BB:2751:G:H2'	23:BB:2751:G:N3	2.10	0.67
24:BI:10:LEU:HD13	24:BI:12:VAL:HG13	1.76	0.67
25:BC:158:GLY:N	25:BC:194:VAL:HG13	2.10	0.67
25:BC:216:ARG:HG3	25:BC:216:ARG:HH11	1.60	0.67
26:BD:14:ILE:HA	28:BP:11:GLN:HE22	1.59	0.67
29:BE:130:LYS:HB2	29:BE:133:LEU:HG	1.76	0.67
39:BX:14:LEU:HD13	39:BX:57:LEU:HD21	1.75	0.67
40:BH:112:LYS:C	40:BH:112:LYS:HE3	2.20	0.67
42:BN:45:ARG:HG3	42:BN:95:THR:HG21	1.76	0.67
1:CA:1170:A:H2'	1:CA:1171:A:O4'	1.95	0.67
1:CA:1244:G:H2'	1:CA:1245:C:C6	2.30	0.67
1:CA:1432:G:H1'	1:CA:1468:A:N6	2.10	0.67
2:CC:154:GLY:HA3	2:CC:162:ALA:HB1	1.77	0.67
23:DB:1429:G:H2'	23:DB:1430:G:H8	1.60	0.67
23:DB:1655:A:H5'	26:DD:118:PHE:HB2	1.76	0.67
23:DB:2141:G:H2'	23:DB:2142:A:H8	1.60	0.67
23:DB:2143:C:H3'	23:DB:2144:G:H8	1.60	0.67
23:DB:2291:U:H2'	23:DB:2292:U:C6	2.30	0.67
29:DE:109:LEU:HD13	29:DE:180:LEU:HD13	1.77	0.67
37:DL:125:LEU:H	37:DL:143:GLU:HG3	1.60	0.67
38:DM:35:ALA:CB	38:DM:100:LYS:H	2.07	0.67
45:DS:69:LEU:HG	45:DS:107:VAL:HG22	1.76	0.67
49:DR:68:ARG:NH1	49:DR:90:ARG:HD3	2.09	0.67
1:AA:473:U:H2'	1:AA:474:G:H8	1.60	0.67
6:AG:66:GLU:HA	6:AG:69:ARG:HD2	1.77	0.67
10:AK:28:ASN:HD22	10:AK:29:THR:H	1.43	0.67
23:BB:1429:G:H2'	23:BB:1430:G:H8	1.60	0.67
23:BB:2078:C:H2'	23:BB:2079:U:C6	2.30	0.67
39:BX:12:GLU:HA	39:BX:15:ASN:HD21	1.58	0.67
46:BU:85:ARG:HH11	46:BU:86:PHE:N	1.93	0.67
1:CA:518:C:H2'	1:CA:530:G:H8	1.60	0.67
8:CI:9:GLY:HA2	8:CI:80:HIS:HD2	1.59	0.67
9:CJ:17:LEU:HD22	9:CJ:96:VAL:HG13	1.76	0.67
13:CN:27:LYS:HA	13:CN:31:SER:HB2	1.76	0.67
23:DB:594:U:H2'	23:DB:595:C:C6	2.30	0.67
23:DB:2394:C:H5''	37:DL:63:LYS:HD3	1.76	0.67
43:DO:89:ASP:HA	43:DO:116:GLN:O	1.94	0.67
1:AA:1009:U:H5'	1:AA:1010:U:OP2	1.95	0.66
19:AT:68:LYS:HE2	19:AT:68:LYS:HA	1.76	0.66
20:AB:186:VAL:O	20:AB:200:PRO:HA	1.95	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:AU:24:LYS:CD	21:AU:25:ALA:H	2.06	0.66
23:BB:191:A:H2'	23:BB:192:C:C6	2.30	0.66
23:BB:1568:G:H4'	25:BC:58:LYS:HB3	1.77	0.66
44:BQ:91:ARG:NH1	49:BR:10:LYS:HB3	2.10	0.66
45:BS:73:LYS:HE3	45:BS:74:ILE:H	1.59	0.66
46:BU:12:VAL:HG22	46:BU:69:VAL:HG12	1.77	0.66
46:BU:14:THR:HG21	46:BU:64:ILE:HD13	1.76	0.66
50:BT:32:LEU:H	50:BT:83:ALA:HB3	1.59	0.66
3:CD:137:SER:HB2	3:CD:138:PRO:HD2	1.76	0.66
11:CL:33:CYS:HA	11:CL:54:VAL:HA	1.77	0.66
13:CN:52:ARG:HD2	13:CN:58:ARG:HH21	1.57	0.66
24:DI:27:LEU:HD12	24:DI:32:VAL:HG11	1.75	0.66
35:DV:80:HIS:CD2	35:DV:83:LYS:HB2	2.29	0.66
47:DF:62:GLN:HG3	47:DF:91:ARG:NH1	2.09	0.66
47:DF:126:ASN:HD22	47:DF:156:THR:HA	1.60	0.66
49:DR:31:GLU:H	49:DR:63:VAL:HG22	1.58	0.66
11:AL:33:CYS:HA	11:AL:54:VAL:HA	1.76	0.66
23:BB:587:C:O2'	37:BL:19:LEU:HD13	1.93	0.66
28:BP:4:ILE:HG22	28:BP:5:LYS:N	2.10	0.66
52:BW:67:LYS:O	52:BW:68:PHE:HB2	1.93	0.66
1:CA:736:C:H5''	5:CF:90:MET:HE3	1.77	0.66
23:DB:923:G:H1'	52:DW:23:LYS:HZ2	1.60	0.66
23:DB:1722:A:H2'	23:DB:1723:G:H8	1.60	0.66
23:DB:1778:U:H2'	23:DB:1784:A:H62	1.59	0.66
51:DZ:66:THR:O	51:DZ:69:ALA:HB3	1.95	0.66
1:AA:56:U:H2'	1:AA:57:G:H8	1.60	0.66
1:AA:1432:G:H5'	28:BP:105:LYS:HG2	1.76	0.66
4:AE:89:THR:HG22	4:AE:90:GLY:N	2.09	0.66
6:AG:4:ARG:HD2	6:AG:5:VAL:H	1.59	0.66
9:AJ:23:ALA:O	9:AJ:27:GLU:HB2	1.95	0.66
12:AM:9:PRO:HB2	12:AM:17:ALA:HB1	1.77	0.66
19:AT:49:ALA:HA	19:AT:52:GLU:OE2	1.95	0.66
23:BB:2728:U:H2'	23:BB:2729:G:C8	2.31	0.66
29:BE:192:ALA:HA	29:BE:195:GLN:HE21	1.61	0.66
45:BS:48:LYS:O	45:BS:52:GLU:HG2	1.94	0.66
45:BS:55:ILE:HD12	45:BS:69:LEU:HD23	1.76	0.66
52:BW:50:VAL:HG23	52:BW:61:LYS:HE3	1.76	0.66
2:CC:70:ALA:HA	2:CC:105:VAL:HG21	1.77	0.66
5:CF:38:ARG:HH21	5:CF:63:ASN:ND2	1.92	0.66
9:CJ:52:LEU:HA	9:CJ:62:ARG:HA	1.77	0.66
9:CJ:80:THR:HB	9:CJ:83:THR:OG1	1.94	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:CN:25:GLU:O	13:CN:29:ILE:HG13	1.95	0.66
23:DB:140:C:H4'	23:DB:141:G:C6	2.31	0.66
23:DB:191:A:H2'	23:DB:192:C:C6	2.30	0.66
23:DB:549:G:H2'	41:DJ:2:LYS:HE3	1.76	0.66
23:DB:1080:A:H2'	23:DB:1081:U:C6	2.29	0.66
23:DB:1406:U:H2'	23:DB:1407:G:C8	2.30	0.66
23:DB:1486:U:H2'	23:DB:1487:U:H6	1.59	0.66
23:DB:2103:C:H3'	23:DB:2104:C:C2	2.30	0.66
23:DB:2734:A:H2'	23:DB:2735:G:H5'	1.78	0.66
30:DY:43:ILE:O	30:DY:47:ILE:HG12	1.95	0.66
39:DX:56:LEU:C	39:DX:58:ASN:H	2.03	0.66
51:DZ:5:CYS:CB	51:DZ:10:LYS:H	2.06	0.66
1:AA:41:G:H2'	1:AA:42:G:H8	1.61	0.66
1:AA:532:A:N6	2:AC:191:THR:HB	2.10	0.66
1:AA:539:A:H2'	1:AA:540:G:C8	2.31	0.66
3:AD:25:ARG:HH11	3:AD:26:ALA:N	1.93	0.66
43:BO:35:ILE:HG22	43:BO:53:THR:HG23	1.77	0.66
1:CA:1000:A:H2'	1:CA:1001:C:C6	2.31	0.66
4:CE:81:GLN:H	4:CE:146:MET:HE3	1.61	0.66
12:CM:52:ILE:HG23	12:CM:56:ARG:HH12	1.59	0.66
13:CN:5:MET:HB3	13:CN:62:ARG:HH12	1.61	0.66
23:DB:1592:C:H2'	23:DB:1593:A:C8	2.31	0.66
23:DB:2141:G:H2'	23:DB:2142:A:C8	2.31	0.66
23:DB:2264:C:N4	52:DW:11:ASN:HD21	1.93	0.66
34:D3:61:LEU:HB2	34:D3:64:ALA:HB2	1.77	0.66
36:D2:21:ARG:HG2	36:D2:31:LEU:HG	1.77	0.66
40:DH:113:SER:H	40:DH:132:PHE:HE1	1.44	0.66
46:DU:12:VAL:HG22	46:DU:69:VAL:HG12	1.76	0.66
48:DG:8:VAL:HG11	48:DG:49:LEU:HB2	1.75	0.66
1:AA:390:U:H2'	1:AA:391:G:C8	2.30	0.66
1:AA:1062:U:H2'	1:AA:1063:C:C6	2.30	0.66
7:AH:87:ARG:H	7:AH:90:GLU:HB3	1.61	0.66
9:AJ:77:VAL:HG12	9:AJ:78:GLU:HG3	1.78	0.66
23:BB:79:C:HO2'	23:BB:346:A:H1'	1.59	0.66
23:BB:549:G:H2'	41:BJ:2:LYS:HE3	1.77	0.66
23:BB:873:C:H4'	38:BM:64:TRP:HE1	1.60	0.66
23:BB:1081:U:H4'	24:BI:123:ALA:HB1	1.77	0.66
23:BB:1484:U:H2'	23:BB:1485:U:C6	2.31	0.66
23:BB:2882:A:OP1	42:BN:96:ARG:HD2	1.94	0.66
27:BK:8:LEU:H	27:BK:8:LEU:HD12	1.61	0.66
52:BW:23:LYS:HD2	52:BW:24:ARG:H	1.61	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:658:C:H2'	1:CA:659:U:H6	1.61	0.66
23:DB:545:U:H3'	23:DB:545:U:OP2	1.96	0.66
23:DB:2425:A:H5'	23:DB:2427:C:O4'	1.95	0.66
24:DI:72:THR:HG22	24:DI:115:ASP:OD2	1.95	0.66
39:DX:20:ASN:O	39:DX:24:GLU:HB3	1.95	0.66
40:DH:2:GLN:O	40:DH:3:VAL:HG22	1.95	0.66
47:DF:119:LYS:HA	47:DF:121:PHE:CE1	2.30	0.66
48:DG:122:ALA:HA	48:DG:132:LEU:HA	1.78	0.66
2:AC:13:ILE:H	2:AC:13:ILE:HD13	1.61	0.66
3:AD:2:ARG:NH1	3:AD:114:ARG:HG3	2.11	0.66
23:BB:171:U:H2'	23:BB:172:A:C8	2.30	0.66
23:BB:1464:G:H2'	23:BB:1465:G:H8	1.60	0.66
41:BJ:99:ARG:HA	41:BJ:102:GLU:HB2	1.78	0.66
50:BT:32:LEU:N	50:BT:83:ALA:HB3	2.09	0.66
1:CA:524:G:H2'	1:CA:525:C:C6	2.31	0.66
1:CA:1009:U:H5'	1:CA:1010:U:OP2	1.95	0.66
1:CA:1320:C:N3	18:CS:35:ARG:HD3	2.11	0.66
3:CD:123:MET:HE3	3:CD:126:GLY:HA2	1.77	0.66
23:DB:479:A:N3	23:DB:481:G:H5''	2.09	0.66
23:DB:2102:G:H2'	23:DB:2103:C:O4'	1.96	0.66
23:DB:2591:C:H2'	23:DB:2592:G:H8	1.60	0.66
24:DI:9:LYS:HG2	24:DI:57:VAL:HG13	1.77	0.66
24:DI:42:ASN:HA	24:DI:45:THR:OG1	1.95	0.66
29:DE:58:LYS:HE2	29:DE:60:TRP:CD1	2.28	0.66
37:DL:56:PRO:HD2	37:DL:59:ARG:HG3	1.78	0.66
38:DM:42:THR:O	38:DM:44:ARG:N	2.27	0.66
41:DJ:58:ASN:HA	41:DJ:127:GLY:HA2	1.76	0.66
46:DU:85:ARG:HH11	46:DU:86:PHE:N	1.93	0.66
1:AA:806:C:H2'	1:AA:807:A:H8	1.60	0.66
1:AA:1316:G:H22	1:AA:1318:A:H3'	1.61	0.66
13:AN:27:LYS:HA	13:AN:31:SER:HB2	1.76	0.66
15:AP:57:ILE:O	15:AP:61:VAL:HG23	1.95	0.66
25:BC:156:SER:O	25:BC:194:VAL:HG11	1.96	0.66
26:BD:11:MET:HE1	26:BD:192:ALA:H	1.61	0.66
30:BY:43:ILE:O	30:BY:47:ILE:HG12	1.94	0.66
45:BS:27:LYS:O	45:BS:32:ALA:HB2	1.96	0.66
52:BW:81:ILE:O	52:BW:81:ILE:HG13	1.95	0.66
1:CA:501:C:H2'	1:CA:502:A:H8	1.59	0.66
1:CA:1302:C:OP2	12:CM:16:ILE:HD11	1.95	0.66
12:CM:53:ASP:HA	12:CM:56:ARG:NH2	2.10	0.66
23:DB:721:A:H2'	23:DB:722:A:C8	2.30	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:1080:A:H4'	24:DI:126:ARG:HD2	1.75	0.66
45:DS:24:ILE:HG23	45:DS:32:ALA:HB1	1.76	0.66
48:DG:104:LEU:HB2	48:DG:112:VAL:HB	1.78	0.66
51:DZ:40:VAL:HG22	51:DZ:45:ARG:O	1.94	0.66
20:AB:14:HIS:HD2	20:AB:202:ASN:H	1.44	0.66
23:BB:78:U:H2'	23:BB:79:C:C6	2.30	0.66
23:BB:982:C:H5'	23:BB:982:C:O2	1.96	0.66
23:BB:1551:A:H3'	23:BB:1552:A:H5''	1.78	0.66
24:BI:121:ILE:HA	24:BI:124:MET:HE3	1.76	0.66
29:BE:48:THR:N	29:BE:51:GLU:HG3	2.11	0.66
50:BT:82:LYS:HD2	50:BT:84:TYR:HE1	1.59	0.66
9:CJ:55:PRO:HA	13:CN:80:ARG:NH2	2.10	0.66
23:DB:171:U:H2'	23:DB:172:A:C8	2.30	0.66
23:DB:224:U:O4	23:DB:420:C:H5'	1.95	0.66
44:DQ:4:LYS:HZ3	44:DQ:7:VAL:HG22	1.61	0.66
48:DG:26:LYS:HA	48:DG:32:LEU:HA	1.78	0.66
50:DT:11:LEU:HA	50:DT:34:VAL:HG12	1.77	0.66
1:AA:865:A:H5'	1:AA:1078:U:O4	1.96	0.66
11:AL:17:LYS:HE3	11:AL:17:LYS:N	2.11	0.66
23:BB:709:U:H2'	23:BB:710:U:C6	2.31	0.66
23:BB:1149:G:H2'	23:BB:1150:C:C6	2.31	0.66
23:BB:1406:U:H2'	23:BB:1407:G:C8	2.31	0.66
23:BB:2591:C:H2'	23:BB:2592:G:H8	1.61	0.66
27:BK:104:THR:HB	27:BK:106:GLU:OE1	1.96	0.66
35:BV:80:HIS:CD2	35:BV:83:LYS:HB2	2.30	0.66
44:BQ:65:ASN:HB2	44:BQ:75:TYR:HB2	1.78	0.66
1:CA:60:A:H4'	1:CA:61:G:O5'	1.96	0.66
16:CQ:16:MET:CB	16:CQ:19:SER:HB2	2.25	0.66
20:CB:209:VAL:O	20:CB:213:LEU:HB2	1.96	0.66
23:DB:18:U:H2'	23:DB:19:A:C8	2.31	0.66
23:DB:1098:A:H2'	24:DI:4:VAL:CA	2.26	0.66
26:DD:116:LYS:HB3	26:DD:118:PHE:CE2	2.30	0.66
27:DK:89:ASN:C	27:DK:89:ASN:HD22	2.04	0.66
29:DE:58:LYS:C	29:DE:60:TRP:N	2.52	0.66
38:DM:59:ARG:HE	38:DM:60:GLN:H	1.42	0.66
20:AB:138:ARG:HD3	20:AB:141:GLU:OE1	1.96	0.66
23:BB:1138:G:H2'	23:BB:1139:G:O4'	1.96	0.66
28:BP:47:ILE:HD13	28:BP:61:ARG:HG2	1.78	0.66
47:BF:62:GLN:HG3	47:BF:91:ARG:NH1	2.11	0.66
47:BF:116:LEU:HB3	47:BF:176:PHE:HA	1.78	0.66
48:BG:17:LYS:HZ2	48:BG:18:ILE:N	1.94	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CE:92:ARG:HH11	4:CE:92:ARG:HB3	1.61	0.66
17:CR:34:GLU:HB2	21:CU:18:PHE:CZ	2.31	0.66
22:DA:107:G:O2'	22:DA:108:A:H5'	1.96	0.66
23:DB:770:G:H5''	36:D2:10:LEU:HD12	1.77	0.66
23:DB:773:U:H4'	25:DC:45:ASN:O	1.96	0.66
23:DB:784:G:C6	25:DC:227:VAL:HG11	2.31	0.66
23:DB:962:G:H21	23:DB:2250:G:H22	1.43	0.66
25:DC:158:GLY:N	25:DC:194:VAL:HG13	2.11	0.66
1:AA:493:A:H5'	1:AA:494:G:OP2	1.96	0.65
4:AE:76:ASN:HB2	4:AE:81:GLN:NE2	2.10	0.65
5:AF:38:ARG:HH21	5:AF:63:ASN:HD21	1.43	0.65
23:BB:751:A:H5'	45:BS:90:LYS:HA	1.78	0.65
24:BI:7:TYR:HB2	24:BI:58:ILE:O	1.95	0.65
26:BD:148:GLN:CG	26:BD:152:PRO:HG2	2.26	0.65
37:BL:90:VAL:HB	37:BL:122:VAL:HG12	1.78	0.65
39:BX:49:ASP:O	39:BX:53:VAL:HG23	1.97	0.65
42:BN:34:ILE:O	42:BN:112:TYR:HA	1.96	0.65
44:BQ:65:ASN:O	44:BQ:69:ARG:HB2	1.95	0.65
23:DB:664:G:H2'	23:DB:665:U:H6	1.61	0.65
23:DB:2484:G:OP1	38:DM:44:ARG:HD3	1.96	0.65
25:DC:244:VAL:HB	25:DC:249:VAL:H	1.61	0.65
29:DE:130:LYS:HB2	29:DE:133:LEU:HG	1.77	0.65
42:DN:45:ARG:HG3	42:DN:95:THR:HG21	1.76	0.65
23:BB:654:A:H2'	23:BB:655:A:H5''	1.76	0.65
23:BB:1021:A:H62	23:BB:1141:U:H3	1.43	0.65
23:BB:1386:C:H2'	23:BB:1387:A:C8	2.31	0.65
26:BD:116:LYS:HB3	26:BD:118:PHE:CE2	2.31	0.65
38:BM:42:THR:O	38:BM:44:ARG:N	2.28	0.65
39:BX:39:GLN:O	39:BX:42:LEU:HB2	1.96	0.65
41:BJ:3:THR:HB	41:BJ:44:TYR:CE1	2.31	0.65
44:BQ:71:ASN:HD22	44:BQ:109:VAL:HG11	1.61	0.65
48:BG:26:LYS:HA	48:BG:32:LEU:HA	1.78	0.65
48:BG:122:ALA:HA	48:BG:132:LEU:HA	1.77	0.65
6:CG:57:GLU:CD	6:CG:57:GLU:H	2.04	0.65
9:CJ:15:HIS:HA	9:CJ:18:ILE:HG22	1.78	0.65
15:CP:46:LYS:HG3	15:CP:48:GLU:O	1.95	0.65
15:CP:68:SER:OG	15:CP:71:VAL:HG12	1.96	0.65
19:CT:43:LYS:HE2	19:CT:44:ALA:N	2.09	0.65
20:CB:14:HIS:HD2	20:CB:202:ASN:H	1.42	0.65
23:DB:1125:G:H4'	32:D4:37:GLN:NE2	2.11	0.65
23:DB:1484:U:H2'	23:DB:1485:U:C6	2.32	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:2267:A:H8	23:DB:2267:A:O5'	1.79	0.65
29:DE:29:HIS:NE2	37:DL:8:PRO:HG3	2.11	0.65
46:DU:80:ASP:HB3	46:DU:96:LYS:N	2.12	0.65
52:DW:39:GLN:HG3	52:DW:42:THR:HB	1.77	0.65
2:AC:129:PHE:HE2	2:AC:165:GLU:HG2	1.61	0.65
6:AG:74:VAL:HA	6:AG:87:PRO:HA	1.78	0.65
14:AO:8:THR:O	14:AO:12:VAL:HG23	1.96	0.65
23:BB:664:G:H2'	23:BB:665:U:C6	2.30	0.65
23:BB:1166:G:H2'	23:BB:1167:C:C6	2.31	0.65
23:BB:2795:C:H2'	23:BB:2796:U:O4'	1.96	0.65
36:B2:21:ARG:HG2	36:B2:31:LEU:HG	1.78	0.65
52:BW:23:LYS:NZ	52:BW:24:ARG:HG3	2.09	0.65
1:CA:812:G:H2'	1:CA:812:G:N3	2.11	0.65
4:CE:45:VAL:HG12	4:CE:116:VAL:HG23	1.79	0.65
21:CU:11:PHE:HD1	21:CU:11:PHE:O	1.79	0.65
23:DB:162:U:H4'	23:DB:163:C:OP1	1.95	0.65
23:DB:545:U:H2'	23:DB:546:U:H4'	1.78	0.65
23:DB:947:A:H2'	23:DB:948:C:C6	2.30	0.65
23:DB:996:A:C4'	44:DQ:91:ARG:HH11	2.09	0.65
23:DB:1131:G:N2	23:DB:2024:G:H21	1.94	0.65
23:DB:1138:G:H2'	23:DB:1139:G:O4'	1.96	0.65
23:DB:1309:G:OP1	36:D2:9:VAL:HG12	1.97	0.65
23:DB:1508:A:H5'	23:DB:1509:A:C6	2.31	0.65
46:DU:24:VAL:HG22	46:DU:35:VAL:HG22	1.76	0.65
50:DT:73:ARG:HB3	50:DT:73:ARG:HH21	1.61	0.65
52:DW:23:LYS:HD2	52:DW:24:ARG:H	1.62	0.65
1:AA:590:U:H2'	1:AA:591:U:C6	2.31	0.65
1:AA:1244:G:H2'	1:AA:1245:C:C6	2.31	0.65
1:AA:1287:A:H2'	1:AA:1288:A:C8	2.32	0.65
1:AA:1463:U:H2'	1:AA:1464:U:C6	2.31	0.65
11:AL:24:GLU:HB2	11:AL:26:CYS:SG	2.37	0.65
18:AS:47:THR:HG23	18:AS:60:PHE:HE1	1.61	0.65
23:BB:675:A:H4'	29:BE:60:TRP:CZ2	2.31	0.65
23:BB:1820:U:OP1	25:BC:176:ARG:HD2	1.97	0.65
23:BB:2322:A:C6	23:BB:2333:A:N6	2.65	0.65
25:BC:156:SER:HB3	25:BC:159:THR:HG21	1.78	0.65
40:BH:27:ARG:HG2	40:BH:27:ARG:HH21	1.62	0.65
43:BO:15:ARG:HH21	43:BO:95:SER:CB	2.09	0.65
46:BU:24:VAL:HG22	46:BU:35:VAL:HG22	1.78	0.65
47:BF:119:LYS:HA	47:BF:121:PHE:CE1	2.30	0.65
49:BR:68:ARG:NH1	49:BR:90:ARG:HD3	2.11	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:460:A:H4'	50:DT:72:GLN:HB2	1.78	0.65
23:DB:709:U:H2'	23:DB:710:U:C6	2.31	0.65
23:DB:947:A:H2'	23:DB:948:C:H6	1.62	0.65
23:DB:2458:G:H1'	23:DB:2460:U:O4	1.96	0.65
28:DP:50:ARG:HB3	28:DP:57:ALA:H	1.60	0.65
29:DE:147:LEU:HB3	29:DE:186:VAL:HG23	1.77	0.65
39:DX:49:ASP:O	39:DX:53:VAL:HG23	1.96	0.65
1:AA:9:G:H5'	4:AE:107:GLY:HA3	1.78	0.65
11:AL:20:VAL:HB	11:AL:94:TYR:HE1	1.62	0.65
23:BB:18:U:H2'	23:BB:19:A:C8	2.31	0.65
26:BD:8:LYS:HD3	26:BD:197:THR:H	1.61	0.65
36:B2:10:LEU:HD21	36:B2:14:ARG:NH1	2.10	0.65
37:BL:56:PRO:HD2	37:BL:59:ARG:HG3	1.78	0.65
1:CA:473:U:H2'	1:CA:474:G:H8	1.62	0.65
6:CG:74:VAL:HA	6:CG:87:PRO:HA	1.78	0.65
9:CJ:23:ALA:O	9:CJ:27:GLU:HB2	1.97	0.65
13:CN:26:LEU:HD11	13:CN:44:VAL:HG22	1.78	0.65
23:DB:857:G:C2'	23:DB:858:G:H5'	2.27	0.65
23:DB:1993:U:H4'	26:DD:133:THR:CG2	2.26	0.65
26:DD:69:ALA:HA	26:DD:73:VAL:HB	1.78	0.65
36:D2:19:ARG:HG2	36:D2:19:ARG:NH2	2.09	0.65
51:DZ:38:PHE:HE2	51:DZ:51:VAL:HG21	1.61	0.65
52:DW:81:ILE:HG13	52:DW:81:ILE:O	1.96	0.65
1:AA:658:C:H2'	1:AA:659:U:H6	1.61	0.65
1:AA:812:G:N3	1:AA:812:G:H2'	2.11	0.65
1:AA:1320:C:N3	18:AS:35:ARG:HD3	2.11	0.65
15:AP:46:LYS:HG3	15:AP:48:GLU:O	1.97	0.65
20:AB:44:LYS:C	20:AB:47:PRO:HD2	2.22	0.65
20:AB:53:LEU:HD11	20:AB:216:VAL:HG12	1.78	0.65
23:BB:162:U:H4'	23:BB:163:C:OP1	1.96	0.65
23:BB:224:U:O4	23:BB:420:C:H5'	1.97	0.65
23:BB:962:G:H21	23:BB:2250:G:H22	1.44	0.65
23:BB:1309:G:OP1	36:B2:9:VAL:HG12	1.97	0.65
23:BB:2291:U:H2'	23:BB:2292:U:C6	2.31	0.65
23:BB:2866:U:H4'	23:BB:2867:G:H4'	1.77	0.65
37:BL:125:LEU:H	37:BL:143:GLU:HG3	1.60	0.65
50:BT:69:ARG:HB3	50:BT:74:ILE:HA	1.79	0.65
52:BW:24:ARG:HA	52:BW:66:VAL:H	1.62	0.65
1:CA:320:A:H2'	1:CA:321:A:C8	2.31	0.65
19:CT:38:ILE:HG12	19:CT:85:LEU:HD13	1.77	0.65
20:CB:26:MET:HE1	20:CB:186:VAL:HG23	1.77	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:479:A:O2'	23:DB:481:G:H5'	1.96	0.65
23:DB:492:A:H2'	23:DB:493:G:O4'	1.97	0.65
23:DB:981:A:H2'	23:DB:982:C:H5''	1.78	0.65
23:DB:1726:C:H2'	23:DB:1727:C:C6	2.31	0.65
23:DB:2366:A:H2'	23:DB:2367:G:O4'	1.97	0.65
34:D3:22:LYS:HB2	34:D3:48:MET:SD	2.36	0.65
37:DL:90:VAL:HB	37:DL:122:VAL:HG12	1.78	0.65
44:DQ:65:ASN:HB2	44:DQ:75:TYR:HB2	1.79	0.65
48:DG:24:THR:HA	48:DG:34:ARG:HA	1.79	0.65
1:AA:524:G:H2'	1:AA:525:C:C6	2.32	0.65
2:AC:26:LYS:HG3	2:AC:27:GLU:N	2.11	0.65
8:AI:9:GLY:HA2	8:AI:80:HIS:HD2	1.61	0.65
10:AK:58:THR:HB	10:AK:59:PRO:HD2	1.79	0.65
12:AM:28:ARG:NH2	12:AM:62:PHE:HB2	2.11	0.65
15:AP:6:LEU:HB3	15:AP:17:TYR:HB3	1.78	0.65
23:BB:53:A:H1'	23:BB:179:C:O2'	1.97	0.65
23:BB:590:A:H2'	23:BB:591:U:C6	2.32	0.65
23:BB:1406:U:H2'	23:BB:1407:G:H8	1.61	0.65
23:BB:1722:A:H2'	23:BB:1723:G:H8	1.60	0.65
25:BC:137:GLY:H	25:BC:163:ILE:HB	1.62	0.65
25:BC:211:ARG:C	25:BC:213:ARG:H	2.05	0.65
26:BD:69:ALA:HA	26:BD:73:VAL:HB	1.77	0.65
29:BE:58:LYS:C	29:BE:60:TRP:N	2.52	0.65
36:B2:19:ARG:HG2	36:B2:19:ARG:NH2	2.08	0.65
38:BM:96:ILE:HD11	38:BM:126:ILE:HG12	1.79	0.65
40:BH:8:LYS:O	40:BH:13:GLY:HA3	1.96	0.65
44:BQ:63:ARG:HH22	44:BQ:96:ASP:CA	2.09	0.65
1:CA:814:A:H5'	1:CA:1511:G:H4'	1.79	0.65
23:DB:362:A:N3	23:DB:362:A:H2'	2.10	0.65
23:DB:849:A:H2'	23:DB:850:U:C6	2.31	0.65
37:DL:18:ARG:C	37:DL:19:LEU:HD12	2.21	0.65
39:DX:39:GLN:O	39:DX:42:LEU:HB2	1.96	0.65
44:DQ:65:ASN:O	44:DQ:69:ARG:HB2	1.96	0.65
47:DF:135:ILE:HD11	47:DF:137:PHE:HB3	1.79	0.65
48:DG:88:LEU:HD12	48:DG:88:LEU:O	1.97	0.65
49:DR:28:ALA:O	49:DR:63:VAL:HG21	1.96	0.65
52:DW:24:ARG:HA	52:DW:66:VAL:H	1.62	0.65
1:AA:1316:G:N2	1:AA:1318:A:H3'	2.11	0.65
1:AA:1479:C:H2'	1:AA:1480:A:H8	1.62	0.65
4:AE:81:GLN:H	4:AE:146:MET:HE3	1.61	0.65
7:AH:40:LYS:HD2	7:AH:47:ASP:HA	1.79	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AJ:6:ILE:HB	9:AJ:76:ILE:HD11	1.79	0.65
11:AL:20:VAL:HB	11:AL:94:TYR:CE1	2.32	0.65
23:BB:431:U:O2'	23:BB:432:A:H5'	1.96	0.65
24:BI:89:SER:HA	24:BI:97:VAL:HG21	1.79	0.65
27:BK:41:ILE:HG13	27:BK:42:THR:H	1.61	0.65
50:BT:73:ARG:HB3	50:BT:73:ARG:HH21	1.62	0.65
2:CC:155:ARG:H	2:CC:162:ALA:HA	1.62	0.65
23:DB:155:A:H2'	23:DB:156:A:C8	2.31	0.65
23:DB:233:A:H61	23:DB:428:A:H61	1.44	0.65
23:DB:281:C:H2'	23:DB:282:A:H8	1.61	0.65
29:DE:48:THR:N	29:DE:51:GLU:HG3	2.12	0.65
42:DN:58:ASP:O	42:DN:59:SER:HB3	1.95	0.65
44:DQ:91:ARG:NH1	49:DR:10:LYS:HB3	2.11	0.65
47:DF:107:VAL:O	47:DF:110:ILE:HG22	1.97	0.65
1:AA:1054:C:O2'	1:AA:1055:A:H5''	1.97	0.65
7:AH:76:ARG:HG3	7:AH:77:VAL:N	2.12	0.65
11:AL:60:PHE:O	11:AL:62:VAL:HG13	1.97	0.65
16:AQ:16:MET:CB	16:AQ:19:SER:HB2	2.26	0.65
18:AS:18:VAL:CG2	18:AS:43:MET:HB3	2.26	0.65
23:BB:1993:U:H4'	26:BD:133:THR:HG22	1.79	0.65
23:BB:2728:U:H2'	23:BB:2729:G:H8	1.61	0.65
35:BV:42:LEU:HD23	35:BV:42:LEU:H	1.62	0.65
42:BN:58:ASP:O	42:BN:59:SER:HB3	1.96	0.65
1:CA:408:A:OP1	3:CD:111:ALA:HB3	1.95	0.65
1:CA:1103:C:H5''	20:CB:96:LEU:HD12	1.78	0.65
4:CE:92:ARG:HB3	4:CE:92:ARG:NH1	2.12	0.65
7:CH:76:ARG:HG3	7:CH:77:VAL:N	2.12	0.65
12:CM:2:ARG:HG3	12:CM:6:ILE:H	1.62	0.65
12:CM:28:ARG:NH2	12:CM:62:PHE:HB2	2.11	0.65
20:CB:202:ASN:HD22	20:CB:202:ASN:C	2.04	0.65
23:DB:544:C:H2'	23:DB:545:U:C4	2.32	0.65
23:DB:1338:G:H4'	50:DT:18:GLU:HG3	1.79	0.65
23:DB:2360:G:H4'	37:DL:61:LEU:HD11	1.77	0.65
23:DB:2635:A:H5'	26:DD:79:LEU:HD23	1.79	0.65
25:DC:173:LEU:H	25:DC:173:LEU:HD22	1.61	0.65
37:DL:93:ASN:O	37:DL:95:LEU:HD12	1.97	0.65
40:DH:77:THR:HA	40:DH:143:ILE:O	1.97	0.65
47:DF:168:LEU:HD13	47:DF:169:LEU:H	1.62	0.65
49:DR:71:LYS:HG3	49:DR:72:VAL:N	2.12	0.65
51:DZ:6:GLN:HE22	51:DZ:77:LYS:NZ	1.94	0.65
4:AE:45:VAL:HG12	4:AE:116:VAL:HG23	1.79	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AM:44:ILE:HD12	12:AM:45:SER:H	1.62	0.65
16:AQ:18:LYS:HE3	16:AQ:48:GLU:HG2	1.79	0.65
23:BB:547:A:H3'	23:BB:548:G:H8	1.62	0.65
23:BB:1038:G:H2'	23:BB:1039:A:H8	1.61	0.65
40:BH:2:GLN:O	40:BH:3:VAL:HG22	1.97	0.65
1:CA:235:C:H2'	1:CA:236:A:C8	2.32	0.65
1:CA:1006:G:H2'	1:CA:1007:U:C6	2.32	0.65
23:DB:138:U:H4'	23:DB:139:U:H2'	1.78	0.65
23:DB:2728:U:H2'	23:DB:2729:G:H8	1.62	0.65
24:DI:41:PHE:O	24:DI:45:THR:HG23	1.97	0.65
41:DJ:3:THR:HB	41:DJ:44:TYR:CE1	2.32	0.65
45:DS:17:VAL:C	45:DS:19:LEU:H	2.05	0.65
46:DU:34:ILE:HG12	46:DU:63:ALA:HB2	1.79	0.65
4:AE:92:ARG:NH1	4:AE:92:ARG:HB3	2.13	0.64
11:AL:41:PRO:HB3	11:AL:49:ARG:NH1	2.12	0.64
13:AN:40:ARG:NH2	18:AS:6:LYS:CB	2.58	0.64
16:AQ:18:LYS:HG2	16:AQ:48:GLU:HA	1.79	0.64
23:BB:134:G:H2'	23:BB:135:U:C6	2.33	0.64
23:BB:545:U:C6	23:BB:547:A:H5'	2.31	0.64
23:BB:2229:U:H2'	23:BB:2230:G:C8	2.32	0.64
23:BB:2884:U:O2	31:B0:49:ARG:HG2	1.97	0.64
26:BD:136:ASN:HD21	26:BD:139:SER:C	2.05	0.64
27:BK:7:MET:HE3	27:BK:18:ARG:HB3	1.79	0.64
47:BF:42:ALA:HB1	47:BF:46:LYS:HZ3	1.61	0.64
47:BF:107:VAL:O	47:BF:110:ILE:HG22	1.97	0.64
12:CM:38:ILE:HG22	12:CM:42:VAL:HG21	1.78	0.64
18:CS:30:LEU:HD12	18:CS:48:ILE:HG12	1.79	0.64
23:DB:18:U:H2'	23:DB:19:A:H8	1.61	0.64
23:DB:664:G:H2'	23:DB:665:U:C6	2.32	0.64
23:DB:2400:G:O2'	23:DB:2401:U:H5'	1.97	0.64
25:DC:156:SER:O	25:DC:194:VAL:HG11	1.97	0.64
33:D1:3:GLY:O	33:D1:4:ILE:HG12	1.96	0.64
40:DH:119:ASN:ND2	40:DH:121:VAL:HG13	2.11	0.64
43:DO:74:VAL:O	43:DO:78:VAL:HG23	1.97	0.64
46:DU:35:VAL:HB	46:DU:38:ILE:CG2	2.26	0.64
47:DF:37:MET:HE2	47:DF:149:ARG:HD2	1.78	0.64
50:DT:38:ALA:O	50:DT:39:THR:HB	1.96	0.64
5:AF:16:GLU:CD	5:AF:16:GLU:H	2.05	0.64
23:BB:581:C:H2'	23:BB:582:A:C8	2.33	0.64
23:BB:1076:C:H4'	24:BI:94:LYS:CE	2.27	0.64
23:BB:1441:G:H2'	23:BB:1442:U:C6	2.31	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:1726:C:H2'	23:BB:1727:C:C6	2.33	0.64
40:BH:27:ARG:H	40:BH:31:VAL:CG2	2.11	0.64
40:BH:79:THR:HG22	40:BH:145:ASN:HB2	1.79	0.64
2:CC:26:LYS:HG3	2:CC:27:GLU:N	2.12	0.64
9:CJ:24:GLU:HG2	9:CJ:90:LEU:HD21	1.78	0.64
11:CL:20:VAL:HB	11:CL:94:TYR:CE1	2.32	0.64
11:CL:51:VAL:HG12	11:CL:52:CYS:H	1.62	0.64
23:DB:594:U:H2'	23:DB:595:C:H6	1.62	0.64
23:DB:1203:U:H1'	37:DL:4:ASN:HD21	1.62	0.64
23:DB:1205:A:H4'	23:DB:1206:G:OP2	1.96	0.64
25:DC:140:VAL:HG12	25:DC:141:HIS:H	1.61	0.64
25:DC:216:ARG:HH11	25:DC:216:ARG:HG3	1.60	0.64
27:DK:38:ILE:HD13	27:DK:61:VAL:HG12	1.78	0.64
35:DV:42:LEU:HD23	35:DV:42:LEU:H	1.61	0.64
47:DF:141:ASP:HB2	47:DF:144:LYS:HB2	1.78	0.64
1:AA:1006:G:H2'	1:AA:1007:U:H6	1.62	0.64
2:AC:116:ALA:O	2:AC:119:ILE:HG22	1.98	0.64
3:AD:60:VAL:HA	3:AD:63:ILE:HD12	1.80	0.64
23:BB:18:U:H2'	23:BB:19:A:H8	1.61	0.64
23:BB:139:U:H5	50:BT:1:MET:HB3	1.63	0.64
23:BB:345:A:H1'	23:BB:346:A:C2	2.32	0.64
23:BB:2267:A:C8	23:BB:2267:A:O5'	2.51	0.64
37:BL:93:ASN:O	37:BL:95:LEU:HD12	1.96	0.64
40:BH:132:PHE:HB3	40:BH:140:ALA:HB3	1.79	0.64
41:BJ:18:VAL:HG12	41:BJ:54:ILE:HD11	1.78	0.64
44:BQ:30:VAL:O	44:BQ:31:TYR:HB2	1.96	0.64
46:BU:80:ASP:HB3	46:BU:96:LYS:N	2.13	0.64
49:BR:28:ALA:O	49:BR:63:VAL:HG21	1.97	0.64
49:BR:60:LYS:N	49:BR:100:GLY:HA3	2.06	0.64
1:CA:1463:U:H2'	1:CA:1464:U:C6	2.32	0.64
13:CN:20:PHE:HB3	13:CN:24:ALA:HB2	1.79	0.64
17:CR:38:ILE:H	17:CR:38:ILE:HD13	1.63	0.64
23:DB:315:G:H2'	23:DB:316:C:C6	2.32	0.64
23:DB:1440:U:H2'	23:DB:1441:G:C8	2.32	0.64
23:DB:2137:U:O2'	23:DB:2138:G:H5'	1.97	0.64
23:DB:2182:U:H2'	23:DB:2183:A:C8	2.33	0.64
23:DB:2728:U:H2'	23:DB:2729:G:C8	2.31	0.64
24:DI:1:ALA:C	24:DI:2:LYS:HD2	2.22	0.64
26:DD:186:LEU:HD21	28:DP:3:ILE:HD11	1.79	0.64
47:DF:90:LEU:C	47:DF:91:ARG:HD3	2.21	0.64
52:DW:37:VAL:HG13	52:DW:55:ASP:O	1.96	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1343:G:H2'	1:AA:1344:C:C6	2.33	0.64
2:AC:70:ALA:HA	2:AC:105:VAL:HG21	1.79	0.64
9:AJ:15:HIS:HA	9:AJ:18:ILE:HG22	1.79	0.64
20:AB:16:GLY:HA3	20:AB:39:ILE:HA	1.79	0.64
25:BC:173:LEU:HD22	25:BC:173:LEU:H	1.61	0.64
26:BD:51:THR:HG21	26:BD:76:GLY:HA3	1.80	0.64
46:BU:35:VAL:HB	46:BU:38:ILE:CG2	2.26	0.64
47:BF:37:MET:HE2	47:BF:149:ARG:HD2	1.80	0.64
47:BF:110:ILE:HA	47:BF:111:ARG:CZ	2.27	0.64
49:BR:31:GLU:H	49:BR:63:VAL:HG22	1.61	0.64
1:CA:1009:U:H1'	1:CA:1021:A:C2	2.33	0.64
2:CC:116:ALA:O	2:CC:119:ILE:HG22	1.97	0.64
5:CF:53:LYS:HB3	5:CF:54:LEU:HD22	1.80	0.64
20:CB:53:LEU:HD11	20:CB:216:VAL:HG12	1.80	0.64
23:DB:254:G:H22	34:D3:7:ARG:HH21	1.45	0.64
23:DB:1373:A:H2'	23:DB:1374:G:O4'	1.96	0.64
23:DB:1857:G:N2	23:DB:1884:G:H2'	2.13	0.64
23:DB:2086:U:H2'	23:DB:2087:G:C8	2.32	0.64
27:DK:41:ILE:HG13	27:DK:42:THR:H	1.63	0.64
42:DN:34:ILE:O	42:DN:112:TYR:HA	1.97	0.64
48:DG:87:GLN:HG2	48:DG:164:ALA:HA	1.80	0.64
17:AR:38:ILE:HD13	17:AR:38:ILE:H	1.62	0.64
20:AB:118:THR:O	20:AB:121:GLN:HB3	1.97	0.64
23:BB:321:U:H5''	29:BE:131:THR:HG23	1.79	0.64
23:BB:2102:G:N3	23:BB:2102:G:H2'	2.12	0.64
23:BB:2147:A:H5'	23:BB:2148:G:H4'	1.79	0.64
38:BM:26:VAL:HA	38:BM:66:ARG:HH21	1.62	0.64
43:BO:76:LYS:O	43:BO:80:GLU:HG2	1.97	0.64
49:BR:49:ILE:HD13	49:BR:53:PHE:N	2.13	0.64
1:CA:501:C:H2'	1:CA:502:A:C8	2.32	0.64
1:CA:1273:C:H2'	1:CA:1274:A:O4'	1.97	0.64
6:CG:125:ASP:HB3	6:CG:131:GLY:N	2.13	0.64
23:DB:1175:A:H3'	23:DB:1175:A:N3	2.13	0.64
23:DB:1283:G:N2	23:DB:1285:A:H3'	2.12	0.64
23:DB:1386:C:H2'	23:DB:1387:A:C8	2.33	0.64
23:DB:1439:A:C6	23:DB:1552:A:N7	2.65	0.64
27:DK:87:LEU:HB2	27:DK:93:GLN:O	1.98	0.64
29:DE:134:LEU:HD21	29:DE:161:ALA:HB2	1.79	0.64
44:DQ:91:ARG:HH21	44:DQ:94:LEU:HD21	1.63	0.64
45:DS:48:LYS:O	45:DS:52:GLU:HG2	1.96	0.64
46:DU:86:PHE:CD2	46:DU:92:VAL:HG21	2.32	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:501:C:H2'	1:AA:502:A:H8	1.62	0.64
1:AA:1302:C:OP2	12:AM:16:ILE:HD11	1.97	0.64
3:AD:165:GLU:CG	3:AD:166:LYS:H	2.09	0.64
4:AE:43:GLY:O	4:AE:72:ASN:HA	1.97	0.64
8:AI:39:GLY:HA2	8:AI:44:ARG:HD3	1.78	0.64
8:AI:87:MET:HE3	8:AI:91:GLU:HG2	1.80	0.64
14:AO:53:ARG:HD2	23:BB:715:A:H61	1.61	0.64
23:BB:125:A:H3'	23:BB:126:A:C5'	2.28	0.64
23:BB:1024:G:C3'	23:BB:1025:G:H5''	2.26	0.64
23:BB:2749:A:C3'	23:BB:2750:A:H5''	2.28	0.64
47:BF:107:VAL:HA	47:BF:111:ARG:HH12	1.63	0.64
1:CA:279:A:H5''	1:CA:280:C:H3'	1.79	0.64
1:CA:451:A:H4'	1:CA:452:A:O4'	1.98	0.64
1:CA:590:U:H2'	1:CA:591:U:C6	2.32	0.64
2:CC:129:PHE:HE2	2:CC:165:GLU:HG2	1.61	0.64
15:CP:20:VAL:HG23	15:CP:35:ARG:HA	1.79	0.64
23:DB:1166:G:H2'	23:DB:1167:C:C6	2.33	0.64
23:DB:2334:U:N3	43:DO:16:ARG:HG2	2.11	0.64
25:DC:116:GLN:HG2	25:DC:117:SER:H	1.63	0.64
28:DP:31:VAL:HG12	28:DP:38:ARG:O	1.97	0.64
43:DO:15:ARG:HH21	43:DO:95:SER:HB3	1.61	0.64
23:BB:315:G:H2'	23:BB:316:C:C6	2.33	0.64
23:BB:2810:A:H2'	23:BB:2811:G:O4'	1.96	0.64
27:BK:38:ILE:HD13	27:BK:61:VAL:HG12	1.79	0.64
28:BP:88:ARG:HB2	28:BP:112:ARG:NH1	2.13	0.64
32:B4:7:VAL:HG13	32:B4:8:LYS:N	2.13	0.64
48:BG:24:THR:HA	48:BG:34:ARG:HA	1.80	0.64
50:BT:2:ILE:HB	50:BT:3:ARG:HD3	1.79	0.64
7:CH:87:ARG:H	7:CH:90:GLU:HB3	1.61	0.64
8:CI:39:GLY:HA2	8:CI:44:ARG:HD3	1.79	0.64
14:CO:8:THR:O	14:CO:12:VAL:HG23	1.97	0.64
23:DB:431:U:O2'	23:DB:432:A:H5'	1.98	0.64
23:DB:654:A:H2'	23:DB:655:A:H5''	1.79	0.64
23:DB:1098:A:H3'	24:DI:3:LYS:CB	2.27	0.64
23:DB:2070:A:H2'	23:DB:2071:A:C8	2.32	0.64
37:DL:131:ALA:C	37:DL:133:ALA:H	2.05	0.64
40:DH:8:LYS:O	40:DH:13:GLY:HA3	1.97	0.64
44:DQ:27:ARG:HA	44:DQ:33:VAL:HG23	1.80	0.64
4:AE:92:ARG:HB3	4:AE:92:ARG:HH11	1.63	0.64
20:AB:202:ASN:HD22	20:AB:202:ASN:C	2.05	0.64
23:BB:155:A:H2'	23:BB:156:A:C8	2.32	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:1727:C:H2'	23:BB:1728:C:H6	1.63	0.64
25:BC:140:VAL:HG12	25:BC:141:HIS:H	1.61	0.64
26:BD:9:VAL:HA	26:BD:197:THR:HG23	1.80	0.64
37:BL:132:ARG:O	37:BL:136:GLU:HG3	1.98	0.64
1:CA:1202:U:H1'	13:CN:68:ARG:HD2	1.79	0.64
1:CA:1391:U:H2'	1:CA:1392:G:C8	2.33	0.64
2:CC:14:VAL:O	2:CC:15:LYS:HD2	1.97	0.64
7:CH:40:LYS:HD2	7:CH:47:ASP:HA	1.80	0.64
25:DC:77:VAL:HG23	25:DC:112:GLY:N	2.08	0.64
38:DM:2:LEU:O	38:DM:69:PRO:HG3	1.98	0.64
40:DH:96:THR:HG23	40:DH:97:ARG:HD3	1.79	0.64
43:DO:76:LYS:O	43:DO:80:GLU:HG2	1.98	0.64
45:DS:27:LYS:O	45:DS:32:ALA:HB2	1.97	0.64
47:DF:40:GLY:HA2	47:DF:84:ILE:HG23	1.79	0.64
51:DZ:30:LEU:N	51:DZ:30:LEU:HD23	2.11	0.64
1:AA:279:A:H5''	1:AA:280:C:H3'	1.77	0.64
1:AA:1006:G:H2'	1:AA:1007:U:C6	2.33	0.64
4:AE:28:ARG:NH2	4:AE:30:PHE:HA	2.13	0.64
12:AM:2:ARG:HG3	12:AM:6:ILE:H	1.62	0.64
23:BB:2331:G:H21	23:BB:2336:A:H8	1.44	0.64
23:BB:2645:G:H3'	23:BB:2646:C:H5'	1.79	0.64
25:BC:13:ARG:HG3	25:BC:14:HIS:ND1	2.13	0.64
41:BJ:43:GLU:O	41:BJ:45:THR:N	2.31	0.64
47:BF:135:ILE:HD11	47:BF:137:PHE:HB3	1.78	0.64
47:BF:141:ASP:HB2	47:BF:144:LYS:HB2	1.79	0.64
1:CA:337:G:H2'	1:CA:338:A:H8	1.60	0.64
1:CA:806:C:H2'	1:CA:807:A:H8	1.62	0.64
1:CA:812:G:HO2'	1:CA:813:U:H6	1.45	0.64
1:CA:1250:A:H2'	1:CA:1251:A:C8	2.33	0.64
1:CA:1478:U:H2'	1:CA:1479:C:C6	2.32	0.64
8:CI:79:ARG:NH2	8:CI:102:PHE:HA	2.13	0.64
10:CK:105:ARG:NH2	21:CU:10:PRO:HB3	2.13	0.64
16:CQ:13:SER:HB3	16:CQ:21:VAL:HB	1.80	0.64
16:CQ:18:LYS:HG2	16:CQ:48:GLU:HA	1.80	0.64
23:DB:1440:U:H2'	23:DB:1441:G:H8	1.62	0.64
23:DB:1727:C:H2'	23:DB:1728:C:H6	1.62	0.64
25:DC:13:ARG:HG3	25:DC:14:HIS:ND1	2.13	0.64
29:DE:29:HIS:HE2	37:DL:8:PRO:HG3	1.63	0.64
47:DF:39:VAL:HG11	47:DF:49:LEU:HD23	1.79	0.64
47:DF:39:VAL:HG21	47:DF:49:LEU:HA	1.80	0.64
52:DW:35:ILE:O	52:DW:35:ILE:HG12	1.97	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1391:U:H2'	1:AA:1392:G:C8	2.33	0.64
17:AR:34:GLU:HB2	21:AU:18:PHE:CZ	2.33	0.64
23:BB:355:U:H2'	23:BB:356:G:C8	2.31	0.64
23:BB:479:A:O2'	23:BB:481:G:H5'	1.98	0.64
23:BB:492:A:H2'	23:BB:493:G:O4'	1.97	0.64
23:BB:1203:U:H3'	23:BB:1204:A:H5''	1.80	0.64
46:BU:72:PHE:HA	46:BU:78:LYS:O	1.98	0.64
51:BZ:66:THR:O	51:BZ:69:ALA:HB3	1.98	0.64
1:CA:734:G:H21	17:CR:63:TYR:HE1	1.44	0.64
23:DB:172:A:H2'	23:DB:173:A:H8	1.62	0.64
23:DB:751:A:H5'	45:DS:90:LYS:HA	1.78	0.64
23:DB:1812:U:H2'	23:DB:1813:G:C8	2.33	0.64
37:DL:132:ARG:O	37:DL:136:GLU:HG3	1.98	0.64
46:DU:24:VAL:HA	46:DU:35:VAL:HA	1.79	0.64
46:DU:26:ASN:HD22	46:DU:26:ASN:N	1.94	0.64
1:AA:1218:C:H2'	1:AA:1219:A:C8	2.33	0.63
2:AC:14:VAL:O	2:AC:15:LYS:HD2	1.98	0.63
21:AU:11:PHE:HD1	21:AU:11:PHE:O	1.80	0.63
23:BB:365:U:H2'	23:BB:366:C:C6	2.33	0.63
23:BB:675:A:H4'	29:BE:60:TRP:HZ2	1.61	0.63
23:BB:741:U:H2'	23:BB:742:A:C8	2.33	0.63
23:BB:1354:A:H2'	23:BB:1355:G:O4'	1.98	0.63
23:BB:2884:U:O4	31:B0:39:ARG:HD3	1.98	0.63
29:BE:134:LEU:HD21	29:BE:161:ALA:HB2	1.80	0.63
38:BM:19:GLY:N	38:BM:38:ARG:NH2	2.46	0.63
43:BO:58:ILE:HG22	43:BO:62:LEU:HD23	1.81	0.63
47:BF:101:ARG:NH1	47:BF:138:PRO:HB2	2.12	0.63
48:BG:8:VAL:HG11	48:BG:49:LEU:CB	2.28	0.63
49:BR:36:ALA:HA	49:BR:58:VAL:HA	1.80	0.63
1:CA:502:A:H2'	1:CA:503:C:H6	1.62	0.63
1:CA:923:A:H2'	1:CA:924:C:C6	2.33	0.63
1:CA:1101:A:H61	20:CB:101:THR:HG21	1.63	0.63
15:CP:6:LEU:HB3	15:CP:17:TYR:HB3	1.80	0.63
23:DB:794:A:H2'	23:DB:795:C:C6	2.32	0.63
23:DB:1060:U:O4	23:DB:1088:A:N6	2.31	0.63
23:DB:1947:C:H2'	23:DB:1948:G:H8	1.63	0.63
23:DB:2296:U:H4'	23:DB:2297:A:OP1	1.98	0.63
23:DB:2674:G:H4'	27:DK:30:ARG:HG3	1.78	0.63
23:DB:2795:C:H2'	23:DB:2796:U:O4'	1.97	0.63
25:DC:69:ASN:O	25:DC:70:LYS:C	2.41	0.63
27:DK:71:ARG:HD2	27:DK:106:GLU:OE2	1.97	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DL:143:GLU:CG	37:DL:144:GLU:H	2.10	0.63
38:DM:40:ARG:HD3	38:DM:93:VAL:HG21	1.80	0.63
44:DQ:57:ARG:HH12	44:DQ:61:ILE:HD11	1.61	0.63
48:DG:84:LYS:HB2	48:DG:132:LEU:H	1.63	0.63
49:DR:60:LYS:N	49:DR:100:GLY:HA3	2.05	0.63
1:AA:17:U:H2'	1:AA:18:C:C6	2.33	0.63
1:AA:337:G:H2'	1:AA:338:A:H8	1.60	0.63
1:AA:411:A:H62	1:AA:413:G:N2	1.96	0.63
2:AC:155:ARG:H	2:AC:162:ALA:HA	1.62	0.63
38:BM:2:LEU:O	38:BM:69:PRO:HG3	1.97	0.63
40:BH:41:LYS:HE3	40:BH:41:LYS:N	2.14	0.63
40:BH:83:LYS:CB	40:BH:91:PHE:HB2	2.29	0.63
44:BQ:91:ARG:HH21	44:BQ:94:LEU:HD21	1.63	0.63
50:BT:36:LYS:O	50:BT:36:LYS:HD3	1.97	0.63
1:CA:818:G:H3'	1:CA:819:A:H5''	1.80	0.63
1:CA:859:G:H2'	1:CA:860:A:H8	1.63	0.63
1:CA:1221:G:O3'	18:CS:76:THR:HG21	1.98	0.63
4:CE:152:VAL:HA	4:CE:155:LYS:HD3	1.81	0.63
10:CK:51:PHE:HB2	10:CK:55:ARG:HB3	1.80	0.63
23:DB:543:G:H21	23:DB:545:U:H5'	1.63	0.63
23:DB:580:U:H2'	23:DB:581:C:C6	2.34	0.63
23:DB:864:G:O2'	23:DB:865:C:H5'	1.98	0.63
23:DB:948:C:H2'	23:DB:949:G:H8	1.63	0.63
25:DC:156:SER:HB3	25:DC:159:THR:HG21	1.80	0.63
52:DW:64:GLY:HA2	52:DW:84:GLU:H	1.63	0.63
1:AA:74:A:O2'	1:AA:75:G:H5'	1.98	0.63
1:AA:1513:A:H2'	1:AA:1514:G:H8	1.61	0.63
23:BB:1439:A:C6	23:BB:1552:A:N7	2.66	0.63
47:BF:105:ILE:O	47:BF:109:ARG:HB2	1.98	0.63
1:CA:45:G:H2'	1:CA:46:G:H8	1.61	0.63
1:CA:56:U:H2'	1:CA:57:G:H8	1.62	0.63
23:DB:1790:C:O2'	25:DC:207:ALA:HB2	1.98	0.63
26:DD:51:THR:HG21	26:DD:76:GLY:HA3	1.79	0.63
35:DV:70:ILE:N	35:DV:70:ILE:HD13	2.13	0.63
1:AA:728:A:H2'	1:AA:729:A:C8	2.33	0.63
3:AD:169:TRP:NE1	3:AD:170:LEU:HD23	2.13	0.63
8:AI:62:LEU:H	8:AI:62:LEU:HD22	1.62	0.63
9:AJ:52:LEU:HA	9:AJ:62:ARG:HA	1.79	0.63
18:AS:30:LEU:HD12	18:AS:48:ILE:HG12	1.80	0.63
23:BB:222:A:N1	23:BB:233:A:H5''	2.13	0.63
23:BB:620:G:N3	23:BB:620:G:H5'	2.13	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:794:A:H2'	23:BB:795:C:C6	2.33	0.63
23:BB:2471:A:O2'	23:BB:2472:G:H8	1.81	0.63
24:BI:129:GLU:HB3	24:BI:133:ARG:NH1	2.12	0.63
25:BC:128:THR:HA	25:BC:190:THR:CA	2.27	0.63
26:BD:16:THR:HB	26:BD:18:ASP:OD1	1.98	0.63
27:BK:102:PRO:HA	27:BK:120:PRO:HB3	1.81	0.63
44:BQ:9:ALA:C	44:BQ:11:ALA:H	2.06	0.63
44:BQ:56:PHE:O	44:BQ:59:LEU:HB3	1.98	0.63
47:BF:168:LEU:HD13	47:BF:169:LEU:H	1.63	0.63
50:BT:38:ALA:O	50:BT:39:THR:HB	1.99	0.63
1:CA:818:G:C3'	1:CA:819:A:H5''	2.28	0.63
1:CA:1237:C:H3'	1:CA:1336:C:H41	1.63	0.63
8:CI:62:LEU:HD22	8:CI:62:LEU:H	1.63	0.63
10:CK:88:PRO:HD3	21:CU:28:LEU:CD1	2.28	0.63
11:CL:17:LYS:HE3	11:CL:17:LYS:H	1.63	0.63
23:DB:26:G:H1'	23:DB:514:A:N6	2.14	0.63
23:DB:1447:C:H2'	23:DB:1448:G:H8	1.63	0.63
23:DB:2078:C:H2'	23:DB:2079:U:H6	1.62	0.63
23:DB:2137:U:H2'	23:DB:2138:G:H8	1.62	0.63
23:DB:2353:G:N3	52:DW:30:VAL:HG13	2.14	0.63
27:DK:64:ARG:HD2	27:DK:102:PRO:O	1.98	0.63
28:DP:88:ARG:HB2	28:DP:112:ARG:NH1	2.13	0.63
41:DJ:3:THR:HB	41:DJ:44:TYR:HE1	1.63	0.63
46:DU:78:LYS:HD3	46:DU:79:ALA:H	1.62	0.63
47:DF:125:GLY:O	47:DF:157:THR:HG23	1.99	0.63
1:AA:382:A:H2'	1:AA:383:A:C8	2.34	0.63
1:AA:586:C:H5''	7:AH:81:GLY:HA2	1.80	0.63
1:AA:781:A:H2'	1:AA:782:A:H5'	1.79	0.63
10:AK:110:THR:HG22	21:AU:4:LYS:HA	1.81	0.63
23:BB:176:A:O2'	23:BB:177:G:H5'	1.98	0.63
23:BB:1579:A:H2'	23:BB:1580:A:C8	2.33	0.63
23:BB:2444:G:P	29:BE:63:LYS:HD2	2.38	0.63
24:BI:11:GLN:HA	24:BI:55:PRO:HA	1.79	0.63
38:BM:114:ARG:HH21	38:BM:114:ARG:HB2	1.63	0.63
41:BJ:3:THR:HB	41:BJ:44:TYR:HE1	1.63	0.63
46:BU:24:VAL:HA	46:BU:35:VAL:HA	1.81	0.63
49:BR:38:VAL:HG22	49:BR:40:MET:H	1.64	0.63
52:BW:37:VAL:HG13	52:BW:55:ASP:O	1.99	0.63
5:CF:53:LYS:NZ	5:CF:54:LEU:H	1.95	0.63
10:CK:58:THR:HB	10:CK:59:PRO:HD2	1.79	0.63
13:CN:5:MET:SD	13:CN:8:ARG:HD3	2.38	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:620:G:H5'	23:DB:620:G:N3	2.13	0.63
23:DB:1015:U:H2'	23:DB:1016:G:C8	2.34	0.63
23:DB:1579:A:H2'	23:DB:1580:A:C8	2.34	0.63
23:DB:1935:G:H1'	23:DB:1964:G:N2	2.14	0.63
23:DB:2137:U:H2'	23:DB:2138:G:C8	2.34	0.63
23:DB:2267:A:H8	23:DB:2267:A:C3'	2.07	0.63
24:DI:20:SER:O	24:DI:25:PRO:HD2	1.98	0.63
30:DY:2:LYS:HD3	30:DY:2:LYS:H	1.63	0.63
37:DL:78:ARG:HB3	37:DL:113:ALA:HB2	1.79	0.63
38:DM:21:ALA:HB2	38:DM:100:LYS:HG2	1.80	0.63
40:DH:94:ILE:O	40:DH:122:LEU:HB2	1.98	0.63
47:DF:41:GLU:O	47:DF:43:ILE:HG22	1.97	0.63
1:AA:235:C:H2'	1:AA:236:A:C8	2.33	0.63
1:AA:522:C:H41	11:AL:49:ARG:HH22	1.46	0.63
5:AF:6:ILE:HG23	5:AF:62:MET:HB3	1.78	0.63
5:AF:29:ILE:HD13	5:AF:64:VAL:HG21	1.81	0.63
20:AB:204:ASP:CG	20:AB:205:ALA:H	2.06	0.63
23:BB:948:C:H2'	23:BB:949:G:H8	1.64	0.63
23:BB:1060:U:O4	23:BB:1088:A:N6	2.31	0.63
23:BB:2155:U:H2'	23:BB:2156:G:O4'	1.99	0.63
23:BB:2181:U:H2'	23:BB:2182:U:C6	2.33	0.63
23:BB:2346:A:H3'	23:BB:2347:C:H5''	1.80	0.63
24:BI:20:SER:O	24:BI:25:PRO:HD2	1.99	0.63
29:BE:149:ILE:HG23	29:BE:188:MET:HA	1.81	0.63
33:B1:26:LYS:HD2	33:B1:30:PRO:HA	1.80	0.63
48:BG:145:ALA:HA	48:BG:148:ARG:HG3	1.80	0.63
51:BZ:5:CYS:CB	51:BZ:10:LYS:H	2.08	0.63
1:CA:41:G:H2'	1:CA:42:G:C8	2.34	0.63
1:CA:950:U:H2'	1:CA:951:G:C8	2.34	0.63
1:CA:1163:A:H2'	1:CA:1164:G:H8	1.64	0.63
3:CD:138:PRO:HA	3:CD:181:PHE:HD2	1.62	0.63
6:CG:23:ALA:O	6:CG:26:VAL:HG22	1.99	0.63
11:CL:60:PHE:O	11:CL:62:VAL:HG13	1.98	0.63
14:CO:11:ILE:HD11	14:CO:30:ALA:HB1	1.81	0.63
19:CT:79:THR:HG22	19:CT:83:ASN:ND2	2.13	0.63
20:CB:204:ASP:CG	20:CB:205:ALA:H	2.06	0.63
23:DB:2387:U:H1'	52:DW:38:ARG:CZ	2.28	0.63
23:DB:2471:A:O2'	23:DB:2472:G:H8	1.79	0.63
27:DK:41:ILE:HG13	27:DK:42:THR:N	2.14	0.63
36:D2:10:LEU:HD21	36:D2:14:ARG:NH1	2.13	0.63
45:DS:55:ILE:HD12	45:DS:69:LEU:HD23	1.80	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:DF:107:VAL:HA	47:DF:111:ARG:HH12	1.63	0.63
50:DT:69:ARG:HB3	50:DT:74:ILE:HA	1.81	0.63
1:AA:1237:C:H3'	1:AA:1336:C:H41	1.63	0.63
23:BB:557:C:H2'	23:BB:558:U:C6	2.33	0.63
23:BB:1812:U:H2'	23:BB:1813:G:C8	2.34	0.63
23:BB:2135:A:H3'	23:BB:2136:G:H8	1.63	0.63
23:BB:2720:U:H5''	28:BP:52:ARG:NH2	2.13	0.63
29:BE:47:LYS:HB3	29:BE:51:GLU:HB2	1.79	0.63
41:BJ:84:ILE:O	41:BJ:84:ILE:HG23	1.98	0.63
23:DB:278:A:OP2	23:DB:278:A:H3'	1.98	0.63
23:DB:581:C:H2'	23:DB:582:A:C8	2.34	0.63
23:DB:1018:U:O2'	23:DB:1019:U:H5'	1.98	0.63
24:DI:27:LEU:H	24:DI:27:LEU:CD2	2.11	0.63
48:DG:148:ARG:HB2	48:DG:152:ARG:NH2	2.14	0.63
50:DT:61:LEU:HG	50:DT:82:LYS:HB2	1.78	0.63
13:AN:63:CYS:HB3	13:AN:67:GLY:N	2.13	0.63
14:AO:53:ARG:HG3	14:AO:57:LEU:HD13	1.81	0.63
20:AB:63:LYS:HA	20:AB:224:ARG:NH1	2.14	0.63
23:BB:142:A:O2'	23:BB:143:C:H5'	1.99	0.63
23:BB:580:U:H2'	23:BB:581:C:C6	2.33	0.63
23:BB:974:G:OP2	49:BR:78:ARG:HD3	1.99	0.63
23:BB:1442:U:H2'	23:BB:1443:U:C6	2.34	0.63
23:BB:2425:A:H5'	23:BB:2427:C:O4'	1.99	0.63
26:BD:25:THR:HG21	26:BD:193:VAL:HG22	1.81	0.63
41:BJ:72:LYS:HB2	41:BJ:89:PHE:H	1.64	0.63
47:BF:40:GLY:HA2	47:BF:84:ILE:HG23	1.80	0.63
48:BG:173:ALA:HB3	48:BG:175:LYS:NZ	2.14	0.63
51:BZ:30:LEU:HD23	51:BZ:30:LEU:N	2.13	0.63
1:CA:728:A:H2'	1:CA:729:A:C8	2.34	0.63
1:CA:1414:U:H2'	1:CA:1415:G:H8	1.62	0.63
3:CD:2:ARG:NH1	3:CD:114:ARG:HG3	2.13	0.63
16:CQ:18:LYS:HE3	16:CQ:48:GLU:HG2	1.79	0.63
23:DB:53:A:H1'	23:DB:179:C:O2'	1.99	0.63
23:DB:580:U:H2'	23:DB:581:C:H6	1.64	0.63
23:DB:1506:U:H2'	23:DB:1507:C:C6	2.34	0.63
23:DB:2074:U:H2'	23:DB:2075:U:C6	2.33	0.63
24:DI:121:ILE:HD13	24:DI:121:ILE:N	2.13	0.63
38:DM:71:LYS:HD3	38:DM:95:LEU:HD13	1.81	0.63
40:DH:5:LEU:HD13	40:DH:13:GLY:HA2	1.80	0.63
42:DN:96:ARG:HE	42:DN:116:VAL:HG23	1.64	0.63
1:AA:844:G:H3'	1:AA:844:G:OP2	1.99	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AF:3:HIS:CD2	5:AF:65:GLU:HG3	2.34	0.63
5:AF:18:VAL:HG21	5:AF:58:HIS:CE1	2.34	0.63
5:AF:53:LYS:HB3	5:AF:54:LEU:HD22	1.79	0.63
8:AI:24:ASN:CG	8:AI:25:GLY:H	2.07	0.63
10:AK:14:GLN:HA	10:AK:76:TYR:O	1.98	0.63
19:AT:43:LYS:HE2	19:AT:44:ALA:N	2.11	0.63
23:BB:279:A:N6	23:BB:361:G:H1'	2.13	0.63
23:BB:1015:U:H2'	23:BB:1016:G:C8	2.34	0.63
23:BB:1205:A:H4'	23:BB:1206:G:OP2	1.99	0.63
23:BB:2064:C:H2'	23:BB:2065:C:C6	2.34	0.63
23:BB:2229:U:H2'	23:BB:2230:G:H8	1.64	0.63
25:BC:116:GLN:HG2	25:BC:117:SER:H	1.64	0.63
44:BQ:27:ARG:HA	44:BQ:33:VAL:HG23	1.81	0.63
44:BQ:97:ILE:HG13	44:BQ:105:PHE:HB2	1.81	0.63
45:BS:17:VAL:C	45:BS:19:LEU:H	2.07	0.63
46:BU:86:PHE:CD2	46:BU:92:VAL:HG21	2.33	0.63
48:BG:84:LYS:HB2	48:BG:132:LEU:H	1.64	0.63
50:BT:28:ASN:HA	50:BT:91:GLN:HE22	1.64	0.63
2:CC:148:ILE:HA	2:CC:200:TRP:O	1.99	0.63
10:CK:91:GLY:HA2	10:CK:94:SER:HB3	1.81	0.63
23:DB:1178:C:H2'	23:DB:1179:G:C8	2.34	0.63
23:DB:2331:G:H21	23:DB:2336:A:H8	1.45	0.63
26:DD:148:GLN:CG	26:DD:152:PRO:HG2	2.28	0.63
35:DV:9:ARG:HH22	35:DV:12:GLN:HA	1.64	0.63
44:DQ:63:ARG:NH2	44:DQ:96:ASP:HA	2.13	0.63
46:DU:32:LYS:HA	46:DU:65:GLN:HA	1.81	0.63
52:DW:7:GLY:C	52:DW:10:ARG:HH12	2.07	0.63
1:AA:1329:A:H5''	12:AM:24:VAL:HA	1.80	0.62
6:AG:125:ASP:HB3	6:AG:131:GLY:N	2.12	0.62
22:BA:98:G:H1	35:BV:14:LYS:HB2	1.63	0.62
23:BB:27:G:HO2'	23:BB:28:A:H8	1.47	0.62
23:BB:947:A:H2'	23:BB:948:C:C6	2.34	0.62
23:BB:1107:G:H2'	23:BB:1108:U:H6	1.61	0.62
23:BB:1203:U:H3'	23:BB:1204:A:C5'	2.28	0.62
23:BB:2071:A:H2'	23:BB:2072:C:C6	2.33	0.62
23:BB:2801:G:H2'	23:BB:2802:G:C8	2.34	0.62
26:BD:51:THR:CG2	26:BD:76:GLY:HA3	2.29	0.62
30:BY:2:LYS:HD3	30:BY:2:LYS:H	1.63	0.62
36:B2:30:VAL:HA	36:B2:33:ARG:NH2	2.13	0.62
37:BL:78:ARG:HB3	37:BL:113:ALA:HB2	1.80	0.62
38:BM:35:ALA:HB3	38:BM:99:GLY:H	1.63	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BM:82:MET:HE3	38:BM:83:GLY:N	2.13	0.62
40:BH:57:LYS:O	40:BH:61:VAL:HG12	1.99	0.62
42:BN:96:ARG:HE	42:BN:116:VAL:HG23	1.63	0.62
45:BS:29:VAL:HG11	45:BS:55:ILE:HD13	1.81	0.62
4:CE:28:ARG:NH2	4:CE:30:PHE:HA	2.14	0.62
4:CE:87:VAL:HG23	4:CE:92:ARG:HA	1.80	0.62
4:CE:113:VAL:HG11	4:CE:136:VAL:HG23	1.81	0.62
20:CB:20:ARG:CZ	20:CB:20:ARG:HA	2.29	0.62
20:CB:150:ILE:HG13	20:CB:153:MET:HE3	1.80	0.62
23:DB:557:C:H2'	23:DB:558:U:C6	2.33	0.62
23:DB:2328:A:H2'	23:DB:2329:U:C6	2.34	0.62
28:DP:52:ARG:HH11	28:DP:52:ARG:HG2	1.62	0.62
31:D0:33:SER:C	31:D0:35:GLU:H	2.07	0.62
40:DH:27:ARG:H	40:DH:31:VAL:HG21	1.64	0.62
41:DJ:6:ALA:HB3	41:DJ:45:THR:HG21	1.81	0.62
41:DJ:40:HIS:HE1	41:DJ:41:LYS:HE3	1.63	0.62
43:DO:58:ILE:HG22	43:DO:62:LEU:HD23	1.81	0.62
44:DQ:30:VAL:O	44:DQ:31:TYR:HB2	1.97	0.62
47:DF:43:ILE:HG23	47:DF:44:ALA:N	2.12	0.62
51:DZ:7:VAL:HG21	51:DZ:59:ILE:HD11	1.79	0.62
1:AA:1486:G:H2'	1:AA:1487:G:O4'	1.99	0.62
4:AE:45:VAL:O	4:AE:71:ILE:HG22	1.98	0.62
13:AN:20:PHE:HB3	13:AN:24:ALA:HB2	1.79	0.62
13:AN:48:GLN:O	13:AN:51:PRO:HD2	2.00	0.62
20:AB:85:SER:O	20:AB:86:CYS:HB2	1.98	0.62
20:AB:150:ILE:HG13	20:AB:153:MET:HE3	1.80	0.62
23:BB:26:G:H1'	23:BB:514:A:N6	2.14	0.62
23:BB:753:A:H2'	23:BB:754:U:C6	2.33	0.62
23:BB:918:A:H2'	23:BB:919:U:H5'	1.81	0.62
23:BB:1018:U:O2'	23:BB:1019:U:H5'	1.98	0.62
23:BB:1440:U:H2'	23:BB:1441:G:H8	1.64	0.62
23:BB:2471:A:HO2'	23:BB:2472:G:H8	1.46	0.62
36:B2:3:ARG:NE	36:B2:3:ARG:HA	2.14	0.62
40:BH:49:ALA:HB3	40:BH:50:ARG:NH1	2.14	0.62
45:BS:15:GLN:HA	45:BS:18:ARG:HG2	1.81	0.62
1:CA:539:A:H2'	1:CA:540:G:C8	2.34	0.62
3:CD:96:ARG:HB3	3:CD:98:ASP:OD2	1.99	0.62
4:CE:43:GLY:O	4:CE:72:ASN:HA	1.99	0.62
23:DB:2138:G:H2'	23:DB:2139:U:C6	2.34	0.62
23:DB:2834:G:H1'	23:DB:2883:A:N6	2.15	0.62
28:DP:91:VAL:HG21	28:DP:96:LEU:HD21	1.82	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DJ:103:ILE:HD12	41:DJ:104:ALA:N	2.14	0.62
46:DU:14:THR:HG21	46:DU:64:ILE:HD13	1.80	0.62
47:DF:92:GLY:HA2	47:DF:95:MET:HE3	1.80	0.62
50:DT:92:ASN:HB2	50:DT:93:LEU:HD22	1.81	0.62
1:AA:501:C:H2'	1:AA:502:A:C8	2.34	0.62
1:AA:719:C:O2'	17:AR:37:LYS:HB2	1.97	0.62
3:AD:96:ARG:HB3	3:AD:98:ASP:OD2	1.99	0.62
23:BB:118:A:H5'	23:BB:119:A:H8	1.64	0.62
40:BH:135:HIS:HB3	40:BH:138:VAL:HG23	1.82	0.62
46:BU:26:ASN:N	46:BU:26:ASN:HD22	1.96	0.62
48:BG:88:LEU:O	48:BG:88:LEU:HD12	1.98	0.62
52:BW:35:ILE:HG12	52:BW:35:ILE:O	1.96	0.62
1:CA:843:U:OP2	1:CA:843:U:H4'	2.00	0.62
8:CI:123:ARG:HB3	8:CI:123:ARG:NH1	2.14	0.62
20:CB:138:ARG:HD3	20:CB:141:GLU:OE1	2.00	0.62
23:DB:126:A:OP2	36:D2:19:ARG:HB2	1.98	0.62
23:DB:155:A:H2'	23:DB:156:A:H8	1.63	0.62
23:DB:2814:A:H2'	23:DB:2815:C:C6	2.34	0.62
27:DK:104:THR:HB	27:DK:106:GLU:OE1	1.98	0.62
28:DP:13:LYS:HD3	28:DP:76:HIS:HA	1.80	0.62
38:DM:35:ALA:HB3	38:DM:99:GLY:H	1.64	0.62
40:DH:27:ARG:HG2	40:DH:27:ARG:HH21	1.63	0.62
52:DW:77:LYS:O	52:DW:78:PHE:HB2	1.99	0.62
1:AA:699:C:H2'	1:AA:700:G:H5''	1.81	0.62
1:AA:818:G:C3'	1:AA:819:A:H5''	2.29	0.62
23:BB:1046:A:C3'	23:BB:1047:G:H5''	2.30	0.62
23:BB:1857:G:N2	23:BB:1884:G:H2'	2.14	0.62
25:BC:244:VAL:HB	25:BC:249:VAL:H	1.65	0.62
28:BP:89:GLY:HA2	28:BP:112:ARG:N	2.14	0.62
37:BL:131:ALA:C	37:BL:133:ALA:H	2.06	0.62
47:BF:37:MET:HE3	47:BF:56:LEU:HD23	1.80	0.62
47:BF:90:LEU:C	47:BF:91:ARG:HD3	2.25	0.62
50:BT:44:LYS:O	50:BT:48:GLN:HG2	1.99	0.62
1:CA:411:A:H62	1:CA:413:G:N2	1.97	0.62
1:CA:522:C:H41	11:CL:49:ARG:HH22	1.47	0.62
6:CG:19:SER:OG	6:CG:22:LEU:HB2	1.99	0.62
8:CI:56:MET:C	8:CI:58:GLU:H	2.06	0.62
11:CL:42:LYS:HD2	11:CL:43:LYS:HG2	1.82	0.62
15:CP:46:LYS:C	15:CP:48:GLU:H	2.06	0.62
23:DB:996:A:H4'	44:DQ:91:ARG:HG2	1.80	0.62
24:DI:126:ARG:HH11	24:DI:126:ARG:HB3	1.64	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DD:133:THR:HG23	26:DD:134:HIS:N	2.14	0.62
38:DM:19:GLY:N	38:DM:38:ARG:NH2	2.48	0.62
40:DH:94:ILE:HG22	40:DH:122:LEU:HG	1.81	0.62
43:DO:15:ARG:HH21	43:DO:95:SER:CB	2.12	0.62
44:DQ:4:LYS:NZ	44:DQ:7:VAL:HG22	2.14	0.62
47:DF:43:ILE:HB	47:DF:82:TYR:OH	1.99	0.62
47:DF:105:ILE:O	47:DF:109:ARG:HB2	1.99	0.62
49:DR:36:ALA:HA	49:DR:58:VAL:HA	1.81	0.62
50:DT:54:GLU:CB	50:DT:88:LYS:HB2	2.30	0.62
1:AA:320:A:H2'	1:AA:321:A:C8	2.34	0.62
1:AA:451:A:H4'	1:AA:452:A:O4'	2.00	0.62
1:AA:950:U:H2'	1:AA:951:G:C8	2.34	0.62
2:AC:6:PRO:HA	2:AC:9:ILE:HG22	1.80	0.62
2:AC:190:THR:HG22	2:AC:191:THR:H	1.65	0.62
23:BB:2366:A:H2'	23:BB:2367:G:O4'	1.99	0.62
23:BB:2737:G:H2'	23:BB:2738:A:C8	2.35	0.62
23:BB:2834:G:H1'	23:BB:2883:A:N6	2.15	0.62
27:BK:87:LEU:HB2	27:BK:93:GLN:O	1.99	0.62
42:BN:59:SER:O	42:BN:63:ARG:HB2	1.99	0.62
48:BG:173:ALA:HB3	48:BG:175:LYS:HZ3	1.65	0.62
49:BR:71:LYS:HG3	49:BR:72:VAL:N	2.14	0.62
4:CE:45:VAL:O	4:CE:71:ILE:HG22	2.00	0.62
11:CL:82:ARG:HH11	11:CL:82:ARG:HG2	1.64	0.62
22:DA:28:C:OP1	43:DO:31:THR:HG21	1.99	0.62
23:DB:1024:G:C3'	23:DB:1025:G:H5''	2.26	0.62
23:DB:1786:A:H1'	23:DB:1938:A:N6	2.14	0.62
23:DB:1813:G:N3	25:DC:49:THR:HG21	2.14	0.62
25:DC:145:MET:HE2	25:DC:145:MET:HA	1.80	0.62
27:DK:102:PRO:HA	27:DK:120:PRO:HB3	1.81	0.62
28:DP:4:ILE:HG22	28:DP:5:LYS:N	2.09	0.62
43:DO:56:LYS:HG2	43:DO:60:GLU:CD	2.24	0.62
46:DU:46:LYS:NZ	46:DU:47:PRO:HG2	2.15	0.62
1:AA:678:U:H2'	1:AA:679:C:C6	2.34	0.62
4:AE:23:THR:HA	4:AE:28:ARG:HA	1.81	0.62
5:AF:53:LYS:NZ	5:AF:54:LEU:H	1.97	0.62
8:AI:56:MET:C	8:AI:58:GLU:H	2.07	0.62
8:AI:123:ARG:HB3	8:AI:123:ARG:NH1	2.15	0.62
10:AK:88:PRO:HD3	21:AU:28:LEU:CD1	2.30	0.62
11:AL:107:LYS:H	11:AL:107:LYS:HZ2	1.47	0.62
11:AL:122:LYS:HG3	11:AL:123:ALA:H	1.65	0.62
19:AT:49:ALA:HA	19:AT:52:GLU:CD	2.23	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AB:26:MET:SD	20:AB:192:PRO:HD3	2.39	0.62
23:BB:594:U:H2'	23:BB:595:C:H6	1.63	0.62
23:BB:770:G:H5''	36:B2:10:LEU:HD12	1.82	0.62
23:BB:1935:G:H1'	23:BB:1964:G:N2	2.15	0.62
23:BB:2074:U:H2'	23:BB:2075:U:C6	2.34	0.62
23:BB:2183:A:H2'	23:BB:2184:A:C8	2.34	0.62
25:BC:69:ASN:O	25:BC:70:LYS:C	2.42	0.62
27:BK:64:ARG:HD2	27:BK:102:PRO:O	1.99	0.62
40:BH:90:LEU:HD11	40:BH:146:VAL:HG12	1.82	0.62
46:BU:34:ILE:HG12	46:BU:63:ALA:HB2	1.81	0.62
47:BF:125:GLY:O	47:BF:157:THR:HG23	1.99	0.62
1:CA:1163:A:H2'	1:CA:1164:G:C8	2.34	0.62
1:CA:1513:A:H2'	1:CA:1514:G:H8	1.62	0.62
3:CD:169:TRP:NE1	3:CD:170:LEU:HD23	2.15	0.62
11:CL:85:ARG:HA	11:CL:93:ARG:HA	1.81	0.62
13:CN:68:ARG:HH12	13:CN:70:HIS:HB2	1.64	0.62
18:CS:48:ILE:HG21	18:CS:70:LEU:HD21	1.81	0.62
20:CB:63:LYS:HA	20:CB:224:ARG:NH1	2.15	0.62
23:DB:704:G:C2'	23:DB:726:G:H22	2.12	0.62
23:DB:753:A:H2'	23:DB:754:U:C6	2.34	0.62
23:DB:1100:C:H2'	23:DB:1101:U:H6	1.63	0.62
23:DB:1593:A:H2'	23:DB:1594:U:C6	2.35	0.62
23:DB:1826:G:H2'	23:DB:1827:U:H6	1.64	0.62
23:DB:2065:C:H2'	23:DB:2066:C:H6	1.64	0.62
25:DC:73:ILE:HG21	25:DC:97:ASP:HB2	1.82	0.62
27:DK:119:ALA:HB3	27:DK:120:PRO:HD3	1.81	0.62
44:DQ:9:ALA:C	44:DQ:11:ALA:H	2.07	0.62
44:DQ:97:ILE:HG13	44:DQ:105:PHE:HB2	1.81	0.62
47:DF:116:LEU:HB3	47:DF:176:PHE:HA	1.80	0.62
5:AF:66:ALA:HB1	5:AF:67:PRO:HD2	1.82	0.62
14:AO:81:LEU:HD23	14:AO:85:LEU:HD13	1.81	0.62
23:BB:419:U:H2'	23:BB:420:C:C6	2.35	0.62
23:BB:1131:G:N2	23:BB:2024:G:H21	1.97	0.62
23:BB:2189:U:H2'	23:BB:2190:G:H8	1.62	0.62
23:BB:2400:G:O2'	23:BB:2401:U:H5'	2.00	0.62
23:BB:2814:A:H2'	23:BB:2815:C:C6	2.35	0.62
34:B3:22:LYS:HA	34:B3:48:MET:HA	1.81	0.62
40:BH:90:LEU:HB3	40:BH:123:ARG:HD3	1.80	0.62
48:BG:148:ARG:HB2	48:BG:152:ARG:NH2	2.13	0.62
1:CA:1218:C:H2'	1:CA:1219:A:C8	2.35	0.62
1:CA:1343:G:H2'	1:CA:1344:C:C6	2.34	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:CM:44:ILE:HD12	12:CM:45:SER:H	1.64	0.62
22:DA:98:G:N1	35:DV:14:LYS:HB2	2.14	0.62
23:DB:282:A:H2'	23:DB:283:G:C8	2.34	0.62
23:DB:2097:A:H2'	23:DB:2098:U:C6	2.34	0.62
23:DB:2243:U:H2'	23:DB:2244:U:C6	2.34	0.62
27:DK:79:PHE:CD2	28:DP:69:VAL:HG12	2.35	0.62
35:DV:79:ARG:NH1	38:DM:134:THR:HG21	2.14	0.62
35:DV:93:ARG:HH11	35:DV:93:ARG:HG3	1.64	0.62
37:DL:17:LYS:HD2	37:DL:19:LEU:HD11	1.82	0.62
38:DM:82:MET:HE3	38:DM:83:GLY:N	2.15	0.62
47:DF:71:LYS:O	47:DF:73:VAL:HG23	2.00	0.62
48:DG:8:VAL:HG11	48:DG:49:LEU:CB	2.29	0.62
49:DR:76:LYS:HB2	49:DR:85:LYS:HB2	1.81	0.62
1:AA:590:U:H2'	1:AA:591:U:H6	1.65	0.62
8:AI:33:SER:HB3	8:AI:36:GLN:HB2	1.82	0.62
23:BB:136:G:H2'	23:BB:137:U:C6	2.34	0.62
23:BB:580:U:H2'	23:BB:581:C:H6	1.65	0.62
23:BB:968:C:H2'	23:BB:969:G:H8	1.65	0.62
23:BB:1447:C:H2'	23:BB:1448:G:H8	1.63	0.62
23:BB:1590:A:H2'	23:BB:1591:A:C8	2.35	0.62
23:BB:1590:A:H2'	23:BB:1591:A:H8	1.65	0.62
25:BC:77:VAL:HG23	25:BC:112:GLY:N	2.07	0.62
26:BD:174:SER:O	26:BD:175:LEU:HB2	1.98	0.62
39:BX:20:ASN:HA	39:BX:24:GLU:OE1	2.00	0.62
41:BJ:25:LEU:HD13	41:BJ:26:GLY:N	2.14	0.62
44:BQ:10:ARG:HA	44:BQ:13:HIS:HB2	1.82	0.62
47:BF:42:ALA:HB1	47:BF:46:LYS:NZ	2.15	0.62
52:BW:64:GLY:HA2	52:BW:84:GLU:H	1.64	0.62
1:CA:1313:U:OP2	18:CS:5:LYS:HA	2.00	0.62
10:CK:61:ALA:O	10:CK:64:VAL:HG12	2.00	0.62
10:CK:80:ASN:H	10:CK:80:ASN:ND2	1.97	0.62
20:CB:86:CYS:HB3	20:CB:88:GLN:CD	2.24	0.62
20:CB:163:ILE:CG2	20:CB:164:ASP:H	2.05	0.62
20:CB:213:LEU:O	20:CB:216:VAL:HG22	2.00	0.62
22:DA:32:U:H4'	22:DA:52:A:N6	2.15	0.62
23:DB:1060:U:C5	24:DI:131:THR:HG22	2.35	0.62
23:DB:1104:C:H2'	23:DB:1105:U:C6	2.35	0.62
23:DB:2773:C:H5''	26:DD:169:ARG:HB2	1.82	0.62
25:DC:211:ARG:C	25:DC:213:ARG:H	2.07	0.62
39:DX:12:GLU:HA	39:DX:15:ASN:HD21	1.64	0.62
42:DN:102:PHE:N	42:DN:109:PRO:HA	2.11	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:DZ:40:VAL:CG2	51:DZ:43:GLU:HB3	2.27	0.62
1:AA:90:C:H2'	1:AA:91:U:C5	2.34	0.62
2:AC:59:PRO:HG2	2:AC:62:SER:OG	1.99	0.62
2:AC:148:ILE:HA	2:AC:200:TRP:O	2.00	0.62
19:AT:38:ILE:HG12	19:AT:85:LEU:HD13	1.80	0.62
19:AT:79:THR:HG22	19:AT:83:ASN:ND2	2.14	0.62
23:BB:254:G:N2	34:B3:7:ARG:HH21	1.96	0.62
23:BB:289:G:H2'	23:BB:290:U:O4'	1.99	0.62
23:BB:981:A:H2'	23:BB:982:C:H5''	1.80	0.62
23:BB:1593:A:H2'	23:BB:1594:U:C6	2.35	0.62
23:BB:2352:A:H2'	23:BB:2353:G:O4'	2.00	0.62
23:BB:2636:C:H2'	23:BB:2637:U:C6	2.35	0.62
23:BB:2636:C:H4'	26:BD:81:GLU:OE2	2.00	0.62
24:BI:85:ILE:HD13	24:BI:137:LEU:HD21	1.80	0.62
27:BK:41:ILE:HG13	27:BK:42:THR:N	2.14	0.62
39:BX:29:ARG:NH1	50:BT:12:ARG:NE	2.48	0.62
44:BQ:107:ALA:HB1	49:BR:48:LYS:HE3	1.81	0.62
46:BU:78:LYS:HD3	46:BU:79:ALA:H	1.64	0.62
2:CC:6:PRO:HA	2:CC:9:ILE:HG22	1.81	0.62
8:CI:5:TYR:HB2	8:CI:20:ILE:HB	1.81	0.62
10:CK:14:GLN:HA	10:CK:76:TYR:O	1.99	0.62
20:CB:16:GLY:HA2	20:CB:40:ILE:HG13	1.81	0.62
20:CB:16:GLY:HA3	20:CB:39:ILE:HA	1.80	0.62
20:CB:85:SER:O	20:CB:86:CYS:HB2	1.98	0.62
23:DB:1594:U:H2'	23:DB:1595:C:C6	2.35	0.62
23:DB:2229:U:H2'	23:DB:2230:G:C8	2.35	0.62
27:DK:118:LEU:O	27:DK:120:PRO:HD2	2.00	0.62
33:D1:26:LYS:HD2	33:D1:30:PRO:HA	1.81	0.62
36:D2:10:LEU:HD11	36:D2:14:ARG:CZ	2.30	0.62
40:DH:83:LYS:HE2	40:DH:149:GLU:HG3	1.81	0.62
46:DU:46:LYS:HZ1	46:DU:47:PRO:HG2	1.64	0.62
49:DR:4:VAL:HG23	49:DR:39:LEU:H	1.64	0.62
49:DR:6:GLN:HE22	49:DR:10:LYS:N	1.97	0.62
51:DZ:59:ILE:HG22	51:DZ:64:ILE:HG13	1.82	0.62
1:AA:323:U:H2'	1:AA:324:G:O4'	2.00	0.62
5:AF:80:PHE:CZ	25:BC:123:ILE:HG12	2.35	0.62
8:AI:26:LYS:N	8:AI:61:ASP:HB3	2.15	0.62
21:AU:42:THR:O	21:AU:46:ARG:HG3	2.00	0.62
23:BB:1373:A:H2'	23:BB:1374:G:O4'	1.99	0.62
25:BC:202:ARG:HH12	25:BC:213:ARG:HE	1.45	0.62
39:BX:48:ARG:O	39:BX:51:ALA:HB3	2.00	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:BG:104:LEU:HB2	48:BG:112:VAL:HB	1.82	0.62
49:BR:6:GLN:HE22	49:BR:10:LYS:N	1.96	0.62
50:BT:1:MET:C	50:BT:2:ILE:HD13	2.25	0.62
1:CA:188:C:H2'	1:CA:189:A:O4'	2.00	0.62
1:CA:312:C:H2'	1:CA:313:A:H8	1.64	0.62
3:CD:84:ASN:ND2	3:CD:86:GLY:H	1.98	0.62
8:CI:51:LEU:HB3	8:CI:56:MET:HG2	1.82	0.62
23:DB:176:A:O2'	23:DB:177:G:H5'	1.99	0.62
23:DB:1568:G:H4'	25:DC:58:LYS:HB3	1.80	0.62
25:DC:74:PRO:HG2	25:DC:96:LYS:CG	2.30	0.62
26:DD:51:THR:CG2	26:DD:76:GLY:HA3	2.30	0.62
26:DD:174:SER:O	26:DD:175:LEU:HB2	1.98	0.62
38:DM:35:ALA:HB2	38:DM:100:LYS:HB2	1.80	0.62
41:DJ:40:HIS:CE1	41:DJ:41:LYS:HG3	2.35	0.62
1:AA:746:A:H2'	1:AA:747:A:C8	2.35	0.61
1:AA:843:U:OP2	1:AA:843:U:H4'	1.97	0.61
1:AA:1007:U:H2'	1:AA:1008:U:C6	2.34	0.61
1:AA:1011:C:H2'	1:AA:1012:A:C8	2.35	0.61
1:AA:1359:C:H3'	13:AN:74:ARG:NH2	2.14	0.61
9:AJ:22:THR:OG1	9:AJ:72:ARG:HG3	2.00	0.61
11:AL:35:ARG:CZ	11:AL:35:ARG:HA	2.30	0.61
23:BB:172:A:H2'	23:BB:173:A:H8	1.64	0.61
23:BB:589:U:H2'	23:BB:590:A:C8	2.35	0.61
23:BB:1045:C:H4'	23:BB:1046:A:H5''	1.81	0.61
23:BB:1869:G:H2'	23:BB:1870:C:H5'	1.82	0.61
23:BB:2147:A:H5'	23:BB:2148:G:C4'	2.30	0.61
23:BB:2674:G:H4'	27:BK:30:ARG:HG3	1.82	0.61
29:BE:58:LYS:HE2	29:BE:60:TRP:CD1	2.32	0.61
35:BV:44:HIS:NE2	35:BV:85:LYS:HB2	2.15	0.61
40:BH:99:ILE:HD12	40:BH:130:VAL:HG11	1.82	0.61
42:BN:87:PHE:CE1	42:BN:116:VAL:HG12	2.34	0.61
49:BR:49:ILE:HD13	49:BR:53:PHE:H	1.63	0.61
1:CA:212:G:H2'	1:CA:213:G:H8	1.63	0.61
1:CA:390:U:H2'	1:CA:391:G:H8	1.65	0.61
10:CK:110:THR:HG22	21:CU:4:LYS:HA	1.81	0.61
23:DB:1849:G:H2'	23:DB:1850:G:H8	1.65	0.61
23:DB:1869:G:H2'	23:DB:1870:C:H5'	1.82	0.61
23:DB:2898:U:H2'	23:DB:2899:A:C8	2.35	0.61
6:AG:72:VAL:HG12	6:AG:89:GLU:HG3	1.81	0.61
8:AI:51:LEU:HB3	8:AI:56:MET:HG2	1.83	0.61
9:AJ:52:LEU:HD21	9:AJ:59:LYS:HA	1.82	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AK:91:GLY:HA2	10:AK:94:SER:HB3	1.82	0.61
15:AP:20:VAL:HG23	15:AP:35:ARG:HA	1.81	0.61
23:BB:1553:A:O2'	23:BB:1554:U:H2'	2.00	0.61
23:BB:1947:C:H2'	23:BB:1948:G:H8	1.65	0.61
38:BM:21:ALA:HB2	38:BM:100:LYS:HG2	1.81	0.61
38:BM:35:ALA:HB2	38:BM:100:LYS:HB2	1.81	0.61
1:CA:182:A:O2'	1:CA:183:C:H3'	2.00	0.61
1:CA:621:A:H2'	1:CA:622:A:C8	2.35	0.61
1:CA:1147:C:H1'	8:CI:17:ARG:NH1	2.16	0.61
5:CF:18:VAL:HG21	5:CF:58:HIS:CE1	2.35	0.61
7:CH:94:VAL:HG23	7:CH:101:ALA:HB2	1.81	0.61
14:CO:70:LEU:HD12	14:CO:78:TYR:HB2	1.81	0.61
19:CT:49:ALA:HA	19:CT:52:GLU:OE2	2.00	0.61
19:CT:61:ALA:HA	19:CT:67:HIS:H	1.65	0.61
23:DB:351:C:H2'	23:DB:352:A:C8	2.34	0.61
23:DB:855:G:N3	52:DW:23:LYS:HE3	2.15	0.61
23:DB:1100:C:OP2	24:DI:2:LYS:HB3	1.99	0.61
23:DB:1590:A:H2'	23:DB:1591:A:C8	2.35	0.61
23:DB:2352:A:C2	52:DW:29:SER:HB3	2.35	0.61
23:DB:2882:A:OP1	42:DN:96:ARG:HD2	2.00	0.61
24:DI:32:VAL:HG22	24:DI:60:VAL:HG21	1.82	0.61
26:DD:10:GLY:O	26:DD:11:MET:HB2	2.01	0.61
26:DD:16:THR:HB	26:DD:18:ASP:OD1	2.00	0.61
26:DD:97:SER:HB3	26:DD:99:GLU:HG3	1.82	0.61
29:DE:161:ALA:HA	29:DE:164:LEU:HB2	1.83	0.61
40:DH:42:LYS:HA	40:DH:45:GLU:OE2	1.98	0.61
42:DN:59:SER:O	42:DN:63:ARG:HB2	1.99	0.61
47:DF:24:VAL:O	47:DF:27:VAL:HG22	2.01	0.61
48:DG:154:GLU:HB3	48:DG:158:GLY:H	1.65	0.61
50:DT:1:MET:C	50:DT:2:ILE:HD13	2.25	0.61
52:DW:24:ARG:HD2	52:DW:65:LYS:HG2	1.82	0.61
1:AA:1239:A:H4'	1:AA:1240:U:H5'	1.81	0.61
1:AA:1313:U:OP2	18:AS:5:LYS:HA	2.00	0.61
3:AD:197:HIS:HA	3:AD:200:VAL:HG22	1.82	0.61
7:AH:94:VAL:HG23	7:AH:101:ALA:HB2	1.83	0.61
8:AI:5:TYR:HB2	8:AI:20:ILE:HB	1.81	0.61
20:AB:80:LYS:HG3	20:AB:81:ASP:H	1.65	0.61
20:AB:83:ALA:HB3	20:AB:90:PHE:HB3	1.82	0.61
21:AU:39:LYS:N	21:AU:40:PRO:HD2	2.14	0.61
23:BB:5:A:H2'	23:BB:6:A:C8	2.35	0.61
23:BB:30:G:OP1	44:BQ:4:LYS:HG2	2.00	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:75:G:H4'	39:BX:48:ARG:HH22	1.63	0.61
23:BB:145:C:H2'	23:BB:146:A:H8	1.65	0.61
23:BB:222:A:H61	23:BB:232:G:H1'	1.66	0.61
23:BB:452:G:OP1	29:BE:53:THR:HG23	1.99	0.61
23:BB:1038:G:H2'	23:BB:1039:A:C8	2.35	0.61
23:BB:1082:U:N3	23:BB:1086:A:C6	2.69	0.61
29:BE:33:VAL:O	29:BE:36:ALA:HB3	2.00	0.61
29:BE:48:THR:H	29:BE:51:GLU:HG3	1.66	0.61
36:B2:3:ARG:HA	36:B2:3:ARG:CZ	2.29	0.61
40:BH:32:PRO:HG3	51:BZ:39:TRP:HB3	1.82	0.61
45:BS:31:GLN:C	45:BS:33:LEU:H	2.07	0.61
47:BF:92:GLY:HA2	47:BF:95:MET:HE3	1.82	0.61
2:CC:70:ALA:HA	2:CC:105:VAL:CG2	2.31	0.61
9:CJ:22:THR:OG1	9:CJ:72:ARG:HG3	1.99	0.61
23:DB:559:G:P	41:DJ:111:LYS:HD3	2.41	0.61
23:DB:899:A:H2'	23:DB:900:A:O4'	2.00	0.61
23:DB:992:C:H4'	49:DR:74:ILE:HD13	1.82	0.61
23:DB:1441:G:H2'	23:DB:1442:U:C6	2.34	0.61
23:DB:2311:A:H1'	47:DF:84:ILE:HD13	1.81	0.61
26:DD:68:PHE:HB3	26:DD:73:VAL:HG23	1.83	0.61
35:DV:24:ASN:O	35:DV:44:HIS:HB2	2.00	0.61
35:DV:44:HIS:NE2	35:DV:85:LYS:HB2	2.16	0.61
38:DM:43:ALA:O	38:DM:46:ILE:HG12	2.01	0.61
42:DN:87:PHE:CE1	42:DN:116:VAL:HG12	2.35	0.61
47:DF:110:ILE:HA	47:DF:111:ARG:CZ	2.30	0.61
48:DG:154:GLU:H	48:DG:158:GLY:HA2	1.65	0.61
48:DG:174:LYS:HZ3	48:DG:176:LYS:HG2	1.65	0.61
1:AA:270:A:H2'	1:AA:271:C:C6	2.35	0.61
1:AA:922:G:H2'	1:AA:923:A:C8	2.36	0.61
18:AS:48:ILE:HG21	18:AS:70:LEU:HD21	1.81	0.61
20:AB:16:GLY:HA2	20:AB:40:ILE:HG13	1.82	0.61
23:BB:62:U:O2	23:BB:62:U:H2'	1.99	0.61
23:BB:458:G:H22	23:BB:469:G:H2'	1.65	0.61
23:BB:857:G:C2'	23:BB:858:G:H5'	2.31	0.61
23:BB:1047:G:HO2'	23:BB:1048:A:P	2.23	0.61
23:BB:1440:U:H2'	23:BB:1441:G:C8	2.34	0.61
23:BB:2267:A:H8	23:BB:2267:A:C3'	2.07	0.61
27:BK:71:ARG:HD2	27:BK:106:GLU:OE2	2.01	0.61
28:BP:91:VAL:HG21	28:BP:96:LEU:HD21	1.83	0.61
33:B1:3:GLY:O	33:B1:4:ILE:HG12	2.00	0.61
43:BO:74:VAL:O	43:BO:78:VAL:HG23	2.00	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BU:46:LYS:HZ1	46:BU:47:PRO:HG2	1.65	0.61
5:CF:66:ALA:HB1	5:CF:67:PRO:HD2	1.82	0.61
11:CL:54:VAL:CG2	11:CL:79:ILE:HD11	2.29	0.61
23:DB:877:A:O2'	23:DB:878:A:H5'	2.01	0.61
23:DB:955:U:OP1	38:DM:86:LYS:HE3	1.99	0.61
23:DB:1082:U:N3	23:DB:1086:A:C6	2.68	0.61
23:DB:1098:A:OP2	24:DI:3:LYS:HG2	1.99	0.61
23:DB:1316:U:O2'	23:DB:1317:G:H5'	2.01	0.61
23:DB:2151:U:O2'	23:DB:2152:G:H5'	2.01	0.61
38:DM:26:VAL:HA	38:DM:66:ARG:HH21	1.64	0.61
47:DF:42:ALA:HB1	47:DF:46:LYS:NZ	2.13	0.61
47:DF:91:ARG:HD3	47:DF:91:ARG:N	2.15	0.61
1:AA:154:U:H2'	1:AA:155:A:C8	2.35	0.61
1:AA:451:A:C6	1:AA:480:U:H2'	2.35	0.61
1:AA:1147:C:H1'	8:AI:17:ARG:NH1	2.15	0.61
1:AA:1432:G:H1'	1:AA:1468:A:H61	1.66	0.61
13:AN:60:ARG:NE	13:AN:62:ARG:HG2	2.15	0.61
13:AN:68:ARG:HH12	13:AN:70:HIS:HB2	1.65	0.61
14:AO:25:THR:HB	14:AO:70:LEU:HD23	1.82	0.61
23:BB:63:A:OP2	23:BB:63:A:H2'	2.01	0.61
23:BB:1405:U:H2'	23:BB:1406:U:C6	2.36	0.61
23:BB:2155:U:H2'	23:BB:2156:G:C8	2.35	0.61
23:BB:2284:A:OP2	33:B1:5:ARG:HG3	2.00	0.61
31:B0:33:SER:C	31:B0:35:GLU:H	2.07	0.61
31:B0:53:VAL:HG21	42:BN:98:LEU:HD11	1.82	0.61
39:BX:8:GLU:O	39:BX:12:GLU:HB2	2.00	0.61
47:BF:66:ILE:HD11	47:BF:83:PRO:HB3	1.83	0.61
48:BG:37:ASN:HD22	48:BG:40:VAL:HB	1.66	0.61
48:BG:87:GLN:HE21	48:BG:164:ALA:HA	1.65	0.61
49:BR:4:VAL:HG23	49:BR:39:LEU:H	1.65	0.61
49:BR:34:GLU:HG2	49:BR:60:LYS:HG2	1.81	0.61
50:BT:5:GLU:HA	50:BT:8:LEU:CB	2.28	0.61
50:BT:18:GLU:C	50:BT:20:ALA:H	2.09	0.61
1:CA:1007:U:H2'	1:CA:1008:U:C6	2.35	0.61
3:CD:197:HIS:HA	3:CD:200:VAL:HG22	1.82	0.61
4:CE:95:MET:HG3	4:CE:124:ALA:HB2	1.82	0.61
23:DB:784:G:O2'	23:DB:785:G:H5''	2.00	0.61
23:DB:1098:A:H3'	24:DI:3:LYS:C	2.26	0.61
23:DB:1405:U:H2'	23:DB:1406:U:C6	2.35	0.61
23:DB:2636:C:H2'	23:DB:2637:U:C6	2.36	0.61
40:DH:82:SER:OG	40:DH:94:ILE:HD11	2.00	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1250:A:H2'	1:AA:1251:A:C8	2.35	0.61
1:AA:1338:G:H2'	1:AA:1339:A:C8	2.35	0.61
3:AD:153:ARG:HG3	3:AD:154:VAL:N	2.15	0.61
4:AE:82:HIS:HB2	4:AE:83:PRO:HD2	1.81	0.61
23:BB:1104:C:H2'	23:BB:1105:U:C6	2.35	0.61
23:BB:1552:A:H2'	23:BB:1553:A:H5'	1.81	0.61
23:BB:1849:G:H2'	23:BB:1850:G:H8	1.64	0.61
23:BB:2885:G:N2	31:B0:31:LYS:HG3	2.15	0.61
25:BC:73:ILE:HG21	25:BC:97:ASP:HB2	1.82	0.61
33:B1:29:LYS:N	33:B1:30:PRO:HD3	2.15	0.61
34:B3:37:THR:HA	34:B3:40:LYS:HE2	1.82	0.61
38:BM:64:TRP:HB2	38:BM:104:GLU:HB2	1.82	0.61
43:BO:100:HIS:C	43:BO:104:GLN:HB2	2.26	0.61
1:CA:270:A:H2'	1:CA:271:C:C6	2.36	0.61
1:CA:429:U:H3'	3:CD:8:LEU:HD23	1.83	0.61
1:CA:678:U:H2'	1:CA:679:C:C6	2.36	0.61
1:CA:1062:U:H2'	1:CA:1063:C:C6	2.35	0.61
1:CA:1329:A:H5''	12:CM:24:VAL:HA	1.82	0.61
8:CI:26:LYS:N	8:CI:61:ASP:HB3	2.14	0.61
13:CN:40:ARG:NH2	18:CS:6:LYS:CB	2.59	0.61
13:CN:63:CYS:HB3	13:CN:67:GLY:N	2.13	0.61
23:DB:1080:A:O2'	24:DI:126:ARG:HD2	2.01	0.61
23:DB:1099:G:C5'	24:DI:3:LYS:N	2.64	0.61
23:DB:1203:U:H3'	23:DB:1204:A:C5'	2.30	0.61
26:DD:13:ARG:HH12	28:DP:74:GLN:CD	2.09	0.61
29:DE:189:THR:O	29:DE:193:VAL:HG23	2.01	0.61
39:DX:8:GLU:O	39:DX:12:GLU:HB2	2.00	0.61
41:DJ:84:ILE:O	41:DJ:84:ILE:HG23	2.00	0.61
1:AA:204:G:H2'	1:AA:205:A:C8	2.36	0.61
1:AA:621:A:H2'	1:AA:622:A:C8	2.35	0.61
3:AD:90:LEU:HA	3:AD:93:LEU:HD12	1.82	0.61
3:AD:116:LEU:HD21	3:AD:153:ARG:HD2	1.83	0.61
7:AH:107:LYS:HE3	7:AH:107:LYS:HA	1.82	0.61
19:AT:61:ALA:HA	19:AT:67:HIS:H	1.65	0.61
23:BB:921:C:H2'	23:BB:922:C:H6	1.66	0.61
23:BB:1796:U:H2'	23:BB:1797:G:H8	1.65	0.61
23:BB:2143:C:H2'	23:BB:2144:G:C8	2.36	0.61
23:BB:2355:G:H4'	52:BW:20:LEU:CD1	2.31	0.61
24:BI:18:ASN:N	24:BI:19:PRO:HD2	2.15	0.61
26:BD:27:ILE:HG23	26:BD:201:LEU:HD12	1.82	0.61
28:BP:13:LYS:HD3	28:BP:76:HIS:HA	1.81	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:B3:22:LYS:HD2	34:B3:46:LYS:HB2	1.83	0.61
40:BH:116:ARG:NH1	40:BH:139:PHE:HB2	2.16	0.61
43:BO:24:THR:HG22	43:BO:42:PRO:HD3	1.82	0.61
47:BF:41:GLU:O	47:BF:43:ILE:HG22	2.00	0.61
52:BW:24:ARG:HD2	52:BW:65:LYS:HG2	1.83	0.61
1:CA:781:A:H2'	1:CA:782:A:H5'	1.81	0.61
1:CA:1239:A:H4'	1:CA:1240:U:H5'	1.81	0.61
7:CH:10:LEU:HD22	7:CH:74:ILE:HD11	1.82	0.61
7:CH:78:SER:HA	7:CH:84:ILE:HD12	1.83	0.61
8:CI:51:LEU:HB3	8:CI:56:MET:CB	2.30	0.61
23:DB:5:A:H2'	23:DB:6:A:C8	2.36	0.61
23:DB:9:G:N2	23:DB:10:A:H62	1.96	0.61
23:DB:117:G:H5'	23:DB:126:A:C8	2.31	0.61
23:DB:2146:C:H4'	23:DB:2148:G:H1'	1.83	0.61
23:DB:2352:A:H2'	23:DB:2353:G:O4'	2.00	0.61
23:DB:2801:G:H2'	23:DB:2802:G:C8	2.34	0.61
23:DB:2895:G:H2'	23:DB:2896:C:C6	2.36	0.61
24:DI:128:ILE:HA	24:DI:131:THR:HG23	1.83	0.61
26:DD:14:ILE:HD13	26:DD:178:VAL:HG11	1.83	0.61
27:DK:64:ARG:HH12	27:DK:101:GLY:HA3	1.66	0.61
29:DE:11:ALA:O	29:DE:12:LEU:HD22	2.00	0.61
41:DJ:43:GLU:O	41:DJ:45:THR:N	2.34	0.61
41:DJ:128:ASN:C	41:DJ:129:GLU:HG3	2.25	0.61
50:DT:28:ASN:HA	50:DT:91:GLN:HE22	1.66	0.61
1:AA:216:U:H2'	1:AA:217:C:C6	2.35	0.61
1:AA:923:A:H2'	1:AA:924:C:C6	2.35	0.61
1:AA:1356:G:H2'	1:AA:1357:A:C8	2.36	0.61
2:AC:70:ALA:HA	2:AC:105:VAL:CG2	2.31	0.61
10:AK:61:ALA:O	10:AK:64:VAL:HG12	2.00	0.61
22:BA:32:U:H4'	22:BA:52:A:N6	2.15	0.61
23:BB:38:A:O2'	29:BE:43:THR:HA	2.01	0.61
23:BB:139:U:H3'	23:BB:140:C:C5'	2.31	0.61
23:BB:2187:U:H2'	23:BB:2188:U:C6	2.36	0.61
23:BB:2898:U:H2'	23:BB:2899:A:C8	2.36	0.61
25:BC:74:PRO:HG2	25:BC:96:LYS:CG	2.31	0.61
26:BD:68:PHE:HB3	26:BD:73:VAL:HG23	1.83	0.61
1:CA:63:C:H5'	1:CA:64:G:OP2	2.01	0.61
1:CA:474:G:H2'	1:CA:475:C:C6	2.35	0.61
21:CU:39:LYS:N	21:CU:40:PRO:HD2	2.15	0.61
23:DB:522:A:H2'	23:DB:523:C:C6	2.35	0.61
33:D1:29:LYS:N	33:D1:30:PRO:HD3	2.15	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:D3:37:THR:HA	34:D3:40:LYS:HE2	1.82	0.61
38:DM:35:ALA:HB2	38:DM:100:LYS:H	1.65	0.61
50:DT:12:ARG:HB3	50:DT:12:ARG:NH1	2.15	0.61
52:DW:23:LYS:HD2	52:DW:24:ARG:N	2.16	0.61
1:AA:41:G:H2'	1:AA:42:G:C8	2.35	0.61
1:AA:190:A:H2'	1:AA:191:G:O4'	2.01	0.61
1:AA:390:U:H2'	1:AA:391:G:H8	1.66	0.61
10:AK:72:ALA:O	10:AK:75:GLU:HG2	2.01	0.61
10:AK:80:ASN:H	10:AK:80:ASN:ND2	1.98	0.61
23:BB:729:G:C5	25:BC:206:LYS:HB2	2.35	0.61
23:BB:1080:A:O2'	24:BI:126:ARG:HB2	2.01	0.61
23:BB:1506:U:H2'	23:BB:1507:C:C6	2.36	0.61
25:BC:145:MET:HE2	25:BC:145:MET:HA	1.82	0.61
37:BL:17:LYS:HD2	37:BL:19:LEU:HD11	1.83	0.61
40:BH:97:ARG:O	40:BH:101:ASP:HB2	2.01	0.61
40:BH:140:ALA:C	40:BH:141:LYS:HD3	2.26	0.61
46:BU:3:LYS:HD3	46:BU:82:VAL:HB	1.83	0.61
50:BT:92:ASN:HB2	50:BT:93:LEU:HD22	1.82	0.61
1:CA:160:A:H2'	1:CA:161:A:O4'	2.01	0.61
1:CA:699:C:H2'	1:CA:700:G:H5''	1.83	0.61
1:CA:1359:C:H3'	13:CN:74:ARG:NH2	2.16	0.61
7:CH:107:LYS:HA	7:CH:107:LYS:HE3	1.83	0.61
23:DB:2144:G:N3	23:DB:2146:C:H5'	2.16	0.61
23:DB:2671:G:H2'	23:DB:2672:U:C6	2.35	0.61
26:DD:25:THR:HG21	26:DD:193:VAL:HG22	1.83	0.61
29:DE:47:LYS:HB3	29:DE:51:GLU:HB2	1.81	0.61
36:D2:3:ARG:CZ	36:D2:3:ARG:HA	2.31	0.61
1:AA:620:C:N1	3:AD:131:ILE:HD13	2.16	0.61
1:AA:1009:U:H1'	1:AA:1021:A:C2	2.35	0.61
11:AL:65:TYR:HB3	11:AL:95:HIS:CD2	2.36	0.61
23:BB:1032:A:H1'	32:B4:23:ILE:HD13	1.82	0.61
23:BB:1105:U:H2'	23:BB:1106:G:C8	2.36	0.61
23:BB:1914:C:H2'	23:BB:1915:U:O4'	2.01	0.61
23:BB:2720:U:H5''	28:BP:52:ARG:HH21	1.66	0.61
26:BD:79:LEU:N	26:BD:79:LEU:HD22	2.16	0.61
35:BV:24:ASN:O	35:BV:44:HIS:HB2	2.00	0.61
35:BV:80:HIS:CD2	35:BV:82:TYR:H	2.16	0.61
41:BJ:77:HIS:CD2	41:BJ:84:ILE:H	2.19	0.61
42:BN:102:PHE:N	42:BN:109:PRO:HA	2.11	0.61
47:BF:24:VAL:O	47:BF:27:VAL:HG22	2.01	0.61
48:BG:120:ILE:HD11	48:BG:132:LEU:HB2	1.83	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:BZ:7:VAL:HG21	51:BZ:59:ILE:HD11	1.82	0.61
1:CA:1338:G:H2'	1:CA:1339:A:C8	2.36	0.61
4:CE:82:HIS:HB2	4:CE:83:PRO:HD2	1.81	0.61
9:CJ:52:LEU:HD21	9:CJ:59:LYS:HA	1.82	0.61
10:CK:113:THR:HG21	21:CU:28:LEU:HD12	1.83	0.61
12:CM:29:SER:O	12:CM:32:ILE:HG22	2.01	0.61
20:CB:128:LEU:HD22	20:CB:129:THR:H	1.66	0.61
20:CB:187:ASP:H	20:CB:190:SER:HB2	1.66	0.61
23:DB:699:A:H4'	23:DB:1634:A:N7	2.16	0.61
23:DB:968:C:H2'	23:DB:969:G:H8	1.66	0.61
23:DB:1174:U:H1'	23:DB:1176:U:C2	2.35	0.61
23:DB:1552:A:H2'	23:DB:1553:A:H5'	1.82	0.61
23:DB:2241:A:H2'	23:DB:2242:G:C8	2.36	0.61
37:DL:6:LEU:H	37:DL:6:LEU:CD2	2.10	0.61
37:DL:123:ARG:HA	37:DL:143:GLU:CB	2.26	0.61
48:DG:148:ARG:HD3	48:DG:152:ARG:CZ	2.31	0.61
50:DT:31:VAL:HA	50:DT:84:TYR:H	1.66	0.61
50:DT:36:LYS:HD3	50:DT:36:LYS:O	2.00	0.61
50:DT:60:THR:HB	50:DT:81:LYS:HD2	1.83	0.61
8:AI:79:ARG:NH2	8:AI:102:PHE:HA	2.16	0.60
9:AJ:37:ARG:HA	9:AJ:37:ARG:NE	2.15	0.60
23:BB:782:A:N7	25:BC:219:VAL:HG21	2.15	0.60
23:BB:2635:A:H4'	26:BD:79:LEU:HB2	1.83	0.60
23:BB:2885:G:H2'	23:BB:2886:A:O4'	2.00	0.60
26:BD:97:SER:HB3	26:BD:99:GLU:HG3	1.83	0.60
35:BV:70:ILE:HD13	35:BV:70:ILE:N	2.16	0.60
43:BO:56:LYS:HG2	43:BO:60:GLU:CD	2.26	0.60
44:BQ:63:ARG:NH2	44:BQ:96:ASP:HA	2.15	0.60
47:BF:37:MET:SD	47:BF:52:ALA:HB1	2.40	0.60
48:BG:154:GLU:HB3	48:BG:158:GLY:H	1.66	0.60
1:CA:1225:A:H3'	1:CA:1226:C:C6	2.35	0.60
3:CD:153:ARG:HG3	3:CD:154:VAL:N	2.16	0.60
4:CE:23:THR:HA	4:CE:28:ARG:HA	1.83	0.60
4:CE:73:VAL:HG11	4:CE:143:LEU:HB3	1.83	0.60
6:CG:77:ARG:HG3	6:CG:79:VAL:HG23	1.82	0.60
13:CN:60:ARG:NE	13:CN:62:ARG:HG2	2.16	0.60
23:DB:357:C:H2'	23:DB:358:U:C6	2.36	0.60
23:DB:443:A:C8	29:DE:40:ARG:HD3	2.36	0.60
23:DB:571:U:H3'	49:DR:80:ARG:NH1	2.16	0.60
24:DI:1:ALA:HB1	24:DI:2:LYS:HD2	1.81	0.60
34:D3:44:ARG:N	34:D3:45:PRO:HD2	2.16	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:D2:30:VAL:HA	36:D2:33:ARG:NH2	2.16	0.60
46:DU:13:LEU:H	46:DU:13:LEU:HD12	1.65	0.60
1:AA:182:A:O2'	1:AA:183:C:H3'	2.01	0.60
1:AA:328:C:H4'	1:AA:329:A:H5''	1.83	0.60
1:AA:1221:G:O3'	18:AS:76:THR:HG21	2.01	0.60
4:AE:152:VAL:HA	4:AE:155:LYS:HD3	1.81	0.60
16:AQ:13:SER:HB3	16:AQ:21:VAL:HB	1.81	0.60
23:BB:626:A:H2'	37:BL:78:ARG:NH1	2.16	0.60
23:BB:1178:C:H2'	23:BB:1179:G:H8	1.65	0.60
23:BB:1709:U:H2'	23:BB:1710:G:C8	2.36	0.60
23:BB:2358:A:H61	37:BL:54:GLN:HE22	1.49	0.60
29:BE:59:PRO:HB2	29:BE:67:ARG:HH22	1.65	0.60
48:BG:154:GLU:H	48:BG:158:GLY:HA2	1.66	0.60
1:CA:746:A:H2'	1:CA:747:A:C8	2.35	0.60
23:DB:414:C:H2'	23:DB:415:A:C8	2.37	0.60
23:DB:441:U:H2'	23:DB:442:G:C8	2.36	0.60
23:DB:693:A:H2'	23:DB:694:U:C6	2.36	0.60
23:DB:962:G:N2	23:DB:2250:G:H1	1.99	0.60
23:DB:1551:A:H3'	23:DB:1552:A:H5''	1.82	0.60
29:DE:149:ILE:HG23	29:DE:188:MET:HA	1.83	0.60
37:DL:92:LEU:HD23	37:DL:92:LEU:H	1.65	0.60
37:DL:95:LEU:HB3	37:DL:100:ILE:HG23	1.81	0.60
38:DM:71:LYS:HE3	38:DM:73:ILE:HD11	1.82	0.60
39:DX:15:ASN:ND2	39:DX:15:ASN:H	1.99	0.60
41:DJ:72:LYS:HB2	41:DJ:89:PHE:H	1.66	0.60
41:DJ:93:ILE:O	41:DJ:97:PRO:HG3	2.01	0.60
1:AA:97:G:H2'	1:AA:98:A:O4'	2.01	0.60
1:AA:398:U:H2'	1:AA:399:G:H8	1.66	0.60
1:AA:818:G:H3'	1:AA:819:A:H5''	1.83	0.60
1:AA:1019:A:H2'	1:AA:1020:G:C8	2.36	0.60
8:AI:51:LEU:HB3	8:AI:56:MET:CB	2.31	0.60
23:BB:233:A:H61	23:BB:428:A:H61	1.48	0.60
23:BB:962:G:N2	38:BM:82:MET:HE2	2.16	0.60
23:BB:1485:U:H2'	23:BB:1486:U:H6	1.66	0.60
23:BB:1826:G:H2'	23:BB:1827:U:H6	1.66	0.60
23:BB:2091:C:H1'	51:BZ:34:HIS:CD2	2.36	0.60
26:BD:10:GLY:HA3	26:BD:26:VAL:N	2.03	0.60
29:BE:176:ASP:O	29:BE:180:LEU:HG	2.01	0.60
38:BM:35:ALA:HB2	38:BM:100:LYS:H	1.65	0.60
42:BN:29:VAL:HG12	42:BN:78:LYS:HG2	1.84	0.60
44:BQ:4:LYS:NZ	44:BQ:7:VAL:HG22	2.16	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:BG:104:LEU:HB3	48:BG:106:LEU:HD21	1.83	0.60
50:BT:60:THR:HB	50:BT:81:LYS:HD2	1.81	0.60
1:CA:1035:A:H2'	1:CA:1036:A:H8	1.66	0.60
6:CG:72:VAL:HG12	6:CG:89:GLU:HG3	1.81	0.60
11:CL:35:ARG:CZ	11:CL:35:ARG:HA	2.31	0.60
18:CS:18:VAL:CG2	18:CS:43:MET:HB3	2.29	0.60
20:CB:83:ALA:HB3	20:CB:90:PHE:HB3	1.83	0.60
23:DB:1061:U:O4'	23:DB:1070:A:H1'	2.00	0.60
23:DB:1203:U:H3'	23:DB:1204:A:H5''	1.83	0.60
23:DB:2722:G:H4'	42:DN:4:ARG:HB2	1.82	0.60
50:DT:18:GLU:C	50:DT:20:ALA:H	2.09	0.60
51:DZ:77:LYS:HD2	51:DZ:78:TYR:H	1.66	0.60
1:AA:812:G:O2'	1:AA:813:U:H6	1.83	0.60
1:AA:1216:A:H5''	13:AN:4:SER:HB3	1.83	0.60
7:AH:28:SER:OG	7:AH:56:PRO:HB2	2.01	0.60
20:AB:20:ARG:CZ	20:AB:20:ARG:HA	2.31	0.60
20:AB:57:ASN:HB2	20:AB:219:THR:O	2.02	0.60
20:AB:119:GLN:O	20:AB:125:PHE:HB3	2.01	0.60
23:BB:155:A:H2'	23:BB:156:A:H8	1.65	0.60
23:BB:1169:A:H2'	23:BB:1170:C:C6	2.36	0.60
24:BI:91:LYS:HB2	24:BI:94:LYS:HD2	1.82	0.60
25:BC:117:SER:HB3	25:BC:128:THR:HB	1.82	0.60
26:BD:133:THR:HG23	26:BD:134:HIS:N	2.16	0.60
29:BE:189:THR:O	29:BE:193:VAL:HG23	2.01	0.60
33:B1:33:LEU:HB3	33:B1:51:ALA:CB	2.31	0.60
38:BM:40:ARG:HB2	38:BM:93:VAL:CG2	2.31	0.60
46:BU:46:LYS:NZ	46:BU:47:PRO:HG2	2.15	0.60
47:BF:141:ASP:O	47:BF:145:VAL:HG13	2.01	0.60
1:CA:398:U:H2'	1:CA:399:G:H8	1.66	0.60
1:CA:429:U:H1'	1:CA:430:A:H5''	1.83	0.60
4:CE:89:THR:HG22	4:CE:90:GLY:N	2.14	0.60
5:CF:4:TYR:CE2	5:CF:71:ILE:HG21	2.37	0.60
18:CS:10:ILE:HG22	18:CS:37:SER:HB3	1.82	0.60
23:DB:458:G:H22	23:DB:469:G:H2'	1.66	0.60
23:DB:1021:A:H62	23:DB:1141:U:H3	1.49	0.60
23:DB:1098:A:C8	24:DI:3:LYS:HB3	2.36	0.60
23:DB:2885:G:H2'	23:DB:2886:A:O4'	2.01	0.60
25:DC:76:VAL:CG1	25:DC:114:GLN:HG2	2.31	0.60
29:DE:48:THR:HG23	29:DE:88:ARG:HH11	1.67	0.60
40:DH:129:GLU:HA	40:DH:143:ILE:HA	1.83	0.60
43:DO:105:ALA:C	43:DO:107:ALA:H	2.09	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:DQ:111:LYS:HZ2	49:DR:48:LYS:HD2	1.65	0.60
45:DS:18:ARG:HB3	45:DS:76:VAL:CG2	2.31	0.60
45:DS:31:GLN:C	45:DS:33:LEU:H	2.07	0.60
1:AA:16:A:O2'	1:AA:17:U:H5'	2.01	0.60
1:AA:129:A:H1'	1:AA:130:A:C8	2.37	0.60
1:AA:237:G:H2'	1:AA:238:A:H8	1.67	0.60
1:AA:814:A:H5'	1:AA:1511:G:H4'	1.82	0.60
3:AD:138:PRO:HA	3:AD:181:PHE:HD2	1.64	0.60
8:AI:24:ASN:HD21	8:AI:26:LYS:HG3	1.67	0.60
10:AK:113:THR:HG21	21:AU:28:LEU:HD12	1.84	0.60
23:BB:2516:A:O2'	23:BB:2517:C:H5'	2.02	0.60
29:BE:196:VAL:O	29:BE:200:LEU:HD23	2.01	0.60
36:B2:10:LEU:O	36:B2:14:ARG:HG2	2.02	0.60
48:BG:152:ARG:HH22	48:BG:162:ARG:HA	1.65	0.60
1:CA:16:A:O2'	1:CA:17:U:H5'	2.01	0.60
1:CA:204:G:H1'	1:CA:466:A:N7	2.17	0.60
1:CA:763:G:H2'	1:CA:764:C:C6	2.36	0.60
1:CA:844:G:H3'	1:CA:844:G:OP2	2.01	0.60
1:CA:1361:G:C2'	1:CA:1362:A:H5''	2.32	0.60
2:CC:120:THR:HG22	2:CC:197:VAL:HG21	1.82	0.60
2:CC:188:ALA:HB3	2:CC:195:ILE:HB	1.83	0.60
5:CF:92:THR:HG22	5:CF:93:LYS:N	2.17	0.60
10:CK:72:ALA:O	10:CK:75:GLU:HG2	2.02	0.60
10:CK:111:ASP:HB2	21:CU:19:LYS:CE	2.32	0.60
23:DB:138:U:H2'	23:DB:140:C:C6	2.36	0.60
23:DB:833:A:H2'	23:DB:834:G:C8	2.37	0.60
23:DB:1099:G:C8	24:DI:3:LYS:CA	2.80	0.60
23:DB:1338:G:H4'	50:DT:18:GLU:CG	2.32	0.60
23:DB:1464:G:H2'	23:DB:1465:G:C8	2.37	0.60
23:DB:1553:A:O2'	23:DB:1554:U:H2'	2.02	0.60
23:DB:1727:C:H2'	23:DB:1728:C:C6	2.36	0.60
35:DV:80:HIS:CD2	35:DV:82:TYR:H	2.17	0.60
36:D2:3:ARG:HA	36:D2:3:ARG:NE	2.15	0.60
39:DX:46:VAL:O	39:DX:50:VAL:HG23	2.02	0.60
47:DF:37:MET:SD	47:DF:52:ALA:HB1	2.42	0.60
49:DR:34:GLU:HG2	49:DR:60:LYS:HG2	1.84	0.60
1:AA:22:G:H2'	1:AA:23:C:C6	2.36	0.60
1:AA:188:C:H2'	1:AA:189:A:O4'	2.00	0.60
1:AA:841:C:H2'	1:AA:843:U:OP2	2.01	0.60
5:AF:38:ARG:HH21	5:AF:63:ASN:ND2	1.98	0.60
13:AN:71:GLY:O	13:AN:79:SER:HA	2.02	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AO:70:LEU:HD12	14:AO:78:TYR:HB2	1.83	0.60
23:BB:849:A:H2'	23:BB:850:U:C6	2.35	0.60
23:BB:1722:A:H2'	23:BB:1723:G:C8	2.37	0.60
23:BB:2880:C:C1'	42:BN:91:ALA:HB3	2.31	0.60
26:BD:113:SER:HB3	26:BD:167:ASN:N	2.17	0.60
27:BK:119:ALA:HB3	27:BK:120:PRO:HD3	1.82	0.60
31:B0:11:LYS:HA	31:B0:14:MET:HE3	1.82	0.60
35:BV:93:ARG:HH11	35:BV:93:ARG:HG3	1.67	0.60
40:BH:68:ARG:HD3	40:BH:134:VAL:CG1	2.32	0.60
40:BH:133:GLN:HA	40:BH:139:PHE:CB	2.31	0.60
40:BH:134:VAL:HG22	40:BH:135:HIS:N	2.16	0.60
44:BQ:101:ASP:HB2	49:BR:2:TYR:OH	2.02	0.60
46:BU:85:ARG:HH11	46:BU:86:PHE:H	1.50	0.60
47:BF:39:VAL:HG21	47:BF:49:LEU:HA	1.84	0.60
1:CA:98:A:H2'	1:CA:99:C:C6	2.37	0.60
1:CA:922:G:H2'	1:CA:923:A:C8	2.35	0.60
1:CA:1053:G:C3'	1:CA:1054:C:H5'	2.31	0.60
11:CL:107:LYS:H	11:CL:107:LYS:HZ2	1.50	0.60
20:CB:26:MET:SD	20:CB:192:PRO:HD3	2.41	0.60
20:CB:130:LYS:HA	20:CB:133:ALA:HB3	1.82	0.60
23:DB:1001:A:H2'	23:DB:1002:G:O4'	2.02	0.60
23:DB:1168:G:H2'	23:DB:1169:A:H8	1.66	0.60
23:DB:1654:A:O2'	26:DD:118:PHE:HB2	2.01	0.60
23:DB:1709:U:H2'	23:DB:1710:G:C8	2.36	0.60
26:DD:79:LEU:N	26:DD:79:LEU:HD22	2.15	0.60
38:DM:26:VAL:HG23	38:DM:104:GLU:OE2	2.02	0.60
38:DM:96:ILE:HD11	38:DM:126:ILE:HG12	1.81	0.60
39:DX:20:ASN:HA	39:DX:24:GLU:OE1	2.01	0.60
40:DH:3:VAL:HG12	40:DH:38:PRO:HA	1.83	0.60
47:DF:31:GLU:HB3	47:DF:156:THR:O	2.01	0.60
48:DG:145:ALA:HA	48:DG:148:ARG:HG3	1.83	0.60
52:DW:39:GLN:NE2	52:DW:42:THR:HB	2.16	0.60
52:DW:77:LYS:HZ2	52:DW:77:LYS:N	1.99	0.60
1:AA:410:G:P	3:AD:25:ARG:HE	2.24	0.60
1:AA:429:U:H1'	1:AA:430:A:H5''	1.83	0.60
1:AA:1039:G:H2'	1:AA:1040:U:C6	2.36	0.60
1:AA:1225:A:H3'	1:AA:1226:C:C6	2.37	0.60
1:AA:1494:G:H5'	23:BB:1913:A:C6	2.36	0.60
4:AE:113:VAL:HG11	4:AE:136:VAL:HG23	1.82	0.60
23:BB:129:C:H2'	23:BB:130:C:H6	1.67	0.60
23:BB:1268:A:H2'	23:BB:1269:A:O4'	2.02	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:1437:C:H2'	23:BB:1438:U:H6	1.63	0.60
23:BB:2063:C:O2	23:BB:2450:A:N1	2.34	0.60
26:BD:34:VAL:CG1	26:BD:94:GLN:H	2.15	0.60
29:BE:5:LEU:CD1	29:BE:10:SER:HB2	2.32	0.60
39:BX:17:GLU:HB3	39:BX:53:VAL:CG1	2.31	0.60
43:BO:105:ALA:C	43:BO:107:ALA:H	2.10	0.60
47:BF:71:LYS:O	47:BF:73:VAL:HG23	2.02	0.60
50:BT:39:THR:CG2	50:BT:42:GLU:H	2.15	0.60
1:CA:154:U:H2'	1:CA:155:A:C8	2.35	0.60
1:CA:1356:G:H2'	1:CA:1357:A:C8	2.37	0.60
2:CC:190:THR:HG22	2:CC:191:THR:H	1.67	0.60
23:DB:921:C:H2'	23:DB:922:C:H6	1.66	0.60
23:DB:948:C:H2'	23:DB:949:G:C8	2.37	0.60
23:DB:2516:A:O2'	23:DB:2517:C:H5'	2.02	0.60
25:DC:137:GLY:H	25:DC:163:ILE:HB	1.67	0.60
25:DC:202:ARG:HH12	25:DC:213:ARG:HE	1.48	0.60
29:DE:31:VAL:HG21	29:DE:104:ALA:HB2	1.84	0.60
29:DE:33:VAL:O	29:DE:36:ALA:HB3	2.02	0.60
30:DY:16:LEU:O	30:DY:19:HIS:HB2	2.02	0.60
43:DO:100:HIS:C	43:DO:104:GLN:HB2	2.26	0.60
44:DQ:81:GLY:HA3	44:DQ:112:ALA:HB1	1.83	0.60
46:DU:72:PHE:HA	46:DU:78:LYS:O	2.02	0.60
47:DF:102:LEU:HA	47:DF:106:ALA:CB	2.32	0.60
1:AA:429:U:H3'	3:AD:8:LEU:HD23	1.84	0.60
2:AC:13:ILE:O	2:AC:14:VAL:HG22	2.02	0.60
4:AE:87:VAL:HG23	4:AE:92:ARG:HA	1.84	0.60
9:AJ:41:PRO:O	9:AJ:42:LEU:HB2	2.02	0.60
10:AK:51:PHE:HB2	10:AK:55:ARG:HB3	1.82	0.60
11:AL:42:LYS:HD2	11:AL:43:LYS:HG2	1.82	0.60
14:AO:11:ILE:HD11	14:AO:30:ALA:HB1	1.84	0.60
15:AP:46:LYS:C	15:AP:48:GLU:H	2.07	0.60
20:AB:187:ASP:H	20:AB:190:SER:HB2	1.66	0.60
23:BB:693:A:H2'	23:BB:694:U:C6	2.37	0.60
23:BB:2502:G:H5'	23:BB:2503:A:C5'	2.25	0.60
23:BB:2671:G:H2'	23:BB:2672:U:C6	2.36	0.60
23:BB:2675:A:N1	23:BB:2732:G:O6	2.35	0.60
23:BB:2868:A:H2'	23:BB:2869:G:C8	2.37	0.60
26:BD:20:VAL:HG22	27:BK:72:PRO:HB3	1.82	0.60
40:BH:5:LEU:HD13	40:BH:13:GLY:HA2	1.83	0.60
44:BQ:104:ALA:HA	49:BR:46:GLU:OE1	2.01	0.60
47:BF:39:VAL:HG11	47:BF:49:LEU:HD23	1.83	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:CI:24:ASN:HD21	8:CI:26:LYS:HG3	1.67	0.60
23:DB:143:C:H2'	23:DB:144:A:C8	2.37	0.60
23:DB:233:A:N6	23:DB:428:A:H61	1.99	0.60
23:DB:2547:A:H2'	23:DB:2548:U:C6	2.37	0.60
25:DC:128:THR:HA	25:DC:190:THR:CA	2.29	0.60
25:DC:145:MET:HE3	25:DC:153:LEU:HD21	1.83	0.60
29:DE:137:LYS:HE2	29:DE:141:MET:SD	2.42	0.60
39:DX:7:ARG:HB2	39:DX:7:ARG:HH11	1.67	0.60
48:DG:173:ALA:HB3	48:DG:175:LYS:NZ	2.17	0.60
49:DR:38:VAL:HG22	49:DR:40:MET:H	1.65	0.60
50:DT:48:GLN:HA	50:DT:48:GLN:NE2	2.16	0.60
6:AG:108:ARG:HA	6:AG:115:MET:HE1	1.82	0.60
20:AB:119:GLN:HA	20:AB:124:THR:OG1	2.01	0.60
23:BB:1727:C:H2'	23:BB:1728:C:C6	2.37	0.60
23:BB:2092:U:H4'	23:BB:2093:G:O5'	2.02	0.60
52:BW:23:LYS:HD2	52:BW:24:ARG:N	2.15	0.60
1:CA:83:C:O2'	1:CA:84:U:H2'	2.02	0.60
1:CA:590:U:H2'	1:CA:591:U:H6	1.67	0.60
1:CA:1432:G:H1'	1:CA:1468:A:H61	1.67	0.60
14:CO:53:ARG:HG3	14:CO:57:LEU:HD13	1.84	0.60
20:CB:127:LYS:O	20:CB:127:LYS:HD2	2.02	0.60
23:DB:275:C:H2'	23:DB:276:U:N1	2.17	0.60
23:DB:870:U:O2'	23:DB:871:U:H5'	2.02	0.60
27:DK:7:MET:HE3	27:DK:18:ARG:HB3	1.82	0.60
29:DE:69:ARG:O	29:DE:70:SER:HB3	2.02	0.60
29:DE:176:ASP:O	29:DE:180:LEU:HG	2.01	0.60
32:D4:7:VAL:HG13	32:D4:8:LYS:N	2.13	0.60
37:DL:110:VAL:HG23	37:DL:126:ARG:O	2.02	0.60
38:DM:40:ARG:HB2	38:DM:93:VAL:CG2	2.32	0.60
48:DG:87:GLN:HE21	48:DG:164:ALA:HA	1.67	0.60
2:AC:19:SER:HB3	2:AC:21:TRP:HE1	1.65	0.60
4:AE:95:MET:HG3	4:AE:124:ALA:HB2	1.84	0.60
23:BB:1419:A:H2'	23:BB:1421:G:N7	2.17	0.60
23:BB:1847:A:H4'	23:BB:1848:A:C8	2.37	0.60
28:BP:52:ARG:HG2	28:BP:52:ARG:HH11	1.65	0.60
37:BL:123:ARG:HA	37:BL:143:GLU:CB	2.29	0.60
38:BM:43:ALA:O	38:BM:46:ILE:HG12	2.01	0.60
41:BJ:93:ILE:O	41:BJ:97:PRO:HG3	2.02	0.60
46:BU:60:LYS:HA	46:BU:60:LYS:HE2	1.83	0.60
47:BF:31:GLU:HB3	47:BF:156:THR:O	2.02	0.60
47:BF:91:ARG:HD3	47:BF:91:ARG:N	2.17	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BW:77:LYS:O	52:BW:78:PHE:HB2	2.01	0.60
1:CA:190:A:H2'	1:CA:191:G:O4'	2.02	0.60
1:CA:484:G:H4'	1:CA:485:U:H5''	1.84	0.60
1:CA:1019:A:H2'	1:CA:1020:G:C8	2.37	0.60
1:CA:1405:G:O2'	1:CA:1406:U:H5'	2.01	0.60
2:CC:63:ILE:HD11	2:CC:96:VAL:HG23	1.84	0.60
23:DB:98:G:H2'	23:DB:99:U:H5''	1.83	0.60
23:DB:1442:U:H2'	23:DB:1443:U:C6	2.35	0.60
23:DB:1930:G:N2	23:DB:1968:G:H2'	2.17	0.60
28:DP:97:TYR:O	28:DP:100:ARG:HB2	2.02	0.60
33:D1:33:LEU:HB3	33:D1:51:ALA:CB	2.32	0.60
41:DJ:11:VAL:HG11	41:DJ:13:ARG:HE	1.67	0.60
1:AA:108:G:C6	19:AT:9:ARG:HG2	2.37	0.59
1:AA:131:A:H2'	1:AA:132:C:C6	2.36	0.59
23:BB:83:A:N1	23:BB:101:A:H5'	2.17	0.59
35:BV:9:ARG:HH22	35:BV:12:GLN:HA	1.67	0.59
37:BL:6:LEU:H	37:BL:6:LEU:CD2	2.13	0.59
39:BX:7:ARG:HB2	39:BX:7:ARG:HH11	1.66	0.59
41:BJ:58:ASN:HA	41:BJ:127:GLY:CA	2.31	0.59
1:CA:108:G:C6	19:CT:9:ARG:HG2	2.38	0.59
1:CA:882:C:O2'	1:CA:883:C:H5'	2.02	0.59
3:CD:97:LEU:HB2	3:CD:134:TYR:HB3	1.84	0.59
6:CG:71:THR:HG22	6:CG:141:HIS:NE2	2.17	0.59
7:CH:11:THR:HA	7:CH:14:ARG:NH1	2.17	0.59
9:CJ:37:ARG:HA	9:CJ:37:ARG:NE	2.17	0.59
13:CN:48:GLN:O	13:CN:51:PRO:HD2	2.02	0.59
13:CN:71:GLY:O	13:CN:79:SER:HA	2.02	0.59
20:CB:122:ASP:OD2	20:CB:124:THR:HG22	2.02	0.59
23:DB:165:A:H2'	23:DB:166:U:H6	1.67	0.59
23:DB:1346:G:O2'	23:DB:1347:A:H5'	2.02	0.59
23:DB:2033:A:O2'	23:DB:2035:G:OP2	2.18	0.59
23:DB:2675:A:N1	23:DB:2732:G:O6	2.35	0.59
23:DB:2814:A:H2'	23:DB:2815:C:H6	1.67	0.59
38:DM:61:GLY:HA2	38:DM:107:GLY:HA3	1.84	0.59
45:DS:15:GLN:HA	45:DS:18:ARG:HG2	1.84	0.59
1:AA:57:G:H2'	1:AA:58:C:C6	2.37	0.59
2:AC:129:PHE:CE2	2:AC:156:LEU:HD13	2.37	0.59
4:AE:155:LYS:O	4:AE:158:LYS:HE3	2.02	0.59
23:BB:1229:C:H2'	23:BB:1230:A:H8	1.67	0.59
23:BB:2070:A:H2'	23:BB:2071:A:C8	2.37	0.59
23:BB:2531:A:H5''	48:BG:156:TYR:CZ	2.37	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:2809:A:H2'	23:BB:2810:A:C8	2.37	0.59
25:BC:145:MET:HE3	25:BC:153:LEU:HD21	1.84	0.59
50:BT:31:VAL:HA	50:BT:84:TYR:H	1.66	0.59
1:CA:812:G:O2'	1:CA:813:U:H6	1.85	0.59
1:CA:1001:C:H2'	1:CA:1002:G:H8	1.67	0.59
3:CD:104:MET:HE2	3:CD:170:LEU:HD13	1.84	0.59
14:CO:25:THR:HB	14:CO:70:LEU:HD23	1.82	0.59
23:DB:62:U:H2'	23:DB:62:U:O2	2.01	0.59
23:DB:918:A:H2'	23:DB:919:U:H5'	1.84	0.59
23:DB:1268:A:H2'	23:DB:1269:A:O4'	2.02	0.59
23:DB:1599:U:H2'	23:DB:1600:C:C6	2.37	0.59
23:DB:1826:G:H2'	23:DB:1827:U:C6	2.37	0.59
23:DB:2737:G:H2'	23:DB:2738:A:C8	2.38	0.59
44:DQ:63:ARG:HH12	44:DQ:96:ASP:HB2	1.67	0.59
47:DF:37:MET:HE3	47:DF:56:LEU:HD23	1.82	0.59
49:DR:4:VAL:O	49:DR:38:VAL:HA	2.03	0.59
1:AA:1035:A:H2'	1:AA:1036:A:H8	1.67	0.59
7:AH:6:ILE:HB	7:AH:76:ARG:NH1	2.16	0.59
8:AI:14:SER:HA	8:AI:68:GLY:O	2.02	0.59
20:AB:121:GLN:HE21	20:AB:122:ASP:HB2	1.67	0.59
23:BB:131:A:H2'	23:BB:132:G:H8	1.67	0.59
23:BB:864:G:O2'	23:BB:865:C:H5'	2.02	0.59
23:BB:2329:U:H2'	23:BB:2330:G:C8	2.37	0.59
24:BI:5:GLN:HG2	24:BI:6:ALA:N	2.17	0.59
35:BV:44:HIS:CE1	35:BV:85:LYS:HB2	2.38	0.59
40:BH:31:VAL:CB	40:BH:32:PRO:CD	2.78	0.59
46:BU:86:PHE:HE1	46:BU:88:ASP:HB3	1.67	0.59
50:BT:54:GLU:CB	50:BT:88:LYS:HB2	2.32	0.59
50:BT:57:VAL:HG22	50:BT:58:VAL:N	2.14	0.59
51:BZ:77:LYS:HD2	51:BZ:78:TYR:H	1.66	0.59
1:CA:21:G:H2'	1:CA:22:G:C8	2.37	0.59
1:CA:382:A:H2'	1:CA:383:A:C8	2.37	0.59
2:CC:19:SER:HB3	2:CC:21:TRP:HE1	1.66	0.59
3:CD:116:LEU:HD21	3:CD:153:ARG:HD2	1.83	0.59
6:CG:78:ARG:NH1	6:CG:82:SER:H	2.00	0.59
8:CI:14:SER:HA	8:CI:68:GLY:O	2.01	0.59
18:CS:28:LYS:HB2	18:CS:29:PRO:HD2	1.84	0.59
22:DA:32:U:C4'	22:DA:52:A:H62	2.16	0.59
23:DB:589:U:H2'	23:DB:590:A:C8	2.36	0.59
23:DB:825:A:O2'	37:DL:54:GLN:HB3	2.03	0.59
23:DB:1012:U:O4	41:DJ:30:THR:HG21	2.02	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:1549:A:H2'	23:DB:1550:C:C6	2.38	0.59
23:DB:1550:C:H2'	23:DB:1551:A:H8	1.68	0.59
23:DB:1590:A:H2'	23:DB:1591:A:H8	1.67	0.59
23:DB:1722:A:H2'	23:DB:1723:G:C8	2.37	0.59
23:DB:2052:A:OP1	26:DD:145:SER:HA	2.01	0.59
23:DB:2267:A:C8	23:DB:2267:A:O5'	2.54	0.59
23:DB:2636:C:H4'	26:DD:81:GLU:OE2	2.02	0.59
23:DB:2652:C:H2'	23:DB:2653:U:O4'	2.02	0.59
23:DB:2898:U:H2'	23:DB:2899:A:H8	1.67	0.59
24:DI:112:LYS:O	24:DI:116:MET:HG3	2.02	0.59
29:DE:58:LYS:HZ3	29:DE:58:LYS:HB2	1.67	0.59
39:DX:5:GLU:O	39:DX:8:GLU:HG2	2.01	0.59
41:DJ:25:LEU:HD13	41:DJ:26:GLY:N	2.16	0.59
48:DG:84:LYS:HG3	48:DG:131:VAL:HB	1.84	0.59
48:DG:120:ILE:HD11	48:DG:132:LEU:HB2	1.83	0.59
1:AA:437:U:H5''	3:AD:151:GLN:CD	2.27	0.59
1:AA:1053:G:C3'	1:AA:1054:C:H5'	2.32	0.59
4:AE:132:PRO:O	4:AE:136:VAL:HG12	2.02	0.59
9:AJ:65:TYR:OH	13:AN:84:ARG:HG3	2.03	0.59
11:AL:106:VAL:HG23	11:AL:116:TYR:HB3	1.84	0.59
23:BB:3:U:HO2'	23:BB:4:U:H6	1.48	0.59
23:BB:1930:G:N2	23:BB:1968:G:H2'	2.17	0.59
23:BB:2264:C:N4	52:BW:11:ASN:HD21	1.99	0.59
23:BB:2895:G:H2'	23:BB:2896:C:C6	2.38	0.59
29:BE:158:PHE:HA	29:BE:169:VAL:HG21	1.83	0.59
3:CD:90:LEU:HA	3:CD:93:LEU:HD12	1.83	0.59
13:CN:40:ARG:CZ	18:CS:6:LYS:HB2	2.32	0.59
23:DB:794:A:H2'	23:DB:795:C:H6	1.68	0.59
23:DB:2411:A:H2'	23:DB:2412:A:C8	2.37	0.59
25:DC:117:SER:HB3	25:DC:128:THR:HB	1.85	0.59
27:DK:60:ALA:HA	27:DK:87:LEU:HD23	1.85	0.59
34:D3:22:LYS:HA	34:D3:48:MET:HA	1.83	0.59
1:AA:45:G:H2'	1:AA:46:G:C8	2.35	0.59
1:AA:80:A:N3	1:AA:81:A:H1'	2.18	0.59
1:AA:160:A:H2'	1:AA:161:A:O4'	2.03	0.59
1:AA:763:G:H2'	1:AA:764:C:C6	2.37	0.59
1:AA:1163:A:H2'	1:AA:1164:G:H8	1.67	0.59
11:AL:85:ARG:HA	11:AL:93:ARG:HA	1.83	0.59
20:AB:213:LEU:O	20:AB:216:VAL:HG22	2.02	0.59
22:BA:52:A:OP1	22:BA:52:A:H4'	2.03	0.59
23:BB:129:C:H2'	23:BB:130:C:C6	2.38	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:2443:C:O2'	23:BB:2444:G:H5'	2.02	0.59
24:BI:27:LEU:H	24:BI:27:LEU:CD2	2.14	0.59
29:BE:21:ARG:HG3	29:BE:22:ASP:N	2.17	0.59
41:BJ:11:VAL:HG11	41:BJ:13:ARG:HE	1.68	0.59
1:CA:204:G:H2'	1:CA:205:A:C8	2.38	0.59
1:CA:312:C:H2'	1:CA:313:A:C8	2.36	0.59
8:CI:46:VAL:HA	8:CI:49:GLN:HG3	1.85	0.59
19:CT:49:ALA:HA	19:CT:52:GLU:CD	2.28	0.59
23:DB:560:C:H2'	23:DB:561:G:O4'	2.03	0.59
23:DB:871:U:H2'	23:DB:872:U:C6	2.36	0.59
23:DB:1275:A:H2'	23:DB:1276:A:O4'	2.02	0.59
23:DB:1564:C:O2'	23:DB:1565:C:H5'	2.03	0.59
23:DB:1794:A:H2'	23:DB:1795:C:H6	1.67	0.59
23:DB:1794:A:H2'	23:DB:1795:C:C6	2.37	0.59
25:DC:242:HIS:O	25:DC:244:VAL:HG13	2.02	0.59
47:DF:141:ASP:CB	47:DF:144:LYS:HB2	2.32	0.59
1:AA:539:A:H2'	1:AA:540:G:H8	1.67	0.59
1:AA:1163:A:H2'	1:AA:1164:G:C8	2.37	0.59
5:AF:4:TYR:CE2	5:AF:71:ILE:HG21	2.37	0.59
23:BB:1097:U:H2'	23:BB:1098:A:H5'	1.84	0.59
23:BB:2557:G:H2'	23:BB:2558:C:C6	2.38	0.59
24:BI:116:MET:HE1	24:BI:124:MET:O	2.03	0.59
29:BE:5:LEU:HD12	29:BE:10:SER:HB2	1.84	0.59
38:BM:66:ARG:CZ	38:BM:101:VAL:HG11	2.32	0.59
40:BH:27:ARG:H	40:BH:31:VAL:HG21	1.67	0.59
41:BJ:40:HIS:CE1	41:BJ:41:LYS:HG3	2.38	0.59
48:BG:166:GLU:CG	48:BG:168:VAL:HG23	2.33	0.59
1:CA:268:U:H2'	1:CA:269:C:C6	2.38	0.59
1:CA:328:C:H4'	1:CA:329:A:H5''	1.83	0.59
1:CA:719:C:O2'	17:CR:37:LYS:HB2	2.02	0.59
8:CI:87:MET:HE3	8:CI:91:GLU:HG2	1.83	0.59
10:CK:127:ARG:HH11	10:CK:127:ARG:HG3	1.67	0.59
20:CB:80:LYS:HG3	20:CB:81:ASP:H	1.66	0.59
23:DB:254:G:N2	34:D3:7:ARG:HH21	2.00	0.59
23:DB:264:C:O2'	23:DB:265:A:H5''	2.02	0.59
23:DB:590:A:H2'	23:DB:591:U:C6	2.37	0.59
23:DB:784:G:N1	25:DC:227:VAL:HG11	2.17	0.59
24:DI:108:ILE:HG22	24:DI:128:ILE:HD13	1.84	0.59
28:DP:4:ILE:O	28:DP:6:GLN:N	2.34	0.59
28:DP:89:GLY:HA2	28:DP:112:ARG:N	2.16	0.59
51:DZ:30:LEU:HD23	51:DZ:30:LEU:H	1.68	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AG:77:ARG:HG3	6:AG:79:VAL:HG23	1.83	0.59
23:BB:782:A:N3	25:BC:224:MET:HB3	2.18	0.59
23:BB:871:U:H2'	23:BB:872:U:C6	2.38	0.59
23:BB:1001:A:H2'	23:BB:1002:G:O4'	2.02	0.59
23:BB:1104:C:H2'	23:BB:1105:U:H6	1.66	0.59
26:BD:148:GLN:HG3	26:BD:152:PRO:CG	2.32	0.59
28:BP:97:TYR:O	28:BP:100:ARG:HB2	2.03	0.59
29:BE:1:MET:HE3	29:BE:2:GLU:N	2.17	0.59
34:B3:22:LYS:HB2	34:B3:48:MET:SD	2.43	0.59
47:BF:103:ILE:HD11	47:BF:174:PHE:HA	1.84	0.59
49:BR:4:VAL:O	49:BR:38:VAL:HA	2.02	0.59
50:BT:61:LEU:HG	50:BT:82:LYS:HB2	1.83	0.59
1:CA:376:G:H2'	1:CA:377:G:H8	1.67	0.59
1:CA:625:U:H4'	15:CP:16:PHE:CE2	2.38	0.59
8:CI:24:ASN:CG	8:CI:25:GLY:H	2.10	0.59
9:CJ:40:ILE:HD12	9:CJ:73:LEU:HD12	1.83	0.59
20:CB:60:ALA:HB1	20:CB:220:VAL:HG13	1.85	0.59
21:CU:19:LYS:HB2	21:CU:20:ARG:HE	1.67	0.59
23:DB:69:C:O2'	23:DB:70:G:H5'	2.01	0.59
23:DB:360:U:H2'	23:DB:361:G:Cl'	2.33	0.59
23:DB:850:U:H2'	23:DB:851:C:C6	2.38	0.59
23:DB:1082:U:C2	23:DB:1086:A:C6	2.90	0.59
23:DB:2064:C:H2'	23:DB:2065:C:C6	2.38	0.59
25:DC:170:TYR:HE2	25:DC:184:GLU:HG2	1.68	0.59
26:DD:20:VAL:HG22	27:DK:72:PRO:HB3	1.84	0.59
39:DX:34:SER:HB2	39:DX:36:GLN:OE1	2.03	0.59
44:DQ:56:PHE:O	44:DQ:59:LEU:HB3	2.02	0.59
50:DT:43:ILE:O	50:DT:47:VAL:HG23	2.03	0.59
1:AA:664:G:H22	1:AA:741:G:H1	1.51	0.59
1:AA:926:G:N2	1:AA:1505:G:H2'	2.18	0.59
1:AA:1151:A:HO2'	1:AA:1152:A:H8	1.50	0.59
2:AC:81:GLU:HG3	2:AC:82:ASP:N	2.18	0.59
23:BB:63:A:H8	23:BB:63:A:OP2	1.84	0.59
23:BB:145:C:H2'	23:BB:146:A:C8	2.38	0.59
23:BB:784:G:H21	25:BC:225:ASN:HD22	1.51	0.59
23:BB:947:A:H2'	23:BB:948:C:H6	1.68	0.59
23:BB:1082:U:C2	23:BB:1086:A:C6	2.91	0.59
23:BB:1245:G:OP1	37:BL:13:LYS:HE3	2.03	0.59
23:BB:1709:U:H2'	23:BB:1710:G:H8	1.67	0.59
23:BB:2760:C:O2'	23:BB:2761:A:H5'	2.03	0.59
24:BI:89:SER:HB2	24:BI:136:GLY:HA3	1.84	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:B3:44:ARG:N	34:B3:45:PRO:HD2	2.16	0.59
45:BS:31:GLN:O	45:BS:35:ILE:HG12	2.02	0.59
46:BU:13:LEU:H	46:BU:13:LEU:HD12	1.68	0.59
46:BU:32:LYS:HA	46:BU:65:GLN:HA	1.83	0.59
46:BU:81:ARG:HH21	46:BU:81:ARG:H	1.51	0.59
49:BR:76:LYS:HB2	49:BR:85:LYS:HB2	1.83	0.59
50:BT:12:ARG:HB3	50:BT:12:ARG:NH1	2.17	0.59
1:CA:35:G:H2'	1:CA:36:C:C6	2.38	0.59
7:CH:6:ILE:HD12	7:CH:35:ILE:HD11	1.84	0.59
20:CB:72:LYS:O	20:CB:76:SER:HB2	2.02	0.59
23:DB:145:C:H2'	23:DB:146:A:H8	1.68	0.59
23:DB:171:U:H2'	23:DB:172:A:H8	1.68	0.59
26:DD:10:GLY:CA	26:DD:26:VAL:H	2.06	0.59
31:D0:11:LYS:HA	31:D0:14:MET:HE3	1.85	0.59
37:DL:136:GLU:HA	37:DL:140:GLY:H	1.66	0.59
40:DH:31:VAL:CB	40:DH:32:PRO:CD	2.78	0.59
43:DO:24:THR:HG22	43:DO:42:PRO:HD3	1.83	0.59
44:DQ:18:LYS:C	44:DQ:20:ALA:H	2.11	0.59
52:DW:49:ASN:O	52:DW:50:VAL:HG13	2.03	0.59
1:AA:1001:C:H2'	1:AA:1002:G:H8	1.67	0.59
1:AA:1279:G:H5''	9:AJ:9:ARG:NH2	2.17	0.59
1:AA:1289:A:H61	8:AI:71:ILE:HD11	1.68	0.59
11:AL:82:ARG:HH11	11:AL:82:ARG:HG2	1.66	0.59
13:AN:42:ASN:O	13:AN:46:LYS:HG3	2.03	0.59
17:AR:64:LEU:HB3	17:AR:66:LEU:HG	1.85	0.59
19:AT:66:ILE:HG23	19:AT:70:LYS:HB3	1.85	0.59
23:BB:414:C:H2'	23:BB:415:A:C8	2.37	0.59
23:BB:527:C:H5'	56:BB:3417:HOH:O	2.02	0.59
23:BB:675:A:H4'	29:BE:62:GLN:HE22	1.67	0.59
23:BB:1210:G:H5'	23:BB:1212:G:O4'	2.02	0.59
23:BB:2066:C:O2'	23:BB:2067:G:H5'	2.03	0.59
23:BB:2758:A:H2'	23:BB:2759:G:H5'	1.84	0.59
25:BC:76:VAL:CG1	25:BC:114:GLN:HG2	2.31	0.59
37:BL:110:VAL:HG23	37:BL:126:ARG:O	2.02	0.59
41:BJ:112:GLY:H	41:BJ:113:PRO:HD2	1.68	0.59
46:BU:53:GLN:O	46:BU:53:GLN:HG2	2.03	0.59
48:BG:15:ASP:CB	48:BG:26:LYS:H	2.14	0.59
48:BG:24:THR:C	48:BG:25:ILE:HD12	2.28	0.59
48:BG:87:GLN:HG2	48:BG:164:ALA:HA	1.83	0.59
1:CA:560:A:H4'	1:CA:561:U:H5''	1.83	0.59
17:CR:41:SER:HB2	17:CR:51:GLN:HG2	1.85	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:CR:64:LEU:HB3	17:CR:66:LEU:HG	1.84	0.59
22:DA:52:A:OP1	22:DA:52:A:H4'	2.01	0.59
23:DB:115:C:O2'	23:DB:116:C:H5'	2.03	0.59
23:DB:855:G:H21	52:DW:23:LYS:CG	2.07	0.59
23:DB:2679:A:O2'	23:DB:2680:U:H5'	2.03	0.59
23:DB:2756:U:H1'	23:DB:2757:A:H5''	1.85	0.59
23:DB:2809:A:H2'	23:DB:2810:A:C8	2.38	0.59
29:DE:196:VAL:O	29:DE:200:LEU:HD23	2.03	0.59
35:DV:62:THR:HB	35:DV:71:LYS:HG2	1.84	0.59
46:DU:73:ASN:C	46:DU:75:ALA:H	2.11	0.59
50:DT:39:THR:CG2	50:DT:42:GLU:H	2.15	0.59
4:AE:73:VAL:HG11	4:AE:143:LEU:HB3	1.84	0.59
12:AM:77:LYS:HA	12:AM:80:MET:HE3	1.85	0.59
20:AB:103:TRP:O	20:AB:107:ARG:HG2	2.02	0.59
21:AU:19:LYS:HB2	21:AU:20:ARG:HE	1.68	0.59
22:BA:28:C:OP1	43:BO:31:THR:HG21	2.03	0.59
23:BB:1060:U:OP2	24:BI:74:PRO:HA	2.03	0.59
23:BB:2241:A:H2'	23:BB:2242:G:C8	2.37	0.59
23:BB:2458:G:H1'	23:BB:2460:U:O4	2.02	0.59
25:BC:4:LYS:HD3	25:BC:16:VAL:HG22	1.85	0.59
27:BK:118:LEU:O	27:BK:120:PRO:HD2	2.02	0.59
28:BP:83:ILE:HD13	28:BP:83:ILE:O	2.03	0.59
37:BL:136:GLU:HA	37:BL:140:GLY:H	1.68	0.59
42:BN:33:ILE:O	42:BN:33:ILE:HD12	2.03	0.59
1:CA:193:C:H2'	1:CA:194:C:C6	2.37	0.59
1:CA:518:C:H2'	1:CA:530:G:C8	2.38	0.59
1:CA:664:G:H22	1:CA:741:G:H1	1.50	0.59
1:CA:841:C:H2'	1:CA:843:U:OP2	2.03	0.59
1:CA:1045:C:H2'	1:CA:1046:A:O4'	2.03	0.59
3:CD:197:HIS:O	3:CD:200:VAL:HG22	2.03	0.59
5:CF:53:LYS:CE	5:CF:54:LEU:H	2.16	0.59
6:CG:21:LEU:HG	6:CG:22:LEU:H	1.67	0.59
23:DB:1199:U:H2'	23:DB:1200:C:C6	2.38	0.59
23:DB:1993:U:H4'	26:DD:133:THR:HG22	1.83	0.59
23:DB:2199:A:H5'	23:DB:2200:C:OP2	2.03	0.59
26:DD:13:ARG:HH12	28:DP:74:GLN:NE2	2.01	0.59
34:D3:7:ARG:O	34:D3:11:LYS:HG3	2.03	0.59
48:DG:37:ASN:HD22	48:DG:40:VAL:HB	1.68	0.59
1:AA:859:G:H2'	1:AA:860:A:H8	1.66	0.58
5:AF:53:LYS:CE	5:AF:54:LEU:H	2.16	0.58
6:AG:23:ALA:O	6:AG:26:VAL:HG22	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AN:5:MET:SD	13:AN:8:ARG:HD3	2.42	0.58
13:AN:40:ARG:CZ	18:AS:6:LYS:HB2	2.32	0.58
18:AS:28:LYS:HB2	18:AS:29:PRO:HD2	1.84	0.58
20:AB:26:MET:HE1	20:AB:186:VAL:HG23	1.84	0.58
23:BB:322:A:H3'	29:BE:163:ASN:HD21	1.68	0.58
23:BB:753:A:H2'	23:BB:754:U:H6	1.68	0.58
23:BB:1119:U:OP1	35:BV:83:LYS:HE3	2.03	0.58
23:BB:2143:C:H2'	23:BB:2144:G:H8	1.68	0.58
23:BB:2443:C:H2'	23:BB:2444:G:H8	1.68	0.58
29:BE:98:LYS:HZ1	29:BE:99:LYS:HE3	1.68	0.58
39:BX:14:LEU:O	39:BX:18:LEU:HB2	2.03	0.58
41:BJ:45:THR:N	41:BJ:46:PRO:HD3	2.18	0.58
47:BF:102:LEU:HA	47:BF:106:ALA:CB	2.33	0.58
52:BW:49:ASN:O	52:BW:50:VAL:HG13	2.03	0.58
1:CA:834:U:H2'	1:CA:835:U:C6	2.36	0.58
3:CD:60:VAL:HA	3:CD:63:ILE:HD12	1.85	0.58
8:CI:48:ARG:O	8:CI:52:GLU:HG2	2.03	0.58
9:CJ:52:LEU:HB2	13:CN:80:ARG:HD2	1.85	0.58
10:CK:30:ILE:HG22	10:CK:45:THR:OG1	2.03	0.58
23:DB:1827:U:C2'	23:DB:1828:G:H5'	2.33	0.58
23:DB:2557:G:H2'	23:DB:2558:C:C6	2.38	0.58
27:DK:10:VAL:HG12	27:DK:12:ASP:H	1.68	0.58
29:DE:5:LEU:CD1	29:DE:10:SER:HB2	2.33	0.58
36:D2:21:ARG:CD	36:D2:43:THR:HG21	2.33	0.58
41:DJ:110:PRO:HB2	41:DJ:111:LYS:HE2	1.85	0.58
44:DQ:104:ALA:HA	49:DR:46:GLU:OE1	2.03	0.58
47:DF:15:LEU:HD22	47:DF:167:ALA:HB1	1.84	0.58
49:DR:10:LYS:N	49:DR:10:LYS:HD2	2.18	0.58
1:AA:502:A:H2'	1:AA:503:C:H6	1.66	0.58
1:AA:1078:U:H2'	1:AA:1079:G:O4'	2.03	0.58
1:AA:1342:C:H2'	1:AA:1343:G:C8	2.38	0.58
1:AA:1464:U:P	28:BP:108:ARG:HH22	2.25	0.58
20:AB:86:CYS:HB3	20:AB:88:GLN:CD	2.28	0.58
23:BB:181:A:H2'	23:BB:182:A:H8	1.66	0.58
23:BB:441:U:H2'	23:BB:442:G:C8	2.38	0.58
23:BB:1283:G:N2	23:BB:1286:A:H5'	2.17	0.58
23:BB:1549:A:H2'	23:BB:1550:C:C6	2.38	0.58
23:BB:1657:U:O2'	23:BB:1658:C:H5'	2.04	0.58
23:BB:1733:G:H2'	23:BB:1734:G:C8	2.38	0.58
26:BD:15:PHE:H	26:BD:15:PHE:HD1	1.51	0.58
28:BP:26:GLU:HA	28:BP:43:GLU:HA	1.84	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BE:195:GLN:O	29:BE:198:GLU:HG2	2.03	0.58
36:B2:21:ARG:CD	36:B2:43:THR:HG21	2.33	0.58
37:BL:143:GLU:HG2	37:BL:144:GLU:N	2.16	0.58
40:BH:44:ILE:HA	40:BH:51:ARG:NH2	2.18	0.58
50:BT:8:LEU:HD22	50:BT:46:ALA:HA	1.86	0.58
1:CA:301:G:H2'	1:CA:302:G:H8	1.67	0.58
1:CA:642:A:H2'	1:CA:643:C:H6	1.68	0.58
1:CA:1437:A:H2'	1:CA:1438:G:H8	1.69	0.58
4:CE:95:MET:HA	4:CE:124:ALA:HB2	1.86	0.58
23:DB:222:A:H61	23:DB:232:G:H1'	1.68	0.58
23:DB:345:A:H1'	23:DB:346:A:C2	2.38	0.58
23:DB:547:A:N1	23:DB:548:G:H1'	2.19	0.58
23:DB:1656:C:H2'	23:DB:1657:U:H6	1.67	0.58
23:DB:2008:C:H2'	23:DB:2009:A:H8	1.68	0.58
23:DB:2143:C:H2'	23:DB:2144:G:O4'	2.03	0.58
26:DD:8:LYS:CD	26:DD:197:THR:H	2.17	0.58
26:DD:27:ILE:HG23	26:DD:201:LEU:HD12	1.85	0.58
35:DV:72:VAL:HB	35:DV:92:VAL:O	2.04	0.58
40:DH:113:SER:HB2	40:DH:132:PHE:HZ	1.68	0.58
47:DF:141:ASP:O	47:DF:145:VAL:HG13	2.02	0.58
1:AA:1045:C:H2'	1:AA:1046:A:O4'	2.03	0.58
1:AA:1488:G:O2'	1:AA:1489:G:H5'	2.03	0.58
2:AC:63:ILE:HD11	2:AC:96:VAL:HG23	1.85	0.58
3:AD:154:VAL:O	3:AD:158:LEU:HD12	2.03	0.58
8:AI:46:VAL:HA	8:AI:49:GLN:HG3	1.85	0.58
9:AJ:67:ILE:HG12	13:AN:94:GLY:O	2.04	0.58
16:AQ:45:VAL:HG21	16:AQ:60:ILE:HG21	1.86	0.58
20:AB:60:ALA:HB1	20:AB:220:VAL:HG13	1.85	0.58
23:BB:559:G:OP1	41:BJ:111:LYS:HD3	2.03	0.58
23:BB:2033:A:H3'	56:BB:3539:HOH:O	2.03	0.58
23:BB:2143:C:H2'	23:BB:2144:G:O4'	2.03	0.58
23:BB:2146:C:H1'	23:BB:2147:A:H4'	1.84	0.58
23:BB:2496:C:OP1	38:BM:82:MET:HB2	2.04	0.58
23:BB:2547:A:H2'	23:BB:2548:U:C6	2.38	0.58
26:BD:14:ILE:HD13	26:BD:178:VAL:HG11	1.84	0.58
29:BE:48:THR:HG23	29:BE:88:ARG:HH11	1.68	0.58
37:BL:79:LEU:CG	37:BL:112:LEU:HA	2.32	0.58
41:BJ:124:VAL:O	41:BJ:125:TYR:HB2	2.02	0.58
46:BU:10:VAL:O	46:BU:21:ARG:HA	2.03	0.58
48:BG:148:ARG:HD3	48:BG:152:ARG:CZ	2.32	0.58
2:CC:13:ILE:O	2:CC:14:VAL:HG22	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:CF:47:LEU:HD21	5:CF:57:ALA:HB3	1.85	0.58
8:CI:33:SER:HB3	8:CI:36:GLN:HB2	1.84	0.58
11:CL:106:VAL:HG23	11:CL:116:TYR:HB3	1.84	0.58
19:CT:66:ILE:HG13	19:CT:70:LYS:HE3	1.84	0.58
23:DB:222:A:N1	23:DB:233:A:H5''	2.17	0.58
23:DB:753:A:H2'	23:DB:754:U:H6	1.68	0.58
23:DB:1230:A:H2'	23:DB:1231:U:C6	2.38	0.58
23:DB:1354:A:H2'	23:DB:1355:G:O4'	2.02	0.58
23:DB:1820:U:OP1	25:DC:176:ARG:HD2	2.03	0.58
27:DK:14:SER:HB2	27:DK:51:LYS:H	1.68	0.58
28:DP:24:THR:O	28:DP:25:VAL:HG22	2.03	0.58
29:DE:48:THR:HG22	29:DE:86:ALA:HB3	1.85	0.58
41:DJ:58:ASN:HA	41:DJ:127:GLY:CA	2.33	0.58
42:DN:38:LEU:O	42:DN:42:LYS:HG3	2.04	0.58
48:DG:95:ALA:HB2	48:DG:130:ILE:HD11	1.86	0.58
1:AA:21:G:H2'	1:AA:22:G:C8	2.38	0.58
7:AH:79:ARG:HB2	7:AH:80:PRO:HD2	1.85	0.58
12:AM:13:HIS:HB2	12:AM:16:ILE:HG22	1.85	0.58
14:AO:53:ARG:HD2	23:BB:715:A:N6	2.19	0.58
19:AT:49:ALA:O	19:AT:52:GLU:HG2	2.04	0.58
22:BA:106:G:H2'	22:BA:107:G:C8	2.39	0.58
23:BB:264:C:O2'	23:BB:265:A:H5''	2.02	0.58
23:BB:581:C:H2'	23:BB:582:A:H8	1.68	0.58
23:BB:948:C:H2'	23:BB:949:G:C8	2.38	0.58
23:BB:2820:A:OP1	42:BN:4:ARG:HA	2.02	0.58
26:BD:10:GLY:CA	26:BD:26:VAL:H	2.06	0.58
26:BD:105:LYS:H	26:BD:106:LYS:NZ	2.01	0.58
27:BK:60:ALA:HA	27:BK:87:LEU:HD23	1.84	0.58
29:BE:161:ALA:HA	29:BE:164:LEU:HB2	1.85	0.58
37:BL:143:GLU:CG	37:BL:144:GLU:H	2.11	0.58
50:BT:59:ASN:O	50:BT:84:TYR:HB2	2.03	0.58
1:CA:1342:C:H2'	1:CA:1343:G:C8	2.38	0.58
2:CC:129:PHE:CE2	2:CC:156:LEU:HD13	2.38	0.58
5:CF:53:LYS:C	5:CF:54:LEU:HD22	2.29	0.58
9:CJ:41:PRO:O	9:CJ:42:LEU:HB2	2.02	0.58
14:CO:81:LEU:HD23	14:CO:85:LEU:HD13	1.85	0.58
22:DA:54:G:O2'	22:DA:55:U:H5'	2.02	0.58
23:DB:63:A:H2'	23:DB:63:A:OP2	2.03	0.58
23:DB:609:A:H2'	23:DB:610:C:O4'	2.02	0.58
23:DB:1419:A:H2'	23:DB:1421:G:N7	2.19	0.58
24:DI:125:THR:O	24:DI:129:GLU:HG3	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DC:78:GLU:OE1	25:DC:94:LEU:HD22	2.04	0.58
25:DC:158:GLY:H	25:DC:194:VAL:HG13	1.69	0.58
25:DC:173:LEU:H	25:DC:173:LEU:CD2	2.17	0.58
27:DK:43:ILE:HG22	27:DK:54:LYS:HA	1.86	0.58
35:DV:44:HIS:CE1	35:DV:86:LEU:H	2.20	0.58
40:DH:93:SER:O	40:DH:94:ILE:HD12	2.02	0.58
41:DJ:112:GLY:H	41:DJ:113:PRO:HD2	1.68	0.58
47:DF:33:ILE:HD13	47:DF:95:MET:HG2	1.85	0.58
47:DF:66:ILE:HD11	47:DF:83:PRO:HB3	1.85	0.58
47:DF:103:ILE:HD11	47:DF:174:PHE:HA	1.84	0.58
48:DG:152:ARG:HH22	48:DG:162:ARG:HA	1.68	0.58
50:DT:32:LEU:O	50:DT:83:ALA:HB2	2.03	0.58
1:AA:22:G:H2'	1:AA:23:C:H6	1.69	0.58
1:AA:474:G:H2'	1:AA:475:C:C6	2.38	0.58
1:AA:1342:C:H2'	1:AA:1343:G:H8	1.68	0.58
1:AA:1532:U:C2	1:AA:1534:A:H5'	2.39	0.58
5:AF:53:LYS:C	5:AF:54:LEU:HD22	2.28	0.58
9:AJ:40:ILE:HD12	9:AJ:73:LEU:HD12	1.84	0.58
23:BB:165:A:H2'	23:BB:166:U:H6	1.69	0.58
23:BB:445:C:O2'	23:BB:446:G:H5'	2.03	0.58
23:BB:1464:G:H2'	23:BB:1465:G:C8	2.38	0.58
23:BB:1826:G:H2'	23:BB:1827:U:C6	2.38	0.58
23:BB:2653:U:O2'	48:BG:109:SER:HB2	2.03	0.58
26:BD:124:ARG:HA	26:BD:165:MET:HE3	1.86	0.58
39:BX:34:SER:HB2	39:BX:36:GLN:OE1	2.04	0.58
40:BH:132:PHE:HB2	40:BH:142:VAL:HG23	1.85	0.58
51:BZ:7:VAL:HG13	51:BZ:8:THR:CG2	2.33	0.58
52:BW:39:GLN:NE2	52:BW:42:THR:HB	2.15	0.58
1:CA:1004:A:H5'	1:CA:1025:U:O2	2.04	0.58
1:CA:1162:C:H2'	1:CA:1163:A:C8	2.39	0.58
1:CA:1450:U:H2'	1:CA:1452:C:C4	2.37	0.58
8:CI:11:ARG:HE	8:CI:12:LYS:HG3	1.67	0.58
8:CI:67:LYS:HZ3	8:CI:67:LYS:HB2	1.68	0.58
14:CO:55:GLY:O	14:CO:59:MET:HG2	2.03	0.58
23:DB:21:A:H2'	23:DB:22:C:C6	2.39	0.58
23:DB:1796:U:H2'	23:DB:1797:G:H8	1.68	0.58
25:DC:141:HIS:CG	25:DC:142:ASN:H	2.22	0.58
31:D0:38:LEU:HD13	31:D0:41:HIS:NE2	2.19	0.58
37:DL:79:LEU:CG	37:DL:112:LEU:HA	2.30	0.58
44:DQ:10:ARG:NH1	44:DQ:10:ARG:HB2	2.18	0.58
1:AA:1361:G:C2'	1:AA:1362:A:H5''	2.33	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AF:6:ILE:HD11	5:AF:8:PHE:HD2	1.67	0.58
7:AH:10:LEU:HD22	7:AH:74:ILE:HD11	1.85	0.58
11:AL:54:VAL:CG2	11:AL:79:ILE:HD11	2.34	0.58
20:AB:23:ASN:HD22	20:AB:24:PRO:HD2	1.68	0.58
21:AU:24:LYS:HB3	21:AU:24:LYS:NZ	2.18	0.58
23:BB:98:G:H2'	23:BB:99:U:H5''	1.85	0.58
23:BB:946:C:H2'	23:BB:947:A:H8	1.69	0.58
23:BB:979:A:H2'	23:BB:982:C:N4	2.18	0.58
23:BB:1444:G:H2'	23:BB:1445:G:H8	1.69	0.58
24:BI:109:ALA:HB1	24:BI:124:MET:HG3	1.85	0.58
29:BE:98:LYS:NZ	29:BE:99:LYS:HE3	2.18	0.58
50:BT:50:LEU:C	50:BT:52:GLU:H	2.11	0.58
1:CA:237:G:H2'	1:CA:238:A:H8	1.69	0.58
1:CA:777:A:H2'	1:CA:778:G:H8	1.68	0.58
1:CA:1279:G:H5''	9:CJ:9:ARG:NH2	2.18	0.58
1:CA:1342:C:H2'	1:CA:1343:G:H8	1.69	0.58
8:CI:47:VAL:HG23	8:CI:48:ARG:HG3	1.86	0.58
20:CB:195:VAL:HG12	20:CB:197:PHE:H	1.69	0.58
21:CU:42:THR:O	21:CU:46:ARG:HG3	2.02	0.58
23:DB:419:U:H2'	23:DB:420:C:C6	2.38	0.58
23:DB:523:C:H4'	23:DB:540:C:O2	2.04	0.58
27:DK:115:ILE:HG23	27:DK:116:ILE:N	2.18	0.58
33:D1:28:THR:C	33:D1:30:PRO:HD3	2.28	0.58
48:DG:152:ARG:HG3	48:DG:153:PRO:HD2	1.86	0.58
50:DT:5:GLU:HA	50:DT:8:LEU:CB	2.28	0.58
52:DW:37:VAL:C	52:DW:39:GLN:H	2.12	0.58
1:AA:56:U:H2'	1:AA:57:G:C8	2.37	0.58
1:AA:518:C:H2'	1:AA:530:G:C8	2.37	0.58
1:AA:1307:U:H2'	1:AA:1308:U:C6	2.39	0.58
10:AK:30:ILE:HG22	10:AK:45:THR:OG1	2.02	0.58
15:AP:73:ALA:O	15:AP:77:GLU:HG3	2.04	0.58
19:AT:4:LYS:HE3	19:AT:6:ALA:H	1.68	0.58
22:BA:32:U:C4'	22:BA:52:A:H62	2.15	0.58
23:BB:2814:A:H2'	23:BB:2815:C:H6	1.67	0.58
26:BD:34:VAL:HB	26:BD:48:ILE:HD11	1.86	0.58
38:BM:40:ARG:HD3	38:BM:93:VAL:HG21	1.86	0.58
41:BJ:128:ASN:C	41:BJ:129:GLU:HG3	2.27	0.58
46:BU:73:ASN:C	46:BU:75:ALA:H	2.11	0.58
46:BU:86:PHE:HD1	46:BU:88:ASP:H	1.48	0.58
48:BG:148:ARG:HA	48:BG:161:VAL:HB	1.85	0.58
50:BT:41:ALA:C	50:BT:43:ILE:H	2.10	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:470:C:H2'	1:CA:471:U:C6	2.39	0.58
1:CA:769:G:O2'	1:CA:770:C:H5'	2.04	0.58
2:CC:59:PRO:HG2	2:CC:62:SER:OG	2.02	0.58
12:CM:70:ARG:CZ	47:DF:142:TYR:HB3	2.33	0.58
23:DB:445:C:O2'	23:DB:446:G:H5'	2.03	0.58
23:DB:1283:G:N2	23:DB:1286:A:H5'	2.17	0.58
23:DB:2063:C:O2	23:DB:2450:A:N1	2.37	0.58
23:DB:2240:U:O2'	23:DB:2241:A:H5'	2.03	0.58
24:DI:71:LYS:HB3	24:DI:115:ASP:OD2	2.03	0.58
25:DC:75:ALA:HB1	25:DC:93:VAL:HG22	1.84	0.58
35:DV:44:HIS:CE1	35:DV:85:LYS:HB2	2.38	0.58
37:DL:85:VAL:HG22	37:DL:94:THR:CG2	2.34	0.58
39:DX:1:MET:O	39:DX:5:GLU:HG2	2.03	0.58
40:DH:99:ILE:O	40:DH:103:VAL:HG12	2.03	0.58
41:DJ:55:ILE:O	41:DJ:55:ILE:HG13	2.03	0.58
41:DJ:124:VAL:O	41:DJ:125:TYR:HB2	2.02	0.58
44:DQ:79:ILE:O	44:DQ:79:ILE:HD13	2.04	0.58
47:DF:34:THR:OG1	47:DF:154:THR:HB	2.04	0.58
48:DG:166:GLU:CG	48:DG:168:VAL:HG23	2.34	0.58
50:DT:44:LYS:O	50:DT:48:GLN:HG2	2.02	0.58
1:AA:312:C:H2'	1:AA:313:A:H8	1.68	0.58
1:AA:868:C:H2'	1:AA:869:G:O4'	2.04	0.58
8:AI:62:LEU:HD22	8:AI:62:LEU:N	2.19	0.58
9:AJ:55:PRO:HA	13:AN:80:ARG:HH22	1.68	0.58
23:BB:417:C:H2'	23:BB:418:C:C6	2.37	0.58
23:BB:1061:U:H4'	23:BB:1070:A:O3'	2.04	0.58
23:BB:1082:U:O4	23:BB:1086:A:C2	2.57	0.58
23:BB:1771:C:H2'	23:BB:1772:A:H8	1.69	0.58
23:BB:1794:A:H2'	23:BB:1795:C:C6	2.38	0.58
23:BB:2033:A:O2'	23:BB:2035:G:OP2	2.19	0.58
23:BB:2646:C:H2'	23:BB:2647:U:O4'	2.03	0.58
23:BB:2896:C:H2'	23:BB:2897:U:C6	2.39	0.58
24:BI:105:LEU:HD11	24:BI:139:VAL:CG1	2.33	0.58
25:BC:141:HIS:CG	25:BC:142:ASN:H	2.22	0.58
25:BC:242:HIS:O	25:BC:244:VAL:HG13	2.03	0.58
37:BL:95:LEU:HB3	37:BL:100:ILE:HG23	1.85	0.58
38:BM:26:VAL:HG23	38:BM:104:GLU:OE2	2.04	0.58
41:BJ:25:LEU:HD22	41:BJ:26:GLY:N	2.18	0.58
44:BQ:81:GLY:HA3	44:BQ:112:ALA:HB1	1.85	0.58
48:BG:34:ARG:HD3	48:BG:34:ARG:N	2.19	0.58
1:CA:1011:C:H2'	1:CA:1012:A:C8	2.39	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1039:G:H2'	1:CA:1040:U:C6	2.39	0.58
1:CA:1071:C:H2'	1:CA:1072:G:C8	2.39	0.58
6:CG:112:ASP:HB2	6:CG:118:ARG:HG2	1.85	0.58
10:CK:51:PHE:CZ	10:CK:61:ALA:HA	2.39	0.58
22:DA:2:G:H2'	22:DA:3:C:C6	2.38	0.58
22:DA:94:A:H2'	22:DA:95:U:O4'	2.04	0.58
23:DB:322:A:H5'	23:DB:340:A:H1'	1.85	0.58
23:DB:1582:C:H2'	23:DB:1583:A:O4'	2.04	0.58
23:DB:1657:U:O2'	23:DB:1658:C:H5'	2.04	0.58
23:DB:2849:U:N3	23:DB:2867:G:C8	2.71	0.58
24:DI:45:THR:CA	24:DI:48:ILE:HG22	2.32	0.58
26:DD:121:THR:C	26:DD:123:LYS:H	2.12	0.58
29:DE:158:PHE:HA	29:DE:169:VAL:HG21	1.84	0.58
46:DU:10:VAL:O	46:DU:21:ARG:HA	2.04	0.58
47:DF:19:PHE:CE2	47:DF:164:GLU:HG2	2.39	0.58
47:DF:35:LEU:HD23	47:DF:153:ILE:HG12	1.86	0.58
50:DT:29:THR:CA	50:DT:86:THR:HA	2.33	0.58
1:AA:470:C:H2'	1:AA:471:U:C6	2.39	0.58
1:AA:617:G:H4'	15:AP:46:LYS:HE2	1.86	0.58
1:AA:1026:G:H2'	1:AA:1027:C:H6	1.68	0.58
1:AA:1123:U:O2'	1:AA:1124:G:H5'	2.04	0.58
1:AA:1450:U:H2'	1:AA:1452:C:C4	2.38	0.58
2:AC:88:LYS:HE3	2:AC:88:LYS:O	2.04	0.58
4:AE:45:VAL:HG13	4:AE:117:ALA:HA	1.86	0.58
23:BB:9:G:N2	23:BB:10:A:H62	2.00	0.58
23:BB:646:U:H3'	23:BB:647:G:H8	1.68	0.58
23:BB:833:A:H2'	23:BB:834:G:C8	2.38	0.58
23:BB:2845:U:O2'	23:BB:2846:G:H5'	2.03	0.58
23:BB:2893:A:H5''	23:BB:2894:G:H5'	1.86	0.58
25:BC:177:SER:O	25:BC:270:ARG:HG3	2.04	0.58
26:BD:182:ALA:O	26:BD:184:ARG:HG2	2.04	0.58
27:BK:14:SER:HB2	27:BK:51:LYS:H	1.68	0.58
29:BE:130:LYS:C	29:BE:132:LYS:H	2.12	0.58
29:BE:154:ASP:OD1	29:BE:156:ASN:HB3	2.03	0.58
30:BY:16:LEU:O	30:BY:19:HIS:HB2	2.02	0.58
33:B1:28:THR:C	33:B1:30:PRO:HD3	2.29	0.58
39:BX:1:MET:O	39:BX:5:GLU:HG2	2.04	0.58
41:BJ:38:GLY:HA3	41:BJ:50:THR:O	2.03	0.58
46:BU:3:LYS:HB3	46:BU:82:VAL:HG21	1.85	0.58
1:CA:625:U:H4'	15:CP:16:PHE:CZ	2.38	0.58
3:CD:154:VAL:O	3:CD:158:LEU:HD12	2.04	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:CH:79:ARG:HB2	7:CH:80:PRO:HD2	1.85	0.58
11:CL:17:LYS:HE3	11:CL:17:LYS:N	2.19	0.58
11:CL:54:VAL:HG21	11:CL:79:ILE:HD11	1.84	0.58
11:CL:65:TYR:HB3	11:CL:95:HIS:CD2	2.39	0.58
18:CS:39:ILE:HB	18:CS:66:VAL:HA	1.85	0.58
22:DA:109:A:H2'	22:DA:110:C:H6	1.68	0.58
23:DB:796:C:H2'	23:DB:797:G:H8	1.68	0.58
25:DC:226:PRO:HA	25:DC:232:GLY:HA3	1.84	0.58
26:DD:113:SER:HB3	26:DD:167:ASN:N	2.19	0.58
27:DK:35:VAL:HG23	27:DK:36:GLY:N	2.15	0.58
27:DK:59:LYS:HD2	27:DK:89:ASN:ND2	2.19	0.58
29:DE:5:LEU:HD12	29:DE:10:SER:HB2	1.85	0.58
35:DV:30:ILE:HB	35:DV:38:LEU:HB3	1.86	0.58
44:DQ:10:ARG:HA	44:DQ:13:HIS:HB2	1.84	0.58
46:DU:86:PHE:HE1	46:DU:88:ASP:HB3	1.69	0.58
52:DW:23:LYS:O	52:DW:66:VAL:HB	2.04	0.58
52:DW:48:ALA:HB3	52:DW:81:ILE:O	2.03	0.58
1:AA:1004:A:H5'	1:AA:1025:U:O2	2.04	0.58
15:AP:34:GLU:CD	15:AP:60:TRP:HE1	2.11	0.58
18:AS:65:MET:HG3	18:AS:73:PHE:CZ	2.39	0.58
23:BB:322:A:H5'	23:BB:340:A:H1'	1.84	0.58
23:BB:1735:A:H2'	23:BB:1736:U:C6	2.39	0.58
26:BD:170:VAL:O	26:BD:170:VAL:HG23	2.04	0.58
37:BL:92:LEU:HD23	37:BL:92:LEU:H	1.68	0.58
38:BM:71:LYS:HD3	38:BM:95:LEU:HD13	1.86	0.58
44:BQ:94:LEU:HD21	49:BR:11:GLN:HB2	1.86	0.58
47:BF:177:ARG:CZ	47:BF:177:ARG:HA	2.34	0.58
52:BW:7:GLY:C	52:BW:10:ARG:HH12	2.12	0.58
52:BW:37:VAL:C	52:BW:39:GLN:H	2.11	0.58
1:CA:56:U:H2'	1:CA:57:G:C8	2.39	0.58
1:CA:410:G:P	3:CD:25:ARG:HE	2.27	0.58
1:CA:620:C:N1	3:CD:131:ILE:HD13	2.18	0.58
3:CD:77:GLU:HA	3:CD:80:ARG:HG2	1.85	0.58
4:CE:155:LYS:O	4:CE:158:LYS:HE3	2.04	0.58
20:CB:218:ALA:HA	20:CB:221:ARG:HG2	1.84	0.58
23:DB:644:A:O2'	23:DB:645:C:H5'	2.04	0.58
23:DB:1548:A:H2'	23:DB:1549:A:C8	2.38	0.58
23:DB:1778:U:H2'	23:DB:1784:A:N6	2.19	0.58
23:DB:2229:U:H2'	23:DB:2230:G:H8	1.67	0.58
29:DE:189:THR:HG23	29:DE:192:ALA:H	1.69	0.58
36:D2:10:LEU:O	36:D2:14:ARG:HG2	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DL:95:LEU:HB3	37:DL:100:ILE:CG2	2.34	0.58
41:DJ:25:LEU:HD22	41:DJ:26:GLY:N	2.17	0.58
46:DU:81:ARG:HH21	46:DU:81:ARG:H	1.51	0.58
52:DW:49:ASN:HB3	52:DW:81:ILE:CG1	2.34	0.58
2:AC:126:ARG:HH22	2:AC:190:THR:CG2	2.14	0.57
5:AF:43:GLY:HA2	5:AF:58:HIS:NE2	2.19	0.57
6:AG:112:ASP:HB2	6:AG:118:ARG:HG2	1.86	0.57
10:AK:88:PRO:HD3	21:AU:28:LEU:HD11	1.86	0.57
19:AT:27:MET:O	19:AT:31:ILE:HG13	2.03	0.57
23:BB:564:C:O2'	23:BB:565:C:H5'	2.04	0.57
23:BB:704:G:C2'	23:BB:726:G:H22	2.15	0.57
23:BB:720:U:H2'	23:BB:721:A:C8	2.39	0.57
23:BB:870:U:O2'	23:BB:871:U:H5'	2.03	0.57
23:BB:921:C:H2'	23:BB:922:C:C6	2.39	0.57
23:BB:1021:A:H61	23:BB:1142:A:H61	1.50	0.57
23:BB:1316:U:O2'	23:BB:1317:G:H5'	2.03	0.57
23:BB:1810:A:H2'	23:BB:1811:G:O4'	2.03	0.57
23:BB:2190:G:O2'	23:BB:2191:A:H5'	2.04	0.57
26:BD:116:LYS:HE2	42:BN:1:MET:HE1	1.86	0.57
29:BE:106:LYS:HE3	29:BE:200:LEU:HD12	1.85	0.57
44:BQ:111:LYS:HZ2	49:BR:48:LYS:HD2	1.69	0.57
48:BG:84:LYS:HG3	48:BG:131:VAL:HB	1.85	0.57
48:BG:89:VAL:HG12	48:BG:90:GLY:H	1.69	0.57
1:CA:6:G:H2'	4:CE:123:LEU:HD22	1.86	0.57
2:CC:182:ASP:HB2	2:CC:203:LYS:HE2	1.86	0.57
3:CD:102:TYR:HE1	3:CD:109:THR:HA	1.69	0.57
3:CD:196:GLU:CD	3:CD:196:GLU:H	2.12	0.57
4:CE:55:VAL:N	4:CE:56:PRO:HD2	2.18	0.57
5:CF:29:ILE:HD13	5:CF:64:VAL:HG21	1.85	0.57
6:CG:108:ARG:HA	6:CG:115:MET:HE1	1.84	0.57
12:CM:77:LYS:HA	12:CM:80:MET:HE3	1.86	0.57
20:CB:93:HIS:CD2	20:CB:145:ASN:HB3	2.39	0.57
23:DB:63:A:H8	23:DB:63:A:OP2	1.86	0.57
23:DB:871:U:H2'	23:DB:872:U:H6	1.67	0.57
23:DB:1805:A:H5''	25:DC:247:TRP:CE2	2.39	0.57
23:DB:2329:U:H2'	23:DB:2330:G:C8	2.39	0.57
23:DB:2868:A:H2'	23:DB:2869:G:C8	2.39	0.57
24:DI:121:ILE:H	24:DI:121:ILE:CD1	2.14	0.57
25:DC:226:PRO:HG3	25:DC:233:GLY:N	2.14	0.57
26:DD:148:GLN:HB2	26:DD:152:PRO:HG2	1.86	0.57
29:DE:130:LYS:C	29:DE:132:LYS:H	2.11	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:DE:138:LEU:HB3	29:DE:143:LEU:O	2.04	0.57
35:DV:1:MET:HG2	35:DV:59:GLU:HG3	1.86	0.57
41:DJ:45:THR:N	41:DJ:46:PRO:HD3	2.18	0.57
42:DN:49:GLU:OE2	42:DN:95:THR:HG22	2.02	0.57
42:DN:82:GLU:C	42:DN:84:GLY:H	2.12	0.57
45:DS:31:GLN:O	45:DS:35:ILE:HG12	2.04	0.57
46:DU:47:PRO:HD3	46:DU:55:GLY:HA3	1.86	0.57
1:AA:1414:U:H2'	1:AA:1415:G:H8	1.70	0.57
1:AA:1437:A:H2'	1:AA:1438:G:H8	1.67	0.57
1:AA:1521:C:H2'	1:AA:1522:U:C6	2.39	0.57
20:AB:96:LEU:HB2	20:AB:99:MET:HE3	1.85	0.57
22:BA:94:A:H2'	22:BA:95:U:O4'	2.03	0.57
23:BB:992:C:H4'	49:BR:74:ILE:HD13	1.86	0.57
23:BB:1477:A:H2'	23:BB:1478:G:O4'	2.04	0.57
23:BB:1550:C:H2'	23:BB:1551:A:H8	1.69	0.57
23:BB:2652:C:H2'	23:BB:2653:U:O4'	2.03	0.57
26:BD:204:LYS:HB2	26:BD:205:PRO:HD2	1.85	0.57
35:BV:49:ASN:HD22	35:BV:49:ASN:N	2.01	0.57
39:BX:17:GLU:OE1	39:BX:21:LEU:HD11	2.04	0.57
40:BH:47:PHE:HA	40:BH:50:ARG:NH2	2.19	0.57
45:BS:18:ARG:HB3	45:BS:76:VAL:CG2	2.34	0.57
47:BF:137:PHE:O	47:BF:139:GLU:N	2.37	0.57
3:CD:18:LEU:HB2	3:CD:20:LEU:HG	1.86	0.57
3:CD:25:ARG:HD3	3:CD:25:ARG:C	2.29	0.57
3:CD:149:LYS:HB2	3:CD:177:MET:HG3	1.86	0.57
8:CI:87:MET:HG2	8:CI:91:GLU:HG2	1.85	0.57
23:DB:139:U:O2'	50:DT:1:MET:HB2	2.03	0.57
23:DB:233:A:H61	23:DB:428:A:N6	2.01	0.57
23:DB:417:C:H2'	23:DB:418:C:C6	2.39	0.57
23:DB:441:U:H2'	23:DB:442:G:H8	1.69	0.57
23:DB:564:C:O2'	23:DB:565:C:H5'	2.04	0.57
23:DB:581:C:H2'	23:DB:582:A:H8	1.68	0.57
23:DB:946:C:H2'	23:DB:947:A:H8	1.69	0.57
23:DB:1513:U:O2'	23:DB:1514:G:H5'	2.03	0.57
23:DB:2182:U:H2'	23:DB:2183:A:H8	1.68	0.57
24:DI:123:ALA:HA	24:DI:126:ARG:HH12	1.68	0.57
29:DE:62:GLN:HG2	29:DE:63:LYS:HG3	1.86	0.57
38:DM:36:VAL:HB	38:DM:127:LYS:O	2.03	0.57
38:DM:64:TRP:HB2	38:DM:104:GLU:HB2	1.85	0.57
38:DM:108:VAL:HG22	38:DM:109:PRO:HD2	1.87	0.57
39:DX:48:ARG:O	39:DX:51:ALA:HB3	2.03	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DN:13:ASN:C	42:DN:15:SER:H	2.12	0.57
47:DF:78:ILE:HD12	47:DF:78:ILE:N	2.18	0.57
1:AA:35:G:H2'	1:AA:36:C:C6	2.39	0.57
1:AA:484:G:H4'	1:AA:485:U:H5''	1.85	0.57
1:AA:796:C:H4'	10:AK:126:ARG:NH2	2.19	0.57
1:AA:1060:U:C4'	9:AJ:54:SER:HB2	2.33	0.57
1:AA:1390:U:H2'	1:AA:1391:U:C6	2.39	0.57
4:AE:84:VAL:CG1	4:AE:146:MET:HB3	2.35	0.57
7:AH:78:SER:HA	7:AH:84:ILE:HD12	1.86	0.57
16:AQ:77:VAL:HG12	16:AQ:79:GLU:H	1.69	0.57
18:AS:10:ILE:HG22	18:AS:37:SER:HB3	1.85	0.57
23:BB:591:U:H1'	34:B3:1:PRO:N	2.19	0.57
23:BB:650:C:H5''	34:B3:48:MET:HE2	1.86	0.57
23:BB:1022:G:N2	23:BB:1142:A:N1	2.51	0.57
23:BB:2285:C:OP2	33:B1:5:ARG:HD3	2.03	0.57
25:BC:173:LEU:H	25:BC:173:LEU:CD2	2.16	0.57
27:BK:79:PHE:CD2	28:BP:69:VAL:HG12	2.39	0.57
37:BL:116:VAL:HG13	37:BL:117:THR:N	2.17	0.57
45:BS:88:ARG:HH21	45:BS:88:ARG:HG3	1.70	0.57
47:BF:33:ILE:HD13	47:BF:95:MET:HG2	1.86	0.57
1:CA:22:G:H2'	1:CA:23:C:C6	2.38	0.57
1:CA:45:G:H2'	1:CA:46:G:C8	2.38	0.57
1:CA:586:C:H5''	7:CH:81:GLY:HA2	1.86	0.57
1:CA:640:A:O2'	1:CA:641:U:H5'	2.03	0.57
1:CA:1216:A:H5''	13:CN:4:SER:HB3	1.85	0.57
4:CE:45:VAL:HG13	4:CE:117:ALA:HA	1.85	0.57
6:CG:2:ARG:HH11	6:CG:2:ARG:CB	2.00	0.57
6:CG:134:VAL:O	6:CG:138:GLU:HG3	2.03	0.57
9:CJ:18:ILE:HG23	9:CJ:19:ASP:N	2.19	0.57
20:CB:56:LEU:O	20:CB:59:ILE:HD12	2.05	0.57
23:DB:921:C:H2'	23:DB:922:C:C6	2.39	0.57
23:DB:1061:U:H4'	23:DB:1070:A:O3'	2.03	0.57
23:DB:1827:U:O2'	23:DB:1828:G:H5'	2.05	0.57
23:DB:2386:A:H2'	23:DB:2387:U:C6	2.39	0.57
26:DD:34:VAL:HB	26:DD:48:ILE:HD11	1.86	0.57
29:DE:154:ASP:OD1	29:DE:156:ASN:HB3	2.04	0.57
35:DV:49:ASN:N	35:DV:49:ASN:HD22	2.01	0.57
44:DQ:104:ALA:HA	49:DR:46:GLU:CD	2.29	0.57
47:DF:137:PHE:O	47:DF:139:GLU:N	2.37	0.57
3:AD:104:MET:SD	3:AD:179:GLY:HA3	2.44	0.57
5:AF:92:THR:HG22	5:AF:93:LYS:N	2.19	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AH:86:LYS:HD2	7:AH:90:GLU:CG	2.35	0.57
17:AR:41:SER:HB2	17:AR:51:GLN:HG2	1.84	0.57
23:BB:705:A:N6	23:BB:726:G:H1'	2.19	0.57
23:BB:1513:U:O2'	23:BB:1514:G:H5'	2.04	0.57
23:BB:1582:C:H3'	23:BB:1583:A:N3	2.20	0.57
23:BB:2146:C:H1'	23:BB:2147:A:C4'	2.33	0.57
23:BB:2898:U:H2'	23:BB:2899:A:H8	1.69	0.57
25:BC:130:PRO:HA	25:BC:188:ARG:HA	1.86	0.57
38:BM:35:ALA:HB3	38:BM:99:GLY:N	2.20	0.57
39:BX:15:ASN:ND2	39:BX:15:ASN:H	2.02	0.57
40:BH:7:ASP:CG	40:BH:8:LYS:H	2.09	0.57
47:BF:43:ILE:HB	47:BF:82:TYR:OH	2.04	0.57
47:BF:120:SER:O	47:BF:127:TYR:HA	2.04	0.57
51:BZ:40:VAL:CG2	51:BZ:43:GLU:HB3	2.31	0.57
51:BZ:59:ILE:HG22	51:BZ:64:ILE:HG13	1.85	0.57
2:CC:57:GLU:HB2	2:CC:64:ARG:HB2	1.86	0.57
8:CI:62:LEU:HD22	8:CI:62:LEU:N	2.19	0.57
13:CN:60:ARG:CZ	13:CN:69:PRO:HB3	2.33	0.57
16:CQ:45:VAL:HG21	16:CQ:60:ILE:HG21	1.85	0.57
23:DB:757:G:H2'	23:DB:758:C:H5'	1.87	0.57
23:DB:1550:C:H2'	23:DB:1551:A:C8	2.40	0.57
23:DB:1733:G:H2'	23:DB:1734:G:C8	2.40	0.57
23:DB:1923:U:H2'	23:DB:1924:C:H6	1.68	0.57
23:DB:2292:U:H2'	23:DB:2293:G:H8	1.70	0.57
23:DB:2646:C:H2'	23:DB:2647:U:O4'	2.04	0.57
