



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 6, 2026 – 03:46 PM UTC

PDB ID : 8OH6 / pdb_00008oh6
Title : Crystal structure of the Candida albicans 80S ribosome in complex with Paromomycin (500umol)
Authors : Kolosova, O.; Zgadzay, Y.; Yusupov, M.
Deposited on : 2023-03-20
Resolution : 3.35 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

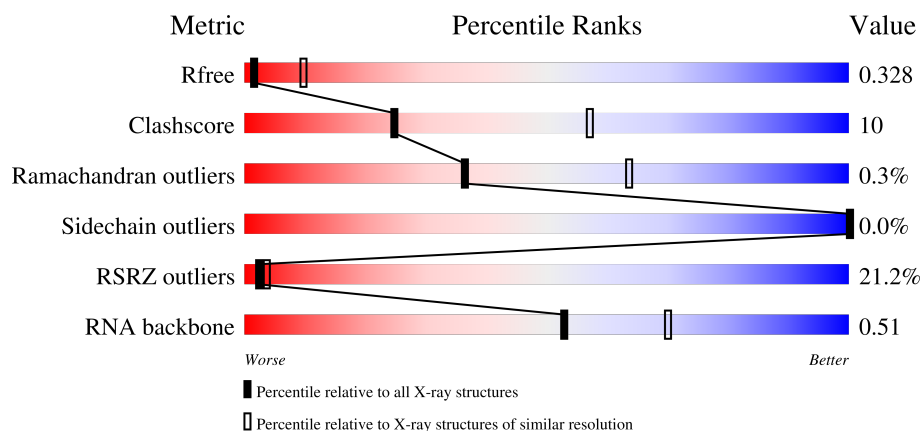
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.35 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	1099 (3.40-3.32)
Clashscore	190562	1116 (3.40-3.32)
Ramachandran outliers	187476	1101 (3.40-3.32)
Sidechain outliers	187428	1101 (3.40-3.32)
RSRZ outliers	180081	1099 (3.40-3.32)
RNA backbone	3983	1110 (3.72-3.00)

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	1	3359	4% 50% 37% 8% .
1	AS	3359	11% 49% 36% 6% 9%
2	3	121	2% 65% 33% .
2	AT	121	6% 62% 36% .

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
3	4	158	
3	AU	158	
4	AW	254	
4	j	254	
5	AX	389	
5	k	389	
6	AY	363	
6	l	363	
7	AZ	298	
7	m	298	
8	BA	176	
8	n	176	
9	BB	241	
9	o	241	
10	BC	262	
10	p	262	
11	BD	191	
11	q	191	
12	BE	220	
12	r	220	
13	BF	174	
13	s	174	
14	BG	202	
14	t	202	
15	BH	131	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
15	u	131	
16	BI	204	
16	v	204	
17	BJ	200	
17	w	200	
18	BK	185	
18	x	185	
19	BL	186	
19	y	186	
20	BM	190	
20	z	190	
21	0	172	
21	BN	172	
22	2	160	
22	BO	160	
23	5	124	
23	BP	124	
24	6	137	
24	BQ	137	
25	7	155	
25	BR	155	
26	8	142	
26	BS	142	
27	9	127	
27	BT	127	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
28	AA	136	
28	BU	136	
29	AB	149	
29	BV	149	
30	AC	63	
30	BW	63	
31	AD	106	
31	BX	106	
32	AE	112	
32	BY	112	
33	AF	131	
33	BZ	131	
34	AG	107	
34	CA	107	
35	AH	122	
35	CB	122	
36	AI	120	
36	CC	120	
37	AJ	99	
37	CD	99	
38	AK	90	
38	CE	90	
39	AL	78	
39	CF	78	
40	AM	51	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
40	CG	51	
41	AN	52	
41	CH	52	
42	AO	25	
42	CI	25	
43	AP	106	
43	CJ	106	
44	AQ	92	
44	CK	92	
45	CL	267	
45	i	267	
46	B	1787	
46	CM	1787	
47	C	261	
47	CN	261	
48	CO	256	
48	D	256	
49	CP	249	
49	E	249	
50	CQ	251	
50	F	251	
51	CR	262	
51	G	262	
52	CS	225	
52	H	225	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
53	CT	236	
53	I	236	
54	CU	186	
54	J	186	
55	CV	206	
55	K	206	
56	CW	189	
56	L	189	
57	CX	118	
57	M	118	
58	CY	155	
58	N	155	
59	CZ	143	
59	O	143	
60	DA	151	
60	P	151	
61	DB	132	
61	Q	132	
62	DC	142	
62	R	142	
63	DD	142	
63	S	142	
64	DE	137	
64	T	137	
65	DF	145	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
65	U	145	
66	DG	145	
66	V	145	
67	DH	119	
67	W	119	
68	DI	87	
68	X	87	
69	DJ	130	
69	Y	130	
70	DK	145	
70	Z	145	
71	DL	135	
71	a	135	
72	DM	105	
72	b	105	
73	DN	119	
73	c	119	
74	DO	82	
74	d	82	
75	DP	67	
75	e	67	
76	DQ	56	
76	f	56	
77	DR	63	
77	g	63	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
78	DS	193	
78	h	193	
79	AR	317	
79	DT	317	
80	l1	217	
81	12	165	

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
82	MG	1	3569	-	-	-	X
82	MG	1	3791	-	-	-	X
82	MG	1	3959	-	-	-	X
82	MG	1	3978	-	-	-	X
82	MG	1	4064	-	-	-	X
82	MG	1	4083	-	-	-	X
82	MG	AS	3409	-	-	-	X
82	MG	AS	3418	-	-	-	X
82	MG	AS	3580	-	-	-	X
82	MG	AS	3671	-	-	-	X
82	MG	AS	3852	-	-	-	X
82	MG	B	1866	-	-	-	X

2 Entry composition

There are 85 unique types of molecules in this entry. The entry contains 401103 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 25S (gene name XR_002086444.1).

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	1	3219	Total	C	N	O	P	0	0	0
			68814	30741	12370	22484	3219			
1	AS	3061	Total	C	N	O	P	0	0	0
			65432	29231	11756	21384	3061			

- Molecule 2 is a RNA chain called 5S.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	3	121	Total	C	N	O	P	0	0	0
			2579	1153	463	842	121			
2	AT	121	Total	C	N	O	P	0	0	0
			2579	1153	463	842	121			

- Molecule 3 is a RNA chain called 5.8S.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	4	157	Total	C	N	O	P	0	0	0
			3333	1491	583	1102	157			
3	AU	156	Total	C	N	O	P	0	0	0
			3313	1482	581	1094	156			

- Molecule 4 is a protein called 60S ribosomal protein L2-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	j	249	Total	C	N	O	S	0	0	0
			1888	1180	376	330	2			
4	AW	248	Total	C	N	O	S	0	0	0
			1879	1175	374	328	2			

- Molecule 5 is a protein called 60S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	k	386	Total	C	N	O	S	0	1	0
			3084	1955	584	538	7			
5	AX	386	Total	C	N	O	S	0	0	0
			3077	1950	582	538	7			

- Molecule 6 is a protein called 60S ribosomal protein L4-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	l	361	Total	C	N	O	S	0	0	0
			2751	1729	529	490	3			
6	AY	359	Total	C	N	O	S	0	0	0
			2737	1722	526	486	3			

- Molecule 7 is a protein called Uncharacterized protein CaJ7.0206.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	m	296	Total	C	N	O	S	0	0	0
			2426	1544	422	458	2			
7	AZ	292	Total	C	N	O	S	0	0	0
			2394	1526	416	450	2			

- Molecule 8 is a protein called 60S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	n	157	Total	C	N	O	S	0	0	0
			1242	796	226	219	1			
8	BA	153	Total	C	N	O		0	0	0
			1210	777	221	212				

- Molecule 9 is a protein called 60S ribosomal protein L7-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	o	228	Total	C	N	O	S	0	0	0
			1834	1176	336	321	1			
9	BB	227	Total	C	N	O	S	0	0	0
			1825	1171	335	318	1			

- Molecule 10 is a protein called 60S ribosomal protein L8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	p	237	Total	C	N	O	S	0	0	0
			1831	1171	325	332	3			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	BC	226	Total	C	N	O	S	0	0	0
			1766	1132	313	318	3			

- Molecule 11 is a protein called 60S ribosomal protein L9-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	q	190	Total	C	N	O	S	0	0	0
			1519	958	276	281	4			
11	BD	189	Total	C	N	O	S	0	0	0
			1510	953	275	278	4			

- Molecule 12 is a protein called 60S ribosomal protein L10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	r	208	Total	C	N	O	S	0	0	0
			1689	1069	322	291	7			
12	BE	206	Total	C	N	O	S	0	0	0
			1671	1057	320	287	7			

- Molecule 13 is a protein called 60S ribosomal protein L11-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	s	171	Total	C	N	O	S	0	0	0
			1371	857	260	250	4			
13	BF	171	Total	C	N	O	S	0	0	0
			1371	857	260	250	4			

- Molecule 14 is a protein called 60S ribosomal protein L13.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
14	t	200	Total	C	N	O	0	0	0
			1610	1009	318	283			
14	BG	200	Total	C	N	O	0	0	0
			1610	1009	318	283			

- Molecule 15 is a protein called 60S ribosomal protein L14-B.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
15	u	130	Total	C	N	O	0	0	0
			1029	660	193	175			
15	BH	128	Total	C	N	O	0	0	0
			1015	651	190	173			

- Molecule 16 is a protein called 60S ribosomal protein L15-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	v	203	Total	C	N	O	S	0	0	0
			1713	1075	356	280	2			
16	BI	203	Total	C	N	O	S	0	0	0
			1713	1075	356	280	2			

- Molecule 17 is a protein called Ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	w	199	Total	C	N	O	S	0	0	0
			1590	1025	294	269	2			
17	BJ	199	Total	C	N	O	S	0	0	0
			1590	1025	294	269	2			

- Molecule 18 is a protein called Ribosomal protein L22.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	x	172	Total	C	N	O	0	0	0
			1380	852	279	249			
18	BK	174	Total	C	N	O	0	0	0
			1396	862	282	252			

- Molecule 19 is a protein called 60S ribosomal protein L18-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
19	y	185	Total	C	N	O	0	0	0
			1458	916	297	245			
19	BL	185	Total	C	N	O	0	0	0
			1458	916	297	245			

- Molecule 20 is a protein called 60S ribosomal protein L19-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	z	179	Total	C	N	O	S	0	0	0
			1457	901	310	243	3			
20	BM	171	Total	C	N	O	S	0	0	0
			1386	859	293	231	3			

- Molecule 21 is a protein called 60S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	0	170	Total	C	N	O	S	0	0	0
			1423	921	258	241	3			
21	BN	170	Total	C	N	O	S	0	0	0
			1423	921	258	241	3			

- Molecule 22 is a protein called 60S ribosomal protein L21-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	2	159	Total	C	N	O	S	0	0	0
			1262	798	241	221	2			
22	BO	159	Total	C	N	O	S	0	0	0
			1262	798	241	221	2			

- Molecule 23 is a protein called 60S ribosomal protein L22-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	5	103	Total	C	N	O		0	0	0
			831	539	138	154				
23	BP	102	Total	C	N	O		0	1	0
			832	540	137	155				

- Molecule 24 is a protein called 60S ribosomal protein L23-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	6	131	Total	C	N	O	S	0	0	0
			977	615	183	171	8			
24	BQ	131	Total	C	N	O	S	0	0	0
			977	615	183	171	8			

- Molecule 25 is a protein called 60S ribosomal protein L24-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	7	118	Total	C	N	O	S	0	0	0
			945	591	192	161	1			
25	BR	111	Total	C	N	O	S	0	0	0
			896	560	183	152	1			

- Molecule 26 is a protein called 60S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	8	121	Total	C	N	O	S	0	0	0
			974	622	175	176	1			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	BS	118	Total	C	N	O	S	0	0	0
			952	607	171	173	1			

- Molecule 27 is a protein called Ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	9	126	Total	C	N	O		0	0	0
			989	618	190	181				
27	BT	124	Total	C	N	O		0	0	0
			975	610	188	177				

- Molecule 28 is a protein called 60S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	AA	135	Total	C	N	O	S	0	0	0
			1087	705	197	183	2			
28	BU	135	Total	C	N	O	S	0	0	0
			1087	705	197	183	2			

- Molecule 29 is a protein called 60S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	AB	148	Total	C	N	O	S	0	0	0
			1170	741	231	197	1			
29	BV	148	Total	C	N	O	S	0	0	0
			1170	741	231	197	1			

- Molecule 30 is a protein called 60S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	AC	62	Total	C	N	O		0	0	0
			493	307	105	81				
30	BW	60	Total	C	N	O	S	0	1	0
			489	305	105	78	1			

- Molecule 31 is a protein called 60S ribosomal protein L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	AD	99	Total	C	N	O	S	0	0	0
			755	483	126	144	2			
31	BX	96	Total	C	N	O	S	0	0	0
			729	469	121	137	2			

- Molecule 32 is a protein called 60S ribosomal protein L31-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	AE	110	Total	C	N	O	S	0	0	0
			894	565	168	159	2			
32	BY	109	Total	C	N	O	S	0	0	0
			889	562	167	158	2			

- Molecule 33 is a protein called 60S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	AF	124	Total	C	N	O	S	0	0	0
			1000	638	194	167	1			
33	BZ	124	Total	C	N	O	S	0	1	0
			1006	643	195	167	1			

- Molecule 34 is a protein called 60S ribosomal protein L33-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	AG	106	Total	C	N	O	S	0	0	0
			847	543	161	142	1			
34	CA	106	Total	C	N	O	S	0	3	0
			867	558	166	142	1			

- Molecule 35 is a protein called 60S ribosomal protein L34-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	AH	111	Total	C	N	O	S	0	0	0
			878	541	180	153	4			
35	CB	112	Total	C	N	O	S	0	4	0
			913	567	188	154	4			

- Molecule 36 is a protein called Ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	AI	120	Total	C	N	O	S	0	0	0
			992	629	195	167	1			
36	CC	117	Total	C	N	O		0	0	0
			970	615	191	164				

- Molecule 37 is a protein called 60S ribosomal protein L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	AJ	97	Total	C	N	O	S	0	0	0
			758	471	156	130	1			
37	CD	98	Total	C	N	O	S	0	1	0
			772	481	158	131	2			

- Molecule 38 is a protein called 60S ribosomal protein L37-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	AK	86	Total	C	N	O	S	0	0	0
			677	413	148	110	6			
38	CE	86	Total	C	N	O	S	0	0	0
			677	413	148	110	6			

- Molecule 39 is a protein called 60S ribosomal protein L38.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	AL	77	Total	C	N	O		0	0	0
			617	393	115	109				
39	CF	76	Total	C	N	O		0	1	0
			618	395	115	108				

- Molecule 40 is a protein called 60S ribosomal protein L39.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	AM	50	Total	C	N	O		0	0	0
			438	275	97	66				
40	CG	50	Total	C	N	O		0	0	0
			438	275	97	66				

- Molecule 41 is a protein called 60S ribosomal protein L40-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	AN	52	Total	C	N	O	S	0	0	0
			419	260	86	67	6			
41	CH	52	Total	C	N	O	S	0	1	0
			427	265	89	67	6			

- Molecule 42 is a protein called 60S ribosomal protein L41.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	AO	25	Total	C	N	O	S	0	0	0
			236	144	63	28	1			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	CI	24	Total	C	N	O	S	0	0	0
			227	138	61	27	1			

- Molecule 43 is a protein called 60S ribosomal protein L42-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	AP	103	Total	C	N	O	S	0	0	0
			828	521	165	137	5			
43	CJ	103	Total	C	N	O	S	0	2	0
			841	531	168	137	5			

- Molecule 44 is a protein called 60S ribosomal protein L43-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	AQ	91	Total	C	N	O	S	0	0	0
			698	430	140	124	4			
44	CK	91	Total	C	N	O	S	0	0	0
			698	430	140	124	4			

- Molecule 45 is a protein called 60S ribosomal protein CAALFM_C304810CA.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
45	i	121	Total	C	N	O	0	0	0
			930	563	166	201			
45	CL	107	Total	C	N	O	0	0	0
			815	490	150	175			

- Molecule 46 is a RNA chain called 18S.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	B	1730	Total	C	N	O	P	0	0	0
			36889	16490	6552	12117	1730			
46	CM	1704	Total	C	N	O	P	0	0	0
			36345	16246	6466	11929	1704			

- Molecule 47 is a protein called 40S ribosomal protein S0.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	C	208	Total	C	N	O	S	0	0	0
			1627	1041	284	297	5			
47	CN	208	Total	C	N	O	S	0	0	0
			1627	1041	284	297	5			

- Molecule 48 is a protein called 40S ribosomal protein S1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	D	214	Total	C	N	O	S	0	0	0
			1724	1094	313	313	4			
48	CO	214	Total	C	N	O	S	0	0	0
			1724	1094	313	313	4			

- Molecule 49 is a protein called Ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	E	217	Total	C	N	O	S	0	0	0
			1629	1039	289	296	5			
49	CP	216	Total	C	N	O	S	0	0	0
			1620	1033	287	295	5			

- Molecule 50 is a protein called Ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	F	223	Total	C	N	O	S	0	0	0
			1707	1087	311	305	4			
50	CQ	223	Total	C	N	O	S	0	0	0
			1707	1087	311	305	4			

- Molecule 51 is a protein called 40S ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	G	259	Total	C	N	O	S	0	0	0
			2051	1304	385	357	5			
51	CR	260	Total	C	N	O	S	0	0	0
			2055	1306	386	358	5			

- Molecule 52 is a protein called Ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	H	206	Total	C	N	O	S	0	0	0
			1614	1008	301	301	4			
52	CS	206	Total	C	N	O	S	0	0	0
			1614	1008	301	301	4			

- Molecule 53 is a protein called 40S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	I	226	Total	C	N	O	S	0	0	0
			1820	1133	351	330	6			
53	CT	235	Total	C	N	O	S	0	0	0
			1895	1180	367	342	6			

- Molecule 54 is a protein called 40S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	J	185	Total	C	N	O	S	0	0	0
			1491	953	269	269				
54	CU	182	Total	C	N	O	S	0	0	0
			1466	939	264	263				

- Molecule 55 is a protein called 40S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
55	K	203	Total	C	N	O	S	0	0	0
			1579	973	322	283	1			
55	CV	203	Total	C	N	O	S	0	0	0
			1579	973	322	283	1			

- Molecule 56 is a protein called Ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
56	L	178	Total	C	N	O	S	0	0	0
			1453	918	286	248	1			
56	CW	178	Total	C	N	O	S	0	0	0
			1453	918	286	248	1			

- Molecule 57 is a protein called 40S ribosomal protein S10-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
57	M	98	Total	C	N	O	S	0	0	0
			817	531	135	150	1			
57	CX	93	Total	C	N	O	S	0	0	0
			783	511	129	142	1			

- Molecule 58 is a protein called 40S ribosomal protein S11A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
58	N	144	Total	C	N	O	S	0	0	0
			1150	734	215	198	3			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
58	CY	141	Total	C	N	O	S	0	0	0
			1129	722	212	192	3			

- Molecule 59 is a protein called 40S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
59	O	116	Total	C	N	O	S	0	0	0
			885	550	158	172	5			
59	CZ	116	Total	C	N	O	S	0	0	0
			885	550	158	172	5			

- Molecule 60 is a protein called 40S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
60	P	150	Total	C	N	O	S	0	0	0
			1187	757	219	210	1			
60	DA	150	Total	C	N	O	S	0	0	0
			1187	757	219	210	1			

- Molecule 61 is a protein called 40S ribosomal protein S14-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
61	Q	127	Total	C	N	O	S	0	0	0
			942	579	186	174	3			
61	DB	127	Total	C	N	O	S	0	0	0
			942	579	186	174	3			

- Molecule 62 is a protein called 40S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
62	R	129	Total	C	N	O	S	0	0	0
			1018	649	185	177	7			
62	DC	118	Total	C	N	O	S	0	0	0
			935	598	169	162	6			

- Molecule 63 is a protein called 40S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
63	S	139	Total	C	N	O	S	0	0	0
			1085	697	197	190	1			
63	DD	140	Total	C	N	O	S	0	0	0
			1091	700	198	192	1			

- Molecule 64 is a protein called 40S ribosomal protein S17-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
64	T	123	Total	C	N	O	S	0	0	0
			991	625	182	183	1			
64	DE	125	Total	C	N	O	S	0	0	0
			1002	631	184	186	1			

- Molecule 65 is a protein called 40S ribosomal protein S18-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
65	U	144	Total	C	N	O	S	0	0	0
			1187	744	233	207	3			
65	DF	142	Total	C	N	O	S	0	0	0
			1169	733	228	205	3			

- Molecule 66 is a protein called 40S ribosomal protein S19-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
66	V	139	Total	C	N	O	S	0	0	0
			1089	682	208	198	1			
66	DG	141	Total	C	N	O	S	0	0	0
			1100	689	210	200	1			

- Molecule 67 is a protein called Ribosomal protein S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
67	W	102	Total	C	N	O	S	0	0	0
			808	509	150	147	2			
67	DH	100	Total	C	N	O	S	0	0	0
			790	499	146	143	2			

- Molecule 68 is a protein called 40S ribosomal protein S21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
68	X	87	Total	C	N	O	S	0	0	0
			676	415	126	133	2			
68	DI	87	Total	C	N	O	S	0	0	0
			676	415	126	133	2			

- Molecule 69 is a protein called 40S ribosomal protein S22-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
69	Y	129	Total	C	N	O	S	0	0	0
			1032	655	191	183	3			
69	DJ	129	Total	C	N	O	S	0	0	0
			1032	655	191	183	3			

- Molecule 70 is a protein called Ribosomal protein S23 (S12).

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
70	Z	143	Total	C	N	O	S	0	0	0
			1110	701	219	188	2			
70	DK	143	Total	C	N	O	S	0	0	0
			1110	701	219	188	2			

- Molecule 71 is a protein called 40S ribosomal protein S24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
71	a	134	Total	C	N	O		0	0	0
			1086	677	218	191				
71	DL	132	Total	C	N	O		0	0	0
			1072	670	216	186				

- Molecule 72 is a protein called 40S ribosomal protein S25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
72	b	71	Total	C	N	O		0	0	0
			570	365	102	103				
72	DM	72	Total	C	N	O		0	0	0
			578	369	103	106				

- Molecule 73 is a protein called 40S ribosomal protein S26.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
73	c	98	Total	C	N	O	S	0	0	0
			779	482	163	128	6			
73	DN	97	Total	C	N	O	S	0	0	0
			770	477	161	126	6			

- Molecule 74 is a protein called 40S ribosomal protein S27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
74	d	81	Total	C	N	O	S	0	0	0
			614	383	110	114	7			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
74	DO	81	Total	C	N	O	S	0	0	0
			614	383	110	114	7			

- Molecule 75 is a protein called 40S ribosomal protein S28-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
75	e	62	Total	C	N	O	S	0	0	0
			487	299	98	88	2			
75	DP	62	Total	C	N	O	S	0	0	0
			487	299	98	88	2			

- Molecule 76 is a protein called 40S ribosomal protein S29A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
76	f	55	Total	C	N	O	S	0	0	0
			454	281	94	75	4			
76	DQ	55	Total	C	N	O	S	0	0	0
			454	281	94	75	4			

- Molecule 77 is a protein called 40S ribosomal protein S30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
77	g	60	Total	C	N	O	S	0	0	0
			474	297	96	79	2			
77	DR	56	Total	C	N	O	S	0	0	0
			444	278	89	75	2			

- Molecule 78 is a protein called Ubiquitin-40S ribosomal protein S31 fusion protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
78	h	70	Total	C	N	O	S	0	0	0
			574	362	113	93	6			
78	DS	70	Total	C	N	O	S	0	0	0
			574	362	113	93	6			

- Molecule 79 is a protein called Guanine nucleotide-binding protein subunit beta-like protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
79	AR	310	Total	C	N	O	S	0	0	0
			2389	1514	410	460	5			
79	DT	311	Total	C	N	O	S	0	0	0
			2398	1519	412	462	5			

- Molecule 80 is a protein called Ribosomal protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
80	11	217	Total	C	N	O	S	0	0	0
			1711	1096	294	312	9			

- Molecule 81 is a protein called 60S ribosomal protein L12-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
81	12	14	Total	C	N	O	0	0	0
			97	60	16	21			

- Molecule 82 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
82	1	684	Total	Mg	0	0
			684	684		
82	3	4	Total	Mg	0	0
			4	4		
82	4	4	Total	Mg	0	0
			4	4		
82	j	1	Total	Mg	0	0
			1	1		
82	k	2	Total	Mg	0	0
			2	2		
82	o	3	Total	Mg	0	0
			3	3		
82	v	1	Total	Mg	0	0
			1	1		
82	w	1	Total	Mg	0	0
			1	1		
82	x	1	Total	Mg	0	0
			1	1		
82	y	1	Total	Mg	0	0
			1	1		
82	z	1	Total	Mg	0	0
			1	1		
82	2	1	Total	Mg	0	0
			1	1		
82	6	1	Total	Mg	0	0
			1	1		
82	9	1	Total	Mg	0	0
			1	1		
82	AA	1	Total	Mg	0	0
			1	1		

Continued on next page...

Continued from previous page...

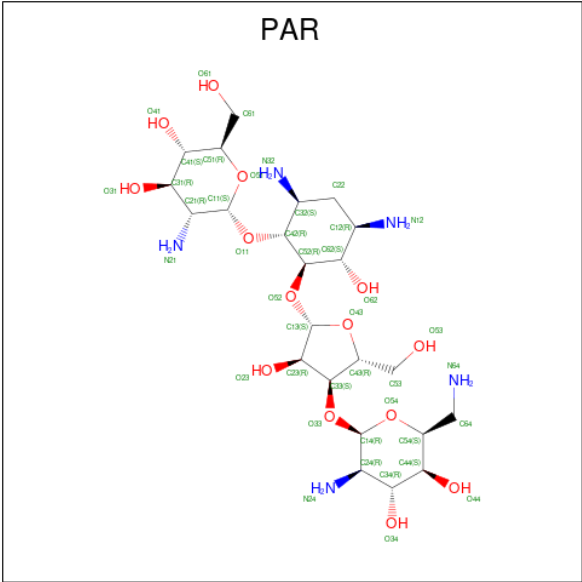
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
82	AB	2	Total 2	Mg 2	0	0
82	AD	1	Total 1	Mg 1	0	0
82	AF	1	Total 1	Mg 1	0	0
82	AH	1	Total 1	Mg 1	0	0
82	AI	1	Total 1	Mg 1	0	0
82	AK	2	Total 2	Mg 2	0	0
82	AN	1	Total 1	Mg 1	0	0
82	AP	2	Total 2	Mg 2	0	0
82	i	1	Total 1	Mg 1	0	0
82	B	69	Total 69	Mg 69	0	0
82	E	1	Total 1	Mg 1	0	0
82	F	1	Total 1	Mg 1	0	0
82	L	1	Total 1	Mg 1	0	0
82	Q	1	Total 1	Mg 1	0	0
82	R	1	Total 1	Mg 1	0	0
82	U	1	Total 1	Mg 1	0	0
82	Y	3	Total 3	Mg 3	0	0
82	Z	1	Total 1	Mg 1	0	0
82	c	1	Total 1	Mg 1	0	0
82	AR	1	Total 1	Mg 1	0	0
82	AS	542	Total 542	Mg 542	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
82	AT	3	Total 3	Mg 3	0	0
82	AU	2	Total 2	Mg 2	0	0
82	AW	1	Total 1	Mg 1	0	0
82	AX	1	Total 1	Mg 1	0	0
82	AZ	1	Total 1	Mg 1	0	0
82	BB	3	Total 3	Mg 3	0	0
82	BE	1	Total 1	Mg 1	0	0
82	BJ	1	Total 1	Mg 1	0	0
82	BK	1	Total 1	Mg 1	0	0
82	BO	1	Total 1	Mg 1	0	0
82	BP	1	Total 1	Mg 1	0	0
82	BQ	2	Total 2	Mg 2	0	0
82	BZ	1	Total 1	Mg 1	0	0
82	CB	1	Total 1	Mg 1	0	0
82	CE	1	Total 1	Mg 1	0	0
82	CH	1	Total 1	Mg 1	0	0
82	CM	25	Total 25	Mg 25	0	0
82	DK	1	Total 1	Mg 1	0	0

- Molecule 83 is PAROMOMYCIN (CCD ID: PAR) (formula: $C_{23}H_{45}N_5O_{14}$) (labeled as "Ligand of Interest" by depositor).



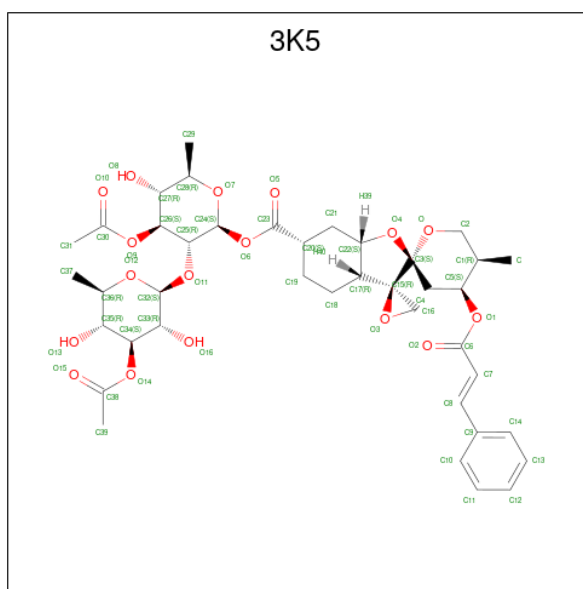
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
83	1	1	Total	C	N	O	0	0
			42	23	5	14		
83	1	1	Total	C	N	O	0	0
			42	23	5	14		
83	1	1	Total	C	N	O	0	0
			42	23	5	14		
83	1	1	Total	C	N	O	0	0
			42	23	5	14		
83	1	1	Total	C	N	O	0	0
			42	23	5	14		
83	1	1	Total	C	N	O	0	0
			42	23	5	14		
83	1	1	Total	C	N	O	0	0
			42	23	5	14		
83	1	1	Total	C	N	O	0	0
			42	23	5	14		
83	1	1	Total	C	N	O	0	0
			42	23	5	14		
83	4	1	Total	C	N	O	0	0
			42	23	5	14		
83	B	1	Total	C	N	O	0	0
			42	23	5	14		
83	B	1	Total	C	N	O	0	0
			42	23	5	14		
83	B	1	Total	C	N	O	0	0
			42	23	5	14		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
83	AS	1	Total	C	N	O	0	0
			42	23	5	14		
83	AS	1	Total	C	N	O	0	0
			42	23	5	14		
83	AS	1	Total	C	N	O	0	0
			42	23	5	14		
83	AS	1	Total	C	N	O	0	0
			42	23	5	14		
83	AS	1	Total	C	N	O	0	0
			42	23	5	14		
83	CM	1	Total	C	N	O	0	0
			42	23	5	14		
83	CM	1	Total	C	N	O	0	0
			42	23	5	14		

- Molecule 84 is 3-O-acetyl-2-O-(3-O-acetyl-6-deoxy-beta-D-glucopyranosyl)-6-deoxy-1-O-{[(2R,2'S,3a'R,4'S,5''R,6'S,7a'S)-5''-methyl-4''-{[(2E)-3-phenylprop-2-enoyl]oxy}decahydrodispiro[oxirane-2,3'-[1]benzofuran-2',2''-pyran]-6'-yl]carbonyl}-beta-D-glucopyranose (CCD ID: 3K5) (formula: C₄₀H₅₂O₁₇).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
84	1	1	Total	C	O	0	0
			57	40	17		
84	AS	1	Total	C	O	0	0
			57	40	17		

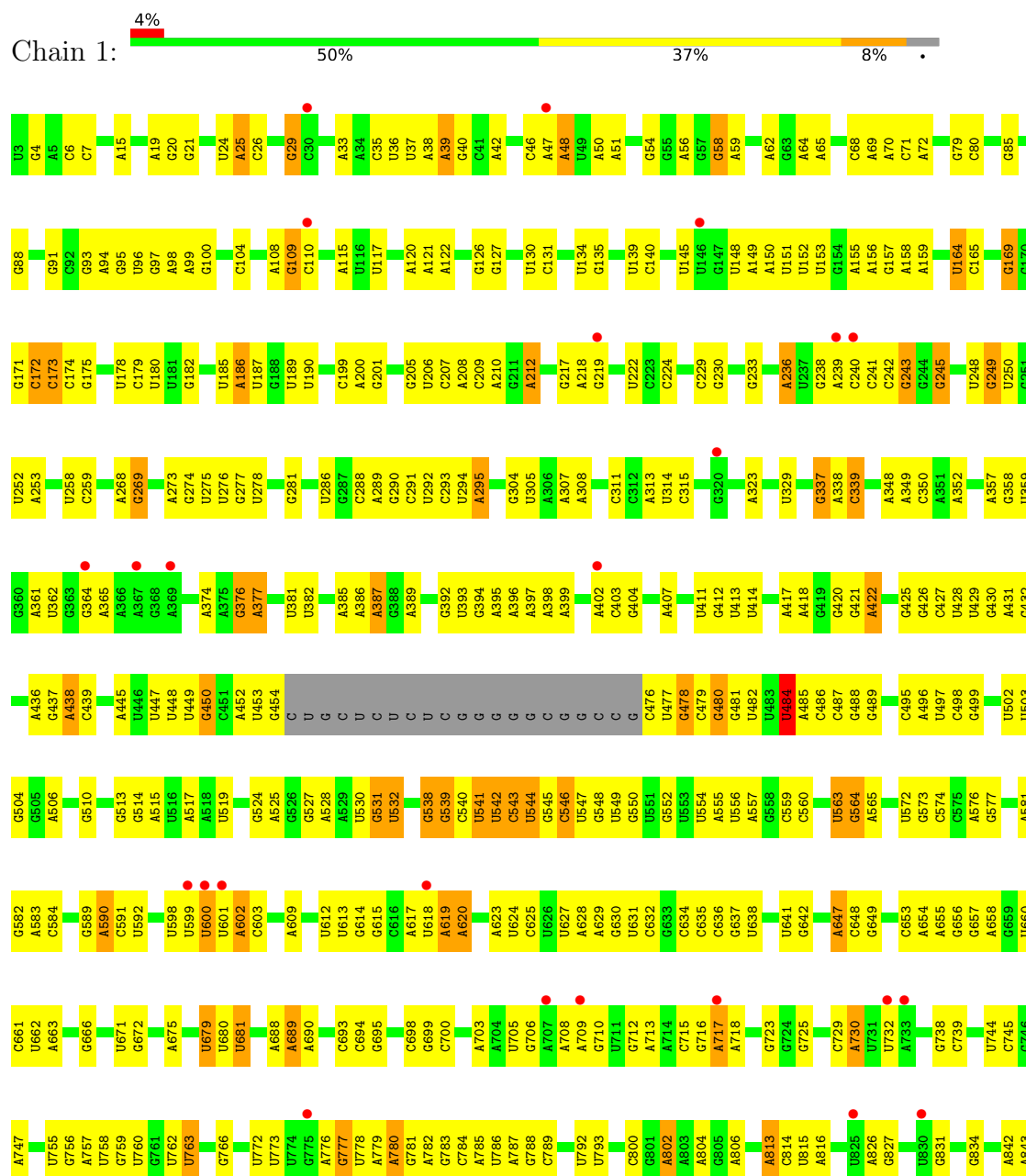
- Molecule 85 is ZINC ION (CCD ID: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
85	AH	1	Total 1	Zn 1	0	0
85	AK	1	Total 1	Zn 1	0	0
85	AN	1	Total 1	Zn 1	0	0
85	AP	1	Total 1	Zn 1	0	0
85	AQ	1	Total 1	Zn 1	0	0
85	c	1	Total 1	Zn 1	0	0
85	f	1	Total 1	Zn 1	0	0
85	h	1	Total 1	Zn 1	0	0
85	CB	1	Total 1	Zn 1	0	0
85	CE	1	Total 1	Zn 1	0	0
85	CH	1	Total 1	Zn 1	0	0
85	CJ	1	Total 1	Zn 1	0	0
85	CK	1	Total 1	Zn 1	0	0
85	DN	1	Total 1	Zn 1	0	0
85	DQ	1	Total 1	Zn 1	0	0
85	DS	1	Total 1	Zn 1	0	0

3 Residue-property plots

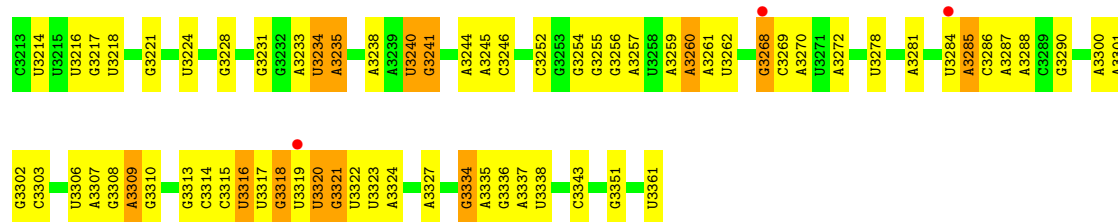
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. 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: 25S (gene name XR_002086444.1)