23:DB:2893:A:H5''	23:DB:2894:G:H5'	1.86	0.57
24:DI:37:PHE:CZ	24:DI:58:ILE:HD11	2.39	0.57
37:DL:55:MET:HE2	37:DL:56:PRO:HD2	1.86	0.57
46:DU:53:GLN:HG2	46:DU:53:GLN:O	2.03	0.57
48:DG:17:LYS:NZ	48:DG:18:ILE:H	2.03	0.57
50:DT:50:LEU:N	50:DT:50:LEU:HD22	2.19	0.57
50:DT:50:LEU:C	50:DT:52:GLU:H	2.12	0.57
51:DZ:21:ALA:HB3	51:DZ:23:ASN:HD21	1.68	0.57
1:AA:268:U:H2'	1:AA:269:C:C6	2.40	0.57
1:AA:335:C:H2'	1:AA:336:A:H8	1.70	0.57
3:AD:16:THR:HG22	3:AD:17:ASP:H	1.68	0.57
8:AI:47:VAL:HG23	8:AI:48:ARG:HG3	1.86	0.57
18:AS:39:ILE:HB	18:AS:66:VAL:HA	1.86	0.57
21:AU:40:PRO:O	21:AU:44:ARG:HB2	2.04	0.57
23:BB:609:A:H2'	23:BB:610:C:O4'	2.04	0.57
23:BB:1080:A:H2'	23:BB:1081:U:H6	1.70	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:1192:G:O2'	23:BB:1193:G:H5'	2.05	0.57
23:BB:1432:G:O2'	23:BB:1433:A:H5'	2.04	0.57
23:BB:1771:C:H2'	23:BB:1772:A:C8	2.39	0.57
23:BB:2411:A:H2'	23:BB:2412:A:C8	2.38	0.57
25:BC:75:ALA:HB1	25:BC:93:VAL:HG22	1.85	0.57
27:BK:43:ILE:HG22	27:BK:54:LYS:HA	1.86	0.57
27:BK:64:ARG:HH12	27:BK:101:GLY:HA3	1.69	0.57
29:BE:31:VAL:HG21	29:BE:104:ALA:HB2	1.87	0.57
30:BY:35:VAL:HG21	30:BY:37:ARG:HH22	1.70	0.57
37:BL:90:VAL:HB	37:BL:122:VAL:HA	1.86	0.57
38:BM:61:GLY:HA2	38:BM:107:GLY:HA3	1.85	0.57
40:BH:3:VAL:HG12	40:BH:38:PRO:HA	1.86	0.57
41:BJ:12:LYS:HB3	41:BJ:12:LYS:HZ3	1.70	0.57
41:BJ:40:HIS:HE1	41:BJ:41:LYS:HE3	1.69	0.57
47:BF:15:LEU:HD22	47:BF:167:ALA:HB1	1.86	0.57
47:BF:149:ARG:HA	47:BF:149:ARG:NH1	2.20	0.57
51:BZ:38:PHE:HE2	51:BZ:51:VAL:HG21	1.69	0.57
1:CA:131:A:H2'	1:CA:132:C:C6	2.38	0.57
1:CA:323:U:H2'	1:CA:324:G:O4'	2.04	0.57
1:CA:617:G:H4'	15:CP:46:LYS:HE2	1.87	0.57
1:CA:1472:U:H2'	1:CA:1473:G:C8	2.39	0.57
2:CC:72:PRO:O	2:CC:76:ILE:HG12	2.04	0.57
19:CT:82:ILE:HA	19:CT:85:LEU:HD22	1.87	0.57
23:DB:139:U:H3	50:DT:49:LYS:CE	2.18	0.57
23:DB:528:A:C2	23:DB:2042:A:H2'	2.40	0.57
23:DB:1021:A:H61	23:DB:1142:A:H61	1.51	0.57
23:DB:1098:A:C2'	24:DI:4:VAL:N	2.68	0.57
23:DB:1429:G:O2'	23:DB:1430:G:H5'	2.03	0.57
23:DB:1847:A:H4'	23:DB:1848:A:C8	2.39	0.57
23:DB:1856:U:H2'	23:DB:1857:G:H5'	1.86	0.57
23:DB:1939:U:H5'	23:DB:1939:U:H6	1.69	0.57
23:DB:2301:C:H2'	23:DB:2302:U:H6	1.69	0.57
23:DB:2500:U:H5'	23:DB:2501:C:OP2	2.04	0.57
26:DD:15:PHE:HD1	26:DD:15:PHE:H	1.52	0.57
27:DK:105:ARG:H	27:DK:105:ARG:CD	2.18	0.57
36:D2:21:ARG:HH21	36:D2:43:THR:HG21	1.69	0.57
40:DH:119:ASN:HD21	40:DH:121:VAL:HG13	1.69	0.57
41:DJ:21:THR:O	41:DJ:62:VAL:HA	2.04	0.57
44:DQ:35:PHE:HE1	44:DQ:39:ILE:HD11	1.68	0.57
46:DU:86:PHE:HD1	46:DU:88:ASP:H	1.50	0.57
52:DW:9:THR:HG22	52:DW:10:ARG:HH11	1.69	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1027:C:H2'	1:AA:1028:C:C6	2.39	0.57
3:AD:201:GLU:OE1	4:AE:104:ILE:HG22	2.04	0.57
5:AF:47:LEU:HD21	5:AF:57:ALA:HB3	1.85	0.57
9:AJ:18:ILE:HG23	9:AJ:19:ASP:N	2.18	0.57
20:AB:218:ALA:HA	20:AB:221:ARG:HG2	1.85	0.57
22:BA:54:G:O2'	22:BA:55:U:H5'	2.05	0.57
23:BB:131:A:H2'	23:BB:132:G:C8	2.39	0.57
23:BB:171:U:H2'	23:BB:172:A:H8	1.68	0.57
23:BB:674:G:HO2'	29:BE:60:TRP:HH2	1.47	0.57
23:BB:988:A:P	30:BY:11:SER:HB3	2.44	0.57
23:BB:2078:C:H2'	23:BB:2079:U:H6	1.68	0.57
23:BB:2679:A:O2'	23:BB:2680:U:H5'	2.04	0.57
23:BB:2776:A:H4'	23:BB:2777:G:C5'	2.35	0.57
29:BE:60:TRP:HA	29:BE:60:TRP:CE3	2.40	0.57
37:BL:47:ARG:HH21	37:BL:47:ARG:CB	2.16	0.57
43:BO:30:ARG:HD2	43:BO:31:THR:N	2.19	0.57
44:BQ:91:ARG:HH12	49:BR:10:LYS:HB3	1.68	0.57
47:BF:78:ILE:H	47:BF:79:ARG:HH11	1.51	0.57
51:BZ:70:GLU:O	51:BZ:72:ARG:N	2.35	0.57
1:CA:844:G:H2'	1:CA:845:A:N9	2.19	0.57
1:CA:1078:U:H2'	1:CA:1079:G:O4'	2.05	0.57
2:CC:51:VAL:HA	2:CC:69:THR:HA	1.87	0.57
2:CC:81:GLU:HG3	2:CC:82:ASP:N	2.19	0.57
2:CC:128:MET:H	2:CC:128:MET:HE3	1.69	0.57
11:CL:86:VAL:HG11	11:CL:89:LEU:HD23	1.87	0.57
22:DA:106:G:H2'	22:DA:107:G:C8	2.40	0.57
23:DB:37:C:O2'	29:DE:45:ALA:HA	2.05	0.57
23:DB:145:C:H2'	23:DB:146:A:C8	2.39	0.57
23:DB:526:A:N6	23:DB:2626:C:H4'	2.19	0.57
23:DB:856:G:C1'	52:DW:23:LYS:HB3	2.33	0.57
23:DB:2143:C:H3'	23:DB:2144:G:C8	2.39	0.57
28:DP:102:ARG:HD2	28:DP:106:ALA:O	2.04	0.57
29:DE:195:GLN:O	29:DE:198:GLU:HG2	2.04	0.57
38:DM:35:ALA:HB3	38:DM:99:GLY:N	2.20	0.57
40:DH:7:ASP:CG	40:DH:8:LYS:H	2.11	0.57
52:DW:35:ILE:O	52:DW:37:VAL:N	2.38	0.57
1:AA:86:G:C2	1:AA:87:C:N4	2.73	0.57
1:AA:335:C:H2'	1:AA:336:A:C8	2.39	0.57
1:AA:449:G:H2'	1:AA:450:G:C8	2.40	0.57
2:AC:176:THR:HB	2:AC:179:ALA:HB2	1.85	0.57
4:AE:55:VAL:N	4:AE:56:PRO:HD2	2.19	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AG:78:ARG:NH1	6:AG:82:SER:H	2.03	0.57
19:AT:54:GLN:N	19:AT:55:PRO:HD2	2.20	0.57
23:BB:850:U:H2'	23:BB:851:C:C6	2.40	0.57
23:BB:871:U:H2'	23:BB:872:U:H6	1.67	0.57
23:BB:1081:U:C5'	24:BI:126:ARG:HD2	2.34	0.57
23:BB:1400:U:H2'	23:BB:1401:G:C8	2.39	0.57
23:BB:1716:U:H2'	23:BB:1717:A:C8	2.40	0.57
23:BB:1932:A:H2'	23:BB:1933:G:O4'	2.05	0.57
23:BB:2181:U:H3'	23:BB:2181:U:OP2	2.04	0.57
23:BB:2783:U:H2'	23:BB:2784:U:C6	2.40	0.57
25:BC:221:GLY:C	25:BC:223:ALA:H	2.13	0.57
29:BE:62:GLN:HG2	29:BE:63:LYS:HG3	1.85	0.57
36:B2:29:GLN:O	36:B2:33:ARG:HB2	2.05	0.57
41:BJ:110:PRO:HB2	41:BJ:111:LYS:HE2	1.86	0.57
51:BZ:30:LEU:HD23	51:BZ:30:LEU:H	1.70	0.57
52:BW:35:ILE:O	52:BW:37:VAL:N	2.38	0.57
1:CA:370:C:H2'	1:CA:371:A:H8	1.69	0.57
1:CA:784:A:H2'	1:CA:785:G:H8	1.70	0.57
1:CA:1060:U:C4'	9:CJ:54:SER:HB2	2.35	0.57
1:CA:1132:C:H2'	1:CA:1133:G:C8	2.39	0.57
1:CA:1160:G:H4'	20:CB:130:LYS:HB2	1.86	0.57
3:CD:201:GLU:OE1	4:CE:104:ILE:HG22	2.04	0.57
6:CG:21:LEU:HG	6:CG:22:LEU:N	2.19	0.57
8:CI:38:PHE:HZ	8:CI:74:GLN:HB3	1.67	0.57
23:DB:1387:A:H2'	23:DB:1388:G:C8	2.37	0.57
23:DB:1911:U:O2'	23:DB:1912:A:H5'	2.04	0.57
23:DB:2093:G:O5'	40:DH:24:GLY:HA3	2.04	0.57
23:DB:2246:G:H2'	23:DB:2247:A:C8	2.40	0.57
23:DB:2598:A:H5''	25:DC:233:GLY:CA	2.34	0.57
23:DB:2776:A:H4'	23:DB:2777:G:C5'	2.35	0.57
24:DI:2:LYS:C	24:DI:3:LYS:HD2	2.30	0.57
38:DM:66:ARG:CZ	38:DM:101:VAL:HG11	2.34	0.57
41:DJ:72:LYS:CB	41:DJ:89:PHE:HB2	2.35	0.57
47:DF:102:LEU:HD13	47:DF:103:ILE:HB	1.86	0.57
1:AA:157:U:O2'	1:AA:158:G:H5'	2.05	0.57
1:AA:204:G:H2'	1:AA:205:A:H8	1.70	0.57
1:AA:513:C:H2'	1:AA:514:C:H6	1.70	0.57
1:AA:625:U:H4'	15:AP:16:PHE:CE2	2.40	0.57
1:AA:1071:C:H2'	1:AA:1072:G:C8	2.40	0.57
5:AF:29:ILE:HG22	5:AF:34:GLY:HA3	1.85	0.57
8:AI:38:PHE:HZ	8:AI:74:GLN:HB3	1.69	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:AS:42:ASN:HD21	18:AS:43:MET:HE3	1.69	0.57
21:AU:19:LYS:HD3	21:AU:20:ARG:HH21	1.70	0.57
22:BA:83:G:OP1	30:BY:16:LEU:HD21	2.05	0.57
23:BB:49:A:H5''	23:BB:51:G:O4'	2.05	0.57
23:BB:972:A:C3'	23:BB:973:A:H5''	2.33	0.57
23:BB:1205:A:N1	29:BE:165:HIS:HB2	2.20	0.57
23:BB:1439:A:H1'	23:BB:1553:A:N6	2.20	0.57
23:BB:1441:G:H2'	23:BB:1442:U:H6	1.70	0.57
23:BB:1592:C:H2'	23:BB:1593:A:C8	2.36	0.57
23:BB:1779:U:H5	23:BB:1784:A:N7	2.03	0.57
23:BB:2636:C:H2'	23:BB:2637:U:H6	1.69	0.57
26:BD:178:VAL:HB	26:BD:188:LEU:HB2	1.86	0.57
31:B0:38:LEU:HD13	31:B0:41:HIS:NE2	2.20	0.57
50:BT:11:LEU:HD22	50:BT:11:LEU:N	2.16	0.57
50:BT:29:THR:CA	50:BT:86:THR:HA	2.32	0.57
50:BT:48:GLN:HA	50:BT:48:GLN:NE2	2.18	0.57
52:BW:59:PHE:O	52:BW:60:ALA:CB	2.53	0.57
1:CA:437:U:H5''	3:CD:151:GLN:CD	2.29	0.57
1:CA:868:C:H2'	1:CA:869:G:O4'	2.05	0.57
20:CB:14:HIS:CD2	20:CB:202:ASN:H	2.22	0.57
20:CB:57:ASN:HB2	20:CB:219:THR:O	2.03	0.57
23:DB:27:G:H1'	23:DB:513:A:H61	1.69	0.57
23:DB:215:G:H4'	23:DB:216:A:H4'	1.87	0.57
23:DB:636:G:H3'	37:DL:128:THR:CG2	2.31	0.57
23:DB:720:U:H2'	23:DB:721:A:C8	2.39	0.57
23:DB:741:U:H2'	23:DB:742:A:C8	2.40	0.57
23:DB:1192:G:O2'	23:DB:1193:G:H5'	2.05	0.57
23:DB:1287:A:N7	42:DN:105:GLY:HA3	2.19	0.57
24:DI:78:LEU:HA	24:DI:81:LYS:HE2	1.87	0.57
24:DI:116:MET:HE1	24:DI:128:ILE:CG1	2.35	0.57
25:DC:4:LYS:HD3	25:DC:16:VAL:HG22	1.87	0.57
28:DP:52:ARG:HB2	28:DP:55:HIS:O	2.05	0.57
29:DE:1:MET:HB3	29:DE:14:VAL:O	2.05	0.57
29:DE:98:LYS:NZ	29:DE:99:LYS:HE3	2.20	0.57
40:DH:31:VAL:O	40:DH:33:GLN:N	2.37	0.57
51:DZ:35:SER:HA	51:DZ:49:LEU:O	2.03	0.57
52:DW:41:GLY:HA2	52:DW:44:PHE:CD2	2.40	0.57
1:AA:918:A:H2'	1:AA:919:A:C8	2.39	0.57
1:AA:1176:A:H2'	1:AA:1177:G:O4'	2.05	0.57
2:AC:72:PRO:O	2:AC:76:ILE:HG12	2.04	0.57
2:AC:182:ASP:HB2	2:AC:203:LYS:HE2	1.86	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AD:102:TYR:HE1	3:AD:109:THR:HA	1.69	0.57
3:AD:196:GLU:CD	3:AD:196:GLU:H	2.12	0.57
19:AT:70:LYS:HA	19:AT:73:ARG:NH1	2.20	0.57
20:AB:195:VAL:HG12	20:AB:197:PHE:H	1.70	0.57
23:BB:233:A:N6	23:BB:428:A:H61	2.02	0.57
23:BB:784:G:O2'	23:BB:785:G:H5''	2.05	0.57
23:BB:1000:A:H2'	23:BB:1001:A:C8	2.40	0.57
23:BB:1778:U:H2'	23:BB:1784:A:H62	1.69	0.57
23:BB:1786:A:H1'	23:BB:1938:A:N6	2.20	0.57
23:BB:1868:C:H2'	23:BB:1869:G:O4'	2.05	0.57
23:BB:2008:C:H2'	23:BB:2009:A:H8	1.70	0.57
23:BB:2318:G:C6	23:BB:2319:G:N1	2.73	0.57
28:BP:52:ARG:HB2	28:BP:55:HIS:O	2.05	0.57
30:BY:40:THR:O	30:BY:43:ILE:HG23	2.05	0.57
40:BH:31:VAL:O	40:BH:33:GLN:N	2.38	0.57
42:BN:92:GLY:HA2	42:BN:94:TYR:CZ	2.40	0.57
1:CA:57:G:H2'	1:CA:58:C:C6	2.40	0.57
1:CA:229:U:H2'	1:CA:230:G:H8	1.70	0.57
1:CA:950:U:H2'	1:CA:951:G:H8	1.68	0.57
1:CA:1060:U:H2'	1:CA:1061:G:H8	1.70	0.57
4:CE:84:VAL:CG1	4:CE:146:MET:HB3	2.34	0.57
5:CF:43:GLY:HA2	5:CF:58:HIS:NE2	2.20	0.57
5:CF:69:GLU:O	5:CF:73:GLU:HG3	2.04	0.57
6:CG:107:ALA:HA	6:CG:110:ARG:HD2	1.87	0.57
11:CL:41:PRO:HB3	11:CL:49:ARG:HH11	1.70	0.57
14:CO:43:PHE:CD1	14:CO:56:LEU:HD22	2.40	0.57
19:CT:70:LYS:HA	19:CT:73:ARG:NH1	2.20	0.57
21:CU:40:PRO:O	21:CU:44:ARG:HB2	2.05	0.57
23:DB:836:G:H2'	23:DB:837:C:C6	2.40	0.57
23:DB:899:A:C5	23:DB:900:A:H1'	2.39	0.57
23:DB:1444:G:H2'	23:DB:1445:G:H8	1.70	0.57
23:DB:2633:G:H2'	23:DB:2634:A:O4'	2.05	0.57
25:DC:6:LYS:O	25:DC:8:THR:HG22	2.05	0.57
27:DK:47:ILE:CG1	27:DK:48:PRO:HD2	2.32	0.57
37:DL:90:VAL:HB	37:DL:122:VAL:HA	1.87	0.57
37:DL:116:VAL:HG13	37:DL:117:THR:N	2.19	0.57
40:DH:90:LEU:HD22	40:DH:122:LEU:O	2.04	0.57
42:DN:92:GLY:HA2	42:DN:94:TYR:CZ	2.40	0.57
44:DQ:34:ALA:O	44:DQ:37:ALA:HB3	2.05	0.57
46:DU:85:ARG:HH11	46:DU:86:PHE:H	1.51	0.57
48:DG:104:LEU:HB3	48:DG:106:LEU:HD21	1.86	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:DR:31:GLU:H	49:DR:63:VAL:CG2	2.16	0.57
51:DZ:7:VAL:HG13	51:DZ:8:THR:CG2	2.31	0.57
1:AA:370:C:H2'	1:AA:371:A:H8	1.69	0.57
1:AA:482:A:H2'	1:AA:483:C:O4'	2.05	0.57
1:AA:1072:G:H2'	1:AA:1073:U:C6	2.40	0.57
1:AA:1301:U:O2	1:AA:1301:U:H2'	2.05	0.57
3:AD:77:GLU:HA	3:AD:80:ARG:HG2	1.86	0.57
4:AE:80:LEU:HA	4:AE:146:MET:HE1	1.87	0.57
10:AK:111:ASP:HB2	21:AU:19:LYS:CE	2.34	0.57
12:AM:29:SER:O	12:AM:32:ILE:HG22	2.05	0.57
18:AS:27:LYS:HB2	18:AS:28:LYS:HZ2	1.70	0.57
23:BB:523:C:H4'	23:BB:540:C:O2	2.05	0.57
23:BB:528:A:C2	23:BB:2042:A:H2'	2.40	0.57
23:BB:962:G:N2	23:BB:2250:G:H1	2.03	0.57
23:BB:1564:C:O2'	23:BB:1565:C:H5'	2.04	0.57
23:BB:2539:C:O2'	23:BB:2540:C:H5'	2.05	0.57
23:BB:2753:A:O2'	23:BB:2754:U:H5'	2.05	0.57
27:BK:59:LYS:HD2	27:BK:89:ASN:ND2	2.20	0.57
36:B2:21:ARG:HH21	36:B2:43:THR:HG21	1.70	0.57
41:BJ:3:THR:HG21	44:BQ:60:TRP:HE1	1.70	0.57
41:BJ:72:LYS:CB	41:BJ:89:PHE:HB2	2.35	0.57
44:BQ:60:TRP:O	44:BQ:64:ILE:HG12	2.05	0.57
46:BU:47:PRO:HD3	46:BU:55:GLY:HA3	1.87	0.57
48:BG:39:ALA:C	48:BG:54:ARG:HB2	2.30	0.57
49:BR:31:GLU:H	49:BR:63:VAL:CG2	2.18	0.57
50:BT:32:LEU:O	50:BT:83:ALA:HB2	2.04	0.57
1:CA:129:A:H1'	1:CA:130:A:C8	2.40	0.57
3:CD:2:ARG:HG3	3:CD:114:ARG:NH1	2.20	0.57
7:CH:6:ILE:HB	7:CH:76:ARG:NH1	2.19	0.57
7:CH:124:ILE:HG22	7:CH:125:ILE:N	2.20	0.57
8:CI:57:VAL:HB	8:CI:58:GLU:OE2	2.04	0.57
15:CP:34:GLU:CD	15:CP:60:TRP:HE1	2.13	0.57
20:CB:8:MET:O	20:CB:9:LEU:HB3	2.04	0.57
20:CB:23:ASN:HD22	20:CB:24:PRO:HD2	1.70	0.57
20:CB:163:ILE:HD11	20:CB:209:VAL:HG12	1.87	0.57
22:DA:10:G:H2'	22:DA:11:C:O4'	2.05	0.57
23:DB:100:U:OP1	23:DB:100:U:H3'	2.05	0.57
23:DB:646:U:H3'	23:DB:647:G:H8	1.69	0.57
23:DB:899:A:H3'	23:DB:900:A:C8	2.37	0.57
23:DB:1055:G:H3'	23:DB:1056:G:H8	1.70	0.57
23:DB:2100:G:H3'	23:DB:2101:A:H8	1.69	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:2543:G:H8	23:DB:2543:G:H5'	1.70	0.57
26:DD:124:ARG:HA	26:DD:165:MET:HE3	1.87	0.57
29:DE:134:LEU:O	29:DE:138:LEU:HG	2.05	0.57
37:DL:77:ILE:HG12	37:DL:95:LEU:HD22	1.86	0.57
41:DJ:12:LYS:HZ3	41:DJ:12:LYS:HB3	1.70	0.57
42:DN:29:VAL:HG12	42:DN:78:LYS:HG2	1.86	0.57
43:DO:97:PHE:HB3	43:DO:103:VAL:HG21	1.87	0.57
47:DF:134:GLN:C	47:DF:136:ILE:H	2.13	0.57
51:DZ:38:PHE:CE2	51:DZ:51:VAL:HG21	2.38	0.57
1:AA:193:C:H2'	1:AA:194:C:C6	2.40	0.56
1:AA:195:A:H1'	1:AA:222:C:O2'	2.05	0.56
1:AA:636:U:H2'	1:AA:637:C:C6	2.40	0.56
1:AA:636:U:H2'	1:AA:637:C:H6	1.70	0.56
1:AA:1132:C:H2'	1:AA:1133:G:C8	2.40	0.56
2:AC:57:GLU:HB2	2:AC:64:ARG:HB2	1.87	0.56
5:AF:7:VAL:HG11	17:AR:64:LEU:HD21	1.87	0.56
6:AG:71:THR:HG22	6:AG:141:HIS:NE2	2.20	0.56
12:AM:79:LEU:HD22	12:AM:86:ARG:HE	1.69	0.56
14:AO:55:GLY:O	14:AO:59:MET:HG2	2.05	0.56
23:BB:17:G:H2'	23:BB:18:U:C6	2.39	0.56
23:BB:69:C:O2'	23:BB:70:G:H5'	2.04	0.56
23:BB:328:U:H4'	46:BU:65:GLN:HE22	1.69	0.56
23:BB:1442:U:H2'	23:BB:1443:U:H6	1.69	0.56
23:BB:1548:A:H2'	23:BB:1549:A:C8	2.40	0.56
23:BB:1558:C:H4'	23:BB:1559:U:C5'	2.34	0.56
23:BB:2776:A:H4'	23:BB:2777:G:H5''	1.86	0.56
23:BB:2860:A:H8	23:BB:2860:A:O5'	1.88	0.56
25:BC:78:GLU:OE1	25:BC:94:LEU:HD22	2.05	0.56
25:BC:229:HIS:ND1	25:BC:230:PRO:HD2	2.20	0.56
26:BD:10:GLY:O	26:BD:11:MET:HB2	2.03	0.56
27:BK:60:ALA:HA	27:BK:87:LEU:CD2	2.35	0.56
27:BK:63:VAL:HG12	27:BK:64:ARG:HD3	1.87	0.56
42:BN:38:LEU:O	42:BN:42:LYS:HG3	2.05	0.56
44:BQ:10:ARG:HB2	44:BQ:10:ARG:NH1	2.20	0.56
46:BU:81:ARG:H	46:BU:81:ARG:NH2	2.02	0.56
47:BF:43:ILE:HG23	47:BF:44:ALA:N	2.13	0.56
1:CA:602:A:O2'	1:CA:603:U:H5'	2.05	0.56
1:CA:1472:U:H2'	1:CA:1473:G:H8	1.70	0.56
19:CT:66:ILE:HG23	19:CT:70:LYS:HB3	1.86	0.56
20:CB:62:ARG:H	20:CB:62:ARG:CD	2.14	0.56
20:CB:96:LEU:HB2	20:CB:99:MET:HE3	1.87	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:96:C:H4'	39:DX:41:HIS:ND1	2.20	0.56
23:DB:459:U:O2'	23:DB:460:A:H5'	2.05	0.56
23:DB:1082:U:O4	23:DB:1086:A:C2	2.57	0.56
23:DB:1139:G:O2'	23:DB:1140:C:H5'	2.05	0.56
23:DB:1810:A:H2'	23:DB:1811:G:O4'	2.05	0.56
23:DB:2821:A:OP2	26:DD:115:GLY:HA3	2.05	0.56
24:DI:99:LYS:HD3	24:DI:99:LYS:H	1.70	0.56
26:DD:170:VAL:O	26:DD:170:VAL:HG23	2.05	0.56
26:DD:178:VAL:HB	26:DD:188:LEU:HB2	1.87	0.56
26:DD:204:LYS:HB2	26:DD:205:PRO:HD2	1.87	0.56
30:DY:30:ARG:HD3	30:DY:30:ARG:H	1.70	0.56
34:D3:22:LYS:HD2	34:D3:46:LYS:HB2	1.87	0.56
38:DM:53:MET:HE1	38:DM:103:TYR:CD2	2.40	0.56
41:DJ:77:HIS:CD2	41:DJ:84:ILE:H	2.23	0.56
43:DO:56:LYS:O	43:DO:60:GLU:HG2	2.05	0.56
1:AA:80:A:H2'	1:AA:81:A:O4'	2.05	0.56
1:AA:237:G:H2'	1:AA:238:A:C8	2.41	0.56
1:AA:285:C:H2'	1:AA:286:C:H6	1.70	0.56
1:AA:384:G:H2'	1:AA:385:C:C6	2.40	0.56
3:AD:149:LYS:HB2	3:AD:177:MET:HG3	1.87	0.56
6:AG:107:ALA:HA	6:AG:110:ARG:HD2	1.86	0.56
10:AK:16:SER:HA	10:AK:77:GLY:O	2.04	0.56
22:BA:60:C:H2'	22:BA:61:G:H8	1.69	0.56
23:BB:557:C:H2'	23:BB:558:U:H6	1.70	0.56
23:BB:967:U:H2'	23:BB:968:C:C6	2.40	0.56
23:BB:1322:A:OP1	45:BS:11:ARG:HD2	2.05	0.56
35:BV:72:VAL:HB	35:BV:92:VAL:O	2.05	0.56
35:BV:76:ASP:CG	35:BV:77:VAL:H	2.13	0.56
40:BH:116:ARG:HH11	40:BH:133:GLN:HB2	1.69	0.56
41:BJ:45:THR:OG1	41:BJ:48:VAL:HB	2.04	0.56
47:BF:4:HIS:O	47:BF:7:TYR:HB3	2.05	0.56
47:BF:102:LEU:HD13	47:BF:103:ILE:HB	1.86	0.56
48:BG:10:VAL:HG23	48:BG:48:THR:HA	1.87	0.56
49:BR:16:GLU:HG2	49:BR:101:ILE:HG13	1.86	0.56
52:BW:28:GLU:HB2	52:BW:31:LEU:HD21	1.87	0.56
1:CA:975:A:H4'	1:CA:976:G:OP2	2.04	0.56
2:CC:67:ILE:HG22	2:CC:69:THR:HG22	1.87	0.56
3:CD:169:TRP:O	3:CD:182:LYS:HB2	2.06	0.56
7:CH:17:GLN:HE21	7:CH:17:GLN:HA	1.70	0.56
13:CN:42:ASN:O	13:CN:46:LYS:HG3	2.05	0.56
23:DB:45:G:C5'	23:DB:46:G:H5'	2.34	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:979:A:H2'	23:DB:982:C:N4	2.19	0.56
23:DB:1098:A:P	24:DI:3:LYS:HG2	2.45	0.56
23:DB:2049:G:H21	26:DD:161:MET:HE2	1.68	0.56
23:DB:2741:A:H2'	23:DB:2742:G:O4'	2.05	0.56
23:DB:2783:U:H2'	23:DB:2784:U:C6	2.40	0.56
25:DC:185:ALA:C	25:DC:187:CYS:H	2.13	0.56
29:DE:48:THR:H	29:DE:51:GLU:HG3	1.68	0.56
39:DX:17:GLU:OE1	39:DX:21:LEU:HD11	2.06	0.56
42:DN:72:ASP:O	42:DN:76:VAL:HG13	2.05	0.56
44:DQ:107:ALA:HB1	49:DR:48:LYS:HE3	1.87	0.56
1:AA:272:C:H2'	1:AA:273:U:H6	1.70	0.56
1:AA:312:C:H2'	1:AA:313:A:C8	2.39	0.56
1:AA:520:A:N1	1:AA:536:C:H1'	2.21	0.56
1:AA:599:C:H5''	7:AH:86:LYS:O	2.05	0.56
2:AC:188:ALA:HB3	2:AC:195:ILE:HB	1.85	0.56
3:AD:186:GLU:CD	3:AD:187:ARG:H	2.13	0.56
6:AG:21:LEU:HG	6:AG:22:LEU:N	2.20	0.56
6:AG:129:ASN:HA	6:AG:134:VAL:HG21	1.85	0.56
8:AI:48:ARG:O	8:AI:52:GLU:HG2	2.05	0.56
9:AJ:53:ILE:CG2	9:AJ:61:ALA:HB1	2.35	0.56
10:AK:51:PHE:CZ	10:AK:61:ALA:HA	2.40	0.56
12:AM:80:MET:HA	12:AM:87:GLY:HA3	1.87	0.56
13:AN:30:ILE:HB	13:AN:44:VAL:HG11	1.87	0.56
19:AT:82:ILE:HA	19:AT:85:LEU:HD22	1.87	0.56
20:AB:56:LEU:O	20:AB:59:ILE:HD12	2.05	0.56
22:BA:13:G:H2'	22:BA:14:U:H5''	1.87	0.56
22:BA:41:G:H21	23:BB:2340:A:H5'	1.71	0.56
22:BA:48:U:H2'	22:BA:49:C:C6	2.41	0.56
23:BB:45:G:H5'	23:BB:46:G:OP1	2.05	0.56
23:BB:560:C:H2'	23:BB:561:G:O4'	2.05	0.56
23:BB:580:U:O2'	23:BB:581:C:H5'	2.06	0.56
23:BB:1125:G:H4'	32:B4:37:GLN:NE2	2.20	0.56
23:BB:1387:A:H2'	23:BB:1388:G:C8	2.39	0.56
23:BB:1794:A:H2'	23:BB:1795:C:H6	1.71	0.56
23:BB:2065:C:H2'	23:BB:2066:C:H6	1.69	0.56
23:BB:2199:A:H5'	23:BB:2200:C:OP2	2.05	0.56
23:BB:2301:C:H2'	23:BB:2302:U:H6	1.70	0.56
23:BB:2500:U:H5'	23:BB:2501:C:OP2	2.05	0.56
25:BC:107:LYS:O	25:BC:109:LEU:HD22	2.05	0.56
26:BD:136:ASN:HD21	26:BD:140:HIS:N	2.03	0.56
27:BK:10:VAL:HG12	27:BK:12:ASP:H	1.70	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BP:24:THR:O	28:BP:25:VAL:HG22	2.05	0.56
35:BV:30:ILE:HB	35:BV:38:LEU:HB3	1.86	0.56
40:BH:117:LEU:HD11	40:BH:130:VAL:CG1	2.35	0.56
43:BO:56:LYS:O	43:BO:60:GLU:HG2	2.04	0.56
44:BQ:94:LEU:C	44:BQ:96:ASP:H	2.13	0.56
47:BF:47:LYS:HA	47:BF:50:ASP:OD1	2.05	0.56
47:BF:137:PHE:HB2	47:BF:138:PRO:CD	2.35	0.56
52:BW:39:GLN:CG	52:BW:42:THR:HB	2.35	0.56
1:CA:636:U:H2'	1:CA:637:C:C6	2.40	0.56
1:CA:1175:G:O2'	1:CA:1176:A:H5'	2.06	0.56
1:CA:1451:U:H5''	1:CA:1452:C:OP2	2.06	0.56
2:CC:129:PHE:CE2	2:CC:165:GLU:HG2	2.41	0.56
2:CC:130:ARG:HD2	2:CC:133:MET:HE2	1.87	0.56
5:CF:29:ILE:HG22	5:CF:34:GLY:HA3	1.86	0.56
9:CJ:53:ILE:HG13	13:CN:84:ARG:NE	2.20	0.56
10:CK:16:SER:HA	10:CK:77:GLY:O	2.05	0.56
14:CO:28:GLN:O	14:CO:32:LEU:HD23	2.05	0.56
22:DA:48:U:H2'	22:DA:49:C:C6	2.40	0.56
23:DB:30:G:H2'	23:DB:31:C:C6	2.41	0.56
23:DB:355:U:H2'	23:DB:356:G:C8	2.39	0.56
23:DB:705:A:N6	23:DB:726:G:H1'	2.20	0.56
23:DB:967:U:H2'	23:DB:968:C:C6	2.40	0.56
23:DB:1174:U:H1'	23:DB:1176:U:H1'	1.88	0.56
23:DB:1198:U:H2'	23:DB:1199:U:C6	2.40	0.56
23:DB:1560:G:H2'	23:DB:1561:C:H6	1.69	0.56
23:DB:1654:A:H2'	23:DB:1655:A:H8	1.71	0.56
23:DB:1771:C:H2'	23:DB:1772:A:H8	1.70	0.56
23:DB:1771:C:H2'	23:DB:1772:A:C8	2.40	0.56
23:DB:1838:C:N4	23:DB:1898:U:H2'	2.19	0.56
23:DB:2052:A:O4'	26:DD:147:GLY:HA3	2.05	0.56
23:DB:2365:G:H4'	52:DW:59:PHE:CD1	2.41	0.56
23:DB:2539:C:O2'	23:DB:2540:C:H5'	2.05	0.56
23:DB:2884:U:O2	31:D0:49:ARG:HG2	2.05	0.56
23:DB:2897:U:H2'	23:DB:2898:U:C6	2.40	0.56
24:DI:17:ALA:C	24:DI:19:PRO:HD3	2.31	0.56
25:DC:6:LYS:C	25:DC:8:THR:H	2.14	0.56
25:DC:80:LEU:HD23	25:DC:91:ALA:HB2	1.87	0.56
26:DD:182:ALA:O	26:DD:184:ARG:HG2	2.04	0.56
38:DM:34:LYS:HE2	38:DM:99:GLY:HA2	1.88	0.56
40:DH:93:SER:C	40:DH:94:ILE:HD12	2.30	0.56
42:DN:33:ILE:HD12	42:DN:33:ILE:O	2.04	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DN:37:THR:HB	42:DN:40:LYS:HB2	1.86	0.56
42:DN:55:ALA:HA	42:DN:80:PHE:CE1	2.41	0.56
43:DO:30:ARG:HD2	43:DO:31:THR:N	2.20	0.56
44:DQ:94:LEU:C	44:DQ:96:ASP:H	2.14	0.56
47:DF:39:VAL:HG12	47:DF:84:ILE:C	2.30	0.56
47:DF:47:LYS:HA	47:DF:50:ASP:OD1	2.05	0.56
48:DG:54:ARG:HB3	48:DG:57:TYR:CD1	2.40	0.56
48:DG:84:LYS:CG	48:DG:85:LYS:H	2.19	0.56
50:DT:41:ALA:C	50:DT:43:ILE:H	2.12	0.56
50:DT:59:ASN:O	50:DT:84:TYR:HB2	2.05	0.56
52:DW:59:PHE:O	52:DW:60:ALA:CB	2.52	0.56
1:AA:1239:A:H4'	1:AA:1240:U:C5'	2.35	0.56
1:AA:1299:A:H2'	1:AA:1301:U:H1'	1.88	0.56
2:AC:96:VAL:HB	2:AC:97:PRO:HD2	1.87	0.56
11:AL:20:VAL:O	11:AL:20:VAL:HG23	2.05	0.56
11:AL:98:ARG:HB2	11:AL:116:TYR:HA	1.88	0.56
12:AM:70:ARG:HH22	47:BF:112:ASP:HB3	1.71	0.56
23:BB:141:G:C6	50:BT:2:ILE:HD12	2.40	0.56
23:BB:197:A:N6	23:BB:2430:A:H2'	2.21	0.56
23:BB:546:U:H5'	23:BB:548:G:O6	2.06	0.56
23:BB:784:G:N1	25:BC:227:VAL:HG11	2.20	0.56
23:BB:794:A:H2'	23:BB:795:C:H6	1.71	0.56
23:BB:1311:G:H21	23:BB:1603:A:H62	1.53	0.56
23:BB:1346:G:O2'	23:BB:1347:A:H5'	2.05	0.56
23:BB:1429:G:O2'	23:BB:1430:G:H5'	2.04	0.56
23:BB:1856:U:H2'	23:BB:1857:G:H5'	1.86	0.56
23:BB:2240:U:O2'	23:BB:2241:A:H5'	2.05	0.56
23:BB:2297:A:N6	23:BB:2319:G:H1'	2.21	0.56
23:BB:2869:G:H2'	23:BB:2870:C:C6	2.40	0.56
25:BC:142:ASN:CG	25:BC:142:ASN:O	2.48	0.56
29:BE:48:THR:HG22	29:BE:86:ALA:HB3	1.86	0.56
1:CA:332:G:OP2	19:CT:4:LYS:HB2	2.06	0.56
1:CA:810:C:O2'	1:CA:811:C:H5'	2.06	0.56
1:CA:1343:G:O3'	8:CI:123:ARG:HB2	2.05	0.56
19:CT:4:LYS:HE3	19:CT:6:ALA:H	1.70	0.56
23:DB:19:A:H2'	23:DB:20:C:C6	2.40	0.56
23:DB:1164:C:H2'	23:DB:1165:A:H8	1.70	0.56
23:DB:1477:A:H2'	23:DB:1478:G:O4'	2.06	0.56
23:DB:1735:A:H2'	23:DB:1736:U:C6	2.41	0.56
23:DB:1744:A:H2'	23:DB:1745:A:C8	2.40	0.56
23:DB:2008:C:H2'	23:DB:2009:A:C8	2.40	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:2896:C:H2'	23:DB:2897:U:C6	2.41	0.56
24:DI:116:MET:HE1	24:DI:128:ILE:HG13	1.87	0.56
40:DH:88:GLY:C	40:DH:89:LYS:HD2	2.30	0.56
44:DQ:86:SER:HB2	49:DR:50:GLY:O	2.04	0.56
48:DG:148:ARG:HA	48:DG:161:VAL:HB	1.86	0.56
1:AA:848:C:H2'	1:AA:849:G:O4'	2.05	0.56
1:AA:882:C:O2'	1:AA:883:C:H5'	2.04	0.56
1:AA:950:U:H2'	1:AA:951:G:H8	1.68	0.56
1:AA:1049:U:H5'	1:AA:1049:U:H6	1.71	0.56
1:AA:1060:U:H2'	1:AA:1061:G:H8	1.70	0.56
4:AE:59:ILE:O	4:AE:63:MET:HG2	2.04	0.56
4:AE:81:GLN:HG2	4:AE:148:SER:HA	1.87	0.56
6:AG:134:VAL:O	6:AG:138:GLU:HG3	2.05	0.56
10:AK:37:GLN:HB2	10:AK:39:ASN:HD22	1.70	0.56
12:AM:58:GLU:O	12:AM:61:LYS:HG2	2.06	0.56
23:BB:1410:G:H2'	23:BB:1411:U:C6	2.41	0.56
23:BB:2836:U:H2'	23:BB:2837:A:C8	2.40	0.56
24:BI:96:LYS:N	24:BI:96:LYS:HD2	2.21	0.56
25:BC:158:GLY:H	25:BC:194:VAL:HG13	1.70	0.56
29:BE:134:LEU:O	29:BE:138:LEU:HG	2.06	0.56
42:BN:72:ASP:O	42:BN:76:VAL:HG13	2.05	0.56
44:BQ:34:ALA:O	44:BQ:37:ALA:HB3	2.05	0.56
44:BQ:91:ARG:HG2	44:BQ:93:ILE:HG22	1.87	0.56
47:BF:135:ILE:CD1	47:BF:137:PHE:HB3	2.36	0.56
47:BF:141:ASP:CB	47:BF:144:LYS:HB2	2.34	0.56
48:BG:123:GLU:O	48:BG:125:PRO:HD3	2.05	0.56
52:BW:23:LYS:O	52:BW:66:VAL:HB	2.05	0.56
1:CA:482:A:H2'	1:CA:483:C:O4'	2.06	0.56
1:CA:777:A:H2'	1:CA:778:G:C8	2.40	0.56
1:CA:918:A:H2'	1:CA:919:A:C8	2.41	0.56
1:CA:1027:C:H2'	1:CA:1028:C:C6	2.41	0.56
1:CA:1097:C:H2'	1:CA:1098:C:C6	2.41	0.56
2:CC:88:LYS:O	2:CC:88:LYS:HE3	2.05	0.56
20:CB:156:LEU:H	20:CB:156:LEU:CD1	2.16	0.56
23:DB:197:A:N6	23:DB:2430:A:H2'	2.21	0.56
23:DB:402:A:H2'	23:DB:403:U:O4'	2.05	0.56
23:DB:718:A:H3'	23:DB:719:C:H6	1.70	0.56
23:DB:1099:G:C8	24:DI:3:LYS:HB2	2.41	0.56
23:DB:2272:U:H5''	23:DB:2273:A:OP1	2.06	0.56
23:DB:2314:A:H2'	23:DB:2315:G:C8	2.40	0.56
23:DB:2841:C:H2'	23:DB:2842:G:C8	2.40	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DC:54:GLY:O	25:DC:214:GLY:HA2	2.06	0.56
25:DC:221:GLY:C	25:DC:223:ALA:H	2.14	0.56
27:DK:60:ALA:HA	27:DK:87:LEU:CD2	2.35	0.56
28:DP:83:ILE:HD13	28:DP:83:ILE:O	2.06	0.56
30:DY:2:LYS:H	30:DY:2:LYS:CD	2.18	0.56
1:AA:451:A:N6	1:AA:480:U:H2'	2.21	0.56
1:AA:1099:G:H2'	1:AA:1100:C:O4'	2.06	0.56
2:AC:120:THR:HG22	2:AC:197:VAL:HG21	1.87	0.56
3:AD:97:LEU:HB2	3:AD:134:TYR:HB3	1.87	0.56
8:AI:87:MET:HG2	8:AI:91:GLU:HG2	1.88	0.56
9:AJ:53:ILE:HG13	13:AN:84:ARG:NE	2.20	0.56
23:BB:139:U:C5	50:BT:1:MET:HB3	2.41	0.56
23:BB:856:G:C1'	52:BW:23:LYS:HB3	2.36	0.56
23:BB:2395:C:H2'	23:BB:2396:G:O4'	2.06	0.56
23:BB:2741:A:H2'	23:BB:2742:G:O4'	2.05	0.56
24:BI:76:ALA:O	24:BI:80:LYS:HG3	2.06	0.56
26:BD:13:ARG:HH12	28:BP:74:GLN:CD	2.14	0.56
37:BL:19:LEU:O	37:BL:21:ARG:HG2	2.04	0.56
37:BL:110:VAL:HB	37:BL:127:VAL:HG23	1.87	0.56
41:BJ:17:VAL:HG23	41:BJ:137:PRO:CB	2.31	0.56
45:BS:95:ARG:HG3	45:BS:97:LEU:HD13	1.87	0.56
47:BF:78:ILE:HD12	47:BF:78:ILE:N	2.21	0.56
52:BW:24:ARG:HD3	52:BW:65:LYS:HE3	1.88	0.56
1:CA:451:A:C6	1:CA:480:U:H2'	2.41	0.56
1:CA:502:A:H2'	1:CA:503:C:C6	2.39	0.56
9:CJ:59:LYS:HG3	9:CJ:60:ASP:N	2.20	0.56
11:CL:43:LYS:HE2	11:CL:44:PRO:HD3	1.88	0.56
16:CQ:77:VAL:HG12	16:CQ:79:GLU:H	1.69	0.56
20:CB:15:PHE:HA	20:CB:42:LEU:HD21	1.88	0.56
23:DB:720:U:H2'	23:DB:721:A:H8	1.69	0.56
23:DB:796:C:H2'	23:DB:797:G:C8	2.40	0.56
23:DB:1092:C:H2'	23:DB:1093:G:H5'	1.88	0.56
23:DB:1902:C:H4'	25:DC:241:LYS:O	2.05	0.56
23:DB:2185:U:H2'	23:DB:2186:G:O4'	2.05	0.56
23:DB:2720:U:H2'	23:DB:2721:A:C8	2.41	0.56
24:DI:54:ILE:HD13	24:DI:55:PRO:N	2.21	0.56
26:DD:113:SER:HB2	26:DD:168:GLU:N	2.19	0.56
29:DE:21:ARG:HG3	29:DE:22:ASP:N	2.21	0.56
29:DE:106:LYS:HE3	29:DE:200:LEU:HD12	1.87	0.56
36:D2:29:GLN:O	36:D2:33:ARG:HB2	2.05	0.56
44:DQ:91:ARG:HH12	49:DR:10:LYS:HB3	1.70	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DU:3:LYS:HD3	46:DU:82:VAL:HB	1.86	0.56
47:DF:137:PHE:HB2	47:DF:138:PRO:CD	2.35	0.56
47:DF:177:ARG:CZ	47:DF:177:ARG:HA	2.35	0.56
48:DG:10:VAL:HG23	48:DG:48:THR:HA	1.88	0.56
1:AA:204:G:H1'	1:AA:466:A:N7	2.21	0.56
6:AG:21:LEU:HG	6:AG:22:LEU:H	1.70	0.56
18:AS:30:LEU:HB2	18:AS:48:ILE:HG23	1.88	0.56
23:BB:30:G:H2'	23:BB:31:C:C6	2.41	0.56
23:BB:278:A:N3	23:BB:278:A:H2'	2.19	0.56
23:BB:1599:U:H2'	23:BB:1600:C:C6	2.41	0.56
23:BB:1651:G:OP1	42:BN:40:LYS:HG3	2.05	0.56
23:BB:2246:G:H2'	23:BB:2247:A:C8	2.41	0.56
23:BB:2257:U:O2'	23:BB:2258:C:H5'	2.06	0.56
24:BI:10:LEU:O	24:BI:10:LEU:HD12	2.05	0.56
24:BI:14:ALA:HB1	24:BI:50:LYS:HA	1.87	0.56
25:BC:74:PRO:HG2	25:BC:96:LYS:HG3	1.86	0.56
37:BL:55:MET:HE3	37:BL:55:MET:HA	1.88	0.56
45:BS:70:LYS:HD3	45:BS:110:ARG:O	2.05	0.56
47:BF:35:LEU:HD23	47:BF:153:ILE:HG12	1.87	0.56
48:BG:152:ARG:HG3	48:BG:153:PRO:HD2	1.86	0.56
1:CA:824:G:O2'	1:CA:825:A:H5'	2.05	0.56
1:CA:1026:G:H2'	1:CA:1027:C:H6	1.70	0.56
6:CG:29:LEU:O	6:CG:29:LEU:HD23	2.06	0.56
7:CH:66:GLN:C	7:CH:68:LYS:H	2.14	0.56
9:CJ:65:TYR:OH	13:CN:84:ARG:HG3	2.05	0.56
11:CL:20:VAL:HG23	11:CL:20:VAL:O	2.05	0.56
12:CM:13:HIS:HB2	12:CM:16:ILE:HG22	1.87	0.56
12:CM:90:HIS:HA	12:CM:108:ARG:NH2	2.21	0.56
19:CT:54:GLN:N	19:CT:55:PRO:HD2	2.20	0.56
23:DB:416:U:H2'	23:DB:417:C:C6	2.41	0.56
23:DB:1099:G:H8	24:DI:3:LYS:H	1.04	0.56
23:DB:1099:G:O5'	24:DI:4:VAL:HG12	2.06	0.56
23:DB:1439:A:H1'	23:DB:1553:A:N6	2.20	0.56
23:DB:1460:U:H4'	23:DB:1461:C:O5'	2.05	0.56
23:DB:2105:U:H2'	23:DB:2106:U:O4'	2.06	0.56
23:DB:2443:C:O2'	23:DB:2444:G:H5'	2.06	0.56
25:DC:130:PRO:HA	25:DC:188:ARG:HA	1.88	0.56
26:DD:109:VAL:HG11	26:DD:193:VAL:HB	1.86	0.56
28:DP:107:ALA:O	28:DP:108:ARG:C	2.49	0.56
33:D1:26:LYS:HB2	33:D1:52:LYS:NZ	2.21	0.56
34:D3:14:LYS:O	34:D3:21:PHE:O	2.24	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:DX:56:LEU:O	39:DX:57:LEU:HB3	2.06	0.56
41:DJ:24:THR:HA	41:DJ:63:ALA:HB3	1.86	0.56
42:DN:9:GLN:O	42:DN:11:ASN:N	2.39	0.56
47:DF:120:SER:O	47:DF:127:TYR:HA	2.06	0.56
47:DF:126:ASN:HB3	47:DF:156:THR:HA	1.87	0.56
1:AA:93:U:H3'	1:AA:94:G:C5'	2.36	0.56
1:AA:1162:C:H2'	1:AA:1163:A:C8	2.41	0.56
1:AA:1451:U:H5''	1:AA:1452:C:OP2	2.06	0.56
3:AD:18:LEU:HB2	3:AD:20:LEU:HG	1.87	0.56
9:AJ:52:LEU:HB2	13:AN:80:ARG:HD2	1.86	0.56
15:AP:36:VAL:O	15:AP:36:VAL:HG13	2.06	0.56
23:BB:5:A:H2'	23:BB:6:A:H8	1.70	0.56
23:BB:184:C:H2'	23:BB:185:G:H8	1.70	0.56
23:BB:200:U:H5''	51:BZ:22:LEU:O	2.05	0.56
23:BB:522:A:H2'	23:BB:523:C:C6	2.39	0.56
23:BB:796:C:H2'	23:BB:797:G:H8	1.70	0.56
23:BB:1061:U:O4'	23:BB:1070:A:H1'	2.06	0.56
23:BB:1351:C:O2'	23:BB:1571:A:H1'	2.06	0.56
23:BB:1458:U:H4'	23:BB:1459:G:O4'	2.06	0.56
25:BC:6:LYS:C	25:BC:8:THR:H	2.13	0.56
27:BK:115:ILE:HG23	27:BK:116:ILE:N	2.20	0.56
35:BV:1:MET:HG2	35:BV:59:GLU:HG3	1.88	0.56
41:BJ:6:ALA:HB3	41:BJ:45:THR:HG21	1.86	0.56
41:BJ:13:ARG:O	41:BJ:52:ASP:HA	2.05	0.56
42:BN:82:GLU:C	42:BN:84:GLY:H	2.14	0.56
47:BF:34:THR:OG1	47:BF:154:THR:HB	2.06	0.56
51:BZ:64:ILE:HD12	51:BZ:64:ILE:N	2.18	0.56
52:BW:49:ASN:HB3	52:BW:81:ILE:CG1	2.36	0.56
1:CA:449:G:H2'	1:CA:450:G:C8	2.41	0.56
1:CA:1176:A:H2'	1:CA:1177:G:O4'	2.06	0.56
1:CA:1254:A:H2'	1:CA:1255:G:C8	2.41	0.56
20:CB:103:TRP:O	20:CB:107:ARG:HG2	2.06	0.56
23:DB:1682:G:H2'	23:DB:1683:U:C6	2.41	0.56
23:DB:1853:A:N1	23:DB:2087:G:H1'	2.21	0.56
23:DB:2183:A:H2'	23:DB:2184:A:C8	2.41	0.56
25:DC:68:ARG:HB2	25:DC:128:THR:HG21	1.88	0.56
25:DC:74:PRO:HG2	25:DC:96:LYS:HG3	1.87	0.56
25:DC:124:LYS:HG3	25:DC:125:PRO:HD2	1.88	0.56
48:DG:123:GLU:O	48:DG:125:PRO:HD3	2.06	0.56
1:AA:272:C:H2'	1:AA:273:U:C6	2.40	0.56
1:AA:625:U:H4'	15:AP:16:PHE:CZ	2.41	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:834:U:H2'	1:AA:835:U:C6	2.41	0.56
8:AI:67:LYS:HZ3	8:AI:67:LYS:HB2	1.71	0.56
16:AQ:45:VAL:HG12	16:AQ:46:HIS:N	2.21	0.56
23:BB:27:G:H1'	23:BB:513:A:H61	1.69	0.56
23:BB:233:A:H61	23:BB:428:A:N6	2.03	0.56
23:BB:1173:U:H2'	23:BB:1174:U:H4'	1.88	0.56
23:BB:1275:A:H2'	23:BB:1276:A:O4'	2.06	0.56
23:BB:2110:G:N2	23:BB:2180:U:H3	2.03	0.56
29:BE:115:GLN:O	29:BE:117:ARG:HG3	2.05	0.56
29:BE:173:THR:C	29:BE:175:ILE:H	2.13	0.56
33:B1:35:LEU:O	33:B1:36:LYS:HB2	2.06	0.56
36:B2:43:THR:O	36:B2:44:VAL:C	2.49	0.56
40:BH:41:LYS:HA	40:BH:44:ILE:HG13	1.88	0.56
41:BJ:103:ILE:HD12	41:BJ:104:ALA:N	2.20	0.56
44:BQ:63:ARG:HH12	44:BQ:96:ASP:HB2	1.70	0.56
45:BS:13:SER:OG	45:BS:16:LYS:HB2	2.06	0.56
47:BF:62:GLN:NE2	47:BF:90:LEU:HD13	2.21	0.56
51:BZ:35:SER:HA	51:BZ:49:LEU:O	2.05	0.56
1:CA:253:A:H2'	1:CA:254:G:H8	1.71	0.56
1:CA:376:G:H5''	15:CP:5:ARG:HB2	1.87	0.56
1:CA:1018:G:H2'	1:CA:1019:A:C8	2.41	0.56
3:CD:16:THR:HG22	3:CD:17:ASP:H	1.70	0.56
3:CD:29:THR:HG22	3:CD:30:LYS:H	1.71	0.56
12:CM:96:VAL:C	12:CM:98:GLY:H	2.14	0.56
13:CN:30:ILE:HB	13:CN:44:VAL:HG11	1.88	0.56
18:CS:11:ASP:HB2	18:CS:14:LEU:HD23	1.87	0.56
23:DB:40:U:H2'	23:DB:41:C:C6	2.41	0.56
23:DB:1485:U:H2'	23:DB:1486:U:H6	1.70	0.56
23:DB:1558:C:H4'	23:DB:1559:U:C5'	2.35	0.56
29:DE:34:ALA:HB2	29:DE:96:VAL:HG21	1.87	0.56
29:DE:98:LYS:HZ1	29:DE:99:LYS:HE3	1.71	0.56
44:DQ:91:ARG:HG2	44:DQ:93:ILE:HG22	1.88	0.56
46:DU:78:LYS:HE3	46:DU:79:ALA:N	2.21	0.56
1:AA:301:G:H2'	1:AA:302:G:H8	1.70	0.56
1:AA:602:A:O2'	1:AA:603:U:H5'	2.05	0.56
1:AA:1018:G:H2'	1:AA:1019:A:H8	1.71	0.56
10:AK:28:ASN:ND2	10:AK:46:ALA:HB3	2.20	0.56
12:AM:10:ASP:HA	12:AM:44:ILE:HD13	1.87	0.56
12:AM:47:LEU:HD13	12:AM:51:GLN:O	2.06	0.56
16:AQ:11:VAL:HG23	16:AQ:56:ASP:O	2.05	0.56
23:BB:91:A:H1'	23:BB:92:U:C6	2.41	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:459:U:O2'	23:BB:460:A:H5'	2.06	0.56
23:BB:670:A:H5''	37:BL:42:SER:HB2	1.87	0.56
23:BB:720:U:H2'	23:BB:721:A:H8	1.70	0.56
23:BB:1447:C:H2'	23:BB:1448:G:C8	2.41	0.56
23:BB:1535:A:H5''	23:BB:1536:C:C5	2.40	0.56
23:BB:2386:A:H2'	23:BB:2387:U:C6	2.41	0.56
23:BB:2605:U:H2'	23:BB:2606:C:C6	2.41	0.56
23:BB:2893:A:H4'	23:BB:2894:G:O5'	2.06	0.56
29:BE:149:ILE:HG23	29:BE:188:MET:CA	2.36	0.56
29:BE:195:GLN:HA	29:BE:198:GLU:CD	2.31	0.56
33:B1:3:GLY:C	33:B1:5:ARG:H	2.14	0.56
33:B1:33:LEU:HB3	33:B1:51:ALA:HB3	1.87	0.56
40:BH:40:THR:N	40:BH:43:ASN:HD21	2.02	0.56
40:BH:103:VAL:HG12	40:BH:142:VAL:HG11	1.87	0.56
43:BO:4:LYS:O	43:BO:8:ILE:HG13	2.06	0.56
52:BW:32:ALA:C	52:BW:34:SER:H	2.14	0.56
52:BW:77:LYS:HZ2	52:BW:77:LYS:N	2.03	0.56
1:CA:403:C:H2'	1:CA:404:G:H8	1.71	0.56
1:CA:908:A:O2'	1:CA:909:A:H5'	2.06	0.56
1:CA:1488:G:H2'	1:CA:1489:G:C8	2.40	0.56
2:CC:142:ARG:HH21	2:CC:143:LEU:HD21	1.71	0.56
7:CH:28:SER:OG	7:CH:56:PRO:HB2	2.06	0.56
7:CH:86:LYS:HD2	7:CH:90:GLU:CG	2.36	0.56
12:CM:58:GLU:O	12:CM:61:LYS:HG2	2.06	0.56
20:CB:165:ALA:HA	20:CB:172:ILE:HD11	1.87	0.56
22:DA:102:G:O2'	22:DA:103:U:H5'	2.06	0.56
23:DB:140:C:H4'	23:DB:141:G:C5	2.41	0.56
23:DB:841:G:O2'	23:DB:842:U:H5'	2.05	0.56
23:DB:1311:G:H21	23:DB:1603:A:H62	1.54	0.56
23:DB:1709:U:H2'	23:DB:1710:G:H8	1.69	0.56
23:DB:1924:C:O2'	23:DB:1925:C:H5'	2.06	0.56
23:DB:2092:U:H4'	23:DB:2093:G:O5'	2.06	0.56
23:DB:2136:G:O2'	23:DB:2137:U:H5'	2.06	0.56
23:DB:2365:G:H4'	52:DW:59:PHE:HE1	1.70	0.56
23:DB:2892:G:H5''	23:DB:2894:G:N2	2.21	0.56
24:DI:49:GLU:CB	24:DI:52:LEU:HD12	2.36	0.56
27:DK:63:VAL:HG12	27:DK:64:ARG:HD3	1.87	0.56
28:DP:26:GLU:HA	28:DP:43:GLU:HA	1.86	0.56
33:D1:3:GLY:C	33:D1:5:ARG:H	2.14	0.56
47:DF:50:ASP:O	47:DF:53:ALA:HB3	2.06	0.56
48:DG:89:VAL:HG12	48:DG:90:GLY:H	1.71	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:403:C:H2'	1:AA:404:G:H8	1.71	0.55
1:AA:476:U:H2'	1:AA:477:C:C6	2.42	0.55
1:AA:552:U:H4'	11:AL:82:ARG:HG2	1.87	0.55
5:AF:80:PHE:HE1	25:BC:135:PRO:HG2	1.72	0.55
8:AI:41:GLU:C	8:AI:43:ALA:H	2.14	0.55
18:AS:11:ASP:HB2	18:AS:14:LEU:HD23	1.88	0.55
20:AB:33:ALA:HA	20:AB:37:VAL:O	2.06	0.55
20:AB:72:LYS:O	20:AB:76:SER:HB2	2.06	0.55
23:BB:182:A:H2'	23:BB:183:C:C6	2.41	0.55
23:BB:721:A:H2'	23:BB:722:A:H8	1.70	0.55
23:BB:1210:G:OP1	23:BB:1212:G:H5'	2.06	0.55
26:BD:25:THR:HG21	26:BD:193:VAL:CG2	2.37	0.55
26:BD:148:GLN:HB2	26:BD:152:PRO:HG2	1.88	0.55
26:BD:175:LEU:HD21	26:BD:191:GLY:O	2.06	0.55
26:BD:186:LEU:HD11	28:BP:3:ILE:HG13	1.86	0.55
29:BE:69:ARG:O	29:BE:70:SER:HB3	2.04	0.55
40:BH:133:GLN:HA	40:BH:139:PHE:HB3	1.88	0.55
47:BF:62:GLN:NE2	47:BF:90:LEU:HA	2.21	0.55
47:BF:110:ILE:HA	47:BF:111:ARG:NH1	2.21	0.55
50:BT:50:LEU:HD22	50:BT:50:LEU:N	2.21	0.55
52:BW:24:ARG:CD	52:BW:65:LYS:HG2	2.36	0.55
1:CA:1048:G:O3'	1:CA:1049:U:H3'	2.05	0.55
9:CJ:53:ILE:CG2	9:CJ:61:ALA:HB1	2.36	0.55
10:CK:28:ASN:HD22	10:CK:29:THR:N	2.04	0.55
12:CM:63:VAL:HG12	12:CM:68:LEU:HG	1.88	0.55
23:DB:15:G:O2'	23:DB:16:C:H5'	2.06	0.55
23:DB:1013:C:H2'	23:DB:1014:A:H8	1.71	0.55
23:DB:1098:A:H2'	24:DI:3:LYS:C	2.32	0.55
23:DB:2523:G:O2'	23:DB:2524:G:H5'	2.06	0.55
25:DC:229:HIS:ND1	25:DC:230:PRO:HD2	2.20	0.55
26:DD:34:VAL:CG1	26:DD:94:GLN:H	2.19	0.55
28:DP:112:ARG:O	28:DP:113:LEU:HB3	2.06	0.55
29:DE:148:ILE:HD13	29:DE:187:VAL:CG2	2.36	0.55
35:DV:53:LYS:HZ3	35:DV:53:LYS:HA	1.71	0.55
39:DX:17:GLU:HB3	39:DX:53:VAL:CG1	2.36	0.55
45:DS:26:GLY:H	45:DS:71:VAL:HG13	1.71	0.55
46:DU:82:VAL:HG13	46:DU:93:ARG:HB3	1.88	0.55
48:DG:108:PHE:H	48:DG:108:PHE:HD1	1.54	0.55
52:DW:37:VAL:CG1	52:DW:38:ARG:HH11	2.18	0.55
1:AA:6:G:H2'	4:AE:123:LEU:HD22	1.87	0.55
1:AA:57:G:H2'	1:AA:58:C:H6	1.69	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:477:C:H2'	1:AA:478:A:C8	2.42	0.55
1:AA:908:A:O2'	1:AA:909:A:H5'	2.06	0.55
1:AA:1200:C:C3'	1:AA:1201:A:H5'	2.37	0.55
7:AH:17:GLN:HA	7:AH:17:GLN:HE21	1.71	0.55
10:AK:16:SER:HA	10:AK:78:ILE:HA	1.87	0.55
12:AM:95:PRO:N	12:AM:108:ARG:HG2	2.22	0.55
12:AM:106:ARG:HD3	12:AM:110:GLY:O	2.07	0.55
16:AQ:46:HIS:HB2	16:AQ:66:LEU:HD13	1.89	0.55
23:BB:150:U:H2'	23:BB:151:C:C6	2.41	0.55
23:BB:1139:G:O2'	23:BB:1140:C:H5'	2.06	0.55
23:BB:1535:A:H5''	23:BB:1536:C:H5	1.70	0.55
23:BB:1716:U:H2'	23:BB:1717:A:H8	1.71	0.55
23:BB:1744:A:H2'	23:BB:1745:A:C8	2.41	0.55
23:BB:1872:A:H2'	23:BB:1873:G:O4'	2.07	0.55
23:BB:2207:C:H2'	23:BB:2208:C:C6	2.41	0.55
25:BC:79:ARG:HD2	25:BC:81:GLU:HG3	1.88	0.55
26:BD:37:VAL:HG23	26:BD:91:THR:HA	1.88	0.55
35:BV:46:LYS:HD2	35:BV:46:LYS:N	2.22	0.55
48:BG:54:ARG:HB3	48:BG:57:TYR:CD1	2.40	0.55
52:BW:41:GLY:HA2	52:BW:44:PHE:CD2	2.41	0.55
1:CA:17:U:H2'	1:CA:18:C:H6	1.69	0.55
1:CA:285:C:H2'	1:CA:286:C:H6	1.71	0.55
1:CA:476:U:H2'	1:CA:477:C:C6	2.41	0.55
1:CA:560:A:N1	1:CA:566:G:H5'	2.21	0.55
1:CA:1414:U:H2'	1:CA:1415:G:C8	2.40	0.55
5:CF:10:VAL:HG12	5:CF:11:HIS:N	2.21	0.55
16:CQ:46:HIS:HB2	16:CQ:66:LEU:HD13	1.89	0.55
22:DA:60:C:H2'	22:DA:61:G:H8	1.71	0.55
23:DB:17:G:H2'	23:DB:18:U:C6	2.41	0.55
23:DB:582:A:H2'	23:DB:583:G:C8	2.42	0.55
23:DB:1400:U:H2'	23:DB:1401:G:C8	2.40	0.55
23:DB:1868:C:H2'	23:DB:1869:G:O4'	2.05	0.55
23:DB:2144:G:O2'	23:DB:2146:C:H5''	2.07	0.55
23:DB:2207:C:H2'	23:DB:2208:C:C6	2.41	0.55
23:DB:2322:A:N6	23:DB:2333:A:H62	2.04	0.55
25:DC:151:GLY:C	25:DC:152:GLN:HG3	2.30	0.55
29:DE:6:LYS:HB2	29:DE:120:VAL:O	2.06	0.55
39:DX:14:LEU:O	39:DX:18:LEU:HB2	2.04	0.55
41:DJ:17:VAL:HG23	41:DJ:137:PRO:CB	2.31	0.55
43:DO:4:LYS:O	43:DO:8:ILE:HG13	2.06	0.55
45:DS:66:ILE:HD13	45:DS:66:ILE:N	2.20	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:DF:110:ILE:CG2	47:DF:113:PHE:HB3	2.36	0.55
1:AA:72:A:H2'	1:AA:73:C:C6	2.42	0.55
1:AA:484:G:H4'	1:AA:485:U:C5'	2.37	0.55
1:AA:1254:A:H2'	1:AA:1255:G:C8	2.41	0.55
1:AA:1472:U:H2'	1:AA:1473:G:C8	2.40	0.55
6:AG:14:ASP:HB3	6:AG:18:GLY:N	2.18	0.55
8:AI:34:LEU:HD11	8:AI:47:VAL:HG21	1.88	0.55
10:AK:70:ALA:C	10:AK:72:ALA:H	2.15	0.55
11:AL:54:VAL:HG21	11:AL:79:ILE:HD11	1.88	0.55
11:AL:86:VAL:HG11	11:AL:89:LEU:HD23	1.88	0.55
12:AM:56:ARG:O	12:AM:59:VAL:HG12	2.07	0.55
19:AT:85:LEU:HD23	19:AT:86:ALA:H	1.71	0.55
20:AB:165:ALA:HA	20:AB:172:ILE:HD11	1.88	0.55
23:BB:402:A:H2'	23:BB:403:U:O4'	2.06	0.55
23:BB:705:A:O2'	25:BC:6:LYS:HG3	2.06	0.55
23:BB:877:A:H2	23:BB:900:A:N7	2.04	0.55
23:BB:1338:G:H4'	50:BT:18:GLU:CG	2.35	0.55
23:BB:1400:U:H2'	23:BB:1401:G:H8	1.71	0.55
23:BB:1723:G:H2'	23:BB:1724:G:O4'	2.06	0.55
23:BB:1874:C:H2'	23:BB:1875:G:O4'	2.05	0.55
23:BB:2339:C:H2'	23:BB:2340:A:C8	2.41	0.55
24:BI:77:VAL:HA	24:BI:80:LYS:CE	2.36	0.55
25:BC:64:VAL:HG22	25:BC:90:ILE:HD11	1.87	0.55
36:B2:39:ARG:HH11	36:B2:39:ARG:HG3	1.71	0.55
40:BH:44:ILE:C	40:BH:46:PHE:H	2.13	0.55
40:BH:44:ILE:O	40:BH:48:GLU:HB3	2.07	0.55
44:BQ:104:ALA:O	44:BQ:105:PHE:HB3	2.07	0.55
46:BU:86:PHE:HD1	46:BU:88:ASP:N	2.05	0.55
48:BG:93:TYR:C	48:BG:94:ARG:HG3	2.32	0.55
49:BR:2:TYR:HB2	49:BR:42:ALA:HB2	1.88	0.55
1:CA:108:G:O6	19:CT:9:ARG:HG2	2.06	0.55
1:CA:987:G:O2'	1:CA:988:G:H5'	2.06	0.55
3:CD:113:ALA:O	3:CD:117:VAL:HG23	2.06	0.55
4:CE:15:ILE:HB	4:CE:35:LEU:O	2.06	0.55
8:CI:19:PHE:HB2	8:CI:63:TYR:HB3	1.87	0.55
10:CK:33:ILE:HG13	10:CK:73:VAL:HG21	1.89	0.55
10:CK:70:ALA:C	10:CK:72:ALA:H	2.14	0.55
23:DB:559:G:OP1	41:DJ:111:LYS:HD3	2.05	0.55
23:DB:1029:A:H2'	23:DB:1030:C:O4'	2.06	0.55
23:DB:1351:C:O2'	23:DB:1571:A:H1'	2.06	0.55
23:DB:1923:U:H2'	23:DB:1924:C:C6	2.41	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:2014:A:H2'	23:DB:2015:A:C8	2.42	0.55
23:DB:2091:C:H1'	51:DZ:34:HIS:CD2	2.41	0.55
23:DB:2257:U:O2'	23:DB:2258:C:H5'	2.06	0.55
23:DB:2595:G:H1	25:DC:238:ASN:ND2	2.04	0.55
25:DC:89:ASN:O	25:DC:105:ALA:HB3	2.06	0.55
26:DD:148:GLN:HG3	26:DD:152:PRO:CG	2.34	0.55
33:D1:33:LEU:HB3	33:D1:51:ALA:HB3	1.88	0.55
41:DJ:16:TYR:O	41:DJ:55:ILE:HG12	2.06	0.55
41:DJ:38:GLY:HA3	41:DJ:50:THR:O	2.05	0.55
47:DF:147:ARG:CZ	47:DF:147:ARG:HB3	2.35	0.55
48:DG:34:ARG:HD3	48:DG:34:ARG:N	2.22	0.55
49:DR:2:TYR:HB2	49:DR:42:ALA:HB2	1.87	0.55
1:AA:109:A:H2'	1:AA:326:G:N2	2.22	0.55
1:AA:376:G:H2'	1:AA:377:G:H8	1.69	0.55
1:AA:560:A:H4'	1:AA:561:U:H5''	1.87	0.55
1:AA:624:C:H2'	1:AA:625:U:C6	2.42	0.55
1:AA:676:A:H1'	10:AK:116:PRO:HB3	1.88	0.55
1:AA:880:C:H2'	1:AA:881:G:H8	1.70	0.55
1:AA:1238:A:C8	1:AA:1303:C:H1'	2.41	0.55
3:AD:25:ARG:HD3	3:AD:25:ARG:C	2.31	0.55
3:AD:192:ALA:C	3:AD:194:ILE:H	2.13	0.55
5:AF:93:LYS:O	5:AF:94:HIS:HB2	2.05	0.55
6:AG:132:THR:O	6:AG:135:LYS:HB3	2.06	0.55
8:AI:99:LYS:HE3	9:CJ:80:THR:HA	1.87	0.55
17:AR:63:TYR:N	17:AR:63:TYR:CD2	2.74	0.55
20:AB:156:LEU:H	20:AB:156:LEU:CD1	2.16	0.55
23:BB:162:U:O2'	23:BB:163:C:H5'	2.06	0.55
23:BB:1229:C:H2'	23:BB:1230:A:C8	2.42	0.55
23:BB:2109:U:H3'	23:BB:2110:G:C8	2.42	0.55
23:BB:2243:U:H2'	23:BB:2244:U:C6	2.42	0.55
23:BB:2484:G:OP1	38:BM:44:ARG:HD3	2.07	0.55
25:BC:6:LYS:O	25:BC:8:THR:HG22	2.07	0.55
29:BE:34:ALA:HB2	29:BE:96:VAL:HG21	1.89	0.55
34:B3:7:ARG:O	34:B3:11:LYS:HG3	2.05	0.55
38:BM:108:VAL:HG22	38:BM:109:PRO:HD2	1.88	0.55
40:BH:130:VAL:HG21	40:BH:144:VAL:CG2	2.33	0.55
42:BN:55:ALA:HA	42:BN:80:PHE:CE1	2.41	0.55
44:BQ:18:LYS:C	44:BQ:20:ALA:H	2.12	0.55
44:BQ:80:ASN:O	44:BQ:83:LYS:HB3	2.07	0.55
44:BQ:94:LEU:CD2	49:BR:11:GLN:HB2	2.36	0.55
51:BZ:49:LEU:HB2	51:BZ:51:VAL:HG23	1.88	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BW:9:THR:HG22	52:BW:10:ARG:HH11	1.71	0.55
1:CA:208:U:H2'	1:CA:210:C:C5	2.40	0.55
1:CA:216:U:H2'	1:CA:217:C:C6	2.41	0.55
1:CA:539:A:H2'	1:CA:540:G:H8	1.70	0.55
1:CA:712:A:O2'	1:CA:713:G:H5'	2.06	0.55
4:CE:17:VAL:HG23	4:CE:33:THR:O	2.07	0.55
4:CE:32:PHE:CE2	4:CE:55:VAL:HG22	2.42	0.55
8:CI:93:LEU:O	8:CI:97:LEU:HG	2.06	0.55
12:CM:47:LEU:HB3	12:CM:51:GLN:HB2	1.88	0.55
12:CM:80:MET:HA	12:CM:87:GLY:HA3	1.88	0.55
22:DA:95:U:H2'	22:DA:96:G:C8	2.42	0.55
23:DB:37:C:O2'	23:DB:38:A:H5'	2.06	0.55
23:DB:1022:G:N2	23:DB:1142:A:N1	2.53	0.55
23:DB:1656:C:H2'	23:DB:1657:U:C6	2.42	0.55
23:DB:2038:G:H2'	23:DB:2039:U:C6	2.42	0.55
23:DB:2626:C:O2'	23:DB:2627:G:H5'	2.07	0.55
23:DB:2869:G:H2'	23:DB:2870:C:C6	2.41	0.55
26:DD:136:ASN:HD21	26:DD:140:HIS:N	2.05	0.55
29:DE:60:TRP:HA	29:DE:60:TRP:CE3	2.42	0.55
37:DL:143:GLU:HG2	37:DL:144:GLU:N	2.15	0.55
45:DS:88:ARG:HH21	45:DS:88:ARG:HG3	1.72	0.55
46:DU:81:ARG:H	46:DU:81:ARG:NH2	2.03	0.55
50:DT:50:LEU:HD22	50:DT:50:LEU:H	1.72	0.55
1:AA:373:A:C1'	1:AA:481:G:H1'	2.37	0.55
1:AA:376:G:H5''	15:AP:5:ARG:HB2	1.88	0.55
1:AA:502:A:H2'	1:AA:503:C:C6	2.42	0.55
1:AA:712:A:O2'	1:AA:713:G:H5'	2.06	0.55
1:AA:810:C:O2'	1:AA:811:C:H5'	2.06	0.55
1:AA:1018:G:H2'	1:AA:1019:A:C8	2.41	0.55
2:AC:51:VAL:HA	2:AC:69:THR:HA	1.88	0.55
4:AE:53:ARG:HE	4:AE:54:GLU:HG2	1.70	0.55
4:AE:131:ASN:HD22	4:AE:134:ASN:H	1.53	0.55
17:AR:63:TYR:N	17:AR:63:TYR:HD2	2.05	0.55
22:BA:54:G:N2	47:BF:25:MET:HE3	2.22	0.55
23:BB:15:G:O2'	23:BB:16:C:H5'	2.06	0.55
23:BB:441:U:H2'	23:BB:442:G:H8	1.72	0.55
23:BB:740:C:O2'	23:BB:741:U:H5'	2.06	0.55
23:BB:1583:A:H5''	23:BB:1584:U:OP1	2.06	0.55
23:BB:1813:G:N3	25:BC:49:THR:HG21	2.22	0.55
23:BB:1827:U:O2'	23:BB:1828:G:H5'	2.06	0.55
24:BI:89:SER:HA	24:BI:97:VAL:CG2	2.36	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BC:20:ASN:OD1	25:BC:22:GLU:HG2	2.07	0.55
26:BD:14:ILE:HG22	26:BD:22:ILE:O	2.06	0.55
27:BK:105:ARG:H	27:BK:105:ARG:CD	2.16	0.55
37:BL:95:LEU:HB3	37:BL:100:ILE:CG2	2.37	0.55
38:BM:30:SER:HA	38:BM:133:LYS:HB2	1.88	0.55
38:BM:66:ARG:NE	38:BM:101:VAL:HG11	2.22	0.55
38:BM:90:GLU:HA	38:BM:90:GLU:OE1	2.06	0.55
44:BQ:83:LYS:NZ	44:BQ:87:VAL:HA	2.21	0.55
47:BF:76:PHE:HD2	47:BF:78:ILE:HD13	1.72	0.55
52:BW:21:GLY:CA	52:BW:33:GLY:HA2	2.37	0.55
1:CA:373:A:C1'	1:CA:481:G:H1'	2.36	0.55
6:CG:99:ALA:O	6:CG:103:ILE:HG13	2.06	0.55
9:CJ:67:ILE:HG12	13:CN:94:GLY:O	2.06	0.55
11:CL:98:ARG:HB2	11:CL:116:TYR:HA	1.87	0.55
19:CT:20:ASN:O	19:CT:24:ARG:HB2	2.06	0.55
23:DB:5:A:H2'	23:DB:6:A:H8	1.72	0.55
23:DB:587:C:O2'	37:DL:19:LEU:HD13	2.06	0.55
23:DB:784:G:H21	25:DC:225:ASN:HD22	1.52	0.55
23:DB:922:C:H1'	52:DW:22:VAL:HG21	1.89	0.55
23:DB:1210:G:H5'	23:DB:1212:G:O4'	2.07	0.55
23:DB:1410:G:H2'	23:DB:1411:U:C6	2.42	0.55
23:DB:1458:U:H4'	23:DB:1459:G:O4'	2.07	0.55
23:DB:1582:C:H3'	23:DB:1583:A:N3	2.21	0.55
23:DB:1723:G:H2'	23:DB:1724:G:O4'	2.07	0.55
23:DB:2605:U:H2'	23:DB:2606:C:C6	2.41	0.55
23:DB:2748:A:H4'	48:DG:3:VAL:HG21	1.87	0.55
23:DB:2836:U:H2'	23:DB:2837:A:C8	2.42	0.55
24:DI:63:ASP:O	24:DI:64:ARG:HB2	2.06	0.55
33:D1:34:GLU:HA	33:D1:48:TYR:O	2.06	0.55
37:DL:9:ALA:HB3	37:DL:12:SER:OG	2.07	0.55
37:DL:110:VAL:HB	37:DL:127:VAL:HG23	1.88	0.55
44:DQ:60:TRP:O	44:DQ:64:ILE:HG12	2.07	0.55
44:DQ:80:ASN:O	44:DQ:83:LYS:HB3	2.07	0.55
44:DQ:105:PHE:O	44:DQ:109:VAL:HG23	2.05	0.55
47:DF:65:LEU:HD23	47:DF:87:LYS:HD2	1.89	0.55
47:DF:128:SER:HB3	47:DF:154:THR:HA	1.88	0.55
48:DG:17:LYS:HZ2	48:DG:18:ILE:H	1.52	0.55
48:DG:24:THR:C	48:DG:25:ILE:HD12	2.30	0.55
1:AA:731:G:H5'	1:AA:766:A:H4'	1.89	0.55
1:AA:1288:A:N1	1:AA:1371:G:H1'	2.22	0.55
19:AT:48:LYS:O	19:AT:52:GLU:HB3	2.07	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:215:G:H4'	23:BB:216:A:H4'	1.88	0.55
23:BB:582:A:H2'	23:BB:583:G:C8	2.42	0.55
23:BB:1230:A:H2'	23:BB:1231:U:C6	2.41	0.55
23:BB:1470:A:H3'	23:BB:1471:G:H8	1.72	0.55
23:BB:1788:C:O2'	23:BB:1789:A:H5'	2.06	0.55
23:BB:1838:C:N4	23:BB:1898:U:H2'	2.22	0.55
23:BB:2196:C:O2'	23:BB:2197:U:H5'	2.06	0.55
24:BI:100:ILE:O	24:BI:139:VAL:HA	2.06	0.55
34:B3:5:THR:HG22	34:B3:62:PRO:HD2	1.89	0.55
39:BX:46:VAL:O	39:BX:50:VAL:HG23	2.07	0.55
40:BH:95:GLY:O	40:BH:99:ILE:HG12	2.07	0.55
45:BS:18:ARG:HB3	45:BS:76:VAL:HG22	1.89	0.55
1:CA:204:G:H2'	1:CA:205:A:H8	1.72	0.55
1:CA:333:U:H2'	1:CA:334:C:C6	2.41	0.55
1:CA:1301:U:H2'	1:CA:1301:U:O2	2.06	0.55
2:CC:190:THR:HG22	2:CC:191:THR:N	2.22	0.55
4:CE:53:ARG:HE	4:CE:54:GLU:HG2	1.71	0.55
4:CE:80:LEU:HA	4:CE:146:MET:HE1	1.89	0.55
23:DB:324:A:H2'	23:DB:325:G:O4'	2.06	0.55
23:DB:1164:C:H2'	23:DB:1165:A:C8	2.41	0.55
23:DB:1442:U:H2'	23:DB:1443:U:H6	1.70	0.55
23:DB:1872:A:H2'	23:DB:1873:G:O4'	2.06	0.55
23:DB:2210:U:N3	23:DB:2212:A:N7	2.55	0.55
23:DB:2352:A:C6	52:DW:30:VAL:HG11	2.42	0.55
24:DI:79:LEU:HD11	24:DI:131:THR:OG1	2.07	0.55
26:DD:37:VAL:HG23	26:DD:91:THR:HA	1.87	0.55
37:DL:19:LEU:O	37:DL:21:ARG:HG2	2.07	0.55
38:DM:90:GLU:HA	38:DM:90:GLU:OE1	2.06	0.55
44:DQ:101:ASP:HB2	49:DR:2:TYR:OH	2.06	0.55
44:DQ:109:VAL:O	44:DQ:113:LYS:HG3	2.06	0.55
46:DU:86:PHE:HB3	46:DU:90:LYS:O	2.06	0.55
47:DF:168:LEU:HD13	47:DF:169:LEU:N	2.21	0.55
48:DG:39:ALA:C	48:DG:54:ARG:HB2	2.31	0.55
50:DT:11:LEU:HD22	50:DT:11:LEU:N	2.16	0.55
3:AD:169:TRP:CE2	3:AD:185:PRO:HB3	2.42	0.55
7:AH:11:THR:HA	7:AH:14:ARG:NH1	2.22	0.55
11:AL:31:GLY:HA3	11:AL:54:VAL:CG1	2.37	0.55
15:AP:74:LEU:O	15:AP:78:VAL:HG12	2.05	0.55
19:AT:20:ASN:O	19:AT:24:ARG:HB2	2.06	0.55
20:AB:14:HIS:CD2	20:AB:202:ASN:H	2.24	0.55
20:AB:163:ILE:HD11	20:AB:209:VAL:HG12	1.89	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:679:C:O2'	23:BB:680:C:H5'	2.07	0.55
23:BB:1425:G:H2'	23:BB:1426:G:C8	2.42	0.55
23:BB:1508:A:H5'	23:BB:1509:A:N6	2.22	0.55
23:BB:1550:C:H2'	23:BB:1551:A:C8	2.41	0.55
23:BB:2758:A:H1'	48:BG:63:GLN:HE22	1.72	0.55
23:BB:2841:C:H2'	23:BB:2842:G:C8	2.40	0.55
25:BC:80:LEU:HD23	25:BC:91:ALA:HB2	1.88	0.55
25:BC:226:PRO:HA	25:BC:232:GLY:HA3	1.87	0.55
33:B1:29:LYS:HA	33:B1:31:GLU:OE1	2.07	0.55
33:B1:34:GLU:HA	33:B1:48:TYR:O	2.06	0.55
35:BV:62:THR:HB	35:BV:71:LYS:HG2	1.89	0.55
35:BV:78:GLN:HB2	35:BV:88:HIS:O	2.07	0.55
41:BJ:30:THR:HG23	41:BJ:31:GLU:N	2.22	0.55
41:BJ:55:ILE:O	41:BJ:55:ILE:HG13	2.04	0.55
42:BN:37:THR:HB	42:BN:40:LYS:HB2	1.89	0.55
43:BO:79:ALA:O	43:BO:83:LEU:HB2	2.07	0.55
43:BO:97:PHE:HB3	43:BO:103:VAL:HG21	1.88	0.55
44:BQ:78:PHE:CZ	44:BQ:82:LEU:HD11	2.41	0.55
46:BU:11:ILE:O	46:BU:12:VAL:HB	2.07	0.55
46:BU:81:ARG:HB2	46:BU:96:LYS:CG	2.37	0.55
47:BF:128:SER:HB3	47:BF:154:THR:HA	1.88	0.55
1:CA:195:A:H1'	1:CA:222:C:O2'	2.06	0.55
1:CA:314:C:O2'	1:CA:315:A:H5'	2.07	0.55
1:CA:1035:A:H2'	1:CA:1036:A:C8	2.42	0.55
1:CA:1239:A:H4'	1:CA:1240:U:C5'	2.36	0.55
1:CA:1299:A:H2'	1:CA:1301:U:H1'	1.89	0.55
1:CA:1308:U:H2'	1:CA:1309:G:H8	1.72	0.55
10:CK:33:ILE:HG12	10:CK:69:CYS:SG	2.47	0.55
11:CL:122:LYS:HG3	11:CL:123:ALA:H	1.70	0.55
17:CR:63:TYR:HD2	17:CR:63:TYR:N	2.05	0.55
18:CS:65:MET:HG3	18:CS:73:PHE:CZ	2.41	0.55
23:DB:1432:G:O2'	23:DB:1433:A:H5'	2.06	0.55
23:DB:1571:A:H2'	23:DB:1572:A:C8	2.42	0.55
23:DB:1716:U:H2'	23:DB:1717:A:C8	2.42	0.55
23:DB:1874:C:H2'	23:DB:1875:G:O4'	2.06	0.55
23:DB:2776:A:H4'	23:DB:2777:G:H5''	1.88	0.55
23:DB:2860:A:H8	23:DB:2860:A:O5'	1.89	0.55
26:DD:116:LYS:HE2	42:DN:1:MET:HE1	1.87	0.55
29:DE:115:GLN:O	29:DE:117:ARG:HG3	2.06	0.55
29:DE:192:ALA:HA	29:DE:195:GLN:NE2	2.20	0.55
30:DY:35:VAL:HG21	30:DY:37:ARG:HH22	1.72	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DL:47:ARG:HH21	37:DL:47:ARG:CB	2.18	0.55
40:DH:141:LYS:HE3	40:DH:141:LYS:N	2.21	0.55
41:DJ:44:TYR:CD2	41:DJ:44:TYR:C	2.84	0.55
41:DJ:96:ARG:O	41:DJ:99:ARG:HG3	2.07	0.55
47:DF:135:ILE:CD1	47:DF:137:PHE:HB3	2.37	0.55
48:DG:9:VAL:H	48:DG:48:THR:HB	1.71	0.55
48:DG:15:ASP:CB	48:DG:26:LYS:H	2.15	0.55
49:DR:16:GLU:HG2	49:DR:101:ILE:HG13	1.87	0.55
1:AA:270:A:H2'	1:AA:271:C:H6	1.71	0.55
1:AA:844:G:H2'	1:AA:845:A:N9	2.21	0.55
1:AA:860:A:H2'	1:AA:861:G:O4'	2.07	0.55
1:AA:1048:G:O3'	1:AA:1049:U:H3'	2.07	0.55
17:AR:58:ILE:O	17:AR:62:ARG:HG3	2.07	0.55
20:AB:166:ASP:OD2	20:AB:190:SER:HA	2.07	0.55
23:BB:324:A:H2'	23:BB:325:G:O4'	2.07	0.55
23:BB:634:C:H2'	23:BB:635:C:C6	2.42	0.55
23:BB:660:C:H2'	23:BB:661:A:H8	1.71	0.55
23:BB:743:A:C2'	23:BB:744:U:H5'	2.37	0.55
23:BB:836:G:H2'	23:BB:837:C:C6	2.42	0.55
23:BB:1816:C:H3'	25:BC:61:TYR:HE2	1.72	0.55
23:BB:2008:C:H2'	23:BB:2009:A:C8	2.41	0.55
23:BB:2286:G:H4'	23:BB:2287:A:O4'	2.07	0.55
25:BC:89:ASN:O	25:BC:105:ALA:HB3	2.07	0.55
28:BP:3:ILE:HG23	28:BP:4:ILE:N	2.21	0.55
28:BP:107:ALA:O	28:BP:108:ARG:C	2.50	0.55
29:BE:138:LEU:HB3	29:BE:143:LEU:O	2.07	0.55
35:BV:4:ILE:HD12	35:BV:63:ILE:HG13	1.87	0.55
42:BN:52:ILE:O	42:BN:55:ALA:HB3	2.07	0.55
46:BU:27:VAL:HG23	46:BU:33:VAL:HG12	1.88	0.55
46:BU:82:VAL:HG13	46:BU:93:ARG:HB3	1.88	0.55
49:BR:15:SER:H	49:BR:18:GLN:CD	2.14	0.55
50:BT:38:ALA:HB3	50:BT:81:LYS:HE2	1.89	0.55
1:CA:848:C:H2'	1:CA:849:G:O4'	2.07	0.55
1:CA:1057:G:H4'	2:CC:196:GLY:H	1.72	0.55
1:CA:1380:U:H5	6:CG:2:ARG:HH12	1.55	0.55
2:CC:96:VAL:HB	2:CC:97:PRO:HD2	1.88	0.55
3:CD:169:TRP:CE2	3:CD:185:PRO:HB3	2.42	0.55
13:CN:51:PRO:HG2	13:CN:52:ARG:H	1.71	0.55
17:CR:63:TYR:N	17:CR:63:TYR:CD2	2.74	0.55
22:DA:13:G:H2'	22:DA:14:U:H5''	1.89	0.55
22:DA:42:C:C5	47:DF:65:LEU:HD22	2.42	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:1000:A:H2'	23:DB:1001:A:C8	2.42	0.55
23:DB:1509:A:H4'	23:DB:1510:G:H8	1.71	0.55
23:DB:1661:G:O2'	23:DB:1662:U:H5'	2.05	0.55
23:DB:1831:G:H2'	23:DB:1832:C:C6	2.42	0.55
23:DB:2286:G:H4'	23:DB:2287:A:O4'	2.06	0.55
23:DB:2297:A:N6	23:DB:2319:G:H1'	2.22	0.55
24:DI:85:ILE:CD1	24:DI:137:LEU:HD21	2.36	0.55
26:DD:105:LYS:H	26:DD:106:LYS:NZ	2.04	0.55
40:DH:87:GLU:H	40:DH:89:LYS:NZ	2.04	0.55
45:DS:13:SER:OG	45:DS:16:LYS:HB2	2.06	0.55
45:DS:70:LYS:HD3	45:DS:110:ARG:O	2.06	0.55
48:DG:25:ILE:O	48:DG:32:LEU:HA	2.07	0.55
48:DG:93:TYR:C	48:DG:94:ARG:HG3	2.31	0.55
1:AA:241:G:O2'	1:AA:242:G:H5'	2.06	0.55
2:AC:190:THR:HG22	2:AC:191:THR:N	2.22	0.55
3:AD:197:HIS:O	3:AD:200:VAL:HG22	2.06	0.55
6:AG:100:MET:O	6:AG:104:VAL:HG23	2.06	0.55
12:AM:47:LEU:HB3	12:AM:51:GLN:HB2	1.87	0.55
12:AM:106:ARG:HH12	12:AM:109:LYS:CD	2.17	0.55
13:AN:51:PRO:HG2	13:AN:52:ARG:H	1.72	0.55
18:AS:39:ILE:HG12	18:AS:70:LEU:HD12	1.88	0.55
23:BB:154:U:H2'	23:BB:155:A:C8	2.42	0.55
23:BB:571:U:H3'	49:BR:80:ARG:NH1	2.22	0.55
23:BB:644:A:O2'	23:BB:645:C:H5'	2.07	0.55
23:BB:1919:A:H2'	23:BB:1920:C:H5'	1.89	0.55
23:BB:2038:G:H2'	23:BB:2039:U:C6	2.42	0.55
23:BB:2867:G:N7	28:BP:20:ARG:NH1	2.54	0.55
24:BI:11:GLN:O	24:BI:11:GLN:HG3	2.07	0.55
24:BI:112:LYS:O	24:BI:116:MET:HG3	2.06	0.55
25:BC:124:LYS:HG3	25:BC:125:PRO:HD2	1.88	0.55
26:BD:9:VAL:HG22	26:BD:9:VAL:O	2.07	0.55
29:BE:189:THR:HG23	29:BE:192:ALA:H	1.71	0.55
32:B4:27:CYS:SG	32:B4:29:ALA:HB3	2.47	0.55
41:BJ:96:ARG:O	41:BJ:99:ARG:HG3	2.07	0.55
42:BN:72:ASP:C	42:BN:74:GLU:H	2.15	0.55
46:BU:78:LYS:HE3	46:BU:79:ALA:N	2.22	0.55
47:BF:110:ILE:CG2	47:BF:113:PHE:HB3	2.37	0.55
52:BW:35:ILE:HG13	52:BW:57:THR:OG1	2.05	0.55
52:BW:37:VAL:CG1	52:BW:38:ARG:HH11	2.19	0.55
1:CA:555:U:H2'	1:CA:556:C:C6	2.42	0.55
1:CA:598:U:H2'	1:CA:599:C:C6	2.42	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1131:G:O2'	1:CA:1132:C:H5'	2.07	0.55
1:CA:1132:C:H2'	1:CA:1133:G:H8	1.71	0.55
1:CA:1404:C:H2'	1:CA:1405:G:C8	2.42	0.55
3:CD:186:GLU:CD	3:CD:187:ARG:H	2.15	0.55
14:CO:56:LEU:O	14:CO:60:VAL:HG23	2.07	0.55
16:CQ:45:VAL:HG12	16:CQ:46:HIS:N	2.22	0.55
18:CS:42:ASN:HD21	18:CS:43:MET:HE3	1.72	0.55
22:DA:83:G:H4'	30:DY:52:PHE:CD2	2.40	0.55
23:DB:91:A:H1'	23:DB:92:U:C6	2.42	0.55
23:DB:1044:C:H1'	23:DB:1048:A:H1'	1.89	0.55
23:DB:1047:G:H1'	23:DB:1111:A:N6	2.21	0.55
23:DB:1495:A:H2'	23:DB:1496:A:C8	2.42	0.55
23:DB:1535:A:H5''	23:DB:1536:C:C5	2.41	0.55
23:DB:2369:A:H2'	23:DB:2370:G:H8	1.72	0.55
23:DB:2635:A:H4'	26:DD:79:LEU:HB2	1.89	0.55
26:DD:51:THR:HG22	26:DD:52:THR:H	1.72	0.55
26:DD:149:ASN:O	26:DD:152:PRO:HD2	2.06	0.55
36:D2:21:ARG:HH21	36:D2:43:THR:CG2	2.20	0.55
38:DM:66:ARG:NE	38:DM:101:VAL:HG11	2.22	0.55
44:DQ:30:VAL:CG1	44:DQ:33:VAL:HG22	2.36	0.55
45:DS:95:ARG:HG3	45:DS:97:LEU:HD13	1.89	0.55
47:DF:62:GLN:NE2	47:DF:90:LEU:HA	2.22	0.55
47:DF:101:ARG:CZ	47:DF:138:PRO:HB2	2.37	0.55
49:DR:6:GLN:HE21	49:DR:7:SER:N	2.04	0.55
51:DZ:31:PRO:HB2	51:DZ:33:LEU:CD1	2.34	0.55
1:AA:66:A:H5'	1:AA:173:U:O4	2.07	0.55
1:AA:332:G:O2'	1:AA:333:U:H5'	2.07	0.55
1:AA:560:A:N1	1:AA:566:G:H5'	2.22	0.55
1:AA:948:C:O2'	1:AA:949:A:H5'	2.07	0.55
1:AA:1031:C:H4'	1:AA:1032:G:H5''	1.87	0.55
1:AA:1132:C:H2'	1:AA:1133:G:H8	1.71	0.55
3:AD:16:THR:HG22	3:AD:17:ASP:N	2.20	0.55
5:AF:69:GLU:O	5:AF:73:GLU:HG3	2.07	0.55
7:AH:6:ILE:HD12	7:AH:35:ILE:HD11	1.88	0.55
7:AH:44:PHE:HE2	7:AH:100:ILE:HG12	1.72	0.55
11:AL:51:VAL:HG12	11:AL:52:CYS:N	2.22	0.55
13:AN:14:ALA:O	13:AN:18:LYS:HG3	2.07	0.55
22:BA:13:G:C2'	22:BA:14:U:H5''	2.37	0.55
23:BB:37:C:O2'	23:BB:38:A:H5'	2.07	0.55
23:BB:589:U:H2'	23:BB:590:A:H8	1.72	0.55
23:BB:2314:A:H2'	23:BB:2315:G:C8	2.41	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:2369:A:H2'	23:BB:2370:G:H8	1.72	0.55
23:BB:2758:A:C2'	23:BB:2759:G:H5'	2.37	0.55
40:BH:1:MET:HB3	40:BH:21:VAL:O	2.07	0.55
40:BH:73:ASN:HD22	40:BH:74:ALA:N	2.05	0.55
51:BZ:38:PHE:CE2	51:BZ:51:VAL:HG21	2.42	0.55
1:CA:22:G:H2'	1:CA:23:C:H6	1.72	0.55
1:CA:484:G:H4'	1:CA:485:U:C5'	2.37	0.55
1:CA:624:C:H2'	1:CA:625:U:C6	2.42	0.55
1:CA:1225:A:H3'	1:CA:1226:C:H6	1.72	0.55
6:CG:129:ASN:HA	6:CG:134:VAL:HG21	1.87	0.55
9:CJ:17:LEU:HD22	9:CJ:96:VAL:CG1	2.36	0.55
10:CK:88:PRO:HD3	21:CU:28:LEU:HD11	1.88	0.55
15:CP:20:VAL:HG21	15:CP:32:PHE:CG	2.42	0.55
23:DB:1381:G:H1'	23:DB:1571:A:N1	2.22	0.55
23:DB:2153:C:H2'	23:DB:2154:A:H8	1.72	0.55
23:DB:2885:G:N2	31:D0:31:LYS:HG3	2.22	0.55
25:DC:20:ASN:OD1	25:DC:22:GLU:HG2	2.07	0.55
25:DC:142:ASN:O	25:DC:142:ASN:CG	2.49	0.55
30:DY:40:THR:O	30:DY:43:ILE:HG23	2.07	0.55
34:D3:5:THR:HG22	34:D3:62:PRO:HD2	1.89	0.55
34:D3:18:LYS:HD2	34:D3:19:GLY:N	2.21	0.55
37:DL:100:ILE:HG12	37:DL:100:ILE:O	2.05	0.55
40:DH:83:LYS:HD2	40:DH:83:LYS:H	1.71	0.55
43:DO:9:ARG:HG3	43:DO:10:ARG:N	2.22	0.55
47:DF:4:HIS:O	47:DF:7:TYR:HB3	2.07	0.55
47:DF:113:PHE:CZ	47:DF:175:PRO:HB2	2.42	0.55
48:DG:154:GLU:C	48:DG:156:TYR:H	2.15	0.55
1:AA:36:C:H4'	11:AL:118:VAL:O	2.08	0.54
1:AA:555:U:H2'	1:AA:556:C:C6	2.41	0.54
1:AA:796:C:H4'	10:AK:126:ARG:HH21	1.71	0.54
1:AA:975:A:H4'	1:AA:976:G:OP2	2.06	0.54
5:AF:80:PHE:CE1	25:BC:135:PRO:HG2	2.42	0.54
7:AH:26:MET:HB2	7:AH:27:PRO:HD2	1.90	0.54
11:AL:49:ARG:HH12	11:AL:88:ASP:CB	2.20	0.54
12:AM:90:HIS:HA	12:AM:108:ARG:NH2	2.21	0.54
15:AP:25:ARG:HD3	15:AP:25:ARG:H	1.71	0.54
19:AT:67:HIS:CD2	19:AT:68:LYS:H	2.25	0.54
23:BB:264:C:C2'	23:BB:265:A:H5''	2.36	0.54
23:BB:699:A:H4'	23:BB:1634:A:N7	2.21	0.54
23:BB:718:A:H3'	23:BB:719:C:H6	1.71	0.54
23:BB:1198:U:H2'	23:BB:1199:U:C6	2.42	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:1796:U:H2'	23:BB:1797:G:C8	2.42	0.54
23:BB:2662:A:H2'	23:BB:2663:G:O4'	2.07	0.54
26:BD:7:LYS:HE2	26:BD:198:GLY:HA2	1.89	0.54
27:BK:3:GLN:HG2	27:BK:4:GLU:N	2.22	0.54
37:BL:42:SER:C	37:BL:44:GLY:H	2.14	0.54
40:BH:99:ILE:C	40:BH:101:ASP:H	2.16	0.54
47:BF:134:GLN:C	47:BF:136:ILE:H	2.15	0.54
1:CA:607:A:H2'	1:CA:608:A:C8	2.43	0.54
1:CA:676:A:H1'	10:CK:116:PRO:HB3	1.88	0.54
1:CA:1018:G:H2'	1:CA:1019:A:H8	1.72	0.54
1:CA:1288:A:N1	1:CA:1371:G:H1'	2.21	0.54
10:CK:16:SER:HA	10:CK:78:ILE:HA	1.88	0.54
10:CK:28:ASN:ND2	10:CK:46:ALA:HB3	2.22	0.54
10:CK:37:GLN:HB2	10:CK:39:ASN:HD22	1.72	0.54
11:CL:31:GLY:HA3	11:CL:54:VAL:CG1	2.37	0.54
11:CL:66:ILE:HD12	11:CL:66:ILE:N	2.22	0.54
12:CM:71:GLU:HA	12:CM:74:MET:SD	2.48	0.54
15:CP:4:ILE:HB	15:CP:67:ILE:HD12	1.87	0.54
15:CP:25:ARG:HD3	15:CP:25:ARG:H	1.72	0.54
20:CB:128:LEU:HD13	20:CB:129:THR:H	1.72	0.54
21:CU:24:LYS:NZ	21:CU:24:LYS:HB3	2.21	0.54
23:DB:143:C:H2'	23:DB:144:A:H8	1.72	0.54
23:DB:1100:C:H2'	23:DB:1101:U:C6	2.42	0.54
23:DB:2341:G:H2'	23:DB:2342:C:C6	2.43	0.54
33:D1:26:LYS:HB2	33:D1:52:LYS:HZ2	1.71	0.54
35:DV:76:ASP:CG	35:DV:77:VAL:H	2.14	0.54
41:DJ:13:ARG:O	41:DJ:14:ASP:HB2	2.07	0.54
41:DJ:18:VAL:CG1	41:DJ:54:ILE:HD11	2.36	0.54
1:AA:176:C:H2'	1:AA:177:G:N3	2.22	0.54
1:AA:310:G:H5''	15:AP:31:ARG:HB2	1.89	0.54
1:AA:487:A:H2'	1:AA:488:C:O4'	2.07	0.54
1:AA:642:A:H2'	1:AA:643:C:H6	1.72	0.54
1:AA:672:U:H2'	1:AA:673:A:C8	2.43	0.54
2:AC:141:MET:HA	2:AC:141:MET:HE3	1.89	0.54
3:AD:98:ASP:HB3	3:AD:132:ALA:HB1	1.90	0.54
3:AD:187:ARG:NH1	3:AD:191:SER:HA	2.14	0.54
8:AI:19:PHE:HB2	8:AI:63:TYR:HB3	1.87	0.54
10:AK:127:ARG:HG3	10:AK:127:ARG:HH11	1.71	0.54
14:AO:78:TYR:CZ	14:AO:82:ILE:HD11	2.42	0.54
23:BB:615:U:O4	29:BE:39:ALA:HB2	2.07	0.54
23:BB:1460:U:H4'	23:BB:1461:C:O5'	2.08	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:1656:C:H2'	23:BB:1657:U:H6	1.72	0.54
23:BB:1732:C:OP1	23:BB:1732:C:H2'	2.06	0.54
23:BB:2720:U:H2'	23:BB:2721:A:C8	2.42	0.54
23:BB:2840:C:H2'	23:BB:2841:C:C6	2.43	0.54
24:BI:122:GLU:CD	24:BI:122:GLU:H	2.15	0.54
25:BC:162:GLN:NE2	25:BC:174:ARG:HH21	2.05	0.54
29:BE:145:ASP:OD1	29:BE:183:PHE:HA	2.07	0.54
29:BE:192:ALA:HA	29:BE:195:GLN:NE2	2.22	0.54
30:BY:23:LEU:HD13	30:BY:28:LEU:HB2	1.89	0.54
35:BV:89:ILE:HD12	35:BV:89:ILE:O	2.07	0.54
37:BL:65:GLY:O	37:BL:66:PHE:HB3	2.06	0.54
37:BL:77:ILE:HG12	37:BL:95:LEU:HD22	1.89	0.54
38:BM:18:ARG:C	38:BM:38:ARG:HH22	2.15	0.54
39:BX:5:GLU:O	39:BX:8:GLU:HG2	2.07	0.54
40:BH:82:SER:N	40:BH:146:VAL:HG13	2.18	0.54
43:BO:94:ARG:HD2	43:BO:97:PHE:O	2.06	0.54
46:BU:86:PHE:HB3	46:BU:90:LYS:O	2.07	0.54
47:BF:126:ASN:HB3	47:BF:156:THR:HA	1.89	0.54
50:BT:39:THR:HG22	50:BT:42:GLU:CG	2.33	0.54
52:BW:48:ALA:HB3	52:BW:81:ILE:O	2.06	0.54
1:CA:229:U:H2'	1:CA:230:G:C8	2.42	0.54
1:CA:237:G:H2'	1:CA:238:A:C8	2.41	0.54
1:CA:272:C:H2'	1:CA:273:U:C6	2.43	0.54
1:CA:636:U:H2'	1:CA:637:C:H6	1.72	0.54
1:CA:1200:C:C3'	1:CA:1201:A:H5'	2.37	0.54
1:CA:1238:A:C8	1:CA:1303:C:H1'	2.42	0.54
11:CL:66:ILE:HG21	11:CL:71:HIS:HB3	1.90	0.54
12:CM:3:ILE:HG21	12:CM:21:ILE:HD11	1.90	0.54
15:CP:74:LEU:O	15:CP:78:VAL:HG12	2.07	0.54
16:CQ:30:HIS:CE1	16:CQ:32:ILE:HG22	2.42	0.54
23:DB:639:U:H2'	23:DB:640:C:C6	2.43	0.54
23:DB:721:A:H2'	23:DB:722:A:H8	1.69	0.54
23:DB:903:C:H2'	23:DB:904:G:C8	2.42	0.54
23:DB:987:C:H2'	23:DB:988:A:O4'	2.07	0.54
23:DB:992:C:O2'	23:DB:993:G:H5'	2.07	0.54
23:DB:2636:C:H2'	23:DB:2637:U:H6	1.72	0.54
25:DC:71:ASP:OD2	25:DC:118:GLY:HA2	2.07	0.54
25:DC:79:ARG:HD2	25:DC:81:GLU:HG3	1.88	0.54
36:D2:33:ARG:CB	36:D2:33:ARG:HH21	2.20	0.54
36:D2:43:THR:O	36:D2:44:VAL:C	2.49	0.54
44:DQ:105:PHE:HA	44:DQ:108:LEU:HG	1.88	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:DF:110:ILE:HA	47:DF:111:ARG:NH1	2.23	0.54
48:DG:17:LYS:HZ2	48:DG:17:LYS:CA	2.17	0.54
1:AA:33:A:H2'	1:AA:34:C:C6	2.42	0.54
1:AA:598:U:H2'	1:AA:599:C:C6	2.42	0.54
1:AA:640:A:O2'	1:AA:641:U:H5'	2.08	0.54
1:AA:922:G:N3	1:AA:1398:A:H2	2.04	0.54
1:AA:1472:U:H2'	1:AA:1473:G:H8	1.73	0.54
3:AD:169:TRP:O	3:AD:182:LYS:HB2	2.06	0.54
7:AH:37:ASN:O	7:AH:41:GLU:HG2	2.06	0.54
13:AN:21:ALA:O	13:AN:22:LYS:HE2	2.07	0.54
13:AN:60:ARG:CZ	13:AN:69:PRO:HB3	2.37	0.54
23:BB:634:C:H2'	23:BB:635:C:H6	1.72	0.54
23:BB:796:C:H2'	23:BB:797:G:C8	2.42	0.54
23:BB:1007:C:O3'	41:BJ:110:PRO:HB3	2.07	0.54
23:BB:1166:G:H2'	23:BB:1167:C:H6	1.70	0.54
23:BB:2019:A:H2	23:BB:2035:G:H22	1.54	0.54
23:BB:2216:G:H2'	23:BB:2217:G:C8	2.43	0.54
23:BB:2355:G:H4'	52:BW:20:LEU:HD13	1.89	0.54
23:BB:2512:C:H2'	23:BB:2513:A:O4'	2.07	0.54
23:BB:2815:C:H2'	23:BB:2816:G:H8	1.72	0.54
25:BC:68:ARG:HB2	25:BC:128:THR:HG21	1.90	0.54
28:BP:31:VAL:O	28:BP:32:VAL:HB	2.06	0.54
41:BJ:21:THR:O	41:BJ:62:VAL:HA	2.08	0.54
42:BN:49:GLU:OE2	42:BN:95:THR:HG22	2.07	0.54
44:BQ:87:VAL:HG12	44:BQ:89:ILE:HD13	1.89	0.54
48:BG:25:ILE:O	48:BG:32:LEU:HA	2.07	0.54
1:CA:270:A:H2'	1:CA:271:C:H6	1.71	0.54
1:CA:586:C:O2'	1:CA:587:G:H5'	2.07	0.54
1:CA:1060:U:H5''	9:CJ:53:ILE:CD1	2.38	0.54
1:CA:1351:U:O2'	1:CA:1352:C:H5'	2.08	0.54
3:CD:104:MET:SD	3:CD:179:GLY:HA3	2.47	0.54
4:CE:81:GLN:HG2	4:CE:148:SER:HA	1.88	0.54
4:CE:131:ASN:O	4:CE:135:VAL:HG23	2.08	0.54
12:CM:95:PRO:N	12:CM:108:ARG:HG2	2.22	0.54
14:CO:78:TYR:CZ	14:CO:82:ILE:HD11	2.42	0.54
20:CB:112:ARG:NH2	20:CB:116:LEU:HD21	2.22	0.54
23:DB:125:A:H3'	23:DB:126:A:H5''	1.89	0.54
23:DB:165:A:H2'	23:DB:166:U:C6	2.42	0.54
23:DB:181:A:H2'	23:DB:182:A:H8	1.72	0.54
23:DB:660:C:H2'	23:DB:661:A:H8	1.72	0.54
23:DB:1159:U:O2'	23:DB:1160:G:H5'	2.07	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:2845:U:O2'	23:DB:2846:G:H5'	2.06	0.54
23:DB:2886:A:H62	31:D0:39:ARG:CD	2.19	0.54
26:DD:14:ILE:HG22	26:DD:22:ILE:O	2.06	0.54
28:DP:91:VAL:CG2	28:DP:96:LEU:HD21	2.37	0.54
30:DY:8:GLN:CG	30:DY:31:ILE:HA	2.36	0.54
34:D3:24:LYS:HB2	37:DL:64:PHE:CD2	2.42	0.54
37:DL:3:LEU:O	37:DL:5:THR:N	2.40	0.54
37:DL:65:GLY:O	37:DL:66:PHE:HB3	2.06	0.54
43:DO:58:ILE:O	43:DO:62:LEU:HB2	2.07	0.54
44:DQ:10:ARG:HB2	44:DQ:10:ARG:CZ	2.36	0.54
46:DU:60:LYS:HE2	46:DU:60:LYS:HA	1.87	0.54
50:DT:54:GLU:HB3	50:DT:88:LYS:HB2	1.89	0.54
1:AA:108:G:O6	19:AT:9:ARG:HG2	2.08	0.54
1:AA:437:U:H4'	3:AD:153:ARG:NH1	2.23	0.54
1:AA:1308:U:H2'	1:AA:1309:G:H8	1.72	0.54
3:AD:106:PHE:CG	3:AD:144:ILE:HD11	2.42	0.54
16:AQ:30:HIS:CE1	16:AQ:32:ILE:HG22	2.42	0.54
20:AB:125:PHE:C	20:AB:127:LYS:HD2	2.33	0.54
23:BB:37:C:H4'	23:BB:451:U:OP1	2.08	0.54
23:BB:1666:G:O2'	23:BB:1667:G:H5'	2.06	0.54
23:BB:2867:G:N3	23:BB:2867:G:C2'	2.70	0.54
24:BI:17:ALA:O	24:BI:18:ASN:HB3	2.07	0.54
28:BP:102:ARG:HD2	28:BP:106:ALA:O	2.08	0.54
31:B0:38:LEU:HB3	31:B0:41:HIS:CD2	2.43	0.54
34:B3:14:LYS:O	34:B3:21:PHE:O	2.25	0.54
38:BM:36:VAL:HB	38:BM:127:LYS:O	2.08	0.54
40:BH:47:PHE:CA	40:BH:50:ARG:HH21	2.20	0.54
47:BF:19:PHE:CE2	47:BF:164:GLU:HG2	2.43	0.54
51:BZ:5:CYS:SG	51:BZ:8:THR:HG23	2.48	0.54
1:CA:98:A:H2'	1:CA:99:C:H6	1.72	0.54
1:CA:492:C:H2'	1:CA:493:A:N3	2.22	0.54
1:CA:922:G:N3	1:CA:1398:A:H2	2.04	0.54
1:CA:1225:A:H5'	1:CA:1226:C:OP2	2.07	0.54
2:CC:176:THR:HB	2:CC:179:ALA:HB2	1.88	0.54
3:CD:106:PHE:CG	3:CD:144:ILE:HD11	2.42	0.54
8:CI:56:MET:CG	8:CI:57:VAL:H	2.20	0.54
16:CQ:11:VAL:HG23	16:CQ:56:ASP:O	2.08	0.54
18:CS:27:LYS:HB2	18:CS:28:LYS:NZ	2.22	0.54
18:CS:30:LEU:HB2	18:CS:48:ILE:HG23	1.87	0.54
23:DB:575:A:O2'	23:DB:576:U:H5'	2.08	0.54
23:DB:972:A:C3'	23:DB:973:A:H5''	2.33	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:1181:U:H2'	23:DB:1182:G:H8	1.71	0.54
23:DB:1197:G:H2'	23:DB:1198:U:H6	1.72	0.54
23:DB:1292:G:H2'	23:DB:1293:C:C6	2.42	0.54
23:DB:1422:G:H1'	23:DB:1495:A:H61	1.73	0.54
23:DB:2196:C:O2'	23:DB:2197:U:H5'	2.07	0.54
23:DB:2893:A:H4'	23:DB:2894:G:O5'	2.07	0.54
25:DC:12:ARG:O	25:DC:12:ARG:HD3	2.07	0.54
34:D3:41:ARG:HG3	34:D3:44:ARG:HH22	1.71	0.54
37:DL:4:ASN:N	37:DL:4:ASN:HD22	2.04	0.54
41:DJ:30:THR:HG23	41:DJ:31:GLU:H	1.71	0.54
47:DF:119:LYS:C	47:DF:121:PHE:H	2.15	0.54
1:AA:314:C:O2'	1:AA:315:A:H5'	2.07	0.54
1:AA:501:C:H1'	1:AA:549:C:H1'	1.89	0.54
1:AA:1060:U:H5''	9:AJ:53:ILE:CD1	2.37	0.54
3:AD:84:ASN:ND2	3:AD:86:GLY:H	2.05	0.54
6:AG:94:ARG:NH1	6:AG:98:LEU:HD21	2.23	0.54
7:AH:66:GLN:C	7:AH:68:LYS:H	2.15	0.54
7:AH:124:ILE:HG22	7:AH:125:ILE:N	2.22	0.54
19:AT:38:ILE:HD13	19:AT:38:ILE:O	2.08	0.54
23:BB:45:G:C5'	23:BB:46:G:H5'	2.36	0.54
23:BB:417:C:H2'	23:BB:418:C:H6	1.73	0.54
23:BB:1654:A:H2'	23:BB:1655:A:H8	1.73	0.54
23:BB:1870:C:H5''	23:BB:1871:A:C6	2.42	0.54
23:BB:2216:G:H2'	23:BB:2217:G:H8	1.72	0.54
23:BB:2436:G:O2'	23:BB:2437:G:H5'	2.07	0.54
24:BI:58:ILE:HD12	24:BI:58:ILE:N	2.22	0.54
28:BP:6:GLN:HA	28:BP:9:GLN:CD	2.33	0.54
29:BE:6:LYS:HB2	29:BE:120:VAL:O	2.07	0.54
44:BQ:10:ARG:HB2	44:BQ:10:ARG:CZ	2.37	0.54
48:BG:30:GLY:HA3	48:BG:78:VAL:HG12	1.89	0.54
48:BG:108:PHE:HD1	48:BG:108:PHE:H	1.53	0.54
1:CA:254:G:OP1	16:CQ:68:LYS:O	2.26	0.54
1:CA:333:U:H2'	1:CA:334:C:H6	1.71	0.54
1:CA:430:A:OP1	3:CD:8:LEU:HB2	2.07	0.54
1:CA:512:U:O2'	1:CA:513:C:H5'	2.06	0.54
1:CA:1521:C:H2'	1:CA:1522:U:C6	2.42	0.54
3:CD:151:GLN:HE21	3:CD:153:ARG:HG2	1.73	0.54
4:CE:59:ILE:O	4:CE:63:MET:HG2	2.08	0.54
5:CF:6:ILE:HD11	5:CF:8:PHE:HD2	1.72	0.54
6:CG:45:ALA:HB3	6:CG:119:LEU:HD23	1.89	0.54
18:CS:66:VAL:C	18:CS:68:HIS:H	2.16	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:CB:80:LYS:HG3	20:CB:81:ASP:N	2.23	0.54
23:DB:150:U:H2'	23:DB:151:C:C6	2.43	0.54
23:DB:1447:C:H2'	23:DB:1448:G:C8	2.42	0.54
23:DB:1541:C:H2'	23:DB:1542:U:C6	2.42	0.54
23:DB:1599:U:H2'	23:DB:1600:C:H6	1.72	0.54
23:DB:2450:A:O2'	23:DB:2451:A:H5'	2.07	0.54
23:DB:2666:C:O4'	23:DB:2666:C:O2	2.25	0.54
23:DB:2700:A:H2'	23:DB:2701:U:C6	2.43	0.54
23:DB:2867:G:N3	23:DB:2867:G:C2'	2.70	0.54
27:DK:53:LYS:HD3	27:DK:56:ASP:OD2	2.08	0.54
29:DE:28:VAL:O	29:DE:32:VAL:HG13	2.07	0.54
33:D1:35:LEU:O	33:D1:36:LYS:HB2	2.06	0.54
40:DH:47:PHE:O	40:DH:51:ARG:HB2	2.08	0.54
40:DH:87:GLU:N	40:DH:89:LYS:HZ2	2.04	0.54
41:DJ:17:VAL:HG22	41:DJ:55:ILE:HD11	1.90	0.54
41:DJ:30:THR:HG23	41:DJ:31:GLU:N	2.22	0.54
41:DJ:44:TYR:O	41:DJ:45:THR:HB	2.07	0.54
49:DR:62:GLU:O	49:DR:96:VAL:HA	2.07	0.54
52:DW:37:VAL:HG11	52:DW:38:ARG:HH11	1.72	0.54
1:AA:93:U:H2'	1:AA:94:G:H4'	1.89	0.54
1:AA:177:G:H5''	19:AT:59:ARG:NH2	2.22	0.54
1:AA:212:G:H2'	1:AA:213:G:C8	2.42	0.54
1:AA:313:A:H2'	1:AA:314:C:C6	2.43	0.54
1:AA:333:U:H2'	1:AA:334:C:C6	2.43	0.54
1:AA:1076:U:H2'	1:AA:1077:G:C8	2.43	0.54
1:AA:1131:G:O2'	1:AA:1132:C:H5'	2.07	0.54
1:AA:1173:U:H2'	1:AA:1174:G:C8	2.42	0.54
20:AB:15:PHE:HA	20:AB:42:LEU:HD21	1.88	0.54
22:BA:42:C:C5	47:BF:65:LEU:HD22	2.43	0.54
22:BA:89:U:O2	23:BB:958:U:H2'	2.08	0.54
23:BB:538:A:N6	23:BB:555:G:O2'	2.41	0.54
23:BB:1784:A:H4'	23:BB:1785:A:O5'	2.07	0.54
23:BB:1859:U:H2'	23:BB:1860:G:C8	2.42	0.54
23:BB:1889:A:H2'	23:BB:1890:A:C8	2.42	0.54
23:BB:2150:C:H2'	23:BB:2151:U:H6	1.71	0.54
23:BB:2543:G:H5'	23:BB:2543:G:H8	1.71	0.54
23:BB:2639:A:H2'	23:BB:2640:G:O4'	2.07	0.54
23:BB:2756:U:H1'	23:BB:2757:A:H5''	1.87	0.54
23:BB:2875:C:H2'	23:BB:2876:G:H8	1.73	0.54
25:BC:93:VAL:HG21	25:BC:115:ILE:HD11	1.88	0.54
25:BC:185:ALA:C	25:BC:187:CYS:H	2.14	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BE:98:LYS:HG2	29:BE:99:LYS:N	2.21	0.54
29:BE:102:ARG:HH21	29:BE:102:ARG:HG3	1.72	0.54
30:BY:2:LYS:HE3	30:BY:58:GLU:HB3	1.89	0.54
47:BF:42:ALA:O	47:BF:43:ILE:C	2.51	0.54
47:BF:65:LEU:HD23	47:BF:87:LYS:HD2	1.89	0.54
1:CA:113:G:H2'	1:CA:114:U:C6	2.42	0.54
1:CA:731:G:H5'	1:CA:766:A:H4'	1.90	0.54
1:CA:1099:G:H2'	1:CA:1100:C:O4'	2.08	0.54
1:CA:1137:C:O2'	1:CA:1138:G:H5''	2.07	0.54
1:CA:1270:G:H2'	1:CA:1271:A:H8	1.73	0.54
4:CE:132:PRO:O	4:CE:136:VAL:HG12	2.08	0.54
6:CG:86:VAL:HG22	6:CG:150:PHE:HB3	1.88	0.54
9:CJ:92:LEU:HD22	9:CJ:92:LEU:H	1.73	0.54
13:CN:20:PHE:CB	13:CN:24:ALA:HB2	2.38	0.54
17:CR:33:THR:C	17:CR:35:SER:H	2.15	0.54
23:DB:162:U:O2'	23:DB:163:C:H5'	2.07	0.54
23:DB:1779:U:H5	23:DB:1784:A:N7	2.06	0.54
23:DB:1932:A:H2'	23:DB:1933:G:O4'	2.07	0.54
23:DB:2700:A:H2'	23:DB:2701:U:H6	1.72	0.54
23:DB:2815:C:H2'	23:DB:2816:G:H8	1.73	0.54
23:DB:2880:C:C1'	42:DN:91:ALA:HB3	2.38	0.54
30:DY:26:LEU:HB2	30:DY:28:LEU:HG	1.89	0.54
31:D0:38:LEU:HB3	31:D0:41:HIS:CD2	2.43	0.54
34:D3:54:LEU:O	34:D3:58:ILE:HG13	2.08	0.54
40:DH:119:ASN:O	40:DH:121:VAL:HG22	2.08	0.54
42:DN:52:ILE:O	42:DN:55:ALA:HB3	2.08	0.54
45:DS:96:ILE:HG23	45:DS:96:ILE:O	2.06	0.54
51:DZ:49:LEU:HB2	51:DZ:51:VAL:HG23	1.88	0.54
51:DZ:64:ILE:HD12	51:DZ:64:ILE:N	2.19	0.54
1:AA:1239:A:H62	1:AA:1299:A:H62	1.56	0.54
1:AA:1314:C:H2'	1:AA:1315:U:C6	2.42	0.54
9:AJ:17:LEU:HD22	9:AJ:96:VAL:CG1	2.38	0.54
14:AO:28:GLN:O	14:AO:32:LEU:HD23	2.08	0.54
20:AB:80:LYS:HG3	20:AB:81:ASP:N	2.22	0.54
22:BA:10:G:H2'	22:BA:11:C:O4'	2.08	0.54
23:BB:3:U:O5'	23:BB:3:U:H6	1.90	0.54
23:BB:416:U:H2'	23:BB:417:C:C6	2.43	0.54
23:BB:559:G:P	41:BJ:111:LYS:HD3	2.48	0.54
23:BB:705:A:N6	23:BB:726:G:O2'	2.40	0.54
23:BB:786:C:O2'	23:BB:787:C:H5'	2.08	0.54
23:BB:848:C:H2'	23:BB:849:A:C8	2.43	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:1501:G:O2'	23:BB:1502:A:H5'	2.08	0.54
23:BB:2080:A:OP1	51:BZ:20:HIS:HB3	2.08	0.54
23:BB:2272:U:H5''	23:BB:2273:A:OP1	2.07	0.54
23:BB:2467:C:H1'	38:BM:122:ALA:HB1	1.90	0.54
25:BC:151:GLY:C	25:BC:152:GLN:HG3	2.31	0.54
28:BP:4:ILE:O	28:BP:6:GLN:N	2.36	0.54
33:B1:49:LYS:HG3	33:B1:50:GLU:N	2.17	0.54
34:B3:18:LYS:HD2	34:B3:19:GLY:N	2.23	0.54
41:BJ:30:THR:HG23	41:BJ:31:GLU:H	1.71	0.54
42:BN:9:GLN:O	42:BN:11:ASN:N	2.41	0.54
42:BN:13:ASN:C	42:BN:15:SER:H	2.14	0.54
45:BS:43:ALA:HA	45:BS:46:LEU:HD12	1.89	0.54
46:BU:80:ASP:O	46:BU:96:LYS:HG2	2.08	0.54
48:BG:17:LYS:HZ2	48:BG:17:LYS:HA	1.73	0.54
1:CA:1329:A:O2'	1:CA:1330:U:H5'	2.07	0.54
1:CA:1476:A:H2'	1:CA:1477:U:O4'	2.07	0.54
3:CD:165:GLU:CG	3:CD:166:LYS:H	2.12	0.54
15:CP:67:ILE:HD11	15:CP:71:VAL:HG22	1.90	0.54
22:DA:13:G:C2'	22:DA:14:U:H5''	2.38	0.54
23:DB:438:G:H2'	23:DB:439:A:H8	1.73	0.54
23:DB:996:A:H4'	44:DQ:91:ARG:CG	2.38	0.54
23:DB:1229:C:H2'	23:DB:1230:A:H8	1.72	0.54
23:DB:1567:G:H5'	25:DC:57:HIS:CD2	2.43	0.54
23:DB:1728:C:O2'	23:DB:1729:U:H5'	2.08	0.54
23:DB:2269:G:H4'	52:DW:19:ARG:HH11	1.72	0.54
24:DI:54:ILE:HD13	24:DI:54:ILE:C	2.32	0.54
29:DE:173:THR:C	29:DE:175:ILE:H	2.15	0.54
37:DL:3:LEU:O	37:DL:5:THR:HG23	2.08	0.54
37:DL:42:SER:C	37:DL:44:GLY:H	2.16	0.54
38:DM:108:VAL:HG13	38:DM:112:LEU:HB3	1.90	0.54
43:DO:94:ARG:HD2	43:DO:97:PHE:O	2.08	0.54
51:DZ:5:CYS:O	51:DZ:6:GLN:HB3	2.08	0.54
52:DW:24:ARG:HD3	52:DW:65:LYS:HE3	1.90	0.54
1:AA:783:C:O2'	1:AA:784:A:H5'	2.07	0.54
3:AD:55:ARG:HH11	3:AD:55:ARG:HG3	1.73	0.54
7:AH:86:LYS:HD2	7:AH:90:GLU:HG3	1.89	0.54
11:AL:82:ARG:HB2	11:AL:97:VAL:HG22	1.90	0.54
13:AN:20:PHE:CB	13:AN:24:ALA:HB2	2.37	0.54
21:AU:8:ASN:O	21:AU:9:GLU:HB3	2.08	0.54
23:BB:156:A:H2'	23:BB:157:C:H6	1.73	0.54
23:BB:160:A:H2'	23:BB:161:A:C8	2.43	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:925:A:O2'	23:BB:926:G:H5'	2.08	0.54
23:BB:1013:C:H2'	23:BB:1014:A:H8	1.73	0.54
23:BB:1015:U:H2'	23:BB:1016:G:H8	1.73	0.54
23:BB:1164:C:H2'	23:BB:1165:A:H8	1.73	0.54
23:BB:2100:G:C6	23:BB:2190:G:C6	2.96	0.54
26:BD:33:ARG:CZ	26:BD:74:GLU:HB3	2.38	0.54
27:BK:70:ARG:HB3	27:BK:70:ARG:HH11	1.73	0.54
29:BE:148:ILE:HD13	29:BE:187:VAL:CG2	2.37	0.54
30:BY:2:LYS:H	30:BY:2:LYS:CD	2.18	0.54
34:B3:50:SER:C	34:B3:52:GLY:H	2.16	0.54
42:BN:39:PRO:C	42:BN:41:ALA:H	2.16	0.54
49:BR:34:GLU:CD	49:BR:60:LYS:HE2	2.33	0.54
49:BR:58:VAL:O	49:BR:58:VAL:HG13	2.08	0.54
1:CA:62:U:H2'	1:CA:63:C:C6	2.43	0.54
1:CA:168:G:O2'	1:CA:169:C:H5'	2.08	0.54
2:CC:141:MET:HE3	2:CC:141:MET:HA	1.89	0.54
10:CK:80:ASN:HD22	10:CK:80:ASN:N	2.04	0.54
12:CM:7:ASN:ND2	12:CM:7:ASN:H	2.06	0.54
20:CB:75:ALA:O	20:CB:79:VAL:HG23	2.08	0.54
23:DB:335:C:O2'	23:DB:336:C:H5'	2.08	0.54
23:DB:1013:C:H2'	23:DB:1014:A:C8	2.42	0.54
23:DB:1152:C:H4'	44:DQ:76:SER:HA	1.88	0.54
23:DB:1181:U:O2'	23:DB:1182:G:H5'	2.07	0.54
23:DB:2339:C:H2'	23:DB:2340:A:C8	2.42	0.54
24:DI:45:THR:HA	24:DI:48:ILE:CG2	2.37	0.54
26:DD:9:VAL:HG22	26:DD:9:VAL:O	2.08	0.54
28:DP:3:ILE:HD13	28:DP:3:ILE:C	2.33	0.54
33:D1:7:LYS:HD3	34:D3:33:THR:HG21	1.90	0.54
35:DV:89:ILE:O	35:DV:89:ILE:HD12	2.07	0.54
37:DL:19:LEU:HD23	37:DL:31:GLY:O	2.07	0.54
38:DM:30:SER:HA	38:DM:133:LYS:HB2	1.90	0.54
42:DN:106:ASP:OD1	42:DN:108:ALA:HB3	2.08	0.54
45:DS:71:VAL:HA	45:DS:107:VAL:HA	1.90	0.54
46:DU:81:ARG:HB2	46:DU:96:LYS:CG	2.37	0.54
47:DF:71:LYS:HE2	47:DF:73:VAL:HB	1.90	0.54
52:DW:28:GLU:HB2	52:DW:31:LEU:HD21	1.90	0.54
1:AA:253:A:H2'	1:AA:254:G:H8	1.72	0.54
1:AA:333:U:H2'	1:AA:334:C:H6	1.73	0.54
1:AA:845:A:N7	1:AA:846:G:H1'	2.23	0.54
2:AC:171:ARG:HB2	2:AC:171:ARG:HH11	1.72	0.54
8:AI:56:MET:CG	8:AI:57:VAL:H	2.20	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AK:92:ARG:HH21	21:AU:24:LYS:CG	2.21	0.54
20:AB:93:HIS:CD2	20:AB:145:ASN:HB3	2.43	0.54
23:BB:19:A:H2'	23:BB:20:C:C6	2.43	0.54
23:BB:460:A:H2'	23:BB:461:C:O4'	2.07	0.54
23:BB:639:U:H2'	23:BB:640:C:C6	2.43	0.54
23:BB:923:G:H1'	52:BW:23:LYS:NZ	2.22	0.54
23:BB:942:G:O2'	23:BB:943:A:H5'	2.07	0.54
23:BB:1274:A:N3	23:BB:1297:C:H1'	2.23	0.54
23:BB:1877:A:H2'	23:BB:1878:G:C8	2.42	0.54
23:BB:2230:G:H2'	23:BB:2231:U:C6	2.42	0.54
23:BB:2680:U:OP2	26:BD:114:LYS:HB3	2.08	0.54
29:BE:58:LYS:HZ3	29:BE:58:LYS:HB2	1.73	0.54
40:BH:5:LEU:O	40:BH:6:LEU:HD12	2.08	0.54
40:BH:27:ARG:NE	51:BZ:64:ILE:HD11	2.21	0.54
40:BH:94:ILE:HG23	40:BH:99:ILE:HD11	1.90	0.54
41:BJ:16:TYR:O	41:BJ:55:ILE:HG12	2.08	0.54
47:BF:134:GLN:NE2	47:BF:136:ILE:HD13	2.23	0.54
47:BF:147:ARG:HB3	47:BF:147:ARG:CZ	2.37	0.54
47:BF:168:LEU:HD13	47:BF:169:LEU:N	2.22	0.54
48:BG:148:ARG:HD3	48:BG:152:ARG:NE	2.23	0.54
49:BR:6:GLN:HE21	49:BR:7:SER:N	2.06	0.54
1:CA:106:C:O2'	1:CA:107:G:H5'	2.07	0.54
1:CA:241:G:O2'	1:CA:242:G:H5'	2.07	0.54
1:CA:1101:A:H4'	1:CA:1102:A:O5'	2.07	0.54
1:CA:1314:C:H2'	1:CA:1315:U:C6	2.42	0.54
1:CA:1369:C:H2'	1:CA:1370:G:C8	2.42	0.54
5:CF:10:VAL:HG12	5:CF:11:HIS:H	1.73	0.54
9:CJ:29:ALA:O	9:CJ:32:THR:HG22	2.07	0.54
19:CT:48:LYS:O	19:CT:52:GLU:HB3	2.08	0.54
21:CU:44:ARG:HH11	21:CU:44:ARG:HG2	1.73	0.54
23:DB:154:U:H2'	23:DB:155:A:C8	2.43	0.54
23:DB:460:A:H2'	23:DB:461:C:O4'	2.08	0.54
23:DB:557:C:H2'	23:DB:558:U:H6	1.72	0.54
23:DB:919:U:H2'	23:DB:920:A:H8	1.67	0.54
23:DB:1816:C:H3'	25:DC:61:TYR:HE2	1.71	0.54
23:DB:2286:G:C8	23:DB:2286:G:H5'	2.43	0.54
23:DB:2405:G:H1'	23:DB:2412:A:H61	1.73	0.54
23:DB:2662:A:H2'	23:DB:2663:G:O4'	2.08	0.54
23:DB:2841:C:H2'	23:DB:2842:G:H8	1.73	0.54
24:DI:17:ALA:O	24:DI:18:ASN:CB	2.56	0.54
24:DI:24:GLY:HA2	24:DI:34:ILE:HD12	1.89	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DC:149:LYS:HD3	25:DC:152:GLN:NE2	2.21	0.54
25:DC:226:PRO:CG	25:DC:233:GLY:H	2.15	0.54
26:DD:33:ARG:CZ	26:DD:74:GLU:HB3	2.38	0.54
33:D1:29:LYS:HA	33:D1:31:GLU:OE1	2.07	0.54
35:DV:46:LYS:N	35:DV:46:LYS:HD2	2.22	0.54
35:DV:78:GLN:HB2	35:DV:88:HIS:O	2.08	0.54
36:D2:10:LEU:HD21	36:D2:14:ARG:HH11	1.73	0.54
41:DJ:45:THR:OG1	41:DJ:48:VAL:HB	2.08	0.54
46:DU:58:VAL:HG12	46:DU:59:GLU:N	2.18	0.54
49:DR:78:ARG:HG3	49:DR:78:ARG:HH21	1.72	0.54
52:DW:9:THR:CG2	52:DW:10:ARG:HH11	2.21	0.54
1:AA:17:U:H2'	1:AA:18:C:H6	1.72	0.54
1:AA:68:G:C5'	1:AA:171:A:H1'	2.32	0.54
1:AA:178:C:O2'	1:AA:179:A:H5'	2.08	0.54
1:AA:373:A:H3'	1:AA:373:A:OP2	2.08	0.54
1:AA:784:A:H2'	1:AA:785:G:H8	1.73	0.54
1:AA:818:G:H3'	1:AA:819:A:C5'	2.38	0.54
1:AA:996:A:H2'	1:AA:997:U:C6	2.43	0.54
1:AA:1057:G:H4'	2:AC:196:GLY:H	1.73	0.54
2:AC:26:LYS:HE2	2:AC:27:GLU:HG3	1.90	0.54
2:AC:48:LYS:H	2:AC:48:LYS:CD	2.17	0.54
8:AI:44:ARG:HH11	8:AI:44:ARG:HG2	1.71	0.54
12:AM:19:THR:HA	12:AM:24:VAL:HG23	1.90	0.54
23:BB:636:G:H3'	37:BL:128:THR:HG21	1.89	0.54
23:BB:841:G:O2'	23:BB:842:U:H5'	2.07	0.54
23:BB:1029:A:H2'	23:BB:1030:C:O4'	2.08	0.54
23:BB:1482:G:N2	23:BB:1508:A:H1'	2.23	0.54
23:BB:1508:A:H2'	23:BB:1509:A:C2	2.43	0.54
23:BB:2277:G:H5''	38:BM:86:LYS:HB3	1.90	0.54
23:BB:2443:C:H2'	23:BB:2444:G:C8	2.43	0.54
23:BB:2861:U:H2'	23:BB:2862:G:H8	1.73	0.54
26:BD:62:LYS:HB2	26:BD:63:PRO:HD3	1.90	0.54
35:BV:14:LYS:HE3	35:BV:18:ARG:NH2	2.21	0.54
48:BG:154:GLU:OE2	48:BG:156:TYR:HB2	2.07	0.54
50:BT:43:ILE:O	50:BT:47:VAL:HG23	2.06	0.54
51:BZ:6:GLN:HE22	51:BZ:77:LYS:CE	2.20	0.54
52:BW:37:VAL:HG11	52:BW:38:ARG:HH11	1.71	0.54
1:CA:157:U:O2'	1:CA:158:G:H5'	2.07	0.54
1:CA:373:A:H3'	1:CA:373:A:OP2	2.08	0.54
1:CA:384:G:H2'	1:CA:385:C:C6	2.43	0.54
1:CA:845:A:N7	1:CA:846:G:H1'	2.23	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1096:C:H2'	1:CA:1097:C:C6	2.43	0.54
1:CA:1230:C:H2'	1:CA:1231:G:H8	1.72	0.54
1:CA:1307:U:H2'	1:CA:1308:U:C6	2.42	0.54
1:CA:1321:U:H2'	1:CA:1322:C:C5	2.42	0.54
1:CA:1392:G:O2'	1:CA:1393:U:H5'	2.07	0.54
1:CA:1438:G:O2'	1:CA:1439:G:H5'	2.08	0.54
2:CC:134:LYS:HA	2:CC:167:TYR:HE2	1.72	0.54
3:CD:104:MET:SD	3:CD:142:VAL:HB	2.48	0.54
5:CF:93:LYS:O	5:CF:94:HIS:HB2	2.06	0.54
23:DB:182:A:H2'	23:DB:183:C:C6	2.43	0.54
23:DB:1454:C:H5'	42:DN:63:ARG:NE	2.23	0.54
23:DB:1535:A:H5''	23:DB:1536:C:H5	1.71	0.54
23:DB:2359:C:H2'	23:DB:2360:G:C8	2.43	0.54
23:DB:2643:G:H2'	23:DB:2644:G:O4'	2.08	0.54
24:DI:76:ALA:HA	24:DI:135:MET:SD	2.48	0.54
25:DC:93:VAL:HG21	25:DC:115:ILE:HD11	1.89	0.54
26:DD:168:GLU:O	26:DD:170:VAL:HG22	2.08	0.54
27:DK:3:GLN:HG2	27:DK:4:GLU:N	2.22	0.54
28:DP:3:ILE:HG23	28:DP:4:ILE:N	2.23	0.54
35:DV:10:LYS:HG2	35:DV:11:GLU:HG3	1.89	0.54
45:DS:24:ILE:CG1	45:DS:36:LEU:HD21	2.38	0.54
45:DS:86:MET:HG3	45:DS:96:ILE:HD12	1.88	0.54
49:DR:15:SER:H	49:DR:18:GLN:CD	2.15	0.54
1:AA:72:A:H2'	1:AA:73:C:H6	1.73	0.53
1:AA:370:C:O2'	1:AA:371:A:H5'	2.08	0.53
1:AA:1142:G:H2'	1:AA:1143:G:O4'	2.08	0.53
1:AA:1343:G:H2'	1:AA:1344:C:H6	1.73	0.53
6:AG:61:PHE:O	6:AG:65:LEU:HD13	2.08	0.53
14:AO:56:LEU:HD21	23:BB:715:A:C2	2.44	0.53
23:BB:968:C:H2'	23:BB:969:G:C8	2.43	0.53
23:BB:1535:A:H3'	23:BB:1536:C:H6	1.74	0.53
23:BB:1571:A:H2'	23:BB:1572:A:C8	2.43	0.53
23:BB:1607:C:H4'	23:BB:1608:A:O5'	2.08	0.53
23:BB:2292:U:H2'	23:BB:2293:G:H8	1.74	0.53
23:BB:2633:G:H2'	23:BB:2634:A:O4'	2.07	0.53
27:BK:53:LYS:HD3	27:BK:56:ASP:OD2	2.09	0.53
27:BK:99:ILE:N	27:BK:118:LEU:HD22	2.23	0.53
27:BK:107:LEU:C	27:BK:109:SER:H	2.16	0.53
34:B3:54:LEU:O	34:B3:58:ILE:HG13	2.07	0.53
37:BL:100:ILE:O	37:BL:100:ILE:HG12	2.07	0.53
38:BM:71:LYS:HE3	38:BM:73:ILE:HD11	1.90	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BM:71:LYS:HG2	38:BM:73:ILE:HD11	1.90	0.53
40:BH:49:ALA:HB3	40:BH:50:ARG:CZ	2.38	0.53
40:BH:62:LEU:HD13	40:BH:66:ASN:HD21	1.73	0.53
1:CA:176:C:H2'	1:CA:177:G:N3	2.22	0.53
1:CA:177:G:H5''	19:CT:59:ARG:NH2	2.22	0.53
1:CA:335:C:H2'	1:CA:336:A:C8	2.44	0.53
1:CA:586:C:C2'	1:CA:587:G:H5'	2.38	0.53
1:CA:679:C:H2'	1:CA:680:C:H6	1.72	0.53
1:CA:1250:A:H4'	8:CI:69:GLY:N	2.19	0.53
1:CA:1343:G:H2'	1:CA:1344:C:H6	1.73	0.53
20:CB:144:GLU:O	20:CB:148:GLY:HA3	2.08	0.53
20:CB:218:ALA:O	20:CB:222:GLU:HG2	2.08	0.53
23:DB:45:G:H5'	23:DB:46:G:OP1	2.08	0.53
23:DB:79:C:O2'	23:DB:346:A:H1'	2.07	0.53
23:DB:580:U:O2'	23:DB:581:C:H5'	2.07	0.53
23:DB:740:C:O2'	23:DB:741:U:H5'	2.08	0.53
23:DB:851:C:O4'	30:DY:46:MET:HG2	2.08	0.53
23:DB:1060:U:OP2	24:DI:74:PRO:HA	2.08	0.53
23:DB:1140:C:H2'	23:DB:1141:U:H5'	1.90	0.53
23:DB:1444:G:H2'	23:DB:1445:G:C8	2.43	0.53
23:DB:1583:A:H5''	23:DB:1584:U:OP1	2.08	0.53
23:DB:2065:C:H2'	23:DB:2066:C:C6	2.43	0.53
24:DI:32:VAL:HG22	24:DI:60:VAL:CG2	2.38	0.53
25:DC:94:LEU:HB2	25:DC:100:ARG:HD3	1.89	0.53
28:DP:88:ARG:HB2	28:DP:112:ARG:CZ	2.38	0.53
29:DE:195:GLN:HA	29:DE:198:GLU:CD	2.33	0.53
35:DV:75:GLN:HG2	35:DV:92:VAL:HB	1.90	0.53
40:DH:118:PRO:O	40:DH:119:ASN:HB3	2.08	0.53
47:DF:104:THR:C	47:DF:108:PRO:HG2	2.33	0.53
48:DG:30:GLY:HA3	48:DG:78:VAL:HG12	1.88	0.53
52:DW:24:ARG:CD	52:DW:65:LYS:HG2	2.38	0.53
1:AA:492:C:H2'	1:AA:493:A:N3	2.24	0.53
1:AA:777:A:H2'	1:AA:778:G:C8	2.43	0.53
1:AA:1270:G:H2'	1:AA:1271:A:H8	1.73	0.53
1:AA:1521:C:H2'	1:AA:1522:U:H6	1.73	0.53
3:AD:160:LEU:N	3:AD:160:LEU:HD13	2.24	0.53
5:AF:3:HIS:CE1	5:AF:95:ALA:H	2.26	0.53
6:AG:45:ALA:HB3	6:AG:119:LEU:HD23	1.89	0.53
6:AG:86:VAL:HG22	6:AG:150:PHE:HB3	1.90	0.53
8:AI:57:VAL:HB	8:AI:58:GLU:OE2	2.08	0.53
11:AL:107:LYS:NZ	11:AL:107:LYS:N	2.56	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AM:85:TYR:HA	12:AM:88:LEU:HD12	1.89	0.53
13:AN:16:ALA:HA	13:AN:54:SER:O	2.07	0.53
18:AS:66:VAL:C	18:AS:68:HIS:H	2.16	0.53
21:AU:48:LYS:HG3	21:AU:49:ALA:N	2.24	0.53
23:BB:528:A:C2	23:BB:2043:C:H4'	2.42	0.53
23:BB:592:A:N3	34:B3:3:ILE:HD11	2.23	0.53
23:BB:937:C:H2'	23:BB:938:G:H8	1.73	0.53
23:BB:1197:G:H2'	23:BB:1198:U:H6	1.73	0.53
23:BB:1654:A:O2'	26:BD:118:PHE:HB2	2.07	0.53
23:BB:2700:A:H2'	23:BB:2701:U:C6	2.43	0.53
23:BB:2886:A:H62	31:B0:39:ARG:CD	2.21	0.53
24:BI:52:LEU:HD21	24:BI:81:LYS:HZ2	1.73	0.53
24:BI:81:LYS:HG3	24:BI:82:ALA:N	2.23	0.53
29:BE:188:MET:HG2	29:BE:193:VAL:HG22	1.90	0.53
35:BV:77:VAL:HG12	38:BM:136:MET:HE2	1.89	0.53
36:B2:21:ARG:HD2	36:B2:43:THR:HG21	1.90	0.53
43:BO:9:ARG:HG3	43:BO:10:ARG:N	2.23	0.53
45:BS:71:VAL:HA	45:BS:107:VAL:HA	1.91	0.53
45:BS:86:MET:HG3	45:BS:96:ILE:HD12	1.90	0.53
45:BS:96:ILE:HG23	45:BS:96:ILE:O	2.07	0.53
48:BG:154:GLU:C	48:BG:156:TYR:H	2.15	0.53
52:BW:39:GLN:HG3	52:BW:42:THR:CB	2.38	0.53
1:CA:499:A:H4'	1:CA:500:G:OP1	2.07	0.53
1:CA:560:A:H5'	1:CA:566:G:N2	2.22	0.53
1:CA:818:G:H3'	1:CA:819:A:C5'	2.38	0.53
1:CA:1003:G:N2	1:CA:1005:A:H5'	2.23	0.53
5:CF:3:HIS:HB2	5:CF:92:THR:CA	2.33	0.53
12:CM:47:LEU:HD13	12:CM:51:GLN:O	2.08	0.53
12:CM:106:ARG:HD3	12:CM:110:GLY:O	2.07	0.53
15:CP:36:VAL:O	15:CP:36:VAL:HG13	2.07	0.53
18:CS:30:LEU:HB2	18:CS:48:ILE:HA	1.90	0.53
22:DA:43:C:H1'	47:DF:91:ARG:NH2	2.22	0.53
22:DA:89:U:O2	23:DB:958:U:H2'	2.09	0.53
23:DB:132:G:O2'	23:DB:133:U:H5'	2.08	0.53
23:DB:328:U:H4'	46:DU:65:GLN:CD	2.32	0.53
23:DB:540:C:H2'	23:DB:541:A:H8	1.72	0.53
23:DB:699:A:H2'	23:DB:700:G:O4'	2.08	0.53
23:DB:1771:C:O2'	23:DB:1772:A:H5'	2.09	0.53
23:DB:1816:C:H3'	25:DC:61:TYR:CE2	2.43	0.53
23:DB:2138:G:H2'	23:DB:2139:U:H6	1.73	0.53
23:DB:2301:C:H2'	23:DB:2302:U:C6	2.43	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:2393:U:O2'	23:DB:2394:C:H5'	2.08	0.53
23:DB:2861:U:H2'	23:DB:2862:G:H8	1.73	0.53
23:DB:2895:G:H2'	23:DB:2896:C:H6	1.71	0.53
25:DC:179:GLU:HG3	25:DC:269:ARG:HA	1.89	0.53
40:DH:90:LEU:H	40:DH:90:LEU:CD1	2.21	0.53
52:DW:32:ALA:C	52:DW:34:SER:H	2.16	0.53
1:AA:80:A:C2	1:AA:81:A:H1'	2.43	0.53
1:AA:168:G:O2'	1:AA:169:C:H5'	2.08	0.53
1:AA:499:A:H4'	1:AA:500:G:OP1	2.08	0.53
1:AA:596:A:H2'	1:AA:597:G:H8	1.73	0.53
1:AA:987:G:O2'	1:AA:988:G:H5'	2.08	0.53
1:AA:1035:A:H2'	1:AA:1036:A:C8	2.42	0.53
6:AG:145:GLU:C	6:AG:147:ASN:H	2.16	0.53
7:AH:17:GLN:NE2	7:AH:69:ALA:HB1	2.23	0.53
8:AI:11:ARG:HE	8:AI:12:LYS:HG3	1.71	0.53
8:AI:61:ASP:C	8:AI:62:LEU:HD13	2.34	0.53
12:AM:63:VAL:HG12	12:AM:68:LEU:HG	1.90	0.53
14:AO:78:TYR:CE1	14:AO:82:ILE:HD11	2.43	0.53
22:BA:16:G:O2'	22:BA:17:C:H5'	2.08	0.53
23:BB:909:A:H2'	23:BB:912:C:H5	1.73	0.53
23:BB:987:C:H2'	23:BB:988:A:O4'	2.08	0.53
23:BB:2756:U:C1'	23:BB:2757:A:H5''	2.39	0.53
24:BI:49:GLU:CG	24:BI:54:ILE:HD11	2.39	0.53
25:BC:94:LEU:HB2	25:BC:100:ARG:CD	2.37	0.53
26:BD:151:THR:CB	26:BD:152:PRO:HD3	2.38	0.53
28:BP:91:VAL:CG2	28:BP:96:LEU:HD21	2.38	0.53
29:BE:11:ALA:O	29:BE:12:LEU:HD22	2.09	0.53
30:BY:26:LEU:HB2	30:BY:28:LEU:HG	1.90	0.53
40:BH:120:GLY:O	40:BH:122:LEU:HD12	2.08	0.53
41:BJ:24:THR:HA	41:BJ:63:ALA:HB3	1.89	0.53
41:BJ:44:TYR:O	41:BJ:45:THR:HB	2.09	0.53
45:BS:26:GLY:H	45:BS:71:VAL:HG13	1.73	0.53
47:BF:113:PHE:CZ	47:BF:175:PRO:HB2	2.43	0.53
49:BR:7:SER:HB2	49:BR:22:LEU:CB	2.30	0.53
1:CA:538:G:OP2	11:CL:111:GLN:HB2	2.08	0.53
1:CA:796:C:H4'	10:CK:126:ARG:HH21	1.74	0.53
1:CA:1121:U:H2'	1:CA:1122:U:C6	2.44	0.53
1:CA:1306:A:N6	1:CA:1331:G:H1'	2.23	0.53
3:CD:16:THR:HG22	3:CD:17:ASP:N	2.23	0.53
6:CG:15:PRO:HG2	6:CG:43:TYR:OH	2.09	0.53
8:CI:34:LEU:HD11	8:CI:47:VAL:HG21	1.89	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:CT:50:PHE:O	19:CT:53:MET:HG3	2.08	0.53
19:CT:67:HIS:CD2	19:CT:68:LYS:H	2.26	0.53
23:DB:151:C:H2'	23:DB:152:A:H8	1.72	0.53
23:DB:811:U:OP2	37:DL:20:GLY:HA2	2.08	0.53
23:DB:1050:A:H2'	23:DB:1051:G:O4'	2.08	0.53
23:DB:1098:A:C3'	24:DI:4:VAL:N	2.71	0.53
23:DB:2598:A:OP1	25:DC:233:GLY:HA3	2.08	0.53
23:DB:2639:A:H2'	23:DB:2640:G:O4'	2.08	0.53
27:DK:19:VAL:HB	27:DK:41:ILE:CG1	2.38	0.53
34:D3:49:VAL:O	34:D3:51:LYS:N	2.42	0.53
37:DL:93:ASN:O	37:DL:95:LEU:N	2.41	0.53
40:DH:60:GLU:OE2	40:DH:63:ALA:HB2	2.08	0.53
46:DU:86:PHE:HD1	46:DU:88:ASP:N	2.07	0.53
47:DF:78:ILE:H	47:DF:79:ARG:HH11	1.55	0.53
52:DW:28:GLU:H	52:DW:31:LEU:HG	1.73	0.53
1:AA:229:U:H2'	1:AA:230:G:H8	1.73	0.53
1:AA:398:U:H2'	1:AA:399:G:C8	2.44	0.53
1:AA:769:G:O2'	1:AA:770:C:H5'	2.07	0.53
1:AA:1028:C:H3'	1:AA:1029:U:C5	2.44	0.53
11:AL:43:LYS:HE2	11:AL:44:PRO:HD3	1.90	0.53
14:AO:32:LEU:O	14:AO:36:ILE:HG12	2.08	0.53
14:AO:43:PHE:CD1	14:AO:56:LEU:HD22	2.43	0.53
23:BB:95:A:H4'	39:BX:38:GLN:O	2.09	0.53
23:BB:592:A:H2'	23:BB:593:U:C6	2.43	0.53
23:BB:757:G:H2'	23:BB:758:C:H5'	1.91	0.53
23:BB:1013:C:H2'	23:BB:1014:A:C8	2.43	0.53
23:BB:1930:G:HO2'	23:BB:1968:G:H1	1.54	0.53
23:BB:2197:U:O2'	23:BB:2198:A:H2'	2.08	0.53
23:BB:2405:G:H1'	23:BB:2412:A:H61	1.73	0.53
25:BC:94:LEU:HB2	25:BC:100:ARG:HD3	1.89	0.53
26:BD:121:THR:C	26:BD:123:LYS:H	2.15	0.53
26:BD:168:GLU:O	26:BD:170:VAL:HG22	2.09	0.53
32:B4:23:ILE:HB	32:B4:38:GLY:HA3	1.89	0.53
33:B1:28:THR:O	33:B1:29:LYS:HD2	2.08	0.53
38:BM:24:THR:HG23	38:BM:34:LYS:HE3	1.90	0.53
38:BM:34:LYS:HE2	38:BM:99:GLY:HA2	1.89	0.53
40:BH:142:VAL:HG12	40:BH:143:ILE:N	2.20	0.53
41:BJ:123:LYS:HG2	41:BJ:132:HIS:NE2	2.23	0.53
42:BN:106:ASP:OD1	42:BN:108:ALA:HB3	2.08	0.53
44:BQ:30:VAL:CG1	44:BQ:33:VAL:HG22	2.39	0.53
44:BQ:105:PHE:O	44:BQ:109:VAL:HG23	2.08	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BS:22:ASP:HA	45:BS:25:ARG:NH1	2.23	0.53
50:BT:4:GLU:CD	50:BT:5:GLU:H	2.16	0.53
52:BW:9:THR:CG2	52:BW:10:ARG:HH11	2.22	0.53
52:BW:21:GLY:HA3	52:BW:33:GLY:HA2	1.91	0.53
52:BW:49:ASN:CB	52:BW:60:ALA:HA	2.38	0.53
1:CA:250:A:H1'	1:CA:252:U:C5	2.44	0.53
1:CA:415:A:H3'	1:CA:416:G:H8	1.72	0.53
1:CA:520:A:N1	1:CA:536:C:H1'	2.23	0.53
1:CA:1031:C:H4'	1:CA:1032:G:H5''	1.90	0.53
7:CH:49:LYS:HG3	7:CH:50:VAL:N	2.23	0.53
8:CI:44:ARG:HH11	8:CI:44:ARG:HG2	1.73	0.53
9:CJ:56:HIS:O	9:CJ:57:VAL:HG12	2.08	0.53
12:CM:10:ASP:HA	12:CM:44:ILE:HD13	1.89	0.53
20:CB:142:LYS:HA	20:CB:145:ASN:OD1	2.07	0.53
21:CU:19:LYS:HD3	21:CU:20:ARG:HH21	1.72	0.53
23:DB:1407:G:H2'	23:DB:1408:G:H8	1.72	0.53
23:DB:2306:C:H3'	23:DB:2307:G:H5'	1.90	0.53
27:DK:109:SER:C	27:DK:111:LYS:H	2.17	0.53
28:DP:91:VAL:O	28:DP:92:ARG:HB3	2.07	0.53
35:DV:4:ILE:HD12	35:DV:63:ILE:HG13	1.90	0.53
41:DJ:13:ARG:O	41:DJ:52:ASP:HA	2.09	0.53
42:DN:72:ASP:C	42:DN:74:GLU:H	2.15	0.53
1:AA:82:G:C6	1:AA:88:U:O2	2.61	0.53
1:AA:182:A:O2'	1:AA:183:C:H5''	2.09	0.53
1:AA:1096:C:H2'	1:AA:1097:C:C6	2.43	0.53
2:AC:126:ARG:NH2	2:AC:190:THR:HG23	2.13	0.53
4:AE:95:MET:HA	4:AE:124:ALA:HB2	1.90	0.53
6:AG:99:ALA:O	6:AG:103:ILE:HG13	2.09	0.53
9:AJ:56:HIS:O	9:AJ:57:VAL:HG12	2.09	0.53
15:AP:20:VAL:HG21	15:AP:32:PHE:CG	2.44	0.53
16:AQ:24:ILE:HG13	16:AQ:41:THR:HB	1.90	0.53
20:AB:144:GLU:O	20:AB:148:GLY:HA3	2.09	0.53
23:BB:633:A:H8	23:BB:633:A:O5'	1.91	0.53
23:BB:950:G:H2'	23:BB:951:C:C6	2.44	0.53
23:BB:1341:G:H2'	23:BB:1397:U:O2'	2.07	0.53
23:BB:1395:A:H4'	23:BB:1397:U:C5	2.44	0.53
23:BB:2722:G:H4'	42:BN:4:ARG:HB2	1.89	0.53
23:BB:2834:G:H1'	23:BB:2883:A:H61	1.74	0.53
23:BB:2868:A:H2'	23:BB:2869:G:H8	1.73	0.53
23:BB:2897:U:H2'	23:BB:2898:U:C6	2.44	0.53
24:BI:18:ASN:N	24:BI:19:PRO:CD	2.71	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BY:30:ARG:HD3	30:BY:30:ARG:H	1.74	0.53
35:BV:10:LYS:HG2	35:BV:11:GLU:HG3	1.91	0.53
36:B2:21:ARG:HH21	36:B2:43:THR:CG2	2.21	0.53
37:BL:4:ASN:N	37:BL:4:ASN:HD22	2.04	0.53
39:BX:41:HIS:O	39:BX:44:LYS:HB3	2.09	0.53
40:BH:83:LYS:HB3	40:BH:83:LYS:NZ	2.24	0.53
46:BU:62:ALA:O	46:BU:63:ALA:HB3	2.09	0.53
1:CA:552:U:H4'	11:CL:82:ARG:HG2	1.90	0.53
1:CA:783:C:O2'	1:CA:784:A:H5'	2.08	0.53
1:CA:1081:A:OP1	4:CE:21:SER:O	2.26	0.53
1:CA:1239:A:H62	1:CA:1299:A:H62	1.55	0.53
14:CO:16:GLY:HA2	14:CO:27:VAL:CG2	2.39	0.53
14:CO:84:ARG:C	14:CO:85:LEU:HD12	2.34	0.53
23:DB:634:C:H2'	23:DB:635:C:C6	2.42	0.53
23:DB:693:A:H2'	23:DB:694:U:H6	1.73	0.53
23:DB:705:A:N6	23:DB:726:G:O2'	2.42	0.53
23:DB:1508:A:H2'	23:DB:1509:A:C2	2.43	0.53
23:DB:1913:A:H4'	23:DB:1915:U:OP2	2.08	0.53
23:DB:2153:C:H2'	23:DB:2154:A:C8	2.44	0.53
23:DB:2339:C:H2'	23:DB:2340:A:H8	1.73	0.53
23:DB:2649:C:H2'	23:DB:2650:U:H6	1.73	0.53
23:DB:2654:A:N1	23:DB:2665:A:H5''	2.23	0.53
23:DB:2840:C:H2'	23:DB:2841:C:C6	2.43	0.53
25:DC:143:VAL:HG12	25:DC:144:GLU:N	2.24	0.53
27:DK:107:LEU:C	27:DK:109:SER:H	2.16	0.53
29:DE:109:LEU:HD12	29:DE:112:LEU:HD12	1.89	0.53
38:DM:55:ARG:HA	38:DM:55:ARG:HH21	1.74	0.53
43:DO:51:ALA:O	43:DO:74:VAL:HG13	2.08	0.53
44:DQ:23:TYR:HB3	44:DQ:27:ARG:HB3	1.90	0.53
48:DG:173:ALA:HB3	48:DG:175:LYS:HZ3	1.73	0.53
52:DW:35:ILE:HG13	52:DW:57:THR:OG1	2.08	0.53
52:DW:49:ASN:HB2	52:DW:61:LYS:N	2.23	0.53
1:AA:32:A:H2'	1:AA:33:A:C8	2.44	0.53
1:AA:250:A:H1'	1:AA:252:U:C5	2.44	0.53
1:AA:1053:G:N7	1:AA:1199:U:H3'	2.24	0.53
2:AC:142:ARG:HH21	2:AC:143:LEU:HD21	1.73	0.53
3:AD:29:THR:HG22	3:AD:30:LYS:H	1.73	0.53
5:AF:10:VAL:HG12	5:AF:11:HIS:N	2.23	0.53
9:AJ:76:ILE:HD12	9:AJ:76:ILE:O	2.08	0.53
11:AL:106:VAL:CG2	11:AL:116:TYR:HB3	2.38	0.53
22:BA:95:U:H2'	22:BA:96:G:C8	2.44	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:582:A:H2'	23:BB:583:G:H8	1.74	0.53
23:BB:1097:U:C2'	23:BB:1098:A:H5'	2.37	0.53
23:BB:2054:A:H2'	31:B0:4:GLN:OE1	2.09	0.53
23:BB:2360:G:H4'	37:BL:61:LEU:HD11	1.91	0.53
24:BI:75:ALA:HB2	24:BI:112:LYS:HE2	1.89	0.53
27:BK:35:VAL:HG23	27:BK:36:GLY:N	2.16	0.53
29:BE:200:LEU:O	29:BE:201:ALA:HB3	2.07	0.53
34:B3:21:PHE:CE1	34:B3:58:ILE:HG12	2.43	0.53
47:BF:7:TYR:OH	47:BF:29:ARG:HG3	2.08	0.53
47:BF:101:ARG:CZ	47:BF:138:PRO:HB2	2.38	0.53
48:BG:174:LYS:HZ3	48:BG:176:LYS:HG2	1.72	0.53
1:CA:487:A:H2'	1:CA:488:C:O4'	2.07	0.53
1:CA:1186:G:H21	13:CN:100:TRP:C	2.17	0.53
1:CA:1386:G:O2'	1:CA:1387:G:H5'	2.09	0.53
1:CA:1390:U:H2'	1:CA:1391:U:C6	2.44	0.53
6:CG:14:ASP:HB3	6:CG:18:GLY:N	2.15	0.53
7:CH:37:ASN:O	7:CH:41:GLU:HG2	2.08	0.53
8:CI:41:GLU:C	8:CI:43:ALA:H	2.16	0.53
9:CJ:42:LEU:HD11	9:CJ:73:LEU:HB2	1.90	0.53
23:DB:1098:A:C3'	24:DI:3:LYS:HA	2.28	0.53
23:DB:1607:C:H4'	23:DB:1608:A:O5'	2.08	0.53
23:DB:1716:U:H2'	23:DB:1717:A:H8	1.74	0.53
23:DB:1877:A:H2'	23:DB:1878:G:C8	2.43	0.53
25:DC:146:LYS:HB2	25:DC:149:LYS:HB2	1.91	0.53
28:DP:31:VAL:O	28:DP:32:VAL:HB	2.08	0.53
29:DE:98:LYS:HG2	29:DE:99:LYS:N	2.23	0.53
31:D0:53:VAL:HG21	42:DN:98:LEU:HD11	1.91	0.53
32:D4:27:CYS:SG	32:D4:29:ALA:HB3	2.48	0.53
34:D3:21:PHE:HE1	34:D3:58:ILE:HG12	1.73	0.53
39:DX:39:GLN:HB2	39:DX:42:LEU:HD22	1.91	0.53
40:DH:1:MET:HB3	40:DH:21:VAL:O	2.09	0.53
41:DJ:127:GLY:O	41:DJ:128:ASN:HB2	2.08	0.53
42:DN:39:PRO:C	42:DN:41:ALA:H	2.14	0.53
47:DF:3:LEU:HB2	47:DF:100:GLU:OE1	2.08	0.53
51:DZ:70:GLU:O	51:DZ:72:ARG:N	2.36	0.53
52:DW:37:VAL:CG1	52:DW:38:ARG:H	2.18	0.53
1:AA:376:G:H5''	15:AP:5:ARG:HD3	1.91	0.53
1:AA:1097:C:H2'	1:AA:1098:C:C6	2.43	0.53
1:AA:1321:U:H2'	1:AA:1322:C:C5	2.43	0.53
1:AA:1343:G:O3'	8:AI:123:ARG:HB2	2.09	0.53
2:AC:129:PHE:CE2	2:AC:165:GLU:HG2	2.41	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AF:68:GLN:O	5:AF:71:ILE:HG23	2.08	0.53
8:AI:93:LEU:O	8:AI:97:LEU:HG	2.07	0.53
14:AO:26:GLU:HA	14:AO:81:LEU:HD11	1.90	0.53
23:BB:337:C:OP1	46:BU:3:LYS:HG3	2.08	0.53
23:BB:1156:A:H5''	56:BB:3488:HOH:O	2.09	0.53
23:BB:1405:U:H2'	23:BB:1406:U:H6	1.74	0.53
23:BB:1495:A:H2'	23:BB:1496:A:C8	2.43	0.53
23:BB:1877:A:H2'	23:BB:1878:G:H8	1.74	0.53
23:BB:2339:C:H2'	23:BB:2340:A:H8	1.72	0.53
23:BB:2700:A:H2'	23:BB:2701:U:H6	1.72	0.53
23:BB:2772:C:H2'	23:BB:2773:C:H6	1.74	0.53
24:BI:62:ALA:C	24:BI:64:ARG:H	2.15	0.53
26:BD:13:ARG:HH12	28:BP:74:GLN:NE2	2.06	0.53
27:BK:88:ASN:ND2	27:BK:88:ASN:C	2.67	0.53
29:BE:137:LYS:HE2	29:BE:141:MET:SD	2.49	0.53
37:BL:141:LYS:HZ3	37:BL:143:GLU:HA	1.74	0.53
40:BH:44:ILE:HG22	40:BH:51:ARG:HH22	1.72	0.53
41:BJ:59:ALA:C	41:BJ:61:LYS:H	2.17	0.53
41:BJ:136:GLN:N	41:BJ:137:PRO:HD3	2.24	0.53
51:BZ:31:PRO:HB2	51:BZ:33:LEU:CD1	2.33	0.53
1:CA:212:G:H2'	1:CA:213:G:C8	2.44	0.53
1:CA:238:A:H2'	1:CA:239:U:H5''	1.90	0.53
1:CA:376:G:H5''	15:CP:5:ARG:HD3	1.91	0.53
1:CA:513:C:H2'	1:CA:514:C:H6	1.73	0.53
1:CA:996:A:H2'	1:CA:997:U:C6	2.43	0.53
1:CA:1234:C:O2'	1:CA:1235:U:H5'	2.09	0.53
1:CA:1386:G:H2'	1:CA:1387:G:H8	1.72	0.53
5:CF:54:LEU:HD13	5:CF:54:LEU:N	2.24	0.53
8:CI:98:ARG:NE	8:CI:103:VAL:HG21	2.23	0.53
12:CM:15:VAL:HG22	12:CM:33:LEU:HD11	1.89	0.53
12:CM:48:SER:HB2	12:CM:51:GLN:HG3	1.91	0.53
18:CS:39:ILE:HG12	18:CS:70:LEU:HD12	1.89	0.53
20:CB:67:LEU:H	20:CB:160:LEU:HA	1.74	0.53
23:DB:264:C:C2'	23:DB:265:A:H5''	2.38	0.53
23:DB:1199:U:H2'	23:DB:1200:C:H6	1.73	0.53
23:DB:1341:G:H2'	23:DB:1397:U:O2'	2.09	0.53
23:DB:2037:A:H2'	23:DB:2038:G:C8	2.44	0.53
23:DB:2135:A:H61	23:DB:2156:G:C2'	2.21	0.53
23:DB:2195:U:O2'	23:DB:2196:C:H5'	2.09	0.53
23:DB:2675:A:H4'	27:DK:29:HIS:HB2	1.91	0.53
24:DI:100:ILE:O	24:DI:139:VAL:HA	2.09	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DC:104:LEU:O	25:DC:105:ALA:HB3	2.08	0.53
26:DD:62:LYS:HB2	26:DD:63:PRO:HD3	1.91	0.53
28:DP:77:SER:OG	28:DP:79:VAL:HG22	2.09	0.53
30:DY:23:LEU:HD13	30:DY:28:LEU:HB2	1.91	0.53
34:D3:21:PHE:CE1	34:D3:58:ILE:HG12	2.44	0.53
34:D3:41:ARG:HG3	34:D3:44:ARG:NH2	2.24	0.53
37:DL:115:GLU:N	37:DL:115:GLU:OE1	2.42	0.53
38:DM:6:ARG:O	38:DM:7:THR:HG23	2.09	0.53
43:DO:88:LYS:HE2	43:DO:116:GLN:CD	2.34	0.53
46:DU:66:VAL:C	46:DU:68:ASN:H	2.17	0.53
50:DT:21:SER:O	50:DT:25:GLU:HB2	2.09	0.53
1:AA:607:A:H2'	1:AA:608:A:C8	2.44	0.53
1:AA:1225:A:H3'	1:AA:1226:C:H6	1.73	0.53
1:AA:1230:C:H2'	1:AA:1231:G:H8	1.73	0.53
1:AA:1306:A:N6	1:AA:1331:G:H1'	2.24	0.53
1:AA:1308:U:H2'	1:AA:1309:G:C8	2.43	0.53
9:AJ:29:ALA:O	9:AJ:32:THR:HG22	2.08	0.53
12:AM:7:ASN:ND2	12:AM:7:ASN:H	2.06	0.53
12:AM:15:VAL:HG22	12:AM:33:LEU:HD11	1.88	0.53
12:AM:63:VAL:CG1	12:AM:67:ASP:HB2	2.39	0.53
20:AB:67:LEU:H	20:AB:160:LEU:HA	1.74	0.53
23:BB:21:A:H2'	23:BB:22:C:C6	2.44	0.53
23:BB:40:U:H2'	23:BB:41:C:C6	2.44	0.53
23:BB:410:G:H5''	23:BB:411:G:H5'	1.91	0.53
23:BB:646:U:H3'	23:BB:647:G:C8	2.44	0.53
23:BB:1306:C:H2'	23:BB:1307:A:H8	1.74	0.53
23:BB:1444:G:H2'	23:BB:1445:G:C8	2.43	0.53
23:BB:1541:C:H2'	23:BB:1542:U:C6	2.43	0.53
23:BB:1551:A:C3'	23:BB:1552:A:H5''	2.39	0.53
23:BB:1661:G:O2'	23:BB:1662:U:H5'	2.09	0.53
26:BD:98:VAL:C	26:BD:100:LEU:H	2.17	0.53
31:B0:55:ALA:C	31:B0:56:LYS:HG3	2.33	0.53
33:B1:40:PRO:O	33:B1:43:ARG:HG2	2.09	0.53
40:BH:9:VAL:HB	40:BH:12:LEU:O	2.09	0.53
41:BJ:26:GLY:O	41:BJ:30:THR:HG22	2.09	0.53
42:BN:15:SER:O	42:BN:18:GLN:HB2	2.09	0.53
46:BU:21:ARG:HD3	46:BU:72:PHE:CD2	2.43	0.53
46:BU:23:LYS:N	46:BU:23:LYS:HD2	2.23	0.53
47:BF:104:THR:C	47:BF:108:PRO:HG2	2.34	0.53
48:BG:34:ARG:HH11	48:BG:34:ARG:N	1.97	0.53
48:BG:116:LEU:HD23	48:BG:121:THR:HA	1.91	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:BR:5:PHE:O	49:BR:11:GLN:HA	2.07	0.53
49:BR:10:LYS:N	49:BR:10:LYS:HD2	2.23	0.53
1:CA:266:G:O2'	1:CA:267:C:H3'	2.09	0.53
1:CA:313:A:H2'	1:CA:314:C:C6	2.44	0.53
1:CA:477:C:H2'	1:CA:478:A:C8	2.44	0.53
1:CA:796:C:H4'	10:CK:126:ARG:NH2	2.24	0.53
1:CA:1308:U:H2'	1:CA:1309:G:C8	2.43	0.53
1:CA:1480:A:H2'	1:CA:1481:U:C6	2.44	0.53
4:CE:89:THR:CG2	4:CE:90:GLY:H	2.16	0.53
4:CE:95:MET:HA	4:CE:124:ALA:CB	2.39	0.53
6:CG:100:MET:O	6:CG:104:VAL:HG23	2.08	0.53
7:CH:55:LYS:HA	7:CH:55:LYS:NZ	2.24	0.53
11:CL:82:ARG:HB2	11:CL:97:VAL:HG22	1.89	0.53
20:CB:184:ALA:C	20:CB:199:ILE:HD12	2.33	0.53
23:DB:26:G:H1'	23:DB:514:A:H61	1.72	0.53
23:DB:30:G:OP1	44:DQ:4:LYS:HG2	2.08	0.53
23:DB:280:U:H2'	23:DB:281:C:C6	2.44	0.53
23:DB:305:C:H2'	23:DB:306:U:C6	2.44	0.53
23:DB:544:C:O5'	23:DB:545:U:OP1	2.27	0.53
23:DB:854:C:O2'	23:DB:855:G:H5'	2.08	0.53
23:DB:925:A:O2'	23:DB:926:G:H5'	2.08	0.53
23:DB:1220:G:H2'	23:DB:1221:C:H6	1.73	0.53
23:DB:1434:A:H62	23:DB:1558:C:H42	1.55	0.53
23:DB:1889:A:H2'	23:DB:1890:A:C8	2.44	0.53
23:DB:2142:A:H2'	23:DB:2143:C:O4'	2.09	0.53
24:DI:52:LEU:HD22	24:DI:81:LYS:HD3	1.91	0.53
27:DK:19:VAL:C	27:DK:41:ILE:HD11	2.33	0.53
29:DE:1:MET:HE3	29:DE:2:GLU:N	2.22	0.53
29:DE:145:ASP:OD1	29:DE:183:PHE:HA	2.08	0.53
31:D0:48:TYR:CG	31:D0:49:ARG:N	2.76	0.53
38:DM:26:VAL:HG13	38:DM:133:LYS:HA	1.90	0.53
40:DH:86:ASP:OD2	40:DH:89:LYS:HD3	2.09	0.53
41:DJ:136:GLN:N	41:DJ:137:PRO:HD3	2.24	0.53
42:DN:114:GLU:HG2	42:DN:115:LEU:N	2.24	0.53
46:DU:27:VAL:HG23	46:DU:33:VAL:HG12	1.90	0.53
48:DG:34:ARG:HH11	48:DG:34:ARG:N	1.96	0.53
49:DR:49:ILE:HG21	49:DR:53:PHE:C	2.33	0.53
50:DT:64:LYS:HD2	50:DT:64:LYS:H	1.74	0.53
1:AA:238:A:H2'	1:AA:239:U:H5''	1.91	0.53
1:AA:394:G:H2'	1:AA:395:C:H6	1.74	0.53
1:AA:1225:A:H5'	1:AA:1226:C:OP2	2.09	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1272:G:H2'	1:AA:1273:C:C6	2.44	0.53
1:AA:1533:C:O2'	1:AA:1534:A:H5''	2.08	0.53
14:AO:24:SER:HB3	14:AO:27:VAL:CG2	2.36	0.53
16:AQ:74:LEU:HD22	16:AQ:75:VAL:N	2.24	0.53
17:AR:33:THR:C	17:AR:35:SER:H	2.16	0.53
21:AU:48:LYS:HA	21:AU:51:ALA:HB3	1.91	0.53
22:BA:48:U:H2'	22:BA:49:C:H6	1.74	0.53
23:BB:156:A:H2'	23:BB:157:C:C6	2.43	0.53
23:BB:673:C:H5''	29:BE:76:PRO:HD2	1.90	0.53
23:BB:1633:G:O2'	23:BB:1634:A:H5''	2.09	0.53
23:BB:2405:G:H1'	23:BB:2412:A:N6	2.24	0.53
23:BB:2643:G:H2'	23:BB:2644:G:O4'	2.08	0.53
23:BB:2772:C:H2'	23:BB:2773:C:C6	2.43	0.53
23:BB:2841:C:H2'	23:BB:2842:G:H8	1.73	0.53
23:BB:2852:G:H2'	23:BB:2853:C:C6	2.44	0.53
33:B1:10:LEU:O	33:B1:19:PHE:HB2	2.08	0.53
34:B3:7:ARG:HH11	34:B3:7:ARG:HG3	1.74	0.53
36:B2:33:ARG:HB2	36:B2:33:ARG:HH21	1.74	0.53
37:BL:3:LEU:O	37:BL:5:THR:HG23	2.09	0.53
41:BJ:127:GLY:O	41:BJ:128:ASN:HB2	2.08	0.53
42:BN:31:HIS:O	42:BN:33:ILE:HG13	2.09	0.53
42:BN:45:ARG:O	42:BN:49:GLU:HG3	2.09	0.53
46:BU:50:ALA:H	46:BU:53:GLN:CD	2.17	0.53
47:BF:39:VAL:HG12	47:BF:84:ILE:C	2.33	0.53
47:BF:78:ILE:HA	47:BF:82:TYR:CD2	2.44	0.53
48:BG:123:GLU:HG2	48:BG:124:CYS:N	2.23	0.53
48:BG:133:LYS:HD3	48:BG:133:LYS:N	2.23	0.53
50:BT:2:ILE:HG12	50:BT:3:ARG:H	1.73	0.53
1:CA:95:C:H2'	1:CA:95:C:O2	2.08	0.53
1:CA:825:A:H2'	1:CA:826:C:H6	1.74	0.53
1:CA:880:C:H2'	1:CA:881:G:H8	1.74	0.53
1:CA:956:U:O2'	1:CA:957:U:H5'	2.09	0.53
1:CA:1028:C:H3'	1:CA:1029:U:C5	2.44	0.53
6:CG:132:THR:O	6:CG:135:LYS:HB3	2.08	0.53
8:CI:17:ARG:HB2	8:CI:65:THR:HB	1.91	0.53
8:CI:61:ASP:C	8:CI:62:LEU:HD13	2.33	0.53
13:CN:41:TRP:HB3	13:CN:44:VAL:HG12	1.90	0.53
13:CN:60:ARG:NE	13:CN:69:PRO:HB3	2.24	0.53
20:CB:33:ALA:HA	20:CB:37:VAL:O	2.08	0.53
21:CU:8:ASN:O	21:CU:9:GLU:HB3	2.09	0.53
22:DA:2:G:H2'	22:DA:3:C:H6	1.72	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:321:U:OP2	29:DE:130:LYS:HD3	2.08	0.53
23:DB:582:A:H2'	23:DB:583:G:H8	1.74	0.53
23:DB:1015:U:H2'	23:DB:1016:G:H8	1.73	0.53
23:DB:1028:A:N6	23:DB:1125:G:H2'	2.24	0.53
23:DB:1742:U:H2'	23:DB:1743:G:C8	2.44	0.53
23:DB:2512:C:H2'	23:DB:2513:A:O4'	2.08	0.53
23:DB:2834:G:H1'	23:DB:2883:A:H61	1.74	0.53
56:DB:3575:HOH:O	25:DC:230:PRO:HA	2.09	0.53
29:DE:149:ILE:HG23	29:DE:188:MET:CA	2.39	0.53
30:DY:2:LYS:HE3	30:DY:58:GLU:HB3	1.90	0.53
35:DV:29:ILE:HG13	35:DV:88:HIS:HE1	1.74	0.53
44:DQ:77:LYS:HA	44:DQ:80:ASN:HB3	1.90	0.53
46:DU:11:ILE:O	46:DU:12:VAL:HB	2.08	0.53
47:DF:34:THR:HA	47:DF:89:THR:HA	1.91	0.53
47:DF:138:PRO:HA	47:DF:142:TYR:CE2	2.44	0.53
47:DF:149:ARG:HA	47:DF:149:ARG:NH1	2.21	0.53
52:DW:39:GLN:CG	52:DW:42:THR:HB	2.39	0.53
1:AA:113:G:H2'	1:AA:114:U:C6	2.44	0.53
1:AA:123:U:H2'	1:AA:124:C:C6	2.44	0.53
1:AA:179:A:H2'	1:AA:180:U:O4'	2.08	0.53
1:AA:415:A:H3'	1:AA:416:G:H8	1.73	0.53
1:AA:952:U:H2'	1:AA:953:G:C8	2.44	0.53
1:AA:1011:C:H2'	1:AA:1012:A:H8	1.73	0.53
1:AA:1020:G:H2'	1:AA:1020:G:N3	2.23	0.53
1:AA:1101:A:H4'	1:AA:1102:A:O5'	2.09	0.53
1:AA:1219:A:H2'	1:AA:1220:G:C8	2.44	0.53
4:AE:17:VAL:HG23	4:AE:33:THR:O	2.09	0.53
6:AG:63:VAL:HA	6:AG:66:GLU:CD	2.34	0.53
6:AG:94:ARG:HH11	6:AG:98:LEU:HD11	1.72	0.53
7:AH:38:VAL:HG13	7:AH:111:THR:HG22	1.89	0.53
8:AI:19:PHE:O	8:AI:62:LEU:HA	2.08	0.53
11:AL:88:ASP:C	11:AL:89:LEU:HD22	2.34	0.53
12:AM:86:ARG:HD2	18:AS:2:ARG:HH12	1.74	0.53
16:AQ:37:ILE:HG22	16:AQ:39:ARG:HE	1.74	0.53
23:BB:144:A:H2'	23:BB:145:C:C6	2.43	0.53
23:BB:825:A:O2'	37:BL:54:GLN:HB3	2.09	0.53
23:BB:937:C:H2'	23:BB:938:G:C8	2.44	0.53
23:BB:1060:U:O2	23:BB:1088:A:C8	2.62	0.53
23:BB:1443:U:H2'	23:BB:1444:G:C8	2.43	0.53
23:BB:2037:A:H2'	23:BB:2038:G:C8	2.44	0.53
23:BB:2183:A:H2'	23:BB:2184:A:N7	2.23	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:2185:U:H2'	23:BB:2186:G:H8	1.70	0.53
23:BB:2261:C:N4	52:BW:10:ARG:HB3	2.24	0.53
25:BC:180:MET:HB3	25:BC:267:VAL:HB	1.90	0.53
33:B1:26:LYS:HB2	33:B1:52:LYS:NZ	2.24	0.53
34:B3:21:PHE:HE1	34:B3:58:ILE:HG12	1.73	0.53
38:BM:53:MET:HE1	38:BM:103:TYR:CD2	2.44	0.53
40:BH:115:VAL:O	40:BH:133:GLN:HB3	2.09	0.53
52:BW:43:LYS:HD2	52:BW:79:ILE:HD11	1.90	0.53
1:CA:325:A:H2'	1:CA:326:G:O4'	2.09	0.53
1:CA:672:U:H2'	1:CA:673:A:C8	2.44	0.53
1:CA:1004:A:C8	1:CA:1025:U:H1'	2.44	0.53
4:CE:136:VAL:HG13	4:CE:137:ARG:H	1.73	0.53
8:CI:56:MET:SD	8:CI:57:VAL:N	2.81	0.53
9:CJ:76:ILE:O	9:CJ:76:ILE:HD12	2.08	0.53
15:CP:61:VAL:HA	15:CP:65:ALA:HB3	1.91	0.53
15:CP:66:THR:O	15:CP:67:ILE:HB	2.09	0.53
22:DA:48:U:H2'	22:DA:49:C:H6	1.74	0.53
23:DB:283:G:C2	23:DB:284:U:H1'	2.44	0.53
23:DB:709:U:H2'	23:DB:710:U:H6	1.74	0.53
23:DB:1400:U:H2'	23:DB:1401:G:H8	1.73	0.53
23:DB:1922:G:H2'	23:DB:1923:U:O4'	2.09	0.53
23:DB:2292:U:H2'	23:DB:2293:G:C8	2.44	0.53
23:DB:2415:G:H4'	37:DL:66:PHE:HB2	1.90	0.53
23:DB:2720:U:H2'	23:DB:2721:A:H8	1.72	0.53
25:DC:107:LYS:O	25:DC:109:LEU:HD22	2.09	0.53
29:DE:109:LEU:O	29:DE:112:LEU:HB2	2.09	0.53
35:DV:53:LYS:HA	35:DV:53:LYS:NZ	2.23	0.53
36:D2:33:ARG:HB2	36:D2:33:ARG:HH21	1.74	0.53
37:DL:55:MET:HA	37:DL:55:MET:HE3	1.90	0.53
43:DO:49:VAL:CG2	43:DO:82:ALA:HB2	2.35	0.53
47:DF:42:ALA:O	47:DF:43:ILE:C	2.51	0.53
47:DF:108:PRO:O	47:DF:110:ILE:HG23	2.08	0.53
49:DR:61:ALA:CB	49:DR:98:ILE:HA	2.39	0.53
1:AA:285:C:H2'	1:AA:286:C:C6	2.43	0.52
1:AA:1508:A:H2'	1:AA:1509:C:C6	2.44	0.52
5:AF:11:HIS:CE1	5:AF:13:ASP:HB2	2.44	0.52
12:AM:96:VAL:C	12:AM:98:GLY:H	2.15	0.52
15:AP:4:ILE:HB	15:AP:67:ILE:HD12	1.90	0.52
23:BB:247:G:H4'	23:BB:386:G:C5	2.44	0.52
23:BB:1244:A:H5''	37:BL:8:PRO:CD	2.36	0.52
23:BB:2152:G:H2'	23:BB:2152:G:N3	2.24	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:2286:G:C8	23:BB:2286:G:H5'	2.44	0.52
23:BB:2472:G:O6	23:BB:2476:A:H4'	2.09	0.52
24:BI:23:VAL:HG23	24:BI:24:GLY:N	2.24	0.52
27:BK:17:ARG:HB2	27:BK:45:GLU:HB3	1.90	0.52
27:BK:58:LEU:N	27:BK:58:LEU:HD23	2.24	0.52
29:BE:28:VAL:O	29:BE:32:VAL:HG13	2.09	0.52
38:BM:108:VAL:HG13	38:BM:112:LEU:HB3	1.89	0.52
41:BJ:35:ARG:HA	41:BJ:40:HIS:CD2	2.44	0.52
46:BU:21:ARG:HD3	46:BU:72:PHE:CG	2.44	0.52
47:BF:50:ASP:O	47:BF:53:ALA:HB3	2.09	0.52
47:BF:79:ARG:HE	47:BF:79:ARG:N	2.07	0.52
48:BG:155:PRO:C	48:BG:170:THR:HB	2.34	0.52
1:CA:285:C:H2'	1:CA:286:C:C6	2.44	0.52
1:CA:371:A:O2'	1:CA:372:C:H5'	2.10	0.52
1:CA:1203:C:H4'	13:CN:66:THR:HG22	1.90	0.52
1:CA:1289:A:H61	8:CI:71:ILE:HD11	1.73	0.52
7:CH:38:VAL:HG13	7:CH:111:THR:HG22	1.90	0.52
8:CI:19:PHE:O	8:CI:62:LEU:HA	2.09	0.52
11:CL:51:VAL:HG12	11:CL:52:CYS:N	2.23	0.52
16:CQ:24:ILE:HG13	16:CQ:41:THR:HB	1.91	0.52
19:CT:27:MET:O	19:CT:31:ILE:HG13	2.08	0.52
21:CU:48:LYS:HG3	21:CU:49:ALA:N	2.23	0.52
23:DB:64:A:H2'	23:DB:65:U:C6	2.44	0.52
23:DB:634:C:H2'	23:DB:635:C:H6	1.74	0.52
23:DB:958:U:H3	38:DM:16:ARG:HB3	1.73	0.52
23:DB:1166:G:H2'	23:DB:1167:C:H6	1.72	0.52
23:DB:1693:U:O2'	25:DC:13:ARG:NH2	2.40	0.52
23:DB:1784:A:H4'	23:DB:1785:A:O5'	2.09	0.52
23:DB:2297:A:H61	23:DB:2319:G:H1'	1.74	0.52
23:DB:2341:G:H2'	23:DB:2342:C:H6	1.73	0.52
23:DB:2395:C:H2'	23:DB:2396:G:O4'	2.08	0.52
23:DB:2512:C:OP2	26:DD:128:ARG:HD2	2.10	0.52
24:DI:5:GLN:O	24:DI:6:ALA:HB3	2.08	0.52
26:DD:25:THR:HG21	26:DD:193:VAL:CG2	2.39	0.52
39:DX:20:ASN:N	39:DX:20:ASN:HD22	2.06	0.52
40:DH:80:ILE:HD11	40:DH:146:VAL:HA	1.90	0.52
42:DN:65:LEU:HD11	42:DN:69:ARG:CZ	2.40	0.52
46:DU:3:LYS:HB3	46:DU:82:VAL:HG21	1.90	0.52
47:DF:19:PHE:CZ	47:DF:164:GLU:HA	2.43	0.52
48:DG:17:LYS:HB3	48:DG:24:THR:N	2.19	0.52
1:AA:1369:C:H2'	1:AA:1370:G:C8	2.43	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AH:103:VAL:HG22	7:AH:124:ILE:HA	1.90	0.52
9:AJ:59:LYS:HG3	9:AJ:60:ASP:N	2.22	0.52
9:AJ:92:LEU:H	9:AJ:92:LEU:HD22	1.73	0.52
13:AN:26:LEU:HA	13:AN:29:ILE:HD12	1.92	0.52
23:BB:64:A:H2'	23:BB:65:U:C6	2.44	0.52
23:BB:96:C:H4'	39:BX:41:HIS:CE1	2.43	0.52
23:BB:903:C:H2'	23:BB:904:G:C8	2.43	0.52
23:BB:1332:G:N3	23:BB:1332:G:H2'	2.25	0.52
23:BB:1582:C:H2'	23:BB:1583:A:O4'	2.08	0.52
23:BB:1723:G:H3'	23:BB:1724:G:H8	1.74	0.52
23:BB:2626:C:O2'	23:BB:2627:G:H5'	2.09	0.52
23:BB:2800:A:H2'	23:BB:2801:G:O4'	2.10	0.52
25:BC:170:TYR:HE2	25:BC:184:GLU:HG2	1.73	0.52
26:BD:8:LYS:CD	26:BD:197:THR:H	2.23	0.52
28:BP:3:ILE:C	28:BP:3:ILE:HD13	2.34	0.52
28:BP:91:VAL:O	28:BP:92:ARG:HB3	2.08	0.52
35:BV:40:ILE:HD13	35:BV:40:ILE:N	2.23	0.52
37:BL:93:ASN:O	37:BL:95:LEU:N	2.40	0.52
38:BM:68:PHE:CG	38:BM:69:PRO:HD2	2.44	0.52
41:BJ:96:ARG:NE	41:BJ:99:ARG:HD2	2.25	0.52
48:BG:115:GLN:CD	48:BG:115:GLN:H	2.17	0.52
1:CA:272:C:H2'	1:CA:273:U:H6	1.74	0.52
1:CA:398:U:H2'	1:CA:399:G:C8	2.45	0.52
1:CA:599:C:H5''	7:CH:86:LYS:O	2.09	0.52
1:CA:1021:A:H2'	1:CA:1022:A:O4'	2.09	0.52
2:CC:128:MET:HB2	2:CC:131:ARG:HB2	1.92	0.52
3:CD:82:LYS:NZ	3:CD:82:LYS:HB3	2.24	0.52
5:CF:68:GLN:O	5:CF:71:ILE:HG23	2.09	0.52
6:CG:63:VAL:HA	6:CG:66:GLU:CD	2.33	0.52
6:CG:68:VAL:HG11	6:CG:133:ALA:HB1	1.91	0.52
12:CM:79:LEU:HD22	12:CM:86:ARG:HE	1.74	0.52
20:CB:182:VAL:HG12	20:CB:195:VAL:HG13	1.91	0.52
23:DB:160:A:H2'	23:DB:161:A:C8	2.44	0.52
23:DB:591:U:H1'	34:D3:1:PRO:N	2.24	0.52
23:DB:729:G:C5	25:DC:206:LYS:HB2	2.44	0.52
23:DB:848:C:H2'	23:DB:849:A:C8	2.44	0.52
23:DB:988:A:P	30:DY:11:SER:HB3	2.49	0.52
23:DB:1528:A:H2'	23:DB:1529:G:O4'	2.09	0.52
23:DB:1805:A:N3	25:DC:49:THR:CG2	2.72	0.52
23:DB:1993:U:H4'	26:DD:133:THR:HG21	1.91	0.52
23:DB:2405:G:H1'	23:DB:2412:A:N6	2.24	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DD:11:MET:HE1	26:DD:192:ALA:N	2.24	0.52
26:DD:14:ILE:O	26:DD:14:ILE:HG23	2.09	0.52
27:DK:17:ARG:HB2	27:DK:45:GLU:HB3	1.91	0.52
28:DP:19:PHE:CE2	28:DP:25:VAL:HG11	2.44	0.52
28:DP:62:LYS:O	28:DP:63:ILE:HB	2.10	0.52
37:DL:29:LYS:C	37:DL:31:GLY:H	2.18	0.52
38:DM:21:ALA:CB	38:DM:100:LYS:HG2	2.39	0.52
39:DX:15:ASN:O	39:DX:19:LEU:HD13	2.09	0.52
44:DQ:87:VAL:HG12	44:DQ:89:ILE:HD13	1.89	0.52
47:DF:107:VAL:N	47:DF:108:PRO:CD	2.71	0.52
50:DT:11:LEU:CD2	50:DT:46:ALA:HB1	2.37	0.52
1:AA:254:G:OP1	16:AQ:68:LYS:O	2.26	0.52
1:AA:956:U:O2'	1:AA:957:U:H5'	2.09	0.52
2:AC:128:MET:H	2:AC:128:MET:HE3	1.73	0.52
2:AC:128:MET:HB2	2:AC:131:ARG:HB2	1.90	0.52
2:AC:134:LYS:HA	2:AC:167:TYR:HE2	1.75	0.52
3:AD:26:ALA:HA	3:AD:30:LYS:HE3	1.92	0.52
4:AE:158:LYS:HZ3	7:AH:65:PHE:HA	1.74	0.52
5:AF:92:THR:O	5:AF:93:LYS:HB2	2.10	0.52
8:AI:98:ARG:NE	8:AI:103:VAL:HG21	2.25	0.52
22:BA:32:U:H1'	22:BA:52:A:N7	2.25	0.52
22:BA:43:C:H1'	47:BF:91:ARG:NH2	2.23	0.52
23:BB:141:G:C6	50:BT:2:ILE:HG21	2.44	0.52
23:BB:1805:A:H5''	25:BC:247:TRP:CE2	2.45	0.52
23:BB:1816:C:H3'	25:BC:61:TYR:CE2	2.45	0.52
23:BB:2186:G:H2'	23:BB:2187:U:O4'	2.08	0.52
23:BB:2598:A:H5''	25:BC:233:GLY:CA	2.38	0.52
24:BI:23:VAL:HG23	24:BI:24:GLY:H	1.73	0.52
27:BK:109:SER:C	27:BK:111:LYS:H	2.17	0.52
28:BP:56:SER:O	28:BP:74:GLN:HA	2.10	0.52
28:BP:77:SER:OG	28:BP:79:VAL:HG22	2.09	0.52
29:BE:1:MET:HB3	29:BE:14:VAL:O	2.10	0.52
37:BL:9:ALA:HB3	37:BL:12:SER:OG	2.09	0.52
38:BM:63:ILE:HD12	38:BM:63:ILE:N	2.24	0.52
47:BF:34:THR:HA	47:BF:89:THR:HA	1.90	0.52
48:BG:95:ALA:HB2	48:BG:130:ILE:HD11	1.90	0.52
52:BW:49:ASN:HB2	52:BW:61:LYS:N	2.22	0.52
1:CA:109:A:H2'	1:CA:326:G:N2	2.24	0.52
1:CA:792:A:H4'	1:CA:793:U:O5'	2.07	0.52
1:CA:1123:U:O2'	1:CA:1124:G:H5'	2.09	0.52
6:CG:135:LYS:HD3	6:CG:136:LYS:N	2.25	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:CN:16:ALA:HA	13:CN:54:SER:O	2.09	0.52
19:CT:85:LEU:HD23	19:CT:86:ALA:H	1.74	0.52
23:DB:303:G:H2'	23:DB:304:U:C6	2.45	0.52
23:DB:467:G:OP1	36:D2:33:ARG:HG2	2.08	0.52
23:DB:825:A:H1'	37:DL:54:GLN:HE21	1.73	0.52
23:DB:1322:A:C2'	23:DB:1323:C:H5'	2.40	0.52
23:DB:1335:C:H2'	23:DB:1336:A:H8	1.74	0.52
23:DB:1560:G:H2'	23:DB:1561:C:C6	2.44	0.52
23:DB:2216:G:H2'	23:DB:2217:G:H8	1.75	0.52
23:DB:2305:U:H5''	47:DF:130:GLY:HA3	1.91	0.52
23:DB:2492:U:O2'	23:DB:2493:U:H5'	2.09	0.52
23:DB:2648:G:H2'	23:DB:2649:C:C6	2.44	0.52
23:DB:2704:C:H2'	23:DB:2705:A:O4'	2.10	0.52
24:DI:10:LEU:HD12	24:DI:10:LEU:O	2.09	0.52
24:DI:102:ARG:HG3	24:DI:141:ASP:HB2	1.92	0.52
24:DI:131:THR:O	24:DI:135:MET:HG3	2.10	0.52
25:DC:32:LEU:O	25:DC:33:LEU:HD23	2.10	0.52
26:DD:77:ARG:HB2	26:DD:80:TRP:HH2	1.75	0.52
27:DK:113:MET:HE2	27:DK:116:ILE:HD11	1.90	0.52
35:DV:77:VAL:HA	35:DV:89:ILE:HG22	1.91	0.52
40:DH:4:ILE:HD12	40:DH:37:VAL:HG13	1.90	0.52
40:DH:5:LEU:O	40:DH:6:LEU:HD12	2.09	0.52
43:DO:79:ALA:O	43:DO:83:LEU:HB2	2.08	0.52
44:DQ:96:ASP:C	44:DQ:98:ALA:H	2.17	0.52
44:DQ:104:ALA:O	44:DQ:105:PHE:HB3	2.08	0.52
47:DF:11:VAL:HG12	47:DF:12:VAL:N	2.21	0.52
48:DG:123:GLU:HG2	48:DG:124:CYS:N	2.23	0.52
48:DG:133:LYS:HD3	48:DG:133:LYS:N	2.24	0.52
48:DG:154:GLU:OE2	48:DG:156:TYR:HB2	2.10	0.52
49:DR:34:GLU:CD	49:DR:60:LYS:HE2	2.34	0.52
52:DW:23:LYS:C	52:DW:66:VAL:HB	2.34	0.52
1:AA:224:U:H2'	1:AA:225:C:H6	1.73	0.52
1:AA:777:A:H2'	1:AA:778:G:H8	1.74	0.52
3:AD:160:LEU:HD13	3:AD:160:LEU:H	1.74	0.52
5:AF:54:LEU:HD13	5:AF:54:LEU:N	2.24	0.52
6:AG:29:LEU:O	6:AG:29:LEU:HD23	2.09	0.52
7:AH:49:LYS:HG3	7:AH:50:VAL:N	2.23	0.52
16:AQ:60:ILE:HG22	16:AQ:74:LEU:HA	1.90	0.52
21:AU:39:LYS:N	21:AU:40:PRO:CD	2.73	0.52
22:BA:30:C:H2'	22:BA:31:C:H5'	1.91	0.52
22:BA:49:C:H2'	22:BA:50:A:C8	2.44	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:60:C:H2'	22:BA:61:G:C8	2.45	0.52
23:BB:26:G:H1'	23:BB:514:A:H61	1.73	0.52
23:BB:363:G:H2'	23:BB:364:C:C6	2.43	0.52
23:BB:996:A:H4'	44:BQ:91:ARG:HH11	1.74	0.52
23:BB:1140:C:H2'	23:BB:1141:U:H5'	1.92	0.52
23:BB:1164:C:H2'	23:BB:1165:A:C8	2.45	0.52
23:BB:1292:G:H2'	23:BB:1293:C:C6	2.44	0.52
23:BB:1381:G:H1'	23:BB:1571:A:N1	2.25	0.52
23:BB:1742:U:H2'	23:BB:1743:G:C8	2.45	0.52
23:BB:1827:U:C2'	23:BB:1828:G:H5'	2.39	0.52
23:BB:2666:C:O4'	23:BB:2666:C:O2	2.25	0.52
23:BB:2849:U:H4'	23:BB:2850:A:C5'	2.39	0.52
31:B0:21:LEU:HD12	45:BS:19:LEU:O	2.09	0.52
34:B3:39:ARG:O	34:B3:43:LEU:HG	2.10	0.52
36:B2:33:ARG:HH21	36:B2:33:ARG:CB	2.22	0.52
37:BL:85:VAL:HG22	37:BL:94:THR:CG2	2.38	0.52
52:BW:23:LYS:C	52:BW:66:VAL:HB	2.34	0.52
1:CA:373:A:H1'	1:CA:481:G:H1'	1.92	0.52
7:CH:44:PHE:HE2	7:CH:100:ILE:HG12	1.73	0.52
12:CM:85:TYR:HA	12:CM:88:LEU:HD12	1.91	0.52
23:DB:1077:A:H4'	24:DI:93:ASN:OD1	2.09	0.52
23:DB:2386:A:N3	52:DW:38:ARG:HD2	2.25	0.52
23:DB:2589:A:H2'	23:DB:2590:A:H8	1.75	0.52
23:DB:2598:A:H5''	25:DC:233:GLY:HA2	1.91	0.52
24:DI:79:LEU:HD12	24:DI:135:MET:SD	2.49	0.52
25:DC:74:PRO:HG2	25:DC:96:LYS:HG2	1.90	0.52
25:DC:162:GLN:NE2	25:DC:174:ARG:HH21	2.07	0.52
25:DC:177:SER:O	25:DC:270:ARG:HG3	2.09	0.52
27:DK:99:ILE:N	27:DK:118:LEU:HD22	2.24	0.52
29:DE:68:ALA:O	29:DE:69:ARG:C	2.53	0.52
33:D1:8:ILE:HG23	33:D1:51:ALA:HA	1.92	0.52
36:D2:21:ARG:HD2	36:D2:43:THR:HG21	1.90	0.52
38:DM:24:THR:HG23	38:DM:34:LYS:HE3	1.91	0.52
38:DM:68:PHE:CG	38:DM:69:PRO:HD2	2.45	0.52
44:DQ:83:LYS:NZ	44:DQ:87:VAL:HA	2.23	0.52
45:DS:18:ARG:HB3	45:DS:76:VAL:HG22	1.91	0.52
47:DF:74:ALA:HB3	47:DF:77:LYS:O	2.09	0.52
48:DG:148:ARG:HD3	48:DG:152:ARG:NE	2.25	0.52
50:DT:57:VAL:HG13	50:DT:58:VAL:N	2.25	0.52
1:AA:1292:G:H2'	1:AA:1293:C:C6	2.45	0.52
2:AC:130:ARG:HD2	2:AC:133:MET:HE2	1.91	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AH:34:ALA:HB1	7:AH:109:VAL:HB	1.92	0.52
22:BA:86:G:H2'	22:BA:87:U:O4'	2.10	0.52
23:BB:503:A:H5''	23:BB:505:A:OP1	2.10	0.52
23:BB:608:A:H2'	23:BB:609:A:C8	2.44	0.52
23:BB:1159:U:O2'	23:BB:1160:G:H5'	2.08	0.52
23:BB:1560:G:H2'	23:BB:1561:C:H6	1.72	0.52
23:BB:1656:C:H2'	23:BB:1657:U:C6	2.44	0.52
23:BB:2210:U:N3	23:BB:2212:A:N7	2.57	0.52
23:BB:2838:G:H2'	23:BB:2839:G:H8	1.74	0.52
26:BD:149:ASN:O	26:BD:152:PRO:HD2	2.08	0.52
32:B4:2:LYS:HG2	32:B4:4:ARG:HG3	1.92	0.52
34:B3:30:HIS:O	34:B3:31:ILE:C	2.52	0.52
37:BL:79:LEU:HB2	37:BL:113:ALA:N	2.13	0.52
37:BL:115:GLU:N	37:BL:115:GLU:OE1	2.42	0.52
47:BF:3:LEU:HB2	47:BF:100:GLU:OE1	2.10	0.52
50:BT:1:MET:HB2	50:BT:2:ILE:HD13	1.91	0.52
1:CA:239:U:H6	1:CA:239:U:C5'	2.23	0.52
1:CA:370:C:O2'	1:CA:371:A:H5'	2.08	0.52
7:CH:17:GLN:NE2	7:CH:69:ALA:HB1	2.25	0.52