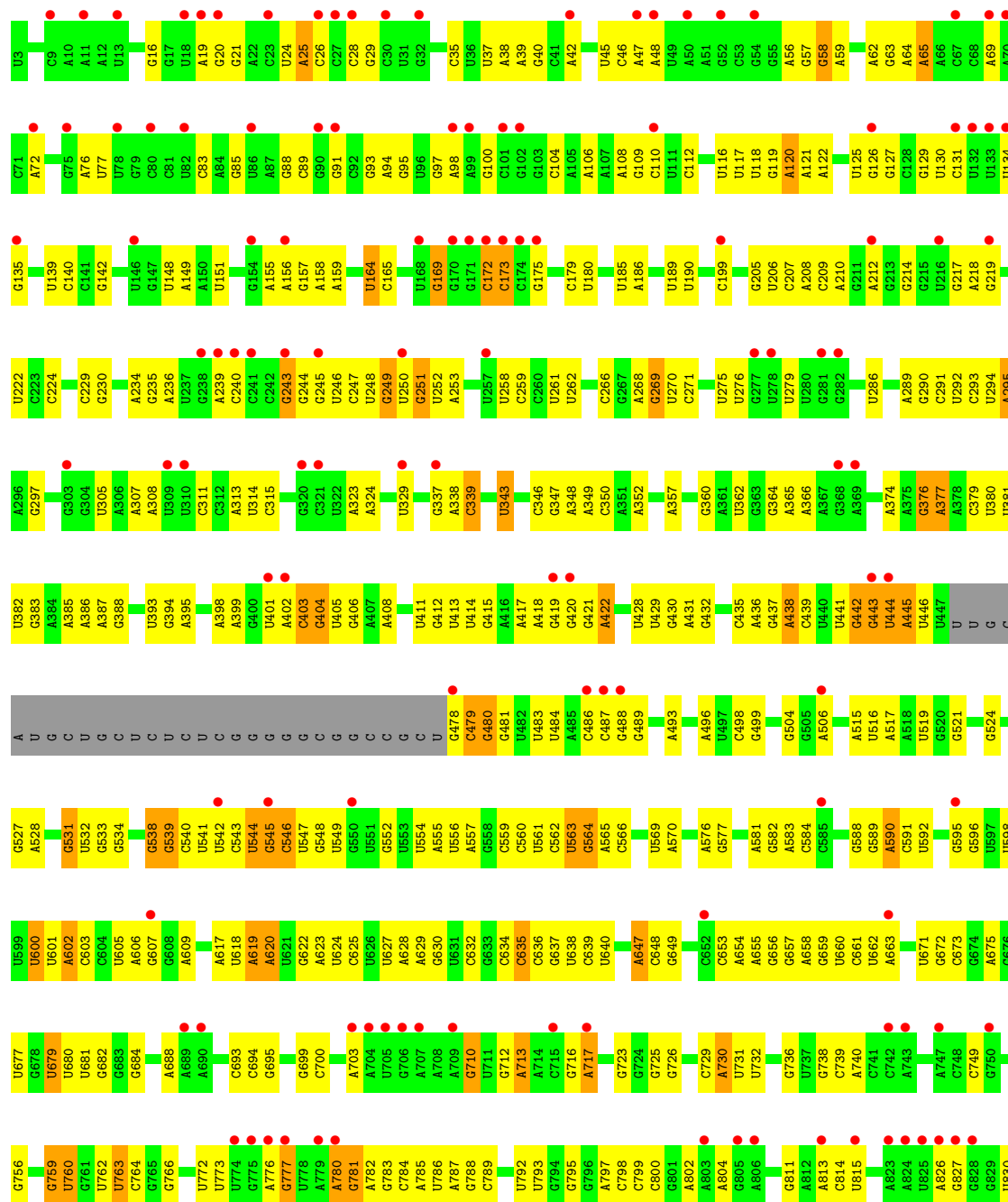


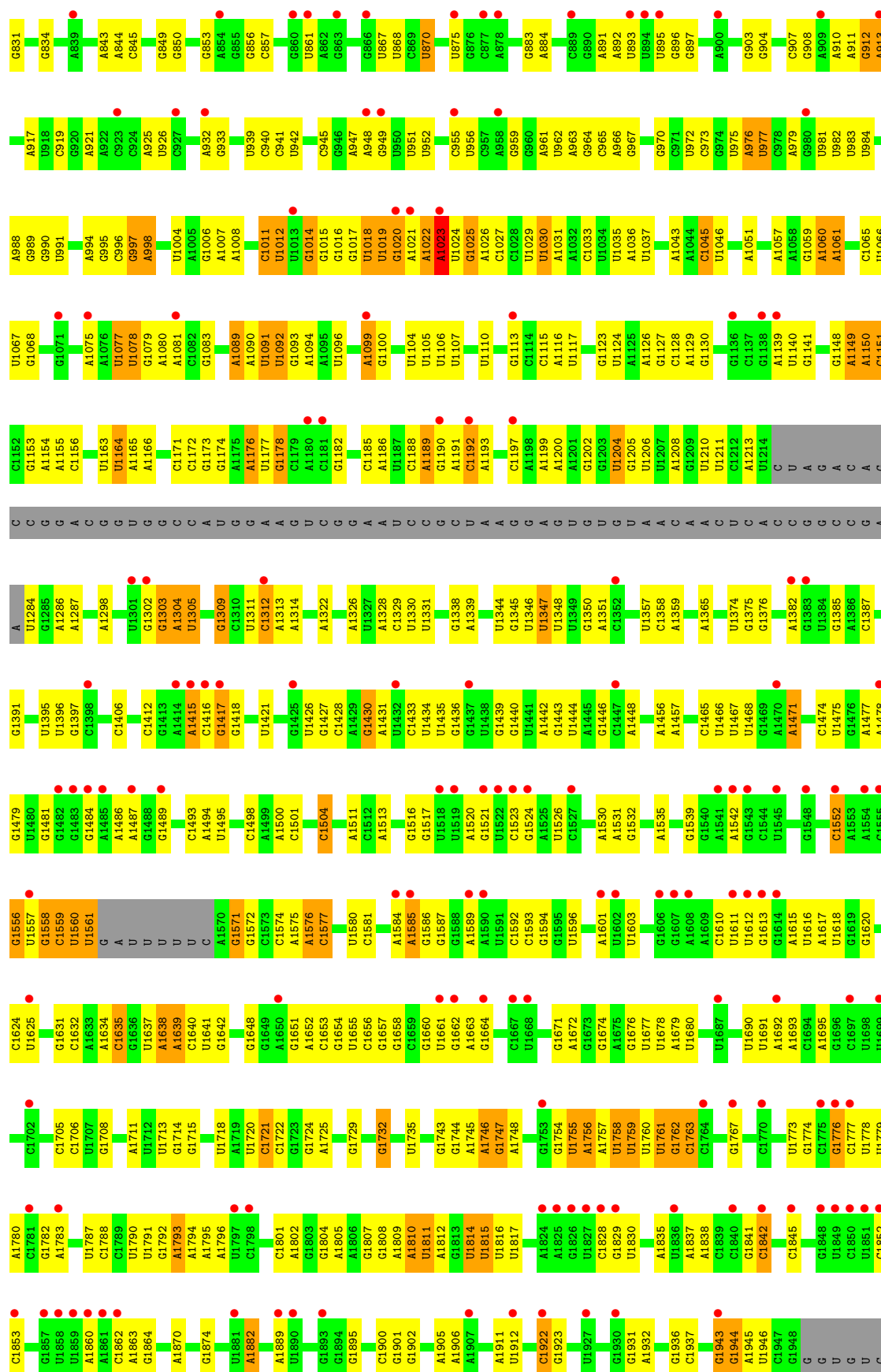
C	C1937	C1828	A1748	G1642	U1566	A1477	G1277	A1208	G1113	A1021	C940	A844
A	U1938	G1829	G1648	G1567	A1382	A1478	G1278	A1209	G1114	A1022	C941	C945
G	A1830	U1568	G1754	U1568	G1383	G1479	G1279	G1209	C1115	C1023	C942	C946
C	G1943	A1831	U1755	G1649	A1480	U1480	G1280	C1215	C1116	G1025	C943	G849
G	G1832	A1832	A1756	A1650	G1481	G1481	G1281	G1216	C1117	G1026	C944	G850
G	A1945	U1833	A1757	G1651	G1571	G1482	A1282	A1282	U1117	A1028	C945	U851
A	U1946	A1834	U1758	A1652	G1483	G1483	A1283	G1218	C1027	C1027	A948	G852
C	A1835	G1653	U1759	G1653	C1573	G1484	A1286	C1223	U1121	C1028	G949	G853
U	A1836	U1760	G1654	C1574	A1485	A1485	A1287	C1224	G1122	U1029	U950	
U	G	A1837	U1761	U1655	A1575	G1489		G1225	G1123	U1030	U951	G856
C	A1838	G1662	G1762	G1656	A1576	G1489		G1226	A1125	C1033	U952	C957
U	G	G1657	G1763	G1657	C1577	C1577	G1291	A1227	A1126	C1034	C955	
G	U	G1658		G1658	C1578	C1493		C1228	G1127	U1035	C956	U861
G	C	C1659	G1774	C1659	A1494	A1494	A1298	G1229	U1036	A1036	C957	U867
U	C	G1775	G1775	U1580	U1580			G1230	G1130	U1037	A958	
G	U	G1845	G1776	G1661	U1661	G1416	G1302	U1231			G959	U870
G	U	G1777		G1662	G1662	G1417	G1303	U1232	U1140	A1042		
A	G	U1778		A1663	A1663	U1421	G1304	G1233	G1148	A1043	U962	U875
G	C	U1779	A1780	G1664	A1586	C1504	U1305	C1234	A1149	C1045	A963	A879
G	C	G1781	C1781	G1669	G1587		G1309	A1235	A1150	C965		
U	C	U1782	G1782	G1670	G1588	G1427		A1236	C1151	A1057	C982	
C	U	A1860	G1671	G1671	A1589	C1428	C1312	G1239	G1152	A1058	G970	
C	G	A1861	A1783	A1672	A1590	A1429	A1313	A1240	G1153	C971		
C	U	A1862	G1784	G1785	U1591	U1519	A1314	A1241	A1154	U1060	U972	A894
U	U	A1863	G1786	G1678	C1592	U1520	A1314	G1242	A1155	A1061	C973	A891
G	U	G1864	U1787	A1679	C1593	G1432	U1318	G1243	C1156	G1062	G974	A892
A	A	G1874	G	G1796	G1594	U1522	U1434	C1244	U1063	U1063	U975	
A	A	U1881	U1790	U1685	A1598	G1524	A1322	A1247	U1163		A976	G896
A	C	A1882	G1791	A1599	A1525	G1436	C1323	A1248	U1164	G1068	U977	G897
C	C	A1883	G1792	U1690	A1600	U1526	A1324	U1249	A1165	U1069		
C	C	A1793	G1691	A1601	C1527	G1439	U1325	A1255	A1166	U1070	U981	G903
C	G	G1888	A1692	U1602	C1528	G1440	A1326	C1250			U982	G904
C	C	A1895	A1693	U1603	U1529	U1441		C1251	C1172	U1074	U983	
U	C	G		G1603	A1530	A1442	U1330	C1252	G1173		U984	C907
U	U	A1892	U1701	U1611	A1531	G1443	U1331	C1253	G1174	U1077		
G	G	G	C1705	U1612	G1532	G1446	G1338	U1254	A1175	U1078	A988	A910
U	U	G1895	C1706	G1613	G15							

A3137	U2934	U2855	G2749	G2857	U2471	U2406	A2335	G2239	G2138	G
U3138	U2937	C2856	G2750	A2658	A2472	G2407	A2336	A2240	G2139	G
U3139	U2941	A2859	G2756	U2659	C2473	C2409	A2339	C2241	A2145	C
G3142	A2941	U2860	G2766	A2661	U2475	G2413	A2341	C2244	A2146	C
G3143	A2942	U2861	U2767	A2663	U2477	U2414	A2344	C2245	G2147	G
A3144	A2943	C2866	G2768	C2664	A2478	G2415	A2345	G2250	U2148	U2067
C3145	U2946	G2867	G2768	C2665	A2479	G2416	A2346	G2251	G2149	U2068
U3146	U2947	A2868	A2771	A2666	A2480	A2418	A2347	U2252	G2155	U2069
G3147	G2947	U2869	G2772	A2667	A2481	A2419	A2348	A2253	G2156	A2070
A3148	A2954	G2870	A2773	A2668	U2482	G2420	G2349	G2254	A2158	A2071
G3149	A2955	U2871	A2774	A2669	U2483	A2421	A2350	G2255	G2159	A2077
A3150	C2956	A2872	A2775	G2670	U2484	C2422	A2351	A2257	G2163	A2078
C3151	C2957	G2873	C2782	A2676	A2489	G2425	A2352	A2258	U2163	C2079
G3152	U2958	A2874	A2783	A2677	U2492	A2426	A2353	A2259	G2171	U2080
A3153	A2959	U2875	C2784	G2678	A2493	A2427	G2354	U2260	U2172	U2081
A3154	U2876	A2785	A2785	U2679	A2493	G2428	G2355	G2261	G2176	A2082
A3157	U2877	G2886	G2786	C2680	A2498	G2429	G2360	U2264	A2176	G2083
C3158	G2887	U2887	G2787	C2681	U2499	G2430	C2361	A2269	G2177	A2085
A3159	U2888	C2682	A2788	C2682	G2500	G2432	A2362	U2270	C2182	U2086
G3160	U2888	G2686	U2790	G2686	A2501	U2433	G2363	U2276	U2183	G2088
U3161	G2894	U2895	G2796	U2691	A2502	A2434	U2366	G2276	G2184	G2089
U	U2896	C2897	C2797	U2692	G2503	G2435	C2367	G2285	A2185	U2090
U	U2897	U2898	G2806	C2698	G2504	A2436	C2368	G2286	A2186	A2091
A3165	A2972	A2898	U2807	C2699	G2505	U2437	G2369	A2287	U2187	C2092
A3166	C2974	C2899	C2808	G2700	G2511	A2440	C2370	U2288	G2188	G2093
G3167	G2975	U2900	A2809	U2701	G2512	A2441	G2371	G2289	A2191	G2094
C3171	U2978	G2901	A2816	G2702	G2513	G2442	G2372	A2290	A2192	A2095
U3172	A2983	A2902	U2817	C2709	G2514	G2443	A2375	A2291	A2196	C2096
C3176	A2984	C2903	U2818	U2710	G2515	G2444	A2380	U2292	A2197	A2097
C3177	U2985	G2904	U2819	C2713	G2516	G2445	A2381	G2293	G2200	A2098
A3178	G2986	U2907	U2820	C2717	G2517	G2446	A2382	U2296	A2200	G2100
U3179	A2987	A2908	U2821	C2718	G2518	A2447	A2383	U2297	A2201	U2107
U3180	U2988	G2909	U2822	U2719	G2519	G2448	C2384	A2305	A2202	G2108
C3182	A2989	G2910	U2823	G2720	A2520	U2449	A2385	U2308	U2203	A2109
A3183	U2992	G2911	U2824	U2721	A2521	U2450	U2386	C2309	U2204	C2110
G3184	U2993	A2912	U2825	U2722	A2522	G2451	G2387	A2310	C2205	U2111
G3185	A2994	G2913	U2826	G2723	A2523	G2452	U2388	C2311	A2206	C2114
A3190	U2995	G2914	U2827	U2724	A2524	G2453	U2389	C2312	A2207	G2115
A3191	A3005	G2915	U2828	G2725	U2525	C2454	A2390	U2313	A2210	U2116
A3192	U3010	U2916	A2836	U2726	U2526	G2455	A2391	U2314	A2211	A2117
C3193	U3011	G2917	U2837	U2727	U2527	G2456	U2392	U2315	U2218	U2118
G3194	U3012	U2918	U2838	A2734	U2528	G2457	C2393	C2316	A2220	U2119
A3195	U3013	G2919	U2839	U2735	U2529	G2458	U2394	C2317	A2221	A2121
G3196	U3014	U2920	U2840	C2736	U2530	U2459	U2395	U2322	A2222	G2122
U3197	U3015	G2921	U2841	U2737	U2531	G2460	A2396	G2227	A2233	A2125
C3198	U3016	U2922	U2842	U2738	U2532	G2461	A2397	A2234	A2235	A2130
G3199	A3021	G2923	A2843	U2739	U2533	A2464	C2398	U2323	G2236	U2131
A3200	U3022	U2924	A2844	U2740	U2534	U2465	A2401	C2324	A2237	A2136
U3201	U3023	U2925	U2845	U2741	U2535	U2466	A2402	A2325	A2238	U2137
G3202	G3024	U2926	U2846	U2742	U2536	C2467	A2403	A2326	A2239	
A3203	U3025	A2927	U2847	U2743	U2537	A2468	A2404	A2327	A2240	
A3204	U3026	U2928	U2848	C2744	U2538	A2469	U2405	A2328	A2241	
U3205	U3027	U2929	U2849	C2745	U2539	A2470		A2329	A2242	
A3206	U3028	C2932	U2850	U2746	U2540			A2330	A2243	
A3207	U3029	U2933	U2851	U2747	U2541			A2331	A2244	
A3208	U3030	G2934	U2852	U2748	U2542			A2332	A2245	
A3209	U3031	U2935	U2853	U2749	U2543			A2333	A2246	
A3210	U3032	U2936	U2854	U2750	U2544			A2334	A2247	
G3211	U3033	U2937	U2855	U2751	U2545			A2335	A2248	
A3212	U3034	U2938	U2856	U2752	U2546			A2336	A2249	
A3213	U3035	U2939	U2857	U2753	U2547			A2337	A2250	
A3214	U3036	U2940	U2858	U2754	U2548			A2338	A2251	
A3215	U3037	U2941	U2859	U2755	U2549			A2339	A2252	
A3216	U3038	U2942	U2860	U2756	U2550			A2340	A2253	
A3217	U3039	U2943	U2861	U2757	U2551			A2341	A2254	
A3218	U3040	U2944	U2862	U2758	U2552			A2342	A2255	
A3219	U3041	U2945	U2863	U2759	U2553			A2343	A2256	
A3220	U3042	U2946	U2864	U2760	U2554			A2344	A2257	
A3221	U3043	U2947	U2865	U2761	U2555			A2345	A2258	
A3222	U3044	U2948	U2866	U2762	U2556			A2346	A2259	
A3223	U3045	U2949	U2867	U2763	U2557			A2347	A2260	
A3224	U3046	U2950	U2868	U2764	U2558			A2348	A2261	
A3225	U3047	U2951	U2869	U2765	U2559			A2349	A2262	
A3226	U3048	U2952	U2870	U2766	U2560			A2350	A2263	
A3227	U3049	U2953	U2871	U2767	U2561			A2351	A2264	
A3228	U3050	U2954	U2872	U2768	U2562			A2352	A2265	
A3229	U3051	U2955	U2873	U2769	U2563			A2353	A2266	
A3230	U3052	U2956	U2874	U2770	U2564			A2354	A2267	
A3231	U3053	U2957	U2875	U2771	U2565			A2355	A2268	
A3232	U3054	U2958	U2876	U2772	U2566			A2356	A2269	
A3233	U3055	U2959	U2877	U2773	U2567			A2357	A2270	
A3234	U3056	U2960	U2878	U2774	U2568			A2358	A2271	
A3235	U3057	U2961	U2879	U2775	U2569			A2359	A2272	
A3236	U3058	U2962	U2880	U2776	U2570			A2360	A2273	
A3237	U3059	U2963	U2881	U2777	U2571			A2361	A2274	
A3238	U3060	U2964	U2882	U2778	U2572			A2362	A2275	
A3239	U3061	U2965	U2883	U2779	U2573			A2363	A2276	
A3240	U3062	U2966	U2884	U2780	U2574			A2364	A2277	
A3241	U3063	U2967	U2885	U2781	U2575			A2365	A2278	
A3242	U3064	U2968	U2886	U2782	U2576			A2366	A2279	
A3243	U3065	U2969	U2887	U2783	U2577			A2367	A2280	
A3244	U3066	U2970	U2888	U2784	U2578			A2368	A2281	
A3245	U3067	U2971	U2889	U2785	U2579			A2369	A2282	
A3246	U3068	U2972	U2890	U2786	U2580			A2370	A2283	
A3247	U3069	U2973	U2891	U2787	U2581			A2371	A2284	
A3248	U3070	U2974	U2892	U2788	U2582			A2372	A2285	
A3249	U3071	U2975	U2893	U2789	U2583			A2373	A2286	
A3250	U3072	U2976	U2894	U2790	U2584			A2374	A2287	
A3251	U3073	U2977	U2895	U2791	U2585			A2375	A2288	
A3252	U3074	U2978	U2896	U2792	U2586			A2376	A2289	
A3253	U3075	U2979	U2897	U2793	U2587			A2377	A2290	
A3254	U3076	U2980	U2898	U2794	U2588			A2378	A2291	
A3255	U3077	U2981	U2899	U2795	U2589			A2379	A2292	
A3256	U3078	U2982	U2900	U2796	U2590			A2380	A2293	
A3257	U3079	U2983	U2901	U2797	U2591			A2381	A2294	
A3258	U3080	U2984	U2902	U2798	U2592			A2382	A2295	
A3259	U3081	U2985	U2903	U2799	U2593			A2383	A2296	
A3260	U3082	U2986	U2904	U2800	U2594			A2384	A2297	
A3261	U3083	U2987	U2905	U2801	U2595			A2385	A2298	
A3262	U3084	U2988	U2906	U2802	U2596			A2386	A2299	
A3263	U3085	U2989	U2907	U2803	U2597			A2387	A2300	
A3264	U3086	U2990	U2908	U2804	U2598			A2388	A2301	
A3265	U3087	U2991	U2909	U2805	U2599			A2389	A2302	
A3266	U3088	U2992	U2910	U2806	U2600			A2390	A2303	
A3267	U3089	U2993	U2911	U2807	U2601			A2391	A2304	
A3268	U3090	U2994	U2912	U2808	U2602			A2392	A2305	
A3269	U3091	U2995	U2913	U2809	U2603			A2393	A2306	
A3270	U3092	U2996	U2914	U2810	U2604			A2394	A2307	
A3271	U3093	U2997	U2915	U2811	U2605			A2395	A2308	
A3272	U3094	U2998	U2916	U2812	U2606			A2396	A2309	
A3273	U3095	U2999	U2917	U2813	U2607			A2397	A2310	
A3274	U3096	U3000	U2918	U2814	U2608			A2398	A2311	

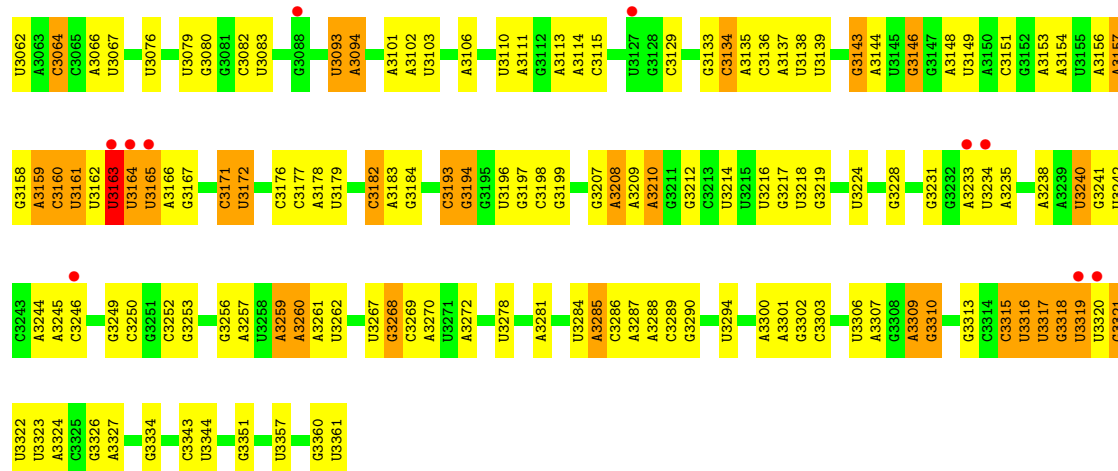


● Molecule 1: 25S (gene name XR_002086444.1)

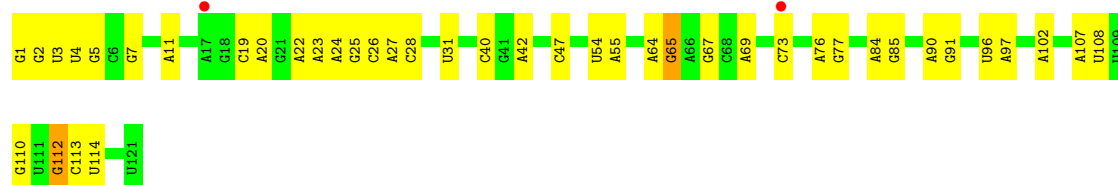




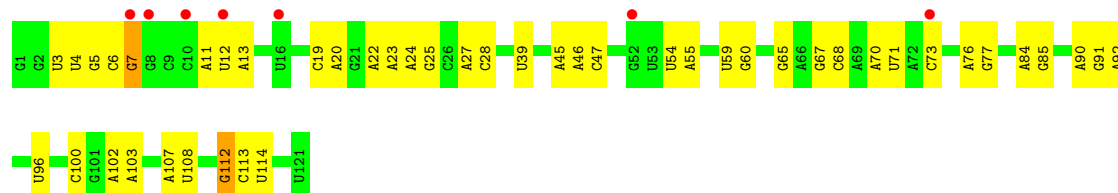




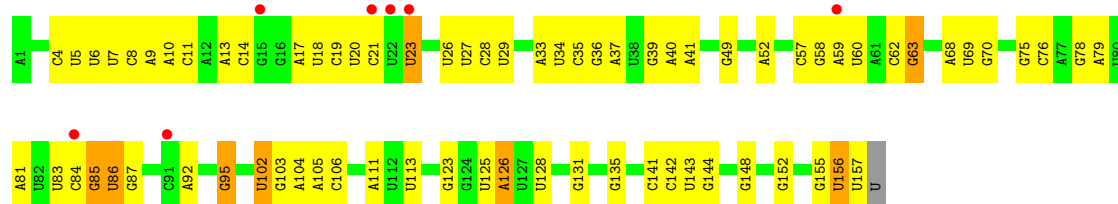
• Molecule 2: 5S



• Molecule 2: 5S

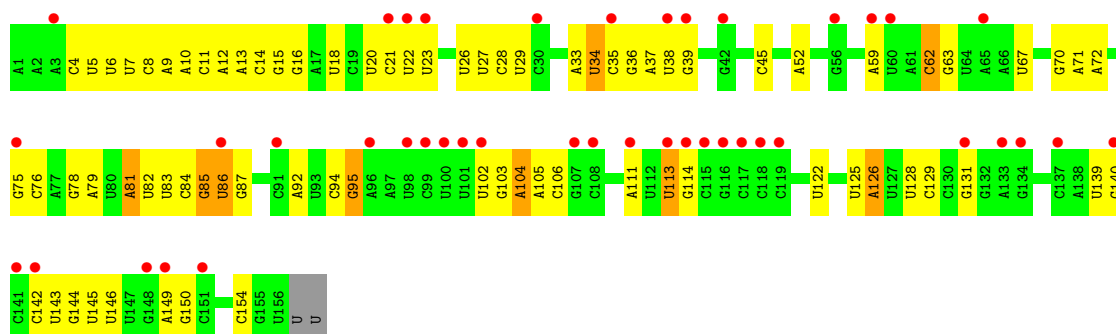


• Molecule 3: 5.8S

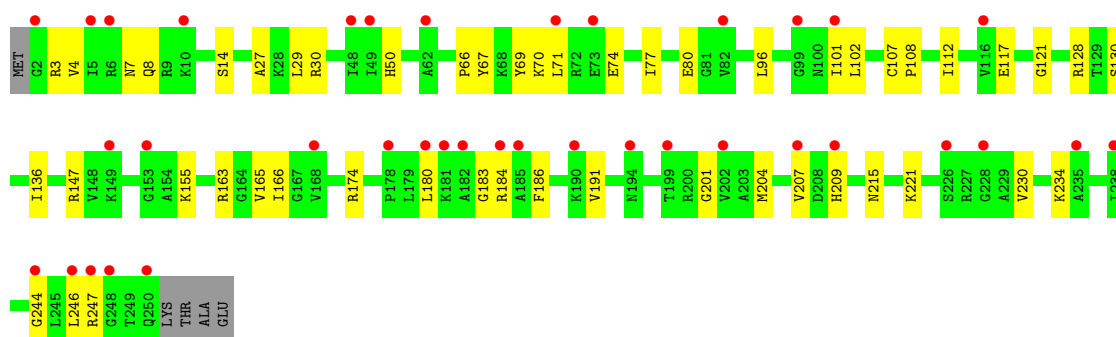
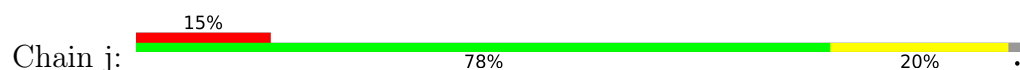


• Molecule 3: 5.8S

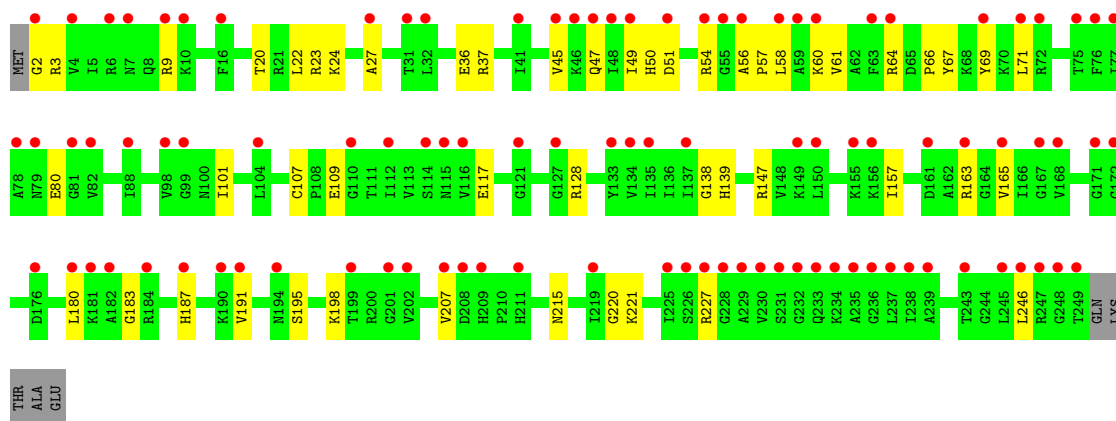
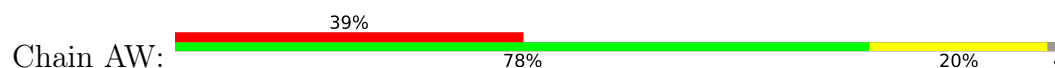




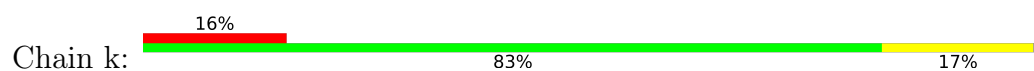
• Molecule 4: 60S ribosomal protein L2-B

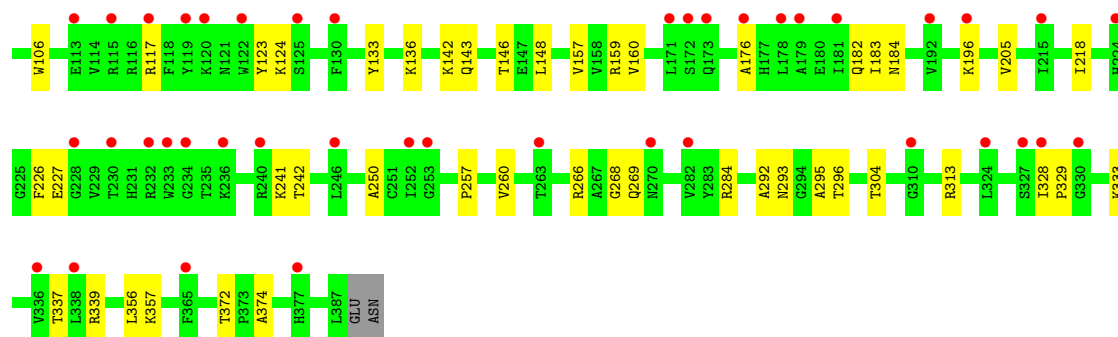


• Molecule 4: 60S ribosomal protein L2-B

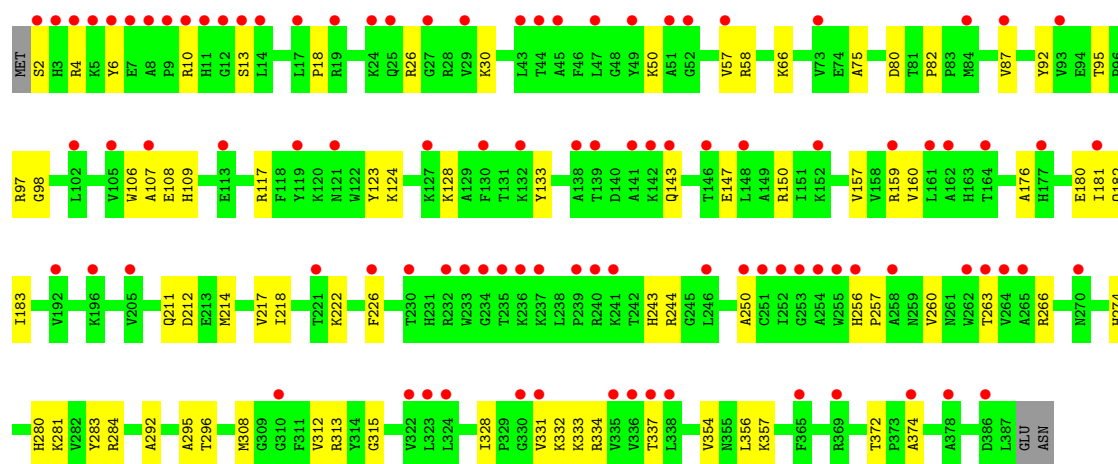
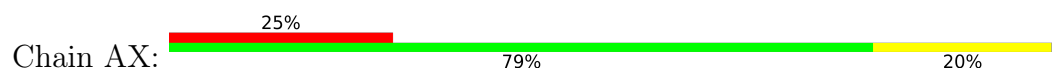


• Molecule 5: 60S ribosomal protein L3

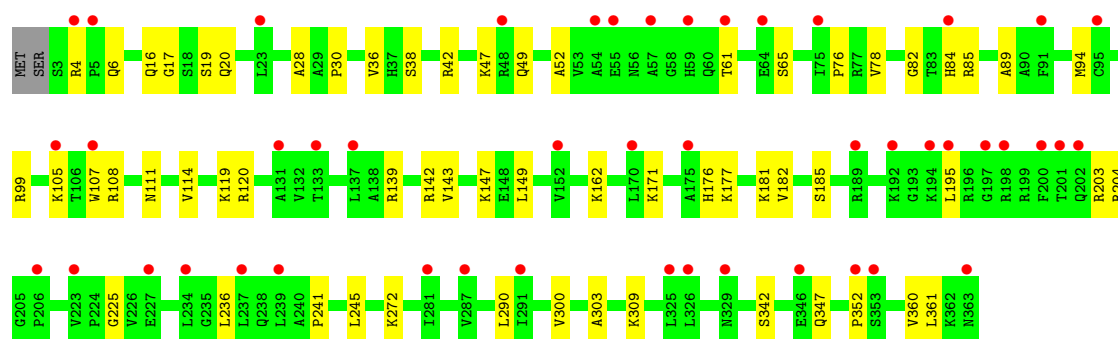
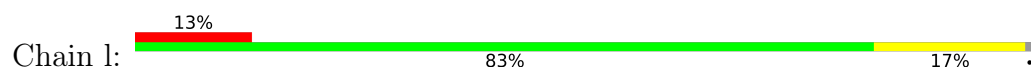




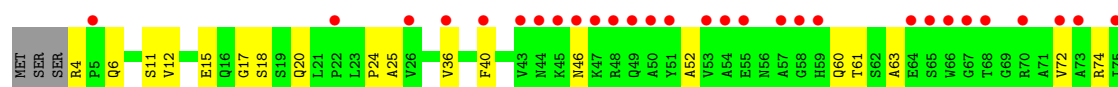
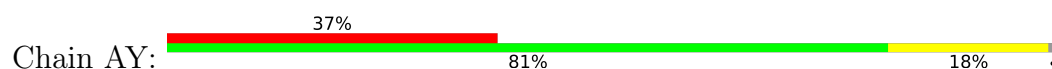
• Molecule 5: 60S ribosomal protein L3

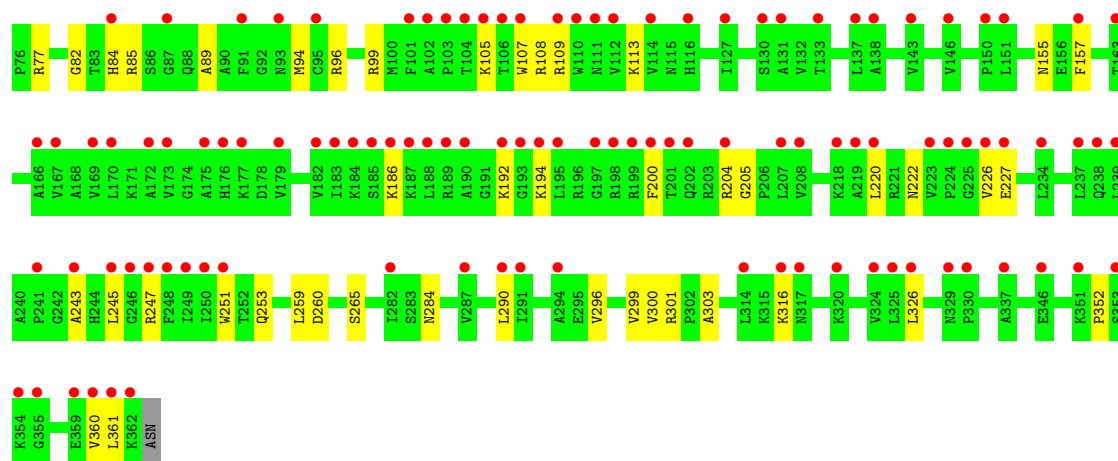


• Molecule 6: 60S ribosomal protein L4-B

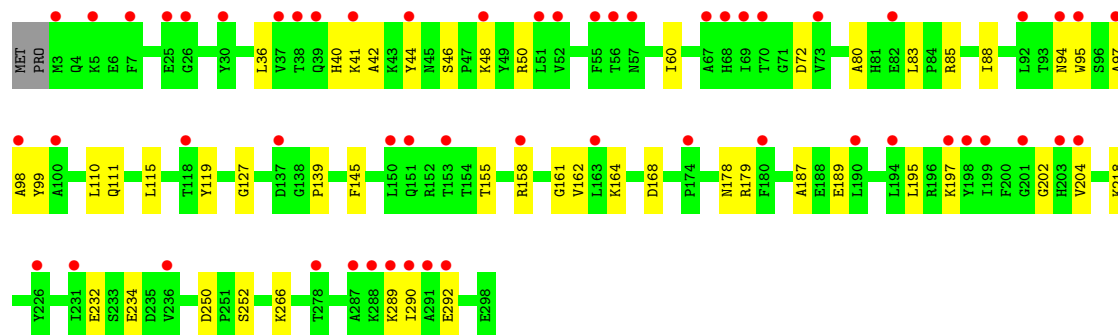
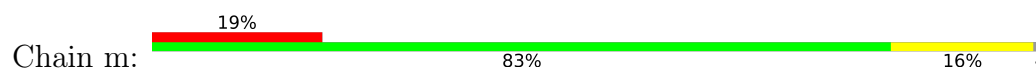


• Molecule 6: 60S ribosomal protein L4-B

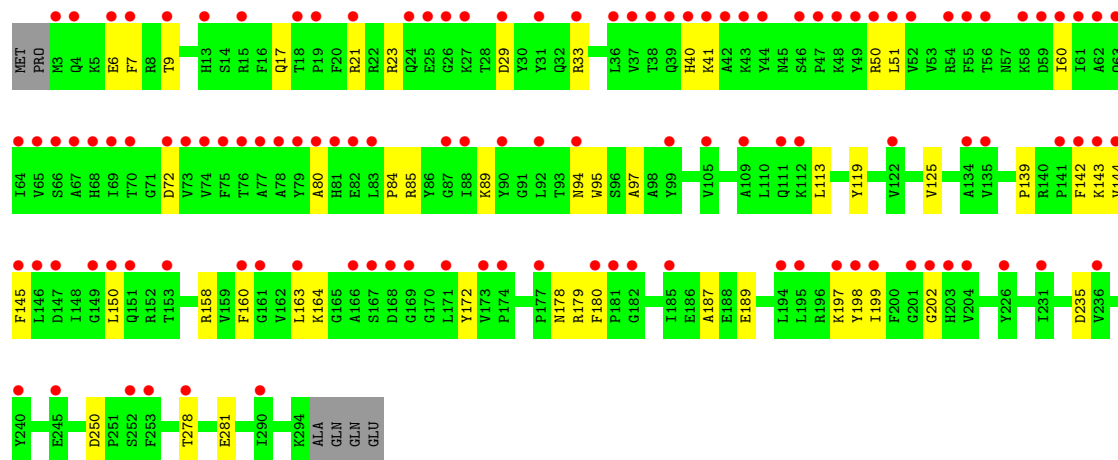
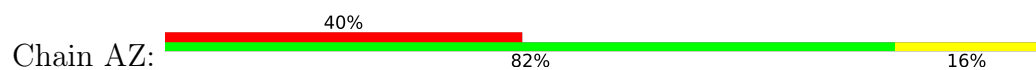




• Molecule 7: Uncharacterized protein CaJ7.0206

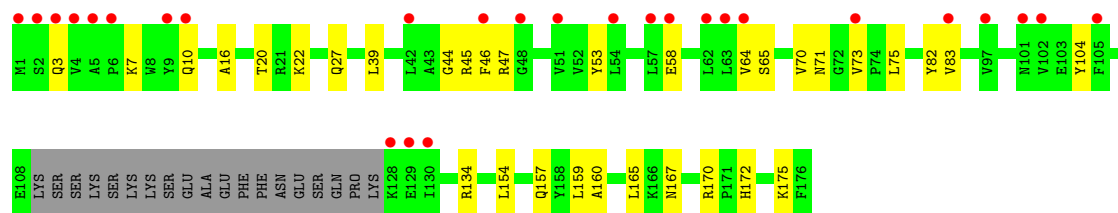


• Molecule 7: Uncharacterized protein CaJ7.0206

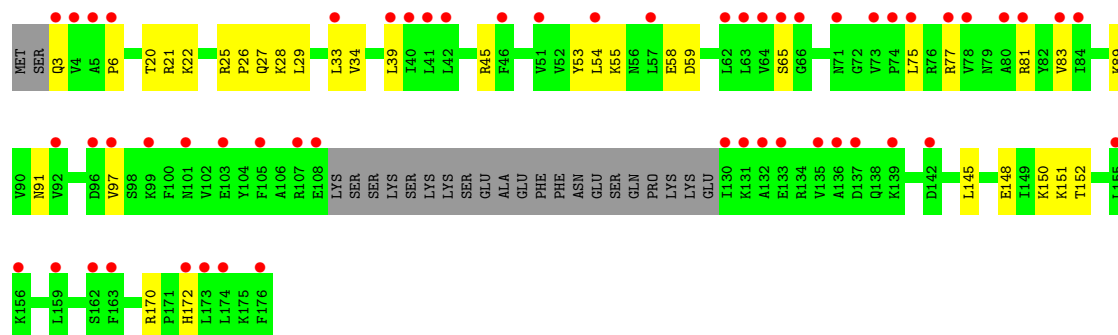


• Molecule 8: 60S ribosomal protein L6

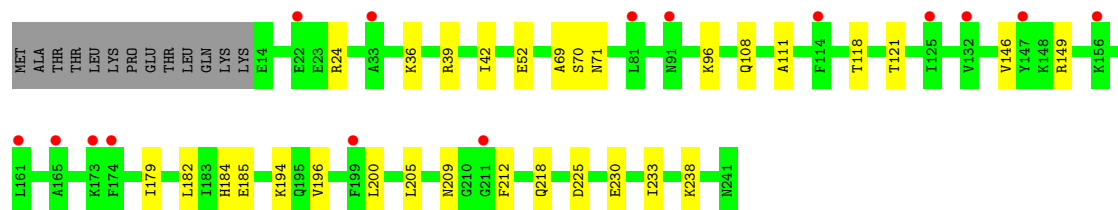
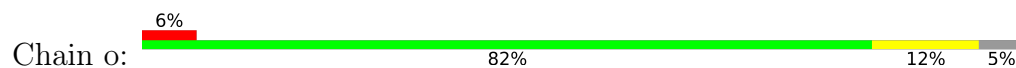




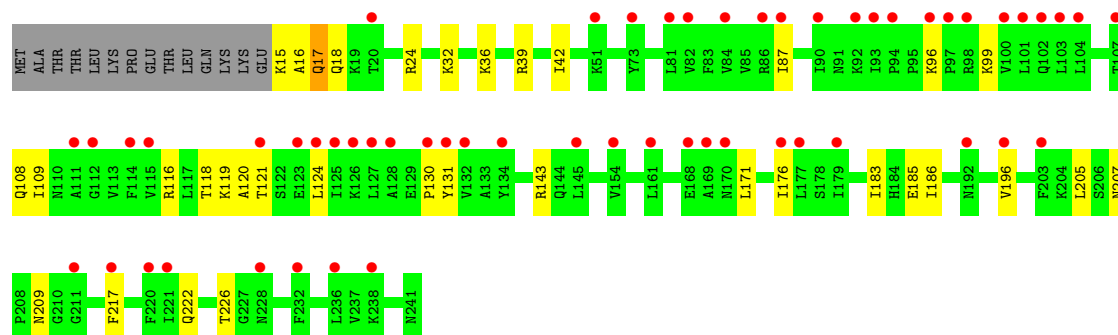
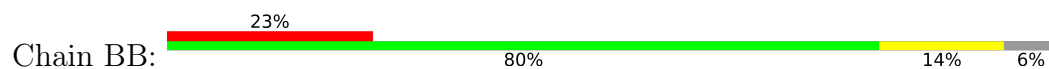
• Molecule 8: 60S ribosomal protein L6



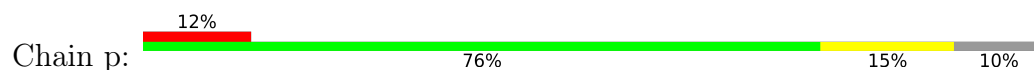
• Molecule 9: 60S ribosomal protein L7-A

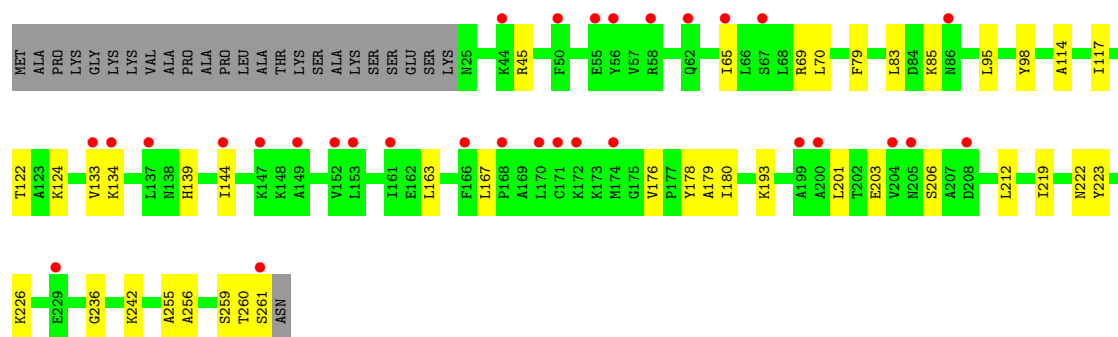


• Molecule 9: 60S ribosomal protein L7-A



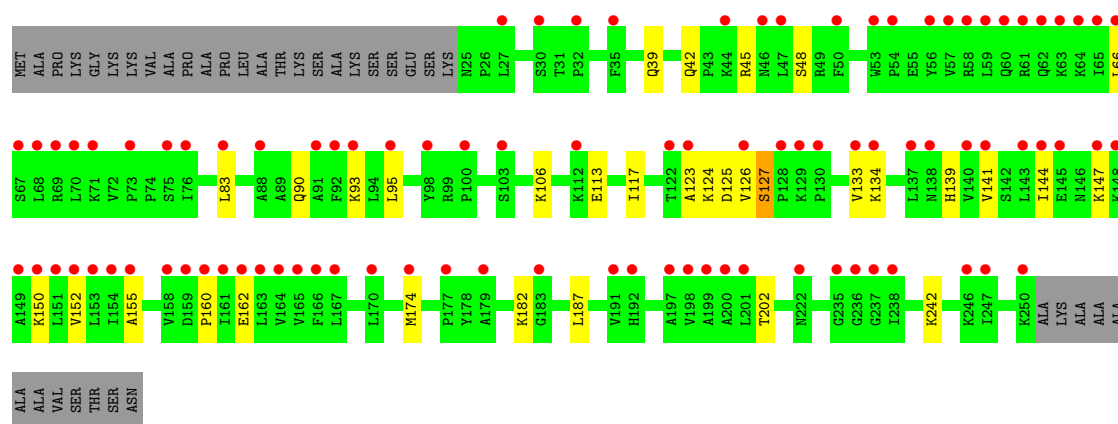
• Molecule 10: 60S ribosomal protein L8





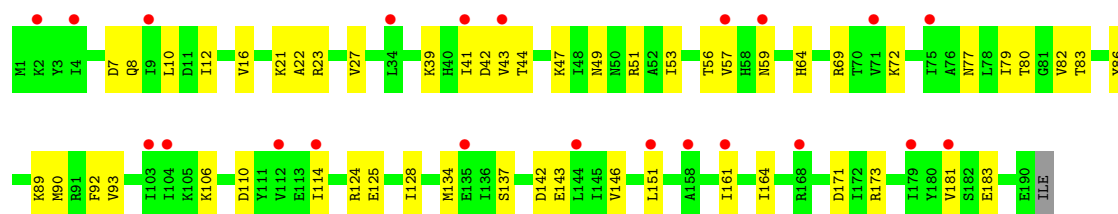
• Molecule 10: 60S ribosomal protein L8

Chain BC: 35% 74% 12% 14%



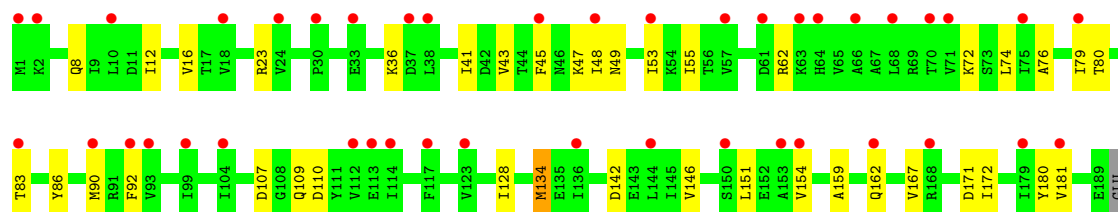
• Molecule 11: 60S ribosomal protein L9-B

Chain q: 12% 72% 27%



• Molecule 11: 60S ribosomal protein L9-B

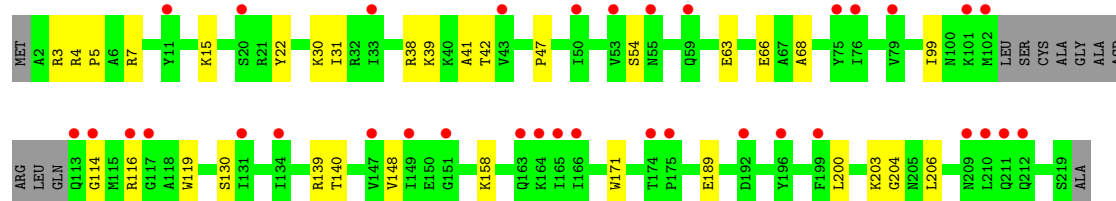
Chain BD: 22% 79% 20%



ILE

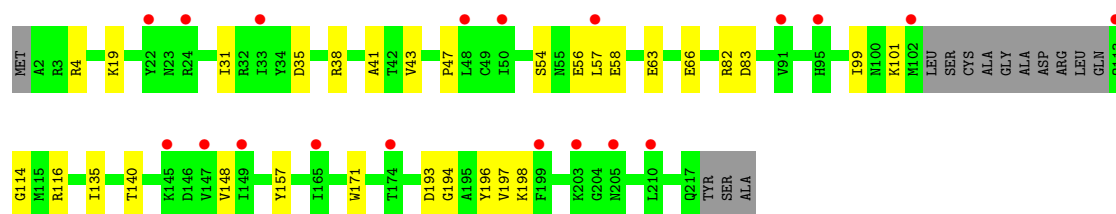
- Molecule 12: 60S ribosomal protein L10

Chain r: 



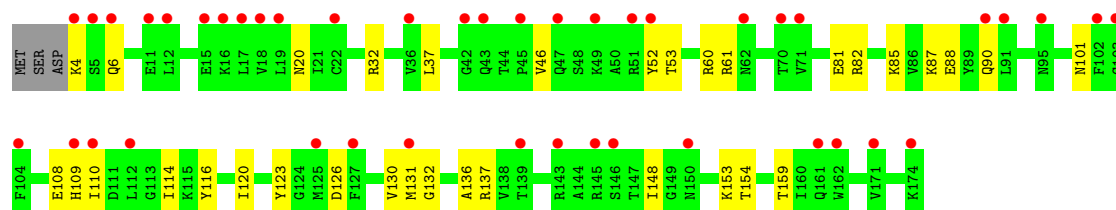
- Molecule 12: 60S ribosomal protein L10

Chain BE: 



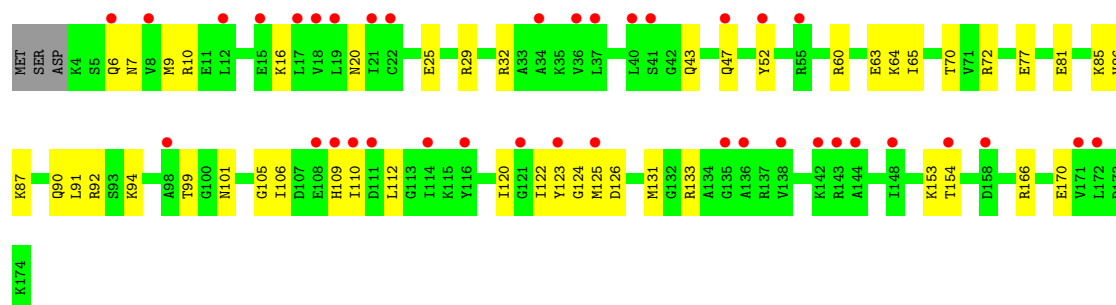
- Molecule 13: 60S ribosomal protein L11-B

Chain s: 

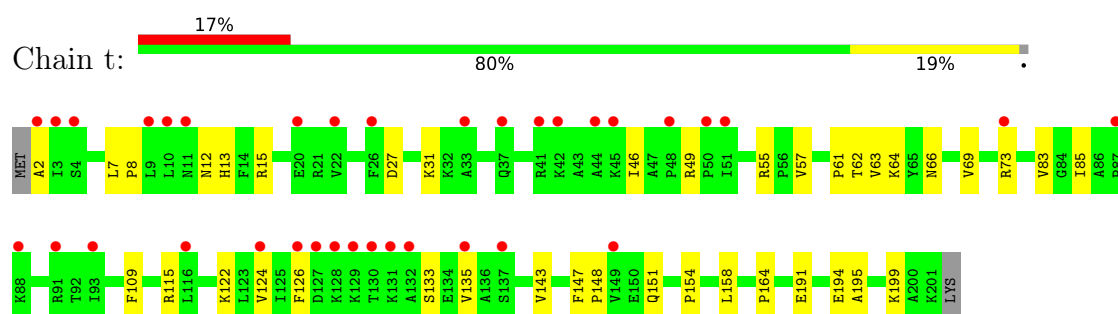


- Molecule 13: 60S ribosomal protein L11-B

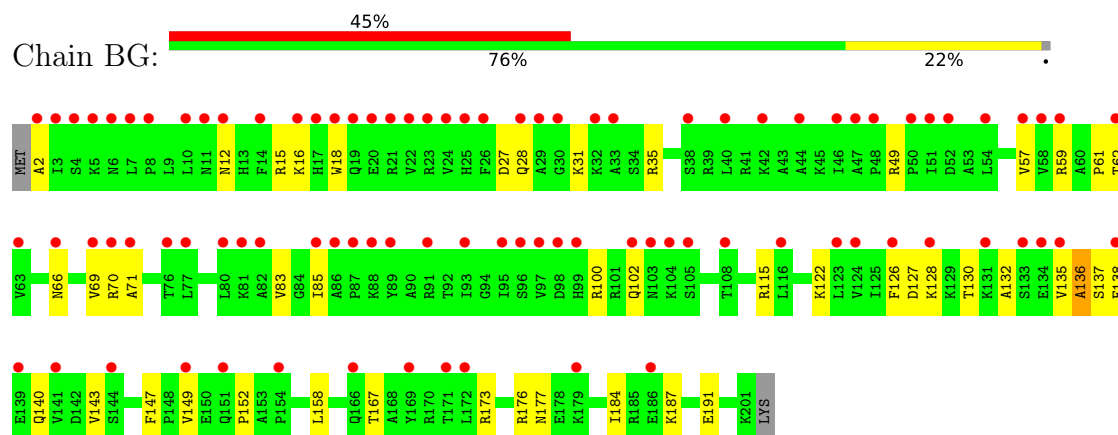
Chain BF: 



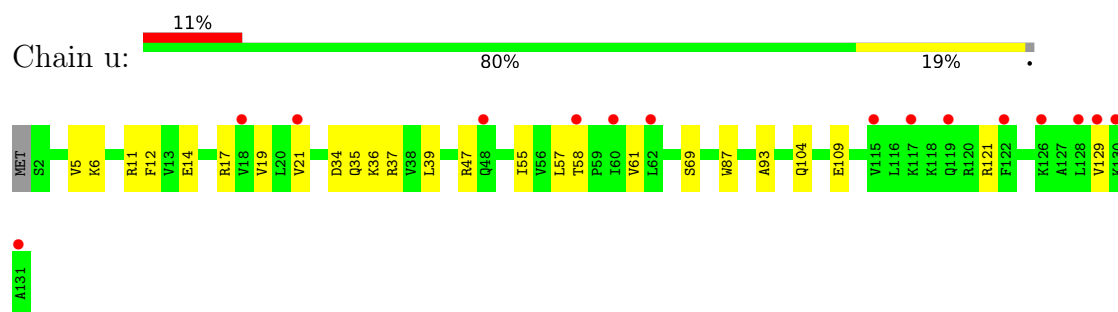
- Molecule 14: 60S ribosomal protein L13



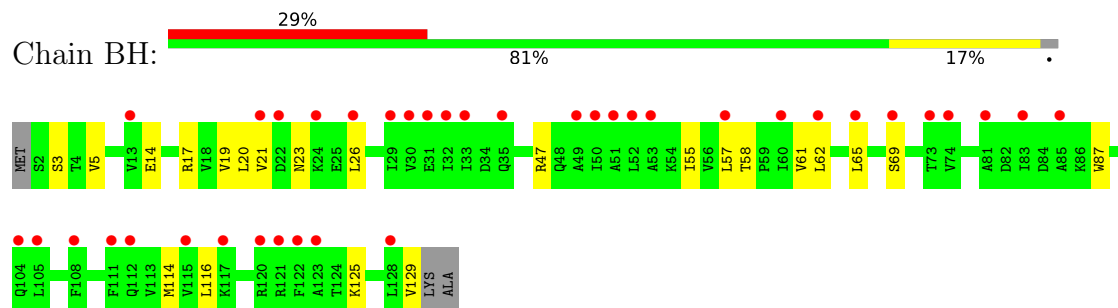
• Molecule 14: 60S ribosomal protein L13



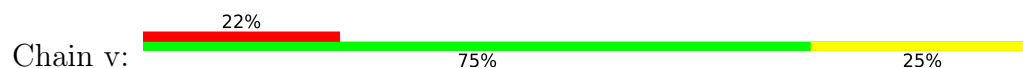
• Molecule 15: 60S ribosomal protein L14-B

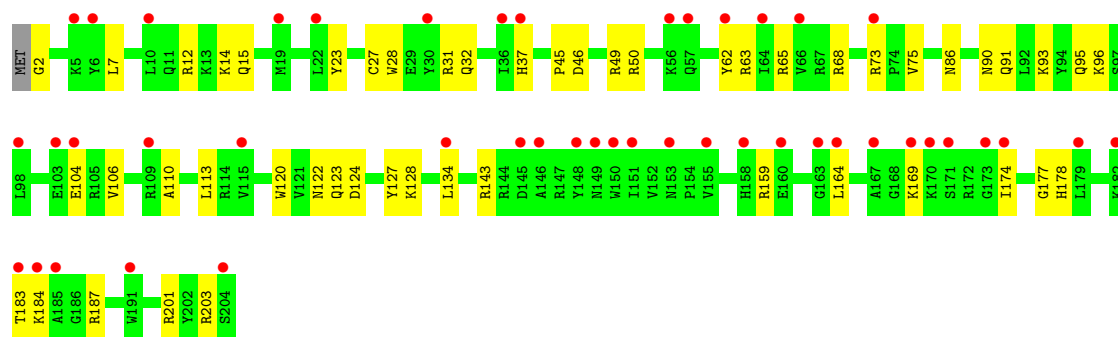


• Molecule 15: 60S ribosomal protein L14-B

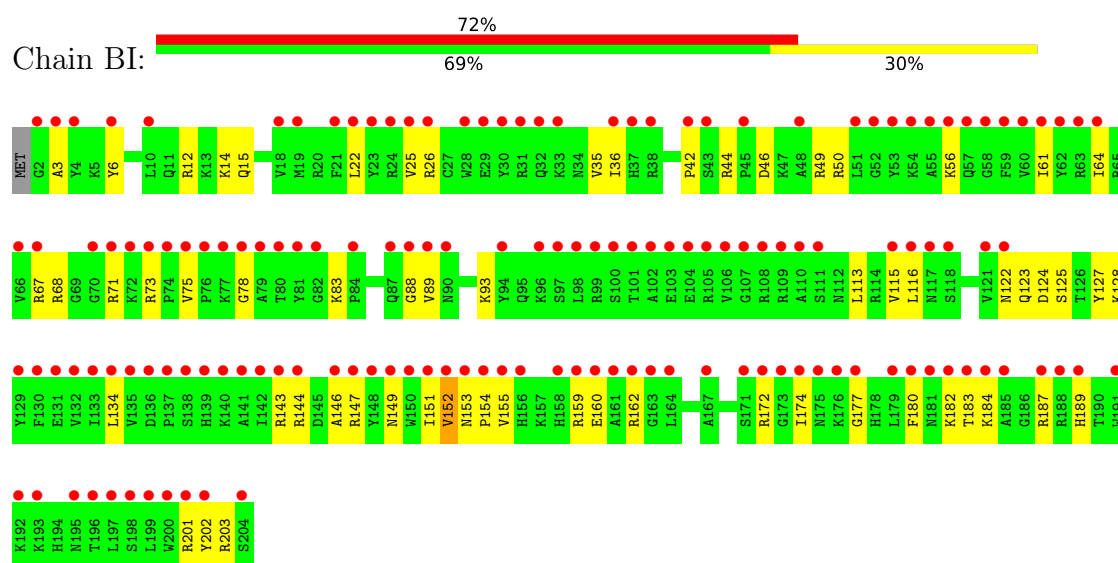


• Molecule 16: 60S ribosomal protein L15-A

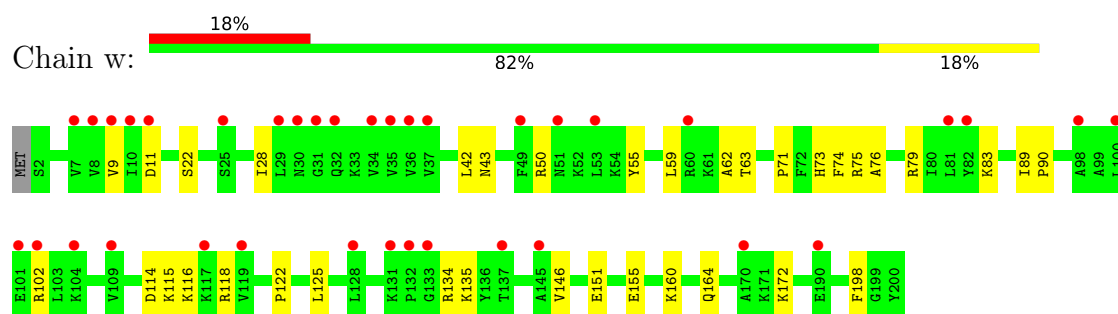




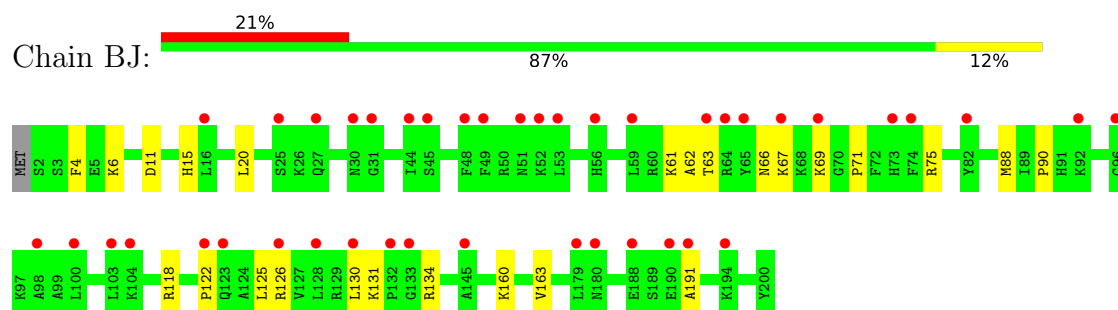
• Molecule 16: 60S ribosomal protein L15-A



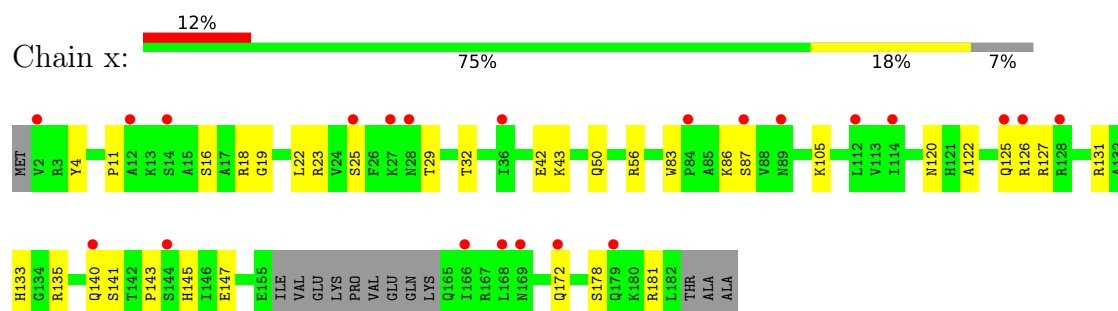
• Molecule 17: Ribosomal protein L13



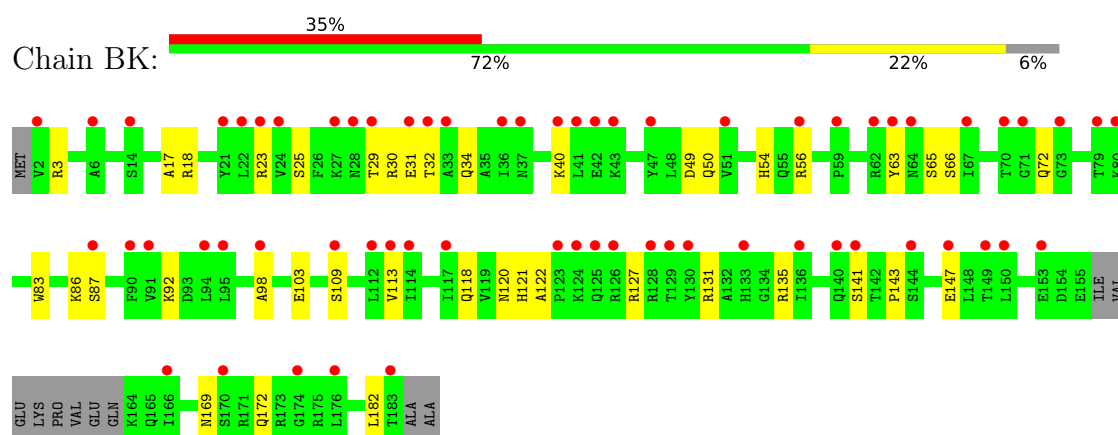
• Molecule 17: Ribosomal protein L13



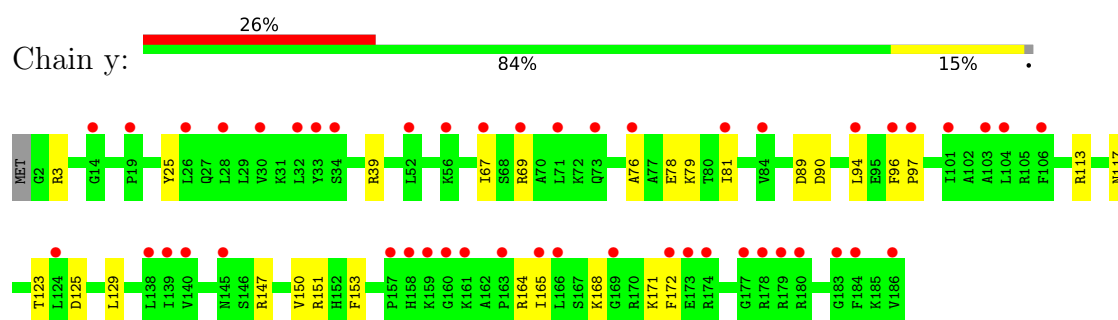
- Molecule 18: Ribosomal protein L22



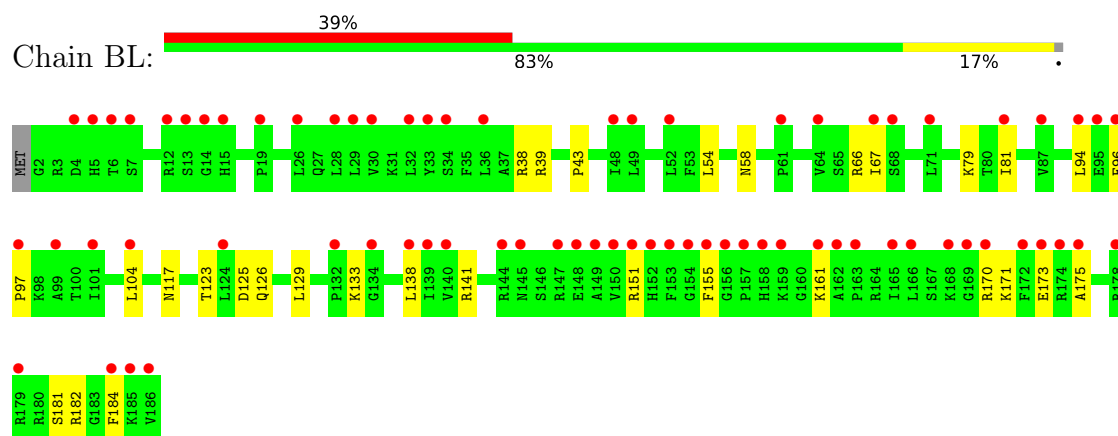
- Molecule 18: Ribosomal protein L22



- Molecule 19: 60S ribosomal protein L18-A

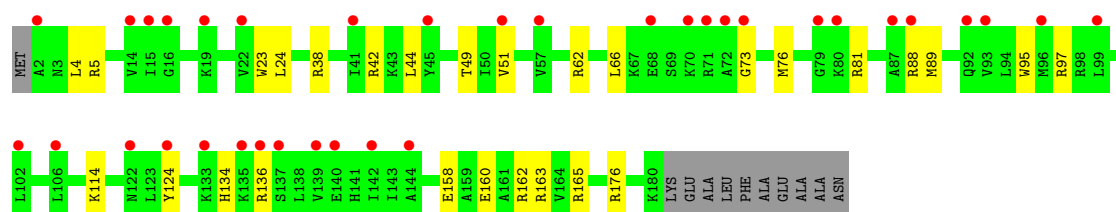


- Molecule 19: 60S ribosomal protein L18-A



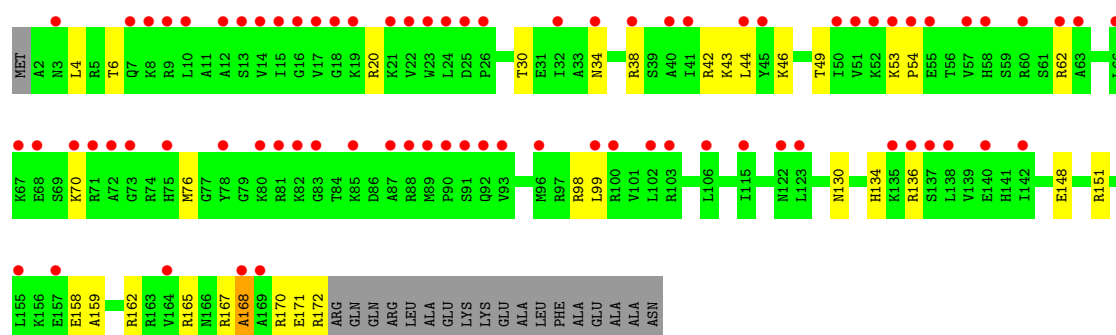
- Molecule 20: 60S ribosomal protein L19-A

Chain z: 



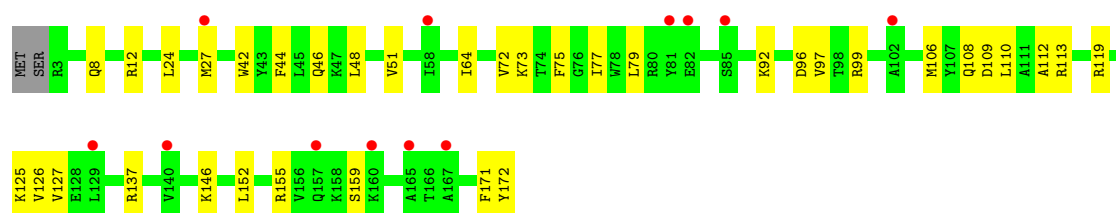
- Molecule 20: 60S ribosomal protein L19-A

Chain BM: 



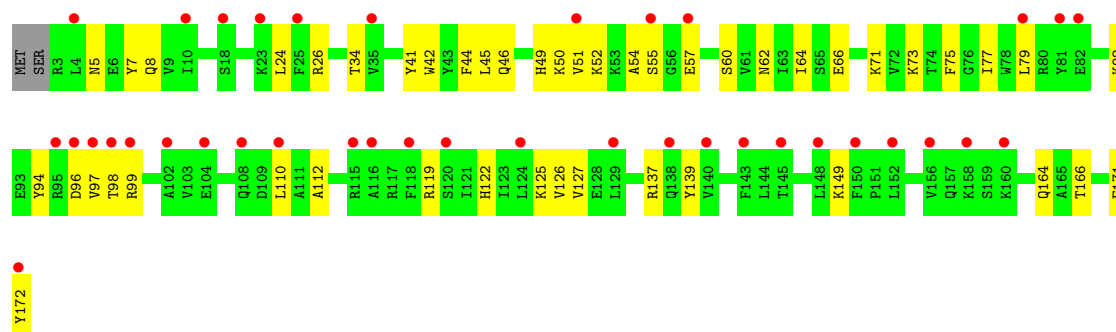
- Molecule 21: 60S ribosomal protein L20

Chain 0: 