8:CI:20:ILE:HG23	8:CI:60:LEU:CD1	2.39	0.52
12:CM:89:ARG:NH2	12:CM:94:LEU:HD12	2.25	0.52
23:DB:152:A:H2'	23:DB:153:U:C6	2.44	0.52
23:DB:650:C:H5''	34:D3:48:MET:HE2	1.91	0.52
23:DB:1190:G:OP1	37:DL:32:GLY:HA2	2.09	0.52
23:DB:1470:A:H3'	23:DB:1471:G:H8	1.74	0.52
23:DB:2019:A:H2	23:DB:2035:G:H22	1.57	0.52
23:DB:2213:U:C2'	23:DB:2213:U:O2	2.57	0.52
23:DB:2358:A:H61	37:DL:54:GLN:HE22	1.57	0.52
23:DB:2537:U:H2'	23:DB:2538:C:H6	1.74	0.52
23:DB:2899:A:H2'	23:DB:2900:A:C8	2.45	0.52
25:DC:94:LEU:HB2	25:DC:100:ARG:CD	2.40	0.52
25:DC:180:MET:HB3	25:DC:267:VAL:HB	1.91	0.52
28:DP:26:GLU:O	28:DP:28:LYS:HE2	2.09	0.52
32:D4:23:ILE:HB	32:D4:38:GLY:HA3	1.91	0.52
34:D3:16:THR:HG21	34:D3:48:MET:HE1	1.92	0.52
41:DJ:44:TYR:CD2	44:DQ:59:LEU:HD11	2.45	0.52
41:DJ:96:ARG:NE	41:DJ:99:ARG:HD2	2.25	0.52
45:DS:43:ALA:HA	45:DS:46:LEU:HD12	1.90	0.52
46:DU:41:VAL:HG22	46:DU:60:LYS:O	2.09	0.52
47:DF:2:LYS:HE3	47:DF:97:GLU:HA	1.92	0.52
48:DG:88:LEU:HD13	48:DG:93:TYR:HB3	1.91	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:229:U:H2'	1:AA:230:G:C8	2.44	0.52
1:AA:792:A:H4'	1:AA:793:U:O5'	2.10	0.52
1:AA:1186:G:H21	13:AN:100:TRP:C	2.18	0.52
6:AG:68:VAL:HG11	6:AG:133:ALA:HB1	1.91	0.52
9:AJ:42:LEU:HD11	9:AJ:73:LEU:HB2	1.92	0.52
9:AJ:52:LEU:HG	9:AJ:62:ARG:HE	1.75	0.52
11:AL:66:ILE:HD12	11:AL:66:ILE:N	2.25	0.52
12:AM:3:ILE:HG21	12:AM:21:ILE:HD11	1.90	0.52
22:BA:76:G:O2'	22:BA:77:U:H5'	2.10	0.52
23:BB:151:C:H2'	23:BB:152:A:H8	1.74	0.52
23:BB:1349:C:H2'	23:BB:1350:C:H6	1.74	0.52
23:BB:1849:G:H2'	23:BB:1850:G:C8	2.44	0.52
25:BC:179:GLU:HG3	25:BC:269:ARG:HA	1.92	0.52
27:BK:99:ILE:HD13	27:BK:118:LEU:HD13	1.92	0.52
28:BP:88:ARG:HB2	28:BP:112:ARG:CZ	2.40	0.52
35:BV:42:LEU:HD23	35:BV:42:LEU:N	2.24	0.52
35:BV:53:LYS:HZ3	35:BV:53:LYS:HA	1.74	0.52
38:BM:55:ARG:HH21	38:BM:55:ARG:HA	1.74	0.52
41:BJ:13:ARG:O	41:BJ:14:ASP:HB2	2.09	0.52
41:BJ:17:VAL:HG22	41:BJ:55:ILE:HD11	1.90	0.52
43:BO:28:VAL:HG11	43:BO:92:PHE:CZ	2.45	0.52
44:BQ:96:ASP:C	44:BQ:98:ALA:H	2.17	0.52
44:BQ:105:PHE:HA	44:BQ:108:LEU:HG	1.91	0.52
45:BS:48:LYS:HE2	45:BS:52:GLU:OE1	2.10	0.52
47:BF:19:PHE:CZ	47:BF:164:GLU:HA	2.44	0.52
47:BF:107:VAL:N	47:BF:108:PRO:CD	2.71	0.52
50:BT:68:LYS:O	50:BT:69:ARG:CB	2.58	0.52
50:BT:68:LYS:O	50:BT:69:ARG:HB3	2.10	0.52
50:BT:87:LEU:HB2	50:BT:91:GLN:HG2	1.91	0.52
51:BZ:76:GLU:HG3	51:BZ:77:LYS:H	1.75	0.52
1:CA:32:A:H2'	1:CA:33:A:C8	2.45	0.52
1:CA:1080:A:H2'	1:CA:1081:A:H5'	1.91	0.52
2:CC:171:ARG:HH11	2:CC:171:ARG:HB2	1.73	0.52
11:CL:107:LYS:NZ	11:CL:107:LYS:N	2.57	0.52
12:CM:6:ILE:O	12:CM:8:ILE:HG23	2.10	0.52
14:CO:24:SER:HB3	14:CO:27:VAL:CG2	2.37	0.52
23:DB:299:A:N6	23:DB:322:A:H1'	2.25	0.52
23:DB:696:G:O2'	23:DB:697:G:H5'	2.10	0.52
23:DB:950:G:H2'	23:DB:951:C:C6	2.45	0.52
23:DB:1099:G:C5'	24:DI:4:VAL:HG12	2.40	0.52
23:DB:1405:U:H2'	23:DB:1406:U:H6	1.74	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:1425:G:H2'	23:DB:1426:G:C8	2.45	0.52
23:DB:1666:G:O2'	23:DB:1667:G:H5'	2.09	0.52
23:DB:1676:A:H2'	23:DB:1677:A:O4'	2.09	0.52
23:DB:2322:A:N6	23:DB:2333:A:N6	2.58	0.52
23:DB:2355:G:H4'	52:DW:20:LEU:CD1	2.40	0.52
23:DB:2651:C:O2'	23:DB:2652:C:H5'	2.09	0.52
27:DK:61:VAL:HG11	27:DK:112:PHE:CE2	2.45	0.52
27:DK:88:ASN:ND2	27:DK:88:ASN:C	2.66	0.52
31:D0:21:LEU:HD12	45:DS:19:LEU:O	2.09	0.52
32:D4:15:LYS:O	32:D4:16:ILE:HB	2.09	0.52
41:DJ:55:ILE:HB	41:DJ:123:LYS:HB2	1.91	0.52
41:DJ:73:VAL:HG23	41:DJ:74:TYR:H	1.75	0.52
45:DS:27:LYS:HD2	45:DS:27:LYS:H	1.73	0.52
46:DU:21:ARG:HH11	46:DU:21:ARG:HG3	1.74	0.52
47:DF:102:LEU:HA	47:DF:106:ALA:HB3	1.90	0.52
47:DF:115:GLY:HA3	47:DF:177:ARG:HD2	1.91	0.52
47:DF:169:LEU:HA	47:DF:172:PHE:HD2	1.74	0.52
49:DR:54:VAL:HG22	49:DR:55:ASP:OD2	2.10	0.52
1:AA:264:C:O2'	16:AQ:65:PRO:HG2	2.09	0.52
1:AA:279:A:H5'	1:AA:281:G:O4'	2.09	0.52
1:AA:1438:G:O2'	1:AA:1439:G:H5'	2.09	0.52
1:AA:1491:G:H3'	53:AA:1601:NMY:O3	2.09	0.52
12:AM:48:SER:HB2	12:AM:51:GLN:HG3	1.90	0.52
14:AO:26:GLU:CD	14:AO:77:ARG:HD2	2.35	0.52
23:BB:1654:A:H2'	23:BB:1655:A:C8	2.44	0.52
23:BB:1682:G:H2'	23:BB:1683:U:C6	2.44	0.52
23:BB:1728:C:O2'	23:BB:1729:U:H5'	2.09	0.52
23:BB:1831:G:H2'	23:BB:1832:C:C6	2.43	0.52
23:BB:1923:U:H2'	23:BB:1924:C:C6	2.45	0.52
23:BB:1957:C:H2'	23:BB:1958:C:C6	2.44	0.52
23:BB:1993:U:H4'	26:BD:133:THR:HG21	1.90	0.52
23:BB:2025:C:H5'	26:BD:154:LYS:NZ	2.25	0.52
23:BB:2455:G:H2'	23:BB:2456:C:C6	2.44	0.52
26:BD:118:PHE:HE2	42:BN:1:MET:SD	2.32	0.52
29:BE:68:ALA:O	29:BE:69:ARG:C	2.52	0.52
36:B2:42:LEU:O	36:B2:43:THR:HG23	2.10	0.52
40:BH:29:PHE:C	40:BH:31:VAL:H	2.18	0.52
41:BJ:81:ILE:HG23	41:BJ:82:GLY:N	2.19	0.52
46:BU:66:VAL:C	46:BU:68:ASN:H	2.17	0.52
48:BG:9:VAL:H	48:BG:48:THR:HB	1.74	0.52
48:BG:16:VAL:HG11	48:BG:44:HIS:CE1	2.45	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:17:U:O2'	1:CA:18:C:H5'	2.09	0.52
1:CA:62:U:H2'	1:CA:63:C:H6	1.73	0.52
1:CA:948:C:O2'	1:CA:949:A:H5'	2.10	0.52
1:CA:1072:G:H2'	1:CA:1073:U:C6	2.44	0.52
1:CA:1161:C:H2'	1:CA:1162:C:H6	1.74	0.52
1:CA:1219:A:H2'	1:CA:1220:G:C8	2.45	0.52
3:CD:192:ALA:C	3:CD:194:ILE:H	2.18	0.52
4:CE:80:LEU:HG	4:CE:122:VAL:HG11	1.90	0.52
14:CO:43:PHE:CE1	14:CO:56:LEU:HD22	2.45	0.52
16:CQ:74:LEU:HD22	16:CQ:75:VAL:N	2.25	0.52
19:CT:28:ARG:O	19:CT:32:LYS:HG3	2.09	0.52
20:CB:101:THR:HG22	20:CB:174:GLU:OE1	2.10	0.52
23:DB:49:A:H5''	23:DB:51:G:O4'	2.09	0.52
23:DB:234:U:H2'	23:DB:235:U:H6	1.74	0.52
23:DB:675:A:H4'	29:DE:62:GLN:HE22	1.74	0.52
23:DB:827:U:H5'	23:DB:828:U:O5'	2.10	0.52
23:DB:968:C:H2'	23:DB:969:G:C8	2.44	0.52
23:DB:1149:G:H2'	23:DB:1150:C:H6	1.72	0.52
23:DB:1332:G:H2'	23:DB:1332:G:N3	2.25	0.52
23:DB:1443:U:H2'	23:DB:1444:G:C8	2.45	0.52
23:DB:1859:U:H2'	23:DB:1860:G:C8	2.45	0.52
23:DB:2710:C:H2'	23:DB:2711:A:H8	1.75	0.52
29:DE:98:LYS:O	29:DE:102:ARG:HG2	2.09	0.52
37:DL:79:LEU:HB2	37:DL:113:ALA:N	2.13	0.52
40:DH:76:GLU:O	40:DH:77:THR:HG23	2.09	0.52
40:DH:110:VAL:HG22	40:DH:110:VAL:O	2.09	0.52
41:DJ:26:GLY:O	41:DJ:30:THR:HG22	2.09	0.52
47:DF:7:TYR:OH	47:DF:29:ARG:HG3	2.10	0.52
48:DG:116:LEU:HD23	48:DG:121:THR:HA	1.91	0.52
1:AA:430:A:OP1	3:AD:8:LEU:HB2	2.10	0.52
1:AA:1137:C:O2'	1:AA:1138:G:H5''	2.10	0.52
1:AA:1147:C:O2'	8:AI:17:ARG:HD2	2.10	0.52
1:AA:1508:A:H2'	1:AA:1509:C:H6	1.74	0.52
7:AH:100:ILE:HG13	7:AH:128:VAL:O	2.10	0.52
13:AN:50:LEU:N	13:AN:51:PRO:HD2	2.25	0.52
13:AN:60:ARG:NE	13:AN:69:PRO:HB3	2.25	0.52
15:AP:78:VAL:O	15:AP:80:LYS:N	2.43	0.52
20:AB:138:ARG:HB2	20:AB:138:ARG:NH1	2.24	0.52
22:BA:38:C:H2'	22:BA:39:A:O4'	2.10	0.52
23:BB:165:A:H2'	23:BB:166:U:C6	2.44	0.52
23:BB:729:G:H2'	23:BB:1775:U:H1'	1.91	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:1149:G:H2'	23:BB:1150:C:H6	1.75	0.52
23:BB:1386:C:H2'	23:BB:1387:A:H8	1.72	0.52
23:BB:1747:U:H2'	23:BB:1748:C:C6	2.45	0.52
23:BB:1749:A:H2'	23:BB:1750:G:H8	1.75	0.52
23:BB:2049:G:H21	26:BD:161:MET:HE2	1.75	0.52
23:BB:2341:G:H2'	23:BB:2342:C:C6	2.45	0.52
23:BB:2341:G:H2'	23:BB:2342:C:H6	1.75	0.52
23:BB:2512:C:OP2	26:BD:128:ARG:HD2	2.09	0.52
23:BB:2895:G:H2'	23:BB:2896:C:H6	1.74	0.52
25:BC:143:VAL:HG12	25:BC:144:GLU:N	2.25	0.52
31:B0:53:VAL:HG12	42:BN:118:ARG:NH1	2.25	0.52
40:BH:121:VAL:HG21	40:BH:128:HIS:NE2	2.25	0.52
41:BJ:44:TYR:C	41:BJ:44:TYR:CD2	2.84	0.52
45:BS:58:ALA:CB	45:BS:69:LEU:HD21	2.40	0.52
46:BU:40:LEU:HB3	46:BU:59:GLU:HG2	1.91	0.52
50:BT:54:GLU:HB3	50:BT:88:LYS:HB2	1.92	0.52
1:CA:685:G:O2'	1:CA:686:U:H5'	2.10	0.52
3:CD:152:SER:O	3:CD:155:LYS:HG2	2.10	0.52
5:CF:3:HIS:CE1	5:CF:95:ALA:H	2.27	0.52
9:CJ:52:LEU:HG	9:CJ:62:ARG:HE	1.74	0.52
11:CL:106:VAL:CG2	11:CL:116:TYR:HB3	2.39	0.52
18:CS:32:THR:HG22	18:CS:34:SER:H	1.75	0.52
19:CT:38:ILE:HD13	19:CT:38:ILE:O	2.10	0.52
23:DB:361:G:O2'	23:DB:362:A:H5'	2.09	0.52
23:DB:394:C:H2'	23:DB:395:U:O4'	2.10	0.52
23:DB:857:G:H2'	23:DB:858:G:H5'	1.92	0.52
23:DB:1098:A:H3'	24:DI:3:LYS:HB3	1.91	0.52
23:DB:1849:G:H2'	23:DB:1850:G:C8	2.45	0.52
23:DB:2472:G:O6	23:DB:2476:A:H4'	2.09	0.52
23:DB:2520:C:O2'	23:DB:2521:C:H5'	2.10	0.52
33:D1:25:ASN:OD1	33:D1:27:ARG:HB2	2.10	0.52
41:DJ:4:PHE:CG	41:DJ:5:THR:N	2.78	0.52
42:DN:49:GLU:HB2	42:DN:50:PRO:HD3	1.92	0.52
47:DF:134:GLN:NE2	47:DF:136:ILE:HD13	2.25	0.52
1:AA:244:U:O4	1:AA:906:A:H1'	2.10	0.52
1:AA:266:G:O2'	1:AA:267:C:H3'	2.10	0.52
1:AA:327:A:H1'	1:AA:329:A:O4'	2.09	0.52
1:AA:436:C:O2'	1:AA:437:U:H5'	2.09	0.52
1:AA:824:G:O2'	1:AA:825:A:H5'	2.09	0.52
3:AD:104:MET:SD	3:AD:142:VAL:HB	2.50	0.52
3:AD:196:GLU:O	3:AD:199:ILE:HG12	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AG:15:PRO:HG2	6:AG:43:TYR:OH	2.10	0.52
8:AI:56:MET:SD	8:AI:57:VAL:N	2.82	0.52
10:AK:35:ASP:C	10:AK:37:GLN:H	2.18	0.52
23:BB:329:G:H1	46:BU:16:LYS:HG3	1.74	0.52
23:BB:364:C:H2'	23:BB:365:U:C6	2.44	0.52
23:BB:616:A:H4'	29:BE:101:TYR:CE2	2.44	0.52
23:BB:1169:A:H2'	23:BB:1170:C:H6	1.72	0.52
23:BB:1422:G:H1'	23:BB:1495:A:H61	1.75	0.52
23:BB:1747:U:H2'	23:BB:1748:C:H6	1.75	0.52
23:BB:2037:A:H2'	23:BB:2038:G:H8	1.73	0.52
23:BB:2651:C:O2'	23:BB:2652:C:H5'	2.10	0.52
23:BB:2720:U:H2'	23:BB:2721:A:H8	1.74	0.52
23:BB:2892:G:H5''	23:BB:2894:G:N2	2.25	0.52
26:BD:32:ASN:HA	26:BD:51:THR:O	2.09	0.52
26:BD:113:SER:HB2	26:BD:168:GLU:N	2.17	0.52
27:BK:47:ILE:CG1	27:BK:48:PRO:HD2	2.34	0.52
35:BV:4:ILE:N	35:BV:62:THR:O	2.43	0.52
38:BM:134:THR:HG22	38:BM:136:MET:H	1.75	0.52
40:BH:62:LEU:HD12	40:BH:62:LEU:N	2.24	0.52
41:BJ:55:ILE:HB	41:BJ:123:LYS:HB2	1.92	0.52
42:BN:19:ALA:C	42:BN:21:PHE:H	2.18	0.52
44:BQ:86:SER:HB3	49:BR:52:PRO:HD3	1.92	0.52
47:BF:169:LEU:HA	47:BF:172:PHE:HD2	1.75	0.52
52:BW:28:GLU:H	52:BW:31:LEU:HG	1.75	0.52
1:CA:24:U:O2'	1:CA:25:C:H5'	2.10	0.52
1:CA:178:C:O2'	1:CA:179:A:H5'	2.09	0.52
1:CA:677:U:H3	1:CA:713:G:H22	1.57	0.52
1:CA:860:A:H2'	1:CA:861:G:O4'	2.09	0.52
1:CA:1200:C:H3'	1:CA:1201:A:H5'	1.92	0.52
1:CA:1234:C:H1'	1:CA:1364:U:O2	2.10	0.52
1:CA:1318:A:H4'	18:CS:9:PHE:CE1	2.44	0.52
1:CA:1521:C:H2'	1:CA:1522:U:H6	1.75	0.52
2:CC:54:ILE:HG23	2:CC:54:ILE:O	2.09	0.52
3:CD:117:VAL:O	3:CD:130:ASN:HA	2.10	0.52
6:CG:61:PHE:O	6:CG:65:LEU:HD13	2.10	0.52
6:CG:145:GLU:C	6:CG:147:ASN:H	2.18	0.52
7:CH:94:VAL:CG2	7:CH:101:ALA:HB2	2.39	0.52
12:CM:19:THR:HA	12:CM:24:VAL:HG23	1.91	0.52
14:CO:17:ARG:HD3	14:CO:24:SER:OG	2.10	0.52
19:CT:49:ALA:O	19:CT:52:GLU:HG2	2.10	0.52
21:CU:39:LYS:N	21:CU:40:PRO:CD	2.73	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:CU:40:PRO:HA	21:CU:44:ARG:HD3	1.92	0.52
23:DB:633:A:H8	23:DB:633:A:O5'	1.92	0.52
23:DB:929:U:O2'	23:DB:930:G:H5'	2.10	0.52
23:DB:1422:G:C1'	23:DB:1495:A:H61	2.23	0.52
23:DB:1501:G:O2'	23:DB:1502:A:H5'	2.09	0.52
23:DB:1508:A:H5'	23:DB:1509:A:N6	2.23	0.52
23:DB:1732:C:H2'	23:DB:1732:C:OP1	2.10	0.52
23:DB:2443:C:H2'	23:DB:2444:G:H8	1.75	0.52
23:DB:2698:U:H2'	23:DB:2699:C:C6	2.45	0.52
24:DI:5:GLN:HB2	24:DI:30:GLN:OE1	2.10	0.52
27:DK:87:LEU:HD12	27:DK:92:GLU:HA	1.92	0.52
28:DP:88:ARG:HB3	28:DP:88:ARG:NH2	2.25	0.52
31:D0:55:ALA:C	31:D0:56:LYS:HG3	2.33	0.52
33:D1:10:LEU:O	33:D1:19:PHE:HB2	2.10	0.52
34:D3:50:SER:C	34:D3:52:GLY:H	2.17	0.52
41:DJ:25:LEU:HB2	41:DJ:62:VAL:CG2	2.40	0.52
46:DU:78:LYS:CD	46:DU:79:ALA:H	2.22	0.52
48:DG:155:PRO:C	48:DG:170:THR:HB	2.35	0.52
50:DT:10:VAL:HG21	50:DT:42:GLU:HG3	1.91	0.52
52:DW:21:GLY:CA	52:DW:33:GLY:HA2	2.40	0.52
1:AA:472:U:H2'	1:AA:473:U:C6	2.44	0.52
1:AA:560:A:H5'	1:AA:566:G:N2	2.25	0.52
1:AA:1003:G:N2	1:AA:1005:A:H5'	2.25	0.52
1:AA:1289:A:H2'	1:AA:1290:G:H5'	1.91	0.52
3:AD:11:SER:HA	3:AD:18:LEU:CD2	2.39	0.52
4:AE:19:ARG:O	4:AE:20:VAL:HB	2.10	0.52
11:AL:66:ILE:HG21	11:AL:71:HIS:HB3	1.91	0.52
20:AB:95:TRP:CH2	20:AB:100:LEU:HB2	2.40	0.52
23:BB:182:A:H2'	23:BB:183:C:H6	1.74	0.52
23:BB:322:A:C3'	29:BE:163:ASN:HD21	2.23	0.52
23:BB:699:A:H2'	23:BB:700:G:O4'	2.09	0.52
23:BB:1172:C:H2'	23:BB:1172:C:O2	2.10	0.52
23:BB:1676:A:H2'	23:BB:1677:A:O4'	2.10	0.52
23:BB:2021:C:OP1	31:B0:8:THR:HG21	2.10	0.52
23:BB:2301:C:H2'	23:BB:2302:U:C6	2.44	0.52
23:BB:2825:G:N3	23:BB:2825:G:H5''	2.25	0.52
29:BE:166:LYS:O	29:BE:167:VAL:HB	2.10	0.52
31:B0:42:ILE:HG12	42:BN:99:LYS:O	2.09	0.52
33:B1:8:ILE:HG23	33:B1:51:ALA:HA	1.92	0.52
36:B2:10:LEU:HD11	36:B2:14:ARG:CZ	2.40	0.52
39:BX:56:LEU:O	39:BX:57:LEU:HB3	2.08	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BH:75:LEU:HD21	40:BH:105:ALA:HA	1.93	0.52
41:BJ:4:PHE:CG	41:BJ:5:THR:N	2.78	0.52
41:BJ:56:VAL:HG12	41:BJ:57:LEU:N	2.25	0.52
47:BF:78:ILE:HG23	47:BF:82:TYR:HB3	1.92	0.52
47:BF:79:ARG:NE	47:BF:82:TYR:HD2	2.07	0.52
47:BF:138:PRO:HA	47:BF:142:TYR:CE2	2.45	0.52
48:BG:96:ALA:HB3	48:BG:103:ASN:HB3	1.92	0.52
49:BR:54:VAL:HG22	49:BR:55:ASP:OD2	2.10	0.52
50:BT:69:ARG:HG2	50:BT:73:ARG:C	2.35	0.52
1:CA:144:G:H2'	1:CA:145:G:O4'	2.10	0.52
1:CA:194:C:O2'	1:CA:195:A:H5'	2.10	0.52
1:CA:253:A:H2'	1:CA:254:G:C8	2.44	0.52
1:CA:394:G:H2'	1:CA:395:C:H6	1.75	0.52
1:CA:405:U:O4	3:CD:1:ALA:HA	2.10	0.52
1:CA:575:G:H4'	1:CA:576:C:OP1	2.10	0.52
14:CO:78:TYR:CE1	14:CO:82:ILE:HD11	2.45	0.52
22:DA:16:G:O2'	22:DA:17:C:H5'	2.10	0.52
22:DA:50:A:OP1	43:DO:68:LYS:HB2	2.10	0.52
23:DB:173:A:H2'	23:DB:174:U:C6	2.45	0.52
23:DB:1386:C:H2'	23:DB:1387:A:H8	1.75	0.52
23:DB:2085:U:O2'	23:DB:2086:U:H5'	2.10	0.52
23:DB:2537:U:H2'	23:DB:2538:C:C6	2.46	0.52
23:DB:2707:U:H2'	23:DB:2708:G:C8	2.45	0.52
23:DB:2734:A:C2'	23:DB:2735:G:H5'	2.40	0.52
25:DC:90:ILE:CD1	25:DC:102:TYR:HB3	2.39	0.52
26:DD:51:THR:HG22	26:DD:52:THR:N	2.25	0.52
46:DU:23:LYS:HD2	46:DU:23:LYS:N	2.25	0.52
47:DF:43:ILE:HB	47:DF:82:TYR:CZ	2.45	0.52
48:DG:115:GLN:CD	48:DG:115:GLN:H	2.17	0.52
50:DT:39:THR:O	50:DT:40:LYS:HB2	2.09	0.52
50:DT:82:LYS:HD2	50:DT:84:TYR:CE1	2.42	0.52
50:DT:87:LEU:HB2	50:DT:91:GLN:HG2	1.92	0.52
1:AA:1219:A:H2'	1:AA:1220:G:H8	1.75	0.51
2:AC:113:LYS:HB2	2:AC:184:ASN:OD1	2.09	0.51
9:AJ:14:ASP:OD1	9:AJ:17:LEU:HB2	2.10	0.51
15:AP:67:ILE:HD11	15:AP:71:VAL:HG22	1.92	0.51
20:AB:62:ARG:H	20:AB:62:ARG:CD	2.16	0.51
20:AB:107:ARG:HA	20:AB:110:ILE:HD12	1.91	0.51
20:AB:113:LEU:HD12	20:AB:143:LEU:HB3	1.92	0.51
21:AU:40:PRO:HA	21:AU:44:ARG:HD3	1.92	0.51
23:BB:132:G:O2'	23:BB:133:U:H5'	2.10	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:322:A:C2'	29:BE:163:ASN:HD21	2.23	0.51
23:BB:616:A:H3'	23:BB:617:G:C8	2.42	0.51
23:BB:817:C:O2'	23:BB:839:U:H5''	2.10	0.51
23:BB:1050:A:H2'	23:BB:1051:G:H8	1.75	0.51
23:BB:1220:G:H2'	23:BB:1221:C:H6	1.74	0.51
23:BB:1295:C:H2'	23:BB:1296:G:C8	2.45	0.51
23:BB:1319:C:O2'	23:BB:1320:C:H5'	2.09	0.51
23:BB:1805:A:N3	25:BC:49:THR:CG2	2.74	0.51
23:BB:1847:A:H4'	23:BB:1848:A:H8	1.75	0.51
23:BB:2052:A:OP1	26:BD:145:SER:HA	2.09	0.51
23:BB:2136:G:H3'	23:BB:2137:U:H5	1.76	0.51
23:BB:2353:G:N3	52:BW:30:VAL:HG13	2.26	0.51
23:BB:2849:U:N3	23:BB:2867:G:C8	2.76	0.51
26:BD:69:ALA:CA	26:BD:73:VAL:HB	2.40	0.51
26:BD:77:ARG:HB2	26:BD:80:TRP:HH2	1.75	0.51
28:BP:3:ILE:HG23	28:BP:4:ILE:HG13	1.92	0.51
38:BM:26:VAL:HG13	38:BM:133:LYS:HA	1.92	0.51
40:BH:40:THR:N	40:BH:43:ASN:ND2	2.55	0.51
43:BO:51:ALA:O	43:BO:74:VAL:HG13	2.10	0.51
49:BR:62:GLU:O	49:BR:96:VAL:HA	2.10	0.51
52:BW:9:THR:OG1	52:BW:10:ARG:N	2.42	0.51
1:CA:926:G:N2	1:CA:1505:G:H2'	2.25	0.51
1:CA:952:U:H2'	1:CA:953:G:C8	2.44	0.51
1:CA:1142:G:H2'	1:CA:1143:G:O4'	2.09	0.51
2:CC:113:LYS:HB2	2:CC:184:ASN:OD1	2.10	0.51
3:CD:26:ALA:HA	3:CD:30:LYS:HE3	1.91	0.51
3:CD:106:PHE:CD1	3:CD:144:ILE:HD11	2.45	0.51
3:CD:146:GLU:C	3:CD:148:ALA:H	2.18	0.51
6:CG:11:ILE:H	6:CG:11:ILE:HD12	1.75	0.51
6:CG:104:VAL:HG12	6:CG:108:ARG:HH11	1.75	0.51
11:CL:7:VAL:HG22	16:CQ:33:TYR:HD1	1.74	0.51
11:CL:31:GLY:HA3	11:CL:54:VAL:HG12	1.92	0.51
12:CM:56:ARG:O	12:CM:59:VAL:HG12	2.10	0.51
22:DA:22:U:H2'	22:DA:23:G:C8	2.45	0.51
23:DB:483:A:C4	46:DU:57:ILE:HD11	2.45	0.51
23:DB:592:A:H2'	23:DB:593:U:C6	2.45	0.51
23:DB:1376:C:H3'	56:DB:3278:HOH:O	2.10	0.51
23:DB:1723:G:H3'	23:DB:1724:G:H8	1.74	0.51
23:DB:2282:G:H4'	23:DB:2389:G:O2'	2.09	0.51
23:DB:2425:A:H5''	23:DB:2426:A:H3'	1.91	0.51
23:DB:2772:C:H2'	23:DB:2773:C:C6	2.45	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:2852:G:H2'	23:DB:2853:C:C6	2.45	0.51
24:DI:85:ILE:HD12	24:DI:87:SER:O	2.09	0.51
24:DI:99:LYS:HD3	24:DI:99:LYS:N	2.25	0.51
26:DD:101:PHE:HE2	26:DD:205:PRO:HD3	1.75	0.51
42:DN:49:GLU:HA	42:DN:94:TYR:HD2	1.76	0.51
47:DF:78:ILE:HG23	47:DF:82:TYR:HB3	1.92	0.51
50:DT:57:VAL:HG22	50:DT:58:VAL:N	2.16	0.51
1:AA:325:A:H2'	1:AA:326:G:O4'	2.09	0.51
1:AA:465:A:N3	1:AA:465:A:H5'	2.26	0.51
1:AA:586:C:C2'	1:AA:587:G:H5'	2.40	0.51
1:AA:825:A:H2'	1:AA:826:C:H6	1.73	0.51
1:AA:858:G:O6	1:AA:869:G:H3'	2.10	0.51
1:AA:1004:A:C8	1:AA:1025:U:H1'	2.45	0.51
1:AA:1298:U:H2'	6:AG:113:LYS:NZ	2.25	0.51
5:AF:43:GLY:HA2	5:AF:58:HIS:CD2	2.45	0.51
9:AJ:88:MET:SD	9:AJ:88:MET:N	2.83	0.51
12:AM:6:ILE:O	12:AM:8:ILE:HG23	2.11	0.51
12:AM:49:GLU:HG3	12:AM:53:ASP:OD1	2.11	0.51
12:AM:89:ARG:NH2	12:AM:94:LEU:HD12	2.25	0.51
13:AN:24:ALA:O	13:AN:27:LYS:HG2	2.10	0.51
13:AN:41:TRP:HB3	13:AN:44:VAL:HG12	1.90	0.51
19:AT:50:PHE:O	19:AT:53:MET:HG3	2.09	0.51
20:AB:65:LYS:H	20:AB:158:ASP:CG	2.18	0.51
20:AB:112:ARG:NH2	20:AB:116:LEU:HD21	2.24	0.51
20:AB:124:THR:OG1	20:AB:124:THR:O	2.25	0.51
23:BB:139:U:H5''	23:BB:140:C:O4'	2.10	0.51
23:BB:438:G:H2'	23:BB:439:A:C8	2.45	0.51
23:BB:478:A:H5''	23:BB:479:A:OP2	2.10	0.51
23:BB:934:U:H2'	23:BB:935:C:C6	2.45	0.51
23:BB:1220:G:H2'	23:BB:1221:C:C6	2.45	0.51
23:BB:1241:A:H2'	23:BB:1242:U:H5'	1.92	0.51
23:BB:2213:U:C2'	23:BB:2213:U:O2	2.57	0.51
25:BC:159:THR:O	25:BC:194:VAL:HG12	2.11	0.51
25:BC:255:LYS:C	25:BC:256:THR:HG23	2.34	0.51
26:BD:111:GLY:H	26:BD:194:PRO:HG2	1.75	0.51
27:BK:113:MET:HE2	27:BK:113:MET:HA	1.92	0.51
30:BY:2:LYS:HG2	30:BY:3:THR:H	1.75	0.51
36:B2:10:LEU:HD21	36:B2:14:ARG:HH11	1.72	0.51
37:BL:3:LEU:O	37:BL:5:THR:N	2.43	0.51
39:BX:20:ASN:N	39:BX:20:ASN:HD22	2.08	0.51
40:BH:82:SER:HB3	40:BH:92:GLY:O	2.09	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BQ:35:PHE:HE1	44:BQ:39:ILE:HD11	1.75	0.51
46:BU:85:ARG:NE	46:BU:85:ARG:HA	2.26	0.51
48:BG:84:LYS:HB3	48:BG:132:LEU:O	2.11	0.51
1:CA:201:G:O2'	1:CA:469:C:H4'	2.09	0.51
1:CA:634:C:H2'	1:CA:635:A:H8	1.76	0.51
1:CA:972:C:P	9:CJ:59:LYS:HD3	2.50	0.51
1:CA:1147:C:O2'	8:CI:17:ARG:HD2	2.11	0.51
1:CA:1488:G:O2'	1:CA:1489:G:H5'	2.10	0.51
5:CF:92:THR:O	5:CF:93:LYS:HB2	2.11	0.51
18:CS:11:ASP:H	18:CS:14:LEU:HD21	1.75	0.51
20:CB:13:VAL:HG11	20:CB:207:ARG:HG2	1.91	0.51
23:DB:156:A:H2'	23:DB:157:C:C6	2.45	0.51
23:DB:753:A:O2'	23:DB:754:U:H5'	2.10	0.51
23:DB:825:A:H1'	37:DL:54:GLN:NE2	2.26	0.51
23:DB:1060:U:O2	23:DB:1088:A:C8	2.63	0.51
23:DB:1213:A:C6	23:DB:1237:A:H1'	2.45	0.51
23:DB:1229:C:H2'	23:DB:1230:A:C8	2.45	0.51
23:DB:1654:A:H2'	23:DB:1655:A:C8	2.44	0.51
23:DB:2230:G:H2'	23:DB:2231:U:C6	2.45	0.51
25:DC:116:GLN:HG2	25:DC:117:SER:N	2.23	0.51
25:DC:246:PRO:HB2	25:DC:247:TRP:CZ3	2.45	0.51
37:DL:85:VAL:HG22	37:DL:94:THR:HG22	1.93	0.51
40:DH:73:ASN:ND2	40:DH:140:ALA:HB1	2.26	0.51
44:DQ:59:LEU:C	44:DQ:59:LEU:HD13	2.35	0.51
44:DQ:86:SER:HB3	49:DR:52:PRO:HD3	1.92	0.51
47:DF:79:ARG:NE	47:DF:82:TYR:HD2	2.08	0.51
49:DR:58:VAL:O	49:DR:58:VAL:HG13	2.10	0.51
52:DW:49:ASN:CB	52:DW:60:ALA:HA	2.40	0.51
1:AA:171:A:H2'	1:AA:172:A:C8	2.44	0.51
1:AA:239:U:H6	1:AA:239:U:C5'	2.23	0.51
1:AA:253:A:H2'	1:AA:254:G:C8	2.45	0.51
1:AA:677:U:H2'	1:AA:678:U:C6	2.45	0.51
1:AA:1172:C:O2'	1:AA:1173:U:H5'	2.10	0.51
1:AA:1490:U:H5'	1:AA:1491:G:OP2	2.11	0.51
8:AI:99:LYS:HE3	9:CJ:80:THR:CA	2.40	0.51
12:AM:15:VAL:HG22	12:AM:33:LEU:CD1	2.40	0.51
18:AS:44:ILE:HA	18:AS:61:VAL:CG1	2.40	0.51
20:AB:23:ASN:HD22	20:AB:24:PRO:CD	2.23	0.51
23:BB:84:A:P	46:BU:5:ARG:HE	2.33	0.51
23:BB:274:C:H2'	23:BB:275:C:O4'	2.11	0.51
23:BB:767:U:O2'	23:BB:768:G:H5'	2.10	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:919:U:H2'	23:BB:920:A:H8	1.70	0.51
23:BB:1083:U:H2'	23:BB:1085:A:OP2	2.10	0.51
23:BB:1509:A:H4'	23:BB:1510:G:H8	1.74	0.51
27:BK:64:ARG:O	27:BK:82:ASN:HA	2.10	0.51
27:BK:113:MET:HE2	27:BK:116:ILE:HD11	1.91	0.51
28:BP:77:SER:O	28:BP:80:VAL:HG12	2.10	0.51
29:BE:60:TRP:C	29:BE:62:GLN:H	2.18	0.51
29:BE:182:ALA:O	29:BE:183:PHE:HB2	2.10	0.51
40:BH:77:THR:HG22	40:BH:79:THR:HG23	1.93	0.51
41:BJ:18:VAL:CG1	41:BJ:54:ILE:HD11	2.39	0.51
47:BF:119:LYS:C	47:BF:121:PHE:H	2.17	0.51
49:BR:61:ALA:CB	49:BR:98:ILE:HA	2.41	0.51
50:BT:50:LEU:HD22	50:BT:50:LEU:H	1.74	0.51
1:CA:34:C:H2'	1:CA:35:G:H8	1.76	0.51
1:CA:179:A:H2'	1:CA:180:U:O4'	2.09	0.51
1:CA:310:G:H5''	15:CP:31:ARG:HB2	1.91	0.51
1:CA:386:C:C2'	1:CA:387:U:H5'	2.41	0.51
1:CA:674:G:H2'	1:CA:675:A:H8	1.75	0.51
1:CA:1243:C:H2'	1:CA:1244:G:H8	1.75	0.51
1:CA:1251:A:H2'	1:CA:1252:A:C8	2.46	0.51
1:CA:1292:G:H2'	1:CA:1293:C:C6	2.44	0.51
1:CA:1298:U:H2'	6:CG:113:LYS:NZ	2.25	0.51
56:CA:1764:HOH:O	13:CN:1:ALA:HB3	2.10	0.51
7:CH:34:ALA:HB1	7:CH:109:VAL:HB	1.91	0.51
11:CL:88:ASP:C	11:CL:89:LEU:HD22	2.35	0.51
16:CQ:80:LYS:H	16:CQ:80:LYS:HD2	1.75	0.51
19:CT:2:ASN:ND2	19:CT:3:ILE:N	2.57	0.51
23:DB:184:C:H2'	23:DB:185:G:H8	1.75	0.51
23:DB:692:C:H2'	23:DB:693:A:H8	1.75	0.51
23:DB:937:C:H2'	23:DB:938:G:C8	2.46	0.51
23:DB:1007:C:O3'	41:DJ:110:PRO:HB3	2.09	0.51
23:DB:1083:U:H2'	23:DB:1085:A:OP2	2.10	0.51
23:DB:1310:G:H21	23:DB:1610:A:H8	1.59	0.51
23:DB:1349:C:H2'	23:DB:1350:C:H6	1.76	0.51
23:DB:1796:U:H2'	23:DB:1797:G:C8	2.45	0.51
23:DB:2489:U:O2'	23:DB:2490:G:H5'	2.10	0.51
23:DB:2611:C:O2'	23:DB:2612:C:H5'	2.10	0.51
24:DI:18:ASN:HB2	24:DI:38:CYS:SG	2.51	0.51
24:DI:129:GLU:HB3	24:DI:133:ARG:HH12	1.75	0.51
25:DC:64:VAL:HG22	25:DC:90:ILE:HD11	1.91	0.51
37:DL:82:LEU:HD23	37:DL:90:VAL:HG21	1.92	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DH:135:HIS:CG	40:DH:136:SER:N	2.79	0.51
41:DJ:56:VAL:HG12	41:DJ:57:LEU:N	2.25	0.51
42:DN:31:HIS:O	42:DN:33:ILE:HG13	2.10	0.51
46:DU:81:ARG:HB2	46:DU:96:LYS:HG2	1.91	0.51
49:DR:5:PHE:O	49:DR:11:GLN:HA	2.09	0.51
50:DT:4:GLU:CD	50:DT:5:GLU:H	2.17	0.51
50:DT:43:ILE:HG21	50:DT:58:VAL:HG21	1.92	0.51
50:DT:68:LYS:O	50:DT:69:ARG:HB3	2.10	0.51
1:AA:1234:C:O2'	1:AA:1235:U:H5'	2.10	0.51
1:AA:1243:C:H2'	1:AA:1244:G:H8	1.75	0.51
1:AA:1318:A:H4'	18:AS:9:PHE:CE1	2.45	0.51
1:AA:1329:A:O2'	1:AA:1330:U:H5'	2.10	0.51
1:AA:1359:C:H3'	13:AN:74:ARG:HH21	1.74	0.51
4:AE:80:LEU:HG	4:AE:122:VAL:HG11	1.92	0.51
16:AQ:45:VAL:HG11	16:AQ:60:ILE:HG21	1.92	0.51
20:AB:118:THR:HA	20:AB:121:GLN:HB3	1.92	0.51
22:BA:55:U:H2'	22:BA:56:G:H8	1.76	0.51
23:BB:143:C:O5'	23:BB:143:C:H6	1.94	0.51
23:BB:173:A:H2'	23:BB:174:U:C6	2.45	0.51
23:BB:305:C:H2'	23:BB:306:U:C6	2.46	0.51
23:BB:438:G:H2'	23:BB:439:A:H8	1.74	0.51
23:BB:443:A:C8	29:BE:40:ARG:HD3	2.45	0.51
23:BB:1117:C:H2'	23:BB:1118:C:H6	1.76	0.51
23:BB:1704:C:O2'	23:BB:1705:A:H5'	2.09	0.51
23:BB:2649:C:H2'	23:BB:2650:U:H6	1.73	0.51
23:BB:2747:G:H2'	23:BB:2748:A:C8	2.45	0.51
25:BC:104:LEU:O	25:BC:105:ALA:HB3	2.10	0.51
25:BC:116:GLN:HG2	25:BC:117:SER:N	2.25	0.51
25:BC:222:THR:HA	25:BC:231:HIS:O	2.10	0.51
26:BD:14:ILE:HG23	26:BD:14:ILE:O	2.10	0.51
31:B0:48:TYR:CG	31:B0:49:ARG:N	2.77	0.51
34:B3:60:CYS:C	34:B3:62:PRO:HD3	2.35	0.51
40:BH:40:THR:O	40:BH:42:LYS:N	2.39	0.51
44:BQ:59:LEU:O	44:BQ:62:ALA:HB3	2.11	0.51
44:BQ:105:PHE:HA	44:BQ:108:LEU:CD1	2.40	0.51
45:BS:24:ILE:CG1	45:BS:36:LEU:HD21	2.39	0.51
1:CA:33:A:H2'	1:CA:34:C:C6	2.45	0.51
1:CA:182:A:O2'	1:CA:183:C:H5''	2.11	0.51
1:CA:679:C:H2'	1:CA:680:C:C6	2.45	0.51
1:CA:1053:G:N7	1:CA:1199:U:H3'	2.25	0.51
1:CA:1225:A:H2'	1:CA:1225:A:N3	2.25	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CC:116:ALA:O	2:CC:120:THR:HG23	2.10	0.51
11:CL:49:ARG:HH12	11:CL:88:ASP:CB	2.23	0.51
22:DA:38:C:H2'	22:DA:39:A:O4'	2.09	0.51
23:DB:116:C:O2'	23:DB:126:A:C8	2.64	0.51
23:DB:589:U:H2'	23:DB:590:A:H8	1.75	0.51
23:DB:817:C:O2'	23:DB:839:U:H5''	2.10	0.51
23:DB:851:C:H2'	23:DB:852:U:H6	1.75	0.51
23:DB:1633:G:O2'	23:DB:1634:A:H5''	2.09	0.51
23:DB:2106:U:H2'	23:DB:2107:G:OP1	2.10	0.51
24:DI:23:VAL:HG12	24:DI:27:LEU:HD21	1.92	0.51
24:DI:92:PRO:O	24:DI:93:ASN:HB2	2.08	0.51
25:DC:102:TYR:O	25:DC:103:ILE:HG13	2.10	0.51
30:DY:2:LYS:HG2	30:DY:3:THR:H	1.76	0.51
35:DV:40:ILE:N	35:DV:40:ILE:HD13	2.26	0.51
36:D2:25:LYS:C	36:D2:27:GLY:H	2.18	0.51
42:DN:79:LEU:C	42:DN:81:ASN:H	2.19	0.51
44:DQ:59:LEU:O	44:DQ:62:ALA:HB3	2.10	0.51
45:DS:58:ALA:CB	45:DS:69:LEU:HD21	2.40	0.51
46:DU:80:ASP:O	46:DU:96:LYS:HG2	2.10	0.51
47:DF:71:LYS:HG2	47:DF:73:VAL:H	1.76	0.51
47:DF:106:ALA:HA	47:DF:135:ILE:CD1	2.41	0.51
52:DW:36:ILE:HB	52:DW:39:GLN:NE2	2.24	0.51
1:AA:93:U:OP2	1:AA:94:G:H5''	2.10	0.51
1:AA:162:A:H2'	1:AA:163:C:O4'	2.10	0.51
1:AA:224:U:H2'	1:AA:225:C:C6	2.46	0.51
2:AC:67:ILE:HG22	2:AC:69:THR:HG22	1.93	0.51
3:AD:117:VAL:O	3:AD:130:ASN:HA	2.11	0.51
3:AD:186:GLU:CD	3:AD:187:ARG:N	2.68	0.51
12:AM:71:GLU:HA	12:AM:74:MET:HG3	1.92	0.51
18:AS:64:GLU:CD	18:AS:64:GLU:N	2.68	0.51
23:BB:418:C:H2'	23:BB:419:U:C6	2.46	0.51
23:BB:674:G:O2'	29:BE:60:TRP:HH2	1.94	0.51
23:BB:709:U:H2'	23:BB:710:U:H6	1.72	0.51
23:BB:827:U:H5'	23:BB:828:U:O5'	2.11	0.51
23:BB:1287:A:N7	42:BN:105:GLY:HA3	2.25	0.51
23:BB:2241:A:H2'	23:BB:2242:G:H8	1.76	0.51
23:BB:2589:A:H2'	23:BB:2590:A:H8	1.75	0.51
25:BC:146:LYS:HB2	25:BC:149:LYS:HB2	1.92	0.51
29:BE:109:LEU:O	29:BE:112:LEU:HB2	2.10	0.51
32:B4:11:CYS:SG	32:B4:13:ASN:HB2	2.50	0.51
34:B3:60:CYS:C	34:B3:61:LEU:HD23	2.35	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BV:75:GLN:HG2	35:BV:92:VAL:HB	1.92	0.51
37:BL:46:VAL:HB	37:BL:50:PHE:HD1	1.76	0.51
37:BL:93:ASN:ND2	37:BL:94:THR:H	2.08	0.51
37:BL:125:LEU:H	37:BL:143:GLU:CG	2.24	0.51
37:BL:141:LYS:NZ	37:BL:143:GLU:HA	2.25	0.51
40:BH:68:ARG:O	40:BH:72:ILE:HG22	2.11	0.51
41:BJ:96:ARG:N	41:BJ:97:PRO:HD3	2.25	0.51
45:BS:27:LYS:HD2	45:BS:27:LYS:H	1.75	0.51
45:BS:66:ILE:HD13	45:BS:66:ILE:N	2.20	0.51
48:BG:88:LEU:HD13	48:BG:93:TYR:HB3	1.92	0.51
48:BG:140:ILE:HD12	48:BG:141:GLY:N	2.26	0.51
49:BR:6:GLN:HE21	49:BR:6:GLN:C	2.18	0.51
51:BZ:64:ILE:H	51:BZ:64:ILE:CD1	2.17	0.51
14:CO:26:GLU:HA	14:CO:81:LEU:HD11	1.91	0.51
20:CB:83:ALA:HA	20:CB:88:GLN:HB2	1.92	0.51
20:CB:116:LEU:HB3	20:CB:140:LEU:HD11	1.92	0.51
20:CB:221:ARG:HH11	20:CB:221:ARG:CB	2.24	0.51
23:DB:438:G:H2'	23:DB:439:A:C8	2.45	0.51
23:DB:1220:G:H2'	23:DB:1221:C:C6	2.45	0.51
23:DB:1870:C:H5''	23:DB:1871:A:C6	2.46	0.51
23:DB:2207:C:H2'	23:DB:2208:C:H6	1.75	0.51
23:DB:2615:U:C2	31:D0:3:GLN:HA	2.45	0.51
25:DC:34:GLU:O	25:DC:34:GLU:HG3	2.10	0.51
25:DC:107:LYS:HD3	25:DC:193:GLU:HB2	1.93	0.51
25:DC:209:ALA:HA	25:DC:212:TRP:NE1	2.25	0.51
26:DD:46:ARG:HH12	26:DD:88:GLU:HG3	1.75	0.51
27:DK:113:MET:HE2	27:DK:113:MET:HA	1.92	0.51
34:D3:60:CYS:C	34:D3:62:PRO:HD3	2.36	0.51
37:DL:141:LYS:NZ	37:DL:143:GLU:HA	2.25	0.51
41:DJ:59:ALA:C	41:DJ:61:LYS:H	2.17	0.51
42:DN:3:HIS:O	42:DN:4:ARG:HB2	2.11	0.51
47:DF:21:TYR:HD2	47:DF:27:VAL:HG12	1.76	0.51
49:DR:1:MET:HA	49:DR:42:ALA:HB3	1.93	0.51
1:AA:123:U:H2'	1:AA:124:C:H6	1.76	0.51
1:AA:538:G:OP2	11:AL:111:GLN:HB2	2.10	0.51
1:AA:677:U:H2'	1:AA:678:U:H6	1.75	0.51
1:AA:946:A:H2'	1:AA:947:G:H8	1.72	0.51
3:AD:113:ALA:O	3:AD:117:VAL:HG23	2.11	0.51
4:AE:131:ASN:O	4:AE:135:VAL:HG23	2.09	0.51
8:AI:17:ARG:HB2	8:AI:65:THR:HB	1.92	0.51
15:AP:12:LYS:C	15:AP:14:ARG:H	2.19	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:AS:11:ASP:H	18:AS:14:LEU:HD21	1.75	0.51
18:AS:27:LYS:NZ	18:AS:27:LYS:HB3	2.26	0.51
19:AT:72:ALA:HA	19:AT:75:LYS:HD3	1.92	0.51
23:BB:394:C:H2'	23:BB:395:U:O4'	2.10	0.51
23:BB:575:A:O2'	23:BB:576:U:H5'	2.11	0.51
23:BB:871:U:H4'	38:BM:68:PHE:CE2	2.46	0.51
23:BB:1347:A:H2'	23:BB:1348:C:O4'	2.11	0.51
23:BB:1418:G:H1'	23:BB:1580:A:H61	1.75	0.51
23:BB:1582:C:H3'	23:BB:1583:A:C2	2.45	0.51
23:BB:1789:A:OP1	25:BC:220:ARG:HD3	2.11	0.51
23:BB:2344:U:H4'	23:BB:2345:G:OP1	2.10	0.51
23:BB:2698:U:H2'	23:BB:2699:C:C6	2.45	0.51
23:BB:2704:C:H2'	23:BB:2705:A:O4'	2.11	0.51
23:BB:2707:U:H2'	23:BB:2708:G:C8	2.46	0.51
25:BC:71:ASP:OD2	25:BC:118:GLY:HA2	2.11	0.51
25:BC:93:VAL:HG13	25:BC:94:LEU:N	2.26	0.51
26:BD:14:ILE:HG23	26:BD:22:ILE:HB	1.91	0.51
26:BD:61:THR:O	26:BD:64:GLU:HB2	2.11	0.51
26:BD:104:VAL:HG13	26:BD:106:LYS:HE2	1.92	0.51
27:BK:121:GLU:O	27:BK:122:VAL:C	2.54	0.51
35:BV:77:VAL:HA	35:BV:89:ILE:HG22	1.91	0.51
40:BH:47:PHE:C	40:BH:50:ARG:HH21	2.18	0.51
42:BN:77:ALA:O	42:BN:81:ASN:HB2	2.11	0.51
44:BQ:59:LEU:HD13	44:BQ:59:LEU:C	2.35	0.51
44:BQ:91:ARG:NE	49:BR:11:GLN:H	2.09	0.51
47:BF:71:LYS:HE2	47:BF:73:VAL:HB	1.92	0.51
1:CA:123:U:H2'	1:CA:124:C:C6	2.45	0.51
1:CA:715:A:H2'	1:CA:716:A:C8	2.46	0.51
1:CA:1085:U:H3'	1:CA:1086:U:C5	2.45	0.51
1:CA:1102:A:H2'	1:CA:1103:C:C6	2.45	0.51
1:CA:1219:A:H2'	1:CA:1220:G:H8	1.76	0.51
1:CA:1287:A:H2'	1:CA:1288:A:H8	1.72	0.51
2:CC:26:LYS:HE2	2:CC:27:GLU:HG3	1.92	0.51
7:CH:26:MET:HB2	7:CH:27:PRO:HD2	1.93	0.51
7:CH:74:ILE:HG13	7:CH:128:VAL:HG22	1.92	0.51
10:CK:35:ASP:C	10:CK:37:GLN:H	2.18	0.51
13:CN:26:LEU:HA	13:CN:29:ILE:HD12	1.92	0.51
14:CO:26:GLU:CD	14:CO:77:ARG:HD2	2.35	0.51
16:CQ:28:VAL:HG12	16:CQ:37:ILE:O	2.11	0.51
22:DA:32:U:H2'	22:DA:33:G:H8	1.75	0.51
22:DA:90:C:OP1	38:DM:16:ARG:HB2	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:1099:G:H5''	24:DI:2:LYS:HB2	1.93	0.51
23:DB:1774:C:H2'	23:DB:1774:C:O2	2.10	0.51
23:DB:1812:U:H1'	25:DC:43:ASN:ND2	2.25	0.51
23:DB:2376:A:N1	43:DO:92:PHE:HD2	2.07	0.51
23:DB:2875:C:H2'	23:DB:2876:G:H8	1.76	0.51
27:DK:121:GLU:O	27:DK:122:VAL:C	2.54	0.51
28:DP:89:GLY:HA2	28:DP:111:GLU:HA	1.92	0.51
40:DH:88:GLY:HA3	40:DH:125:THR:OG1	2.10	0.51
44:DQ:78:PHE:CZ	44:DQ:82:LEU:HD11	2.46	0.51
52:DW:68:PHE:CE1	52:DW:79:ILE:HD11	2.45	0.51
1:AA:144:G:H2'	1:AA:145:G:O4'	2.11	0.51
1:AA:242:G:H2'	1:AA:243:A:H5''	1.91	0.51
1:AA:555:U:H2'	1:AA:556:C:H6	1.75	0.51
1:AA:1351:U:O2'	1:AA:1352:C:H5'	2.10	0.51
3:AD:2:ARG:HG3	3:AD:114:ARG:NH1	2.25	0.51
3:AD:152:SER:O	3:AD:155:LYS:HG2	2.11	0.51
6:AG:135:LYS:HD3	6:AG:136:LYS:N	2.26	0.51
7:AH:94:VAL:CG2	7:AH:101:ALA:HB2	2.40	0.51
16:AQ:28:VAL:HG12	16:AQ:37:ILE:O	2.10	0.51
23:BB:62:U:C2'	23:BB:63:A:H5'	2.40	0.51
23:BB:279:A:H2'	23:BB:280:U:H5'	1.92	0.51
23:BB:526:A:N6	23:BB:2626:C:H4'	2.25	0.51
23:BB:693:A:H2'	23:BB:694:U:H6	1.75	0.51
23:BB:912:C:H2'	23:BB:913:U:C6	2.45	0.51
23:BB:1054:A:H2'	23:BB:1055:G:C8	2.46	0.51
23:BB:1353:A:H2'	23:BB:1354:A:C8	2.45	0.51
23:BB:1947:C:H2'	23:BB:1948:G:C8	2.46	0.51
23:BB:2648:G:H2'	23:BB:2649:C:C6	2.45	0.51
26:BD:51:THR:HG22	26:BD:52:THR:N	2.26	0.51
27:BK:109:SER:HB2	27:BK:111:LYS:HE2	1.92	0.51
35:BV:44:HIS:CE1	35:BV:86:LEU:H	2.20	0.51
36:B2:25:LYS:C	36:B2:27:GLY:H	2.19	0.51
38:BM:21:ALA:CB	38:BM:100:LYS:HG2	2.40	0.51
39:BX:31:GLN:HB3	39:BX:37:LEU:HD12	1.93	0.51
42:BN:49:GLU:HA	42:BN:94:TYR:HD2	1.75	0.51
44:BQ:111:LYS:NZ	49:BR:50:GLY:HA2	2.26	0.51
46:BU:23:LYS:HD2	46:BU:23:LYS:H	1.76	0.51
46:BU:78:LYS:CD	46:BU:79:ALA:H	2.24	0.51
47:BF:100:GLU:C	47:BF:102:LEU:N	2.68	0.51
47:BF:126:ASN:HD22	47:BF:156:THR:CA	2.22	0.51
51:BZ:5:CYS:O	51:BZ:6:GLN:HB3	2.10	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BW:17:ALA:O	52:BW:18:LYS:HD2	2.11	0.51
1:CA:57:G:H2'	1:CA:58:C:H6	1.75	0.51
1:CA:279:A:H5'	1:CA:281:G:O4'	2.10	0.51
1:CA:436:C:O2'	1:CA:437:U:H5'	2.11	0.51
1:CA:842:U:H4'	1:CA:846:G:C2	2.45	0.51
12:CM:63:VAL:CG1	12:CM:67:ASP:HB2	2.41	0.51
13:CN:55:SER:HB2	13:CN:58:ARG:HD2	1.93	0.51
23:DB:62:U:C2'	23:DB:63:A:H5'	2.41	0.51
23:DB:1198:U:H2'	23:DB:1199:U:H6	1.75	0.51
23:DB:1274:A:N3	23:DB:1297:C:H1'	2.25	0.51
23:DB:1804:C:OP1	25:DC:256:THR:HB	2.11	0.51
23:DB:2893:A:H4'	23:DB:2894:G:C5'	2.41	0.51
24:DI:1:ALA:CB	24:DI:2:LYS:HD2	2.40	0.51
26:DD:107:VAL:HA	26:DD:204:LYS:O	2.11	0.51
34:D3:39:ARG:O	34:D3:43:LEU:HG	2.10	0.51
37:DL:93:ASN:ND2	37:DL:94:THR:H	2.08	0.51
38:DM:18:ARG:C	38:DM:38:ARG:HH22	2.18	0.51
38:DM:59:ARG:HE	38:DM:60:GLN:N	2.09	0.51
40:DH:29:PHE:C	40:DH:31:VAL:H	2.19	0.51
41:DJ:96:ARG:N	41:DJ:97:PRO:HD3	2.26	0.51
42:DN:13:ASN:OD1	42:DN:15:SER:HB3	2.09	0.51
44:DQ:105:PHE:HA	44:DQ:108:LEU:CD1	2.41	0.51
47:DF:126:ASN:HD22	47:DF:156:THR:CA	2.24	0.51
49:DR:3:ALA:O	49:DR:4:VAL:HG13	2.10	0.51
50:DT:39:THR:HG22	50:DT:42:GLU:CG	2.36	0.51
1:AA:77:A:H8	1:AA:77:A:O5'	1.93	0.51
1:AA:204:G:H1'	1:AA:466:A:H62	1.76	0.51
1:AA:332:G:OP2	19:AT:4:LYS:HB2	2.10	0.51
1:AA:399:G:H2'	1:AA:400:C:C6	2.45	0.51
1:AA:556:C:O2'	1:AA:557:G:H5'	2.11	0.51
1:AA:586:C:O2'	1:AA:587:G:H5'	2.09	0.51
1:AA:678:U:H2'	1:AA:679:C:H6	1.74	0.51
1:AA:840:C:H2'	1:AA:842:U:OP2	2.11	0.51
1:AA:1026:G:H2'	1:AA:1027:C:C6	2.46	0.51
1:AA:1225:A:H2'	1:AA:1225:A:N3	2.25	0.51
1:AA:1250:A:H4'	8:AI:69:GLY:N	2.20	0.51
1:AA:1289:A:H61	8:AI:71:ILE:CD1	2.24	0.51
5:AF:3:HIS:HB2	5:AF:92:THR:CA	2.35	0.51
5:AF:6:ILE:HD11	5:AF:8:PHE:CD2	2.46	0.51
6:AG:11:ILE:HG12	6:AG:24:LYS:HE2	1.91	0.51
6:AG:104:VAL:HG12	6:AG:108:ARG:HH11	1.76	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AH:55:LYS:HA	7:AH:55:LYS:NZ	2.25	0.51
9:AJ:35:GLN:HG2	9:AJ:78:GLU:OE1	2.10	0.51
9:AJ:92:LEU:N	9:AJ:92:LEU:HD13	2.25	0.51
14:AO:16:GLY:HA2	14:AO:27:VAL:CG2	2.40	0.51
19:AT:28:ARG:O	19:AT:32:LYS:HG3	2.09	0.51
23:BB:2875:C:H2'	23:BB:2876:G:C8	2.46	0.51
24:BI:17:ALA:O	24:BI:18:ASN:CB	2.59	0.51
24:BI:79:LEU:HD11	24:BI:131:THR:OG1	2.10	0.51
25:BC:106:PRO:O	25:BC:109:LEU:HD13	2.10	0.51
26:BD:3:GLY:C	26:BD:4:LEU:HD22	2.36	0.51
26:BD:92:VAL:O	26:BD:94:GLN:N	2.44	0.51
26:BD:109:VAL:HG11	26:BD:193:VAL:CB	2.39	0.51
26:BD:159:LYS:O	26:BD:161:MET:HG2	2.11	0.51
35:BV:53:LYS:HA	35:BV:53:LYS:NZ	2.25	0.51
37:BL:82:LEU:HD23	37:BL:90:VAL:HG21	1.92	0.51
38:BM:40:ARG:HB2	38:BM:93:VAL:HG21	1.92	0.51
39:BX:56:LEU:C	39:BX:58:ASN:N	2.68	0.51
40:BH:4:ILE:HD12	40:BH:37:VAL:HG13	1.92	0.51
40:BH:90:LEU:HD13	40:BH:124:THR:O	2.11	0.51
41:BJ:25:LEU:HB2	41:BJ:62:VAL:CG2	2.40	0.51
41:BJ:102:GLU:HG3	41:BJ:124:VAL:HG11	1.93	0.51
42:BN:49:GLU:HB2	42:BN:50:PRO:HD3	1.93	0.51
42:BN:83:LEU:HA	42:BN:86:ARG:HG3	1.91	0.51
49:BR:49:ILE:HG21	49:BR:53:PHE:C	2.36	0.51
50:BT:10:VAL:HG21	50:BT:42:GLU:HG3	1.93	0.51
1:CA:80:A:H2'	1:CA:81:A:C8	2.46	0.51
1:CA:148:G:N3	1:CA:1446:A:H2	2.09	0.51
1:CA:893:C:H2'	1:CA:894:G:H8	1.76	0.51
1:CA:923:A:H2'	1:CA:924:C:H6	1.74	0.51
1:CA:1384:C:H2'	1:CA:1385:G:C8	2.46	0.51
3:CD:196:GLU:O	3:CD:199:ILE:HG12	2.10	0.51
5:CF:6:ILE:HD12	5:CF:7:VAL:N	2.26	0.51
9:CJ:92:LEU:N	9:CJ:92:LEU:HD13	2.26	0.51
13:CN:24:ALA:O	13:CN:27:LYS:HG2	2.11	0.51
17:CR:45:GLY:O	17:CR:46:THR:C	2.54	0.51
20:CB:23:ASN:HD22	20:CB:24:PRO:CD	2.24	0.51
22:DA:49:C:H2'	22:DA:50:A:C8	2.46	0.51
23:DB:136:G:H2'	23:DB:137:U:C6	2.46	0.51
23:DB:182:A:H2'	23:DB:183:C:H6	1.75	0.51
23:DB:1341:G:N2	23:DB:1398:C:H4'	2.26	0.51
23:DB:1418:G:H1'	23:DB:1580:A:H61	1.76	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:1736:U:H2'	23:DB:1737:G:O4'	2.11	0.51
23:DB:1818:U:HO2'	23:DB:1819:A:P	2.33	0.51
23:DB:2094:A:H2'	23:DB:2095:A:C8	2.46	0.51
23:DB:2216:G:H2'	23:DB:2217:G:C8	2.45	0.51
23:DB:2352:A:N3	52:DW:29:SER:HB3	2.26	0.51
23:DB:2840:C:H2'	23:DB:2841:C:H6	1.75	0.51
26:DD:151:THR:CB	26:DD:152:PRO:HD3	2.38	0.51
37:DL:125:LEU:HB2	37:DL:143:GLU:OE2	2.11	0.51
38:DM:63:ILE:HD12	38:DM:63:ILE:N	2.26	0.51
40:DH:141:LYS:HE3	40:DH:141:LYS:H	1.75	0.51
46:DU:21:ARG:HD3	46:DU:72:PHE:CG	2.46	0.51
46:DU:40:LEU:HB3	46:DU:59:GLU:HG2	1.92	0.51
1:AA:373:A:H1'	1:AA:481:G:H1'	1.93	0.51
1:AA:742:G:O2'	1:AA:743:A:H5'	2.11	0.51
1:AA:979:C:H1'	1:AA:1317:C:H41	1.76	0.51
1:AA:1377:A:C5	6:AG:6:ILE:HG12	2.45	0.51
1:AA:1473:G:H2'	1:AA:1474:U:O4'	2.11	0.51
1:AA:1524:C:H2'	1:AA:1525:G:C8	2.46	0.51
2:AC:48:LYS:HD3	2:AC:48:LYS:N	2.17	0.51
3:AD:151:GLN:HE21	3:AD:153:ARG:HG2	1.76	0.51
13:AN:68:ARG:HH12	13:AN:71:GLY:H	1.59	0.51
14:AO:39:LEU:HD23	14:AO:43:PHE:HE1	1.76	0.51
23:BB:152:A:H2'	23:BB:153:U:C6	2.45	0.51
23:BB:279:A:H2'	23:BB:280:U:C5'	2.41	0.51
23:BB:1407:G:H2'	23:BB:1408:G:H8	1.74	0.51
23:BB:1736:U:H2'	23:BB:1737:G:O4'	2.10	0.51
23:BB:1804:C:OP1	25:BC:256:THR:HB	2.11	0.51
23:BB:1939:U:H5'	23:BB:1939:U:H6	1.75	0.51
23:BB:1957:C:H2'	23:BB:1958:C:H6	1.76	0.51
23:BB:2450:A:O2'	23:BB:2451:A:H5'	2.11	0.51
23:BB:2611:C:O2'	23:BB:2612:C:H5'	2.10	0.51
24:BI:124:MET:O	24:BI:128:ILE:HG12	2.11	0.51
25:BC:75:ALA:HB2	25:BC:95:TYR:HA	1.93	0.51
25:BC:90:ILE:HD13	25:BC:103:ILE:O	2.11	0.51
25:BC:102:TYR:O	25:BC:103:ILE:HG13	2.11	0.51
25:BC:109:LEU:CD2	25:BC:109:LEU:H	2.24	0.51
26:BD:107:VAL:HA	26:BD:204:LYS:O	2.11	0.51
27:BK:79:PHE:HZ	27:BK:104:THR:HG23	1.76	0.51
28:BP:89:GLY:HA2	28:BP:111:GLU:HA	1.93	0.51
38:BM:35:ALA:HB3	38:BM:100:LYS:H	1.74	0.51
47:BF:21:TYR:HD2	47:BF:27:VAL:HG12	1.76	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:BG:104:LEU:O	48:BG:111:PRO:HA	2.11	0.51
50:BT:11:LEU:HD11	50:BT:46:ALA:HB3	1.93	0.51
1:CA:162:A:H2'	1:CA:163:C:O4'	2.11	0.51
1:CA:335:C:H2'	1:CA:336:A:H8	1.74	0.51
1:CA:842:U:H2'	1:CA:843:U:O3'	2.11	0.51
1:CA:1020:G:N3	1:CA:1020:G:H2'	2.25	0.51
1:CA:1151:A:HO2'	1:CA:1152:A:H8	1.57	0.51
7:CH:103:VAL:HG22	7:CH:124:ILE:HA	1.93	0.51
8:CI:53:LEU:HD13	8:CI:53:LEU:O	2.11	0.51
19:CT:77:ASN:O	19:CT:81:GLN:HG3	2.11	0.51
23:DB:265:A:O2'	23:DB:266:G:H4'	2.11	0.51
23:DB:345:A:N3	23:DB:346:A:N1	2.58	0.51
23:DB:528:A:C2	23:DB:2043:C:H4'	2.45	0.51
23:DB:610:C:O2'	23:DB:611:C:H5'	2.11	0.51
23:DB:612:G:H2'	23:DB:614:A:H5''	1.93	0.51
23:DB:1245:G:OP1	37:DL:13:LYS:HE3	2.11	0.51
23:DB:1535:A:H3'	23:DB:1536:C:H6	1.76	0.51
23:DB:1582:C:H3'	23:DB:1583:A:C2	2.46	0.51
23:DB:2066:C:O2'	23:DB:2067:G:H5'	2.11	0.51
23:DB:2692:G:O2'	23:DB:2693:G:H5'	2.11	0.51
23:DB:2801:G:H2'	23:DB:2802:G:H8	1.74	0.51
27:DK:99:ILE:HD13	27:DK:118:LEU:HD13	1.93	0.51
29:DE:182:ALA:O	29:DE:183:PHE:HB2	2.11	0.51
35:DV:80:HIS:CG	35:DV:83:LYS:HB2	2.46	0.51
36:D2:26:ASN:O	36:D2:30:VAL:HG23	2.10	0.51
40:DH:96:THR:HG23	40:DH:97:ARG:H	1.75	0.51
44:DQ:111:LYS:HB2	49:DR:48:LYS:HE2	1.92	0.51
45:DS:26:GLY:HA2	45:DS:71:VAL:O	2.11	0.51
46:DU:23:LYS:HD2	46:DU:23:LYS:H	1.76	0.51
46:DU:50:ALA:H	46:DU:53:GLN:CD	2.19	0.51
47:DF:78:ILE:HA	47:DF:82:TYR:CD2	2.46	0.51
51:DZ:6:GLN:HE22	51:DZ:77:LYS:CE	2.24	0.51
52:DW:17:ALA:O	52:DW:18:LYS:HD2	2.10	0.51
1:AA:674:G:H2'	1:AA:675:A:H8	1.75	0.51
1:AA:1203:C:H4'	13:AN:66:THR:HG22	1.93	0.51
1:AA:1320:C:H41	18:AS:36:ARG:HE	1.58	0.51
3:AD:82:LYS:NZ	3:AD:82:LYS:HB3	2.25	0.51
3:AD:106:PHE:CD1	3:AD:144:ILE:HD11	2.46	0.51
5:AF:1:MET:SD	5:AF:67:PRO:HD3	2.51	0.51
6:AG:94:ARG:NH1	6:AG:98:LEU:HD11	2.26	0.51
12:AM:109:LYS:HG3	12:AM:110:GLY:H	1.76	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AN:55:SER:HB2	13:AN:58:ARG:HD2	1.92	0.51
14:AO:84:ARG:C	14:AO:85:LEU:HD12	2.36	0.51
20:AB:102:ASN:O	20:AB:106:VAL:HG23	2.11	0.51
22:BA:11:C:H5''	52:BW:71:LYS:HE3	1.93	0.51
22:BA:50:A:OP1	43:BO:68:LYS:HB2	2.11	0.51
22:BA:91:C:H2'	22:BA:92:C:H6	1.76	0.51
23:BB:78:U:H2'	23:BB:79:C:H6	1.76	0.51
23:BB:161:A:C3'	23:BB:162:U:H5''	2.38	0.51
23:BB:328:U:H4'	46:BU:65:GLN:CD	2.35	0.51
23:BB:329:G:H1	46:BU:16:LYS:NZ	2.09	0.51
23:BB:338:G:N2	23:BB:339:U:H1'	2.25	0.51
23:BB:962:G:H21	23:BB:2250:G:N2	2.08	0.51
23:BB:1244:A:O2'	23:BB:1245:G:H5'	2.10	0.51
23:BB:1484:U:H2'	23:BB:1485:U:H6	1.76	0.51
23:BB:1902:C:H4'	25:BC:241:LYS:O	2.11	0.51
23:BB:2292:U:H2'	23:BB:2293:G:C8	2.46	0.51
23:BB:2329:U:H2'	23:BB:2330:G:H8	1.75	0.51
23:BB:2710:C:H2'	23:BB:2711:A:H8	1.75	0.51
24:BI:63:ASP:C	24:BI:65:SER:H	2.18	0.51
25:BC:32:LEU:O	25:BC:33:LEU:HD23	2.11	0.51
26:BD:34:VAL:HG12	26:BD:94:GLN:H	1.75	0.51
26:BD:113:SER:HB3	26:BD:167:ASN:H	1.76	0.51
33:B1:26:LYS:HB2	33:B1:52:LYS:HZ2	1.76	0.51
35:BV:51:GLN:HA	35:BV:56:PHE:CG	2.46	0.51
38:BM:6:ARG:O	38:BM:7:THR:HG23	2.10	0.51
40:BH:80:ILE:HD11	40:BH:102:ALA:HB3	1.91	0.51
44:BQ:18:LYS:C	44:BQ:20:ALA:N	2.69	0.51
47:BF:102:LEU:HA	47:BF:106:ALA:HB3	1.92	0.51
48:BG:176:LYS:O	48:BG:176:LYS:HE2	2.10	0.51
1:CA:123:U:H2'	1:CA:124:C:H6	1.76	0.51
1:CA:1278:G:H4'	1:CA:1279:G:C5'	2.41	0.51
1:CA:1477:U:H2'	1:CA:1478:U:C6	2.46	0.51
3:CD:11:SER:HA	3:CD:18:LEU:CD2	2.40	0.51
4:CE:19:ARG:O	4:CE:20:VAL:HB	2.11	0.51
4:CE:104:ILE:HG23	4:CE:104:ILE:O	2.11	0.51
16:CQ:75:VAL:HG23	16:CQ:76:ARG:N	2.25	0.51
23:DB:299:A:N6	23:DB:322:A:O2'	2.43	0.51
23:DB:543:G:N2	23:DB:545:U:H5'	2.26	0.51
23:DB:646:U:H3'	23:DB:647:G:C8	2.44	0.51
23:DB:873:C:H4'	38:DM:64:TRP:NE1	2.26	0.51
23:DB:912:C:H2'	23:DB:913:U:C6	2.45	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:934:U:H2'	23:DB:935:C:C6	2.47	0.51
23:DB:1640:A:H2'	23:DB:1641:A:C8	2.46	0.51
23:DB:1897:G:O2'	23:DB:1898:U:H5'	2.11	0.51
23:DB:2037:A:H2'	23:DB:2038:G:H8	1.76	0.51
23:DB:2579:C:O2'	26:DD:136:ASN:HA	2.11	0.51
56:DB:3474:HOH:O	37:DL:99:ASN:HB3	2.10	0.51
25:DC:75:ALA:CB	25:DC:93:VAL:HG22	2.41	0.51
28:DP:6:GLN:HA	28:DP:9:GLN:CD	2.36	0.51
29:DE:58:LYS:H	29:DE:58:LYS:HZ2	1.59	0.51
29:DE:153:LEU:HG	29:DE:154:ASP:H	1.76	0.51
30:DY:8:GLN:HB3	30:DY:31:ILE:C	2.35	0.51
35:DV:42:LEU:HD23	35:DV:42:LEU:N	2.25	0.51
37:DL:141:LYS:HZ3	37:DL:143:GLU:HA	1.75	0.51
38:DM:126:ILE:HD12	38:DM:126:ILE:N	2.26	0.51
40:DH:96:THR:OG1	40:DH:112:LYS:HD3	2.10	0.51
41:DJ:116:ARG:O	41:DJ:120:ARG:HG2	2.10	0.51
42:DN:12:ARG:HG2	42:DN:16:HIS:HB2	1.93	0.51
43:DO:15:ARG:NH2	43:DO:95:SER:HB3	2.26	0.51
48:DG:84:LYS:CB	48:DG:132:LEU:H	2.24	0.51
50:DT:68:LYS:O	50:DT:69:ARG:CB	2.58	0.51
50:DT:81:LYS:HG3	50:DT:82:LYS:N	2.26	0.51
1:AA:148:G:N3	1:AA:1446:A:H2	2.08	0.50
1:AA:658:C:H2'	1:AA:659:U:C6	2.45	0.50
1:AA:1458:G:H2'	1:AA:1459:G:H8	1.76	0.50
2:AC:13:ILE:HG12	2:AC:14:VAL:HG13	1.94	0.50
3:AD:54:LEU:HD22	3:AD:54:LEU:O	2.11	0.50
4:AE:82:HIS:CE1	4:AE:146:MET:HA	2.46	0.50
5:AF:10:VAL:HG12	5:AF:11:HIS:H	1.77	0.50
10:AK:44:ALA:HB3	10:AK:69:CYS:HB2	1.92	0.50
20:AB:8:MET:HE3	20:AB:8:MET:O	2.11	0.50
23:BB:234:U:H2'	23:BB:235:U:H6	1.76	0.50
23:BB:558:U:O2'	23:BB:559:G:H5'	2.11	0.50
23:BB:588:U:H1'	29:BE:85:PHE:CG	2.46	0.50
23:BB:988:A:C8	30:BY:13:ILE:HD12	2.46	0.50
23:BB:1422:G:C1'	23:BB:1495:A:H61	2.24	0.50
23:BB:1640:A:O2'	23:BB:1641:A:H5'	2.11	0.50
23:BB:1774:C:H2'	23:BB:1774:C:O2	2.11	0.50
23:BB:2393:U:O2'	23:BB:2394:C:H5'	2.11	0.50
26:BD:7:LYS:CE	26:BD:198:GLY:HA2	2.41	0.50
27:BK:11:ALA:HB3	27:BK:85:VAL:CG2	2.41	0.50
27:BK:19:VAL:C	27:BK:41:ILE:HD11	2.36	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BP:26:GLU:O	28:BP:28:LYS:HE2	2.10	0.50
34:B3:49:VAL:CG2	34:B3:54:LEU:HD13	2.38	0.50
35:BV:29:ILE:HG13	35:BV:88:HIS:HE1	1.75	0.50
43:BO:88:LYS:HE2	43:BO:116:GLN:CD	2.36	0.50
47:BF:101:ARG:HA	47:BF:105:ILE:HD12	1.93	0.50
49:BR:39:LEU:O	49:BR:40:MET:HB2	2.12	0.50
1:CA:140:U:H2'	1:CA:141:G:H8	1.75	0.50
1:CA:235:C:H2'	1:CA:236:A:H8	1.74	0.50
1:CA:624:C:H2'	1:CA:625:U:H6	1.75	0.50
1:CA:979:C:H1'	1:CA:1317:C:H41	1.75	0.50
2:CC:76:ILE:HA	2:CC:83:VAL:CG2	2.33	0.50
12:CM:95:PRO:HD3	12:CM:108:ARG:HG2	1.93	0.50
20:CB:14:HIS:CE1	20:CB:42:LEU:HD22	2.45	0.50
22:DA:35:C:O2	22:DA:35:C:H3'	2.11	0.50
22:DA:60:C:H2'	22:DA:61:G:C8	2.46	0.50
23:DB:425:G:O2'	23:DB:426:C:H5'	2.11	0.50
23:DB:1150:C:H2'	23:DB:1151:A:H8	1.76	0.50
23:DB:1395:A:H4'	23:DB:1397:U:C5	2.46	0.50
23:DB:1647:U:H3'	23:DB:1647:U:P	2.52	0.50
23:DB:1820:U:H3	25:DC:197:ALA:HA	1.77	0.50
23:DB:2281:A:O2'	23:DB:2282:G:H5'	2.11	0.50
27:DK:2:ILE:HD12	27:DK:2:ILE:N	2.26	0.50
34:D3:30:HIS:O	34:D3:31:ILE:C	2.53	0.50
40:DH:9:VAL:HB	40:DH:12:LEU:O	2.11	0.50
40:DH:135:HIS:HB3	40:DH:138:VAL:CB	2.33	0.50
50:DT:27:SER:O	50:DT:28:ASN:HB3	2.10	0.50
51:DZ:5:CYS:SG	51:DZ:8:THR:HG23	2.51	0.50
51:DZ:64:ILE:H	51:DZ:64:ILE:CD1	2.16	0.50
51:DZ:74:ARG:HD2	51:DZ:76:GLU:OE2	2.10	0.50
1:AA:269:C:H2'	1:AA:270:A:H8	1.72	0.50
1:AA:512:U:H2'	1:AA:513:C:C6	2.47	0.50
1:AA:1080:A:H2'	1:AA:1081:A:H5'	1.93	0.50
3:AD:89:LEU:CD2	3:AD:199:ILE:HD11	2.42	0.50
4:AE:32:PHE:CE2	4:AE:55:VAL:HG22	2.47	0.50
6:AG:11:ILE:H	6:AG:11:ILE:HD12	1.75	0.50
10:AK:80:ASN:HD22	10:AK:80:ASN:N	2.07	0.50
16:AQ:75:VAL:HG23	16:AQ:76:ARG:N	2.25	0.50
19:AT:2:ASN:ND2	19:AT:3:ILE:N	2.58	0.50
20:AB:112:ARG:HA	20:AB:115:ASP:OD2	2.11	0.50
22:BA:35:C:H3'	22:BA:35:C:O2	2.11	0.50
23:BB:997:G:O2'	23:BB:998:C:H5'	2.11	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:1117:C:H2'	23:BB:1118:C:C6	2.46	0.50
23:BB:1790:C:O2'	25:BC:207:ALA:HB2	2.09	0.50
23:BB:2281:A:O2'	23:BB:2282:G:H5'	2.11	0.50
23:BB:2722:G:H2'	23:BB:2723:C:C6	2.46	0.50
23:BB:2801:G:H2'	23:BB:2802:G:H8	1.73	0.50
23:BB:2886:A:H3'	23:BB:2887:A:H8	1.75	0.50
26:BD:181:ASP:CG	26:BD:184:ARG:HD2	2.35	0.50
27:BK:19:VAL:HB	27:BK:41:ILE:CG1	2.41	0.50
27:BK:98:ARG:C	27:BK:99:ILE:HD12	2.36	0.50
30:BY:8:GLN:CG	30:BY:31:ILE:HA	2.37	0.50
32:B4:15:LYS:O	32:B4:16:ILE:HB	2.10	0.50
38:BM:59:ARG:NH1	38:BM:60:GLN:HB3	2.13	0.50
39:BX:12:GLU:CA	39:BX:15:ASN:HD21	2.23	0.50
40:BH:83:LYS:HB3	40:BH:83:LYS:HZ2	1.75	0.50
41:BJ:58:ASN:C	41:BJ:60:ASP:H	2.20	0.50
47:BF:32:LYS:HE2	47:BF:34:THR:HG22	1.93	0.50
47:BF:91:ARG:O	47:BF:92:GLY:C	2.55	0.50
47:BF:108:PRO:O	47:BF:110:ILE:HG23	2.11	0.50
49:BR:1:MET:HA	49:BR:42:ALA:HB3	1.92	0.50
1:CA:505:G:H2'	1:CA:506:G:H8	1.75	0.50
1:CA:598:U:H2'	1:CA:599:C:H6	1.76	0.50
1:CA:1076:U:H2'	1:CA:1077:G:C8	2.47	0.50
1:CA:1473:G:H2'	1:CA:1474:U:O4'	2.11	0.50
5:CF:11:HIS:CE1	5:CF:13:ASP:HB2	2.46	0.50
6:CG:144:ALA:C	6:CG:146:ALA:H	2.18	0.50
13:CN:50:LEU:N	13:CN:51:PRO:HD2	2.25	0.50
18:CS:27:LYS:HB2	18:CS:28:LYS:HZ2	1.75	0.50
22:DA:86:G:H2'	22:DA:87:U:O4'	2.10	0.50
23:DB:414:C:H2'	23:DB:415:A:H8	1.76	0.50
23:DB:962:G:H21	23:DB:2250:G:N2	2.07	0.50
23:DB:1064:C:H5'	24:DI:88:GLY:HA3	1.93	0.50
23:DB:1295:C:H2'	23:DB:1296:G:C8	2.45	0.50
23:DB:1725:U:O2'	23:DB:1726:C:H5'	2.11	0.50
23:DB:1847:A:H4'	23:DB:1848:A:H8	1.76	0.50
25:DC:18:VAL:HG11	25:DC:202:ARG:HD2	1.93	0.50
26:DD:8:LYS:HB2	26:DD:201:LEU:HD11	1.93	0.50
26:DD:181:ASP:CG	26:DD:184:ARG:HD2	2.36	0.50
27:DK:58:LEU:HD23	27:DK:58:LEU:N	2.26	0.50
29:DE:111:GLU:HG2	29:DE:114:ARG:HH21	1.76	0.50
38:DM:35:ALA:HB3	38:DM:100:LYS:H	1.76	0.50
40:DH:86:ASP:H	40:DH:89:LYS:HD3	1.76	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DH:127:GLU:CA	40:DH:145:ASN:HA	2.37	0.50
41:DJ:25:LEU:HB2	41:DJ:62:VAL:HG21	1.92	0.50
44:DQ:81:GLY:C	44:DQ:83:LYS:N	2.67	0.50
45:DS:52:GLU:HA	45:DS:55:ILE:CG2	2.39	0.50
45:DS:73:LYS:CE	45:DS:74:ILE:H	2.24	0.50
46:DU:11:ILE:O	46:DU:11:ILE:HD13	2.11	0.50
47:DF:87:LYS:CG	47:DF:88:VAL:H	2.19	0.50
48:DG:104:LEU:O	48:DG:111:PRO:HA	2.10	0.50
1:AA:624:C:H2'	1:AA:625:U:H6	1.75	0.50
1:AA:719:C:O2	17:AR:37:LYS:HA	2.11	0.50
1:AA:1446:A:N6	1:AA:1447:A:N6	2.59	0.50
6:AG:21:LEU:HD23	6:AG:21:LEU:H	1.76	0.50
7:AH:14:ARG:HE	7:AH:75:GLN:NE2	2.10	0.50
9:AJ:7:ARG:O	9:AJ:100:ILE:HA	2.11	0.50
12:AM:95:PRO:HD3	12:AM:108:ARG:HG2	1.93	0.50
20:AB:15:PHE:CD1	20:AB:16:GLY:N	2.80	0.50
20:AB:187:ASP:HB3	20:AB:201:GLY:O	2.11	0.50
23:BB:598:U:H2'	23:BB:599:A:H8	1.76	0.50
23:BB:612:G:H2'	23:BB:614:A:H5''	1.93	0.50
23:BB:815:C:OP2	49:BR:85:LYS:HE2	2.12	0.50
23:BB:958:U:H3	38:BM:16:ARG:HB3	1.77	0.50
23:BB:1199:U:H2'	23:BB:1200:C:C6	2.46	0.50
23:BB:1729:U:H2'	23:BB:1730:C:C4'	2.41	0.50
23:BB:1824:G:O2'	23:BB:1825:U:H5'	2.11	0.50
23:BB:2449:U:H4'	23:BB:2450:A:OP1	2.11	0.50
29:BE:34:ALA:CB	29:BE:96:VAL:HG21	2.41	0.50
35:BV:4:ILE:HG22	35:BV:63:ILE:HG23	1.94	0.50
42:BN:70:THR:HB	42:BN:75:ILE:HD11	1.94	0.50
44:BQ:77:LYS:HA	44:BQ:80:ASN:HB3	1.93	0.50
47:BF:64:PRO:HA	47:BF:88:VAL:HG21	1.94	0.50
49:BR:3:ALA:O	49:BR:4:VAL:HG13	2.12	0.50
50:BT:57:VAL:HG13	50:BT:58:VAL:N	2.27	0.50
1:CA:1359:C:H3'	13:CN:74:ARG:HH21	1.74	0.50
1:CA:1456:A:H2'	1:CA:1457:G:O4'	2.11	0.50
9:CJ:10:LEU:HB3	9:CJ:18:ILE:HD11	1.93	0.50
18:CS:27:LYS:NZ	18:CS:27:LYS:HB3	2.26	0.50
23:DB:3:U:H2'	23:DB:4:U:C6	2.46	0.50
23:DB:259:G:O2'	23:DB:260:G:H5'	2.12	0.50
23:DB:277:G:H4'	23:DB:278:A:N7	2.26	0.50
23:DB:1100:C:H41	24:DI:1:ALA:N	2.10	0.50
23:DB:1534:U:H2'	23:DB:1536:C:C5	2.46	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:1877:A:H2'	23:DB:1878:G:H8	1.77	0.50
23:DB:2076:U:O4'	23:DB:2076:U:O2	2.29	0.50
23:DB:2097:A:H2'	23:DB:2098:U:H6	1.76	0.50
23:DB:2197:U:O2'	23:DB:2198:A:H2'	2.12	0.50
23:DB:2449:U:H4'	23:DB:2450:A:OP1	2.11	0.50
23:DB:2722:G:H2'	23:DB:2723:C:C6	2.47	0.50
24:DI:11:GLN:HA	24:DI:55:PRO:HA	1.92	0.50
28:DP:56:SER:O	28:DP:74:GLN:HA	2.11	0.50
28:DP:77:SER:O	28:DP:80:VAL:HG12	2.11	0.50
28:DP:110:LYS:HD2	28:DP:110:LYS:N	2.20	0.50
29:DE:60:TRP:C	29:DE:62:GLN:H	2.20	0.50
34:D3:14:LYS:O	34:D3:14:LYS:HD2	2.10	0.50
35:DV:70:ILE:HD13	35:DV:70:ILE:H	1.76	0.50
38:DM:40:ARG:HB2	38:DM:93:VAL:HG22	1.92	0.50
38:DM:71:LYS:HG2	38:DM:73:ILE:HD11	1.92	0.50
40:DH:125:THR:HA	40:DH:146:VAL:CB	2.37	0.50
41:DJ:123:LYS:HG2	41:DJ:132:HIS:NE2	2.26	0.50
44:DQ:24:TYR:CG	44:DQ:25:GLY:N	2.79	0.50
48:DG:84:LYS:HB3	48:DG:132:LEU:O	2.10	0.50
48:DG:85:LYS:HA	48:DG:131:VAL:HG12	1.93	0.50
48:DG:93:TYR:O	48:DG:94:ARG:HG3	2.11	0.50
50:DT:5:GLU:CA	50:DT:8:LEU:HB2	2.32	0.50
1:AA:684:U:H1'	10:AK:39:ASN:HA	1.93	0.50
1:AA:1105:A:H2'	1:AA:1106:G:H8	1.76	0.50
1:AA:1121:U:H2'	1:AA:1122:U:C6	2.46	0.50
1:AA:1406:U:C2'	1:AA:1407:C:H5'	2.41	0.50
1:AA:1479:C:O2'	1:AA:1480:A:H5'	2.12	0.50
5:AF:18:VAL:N	5:AF:19:PRO:HD2	2.26	0.50
20:AB:75:ALA:O	20:AB:79:VAL:HG23	2.12	0.50
20:AB:83:ALA:HA	20:AB:88:GLN:HB2	1.94	0.50
20:AB:101:THR:HG23	20:AB:102:ASN:H	1.76	0.50
20:AB:156:LEU:HD12	20:AB:156:LEU:N	2.20	0.50
23:BB:2537:U:H2'	23:BB:2538:C:H6	1.76	0.50
24:BI:125:THR:O	24:BI:129:GLU:HG3	2.11	0.50
25:BC:248:GLY:C	25:BC:249:VAL:HG22	2.37	0.50
26:BD:186:LEU:HD21	28:BP:7:LEU:HD22	1.93	0.50
27:BK:71:ARG:HE	27:BK:71:ARG:HA	1.76	0.50
28:BP:112:ARG:O	28:BP:113:LEU:HB3	2.11	0.50
41:BJ:11:VAL:HG13	41:BJ:50:THR:HG22	1.92	0.50
41:BJ:72:LYS:CG	41:BJ:89:PHE:HB2	2.41	0.50
48:BG:94:ARG:C	48:BG:94:ARG:HE	2.20	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:87:C:C2'	1:CA:88:U:H5''	2.41	0.50
1:CA:370:C:H2'	1:CA:371:A:C8	2.46	0.50
1:CA:454:G:H2'	1:CA:455:G:H8	1.75	0.50
1:CA:555:U:H2'	1:CA:556:C:H6	1.76	0.50
1:CA:678:U:H2'	1:CA:679:C:H6	1.76	0.50
1:CA:815:A:H4'	1:CA:817:C:C4	2.46	0.50
1:CA:1240:U:C5	6:CG:115:MET:HE3	2.46	0.50
1:CA:1422:G:O2'	1:CA:1423:G:H5'	2.10	0.50
5:CF:7:VAL:HG11	17:CR:64:LEU:HD21	1.93	0.50
6:CG:104:VAL:CG1	6:CG:108:ARG:HH11	2.25	0.50
12:CM:49:GLU:HG3	12:CM:53:ASP:OD1	2.12	0.50
21:CU:48:LYS:HA	21:CU:51:ALA:HB3	1.93	0.50
22:DA:32:U:H2'	22:DA:33:G:C8	2.46	0.50
23:DB:197:A:H62	23:DB:2430:A:H2'	1.76	0.50
23:DB:1439:A:N7	23:DB:1440:U:N1	2.59	0.50
24:DI:19:PRO:HB2	24:DI:22:PRO:HD2	1.94	0.50
27:DK:66:LYS:HZ1	27:DK:81:GLY:N	2.09	0.50
33:D1:28:THR:O	33:D1:29:LYS:HD2	2.11	0.50
35:DV:51:GLN:HA	35:DV:56:PHE:CG	2.46	0.50
39:DX:7:ARG:HB2	39:DX:7:ARG:NH1	2.26	0.50
41:DJ:98:GLU:HG3	41:DJ:124:VAL:HB	1.94	0.50
42:DN:86:ARG:HE	42:DN:117:ASP:CG	2.19	0.50
46:DU:73:ASN:HD22	46:DU:74:ALA:N	2.10	0.50
48:DG:140:ILE:HD12	48:DG:141:GLY:N	2.26	0.50
50:DT:38:ALA:HB3	50:DT:81:LYS:HE2	1.93	0.50
1:AA:79:G:H2'	1:AA:80:A:H8	1.71	0.50
1:AA:91:U:H2'	1:AA:92:U:O4'	2.12	0.50
1:AA:245:U:H2'	1:AA:246:A:H5'	1.92	0.50
1:AA:651:C:H2'	1:AA:652:U:C6	2.47	0.50
1:AA:893:C:H2'	1:AA:894:G:C8	2.47	0.50
1:AA:1317:C:OP1	13:AN:56:PRO:HD2	2.12	0.50
1:AA:1456:A:H2'	1:AA:1457:G:O4'	2.11	0.50
1:AA:1499:A:O2'	1:AA:1500:A:H5'	2.11	0.50
2:AC:54:ILE:O	2:AC:54:ILE:HG23	2.12	0.50
3:AD:29:THR:HB	3:AD:30:LYS:HZ3	1.74	0.50
3:AD:115:GLN:HG3	3:AD:119:HIS:CE1	2.46	0.50
6:AG:24:LYS:O	6:AG:28:ILE:HG12	2.11	0.50
6:AG:62:GLU:O	6:AG:66:GLU:HG3	2.12	0.50
9:AJ:8:ILE:HG13	9:AJ:100:ILE:HG22	1.93	0.50
10:AK:33:ILE:HG13	10:AK:73:VAL:HG21	1.92	0.50
11:AL:41:PRO:HB3	11:AL:49:ARG:HH11	1.75	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AO:9:ALA:O	14:AO:12:VAL:HB	2.12	0.50
15:AP:20:VAL:HG23	15:AP:34:GLU:C	2.36	0.50
20:AB:70:GLY:HA3	20:AB:79:VAL:HG21	1.94	0.50
21:AU:44:ARG:HH11	21:AU:44:ARG:HG2	1.77	0.50
22:BA:22:U:H2'	22:BA:23:G:C8	2.46	0.50
23:BB:719:C:O2'	23:BB:720:U:H5'	2.11	0.50
23:BB:854:C:O2'	23:BB:855:G:H5'	2.12	0.50
23:BB:1528:A:H2'	23:BB:1529:G:O4'	2.11	0.50
23:BB:1799:G:OP2	25:BC:269:ARG:NH2	2.45	0.50
23:BB:2393:U:H4'	37:BL:59:ARG:O	2.11	0.50
23:BB:2523:G:O2'	23:BB:2524:G:H5'	2.10	0.50
23:BB:2795:C:H2'	23:BB:2796:U:C1'	2.41	0.50
25:BC:90:ILE:CD1	25:BC:102:TYR:HB3	2.41	0.50
27:BK:87:LEU:HD12	27:BK:92:GLU:HA	1.93	0.50
31:B0:50:GLY:C	31:B0:51:ARG:HG2	2.37	0.50
41:BJ:98:GLU:HG3	41:BJ:124:VAL:HB	1.93	0.50
41:BJ:124:VAL:HG23	41:BJ:125:TYR:H	1.77	0.50
43:BO:58:ILE:O	43:BO:62:LEU:HB2	2.11	0.50
46:BU:41:VAL:HG22	46:BU:60:LYS:O	2.11	0.50
47:BF:71:LYS:HG2	47:BF:73:VAL:H	1.76	0.50
48:BG:142:GLN:HG3	48:BG:146:ASP:OD2	2.12	0.50
50:BT:69:ARG:HG2	50:BT:73:ARG:O	2.12	0.50
1:CA:201:G:H2'	1:CA:202:G:O4'	2.12	0.50
6:CG:14:ASP:HB3	6:CG:19:SER:H	1.75	0.50
11:CL:43:LYS:CE	11:CL:44:PRO:HD3	2.42	0.50
12:CM:71:GLU:HA	12:CM:74:MET:HG3	1.94	0.50
15:CP:18:GLN:HE21	15:CP:35:ARG:HD3	1.76	0.50
15:CP:76:LYS:NZ	15:CP:80:LYS:HD3	2.27	0.50
16:CQ:7:LEU:O	16:CQ:60:ILE:HD13	2.11	0.50
16:CQ:45:VAL:HG11	16:CQ:60:ILE:HG21	1.92	0.50
23:DB:278:A:H3'	23:DB:278:A:P	2.52	0.50
23:DB:608:A:H2'	23:DB:609:A:C8	2.47	0.50
23:DB:767:U:O2'	23:DB:768:G:H5'	2.11	0.50
23:DB:1098:A:C4	24:DI:3:LYS:O	2.65	0.50
23:DB:1390:U:O2'	23:DB:1391:U:H5'	2.11	0.50
23:DB:1799:G:N2	23:DB:1818:U:O2'	2.45	0.50
23:DB:1882:U:O2'	23:DB:1883:U:H5'	2.11	0.50
23:DB:2078:C:O2'	23:DB:2079:U:H5'	2.12	0.50
23:DB:2241:A:H2'	23:DB:2242:G:H8	1.73	0.50
23:DB:2247:A:O2'	23:DB:2248:C:H5'	2.11	0.50
24:DI:27:LEU:HD23	24:DI:27:LEU:N	2.19	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DD:118:PHE:CE1	26:DD:123:LYS:HD2	2.47	0.50
27:DK:54:LYS:HD2	27:DK:54:LYS:N	2.22	0.50
30:DY:30:ARG:HD3	30:DY:30:ARG:N	2.26	0.50
31:D0:53:VAL:HG12	42:DN:118:ARG:NH1	2.26	0.50
38:DM:1:MET:O	38:DM:2:LEU:HB2	2.12	0.50
38:DM:4:PRO:HG2	38:DM:70:ASP:HA	1.91	0.50
39:DX:31:GLN:HB3	39:DX:37:LEU:HD12	1.93	0.50
41:DJ:3:THR:HG21	44:DQ:60:TRP:HE1	1.75	0.50
42:DN:77:ALA:O	42:DN:81:ASN:HB2	2.12	0.50
43:DO:28:VAL:HG11	43:DO:92:PHE:CZ	2.46	0.50
43:DO:75:GLY:HA3	43:DO:106:LEU:HA	1.93	0.50
49:DR:6:GLN:HE21	49:DR:6:GLN:C	2.19	0.50
52:DW:39:GLN:HG3	52:DW:42:THR:CB	2.41	0.50
1:AA:140:U:H2'	1:AA:141:G:H8	1.75	0.50
1:AA:467:U:O2	1:AA:467:U:H2'	2.12	0.50
1:AA:736:C:H2'	1:AA:737:C:C6	2.47	0.50
2:AC:129:PHE:CG	2:AC:130:ARG:N	2.80	0.50
3:AD:58:GLN:O	3:AD:62:ARG:HG2	2.12	0.50
3:AD:173:ASP:HB3	3:AD:178:GLU:HB2	1.94	0.50
4:AE:104:ILE:O	4:AE:104:ILE:HG23	2.10	0.50
12:AM:63:VAL:HG13	12:AM:67:ASP:HB2	1.94	0.50
14:AO:43:PHE:CE1	14:AO:56:LEU:HD22	2.47	0.50
16:AQ:68:LYS:HG2	16:AQ:69:THR:HG23	1.93	0.50
20:AB:13:VAL:HG11	20:AB:207:ARG:HG2	1.94	0.50
20:AB:142:LYS:HA	20:AB:145:ASN:OD1	2.11	0.50
23:BB:513:A:H8	23:BB:513:A:O5'	1.94	0.50
23:BB:1100:C:H2'	23:BB:1101:U:H6	1.76	0.50
23:BB:1401:G:H2'	23:BB:1402:U:C6	2.46	0.50
23:BB:1545:A:H2'	23:BB:1546:G:O4'	2.11	0.50
23:BB:1599:U:H2'	23:BB:1600:C:H6	1.77	0.50
23:BB:1853:A:N1	23:BB:2087:G:H1'	2.26	0.50
23:BB:2365:G:O2'	52:BW:59:PHE:HE1	1.95	0.50
23:BB:2615:U:C2	31:B0:3:GLN:HA	2.46	0.50
23:BB:2840:C:H2'	23:BB:2841:C:H6	1.75	0.50
26:BD:55:LYS:C	26:BD:57:ALA:H	2.19	0.50
29:BE:154:ASP:C	29:BE:156:ASN:H	2.20	0.50
45:BS:22:ASP:HA	45:BS:25:ARG:HH11	1.76	0.50
46:BU:19:GLY:O	46:BU:20:LYS:HD3	2.11	0.50
48:BG:17:LYS:HA	48:BG:17:LYS:NZ	2.25	0.50
48:BG:17:LYS:NZ	48:BG:18:ILE:H	2.04	0.50
50:BT:7:LEU:HD13	50:BT:7:LEU:O	2.12	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:BT:39:THR:O	50:BT:40:LYS:HB2	2.10	0.50
52:BW:59:PHE:O	52:BW:60:ALA:HB3	2.11	0.50
1:CA:80:A:H2'	1:CA:81:A:H8	1.77	0.50
1:CA:437:U:H4'	3:CD:153:ARG:NH1	2.26	0.50
1:CA:501:C:H1'	1:CA:549:C:H1'	1.92	0.50
1:CA:707:U:H2'	1:CA:708:C:C6	2.46	0.50
1:CA:719:C:O2	17:CR:37:LYS:HA	2.11	0.50
1:CA:1105:A:H2'	1:CA:1106:G:H8	1.75	0.50
2:CC:21:TRP:CH2	2:CC:31:ASN:HB3	2.47	0.50
3:CD:186:GLU:CD	3:CD:187:ARG:N	2.70	0.50
7:CH:6:ILE:HD12	7:CH:35:ILE:CD1	2.42	0.50
7:CH:100:ILE:HG13	7:CH:128:VAL:O	2.10	0.50
12:CM:106:ARG:HA	12:CM:106:ARG:HH11	1.77	0.50
13:CN:21:ALA:O	13:CN:22:LYS:HE2	2.11	0.50
16:CQ:60:ILE:HG12	16:CQ:72:TRP:HE3	1.77	0.50
17:CR:58:ILE:O	17:CR:62:ARG:HG3	2.12	0.50
21:CU:11:PHE:O	21:CU:11:PHE:CD1	2.63	0.50
23:DB:99:U:H5'	23:DB:99:U:O2	2.11	0.50
23:DB:279:A:H2'	23:DB:280:U:H5'	1.93	0.50
23:DB:289:G:H2'	23:DB:290:U:C6	2.46	0.50
23:DB:417:C:H2'	23:DB:418:C:H6	1.75	0.50
23:DB:627:A:N6	37:DL:112:LEU:HD21	2.26	0.50
23:DB:1046:A:H3'	23:DB:1047:G:C5'	2.42	0.50
23:DB:1306:C:H2'	23:DB:1307:A:H8	1.76	0.50
23:DB:2389:G:H5''	23:DB:2390:U:H5'	1.93	0.50
23:DB:2467:C:H1'	38:DM:122:ALA:HB1	1.94	0.50
25:DC:75:ALA:HB2	25:DC:95:TYR:HA	1.94	0.50
26:DD:104:VAL:HG13	26:DD:106:LYS:HE2	1.94	0.50
27:DK:71:ARG:HB3	27:DK:72:PRO:HD2	1.93	0.50
37:DL:109:LYS:HB3	37:DL:111:ILE:HD11	1.93	0.50
44:DQ:94:LEU:CD2	49:DR:11:GLN:HB2	2.42	0.50
46:DU:14:THR:O	46:DU:18:LYS:HA	2.11	0.50
47:DF:135:ILE:HG13	47:DF:137:PHE:H	1.77	0.50
49:DR:3:ALA:O	49:DR:13:ARG:HA	2.12	0.50
49:DR:14:VAL:HG22	49:DR:15:SER:N	2.26	0.50
50:DT:7:LEU:HD13	50:DT:7:LEU:O	2.12	0.50
50:DT:11:LEU:HD11	50:DT:46:ALA:HB3	1.93	0.50
1:AA:255:G:H5'	16:AQ:17:GLU:O	2.12	0.50
1:AA:370:C:H2'	1:AA:371:A:C8	2.47	0.50
1:AA:405:U:O4	3:AD:1:ALA:HA	2.11	0.50
1:AA:455:G:H2'	1:AA:456:A:C8	2.47	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:634:C:H2'	1:AA:635:A:H8	1.76	0.50
10:AK:92:ARG:NH2	21:AU:24:LYS:HG2	2.24	0.50
11:AL:45:ASN:N	11:AL:45:ASN:HD22	2.10	0.50
22:BA:90:C:OP1	38:BM:16:ARG:HB2	2.12	0.50
22:BA:109:A:H2'	22:BA:110:C:H6	1.71	0.50
23:BB:41:C:O2'	23:BB:42:A:H5'	2.11	0.50
23:BB:813:U:H2'	23:BB:814:C:C6	2.47	0.50
23:BB:1458:U:C5'	23:BB:1459:G:H5'	2.30	0.50
23:BB:1534:U:H2'	23:BB:1536:C:C5	2.47	0.50
23:BB:1640:A:H2'	23:BB:1641:A:C8	2.47	0.50
23:BB:2654:A:N1	23:BB:2665:A:H5''	2.26	0.50
25:BC:210:ALA:O	25:BC:215:VAL:HB	2.12	0.50
29:BE:98:LYS:O	29:BE:102:ARG:HG2	2.10	0.50
29:BE:109:LEU:HD12	29:BE:112:LEU:HD12	1.92	0.50
34:B3:14:LYS:O	34:B3:14:LYS:HD2	2.11	0.50
41:BJ:101:ILE:O	41:BJ:105:VAL:HG22	2.11	0.50
41:BJ:116:ARG:O	41:BJ:120:ARG:HG2	2.11	0.50
51:BZ:21:ALA:HB3	51:BZ:23:ASN:HD21	1.77	0.50
52:BW:37:VAL:CG1	52:BW:38:ARG:H	2.18	0.50
1:CA:69:G:N2	1:CA:71:A:H62	2.09	0.50
1:CA:512:U:H2'	1:CA:513:C:C6	2.47	0.50
1:CA:524:G:H2'	1:CA:525:C:H6	1.76	0.50
1:CA:542:G:O2'	1:CA:543:U:H5'	2.12	0.50
1:CA:1101:A:N6	20:CB:101:THR:HG21	2.27	0.50
2:CC:13:ILE:C	2:CC:15:LYS:H	2.20	0.50
2:CC:149:LYS:HG3	2:CC:168:ARG:HB2	1.93	0.50
5:CF:18:VAL:N	5:CF:19:PRO:HD2	2.26	0.50
5:CF:85:ILE:HG22	5:CF:86:ARG:N	2.27	0.50
6:CG:50:ALA:HB2	6:CG:57:GLU:HG3	1.93	0.50
9:CJ:55:PRO:HA	13:CN:80:ARG:HH22	1.76	0.50
12:CM:7:ASN:N	12:CM:7:ASN:HD22	2.08	0.50
14:CO:8:THR:O	14:CO:11:ILE:HG22	2.11	0.50
20:CB:22:TRP:HA	20:CB:188:THR:HB	1.94	0.50
20:CB:65:LYS:H	20:CB:158:ASP:CG	2.19	0.50
23:DB:337:C:H2'	23:DB:338:G:O4'	2.12	0.50
23:DB:1482:G:N2	23:DB:1508:A:H1'	2.25	0.50
23:DB:1723:G:C2'	23:DB:1724:G:H5'	2.42	0.50
23:DB:2094:A:H2'	23:DB:2095:A:H8	1.77	0.50
23:DB:2678:C:H2'	23:DB:2679:A:C8	2.47	0.50
25:DC:2:VAL:HG23	25:DC:3:VAL:N	2.27	0.50
25:DC:83:ASP:HB2	25:DC:90:ILE:HB	1.94	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DD:7:LYS:HE2	26:DD:198:GLY:HA2	1.94	0.50
26:DD:61:THR:O	26:DD:64:GLU:HB2	2.12	0.50
29:DE:119:ILE:HD11	29:DE:185:LYS:HE2	1.93	0.50
29:DE:154:ASP:C	29:DE:156:ASN:H	2.20	0.50
40:DH:65:ALA:HB1	40:DH:138:VAL:HG11	1.92	0.50
40:DH:127:GLU:HB2	40:DH:143:ILE:HG22	1.92	0.50
41:DJ:11:VAL:HG21	41:DJ:13:ARG:HH11	1.76	0.50
41:DJ:11:VAL:HG13	41:DJ:50:THR:HG22	1.93	0.50
42:DN:15:SER:O	42:DN:18:GLN:HB2	2.11	0.50
44:DQ:18:LYS:C	44:DQ:20:ALA:N	2.68	0.50
45:DS:22:ASP:HA	45:DS:25:ARG:NH1	2.27	0.50
45:DS:72:THR:CG2	45:DS:108:SER:HB3	2.42	0.50
47:DF:35:LEU:CD2	47:DF:153:ILE:HG12	2.42	0.50
1:AA:454:G:H2'	1:AA:455:G:H8	1.75	0.50
1:AA:532:A:C8	2:AC:192:TYR:HD2	2.29	0.50
1:AA:1175:G:O2'	1:AA:1176:A:H5'	2.11	0.50
1:AA:1377:A:H2'	6:AG:6:ILE:HD11	1.93	0.50
2:AC:45:GLU:C	2:AC:46:LEU:HD22	2.37	0.50
3:AD:191:SER:O	3:AD:192:ALA:HB2	2.12	0.50
7:AH:113:ARG:HH21	7:AH:114:ALA:HA	1.77	0.50
10:AK:22:ILE:CG2	10:AK:95:THR:HG21	2.34	0.50
20:AB:14:HIS:CE1	20:AB:42:LEU:HD22	2.47	0.50
21:AU:16:ARG:CZ	21:AU:19:LYS:NZ	2.75	0.50
23:BB:197:A:H62	23:BB:2430:A:H2'	1.75	0.50
23:BB:303:G:H2'	23:BB:304:U:C6	2.47	0.50
23:BB:2466:C:OP1	32:B4:4:ARG:HB3	2.12	0.50
24:BI:29:GLN:HE21	24:BI:29:GLN:HA	1.76	0.50
26:BD:8:LYS:HB2	26:BD:201:LEU:HD11	1.94	0.50
35:BV:80:HIS:HA	35:BV:87:GLN:OE1	2.11	0.50
37:BL:55:MET:HE2	37:BL:56:PRO:HD2	1.94	0.50
38:BM:131:VAL:HG12	38:BM:132:THR:H	1.76	0.50
44:BQ:26:ALA:HB1	44:BQ:30:VAL:CG1	2.42	0.50
49:BR:3:ALA:O	49:BR:13:ARG:HA	2.12	0.50
50:BT:10:VAL:HG11	50:BT:43:ILE:HG13	1.93	0.50
50:BT:13:ALA:O	50:BT:32:LEU:HB2	2.12	0.50
50:BT:54:GLU:HG3	50:BT:90:GLY:N	2.25	0.50
50:BT:81:LYS:HG3	50:BT:82:LYS:N	2.26	0.50
1:CA:735:C:O2'	1:CA:736:C:H5'	2.12	0.50
1:CA:802:A:H2'	1:CA:803:G:O4'	2.12	0.50
1:CA:920:U:H2'	1:CA:921:U:H6	1.76	0.50
1:CA:1508:A:H2'	1:CA:1509:C:C6	2.47	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CC:61:LYS:O	2:CC:96:VAL:HB	2.12	0.50
3:CD:160:LEU:HD13	3:CD:160:LEU:N	2.26	0.50
9:CJ:7:ARG:O	9:CJ:100:ILE:HA	2.12	0.50
11:CL:49:ARG:CG	11:CL:89:LEU:HD21	2.39	0.50
11:CL:81:ILE:HG23	11:CL:94:TYR:HB3	1.94	0.50
18:CS:64:GLU:N	18:CS:64:GLU:CD	2.70	0.50
19:CT:72:ALA:HA	19:CT:75:LYS:HD3	1.92	0.50
20:CB:202:ASN:ND2	20:CB:204:ASP:N	2.51	0.50
23:DB:98:G:C2'	23:DB:99:U:H5''	2.42	0.50
23:DB:478:A:H5''	23:DB:479:A:OP2	2.12	0.50
23:DB:538:A:N6	23:DB:555:G:O2'	2.43	0.50
23:DB:540:C:O2'	23:DB:541:A:H5'	2.11	0.50
23:DB:719:C:O2'	23:DB:720:U:H5'	2.12	0.50
23:DB:873:C:H2'	23:DB:874:G:C8	2.46	0.50
23:DB:1098:A:O5'	24:DI:3:LYS:HG2	2.12	0.50
23:DB:2455:G:H2'	23:DB:2456:C:C6	2.47	0.50
23:DB:2886:A:H3'	23:DB:2887:A:H8	1.76	0.50
25:DC:52:HIS:NE2	25:DC:218:THR:HG23	2.26	0.50
25:DC:53:ILE:O	25:DC:53:ILE:HG23	2.12	0.50
25:DC:93:VAL:HG13	25:DC:94:LEU:N	2.27	0.50
25:DC:109:LEU:CD2	25:DC:109:LEU:H	2.25	0.50
26:DD:14:ILE:HG23	26:DD:22:ILE:HB	1.94	0.50
26:DD:69:ALA:CA	26:DD:73:VAL:HB	2.40	0.50
29:DE:58:LYS:HD3	29:DE:58:LYS:N	2.27	0.50
33:D1:36:LYS:HG3	33:D1:47:ILE:HG13	1.94	0.50
50:DT:8:LEU:HD22	50:DT:46:ALA:HA	1.93	0.50
50:DT:54:GLU:HG3	50:DT:89:GLU:H	1.77	0.50
52:DW:65:LYS:HG3	52:DW:84:GLU:CB	2.41	0.50
1:AA:802:A:H2'	1:AA:803:G:O4'	2.11	0.50
1:AA:843:U:H2'	1:AA:843:U:O2	2.12	0.50
1:AA:1014:A:H4'	18:AS:13:HIS:CG	2.47	0.50
1:AA:1217:C:OP1	13:AN:8:ARG:HD2	2.12	0.50
1:AA:1410:A:H2'	1:AA:1411:C:C6	2.47	0.50
3:AD:18:LEU:HD12	3:AD:63:ILE:HG12	1.94	0.50
4:AE:143:LEU:O	4:AE:146:MET:HG2	2.11	0.50
11:AL:31:GLY:HA3	11:AL:54:VAL:HG12	1.92	0.50
18:AS:32:THR:HG22	18:AS:34:SER:H	1.76	0.50
20:AB:46:VAL:HA	20:AB:49:PHE:CD2	2.47	0.50
23:BB:1056:G:H4'	23:BB:1086:A:H8	1.77	0.50
23:BB:1674:G:N2	23:BB:1677:A:N1	2.60	0.50
23:BB:1778:U:H2'	23:BB:1784:A:N6	2.27	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:2052:A:O4'	26:BD:147:GLY:HA3	2.12	0.50
25:BC:12:ARG:HA	25:BC:15:VAL:HG23	1.94	0.50
25:BC:75:ALA:CB	25:BC:93:VAL:HG22	2.42	0.50
26:BD:116:LYS:HB3	26:BD:118:PHE:CZ	2.47	0.50
30:BY:8:GLN:HB3	30:BY:31:ILE:C	2.37	0.50
34:B3:49:VAL:O	34:B3:51:LYS:N	2.44	0.50
41:BJ:73:VAL:HG23	41:BJ:74:TYR:H	1.76	0.50
43:BO:15:ARG:NH2	43:BO:95:SER:HB3	2.23	0.50
43:BO:28:VAL:HG21	43:BO:106:LEU:HD21	1.93	0.50
44:BQ:65:ASN:CB	44:BQ:75:TYR:HB2	2.41	0.50
48:BG:106:LEU:O	48:BG:108:PHE:N	2.44	0.50
50:BT:21:SER:O	50:BT:25:GLU:HB2	2.11	0.50
1:CA:152:A:H2'	1:CA:153:C:O4'	2.11	0.50
1:CA:244:U:O4	1:CA:906:A:H1'	2.11	0.50
1:CA:952:U:H2'	1:CA:953:G:H8	1.77	0.50
1:CA:1014:A:H4'	18:CS:13:HIS:CG	2.47	0.50
1:CA:1317:C:OP1	13:CN:56:PRO:HD2	2.11	0.50
1:CA:1508:A:H2'	1:CA:1509:C:H6	1.76	0.50
3:CD:89:LEU:CD2	3:CD:199:ILE:HD11	2.42	0.50
10:CK:44:ALA:HB3	10:CK:69:CYS:HB2	1.92	0.50
20:CB:101:THR:HG23	20:CB:102:ASN:H	1.77	0.50
23:DB:459:U:C2'	23:DB:460:A:H5'	2.42	0.50
23:DB:558:U:O2'	23:DB:559:G:H5'	2.12	0.50
23:DB:673:C:C2'	23:DB:674:G:H5'	2.42	0.50
23:DB:1063:G:H4'	24:DI:135:MET:HG2	1.94	0.50
23:DB:1640:A:O2'	23:DB:1641:A:H5'	2.12	0.50
23:DB:2021:C:OP1	31:D0:8:THR:HG21	2.12	0.50
23:DB:2246:G:H2'	23:DB:2247:A:H8	1.77	0.50
23:DB:2514:U:H2'	23:DB:2515:C:C6	2.47	0.50
25:DC:248:GLY:C	25:DC:249:VAL:HG22	2.37	0.50
26:DD:118:PHE:HE2	42:DN:1:MET:SD	2.34	0.50
26:DD:186:LEU:HD21	28:DP:7:LEU:HD22	1.94	0.50
40:DH:41:LYS:O	40:DH:45:GLU:HG3	2.12	0.50
42:DN:45:ARG:O	42:DN:49:GLU:HG3	2.11	0.50
42:DN:75:ILE:O	42:DN:79:LEU:HD12	2.11	0.50
48:DG:96:ALA:HB3	48:DG:103:ASN:HB3	1.94	0.50
48:DG:176:LYS:O	48:DG:176:LYS:HE2	2.12	0.50
1:AA:201:G:O2'	1:AA:469:C:H4'	2.12	0.49
1:AA:1021:A:H2'	1:AA:1022:A:O4'	2.11	0.49
1:AA:1366:C:H2'	1:AA:1367:C:H6	1.77	0.49
2:AC:13:ILE:C	2:AC:15:LYS:H	2.20	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AC:61:LYS:O	2:AC:96:VAL:HB	2.12	0.49
3:AD:29:THR:HG22	3:AD:30:LYS:HD3	1.94	0.49
12:AM:7:ASN:N	12:AM:7:ASN:HD22	2.10	0.49
12:AM:106:ARG:HA	12:AM:106:ARG:HH11	1.77	0.49
16:AQ:80:LYS:HD2	16:AQ:80:LYS:H	1.77	0.49
18:AS:5:LYS:O	18:AS:6:LYS:HD2	2.12	0.49
18:AS:27:LYS:HB2	18:AS:28:LYS:NZ	2.26	0.49
18:AS:44:ILE:O	18:AS:44:ILE:HG23	2.12	0.49
20:AB:116:LEU:HB3	20:AB:140:LEU:HD11	1.93	0.49
23:BB:477:A:H2'	23:BB:478:A:C8	2.47	0.49
23:BB:784:G:H5''	25:BC:225:ASN:OD1	2.13	0.49
23:BB:962:G:H21	38:BM:82:MET:HE2	1.75	0.49
23:BB:1213:A:C6	23:BB:1237:A:H1'	2.47	0.49
23:BB:1355:G:O2'	23:BB:1356:G:H5'	2.12	0.49
23:BB:2076:U:O2	23:BB:2076:U:O4'	2.30	0.49
23:BB:2734:A:C2'	23:BB:2735:G:H5'	2.39	0.49
23:BB:2893:A:H4'	23:BB:2894:G:C5'	2.42	0.49
25:BC:74:PRO:HG2	25:BC:96:LYS:HG2	1.93	0.49
41:BJ:42:ALA:O	41:BJ:44:TYR:N	2.45	0.49
41:BJ:115:GLY:HA2	41:BJ:118:MET:HE3	1.94	0.49
44:BQ:4:LYS:HZ3	44:BQ:7:VAL:HG22	1.76	0.49
47:BF:135:ILE:HG13	47:BF:137:PHE:H	1.77	0.49
50:BT:82:LYS:HD2	50:BT:84:TYR:CE1	2.43	0.49
1:CA:255:G:H2'	1:CA:256:U:C6	2.47	0.49
1:CA:374:A:H5''	1:CA:452:A:N1	2.26	0.49
1:CA:472:U:H2'	1:CA:473:U:C6	2.47	0.49
1:CA:617:G:H4'	15:CP:46:LYS:CE	2.42	0.49
1:CA:1321:U:H2'	1:CA:1322:C:H5	1.76	0.49
1:CA:1524:C:H2'	1:CA:1525:G:C8	2.47	0.49
4:CE:82:HIS:CE1	4:CE:146:MET:HA	2.47	0.49
9:CJ:6:ILE:HB	9:CJ:76:ILE:CD1	2.40	0.49
9:CJ:8:ILE:HG13	9:CJ:100:ILE:HG22	1.94	0.49
12:CM:2:ARG:HG3	12:CM:6:ILE:N	2.27	0.49
13:CN:40:ARG:NH1	18:CS:6:LYS:O	2.36	0.49
16:CQ:30:HIS:ND1	16:CQ:32:ILE:HG22	2.27	0.49
18:CS:44:ILE:HA	18:CS:61:VAL:CG1	2.42	0.49
22:DA:55:U:H2'	22:DA:56:G:H8	1.76	0.49
23:DB:57:C:H2'	23:DB:58:G:O4'	2.12	0.49
23:DB:315:G:H2'	23:DB:316:C:H6	1.76	0.49
23:DB:558:U:H5'	41:DJ:114:LEU:HD22	1.94	0.49
23:DB:636:G:O5'	37:DL:128:THR:HG22	2.11	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:729:G:H2'	23:DB:1775:U:H1'	1.93	0.49
23:DB:1106:G:H2'	23:DB:1107:G:H8	1.77	0.49
23:DB:1141:U:H4'	23:DB:1142:A:C1'	2.42	0.49
23:DB:1484:U:H2'	23:DB:1485:U:H6	1.76	0.49
23:DB:2329:U:H2'	23:DB:2330:G:H8	1.77	0.49
23:DB:2645:G:H3'	23:DB:2646:C:C5'	2.42	0.49
23:DB:2820:A:OP1	42:DN:4:ARG:HA	2.12	0.49
23:DB:2863:C:O2'	23:DB:2864:G:H5'	2.12	0.49
24:DI:78:LEU:HD13	24:DI:108:ILE:HG23	1.94	0.49
25:DC:12:ARG:HA	25:DC:15:VAL:HG23	1.93	0.49
28:DP:3:ILE:HD13	28:DP:3:ILE:O	2.12	0.49
38:DM:24:THR:HG23	38:DM:34:LYS:CE	2.42	0.49
40:DH:4:ILE:HD12	40:DH:37:VAL:O	2.12	0.49
40:DH:40:THR:O	40:DH:42:LYS:N	2.44	0.49
40:DH:113:SER:HB2	40:DH:132:PHE:CZ	2.47	0.49
42:DN:23:ASN:O	42:DN:27:SER:HB2	2.12	0.49
43:DO:28:VAL:HG21	43:DO:106:LEU:HD21	1.94	0.49
47:DF:79:ARG:HE	47:DF:79:ARG:N	2.09	0.49
1:AA:389:A:H2'	1:AA:389:A:N3	2.27	0.49
1:AA:505:G:H2'	1:AA:506:G:H8	1.76	0.49
1:AA:1207:G:O2'	1:AA:1208:C:H5'	2.13	0.49
1:AA:1278:G:H4'	1:AA:1279:G:C5'	2.42	0.49
1:AA:1527:U:O2'	1:AA:1528:U:H5'	2.11	0.49
2:AC:106:ARG:HG2	2:AC:106:ARG:O	2.12	0.49
4:AE:82:HIS:HE1	4:AE:146:MET:HA	1.77	0.49
4:AE:158:LYS:NZ	7:AH:65:PHE:HA	2.27	0.49
5:AF:47:LEU:HD21	5:AF:57:ALA:CB	2.42	0.49
10:AK:33:ILE:HG12	10:AK:69:CYS:SG	2.52	0.49
18:AS:49:ALA:HA	18:AS:57:VAL:O	2.12	0.49
23:BB:946:C:H2'	23:BB:947:A:C8	2.48	0.49
23:BB:1175:A:C5	23:BB:1176:U:H1'	2.47	0.49
23:BB:1487:U:H2'	23:BB:1488:C:C6	2.47	0.49
23:BB:1560:G:H2'	23:BB:1561:C:C6	2.46	0.49
23:BB:1714:U:H3'	23:BB:1715:G:C5'	2.42	0.49
23:BB:2352:A:C6	52:BW:30:VAL:HG11	2.47	0.49
25:BC:30:ALA:C	25:BC:32:LEU:H	2.20	0.49
25:BC:107:LYS:HD3	25:BC:193:GLU:HB2	1.92	0.49
26:BD:101:PHE:HE2	26:BD:205:PRO:HD3	1.78	0.49
27:BK:2:ILE:HA	27:BK:33:ALA:H	1.77	0.49
37:BL:84:LYS:C	37:BL:86:GLU:H	2.20	0.49
40:BH:73:ASN:HD22	40:BH:73:ASN:N	2.10	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BH:144:VAL:HG12	40:BH:146:VAL:HG23	1.94	0.49
44:BQ:23:TYR:HB3	44:BQ:27:ARG:HB3	1.94	0.49
46:BU:81:ARG:HB2	46:BU:96:LYS:HG2	1.93	0.49
47:BF:87:LYS:HG3	47:BF:88:VAL:N	2.20	0.49
48:BG:84:LYS:HG3	48:BG:131:VAL:CA	2.42	0.49
48:BG:93:TYR:O	48:BG:94:ARG:HG3	2.11	0.49
51:BZ:71:LEU:O	51:BZ:74:ARG:HG2	2.12	0.49
1:CA:36:C:H4'	11:CL:118:VAL:O	2.12	0.49
1:CA:332:G:O2'	1:CA:333:U:H5'	2.11	0.49
1:CA:373:A:O4'	1:CA:481:G:H1'	2.12	0.49
1:CA:441:A:H61	1:CA:493:A:H62	1.60	0.49
1:CA:692:U:H2'	1:CA:694:A:OP2	2.12	0.49
1:CA:1240:U:H3	6:CG:29:LEU:HD23	1.77	0.49
1:CA:1308:U:H3'	12:CM:97:ARG:NH1	2.26	0.49
1:CA:1446:A:N6	1:CA:1447:A:N6	2.60	0.49
2:CC:13:ILE:HD13	2:CC:13:ILE:N	2.27	0.49
3:CD:54:LEU:HD22	3:CD:54:LEU:O	2.12	0.49
4:CE:131:ASN:HD22	4:CE:134:ASN:H	1.60	0.49
8:CI:51:LEU:HB3	8:CI:56:MET:CG	2.42	0.49
19:CT:68:LYS:HE2	19:CT:68:LYS:CA	2.42	0.49
20:CB:8:MET:CG	20:CB:9:LEU:H	2.25	0.49
20:CB:16:GLY:CA	20:CB:40:ILE:H	2.25	0.49
23:DB:156:A:H2'	23:DB:157:C:H6	1.76	0.49
23:DB:309:A:N3	23:DB:329:G:O2'	2.45	0.49
23:DB:997:G:O2'	23:DB:998:C:H5'	2.13	0.49
23:DB:1210:G:OP1	23:DB:1212:G:H5'	2.11	0.49
23:DB:1439:A:N7	23:DB:1440:U:C2	2.81	0.49
23:DB:1729:U:H2'	23:DB:1730:C:C4'	2.42	0.49
23:DB:2095:A:H3'	23:DB:2096:C:H6	1.76	0.49
23:DB:2443:C:H2'	23:DB:2444:G:C8	2.48	0.49
23:DB:2746:U:H4'	48:DG:137:LYS:HG3	1.94	0.49
24:DI:17:ALA:O	24:DI:18:ASN:HB3	2.12	0.49
25:DC:90:ILE:HD13	25:DC:103:ILE:O	2.12	0.49
25:DC:170:TYR:CD2	25:DC:184:GLU:HA	2.47	0.49
26:DD:4:LEU:HD23	26:DD:101:PHE:CE1	2.47	0.49
27:DK:70:ARG:HB3	27:DK:70:ARG:HH11	1.76	0.49
28:DP:3:ILE:HG23	28:DP:4:ILE:HG13	1.94	0.49
29:DE:147:LEU:HD12	29:DE:149:ILE:HG22	1.94	0.49
39:DX:23:ARG:HA	39:DX:26:PHE:HB3	1.94	0.49
41:DJ:35:ARG:HA	41:DJ:40:HIS:CD2	2.47	0.49
41:DJ:58:ASN:C	41:DJ:60:ASP:H	2.20	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:DQ:94:LEU:HD21	49:DR:11:GLN:HB2	1.94	0.49
46:DU:21:ARG:HD3	46:DU:72:PHE:CD2	2.47	0.49
48:DG:10:VAL:HG12	48:DG:14:VAL:HG21	1.94	0.49
52:DW:43:LYS:HB3	52:DW:58:LEU:CD1	2.42	0.49
1:AA:87:C:H2'	1:AA:88:U:C4'	2.42	0.49
1:AA:208:U:H2'	1:AA:210:C:C5	2.47	0.49
1:AA:401:C:H2'	1:AA:402:G:H8	1.76	0.49
1:AA:842:U:H2'	1:AA:843:U:O3'	2.13	0.49
1:AA:1200:C:H3'	1:AA:1201:A:H5'	1.93	0.49
1:AA:1247:U:O2'	1:AA:1248:A:H5'	2.12	0.49
1:AA:1330:U:H2'	1:AA:1331:G:H5'	1.94	0.49
5:AF:3:HIS:CD2	5:AF:3:HIS:N	2.81	0.49
5:AF:53:LYS:HE2	5:AF:53:LYS:HA	1.94	0.49
5:AF:81:ASN:HB3	5:AF:84:VAL:HG12	1.94	0.49
6:AG:94:ARG:HH12	6:AG:98:LEU:HD21	1.77	0.49
7:AH:94:VAL:HG21	7:AH:100:ILE:O	2.12	0.49
8:AI:39:GLY:HA2	8:AI:44:ARG:CD	2.41	0.49
8:AI:66:VAL:CG2	8:AI:74:GLN:HG3	2.42	0.49
12:AM:1:ALA:C	12:AM:8:ILE:HG22	2.38	0.49
15:AP:66:THR:O	15:AP:67:ILE:HB	2.10	0.49
19:AT:53:MET:O	19:AT:57:VAL:HG22	2.12	0.49
23:BB:528:A:N1	23:BB:2042:A:H2'	2.28	0.49
23:BB:545:U:C5	23:BB:547:A:H5'	2.47	0.49
23:BB:696:G:O2'	23:BB:697:G:H5'	2.12	0.49
23:BB:855:G:N3	52:BW:23:LYS:HE3	2.27	0.49
23:BB:1219:U:H2'	23:BB:1220:G:H8	1.77	0.49
23:BB:1434:A:H62	23:BB:1558:C:H42	1.58	0.49
23:BB:2260:C:H2'	23:BB:2261:C:H6	1.77	0.49
23:BB:2691:C:H2'	23:BB:2692:G:H8	1.78	0.49
26:BD:40:LEU:HD12	26:BD:41:ALA:N	2.28	0.49
26:BD:124:ARG:O	26:BD:124:ARG:HG3	2.11	0.49
28:BP:110:LYS:HD2	28:BP:110:LYS:N	2.23	0.49
29:BE:70:SER:HB2	29:BE:78:TRP:CZ2	2.48	0.49
37:BL:29:LYS:C	37:BL:31:GLY:H	2.21	0.49
38:BM:31:PHE:HB3	38:BM:130:PHE:CZ	2.48	0.49
39:BX:39:GLN:HB2	39:BX:42:LEU:HD22	1.93	0.49
40:BH:4:ILE:HD12	40:BH:37:VAL:O	2.11	0.49
40:BH:4:ILE:HG12	40:BH:44:ILE:HG23	1.93	0.49
42:BN:25:ALA:O	42:BN:29:VAL:HG23	2.11	0.49
42:BN:79:LEU:C	42:BN:81:ASN:H	2.20	0.49
42:BN:83:LEU:HA	42:BN:86:ARG:CB	2.42	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BN:114:GLU:HG2	42:BN:115:LEU:N	2.27	0.49
43:BO:75:GLY:HA3	43:BO:106:LEU:HA	1.94	0.49
45:BS:36:LEU:N	45:BS:36:LEU:HD22	2.27	0.49
46:BU:21:ARG:HG3	46:BU:21:ARG:HH11	1.76	0.49
47:BF:1:ALA:O	47:BF:4:HIS:HB3	2.13	0.49
47:BF:106:ALA:HA	47:BF:135:ILE:CD1	2.41	0.49
47:BF:168:LEU:O	47:BF:169:LEU:HB2	2.13	0.49
48:BG:85:LYS:HA	48:BG:131:VAL:HG12	1.94	0.49
49:BR:14:VAL:HG22	49:BR:15:SER:N	2.27	0.49
50:BT:15:HIS:HB3	50:BT:31:VAL:HG23	1.94	0.49
1:CA:378:G:H2'	1:CA:379:C:C6	2.47	0.49
1:CA:399:G:H2'	1:CA:400:C:C6	2.47	0.49
1:CA:658:C:H2'	1:CA:659:U:C6	2.44	0.49
1:CA:794:A:H2'	1:CA:795:C:C6	2.48	0.49
1:CA:1320:C:H41	18:CS:36:ARG:HE	1.59	0.49
2:CC:174:LEU:HD12	2:CC:174:LEU:H	1.77	0.49
2:CC:181:ILE:HD12	2:CC:181:ILE:N	2.26	0.49
6:CG:94:ARG:NH1	6:CG:98:LEU:HD21	2.27	0.49
10:CK:110:THR:CG2	21:CU:4:LYS:HA	2.42	0.49
11:CL:45:ASN:HD22	11:CL:45:ASN:N	2.09	0.49
13:CN:79:SER:O	13:CN:83:VAL:HG23	2.12	0.49
23:DB:863:A:H2'	23:DB:864:G:C8	2.47	0.49
23:DB:920:A:H2'	23:DB:921:C:C6	2.47	0.49
23:DB:937:C:H2'	23:DB:938:G:H8	1.76	0.49
23:DB:1098:A:C3'	24:DI:3:LYS:C	2.85	0.49
23:DB:1099:G:O2'	23:DB:1100:C:H5'	2.13	0.49
23:DB:1153:C:H2'	23:DB:1154:G:O4'	2.12	0.49
23:DB:1326:U:H2'	23:DB:1327:A:H8	1.77	0.49
23:DB:2025:C:H5'	26:DD:154:LYS:NZ	2.27	0.49
26:DD:32:ASN:HA	26:DD:51:THR:O	2.12	0.49
26:DD:92:VAL:O	26:DD:94:GLN:N	2.45	0.49
26:DD:111:GLY:H	26:DD:194:PRO:HG2	1.77	0.49
29:DE:34:ALA:CB	29:DE:96:VAL:HG21	2.41	0.49
33:D1:40:PRO:O	33:D1:43:ARG:HG2	2.11	0.49
37:DL:77:ILE:HD11	37:DL:95:LEU:HD13	1.93	0.49
37:DL:125:LEU:H	37:DL:143:GLU:CG	2.22	0.49
38:DM:78:LEU:HD12	38:DM:79:ALA:H	1.77	0.49
38:DM:134:THR:HG22	38:DM:136:MET:H	1.76	0.49
38:DM:135:VAL:O	38:DM:136:MET:HG3	2.12	0.49
40:DH:90:LEU:HD12	40:DH:90:LEU:N	2.25	0.49
47:DF:64:PRO:HA	47:DF:88:VAL:HG21	1.92	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:DR:78:ARG:HB3	49:DR:83:TYR:HB3	1.94	0.49
52:DW:30:VAL:O	52:DW:30:VAL:HG22	2.13	0.49
52:DW:50:VAL:HG23	52:DW:61:LYS:CE	2.42	0.49
52:DW:59:PHE:O	52:DW:60:ALA:HB3	2.12	0.49
1:AA:714:G:H21	1:AA:777:A:H1'	1.77	0.49
1:AA:1031:C:H4'	1:AA:1032:G:C5'	2.43	0.49
2:AC:21:TRP:CH2	2:AC:31:ASN:HB3	2.47	0.49
8:AI:39:GLY:O	8:AI:41:GLU:HG3	2.12	0.49
16:AQ:30:HIS:ND1	16:AQ:32:ILE:HG22	2.27	0.49
19:AT:53:MET:HA	19:AT:56:ILE:HD12	1.93	0.49
20:AB:172:ILE:HG23	20:AB:182:VAL:HG11	1.95	0.49
23:BB:362:A:H3'	23:BB:363:G:H8	1.76	0.49
23:BB:414:C:H2'	23:BB:415:A:H8	1.78	0.49
23:BB:540:C:H2'	23:BB:541:A:H8	1.76	0.49
23:BB:705:A:H61	23:BB:726:G:H1'	1.78	0.49
23:BB:814:C:H2'	23:BB:815:C:H6	1.77	0.49
23:BB:1161:C:H2'	23:BB:1162:G:H8	1.77	0.49
23:BB:1482:G:H2'	23:BB:1483:G:H8	1.77	0.49
23:BB:1570:A:H2'	23:BB:1571:A:C8	2.47	0.49
23:BB:1683:U:H2'	23:BB:1684:G:C8	2.47	0.49
23:BB:2081:U:OP1	51:BZ:19:SER:HB3	2.13	0.49
23:BB:2269:G:H4'	52:BW:19:ARG:HH12	1.78	0.49
23:BB:2498:C:H3'	56:BB:3589:HOH:O	2.12	0.49
25:BC:117:SER:CB	25:BC:128:THR:HB	2.43	0.49
25:BC:221:GLY:HA2	25:BC:224:MET:HE3	1.94	0.49
25:BC:243:PRO:O	25:BC:250:GLN:HA	2.12	0.49
28:BP:47:ILE:HG13	28:BP:48:ALA:H	1.77	0.49
34:B3:41:ARG:HG3	34:B3:44:ARG:NH2	2.26	0.49
34:B3:41:ARG:HG3	34:B3:44:ARG:HH22	1.76	0.49
37:BL:129:LYS:HA	37:BL:132:ARG:HG2	1.93	0.49
38:BM:126:ILE:HD12	38:BM:126:ILE:N	2.27	0.49
41:BJ:34:ARG:HG3	41:BJ:34:ARG:HH11	1.76	0.49
41:BJ:44:TYR:CD2	44:BQ:59:LEU:HD11	2.47	0.49
43:BO:14:ALA:C	43:BO:16:ARG:H	2.21	0.49
43:BO:28:VAL:O	43:BO:28:VAL:HG13	2.13	0.49
44:BQ:35:PHE:C	44:BQ:37:ALA:N	2.71	0.49
46:BU:73:ASN:HD22	46:BU:74:ALA:N	2.10	0.49
47:BF:2:LYS:HE3	47:BF:97:GLU:HA	1.94	0.49
47:BF:35:LEU:CD2	47:BF:153:ILE:HG12	2.42	0.49
48:BG:17:LYS:HB3	48:BG:24:THR:N	2.17	0.49
48:BG:54:ARG:HD3	48:BG:54:ARG:C	2.38	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:BG:83:THR:C	48:BG:84:LYS:HD3	2.38	0.49
51:BZ:53:ALA:O	51:BZ:54:LYS:HB3	2.12	0.49
52:BW:39:GLN:HG3	52:BW:42:THR:H	1.77	0.49
1:CA:204:G:H1'	1:CA:466:A:H62	1.78	0.49
1:CA:389:A:N3	1:CA:389:A:H2'	2.27	0.49
1:CA:596:A:H2'	1:CA:597:G:H8	1.77	0.49
1:CA:1069:C:H4'	1:CA:1192:C:O2	2.12	0.49
1:CA:1096:C:H2'	1:CA:1097:C:H6	1.78	0.49
3:CD:191:SER:O	3:CD:192:ALA:HB2	2.13	0.49
5:CF:97:THR:O	5:CF:98:GLU:CD	2.56	0.49
8:CI:119:LYS:C	8:CI:121:ARG:H	2.20	0.49
22:DA:7:G:H1'	43:DO:38:GLN:HE22	1.76	0.49
23:DB:81:G:H2'	23:DB:82:U:O4'	2.12	0.49
23:DB:1364:G:H5''	51:DZ:3:ARG:CZ	2.42	0.49
23:DB:2147:A:O5'	23:DB:2148:G:H5''	2.12	0.49
23:DB:2355:G:H4'	52:DW:20:LEU:HD13	1.94	0.49
23:DB:2825:G:H5''	23:DB:2825:G:N3	2.27	0.49
23:DB:2897:U:H2'	23:DB:2898:U:H6	1.77	0.49
28:DP:62:LYS:HE3	28:DP:64:SER:OG	2.11	0.49
29:DE:70:SER:HB2	29:DE:78:TRP:CZ2	2.48	0.49
40:DH:8:LYS:O	40:DH:9:VAL:C	2.55	0.49
41:DJ:42:ALA:O	41:DJ:44:TYR:N	2.46	0.49
42:DN:109:PRO:C	42:DN:110:MET:HE2	2.38	0.49
44:DQ:26:ALA:HB1	44:DQ:30:VAL:HG11	1.93	0.49
45:DS:43:ALA:O	45:DS:46:LEU:HB2	2.12	0.49
52:DW:21:GLY:HA3	52:DW:33:GLY:HA2	1.94	0.49
1:AA:34:C:H2'	1:AA:35:G:H8	1.76	0.49
1:AA:374:A:H5''	1:AA:452:A:N1	2.27	0.49
1:AA:679:C:H2'	1:AA:680:C:C6	2.47	0.49
1:AA:685:G:O2'	1:AA:686:U:H5'	2.12	0.49
1:AA:1085:U:H3'	1:AA:1086:U:C5	2.47	0.49
1:AA:1386:G:H2'	1:AA:1387:G:H8	1.76	0.49
1:AA:1480:A:H2'	1:AA:1481:U:O4'	2.13	0.49
7:AH:94:VAL:HG12	7:AH:99:GLY:HA3	1.93	0.49
8:AI:20:ILE:HD13	8:AI:85:ALA:CB	2.40	0.49
15:AP:61:VAL:HA	15:AP:65:ALA:HB3	1.94	0.49
23:BB:3:U:O2'	23:BB:4:U:C6	2.63	0.49
23:BB:118:A:N3	23:BB:178:G:H1'	2.27	0.49
23:BB:337:C:H2'	23:BB:338:G:O4'	2.12	0.49
23:BB:820:A:H2'	23:BB:821:A:O4'	2.12	0.49
23:BB:857:G:O2'	23:BB:858:G:H5'	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:873:C:H2'	23:BB:874:G:C8	2.47	0.49
23:BB:1023:U:H2'	23:BB:1024:G:H5'	1.93	0.49
23:BB:1258:U:H2'	23:BB:1259:G:H8	1.78	0.49
23:BB:1683:U:H2'	23:BB:1684:G:H8	1.78	0.49
23:BB:2091:C:O3'	51:BZ:56:MET:HE1	2.13	0.49
23:BB:2155:U:H2'	23:BB:2156:G:H8	1.76	0.49
23:BB:2247:A:O2'	23:BB:2248:C:H5'	2.11	0.49
23:BB:2732:G:H5'	23:BB:2733:A:O4'	2.13	0.49
23:BB:2757:A:H2'	23:BB:2757:A:N3	2.28	0.49
25:BC:12:ARG:HD3	25:BC:12:ARG:O	2.13	0.49
25:BC:93:VAL:HG12	25:BC:101:ARG:O	2.13	0.49
27:BK:71:ARG:O	27:BK:72:PRO:C	2.56	0.49
28:BP:74:GLN:O	28:BP:76:HIS:N	2.45	0.49
40:BH:122:LEU:HD12	40:BH:122:LEU:H	1.77	0.49
40:BH:149:GLU:O	40:BH:149:GLU:HG3	2.11	0.49
43:BO:26:LEU:HD13	43:BO:39:VAL:HG23	1.94	0.49
44:BQ:26:ALA:HB1	44:BQ:30:VAL:HG11	1.94	0.49
44:BQ:79:ILE:HD13	44:BQ:79:ILE:O	2.11	0.49
47:BF:45:ASP:C	47:BF:47:LYS:H	2.20	0.49
47:BF:84:ILE:HG22	47:BF:84:ILE:O	2.12	0.49
48:BG:10:VAL:O	48:BG:10:VAL:HG12	2.12	0.49
1:CA:6:G:H4'	1:CA:298:A:H4'	1.95	0.49
1:CA:598:U:H4'	7:CH:85:TYR:CD2	2.47	0.49
5:CF:43:GLY:HA2	5:CF:58:HIS:CD2	2.48	0.49
8:CI:64:ILE:HD12	8:CI:64:ILE:H	1.78	0.49
8:CI:66:VAL:CG2	8:CI:74:GLN:HG3	2.41	0.49
9:CJ:53:ILE:HG13	13:CN:84:ARG:CZ	2.43	0.49
11:CL:23:LEU:O	11:CL:25:ALA:N	2.45	0.49
12:CM:50:GLY:HA2	12:CM:53:ASP:CG	2.37	0.49
12:CM:52:ILE:HD12	12:CM:55:LEU:HD12	1.95	0.49
13:CN:14:ALA:O	13:CN:18:LYS:HG3	2.12	0.49
20:CB:16:GLY:HA2	20:CB:40:ILE:CG1	2.42	0.49
20:CB:57:ASN:HA	20:CB:60:ALA:HB3	1.94	0.49
23:DB:813:U:H2'	23:DB:814:C:C6	2.47	0.49
23:DB:2243:U:O2'	23:DB:2244:U:H5'	2.13	0.49
25:DC:117:SER:CB	25:DC:128:THR:HB	2.42	0.49
32:D4:9:LYS:N	32:D4:9:LYS:HD3	2.28	0.49
32:D4:11:CYS:SG	32:D4:13:ASN:HB2	2.52	0.49
40:DH:95:GLY:H	40:DH:98:ASP:HB2	1.78	0.49
41:DJ:72:LYS:CG	41:DJ:89:PHE:HB2	2.43	0.49
45:DS:36:LEU:N	45:DS:36:LEU:HD22	2.27	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:DF:49:LEU:HD11	47:DF:66:ILE:HD12	1.92	0.49
50:DT:29:THR:CG2	50:DT:86:THR:HG22	2.43	0.49
1:AA:441:A:H61	1:AA:493:A:H62	1.61	0.49
1:AA:1073:U:H4'	20:AB:104:LYS:CE	2.42	0.49
3:AD:138:PRO:HA	3:AD:181:PHE:CD2	2.47	0.49
10:AK:115:ILE:HD12	10:AK:115:ILE:O	2.11	0.49
12:AM:95:PRO:CD	12:AM:108:ARG:HG2	2.43	0.49
18:AS:48:ILE:HG22	18:AS:49:ALA:N	2.24	0.49
23:BB:81:G:H2'	23:BB:82:U:O4'	2.13	0.49
23:BB:454:A:H4'	23:BB:455:C:OP2	2.12	0.49
23:BB:540:C:O2'	23:BB:541:A:H5'	2.12	0.49
23:BB:975:A:H1'	23:BB:990:A:C2	2.47	0.49
23:BB:996:A:H4'	44:BQ:91:ARG:HG2	1.94	0.49
23:BB:1258:U:H2'	23:BB:1259:G:C8	2.47	0.49
23:BB:1665:A:O2'	23:BB:1666:G:H5'	2.13	0.49
23:BB:2065:C:H2'	23:BB:2066:C:C6	2.46	0.49
23:BB:2213:U:O2	23:BB:2213:U:H2'	2.13	0.49
23:BB:2282:G:H4'	23:BB:2389:G:O2'	2.12	0.49
27:BK:71:ARG:HB3	27:BK:72:PRO:HD2	1.95	0.49
28:BP:26:GLU:HG3	28:BP:43:GLU:HB2	1.95	0.49
28:BP:88:ARG:NH2	28:BP:88:ARG:HB3	2.27	0.49
29:BE:181:ILE:HG12	37:BL:2:ARG:N	2.27	0.49
40:BH:124:THR:O	40:BH:125:THR:CB	2.59	0.49
43:BO:51:ALA:HB3	43:BO:78:VAL:CG2	2.38	0.49
44:BQ:35:PHE:C	44:BQ:37:ALA:H	2.20	0.49
45:BS:70:LYS:HD3	45:BS:110:ARG:C	2.38	0.49
47:BF:115:GLY:HA3	47:BF:177:ARG:HD2	1.94	0.49
47:BF:174:PHE:HB3	47:BF:176:PHE:CD1	2.48	0.49
1:CA:840:C:N3	1:CA:842:U:H5'	2.26	0.49
1:CA:893:C:H2'	1:CA:894:G:C8	2.47	0.49
1:CA:984:C:O2'	1:CA:985:C:H5'	2.12	0.49
1:CA:1057:G:H5''	2:CC:153:SER:HB2	1.95	0.49
1:CA:1272:G:H2'	1:CA:1273:C:C6	2.48	0.49
2:CC:13:ILE:HG12	2:CC:14:VAL:HG13	1.93	0.49
2:CC:129:PHE:CG	2:CC:130:ARG:N	2.80	0.49
5:CF:18:VAL:O	5:CF:22:ILE:HG13	2.11	0.49
7:CH:51:GLU:HG2	7:CH:52:GLY:N	2.24	0.49
11:CL:83:GLY:HA2	11:CL:94:TYR:HA	1.95	0.49
12:CM:63:VAL:HG13	12:CM:67:ASP:HB2	1.94	0.49
14:CO:32:LEU:O	14:CO:36:ILE:HG12	2.12	0.49
15:CP:73:ALA:O	15:CP:77:GLU:HG3	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:CU:27:VAL:O	21:CU:31:VAL:HG23	2.12	0.49
23:DB:598:U:H2'	23:DB:599:A:H8	1.77	0.49
23:DB:743:A:C2'	23:DB:744:U:H5'	2.42	0.49
23:DB:782:A:N3	25:DC:224:MET:HB3	2.28	0.49
23:DB:909:A:H2'	23:DB:912:C:H5	1.76	0.49
23:DB:975:A:H1'	23:DB:990:A:C2	2.48	0.49
23:DB:1319:C:O2'	23:DB:1320:C:H5'	2.13	0.49
23:DB:1539:U:H2'	23:DB:1540:G:C8	2.46	0.49
23:DB:1551:A:C3'	23:DB:1552:A:H5''	2.42	0.49
23:DB:1570:A:H2'	23:DB:1571:A:C8	2.47	0.49
23:DB:2101:A:O2'	23:DB:2102:G:H5'	2.12	0.49
24:DI:90:GLY:C	24:DI:92:PRO:HD3	2.38	0.49
25:DC:175:LEU:HD11	25:DC:181:ARG:HG3	1.94	0.49
26:DD:7:LYS:CE	26:DD:198:GLY:HA2	2.42	0.49
26:DD:90:PHE:CD2	26:DD:94:GLN:HG3	2.47	0.49
26:DD:90:PHE:HD2	26:DD:94:GLN:HG3	1.77	0.49
29:DE:150:THR:HG21	29:DE:153:LEU:HA	1.93	0.49
29:DE:166:LYS:O	29:DE:167:VAL:HB	2.12	0.49
36:D2:18:PHE:CZ	36:D2:22:MET:HE3	2.48	0.49
36:D2:42:LEU:O	36:D2:43:THR:HG23	2.13	0.49
38:DM:101:VAL:O	38:DM:101:VAL:HG13	2.13	0.49
46:DU:85:ARG:NH1	46:DU:86:PHE:N	2.60	0.49
47:DF:19:PHE:HE1	47:DF:167:ALA:HB2	1.78	0.49
48:DG:94:ARG:C	48:DG:94:ARG:HE	2.20	0.49
50:DT:25:GLU:HG2	50:DT:29:THR:O	2.13	0.49
1:AA:17:U:O2'	1:AA:18:C:H5'	2.12	0.49
1:AA:679:C:H2'	1:AA:680:C:H6	1.77	0.49
1:AA:715:A:H2'	1:AA:716:A:C8	2.47	0.49
1:AA:1057:G:H5''	2:AC:153:SER:HB2	1.94	0.49
1:AA:1251:A:H2'	1:AA:1252:A:C8	2.47	0.49
2:AC:174:LEU:H	2:AC:174:LEU:HD12	1.78	0.49
4:AE:15:ILE:HB	4:AE:35:LEU:O	2.12	0.49
6:AG:15:PRO:HG3	6:AG:39:GLU:OE1	2.13	0.49
8:AI:99:LYS:HE3	9:CJ:80:THR:C	2.37	0.49
10:AK:73:VAL:O	10:AK:76:TYR:HB2	2.12	0.49
10:AK:110:THR:CG2	21:AU:4:LYS:HA	2.43	0.49
13:AN:32:ASP:CG	13:AN:33:VAL:N	2.70	0.49
14:AO:17:ARG:HD3	14:AO:24:SER:OG	2.13	0.49
20:AB:165:ALA:HB3	20:AB:186:VAL:HG12	1.95	0.49
22:BA:49:C:H2'	22:BA:50:A:H8	1.77	0.49
23:BB:39:G:H2'	23:BB:40:U:C6	2.48	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:57:C:H2'	23:BB:58:G:O4'	2.12	0.49
23:BB:588:U:H1'	29:BE:85:PHE:CD1	2.47	0.49
23:BB:1080:A:O2'	23:BB:1081:U:H5'	2.12	0.49
23:BB:1198:U:H2'	23:BB:1199:U:H6	1.78	0.49
23:BB:1310:G:H21	23:BB:1610:A:H8	1.61	0.49
23:BB:1439:A:N7	23:BB:1440:U:N1	2.61	0.49
23:BB:1729:U:H2'	23:BB:1730:C:O4'	2.13	0.49
23:BB:1779:U:C5	23:BB:1784:A:N7	2.79	0.49
23:BB:2359:C:H2'	23:BB:2360:G:C8	2.48	0.49
23:BB:2537:U:H2'	23:BB:2538:C:C6	2.47	0.49
23:BB:2732:G:H3'	23:BB:2733:A:H5'	1.95	0.49
23:BB:2828:G:O2'	23:BB:2829:A:H5'	2.11	0.49
24:BI:74:PRO:O	24:BI:77:VAL:HG22	2.12	0.49
25:BC:245:THR:O	25:BC:247:TRP:N	2.45	0.49
27:BK:2:ILE:HD12	27:BK:2:ILE:N	2.27	0.49
29:BE:58:LYS:N	29:BE:58:LYS:HD3	2.27	0.49
29:BE:150:THR:HG21	29:BE:153:LEU:HA	1.94	0.49
35:BV:40:ILE:HD13	35:BV:40:ILE:H	1.78	0.49
38:BM:4:PRO:HG2	38:BM:70:ASP:HA	1.93	0.49
40:BH:114:GLU:HB3	40:BH:134:VAL:CA	2.43	0.49
40:BH:141:LYS:HD3	40:BH:141:LYS:N	2.26	0.49
44:BQ:86:SER:HB2	49:BR:50:GLY:O	2.12	0.49
46:BU:14:THR:O	46:BU:18:LYS:HA	2.12	0.49
1:CA:219:U:H2'	1:CA:220:G:H8	1.77	0.49
1:CA:264:C:O2'	16:CQ:65:PRO:HG2	2.12	0.49
1:CA:432:A:H2'	1:CA:433:G:H5'	1.94	0.49
1:CA:552:U:O2'	1:CA:553:A:H5'	2.13	0.49
1:CA:627:G:H2'	1:CA:628:G:C8	2.47	0.49
3:CD:49:ASP:O	3:CD:53:GLN:HG3	2.13	0.49
5:CF:47:LEU:HD21	5:CF:57:ALA:CB	2.42	0.49
6:CG:62:GLU:O	6:CG:66:GLU:HG3	2.12	0.49
9:CJ:14:ASP:OD1	9:CJ:17:LEU:HB2	2.13	0.49
22:DA:76:G:O2'	22:DA:77:U:H5'	2.12	0.49
23:DB:68:G:H2'	23:DB:69:C:H6	1.77	0.49
23:DB:100:U:OP1	23:DB:101:A:O5'	2.30	0.49
23:DB:192:C:C2'	23:DB:193:U:H5'	2.42	0.49
23:DB:782:A:N7	25:DC:219:VAL:HG21	2.28	0.49
23:DB:1439:A:N7	23:DB:1440:U:C6	2.81	0.49
23:DB:1487:U:H2'	23:DB:1488:C:C6	2.48	0.49
23:DB:1916:A:H2'	23:DB:1917:U:O4'	2.13	0.49
23:DB:2260:C:H2'	23:DB:2261:C:H6	1.77	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:2385:C:H2'	23:DB:2386:A:C8	2.47	0.49
23:DB:2471:A:O2'	23:DB:2472:G:O5'	2.31	0.49
23:DB:2732:G:H5'	23:DB:2733:A:O4'	2.12	0.49
23:DB:2776:A:H4'	23:DB:2777:G:O5'	2.13	0.49
24:DI:21:PRO:CB	24:DI:22:PRO:HD3	2.38	0.49
25:DC:71:ASP:O	25:DC:73:ILE:HG12	2.13	0.49
26:DD:55:LYS:C	26:DD:57:ALA:H	2.20	0.49
30:DY:7:THR:HA	30:DY:34:THR:HA	1.95	0.49
30:DY:8:GLN:HB3	30:DY:31:ILE:O	2.13	0.49
37:DL:95:LEU:O	37:DL:100:ILE:HG22	2.13	0.49
44:DQ:109:VAL:CG1	44:DQ:113:LYS:HE3	2.41	0.49
47:DF:32:LYS:HE2	47:DF:34:THR:HG22	1.93	0.49
47:DF:65:LEU:H	47:DF:88:VAL:HG22	1.75	0.49
47:DF:174:PHE:HB3	47:DF:176:PHE:CD1	2.47	0.49
50:DT:13:ALA:O	50:DT:32:LEU:HB2	2.13	0.49
1:AA:201:G:H2'	1:AA:202:G:O4'	2.12	0.49
1:AA:373:A:H2'	1:AA:374:A:H8	1.77	0.49
1:AA:1113:C:O2'	1:AA:1114:C:H5'	2.13	0.49
1:AA:1151:A:O2'	1:AA:1152:A:H8	1.95	0.49
1:AA:1287:A:H2'	1:AA:1288:A:H8	1.77	0.49
1:AA:1321:U:H2'	1:AA:1322:C:H5	1.78	0.49
1:AA:1366:C:H2'	1:AA:1367:C:C6	2.47	0.49
4:AE:28:ARG:NH1	4:AE:30:PHE:HB3	2.25	0.49
9:AJ:10:LEU:O	9:AJ:71:LEU:HA	2.13	0.49
9:AJ:10:LEU:HB3	9:AJ:18:ILE:HD11	1.93	0.49
18:AS:30:LEU:HB2	18:AS:48:ILE:HA	1.94	0.49
22:BA:30:C:H2'	22:BA:30:C:O2	2.13	0.49
23:BB:643:A:H2'	23:BB:644:A:O4'	2.12	0.49
23:BB:660:C:H2'	23:BB:661:A:C8	2.46	0.49
23:BB:1341:G:N2	23:BB:1398:C:H4'	2.28	0.49
23:BB:1454:C:H5'	42:BN:63:ARG:NE	2.27	0.49
23:BB:1539:U:H2'	23:BB:1540:G:C8	2.48	0.49
23:BB:1773:A:N7	23:BB:1829:A:H1'	2.28	0.49
23:BB:1830:C:H2'	23:BB:1831:G:H8	1.76	0.49
23:BB:2065:C:O2'	23:BB:2066:C:H5'	2.12	0.49
23:BB:2108:A:C2'	23:BB:2109:U:H4'	2.35	0.49
23:BB:2136:G:H2'	23:BB:2136:G:N3	2.28	0.49
23:BB:2187:U:H2'	23:BB:2188:U:H6	1.77	0.49
23:BB:2598:A:OP1	25:BC:233:GLY:HA3	2.13	0.49
23:BB:2693:G:O2'	23:BB:2694:G:H5'	2.13	0.49
25:BC:54:GLY:O	25:BC:214:GLY:HA2	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BC:183:VAL:HG22	25:BC:187:CYS:SG	2.53	0.49
26:BD:8:LYS:HB2	26:BD:201:LEU:HD21	1.95	0.49
29:BE:160:ALA:O	29:BE:161:ALA:HB3	2.13	0.49
30:BY:7:THR:HG22	30:BY:9:THR:H	1.78	0.49
35:BV:80:HIS:CG	35:BV:83:LYS:HB2	2.47	0.49
37:BL:19:LEU:HD23	37:BL:31:GLY:O	2.12	0.49
44:BQ:91:ARG:NH2	49:BR:11:GLN:H	2.11	0.49
45:BS:54:ALA:HA	45:BS:57:ASN:HB2	1.95	0.49
46:BU:11:ILE:O	46:BU:11:ILE:HD13	2.12	0.49
47:BF:27:VAL:HG23	47:BF:27:VAL:O	2.13	0.49
47:BF:65:LEU:H	47:BF:88:VAL:HG22	1.76	0.49
47:BF:161:SER:OG	47:BF:164:GLU:HG3	2.12	0.49
1:CA:242:G:H2'	1:CA:243:A:H5''	1.94	0.49
1:CA:734:G:H2'	1:CA:735:C:C6	2.48	0.49
1:CA:1169:A:H2'	1:CA:1170:A:C8	2.47	0.49
8:CI:49:GLN:N	8:CI:50:PRO:HD2	2.27	0.49
9:CJ:5:ARG:HG2	9:CJ:79:PRO:HG3	1.95	0.49
10:CK:115:ILE:O	10:CK:115:ILE:HD12	2.12	0.49
12:CM:1:ALA:C	12:CM:8:ILE:HG22	2.38	0.49
12:CM:15:VAL:HG22	12:CM:33:LEU:CD1	2.42	0.49
12:CM:84:CYS:C	12:CM:88:LEU:HD12	2.38	0.49
16:CQ:68:LYS:HG2	16:CQ:69:THR:HG23	1.95	0.49
19:CT:53:MET:O	19:CT:57:VAL:HG22	2.12	0.49
20:CB:70:GLY:HA3	20:CB:79:VAL:HG21	1.94	0.49
20:CB:95:TRP:CH2	20:CB:100:LEU:HB2	2.42	0.49
20:CB:107:ARG:HA	20:CB:110:ILE:HD12	1.94	0.49
22:DA:30:C:H2'	22:DA:31:C:H5'	1.94	0.49
22:DA:32:U:H1'	22:DA:52:A:N7	2.28	0.49
23:DB:418:C:H2'	23:DB:419:U:C6	2.47	0.49
23:DB:572:A:H5''	23:DB:573:U:OP2	2.13	0.49
23:DB:755:U:H2'	23:DB:756:A:C8	2.47	0.49
23:DB:1263:U:O2'	31:D0:7:PRO:HD2	2.13	0.49
23:DB:1487:U:H2'	23:DB:1488:C:H6	1.78	0.49
23:DB:1923:U:O2'	23:DB:1924:C:H5'	2.12	0.49
24:DI:89:SER:HA	24:DI:97:VAL:HG11	1.95	0.49
24:DI:126:ARG:NH1	24:DI:126:ARG:HB3	2.27	0.49
25:DC:71:ASP:C	25:DC:73:ILE:H	2.21	0.49
26:DD:11:MET:HE1	26:DD:192:ALA:HA	1.95	0.49
26:DD:175:LEU:HD21	26:DD:191:GLY:O	2.13	0.49
39:DX:41:HIS:O	39:DX:44:LYS:HB3	2.12	0.49
43:DO:28:VAL:O	43:DO:28:VAL:HG13	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:DF:91:ARG:O	47:DF:92:GLY:C	2.55	0.49
47:DF:168:LEU:O	47:DF:169:LEU:HB2	2.12	0.49
48:DG:83:THR:C	48:DG:84:LYS:HD3	2.38	0.49
1:AA:378:G:H2'	1:AA:379:C:C6	2.48	0.49
1:AA:438:U:H4'	3:AD:119:HIS:HD2	1.78	0.49
1:AA:797:C:O2'	1:AA:798:U:H5'	2.13	0.49
1:AA:803:G:H2'	1:AA:804:U:C6	2.48	0.49
1:AA:1240:U:C5	6:AG:115:MET:HE3	2.48	0.49
2:AC:181:ILE:HD12	2:AC:181:ILE:N	2.28	0.49
3:AD:146:GLU:C	3:AD:148:ALA:H	2.18	0.49
4:AE:101:GLY:H	4:AE:121:ASN:ND2	2.10	0.49
4:AE:156:ARG:HA	7:AH:63:LYS:NZ	2.28	0.49
8:AI:20:ILE:HG23	8:AI:60:LEU:CD1	2.43	0.49
14:AO:25:THR:CB	14:AO:70:LEU:HD23	2.42	0.49
23:BB:150:U:H2'	23:BB:151:C:H6	1.77	0.49
23:BB:741:U:H2'	23:BB:742:A:H8	1.78	0.49
23:BB:851:C:H2'	23:BB:852:U:H6	1.78	0.49
23:BB:1028:A:N6	23:BB:1125:G:H2'	2.28	0.49
23:BB:1203:U:C4'	37:BL:3:LEU:HD12	2.43	0.49
23:BB:1242:U:H2'	23:BB:1243:C:C6	2.48	0.49
23:BB:1465:G:H2'	23:BB:1466:U:C6	2.47	0.49
23:BB:2821:A:OP2	26:BD:115:GLY:HA3	2.12	0.49
24:BI:85:ILE:CD1	24:BI:137:LEU:HD21	2.43	0.49
24:BI:135:MET:HG3	24:BI:137:LEU:HG	1.95	0.49
25:BC:83:ASP:HB2	25:BC:90:ILE:HB	1.95	0.49
26:BD:124:ARG:HA	26:BD:165:MET:CE	2.43	0.49
27:BK:54:LYS:HD2	27:BK:54:LYS:N	2.23	0.49
28:BP:103:THR:HG22	28:BP:104:GLY:H	1.78	0.49
28:BP:112:ARG:HH11	28:BP:112:ARG:HB2	1.77	0.49
36:B2:10:LEU:C	36:B2:10:LEU:HD13	2.38	0.49
40:BH:133:GLN:HA	40:BH:139:PHE:HB2	1.95	0.49
47:BF:11:VAL:HG21	47:BF:172:PHE:CE1	2.48	0.49
51:BZ:74:ARG:HD2	51:BZ:76:GLU:OE2	2.12	0.49
1:CA:366:A:O2'	1:CA:394:G:N2	2.46	0.49
1:CA:420:U:H2'	1:CA:422:C:C4	2.48	0.49
1:CA:451:A:N6	1:CA:480:U:H2'	2.27	0.49
1:CA:465:A:H5'	1:CA:465:A:N3	2.27	0.49
1:CA:677:U:H2'	1:CA:678:U:C6	2.48	0.49
2:CC:106:ARG:HG2	2:CC:106:ARG:O	2.13	0.49
2:CC:126:ARG:HH22	2:CC:190:THR:CG2	2.16	0.49
4:CE:156:ARG:HB3	7:CH:43:GLY:HA3	1.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:CF:3:HIS:N	5:CF:92:THR:OG1	2.45	0.49
6:CG:24:LYS:O	6:CG:28:ILE:HG12	2.12	0.49
7:CH:94:VAL:HG21	7:CH:100:ILE:O	2.12	0.49
20:CB:15:PHE:CD1	20:CB:16:GLY:N	2.80	0.49
23:DB:1064:C:H2'	23:DB:1065:U:O4'	2.13	0.49
23:DB:1824:G:O2'	23:DB:1825:U:H5'	2.12	0.49
23:DB:2054:A:H2'	31:D0:4:GLN:OE1	2.12	0.49
23:DB:2077:A:C6	23:DB:2078:C:N4	2.81	0.49
23:DB:2761:A:H1'	48:DG:142:GLN:NE2	2.27	0.49
25:DC:155:ARG:HH11	25:DC:155:ARG:CB	2.26	0.49
25:DC:222:THR:HA	25:DC:231:HIS:O	2.12	0.49
25:DC:255:LYS:C	25:DC:256:THR:HG23	2.36	0.49
27:DK:43:ILE:CD1	27:DK:52:VAL:HB	2.43	0.49
27:DK:47:ILE:HG23	27:DK:48:PRO:CD	2.43	0.49
29:DE:150:THR:OG1	29:DE:151:GLY:N	2.45	0.49
34:D3:60:CYS:C	34:D3:61:LEU:HD23	2.37	0.49
39:DX:56:LEU:C	39:DX:58:ASN:N	2.69	0.49
40:DH:113:SER:N	40:DH:132:PHE:HE1	2.08	0.49
43:DO:14:ALA:C	43:DO:16:ARG:H	2.20	0.49
45:DS:13:SER:OG	45:DS:14:ALA:N	2.46	0.49
45:DS:54:ALA:HA	45:DS:57:ASN:HB2	1.95	0.49
47:DF:76:PHE:HD2	47:DF:78:ILE:HD13	1.75	0.49
48:DG:17:LYS:HA	48:DG:17:LYS:NZ	2.24	0.49
48:DG:84:LYS:HG3	48:DG:131:VAL:CA	2.42	0.49
1:AA:34:C:H2'	1:AA:35:G:C8	2.47	0.49
1:AA:87:C:H2'	1:AA:88:U:H4'	1.95	0.49
1:AA:409:U:OP1	3:AD:23:GLY:HA3	2.13	0.49
1:AA:413:G:H2'	1:AA:428:G:H21	1.78	0.49
1:AA:1216:A:H5''	13:AN:4:SER:CB	2.42	0.49
6:AG:4:ARG:NE	6:AG:6:ILE:HG23	2.28	0.49
6:AG:14:ASP:O	6:AG:18:GLY:HA2	2.13	0.49
6:AG:97:ALA:HA	6:AG:100:MET:HE3	1.95	0.49
8:AI:23:GLY:H	8:AI:60:LEU:HA	1.77	0.49
8:AI:51:LEU:HB3	8:AI:56:MET:CG	2.43	0.49
8:AI:53:LEU:O	8:AI:53:LEU:HD13	2.13	0.49
12:AM:22:TYR:N	12:AM:65:GLU:OE2	2.46	0.49
14:AO:35:GLN:O	14:AO:39:LEU:HB2	2.13	0.49
15:AP:40:ASN:ND2	15:AP:43:ALA:N	2.53	0.49
20:AB:57:ASN:HA	20:AB:60:ALA:HB3	1.94	0.49
20:AB:101:THR:HG23	20:AB:102:ASN:N	2.27	0.49
22:BA:102:G:O2'	22:BA:103:U:H5'	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:141:G:H3'	23:BB:142:A:O4'	2.13	0.49
23:BB:315:G:H2'	23:BB:316:C:H6	1.76	0.49
23:BB:322:A:H5'	23:BB:340:A:C1'	2.43	0.49
23:BB:951:C:O2'	23:BB:952:G:H5'	2.13	0.49
23:BB:1275:A:H2'	23:BB:1275:A:N3	2.28	0.49
23:BB:1287:A:H3'	23:BB:1288:G:N2	2.28	0.49
23:BB:1386:C:H1'	23:BB:1470:A:H1'	1.94	0.49
23:BB:2233:U:H2'	23:BB:2234:G:C8	2.48	0.49
23:BB:2557:G:H2'	23:BB:2558:C:H6	1.78	0.49
23:BB:2678:C:H2'	23:BB:2679:A:C8	2.48	0.49
23:BB:2692:G:O2'	23:BB:2693:G:H5'	2.13	0.49
24:BI:63:ASP:C	24:BI:65:SER:N	2.71	0.49
25:BC:140:VAL:HG12	25:BC:141:HIS:N	2.27	0.49
26:BD:51:THR:HG22	26:BD:52:THR:H	1.77	0.49
26:BD:106:LYS:HD3	26:BD:106:LYS:N	2.28	0.49
26:BD:159:LYS:C	26:BD:159:LYS:HD3	2.37	0.49
38:BM:40:ARG:HB2	38:BM:93:VAL:HG22	1.93	0.49
39:BX:7:ARG:HB2	39:BX:7:ARG:NH1	2.27	0.49
40:BH:70:GLU:CD	40:BH:70:GLU:H	2.19	0.49
48:BG:145:ALA:HA	48:BG:148:ARG:CG	2.42	0.49
52:BW:65:LYS:HG3	52:BW:84:GLU:CB	2.41	0.49
1:CA:834:U:H2'	1:CA:835:U:H6	1.78	0.49
1:CA:903:G:H2'	1:CA:904:U:C6	2.48	0.49
1:CA:1172:C:O2'	1:CA:1173:U:H5'	2.12	0.49
1:CA:1238:A:H2	1:CA:1241:G:N3	2.11	0.49
2:CC:45:GLU:C	2:CC:46:LEU:HD22	2.37	0.49
3:CD:171:GLU:HB2	3:CD:180:THR:HB	1.94	0.49
10:CK:70:ALA:O	10:CK:74:LYS:HB2	2.13	0.49
10:CK:92:ARG:HH21	21:CU:24:LYS:CG	2.25	0.49
10:CK:117:HIS:O	10:CK:118:ASN:HB2	2.13	0.49
12:CM:95:PRO:CD	12:CM:108:ARG:HG2	2.43	0.49
16:CQ:18:LYS:HA	16:CQ:47:ASP:O	2.13	0.49
16:CQ:60:ILE:HG22	16:CQ:74:LEU:HA	1.94	0.49
19:CT:5:SER:C	19:CT:7:LYS:H	2.21	0.49
19:CT:14:GLU:O	19:CT:17:ARG:HB3	2.13	0.49
20:CB:113:LEU:HD12	20:CB:143:LEU:HB3	1.95	0.49
23:DB:38:A:N3	29:DE:43:THR:HB	2.28	0.49
23:DB:41:C:O2'	23:DB:42:A:H5'	2.12	0.49
23:DB:616:A:H3'	23:DB:617:G:C8	2.41	0.49
23:DB:660:C:H2'	23:DB:661:A:C8	2.47	0.49
23:DB:758:C:O2	23:DB:1981:A:H2	1.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:873:C:H2'	23:DB:874:G:H8	1.78	0.49
23:DB:1230:A:H2'	23:DB:1231:U:H6	1.75	0.49
23:DB:1429:G:H2'	23:DB:1430:G:C8	2.43	0.49
23:DB:1591:A:H2'	23:DB:1592:C:C6	2.48	0.49
23:DB:2150:C:H2'	23:DB:2151:U:C6	2.48	0.49
23:DB:2557:G:H2'	23:DB:2558:C:H6	1.78	0.49
23:DB:2772:C:H2'	23:DB:2773:C:H6	1.77	0.49
23:DB:2795:C:H2'	23:DB:2796:U:C1'	2.43	0.49
23:DB:2864:G:H2'	23:DB:2865:U:C6	2.48	0.49
27:DK:2:ILE:HA	27:DK:33:ALA:H	1.78	0.49
27:DK:71:ARG:HA	27:DK:71:ARG:HE	1.78	0.49
28:DP:1:SER:H1	28:DP:4:ILE:HB	1.77	0.49
29:DE:59:PRO:HB2	29:DE:67:ARG:NH2	2.25	0.49
35:DV:4:ILE:N	35:DV:62:THR:O	2.46	0.49
41:DJ:59:ALA:O	41:DJ:62:VAL:HG12	2.13	0.49
44:DQ:51:GLN:O	44:DQ:54:ARG:HB2	2.13	0.49
48:DG:54:ARG:HD3	48:DG:54:ARG:C	2.38	0.49
1:AA:152:A:H2'	1:AA:153:C:O4'	2.12	0.48
1:AA:893:C:H2'	1:AA:894:G:H8	1.76	0.48
1:AA:1072:G:H2'	1:AA:1073:U:H6	1.77	0.48
1:AA:1324:A:H2'	1:AA:1325:C:O4'	2.13	0.48
4:AE:156:ARG:HB3	7:AH:43:GLY:HA3	1.95	0.48
8:AI:119:LYS:C	8:AI:121:ARG:H	2.21	0.48
10:AK:70:ALA:O	10:AK:74:LYS:HB2	2.12	0.48
12:AM:86:ARG:O	12:AM:89:ARG:HB2	2.13	0.48
16:AQ:7:LEU:O	16:AQ:60:ILE:HD13	2.13	0.48
18:AS:62:THR:HG22	18:AS:63:ASP:N	2.29	0.48
20:AB:27:LYS:C	20:AB:27:LYS:HD2	2.38	0.48
21:AU:9:GLU:OE2	2:CC:108:PRO:HG3	2.13	0.48
22:BA:32:U:H2'	22:BA:33:G:C8	2.48	0.48
23:BB:378:C:O2'	23:BB:379:G:H5'	2.13	0.48
23:BB:419:U:H2'	23:BB:420:C:H6	1.76	0.48
23:BB:510:C:H2'	23:BB:511:U:O4'	2.12	0.48
23:BB:833:A:H1'	37:BL:52:GLY:N	2.28	0.48
23:BB:1295:C:H2'	23:BB:1296:G:H8	1.78	0.48
23:BB:1390:U:O2'	23:BB:1391:U:H5'	2.12	0.48
23:BB:2579:C:O2'	26:BD:136:ASN:HA	2.13	0.48
23:BB:2862:G:H2'	23:BB:2863:C:C6	2.48	0.48
23:BB:2864:G:H2'	23:BB:2865:U:C6	2.48	0.48
25:BC:91:ALA:CB	25:BC:105:ALA:HB2	2.43	0.48
28:BP:62:LYS:O	28:BP:63:ILE:HB	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BL:131:ALA:C	37:BL:133:ALA:N	2.68	0.48
39:BX:28:LEU:HB3	39:BX:43:LEU:HD21	1.95	0.48
43:BO:30:ARG:HG3	43:BO:30:ARG:HH11	1.77	0.48
44:BQ:24:TYR:CG	44:BQ:25:GLY:N	2.80	0.48
46:BU:39:ASN:CB	46:BU:62:ALA:HB3	2.41	0.48
49:BR:4:VAL:HA	49:BR:12:HIS:O	2.13	0.48
52:BW:54:ARG:C	52:BW:56:HIS:H	2.20	0.48
1:CA:858:G:O6	1:CA:869:G:H3'	2.13	0.48
1:CA:1026:G:H2'	1:CA:1027:C:C6	2.48	0.48
1:CA:1310:G:O2'	1:CA:1311:A:H5'	2.13	0.48
1:CA:1330:U:H2'	1:CA:1331:G:H5'	1.95	0.48
1:CA:1332:A:H2'	1:CA:1333:A:O4'	2.13	0.48
4:CE:82:HIS:HE1	4:CE:146:MET:HA	1.77	0.48
4:CE:156:ARG:HA	7:CH:63:LYS:NZ	2.28	0.48
4:CE:158:LYS:NZ	7:CH:65:PHE:HA	2.28	0.48
6:CG:14:ASP:O	6:CG:18:GLY:HA2	2.13	0.48
6:CG:21:LEU:HD23	6:CG:21:LEU:H	1.78	0.48
6:CG:94:ARG:HH11	6:CG:98:LEU:HD11	1.78	0.48
7:CH:113:ARG:HH21	7:CH:114:ALA:HA	1.78	0.48
9:CJ:88:MET:SD	9:CJ:88:MET:N	2.86	0.48
10:CK:92:ARG:HH22	10:CK:111:ASP:CG	2.21	0.48
14:CO:39:LEU:HD23	14:CO:43:PHE:HE1	1.78	0.48
15:CP:12:LYS:C	15:CP:14:ARG:H	2.20	0.48
17:CR:44:THR:C	17:CR:46:THR:H	2.21	0.48
17:CR:56:ARG:O	17:CR:60:ARG:HG2	2.13	0.48
18:CS:28:LYS:HZ2	18:CS:28:LYS:N	2.01	0.48
22:DA:30:C:H1'	22:DA:58:A:N1	2.28	0.48
23:DB:38:A:O2'	29:DE:43:THR:HA	2.13	0.48
23:DB:200:U:H5''	51:DZ:22:LEU:O	2.13	0.48
23:DB:522:A:H2'	23:DB:523:C:H6	1.75	0.48
23:DB:657:U:H2'	23:DB:658:U:C6	2.48	0.48
23:DB:845:A:C2'	23:DB:846:U:H5''	2.39	0.48
23:DB:1536:C:H1'	23:DB:1537:G:N2	2.29	0.48
23:DB:1585:C:H2'	23:DB:1586:A:O4'	2.13	0.48
23:DB:1714:U:H3'	23:DB:1715:G:C5'	2.43	0.48
23:DB:1749:A:H2'	23:DB:1750:G:H8	1.77	0.48
23:DB:2144:G:C2	23:DB:2146:C:H5'	2.47	0.48
23:DB:2421:G:N7	34:D3:30:HIS:NE2	2.61	0.48
23:DB:2756:U:C1'	23:DB:2757:A:H5''	2.42	0.48
23:DB:2800:A:H2'	23:DB:2801:G:O4'	2.12	0.48
25:DC:140:VAL:HG12	25:DC:141:HIS:N	2.28	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:DK:71:ARG:O	27:DK:72:PRO:C	2.56	0.48
29:DE:27:LEU:O	29:DE:30:GLN:HB3	2.13	0.48
33:D1:14:ALA:HB3	33:D1:16:THR:HG22	1.93	0.48
41:DJ:45:THR:O	41:DJ:45:THR:HG23	2.13	0.48
42:DN:19:ALA:C	42:DN:21:PHE:H	2.21	0.48
42:DN:51:LEU:HD21	42:DN:70:THR:HG21	1.95	0.48
44:DQ:26:ALA:HB1	44:DQ:30:VAL:CG1	2.42	0.48
44:DQ:35:PHE:C	44:DQ:37:ALA:H	2.20	0.48
45:DS:48:LYS:HE2	45:DS:52:GLU:OE1	2.13	0.48
46:DU:85:ARG:HA	46:DU:85:ARG:NE	2.26	0.48
46:DU:85:ARG:O	46:DU:92:VAL:HB	2.12	0.48
49:DR:78:ARG:HG3	49:DR:78:ARG:NH2	2.28	0.48
51:DZ:20:HIS:O	51:DZ:21:ALA:HB3	2.13	0.48
51:DZ:76:GLU:HG3	51:DZ:77:LYS:H	1.77	0.48
1:AA:823:C:O2'	1:AA:824:G:H5'	2.13	0.48
1:AA:948:C:H2'	1:AA:949:A:H8	1.78	0.48
1:AA:1161:C:H2'	1:AA:1162:C:H6	1.78	0.48
1:AA:1319:A:H4'	1:AA:1320:C:OP1	2.13	0.48
2:AC:116:ALA:O	2:AC:120:THR:HG23	2.13	0.48
2:AC:140:ALA:HB3	2:AC:148:ILE:HD12	1.94	0.48
3:AD:102:TYR:CE1	3:AD:109:THR:HA	2.48	0.48
3:AD:115:GLN:HE21	3:AD:119:HIS:CE1	2.31	0.48
6:AG:14:ASP:HB3	6:AG:19:SER:H	1.78	0.48
8:AI:49:GLN:N	8:AI:50:PRO:HD2	2.29	0.48
9:AJ:80:THR:HG22	9:AJ:81:GLU:N	2.28	0.48
16:AQ:60:ILE:HG12	16:AQ:72:TRP:HE3	1.77	0.48
23:BB:547:A:H5''	23:BB:548:G:N7	2.27	0.48
23:BB:610:C:O2'	23:BB:611:C:H5'	2.13	0.48
23:BB:657:U:H2'	23:BB:658:U:C6	2.48	0.48
23:BB:2297:A:H61	23:BB:2319:G:H1'	1.78	0.48
23:BB:2306:C:H3'	23:BB:2307:G:H5''	1.93	0.48
23:BB:2394:C:H5''	37:BL:63:LYS:HD3	1.95	0.48
23:BB:2553:G:H2'	23:BB:2554:U:O4'	2.13	0.48
23:BB:2800:A:H2'	23:BB:2801:G:C8	2.48	0.48
23:BB:2836:U:H2'	23:BB:2837:A:H8	1.77	0.48
23:BB:2869:G:H2'	23:BB:2870:C:H6	1.77	0.48
29:BE:72:SER:C	29:BE:74:LYS:H	2.20	0.48
33:B1:8:ILE:HD12	33:B1:51:ALA:HA	1.96	0.48
40:BH:116:ARG:CZ	40:BH:131:SER:HB3	2.43	0.48
41:BJ:4:PHE:HB3	41:BJ:44:TYR:CD1	2.49	0.48
41:BJ:19:ASP:OD2	41:BJ:58:ASN:HB2	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BJ:100:VAL:O	41:BJ:104:ALA:HB2	2.14	0.48
45:BS:26:GLY:HA2	45:BS:71:VAL:O	2.13	0.48
47:BF:134:GLN:H	47:BF:150:GLY:H	1.61	0.48
49:BR:15:SER:OG	49:BR:18:GLN:HG2	2.13	0.48
51:BZ:6:GLN:HE22	51:BZ:77:LYS:HZ1	1.57	0.48
1:CA:34:C:H2'	1:CA:35:G:C8	2.48	0.48
1:CA:224:U:H2'	1:CA:225:C:C6	2.48	0.48
1:CA:246:A:N6	1:CA:281:G:H1'	2.28	0.48
1:CA:677:U:H2'	1:CA:678:U:H6	1.77	0.48
1:CA:1391:U:H2'	1:CA:1392:G:H8	1.76	0.48
4:CE:143:LEU:O	4:CE:146:MET:HG2	2.14	0.48
6:CG:11:ILE:HG12	6:CG:24:LYS:HE2	1.95	0.48
7:CH:12:ARG:HG3	7:CH:12:ARG:HH11	1.79	0.48
7:CH:86:LYS:HD2	7:CH:90:GLU:HG3	1.93	0.48
12:CM:14:ALA:HB1	12:CM:33:LEU:HD21	1.95	0.48
13:CN:49:THR:O	13:CN:50:LEU:HB2	2.12	0.48
20:CB:46:VAL:HA	20:CB:49:PHE:CD2	2.48	0.48
20:CB:172:ILE:HG23	20:CB:182:VAL:HG11	1.95	0.48
20:CB:187:ASP:OD1	20:CB:203:ASP:HB3	2.13	0.48
23:DB:170:U:H2'	23:DB:171:U:C6	2.48	0.48
23:DB:847:U:O2	23:DB:847:U:O4'	2.30	0.48
23:DB:1241:A:H2'	23:DB:1242:U:H5'	1.95	0.48
23:DB:1248:G:OP1	44:DQ:1:ALA:HB3	2.13	0.48
23:DB:1252:G:H5''	56:DB:3464:HOH:O	2.13	0.48
23:DB:1295:C:H2'	23:DB:1296:G:H8	1.77	0.48
23:DB:1545:A:H2'	23:DB:1546:G:O4'	2.12	0.48
23:DB:2418:A:H2'	23:DB:2419:U:O4'	2.14	0.48
23:DB:2693:G:O2'	23:DB:2694:G:H5'	2.13	0.48
26:DD:3:GLY:C	26:DD:4:LEU:HD22	2.38	0.48
27:DK:109:SER:HB2	27:DK:111:LYS:HE2	1.96	0.48
29:DE:115:GLN:HE22	37:DL:2:ARG:HD3	1.78	0.48
31:D0:50:GLY:C	31:D0:51:ARG:HG2	2.38	0.48
40:DH:90:LEU:HD13	40:DH:123:ARG:C	2.38	0.48
41:DJ:101:ILE:O	41:DJ:105:VAL:HG22	2.14	0.48
47:DF:34:THR:HG1	47:DF:154:THR:HB	1.79	0.48
47:DF:134:GLN:H	47:DF:150:GLY:H	1.61	0.48
48:DG:54:ARG:HB3	48:DG:57:TYR:HD1	1.78	0.48
48:DG:142:GLN:HG3	48:DG:146:ASP:OD2	2.13	0.48
51:DZ:21:ALA:HB3	51:DZ:23:ASN:ND2	2.27	0.48
52:DW:9:THR:OG1	52:DW:10:ARG:N	2.42	0.48
1:AA:65:A:C2	1:AA:381:C:H2'	2.48	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:86:G:H1'	1:AA:87:C:H5	1.77	0.48
1:AA:1320:C:H2'	1:AA:1321:U:O4'	2.13	0.48
2:AC:149:LYS:HB2	2:AC:168:ARG:HG3	1.96	0.48
3:AD:96:ARG:HH12	3:AD:133:SER:HB3	1.78	0.48
4:AE:87:VAL:HG23	4:AE:91:SER:O	2.12	0.48
5:AF:18:VAL:O	5:AF:22:ILE:HG13	2.13	0.48
7:AH:74:ILE:HG13	7:AH:128:VAL:HG22	1.94	0.48
12:AM:106:ARG:HE	12:AM:112:ARG:HD3	1.78	0.48
23:BB:195:A:H61	23:BB:198:C:H3'	1.78	0.48
23:BB:418:C:H2'	23:BB:419:U:H6	1.78	0.48
23:BB:598:U:H2'	23:BB:599:A:C8	2.49	0.48
23:BB:858:G:H21	23:BB:2268:A:H3'	1.78	0.48
23:BB:1902:C:H2'	23:BB:1903:G:O4'	2.13	0.48
23:BB:2489:U:O2'	23:BB:2490:G:H5'	2.13	0.48
24:BI:52:LEU:HD12	24:BI:52:LEU:N	2.28	0.48
25:BC:53:ILE:O	25:BC:53:ILE:HG23	2.11	0.48
25:BC:226:PRO:CG	25:BC:233:GLY:H	2.19	0.48
28:BP:96:LEU:HB3	28:BP:99:LEU:HB2	1.95	0.48
40:BH:97:ARG:HA	40:BH:112:LYS:CB	2.43	0.48
40:BH:114:GLU:HB2	40:BH:132:PHE:CE1	2.48	0.48
43:BO:49:VAL:CG2	43:BO:82:ALA:HB2	2.34	0.48
44:BQ:109:VAL:O	44:BQ:113:LYS:HG3	2.13	0.48
45:BS:6:LYS:HB3	45:BS:104:THR:HA	1.95	0.48
46:BU:58:VAL:HG12	46:BU:59:GLU:N	2.20	0.48
52:BW:49:ASN:HB2	52:BW:60:ALA:CA	2.43	0.48
1:CA:224:U:H2'	1:CA:225:C:H6	1.77	0.48
1:CA:401:C:H2'	1:CA:402:G:H8	1.77	0.48
1:CA:648:A:H2'	1:CA:649:A:C8	2.48	0.48
1:CA:736:C:H2'	1:CA:737:C:C6	2.48	0.48
2:CC:11:LEU:HD11	13:CN:87:ALA:O	2.13	0.48
3:CD:102:TYR:CE1	3:CD:109:THR:HA	2.47	0.48
7:CH:74:ILE:O	7:CH:74:ILE:HG23	2.13	0.48
12:CM:86:ARG:O	12:CM:89:ARG:HB2	2.13	0.48
12:CM:109:LYS:HG3	12:CM:110:GLY:H	1.77	0.48
16:CQ:82:VAL:O	16:CQ:82:VAL:HG13	2.14	0.48
20:CB:64:GLY:O	20:CB:66:ILE:HG12	2.13	0.48
20:CB:187:ASP:HB3	20:CB:201:GLY:O	2.13	0.48
23:DB:37:C:H4'	23:DB:451:U:OP1	2.12	0.48
23:DB:246:C:C2'	23:DB:247:G:H5'	2.43	0.48
23:DB:464:U:H2'	23:DB:465:G:O4'	2.14	0.48
23:DB:786:C:O2'	23:DB:787:C:H5'	2.14	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:956:G:OP2	38:DM:86:LYS:HE2	2.12	0.48
23:DB:969:G:H2'	23:DB:970:U:C6	2.49	0.48
23:DB:1023:U:H2'	23:DB:1024:G:H5'	1.94	0.48
23:DB:1161:C:H2'	23:DB:1162:G:H8	1.79	0.48
23:DB:1651:G:OP1	42:DN:37:THR:HG21	2.13	0.48
23:DB:1704:C:O2'	23:DB:1705:A:H5'	2.13	0.48
23:DB:2096:C:H2'	23:DB:2097:A:C8	2.49	0.48
23:DB:2821:A:H2'	23:DB:2822:G:O4'	2.14	0.48
25:DC:106:PRO:O	25:DC:109:LEU:HD13	2.12	0.48
25:DC:259:ASN:C	25:DC:261:ARG:H	2.20	0.48
27:DK:8:LEU:HD12	27:DK:8:LEU:N	2.25	0.48
29:DE:58:LYS:HZ3	29:DE:58:LYS:CB	2.25	0.48
29:DE:160:ALA:C	29:DE:162:ARG:H	2.19	0.48
37:DL:6:LEU:HD23	37:DL:6:LEU:N	2.18	0.48
38:DM:31:PHE:HB3	38:DM:130:PHE:CZ	2.48	0.48
38:DM:114:ARG:HA	38:DM:130:PHE:CE1	2.47	0.48
44:DQ:35:PHE:C	44:DQ:37:ALA:N	2.71	0.48
45:DS:22:ASP:HA	45:DS:25:ARG:HH11	1.79	0.48
46:DU:84:PHE:O	46:DU:85:ARG:CB	2.58	0.48
48:DG:1:SER:HA	48:DG:61:TRP:CZ3	2.48	0.48
48:DG:120:ILE:C	48:DG:120:ILE:HD13	2.38	0.48
51:DZ:71:LEU:O	51:DZ:74:ARG:HG2	2.14	0.48
1:AA:107:G:O6	19:AT:9:ARG:HD3	2.14	0.48
1:AA:665:A:H2'	1:AA:725:G:N2	2.28	0.48
1:AA:794:A:H2'	1:AA:795:C:C6	2.48	0.48
1:AA:939:G:H5'	6:AG:101:ARG:NH1	2.29	0.48
1:AA:984:C:O2'	1:AA:985:C:H5'	2.13	0.48
2:AC:53:ARG:HG2	2:AC:54:ILE:H	1.79	0.48
3:AD:126:GLY:O	3:AD:127:ARG:HD2	2.12	0.48
5:AF:97:THR:O	5:AF:98:GLU:CD	2.56	0.48
8:AI:123:ARG:HB3	8:AI:123:ARG:CZ	2.44	0.48
13:AN:79:SER:O	13:AN:83:VAL:HG23	2.13	0.48
18:AS:42:ASN:ND2	18:AS:43:MET:H	2.12	0.48
20:AB:122:ASP:C	20:AB:124:THR:H	2.21	0.48
22:BA:53:A:O2'	22:BA:54:G:H5'	2.14	0.48
23:BB:532:A:H4'	23:BB:533:G:C8	2.49	0.48
23:BB:840:C:H2'	23:BB:841:G:H8	1.79	0.48
23:BB:929:U:O2'	23:BB:930:G:H5'	2.14	0.48
23:BB:932:U:O4'	23:BB:932:U:O2	2.32	0.48
23:BB:1028:A:H2'	23:BB:1029:A:C8	2.48	0.48
23:BB:1487:U:H2'	23:BB:1488:C:H6	1.78	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:1549:A:H2'	23:BB:1550:C:H6	1.79	0.48
23:BB:1749:A:H2'	23:BB:1750:G:C8	2.48	0.48
23:BB:1920:C:H2'	23:BB:1921:G:H8	1.78	0.48
23:BB:2425:A:H5''	23:BB:2426:A:H3'	1.95	0.48
23:BB:2466:C:O2'	23:BB:2467:C:H5'	2.13	0.48
23:BB:2636:C:O2'	23:BB:2637:U:H5'	2.13	0.48
23:BB:2667:C:H1'	48:BG:108:PHE:CD2	2.48	0.48
24:BI:52:LEU:HD21	24:BI:81:LYS:NZ	2.29	0.48
25:BC:71:ASP:O	25:BC:73:ILE:HG12	2.13	0.48
26:BD:175:LEU:HD23	26:BD:190:LYS:HB3	1.94	0.48
27:BK:61:VAL:HG11	27:BK:112:PHE:CE2	2.49	0.48
29:BE:27:LEU:O	29:BE:30:GLN:HB3	2.14	0.48
29:BE:102:ARG:HG3	29:BE:102:ARG:NH2	2.28	0.48
31:B0:43:THR:OG1	31:B0:47:TYR:HB2	2.13	0.48
35:BV:51:GLN:HB2	35:BV:57:TYR:OH	2.13	0.48
40:BH:8:LYS:O	40:BH:9:VAL:C	2.56	0.48
40:BH:65:ALA:O	40:BH:68:ARG:HD2	2.13	0.48
48:BG:53:PRO:HG3	48:BG:61:TRP:CD2	2.49	0.48
49:BR:57:GLY:HA2	49:BR:102:SER:O	2.13	0.48
51:BZ:20:HIS:C	51:BZ:22:LEU:H	2.22	0.48
1:CA:373:A:H2'	1:CA:374:A:H8	1.79	0.48
1:CA:584:G:O2'	1:CA:585:G:H5'	2.14	0.48
1:CA:946:A:H2'	1:CA:947:G:H8	1.74	0.48
1:CA:1347:G:C8	8:CI:108:ARG:HB2	2.48	0.48
3:CD:29:THR:HB	3:CD:30:LYS:HZ3	1.79	0.48
3:CD:169:TRP:CD2	3:CD:185:PRO:HB3	2.48	0.48
3:CD:187:ARG:O	3:CD:191:SER:HB3	2.13	0.48
4:CE:87:VAL:HG23	4:CE:91:SER:O	2.13	0.48
5:CF:53:LYS:HE2	5:CF:53:LYS:HA	1.94	0.48
8:CI:123:ARG:HB3	8:CI:123:ARG:CZ	2.43	0.48
20:CB:104:LYS:HB2	20:CB:104:LYS:NZ	2.28	0.48
23:DB:208:C:H2'	23:DB:209:C:C6	2.48	0.48
23:DB:659:G:H21	29:DE:30:GLN:NE2	2.11	0.48
23:DB:858:G:H21	23:DB:2268:A:H3'	1.78	0.48
23:DB:919:U:O5'	23:DB:919:U:H6	1.96	0.48
23:DB:945:A:OP2	23:DB:945:A:H4'	2.14	0.48
23:DB:1287:A:H3'	23:DB:1288:G:N2	2.28	0.48
23:DB:1353:A:H2'	23:DB:1354:A:C8	2.47	0.48
23:DB:1488:C:O2'	23:DB:1489:C:H5'	2.13	0.48
23:DB:1856:U:C2'	23:DB:1857:G:H5'	2.44	0.48
23:DB:2896:C:H2'	23:DB:2897:U:H6	1.78	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DD:124:ARG:HA	26:DD:165:MET:CE	2.43	0.48
41:DJ:81:ILE:HG23	41:DJ:82:GLY:N	2.18	0.48
44:DQ:91:ARG:HE	44:DQ:94:LEU:HD23	1.78	0.48
47:DF:27:VAL:O	47:DF:27:VAL:HG23	2.14	0.48
48:DG:10:VAL:HG12	48:DG:10:VAL:O	2.12	0.48
50:DT:15:HIS:HB3	50:DT:31:VAL:HG23	1.94	0.48
1:AA:413:G:H2'	1:AA:428:G:N2	2.29	0.48
1:AA:677:U:H3	1:AA:713:G:H22	1.60	0.48
1:AA:687:A:C2	1:AA:704:A:C5	3.02	0.48
1:AA:1030:U:O2	1:AA:1030:U:H2'	2.14	0.48
1:AA:1077:G:N2	1:AA:1080:A:OP2	2.42	0.48
3:AD:169:TRP:CD2	3:AD:185:PRO:HB3	2.48	0.48
5:AF:6:ILE:HD12	5:AF:7:VAL:N	2.29	0.48
7:AH:74:ILE:HG23	7:AH:74:ILE:O	2.14	0.48
10:AK:117:HIS:O	10:AK:118:ASN:HB2	2.12	0.48
12:AM:2:ARG:HG3	12:AM:6:ILE:N	2.27	0.48
12:AM:14:ALA:HB1	12:AM:33:LEU:HD21	1.96	0.48
12:AM:87:GLY:HA2	12:AM:90:HIS:HD2	1.78	0.48
13:AN:46:LYS:HZ2	18:AS:15:LEU:HD11	1.79	0.48
19:AT:5:SER:C	19:AT:7:LYS:H	2.20	0.48
20:AB:83:ALA:O	20:AB:88:GLN:HB2	2.14	0.48
23:BB:79:C:HO2'	23:BB:346:A:C1'	2.26	0.48
23:BB:753:A:O2'	23:BB:754:U:H5'	2.13	0.48
23:BB:1114:C:H2'	23:BB:1115:G:C8	2.49	0.48
23:BB:1364:G:H5''	51:BZ:3:ARG:CZ	2.43	0.48
23:BB:1725:U:O2'	23:BB:1726:C:H5'	2.14	0.48
23:BB:2151:U:H2'	23:BB:2152:G:C8	2.43	0.48
23:BB:2191:A:H2'	23:BB:2192:U:C6	2.48	0.48
23:BB:2199:A:H3'	23:BB:2200:C:H6	1.79	0.48
23:BB:2492:U:O2'	23:BB:2493:U:H5'	2.13	0.48
23:BB:2821:A:H2'	23:BB:2822:G:O4'	2.14	0.48
24:BI:2:LYS:HB3	24:BI:2:LYS:NZ	2.28	0.48
24:BI:135:MET:HE2	24:BI:137:LEU:HD11	1.95	0.48
26:BD:106:LYS:O	26:BD:107:VAL:HB	2.13	0.48
28:BP:47:ILE:HG13	28:BP:48:ALA:N	2.29	0.48
28:BP:47:ILE:HD11	28:BP:59:THR:HG22	1.95	0.48
29:BE:150:THR:OG1	29:BE:151:GLY:N	2.46	0.48
39:BX:23:ARG:HA	39:BX:26:PHE:HB3	1.95	0.48
41:BJ:25:LEU:HB2	41:BJ:62:VAL:HG21	1.94	0.48
42:BN:86:ARG:HE	42:BN:117:ASP:CG	2.21	0.48
45:BS:1:MET:SD	45:BS:62:ASP:HB3	2.54	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:BT:27:SER:O	50:BT:28:ASN:HB3	2.12	0.48
1:CA:142:G:N3	1:CA:196:A:H2	2.12	0.48
1:CA:240:G:H8	1:CA:240:G:H5'	1.77	0.48
1:CA:327:A:H1'	1:CA:329:A:O4'	2.12	0.48
1:CA:374:A:OP1	1:CA:452:A:N1	2.46	0.48
1:CA:1324:A:H2'	1:CA:1325:C:O4'	2.13	0.48
1:CA:1432:G:H5'	28:DP:105:LYS:HG2	1.96	0.48
3:CD:35:GLN:O	3:CD:36:ALA:HB2	2.13	0.48
3:CD:160:LEU:HA	3:CD:163:GLN:HG3	1.96	0.48
4:CE:11:GLN:HB3	4:CE:116:VAL:HG12	1.96	0.48
6:CG:122:GLU:OE1	6:CG:131:GLY:HA3	2.13	0.48
9:CJ:35:GLN:HG2	9:CJ:78:GLU:OE1	2.13	0.48
11:CL:30:ARG:O	11:CL:57:THR:HG23	2.13	0.48
11:CL:107:LYS:N	11:CL:107:LYS:HZ3	2.12	0.48
13:CN:42:ASN:HD22	13:CN:45:LEU:HD22	1.78	0.48
19:CT:27:MET:HG2	19:CT:31:ILE:HD11	1.96	0.48
19:CT:53:MET:HA	19:CT:56:ILE:HD12	1.95	0.48
20:CB:166:ASP:OD2	20:CB:190:SER:HA	2.13	0.48
22:DA:6:G:H2'	22:DA:7:G:H8	1.78	0.48
22:DA:49:C:H2'	22:DA:50:A:H8	1.78	0.48
23:DB:19:A:H2'	23:DB:20:C:H6	1.77	0.48
23:DB:68:G:H2'	23:DB:69:C:C6	2.48	0.48
23:DB:146:A:H2'	23:DB:147:C:C6	2.48	0.48
23:DB:413:C:H2'	23:DB:414:C:C6	2.49	0.48
23:DB:553:G:HO2'	23:DB:554:U:H5'	1.79	0.48
23:DB:1028:A:H2'	23:DB:1029:A:C8	2.48	0.48
23:DB:1244:A:O2'	23:DB:1245:G:H5'	2.12	0.48
23:DB:1482:G:H2'	23:DB:1483:G:H8	1.77	0.48
23:DB:2882:A:H2'	23:DB:2883:A:H5''	1.96	0.48
24:DI:2:LYS:HB3	24:DI:2:LYS:NZ	2.28	0.48
24:DI:27:LEU:HB2	24:DI:32:VAL:HG21	1.94	0.48
24:DI:102:ARG:HG3	24:DI:141:ASP:CB	2.43	0.48
25:DC:30:ALA:C	25:DC:32:LEU:H	2.21	0.48
26:DD:13:ARG:HD2	28:DP:55:HIS:ND1	2.28	0.48
27:DK:43:ILE:HD12	27:DK:56:ASP:HB2	1.96	0.48
28:DP:50:ARG:HD3	28:DP:56:SER:HB3	1.96	0.48
32:D4:2:LYS:HG2	32:D4:4:ARG:HG3	1.95	0.48
33:D1:49:LYS:HG3	33:D1:50:GLU:N	2.17	0.48
34:D3:28:LEU:HD22	34:D3:43:LEU:CB	2.44	0.48
35:DV:21:ARG:HE	35:DV:87:GLN:HB3	1.78	0.48
35:DV:80:HIS:HA	35:DV:87:GLN:OE1	2.14	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DH:85:GLY:H	40:DH:89:LYS:H	1.60	0.48
45:DS:1:MET:SD	45:DS:62:ASP:HB3	2.53	0.48
46:DU:48:VAL:O	46:DU:48:VAL:HG13	2.14	0.48
47:DF:45:ASP:C	47:DF:47:LYS:H	2.20	0.48
48:DG:53:PRO:HG3	48:DG:61:TRP:CD2	2.48	0.48
52:DW:39:GLN:HG3	52:DW:42:THR:H	1.77	0.48
1:AA:470:C:H2'	1:AA:471:U:H6	1.77	0.48
1:AA:552:U:O2'	1:AA:553:A:H5'	2.13	0.48
1:AA:842:U:H4'	1:AA:846:G:C2	2.49	0.48
1:AA:1179:A:H2'	1:AA:1180:A:O4'	2.14	0.48
1:AA:1240:U:H3	6:AG:29:LEU:HD23	1.78	0.48
1:AA:1294:G:H2'	1:AA:1295:U:C6	2.49	0.48
2:AC:119:ILE:HG13	2:AC:132:ALA:HB1	1.96	0.48
4:AE:136:VAL:HG13	4:AE:137:ARG:H	1.79	0.48
5:AF:12:PRO:C	5:AF:14:GLN:H	2.22	0.48