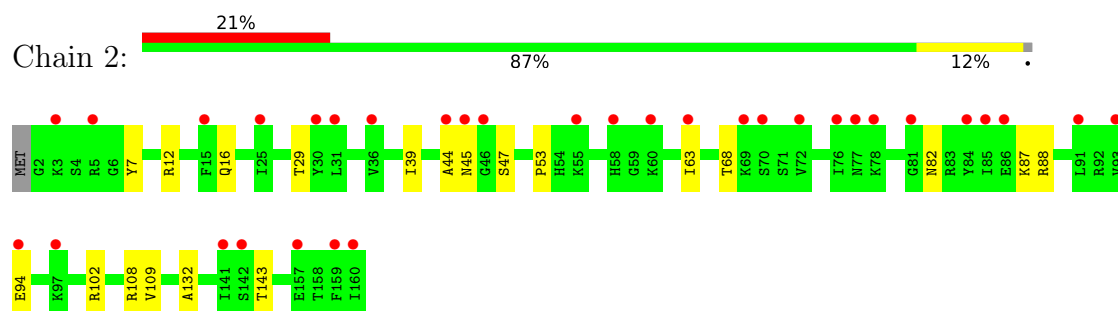


- Molecule 21: 60S ribosomal protein L20

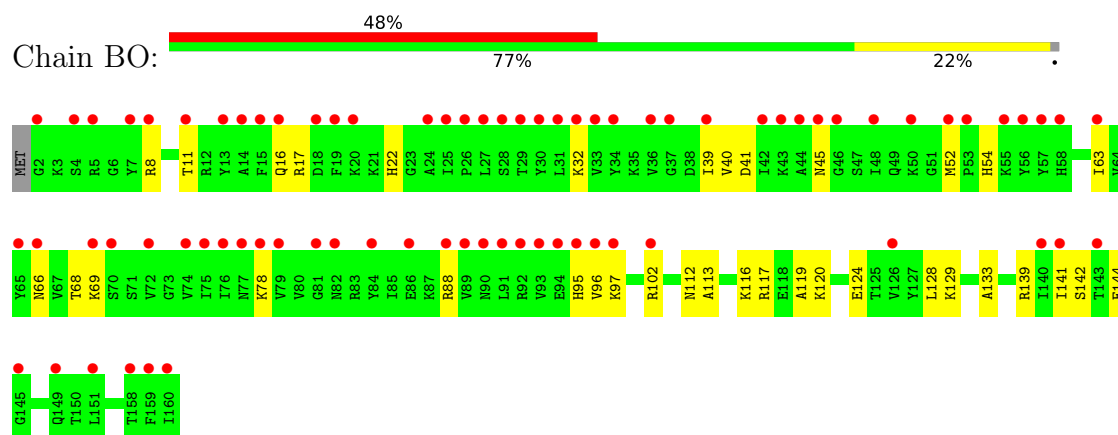
Chain BN: 



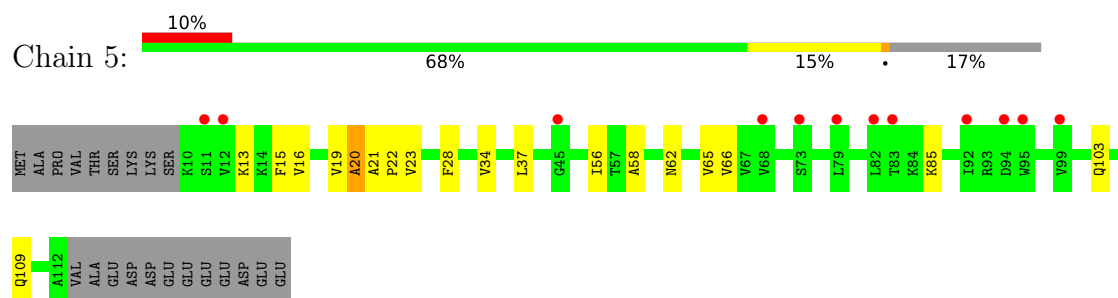
- Molecule 22: 60S ribosomal protein L21-A



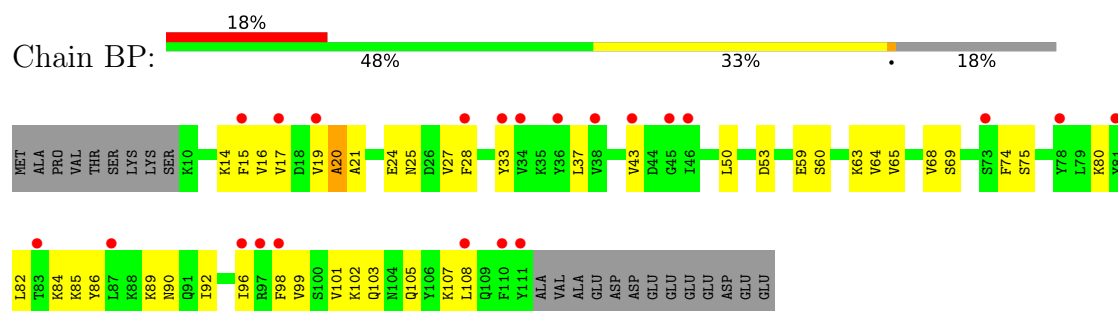
- Molecule 22: 60S ribosomal protein L21-A



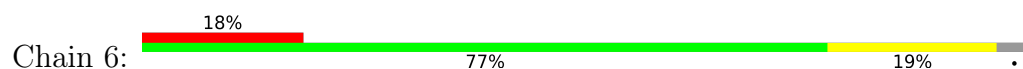
- Molecule 23: 60S ribosomal protein L22-B

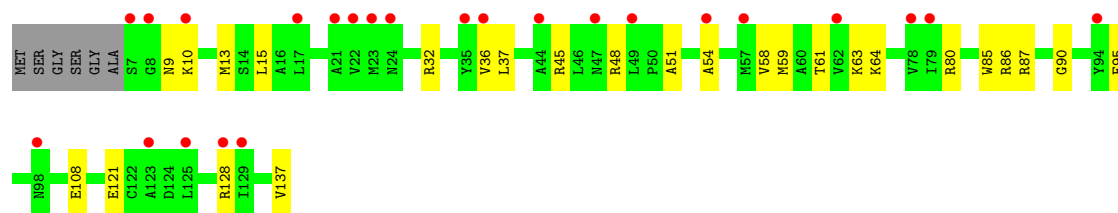


- Molecule 23: 60S ribosomal protein L22-B

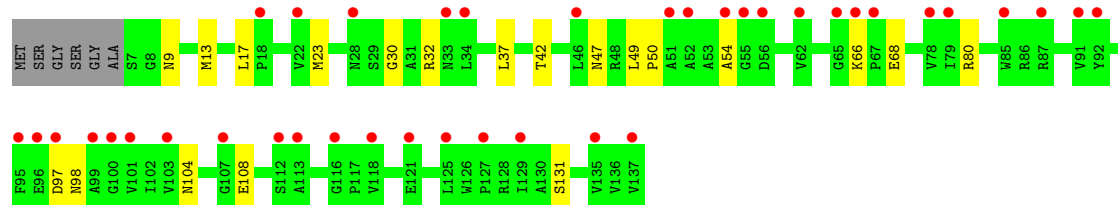
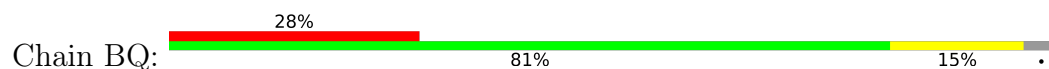


- Molecule 24: 60S ribosomal protein L23-A

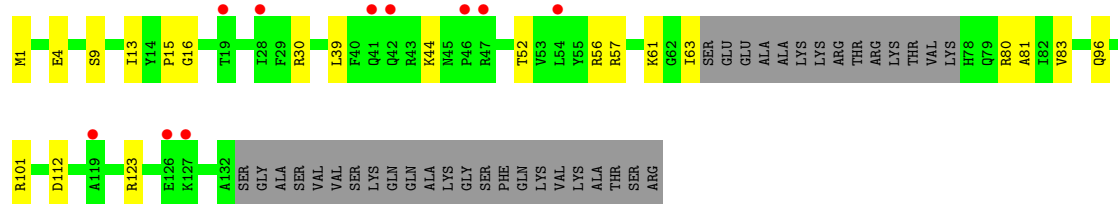




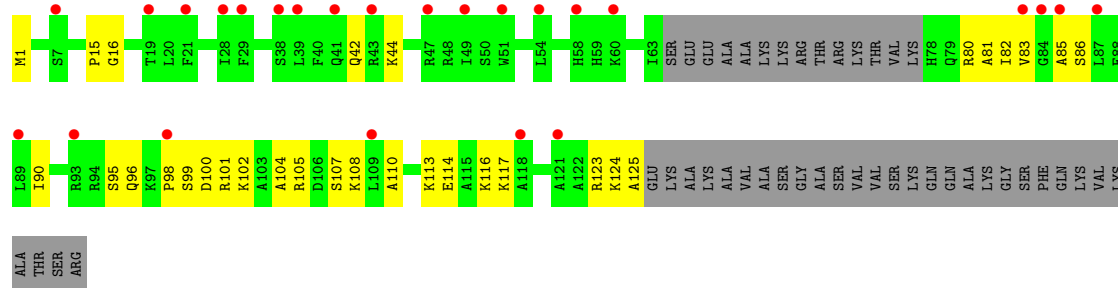
• Molecule 24: 60S ribosomal protein L23-A



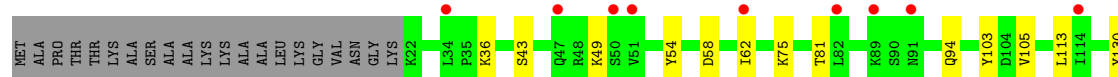
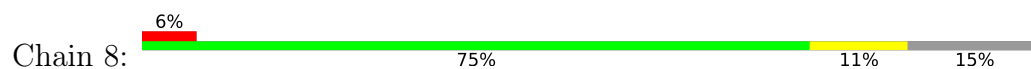
• Molecule 25: 60S ribosomal protein L24-A



• Molecule 25: 60S ribosomal protein L24-A



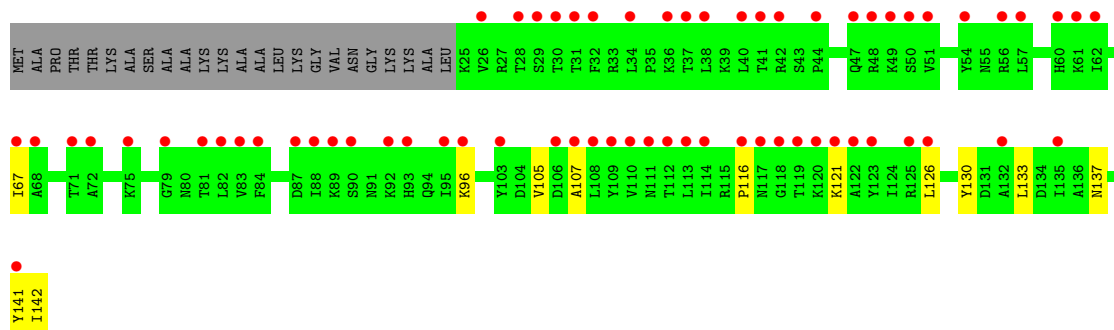
• Molecule 26: 60S ribosomal protein L25





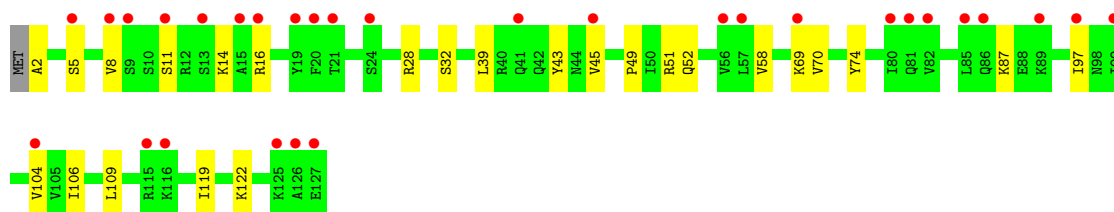
- Molecule 26: 60S ribosomal protein L25

Chain BS:



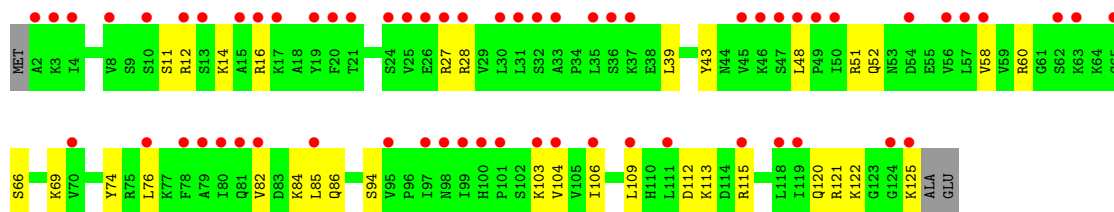
- Molecule 27: Ribosomal protein L24

Chain 9:



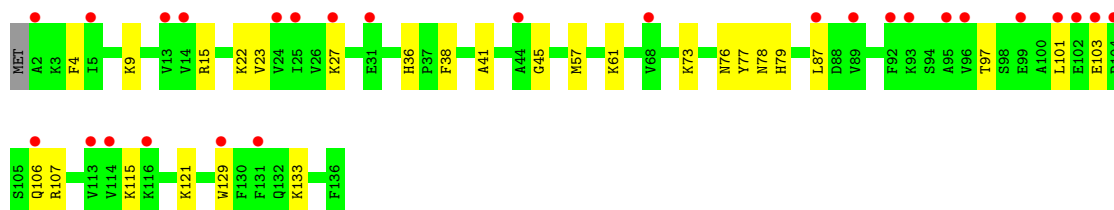
- Molecule 27: Ribosomal protein L24

Chain BT:

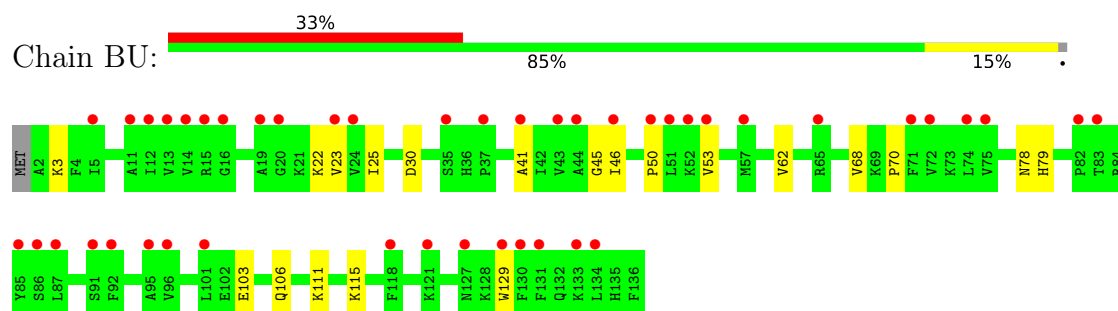


- Molecule 28: 60S ribosomal protein L27

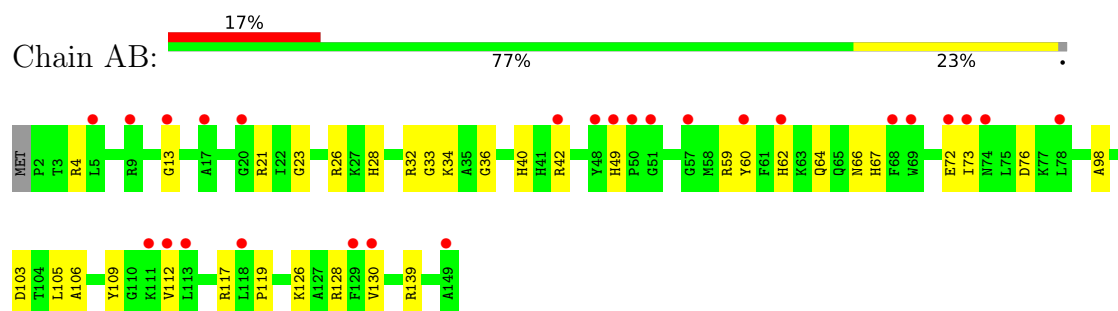
Chain AA:



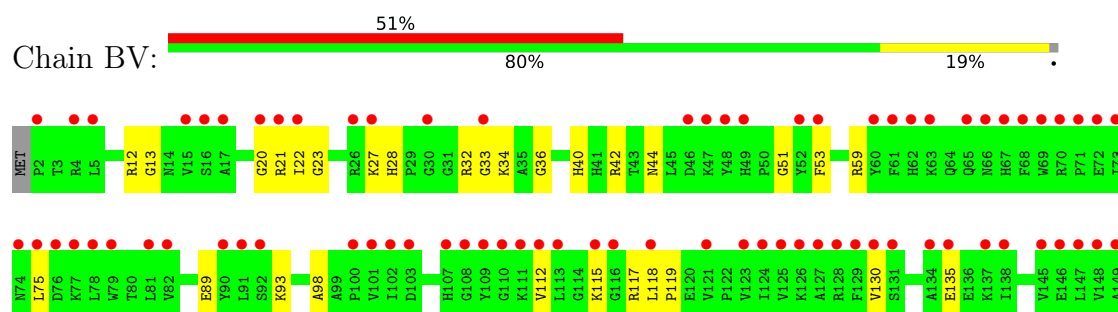
- Molecule 28: 60S ribosomal protein L27



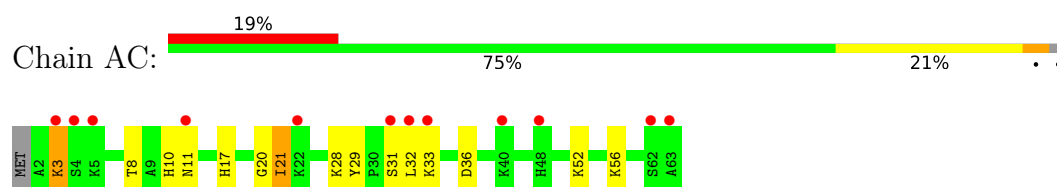
- Molecule 29: 60S ribosomal protein L28



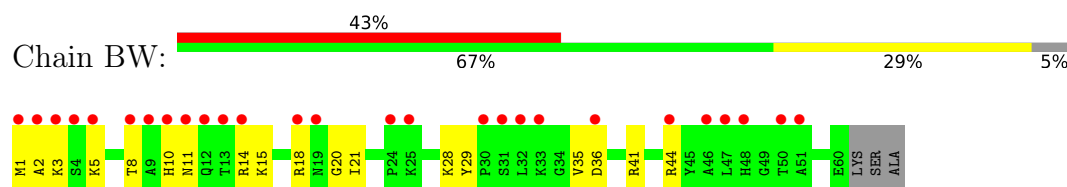
- Molecule 29: 60S ribosomal protein L28



- Molecule 30: 60S ribosomal protein L29

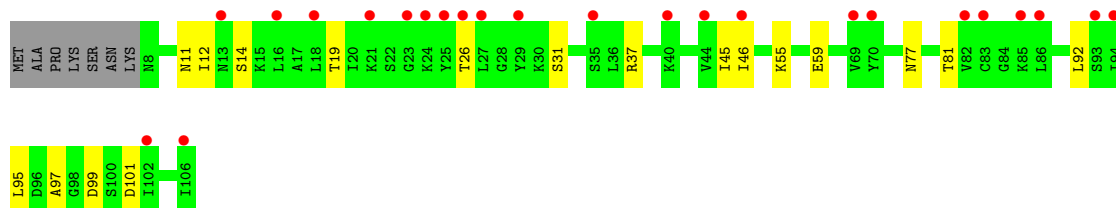


- Molecule 30: 60S ribosomal protein L29



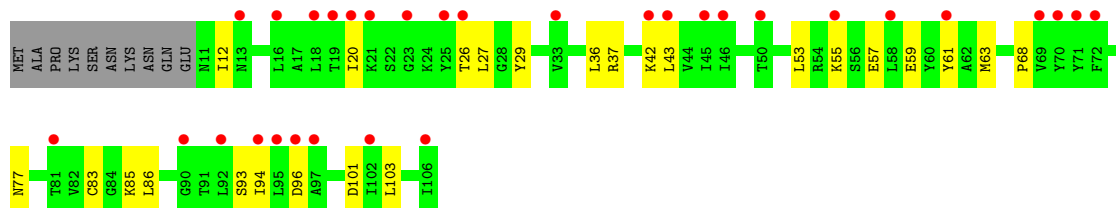
- Molecule 31: 60S ribosomal protein L30

Chain AD: 



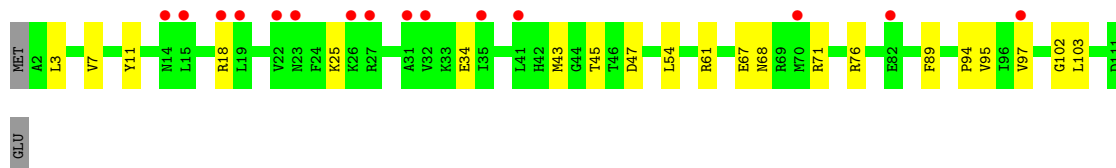
- Molecule 31: 60S ribosomal protein L30

Chain BX: 



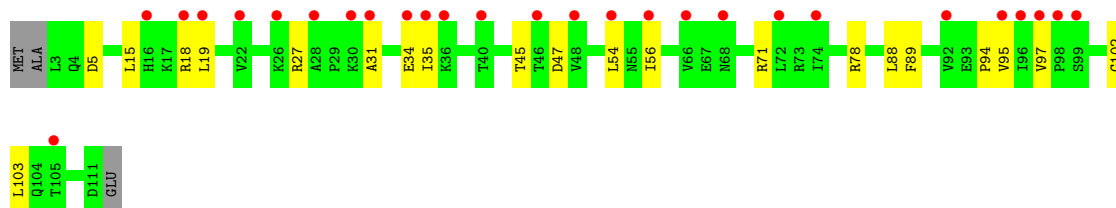
- Molecule 32: 60S ribosomal protein L31-B

Chain AE: 



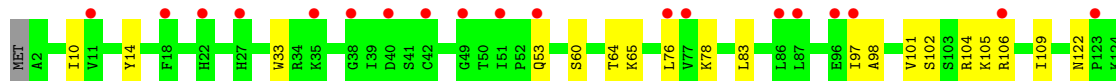
- Molecule 32: 60S ribosomal protein L31-B

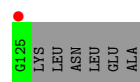
Chain BY: 



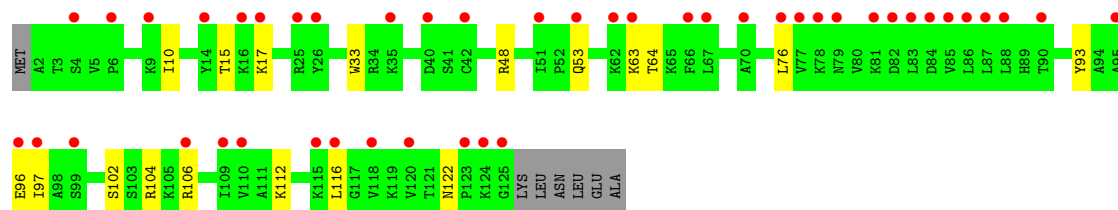
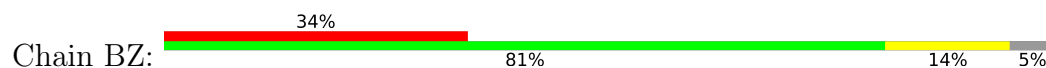
- Molecule 33: 60S ribosomal protein L32

Chain AF: 

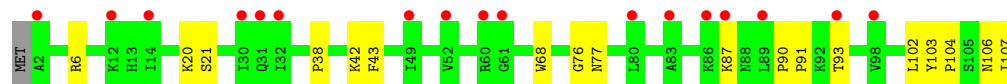
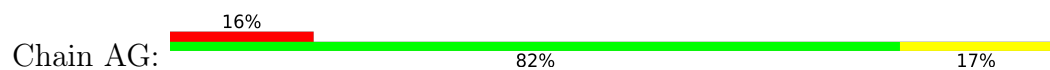




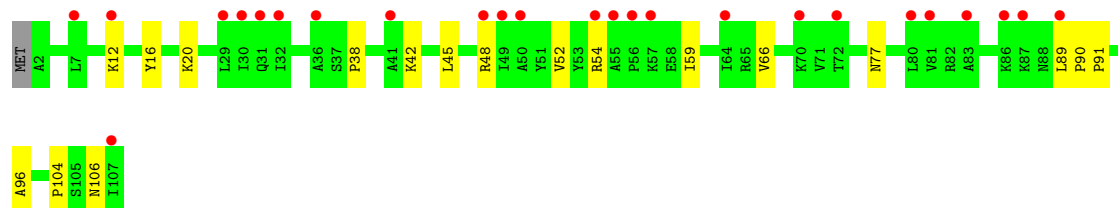
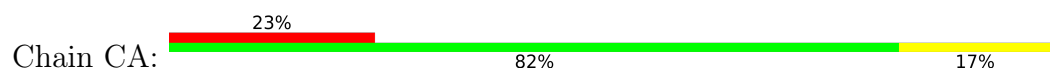
• Molecule 33: 60S ribosomal protein L32



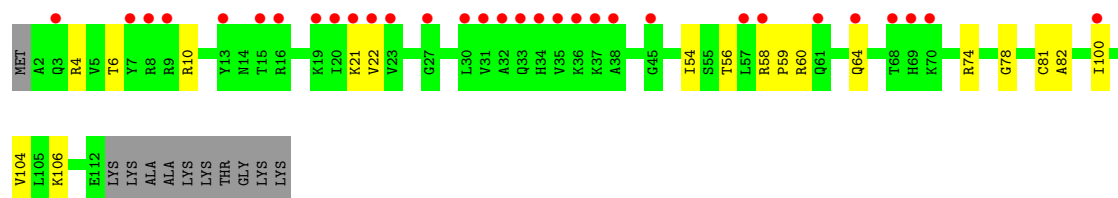
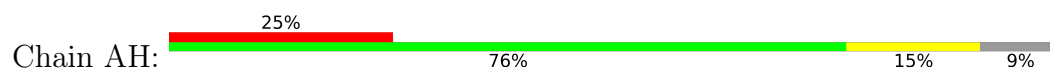
• Molecule 34: 60S ribosomal protein L33-A



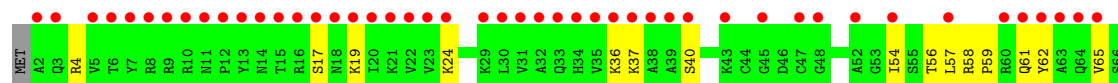
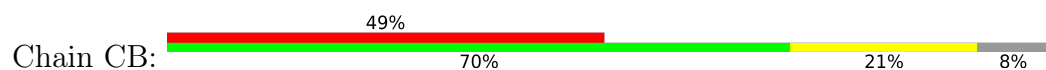
• Molecule 34: 60S ribosomal protein L33-A

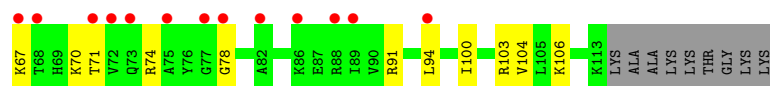


• Molecule 35: 60S ribosomal protein L34-B

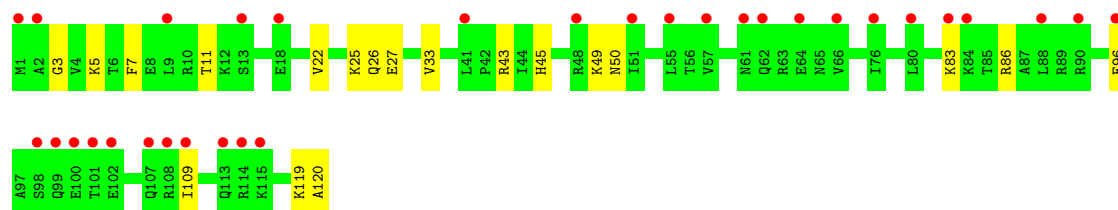
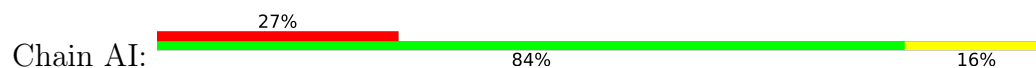


• Molecule 35: 60S ribosomal protein L34-B

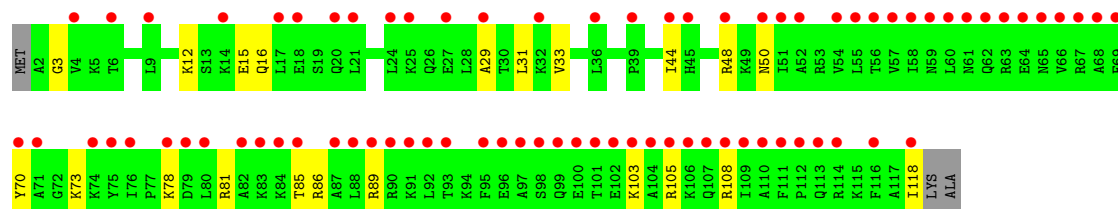
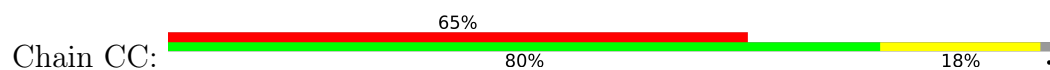




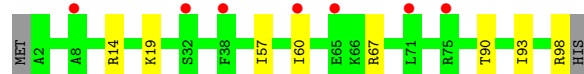
• Molecule 36: Ribosomal protein L29



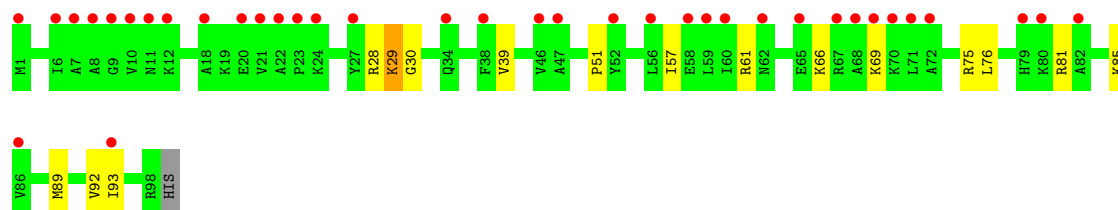
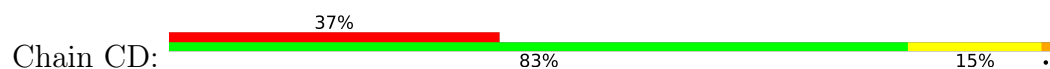
• Molecule 36: Ribosomal protein L29



• Molecule 37: 60S ribosomal protein L36



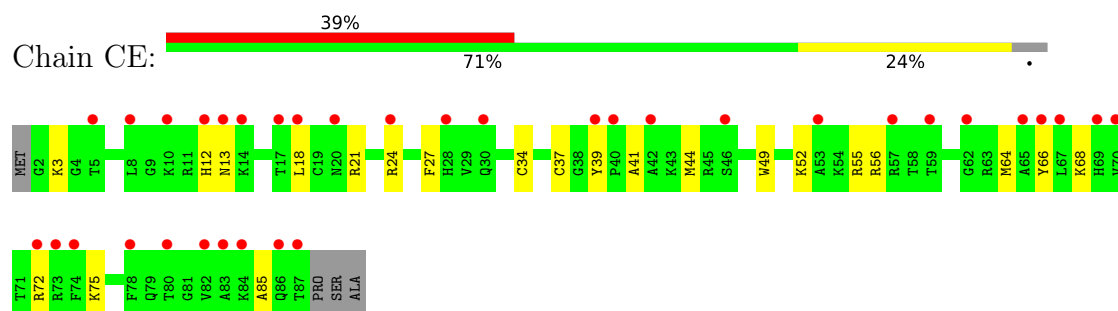
• Molecule 37: 60S ribosomal protein L36



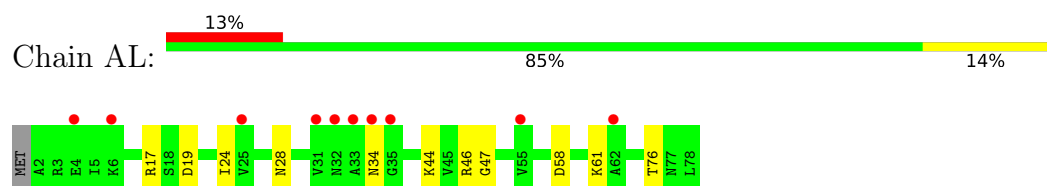
• Molecule 38: 60S ribosomal protein L37-B



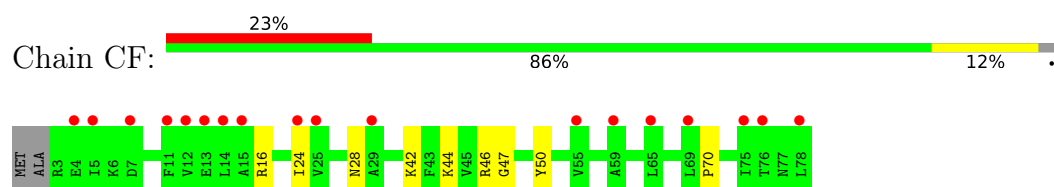
- Molecule 38: 60S ribosomal protein L37-B



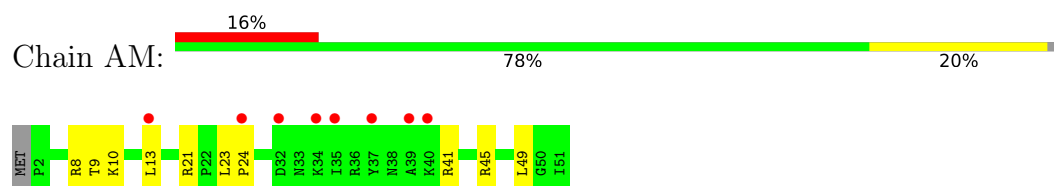
- Molecule 39: 60S ribosomal protein L38



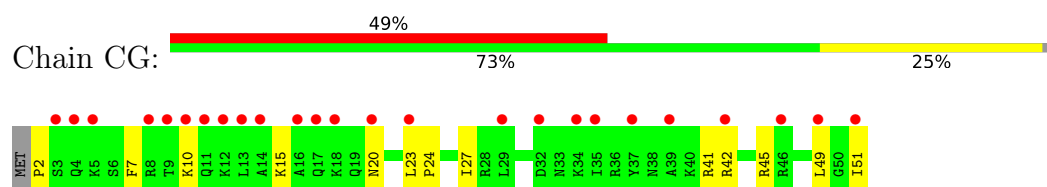
- Molecule 39: 60S ribosomal protein L38



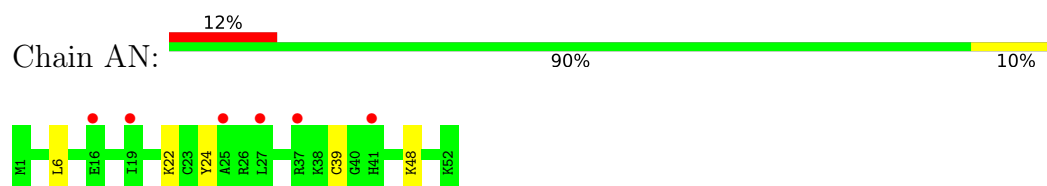
- Molecule 40: 60S ribosomal protein L39



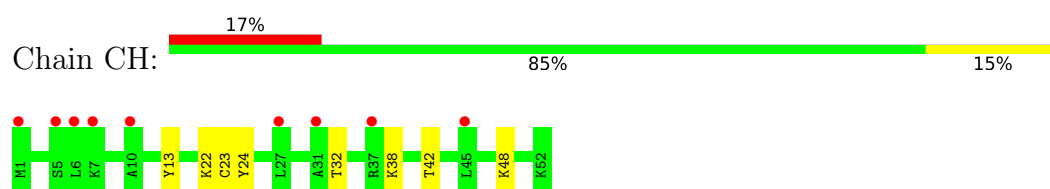
- Molecule 40: 60S ribosomal protein L39



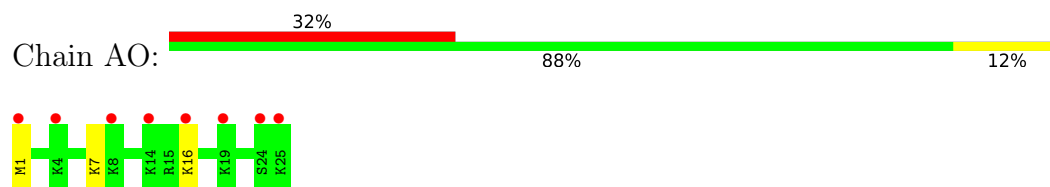
- Molecule 41: 60S ribosomal protein L40-B



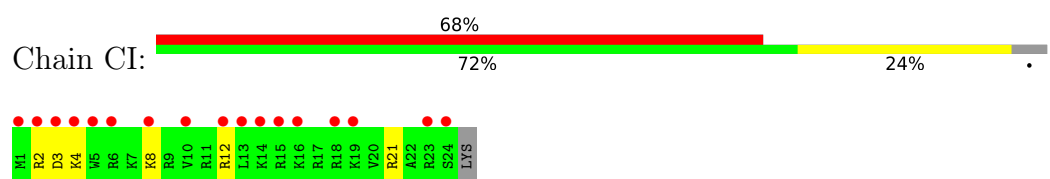
- Molecule 41: 60S ribosomal protein L40-B



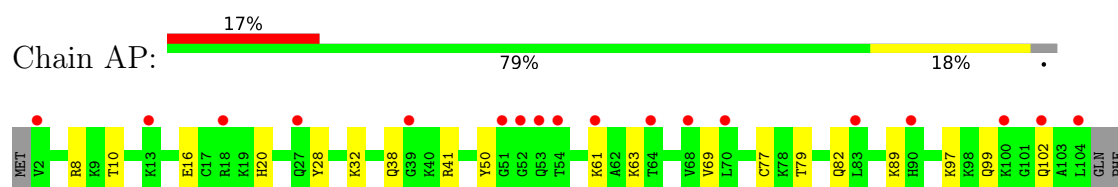
- Molecule 42: 60S ribosomal protein L41



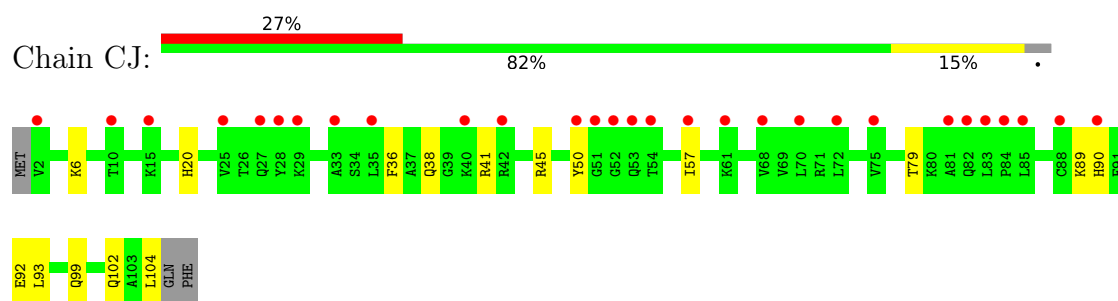
- Molecule 42: 60S ribosomal protein L41



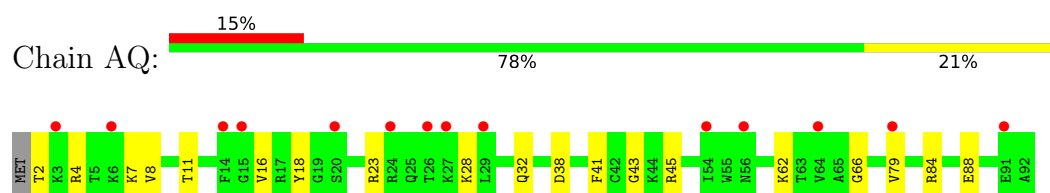
- Molecule 43: 60S ribosomal protein L42-B



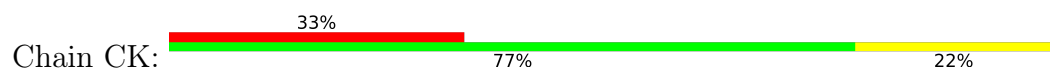
- Molecule 43: 60S ribosomal protein L42-B

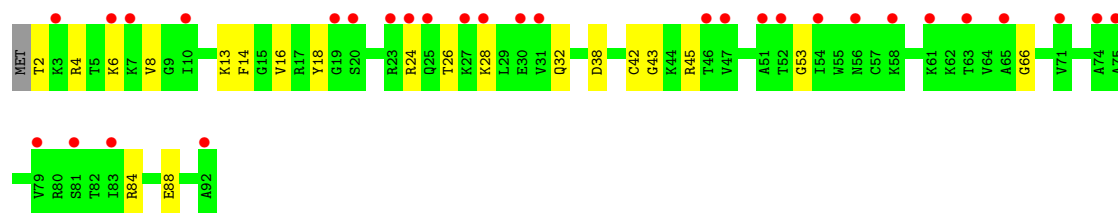


- Molecule 44: 60S ribosomal protein L43-A

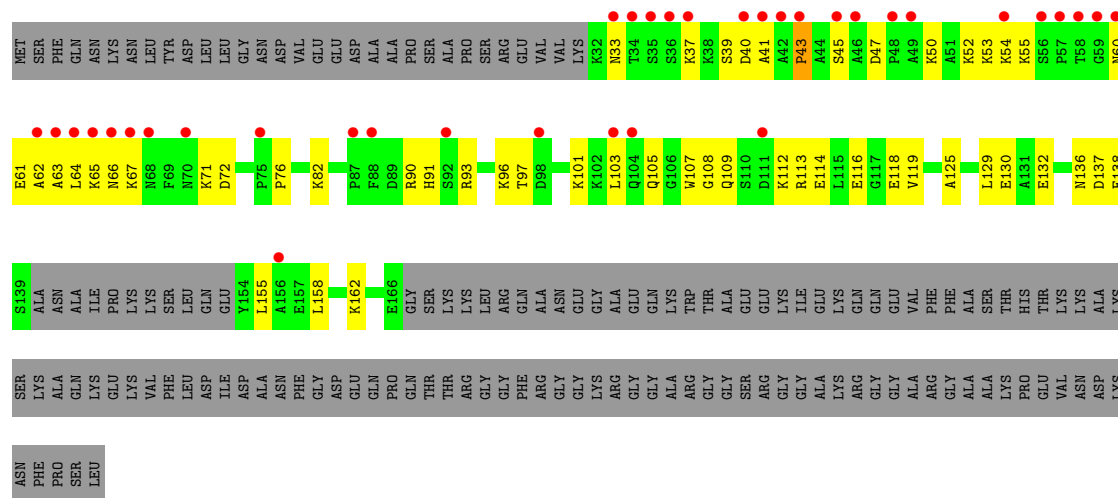


- Molecule 44: 60S ribosomal protein L43-A

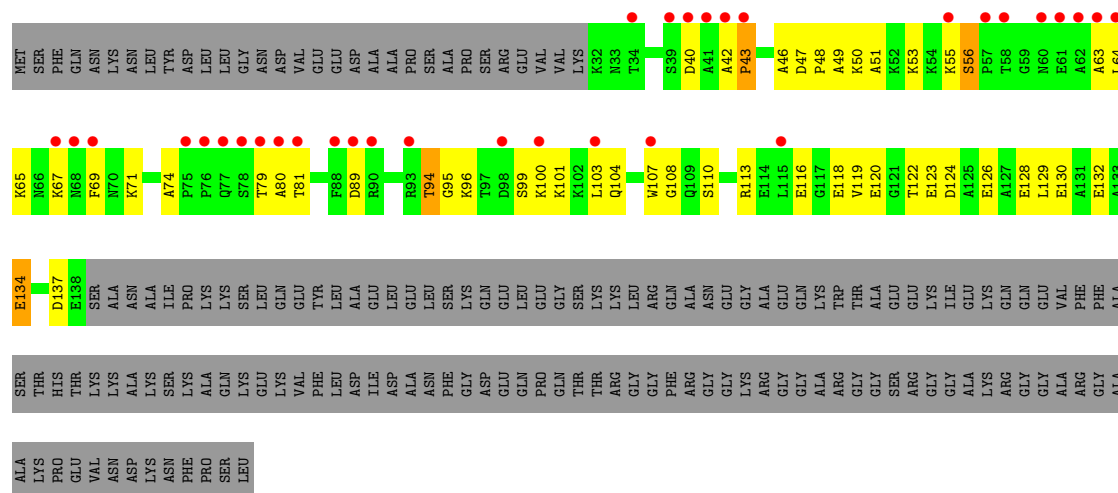




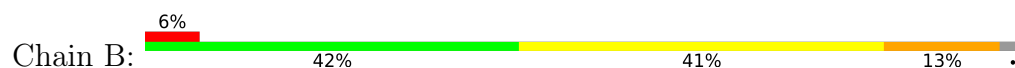
• Molecule 45: 60S ribosomal protein CAALFM_C304810CA

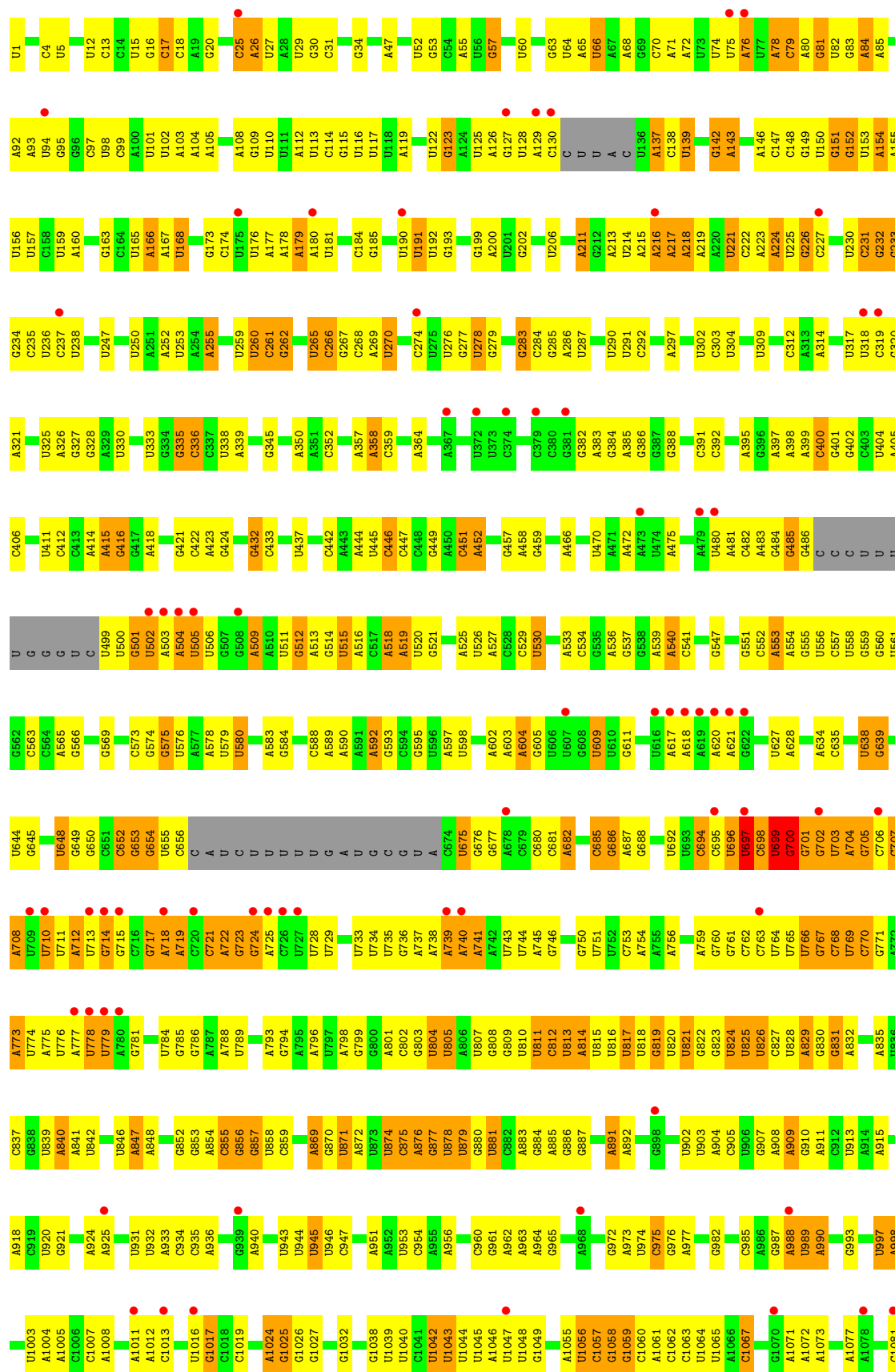


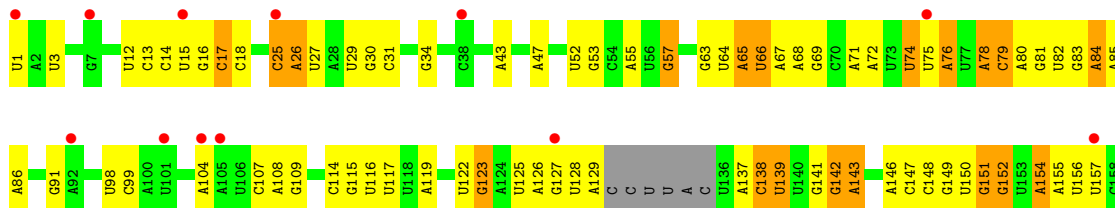
• Molecule 45: 60S ribosomal protein CAALFM_C304810CA

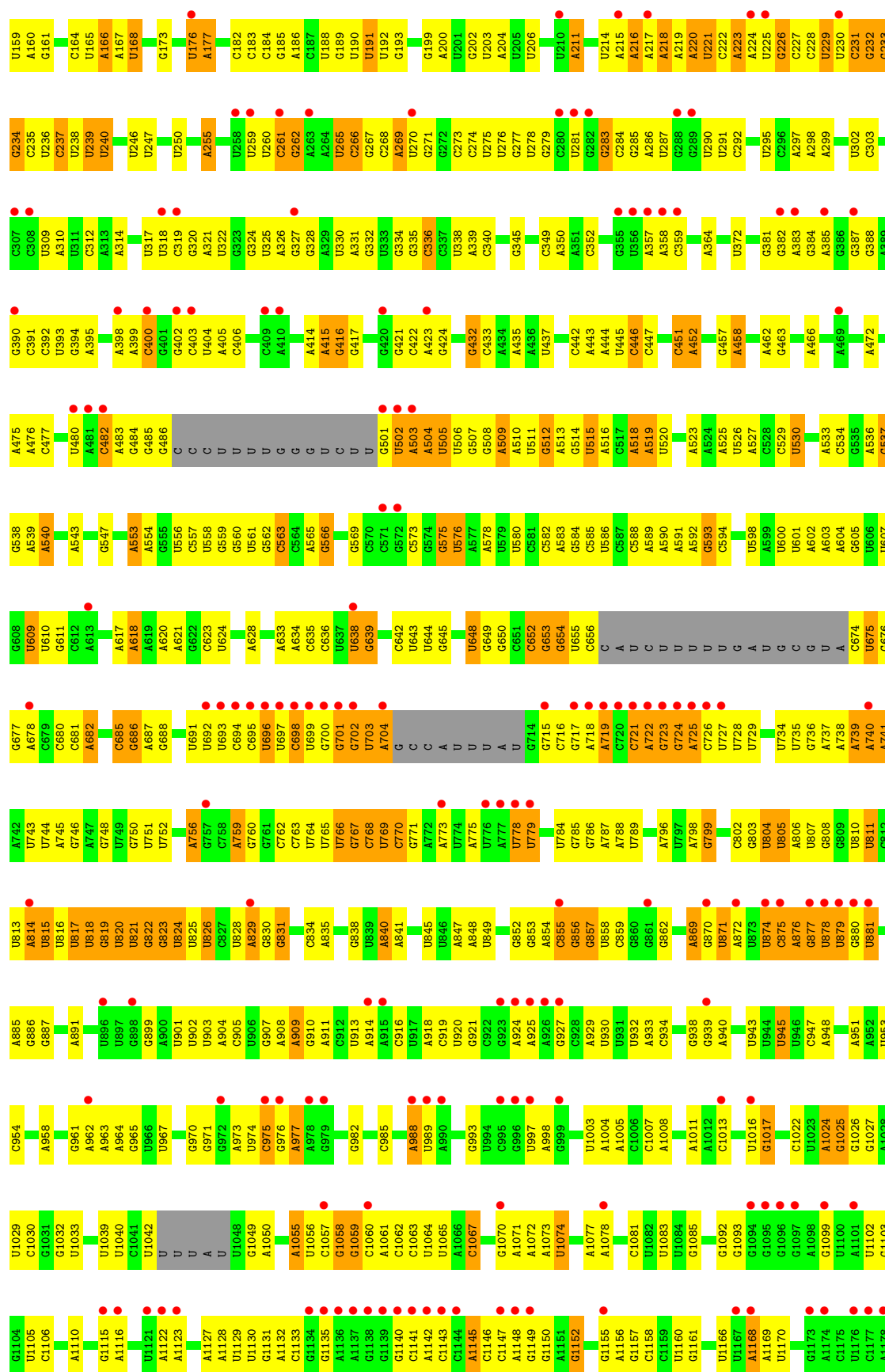


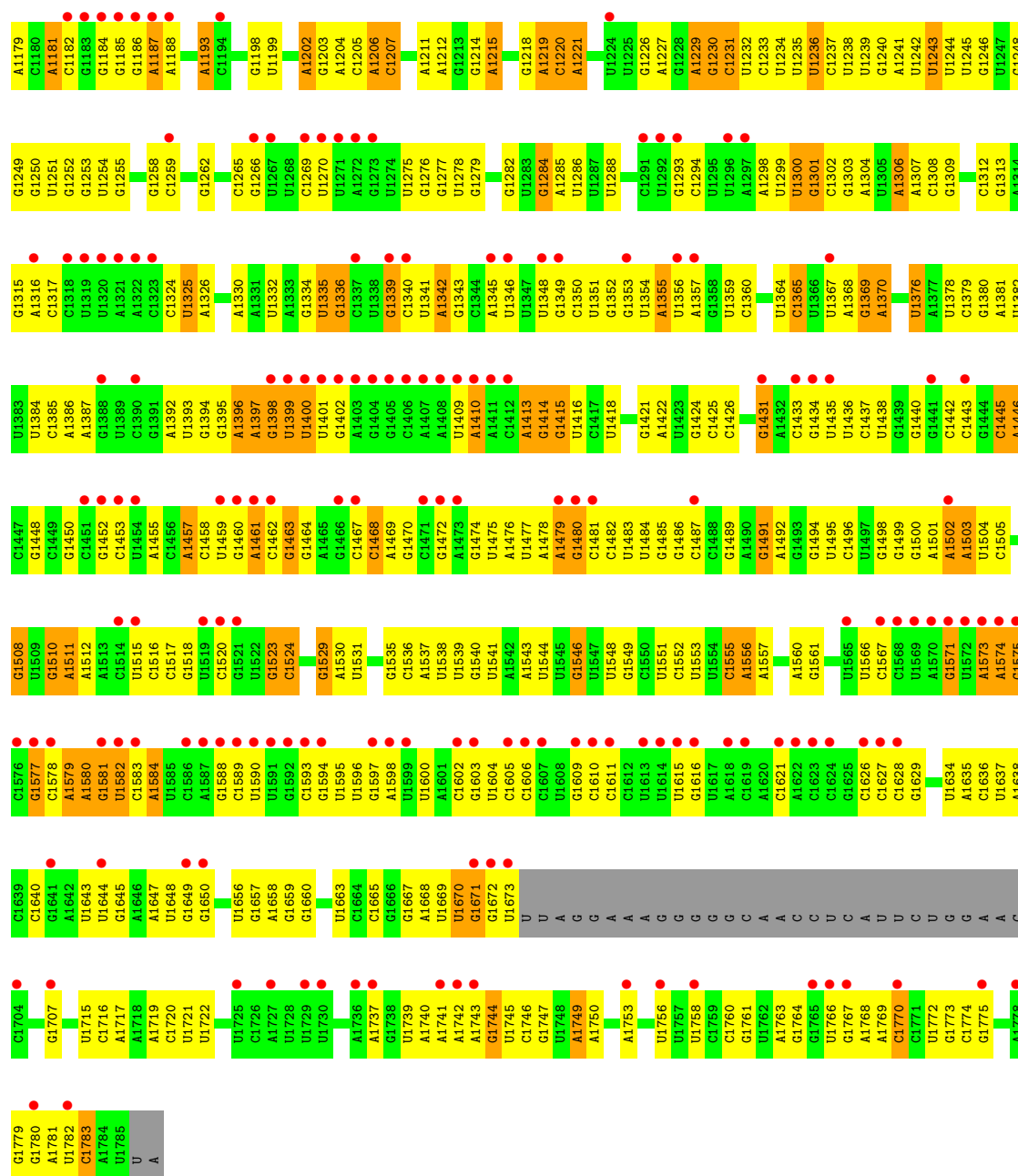
• Molecule 46: 18S

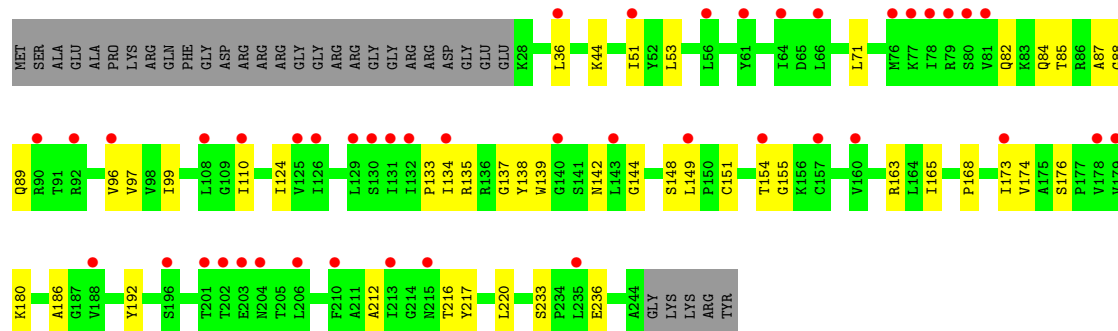




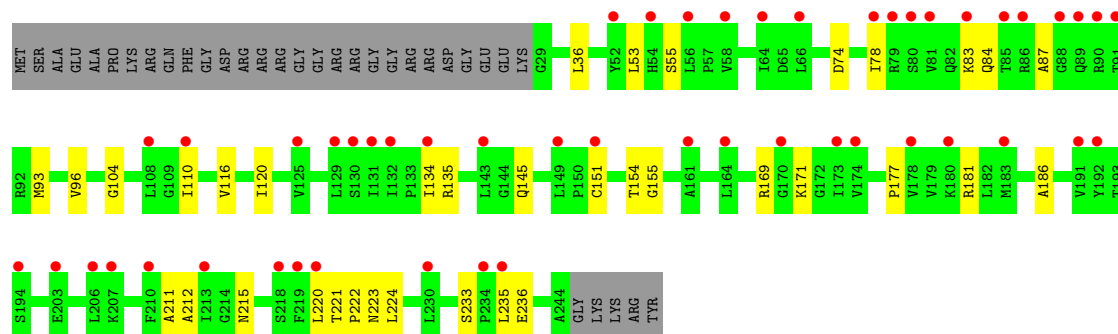
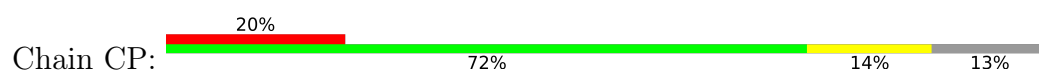




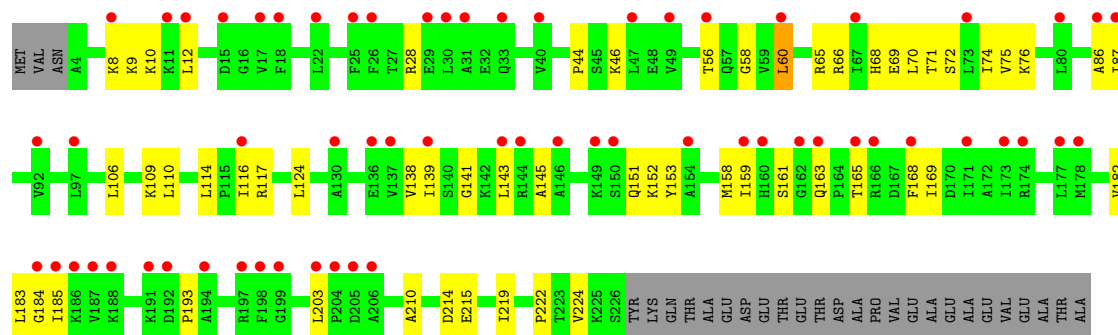




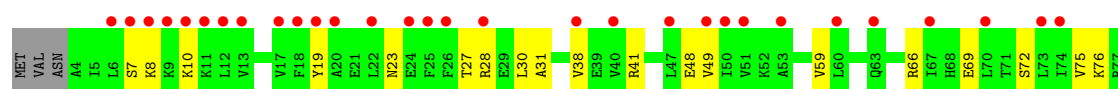
• Molecule 49: Ribosomal protein S5

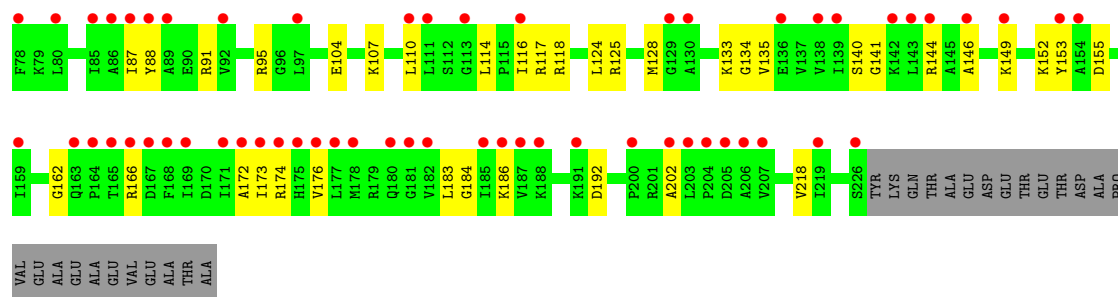


• Molecule 50: Ribosomal protein S3

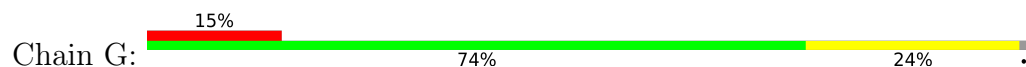


• Molecule 50: Ribosomal protein S3

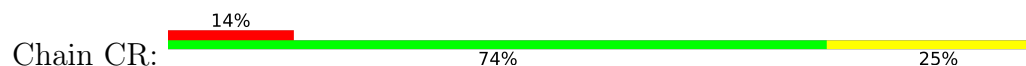




• Molecule 51: 40S ribosomal protein S4

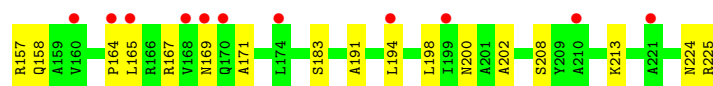


• Molecule 51: 40S ribosomal protein S4

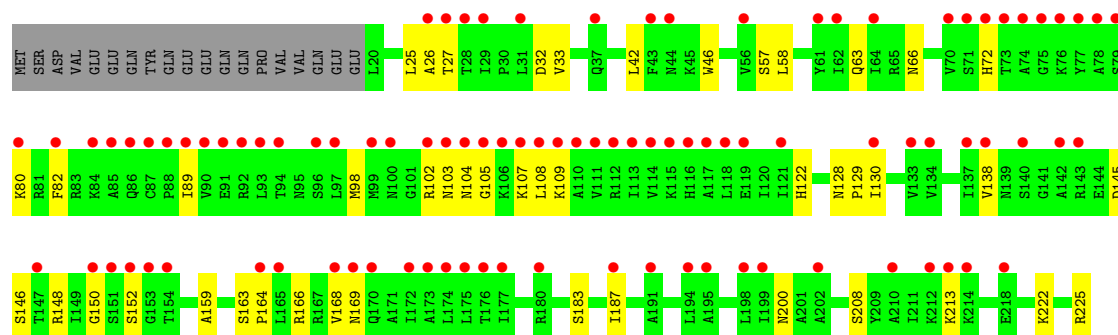
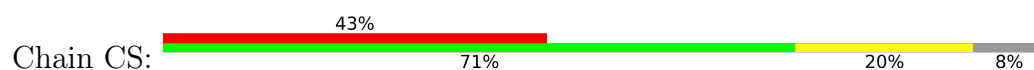


• Molecule 52: Ribosomal protein S7

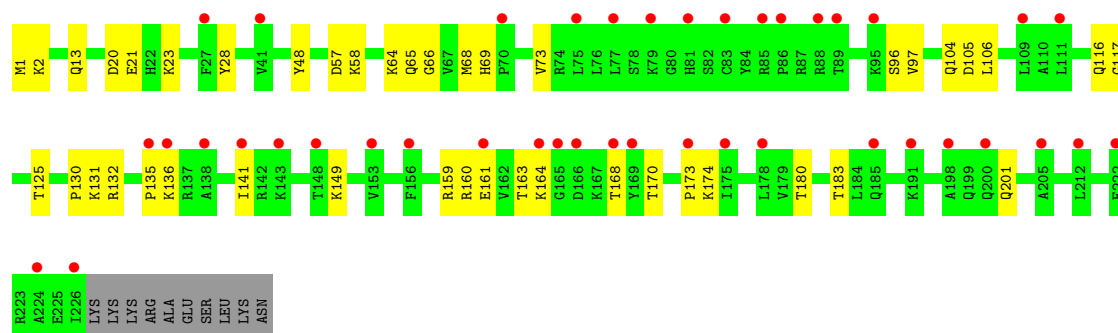
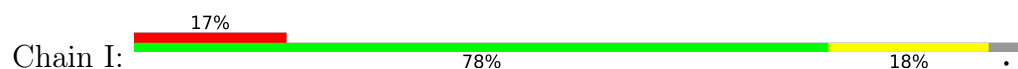




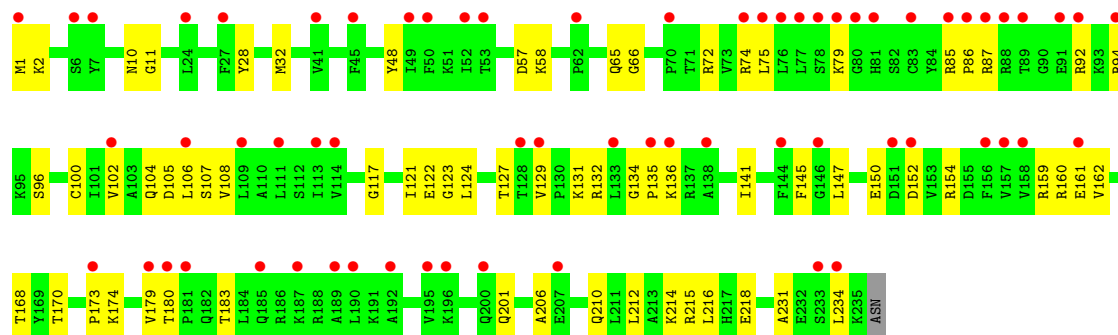
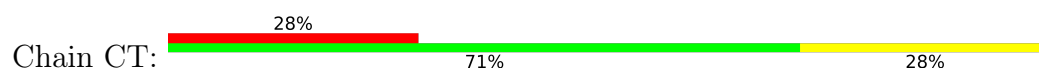
• Molecule 52: Ribosomal protein S7



• Molecule 53: 40S ribosomal protein S6

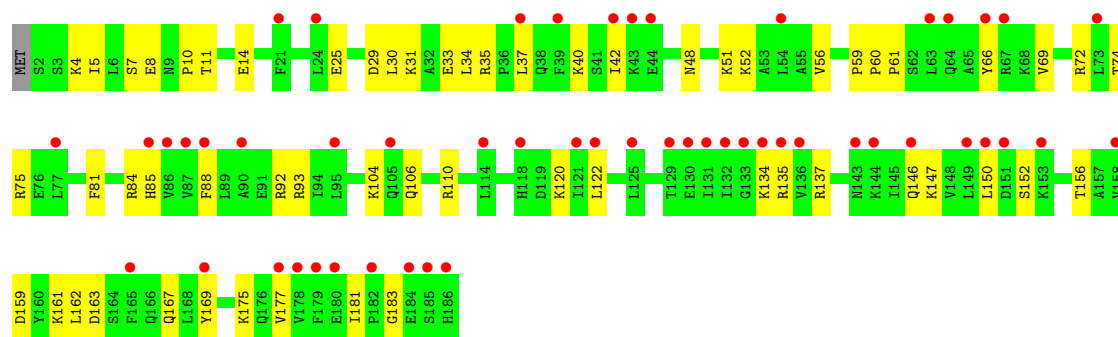


• Molecule 53: 40S ribosomal protein S6

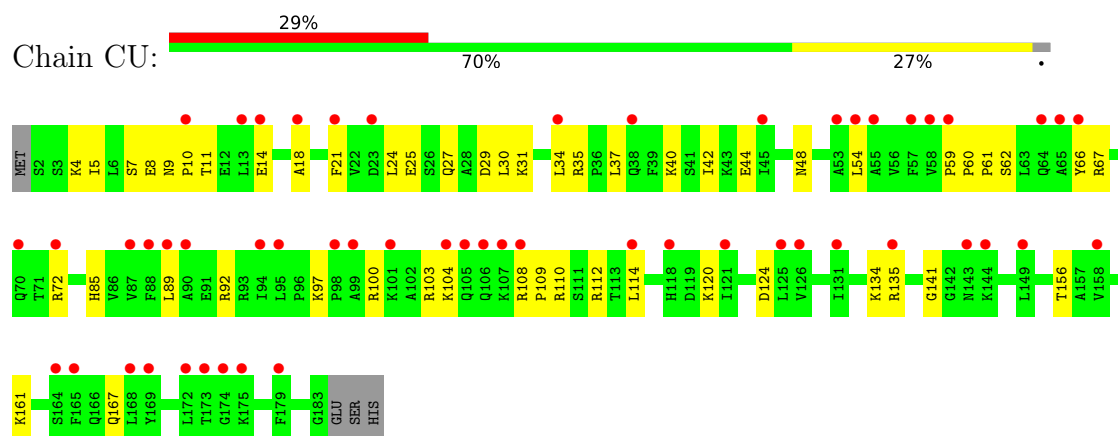


• Molecule 54: 40S ribosomal protein S7

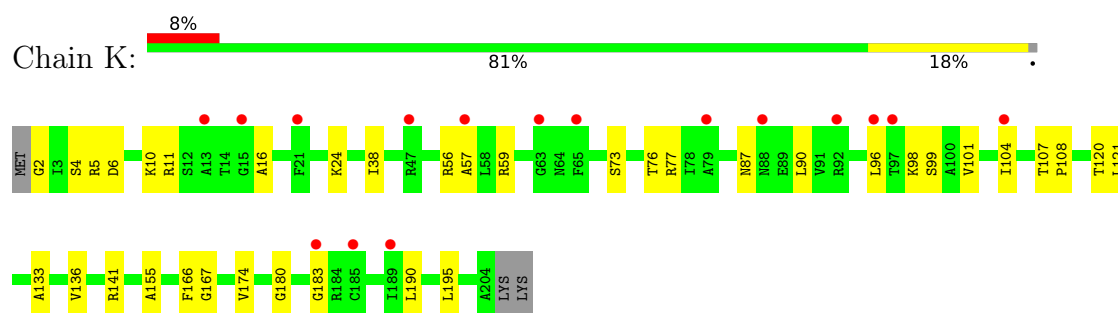




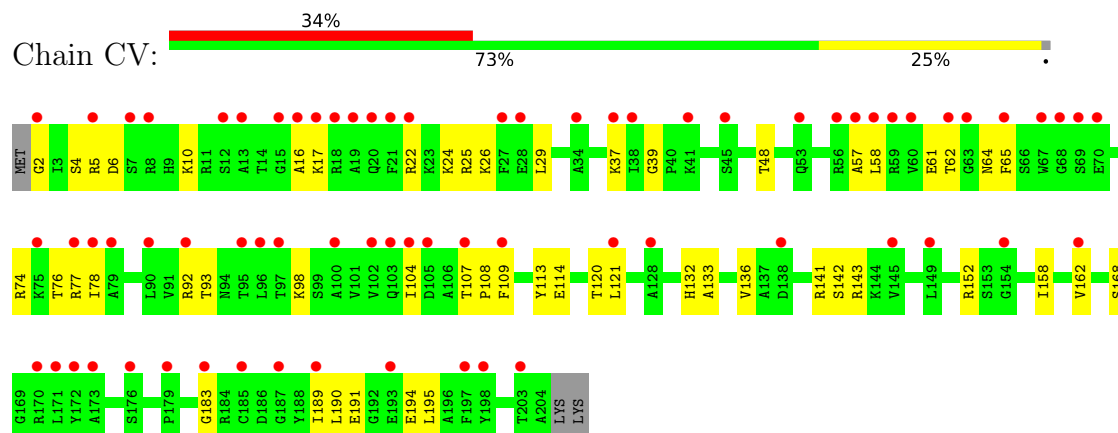
• Molecule 54: 40S ribosomal protein S7



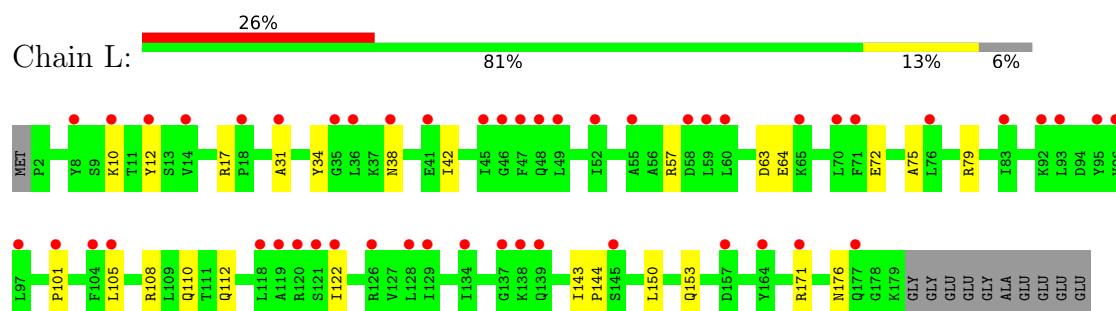
• Molecule 55: 40S ribosomal protein S8



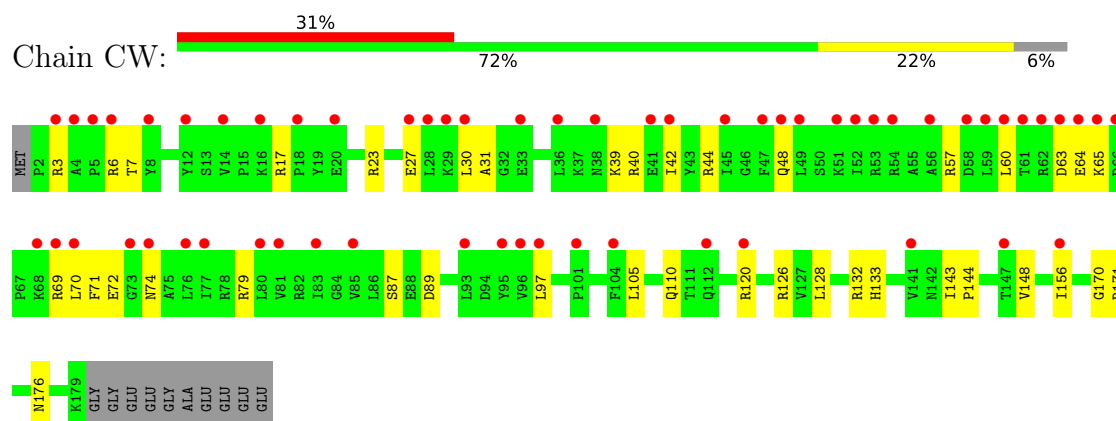
• Molecule 55: 40S ribosomal protein S8



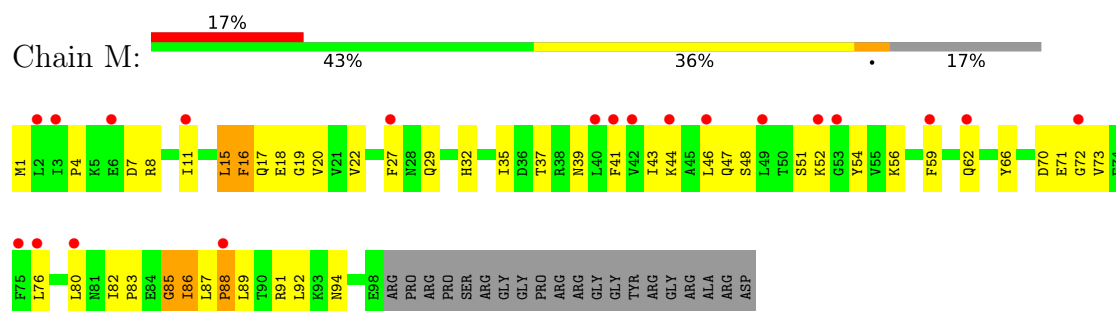
- Molecule 56: Ribosomal protein S4



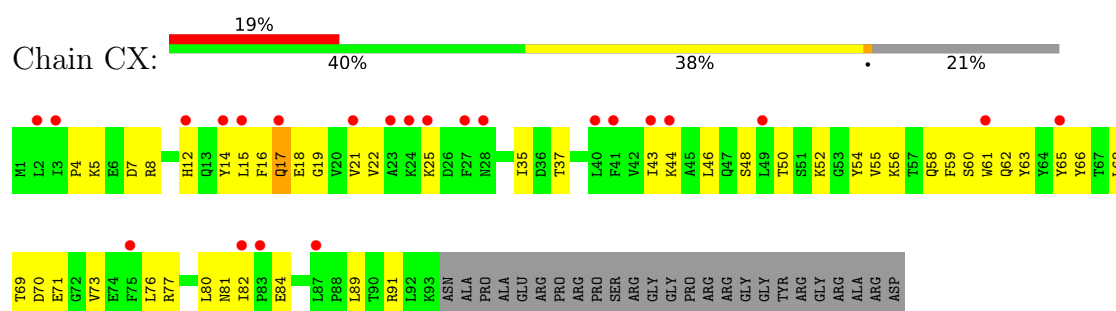
- Molecule 56: Ribosomal protein S4



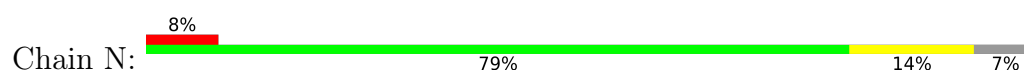
- Molecule 57: 40S ribosomal protein S10-A