11:AL:81:ILE:HG23	11:AL:94:TYR:HB3	1.96	0.48
14:AO:56:LEU:O	14:AO:60:VAL:HG23	2.12	0.48
23:BB:4:U:H2'	23:BB:5:A:C8	2.48	0.48
23:BB:335:C:H5''	46:BU:81:ARG:NH1	2.29	0.48
23:BB:576:U:H2'	23:BB:577:G:C8	2.48	0.48
23:BB:979:A:H2'	23:BB:982:C:H42	1.78	0.48
23:BB:1196:C:H2'	23:BB:1197:G:C8	2.49	0.48
23:BB:1230:A:H2'	23:BB:1231:U:H6	1.76	0.48
23:BB:1285:A:H2'	23:BB:1286:A:H5''	1.94	0.48
23:BB:1326:U:H2'	23:BB:1327:A:H8	1.78	0.48
23:BB:1505:A:H2'	23:BB:1506:U:C6	2.49	0.48
23:BB:1647:U:P	23:BB:1647:U:H3'	2.53	0.48
23:BB:2899:A:H2'	23:BB:2900:A:C8	2.49	0.48
56:BB:3554:HOH:O	29:BE:63:LYS:HE2	2.13	0.48
24:BI:21:PRO:CB	24:BI:22:PRO:HD3	2.40	0.48
25:BC:2:VAL:HG23	25:BC:3:VAL:N	2.28	0.48
25:BC:226:PRO:HG3	25:BC:233:GLY:N	2.19	0.48
29:BE:148:ILE:HD13	29:BE:187:VAL:HG21	1.95	0.48
33:B1:14:ALA:HB3	33:B1:16:THR:HG22	1.95	0.48
37:BL:125:LEU:HB2	37:BL:143:GLU:OE2	2.13	0.48
38:BM:114:ARG:HA	38:BM:130:PHE:CE1	2.49	0.48
44:BQ:91:ARG:HE	44:BQ:94:LEU:HD23	1.79	0.48
44:BQ:96:ASP:C	44:BQ:98:ALA:N	2.70	0.48
47:BF:2:LYS:CD	47:BF:100:GLU:HG2	2.41	0.48
47:BF:34:THR:HG1	47:BF:154:THR:HB	1.79	0.48
48:BG:84:LYS:CB	48:BG:132:LEU:H	2.25	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1180:A:OP1	8:CI:104:THR:HG22	2.14	0.48
1:CA:1289:A:H2'	1:CA:1290:G:H5'	1.95	0.48
2:CC:104:GLU:HG2	2:CC:105:VAL:H	1.79	0.48
2:CC:109:GLU:HG2	2:CC:139:ASN:HB3	1.96	0.48
2:CC:128:MET:H	2:CC:128:MET:CE	2.27	0.48
2:CC:140:ALA:HB3	2:CC:148:ILE:HD12	1.94	0.48
5:CF:37:HIS:O	5:CF:97:THR:HG23	2.14	0.48
11:CL:35:ARG:HG3	11:CL:36:VAL:N	2.28	0.48
15:CP:20:VAL:HG21	15:CP:32:PHE:CD2	2.49	0.48
23:DB:95:A:H4'	39:DX:38:GLN:O	2.14	0.48
23:DB:378:C:O2'	23:DB:379:G:H5'	2.14	0.48
23:DB:643:A:H2'	23:DB:644:A:O4'	2.13	0.48
23:DB:857:G:O2'	23:DB:858:G:H5'	2.12	0.48
23:DB:942:G:O2'	23:DB:943:A:H5'	2.13	0.48
23:DB:1745:A:H2'	23:DB:1746:A:O4'	2.13	0.48
23:DB:2663:G:H2'	23:DB:2664:G:O4'	2.12	0.48
24:DI:57:VAL:HG23	24:DI:71:LYS:NZ	2.28	0.48
26:DD:40:LEU:HD12	26:DD:41:ALA:N	2.28	0.48
27:DK:64:ARG:O	27:DK:82:ASN:HA	2.14	0.48
28:DP:112:ARG:HB2	28:DP:112:ARG:HH11	1.79	0.48
35:DV:14:LYS:HE3	35:DV:18:ARG:NH2	2.24	0.48
41:DJ:19:ASP:OD2	41:DJ:58:ASN:HB2	2.13	0.48
41:DJ:40:HIS:ND1	41:DJ:41:LYS:HG3	2.29	0.48
42:DN:2:ARG:O	42:DN:2:ARG:HG2	2.13	0.48
43:DO:26:LEU:HD13	43:DO:39:VAL:HG23	1.95	0.48
44:DQ:23:TYR:CB	44:DQ:27:ARG:HB3	2.44	0.48
44:DQ:57:ARG:HH11	44:DQ:57:ARG:HG2	1.79	0.48
46:DU:62:ALA:O	46:DU:63:ALA:HB3	2.13	0.48
47:DF:101:ARG:HA	47:DF:105:ILE:HD12	1.96	0.48
49:DR:7:SER:HB2	49:DR:22:LEU:CB	2.31	0.48
50:DT:69:ARG:HG2	50:DT:73:ARG:C	2.38	0.48
1:AA:50:A:N6	1:AA:361:G:H4'	2.29	0.48
1:AA:373:A:O4'	1:AA:481:G:H1'	2.13	0.48
1:AA:906:A:C2'	1:AA:907:A:H5''	2.43	0.48
1:AA:1039:G:H2'	1:AA:1040:U:H6	1.77	0.48
1:AA:1102:A:H2'	1:AA:1103:C:C6	2.49	0.48
1:AA:1277:C:O2'	1:AA:1279:G:H8	1.97	0.48
1:AA:1278:G:H4'	1:AA:1279:G:O5'	2.14	0.48
8:AI:56:MET:O	8:AI:58:GLU:N	2.42	0.48
10:AK:28:ASN:HD22	10:AK:29:THR:N	2.08	0.48
12:AM:70:ARG:HH22	47:BF:112:ASP:CB	2.26	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:AP:59:HIS:O	15:AP:63:GLN:HG3	2.13	0.48
15:AP:66:THR:HG22	15:AP:67:ILE:H	1.79	0.48
19:AT:68:LYS:HE2	19:AT:68:LYS:CA	2.44	0.48
20:AB:218:ALA:O	20:AB:222:GLU:HG2	2.13	0.48
20:AB:221:ARG:HH11	20:AB:221:ARG:CB	2.25	0.48
23:BB:132:G:H2'	23:BB:133:U:C6	2.49	0.48
23:BB:1060:U:C4	24:BI:131:THR:HG22	2.47	0.48
23:BB:1150:C:H2'	23:BB:1151:A:H8	1.79	0.48
23:BB:1163:G:O2'	23:BB:1164:C:H5'	2.14	0.48
23:BB:1197:G:H2'	23:BB:1198:U:C6	2.48	0.48
23:BB:1429:G:H2'	23:BB:1430:G:C8	2.44	0.48
23:BB:2880:C:O4'	42:BN:91:ALA:HB3	2.14	0.48
24:BI:116:MET:SD	24:BI:124:MET:HB2	2.53	0.48
25:BC:34:GLU:HG3	25:BC:34:GLU:O	2.14	0.48
26:BD:14:ILE:CG2	26:BD:22:ILE:HB	2.44	0.48
27:BK:98:ARG:HE	27:BK:98:ARG:N	2.12	0.48
30:BY:7:THR:HA	30:BY:34:THR:HA	1.96	0.48
31:B0:21:LEU:HB3	45:BS:23:LEU:HD21	1.96	0.48
38:BM:108:VAL:HG11	38:BM:112:LEU:HD12	1.94	0.48
48:BG:28:LYS:O	48:BG:29:ASN:HB3	2.14	0.48
1:CA:190:A:O5'	1:CA:190:A:H8	1.97	0.48
1:CA:413:G:H2'	1:CA:428:G:H21	1.79	0.48
1:CA:438:U:H4'	3:CD:119:HIS:HD2	1.78	0.48
1:CA:490:C:H2'	1:CA:491:G:C8	2.49	0.48
1:CA:505:G:H2'	1:CA:506:G:C8	2.49	0.48
1:CA:906:A:C2'	1:CA:907:A:H5''	2.44	0.48
1:CA:1161:C:H2'	1:CA:1162:C:C6	2.48	0.48
1:CA:1370:G:O2'	1:CA:1371:G:H5'	2.13	0.48
1:CA:1526:G:P	21:CU:38:GLU:HB3	2.54	0.48
1:CA:1533:C:H2'	1:CA:1534:A:C3'	2.29	0.48
4:CE:39:GLY:HA3	4:CE:116:VAL:HB	1.95	0.48
9:CJ:83:THR:O	9:CJ:87:LEU:HD22	2.14	0.48
12:CM:70:ARG:NE	47:DF:136:ILE:HG21	2.28	0.48
13:CN:32:ASP:CG	13:CN:33:VAL:N	2.71	0.48
23:DB:598:U:H2'	23:DB:599:A:C8	2.49	0.48
23:DB:1184:U:O2'	23:DB:1185:G:H5'	2.14	0.48
23:DB:1212:G:H1'	23:DB:1236:G:N2	2.29	0.48
23:DB:1957:C:H2'	23:DB:1958:C:C6	2.49	0.48
23:DB:2022:U:O2'	23:DB:2617:U:H5'	2.13	0.48
23:DB:2186:G:H2'	23:DB:2187:U:O4'	2.12	0.48
23:DB:2797:U:H3'	23:DB:2798:U:C5	2.48	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:DI:76:ALA:O	24:DI:135:MET:HE1	2.14	0.48
27:DK:79:PHE:HD2	28:DP:69:VAL:HG12	1.74	0.48
28:DP:20:ARG:O	28:DP:46:VAL:HG21	2.13	0.48
37:DL:95:LEU:HB2	37:DL:101:ILE:CG1	2.44	0.48
40:DH:4:ILE:HD12	40:DH:4:ILE:H	1.79	0.48
42:DN:70:THR:HB	42:DN:75:ILE:HD11	1.94	0.48
45:DS:70:LYS:HD3	45:DS:110:ARG:C	2.39	0.48
47:DF:62:GLN:NE2	47:DF:90:LEU:HD13	2.27	0.48
47:DF:87:LYS:HG3	47:DF:88:VAL:N	2.17	0.48
48:DG:106:LEU:O	48:DG:108:PHE:N	2.47	0.48
1:AA:490:C:H2'	1:AA:491:G:C8	2.49	0.48
1:AA:736:C:H5''	5:AF:90:MET:CE	2.42	0.48
1:AA:840:C:N3	1:AA:842:U:H5'	2.29	0.48
1:AA:1001:C:H2'	1:AA:1002:G:C8	2.48	0.48
3:AD:118:SER:HA	3:AD:130:ASN:HB2	1.96	0.48
3:AD:173:ASP:OD1	3:AD:176:LYS:HD3	2.14	0.48
6:AG:144:ALA:O	6:AG:145:GLU:HB3	2.12	0.48
14:AO:8:THR:O	14:AO:11:ILE:HG22	2.14	0.48
21:AU:27:VAL:O	21:AU:31:VAL:HG23	2.14	0.48
22:BA:30:C:H1'	22:BA:58:A:N1	2.28	0.48
23:BB:184:C:H2'	23:BB:185:G:C8	2.47	0.48
23:BB:192:C:C2'	23:BB:193:U:H5'	2.44	0.48
23:BB:467:G:OP1	36:B2:33:ARG:HG2	2.14	0.48
23:BB:1443:U:H2'	23:BB:1444:G:H8	1.79	0.48
23:BB:1591:A:H2'	23:BB:1592:C:C6	2.49	0.48
23:BB:1913:A:H4'	23:BB:1914:C:H5''	1.95	0.48
25:BC:18:VAL:HG11	25:BC:202:ARG:HD2	1.95	0.48
25:BC:152:GLN:HA	25:BC:155:ARG:HD3	1.94	0.48
26:BD:118:PHE:O	26:BD:119:ALA:HB3	2.14	0.48
32:B4:9:LYS:HD3	32:B4:9:LYS:N	2.29	0.48
37:BL:80:SER:H	37:BL:113:ALA:HB3	1.79	0.48
38:BM:2:LEU:CD2	38:BM:46:ILE:HD11	2.44	0.48
40:BH:59:ALA:HA	40:BH:62:LEU:CD2	2.44	0.48
40:BH:68:ARG:HB3	40:BH:134:VAL:HG11	1.96	0.48
40:BH:105:ALA:HB3	40:BH:108:VAL:HG21	1.96	0.48
40:BH:125:THR:HG23	40:BH:146:VAL:O	2.13	0.48
45:BS:51:LEU:C	45:BS:53:SER:H	2.21	0.48
48:BG:19:ASN:HB2	48:BG:22:VAL:HB	1.95	0.48
48:BG:44:HIS:ND1	48:BG:49:LEU:HD12	2.29	0.48
48:BG:105:SER:C	48:BG:106:LEU:HD23	2.39	0.48
1:CA:714:G:H21	1:CA:777:A:H1'	1.79	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1283:U:O2'	1:CA:1284:C:H5'	2.13	0.48
3:CD:98:ASP:HB3	3:CD:132:ALA:HB1	1.96	0.48
3:CD:126:GLY:O	3:CD:127:ARG:HD2	2.14	0.48
3:CD:160:LEU:HD13	3:CD:160:LEU:H	1.78	0.48
3:CD:173:ASP:HB3	3:CD:178:GLU:HB2	1.96	0.48
10:CK:73:VAL:O	10:CK:76:TYR:HB2	2.13	0.48
13:CN:30:ILE:HB	13:CN:44:VAL:HG21	1.96	0.48
20:CB:128:LEU:CD1	20:CB:131:LYS:HB3	2.43	0.48
23:DB:161:A:C3'	23:DB:162:U:H5''	2.38	0.48
23:DB:401:A:H2'	23:DB:402:A:C8	2.49	0.48
23:DB:510:C:H2'	23:DB:511:U:O4'	2.13	0.48
23:DB:526:A:N6	23:DB:2626:C:C4'	2.76	0.48
23:DB:615:U:O4	29:DE:39:ALA:HB2	2.13	0.48
23:DB:1099:G:C8	24:DI:3:LYS:CB	2.96	0.48
23:DB:1285:A:H2'	23:DB:1286:A:H5''	1.94	0.48
23:DB:1338:G:H5''	50:DT:17:SER:HB3	1.96	0.48
23:DB:1773:A:N7	23:DB:1829:A:H1'	2.29	0.48
23:DB:1789:A:OP1	25:DC:220:ARG:HD3	2.14	0.48
23:DB:2213:U:O2	23:DB:2213:U:H2'	2.13	0.48
23:DB:2215:C:O2'	23:DB:2216:G:H5'	2.14	0.48
23:DB:2295:C:O2'	23:DB:2296:U:H5'	2.13	0.48
23:DB:2751:G:H4'	48:DG:3:VAL:HG13	1.96	0.48
23:DB:2862:G:H2'	23:DB:2863:C:C6	2.48	0.48
24:DI:100:ILE:O	24:DI:139:VAL:HG13	2.14	0.48
24:DI:129:GLU:HB3	24:DI:133:ARG:NH1	2.29	0.48
25:DC:221:GLY:HA2	25:DC:224:MET:HE3	1.95	0.48
28:DP:74:GLN:O	28:DP:76:HIS:N	2.47	0.48
29:DE:87:ALA:O	29:DE:88:ARG:HD3	2.14	0.48
38:DM:69:PRO:HA	38:DM:94:ALA:HB2	1.96	0.48
41:DJ:44:TYR:CE2	44:DQ:59:LEU:HD11	2.49	0.48
44:DQ:51:GLN:O	44:DQ:55:GLN:HG3	2.14	0.48
45:DS:6:LYS:HB3	45:DS:104:THR:HA	1.95	0.48
46:DU:51:LEU:O	46:DU:52:ASN:HB2	2.14	0.48
47:DF:162:ASP:O	47:DF:166:ARG:HD2	2.13	0.48
48:DG:17:LYS:HZ2	48:DG:18:ILE:N	2.09	0.48
49:DR:21:ARG:HB3	49:DR:95:ASP:OD1	2.14	0.48
1:AA:142:G:N3	1:AA:196:A:H2	2.12	0.48
1:AA:658:C:O2'	1:AA:659:U:H5'	2.13	0.48
1:AA:919:A:O2'	1:AA:920:U:H5'	2.13	0.48
1:AA:1178:G:H2'	1:AA:1180:A:OP2	2.14	0.48
3:AD:49:ASP:O	3:AD:53:GLN:HG3	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AG:122:GLU:OE1	6:AG:131:GLY:HA3	2.14	0.48
11:AL:30:ARG:O	11:AL:57:THR:HG23	2.14	0.48
13:AN:30:ILE:HG22	13:AN:41:TRP:CB	2.41	0.48
20:AB:22:TRP:HA	20:AB:188:THR:HB	1.96	0.48
20:AB:101:THR:HG22	20:AB:174:GLU:OE1	2.13	0.48
22:BA:91:C:H2'	22:BA:92:C:C6	2.48	0.48
23:BB:306:U:H2'	23:BB:307:G:O4'	2.14	0.48
23:BB:663:G:OP1	37:BL:17:LYS:HG2	2.14	0.48
23:BB:1180:U:O2'	23:BB:1181:U:H5'	2.13	0.48
23:BB:1491:G:H5'	25:BC:97:ASP:OD1	2.13	0.48
23:BB:2207:C:H2'	23:BB:2208:C:H6	1.77	0.48
23:BB:2246:G:H2'	23:BB:2247:A:H8	1.77	0.48
25:BC:131:MET:HA	25:BC:134:ILE:HG12	1.96	0.48
31:B0:41:HIS:HB2	42:BN:99:LYS:C	2.37	0.48
40:BH:44:ILE:C	40:BH:46:PHE:N	2.72	0.48
40:BH:117:LEU:HD11	40:BH:130:VAL:HG13	1.95	0.48
41:BJ:44:TYR:CD2	44:BQ:59:LEU:HD21	2.49	0.48
41:BJ:45:THR:O	41:BJ:45:THR:HG23	2.14	0.48
42:BN:106:ASP:C	42:BN:108:ALA:N	2.66	0.48
43:BO:106:LEU:CA	43:BO:109:ALA:HB3	2.44	0.48
44:BQ:81:GLY:C	44:BQ:83:LYS:N	2.68	0.48
45:BS:13:SER:OG	45:BS:14:ALA:N	2.47	0.48
46:BU:73:ASN:HD22	46:BU:73:ASN:N	2.11	0.48
52:BW:30:VAL:HG22	52:BW:30:VAL:O	2.14	0.48
1:CA:50:A:N6	1:CA:361:G:H4'	2.29	0.48
1:CA:113:G:H2'	1:CA:114:U:H6	1.76	0.48
1:CA:410:G:H2'	1:CA:429:U:C5	2.49	0.48
1:CA:455:G:H2'	1:CA:456:A:C8	2.48	0.48
1:CA:695:A:H61	1:CA:797:C:H1'	1.79	0.48
1:CA:1247:U:O2'	1:CA:1248:A:H5'	2.13	0.48
3:CD:32:LYS:O	3:CD:35:GLN:HB2	2.14	0.48
5:CF:3:HIS:CD2	5:CF:3:HIS:N	2.81	0.48
5:CF:36:ILE:HG12	5:CF:64:VAL:HG13	1.96	0.48
5:CF:46:GLN:HG3	5:CF:47:LEU:N	2.29	0.48
6:CG:97:ALA:HA	6:CG:100:MET:HE3	1.96	0.48
8:CI:23:GLY:H	8:CI:60:LEU:HA	1.79	0.48
13:CN:27:LYS:HG3	13:CN:28:ALA:N	2.26	0.48
14:CO:85:LEU:HD12	14:CO:85:LEU:N	2.29	0.48
18:CS:29:PRO:HA	18:CS:47:THR:O	2.13	0.48
23:DB:7:G:H4'	41:DJ:15:TRP:CZ2	2.49	0.48
23:DB:121:G:H2'	23:DB:122:G:H8	1.79	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:831:G:H2'	23:DB:832:U:O4'	2.14	0.48
23:DB:1260:A:H2'	23:DB:1261:C:C6	2.48	0.48
23:DB:1438:U:H2'	23:DB:1439:A:O4'	2.13	0.48
23:DB:2053:G:O2'	23:DB:2054:A:H5'	2.13	0.48
23:DB:2415:G:C4'	37:DL:66:PHE:HB2	2.44	0.48
23:DB:2838:G:H2'	23:DB:2839:G:H8	1.77	0.48
23:DB:2849:U:H4'	23:DB:2850:A:C5'	2.41	0.48
25:DC:91:ALA:CB	25:DC:105:ALA:HB2	2.44	0.48
25:DC:159:THR:O	25:DC:194:VAL:HG12	2.14	0.48
27:DK:42:THR:O	27:DK:43:ILE:C	2.57	0.48
27:DK:98:ARG:HE	27:DK:98:ARG:N	2.12	0.48
29:DE:21:ARG:HG3	29:DE:22:ASP:O	2.13	0.48
29:DE:148:ILE:HD13	29:DE:187:VAL:HG21	1.96	0.48
33:D1:11:VAL:O	33:D1:48:TYR:HA	2.13	0.48
37:DL:14:LYS:O	37:DL:16:GLY:N	2.47	0.48
38:DM:54:THR:O	38:DM:56:ALA:N	2.43	0.48
40:DH:83:LYS:HG3	40:DH:149:GLU:HG3	1.94	0.48
40:DH:119:ASN:C	40:DH:121:VAL:H	2.22	0.48
42:DN:1:MET:HE3	42:DN:3:HIS:CD2	2.48	0.48
43:DO:2:ASP:OD2	43:DO:4:LYS:HB3	2.14	0.48
46:DU:35:VAL:O	46:DU:38:ILE:HG22	2.14	0.48
48:DG:44:HIS:ND1	48:DG:49:LEU:HD12	2.28	0.48
52:DW:46:ALA:HB2	52:DW:78:PHE:CD1	2.46	0.48
1:AA:235:C:H2'	1:AA:236:A:H8	1.75	0.48
1:AA:952:U:H2'	1:AA:953:G:H8	1.77	0.48
1:AA:974:A:H8	1:AA:974:A:OP1	1.97	0.48
1:AA:1355:G:H2'	1:AA:1356:G:H8	1.79	0.48
3:AD:25:ARG:O	3:AD:26:ALA:HB3	2.14	0.48
3:AD:30:LYS:HD3	3:AD:30:LYS:N	2.29	0.48
3:AD:151:GLN:HB3	3:AD:154:VAL:HG22	1.95	0.48
7:AH:6:ILE:HD11	7:AH:31:LEU:HD23	1.96	0.48
7:AH:51:GLU:HG2	7:AH:52:GLY:N	2.26	0.48
8:AI:64:ILE:H	8:AI:64:ILE:HD12	1.79	0.48
17:AR:38:ILE:HG22	17:AR:58:ILE:HG21	1.96	0.48
22:BA:6:G:H2'	22:BA:7:G:H8	1.77	0.48
23:BB:554:U:H2'	23:BB:555:G:O4'	2.14	0.48
23:BB:873:C:H4'	38:BM:64:TRP:NE1	2.28	0.48
23:BB:1532:A:H2'	23:BB:1532:A:N3	2.29	0.48
23:BB:1856:U:C2'	23:BB:1857:G:H5'	2.44	0.48
23:BB:2228:G:H2'	23:BB:2229:U:C6	2.48	0.48
23:BB:2567:G:H2'	23:BB:2568:U:C6	2.49	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:2592:G:H2'	23:BB:2593:U:O4'	2.13	0.48
26:BD:90:PHE:CD2	26:BD:94:GLN:HG3	2.48	0.48
28:BP:4:ILE:CG2	28:BP:5:LYS:H	2.18	0.48
28:BP:25:VAL:HA	28:BP:85:VAL:HA	1.96	0.48
29:BE:21:ARG:HG3	29:BE:22:ASP:O	2.14	0.48
38:BM:1:MET:O	38:BM:2:LEU:HB2	2.14	0.48
38:BM:101:VAL:O	38:BM:101:VAL:HG13	2.13	0.48
39:BX:15:ASN:O	39:BX:19:LEU:HD13	2.13	0.48
1:CA:150:U:H2'	1:CA:151:A:H8	1.79	0.48
1:CA:245:U:H2'	1:CA:246:A:H5'	1.96	0.48
1:CA:551:U:O2'	1:CA:552:U:H5'	2.14	0.48
1:CA:701:U:H5''	1:CA:703:G:O4'	2.13	0.48
1:CA:1097:C:H2'	1:CA:1098:C:H6	1.78	0.48
1:CA:1192:C:H2'	1:CA:1193:G:O4'	2.14	0.48
1:CA:1278:G:H4'	1:CA:1279:G:O5'	2.14	0.48
1:CA:1337:G:H5''	1:CA:1338:G:OP1	2.14	0.48
4:CE:28:ARG:NH1	4:CE:30:PHE:HB3	2.27	0.48
4:CE:101:GLY:H	4:CE:121:ASN:ND2	2.12	0.48
8:CI:93:LEU:HD13	8:CI:97:LEU:HD11	1.96	0.48
9:CJ:80:THR:HG22	9:CJ:81:GLU:N	2.29	0.48
11:CL:78:VAL:O	11:CL:102:ASP:HB2	2.14	0.48
14:CO:9:ALA:O	14:CO:12:VAL:HB	2.13	0.48
20:CB:44:LYS:O	20:CB:48:MET:HG2	2.14	0.48
23:DB:503:A:H5''	23:DB:505:A:OP1	2.14	0.48
23:DB:635:C:O2'	23:DB:639:U:H5''	2.13	0.48
23:DB:947:A:O2'	23:DB:984:A:H2	1.96	0.48
23:DB:1275:A:H2'	23:DB:1275:A:N3	2.28	0.48
23:DB:1464:G:O2'	23:DB:1465:G:H5'	2.13	0.48
23:DB:1747:U:H2'	23:DB:1748:C:C6	2.48	0.48
23:DB:1747:U:H2'	23:DB:1748:C:H6	1.78	0.48
23:DB:1788:C:O2'	23:DB:1789:A:H5'	2.13	0.48
25:DC:66:PHE:N	25:DC:66:PHE:CD1	2.81	0.48
25:DC:80:LEU:HD21	25:DC:109:LEU:HG	1.95	0.48
25:DC:93:VAL:HG12	25:DC:101:ARG:O	2.13	0.48
25:DC:209:ALA:HA	25:DC:212:TRP:CE2	2.49	0.48
26:DD:90:PHE:O	26:DD:91:THR:C	2.57	0.48
26:DD:116:LYS:HB3	26:DD:118:PHE:CZ	2.48	0.48
26:DD:119:ALA:HB2	26:DD:163:GLY:C	2.39	0.48
29:DE:58:LYS:H	29:DE:58:LYS:HZ3	1.59	0.48
33:D1:8:ILE:HD12	33:D1:51:ALA:HA	1.95	0.48
36:D2:1:MET:HG2	36:D2:2:LYS:H	1.78	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DH:127:GLU:HA	40:DH:144:VAL:O	2.13	0.48
41:DJ:4:PHE:HB3	41:DJ:44:TYR:CD1	2.49	0.48
44:DQ:30:VAL:O	44:DQ:31:TYR:CB	2.62	0.48
45:DS:51:LEU:C	45:DS:53:SER:H	2.21	0.48
47:DF:34:THR:HG22	47:DF:89:THR:HG22	1.95	0.48
51:DZ:53:ALA:O	51:DZ:54:LYS:HB3	2.13	0.48
1:AA:68:G:H2'	1:AA:69:G:O4'	2.14	0.47
1:AA:93:U:H6	1:AA:93:U:O5'	1.97	0.47
1:AA:394:G:H2'	1:AA:395:C:C6	2.49	0.47
1:AA:617:G:H4'	15:AP:46:LYS:CE	2.43	0.47
1:AA:880:C:H2'	1:AA:881:G:C8	2.47	0.47
1:AA:972:C:P	9:AJ:59:LYS:HD3	2.53	0.47
1:AA:1096:C:H2'	1:AA:1097:C:H6	1.79	0.47
4:AE:95:MET:HA	4:AE:124:ALA:CB	2.43	0.47
5:AF:55:HIS:O	5:AF:56:LYS:HG3	2.14	0.47
6:AG:50:ALA:HB2	6:AG:57:GLU:HG3	1.95	0.47
12:AM:76:ILE:O	12:AM:80:MET:HG3	2.13	0.47
17:AR:45:GLY:O	17:AR:46:THR:C	2.55	0.47
18:AS:64:GLU:CD	18:AS:64:GLU:H	2.21	0.47
20:AB:94:ARG:HE	20:AB:94:ARG:N	2.11	0.47
23:BB:170:U:H2'	23:BB:171:U:C6	2.49	0.47
23:BB:528:A:H2	23:BB:2043:C:H4'	1.78	0.47
23:BB:591:U:H1'	34:B3:1:PRO:H3	1.78	0.47
23:BB:727:A:OP1	23:BB:1431:A:O2'	2.31	0.47
23:BB:758:C:O2	23:BB:1981:A:H2	1.97	0.47
23:BB:873:C:H2'	23:BB:874:G:H8	1.79	0.47
23:BB:1025:G:OP1	23:BB:1025:G:H8	1.97	0.47
23:BB:1296:G:O2'	23:BB:1297:C:H5'	2.14	0.47
23:BB:1374:G:H2'	23:BB:1375:U:C6	2.49	0.47
23:BB:1573:G:H2'	23:BB:1574:C:H5'	1.95	0.47
23:BB:1841:U:H2'	23:BB:1842:G:H8	1.78	0.47
23:BB:1847:A:H1'	23:BB:1848:A:N7	2.29	0.47
23:BB:2093:G:O2'	23:BB:2094:A:H5'	2.13	0.47
23:BB:2104:C:H2'	23:BB:2105:U:H6	1.79	0.47
23:BB:2755:C:O2'	23:BB:2756:U:H2'	2.14	0.47
23:BB:2865:U:H5''	23:BB:2866:U:OP2	2.14	0.47
23:BB:2882:A:H2'	23:BB:2883:A:H5''	1.96	0.47
37:BL:95:LEU:O	37:BL:100:ILE:HG22	2.14	0.47
39:BX:28:LEU:HB3	39:BX:43:LEU:CD2	2.44	0.47
42:BN:37:THR:OG1	42:BN:40:LYS:HE2	2.14	0.47
44:BQ:30:VAL:CG1	44:BQ:31:TYR:H	2.00	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BS:56:ALA:O	45:BS:59:GLU:HB2	2.13	0.47
46:BU:85:ARG:NH1	46:BU:86:PHE:N	2.60	0.47
47:BF:78:ILE:HG23	47:BF:82:TYR:CG	2.49	0.47
1:CA:125:U:H2'	1:CA:126:G:C8	2.49	0.47
1:CA:939:G:H2'	1:CA:940:C:C6	2.49	0.47
1:CA:1190:G:OP1	2:CC:3:LYS:HA	2.14	0.47
2:CC:149:LYS:HB2	2:CC:168:ARG:HG3	1.94	0.47
3:CD:25:ARG:HH12	3:CD:30:LYS:HE3	1.79	0.47
9:CJ:8:ILE:HD12	9:CJ:8:ILE:N	2.28	0.47
10:CK:75:GLU:CD	10:CK:75:GLU:N	2.71	0.47
15:CP:20:VAL:HG23	15:CP:34:GLU:C	2.39	0.47
15:CP:40:ASN:ND2	15:CP:43:ALA:N	2.52	0.47
19:CT:27:MET:SD	19:CT:66:ILE:HG12	2.54	0.47
20:CB:83:ALA:O	20:CB:88:GLN:HB2	2.14	0.47
20:CB:138:ARG:NH1	20:CB:138:ARG:HB2	2.29	0.47
22:DA:30:C:H2'	22:DA:30:C:O2	2.13	0.47
22:DA:85:G:H2'	22:DA:86:G:H8	1.79	0.47
23:DB:188:G:OP1	51:DZ:14:THR:HG23	2.14	0.47
23:DB:283:G:H2'	23:DB:284:U:C4'	2.44	0.47
23:DB:360:U:H2'	23:DB:361:G:C8	2.48	0.47
23:DB:547:A:H2'	23:DB:547:A:N3	2.28	0.47
23:DB:587:C:H4'	23:DB:588:U:C6	2.49	0.47
23:DB:639:U:H2'	23:DB:640:C:H6	1.78	0.47
23:DB:1060:U:H5	24:DI:131:THR:HG22	1.76	0.47
23:DB:1441:G:H2'	23:DB:1442:U:H6	1.75	0.47
23:DB:1693:U:H1'	25:DC:13:ARG:NH2	2.28	0.47
23:DB:1779:U:C5	23:DB:1784:A:N7	2.82	0.47
23:DB:1880:U:H2'	23:DB:1881:C:C6	2.49	0.47
23:DB:2038:G:H2'	23:DB:2039:U:H6	1.79	0.47
23:DB:2061:G:H5''	23:DB:2503:A:C2	2.49	0.47
23:DB:2092:U:H5	23:DB:2226:C:OP2	1.97	0.47
23:DB:2804:U:H2'	23:DB:2805:C:H6	1.75	0.47
25:DC:144:GLU:HB3	25:DC:187:CYS:HB3	1.96	0.47
26:DD:106:LYS:HD3	26:DD:106:LYS:N	2.29	0.47
29:DE:52:VAL:HG11	29:DE:81:GLY:HA3	1.95	0.47
37:DL:46:VAL:HB	37:DL:50:PHE:HD1	1.79	0.47
39:DX:12:GLU:CA	39:DX:15:ASN:HD21	2.27	0.47
42:DN:82:GLU:C	42:DN:84:GLY:N	2.71	0.47
44:DQ:104:ALA:C	44:DQ:106:THR:H	2.21	0.47
45:DS:42:LYS:O	45:DS:45:VAL:HG22	2.14	0.47
47:DF:43:ILE:CG2	47:DF:44:ALA:H	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:DG:28:LYS:O	48:DG:29:ASN:HB3	2.14	0.47
1:AA:161:A:H2'	1:AA:162:A:C8	2.49	0.47
1:AA:541:G:O2'	3:AD:39:GLN:HB3	2.14	0.47
1:AA:815:A:H4'	1:AA:817:C:C4	2.49	0.47
1:AA:1098:C:O2'	1:AA:1099:G:H5'	2.14	0.47
3:AD:35:GLN:O	3:AD:36:ALA:HB2	2.13	0.47
11:AL:35:ARG:HG3	11:AL:36:VAL:N	2.29	0.47
13:AN:17:ASP:HA	13:AN:21:ALA:HB2	1.95	0.47
20:AB:120:SER:HA	20:AB:125:PHE:HB3	1.96	0.47
20:AB:148:GLY:C	20:AB:150:ILE:H	2.23	0.47
20:AB:184:ALA:C	20:AB:199:ILE:HD12	2.39	0.47
22:BA:32:U:H2'	22:BA:33:G:H8	1.78	0.47
23:BB:208:C:H2'	23:BB:209:C:C6	2.50	0.47
23:BB:692:C:H2'	23:BB:693:A:H8	1.79	0.47
23:BB:969:G:OP1	30:BY:17:PRO:HG3	2.14	0.47
23:BB:1263:U:O2'	31:B0:7:PRO:HD2	2.15	0.47
23:BB:1910:G:O2'	23:BB:1911:U:H5'	2.13	0.47
23:BB:2022:U:O2'	23:BB:2617:U:H5'	2.14	0.47
23:BB:2747:G:O6	23:BB:2755:C:H5''	2.13	0.47
23:BB:2794:C:H2'	23:BB:2795:C:C6	2.49	0.47
24:BI:56:VAL:CG2	24:BI:68:PHE:HB2	2.44	0.47
25:BC:153:LEU:HD13	25:BC:175:LEU:HD21	1.96	0.47
25:BC:181:ARG:HD3	25:BC:265:PHE:O	2.14	0.47
27:BK:22:ILE:O	27:BK:23:LYS:HB2	2.14	0.47
29:BE:147:LEU:HD12	29:BE:149:ILE:HG22	1.96	0.47
30:BY:43:ILE:HG13	30:BY:44:ARG:N	2.28	0.47
35:BV:35:GLU:HG3	35:BV:93:ARG:NH1	2.29	0.47
38:BM:69:PRO:HA	38:BM:94:ALA:HB2	1.95	0.47
39:BX:55:THR:O	39:BX:58:ASN:HB3	2.14	0.47
40:BH:32:PRO:O	40:BH:33:GLN:HB2	2.14	0.47
43:BO:24:THR:OG1	43:BO:90:VAL:HG12	2.14	0.47
44:BQ:60:TRP:CH2	44:BQ:93:ILE:HB	2.50	0.47
47:BF:34:THR:HG22	47:BF:89:THR:HG22	1.95	0.47
51:BZ:6:GLN:NE2	51:BZ:77:LYS:NZ	2.62	0.47
52:BW:24:ARG:HD3	52:BW:65:LYS:CE	2.44	0.47
52:BW:50:VAL:HG23	52:BW:61:LYS:CE	2.44	0.47
1:CA:97:G:H2'	1:CA:98:A:O4'	2.14	0.47
1:CA:255:G:H5'	16:CQ:17:GLU:O	2.15	0.47
1:CA:738:C:H2'	1:CA:739:C:H6	1.79	0.47
1:CA:821:G:H2'	1:CA:822:U:C6	2.48	0.47
2:CC:149:LYS:HA	2:CC:168:ARG:HB2	1.96	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CD:18:LEU:HD12	3:CD:63:ILE:HG12	1.95	0.47
3:CD:29:THR:HG22	3:CD:30:LYS:HD3	1.95	0.47
3:CD:138:PRO:HA	3:CD:181:PHE:CD2	2.46	0.47
5:CF:6:ILE:HD11	5:CF:8:PHE:CD2	2.49	0.47
6:CG:6:ILE:HG22	6:CG:7:GLY:N	2.28	0.47
6:CG:91:ARG:HB3	6:CG:92:PRO:HD2	1.96	0.47
6:CG:104:VAL:HG12	6:CG:108:ARG:HD2	1.95	0.47
12:CM:22:TYR:N	12:CM:65:GLU:OE2	2.47	0.47
14:CO:81:LEU:O	14:CO:85:LEU:HD13	2.14	0.47
18:CS:66:VAL:HG23	18:CS:67:GLY:H	1.78	0.47
19:CT:65:LEU:HD23	19:CT:66:ILE:HD13	1.96	0.47
22:DA:74:U:H2'	22:DA:75:G:C8	2.48	0.47
23:DB:20:C:H2'	23:DB:21:A:H8	1.79	0.47
23:DB:276:U:H6	23:DB:276:U:O5'	1.97	0.47
23:DB:1301:A:HO2'	23:DB:1302:A:H2'	1.77	0.47
23:DB:1347:A:H2'	23:DB:1348:C:O4'	2.14	0.47
23:DB:1355:G:O2'	23:DB:1356:G:H5'	2.13	0.47
23:DB:1386:C:H1'	23:DB:1470:A:H1'	1.95	0.47
23:DB:1997:C:O2'	23:DB:1998:A:H5'	2.14	0.47
23:DB:2243:U:O2	23:DB:2434:A:C2	2.68	0.47
23:DB:2691:C:H2'	23:DB:2692:G:H8	1.79	0.47
24:DI:18:ASN:N	24:DI:19:PRO:CD	2.77	0.47
25:DC:211:ARG:C	25:DC:213:ARG:N	2.73	0.47
25:DC:245:THR:O	25:DC:247:TRP:N	2.48	0.47
26:DD:31:ALA:O	26:DD:52:THR:HG23	2.14	0.47
26:DD:98:VAL:C	26:DD:100:LEU:H	2.21	0.47
28:DP:24:THR:C	28:DP:25:VAL:HG13	2.39	0.47
29:DE:188:MET:HG2	29:DE:193:VAL:HG22	1.96	0.47
35:DV:6:ALA:O	35:DV:65:VAL:HG12	2.14	0.47
45:DS:26:GLY:N	45:DS:71:VAL:HG13	2.28	0.47
50:DT:4:GLU:CD	50:DT:5:GLU:N	2.72	0.47
1:AA:78:A:H2'	1:AA:79:G:C8	2.49	0.47
1:AA:192:A:O2'	1:AA:193:C:H5'	2.15	0.47
1:AA:513:C:H2'	1:AA:514:C:C6	2.48	0.47
1:AA:575:G:H4'	1:AA:576:C:OP1	2.14	0.47
1:AA:682:G:O2'	1:AA:683:G:H5'	2.15	0.47
1:AA:1307:U:H2'	1:AA:1308:U:H6	1.79	0.47
1:AA:1410:A:H2'	1:AA:1411:C:H6	1.80	0.47
12:AM:64:VAL:HA	12:AM:68:LEU:HD12	1.96	0.47
17:AR:44:THR:C	17:AR:46:THR:H	2.22	0.47
18:AS:71:GLY:C	18:AS:73:PHE:H	2.22	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AB:87:ASP:HB2	20:AB:224:ARG:NH2	2.28	0.47
20:AB:104:LYS:HB2	20:AB:104:LYS:NZ	2.29	0.47
23:BB:154:U:H2'	23:BB:155:A:H8	1.78	0.47
23:BB:207:A:H2'	23:BB:208:C:O4'	2.15	0.47
23:BB:459:U:C2'	23:BB:460:A:H5'	2.44	0.47
23:BB:536:G:P	44:BQ:52:ARG:HH21	2.37	0.47
23:BB:558:U:H5'	41:BJ:114:LEU:HD22	1.96	0.47
23:BB:1714:U:H3'	23:BB:1715:G:H5'	1.96	0.47
23:BB:2595:G:H1	25:BC:238:ASN:ND2	2.11	0.47
23:BB:2751:G:H5'	48:BG:2:ARG:CD	2.44	0.47
23:BB:2815:C:H2'	23:BB:2816:G:C8	2.49	0.47
23:BB:2884:U:H2'	23:BB:2885:G:C8	2.49	0.47
25:BC:4:LYS:HE3	25:BC:13:ARG:O	2.13	0.47
25:BC:66:PHE:N	25:BC:66:PHE:CD1	2.82	0.47
25:BC:175:LEU:HD11	25:BC:181:ARG:HG3	1.96	0.47
26:BD:4:LEU:HD23	26:BD:101:PHE:CE1	2.48	0.47
28:BP:19:PHE:CE2	28:BP:25:VAL:HG11	2.50	0.47
28:BP:61:ARG:HH21	28:BP:61:ARG:CB	2.25	0.47
34:B3:56:LEU:O	34:B3:59:ALA:HB3	2.14	0.47
35:BV:21:ARG:HE	35:BV:87:GLN:HB3	1.79	0.47
36:B2:9:VAL:HG13	36:B2:10:LEU:N	2.29	0.47
40:BH:68:ARG:CD	40:BH:134:VAL:HG11	2.40	0.47
41:BJ:64:VAL:O	41:BJ:68:LYS:HD2	2.15	0.47
42:BN:13:ASN:OD1	42:BN:15:SER:HB3	2.14	0.47
44:BQ:83:LYS:HZ1	44:BQ:87:VAL:HA	1.79	0.47
46:BU:14:THR:HG21	46:BU:64:ILE:CD1	2.43	0.47
47:BF:148:VAL:O	47:BF:149:ARG:HG2	2.14	0.47
48:BG:120:ILE:HD13	48:BG:120:ILE:C	2.39	0.47
50:BT:4:GLU:CD	50:BT:5:GLU:N	2.72	0.47
50:BT:76:ARG:CZ	50:BT:76:ARG:HB3	2.44	0.47
1:CA:1098:C:O2'	1:CA:1099:G:H5'	2.15	0.47
1:CA:1179:A:H2'	1:CA:1180:A:O4'	2.14	0.47
1:CA:1319:A:H4'	1:CA:1320:C:OP1	2.14	0.47
2:CC:48:LYS:HD3	2:CC:48:LYS:N	2.17	0.47
4:CE:9:GLU:O	4:CE:40:ASP:HA	2.14	0.47
4:CE:156:ARG:HB3	7:CH:43:GLY:O	2.14	0.47
5:CF:17:GLN:O	5:CF:21:MET:HG3	2.14	0.47
16:CQ:46:HIS:NE2	16:CQ:48:GLU:HB2	2.28	0.47
20:CB:27:LYS:HD2	20:CB:27:LYS:C	2.38	0.47
23:DB:246:C:H2'	23:DB:247:G:H5'	1.96	0.47
23:DB:322:A:C2	23:DB:340:A:C6	3.02	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:345:A:H1'	23:DB:346:A:H2	1.77	0.47
23:DB:1683:U:H2'	23:DB:1684:G:C8	2.49	0.47
23:DB:2065:C:O2'	23:DB:2066:C:H5'	2.14	0.47
23:DB:2867:G:N7	28:DP:20:ARG:NH1	2.62	0.47
23:DB:2895:G:O2'	23:DB:2896:C:H5'	2.15	0.47
35:DV:16:ALA:HA	35:DV:19:ARG:NE	2.26	0.47
38:DM:40:ARG:HB2	38:DM:93:VAL:HG21	1.95	0.47
38:DM:131:VAL:HG12	38:DM:132:THR:H	1.79	0.47
41:DJ:102:GLU:HG3	41:DJ:124:VAL:HG11	1.95	0.47
42:DN:38:LEU:CB	42:DN:39:PRO:HD3	2.41	0.47
46:DU:35:VAL:HB	46:DU:38:ILE:CB	2.43	0.47
49:DR:39:LEU:O	49:DR:40:MET:HB2	2.13	0.47
49:DR:91:GLN:HG3	49:DR:92:TRP:N	2.30	0.47
52:DW:64:GLY:HA3	52:DW:83:ALA:HA	1.96	0.47
1:AA:24:U:O2'	1:AA:25:C:H5'	2.14	0.47
1:AA:512:U:O2'	1:AA:513:C:H5'	2.14	0.47
1:AA:920:U:H2'	1:AA:921:U:H6	1.74	0.47
1:AA:1114:C:H2'	1:AA:1115:U:C6	2.50	0.47
1:AA:1238:A:H2	1:AA:1241:G:N3	2.12	0.47
1:AA:1246:A:H2'	1:AA:1247:U:O4'	2.13	0.47
1:AA:1486:G:H2'	1:AA:1487:G:C1'	2.44	0.47
2:AC:6:PRO:O	2:AC:9:ILE:HG22	2.14	0.47
2:AC:154:GLY:O	2:AC:155:ARG:HB2	2.15	0.47
2:AC:155:ARG:HA	2:AC:155:ARG:HD2	1.66	0.47
8:AI:24:ASN:CG	8:AI:25:GLY:N	2.73	0.47
9:AJ:5:ARG:HG2	9:AJ:79:PRO:HG3	1.94	0.47
10:AK:22:ILE:HD13	10:AK:95:THR:CG2	2.44	0.47
12:AM:84:CYS:C	12:AM:88:LEU:HD12	2.39	0.47
14:AO:64:ARG:HA	14:AO:64:ARG:NE	2.29	0.47
15:AP:45:GLU:C	15:AP:47:GLU:H	2.22	0.47
19:AT:14:GLU:O	19:AT:17:ARG:HB3	2.14	0.47
22:BA:55:U:H2'	22:BA:56:G:C8	2.49	0.47
22:BA:101:A:H2'	22:BA:102:G:O4'	2.14	0.47
23:BB:335:C:O2'	23:BB:336:C:H5'	2.14	0.47
23:BB:553:G:H2'	23:BB:554:U:O4'	2.13	0.47
23:BB:1260:A:H2'	23:BB:1261:C:C6	2.48	0.47
23:BB:1723:G:C2'	23:BB:1724:G:H5'	2.44	0.47
23:BB:2193:G:H2'	23:BB:2194:U:H6	1.79	0.47
23:BB:2514:U:H2'	23:BB:2515:C:C6	2.50	0.47
23:BB:2675:A:H4'	27:BK:29:HIS:HB2	1.96	0.47
25:BC:89:ASN:HD22	25:BC:89:ASN:HA	1.52	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BC:170:TYR:CD2	25:BC:184:GLU:HA	2.49	0.47
33:B1:36:LYS:HG3	33:B1:47:ILE:HG13	1.95	0.47
39:BX:29:ARG:HH12	50:BT:12:ARG:HG2	1.79	0.47
42:BN:2:ARG:HG2	42:BN:2:ARG:O	2.14	0.47
46:BU:35:VAL:O	46:BU:38:ILE:HG22	2.15	0.47
47:BF:107:VAL:HA	47:BF:111:ARG:NH1	2.30	0.47
49:BR:6:GLN:HE22	49:BR:9:GLY:C	2.23	0.47
50:BT:64:LYS:H	50:BT:64:LYS:HD2	1.79	0.47
52:BW:43:LYS:HB3	52:BW:58:LEU:CD1	2.44	0.47
1:CA:107:G:O6	19:CT:9:ARG:HD3	2.15	0.47
1:CA:238:A:H3'	1:CA:239:U:H5''	1.96	0.47
1:CA:299:G:H2'	1:CA:300:A:C8	2.49	0.47
1:CA:531:U:H5'	1:CA:531:U:H6	1.79	0.47
1:CA:607:A:H2'	1:CA:608:A:H8	1.78	0.47
1:CA:659:U:N3	1:CA:747:A:N6	2.62	0.47
1:CA:735:C:H2'	1:CA:736:C:H6	1.79	0.47
1:CA:840:C:H2'	1:CA:842:U:OP2	2.14	0.47
1:CA:974:A:OP1	1:CA:974:A:H8	1.97	0.47
1:CA:993:G:H2'	1:CA:995:C:H41	1.80	0.47
1:CA:1413:A:O2'	1:CA:1414:U:H5'	2.15	0.47
2:CC:6:PRO:O	2:CC:9:ILE:HG22	2.15	0.47
7:CH:14:ARG:HE	7:CH:75:GLN:NE2	2.12	0.47
9:CJ:10:LEU:O	9:CJ:71:LEU:HA	2.15	0.47
12:CM:2:ARG:O	12:CM:4:ALA:N	2.48	0.47
13:CN:29:ILE:HB	13:CN:30:ILE:HD12	1.97	0.47
13:CN:30:ILE:HG22	13:CN:41:TRP:CB	2.44	0.47
14:CO:74:ASP:OD1	14:CO:76:ALA:HB3	2.14	0.47
20:CB:19:THR:HG23	20:CB:20:ARG:N	2.27	0.47
20:CB:112:ARG:HA	20:CB:115:ASP:OD2	2.14	0.47
23:DB:338:G:N2	23:DB:339:U:H1'	2.28	0.47
23:DB:705:A:H61	23:DB:726:G:H1'	1.79	0.47
23:DB:1197:G:H2'	23:DB:1198:U:C6	2.48	0.47
23:DB:1258:U:H2'	23:DB:1259:G:C8	2.49	0.47
23:DB:1465:G:H2'	23:DB:1466:U:C6	2.50	0.47
23:DB:1729:U:H2'	23:DB:1730:C:O4'	2.14	0.47
23:DB:1936:A:H2	23:DB:1943:U:C5	2.31	0.47
23:DB:2199:A:H3'	23:DB:2200:C:H6	1.79	0.47
23:DB:2247:A:H2'	23:DB:2248:C:C6	2.50	0.47
23:DB:2393:U:H5''	37:DL:62:PRO:HG3	1.96	0.47
23:DB:2784:U:H2'	23:DB:2785:C:H6	1.79	0.47
24:DI:72:THR:CG2	24:DI:112:LYS:HD2	2.44	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DC:152:GLN:HA	25:DC:155:ARG:HD3	1.96	0.47
26:DD:159:LYS:HD3	26:DD:159:LYS:C	2.39	0.47
26:DD:175:LEU:HD23	26:DD:190:LYS:HB3	1.96	0.47
27:DK:22:ILE:O	27:DK:23:LYS:HB2	2.14	0.47
29:DE:102:ARG:HH21	29:DE:102:ARG:HG3	1.79	0.47
39:DX:3:ALA:O	39:DX:6:LEU:HB2	2.14	0.47
41:DJ:44:TYR:CD2	44:DQ:59:LEU:HD21	2.50	0.47
43:DO:104:GLN:O	43:DO:107:ALA:HB3	2.14	0.47
43:DO:106:LEU:CA	43:DO:109:ALA:HB3	2.45	0.47
44:DQ:60:TRP:CH2	44:DQ:93:ILE:HB	2.49	0.47
45:DS:1:MET:HE2	45:DS:1:MET:HA	1.97	0.47
45:DS:25:ARG:CZ	45:DS:74:ILE:HG23	2.44	0.47
46:DU:19:GLY:O	46:DU:20:LYS:HD3	2.15	0.47
47:DF:78:ILE:HG23	47:DF:82:TYR:CG	2.50	0.47
51:DZ:7:VAL:HG21	51:DZ:59:ILE:CD1	2.45	0.47
51:DZ:20:HIS:C	51:DZ:22:LEU:H	2.23	0.47
1:AA:62:U:O2'	1:AA:379:C:H1'	2.15	0.47
1:AA:708:C:H2'	1:AA:709:U:H6	1.80	0.47
1:AA:1164:G:H2'	1:AA:1165:U:C6	2.49	0.47
1:AA:1391:U:H2'	1:AA:1392:G:H8	1.76	0.47
1:AA:1526:G:P	21:AU:38:GLU:HB3	2.54	0.47
3:AD:153:ARG:HG3	3:AD:154:VAL:H	1.79	0.47
8:AI:5:TYR:O	8:AI:19:PHE:HA	2.15	0.47
11:AL:7:VAL:HG22	16:AQ:33:TYR:HD1	1.80	0.47
14:AO:74:ASP:OD1	14:AO:76:ALA:HB3	2.15	0.47
20:AB:15:PHE:HD1	20:AB:16:GLY:N	2.12	0.47
20:AB:16:GLY:HA2	20:AB:40:ILE:CG1	2.44	0.47
23:BB:118:A:OP2	23:BB:119:A:H2'	2.14	0.47
23:BB:167:A:H2'	23:BB:168:G:O4'	2.15	0.47
23:BB:196:A:H2'	23:BB:196:A:N3	2.29	0.47
23:BB:680:C:H2'	23:BB:681:G:C8	2.48	0.47
23:BB:950:G:H2'	23:BB:951:C:H6	1.79	0.47
23:BB:1488:C:O2'	23:BB:1489:C:H5'	2.14	0.47
23:BB:1841:U:H2'	23:BB:1842:G:C8	2.49	0.47
23:BB:1842:G:H2'	23:BB:1843:C:C6	2.49	0.47
23:BB:1936:A:H2	23:BB:1943:U:C5	2.32	0.47
23:BB:2295:C:O2'	23:BB:2296:U:H5'	2.14	0.47
23:BB:2743:U:H3'	23:BB:2744:G:H5''	1.97	0.47
23:BB:2787:C:O2'	23:BB:2788:C:H5'	2.14	0.47
23:BB:2847:U:H5''	28:BP:94:ALA:CB	2.44	0.47
25:BC:71:ASP:C	25:BC:73:ILE:H	2.22	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BD:68:PHE:HB3	26:BD:73:VAL:HA	1.96	0.47
29:BE:46:GLN:HG3	29:BE:87:ALA:CB	2.40	0.47
29:BE:108:ILE:HD13	29:BE:108:ILE:O	2.15	0.47
31:B0:2:VAL:HG12	31:B0:3:GLN:H	1.79	0.47
41:BJ:123:LYS:HG2	41:BJ:132:HIS:CD2	2.49	0.47
44:BQ:60:TRP:CZ2	44:BQ:93:ILE:HB	2.50	0.47
46:BU:48:VAL:O	46:BU:48:VAL:HG13	2.15	0.47
52:BW:36:ILE:HB	52:BW:39:GLN:NE2	2.29	0.47
52:BW:75:ASN:O	52:BW:76:ARG:HB2	2.13	0.47
1:CA:89:U:H2'	1:CA:90:C:C6	2.50	0.47
1:CA:254:G:H4'	16:CQ:19:SER:OG	2.15	0.47
1:CA:413:G:H2'	1:CA:428:G:N2	2.29	0.47
1:CA:556:C:O2'	1:CA:557:G:H5'	2.14	0.47
1:CA:665:A:H2'	1:CA:725:G:N2	2.29	0.47
1:CA:721:G:H4'	1:CA:722:G:O4'	2.13	0.47
1:CA:939:G:H5'	6:CG:101:ARG:NH1	2.29	0.47
1:CA:1014:A:H2'	1:CA:1015:G:O4'	2.15	0.47
1:CA:1173:U:H2'	1:CA:1174:G:C8	2.48	0.47
20:CB:20:ARG:HA	20:CB:20:ARG:NE	2.30	0.47
20:CB:204:ASP:O	20:CB:208:ALA:HB3	2.15	0.47
22:DA:14:U:H4'	22:DA:70:C:O2	2.15	0.47
23:DB:154:U:H2'	23:DB:155:A:H8	1.79	0.47
23:DB:175:G:O2'	23:DB:176:A:H5'	2.14	0.47
23:DB:587:C:H4'	23:DB:588:U:H6	1.80	0.47
23:DB:659:G:H4'	29:DE:95:LYS:HB3	1.95	0.47
23:DB:679:C:O2'	23:DB:680:C:H5'	2.15	0.47
23:DB:833:A:H1'	37:DL:52:GLY:N	2.30	0.47
23:DB:958:U:OP2	38:DM:14:LYS:NZ	2.44	0.47
23:DB:1050:A:C2	23:DB:1051:G:H1'	2.49	0.47
23:DB:1196:C:H2'	23:DB:1197:G:C8	2.50	0.47
23:DB:1292:G:O2'	23:DB:1293:C:H5'	2.15	0.47
23:DB:1674:G:N2	23:DB:1677:A:N1	2.61	0.47
23:DB:1749:A:H2'	23:DB:1750:G:C8	2.49	0.47
23:DB:1851:U:O2'	23:DB:1852:U:H5'	2.14	0.47
23:DB:2049:G:O2'	23:DB:2050:C:H5'	2.14	0.47
24:DI:37:PHE:HB2	24:DI:66:PHE:CE2	2.49	0.47
26:DD:106:LYS:O	26:DD:107:VAL:HB	2.15	0.47
27:DK:77:ILE:HG12	28:DP:71:ARG:HD2	1.95	0.47
27:DK:88:ASN:ND2	27:DK:89:ASN:N	2.63	0.47
32:D4:7:VAL:CG1	32:D4:8:LYS:H	2.22	0.47
35:DV:51:GLN:HB2	35:DV:57:TYR:OH	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DL:84:LYS:C	37:DL:86:GLU:H	2.20	0.47
41:DJ:64:VAL:HG22	41:DJ:68:LYS:HD2	1.96	0.47
42:DN:80:PHE:O	42:DN:85:PRO:HD3	2.15	0.47
45:DS:46:LEU:O	45:DS:50:VAL:HG23	2.15	0.47
1:AA:649:A:H2'	1:AA:650:G:O4'	2.14	0.47
1:AA:1007:U:H2'	1:AA:1008:U:H6	1.77	0.47
1:AA:1254:A:H2'	1:AA:1255:G:H8	1.80	0.47
2:AC:112:ALA:HB1	2:AC:184:ASN:HB2	1.95	0.47
12:AM:2:ARG:O	12:AM:4:ALA:N	2.48	0.47
13:AN:42:ASN:ND2	13:AN:45:LEU:HD22	2.30	0.47
13:AN:46:LYS:HZ2	18:AS:15:LEU:CD1	2.27	0.47
17:AR:56:ARG:O	17:AR:60:ARG:HG2	2.15	0.47
19:AT:60:GLN:HB3	19:AT:65:LEU:HD23	1.97	0.47
22:BA:85:G:H2'	22:BA:86:G:H8	1.80	0.47
23:BB:41:C:H2'	23:BB:42:A:O4'	2.14	0.47
23:BB:138:U:O2'	50:BT:1:MET:HA	2.15	0.47
23:BB:299:A:N6	23:BB:322:A:H1'	2.30	0.47
23:BB:773:U:O2'	25:BC:47:ARG:HD3	2.14	0.47
23:BB:1030:C:O2'	23:BB:1031:G:H5'	2.15	0.47
23:BB:1335:C:H2'	23:BB:1336:A:H8	1.80	0.47
23:BB:2311:A:O2'	47:BF:84:ILE:HG21	2.15	0.47
23:BB:2663:G:H2'	23:BB:2664:G:O4'	2.14	0.47
26:BD:101:PHE:HA	26:BD:104:VAL:HG21	1.96	0.47
28:BP:61:ARG:HD3	28:BP:70:GLU:OE1	2.15	0.47
29:BE:60:TRP:HA	29:BE:60:TRP:HE3	1.80	0.47
29:BE:119:ILE:HD11	29:BE:185:LYS:HE2	1.95	0.47
32:B4:9:LYS:HE2	32:B4:10:LEU:N	2.29	0.47
35:BV:83:LYS:O	35:BV:85:LYS:N	2.47	0.47
38:BM:123:LYS:O	38:BM:124:LEU:HG	2.14	0.47
42:BN:81:ASN:O	42:BN:85:PRO:HD2	2.14	0.47
47:BF:49:LEU:HD11	47:BF:66:ILE:HD12	1.95	0.47
52:BW:21:GLY:N	52:BW:33:GLY:HA2	2.29	0.47
1:CA:317:U:H2'	1:CA:318:G:H8	1.78	0.47
1:CA:843:U:H2'	1:CA:843:U:O2	2.14	0.47
1:CA:919:A:O2'	1:CA:920:U:H5'	2.15	0.47
1:CA:1171:A:H2'	1:CA:1172:C:C6	2.49	0.47
1:CA:1435:G:H2'	1:CA:1436:U:C6	2.49	0.47
3:CD:116:LEU:O	3:CD:121:ALA:HB3	2.15	0.47
3:CD:153:ARG:HG3	3:CD:154:VAL:H	1.79	0.47
5:CF:12:PRO:C	5:CF:14:GLN:H	2.23	0.47
12:CM:44:ILE:HA	12:CM:47:LEU:CD1	2.44	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:CP:59:HIS:O	15:CP:63:GLN:HG3	2.15	0.47
23:DB:151:C:H2'	23:DB:152:A:C8	2.49	0.47
23:DB:198:C:H2'	23:DB:199:A:H5''	1.95	0.47
23:DB:263:G:H2'	23:DB:264:C:O4'	2.14	0.47
23:DB:521:U:H2'	23:DB:522:A:C8	2.50	0.47
23:DB:554:U:H2'	23:DB:555:G:O4'	2.13	0.47
23:DB:659:G:H21	29:DE:30:GLN:HE22	1.63	0.47
23:DB:946:C:H2'	23:DB:947:A:C8	2.49	0.47
23:DB:1275:A:C4	42:DN:16:HIS:CD2	3.02	0.47
23:DB:1424:G:O2'	23:DB:1425:G:H5'	2.14	0.47
23:DB:1434:A:H62	23:DB:1558:C:N4	2.12	0.47
23:DB:1847:A:H1'	23:DB:1848:A:N7	2.30	0.47
23:DB:2875:C:H2'	23:DB:2876:G:C8	2.49	0.47
26:DD:68:PHE:HB3	26:DD:73:VAL:HA	1.97	0.47
27:DK:11:ALA:HB3	27:DK:85:VAL:CG2	2.45	0.47
27:DK:20:MET:C	27:DK:41:ILE:HD12	2.40	0.47
27:DK:105:ARG:HD3	27:DK:105:ARG:N	2.25	0.47
29:DE:160:ALA:O	29:DE:161:ALA:HB3	2.15	0.47
37:DL:131:ALA:C	37:DL:133:ALA:N	2.67	0.47
38:DM:94:ALA:O	38:DM:96:ILE:HG23	2.15	0.47
40:DH:114:GLU:O	40:DH:115:VAL:C	2.58	0.47
41:DJ:75:TYR:CD1	41:DJ:86:GLN:HB3	2.50	0.47
43:DO:67:ASN:H	43:DO:70:ALA:CB	2.26	0.47
46:DU:73:ASN:HD22	46:DU:73:ASN:N	2.11	0.47
47:DF:108:PRO:C	47:DF:110:ILE:H	2.23	0.47
48:DG:19:ASN:HB2	48:DG:22:VAL:HB	1.96	0.47
1:AA:177:G:P	19:AT:23:ARG:HH22	2.37	0.47
1:AA:463:U:H5'	1:AA:464:U:OP2	2.15	0.47
1:AA:505:G:H2'	1:AA:506:G:C8	2.50	0.47
1:AA:552:U:H5'	11:AL:82:ARG:HH11	1.80	0.47
1:AA:648:A:H2'	1:AA:649:A:C8	2.50	0.47
1:AA:695:A:H61	1:AA:797:C:H1'	1.78	0.47
1:AA:714:G:N2	1:AA:777:A:H1'	2.29	0.47
1:AA:735:C:H2'	1:AA:736:C:H6	1.77	0.47
1:AA:997:U:O2'	1:AA:998:C:H5'	2.14	0.47
1:AA:1060:U:H2'	1:AA:1061:G:C8	2.50	0.47
1:AA:1308:U:H3'	12:AM:97:ARG:NH1	2.29	0.47
1:AA:1337:G:H5''	1:AA:1338:G:OP1	2.13	0.47
1:AA:1432:G:H5'	28:BP:105:LYS:CG	2.44	0.47
2:AC:109:GLU:HG2	2:AC:139:ASN:HB3	1.95	0.47
3:AD:81:LEU:HB2	3:AD:88:ASN:ND2	2.30	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AI:94:ARG:HH11	8:AI:94:ARG:CB	2.25	0.47
9:AJ:26:VAL:O	9:AJ:30:LYS:HG3	2.15	0.47
9:AJ:66:GLU:HB3	13:AN:98:ALA:HB2	1.97	0.47
12:AM:44:ILE:HA	12:AM:47:LEU:CD1	2.44	0.47
12:AM:79:LEU:HA	12:AM:82:LEU:HB2	1.96	0.47
13:AN:42:ASN:HD22	13:AN:45:LEU:HD22	1.79	0.47
13:AN:49:THR:O	13:AN:50:LEU:HB2	2.14	0.47
15:AP:38:PHE:CE2	15:AP:51:ARG:HD3	2.50	0.47
20:AB:16:GLY:CA	20:AB:40:ILE:H	2.27	0.47
20:AB:44:LYS:O	20:AB:48:MET:HG2	2.13	0.47
20:AB:204:ASP:O	20:AB:208:ALA:HB3	2.15	0.47
23:BB:198:C:H2'	23:BB:199:A:H5''	1.97	0.47
23:BB:242:G:C8	34:B3:4:LYS:HG2	2.50	0.47
23:BB:401:A:H2'	23:BB:402:A:C8	2.50	0.47
23:BB:460:A:C4'	50:BT:72:GLN:HB2	2.35	0.47
23:BB:847:U:O2	23:BB:847:U:O4'	2.30	0.47
23:BB:923:G:N3	52:BW:23:LYS:HE3	2.30	0.47
23:BB:1418:G:H1'	23:BB:1580:A:N6	2.30	0.47
23:BB:1439:A:N7	23:BB:1440:U:C2	2.82	0.47
23:BB:1595:C:O2'	23:BB:1596:A:H5'	2.14	0.47
23:BB:1771:C:O2'	23:BB:1772:A:H5'	2.14	0.47
23:BB:1812:U:H1'	25:BC:43:ASN:ND2	2.26	0.47
23:BB:2053:G:O2'	23:BB:2054:A:H5'	2.15	0.47
23:BB:2099:U:H2'	23:BB:2100:G:C8	2.45	0.47
23:BB:2179:C:H2'	23:BB:2180:U:C6	2.50	0.47
23:BB:2247:A:H2'	23:BB:2248:C:C6	2.50	0.47
23:BB:2385:C:H3'	56:BB:3567:HOH:O	2.15	0.47
23:BB:2784:U:H2'	23:BB:2785:C:H6	1.80	0.47
23:BB:2838:G:H2'	23:BB:2839:G:C8	2.49	0.47
25:BC:259:ASN:C	25:BC:261:ARG:H	2.23	0.47
26:BD:11:MET:HE1	26:BD:192:ALA:N	2.29	0.47
26:BD:31:ALA:O	26:BD:52:THR:HG23	2.15	0.47
26:BD:55:LYS:HB2	26:BD:60:VAL:HG13	1.95	0.47
27:BK:63:VAL:HG21	27:BK:85:VAL:HG23	1.97	0.47
27:BK:88:ASN:ND2	27:BK:89:ASN:N	2.63	0.47
28:BP:50:ARG:CB	28:BP:57:ALA:H	2.27	0.47
30:BY:30:ARG:HD3	30:BY:30:ARG:N	2.28	0.47
31:B0:21:LEU:HD13	45:BS:23:LEU:HD11	1.96	0.47
36:B2:18:PHE:CZ	36:B2:22:MET:HE3	2.50	0.47
37:BL:14:LYS:O	37:BL:16:GLY:N	2.48	0.47
37:BL:77:ILE:HD11	37:BL:95:LEU:HD13	1.96	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BM:69:PRO:HG2	38:BM:70:ASP:H	1.79	0.47
38:BM:135:VAL:O	38:BM:136:MET:HG3	2.15	0.47
40:BH:4:ILE:HD12	40:BH:4:ILE:H	1.79	0.47
40:BH:7:ASP:CG	40:BH:8:LYS:N	2.73	0.47
40:BH:53:GLU:HA	40:BH:57:LYS:HG2	1.97	0.47
40:BH:90:LEU:HD11	40:BH:146:VAL:CG1	2.43	0.47
40:BH:116:ARG:HD3	40:BH:133:GLN:HB2	1.97	0.47
42:BN:80:PHE:O	42:BN:85:PRO:HD3	2.14	0.47
44:BQ:30:VAL:CG1	44:BQ:31:TYR:N	2.67	0.47
45:BS:72:THR:CG2	45:BS:108:SER:HB3	2.44	0.47
46:BU:35:VAL:HB	46:BU:38:ILE:CB	2.45	0.47
46:BU:51:LEU:O	46:BU:52:ASN:HB2	2.14	0.47
47:BF:43:ILE:HB	47:BF:82:TYR:CZ	2.50	0.47
48:BG:97:VAL:HA	48:BG:102:ILE:HA	1.97	0.47
50:BT:5:GLU:HA	50:BT:8:LEU:HD12	1.96	0.47
50:BT:25:GLU:HG2	50:BT:29:THR:O	2.15	0.47
50:BT:29:THR:CG2	50:BT:86:THR:HG22	2.44	0.47
52:BW:8:SER:O	52:BW:9:THR:HB	2.14	0.47
52:BW:64:GLY:HA3	52:BW:83:ALA:HA	1.96	0.47
1:CA:200:G:O2'	1:CA:381:C:N4	2.48	0.47
1:CA:279:A:H4'	1:CA:280:C:OP2	2.14	0.47
1:CA:467:U:H2'	1:CA:467:U:O2	2.13	0.47
1:CA:552:U:H2'	1:CA:553:A:C8	2.50	0.47
1:CA:731:G:O2'	1:CA:732:C:H5'	2.15	0.47
1:CA:742:G:O2'	1:CA:743:A:H5'	2.14	0.47
1:CA:921:U:H5'	1:CA:1081:A:O3'	2.15	0.47
1:CA:1010:U:O2'	1:CA:1011:C:H5'	2.14	0.47
1:CA:1011:C:H2'	1:CA:1012:A:H8	1.78	0.47
1:CA:1039:G:H2'	1:CA:1040:U:H6	1.80	0.47
1:CA:1178:G:H2'	1:CA:1180:A:OP2	2.14	0.47
1:CA:1207:G:O2'	1:CA:1208:C:H5'	2.13	0.47
1:CA:1216:A:H5''	13:CN:4:SER:CB	2.44	0.47
2:CC:53:ARG:HG2	2:CC:54:ILE:H	1.79	0.47
2:CC:154:GLY:O	2:CC:155:ARG:HB2	2.14	0.47
2:CC:178:ARG:HG2	2:CC:178:ARG:O	2.15	0.47
2:CC:184:ASN:HD22	2:CC:185:THR:H	1.63	0.47
3:CD:77:GLU:OE1	3:CD:80:ARG:HD3	2.15	0.47
3:CD:160:LEU:HA	3:CD:163:GLN:CG	2.45	0.47
3:CD:187:ARG:NH1	3:CD:191:SER:HA	2.14	0.47
3:CD:199:ILE:HG13	3:CD:200:VAL:N	2.30	0.47
4:CE:136:VAL:HG13	4:CE:137:ARG:N	2.29	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:CG:15:PRO:HG3	6:CG:39:GLU:OE1	2.13	0.47
7:CH:49:LYS:HB3	7:CH:59:GLU:HB2	1.96	0.47
8:CI:56:MET:HE1	8:CI:60:LEU:HG	1.96	0.47
11:CL:79:ILE:HD12	11:CL:96:THR:HG22	1.96	0.47
18:CS:5:LYS:O	18:CS:6:LYS:HD2	2.13	0.47
18:CS:44:ILE:O	18:CS:44:ILE:HG23	2.13	0.47
20:CB:16:GLY:HA2	20:CB:40:ILE:H	1.79	0.47
20:CB:209:VAL:HG23	20:CB:210:THR:N	2.29	0.47
22:DA:28:C:H2'	22:DA:29:A:H8	1.80	0.47
23:DB:10:A:H2'	23:DB:11:C:C2	2.49	0.47
23:DB:21:A:O2'	23:DB:22:C:H5'	2.15	0.47
23:DB:189:G:H2'	23:DB:205:G:H22	1.80	0.47
23:DB:196:A:H2'	23:DB:196:A:N3	2.30	0.47
23:DB:275:C:H2'	23:DB:276:U:C1'	2.45	0.47
23:DB:281:C:O2'	23:DB:282:A:H5'	2.14	0.47
23:DB:418:C:H2'	23:DB:419:U:H6	1.80	0.47
23:DB:553:G:H2'	23:DB:554:U:O4'	2.14	0.47
23:DB:630:G:N2	23:DB:632:A:H3'	2.30	0.47
23:DB:814:C:H2'	23:DB:815:C:H6	1.79	0.47
23:DB:951:C:O2'	23:DB:952:G:H5'	2.15	0.47
23:DB:1093:G:O2'	23:DB:1094:U:H5'	2.15	0.47
23:DB:1099:G:H3'	24:DI:2:LYS:HA	1.96	0.47
23:DB:1577:C:H2'	23:DB:1578:U:O4'	2.15	0.47
23:DB:1654:A:O2'	26:DD:118:PHE:CB	2.63	0.47
23:DB:1830:C:H2'	23:DB:1831:G:H8	1.78	0.47
23:DB:2049:G:N2	26:DD:161:MET:HE2	2.29	0.47
23:DB:2228:G:H2'	23:DB:2229:U:C6	2.50	0.47
23:DB:2430:A:H5'	23:DB:2431:U:OP2	2.15	0.47
23:DB:2515:C:O2'	23:DB:2516:A:H5'	2.15	0.47
23:DB:2676:C:H2'	23:DB:2677:G:H8	1.79	0.47
24:DI:52:LEU:HD13	24:DI:81:LYS:HZ3	1.80	0.47
24:DI:96:LYS:HD3	24:DI:138:VAL:HG21	1.97	0.47
26:DD:79:LEU:HD22	26:DD:79:LEU:H	1.80	0.47
26:DD:138:LEU:N	26:DD:138:LEU:HD22	2.29	0.47
27:DK:98:ARG:C	27:DK:99:ILE:HD12	2.39	0.47
28:DP:52:ARG:HG2	28:DP:52:ARG:NH1	2.29	0.47
28:DP:96:LEU:HB3	28:DP:99:LEU:HB2	1.97	0.47
30:DY:51:SER:HA	30:DY:54:VAL:CG2	2.45	0.47
32:D4:36:ARG:HG2	32:D4:37:GLN:H	1.79	0.47
34:D3:61:LEU:CB	34:D3:64:ALA:HB2	2.44	0.47
35:DV:93:ARG:HG3	35:DV:93:ARG:NH1	2.29	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DL:80:SER:H	37:DL:113:ALA:HB3	1.80	0.47
37:DL:85:VAL:HG22	37:DL:94:THR:HG21	1.97	0.47
37:DL:142:ILE:N	37:DL:142:ILE:HD12	2.30	0.47
38:DM:69:PRO:HG2	38:DM:70:ASP:H	1.78	0.47
38:DM:108:VAL:HG11	38:DM:112:LEU:HD12	1.96	0.47
39:DX:15:ASN:H	39:DX:15:ASN:HD22	1.61	0.47
40:DH:54:LEU:C	40:DH:56:ALA:H	2.23	0.47
40:DH:62:LEU:HG	40:DH:66:ASN:ND2	2.26	0.47
40:DH:131:SER:HB2	40:DH:141:LYS:HA	1.96	0.47
40:DH:131:SER:HA	40:DH:141:LYS:HA	1.97	0.47
42:DN:83:LEU:HA	42:DN:86:ARG:HG3	1.95	0.47
43:DO:26:LEU:HD13	43:DO:39:VAL:CG2	2.44	0.47
44:DQ:9:ALA:C	44:DQ:11:ALA:N	2.73	0.47
44:DQ:65:ASN:CB	44:DQ:75:TYR:HB2	2.42	0.47
44:DQ:91:ARG:HE	49:DR:11:GLN:HB2	1.79	0.47
45:DS:13:SER:HB3	45:DS:16:LYS:HE3	1.96	0.47
47:DF:11:VAL:HG21	47:DF:172:PHE:CE1	2.50	0.47
47:DF:161:SER:OG	47:DF:164:GLU:HG3	2.14	0.47
48:DG:10:VAL:HG13	48:DG:14:VAL:HB	1.96	0.47
48:DG:58:ALA:C	48:DG:60:GLY:H	2.22	0.47
48:DG:72:ASN:O	48:DG:76:ILE:HG12	2.15	0.47
48:DG:97:VAL:HA	48:DG:102:ILE:HA	1.96	0.47
49:DR:6:GLN:HE22	49:DR:9:GLY:C	2.23	0.47
50:DT:69:ARG:NH1	50:DT:69:ARG:HA	2.29	0.47
50:DT:76:ARG:CZ	50:DT:76:ARG:HB3	2.44	0.47
51:DZ:14:THR:HA	51:DZ:28:ARG:CA	2.38	0.47
52:DW:43:LYS:HD2	52:DW:79:ILE:HD11	1.97	0.47
52:DW:75:ASN:O	52:DW:76:ARG:HB2	2.14	0.47
1:AA:240:G:H5'	1:AA:240:G:H8	1.80	0.47
1:AA:256:U:H3'	1:AA:257:G:H8	1.79	0.47
1:AA:832:G:O2'	1:AA:833:G:H5'	2.15	0.47
1:AA:923:A:H2'	1:AA:924:C:H6	1.76	0.47
1:AA:1392:G:O2'	1:AA:1393:U:H5'	2.15	0.47
1:AA:1435:G:H2'	1:AA:1436:U:C6	2.50	0.47
3:AD:18:LEU:O	3:AD:19:PHE:HB2	2.15	0.47
11:AL:68:GLY:HA3	11:AL:106:VAL:HG21	1.97	0.47
11:AL:107:LYS:O	11:AL:107:LYS:HD2	2.15	0.47
12:AM:64:VAL:HA	12:AM:68:LEU:CD1	2.44	0.47
12:AM:95:PRO:HB2	12:AM:99:GLN:OE1	2.15	0.47
22:BA:64:G:H2'	22:BA:65:U:C6	2.50	0.47
23:BB:151:C:H2'	23:BB:152:A:C8	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:263:G:H2'	23:BB:264:C:O4'	2.15	0.47
23:BB:321:U:OP2	29:BE:130:LYS:HD3	2.15	0.47
23:BB:553:G:O2'	23:BB:554:U:H5'	2.15	0.47
23:BB:680:C:H2'	23:BB:681:G:H8	1.78	0.47
23:BB:1824:G:H1'	25:BC:251:THR:CG2	2.44	0.47
25:BC:153:LEU:HD13	25:BC:175:LEU:CD2	2.45	0.47
26:BD:90:PHE:O	26:BD:91:THR:C	2.57	0.47
27:BK:34:GLY:O	27:BK:36:GLY:N	2.48	0.47
28:BP:50:ARG:HD3	28:BP:75:THR:OG1	2.14	0.47
35:BV:38:LEU:HG	35:BV:40:ILE:HG23	1.96	0.47
36:B2:21:ARG:HD3	36:B2:43:THR:HG21	1.96	0.47
38:BM:24:THR:HG23	38:BM:34:LYS:CE	2.44	0.47
41:BJ:55:ILE:CG2	41:BJ:123:LYS:HB2	2.45	0.47
44:BQ:104:ALA:C	44:BQ:106:THR:H	2.23	0.47
1:CA:161:A:H2'	1:CA:162:A:C8	2.50	0.47
1:CA:642:A:H2'	1:CA:643:C:C6	2.50	0.47
1:CA:651:C:H2'	1:CA:652:U:C6	2.50	0.47
1:CA:822:U:O2'	1:CA:823:C:H5'	2.15	0.47
1:CA:979:C:H1'	1:CA:1317:C:N4	2.30	0.47
1:CA:1113:C:O2'	1:CA:1114:C:H5'	2.15	0.47
1:CA:1262:C:H2'	1:CA:1263:C:C6	2.50	0.47
2:CC:119:ILE:HG13	2:CC:132:ALA:HB1	1.96	0.47
5:CF:25:TYR:O	5:CF:29:ILE:HG13	2.14	0.47
6:CG:50:ALA:CB	6:CG:57:GLU:HG3	2.45	0.47
8:CI:56:MET:O	8:CI:58:GLU:N	2.41	0.47
10:CK:90:PRO:C	10:CK:92:ARG:H	2.23	0.47
11:CL:68:GLY:HA3	11:CL:106:VAL:HG21	1.97	0.47
12:CM:6:ILE:O	12:CM:7:ASN:C	2.58	0.47
12:CM:64:VAL:HA	12:CM:68:LEU:HD12	1.97	0.47
12:CM:70:ARG:HH22	47:DF:142:TYR:HB3	1.76	0.47
14:CO:25:THR:CB	14:CO:70:LEU:HD23	2.45	0.47
16:CQ:37:ILE:HG22	16:CQ:39:ARG:HE	1.80	0.47
18:CS:50:VAL:O	18:CS:56:HIS:HA	2.14	0.47
19:CT:57:VAL:HB	19:CT:71:ALA:HB1	1.96	0.47
20:CB:178:LEU:HB2	20:CB:180:ILE:HG12	1.97	0.47
22:DA:14:U:H5'	22:DA:70:C:O2'	2.15	0.47
23:DB:170:U:H2'	23:DB:171:U:H6	1.80	0.47
23:DB:409:G:H2'	23:DB:410:G:C8	2.50	0.47
23:DB:528:A:N1	23:DB:2042:A:H2'	2.29	0.47
23:DB:1258:U:H2'	23:DB:1259:G:H8	1.79	0.47
23:DB:1439:A:C5	23:DB:1552:A:N6	2.83	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:1548:A:H2'	23:DB:1549:A:H8	1.79	0.47
23:DB:2468:A:H2'	23:DB:2476:A:C6	2.49	0.47
23:DB:2548:U:H1'	27:DK:23:LYS:NZ	2.30	0.47
23:DB:2892:G:H5''	23:DB:2894:G:H22	1.78	0.47
26:DD:148:GLN:CB	26:DD:152:PRO:HG2	2.44	0.47
26:DD:171:THR:OG1	26:DD:172:VAL:N	2.48	0.47
27:DK:2:ILE:HG13	27:DK:33:ALA:O	2.15	0.47
27:DK:11:ALA:O	27:DK:100:PHE:N	2.42	0.47
31:D0:21:LEU:HB3	45:DS:23:LEU:HD21	1.97	0.47
40:DH:128:HIS:O	40:DH:144:VAL:N	2.48	0.47
41:DJ:13:ARG:HB3	41:DJ:53:TYR:CD2	2.50	0.47
42:DN:41:ALA:C	42:DN:43:GLU:N	2.71	0.47
44:DQ:86:SER:CB	49:DR:51:VAL:HA	2.44	0.47
45:DS:31:GLN:C	45:DS:33:LEU:N	2.73	0.47
47:DF:147:ARG:HB3	47:DF:147:ARG:NH1	2.30	0.47
50:DT:5:GLU:HA	50:DT:8:LEU:HD12	1.96	0.47
52:DW:54:ARG:C	52:DW:56:HIS:H	2.22	0.47
1:AA:82:G:H2'	1:AA:84:U:C5	2.49	0.47
1:AA:125:U:H2'	1:AA:126:G:C8	2.50	0.47
1:AA:375:U:OP1	15:AP:70:ARG:HD3	2.15	0.47
1:AA:377:G:H2'	1:AA:378:G:H8	1.80	0.47
1:AA:386:C:C2'	1:AA:387:U:H5'	2.45	0.47
1:AA:430:A:P	3:AD:6:PRO:HA	2.55	0.47
1:AA:613:C:H2'	1:AA:614:C:C6	2.49	0.47
1:AA:627:G:H2'	1:AA:628:G:C8	2.50	0.47
1:AA:1190:G:OP1	2:AC:3:LYS:HA	2.14	0.47
2:AC:119:ILE:HD11	2:AC:133:MET:HA	1.97	0.47
5:AF:46:GLN:HG3	5:AF:47:LEU:N	2.29	0.47
6:AG:91:ARG:HB3	6:AG:92:PRO:HD2	1.97	0.47
6:AG:144:ALA:C	6:AG:146:ALA:H	2.21	0.47
8:AI:56:MET:HE1	8:AI:60:LEU:HG	1.96	0.47
13:AN:30:ILE:HB	13:AN:44:VAL:HG21	1.97	0.47
14:AO:57:LEU:HD11	23:BB:715:A:N6	2.30	0.47
14:AO:81:LEU:O	14:AO:85:LEU:HD13	2.15	0.47
16:AQ:37:ILE:HG22	16:AQ:39:ARG:NE	2.30	0.47
20:AB:178:LEU:HB2	20:AB:180:ILE:HG12	1.97	0.47
22:BA:43:C:H4'	47:BF:91:ARG:NE	2.29	0.47
23:BB:426:C:O2'	23:BB:427:U:H5'	2.15	0.47
23:BB:593:U:H2'	23:BB:594:U:C6	2.50	0.47
23:BB:755:U:H2'	23:BB:756:A:C8	2.49	0.47
23:BB:863:A:H2'	23:BB:864:G:C8	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:969:G:H2'	23:BB:970:U:C6	2.50	0.47
23:BB:1063:G:H1'	24:BI:134:SER:O	2.15	0.47
23:BB:1141:U:H4'	23:BB:1142:A:C1'	2.44	0.47
23:BB:1183:U:H2'	23:BB:1184:U:C6	2.49	0.47
23:BB:1292:G:O2'	23:BB:1293:C:H5'	2.15	0.47
23:BB:1536:C:H1'	23:BB:1537:G:N2	2.30	0.47
23:BB:1821:A:H2'	23:BB:1822:C:C6	2.50	0.47
23:BB:2428:G:H5''	23:BB:2429:G:OP1	2.15	0.47
24:BI:79:LEU:HD23	24:BI:108:ILE:CD1	2.45	0.47
26:BD:109:VAL:CG1	26:BD:193:VAL:HB	2.45	0.47
27:BK:47:ILE:HG23	27:BK:48:PRO:CD	2.45	0.47
27:BK:118:LEU:C	27:BK:120:PRO:HD2	2.40	0.47
29:BE:87:ALA:O	29:BE:88:ARG:HD3	2.14	0.47
31:B0:29:VAL:HA	31:B0:35:GLU:O	2.15	0.47
38:BM:131:VAL:HG12	38:BM:132:THR:N	2.30	0.47
44:BQ:109:VAL:CG1	44:BQ:113:LYS:HE3	2.43	0.47
47:BF:68:LYS:HD2	47:BF:68:LYS:N	2.29	0.47
48:BG:91:VAL:O	48:BG:93:TYR:N	2.42	0.47
49:BR:91:GLN:HG3	49:BR:92:TRP:N	2.30	0.47
50:BT:41:ALA:C	50:BT:43:ILE:N	2.72	0.47
51:BZ:59:ILE:HD13	51:BZ:67:VAL:HG21	1.97	0.47
1:CA:301:G:H2'	1:CA:302:G:C8	2.49	0.47
1:CA:684:U:H1'	10:CK:39:ASN:HA	1.96	0.47
1:CA:1057:G:O3'	2:CC:196:GLY:HA3	2.15	0.47
1:CA:1206:G:H2'	1:CA:1207:G:O4'	2.15	0.47
1:CA:1450:U:H2'	1:CA:1452:C:C5	2.49	0.47
8:CI:16:ALA:HA	8:CI:66:VAL:HA	1.97	0.47
8:CI:43:ALA:O	8:CI:46:VAL:HG22	2.15	0.47
8:CI:46:VAL:O	8:CI:49:GLN:HB2	2.14	0.47
12:CM:44:ILE:HA	12:CM:47:LEU:HD12	1.96	0.47
12:CM:106:ARG:HH21	12:CM:112:ARG:HD3	1.80	0.47
20:CB:13:VAL:O	20:CB:13:VAL:HG12	2.15	0.47
20:CB:15:PHE:O	20:CB:40:ILE:HD12	2.15	0.47
23:DB:351:C:H2'	23:DB:352:A:H8	1.75	0.47
23:DB:426:C:O2'	23:DB:427:U:H5'	2.15	0.47
23:DB:454:A:H4'	23:DB:455:C:OP2	2.15	0.47
23:DB:924:G:H2'	23:DB:925:A:H8	1.80	0.47
23:DB:1335:C:H2'	23:DB:1336:A:C8	2.50	0.47
23:DB:1401:G:H2'	23:DB:1402:U:C6	2.50	0.47
23:DB:1438:U:O2'	23:DB:1439:A:H5'	2.15	0.47
23:DB:1672:A:C2	23:DB:2582:G:H5'	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:1805:A:N3	25:DC:49:THR:HG23	2.29	0.47
23:DB:2785:C:H2'	23:DB:2786:U:H6	1.80	0.47
24:DI:23:VAL:HG12	24:DI:24:GLY:N	2.30	0.47
24:DI:78:LEU:HD23	24:DI:81:LYS:HE2	1.95	0.47
25:DC:131:MET:HA	25:DC:134:ILE:HG12	1.97	0.47
26:DD:55:LYS:HB2	26:DD:60:VAL:HG13	1.96	0.47
27:DK:88:ASN:HD22	27:DK:89:ASN:N	2.13	0.47
28:DP:50:ARG:HD3	28:DP:75:THR:OG1	2.14	0.47
29:DE:40:ARG:NH2	29:DE:92:HIS:NE2	2.63	0.47
29:DE:60:TRP:HB3	29:DE:61:ARG:H	1.34	0.47
30:DY:7:THR:HG22	30:DY:9:THR:H	1.80	0.47
36:D2:39:ARG:HG3	36:D2:39:ARG:HH11	1.80	0.47
37:DL:129:LYS:HA	37:DL:132:ARG:HG2	1.95	0.47
38:DM:36:VAL:HG21	38:DM:129:THR:HB	1.96	0.47
39:DX:45:GLN:O	39:DX:46:VAL:HB	2.15	0.47
41:DJ:29:ALA:O	41:DJ:32:LEU:HB2	2.15	0.47
41:DJ:34:ARG:HH11	41:DJ:34:ARG:HG3	1.80	0.47
46:DU:26:ASN:N	46:DU:26:ASN:ND2	2.62	0.47
47:DF:46:LYS:NZ	47:DF:46:LYS:HA	2.30	0.47
50:DT:69:ARG:HG2	50:DT:73:ARG:O	2.14	0.47
1:AA:33:A:H2'	1:AA:34:C:H6	1.79	0.47
1:AA:208:U:H6	1:AA:208:U:O5'	1.98	0.47
1:AA:708:C:H2'	1:AA:709:U:C6	2.50	0.47
1:AA:1171:A:H2'	1:AA:1172:C:C6	2.49	0.47
1:AA:1244:G:H2'	1:AA:1245:C:H6	1.78	0.47
3:AD:2:ARG:O	3:AD:3:TYR:HB3	2.14	0.47
10:AK:90:PRO:C	10:AK:92:ARG:H	2.21	0.47
11:AL:23:LEU:O	11:AL:25:ALA:N	2.48	0.47
11:AL:107:LYS:HD2	11:AL:107:LYS:C	2.40	0.47
12:AM:52:ILE:HA	12:AM:55:LEU:HG	1.97	0.47
12:AM:71:GLU:HA	12:AM:74:MET:SD	2.54	0.47
13:AN:29:ILE:HB	13:AN:30:ILE:HD12	1.96	0.47
15:AP:46:LYS:C	15:AP:48:GLU:N	2.72	0.47
20:AB:187:ASP:OD1	20:AB:203:ASP:HB3	2.14	0.47
22:BA:74:U:H2'	22:BA:75:G:O4'	2.15	0.47
23:BB:146:A:H2'	23:BB:147:C:C6	2.50	0.47
23:BB:265:A:O2'	23:BB:266:G:H4'	2.15	0.47
23:BB:527:C:O4'	23:BB:527:C:O2	2.33	0.47
23:BB:781:A:OP1	25:BC:216:ARG:NH2	2.47	0.47
23:BB:1184:U:O2'	23:BB:1185:G:H5'	2.15	0.47
23:BB:2093:G:O5'	40:BH:24:GLY:HA3	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:2291:U:O2'	23:BB:2374:C:H1'	2.15	0.47
23:BB:2578:G:C5	26:BD:145:SER:HB2	2.50	0.47
23:BB:2797:U:H3'	23:BB:2798:U:C5	2.50	0.47
23:BB:2812:G:H2'	23:BB:2813:A:C8	2.50	0.47
23:BB:2835:A:N6	23:BB:2878:U:H2'	2.30	0.47
25:BC:80:LEU:HD21	25:BC:109:LEU:HG	1.97	0.47
26:BD:39:ASP:CG	26:BD:41:ALA:H	2.23	0.47
26:BD:114:LYS:HG3	26:BD:115:GLY:H	1.80	0.47
27:BK:20:MET:C	27:BK:41:ILE:HD12	2.40	0.47
30:BY:15:ARG:HG2	30:BY:53:MET:SD	2.55	0.47
30:BY:37:ARG:CG	30:BY:38:GLU:H	2.27	0.47
33:B1:3:GLY:C	33:B1:5:ARG:N	2.73	0.47
35:BV:72:VAL:HG11	35:BV:93:ARG:HA	1.97	0.47
35:BV:81:PRO:HG2	38:BM:20:LEU:HD12	1.97	0.47
41:BJ:11:VAL:HG21	41:BJ:13:ARG:HH11	1.79	0.47
42:BN:23:ASN:O	42:BN:27:SER:HB2	2.15	0.47
42:BN:109:PRO:C	42:BN:110:MET:HE2	2.40	0.47
43:BO:26:LEU:HD13	43:BO:39:VAL:CG2	2.45	0.47
46:BU:13:LEU:HD12	46:BU:68:ASN:O	2.14	0.47
48:BG:84:LYS:HB2	48:BG:132:LEU:HG	1.97	0.47
1:CA:96:U:H2'	1:CA:97:G:H8	1.80	0.47
1:CA:177:G:P	19:CT:23:ARG:HH22	2.38	0.47
1:CA:394:G:H2'	1:CA:395:C:C6	2.50	0.47
1:CA:620:C:C2	3:CD:131:ILE:HD13	2.50	0.47
1:CA:666:G:H5'	1:CA:726:C:H1'	1.97	0.47
1:CA:687:A:C2	1:CA:704:A:C5	3.03	0.47
1:CA:736:C:H5''	5:CF:90:MET:CE	2.45	0.47
1:CA:1053:G:C4'	1:CA:1054:C:H5'	2.45	0.47
1:CA:1060:U:H2'	1:CA:1061:G:C8	2.49	0.47
1:CA:1250:A:H2'	1:CA:1251:A:H8	1.80	0.47
1:CA:1289:A:H61	8:CI:71:ILE:CD1	2.28	0.47
1:CA:1335:U:H5''	1:CA:1337:G:N2	2.30	0.47
1:CA:1366:C:H2'	1:CA:1367:C:C6	2.49	0.47
2:CC:46:LEU:HB3	2:CC:49:ALA:CB	2.45	0.47
3:CD:25:ARG:O	3:CD:26:ALA:HB3	2.14	0.47
7:CH:29:SER:O	7:CH:30:LYS:C	2.58	0.47
8:CI:5:TYR:O	8:CI:19:PHE:HA	2.15	0.47
8:CI:50:PRO:O	8:CI:54:VAL:HG22	2.14	0.47
9:CJ:5:ARG:N	9:CJ:76:ILE:O	2.48	0.47
9:CJ:41:PRO:HG2	9:CJ:42:LEU:H	1.80	0.47
10:CK:63:GLN:HG3	10:CK:98:ALA:HB2	1.96	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:CL:29:LYS:HB3	11:CL:56:LEU:HD22	1.97	0.47
13:CN:17:ASP:HA	13:CN:21:ALA:HB2	1.97	0.47
13:CN:53:ASP:HA	13:CN:58:ARG:HD3	1.97	0.47
15:CP:45:GLU:C	15:CP:47:GLU:H	2.22	0.47
18:CS:79:TYR:CE1	18:CS:80:ARG:HG3	2.50	0.47
20:CB:129:THR:C	20:CB:131:LYS:N	2.73	0.47
23:DB:727:A:OP1	23:DB:1431:A:O2'	2.31	0.47
23:DB:817:C:H2'	23:DB:818:G:O4'	2.15	0.47
23:DB:1085:A:H1'	23:DB:1105:U:H1'	1.96	0.47
23:DB:1683:U:O2'	23:DB:1684:G:H5'	2.15	0.47
23:DB:1908:C:O2'	23:DB:1909:C:H5'	2.15	0.47
23:DB:2135:A:O2'	23:DB:2136:G:H5'	2.14	0.47
23:DB:2368:C:H2'	23:DB:2369:A:H8	1.79	0.47
23:DB:2497:A:H5''	56:DB:3699:HOH:O	2.15	0.47
23:DB:2812:G:H2'	23:DB:2813:A:C8	2.50	0.47
25:DC:143:VAL:HG12	25:DC:144:GLU:H	1.80	0.47
25:DC:243:PRO:O	25:DC:250:GLN:HA	2.15	0.47
26:DD:118:PHE:O	26:DD:119:ALA:HB3	2.14	0.47
26:DD:118:PHE:CD1	26:DD:119:ALA:N	2.83	0.47
29:DE:31:VAL:HG21	29:DE:104:ALA:CB	2.44	0.47
29:DE:59:PRO:CB	29:DE:67:ARG:HH22	2.25	0.47
35:DV:72:VAL:HG11	35:DV:93:ARG:HA	1.97	0.47
37:DL:3:LEU:HA	37:DL:6:LEU:HD21	1.96	0.47
37:DL:50:PHE:O	37:DL:52:GLY:N	2.48	0.47
43:DO:51:ALA:HB3	43:DO:78:VAL:CG2	2.41	0.47
44:DQ:111:LYS:HE3	49:DR:48:LYS:NZ	2.30	0.47
47:DF:113:PHE:HZ	47:DF:175:PRO:HB2	1.79	0.47
50:DT:2:ILE:HG12	50:DT:3:ARG:H	1.79	0.47
52:DW:49:ASN:HB2	52:DW:60:ALA:CA	2.43	0.47
1:AA:437:U:H4'	3:AD:153:ARG:HH12	1.81	0.46
1:AA:525:C:O2'	1:AA:526:C:H5'	2.15	0.46
1:AA:546:A:P	3:AD:68:GLU:HB3	2.55	0.46
1:AA:598:U:H2'	1:AA:599:C:H6	1.79	0.46
1:AA:621:A:H2'	1:AA:622:A:H8	1.79	0.46
1:AA:1332:A:H2'	1:AA:1333:A:O4'	2.15	0.46
6:AG:104:VAL:CG1	6:AG:108:ARG:HH11	2.28	0.46
7:AH:49:LYS:HB3	7:AH:59:GLU:HB2	1.97	0.46
12:AM:90:HIS:C	12:AM:92:ARG:H	2.23	0.46
18:AS:79:TYR:CE1	18:AS:80:ARG:HG3	2.50	0.46
19:AT:27:MET:HG2	19:AT:31:ILE:HD11	1.97	0.46
20:AB:10:LYS:O	20:AB:13:VAL:HG23	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AB:182:VAL:HG12	20:AB:195:VAL:HG13	1.97	0.46
23:BB:686:U:O2'	36:B2:5:PHE:HA	2.15	0.46
23:BB:1203:U:H4'	37:BL:3:LEU:HD12	1.96	0.46
23:BB:1266:G:N2	23:BB:2012:G:H2'	2.30	0.46
23:BB:2070:A:C2	23:BB:2442:C:C2	3.04	0.46
23:BB:2250:G:H8	23:BB:2250:G:O5'	1.97	0.46
23:BB:2471:A:O2'	23:BB:2472:G:O5'	2.33	0.46
23:BB:2480:C:O2'	23:BB:2481:G:H5'	2.14	0.46
23:BB:2758:A:C1'	48:BG:63:GLN:HE22	2.28	0.46
25:BC:209:ALA:HA	25:BC:212:TRP:NE1	2.30	0.46
25:BC:249:VAL:O	25:BC:250:GLN:C	2.58	0.46
26:BD:46:ARG:HH22	26:BD:87:GLY:H	1.62	0.46
26:BD:171:THR:OG1	26:BD:172:VAL:N	2.47	0.46
27:BK:11:ALA:O	27:BK:100:PHE:N	2.44	0.46
33:B1:24:LYS:HG2	33:B1:25:ASN:N	2.30	0.46
33:B1:46:VAL:HG22	33:B1:47:ILE:N	2.23	0.46
37:BL:95:LEU:HB2	37:BL:101:ILE:CG1	2.45	0.46
38:BM:41:LEU:C	38:BM:43:ALA:H	2.23	0.46
39:BX:3:ALA:O	39:BX:6:LEU:HB2	2.15	0.46
40:BH:82:SER:HB2	40:BH:146:VAL:HG13	1.97	0.46
41:BJ:13:ARG:HB3	41:BJ:53:TYR:CD2	2.50	0.46
42:BN:1:MET:HE3	42:BN:3:HIS:CD2	2.50	0.46
44:BQ:51:GLN:O	44:BQ:55:GLN:HG3	2.16	0.46
45:BS:15:GLN:HA	45:BS:18:ARG:CG	2.45	0.46
46:BU:71:ILE:HD11	46:BU:82:VAL:HG22	1.97	0.46
47:BF:66:ILE:HA	47:BF:85:GLY:O	2.14	0.46
49:BR:40:MET:O	49:BR:41:ILE:HD13	2.14	0.46
50:BT:11:LEU:CD2	50:BT:46:ALA:HB1	2.38	0.46
52:BW:68:PHE:CE1	52:BW:79:ILE:HD11	2.51	0.46
1:CA:167:A:H2'	1:CA:168:G:H8	1.80	0.46
1:CA:409:U:OP1	3:CD:23:GLY:HA3	2.15	0.46
1:CA:634:C:H2'	1:CA:635:A:C8	2.50	0.46
1:CA:709:U:H2'	1:CA:710:G:H8	1.80	0.46
1:CA:812:G:H4'	1:CA:812:G:OP1	2.15	0.46
1:CA:921:U:O2	4:CE:23:THR:HG23	2.14	0.46
1:CA:1014:A:H4'	18:CS:13:HIS:CD2	2.50	0.46
1:CA:1030:U:H2'	1:CA:1030:U:O2	2.13	0.46
1:CA:1246:A:H2'	1:CA:1247:U:O4'	2.16	0.46
2:CC:39:ARG:HE	2:CC:54:ILE:HG23	1.80	0.46
2:CC:119:ILE:HD11	2:CC:133:MET:HA	1.98	0.46
3:CD:115:GLN:HG3	3:CD:119:HIS:CE1	2.49	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CD:148:ALA:O	3:CD:151:GLN:HB2	2.15	0.46
5:CF:18:VAL:HG21	5:CF:58:HIS:CD2	2.50	0.46
7:CH:86:LYS:HD2	7:CH:90:GLU:HG2	1.97	0.46
8:CI:94:ARG:HH11	8:CI:94:ARG:CB	2.28	0.46
11:CL:28:GLN:HE21	11:CL:28:GLN:HB3	1.53	0.46
15:CP:46:LYS:C	15:CP:48:GLU:N	2.71	0.46
23:DB:208:C:H2'	23:DB:209:C:H6	1.79	0.46
23:DB:322:A:H5'	23:DB:340:A:C1'	2.45	0.46
23:DB:1099:G:H4'	24:DI:4:VAL:CG1	2.45	0.46
23:DB:1577:C:H2'	23:DB:1578:U:C6	2.49	0.46
23:DB:1842:G:H2'	23:DB:1843:C:C6	2.49	0.46
23:DB:2589:A:H2'	23:DB:2590:A:C8	2.50	0.46
23:DB:2649:C:H2'	23:DB:2650:U:C6	2.50	0.46
23:DB:2740:A:H2'	23:DB:2741:A:C8	2.50	0.46
25:DC:210:ALA:O	25:DC:215:VAL:HB	2.15	0.46
25:DC:249:VAL:O	25:DC:250:GLN:C	2.58	0.46
26:DD:39:ASP:OD2	26:DD:41:ALA:HB3	2.14	0.46
26:DD:186:LEU:HD11	28:DP:3:ILE:HG13	1.97	0.46
27:DK:71:ARG:CG	27:DK:105:ARG:HH21	2.20	0.46
27:DK:76:VAL:HG12	27:DK:77:ILE:N	2.31	0.46
39:DX:24:GLU:O	39:DX:28:LEU:HD23	2.15	0.46
42:DN:17:ARG:O	42:DN:18:GLN:HG2	2.14	0.46
46:DU:71:ILE:HD11	46:DU:82:VAL:HG22	1.96	0.46
48:DG:33:THR:HA	48:DG:34:ARG:NH1	2.30	0.46
48:DG:93:TYR:HA	48:DG:105:SER:O	2.14	0.46
49:DR:4:VAL:HA	49:DR:12:HIS:O	2.15	0.46
50:DT:23:ALA:C	50:DT:25:GLU:H	2.23	0.46
52:DW:19:ARG:N	52:DW:19:ARG:HD3	2.30	0.46
1:AA:46:G:O2'	1:AA:365:U:H1'	2.16	0.46
1:AA:150:U:H2'	1:AA:151:A:H8	1.80	0.46
1:AA:261:U:H2'	1:AA:263:A:OP2	2.14	0.46
1:AA:812:G:OP1	1:AA:812:G:H4'	2.14	0.46
1:AA:1014:A:H4'	18:AS:13:HIS:CD2	2.50	0.46
1:AA:1084:G:H5'	1:AA:1102:A:OP2	2.16	0.46
3:AD:101:VAL:HG13	3:AD:106:PHE:HB2	1.97	0.46
5:AF:85:ILE:HG22	5:AF:86:ARG:N	2.30	0.46
7:AH:29:SER:O	7:AH:30:LYS:C	2.58	0.46
8:AI:5:TYR:HB3	8:AI:88:GLU:OE2	2.14	0.46
9:AJ:41:PRO:HG2	9:AJ:42:LEU:H	1.80	0.46
11:AL:28:GLN:HE21	11:AL:28:GLN:HB3	1.53	0.46
12:AM:44:ILE:HA	12:AM:47:LEU:HD12	1.97	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:AQ:29:LYS:HG3	16:AQ:34:GLY:O	2.15	0.46
16:AQ:46:HIS:NE2	16:AQ:48:GLU:HB2	2.30	0.46
19:AT:77:ASN:O	19:AT:81:GLN:HG3	2.14	0.46
23:BB:99:U:O2	23:BB:99:U:H5'	2.15	0.46
23:BB:454:A:H3'	23:BB:455:C:H5'	1.96	0.46
23:BB:635:C:O2'	23:BB:639:U:H5''	2.15	0.46
23:BB:673:C:C2'	23:BB:674:G:H5'	2.45	0.46
23:BB:945:A:OP2	23:BB:945:A:H4'	2.15	0.46
23:BB:947:A:O2'	23:BB:984:A:H2	1.98	0.46
23:BB:1383:A:H2	23:BB:1405:U:O2	1.98	0.46
23:BB:2078:C:O2'	23:BB:2079:U:H5'	2.15	0.46
23:BB:2101:A:H2'	23:BB:2102:G:C8	2.50	0.46
23:BB:2389:G:H5''	23:BB:2390:U:H5'	1.97	0.46
23:BB:2465:C:O2'	23:BB:2466:C:H5'	2.16	0.46
23:BB:2722:G:H2'	23:BB:2723:C:H6	1.81	0.46
23:BB:2753:A:H2'	23:BB:2754:U:C6	2.50	0.46
23:BB:2817:U:O2'	23:BB:2837:A:H1'	2.15	0.46
26:BD:168:GLU:O	26:BD:170:VAL:HG13	2.15	0.46
28:BP:62:LYS:HE3	28:BP:64:SER:OG	2.14	0.46
29:BE:47:LYS:HA	29:BE:51:GLU:OE2	2.15	0.46
31:B0:53:VAL:HG21	42:BN:98:LEU:CD1	2.45	0.46
34:B3:7:ARG:HG3	34:B3:7:ARG:NH1	2.30	0.46
37:BL:50:PHE:O	37:BL:52:GLY:N	2.49	0.46
37:BL:113:ALA:HB3	37:BL:115:GLU:OE1	2.15	0.46
38:BM:59:ARG:O	38:BM:60:GLN:C	2.58	0.46
40:BH:14:SER:C	40:BH:16:GLY:N	2.72	0.46
40:BH:99:ILE:HG22	40:BH:100:ALA:N	2.30	0.46
41:BJ:59:ALA:O	41:BJ:62:VAL:HG12	2.15	0.46
42:BN:38:LEU:CB	42:BN:39:PRO:HD3	2.40	0.46
42:BN:82:GLU:C	42:BN:84:GLY:N	2.72	0.46
43:BO:67:ASN:N	43:BO:70:ALA:HB3	2.27	0.46
44:BQ:91:ARG:NH2	49:BR:11:GLN:O	2.48	0.46
47:BF:19:PHE:HE1	47:BF:167:ALA:HB2	1.81	0.46
47:BF:32:LYS:H	47:BF:95:MET:HE2	1.80	0.46
47:BF:162:ASP:O	47:BF:166:ARG:HD2	2.15	0.46
47:BF:177:ARG:NH2	47:BF:178:LYS:H	2.13	0.46
48:BG:26:LYS:HA	48:BG:32:LEU:H	1.80	0.46
50:BT:1:MET:CG	50:BT:2:ILE:H	2.28	0.46
50:BT:25:GLU:C	50:BT:27:SER:H	2.22	0.46
50:BT:43:ILE:HG21	50:BT:58:VAL:HG21	1.96	0.46
51:BZ:32:ASN:O	51:BZ:33:LEU:O	2.33	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:131:A:H2'	1:CA:132:C:H6	1.80	0.46
1:CA:470:C:H2'	1:CA:471:U:H6	1.78	0.46
1:CA:708:C:H2'	1:CA:709:U:C6	2.51	0.46
1:CA:803:G:H2'	1:CA:804:U:C6	2.49	0.46
1:CA:1151:A:O2'	1:CA:1152:A:H8	1.97	0.46
1:CA:1320:C:H2'	1:CA:1321:U:O4'	2.15	0.46
5:CF:18:VAL:HG11	5:CF:58:HIS:NE2	2.31	0.46
6:CG:144:ALA:O	6:CG:145:GLU:HB3	2.14	0.46
9:CJ:26:VAL:O	9:CJ:30:LYS:HG3	2.16	0.46
17:CR:52:ARG:CB	17:CR:56:ARG:HH21	2.26	0.46
18:CS:71:GLY:C	18:CS:73:PHE:H	2.23	0.46
20:CB:115:ASP:O	20:CB:119:GLN:HG2	2.15	0.46
23:DB:160:A:N6	23:DB:167:A:H1'	2.30	0.46
23:DB:309:A:H4'	46:DU:15:GLY:HA3	1.98	0.46
23:DB:553:G:O2'	23:DB:554:U:H5'	2.15	0.46
23:DB:718:A:H5'	23:DB:719:C:C5	2.50	0.46
23:DB:840:C:H2'	23:DB:841:G:H8	1.80	0.46
23:DB:1080:A:C4'	24:DI:126:ARG:HD2	2.43	0.46
23:DB:1099:G:H3'	24:DI:2:LYS:CB	2.45	0.46
23:DB:1651:G:OP1	42:DN:40:LYS:HG3	2.14	0.46
23:DB:2027:G:O2'	23:DB:2028:U:H5'	2.14	0.46
23:DB:2087:G:O2'	23:DB:2088:A:H5'	2.15	0.46
23:DB:2146:C:H4'	23:DB:2148:G:C1'	2.44	0.46
23:DB:2785:C:H2'	23:DB:2786:U:C6	2.50	0.46
23:DB:2815:C:H2'	23:DB:2816:G:C8	2.51	0.46
23:DB:2868:A:H2'	23:DB:2869:G:H8	1.77	0.46
23:DB:2889:C:H2'	23:DB:2890:G:C8	2.50	0.46
24:DI:69:VAL:O	24:DI:69:VAL:HG23	2.14	0.46
27:DK:20:MET:O	27:DK:41:ILE:HD12	2.16	0.46
28:DP:47:ILE:HG13	28:DP:48:ALA:N	2.30	0.46
30:DY:21:ALA:O	30:DY:24:LEU:HB3	2.14	0.46
34:D3:56:LEU:O	34:D3:59:ALA:HB3	2.15	0.46
36:D2:21:ARG:HD3	36:D2:43:THR:HG21	1.96	0.46
37:DL:4:ASN:N	37:DL:4:ASN:ND2	2.61	0.46
37:DL:29:LYS:C	37:DL:31:GLY:N	2.71	0.46
37:DL:40:SER:C	37:DL:41:ARG:HG3	2.39	0.46
38:DM:41:LEU:C	38:DM:43:ALA:H	2.22	0.46
42:DN:81:ASN:O	42:DN:85:PRO:HD2	2.15	0.46
48:DG:91:VAL:O	48:DG:93:TYR:N	2.45	0.46
49:DR:57:GLY:HA2	49:DR:102:SER:O	2.15	0.46
1:AA:69:G:H2'	1:AA:70:U:C6	2.50	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:140:U:H2'	1:AA:141:G:C8	2.50	0.46
1:AA:366:A:O2'	1:AA:394:G:N2	2.48	0.46
1:AA:551:U:O2'	1:AA:552:U:H5'	2.15	0.46
1:AA:620:C:C2	3:AD:131:ILE:HD13	2.51	0.46
1:AA:693:G:H2'	1:AA:694:A:O4'	2.15	0.46
1:AA:707:U:H2'	1:AA:708:C:C6	2.50	0.46
1:AA:1234:C:H1'	1:AA:1364:U:O2	2.15	0.46
1:AA:1430:A:H2'	1:AA:1431:A:O4'	2.16	0.46
2:AC:13:ILE:HD13	2:AC:13:ILE:N	2.30	0.46
3:AD:94:GLU:OE2	3:AD:190:LEU:HD21	2.16	0.46
4:AE:156:ARG:HB3	7:AH:43:GLY:O	2.15	0.46
5:AF:37:HIS:O	5:AF:97:THR:HG23	2.15	0.46
8:AI:67:LYS:HB2	8:AI:67:LYS:NZ	2.30	0.46
9:AJ:5:ARG:N	9:AJ:76:ILE:O	2.49	0.46
10:AK:63:GLN:HG3	10:AK:98:ALA:HB2	1.96	0.46
12:AM:1:ALA:O	12:AM:3:ILE:HG13	2.15	0.46
13:AN:70:HIS:O	13:AN:71:GLY:C	2.58	0.46
15:AP:20:VAL:HG21	15:AP:32:PHE:CD2	2.49	0.46
18:AS:66:VAL:HG23	18:AS:67:GLY:H	1.80	0.46
19:AT:53:MET:HE3	19:AT:54:GLN:HA	1.97	0.46
20:AB:71:THR:HG23	20:AB:94:ARG:H	1.80	0.46
20:AB:128:LEU:HG	20:AB:132:GLU:HG2	1.97	0.46
23:BB:68:G:H2'	23:BB:69:C:H6	1.80	0.46
23:BB:309:A:N3	23:BB:329:G:O2'	2.47	0.46
23:BB:548:G:H8	23:BB:548:G:O5'	1.98	0.46
23:BB:599:A:O2'	23:BB:600:G:H5'	2.14	0.46
23:BB:1219:U:H2'	23:BB:1220:G:C8	2.49	0.46
23:BB:1577:C:H2'	23:BB:1578:U:O4'	2.15	0.46
23:BB:1683:U:O2'	23:BB:1684:G:H5'	2.16	0.46
23:BB:2598:A:H5''	25:BC:233:GLY:HA2	1.97	0.46
23:BB:2685:G:O2'	23:BB:2686:G:H5'	2.16	0.46
23:BB:2896:C:H2'	23:BB:2897:U:H6	1.77	0.46
26:BD:39:ASP:OD2	26:BD:41:ALA:HB3	2.15	0.46
26:BD:90:PHE:HD2	26:BD:94:GLN:HG3	1.80	0.46
27:BK:47:ILE:HG23	27:BK:49:ARG:H	1.80	0.46
27:BK:105:ARG:HD3	27:BK:105:ARG:N	2.24	0.46
29:BE:48:THR:C	29:BE:50:ALA:N	2.73	0.46
29:BE:48:THR:C	29:BE:50:ALA:H	2.23	0.46
29:BE:52:VAL:HG11	29:BE:81:GLY:HA3	1.97	0.46
29:BE:160:ALA:C	29:BE:162:ARG:H	2.22	0.46
30:BY:8:GLN:HB3	30:BY:31:ILE:O	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BV:32:GLY:O	35:BV:93:ARG:HG3	2.15	0.46
38:BM:38:ARG:HH11	38:BM:38:ARG:CB	2.20	0.46
41:BJ:8:PRO:HG3	41:BJ:48:VAL:HG13	1.97	0.46
41:BJ:65:THR:HG23	41:BJ:66:GLY:N	2.31	0.46
42:BN:3:HIS:O	42:BN:4:ARG:HB2	2.14	0.46
45:BS:46:LEU:O	45:BS:50:VAL:HG23	2.15	0.46
46:BU:48:VAL:O	46:BU:48:VAL:HG22	2.15	0.46
47:BF:46:LYS:HZ3	47:BF:46:LYS:HA	1.81	0.46
1:CA:308:C:H2'	1:CA:309:A:H8	1.80	0.46
1:CA:592:G:H2'	1:CA:593:U:C6	2.50	0.46
1:CA:664:G:P	17:CR:52:ARG:HH21	2.39	0.46
1:CA:737:C:H2'	1:CA:738:C:H6	1.80	0.46
1:CA:928:G:O2'	1:CA:929:G:H5'	2.16	0.46
1:CA:1533:C:C2'	1:CA:1534:A:H3'	2.29	0.46
3:CD:84:ASN:ND2	3:CD:84:ASN:C	2.70	0.46
13:CN:42:ASN:ND2	13:CN:45:LEU:HD22	2.30	0.46
13:CN:70:HIS:O	13:CN:71:GLY:C	2.59	0.46
23:DB:4:U:H2'	23:DB:5:A:C8	2.50	0.46
23:DB:77:G:H2'	23:DB:78:U:O4'	2.15	0.46
23:DB:189:G:H2'	23:DB:205:G:N2	2.31	0.46
23:DB:508:A:HO2'	23:DB:509:C:P	2.38	0.46
23:DB:950:G:H2'	23:DB:951:C:H6	1.80	0.46
23:DB:1532:A:H2'	23:DB:1532:A:N3	2.29	0.46
23:DB:1583:A:H4'	23:DB:1585:C:C4	2.50	0.46
23:DB:2260:C:O2'	23:DB:2261:C:H5'	2.15	0.46
25:DC:4:LYS:HE3	25:DC:13:ARG:O	2.15	0.46
26:DD:91:THR:HG23	26:DD:92:VAL:N	2.25	0.46
26:DD:101:PHE:HA	26:DD:104:VAL:HG21	1.96	0.46
26:DD:123:LYS:O	26:DD:165:MET:HE1	2.16	0.46
27:DK:53:LYS:HD3	27:DK:53:LYS:H	1.80	0.46
27:DK:118:LEU:C	27:DK:120:PRO:HD2	2.39	0.46
29:DE:48:THR:C	29:DE:50:ALA:H	2.23	0.46
33:D1:36:LYS:HA	33:D1:46:VAL:O	2.15	0.46
40:DH:41:LYS:O	40:DH:44:ILE:HG12	2.16	0.46
40:DH:127:GLU:HA	40:DH:145:ASN:CA	2.39	0.46
43:DO:30:ARG:HH11	43:DO:30:ARG:HG3	1.80	0.46
45:DS:61:ASN:HB3	45:DS:62:ASP:H	1.51	0.46
46:DU:95:PHE:CE1	46:DU:102:ILE:HB	2.30	0.46
47:DF:131:VAL:C	47:DF:133:GLU:H	2.23	0.46
48:DG:7:PRO:O	48:DG:8:VAL:HB	2.15	0.46
1:AA:159:G:N1	1:AA:163:C:N4	2.63	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:190:A:H8	1:AA:190:A:O5'	1.98	0.46
1:AA:775:G:O2'	1:AA:776:G:H5'	2.15	0.46
1:AA:987:G:H2'	1:AA:988:G:H8	1.80	0.46
1:AA:1187:G:P	8:AI:114:LYS:HE3	2.55	0.46
1:AA:1206:G:H2'	1:AA:1207:G:O4'	2.16	0.46
1:AA:1260:G:OP1	1:AA:1284:C:H4'	2.15	0.46
1:AA:1302:C:C2	12:AM:16:ILE:HD12	2.50	0.46
1:AA:1460:C:H2'	1:AA:1461:G:C8	2.51	0.46
2:AC:30:ASP:HA	13:AN:64:ARG:NH2	2.31	0.46
2:AC:137:VAL:HG13	2:AC:148:ILE:HG21	1.98	0.46
7:AH:36:ALA:O	7:AH:45:ILE:HD11	2.15	0.46
13:AN:60:ARG:O	13:AN:62:ARG:N	2.49	0.46
20:AB:20:ARG:HA	20:AB:20:ARG:NE	2.30	0.46
22:BA:112:G:O2'	22:BA:113:C:H5'	2.15	0.46
23:BB:919:U:O5'	23:BB:919:U:H6	1.98	0.46
23:BB:1221:C:O2'	23:BB:1222:U:H5'	2.15	0.46
23:BB:1433:A:H2'	23:BB:1434:A:O4'	2.15	0.46
23:BB:1439:A:C5	23:BB:1552:A:N6	2.83	0.46
23:BB:1678:A:H2'	23:BB:1679:A:O4'	2.16	0.46
23:BB:1985:C:O2'	23:BB:1986:C:H5'	2.14	0.46
23:BB:2147:A:H5'	23:BB:2148:G:O4'	2.15	0.46
23:BB:2746:U:H4'	48:BG:137:LYS:HG3	1.97	0.46
24:BI:5:GLN:HG2	24:BI:6:ALA:H	1.78	0.46
25:BC:91:ALA:HB2	25:BC:105:ALA:HB2	1.96	0.46
25:BC:130:PRO:CG	25:BC:133:ASN:HD22	2.18	0.46
26:BD:38:LYS:HD3	26:BD:45:TYR:OH	2.14	0.46
26:BD:46:ARG:HH12	26:BD:88:GLU:HG3	1.81	0.46
27:BK:107:LEU:C	27:BK:109:SER:N	2.73	0.46
29:BE:58:LYS:HB2	29:BE:60:TRP:HB2	1.98	0.46
34:B3:61:LEU:CB	34:B3:64:ALA:HB2	2.44	0.46
37:BL:85:VAL:HG22	37:BL:94:THR:HG22	1.97	0.46
37:BL:95:LEU:HB2	37:BL:101:ILE:HG13	1.98	0.46
38:BM:78:LEU:HD12	38:BM:79:ALA:H	1.80	0.46
40:BH:108:VAL:HG12	40:BH:109:GLU:N	2.28	0.46
42:BN:12:ARG:HG2	42:BN:16:HIS:HB2	1.97	0.46
45:BS:52:GLU:HA	45:BS:55:ILE:CG2	2.42	0.46
48:BG:10:VAL:HG12	48:BG:14:VAL:HG21	1.97	0.46
48:BG:26:LYS:HA	48:BG:32:LEU:CA	2.45	0.46
48:BG:96:ALA:O	48:BG:97:VAL:HB	2.16	0.46
48:BG:167:VAL:HG23	48:BG:168:VAL:N	2.26	0.46
1:CA:87:C:C3'	1:CA:88:U:H5''	2.46	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:580:C:H2'	1:CA:581:G:O4'	2.16	0.46
1:CA:586:C:C5'	7:CH:81:GLY:HA2	2.45	0.46
1:CA:725:G:H2'	1:CA:726:C:C6	2.50	0.46
1:CA:1217:C:OP1	13:CN:8:ARG:HD2	2.16	0.46
1:CA:1430:A:H2'	1:CA:1431:A:O4'	2.16	0.46
1:CA:1527:U:O2'	1:CA:1528:U:H5'	2.15	0.46
3:CD:58:GLN:O	3:CD:62:ARG:HG2	2.15	0.46
7:CH:94:VAL:HG12	7:CH:99:GLY:HA3	1.97	0.46
8:CI:71:ILE:H	8:CI:71:ILE:CD1	2.26	0.46
12:CM:50:GLY:HA2	12:CM:53:ASP:OD1	2.16	0.46
12:CM:76:ILE:O	12:CM:80:MET:HG3	2.15	0.46
19:CT:72:ALA:O	19:CT:75:LYS:HD3	2.14	0.46
20:CB:148:GLY:C	20:CB:150:ILE:H	2.23	0.46
21:CU:40:PRO:C	21:CU:42:THR:H	2.23	0.46
22:DA:35:C:H2'	22:DA:36:C:O4'	2.16	0.46
23:DB:123:G:H2'	23:DB:124:G:H8	1.80	0.46
23:DB:276:U:H2'	23:DB:278:A:H2	1.77	0.46
23:DB:419:U:H2'	23:DB:420:C:H6	1.79	0.46
23:DB:533:G:H5'	44:DQ:23:TYR:CD2	2.50	0.46
23:DB:593:U:H2'	23:DB:594:U:C6	2.50	0.46
23:DB:677:A:O2'	23:DB:2071:A:H5'	2.15	0.46
23:DB:1025:G:OP1	23:DB:1025:G:H8	1.99	0.46
23:DB:1827:U:H2'	23:DB:1828:G:H5'	1.96	0.46
23:DB:2143:C:H2'	23:DB:2144:G:C4'	2.45	0.46
23:DB:2335:A:OP1	43:DO:13:ARG:NH1	2.48	0.46
23:DB:2751:G:OP2	48:DG:2:ARG:HD2	2.15	0.46
26:DD:38:LYS:HD3	26:DD:45:TYR:OH	2.16	0.46
26:DD:118:PHE:HZ	26:DD:123:LYS:NZ	2.14	0.46
27:DK:34:GLY:O	27:DK:36:GLY:N	2.48	0.46
28:DP:103:THR:HG22	28:DP:104:GLY:H	1.79	0.46
37:DL:103:ILE:H	37:DL:103:ILE:CD1	2.23	0.46
42:DN:39:PRO:C	42:DN:41:ALA:N	2.74	0.46
46:DU:8:ASP:HB3	46:DU:71:ILE:HG22	1.97	0.46
46:DU:21:ARG:HG3	46:DU:21:ARG:NH1	2.31	0.46
47:DF:100:GLU:C	47:DF:102:LEU:N	2.68	0.46
47:DF:102:LEU:HD13	47:DF:102:LEU:C	2.41	0.46
50:DT:85:VAL:C	50:DT:86:THR:HG23	2.41	0.46
1:AA:255:G:O3'	16:AQ:18:LYS:HD2	2.14	0.46
1:AA:531:U:H5'	1:AA:531:U:H6	1.80	0.46
1:AA:915:A:H2'	1:AA:916:U:H5'	1.96	0.46
1:AA:1141:C:H2'	1:AA:1142:G:H8	1.80	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1237:C:H3'	1:AA:1238:A:H5'	1.98	0.46
1:AA:1437:A:H2'	1:AA:1438:G:C8	2.49	0.46
2:AC:111:ASP:OD2	2:AC:114:LEU:HG	2.16	0.46
2:AC:149:LYS:HA	2:AC:168:ARG:HB2	1.97	0.46
2:AC:178:ARG:HG2	2:AC:178:ARG:O	2.15	0.46
3:AD:157:ALA:O	3:AD:160:LEU:HD22	2.16	0.46
10:AK:70:ALA:C	10:AK:72:ALA:N	2.73	0.46
17:AR:52:ARG:CB	17:AR:56:ARG:HH21	2.28	0.46
18:AS:14:LEU:HG	18:AS:15:LEU:N	2.30	0.46
18:AS:62:THR:HG22	18:AS:63:ASP:H	1.81	0.46
20:AB:71:THR:HG23	20:AB:94:ARG:N	2.31	0.46
20:AB:125:PHE:HD2	20:AB:125:PHE:H	1.64	0.46
21:AU:11:PHE:O	21:AU:11:PHE:CD1	2.65	0.46
23:BB:19:A:H2'	23:BB:20:C:H6	1.79	0.46
23:BB:100:U:O2	23:BB:100:U:C2'	2.52	0.46
23:BB:246:C:H2'	23:BB:247:G:H5'	1.97	0.46
23:BB:533:G:H5'	44:BQ:23:TYR:CD2	2.50	0.46
23:BB:674:G:H2'	23:BB:804:A:H61	1.80	0.46
23:BB:877:A:C2	23:BB:900:A:N7	2.84	0.46
23:BB:973:A:H8	23:BB:973:A:OP1	1.98	0.46
23:BB:1010:A:N3	23:BB:1153:C:H1'	2.30	0.46
23:BB:1053:C:H2'	23:BB:1054:A:H8	1.80	0.46
23:BB:1105:U:H2'	23:BB:1106:G:H8	1.76	0.46
23:BB:1181:U:O2'	23:BB:1182:G:H5'	2.16	0.46
23:BB:1343:G:O4'	23:BB:1597:A:H2'	2.16	0.46
23:BB:1439:A:N7	23:BB:1440:U:C6	2.83	0.46
23:BB:2286:G:O6	33:B1:22:THR:HG21	2.16	0.46
23:BB:2332:C:H4'	23:BB:2336:A:C6	2.51	0.46
23:BB:2430:A:H5'	23:BB:2431:U:OP2	2.15	0.46
23:BB:2649:C:H2'	23:BB:2650:U:C6	2.51	0.46
23:BB:2803:G:O2'	23:BB:2804:U:H5'	2.16	0.46
24:BI:35:MET:SD	24:BI:35:MET:C	2.98	0.46
25:BC:155:ARG:HH11	25:BC:155:ARG:CB	2.29	0.46
25:BC:239:PHE:HD1	25:BC:241:LYS:H	1.64	0.46
26:BD:33:ARG:NE	26:BD:74:GLU:HB3	2.30	0.46
26:BD:48:ILE:HG23	26:BD:82:PHE:HB2	1.97	0.46
26:BD:118:PHE:CD1	26:BD:119:ALA:N	2.84	0.46
28:BP:1:SER:N	28:BP:4:ILE:HB	2.31	0.46
28:BP:4:ILE:C	28:BP:6:GLN:H	2.23	0.46
28:BP:20:ARG:O	28:BP:46:VAL:HG21	2.15	0.46
29:BE:188:MET:HG2	29:BE:193:VAL:CG2	2.45	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BL:4:ASN:N	37:BL:4:ASN:ND2	2.61	0.46
38:BM:105:MET:HE3	38:BM:117:PHE:CZ	2.51	0.46
40:BH:62:LEU:HD13	40:BH:66:ASN:ND2	2.29	0.46
40:BH:79:THR:HG22	40:BH:145:ASN:CB	2.44	0.46
42:BN:41:ALA:C	42:BN:43:GLU:N	2.72	0.46
47:BF:108:PRO:C	47:BF:110:ILE:H	2.24	0.46
48:BG:7:PRO:O	48:BG:8:VAL:HB	2.16	0.46
48:BG:84:LYS:HG3	48:BG:131:VAL:C	2.41	0.46
49:BR:78:ARG:HH21	49:BR:78:ARG:HG3	1.79	0.46
50:BT:18:GLU:O	50:BT:20:ALA:N	2.42	0.46
50:BT:69:ARG:HA	50:BT:69:ARG:NH1	2.30	0.46
51:BZ:20:HIS:O	51:BZ:21:ALA:HB3	2.15	0.46
1:CA:36:C:O3'	11:CL:119:LYS:HA	2.15	0.46
1:CA:525:C:O2'	1:CA:526:C:H5'	2.15	0.46
1:CA:711:G:O2'	1:CA:712:A:H5'	2.16	0.46
1:CA:766:A:H2'	1:CA:767:A:O4'	2.15	0.46
1:CA:780:A:O2'	1:CA:781:A:H5''	2.16	0.46
1:CA:896:C:O2'	1:CA:897:C:H5'	2.16	0.46
1:CA:994:A:N1	1:CA:1047:G:H4'	2.31	0.46
1:CA:1031:C:H4'	1:CA:1032:G:C5'	2.45	0.46
3:CD:81:LEU:HB2	3:CD:88:ASN:ND2	2.31	0.46
3:CD:118:SER:HA	3:CD:130:ASN:HB2	1.95	0.46
4:CE:84:VAL:HG11	4:CE:146:MET:HB3	1.97	0.46
6:CG:144:ALA:O	6:CG:146:ALA:N	2.41	0.46
7:CH:124:ILE:HG22	7:CH:125:ILE:H	1.80	0.46
8:CI:39:GLY:O	8:CI:41:GLU:HG3	2.16	0.46
9:CJ:37:ARG:NH1	9:CJ:77:VAL:HG21	2.30	0.46
12:CM:64:VAL:HA	12:CM:68:LEU:CD1	2.46	0.46
20:CB:86:CYS:SG	20:CB:87:ASP:N	2.86	0.46
20:CB:125:PHE:HA	20:CB:127:LYS:HZ1	1.80	0.46
23:DB:544:C:H2'	23:DB:545:U:C5	2.51	0.46
23:DB:680:C:H2'	23:DB:681:G:C8	2.50	0.46
23:DB:1099:G:O5'	24:DI:3:LYS:C	2.57	0.46
23:DB:1945:G:C4	23:DB:1946:U:C5	3.04	0.46
23:DB:2336:A:H62	52:DW:40:ARG:CB	2.28	0.46
23:DB:2428:G:H5''	23:DB:2429:G:OP1	2.16	0.46
23:DB:2688:G:H1'	23:DB:2721:A:N6	2.30	0.46
23:DB:2732:G:H3'	23:DB:2733:A:H5'	1.98	0.46
24:DI:80:LYS:HG3	24:DI:135:MET:HE1	1.97	0.46
25:DC:123:ILE:HD13	25:DC:135:PRO:HG2	1.98	0.46
26:DD:107:VAL:H	26:DD:205:PRO:HA	1.81	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:DK:107:LEU:C	27:DK:109:SER:N	2.74	0.46
28:DP:25:VAL:HA	28:DP:85:VAL:HA	1.97	0.46
30:DY:37:ARG:CG	30:DY:38:GLU:H	2.27	0.46
31:D0:43:THR:HG23	31:D0:47:TYR:O	2.15	0.46
35:DV:29:ILE:HG13	35:DV:88:HIS:CE1	2.51	0.46
35:DV:38:LEU:HG	35:DV:40:ILE:HG23	1.96	0.46
37:DL:91:ASP:HB2	37:DL:94:THR:OG1	2.15	0.46
38:DM:2:LEU:CD2	38:DM:46:ILE:HD11	2.45	0.46
40:DH:14:SER:C	40:DH:16:GLY:N	2.72	0.46
40:DH:96:THR:HG23	40:DH:97:ARG:CD	2.45	0.46
44:DQ:96:ASP:C	44:DQ:98:ALA:N	2.71	0.46
47:DF:7:TYR:HA	47:DF:11:VAL:CG2	2.45	0.46
47:DF:62:GLN:HE22	47:DF:90:LEU:HA	1.80	0.46
52:DW:8:SER:O	52:DW:9:THR:HB	2.16	0.46
52:DW:49:ASN:C	52:DW:50:VAL:HG22	2.40	0.46
1:AA:374:A:OP1	1:AA:452:A:N1	2.49	0.46
1:AA:404:G:H2'	1:AA:405:U:C6	2.51	0.46
1:AA:432:A:H2'	1:AA:433:G:H5'	1.97	0.46
1:AA:634:C:H2'	1:AA:635:A:C8	2.51	0.46
1:AA:993:G:H2'	1:AA:995:C:H41	1.80	0.46
1:AA:1298:U:H2'	6:AG:113:LYS:HZ1	1.78	0.46
1:AA:1405:G:H2'	1:AA:1406:U:O4'	2.16	0.46
3:AD:32:LYS:O	3:AD:35:GLN:HB2	2.15	0.46
3:AD:165:GLU:CG	3:AD:166:LYS:N	2.79	0.46
5:AF:51:ILE:HD11	5:AF:86:ARG:HG3	1.97	0.46
6:AG:145:GLU:C	6:AG:147:ASN:N	2.72	0.46
8:AI:43:ALA:C	8:AI:45:MET:H	2.23	0.46
10:AK:30:ILE:O	10:AK:30:ILE:HG13	2.15	0.46
10:AK:92:ARG:HH22	10:AK:111:ASP:CG	2.24	0.46
11:AL:3:VAL:O	11:AL:7:VAL:HG23	2.15	0.46
11:AL:78:VAL:O	11:AL:102:ASP:HB2	2.15	0.46
18:AS:68:HIS:HB3	18:AS:72:GLU:CD	2.41	0.46
20:AB:68:PHE:CE1	20:AB:88:GLN:HB3	2.50	0.46
20:AB:209:VAL:HG23	20:AB:210:THR:N	2.30	0.46
23:BB:68:G:H2'	23:BB:69:C:C6	2.50	0.46
23:BB:126:A:C5'	36:B2:19:ARG:HG3	2.27	0.46
23:BB:322:A:C2	23:BB:340:A:C6	3.04	0.46
23:BB:359:G:O2'	23:BB:360:U:H5'	2.14	0.46
23:BB:677:A:O2'	23:BB:2071:A:H5'	2.15	0.46
23:BB:826:U:H5''	23:BB:2428:G:O3'	2.14	0.46
23:BB:920:A:H2'	23:BB:921:C:C6	2.50	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:1438:U:H2'	23:BB:1439:A:O4'	2.15	0.46
23:BB:2030:A:H4'	23:BB:2031:A:H5'	1.98	0.46
23:BB:2153:C:O2	23:BB:2153:C:H2'	2.16	0.46
23:BB:2231:U:O2'	23:BB:2232:C:H5'	2.16	0.46
23:BB:2774:C:H2'	23:BB:2775:G:O4'	2.15	0.46
25:BC:141:HIS:HB3	25:BC:190:THR:OG1	2.16	0.46
27:BK:42:THR:O	27:BK:43:ILE:C	2.59	0.46
27:BK:76:VAL:HG12	27:BK:77:ILE:N	2.31	0.46
27:BK:79:PHE:HD2	28:BP:69:VAL:HG12	1.80	0.46
28:BP:4:ILE:HA	28:BP:7:LEU:HB3	1.98	0.46
28:BP:50:ARG:HD3	28:BP:56:SER:HB3	1.97	0.46
29:BE:59:PRO:HB2	29:BE:67:ARG:NH2	2.29	0.46
29:BE:73:ILE:O	29:BE:73:ILE:HG12	2.16	0.46
29:BE:111:GLU:HG2	29:BE:114:ARG:HH21	1.81	0.46
29:BE:153:LEU:HG	29:BE:154:ASP:H	1.79	0.46
35:BV:70:ILE:HD13	35:BV:70:ILE:H	1.81	0.46
37:BL:89:VAL:HA	37:BL:121:THR:O	2.16	0.46
40:BH:49:ALA:HB3	40:BH:50:ARG:NH2	2.31	0.46
44:BQ:9:ALA:C	44:BQ:11:ALA:N	2.72	0.46
44:BQ:91:ARG:HE	44:BQ:94:LEU:CD2	2.28	0.46
45:BS:26:GLY:N	45:BS:71:VAL:HG13	2.30	0.46
52:BW:47:GLY:HA3	52:BW:80:SER:CB	2.45	0.46
1:CA:261:U:H2'	1:CA:263:A:OP2	2.16	0.46
1:CA:284:C:H2'	1:CA:285:C:H6	1.81	0.46
1:CA:430:A:P	3:CD:6:PRO:HA	2.56	0.46
1:CA:948:C:H2'	1:CA:949:A:H8	1.79	0.46
1:CA:1114:C:H2'	1:CA:1115:U:C6	2.51	0.46
1:CA:1244:G:H2'	1:CA:1245:C:H6	1.78	0.46
1:CA:1458:G:H2'	1:CA:1459:G:H8	1.81	0.46
2:CC:16:PRO:HG2	2:CC:53:ARG:NH2	2.30	0.46
6:CG:71:THR:C	6:CG:90:VAL:HG22	2.40	0.46
6:CG:94:ARG:NH1	6:CG:98:LEU:HD11	2.31	0.46
6:CG:104:VAL:O	6:CG:108:ARG:HG3	2.16	0.46
12:CM:95:PRO:HB2	12:CM:99:GLN:OE1	2.15	0.46
18:CS:68:HIS:HB3	18:CS:72:GLU:CD	2.41	0.46
20:CB:121:GLN:CD	20:CB:122:ASP:N	2.74	0.46
20:CB:174:GLU:O	20:CB:177:ASN:HB3	2.16	0.46
21:CU:3:ILE:HG23	21:CU:18:PHE:CD1	2.51	0.46
22:DA:17:C:H2'	22:DA:18:G:O4'	2.16	0.46
22:DA:54:G:N2	47:DF:25:MET:HE3	2.28	0.46
23:DB:483:A:O2'	46:DU:56:GLY:HA2	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:532:A:H4'	23:DB:533:G:C8	2.49	0.46
23:DB:670:A:H5''	37:DL:42:SER:HB2	1.97	0.46
23:DB:1260:A:H2'	23:DB:1261:C:H6	1.80	0.46
23:DB:1683:U:H2'	23:DB:1684:G:H8	1.80	0.46
23:DB:1947:C:H2'	23:DB:1948:G:C8	2.46	0.46
23:DB:2299:U:H2'	23:DB:2300:C:C6	2.51	0.46
23:DB:2309:A:H2'	23:DB:2310:C:C6	2.51	0.46
23:DB:2353:G:N3	52:DW:30:VAL:CG1	2.78	0.46
23:DB:2800:A:H2'	23:DB:2801:G:C8	2.51	0.46
31:D0:43:THR:OG1	31:D0:47:TYR:HB2	2.15	0.46
32:D4:36:ARG:O	32:D4:37:GLN:C	2.58	0.46
33:D1:24:LYS:HG2	33:D1:25:ASN:N	2.30	0.46
38:DM:59:ARG:O	38:DM:60:GLN:C	2.58	0.46
45:DS:29:VAL:HG11	45:DS:55:ILE:CD1	2.44	0.46
46:DU:41:VAL:O	46:DU:42:LYS:HB2	2.16	0.46
47:DF:3:LEU:HD12	47:DF:96:TRP:CD1	2.50	0.46
47:DF:102:LEU:HA	47:DF:106:ALA:HB2	1.98	0.46
48:DG:16:VAL:HG11	48:DG:44:HIS:CE1	2.50	0.46
48:DG:84:LYS:HB2	48:DG:132:LEU:HG	1.96	0.46
48:DG:86:LEU:HD23	48:DG:163:TYR:HA	1.98	0.46
48:DG:96:ALA:O	48:DG:97:VAL:HB	2.16	0.46
1:AA:499:A:H4'	1:AA:500:G:H5'	1.97	0.46
1:AA:821:G:H2'	1:AA:822:U:C6	2.51	0.46
1:AA:1014:A:H2'	1:AA:1015:G:O4'	2.15	0.46
1:AA:1053:G:C4'	1:AA:1054:C:H5'	2.46	0.46
2:AC:19:SER:HB3	2:AC:21:TRP:NE1	2.31	0.46
2:AC:128:MET:H	2:AC:128:MET:CE	2.29	0.46
3:AD:169:TRP:CD1	3:AD:170:LEU:HD23	2.51	0.46
3:AD:187:ARG:O	3:AD:191:SER:HB3	2.14	0.46
5:AF:18:VAL:HG21	5:AF:58:HIS:CD2	2.50	0.46
6:AG:67:ASN:C	6:AG:69:ARG:H	2.24	0.46
12:AM:106:ARG:HH21	12:AM:112:ARG:HD3	1.80	0.46
16:AQ:18:LYS:HA	16:AQ:47:ASP:O	2.15	0.46
19:AT:57:VAL:HB	19:AT:71:ALA:HB1	1.97	0.46
20:AB:8:MET:O	20:AB:11:ALA:HB3	2.16	0.46
20:AB:102:ASN:OD1	20:AB:105:THR:HB	2.16	0.46
23:BB:15:G:H2'	23:BB:16:C:H6	1.80	0.46
23:BB:496:G:H4'	45:BS:61:ASN:ND2	2.30	0.46
23:BB:549:G:H2'	41:BJ:2:LYS:CE	2.45	0.46
23:BB:901:C:H2'	23:BB:902:C:C6	2.51	0.46
23:BB:1260:A:H2'	23:BB:1261:C:H6	1.81	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:1508:A:H5'	23:BB:1509:A:N1	2.30	0.46
23:BB:1577:C:H2'	23:BB:1578:U:C6	2.51	0.46
23:BB:1911:U:O4	23:BB:1918:A:H2'	2.16	0.46
23:BB:2085:U:O2'	23:BB:2086:U:H5'	2.15	0.46
23:BB:2579:C:O5'	23:BB:2579:C:H6	1.98	0.46
24:BI:138:VAL:HG12	24:BI:139:VAL:N	2.30	0.46
25:BC:90:ILE:HD13	25:BC:103:ILE:C	2.40	0.46
26:BD:148:GLN:CB	26:BD:152:PRO:HG2	2.44	0.46
28:BP:32:VAL:HG12	28:BP:33:GLU:O	2.16	0.46
33:B1:18:HIS:NE2	33:B1:40:PRO:HD2	2.30	0.46
34:B3:9:ALA:HA	37:BL:58:TYR:HB2	1.97	0.46
36:B2:31:LEU:CD2	36:B2:42:LEU:HD12	2.40	0.46
37:BL:91:ASP:HB2	37:BL:94:THR:OG1	2.16	0.46
39:BX:51:ALA:O	39:BX:55:THR:N	2.48	0.46
41:BJ:24:THR:O	41:BJ:25:LEU:HB3	2.16	0.46
41:BJ:75:TYR:CD1	41:BJ:86:GLN:HB3	2.51	0.46
41:BJ:89:PHE:CE1	41:BJ:93:ILE:HD13	2.49	0.46
42:BN:75:ILE:O	42:BN:79:LEU:HD12	2.16	0.46
43:BO:104:GLN:O	43:BO:107:ALA:HB3	2.15	0.46
45:BS:43:ALA:O	45:BS:46:LEU:HB2	2.16	0.46
45:BS:73:LYS:HE3	45:BS:74:ILE:N	2.29	0.46
45:BS:73:LYS:CE	45:BS:74:ILE:H	2.28	0.46
46:BU:41:VAL:O	46:BU:42:LYS:HB2	2.15	0.46
47:BF:7:TYR:HA	47:BF:11:VAL:CG2	2.46	0.46
47:BF:62:GLN:HE22	47:BF:90:LEU:HA	1.81	0.46
48:BG:1:SER:HA	48:BG:61:TRP:CZ3	2.50	0.46
50:BT:89:GLU:C	50:BT:91:GLN:H	2.24	0.46
1:CA:182:A:H5''	1:CA:182:A:N3	2.31	0.46
1:CA:454:G:O2'	1:CA:455:G:H5'	2.16	0.46
1:CA:1001:C:H2'	1:CA:1002:G:C8	2.47	0.46
1:CA:1254:A:H2'	1:CA:1255:G:H8	1.80	0.46
3:CD:197:HIS:HA	3:CD:200:VAL:CG2	2.45	0.46
4:CE:42:ASN:O	4:CE:75:LEU:HD12	2.16	0.46
6:CG:126:ALA:C	6:CG:128:GLU:H	2.24	0.46
9:CJ:8:ILE:HD13	9:CJ:74:VAL:HG12	1.97	0.46
9:CJ:59:LYS:C	9:CJ:61:ALA:H	2.24	0.46
10:CK:30:ILE:O	10:CK:30:ILE:HG13	2.16	0.46
14:CO:35:GLN:O	14:CO:39:LEU:HB2	2.16	0.46
18:CS:15:LEU:O	18:CS:18:VAL:HG12	2.16	0.46
18:CS:48:ILE:HG22	18:CS:49:ALA:N	2.25	0.46
18:CS:49:ALA:HA	18:CS:57:VAL:O	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:CT:60:GLN:HB3	19:CT:65:LEU:HD23	1.97	0.46
20:CB:15:PHE:HD1	20:CB:16:GLY:N	2.13	0.46
20:CB:212:TYR:O	20:CB:216:VAL:HG13	2.16	0.46
22:DA:28:C:H5	22:DA:56:G:N1	2.13	0.46
22:DA:53:A:O2'	22:DA:54:G:H5'	2.16	0.46
23:DB:275:C:H2'	23:DB:276:U:C2	2.50	0.46
23:DB:667:U:H2'	23:DB:668:A:O4'	2.16	0.46
23:DB:845:A:N1	23:DB:847:U:H1'	2.29	0.46
23:DB:932:U:O2	23:DB:932:U:O4'	2.32	0.46
23:DB:991:C:H5'	23:DB:991:C:H6	1.80	0.46
23:DB:1221:C:O2'	23:DB:1222:U:H5'	2.16	0.46
23:DB:1505:A:H2'	23:DB:1506:U:C6	2.51	0.46
23:DB:1641:A:H2'	23:DB:1642:G:O4'	2.16	0.46
23:DB:1684:G:H2'	23:DB:1685:C:C6	2.51	0.46
23:DB:1821:A:H2'	23:DB:1822:C:C6	2.51	0.46
23:DB:2025:C:H5'	26:DD:154:LYS:HZ3	1.81	0.46
23:DB:2787:C:O2'	23:DB:2788:C:H5'	2.15	0.46
24:DI:75:ALA:O	24:DI:79:LEU:HG	2.16	0.46
26:DD:4:LEU:HD12	26:DD:32:ASN:HB2	1.97	0.46
26:DD:39:ASP:CG	26:DD:41:ALA:H	2.23	0.46
34:D3:49:VAL:CG2	34:D3:54:LEU:HD13	2.40	0.46
35:DV:83:LYS:O	35:DV:85:LYS:N	2.48	0.46
36:D2:34:ARG:HB3	36:D2:39:ARG:HB2	1.97	0.46
37:DL:79:LEU:HB3	37:DL:115:GLU:O	2.16	0.46
40:DH:32:PRO:O	40:DH:33:GLN:HB2	2.16	0.46
41:DJ:124:VAL:HG23	41:DJ:125:TYR:H	1.80	0.46
47:DF:66:ILE:HA	47:DF:85:GLY:O	2.16	0.46
1:AA:6:G:H4'	1:AA:298:A:H4'	1.98	0.46
1:AA:81:A:N3	1:AA:82:G:N7	2.64	0.46
1:AA:102:G:H2'	1:AA:103:U:H6	1.80	0.46
1:AA:246:A:N6	1:AA:281:G:H1'	2.31	0.46
1:AA:255:G:H2'	1:AA:256:U:C6	2.51	0.46
1:AA:659:U:N3	1:AA:747:A:N6	2.63	0.46
1:AA:978:A:H5'	1:AA:1362:A:N6	2.31	0.46
1:AA:979:C:H1'	1:AA:1317:C:N4	2.31	0.46
1:AA:1226:C:C4	12:AM:102:LYS:HB3	2.51	0.46
1:AA:1450:U:H2'	1:AA:1452:C:C5	2.51	0.46
2:AC:178:ARG:HG2	2:AC:206:ILE:HA	1.96	0.46
2:AC:184:ASN:HD22	2:AC:185:THR:H	1.64	0.46
4:AE:9:GLU:O	4:AE:40:ASP:HA	2.16	0.46
4:AE:84:VAL:HG11	4:AE:146:MET:HB3	1.97	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AI:16:ALA:HA	8:AI:66:VAL:HA	1.97	0.46
8:AI:50:PRO:O	8:AI:54:VAL:HG22	2.15	0.46
11:AL:107:LYS:N	11:AL:107:LYS:HZ3	2.14	0.46
23:BB:259:G:O2'	23:BB:260:G:H5'	2.16	0.46
23:BB:329:G:H22	46:BU:16:LYS:NZ	2.13	0.46
23:BB:572:A:H5''	23:BB:573:U:OP2	2.15	0.46
23:BB:1040:A:H2'	23:BB:1041:G:H8	1.80	0.46
23:BB:1082:U:C2	23:BB:1086:A:N1	2.84	0.46
23:BB:1249:U:O4'	44:BQ:3:VAL:HG21	2.15	0.46
23:BB:1411:U:H2'	23:BB:1412:U:C6	2.51	0.46
23:BB:1464:G:O2'	23:BB:1465:G:H5'	2.16	0.46
23:BB:1490:A:H2'	25:BC:97:ASP:CG	2.41	0.46
23:BB:1641:A:H2'	23:BB:1642:G:O4'	2.16	0.46
23:BB:1745:A:H2'	23:BB:1746:A:O4'	2.15	0.46
23:BB:2438:U:O3'	23:BB:2439:A:H3'	2.16	0.46
23:BB:2520:C:O2'	23:BB:2521:C:H5'	2.16	0.46
23:BB:2716:C:O2'	23:BB:2717:C:H5'	2.16	0.46
24:BI:27:LEU:HB2	24:BI:32:VAL:HG21	1.97	0.46
24:BI:44:LYS:O	24:BI:48:ILE:HG13	2.15	0.46
25:BC:209:ALA:HA	25:BC:212:TRP:CE2	2.51	0.46
26:BD:4:LEU:HD12	26:BD:32:ASN:HB2	1.96	0.46
26:BD:38:LYS:HD3	26:BD:45:TYR:CZ	2.51	0.46
26:BD:69:ALA:N	26:BD:73:VAL:HB	2.31	0.46
27:BK:43:ILE:CD1	27:BK:52:VAL:HB	2.45	0.46
27:BK:88:ASN:HD22	27:BK:89:ASN:N	2.13	0.46
29:BE:40:ARG:NH2	29:BE:92:HIS:NE2	2.64	0.46
29:BE:175:ILE:HD11	29:BE:180:LEU:HD11	1.97	0.46
30:BY:35:VAL:HG11	30:BY:37:ARG:HH12	1.81	0.46
32:B4:11:CYS:SG	32:B4:33:HIS:CE1	3.08	0.46
37:BL:40:SER:O	37:BL:44:GLY:HA3	2.15	0.46
38:BM:126:ILE:HD12	38:BM:126:ILE:H	1.81	0.46
40:BH:9:VAL:O	40:BH:10:ALA:C	2.58	0.46
40:BH:82:SER:O	40:BH:90:LEU:HG	2.14	0.46
46:BU:95:PHE:CE1	46:BU:102:ILE:HB	2.31	0.46
48:BG:33:THR:HA	48:BG:34:ARG:NH1	2.30	0.46
48:BG:84:LYS:HG2	48:BG:85:LYS:N	2.28	0.46
1:CA:546:A:P	3:CD:68:GLU:HB3	2.56	0.46
1:CA:552:U:H2'	1:CA:553:A:H8	1.79	0.46
1:CA:992:U:H1'	1:CA:993:G:C2	2.49	0.46
1:CA:1237:C:H3'	1:CA:1238:A:H5'	1.97	0.46
1:CA:1298:U:H2'	6:CG:113:LYS:HZ1	1.80	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1375:A:H2'	1:CA:1376:U:H6	1.81	0.46
2:CC:194:VAL:HG12	2:CC:195:ILE:N	2.30	0.46
9:CJ:8:ILE:HD13	9:CJ:74:VAL:CG1	2.46	0.46
9:CJ:40:ILE:HB	9:CJ:73:LEU:HB3	1.98	0.46
12:CM:71:GLU:HA	12:CM:74:MET:CG	2.45	0.46
13:CN:11:LYS:O	13:CN:15:LEU:HG	2.16	0.46
14:CO:64:ARG:NE	14:CO:64:ARG:HA	2.31	0.46
14:CO:71:LYS:HB2	14:CO:78:TYR:CG	2.51	0.46
17:CR:31:TYR:CD1	17:CR:54:LEU:HD11	2.50	0.46
23:DB:84:A:H4'	23:DB:85:G:O5'	2.16	0.46
23:DB:129:C:H2'	23:DB:130:C:H6	1.81	0.46
23:DB:513:A:H8	23:DB:513:A:O5'	1.98	0.46
23:DB:813:U:H2'	23:DB:814:C:H6	1.80	0.46
23:DB:979:A:H2'	23:DB:982:C:H42	1.79	0.46
23:DB:1055:G:H3'	23:DB:1056:G:C8	2.50	0.46
23:DB:1055:G:H2'	23:DB:1056:G:O4'	2.15	0.46
23:DB:1411:U:H2'	23:DB:1412:U:C6	2.51	0.46
23:DB:1454:C:C5	42:DN:64:ARG:HG2	2.50	0.46
23:DB:2093:G:O2'	23:DB:2094:A:H5'	2.15	0.46
23:DB:2148:G:N3	23:DB:2148:G:C2'	2.78	0.46
23:DB:2332:C:H4'	23:DB:2336:A:C6	2.51	0.46
23:DB:2862:G:H2'	23:DB:2863:C:H6	1.81	0.46
24:DI:57:VAL:HG23	24:DI:71:LYS:HZ1	1.81	0.46
25:DC:259:ASN:OD1	25:DC:261:ARG:HB3	2.16	0.46
29:DE:108:ILE:HD13	29:DE:108:ILE:O	2.15	0.46
31:D0:43:THR:HG23	31:D0:47:TYR:C	2.41	0.46
32:D4:9:LYS:HE2	32:D4:10:LEU:N	2.31	0.46
40:DH:7:ASP:CG	40:DH:8:LYS:N	2.74	0.46
40:DH:135:HIS:CG	40:DH:136:SER:H	2.34	0.46
43:DO:24:THR:OG1	43:DO:90:VAL:HG12	2.15	0.46
43:DO:116:GLN:O	43:DO:117:PHE:HB3	2.15	0.46
48:DG:3:VAL:O	48:DG:68:ARG:HG3	2.16	0.46
48:DG:125:PRO:HB2	48:DG:129:GLU:CD	2.41	0.46
49:DR:15:SER:OG	49:DR:18:GLN:HG2	2.16	0.46
49:DR:23:GLU:O	49:DR:24:LYS:C	2.58	0.46
51:DZ:6:GLN:HE21	51:DZ:50:ARG:N	1.99	0.46
52:DW:24:ARG:HD3	52:DW:65:LYS:CE	2.45	0.46
1:AA:93:U:C3'	1:AA:94:G:H4'	2.46	0.46
1:AA:524:G:H2'	1:AA:525:C:H6	1.80	0.46
1:AA:992:U:H2'	1:AA:1043:G:N7	2.30	0.46
2:AC:11:LEU:HD11	13:AN:87:ALA:O	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AC:16:PRO:HG2	2:AC:53:ARG:NH2	2.31	0.46
2:AC:194:VAL:HG12	2:AC:195:ILE:N	2.31	0.46
5:AF:18:VAL:HG11	5:AF:58:HIS:NE2	2.30	0.46
9:AJ:8:ILE:HD12	9:AJ:8:ILE:N	2.31	0.46
12:AM:22:TYR:HB3	12:AM:69:ARG:NH2	2.31	0.46
15:AP:6:LEU:CD1	15:AP:71:VAL:HB	2.46	0.46
20:AB:27:LYS:C	20:AB:29:PHE:H	2.24	0.46
20:AB:64:GLY:O	20:AB:66:ILE:HG12	2.15	0.46
20:AB:64:GLY:HA2	20:AB:158:ASP:OD1	2.15	0.46
21:AU:48:LYS:C	21:AU:50:SER:N	2.74	0.46
22:BA:14:U:H4'	22:BA:70:C:O2	2.16	0.46
23:BB:444:C:O2'	23:BB:445:C:H5'	2.16	0.46
23:BB:508:A:HO2'	23:BB:509:C:P	2.38	0.46
23:BB:1152:C:H4'	44:BQ:76:SER:HA	1.97	0.46
23:BB:1799:G:H4'	23:BB:1800:C:O5'	2.16	0.46
23:BB:2025:C:H5'	26:BD:154:LYS:HZ3	1.79	0.46
23:BB:2676:C:H2'	23:BB:2677:G:H8	1.81	0.46
37:BL:101:ILE:HG22	37:BL:102:GLY:N	2.31	0.46
38:BM:35:ALA:C	38:BM:37:GLY:H	2.24	0.46
47:BF:7:TYR:O	47:BF:11:VAL:HB	2.16	0.46
47:BF:177:ARG:CZ	47:BF:178:LYS:H	2.29	0.46
48:BG:84:LYS:CG	48:BG:85:LYS:H	2.19	0.46
48:BG:86:LEU:HD23	48:BG:163:TYR:HA	1.98	0.46
1:CA:620:C:O2	3:CD:131:ILE:HG21	2.15	0.46
1:CA:682:G:O2'	1:CA:683:G:H5'	2.16	0.46
1:CA:1355:G:H2'	1:CA:1356:G:H8	1.81	0.46
1:CA:1486:G:H2'	1:CA:1487:G:O4'	2.16	0.46
11:CL:107:LYS:HD2	11:CL:107:LYS:C	2.40	0.46
17:CR:38:ILE:HG22	17:CR:58:ILE:HG21	1.98	0.46
18:CS:1:PRO:O	18:CS:2:ARG:HB2	2.16	0.46
18:CS:62:THR:HG22	18:CS:63:ASP:N	2.30	0.46
20:CB:63:LYS:HB3	20:CB:87:ASP:OD2	2.16	0.46
20:CB:204:ASP:CG	20:CB:205:ALA:N	2.73	0.46
22:DA:55:U:H2'	22:DA:56:G:C8	2.50	0.46
23:DB:62:U:O2	23:DB:62:U:C2'	2.64	0.46
23:DB:533:G:H5'	44:DQ:23:TYR:CE2	2.50	0.46
23:DB:564:C:H1'	44:DQ:36:GLN:OE1	2.16	0.46
23:DB:646:U:H5''	23:DB:647:G:C8	2.50	0.46
23:DB:840:C:H2'	23:DB:841:G:C8	2.51	0.46
23:DB:1266:G:N2	23:DB:2012:G:H2'	2.31	0.46
23:DB:1433:A:H2'	23:DB:1434:A:O4'	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:2028:U:H2'	23:DB:2029:G:C8	2.50	0.46
23:DB:2305:U:H1'	47:DF:132:ARG:HA	1.98	0.46
23:DB:2314:A:H2'	23:DB:2315:G:H8	1.81	0.46
23:DB:2438:U:O3'	23:DB:2439:A:H3'	2.16	0.46
24:DI:10:LEU:HD12	24:DI:10:LEU:C	2.40	0.46
24:DI:70:THR:O	24:DI:70:THR:HG23	2.15	0.46
24:DI:100:ILE:HG23	24:DI:104:GLN:OE1	2.16	0.46
28:DP:6:GLN:O	28:DP:10:GLU:HB2	2.16	0.46
29:DE:47:LYS:HA	29:DE:51:GLU:OE2	2.16	0.46
31:D0:2:VAL:HG12	31:D0:3:GLN:H	1.81	0.46
33:D1:29:LYS:C	33:D1:31:GLU:H	2.24	0.46
34:D3:31:ILE:HD11	34:D3:34:LYS:CD	2.39	0.46
35:DV:32:GLY:O	35:DV:93:ARG:HG3	2.16	0.46
38:DM:59:ARG:NH1	38:DM:60:GLN:HB3	2.15	0.46
40:DH:128:HIS:N	40:DH:144:VAL:O	2.49	0.46
44:DQ:91:ARG:NE	49:DR:11:GLN:H	2.12	0.46
44:DQ:111:LYS:HE3	49:DR:48:LYS:HZ3	1.80	0.46
45:DS:57:ASN:HD22	45:DS:57:ASN:HA	1.55	0.46
46:DU:34:ILE:HG12	46:DU:63:ALA:CB	2.44	0.46
48:DG:10:VAL:HG21	48:DG:49:LEU:HD13	1.98	0.46
48:DG:26:LYS:HA	48:DG:32:LEU:H	1.80	0.46
1:AA:36:C:O3'	11:AL:119:LYS:HA	2.15	0.46
1:AA:401:C:H1'	1:AA:622:A:H1'	1.98	0.46
1:AA:403:C:H2'	1:AA:404:G:C8	2.50	0.46
1:AA:642:A:C5	7:AH:106:SER:HA	2.51	0.46
1:AA:662:U:H2'	1:AA:663:A:H8	1.80	0.46
1:AA:1010:U:O2'	1:AA:1011:C:H5'	2.15	0.46
1:AA:1161:C:H2'	1:AA:1162:C:C6	2.51	0.46
3:AD:199:ILE:HG13	3:AD:200:VAL:N	2.30	0.46
6:AG:11:ILE:HD12	6:AG:11:ILE:N	2.31	0.46
9:AJ:6:ILE:HB	9:AJ:76:ILE:CD1	2.46	0.46
10:AK:85:VAL:O	10:AK:111:ASP:HA	2.16	0.46
11:AL:83:GLY:HA2	11:AL:94:TYR:HA	1.97	0.46
12:AM:6:ILE:O	12:AM:7:ASN:C	2.58	0.46
12:AM:71:GLU:HA	12:AM:74:MET:CG	2.47	0.46
12:AM:109:LYS:HG3	12:AM:110:GLY:N	2.30	0.46
15:AP:38:PHE:CD2	15:AP:51:ARG:HB2	2.51	0.46
22:BA:78:A:H2'	22:BA:79:G:O4'	2.16	0.46
23:BB:4:U:H2'	23:BB:5:A:H8	1.81	0.46
23:BB:1081:U:O2'	24:BI:118:GLY:HA2	2.16	0.46
23:BB:1153:C:H2'	23:BB:1154:G:O4'	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:1728:C:H2'	23:BB:1730:C:O2	2.16	0.46
23:BB:1987:A:H2'	23:BB:1988:G:H8	1.81	0.46
23:BB:2098:U:O2'	23:BB:2099:U:H5'	2.15	0.46
23:BB:2415:G:H2'	23:BB:2416:C:H6	1.81	0.46
24:BI:33:ASN:HD21	24:BI:64:ARG:NH1	2.09	0.46
34:B3:31:ILE:HD11	34:B3:34:LYS:CD	2.37	0.46
40:BH:67:ALA:CA	40:BH:70:GLU:HG2	2.46	0.46
42:BN:72:ASP:C	42:BN:74:GLU:N	2.73	0.46
43:BO:7:ARG:HA	43:BO:10:ARG:CZ	2.46	0.46
44:BQ:91:ARG:NH2	49:BR:11:GLN:N	2.64	0.46
45:BS:73:LYS:HD2	45:BS:73:LYS:HA	1.68	0.46
46:BU:85:ARG:O	46:BU:92:VAL:HB	2.16	0.46
47:BF:41:GLU:O	47:BF:43:ILE:N	2.49	0.46
47:BF:78:ILE:HG13	47:BF:82:TYR:CZ	2.50	0.46
49:BR:78:ARG:HB3	49:BR:83:TYR:HB3	1.97	0.46
50:BT:5:GLU:CA	50:BT:8:LEU:HB2	2.31	0.46
50:BT:23:ALA:C	50:BT:25:GLU:H	2.24	0.46
51:BZ:15:GLY:O	51:BZ:26:LYS:HA	2.16	0.46
1:CA:642:A:C5	7:CH:106:SER:HA	2.51	0.46
1:CA:991:U:H2'	1:CA:1212:U:C2	2.50	0.46
3:CD:11:SER:HA	3:CD:18:LEU:HD22	1.98	0.46
8:CI:67:LYS:HB2	8:CI:67:LYS:NZ	2.31	0.46
13:CN:46:LYS:HZ2	18:CS:15:LEU:HD11	1.81	0.46
16:CQ:17:GLU:C	16:CQ:19:SER:H	2.23	0.46
18:CS:64:GLU:CD	18:CS:64:GLU:H	2.23	0.46
22:DA:6:G:H2'	22:DA:7:G:C8	2.51	0.46
22:DA:91:C:H2'	22:DA:92:C:H6	1.81	0.46
23:DB:30:G:H2'	23:DB:31:C:H6	1.79	0.46
23:DB:256:A:O2'	23:DB:257:C:H5'	2.16	0.46
23:DB:365:U:H2'	23:DB:366:C:H6	1.80	0.46
23:DB:558:U:O3'	41:DJ:111:LYS:HD3	2.16	0.46
23:DB:784:G:H5''	25:DC:225:ASN:OD1	2.15	0.46
23:DB:820:A:H2'	23:DB:821:A:O4'	2.16	0.46
23:DB:1099:G:OP2	24:DI:2:LYS:O	2.33	0.46
23:DB:1173:U:O5'	23:DB:1173:U:H6	1.98	0.46
23:DB:1965:C:H5''	23:DB:1966:A:H2'	1.98	0.46
23:DB:2194:U:H2'	23:DB:2195:U:H6	1.81	0.46
23:DB:2835:A:N6	23:DB:2878:U:H2'	2.31	0.46
24:DI:59:THR:O	24:DI:59:THR:HG23	2.16	0.46
24:DI:140:GLU:H	24:DI:140:GLU:CD	2.24	0.46
25:DC:65:ASP:O	25:DC:65:ASP:CG	2.59	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DC:145:MET:HE3	25:DC:153:LEU:HD11	1.98	0.46
26:DD:113:SER:HB3	26:DD:167:ASN:H	1.79	0.46
27:DK:85:VAL:O	27:DK:87:LEU:HD23	2.15	0.46
28:DP:61:ARG:HD3	28:DP:70:GLU:HG3	1.97	0.46
29:DE:72:SER:C	29:DE:74:LYS:H	2.23	0.46
38:DM:30:SER:OG	38:DM:106:ASP:HA	2.16	0.46
38:DM:97:GLN:HB2	38:DM:98:PRO:HD2	1.98	0.46
40:DH:9:VAL:O	40:DH:10:ALA:C	2.58	0.46
40:DH:14:SER:HB2	40:DH:17:ASP:HB2	1.98	0.46
41:DJ:11:VAL:HG21	41:DJ:13:ARG:NH1	2.31	0.46
42:DN:72:ASP:C	42:DN:74:GLU:N	2.74	0.46
44:DQ:83:LYS:HZ2	44:DQ:83:LYS:HA	1.81	0.46
47:DF:37:MET:CE	47:DF:149:ARG:HD2	2.46	0.46
50:DT:57:VAL:O	50:DT:85:VAL:O	2.34	0.46
1:AA:462:G:H2'	1:AA:463:U:C6	2.51	0.45
1:AA:1060:U:H5''	9:AJ:53:ILE:HD11	1.98	0.45
1:AA:1335:U:H5''	1:AA:1337:G:N2	2.31	0.45
1:AA:1347:G:C8	8:AI:108:ARG:HB2	2.51	0.45
1:AA:1408:A:H5'	1:AA:1409:C:OP2	2.16	0.45
4:AE:98:ALA:HB2	4:AE:123:LEU:HG	1.98	0.45
4:AE:148:SER:OG	4:AE:151:MET:HB2	2.16	0.45
10:AK:101:ALA:C	10:AK:103:GLY:H	2.22	0.45
17:AR:31:TYR:CD1	17:AR:54:LEU:HD11	2.51	0.45
21:AU:42:THR:C	21:AU:46:ARG:HE	2.24	0.45
22:BA:7:G:H1'	43:BO:38:GLN:HE22	1.80	0.45
23:BB:141:G:H5''	23:BB:142:A:O4'	2.15	0.45
23:BB:143:C:H3'	23:BB:144:A:C8	2.51	0.45
23:BB:170:U:H2'	23:BB:171:U:H6	1.81	0.45
23:BB:217:A:H2'	23:BB:218:A:O4'	2.15	0.45
23:BB:299:A:N6	23:BB:322:A:O2'	2.48	0.45
23:BB:823:C:O2'	23:BB:824:U:H5'	2.16	0.45
23:BB:858:G:H4'	52:BW:19:ARG:HH22	1.81	0.45
23:BB:1301:A:HO2'	23:BB:1302:A:H2'	1.80	0.45
23:BB:1824:G:O2'	25:BC:251:THR:HG21	2.16	0.45
23:BB:1979:U:O2'	23:BB:1980:G:H5'	2.16	0.45
23:BB:2186:G:H2'	23:BB:2187:U:C6	2.50	0.45
23:BB:2276:G:OP2	38:BM:85:GLY:N	2.43	0.45
23:BB:2804:U:H2'	23:BB:2805:C:H6	1.77	0.45
23:BB:2834:G:O6	23:BB:2879:A:H2'	2.15	0.45
23:BB:2897:U:H2'	23:BB:2898:U:H6	1.80	0.45
25:BC:61:TYR:HA	25:BC:85:ASN:HD21	1.80	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BK:53:LYS:HD3	27:BK:53:LYS:H	1.81	0.45
38:BM:36:VAL:HG21	38:BM:129:THR:HB	1.98	0.45
43:BO:105:ALA:C	43:BO:107:ALA:N	2.74	0.45
47:BF:104:THR:CA	47:BF:108:PRO:HG2	2.46	0.45
49:BR:23:GLU:O	49:BR:24:LYS:C	2.59	0.45
50:BT:4:GLU:OE2	50:BT:5:GLU:HG2	2.15	0.45
51:BZ:40:VAL:CG2	51:BZ:45:ARG:H	2.30	0.45
1:CA:93:U:O5'	1:CA:93:U:H6	1.99	0.45
1:CA:144:G:O2'	1:CA:145:G:H5'	2.16	0.45
1:CA:409:U:H2'	1:CA:410:G:C8	2.51	0.45
1:CA:610:U:O2	1:CA:610:U:O4'	2.32	0.45
1:CA:725:G:H2'	1:CA:726:C:H6	1.82	0.45
1:CA:1342:C:O2'	8:CI:125:GLN:HB3	2.16	0.45
1:CA:1411:C:H2'	1:CA:1412:C:C6	2.51	0.45
1:CA:1427:C:H2'	1:CA:1428:A:C8	2.51	0.45
2:CC:31:ASN:ND2	2:CC:58:ARG:HE	2.13	0.45
2:CC:111:ASP:OD2	2:CC:114:LEU:HG	2.15	0.45
3:CD:115:GLN:HE21	3:CD:119:HIS:CE1	2.35	0.45
5:CF:9:MET:HE1	17:CR:64:LEU:O	2.16	0.45
8:CI:87:MET:HE2	8:CI:88:GLU:HA	1.98	0.45
12:CM:106:ARG:HH12	12:CM:109:LYS:CD	2.20	0.45
20:CB:65:LYS:HA	20:CB:89:PHE:HE1	1.80	0.45
22:DA:51:G:H2'	22:DA:52:A:O5'	2.17	0.45
23:DB:78:U:H2'	23:DB:79:C:H6	1.75	0.45
23:DB:122:G:O2'	23:DB:123:G:H5'	2.16	0.45
23:DB:125:A:C6	36:D2:10:LEU:HD23	2.52	0.45
23:DB:141:G:N3	23:DB:141:G:C3'	2.75	0.45
23:DB:346:A:H3'	23:DB:347:A:H8	1.81	0.45
23:DB:374:A:N6	23:DB:400:G:H1'	2.31	0.45
23:DB:1099:G:N7	24:DI:3:LYS:CD	2.79	0.45
23:DB:1517:G:O2'	23:DB:1518:C:H5'	2.16	0.45
23:DB:1665:A:O2'	23:DB:1666:G:H5'	2.15	0.45
23:DB:2088:A:H2'	23:DB:2089:C:C6	2.51	0.45
23:DB:2461:A:H2'	23:DB:2462:C:H6	1.76	0.45
23:DB:2751:G:H2'	23:DB:2751:G:N3	2.30	0.45
24:DI:138:VAL:HG12	24:DI:139:VAL:N	2.31	0.45
29:DE:161:ALA:HA	29:DE:164:LEU:HD12	1.97	0.45
29:DE:176:ASP:OD1	29:DE:178:VAL:HG12	2.16	0.45
37:DL:93:ASN:CG	37:DL:94:THR:H	2.25	0.45
39:DX:55:THR:O	39:DX:58:ASN:HB3	2.16	0.45
41:DJ:82:GLY:O	41:DJ:83:GLY:C	2.58	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DN:70:THR:O	42:DN:70:THR:OG1	2.33	0.45
44:DQ:15:LYS:HD2	44:DQ:19:GLN:HE21	1.80	0.45
45:DS:81:SER:CB	45:DS:99:ARG:HA	2.46	0.45
47:DF:7:TYR:O	47:DF:11:VAL:HB	2.16	0.45
47:DF:163:GLU:CA	47:DF:166:ARG:HH11	2.20	0.45
48:DG:54:ARG:HD3	48:DG:55:ASP:N	2.31	0.45
48:DG:105:SER:C	48:DG:106:LEU:HD23	2.40	0.45
50:DT:10:VAL:HG11	50:DT:43:ILE:HG13	1.98	0.45
50:DT:54:GLU:HG3	50:DT:90:GLY:N	2.26	0.45
1:AA:92:U:H2'	1:AA:93:U:C6	2.51	0.45
1:AA:113:G:H2'	1:AA:114:U:H6	1.77	0.45
1:AA:1402:C:H2'	1:AA:1403:C:O4'	2.16	0.45
3:AD:160:LEU:HA	3:AD:163:GLN:HG3	1.98	0.45
6:AG:104:VAL:HG12	6:AG:108:ARG:HD2	1.99	0.45
8:AI:62:LEU:N	8:AI:62:LEU:HD13	2.32	0.45
9:AJ:53:ILE:HG13	13:AN:84:ARG:CZ	2.46	0.45
9:AJ:92:LEU:HB2	9:AJ:93:ALA:H	1.63	0.45
10:AK:57:SER:O	10:AK:90:PRO:HG3	2.16	0.45
12:AM:72:ILE:O	12:AM:76:ILE:HG13	2.15	0.45
15:AP:43:ALA:HA	15:AP:46:LYS:HE3	1.98	0.45
19:AT:5:SER:C	19:AT:7:LYS:N	2.74	0.45
19:AT:27:MET:SD	19:AT:66:ILE:HG12	2.56	0.45
20:AB:115:ASP:O	20:AB:119:GLN:HG2	2.16	0.45
21:AU:35:GLU:HB3	21:AU:36:PHE:H	1.47	0.45
23:BB:37:C:O2'	29:BE:45:ALA:HA	2.16	0.45
23:BB:182:A:H1'	23:BB:434:U:H5'	1.98	0.45
23:BB:208:C:H2'	23:BB:209:C:H6	1.81	0.45
23:BB:485:C:HO2'	45:BS:60:HIS:CE1	2.34	0.45
23:BB:533:G:H5'	44:BQ:23:TYR:CE2	2.51	0.45
23:BB:857:G:H2'	23:BB:858:G:H5'	1.98	0.45
23:BB:1882:U:O2'	23:BB:1883:U:H5'	2.15	0.45
23:BB:2230:G:H2'	23:BB:2231:U:H6	1.80	0.45
23:BB:2645:G:H3'	23:BB:2646:C:C5'	2.44	0.45
23:BB:2688:G:H1'	23:BB:2721:A:N6	2.32	0.45
23:BB:2839:G:H2'	23:BB:2840:C:H6	1.81	0.45
25:BC:29:PHE:CE2	25:BC:31:PRO:HG2	2.51	0.45
26:BD:98:VAL:C	26:BD:100:LEU:N	2.71	0.45
26:BD:119:ALA:HB2	26:BD:163:GLY:C	2.41	0.45
31:B0:27:LEU:H	31:B0:27:LEU:CD1	2.23	0.45
36:B2:26:ASN:O	36:B2:30:VAL:HG23	2.16	0.45
37:BL:65:GLY:O	37:BL:66:PHE:CB	2.64	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BM:97:GLN:HB2	38:BM:98:PRO:HD2	1.98	0.45
42:BN:9:GLN:C	42:BN:17:ARG:HD3	2.41	0.45
43:BO:18:LEU:HD23	43:BO:25:ARG:CD	2.47	0.45
43:BO:49:VAL:HG11	43:BO:82:ALA:HB2	1.98	0.45
44:BQ:30:VAL:O	44:BQ:31:TYR:CB	2.62	0.45
47:BF:87:LYS:CG	47:BF:88:VAL:H	2.21	0.45
47:BF:121:PHE:HB3	47:BF:127:TYR:CE2	2.52	0.45
48:BG:47:ASN:CG	48:BG:48:THR:N	2.74	0.45
49:BR:21:ARG:HB3	49:BR:95:ASP:OD1	2.16	0.45
1:CA:364:A:H2'	1:CA:365:U:O2	2.17	0.45
1:CA:541:G:O2'	3:CD:39:GLN:HB3	2.16	0.45
1:CA:649:A:H2'	1:CA:650:G:O4'	2.16	0.45
3:CD:30:LYS:HD3	3:CD:30:LYS:N	2.31	0.45
6:CG:94:ARG:HH12	6:CG:98:LEU:HD21	1.80	0.45
8:CI:56:MET:C	8:CI:58:GLU:N	2.70	0.45
11:CL:65:TYR:C	11:CL:66:ILE:HD12	2.42	0.45
12:CM:79:LEU:HA	12:CM:82:LEU:HB2	1.98	0.45
12:CM:106:ARG:HE	12:CM:112:ARG:HD3	1.81	0.45
15:CP:1:MET:HA	15:CP:1:MET:HE3	1.97	0.45
23:DB:41:C:H2'	23:DB:42:A:O4'	2.16	0.45
23:DB:137:U:C2'	23:DB:138:U:O4'	2.60	0.45
23:DB:306:U:H2'	23:DB:307:G:O4'	2.16	0.45
23:DB:784:G:N2	25:DC:225:ASN:HD22	2.14	0.45
23:DB:825:A:O2'	37:DL:54:GLN:NE2	2.50	0.45
23:DB:1118:C:H2'	23:DB:1119:U:C6	2.52	0.45
23:DB:1190:G:P	37:DL:32:GLY:HA2	2.55	0.45
23:DB:1249:U:O4'	44:DQ:3:VAL:HG21	2.16	0.45
23:DB:1561:C:H2'	23:DB:1562:U:C6	2.50	0.45
23:DB:1637:A:H2'	23:DB:1638:C:C6	2.51	0.45
23:DB:1922:G:O2'	23:DB:1923:U:H5'	2.16	0.45
23:DB:2341:G:O2'	23:DB:2342:C:H5'	2.16	0.45
23:DB:2600:A:O2'	23:DB:2601:C:H5'	2.16	0.45
23:DB:2722:G:H2'	23:DB:2723:C:H6	1.80	0.45
23:DB:2751:G:H4'	48:DG:3:VAL:CG1	2.46	0.45
23:DB:2774:C:H2'	23:DB:2775:G:O4'	2.15	0.45
23:DB:2900:A:H2'	23:DB:2901:C:O4'	2.15	0.45
25:DC:91:ALA:HB2	25:DC:105:ALA:HB2	1.97	0.45
26:DD:46:ARG:HH22	26:DD:87:GLY:H	1.61	0.45
28:DP:32:VAL:HG12	28:DP:33:GLU:O	2.15	0.45
29:DE:58:LYS:HB2	29:DE:60:TRP:HB2	1.98	0.45
31:D0:21:LEU:HD13	45:DS:23:LEU:HD11	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:D1:18:HIS:NE2	33:D1:40:PRO:HD2	2.31	0.45
34:D3:54:LEU:HD11	34:D3:58:ILE:HD11	1.98	0.45
36:D2:36:ALA:C	36:D2:38:GLY:H	2.23	0.45
38:DM:35:ALA:C	38:DM:37:GLY:H	2.24	0.45
39:DX:51:ALA:O	39:DX:55:THR:N	2.49	0.45
42:DN:83:LEU:HA	42:DN:86:ARG:CB	2.45	0.45
45:DS:33:LEU:HG	45:DS:51:LEU:HD23	1.98	0.45
46:DU:48:VAL:O	46:DU:48:VAL:HG22	2.16	0.45
50:DT:41:ALA:C	50:DT:43:ILE:N	2.74	0.45
1:AA:706:A:H4'	10:AK:30:ILE:HD11	1.99	0.45
2:AC:47:ALA:C	2:AC:49:ALA:H	2.25	0.45
8:AI:93:LEU:HD13	8:AI:97:LEU:HD11	1.98	0.45
9:AJ:52:LEU:HB2	13:AN:80:ARG:CD	2.46	0.45
9:AJ:83:THR:O	9:AJ:87:LEU:HD22	2.16	0.45
12:AM:68:LEU:O	12:AM:72:ILE:HB	2.17	0.45
20:AB:16:GLY:HA2	20:AB:40:ILE:H	1.80	0.45
20:AB:19:THR:HG23	20:AB:20:ARG:N	2.28	0.45
22:BA:7:G:O2'	22:BA:8:C:H5'	2.16	0.45
23:BB:30:G:H2'	23:BB:31:C:H6	1.80	0.45
23:BB:63:A:C8	23:BB:63:A:OP2	2.68	0.45
23:BB:425:G:O2'	23:BB:426:C:H5'	2.15	0.45
23:BB:674:G:H1'	29:BE:69:ARG:HE	1.82	0.45
23:BB:819:A:OP2	23:BB:1187:G:N2	2.49	0.45
23:BB:845:A:N1	23:BB:847:U:H1'	2.32	0.45
23:BB:992:C:O2'	23:BB:993:G:H5'	2.16	0.45
23:BB:1585:C:H2'	23:BB:1586:A:O4'	2.16	0.45
23:BB:1945:G:C4	23:BB:1946:U:C5	3.04	0.45
23:BB:2088:A:H2'	23:BB:2089:C:C6	2.52	0.45
23:BB:2340:A:H2'	23:BB:2341:G:H8	1.81	0.45
23:BB:2415:G:H2'	23:BB:2416:C:C6	2.51	0.45
23:BB:2895:G:O2'	23:BB:2896:C:H5'	2.15	0.45
25:BC:18:VAL:O	25:BC:18:VAL:HG13	2.16	0.45
26:BD:29:VAL:O	26:BD:185:ASN:HB3	2.16	0.45
27:BK:8:LEU:HD12	27:BK:8:LEU:N	2.28	0.45
28:BP:3:ILE:HD13	28:BP:3:ILE:O	2.16	0.45
29:BE:134:LEU:CD2	29:BE:161:ALA:HB2	2.44	0.45
37:BL:80:SER:HB3	37:BL:115:GLU:OE2	2.16	0.45
38:BM:29:GLY:HA2	38:BM:106:ASP:HB2	1.98	0.45
38:BM:82:MET:O	38:BM:83:GLY:C	2.58	0.45
39:BX:15:ASN:H	39:BX:15:ASN:HD22	1.63	0.45
40:BH:41:LYS:C	40:BH:43:ASN:N	2.74	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BH:94:ILE:CG2	40:BH:99:ILE:HD11	2.46	0.45
42:BN:79:LEU:O	42:BN:80:PHE:HB2	2.16	0.45
44:BQ:111:LYS:HB2	49:BR:48:LYS:HE2	1.98	0.45
47:BF:110:ILE:HB	47:BF:113:PHE:HB3	1.98	0.45
49:BR:5:PHE:N	49:BR:5:PHE:CD1	2.84	0.45
50:BT:54:GLU:HG3	50:BT:89:GLU:H	1.81	0.45
50:BT:83:ALA:O	50:BT:84:TYR:HB2	2.17	0.45
51:BZ:29:PHE:CD1	51:BZ:29:PHE:N	2.84	0.45
51:BZ:66:THR:O	51:BZ:70:GLU:HG3	2.16	0.45
1:CA:105:G:H2'	1:CA:106:C:H6	1.81	0.45
1:CA:256:U:H3'	1:CA:257:G:H8	1.80	0.45
1:CA:865:A:H2'	1:CA:866:C:C6	2.51	0.45
1:CA:895:G:H2'	1:CA:896:C:C6	2.52	0.45
1:CA:1141:C:H2'	1:CA:1142:G:H8	1.82	0.45
1:CA:1253:G:N1	1:CA:1285:A:N6	2.64	0.45
1:CA:1277:C:O2'	1:CA:1279:G:H8	1.99	0.45
3:CD:151:GLN:HB3	3:CD:154:VAL:HG22	1.97	0.45
7:CH:6:ILE:HD11	7:CH:31:LEU:HD23	1.97	0.45
11:CL:81:ILE:CG2	11:CL:94:TYR:HB3	2.47	0.45
12:CM:28:ARG:HH12	12:CM:59:VAL:HA	1.82	0.45
12:CM:109:LYS:HG3	12:CM:110:GLY:N	2.31	0.45
18:CS:19:GLU:HA	18:CS:22:VAL:HG23	1.98	0.45
20:CB:25:LYS:HD3	20:CB:193:ASP:OD1	2.16	0.45
20:CB:71:THR:HG23	20:CB:94:ARG:N	2.32	0.45
20:CB:101:THR:HG23	20:CB:102:ASN:N	2.30	0.45
20:CB:156:LEU:HD12	20:CB:156:LEU:N	2.20	0.45
22:DA:15:A:H3'	22:DA:15:A:OP2	2.16	0.45
22:DA:28:C:H2'	22:DA:29:A:O4'	2.17	0.45
22:DA:91:C:H2'	22:DA:92:C:C6	2.52	0.45
23:DB:2:G:O2'	23:DB:3:U:H5'	2.16	0.45
23:DB:39:G:H2'	23:DB:40:U:C6	2.51	0.45
23:DB:477:A:H2'	23:DB:478:A:C8	2.51	0.45
23:DB:936:A:H2'	23:DB:937:C:C6	2.52	0.45
23:DB:1199:U:H5'	44:DQ:4:LYS:HD3	1.98	0.45
23:DB:1242:U:H2'	23:DB:1243:C:C6	2.52	0.45
23:DB:1315:C:H2'	23:DB:1316:U:H6	1.81	0.45
23:DB:1418:G:H1'	23:DB:1580:A:N6	2.31	0.45
23:DB:1694:C:OP1	25:DC:7:PRO:HG2	2.16	0.45
23:DB:1733:G:H2'	23:DB:1734:G:H8	1.82	0.45
23:DB:1799:G:H4'	23:DB:1800:C:O5'	2.17	0.45
23:DB:1921:G:O2'	23:DB:1922:G:H5'	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:1957:C:H2'	23:DB:1958:C:H6	1.81	0.45
23:DB:1987:A:H2'	23:DB:1988:G:H8	1.82	0.45
23:DB:2184:A:H2'	23:DB:2185:U:C5	2.50	0.45
23:DB:2312:U:H5'	47:DF:84:ILE:HD12	1.99	0.45
23:DB:2417:C:O2'	23:DB:2418:A:H5'	2.15	0.45
23:DB:2592:G:H2'	23:DB:2593:U:O4'	2.16	0.45
23:DB:2869:G:H2'	23:DB:2870:C:H6	1.80	0.45
25:DC:62:ARG:O	25:DC:63:ILE:HG12	2.17	0.45
26:DD:109:VAL:HG11	26:DD:193:VAL:CB	2.46	0.45
26:DD:125:TRP:CD1	26:DD:160:LYS:HB3	2.51	0.45
26:DD:159:LYS:O	26:DD:161:MET:HG2	2.16	0.45
26:DD:168:GLU:O	26:DD:170:VAL:HG13	2.16	0.45
28:DP:4:ILE:HA	28:DP:7:LEU:HB3	1.98	0.45
29:DE:48:THR:C	29:DE:50:ALA:N	2.74	0.45
30:DY:5:LYS:HE2	30:DY:57:GLU:O	2.16	0.45
30:DY:15:ARG:HG2	30:DY:53:MET:SD	2.56	0.45
31:D0:29:VAL:HA	31:D0:35:GLU:O	2.16	0.45
32:D4:10:LEU:HD13	32:D4:33:HIS:CD2	2.51	0.45
33:D1:47:ILE:HD12	33:D1:47:ILE:N	2.31	0.45
37:DL:2:ARG:HG2	37:DL:2:ARG:O	2.16	0.45
40:DH:83:LYS:CE	40:DH:149:GLU:HG3	2.47	0.45
40:DH:85:GLY:HA2	40:DH:91:PHE:CE1	2.51	0.45
40:DH:100:ALA:HB2	40:DH:112:LYS:HB3	1.99	0.45
41:DJ:16:TYR:CD2	41:DJ:140:LEU:HD12	2.51	0.45
43:DO:56:LYS:HG2	43:DO:60:GLU:CG	2.45	0.45
44:DQ:91:ARG:HE	44:DQ:94:LEU:CD2	2.30	0.45
47:DF:13:LYS:HE3	47:DF:14:LYS:N	2.31	0.45
47:DF:107:VAL:HG11	47:DF:175:PRO:CG	2.41	0.45
48:DG:47:ASN:CG	48:DG:48:THR:N	2.75	0.45
50:DT:1:MET:CG	50:DT:2:ILE:H	2.29	0.45
50:DT:4:GLU:OE2	50:DT:5:GLU:HG2	2.15	0.45
50:DT:15:HIS:O	50:DT:16:VAL:C	2.59	0.45
52:DW:47:GLY:HA3	52:DW:80:SER:CB	2.45	0.45
1:AA:60:A:H4'	1:AA:61:G:O5'	2.17	0.45
1:AA:237:G:O2'	1:AA:238:A:H5'	2.17	0.45
1:AA:371:A:O2'	1:AA:372:C:H5'	2.16	0.45
1:AA:592:G:H2'	1:AA:593:U:C6	2.50	0.45
1:AA:1370:G:O2'	1:AA:1371:G:H5'	2.17	0.45
13:AN:53:ASP:HA	13:AN:58:ARG:HD3	1.97	0.45
16:AQ:52:CYS:HB3	16:AQ:77:VAL:HG22	1.97	0.45
23:BB:219:A:O2'	23:BB:220:G:H5'	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:463:G:N2	23:BB:466:A:OP2	2.45	0.45
23:BB:675:A:OP1	29:BE:60:TRP:NE1	2.49	0.45
23:BB:936:A:H2'	23:BB:937:C:C6	2.51	0.45
23:BB:1059:G:H2'	23:BB:1060:U:C5	2.51	0.45
23:BB:1080:A:H2'	23:BB:1081:U:C6	2.50	0.45
23:BB:1880:U:H2'	23:BB:1881:C:C6	2.52	0.45
23:BB:2309:A:H2'	23:BB:2310:C:C6	2.52	0.45
23:BB:2418:A:H2'	23:BB:2419:U:O4'	2.16	0.45
23:BB:2569:G:O2'	23:BB:2570:G:H5'	2.16	0.45
23:BB:2630:G:O2'	23:BB:2631:G:H5'	2.17	0.45
23:BB:2840:C:O2'	23:BB:2841:C:H5'	2.17	0.45
24:BI:7:TYR:CD1	24:BI:7:TYR:C	2.95	0.45
24:BI:14:ALA:HA	24:BI:45:THR:HG21	1.96	0.45
24:BI:135:MET:HE2	24:BI:137:LEU:CD1	2.47	0.45
25:BC:259:ASN:OD1	25:BC:261:ARG:HB3	2.17	0.45
26:BD:184:ARG:HD3	26:BD:186:LEU:HD22	1.98	0.45
26:BD:202:ILE:HD12	26:BD:202:ILE:N	2.31	0.45
28:BP:103:THR:HG22	28:BP:104:GLY:N	2.32	0.45
30:BY:15:ARG:N	30:BY:15:ARG:HD2	2.31	0.45
31:B0:43:THR:HG23	31:B0:47:TYR:O	2.17	0.45
32:B4:10:LEU:HD13	32:B4:33:HIS:CD2	2.52	0.45
33:B1:25:ASN:OD1	33:B1:27:ARG:HB2	2.16	0.45
35:BV:79:ARG:NH1	38:BM:134:THR:HG21	2.32	0.45
38:BM:41:LEU:O	38:BM:94:ALA:N	2.49	0.45
38:BM:120:ALA:C	38:BM:122:ALA:N	2.73	0.45
41:BJ:64:VAL:HG22	41:BJ:68:LYS:HD2	1.98	0.45
43:BO:34:HIS:HB3	43:BO:36:TYR:HE2	1.81	0.45
47:BF:74:ALA:HB3	47:BF:77:LYS:O	2.15	0.45
1:CA:8:A:C6	3:CD:205:LYS:HG3	2.52	0.45
1:CA:197:A:H4'	1:CA:198:G:O5'	2.16	0.45
1:CA:708:C:O2'	1:CA:709:U:H5'	2.16	0.45
1:CA:714:G:N2	1:CA:777:A:H1'	2.32	0.45
1:CA:880:C:H2'	1:CA:881:G:C8	2.51	0.45
1:CA:1238:A:N7	1:CA:1303:C:H1'	2.32	0.45
1:CA:1241:G:H2'	1:CA:1242:G:H8	1.80	0.45
1:CA:1294:G:H2'	1:CA:1295:U:C6	2.52	0.45
2:CC:178:ARG:HG2	2:CC:206:ILE:HA	1.98	0.45
8:CI:71:ILE:HD12	8:CI:71:ILE:N	2.27	0.45
10:CK:125:LYS:O	21:CU:33:ARG:CZ	2.63	0.45
12:CM:21:ILE:O	12:CM:24:VAL:HG22	2.16	0.45
22:DA:28:C:H5	22:DA:56:G:H22	1.64	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:52:A:H2'	22:DA:53:A:H8	1.81	0.45
23:DB:64:A:O2'	23:DB:65:U:H5'	2.16	0.45
23:DB:182:A:H1'	23:DB:434:U:H5'	1.98	0.45
23:DB:247:G:H4'	23:DB:386:G:C5	2.51	0.45
23:DB:705:A:O2'	25:DC:6:LYS:HG3	2.16	0.45
23:DB:973:A:OP1	23:DB:973:A:H8	2.00	0.45
23:DB:1010:A:N3	23:DB:1153:C:H1'	2.31	0.45
23:DB:1168:G:O2'	23:DB:1169:A:H5'	2.17	0.45
23:DB:1204:A:N1	23:DB:1241:A:N1	2.65	0.45
23:DB:1383:A:H2	23:DB:1405:U:O2	1.99	0.45
23:DB:1714:U:H3'	23:DB:1715:G:H5'	1.98	0.45
23:DB:1718:G:O2'	23:DB:1719:G:H5'	2.17	0.45
23:DB:1843:C:O2'	23:DB:1844:C:H5'	2.16	0.45
23:DB:2106:U:H2'	23:DB:2106:U:O2	2.17	0.45
23:DB:2233:U:H2'	23:DB:2234:G:C8	2.50	0.45
23:DB:2348:U:O2'	23:DB:2349:G:H5'	2.16	0.45
23:DB:2352:A:H8	23:DB:2352:A:O5'	2.00	0.45
23:DB:2515:C:H2'	23:DB:2516:A:H8	1.82	0.45
23:DB:2591:C:OP1	25:DC:237:ARG:HG3	2.16	0.45
23:DB:2685:G:O2'	23:DB:2686:G:H5'	2.17	0.45
23:DB:2893:A:H4'	23:DB:2894:G:H5'	1.97	0.45
24:DI:128:ILE:HA	24:DI:131:THR:CG2	2.45	0.45
26:DD:14:ILE:CG2	26:DD:22:ILE:HB	2.46	0.45
28:DP:1:SER:N	28:DP:4:ILE:HB	2.31	0.45
28:DP:4:ILE:C	28:DP:6:GLN:N	2.74	0.45
30:DY:15:ARG:HD2	30:DY:15:ARG:N	2.31	0.45
31:D0:41:HIS:HB2	42:DN:99:LYS:C	2.42	0.45
32:D4:8:LYS:HG2	32:D4:9:LYS:HD3	1.98	0.45
34:D3:21:PHE:O	34:D3:22:LYS:O	2.35	0.45
36:D2:36:ALA:C	36:D2:38:GLY:N	2.72	0.45
38:DM:123:LYS:O	38:DM:124:LEU:HG	2.16	0.45
40:DH:62:LEU:HD23	40:DH:63:ALA:N	2.32	0.45
40:DH:90:LEU:O	40:DH:91:PHE:C	2.58	0.45
44:DQ:77:LYS:O	44:DQ:80:ASN:HB3	2.16	0.45
46:DU:98:ASN:OD1	46:DU:100:GLU:HB2	2.16	0.45
47:DF:41:GLU:O	47:DF:43:ILE:N	2.50	0.45
47:DF:90:LEU:HB3	47:DF:95:MET:HA	1.98	0.45
48:DG:9:VAL:HA	48:DG:48:THR:CG2	2.41	0.45
48:DG:23:ILE:HG21	48:DG:71:LEU:HD11	1.98	0.45
48:DG:84:LYS:HG2	48:DG:85:LYS:N	2.27	0.45
50:DT:25:GLU:C	50:DT:27:SER:H	2.23	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:DW:36:ILE:HD12	52:DW:39:GLN:HE22	1.82	0.45
1:AA:238:A:H3'	1:AA:239:U:H5''	1.99	0.45
1:AA:586:C:C5'	7:AH:81:GLY:HA2	2.44	0.45
1:AA:818:G:C2'	1:AA:819:A:H5''	2.47	0.45
1:AA:1533:C:C2'	1:AA:1534:A:H5''	2.46	0.45
4:AE:71:ILE:HG12	4:AE:72:ASN:N	2.32	0.45
6:AG:50:ALA:CB	6:AG:57:GLU:HG3	2.46	0.45
7:AH:6:ILE:HD12	7:AH:35:ILE:CD1	2.46	0.45
8:AI:43:ALA:O	8:AI:46:VAL:HG22	2.16	0.45
9:AJ:40:ILE:HB	9:AJ:73:LEU:HB3	1.98	0.45
12:AM:15:VAL:HG13	12:AM:30:LYS:HA	1.98	0.45
18:AS:15:LEU:O	18:AS:18:VAL:HG12	2.17	0.45
23:BB:107:G:H2'	23:BB:108:G:H8	1.80	0.45
23:BB:219:A:H2	23:BB:234:U:O2	2.00	0.45
23:BB:246:C:C2'	23:BB:247:G:H5'	2.46	0.45
23:BB:322:A:P	29:BE:163:ASN:HD22	2.39	0.45
23:BB:363:G:H2'	23:BB:364:C:H6	1.81	0.45
23:BB:667:U:H2'	23:BB:668:A:O4'	2.17	0.45
23:BB:840:C:H2'	23:BB:841:G:C8	2.52	0.45
23:BB:1490:A:H2'	25:BC:97:ASP:OD1	2.16	0.45
23:BB:1789:A:H2'	23:BB:1790:C:O4'	2.17	0.45
23:BB:2023:C:H4'	23:BB:2617:U:O3'	2.17	0.45
23:BB:2025:C:H2'	23:BB:2026:U:C6	2.52	0.45
23:BB:2306:C:H3'	23:BB:2307:G:H5'	1.92	0.45
23:BB:2515:C:O2'	23:BB:2516:A:H5'	2.16	0.45
23:BB:2811:G:O2'	23:BB:2812:G:H5'	2.16	0.45
24:BI:126:ARG:HA	24:BI:129:GLU:OE2	2.16	0.45
28:BP:24:THR:C	28:BP:25:VAL:HG13	2.40	0.45
28:BP:52:ARG:HG2	28:BP:52:ARG:NH1	2.31	0.45
29:BE:138:LEU:O	29:BE:142:ALA:N	2.50	0.45
29:BE:152:GLU:HA	29:BE:152:GLU:OE1	2.16	0.45
37:BL:121:THR:HG22	37:BL:141:LYS:HB3	1.98	0.45
39:BX:1:MET:CG	39:BX:4:LYS:HD3	2.47	0.45
40:BH:49:ALA:HB3	40:BH:50:ARG:HH12	1.81	0.45
41:BJ:123:LYS:O	41:BJ:124:VAL:HG13	2.16	0.45
42:BN:32:GLU:O	42:BN:114:GLU:HA	2.17	0.45
46:BU:26:ASN:N	46:BU:26:ASN:ND2	2.64	0.45
47:BF:29:ARG:HH11	47:BF:29:ARG:HB2	1.82	0.45
48:BG:23:ILE:HG21	48:BG:71:LEU:HD11	1.98	0.45
48:BG:32:LEU:HB3	48:BG:34:ARG:CZ	2.47	0.45
48:BG:93:TYR:HA	48:BG:105:SER:O	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:105:G:H2'	1:CA:106:C:C6	2.51	0.45
1:CA:140:U:H2'	1:CA:141:G:C8	2.51	0.45
1:CA:192:A:O2'	1:CA:193:C:H5'	2.17	0.45
1:CA:269:C:H2'	1:CA:270:A:H8	1.76	0.45
1:CA:693:G:H2'	1:CA:694:A:O4'	2.16	0.45
5:CF:81:ASN:HB3	5:CF:84:VAL:HG12	1.98	0.45
7:CH:113:ARG:O	7:CH:117:GLN:HG3	2.16	0.45
19:CT:11:ILE:O	19:CT:15:LYS:HB2	2.16	0.45
21:CU:40:PRO:C	21:CU:42:THR:N	2.74	0.45
22:DA:28:C:H2'	22:DA:29:A:C8	2.52	0.45
23:DB:3:U:H2'	23:DB:4:U:H6	1.82	0.45
23:DB:195:A:H61	23:DB:198:C:H3'	1.81	0.45
23:DB:599:A:O2'	23:DB:600:G:H5'	2.16	0.45
23:DB:1291:C:O2'	23:DB:1292:G:H5'	2.17	0.45
23:DB:1678:A:H2'	23:DB:1679:A:O4'	2.16	0.45
23:DB:1740:G:H2'	23:DB:1741:C:H6	1.81	0.45
23:DB:2295:C:OP2	43:DO:10:ARG:HG2	2.16	0.45
23:DB:2884:U:H2'	23:DB:2885:G:C8	2.51	0.45
25:DC:28:PRO:HG2	25:DC:33:LEU:HD11	1.98	0.45
25:DC:259:ASN:C	25:DC:261:ARG:N	2.74	0.45
26:DD:98:VAL:C	26:DD:100:LEU:N	2.72	0.45
28:DP:4:ILE:C	28:DP:6:GLN:H	2.21	0.45
28:DP:47:ILE:HD11	28:DP:59:THR:HG22	1.97	0.45
34:D3:32:LEU:HA	34:D3:35:LYS:HD2	1.97	0.45
38:DM:41:LEU:O	38:DM:94:ALA:N	2.50	0.45
41:DJ:65:THR:HG23	41:DJ:66:GLY:N	2.32	0.45
42:DN:25:ALA:O	42:DN:29:VAL:HG23	2.17	0.45
43:DO:28:VAL:CG2	43:DO:106:LEU:HD21	2.47	0.45
44:DQ:83:LYS:NZ	44:DQ:83:LYS:HA	2.31	0.45
45:DS:13:SER:O	45:DS:101:SER:HB3	2.17	0.45
45:DS:50:VAL:O	45:DS:53:SER:HB3	2.16	0.45
48:DG:67:ALA:HA	48:DG:70:LEU:HB2	1.98	0.45
48:DG:84:LYS:HG3	48:DG:131:VAL:CB	2.45	0.45
50:DT:18:GLU:O	50:DT:20:ALA:N	2.43	0.45
1:AA:219:U:H2'	1:AA:220:G:H8	1.80	0.45
1:AA:317:U:H2'	1:AA:318:G:H8	1.81	0.45
1:AA:412:A:O2'	1:AA:413:G:H5''	2.16	0.45
1:AA:420:U:H2'	1:AA:422:C:C4	2.51	0.45
1:AA:708:C:O2'	1:AA:709:U:H5'	2.17	0.45
1:AA:991:U:H2'	1:AA:1212:U:C2	2.51	0.45
1:AA:1020:G:H2'	1:AA:1021:A:H5'	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1169:A:H2'	1:AA:1170:A:C8	2.51	0.45
1:AA:1193:G:O2'	1:AA:1194:U:H5'	2.15	0.45
1:AA:1355:G:H2'	1:AA:1356:G:C8	2.52	0.45
3:AD:24:VAL:HG23	3:AD:25:ARG:N	2.19	0.45
23:BB:9:G:H21	23:BB:10:A:N6	2.04	0.45
23:BB:98:G:C2'	23:BB:99:U:H5''	2.45	0.45
23:BB:813:U:H2'	23:BB:814:C:H6	1.80	0.45
23:BB:831:G:H2'	23:BB:832:U:O4'	2.16	0.45
23:BB:848:C:H2'	23:BB:849:A:H8	1.81	0.45
23:BB:2065:C:H1'	23:BB:2449:U:H3	1.81	0.45
23:BB:2092:U:H5	23:BB:2226:C:OP2	2.00	0.45
23:BB:2189:U:H2'	23:BB:2190:G:C8	2.48	0.45
23:BB:2515:C:H2'	23:BB:2516:A:H8	1.82	0.45
23:BB:2589:A:H2'	23:BB:2590:A:C8	2.51	0.45
23:BB:2892:G:H5''	23:BB:2894:G:H22	1.81	0.45
24:BI:19:PRO:HG2	24:BI:22:PRO:HB2	1.99	0.45
24:BI:32:VAL:HG13	24:BI:66:PHE:CD2	2.51	0.45
25:BC:106:PRO:HB3	25:BC:141:HIS:CE1	2.52	0.45
25:BC:128:THR:HG23	25:BC:190:THR:HG22	1.98	0.45
25:BC:143:VAL:HG12	25:BC:144:GLU:H	1.81	0.45