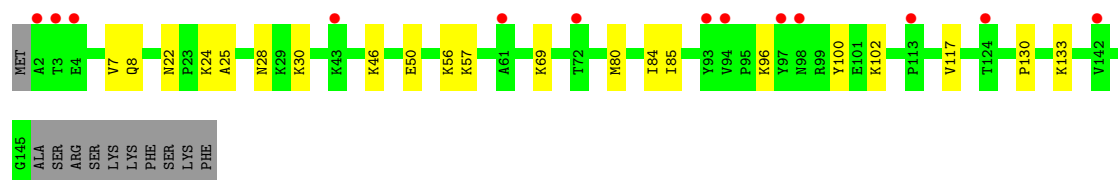


- Molecule 57: 40S ribosomal protein S10-A

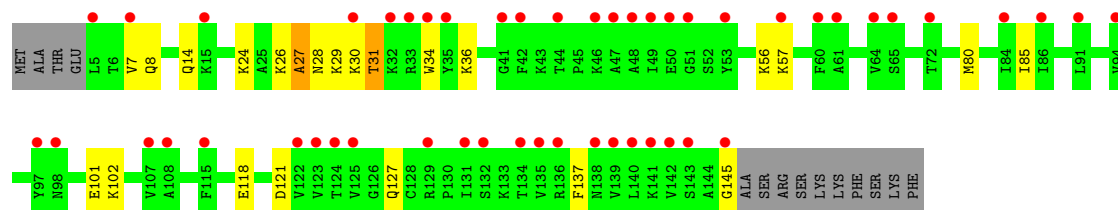
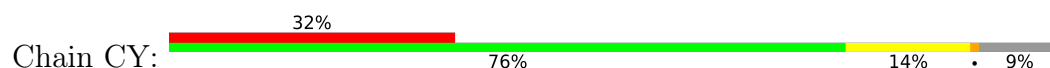


- Molecule 58: 40S ribosomal protein S11A

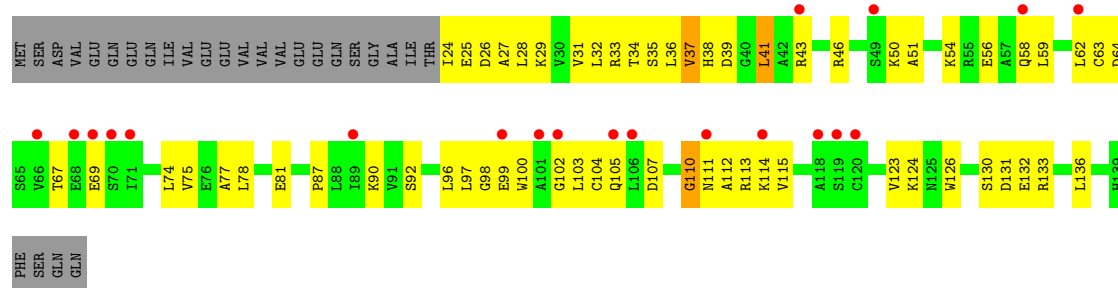




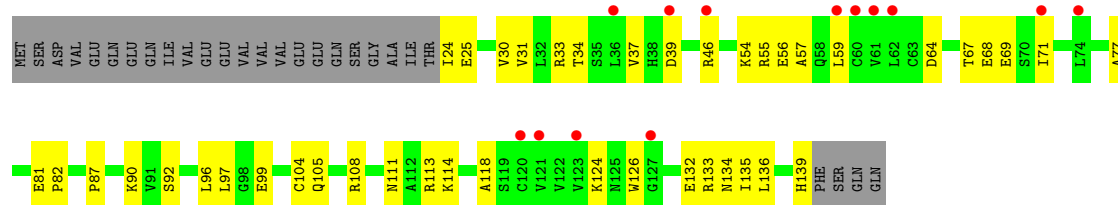
- Molecule 58: 40S ribosomal protein S11A



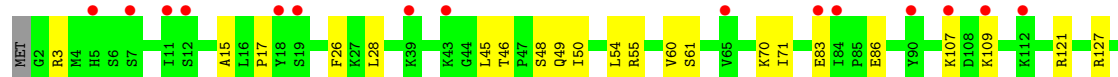
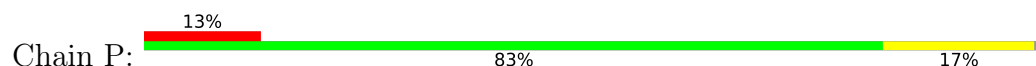
- Molecule 59: 40S ribosomal protein S12

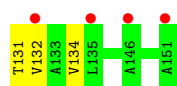


- Molecule 59: 40S ribosomal protein S12

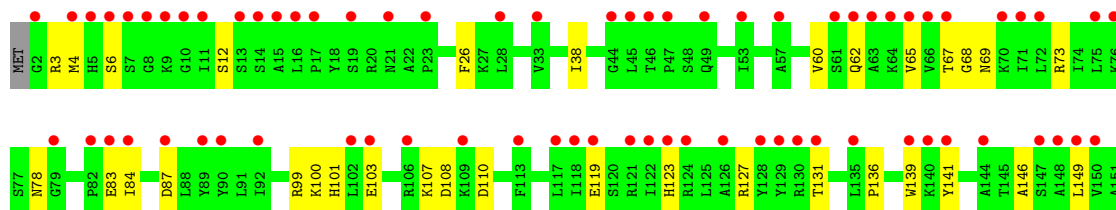
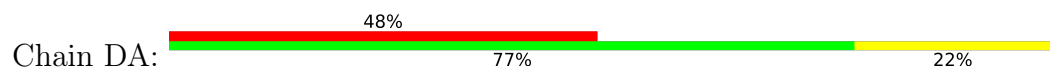


- Molecule 60: 40S ribosomal protein S13

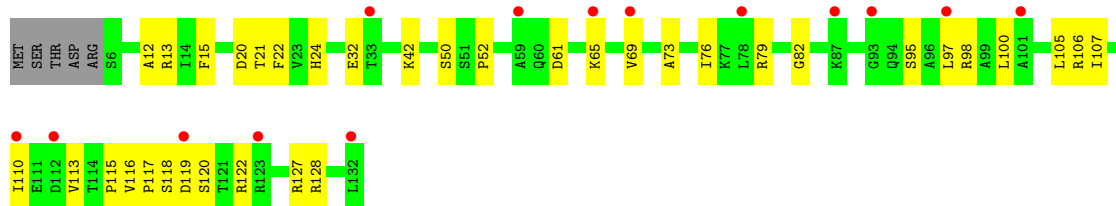




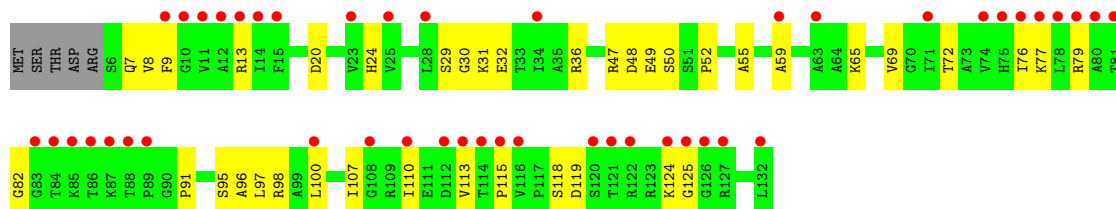
- Molecule 60: 40S ribosomal protein S13



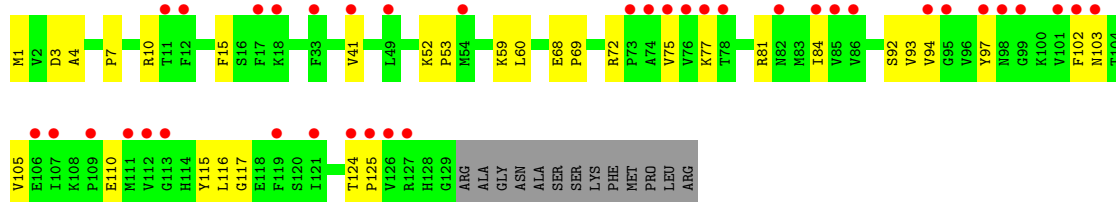
- Molecule 61: 40S ribosomal protein S14-A



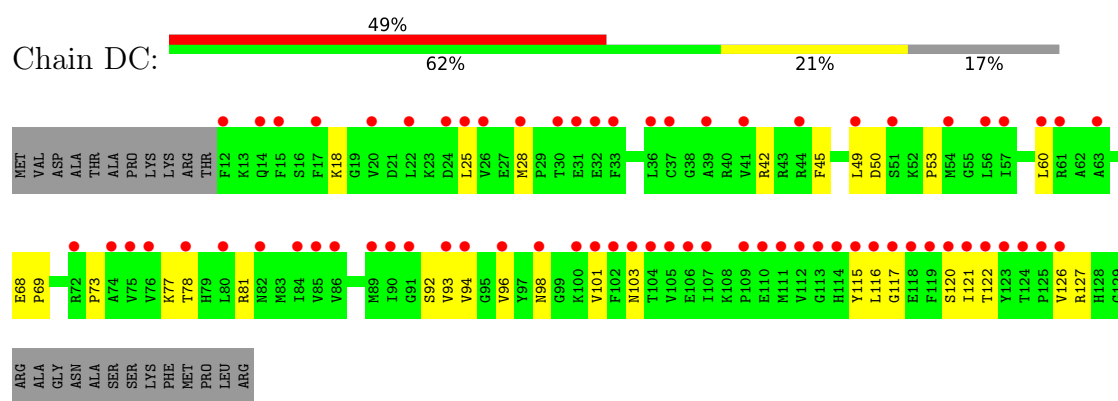
- Molecule 61: 40S ribosomal protein S14-A



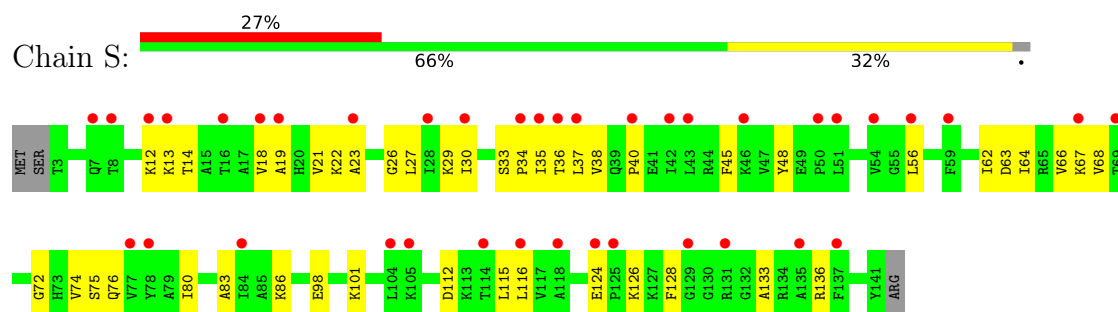
- Molecule 62: 40S ribosomal protein S15



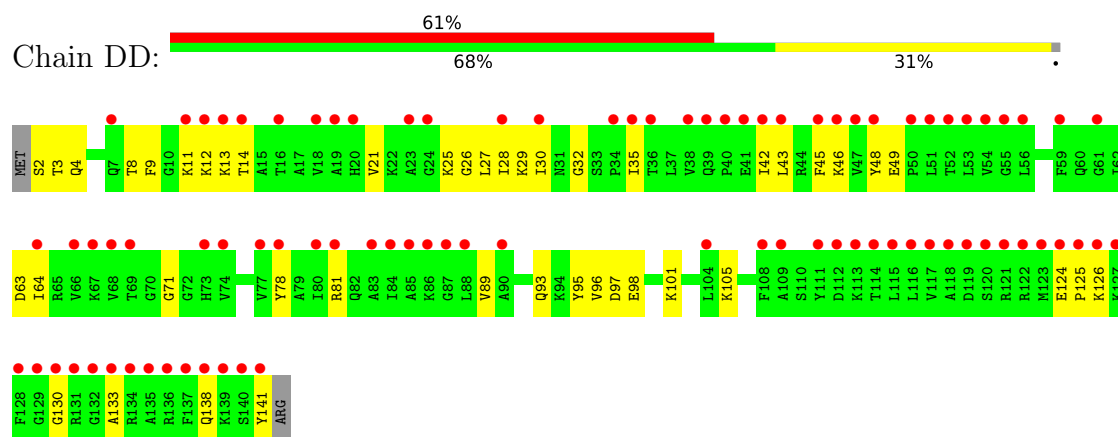
- Molecule 62: 40S ribosomal protein S15



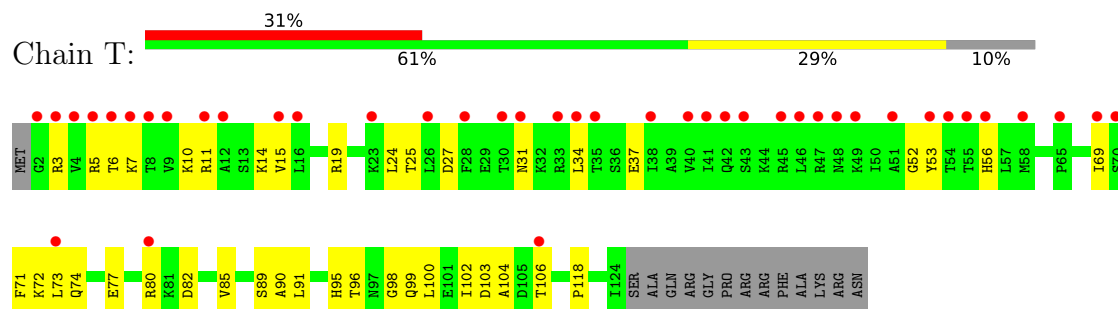
- Molecule 63: 40S ribosomal protein S16



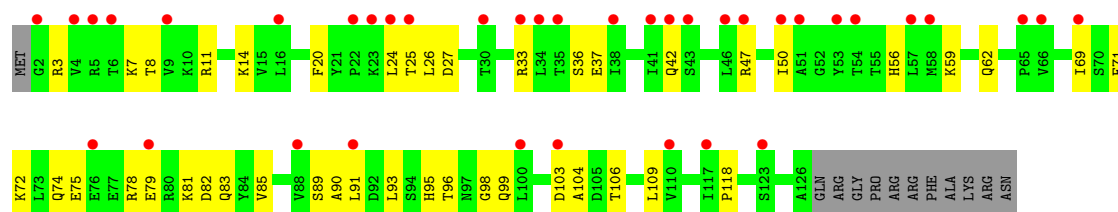
- Molecule 63: 40S ribosomal protein S16



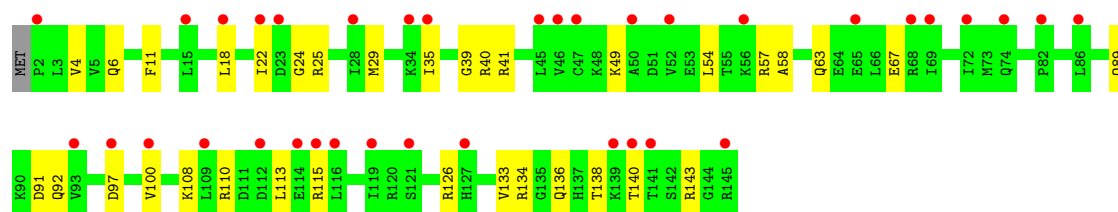
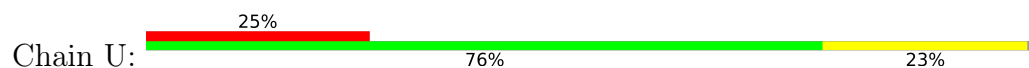
- Molecule 64: 40S ribosomal protein S17-B



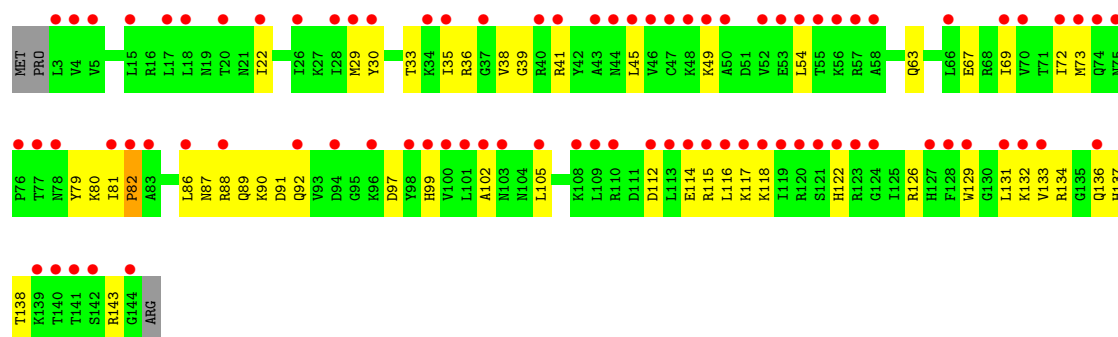
- Molecule 64: 40S ribosomal protein S17-B



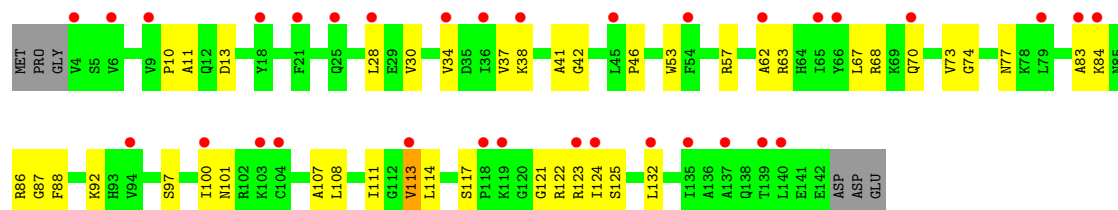
• Molecule 65: 40S ribosomal protein S18-B



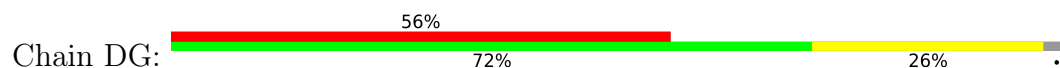
• Molecule 65: 40S ribosomal protein S18-B

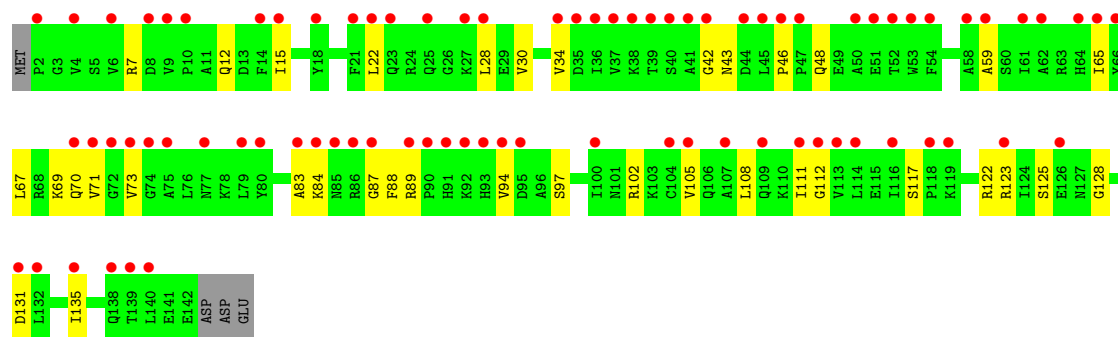


• Molecule 66: 40S ribosomal protein S19-A

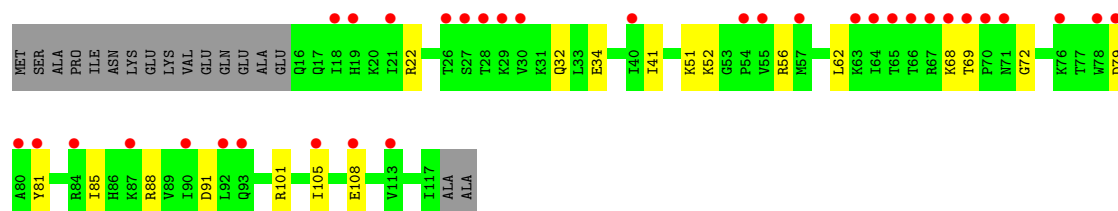


• Molecule 66: 40S ribosomal protein S19-A

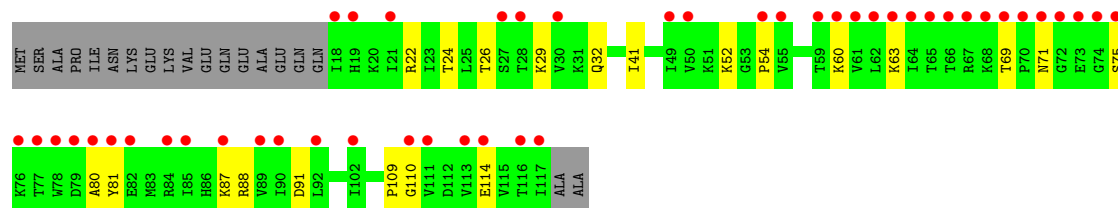
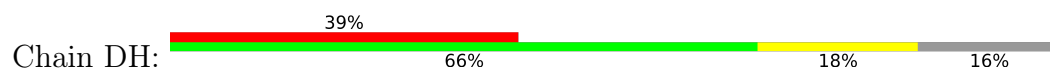




• Molecule 67: Ribosomal protein S10



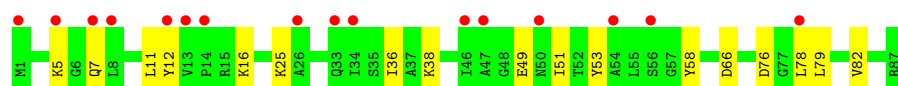
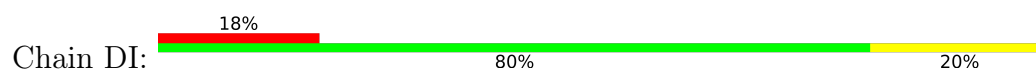
• Molecule 67: Ribosomal protein S10



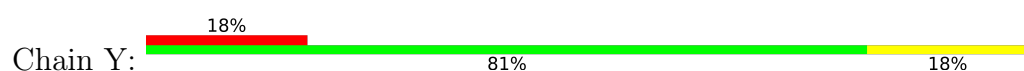
• Molecule 68: 40S ribosomal protein S21

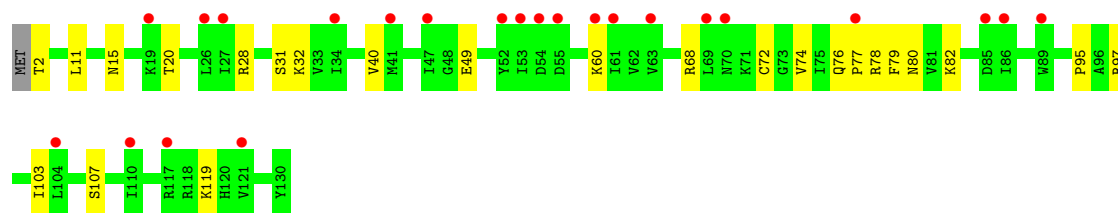


• Molecule 68: 40S ribosomal protein S21

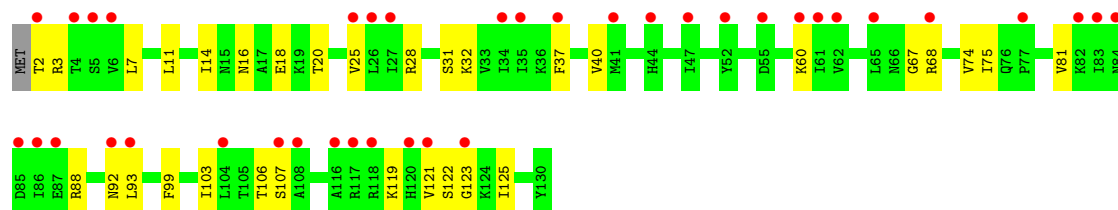
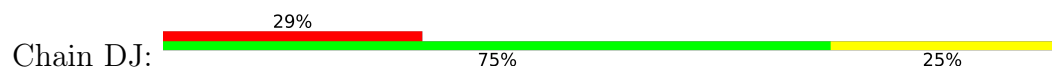


• Molecule 69: 40S ribosomal protein S22-A

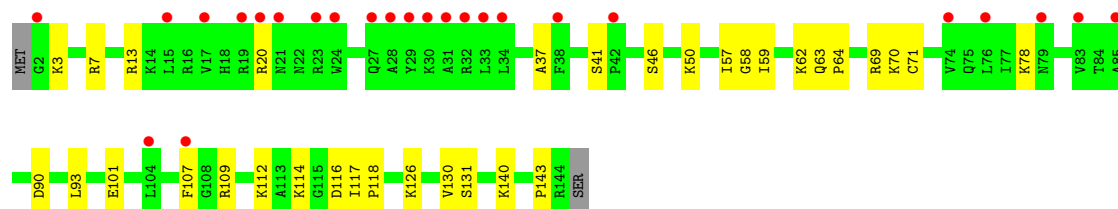
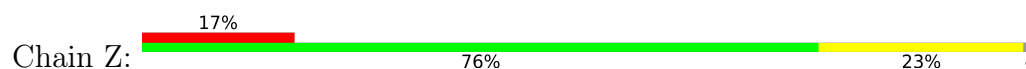




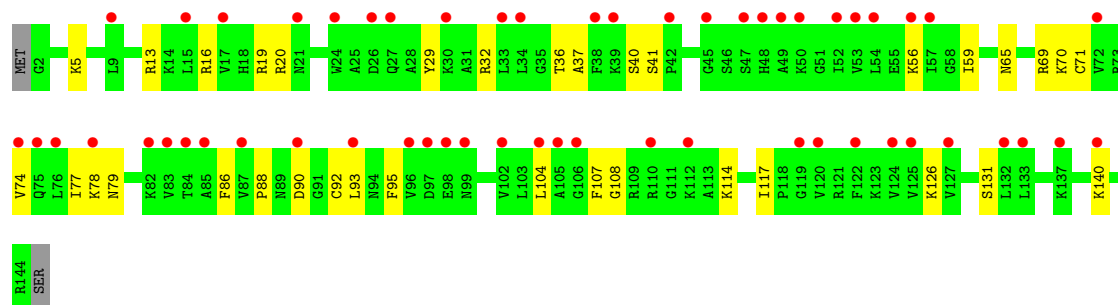
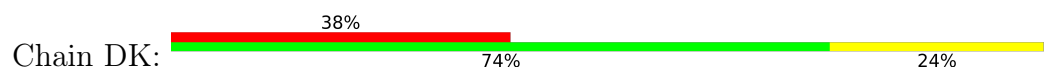
- Molecule 69: 40S ribosomal protein S22-A



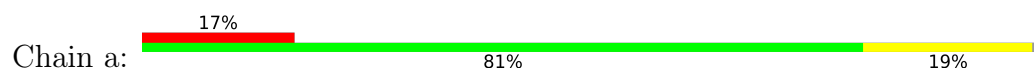
- Molecule 70: Ribosomal protein S23 (S12)

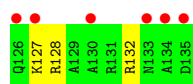


- Molecule 70: Ribosomal protein S23 (S12)

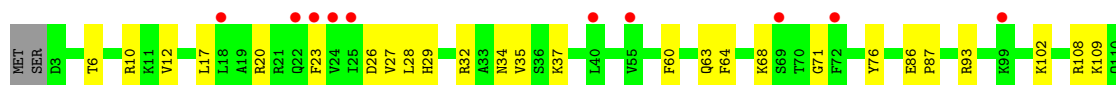
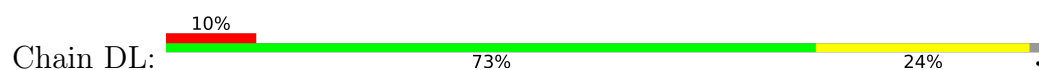


- Molecule 71: 40S ribosomal protein S24

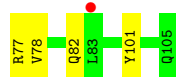
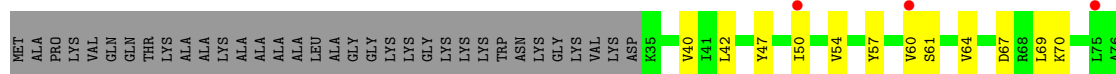




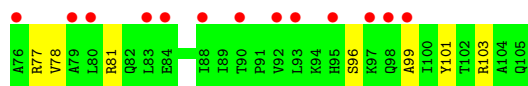
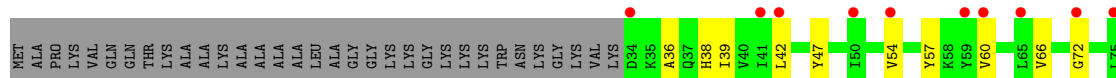
- Molecule 71: 40S ribosomal protein S24



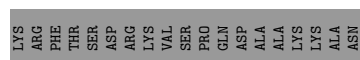
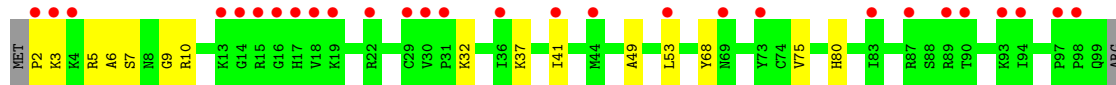
- Molecule 72: 40S ribosomal protein S25



- Molecule 72: 40S ribosomal protein S25

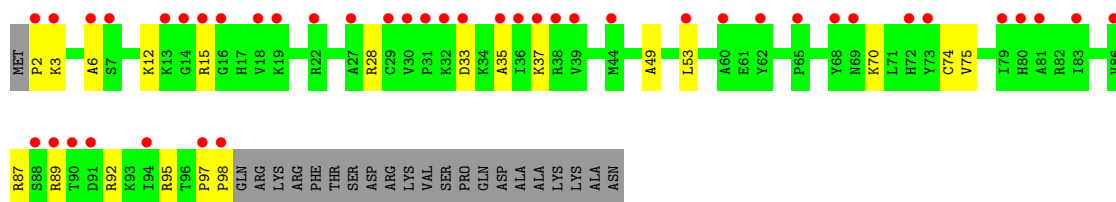


- Molecule 73: 40S ribosomal protein S26

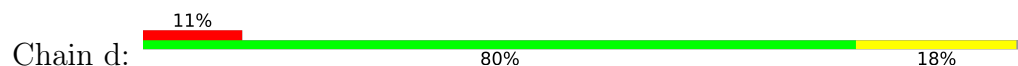


- Molecule 73: 40S ribosomal protein S26

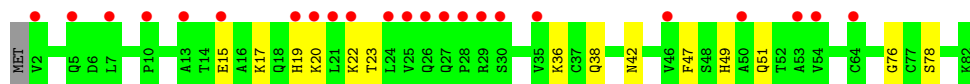
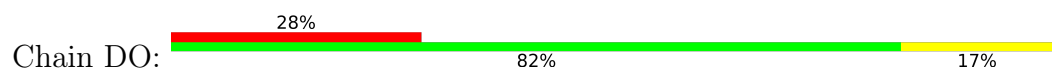




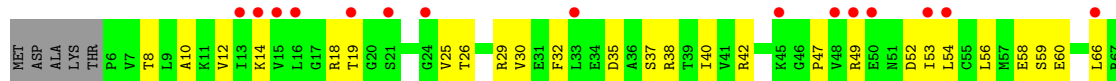
- Molecule 74: 40S ribosomal protein S27



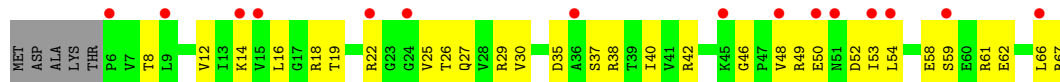
- Molecule 74: 40S ribosomal protein S27



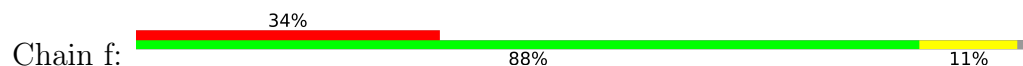
- Molecule 75: 40S ribosomal protein S28-B



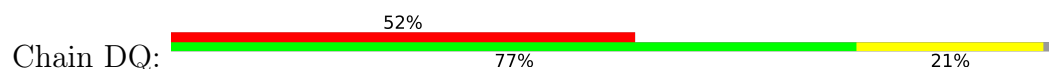
- Molecule 75: 40S ribosomal protein S28-B

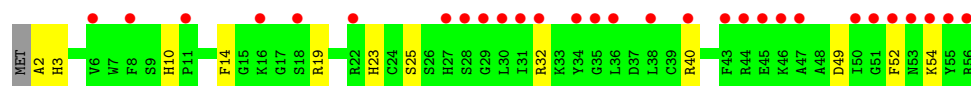


- Molecule 76: 40S ribosomal protein S29A

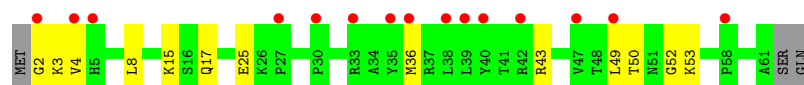
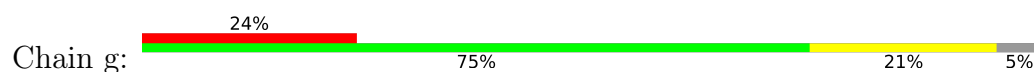


- Molecule 76: 40S ribosomal protein S29A

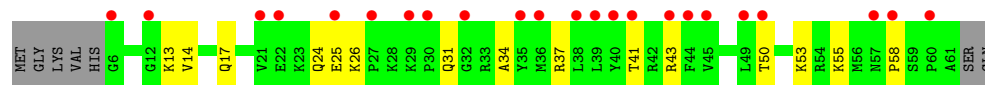
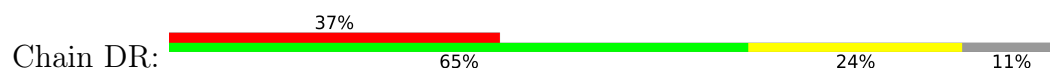




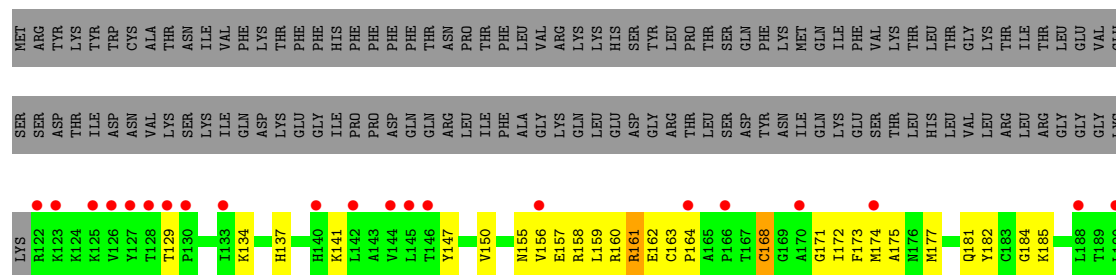
- Molecule 77: 40S ribosomal protein S30