26:BD:112:THR:O	26:BD:113:SER:HB2	2.17	0.45
29:BE:69:ARG:O	29:BE:70:SER:CB	2.64	0.45
29:BE:173:THR:C	29:BE:175:ILE:N	2.75	0.45
33:B1:11:VAL:O	33:B1:48:TYR:HA	2.15	0.45
34:B3:28:LEU:HD22	34:B3:43:LEU:CB	2.46	0.45
35:BV:48:MET:O	35:BV:51:GLN:HG3	2.17	0.45
40:BH:29:PHE:C	40:BH:31:VAL:N	2.73	0.45
40:BH:61:VAL:C	40:BH:63:ALA:H	2.24	0.45
41:BJ:16:TYR:CD2	41:BJ:140:LEU:HD12	2.51	0.45
42:BN:16:HIS:C	42:BN:18:GLN:H	2.24	0.45
42:BN:19:ALA:C	42:BN:21:PHE:N	2.74	0.45
42:BN:65:LEU:HD11	42:BN:69:ARG:CZ	2.46	0.45
43:BO:20:GLU:OE2	43:BO:21:LEU:HG	2.17	0.45
44:BQ:57:ARG:HG2	44:BQ:57:ARG:HH11	1.82	0.45
47:BF:59:ILE:HG22	47:BF:98:PHE:HE1	1.82	0.45
47:BF:131:VAL:O	47:BF:132:ARG:HB2	2.17	0.45
48:BG:10:VAL:HB	48:BG:47:ASN:O	2.16	0.45
1:CA:152:A:H3'	1:CA:153:C:H6	1.82	0.45
1:CA:463:U:H5'	1:CA:464:U:OP2	2.16	0.45
1:CA:475:C:O2'	1:CA:476:U:H5'	2.16	0.45
1:CA:613:C:H2'	1:CA:614:C:C6	2.51	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:664:G:N2	1:CA:741:G:H1	2.15	0.45
1:CA:692:U:O2	1:CA:694:A:H5''	2.17	0.45
1:CA:1252:A:H2'	1:CA:1253:G:O4'	2.17	0.45
1:CA:1463:U:OP1	28:DP:108:ARG:HD2	2.17	0.45
2:CC:48:LYS:H	2:CC:48:LYS:CD	2.16	0.45
4:CE:149:PRO:HB3	7:CH:98:LEU:HD21	1.98	0.45
5:CF:38:ARG:HB3	5:CF:63:ASN:HB2	1.97	0.45
6:CG:11:ILE:HD12	6:CG:11:ILE:N	2.31	0.45
8:CI:83:THR:OG1	8:CI:97:LEU:HD13	2.17	0.45
9:CJ:18:ILE:CG2	9:CJ:19:ASP:N	2.80	0.45
9:CJ:51:VAL:CG2	13:CN:80:ARG:HB2	2.47	0.45
16:CQ:52:CYS:HB3	16:CQ:77:VAL:HG22	1.97	0.45
20:CB:70:GLY:HA2	20:CB:163:ILE:CG2	2.47	0.45
23:DB:103:A:H3'	23:DB:104:A:H8	1.80	0.45
23:DB:326:G:O2'	23:DB:327:G:H5'	2.17	0.45
23:DB:410:G:H5''	23:DB:411:G:H5'	1.98	0.45
23:DB:901:C:H2'	23:DB:902:C:C6	2.52	0.45
23:DB:1082:U:C2	23:DB:1086:A:N1	2.84	0.45
23:DB:1098:A:O2'	24:DI:4:VAL:C	2.60	0.45
23:DB:1117:C:O2'	23:DB:1118:C:H5'	2.15	0.45
23:DB:1315:C:H2'	23:DB:1316:U:C6	2.52	0.45
23:DB:1653:G:O6	42:DN:10:LEU:O	2.34	0.45
23:DB:1693:U:H4'	23:DB:1694:C:OP2	2.16	0.45
23:DB:1985:C:O2'	23:DB:1986:C:H5'	2.16	0.45
23:DB:2028:U:O2'	23:DB:2029:G:H5'	2.16	0.45
23:DB:2250:G:H8	23:DB:2250:G:O5'	2.00	0.45
23:DB:2344:U:H4'	23:DB:2345:G:OP1	2.16	0.45
23:DB:2415:G:H2'	23:DB:2416:C:C6	2.52	0.45
23:DB:2463:C:O2'	23:DB:2464:G:H5'	2.17	0.45
23:DB:2466:C:O2'	23:DB:2467:C:H5'	2.16	0.45
23:DB:2472:G:C2'	23:DB:2475:C:H42	2.26	0.45
23:DB:2678:C:H2'	23:DB:2679:A:H8	1.81	0.45
24:DI:45:THR:O	24:DI:48:ILE:HG22	2.15	0.45
26:DD:69:ALA:N	26:DD:73:VAL:HB	2.31	0.45
27:DK:64:ARG:HH12	27:DK:101:GLY:CA	2.28	0.45
28:DP:44:GLY:HA3	28:DP:60:VAL:CG1	2.47	0.45
34:D3:24:LYS:HB2	37:DL:64:PHE:HD2	1.82	0.45
36:D2:10:LEU:HD13	36:D2:10:LEU:C	2.41	0.45
37:DL:89:VAL:HA	37:DL:121:THR:O	2.17	0.45
38:DM:126:ILE:HD12	38:DM:126:ILE:H	1.81	0.45
40:DH:83:LYS:HE2	40:DH:149:GLU:CG	2.45	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DN:51:LEU:HD11	42:DN:69:ARG:HG3	1.98	0.45
42:DN:106:ASP:C	42:DN:108:ALA:N	2.67	0.45
44:DQ:60:TRP:CZ2	44:DQ:93:ILE:HB	2.51	0.45
44:DQ:79:ILE:HD13	44:DQ:79:ILE:C	2.42	0.45
45:DS:13:SER:CB	45:DS:16:LYS:HE3	2.46	0.45
47:DF:106:ALA:N	47:DF:108:PRO:HD2	2.32	0.45
48:DG:84:LYS:HG3	48:DG:131:VAL:C	2.41	0.45
49:DR:49:ILE:HG22	49:DR:54:VAL:HB	1.99	0.45
1:AA:8:A:C6	3:AD:205:LYS:HG3	2.52	0.45
1:AA:85:U:H1'	1:AA:86:G:C4'	2.46	0.45
1:AA:194:C:O2'	1:AA:195:A:H5'	2.17	0.45
1:AA:610:U:O4'	1:AA:610:U:O2	2.31	0.45
1:AA:1280:A:H3'	1:AA:1281:C:H5''	1.98	0.45
11:AL:43:LYS:CE	11:AL:44:PRO:HD3	2.46	0.45
14:AO:85:LEU:HD12	14:AO:85:LEU:N	2.31	0.45
21:AU:40:PRO:C	21:AU:42:THR:N	2.75	0.45
23:BB:7:G:H4'	41:BJ:15:TRP:CZ2	2.52	0.45
23:BB:1100:C:H2'	23:BB:1101:U:C6	2.51	0.45
23:BB:1173:U:H2'	23:BB:1174:U:C4'	2.47	0.45
23:BB:1173:U:H1'	23:BB:1177:G:H22	1.82	0.45
23:BB:1551:A:H2'	23:BB:1552:A:O4'	2.17	0.45
23:BB:2420:C:O2'	23:BB:2421:G:H5'	2.16	0.45
23:BB:2468:A:H2'	23:BB:2476:A:C6	2.52	0.45
23:BB:2790:U:H5'	23:BB:2893:A:N7	2.32	0.45
23:BB:2889:C:H2'	23:BB:2890:G:C8	2.51	0.45
27:BK:2:ILE:HG13	27:BK:33:ALA:O	2.17	0.45
28:BP:59:THR:H	28:BP:72:VAL:HA	1.82	0.45
28:BP:61:ARG:HD3	28:BP:70:GLU:HG3	1.98	0.45
32:B4:36:ARG:O	32:B4:37:GLN:C	2.60	0.45
38:BM:59:ARG:HE	38:BM:60:GLN:N	2.09	0.45
41:BJ:44:TYR:CE2	44:BQ:59:LEU:HD11	2.51	0.45
41:BJ:59:ALA:C	41:BJ:61:LYS:N	2.75	0.45
41:BJ:114:LEU:O	41:BJ:118:MET:HG3	2.17	0.45
42:BN:34:ILE:HB	42:BN:113:ILE:CG2	2.44	0.45
44:BQ:23:TYR:CB	44:BQ:27:ARG:HB3	2.47	0.45
44:BQ:91:ARG:HE	49:BR:11:GLN:HB2	1.82	0.45
45:BS:50:VAL:O	45:BS:53:SER:HB3	2.17	0.45
47:BF:3:LEU:HD12	47:BF:96:TRP:CD1	2.52	0.45
48:BG:54:ARG:HB3	48:BG:57:TYR:HD1	1.79	0.45
50:BT:28:ASN:C	50:BT:29:THR:HG23	2.41	0.45
52:BW:38:ARG:N	52:BW:38:ARG:HD3	2.31	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:322:C:H2'	1:CA:323:U:C6	2.52	0.45
1:CA:513:C:H2'	1:CA:514:C:C6	2.49	0.45
1:CA:543:U:H2'	1:CA:544:G:H8	1.82	0.45
1:CA:597:G:H2'	1:CA:598:U:H5'	1.98	0.45
1:CA:598:U:H4'	7:CH:85:TYR:CG	2.51	0.45
1:CA:621:A:H2'	1:CA:622:A:H8	1.81	0.45
1:CA:658:C:O2'	1:CA:659:U:H5'	2.17	0.45
1:CA:832:G:O2'	1:CA:833:G:H5'	2.16	0.45
1:CA:1007:U:H2'	1:CA:1008:U:H6	1.79	0.45
1:CA:1118:U:H2'	1:CA:1119:C:H6	1.81	0.45
1:CA:1202:U:O2'	13:CN:68:ARG:HG3	2.17	0.45
1:CA:1220:G:O2'	1:CA:1221:G:H5'	2.17	0.45
1:CA:1387:G:H2'	1:CA:1388:C:C6	2.52	0.45
3:CD:2:ARG:O	3:CD:3:TYR:HB3	2.17	0.45
7:CH:1:SER:O	7:CH:3:GLN:HG3	2.16	0.45
7:CH:49:LYS:O	7:CH:59:GLU:N	2.49	0.45
7:CH:68:LYS:HG3	7:CH:69:ALA:H	1.82	0.45
9:CJ:66:GLU:HB3	13:CN:98:ALA:HB2	1.99	0.45
10:CK:22:ILE:CG2	10:CK:95:THR:HG21	2.34	0.45
11:CL:56:LEU:HD21	11:CL:81:ILE:HG13	1.99	0.45
12:CM:52:ILE:HA	12:CM:55:LEU:HG	1.98	0.45
12:CM:87:GLY:HA2	12:CM:90:HIS:HD2	1.82	0.45
16:CQ:29:LYS:HG3	16:CQ:34:GLY:O	2.17	0.45
16:CQ:30:HIS:C	16:CQ:32:ILE:H	2.25	0.45
16:CQ:80:LYS:H	16:CQ:80:LYS:CD	2.29	0.45
22:DA:43:C:H4'	47:DF:91:ARG:NE	2.31	0.45
23:DB:299:A:H2'	23:DB:300:A:C8	2.51	0.45
23:DB:680:C:H2'	23:DB:681:G:H8	1.82	0.45
23:DB:1060:U:H5	24:DI:131:THR:CG2	2.30	0.45
23:DB:1092:C:C2'	23:DB:1093:G:H5'	2.46	0.45
23:DB:1219:U:H2'	23:DB:1220:G:H8	1.81	0.45
23:DB:1541:C:H2'	23:DB:1542:U:H6	1.82	0.45
23:DB:1841:U:H2'	23:DB:1842:G:H8	1.81	0.45
23:DB:2553:G:H2'	23:DB:2554:U:O4'	2.17	0.45
26:DD:124:ARG:O	26:DD:124:ARG:HG3	2.14	0.45
27:DK:63:VAL:HG21	27:DK:85:VAL:HG23	1.99	0.45
29:DE:73:ILE:HG12	29:DE:73:ILE:O	2.17	0.45
37:DL:113:ALA:HB3	37:DL:115:GLU:OE1	2.16	0.45
46:DU:73:ASN:HB3	46:DU:95:PHE:CD2	2.52	0.45
47:DF:29:ARG:HB2	47:DF:29:ARG:HH11	1.82	0.45
47:DF:32:LYS:HE2	47:DF:34:THR:CG2	2.46	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:DF:84:ILE:HG22	47:DF:84:ILE:O	2.16	0.45
47:DF:104:THR:CA	47:DF:108:PRO:HG2	2.47	0.45
47:DF:107:VAL:HB	47:DF:108:PRO:HD3	1.99	0.45
49:DR:66:HIS:ND1	49:DR:94:THR:HG22	2.32	0.45
50:DT:93:LEU:HD22	50:DT:93:LEU:N	2.32	0.45
1:AA:105:G:H2'	1:AA:106:C:C6	2.52	0.45
1:AA:613:C:H2'	1:AA:614:C:H6	1.82	0.45
1:AA:709:U:H2'	1:AA:710:G:H8	1.82	0.45
1:AA:731:G:O2'	1:AA:732:C:H5'	2.16	0.45
1:AA:1053:G:H4'	1:AA:1054:C:H5'	1.99	0.45
1:AA:1202:U:O2'	13:AN:68:ARG:HG3	2.17	0.45
1:AA:1494:G:O2'	1:AA:1495:U:H5'	2.17	0.45
53:AA:1601:NMY:H5	53:AA:1601:NMY:H91	1.81	0.45
8:AI:46:VAL:O	8:AI:49:GLN:HB2	2.17	0.45
9:AJ:51:VAL:CG2	13:AN:80:ARG:HB2	2.46	0.45
12:AM:79:LEU:HD21	12:AM:86:ARG:HH21	1.82	0.45
20:AB:22:TRP:CG	20:AB:23:ASN:N	2.83	0.45
20:AB:65:LYS:HA	20:AB:89:PHE:HE1	1.82	0.45
22:BA:6:G:H2'	22:BA:7:G:C8	2.51	0.45
23:BB:21:A:O2'	23:BB:22:C:H5'	2.16	0.45
23:BB:244:A:H2'	23:BB:245:G:O4'	2.17	0.45
23:BB:639:U:H2'	23:BB:640:C:H6	1.79	0.45
23:BB:817:C:H2'	23:BB:818:G:O4'	2.16	0.45
23:BB:1408:G:O2'	23:BB:1409:U:H5'	2.17	0.45
23:BB:1599:U:OP1	50:BT:39:THR:HA	2.16	0.45
23:BB:1746:A:H2'	23:BB:1747:U:C6	2.51	0.45
23:BB:1799:G:C5	25:BC:175:LEU:HD13	2.52	0.45
23:BB:2373:G:O2'	23:BB:2374:C:H5'	2.17	0.45
23:BB:2740:A:H2'	23:BB:2741:A:C8	2.51	0.45
23:BB:2751:G:H5'	48:BG:2:ARG:HD2	1.99	0.45
25:BC:32:LEU:O	25:BC:63:ILE:HG12	2.17	0.45
26:BD:106:LYS:HB3	26:BD:206:ALA:CB	2.47	0.45
29:BE:60:TRP:CZ3	29:BE:62:GLN:HA	2.52	0.45
29:BE:181:ILE:HG13	37:BL:2:ARG:HB3	1.99	0.45
31:B0:42:ILE:HG22	31:B0:43:THR:O	2.16	0.45
33:B1:22:THR:OG1	33:B1:23:THR:N	2.49	0.45
35:BV:6:ALA:O	35:BV:65:VAL:HG12	2.17	0.45
38:BM:40:ARG:HB3	38:BM:95:LEU:HD12	1.99	0.45
40:BH:62:LEU:O	40:BH:63:ALA:C	2.60	0.45
40:BH:106:ALA:C	40:BH:108:VAL:H	2.25	0.45
40:BH:132:PHE:HB2	40:BH:142:VAL:CG2	2.47	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BJ:29:ALA:O	41:BJ:32:LEU:HB2	2.17	0.45
42:BN:51:LEU:HD11	42:BN:69:ARG:HG3	1.99	0.45
45:BS:24:ILE:CG2	45:BS:71:VAL:HG11	2.44	0.45
47:BF:78:ILE:H	47:BF:79:ARG:NH1	2.13	0.45
47:BF:78:ILE:HA	47:BF:79:ARG:HE	1.82	0.45
47:BF:107:VAL:HB	47:BF:108:PRO:HD3	1.99	0.45
48:BG:3:VAL:O	48:BG:68:ARG:HG3	2.17	0.45
48:BG:72:ASN:O	48:BG:76:ILE:HG12	2.16	0.45
52:BW:23:LYS:HD2	52:BW:24:ARG:HB3	1.99	0.45
1:CA:93:U:H2'	1:CA:94:G:H5'	1.99	0.45
1:CA:254:G:O2'	1:CA:255:G:H5'	2.17	0.45
1:CA:478:A:H2'	1:CA:479:U:O4'	2.17	0.45
1:CA:579:A:H2'	1:CA:580:C:C6	2.52	0.45
1:CA:600:A:H2'	1:CA:601:G:H8	1.81	0.45
1:CA:1280:A:H3'	1:CA:1281:C:H5''	1.99	0.45
1:CA:1366:C:H2'	1:CA:1367:C:H6	1.81	0.45
1:CA:1460:C:H2'	1:CA:1461:G:C8	2.52	0.45
3:CD:89:LEU:HD23	3:CD:199:ILE:HD11	1.98	0.45
6:CG:144:ALA:C	6:CG:146:ALA:N	2.75	0.45
8:CI:62:LEU:N	8:CI:62:LEU:HD13	2.31	0.45
10:CK:70:ALA:C	10:CK:72:ALA:N	2.72	0.45
12:CM:37:GLY:O	12:CM:38:ILE:HD13	2.17	0.45
13:CN:87:ALA:HB2	13:CN:92:ILE:HD12	1.98	0.45
14:CO:70:LEU:HD13	14:CO:70:LEU:C	2.41	0.45
18:CS:14:LEU:HG	18:CS:15:LEU:N	2.31	0.45
21:CU:40:PRO:HG2	21:CU:41:THR:H	1.82	0.45
23:DB:1:G:H2'	23:DB:2:G:H8	1.81	0.45
23:DB:52:A:C5	23:DB:118:A:C2	3.04	0.45
23:DB:102:U:H5''	23:DB:102:U:O2	2.16	0.45
23:DB:483:A:H1'	46:DU:57:ILE:HG13	1.98	0.45
23:DB:823:C:O2'	23:DB:824:U:H5'	2.17	0.45
23:DB:1058:U:H1'	24:DI:117:THR:HG22	1.99	0.45
23:DB:1458:U:C5'	23:DB:1459:G:H5'	2.32	0.45
23:DB:1459:G:H8	23:DB:1459:G:P	2.40	0.45
23:DB:1549:A:H2'	23:DB:1550:C:H6	1.80	0.45
23:DB:1752:C:O2'	23:DB:1753:G:H5'	2.16	0.45
23:DB:2065:C:H1'	23:DB:2449:U:H3	1.81	0.45
23:DB:2373:G:O2'	23:DB:2374:C:H5'	2.17	0.45
23:DB:2436:G:O2'	23:DB:2437:G:H5'	2.17	0.45
23:DB:2716:C:O2'	23:DB:2717:C:H5'	2.17	0.45
23:DB:2811:G:HO2'	23:DB:2812:G:H5'	1.82	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:2811:G:OP1	26:DD:62:LYS:HD2	2.16	0.45
23:DB:2829:A:O2'	23:DB:2830:C:H5'	2.17	0.45
23:DB:2865:U:H5''	23:DB:2866:U:OP2	2.17	0.45
24:DI:21:PRO:HB2	24:DI:22:PRO:CD	2.43	0.45
25:DC:29:PHE:CE2	25:DC:31:PRO:HG2	2.52	0.45
25:DC:36:ASN:HD21	25:DC:85:ASN:ND2	2.15	0.45
25:DC:183:VAL:HG22	25:DC:187:CYS:SG	2.57	0.45
25:DC:196:ASN:O	25:DC:197:ALA:HB3	2.17	0.45
27:DK:47:ILE:HG23	27:DK:49:ARG:H	1.82	0.45
34:D3:16:THR:HG21	34:D3:48:MET:SD	2.56	0.45
35:DV:40:ILE:HD13	35:DV:40:ILE:H	1.81	0.45
35:DV:42:LEU:CD1	35:DV:47:VAL:HG21	2.42	0.45
36:D2:9:VAL:HG13	36:D2:10:LEU:N	2.30	0.45
38:DM:38:ARG:HH11	38:DM:38:ARG:CB	2.21	0.45
38:DM:105:MET:HE3	38:DM:117:PHE:CZ	2.51	0.45
41:DJ:70:THR:HG22	41:DJ:90:GLU:OE2	2.16	0.45
45:DS:24:ILE:CG2	45:DS:71:VAL:HG11	2.42	0.45
45:DS:56:ALA:O	45:DS:59:GLU:HB2	2.17	0.45
47:DF:148:VAL:O	47:DF:149:ARG:HG2	2.16	0.45
48:DG:23:ILE:O	48:DG:34:ARG:HA	2.17	0.45
50:DT:43:ILE:CG2	50:DT:58:VAL:HG21	2.46	0.45
51:DZ:18:ARG:HA	51:DZ:18:ARG:HE	1.82	0.45
52:DW:21:GLY:N	52:DW:33:GLY:HA2	2.32	0.45
52:DW:37:VAL:HG12	52:DW:38:ARG:HD3	1.99	0.45
1:AA:182:A:N3	1:AA:182:A:H5''	2.32	0.45
1:AA:441:A:H61	1:AA:493:A:N6	2.15	0.45
1:AA:478:A:H2'	1:AA:479:U:O4'	2.17	0.45
1:AA:693:G:OP1	10:AK:126:ARG:NH1	2.49	0.45
1:AA:766:A:H2'	1:AA:767:A:O4'	2.17	0.45
1:AA:986:U:H2'	1:AA:987:G:O4'	2.17	0.45
1:AA:1057:G:O3'	2:AC:196:GLY:HA3	2.16	0.45
1:AA:1140:C:O2'	1:AA:1141:C:H5'	2.17	0.45
1:AA:1220:G:O2'	1:AA:1221:G:H5'	2.17	0.45
1:AA:1241:G:H2'	1:AA:1242:G:H8	1.82	0.45
2:AC:115:VAL:HG13	2:AC:136:ALA:HB1	1.98	0.45
3:AD:81:LEU:C	3:AD:83:GLY:H	2.25	0.45
4:AE:42:ASN:O	4:AE:75:LEU:HD12	2.16	0.45
4:AE:52:ALA:HB2	4:AE:61:LYS:CE	2.42	0.45
10:AK:90:PRO:C	10:AK:92:ARG:N	2.74	0.45
10:AK:95:THR:HG23	10:AK:96:ILE:N	2.31	0.45
10:AK:125:LYS:O	21:AU:33:ARG:CZ	2.65	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:AQ:30:HIS:C	16:AQ:32:ILE:H	2.25	0.45
23:BB:125:A:C6	36:B2:10:LEU:HD23	2.52	0.45
23:BB:242:G:N7	34:B3:4:LYS:HG2	2.31	0.45
23:BB:508:A:O2'	23:BB:509:C:OP1	2.35	0.45
23:BB:587:C:H4'	23:BB:588:U:C6	2.52	0.45
23:BB:784:G:N2	25:BC:225:ASN:HD22	2.13	0.45
23:BB:982:C:O2	23:BB:982:C:H2'	2.16	0.45
23:BB:1561:C:H2'	23:BB:1562:U:C6	2.52	0.45
23:BB:1593:A:H2'	23:BB:1594:U:H6	1.80	0.45
23:BB:2678:C:H2'	23:BB:2679:A:H8	1.82	0.45
23:BB:2751:G:H4'	23:BB:2752:C:OP1	2.16	0.45
24:BI:12:VAL:HG23	24:BI:41:PHE:CE2	2.52	0.45
24:BI:72:THR:HG21	24:BI:111:THR:O	2.17	0.45
25:BC:138:SER:O	25:BC:140:VAL:HG23	2.17	0.45
25:BC:189:ALA:C	25:BC:190:THR:HG23	2.42	0.45
26:BD:30:GLU:HB3	26:BD:185:ASN:ND2	2.31	0.45
26:BD:138:LEU:N	26:BD:138:LEU:HD22	2.31	0.45
30:BY:21:ALA:O	30:BY:24:LEU:HB3	2.17	0.45
30:BY:37:ARG:HG3	30:BY:38:GLU:OE1	2.17	0.45
31:B0:33:SER:C	31:B0:35:GLU:N	2.72	0.45
31:B0:43:THR:HG23	31:B0:47:TYR:C	2.42	0.45
33:B1:18:HIS:CD2	33:B1:40:PRO:HD2	2.52	0.45
39:BX:36:GLN:O	39:BX:37:LEU:C	2.60	0.45
39:BX:36:GLN:HB2	39:BX:37:LEU:H	1.50	0.45
43:BO:2:ASP:OD2	43:BO:4:LYS:HB3	2.16	0.45
46:BU:12:VAL:HG22	46:BU:69:VAL:CG1	2.45	0.45
47:BF:137:PHE:O	47:BF:138:PRO:C	2.59	0.45
48:BG:157:LYS:HB3	48:BG:159:LYS:HG2	1.98	0.45
1:CA:201:G:O2'	1:CA:202:G:H5'	2.17	0.45
1:CA:616:G:N3	1:CA:616:G:H2'	2.32	0.45
1:CA:987:G:H2'	1:CA:988:G:H8	1.82	0.45
1:CA:992:U:H2'	1:CA:1043:G:N7	2.32	0.45
1:CA:997:U:O2'	1:CA:998:C:H5'	2.17	0.45
1:CA:1020:G:H2'	1:CA:1021:A:H5'	1.99	0.45
1:CA:1060:U:H5''	9:CJ:53:ILE:HD11	1.98	0.45
1:CA:1143:G:H2'	1:CA:1144:G:H8	1.82	0.45
1:CA:1386:G:H2'	1:CA:1387:G:C8	2.51	0.45
3:CD:100:VAL:HG11	3:CD:142:VAL:HG21	1.98	0.45
8:CI:20:ILE:HD13	8:CI:85:ALA:CB	2.44	0.45
8:CI:34:LEU:HD21	8:CI:48:ARG:HE	1.82	0.45
12:CM:68:LEU:O	12:CM:72:ILE:HB	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:CP:1:MET:HE2	15:CP:3:THR:HG22	1.99	0.45
19:CT:5:SER:C	19:CT:7:LYS:N	2.75	0.45
20:CB:102:ASN:O	20:CB:106:VAL:HG23	2.17	0.45
21:CU:41:THR:HG22	21:CU:45:LYS:HZ3	1.82	0.45
22:DA:7:G:O2'	22:DA:8:C:H5'	2.16	0.45
23:DB:184:C:H2'	23:DB:185:G:C8	2.51	0.45
23:DB:826:U:O2'	37:DL:53:GLY:HA3	2.17	0.45
23:DB:1945:G:H2'	23:DB:1946:U:C6	2.52	0.45
23:DB:2336:A:N6	52:DW:40:ARG:HD2	2.32	0.45
23:DB:2411:A:H2'	23:DB:2412:A:H8	1.81	0.45
23:DB:2415:G:H2'	23:DB:2416:C:H6	1.81	0.45
23:DB:2793:C:H2'	23:DB:2794:C:C6	2.51	0.45
23:DB:2828:G:O2'	23:DB:2829:A:H5'	2.17	0.45
25:DC:156:SER:HB3	25:DC:159:THR:CG2	2.47	0.45
25:DC:250:GLN:HG2	25:DC:254:LYS:HG2	1.99	0.45
26:DD:47:ALA:HB1	26:DD:81:GLU:HG3	1.99	0.45
28:DP:6:GLN:HA	28:DP:9:GLN:HG2	1.99	0.45
28:DP:47:ILE:HG13	28:DP:48:ALA:H	1.81	0.45
31:D0:42:ILE:HG22	31:D0:43:THR:O	2.16	0.45
38:DM:17:ASN:HD22	38:DM:17:ASN:HA	1.60	0.45
39:DX:31:GLN:CG	39:DX:37:LEU:HB2	2.36	0.45
41:DJ:123:LYS:O	41:DJ:124:VAL:HG13	2.17	0.45
45:DS:73:LYS:HE3	45:DS:74:ILE:N	2.27	0.45
47:DF:71:LYS:C	47:DF:73:VAL:H	2.24	0.45
50:DT:1:MET:O	50:DT:2:ILE:HG23	2.17	0.45
50:DT:83:ALA:O	50:DT:84:TYR:HB2	2.17	0.45
50:DT:87:LEU:HB2	50:DT:91:GLN:CG	2.47	0.45
51:DZ:5:CYS:HB3	51:DZ:10:LYS:N	2.14	0.45
52:DW:30:VAL:HG13	52:DW:30:VAL:O	2.17	0.45
1:AA:92:U:H2'	1:AA:93:U:C5	2.52	0.45
1:AA:580:C:H2'	1:AA:581:G:O4'	2.17	0.45
1:AA:879:C:O2'	1:AA:880:C:H5'	2.17	0.45
1:AA:1159:U:O4'	1:AA:1182:G:N2	2.50	0.45
2:AC:42:LEU:O	2:AC:46:LEU:HB2	2.16	0.45
2:AC:149:LYS:HG3	2:AC:168:ARG:HB2	1.98	0.45
3:AD:160:LEU:HA	3:AD:163:GLN:CG	2.47	0.45
3:AD:171:GLU:HB2	3:AD:180:THR:HB	1.99	0.45
6:AG:126:ALA:C	6:AG:128:GLU:H	2.25	0.45
7:AH:1:SER:O	7:AH:3:GLN:HG3	2.17	0.45
7:AH:12:ARG:HH11	7:AH:12:ARG:HG3	1.82	0.45
8:AI:35:GLU:C	8:AI:37:TYR:H	2.24	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AK:16:SER:C	10:AK:79:LYS:H	2.24	0.45
11:AL:23:LEU:C	11:AL:25:ALA:N	2.75	0.45
12:AM:7:ASN:ND2	12:AM:7:ASN:N	2.64	0.45
13:AN:79:SER:OG	13:AN:82:LYS:HG2	2.17	0.45
18:AS:19:GLU:HA	18:AS:22:VAL:HG23	1.99	0.45
18:AS:29:PRO:HA	18:AS:47:THR:O	2.16	0.45
20:AB:128:LEU:HB3	20:AB:132:GLU:HB3	1.99	0.45
22:BA:28:C:H2'	22:BA:29:A:O4'	2.17	0.45
23:BB:220:G:H1	23:BB:427:U:H2'	1.82	0.45
23:BB:464:U:H2'	23:BB:465:G:O4'	2.17	0.45
23:BB:1239:G:H5''	56:BB:3608:HOH:O	2.17	0.45
23:BB:1584:U:H3'	23:BB:1585:C:H5'	1.99	0.45
23:BB:1637:A:H2'	23:BB:1638:C:C6	2.52	0.45
23:BB:1740:G:H2'	23:BB:1741:C:H6	1.80	0.45
23:BB:1845:G:O2'	23:BB:1846:G:H5'	2.17	0.45
23:BB:2146:C:C4'	23:BB:2148:G:H1'	2.47	0.45
23:BB:2463:C:O2'	23:BB:2464:G:H5'	2.16	0.45
23:BB:2671:G:H2'	23:BB:2672:U:H6	1.81	0.45
23:BB:2714:G:O2'	23:BB:2715:C:H5'	2.17	0.45
23:BB:2783:U:H2'	23:BB:2784:U:H6	1.82	0.45
23:BB:2835:A:H61	23:BB:2878:U:H2'	1.82	0.45
24:BI:109:ALA:HB1	24:BI:124:MET:CG	2.47	0.45
26:BD:168:GLU:O	26:BD:169:ARG:C	2.60	0.45
29:BE:59:PRO:CB	29:BE:67:ARG:HH22	2.30	0.45
33:B1:36:LYS:HA	33:B1:46:VAL:O	2.16	0.45
34:B3:14:LYS:O	34:B3:15:LYS:C	2.60	0.45
37:BL:57:LEU:C	37:BL:59:ARG:H	2.24	0.45
37:BL:142:ILE:HD12	37:BL:142:ILE:N	2.31	0.45
38:BM:94:ALA:O	38:BM:96:ILE:HG23	2.16	0.45
40:BH:69:ALA:HA	40:BH:140:ALA:CB	2.47	0.45
44:BQ:7:VAL:O	44:BQ:11:ALA:HB2	2.17	0.45
45:BS:25:ARG:CZ	45:BS:74:ILE:HG23	2.47	0.45
45:BS:33:LEU:HG	45:BS:51:LEU:HD23	1.99	0.45
45:BS:42:LYS:O	45:BS:45:VAL:HG22	2.17	0.45
47:BF:78:ILE:N	47:BF:79:ARG:HH11	2.15	0.45
47:BF:106:ALA:N	47:BF:108:PRO:HD2	2.31	0.45
47:BF:131:VAL:C	47:BF:133:GLU:H	2.25	0.45
50:BT:7:LEU:C	50:BT:9:LYS:H	2.25	0.45
1:CA:612:C:H2'	1:CA:613:C:C6	2.53	0.45
1:CA:1107:C:OP1	2:CC:171:ARG:HB2	2.16	0.45
2:CC:38:VAL:HG23	2:CC:39:ARG:N	2.32	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CC:137:VAL:HG13	2:CC:148:ILE:HG21	1.98	0.45
11:CL:107:LYS:HD2	11:CL:107:LYS:O	2.17	0.45
13:CN:68:ARG:HH12	13:CN:71:GLY:H	1.63	0.45
15:CP:4:ILE:O	15:CP:71:VAL:HG11	2.17	0.45
15:CP:43:ALA:HA	15:CP:46:LYS:HE3	1.99	0.45
18:CS:42:ASN:ND2	18:CS:43:MET:H	2.15	0.45
20:CB:87:ASP:HB2	20:CB:224:ARG:NH2	2.31	0.45
21:CU:25:ALA:C	21:CU:27:VAL:H	2.25	0.45
22:DA:78:A:H2'	22:DA:79:G:O4'	2.17	0.45
23:DB:321:U:OP2	29:DE:130:LYS:HA	2.17	0.45
23:DB:321:U:O4'	29:DE:159:LEU:HG	2.17	0.45
23:DB:1051:G:H2'	23:DB:1052:C:C6	2.52	0.45
23:DB:1374:G:H2'	23:DB:1375:U:C6	2.52	0.45
23:DB:2291:U:O2'	23:DB:2374:C:H1'	2.17	0.45
23:DB:2340:A:H2'	23:DB:2341:G:H8	1.80	0.45
23:DB:2365:G:O2'	52:DW:59:PHE:CE1	2.70	0.45
23:DB:2369:A:H2'	23:DB:2370:G:C8	2.52	0.45
25:DC:90:ILE:HD13	25:DC:103:ILE:C	2.41	0.45
26:DD:33:ARG:NE	26:DD:74:GLU:HB3	2.32	0.45
26:DD:114:LYS:HG3	26:DD:115:GLY:H	1.81	0.45
29:DE:195:GLN:C	29:DE:197:GLU:N	2.75	0.45
37:DL:101:ILE:HG22	37:DL:102:GLY:N	2.32	0.45
40:DH:92:GLY:O	40:DH:93:SER:HB3	2.16	0.45
40:DH:115:VAL:C	40:DH:117:LEU:H	2.25	0.45
41:DJ:24:THR:O	41:DJ:25:LEU:HB3	2.17	0.45
41:DJ:123:LYS:HG2	41:DJ:132:HIS:CD2	2.51	0.45
46:DU:39:ASN:CB	46:DU:62:ALA:HB3	2.42	0.45
47:DF:74:ALA:HB1	47:DF:76:PHE:CD2	2.51	0.45
47:DF:137:PHE:O	47:DF:138:PRO:C	2.59	0.45
48:DG:10:VAL:HB	48:DG:47:ASN:O	2.17	0.45
48:DG:145:ALA:HA	48:DG:148:ARG:CG	2.45	0.45
52:DW:38:ARG:N	52:DW:38:ARG:HD3	2.32	0.45
52:DW:61:LYS:HB3	52:DW:62:ALA:H	1.44	0.45
1:AA:90:C:H2'	1:AA:91:U:C6	2.52	0.44
1:AA:93:U:C2'	1:AA:94:G:H4'	2.47	0.44
1:AA:106:C:O2'	1:AA:107:G:H5'	2.16	0.44
1:AA:254:G:H4'	16:AQ:19:SER:OG	2.16	0.44
1:AA:299:G:H2'	1:AA:300:A:C8	2.52	0.44
1:AA:620:C:H2'	1:AA:621:A:C8	2.52	0.44
1:AA:659:U:O2'	1:AA:660:C:H5'	2.17	0.44
1:AA:725:G:H2'	1:AA:726:C:C6	2.52	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1239:A:N6	1:AA:1299:A:H62	2.15	0.44
3:AD:84:ASN:ND2	3:AD:84:ASN:C	2.72	0.44
10:AK:36:ARG:HH11	10:AK:36:ARG:HG3	1.82	0.44
12:AM:3:ILE:HA	12:AM:56:ARG:CG	2.43	0.44
12:AM:42:VAL:HB	12:AM:47:LEU:CD2	2.44	0.44
15:AP:1:MET:HA	15:AP:1:MET:HE3	1.99	0.44
15:AP:20:VAL:HG23	15:AP:34:GLU:O	2.18	0.44
16:AQ:59:GLU:C	16:AQ:75:VAL:HG22	2.41	0.44
20:AB:15:PHE:O	20:AB:40:ILE:HD12	2.17	0.44
22:BA:17:C:H2'	22:BA:18:G:O4'	2.17	0.44
22:BA:28:C:H2'	22:BA:29:A:H8	1.82	0.44
23:BB:72:U:H1'	39:BX:51:ALA:CB	2.47	0.44
23:BB:175:G:O2'	23:BB:176:A:H5'	2.17	0.44
23:BB:297:G:H2'	23:BB:298:G:O4'	2.17	0.44
23:BB:329:G:H1	46:BU:16:LYS:HZ3	1.63	0.44
23:BB:971:G:OP2	23:BB:974:G:N2	2.50	0.44
23:BB:990:A:H1'	23:BB:1156:A:C2	2.53	0.44
23:BB:1047:G:O2'	23:BB:1110:G:N1	2.42	0.44
23:BB:1064:C:H2'	23:BB:1065:U:O4'	2.17	0.44
23:BB:1091:G:O2'	23:BB:1092:C:H5'	2.17	0.44
23:BB:1476:U:HO2'	23:BB:1477:A:H8	1.65	0.44
23:BB:1797:G:O3'	25:BC:255:LYS:HA	2.18	0.44
23:BB:2181:U:H2'	23:BB:2182:U:O4'	2.16	0.44
23:BB:2215:C:O2'	23:BB:2216:G:H5'	2.17	0.44
23:BB:2228:G:H2'	23:BB:2229:U:H6	1.82	0.44
24:BI:92:PRO:C	24:BI:94:LYS:H	2.25	0.44
27:BK:85:VAL:O	27:BK:87:LEU:HD23	2.17	0.44
29:BE:29:HIS:C	29:BE:32:VAL:HG22	2.41	0.44
32:B4:36:ARG:HG2	32:B4:37:GLN:H	1.81	0.44
39:BX:45:GLN:O	39:BX:46:VAL:HB	2.17	0.44
40:BH:41:LYS:CA	40:BH:44:ILE:HG13	2.48	0.44
40:BH:89:LYS:HB3	40:BH:90:LEU:H	1.59	0.44
41:BJ:106:LYS:HA	41:BJ:106:LYS:HD2	1.86	0.44
43:BO:67:ASN:H	43:BO:70:ALA:CB	2.26	0.44
45:BS:13:SER:O	45:BS:101:SER:HB3	2.16	0.44
45:BS:61:ASN:HB3	45:BS:62:ASP:H	1.51	0.44
48:BG:36:LEU:HD22	48:BG:36:LEU:N	2.32	0.44
48:BG:102:ILE:CD1	48:BG:116:LEU:HD11	2.46	0.44
50:BT:15:HIS:O	50:BT:16:VAL:C	2.59	0.44
50:BT:87:LEU:HB2	50:BT:91:GLN:CG	2.46	0.44
1:CA:125:U:H2'	1:CA:126:G:H8	1.82	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:171:A:H2'	1:CA:172:A:C8	2.52	0.44
1:CA:439:U:H2'	1:CA:440:C:H6	1.82	0.44
1:CA:577:G:O2'	1:CA:578:C:H5'	2.17	0.44
1:CA:1006:G:O2'	1:CA:1007:U:H5'	2.17	0.44
1:CA:1313:U:O2'	1:CA:1314:C:H5'	2.18	0.44
1:CA:1375:A:H2'	1:CA:1376:U:C6	2.51	0.44
1:CA:1453:G:H2'	1:CA:1454:G:O4'	2.17	0.44
1:CA:1483:A:H2'	1:CA:1484:C:O4'	2.17	0.44
1:CA:1499:A:O2'	1:CA:1500:A:H5'	2.17	0.44
2:CC:19:SER:HB3	2:CC:21:TRP:NE1	2.32	0.44
2:CC:112:ALA:O	2:CC:113:LYS:C	2.60	0.44
5:CF:49:TYR:CE2	5:CF:51:ILE:HB	2.52	0.44
6:CG:145:GLU:C	6:CG:147:ASN:N	2.74	0.44
10:CK:95:THR:HG23	10:CK:96:ILE:N	2.31	0.44
10:CK:101:ALA:C	10:CK:103:GLY:H	2.25	0.44
12:CM:7:ASN:ND2	12:CM:7:ASN:N	2.64	0.44
12:CM:70:ARG:HH21	47:DF:136:ILE:HB	1.81	0.44
19:CT:41:GLY:O	19:CT:42:ASP:HB2	2.17	0.44
20:CB:68:PHE:CE1	20:CB:88:GLN:HB3	2.52	0.44
23:DB:131:A:H2'	23:DB:132:G:C8	2.51	0.44
23:DB:292:U:H2'	23:DB:293:U:C6	2.52	0.44
23:DB:360:U:H2'	23:DB:361:G:O4'	2.17	0.44
23:DB:454:A:H3'	23:DB:455:C:H5'	1.99	0.44
23:DB:828:U:H4'	23:DB:831:G:N1	2.32	0.44
23:DB:1296:G:O2'	23:DB:1297:C:H5'	2.17	0.44
23:DB:1576:U:O2'	23:DB:1577:C:H5'	2.17	0.44
23:DB:1998:A:OP2	26:DD:141:ARG:NH2	2.50	0.44
23:DB:2110:G:H8	23:DB:2110:G:OP2	2.00	0.44
23:DB:2846:G:OP1	28:DP:51:ASN:HB2	2.17	0.44
24:DI:41:PHE:CE2	24:DI:45:THR:HG21	2.52	0.44
24:DI:53:PRO:CG	24:DI:77:VAL:HG11	2.46	0.44
26:DD:38:LYS:HD3	26:DD:45:TYR:CZ	2.52	0.44
28:DP:59:THR:H	28:DP:72:VAL:HA	1.82	0.44
29:DE:138:LEU:O	29:DE:142:ALA:N	2.50	0.44
30:DY:51:SER:HA	30:DY:54:VAL:HG22	1.99	0.44
37:DL:65:GLY:O	37:DL:66:PHE:CB	2.65	0.44
38:DM:102:LEU:HB3	38:DM:103:TYR:CD1	2.51	0.44
40:DH:84:ALA:O	40:DH:91:PHE:HE1	1.99	0.44
41:DJ:64:VAL:O	41:DJ:68:LYS:HD2	2.17	0.44
42:DN:79:LEU:O	42:DN:80:PHE:HB2	2.18	0.44
47:DF:110:ILE:HB	47:DF:113:PHE:HB3	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:DG:94:ARG:HH21	48:DG:104:LEU:HA	1.83	0.44
49:DR:86:GLN:HE21	49:DR:86:GLN:HB2	1.53	0.44
50:DT:12:ARG:HB3	50:DT:12:ARG:HH11	1.82	0.44
51:DZ:66:THR:O	51:DZ:70:GLU:HG3	2.17	0.44
1:AA:308:C:H2'	1:AA:309:A:H8	1.83	0.44
1:AA:468:A:H8	1:AA:469:C:C6	2.36	0.44
1:AA:734:G:H2'	1:AA:735:C:C6	2.53	0.44
1:AA:921:U:O2	4:AE:23:THR:HG23	2.17	0.44
1:AA:994:A:N1	1:AA:1047:G:H4'	2.32	0.44
1:AA:1192:C:H2'	1:AA:1193:G:O4'	2.17	0.44
1:AA:1225:A:O2'	18:AS:77:ARG:HD3	2.17	0.44
1:AA:1238:A:N7	1:AA:1303:C:H1'	2.32	0.44
1:AA:1332:A:H2'	1:AA:1333:A:C8	2.52	0.44
1:AA:1418:A:N6	1:AA:1482:G:H1'	2.31	0.44
1:AA:1533:C:C3'	1:AA:1534:A:H5''	2.47	0.44
4:AE:131:ASN:ND2	4:AE:134:ASN:H	2.15	0.44
4:AE:149:PRO:HB3	7:AH:98:LEU:HD21	1.99	0.44
5:AF:17:GLN:O	5:AF:21:MET:HG3	2.17	0.44
7:AH:83:ARG:C	7:AH:84:ILE:HG13	2.42	0.44
23:BB:182:A:O2'	23:BB:183:C:H5'	2.17	0.44
23:BB:327:G:O2'	23:BB:328:U:H5'	2.16	0.44
23:BB:528:A:H3'	23:BB:528:A:H8	1.81	0.44
23:BB:1146:C:H2'	23:BB:1147:A:C8	2.52	0.44
23:BB:1172:C:O2	23:BB:1172:C:C2'	2.65	0.44
23:BB:1652:A:OP1	42:BN:8:ARG:HD3	2.17	0.44
23:BB:1921:G:O2'	23:BB:1922:G:H5'	2.17	0.44
24:BI:64:ARG:C	24:BI:64:ARG:HD2	2.42	0.44
25:BC:120:ASP:CG	25:BC:121:ALA:H	2.25	0.44
28:BP:44:GLY:HA3	28:BP:60:VAL:CG1	2.48	0.44
29:BE:129:PRO:HB3	29:BE:159:LEU:HD23	1.99	0.44
30:BY:12:ALA:HB2	30:BY:53:MET:CE	2.47	0.44
30:BY:51:SER:HA	30:BY:54:VAL:CG2	2.48	0.44
35:BV:16:ALA:HA	35:BV:19:ARG:NE	2.27	0.44
35:BV:29:ILE:HG13	35:BV:88:HIS:CE1	2.51	0.44
36:B2:22:MET:HA	36:B2:28:ARG:HG3	1.99	0.44
37:BL:29:LYS:C	37:BL:31:GLY:N	2.73	0.44
40:BH:119:ASN:HB2	40:BH:120:GLY:H	1.71	0.44
40:BH:141:LYS:HE2	40:BH:141:LYS:HB2	1.73	0.44
41:BJ:44:TYR:C	41:BJ:44:TYR:HD2	2.25	0.44
41:BJ:44:TYR:HB2	44:BQ:63:ARG:CD	2.47	0.44
41:BJ:82:GLY:O	41:BJ:83:GLY:C	2.59	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BO:106:LEU:HA	43:BO:109:ALA:HB3	1.99	0.44
43:BO:116:GLN:O	43:BO:117:PHE:HB3	2.17	0.44
50:BT:47:VAL:HG12	50:BT:47:VAL:O	2.16	0.44
50:BT:93:LEU:HD22	50:BT:93:LEU:N	2.32	0.44
51:BZ:7:VAL:HG21	51:BZ:59:ILE:CD1	2.48	0.44
51:BZ:11:ARG:HB3	51:BZ:12:PRO:HD2	1.99	0.44
52:BW:49:ASN:C	52:BW:50:VAL:HG22	2.41	0.44
52:BW:77:LYS:HZ3	52:BW:77:LYS:HB2	1.81	0.44
1:CA:84:U:O2'	1:CA:85:U:H5'	2.17	0.44
1:CA:189:A:H2'	1:CA:190:A:C8	2.51	0.44
1:CA:208:U:O5'	1:CA:208:U:H6	2.01	0.44
1:CA:409:U:O2'	1:CA:410:G:H5'	2.17	0.44
1:CA:1379:G:N7	6:CG:2:ARG:CZ	2.80	0.44
2:CC:115:VAL:HG13	2:CC:136:ALA:HB1	1.99	0.44
8:CI:43:ALA:C	8:CI:45:MET:H	2.25	0.44
11:CL:23:LEU:C	11:CL:25:ALA:N	2.74	0.44
14:CO:62:GLN:O	14:CO:66:LEU:HD23	2.17	0.44
20:CB:71:THR:HG23	20:CB:94:ARG:H	1.82	0.44
20:CB:110:ILE:O	20:CB:113:LEU:HB3	2.17	0.44
23:DB:124:G:C6	36:D2:19:ARG:NH1	2.85	0.44
23:DB:527:C:O2	23:DB:527:C:O4'	2.32	0.44
23:DB:686:U:O2'	36:D2:5:PHE:HA	2.17	0.44
23:DB:797:G:OP1	29:DE:55:SER:OG	2.33	0.44
23:DB:848:C:H2'	23:DB:849:A:H8	1.83	0.44
23:DB:1011:G:O2'	23:DB:1013:C:H5''	2.17	0.44
23:DB:1030:C:O2'	23:DB:1031:G:H5'	2.17	0.44
23:DB:1060:U:OP1	24:DI:75:ALA:HB3	2.17	0.44
23:DB:1652:A:OP1	42:DN:8:ARG:HD3	2.18	0.44
23:DB:1951:U:O2'	23:DB:1953:A:N7	2.47	0.44
23:DB:2838:G:H2'	23:DB:2839:G:C8	2.52	0.44
23:DB:2844:G:O2'	23:DB:2845:U:H5'	2.16	0.44
25:DC:120:ASP:CG	25:DC:121:ALA:H	2.25	0.44
26:DD:123:LYS:HD3	26:DD:165:MET:SD	2.57	0.44
27:DK:79:PHE:HZ	27:DK:104:THR:HG23	1.82	0.44
29:DE:1:MET:HB2	29:DE:16:GLU:CA	2.48	0.44
38:DM:29:GLY:HA2	38:DM:106:ASP:HB2	1.98	0.44
40:DH:88:GLY:O	40:DH:124:THR:HA	2.17	0.44
41:DJ:64:VAL:O	41:DJ:65:THR:HG22	2.16	0.44
45:DS:24:ILE:CD1	45:DS:36:LEU:HD21	2.48	0.44
45:DS:28:LYS:HB3	45:DS:29:VAL:H	1.43	0.44
47:DF:33:ILE:HG22	47:DF:90:LEU:HD23	1.97	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:DG:103:ASN:HA	48:DG:113:ASP:OD1	2.17	0.44
50:DT:25:GLU:C	50:DT:27:SER:N	2.74	0.44
51:DZ:15:GLY:O	51:DZ:26:LYS:HA	2.18	0.44
1:AA:88:U:O2'	1:AA:89:U:C6	2.70	0.44
1:AA:475:C:O2'	1:AA:476:U:H5'	2.17	0.44
1:AA:738:C:H2'	1:AA:739:C:H6	1.82	0.44
1:AA:883:C:O2'	1:AA:884:U:H5'	2.17	0.44
1:AA:1069:C:H4'	1:AA:1192:C:O2	2.18	0.44
1:AA:1252:A:H2'	1:AA:1253:G:O4'	2.18	0.44
3:AD:116:LEU:O	3:AD:121:ALA:HB3	2.17	0.44
4:AE:136:VAL:HG13	4:AE:137:ARG:N	2.32	0.44
6:AG:87:PRO:HG2	6:AG:151:ALA:HB2	1.99	0.44
7:AH:49:LYS:HB3	7:AH:59:GLU:CD	2.43	0.44
9:AJ:21:ALA:HB2	9:AJ:96:VAL:HG11	2.00	0.44
12:AM:69:ARG:O	12:AM:72:ILE:HG22	2.18	0.44
14:AO:71:LYS:HB2	14:AO:78:TYR:CG	2.52	0.44
15:AP:66:THR:HG22	15:AP:67:ILE:N	2.33	0.44
16:AQ:80:LYS:H	16:AQ:80:LYS:CD	2.30	0.44
23:BB:138:U:O5'	23:BB:138:U:H6	2.00	0.44
23:BB:718:A:H5'	23:BB:719:C:C5	2.52	0.44
23:BB:765:C:H2'	23:BB:766:U:C6	2.52	0.44
23:BB:845:A:C2'	23:BB:846:U:H5''	2.40	0.44
23:BB:932:U:H1'	23:BB:934:U:C4	2.52	0.44
23:BB:1076:C:H4'	24:BI:94:LYS:NZ	2.31	0.44
23:BB:1349:C:H2'	23:BB:1350:C:C6	2.51	0.44
23:BB:1897:G:O2'	23:BB:1898:U:H5'	2.16	0.44
23:BB:1920:C:H2'	23:BB:1921:G:C8	2.53	0.44
23:BB:2098:U:H2'	23:BB:2099:U:C6	2.52	0.44
23:BB:2472:G:C2'	23:BB:2475:C:H42	2.26	0.44
23:BB:2863:C:O2'	23:BB:2864:G:H5'	2.16	0.44
24:BI:63:ASP:O	24:BI:65:SER:N	2.50	0.44
26:BD:91:THR:HG23	26:BD:92:VAL:N	2.26	0.44
28:BP:3:ILE:CG2	28:BP:4:ILE:N	2.80	0.44
28:BP:6:GLN:HA	28:BP:9:GLN:HG2	2.00	0.44
35:BV:42:LEU:H	35:BV:42:LEU:CD2	2.25	0.44
37:BL:3:LEU:HA	37:BL:6:LEU:HD21	1.99	0.44
37:BL:79:LEU:HD13	37:BL:115:GLU:O	2.17	0.44
39:BX:59:GLU:CD	39:BX:59:GLU:N	2.73	0.44
45:BS:60:HIS:ND1	45:BS:60:HIS:O	2.51	0.44
46:BU:2:ALA:O	46:BU:5:ARG:NH2	2.50	0.44
47:BF:13:LYS:HE3	47:BF:14:LYS:N	2.32	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:BF:46:LYS:NZ	47:BF:46:LYS:HA	2.32	0.44
47:BF:65:LEU:CD2	47:BF:87:LYS:HD2	2.47	0.44
50:BT:25:GLU:C	50:BT:27:SER:N	2.74	0.44
50:BT:57:VAL:O	50:BT:85:VAL:O	2.35	0.44
51:BZ:21:ALA:HB3	51:BZ:23:ASN:ND2	2.32	0.44
1:CA:455:G:H2'	1:CA:456:A:H8	1.83	0.44
1:CA:490:C:H2'	1:CA:491:G:H8	1.83	0.44
1:CA:708:C:H2'	1:CA:709:U:H6	1.81	0.44
1:CA:861:G:O2'	1:CA:862:C:H5'	2.16	0.44
3:CD:29:THR:HG22	3:CD:30:LYS:N	2.31	0.44
5:CF:62:MET:O	5:CF:63:ASN:HB2	2.17	0.44
8:CI:29:ILE:HG12	8:CI:64:ILE:CB	2.47	0.44
9:CJ:24:GLU:CG	9:CJ:90:LEU:HD11	2.47	0.44
10:CK:22:ILE:HD13	10:CK:95:THR:CG2	2.46	0.44
12:CM:1:ALA:O	12:CM:3:ILE:HG13	2.17	0.44
15:CP:6:LEU:CD1	15:CP:71:VAL:HB	2.48	0.44
17:CR:68:PRO:HB2	17:CR:70:THR:O	2.17	0.44
20:CB:165:ALA:HB3	20:CB:186:VAL:HG12	1.98	0.44
23:DB:15:G:H2'	23:DB:16:C:H6	1.83	0.44
23:DB:783:A:H8	23:DB:784:G:H4'	1.82	0.44
23:DB:962:G:H21	23:DB:2250:G:H1	1.61	0.44
23:DB:1059:G:H2'	23:DB:1060:U:C5	2.52	0.44
23:DB:1205:A:N1	29:DE:165:HIS:HB2	2.33	0.44
23:DB:1219:U:H2'	23:DB:1220:G:C8	2.52	0.44
23:DB:1443:U:H2'	23:DB:1444:G:H8	1.82	0.44
23:DB:1653:G:H1	42:DN:11:ASN:HD21	1.65	0.44
23:DB:1746:A:H2'	23:DB:1747:U:C6	2.52	0.44
23:DB:1854:A:N6	23:DB:1888:G:H1'	2.33	0.44
23:DB:2080:A:OP1	51:DZ:20:HIS:HB3	2.18	0.44
23:DB:2758:A:O2'	23:DB:2759:G:H5'	2.17	0.44
23:DB:2830:C:H1'	23:DB:2836:U:O4'	2.18	0.44
28:DP:61:ARG:HH21	28:DP:61:ARG:CB	2.27	0.44
32:D4:11:CYS:SG	32:D4:33:HIS:CE1	3.10	0.44
33:D1:3:GLY:C	33:D1:5:ARG:N	2.74	0.44
33:D1:46:VAL:HG22	33:D1:47:ILE:N	2.25	0.44
38:DM:53:MET:HE1	38:DM:103:TYR:CE2	2.52	0.44
43:DO:6:ALA:O	43:DO:10:ARG:HG3	2.17	0.44
45:DS:40:ASN:O	45:DS:41:LYS:HG3	2.17	0.44
47:DF:177:ARG:NH2	47:DF:178:LYS:H	2.16	0.44
48:DG:36:LEU:N	48:DG:36:LEU:HD22	2.33	0.44
49:DR:5:PHE:N	49:DR:5:PHE:CD1	2.85	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:DT:34:VAL:HG21	50:DT:43:ILE:HD11	1.99	0.44
50:DT:40:LYS:O	50:DT:43:ILE:HG22	2.18	0.44
1:AA:35:G:H2'	1:AA:36:C:H6	1.81	0.44
1:AA:167:A:H2'	1:AA:168:G:H8	1.81	0.44
1:AA:1165:U:H2'	1:AA:1166:G:O4'	2.18	0.44
1:AA:1453:G:H2'	1:AA:1454:G:O4'	2.17	0.44
2:AC:112:ALA:O	2:AC:113:LYS:C	2.59	0.44
3:AD:89:LEU:HD23	3:AD:199:ILE:HD11	1.99	0.44
3:AD:100:VAL:HG11	3:AD:142:VAL:HG21	1.98	0.44
6:AG:15:PRO:HG2	6:AG:16:LYS:H	1.82	0.44
7:AH:29:SER:OG	7:AH:32:LYS:HG3	2.16	0.44
7:AH:86:LYS:HD2	7:AH:90:GLU:HG2	1.98	0.44
8:AI:21:LYS:HB3	8:AI:61:ASP:O	2.18	0.44
8:AI:40:ARG:H	8:AI:44:ARG:CZ	2.30	0.44
8:AI:83:THR:OG1	8:AI:97:LEU:HD13	2.17	0.44
10:AK:75:GLU:N	10:AK:75:GLU:CD	2.72	0.44
10:AK:91:GLY:O	10:AK:95:THR:HG22	2.18	0.44
12:AM:33:LEU:HD22	12:AM:38:ILE:HB	1.99	0.44
13:AN:87:ALA:HB2	13:AN:92:ILE:HD12	1.99	0.44
16:AQ:17:GLU:C	16:AQ:19:SER:H	2.24	0.44
22:BA:14:U:H5'	22:BA:70:C:O2'	2.16	0.44
23:BB:182:A:HO2'	23:BB:183:C:H5'	1.81	0.44
23:BB:470:A:H61	50:BT:72:GLN:NE2	2.15	0.44
23:BB:907:G:O2'	23:BB:908:C:H5'	2.18	0.44
23:BB:1072:C:N3	23:BB:1092:C:N4	2.64	0.44
23:BB:1103:A:H5''	23:BB:1104:C:C5	2.53	0.44
23:BB:1409:U:O2'	23:BB:1410:G:H5'	2.17	0.44
23:BB:1434:A:H62	23:BB:1558:C:N4	2.15	0.44
23:BB:1842:G:H2'	23:BB:1843:C:H6	1.83	0.44
23:BB:1846:G:H2'	23:BB:1847:A:O4'	2.18	0.44
23:BB:2862:G:H2'	23:BB:2863:C:H6	1.83	0.44
25:BC:52:HIS:NE2	25:BC:218:THR:HG23	2.33	0.44
25:BC:78:GLU:HG3	25:BC:94:LEU:HB3	2.00	0.44
25:BC:211:ARG:C	25:BC:213:ARG:N	2.71	0.44
26:BD:24:VAL:HG23	26:BD:189:VAL:N	2.33	0.44
26:BD:122:VAL:O	26:BD:122:VAL:HG12	2.18	0.44
27:BK:98:ARG:HA	27:BK:118:LEU:CD2	2.47	0.44
28:BP:4:ILE:C	28:BP:6:GLN:N	2.75	0.44
29:BE:176:ASP:OD1	29:BE:178:VAL:HG12	2.17	0.44
30:BY:5:LYS:HE2	30:BY:57:GLU:O	2.17	0.44
35:BV:10:LYS:C	35:BV:11:GLU:HG3	2.41	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BL:2:ARG:HG2	37:BL:2:ARG:O	2.17	0.44
40:BH:80:ILE:CD1	40:BH:102:ALA:HB3	2.47	0.44
45:BS:17:VAL:HG11	45:BS:103:ILE:HG12	2.00	0.44
46:BU:11:ILE:HG23	46:BU:12:VAL:N	2.33	0.44
46:BU:73:ASN:HB3	46:BU:95:PHE:CD2	2.51	0.44
47:BF:71:LYS:C	47:BF:73:VAL:H	2.24	0.44
47:BF:102:LEU:HD13	47:BF:102:LEU:C	2.42	0.44
49:BR:6:GLN:HE22	49:BR:9:GLY:N	2.16	0.44
50:BT:12:ARG:HB3	50:BT:12:ARG:HH11	1.83	0.44
50:BT:40:LYS:O	50:BT:44:LYS:N	2.49	0.44
50:BT:55:VAL:HG22	50:BT:87:LEU:CD2	2.48	0.44
52:BW:23:LYS:CG	52:BW:24:ARG:N	2.80	0.44
1:CA:322:C:O2'	1:CA:323:U:H5'	2.17	0.44
1:CA:736:C:H2'	1:CA:737:C:H6	1.82	0.44
1:CA:986:U:H2'	1:CA:987:G:O4'	2.17	0.44
1:CA:1085:U:H3'	1:CA:1086:U:C6	2.53	0.44
1:CA:1237:C:H4'	1:CA:1334:G:N2	2.33	0.44
1:CA:1352:C:H2'	1:CA:1353:G:C8	2.52	0.44
2:CC:180:ASP:C	2:CC:181:ILE:HD12	2.42	0.44
8:CI:9:GLY:HA3	8:CI:81:GLY:N	2.33	0.44
10:CK:17:ASP:HB3	10:CK:80:ASN:HD21	1.77	0.44
10:CK:36:ARG:HH11	10:CK:36:ARG:HG3	1.82	0.44
13:CN:46:LYS:HZ2	18:CS:15:LEU:CD1	2.31	0.44
15:CP:38:PHE:CE2	15:CP:51:ARG:HD3	2.52	0.44
20:CB:64:GLY:HA2	20:CB:158:ASP:OD1	2.17	0.44
21:CU:42:THR:C	21:CU:46:ARG:HE	2.25	0.44
23:DB:135:U:O2'	23:DB:136:G:H5'	2.17	0.44
23:DB:329:G:H22	46:DU:16:LYS:NZ	2.16	0.44
23:DB:354:A:H2'	23:DB:355:U:H6	1.77	0.44
23:DB:692:C:H2'	23:DB:693:A:C8	2.53	0.44
23:DB:1099:G:H4'	24:DI:4:VAL:HB	1.98	0.44
23:DB:1251:C:O2'	23:DB:1252:G:H3'	2.17	0.44
23:DB:1551:A:H2'	23:DB:1552:A:O4'	2.17	0.44
23:DB:1573:G:H2'	23:DB:1574:C:H5'	1.98	0.44
23:DB:1792:G:O2'	23:DB:1793:C:H5'	2.17	0.44
23:DB:2103:C:H3'	23:DB:2104:C:O2	2.18	0.44
23:DB:2393:U:H4'	37:DL:59:ARG:O	2.17	0.44
24:DI:72:THR:OG1	24:DI:73:PRO:HD2	2.17	0.44
29:DE:69:ARG:O	29:DE:70:SER:CB	2.64	0.44
29:DE:171:ASP:CG	29:DE:172:ALA:N	2.76	0.44
35:DV:35:GLU:HG3	35:DV:93:ARG:NH1	2.32	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DL:57:LEU:C	37:DL:59:ARG:H	2.24	0.44
37:DL:132:ARG:HA	37:DL:135:ILE:CG2	2.47	0.44
39:DX:36:GLN:O	39:DX:37:LEU:C	2.60	0.44
39:DX:59:GLU:N	39:DX:59:GLU:OE2	2.50	0.44
44:DQ:63:ARG:HH12	44:DQ:96:ASP:CB	2.31	0.44
46:DU:84:PHE:CE2	46:DU:93:ARG:HG2	2.53	0.44
48:DG:21:GLN:O	48:DG:37:ASN:HB2	2.17	0.44
49:DR:51:VAL:O	49:DR:52:PRO:C	2.61	0.44
50:DT:50:LEU:O	50:DT:51:PHE:HB2	2.16	0.44
51:DZ:77:LYS:CG	51:DZ:78:TYR:H	2.30	0.44
1:AA:8:A:H1'	4:AE:107:GLY:HA2	1.99	0.44
1:AA:439:U:H2'	1:AA:440:C:H6	1.82	0.44
1:AA:529:G:O6	11:AL:45:ASN:HA	2.17	0.44
1:AA:584:G:O2'	1:AA:585:G:H5'	2.18	0.44
1:AA:607:A:H2'	1:AA:608:A:H8	1.81	0.44
1:AA:701:U:H5''	1:AA:703:G:O4'	2.16	0.44
1:AA:895:G:H2'	1:AA:896:C:C6	2.51	0.44
1:AA:906:A:H2'	1:AA:907:A:H5''	2.00	0.44
1:AA:1181:G:H1'	1:AA:1182:G:C5	2.52	0.44
1:AA:1262:C:H2'	1:AA:1263:C:C6	2.52	0.44
2:AC:42:LEU:O	2:AC:46:LEU:HD23	2.17	0.44
2:AC:104:GLU:HG2	2:AC:105:VAL:H	1.81	0.44
9:AJ:17:LEU:CD1	9:AJ:95:GLY:HA3	2.47	0.44
10:AK:17:ASP:HB3	10:AK:80:ASN:CG	2.43	0.44
10:AK:89:GLY:O	10:AK:92:ARG:HB2	2.16	0.44
12:AM:50:GLY:HA2	12:AM:53:ASP:CG	2.43	0.44
12:AM:66:GLY:O	12:AM:67:ASP:C	2.61	0.44
13:AN:72:PHE:HE1	13:AN:74:ARG:HG2	1.82	0.44
20:AB:14:HIS:HB2	20:AB:208:ALA:HB2	2.00	0.44
20:AB:123:GLY:C	20:AB:125:PHE:H	2.25	0.44
21:AU:3:ILE:HG23	21:AU:18:PHE:CD1	2.52	0.44
22:BA:52:A:H2'	22:BA:53:A:H8	1.82	0.44
23:BB:84:A:H4'	23:BB:85:G:O5'	2.17	0.44
23:BB:494:G:O2'	23:BB:495:G:H5'	2.17	0.44
23:BB:1470:A:H2'	23:BB:1471:G:O4'	2.18	0.44
23:BB:1684:G:H2'	23:BB:1685:C:C6	2.52	0.44
23:BB:1792:G:O2'	23:BB:1793:C:H5'	2.17	0.44
23:BB:1794:A:O2'	23:BB:1795:C:H5'	2.18	0.44
23:BB:2527:C:O3'	32:B4:31:PRO:HB2	2.16	0.44
23:BB:2531:A:H5''	48:BG:156:TYR:CE1	2.52	0.44
23:BB:2750:A:OP1	23:BB:2750:A:H8	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:BI:11:GLN:NE2	24:BI:74:PRO:HG2	2.32	0.44
24:BI:32:VAL:HG22	24:BI:60:VAL:CG2	2.48	0.44
26:BD:79:LEU:HD22	26:BD:79:LEU:H	1.83	0.44
26:BD:107:VAL:H	26:BD:205:PRO:HA	1.82	0.44
27:BK:20:MET:O	27:BK:41:ILE:HD12	2.17	0.44
27:BK:103:VAL:HG23	27:BK:122:VAL:O	2.18	0.44
34:B3:28:LEU:O	34:B3:28:LEU:HG	2.18	0.44
40:BH:73:ASN:N	40:BH:73:ASN:ND2	2.66	0.44
41:BJ:40:HIS:ND1	41:BJ:41:LYS:HG3	2.32	0.44
45:BS:13:SER:HB3	45:BS:16:LYS:HE3	1.98	0.44
45:BS:29:VAL:HG23	45:BS:70:LYS:HA	2.00	0.44
46:BU:21:ARG:HG3	46:BU:21:ARG:NH1	2.32	0.44
48:BG:15:ASP:HA	48:BG:26:LYS:NZ	2.32	0.44
48:BG:54:ARG:HD3	48:BG:55:ASP:N	2.33	0.44
50:BT:32:LEU:HG	50:BT:83:ALA:HB2	2.00	0.44
50:BT:48:GLN:O	50:BT:52:GLU:HA	2.18	0.44
50:BT:85:VAL:C	50:BT:86:THR:HG23	2.42	0.44
51:BZ:18:ARG:HA	51:BZ:18:ARG:HE	1.83	0.44
52:BW:30:VAL:HG13	52:BW:30:VAL:O	2.18	0.44
1:CA:35:G:H2'	1:CA:36:C:H6	1.79	0.44
1:CA:308:C:H2'	1:CA:309:A:C8	2.53	0.44
1:CA:692:U:C2	1:CA:694:A:H5''	2.53	0.44
1:CA:844:G:C6	1:CA:845:A:N6	2.86	0.44
1:CA:935:A:O2'	1:CA:936:C:H5'	2.17	0.44
1:CA:1053:G:H4'	1:CA:1054:C:H5'	2.00	0.44
1:CA:1332:A:H2'	1:CA:1333:A:C8	2.53	0.44
2:CC:81:GLU:CG	2:CC:82:ASP:N	2.81	0.44
3:CD:157:ALA:O	3:CD:160:LEU:HD22	2.18	0.44
6:CG:15:PRO:HG2	6:CG:16:LYS:H	1.82	0.44
7:CH:36:ALA:O	7:CH:45:ILE:HD11	2.17	0.44
7:CH:39:LEU:HD21	7:CH:128:VAL:HG21	2.00	0.44
9:CJ:52:LEU:HB2	13:CN:80:ARG:CD	2.46	0.44
10:CK:109:ILE:HB	21:CU:16:ARG:HH12	1.83	0.44
10:CK:125:LYS:O	10:CK:126:ARG:C	2.60	0.44
11:CL:54:VAL:HG22	11:CL:79:ILE:HD11	1.98	0.44
21:CU:11:PHE:O	21:CU:13:VAL:N	2.49	0.44
22:DA:2:G:O2'	22:DA:3:C:H5'	2.18	0.44
22:DA:95:U:H2'	22:DA:96:G:H8	1.80	0.44
23:DB:9:G:H21	23:DB:10:A:N6	2.03	0.44
23:DB:149:A:H2'	23:DB:150:U:C6	2.53	0.44
23:DB:1518:C:H2'	23:DB:1519:G:H8	1.83	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:1841:U:H2'	23:DB:1842:G:C8	2.52	0.44
23:DB:1902:C:H2'	23:DB:1903:G:O4'	2.17	0.44
23:DB:2194:U:H2'	23:DB:2195:U:C6	2.53	0.44
23:DB:2710:C:H2'	23:DB:2711:A:C8	2.53	0.44
23:DB:2811:G:O2'	23:DB:2812:G:H5'	2.17	0.44
24:DI:45:THR:C	24:DI:48:ILE:HG22	2.43	0.44
25:DC:124:LYS:H	25:DC:191:LEU:HD13	1.82	0.44
25:DC:140:VAL:CG2	25:DC:163:ILE:HG12	2.48	0.44
26:DD:29:VAL:O	26:DD:185:ASN:HB3	2.18	0.44
29:DE:60:TRP:HA	29:DE:60:TRP:HE3	1.83	0.44
29:DE:60:TRP:CZ3	29:DE:62:GLN:HA	2.53	0.44
37:DL:118:THR:HA	37:DL:119:PRO:HD3	1.90	0.44
38:DM:105:MET:HE1	38:DM:116:ALA:CB	2.48	0.44
39:DX:13:GLU:OE2	39:DX:13:GLU:HA	2.17	0.44
43:DO:17:LYS:O	43:DO:17:LYS:HD3	2.17	0.44
44:DQ:7:VAL:O	44:DQ:11:ALA:HB2	2.18	0.44
45:DS:60:HIS:ND1	45:DS:60:HIS:O	2.50	0.44
46:DU:12:VAL:HG22	46:DU:69:VAL:CG1	2.44	0.44
47:DF:3:LEU:HB2	47:DF:100:GLU:CD	2.42	0.44
47:DF:68:LYS:N	47:DF:68:LYS:HD2	2.32	0.44
47:DF:134:GLN:NE2	47:DF:136:ILE:HA	2.32	0.44
1:AA:322:C:O2'	1:AA:323:U:H5'	2.18	0.44
1:AA:389:A:H3'	1:AA:390:U:H6	1.83	0.44
1:AA:543:U:H2'	1:AA:544:G:H8	1.82	0.44
1:AA:1427:C:H2'	1:AA:1428:A:C8	2.53	0.44
2:AC:76:ILE:HA	2:AC:83:VAL:CG2	2.33	0.44
2:AC:111:ASP:O	2:AC:115:VAL:HG23	2.18	0.44
3:AD:100:VAL:HG21	3:AD:136:VAL:HG21	2.00	0.44
5:AF:38:ARG:HB3	5:AF:63:ASN:HB2	1.97	0.44
8:AI:35:GLU:O	8:AI:39:GLY:HA3	2.17	0.44
10:AK:125:LYS:O	10:AK:126:ARG:C	2.60	0.44
13:AN:17:ASP:C	13:AN:19:TYR:H	2.26	0.44
13:AN:26:LEU:HD21	13:AN:44:VAL:HG13	2.00	0.44
13:AN:45:LEU:HD23	13:AN:45:LEU:C	2.42	0.44
20:AB:110:ILE:O	20:AB:113:LEU:HB3	2.18	0.44
20:AB:116:LEU:HD22	20:AB:140:LEU:HD11	1.99	0.44
20:AB:174:GLU:O	20:AB:177:ASN:HB3	2.17	0.44
20:AB:212:TYR:O	20:AB:216:VAL:HG13	2.17	0.44
22:BA:83:G:P	30:BY:16:LEU:HD21	2.58	0.44
23:BB:20:C:H2'	23:BB:21:A:H8	1.82	0.44
23:BB:346:A:H5'	23:BB:346:A:N3	2.33	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:646:U:H5''	23:BB:647:G:C8	2.52	0.44
23:BB:651:G:OP1	34:B3:18:LYS:HE3	2.18	0.44
23:BB:1161:C:H2'	23:BB:1162:G:C8	2.52	0.44
23:BB:1681:G:N3	23:BB:1762:A:H2'	2.32	0.44
23:BB:2543:G:H2'	23:BB:2544:G:C8	2.52	0.44
23:BB:2604:U:O2'	23:BB:2605:U:H5'	2.16	0.44
23:BB:2830:C:H1'	23:BB:2836:U:O4'	2.18	0.44
25:BC:140:VAL:CG2	25:BC:163:ILE:HG12	2.48	0.44
27:BK:99:ILE:H	27:BK:118:LEU:HD22	1.82	0.44
28:BP:25:VAL:HA	28:BP:85:VAL:CA	2.48	0.44
29:BE:192:ALA:O	29:BE:196:VAL:HG23	2.18	0.44
32:B4:8:LYS:HG2	32:B4:9:LYS:HD3	1.99	0.44
34:B3:32:LEU:HA	34:B3:35:LYS:HD2	2.00	0.44
37:BL:132:ARG:HA	37:BL:135:ILE:CG2	2.48	0.44
38:BM:42:THR:HB	38:BM:45:GLN:HG3	2.00	0.44
38:BM:64:TRP:HB2	38:BM:104:GLU:CB	2.46	0.44
44:BQ:77:LYS:O	44:BQ:80:ASN:HB3	2.18	0.44
45:BS:57:ASN:O	45:BS:61:ASN:HB2	2.18	0.44
46:BU:85:ARG:HA	46:BU:85:ARG:CZ	2.48	0.44
47:BF:78:ILE:HG23	47:BF:82:TYR:CB	2.47	0.44
49:BR:19:THR:HB	49:BR:97:LYS:HA	1.99	0.44
52:BW:39:GLN:CG	52:BW:40:ARG:N	2.79	0.44
52:BW:46:ALA:HB2	52:BW:78:PHE:CD1	2.44	0.44
1:CA:33:A:H2'	1:CA:34:C:H6	1.82	0.44
1:CA:663:A:O2'	1:CA:664:G:H5'	2.18	0.44
1:CA:865:A:H2	1:CA:918:A:H4'	1.83	0.44
1:CA:986:U:H1'	18:CS:53:GLY:O	2.18	0.44
1:CA:1125:U:O2	1:CA:1126:U:H6	2.01	0.44
1:CA:1217:C:H2'	1:CA:1218:C:C6	2.53	0.44
1:CA:1384:C:H2'	1:CA:1385:G:H8	1.80	0.44
1:CA:1407:C:O2'	1:CA:1408:A:H5'	2.18	0.44
3:CD:123:MET:HG3	3:CD:127:ARG:O	2.17	0.44
3:CD:154:VAL:HG23	3:CD:155:LYS:H	1.83	0.44
8:CI:35:GLU:O	8:CI:39:GLY:HA3	2.17	0.44
8:CI:66:VAL:HG21	8:CI:74:GLN:HG3	1.99	0.44
8:CI:108:ARG:HH11	8:CI:108:ARG:HB3	1.83	0.44
10:CK:90:PRO:C	10:CK:92:ARG:N	2.75	0.44
12:CM:90:HIS:C	12:CM:92:ARG:H	2.24	0.44
13:CN:60:ARG:O	13:CN:62:ARG:N	2.50	0.44
15:CP:66:THR:HG22	15:CP:67:ILE:H	1.83	0.44
20:CB:27:LYS:C	20:CB:29:PHE:H	2.24	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:CU:16:ARG:CZ	21:CU:19:LYS:NZ	2.80	0.44
23:DB:6:A:O2'	23:DB:7:G:H5'	2.18	0.44
23:DB:433:C:H2'	23:DB:434:U:C6	2.53	0.44
23:DB:536:G:H21	41:DJ:47:HIS:CG	2.36	0.44
23:DB:659:G:H4'	29:DE:95:LYS:HD2	1.99	0.44
23:DB:866:A:H61	23:DB:913:U:C1'	2.31	0.44
23:DB:1092:C:H2'	23:DB:1093:G:C5'	2.47	0.44
23:DB:1183:U:H2'	23:DB:1184:U:C6	2.52	0.44
23:DB:1198:U:H5'	44:DQ:8:ILE:HD13	2.00	0.44
23:DB:1537:G:H5'	23:DB:1538:G:OP2	2.18	0.44
23:DB:1846:G:H2'	23:DB:1847:A:O4'	2.17	0.44
23:DB:1878:G:H2'	23:DB:1879:C:C6	2.53	0.44
23:DB:2221:G:O2'	23:DB:2222:C:H5'	2.18	0.44
23:DB:2637:U:H5''	26:DD:83:ARG:HH22	1.83	0.44
23:DB:2660:A:H2'	23:DB:2661:G:C8	2.53	0.44
23:DB:2797:U:H3'	23:DB:2798:U:H5	1.83	0.44
25:DC:141:HIS:HB3	25:DC:190:THR:OG1	2.17	0.44
25:DC:189:ALA:C	25:DC:190:THR:HG23	2.43	0.44
26:DD:8:LYS:HB2	26:DD:201:LEU:HD21	1.98	0.44
26:DD:16:THR:C	26:DD:18:ASP:H	2.25	0.44
26:DD:121:THR:HB	26:DD:127:PHE:CD1	2.53	0.44
28:DP:33:GLU:HA	28:DP:33:GLU:OE1	2.18	0.44
30:DY:35:VAL:HG11	30:DY:37:ARG:HH12	1.82	0.44
33:D1:22:THR:OG1	33:D1:23:THR:N	2.49	0.44
37:DL:23:ILE:H	37:DL:23:ILE:CD1	2.26	0.44
38:DM:82:MET:O	38:DM:83:GLY:C	2.60	0.44
40:DH:25:TYR:CD1	40:DH:30:LEU:HG	2.53	0.44
40:DH:29:PHE:C	40:DH:31:VAL:N	2.74	0.44
41:DJ:54:ILE:HD12	41:DJ:55:ILE:H	1.82	0.44
41:DJ:100:VAL:O	41:DJ:104:ALA:HB2	2.18	0.44
43:DO:88:LYS:HG2	43:DO:116:GLN:HB2	2.00	0.44
44:DQ:30:VAL:HG22	44:DQ:31:TYR:N	2.32	0.44
46:DU:26:ASN:HD22	46:DU:26:ASN:H	1.63	0.44
47:DF:46:LYS:O	47:DF:49:LEU:HB3	2.18	0.44
49:DR:70:GLU:CD	49:DR:70:GLU:N	2.74	0.44
50:DT:29:THR:H	50:DT:91:GLN:NE2	2.16	0.44
51:DZ:6:GLN:NE2	51:DZ:77:LYS:NZ	2.64	0.44
51:DZ:32:ASN:O	51:DZ:33:LEU:O	2.34	0.44
1:AA:328:C:H4'	1:AA:329:A:C5'	2.48	0.44
1:AA:401:C:H2'	1:AA:402:G:C8	2.51	0.44
1:AA:415:A:N1	1:AA:428:G:O6	2.51	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:612:C:H2'	1:AA:613:C:C6	2.52	0.44
1:AA:616:G:H2'	1:AA:616:G:N3	2.33	0.44
1:AA:721:G:H4'	1:AA:722:G:O4'	2.18	0.44
1:AA:737:C:H2'	1:AA:738:C:H6	1.83	0.44
1:AA:822:U:O2'	1:AA:823:C:H5'	2.18	0.44
1:AA:939:G:H2'	1:AA:940:C:C6	2.53	0.44
1:AA:986:U:H1'	18:AS:53:GLY:O	2.18	0.44
1:AA:1070:U:H2'	1:AA:1071:C:C6	2.53	0.44
1:AA:1097:C:H2'	1:AA:1098:C:H6	1.83	0.44
2:AC:80:GLY:O	2:AC:84:GLU:HB2	2.18	0.44
3:AD:11:SER:HA	3:AD:18:LEU:HD22	1.98	0.44
3:AD:55:ARG:HG3	3:AD:55:ARG:NH1	2.33	0.44
4:AE:29:ILE:O	4:AE:29:ILE:HG22	2.18	0.44
4:AE:77:ASN:OD1	4:AE:78:GLY:N	2.51	0.44
9:AJ:53:ILE:HG23	9:AJ:61:ALA:HB1	2.00	0.44
18:AS:42:ASN:ND2	18:AS:43:MET:N	2.66	0.44
20:AB:25:LYS:HD3	20:AB:193:ASP:OD1	2.18	0.44
22:BA:35:C:H2'	22:BA:36:C:O4'	2.18	0.44
23:BB:335:C:OP2	46:BU:81:ARG:NH1	2.46	0.44
23:BB:993:G:O2'	23:BB:994:C:H5'	2.18	0.44
23:BB:1173:U:O2	23:BB:1174:U:H1'	2.18	0.44
23:BB:1438:U:C4	23:BB:1552:A:N6	2.86	0.44
23:BB:1459:G:P	23:BB:1459:G:H8	2.40	0.44
23:BB:1534:U:O2'	23:BB:1535:A:H8	2.00	0.44
23:BB:1640:A:H2'	23:BB:1641:A:H8	1.83	0.44
23:BB:2038:G:H2'	23:BB:2039:U:H6	1.80	0.44
23:BB:2087:G:O2'	23:BB:2088:A:H5'	2.18	0.44
23:BB:2096:C:O2'	23:BB:2097:A:H5'	2.18	0.44
23:BB:2186:G:O2'	23:BB:2187:U:H5'	2.18	0.44
23:BB:2368:C:H2'	23:BB:2369:A:H8	1.82	0.44
23:BB:2794:C:O2'	23:BB:2795:C:H5'	2.18	0.44
23:BB:2800:A:H2'	23:BB:2801:G:H8	1.82	0.44
25:BC:62:ARG:O	25:BC:63:ILE:HG12	2.17	0.44
25:BC:144:GLU:HB3	25:BC:187:CYS:HB3	1.99	0.44
26:BD:29:VAL:C	26:BD:185:ASN:HB3	2.42	0.44
38:BM:102:LEU:HB3	38:BM:103:TYR:CD1	2.53	0.44
40:BH:106:ALA:C	40:BH:108:VAL:N	2.73	0.44
41:BJ:4:PHE:O	41:BJ:44:TYR:CZ	2.71	0.44
42:BN:82:GLU:HB3	42:BN:83:LEU:H	1.59	0.44
44:BQ:16:ILE:O	44:BQ:18:LYS:N	2.50	0.44
46:BU:34:ILE:HG12	46:BU:63:ALA:CB	2.46	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:BF:43:ILE:HG13	47:BF:44:ALA:N	2.31	0.44
47:BF:113:PHE:HZ	47:BF:175:PRO:HB2	1.80	0.44
48:BG:103:ASN:HA	48:BG:113:ASP:OD1	2.16	0.44
48:BG:125:PRO:HB2	48:BG:129:GLU:CD	2.43	0.44
50:BT:30:ILE:O	50:BT:85:VAL:HG23	2.18	0.44
50:BT:50:LEU:O	50:BT:51:PHE:HB2	2.17	0.44
50:BT:50:LEU:O	50:BT:52:GLU:N	2.49	0.44
1:CA:10:A:OP2	4:CE:130:THR:HB	2.18	0.44
1:CA:393:A:O2'	1:CA:394:G:H5'	2.16	0.44
1:CA:432:A:C2'	1:CA:433:G:H5'	2.48	0.44
1:CA:797:C:O2'	1:CA:798:U:H5'	2.18	0.44
1:CA:960:U:O2'	1:CA:1223:C:H4'	2.17	0.44
1:CA:1164:G:H2'	1:CA:1165:U:C6	2.53	0.44
1:CA:1181:G:H1'	1:CA:1182:G:C5	2.53	0.44
2:CC:128:MET:HE3	2:CC:128:MET:N	2.32	0.44
11:CL:21:PRO:C	11:CL:23:LEU:H	2.24	0.44
13:CN:92:ILE:HG21	13:CN:95:LEU:HD22	2.00	0.44
16:CQ:46:HIS:HB2	16:CQ:70:LYS:HE2	2.00	0.44
23:DB:10:A:H61	23:DB:2895:G:H1'	1.82	0.44
23:DB:40:U:H2'	23:DB:41:C:H6	1.82	0.44
23:DB:141:G:C6	50:DT:2:ILE:HG23	2.53	0.44
23:DB:924:G:H2'	23:DB:925:A:C8	2.53	0.44
23:DB:1169:A:H2'	23:DB:1170:C:C6	2.53	0.44
23:DB:1508:A:H5'	23:DB:1509:A:N1	2.33	0.44
23:DB:1531:C:H2'	23:DB:1532:A:C8	2.53	0.44
23:DB:2389:G:H5''	23:DB:2390:U:O4'	2.17	0.44
23:DB:2579:C:O5'	23:DB:2579:C:H6	2.01	0.44
23:DB:2794:C:H2'	23:DB:2795:C:C6	2.53	0.44
23:DB:2817:U:O2'	23:DB:2837:A:H1'	2.18	0.44
23:DB:2819:G:O2'	23:DB:2820:A:H5''	2.17	0.44
25:DC:246:PRO:HB2	25:DC:247:TRP:CE3	2.52	0.44
29:DE:175:ILE:HD11	29:DE:180:LEU:HD11	2.00	0.44
32:D4:30:GLU:HA	32:D4:31:PRO:HD3	1.89	0.44
33:D1:38:PHE:HB2	33:D1:45:HIS:CE1	2.52	0.44
34:D3:14:LYS:O	34:D3:15:LYS:C	2.61	0.44
40:DH:34:GLY:O	40:DH:35:LYS:HG2	2.17	0.44
40:DH:83:LYS:HE2	40:DH:149:GLU:CD	2.43	0.44
43:DO:106:LEU:HA	43:DO:109:ALA:HB3	1.99	0.44
45:DS:41:LYS:O	45:DS:42:LYS:C	2.60	0.44
48:DG:116:LEU:HG	48:DG:120:ILE:HD12	1.99	0.44
50:DT:47:VAL:HG12	50:DT:47:VAL:O	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:DT:89:GLU:C	50:DT:91:GLN:H	2.25	0.44
52:DW:76:ARG:HB3	52:DW:78:PHE:CE2	2.52	0.44
1:AA:197:A:H4'	1:AA:198:G:O5'	2.18	0.44
1:AA:552:U:H2'	1:AA:553:A:C8	2.52	0.44
1:AA:692:U:H2'	1:AA:694:A:OP2	2.17	0.44
1:AA:1080:A:O3'	4:AE:20:VAL:HG11	2.16	0.44
1:AA:1237:C:H4'	1:AA:1334:G:N2	2.33	0.44
2:AC:8:GLY:HA2	2:AC:11:LEU:HG	1.99	0.44
3:AD:8:LEU:HD12	3:AD:31:CYS:SG	2.58	0.44
5:AF:53:LYS:CD	5:AF:54:LEU:H	2.31	0.44
7:AH:113:ARG:O	7:AH:117:GLN:HG3	2.18	0.44
9:AJ:18:ILE:CG2	9:AJ:19:ASP:N	2.79	0.44
11:AL:56:LEU:HD21	11:AL:81:ILE:HG13	1.99	0.44
13:AN:27:LYS:HG3	13:AN:28:ALA:N	2.28	0.44
14:AO:70:LEU:C	14:AO:70:LEU:HD13	2.43	0.44
16:AQ:46:HIS:HB2	16:AQ:70:LYS:HE2	2.00	0.44
16:AQ:58:VAL:HB	16:AQ:74:LEU:HD23	2.00	0.44
20:AB:202:ASN:ND2	20:AB:204:ASP:N	2.52	0.44
23:BB:121:G:H2'	23:BB:122:G:C8	2.53	0.44
23:BB:256:A:H2'	23:BB:257:C:H6	1.82	0.44
23:BB:465:G:H2'	23:BB:466:A:C8	2.52	0.44
23:BB:770:G:H1'	23:BB:1379:U:C4	2.52	0.44
23:BB:1124:G:H1'	32:B4:38:GLY:OXT	2.17	0.44
23:BB:1183:U:H2'	23:BB:1184:U:H6	1.83	0.44
23:BB:1322:A:C2'	23:BB:1323:C:H5'	2.47	0.44
23:BB:1629:U:O2	23:BB:2698:U:H5''	2.18	0.44
23:BB:1904:G:H1'	23:BB:1927:A:N1	2.32	0.44
23:BB:2221:G:O2'	23:BB:2222:C:H5'	2.18	0.44
23:BB:2233:U:H2'	23:BB:2234:G:H8	1.83	0.44
23:BB:2385:C:H2'	23:BB:2386:A:C8	2.52	0.44
23:BB:2419:U:OP2	34:B3:32:LEU:HD13	2.18	0.44
23:BB:2617:U:C2'	23:BB:2618:G:H5'	2.48	0.44
23:BB:2648:G:H2'	23:BB:2649:C:H6	1.81	0.44
23:BB:2793:C:H2'	23:BB:2794:C:C6	2.53	0.44
24:BI:19:PRO:HB2	24:BI:22:PRO:HD2	2.00	0.44
24:BI:38:CYS:O	24:BI:42:ASN:ND2	2.50	0.44
25:BC:245:THR:C	25:BC:247:TRP:H	2.26	0.44
26:BD:8:LYS:O	26:BD:9:VAL:HB	2.17	0.44
26:BD:47:ALA:HB1	26:BD:81:GLU:HG3	1.99	0.44
26:BD:117:GLY:HA2	26:BD:164:GLN:NE2	2.33	0.44
26:BD:123:LYS:O	26:BD:165:MET:HE1	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BP:6:GLN:HA	28:BP:9:GLN:NE2	2.33	0.44
28:BP:6:GLN:O	28:BP:10:GLU:HB2	2.17	0.44
29:BE:122:GLU:O	29:BE:123:LYS:HB2	2.17	0.44
31:B0:41:HIS:HB2	42:BN:99:LYS:O	2.17	0.44
36:B2:25:LYS:C	36:B2:27:GLY:N	2.76	0.44
40:BH:14:SER:HB2	40:BH:17:ASP:HB2	1.99	0.44
40:BH:106:ALA:N	40:BH:108:VAL:HG23	2.33	0.44
41:BJ:70:THR:HG22	41:BJ:90:GLU:OE2	2.18	0.44
43:BO:14:ALA:O	43:BO:18:LEU:HB2	2.17	0.44
45:BS:13:SER:CB	45:BS:16:LYS:HE3	2.48	0.44
46:BU:98:ASN:OD1	46:BU:100:GLU:HB2	2.17	0.44
47:BF:90:LEU:HB3	47:BF:95:MET:HA	1.99	0.44
47:BF:102:LEU:C	47:BF:104:THR:H	2.25	0.44
51:BZ:77:LYS:CG	51:BZ:78:TYR:H	2.30	0.44
52:BW:37:VAL:HG12	52:BW:38:ARG:HD3	1.99	0.44
1:CA:65:A:C8	1:CA:381:C:N4	2.86	0.44
1:CA:201:G:H2'	1:CA:202:G:C8	2.53	0.44
1:CA:401:C:H2'	1:CA:402:G:C8	2.52	0.44
1:CA:587:G:H4'	7:CH:3:GLN:HA	2.00	0.44
1:CA:1072:G:H2'	1:CA:1073:U:H6	1.82	0.44
1:CA:1193:G:O2'	1:CA:1194:U:H5'	2.18	0.44
1:CA:1260:G:H4'	1:CA:1283:U:O2'	2.18	0.44
1:CA:1451:U:O2	1:CA:1451:U:O4'	2.36	0.44
2:CC:30:ASP:HA	13:CN:64:ARG:NH2	2.32	0.44
2:CC:81:GLU:CD	2:CC:81:GLU:C	2.86	0.44
2:CC:112:ALA:HB1	2:CC:184:ASN:HB2	2.00	0.44
3:CD:18:LEU:O	3:CD:19:PHE:HB2	2.17	0.44
3:CD:151:GLN:HE22	3:CD:153:ARG:HH11	1.66	0.44
8:CI:5:TYR:HB3	8:CI:88:GLU:OE2	2.18	0.44
8:CI:35:GLU:C	8:CI:37:TYR:H	2.25	0.44
9:CJ:26:VAL:HG12	9:CJ:30:LYS:HE2	2.00	0.44
10:CK:91:GLY:O	10:CK:95:THR:HG22	2.17	0.44
16:CQ:59:GLU:C	16:CQ:75:VAL:HG22	2.43	0.44
23:DB:150:U:H2'	23:DB:151:C:H6	1.83	0.44
23:DB:285:G:O2'	23:DB:286:U:H5'	2.18	0.44
23:DB:576:U:H2'	23:DB:577:G:C8	2.53	0.44
23:DB:819:A:OP2	23:DB:1187:G:N2	2.48	0.44
23:DB:1047:G:O3'	23:DB:1048:A:H8	2.00	0.44
23:DB:1177:G:H2'	23:DB:1178:C:C6	2.53	0.44
23:DB:1336:A:H3'	23:DB:1337:G:H8	1.82	0.44
23:DB:1349:C:H2'	23:DB:1350:C:C6	2.52	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:1470:A:H2'	23:DB:1471:G:O4'	2.18	0.44
23:DB:1595:C:O2'	23:DB:1596:A:H5'	2.18	0.44
23:DB:2023:C:H4'	23:DB:2617:U:O3'	2.18	0.44
23:DB:2365:G:O2'	52:DW:59:PHE:HE1	2.00	0.44
25:DC:30:ALA:N	25:DC:31:PRO:HD2	2.32	0.44
26:DD:23:PRO:O	26:DD:24:VAL:HB	2.18	0.44
27:DK:87:LEU:O	27:DK:88:ASN:C	2.60	0.44
31:D0:42:ILE:HG12	42:DN:99:LYS:O	2.18	0.44
40:DH:4:ILE:CD1	40:DH:37:VAL:HG13	2.48	0.44
42:DN:32:GLU:O	42:DN:114:GLU:HA	2.18	0.44
44:DQ:30:VAL:HG11	44:DQ:33:VAL:HG22	2.00	0.44
46:DU:13:LEU:HD12	46:DU:68:ASN:O	2.18	0.44
47:DF:78:ILE:H	47:DF:79:ARG:NH1	2.16	0.44
47:DF:106:ALA:HA	47:DF:135:ILE:HD13	2.00	0.44
47:DF:137:PHE:N	47:DF:137:PHE:CD2	2.82	0.44
50:DT:40:LYS:O	50:DT:44:LYS:N	2.48	0.44
50:DT:55:VAL:HG13	50:DT:85:VAL:HG12	2.00	0.44
52:DW:17:ALA:CA	52:DW:35:ILE:HG23	2.27	0.44
1:AA:200:G:O2'	1:AA:381:C:N4	2.51	0.44
1:AA:276:G:O2'	1:AA:277:C:H5'	2.18	0.44
1:AA:358:U:H2'	1:AA:359:G:C8	2.53	0.44
1:AA:410:G:H2'	1:AA:429:U:C5	2.53	0.44
1:AA:455:G:H2'	1:AA:456:A:H8	1.81	0.44
1:AA:656:G:O2'	1:AA:657:U:H5'	2.17	0.44
1:AA:725:G:H2'	1:AA:726:C:H6	1.83	0.44
1:AA:736:C:H2'	1:AA:737:C:H6	1.82	0.44
1:AA:825:A:H4'	7:AH:2:MET:HE1	1.99	0.44
1:AA:935:A:O2'	1:AA:936:C:H5'	2.18	0.44
1:AA:1491:G:N3	1:AA:1491:G:H2'	2.33	0.44
3:AD:138:PRO:C	3:AD:140:ASP:H	2.26	0.44
9:AJ:31:ARG:HE	9:AJ:31:ARG:HB2	1.66	0.44
10:AK:86:LYS:HB2	10:AK:113:THR:HA	1.99	0.44
13:AN:60:ARG:NH1	13:AN:62:ARG:CZ	2.81	0.44
14:AO:25:THR:CG2	14:AO:70:LEU:HD23	2.48	0.44
16:AQ:61:ARG:C	16:AQ:61:ARG:HD2	2.43	0.44
17:AR:41:SER:HB2	17:AR:51:GLN:CG	2.48	0.44
20:AB:125:PHE:O	20:AB:127:LYS:HD2	2.17	0.44
20:AB:221:ARG:HB3	20:AB:221:ARG:NH1	2.30	0.44
21:AU:27:VAL:O	21:AU:30:GLU:HB3	2.17	0.44
23:BB:587:C:H4'	23:BB:588:U:H6	1.83	0.44
23:BB:617:G:O2'	23:BB:618:G:H5'	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:786:C:HO2'	23:BB:787:C:H5'	1.83	0.44
23:BB:934:U:H2'	23:BB:935:C:H6	1.83	0.44
23:BB:1145:C:O2'	23:BB:1146:C:H5'	2.18	0.44
23:BB:1146:C:H2'	23:BB:1147:A:H8	1.83	0.44
23:BB:1516:G:H2'	23:BB:1517:G:H8	1.83	0.44
23:BB:1547:C:H2'	23:BB:1548:A:C8	2.53	0.44
23:BB:1583:A:H4'	23:BB:1585:C:C4	2.53	0.44
23:BB:1717:A:H2'	23:BB:1718:G:O4'	2.18	0.44
23:BB:1723:G:N7	23:BB:1737:G:N2	2.61	0.44
23:BB:1945:G:H2'	23:BB:1946:U:C6	2.53	0.44
23:BB:1946:U:H2'	23:BB:1947:C:H6	1.83	0.44
24:BI:32:VAL:HG22	24:BI:60:VAL:HG21	2.00	0.44
25:BC:203:VAL:O	25:BC:204:LEU:HB2	2.18	0.44
26:BD:118:PHE:CE1	26:BD:123:LYS:HD2	2.53	0.44
28:BP:13:LYS:HG2	28:BP:76:HIS:ND1	2.33	0.44
29:BE:171:ASP:CG	29:BE:172:ALA:N	2.76	0.44
32:B4:35:GLN:HB2	32:B4:35:GLN:HE21	1.67	0.44
33:B1:29:LYS:C	33:B1:31:GLU:H	2.25	0.44
33:B1:38:PHE:HB2	33:B1:45:HIS:CE1	2.53	0.44
37:BL:93:ASN:CG	37:BL:94:THR:H	2.26	0.44
39:BX:23:ARG:HD3	50:BT:50:LEU:HD12	2.00	0.44
39:BX:52:ARG:O	39:BX:55:THR:HB	2.18	0.44
41:BJ:57:LEU:HB3	41:BJ:58:ASN:H	1.68	0.44
43:BO:56:LYS:HG2	43:BO:60:GLU:CG	2.47	0.44
45:BS:81:SER:CB	45:BS:99:ARG:HA	2.48	0.44
47:BF:32:LYS:HE2	47:BF:34:THR:CG2	2.48	0.44
49:BR:15:SER:H	49:BR:18:GLN:CG	2.30	0.44
49:BR:70:GLU:CD	49:BR:70:GLU:N	2.76	0.44
1:CA:46:G:O2'	1:CA:365:U:H1'	2.18	0.44
1:CA:208:U:H2'	1:CA:210:C:C4	2.53	0.44
1:CA:236:A:O2'	1:CA:237:G:H5'	2.18	0.44
1:CA:401:C:H1'	1:CA:622:A:H1'	2.00	0.44
3:CD:24:VAL:HG23	3:CD:25:ARG:N	2.22	0.44
4:CE:9:GLU:CD	4:CE:10:LEU:H	2.26	0.44
8:CI:40:ARG:H	8:CI:44:ARG:CZ	2.31	0.44
8:CI:120:ALA:C	8:CI:121:ARG:HG2	2.43	0.44
11:CL:79:ILE:C	11:CL:101:LEU:HD12	2.43	0.44
12:CM:78:ARG:HH22	18:CS:68:HIS:CE1	2.36	0.44
13:CN:45:LEU:HD23	13:CN:45:LEU:C	2.43	0.44
18:CS:39:ILE:HG12	18:CS:70:LEU:CD1	2.48	0.44
20:CB:22:TRP:CG	20:CB:23:ASN:N	2.83	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:61:G:H2'	22:DA:62:C:H6	1.83	0.44
23:DB:182:A:O2'	23:DB:183:C:H5'	2.17	0.44
23:DB:219:A:H2	23:DB:234:U:O2	2.01	0.44
23:DB:591:U:H1'	34:D3:1:PRO:H3	1.83	0.44
23:DB:760:G:C2'	23:DB:761:A:H5'	2.48	0.44
23:DB:962:G:N2	23:DB:2250:G:H22	2.12	0.44
23:DB:1147:A:O2'	23:DB:1148:U:H5'	2.18	0.44
23:DB:1322:A:C4'	45:DS:82:MET:HE1	2.47	0.44
23:DB:1526:C:H2'	23:DB:1527:G:O4'	2.18	0.44
23:DB:1534:U:H1'	23:DB:1538:G:N2	2.33	0.44
23:DB:1904:G:H1'	23:DB:1927:A:N1	2.33	0.44
23:DB:2282:G:H5'	23:DB:2389:G:H1'	2.00	0.44
23:DB:2370:G:H2'	23:DB:2371:G:O4'	2.18	0.44
23:DB:2840:C:O2'	23:DB:2841:C:H5'	2.17	0.44
26:DD:48:ILE:HG23	26:DD:82:PHE:HB2	1.98	0.44
28:DP:89:GLY:N	28:DP:112:ARG:NH1	2.66	0.44
29:DE:102:ARG:HG3	29:DE:102:ARG:NH2	2.33	0.44
29:DE:146:VAL:O	29:DE:167:VAL:HA	2.18	0.44
32:D4:1:MET:HE1	32:D4:24:ARG:HH22	1.83	0.44
39:DX:18:LEU:O	39:DX:22:LEU:HB3	2.18	0.44
43:DO:93:ASP:C	43:DO:95:SER:N	2.76	0.44
44:DQ:75:TYR:O	44:DQ:78:PHE:HB3	2.17	0.44
44:DQ:91:ARG:NH2	49:DR:11:GLN:O	2.50	0.44
45:DS:47:VAL:HG23	45:DS:48:LYS:N	2.32	0.44
46:DU:73:ASN:ND2	46:DU:74:ALA:N	2.66	0.44
48:DG:87:GLN:HE21	48:DG:164:ALA:CA	2.31	0.44
51:DZ:29:PHE:N	51:DZ:29:PHE:CD1	2.85	0.44
51:DZ:53:ALA:O	51:DZ:55:GLY:N	2.46	0.44
1:AA:105:G:H2'	1:AA:106:C:H6	1.83	0.43
1:AA:598:U:H4'	7:AH:85:TYR:CD2	2.53	0.43
1:AA:1118:U:H2'	1:AA:1119:C:H6	1.83	0.43
1:AA:1243:C:H2'	1:AA:1244:G:C8	2.52	0.43
1:AA:1352:C:H2'	1:AA:1353:G:C8	2.53	0.43
2:AC:78:LYS:HG3	2:AC:81:GLU:HB3	2.00	0.43
3:AD:123:MET:HG3	3:AD:127:ARG:O	2.18	0.43
7:AH:44:PHE:CE2	7:AH:100:ILE:HG12	2.53	0.43
7:AH:68:LYS:HG3	7:AH:69:ALA:H	1.81	0.43
10:AK:50:GLY:O	10:AK:51:PHE:C	2.61	0.43
15:AP:7:ALA:O	15:AP:17:TYR:HA	2.17	0.43
17:AR:43:ILE:O	17:AR:44:THR:HG23	2.18	0.43
18:AS:45:GLY:N	18:AS:61:VAL:HB	2.33	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:72:U:H1'	39:BX:51:ALA:HA	1.99	0.43
23:BB:214:G:N2	23:BB:216:A:N3	2.65	0.43
23:BB:630:G:N2	23:BB:632:A:H3'	2.32	0.43
23:BB:1258:U:O4'	29:BE:79:ARG:HD2	2.18	0.43
23:BB:1541:C:H2'	23:BB:1542:U:H6	1.83	0.43
23:BB:2314:A:H2'	23:BB:2315:G:H8	1.83	0.43
23:BB:2356:U:C5'	52:BW:16:GLU:HG3	2.36	0.43
23:BB:2373:G:H2'	23:BB:2374:C:C6	2.53	0.43
23:BB:2527:C:O2'	23:BB:2528:U:H5'	2.18	0.43
24:BI:37:PHE:HB2	24:BI:66:PHE:CZ	2.53	0.43
25:BC:30:ALA:N	25:BC:31:PRO:HD2	2.32	0.43
25:BC:52:HIS:HA	25:BC:216:ARG:HB2	2.00	0.43
25:BC:156:SER:HB3	25:BC:159:THR:CG2	2.45	0.43
25:BC:250:GLN:CD	25:BC:250:GLN:N	2.73	0.43
27:BK:2:ILE:HD13	27:BK:6:THR:HG21	2.00	0.43
36:B2:34:ARG:HB3	36:B2:39:ARG:HB2	1.99	0.43
38:BM:96:ILE:HD11	38:BM:126:ILE:CG1	2.47	0.43
40:BH:18:GLN:NE2	40:BH:44:ILE:HG21	2.32	0.43
40:BH:67:ALA:C	40:BH:70:GLU:HG2	2.42	0.43
42:BN:71:ARG:HH21	42:BN:71:ARG:CG	2.31	0.43
43:BO:35:ILE:HG13	43:BO:71:ALA:CB	2.48	0.43
44:BQ:51:GLN:O	44:BQ:54:ARG:HB2	2.17	0.43
46:BU:8:ASP:HB3	46:BU:71:ILE:HG22	2.00	0.43
48:BG:54:ARG:HD2	48:BG:57:TYR:HE1	1.83	0.43
50:BT:40:LYS:O	50:BT:43:ILE:HG22	2.18	0.43
51:BZ:71:LEU:HA	51:BZ:74:ARG:HE	1.83	0.43
1:CA:102:G:H2'	1:CA:103:U:H6	1.82	0.43
1:CA:213:G:H3'	1:CA:214:C:H6	1.82	0.43
1:CA:978:A:H5'	1:CA:1362:A:N6	2.32	0.43
1:CA:1070:U:H2'	1:CA:1071:C:C6	2.52	0.43
1:CA:1260:G:OP1	1:CA:1284:C:H4'	2.17	0.43
1:CA:1307:U:H2'	1:CA:1308:U:H6	1.83	0.43
1:CA:1309:G:P	12:CM:86:ARG:HH12	2.41	0.43
1:CA:1402:C:H2'	1:CA:1403:C:O4'	2.17	0.43
1:CA:1437:A:H2'	1:CA:1438:G:C8	2.49	0.43
1:CA:1525:G:O2'	1:CA:1526:G:H5'	2.18	0.43
4:CE:71:ILE:HG12	4:CE:72:ASN:N	2.33	0.43
7:CH:31:LEU:O	7:CH:35:ILE:HG13	2.18	0.43
10:CK:50:GLY:O	10:CK:51:PHE:C	2.61	0.43
10:CK:80:ASN:HB3	10:CK:105:ARG:HB3	2.00	0.43
18:CS:42:ASN:ND2	18:CS:43:MET:N	2.66	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:CB:17:HIS:HB3	20:CB:18:GLN:OE1	2.18	0.43
20:CB:138:ARG:HA	20:CB:141:GLU:CD	2.43	0.43
23:DB:12:U:O2	23:DB:2626:C:H4'	2.18	0.43
23:DB:21:A:H2'	23:DB:22:C:H6	1.83	0.43
23:DB:188:G:H5''	51:DZ:14:THR:HG21	1.99	0.43
23:DB:217:A:H2'	23:DB:218:A:O4'	2.18	0.43
23:DB:340:A:H2'	23:DB:341:C:O4'	2.18	0.43
23:DB:483:A:H3'	23:DB:484:C:H6	1.83	0.43
23:DB:596:U:H2'	23:DB:597:G:C8	2.53	0.43
23:DB:637:A:P	37:DL:112:LEU:HD22	2.58	0.43
23:DB:1146:C:H2'	23:DB:1147:A:C8	2.53	0.43
23:DB:1237:A:O2'	23:DB:1238:G:O4'	2.36	0.43
23:DB:1292:G:H2'	23:DB:1293:C:H6	1.82	0.43
23:DB:1553:A:H2'	23:DB:1555:G:N7	2.33	0.43
23:DB:1681:G:N3	23:DB:1762:A:H2'	2.33	0.43
23:DB:1818:U:H2'	25:DC:152:GLN:O	2.18	0.43
23:DB:1936:A:H2	23:DB:1943:U:O4	2.01	0.43
23:DB:2267:A:N6	23:DB:2272:U:H3	2.11	0.43
25:DC:78:GLU:HG3	25:DC:94:LEU:HB3	2.00	0.43
29:DE:122:GLU:O	29:DE:123:LYS:HB2	2.18	0.43
29:DE:151:GLY:HA2	29:DE:195:GLN:HE22	1.83	0.43
29:DE:152:GLU:HA	29:DE:152:GLU:OE1	2.18	0.43
35:DV:3:THR:HA	35:DV:62:THR:HG1	1.82	0.43
39:DX:59:GLU:N	39:DX:59:GLU:CD	2.73	0.43
42:DN:9:GLN:C	42:DN:17:ARG:HD3	2.43	0.43
42:DN:13:ASN:C	42:DN:15:SER:N	2.75	0.43
42:DN:37:THR:OG1	42:DN:40:LYS:HE2	2.18	0.43
43:DO:61:GLN:HE21	43:DO:61:GLN:HB3	1.64	0.43
43:DO:67:ASN:N	43:DO:70:ALA:HB3	2.25	0.43
46:DU:85:ARG:O	46:DU:86:PHE:HB2	2.18	0.43
47:DF:121:PHE:HB3	47:DF:127:TYR:CE2	2.52	0.43
48:DG:71:LEU:O	48:DG:74:MET:HB2	2.18	0.43
49:DR:4:VAL:CG2	49:DR:39:LEU:HG	2.48	0.43
1:AA:152:A:H3'	1:AA:153:C:H6	1.81	0.43
1:AA:189:A:H2'	1:AA:190:A:C8	2.53	0.43
1:AA:263:A:H2'	1:AA:264:C:C6	2.53	0.43
1:AA:593:U:H2'	1:AA:594:U:C6	2.53	0.43
1:AA:1072:G:N2	20:AB:105:THR:HG21	2.32	0.43
1:AA:1254:A:H5'	1:AA:1356:G:H4'	1.99	0.43
1:AA:1270:G:H2'	1:AA:1271:A:C8	2.52	0.43
1:AA:1465:A:O2'	1:AA:1466:C:H5'	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AD:3:TYR:CZ	3:AD:10:LEU:HD21	2.54	0.43
5:AF:7:VAL:O	5:AF:7:VAL:HG13	2.18	0.43
7:AH:49:LYS:O	7:AH:59:GLU:N	2.51	0.43
12:AM:89:ARG:CZ	12:AM:94:LEU:HD12	2.48	0.43
13:AN:20:PHE:CG	13:AN:24:ALA:HB2	2.53	0.43
14:AO:62:GLN:O	14:AO:66:LEU:HD23	2.18	0.43
23:BB:39:G:H2'	23:BB:40:U:H6	1.81	0.43
23:BB:65:U:H2'	23:BB:66:C:H6	1.82	0.43
23:BB:160:A:N6	23:BB:167:A:H1'	2.33	0.43
23:BB:374:A:N6	23:BB:400:G:H1'	2.33	0.43
23:BB:672:C:H2'	23:BB:673:C:H6	1.84	0.43
23:BB:956:G:N2	23:BB:959:A:H3'	2.33	0.43
23:BB:981:A:H4'	23:BB:2037:A:H5'	2.00	0.43
23:BB:1076:C:H2'	23:BB:1077:A:H8	1.82	0.43
23:BB:1103:A:H5''	23:BB:1104:C:C6	2.53	0.43
23:BB:1553:A:H2'	23:BB:1555:G:N7	2.33	0.43
23:BB:1687:G:O2'	23:BB:1688:U:H5'	2.18	0.43
23:BB:1998:A:OP2	26:BD:141:ARG:NH2	2.51	0.43
23:BB:2028:U:H2'	23:BB:2029:G:C8	2.53	0.43
23:BB:2352:A:H8	23:BB:2352:A:O5'	2.01	0.43
23:BB:2556:C:H2'	23:BB:2557:G:O4'	2.18	0.43
23:BB:2776:A:H4'	23:BB:2777:G:O5'	2.18	0.43
26:BD:11:MET:HE1	26:BD:192:ALA:HA	2.00	0.43
26:BD:13:ARG:HD2	28:BP:55:HIS:ND1	2.33	0.43
28:BP:15:ASP:O	28:BP:17:PRO:HD3	2.18	0.43
29:BE:1:MET:HB2	29:BE:16:GLU:CA	2.49	0.43
33:B1:3:GLY:O	33:B1:5:ARG:N	2.51	0.43
37:BL:79:LEU:HD23	37:BL:79:LEU:HA	1.90	0.43
38:BM:23:GLY:O	38:BM:101:VAL:HG12	2.18	0.43
39:BX:6:LEU:O	39:BX:7:ARG:HB3	2.18	0.43
39:BX:18:LEU:O	39:BX:22:LEU:HB3	2.18	0.43
40:BH:41:LYS:C	40:BH:43:ASN:H	2.26	0.43
40:BH:59:ALA:C	40:BH:62:LEU:HG	2.42	0.43
40:BH:103:VAL:CG1	40:BH:142:VAL:HG11	2.47	0.43
41:BJ:64:VAL:O	41:BJ:65:THR:HG22	2.17	0.43
41:BJ:72:LYS:O	41:BJ:73:VAL:HG13	2.18	0.43
44:BQ:49:ARG:O	44:BQ:53:LYS:HE2	2.18	0.43
47:BF:2:LYS:CE	47:BF:100:GLU:HG2	2.48	0.43
47:BF:163:GLU:CA	47:BF:166:ARG:HH11	2.22	0.43
48:BG:67:ALA:HA	48:BG:70:LEU:HB2	2.00	0.43
1:CA:235:C:H1'	16:CQ:62:GLU:OE1	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:252:U:H2'	1:CA:253:A:C8	2.53	0.43
1:CA:737:C:H2'	1:CA:738:C:C6	2.53	0.43
1:CA:865:A:C2	1:CA:918:A:H4'	2.53	0.43
1:CA:1140:C:O2'	1:CA:1141:C:H5'	2.18	0.43
1:CA:1160:G:H4'	20:CB:130:LYS:HG3	2.00	0.43
1:CA:1309:G:H2'	1:CA:1310:G:H8	1.84	0.43
2:CC:42:LEU:O	2:CC:46:LEU:HD23	2.16	0.43
2:CC:116:ALA:HB1	2:CC:186:SER:OG	2.17	0.43
2:CC:126:ARG:NH2	2:CC:190:THR:HG23	2.16	0.43
3:CD:90:LEU:HD21	3:CD:196:GLU:CB	2.45	0.43
3:CD:146:GLU:C	3:CD:148:ALA:N	2.76	0.43
3:CD:169:TRP:CD1	3:CD:170:LEU:HD23	2.53	0.43
7:CH:83:ARG:C	7:CH:84:ILE:HG13	2.42	0.43
10:CK:89:GLY:O	10:CK:92:ARG:HB2	2.17	0.43
13:CN:17:ASP:C	13:CN:19:TYR:H	2.25	0.43
14:CO:50:HIS:O	14:CO:53:ARG:HB3	2.18	0.43
21:CU:33:ARG:NH1	21:CU:34:ARG:HH11	2.16	0.43
23:DB:297:G:H2'	23:DB:298:G:O4'	2.18	0.43
23:DB:346:A:H2'	23:DB:347:A:O4'	2.18	0.43
23:DB:356:G:O2'	23:DB:357:C:H5'	2.18	0.43
23:DB:367:G:N2	23:DB:368:A:H1'	2.33	0.43
23:DB:463:G:N2	23:DB:466:A:OP2	2.50	0.43
23:DB:611:C:H2'	23:DB:612:G:O4'	2.17	0.43
23:DB:736:C:H2'	23:DB:737:C:C6	2.54	0.43
23:DB:1106:G:O2'	23:DB:1107:G:H5'	2.18	0.43
23:DB:1322:A:C5'	45:DS:82:MET:HE1	2.48	0.43
23:DB:1434:A:N6	23:DB:1558:C:H42	2.16	0.43
23:DB:2432:A:H2'	23:DB:2433:A:C8	2.53	0.43
23:DB:2531:A:H5'	48:DG:173:ALA:CB	2.45	0.43
23:DB:2671:G:H2'	23:DB:2672:U:H6	1.79	0.43
23:DB:2751:G:O4'	48:DG:2:ARG:HD3	2.18	0.43
23:DB:2836:U:H2'	23:DB:2837:A:H8	1.80	0.43
24:DI:12:VAL:HG13	24:DI:41:PHE:CE2	2.53	0.43
24:DI:105:LEU:CD1	24:DI:129:GLU:HG2	2.44	0.43
27:DK:24:VAL:HG13	27:DK:33:ALA:HB2	1.99	0.43
27:DK:70:ARG:H	27:DK:70:ARG:HG2	1.69	0.43
33:D1:39:ASP:OD1	33:D1:42:VAL:HG23	2.18	0.43
35:DV:59:GLU:CD	35:DV:60:VAL:N	2.76	0.43
37:DL:79:LEU:HD13	37:DL:115:GLU:O	2.18	0.43
38:DM:120:ALA:C	38:DM:122:ALA:N	2.74	0.43
38:DM:131:VAL:HG12	38:DM:132:THR:N	2.32	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DJ:44:TYR:C	41:DJ:44:TYR:HD2	2.25	0.43
42:DN:11:ASN:O	42:DN:12:ARG:HB2	2.17	0.43
42:DN:49:GLU:N	42:DN:50:PRO:CD	2.81	0.43
45:DS:29:VAL:HG23	45:DS:70:LYS:HA	2.00	0.43
46:DU:85:ARG:HA	46:DU:85:ARG:CZ	2.48	0.43
47:DF:62:GLN:NE2	47:DF:91:ARG:NE	2.66	0.43
47:DF:62:GLN:HB2	47:DF:63:LYS:H	1.64	0.43
47:DF:102:LEU:C	47:DF:104:THR:H	2.26	0.43
47:DF:103:ILE:HD11	47:DF:174:PHE:CA	2.47	0.43
47:DF:128:SER:HB3	47:DF:154:THR:CG2	2.45	0.43
47:DF:155:ILE:HG22	47:DF:156:THR:N	2.34	0.43
49:DR:15:SER:H	49:DR:18:GLN:CG	2.31	0.43
52:DW:41:GLY:HA2	52:DW:44:PHE:CE2	2.53	0.43
1:AA:215:C:H2'	1:AA:216:U:O4'	2.17	0.43
1:AA:360:G:O2'	1:AA:361:G:H5'	2.18	0.43
1:AA:552:U:H2'	1:AA:553:A:H8	1.83	0.43
1:AA:579:A:H2'	1:AA:580:C:C6	2.54	0.43
1:AA:598:U:H4'	7:AH:85:TYR:CG	2.53	0.43
1:AA:611:C:H2'	1:AA:612:C:H6	1.82	0.43
1:AA:683:G:O2'	1:AA:684:U:H5'	2.18	0.43
1:AA:1148:U:H5'	8:AI:6:TYR:OH	2.19	0.43
1:AA:1180:A:OP1	8:AI:104:THR:HG22	2.18	0.43
1:AA:1309:G:H2'	1:AA:1310:G:H8	1.83	0.43
1:AA:1386:G:O2'	1:AA:1387:G:H5'	2.18	0.43
3:AD:29:THR:HG22	3:AD:30:LYS:N	2.33	0.43
6:AG:128:GLU:O	6:AG:129:ASN:C	2.61	0.43
9:AJ:59:LYS:C	9:AJ:61:ALA:H	2.26	0.43
11:AL:79:ILE:C	11:AL:101:LEU:HD12	2.44	0.43
12:AM:21:ILE:O	12:AM:24:VAL:HG22	2.19	0.43
15:AP:52:LEU:CD2	15:AP:75:ILE:HA	2.48	0.43
17:AR:68:PRO:HB2	17:AR:70:THR:O	2.18	0.43
20:AB:96:LEU:HD23	20:AB:99:MET:HE3	1.99	0.43
23:BB:28:A:N6	23:BB:512:G:O2'	2.51	0.43
23:BB:77:G:H2'	23:BB:78:U:O4'	2.17	0.43
23:BB:143:C:H2'	23:BB:144:A:C8	2.53	0.43
23:BB:277:G:N3	23:BB:361:G:O6	2.50	0.43
23:BB:596:U:H2'	23:BB:597:G:C8	2.53	0.43
23:BB:736:C:H2'	23:BB:737:C:H6	1.83	0.43
23:BB:988:A:O5'	30:BY:11:SER:HB3	2.18	0.43
23:BB:1251:C:O2'	23:BB:1252:G:H3'	2.18	0.43
23:BB:1693:U:H4'	23:BB:1694:C:OP2	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:1723:G:C4	23:BB:1724:G:C8	3.07	0.43
23:BB:2014:A:H2'	23:BB:2015:A:C8	2.53	0.43
23:BB:2331:G:O2'	52:BW:40:ARG:HB2	2.18	0.43
23:BB:2699:C:O2'	23:BB:2700:A:H5'	2.18	0.43
24:BI:83:ALA:N	24:BI:100:ILE:HD11	2.33	0.43
24:BI:103:ALA:O	24:BI:107:GLU:HG3	2.18	0.43
25:BC:196:ASN:O	25:BC:197:ALA:HB3	2.16	0.43
26:BD:121:THR:HB	26:BD:127:PHE:CD1	2.53	0.43
27:BK:12:ASP:OD2	27:BK:85:VAL:HG13	2.18	0.43
28:BP:50:ARG:O	28:BP:51:ASN:HB2	2.18	0.43
29:BE:29:HIS:O	29:BE:33:VAL:HG23	2.18	0.43
29:BE:31:VAL:HG21	29:BE:104:ALA:CB	2.47	0.43
29:BE:181:ILE:HD13	37:BL:3:LEU:HD23	1.99	0.43
34:B3:21:PHE:O	34:B3:22:LYS:O	2.37	0.43
34:B3:54:LEU:HD11	34:B3:58:ILE:HD11	2.01	0.43
37:BL:79:LEU:HB3	37:BL:115:GLU:O	2.17	0.43
37:BL:105:ILE:HG22	37:BL:106:GLU:N	2.33	0.43
39:BX:58:ASN:C	39:BX:60:LYS:N	2.75	0.43
44:BQ:75:TYR:O	44:BQ:78:PHE:HB3	2.18	0.43
44:BQ:85:ALA:O	44:BQ:86:SER:C	2.62	0.43
45:BS:41:LYS:O	45:BS:42:LYS:C	2.61	0.43
47:BF:103:ILE:HD11	47:BF:174:PHE:CA	2.47	0.43
49:BR:97:LYS:O	49:BR:98:ILE:HB	2.18	0.43
51:BZ:39:TRP:HB2	51:BZ:46:PHE:CE2	2.53	0.43
1:CA:83:C:O3'	1:CA:84:U:C6	2.71	0.43
1:CA:214:C:H2'	1:CA:215:C:C6	2.53	0.43
1:CA:215:C:H2'	1:CA:216:U:O4'	2.18	0.43
1:CA:420:U:H2'	1:CA:422:C:C5	2.53	0.43
1:CA:435:A:H2'	1:CA:435:A:N3	2.34	0.43
1:CA:529:G:O6	11:CL:45:ASN:HA	2.18	0.43
1:CA:620:C:H2'	1:CA:621:A:C8	2.53	0.43
1:CA:828:U:O2'	20:CB:24:PRO:HB3	2.18	0.43
1:CA:1475:G:H4'	23:DB:1689:A:H4'	1.99	0.43
3:CD:55:ARG:HH11	3:CD:55:ARG:HG3	1.83	0.43
3:CD:81:LEU:C	3:CD:83:GLY:H	2.26	0.43
3:CD:182:LYS:HE2	3:CD:182:LYS:HB3	1.81	0.43
4:CE:154:ALA:HB1	7:CH:65:PHE:CZ	2.53	0.43
5:CF:53:LYS:CD	5:CF:54:LEU:H	2.32	0.43
8:CI:23:GLY:O	8:CI:24:ASN:C	2.62	0.43
12:CM:89:ARG:CZ	12:CM:94:LEU:HD12	2.48	0.43
13:CN:52:ARG:HA	13:CN:52:ARG:HD3	1.90	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:CS:36:ARG:O	18:CS:69:LYS:HD2	2.18	0.43
18:CS:66:VAL:C	18:CS:68:HIS:N	2.75	0.43
20:CB:52:ALA:O	20:CB:56:LEU:HB2	2.17	0.43
20:CB:94:ARG:N	20:CB:94:ARG:HE	2.15	0.43
23:DB:65:U:H2'	23:DB:66:C:H6	1.82	0.43
23:DB:651:G:OP1	34:D3:18:LYS:HG3	2.18	0.43
23:DB:1161:C:H2'	23:DB:1162:G:C8	2.54	0.43
23:DB:1210:G:N3	23:DB:1212:G:N2	2.65	0.43
23:DB:1409:U:O2'	23:DB:1410:G:H5'	2.19	0.43
23:DB:1537:G:N3	23:DB:1537:G:H5''	2.33	0.43
23:DB:1791:A:C2	23:DB:1829:A:H4'	2.53	0.43
23:DB:2230:G:H2'	23:DB:2231:U:H6	1.83	0.43
23:DB:2306:C:H3'	23:DB:2307:G:H5''	1.95	0.43
23:DB:2665:A:H2'	23:DB:2666:C:O2	2.17	0.43
23:DB:2680:U:OP2	26:DD:114:LYS:HB3	2.18	0.43
26:DD:168:GLU:O	26:DD:169:ARG:C	2.60	0.43
30:DY:19:HIS:C	30:DY:21:ALA:N	2.75	0.43
34:D3:28:LEU:O	34:D3:28:LEU:HG	2.17	0.43
35:DV:51:GLN:HA	35:DV:56:PHE:CB	2.48	0.43
37:DL:42:SER:C	37:DL:44:GLY:N	2.77	0.43
37:DL:95:LEU:HB2	37:DL:101:ILE:HG13	1.99	0.43
38:DM:69:PRO:C	38:DM:71:LYS:H	2.27	0.43
40:DH:95:GLY:N	40:DH:98:ASP:OD2	2.51	0.43
41:DJ:54:ILE:HD12	41:DJ:55:ILE:N	2.33	0.43
41:DJ:59:ALA:C	41:DJ:61:LYS:N	2.76	0.43
42:DN:33:ILE:C	42:DN:34:ILE:HG13	2.43	0.43
43:DO:34:HIS:CE1	43:DO:65:THR:HG21	2.52	0.43
44:DQ:83:LYS:HZ3	44:DQ:87:VAL:HA	1.82	0.43
45:DS:27:LYS:H	45:DS:27:LYS:CD	2.30	0.43
45:DS:57:ASN:O	45:DS:61:ASN:HB2	2.18	0.43
45:DS:81:SER:HA	45:DS:99:ARG:HA	2.00	0.43
46:DU:14:THR:HG21	46:DU:64:ILE:CD1	2.46	0.43
48:DG:68:ARG:NH1	48:DG:72:ASN:HB2	2.33	0.43
48:DG:97:VAL:HG23	48:DG:124:CYS:SG	2.59	0.43
51:DZ:11:ARG:HB3	51:DZ:12:PRO:HD2	1.99	0.43
51:DZ:17:ASN:HD22	51:DZ:25:THR:HB	1.84	0.43
1:AA:638:U:H2'	1:AA:639:G:O4'	2.19	0.43
1:AA:844:G:C6	1:AA:845:A:N6	2.87	0.43
1:AA:960:U:O2'	1:AA:1223:C:H4'	2.18	0.43
1:AA:1489:G:H2'	1:AA:1490:U:H6	1.84	0.43
1:AA:1515:G:O2'	1:AA:1516:G:H5'	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AC:31:ASN:ND2	2:AC:58:ARG:HE	2.17	0.43
3:AD:151:GLN:HE22	3:AD:153:ARG:HH11	1.66	0.43
7:AH:124:ILE:HG22	7:AH:125:ILE:H	1.84	0.43
8:AI:34:LEU:HD21	8:AI:48:ARG:HE	1.83	0.43
10:AK:16:SER:CA	10:AK:78:ILE:HA	2.48	0.43
14:AO:50:HIS:O	14:AO:53:ARG:HB3	2.18	0.43
20:AB:131:LYS:HB3	20:AB:131:LYS:HE2	1.84	0.43
23:BB:122:G:O2'	23:BB:123:G:H5'	2.19	0.43
23:BB:322:A:H2'	29:BE:163:ASN:HD21	1.81	0.43
23:BB:526:A:N6	23:BB:2626:C:C4'	2.81	0.43
23:BB:783:A:H8	23:BB:784:G:H4'	1.83	0.43
23:BB:956:G:OP2	38:BM:86:LYS:HE2	2.18	0.43
23:BB:1076:C:H2'	23:BB:1077:A:C8	2.53	0.43
23:BB:1137:G:O2'	23:BB:1138:G:H5'	2.18	0.43
23:BB:1139:G:O2'	23:BB:1143:A:N1	2.46	0.43
23:BB:1733:G:H2'	23:BB:1734:G:H8	1.80	0.43
23:BB:2365:G:H4'	52:BW:59:PHE:CE1	2.54	0.43
23:BB:2370:G:H2'	23:BB:2371:G:O4'	2.18	0.43
23:BB:2457:U:C2'	23:BB:2458:G:H5'	2.48	0.43
23:BB:2489:U:H2'	23:BB:2490:G:O4'	2.18	0.43
23:BB:2733:A:H2'	23:BB:2734:A:O4'	2.18	0.43
23:BB:2846:G:OP1	28:BP:51:ASN:HB2	2.18	0.43
23:BB:2852:G:H2'	23:BB:2853:C:H6	1.81	0.43
24:BI:4:VAL:O	24:BI:4:VAL:HG13	2.18	0.43
25:BC:61:TYR:HA	25:BC:85:ASN:ND2	2.33	0.43
27:BK:64:ARG:HH12	27:BK:101:GLY:CA	2.30	0.43
34:B3:44:ARG:N	34:B3:45:PRO:CD	2.82	0.43
36:B2:1:MET:HG2	36:B2:2:LYS:H	1.83	0.43
37:BL:42:SER:C	37:BL:44:GLY:N	2.75	0.43
38:BM:32:GLY:HA2	38:BM:117:PHE:CZ	2.53	0.43
42:BN:28:LEU:HD23	42:BN:113:ILE:HG23	2.00	0.43
42:BN:43:GLU:C	42:BN:45:ARG:N	2.75	0.43
42:BN:49:GLU:N	42:BN:50:PRO:CD	2.81	0.43
42:BN:92:GLY:C	42:BN:94:TYR:H	2.26	0.43
46:BU:81:ARG:HB2	46:BU:96:LYS:HG3	1.99	0.43
47:BF:62:GLN:HB2	47:BF:63:LYS:H	1.64	0.43
47:BF:92:GLY:O	47:BF:95:MET:HB3	2.18	0.43
47:BF:128:SER:HB3	47:BF:154:THR:CG2	2.44	0.43
48:BG:54:ARG:HD2	48:BG:57:TYR:CE1	2.54	0.43
48:BG:84:LYS:HG3	48:BG:131:VAL:CB	2.46	0.43
48:BG:129:GLU:C	48:BG:130:ILE:HG13	2.43	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:BZ:77:LYS:CD	51:BZ:78:TYR:H	2.30	0.43
1:CA:255:G:O3'	16:CQ:18:LYS:HD2	2.19	0.43
1:CA:328:C:H4'	1:CA:329:A:C5'	2.49	0.43
1:CA:541:G:O2'	1:CA:542:G:H5'	2.19	0.43
1:CA:796:C:O2'	1:CA:797:C:H5'	2.18	0.43
1:CA:1327:C:H2'	1:CA:1328:C:C6	2.52	0.43
1:CA:1462:C:H2'	1:CA:1463:U:C6	2.54	0.43
2:CC:57:GLU:HB2	2:CC:64:ARG:CB	2.49	0.43
2:CC:148:ILE:HG12	2:CC:149:LYS:N	2.33	0.43
4:CE:12:GLU:HB3	4:CE:63:MET:HE1	2.01	0.43
4:CE:15:ILE:HD12	4:CE:35:LEU:HG	2.01	0.43
4:CE:55:VAL:N	4:CE:56:PRO:CD	2.82	0.43
4:CE:98:ALA:HB2	4:CE:123:LEU:HG	2.00	0.43
6:CG:67:ASN:C	6:CG:69:ARG:H	2.26	0.43
7:CH:25:THR:O	7:CH:26:MET:HB3	2.18	0.43
8:CI:39:GLY:HA2	8:CI:44:ARG:CD	2.45	0.43
10:CK:52:ARG:NH1	10:CK:52:ARG:HB3	2.33	0.43
16:CQ:37:ILE:HG22	16:CQ:39:ARG:NE	2.34	0.43
18:CS:66:VAL:O	18:CS:68:HIS:N	2.52	0.43
22:DA:64:G:H2'	22:DA:65:U:C6	2.53	0.43
23:DB:268:C:O2	23:DB:268:C:H2'	2.18	0.43
23:DB:360:U:H2'	23:DB:361:G:N9	2.32	0.43
23:DB:528:A:H3'	23:DB:528:A:H8	1.82	0.43
23:DB:1427:A:H4'	23:DB:1428:C:O4'	2.18	0.43
23:DB:2267:A:C8	23:DB:2267:A:C4'	3.01	0.43
24:DI:2:LYS:O	24:DI:3:LYS:HG3	2.18	0.43
25:DC:93:VAL:CG2	25:DC:115:ILE:HD11	2.49	0.43
26:DD:22:ILE:HG22	26:DD:23:PRO:O	2.18	0.43
26:DD:45:TYR:CD1	26:DD:45:TYR:N	2.86	0.43
26:DD:106:LYS:HB3	26:DD:206:ALA:CB	2.48	0.43
26:DD:107:VAL:HG21	26:DD:177:VAL:HG12	2.01	0.43
26:DD:108:ASP:OD2	26:DD:206:ALA:HA	2.18	0.43
27:DK:19:VAL:HB	27:DK:41:ILE:HD11	2.00	0.43
28:DP:3:ILE:CG2	28:DP:4:ILE:N	2.81	0.43
28:DP:26:GLU:HG3	28:DP:43:GLU:HB2	2.00	0.43
28:DP:44:GLY:HA3	28:DP:60:VAL:HG12	2.00	0.43
28:DP:103:THR:HG22	28:DP:104:GLY:N	2.33	0.43
29:DE:110:SER:HB3	29:DE:114:ARG:HH12	1.84	0.43
31:D0:50:GLY:O	31:D0:51:ARG:C	2.61	0.43
35:DV:30:ILE:HA	35:DV:91:PHE:O	2.18	0.43
35:DV:30:ILE:HG12	35:DV:91:PHE:HB2	2.01	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:D2:17:GLY:O	36:D2:21:ARG:HB2	2.17	0.43
37:DL:105:ILE:HG22	37:DL:106:GLU:N	2.34	0.43
38:DM:124:LEU:HA	38:DM:125:PRO:HD3	1.89	0.43
39:DX:59:GLU:CD	39:DX:60:LYS:N	2.75	0.43
41:DJ:55:ILE:CG2	41:DJ:123:LYS:HB2	2.48	0.43
41:DJ:99:ARG:HH11	41:DJ:99:ARG:HG2	1.82	0.43
42:DN:19:ALA:C	42:DN:21:PHE:N	2.76	0.43
43:DO:94:ARG:O	43:DO:97:PHE:HB2	2.17	0.43
45:DS:25:ARG:HH11	45:DS:25:ARG:HB2	1.83	0.43
48:DG:93:TYR:O	48:DG:94:ARG:O	2.37	0.43
1:AA:82:G:H2'	1:AA:84:U:H5	1.84	0.43
1:AA:537:G:H2'	1:AA:538:G:H8	1.84	0.43
1:AA:656:G:HO2'	1:AA:657:U:H5'	1.84	0.43
1:AA:958:A:N1	18:AS:53:GLY:C	2.77	0.43
1:AA:1342:C:O2'	8:AI:125:GLN:HB3	2.17	0.43
3:AD:197:HIS:HA	3:AD:200:VAL:CG2	2.47	0.43
5:AF:62:MET:HG3	5:AF:64:VAL:CG2	2.49	0.43
9:AJ:80:THR:HB	9:AJ:83:THR:HG1	1.80	0.43
17:AR:32:ILE:HG23	17:AR:36:GLY:O	2.19	0.43
18:AS:39:ILE:HG12	18:AS:70:LEU:CD1	2.48	0.43
21:AU:40:PRO:HG2	21:AU:41:THR:H	1.82	0.43
22:BA:28:C:H5	22:BA:56:G:H22	1.66	0.43
23:BB:18:U:OP1	44:BQ:29:ARG:NH2	2.50	0.43
23:BB:340:A:H2'	23:BB:341:C:O4'	2.19	0.43
23:BB:345:A:N3	23:BB:346:A:N1	2.66	0.43
23:BB:409:G:H2'	23:BB:410:G:C8	2.53	0.43
23:BB:923:G:H5'	52:BW:25:PHE:CZ	2.54	0.43
23:BB:1526:C:H2'	23:BB:1527:G:O4'	2.19	0.43
23:BB:1796:U:H4'	25:BC:252:LYS:O	2.18	0.43
23:BB:2144:G:O2'	23:BB:2146:C:H5'	2.18	0.43
23:BB:2199:A:H5''	23:BB:2200:C:H5	1.84	0.43
23:BB:2260:C:O2'	23:BB:2261:C:H5'	2.19	0.43
23:BB:2369:A:H2'	23:BB:2370:G:C8	2.53	0.43
23:BB:2421:G:N7	34:B3:30:HIS:NE2	2.67	0.43
23:BB:2886:A:N6	31:B0:39:ARG:NE	2.62	0.43
24:BI:29:GLN:HA	24:BI:29:GLN:NE2	2.32	0.43
24:BI:91:LYS:O	24:BI:94:LYS:HB2	2.18	0.43
25:BC:123:ILE:HD13	25:BC:135:PRO:HG2	1.99	0.43
28:BP:89:GLY:N	28:BP:112:ARG:NH1	2.66	0.43
32:B4:30:GLU:HA	32:B4:31:PRO:HD3	1.89	0.43
33:B1:47:ILE:N	33:B1:47:ILE:HD12	2.33	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:B3:9:ALA:O	34:B3:13:PHE:HD2	2.01	0.43
37:BL:77:ILE:HG13	37:BL:101:ILE:HD11	2.00	0.43
37:BL:85:VAL:HG22	37:BL:94:THR:HG21	2.01	0.43
40:BH:54:LEU:HA	40:BH:58:LEU:CB	2.48	0.43
40:BH:78:VAL:HB	40:BH:143:ILE:O	2.19	0.43
41:BJ:25:LEU:O	41:BJ:27:ARG:N	2.50	0.43
41:BJ:55:ILE:HG22	41:BJ:123:LYS:HB2	2.00	0.43
45:BS:27:LYS:H	45:BS:27:LYS:CD	2.32	0.43
45:BS:28:LYS:O	45:BS:29:VAL:HG23	2.19	0.43
47:BF:1:ALA:O	47:BF:2:LYS:C	2.59	0.43
47:BF:116:LEU:H	47:BF:176:PHE:C	2.25	0.43
48:BG:116:LEU:HG	48:BG:120:ILE:HD12	2.01	0.43
50:BT:55:VAL:HG13	50:BT:85:VAL:HG12	1.99	0.43
51:BZ:14:THR:HA	51:BZ:28:ARG:CA	2.39	0.43
52:BW:39:GLN:HG3	52:BW:42:THR:N	2.33	0.43
1:CA:537:G:H2'	1:CA:538:G:C8	2.54	0.43
1:CA:618:C:N3	1:CA:622:A:N6	2.65	0.43
1:CA:1201:A:H8	1:CA:1201:A:H5''	1.84	0.43
3:CD:3:TYR:O	3:CD:4:LEU:HD12	2.17	0.43
7:CH:29:SER:OG	7:CH:32:LYS:HG3	2.18	0.43
10:CK:31:VAL:HG11	10:CK:95:THR:OG1	2.18	0.43
20:CB:14:HIS:HB2	20:CB:208:ALA:HB2	2.01	0.43
23:DB:121:G:H2'	23:DB:122:G:C8	2.53	0.43
23:DB:235:U:H2'	23:DB:236:C:C6	2.53	0.43
23:DB:374:A:H61	23:DB:400:G:H1'	1.83	0.43
23:DB:871:U:H4'	38:DM:68:PHE:CE2	2.54	0.43
23:DB:997:G:OP1	44:DQ:92:LYS:HB2	2.19	0.43
23:DB:1640:A:H2'	23:DB:1641:A:H8	1.82	0.43
23:DB:1728:C:H2'	23:DB:1730:C:O2	2.18	0.43
23:DB:1789:A:H2'	23:DB:1790:C:O4'	2.18	0.43
23:DB:1923:U:O4	53:DB:3001:NMY:N9	2.51	0.43
23:DB:2025:C:H2'	23:DB:2026:U:C6	2.53	0.43
23:DB:2330:G:H1'	52:DW:38:ARG:HB2	2.00	0.43
23:DB:2520:C:C6	23:DB:2567:G:H1'	2.53	0.43
24:DI:54:ILE:O	24:DI:54:ILE:HG23	2.18	0.43
26:DD:16:THR:HB	26:DD:18:ASP:CG	2.43	0.43
28:DP:6:GLN:HA	28:DP:9:GLN:NE2	2.33	0.43
28:DP:25:VAL:HA	28:DP:85:VAL:CA	2.48	0.43
28:DP:89:GLY:HA2	28:DP:112:ARG:H	1.82	0.43
29:DE:153:LEU:HG	29:DE:154:ASP:N	2.32	0.43
35:DV:48:MET:O	35:DV:51:GLN:HG3	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:DM:19:GLY:H	38:DM:38:ARG:HH22	1.65	0.43
38:DM:32:GLY:HA2	38:DM:117:PHE:CZ	2.53	0.43
41:DJ:23:LYS:HE3	41:DJ:142:ILE:HG12	2.01	0.43
45:DS:99:ARG:H	45:DS:99:ARG:HG2	1.54	0.43
47:DF:65:LEU:CD2	47:DF:87:LYS:HD2	2.48	0.43
47:DF:78:ILE:HA	47:DF:79:ARG:HE	1.84	0.43
47:DF:78:ILE:HG13	47:DF:82:TYR:CZ	2.53	0.43
48:DG:10:VAL:C	48:DG:14:VAL:HG21	2.43	0.43
51:DZ:39:TRP:HB2	51:DZ:46:PHE:CE2	2.54	0.43
52:DW:23:LYS:HD2	52:DW:24:ARG:HB3	2.00	0.43
1:AA:104:G:O2'	1:AA:105:G:H5'	2.19	0.43
1:AA:279:A:H4'	1:AA:280:C:OP2	2.17	0.43
1:AA:587:G:H4'	7:AH:3:GLN:HA	2.01	0.43
1:AA:865:A:H2	1:AA:918:A:H4'	1.83	0.43
1:AA:1309:G:P	12:AM:86:ARG:HH12	2.42	0.43
2:AC:38:VAL:HG23	2:AC:39:ARG:N	2.33	0.43
2:AC:116:ALA:HB1	2:AC:186:SER:OG	2.19	0.43
4:AE:9:GLU:CD	4:AE:10:LEU:H	2.26	0.43
6:AG:112:ASP:HB3	6:AG:113:LYS:H	1.63	0.43
11:AL:42:LYS:HB3	11:AL:43:LYS:H	1.63	0.43
12:AM:102:LYS:HB2	12:AM:102:LYS:NZ	2.34	0.43
13:AN:17:ASP:O	13:AN:21:ALA:HB3	2.18	0.43
15:AP:4:ILE:O	15:AP:71:VAL:HG11	2.18	0.43
18:AS:50:VAL:O	18:AS:56:HIS:HA	2.19	0.43
22:BA:92:C:O2'	22:BA:93:C:H5'	2.18	0.43
23:BB:12:U:O2	23:BB:2626:C:H4'	2.19	0.43
23:BB:62:U:O2	23:BB:62:U:C2'	2.63	0.43
23:BB:736:C:H2'	23:BB:737:C:C6	2.54	0.43
23:BB:924:G:H2'	23:BB:925:A:H8	1.83	0.43
23:BB:1424:G:O2'	23:BB:1425:G:H5'	2.18	0.43
23:BB:1666:G:C2'	23:BB:1667:G:H5'	2.48	0.43
23:BB:1878:G:H2'	23:BB:1879:C:C6	2.53	0.43
23:BB:1893:C:H2'	23:BB:1894:C:O4'	2.18	0.43
23:BB:2282:G:O2'	23:BB:2283:C:OP2	2.33	0.43
23:BB:2408:U:O2'	23:BB:2409:G:H5'	2.18	0.43
23:BB:2411:A:H2'	23:BB:2412:A:H8	1.82	0.43
23:BB:2874:C:H2'	23:BB:2875:C:C6	2.54	0.43
23:BB:2893:A:H4'	23:BB:2894:G:H5'	1.99	0.43
25:BC:66:PHE:CE2	25:BC:104:LEU:HD11	2.54	0.43
25:BC:259:ASN:C	25:BC:261:ARG:N	2.76	0.43
26:BD:92:VAL:O	26:BD:93:GLY:C	2.61	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BE:146:VAL:O	29:BE:167:VAL:HA	2.18	0.43
29:BE:146:VAL:HG12	29:BE:147:LEU:N	2.34	0.43
32:B4:7:VAL:CG1	32:B4:8:LYS:H	2.22	0.43
35:BV:93:ARG:HG3	35:BV:93:ARG:NH1	2.30	0.43
37:BL:132:ARG:C	37:BL:135:ILE:HG22	2.43	0.43
39:BX:13:GLU:HA	39:BX:13:GLU:OE2	2.18	0.43
40:BH:68:ARG:HD3	40:BH:134:VAL:HG21	2.00	0.43
44:BQ:86:SER:O	44:BQ:88:GLU:N	2.48	0.43
46:BU:73:ASN:ND2	46:BU:74:ALA:N	2.66	0.43
47:BF:106:ALA:HA	47:BF:135:ILE:HD13	1.99	0.43
47:BF:134:GLN:NE2	47:BF:136:ILE:HA	2.33	0.43
48:BG:10:VAL:HG13	48:BG:14:VAL:HB	2.00	0.43
1:CA:676:A:H2'	1:CA:677:U:C6	2.54	0.43
1:CA:1239:A:N6	1:CA:1299:A:H62	2.14	0.43
2:CC:42:LEU:O	2:CC:46:LEU:HB2	2.19	0.43
5:CF:1:MET:SD	5:CF:67:PRO:HD3	2.57	0.43
6:CG:55:LYS:H	6:CG:55:LYS:HG2	1.63	0.43
8:CI:26:LYS:C	8:CI:27:ILE:HG13	2.44	0.43
10:CK:92:ARG:NH2	21:CU:24:LYS:HG2	2.28	0.43
13:CN:25:GLU:O	13:CN:26:LEU:C	2.61	0.43
15:CP:52:LEU:CD2	15:CP:75:ILE:HA	2.49	0.43
20:CB:43:GLU:H	20:CB:43:GLU:HG2	1.50	0.43
20:CB:69:VAL:O	20:CB:163:ILE:HG22	2.19	0.43
20:CB:129:THR:C	20:CB:131:LYS:H	2.26	0.43
23:DB:155:A:O2'	23:DB:156:A:H5'	2.18	0.43
23:DB:320:A:H4'	23:DB:322:A:N7	2.34	0.43
23:DB:695:G:OP1	23:DB:1380:G:H4'	2.19	0.43
23:DB:765:C:H2'	23:DB:766:U:C6	2.53	0.43
23:DB:1145:C:O2'	23:DB:1146:C:H5'	2.18	0.43
23:DB:1322:A:H2'	23:DB:1323:C:H5'	2.00	0.43
23:DB:1831:G:H2'	23:DB:1832:C:H6	1.83	0.43
23:DB:1893:C:H2'	23:DB:1894:C:O4'	2.19	0.43
23:DB:2489:U:H2'	23:DB:2490:G:O4'	2.19	0.43
23:DB:2637:U:H5''	26:DD:83:ARG:NH2	2.33	0.43
25:DC:203:VAL:O	25:DC:204:LEU:HB2	2.19	0.43
26:DD:8:LYS:O	26:DD:9:VAL:HB	2.19	0.43
26:DD:202:ILE:O	26:DD:202:ILE:HG22	2.17	0.43
28:DP:50:ARG:CB	28:DP:57:ALA:H	2.27	0.43
28:DP:61:ARG:HD3	28:DP:70:GLU:CG	2.49	0.43
29:DE:46:GLN:HB3	29:DE:86:ALA:HA	2.00	0.43
29:DE:117:ARG:HA	29:DE:185:LYS:HG2	1.99	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:DE:136:GLN:O	29:DE:137:LYS:C	2.62	0.43
34:D3:44:ARG:N	34:D3:45:PRO:CD	2.81	0.43
37:DL:81:ASP:O	37:DL:83:ALA:N	2.45	0.43
41:DJ:45:THR:H	41:DJ:46:PRO:CD	2.27	0.43
43:DO:35:ILE:HG13	43:DO:71:ALA:CB	2.49	0.43
44:DQ:24:TYR:CD1	44:DQ:25:GLY:N	2.86	0.43
47:DF:78:ILE:HG23	47:DF:82:TYR:CB	2.49	0.43
47:DF:116:LEU:H	47:DF:176:PHE:C	2.26	0.43
47:DF:131:VAL:O	47:DF:132:ARG:HB2	2.19	0.43
51:DZ:51:VAL:HG11	51:DZ:56:MET:HG3	2.00	0.43
51:DZ:59:ILE:HD13	51:DZ:67:VAL:HG21	2.00	0.43
1:AA:77:A:O2'	1:AA:78:A:H5'	2.19	0.43
1:AA:642:A:H2'	1:AA:643:C:C6	2.51	0.43
1:AA:894:G:O2'	1:AA:895:G:H5'	2.19	0.43
1:AA:1017:U:H2'	1:AA:1018:G:C8	2.54	0.43
1:AA:1462:C:H2'	1:AA:1463:U:C6	2.53	0.43
2:AC:76:ILE:C	2:AC:82:ASP:HB2	2.44	0.43
2:AC:148:ILE:HG12	2:AC:149:LYS:N	2.34	0.43
3:AD:77:GLU:O	3:AD:81:LEU:HG	2.18	0.43
5:AF:98:GLU:HG2	5:AF:99:ALA:H	1.80	0.43
6:AG:71:THR:C	6:AG:90:VAL:HG22	2.43	0.43
7:AH:47:ASP:CG	7:AH:48:PHE:H	2.26	0.43
9:AJ:8:ILE:HD13	9:AJ:74:VAL:CG1	2.49	0.43
9:AJ:37:ARG:NH1	9:AJ:77:VAL:HG21	2.33	0.43
11:AL:49:ARG:CG	11:AL:89:LEU:HD21	2.44	0.43
18:AS:36:ARG:C	18:AS:69:LYS:HD2	2.44	0.43
18:AS:66:VAL:O	18:AS:68:HIS:N	2.52	0.43
20:AB:18:GLN:O	20:AB:37:VAL:HG23	2.18	0.43
22:BA:53:A:C2'	22:BA:54:G:H5'	2.49	0.43
23:BB:101:A:H2'	23:BB:102:U:OP2	2.19	0.43
23:BB:298:G:OP1	46:BU:83:GLY:HA2	2.18	0.43
23:BB:416:U:H2'	23:BB:417:C:H6	1.84	0.43
23:BB:1401:G:H2'	23:BB:1402:U:H6	1.83	0.43
23:BB:1478:G:O2'	23:BB:1479:G:H5'	2.18	0.43
23:BB:1567:G:H5'	25:BC:57:HIS:CD2	2.53	0.43
23:BB:1576:U:O2'	23:BB:1577:C:H5'	2.19	0.43
23:BB:1739:A:H2'	23:BB:1740:G:C8	2.53	0.43
23:BB:1740:G:H2'	23:BB:1741:C:C6	2.54	0.43
23:BB:1833:C:O2'	23:BB:1969:A:N1	2.51	0.43
23:BB:2146:C:H4'	23:BB:2148:G:H1'	2.00	0.43
23:BB:2220:U:O2'	23:BB:2221:G:H5'	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:2742:G:O2'	23:BB:2743:U:H5'	2.17	0.43
23:BB:2819:G:O2'	23:BB:2820:A:H5''	2.18	0.43
23:BB:2847:U:H5''	28:BP:94:ALA:HB2	2.00	0.43
25:BC:145:MET:HE3	25:BC:153:LEU:HD11	2.01	0.43
28:BP:61:ARG:HD3	28:BP:70:GLU:CG	2.49	0.43
29:BE:32:VAL:HG23	29:BE:33:VAL:N	2.34	0.43
38:BM:54:THR:O	38:BM:56:ALA:N	2.45	0.43
43:BO:49:VAL:HG11	43:BO:82:ALA:CA	2.48	0.43
44:BQ:79:ILE:HD13	44:BQ:79:ILE:C	2.44	0.43
45:BS:26:GLY:O	45:BS:28:LYS:N	2.52	0.43
48:BG:58:ALA:C	48:BG:60:GLY:H	2.25	0.43
48:BG:94:ARG:HH21	48:BG:104:LEU:HA	1.82	0.43
48:BG:106:LEU:HD23	48:BG:106:LEU:N	2.33	0.43
50:BT:72:GLN:H	50:BT:72:GLN:HG2	1.63	0.43
1:CA:65:A:C4	1:CA:381:C:C4	3.07	0.43
1:CA:355:C:O2'	1:CA:356:A:H5'	2.18	0.43
1:CA:403:C:H2'	1:CA:404:G:C8	2.51	0.43
1:CA:586:C:H2'	1:CA:587:G:H5'	2.01	0.43
1:CA:706:A:H4'	10:CK:30:ILE:HD11	2.00	0.43
1:CA:1103:C:O2	20:CB:105:THR:HG21	2.18	0.43
1:CA:1254:A:OP1	9:CJ:47:GLU:HG3	2.19	0.43
1:CA:1355:G:H2'	1:CA:1356:G:C8	2.53	0.43
2:CC:78:LYS:HE3	2:CC:81:GLU:HG2	2.01	0.43
3:CD:3:TYR:CZ	3:CD:10:LEU:HD21	2.54	0.43
3:CD:8:LEU:HD12	3:CD:31:CYS:SG	2.58	0.43
3:CD:173:ASP:OD1	3:CD:176:LYS:HD3	2.19	0.43
8:CI:34:LEU:CD1	8:CI:47:VAL:HG21	2.49	0.43
9:CJ:17:LEU:CD1	9:CJ:95:GLY:HA3	2.49	0.43
12:CM:28:ARG:CZ	12:CM:62:PHE:HB2	2.48	0.43
19:CT:2:ASN:CG	19:CT:3:ILE:N	2.77	0.43
20:CB:45:THR:HA	20:CB:48:MET:HG3	2.00	0.43
20:CB:96:LEU:HD23	20:CB:99:MET:HE3	2.00	0.43
20:CB:119:GLN:HB3	20:CB:125:PHE:HD1	1.84	0.43
23:DB:39:G:H2'	23:DB:40:U:H6	1.84	0.43
23:DB:51:G:H1'	23:DB:118:A:N6	2.34	0.43
23:DB:64:A:H2'	23:DB:65:U:H6	1.84	0.43
23:DB:79:C:O2'	23:DB:346:A:C8	2.71	0.43
23:DB:244:A:H2'	23:DB:245:G:O4'	2.19	0.43
23:DB:839:U:H2'	23:DB:840:C:C6	2.52	0.43
23:DB:912:C:O2'	23:DB:913:U:H5'	2.19	0.43
23:DB:930:G:H1'	30:DY:24:LEU:HD11	2.01	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:934:U:H2'	23:DB:935:C:H6	1.84	0.43
23:DB:956:G:N2	23:DB:959:A:H3'	2.34	0.43
23:DB:958:U:O4	38:DM:16:ARG:HA	2.19	0.43
23:DB:1333:G:H2'	23:DB:1334:G:H8	1.82	0.43
23:DB:1559:U:H3'	23:DB:1560:G:H5'	2.00	0.43
23:DB:2139:U:O2'	23:DB:2140:G:H5'	2.18	0.43
23:DB:2261:C:N4	52:DW:10:ARG:HB3	2.33	0.43
23:DB:2743:U:C2'	23:DB:2744:G:H5''	2.42	0.43
23:DB:2852:G:H2'	23:DB:2853:C:H6	1.82	0.43
25:DC:107:LYS:HB3	25:DC:108:GLY:H	1.68	0.43
27:DK:47:ILE:HG23	27:DK:48:PRO:N	2.33	0.43
27:DK:115:ILE:CG2	27:DK:116:ILE:N	2.82	0.43
28:DP:50:ARG:CD	28:DP:56:SER:HB3	2.49	0.43
29:DE:46:GLN:HG3	29:DE:87:ALA:CB	2.40	0.43
35:DV:10:LYS:C	35:DV:11:GLU:HG3	2.43	0.43
35:DV:28:ALA:HA	35:DV:88:HIS:ND1	2.34	0.43
43:DO:14:ALA:O	43:DO:18:LEU:HB2	2.19	0.43
43:DO:49:VAL:HG11	43:DO:82:ALA:CA	2.49	0.43
43:DO:77:ALA:O	43:DO:81:ARG:HD3	2.18	0.43
43:DO:88:LYS:HG2	43:DO:89:ASP:N	2.33	0.43
44:DQ:85:ALA:O	44:DQ:86:SER:C	2.61	0.43
44:DQ:105:PHE:HA	44:DQ:108:LEU:CG	2.49	0.43
45:DS:26:GLY:O	45:DS:28:LYS:N	2.52	0.43
47:DF:32:LYS:H	47:DF:95:MET:HE2	1.83	0.43
48:DG:26:LYS:HA	48:DG:32:LEU:CA	2.45	0.43
49:DR:2:TYR:CB	49:DR:42:ALA:HB2	2.49	0.43
50:DT:28:ASN:C	50:DT:29:THR:HG23	2.44	0.43
1:AA:676:A:H2'	1:AA:677:U:C6	2.53	0.43
1:AA:692:U:C2	1:AA:694:A:H5''	2.54	0.43
1:AA:697:U:O2	1:AA:798:U:H1'	2.19	0.43
1:AA:903:G:H2'	1:AA:904:U:C6	2.54	0.43
1:AA:1014:A:H2'	1:AA:1015:G:C8	2.54	0.43
1:AA:1310:G:O2'	1:AA:1311:A:H5'	2.18	0.43
1:AA:1323:G:H4'	1:AA:1362:A:C4	2.54	0.43
2:AC:55:VAL:HG12	2:AC:56:ILE:N	2.34	0.43
3:AD:3:TYR:O	3:AD:4:LEU:HD12	2.19	0.43
3:AD:18:LEU:HD11	3:AD:59:LYS:HG3	1.99	0.43
3:AD:96:ARG:O	3:AD:100:VAL:HG23	2.19	0.43
4:AE:15:ILE:HD12	4:AE:35:LEU:HG	2.00	0.43
5:AF:1:MET:HB3	5:AF:66:ALA:C	2.44	0.43
5:AF:9:MET:HE1	17:AR:64:LEU:O	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AG:104:VAL:O	6:AG:108:ARG:HG3	2.18	0.43
7:AH:25:THR:O	7:AH:26:MET:HB3	2.19	0.43
8:AI:66:VAL:HG21	8:AI:74:GLN:HG3	2.01	0.43
10:AK:15:VAL:HB	10:AK:78:ILE:CD1	2.49	0.43
10:AK:124:LYS:O	21:AU:33:ARG:HG2	2.18	0.43
13:AN:25:GLU:O	13:AN:26:LEU:C	2.61	0.43
16:AQ:74:LEU:C	16:AQ:74:LEU:HD13	2.44	0.43
18:AS:28:LYS:HD2	18:AS:28:LYS:N	2.34	0.43
19:AT:43:LYS:HB3	19:AT:85:LEU:HD21	2.01	0.43
20:AB:27:LYS:CA	20:AB:30:ILE:HD12	2.39	0.43
20:AB:70:GLY:HA2	20:AB:163:ILE:CG2	2.48	0.43
20:AB:93:HIS:O	20:AB:94:ARG:C	2.62	0.43
20:AB:221:ARG:HG3	20:AB:222:GLU:N	2.32	0.43
22:BA:39:A:H2	22:BA:46:A:H61	1.67	0.43
23:BB:163:C:O2	23:BB:163:C:O4'	2.37	0.43
23:BB:1060:U:C1'	23:BB:1062:G:H5'	2.49	0.43
23:BB:1175:A:H3'	23:BB:1176:U:O4'	2.19	0.43
23:BB:1333:G:H2'	23:BB:1334:G:H8	1.84	0.43
23:BB:1803:A:H4'	25:BC:256:THR:OG1	2.18	0.43
23:BB:1843:C:O2'	23:BB:1844:C:H5'	2.19	0.43
23:BB:1904:G:O2'	23:BB:1905:C:H5'	2.19	0.43
23:BB:2243:U:O2	23:BB:2434:A:C2	2.72	0.43
23:BB:2590:A:H5''	25:BC:237:ARG:NH2	2.33	0.43
23:BB:2659:G:N2	23:BB:2661:G:H3'	2.34	0.43
23:BB:2737:G:H2'	23:BB:2738:A:H8	1.83	0.43
23:BB:2751:G:N3	23:BB:2751:G:C2'	2.78	0.43
23:BB:2825:G:H2'	23:BB:2826:A:H5'	2.00	0.43
25:BC:64:VAL:O	25:BC:65:ASP:CB	2.54	0.43
25:BC:65:ASP:O	25:BC:65:ASP:CG	2.60	0.43
26:BD:45:TYR:CD1	26:BD:45:TYR:N	2.87	0.43
26:BD:54:ALA:HA	26:BD:76:GLY:N	2.33	0.43
26:BD:62:LYS:O	26:BD:66:GLY:N	2.51	0.43
27:BK:43:ILE:HG21	27:BK:46:ALA:HB2	2.01	0.43
29:BE:131:THR:HB	29:BE:164:LEU:HG	2.00	0.43
29:BE:153:LEU:HG	29:BE:154:ASP:N	2.34	0.43
31:B0:50:GLY:O	31:B0:51:ARG:C	2.62	0.43
35:BV:59:GLU:CD	35:BV:60:VAL:N	2.77	0.43
37:BL:30:THR:O	37:BL:31:GLY:C	2.61	0.43
37:BL:81:ASP:HA	37:BL:84:LYS:CE	2.36	0.43
37:BL:92:LEU:CD2	37:BL:124:GLY:HA3	2.48	0.43
37:BL:96:LYS:HE2	37:BL:102:GLY:O	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BX:59:GLU:CD	39:BX:60:LYS:N	2.77	0.43
39:BX:59:GLU:N	39:BX:59:GLU:OE2	2.52	0.43
41:BJ:12:LYS:O	41:BJ:13:ARG:HB2	2.18	0.43
43:BO:28:VAL:CG2	43:BO:106:LEU:HD21	2.47	0.43
45:BS:40:ASN:O	45:BS:41:LYS:HG3	2.18	0.43
47:BF:59:ILE:H	47:BF:59:ILE:HG13	1.66	0.43
47:BF:74:ALA:HB1	47:BF:76:PHE:CD2	2.53	0.43
48:BG:1:SER:O	48:BG:3:VAL:N	2.52	0.43
48:BG:9:VAL:HG12	48:BG:11:PRO:CD	2.47	0.43
50:BT:57:VAL:HG12	50:BT:86:THR:OG1	2.18	0.43
50:BT:74:ILE:HG13	50:BT:75:GLY:N	2.34	0.43
1:CA:16:A:H2	1:CA:1080:A:N3	2.17	0.43
1:CA:36:C:O2'	1:CA:37:U:H5'	2.18	0.43
1:CA:159:G:N1	1:CA:163:C:N4	2.67	0.43
1:CA:276:G:O2'	1:CA:277:C:H5'	2.19	0.43
1:CA:321:A:O2'	1:CA:322:C:H5'	2.18	0.43
1:CA:412:A:O2'	1:CA:413:G:H5''	2.19	0.43
1:CA:825:A:H2'	1:CA:826:C:C6	2.53	0.43
1:CA:1067:A:H4'	1:CA:1068:G:O5'	2.18	0.43
1:CA:1270:G:H2'	1:CA:1271:A:C8	2.52	0.43
3:CD:21:LYS:C	3:CD:23:GLY:H	2.25	0.43
3:CD:105:GLY:O	3:CD:157:ALA:HB1	2.18	0.43
3:CD:138:PRO:C	3:CD:140:ASP:H	2.26	0.43
4:CE:57:ALA:O	4:CE:61:LYS:HG2	2.18	0.43
5:CF:51:ILE:HG23	5:CF:51:ILE:O	2.19	0.43
9:CJ:57:VAL:HG13	9:CJ:58:ASN:N	2.33	0.43
10:CK:57:SER:O	10:CK:90:PRO:HG3	2.18	0.43
10:CK:68:ARG:HG3	10:CK:68:ARG:HH11	1.83	0.43
12:CM:15:VAL:HG13	12:CM:30:LYS:HA	1.99	0.43
12:CM:42:VAL:HB	12:CM:47:LEU:CD2	2.44	0.43
12:CM:79:LEU:HD13	12:CM:86:ARG:HB3	2.01	0.43
13:CN:20:PHE:O	13:CN:21:ALA:C	2.61	0.43
14:CO:88:ARG:O	14:CO:89:ARG:HB2	2.19	0.43
15:CP:38:PHE:CD2	15:CP:51:ARG:HB2	2.53	0.43
19:CT:42:ASP:HA	19:CT:43:LYS:NZ	2.34	0.43
21:CU:35:GLU:HB3	21:CU:36:PHE:H	1.47	0.43
22:DA:92:C:O2'	22:DA:93:C:H5'	2.18	0.43
23:DB:552:U:O2'	23:DB:553:G:H5'	2.18	0.43
23:DB:832:U:H2'	23:DB:833:A:C8	2.54	0.43
23:DB:1118:C:H2'	23:DB:1119:U:O4'	2.19	0.43
23:DB:1203:U:C4'	37:DL:3:LEU:HD12	2.48	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:1257:C:H5'	29:DE:78:TRP:CZ3	2.54	0.43
23:DB:1509:A:H4'	23:DB:1510:G:C8	2.53	0.43
23:DB:1535:A:O2'	23:DB:1536:C:H5'	2.17	0.43
23:DB:2282:G:H5''	23:DB:2283:C:O4'	2.19	0.43
23:DB:2336:A:N6	52:DW:40:ARG:HB3	2.33	0.43
23:DB:2345:G:N3	23:DB:2381:A:H2'	2.33	0.43
23:DB:2543:G:H2'	23:DB:2544:G:C8	2.53	0.43
23:DB:2617:U:C4	23:DB:2618:G:N7	2.87	0.43
23:DB:2888:C:H2'	23:DB:2889:C:C6	2.54	0.43
24:DI:105:LEU:HD11	24:DI:139:VAL:CG2	2.43	0.43
29:DE:29:HIS:C	29:DE:32:VAL:HG22	2.43	0.43
39:DX:6:LEU:O	39:DX:7:ARG:HB3	2.19	0.43
40:DH:27:ARG:HE	51:DZ:64:ILE:HD11	1.84	0.43
41:DJ:42:ALA:C	41:DJ:44:TYR:H	2.27	0.43
41:DJ:110:PRO:O	41:DJ:115:GLY:HA3	2.19	0.43
43:DO:2:ASP:HA	43:DO:3:LYS:HZ2	1.84	0.43
46:DU:70:ALA:HB1	46:DU:79:ALA:CB	2.49	0.43
48:DG:1:SER:O	48:DG:3:VAL:N	2.51	0.43
50:DT:57:VAL:HG12	50:DT:86:THR:OG1	2.19	0.43
51:DZ:28:ARG:HG2	51:DZ:28:ARG:O	2.18	0.43
52:DW:9:THR:HG23	52:DW:10:ARG:CD	2.32	0.43
52:DW:18:LYS:H	52:DW:35:ILE:CG2	2.32	0.43
52:DW:39:GLN:HG3	52:DW:42:THR:N	2.34	0.43
1:AA:10:A:OP2	4:AE:130:THR:HB	2.19	0.43
1:AA:98:A:O2'	1:AA:99:C:H5'	2.19	0.43
1:AA:663:A:O2'	1:AA:664:G:H5'	2.19	0.43
1:AA:737:C:H2'	1:AA:738:C:C6	2.54	0.43
1:AA:1082:A:O2'	1:AA:1083:U:H5'	2.19	0.43
1:AA:1173:U:H2'	1:AA:1174:G:H8	1.82	0.43
1:AA:1253:G:N1	1:AA:1285:A:N6	2.67	0.43
3:AD:21:LYS:C	3:AD:23:GLY:H	2.27	0.43
3:AD:196:GLU:O	3:AD:197:HIS:C	2.62	0.43
8:AI:35:GLU:HG3	8:AI:44:ARG:HD2	2.00	0.43
9:AJ:8:ILE:HD13	9:AJ:74:VAL:HG12	2.01	0.43
9:AJ:52:LEU:CB	13:AN:80:ARG:HE	2.32	0.43
13:AN:20:PHE:O	13:AN:21:ALA:C	2.62	0.43
14:AO:45:GLU:O	14:AO:47:LYS:N	2.51	0.43
14:AO:70:LEU:HD12	14:AO:78:TYR:CB	2.49	0.43
15:AP:1:MET:HE2	15:AP:3:THR:HG22	2.00	0.43
18:AS:29:PRO:HA	18:AS:47:THR:HG22	2.00	0.43
21:AU:40:PRO:C	21:AU:42:THR:H	2.25	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:51:G:H2'	22:BA:52:A:O5'	2.19	0.43
23:BB:6:A:O2'	23:BB:7:G:H5'	2.19	0.43
23:BB:518:G:H2'	23:BB:519:U:C6	2.54	0.43
23:BB:613:A:C2	29:BE:173:THR:HG21	2.54	0.43
23:BB:978:G:O4'	23:BB:1001:A:H2	2.02	0.43
23:BB:1174:U:H2'	23:BB:1175:A:H5''	1.99	0.43
23:BB:1177:G:H2'	23:BB:1178:C:C6	2.53	0.43
23:BB:2028:U:O2'	23:BB:2029:G:H5'	2.18	0.43
23:BB:2305:U:H1'	47:BF:132:ARG:HA	2.00	0.43
23:BB:2784:U:O2'	23:BB:2785:C:H5'	2.19	0.43
26:BD:111:GLY:H	26:BD:194:PRO:CG	2.32	0.43
28:BP:5:LYS:HD3	28:BP:5:LYS:C	2.44	0.43
29:BE:195:GLN:C	29:BE:197:GLU:N	2.77	0.43
34:B3:23:HIS:ND1	34:B3:24:LYS:N	2.67	0.43
37:BL:89:VAL:HG23	37:BL:123:ARG:CG	2.45	0.43
40:BH:131:SER:CA	40:BH:141:LYS:HA	2.41	0.43
42:BN:11:ASN:O	42:BN:12:ARG:HB2	2.17	0.43
42:BN:47:VAL:C	42:BN:50:PRO:HD2	2.43	0.43
45:BS:1:MET:HE2	45:BS:1:MET:HA	2.00	0.43
45:BS:24:ILE:O	45:BS:25:ARG:C	2.62	0.43
45:BS:47:VAL:HG23	45:BS:48:LYS:N	2.33	0.43
47:BF:41:GLU:HB2	47:BF:48:LEU:HD11	2.00	0.43
48:BG:71:LEU:O	48:BG:74:MET:HB2	2.18	0.43
49:BR:49:ILE:HG22	49:BR:54:VAL:HB	2.00	0.43
51:BZ:28:ARG:O	51:BZ:28:ARG:HG2	2.19	0.43
1:CA:169:C:O2'	1:CA:170:U:H5'	2.19	0.43
1:CA:238:A:C3'	1:CA:239:U:H5''	2.49	0.43
1:CA:252:U:H2'	1:CA:253:A:H8	1.83	0.43
1:CA:424:G:O2'	1:CA:425:G:H5'	2.19	0.43
1:CA:613:C:H2'	1:CA:614:C:H6	1.83	0.43
1:CA:1411:C:H2'	1:CA:1412:C:H6	1.83	0.43
2:CC:80:GLY:O	2:CC:84:GLU:HB2	2.19	0.43
6:CG:22:LEU:O	6:CG:26:VAL:HG13	2.18	0.43
10:CK:22:ILE:HG12	10:CK:31:VAL:HG12	2.00	0.43
14:CO:59:MET:HG2	14:CO:59:MET:H	1.60	0.43
17:CR:43:ILE:O	17:CR:44:THR:HG23	2.18	0.43
20:CB:139:GLU:HG2	20:CB:143:LEU:HD12	2.01	0.43
23:DB:138:U:O3'	23:DB:140:C:OP2	2.37	0.43
23:DB:540:C:H2'	23:DB:541:A:C8	2.53	0.43
23:DB:781:A:OP1	25:DC:216:ARG:NH2	2.51	0.43
23:DB:920:A:H2'	23:DB:921:C:H6	1.82	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:993:G:OP1	44:DQ:49:ARG:NH1	2.52	0.43
23:DB:2135:A:N6	23:DB:2156:G:O2'	2.48	0.43
23:DB:2154:A:H2'	23:DB:2155:U:O4'	2.19	0.43
25:DC:106:PRO:HB3	25:DC:141:HIS:CE1	2.54	0.43
25:DC:132:ARG:O	25:DC:132:ARG:HG3	2.18	0.43
25:DC:216:ARG:HG3	25:DC:216:ARG:NH1	2.31	0.43
26:DD:202:ILE:HD12	26:DD:202:ILE:N	2.33	0.43
29:DE:134:LEU:O	29:DE:134:LEU:HD12	2.19	0.43
32:D4:1:MET:HE1	32:D4:24:ARG:NH2	2.33	0.43
34:D3:23:HIS:ND1	34:D3:24:LYS:N	2.67	0.43
37:DL:82:LEU:O	37:DL:85:VAL:HG12	2.19	0.43
38:DM:42:THR:HB	38:DM:45:GLN:HG3	2.01	0.43
41:DJ:24:THR:OG1	41:DJ:27:ARG:HD2	2.19	0.43
42:DN:82:GLU:O	42:DN:84:GLY:N	2.52	0.43
43:DO:49:VAL:HG11	43:DO:82:ALA:HB2	2.00	0.43
50:DT:55:VAL:HG22	50:DT:87:LEU:CD2	2.49	0.43
1:AA:210:C:H1'	1:AA:211:G:C2	2.54	0.43
1:AA:490:C:H2'	1:AA:491:G:H8	1.83	0.43
1:AA:537:G:H2'	1:AA:538:G:C8	2.53	0.43
1:AA:825:A:H2'	1:AA:826:C:C6	2.53	0.43
2:AC:133:MET:SD	2:AC:152:VAL:HG23	2.59	0.43
2:AC:137:VAL:HA	2:AC:148:ILE:CD1	2.46	0.43
6:AG:70:PRO:HA	6:AG:141:HIS:CE1	2.54	0.43
7:AH:39:LEU:HD21	7:AH:128:VAL:HG21	2.00	0.43
8:AI:26:LYS:C	8:AI:27:ILE:HG13	2.44	0.43
8:AI:34:LEU:CD1	8:AI:47:VAL:HG21	2.49	0.43
15:AP:46:LYS:O	15:AP:47:GLU:HB2	2.18	0.43
19:AT:72:ALA:O	19:AT:75:LYS:HD3	2.19	0.43
20:AB:95:TRP:HZ3	20:AB:174:GLU:OE2	2.02	0.43
23:BB:282:A:O2'	23:BB:283:G:H5'	2.19	0.43
23:BB:751:A:C5'	45:BS:90:LYS:HA	2.48	0.43
23:BB:766:U:H2'	23:BB:767:U:C6	2.54	0.43
23:BB:902:C:H2'	23:BB:903:C:C6	2.53	0.43
23:BB:1291:C:O2'	23:BB:1292:G:H5'	2.19	0.43
23:BB:1548:A:H2'	23:BB:1549:A:H8	1.82	0.43
23:BB:2104:C:C3'	23:BB:2104:C:C6	3.00	0.43
23:BB:2144:G:N2	23:BB:2146:C:O4'	2.49	0.43
23:BB:2389:G:H5''	23:BB:2390:U:O4'	2.18	0.43
23:BB:2785:C:H2'	23:BB:2786:U:C6	2.53	0.43
23:BB:2819:G:H2'	23:BB:2821:A:N7	2.33	0.43
23:BB:2888:C:H2'	23:BB:2889:C:C6	2.54	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:BI:14:ALA:CB	24:BI:50:LYS:HA	2.49	0.43
25:BC:141:HIS:CG	25:BC:142:ASN:N	2.87	0.43
25:BC:245:THR:OG1	25:BC:249:VAL:HG23	2.19	0.43
26:BD:16:THR:C	26:BD:18:ASP:H	2.27	0.43
26:BD:116:LYS:HD3	42:BN:1:MET:HE1	2.01	0.43
28:BP:9:GLN:HA	28:BP:12:MET:SD	2.59	0.43
28:BP:91:VAL:HG11	28:BP:96:LEU:CD1	2.47	0.43
30:BY:8:GLN:OE1	30:BY:23:LEU:HD11	2.18	0.43
38:BM:18:ARG:HA	38:BM:18:ARG:HD2	1.74	0.43
40:BH:26:ALA:O	40:BH:27:ARG:C	2.62	0.43
41:BJ:43:GLU:O	41:BJ:44:TYR:C	2.61	0.43
43:BO:35:ILE:HG13	43:BO:71:ALA:HB2	2.01	0.43
46:BU:11:ILE:CG2	46:BU:12:VAL:N	2.82	0.43
46:BU:25:LYS:N	46:BU:34:ILE:O	2.51	0.43
47:BF:78:ILE:HA	47:BF:79:ARG:HH11	1.84	0.43
48:BG:23:ILE:O	48:BG:34:ARG:HA	2.18	0.43
48:BG:132:LEU:H	48:BG:132:LEU:HG	1.71	0.43
51:BZ:6:GLN:HE21	51:BZ:50:ARG:N	2.01	0.43
1:CA:175:C:H2'	1:CA:176:C:H6	1.84	0.43
1:CA:255:G:H2'	1:CA:256:U:H6	1.84	0.43
1:CA:818:G:C2'	1:CA:819:A:H5''	2.49	0.43
1:CA:1111:A:O2'	1:CA:1112:C:H5'	2.19	0.43
1:CA:1149:C:H2'	1:CA:1150:A:C8	2.54	0.43
2:CC:4:VAL:HG22	2:CC:5:HIS:N	2.34	0.43
3:CD:50:TYR:HA	3:CD:53:GLN:HE21	1.83	0.43
3:CD:196:GLU:O	3:CD:197:HIS:C	2.61	0.43
4:CE:148:SER:OG	4:CE:151:MET:HB2	2.19	0.43
8:CI:35:GLU:HG3	8:CI:44:ARG:HD2	2.01	0.43
10:CK:124:LYS:O	10:CK:125:LYS:HB2	2.19	0.43
12:CM:3:ILE:HA	12:CM:56:ARG:CG	2.43	0.43
12:CM:72:ILE:O	12:CM:76:ILE:HG13	2.19	0.43
16:CQ:74:LEU:C	16:CQ:74:LEU:HD13	2.44	0.43
18:CS:36:ARG:C	18:CS:69:LYS:HD2	2.43	0.43
20:CB:93:HIS:O	20:CB:94:ARG:C	2.61	0.43
20:CB:94:ARG:HG2	20:CB:94:ARG:O	2.18	0.43
23:DB:219:A:O2'	23:DB:220:G:H5'	2.19	0.43
23:DB:302:C:H2'	23:DB:303:G:H8	1.83	0.43
23:DB:528:A:H2	23:DB:2043:C:H4'	1.83	0.43
23:DB:566:U:H2'	23:DB:567:U:O4'	2.19	0.43
23:DB:580:U:O3'	44:DQ:30:VAL:HG23	2.19	0.43
23:DB:1052:C:H2'	23:DB:1053:C:O4'	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:1056:G:H5''	23:DB:1057:A:H5'	2.00	0.43
23:DB:1720:U:C2'	23:DB:1721:G:H5'	2.49	0.43
23:DB:1939:U:H5'	23:DB:1939:U:C6	2.52	0.43
23:DB:2363:G:O2'	23:DB:2364:C:H5'	2.19	0.43
23:DB:2598:A:H5''	25:DC:233:GLY:HA3	2.00	0.43
23:DB:2659:G:N2	23:DB:2661:G:H3'	2.34	0.43
23:DB:2839:G:H2'	23:DB:2840:C:H6	1.83	0.43
24:DI:129:GLU:CB	24:DI:133:ARG:HH12	2.31	0.43
26:DD:125:TRP:CG	26:DD:160:LYS:HB3	2.54	0.43
28:DP:50:ARG:HB3	28:DP:57:ALA:O	2.19	0.43
28:DP:63:ILE:O	28:DP:63:ILE:HG22	2.18	0.43
29:DE:157:LEU:HG	29:DE:169:VAL:HG11	2.00	0.43
31:D0:41:HIS:O	31:D0:42:ILE:O	2.37	0.43
37:DL:81:ASP:HA	37:DL:84:LYS:CE	2.37	0.43
40:DH:125:THR:CA	40:DH:146:VAL:HB	2.41	0.43
46:DU:20:LYS:HB2	46:DU:20:LYS:HE2	1.91	0.43
46:DU:47:PRO:HB3	46:DU:55:GLY:HA3	2.01	0.43
46:DU:73:ASN:C	46:DU:75:ALA:N	2.75	0.43
47:DF:130:GLY:HA2	47:DF:152:ASP:HA	2.01	0.43
48:DG:93:TYR:HE1	48:DG:160:GLY:HA2	1.84	0.43
48:DG:107:GLY:O	48:DG:108:PHE:C	2.61	0.43
51:DZ:30:LEU:HA	51:DZ:31:PRO:HD3	1.93	0.43
1:AA:126:G:H4'	1:AA:634:C:H1'	2.00	0.42
1:AA:131:A:H2'	1:AA:132:C:H6	1.80	0.42
1:AA:213:G:H3'	1:AA:214:C:H6	1.84	0.42
1:AA:214:C:H2'	1:AA:215:C:C6	2.53	0.42
1:AA:235:C:H1'	16:AQ:62:GLU:OE1	2.19	0.42
1:AA:252:U:H2'	1:AA:253:A:H8	1.84	0.42
1:AA:364:A:H2'	1:AA:365:U:O2	2.19	0.42
1:AA:597:G:H2'	1:AA:598:U:H5'	2.00	0.42
1:AA:664:G:N2	1:AA:741:G:H1	2.15	0.42
1:AA:711:G:O2'	1:AA:712:A:H5'	2.19	0.42
1:AA:865:A:C2	1:AA:918:A:H4'	2.54	0.42
1:AA:1451:U:O2	1:AA:1451:U:O4'	2.36	0.42
3:AD:53:GLN:HA	3:AD:198:LEU:HD22	2.00	0.42
3:AD:104:MET:CE	3:AD:170:LEU:HD13	2.48	0.42
4:AE:43:GLY:O	4:AE:44:ARG:HG3	2.19	0.42
5:AF:62:MET:O	5:AF:63:ASN:HB2	2.18	0.42
8:AI:27:ILE:CG2	8:AI:34:LEU:HB2	2.49	0.42
11:AL:21:PRO:C	11:AL:23:LEU:H	2.26	0.42
11:AL:81:ILE:CG2	11:AL:94:TYR:HB3	2.49	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AM:7:ASN:H	12:AM:7:ASN:HD22	1.67	0.42
12:AM:53:ASP:HA	12:AM:56:ARG:CZ	2.49	0.42
12:AM:78:ARG:HH22	18:AS:68:HIS:CE1	2.37	0.42
12:AM:79:LEU:HD13	12:AM:86:ARG:HB3	2.00	0.42
13:AN:26:LEU:C	13:AN:26:LEU:HD23	2.44	0.42
17:AR:31:TYR:C	17:AR:32:ILE:HG13	2.44	0.42
20:AB:104:LYS:HA	20:AB:107:ARG:HD3	2.01	0.42
20:AB:122:ASP:C	20:AB:124:THR:N	2.76	0.42
21:AU:24:LYS:HB3	21:AU:24:LYS:HZ2	1.82	0.42
22:BA:43:C:C2'	47:BF:91:ARG:HD2	2.49	0.42
23:BB:586:A:H5'	29:BE:84:THR:OG1	2.18	0.42
23:BB:599:A:H2'	23:BB:600:G:H8	1.84	0.42
23:BB:674:G:O3'	29:BE:60:TRP:CZ2	2.71	0.42
23:BB:782:A:C2	25:BC:224:MET:SD	3.12	0.42
23:BB:838:C:C2	23:BB:941:A:C6	3.07	0.42
23:BB:974:G:P	49:BR:78:ARG:HD3	2.58	0.42
23:BB:991:C:H5'	23:BB:991:C:H6	1.84	0.42
23:BB:1204:A:N1	23:BB:1241:A:N1	2.67	0.42
23:BB:1864:U:O2'	23:BB:1865:U:H5'	2.19	0.42
23:BB:2204:G:OP2	25:BC:146:LYS:HD2	2.19	0.42
23:BB:2379:G:H2'	23:BB:2380:C:C6	2.54	0.42
23:BB:2598:A:H5''	25:BC:233:GLY:HA3	2.01	0.42
23:BB:2861:U:H2'	23:BB:2862:G:C8	2.52	0.42
25:BC:173:LEU:CD2	25:BC:173:LEU:N	2.80	0.42
26:BD:13:ARG:HH12	28:BP:74:GLN:CG	2.31	0.42
26:BD:54:ALA:N	26:BD:76:GLY:HA2	2.34	0.42
26:BD:60:VAL:HG23	26:BD:60:VAL:O	2.19	0.42
26:BD:163:GLY:O	26:BD:164:GLN:C	2.62	0.42
28:BP:36:LYS:HA	28:BP:36:LYS:HD3	1.90	0.42
30:BY:51:SER:HA	30:BY:54:VAL:HG22	2.01	0.42
34:B3:57:VAL:C	34:B3:59:ALA:H	2.27	0.42
37:BL:122:VAL:HG23	37:BL:143:GLU:OE1	2.19	0.42
39:BX:40:SER:C	39:BX:42:LEU:N	2.77	0.42
41:BJ:13:ARG:HB3	41:BJ:53:TYR:HD2	1.84	0.42
45:BS:81:SER:HA	45:BS:99:ARG:HA	1.99	0.42
46:BU:70:ALA:HB1	46:BU:79:ALA:CB	2.49	0.42
47:BF:98:PHE:C	47:BF:100:GLU:N	2.77	0.42
47:BF:102:LEU:HA	47:BF:106:ALA:HB2	1.99	0.42
47:BF:102:LEU:CD2	47:BF:106:ALA:HB3	2.49	0.42
47:BF:116:LEU:HB3	47:BF:176:PHE:CA	2.47	0.42
48:BG:21:GLN:O	48:BG:37:ASN:HB2	2.18	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:BT:29:THR:HA	50:BT:86:THR:CA	2.42	0.42
1:CA:44:A:O2'	1:CA:45:G:H5'	2.19	0.42
1:CA:167:A:O2'	1:CA:168:G:H5'	2.19	0.42
1:CA:330:C:O2'	1:CA:331:G:H5'	2.18	0.42
1:CA:551:U:H2'	1:CA:552:U:C6	2.53	0.42
1:CA:551:U:H2'	1:CA:552:U:H6	1.83	0.42
1:CA:775:G:O2'	1:CA:776:G:H5'	2.19	0.42
1:CA:1201:A:H5''	1:CA:1201:A:C8	2.54	0.42
1:CA:1355:G:O2'	1:CA:1356:G:H5'	2.19	0.42
5:CF:46:GLN:HE21	5:CF:46:GLN:HB2	1.61	0.42
6:CG:135:LYS:HE2	6:CG:139:ASP:OD2	2.19	0.42
10:CK:17:ASP:HB3	10:CK:80:ASN:CG	2.43	0.42
18:CS:43:MET:CG	18:CS:61:VAL:HG21	2.44	0.42
19:CT:53:MET:HE3	19:CT:54:GLN:HA	2.01	0.42
20:CB:221:ARG:HG3	20:CB:222:GLU:N	2.33	0.42
23:DB:133:U:H2'	23:DB:134:G:H8	1.84	0.42
23:DB:133:U:H2'	23:DB:134:G:C8	2.54	0.42
23:DB:235:U:H2'	23:DB:236:C:H6	1.84	0.42
23:DB:433:C:O2'	23:DB:434:U:H5'	2.19	0.42
23:DB:596:U:H2'	23:DB:597:G:H8	1.84	0.42
23:DB:659:G:H4'	29:DE:95:LYS:CD	2.49	0.42
23:DB:674:G:H2'	23:DB:804:A:H61	1.84	0.42
23:DB:807:U:H2'	23:DB:808:G:H8	1.84	0.42
23:DB:932:U:H1'	23:DB:934:U:C4	2.54	0.42
23:DB:982:C:O2	23:DB:982:C:H2'	2.17	0.42
23:DB:1057:A:H62	23:DB:1086:A:H2'	1.83	0.42
23:DB:1224:U:H4'	49:DR:88:GLY:O	2.19	0.42
23:DB:1397:U:H5''	23:DB:1398:C:H5	1.82	0.42
23:DB:1400:U:O2'	23:DB:1401:G:H5'	2.19	0.42
23:DB:1408:G:O2'	23:DB:1409:U:H5'	2.19	0.42
23:DB:1739:A:H2'	23:DB:1740:G:O4'	2.19	0.42
23:DB:1764:C:O2'	23:DB:1765:U:H5'	2.18	0.42
23:DB:2488:G:O2'	23:DB:2489:U:H5'	2.19	0.42
25:DC:145:MET:HB2	25:DC:152:GLN:HE22	1.84	0.42
26:DD:92:VAL:O	26:DD:93:GLY:C	2.60	0.42
26:DD:114:LYS:H	26:DD:114:LYS:HG2	1.61	0.42
28:DP:61:ARG:HD3	28:DP:70:GLU:OE1	2.19	0.42
30:DY:6:ILE:HG22	30:DY:7:THR:H	1.84	0.42
40:DH:3:VAL:HB	40:DH:37:VAL:C	2.44	0.42
40:DH:96:THR:OG1	40:DH:97:ARG:N	2.52	0.42
43:DO:105:ALA:C	43:DO:107:ALA:N	2.73	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:DQ:63:ARG:HH12	44:DQ:96:ASP:HA	1.83	0.42
45:DS:17:VAL:HG11	45:DS:103:ILE:HG12	2.01	0.42
47:DF:49:LEU:HD13	47:DF:49:LEU:C	2.44	0.42
48:DG:83:THR:HA	48:DG:84:LYS:NZ	2.34	0.42
48:DG:174:LYS:NZ	48:DG:176:LYS:HG2	2.33	0.42
49:DR:18:GLN:O	49:DR:18:GLN:HG3	2.19	0.42
49:DR:38:VAL:HG11	49:DR:41:ILE:HD11	2.01	0.42
49:DR:59:ILE:HA	49:DR:101:ILE:H	1.83	0.42
50:DT:32:LEU:HG	50:DT:83:ALA:HB2	2.01	0.42
52:DW:39:GLN:CG	52:DW:40:ARG:N	2.78	0.42
1:AA:36:C:O2'	1:AA:37:U:H5'	2.18	0.42
1:AA:71:A:H2'	1:AA:72:A:H8	1.84	0.42
1:AA:666:G:H5'	1:AA:726:C:H1'	2.01	0.42
1:AA:724:G:O2'	1:AA:725:G:H5'	2.20	0.42
1:AA:864:A:H2'	1:AA:865:A:C8	2.53	0.42
1:AA:1056:U:O2'	1:AA:1057:G:H5'	2.18	0.42
1:AA:1143:G:H2'	1:AA:1144:G:H8	1.84	0.42
1:AA:1149:C:H2'	1:AA:1150:A:C8	2.54	0.42
1:AA:1390:U:H2'	1:AA:1391:U:H6	1.80	0.42
3:AD:32:LYS:C	3:AD:35:GLN:HE21	2.27	0.42
6:AG:109:LYS:HE2	6:AG:109:LYS:HA	2.01	0.42
6:AG:145:GLU:C	6:AG:148:LYS:H	2.27	0.42
8:AI:108:ARG:HH11	8:AI:108:ARG:HB3	1.84	0.42
11:AL:68:GLY:HA3	11:AL:106:VAL:CG2	2.49	0.42
12:AM:28:ARG:CZ	12:AM:62:PHE:HB2	2.50	0.42
18:AS:38:THR:HA	18:AS:68:HIS:O	2.18	0.42
23:BB:85:G:OP1	46:BU:6:ARG:N	2.52	0.42
23:BB:314:C:O2'	23:BB:315:G:H5'	2.18	0.42
23:BB:607:U:O4	23:BB:620:G:H5''	2.19	0.42
23:BB:748:G:C8	45:BS:89:ALA:HB1	2.54	0.42
23:BB:832:U:H2'	23:BB:833:A:C8	2.53	0.42
23:BB:1140:C:C2'	23:BB:1141:U:H5'	2.49	0.42
23:BB:1459:G:H5''	23:BB:1460:U:OP1	2.19	0.42
23:BB:1537:G:H5'	23:BB:1538:G:OP2	2.19	0.42
23:BB:1556:C:O2'	23:BB:1557:C:H5'	2.19	0.42
23:BB:1559:U:H3'	23:BB:1560:G:H5'	2.01	0.42
23:BB:1690:A:H2'	23:BB:1691:C:O4'	2.19	0.42
23:BB:1805:A:N3	25:BC:49:THR:HG23	2.33	0.42
23:BB:1881:C:H2'	23:BB:1882:U:O4'	2.20	0.42
23:BB:1908:C:O2'	23:BB:1909:C:H5'	2.20	0.42
23:BB:2098:U:H2'	23:BB:2099:U:O4'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:2243:U:O2'	23:BB:2244:U:H5'	2.19	0.42
23:BB:2299:U:H2'	23:BB:2300:C:C6	2.54	0.42
23:BB:2345:G:N3	23:BB:2381:A:H2'	2.33	0.42
25:BC:124:LYS:H	25:BC:191:LEU:HD13	1.84	0.42
26:BD:16:THR:HB	26:BD:18:ASP:CG	2.43	0.42
28:BP:45:VAL:N	28:BP:60:VAL:HG13	2.34	0.42
28:BP:89:GLY:HA2	28:BP:112:ARG:H	1.83	0.42
29:BE:117:ARG:HA	29:BE:185:LYS:HG2	2.00	0.42
36:B2:31:LEU:C	36:B2:33:ARG:N	2.76	0.42
37:BL:81:ASP:O	37:BL:83:ALA:N	2.45	0.42
41:BJ:23:LYS:HE3	41:BJ:142:ILE:HG12	2.02	0.42
45:BS:24:ILE:CD1	45:BS:36:LEU:HD21	2.48	0.42
45:BS:25:ARG:HH11	45:BS:25:ARG:HB2	1.84	0.42
45:BS:28:LYS:HB3	45:BS:29:VAL:H	1.43	0.42
46:BU:45:GLN:HE21	46:BU:45:GLN:HB3	1.72	0.42
46:BU:47:PRO:HB3	46:BU:55:GLY:HA3	2.02	0.42
47:BF:118:ALA:HA	47:BF:176:PHE:HE2	1.84	0.42
48:BG:26:LYS:CB	48:BG:32:LEU:HG	2.43	0.42
48:BG:89:VAL:HG12	48:BG:90:GLY:N	2.33	0.42
49:BR:4:VAL:HB	49:BR:39:LEU:HG	2.01	0.42
49:BR:51:VAL:O	49:BR:52:PRO:C	2.61	0.42
50:BT:48:GLN:HE21	50:BT:48:GLN:CA	2.19	0.42
51:BZ:63:GLY:HA3	51:BZ:66:THR:OG1	2.19	0.42
1:CA:83:C:O3'	1:CA:84:U:H6	2.01	0.42
1:CA:171:A:O2'	1:CA:172:A:H5'	2.19	0.42
1:CA:947:G:H2'	1:CA:948:C:C6	2.54	0.42
1:CA:1292:G:H2'	1:CA:1293:C:H6	1.84	0.42
1:CA:1302:C:C2	12:CM:16:ILE:HD12	2.54	0.42
4:CE:39:GLY:HA2	4:CE:44:ARG:O	2.19	0.42
4:CE:111:ARG:HG3	4:CE:112:ALA:N	2.34	0.42
4:CE:132:PRO:HG2	4:CE:133:ILE:H	1.84	0.42
9:CJ:15:HIS:HA	9:CJ:18:ILE:CG2	2.46	0.42
10:CK:86:LYS:HB2	10:CK:113:THR:HA	2.01	0.42
11:CL:3:VAL:O	11:CL:7:VAL:HG23	2.19	0.42
11:CL:68:GLY:HA3	11:CL:106:VAL:CG2	2.49	0.42
12:CM:39:ALA:HB3	12:CM:42:VAL:CG1	2.48	0.42
12:CM:66:GLY:O	12:CM:67:ASP:C	2.61	0.42
20:CB:46:VAL:N	20:CB:47:PRO:CD	2.83	0.42
20:CB:86:CYS:HB3	20:CB:88:GLN:OE1	2.18	0.42
22:DA:8:C:OP1	43:DO:15:ARG:NH2	2.47	0.42
23:DB:289:G:H2'	23:DB:290:U:H6	1.83	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:291:G:O2'	23:DB:292:U:H5'	2.19	0.42
23:DB:327:G:O2'	23:DB:328:U:H5'	2.18	0.42
23:DB:773:U:O2'	25:DC:47:ARG:HD3	2.19	0.42
23:DB:923:G:H1'	52:DW:23:LYS:NZ	2.32	0.42
23:DB:1163:G:O2'	23:DB:1164:C:H5'	2.20	0.42
23:DB:1343:G:O4'	23:DB:1597:A:H2'	2.19	0.42
23:DB:2283:C:H5''	23:DB:2389:G:O2'	2.19	0.42
23:DB:2527:C:O2'	23:DB:2528:U:H5'	2.19	0.42
25:DC:18:VAL:O	25:DC:18:VAL:HG13	2.19	0.42
25:DC:129:LEU:HB3	25:DC:134:ILE:CG2	2.47	0.42
25:DC:239:PHE:HD1	25:DC:241:LYS:H	1.66	0.42
26:DD:17:GLU:H	26:DD:17:GLU:HG3	1.64	0.42
30:DY:43:ILE:HG13	30:DY:44:ARG:N	2.29	0.42
31:D0:27:LEU:HB2	31:D0:28:SER:H	1.57	0.42
33:D1:18:HIS:CD2	33:D1:40:PRO:HD2	2.53	0.42
37:DL:40:SER:O	37:DL:44:GLY:HA3	2.18	0.42
39:DX:58:ASN:C	39:DX:60:LYS:N	2.74	0.42
41:DJ:38:GLY:O	41:DJ:43:GLU:HB2	2.19	0.42
42:DN:16:HIS:C	42:DN:18:GLN:H	2.27	0.42
44:DQ:38:VAL:O	44:DQ:39:ILE:C	2.62	0.42
47:DF:2:LYS:CD	47:DF:100:GLU:HG2	2.46	0.42
47:DF:43:ILE:HG13	47:DF:44:ALA:N	2.33	0.42
48:DG:117:PRO:HD2	48:DG:120:ILE:HG21	2.02	0.42
48:DG:139:VAL:O	48:DG:142:GLN:HB3	2.19	0.42
49:DR:43:ASN:ND2	49:DR:44:GLY:N	2.66	0.42
1:AA:106:C:O2	1:AA:379:C:H4'	2.19	0.42
1:AA:159:G:H5'	1:AA:160:A:OP2	2.19	0.42
1:AA:266:G:OP2	1:AA:266:G:H4'	2.19	0.42
1:AA:608:A:H3'	56:AA:1896:HOH:O	2.19	0.42
1:AA:661:G:O2'	1:AA:662:U:H5'	2.19	0.42
1:AA:818:G:C3'	1:AA:819:A:C5'	2.95	0.42
1:AA:1226:C:H2'	12:AM:101:THR:OG1	2.19	0.42
2:AC:81:GLU:CD	2:AC:81:GLU:C	2.87	0.42
3:AD:24:VAL:CG2	3:AD:25:ARG:H	2.21	0.42
3:AD:105:GLY:O	3:AD:157:ALA:HB1	2.19	0.42
7:AH:38:VAL:CG1	7:AH:111:THR:HG22	2.49	0.42
8:AI:56:MET:C	8:AI:58:GLU:N	2.71	0.42
11:AL:29:LYS:HB3	11:AL:56:LEU:HD22	2.01	0.42
12:AM:52:ILE:HD12	12:AM:55:LEU:HD12	1.99	0.42
20:AB:46:VAL:N	20:AB:47:PRO:CD	2.83	0.42
20:AB:63:LYS:HG2	20:AB:224:ARG:NH1	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:5:U:H2'	22:BA:6:G:H8	1.83	0.42
23:BB:141:G:H1	50:BT:2:ILE:CD1	2.20	0.42
23:BB:705:A:O2'	23:BB:706:A:H5'	2.19	0.42
23:BB:1336:A:H3'	23:BB:1337:G:H8	1.83	0.42
23:BB:1539:U:H3'	23:BB:1540:G:H8	1.84	0.42
23:BB:1672:A:C2	23:BB:2582:G:H5'	2.54	0.42
23:BB:2064:C:H2'	23:BB:2065:C:H6	1.81	0.42
23:BB:2515:C:OP1	41:BJ:81:ILE:HG12	2.19	0.42
23:BB:2660:A:H2'	23:BB:2661:G:C8	2.53	0.42
23:BB:2746:U:C4'	48:BG:138:GLN:HA	2.49	0.42
25:BC:28:PRO:HG2	25:BC:33:LEU:HD11	2.00	0.42
26:BD:125:TRP:CE3	26:BD:160:LYS:HD3	2.53	0.42
27:BK:66:LYS:C	27:BK:68:GLY:H	2.27	0.42
28:BP:33:GLU:HA	28:BP:33:GLU:OE1	2.18	0.42
29:BE:136:GLN:O	29:BE:137:LYS:C	2.62	0.42
29:BE:157:LEU:HG	29:BE:169:VAL:HG11	2.00	0.42
33:B1:10:LEU:HA	33:B1:49:LYS:O	2.19	0.42
36:B2:17:GLY:O	36:B2:21:ARG:HB2	2.19	0.42
36:B2:30:VAL:HA	36:B2:33:ARG:HH22	1.83	0.42
40:BH:25:TYR:CD1	40:BH:30:LEU:HG	2.54	0.42
40:BH:81:ALA:CB	40:BH:147:VAL:HG23	2.49	0.42
41:BJ:42:ALA:C	41:BJ:44:TYR:H	2.27	0.42
42:BN:51:LEU:HD21	42:BN:70:THR:HG21	2.02	0.42
42:BN:83:LEU:HD23	42:BN:115:LEU:HD11	2.01	0.42
43:BO:18:LEU:HD23	43:BO:25:ARG:HD3	2.00	0.42
43:BO:77:ALA:O	43:BO:81:ARG:HD3	2.19	0.42
45:BS:31:GLN:C	45:BS:33:LEU:N	2.73	0.42
46:BU:50:ALA:C	46:BU:53:GLN:HE22	2.28	0.42
50:BT:62:VAL:HG12	50:BT:63:VAL:H	1.85	0.42
1:CA:91:U:H2'	1:CA:92:U:H6	1.83	0.42
1:CA:182:A:H1'	1:CA:183:C:C5	2.55	0.42
1:CA:219:U:H2'	1:CA:220:G:C8	2.54	0.42
1:CA:638:U:H2'	1:CA:639:G:O4'	2.19	0.42
1:CA:982:U:OP2	13:CN:60:ARG:NH1	2.53	0.42
1:CA:1180:A:P	8:CI:98:ARG:HH22	2.42	0.42
4:CE:45:VAL:HG23	4:CE:71:ILE:CG2	2.49	0.42
7:CH:120:LEU:O	7:CH:120:LEU:HD23	2.19	0.42
10:CK:55:ARG:O	10:CK:55:ARG:HD3	2.19	0.42
10:CK:124:LYS:O	21:CU:33:ARG:HG2	2.20	0.42
11:CL:113:ARG:O	11:CL:114:SER:C	2.61	0.42
14:CO:70:LEU:HD12	14:CO:78:TYR:CB	2.47	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:28:A:N6	23:DB:512:G:O2'	2.52	0.42
23:DB:167:A:H2'	23:DB:168:G:O4'	2.19	0.42
23:DB:497:A:H2'	23:DB:498:G:O4'	2.18	0.42
23:DB:990:A:H1'	23:DB:1156:A:C2	2.54	0.42
23:DB:1060:U:O4	24:DI:131:THR:HG22	2.19	0.42
23:DB:1062:G:H2'	23:DB:1063:G:H8	1.84	0.42
23:DB:1120:G:O2'	23:DB:1121:C:H5'	2.19	0.42
23:DB:1140:C:C2'	23:DB:1141:U:H5'	2.49	0.42
23:DB:1322:A:OP1	45:DS:11:ARG:HD2	2.19	0.42
23:DB:1444:G:O2'	23:DB:1445:G:H5'	2.20	0.42
23:DB:1700:A:H2'	23:DB:1701:A:H5'	2.00	0.42
23:DB:1864:U:O2'	23:DB:1865:U:H5'	2.19	0.42
23:DB:1904:G:O2'	23:DB:1905:C:H5'	2.19	0.42
23:DB:2271:G:H2'	23:DB:2272:U:H6	1.79	0.42
23:DB:2368:C:H2'	23:DB:2369:A:C8	2.54	0.42
23:DB:2604:U:O2'	23:DB:2605:U:H5'	2.19	0.42
23:DB:2630:G:O2'	23:DB:2631:G:H5'	2.19	0.42
23:DB:2903:U:H3'	23:DB:2903:U:O2	2.19	0.42
56:DB:3321:HOH:O	29:DE:63:LYS:HE2	2.18	0.42
26:DD:60:VAL:O	26:DD:60:VAL:HG23	2.19	0.42
26:DD:119:ALA:CB	26:DD:163:GLY:C	2.93	0.42
27:DK:99:ILE:H	27:DK:118:LEU:HD22	1.83	0.42
28:DP:45:VAL:N	28:DP:60:VAL:HG13	2.34	0.42
32:D4:8:LYS:CG	32:D4:9:LYS:HD3	2.50	0.42
35:DV:83:LYS:HA	35:DV:84:PRO:HD3	1.92	0.42
37:DL:89:VAL:O	37:DL:89:VAL:HG13	2.19	0.42