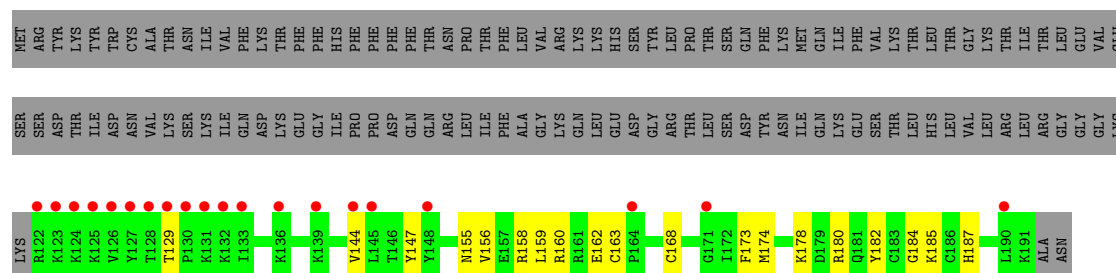
- Molecule 77: 40S ribosomal protein S30



- Molecule 78: Ubiquitin-40S ribosomal protein S31 fusion protein

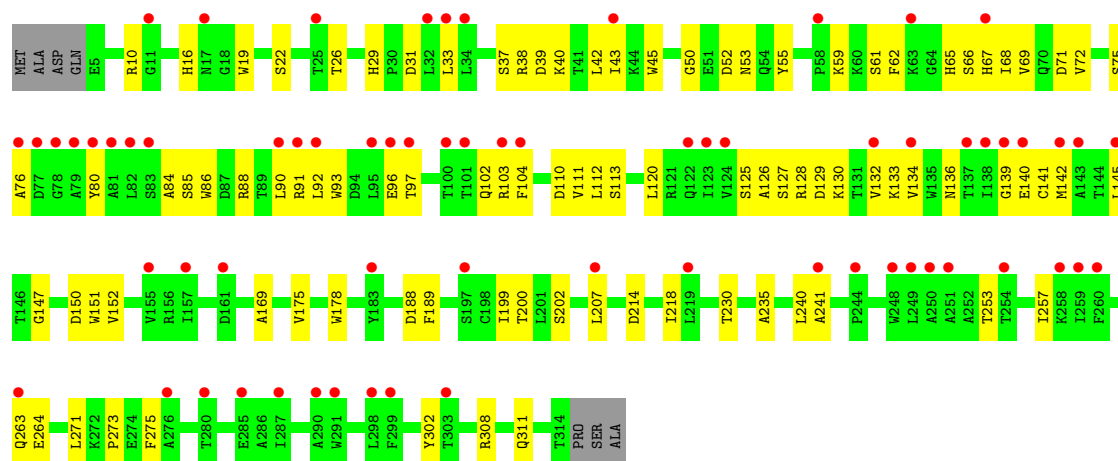


- Molecule 78: Ubiquitin-40S ribosomal protein S31 fusion protein



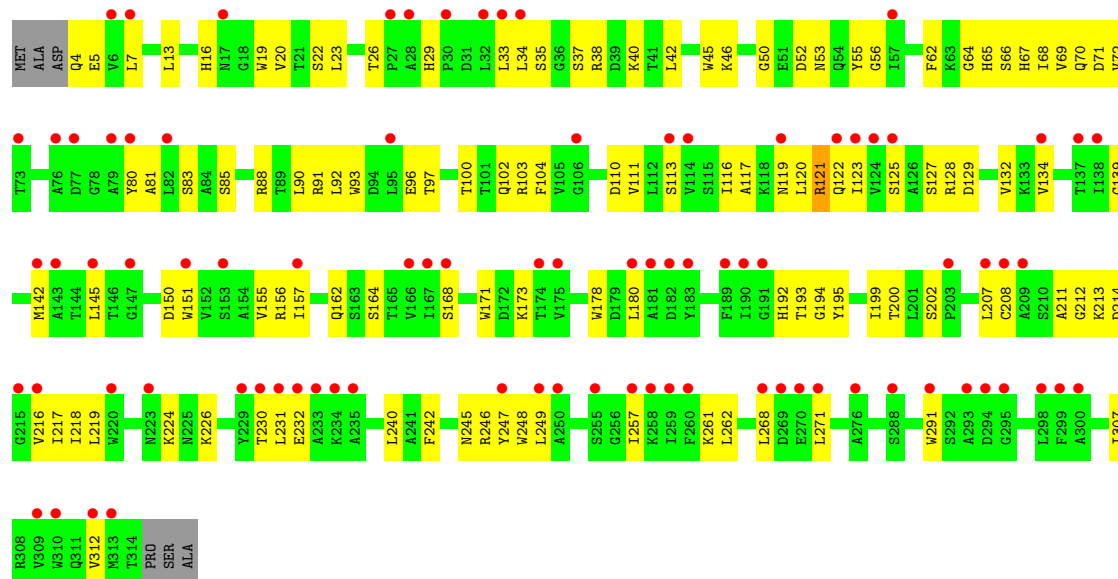
- Molecule 79: Guanine nucleotide-binding protein subunit beta-like protein





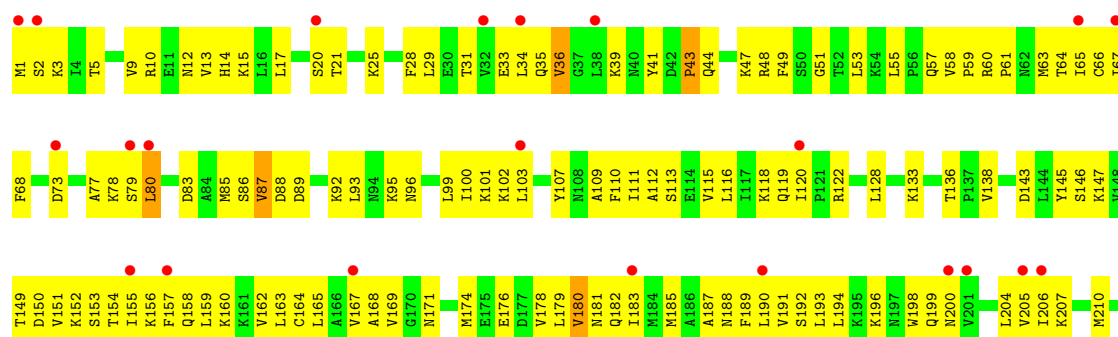
• Molecule 79: Guanine nucleotide-binding protein subunit beta-like protein

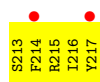
Chain DT: 27% 61% 37%



• Molecule 80: Ribosomal protein

Chain 11: 11% 39% 59%





- Molecule 81: 60S ribosomal protein L12-A



4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	296.89Å 293.38Å 443.00Å 90.00° 99.39° 90.00°	Depositor
Resolution (Å)	175.26 – 3.35 175.26 – 3.35	Depositor EDS
% Data completeness (in resolution range)	99.3 (175.26-3.35) 89.9 (175.26-3.35)	Depositor EDS
R_{merge}	1.16	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.01 (at 3.07Å)	Xtriage
Refinement program	PHENIX (1.19rc4_4035: ???)	Depositor
R, R_{free}	0.284 , 0.328 0.284 , 0.328	Depositor DCC
R_{free} test set	2000 reflections (0.15%)	wwPDB-VP
Wilson B-factor (Å ²)	35.6	Xtriage
Anisotropy	0.233	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.25 , 12.2	EDS
L-test for twinning ²	$\langle L \rangle = 0.38$, $\langle L^2 \rangle = 0.21$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.81	EDS
Total number of atoms	401103	wwPDB-VP
Average B, all atoms (Å ²)	86.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 6.28% 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: ZN, PAR, MG, 3K5

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	1	0.17	0/77018	0.42	5/120068 (0.0%)
1	AS	0.16	0/73229	0.42	5/114152 (0.0%)
2	3	0.13	0/2884	0.30	0/4492
2	AT	0.13	0/2884	0.31	0/4492
3	4	0.14	0/3724	0.38	0/5798
3	AU	0.14	0/3702	0.37	0/5764
4	AW	0.13	0/1913	0.40	0/2569
4	j	0.15	0/1922	0.38	0/2581
5	AX	0.14	0/3145	0.41	0/4231
5	k	0.15	0/3156	0.43	0/4246
6	AY	0.13	0/2785	0.43	0/3758
6	l	0.16	0/2799	0.44	0/3777
7	AZ	0.14	0/2447	0.42	0/3294
7	m	0.15	0/2479	0.42	0/3337
8	BA	0.14	0/1231	0.41	0/1662
8	n	0.15	0/1263	0.44	0/1703
9	BB	0.13	0/1858	0.39	0/2496
9	o	0.16	0/1867	0.42	0/2508
10	BC	0.16	0/1796	0.51	0/2419
10	p	0.16	0/1861	0.46	0/2508
11	BD	0.14	0/1528	0.41	0/2055
11	q	0.18	0/1537	0.42	0/2067
12	BE	0.14	0/1705	0.41	0/2288
12	r	0.15	0/1724	0.40	0/2314
13	BF	0.15	0/1390	0.43	0/1861
13	s	0.17	0/1390	0.45	0/1861
14	BG	0.15	0/1637	0.51	0/2195
14	t	0.15	0/1637	0.42	0/2195
15	BH	0.15	0/1030	0.38	0/1389
15	u	0.17	0/1044	0.41	0/1407
16	BI	0.14	0/1753	0.41	0/2347
16	v	0.16	0/1753	0.40	0/2347

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	BJ	0.13	0/1620	0.40	0/2167
17	w	0.14	0/1620	0.39	0/2167
18	BK	0.13	0/1419	0.38	0/1906
18	x	0.14	0/1403	0.41	0/1885
19	BL	0.12	0/1482	0.37	0/1985
19	y	0.14	0/1482	0.41	0/1985
20	BM	0.13	0/1404	0.43	0/1868
20	z	0.13	0/1475	0.38	0/1961
21	0	0.14	0/1457	0.38	0/1962
21	BN	0.13	0/1457	0.36	0/1962
22	2	0.13	0/1285	0.37	0/1723
22	BO	0.12	0/1285	0.36	0/1723
23	5	0.15	0/846	0.41	0/1140
23	BP	0.24	0/850	0.66	0/1145
24	6	0.13	0/993	0.38	0/1339
24	BQ	0.14	0/993	0.40	0/1339
25	7	0.12	0/958	0.29	0/1267
25	BR	0.17	0/909	0.34	0/1202
26	8	0.13	0/990	0.35	0/1337
26	BS	0.12	0/968	0.33	0/1308
27	9	0.13	0/999	0.35	0/1334
27	BT	0.15	0/985	0.41	0/1315
28	AA	0.12	0/1112	0.36	0/1488
28	BU	0.13	0/1112	0.41	0/1488
29	AB	0.14	0/1199	0.38	0/1607
29	BV	0.13	0/1199	0.43	0/1607
30	AC	0.14	0/503	0.59	0/668
30	BW	0.14	0/502	0.52	0/666
31	AD	0.13	0/764	0.35	0/1029
31	BX	0.14	0/738	0.40	0/994
32	AE	0.15	0/907	0.43	0/1219
32	BY	0.13	0/902	0.43	0/1212
33	AF	0.14	0/1021	0.42	0/1368
33	BZ	0.13	0/1030	0.43	0/1379
34	AG	0.13	0/866	0.36	0/1165
34	CA	0.22	0/895	0.39	0/1201
35	AH	0.14	0/887	0.39	0/1184
35	CB	0.15	0/934	0.42	0/1242
36	AI	0.15	0/1003	0.38	0/1336
36	CC	0.13	0/981	0.43	0/1308
37	AJ	0.12	0/763	0.37	0/1012
37	CD	0.15	0/780	0.52	0/1033
38	AK	0.15	0/690	0.42	0/916

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
38	CE	0.16	0/690	0.44	0/916
39	AL	0.14	0/623	0.42	0/831
39	CF	0.13	0/627	0.37	0/835
40	AM	0.13	0/447	0.34	0/594
40	CG	0.13	0/447	0.45	0/594
41	AN	0.16	0/425	0.44	0/563
41	CH	0.13	0/436	0.38	0/577
42	AO	0.18	0/237	0.48	0/304
42	CI	0.19	0/228	0.55	0/293
43	AP	0.15	0/840	0.41	0/1110
43	CJ	0.15	0/860	0.38	0/1136
44	AQ	0.14	0/705	0.36	0/940
44	CK	0.13	0/705	0.41	0/940
45	CL	0.28	0/826	0.94	1/1104 (0.1%)
45	i	0.24	0/941	0.89	0/1257
46	B	0.17	0/41264	0.43	6/64298 (0.0%)
46	CM	0.17	0/40656	0.44	4/63348 (0.0%)
47	C	0.13	0/1666	0.37	0/2273
47	CN	0.14	0/1666	0.43	0/2273
48	CO	0.20	0/1750	0.62	0/2354
48	D	0.13	0/1750	0.36	0/2354
49	CP	0.12	0/1648	0.37	0/2237
49	E	0.14	0/1657	0.39	0/2248
50	CQ	0.21	0/1731	0.47	0/2324
50	F	0.17	0/1731	0.51	1/2324 (0.0%)
51	CR	0.14	0/2096	0.40	0/2822
51	G	0.13	0/2092	0.37	0/2817
52	CS	0.13	0/1631	0.41	0/2199
52	H	0.18	0/1631	0.45	1/2199 (0.0%)
53	CT	0.13	0/1920	0.41	0/2560
53	I	0.14	0/1845	0.42	0/2464
54	CU	0.17	0/1490	0.44	0/2004
54	J	0.15	0/1516	0.43	0/2039
55	CV	0.14	0/1606	0.41	0/2150
55	K	0.13	0/1606	0.37	0/2150
56	CW	0.13	0/1478	0.39	0/1978
56	L	0.13	0/1478	0.35	0/1978
57	CX	0.18	0/801	0.50	0/1081
57	M	0.23	0/836	0.73	2/1130 (0.2%)
58	CY	0.18	0/1154	0.51	0/1553
58	N	0.14	0/1175	0.43	0/1582
59	CZ	0.17	0/892	0.55	0/1203
59	O	0.29	0/892	0.92	0/1203

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
60	DA	0.14	0/1210	0.40	0/1631
60	P	0.14	0/1210	0.40	0/1631
61	DB	0.14	0/953	0.47	0/1279
61	Q	0.13	0/953	0.40	0/1279
62	DC	0.15	0/954	0.49	0/1282
62	R	0.18	0/1038	0.55	0/1395
63	DD	0.14	0/1109	0.40	0/1486
63	S	0.16	0/1103	0.46	0/1478
64	DE	0.16	0/1014	0.47	0/1361
64	T	0.18	0/1003	0.53	0/1346
65	DF	0.16	0/1186	0.56	0/1590
65	U	0.15	0/1205	0.42	0/1615
66	DG	0.14	0/1120	0.45	0/1508
66	V	0.16	0/1108	0.55	0/1492
67	DH	0.14	0/800	0.40	0/1082
67	W	0.16	0/818	0.47	0/1106
68	DI	0.14	0/683	0.44	0/918
68	X	0.15	0/683	0.43	0/918
69	DJ	0.15	0/1049	0.42	0/1412
69	Y	0.16	0/1049	0.39	0/1412
70	DK	0.15	0/1128	0.45	0/1505
70	Z	0.15	0/1128	0.51	0/1505
71	DL	0.12	0/1086	0.37	0/1447
71	a	0.12	0/1100	0.39	0/1466
72	DM	0.14	0/585	0.39	0/789
72	b	0.14	0/577	0.37	0/778
73	DN	0.18	0/782	0.51	0/1048
73	c	0.16	0/791	0.47	0/1060
74	DO	0.13	0/624	0.43	0/843
74	d	0.14	0/624	0.43	0/843
75	DP	0.15	0/489	0.48	0/654
75	e	0.16	0/489	0.52	0/654
76	DQ	0.14	0/466	0.38	0/620
76	f	0.15	0/466	0.41	0/620
77	DR	0.16	0/451	0.50	0/601
77	g	0.15	0/482	0.49	0/642
78	DS	0.17	0/585	0.54	0/778
78	h	0.26	0/585	0.82	0/778
79	AR	0.17	0/2442	0.46	0/3325
79	DT	0.23	0/2451	0.60	1/3337 (0.0%)
80	l1	0.17	0/1737	0.46	0/2335
81	12	0.10	0/96	0.33	0/128
All	All	0.16	0/427866	0.43	26/627439 (0.0%)

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	1	0	1
9	o	0	1
11	BD	0	1
52	H	0	1
57	M	0	1
61	Q	0	1
79	DT	0	1
All	All	0	7

There are no bond length outliers.

All (26) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AS	3163	U	O5'-C5'-C4'	10.56	127.33	111.50
46	CM	1340	C	OP1-P-O3'	-9.23	80.30	108.00
46	CM	1340	C	OP2-P-O3'	-8.21	83.36	108.00
1	AS	3163	U	O5'-P-OP1	6.47	127.42	108.00
1	1	1669	G	O3'-P-O5'	6.24	113.36	104.00
1	1	1670	G	C5'-C4'-C3'	6.23	125.35	116.00
46	B	699	U	O3'-P-O5'	-6.14	94.80	104.00
46	B	700	G	P-O5'-C5'	6.13	130.10	120.90
46	B	700	G	C5'-C4'-C3'	5.98	124.16	115.20
57	M	85	GLY	N-CA-C	-5.96	99.05	113.18
57	M	16	PHE	N-CA-C	-5.89	100.58	109.95
46	B	700	G	O5'-C5'-C4'	-5.86	102.91	111.70
79	DT	121	ARG	CA-CB-CG	5.70	125.49	114.10
1	AS	444	U	C4'-C3'-O3'	5.56	121.34	113.00
46	CM	725	A	O5'-C5'-C4'	-5.54	103.19	111.50
46	B	700	G	P-O3'-C3'	5.35	128.23	120.20
50	F	60	LEU	CA-CB-CG	5.32	134.91	116.30
46	B	697	U	O3'-P-O5'	5.31	111.96	104.00
45	CL	134	GLU	N-CA-C	-5.23	106.05	112.90
1	1	484	U	O5'-C5'-C4'	5.20	119.30	111.50
1	1	484	U	P-O5'-C5'	5.19	128.68	120.90
1	1	2637	U	C4'-C3'-O3'	-5.18	101.62	109.40
1	AS	1023	A	N9-C1'-C2'	5.16	119.74	112.00
1	AS	1018	U	O3'-P-O5'	5.14	111.71	104.00
46	CM	482	C	N1-C1'-C2'	5.04	119.56	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
52	H	154	THR	N-CA-C	5.00	117.55	110.50

There are no chirality outliers.

All (7) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	1	2832	U	Sidechain
11	BD	134	MET	Mainchain
79	DT	120	LEU	Mainchain
52	H	153	GLY	Mainchain
57	M	15	LEU	Mainchain
61	Q	119	ASP	Peptide
9	o	233	ILE	Mainchain

5.2 Too-close contacts

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	1	68814	0	34586	1107	0
1	AS	65432	0	32882	1064	0
2	3	2579	0	1304	32	0
2	AT	2579	0	1304	35	0
3	4	3333	0	1684	54	0
3	AU	3313	0	1674	68	0
4	AW	1879	0	1954	45	0
4	j	1888	0	1962	43	0
5	AX	3077	0	3166	62	0
5	k	3084	0	3173	51	0
6	AY	2737	0	2868	53	0
6	l	2751	0	2879	54	0
7	AZ	2394	0	2361	41	0
7	m	2426	0	2389	35	0
8	BA	1210	0	1285	27	0
8	n	1242	0	1321	29	0
9	BB	1825	0	1913	30	0
9	o	1834	0	1919	21	0
10	BC	1766	0	1882	25	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
10	p	1831	0	1951	25	0
11	BD	1510	0	1582	28	0
11	q	1519	0	1588	33	0
12	BE	1671	0	1717	20	0
12	r	1689	0	1731	24	0
13	BF	1371	0	1410	31	0
13	s	1371	0	1410	27	0
14	BG	1610	0	1686	38	0
14	t	1610	0	1686	35	0
15	BH	1015	0	1098	19	0
15	u	1029	0	1116	24	0
16	BI	1713	0	1764	56	0
16	v	1713	0	1764	42	0
17	BJ	1590	0	1705	21	0
17	w	1590	0	1705	26	0
18	BK	1396	0	1421	31	0
18	x	1380	0	1401	25	0
19	BL	1458	0	1556	28	0
19	y	1458	0	1556	27	0
20	BM	1386	0	1487	31	0
20	z	1457	0	1564	22	0
21	0	1423	0	1480	31	0
21	BN	1423	0	1480	39	0
22	2	1262	0	1314	16	0
22	BO	1262	0	1314	30	0
23	5	831	0	848	16	0
23	BP	832	0	849	35	0
24	6	977	0	1025	18	0
24	BQ	977	0	1026	15	0
25	7	945	0	1010	19	0
25	BR	896	0	954	34	0
26	8	974	0	1032	13	0
26	BS	952	0	1003	8	0
27	9	989	0	1064	18	0
27	BT	975	0	1053	34	0
28	AA	1087	0	1154	20	0
28	BU	1087	0	1154	12	0
29	AB	1170	0	1203	30	0
29	BV	1170	0	1203	26	0
30	AC	493	0	520	11	0
30	BW	489	0	522	20	0
31	AD	755	0	795	13	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
31	BX	729	0	775	20	0
32	AE	894	0	941	18	0
32	BY	889	0	936	14	0
33	AF	1000	0	1069	14	0
33	BZ	1006	0	1082	14	0
34	AG	847	0	893	19	0
34	CA	867	0	932	17	0
35	AH	878	0	934	18	0
35	CB	913	0	999	22	0
36	AI	992	0	1093	18	0
36	CC	970	0	1063	16	0
37	AJ	758	0	838	8	0
37	CD	772	0	863	13	0
38	AK	677	0	697	20	0
38	CE	677	0	697	20	0
39	AL	617	0	675	8	0
39	CF	618	0	683	9	0
40	AM	438	0	475	8	0
40	CG	438	0	475	14	0
41	AN	419	0	460	5	0
41	CH	427	0	473	7	0
42	AO	236	0	285	3	0
42	CI	227	0	272	9	0
43	AP	828	0	893	15	0
43	CJ	841	0	913	13	0
44	AQ	698	0	734	14	0
44	CK	698	0	734	19	0
45	CL	815	0	793	63	0
45	i	930	0	905	49	0
46	B	36889	0	18557	754	0
46	CM	36345	0	18285	811	0
47	C	1627	0	1644	39	0
47	CN	1627	0	1644	32	0
48	CO	1724	0	1805	62	0
48	D	1724	0	1805	34	0
49	CP	1620	0	1715	27	0
49	E	1629	0	1728	35	0
50	CQ	1707	0	1807	46	0
50	F	1707	0	1807	49	0
51	CR	2055	0	2137	45	0
51	G	2051	0	2134	46	0
52	CS	1614	0	1688	40	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
52	H	1614	0	1688	49	0
53	CT	1895	0	1988	58	0
53	I	1820	0	1896	40	0
54	CU	1466	0	1561	37	0
54	J	1491	0	1579	43	0
55	CV	1579	0	1602	43	0
55	K	1579	0	1602	27	0
56	CW	1453	0	1532	35	0
56	L	1453	0	1532	17	0
57	CX	783	0	799	41	0
57	M	817	0	828	49	0
58	CY	1129	0	1183	24	0
58	N	1150	0	1201	18	0
59	CZ	885	0	915	30	0
59	O	885	0	915	62	0
60	DA	1187	0	1249	22	0
60	P	1187	0	1249	22	0
61	DB	942	0	981	30	0
61	Q	942	0	981	23	0
62	DC	935	0	970	37	0
62	R	1018	0	1065	32	0
63	DD	1091	0	1155	38	0
63	S	1085	0	1150	42	0
64	DE	1002	0	1058	37	0
64	T	991	0	1048	39	0
65	DF	1169	0	1216	49	0
65	U	1187	0	1237	29	0
66	DG	1100	0	1114	30	0
66	V	1089	0	1103	35	0
67	DH	790	0	855	19	0
67	W	808	0	871	18	0
68	DI	676	0	677	17	0
68	X	676	0	677	19	0
69	DJ	1032	0	1066	29	0
69	Y	1032	0	1066	20	0
70	DK	1110	0	1182	35	0
70	Z	1110	0	1182	29	0
71	DL	1072	0	1123	29	0
71	a	1086	0	1132	21	0
72	DM	578	0	613	11	0
72	b	570	0	609	10	0
73	DN	770	0	825	16	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
73	c	779	0	832	12	0
74	DO	614	0	630	12	0
74	d	614	0	630	10	0
75	DP	487	0	523	24	0
75	e	487	0	523	21	0
76	DQ	454	0	432	11	0
76	f	454	0	431	10	0
77	DR	444	0	483	14	0
77	g	474	0	515	12	0
78	DS	574	0	606	19	0
78	h	574	0	606	36	0
79	AR	2389	0	2366	69	0
79	DT	2398	0	2374	87	0
80	l1	1711	0	1817	126	0
81	12	97	0	103	3	0
82	1	684	0	0	0	0
82	2	1	0	0	0	0
82	3	4	0	0	0	0
82	4	4	0	0	0	0
82	6	1	0	0	0	0
82	9	1	0	0	0	0
82	AA	1	0	0	0	0
82	AB	2	0	0	0	0
82	AD	1	0	0	0	0
82	AF	1	0	0	0	0
82	AH	1	0	0	0	0
82	AI	1	0	0	0	0
82	AK	2	0	0	0	0
82	AN	1	0	0	0	0
82	AP	2	0	0	0	0
82	AR	1	0	0	0	0
82	AS	542	0	0	0	0
82	AT	3	0	0	0	0
82	AU	2	0	0	0	0
82	AW	1	0	0	0	0
82	AX	1	0	0	0	0
82	AZ	1	0	0	0	0
82	B	69	0	0	0	0
82	BB	3	0	0	0	0
82	BE	1	0	0	0	0
82	BJ	1	0	0	0	0
82	BK	1	0	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
82	BO	1	0	0	0	0
82	BP	1	0	0	0	0
82	BQ	2	0	0	0	0
82	BZ	1	0	0	0	0
82	CB	1	0	0	0	0
82	CE	1	0	0	0	0
82	CH	1	0	0	0	0
82	CM	25	0	0	0	0
82	DK	1	0	0	0	0
82	E	1	0	0	0	0
82	F	1	0	0	0	0
82	L	1	0	0	0	0
82	Q	1	0	0	0	0
82	R	1	0	0	0	0
82	U	1	0	0	0	0
82	Y	3	0	0	0	0
82	Z	1	0	0	0	0
82	c	1	0	0	0	0
82	i	1	0	0	0	0
82	j	1	0	0	0	0
82	k	2	0	0	0	0
82	o	3	0	0	0	0
82	v	1	0	0	0	0
82	w	1	0	0	0	0
82	x	1	0	0	0	0
82	y	1	0	0	0	0
82	z	1	0	0	0	0
83	1	420	0	450	32	0
83	4	42	0	45	1	0
83	AS	210	0	225	16	0
83	B	126	0	135	12	0
83	CM	84	0	90	8	0
84	1	57	0	52	3	0
84	AS	57	0	52	4	0
85	AH	1	0	0	0	0
85	AK	1	0	0	0	0
85	AN	1	0	0	0	0
85	AP	1	0	0	0	0
85	AQ	1	0	0	0	0
85	CB	1	0	0	0	0
85	CE	1	0	0	0	0
85	CH	1	0	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
85	CJ	1	0	0	0	0
85	CK	1	0	0	0	0
85	DN	1	0	0	0	0
85	DQ	1	0	0	0	0
85	DS	1	0	0	0	0
85	c	1	0	0	0	0
85	f	1	0	0	0	0
85	h	1	0	0	0	0
All	All	401103	0	298940	6780	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 10.