40:DH:97:ARG:HA	40:DH:112:LYS:HG2	2.01	0.42
40:DH:131:SER:HA	40:DH:140:ALA:O	2.19	0.42
41:DJ:12:LYS:O	41:DJ:13:ARG:HB2	2.19	0.42
41:DJ:13:ARG:HB3	41:DJ:53:TYR:HD2	1.84	0.42
41:DJ:99:ARG:C	41:DJ:101:ILE:N	2.76	0.42
42:DN:43:GLU:C	42:DN:45:ARG:N	2.74	0.42
43:DO:60:GLU:C	43:DO:62:LEU:H	2.27	0.42
44:DQ:30:VAL:CG1	44:DQ:31:TYR:N	2.69	0.42
44:DQ:111:LYS:NZ	49:DR:50:GLY:HA2	2.35	0.42
47:DF:98:PHE:C	47:DF:100:GLU:N	2.78	0.42
48:DG:66:THR:HG23	48:DG:67:ALA:H	1.84	0.42
48:DG:68:ARG:HH12	48:DG:72:ASN:ND2	2.07	0.42
48:DG:106:LEU:HD23	48:DG:106:LEU:N	2.34	0.42
49:DR:40:MET:HG3	49:DR:48:LYS:HA	2.01	0.42
52:DW:28:GLU:OE1	52:DW:28:GLU:HA	2.17	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:125:U:H2'	1:AA:126:G:H8	1.83	0.42
1:AA:577:G:O2'	1:AA:578:C:H5'	2.18	0.42
1:AA:1009:U:H2'	1:AA:1009:U:O2	2.19	0.42
1:AA:1125:U:O2	1:AA:1126:U:H6	2.02	0.42
2:AC:46:LEU:HB3	2:AC:49:ALA:CB	2.49	0.42
3:AD:50:TYR:HA	3:AD:53:GLN:HE21	1.85	0.42
6:AG:22:LEU:O	6:AG:26:VAL:HG13	2.20	0.42
7:AH:4:ASP:OD1	7:AH:7:ALA:HB2	2.19	0.42
7:AH:118:ALA:HB3	7:AH:120:LEU:CD2	2.44	0.42
8:AI:66:VAL:HG22	8:AI:67:LYS:N	2.35	0.42
9:AJ:26:VAL:HG12	9:AJ:30:LYS:HE2	2.01	0.42
10:AK:30:ILE:HG22	10:AK:45:THR:CB	2.50	0.42
13:AN:50:LEU:H	13:AN:51:PRO:HD2	1.84	0.42
13:AN:50:LEU:HB3	13:AN:51:PRO:HD3	2.02	0.42
18:AS:36:ARG:O	18:AS:69:LYS:HD2	2.19	0.42
20:AB:68:PHE:CD1	20:AB:83:ALA:HB2	2.55	0.42
20:AB:68:PHE:CD1	20:AB:68:PHE:N	2.87	0.42
20:AB:83:ALA:CB	20:AB:90:PHE:HB3	2.49	0.42
20:AB:128:LEU:CD1	20:AB:129:THR:H	2.26	0.42
21:AU:25:ALA:C	21:AU:27:VAL:H	2.27	0.42
22:BA:28:C:H2'	22:BA:29:A:C8	2.54	0.42
23:BB:350:G:O2'	23:BB:351:C:H5'	2.19	0.42
23:BB:388:G:N7	23:BB:390:U:H2'	2.34	0.42
23:BB:433:C:H2'	23:BB:434:U:C6	2.53	0.42
23:BB:483:A:C4	46:BU:57:ILE:HD11	2.54	0.42
23:BB:566:U:H2'	23:BB:567:U:O4'	2.20	0.42
23:BB:911:A:H2'	38:BM:9:PHE:CZ	2.54	0.42
23:BB:1237:A:O2'	23:BB:1238:G:O4'	2.37	0.42
23:BB:1299:G:N2	23:BB:1640:A:C8	2.88	0.42
23:BB:1946:U:H2'	23:BB:1947:C:C6	2.54	0.42
23:BB:2236:U:O2'	23:BB:2237:G:H5'	2.19	0.42
23:BB:2317:A:H2'	23:BB:2318:G:O4'	2.19	0.42
25:BC:93:VAL:CG2	25:BC:115:ILE:HD11	2.49	0.42
25:BC:132:ARG:O	25:BC:132:ARG:HG3	2.19	0.42
31:B0:31:LYS:HD2	31:B0:31:LYS:H	1.85	0.42
31:B0:41:HIS:O	31:B0:42:ILE:O	2.38	0.42
32:B4:8:LYS:CG	32:B4:9:LYS:HD3	2.48	0.42
33:B1:28:THR:C	33:B1:29:LYS:HD2	2.45	0.42
35:BV:79:ARG:HA	35:BV:86:LEU:HA	2.01	0.42
37:BL:19:LEU:HD12	37:BL:19:LEU:N	2.33	0.42
41:BJ:99:ARG:HH11	41:BJ:99:ARG:HG2	1.83	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BN:13:ASN:C	42:BN:15:SER:N	2.77	0.42
45:BS:71:VAL:O	45:BS:71:VAL:HG22	2.19	0.42
46:BU:2:ALA:HB3	46:BU:5:ARG:CZ	2.50	0.42
47:BF:3:LEU:HB2	47:BF:100:GLU:CD	2.44	0.42
49:BR:59:ILE:HA	49:BR:101:ILE:H	1.85	0.42
1:CA:151:A:H5'	1:CA:152:A:OP2	2.20	0.42
1:CA:273:U:O4	1:CA:274:A:N6	2.52	0.42
1:CA:502:A:H4'	1:CA:550:G:H4'	2.00	0.42
1:CA:693:G:OP1	10:CK:126:ARG:NH1	2.50	0.42
1:CA:906:A:H2'	1:CA:907:A:H5''	2.00	0.42
1:CA:1423:G:H2'	1:CA:1424:U:H6	1.82	0.42
2:CC:8:GLY:HA2	2:CC:11:LEU:HG	2.00	0.42
2:CC:47:ALA:C	2:CC:49:ALA:H	2.26	0.42
2:CC:122:GLN:O	2:CC:127:VAL:HG13	2.19	0.42
2:CC:156:LEU:C	2:CC:158:GLY:H	2.27	0.42
4:CE:158:LYS:HZ3	7:CH:65:PHE:HA	1.84	0.42
11:CL:36:VAL:HG23	11:CL:36:VAL:O	2.19	0.42
14:CO:82:ILE:O	14:CO:86:GLY:N	2.52	0.42
16:CQ:46:HIS:HE2	16:CQ:48:GLU:HB2	1.83	0.42
17:CR:41:SER:HB2	17:CR:51:GLN:CG	2.48	0.42
18:CS:28:LYS:HD2	18:CS:28:LYS:N	2.34	0.42
18:CS:57:VAL:HG23	18:CS:59:VAL:HG13	2.02	0.42
22:DA:28:C:O2	22:DA:28:C:O4'	2.38	0.42
23:DB:108:G:H2'	23:DB:109:C:H6	1.85	0.42
23:DB:632:A:H2'	23:DB:633:A:C8	2.53	0.42
23:DB:978:G:O4'	23:DB:1001:A:H2	2.03	0.42
23:DB:1098:A:C2'	24:DI:3:LYS:C	2.92	0.42
23:DB:1100:C:C5	24:DI:1:ALA:O	2.72	0.42
23:DB:1360:G:O6	23:DB:1372:U:C2	2.72	0.42
23:DB:1490:A:H2'	25:DC:97:ASP:CG	2.44	0.42
23:DB:1547:C:H2'	23:DB:1548:A:C8	2.54	0.42
23:DB:1616:A:H4'	23:DB:1617:C:OP2	2.20	0.42
23:DB:1723:G:C4	23:DB:1724:G:C8	3.07	0.42
23:DB:2345:G:H4'	23:DB:2346:A:O5'	2.19	0.42
23:DB:2734:A:H2'	23:DB:2735:G:C5'	2.47	0.42
23:DB:2742:G:OP2	32:D4:24:ARG:NH1	2.52	0.42
23:DB:2835:A:H61	23:DB:2878:U:H2'	1.83	0.42
23:DB:2901:C:O2'	23:DB:2902:C:H5'	2.19	0.42
24:DI:54:ILE:HD11	24:DI:71:LYS:N	2.34	0.42
25:DC:66:PHE:CE2	25:DC:104:LEU:HD11	2.55	0.42
25:DC:124:LYS:N	25:DC:191:LEU:HD13	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DC:171:VAL:HB	25:DC:183:VAL:HG12	2.02	0.42
26:DD:122:VAL:O	26:DD:122:VAL:HG12	2.19	0.42
27:DK:98:ARG:HA	27:DK:118:LEU:CD2	2.48	0.42
29:DE:134:LEU:CD2	29:DE:161:ALA:HB2	2.46	0.42
37:DL:30:THR:O	37:DL:31:GLY:C	2.61	0.42
39:DX:29:ARG:NH1	50:DT:12:ARG:HE	2.16	0.42
40:DH:27:ARG:HH21	40:DH:27:ARG:CG	2.31	0.42
41:DJ:72:LYS:O	41:DJ:73:VAL:HG13	2.19	0.42
42:DN:98:LEU:O	42:DN:112:TYR:HB2	2.19	0.42
44:DQ:84:LYS:O	44:DQ:86:SER:N	2.52	0.42
45:DS:24:ILE:O	45:DS:25:ARG:C	2.62	0.42
46:DU:35:VAL:HB	46:DU:38:ILE:HB	2.01	0.42
47:DF:110:ILE:HA	47:DF:111:ARG:NE	2.34	0.42
51:DZ:30:LEU:N	51:DZ:30:LEU:CD2	2.81	0.42
52:DW:49:ASN:HB3	52:DW:81:ILE:CD1	2.49	0.42
1:AA:151:A:H5'	1:AA:152:A:OP2	2.20	0.42
1:AA:321:A:O2'	1:AA:322:C:H5'	2.20	0.42
1:AA:828:U:O2'	20:AB:24:PRO:HB3	2.19	0.42
1:AA:889:A:H4'	1:AA:890:G:OP1	2.19	0.42
2:AC:156:LEU:C	2:AC:158:GLY:H	2.27	0.42
3:AD:90:LEU:HD21	3:AD:196:GLU:CB	2.44	0.42
4:AE:111:ARG:HG3	4:AE:112:ALA:N	2.34	0.42
5:AF:18:VAL:HG21	5:AF:58:HIS:CG	2.54	0.42
5:AF:46:GLN:HG3	5:AF:47:LEU:H	1.85	0.42
6:AG:70:PRO:O	6:AG:95:ARG:HG3	2.20	0.42
7:AH:31:LEU:O	7:AH:35:ILE:HG13	2.19	0.42
12:AM:90:HIS:CE1	12:AM:96:VAL:HG21	2.55	0.42
19:AT:65:LEU:HD23	19:AT:66:ILE:HD13	2.01	0.42
20:AB:45:THR:HA	20:AB:48:MET:HG3	2.02	0.42
23:BB:10:A:H2'	23:BB:11:C:C2	2.55	0.42
23:BB:38:A:N3	29:BE:43:THR:HB	2.33	0.42
23:BB:189:G:H2'	23:BB:205:G:H22	1.84	0.42
23:BB:235:U:H2'	23:BB:236:C:C6	2.55	0.42
23:BB:962:G:N2	23:BB:2250:G:H22	2.12	0.42
23:BB:1147:A:O2'	23:BB:1148:U:H5'	2.19	0.42
23:BB:1315:C:H2'	23:BB:1316:U:C6	2.55	0.42
23:BB:1515:A:H3'	23:BB:1516:G:H8	1.84	0.42
23:BB:1731:G:O2'	23:BB:1732:C:H5''	2.20	0.42
23:BB:2145:C:H6	23:BB:2145:C:H2'	1.64	0.42
23:BB:2365:G:O2'	52:BW:59:PHE:CE1	2.72	0.42
31:B0:38:LEU:HD13	31:B0:41:HIS:CE1	2.54	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:B4:27:CYS:HB3	32:B4:33:HIS:HB2	2.01	0.42
34:B3:16:THR:HG21	34:B3:48:MET:SD	2.60	0.42
34:B3:24:LYS:HB2	37:BL:64:PHE:CD2	2.54	0.42
37:BL:135:ILE:HG23	37:BL:136:GLU:N	2.35	0.42
38:BM:17:ASN:HD22	38:BM:17:ASN:HA	1.60	0.42
40:BH:34:GLY:O	40:BH:35:LYS:HG2	2.20	0.42
40:BH:59:ALA:CA	40:BH:62:LEU:HG	2.50	0.42
40:BH:99:ILE:CD1	40:BH:130:VAL:HG11	2.48	0.42
41:BJ:110:PRO:O	41:BJ:115:GLY:HA3	2.19	0.42
45:BS:12:SER:O	45:BS:13:SER:HB3	2.20	0.42
45:BS:83:LYS:HD3	45:BS:97:LEU:CD1	2.47	0.42
47:BF:137:PHE:CD2	47:BF:137:PHE:N	2.83	0.42
48:BG:6:ALA:HB3	48:BG:68:ARG:NE	2.34	0.42
48:BG:10:VAL:C	48:BG:14:VAL:HG21	2.44	0.42
1:CA:204:G:N3	1:CA:466:A:N6	2.67	0.42
1:CA:441:A:H61	1:CA:493:A:N6	2.17	0.42
1:CA:491:G:O2'	1:CA:492:C:H5'	2.20	0.42
1:CA:747:A:H2'	1:CA:748:G:O4'	2.20	0.42
1:CA:1056:U:O2'	1:CA:1057:G:H5'	2.20	0.42
1:CA:1243:C:H2'	1:CA:1244:G:C8	2.53	0.42
1:CA:1256:A:O4'	1:CA:1278:G:N2	2.52	0.42
1:CA:1339:A:H2'	1:CA:1340:A:O4'	2.20	0.42
13:CN:47:LEU:C	13:CN:49:THR:N	2.76	0.42
14:CO:25:THR:O	14:CO:29:VAL:HG23	2.20	0.42
15:CP:23:ASP:OD1	15:CP:25:ARG:HB2	2.19	0.42
23:DB:4:U:H2'	23:DB:5:A:H8	1.84	0.42
23:DB:63:A:C8	23:DB:63:A:OP2	2.70	0.42
23:DB:118:A:OP2	23:DB:119:A:H5''	2.19	0.42
23:DB:337:C:OP1	46:DU:3:LYS:HG3	2.20	0.42
23:DB:515:A:H2	23:DB:1260:A:N3	2.17	0.42
23:DB:697:G:H2'	23:DB:698:C:C6	2.55	0.42
23:DB:730:A:H3'	56:DB:3611:HOH:O	2.19	0.42
23:DB:902:C:H2'	23:DB:903:C:C6	2.54	0.42
23:DB:1190:G:OP1	37:DL:32:GLY:CA	2.67	0.42
23:DB:1495:A:C2	23:DB:1578:U:H1'	2.54	0.42
23:DB:1731:G:O2'	23:DB:1732:C:H5''	2.19	0.42
23:DB:2002:G:OP1	42:DN:13:ASN:HA	2.19	0.42
23:DB:2137:U:C2'	23:DB:2138:G:H5'	2.49	0.42
23:DB:2185:U:O2'	23:DB:2186:G:H5'	2.20	0.42
23:DB:2648:G:H2'	23:DB:2649:C:H6	1.81	0.42
24:DI:90:GLY:C	24:DI:91:LYS:HD2	2.43	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:DI:99:LYS:HB2	24:DI:140:GLU:OE1	2.19	0.42
24:DI:108:ILE:CG2	24:DI:128:ILE:HD13	2.49	0.42
25:DC:4:LYS:CD	25:DC:5:CYS:H	2.19	0.42
25:DC:244:VAL:HB	25:DC:249:VAL:N	2.30	0.42
26:DD:62:LYS:O	26:DD:66:GLY:N	2.52	0.42
28:DP:13:LYS:HG2	28:DP:76:HIS:ND1	2.35	0.42
29:DE:4:VAL:HG12	29:DE:6:LYS:H	1.85	0.42
29:DE:60:TRP:CZ2	29:DE:62:GLN:NE2	2.88	0.42
29:DE:158:PHE:HD2	29:DE:169:VAL:HG23	1.85	0.42
29:DE:192:ALA:O	29:DE:196:VAL:HG23	2.19	0.42
34:D3:50:SER:C	34:D3:52:GLY:N	2.78	0.42
35:DV:6:ALA:HB2	35:DV:42:LEU:HB3	2.02	0.42
37:DL:112:LEU:O	37:DL:112:LEU:HD23	2.19	0.42
41:DJ:8:PRO:HG3	41:DJ:48:VAL:HG13	2.01	0.42
41:DJ:115:GLY:HA2	41:DJ:118:MET:HE3	2.00	0.42
43:DO:20:GLU:OE2	43:DO:21:LEU:HG	2.19	0.42
44:DQ:32:ARG:O	44:DQ:36:GLN:HG3	2.19	0.42
44:DQ:63:ARG:HH22	44:DQ:96:ASP:N	2.16	0.42
47:DF:102:LEU:O	47:DF:103:ILE:CB	2.68	0.42
47:DF:134:GLN:O	47:DF:136:ILE:N	2.52	0.42
50:DT:7:LEU:C	50:DT:9:LYS:H	2.26	0.42
50:DT:32:LEU:H	50:DT:83:ALA:CB	2.31	0.42
50:DT:48:GLN:O	50:DT:52:GLU:HA	2.19	0.42
1:AA:169:C:O2'	1:AA:170:U:H5'	2.19	0.42
1:AA:435:A:N3	1:AA:435:A:H2'	2.33	0.42
1:AA:547:A:H4'	1:AA:548:G:O5'	2.20	0.42
1:AA:600:A:H2'	1:AA:601:G:H8	1.84	0.42
1:AA:762:U:H2'	1:AA:763:G:H8	1.84	0.42
1:AA:766:A:H2	1:AA:1525:G:N3	2.17	0.42
1:AA:878:A:H2'	1:AA:879:C:C6	2.55	0.42
1:AA:1525:G:O2'	1:AA:1526:G:H5'	2.19	0.42
2:AC:184:ASN:O	2:AC:199:VAL:HG22	2.19	0.42
3:AD:1:ALA:O	3:AD:2:ARG:HG2	2.20	0.42
8:AI:41:GLU:C	8:AI:43:ALA:N	2.77	0.42
9:AJ:57:VAL:HG13	9:AJ:58:ASN:N	2.35	0.42
11:AL:113:ARG:O	11:AL:114:SER:C	2.63	0.42
12:AM:28:ARG:HH12	12:AM:59:VAL:HA	1.85	0.42
12:AM:50:GLY:HA2	12:AM:53:ASP:OD1	2.20	0.42
12:AM:96:VAL:C	12:AM:98:GLY:N	2.78	0.42
13:AN:52:ARG:HA	13:AN:52:ARG:HD3	1.90	0.42
19:AT:11:ILE:O	19:AT:15:LYS:HB2	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AB:13:VAL:HG12	20:AB:13:VAL:O	2.19	0.42
23:BB:497:A:H2'	23:BB:498:G:O4'	2.20	0.42
23:BB:611:C:H2'	23:BB:612:G:O4'	2.20	0.42
23:BB:688:U:O2'	23:BB:689:A:H5'	2.20	0.42
23:BB:1050:A:H2'	23:BB:1051:G:C8	2.54	0.42
23:BB:1438:U:O2'	23:BB:1439:A:H5'	2.19	0.42
23:BB:1562:U:H2'	23:BB:1563:U:C6	2.54	0.42
23:BB:1818:U:H2'	25:BC:152:GLN:O	2.19	0.42
23:BB:2341:G:O2'	23:BB:2342:C:H5'	2.19	0.42
23:BB:2778:A:O2'	23:BB:2781:A:H5'	2.20	0.42
23:BB:2834:G:H2'	23:BB:2879:A:H61	1.85	0.42
25:BC:162:GLN:HE22	25:BC:174:ARG:HH21	1.67	0.42
25:BC:245:THR:C	25:BC:247:TRP:N	2.77	0.42
26:BD:202:ILE:HG22	26:BD:202:ILE:O	2.18	0.42
27:BK:42:THR:HG23	27:BK:57:VAL:HG22	2.01	0.42
27:BK:43:ILE:CG2	27:BK:54:LYS:HA	2.49	0.42
28:BP:8:GLU:C	28:BP:10:GLU:N	2.77	0.42
29:BE:46:GLN:HB3	29:BE:86:ALA:HA	2.01	0.42
29:BE:58:LYS:N	29:BE:58:LYS:CD	2.83	0.42
32:B4:1:MET:HE1	32:B4:24:ARG:NH2	2.35	0.42
33:B1:33:LEU:HD12	33:B1:34:GLU:N	2.35	0.42
35:BV:51:GLN:HA	35:BV:56:PHE:CB	2.49	0.42
38:BM:28:PHE:HB3	38:BM:64:TRP:CE2	2.55	0.42
38:BM:57:VAL:HA	38:BM:112:LEU:HD11	2.00	0.42
39:BX:1:MET:HA	39:BX:4:LYS:HB3	2.02	0.42
43:BO:90:VAL:HG22	43:BO:115:LEU:HD11	2.01	0.42
43:BO:93:ASP:C	43:BO:95:SER:N	2.77	0.42
44:BQ:57:ARG:HA	44:BQ:60:TRP:CE3	2.55	0.42
44:BQ:94:LEU:C	44:BQ:96:ASP:N	2.78	0.42
46:BU:84:PHE:CE2	46:BU:93:ARG:HG2	2.54	0.42
47:BF:97:GLU:O	47:BF:100:GLU:HB2	2.20	0.42
48:BG:93:TYR:O	48:BG:94:ARG:O	2.37	0.42
48:BG:97:VAL:HG23	48:BG:124:CYS:SG	2.60	0.42
48:BG:125:PRO:HD3	48:BG:131:VAL:HG22	2.01	0.42
50:BT:50:LEU:C	50:BT:52:GLU:N	2.76	0.42
1:CA:71:A:O2'	1:CA:72:A:H5'	2.18	0.42
1:CA:79:G:H2'	1:CA:80:A:H8	1.84	0.42
1:CA:174:A:O2'	1:CA:175:C:H5'	2.19	0.42
1:CA:177:G:N3	1:CA:177:G:O4'	2.53	0.42
1:CA:828:U:H2'	1:CA:829:G:O5'	2.19	0.42
1:CA:1165:U:H2'	1:CA:1166:G:O4'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1225:A:O2'	18:CS:77:ARG:HD3	2.19	0.42
1:CA:1480:A:H2'	1:CA:1481:U:H6	1.83	0.42
2:CC:82:ASP:O	2:CC:86:LEU:HG	2.19	0.42
3:CD:43:ARG:HH11	3:CD:43:ARG:HB3	1.85	0.42
3:CD:154:VAL:O	3:CD:157:ALA:HB3	2.20	0.42
3:CD:197:HIS:O	3:CD:201:GLU:HG3	2.18	0.42
4:CE:33:THR:HB	4:CE:49:TYR:CE1	2.55	0.42
4:CE:97:PRO:HA	4:CE:122:VAL:HG12	2.02	0.42
7:CH:47:ASP:CG	7:CH:48:PHE:H	2.28	0.42
8:CI:27:ILE:CG2	8:CI:34:LEU:HB2	2.49	0.42
20:CB:10:LYS:O	20:CB:13:VAL:HG23	2.19	0.42
20:CB:104:LYS:HA	20:CB:107:ARG:HD3	2.01	0.42
23:DB:43:G:H2'	23:DB:44:A:O4'	2.20	0.42
23:DB:416:U:H2'	23:DB:417:C:H6	1.82	0.42
23:DB:494:G:O2'	23:DB:495:G:H5'	2.20	0.42
23:DB:812:C:H4'	44:DQ:12:ARG:HH22	1.85	0.42
23:DB:1046:A:H4'	23:DB:1047:G:OP2	2.19	0.42
23:DB:2602:A:N3	23:DB:2602:A:C2'	2.80	0.42
25:DC:52:HIS:HA	25:DC:216:ARG:HB2	2.01	0.42
25:DC:181:ARG:HD3	25:DC:265:PHE:O	2.19	0.42
29:DE:29:HIS:O	29:DE:33:VAL:HG23	2.19	0.42
29:DE:105:LEU:HD23	29:DE:105:LEU:HA	1.87	0.42
29:DE:146:VAL:HG12	29:DE:147:LEU:N	2.34	0.42
32:D4:36:ARG:CG	32:D4:37:GLN:H	2.30	0.42
35:DV:16:ALA:N	35:DV:19:ARG:HH21	2.17	0.42
36:D2:22:MET:HA	36:D2:28:ARG:HG3	2.00	0.42
37:DL:135:ILE:HG23	37:DL:136:GLU:N	2.35	0.42
38:DM:105:MET:HE3	38:DM:117:PHE:CE2	2.54	0.42
41:DJ:58:ASN:O	41:DJ:59:ALA:HB3	2.20	0.42
44:DQ:48:ASP:C	44:DQ:50:ARG:N	2.77	0.42
45:DS:72:THR:HG23	45:DS:108:SER:HB3	2.01	0.42
46:DU:11:ILE:HG23	46:DU:12:VAL:N	2.33	0.42
46:DU:48:VAL:H	46:DU:53:GLN:HG3	1.85	0.42
47:DF:92:GLY:O	47:DF:95:MET:HB3	2.18	0.42
47:DF:141:ASP:O	47:DF:142:TYR:C	2.63	0.42
48:DG:125:PRO:HD2	48:DG:129:GLU:HG2	2.02	0.42
48:DG:170:THR:O	48:DG:171:LYS:HD3	2.19	0.42
49:DR:39:LEU:HA	49:DR:53:PHE:HA	2.01	0.42
49:DR:91:GLN:HG3	49:DR:92:TRP:H	1.84	0.42
52:DW:59:PHE:CD2	52:DW:60:ALA:N	2.88	0.42
1:AA:91:U:O5'	1:AA:91:U:H6	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:177:G:N3	1:AA:177:G:O4'	2.53	0.42
1:AA:1006:G:O2'	1:AA:1007:U:H5'	2.19	0.42
1:AA:1260:G:P	1:AA:1284:C:H4'	2.60	0.42
2:AC:2:GLN:H	2:AC:2:GLN:NE2	2.18	0.42
2:AC:112:ALA:CB	2:AC:184:ASN:HB2	2.49	0.42
4:AE:55:VAL:N	4:AE:56:PRO:CD	2.83	0.42
10:AK:22:ILE:HD13	10:AK:95:THR:HG23	2.00	0.42
10:AK:35:ASP:C	10:AK:37:GLN:N	2.78	0.42
20:AB:116:LEU:HB3	20:AB:140:LEU:CG	2.49	0.42
22:BA:15:A:H3'	22:BA:15:A:OP2	2.19	0.42
23:BB:144:A:H2'	23:BB:145:C:H6	1.83	0.42
23:BB:326:G:O2'	23:BB:327:G:H5'	2.19	0.42
23:BB:531:C:O2'	23:BB:563:A:H5''	2.20	0.42
23:BB:538:A:H2'	23:BB:539:G:O4'	2.20	0.42
23:BB:659:G:H4'	29:BE:95:LYS:HB3	2.00	0.42
23:BB:1035:U:H2'	23:BB:1036:G:H8	1.85	0.42
23:BB:1199:U:H2'	23:BB:1200:C:H6	1.83	0.42
23:BB:1541:C:H2'	23:BB:1542:U:O4'	2.20	0.42
23:BB:1642:G:O2'	23:BB:1643:G:H5'	2.19	0.42
23:BB:2305:U:C1'	47:BF:132:ARG:HA	2.49	0.42
23:BB:2531:A:H4'	48:BG:156:TYR:CD1	2.54	0.42
23:BB:2710:C:H2'	23:BB:2711:A:C8	2.52	0.42
23:BB:2786:U:O2'	26:BD:66:GLY:HA3	2.20	0.42
23:BB:2884:U:H4'	31:B0:49:ARG:NH2	2.35	0.42
25:BC:149:LYS:HD3	25:BC:152:GLN:NE2	2.26	0.42
26:BD:37:VAL:CG2	26:BD:91:THR:HA	2.50	0.42
26:BD:141:ARG:O	26:BD:142:VAL:HG13	2.20	0.42
45:BS:3:THR:HG21	45:BS:58:ALA:HB2	2.01	0.42
46:BU:73:ASN:C	46:BU:75:ALA:N	2.74	0.42
47:BF:46:LYS:O	47:BF:49:LEU:HB3	2.19	0.42
47:BF:110:ILE:HA	47:BF:111:ARG:NE	2.35	0.42
47:BF:134:GLN:HE21	47:BF:134:GLN:HB3	1.56	0.42
48:BG:174:LYS:NZ	48:BG:176:LYS:HG2	2.34	0.42
50:BT:43:ILE:CG2	50:BT:58:VAL:HG21	2.49	0.42
51:BZ:68:LEU:HD22	51:BZ:78:TYR:CD1	2.54	0.42
1:CA:104:G:O2'	1:CA:105:G:H5'	2.20	0.42
1:CA:263:A:H2'	1:CA:264:C:C6	2.55	0.42
1:CA:366:A:O2'	1:CA:367:U:P	2.78	0.42
1:CA:667:G:H4'	14:CO:51:HIS:ND1	2.35	0.42
1:CA:1161:C:O2'	1:CA:1162:C:H5'	2.20	0.42
1:CA:1231:G:O2'	1:CA:1232:U:H5'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1300:G:HO2'	1:CA:1301:U:P	2.43	0.42
3:CD:32:LYS:C	3:CD:35:GLN:HE21	2.28	0.42
4:CE:81:GLN:H	4:CE:146:MET:CE	2.30	0.42
4:CE:87:VAL:HG22	4:CE:88:HIS:N	2.35	0.42
6:CG:78:ARG:NH1	6:CG:78:ARG:C	2.78	0.42
7:CH:36:ALA:HA	7:CH:39:LEU:HD12	2.00	0.42
10:CK:127:ARG:HG3	10:CK:127:ARG:NH1	2.33	0.42
12:CM:33:LEU:HD22	12:CM:38:ILE:HB	2.02	0.42
15:CP:71:VAL:O	15:CP:75:ILE:HG13	2.20	0.42
15:CP:75:ILE:HG13	15:CP:75:ILE:H	1.61	0.42
16:CQ:61:ARG:HD2	16:CQ:61:ARG:C	2.44	0.42
20:CB:216:VAL:O	20:CB:220:VAL:HG23	2.19	0.42
21:CU:48:LYS:C	21:CU:50:SER:N	2.74	0.42
23:DB:123:G:H2'	23:DB:124:G:C8	2.54	0.42
23:DB:278:A:N7	23:DB:361:G:N1	2.67	0.42
23:DB:327:G:H2'	23:DB:328:U:O4'	2.20	0.42
23:DB:345:A:C1'	23:DB:346:A:H2	2.33	0.42
23:DB:969:G:H2'	23:DB:970:U:H6	1.85	0.42
23:DB:1139:G:O2'	23:DB:1143:A:N1	2.46	0.42
23:DB:1275:A:C2'	23:DB:1276:A:O4'	2.68	0.42
23:DB:1534:U:O2'	23:DB:1535:A:H8	2.02	0.42
23:DB:1813:G:N3	25:DC:49:THR:CG2	2.80	0.42
23:DB:1823:G:O2'	23:DB:1824:G:H5'	2.20	0.42
23:DB:2144:G:N2	23:DB:2146:C:O4'	2.53	0.42
23:DB:2231:U:O2'	23:DB:2232:C:H5'	2.19	0.42
23:DB:2667:C:H2'	23:DB:2668:G:O4'	2.20	0.42
23:DB:2784:U:H2'	23:DB:2785:C:C6	2.55	0.42
23:DB:2793:C:H2'	23:DB:2794:C:H6	1.84	0.42
23:DB:2834:G:O6	23:DB:2879:A:H2'	2.19	0.42
29:DE:58:LYS:N	29:DE:58:LYS:CD	2.83	0.42
35:DV:77:VAL:HG23	35:DV:89:ILE:CG2	2.50	0.42
36:D2:32:ALA:HA	36:D2:35:ARG:HB2	2.01	0.42
37:DL:77:ILE:HG13	37:DL:101:ILE:HD11	2.01	0.42
37:DL:79:LEU:HD23	37:DL:79:LEU:HA	1.91	0.42
39:DX:52:ARG:O	39:DX:55:THR:HB	2.19	0.42
40:DH:111:ALA:O	40:DH:112:LYS:C	2.61	0.42
41:DJ:23:LYS:CE	41:DJ:142:ILE:HG23	2.46	0.42
42:DN:12:ARG:HG3	42:DN:13:ASN:N	2.34	0.42
42:DN:60:VAL:O	42:DN:63:ARG:HB3	2.19	0.42
42:DN:64:ARG:O	42:DN:67:PHE:HB3	2.19	0.42
43:DO:18:LEU:HD23	43:DO:25:ARG:CD	2.49	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:DO:34:HIS:HB3	43:DO:36:TYR:HE2	1.83	0.42
44:DQ:52:ARG:C	44:DQ:54:ARG:N	2.78	0.42
47:DF:13:LYS:HA	47:DF:16:MET:HB2	2.01	0.42
47:DF:177:ARG:CZ	47:DF:178:LYS:H	2.32	0.42
51:DZ:63:GLY:HA3	51:DZ:66:THR:OG1	2.20	0.42
1:AA:90:C:H2'	1:AA:91:U:H5	1.83	0.42
1:AA:182:A:H1'	1:AA:183:C:C5	2.55	0.42
1:AA:532:A:N7	2:AC:192:TYR:HD2	2.18	0.42
1:AA:947:G:H2'	1:AA:948:C:C6	2.55	0.42
3:AD:146:GLU:C	3:AD:148:ALA:N	2.76	0.42
4:AE:87:VAL:HG22	4:AE:88:HIS:N	2.35	0.42
5:AF:74:LEU:HD11	5:AF:78:PHE:CZ	2.54	0.42
6:AG:101:ARG:HG2	6:AG:105:GLU:OE2	2.19	0.42
6:AG:145:GLU:CA	6:AG:148:LYS:HB2	2.39	0.42
8:AI:9:GLY:HA3	8:AI:81:GLY:N	2.34	0.42
8:AI:29:ILE:HG12	8:AI:64:ILE:CB	2.49	0.42
9:AJ:65:TYR:C	13:AN:98:ALA:HB2	2.45	0.42
12:AM:70:ARG:HH12	47:BF:112:ASP:CG	2.28	0.42
14:AO:73:LYS:O	14:AO:74:ASP:HB2	2.20	0.42
16:AQ:18:LYS:HE3	16:AQ:48:GLU:CG	2.49	0.42
23:BB:154:U:O2'	23:BB:155:A:H5'	2.19	0.42
23:BB:279:A:C2	23:BB:362:A:H4'	2.54	0.42
23:BB:764:A:N1	23:BB:1789:A:O2'	2.51	0.42
23:BB:853:C:H2'	23:BB:854:C:H6	1.85	0.42
23:BB:877:A:H2'	23:BB:899:A:N1	2.35	0.42
23:BB:1315:C:H2'	23:BB:1316:U:H6	1.84	0.42
23:BB:1438:U:N3	23:BB:1552:A:N6	2.68	0.42
23:BB:1495:A:C2	23:BB:1578:U:H1'	2.54	0.42
23:BB:1537:G:H5''	23:BB:1537:G:N3	2.35	0.42
23:BB:1739:A:H2'	23:BB:1740:G:H8	1.84	0.42
23:BB:2282:G:H5'	23:BB:2389:G:H1'	2.01	0.42
24:BI:48:ILE:O	24:BI:49:GLU:HB3	2.20	0.42
27:BK:87:LEU:O	27:BK:88:ASN:C	2.62	0.42
29:BE:114:ARG:C	29:BE:116:ASP:H	2.28	0.42
30:BY:7:THR:O	30:BY:54:VAL:HA	2.20	0.42
35:BV:4:ILE:HB	35:BV:63:ILE:HG13	2.00	0.42
37:BL:40:SER:C	37:BL:41:ARG:HG3	2.44	0.42
37:BL:40:SER:OG	37:BL:41:ARG:HG3	2.18	0.42
40:BH:72:ILE:HG23	40:BH:140:ALA:CB	2.49	0.42
40:BH:75:LEU:HD11	40:BH:103:VAL:O	2.19	0.42
43:BO:52:SER:O	43:BO:55:GLU:HG3	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BQ:15:LYS:HD2	44:BQ:19:GLN:HE21	1.84	0.42
44:BQ:63:ARG:HH12	44:BQ:96:ASP:HA	1.85	0.42
46:BU:3:LYS:CB	46:BU:82:VAL:HG21	2.50	0.42
47:BF:130:GLY:HA2	47:BF:152:ASP:HA	2.01	0.42
47:BF:147:ARG:HB3	47:BF:147:ARG:NH1	2.34	0.42
48:BG:83:THR:HA	48:BG:84:LYS:NZ	2.35	0.42
48:BG:84:LYS:O	48:BG:85:LYS:O	2.38	0.42
48:BG:137:LYS:O	48:BG:140:ILE:HG13	2.19	0.42
52:BW:77:LYS:H	52:BW:77:LYS:HZ3	1.63	0.42
1:CA:79:G:H2'	1:CA:80:A:C8	2.55	0.42
1:CA:88:U:H2'	1:CA:89:U:C6	2.55	0.42
1:CA:389:A:H3'	1:CA:390:U:H6	1.83	0.42
1:CA:476:U:H2'	1:CA:477:C:H6	1.84	0.42
1:CA:734:G:H2'	1:CA:735:C:H6	1.85	0.42
1:CA:818:G:C3'	1:CA:819:A:C5'	2.96	0.42
1:CA:883:C:O2'	1:CA:884:U:H5'	2.20	0.42
1:CA:923:A:OP1	4:CE:25:LYS:HB3	2.20	0.42
1:CA:1048:G:H5''	13:CN:2:LYS:HD2	2.02	0.42
1:CA:1143:G:H2'	1:CA:1144:G:C8	2.55	0.42
1:CA:1320:C:H1'	18:CS:72:GLU:HB3	2.01	0.42
1:CA:1343:G:H1'	8:CI:122:ARG:NH1	2.34	0.42
5:CF:38:ARG:NH2	5:CF:63:ASN:ND2	2.64	0.42
11:CL:84:GLY:H	11:CL:94:TYR:HA	1.85	0.42
13:CN:47:LEU:C	13:CN:49:THR:H	2.27	0.42
17:CR:28:LEU:C	17:CR:30:ASN:N	2.76	0.42
18:CS:18:VAL:HG13	18:CS:19:GLU:N	2.35	0.42
20:CB:116:LEU:HB3	20:CB:140:LEU:CD1	2.50	0.42
20:CB:212:TYR:HA	20:CB:215:ALA:HB3	2.02	0.42
22:DA:35:C:H2'	22:DA:36:C:C5'	2.50	0.42
23:DB:1:G:H2'	23:DB:2:G:C8	2.55	0.42
23:DB:20:C:H2'	23:DB:21:A:C8	2.54	0.42
23:DB:137:U:H2'	23:DB:138:U:C1'	2.48	0.42
23:DB:170:U:O2'	23:DB:171:U:H5'	2.19	0.42
23:DB:519:U:H2'	23:DB:520:G:H8	1.84	0.42
23:DB:547:A:C6	23:DB:548:G:H1'	2.55	0.42
23:DB:633:A:H2'	23:DB:634:C:C5'	2.50	0.42
23:DB:674:G:H1'	29:DE:69:ARG:HE	1.84	0.42
23:DB:776:G:H4'	23:DB:777:G:O5'	2.20	0.42
23:DB:838:C:C2	23:DB:941:A:C6	3.08	0.42
23:DB:858:G:H4'	52:DW:19:ARG:HH22	1.84	0.42
23:DB:1098:A:O3'	24:DI:4:VAL:O	2.37	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:1690:A:H2'	23:DB:1691:C:O4'	2.20	0.42
23:DB:2030:A:H4'	23:DB:2031:A:H5'	2.01	0.42
23:DB:2261:C:O2'	23:DB:2262:U:H5'	2.20	0.42
23:DB:2529:G:H4'	48:DG:174:LYS:HG3	2.02	0.42
23:DB:2556:C:H2'	23:DB:2557:G:O4'	2.19	0.42
25:DC:76:VAL:HA	25:DC:113:ASP:O	2.20	0.42
27:DK:103:VAL:HG23	27:DK:122:VAL:O	2.20	0.42
27:DK:119:ALA:HB3	27:DK:120:PRO:CD	2.50	0.42
36:D2:33:ARG:HH21	36:D2:33:ARG:CG	2.33	0.42
37:DL:51:GLU:O	37:DL:52:GLY:C	2.63	0.42
37:DL:80:SER:HB3	37:DL:115:GLU:OE2	2.20	0.42
40:DH:60:GLU:HA	40:DH:62:LEU:CD2	2.49	0.42
40:DH:86:ASP:HB2	40:DH:87:GLU:H	1.59	0.42
40:DH:97:ARG:HA	40:DH:100:ALA:HB3	2.01	0.42
40:DH:126:GLY:O	40:DH:146:VAL:N	2.50	0.42
42:DN:100:CYS:O	42:DN:101:GLY:O	2.37	0.42
44:DQ:63:ARG:O	44:DQ:64:ILE:C	2.62	0.42
44:DQ:67:ALA:O	44:DQ:70:GLN:HB3	2.19	0.42
46:DU:5:ARG:HG2	46:DU:5:ARG:HH21	1.84	0.42
1:AA:62:U:H2'	1:AA:63:C:C6	2.55	0.42
1:AA:144:G:O2'	1:AA:145:G:H5'	2.18	0.42
1:AA:471:U:H2'	1:AA:472:U:H6	1.85	0.42
1:AA:592:G:H2'	1:AA:593:U:H6	1.85	0.42
1:AA:600:A:O3'	7:AH:88:LYS:HE3	2.18	0.42
1:AA:652:U:H1'	1:AA:653:U:C5	2.55	0.42
1:AA:1067:A:H4'	1:AA:1068:G:O5'	2.18	0.42
2:AC:63:ILE:HD11	2:AC:96:VAL:CG2	2.50	0.42
2:AC:81:GLU:CG	2:AC:82:ASP:N	2.80	0.42
4:AE:97:PRO:HA	4:AE:122:VAL:HG12	2.02	0.42
7:AH:80:PRO:C	7:AH:82:LEU:N	2.76	0.42
8:AI:23:GLY:O	8:AI:24:ASN:C	2.63	0.42
8:AI:79:ARG:O	8:AI:83:THR:HG22	2.20	0.42
10:AK:80:ASN:HB3	10:AK:105:ARG:HB3	2.02	0.42
12:AM:5:GLY:O	12:AM:7:ASN:N	2.53	0.42
13:AN:22:LYS:HA	13:AN:25:GLU:OE2	2.20	0.42
18:AS:10:ILE:HG22	18:AS:38:THR:N	2.35	0.42
19:AT:26:MET:HE1	19:AT:56:ILE:HG23	2.01	0.42
20:AB:52:ALA:O	20:AB:56:LEU:HB2	2.18	0.42
20:AB:136:ARG:O	20:AB:139:GLU:HB3	2.20	0.42
20:AB:209:VAL:HG23	20:AB:210:THR:H	1.84	0.42
23:BB:43:G:H2'	23:BB:44:A:O4'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:286:U:H2'	23:BB:287:G:C8	2.54	0.42
23:BB:350:G:H2'	23:BB:351:C:O4'	2.20	0.42
23:BB:483:A:H3'	23:BB:484:C:H6	1.84	0.42
23:BB:924:G:H2'	23:BB:925:A:C8	2.55	0.42
23:BB:928:A:O2'	30:BY:37:ARG:HD3	2.20	0.42
23:BB:1059:G:N2	24:BI:130:GLY:HA3	2.35	0.42
23:BB:1063:G:O2'	23:BB:1064:C:H5'	2.20	0.42
23:BB:1369:G:O2'	23:BB:1370:C:H5'	2.20	0.42
23:BB:1668:A:N3	23:BB:1670:C:C4	2.88	0.42
23:BB:1854:A:N6	23:BB:1888:G:H1'	2.34	0.42
23:BB:2617:U:C4	23:BB:2618:G:N7	2.88	0.42
23:BB:2733:A:C8	23:BB:2733:A:H3'	2.55	0.42
23:BB:2785:C:H2'	23:BB:2786:U:H6	1.84	0.42
27:BK:15:GLY:HA2	27:BK:46:ALA:HA	2.01	0.42
31:B0:42:ILE:CD1	42:BN:98:LEU:HD12	2.43	0.42
32:B4:36:ARG:CG	32:B4:37:GLN:H	2.33	0.42
35:BV:16:ALA:N	35:BV:19:ARG:HH21	2.17	0.42
37:BL:92:LEU:H	37:BL:92:LEU:CD2	2.31	0.42
37:BL:121:THR:HB	37:BL:141:LYS:HD2	2.02	0.42
38:BM:71:LYS:HG2	38:BM:73:ILE:CD1	2.49	0.42
39:BX:56:LEU:O	39:BX:58:ASN:N	2.53	0.42
40:BH:21:VAL:HG21	40:BH:25:TYR:HD2	1.84	0.42
42:BN:33:ILE:C	42:BN:34:ILE:HG13	2.45	0.42
43:BO:30:ARG:HG3	43:BO:30:ARG:NH1	2.35	0.42
44:BQ:21:LYS:HA	44:BQ:21:LYS:HD3	1.83	0.42
44:BQ:77:LYS:HE2	44:BQ:116:LEU:CD2	2.46	0.42
44:BQ:86:SER:CB	49:BR:51:VAL:HA	2.49	0.42
48:BG:107:GLY:O	48:BG:108:PHE:C	2.61	0.42
52:BW:36:ILE:H	52:BW:36:ILE:HG13	1.70	0.42
1:CA:65:A:C5	1:CA:381:C:N3	2.88	0.42
1:CA:89:U:H2'	1:CA:90:C:H6	1.84	0.42
1:CA:175:C:H2'	1:CA:176:C:C6	2.54	0.42
1:CA:279:A:C5'	1:CA:280:C:H3'	2.48	0.42
1:CA:358:U:H2'	1:CA:359:G:C8	2.55	0.42
1:CA:499:A:H4'	1:CA:500:G:H5'	2.02	0.42
1:CA:600:A:O3'	7:CH:88:LYS:HE3	2.20	0.42
1:CA:709:U:O2'	1:CA:710:G:H5'	2.20	0.42
1:CA:864:A:H2'	1:CA:865:A:C8	2.55	0.42
1:CA:1118:U:O2'	1:CA:1119:C:H5'	2.20	0.42
1:CA:1148:U:H2'	1:CA:1149:C:O4'	2.20	0.42
2:CC:76:ILE:C	2:CC:82:ASP:HB2	2.45	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CD:18:LEU:HD11	3:CD:59:LYS:HG3	2.00	0.42
5:CF:1:MET:HB3	5:CF:66:ALA:C	2.43	0.42
5:CF:26:THR:HA	5:CF:36:ILE:HD11	2.02	0.42
5:CF:51:ILE:HD11	5:CF:86:ARG:HG3	2.02	0.42
6:CG:86:VAL:HG13	6:CG:151:ALA:O	2.20	0.42
8:CI:21:LYS:HB3	8:CI:61:ASP:O	2.20	0.42
10:CK:16:SER:C	10:CK:79:LYS:H	2.25	0.42
10:CK:85:VAL:O	10:CK:111:ASP:HA	2.20	0.42
11:CL:23:LEU:C	11:CL:25:ALA:H	2.28	0.42
12:CM:5:GLY:O	12:CM:7:ASN:N	2.53	0.42
12:CM:30:LYS:HG3	12:CM:40:GLU:OE1	2.20	0.42
12:CM:38:ILE:HG13	12:CM:55:LEU:HD21	2.02	0.42
13:CN:19:TYR:HB3	13:CN:20:PHE:H	1.56	0.42
20:CB:20:ARG:CZ	20:CB:20:ARG:CA	2.97	0.42
20:CB:31:PHE:HB2	20:CB:41:ASN:CA	2.45	0.42
20:CB:53:LEU:CD1	20:CB:216:VAL:HG12	2.49	0.42
22:DA:89:U:C2	23:DB:958:U:H2'	2.55	0.42
23:DB:98:G:C3'	23:DB:99:U:H5''	2.50	0.42
23:DB:358:U:H2'	23:DB:359:G:C8	2.55	0.42
23:DB:484:C:H2'	23:DB:485:C:C6	2.55	0.42
23:DB:736:C:H2'	23:DB:737:C:H6	1.83	0.42
23:DB:923:G:O2'	23:DB:924:G:H5'	2.20	0.42
23:DB:1215:G:O2'	23:DB:1216:G:H5'	2.19	0.42
23:DB:1490:A:H2'	25:DC:97:ASP:OD1	2.20	0.42
23:DB:1642:G:O2'	23:DB:1643:G:H5'	2.20	0.42
23:DB:1842:G:H2'	23:DB:1843:C:H6	1.85	0.42
23:DB:2135:A:N6	23:DB:2156:G:C2'	2.82	0.42
23:DB:2318:G:C6	23:DB:2319:G:N1	2.88	0.42
23:DB:2487:G:H2'	23:DB:2488:G:H8	1.84	0.42
23:DB:2688:G:H1'	23:DB:2721:A:H61	1.84	0.42
23:DB:2757:A:N3	23:DB:2757:A:H2'	2.34	0.42
25:DC:64:VAL:HG11	25:DC:66:PHE:CE2	2.55	0.42
26:DD:82:PHE:O	26:DD:83:ARG:C	2.63	0.42
27:DK:58:LEU:HB2	27:DK:59:LYS:H	1.69	0.42
28:DP:8:GLU:C	28:DP:10:GLU:N	2.76	0.42
29:DE:176:ASP:OD1	29:DE:176:ASP:C	2.62	0.42
39:DX:23:ARG:O	39:DX:27:ASN:N	2.46	0.42
40:DH:80:ILE:CD1	40:DH:146:VAL:HA	2.49	0.42
42:DN:71:ARG:CG	42:DN:71:ARG:HH21	2.32	0.42
45:DS:2:GLU:O	45:DS:3:THR:O	2.38	0.42
47:DF:3:LEU:HD13	47:DF:3:LEU:O	2.18	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:DF:41:GLU:HB2	47:DF:48:LEU:HD11	2.01	0.42
47:DF:56:LEU:HD22	47:DF:59:ILE:HD12	2.01	0.42
47:DF:118:ALA:HA	47:DF:176:PHE:HE2	1.84	0.42
47:DF:121:PHE:HB3	47:DF:127:TYR:CZ	2.55	0.42
48:DG:9:VAL:HG12	48:DG:11:PRO:CD	2.47	0.42
48:DG:32:LEU:HB3	48:DG:34:ARG:CZ	2.50	0.42
48:DG:120:ILE:HD13	48:DG:121:THR:N	2.35	0.42
51:DZ:40:VAL:CG2	51:DZ:45:ARG:H	2.32	0.42
1:AA:81:A:C2	1:AA:82:G:N7	2.88	0.42
1:AA:97:G:C2	1:AA:98:A:H1'	2.54	0.42
1:AA:301:G:H2'	1:AA:302:G:C8	2.51	0.42
1:AA:735:C:O2'	1:AA:736:C:H5'	2.19	0.42
1:AA:769:G:H4'	1:AA:1513:A:H4'	2.01	0.42
1:AA:792:A:H1'	1:AA:794:A:N7	2.34	0.42
1:AA:1320:C:O2'	1:AA:1321:U:H5'	2.20	0.42
1:AA:1329:A:OP1	12:AM:28:ARG:HB2	2.20	0.42
3:AD:148:ALA:O	3:AD:151:GLN:HB2	2.20	0.42
4:AE:45:VAL:HG23	4:AE:71:ILE:CG2	2.50	0.42
5:AF:86:ARG:HD2	17:AR:63:TYR:O	2.19	0.42
6:AG:144:ALA:C	6:AG:146:ALA:N	2.77	0.42
6:AG:145:GLU:OE2	6:AG:148:LYS:HD2	2.19	0.42
8:AI:33:SER:HB3	8:AI:36:GLN:HE21	1.85	0.42
11:AL:36:VAL:O	11:AL:36:VAL:HG23	2.19	0.42
12:AM:37:GLY:O	12:AM:38:ILE:HD13	2.20	0.42
13:AN:47:LEU:C	13:AN:49:THR:H	2.28	0.42
14:AO:16:GLY:HA2	14:AO:27:VAL:HG22	2.02	0.42
14:AO:33:THR:HA	14:AO:36:ILE:HB	2.02	0.42
20:AB:138:ARG:HA	20:AB:141:GLU:CD	2.45	0.42
23:BB:141:G:OP2	23:BB:142:A:C4	2.73	0.42
23:BB:413:C:H2'	23:BB:414:C:C6	2.54	0.42
23:BB:545:U:C2	23:BB:548:G:OP2	2.73	0.42
23:BB:560:C:H3'	23:BB:561:G:C8	2.55	0.42
23:BB:697:G:H2'	23:BB:698:C:C6	2.55	0.42
23:BB:828:U:H4'	23:BB:831:G:N1	2.35	0.42
23:BB:1108:U:C5	23:BB:1109:C:C5	3.08	0.42
23:BB:1310:G:H1'	23:BB:1611:C:H5'	2.01	0.42
23:BB:1820:U:H3	25:BC:197:ALA:HA	1.85	0.42
23:BB:1922:G:O2'	23:BB:1923:U:H5'	2.20	0.42
23:BB:2002:G:OP1	42:BN:13:ASN:HA	2.20	0.42
23:BB:2075:U:H2'	23:BB:2238:G:N2	2.34	0.42
23:BB:2796:U:H3'	23:BB:2798:U:O4	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:2813:A:H2'	23:BB:2814:A:C8	2.55	0.42
24:BI:129:GLU:CB	24:BI:133:ARG:HH12	2.23	0.42
27:BK:119:ALA:HB3	27:BK:120:PRO:CD	2.50	0.42
29:BE:158:PHE:HD2	29:BE:169:VAL:HG23	1.85	0.42
33:B1:7:LYS:CD	34:B3:33:THR:HG21	2.46	0.42
37:BL:41:ARG:HH21	37:BL:41:ARG:HG2	1.85	0.42
37:BL:109:LYS:HB3	37:BL:111:ILE:HD11	2.02	0.42
44:BQ:111:LYS:HE3	49:BR:48:LYS:NZ	2.34	0.42
46:BU:5:ARG:HG2	46:BU:5:ARG:HH21	1.84	0.42
47:BF:68:LYS:HB3	47:BF:69:ALA:H	1.71	0.42
48:BG:15:ASP:OD2	48:BG:17:LYS:HB2	2.19	0.42
48:BG:139:VAL:O	48:BG:142:GLN:HB3	2.20	0.42
49:BR:18:GLN:O	49:BR:18:GLN:HG3	2.20	0.42
1:CA:77:A:O2'	1:CA:78:A:H5'	2.20	0.42
1:CA:259:G:O2'	1:CA:260:G:H5'	2.19	0.42
1:CA:707:U:H2'	1:CA:708:C:H6	1.85	0.42
1:CA:1053:G:O6	1:CA:1199:U:H2'	2.19	0.42
1:CA:1296:C:C4'	1:CA:1302:C:H41	2.21	0.42
3:CD:165:GLU:CG	3:CD:166:LYS:N	2.81	0.42
6:CG:101:ARG:HG2	6:CG:105:GLU:OE2	2.20	0.42
6:CG:128:GLU:O	6:CG:129:ASN:C	2.62	0.42
10:CK:12:ARG:HD3	10:CK:76:TYR:CE1	2.55	0.42
12:CM:43:LYS:N	12:CM:43:LYS:HD2	2.35	0.42
12:CM:79:LEU:H	12:CM:79:LEU:HG	1.69	0.42
13:CN:22:LYS:HA	13:CN:25:GLU:OE2	2.20	0.42
13:CN:50:LEU:H	13:CN:51:PRO:HD2	1.85	0.42
14:CO:45:GLU:O	14:CO:47:LYS:N	2.52	0.42
14:CO:73:LYS:O	14:CO:74:ASP:HB2	2.20	0.42
16:CQ:58:VAL:HB	16:CQ:74:LEU:HD23	2.02	0.42
18:CS:29:PRO:HA	18:CS:47:THR:HG22	2.02	0.42
20:CB:20:ARG:HH22	20:CB:22:TRP:CD1	2.38	0.42
20:CB:209:VAL:HG23	20:CB:210:THR:H	1.84	0.42
23:DB:35:G:H1'	23:DB:454:A:C4	2.55	0.42
23:DB:285:G:H2'	23:DB:286:U:O4'	2.19	0.42
23:DB:996:A:H4'	44:DQ:91:ARG:HH11	1.84	0.42
23:DB:1270:C:H5''	23:DB:1271:G:O5'	2.20	0.42
23:DB:1310:G:H1'	23:DB:1611:C:H5'	2.01	0.42
23:DB:1322:A:C5	23:DB:1323:C:C5	3.08	0.42
23:DB:1365:A:OP2	51:DZ:3:ARG:HB2	2.20	0.42
23:DB:1667:G:N2	23:DB:1992:G:OP2	2.45	0.42
23:DB:1717:A:H2'	23:DB:1718:G:O4'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:1848:A:H2'	23:DB:1849:G:C8	2.55	0.42
23:DB:1908:C:H2'	23:DB:1909:C:H6	1.85	0.42
23:DB:2061:G:H3'	56:DB:3296:HOH:O	2.20	0.42
23:DB:2222:C:H4'	25:DC:184:GLU:OE2	2.20	0.42
23:DB:2359:C:O2'	23:DB:2360:G:H5'	2.20	0.42
23:DB:2394:C:OP1	37:DL:63:LYS:HG2	2.19	0.42
23:DB:2627:G:O2'	23:DB:2781:A:N1	2.48	0.42
23:DB:2825:G:H2'	23:DB:2826:A:H5'	2.00	0.42
26:DD:54:ALA:HA	26:DD:76:GLY:N	2.35	0.42
26:DD:117:GLY:HA2	26:DD:164:GLN:NE2	2.35	0.42
27:DK:2:ILE:HD13	27:DK:6:THR:HG21	2.02	0.42
27:DK:97:THR:HB	27:DK:98:ARG:NH2	2.35	0.42
28:DP:112:ARG:NH1	28:DP:112:ARG:HB2	2.34	0.42
29:DE:173:THR:C	29:DE:175:ILE:N	2.77	0.42
30:DY:7:THR:O	30:DY:54:VAL:HA	2.20	0.42
37:DL:132:ARG:C	37:DL:135:ILE:HG22	2.44	0.42
38:DM:112:LEU:O	38:DM:113:ALA:C	2.63	0.42
40:DH:127:GLU:HB2	40:DH:143:ILE:CG2	2.50	0.42
41:DJ:109:LEU:CD1	41:DJ:119:PHE:HB2	2.50	0.42
43:DO:93:ASP:C	43:DO:95:SER:H	2.28	0.42
44:DQ:86:SER:O	44:DQ:88:GLU:N	2.51	0.42
47:DF:59:ILE:HG22	47:DF:98:PHE:HE1	1.84	0.42
47:DF:78:ILE:N	47:DF:78:ILE:CD1	2.83	0.42
48:DG:15:ASP:OD2	48:DG:17:LYS:HB2	2.20	0.42
48:DG:42:VAL:HA	48:DG:50:THR:O	2.20	0.42
49:DR:4:VAL:HB	49:DR:39:LEU:HG	2.01	0.42
52:DW:23:LYS:CG	52:DW:24:ARG:N	2.82	0.42
1:AA:113:G:O4'	1:AA:354:G:H4'	2.20	0.41
1:AA:392:C:H2'	1:AA:393:A:H8	1.85	0.41
1:AA:411:A:N7	1:AA:413:G:N3	2.68	0.41
1:AA:489:C:O2'	1:AA:490:C:H5'	2.20	0.41
1:AA:533:A:H5''	56:AA:1893:HOH:O	2.19	0.41
1:AA:895:G:H2'	1:AA:896:C:H6	1.86	0.41
1:AA:896:C:O2'	1:AA:897:C:H5'	2.19	0.41
1:AA:1028:C:H3'	1:AA:1029:U:H5	1.85	0.41
1:AA:1053:G:O6	1:AA:1199:U:H2'	2.19	0.41
1:AA:1060:U:H5''	9:AJ:53:ILE:HG12	2.00	0.41
4:AE:132:PRO:HG2	4:AE:133:ILE:H	1.85	0.41
5:AF:64:VAL:HG12	5:AF:65:GLU:N	2.29	0.41
8:AI:24:ASN:O	8:AI:59:LYS:N	2.53	0.41
11:AL:54:VAL:HG22	11:AL:79:ILE:HD11	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AN:88:MET:HA	13:AN:88:MET:HE2	2.02	0.41
14:AO:16:GLY:C	14:AO:18:ASP:N	2.78	0.41
14:AO:82:ILE:O	14:AO:86:GLY:N	2.53	0.41
20:AB:31:PHE:HB2	20:AB:41:ASN:CA	2.47	0.41
21:AU:26:GLY:O	21:AU:30:GLU:HB2	2.19	0.41
23:BB:107:G:O2'	23:BB:108:G:H5'	2.19	0.41
23:BB:141:G:H5''	23:BB:142:A:C1'	2.50	0.41
23:BB:170:U:O2'	23:BB:171:U:H5'	2.20	0.41
23:BB:215:G:C4'	23:BB:216:A:H4'	2.50	0.41
23:BB:513:A:O2'	23:BB:514:A:H5'	2.20	0.41
23:BB:522:A:H2'	23:BB:523:C:H6	1.81	0.41
23:BB:1171:G:H2'	23:BB:1172:C:H4'	2.02	0.41
23:BB:1182:G:H2'	23:BB:1183:U:O4'	2.20	0.41
23:BB:1654:A:O2'	26:BD:118:PHE:CB	2.68	0.41
23:BB:1987:A:H2'	23:BB:1988:G:C8	2.55	0.41
23:BB:2249:U:H4'	23:BB:2275:C:C5	2.55	0.41
25:BC:124:LYS:N	25:BC:191:LEU:HD13	2.35	0.41
27:BK:13:ASN:ND2	27:BK:98:ARG:H	2.17	0.41
27:BK:24:VAL:HG13	27:BK:33:ALA:HB2	2.02	0.41
27:BK:26:GLY:C	27:BK:30:ARG:HD2	2.45	0.41
28:BP:44:GLY:HA3	28:BP:60:VAL:HG12	2.01	0.41
29:BE:31:VAL:O	29:BE:34:ALA:HB3	2.20	0.41
29:BE:149:ILE:O	29:BE:188:MET:HA	2.20	0.41
29:BE:176:ASP:OD1	29:BE:176:ASP:C	2.63	0.41
30:BY:7:THR:O	30:BY:54:VAL:HG12	2.20	0.41
35:BV:44:HIS:O	35:BV:45:ASP:C	2.63	0.41
37:BL:77:ILE:O	37:BL:110:VAL:O	2.38	0.41
39:BX:27:ASN:O	39:BX:28:LEU:C	2.63	0.41
40:BH:4:ILE:CD1	40:BH:37:VAL:HG13	2.50	0.41
40:BH:44:ILE:CG2	40:BH:51:ARG:HH22	2.32	0.41
40:BH:48:GLU:H	40:BH:48:GLU:CD	2.28	0.41
40:BH:80:ILE:HB	40:BH:144:VAL:CG1	2.35	0.41
43:BO:61:GLN:HE21	43:BO:61:GLN:HB3	1.63	0.41
45:BS:86:MET:HE2	45:BS:87:PRO:HD2	2.02	0.41
47:BF:119:LYS:C	47:BF:121:PHE:N	2.78	0.41
47:BF:155:ILE:HG22	47:BF:156:THR:N	2.35	0.41
48:BG:74:MET:O	48:BG:78:VAL:HG13	2.20	0.41
49:BR:78:ARG:HG3	49:BR:78:ARG:NH2	2.34	0.41
51:BZ:5:CYS:HB3	51:BZ:10:LYS:N	2.14	0.41
52:BW:19:ARG:HD3	52:BW:19:ARG:N	2.35	0.41
1:CA:6:G:C8	4:CE:123:LEU:HD21	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:53:A:H2'	1:CA:54:C:O4'	2.20	0.41
1:CA:113:G:O4'	1:CA:354:G:H4'	2.20	0.41
1:CA:221:C:O2'	1:CA:222:C:H5'	2.19	0.41
1:CA:537:G:H2'	1:CA:538:G:H8	1.85	0.41
1:CA:652:U:H1'	1:CA:653:U:C5	2.55	0.41
1:CA:769:G:H4'	1:CA:1513:A:H4'	2.02	0.41
1:CA:824:G:H2'	1:CA:825:A:H8	1.85	0.41
1:CA:922:G:H2'	1:CA:923:A:H8	1.84	0.41
1:CA:1009:U:H2'	1:CA:1010:U:C5	2.55	0.41
1:CA:1148:U:H5'	8:CI:6:TYR:OH	2.20	0.41
1:CA:1226:C:C4	12:CM:102:LYS:HB3	2.55	0.41
2:CC:133:MET:SD	2:CC:152:VAL:HG23	2.60	0.41
3:CD:199:ILE:CG1	3:CD:200:VAL:N	2.83	0.41
5:CF:81:ASN:OD1	5:CF:83:ALA:HB3	2.20	0.41
6:CG:58:LEU:H	6:CG:58:LEU:CD2	2.25	0.41
9:CJ:52:LEU:CB	13:CN:80:ARG:HE	2.33	0.41
12:CM:102:LYS:HB2	12:CM:102:LYS:NZ	2.34	0.41
13:CN:9:GLU:HB2	13:CN:62:ARG:NE	2.35	0.41
18:CS:10:ILE:HG22	18:CS:38:THR:N	2.35	0.41
18:CS:45:GLY:N	18:CS:61:VAL:HB	2.35	0.41
18:CS:61:VAL:HG12	18:CS:62:THR:N	2.34	0.41
20:CB:27:LYS:CA	20:CB:30:ILE:HD12	2.39	0.41
23:DB:112:U:H2'	23:DB:113:U:H5'	2.01	0.41
23:DB:635:C:O2'	23:DB:636:G:H5'	2.19	0.41
23:DB:723:C:H2'	23:DB:724:U:C6	2.55	0.41
23:DB:780:G:H2'	23:DB:782:A:N7	2.35	0.41
23:DB:851:C:H2'	23:DB:852:U:C6	2.54	0.41
23:DB:1137:G:O2'	23:DB:1138:G:H5'	2.20	0.41
23:DB:1684:G:H2'	23:DB:1685:C:H6	1.85	0.41
23:DB:1794:A:O2'	23:DB:1795:C:H5'	2.20	0.41
23:DB:2041:U:H2'	23:DB:2042:A:C8	2.56	0.41
23:DB:2143:C:N3	23:DB:2144:G:H1'	2.35	0.41
23:DB:2252:G:O2'	23:DB:2253:G:H5'	2.19	0.41
23:DB:2330:G:N3	52:DW:38:ARG:HB3	2.35	0.41
23:DB:2419:U:H3'	34:D3:32:LEU:HD12	2.01	0.41
23:DB:2519:U:C6	23:DB:2542:A:N6	2.87	0.41
23:DB:2557:G:C6	23:DB:2558:C:N4	2.88	0.41
23:DB:2568:U:H2'	23:DB:2569:G:O4'	2.20	0.41
23:DB:2617:U:C2'	23:DB:2618:G:H5'	2.50	0.41
23:DB:2796:U:H3'	23:DB:2798:U:O4	2.19	0.41
23:DB:2886:A:N6	31:D0:39:ARG:NE	2.56	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:DI:63:ASP:C	24:DI:65:SER:H	2.27	0.41
25:DC:173:LEU:CD2	25:DC:173:LEU:N	2.81	0.41
25:DC:196:ASN:C	25:DC:198:GLU:H	2.28	0.41
26:DD:34:VAL:HG12	26:DD:94:GLN:H	1.83	0.41
26:DD:37:VAL:CG2	26:DD:91:THR:HA	2.49	0.41
26:DD:91:THR:O	26:DD:92:VAL:C	2.62	0.41
27:DK:70:ARG:HH11	27:DK:76:VAL:HG22	1.85	0.41
29:DE:83:VAL:O	29:DE:84:THR:C	2.63	0.41
29:DE:131:THR:HB	29:DE:164:LEU:HG	2.01	0.41
35:DV:29:ILE:HA	35:DV:38:LEU:O	2.20	0.41
38:DM:18:ARG:CA	38:DM:38:ARG:HH22	2.32	0.41
44:DQ:7:VAL:HG23	44:DQ:8:ILE:N	2.35	0.41
45:DS:59:GLU:OE2	45:DS:66:ILE:HG23	2.18	0.41
46:DU:2:ALA:O	46:DU:5:ARG:NH2	2.52	0.41
46:DU:81:ARG:HB2	46:DU:96:LYS:HG3	2.02	0.41
48:DG:10:VAL:CG1	48:DG:14:VAL:HG21	2.50	0.41
48:DG:17:LYS:O	48:DG:23:ILE:HG23	2.20	0.41
48:DG:167:VAL:HG23	48:DG:168:VAL:N	2.27	0.41
1:AA:77:A:H2'	1:AA:78:A:C8	2.55	0.41
1:AA:284:C:H2'	1:AA:285:C:H6	1.84	0.41
1:AA:420:U:H2'	1:AA:422:C:C5	2.55	0.41
1:AA:691:G:H1'	1:AA:696:A:N6	2.34	0.41
1:AA:1283:U:O2'	1:AA:1284:C:H5'	2.19	0.41
2:AC:14:VAL:HG23	2:AC:15:LYS:HD3	2.01	0.41
2:AC:26:LYS:HE3	2:AC:26:LYS:HB2	1.89	0.41
7:AH:80:PRO:C	7:AH:82:LEU:H	2.27	0.41
8:AI:56:MET:CG	8:AI:57:VAL:N	2.83	0.41
10:AK:22:ILE:HG12	10:AK:31:VAL:HG12	2.02	0.41
13:AN:92:ILE:HG21	13:AN:95:LEU:HD22	2.01	0.41
19:AT:2:ASN:CG	19:AT:3:ILE:N	2.77	0.41
20:AB:139:GLU:HG2	20:AB:143:LEU:HD12	2.02	0.41
20:AB:204:ASP:CG	20:AB:205:ALA:N	2.72	0.41
21:AU:41:THR:HG22	21:AU:45:LYS:HZ3	1.85	0.41
23:BB:1335:C:H2'	23:BB:1336:A:C8	2.55	0.41
23:BB:1535:A:O2'	23:BB:1536:C:H5'	2.20	0.41
23:BB:1547:C:H2'	23:BB:1548:A:H8	1.84	0.41
23:BB:1552:A:H2'	23:BB:1553:A:C5'	2.50	0.41
23:BB:1999:C:O2'	23:BB:2000:C:H5'	2.20	0.41
23:BB:2352:A:N1	52:BW:30:VAL:HG11	2.35	0.41
23:BB:2889:C:O2'	23:BB:2890:G:H5'	2.20	0.41
26:BD:91:THR:O	26:BD:92:VAL:C	2.62	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BD:118:PHE:HZ	26:BD:123:LYS:NZ	2.17	0.41
28:BP:50:ARG:HB3	28:BP:57:ALA:O	2.20	0.41
28:BP:61:ARG:HD3	28:BP:70:GLU:CD	2.45	0.41
28:BP:112:ARG:NH1	28:BP:112:ARG:HB2	2.34	0.41
29:BE:115:GLN:O	29:BE:116:ASP:C	2.63	0.41
30:BY:12:ALA:HB2	30:BY:53:MET:HE1	2.03	0.41
31:B0:49:ARG:O	31:B0:51:ARG:NE	2.53	0.41
37:BL:51:GLU:CD	37:BL:60:ARG:NH1	2.78	0.41
37:BL:74:THR:HA	37:BL:107:PHE:O	2.20	0.41
41:BJ:36:LEU:HD12	41:BJ:121:LYS:HE3	2.02	0.41
42:BN:76:VAL:HA	42:BN:79:LEU:HD12	2.02	0.41
42:BN:98:LEU:O	42:BN:112:TYR:HB2	2.20	0.41
44:BQ:30:VAL:HG22	44:BQ:31:TYR:N	2.35	0.41
44:BQ:83:LYS:NZ	44:BQ:83:LYS:HA	2.35	0.41
45:BS:4:ILE:HG22	45:BS:106:VAL:HG22	2.02	0.41
45:BS:33:LEU:HG	45:BS:51:LEU:CD2	2.50	0.41
46:BU:50:ALA:H	46:BU:53:GLN:NE2	2.18	0.41
47:BF:1:ALA:HB1	47:BF:4:HIS:HB3	2.01	0.41
47:BF:11:VAL:HG12	47:BF:12:VAL:N	2.22	0.41
47:BF:11:VAL:O	47:BF:12:VAL:HB	2.20	0.41
47:BF:31:GLU:O	47:BF:32:LYS:O	2.38	0.41
47:BF:78:ILE:HG13	47:BF:82:TYR:CE1	2.55	0.41
48:BG:152:ARG:HA	48:BG:152:ARG:HD2	1.86	0.41
1:CA:126:G:H4'	1:CA:634:C:H1'	2.02	0.41
1:CA:237:G:O2'	1:CA:238:A:H5'	2.19	0.41
1:CA:920:U:HO2'	1:CA:1081:A:H4'	1.85	0.41
1:CA:1465:A:O2'	1:CA:1466:C:H5'	2.20	0.41
1:CA:1517:G:H1'	23:DB:1919:A:O3'	2.20	0.41
3:CD:101:VAL:HG13	3:CD:106:PHE:HB2	2.01	0.41
4:CE:32:PHE:CZ	4:CE:55:VAL:HG22	2.55	0.41
5:CF:81:ASN:O	5:CF:82:ASP:C	2.63	0.41
12:CM:53:ASP:HA	12:CM:56:ARG:CZ	2.50	0.41
17:CR:28:LEU:C	17:CR:30:ASN:H	2.28	0.41
17:CR:31:TYR:C	17:CR:32:ILE:HG13	2.45	0.41
20:CB:83:ALA:CB	20:CB:90:PHE:HB3	2.49	0.41
23:DB:10:A:H61	23:DB:2895:G:C1'	2.33	0.41
23:DB:673:C:H2'	23:DB:674:G:H5'	2.02	0.41
23:DB:770:G:O2'	23:DB:771:G:H5'	2.19	0.41
23:DB:839:U:H2'	23:DB:840:C:H6	1.85	0.41
23:DB:1539:U:H3'	23:DB:1540:G:H8	1.85	0.41
23:DB:1740:G:H2'	23:DB:1741:C:C6	2.54	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:1930:G:H22	23:DB:1969:A:P	2.43	0.41
23:DB:1983:G:H4'	23:DB:2606:C:H4'	2.02	0.41
23:DB:1987:A:H2'	23:DB:1988:G:C8	2.55	0.41
23:DB:2219:U:O2'	23:DB:2220:U:H5'	2.20	0.41
23:DB:2376:A:N1	43:DO:92:PHE:HB3	2.36	0.41
23:DB:2462:C:H2'	23:DB:2463:C:C6	2.54	0.41
23:DB:2480:C:O2'	23:DB:2481:G:H5'	2.19	0.41
23:DB:2758:A:H2'	23:DB:2759:G:O4'	2.20	0.41
24:DI:72:THR:HG23	24:DI:112:LYS:HD2	2.02	0.41
25:DC:160:TYR:CD1	25:DC:160:TYR:C	2.98	0.41
26:DD:29:VAL:C	26:DD:185:ASN:HB3	2.46	0.41
26:DD:114:LYS:HE2	26:DD:165:MET:HG2	2.02	0.41
28:DP:15:ASP:O	28:DP:17:PRO:HD3	2.20	0.41
35:DV:1:MET:HG2	35:DV:59:GLU:CG	2.48	0.41
37:DL:121:THR:HB	37:DL:141:LYS:HD2	2.01	0.41
38:DM:18:ARG:HA	38:DM:18:ARG:HD2	1.75	0.41
42:DN:92:GLY:C	42:DN:94:TYR:H	2.29	0.41
43:DO:90:VAL:HG22	43:DO:115:LEU:HD11	2.02	0.41
44:DQ:57:ARG:HA	44:DQ:60:TRP:CE3	2.55	0.41
45:DS:28:LYS:O	45:DS:29:VAL:HG23	2.20	0.41
46:DU:94:PHE:HA	46:DU:101:THR:HA	2.01	0.41
47:DF:46:LYS:HZ3	47:DF:46:LYS:HA	1.85	0.41
48:DG:54:ARG:HD2	48:DG:57:TYR:CE1	2.55	0.41
49:DR:11:GLN:O	49:DR:12:HIS:CG	2.73	0.41
49:DR:72:VAL:CG2	49:DR:89:HIS:HB3	2.46	0.41
50:DT:50:LEU:C	50:DT:52:GLU:N	2.76	0.41
1:AA:43:C:H2'	1:AA:44:A:O4'	2.19	0.41
1:AA:252:U:H2'	1:AA:253:A:C8	2.55	0.41
1:AA:330:C:O2'	1:AA:331:G:H5'	2.20	0.41
1:AA:343:U:O2'	1:AA:344:A:H2'	2.20	0.41
1:AA:834:U:H2'	1:AA:835:U:H6	1.85	0.41
1:AA:865:A:H2'	1:AA:866:C:C6	2.54	0.41
1:AA:884:U:H4'	1:AA:885:G:H5''	2.00	0.41
1:AA:1076:U:H2'	1:AA:1077:G:H8	1.84	0.41
1:AA:1180:A:P	8:AI:98:ARG:HH22	2.44	0.41
1:AA:1327:C:H2'	1:AA:1328:C:C6	2.54	0.41
3:AD:154:VAL:HG23	3:AD:155:LYS:H	1.85	0.41
5:AF:3:HIS:N	5:AF:92:THR:OG1	2.48	0.41
5:AF:17:GLN:C	5:AF:19:PRO:HD2	2.45	0.41
5:AF:51:ILE:O	5:AF:51:ILE:HG23	2.20	0.41
6:AG:6:ILE:H	6:AG:6:ILE:HG13	1.58	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AG:125:ASP:HB3	6:AG:130:LYS:HB3	2.02	0.41
8:AI:36:GLN:HE21	8:AI:36:GLN:N	2.18	0.41
9:AJ:57:VAL:O	9:AJ:58:ASN:HB2	2.19	0.41
13:AN:56:PRO:C	13:AN:58:ARG:H	2.28	0.41
15:AP:71:VAL:O	15:AP:75:ILE:HG13	2.20	0.41
20:AB:23:ASN:O	20:AB:25:LYS:N	2.53	0.41
20:AB:94:ARG:O	20:AB:94:ARG:HG2	2.20	0.41
20:AB:107:ARG:HG3	20:AB:108:GLN:NE2	2.35	0.41
20:AB:118:THR:O	20:AB:124:THR:HG23	2.21	0.41
23:BB:596:U:H2'	23:BB:597:G:H8	1.84	0.41
23:BB:956:G:H5''	38:BM:76:LYS:HE2	2.02	0.41
23:BB:1172:C:H3'	23:BB:1173:U:H6	1.78	0.41
23:BB:1431:A:H2'	23:BB:1432:G:C8	2.55	0.41
23:BB:1531:C:H2'	23:BB:1532:A:C8	2.55	0.41
23:BB:1693:U:O2'	25:BC:13:ARG:NH2	2.53	0.41
23:BB:2027:G:O2'	23:BB:2028:U:H5'	2.20	0.41
23:BB:2369:A:O2'	23:BB:2370:G:H5'	2.20	0.41
23:BB:2457:U:H2'	23:BB:2458:G:H5'	2.02	0.41
24:BI:91:LYS:O	24:BI:91:LYS:HG3	2.20	0.41
25:BC:129:LEU:HB3	25:BC:134:ILE:CG2	2.46	0.41
25:BC:152:GLN:HA	25:BC:155:ARG:CD	2.49	0.41
25:BC:219:VAL:HG12	25:BC:224:MET:HE2	2.02	0.41
29:BE:146:VAL:HA	29:BE:185:LYS:O	2.21	0.41
29:BE:161:ALA:HA	29:BE:164:LEU:HD12	2.02	0.41
32:B4:3:VAL:HG23	32:B4:4:ARG:N	2.30	0.41
35:BV:30:ILE:HA	35:BV:91:PHE:O	2.21	0.41
36:B2:32:ALA:HA	36:B2:35:ARG:HB2	2.02	0.41
37:BL:124:GLY:H	37:BL:143:GLU:HG3	1.84	0.41
41:BJ:99:ARG:C	41:BJ:101:ILE:N	2.77	0.41
42:BN:73:ASN:O	42:BN:76:VAL:HG22	2.21	0.41
44:BQ:67:ALA:O	44:BQ:70:GLN:HB3	2.20	0.41
44:BQ:78:PHE:CE2	44:BQ:82:LEU:HD11	2.55	0.41
44:BQ:93:ILE:HG23	44:BQ:94:LEU:N	2.35	0.41
47:BF:31:GLU:HB2	47:BF:158:THR:HG23	2.02	0.41
47:BF:34:THR:O	47:BF:35:LEU:HB2	2.20	0.41
48:BG:84:LYS:CB	48:BG:132:LEU:HG	2.50	0.41
49:BR:2:TYR:CB	49:BR:42:ALA:HB2	2.50	0.41
50:BT:29:THR:H	50:BT:91:GLN:NE2	2.18	0.41
50:BT:39:THR:O	50:BT:41:ALA:N	2.48	0.41
50:BT:54:GLU:CG	50:BT:90:GLY:H	2.27	0.41
1:CA:379:C:O2'	1:CA:380:G:H5'	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:386:C:O2'	1:CA:387:U:H5'	2.20	0.41
1:CA:415:A:N1	1:CA:428:G:O6	2.53	0.41
1:CA:423:G:O2'	1:CA:424:G:H5'	2.19	0.41
1:CA:462:G:H2'	1:CA:463:U:C6	2.55	0.41
1:CA:468:A:H8	1:CA:469:C:C6	2.38	0.41
1:CA:592:G:H2'	1:CA:593:U:H6	1.85	0.41
1:CA:627:G:H2'	1:CA:628:G:H8	1.86	0.41
1:CA:709:U:H2'	1:CA:710:G:C8	2.54	0.41
1:CA:894:G:O2'	1:CA:895:G:H5'	2.19	0.41
5:CF:29:ILE:HG21	5:CF:64:VAL:CG1	2.31	0.41
5:CF:86:ARG:CZ	17:CR:63:TYR:HB3	2.50	0.41
5:CF:98:GLU:O	5:CF:99:ALA:HB3	2.19	0.41
7:CH:6:ILE:HD11	7:CH:31:LEU:CD2	2.50	0.41
8:CI:11:ARG:NH2	8:CI:12:LYS:HD2	2.35	0.41
9:CJ:83:THR:O	9:CJ:86:ALA:HB3	2.20	0.41
10:CK:35:ASP:C	10:CK:37:GLN:N	2.78	0.41
11:CL:35:ARG:HH12	11:CL:75:GLU:CD	2.28	0.41
12:CM:33:LEU:HD13	12:CM:39:ALA:O	2.20	0.41
12:CM:79:LEU:HB2	12:CM:84:CYS:SG	2.61	0.41
13:CN:40:ARG:HH11	13:CN:40:ARG:HG3	1.85	0.41
14:CO:16:GLY:HA2	14:CO:27:VAL:HG22	2.02	0.41
14:CO:16:GLY:C	14:CO:18:ASP:N	2.78	0.41
18:CS:39:ILE:HG21	18:CS:61:VAL:HG13	2.02	0.41
20:CB:103:TRP:CZ3	20:CB:107:ARG:HD2	2.56	0.41
22:DA:21:G:O2'	22:DA:22:U:H5'	2.21	0.41
23:DB:592:A:N3	34:D3:3:ILE:HD11	2.35	0.41
23:DB:730:A:H5'	56:DB:3611:HOH:O	2.19	0.41
23:DB:971:G:O2'	23:DB:972:A:H5'	2.20	0.41
23:DB:1102:C:H2'	23:DB:1103:A:H8	1.85	0.41
23:DB:1324:G:H1'	23:DB:1616:A:C6	2.54	0.41
23:DB:1333:G:H3'	56:DB:3550:HOH:O	2.21	0.41
23:DB:1418:G:C2'	23:DB:1580:A:H61	2.34	0.41
23:DB:1434:A:H4'	23:DB:1434:A:OP1	2.19	0.41
23:DB:1515:A:H3'	23:DB:1516:G:H8	1.86	0.41
23:DB:1584:U:H3'	23:DB:1585:C:H5'	2.02	0.41
23:DB:2233:U:H2'	23:DB:2234:G:H8	1.85	0.41
23:DB:2379:G:O3'	43:DO:17:LYS:HE2	2.20	0.41
23:DB:2394:C:H2'	23:DB:2395:C:C6	2.55	0.41
23:DB:2743:U:H2'	23:DB:2744:G:C5'	2.44	0.41
24:DI:73:PRO:CG	24:DI:78:LEU:HD21	2.46	0.41
25:DC:51:ARG:NH2	25:DC:246:PRO:HG2	2.35	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DD:33:ARG:NH1	26:DD:53:GLY:O	2.52	0.41
29:DE:3:LEU:HB3	29:DE:12:LEU:HB2	2.02	0.41
34:D3:9:ALA:O	34:D3:13:PHE:HD2	2.02	0.41
41:DJ:55:ILE:CB	41:DJ:123:LYS:HB2	2.50	0.41
41:DJ:96:ARG:CZ	41:DJ:99:ARG:HD2	2.50	0.41
41:DJ:130:HIS:O	41:DJ:130:HIS:CG	2.73	0.41
42:DN:78:LYS:O	42:DN:82:GLU:HB2	2.21	0.41
43:DO:7:ARG:HA	43:DO:10:ARG:CZ	2.50	0.41
43:DO:83:LEU:HD12	43:DO:83:LEU:HA	1.92	0.41
47:DF:102:LEU:CD2	47:DF:106:ALA:HB3	2.50	0.41
48:DG:54:ARG:HD2	48:DG:57:TYR:HE1	1.85	0.41
50:DT:54:GLU:CG	50:DT:90:GLY:H	2.27	0.41
1:AA:471:U:H2'	1:AA:472:U:C6	2.55	0.41
1:AA:551:U:O2'	11:AL:82:ARG:HD2	2.21	0.41
1:AA:575:G:O2'	1:AA:820:U:H5''	2.20	0.41
1:AA:828:U:H2'	1:AA:829:G:O5'	2.20	0.41
1:AA:1057:G:H5''	2:AC:153:SER:CB	2.50	0.41
1:AA:1339:A:H2'	1:AA:1340:A:O4'	2.21	0.41
3:AD:72:ARG:HH11	3:AD:72:ARG:HG2	1.86	0.41
5:AF:42:TRP:CD1	5:AF:42:TRP:N	2.89	0.41
7:AH:36:ALA:HA	7:AH:39:LEU:HD12	2.02	0.41
8:AI:81:GLY:O	8:AI:84:ARG:HB2	2.20	0.41
9:AJ:8:ILE:HB	9:AJ:74:VAL:HB	2.02	0.41
9:AJ:15:HIS:O	9:AJ:18:ILE:HG22	2.21	0.41
12:AM:77:LYS:O	12:AM:78:ARG:C	2.63	0.41
13:AN:40:ARG:NH2	18:AS:6:LYS:CG	2.84	0.41
14:AO:78:TYR:O	14:AO:82:ILE:HG13	2.20	0.41
16:AQ:39:ARG:HH11	16:AQ:39:ARG:HG3	1.85	0.41
17:AR:28:LEU:C	17:AR:30:ASN:N	2.77	0.41
20:AB:53:LEU:CD1	20:AB:216:VAL:HG12	2.47	0.41
23:BB:319:G:H2'	23:BB:320:A:O4'	2.21	0.41
23:BB:378:C:C2'	23:BB:379:G:H5'	2.50	0.41
23:BB:632:A:H2'	23:BB:633:A:C8	2.56	0.41
23:BB:633:A:OP1	37:BL:68:SER:HB2	2.20	0.41
23:BB:1057:A:H62	23:BB:1086:A:H2'	1.85	0.41
23:BB:1064:C:O2'	23:BB:1065:U:H5'	2.20	0.41
23:BB:1418:G:C2'	23:BB:1580:A:H61	2.34	0.41
23:BB:1803:A:H3'	23:BB:1804:C:H6	1.84	0.41
23:BB:1848:A:H2'	23:BB:1849:G:C8	2.56	0.41
23:BB:2517:C:C2	23:BB:2542:A:N6	2.88	0.41
25:BC:30:ALA:O	25:BC:32:LEU:N	2.53	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BC:173:LEU:O	25:BC:173:LEU:HD23	2.21	0.41
25:BC:184:GLU:O	25:BC:185:ALA:HB3	2.20	0.41
27:BK:47:ILE:HG23	27:BK:48:PRO:N	2.34	0.41
28:BP:74:GLN:O	28:BP:75:THR:C	2.63	0.41
29:BE:28:VAL:HG23	29:BE:29:HIS:N	2.36	0.41
33:B1:33:LEU:HD12	33:B1:34:GLU:H	1.84	0.41
35:BV:80:HIS:HB3	35:BV:83:LYS:O	2.20	0.41
38:BM:69:PRO:C	38:BM:71:LYS:H	2.29	0.41
42:BN:12:ARG:HG3	42:BN:13:ASN:N	2.36	0.41
42:BN:60:VAL:O	42:BN:63:ARG:HB3	2.20	0.41
42:BN:87:PHE:C	42:BN:89:SER:H	2.28	0.41
45:BS:8:ARG:HB3	45:BS:102:HIS:CE1	2.55	0.41
46:BU:14:THR:HB	46:BU:68:ASN:HB3	2.03	0.41
47:BF:1:ALA:CA	47:BF:4:HIS:HB3	2.51	0.41
47:BF:49:LEU:C	47:BF:49:LEU:HD13	2.46	0.41
48:BG:17:LYS:O	48:BG:23:ILE:HG23	2.20	0.41
48:BG:28:LYS:O	48:BG:30:GLY:N	2.53	0.41
48:BG:30:GLY:CA	48:BG:78:VAL:HA	2.46	0.41
48:BG:32:LEU:HB3	48:BG:34:ARG:NE	2.35	0.41
48:BG:70:LEU:HD22	48:BG:70:LEU:HA	1.93	0.41
48:BG:154:GLU:O	48:BG:158:GLY:N	2.54	0.41
49:BR:43:ASN:ND2	49:BR:44:GLY:N	2.68	0.41
51:BZ:52:SER:O	51:BZ:53:ALA:C	2.63	0.41
52:BW:41:GLY:HA2	52:BW:44:PHE:CE2	2.55	0.41
52:BW:45:HIS:ND1	52:BW:45:HIS:N	2.66	0.41
1:CA:93:U:C2'	1:CA:94:G:H5'	2.50	0.41
1:CA:437:U:H4'	3:CD:153:ARG:HH12	1.85	0.41
1:CA:538:G:H2'	1:CA:539:A:C8	2.55	0.41
1:CA:724:G:O2'	1:CA:725:G:H5'	2.20	0.41
1:CA:814:A:C5'	1:CA:1511:G:H4'	2.49	0.41
1:CA:1020:G:H2'	1:CA:1021:A:C5'	2.50	0.41
2:CC:78:LYS:HG3	2:CC:81:GLU:HB3	2.01	0.41
5:CF:16:GLU:CD	5:CF:16:GLU:N	2.75	0.41
5:CF:18:VAL:HG21	5:CF:58:HIS:CG	2.55	0.41
7:CH:4:ASP:HB2	7:CH:80:PRO:HG3	2.03	0.41
9:CJ:51:VAL:O	9:CJ:63:ASP:N	2.53	0.41
13:CN:20:PHE:CG	13:CN:24:ALA:HB2	2.55	0.41
15:CP:20:VAL:HG23	15:CP:35:ARG:CA	2.49	0.41
19:CT:26:MET:HE1	19:CT:56:ILE:HG23	2.02	0.41
20:CB:18:GLN:O	20:CB:37:VAL:HG23	2.20	0.41
22:DA:67:G:O2'	22:DA:68:C:H5'	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:129:C:H2'	23:DB:130:C:C6	2.55	0.41
23:DB:154:U:O2'	23:DB:155:A:H5'	2.19	0.41
23:DB:163:C:O2	23:DB:163:C:O4'	2.38	0.41
23:DB:388:G:N7	23:DB:390:U:H2'	2.35	0.41
23:DB:876:C:H2'	23:DB:877:A:O4'	2.21	0.41
23:DB:1174:U:H1'	23:DB:1176:U:C1'	2.49	0.41
23:DB:1248:G:C4	44:DQ:2:ARG:HD2	2.56	0.41
23:DB:1299:G:N2	23:DB:1640:A:C8	2.88	0.41
23:DB:1430:G:H2'	23:DB:1431:A:C8	2.55	0.41
23:DB:1495:A:O2'	23:DB:1496:A:H5'	2.21	0.41
23:DB:2320:U:O2'	23:DB:2322:A:N7	2.48	0.41
23:DB:2465:C:O2'	23:DB:2466:C:H5'	2.19	0.41
23:DB:2569:G:O2'	23:DB:2570:G:H5'	2.20	0.41
23:DB:2783:U:H2'	23:DB:2784:U:H6	1.82	0.41
23:DB:2808:G:O2'	23:DB:2809:A:H8	2.04	0.41
25:DC:6:LYS:O	25:DC:8:THR:N	2.52	0.41
25:DC:32:LEU:O	25:DC:63:ILE:HG12	2.21	0.41
25:DC:92:LEU:HD12	25:DC:92:LEU:HA	1.90	0.41
25:DC:120:ASP:OD2	25:DC:120:ASP:N	2.51	0.41
25:DC:142:ASN:HA	25:DC:153:LEU:O	2.20	0.41
27:DK:30:ARG:HH11	27:DK:30:ARG:HG2	1.85	0.41
29:DE:119:ILE:HD11	29:DE:185:LYS:CE	2.50	0.41
29:DE:160:ALA:C	29:DE:162:ARG:N	2.79	0.41
30:DY:7:THR:HG22	30:DY:8:GLN:N	2.36	0.41
32:D4:25:VAL:HG11	32:D4:35:GLN:NE2	2.36	0.41
34:D3:7:ARG:HH11	34:D3:7:ARG:HG3	1.85	0.41
37:DL:56:PRO:O	37:DL:60:ARG:HG3	2.20	0.41
38:DM:11:LYS:HD2	38:DM:86:LYS:HG2	2.02	0.41
38:DM:35:ALA:C	38:DM:36:VAL:HG23	2.46	0.41
44:DQ:23:TYR:HB2	44:DQ:28:SER:OG	2.21	0.41
46:DU:11:ILE:CG2	46:DU:12:VAL:N	2.83	0.41
47:DF:31:GLU:HB2	47:DF:158:THR:HG23	2.03	0.41
48:DG:110:HIS:HA	48:DG:111:PRO:HD3	1.95	0.41
51:DZ:52:SER:O	51:DZ:53:ALA:C	2.63	0.41
1:AA:85:U:O2'	1:AA:86:G:H5''	2.21	0.41
1:AA:409:U:H2'	1:AA:410:G:C8	2.55	0.41
1:AA:992:U:H1'	1:AA:993:G:C2	2.55	0.41
1:AA:1009:U:H2'	1:AA:1010:U:C5	2.56	0.41
1:AA:1020:G:H2'	1:AA:1021:A:C5'	2.50	0.41
1:AA:1024:G:O2'	1:AA:1025:U:H5'	2.20	0.41
1:AA:1375:A:H2'	1:AA:1376:U:H6	1.86	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AC:57:GLU:H	2:AC:64:ARG:HB3	1.84	0.41
4:AE:154:ALA:HB1	7:AH:65:PHE:CZ	2.55	0.41
7:AH:49:LYS:HB3	7:AH:59:GLU:OE2	2.21	0.41
11:AL:82:ARG:HG2	11:AL:82:ARG:NH1	2.33	0.41
13:AN:9:GLU:HB2	13:AN:62:ARG:NE	2.36	0.41
17:AR:28:LEU:C	17:AR:30:ASN:H	2.29	0.41
18:AS:38:THR:HG23	18:AS:69:LYS:CE	2.51	0.41
18:AS:40:PHE:HB2	18:AS:42:ASN:ND2	2.35	0.41
18:AS:61:VAL:HG12	18:AS:62:THR:N	2.36	0.41
19:AT:66:ILE:HG22	19:AT:67:HIS:N	2.34	0.41
22:BA:98:G:N1	35:BV:14:LYS:HB2	2.31	0.41
23:BB:172:A:O2'	23:BB:173:A:H5'	2.20	0.41
23:BB:268:C:O2	23:BB:268:C:H2'	2.20	0.41
23:BB:519:U:H2'	23:BB:520:G:H8	1.85	0.41
23:BB:627:A:H4'	23:BB:628:G:OP1	2.20	0.41
23:BB:866:A:H61	23:BB:913:U:C1'	2.33	0.41
23:BB:1210:G:N3	23:BB:1212:G:N2	2.68	0.41
23:BB:1789:A:H2'	23:BB:1790:C:C6	2.55	0.41
23:BB:1973:G:O2'	23:BB:1974:C:H5'	2.20	0.41
23:BB:2267:A:C8	23:BB:2267:A:C4'	3.03	0.41
23:BB:2394:C:H2'	23:BB:2395:C:C6	2.56	0.41
23:BB:2520:C:C6	23:BB:2567:G:H1'	2.55	0.41
23:BB:2552:U:C2	23:BB:2554:U:H5'	2.56	0.41
23:BB:2602:A:OP1	23:BB:2602:A:H3'	2.21	0.41
23:BB:2786:U:H4'	26:BD:66:GLY:O	2.21	0.41
23:BB:2817:U:O2	23:BB:2836:U:H1'	2.20	0.41
25:BC:64:VAL:HG12	25:BC:65:ASP:N	2.35	0.41
25:BC:142:ASN:HA	25:BC:153:LEU:O	2.20	0.41
25:BC:250:GLN:HG2	25:BC:254:LYS:HG2	2.02	0.41
26:BD:30:GLU:HA	26:BD:185:ASN:CG	2.46	0.41
27:BK:77:ILE:HG12	28:BP:71:ARG:HD2	2.02	0.41
27:BK:119:ALA:O	27:BK:120:PRO:O	2.39	0.41
28:BP:13:LYS:CD	28:BP:76:HIS:HA	2.49	0.41
30:BY:5:LYS:HE2	30:BY:5:LYS:N	2.35	0.41
30:BY:7:THR:HG22	30:BY:8:GLN:N	2.35	0.41
38:BM:18:ARG:CA	38:BM:38:ARG:HH22	2.33	0.41
38:BM:21:ALA:HB1	38:BM:100:LYS:HE2	2.02	0.41
38:BM:53:MET:HE1	38:BM:103:TYR:CE2	2.55	0.41
40:BH:106:ALA:O	40:BH:108:VAL:N	2.52	0.41
41:BJ:55:ILE:CB	41:BJ:123:LYS:HB2	2.50	0.41
43:BO:88:LYS:HG2	43:BO:116:GLN:HB2	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BU:81:ARG:NH2	46:BU:81:ARG:HG3	2.35	0.41
46:BU:94:PHE:HA	46:BU:101:THR:HA	2.01	0.41
49:BR:79:ARG:C	49:BR:81:LYS:H	2.28	0.41
1:CA:210:C:H1'	1:CA:211:G:C2	2.56	0.41
1:CA:334:C:H2'	1:CA:335:C:H6	1.85	0.41
1:CA:359:G:H2'	1:CA:360:G:O4'	2.20	0.41
1:CA:404:G:H4'	1:CA:439:U:O2	2.20	0.41
1:CA:884:U:H4'	1:CA:885:G:H5''	2.03	0.41
1:CA:1080:A:H5''	4:CE:20:VAL:HG11	2.02	0.41
2:CC:111:ASP:O	2:CC:115:VAL:HG23	2.21	0.41
2:CC:116:ALA:O	2:CC:117:ASP:C	2.63	0.41
3:CD:1:ALA:O	3:CD:2:ARG:HG2	2.20	0.41
3:CD:22:SER:CB	3:CD:109:THR:HG22	2.46	0.41
4:CE:52:ALA:HB2	4:CE:61:LYS:CE	2.40	0.41
5:CF:11:HIS:CG	5:CF:12:PRO:HD2	2.55	0.41
7:CH:4:ASP:OD1	7:CH:7:ALA:HB2	2.20	0.41
8:CI:36:GLN:HE21	8:CI:36:GLN:N	2.17	0.41
8:CI:41:GLU:C	8:CI:43:ALA:N	2.78	0.41
8:CI:66:VAL:HG22	8:CI:67:LYS:N	2.35	0.41
9:CJ:15:HIS:O	9:CJ:18:ILE:HG22	2.19	0.41
10:CK:16:SER:CA	10:CK:78:ILE:HA	2.50	0.41
13:CN:17:ASP:O	13:CN:21:ALA:HB3	2.20	0.41
13:CN:26:LEU:HD21	13:CN:44:VAL:HG13	2.01	0.41
13:CN:60:ARG:NH1	13:CN:62:ARG:CZ	2.83	0.41
13:CN:79:SER:OG	13:CN:82:LYS:HG2	2.20	0.41
18:CS:38:THR:HA	18:CS:68:HIS:O	2.21	0.41
18:CS:40:PHE:O	18:CS:43:MET:HG2	2.21	0.41
19:CT:32:LYS:O	19:CT:33:LYS:C	2.63	0.41
19:CT:43:LYS:HB3	19:CT:85:LEU:HD21	2.02	0.41
20:CB:116:LEU:HB3	20:CB:140:LEU:CG	2.50	0.41
23:DB:138:U:O4'	50:DT:1:MET:HA	2.20	0.41
23:DB:311:A:H3'	23:DB:312:G:C8	2.55	0.41
23:DB:531:C:O2'	23:DB:563:A:H5''	2.20	0.41
23:DB:627:A:H4'	23:DB:628:G:OP1	2.20	0.41
23:DB:675:A:N3	23:DB:2443:C:O2'	2.51	0.41
23:DB:710:U:O2'	23:DB:711:G:H5'	2.20	0.41
23:DB:826:U:H2'	23:DB:828:U:O4'	2.21	0.41
23:DB:971:G:OP2	23:DB:974:G:N2	2.54	0.41
23:DB:991:C:H5''	23:DB:1185:G:H2'	2.03	0.41
23:DB:1163:G:H4'	49:DR:92:TRP:CD1	2.56	0.41
23:DB:1203:U:H4'	37:DL:3:LEU:HD12	2.01	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:1803:A:H3'	23:DB:1804:C:H6	1.85	0.41
23:DB:2199:A:H5''	23:DB:2200:C:H5	1.84	0.41
23:DB:2330:G:N2	52:DW:38:ARG:O	2.51	0.41
23:DB:2606:C:O2'	23:DB:2607:G:H5'	2.21	0.41
23:DB:2723:C:C5'	42:DN:1:MET:HE2	2.44	0.41
23:DB:2846:G:OP1	28:DP:52:ARG:NH1	2.52	0.41
24:DI:52:LEU:HD13	24:DI:81:LYS:NZ	2.35	0.41
24:DI:53:PRO:HG2	24:DI:77:VAL:HG11	2.01	0.41
25:DC:141:HIS:CG	25:DC:142:ASN:N	2.87	0.41
29:DE:194:LYS:O	29:DE:197:GLU:HB3	2.20	0.41
35:DV:1:MET:HG2	35:DV:59:GLU:CD	2.45	0.41
35:DV:44:HIS:O	35:DV:45:ASP:C	2.63	0.41
36:D2:25:LYS:C	36:D2:27:GLY:N	2.76	0.41
36:D2:31:LEU:CD2	36:D2:42:LEU:HD12	2.44	0.41
37:DL:19:LEU:HD12	37:DL:19:LEU:N	2.35	0.41
37:DL:118:THR:O	37:DL:120:VAL:HG23	2.20	0.41
39:DX:36:GLN:HB2	39:DX:37:LEU:H	1.49	0.41
40:DH:43:ASN:C	40:DH:45:GLU:N	2.78	0.41
41:DJ:43:GLU:O	41:DJ:44:TYR:C	2.63	0.41
42:DN:17:ARG:NH2	42:DN:17:ARG:HB2	2.34	0.41
43:DO:35:ILE:HG13	43:DO:71:ALA:HB2	2.02	0.41
43:DO:115:LEU:HD13	43:DO:116:GLN:H	1.85	0.41
46:DU:18:LYS:HB3	46:DU:19:GLY:H	1.61	0.41
46:DU:25:LYS:N	46:DU:34:ILE:O	2.52	0.41
47:DF:42:ALA:O	47:DF:44:ALA:N	2.53	0.41
47:DF:122:ASP:HB3	47:DF:123:GLY:H	1.70	0.41
48:DG:129:GLU:C	48:DG:130:ILE:HG13	2.44	0.41
48:DG:157:LYS:HB3	48:DG:159:LYS:HG2	2.03	0.41
52:DW:27:GLY:O	52:DW:63:ASP:HA	2.21	0.41
1:AA:86:G:N3	1:AA:87:C:N4	2.67	0.41
1:AA:130:A:N1	1:AA:233:C:H1'	2.36	0.41
1:AA:279:A:C5'	1:AA:280:C:H3'	2.48	0.41
1:AA:376:G:O3'	15:AP:5:ARG:HD3	2.21	0.41
1:AA:409:U:O2'	1:AA:410:G:H5'	2.21	0.41
1:AA:696:A:H1'	1:AA:786:G:O2'	2.20	0.41
1:AA:921:U:H2'	1:AA:922:G:C8	2.56	0.41
1:AA:957:U:H2'	1:AA:959:A:OP2	2.20	0.41
1:AA:1095:U:H2'	1:AA:1096:C:C6	2.56	0.41
1:AA:1231:G:O2'	1:AA:1232:U:H5'	2.20	0.41
1:AA:1277:C:O2'	1:AA:1279:G:C8	2.73	0.41
1:AA:1396:A:O4'	1:AA:1398:A:H1'	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AC:116:ALA:HA	2:AC:119:ILE:HG22	2.01	0.41
3:AD:199:ILE:CG1	3:AD:200:VAL:N	2.84	0.41
4:AE:39:GLY:HA3	4:AE:116:VAL:HB	2.02	0.41
8:AI:87:MET:HE2	8:AI:88:GLU:HA	2.02	0.41
11:AL:34:THR:N	11:AL:53:ARG:O	2.53	0.41
11:AL:35:ARG:HG3	11:AL:36:VAL:H	1.85	0.41
12:AM:33:LEU:HD13	12:AM:39:ALA:O	2.21	0.41
13:AN:17:ASP:C	13:AN:19:TYR:N	2.78	0.41
18:AS:35:ARG:HB3	18:AS:50:VAL:HG13	2.01	0.41
22:BA:28:C:H5	22:BA:56:G:N1	2.14	0.41
23:BB:165:A:H2'	23:BB:166:U:O4'	2.20	0.41
23:BB:278:A:N3	23:BB:278:A:C2'	2.84	0.41
23:BB:308:G:H2'	23:BB:309:A:O4'	2.21	0.41
23:BB:327:G:H2'	23:BB:328:U:O4'	2.20	0.41
23:BB:509:C:H5''	23:BB:510:C:OP2	2.20	0.41
23:BB:683:U:H6	23:BB:683:U:O5'	2.03	0.41
23:BB:996:A:H4'	44:BQ:91:ARG:CG	2.49	0.41
23:BB:1011:G:O2'	23:BB:1013:C:H5''	2.21	0.41
23:BB:1351:C:H2'	23:BB:1352:U:O4'	2.20	0.41
23:BB:1376:C:H5''	56:BB:3504:HOH:O	2.20	0.41
23:BB:1430:G:H2'	23:BB:1431:A:C8	2.56	0.41
23:BB:1739:A:H2'	23:BB:1740:G:O4'	2.20	0.41
23:BB:1760:C:H2'	23:BB:1761:C:O4'	2.19	0.41
23:BB:1799:G:N2	23:BB:1818:U:O2'	2.53	0.41
23:BB:2026:U:H2'	23:BB:2027:G:O4'	2.21	0.41
23:BB:2086:U:H2'	23:BB:2087:G:H8	1.84	0.41
23:BB:2199:A:O2'	51:BZ:36:HIS:HE1	2.03	0.41
23:BB:2338:C:O2'	23:BB:2339:C:H5'	2.20	0.41
29:BE:60:TRP:CZ2	29:BE:62:GLN:NE2	2.89	0.41
31:B0:32:THR:OG1	31:B0:50:GLY:HA2	2.21	0.41
36:B2:6:GLN:HA	36:B2:6:GLN:NE2	2.35	0.41
40:BH:7:ASP:HA	40:BH:15:LEU:CD2	2.40	0.41
40:BH:99:ILE:CD1	40:BH:144:VAL:HG21	2.50	0.41
40:BH:114:GLU:HA	40:BH:133:GLN:O	2.21	0.41
41:BJ:45:THR:N	41:BJ:46:PRO:CD	2.83	0.41
44:BQ:63:ARG:O	44:BQ:64:ILE:C	2.62	0.41
47:BF:12:VAL:HG13	47:BF:27:VAL:HG21	2.01	0.41
47:BF:20:ASN:O	47:BF:20:ASN:CG	2.64	0.41
48:BG:93:TYR:HE1	48:BG:160:GLY:HA2	1.85	0.41
48:BG:170:THR:O	48:BG:171:LYS:HD3	2.21	0.41
52:BW:49:ASN:HB3	52:BW:81:ILE:CD1	2.51	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:130:A:N1	1:CA:233:C:H1'	2.35	0.41
1:CA:372:C:H4'	1:CA:373:A:H5'	2.02	0.41
1:CA:676:A:H2'	1:CA:677:U:H6	1.85	0.41
1:CA:921:U:H2'	1:CA:922:G:O4'	2.21	0.41
1:CA:958:A:N1	18:CS:53:GLY:C	2.79	0.41
1:CA:1084:G:H5'	1:CA:1102:A:OP2	2.20	0.41
1:CA:1099:G:P	20:CB:94:ARG:HD3	2.61	0.41
1:CA:1187:G:P	8:CI:114:LYS:HE3	2.61	0.41
1:CA:1254:A:H5'	1:CA:1356:G:H4'	2.02	0.41
1:CA:1341:U:O2'	1:CA:1342:C:H5'	2.21	0.41
1:CA:1396:A:O4'	1:CA:1398:A:H1'	2.21	0.41
6:CG:52:ARG:H	6:CG:52:ARG:HG3	1.73	0.41
8:CI:38:PHE:HB3	8:CI:43:ALA:HB3	2.03	0.41
8:CI:87:MET:HE2	8:CI:87:MET:C	2.46	0.41
9:CJ:53:ILE:HG23	9:CJ:61:ALA:HB1	2.02	0.41
12:CM:22:TYR:HB3	12:CM:69:ARG:NH2	2.34	0.41
13:CN:50:LEU:HB3	13:CN:51:PRO:HD3	2.02	0.41
18:CS:11:ASP:OD1	18:CS:34:SER:HB2	2.21	0.41
20:CB:55:GLU:O	20:CB:58:LYS:HB3	2.20	0.41
20:CB:82:ALA:CB	20:CB:213:LEU:HD22	2.50	0.41
20:CB:172:ILE:H	20:CB:172:ILE:HG13	1.72	0.41
23:DB:58:G:O2'	23:DB:73:A:N1	2.51	0.41
23:DB:163:C:H5'	23:DB:163:C:O2	2.20	0.41
23:DB:207:A:H2'	23:DB:208:C:O4'	2.20	0.41
23:DB:272:A:H2'	23:DB:273:G:C8	2.56	0.41
23:DB:633:A:H2'	23:DB:634:C:H5'	2.01	0.41
23:DB:863:A:O2'	23:DB:864:G:H5'	2.20	0.41
23:DB:936:A:H2'	23:DB:937:C:H6	1.86	0.41
23:DB:1146:C:H2'	23:DB:1147:A:H8	1.85	0.41
23:DB:1739:A:H2'	23:DB:1740:G:C8	2.56	0.41
23:DB:1863:G:H2'	23:DB:1864:U:O4'	2.20	0.41
23:DB:2073:C:O2'	23:DB:2074:U:H5'	2.20	0.41
23:DB:2247:A:H2'	23:DB:2248:C:H6	1.85	0.41
23:DB:2483:C:H2'	23:DB:2484:G:O4'	2.21	0.41
23:DB:2523:G:C2'	23:DB:2524:G:H5'	2.51	0.41
25:DC:245:THR:C	25:DC:247:TRP:N	2.79	0.41
27:DK:35:VAL:HG12	27:DK:69:VAL:HG22	2.02	0.41
28:DP:16:VAL:O	28:DP:16:VAL:HG23	2.21	0.41
28:DP:50:ARG:O	28:DP:51:ASN:HB2	2.21	0.41
28:DP:74:GLN:O	28:DP:75:THR:C	2.63	0.41
29:DE:192:ALA:CA	29:DE:195:GLN:HE21	2.30	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:DE:195:GLN:C	29:DE:197:GLU:H	2.27	0.41
30:DY:5:LYS:HE2	30:DY:5:LYS:H	1.86	0.41
31:D0:49:ARG:O	31:D0:51:ARG:NE	2.53	0.41
37:DL:51:GLU:CD	37:DL:60:ARG:NH1	2.79	0.41
38:DM:41:LEU:HB3	38:DM:46:ILE:HG22	2.02	0.41
40:DH:26:ALA:HA	40:DH:31:VAL:HG23	2.03	0.41
40:DH:88:GLY:H	40:DH:89:LYS:HD2	1.85	0.41
40:DH:117:LEU:HG	40:DH:119:ASN:O	2.21	0.41
41:DJ:6:ALA:CB	41:DJ:45:THR:HG21	2.49	0.41
42:DN:12:ARG:HG3	42:DN:13:ASN:H	1.84	0.41
44:DQ:59:LEU:HD13	44:DQ:60:TRP:N	2.35	0.41
44:DQ:93:ILE:HG23	44:DQ:94:LEU:N	2.36	0.41
45:DS:83:LYS:HD3	45:DS:97:LEU:CD1	2.46	0.41
47:DF:20:ASN:O	47:DF:20:ASN:CG	2.64	0.41
48:DG:26:LYS:CB	48:DG:32:LEU:HG	2.45	0.41
48:DG:102:ILE:CD1	48:DG:116:LEU:HD11	2.51	0.41
49:DR:19:THR:HB	49:DR:97:LYS:HA	2.02	0.41
50:DT:30:ILE:O	50:DT:85:VAL:HG23	2.20	0.41
51:DZ:77:LYS:CD	51:DZ:78:TYR:H	2.30	0.41
52:DW:49:ASN:HA	52:DW:61:LYS:HB2	2.03	0.41
1:AA:175:C:H2'	1:AA:176:C:C6	2.56	0.41
1:AA:204:G:N3	1:AA:466:A:N6	2.69	0.41
1:AA:322:C:H2'	1:AA:323:U:C6	2.55	0.41
1:AA:424:G:O2'	1:AA:425:G:H5'	2.20	0.41
1:AA:632:U:H5''	1:AA:633:G:C8	2.55	0.41
1:AA:692:U:O2	1:AA:694:A:H5''	2.21	0.41
1:AA:734:G:N2	17:AR:63:TYR:HE1	2.13	0.41
1:AA:747:A:H2'	1:AA:748:G:O4'	2.21	0.41
1:AA:1107:C:OP1	2:AC:171:ARG:HB2	2.20	0.41
1:AA:1217:C:H2'	1:AA:1218:C:C6	2.55	0.41
2:AC:4:VAL:HG22	2:AC:5:HIS:N	2.35	0.41
2:AC:60:ALA:C	2:AC:62:SER:H	2.29	0.41
4:AE:39:GLY:HA2	4:AE:44:ARG:O	2.20	0.41
5:AF:49:TYR:CE2	5:AF:51:ILE:HB	2.55	0.41
8:AI:108:ARG:H	8:AI:108:ARG:HG2	1.43	0.41
9:AJ:10:LEU:HD23	9:AJ:98:VAL:HG12	2.02	0.41
9:AJ:24:GLU:CG	9:AJ:90:LEU:HD11	2.51	0.41
9:AJ:59:LYS:HB2	9:AJ:62:ARG:NH2	2.35	0.41
12:AM:33:LEU:CD2	12:AM:38:ILE:HB	2.51	0.41
14:AO:88:ARG:O	14:AO:89:ARG:HB2	2.21	0.41
15:AP:2:VAL:O	15:AP:65:ALA:HA	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:AR:22:TYR:CZ	17:AR:23:LYS:HE3	2.56	0.41
18:AS:18:VAL:HG13	18:AS:19:GLU:N	2.35	0.41
20:AB:82:ALA:CB	20:AB:213:LEU:HD22	2.49	0.41
20:AB:98:GLY:HA2	20:AB:174:GLU:OE1	2.20	0.41
22:BA:89:U:C2	23:BB:958:U:H2'	2.55	0.41
22:BA:94:A:OP1	35:BV:19:ARG:HD3	2.20	0.41
22:BA:95:U:H2'	22:BA:96:G:H8	1.84	0.41
23:BB:10:A:H61	23:BB:2895:G:H1'	1.84	0.41
23:BB:160:A:H1'	23:BB:2208:C:O2'	2.20	0.41
23:BB:235:U:H2'	23:BB:236:C:H6	1.86	0.41
23:BB:247:G:H4'	23:BB:386:G:C4	2.55	0.41
23:BB:483:A:H2'	23:BB:484:C:O4'	2.20	0.41
23:BB:738:G:O2'	23:BB:739:A:H5'	2.20	0.41
23:BB:850:U:O2'	30:BY:22:THR:HG22	2.20	0.41
23:BB:855:G:C2	52:BW:23:LYS:HG2	2.53	0.41
23:BB:912:C:O2'	23:BB:913:U:H5'	2.21	0.41
23:BB:1568:G:H4'	25:BC:58:LYS:CB	2.49	0.41
23:BB:1750:G:H2'	23:BB:1751:U:C6	2.56	0.41
23:BB:1830:C:H2'	23:BB:1831:G:C8	2.55	0.41
23:BB:1936:A:H2	23:BB:1943:U:O4	2.04	0.41
23:BB:1965:C:H5''	23:BB:1966:A:H2'	2.01	0.41
23:BB:2590:A:O2'	23:BB:2591:C:H5'	2.20	0.41
23:BB:2867:G:H2'	23:BB:2868:A:OP2	2.21	0.41
25:BC:80:LEU:CD1	25:BC:109:LEU:HG	2.41	0.41
25:BC:171:VAL:HB	25:BC:183:VAL:HG12	2.03	0.41
25:BC:221:GLY:C	25:BC:223:ALA:N	2.78	0.41
26:BD:23:PRO:O	26:BD:24:VAL:HB	2.20	0.41
26:BD:119:ALA:CB	26:BD:163:GLY:C	2.94	0.41
30:BY:33:HIS:O	30:BY:34:THR:HB	2.21	0.41
34:B3:31:ILE:O	34:B3:31:ILE:HG12	2.21	0.41
35:BV:6:ALA:HB2	35:BV:42:LEU:HB3	2.01	0.41
38:BM:123:LYS:H	38:BM:123:LYS:HG2	1.71	0.41
40:BH:30:LEU:O	40:BH:36:ALA:HB3	2.21	0.41
41:BJ:7:LYS:C	41:BJ:9:GLU:H	2.28	0.41
41:BJ:11:VAL:HG21	41:BJ:13:ARG:NH1	2.36	0.41
41:BJ:54:ILE:HD12	41:BJ:55:ILE:H	1.86	0.41
43:BO:115:LEU:HD13	43:BO:116:GLN:H	1.86	0.41
46:BU:73:ASN:HD22	46:BU:74:ALA:H	1.68	0.41
47:BF:133:GLU:HA	47:BF:150:GLY:HA2	2.03	0.41
48:BG:133:LYS:HD3	48:BG:133:LYS:H	1.85	0.41
51:BZ:45:ARG:HE	51:BZ:47:VAL:CG1	2.27	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:209:U:H5'	1:CA:210:C:C5	2.55	0.41
1:CA:408:A:H3'	1:CA:409:U:H6	1.86	0.41
1:CA:940:C:H2'	1:CA:941:G:C8	2.56	0.41
1:CA:1009:U:H2'	1:CA:1009:U:O2	2.19	0.41
1:CA:1226:C:OP2	12:CM:101:THR:HG21	2.20	0.41
1:CA:1260:G:P	1:CA:1284:C:H4'	2.61	0.41
6:CG:145:GLU:C	6:CG:148:LYS:H	2.29	0.41
7:CH:24:VAL:HG22	7:CH:25:THR:N	2.36	0.41
15:CP:26:ASN:HD21	15:CP:31:ARG:HD3	1.85	0.41
18:CS:62:THR:HG22	18:CS:63:ASP:H	1.85	0.41
20:CB:23:ASN:C	20:CB:25:LYS:H	2.29	0.41
20:CB:23:ASN:O	20:CB:25:LYS:N	2.54	0.41
20:CB:68:PHE:N	20:CB:68:PHE:CD1	2.88	0.41
23:DB:510:C:C2'	23:DB:511:U:H5'	2.50	0.41
23:DB:844:A:C2	23:DB:845:A:N1	2.89	0.41
23:DB:1161:C:H4'	49:DR:8:GLY:O	2.21	0.41
23:DB:1204:A:N1	23:DB:1241:A:C2	2.88	0.41
23:DB:1304:A:O2'	23:DB:1305:C:H5'	2.21	0.41
23:DB:1824:G:H2'	23:DB:1825:U:H6	1.85	0.41
23:DB:2094:A:P	40:DH:22:LYS:HD2	2.61	0.41
23:DB:2106:U:C2'	23:DB:2107:G:OP1	2.69	0.41
23:DB:2778:A:O2'	23:DB:2781:A:H5'	2.21	0.41
23:DB:2886:A:H62	31:D0:39:ARG:CZ	2.33	0.41
24:DI:14:ALA:HB3	24:DI:51:GLY:H	1.86	0.41
24:DI:73:PRO:HA	24:DI:74:PRO:HD3	1.93	0.41
26:DD:114:LYS:CG	26:DD:115:GLY:H	2.34	0.41
30:DY:7:THR:O	30:DY:54:VAL:HG12	2.21	0.41
30:DY:13:ILE:HG22	30:DY:14:GLY:N	2.36	0.41
30:DY:37:ARG:HG3	30:DY:38:GLU:OE1	2.20	0.41
41:DJ:25:LEU:O	41:DJ:27:ARG:N	2.51	0.41
41:DJ:40:HIS:CE1	41:DJ:41:LYS:HE3	2.50	0.41
41:DJ:114:LEU:O	41:DJ:118:MET:HG3	2.19	0.41
42:DN:79:LEU:HA	42:DN:83:LEU:HD12	2.02	0.41
43:DO:18:LEU:HD23	43:DO:25:ARG:HD3	2.01	0.41
44:DQ:63:ARG:NH1	44:DQ:96:ASP:HA	2.36	0.41
45:DS:60:HIS:O	45:DS:60:HIS:CG	2.74	0.41
49:DR:97:LYS:O	49:DR:98:ILE:HB	2.20	0.41
50:DT:1:MET:HB2	50:DT:2:ILE:HD13	2.02	0.41
50:DT:18:GLU:C	50:DT:20:ALA:N	2.75	0.41
1:AA:93:U:OP1	1:AA:94:G:OP2	2.39	0.41
1:AA:308:C:H2'	1:AA:309:A:C8	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:439:U:O3'	3:AD:120:LYS:NZ	2.54	0.41
1:AA:791:G:C6	1:AA:792:A:N7	2.89	0.41
1:AA:827:U:H2'	1:AA:870:U:O4	2.21	0.41
1:AA:1363:A:N3	1:AA:1363:A:H2'	2.35	0.41
1:AA:1394:A:C5	1:AA:1501:C:H4'	2.56	0.41
1:AA:1458:G:H5''	19:AT:25:SER:HB2	2.03	0.41
3:AD:39:GLN:HG3	3:AD:40:HIS:N	2.36	0.41
3:AD:171:GLU:O	3:AD:179:GLY:HA2	2.21	0.41
5:AF:15:SER:HA	5:AF:18:VAL:HG23	2.03	0.41
5:AF:81:ASN:O	5:AF:82:ASP:C	2.64	0.41
6:AG:22:LEU:O	6:AG:25:PHE:HB3	2.21	0.41
8:AI:114:LYS:H	8:AI:120:ALA:HA	1.86	0.41
9:AJ:53:ILE:HG23	9:AJ:54:SER:H	1.86	0.41
9:AJ:57:VAL:HG22	9:AJ:58:ASN:N	2.30	0.41
10:AK:31:VAL:HG11	10:AK:95:THR:OG1	2.20	0.41
12:AM:38:ILE:HG13	12:AM:55:LEU:HD21	2.02	0.41
14:AO:45:GLU:HG2	14:AO:46:HIS:N	2.36	0.41
18:AS:57:VAL:HG23	18:AS:59:VAL:HG13	2.03	0.41
19:AT:54:GLN:N	19:AT:55:PRO:CD	2.84	0.41
20:AB:23:ASN:C	20:AB:25:LYS:H	2.28	0.41
20:AB:116:LEU:HB3	20:AB:140:LEU:HG	2.03	0.41
20:AB:118:THR:HA	20:AB:121:GLN:CB	2.50	0.41
23:BB:225:C:H2'	23:BB:226:A:O4'	2.21	0.41
23:BB:587:C:C6	23:BB:671:C:H1'	2.56	0.41
23:BB:715:A:H2'	23:BB:716:A:C8	2.55	0.41
23:BB:1434:A:N6	23:BB:1558:C:H42	2.19	0.41
23:BB:1475:G:H4'	23:BB:1476:U:O5'	2.21	0.41
23:BB:1846:G:N2	23:BB:1848:A:N6	2.69	0.41
23:BB:2041:U:H2'	23:BB:2042:A:C8	2.55	0.41
23:BB:2223:G:C2'	23:BB:2224:G:H5'	2.51	0.41
23:BB:2320:U:O2'	23:BB:2322:A:N7	2.48	0.41
23:BB:2382:G:H21	34:B3:41:ARG:NH2	2.18	0.41
23:BB:2398:U:H2'	23:BB:2399:G:H8	1.86	0.41
23:BB:2483:C:H2'	23:BB:2484:G:O4'	2.21	0.41
25:BC:64:VAL:HG11	25:BC:66:PHE:CE2	2.56	0.41
26:BD:22:ILE:HG22	26:BD:23:PRO:O	2.20	0.41
26:BD:88:GLU:CD	26:BD:88:GLU:H	2.29	0.41
29:BE:147:LEU:O	29:BE:168:ASP:O	2.38	0.41
29:BE:154:ASP:OD2	29:BE:157:LEU:HB3	2.21	0.41
30:BY:6:ILE:HG22	30:BY:7:THR:H	1.85	0.41
33:B1:31:GLU:H	33:B1:31:GLU:CD	2.27	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BV:28:ALA:HA	35:BV:88:HIS:ND1	2.36	0.41
41:BJ:23:LYS:CE	41:BJ:142:ILE:HG23	2.45	0.41
41:BJ:44:TYR:HB2	44:BQ:63:ARG:HG2	2.03	0.41
41:BJ:109:LEU:CD1	41:BJ:119:PHE:HB2	2.50	0.41
43:BO:49:VAL:HG11	43:BO:82:ALA:HA	2.03	0.41
44:BQ:84:LYS:O	44:BQ:86:SER:N	2.53	0.41
46:BU:4:ILE:CD1	46:BU:71:ILE:HG23	2.51	0.41
46:BU:83:GLY:O	46:BU:93:ARG:HA	2.20	0.41
49:BR:38:VAL:HG11	49:BR:41:ILE:HD11	2.03	0.41
49:BR:40:MET:HG3	49:BR:48:LYS:HA	2.02	0.41
51:BZ:17:ASN:HD22	51:BZ:25:THR:HB	1.85	0.41
1:CA:337:G:O2'	1:CA:338:A:H5'	2.20	0.41
1:CA:377:G:H2'	1:CA:378:G:H8	1.86	0.41
1:CA:632:U:H5''	1:CA:633:G:C8	2.56	0.41
1:CA:635:A:H2'	1:CA:636:U:C6	2.56	0.41
1:CA:656:G:O2'	1:CA:657:U:H5'	2.21	0.41
1:CA:811:C:O2'	1:CA:901:A:N1	2.52	0.41
1:CA:915:A:H2'	1:CA:916:U:H5'	2.02	0.41
1:CA:1306:A:N6	1:CA:1331:G:C1'	2.84	0.41
1:CA:1434:A:H2'	1:CA:1435:G:O4'	2.20	0.41
2:CC:14:VAL:HG23	2:CC:15:LYS:HD3	2.03	0.41
3:CD:62:ARG:HG2	3:CD:62:ARG:H	1.72	0.41
3:CD:94:GLU:OE2	3:CD:190:LEU:HD21	2.20	0.41
4:CE:75:LEU:HD23	4:CE:75:LEU:HA	1.92	0.41
4:CE:77:ASN:OD1	4:CE:78:GLY:N	2.53	0.41
5:CF:7:VAL:O	5:CF:7:VAL:HG13	2.21	0.41
5:CF:67:PRO:O	5:CF:68:GLN:C	2.64	0.41
7:CH:49:LYS:HB3	7:CH:59:GLU:CD	2.46	0.41
8:CI:24:ASN:CG	8:CI:25:GLY:N	2.75	0.41
9:CJ:8:ILE:HB	9:CJ:74:VAL:HB	2.01	0.41
13:CN:14:ALA:HB1	13:CN:18:LYS:HE2	2.03	0.41
18:CS:62:THR:O	18:CS:63:ASP:C	2.64	0.41
19:CT:15:LYS:HD3	19:CT:18:LYS:HE3	2.01	0.41
21:CU:9:GLU:CD	21:CU:10:PRO:HD2	2.45	0.41
23:DB:137:U:H1'	50:DT:1:MET:N	2.34	0.41
23:DB:529:A:OP2	41:DJ:113:PRO:HD3	2.21	0.41
23:DB:624:C:O2'	23:DB:657:U:H5''	2.20	0.41
23:DB:705:A:O2'	23:DB:706:A:H5'	2.21	0.41
23:DB:764:A:N1	23:DB:1789:A:O2'	2.53	0.41
23:DB:766:U:H2'	23:DB:767:U:C6	2.56	0.41
23:DB:935:C:H2'	23:DB:936:A:C8	2.56	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:942:G:H2'	23:DB:943:A:H8	1.86	0.41
23:DB:1060:U:C1'	23:DB:1062:G:H5'	2.51	0.41
23:DB:1068:G:C6	23:DB:1069:A:N6	2.89	0.41
23:DB:1327:A:H2'	23:DB:1328:A:O4'	2.21	0.41
23:DB:1438:U:C4	23:DB:1552:A:N6	2.89	0.41
23:DB:1812:U:O2	25:DC:43:ASN:ND2	2.54	0.41
23:DB:2334:U:C2	43:DO:16:ARG:HG2	2.56	0.41
23:DB:2733:A:H2'	23:DB:2734:A:O4'	2.20	0.41
23:DB:2867:G:H2'	23:DB:2868:A:OP2	2.21	0.41
24:DI:16:MET:N	24:DI:42:ASN:OD1	2.54	0.41
24:DI:63:ASP:O	24:DI:63:ASP:OD1	2.39	0.41
25:DC:128:THR:HG23	25:DC:190:THR:HG22	2.03	0.41
26:DD:14:ILE:HA	28:DP:11:GLN:NE2	2.30	0.41
26:DD:54:ALA:N	26:DD:76:GLY:HA2	2.35	0.41
26:DD:62:LYS:N	26:DD:63:PRO:CD	2.83	0.41
31:D0:38:LEU:HD13	31:D0:41:HIS:CE1	2.55	0.41
31:D0:41:HIS:HB2	42:DN:99:LYS:O	2.21	0.41
33:D1:3:GLY:O	33:D1:5:ARG:N	2.53	0.41
34:D3:49:VAL:C	34:D3:51:LYS:H	2.28	0.41
34:D3:57:VAL:C	34:D3:59:ALA:H	2.28	0.41
35:DV:9:ARG:HD2	35:DV:41:GLU:HB3	2.03	0.41
38:DM:64:TRP:HB2	38:DM:104:GLU:CB	2.51	0.41
40:DH:21:VAL:HG21	40:DH:25:TYR:HD2	1.86	0.41
40:DH:89:LYS:HA	40:DH:123:ARG:O	2.20	0.41
42:DN:47:VAL:C	42:DN:50:PRO:HD2	2.45	0.41
43:DO:7:ARG:HA	43:DO:10:ARG:NE	2.36	0.41
45:DS:1:MET:HB2	45:DS:109:ASP:OD1	2.20	0.41
46:DU:88:ASP:CG	46:DU:89:GLY:N	2.77	0.41
47:DF:107:VAL:HA	47:DF:111:ARG:NH1	2.31	0.41
47:DF:108:PRO:C	47:DF:110:ILE:N	2.79	0.41
48:DG:154:GLU:O	48:DG:158:GLY:N	2.54	0.41
48:DG:163:TYR:O	48:DG:165:ASP:N	2.54	0.41
1:AA:95:C:O2	1:AA:95:C:H2'	2.20	0.41
1:AA:189:A:O2'	1:AA:190:A:H5'	2.21	0.41
1:AA:309:A:O2'	1:AA:310:G:H5'	2.20	0.41
1:AA:366:A:O2'	1:AA:367:U:P	2.79	0.41
1:AA:528:C:H41	11:AL:45:ASN:CG	2.29	0.41
1:AA:596:A:H2'	1:AA:597:G:C8	2.54	0.41
1:AA:620:C:C1'	3:AD:131:ILE:HD13	2.51	0.41
1:AA:778:G:H2'	1:AA:779:C:C6	2.56	0.41
1:AA:921:U:H2'	1:AA:922:G: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:1143:G:H2'	1:AA:1144:G:C8	2.56	0.41
1:AA:1201:A:H5''	1:AA:1201:A:C8	2.56	0.41
1:AA:1226:C:OP2	12:AM:101:THR:HG21	2.21	0.41
1:AA:1258:G:C2	1:AA:1278:G:N2	2.88	0.41
1:AA:1373:G:H5''	6:AG:35:LYS:HB2	2.03	0.41
3:AD:77:GLU:OE1	3:AD:80:ARG:HD3	2.21	0.41
3:AD:154:VAL:O	3:AD:157:ALA:HB3	2.21	0.41
3:AD:192:ALA:C	3:AD:194:ILE:N	2.79	0.41
5:AF:11:HIS:CG	5:AF:12:PRO:HD2	2.56	0.41
7:AH:6:ILE:HD11	7:AH:31:LEU:CD2	2.51	0.41
7:AH:90:GLU:O	7:AH:91:LEU:C	2.64	0.41
7:AH:120:LEU:O	7:AH:120:LEU:HD23	2.21	0.41
8:AI:27:ILE:HG22	8:AI:34:LEU:HB2	2.03	0.41
9:AJ:83:THR:O	9:AJ:86:ALA:HB3	2.21	0.41
10:AK:52:ARG:HB3	10:AK:52:ARG:NH1	2.35	0.41
11:AL:65:TYR:C	11:AL:66:ILE:HD12	2.46	0.41
12:AM:10:ASP:HA	12:AM:44:ILE:CD1	2.51	0.41
13:AN:5:MET:HE3	13:AN:62:ARG:HH22	1.85	0.41
13:AN:14:ALA:HB1	13:AN:18:LYS:HE2	2.03	0.41
13:AN:52:ARG:C	13:AN:54:SER:H	2.29	0.41
14:AO:59:MET:HG2	14:AO:59:MET:H	1.58	0.41
14:AO:70:LEU:HD12	14:AO:78:TYR:CA	2.51	0.41
20:AB:63:LYS:HB3	20:AB:87:ASP:OD2	2.21	0.41
20:AB:202:ASN:ND2	20:AB:202:ASN:C	2.77	0.41
21:AU:19:LYS:CD	21:AU:20:ARG:HH21	2.33	0.41
22:BA:62:C:H2'	22:BA:63:C:C6	2.56	0.41
23:BB:10:A:H61	23:BB:2895:G:C1'	2.34	0.41
23:BB:185:G:H2'	23:BB:186:G:O4'	2.21	0.41
23:BB:285:G:O2'	23:BB:286:U:H5'	2.20	0.41
23:BB:367:G:N2	23:BB:368:A:H1'	2.36	0.41
23:BB:672:C:H2'	23:BB:673:C:C6	2.56	0.41
23:BB:713:G:O2'	23:BB:714:U:H5'	2.20	0.41
23:BB:786:C:H5''	23:BB:1780:A:C8	2.56	0.41
23:BB:839:U:H2'	23:BB:840:C:C6	2.56	0.41
23:BB:909:A:H2'	23:BB:912:C:C5	2.54	0.41
23:BB:988:A:OP1	30:BY:11:SER:HB3	2.21	0.41
23:BB:1059:G:H2'	23:BB:1060:U:C6	2.55	0.41
23:BB:1064:C:H5'	24:BI:88:GLY:HA3	2.03	0.41
23:BB:1270:C:H5''	23:BB:1271:G:O5'	2.21	0.41
23:BB:1322:A:C5	23:BB:1323:C:C5	3.09	0.41
23:BB:1322:A:C4'	45:BS:82:MET:HE1	2.45	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:1518:C:H2'	23:BB:1519:G:H8	1.84	0.41
23:BB:1616:A:H4'	23:BB:1617:C:OP2	2.21	0.41
23:BB:1653:G:O6	42:BN:10:LEU:O	2.39	0.41
23:BB:1857:G:H21	23:BB:1884:G:H2'	1.86	0.41
23:BB:1917:U:O2'	23:BB:1918:A:H5'	2.20	0.41
23:BB:2363:G:O2'	23:BB:2364:C:H5'	2.20	0.41
23:BB:2467:C:H42	23:BB:2483:C:N4	2.18	0.41
23:BB:2734:A:H2'	23:BB:2735:G:C5'	2.47	0.41
24:BI:15:GLY:O	24:BI:16:MET:HB2	2.19	0.41
25:BC:121:ALA:HB3	25:BC:129:LEU:HD11	2.03	0.41
25:BC:143:VAL:HG11	25:BC:173:LEU:HD11	2.03	0.41
25:BC:160:TYR:C	25:BC:160:TYR:CD1	2.99	0.41
25:BC:161:VAL:HG13	25:BC:174:ARG:O	2.21	0.41
25:BC:196:ASN:C	25:BC:198:GLU:H	2.28	0.41
25:BC:251:THR:HG22	25:BC:251:THR:O	2.20	0.41
27:BK:8:LEU:HD12	27:BK:19:VAL:O	2.20	0.41
27:BK:71:ARG:CG	27:BK:105:ARG:HH21	2.26	0.41
28:BP:58:PHE:HE1	28:BP:83:ILE:HG13	1.86	0.41
28:BP:98:TYR:CE2	28:BP:99:LEU:HD23	2.56	0.41
29:BE:170:ARG:HH22	29:BE:176:ASP:HB2	1.86	0.41
30:BY:51:SER:C	30:BY:53:MET:H	2.27	0.41
32:B4:16:ILE:HG12	32:B4:25:VAL:HG22	2.03	0.41
33:B1:6:GLU:HG2	33:B1:52:LYS:HE2	2.03	0.41
35:BV:30:ILE:HG12	35:BV:91:PHE:HB2	2.02	0.41
35:BV:83:LYS:HA	35:BV:84:PRO:HD3	1.92	0.41
37:BL:47:ARG:HB3	37:BL:47:ARG:NH2	2.27	0.41
37:BL:51:GLU:O	37:BL:52:GLY:C	2.64	0.41
37:BL:56:PRO:O	37:BL:60:ARG:HG3	2.19	0.41
38:BM:43:ALA:C	38:BM:45:GLN:N	2.78	0.41
40:BH:3:VAL:HB	40:BH:37:VAL:C	2.45	0.41
40:BH:43:ASN:C	40:BH:47:PHE:HB3	2.45	0.41
40:BH:78:VAL:HG11	40:BH:103:VAL:HG12	2.03	0.41
40:BH:128:HIS:CE1	40:BH:130:VAL:HG13	2.56	0.41
41:BJ:45:THR:H	41:BJ:46:PRO:CD	2.27	0.41
41:BJ:130:HIS:O	41:BJ:130:HIS:CG	2.74	0.41
42:BN:79:LEU:HA	42:BN:83:LEU:HD12	2.02	0.41
44:BQ:24:TYR:CD1	44:BQ:25:GLY:N	2.86	0.41
45:BS:45:VAL:HA	45:BS:48:LYS:HB3	2.03	0.41
46:BU:88:ASP:O	46:BU:90:LYS:N	2.54	0.41
47:BF:37:MET:CE	47:BF:149:ARG:HD2	2.50	0.41
47:BF:100:GLU:C	47:BF:102:LEU:H	2.29	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:BF:141:ASP:O	47:BF:142:TYR:C	2.63	0.41
48:BG:10:VAL:HG21	48:BG:49:LEU:HD13	2.03	0.41
48:BG:17:LYS:HZ2	48:BG:17:LYS:CA	2.33	0.41
48:BG:154:GLU:H	48:BG:158:GLY:CA	2.32	0.41
49:BR:14:VAL:HG21	49:BR:98:ILE:CG1	2.44	0.41
50:BT:18:GLU:C	50:BT:20:ALA:N	2.74	0.41
51:BZ:18:ARG:HH11	51:BZ:24:ALA:N	2.18	0.41
51:BZ:59:ILE:CD1	51:BZ:67:VAL:HG21	2.51	0.41
52:BW:18:LYS:H	52:BW:35:ILE:CG2	2.34	0.41
1:CA:139:A:H2'	1:CA:140:U:C6	2.55	0.41
1:CA:152:A:N6	1:CA:170:U:C2	2.89	0.41
1:CA:159:G:H5'	1:CA:160:A:OP2	2.20	0.41
1:CA:348:G:O2'	1:CA:349:A:H5'	2.21	0.41
1:CA:659:U:O2'	1:CA:660:C:H5'	2.21	0.41
1:CA:661:G:O2'	1:CA:662:U:H5'	2.21	0.41
1:CA:796:C:OP1	10:CK:127:ARG:HB3	2.20	0.41
1:CA:927:G:H4'	1:CA:1503:A:N7	2.36	0.41
1:CA:998:C:H2'	1:CA:999:C:C6	2.56	0.41
1:CA:1053:G:N7	1:CA:1200:C:H5''	2.36	0.41
1:CA:1159:U:O4'	1:CA:1182:G:N2	2.54	0.41
1:CA:1181:G:O2'	1:CA:1182:G:N7	2.48	0.41
1:CA:1515:G:O2'	1:CA:1516:G:H5'	2.21	0.41
2:CC:33:ASP:O	2:CC:36:PHE:HB3	2.21	0.41
2:CC:120:THR:HG22	2:CC:197:VAL:CG2	2.50	0.41
3:CD:25:ARG:NH1	3:CD:30:LYS:HE3	2.35	0.41
5:CF:15:SER:HA	5:CF:18:VAL:HG23	2.03	0.41
5:CF:46:GLN:HG3	5:CF:47:LEU:H	1.86	0.41
6:CG:70:PRO:O	6:CG:95:ARG:HG3	2.21	0.41
7:CH:80:PRO:C	7:CH:82:LEU:N	2.78	0.41
10:CK:88:PRO:HD3	21:CU:28:LEU:HD13	2.03	0.41
12:CM:10:ASP:HA	12:CM:44:ILE:CD1	2.51	0.41
12:CM:111:PRO:O	12:CM:112:ARG:C	2.64	0.41
14:CO:89:ARG:NH2	23:DB:715:A:H5''	2.31	0.41
15:CP:66:THR:HG22	15:CP:67:ILE:N	2.36	0.41
20:CB:65:LYS:HB3	20:CB:157:PRO:HA	2.03	0.41
20:CB:121:GLN:HE22	20:CB:122:ASP:HB3	1.86	0.41
20:CB:145:ASN:N	20:CB:145:ASN:ND2	2.66	0.41
20:CB:147:LEU:O	20:CB:150:ILE:HG22	2.21	0.41
22:DA:35:C:O2	22:DA:35:C:C3'	2.69	0.41
22:DA:43:C:C2'	47:DF:91:ARG:HD2	2.51	0.41
22:DA:83:G:OP1	30:DY:16:LEU:HD21	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:215:G:H4'	23:DB:216:A:OP1	2.20	0.41
23:DB:269:C:H2'	23:DB:270:A:H8	1.86	0.41
23:DB:352:A:H2'	23:DB:353:C:C6	2.56	0.41
23:DB:362:A:N3	23:DB:362:A:C2'	2.81	0.41
23:DB:444:C:O2'	23:DB:445:C:H5'	2.21	0.41
23:DB:572:A:C2	23:DB:2033:A:C2	3.08	0.41
23:DB:625:G:O2'	23:DB:626:A:H5'	2.20	0.41
23:DB:633:A:H2'	23:DB:634:C:O4'	2.21	0.41
23:DB:672:C:H2'	23:DB:673:C:H6	1.86	0.41
23:DB:907:G:O2'	23:DB:908:C:H5'	2.20	0.41
23:DB:996:A:C4'	44:DQ:91:ARG:NH1	2.82	0.41
23:DB:1021:A:C2	23:DB:1023:U:C2	3.09	0.41
23:DB:1063:G:C5'	24:DI:135:MET:HG2	2.51	0.41
23:DB:1099:G:O5'	24:DI:3:LYS:CA	2.69	0.41
23:DB:1152:C:O2'	23:DB:1153:C:H5'	2.20	0.41
23:DB:1290:C:O2'	23:DB:1291:C:H5'	2.21	0.41
23:DB:1396:U:O2	23:DB:1396:U:O4'	2.37	0.41
23:DB:1520:U:H2'	23:DB:1521:G:O4'	2.21	0.41
23:DB:1561:C:H2'	23:DB:1562:U:H6	1.86	0.41
23:DB:1845:G:C6	23:DB:1896:G:C6	3.09	0.41
23:DB:1946:U:H2'	23:DB:1947:C:C6	2.56	0.41
23:DB:1962:C:H4'	23:DB:1963:U:H5	1.86	0.41
23:DB:2007:U:O2'	23:DB:2008:C:H5'	2.20	0.41
23:DB:2222:C:H2'	23:DB:2223:G:O4'	2.21	0.41
23:DB:2228:G:H2'	23:DB:2229:U:H6	1.86	0.41
23:DB:2385:C:H2'	23:DB:2386:A:H8	1.84	0.41
23:DB:2496:C:O2'	23:DB:2497:A:H5'	2.21	0.41
23:DB:2590:A:O2'	23:DB:2591:C:H5'	2.20	0.41
23:DB:2635:A:C5'	26:DD:79:LEU:HB2	2.49	0.41
23:DB:2637:U:C2'	23:DB:2638:G:H5'	2.51	0.41
23:DB:2698:U:H2'	23:DB:2699:C:H6	1.86	0.41
23:DB:2758:A:C2'	23:DB:2759:G:H5'	2.51	0.41
23:DB:2784:U:O2'	23:DB:2785:C:H5'	2.20	0.41
24:DI:49:GLU:HB3	24:DI:52:LEU:HD12	2.02	0.41
24:DI:112:LYS:HB2	24:DI:116:MET:SD	2.61	0.41
24:DI:126:ARG:NH1	24:DI:126:ARG:CB	2.84	0.41
25:DC:12:ARG:HD3	25:DC:12:ARG:C	2.46	0.41
25:DC:91:ALA:N	25:DC:103:ILE:O	2.54	0.41
25:DC:138:SER:O	25:DC:140:VAL:HG23	2.20	0.41
25:DC:184:GLU:O	25:DC:185:ALA:HB3	2.20	0.41
26:DD:9:VAL:O	26:DD:9:VAL:HG13	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DD:184:ARG:HD3	26:DD:186:LEU:HD22	2.02	0.41
27:DK:26:GLY:C	27:DK:30:ARG:HD2	2.46	0.41
27:DK:39:ILE:HD13	27:DK:39:ILE:HA	1.95	0.41
27:DK:43:ILE:HG21	27:DK:46:ALA:HB2	2.02	0.41
28:DP:104:GLY:O	28:DP:106:ALA:N	2.49	0.41
30:DY:12:ALA:HB2	30:DY:53:MET:CE	2.51	0.41
30:DY:51:SER:C	30:DY:53:MET:H	2.28	0.41
31:D0:30:ASP:OD2	31:D0:31:LYS:N	2.50	0.41
32:D4:35:GLN:HB2	32:D4:35:GLN:HE21	1.65	0.41
33:D1:28:THR:C	33:D1:29:LYS:HD2	2.46	0.41
35:DV:4:ILE:HB	35:DV:63:ILE:HG13	2.02	0.41
35:DV:4:ILE:HG22	35:DV:63:ILE:HG23	2.03	0.41
37:DL:40:SER:OG	37:DL:41:ARG:HG3	2.21	0.41
37:DL:77:ILE:O	37:DL:110:VAL:O	2.39	0.41
39:DX:27:ASN:O	39:DX:28:LEU:C	2.63	0.41
40:DH:30:LEU:O	40:DH:36:ALA:HB3	2.21	0.41
40:DH:117:LEU:HD12	40:DH:118:PRO:HD2	2.03	0.41
40:DH:128:HIS:O	40:DH:143:ILE:HA	2.20	0.41
41:DJ:57:LEU:HB3	41:DJ:58:ASN:H	1.68	0.41
42:DN:61:ALA:C	42:DN:63:ARG:H	2.29	0.41
44:DQ:4:LYS:CE	44:DQ:7:VAL:HG22	2.51	0.41
45:DS:3:THR:HG21	45:DS:58:ALA:HB2	2.03	0.41
46:DU:14:THR:HB	46:DU:68:ASN:HB3	2.02	0.41
47:DF:3:LEU:HB2	47:DF:100:GLU:OE2	2.21	0.41
47:DF:12:VAL:HG13	47:DF:27:VAL:HG21	2.02	0.41
47:DF:32:LYS:HA	47:DF:95:MET:CG	2.46	0.41
47:DF:76:PHE:O	47:DF:77:LYS:HB2	2.21	0.41
47:DF:134:GLN:C	47:DF:136:ILE:N	2.78	0.41
47:DF:174:PHE:HB3	47:DF:176:PHE:HD1	1.86	0.41
48:DG:15:ASP:HA	48:DG:26:LYS:NZ	2.36	0.41
48:DG:24:THR:CG2	48:DG:34:ARG:HB3	2.40	0.41
48:DG:125:PRO:HD3	48:DG:131:VAL:HG22	2.02	0.41
51:DZ:45:ARG:HE	51:DZ:47:VAL:CG1	2.26	0.41
51:DZ:71:LEU:HA	51:DZ:74:ARG:HE	1.86	0.41
1:AA:139:A:H2'	1:AA:140:U:C6	2.56	0.41
1:AA:454:G:O2'	1:AA:455:G:H5'	2.20	0.41
1:AA:491:G:O2'	1:AA:492:C:H5'	2.21	0.41
1:AA:502:A:H4'	1:AA:550:G:H4'	2.03	0.41
1:AA:578:C:H2'	1:AA:579:A:H8	1.86	0.41
1:AA:645:G:O2'	1:AA:646:G:H5'	2.21	0.41
1:AA:709:U:H2'	1:AA:710:G:C8	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:796:C:O2'	1:AA:797:C:H5'	2.21	0.41
1:AA:1081:A:O2'	1:AA:1082:A:H5'	2.21	0.41
2:AC:33:ASP:O	2:AC:36:PHE:HB3	2.20	0.41
3:AD:176:LYS:HD3	3:AD:176:LYS:H	1.85	0.41
8:AI:87:MET:HG3	8:AI:94:ARG:HG3	2.02	0.41
13:AN:68:ARG:NH1	13:AN:71:GLY:H	2.19	0.41
16:AQ:34:GLY:O	16:AQ:35:LYS:C	2.64	0.41
18:AS:35:ARG:HB3	18:AS:50:VAL:CG1	2.51	0.41
22:BA:3:C:H2'	22:BA:4:C:C6	2.56	0.41
22:BA:35:C:O2	22:BA:35:C:C3'	2.69	0.41
22:BA:42:C:C6	47:BF:65:LEU:HD13	2.56	0.41
22:BA:100:G:H2'	22:BA:101:A:O4'	2.20	0.41
23:BB:35:G:H1'	23:BB:454:A:C4	2.55	0.41
23:BB:75:G:H4'	39:BX:48:ARG:NH2	2.32	0.41
23:BB:142:A:H2'	23:BB:143:C:C5	2.54	0.41
23:BB:374:A:H61	23:BB:400:G:H1'	1.85	0.41
23:BB:920:A:H2'	23:BB:921:C:H6	1.86	0.41
23:BB:1068:G:C6	23:BB:1069:A:N6	2.89	0.41
23:BB:1183:U:O2'	23:BB:1184:U:H5'	2.21	0.41
23:BB:1397:U:H5''	23:BB:1398:C:H5	1.85	0.41
23:BB:1430:G:O2'	23:BB:1431:A:H5'	2.21	0.41
23:BB:1718:G:O2'	23:BB:1719:G:H5'	2.21	0.41
23:BB:2241:A:O2'	23:BB:2242:G:H5'	2.21	0.41
23:BB:2439:A:H4'	23:BB:2440:C:O5'	2.21	0.41
23:BB:2488:G:O2'	23:BB:2489:U:H5'	2.20	0.41
23:BB:2519:U:C6	23:BB:2542:A:N6	2.89	0.41
23:BB:2635:A:C5'	26:BD:79:LEU:HB2	2.51	0.41
23:BB:2692:G:H1'	23:BB:2847:U:O2'	2.21	0.41
23:BB:2723:C:H2'	23:BB:2724:U:O4'	2.21	0.41
23:BB:2733:A:O2'	23:BB:2734:A:H5'	2.21	0.41
23:BB:2848:G:H1'	23:BB:2868:A:N6	2.36	0.41
24:BI:17:ALA:C	24:BI:19:PRO:HD2	2.46	0.41
25:BC:6:LYS:HA	25:BC:7:PRO:HD3	1.91	0.41
25:BC:63:ILE:HD13	25:BC:63:ILE:HA	1.87	0.41
25:BC:216:ARG:NH1	25:BC:216:ARG:CG	2.84	0.41
27:BK:116:ILE:H	27:BK:116:ILE:HG13	1.71	0.41
29:BE:170:ARG:NH2	29:BE:176:ASP:HB2	2.36	0.41
29:BE:181:ILE:O	37:BL:2:ARG:N	2.53	0.41
30:BY:5:LYS:HE2	30:BY:5:LYS:H	1.86	0.41
33:B1:37:LYS:HB2	33:B1:48:TYR:CD2	2.55	0.41
37:BL:89:VAL:O	37:BL:89:VAL:HG13	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BL:118:THR:O	37:BL:120:VAL:HG23	2.20	0.41
40:BH:67:ALA:HB1	40:BH:70:GLU:CG	2.51	0.41
40:BH:102:ALA:C	40:BH:104:THR:H	2.29	0.41
42:BN:17:ARG:O	42:BN:18:GLN:HG2	2.21	0.41
44:BQ:3:VAL:O	44:BQ:4:LYS:C	2.63	0.41
44:BQ:105:PHE:HA	44:BQ:108:LEU:CG	2.50	0.41
45:BS:47:VAL:HG12	45:BS:103:ILE:CG2	2.46	0.41
47:BF:2:LYS:HZ2	47:BF:100:GLU:HG2	1.86	0.41
48:BG:42:VAL:HA	48:BG:50:THR:O	2.21	0.41
48:BG:87:GLN:HE21	48:BG:164:ALA:CA	2.32	0.41
48:BG:94:ARG:C	48:BG:94:ARG:NE	2.79	0.41
48:BG:122:ALA:HA	48:BG:131:VAL:O	2.20	0.41
52:BW:27:GLY:O	52:BW:63:ASP:HA	2.21	0.41
1:CA:310:G:O2'	1:CA:311:C:H5'	2.21	0.41
1:CA:591:U:O2'	1:CA:592:G:H5'	2.21	0.41
1:CA:611:C:H2'	1:CA:612:C:H6	1.86	0.41
1:CA:744:C:H2'	1:CA:745:G:C8	2.56	0.41
1:CA:1305:G:H2'	1:CA:1331:G:N2	2.36	0.41
1:CA:1496:C:H2'	1:CA:1497:G:O4'	2.20	0.41
2:CC:63:ILE:HG22	2:CC:65:VAL:HG23	2.02	0.41
2:CC:68:HIS:HA	2:CC:103:ALA:HB3	2.03	0.41
2:CC:137:VAL:HG13	2:CC:148:ILE:CG2	2.51	0.41
2:CC:153:SER:O	2:CC:156:LEU:HD21	2.21	0.41
7:CH:101:ALA:HB3	7:CH:112:ASP:HB3	2.03	0.41
9:CJ:21:ALA:HB2	9:CJ:96:VAL:HG11	2.03	0.41
9:CJ:57:VAL:O	9:CJ:58:ASN:HB2	2.21	0.41
9:CJ:93:ALA:O	9:CJ:96:VAL:HG22	2.21	0.41
11:CL:3:VAL:O	11:CL:4:ASN:C	2.64	0.41
11:CL:35:ARG:HG3	11:CL:36:VAL:H	1.86	0.41
13:CN:5:MET:HE3	13:CN:62:ARG:HH22	1.86	0.41
13:CN:34:ASN:HB2	13:CN:35:ALA:H	1.48	0.41
15:CP:46:LYS:O	15:CP:47:GLU:HB2	2.20	0.41
19:CT:4:LYS:HD2	19:CT:4:LYS:HA	1.89	0.41
19:CT:27:MET:HE3	19:CT:31:ILE:CD1	2.51	0.41
20:CB:165:ALA:CB	20:CB:186:VAL:HG12	2.51	0.41
23:DB:106:C:H2'	23:DB:107:G:H8	1.85	0.41
23:DB:108:G:H2'	23:DB:109:C:C6	2.56	0.41
23:DB:197:A:H4'	23:DB:2069:G:OP2	2.21	0.41
23:DB:319:G:H2'	23:DB:320:A:O4'	2.21	0.41
23:DB:341:C:O2'	23:DB:342:A:H5'	2.21	0.41
23:DB:355:U:H2'	23:DB:356:G:H8	1.85	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:518:G:H2'	23:DB:519:U:C6	2.56	0.41
23:DB:528:A:H3'	23:DB:528:A:C8	2.56	0.41
23:DB:560:C:H3'	23:DB:561:G:C8	2.56	0.41
23:DB:932:U:H4'	23:DB:933:A:C4	2.56	0.41
23:DB:981:A:H4'	23:DB:2037:A:H5'	2.03	0.41
23:DB:1060:U:C4	24:DI:131:THR:HG22	2.56	0.41
23:DB:1098:A:C8	24:DI:3:LYS:CB	3.04	0.41
23:DB:1175:A:N3	23:DB:1175:A:C3'	2.83	0.41
23:DB:1516:G:H2'	23:DB:1517:G:H8	1.85	0.41
23:DB:1623:G:O2'	23:DB:1624:U:H5'	2.20	0.41
23:DB:1845:G:O2'	23:DB:1846:G:H5'	2.20	0.41
23:DB:2385:C:O2'	23:DB:2386:A:H5'	2.20	0.41
23:DB:2387:U:O2'	52:DW:38:ARG:NH2	2.54	0.41
23:DB:2485:G:O2'	23:DB:2486:C:H5'	2.21	0.41
23:DB:2655:G:O2'	23:DB:2656:U:P	2.78	0.41
23:DB:2742:G:O2'	23:DB:2743:U:H5'	2.21	0.41
23:DB:2747:G:H8	23:DB:2747:G:O5'	2.04	0.41
23:DB:2889:C:O2'	23:DB:2890:G:H5'	2.20	0.41
25:DC:12:ARG:HA	25:DC:15:VAL:CG2	2.51	0.41
25:DC:89:ASN:HD22	25:DC:89:ASN:HA	1.52	0.41
25:DC:170:TYR:HD2	25:DC:184:GLU:HA	1.85	0.41
26:DD:125:TRP:CE3	26:DD:160:LYS:HD3	2.56	0.41
27:DK:15:GLY:HA2	27:DK:46:ALA:HA	2.02	0.41
27:DK:31:ARG:HH11	27:DK:31:ARG:HG3	1.86	0.41
27:DK:43:ILE:CG2	27:DK:54:LYS:HA	2.48	0.41
29:DE:32:VAL:HG23	29:DE:33:VAL:N	2.36	0.41
29:DE:132:LYS:O	29:DE:135:ALA:HB3	2.21	0.41
35:DV:5:ASN:OD1	35:DV:5:ASN:N	2.53	0.41
36:D2:6:GLN:HA	36:D2:6:GLN:NE2	2.35	0.41
38:DM:41:LEU:HD11	38:DM:102:LEU:CD1	2.51	0.41
38:DM:41:LEU:HD11	38:DM:102:LEU:HD11	2.03	0.41
39:DX:14:LEU:H	39:DX:14:LEU:HD22	1.86	0.41
40:DH:69:ALA:HB1	40:DH:140:ALA:HB2	2.02	0.41
40:DH:110:VAL:O	40:DH:110:VAL:HG13	2.21	0.41
42:DN:58:ASP:O	42:DN:59:SER:CB	2.66	0.41
43:DO:18:LEU:HD12	43:DO:18:LEU:HA	1.91	0.41
44:DQ:86:SER:HB3	49:DR:51:VAL:HA	2.03	0.41
47:DF:134:GLN:HB2	47:DF:149:ARG:HB3	2.03	0.41
48:DG:132:LEU:H	48:DG:132:LEU:HG	1.70	0.41
49:DR:61:ALA:HB1	49:DR:98:ILE:H	1.86	0.41
50:DT:29:THR:H	50:DT:91:GLN:HE22	1.69	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:DT:43:ILE:HG22	50:DT:44:LYS:N	2.36	0.41
51:DZ:68:LEU:HD22	51:DZ:78:TYR:CD1	2.55	0.41
1:AA:175:C:H2'	1:AA:176:C:H6	1.86	0.40
1:AA:209:U:H5'	1:AA:210:C:C5	2.56	0.40
1:AA:236:A:O2'	1:AA:237:G:H5'	2.21	0.40
1:AA:239:U:H5''	1:AA:239:U:H6	1.85	0.40
1:AA:369:G:O2'	1:AA:370:C:H5'	2.22	0.40
1:AA:465:A:N3	1:AA:465:A:O4'	2.54	0.40
1:AA:586:C:H2'	1:AA:587:G:H5'	2.03	0.40
1:AA:643:C:H2'	1:AA:644:U:H6	1.86	0.40
1:AA:862:C:O2'	1:AA:863:U:H5'	2.21	0.40
1:AA:981:U:H2'	1:AA:982:U:C5	2.56	0.40
1:AA:1200:C:O5'	1:AA:1201:A:H3'	2.21	0.40
1:AA:1254:A:OP1	9:AJ:47:GLU:HG3	2.20	0.40
1:AA:1426:G:O2'	1:AA:1427:C:H5'	2.20	0.40
4:AE:57:ALA:O	4:AE:61:LYS:HG2	2.20	0.40
6:AG:53:SER:C	6:AG:55:LYS:H	2.29	0.40
6:AG:72:VAL:CG1	6:AG:89:GLU:HG3	2.50	0.40
7:AH:79:ARG:NH1	7:AH:82:LEU:HB3	2.35	0.40
12:AM:33:LEU:HB3	12:AM:38:ILE:O	2.21	0.40
12:AM:44:ILE:HD12	12:AM:45:SER:N	2.34	0.40
13:AN:47:LEU:C	13:AN:49:THR:N	2.77	0.40
14:AO:81:LEU:HD23	14:AO:81:LEU:O	2.22	0.40
15:AP:71:VAL:HG13	15:AP:72:ALA:N	2.37	0.40
19:AT:74:HIS:O	19:AT:78:LEU:HB2	2.21	0.40
20:AB:205:ALA:HB3	20:AB:208:ALA:HB3	2.01	0.40
22:BA:28:C:OP1	43:BO:34:HIS:HB2	2.21	0.40
23:BB:40:U:H2'	23:BB:41:C:H6	1.86	0.40
23:BB:722:A:H2'	23:BB:723:C:C6	2.56	0.40
23:BB:856:G:H2'	23:BB:857:G:C8	2.56	0.40
23:BB:993:G:OP1	44:BQ:49:ARG:NH1	2.55	0.40
23:BB:1353:A:H2'	23:BB:1354:A:H8	1.85	0.40
23:BB:1505:A:H2'	23:BB:1506:U:O4'	2.21	0.40
23:BB:1799:G:C4	25:BC:175:LEU:HD13	2.56	0.40
23:BB:1951:U:H2'	23:BB:1953:A:OP2	2.21	0.40
23:BB:2073:C:O2'	23:BB:2074:U:H5'	2.20	0.40
23:BB:2138:G:H2'	23:BB:2139:U:C5'	2.51	0.40
23:BB:2899:A:H5'	41:BJ:136:GLN:OE1	2.21	0.40
24:BI:37:PHE:HZ	24:BI:56:VAL:HG11	1.86	0.40
25:BC:75:ALA:CB	25:BC:95:TYR:HA	2.51	0.40
26:BD:125:TRP:CD1	26:BD:160:LYS:HB3	2.56	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BK:97:THR:HB	27:BK:98:ARG:NH2	2.36	0.40
28:BP:29:VAL:O	28:BP:40:GLN:N	2.54	0.40
33:B1:39:ASP:OD1	33:B1:42:VAL:HG23	2.20	0.40
35:BV:4:ILE:CD1	35:BV:63:ILE:HG13	2.51	0.40
38:BM:93:VAL:HG22	38:BM:94:ALA:H	1.86	0.40
40:BH:70:GLU:CD	40:BH:70:GLU:N	2.78	0.40
40:BH:114:GLU:OE2	40:BH:134:VAL:HA	2.21	0.40
41:BJ:58:ASN:O	41:BJ:59:ALA:HB3	2.21	0.40
44:BQ:7:VAL:HG23	44:BQ:8:ILE:N	2.35	0.40
51:BZ:77:LYS:O	51:BZ:78:TYR:HB3	2.21	0.40
52:BW:24:ARG:HD2	52:BW:25:PHE:N	2.36	0.40
52:BW:50:VAL:O	52:BW:52:CYS:N	2.54	0.40
1:CA:276:G:H5'	16:CQ:16:MET:SD	2.61	0.40
1:CA:336:A:O2'	1:CA:337:G:H5'	2.20	0.40
1:CA:593:U:H2'	1:CA:594:U:C6	2.56	0.40
1:CA:614:C:O2'	1:CA:615:G:H5'	2.21	0.40
1:CA:691:G:H1'	1:CA:696:A:N6	2.36	0.40
1:CA:812:G:OP1	1:CA:812:G:C4'	2.69	0.40
1:CA:872:A:C4	1:CA:874:G:N7	2.89	0.40
1:CA:1200:C:O5'	1:CA:1201:A:H3'	2.22	0.40
1:CA:1238:A:C2	1:CA:1241:G:N3	2.88	0.40
1:CA:1460:C:H2'	1:CA:1461:G:H8	1.86	0.40
3:CD:53:GLN:HA	3:CD:198:LEU:HD22	2.03	0.40
3:CD:121:ALA:C	3:CD:122:ILE:HD13	2.46	0.40
3:CD:171:GLU:O	3:CD:179:GLY:HA2	2.20	0.40
6:CG:70:PRO:HA	6:CG:141:HIS:CE1	2.56	0.40
8:CI:6:TYR:C	8:CI:85:ALA:HB2	2.46	0.40
11:CL:43:LYS:HG3	11:CL:44:PRO:HD2	2.03	0.40
14:CO:70:LEU:HD12	14:CO:78:TYR:N	2.36	0.40
14:CO:70:LEU:HD12	14:CO:78:TYR:CA	2.51	0.40
15:CP:71:VAL:HG13	15:CP:72:ALA:N	2.36	0.40
22:DA:8:C:O2'	43:DO:40:ILE:HD13	2.21	0.40
23:DB:314:C:O2'	23:DB:315:G:H5'	2.20	0.40
23:DB:483:A:H2'	23:DB:484:C:O4'	2.21	0.40
23:DB:579:G:H4'	23:DB:2017:U:H2'	2.03	0.40
23:DB:722:A:H2'	23:DB:723:C:C6	2.56	0.40
23:DB:784:G:H21	25:DC:225:ASN:ND2	2.19	0.40
23:DB:977:G:H4'	23:DB:1155:A:H5'	2.03	0.40
23:DB:1430:G:O2'	23:DB:1431:A:H5'	2.21	0.40
23:DB:1491:G:H5'	25:DC:97:ASP:OD1	2.21	0.40
23:DB:1720:U:O2'	23:DB:1721:G:H5'	2.22	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:2384:U:H5''	23:DB:2386:A:OP1	2.21	0.40
23:DB:2434:A:H8	23:DB:2434:A:H2'	1.73	0.40
23:DB:2467:C:C2'	23:DB:2468:A:H5'	2.51	0.40
25:DC:251:THR:HG22	25:DC:251:THR:O	2.21	0.40
26:DD:24:VAL:HG23	26:DD:189:VAL:N	2.35	0.40
29:DE:129:PRO:HB3	29:DE:159:LEU:HD23	2.02	0.40
34:D3:31:ILE:O	34:D3:31:ILE:HG12	2.21	0.40
37:DL:67:THR:O	37:DL:68:SER:C	2.64	0.40
38:DM:41:LEU:HA	38:DM:45:GLN:OE1	2.21	0.40
40:DH:60:GLU:C	40:DH:62:LEU:H	2.28	0.40
40:DH:87:GLU:OE1	40:DH:89:LYS:NZ	2.53	0.40
41:DJ:4:PHE:O	41:DJ:44:TYR:CZ	2.74	0.40
42:DN:51:LEU:CD2	42:DN:70:THR:HG21	2.51	0.40
43:DO:60:GLU:C	43:DO:62:LEU:N	2.79	0.40
44:DQ:9:ALA:O	44:DQ:11:ALA:N	2.54	0.40
45:DS:8:ARG:HB3	45:DS:102:HIS:CE1	2.56	0.40
49:DR:71:LYS:HG3	49:DR:72:VAL:H	1.86	0.40
51:DZ:59:ILE:CD1	51:DZ:67:VAL:HG21	2.52	0.40
1:AA:254:G:O2'	1:AA:255:G:H5'	2.21	0.40
1:AA:263:A:H2'	1:AA:264:C:C5	2.56	0.40
1:AA:796:C:OP1	10:AK:127:ARG:HB3	2.20	0.40
1:AA:985:C:H2'	1:AA:986:U:C6	2.55	0.40
1:AA:1009:U:O2	1:AA:1009:U:C2'	2.69	0.40
1:AA:1142:G:C2	1:AA:1143:G:H1'	2.56	0.40
1:AA:1238:A:C2	1:AA:1241:G:N3	2.89	0.40
1:AA:1434:A:H2'	1:AA:1435:G:O4'	2.22	0.40
1:AA:1460:C:H2'	1:AA:1461:G:H8	1.85	0.40
3:AD:203:TYR:HD2	3:AD:203:TYR:HA	1.79	0.40
4:AE:104:ILE:HD11	4:AE:114:LEU:HB2	2.02	0.40
7:AH:29:SER:O	7:AH:33:VAL:HG23	2.21	0.40
7:AH:77:VAL:HG21	7:AH:127:TYR:CE1	2.56	0.40
12:AM:39:ALA:HB3	12:AM:42:VAL:CG1	2.46	0.40
13:AN:27:LYS:C	13:AN:29:ILE:N	2.78	0.40
13:AN:34:ASN:HB2	13:AN:35:ALA:H	1.47	0.40
13:AN:50:LEU:N	13:AN:51:PRO:CD	2.84	0.40
19:AT:57:VAL:HG23	19:AT:58:ASP:N	2.35	0.40
19:AT:85:LEU:HD23	19:AT:86:ALA:N	2.34	0.40
20:AB:21:TYR:O	20:AB:22:TRP:O	2.39	0.40
20:AB:62:ARG:O	20:AB:63:LYS:C	2.63	0.40
20:AB:121:GLN:HE21	20:AB:122:ASP:CB	2.32	0.40
22:BA:18:G:H2'	22:BA:19:C:C6	2.57	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:75:G:H1'	35:BV:29:ILE:HG12	2.03	0.40
23:BB:189:G:H2'	23:BB:205:G:N2	2.36	0.40
23:BB:705:A:H2'	23:BB:706:A:H8	1.87	0.40
23:BB:863:A:O2'	23:BB:864:G:H5'	2.21	0.40
23:BB:1799:G:O2'	25:BC:179:GLU:OE2	2.37	0.40
23:BB:1863:G:H2'	23:BB:1864:U:O4'	2.21	0.40
23:BB:1870:C:H2'	23:BB:1871:A:N3	2.36	0.40
23:BB:2365:G:OP1	52:BW:54:ARG:HG3	2.21	0.40
23:BB:2384:U:H5''	23:BB:2386:A:OP1	2.20	0.40
23:BB:2784:U:H2'	23:BB:2785:C:C6	2.56	0.40
23:BB:2797:U:H3'	23:BB:2798:U:H5	1.86	0.40
25:BC:20:ASN:HB3	25:BC:23:LEU:HD13	2.03	0.40
25:BC:64:VAL:HG11	25:BC:66:PHE:CZ	2.56	0.40
26:BD:62:LYS:N	26:BD:63:PRO:CD	2.84	0.40
26:BD:82:PHE:O	26:BD:83:ARG:C	2.64	0.40
27:BK:70:ARG:HH11	27:BK:76:VAL:HG22	1.86	0.40
28:BP:50:ARG:CD	28:BP:56:SER:HB3	2.51	0.40
29:BE:38:GLY:C	29:BE:40:ARG:N	2.80	0.40
29:BE:151:GLY:HA2	29:BE:195:GLN:HE22	1.86	0.40
29:BE:154:ASP:C	29:BE:156:ASN:N	2.79	0.40
35:BV:29:ILE:HA	35:BV:38:LEU:O	2.22	0.40
35:BV:76:ASP:CG	35:BV:77:VAL:N	2.80	0.40
36:B2:6:GLN:HA	36:B2:7:PRO:HD2	1.89	0.40
39:BX:1:MET:HG3	39:BX:4:LYS:HD3	2.02	0.40
39:BX:18:LEU:HA	39:BX:21:LEU:HD12	2.03	0.40
40:BH:54:LEU:O	40:BH:58:LEU:N	2.55	0.40
40:BH:115:VAL:C	40:BH:133:GLN:HB3	2.46	0.40
42:BN:25:ALA:HA	42:BN:44:LEU:HD11	2.04	0.40
42:BN:82:GLU:O	42:BN:84:GLY:N	2.54	0.40
43:BO:6:ALA:O	43:BO:10:ARG:HG3	2.21	0.40
44:BQ:38:VAL:O	44:BQ:39:ILE:C	2.64	0.40
47:BF:33:ILE:HG22	47:BF:90:LEU:HD23	2.01	0.40
47:BF:102:LEU:O	47:BF:103:ILE:CB	2.69	0.40
52:BW:36:ILE:HD12	52:BW:39:GLN:HE22	1.85	0.40
1:CA:189:A:O2'	1:CA:190:A:H5'	2.21	0.40
1:CA:215:C:H2'	1:CA:216:U:C6	2.56	0.40
1:CA:284:C:O2'	1:CA:285:C:H5'	2.21	0.40
1:CA:397:A:H3'	1:CA:397:A:N3	2.36	0.40
1:CA:471:U:H2'	1:CA:472:U:H6	1.85	0.40
1:CA:515:G:O2'	1:CA:516:U:H5'	2.21	0.40
1:CA:587:G:C6	1:CA:755:G:C6	3.09	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:674:G:H2'	1:CA:675:A:C8	2.55	0.40
1:CA:683:G:O2'	1:CA:684:U:H5'	2.21	0.40
1:CA:778:G:H2'	1:CA:779:C:C6	2.56	0.40
1:CA:878:A:H5''	7:CH:80:PRO:HG2	2.04	0.40
1:CA:895:G:H2'	1:CA:896:C:H6	1.86	0.40
1:CA:993:G:N2	1:CA:996:A:N6	2.69	0.40
1:CA:1017:U:H2'	1:CA:1018:G:C8	2.56	0.40
1:CA:1323:G:H4'	1:CA:1362:A:C4	2.56	0.40
2:CC:19:SER:O	13:CN:93:PRO:HB3	2.21	0.40
2:CC:26:LYS:HE3	2:CC:26:LYS:HB2	1.87	0.40
2:CC:139:ASN:N	2:CC:139:ASN:HD22	2.19	0.40
5:CF:74:LEU:HD11	5:CF:78:PHE:CZ	2.57	0.40
6:CG:14:ASP:OD2	6:CG:22:LEU:HB3	2.21	0.40
6:CG:22:LEU:O	6:CG:25:PHE:HB3	2.21	0.40
6:CG:67:ASN:O	6:CG:137:ARG:NE	2.53	0.40
7:CH:77:VAL:HG21	7:CH:127:TYR:CE1	2.56	0.40
9:CJ:21:ALA:O	9:CJ:25:ILE:HG13	2.21	0.40
10:CK:22:ILE:HD13	10:CK:95:THR:HG23	2.02	0.40
12:CM:77:LYS:O	12:CM:78:ARG:C	2.63	0.40
12:CM:90:HIS:CE1	12:CM:96:VAL:HG21	2.56	0.40
12:CM:96:VAL:C	12:CM:98:GLY:N	2.77	0.40
13:CN:26:LEU:C	13:CN:26:LEU:HD23	2.45	0.40
13:CN:60:ARG:NH2	13:CN:69:PRO:HB3	2.36	0.40
14:CO:45:GLU:HG2	14:CO:46:HIS:N	2.36	0.40
18:CS:20:LYS:HB3	18:CS:20:LYS:HE3	1.93	0.40
20:CB:62:ARG:O	20:CB:63:LYS:C	2.65	0.40
20:CB:63:LYS:HG2	20:CB:224:ARG:NH1	2.35	0.40
20:CB:65:LYS:HB2	20:CB:158:ASP:OD2	2.21	0.40
23:DB:48:G:N2	23:DB:177:G:H21	2.20	0.40
23:DB:361:G:N3	23:DB:362:A:H8	2.19	0.40
23:DB:715:A:H2'	23:DB:716:A:C8	2.56	0.40
23:DB:755:U:H2'	23:DB:756:A:H8	1.86	0.40
23:DB:931:U:P	30:DY:29:ARG:NH1	2.94	0.40
23:DB:1053:C:C2'	23:DB:1054:A:H5'	2.51	0.40
23:DB:1454:C:H5'	42:DN:63:ARG:CZ	2.52	0.40
23:DB:1547:C:H2'	23:DB:1548:A:H8	1.86	0.40
23:DB:1766:G:O2'	23:DB:1767:G:H5'	2.21	0.40
23:DB:2052:A:H4'	26:DD:148:GLN:N	2.36	0.40
23:DB:2298:A:N1	23:DB:2321:U:C5	2.90	0.40
23:DB:2567:G:H2'	23:DB:2568:U:C6	2.56	0.40
23:DB:2570:G:O2'	23:DB:2571:U:H5'	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:2597:G:OP1	25:DC:240:GLY:HA3	2.22	0.40
23:DB:2621:G:P	26:DD:124:ARG:HH22	2.44	0.40
23:DB:2640:G:OP1	41:DJ:95:ARG:NH2	2.55	0.40
23:DB:2834:G:H2'	23:DB:2879:A:H61	1.86	0.40
24:DI:56:VAL:CG2	24:DI:68:PHE:HB2	2.51	0.40
25:DC:6:LYS:C	25:DC:8:THR:N	2.79	0.40
25:DC:221:GLY:C	25:DC:223:ALA:N	2.79	0.40
27:DK:42:THR:O	27:DK:44:LYS:HG2	2.21	0.40
27:DK:66:LYS:NZ	27:DK:81:GLY:N	2.69	0.40
29:DE:46:GLN:HB2	29:DE:87:ALA:O	2.21	0.40
30:DY:8:GLN:OE1	30:DY:23:LEU:HD11	2.22	0.40
32:D4:15:LYS:O	32:D4:16:ILE:CB	2.69	0.40
38:DM:96:ILE:HD11	38:DM:126:ILE:CG1	2.50	0.40
39:DX:28:LEU:HB3	39:DX:43:LEU:HD21	2.04	0.40
44:DQ:16:ILE:O	44:DQ:18:LYS:N	2.51	0.40
45:DS:86:MET:HE2	45:DS:87:PRO:HD2	2.03	0.40
46:DU:43:LYS:C	46:DU:45:GLN:H	2.29	0.40
46:DU:81:ARG:NH2	46:DU:81:ARG:HG3	2.36	0.40
47:DF:8:LYS:HA	47:DF:12:VAL:CG2	2.43	0.40
47:DF:74:ALA:HB3	47:DF:78:ILE:HB	2.03	0.40
48:DG:6:ALA:HB3	48:DG:68:ARG:NE	2.36	0.40
49:DR:6:GLN:HE22	49:DR:9:GLY:N	2.18	0.40
51:DZ:77:LYS:CG	51:DZ:78:TYR:N	2.84	0.40
1:AA:152:A:H3'	1:AA:153:C:C6	2.56	0.40
1:AA:219:U:H2'	1:AA:220:G:C8	2.56	0.40
1:AA:432:A:C2'	1:AA:433:G:H5'	2.51	0.40
1:AA:585:G:O2'	1:AA:586:C:H5'	2.22	0.40
1:AA:824:G:H2'	1:AA:825:A:H8	1.86	0.40
1:AA:865:A:H5'	1:AA:1078:U:C4	2.56	0.40
1:AA:1343:G:H1'	8:AI:122:ARG:NH1	2.36	0.40
2:AC:78:LYS:HE3	2:AC:81:GLU:HG2	2.04	0.40
2:AC:180:ASP:C	2:AC:181:ILE:HD12	2.47	0.40
3:AD:3:TYR:C	3:AD:4:LEU:HG	2.46	0.40
3:AD:43:ARG:HB3	3:AD:43:ARG:HH11	1.86	0.40
3:AD:162:GLU:N	3:AD:162:GLU:OE2	2.55	0.40
5:AF:53:LYS:HD3	5:AF:54:LEU:H	1.87	0.40
9:AJ:10:LEU:CD2	9:AJ:98:VAL:HG12	2.51	0.40
10:AK:124:LYS:CA	21:AU:34:ARG:HB3	2.37	0.40
12:AM:43:LYS:HD2	12:AM:43:LYS:N	2.36	0.40
13:AN:11:LYS:O	13:AN:15:LEU:HG	2.20	0.40
14:AO:88:ARG:NE	14:AO:88:ARG:HA	2.36	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AT:42:ASP:HA	19:AT:43:LYS:NZ	2.37	0.40
20:AB:125:PHE:CD2	20:AB:126:ASP:N	2.90	0.40
20:AB:145:ASN:N	20:AB:145:ASN:ND2	2.68	0.40
23:BB:30:G:H2'	23:BB:31:C:O4'	2.22	0.40
23:BB:55:G:H2'	23:BB:56:A:H8	1.85	0.40
23:BB:163:C:H5'	23:BB:163:C:O2	2.22	0.40
23:BB:540:C:H2'	23:BB:541:A:C8	2.55	0.40
23:BB:768:G:O2'	23:BB:769:U:H5'	2.21	0.40
23:BB:811:U:OP2	37:BL:20:GLY:HA2	2.21	0.40
23:BB:870:U:C2'	23:BB:871:U:H5'	2.50	0.40
23:BB:1105:U:O2'	23:BB:1106:G:H5'	2.21	0.40
23:BB:1350:C:H5'	23:BB:1351:C:OP2	2.22	0.40
23:BB:1431:A:H2'	23:BB:1432:G:H8	1.86	0.40
23:BB:1507:C:H2'	23:BB:1508:A:H4'	2.03	0.40
23:BB:2204:G:O2'	23:BB:2205:A:H5'	2.21	0.40
23:BB:2667:C:H2'	23:BB:2668:G:O4'	2.21	0.40
23:BB:2688:G:H1'	23:BB:2721:A:H61	1.86	0.40
23:BB:2839:G:O2'	23:BB:2840:C:H5'	2.21	0.40
25:BC:36:ASN:HD21	25:BC:85:ASN:ND2	2.20	0.40
26:BD:96:ILE:HD12	26:BD:96:ILE:N	2.35	0.40
27:BK:99:ILE:H	27:BK:118:LEU:CD2	2.35	0.40
27:BK:115:ILE:CG2	27:BK:116:ILE:N	2.84	0.40
29:BE:46:GLN:HB2	29:BE:87:ALA:O	2.21	0.40
30:BY:19:HIS:C	30:BY:21:ALA:N	2.77	0.40
30:BY:20:LYS:H	30:BY:20:LYS:HG3	1.67	0.40
33:B1:51:ALA:O	33:B1:52:LYS:C	2.64	0.40
40:BH:26:ALA:HA	40:BH:31:VAL:HG23	2.03	0.40
40:BH:48:GLU:HA	40:BH:51:ARG:CZ	2.51	0.40
42:BN:28:LEU:C	42:BN:28:LEU:HD13	2.46	0.40
44:BQ:30:VAL:HG11	44:BQ:33:VAL:HG22	2.03	0.40
44:BQ:59:LEU:HD13	44:BQ:60:TRP:N	2.37	0.40
46:BU:35:VAL:HB	46:BU:38:ILE:HB	2.03	0.40
46:BU:85:ARG:O	46:BU:86:PHE:HB2	2.20	0.40
46:BU:88:ASP:CG	46:BU:89:GLY:N	2.78	0.40
48:BG:68:ARG:HH12	48:BG:72:ASN:ND2	2.02	0.40
51:BZ:5:CYS:SG	51:BZ:7:VAL:HG12	2.61	0.40
51:BZ:30:LEU:HA	51:BZ:31:PRO:HD3	1.93	0.40
52:BW:54:ARG:HH11	52:BW:54:ARG:CB	2.34	0.40
52:BW:76:ARG:HB3	52:BW:78:PHE:CE2	2.56	0.40
1:CA:230:G:O2'	1:CA:231:U:H5'	2.21	0.40
1:CA:275:G:H5'	16:CQ:15:LYS:HD3	2.03	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:543:U:H2'	1:CA:544:G:C8	2.57	0.40
1:CA:552:U:H5'	11:CL:82:ARG:HH11	1.85	0.40
1:CA:697:U:O2	1:CA:798:U:H1'	2.21	0.40
1:CA:805:C:O2'	1:CA:806:C:H5'	2.20	0.40
1:CA:1009:U:O2	1:CA:1009:U:C2'	2.69	0.40
1:CA:1028:C:H3'	1:CA:1029:U:H5	1.85	0.40
1:CA:1423:G:H2'	1:CA:1424:U:C6	2.55	0.40
3:CD:80:ARG:HG3	3:CD:80:ARG:HH11	1.87	0.40
5:CF:17:GLN:C	5:CF:19:PRO:HD2	2.46	0.40
6:CG:125:ASP:HB3	6:CG:130:LYS:HB3	2.03	0.40
7:CH:12:ARG:HB3	7:CH:24:VAL:HG21	2.04	0.40
9:CJ:37:ARG:HH11	9:CJ:77:VAL:HG21	1.87	0.40
9:CJ:42:LEU:CD1	9:CJ:73:LEU:HB2	2.51	0.40
9:CJ:53:ILE:HG23	9:CJ:54:SER:H	1.85	0.40
9:CJ:65:TYR:C	13:CN:98:ALA:HB2	2.45	0.40
10:CK:15:VAL:HB	10:CK:78:ILE:CD1	2.50	0.40
13:CN:88:MET:HE2	13:CN:88:MET:HA	2.02	0.40
19:CT:15:LYS:HA	19:CT:18:LYS:HE3	2.03	0.40
20:CB:42:LEU:HA	20:CB:45:THR:HB	2.04	0.40
20:CB:68:PHE:CD1	20:CB:83:ALA:HB2	2.56	0.40
23:DB:77:G:O2'	23:DB:78:U:H5'	2.20	0.40
23:DB:127:A:N7	36:D2:46:LYS:HE2	2.36	0.40
23:DB:131:A:H2'	23:DB:132:G:H8	1.86	0.40
23:DB:132:G:H2'	23:DB:133:U:C6	2.57	0.40
23:DB:512:G:H4'	23:DB:512:G:OP1	2.21	0.40
23:DB:538:A:H2'	23:DB:539:G:O4'	2.22	0.40
23:DB:1059:G:H2'	23:DB:1060:U:C6	2.56	0.40
23:DB:1081:U:H5'	24:DI:126:ARG:CZ	2.51	0.40
23:DB:1114:C:H2'	23:DB:1115:G:C8	2.57	0.40
23:DB:1726:C:H2'	23:DB:1727:C:H6	1.84	0.40
23:DB:2223:G:H2'	23:DB:2224:G:H5'	2.03	0.40
23:DB:2408:U:O2'	23:DB:2409:G:H5'	2.20	0.40
23:DB:2694:G:O2'	23:DB:2695:U:H5'	2.21	0.40
23:DB:2733:A:H3'	23:DB:2733:A:C8	2.56	0.40
23:DB:2799:A:OP2	23:DB:2799:A:H8	2.04	0.40
23:DB:2886:A:N6	31:D0:39:ARG:CZ	2.84	0.40
24:DI:68:PHE:CD1	24:DI:68:PHE:N	2.90	0.40
24:DI:102:ARG:O	24:DI:106:GLN:HG3	2.21	0.40
24:DI:128:ILE:CA	24:DI:131:THR:HG23	2.51	0.40
25:DC:196:ASN:O	25:DC:198:GLU:HG2	2.22	0.40
26:DD:114:LYS:HB2	26:DD:116:LYS:CE	2.47	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DD:149:ASN:C	26:DD:152:PRO:HD2	2.46	0.40
26:DD:163:GLY:O	26:DD:164:GLN:C	2.64	0.40
27:DK:109:SER:O	27:DK:111:LYS:N	2.54	0.40
28:DP:80:VAL:CG1	28:DP:81:ASP:N	2.84	0.40
31:D0:49:ARG:O	31:D0:51:ARG:HG2	2.21	0.40
35:DV:26:PHE:CE2	35:DV:44:HIS:HA	2.56	0.40
37:DL:21:ARG:HA	37:DL:21:ARG:HD3	1.93	0.40
39:DX:1:MET:HA	39:DX:4:LYS:HB3	2.03	0.40
41:DJ:20:ALA:HA	41:DJ:23:LYS:HG3	2.03	0.40
41:DJ:44:TYR:HB2	44:DQ:63:ARG:CD	2.51	0.40
43:DO:111:ARG:NH2	43:DO:117:PHE:O	2.55	0.40
46:DU:2:ALA:HB3	46:DU:5:ARG:CZ	2.51	0.40
48:DG:30:GLY:O	48:DG:78:VAL:HG12	2.22	0.40
48:DG:122:ALA:HA	48:DG:131:VAL:O	2.22	0.40
49:DR:37:GLU:N	49:DR:37:GLU:CD	2.79	0.40
51:DZ:10:LYS:HG2	51:DZ:31:PRO:HG3	2.02	0.40
1:AA:53:A:C2	1:AA:54:C:H1'	2.56	0.40
1:AA:123:U:OP1	1:AA:312:C:H5'	2.21	0.40
1:AA:221:C:O2'	1:AA:222:C:H5'	2.21	0.40
1:AA:355:C:O2'	1:AA:356:A:H5'	2.20	0.40
1:AA:472:U:N3	1:AA:473:U:C4	2.90	0.40
1:AA:554:A:H5'	11:AL:25:ALA:HB1	2.04	0.40
1:AA:923:A:OP1	4:AE:25:LYS:HB3	2.22	0.40
1:AA:1139:G:H4'	1:AA:1140:C:O5'	2.21	0.40
1:AA:1313:U:O2'	1:AA:1314:C:H5'	2.22	0.40
2:AC:128:MET:HE3	2:AC:128:MET:N	2.36	0.40
2:AC:153:SER:O	2:AC:156:LEU:HD21	2.21	0.40
3:AD:123:MET:HG3	3:AD:127:ARG:N	2.36	0.40
4:AE:156:ARG:HA	7:AH:63:LYS:HZ1	1.86	0.40
5:AF:25:TYR:O	5:AF:29:ILE:HG13	2.21	0.40
7:AH:101:ALA:HB3	7:AH:112:ASP:HB3	2.03	0.40
12:AM:22:TYR:HB2	12:AM:65:GLU:HA	2.02	0.40
14:AO:3:LEU:HB2	14:AO:35:GLN:NE2	2.36	0.40
14:AO:70:LEU:HD12	14:AO:78:TYR:N	2.36	0.40
15:AP:22:ALA:HA	15:AP:33:ILE:HG13	2.03	0.40
18:AS:43:MET:CG	18:AS:61:VAL:HG21	2.44	0.40
19:AT:27:MET:HE3	19:AT:31:ILE:CD1	2.51	0.40
20:AB:163:ILE:CG2	20:AB:164:ASP:N	2.70	0.40
20:AB:212:TYR:HA	20:AB:215:ALA:HB3	2.03	0.40
22:BA:8:C:OP1	43:BO:15:ARG:NH2	2.52	0.40
22:BA:35:C:H2'	22:BA:36:C:C5'	2.51	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:284:U:H2'	23:BB:285:G:H8	1.87	0.40
23:BB:296:U:H2'	23:BB:297:G:C8	2.57	0.40
23:BB:528:A:H3'	23:BB:528:A:C8	2.56	0.40
23:BB:625:G:O2'	23:BB:626:A:H5'	2.20	0.40
23:BB:670:A:H4'	23:BB:671:C:C5'	2.37	0.40
23:BB:784:G:O6	25:BC:227:VAL:HG11	2.21	0.40
23:BB:1021:A:C2	23:BB:1023:U:C2	3.09	0.40
23:BB:1051:G:N3	23:BB:1051:G:H2'	2.36	0.40
23:BB:1427:A:H4'	23:BB:1428:C:O4'	2.21	0.40
23:BB:1439:A:N3	23:BB:1553:A:C5	2.90	0.40
23:BB:1997:C:O2'	23:BB:1998:A:H5'	2.22	0.40
23:BB:2049:G:O2'	23:BB:2050:C:H5'	2.21	0.40
23:BB:2186:G:H2'	23:BB:2187:U:H6	1.86	0.40
23:BB:2295:C:OP2	43:BO:9:ARG:NH2	2.55	0.40
23:BB:2336:A:H1'	23:BB:2385:C:O4'	2.21	0.40
24:BI:48:ILE:HG22	24:BI:49:GLU:HG2	2.02	0.40
25:BC:32:LEU:C	25:BC:33:LEU:HD23	2.47	0.40
25:BC:220:ARG:O	25:BC:223:ALA:HB3	2.21	0.40
26:BD:30:GLU:HG3	26:BD:52:THR:CG2	2.50	0.40
27:BK:30:ARG:HH11	27:BK:30:ARG:HG2	1.86	0.40
28:BP:96:LEU:HD12	28:BP:96:LEU:N	2.37	0.40
34:B3:50:SER:C	34:B3:52:GLY:N	2.77	0.40
35:BV:77:VAL:HG23	35:BV:89:ILE:CG2	2.52	0.40
37:BL:67:THR:O	37:BL:68:SER:C	2.64	0.40
41:BJ:77:HIS:CD2	41:BJ:84:ILE:N	2.89	0.40
43:BO:94:ARG:O	43:BO:97:PHE:HB2	2.21	0.40
44:BQ:27:ARG:HA	44:BQ:33:VAL:CG2	2.50	0.40
44:BQ:42:GLY:HA3	49:BR:75:VAL:HG21	2.04	0.40
51:BZ:4:VAL:O	51:BZ:5:CYS:C	2.65	0.40
1:CA:173:U:H5'	1:CA:197:A:O4'	2.22	0.40
1:CA:411:A:N7	1:CA:413:G:N3	2.69	0.40
1:CA:471:U:H2'	1:CA:472:U:C6	2.56	0.40
1:CA:486:U:H2'	1:CA:487:A:C8	2.57	0.40
1:CA:845:A:OP2	1:CA:845:A:H8	2.05	0.40
1:CA:1160:G:H4'	20:CB:130:LYS:CG	2.52	0.40
1:CA:1373:G:H5''	6:CG:35:LYS:HB2	2.03	0.40
1:CA:1492:A:H2'	1:CA:1493:A:C8	2.57	0.40
2:CC:9:ILE:O	2:CC:9:ILE:HG13	2.20	0.40
2:CC:60:ALA:C	2:CC:62:SER:H	2.30	0.40
3:CD:3:TYR:C	3:CD:4:LEU:HG	2.46	0.40
4:CE:104:ILE:HD11	4:CE:114:LEU:HB2	2.03	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:CI:7:GLY:CA	8:CI:85:ALA:HB2	2.51	0.40
9:CJ:17:LEU:HD11	9:CJ:95:GLY:HA3	2.04	0.40
12:CM:52:ILE:HD12	12:CM:55:LEU:CD1	2.51	0.40
22:DA:75:G:H1'	35:DV:29:ILE:HG12	2.03	0.40
23:DB:55:G:H2'	23:DB:56:A:H8	1.86	0.40
23:DB:137:U:H6	23:DB:137:U:P	2.44	0.40
23:DB:215:G:C4'	23:DB:216:A:H4'	2.49	0.40
23:DB:218:A:O2'	23:DB:219:A:H5'	2.21	0.40
23:DB:579:G:C4'	23:DB:2017:U:H2'	2.52	0.40
23:DB:738:G:O2'	23:DB:739:A:H5'	2.22	0.40
23:DB:785:G:H2'	23:DB:786:C:C6	2.57	0.40
23:DB:810:U:O2'	37:DL:20:GLY:HA3	2.21	0.40
23:DB:853:C:H2'	23:DB:854:C:H6	1.86	0.40
23:DB:1035:U:O2'	23:DB:1036:G:H5'	2.20	0.40
23:DB:1076:C:O2'	23:DB:1077:A:H5'	2.22	0.40
23:DB:1315:C:O2'	23:DB:1316:U:H5'	2.21	0.40
23:DB:1351:C:H2'	23:DB:1352:U:O4'	2.22	0.40
23:DB:1760:C:H2'	23:DB:1761:C:O4'	2.20	0.40
23:DB:1796:U:H4'	25:DC:252:LYS:O	2.21	0.40
23:DB:2083:G:H2'	23:DB:2084:C:H6	1.85	0.40
23:DB:2578:G:C5	26:DD:145:SER:HB2	2.56	0.40
23:DB:2723:C:H2'	23:DB:2724:U:O4'	2.21	0.40
24:DI:2:LYS:HD2	24:DI:2:LYS:N	2.35	0.40
25:DC:80:LEU:HD23	25:DC:80:LEU:HA	1.96	0.40
25:DC:90:ILE:HG23	25:DC:91:ALA:N	2.37	0.40
25:DC:269:ARG:O	25:DC:270:ARG:C	2.63	0.40
26:DD:112:THR:O	26:DD:113:SER:HB2	2.20	0.40
26:DD:119:ALA:HB1	26:DD:163:GLY:N	2.37	0.40
27:DK:7:MET:HE1	27:DK:44:LYS:CB	2.52	0.40
28:DP:86:LYS:HB3	28:DP:87:ARG:H	1.66	0.40
28:DP:98:TYR:CE2	28:DP:99:LEU:HD23	2.56	0.40
29:DE:149:ILE:O	29:DE:149:ILE:HG12	2.20	0.40
33:D1:31:GLU:H	33:D1:31:GLU:CD	2.28	0.40
34:D3:14:LYS:HE3	34:D3:14:LYS:HB3	1.94	0.40
35:DV:16:ALA:O	35:DV:19:ARG:HB2	2.21	0.40
35:DV:80:HIS:HB3	35:DV:83:LYS:O	2.20	0.40
38:DM:57:VAL:HA	38:DM:112:LEU:HD11	2.02	0.40
38:DM:105:MET:HE1	38:DM:116:ALA:HB1	2.04	0.40
39:DX:20:ASN:N	39:DX:20:ASN:ND2	2.68	0.40
40:DH:43:ASN:C	40:DH:45:GLU:H	2.28	0.40
41:DJ:88:THR:HG23	41:DJ:91:GLU:H	1.87	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:DO:30:ARG:HG3	43:DO:30:ARG:NH1	2.36	0.40
43:DO:49:VAL:HG11	43:DO:82:ALA:HA	2.03	0.40
46:DU:88:ASP:O	46:DU:90:LYS:N	2.54	0.40
47:DF:119:LYS:C	47:DF:121:PHE:N	2.77	0.40
48:DG:26:LYS:HA	48:DG:32:LEU:N	2.37	0.40
48:DG:37:ASN:ND2	48:DG:40:VAL:HB	2.36	0.40
48:DG:84:LYS:CB	48:DG:132:LEU:HG	2.51	0.40
1:AA:259:G:O2'	1:AA:260:G:H5'	2.22	0.40
1:AA:284:C:O2'	1:AA:285:C:H5'	2.22	0.40
1:AA:500:G:H2'	1:AA:501:C:C6	2.57	0.40
1:AA:543:U:H2'	1:AA:544:G:C8	2.57	0.40
1:AA:556:C:C2'	1:AA:557:G:H5'	2.51	0.40
1:AA:620:C:O2	3:AD:131:ILE:HG21	2.21	0.40
1:AA:674:G:O2'	1:AA:675:A:H5'	2.22	0.40
1:AA:735:C:H2'	1:AA:736:C:C6	2.55	0.40
1:AA:846:G:N3	1:AA:846:G:H2'	2.37	0.40
1:AA:1069:C:O4'	1:AA:1191:A:H2	2.05	0.40
1:AA:1157:A:H4'	1:AA:1158:C:O5'	2.22	0.40
1:AA:1332:A:H2'	1:AA:1333:A:H8	1.87	0.40
1:AA:1376:U:H2'	1:AA:1377:A:C8	2.55	0.40
1:AA:1489:G:H2'	1:AA:1490:U:C6	2.56	0.40
1:AA:1522:U:O2'	1:AA:1523:G:H5'	2.22	0.40
5:AF:79:ARG:HA	5:AF:79:ARG:HD3	1.88	0.40
6:AG:148:LYS:O	6:AG:151:ALA:HB3	2.22	0.40
8:AI:7:GLY:CA	8:AI:85:ALA:HB2	2.52	0.40
8:AI:11:ARG:NH2	8:AI:12:LYS:HD2	2.37	0.40
11:AL:107:LYS:O	11:AL:108:ASP:HB2	2.21	0.40
14:AO:73:LYS:HD3	14:AO:73:LYS:HA	1.94	0.40
18:AS:45:GLY:HA2	18:AS:61:VAL:O	2.22	0.40
20:AB:30:ILE:HG21	20:AB:38:HIS:CD2	2.57	0.40
20:AB:42:LEU:HA	20:AB:45:THR:HB	2.03	0.40
20:AB:69:VAL:O	20:AB:163:ILE:HG22	2.21	0.40
20:AB:133:ALA:O	20:AB:137:THR:HG23	2.22	0.40
20:AB:165:ALA:CB	20:AB:186:VAL:HG12	2.51	0.40
22:BA:73:A:C5	22:BA:74:U:C5	3.10	0.40
23:BB:776:G:H4'	23:BB:777:G:O5'	2.22	0.40
23:BB:807:U:H2'	23:BB:808:G:H8	1.86	0.40
23:BB:962:G:H21	23:BB:2250:G:H1	1.67	0.40
23:BB:1204:A:N1	23:BB:1241:A:C2	2.90	0.40
23:BB:1275:A:C4	42:BN:16:HIS:CD2	3.10	0.40
23:BB:2077:A:C6	23:BB:2078:C:N4	2.90	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:2199:A:H3'	23:BB:2200:C:C6	2.57	0.40
23:BB:2219:U:O2'	23:BB:2220:U:H5'	2.21	0.40
23:BB:2252:G:O2'	23:BB:2253:G:H5'	2.21	0.40
23:BB:2359:C:O2'	23:BB:2360:G:H5'	2.21	0.40
23:BB:2455:G:H2'	23:BB:2456:C:H6	1.85	0.40
23:BB:2462:C:H2'	23:BB:2463:C:C6	2.57	0.40
23:BB:2591:C:OP1	25:BC:237:ARG:HG3	2.21	0.40
23:BB:2655:G:O2'	23:BB:2656:U:P	2.80	0.40
23:BB:2665:A:H2'	23:BB:2666:C:O2	2.21	0.40
25:BC:12:ARG:HA	25:BC:15:VAL:CG2	2.52	0.40
25:BC:83:ASP:HA	25:BC:84:PRO:HD3	1.85	0.40
25:BC:140:VAL:O	25:BC:141:HIS:HB2	2.21	0.40
26:BD:141:ARG:O	26:BD:141:ARG:HG3	2.22	0.40
26:BD:186:LEU:CD2	28:BP:3:ILE:HD11	2.47	0.40
27:BK:39:ILE:HD13	27:BK:39:ILE:HA	1.93	0.40
34:B3:49:VAL:C	34:B3:51:LYS:H	2.29	0.40
37:BL:141:LYS:HD3	37:BL:141:LYS:C	2.47	0.40
41:BJ:20:ALA:HA	41:BJ:23:LYS:HG3	2.04	0.40
42:BN:2:ARG:HG2	42:BN:5:LYS:HB2	2.03	0.40
43:BO:34:HIS:CE1	43:BO:65:THR:HG21	2.57	0.40
44:BQ:9:ALA:O	44:BQ:11:ALA:N	2.53	0.40
44:BQ:27:ARG:HH11	44:BQ:27:ARG:HG3	1.85	0.40
46:BU:46:LYS:HE3	46:BU:47:PRO:O	2.21	0.40
47:BF:81:GLY:O	47:BF:82:TYR:C	2.64	0.40
47:BF:124:ARG:HD2	47:BF:124:ARG:HA	1.93	0.40
48:BG:37:ASN:ND2	48:BG:40:VAL:HB	2.34	0.40
48:BG:38:ASP:CG	48:BG:39:ALA:N	2.80	0.40
49:BR:34:GLU:HB3	49:BR:58:VAL:CG2	2.51	0.40
49:BR:63:VAL:HA	49:BR:95:ASP:O	2.21	0.40
50:BT:61:LEU:HD12	50:BT:62:VAL:O	2.21	0.40
1:CA:284:C:H2'	1:CA:285:C:C6	2.57	0.40
1:CA:762:U:H2'	1:CA:763:G:H8	1.86	0.40
1:CA:796:C:H2'	1:CA:797:C:H6	1.86	0.40
1:CA:932:C:H2'	1:CA:933:G:H8	1.87	0.40
1:CA:1087:G:O2'	1:CA:1088:G:H5'	2.22	0.40
1:CA:1118:U:H2'	1:CA:1119:C:C6	2.56	0.40
2:CC:55:VAL:HG12	2:CC:56:ILE:N	2.36	0.40
2:CC:120:THR:HB	2:CC:188:ALA:HB2	2.04	0.40
3:CD:10:LEU:HB3	3:CD:62:ARG:HD3	2.04	0.40
7:CH:44:PHE:CE2	7:CH:100:ILE:HG12	2.54	0.40
8:CI:27:ILE:HG22	8:CI:34:LEU:HB2	2.03	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:CI:33:SER:HB3	8:CI:36:GLN:HE21	1.86	0.40
14:CO:33:THR:HA	14:CO:36:ILE:HB	2.03	0.40
18:CS:38:THR:HG23	18:CS:69:LYS:CE	2.52	0.40
20:CB:8:MET:SD	20:CB:9:LEU:N	2.80	0.40
20:CB:8:MET:HB2	20:CB:11:ALA:CB	2.52	0.40
20:CB:205:ALA:HB3	20:CB:208:ALA:HB3	2.03	0.40
21:CU:19:LYS:C	21:CU:21:SER:H	2.30	0.40
23:DB:185:G:H2'	23:DB:186:G:O4'	2.21	0.40
23:DB:295:G:O2'	23:DB:296:U:H5'	2.21	0.40
23:DB:543:G:H3'	23:DB:544:C:H5''	2.04	0.40
23:DB:649:G:H2'	23:DB:650:C:C6	2.56	0.40
23:DB:672:C:H2'	23:DB:673:C:C6	2.57	0.40
23:DB:825:A:H2'	23:DB:826:U:O4'	2.22	0.40
23:DB:826:U:H5''	23:DB:2428:G:O3'	2.21	0.40
23:DB:852:U:H2'	23:DB:853:C:C6	2.56	0.40
23:DB:1183:U:H2'	23:DB:1184:U:H6	1.86	0.40
23:DB:1438:U:N3	23:DB:1552:A:N6	2.69	0.40
23:DB:2298:A:H2'	23:DB:2299:U:O4'	2.22	0.40
25:DC:245:THR:C	25:DC:247:TRP:H	2.29	0.40
26:DD:13:ARG:HH12	28:DP:74:GLN:CG	2.34	0.40
26:DD:48:ILE:HG23	26:DD:48:ILE:O	2.22	0.40
27:DK:12:ASP:OD2	27:DK:85:VAL:HG13	2.21	0.40
28:DP:9:GLN:HA	28:DP:12:MET:SD	2.62	0.40
29:DE:151:GLY:CA	29:DE:195:GLN:HE22	2.35	0.40
30:DY:5:LYS:HE2	30:DY:5:LYS:N	2.36	0.40
35:DV:1:MET:CE	35:DV:2:PHE:H	2.35	0.40
35:DV:9:ARG:NE	35:DV:20:LEU:HD11	2.36	0.40
35:DV:81:PRO:O	38:DM:34:LYS:HE2	2.22	0.40
41:DJ:44:TYR:O	41:DJ:45:THR:CB	2.68	0.40
41:DJ:103:ILE:HA	41:DJ:106:LYS:HB3	2.04	0.40
42:DN:97:ILE:HD12	42:DN:98:LEU:H	1.84	0.40
47:DF:39:VAL:CG1	47:DF:49:LEU:HD23	2.48	0.40
47:DF:168:LEU:HD13	47:DF:172:PHE:HE2	1.85	0.40
48:DG:168:VAL:HG12	48:DG:168:VAL:O	2.21	0.40
52:DW:54:ARG:HB3	52:DW:54:ARG:NH1	2.37	0.40

There are no symmetry-related clashes.

5.3 Torsion angles

5.3.1 Protein backbone

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	AC	204/232 (88%)	155 (76%)	35 (17%)	14 (7%)	1	6
2	CC	204/232 (88%)	155 (76%)	36 (18%)	13 (6%)	1	7
3	AD	203/205 (99%)	154 (76%)	34 (17%)	15 (7%)	1	5
3	CD	203/205 (99%)	151 (74%)	37 (18%)	15 (7%)	1	5
4	AE	148/166 (89%)	120 (81%)	25 (17%)	3 (2%)	6	30
4	CE	148/166 (89%)	120 (81%)	24 (16%)	4 (3%)	4	24
5	AF	98/135 (73%)	67 (68%)	26 (26%)	5 (5%)	1	12
5	CF	98/135 (73%)	65 (66%)	28 (29%)	5 (5%)	1	12
6	AG	148/178 (83%)	124 (84%)	18 (12%)	6 (4%)	2	16
6	CG	150/178 (84%)	127 (85%)	18 (12%)	5 (3%)	3	20
7	AH	127/129 (98%)	98 (77%)	25 (20%)	4 (3%)	3	21
7	CH	127/129 (98%)	97 (76%)	27 (21%)	3 (2%)	4	26
8	AI	125/129 (97%)	95 (76%)	20 (16%)	10 (8%)	1	4
8	CI	125/129 (97%)	97 (78%)	19 (15%)	9 (7%)	1	6
9	AJ	96/103 (93%)	73 (76%)	15 (16%)	8 (8%)	0	4
9	CJ	96/103 (93%)	74 (77%)	13 (14%)	9 (9%)	0	3
10	AK	115/128 (90%)	88 (76%)	22 (19%)	5 (4%)	2	15
10	CK	115/128 (90%)	85 (74%)	25 (22%)	5 (4%)	2	15
11	AL	121/123 (98%)	79 (65%)	33 (27%)	9 (7%)	1	5
11	CL	121/123 (98%)	80 (66%)	32 (26%)	9 (7%)	1	5
12	AM	112/117 (96%)	76 (68%)	27 (24%)	9 (8%)	1	4
12	CM	111/117 (95%)	77 (69%)	26 (23%)	8 (7%)	1	6
13	AN	92/100 (92%)	58 (63%)	24 (26%)	10 (11%)	0	2
13	CN	92/100 (92%)	58 (63%)	23 (25%)	11 (12%)	0	1
14	AO	86/89 (97%)	71 (83%)	12 (14%)	3 (4%)	3	19

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
14	CO	86/89 (97%)	71 (83%)	12 (14%)	3 (4%)	3	19
15	AP	80/82 (98%)	60 (75%)	14 (18%)	6 (8%)	1	5
15	CP	78/82 (95%)	58 (74%)	14 (18%)	6 (8%)	1	5
16	AQ	78/83 (94%)	58 (74%)	16 (20%)	4 (5%)	1	12
16	CQ	79/83 (95%)	59 (75%)	16 (20%)	4 (5%)	1	12
17	AR	53/74 (72%)	43 (81%)	8 (15%)	2 (4%)	2	17
17	CR	53/74 (72%)	43 (81%)	9 (17%)	1 (2%)	6	31
18	AS	77/91 (85%)	54 (70%)	17 (22%)	6 (8%)	1	5
18	CS	78/91 (86%)	54 (69%)	17 (22%)	7 (9%)	0	3
19	AT	83/86 (96%)	65 (78%)	12 (14%)	6 (7%)	1	6
19	CT	83/86 (96%)	66 (80%)	11 (13%)	6 (7%)	1	6
20	AB	216/240 (90%)	150 (69%)	44 (20%)	22 (10%)	0	2
20	CB	216/240 (90%)	147 (68%)	48 (22%)	21 (10%)	0	2
21	AU	49/70 (70%)	28 (57%)	11 (22%)	10 (20%)	0	0
21	CU	49/70 (70%)	28 (57%)	10 (20%)	11 (22%)	0	0
24	BI	139/141 (99%)	119 (86%)	15 (11%)	5 (4%)	2	18
24	DI	139/141 (99%)	114 (82%)	20 (14%)	5 (4%)	2	18
25	BC	269/272 (99%)	174 (65%)	49 (18%)	46 (17%)	0	0
25	DC	269/272 (99%)	174 (65%)	47 (18%)	48 (18%)	0	0
26	BD	207/209 (99%)	112 (54%)	63 (30%)	32 (16%)	0	0
26	DD	207/209 (99%)	114 (55%)	58 (28%)	35 (17%)	0	0
27	BK	119/123 (97%)	75 (63%)	28 (24%)	16 (13%)	0	1
27	DK	119/123 (97%)	75 (63%)	27 (23%)	17 (14%)	0	1
28	BP	112/114 (98%)	62 (55%)	35 (31%)	15 (13%)	0	1
28	DP	112/114 (98%)	63 (56%)	34 (30%)	15 (13%)	0	1
29	BE	199/201 (99%)	131 (66%)	51 (26%)	17 (8%)	0	3
29	DE	199/201 (99%)	130 (65%)	53 (27%)	16 (8%)	1	4
30	BY	56/58 (97%)	36 (64%)	14 (25%)	6 (11%)	0	2
30	DY	56/58 (97%)	37 (66%)	13 (23%)	6 (11%)	0	2
31	B0	54/56 (96%)	39 (72%)	10 (18%)	5 (9%)	0	3
31	D0	54/56 (96%)	39 (72%)	10 (18%)	5 (9%)	0	3

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
32	B4	36/38 (95%)	21 (58%)	7 (19%)	8 (22%)	0	0
32	D4	36/38 (95%)	20 (56%)	7 (19%)	9 (25%)	0	0
33	B1	48/54 (89%)	37 (77%)	5 (10%)	6 (12%)	0	1
33	D1	48/54 (89%)	37 (77%)	5 (10%)	6 (12%)	0	1
34	B3	62/64 (97%)	44 (71%)	13 (21%)	5 (8%)	1	4
34	D3	62/64 (97%)	44 (71%)	13 (21%)	5 (8%)	1	4
35	BV	92/94 (98%)	65 (71%)	23 (25%)	4 (4%)	2	15
35	DV	92/94 (98%)	65 (71%)	23 (25%)	4 (4%)	2	15
36	B2	44/46 (96%)	29 (66%)	14 (32%)	1 (2%)	5	27
36	D2	44/46 (96%)	28 (64%)	15 (34%)	1 (2%)	5	27
37	BL	141/144 (98%)	88 (62%)	30 (21%)	23 (16%)	0	0
37	DL	141/144 (98%)	88 (62%)	29 (21%)	24 (17%)	0	0
38	BM	134/136 (98%)	86 (64%)	31 (23%)	17 (13%)	0	1
38	DM	134/136 (98%)	86 (64%)	32 (24%)	16 (12%)	0	1
39	BX	61/63 (97%)	38 (62%)	18 (30%)	5 (8%)	0	4
39	DX	61/63 (97%)	38 (62%)	18 (30%)	5 (8%)	0	4
40	BH	147/149 (99%)	77 (52%)	41 (28%)	29 (20%)	0	0
40	DH	147/149 (99%)	85 (58%)	39 (26%)	23 (16%)	0	0
41	BJ	140/142 (99%)	88 (63%)	36 (26%)	16 (11%)	0	2
41	DJ	140/142 (99%)	89 (64%)	33 (24%)	18 (13%)	0	1
42	BN	118/127 (93%)	72 (61%)	34 (29%)	12 (10%)	0	2
42	DN	118/127 (93%)	71 (60%)	35 (30%)	12 (10%)	0	2
43	BO	114/117 (97%)	84 (74%)	25 (22%)	5 (4%)	2	14
43	DO	114/117 (97%)	83 (73%)	25 (22%)	6 (5%)	1	11
44	BQ	115/117 (98%)	73 (64%)	34 (30%)	8 (7%)	1	6
44	DQ	115/117 (98%)	70 (61%)	38 (33%)	7 (6%)	1	9
45	BS	108/110 (98%)	69 (64%)	28 (26%)	11 (10%)	0	2
45	DS	108/110 (98%)	69 (64%)	29 (27%)	10 (9%)	0	3
46	BU	100/103 (97%)	53 (53%)	25 (25%)	22 (22%)	0	0
46	DU	100/103 (97%)	54 (54%)	23 (23%)	23 (23%)	0	0
47	BF	176/178 (99%)	107 (61%)	44 (25%)	25 (14%)	0	1

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
47	DF	176/178 (99%)	107 (61%)	44 (25%)	25 (14%)	0	1
48	BG	174/176 (99%)	100 (58%)	48 (28%)	26 (15%)	0	1
48	DG	174/176 (99%)	101 (58%)	48 (28%)	25 (14%)	0	1
49	BR	101/103 (98%)	65 (64%)	25 (25%)	11 (11%)	0	2
49	DR	101/103 (98%)	64 (63%)	28 (28%)	9 (9%)	0	3
50	BT	91/100 (91%)	50 (55%)	31 (34%)	10 (11%)	0	2
50	DT	91/100 (91%)	51 (56%)	30 (33%)	10 (11%)	0	2
51	BZ	75/78 (96%)	53 (71%)	18 (24%)	4 (5%)	1	11
51	DZ	75/78 (96%)	50 (67%)	21 (28%)	4 (5%)	1	11
52	BW	77/84 (92%)	29 (38%)	27 (35%)	21 (27%)	0	0
52	DW	77/84 (92%)	29 (38%)	26 (34%)	22 (29%)	0	0
All	All	11241/11914 (94%)	7579 (67%)	2528 (22%)	1134 (10%)	0	2

All (1134) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	AC	14	VAL
2	AC	54	ILE
2	AC	153	SER
2	AC	205	GLU
5	AF	92	THR
6	AG	6	ILE
7	AH	65	PHE
8	AI	8	THR
9	AJ	57	VAL
10	AK	124	LYS
10	AK	126	ARG
13	AN	50	LEU
15	AP	44	SER
16	AQ	32	ILE
18	AS	63	ASP
19	AT	3	ILE
20	AB	9	LEU
20	AB	19	THR
20	AB	22	TRP
20	AB	94	ARG
20	AB	163	ILE
21	AU	23	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	AU	25	ALA
21	AU	34	ARG
24	BI	18	ASN
25	BC	77	VAL
25	BC	107	LYS
26	BD	9	VAL
26	BD	14	ILE
26	BD	74	GLU
26	BD	107	VAL
26	BD	122	VAL
26	BD	169	ARG
26	BD	170	VAL
26	BD	184	ARG
27	BK	31	ARG
27	BK	35	VAL
27	BK	72	PRO
27	BK	119	ALA
27	BK	120	PRO
28	BP	25	VAL
28	BP	50	ARG
28	BP	65	ASN
28	BP	75	THR
28	BP	100	ARG
29	BE	45	ALA
29	BE	60	TRP
29	BE	69	ARG
29	BE	79	ARG
29	BE	165	HIS
29	BE	167	VAL
30	BY	2	LYS
31	B0	42	ILE
31	B0	51	ARG
34	B3	31	ILE
34	B3	50	SER
37	BL	51	GLU
37	BL	89	VAL
37	BL	100	ILE
37	BL	111	ILE
37	BL	116	VAL
38	BM	2	LEU
38	BM	36	VAL
38	BM	78	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	BX	2	LYS
40	BH	9	VAL
40	BH	10	ALA
40	BH	31	VAL
40	BH	32	PRO
40	BH	33	GLN
40	BH	73	ASN
40	BH	77	THR
40	BH	105	ALA
40	BH	136	SER
40	BH	147	VAL
41	BJ	4	PHE
41	BJ	44	TYR
41	BJ	45	THR
41	BJ	73	VAL
41	BJ	81	ILE
41	BJ	124	VAL
42	BN	11	ASN
42	BN	82	GLU
44	BQ	30	VAL
44	BQ	31	TYR
44	BQ	89	ILE
45	BS	3	THR
45	BS	13	SER
45	BS	27	LYS
45	BS	61	ASN
46	BU	6	ARG
46	BU	18	LYS
46	BU	42	LYS
46	BU	85	ARG
47	BF	9	ASP
47	BF	32	LYS
47	BF	41	GLU
47	BF	43	ILE
47	BF	77	LYS
47	BF	92	GLY
47	BF	103	ILE
47	BF	110	ILE
47	BF	112	ASP
47	BF	138	PRO
47	BF	149	ARG
48	BG	9	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
48	BG	11	PRO
48	BG	46	ASP
48	BG	85	LYS
48	BG	89	VAL
48	BG	91	VAL
48	BG	94	ARG
48	BG	117	PRO
48	BG	172	GLU
50	BT	2	ILE
50	BT	39	THR
50	BT	58	VAL
50	BT	88	LYS
51	BZ	33	LEU
51	BZ	77	LYS
52	BW	9	THR
52	BW	30	VAL
52	BW	36	ILE
52	BW	50	VAL
52	BW	59	PHE
52	BW	60	ALA
52	BW	61	LYS
2	CC	14	VAL
2	CC	54	ILE
2	CC	153	SER
2	CC	205	GLU
3	CD	24	VAL
5	CF	92	THR
7	CH	65	PHE
8	CI	8	THR
9	CJ	57	VAL
10	CK	124	LYS
10	CK	126	ARG
12	CM	105	ALA
13	CN	50	LEU
15	CP	44	SER
15	CP	67	ILE
16	CQ	32	ILE
18	CS	63	ASP
19	CT	3	ILE
20	CB	19	THR
20	CB	22	TRP
20	CB	94	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	CU	34	ARG
24	DI	5	GLN
24	DI	18	ASN
25	DC	77	VAL
25	DC	107	LYS
26	DD	9	VAL
26	DD	14	ILE
26	DD	74	GLU
26	DD	107	VAL
26	DD	122	VAL
26	DD	169	ARG
26	DD	170	VAL
26	DD	184	ARG
27	DK	31	ARG
27	DK	35	VAL
27	DK	72	PRO
27	DK	92	GLU
27	DK	119	ALA
27	DK	120	PRO
28	DP	25	VAL
28	DP	50	ARG
28	DP	65	ASN
28	DP	75	THR
28	DP	100	ARG
29	DE	45	ALA
29	DE	60	TRP
29	DE	69	ARG
29	DE	79	ARG
29	DE	165	HIS
29	DE	167	VAL
30	DY	2	LYS
31	D0	42	ILE
31	D0	51	ARG
34	D3	31	ILE
34	D3	50	SER
37	DL	51	GLU
37	DL	89	VAL
37	DL	100	ILE
37	DL	111	ILE
37	DL	116	VAL
38	DM	2	LEU
38	DM	36	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	DM	78	LEU
39	DX	2	LYS
40	DH	9	VAL
40	DH	10	ALA
40	DH	31	VAL
40	DH	32	PRO
40	DH	33	GLN
40	DH	121	VAL
40	DH	136	SER
41	DJ	4	PHE
41	DJ	44	TYR
41	DJ	45	THR
41	DJ	73	VAL
41	DJ	81	ILE
41	DJ	124	VAL
42	DN	11	ASN
42	DN	82	GLU
42	DN	89	SER
44	DQ	30	VAL
44	DQ	31	TYR
44	DQ	89	ILE
45	DS	3	THR
45	DS	13	SER
45	DS	27	LYS
46	DU	6	ARG
46	DU	18	LYS
46	DU	42	LYS
46	DU	85	ARG
47	DF	9	ASP
47	DF	32	LYS
47	DF	41	GLU
47	DF	43	ILE
47	DF	77	LYS
47	DF	92	GLY
47	DF	103	ILE
47	DF	110	ILE
47	DF	112	ASP
47	DF	138	PRO
47	DF	149	ARG
48	DG	9	VAL
48	DG	11	PRO
48	DG	46	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
48	DG	85	LYS
48	DG	89	VAL
48	DG	91	VAL
48	DG	94	ARG
48	DG	117	PRO
48	DG	172	GLU
50	DT	2	ILE
50	DT	39	THR
50	DT	58	VAL
50	DT	88	LYS
51	DZ	33	LEU
51	DZ	77	LYS
52	DW	9	THR
52	DW	14	ASP
52	DW	30	VAL
52	DW	36	ILE
52	DW	50	VAL
52	DW	59	PHE
52	DW	60	ALA
52	DW	61	LYS
2	AC	47	ALA
2	AC	112	ALA
2	AC	180	ASP
3	AD	24	VAL
3	AD	25	ARG
3	AD	107	GLY
3	AD	165	GLU
3	AD	192	ALA
4	AE	20	VAL
4	AE	108	GLY
5	AF	85	ILE
6	AG	68	VAL
7	AH	2	MET
7	AH	82	LEU
8	AI	127	SER
9	AJ	36	VAL
9	AJ	74	VAL
10	AK	88	PRO
11	AL	23	LEU
11	AL	24	GLU
11	AL	42	LYS
11	AL	117	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	AM	22	TYR
12	AM	49	GLU
12	AM	104	ASN
12	AM	105	ALA
13	AN	29	ILE
13	AN	71	GLY
14	AO	18	ASP
14	AO	74	ASP
15	AP	67	ILE
15	AP	79	ASN
18	AS	27	LYS
19	AT	42	ASP
20	AB	14	HIS
20	AB	15	PHE
20	AB	18	GLN
20	AB	86	CYS
20	AB	188	THR
21	AU	7	GLU
21	AU	12	ASP
21	AU	22	CYS
21	AU	32	ARG
24	BI	14	ALA
24	BI	64	ARG
25	BC	3	VAL
25	BC	18	VAL
25	BC	35	LYS
25	BC	36	ASN
25	BC	63	ILE
25	BC	69	ASN
25	BC	93	VAL
25	BC	94	LEU
25	BC	123	ILE
25	BC	141	HIS
25	BC	142	ASN
25	BC	232	GLY
25	BC	239	PHE
25	BC	255	LYS
26	BD	91	THR
26	BD	93	GLY
26	BD	121	THR
26	BD	136	ASN
26	BD	145	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
27	BK	18	ARG
27	BK	46	ALA
27	BK	92	GLU
27	BK	110	GLU
28	BP	37	LYS
28	BP	38	ARG
28	BP	64	SER
28	BP	83	ILE
28	BP	101	GLU
29	BE	42	GLY
29	BE	46	GLN
30	BY	4	ILE
31	B0	48	TYR
32	B4	4	ARG
32	B4	8	LYS
33	B1	4	ILE
34	B3	20	GLY
34	B3	22	LYS
35	BV	25	LYS
36	B2	44	VAL
37	BL	15	ALA
37	BL	28	GLY
38	BM	19	GLY
38	BM	56	ALA
38	BM	69	PRO
38	BM	83	GLY
38	BM	134	THR
39	BX	9	LYS
40	BH	3	VAL
40	BH	12	LEU
40	BH	28	ASN
40	BH	64	ALA
40	BH	125	THR
41	BJ	43	GLU
41	BJ	84	ILE
41	BJ	111	LYS
42	BN	10	LEU
42	BN	89	SER
42	BN	98	LEU
42	BN	100	CYS
42	BN	101	GLY
42	BN	119	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
43	BO	83	LEU
43	BO	98	GLN
44	BQ	18	LYS
45	BS	14	ALA
45	BS	25	ARG
45	BS	96	ILE
46	BU	19	GLY
46	BU	41	VAL
46	BU	47	PRO
46	BU	78	LYS
46	BU	89	GLY
47	BF	11	VAL
47	BF	36	ASN
47	BF	78	ILE
47	BF	135	ILE
47	BF	148	VAL
48	BG	2	ARG
48	BG	84	LYS
48	BG	97	VAL
48	BG	107	GLY
49	BR	24	LYS
49	BR	57	GLY
50	BT	19	LYS
50	BT	38	ALA
50	BT	69	ARG
51	BZ	35	SER
52	BW	12	GLY
52	BW	14	ASP
52	BW	17	ALA
52	BW	32	ALA
52	BW	51	GLY
52	BW	53	GLY
52	BW	62	ALA
52	BW	77	LYS
2	CC	112	ALA
2	CC	180	ASP
3	CD	22	SER
3	CD	25	ARG
3	CD	107	GLY
3	CD	165	GLU
3	CD	192	ALA
4	CE	20	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	CE	108	GLY
5	CF	85	ILE
6	CG	112	ASP
6	CG	152	HIS
7	CH	2	MET
7	CH	82	LEU
8	CI	127	SER
9	CJ	36	VAL
9	CJ	74	VAL
10	CK	88	PRO
11	CL	23	LEU
11	CL	24	GLU
11	CL	42	LYS
11	CL	117	GLY
12	CM	22	TYR
12	CM	49	GLU
12	CM	104	ASN
13	CN	29	ILE
13	CN	71	GLY
14	CO	18	ASP
14	CO	74	ASP
18	CS	27	LYS
19	CT	42	ASP
20	CB	14	HIS
20	CB	18	GLN
20	CB	86	CYS
20	CB	131	LYS
20	CB	154	GLY
20	CB	163	ILE
20	CB	188	THR
21	CU	7	GLU
21	CU	12	ASP
21	CU	22	CYS
21	CU	23	GLU
21	CU	25	ALA
21	CU	32	ARG
25	DC	18	VAL
25	DC	35	LYS
25	DC	36	ASN
25	DC	59	GLN
25	DC	63	ILE
25	DC	64	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	DC	69	ASN
25	DC	93	VAL
25	DC	94	LEU
25	DC	123	ILE
25	DC	141	HIS
25	DC	142	ASN
25	DC	190	THR
25	DC	232	GLY
25	DC	239	PHE
25	DC	255	LYS
26	DD	91	THR
26	DD	93	GLY
26	DD	121	THR
26	DD	127	PHE
26	DD	136	ASN
26	DD	145	SER
27	DK	17	ARG
27	DK	18	ARG
27	DK	110	GLU
28	DP	37	LYS
28	DP	64	SER
28	DP	83	ILE
28	DP	101	GLU
29	DE	42	GLY
30	DY	4	ILE
31	D0	48	TYR
32	D4	8	LYS
32	D4	37	GLN
33	D1	4	ILE
34	D3	20	GLY
34	D3	22	LYS
35	DV	25	LYS
36	D2	44	VAL
37	DL	3	LEU
37	DL	15	ALA
37	DL	28	GLY
38	DM	19	GLY
38	DM	56	ALA
38	DM	69	PRO
38	DM	83	GLY
38	DM	134	THR
39	DX	9	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	DH	3	VAL
40	DH	12	LEU
40	DH	28	ASN
40	DH	113	SER
41	DJ	43	GLU
41	DJ	84	ILE
41	DJ	111	LYS
42	DN	10	LEU
42	DN	98	LEU
42	DN	100	CYS
42	DN	101	GLY
42	DN	119	SER
43	DO	83	LEU
43	DO	98	GLN
44	DQ	18	LYS
45	DS	14	ALA
45	DS	25	ARG
45	DS	61	ASN
45	DS	96	ILE
46	DU	19	GLY
46	DU	41	VAL
46	DU	47	PRO
46	DU	89	GLY
47	DF	11	VAL
47	DF	36	ASN
47	DF	78	ILE
47	DF	135	ILE
47	DF	148	VAL
48	DG	2	ARG
48	DG	31	GLU
48	DG	84	LYS
48	DG	97	VAL
48	DG	107	GLY
48	DG	164	ALA
49	DR	24	LYS
49	DR	57	GLY
50	DT	19	LYS
50	DT	38	ALA
51	DZ	35	SER
52	DW	12	GLY
52	DW	17	ALA
52	DW	32	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
52	DW	51	GLY
52	DW	53	GLY
52	DW	77	LYS
2	AC	3	LYS
2	AC	59	PRO
2	AC	107	LYS
3	AD	22	SER
3	AD	31	CYS
3	AD	169	TRP
3	AD	191	SER
5	AF	54	LEU
5	AF	69	GLU
5	AF	98	GLU
6	AG	112	ASP
8	AI	24	ASN
8	AI	44	ARG
9	AJ	56	HIS
9	AJ	75	ASP
10	AK	51	PHE
11	AL	13	ARG
11	AL	61	GLU
11	AL	122	LYS
12	AM	6	ILE
13	AN	2	LYS
13	AN	61	ASN
16	AQ	28	VAL
16	AQ	81	ALA
20	AB	121	GLN
20	AB	141	GLU
20	AB	153	MET
20	AB	154	GLY
21	AU	17	ARG
24	BI	23	VAL
25	BC	4	LYS
25	BC	37	SER
25	BC	59	GLN
25	BC	64	VAL
25	BC	65	ASP
25	BC	88	ALA
25	BC	121	ALA
25	BC	140	VAL
25	BC	189	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BC	190	THR
25	BC	222	THR
26	BD	113	SER
26	BD	127	PHE
26	BD	164	GLN
26	BD	167	ASN
26	BD	181	ASP
26	BD	194	PRO
27	BK	6	THR
27	BK	17	ARG
28	BP	104	GLY
30	BY	9	THR
32	B4	34	LYS
37	BL	3	LEU
37	BL	5	THR
37	BL	117	THR
38	BM	43	ALA
38	BM	59	ARG
38	BM	77	PRO
39	BX	37	LEU
40	BH	11	ASN
40	BH	44	ILE
40	BH	83	LYS
40	BH	103	VAL
41	BJ	72	LYS
41	BJ	113	PRO
42	BN	61	ALA
42	BN	83	LEU
43	BO	100	HIS
44	BQ	4	LYS
44	BQ	10	ARG
44	BQ	88	GLU
45	BS	40	ASN
46	BU	9	GLU
46	BU	49	PRO
46	BU	61	GLU
46	BU	96	LYS
47	BF	42	ALA
47	BF	87	LYS
47	BF	176	PHE
48	BG	31	GLU
48	BG	38	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
48	BG	164	ALA
49	BR	43	ASN
52	BW	13	ARG
52	BW	23	LYS
2	CC	3	LYS
2	CC	47	ALA
2	CC	59	PRO
2	CC	107	LYS
3	CD	31	CYS
3	CD	169	TRP
3	CD	191	SER
5	CF	98	GLU
6	CG	68	VAL
8	CI	24	ASN
9	CJ	56	HIS
9	CJ	75	ASP
10	CK	51	PHE
11	CL	13	ARG
11	CL	61	GLU
11	CL	122	LYS
12	CM	6	ILE
13	CN	2	LYS
16	CQ	81	ALA
17	CR	46	THR
19	CT	41	GLY
20	CB	15	PHE
20	CB	58	LYS
20	CB	141	GLU
20	CB	153	MET
24	DI	23	VAL
25	DC	3	VAL
25	DC	4	LYS
25	DC	37	SER
25	DC	52	HIS
25	DC	65	ASP
25	DC	140	VAL
25	DC	222	THR
26	DD	24	VAL
26	DD	113	SER
26	DD	131	ASP
26	DD	167	ASN
26	DD	194	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
27	DK	6	THR
27	DK	46	ALA
28	DP	38	ARG
28	DP	104	GLY
29	DE	46	GLN
29	DE	153	LEU
30	DY	9	THR
30	DY	34	THR
31	D0	54	ILE
32	D4	4	ARG
32	D4	9	LYS
32	D4	16	ILE
32	D4	34	LYS
33	D1	51	ALA
37	DL	5	THR
37	DL	54	GLN
37	DL	117	THR
38	DM	43	ALA
38	DM	59	ARG
38	DM	72	PRO
38	DM	77	PRO
39	DX	37	LEU
40	DH	11	ASN
41	DJ	2	LYS
41	DJ	5	THR
41	DJ	72	LYS
41	DJ	113	PRO
42	DN	61	ALA
42	DN	83	LEU
43	DO	100	HIS
44	DQ	10	ARG
44	DQ	88	GLU
45	DS	40	ASN
46	DU	9	GLU
46	DU	49	PRO
46	DU	61	GLU
46	DU	78	LYS
47	DF	42	ALA
47	DF	87	LYS
47	DF	176	PHE
48	DG	38	ASP
48	DG	170	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
49	DR	43	ASN
50	DT	69	ARG
52	DW	13	ARG
52	DW	23	LYS
52	DW	62	ALA
52	DW	70	VAL
2	AC	100	ILE
3	AD	82	LYS
6	AG	127	ALA
8	AI	42	THR
8	AI	55	ASP
8	AI	106	ASP
9	AJ	93	ALA
12	AM	7	ASN
13	AN	52	ARG
15	AP	28	ARG
15	AP	49	GLY
15	AP	52	LEU
17	AR	46	THR
18	AS	67	GLY
18	AS	72	GLU
19	AT	4	LYS
19	AT	41	GLY
19	AT	65	LEU
19	AT	67	HIS
20	AB	58	LYS
20	AB	205	ALA
21	AU	9	GLU
21	AU	33	ARG
24	BI	49	GLU
25	BC	52	HIS
25	BC	53	ILE
25	BC	70	LYS
25	BC	196	ASN
25	BC	212	TRP
25	BC	237	ARG
25	BC	248	GLY
26	BD	24	VAL
26	BD	31	ALA
26	BD	95	SER
26	BD	131	ASP
26	BD	159	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BD	162	ALA
26	BD	197	THR
27	BK	4	GLU
27	BK	14	SER
28	BP	31	VAL
28	BP	108	ARG
29	BE	153	LEU
30	BY	34	THR
30	BY	49	ALA
30	BY	50	VAL
31	B0	26	SER
31	B0	54	ILE
32	B4	9	LYS
32	B4	16	ILE
32	B4	37	GLN
33	B1	35	LEU
33	B1	36	LYS
33	B1	50	GLU
33	B1	51	ALA
35	BV	71	LYS
37	BL	4	ASN
37	BL	17	LYS
37	BL	29	LYS
37	BL	36	LYS
37	BL	66	PHE
37	BL	81	ASP
37	BL	94	THR
37	BL	99	ASN
37	BL	143	GLU
38	BM	42	THR
38	BM	60	GLN
38	BM	72	PRO
39	BX	62	GLY
40	BH	7	ASP
40	BH	54	LEU
40	BH	100	ALA
40	BH	118	PRO
41	BJ	5	THR
41	BJ	13	ARG
42	BN	13	ASN
42	BN	104	ALA
43	BO	99	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
45	BS	29	VAL
45	BS	80	PRO
46	BU	12	VAL
46	BU	50	ALA
46	BU	82	VAL
46	BU	91	LYS
46	BU	92	VAL
46	BU	101	THR
48	BG	32	LEU
48	BG	61	TRP
48	BG	120	ILE
48	BG	170	THR
49	BR	7	SER
49	BR	65	ALA
50	BT	28	ASN
50	BT	86	THR
52	BW	70	VAL
3	CD	82	LYS
5	CF	54	LEU
5	CF	69	GLU
6	CG	127	ALA
8	CI	44	ARG
8	CI	55	ASP
8	CI	106	ASP
9	CJ	93	ALA
11	CL	47	ALA
12	CM	7	ASN
13	CN	51	PRO
13	CN	52	ARG
13	CN	61	ASN
14	CO	34	ALA
15	CP	28	ARG
15	CP	49	GLY
15	CP	52	LEU
16	CQ	28	VAL
18	CS	2	ARG
18	CS	52	ASN
18	CS	67	GLY
18	CS	72	GLU
19	CT	4	LYS
19	CT	65	LEU
19	CT	67	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	CB	9	LEU
20	CB	205	ALA
21	CU	9	GLU
21	CU	33	ARG
24	DI	14	ALA
25	DC	53	ILE
25	DC	70	LYS
25	DC	88	ALA
25	DC	121	ALA
25	DC	189	ALA
25	DC	196	ASN
25	DC	212	TRP
25	DC	237	ARG
25	DC	248	GLY
25	DC	260	LYS
26	DD	31	ALA
26	DD	95	SER
26	DD	159	LYS
26	DD	162	ALA
26	DD	164	GLN
26	DD	181	ASP
26	DD	197	THR
27	DK	4	GLU
27	DK	14	SER
27	DK	43	ILE
27	DK	73	ASP
28	DP	108	ARG
30	DY	49	ALA
31	D0	26	SER
33	D1	36	LYS
33	D1	50	GLU
35	DV	71	LYS
37	DL	4	ASN
37	DL	19	LEU
37	DL	36	LYS
37	DL	66	PHE
37	DL	81	ASP
37	DL	94	THR
37	DL	99	ASN
37	DL	143	GLU
38	DM	42	THR
38	DM	60	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	DX	16	THR
39	DX	62	GLY
40	DH	7	ASP
40	DH	41	LYS
40	DH	90	LEU
40	DH	92	GLY
40	DH	119	ASN
41	DJ	13	ARG
42	DN	104	ALA
43	DO	99	TYR
44	DQ	4	LYS
45	DS	29	VAL
45	DS	80	PRO
46	DU	12	VAL
46	DU	50	ALA
46	DU	82	VAL
46	DU	91	LYS
46	DU	92	VAL
46	DU	96	LYS
46	DU	101	THR
47	DF	2	LYS
48	DG	32	LEU
48	DG	61	TRP
48	DG	120	ILE
49	DR	7	SER
49	DR	65	ALA
50	DT	28	ASN
50	DT	86	THR
52	DW	27	GLY
3	AD	4	LEU
9	AJ	41	PRO
9	AJ	62	ARG
12	AM	65	GLU
13	AN	51	PRO
13	AN	70	HIS
14	AO	34	ALA
18	AS	52	ASN
20	AB	76	SER
20	AB	200	PRO
25	BC	105	ALA
25	BC	145	MET
25	BC	186	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BC	246	PRO
26	BD	54	ALA
26	BD	56	LYS
26	BD	109	VAL
26	BD	119	ALA
26	BD	143	PRO
27	BK	43	ILE
27	BK	93	GLN
29	BE	70	SER
32	B4	20	ASP
34	B3	58	ILE
37	BL	19	LEU
37	BL	41	ARG
37	BL	54	GLN
38	BM	20	LEU
39	BX	16	THR
40	BH	62	LEU
40	BH	86	ASP
40	BH	99	ILE
41	BJ	2	LYS
41	BJ	14	ASP
43	BO	68	LYS
46	BU	51	LEU
46	BU	67	SER
47	BF	7	TYR
47	BF	12	VAL
47	BF	133	GLU
47	BF	136	ILE
49	BR	52	PRO
49	BR	70	GLU
49	BR	79	ARG
49	BR	98	ILE
49	BR	101	ILE
51	BZ	28	ARG
52	BW	27	GLY
52	BW	74	LYS
2	CC	100	ILE
2	CC	145	ALA
3	CD	4	LEU
3	CD	27	ILE
8	CI	42	THR
9	CJ	41	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	CJ	62	ARG
12	CM	97	ARG
13	CN	48	GLN
20	CB	50	ASN
20	CB	200	PRO
21	CU	11	PHE
25	DC	34	GLU
25	DC	105	ALA
25	DC	145	MET
25	DC	186	ASP
25	DC	238	ASN
25	DC	246	PRO
26	DD	11	MET
26	DD	56	LYS
26	DD	75	ALA
26	DD	109	VAL
26	DD	119	ALA
26	DD	143	PRO
26	DD	173	GLN
27	DK	93	GLN
28	DP	31	VAL
29	DE	70	SER
30	DY	50	VAL
32	D4	20	ASP
32	D4	36	ARG
33	D1	35	LEU
34	D3	58	ILE
35	DV	15	GLY
37	DL	17	LYS
37	DL	29	LYS
37	DL	41	ARG
38	DM	20	LEU
38	DM	73	ILE
40	DH	86	ASP
40	DH	96	THR
41	DJ	14	ASP
46	DU	51	LEU
46	DU	63	ALA
46	DU	67	SER
47	DF	7	TYR
47	DF	12	VAL
47	DF	133	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
47	DF	136	ILE
49	DR	52	PRO
49	DR	70	GLU
49	DR	98	ILE
49	DR	101	ILE
51	DZ	28	ARG
52	DW	10	ARG
52	DW	74	LYS
2	AC	145	ALA
3	AD	27	ILE
3	AD	36	ALA
7	AH	66	GLN
11	AL	47	ALA
12	AM	97	ARG
13	AN	62	ARG
16	AQ	31	PRO
17	AR	44	THR
20	AB	24	PRO
20	AB	50	ASN
25	BC	31	PRO
25	BC	34	GLU
25	BC	249	VAL
25	BC	260	LYS
26	BD	173	GLN
27	BK	101	GLY
29	BE	78	TRP
29	BE	96	VAL
29	BE	129	PRO
29	BE	177	PRO
35	BV	15	GLY
35	BV	84	PRO
38	BM	73	ILE
38	BM	81	ARG
44	BQ	91	ARG
45	BS	32	ALA
48	BG	92	GLY
48	BG	155	PRO
49	BR	40	MET
50	BT	55	VAL
3	CD	36	ALA
4	CE	74	ALA
9	CJ	60	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	CN	62	ARG
13	CN	70	HIS
15	CP	16	PHE
16	CQ	31	PRO
20	CB	24	PRO
21	CU	17	ARG
25	DC	31	PRO
25	DC	250	GLN
26	DD	54	ALA
29	DE	96	VAL
29	DE	129	PRO
35	DV	84	PRO
37	DL	68	SER
40	DH	88	GLY
40	DH	98	ASP
40	DH	107	GLY
41	DJ	41	LYS
42	DN	59	SER
43	DO	13	ARG
43	DO	68	LYS
48	DG	155	PRO
50	DT	55	VAL
6	AG	15	PRO
25	BC	48	ILE
25	BC	150	GLY
29	BE	81	GLY
29	BE	83	VAL
40	BH	108	VAL
47	BF	88	VAL
52	BW	37	VAL
6	CG	15	PRO
8	CI	71	ILE
20	CB	64	GLY
25	DC	151	GLY
25	DC	249	VAL
28	DP	63	ILE
29	DE	83	VAL
29	DE	177	PRO
47	DF	88	VAL
52	DW	37	VAL
2	AC	65	VAL
3	AD	179	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	AI	57	VAL
10	AK	89	GLY
12	AM	3	ILE
20	AB	150	ILE
28	BP	63	ILE
29	BE	148	ILE
46	BU	15	GLY
48	BG	16	VAL
2	CC	65	VAL
3	CD	154	VAL
3	CD	179	GLY
8	CI	57	VAL
12	CM	3	ILE
20	CB	150	ILE
25	DC	48	ILE
25	DC	150	GLY
29	DE	148	ILE
32	D4	7	VAL
33	D1	30	PRO
41	DJ	54	ILE
48	DG	16	VAL
3	AD	154	VAL
4	AE	157	GLY
8	AI	71	ILE
18	AS	29	PRO
20	AB	64	GLY
25	BC	151	GLY
28	BP	4	ILE
32	B4	7	VAL
33	B1	30	PRO
37	BL	31	GLY
41	BJ	112	GLY
4	CE	157	GLY
10	CK	89	GLY
27	DK	101	GLY
28	DP	4	ILE
41	DJ	112	GLY
46	DU	15	GLY
48	DG	18	ILE
48	DG	92	GLY
11	AL	15	VAL
40	BH	121	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
48	BG	18	ILE
48	BG	119	GLY
48	BG	168	VAL
13	CN	67	GLY
18	CS	29	PRO
29	DE	81	GLY
37	DL	31	GLY
40	DH	16	GLY
48	DG	168	VAL
2	AC	55	VAL
6	AG	5	VAL
8	AI	82	ILE
13	AN	67	GLY
25	BC	147	PRO
40	BH	16	GLY
47	BF	82	TYR
11	CL	15	VAL
24	DI	34	ILE
25	DC	147	PRO
26	DD	172	VAL

5.3.2 Protein sidechains ⓘ

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	AC	170/189 (90%)	139 (82%)	31 (18%)	2	8
2	CC	170/189 (90%)	139 (82%)	31 (18%)	2	8
3	AD	172/172 (100%)	147 (86%)	25 (14%)	3	15
3	CD	172/172 (100%)	145 (84%)	27 (16%)	2	12
4	AE	113/125 (90%)	93 (82%)	20 (18%)	2	9
4	CE	113/125 (90%)	93 (82%)	20 (18%)	2	9
5	AF	87/116 (75%)	69 (79%)	18 (21%)	1	6
5	CF	87/116 (75%)	69 (79%)	18 (21%)	1	6

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
6	AG	123/146 (84%)	103 (84%)	20 (16%)	2	11
6	CG	125/146 (86%)	105 (84%)	20 (16%)	2	12
7	AH	104/104 (100%)	94 (90%)	10 (10%)	8	31
7	CH	104/104 (100%)	94 (90%)	10 (10%)	8	31
8	AI	105/106 (99%)	88 (84%)	17 (16%)	2	11
8	CI	105/106 (99%)	86 (82%)	19 (18%)	2	8
9	AJ	86/90 (96%)	71 (83%)	15 (17%)	2	9
9	CJ	86/90 (96%)	72 (84%)	14 (16%)	2	11
10	AK	90/98 (92%)	79 (88%)	11 (12%)	5	21
10	CK	90/98 (92%)	79 (88%)	11 (12%)	5	21
11	AL	103/103 (100%)	91 (88%)	12 (12%)	5	23
11	CL	103/103 (100%)	91 (88%)	12 (12%)	5	23
12	AM	92/95 (97%)	77 (84%)	15 (16%)	2	11
12	CM	91/95 (96%)	76 (84%)	15 (16%)	2	10
13	AN	79/83 (95%)	64 (81%)	15 (19%)	1	8
13	CN	79/83 (95%)	64 (81%)	15 (19%)	1	8
14	AO	76/77 (99%)	70 (92%)	6 (8%)	11	39
14	CO	76/77 (99%)	70 (92%)	6 (8%)	11	39
15	AP	65/65 (100%)	59 (91%)	6 (9%)	8	32
15	CP	65/65 (100%)	59 (91%)	6 (9%)	8	32
16	AQ	74/77 (96%)	64 (86%)	10 (14%)	4	18
16	CQ	75/77 (97%)	65 (87%)	10 (13%)	4	18
17	AR	48/64 (75%)	41 (85%)	7 (15%)	3	15
17	CR	48/64 (75%)	41 (85%)	7 (15%)	3	15
18	AS	70/78 (90%)	55 (79%)	15 (21%)	1	6
18	CS	71/78 (91%)	55 (78%)	16 (22%)	1	5
19	AT	65/65 (100%)	54 (83%)	11 (17%)	2	10
19	CT	65/65 (100%)	53 (82%)	12 (18%)	1	8
20	AB	180/198 (91%)	146 (81%)	34 (19%)	1	8
20	CB	180/198 (91%)	146 (81%)	34 (19%)	1	8
21	AU	44/60 (73%)	31 (70%)	13 (30%)	0	1

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
21	CU	44/60 (73%)	31 (70%)	13 (30%)	0	1
24	BI	109/109 (100%)	108 (99%)	1 (1%)	70	79
24	DI	109/109 (100%)	105 (96%)	4 (4%)	30	60
25	BC	216/217 (100%)	177 (82%)	39 (18%)	2	8
25	DC	216/217 (100%)	177 (82%)	39 (18%)	2	8
26	BD	164/164 (100%)	138 (84%)	26 (16%)	2	12
26	DD	164/164 (100%)	138 (84%)	26 (16%)	2	12
27	BK	102/104 (98%)	81 (79%)	21 (21%)	1	6
27	DK	102/104 (98%)	81 (79%)	21 (21%)	1	6
28	BP	99/99 (100%)	79 (80%)	20 (20%)	1	7
28	DP	99/99 (100%)	80 (81%)	19 (19%)	1	8
29	BE	165/165 (100%)	139 (84%)	26 (16%)	2	12
29	DE	165/165 (100%)	138 (84%)	27 (16%)	2	11
30	BY	48/48 (100%)	38 (79%)	10 (21%)	1	6
30	DY	48/48 (100%)	37 (77%)	11 (23%)	1	4
31	B0	47/47 (100%)	37 (79%)	10 (21%)	1	6
31	D0	47/47 (100%)	37 (79%)	10 (21%)	1	6
32	B4	34/34 (100%)	27 (79%)	7 (21%)	1	6
32	D4	34/34 (100%)	28 (82%)	6 (18%)	2	9
33	B1	45/48 (94%)	41 (91%)	4 (9%)	9	33
33	D1	45/48 (94%)	39 (87%)	6 (13%)	4	18
34	B3	51/51 (100%)	47 (92%)	4 (8%)	11	39
34	D3	51/51 (100%)	48 (94%)	3 (6%)	18	48
35	BV	78/78 (100%)	63 (81%)	15 (19%)	1	8
35	DV	78/78 (100%)	62 (80%)	16 (20%)	1	6
36	B2	38/38 (100%)	31 (82%)	7 (18%)	1	8
36	D2	38/38 (100%)	31 (82%)	7 (18%)	1	8
37	BL	102/103 (99%)	86 (84%)	16 (16%)	2	12
37	DL	102/103 (99%)	86 (84%)	16 (16%)	2	12
38	BM	109/109 (100%)	89 (82%)	20 (18%)	2	8
38	DM	109/109 (100%)	88 (81%)	21 (19%)	1	7

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
39	BX	55/55 (100%)	41 (74%)	14 (26%)	0	3
39	DX	55/55 (100%)	41 (74%)	14 (26%)	0	3
40	BH	114/114 (100%)	65 (57%)	49 (43%)	0	0
40	DH	114/114 (100%)	90 (79%)	24 (21%)	1	6
41	BJ	116/116 (100%)	101 (87%)	15 (13%)	4	19
41	DJ	116/116 (100%)	101 (87%)	15 (13%)	4	19
42	BN	100/103 (97%)	85 (85%)	15 (15%)	3	14
42	DN	100/103 (97%)	84 (84%)	16 (16%)	2	12
43	BO	86/87 (99%)	68 (79%)	18 (21%)	1	6
43	DO	86/87 (99%)	68 (79%)	18 (21%)	1	6
44	BQ	89/89 (100%)	75 (84%)	14 (16%)	2	12
44	DQ	89/89 (100%)	75 (84%)	14 (16%)	2	12
45	BS	93/93 (100%)	79 (85%)	14 (15%)	3	13
45	DS	93/93 (100%)	81 (87%)	12 (13%)	4	19
46	BU	83/84 (99%)	66 (80%)	17 (20%)	1	6
46	DU	83/84 (99%)	66 (80%)	17 (20%)	1	6
47	BF	149/149 (100%)	115 (77%)	34 (23%)	1	4
47	DF	149/149 (100%)	115 (77%)	34 (23%)	1	4
48	BG	137/137 (100%)	113 (82%)	24 (18%)	2	9
48	DG	137/137 (100%)	113 (82%)	24 (18%)	2	9
49	BR	84/84 (100%)	71 (84%)	13 (16%)	2	13
49	DR	84/84 (100%)	73 (87%)	11 (13%)	4	19
50	BT	80/84 (95%)	61 (76%)	19 (24%)	1	4
50	DT	80/84 (95%)	61 (76%)	19 (24%)	1	4
51	BZ	67/68 (98%)	51 (76%)	16 (24%)	1	4
51	DZ	67/68 (98%)	52 (78%)	15 (22%)	1	5
52	BW	59/62 (95%)	47 (80%)	12 (20%)	1	6
52	DW	59/62 (95%)	47 (80%)	12 (20%)	1	6
All	All	9333/9700 (96%)	7729 (83%)	1604 (17%)	2	10

All (1604) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	AC	2	GLN
2	AC	13	ILE
2	AC	14	VAL
2	AC	17	TRP
2	AC	20	THR
2	AC	27	GLU
2	AC	30	ASP
2	AC	31	ASN
2	AC	35	ASP
2	AC	41	TYR
2	AC	42	LEU
2	AC	48	LYS
2	AC	61	LYS
2	AC	62	SER
2	AC	69	THR
2	AC	71	ARG
2	AC	74	ILE
2	AC	81	GLU
2	AC	84	GLU
2	AC	87	ARG
2	AC	88	LYS
2	AC	125	ARG
2	AC	128	MET
2	AC	131	ARG
2	AC	138	GLN
2	AC	168	ARG
2	AC	171	ARG
2	AC	180	ASP
2	AC	184	ASN
2	AC	192	TYR
2	AC	206	ILE
3	AD	4	LEU
3	AD	18	LEU
3	AD	25	ARG
3	AD	28	ASP
3	AD	32	LYS
3	AD	35	GLN
3	AD	39	GLN
3	AD	43	ARG
3	AD	55	ARG
3	AD	58	GLN
3	AD	84	ASN
3	AD	87	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	AD	123	MET
3	AD	146	GLU
3	AD	147	LYS
3	AD	154	VAL
3	AD	160	LEU
3	AD	164	ARG
3	AD	176	LYS
3	AD	189	ASP
3	AD	190	LEU
3	AD	194	ILE
3	AD	196	GLU
3	AD	198	LEU
3	AD	203	TYR
4	AE	9	GLU
4	AE	14	LEU
4	AE	21	SER
4	AE	23	THR
4	AE	36	THR
4	AE	45	VAL
4	AE	51	LYS
4	AE	55	VAL
4	AE	61	LYS
4	AE	64	GLU
4	AE	92	ARG
4	AE	95	MET
4	AE	113	VAL
4	AE	119	VAL
4	AE	123	LEU
4	AE	127	TYR
4	AE	141	ASP
4	AE	147	ASN
4	AE	151	MET
4	AE	156	ARG
5	AF	1	MET
5	AF	6	ILE
5	AF	9	MET
5	AF	16	GLU
5	AF	39	LEU
5	AF	46	GLN
5	AF	53	LYS
5	AF	54	LEU
5	AF	55	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	AF	61	LEU
5	AF	64	VAL
5	AF	71	ILE
5	AF	77	THR
5	AF	86	ARG
5	AF	89	VAL
5	AF	90	MET
5	AF	98	GLU
5	AF	100	SER
6	AG	6	ILE
6	AG	8	GLN
6	AG	10	LYS
6	AG	11	ILE
6	AG	22	LEU
6	AG	26	VAL
6	AG	36	SER
6	AG	47	GLU
6	AG	49	LEU
6	AG	55	LYS
6	AG	58	LEU
6	AG	62	GLU
6	AG	75	LYS
6	AG	78	ARG
6	AG	105	GLU
6	AG	109	LYS
6	AG	110	ARG
6	AG	112	ASP
6	AG	117	LEU
6	AG	129	ASN
7	AH	2	MET
7	AH	17	GLN
7	AH	25	THR
7	AH	50	VAL
7	AH	55	LYS
7	AH	72	GLU
7	AH	76	ARG
7	AH	107	LYS
7	AH	111	THR
7	AH	113	ARG
8	AI	36	GLN
8	AI	45	MET
8	AI	55	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	AI	58	GLU
8	AI	59	LYS
8	AI	61	ASP
8	AI	62	LEU
8	AI	67	LYS
8	AI	74	GLN
8	AI	86	LEU
8	AI	87	MET
8	AI	94	ARG
8	AI	108	ARG
8	AI	109	GLN
8	AI	110	VAL
8	AI	122	ARG
8	AI	123	ARG
9	AJ	14	ASP
9	AJ	17	LEU
9	AJ	31	ARG
9	AJ	47	GLU
9	AJ	52	LEU
9	AJ	53	ILE
9	AJ	76	ILE
9	AJ	78	GLU
9	AJ	85	ASP
9	AJ	87	LEU
9	AJ	89	ARG
9	AJ	90	LEU
9	AJ	92	LEU
9	AJ	97	ASP
9	AJ	100	ILE
10	AK	34	THR
10	AK	55	ARG
10	AK	56	LYS
10	AK	75	GLU
10	AK	80	ASN
10	AK	84	MET
10	AK	100	ASN
10	AK	109	ILE
10	AK	110	THR
10	AK	115	ILE
10	AK	128	VAL
11	AL	13	ARG
11	AL	14	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	AL	15	VAL
11	AL	17	LYS
11	AL	19	ASN
11	AL	28	GLN
11	AL	43	LYS
11	AL	63	THR
11	AL	77	SER
11	AL	93	ARG
11	AL	95	HIS
11	AL	107	LYS
12	AM	2	ARG
12	AM	8	ILE
12	AM	15	VAL
12	AM	28	ARG
12	AM	44	ILE
12	AM	46	GLU
12	AM	57	ASP
12	AM	67	ASP
12	AM	71	GLU
12	AM	79	LEU
12	AM	82	LEU
12	AM	92	ARG
12	AM	96	VAL
12	AM	102	LYS
12	AM	106	ARG
13	AN	3	GLN
13	AN	17	ASP
13	AN	19	TYR
13	AN	25	GLU
13	AN	30	ILE
13	AN	32	ASP
13	AN	42	ASN
13	AN	44	VAL
13	AN	45	LEU
13	AN	59	GLN
13	AN	64	ARG
13	AN	65	GLN
13	AN	68	ARG
13	AN	80	ARG
13	AN	97	LYS
14	AO	59	MET
14	AO	62	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
14	AO	64	ARG
14	AO	71	LYS
14	AO	88	ARG
14	AO	89	ARG
15	AP	24	SER
15	AP	28	ARG
15	AP	31	ARG
15	AP	35	ARG
15	AP	45	GLU
15	AP	79	ASN
16	AQ	4	ILE
16	AQ	20	ILE
16	AQ	24	ILE
16	AQ	39	ARG
16	AQ	60	ILE
16	AQ	66	LEU
16	AQ	71	SER
16	AQ	74	LEU
16	AQ	78	VAL
16	AQ	80	LYS
17	AR	33	THR
17	AR	38	ILE
17	AR	44	THR
17	AR	46	THR
17	AR	63	TYR
17	AR	64	LEU
17	AR	73	HIS
18	AS	2	ARG
18	AS	4	LEU
18	AS	5	LYS
18	AS	12	LEU
18	AS	14	LEU
18	AS	15	LEU
18	AS	23	GLU
18	AS	27	LYS
18	AS	28	LYS
18	AS	38	THR
18	AS	42	ASN
18	AS	46	LEU
18	AS	64	GLU
18	AS	66	VAL
18	AS	70	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
19	AT	4	LYS
19	AT	34	VAL
19	AT	35	TYR
19	AT	38	ILE
19	AT	43	LYS
19	AT	53	MET
19	AT	68	LYS
19	AT	69	ASN
19	AT	74	HIS
19	AT	78	LEU
19	AT	85	LEU
20	AB	20	ARG
20	AB	35	ASN
20	AB	36	LYS
20	AB	38	HIS
20	AB	43	GLU
20	AB	46	VAL
20	AB	48	MET
20	AB	53	LEU
20	AB	57	ASN
20	AB	59	ILE
20	AB	62	ARG
20	AB	67	LEU
20	AB	72	LYS
20	AB	81	ASP
20	AB	88	GLN
20	AB	94	ARG
20	AB	95	TRP
20	AB	104	LYS
20	AB	113	LEU
20	AB	124	THR
20	AB	127	LYS
20	AB	128	LEU
20	AB	138	ARG
20	AB	142	LYS
20	AB	145	ASN
20	AB	162	VAL
20	AB	166	ASP
20	AB	176	ASN
20	AB	196	ASP
20	AB	202	ASN
20	AB	207	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	AB	211	LEU
20	AB	213	LEU
20	AB	221	ARG
21	AU	7	GLU
21	AU	11	PHE
21	AU	15	LEU
21	AU	16	ARG
21	AU	17	ARG
21	AU	20	ARG
21	AU	22	CYS
21	AU	24	LYS
21	AU	27	VAL
21	AU	33	ARG
21	AU	34	ARG
21	AU	35	GLU
21	AU	38	GLU
24	BI	63	ASP
25	BC	4	LYS
25	BC	8	THR
25	BC	12	ARG
25	BC	35	LYS
25	BC	37	SER
25	BC	45	ASN
25	BC	52	HIS
25	BC	62	ARG
25	BC	63	ILE
25	BC	65	ASP
25	BC	66	PHE
25	BC	77	VAL
25	BC	89	ASN
25	BC	90	ILE
25	BC	100	ARG
25	BC	109	LEU
25	BC	123	ILE
25	BC	129	LEU
25	BC	134	ILE
25	BC	142	ASN
25	BC	155	ARG
25	BC	172	THR
25	BC	173	LEU
25	BC	176	ARG
25	BC	181	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BC	187	CYS
25	BC	190	THR
25	BC	202	ARG
25	BC	203	VAL
25	BC	211	ARG
25	BC	213	ARG
25	BC	224	MET
25	BC	227	VAL
25	BC	235	GLU
25	BC	249	VAL
25	BC	250	GLN
25	BC	255	LYS
25	BC	257	ARG
25	BC	268	ARG
26	BD	17	GLU
26	BD	34	VAL
26	BD	40	LEU
26	BD	55	LYS
26	BD	56	LYS
26	BD	59	ARG
26	BD	70	LYS
26	BD	74	GLU
26	BD	79	LEU
26	BD	81	GLU
26	BD	84	LEU
26	BD	88	GLU
26	BD	89	GLU
26	BD	91	THR
26	BD	99	GLU
26	BD	112	THR
26	BD	124	ARG
26	BD	138	LEU
26	BD	142	VAL
26	BD	148	GLN
26	BD	159	LYS
26	BD	179	ARG
26	BD	180	VAL
26	BD	186	LEU
26	BD	190	LYS
26	BD	197	THR
27	BK	2	ILE
27	BK	8	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
27	BK	9	ASN
27	BK	18	ARG
27	BK	21	CYS
27	BK	25	LEU
27	BK	32	TYR
27	BK	47	ILE
27	BK	53	LYS
27	BK	54	LYS
27	BK	58	LEU
27	BK	70	ARG
27	BK	72	PRO
27	BK	87	LEU
27	BK	88	ASN
27	BK	89	ASN
27	BK	104	THR
27	BK	105	ARG
27	BK	111	LYS
27	BK	113	MET
27	BK	120	PRO
28	BP	3	ILE
28	BP	19	PHE
28	BP	25	VAL
28	BP	33	GLU
28	BP	38	ARG
28	BP	43	GLU
28	BP	59	THR
28	BP	61	ARG
28	BP	65	ASN
28	BP	67	GLU
28	BP	75	THR
28	BP	82	SER
28	BP	83	ILE
28	BP	99	LEU
28	BP	100	ARG
28	BP	101	GLU
28	BP	111	GLU
28	BP	112	ARG
28	BP	113	LEU
28	BP	114	ASN
29	BE	2	GLU
29	BE	3	LEU
29	BE	5	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	BE	6	LYS
29	BE	7	ASP
29	BE	9	GLN
29	BE	12	LEU
29	BE	18	THR
29	BE	40	ARG
29	BE	58	LYS
29	BE	60	TRP
29	BE	62	GLN
29	BE	70	SER
29	BE	97	ASN
29	BE	98	LYS
29	BE	108	ILE
29	BE	111	GLU
29	BE	118	LEU
29	BE	120	VAL
29	BE	122	GLU
29	BE	149	ILE
29	BE	150	THR
29	BE	159	LEU
29	BE	163	ASN
29	BE	189	THR
29	BE	194	LYS
30	BY	2	LYS
30	BY	5	LYS
30	BY	6	ILE
30	BY	15	ARG
30	BY	16	LEU
30	BY	19	HIS
30	BY	23	LEU
30	BY	37	ARG
30	BY	43	ILE
30	BY	55	LYS
31	B0	2	VAL
31	B0	5	ASN
31	B0	27	LEU
31	B0	31	LYS
31	B0	37	HIS
31	B0	38	LEU
31	B0	45	ASP
31	B0	51	ARG
31	B0	53	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	B0	56	LYS
32	B4	1	MET
32	B4	2	LYS
32	B4	9	LYS
32	B4	22	VAL
32	B4	25	VAL
32	B4	28	SER
32	B4	35	GLN
33	B1	9	LYS
33	B1	31	GLU
33	B1	44	GLN
33	B1	52	LYS
34	B3	7	ARG
34	B3	32	LEU
34	B3	49	VAL
34	B3	61	LEU
35	BV	7	GLU
35	BV	34	LYS
35	BV	35	GLU
35	BV	40	ILE
35	BV	42	LEU
35	BV	45	ASP
35	BV	46	LYS
35	BV	49	ASN
35	BV	51	GLN
35	BV	53	LYS
35	BV	68	LYS
35	BV	69	GLU
35	BV	70	ILE
35	BV	75	GLN
35	BV	79	ARG
36	B2	19	ARG
36	B2	21	ARG
36	B2	33	ARG
36	B2	35	ARG
36	B2	39	ARG
36	B2	42	LEU
36	B2	43	THR
37	BL	4	ASN
37	BL	6	LEU
37	BL	27	LEU
37	BL	47	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
37	BL	55	MET
37	BL	60	ARG
37	BL	67	THR
37	BL	69	ARG
37	BL	82	LEU
37	BL	91	ASP
37	BL	92	LEU
37	BL	95	LEU
37	BL	99	ASN
37	BL	118	THR
37	BL	122	VAL
37	BL	123	ARG
38	BM	2	LEU
38	BM	7	THR
38	BM	10	ARG
38	BM	17	ASN
38	BM	26	VAL
38	BM	38	ARG
38	BM	70	ASP
38	BM	78	LEU
38	BM	81	ARG
38	BM	88	ASN
38	BM	90	GLU
38	BM	104	GLU
38	BM	108	VAL
38	BM	110	GLU
38	BM	111	GLU
38	BM	114	ARG
38	BM	115	GLU
38	BM	123	LYS
38	BM	127	LYS
38	BM	136	MET
39	BX	1	MET
39	BX	8	GLU
39	BX	9	LYS
39	BX	15	ASN
39	BX	18	LEU
39	BX	21	LEU
39	BX	28	LEU
39	BX	29	ARG
39	BX	30	MET
39	BX	36	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	BX	38	GLN
39	BX	48	ARG
39	BX	49	ASP
39	BX	59	GLU
40	BH	3	VAL
40	BH	4	ILE
40	BH	12	LEU
40	BH	14	SER
40	BH	15	LEU
40	BH	19	VAL
40	BH	28	ASN
40	BH	31	VAL
40	BH	32	PRO
40	BH	41	LYS
40	BH	43	ASN
40	BH	44	ILE
40	BH	45	GLU
40	BH	46	PHE
40	BH	48	GLU
40	BH	50	ARG
40	BH	54	LEU
40	BH	55	GLU
40	BH	57	LYS
40	BH	60	GLU
40	BH	62	LEU
40	BH	68	ARG
40	BH	70	GLU
40	BH	71	LYS
40	BH	73	ASN
40	BH	75	LEU
40	BH	76	GLU
40	BH	79	THR
40	BH	82	SER
40	BH	83	LYS
40	BH	87	GLU
40	BH	89	LYS
40	BH	90	LEU
40	BH	104	THR
40	BH	108	VAL
40	BH	110	VAL
40	BH	112	LYS
40	BH	116	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	BH	119	ASN
40	BH	125	THR
40	BH	130	VAL
40	BH	134	VAL
40	BH	135	HIS
40	BH	137	GLU
40	BH	138	VAL
40	BH	139	PHE
40	BH	141	LYS
40	BH	147	VAL
40	BH	149	GLU
41	BJ	1	MET
41	BJ	3	THR
41	BJ	5	THR
41	BJ	9	GLU
41	BJ	12	LYS
41	BJ	28	LEU
41	BJ	36	LEU
41	BJ	65	THR
41	BJ	73	VAL
41	BJ	78	THR
41	BJ	93	ILE
41	BJ	95	ARG
41	BJ	124	VAL
41	BJ	129	GLU
41	BJ	138	GLN
42	BN	1	MET
42	BN	9	GLN
42	BN	11	ASN
42	BN	20	MET
42	BN	33	ILE
42	BN	35	LYS
42	BN	46	ARG
42	BN	51	LEU
42	BN	62	ASN
42	BN	69	ARG
42	BN	71	ARG
42	BN	78	LYS
42	BN	82	GLU
42	BN	114	GLU
42	BN	120	GLU
43	BO	17	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
43	BO	18	LEU
43	BO	20	GLU
43	BO	31	THR
43	BO	35	ILE
43	BO	58	ILE
43	BO	61	GLN
43	BO	62	LEU
43	BO	68	LYS
43	BO	74	VAL
43	BO	81	ARG
43	BO	89	ASP
43	BO	98	GLN
43	BO	100	HIS
43	BO	106	LEU
43	BO	108	ASP
43	BO	115	LEU
43	BO	116	GLN
44	BQ	10	ARG
44	BQ	13	HIS
44	BQ	14	LYS
44	BQ	16	ILE
44	BQ	33	VAL
44	BQ	40	LYS
44	BQ	69	ARG
44	BQ	79	ILE
44	BQ	83	LYS
44	BQ	88	GLU
44	BQ	89	ILE
44	BQ	90	ASP
44	BQ	91	ARG
44	BQ	96	ASP
45	BS	7	HIS
45	BS	15	GLN
45	BS	17	VAL
45	BS	22	ASP
45	BS	57	ASN
45	BS	61	ASN
45	BS	66	ILE
45	BS	69	LEU
45	BS	73	LYS
45	BS	84	ARG
45	BS	86	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
45	BS	88	ARG
45	BS	97	LEU
45	BS	99	ARG
46	BU	7	ASP
46	BU	11	ILE
46	BU	13	LEU
46	BU	18	LYS
46	BU	26	ASN
46	BU	49	PRO
46	BU	51	LEU
46	BU	53	GLN
46	BU	60	LYS
46	BU	64	ILE
46	BU	71	ILE
46	BU	73	ASN
46	BU	78	LYS
46	BU	81	ARG
46	BU	85	ARG
46	BU	88	ASP
46	BU	91	LYS
47	BF	13	LYS
47	BF	24	VAL
47	BF	29	ARG
47	BF	32	LYS
47	BF	46	LYS
47	BF	49	LEU
47	BF	50	ASP
47	BF	62	GLN
47	BF	68	LYS
47	BF	70	ARG
47	BF	76	PHE
47	BF	79	ARG
47	BF	89	THR
47	BF	95	MET
47	BF	97	GLU
47	BF	100	GLU
47	BF	102	LEU
47	BF	103	ILE
47	BF	111	ARG
47	BF	121	PHE
47	BF	128	SER
47	BF	129	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
47	BF	134	GLN
47	BF	137	PHE
47	BF	138	PRO
47	BF	143	ASP
47	BF	147	ARG
47	BF	149	ARG
47	BF	155	ILE
47	BF	157	THR
47	BF	163	GLU
47	BF	168	LEU
47	BF	173	ASP
47	BF	178	LYS
48	BG	14	VAL
48	BG	17	LYS
48	BG	26	LYS
48	BG	31	GLU
48	BG	34	ARG
48	BG	37	ASN
48	BG	54	ARG
48	BG	59	ASP
48	BG	61	TRP
48	BG	66	THR
48	BG	70	LEU
48	BG	84	LYS
48	BG	89	VAL
48	BG	94	ARG
48	BG	105	SER
48	BG	106	LEU
48	BG	120	ILE
48	BG	132	LEU
48	BG	133	LYS
48	BG	138	GLN
48	BG	152	ARG
48	BG	162	ARG
48	BG	166	GLU
48	BG	176	LYS
49	BR	4	VAL
49	BR	20	VAL
49	BR	22	LEU
49	BR	25	LEU
49	BR	39	LEU
49	BR	52	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
49	BR	53	PHE
49	BR	64	VAL
49	BR	70	GLU
49	BR	72	VAL
49	BR	79	ARG
49	BR	82	HIS
49	BR	86	GLN
50	BT	2	ILE
50	BT	3	ARG
50	BT	4	GLU
50	BT	9	LYS
50	BT	11	LEU
50	BT	24	MET
50	BT	29	THR
50	BT	34	VAL
50	BT	36	LYS
50	BT	43	ILE
50	BT	50	LEU
50	BT	58	VAL
50	BT	64	LYS
50	BT	67	VAL
50	BT	68	LYS
50	BT	69	ARG
50	BT	73	ARG
50	BT	81	LYS
50	BT	82	LYS
51	BZ	2	SER
51	BZ	4	VAL
51	BZ	6	GLN
51	BZ	8	THR
51	BZ	14	THR
51	BZ	25	THR
51	BZ	27	ARG
51	BZ	28	ARG
51	BZ	30	LEU
51	BZ	33	LEU
51	BZ	37	ARG
51	BZ	46	PHE
51	BZ	56	MET
51	BZ	66	THR
51	BZ	77	LYS
51	BZ	78	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
52	BW	18	LYS
52	BW	19	ARG
52	BW	23	LYS
52	BW	24	ARG
52	BW	25	PHE
52	BW	28	GLU
52	BW	39	GLN
52	BW	49	ASN
52	BW	50	VAL
52	BW	73	PRO
52	BW	77	LYS
52	BW	82	GLU
2	CC	2	GLN
2	CC	13	ILE
2	CC	14	VAL
2	CC	17	TRP
2	CC	20	THR
2	CC	27	GLU
2	CC	30	ASP
2	CC	31	ASN
2	CC	35	ASP
2	CC	41	TYR
2	CC	42	LEU
2	CC	48	LYS
2	CC	61	LYS
2	CC	62	SER
2	CC	69	THR
2	CC	71	ARG
2	CC	74	ILE
2	CC	81	GLU
2	CC	84	GLU
2	CC	87	ARG
2	CC	88	LYS
2	CC	125	ARG
2	CC	128	MET
2	CC	131	ARG
2	CC	138	GLN
2	CC	168	ARG
2	CC	171	ARG
2	CC	180	ASP
2	CC	184	ASN
2	CC	192	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	CC	206	ILE
3	CD	4	LEU
3	CD	18	LEU
3	CD	25	ARG
3	CD	28	ASP
3	CD	32	LYS
3	CD	35	GLN
3	CD	39	GLN
3	CD	43	ARG
3	CD	54	LEU
3	CD	55	ARG
3	CD	58	GLN
3	CD	84	ASN
3	CD	87	GLU
3	CD	123	MET
3	CD	146	GLU
3	CD	147	LYS
3	CD	154	VAL
3	CD	155	LYS
3	CD	160	LEU
3	CD	164	ARG
3	CD	176	LYS
3	CD	189	ASP
3	CD	190	LEU
3	CD	194	ILE
3	CD	196	GLU
3	CD	198	LEU
3	CD	203	TYR
4	CE	9	GLU
4	CE	14	LEU
4	CE	21	SER
4	CE	23	THR
4	CE	36	THR
4	CE	45	VAL
4	CE	51	LYS
4	CE	55	VAL
4	CE	61	LYS
4	CE	64	GLU
4	CE	92	ARG
4	CE	95	MET
4	CE	113	VAL
4	CE	119	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	CE	123	LEU
4	CE	127	TYR
4	CE	141	ASP
4	CE	147	ASN
4	CE	151	MET
4	CE	156	ARG
5	CF	1	MET
5	CF	6	ILE
5	CF	9	MET
5	CF	16	GLU
5	CF	39	LEU
5	CF	46	GLN
5	CF	53	LYS
5	CF	54	LEU
5	CF	55	HIS
5	CF	61	LEU
5	CF	64	VAL
5	CF	71	ILE
5	CF	77	THR
5	CF	86	ARG
5	CF	89	VAL
5	CF	90	MET
5	CF	98	GLU
5	CF	100	SER
6	CG	2	ARG
6	CG	8	GLN
6	CG	10	LYS
6	CG	22	LEU
6	CG	26	VAL
6	CG	36	SER
6	CG	47	GLU
6	CG	49	LEU
6	CG	55	LYS
6	CG	58	LEU
6	CG	62	GLU
6	CG	75	LYS
6	CG	78	ARG
6	CG	105	GLU
6	CG	109	LYS
6	CG	110	ARG
6	CG	112	ASP
6	CG	117	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	CG	129	ASN
6	CG	152	HIS
7	CH	2	MET
7	CH	17	GLN
7	CH	25	THR
7	CH	50	VAL
7	CH	55	LYS
7	CH	72	GLU
7	CH	76	ARG
7	CH	107	LYS
7	CH	111	THR
7	CH	113	ARG
8	CI	36	GLN
8	CI	45	MET
8	CI	55	ASP
8	CI	56	MET
8	CI	58	GLU
8	CI	59	LYS
8	CI	61	ASP
8	CI	62	LEU
8	CI	67	LYS
8	CI	74	GLN
8	CI	86	LEU
8	CI	87	MET
8	CI	91	GLU
8	CI	94	ARG
8	CI	108	ARG
8	CI	109	GLN
8	CI	110	VAL
8	CI	122	ARG
8	CI	123	ARG
9	CJ	14	ASP
9	CJ	17	LEU
9	CJ	31	ARG
9	CJ	47	GLU
9	CJ	52	LEU
9	CJ	53	ILE
9	CJ	76	ILE
9	CJ	78	GLU
9	CJ	85	ASP
9	CJ	87	LEU
9	CJ	89	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	CJ	90	LEU
9	CJ	92	LEU
9	CJ	100	ILE
10	CK	34	THR
10	CK	55	ARG
10	CK	56	LYS
10	CK	75	GLU
10	CK	80	ASN
10	CK	84	MET
10	CK	100	ASN
10	CK	109	ILE
10	CK	110	THR
10	CK	115	ILE
10	CK	128	VAL
11	CL	13	ARG
11	CL	14	LYS
11	CL	15	VAL
11	CL	17	LYS
11	CL	19	ASN
11	CL	28	GLN
11	CL	43	LYS
11	CL	63	THR
11	CL	77	SER
11	CL	93	ARG
11	CL	95	HIS
11	CL	107	LYS
12	CM	2	ARG
12	CM	8	ILE
12	CM	15	VAL
12	CM	28	ARG
12	CM	44	ILE
12	CM	46	GLU
12	CM	57	ASP
12	CM	67	ASP
12	CM	71	GLU
12	CM	79	LEU
12	CM	82	LEU
12	CM	92	ARG
12	CM	96	VAL
12	CM	102	LYS
12	CM	106	ARG
13	CN	3	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	CN	17	ASP
13	CN	19	TYR
13	CN	25	GLU
13	CN	30	ILE
13	CN	32	ASP
13	CN	42	ASN
13	CN	44	VAL
13	CN	45	LEU
13	CN	59	GLN
13	CN	64	ARG
13	CN	65	GLN
13	CN	68	ARG
13	CN	80	ARG
13	CN	97	LYS
14	CO	59	MET
14	CO	62	GLN
14	CO	64	ARG
14	CO	71	LYS
14	CO	88	ARG
14	CO	89	ARG
15	CP	24	SER
15	CP	28	ARG
15	CP	31	ARG
15	CP	35	ARG
15	CP	45	GLU
15	CP	79	ASN
16	CQ	4	ILE
16	CQ	20	ILE
16	CQ	24	ILE
16	CQ	39	ARG
16	CQ	60	ILE
16	CQ	66	LEU
16	CQ	71	SER
16	CQ	74	LEU
16	CQ	78	VAL
16	CQ	80	LYS
17	CR	33	THR
17	CR	38	ILE
17	CR	44	THR
17	CR	46	THR
17	CR	63	TYR
17	CR	64	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	CR	73	HIS
18	CS	2	ARG
18	CS	4	LEU
18	CS	5	LYS
18	CS	12	LEU
18	CS	14	LEU
18	CS	15	LEU
18	CS	17	LYS
18	CS	23	GLU
18	CS	27	LYS
18	CS	28	LYS
18	CS	38	THR
18	CS	42	ASN
18	CS	46	LEU
18	CS	64	GLU
18	CS	66	VAL
18	CS	70	LEU
19	CT	4	LYS
19	CT	7	LYS
19	CT	34	VAL
19	CT	35	TYR
19	CT	38	ILE
19	CT	43	LYS
19	CT	53	MET
19	CT	68	LYS
19	CT	69	ASN
19	CT	74	HIS
19	CT	78	LEU
19	CT	85	LEU
20	CB	20	ARG
20	CB	35	ASN
20	CB	36	LYS
20	CB	38	HIS
20	CB	43	GLU
20	CB	46	VAL
20	CB	48	MET
20	CB	53	LEU
20	CB	57	ASN
20	CB	59	ILE
20	CB	62	ARG
20	CB	67	LEU
20	CB	72	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	CB	81	ASP
20	CB	88	GLN
20	CB	94	ARG
20	CB	95	TRP
20	CB	104	LYS
20	CB	113	LEU
20	CB	127	LYS
20	CB	128	LEU
20	CB	130	LYS
20	CB	135	MET
20	CB	142	LYS
20	CB	145	ASN
20	CB	162	VAL
20	CB	166	ASP
20	CB	176	ASN
20	CB	196	ASP
20	CB	202	ASN
20	CB	207	ARG
20	CB	211	LEU
20	CB	213	LEU
20	CB	221	ARG
21	CU	7	GLU
21	CU	11	PHE
21	CU	15	LEU
21	CU	16	ARG
21	CU	17	ARG
21	CU	20	ARG
21	CU	22	CYS
21	CU	24	LYS
21	CU	27	VAL
21	CU	33	ARG
21	CU	34	ARG
21	CU	35	GLU
21	CU	38	GLU
24	DI	2	LYS
24	DI	36	GLU
24	DI	54	ILE
24	DI	121	ILE
25	DC	4	LYS
25	DC	8	THR
25	DC	12	ARG
25	DC	18	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	DC	35	LYS
25	DC	37	SER
25	DC	45	ASN
25	DC	52	HIS
25	DC	62	ARG
25	DC	63	ILE
25	DC	65	ASP
25	DC	66	PHE
25	DC	77	VAL
25	DC	89	ASN
25	DC	90	ILE
25	DC	100	ARG
25	DC	109	LEU
25	DC	123	ILE
25	DC	129	LEU
25	DC	134	ILE
25	DC	142	ASN
25	DC	155	ARG
25	DC	172	THR
25	DC	173	LEU
25	DC	176	ARG
25	DC	187	CYS
25	DC	190	THR
25	DC	202	ARG
25	DC	203	VAL
25	DC	211	ARG
25	DC	213	ARG
25	DC	224	MET
25	DC	227	VAL
25	DC	235	GLU
25	DC	249	VAL
25	DC	250	GLN
25	DC	255	LYS
25	DC	257	ARG
25	DC	268	ARG
26	DD	17	GLU
26	DD	34	VAL
26	DD	40	LEU
26	DD	55	LYS
26	DD	56	LYS
26	DD	59	ARG
26	DD	70	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	DD	74	GLU
26	DD	79	LEU
26	DD	81	GLU
26	DD	84	LEU
26	DD	88	GLU
26	DD	89	GLU
26	DD	91	THR
26	DD	99	GLU
26	DD	124	ARG
26	DD	138	LEU
26	DD	142	VAL
26	DD	148	GLN
26	DD	151	THR
26	DD	159	LYS
26	DD	179	ARG
26	DD	180	VAL
26	DD	186	LEU
26	DD	190	LYS
26	DD	197	THR
27	DK	2	ILE
27	DK	8	LEU
27	DK	9	ASN
27	DK	18	ARG
27	DK	21	CYS
27	DK	25	LEU
27	DK	32	TYR
27	DK	47	ILE
27	DK	53	LYS
27	DK	54	LYS
27	DK	58	LEU
27	DK	70	ARG
27	DK	72	PRO
27	DK	87	LEU
27	DK	88	ASN
27	DK	89	ASN
27	DK	104	THR
27	DK	105	ARG
27	DK	111	LYS
27	DK	113	MET
27	DK	120	PRO
28	DP	3	ILE
28	DP	19	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	DP	25	VAL
28	DP	33	GLU
28	DP	38	ARG
28	DP	43	GLU
28	DP	59	THR
28	DP	61	ARG
28	DP	65	ASN
28	DP	67	GLU
28	DP	82	SER
28	DP	83	ILE
28	DP	99	LEU
28	DP	100	ARG
28	DP	101	GLU
28	DP	111	GLU
28	DP	112	ARG
28	DP	113	LEU
28	DP	114	ASN
29	DE	2	GLU
29	DE	3	LEU
29	DE	5	LEU
29	DE	6	LYS
29	DE	7	ASP
29	DE	9	GLN
29	DE	12	LEU
29	DE	18	THR
29	DE	40	ARG
29	DE	58	LYS
29	DE	60	TRP
29	DE	62	GLN
29	DE	70	SER
29	DE	97	ASN
29	DE	98	LYS
29	DE	108	ILE
29	DE	110	SER
29	DE	111	GLU
29	DE	118	LEU
29	DE	120	VAL
29	DE	122	GLU
29	DE	149	ILE
29	DE	150	THR
29	DE	159	LEU
29	DE	163	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	DE	189	THR
29	DE	194	LYS
30	DY	2	LYS
30	DY	5	LYS
30	DY	6	ILE
30	DY	15	ARG
30	DY	16	LEU
30	DY	19	HIS
30	DY	23	LEU
30	DY	37	ARG
30	DY	43	ILE
30	DY	55	LYS
30	DY	56	VAL
31	D0	2	VAL
31	D0	5	ASN
31	D0	27	LEU
31	D0	31	LYS
31	D0	37	HIS
31	D0	38	LEU
31	D0	45	ASP
31	D0	51	ARG
31	D0	53	VAL
31	D0	56	LYS
32	D4	1	MET
32	D4	2	LYS
32	D4	9	LYS
32	D4	25	VAL
32	D4	28	SER
32	D4	35	GLN
33	D1	9	LYS
33	D1	31	GLU
33	D1	33	LEU
33	D1	35	LEU
33	D1	44	GLN
33	D1	52	LYS
34	D3	7	ARG
34	D3	32	LEU
34	D3	61	LEU
35	DV	1	MET
35	DV	7	GLU
35	DV	34	LYS
35	DV	35	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	DV	40	ILE
35	DV	42	LEU
35	DV	45	ASP
35	DV	46	LYS
35	DV	49	ASN
35	DV	51	GLN
35	DV	53	LYS
35	DV	68	LYS
35	DV	69	GLU
35	DV	70	ILE
35	DV	75	GLN
35	DV	79	ARG
36	D2	19	ARG
36	D2	21	ARG
36	D2	33	ARG
36	D2	35	ARG
36	D2	39	ARG
36	D2	42	LEU
36	D2	43	THR
37	DL	4	ASN
37	DL	6	LEU
37	DL	27	LEU
37	DL	47	ARG
37	DL	55	MET
37	DL	60	ARG
37	DL	67	THR
37	DL	69	ARG
37	DL	82	LEU
37	DL	91	ASP
37	DL	92	LEU
37	DL	95	LEU
37	DL	99	ASN
37	DL	118	THR
37	DL	122	VAL
37	DL	123	ARG
38	DM	2	LEU
38	DM	7	THR
38	DM	10	ARG
38	DM	17	ASN
38	DM	26	VAL
38	DM	38	ARG
38	DM	42	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	DM	70	ASP
38	DM	78	LEU
38	DM	81	ARG
38	DM	88	ASN
38	DM	90	GLU
38	DM	104	GLU
38	DM	108	VAL
38	DM	110	GLU
38	DM	111	GLU
38	DM	114	ARG
38	DM	115	GLU
38	DM	123	LYS
38	DM	127	LYS
38	DM	136	MET
39	DX	1	MET
39	DX	8	GLU
39	DX	9	LYS
39	DX	15	ASN
39	DX	18	LEU
39	DX	21	LEU
39	DX	28	LEU
39	DX	29	ARG
39	DX	30	MET
39	DX	36	GLN
39	DX	38	GLN
39	DX	48	ARG
39	DX	49	ASP
39	DX	59	GLU
40	DH	3	VAL
40	DH	4	ILE
40	DH	12	LEU
40	DH	14	SER
40	DH	15	LEU
40	DH	19	VAL
40	DH	28	ASN
40	DH	31	VAL
40	DH	32	PRO
40	DH	43	ASN
40	DH	47	PHE
40	DH	76	GLU
40	DH	77	THR
40	DH	80	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	DH	83	LYS
40	DH	86	ASP
40	DH	97	ARG
40	DH	103	VAL
40	DH	114	GLU
40	DH	121	VAL
40	DH	124	THR
40	DH	129	GLU
40	DH	137	GLU
40	DH	141	LYS
41	DJ	1	MET
41	DJ	3	THR
41	DJ	5	THR
41	DJ	9	GLU
41	DJ	12	LYS
41	DJ	28	LEU
41	DJ	36	LEU
41	DJ	65	THR
41	DJ	73	VAL
41	DJ	93	ILE
41	DJ	95	ARG
41	DJ	120	ARG
41	DJ	124	VAL
41	DJ	129	GLU
41	DJ	138	GLN
42	DN	1	MET
42	DN	9	GLN
42	DN	11	ASN
42	DN	20	MET
42	DN	33	ILE
42	DN	35	LYS
42	DN	46	ARG
42	DN	51	LEU
42	DN	62	ASN
42	DN	69	ARG
42	DN	71	ARG
42	DN	78	LYS
42	DN	82	GLU
42	DN	114	GLU
42	DN	116	VAL
42	DN	120	GLU
43	DO	17	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
43	DO	18	LEU
43	DO	20	GLU
43	DO	31	THR
43	DO	35	ILE
43	DO	58	ILE
43	DO	61	GLN
43	DO	62	LEU
43	DO	68	LYS
43	DO	74	VAL
43	DO	81	ARG
43	DO	89	ASP
43	DO	98	GLN
43	DO	100	HIS
43	DO	106	LEU
43	DO	108	ASP
43	DO	115	LEU
43	DO	116	GLN
44	DQ	10	ARG
44	DQ	13	HIS
44	DQ	14	LYS
44	DQ	16	ILE
44	DQ	33	VAL
44	DQ	40	LYS
44	DQ	69	ARG
44	DQ	79	ILE
44	DQ	83	LYS
44	DQ	88	GLU
44	DQ	89	ILE
44	DQ	90	ASP
44	DQ	91	ARG
44	DQ	96	ASP
45	DS	15	GLN
45	DS	22	ASP
45	DS	57	ASN
45	DS	61	ASN
45	DS	66	ILE
45	DS	69	LEU
45	DS	73	LYS
45	DS	84	ARG
45	DS	86	MET
45	DS	88	ARG
45	DS	97	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
45	DS	99	ARG
46	DU	7	ASP
46	DU	11	ILE
46	DU	13	LEU
46	DU	18	LYS
46	DU	26	ASN
46	DU	49	PRO
46	DU	51	LEU
46	DU	53	GLN
46	DU	60	LYS
46	DU	64	ILE
46	DU	71	ILE
46	DU	73	ASN
46	DU	78	LYS
46	DU	81	ARG
46	DU	85	ARG
46	DU	88	ASP
46	DU	91	LYS
47	DF	13	LYS
47	DF	24	VAL
47	DF	29	ARG
47	DF	32	LYS
47	DF	46	LYS
47	DF	49	LEU
47	DF	50	ASP
47	DF	62	GLN
47	DF	68	LYS
47	DF	70	ARG
47	DF	76	PHE
47	DF	79	ARG
47	DF	89	THR
47	DF	95	MET
47	DF	97	GLU
47	DF	100	GLU
47	DF	102	LEU
47	DF	103	ILE
47	DF	111	ARG
47	DF	121	PHE
47	DF	128	SER
47	DF	129	MET
47	DF	134	GLN
47	DF	137	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
47	DF	138	PRO
47	DF	143	ASP
47	DF	147	ARG
47	DF	149	ARG
47	DF	155	ILE
47	DF	157	THR
47	DF	163	GLU
47	DF	168	LEU
47	DF	173	ASP
47	DF	178	LYS
48	DG	14	VAL
48	DG	17	LYS
48	DG	26	LYS
48	DG	31	GLU
48	DG	34	ARG
48	DG	37	ASN
48	DG	54	ARG
48	DG	59	ASP
48	DG	61	TRP
48	DG	66	THR
48	DG	70	LEU
48	DG	84	LYS
48	DG	89	VAL
48	DG	94	ARG
48	DG	105	SER
48	DG	106	LEU
48	DG	120	ILE
48	DG	132	LEU
48	DG	133	LYS
48	DG	138	GLN
48	DG	152	ARG
48	DG	162	ARG
48	DG	166	GLU
48	DG	176	LYS
49	DR	4	VAL
49	DR	22	LEU
49	DR	25	LEU
49	DR	39	LEU
49	DR	53	PHE
49	DR	64	VAL
49	DR	70	GLU
49	DR	72	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
49	DR	79	ARG
49	DR	82	HIS
49	DR	86	GLN
50	DT	2	ILE
50	DT	3	ARG
50	DT	4	GLU
50	DT	9	LYS
50	DT	11	LEU
50	DT	24	MET
50	DT	34	VAL
50	DT	36	LYS
50	DT	43	ILE
50	DT	48	GLN
50	DT	50	LEU
50	DT	58	VAL
50	DT	64	LYS
50	DT	67	VAL
50	DT	68	LYS
50	DT	69	ARG
50	DT	73	ARG
50	DT	81	LYS
50	DT	82	LYS
51	DZ	4	VAL
51	DZ	6	GLN
51	DZ	8	THR
51	DZ	14	THR
51	DZ	25	THR
51	DZ	27	ARG
51	DZ	28	ARG
51	DZ	30	LEU
51	DZ	33	LEU
51	DZ	37	ARG
51	DZ	46	PHE
51	DZ	56	MET
51	DZ	66	THR
51	DZ	77	LYS
51	DZ	78	TYR
52	DW	18	LYS
52	DW	19	ARG
52	DW	23	LYS
52	DW	24	ARG
52	DW	25	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
52	DW	28	GLU
52	DW	39	GLN
52	DW	49	ASN
52	DW	50	VAL
52	DW	73	PRO
52	DW	77	LYS
52	DW	82	GLU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (392) such sidechains are listed below:

Mol	Chain	Res	Type
2	AC	2	GLN
2	AC	24	ASN
2	AC	31	ASN
2	AC	68	HIS
2	AC	122	GLN
2	AC	139	ASN
2	AC	175	HIS
2	AC	184	ASN
3	AD	35	GLN
3	AD	53	GLN
3	AD	58	GLN
3	AD	84	ASN
3	AD	115	GLN
3	AD	119	HIS
3	AD	135	GLN
3	AD	151	GLN
3	AD	163	GLN
4	AE	81	GLN
4	AE	82	HIS
4	AE	96	GLN
4	AE	131	ASN
5	AF	14	GLN
5	AF	17	GLN
5	AF	46	GLN
5	AF	55	HIS
5	AF	68	GLN
6	AG	147	ASN
7	AH	3	GLN
7	AH	17	GLN
7	AH	75	GLN
7	AH	117	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	AI	4	GLN
8	AI	24	ASN
8	AI	30	ASN
8	AI	31	GLN
8	AI	36	GLN
8	AI	49	GLN
8	AI	74	GLN
8	AI	80	HIS
9	AJ	20	GLN
9	AJ	35	GLN
9	AJ	64	GLN
9	AJ	99	GLN
10	AK	28	ASN
10	AK	39	ASN
10	AK	80	ASN
10	AK	118	ASN
11	AL	5	GLN
11	AL	19	ASN
11	AL	28	GLN
11	AL	45	ASN
11	AL	111	GLN
12	AM	7	ASN
12	AM	90	HIS
13	AN	61	ASN
13	AN	65	GLN
14	AO	37	ASN
14	AO	40	GLN
14	AO	50	HIS
15	AP	18	GLN
15	AP	26	ASN
15	AP	40	ASN
16	AQ	49	ASN
17	AR	53	GLN
17	AR	73	HIS
18	AS	13	HIS
18	AS	42	ASN
18	AS	55	GLN
19	AT	2	ASN
19	AT	54	GLN
19	AT	67	HIS
19	AT	81	GLN
19	AT	83	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	AB	14	HIS
20	AB	23	ASN
20	AB	35	ASN
20	AB	38	HIS
20	AB	88	GLN
20	AB	119	GLN
20	AB	121	GLN
20	AB	145	ASN
20	AB	202	ASN
21	AU	8	ASN
24	BI	11	GLN
24	BI	29	GLN
24	BI	33	ASN
25	BC	24	HIS
25	BC	43	ASN
25	BC	59	GLN
25	BC	85	ASN
25	BC	89	ASN
25	BC	114	GLN
25	BC	133	ASN
25	BC	152	GLN
25	BC	162	GLN
25	BC	196	ASN
25	BC	225	ASN
25	BC	238	ASN
26	BD	32	ASN
26	BD	49	GLN
26	BD	126	ASN
26	BD	130	GLN
26	BD	136	ASN
26	BD	185	ASN
27	BK	13	ASN
27	BK	88	ASN
27	BK	89	ASN
27	BK	90	ASN
27	BK	93	GLN
28	BP	6	GLN
28	BP	11	GLN
28	BP	40	GLN
28	BP	114	ASN
29	BE	24	ASN
29	BE	29	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	BE	30	GLN
29	BE	62	GLN
29	BE	163	ASN
29	BE	195	GLN
30	BY	33	HIS
30	BY	48	ASN
31	B0	3	GLN
31	B0	5	ASN
32	B4	13	ASN
32	B4	35	GLN
32	B4	37	GLN
35	BV	44	HIS
35	BV	49	ASN
35	BV	51	GLN
35	BV	80	HIS
35	BV	88	HIS
36	B2	6	GLN
36	B2	13	ASN
36	B2	29	GLN
37	BL	4	ASN
37	BL	54	GLN
37	BL	104	GLN
38	BM	13	HIS
38	BM	17	ASN
38	BM	22	GLN
39	BX	15	ASN
39	BX	20	ASN
39	BX	25	GLN
40	BH	18	GLN
40	BH	28	ASN
40	BH	43	ASN
40	BH	73	ASN
41	BJ	40	HIS
41	BJ	58	ASN
41	BJ	130	HIS
41	BJ	138	GLN
42	BN	11	ASN
42	BN	16	HIS
42	BN	62	ASN
42	BN	73	ASN
42	BN	107	ASN
43	BO	19	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
43	BO	29	HIS
43	BO	38	GLN
43	BO	61	GLN
43	BO	67	ASN
44	BQ	19	GLN
44	BQ	51	GLN
44	BQ	71	ASN
44	BQ	80	ASN
45	BS	61	ASN
46	BU	26	ASN
46	BU	45	GLN
46	BU	52	ASN
46	BU	73	ASN
47	BF	20	ASN
47	BF	51	ASN
47	BF	62	GLN
47	BF	126	ASN
47	BF	134	GLN
48	BG	37	ASN
48	BG	63	GLN
48	BG	72	ASN
48	BG	87	GLN
48	BG	110	HIS
48	BG	114	HIS
49	BR	6	GLN
49	BR	43	ASN
49	BR	86	GLN
49	BR	87	GLN
50	BT	48	GLN
50	BT	72	GLN
50	BT	91	GLN
50	BT	92	ASN
51	BZ	6	GLN
51	BZ	17	ASN
51	BZ	20	HIS
51	BZ	23	ASN
51	BZ	36	HIS
52	BW	11	ASN
52	BW	39	GLN
52	BW	75	ASN
2	CC	2	GLN
2	CC	24	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	CC	31	ASN
2	CC	68	HIS
2	CC	99	GLN
2	CC	139	ASN
2	CC	175	HIS
2	CC	184	ASN
3	CD	35	GLN
3	CD	53	GLN
3	CD	58	GLN
3	CD	84	ASN
3	CD	115	GLN
3	CD	119	HIS
3	CD	135	GLN
3	CD	151	GLN
3	CD	163	GLN
4	CE	81	GLN
4	CE	82	HIS
4	CE	96	GLN
4	CE	131	ASN
5	CF	14	GLN
5	CF	17	GLN
5	CF	46	GLN
5	CF	52	ASN
6	CG	147	ASN
7	CH	3	GLN
7	CH	17	GLN
7	CH	75	GLN
7	CH	117	GLN
8	CI	4	GLN
8	CI	24	ASN
8	CI	30	ASN
8	CI	31	GLN
8	CI	36	GLN
8	CI	49	GLN
8	CI	74	GLN
8	CI	80	HIS
9	CJ	20	GLN
9	CJ	35	GLN
10	CK	28	ASN
10	CK	39	ASN
10	CK	80	ASN
10	CK	108	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	CK	118	ASN
11	CL	5	GLN
11	CL	19	ASN
11	CL	28	GLN
11	CL	45	ASN
11	CL	111	GLN
12	CM	7	ASN
13	CN	42	ASN
13	CN	65	GLN
13	CN	70	HIS
14	CO	37	ASN
14	CO	40	GLN
14	CO	50	HIS
15	CP	18	GLN
15	CP	26	ASN
15	CP	40	ASN
16	CQ	49	ASN
17	CR	53	GLN
17	CR	73	HIS
18	CS	13	HIS
18	CS	42	ASN
18	CS	55	GLN
18	CS	68	HIS
19	CT	2	ASN
19	CT	19	HIS
19	CT	54	GLN
19	CT	67	HIS
19	CT	74	HIS
19	CT	83	ASN
20	CB	14	HIS
20	CB	23	ASN
20	CB	35	ASN
20	CB	38	HIS
20	CB	119	GLN
20	CB	121	GLN
20	CB	145	ASN
20	CB	202	ASN
24	DI	5	GLN
24	DI	11	GLN
24	DI	33	ASN
25	DC	24	HIS
25	DC	43	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	DC	59	GLN
25	DC	85	ASN
25	DC	89	ASN
25	DC	114	GLN
25	DC	116	GLN
25	DC	133	ASN
25	DC	152	GLN
25	DC	162	GLN
25	DC	196	ASN
25	DC	225	ASN
25	DC	238	ASN
26	DD	32	ASN
26	DD	49	GLN
26	DD	126	ASN
26	DD	130	GLN
26	DD	136	ASN
26	DD	185	ASN
27	DK	89	ASN
27	DK	93	GLN
28	DP	6	GLN
28	DP	11	GLN
28	DP	40	GLN
28	DP	114	ASN
29	DE	24	ASN
29	DE	29	HIS
29	DE	30	GLN
29	DE	62	GLN
29	DE	195	GLN
30	DY	33	HIS
30	DY	48	ASN
31	D0	3	GLN
31	D0	5	ASN
32	D4	13	ASN
32	D4	35	GLN
32	D4	37	GLN
34	D3	42	HIS
35	DV	44	HIS
35	DV	49	ASN
35	DV	51	GLN
35	DV	80	HIS
35	DV	88	HIS
36	D2	6	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	D2	13	ASN
36	D2	16	HIS
36	D2	29	GLN
37	DL	4	ASN
37	DL	38	GLN
37	DL	54	GLN
37	DL	104	GLN
38	DM	17	ASN
38	DM	22	GLN
39	DX	15	ASN
39	DX	20	ASN
39	DX	25	GLN
39	DX	38	GLN
39	DX	39	GLN
40	DH	28	ASN
40	DH	66	ASN
40	DH	73	ASN
40	DH	135	HIS
41	DJ	40	HIS
41	DJ	58	ASN
41	DJ	80	HIS
41	DJ	130	HIS
41	DJ	138	GLN
42	DN	9	GLN
42	DN	11	ASN
42	DN	16	HIS
42	DN	62	ASN
42	DN	73	ASN
42	DN	107	ASN
43	DO	19	GLN
43	DO	29	HIS
43	DO	38	GLN
43	DO	61	GLN
43	DO	67	ASN
44	DQ	19	GLN
44	DQ	51	GLN
44	DQ	71	ASN
44	DQ	80	ASN
45	DS	61	ASN
46	DU	26	ASN
46	DU	45	GLN
46	DU	52	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	DU	73	ASN
47	DF	20	ASN
47	DF	51	ASN
47	DF	62	GLN
47	DF	126	ASN
47	DF	134	GLN
48	DG	37	ASN
48	DG	72	ASN
48	DG	87	GLN
48	DG	114	HIS
49	DR	6	GLN
49	DR	43	ASN
49	DR	86	GLN
50	DT	48	GLN
50	DT	91	GLN
50	DT	92	ASN
51	DZ	6	GLN
51	DZ	17	ASN
51	DZ	20	HIS
51	DZ	23	ASN
51	DZ	36	HIS
52	DW	11	ASN
52	DW	39	GLN
52	DW	49	ASN
52	DW	75	ASN

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	1529/1542 (99%)	239 (15%)	16 (1%)
1	CA	1529/1542 (99%)	229 (14%)	17 (1%)
22	BA	116/120 (96%)	17 (14%)	1 (0%)
22	DA	116/120 (96%)	17 (14%)	1 (0%)
23	BB	2837/2904 (97%)	435 (15%)	18 (0%)
23	DB	2837/2904 (97%)	434 (15%)	20 (0%)
All	All	8964/9132 (98%)	1371 (15%)	73 (0%)

All (1371) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	8	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	9	G
1	AA	14	U
1	AA	31	G
1	AA	32	A
1	AA	39	G
1	AA	47	C
1	AA	48	C
1	AA	49	U
1	AA	51	A
1	AA	52	C
1	AA	54	C
1	AA	55	A
1	AA	65	A
1	AA	71	A
1	AA	72	A
1	AA	79	G
1	AA	83	C
1	AA	84	U
1	AA	85	U
1	AA	86	G
1	AA	87	C
1	AA	88	U
1	AA	89	U
1	AA	91	U
1	AA	93	U
1	AA	94	G
1	AA	95	C
1	AA	96	U
1	AA	119	A
1	AA	121	U
1	AA	131	A
1	AA	151	A
1	AA	182	A
1	AA	183	C
1	AA	197	A
1	AA	209	U
1	AA	210	C
1	AA	211	G
1	AA	239	U
1	AA	240	G
1	AA	243	A
1	AA	244	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	245	U
1	AA	247	G
1	AA	250	A
1	AA	251	G
1	AA	257	G
1	AA	258	G
1	AA	266	G
1	AA	267	C
1	AA	280	C
1	AA	289	G
1	AA	301	G
1	AA	306	A
1	AA	316	C
1	AA	321	A
1	AA	328	C
1	AA	329	A
1	AA	330	C
1	AA	332	G
1	AA	345	C
1	AA	352	C
1	AA	354	G
1	AA	367	U
1	AA	373	A
1	AA	381	C
1	AA	382	A
1	AA	384	G
1	AA	397	A
1	AA	398	U
1	AA	406	G
1	AA	408	A
1	AA	409	U
1	AA	411	A
1	AA	412	A
1	AA	413	G
1	AA	421	U
1	AA	422	C
1	AA	429	U
1	AA	430	A
1	AA	435	A
1	AA	438	U
1	AA	460	A
1	AA	461	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	462	G
1	AA	463	U
1	AA	464	U
1	AA	465	A
1	AA	466	A
1	AA	467	U
1	AA	468	A
1	AA	479	U
1	AA	482	A
1	AA	484	G
1	AA	485	U
1	AA	486	U
1	AA	493	A
1	AA	500	G
1	AA	511	C
1	AA	518	C
1	AA	527	G
1	AA	532	A
1	AA	547	A
1	AA	559	A
1	AA	562	U
1	AA	572	A
1	AA	573	A
1	AA	576	C
1	AA	577	G
1	AA	633	G
1	AA	639	G
1	AA	653	U
1	AA	665	A
1	AA	695	A
1	AA	700	G
1	AA	721	G
1	AA	724	G
1	AA	731	G
1	AA	747	A
1	AA	748	G
1	AA	755	G
1	AA	777	A
1	AA	781	A
1	AA	782	A
1	AA	793	U
1	AA	794	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	812	G
1	AA	815	A
1	AA	817	C
1	AA	819	A
1	AA	821	G
1	AA	828	U
1	AA	829	G
1	AA	841	C
1	AA	843	U
1	AA	844	G
1	AA	845	A
1	AA	907	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	966	G
1	AA	969	A
1	AA	974	A
1	AA	976	G
1	AA	977	A
1	AA	992	U
1	AA	993	G
1	AA	994	A
1	AA	1004	A
1	AA	1009	U
1	AA	1010	U
1	AA	1020	G
1	AA	1021	A
1	AA	1028	C
1	AA	1029	U
1	AA	1030	U
1	AA	1031	C
1	AA	1033	G
1	AA	1034	G
1	AA	1049	U
1	AA	1050	G
1	AA	1054	C
1	AA	1065	U
1	AA	1066	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1081	A
1	AA	1091	U
1	AA	1094	G
1	AA	1095	U
1	AA	1101	A
1	AA	1136	C
1	AA	1137	C
1	AA	1138	G
1	AA	1139	G
1	AA	1158	C
1	AA	1168	U
1	AA	1169	A
1	AA	1171	A
1	AA	1181	G
1	AA	1183	U
1	AA	1196	A
1	AA	1197	A
1	AA	1201	A
1	AA	1202	U
1	AA	1209	C
1	AA	1211	U
1	AA	1212	U
1	AA	1213	A
1	AA	1214	C
1	AA	1225	A
1	AA	1226	C
1	AA	1227	A
1	AA	1240	U
1	AA	1256	A
1	AA	1279	G
1	AA	1280	A
1	AA	1281	C
1	AA	1285	A
1	AA	1300	G
1	AA	1301	U
1	AA	1303	C
1	AA	1305	G
1	AA	1316	G
1	AA	1317	C
1	AA	1319	A
1	AA	1320	C
1	AA	1323	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1335	U
1	AA	1336	C
1	AA	1362	A
1	AA	1363	A
1	AA	1364	U
1	AA	1381	U
1	AA	1398	A
1	AA	1409	C
1	AA	1410	A
1	AA	1419	G
1	AA	1429	A
1	AA	1432	G
1	AA	1446	A
1	AA	1449	C
1	AA	1451	U
1	AA	1452	C
1	AA	1491	G
1	AA	1492	A
1	AA	1497	G
1	AA	1503	A
1	AA	1505	G
1	AA	1506	U
1	AA	1517	G
1	AA	1519	A
1	AA	1520	C
1	AA	1529	G
1	AA	1530	G
1	AA	1534	A
22	BA	16	G
22	BA	25	U
22	BA	26	C
22	BA	30	C
22	BA	35	C
22	BA	36	C
22	BA	42	C
22	BA	52	A
22	BA	53	A
22	BA	67	G
22	BA	87	U
22	BA	88	C
22	BA	89	U
22	BA	90	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	96	G
22	BA	99	A
22	BA	109	A
23	BB	2	G
23	BB	4	U
23	BB	27	G
23	BB	34	U
23	BB	46	G
23	BB	63	A
23	BB	71	A
23	BB	72	U
23	BB	74	A
23	BB	75	G
23	BB	91	A
23	BB	96	C
23	BB	99	U
23	BB	101	A
23	BB	102	U
23	BB	103	A
23	BB	118	A
23	BB	119	A
23	BB	120	U
23	BB	125	A
23	BB	126	A
23	BB	128	C
23	BB	135	U
23	BB	137	U
23	BB	140	C
23	BB	141	G
23	BB	142	A
23	BB	144	A
23	BB	160	A
23	BB	162	U
23	BB	163	C
23	BB	179	C
23	BB	180	G
23	BB	181	A
23	BB	196	A
23	BB	199	A
23	BB	215	G
23	BB	216	A
23	BB	221	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BB	222	A
23	BB	230	G
23	BB	233	A
23	BB	248	G
23	BB	250	G
23	BB	252	G
23	BB	255	A
23	BB	265	A
23	BB	266	G
23	BB	267	C
23	BB	271	G
23	BB	276	U
23	BB	277	G
23	BB	278	A
23	BB	279	A
23	BB	281	C
23	BB	291	G
23	BB	299	A
23	BB	302	C
23	BB	311	A
23	BB	329	G
23	BB	330	A
23	BB	333	G
23	BB	346	A
23	BB	349	U
23	BB	353	C
23	BB	367	G
23	BB	371	A
23	BB	372	G
23	BB	386	G
23	BB	387	U
23	BB	395	U
23	BB	396	G
23	BB	405	U
23	BB	411	G
23	BB	412	A
23	BB	424	G
23	BB	435	C
23	BB	455	C
23	BB	456	C
23	BB	457	A
23	BB	479	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BB	480	A
23	BB	481	G
23	BB	491	G
23	BB	504	A
23	BB	505	A
23	BB	508	A
23	BB	509	C
23	BB	510	C
23	BB	512	G
23	BB	527	C
23	BB	532	A
23	BB	533	G
23	BB	545	U
23	BB	546	U
23	BB	547	A
23	BB	548	G
23	BB	549	G
23	BB	550	C
23	BB	563	A
23	BB	573	U
23	BB	574	A
23	BB	575	A
23	BB	588	U
23	BB	603	A
23	BB	613	A
23	BB	614	A
23	BB	615	U
23	BB	616	A
23	BB	627	A
23	BB	632	A
23	BB	637	A
23	BB	645	C
23	BB	646	U
23	BB	647	G
23	BB	654	A
23	BB	655	A
23	BB	671	C
23	BB	686	U
23	BB	718	A
23	BB	719	C
23	BB	722	A
23	BB	727	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BB	730	A
23	BB	747	U
23	BB	765	C
23	BB	775	G
23	BB	782	A
23	BB	784	G
23	BB	785	G
23	BB	805	G
23	BB	806	C
23	BB	811	U
23	BB	812	C
23	BB	819	A
23	BB	827	U
23	BB	828	U
23	BB	847	U
23	BB	859	G
23	BB	872	U
23	BB	874	G
23	BB	877	A
23	BB	878	A
23	BB	899	A
23	BB	910	A
23	BB	912	C
23	BB	932	U
23	BB	933	A
23	BB	941	A
23	BB	946	C
23	BB	961	C
23	BB	973	A
23	BB	974	G
23	BB	983	A
23	BB	991	C
23	BB	995	C
23	BB	996	A
23	BB	1012	U
23	BB	1013	C
23	BB	1022	G
23	BB	1023	U
23	BB	1025	G
23	BB	1033	U
23	BB	1047	G
23	BB	1051	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BB	1056	G
23	BB	1062	G
23	BB	1070	A
23	BB	1088	A
23	BB	1090	A
23	BB	1106	G
23	BB	1110	G
23	BB	1111	A
23	BB	1112	G
23	BB	1126	A
23	BB	1132	U
23	BB	1133	A
23	BB	1135	C
23	BB	1136	G
23	BB	1139	G
23	BB	1141	U
23	BB	1142	A
23	BB	1171	G
23	BB	1172	C
23	BB	1173	U
23	BB	1174	U
23	BB	1186	G
23	BB	1204	A
23	BB	1205	A
23	BB	1211	C
23	BB	1212	G
23	BB	1238	G
23	BB	1242	U
23	BB	1247	A
23	BB	1248	G
23	BB	1250	G
23	BB	1251	C
23	BB	1253	A
23	BB	1256	G
23	BB	1266	G
23	BB	1271	G
23	BB	1272	A
23	BB	1273	U
23	BB	1275	A
23	BB	1301	A
23	BB	1302	A
23	BB	1324	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BB	1325	U
23	BB	1337	G
23	BB	1341	G
23	BB	1352	U
23	BB	1365	A
23	BB	1368	G
23	BB	1379	U
23	BB	1383	A
23	BB	1384	A
23	BB	1388	G
23	BB	1396	U
23	BB	1397	U
23	BB	1416	G
23	BB	1419	A
23	BB	1428	C
23	BB	1434	A
23	BB	1451	C
23	BB	1453	A
23	BB	1454	C
23	BB	1455	G
23	BB	1459	G
23	BB	1460	U
23	BB	1461	C
23	BB	1476	U
23	BB	1477	A
23	BB	1482	G
23	BB	1486	U
23	BB	1490	A
23	BB	1493	C
23	BB	1494	A
23	BB	1504	A
23	BB	1505	A
23	BB	1507	C
23	BB	1508	A
23	BB	1509	A
23	BB	1510	G
23	BB	1524	G
23	BB	1532	A
23	BB	1535	A
23	BB	1537	G
23	BB	1540	G
23	BB	1552	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BB	1559	U
23	BB	1560	G
23	BB	1569	A
23	BB	1578	U
23	BB	1584	U
23	BB	1588	G
23	BB	1608	A
23	BB	1610	A
23	BB	1634	A
23	BB	1635	A
23	BB	1647	U
23	BB	1648	U
23	BB	1674	G
23	BB	1700	A
23	BB	1706	C
23	BB	1713	A
23	BB	1715	G
23	BB	1724	G
23	BB	1725	U
23	BB	1727	C
23	BB	1729	U
23	BB	1730	C
23	BB	1732	C
23	BB	1733	G
23	BB	1738	G
23	BB	1756	G
23	BB	1758	U
23	BB	1764	C
23	BB	1773	A
23	BB	1800	C
23	BB	1816	C
23	BB	1829	A
23	BB	1833	C
23	BB	1870	C
23	BB	1871	A
23	BB	1872	A
23	BB	1884	G
23	BB	1906	G
23	BB	1927	A
23	BB	1929	G
23	BB	1930	G
23	BB	1937	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BB	1938	A
23	BB	1939	U
23	BB	1940	U
23	BB	1955	U
23	BB	1967	C
23	BB	1970	A
23	BB	1971	U
23	BB	1972	G
23	BB	1991	U
23	BB	1993	U
23	BB	1997	C
23	BB	2022	U
23	BB	2023	C
23	BB	2031	A
23	BB	2032	G
23	BB	2033	A
23	BB	2043	C
23	BB	2048	G
23	BB	2055	C
23	BB	2056	G
23	BB	2060	A
23	BB	2061	G
23	BB	2062	A
23	BB	2069	G
23	BB	2072	C
23	BB	2102	G
23	BB	2103	C
23	BB	2109	U
23	BB	2136	G
23	BB	2137	U
23	BB	2138	G
23	BB	2143	C
23	BB	2144	G
23	BB	2145	C
23	BB	2147	A
23	BB	2148	G
23	BB	2149	U
23	BB	2153	C
23	BB	2154	A
23	BB	2155	U
23	BB	2157	G
23	BB	2181	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BB	2183	A
23	BB	2184	A
23	BB	2192	U
23	BB	2198	A
23	BB	2203	U
23	BB	2204	G
23	BB	2211	A
23	BB	2212	A
23	BB	2213	U
23	BB	2225	A
23	BB	2238	G
23	BB	2239	G
23	BB	2266	A
23	BB	2273	A
23	BB	2283	C
23	BB	2287	A
23	BB	2288	A
23	BB	2305	U
23	BB	2307	G
23	BB	2308	G
23	BB	2309	A
23	BB	2311	A
23	BB	2320	U
23	BB	2321	U
23	BB	2322	A
23	BB	2325	G
23	BB	2333	A
23	BB	2337	G
23	BB	2345	G
23	BB	2347	C
23	BB	2361	G
23	BB	2372	U
23	BB	2379	G
23	BB	2383	G
23	BB	2385	C
23	BB	2396	G
23	BB	2402	U
23	BB	2403	C
23	BB	2406	A
23	BB	2423	U
23	BB	2426	A
23	BB	2429	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BB	2430	A
23	BB	2434	A
23	BB	2435	A
23	BB	2441	U
23	BB	2448	A
23	BB	2472	G
23	BB	2476	A
23	BB	2491	U
23	BB	2502	G
23	BB	2505	G
23	BB	2506	U
23	BB	2518	A
23	BB	2535	G
23	BB	2554	U
23	BB	2566	A
23	BB	2567	G
23	BB	2573	C
23	BB	2586	U
23	BB	2602	A
23	BB	2609	U
23	BB	2613	U
23	BB	2629	U
23	BB	2630	G
23	BB	2634	A
23	BB	2654	A
23	BB	2682	A
23	BB	2689	U
23	BB	2690	U
23	BB	2714	G
23	BB	2726	A
23	BB	2739	U
23	BB	2744	G
23	BB	2748	A
23	BB	2750	A
23	BB	2751	G
23	BB	2752	C
23	BB	2753	A
23	BB	2757	A
23	BB	2765	A
23	BB	2778	A
23	BB	2791	G
23	BB	2797	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BB	2798	U
23	BB	2799	A
23	BB	2800	A
23	BB	2802	G
23	BB	2808	G
23	BB	2820	A
23	BB	2821	A
23	BB	2836	U
23	BB	2850	A
23	BB	2866	U
23	BB	2867	G
23	BB	2872	A
23	BB	2873	A
23	BB	2883	A
23	BB	2885	G
23	BB	2894	G
23	BB	2901	C
23	BB	2903	U
1	CA	9	G
1	CA	14	U
1	CA	31	G
1	CA	32	A
1	CA	39	G
1	CA	47	C
1	CA	48	C
1	CA	49	U
1	CA	51	A
1	CA	52	C
1	CA	54	C
1	CA	55	A
1	CA	71	A
1	CA	72	A
1	CA	84	U
1	CA	85	U
1	CA	86	G
1	CA	87	C
1	CA	88	U
1	CA	93	U
1	CA	119	A
1	CA	121	U
1	CA	131	A
1	CA	151	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	182	A
1	CA	183	C
1	CA	197	A
1	CA	209	U
1	CA	210	C
1	CA	211	G
1	CA	226	G
1	CA	239	U
1	CA	240	G
1	CA	243	A
1	CA	244	U
1	CA	245	U
1	CA	247	G
1	CA	250	A
1	CA	251	G
1	CA	257	G
1	CA	258	G
1	CA	266	G
1	CA	267	C
1	CA	280	C
1	CA	289	G
1	CA	301	G
1	CA	306	A
1	CA	316	C
1	CA	321	A
1	CA	328	C
1	CA	329	A
1	CA	330	C
1	CA	332	G
1	CA	345	C
1	CA	352	C
1	CA	354	G
1	CA	367	U
1	CA	373	A
1	CA	381	C
1	CA	382	A
1	CA	384	G
1	CA	397	A
1	CA	398	U
1	CA	406	G
1	CA	408	A
1	CA	409	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	411	A
1	CA	412	A
1	CA	413	G
1	CA	421	U
1	CA	422	C
1	CA	429	U
1	CA	430	A
1	CA	435	A
1	CA	438	U
1	CA	460	A
1	CA	461	A
1	CA	462	G
1	CA	463	U
1	CA	464	U
1	CA	465	A
1	CA	466	A
1	CA	467	U
1	CA	468	A
1	CA	479	U
1	CA	482	A
1	CA	484	G
1	CA	485	U
1	CA	486	U
1	CA	493	A
1	CA	500	G
1	CA	509	A
1	CA	511	C
1	CA	518	C
1	CA	527	G
1	CA	532	A
1	CA	547	A
1	CA	559	A
1	CA	562	U
1	CA	572	A
1	CA	573	A
1	CA	576	C
1	CA	577	G
1	CA	633	G
1	CA	639	G
1	CA	653	U
1	CA	665	A
1	CA	695	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	700	G
1	CA	721	G
1	CA	724	G
1	CA	731	G
1	CA	747	A
1	CA	748	G
1	CA	755	G
1	CA	777	A
1	CA	781	A
1	CA	782	A
1	CA	793	U
1	CA	794	A
1	CA	812	G
1	CA	815	A
1	CA	817	C
1	CA	819	A
1	CA	821	G
1	CA	828	U
1	CA	829	G
1	CA	841	C
1	CA	843	U
1	CA	844	G
1	CA	845	A
1	CA	907	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	966	G
1	CA	969	A
1	CA	971	G
1	CA	974	A
1	CA	976	G
1	CA	977	A
1	CA	992	U
1	CA	993	G
1	CA	994	A
1	CA	1004	A
1	CA	1009	U
1	CA	1010	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1020	G
1	CA	1021	A
1	CA	1028	C
1	CA	1029	U
1	CA	1030	U
1	CA	1031	C
1	CA	1034	G
1	CA	1049	U
1	CA	1050	G
1	CA	1054	C
1	CA	1065	U
1	CA	1066	C
1	CA	1081	A
1	CA	1091	U
1	CA	1094	G
1	CA	1095	U
1	CA	1101	A
1	CA	1136	C
1	CA	1137	C
1	CA	1138	G
1	CA	1139	G
1	CA	1158	C
1	CA	1168	U
1	CA	1169	A
1	CA	1171	A
1	CA	1181	G
1	CA	1183	U
1	CA	1196	A
1	CA	1197	A
1	CA	1201	A
1	CA	1202	U
1	CA	1209	C
1	CA	1211	U
1	CA	1212	U
1	CA	1213	A
1	CA	1214	C
1	CA	1225	A
1	CA	1226	C
1	CA	1227	A
1	CA	1240	U
1	CA	1256	A
1	CA	1279	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1280	A
1	CA	1281	C
1	CA	1285	A
1	CA	1300	G
1	CA	1301	U
1	CA	1303	C
1	CA	1305	G
1	CA	1316	G
1	CA	1317	C
1	CA	1319	A
1	CA	1320	C
1	CA	1323	G
1	CA	1335	U
1	CA	1336	C
1	CA	1362	A
1	CA	1363	A
1	CA	1364	U
1	CA	1381	U
1	CA	1398	A
1	CA	1419	G
1	CA	1429	A
1	CA	1432	G
1	CA	1446	A
1	CA	1451	U
1	CA	1452	C
1	CA	1453	G
1	CA	1492	A
1	CA	1494	G
1	CA	1497	G
1	CA	1503	A
1	CA	1506	U
1	CA	1517	G
1	CA	1519	A
1	CA	1520	C
1	CA	1529	G
1	CA	1530	G
1	CA	1534	A
22	DA	16	G
22	DA	25	U
22	DA	26	C
22	DA	30	C
22	DA	35	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	36	C
22	DA	42	C
22	DA	52	A
22	DA	53	A
22	DA	67	G
22	DA	87	U
22	DA	88	C
22	DA	89	U
22	DA	90	C
22	DA	96	G
22	DA	99	A
22	DA	109	A
23	DB	2	G
23	DB	27	G
23	DB	34	U
23	DB	46	G
23	DB	63	A
23	DB	71	A
23	DB	72	U
23	DB	74	A
23	DB	75	G
23	DB	91	A
23	DB	99	U
23	DB	100	U
23	DB	101	A
23	DB	102	U
23	DB	103	A
23	DB	118	A
23	DB	119	A
23	DB	120	U
23	DB	125	A
23	DB	126	A
23	DB	139	U
23	DB	140	C
23	DB	141	G
23	DB	143	C
23	DB	160	A
23	DB	162	U
23	DB	163	C
23	DB	179	C
23	DB	180	G
23	DB	181	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DB	196	A
23	DB	199	A
23	DB	215	G
23	DB	216	A
23	DB	221	A
23	DB	222	A
23	DB	230	G
23	DB	233	A
23	DB	248	G
23	DB	250	G
23	DB	252	G
23	DB	255	A
23	DB	265	A
23	DB	266	G
23	DB	267	C
23	DB	271	G
23	DB	273	G
23	DB	276	U
23	DB	277	G
23	DB	278	A
23	DB	280	U
23	DB	281	C
23	DB	282	A
23	DB	284	U
23	DB	287	G
23	DB	288	U
23	DB	289	G
23	DB	299	A
23	DB	302	C
23	DB	311	A
23	DB	329	G
23	DB	330	A
23	DB	333	G
23	DB	346	A
23	DB	349	U
23	DB	352	A
23	DB	353	C
23	DB	354	A
23	DB	359	G
23	DB	363	G
23	DB	371	A
23	DB	372	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DB	386	G
23	DB	387	U
23	DB	395	U
23	DB	396	G
23	DB	405	U
23	DB	411	G
23	DB	412	A
23	DB	424	G
23	DB	435	C
23	DB	455	C
23	DB	456	C
23	DB	457	A
23	DB	479	A
23	DB	480	A
23	DB	481	G
23	DB	491	G
23	DB	504	A
23	DB	505	A
23	DB	508	A
23	DB	509	C
23	DB	510	C
23	DB	512	G
23	DB	527	C
23	DB	532	A
23	DB	533	G
23	DB	544	C
23	DB	545	U
23	DB	546	U
23	DB	547	A
23	DB	548	G
23	DB	549	G
23	DB	563	A
23	DB	573	U
23	DB	574	A
23	DB	575	A
23	DB	588	U
23	DB	603	A
23	DB	613	A
23	DB	614	A
23	DB	615	U
23	DB	616	A
23	DB	627	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DB	632	A
23	DB	637	A
23	DB	645	C
23	DB	646	U
23	DB	647	G
23	DB	654	A
23	DB	655	A
23	DB	671	C
23	DB	686	U
23	DB	718	A
23	DB	719	C
23	DB	722	A
23	DB	727	A
23	DB	730	A
23	DB	747	U
23	DB	765	C
23	DB	775	G
23	DB	782	A
23	DB	784	G
23	DB	785	G
23	DB	805	G
23	DB	806	C
23	DB	811	U
23	DB	812	C
23	DB	819	A
23	DB	827	U
23	DB	828	U
23	DB	847	U
23	DB	859	G
23	DB	872	U
23	DB	874	G
23	DB	899	A
23	DB	910	A
23	DB	912	C
23	DB	932	U
23	DB	933	A
23	DB	941	A
23	DB	946	C
23	DB	961	C
23	DB	973	A
23	DB	974	G
23	DB	983	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DB	991	C
23	DB	995	C
23	DB	996	A
23	DB	1012	U
23	DB	1013	C
23	DB	1022	G
23	DB	1023	U
23	DB	1025	G
23	DB	1033	U
23	DB	1053	C
23	DB	1055	G
23	DB	1070	A
23	DB	1088	A
23	DB	1090	A
23	DB	1098	A
23	DB	1110	G
23	DB	1112	G
23	DB	1116	G
23	DB	1126	A
23	DB	1127	A
23	DB	1132	U
23	DB	1133	A
23	DB	1135	C
23	DB	1136	G
23	DB	1141	U
23	DB	1142	A
23	DB	1170	C
23	DB	1174	U
23	DB	1176	U
23	DB	1179	G
23	DB	1186	G
23	DB	1204	A
23	DB	1205	A
23	DB	1211	C
23	DB	1212	G
23	DB	1238	G
23	DB	1242	U
23	DB	1247	A
23	DB	1248	G
23	DB	1250	G
23	DB	1251	C
23	DB	1253	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DB	1256	G
23	DB	1266	G
23	DB	1271	G
23	DB	1272	A
23	DB	1273	U
23	DB	1275	A
23	DB	1301	A
23	DB	1302	A
23	DB	1324	G
23	DB	1325	U
23	DB	1337	G
23	DB	1341	G
23	DB	1352	U
23	DB	1365	A
23	DB	1368	G
23	DB	1379	U
23	DB	1383	A
23	DB	1384	A
23	DB	1388	G
23	DB	1396	U
23	DB	1397	U
23	DB	1416	G
23	DB	1419	A
23	DB	1428	C
23	DB	1434	A
23	DB	1451	C
23	DB	1453	A
23	DB	1454	C
23	DB	1455	G
23	DB	1459	G
23	DB	1460	U
23	DB	1461	C
23	DB	1476	U
23	DB	1477	A
23	DB	1482	G
23	DB	1486	U
23	DB	1490	A
23	DB	1493	C
23	DB	1494	A
23	DB	1504	A
23	DB	1505	A
23	DB	1507	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DB	1508	A
23	DB	1509	A
23	DB	1510	G
23	DB	1524	G
23	DB	1532	A
23	DB	1535	A
23	DB	1537	G
23	DB	1540	G
23	DB	1552	A
23	DB	1559	U
23	DB	1560	G
23	DB	1569	A
23	DB	1578	U
23	DB	1584	U
23	DB	1588	G
23	DB	1608	A
23	DB	1610	A
23	DB	1634	A
23	DB	1635	A
23	DB	1647	U
23	DB	1648	U
23	DB	1674	G
23	DB	1700	A
23	DB	1706	C
23	DB	1713	A
23	DB	1715	G
23	DB	1724	G
23	DB	1725	U
23	DB	1729	U
23	DB	1730	C
23	DB	1732	C
23	DB	1733	G
23	DB	1738	G
23	DB	1756	G
23	DB	1758	U
23	DB	1764	C
23	DB	1773	A
23	DB	1800	C
23	DB	1816	C
23	DB	1829	A
23	DB	1833	C
23	DB	1870	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DB	1871	A
23	DB	1872	A
23	DB	1884	G
23	DB	1906	G
23	DB	1913	A
23	DB	1914	C
23	DB	1927	A
23	DB	1929	G
23	DB	1930	G
23	DB	1937	A
23	DB	1938	A
23	DB	1939	U
23	DB	1940	U
23	DB	1955	U
23	DB	1967	C
23	DB	1970	A
23	DB	1971	U
23	DB	1972	G
23	DB	1991	U
23	DB	1993	U
23	DB	1997	C
23	DB	2022	U
23	DB	2023	C
23	DB	2031	A
23	DB	2032	G
23	DB	2033	A
23	DB	2043	C
23	DB	2048	G
23	DB	2055	C
23	DB	2056	G
23	DB	2060	A
23	DB	2061	G
23	DB	2062	A
23	DB	2069	G
23	DB	2072	C
23	DB	2096	C
23	DB	2097	A
23	DB	2099	U
23	DB	2101	A
23	DB	2107	G
23	DB	2108	A
23	DB	2110	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DB	2134	A
23	DB	2135	A
23	DB	2138	G
23	DB	2147	A
23	DB	2148	G
23	DB	2152	G
23	DB	2155	U
23	DB	2156	G
23	DB	2157	G
23	DB	2180	U
23	DB	2183	A
23	DB	2184	A
23	DB	2189	U
23	DB	2193	G
23	DB	2198	A
23	DB	2203	U
23	DB	2204	G
23	DB	2211	A
23	DB	2212	A
23	DB	2213	U
23	DB	2225	A
23	DB	2238	G
23	DB	2239	G
23	DB	2266	A
23	DB	2273	A
23	DB	2283	C
23	DB	2287	A
23	DB	2288	A
23	DB	2297	A
23	DB	2305	U
23	DB	2307	G
23	DB	2308	G
23	DB	2309	A
23	DB	2311	A
23	DB	2320	U
23	DB	2321	U
23	DB	2322	A
23	DB	2325	G
23	DB	2333	A
23	DB	2337	G
23	DB	2345	G
23	DB	2347	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DB	2361	G
23	DB	2372	U
23	DB	2379	G
23	DB	2383	G
23	DB	2385	C
23	DB	2396	G
23	DB	2402	U
23	DB	2403	C
23	DB	2406	A
23	DB	2423	U
23	DB	2426	A
23	DB	2429	G
23	DB	2430	A
23	DB	2434	A
23	DB	2435	A
23	DB	2441	U
23	DB	2448	A
23	DB	2472	G
23	DB	2476	A
23	DB	2491	U
23	DB	2502	G
23	DB	2505	G
23	DB	2506	U
23	DB	2518	A
23	DB	2535	G
23	DB	2554	U
23	DB	2566	A
23	DB	2567	G
23	DB	2573	C
23	DB	2586	U
23	DB	2602	A
23	DB	2609	U
23	DB	2613	U
23	DB	2629	U
23	DB	2630	G
23	DB	2634	A
23	DB	2654	A
23	DB	2682	A
23	DB	2689	U
23	DB	2690	U
23	DB	2714	G
23	DB	2719	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DB	2726	A
23	DB	2739	U
23	DB	2744	G
23	DB	2748	A
23	DB	2757	A
23	DB	2765	A
23	DB	2778	A
23	DB	2791	G
23	DB	2797	U
23	DB	2798	U
23	DB	2799	A
23	DB	2800	A
23	DB	2802	G
23	DB	2808	G
23	DB	2820	A
23	DB	2821	A
23	DB	2836	U
23	DB	2850	A
23	DB	2866	U
23	DB	2867	G
23	DB	2872	A
23	DB	2873	A
23	DB	2883	A
23	DB	2885	G
23	DB	2894	G
23	DB	2903	U

All (73) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	AA	51	A
1	AA	243	A
1	AA	279	A
1	AA	328	C
1	AA	366	A
1	AA	372	C
1	AA	428	G
1	AA	429	U
1	AA	960	U
1	AA	975	A
1	AA	1049	U
1	AA	1065	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1201	A
1	AA	1302	C
1	AA	1362	A
1	AA	1397	C
22	BA	66	A
23	BB	63	A
23	BB	162	U
23	BB	508	A
23	BB	670	A
23	BB	858	G
23	BB	1210	G
23	BB	1301	A
23	BB	1419	A
23	BB	1509	A
23	BB	2213	U
23	BB	2282	G
23	BB	2336	A
23	BB	2425	A
23	BB	2434	A
23	BB	2756	U
23	BB	2832	U
23	BB	2894	G
23	BB	2902	C
1	CA	51	A
1	CA	239	U
1	CA	243	A
1	CA	279	A
1	CA	328	C
1	CA	366	A
1	CA	372	C
1	CA	428	G
1	CA	429	U
1	CA	960	U
1	CA	975	A
1	CA	1049	U
1	CA	1065	U
1	CA	1201	A
1	CA	1302	C
1	CA	1362	A
1	CA	1397	C
22	DA	66	A
23	DB	63	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DB	162	U
23	DB	508	A
23	DB	544	C
23	DB	546	U
23	DB	670	A
23	DB	858	G
23	DB	1126	A
23	DB	1210	G
23	DB	1301	A
23	DB	1419	A
23	DB	1509	A
23	DB	2213	U
23	DB	2282	G
23	DB	2336	A
23	DB	2425	A
23	DB	2434	A
23	DB	2756	U
23	DB	2832	U
23	DB	2894	G

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

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 349 ligands modelled in this entry, 345 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
53	NMY	AA	1601	-	43,45,45	1.85	11 (25%)	62,67,67	1.18	5 (8%)
53	NMY	CA	1601	-	43,45,45	1.85	11 (25%)	62,67,67	1.28	7 (11%)
53	NMY	BB	3001	-	43,45,45	1.85	11 (25%)	62,67,67	1.19	6 (9%)
53	NMY	DB	3001	-	43,45,45	1.91	11 (25%)	62,67,67	1.31	6 (9%)

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
53	NMY	AA	1601	-	-	3/18/94/94	0/4/4/4
53	NMY	CA	1601	-	-	5/18/94/94	0/4/4/4
53	NMY	BB	3001	-	-	4/18/94/94	0/4/4/4
53	NMY	DB	3001	-	-	4/18/94/94	0/4/4/4

All (44) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
53	CA	1601	NMY	O22-C18	4.73	1.54	1.41
53	BB	3001	NMY	C3-C2	4.72	1.59	1.53
53	DB	3001	NMY	C3-C2	4.71	1.59	1.53
53	AA	1601	NMY	C3-C2	4.68	1.59	1.53
53	AA	1601	NMY	O22-C18	4.66	1.53	1.41
53	BB	3001	NMY	O22-C18	4.53	1.53	1.41
53	DB	3001	NMY	O22-C18	4.49	1.53	1.41
53	CA	1601	NMY	C3-C2	4.34	1.59	1.53
53	CA	1601	NMY	O5-C1	3.92	1.51	1.41
53	DB	3001	NMY	O16-C13	3.62	1.48	1.41
53	AA	1601	NMY	O5-C1	3.60	1.51	1.41
53	DB	3001	NMY	O5-C1	3.42	1.50	1.41
53	BB	3001	NMY	O5-C1	3.41	1.50	1.41
53	DB	3001	NMY	C19-N23	2.86	1.51	1.47
53	CA	1601	NMY	C19-N23	2.83	1.51	1.47
53	AA	1601	NMY	C19-N23	2.78	1.51	1.47
53	BB	3001	NMY	C19-N23	2.76	1.51	1.47
53	DB	3001	NMY	O22-C22	2.75	1.51	1.44
53	BB	3001	NMY	O22-C22	2.68	1.50	1.44
53	CA	1601	NMY	C14-C15	2.67	1.58	1.53
53	AA	1601	NMY	O16-C13	2.65	1.46	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
53	AA	1601	NMY	O22-C22	2.63	1.50	1.44
53	AA	1601	NMY	C14-C15	2.63	1.58	1.53
53	CA	1601	NMY	O22-C22	2.62	1.50	1.44
53	BB	3001	NMY	O16-C13	2.54	1.46	1.41
53	CA	1601	NMY	C1-C2	2.51	1.57	1.52
53	AA	1601	NMY	O5-C5	2.42	1.50	1.44
53	BB	3001	NMY	C12-C7	2.38	1.58	1.53
53	BB	3001	NMY	C4-C5	2.36	1.58	1.53
53	AA	1601	NMY	C12-C7	2.34	1.58	1.53
53	BB	3001	NMY	O5-C5	2.34	1.50	1.44
53	DB	3001	NMY	C4-C5	2.33	1.58	1.53
53	CA	1601	NMY	C4-C5	2.31	1.58	1.53
53	CA	1601	NMY	O5-C5	2.30	1.50	1.44
53	DB	3001	NMY	C12-C7	2.26	1.58	1.53
53	DB	3001	NMY	O5-C5	2.26	1.49	1.44
53	BB	3001	NMY	C20-C21	2.25	1.58	1.52
53	DB	3001	NMY	C20-C21	2.23	1.58	1.52
53	CA	1601	NMY	C20-C21	2.17	1.58	1.52
53	AA	1601	NMY	C20-C21	2.17	1.58	1.52
53	AA	1601	NMY	C4-C5	2.15	1.57	1.53
53	BB	3001	NMY	C14-C15	2.14	1.57	1.53
53	DB	3001	NMY	C18-C19	2.10	1.56	1.52
53	CA	1601	NMY	C12-C7	2.02	1.57	1.53

All (24) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	DB	3001	NMY	O11-C13-O16	4.94	116.41	111.37
53	DB	3001	NMY	O18-C18-C19	4.31	115.12	108.08
53	CA	1601	NMY	O18-C18-C19	4.03	114.67	108.08
53	BB	3001	NMY	O18-C18-C19	3.90	114.46	108.08
53	AA	1601	NMY	O18-C18-C19	3.76	114.24	108.08
53	BB	3001	NMY	O11-C13-O16	3.49	114.93	111.37
53	DB	3001	NMY	O22-C22-C23	3.13	112.09	106.07
53	BB	3001	NMY	O22-C22-C23	3.04	111.91	106.07
53	CA	1601	NMY	O22-C22-C23	3.03	111.89	106.07
53	CA	1601	NMY	C18-O22-C22	3.00	119.58	113.72
53	AA	1601	NMY	O22-C22-C23	2.99	111.81	106.07
53	AA	1601	NMY	C18-O22-C22	2.90	119.39	113.72
53	BB	3001	NMY	C18-O22-C22	2.75	119.08	113.72
53	DB	3001	NMY	C18-O22-C22	2.70	119.00	113.72
53	DB	3001	NMY	O14-C14-C15	2.68	118.70	111.19

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	CA	1601	NMY	O5-C5-C6	2.60	111.07	106.07
53	CA	1601	NMY	O16-C13-C14	2.54	108.21	104.98
53	BB	3001	NMY	O14-C14-C15	2.50	118.18	111.19
53	AA	1601	NMY	O5-C5-C6	2.41	110.70	106.07
53	BB	3001	NMY	O5-C5-C6	2.41	110.70	106.07
53	DB	3001	NMY	O5-C5-C6	2.35	110.59	106.07
53	CA	1601	NMY	O11-C13-O16	-2.32	109.00	111.37
53	AA	1601	NMY	O14-C14-C15	2.27	117.53	111.19
53	CA	1601	NMY	O14-C14-C15	2.24	117.46	111.19

There are no chirality outliers.

All (16) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
53	AA	1601	NMY	O16-C16-C17-O17
53	BB	3001	NMY	C19-C18-O18-C15
53	CA	1601	NMY	C14-C13-O11-C11
53	DB	3001	NMY	C19-C18-O18-C15
53	CA	1601	NMY	O16-C16-C17-O17
53	AA	1601	NMY	C15-C16-C17-O17
53	CA	1601	NMY	C15-C16-C17-O17
53	DB	3001	NMY	O22-C18-O18-C15
53	BB	3001	NMY	O16-C13-O11-C11
53	CA	1601	NMY	O16-C13-O11-C11
53	BB	3001	NMY	O22-C18-O18-C15
53	AA	1601	NMY	O5-C1-O1-C10
53	BB	3001	NMY	C16-C15-O18-C18
53	DB	3001	NMY	O5-C1-O1-C10
53	CA	1601	NMY	C14-C15-O18-C18
53	DB	3001	NMY	C14-C15-O18-C18

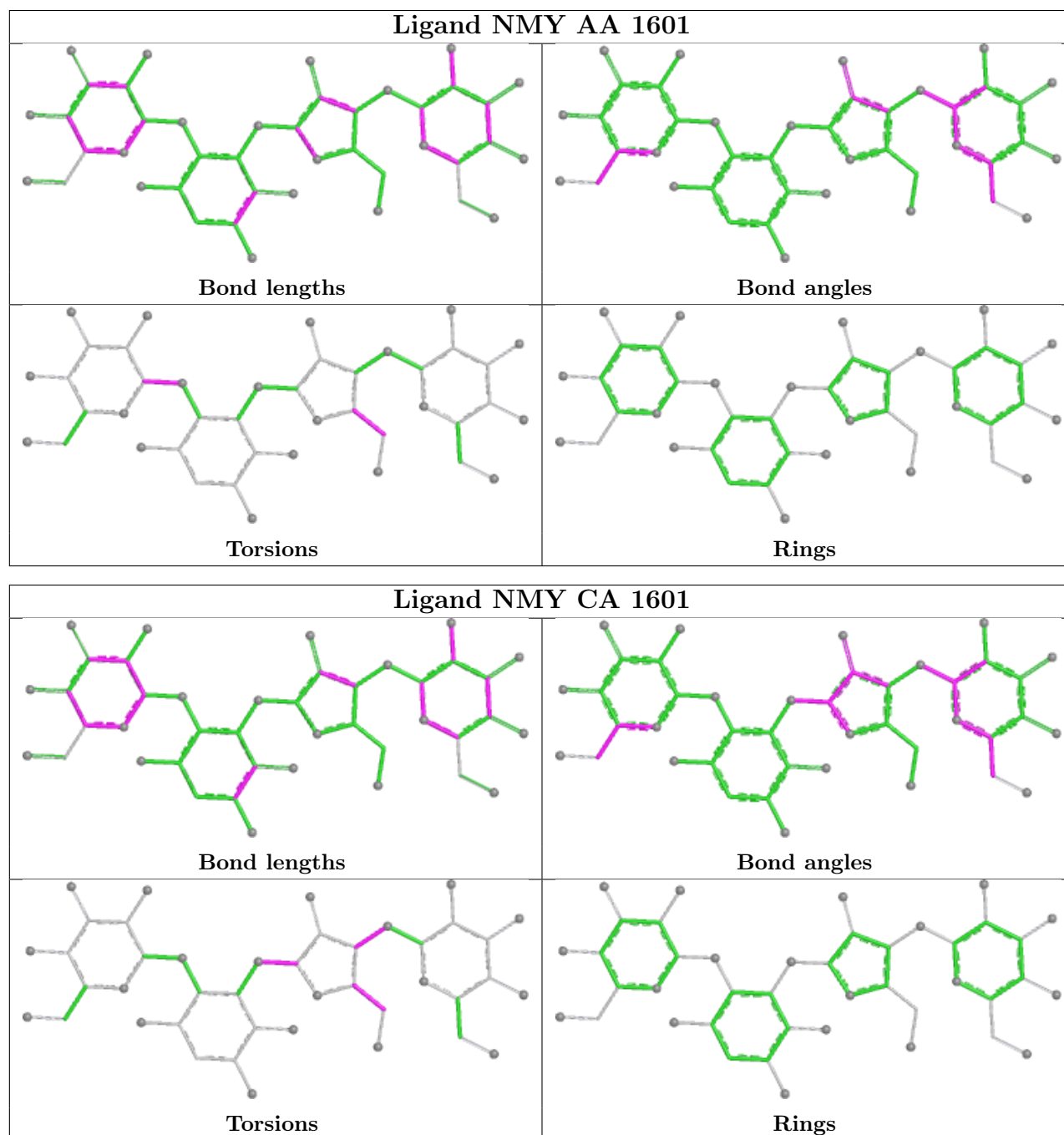
There are no ring outliers.

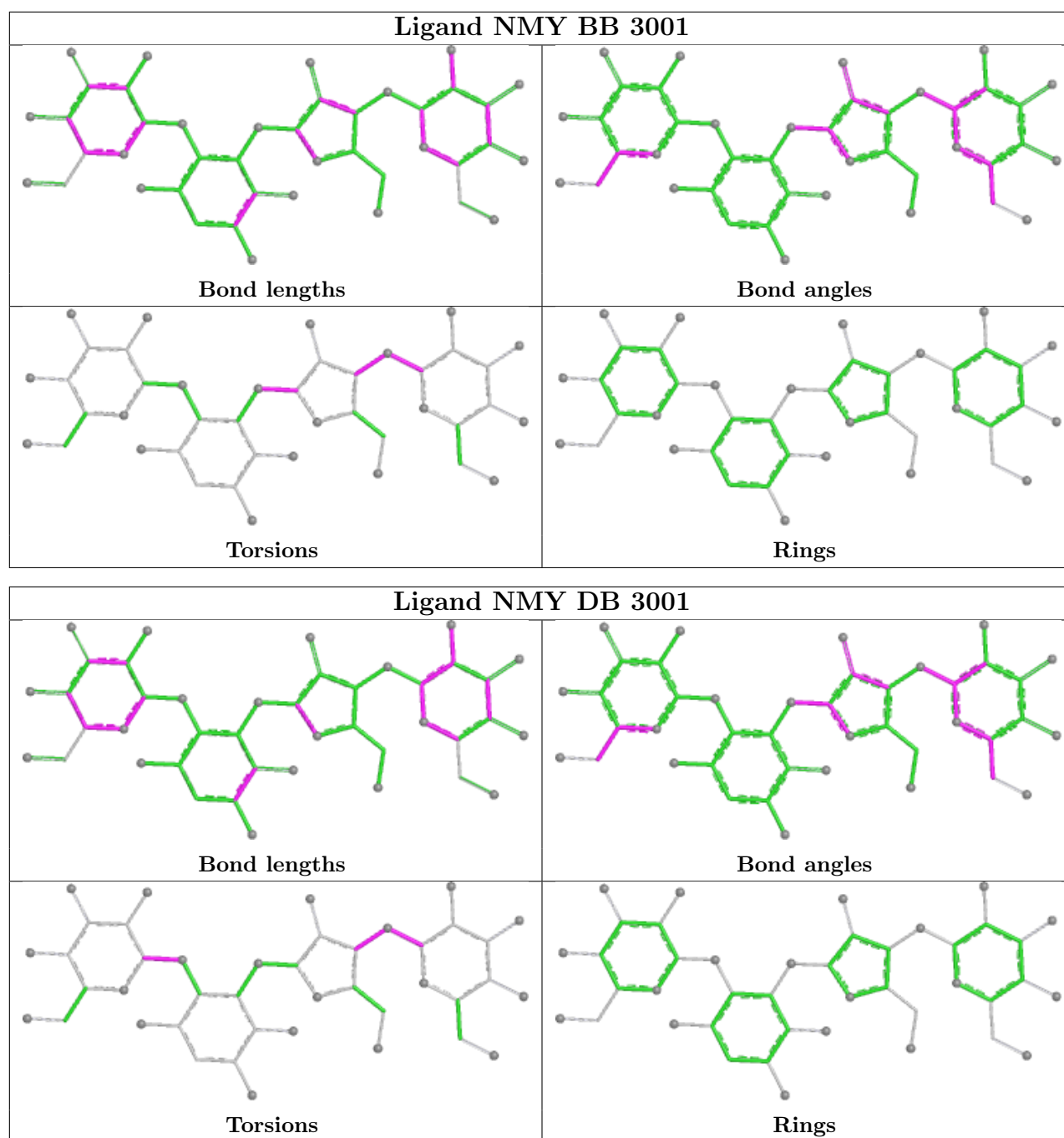
2 monomers are involved in 3 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
53	AA	1601	NMY	2	0
53	DB	3001	NMY	1	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 than 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.





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, 95th 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	1530/1542 (99%)	0.04	45 (2%)	53	35	22, 76, 152, 180	0
1	CA	1530/1542 (99%)	-0.08	46 (3%)	52	34	12, 57, 136, 180	0
2	AC	206/232 (88%)	0.46	21 (10%)	12	8	16, 66, 135, 180	0
2	CC	206/232 (88%)	0.44	17 (8%)	17	11	14, 74, 124, 180	0
3	AD	205/205 (100%)	0.90	30 (14%)	6	4	8, 84, 155, 180	0
3	CD	205/205 (100%)	0.52	15 (7%)	21	13	15, 62, 135, 180	0
4	AE	150/166 (90%)	0.68	18 (12%)	9	6	7, 67, 122, 158	0
4	CE	150/166 (90%)	0.55	14 (9%)	14	10	10, 59, 122, 180	0
5	AF	100/135 (74%)	0.50	6 (6%)	27	17	32, 80, 148, 180	0
5	CF	100/135 (74%)	0.31	4 (4%)	42	26	23, 69, 138, 180	0
6	AG	150/178 (84%)	0.68	21 (14%)	6	5	39, 105, 151, 180	0
6	CG	152/178 (85%)	0.46	11 (7%)	21	14	32, 89, 152, 180	0
7	AH	129/129 (100%)	0.59	12 (9%)	14	10	29, 79, 133, 180	0
7	CH	129/129 (100%)	0.51	15 (11%)	9	7	7, 55, 120, 148	0
8	AI	127/129 (98%)	0.91	16 (12%)	8	6	37, 90, 164, 180	0
8	CI	127/129 (98%)	1.05	20 (15%)	5	4	32, 95, 162, 180	0
9	AJ	98/103 (95%)	0.87	16 (16%)	4	3	17, 85, 158, 180	0
9	CJ	98/103 (95%)	1.29	23 (23%)	2	2	22, 89, 150, 180	0
10	AK	117/128 (91%)	0.31	4 (3%)	48	30	17, 63, 128, 162	0
10	CK	117/128 (91%)	0.20	6 (5%)	33	21	10, 51, 116, 164	0
11	AL	123/123 (100%)	1.04	25 (20%)	3	2	19, 74, 135, 180	0
11	CL	123/123 (100%)	0.72	19 (15%)	5	4	6, 50, 127, 180	0
12	AM	114/117 (97%)	0.63	8 (7%)	22	14	52, 119, 180, 180	0
12	CM	113/117 (96%)	0.73	13 (11%)	9	7	53, 105, 167, 180	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	AN	96/100 (96%)	0.88	10 (10%) 11 8	24, 79, 118, 152	0
13	CN	96/100 (96%)	1.18	16 (16%) 4 3	26, 82, 119, 139	0
14	AO	88/89 (98%)	0.21	4 (4%) 38 24	39, 76, 123, 180	0
14	CO	88/89 (98%)	0.22	5 (5%) 29 19	15, 55, 123, 154	0
15	AP	82/82 (100%)	1.05	13 (15%) 5 4	30, 86, 150, 180	0
15	CP	80/82 (97%)	0.99	12 (15%) 5 4	8, 56, 135, 180	0
16	AQ	80/83 (96%)	0.88	11 (13%) 6 5	49, 96, 155, 180	0
16	CQ	81/83 (97%)	0.36	7 (8%) 16 11	25, 66, 128, 180	0
17	AR	55/74 (74%)	0.70	5 (9%) 15 10	15, 74, 125, 165	0
17	CR	55/74 (74%)	0.43	6 (10%) 10 7	19, 63, 119, 170	0
18	AS	79/91 (86%)	0.95	11 (13%) 6 5	73, 121, 176, 180	0
18	CS	80/91 (87%)	0.96	17 (21%) 2 2	58, 109, 168, 180	0
19	AT	85/86 (98%)	0.91	14 (16%) 4 3	52, 104, 164, 180	0
19	CT	85/86 (98%)	0.67	14 (16%) 4 3	22, 62, 125, 179	0
20	AB	218/240 (90%)	0.42	15 (6%) 23 15	29, 99, 155, 180	0
20	CB	218/240 (90%)	0.50	19 (8%) 16 11	31, 102, 160, 180	0
21	AU	51/70 (72%)	1.58	20 (39%) 1 1	43, 92, 146, 180	0
21	CU	51/70 (72%)	1.55	16 (31%) 1 1	40, 85, 133, 166	0
22	BA	117/120 (97%)	0.20	8 (6%) 23 15	49, 83, 138, 174	0
22	DA	117/120 (97%)	0.38	6 (5%) 33 21	36, 75, 124, 180	0
23	BB	2841/2904 (97%)	-0.05	73 (2%) 57 38	16, 60, 154, 180	0
23	DB	2841/2904 (97%)	-0.21	67 (2%) 59 40	6, 47, 151, 180	0
24	BI	141/141 (100%)	0.97	18 (12%) 7 6	93, 176, 180, 180	0
24	DI	141/141 (100%)	0.59	10 (7%) 22 14	101, 177, 180, 180	0
25	BC	271/272 (99%)	0.72	32 (11%) 9 7	9, 50, 104, 180	0
25	DC	271/272 (99%)	0.64	30 (11%) 10 7	5, 35, 87, 135	0
26	BD	209/209 (100%)	0.85	23 (11%) 10 7	20, 76, 135, 180	0
26	DD	209/209 (100%)	0.77	32 (15%) 5 4	5, 50, 126, 180	0
27	BK	121/123 (98%)	0.87	23 (19%) 3 2	14, 72, 133, 180	0
27	DK	121/123 (98%)	0.37	8 (6%) 24 15	6, 43, 104, 164	0
28	BP	114/114 (100%)	1.27	28 (24%) 2 2	35, 86, 151, 180	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2		OWAB(Å ²)	Q<0.9
28	DP	114/114 (100%)	0.55	13 (11%)	10 7	6, 49, 113, 160	0
29	BE	201/201 (100%)	0.43	17 (8%)	16 11	10, 67, 144, 180	0
29	DE	201/201 (100%)	0.50	23 (11%)	10 7	5, 72, 137, 180	0
30	BY	58/58 (100%)	0.46	3 (5%)	33 21	34, 74, 139, 180	0
30	DY	58/58 (100%)	0.43	2 (3%)	48 30	21, 60, 141, 177	0
31	B0	56/56 (100%)	0.50	3 (5%)	31 20	15, 74, 151, 180	0
31	D0	56/56 (100%)	0.57	2 (3%)	46 29	9, 49, 124, 180	0
32	B4	38/38 (100%)	2.02	17 (44%)	0 1	35, 91, 145, 151	0
32	D4	38/38 (100%)	1.07	6 (15%)	5 4	18, 68, 129, 150	0
33	B1	50/54 (92%)	0.66	4 (8%)	18 12	52, 90, 134, 174	0
33	D1	50/54 (92%)	0.15	0	100 100	14, 76, 127, 175	0
34	B3	64/64 (100%)	1.11	14 (21%)	2 2	26, 59, 87, 158	0
34	D3	64/64 (100%)	1.40	18 (28%)	1 1	9, 49, 112, 156	0
35	BV	94/94 (100%)	0.30	3 (3%)	50 32	29, 97, 155, 178	0
35	DV	94/94 (100%)	0.36	4 (4%)	40 25	21, 89, 153, 167	0
36	B2	46/46 (100%)	0.90	5 (10%)	10 7	14, 50, 83, 144	0
36	D2	46/46 (100%)	0.67	5 (10%)	10 7	5, 38, 76, 180	0
37	BL	143/144 (99%)	0.62	10 (6%)	22 14	25, 70, 133, 180	0
37	DL	143/144 (99%)	0.77	17 (11%)	9 6	9, 59, 117, 147	0
38	BM	136/136 (100%)	0.72	17 (12%)	8 6	21, 68, 136, 180	0
38	DM	136/136 (100%)	0.70	14 (10%)	12 8	13, 54, 118, 167	0
39	BX	63/63 (100%)	0.60	6 (9%)	14 9	21, 81, 149, 175	0
39	DX	63/63 (100%)	0.39	4 (6%)	26 16	38, 97, 156, 180	0
40	BH	149/149 (100%)	0.70	11 (7%)	20 13	31, 134, 180, 180	0
40	DH	149/149 (100%)	0.44	12 (8%)	18 12	32, 110, 160, 180	0
41	BJ	142/142 (100%)	1.36	40 (28%)	1 1	23, 82, 140, 169	0
41	DJ	142/142 (100%)	0.87	22 (15%)	5 4	17, 61, 126, 180	0
42	BN	120/127 (94%)	0.83	14 (11%)	9 7	24, 71, 139, 180	0
42	DN	120/127 (94%)	0.69	14 (11%)	9 7	7, 43, 91, 172	0
43	BO	116/117 (99%)	0.95	19 (16%)	4 3	35, 83, 145, 180	0
43	DO	116/117 (99%)	0.79	17 (14%)	6 4	19, 73, 135, 172	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
44	BQ	117/117 (100%)	1.02	23 (19%) 3 2	10, 66, 129, 167	0
44	DQ	117/117 (100%)	0.77	18 (15%) 5 4	8, 50, 104, 180	0
45	BS	110/110 (100%)	0.66	9 (8%) 17 11	6, 62, 123, 152	0
45	DS	110/110 (100%)	0.61	11 (10%) 12 8	12, 48, 129, 180	0
46	BU	102/103 (99%)	0.61	5 (4%) 35 22	21, 77, 140, 180	0
46	DU	102/103 (99%)	0.79	12 (11%) 9 7	22, 94, 154, 180	0
47	BF	178/178 (100%)	0.64	17 (9%) 13 9	56, 128, 177, 180	0
47	DF	178/178 (100%)	1.29	40 (22%) 2 2	30, 107, 168, 180	0
48	BG	176/176 (100%)	0.52	6 (3%) 48 30	49, 112, 163, 180	0
48	DG	176/176 (100%)	0.68	19 (10%) 11 7	35, 97, 161, 180	0
49	BR	103/103 (100%)	0.57	10 (9%) 13 9	25, 87, 151, 176	0
49	DR	103/103 (100%)	0.61	9 (8%) 16 11	23, 76, 139, 161	0
50	BT	93/100 (93%)	0.74	15 (16%) 4 3	22, 77, 159, 180	0
50	DT	93/100 (93%)	1.21	23 (24%) 2 2	24, 64, 156, 179	0
51	BZ	77/78 (98%)	0.73	8 (10%) 11 8	12, 51, 112, 143	0
51	DZ	77/78 (98%)	0.74	11 (14%) 6 5	9, 48, 94, 128	0
52	BW	79/84 (94%)	1.89	28 (35%) 1 1	18, 85, 141, 159	0
52	DW	79/84 (94%)	2.14	38 (48%) 0 1	20, 71, 134, 180	0
All	All	20417/21046 (97%)	0.37	1656 (8%) 18 12	5, 69, 156, 180	0

All (1656) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
22	DA	88	C	21.7
8	CI	129	ARG	17.2
22	BA	88	C	15.8
8	CI	128	LYS	11.9
11	CL	123	ALA	11.0
23	BB	140	C	9.3
26	DD	118	PHE	8.9
8	AI	128	LYS	8.8
15	CP	52	LEU	8.6
28	BP	99	LEU	8.5
23	BB	139	U	8.3
8	AI	129	ARG	8.2
8	CI	126	PHE	8.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
47	DF	163	GLU	7.8
47	DF	10	GLU	7.6
11	CL	14	LYS	7.4
35	BV	82	TYR	7.4
19	CT	3	ILE	7.4
34	D3	51	LYS	7.3
13	CN	16	ALA	7.3
47	DF	8	LYS	7.3
25	BC	271	SER	7.2
26	BD	118	PHE	7.2
28	BP	101	GLU	7.1
47	DF	173	ASP	7.1
21	CU	35	GLU	7.0
9	CJ	84	VAL	6.9
32	B4	3	VAL	6.9
1	AA	1080	A	6.8
1	CA	1362	A	6.8
23	BB	2320	U	6.8
25	DC	250	GLN	6.7
10	AK	125	LYS	6.6
2	CC	165	GLU	6.6
23	BB	715	A	6.5
17	AR	19	GLU	6.4
36	B2	1	MET	6.3
17	CR	19	GLU	6.3
41	BJ	113	PRO	6.3
47	DF	171	ALA	6.2
52	DW	33	GLY	6.2
52	BW	39	GLN	6.2
11	AL	12	ALA	6.2
25	DC	34	GLU	6.2
26	BD	186	LEU	6.2
10	AK	128	VAL	6.1
19	AT	3	ILE	6.1
21	CU	36	PHE	6.0
1	CA	966	G	6.0
6	AG	4	ARG	6.0
47	DF	172	PHE	6.0
11	CL	13	ARG	6.0
22	DA	87	U	6.0
8	CI	114	LYS	5.9
43	DO	2	ASP	5.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
46	DU	30	SER	5.9
52	DW	74	LYS	5.9
50	DT	71	GLY	5.9
1	CA	240	G	5.9
3	AD	159	GLU	5.9
11	CL	24	GLU	5.9
42	BN	12	ARG	5.8
23	DB	2602	A	5.8
52	BW	33	GLY	5.8
52	DW	36	ILE	5.8
32	B4	7	VAL	5.8
23	DB	645	C	5.7
25	BC	3	VAL	5.7
1	AA	1362	A	5.6
8	AI	127	SER	5.6
1	CA	969	A	5.6
1	AA	79	G	5.6
41	BJ	81	ILE	5.6
49	DR	86	GLN	5.6
52	BW	14	ASP	5.5
41	DJ	81	ILE	5.5
52	DW	6	GLY	5.5
23	DB	100	U	5.5
19	CT	66	ILE	5.5
29	DE	60	TRP	5.4
45	DS	32	ALA	5.4
34	B3	58	ILE	5.4
52	BW	36	ILE	5.4
34	D3	13	PHE	5.4
52	DW	40	ARG	5.4
11	AL	9	LYS	5.3
44	BQ	17	LEU	5.3
48	DG	161	VAL	5.3
23	DB	1730	C	5.3
11	AL	19	ASN	5.3
41	DJ	42	ALA	5.2
8	CI	127	SER	5.2
41	BJ	86	GLN	5.2
8	AI	119	LYS	5.2
22	DA	52	A	5.1
47	DF	27	VAL	5.1
43	DO	20	GLU	5.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
52	BW	45	HIS	5.1
12	CM	52	ILE	5.1
36	B2	46	LYS	5.1
21	CU	43	GLU	5.1
1	AA	884	U	5.1
15	CP	28	ARG	5.1
29	DE	155	GLU	5.1
50	DT	72	GLN	5.1
47	DF	124	ARG	5.1
23	BB	136	G	5.0
11	AL	123	ALA	5.0
39	BX	5	GLU	5.0
19	AT	6	ALA	5.0
18	CS	40	PHE	5.0
37	DL	37	GLY	5.0
10	CK	125	LYS	5.0
1	AA	78	A	4.9
1	CA	121	U	4.9
52	DW	75	ASN	4.9
12	CM	44	ILE	4.9
13	AN	30	ILE	4.9
48	DG	89	VAL	4.9
52	DW	19	ARG	4.9
25	DC	271	SER	4.9
48	BG	1	SER	4.9
52	BW	42	THR	4.9
11	AL	13	ARG	4.8
21	CU	34	ARG	4.8
4	AE	127	TYR	4.8
26	BD	131	ASP	4.8
52	BW	40	ARG	4.8
8	CI	109	GLN	4.8
38	DM	42	THR	4.8
52	DW	37	VAL	4.8
41	BJ	111	LYS	4.8
3	CD	72	ARG	4.8
23	BB	1459	G	4.8
26	BD	140	HIS	4.7
11	AL	25	ALA	4.7
41	BJ	42	ALA	4.7
47	DF	11	VAL	4.7
16	AQ	33	TYR	4.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
23	DB	653	U	4.7
23	DB	1175	A	4.7
8	AI	29	ILE	4.7
23	DB	139	U	4.7
23	BB	1172	C	4.7
9	CJ	60	ASP	4.7
4	AE	25	LYS	4.7
32	B4	9	LYS	4.7
52	DW	43	LYS	4.7
13	CN	20	PHE	4.7
10	CK	128	VAL	4.7
52	BW	75	ASN	4.7
13	CN	22	LYS	4.6
6	AG	80	GLY	4.6
47	DF	169	LEU	4.6
50	DT	90	GLY	4.6
4	CE	30	PHE	4.6
23	BB	137	U	4.6
44	DQ	1	ALA	4.6
11	CL	19	ASN	4.6
19	CT	5	SER	4.6
11	AL	3	VAL	4.6
42	BN	21	PHE	4.6
6	AG	78	ARG	4.5
15	AP	8	ARG	4.5
1	CA	1339	A	4.5
28	BP	91	VAL	4.5
21	AU	37	TYR	4.5
1	AA	562	U	4.5
23	BB	138	U	4.5
47	DF	19	PHE	4.5
1	CA	967	C	4.5
47	DF	7	TYR	4.5
34	B3	50	SER	4.5
20	CB	162	VAL	4.5
51	DZ	51	VAL	4.5
49	BR	77	PHE	4.5
52	DW	18	LYS	4.5
41	BJ	20	ALA	4.5
28	BP	103	THR	4.5
7	AH	13	ILE	4.5
42	DN	83	LEU	4.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
47	BF	102	LEU	4.5
27	BK	104	THR	4.5
7	CH	127	TYR	4.5
13	AN	65	GLN	4.5
11	CL	25	ALA	4.4
23	BB	2145	C	4.4
1	AA	1079	G	4.4
3	AD	24	VAL	4.4
9	CJ	47	GLU	4.4
52	DW	51	GLY	4.4
25	BC	167	ASP	4.4
2	AC	1	GLY	4.4
15	AP	6	LEU	4.4
34	D3	21	PHE	4.4
24	BI	6	ALA	4.4
6	CG	29	LEU	4.4
23	BB	645	C	4.4
52	BW	38	ARG	4.4
15	AP	71	VAL	4.4
11	CL	37	TYR	4.4
20	AB	192	PRO	4.4
41	BJ	59	ALA	4.3
20	AB	212	TYR	4.3
41	BJ	63	ALA	4.3
2	AC	160	GLU	4.3
3	CD	24	VAL	4.3
1	AA	1441	A	4.3
35	BV	83	LYS	4.3
42	BN	17	ARG	4.3
44	BQ	43	GLN	4.3
15	AP	80	LYS	4.3
13	AN	1	ALA	4.3
13	CN	21	ALA	4.3
25	DC	109	LEU	4.3
41	DJ	44	TYR	4.3
13	AN	55	SER	4.3
1	AA	412	A	4.3
23	BB	62	U	4.3
23	BB	2213	U	4.3
47	DF	174	PHE	4.3
21	CU	46	ARG	4.3
37	DL	58	TYR	4.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	AD	157	ALA	4.2
6	CG	104	VAL	4.2
48	DG	168	VAL	4.2
9	CJ	49	PHE	4.2
11	AL	22	ALA	4.2
52	DW	17	ALA	4.2
28	DP	91	VAL	4.2
34	D3	19	GLY	4.2
14	AO	60	VAL	4.2
42	BN	10	LEU	4.2
25	BC	11	GLY	4.2
26	BD	128	ARG	4.2
38	BM	93	VAL	4.2
19	AT	5	SER	4.2
23	DB	546	U	4.2
50	DT	59	ASN	4.2
52	DW	15	SER	4.2
11	CL	22	ALA	4.2
48	DG	12	ALA	4.2
49	BR	86	GLN	4.1
44	BQ	28	SER	4.1
6	AG	140	VAL	4.1
2	CC	133	MET	4.1
40	BH	85	GLY	4.1
9	CJ	25	ILE	4.1
44	BQ	16	ILE	4.1
23	DB	1099	G	4.1
23	DB	2157	G	4.1
26	BD	116	LYS	4.1
38	DM	83	GLY	4.1
1	CA	970	C	4.1
24	BI	59	THR	4.1
24	DI	7	TYR	4.1
49	BR	76	LYS	4.1
8	CI	118	ARG	4.1
46	DU	33	VAL	4.0
9	CJ	59	LYS	4.0
41	DJ	111	LYS	4.0
9	CJ	87	LEU	4.0
9	CJ	44	THR	4.0
3	AD	162	GLU	4.0
6	CG	105	GLU	4.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
15	AP	11	ALA	4.0
23	DB	181	A	4.0
4	AE	94	PHE	4.0
28	BP	47	ILE	4.0
27	DK	119	ALA	4.0
1	AA	86	G	4.0
50	DT	34	VAL	4.0
40	BH	27	ARG	4.0
18	CS	39	ILE	4.0
11	CL	17	LYS	4.0
51	BZ	71	LEU	4.0
26	BD	27	ILE	3.9
25	BC	1	ALA	3.9
23	BB	1171	G	3.9
28	BP	67	GLU	3.9
38	BM	42	THR	3.9
43	DO	60	GLU	3.9
52	BW	50	VAL	3.9
7	AH	122	GLY	3.9
25	DC	11	GLY	3.9
37	DL	17	LYS	3.9
47	DF	18	GLU	3.9
11	AL	7	VAL	3.9
28	BP	69	VAL	3.9
44	BQ	36	GLN	3.9
20	AB	161	PHE	3.9
22	BA	87	U	3.9
11	AL	11	ARG	3.9
25	BC	253	GLY	3.9
3	CD	33	ILE	3.9
8	AI	109	GLN	3.9
26	BD	114	LYS	3.9
35	DV	56	PHE	3.9
8	CI	117	LEU	3.9
2	CC	130	ARG	3.9
49	BR	84	ARG	3.9
8	CI	42	THR	3.9
42	DN	62	ASN	3.9
3	AD	4	LEU	3.9
47	DF	12	VAL	3.8
1	CA	968	A	3.8
3	AD	108	ALA	3.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
20	CB	69	VAL	3.8
4	CE	107	GLY	3.8
15	AP	54	LEU	3.8
25	BC	250	GLN	3.8
36	D2	1	MET	3.8
47	DF	6	TYR	3.8
38	DM	37	GLY	3.8
39	BX	22	LEU	3.8
6	AG	79	VAL	3.8
1	AA	1339	A	3.8
6	CG	78	ARG	3.8
21	AU	41	THR	3.8
23	DB	141	G	3.8
7	CH	75	GLN	3.8
52	BW	6	GLY	3.8
1	CA	1368	A	3.8
26	BD	129	THR	3.8
52	BW	37	VAL	3.7
1	CA	765	G	3.7
20	AB	193	ASP	3.7
11	AL	10	PRO	3.7
24	DI	6	ALA	3.7
43	DO	3	LYS	3.7
1	CA	1534	A	3.7
23	DB	508	A	3.7
1	CA	1384	C	3.7
21	AU	26	GLY	3.7
9	CJ	65	TYR	3.7
25	BC	22	GLU	3.7
52	BW	74	LYS	3.7
33	B1	51	ALA	3.7
7	AH	128	VAL	3.7
23	DB	2213	U	3.7
8	AI	34	LEU	3.7
23	BB	878	A	3.7
9	AJ	60	ASP	3.7
32	D4	20	ASP	3.7
43	BO	92	PHE	3.7
47	DF	99	PHE	3.7
1	CA	1367	C	3.7
48	DG	166	GLU	3.7
27	BK	119	ALA	3.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
38	BM	128	THR	3.7
16	AQ	58	VAL	3.7
46	DU	24	VAL	3.7
21	AU	34	ARG	3.7
37	DL	77	ILE	3.7
12	CM	47	LEU	3.7
51	BZ	49	LEU	3.7
52	DW	31	LEU	3.7
1	CA	85	U	3.7
49	DR	95	ASP	3.7
52	BW	17	ALA	3.7
52	DW	60	ALA	3.7
42	BN	70	THR	3.7
38	DM	18	ARG	3.7
52	DW	45	HIS	3.7
2	AC	156	LEU	3.7
6	AG	81	GLY	3.7
52	DW	25	PHE	3.7
7	CH	92	PRO	3.6
1	AA	765	G	3.6
13	CN	24	ALA	3.6
4	CE	53	ARG	3.6
43	BO	12	THR	3.6
36	D2	29	GLN	3.6
44	BQ	13	HIS	3.6
1	AA	80	A	3.6
1	CA	1257	A	3.6
25	DC	43	ASN	3.6
1	AA	106	C	3.6
43	BO	113	ALA	3.6
4	CE	31	SER	3.6
50	DT	70	HIS	3.6
42	DN	12	ARG	3.6
24	BI	4	VAL	3.6
1	CA	1074	G	3.6
18	AS	65	MET	3.6
32	B4	6	SER	3.6
29	DE	42	GLY	3.6
25	BC	196	ASN	3.6
28	BP	98	TYR	3.6
41	BJ	75	TYR	3.6
50	DT	11	LEU	3.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
41	BJ	54	ILE	3.6
46	BU	14	THR	3.6
22	DA	86	G	3.5
25	DC	202	ARG	3.5
37	DL	65	GLY	3.5
3	CD	66	VAL	3.5
8	AI	124	PRO	3.5
40	DH	9	VAL	3.5
28	BP	106	ALA	3.5
8	AI	12	LYS	3.5
21	AU	15	LEU	3.5
48	DG	88	LEU	3.5
50	DT	5	GLU	3.5
23	DB	62	U	3.5
43	DO	53	THR	3.5
18	AS	7	GLY	3.5
48	DG	160	GLY	3.5
29	DE	58	LYS	3.5
18	AS	70	LEU	3.5
34	B3	54	LEU	3.5
41	BJ	142	ILE	3.5
46	DU	102	ILE	3.5
26	DD	163	GLY	3.5
11	AL	15	VAL	3.5
47	DF	30	VAL	3.5
41	BJ	87	ALA	3.5
16	AQ	7	LEU	3.5
3	AD	27	ILE	3.5
26	BD	30	GLU	3.5
23	DB	182	A	3.5
9	AJ	58	ASN	3.5
23	DB	435	C	3.5
40	DH	12	LEU	3.5
48	DG	104	LEU	3.5
2	AC	205	GLU	3.5
35	DV	82	TYR	3.5
47	DF	22	ASN	3.5
7	CH	39	LEU	3.5
42	BN	1	MET	3.5
52	BW	19	ARG	3.5
23	BB	2585	U	3.5
28	DP	101	GLU	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
13	CN	42	ASN	3.4
21	CU	49	ALA	3.4
43	BO	106	LEU	3.4
32	D4	6	SER	3.4
52	BW	13	ARG	3.4
27	BK	67	LYS	3.4
34	D3	22	LYS	3.4
2	AC	167	TYR	3.4
23	DB	34	U	3.4
38	BM	36	VAL	3.4
28	DP	99	LEU	3.4
47	DF	17	THR	3.4
41	DJ	86	GLN	3.4
36	D2	46	LYS	3.4
23	BB	508	A	3.4
26	DD	135	GLY	3.4
15	AP	81	ALA	3.4
43	DO	33	ARG	3.4
18	AS	48	ILE	3.4
41	BJ	101	ILE	3.4
41	BJ	39	LYS	3.4
1	CA	763	G	3.4
21	AU	35	GLU	3.4
25	BC	265	PHE	3.4
34	B3	21	PHE	3.4
52	DW	50	VAL	3.4
26	BD	111	GLY	3.4
33	B1	15	GLY	3.4
44	BQ	34	ALA	3.4
52	BW	41	GLY	3.4
26	DD	112	THR	3.4
26	DD	101	PHE	3.4
37	DL	85	VAL	3.4
29	DE	81	GLY	3.4
42	DN	20	MET	3.4
21	CU	53	LYS	3.4
43	DO	4	LYS	3.4
17	AR	73	HIS	3.4
5	AF	52	ASN	3.3
25	DC	196	ASN	3.3
23	BB	1583	A	3.3
15	CP	36	VAL	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
42	DN	29	VAL	3.3
12	AM	98	GLY	3.3
38	BM	103	TYR	3.3
40	BH	10	ALA	3.3
52	DW	41	GLY	3.3
28	BP	21	PRO	3.3
32	B4	35	GLN	3.3
32	B4	37	GLN	3.3
23	BB	1537	G	3.3
13	CN	76	PHE	3.3
25	BC	164	VAL	3.3
29	DE	169	VAL	3.3
41	BJ	64	VAL	3.3
52	BW	16	GLU	3.3
9	AJ	59	LYS	3.3
23	BB	2147	A	3.3
34	D3	20	GLY	3.3
1	AA	121	U	3.3
36	D2	43	THR	3.3
28	BP	61	ARG	3.3
47	BF	22	ASN	3.3
21	AU	43	GLU	3.3
27	DK	45	GLU	3.3
51	BZ	76	GLU	3.3
18	AS	3	SER	3.3
24	BI	58	ILE	3.3
34	D3	36	ALA	3.3
42	DN	97	ILE	3.3
2	CC	167	TYR	3.3
32	B4	20	ASP	3.3
1	CA	975	A	3.3
1	AA	1078	U	3.3
1	AA	87	C	3.3
49	BR	75	VAL	3.3
29	BE	25	GLU	3.3
47	DF	3	LEU	3.3
20	CB	216	VAL	3.3
26	DD	56	LYS	3.3
41	BJ	62	VAL	3.3
24	BI	1	ALA	3.3
37	DL	49	GLY	3.3
3	CD	190	LEU	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
12	AM	79	LEU	3.2
39	DX	22	LEU	3.2
43	BO	98	GLN	3.2
46	DU	32	LYS	3.2
52	DW	14	ASP	3.2
26	DD	140	HIS	3.2
9	CJ	36	VAL	3.2
26	DD	52	THR	3.2
38	DM	108	VAL	3.2
52	DW	42	THR	3.2
2	AC	188	ALA	3.2
1	AA	134	G	3.2
23	DB	242	G	3.2
24	DI	84	GLY	3.2
23	BB	63	A	3.2
23	DB	1552	A	3.2
39	BX	57	LEU	3.2
2	CC	152	VAL	3.2
25	BC	19	VAL	3.2
44	DQ	90	ASP	3.2
47	DF	26	GLN	3.2
38	DM	113	ALA	3.2
26	DD	128	ARG	3.2
28	BP	102	ARG	3.2
45	BS	78	GLU	3.2
50	BT	5	GLU	3.2
18	AS	30	LEU	3.2
21	AU	53	LYS	3.2
23	BB	1132	U	3.2
4	AE	30	PHE	3.2
8	CI	13	SER	3.2
23	DB	1413	A	3.2
35	DV	47	VAL	3.2
43	DO	28	VAL	3.2
5	AF	51	ILE	3.2
12	AM	76	ILE	3.2
21	CU	14	ALA	3.2
39	BX	2	LYS	3.2
47	DF	14	LYS	3.2
17	AR	28	LEU	3.2
40	DH	30	LEU	3.2
44	BQ	31	TYR	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
18	CS	61	VAL	3.2
25	BC	2	VAL	3.2
23	BB	1176	U	3.2
7	CH	35	ILE	3.2
27	BK	39	ILE	3.2
47	DF	157	THR	3.2
22	BA	52	A	3.2
34	D3	64	ALA	3.2
23	DB	1026	G	3.2
28	BP	93	LYS	3.2
41	BJ	112	GLY	3.2
7	AH	60	LEU	3.2
21	AU	13	VAL	3.2
19	AT	12	GLN	3.2
27	BK	7	MET	3.2
34	D3	58	ILE	3.2
20	AB	188	THR	3.2
38	BM	127	LYS	3.1
41	BJ	72	LYS	3.1
28	BP	30	TRP	3.1
24	BI	7	TYR	3.1
23	BB	2157	G	3.1
23	DB	140	C	3.1
32	B4	12	ARG	3.1
18	CS	43	MET	3.1
11	AL	1	ALA	3.1
26	DD	209	ALA	3.1
45	DS	43	ALA	3.1
43	DO	66	GLY	3.1
13	CN	41	TRP	3.1
11	AL	24	GLU	3.1
1	AA	323	U	3.1
47	BF	131	VAL	3.1
6	CG	4	ARG	3.1
11	AL	8	ARG	3.1
17	CR	31	TYR	3.1
25	DC	213	ARG	3.1
32	B4	13	ASN	3.1
41	BJ	69	ARG	3.1
51	DZ	78	TYR	3.1
23	BB	1641	A	3.1
23	DB	101	A	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
41	DJ	80	HIS	3.1
43	BO	82	ALA	3.1
23	BB	982	C	3.1
26	BD	112	THR	3.1
26	DD	113	SER	3.1
37	DL	92	LEU	3.1
42	DN	70	THR	3.1
29	BE	51	GLU	3.1
38	BM	110	GLU	3.1
6	AG	101	ARG	3.1
25	BC	269	ARG	3.1
26	DD	77	ARG	3.1
27	BK	9	ASN	3.1
48	BG	87	GLN	3.1
23	DB	878	A	3.1
16	AQ	67	SER	3.1
3	CD	28	ASP	3.1
4	CE	32	PHE	3.1
50	DT	4	GLU	3.1
4	AE	85	LYS	3.1
34	B3	51	LYS	3.1
41	BJ	84	ILE	3.1
41	DJ	1	MET	3.1
20	CB	52	ALA	3.1
41	DJ	87	ALA	3.1
8	AI	51	LEU	3.1
4	CE	86	GLY	3.1
41	BJ	115	GLY	3.1
43	BO	16	ARG	3.1
21	AU	23	GLU	3.1
27	BK	45	GLU	3.1
3	AD	116	LEU	3.0
37	BL	92	LEU	3.0
41	DJ	20	ALA	3.0
1	CA	242	G	3.0
1	CA	971	G	3.0
15	AP	28	ARG	3.0
52	DW	13	ARG	3.0
27	DK	35	VAL	3.0
44	BQ	87	VAL	3.0
40	DH	47	PHE	3.0
29	BE	116	ASP	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
47	DF	21	TYR	3.0
44	BQ	55	GLN	3.0
45	BS	15	GLN	3.0
11	CL	87	LYS	3.0
12	CM	42	VAL	3.0
20	CB	195	VAL	3.0
24	BI	57	VAL	3.0
41	DJ	45	THR	3.0
46	DU	35	VAL	3.0
47	DF	24	VAL	3.0
9	AJ	76	ILE	3.0
45	BS	12	SER	3.0
9	AJ	79	PRO	3.0
37	BL	57	LEU	3.0
11	CL	12	ALA	3.0
41	BJ	52	ASP	3.0
51	BZ	60	ASP	3.0
16	CQ	26	ARG	3.0
19	CT	67	HIS	3.0
47	DF	13	LYS	3.0
47	DF	123	GLY	3.0
20	AB	68	PHE	3.0
52	DW	59	PHE	3.0
8	CI	29	ILE	3.0
18	CS	65	MET	3.0
23	DB	1870	C	3.0
43	BO	8	ILE	3.0
29	BE	143	LEU	3.0
38	DM	102	LEU	3.0
9	CJ	45	ARG	3.0
24	DI	83	ALA	3.0
41	DJ	116	ARG	3.0
43	BO	110	ALA	3.0
41	BJ	71	ASP	3.0
11	CL	122	LYS	3.0
25	BC	4	LYS	3.0
3	AD	172	VAL	3.0
4	CE	55	VAL	3.0
20	CB	220	VAL	3.0
23	BB	2148	G	3.0
43	BO	117	PHE	3.0
38	BM	129	THR	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
41	BJ	43	GLU	3.0
1	AA	1534	A	3.0
21	AU	48	LYS	3.0
13	CN	17	ASP	3.0
8	AI	47	VAL	3.0
20	AB	195	VAL	3.0
41	DJ	82	GLY	3.0
31	D0	22	THR	3.0
25	DC	198	GLU	2.9
23	BB	1808	A	2.9
6	CG	74	VAL	2.9
7	AH	24	VAL	2.9
20	CB	198	VAL	2.9
21	CU	52	VAL	2.9
37	BL	37	GLY	2.9
44	BQ	90	ASP	2.9
29	DE	124	PHE	2.9
1	AA	883	C	2.9
3	AD	177	MET	2.9
44	DQ	16	ILE	2.9
23	DB	405	U	2.9
23	DB	846	U	2.9
23	DB	2402	U	2.9
37	BL	6	LEU	2.9
6	AG	105	GLU	2.9
24	DI	4	VAL	2.9
50	DT	55	VAL	2.9
6	AG	6	ILE	2.9
42	BN	20	MET	2.9
1	CA	412	A	2.9
3	CD	20	LEU	2.9
23	DB	1275	A	2.9
23	DB	1808	A	2.9
11	AL	14	LYS	2.9
48	DG	83	THR	2.9
26	BD	28	GLU	2.9
28	DP	43	GLU	2.9
41	DJ	139	VAL	2.9
47	DF	127	TYR	2.9
17	CR	73	HIS	2.9
19	AT	67	HIS	2.9
5	CF	51	ILE	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
29	DE	88	ARG	2.9
44	DQ	10	ARG	2.9
50	DT	3	ARG	2.9
18	CS	26	ASP	2.9
1	AA	376	G	2.9
28	DP	111	GLU	2.9
35	BV	84	PRO	2.9
41	DJ	113	PRO	2.9
7	CH	126	CYS	2.9
23	BB	1301	A	2.9
23	DB	1027	A	2.9
7	CH	102	VAL	2.9
7	CH	81	GLY	2.9
23	BB	2139	U	2.9
23	BB	2689	U	2.9
2	CC	42	LEU	2.9
15	CP	57	ILE	2.9
20	AB	100	LEU	2.9
25	DC	4	LYS	2.9
29	BE	131	THR	2.9
29	BE	60	TRP	2.9
25	DC	64	VAL	2.9
27	BK	35	VAL	2.9
1	CA	1441	A	2.9
3	AD	3	TYR	2.9
21	AU	46	ARG	2.9
41	BJ	82	GLY	2.9
51	DZ	9	GLY	2.9
14	AO	56	LEU	2.9
16	AQ	3	LYS	2.9
44	BQ	4	LYS	2.9
46	DU	38	ILE	2.9
48	DG	86	LEU	2.9
9	CJ	56	HIS	2.8
34	B3	30	HIS	2.8
50	BT	72	GLN	2.8
25	BC	143	VAL	2.8
50	BT	3	ARG	2.8
18	CS	70	LEU	2.8
28	BP	58	PHE	2.8
19	CT	35	TYR	2.8
38	DM	1	MET	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	AC	175	HIS	2.8
23	BB	1032	A	2.8
11	AL	16	ALA	2.8
1	CA	287	U	2.8
18	CS	1	PRO	2.8
23	BB	436	C	2.8
25	BC	20	ASN	2.8
42	DN	35	LYS	2.8
19	AT	66	ILE	2.8
21	CU	15	LEU	2.8
40	BH	34	GLY	2.8
2	AC	41	TYR	2.8
34	B3	10	ALA	2.8
42	BN	14	SER	2.8
25	DC	62	ARG	2.8
1	CA	209	U	2.8
34	B3	13	PHE	2.8
38	BM	33	LEU	2.8
52	BW	25	PHE	2.8
1	AA	135	C	2.8
1	CA	973	G	2.8
23	BB	1643	G	2.8
23	DB	548	G	2.8
23	DB	2104	C	2.8
7	AH	71	VAL	2.8
26	BD	26	VAL	2.8
27	BK	66	LYS	2.8
30	DY	41	PRO	2.8
32	B4	17	VAL	2.8
2	AC	190	THR	2.8
48	BG	132	LEU	2.8
48	DG	106	LEU	2.8
16	AQ	27	PHE	2.8
52	BW	35	ILE	2.8
25	BC	233	GLY	2.8
26	BD	163	GLY	2.8
23	DB	919	U	2.8
8	CI	123	ARG	2.8
43	BO	107	ALA	2.8
45	BS	92	ARG	2.8
23	DB	143	C	2.8
52	BW	71	LYS	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	AD	154	VAL	2.8
51	DZ	19	SER	2.8
50	BT	4	GLU	2.8
26	BD	156	PHE	2.7
40	BH	143	ILE	2.8
4	CE	157	GLY	2.7
50	BT	79	ASP	2.7
4	CE	117	ALA	2.7
1	CA	904	U	2.7
1	CA	1232	U	2.7
11	AL	23	LEU	2.7
50	BT	93	LEU	2.7
28	BP	63	ILE	2.7
13	AN	66	THR	2.7
1	CA	241	G	2.7
23	DB	2148	G	2.7
34	D3	18	LYS	2.7
9	CJ	26	VAL	2.7
19	CT	57	VAL	2.7
41	DJ	105	VAL	2.7
42	DN	98	LEU	2.7
1	AA	209	U	2.7
3	AD	106	PHE	2.7
46	BU	86	PHE	2.7
46	BU	102	ILE	2.7
15	CP	1	MET	2.7
20	CB	225	SER	2.7
23	BB	1175	A	2.7
25	BC	236	GLY	2.7
41	BJ	37	ARG	2.7
11	CL	9	LYS	2.7
19	CT	4	LYS	2.7
23	DB	2143	C	2.7
39	DX	63	ALA	2.7
27	BK	103	VAL	2.7
38	BM	67	VAL	2.7
48	DG	167	VAL	2.7
7	AH	98	LEU	2.7
42	BN	98	LEU	2.7
43	DO	62	LEU	2.7
8	CI	125	GLN	2.7
22	BA	86	G	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
23	BB	1642	G	2.7
2	AC	206	ILE	2.7
47	DF	140	ILE	2.7
36	B2	22	MET	2.7
38	DM	81	ARG	2.7
44	BQ	29	ARG	2.7
19	CT	63	LYS	2.7
23	BB	2602	A	2.7
26	BD	162	ALA	2.7
27	BK	46	ALA	2.7
32	B4	29	ALA	2.7
47	DF	122	ASP	2.7
52	DW	48	ALA	2.7
2	AC	150	VAL	2.7
7	CH	98	LEU	2.7
15	CP	20	VAL	2.7
52	DW	49	ASN	2.7
2	CC	2	GLN	2.7
7	AH	74	ILE	2.7
29	DE	148	ILE	2.7
14	AO	47	LYS	2.7
21	CU	23	GLU	2.7
48	DG	158	GLY	2.7
49	BR	46	GLU	2.7
52	DW	84	GLU	2.7
3	CD	36	ALA	2.7
20	AB	216	VAL	2.7
23	BB	755	U	2.7
38	BM	102	LEU	2.7
43	DO	21	LEU	2.7
51	DZ	60	ASP	2.7
37	BL	77	ILE	2.6
27	BK	17	ARG	2.6
29	DE	158	PHE	2.6
41	BJ	89	PHE	2.6
4	AE	157	GLY	2.6
19	CT	52	GLU	2.6
44	DQ	72	GLY	2.6
50	DT	89	GLU	2.6
51	DZ	5	CYS	2.6
18	CS	24	SER	2.6
19	CT	71	ALA	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
20	AB	225	SER	2.6
27	DK	122	VAL	2.6
40	BH	9	VAL	2.6
46	DU	12	VAL	2.6
19	AT	35	TYR	2.6
14	CO	46	HIS	2.6
15	CP	75	ILE	2.6
20	AB	199	ILE	2.6
4	CE	25	LYS	2.6
7	AH	92	PRO	2.6
23	BB	561	G	2.6
45	BS	74	ILE	2.6
24	DI	53	PRO	2.6
26	DD	126	ASN	2.6
38	BM	81	ARG	2.6
18	CS	7	GLY	2.6
23	BB	1847	A	2.6
42	DN	120	GLU	2.6
7	CH	103	VAL	2.6
8	CI	103	VAL	2.6
25	DC	33	LEU	2.6
27	DK	69	VAL	2.6
50	DT	87	LEU	2.6
36	D2	45	SER	2.6
25	DC	264	LYS	2.6
29	BE	88	ARG	2.6
31	B0	9	ARG	2.6
15	AP	1	MET	2.6
28	DP	58	PHE	2.6
2	AC	99	GLN	2.6
21	AU	12	ASP	2.6
24	BI	5	GLN	2.6
42	BN	72	ASP	2.6
51	DZ	32	ASN	2.6
28	BP	70	GLU	2.6
52	DW	82	GLU	2.6
23	DB	2355	G	2.6
26	DD	151	THR	2.6
47	BF	169	LEU	2.6
24	DI	1	ALA	2.6
33	B1	14	ALA	2.6
43	DO	82	ALA	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
4	AE	53	ARG	2.6
18	CS	2	ARG	2.6
21	AU	24	LYS	2.6
23	BB	1552	A	2.6
52	DW	38	ARG	2.6
28	BP	64	SER	2.6
32	B4	26	ILE	2.6
25	DC	108	GLY	2.6
38	BM	23	GLY	2.6
19	CT	65	LEU	2.6
44	BQ	108	LEU	2.6
47	DF	15	LEU	2.6
21	AU	44	ARG	2.6
33	B1	7	LYS	2.6
1	CA	108	G	2.6
1	CA	812	G	2.6
1	CA	844	G	2.6
22	BA	67	G	2.6
52	BW	78	PHE	2.6
20	CB	126	ASP	2.6
29	BE	64	GLY	2.6
52	DW	21	GLY	2.6
28	BP	96	LEU	2.6
37	DL	57	LEU	2.6
24	BI	60	VAL	2.6
28	BP	25	VAL	2.6
40	DH	110	VAL	2.6
41	DJ	56	VAL	2.6
47	BF	30	VAL	2.6
25	BC	17	LYS	2.6
34	B3	24	LYS	2.6
28	DP	30	TRP	2.5
34	D3	48	MET	2.5
47	BF	98	PHE	2.5
16	AQ	30	HIS	2.5
21	CU	37	TYR	2.5
41	BJ	44	TYR	2.5
48	DG	11	PRO	2.5
20	CB	123	GLY	2.5
8	CI	34	LEU	2.5
1	AA	251	G	2.5
4	CE	28	ARG	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	AD	36	ALA	2.5
4	AE	144	GLU	2.5
10	CK	13	LYS	2.5
15	AP	79	ASN	2.5
15	AP	82	ALA	2.5
19	CT	14	GLU	2.5
28	DP	67	GLU	2.5
30	BY	55	LYS	2.5
40	DH	35	LYS	2.5
49	BR	73	LYS	2.5
23	BB	1640	A	2.5
23	DB	613	A	2.5
44	BQ	26	ALA	2.5
2	AC	25	THR	2.5
2	CC	119	ILE	2.5
12	CM	21	ILE	2.5
41	BJ	65	THR	2.5
7	CH	2	MET	2.5
1	AA	372	C	2.5
11	CL	18	SER	2.5
14	AO	61	SER	2.5
1	CA	965	U	2.5
2	AC	2	GLN	2.5
22	BA	89	U	2.5
25	DC	248	GLY	2.5
38	BM	83	GLY	2.5
10	CK	55	ARG	2.5
50	DT	9	LYS	2.5
3	AD	26	ALA	2.5
12	AM	4	ALA	2.5
25	DC	22	GLU	2.5
34	D3	53	ASP	2.5
41	DJ	52	ASP	2.5
21	AU	3	ILE	2.5
47	BF	33	ILE	2.5
52	DW	35	ILE	2.5
41	BJ	1	MET	2.5
47	BF	174	PHE	2.5
23	BB	1367	A	2.5
23	BB	1420	A	2.5
47	DF	175	PRO	2.5
41	BJ	32	LEU	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	CA	307	C	2.5
23	BB	1727	C	2.5
50	BT	69	ARG	2.5
5	CF	100	SER	2.5
13	AN	54	SER	2.5
51	DZ	2	SER	2.5
6	CG	79	VAL	2.5
12	AM	59	VAL	2.5
44	BQ	38	VAL	2.5
2	AC	151	GLU	2.5
3	AD	14	GLU	2.5
29	DE	65	THR	2.5
3	CD	203	TYR	2.5
29	BE	59	PRO	2.5
18	AS	2	ARG	2.5
18	CS	36	ARG	2.5
19	AT	8	LYS	2.5
21	CU	48	LYS	2.5
30	BY	10	ARG	2.5
34	B3	29	ARG	2.5
48	DG	150	TYR	2.5
4	CE	26	GLY	2.5
23	BB	1133	A	2.5
23	BB	2799	A	2.5
2	AC	14	VAL	2.5
37	DL	122	VAL	2.5
1	AA	104	G	2.5
23	DB	1731	G	2.5
28	BP	35	SER	2.5
36	B2	45	SER	2.5
47	DF	128	SER	2.5
3	CD	27	ILE	2.5
23	BB	985	C	2.5
23	DB	1221	C	2.5
41	BJ	90	GLU	2.5
6	AG	150	PHE	2.5
47	DF	152	ASP	2.5
41	DJ	24	THR	2.5
46	DU	14	THR	2.5
8	CI	113	LYS	2.5
37	BL	63	LYS	2.5
9	CJ	90	LEU	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
25	DC	201	LEU	2.5
45	DS	23	LEU	2.5
47	BF	116	LEU	2.5
4	CE	127	TYR	2.5
40	DH	61	VAL	2.5
43	BO	28	VAL	2.5
44	DQ	55	GLN	2.5
4	AE	109	ALA	2.4
26	DD	162	ALA	2.4
26	DD	48	ILE	2.4
37	DL	68	SER	2.4
44	DQ	97	ILE	2.4
23	DB	2147	A	2.4
37	BL	10	GLU	2.4
52	DW	68	PHE	2.4
12	CM	78	ARG	2.4
28	BP	110	LYS	2.4
28	DP	50	ARG	2.4
29	DE	61	ARG	2.4
37	BL	17	LYS	2.4
43	BO	2	ASP	2.4
23	DB	2133	G	2.4
26	BD	138	LEU	2.4
21	AU	10	PRO	2.4
40	BH	13	GLY	2.4
45	DS	105	VAL	2.4
48	BG	167	VAL	2.4
50	BT	16	VAL	2.4
52	DW	22	VAL	2.4
6	AG	8	GLN	2.4
2	AC	93	ILE	2.4
7	CH	124	ILE	2.4
20	CB	8	MET	2.4
2	CC	153	SER	2.4
26	DD	137	SER	2.4
47	DF	164	GLU	2.4
4	AE	47	PHE	2.4
13	CN	62	ARG	2.4
14	CO	47	LYS	2.4
25	BC	264	LYS	2.4
27	BK	112	PHE	2.4
43	DO	63	LYS	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
12	CM	55	LEU	2.4
32	D4	10	LEU	2.4
34	B3	27	ASN	2.4
1	AA	1340	A	2.4
11	CL	108	ASP	2.4
15	CP	69	ASP	2.4
4	AE	87	VAL	2.4
49	DR	75	VAL	2.4
1	AA	1230	C	2.4
1	AA	1533	C	2.4
3	AD	1	ALA	2.4
11	CL	112	ALA	2.4
12	CM	4	ALA	2.4
19	AT	71	ALA	2.4
25	DC	90	ILE	2.4
27	BK	38	ILE	2.4
29	BE	86	ALA	2.4
41	BJ	29	ALA	2.4
43	DO	59	ALA	2.4
52	BW	83	ALA	2.4
23	BB	102	U	2.4
27	BK	49	ARG	2.4
41	BJ	119	PHE	2.4
43	DO	9	ARG	2.4
45	DS	12	SER	2.4
28	BP	114	ASN	2.4
3	AD	52	VAL	2.4
34	D3	57	VAL	2.4
44	BQ	7	VAL	2.4
46	DU	8	ASP	2.4
47	DF	9	ASP	2.4
15	AP	42	ILE	2.4
24	BI	13	ALA	2.4
1	CA	468	A	2.4
26	DD	146	ILE	2.4
52	BW	79	ILE	2.4
12	CM	26	LYS	2.4
18	AS	43	MET	2.4
27	BK	18	ARG	2.4
41	BJ	123	LYS	2.4
51	DZ	11	ARG	2.4
18	AS	40	PHE	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	CA	972	C	2.4
9	CJ	81	GLU	2.4
14	CO	45	GLU	2.4
43	BO	20	GLU	2.4
23	DB	27	G	2.4
23	DB	2867	G	2.4
52	DW	52	CYS	2.4
7	CH	128	VAL	2.4
8	CI	115	VAL	2.4
17	AR	39	VAL	2.4
21	CU	41	THR	2.4
27	BK	122	VAL	2.4
9	CJ	85	ASP	2.4
12	AM	87	GLY	2.4
24	DI	51	GLY	2.4
49	BR	88	GLY	2.4
3	AD	121	ALA	2.4
29	BE	161	ALA	2.4
49	BR	83	TYR	2.4
32	B4	15	LYS	2.4
4	AE	92	ARG	2.4
3	AD	35	GLN	2.4
11	AL	60	PHE	2.4
1	AA	77	A	2.4
23	BB	382	A	2.4
23	DB	1566	A	2.4
11	AL	18	SER	2.4
11	AL	21	PRO	2.4
22	DA	25	U	2.4
23	BB	2402	U	2.4
48	DG	112	VAL	2.4
8	AI	8	THR	2.3
50	DT	29	THR	2.3
13	AN	70	HIS	2.3
7	AH	127	TYR	2.3
13	CN	1	ALA	2.3
45	BS	93	ALA	2.3
23	DB	858	G	2.3
2	AC	11	LEU	2.3
9	AJ	64	GLN	2.3
10	AK	99	LEU	2.3
18	AS	73	PHE	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
44	DQ	17	LEU	2.3
45	BS	31	GLN	2.3
47	BF	168	LEU	2.3
3	CD	159	GLU	2.3
29	DE	146	VAL	2.3
41	BJ	105	VAL	2.3
44	DQ	87	VAL	2.3
46	BU	82	VAL	2.3
41	DJ	46	PRO	2.3
52	BW	29	SER	2.3
2	CC	20	THR	2.3
13	AN	97	LYS	2.3
15	AP	13	LYS	2.3
26	BD	171	THR	2.3
26	DD	93	GLY	2.3
35	DV	14	LYS	2.3
40	DH	27	ARG	2.3
50	BT	76	ARG	2.3
11	CL	16	ALA	2.3
25	DC	210	ALA	2.3
42	BN	25	ALA	2.3
1	AA	85	U	2.3
1	CA	239	U	2.3
20	CB	212	TYR	2.3
1	CA	1103	C	2.3
1	CA	1366	C	2.3
13	CN	50	LEU	2.3
23	DB	1072	C	2.3
25	DC	263	ASP	2.3
3	CD	35	GLN	2.3
13	CN	65	GLN	2.3
20	AB	49	PHE	2.3
27	BK	8	LEU	2.3
50	DT	93	LEU	2.3
23	DB	2035	G	2.3
41	BJ	56	VAL	2.3
51	BZ	51	VAL	2.3
16	AQ	35	LYS	2.3
25	BC	27	LYS	2.3
45	DS	27	LYS	2.3
19	AT	9	ARG	2.3
2	CC	166	TRP	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	DD	27	ILE	2.3
28	BP	49	ILE	2.3
29	BE	181	ILE	2.3
7	AH	129	ALA	2.3
9	CJ	83	THR	2.3
19	CT	62	ALA	2.3
28	DP	103	THR	2.3
37	BL	15	ALA	2.3
44	DQ	20	ALA	2.3
17	CR	66	LEU	2.3
52	BW	11	ASN	2.3
20	CB	49	PHE	2.3
21	AU	36	PHE	2.3
23	DB	63	A	2.3
9	AJ	63	ASP	2.3
1	CA	1286	U	2.3
23	BB	405	U	2.3
23	DB	545	U	2.3
23	DB	646	U	2.3
50	DT	91	GLN	2.3
6	CG	39	GLU	2.3
27	BK	121	GLU	2.3
44	DQ	88	GLU	2.3
23	DB	1100	C	2.3
24	DI	23	VAL	2.3
37	DL	110	VAL	2.3
44	DQ	103	VAL	2.3
6	AG	108	ARG	2.3
25	BC	202	ARG	2.3
8	AI	64	ILE	2.3
24	BI	53	PRO	2.3
8	AI	101	GLY	2.3
9	AJ	95	GLY	2.3
40	DH	34	GLY	2.3
41	DJ	112	GLY	2.3
52	DW	12	GLY	2.3
40	BH	84	ALA	2.3
50	BT	27	SER	2.3
12	CM	79	LEU	2.3
48	DG	147	LEU	2.3
52	BW	31	LEU	2.3
1	AA	966	G	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
6	CG	84	TYR	2.3
8	AI	126	PHE	2.3
16	CQ	52	CYS	2.3
47	DF	137	PHE	2.3
44	DQ	15	LYS	2.3
3	AD	34	GLU	2.3
3	CD	114	ARG	2.3
21	CU	44	ARG	2.3
25	DC	15	VAL	2.3
32	B4	4	ARG	2.3
39	BX	11	VAL	2.3
43	BO	33	ARG	2.3
44	BQ	50	ARG	2.3
1	CA	813	U	2.3
16	AQ	24	ILE	2.3
2	AC	157	GLY	2.3
9	CJ	34	ALA	2.3
15	CP	27	ALA	2.3
29	BE	38	GLY	2.3
26	DD	165	MET	2.3
45	DS	44	ALA	2.3
2	CC	156	LEU	2.3
13	CN	70	HIS	2.3
16	CQ	27	PHE	2.3
17	CR	63	TYR	2.3
20	AB	21	TYR	2.3
27	BK	79	PHE	2.3
29	BE	23	PHE	2.3
43	BO	3	LYS	2.3
9	CJ	57	VAL	2.3
34	B3	53	ASP	2.3
44	BQ	33	VAL	2.3
40	DH	149	GLU	2.2
1	AA	377	G	2.2
1	CA	1331	G	2.2
23	BB	1538	G	2.2
28	BP	109	ILE	2.2
32	B4	16	ILE	2.2
19	AT	41	GLY	2.2
26	DD	166	GLY	2.2
29	DE	59	PRO	2.2
25	BC	209	ALA	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
25	DC	1	ALA	2.2
29	DE	26	ALA	2.2
23	DB	1590	A	2.2
25	BC	201	LEU	2.2
51	DZ	49	LEU	2.2
25	DC	141	HIS	2.2
47	BF	157	THR	2.2
4	AE	91	SER	2.2
20	AB	130	LYS	2.2
23	BB	876	C	2.2
23	BB	1582	C	2.2
2	AC	90	VAL	2.2
15	CP	19	VAL	2.2
19	AT	69	ASN	2.2
42	BN	48	VAL	2.2
44	DQ	8	ILE	2.2
49	BR	74	ILE	2.2
16	CQ	7	LEU	2.2
21	CU	51	ALA	2.2
29	DE	201	ALA	2.2
3	AD	71	PHE	2.2
3	AD	205	LYS	2.2
13	AN	20	PHE	2.2
15	CP	12	LYS	2.2
23	BB	381	G	2.2
24	BI	9	LYS	2.2
28	BP	19	PHE	2.2
27	BK	65	THR	2.2
37	DL	5	THR	2.2
44	DQ	4	LYS	2.2
18	AS	80	ARG	2.2
28	BP	100	ARG	2.2
51	BZ	11	ARG	2.2
23	BB	1134	A	2.2
23	BB	1434	A	2.2
23	BB	2037	A	2.2
23	DB	2134	A	2.2
11	AL	78	VAL	2.2
28	DP	69	VAL	2.2
40	DH	115	VAL	2.2
30	BY	8	GLN	2.2
34	D3	31	ILE	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
38	DM	90	GLU	2.2
1	AA	436	C	2.2
1	CA	1397	C	2.2
3	AD	107	GLY	2.2
3	AD	126	GLY	2.2
3	CD	15	GLY	2.2
7	CH	9	MET	2.2
13	CN	35	ALA	2.2
20	CB	56	LEU	2.2
20	CB	97	GLY	2.2
26	BD	144	GLY	2.2
27	BK	102	PRO	2.2
27	DK	50	GLY	2.2
38	DM	78	LEU	2.2
40	BH	30	LEU	2.2
44	BQ	20	ALA	2.2
11	AL	17	LYS	2.2
26	DD	154	LYS	2.2
20	CB	68	PHE	2.2
4	AE	89	THR	2.2
17	AR	22	TYR	2.2
28	DP	98	TYR	2.2
11	CL	15	VAL	2.2
41	DJ	64	VAL	2.2
44	BQ	30	VAL	2.2
4	AE	21	SER	2.2
16	CQ	67	SER	2.2
12	AM	6	ILE	2.2
20	AB	66	ILE	2.2
44	BQ	39	ILE	2.2
9	AJ	47	GLU	2.2
10	AK	118	ASN	2.2
15	CP	47	GLU	2.2
29	DE	97	ASN	2.2
22	DA	58	A	2.2
7	CH	101	ALA	2.2
9	CJ	43	PRO	2.2
13	CN	56	PRO	2.2
20	CB	12	GLY	2.2
20	CB	184	ALA	2.2
26	BD	158	GLY	2.2
50	BT	9	LYS	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
50	BT	70	HIS	2.2
3	AD	66	VAL	2.2
28	BP	27	VAL	2.2
50	DT	10	VAL	2.2
7	AH	125	ILE	2.2
52	DW	34	SER	2.2
38	BM	95	LEU	2.2
41	BJ	122	LEU	2.2
52	BW	20	LEU	2.2
19	CT	27	MET	2.2
29	DE	188	MET	2.2
8	CI	120	ALA	2.2
24	BI	26	ALA	2.2
37	DL	51	GLU	2.2
4	AE	108	GLY	2.2
18	CS	8	PRO	2.2
38	DM	19	GLY	2.2
40	BH	92	GLY	2.2
38	BM	38	ARG	2.2
26	DD	200	ASP	2.2
40	BH	132	PHE	2.2
42	DN	21	PHE	2.2
1	AA	468	A	2.2
23	BB	2140	G	2.2
23	BB	2360	G	2.2
6	CG	83	THR	2.1
11	AL	54	VAL	2.1
25	BC	267	VAL	2.1
32	D4	22	VAL	2.1
48	DG	48	THR	2.1
50	DT	16	VAL	2.1
23	BB	1730	C	2.1
45	DS	103	ILE	2.1
9	AJ	102	LEU	2.1
38	BM	22	GLN	2.1
6	AG	75	LYS	2.1
24	BI	16	MET	2.1
32	B4	28	SER	2.1
42	DN	1	MET	2.1
19	AT	40	ALA	2.1
44	DQ	74	SER	2.1
50	BT	35	ALA	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
9	AJ	62	ARG	2.1
12	CM	98	GLY	2.1
13	AN	60	ARG	2.1
25	BC	55	GLY	2.1
26	DD	59	ARG	2.1
26	DD	72	GLY	2.1
26	DD	152	PRO	2.1
49	DR	44	GLY	2.1
27	DK	9	ASN	2.1
23	DB	1340	U	2.1
26	BD	92	VAL	2.1
6	AG	28	ILE	2.1
23	BB	142	A	2.1
23	DB	547	A	2.1
27	DK	39	ILE	2.1
29	DE	149	ILE	2.1
45	BS	35	ILE	2.1
47	BF	127	TYR	2.1
2	CC	198	LYS	2.1
9	CJ	92	LEU	2.1
34	D3	54	LEU	2.1
1	AA	1338	G	2.1
1	CA	953	G	2.1
3	AD	183	ARG	2.1
23	DB	2269	G	2.1
34	D3	9	ALA	2.1
49	DR	65	ALA	2.1
2	CC	154	GLY	2.1
16	CQ	31	PRO	2.1
23	DB	2021	C	2.1
24	BI	55	PRO	2.1
25	DC	236	GLY	2.1
26	DD	74	GLU	2.1
36	B2	7	PRO	2.1
41	DJ	66	GLY	2.1
48	DG	56	GLY	2.1
6	AG	42	VAL	2.1
16	CQ	82	VAL	2.1
50	DT	47	VAL	2.1
51	BZ	67	VAL	2.1
5	AF	55	HIS	2.1
34	D3	42	HIS	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AA	485	U	2.1
9	CJ	80	THR	2.1
3	AD	75	TYR	2.1
12	AM	26	LYS	2.1
14	CO	48	LYS	2.1
26	DD	114	LYS	2.1
41	BJ	70	THR	2.1
42	DN	113	ILE	2.1
50	DT	43	ILE	2.1
27	BK	32	TYR	2.1
11	CL	8	ARG	2.1
12	CM	97	ARG	2.1
12	CM	14	ALA	2.1
25	BC	162	GLN	2.1
42	DN	91	ALA	2.1
50	BT	91	GLN	2.1
1	CA	306	A	2.1
4	AE	46	GLY	2.1
24	BI	28	GLY	2.1
25	BC	34	GLU	2.1
25	DC	234	GLY	2.1
29	DE	75	SER	2.1
31	D0	26	SER	2.1
8	CI	3	ASN	2.1
52	DW	11	ASN	2.1
1	AA	481	G	2.1
23	BB	1738	G	2.1
23	BB	1989	G	2.1
23	BB	2141	G	2.1
23	BB	1728	C	2.1
49	DR	85	LYS	2.1
32	D4	23	ILE	2.1
32	D4	26	ILE	2.1
40	DH	117	LEU	2.1
43	BO	87	ILE	2.1
47	BF	90	LEU	2.1
10	CK	126	ARG	2.1
18	CS	80	ARG	2.1
31	B0	22	THR	2.1
44	DQ	63	ARG	2.1
45	DS	92	ARG	2.1
48	BG	150	TYR	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
18	CS	21	ALA	2.1
23	DB	2320	U	2.1
23	DB	2334	U	2.1
23	DB	2585	U	2.1
18	CS	25	GLY	2.1
25	DC	46	GLY	2.1
4	CE	144	GLU	2.1
6	AG	73	GLU	2.1
8	AI	50	PRO	2.1
25	BC	193	GLU	2.1
43	BO	5	SER	2.1
29	DE	96	VAL	2.1
23	BB	981	A	2.1
26	DD	32	ASN	2.1
43	BO	85	LYS	2.1
6	AG	12	LEU	2.1
9	AJ	8	ILE	2.1
44	DQ	12	ARG	2.1
47	DF	168	LEU	2.1
48	BG	102	ILE	2.1
5	AF	94	HIS	2.1
49	DR	66	HIS	2.1
5	CF	90	MET	2.1
14	CO	59	MET	2.1
28	DP	23	ASP	2.1
24	BI	67	THR	2.1
25	BC	139	THR	2.1
25	DC	5	CYS	2.1
38	DM	128	THR	2.1
1	AA	108	G	2.1
1	AA	266	G	2.1
1	AA	1077	G	2.1
9	CJ	21	ALA	2.1
23	BB	2104	C	2.1
22	BA	2	G	2.1
23	DB	2446	G	2.1
26	DD	85	ALA	2.1
46	DU	62	ALA	2.1
37	DL	53	GLY	2.1
43	DO	96	GLY	2.1
45	DS	31	GLN	2.1
52	DW	39	GLN	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
6	AG	13	PRO	2.1
6	AG	61	PHE	2.1
21	AU	18	PHE	2.1
39	DX	17	GLU	2.1
9	AJ	57	VAL	2.0
10	CK	73	VAL	2.0
16	AQ	75	VAL	2.0
34	B3	14	LYS	2.0
34	B3	15	LYS	2.0
43	DO	54	VAL	2.0
47	BF	160	LYS	2.0
9	AJ	54	SER	2.0
46	DU	67	SER	2.0
2	AC	42	LEU	2.0
9	AJ	53	ILE	2.0
11	AL	93	ARG	2.0
17	CR	64	LEU	2.0
24	DI	27	LEU	2.0
26	DD	100	LEU	2.0
29	DE	143	LEU	2.0
6	AG	38	ALA	2.0
25	DC	102	TYR	2.0
37	BL	5	THR	2.0
46	BU	101	THR	2.0
47	BF	89	THR	2.0
47	DF	162	ASP	2.0
25	BC	5	CYS	2.0
2	CC	129	PHE	2.0
26	BD	93	GLY	2.0
44	BQ	6	GLY	2.0
24	BI	22	PRO	2.0
5	AF	5	GLU	2.0
29	BE	155	GLU	2.0
39	BX	17	GLU	2.0
23	BB	2362	C	2.0
23	DB	11	C	2.0
51	BZ	54	LYS	2.0
29	DE	178	VAL	2.0
1	CA	266	G	2.0
4	AE	137	ARG	2.0
18	CS	4	LEU	2.0
23	BB	914	G	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
23	BB	2133	G	2.0
23	DB	2458	G	2.0
31	B0	38	LEU	2.0
37	DL	123	ARG	2.0
42	BN	115	LEU	2.0
3	CD	194	ILE	2.0
29	BE	148	ILE	2.0
32	B4	23	ILE	2.0
37	DL	111	ILE	2.0
45	BS	13	SER	2.0
52	DW	29	SER	2.0
23	DB	1101	U	2.0
2	CC	189	HIS	2.0
5	CF	94	HIS	2.0
49	DR	40	MET	2.0
6	AG	116	ALA	2.0
20	CB	60	ALA	2.0
42	BN	68	ALA	2.0
47	BF	106	ALA	2.0
49	DR	2	TYR	2.0
19	AT	42	ASP	2.0
5	AF	8	PHE	2.0
34	D3	52	GLY	2.0
47	BF	19	PHE	2.0
3	AD	45	PRO	2.0
3	AD	184	LYS	2.0
41	BJ	110	PRO	2.0
50	DT	19	LYS	2.0
1	AA	279	A	2.0
1	AA	325	A	2.0
1	AA	435	A	2.0
9	AJ	66	GLU	2.0
21	AU	52	VAL	2.0
22	BA	53	A	2.0
23	BB	2516	A	2.0
6	CG	108	ARG	2.0
29	BE	67	ARG	2.0
38	DM	38	ARG	2.0
39	DX	11	VAL	2.0
50	DT	69	ARG	2.0
51	DZ	4	VAL	2.0
30	DY	28	LEU	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	CC	195	ILE	2.0
8	CI	64	ILE	2.0
16	AQ	4	ILE	2.0
45	DS	24	ILE	2.0
50	BT	74	ILE	2.0

6.2 Non-standard residues in protein, DNA, RNA chains [i](#)

There are no non-standard protein/DNA/RNA residues in this entry.

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, 95th 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
54	MG	AA	1626	1/1	-0.05	0.19	64,64,64,64	1
54	MG	AA	1660	1/1	0.26	0.52	163,163,163,163	0
54	MG	DB	3067	1/1	0.29	0.16	178,178,178,178	0
54	MG	AA	1623	1/1	0.64	0.14	129,129,129,129	0
54	MG	AA	1603	1/1	0.67	0.12	133,133,133,133	0
54	MG	AA	1638	1/1	0.70	0.16	147,147,147,147	0
54	MG	CA	1609	1/1	0.76	0.13	121,121,121,121	0
53	NMY	DB	3001	42/42	0.76	0.37	88,88,88,88	42
54	MG	AA	1624	1/1	0.77	0.33	32,32,32,32	1
53	NMY	AA	1601	42/42	0.78	0.14	71,71,71,71	0
54	MG	AA	1648	1/1	0.79	0.22	94,94,94,94	0
54	MG	CA	1629	1/1	0.79	0.19	46,46,46,46	1
54	MG	AA	1640	1/1	0.79	0.21	104,104,104,104	0
54	MG	DB	3059	1/1	0.80	0.40	180,180,180,180	0
54	MG	AA	1620	1/1	0.81	0.13	130,130,130,130	0
54	MG	BB	3034	1/1	0.82	0.08	136,136,136,136	0
54	MG	BB	3043	1/1	0.82	0.12	170,170,170,170	0
53	NMY	CA	1601	42/42	0.82	0.17	71,71,71,71	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
54	MG	CA	1616	1/1	0.83	0.13	167,167,167,167	0
53	NMY	BB	3001	42/42	0.84	0.85	100,100,100,100	42
54	MG	AA	1658	1/1	0.84	0.11	115,115,115,115	0
54	MG	CA	1657	1/1	0.84	0.15	91,91,91,91	0
54	MG	BB	3101	1/1	0.84	0.10	138,138,138,138	0
54	MG	AA	1609	1/1	0.84	0.09	127,127,127,127	0
54	MG	CA	1638	1/1	0.86	0.21	142,142,142,142	0
54	MG	CA	1621	1/1	0.88	0.23	118,118,118,118	0
54	MG	BB	3082	1/1	0.88	0.15	59,59,59,59	0
54	MG	BB	3048	1/1	0.88	0.14	128,128,128,128	0
54	MG	AA	1615	1/1	0.89	0.08	110,110,110,110	0
54	MG	CA	1627	1/1	0.89	0.19	29,29,29,29	1
54	MG	DB	3031	1/1	0.89	0.12	32,32,32,32	0
54	MG	DB	3035	1/1	0.89	0.21	81,81,81,81	0
54	MG	BB	3058	1/1	0.89	0.09	76,76,76,76	0
54	MG	CA	1635	1/1	0.89	0.11	96,96,96,96	0
54	MG	DB	3084	1/1	0.89	0.12	92,92,92,92	0
54	MG	DB	3096	1/1	0.89	0.13	127,127,127,127	0
54	MG	BB	3011	1/1	0.90	0.08	66,66,66,66	0
54	MG	AA	1647	1/1	0.90	0.08	87,87,87,87	0
54	MG	DB	3061	1/1	0.90	0.15	115,115,115,115	0
54	MG	BB	3039	1/1	0.91	0.06	131,131,131,131	0
54	MG	BB	3094	1/1	0.91	0.08	93,93,93,93	0
54	MG	AA	1635	1/1	0.91	0.08	45,45,45,45	0
54	MG	DB	3053	1/1	0.92	0.07	102,102,102,102	0
54	MG	CA	1623	1/1	0.92	0.07	131,131,131,131	0
54	MG	CA	1612	1/1	0.92	0.07	84,84,84,84	0
54	MG	DB	3014	1/1	0.92	0.10	48,48,48,48	0
54	MG	AA	1628	1/1	0.92	0.09	57,57,57,57	0
54	MG	BB	3098	1/1	0.92	0.12	80,80,80,80	0
55	ZN	D4	101	1/1	0.92	0.10	57,57,57,57	0
54	MG	BB	3044	1/1	0.93	0.06	108,108,108,108	0
54	MG	CA	1607	1/1	0.93	0.08	100,100,100,100	0
54	MG	AA	1631	1/1	0.93	0.08	107,107,107,107	0
54	MG	CA	1641	1/1	0.93	0.11	63,63,63,63	0
54	MG	AA	1653	1/1	0.93	0.10	79,79,79,79	0
54	MG	BB	3081	1/1	0.94	0.14	52,52,52,52	0
54	MG	AA	1656	1/1	0.94	0.12	60,60,60,60	0
54	MG	CA	1636	1/1	0.94	0.09	56,56,56,56	0
54	MG	DB	3034	1/1	0.94	0.06	43,43,43,43	0
54	MG	AA	1651	1/1	0.94	0.07	109,109,109,109	0
54	MG	BB	3073	1/1	0.94	0.08	67,67,67,67	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
54	MG	DB	3051	1/1	0.95	0.06	87,87,87,87	0
54	MG	AA	1650	1/1	0.95	0.07	114,114,114,114	0
54	MG	CA	1652	1/1	0.95	0.11	77,77,77,77	0
54	MG	DB	3060	1/1	0.95	0.07	124,124,124,124	0
54	MG	BB	3079	1/1	0.95	0.13	75,75,75,75	0
54	MG	AA	1636	1/1	0.95	0.15	88,88,88,88	0
54	MG	BB	3010	1/1	0.95	0.06	82,82,82,82	0
54	MG	DB	3093	1/1	0.95	0.05	67,67,67,67	0
54	MG	AA	1637	1/1	0.95	0.10	89,89,89,89	0
55	ZN	B4	101	1/1	0.95	0.09	72,72,72,72	0
54	MG	AA	1621	1/1	0.95	0.10	85,85,85,85	0
54	MG	DB	3019	1/1	0.96	0.10	48,48,48,48	0
54	MG	DB	3029	1/1	0.96	0.06	33,33,33,33	0
54	MG	CA	1619	1/1	0.96	0.08	59,59,59,59	0
54	MG	BB	3092	1/1	0.96	0.05	32,32,32,32	0
54	MG	CA	1622	1/1	0.96	0.06	75,75,75,75	0
54	MG	AA	1619	1/1	0.96	0.12	85,85,85,85	0
54	MG	BB	3095	1/1	0.96	0.06	46,46,46,46	0
54	MG	BB	3052	1/1	0.96	0.07	59,59,59,59	0
54	MG	BB	3100	1/1	0.96	0.10	68,68,68,68	0
54	MG	AA	1657	1/1	0.96	0.07	69,69,69,69	0
54	MG	AA	1616	1/1	0.96	0.08	77,77,77,77	0
54	MG	BB	3040	1/1	0.96	0.06	28,28,28,28	0
54	MG	CA	1642	1/1	0.96	0.05	94,94,94,94	0
54	MG	CA	1611	1/1	0.96	0.05	60,60,60,60	0
54	MG	AA	1625	1/1	0.96	0.15	72,72,72,72	0
54	MG	AA	1618	1/1	0.96	0.06	79,79,79,79	0
54	MG	CA	1643	1/1	0.97	0.04	43,43,43,43	0
54	MG	CA	1647	1/1	0.97	0.05	90,90,90,90	0
54	MG	CA	1648	1/1	0.97	0.11	55,55,55,55	0
54	MG	CA	1649	1/1	0.97	0.06	73,73,73,73	0
54	MG	BB	3111	1/1	0.97	0.11	81,81,81,81	0
54	MG	AA	1654	1/1	0.97	0.04	51,51,51,51	0
54	MG	DB	3005	1/1	0.97	0.09	30,30,30,30	0
54	MG	BB	3018	1/1	0.97	0.06	43,43,43,43	0
54	MG	DB	3016	1/1	0.97	0.05	49,49,49,49	0
54	MG	BB	3019	1/1	0.97	0.06	45,45,45,45	0
54	MG	BB	3072	1/1	0.97	0.05	52,52,52,52	0
54	MG	BB	3029	1/1	0.97	0.12	32,32,32,32	0
54	MG	BB	3032	1/1	0.97	0.07	45,45,45,45	0
54	MG	AA	1613	1/1	0.97	0.04	65,65,65,65	0
54	MG	BB	3035	1/1	0.97	0.12	32,32,32,32	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
54	MG	BB	3088	1/1	0.97	0.11	57,57,57,57	0
54	MG	DB	3054	1/1	0.97	0.06	65,65,65,65	0
54	MG	BB	3091	1/1	0.97	0.06	75,75,75,75	0
54	MG	CA	1628	1/1	0.97	0.04	61,61,61,61	0
54	MG	BB	3038	1/1	0.97	0.04	50,50,50,50	0
54	MG	AA	1629	1/1	0.97	0.05	70,70,70,70	0
54	MG	AA	1641	1/1	0.97	0.10	56,56,56,56	0
54	MG	DB	3091	1/1	0.97	0.07	47,47,47,47	0
54	MG	CA	1637	1/1	0.97	0.04	79,79,79,79	0
54	MG	AA	1652	1/1	0.97	0.05	73,73,73,73	0
54	MG	DB	3105	1/1	0.97	0.05	40,40,40,40	0
54	MG	DB	3107	1/1	0.97	0.05	27,27,27,27	0
54	MG	DB	3111	1/1	0.97	0.10	28,28,28,28	0
54	MG	AA	1627	1/1	0.97	0.04	15,15,15,15	1
54	MG	BB	3045	1/1	0.97	0.07	67,67,67,67	0
54	MG	BB	3033	1/1	0.98	0.04	55,55,55,55	0
54	MG	BB	3059	1/1	0.98	0.04	30,30,30,30	0
54	MG	BB	3107	1/1	0.98	0.04	54,54,54,54	0
54	MG	BB	3065	1/1	0.98	0.05	24,24,24,24	0
54	MG	CA	1654	1/1	0.98	0.04	78,78,78,78	0
54	MG	BB	3068	1/1	0.98	0.04	55,55,55,55	0
54	MG	CA	1659	1/1	0.98	0.04	62,62,62,62	0
54	MG	CA	1661	1/1	0.98	0.05	61,61,61,61	0
54	MG	CE	201	1/1	0.98	0.07	97,97,97,97	0
54	MG	CN	201	1/1	0.98	0.04	48,48,48,48	0
54	MG	AA	1661	1/1	0.98	0.05	79,79,79,79	0
54	MG	DB	3008	1/1	0.98	0.04	16,16,16,16	0
54	MG	CA	1610	1/1	0.98	0.04	79,79,79,79	0
54	MG	BB	3004	1/1	0.98	0.11	38,38,38,38	0
54	MG	BB	3074	1/1	0.98	0.04	31,31,31,31	0
54	MG	CA	1615	1/1	0.98	0.10	41,41,41,41	0
54	MG	DB	3030	1/1	0.98	0.04	74,74,74,74	0
54	MG	BB	3076	1/1	0.98	0.10	60,60,60,60	0
54	MG	BB	3078	1/1	0.98	0.04	32,32,32,32	0
54	MG	AA	1605	1/1	0.98	0.06	48,48,48,48	0
54	MG	DB	3046	1/1	0.98	0.08	55,55,55,55	0
54	MG	AA	1633	1/1	0.98	0.11	51,51,51,51	0
54	MG	BB	3014	1/1	0.98	0.04	42,42,42,42	0
54	MG	CA	1626	1/1	0.98	0.07	8,8,8,8	1
54	MG	DB	3055	1/1	0.98	0.04	42,42,42,42	0
54	MG	BB	3085	1/1	0.98	0.04	44,44,44,44	0
54	MG	AA	1643	1/1	0.98	0.04	53,53,53,53	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
54	MG	BB	3090	1/1	0.98	0.04	49,49,49,49	0
54	MG	DB	3063	1/1	0.98	0.05	71,71,71,71	0
54	MG	CA	1633	1/1	0.98	0.09	73,73,73,73	0
54	MG	DB	3071	1/1	0.98	0.04	61,61,61,61	0
54	MG	DB	3078	1/1	0.98	0.04	46,46,46,46	0
54	MG	AA	1646	1/1	0.98	0.04	94,94,94,94	0
54	MG	BB	3023	1/1	0.98	0.10	41,41,41,41	0
54	MG	AA	1659	1/1	0.98	0.11	112,112,112,112	0
54	MG	AA	1639	1/1	0.98	0.04	57,57,57,57	0
54	MG	DB	3097	1/1	0.98	0.11	33,33,33,33	0
54	MG	BB	3096	1/1	0.98	0.04	42,42,42,42	0
54	MG	BB	3056	1/1	0.98	0.06	34,34,34,34	0
54	MG	BB	3099	1/1	0.98	0.07	41,41,41,41	0
54	MG	CA	1644	1/1	0.98	0.06	58,58,58,58	0
54	MG	CA	1646	1/1	0.98	0.03	72,72,72,72	0
54	MG	AA	1630	1/1	0.99	0.02	35,35,35,35	0
54	MG	AA	1611	1/1	0.99	0.03	28,28,28,28	0
54	MG	BB	3012	1/1	0.99	0.05	25,25,25,25	0
54	MG	BB	3060	1/1	0.99	0.04	30,30,30,30	0
54	MG	BB	3061	1/1	0.99	0.02	41,41,41,41	0
54	MG	BB	3063	1/1	0.99	0.07	31,31,31,31	0
54	MG	CA	1630	1/1	0.99	0.07	40,40,40,40	0
54	MG	CA	1631	1/1	0.99	0.03	34,34,34,34	0
54	MG	CA	1632	1/1	0.99	0.10	47,47,47,47	0
54	MG	BB	3064	1/1	0.99	0.03	26,26,26,26	0
54	MG	BB	3013	1/1	0.99	0.04	41,41,41,41	0
54	MG	BB	3066	1/1	0.99	0.03	44,44,44,44	0
54	MG	BB	3067	1/1	0.99	0.03	34,34,34,34	0
54	MG	AA	1632	1/1	0.99	0.06	37,37,37,37	0
54	MG	CA	1640	1/1	0.99	0.08	57,57,57,57	0
54	MG	BB	3069	1/1	0.99	0.12	32,32,32,32	0
54	MG	BB	3015	1/1	0.99	0.07	27,27,27,27	0
54	MG	AA	1612	1/1	0.99	0.02	37,37,37,37	0
54	MG	AA	1634	1/1	0.99	0.03	52,52,52,52	0
54	MG	BB	3075	1/1	0.99	0.03	13,13,13,13	0
54	MG	BB	3020	1/1	0.99	0.04	45,45,45,45	0
54	MG	BB	3021	1/1	0.99	0.07	22,22,22,22	0
54	MG	BB	3022	1/1	0.99	0.03	22,22,22,22	0
54	MG	BB	3080	1/1	0.99	0.03	37,37,37,37	0
54	MG	AA	1622	1/1	0.99	0.08	27,27,27,27	0
54	MG	CA	1655	1/1	0.99	0.03	69,69,69,69	0
54	MG	CA	1656	1/1	0.99	0.03	27,27,27,27	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
54	MG	BB	3025	1/1	0.99	0.07	14,14,14,14	0
54	MG	CA	1658	1/1	0.99	0.07	52,52,52,52	0
54	MG	BB	3083	1/1	0.99	0.03	5,5,5,5	0
54	MG	CA	1660	1/1	0.99	0.04	69,69,69,69	0
54	MG	BB	3026	1/1	0.99	0.06	54,54,54,54	0
54	MG	BB	3086	1/1	0.99	0.05	66,66,66,66	0
54	MG	AA	1602	1/1	0.99	0.07	29,29,29,29	0
54	MG	BB	3089	1/1	0.99	0.04	45,45,45,45	0
54	MG	BB	3031	1/1	0.99	0.03	47,47,47,47	0
54	MG	DB	3009	1/1	0.99	0.03	19,19,19,19	0
54	MG	DB	3012	1/1	0.99	0.08	37,37,37,37	0
54	MG	AA	1614	1/1	0.99	0.04	64,64,64,64	0
54	MG	DB	3015	1/1	0.99	0.03	22,22,22,22	0
54	MG	AA	1606	1/1	0.99	0.06	47,47,47,47	0
54	MG	DB	3017	1/1	0.99	0.05	6,6,6,6	0
54	MG	BB	3093	1/1	0.99	0.03	36,36,36,36	0
54	MG	DB	3021	1/1	0.99	0.08	9,9,9,9	0
54	MG	DB	3023	1/1	0.99	0.04	29,29,29,29	0
54	MG	DB	3024	1/1	0.99	0.05	55,55,55,55	0
54	MG	DB	3025	1/1	0.99	0.03	44,44,44,44	0
54	MG	DB	3026	1/1	0.99	0.04	15,15,15,15	0
54	MG	DB	3027	1/1	0.99	0.04	36,36,36,36	0
54	MG	AA	1607	1/1	0.99	0.04	64,64,64,64	0
54	MG	AA	1617	1/1	0.99	0.04	45,45,45,45	0
54	MG	BB	3036	1/1	0.99	0.03	36,36,36,36	0
54	MG	DB	3032	1/1	0.99	0.03	18,18,18,18	0
54	MG	DB	3033	1/1	0.99	0.04	62,62,62,62	0
54	MG	BB	3097	1/1	0.99	0.04	32,32,32,32	0
54	MG	BB	3037	1/1	0.99	0.02	42,42,42,42	0
54	MG	DB	3036	1/1	0.99	0.06	40,40,40,40	0
54	MG	DB	3037	1/1	0.99	0.05	15,15,15,15	0
54	MG	DB	3038	1/1	0.99	0.06	17,17,17,17	0
54	MG	DB	3040	1/1	0.99	0.06	58,58,58,58	0
54	MG	DB	3045	1/1	0.99	0.04	22,22,22,22	0
54	MG	AA	1608	1/1	0.99	0.03	54,54,54,54	0
54	MG	DB	3048	1/1	0.99	0.12	23,23,23,23	0
54	MG	DB	3049	1/1	0.99	0.03	46,46,46,46	0
54	MG	AA	1642	1/1	0.99	0.03	59,59,59,59	0
54	MG	DB	3052	1/1	0.99	0.09	32,32,32,32	0
54	MG	AA	1604	1/1	0.99	0.03	36,36,36,36	0
54	MG	BB	3106	1/1	0.99	0.07	33,33,33,33	0
54	MG	BB	3002	1/1	0.99	0.04	24,24,24,24	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
54	MG	DB	3056	1/1	0.99	0.03	12,12,12,12	0
54	MG	DB	3058	1/1	0.99	0.03	43,43,43,43	0
54	MG	BB	3109	1/1	0.99	0.03	32,32,32,32	0
54	MG	BB	3110	1/1	0.99	0.04	30,30,30,30	0
54	MG	BB	3003	1/1	0.99	0.03	24,24,24,24	0
54	MG	DB	3062	1/1	0.99	0.07	47,47,47,47	0
54	MG	CA	1602	1/1	0.99	0.10	6,6,6,6	0
54	MG	DB	3064	1/1	0.99	0.05	33,33,33,33	0
54	MG	DB	3065	1/1	0.99	0.10	16,16,16,16	0
54	MG	DB	3066	1/1	0.99	0.06	29,29,29,29	0
54	MG	CA	1605	1/1	0.99	0.05	16,16,16,16	0
54	MG	DB	3068	1/1	0.99	0.04	19,19,19,19	0
54	MG	AA	1645	1/1	0.99	0.05	60,60,60,60	0
54	MG	DB	3072	1/1	0.99	0.04	30,30,30,30	0
54	MG	DB	3073	1/1	0.99	0.03	33,33,33,33	0
54	MG	BB	3046	1/1	0.99	0.04	46,46,46,46	0
54	MG	DB	3079	1/1	0.99	0.04	43,43,43,43	0
54	MG	DB	3081	1/1	0.99	0.05	18,18,18,18	0
54	MG	DB	3083	1/1	0.99	0.03	24,24,24,24	0
54	MG	BB	3047	1/1	0.99	0.04	46,46,46,46	0
54	MG	DB	3085	1/1	0.99	0.08	25,25,25,25	0
54	MG	DB	3086	1/1	0.99	0.03	18,18,18,18	0
54	MG	DB	3090	1/1	0.99	0.06	34,34,34,34	0
54	MG	BB	3005	1/1	0.99	0.07	39,39,39,39	0
54	MG	DB	3092	1/1	0.99	0.05	46,46,46,46	0
54	MG	BB	3051	1/1	0.99	0.03	41,41,41,41	0
54	MG	DB	3094	1/1	0.99	0.04	21,21,21,21	0
54	MG	CA	1613	1/1	0.99	0.05	77,77,77,77	0
54	MG	CA	1614	1/1	0.99	0.03	58,58,58,58	0
54	MG	DB	3098	1/1	0.99	0.07	36,36,36,36	0
54	MG	DB	3100	1/1	0.99	0.06	9,9,9,9	0
54	MG	DB	3104	1/1	0.99	0.04	21,21,21,21	0
54	MG	BB	3009	1/1	0.99	0.07	64,64,64,64	0
54	MG	BB	3053	1/1	0.99	0.12	25,25,25,25	0
54	MG	DB	3108	1/1	0.99	0.02	21,21,21,21	0
54	MG	DB	3109	1/1	0.99	0.04	10,10,10,10	0
54	MG	DB	3110	1/1	0.99	0.03	19,19,19,19	0
54	MG	BB	3054	1/1	0.99	0.04	46,46,46,46	0
54	MG	DB	3112	1/1	0.99	0.08	37,37,37,37	0
54	MG	CA	1620	1/1	0.99	0.14	70,70,70,70	0
54	MG	BB	3055	1/1	0.99	0.03	58,58,58,58	0
54	MG	CA	1603	1/1	1.00	0.06	30,30,30,30	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
54	MG	CA	1604	1/1	1.00	0.02	52,52,52,52	0
54	MG	BB	3084	1/1	1.00	0.02	21,21,21,21	0
54	MG	CA	1645	1/1	1.00	0.10	45,45,45,45	0
54	MG	DB	3039	1/1	1.00	0.02	19,19,19,19	0
54	MG	CA	1606	1/1	1.00	0.02	19,19,19,19	0
54	MG	DB	3041	1/1	1.00	0.03	15,15,15,15	0
54	MG	DB	3042	1/1	1.00	0.03	7,7,7,7	0
54	MG	DB	3043	1/1	1.00	0.03	15,15,15,15	0
54	MG	DB	3044	1/1	1.00	0.07	12,12,12,12	0
54	MG	BB	3062	1/1	1.00	0.02	29,29,29,29	0
54	MG	CA	1608	1/1	1.00	0.04	40,40,40,40	0
54	MG	DB	3047	1/1	1.00	0.04	24,24,24,24	0
54	MG	BB	3017	1/1	1.00	0.03	28,28,28,28	0
54	MG	CA	1650	1/1	1.00	0.02	12,12,12,12	0
54	MG	DB	3050	1/1	1.00	0.07	32,32,32,32	0
54	MG	CA	1651	1/1	1.00	0.02	40,40,40,40	0
54	MG	BB	3087	1/1	1.00	0.09	41,41,41,41	0
54	MG	CA	1653	1/1	1.00	0.08	33,33,33,33	0
54	MG	BB	3030	1/1	1.00	0.04	36,36,36,36	0
54	MG	AA	1644	1/1	1.00	0.02	24,24,24,24	0
54	MG	AA	1655	1/1	1.00	0.01	38,38,38,38	0
54	MG	DB	3057	1/1	1.00	0.03	5,5,5,5	0
54	MG	AA	1649	1/1	1.00	0.01	19,19,19,19	0
54	MG	BB	3049	1/1	1.00	0.05	14,14,14,14	0
54	MG	BB	3050	1/1	1.00	0.02	18,18,18,18	0
54	MG	CA	1617	1/1	1.00	0.03	9,9,9,9	0
54	MG	CA	1618	1/1	1.00	0.07	8,8,8,8	0
54	MG	BB	3070	1/1	1.00	0.03	15,15,15,15	0
54	MG	BB	3071	1/1	1.00	0.02	29,29,29,29	0
54	MG	DB	3002	1/1	1.00	0.02	5,5,5,5	0
54	MG	DB	3003	1/1	1.00	0.04	9,9,9,9	0
54	MG	DB	3004	1/1	1.00	0.02	14,14,14,14	0
54	MG	AA	1610	1/1	1.00	0.01	10,10,10,10	0
54	MG	DB	3069	1/1	1.00	0.02	6,6,6,6	0
54	MG	DB	3070	1/1	1.00	0.08	23,23,23,23	0
54	MG	DB	3006	1/1	1.00	0.03	20,20,20,20	0
54	MG	DB	3007	1/1	1.00	0.03	12,12,12,12	0
54	MG	BB	3006	1/1	1.00	0.02	5,5,5,5	0
54	MG	DB	3074	1/1	1.00	0.02	28,28,28,28	0
54	MG	DB	3075	1/1	1.00	0.02	7,7,7,7	0
54	MG	DB	3076	1/1	1.00	0.05	26,26,26,26	0
54	MG	DB	3077	1/1	1.00	0.04	47,47,47,47	0

Continued on next page...

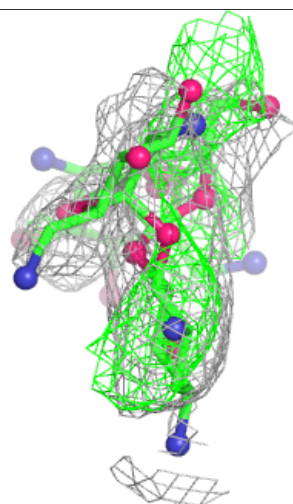
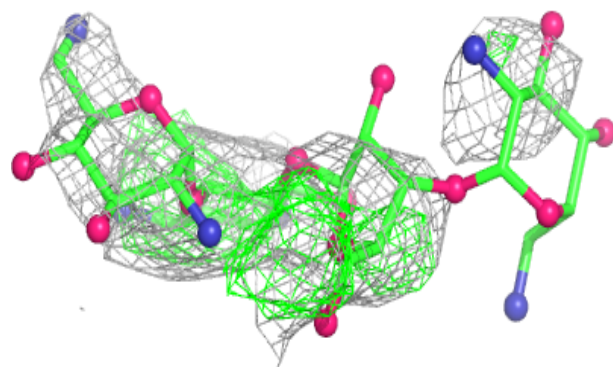
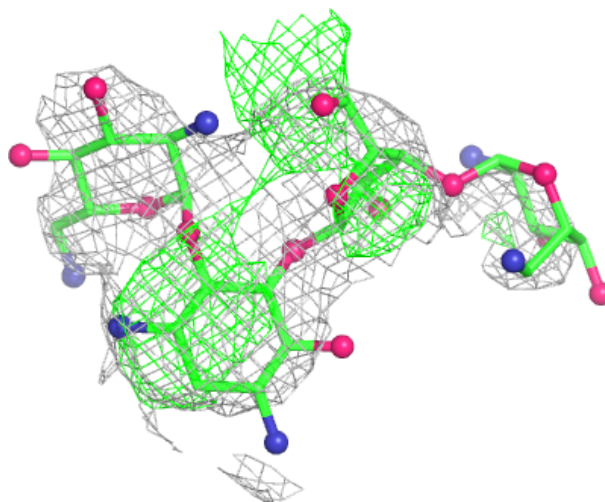
Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
54	MG	BB	3007	1/1	1.00	0.01	5,5,5,5	0
54	MG	DB	3010	1/1	1.00	0.04	5,5,5,5	0
54	MG	DB	3080	1/1	1.00	0.05	39,39,39,39	0
54	MG	DB	3011	1/1	1.00	0.02	7,7,7,7	0
54	MG	DB	3082	1/1	1.00	0.01	6,6,6,6	0
54	MG	CA	1624	1/1	1.00	0.02	34,34,34,34	0
54	MG	DB	3013	1/1	1.00	0.06	21,21,21,21	0
54	MG	CA	1625	1/1	1.00	0.04	34,34,34,34	0
54	MG	BB	3024	1/1	1.00	0.01	7,7,7,7	0
54	MG	DB	3087	1/1	1.00	0.09	25,25,25,25	0
54	MG	DB	3088	1/1	1.00	0.03	48,48,48,48	0
54	MG	DB	3089	1/1	1.00	0.03	10,10,10,10	0
54	MG	BB	3008	1/1	1.00	0.04	64,64,64,64	0
54	MG	BB	3077	1/1	1.00	0.01	37,37,37,37	0
54	MG	DB	3018	1/1	1.00	0.05	8,8,8,8	0
54	MG	BB	3102	1/1	1.00	0.04	28,28,28,28	0
54	MG	DB	3020	1/1	1.00	0.05	5,5,5,5	0
54	MG	DB	3095	1/1	1.00	0.02	39,39,39,39	0
54	MG	BB	3103	1/1	1.00	0.03	37,37,37,37	0
54	MG	DB	3022	1/1	1.00	0.01	5,5,5,5	0
54	MG	BB	3104	1/1	1.00	0.06	8,8,8,8	0
54	MG	DB	3099	1/1	1.00	0.07	29,29,29,29	0
54	MG	BB	3105	1/1	1.00	0.04	21,21,21,21	0
54	MG	DB	3101	1/1	1.00	0.02	5,5,5,5	0
54	MG	DB	3102	1/1	1.00	0.04	14,14,14,14	0
54	MG	DB	3103	1/1	1.00	0.02	16,16,16,16	0
54	MG	BB	3016	1/1	1.00	0.01	18,18,18,18	0
54	MG	CA	1634	1/1	1.00	0.03	8,8,8,8	0
54	MG	DB	3106	1/1	1.00	0.05	39,39,39,39	0
54	MG	BB	3057	1/1	1.00	0.03	20,20,20,20	0
54	MG	DB	3028	1/1	1.00	0.01	8,8,8,8	0
54	MG	BB	3108	1/1	1.00	0.02	25,25,25,25	0
54	MG	BB	3027	1/1	1.00	0.02	34,34,34,34	0
54	MG	BB	3041	1/1	1.00	0.06	28,28,28,28	0
54	MG	CA	1639	1/1	1.00	0.02	14,14,14,14	0
54	MG	BB	3042	1/1	1.00	0.05	8,8,8,8	0
54	MG	BB	3028	1/1	1.00	0.02	32,32,32,32	0

The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.

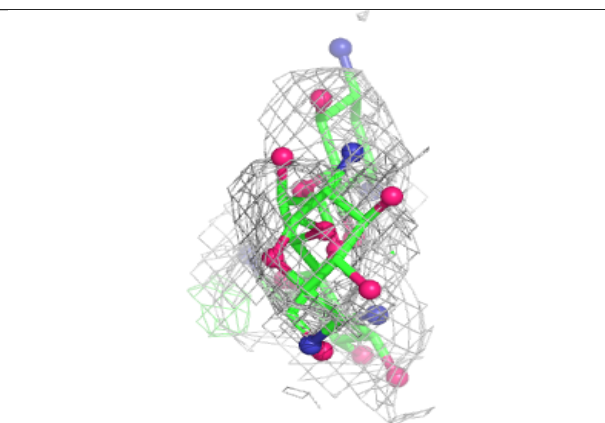
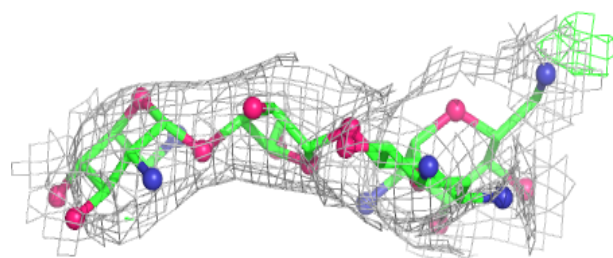
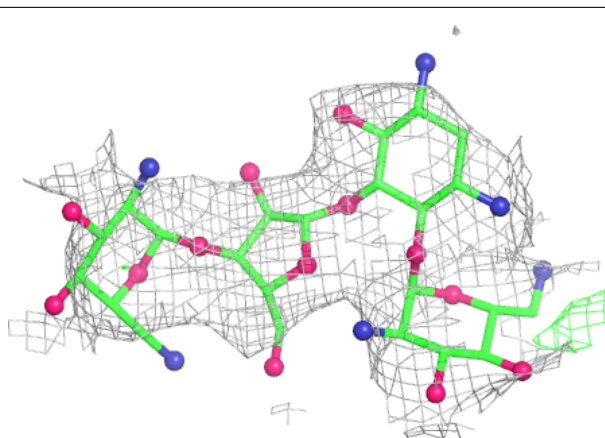
Electron density around NMY DB 3001:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

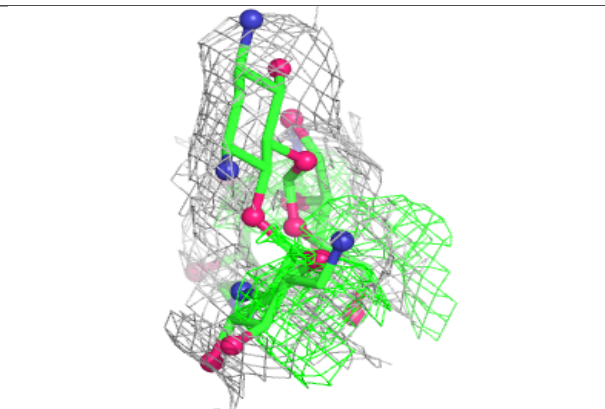
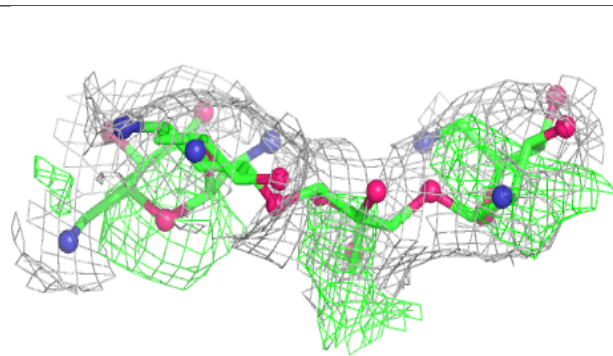
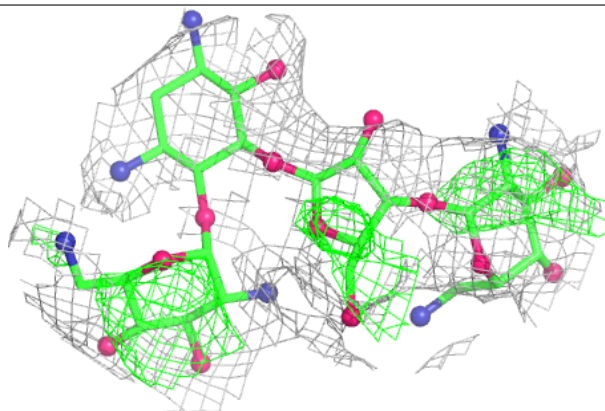


Electron density around NMY AA 1601:

$2mF_o - DF_c$ (at 0.7 rmsd) in gray
 $mF_o - DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)

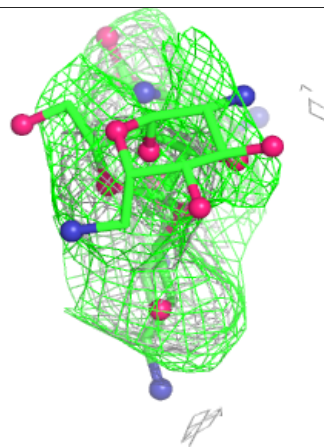
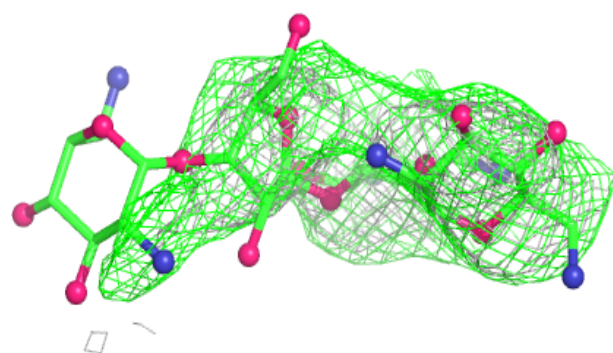
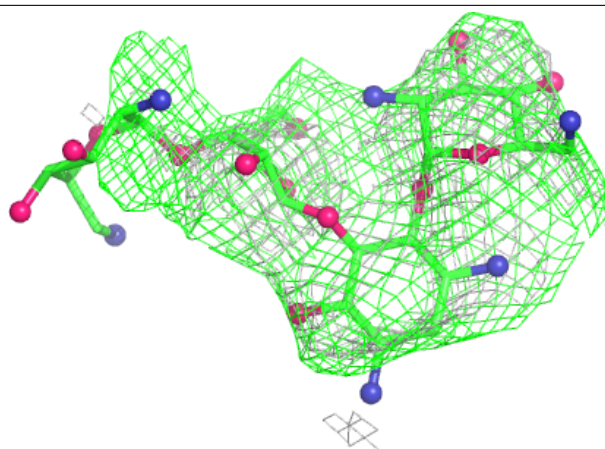
**Electron density around NMY CA 1601:**

$2mF_o - DF_c$ (at 0.7 rmsd) in gray
 $mF_o - DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)



Electron density around NMY BB 3001:

$2mF_o - DF_c$ (at 0.7 rmsd) in gray
 $mF_o - DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)



6.5 Other polymers [i](#)

There are no such residues in this entry.