All (6780) 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)
57:CX:22:VAL:CG1	57:CX:63:TYR:HE2	1.62	1.11
48:D:180:THR:HG22	48:D:183:GLN:OE1	1.53	1.07
45:CL:55:LYS:HD2	45:CL:56:SER:H	1.22	1.04
1:AS:3313:G:H1	1:AS:3322:U:H3	1.05	1.00
57:CX:22:VAL:CG1	57:CX:63:TYR:CE2	2.46	0.99
1:1:531:G:HO2'	1:1:552:G:H1	1.11	0.96
59:O:63:CYS:HB3	59:O:97:LEU:HD11	1.49	0.95
57:CX:22:VAL:HG13	57:CX:63:TYR:HE2	1.30	0.95
46:B:485:G:H1	46:B:499:U:H3	1.10	0.95
57:M:86:ILE:HG13	57:M:87:LEU:H	1.31	0.95
35:CB:58:ARG:HD3	35:CB:59:PRO:HD2	1.50	0.93
1:AS:538:G:H1	1:AS:547:U:H3	1.00	0.92
1:AS:531:G:HO2'	1:AS:552:G:H1	1.14	0.90
66:V:117:SER:HB2	66:V:123:ARG:HB2	1.51	0.89
1:AS:1870:A:N7	20:BM:20:ARG:NH2	2.21	0.89
1:AS:2836:A:H5''	12:BE:114:GLY:HA2	1.53	0.88
80:I1:3:LYS:NZ	80:I1:36:VAL:HG21	1.87	0.88
35:CB:100:ILE:HA	35:CB:103:ARG:HD3	1.54	0.88
25:BR:82:ILE:HG13	53:CT:131:LYS:HG3	1.56	0.87
46:B:1242:U:O2'	57:M:8:ARG:NH2	2.06	0.87
1:AS:1014:G:H1	1:AS:1030:U:H3	1.17	0.87
46:B:509:A:OP2	56:L:176:ASN:ND2	2.07	0.87
1:AS:2184:G:H21	1:AS:2186:A:H61	1.23	0.86
52:CS:164:PRO:HD3	75:DP:54:LEU:HB3	1.55	0.86
48:D:180:THR:HG22	48:D:183:GLN:CD	2.01	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
70:DK:107:PHE:HD2	70:DK:114:LYS:HD3	1.40	0.86
35:AH:58:ARG:HD3	35:AH:59:PRO:HD2	1.57	0.86
65:DF:126:ARG:HB3	65:DF:133:VAL:HG12	1.56	0.86
25:BR:124:LYS:HG3	25:BR:125:ALA:H	1.41	0.86
1:AS:1631:G:N2	1:AS:1634:A:OP2	2.07	0.86
46:B:880:G:H1	46:B:902:U:H3	1.22	0.85
46:CM:484:G:N2	46:CM:501:G:O6	2.09	0.85
51:CR:11:ARG:HH12	51:CR:24:SER:HB2	1.40	0.85
1:1:3235:A:N7	8:n:45:ARG:NH1	2.24	0.85
1:AS:2184:G:N2	1:AS:2186:A:H61	1.74	0.84
55:CV:120:THR:HG21	55:CV:133:ALA:HA	1.59	0.84
54:J:81:PHE:HB3	54:J:84:ARG:HG3	1.57	0.84
20:z:89:MET:HE2	20:z:97:ARG:HH12	1.41	0.84
80:l1:3:LYS:O	80:l1:3:LYS:HD2	1.77	0.83
40:CG:24:PRO:HG2	40:CG:27:ILE:HD12	1.60	0.83
67:DH:41:ILE:HD11	67:DH:54:PRO:HD3	1.59	0.83
1:1:450:G:H22	1:1:478:G:H22	1.22	0.83
1:AS:3262:U:O4	5:AX:124:LYS:NZ	2.12	0.83
1:AS:483:U:H2'	1:AS:484:U:C6	2.14	0.83
1:1:1091:U:H4'	1:1:1092:U:H5'	1.60	0.83
46:CM:1446:A:H1'	45:CL:74:ALA:HB3	1.61	0.83
1:1:496:A:H4'	8:n:27:GLN:HG3	1.59	0.83
46:CM:1276:G:H1	46:CM:1309:G:H22	1.25	0.82
46:B:961:G:H1	46:B:1008:A:HO2'	0.83	0.82
51:G:11:ARG:HH12	51:G:24:SER:HB3	1.44	0.82
1:1:2836:A:H5''	12:r:114:GLY:HA2	1.61	0.82
1:1:1653:C:O2'	1:1:1793:A:OP2	1.98	0.81
46:CM:216:A:N6	46:CM:829:A:O2'	2.13	0.81
5:k:66:LYS:HZ1	24:6:9:ASN:H	1.28	0.81
46:CM:853:G:H1	46:CM:945:U:H3	1.28	0.81
46:B:500:U:O2'	46:B:501:G:N7	2.14	0.81
1:AS:850:G:O2'	20:BM:130:ASN:ND2	2.14	0.81
1:1:756:G:O2'	1:1:766:G:N2	2.14	0.81
1:1:1936:G:H21	1:1:3327:A:H8	1.28	0.81
47:CN:167:LYS:NZ	47:CN:204:TYR:O	2.13	0.81
62:R:1:MET:HB3	65:U:18:LEU:H	1.44	0.80
52:H:95:ASN:OD1	52:H:107:LYS:NZ	2.14	0.80
69:DJ:75:ILE:HD11	69:DJ:93:LEU:HD11	1.62	0.80
1:1:572:U:H2'	1:1:573:G:H8	1.47	0.80
1:AS:564:G:H2'	1:AS:565:A:C8	2.16	0.80
1:1:1182:G:OP2	15:u:36:LYS:NZ	2.14	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:3179:U:OP2	15:u:121:ARG:NH2	2.14	0.80
46:B:853:G:H1	46:B:945:U:H3	1.29	0.80
54:CU:25:GLU:HB2	54:CU:31:LYS:HG3	1.64	0.80
46:B:945:U:H5'	60:P:55:ARG:HD3	1.62	0.80
46:B:1276:G:H1	46:B:1309:G:H22	1.29	0.80
65:U:140:THR:HA	65:U:143:ARG:HH21	1.47	0.80
62:DC:127:ARG:HH21	45:CL:71:LYS:HG2	1.46	0.79
80:l1:205:VAL:HA	80:l1:213:SER:HB2	1.63	0.79
1:1:2937:U:O2	4:j:221:LYS:NZ	2.14	0.79
20:BM:30:THR:O	20:BM:34:ASN:ND2	2.15	0.79
46:CM:1353:G:H5''	66:DG:69:LYS:HE3	1.64	0.79
46:B:700:G:O2'	46:B:701:G:O5'	1.99	0.79
57:M:88:PRO:HD2	57:M:91:ARG:HB2	1.63	0.79
52:H:158:GLN:HG2	75:e:66:LEU:HD11	1.64	0.79
51:G:45:VAL:HG23	51:G:61:VAL:HG11	1.65	0.79
1:AS:412:G:H21	18:BK:118:GLN:HE22	1.27	0.79
1:AS:2638:C:OP2	1:AS:2659:G:N1	2.15	0.79
1:1:3313:G:H1	1:1:3322:U:H3	1.28	0.79
38:AK:20:ASN:OD1	40:AM:8:ARG:NH2	2.16	0.79
46:B:219:A:H5''	46:B:818:U:H1'	1.64	0.79
46:B:1236:U:O2'	46:B:1237:C:O2	2.00	0.79
46:B:4:C:O2'	56:L:17:ARG:NH2	2.16	0.78
21:BN:52:LYS:HE2	21:BN:54:ALA:HB3	1.63	0.78
30:BW:8:THR:HG22	30:BW:10:HIS:H	1.48	0.78
46:CM:327:G:H5''	55:CV:98:LYS:HB3	1.65	0.78
69:DJ:37:PHE:HE1	69:DJ:103:ILE:HG13	1.45	0.78
1:AS:185:U:H3	1:AS:229:C:H42	1.28	0.78
5:AX:292:ALA:HB1	5:AX:295:ALA:HB3	1.64	0.78
46:B:685:C:H5'	69:Y:119:LYS:HE3	1.65	0.78
55:K:2:GLY:O	55:K:24:LYS:NZ	2.15	0.78
16:v:96:LYS:NZ	16:v:104:GLU:OE2	2.15	0.78
78:DS:168:CYS:HB3	78:DS:185:LYS:HE3	1.64	0.78
48:CO:57:ALA:O	48:CO:61:LEU:HD13	1.84	0.78
46:CM:1431:G:N2	78:DS:129:THR:O	2.15	0.77
73:DN:74:CYS:SG	73:DN:75:VAL:N	2.56	0.77
80:l1:15:LYS:HD2	80:l1:214:PHE:CE1	2.18	0.77
80:l1:150:ASP:O	80:l1:154:THR:N	2.14	0.77
1:AS:1657:G:H2'	1:AS:1658:G:C8	2.19	0.77
1:1:2370:C:H1'	5:k:266:ARG:HH21	1.49	0.77
79:AR:42:LEU:HB2	79:AR:62:PHE:HB2	1.66	0.77
1:AS:1735:U:HO2'	35:CB:56:THR:HG1	1.31	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BR:110:ALA:HA	25:BR:113:LYS:HD3	1.67	0.77
48:CO:61:LEU:HD23	48:CO:96:LEU:HD21	1.66	0.77
80:l1:185:MET:HA	80:l1:188:ASN:HD21	1.48	0.77
50:F:138:VAL:HG22	50:F:152:LYS:HG2	1.66	0.77
9:o:108:GLN:OE1	19:y:3:ARG:NH1	2.18	0.77
23:5:19:VAL:HG23	23:5:20:ALA:H	1.49	0.77
45:i:91:HIS:O	46:B:1259:C:N4	2.18	0.77
46:B:1217:U:H5	78:h:137:HIS:HE2	1.31	0.77
46:B:512:G:H1	46:B:541:C:H5	1.31	0.77
57:CX:15:LEU:O	57:CX:19:GLY:HA2	1.85	0.77
62:R:72:ARG:HH21	62:R:93:VAL:HG11	1.49	0.76
23:BP:16:VAL:HG12	23:BP:65:VAL:HG22	1.67	0.76
1:l:716:G:OP1	29:AB:117:ARG:NH2	2.19	0.76
46:B:101:U:H4'	83:B:1801:PAR:H33	1.65	0.76
46:B:1579:A:H2'	46:B:1580:A:H8	1.50	0.76
46:B:774:U:H2'	46:B:775:A:H8	1.49	0.76
46:CM:723:G:H2'	46:CM:724:G:H4'	1.65	0.76
66:DG:42:GLY:HA2	66:DG:84:LYS:HG3	1.67	0.76
20:z:158:GLU:OE2	20:z:162:ARG:NH2	2.19	0.76
37:AJ:98:ARG:HB3	80:l1:215:ARG:HD2	1.66	0.76
59:O:132:GLU:HG3	59:O:136:LEU:HD13	1.65	0.76
63:S:37:LEU:HD22	66:V:10:PRO:HG3	1.68	0.76
46:CM:1067:C:H4'	68:DI:58:TYR:HE1	1.51	0.76
80:l1:68:PHE:HB2	80:l1:110:PHE:HB2	1.68	0.76
1:l:666:G:O2'	19:y:164:ARG:NH1	2.18	0.76
79:AR:90:LEU:HD11	79:AR:125:SER:HB3	1.67	0.76
80:l1:15:LYS:HD3	80:l1:214:PHE:CD1	2.21	0.76
29:AB:59:ARG:HH22	43:AP:38:GLN:HG2	1.51	0.76
64:DE:26:LEU:HD11	64:DE:62:GLN:HG3	1.66	0.76
1:l:3157:A:OP1	11:q:23:ARG:NH1	2.18	0.76
46:B:694:C:O2'	46:B:718:A:N6	2.19	0.76
13:BF:60:ARG:NH1	43:CJ:104:LEU:O	2.18	0.76
46:CM:766:U:H4'	46:CM:767:G:H5''	1.67	0.75
80:l1:155:ILE:HG21	80:l1:169:VAL:HG21	1.67	0.75
46:CM:1468:C:H5''	46:CM:1508:G:H22	1.51	0.75
48:CO:31:ASP:O	48:CO:33:LYS:NZ	2.18	0.75
55:CV:22:ARG:HH21	55:CV:25:ARG:HG3	1.51	0.75
1:AS:617:A:H5'	1:AS:619:A:H1'	1.66	0.75
46:CM:1529:G:N2	46:CM:1556:A:OP2	2.20	0.75
47:C:84:ARG:NH1	47:C:203:PHE:O	2.18	0.75
51:CR:59:ARG:HH22	71:DL:87:PRO:HG3	1.52	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:88:G:N7	19:BL:171:LYS:NZ	2.34	0.75
67:DH:26:THR:HG22	67:DH:87:LYS:HG3	1.68	0.75
59:O:96:LEU:HD12	59:O:100:TRP:HZ3	1.52	0.75
1:AS:2974:C:OP1	5:AX:26:ARG:NH1	2.19	0.75
46:B:1282:G:N2	46:B:1285:A:OP2	2.17	0.75
28:BU:3:LYS:NZ	28:BU:30:ASP:OD1	2.14	0.75
30:BW:11:ASN:OD1	30:BW:14[B]:ARG:NH1	2.20	0.75
80:l1:3:LYS:HZ1	80:l1:36:VAL:HG21	1.50	0.75
1:1:2471:U:O2'	80:l1:35:GLN:NE2	2.20	0.75
54:J:25:GLU:HG3	54:J:35:ARG:HH12	1.52	0.75
46:B:540:A:N6	77:g:25:GLU:OE2	2.20	0.74
47:C:63:ILE:HG12	68:X:36:ILE:HG12	1.69	0.74
1:AS:3317:U:H3'	55:CV:168:SER:HA	1.67	0.74
1:1:1253:C:H42	1:1:1257:G:H22	1.35	0.74
1:1:1657:G:H2'	1:1:1658:G:C8	2.22	0.74
1:1:2700:G:N7	22:2:87:LYS:NZ	2.33	0.74
15:u:34:ASP:OD2	15:u:37:ARG:NH2	2.19	0.74
46:B:871:U:OP1	48:D:214:LYS:NZ	2.20	0.74
1:AS:2199:G:N2	1:AS:2202:A:OP2	2.18	0.74
21:BN:99:ARG:NH1	21:BN:126:VAL:O	2.20	0.74
46:CM:759:A:H61	46:CM:770:C:H42	1.35	0.74
32:BY:45:THR:HG21	32:BY:89:PHE:HA	1.69	0.74
46:B:1220:C:H41	78:h:177:MET:HE1	1.51	0.74
1:AS:2184:G:H21	1:AS:2186:A:N6	1.84	0.74
16:BI:151:ILE:HG23	16:BI:152:VAL:HG23	1.69	0.74
36:CC:3:GLY:HA3	36:CC:50:ASN:HD21	1.51	0.74
57:M:17:GLN:H	57:M:88:PRO:HB3	1.51	0.74
44:CK:24:ARG:NH1	46:CM:967:U:O2'	2.18	0.74
46:CM:849:U:OP1	69:DJ:28:ARG:NH1	2.20	0.74
2:3:107:A:OP2	12:r:203:LYS:NZ	2.21	0.74
1:AS:976:A:H2'	1:AS:977:U:H5'	1.68	0.74
8:n:71:ASN:ND2	8:n:159:LEU:O	2.21	0.74
46:B:1042:U:H3'	46:B:1043:U:H2'	1.70	0.74
1:AS:2233:A:HO2'	46:CM:1744:G:HO2'	1.31	0.74
80:l1:15:LYS:CD	80:l1:214:PHE:CE1	2.70	0.74
1:1:3014:U:OP2	1:1:3064:C:N4	2.20	0.74
30:AC:8:THR:HG22	30:AC:10:HIS:H	1.51	0.74
1:AS:444:U:H2'	1:AS:445:A:C8	2.23	0.74
23:BP:19:VAL:HG23	23:BP:20:ALA:H	1.50	0.74
55:CV:2:GLY:O	55:CV:24:LYS:NZ	2.18	0.74
51:CR:45:VAL:HG23	51:CR:61:VAL:HG11	1.70	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:B:1216:U:H3	46:B:1239:U:H3	1.35	0.73
54:J:161:LYS:O	54:J:163:ASP:N	2.21	0.73
1:AS:591:C:O2	9:BB:24:ARG:NH1	2.20	0.73
1:1:1479:G:O6	35:AH:4:ARG:NH2	2.20	0.73
3:AU:103:G:OP2	3:AU:105:A:O2'	2.06	0.73
3:4:85:G:H5'	27:BT:113:LYS:HD2	1.69	0.73
59:O:107:ASP:OD1	59:O:111:ASN:N	2.22	0.73
1:AS:2163:G:O2'	1:AS:2292:U:OP2	2.06	0.73
1:AS:3199:G:H1	1:AS:3218:U:H3	1.35	0.73
46:CM:748:G:OP2	56:CW:79:ARG:NH2	2.21	0.73
69:DJ:81:VAL:O	69:DJ:122:SER:OG	2.07	0.73
22:BO:142:SER:OG	22:BO:144:GLU:OE1	2.06	0.73
46:CM:1236:U:O2'	46:CM:1237:C:O2	2.04	0.73
46:CM:1395:G:N2	46:CM:1398:G:OP2	2.21	0.73
80:11:55:LEU:HB2	80:11:59:PRO:HD3	1.71	0.73
46:B:327:G:H5''	55:K:98:LYS:HB3	1.71	0.73
46:B:721:C:HO2'	46:B:722:A:H8	1.36	0.73
1:1:831:G:O2'	1:1:853:G:N2	2.21	0.73
1:AS:2709:C:O2'	30:BW:36:ASP:OD1	2.06	0.73
46:CM:869:A:H62	46:CM:913:U:H3	1.36	0.73
79:DT:116:ILE:HG22	79:DT:123:ILE:HG12	1.71	0.73
80:11:3:LYS:HZ3	80:11:36:VAL:HG11	1.54	0.73
1:1:2070:A:O2'	20:Z:114:LYS:NZ	2.21	0.73
15:BH:23:ASN:ND2	15:BH:23:ASN:O	2.22	0.73
83:CM:1803:PAR:H43	83:CM:1803:PAR:H241	1.53	0.73
46:CM:255:A:N3	55:CV:64:ASN:ND2	2.37	0.73
80:11:3:LYS:NZ	80:11:36:VAL:HG11	2.04	0.73
1:1:2869:A:OP2	41:AN:48:LYS:NZ	2.21	0.72
10:p:222:ASN:HA	10:p:226:LYS:HE2	1.71	0.72
1:AS:2932:C:H2'	1:AS:2933:G:H8	1.52	0.72
46:CM:125:U:OP1	53:CT:201:GLN:NE2	2.21	0.72
1:AS:607:G:OP2	6:AY:316:LYS:NZ	2.22	0.72
5:AX:10:ARG:NH2	5:AX:263:THR:O	2.22	0.72
79:DT:38:ARG:HB3	79:DT:68:ILE:HG12	1.69	0.72
46:B:1218:G:H1	46:B:1237:C:H5	1.37	0.72
4:AW:36:GLU:OE1	4:AW:163:ARG:NH1	2.22	0.72
27:BT:39:LEU:HD22	27:BT:43:TYR:HE2	1.55	0.72
1:AS:2867:G:O2'	41:CH:24:TYR:O	2.07	0.72
11:BD:48:ILE:HG22	11:BD:49:ASN:HD22	1.54	0.72
48:CO:74:GLN:O	48:CO:76:SER:N	2.22	0.72
54:CU:24:LEU:O	54:CU:27:GLN:NE2	2.23	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:CX:81:ASN:ND2	59:CZ:37:VAL:O	2.21	0.72
1:1:549:U:H2'	1:1:550:G:H8	1.54	0.72
1:AS:834:G:O6	44:CK:4:ARG:NH2	2.22	0.72
46:CM:1511:A:H2'	46:CM:1512:A:C8	2.25	0.72
18:x:32:THR:HG21	18:x:87:SER:HB3	1.71	0.72
71:a:123:ARG:HG2	71:a:127:LYS:HE2	1.72	0.72
1:1:662:U:H2'	1:1:663:A:C8	2.24	0.72
46:B:766:U:H4'	46:B:767:G:H5''	1.71	0.72
1:AS:3207:G:O6	5:AX:150:ARG:NH2	2.22	0.72
84:AS:3405:3K5:H7	84:AS:3405:3K5:H11	1.71	0.72
46:B:1275:U:H2'	46:B:1276:G:C8	2.25	0.72
48:D:82:ARG:NH2	48:D:191:GLU:OE2	2.23	0.72
79:AR:102:GLN:NE2	79:AR:103:ARG:O	2.23	0.71
1:AS:478:G:H5''	1:AS:479:C:H6	1.54	0.71
50:CQ:41:ARG:HG3	67:DH:109:PRO:HB3	1.71	0.71
80:l1:13:VAL:O	80:l1:17:LEU:N	2.22	0.71
45:i:93:ARG:H	46:B:1259:C:H5	1.36	0.71
46:CM:184:C:OP1	55:CV:152:ARG:NH2	2.23	0.71
1:AS:1091:U:H4'	1:AS:1092:U:H5'	1.71	0.71
19:BL:96:PHE:O	19:BL:117:ASN:ND2	2.22	0.71
80:l1:57:GLN:CD	80:l1:58:VAL:H	1.99	0.71
55:K:155:ALA:O	58:N:24:LYS:NZ	2.24	0.71
1:AS:2713:C:O2'	43:CJ:20:HIS:ND1	2.21	0.71
5:AX:331:VAL:HG22	5:AX:334:ARG:HG3	1.72	0.71
31:BX:57:GLU:HB2	35:CB:94:LEU:HD11	1.71	0.71
57:CX:22:VAL:HG13	57:CX:63:TYR:CE2	2.16	0.71
80:l1:17:LEU:HA	80:l1:20:SER:HB2	1.70	0.71
4:j:130:SER:OG	4:j:174:ARG:NH2	2.23	0.71
16:v:31:ARG:NH1	16:v:124:ASP:OD2	2.23	0.71
75:e:8:THR:HG21	75:e:59:SER:HB2	1.73	0.71
24:BQ:30:GLY:HA3	24:BQ:66:LYS:HE2	1.71	0.71
25:BR:82:ILE:HG22	25:BR:85:ALA:HB2	1.72	0.71
46:CM:723:G:C5	46:CM:724:G:H1'	2.26	0.71
1:AS:297:G:N2	1:AS:297:G:OP2	2.19	0.71
1:AS:981:U:H5''	9:BB:96:LYS:HE2	1.72	0.71
48:D:180:THR:N	48:D:183:GLN:OE1	2.23	0.71
1:AS:2852:U:OP1	24:BQ:47:ASN:ND2	2.23	0.71
7:AZ:197:LYS:HG2	7:AZ:202:GLY:HA3	1.72	0.71
46:CM:1598:A:OP1	52:CS:107:LYS:NZ	2.22	0.71
1:1:693:C:H5''	6:l:272:LYS:HD3	1.72	0.71
18:BK:50:GLN:OE1	18:BK:56:ARG:NH2	2.24	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:B:211:A:H62	46:B:250:U:H3	1.39	0.71
70:Z:107:PHE:CE2	70:Z:114:LYS:HD3	2.26	0.71
1:AS:2932:C:H2'	1:AS:2933:G:C8	2.26	0.71
3:AU:94:C:OP1	38:CE:75:LYS:NZ	2.21	0.71
1:1:628:A:H2'	1:1:629:A:C8	2.25	0.71
7:m:289:LYS:HA	7:m:292:GLU:HG2	1.73	0.71
1:AS:653:C:H2'	1:AS:654:A:H8	1.55	0.71
24:BQ:13:MET:HE1	24:BQ:54:ALA:HB3	1.72	0.71
46:CM:211:A:H62	46:CM:250:U:H3	1.39	0.71
1:1:907:C:H42	4:j:3:ARG:HD3	1.55	0.70
1:1:2234:A:N6	83:B:1803:PAR:O61	2.24	0.70
46:B:336:C:H5''	55:K:10:LYS:HD2	1.73	0.70
46:B:1395:G:N2	46:B:1398:G:OP2	2.23	0.70
1:AS:496:A:OP1	8:BA:81:ARG:NH1	2.24	0.70
1:AS:1870:A:OP2	20:BM:20:ARG:NH1	2.24	0.70
46:CM:1156:A:H2'	46:CM:1157:G:C8	2.26	0.70
48:CO:190:PRO:HG2	48:CO:192:VAL:HG23	1.72	0.70
46:B:856:G:H2'	46:B:857:G:C8	2.25	0.70
73:c:5:ARG:HD3	73:c:9:GLY:N	2.05	0.70
6:AY:301:ARG:NH2	19:BL:38:ARG:O	2.22	0.70
1:AS:1023:A:N6	1:AS:1025:G:N3	2.39	0.70
46:CM:870:G:N2	61:DB:118:SER:O	2.22	0.70
1:1:653:C:H2'	1:1:654:A:H8	1.55	0.70
1:1:834:G:O6	44:AQ:4:ARG:NH2	2.25	0.70
46:B:139:U:OP1	53:I:149:LYS:NZ	2.17	0.70
59:O:54:LYS:HE2	59:O:56:GLU:HB2	1.71	0.70
63:S:12:LYS:HG3	63:S:13:LYS:H	1.56	0.70
78:h:174:MET:HB3	78:h:181:GLN:HB3	1.72	0.70
46:CM:1211:A:O2'	46:CM:1241:A:N1	2.23	0.70
48:CO:48:ILE:HG21	48:CO:61:LEU:HD11	1.73	0.70
1:1:3021:A:N1	24:6:86:ARG:NH2	2.40	0.70
46:B:944:U:O2	60:P:61:SER:OG	2.08	0.70
11:BD:47:LYS:HE3	11:BD:49:ASN:O	1.91	0.70
46:CM:1230:G:H1	46:CM:1235:U:H3	1.38	0.70
62:DC:60:LEU:HD22	62:DC:92:SER:HB3	1.74	0.70
66:DG:117:SER:HB2	66:DG:123:ARG:HB2	1.73	0.70
1:AS:1713:U:H2'	1:AS:1714:G:C8	2.27	0.70
5:k:292:ALA:HB1	5:k:295:ALA:HB3	1.73	0.70
79:AR:257:ILE:HB	79:AR:271:LEU:HB2	1.74	0.70
20:BM:53:LYS:HG2	20:BM:54:PRO:HD2	1.74	0.70
46:B:778:U:O2'	46:B:779:U:O2	2.10	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:1653:C:O2'	1:AS:1793:A:OP2	2.08	0.70
11:BD:92:PHE:HB2	11:BD:142:ASP:HB3	1.73	0.70
46:CM:847:A:O2'	46:CM:948:A:N1	2.22	0.70
1:AS:112:C:OP1	16:BI:147:ARG:NH2	2.24	0.70
46:CM:653:G:H4'	46:CM:654:G:H5'	1.74	0.70
79:DT:42:LEU:HB2	79:DT:62:PHE:HB2	1.74	0.70
1:1:222:U:O4	83:1:3456:PAR:O62	2.10	0.70
24:6:13:MET:HE1	24:6:54:ALA:HB3	1.73	0.70
1:AS:1635:C:OP2	35:CB:74:ARG:NH1	2.25	0.70
45:i:155:LEU:HD23	57:M:92:LEU:HD11	1.74	0.69
46:B:345:G:H5''	58:N:85:ILE:HD11	1.74	0.69
47:C:41:ARG:HD3	47:C:47:ILE:HD11	1.73	0.69
47:C:124:THR:HG22	47:C:174:TRP:HE1	1.56	0.69
48:D:128:LYS:HG2	48:D:134:VAL:HG22	1.74	0.69
67:W:34:GLU:OE2	67:W:88:ARG:NH2	2.25	0.69
50:CQ:48:GLU:HG2	50:CQ:88:TYR:HE2	1.56	0.69
50:CQ:128:MET:HE2	50:CQ:135:VAL:HG12	1.74	0.69
69:DJ:11:LEU:HD11	69:DJ:37:PHE:HE2	1.55	0.69
1:1:564:G:H2'	1:1:565:A:C8	2.27	0.69
1:1:628:A:H2'	1:1:629:A:H8	1.56	0.69
1:1:2086:C:H1'	1:1:3309:A:C8	2.27	0.69
79:AR:52:ASP:O	79:AR:53:ASN:ND2	2.25	0.69
1:AS:2138:G:H2'	1:AS:2139:G:H8	1.56	0.69
1:AS:2370:C:H1'	5:AX:266:ARG:HH21	1.56	0.69
46:CM:390:G:OP1	55:CV:24:LYS:NZ	2.22	0.69
46:CM:881:U:H5'	48:CO:23:PRO:HG2	1.75	0.69
1:1:1804:G:OP2	28:AA:133:LYS:NZ	2.21	0.69
1:AS:377:A:N1	83:AS:3402:PAR:N32	2.40	0.69
1:AS:628:A:H2'	1:AS:629:A:H8	1.57	0.69
1:AS:795:G:O2'	14:BG:18:TRP:NE1	2.21	0.69
46:CM:880:G:H1	46:CM:902:U:H3	1.41	0.69
55:CV:158:ILE:HA	58:CY:24:LYS:HD2	1.72	0.69
19:y:96:PHE:O	19:y:117:ASN:ND2	2.25	0.69
7:m:155:THR:HG22	7:m:179:ARG:HD3	1.74	0.69
32:AE:45:THR:HG22	32:AE:47:ASP:H	1.58	0.69
75:DP:12:VAL:HG12	75:DP:30:VAL:HG12	1.75	0.69
46:B:472:A:H5''	56:L:144:PRO:HD2	1.74	0.69
46:CM:1334:G:N3	46:CM:1365:C:N4	2.40	0.69
55:CV:4:SER:OG	55:CV:6:ASP:OD1	2.11	0.69
46:B:1511:A:H2'	46:B:1512:A:C8	2.28	0.69
46:CM:813:U:C2'	46:CM:814:A:H5'	2.23	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:CM:1579:A:H2'	46:CM:1580:A:H8	1.58	0.69
47:CN:200:ASP:HB2	64:DE:85:VAL:HG23	1.74	0.69
54:CU:5:ILE:HG21	54:CU:10:PRO:HB3	1.73	0.69
79:DT:173:LYS:HG2	79:DT:194:GLY:O	1.93	0.69
1:1:429:U:H2'	1:1:430:G:H8	1.57	0.69
27:9:69:LYS:NZ	27:9:70:VAL:O	2.26	0.69
59:O:104:CYS:SG	59:O:115:VAL:HA	2.33	0.69
1:AS:2953:U:OP2	5:AX:244:ARG:NH2	2.26	0.69
75:DP:8:THR:HG21	75:DP:59:SER:HB2	1.75	0.69
19:y:90:ASP:O	19:y:113:ARG:NH1	2.27	0.69
1:1:2974:C:OP1	5:k:26:ARG:NH1	2.26	0.68
46:B:216:A:N6	46:B:829:A:O2'	2.26	0.68
1:AS:739:C:N3	19:BL:141:ARG:NH2	2.41	0.68
20:BM:170:ARG:HH22	46:CM:838:G:H3'	1.58	0.68
37:CD:28:ARG:O	37:CD:30:GLY:N	2.26	0.68
1:1:2932:C:H2'	1:1:2933:G:H8	1.58	0.68
47:C:147:THR:HG21	47:C:159:ALA:HB1	1.75	0.68
57:M:70:ASP:HB3	57:M:91:ARG:HH22	1.59	0.68
46:CM:3:U:O2	56:CW:17:ARG:NH2	2.26	0.68
1:1:572:U:H2'	1:1:573:G:C8	2.28	0.68
46:B:881:U:H5'	48:D:23:PRO:HG2	1.75	0.68
52:H:113:ILE:HG23	52:H:191:ALA:HA	1.74	0.68
63:S:21:VAL:HG22	63:S:64:ILE:HG12	1.74	0.68
4:AW:51:ASP:OD2	4:AW:54:ARG:NH2	2.26	0.68
14:BG:59:ARG:NH1	14:BG:66:ASN:O	2.26	0.68
46:CM:829:A:H2'	46:CM:830:G:H8	1.58	0.68
59:CZ:81:GLU:HG3	78:DS:156:VAL:HG12	1.76	0.68
67:DH:69:THR:O	76:DQ:40:ARG:NH1	2.16	0.68
13:s:32:ARG:HD3	13:s:120:ILE:HA	1.74	0.68
15:u:17:ARG:NH2	15:u:58:THR:O	2.25	0.68
1:AS:429:U:H2'	1:AS:430:G:H8	1.59	0.68
1:AS:590:A:N1	9:BB:17:GLN:NE2	2.40	0.68
1:AS:2943:A:H2'	1:AS:2943:A:N3	2.09	0.68
1:1:1672:A:O2'	23:5:103:GLN:OE1	2.12	0.68
20:z:165:ARG:HD2	46:B:835:A:H5'	1.75	0.68
32:AE:45:THR:HG21	32:AE:89:PHE:HA	1.75	0.68
1:AS:2936:G:N2	1:AS:2939:A:OP2	2.25	0.68
1:1:739:C:H5''	19:y:69:ARG:HH22	1.59	0.68
1:1:2867:G:O2'	41:AN:24:TYR:O	2.11	0.68
46:B:122:U:H2'	46:B:123:G:H5''	1.75	0.68
46:B:722:A:O2'	46:B:723:G:O5'	2.11	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:S:27:LEU:HB3	63:S:63:ASP:HB2	1.74	0.68
68:X:38:LYS:HD2	68:X:49:GLU:HG3	1.75	0.68
1:AS:3156:A:O2'	11:BD:23:ARG:NH1	2.26	0.68
79:DT:90:LEU:HB2	79:DT:104:PHE:HD2	1.58	0.68
1:1:71:C:O2'	14:t:66:ASN:OD1	2.06	0.68
15:u:14:GLU:HG2	15:u:17:ARG:HG2	1.76	0.68
51:G:100:ARG:NH2	51:G:121:TYR:O	2.27	0.68
1:AS:2869:A:OP2	41:CH:48:LYS:NZ	2.26	0.68
9:BB:16:ALA:O	9:BB:18:GLN:N	2.27	0.68
13:s:82:ARG:HA	13:s:85:LYS:HE2	1.76	0.68
46:B:1719:A:H2'	46:B:1720:C:C6	2.29	0.68
48:D:103:LEU:HD13	48:D:188:LEU:HD13	1.74	0.68
20:BM:98:ARG:NH2	20:BM:130:ASN:OD1	2.27	0.68
1:AS:2873:G:O2'	1:AS:2996:A:N1	2.26	0.68
30:BW:5:LYS:NZ	30:BW:8:THR:OG1	2.22	0.68
46:CM:452:A:H4'	51:CR:62:LYS:HE3	1.76	0.68
64:DE:103:ASP:OD1	64:DE:104:ALA:N	2.27	0.68
80:l:60:ARG:HD2	80:l:61:PRO:HD2	1.75	0.68
1:1:1253:C:H42	1:1:1257:G:N2	1.91	0.68
11:q:92:PHE:HB2	11:q:142:ASP:HB3	1.76	0.68
46:B:1578:C:H2'	46:B:1579:A:H8	1.58	0.68
1:AS:1124:U:OP1	12:BE:4:ARG:NH1	2.21	0.68
16:BI:177:GLY:O	16:BI:184:LYS:NZ	2.26	0.68
46:CM:1040:U:H3	46:CM:1049:G:H1	1.42	0.68
1:1:2452:G:H2'	1:1:2454:C:N4	2.10	0.67
46:B:700:G:OP2	46:B:717:G:N2	2.22	0.67
1:AS:1744:G:OP2	39:CF:42:LYS:NZ	2.22	0.67
46:CM:635:C:O2	54:CU:110:ARG:NH2	2.25	0.67
45:CL:55:LYS:CD	45:CL:56:SER:H	2.02	0.67
1:1:600:U:C2	1:1:602:A:H1'	2.28	0.67
1:1:679:U:O2'	1:1:695:G:O6	2.11	0.67
46:B:1156:A:H2'	46:B:1157:G:C8	2.30	0.67
46:B:1579:A:H2'	46:B:1580:A:C8	2.29	0.67
46:CM:1415:G:N3	67:DH:71:ASN:ND2	2.41	0.67
1:1:627:U:H2'	1:1:628:A:C8	2.30	0.67
1:1:1173:G:N7	34:AG:20:LYS:NZ	2.41	0.67
1:1:1239:G:N2	1:1:1266:A:O2'	2.27	0.67
1:1:1662:G:H2'	1:1:1663:A:H8	1.59	0.67
8:BA:34:VAL:HB	8:BA:89:LYS:HE3	1.74	0.67
23:BP:80:LYS:HG2	23:BP:84:LYS:HZ1	1.58	0.67
46:CM:1469:A:OP2	46:CM:1508:G:N2	2.26	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
72:DM:99:ALA:HB1	72:DM:101:TYR:HE1	1.58	0.67
80:l1:116:LEU:HD12	80:l1:120:ILE:HG13	1.74	0.67
23:5:37:LEU:HB3	23:5:56:ILE:HD13	1.77	0.67
57:M:15:LEU:O	57:M:19:GLY:HA2	1.94	0.67
1:AS:3039:C:OP2	20:BM:62:ARG:NH2	2.26	0.67
42:CI:2:ARG:HH12	42:CI:4:LYS:HD2	1.60	0.67
49:CP:96:VAL:HG22	49:CP:110:ILE:HG12	1.76	0.67
54:CU:5:ILE:HG22	54:CU:7:SER:H	1.59	0.67
45:CL:116:GLU:O	45:CL:120:GLU:HB2	1.93	0.67
46:B:823:G:H2'	46:B:824:U:C5	2.30	0.67
1:AS:1936:G:H21	1:AS:3327:A:H8	1.42	0.67
60:DA:99:ARG:NH2	60:DA:119:GLU:OE2	2.27	0.67
80:l1:47:LYS:HZ2	80:l1:49:PHE:HD2	1.41	0.67
1:1:2932:C:H2'	1:1:2933:G:C8	2.29	0.67
20:z:73:GLY:HA2	20:z:76:MET:HE2	1.76	0.67
46:B:327:G:H5'	55:K:99:SER:OG	1.95	0.67
46:B:1422:A:OP2	50:F:28:ARG:NH2	2.24	0.67
46:B:1527:G:OP2	65:U:40:ARG:NH2	2.27	0.67
46:B:1668:A:H1'	53:I:66:GLY:HA2	1.76	0.67
65:U:92:GLN:OE1	65:U:115:ARG:NH2	2.28	0.67
1:AS:148:U:H4'	16:BI:56:LYS:HG2	1.77	0.67
46:CM:1453:C:O2'	66:DG:88:PHE:O	2.09	0.67
65:DF:29:MET:HB2	65:DF:54:LEU:HD22	1.76	0.67
1:1:976:A:H2'	1:1:977:U:H5'	1.74	0.67
1:1:1124:U:OP1	12:r:4:ARG:NH1	2.28	0.67
6:l:290:LEU:HD22	19:y:129:LEU:HD11	1.76	0.67
46:CM:652:C:H5''	46:CM:653:G:H8	1.59	0.67
48:CO:29:TRP:HE3	48:CO:45:LYS:HD3	1.58	0.67
53:CT:135:PRO:HB2	53:CT:141:ILE:HG12	1.76	0.67
46:B:784:U:H2'	46:B:785:G:H8	1.60	0.67
46:B:1220:C:N4	78:h:177:MET:HE1	2.10	0.67
54:J:5:ILE:HG21	54:J:10:PRO:HB3	1.76	0.67
64:T:103:ASP:OD1	64:T:104:ALA:N	2.27	0.67
10:BC:124:LYS:O	10:BC:126:VAL:N	2.27	0.67
80:l1:66:CYS:HA	80:l1:83:ASP:HB3	1.76	0.67
1:1:1519:U:H5'	26:8:113:LEU:HD13	1.77	0.67
7:m:111:GLN:HE22	7:m:252:SER:HB2	1.61	0.67
59:O:28:LEU:O	59:O:32:LEU:HD23	1.95	0.67
1:AS:628:A:H2'	1:AS:629:A:C8	2.29	0.67
1:AS:831:G:O2'	1:AS:853:G:N2	2.28	0.67
52:CS:26:ALA:HB2	63:DD:25:LYS:HB3	1.77	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:2163:G:O2'	1:1:2292:U:OP2	2.12	0.66
46:B:149:G:N3	53:I:13:GLN:NE2	2.41	0.66
47:CN:63:ILE:HG12	68:DI:36:ILE:HG22	1.77	0.66
58:CY:102:LYS:O	70:DK:13:ARG:NH2	2.27	0.66
1:1:2093:G:H22	1:1:2098:A:H1'	1.60	0.66
75:e:12:VAL:HG22	75:e:52:ASP:H	1.59	0.66
1:AS:307:A:H2'	1:AS:308:A:C8	2.30	0.66
1:AS:800:C:OP1	6:AY:99:ARG:NH2	2.28	0.66
28:BU:50:PRO:HD3	28:BU:68:VAL:HG22	1.77	0.66
1:1:1481:G:N2	35:AH:4:ARG:HD2	2.10	0.66
1:1:3254:G:H2'	1:1:3255:G:C8	2.30	0.66
46:B:869:A:H62	46:B:913:U:H3	1.43	0.66
1:AS:2580:G:OP1	4:AW:2:GLY:N	2.28	0.66
3:AU:52:A:H62	40:CG:27:ILE:HD13	1.59	0.66
1:1:1575:A:H5''	1:1:1576:A:H2	1.59	0.66
1:1:2436:A:H2'	1:1:2437:A:O4'	1.94	0.66
21:BN:164:GLN:NE2	21:BN:166:THR:O	2.29	0.66
46:CM:65:A:O2'	46:CM:67:A:OP2	2.12	0.66
1:1:2530:C:N4	31:AD:59:GLU:OE2	2.28	0.66
13:s:101:ASN:HD22	13:s:130:VAL:HA	1.59	0.66
45:i:71:LYS:NZ	45:i:72:ASP:O	2.28	0.66
58:N:100:TYR:OH	69:Y:80:ASN:ND2	2.29	0.66
59:O:81:GLU:HG3	78:h:155:ASN:HB2	1.78	0.66
12:r:54:SER:OG	12:r:130:SER:O	2.14	0.66
46:B:680:C:H2'	46:B:681:C:C6	2.30	0.66
15:BH:17:ARG:NH2	15:BH:58:THR:O	2.29	0.66
49:CP:177:PRO:HD3	56:CW:17:ARG:HH22	1.61	0.66
80:l:1:64:THR:HB	80:l:1:107:TYR:HD1	1.60	0.66
80:l:1:99:LEU:HA	80:l:1:102:LYS:HB3	1.77	0.66
18:x:50:GLN:OE1	18:x:56:ARG:NH2	2.29	0.66
46:B:1239:U:OP2	59:O:46:ARG:NH1	2.29	0.66
46:B:1665:C:OP1	55:K:59:ARG:NH2	2.28	0.66
59:O:36:LEU:C	59:O:38:HIS:H	2.03	0.66
78:h:160:ARG:HB3	78:h:173:PHE:CD2	2.30	0.66
1:AS:1210:U:OP2	21:BN:137:ARG:NH2	2.28	0.66
11:BD:36:LYS:HE3	11:BD:74:LEU:HD22	1.77	0.66
46:CM:1301:G:OP1	64:DE:7:LYS:N	2.25	0.66
46:CM:1445:C:OP2	65:DF:138:THR:OG1	2.14	0.66
55:CV:136:VAL:O	55:CV:141:ARG:NH2	2.29	0.66
1:1:3338:U:H5''	32:AE:68:ASN:HD22	1.61	0.66
46:B:589:A:H2'	46:B:590:A:C8	2.31	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:B:1198:G:H1	46:B:1436:U:H3	1.44	0.66
53:I:159:ARG:NH1	53:I:170:THR:OG1	2.28	0.66
23:BP:68:VAL:HG12	23:BP:69:SER:H	1.60	0.66
45:CL:55:LYS:HD2	45:CL:56:SER:N	2.05	0.66
16:v:164:LEU:O	16:v:169:LYS:NZ	2.29	0.66
46:B:1452:G:O2'	46:B:1589:C:OP1	2.13	0.66
46:CM:856:G:H2'	46:CM:857:G:C8	2.31	0.66
46:CM:1400:U:H5''	64:DE:3:ARG:HE	1.61	0.66
1:1:1251:C:H4'	81:12:130:LYS:HB3	1.77	0.66
1:1:2899:C:H2'	1:1:2900:C:C6	2.31	0.66
1:AS:679:U:O2'	1:AS:695:G:O6	2.13	0.66
1:AS:2530:C:N4	31:BX:59:GLU:OE2	2.29	0.66
41:CH:23:CYS:HB2	41:CH:38:LYS:HD2	1.77	0.66
71:DL:6:THR:HB	71:DL:28:LEU:HB2	1.77	0.66
1:1:617:A:H5'	1:1:619:A:H1'	1.78	0.65
1:1:2191:A:H2'	1:1:2192:A:C8	2.31	0.65
3:4:86:U:OP2	27:BT:120:GLN:NE2	2.29	0.65
1:AS:897:G:OP1	38:CE:13:ASN:ND2	2.25	0.65
19:BL:67:ILE:HG12	19:BL:81:ILE:HG21	1.78	0.65
80:l:111:ILE:HG22	80:l:136:THR:HB	1.78	0.65
18:x:122:ALA:HB3	18:x:143:PRO:HB2	1.77	0.65
46:B:12:U:H2'	46:B:13:C:C6	2.31	0.65
59:O:59:LEU:HB3	59:O:123:VAL:HB	1.79	0.65
64:T:27:ASP:O	64:T:31:ASN:ND2	2.28	0.65
79:AR:75:SER:HB2	79:AR:120:LEU:HD11	1.77	0.65
25:BR:80:ARG:HH12	53:CT:11:GLY:HA3	1.60	0.65
46:CM:352:C:H5''	55:CV:16:ALA:HB2	1.78	0.65
46:CM:1378:U:OP1	64:DE:59:LYS:NZ	2.23	0.65
45:CL:124:ASP:O	45:CL:128:GLU:HG2	1.96	0.65
1:1:252:U:H5'	1:1:253:A:C8	2.31	0.65
13:s:109:HIS:HD2	13:s:123:TYR:H	1.44	0.65
54:J:137:ARG:NH2	69:Y:49:GLU:OE1	2.28	0.65
58:N:22:ASN:HB3	58:N:25:ALA:HB2	1.76	0.65
1:AS:1344:U:OP1	19:BL:39:ARG:NH2	2.30	0.65
46:CM:317:U:H4'	46:CM:321:A:C8	2.32	0.65
46:CM:1156:A:H2'	46:CM:1157:G:H8	1.61	0.65
70:DK:37:ALA:HA	70:DK:41:SER:HB3	1.78	0.65
46:B:702:G:H4'	46:B:703:U:OP1	1.95	0.65
46:B:1026:G:H2'	46:B:1027:G:C8	2.32	0.65
46:B:1460:G:H2'	46:B:1461:A:H8	1.60	0.65
1:AS:662:U:H2'	1:AS:663:A:C8	2.31	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:1663:A:H2'	1:AS:1664:G:C8	2.32	0.65
18:BK:122:ALA:HB3	18:BK:143:PRO:HB2	1.79	0.65
46:CM:589:A:H2'	46:CM:590:A:C8	2.31	0.65
46:CM:1214:G:N2	46:CM:1240:G:O2'	2.29	0.65
16:v:183:THR:HG22	16:v:187:ARG:HB2	1.76	0.65
36:AI:27:GLU:OE2	36:AI:43:ARG:NH2	2.29	0.65
1:AS:600:U:C2	1:AS:602:A:H1'	2.31	0.65
1:AS:1298:A:N7	1:AS:2829:C:O2'	2.28	0.65
1:AS:2742:G:H5''	43:CJ:79:THR:HG23	1.77	0.65
3:AU:75:G:OP2	27:BT:74:TYR:OH	2.14	0.65
46:CM:738:A:OP1	51:CR:187:ARG:N	2.29	0.65
48:CO:48:ILE:HG12	48:CO:49:ASN:OD1	1.96	0.65
65:DF:79:TYR:O	65:DF:81:ILE:HD12	1.97	0.65
79:DT:202:SER:HB3	79:DT:207:LEU:HB2	1.78	0.65
1:1:358:G:N2	1:1:361:A:OP2	2.29	0.65
12:r:30:LYS:HG3	12:r:63:GLU:HG3	1.78	0.65
51:G:175:PHE:HE2	51:G:198:ARG:HD2	1.60	0.65
69:Y:15:ASN:ND2	69:Y:72:CYS:O	2.20	0.65
84:AS:3405:3K5:H9	43:CJ:57:ILE:HG23	1.79	0.65
46:CM:752:U:H5	56:CW:143:ILE:HG12	1.59	0.65
46:CM:1459:U:OP1	52:CS:183:SER:OG	2.15	0.65
47:CN:15:LYS:HD2	64:DE:93:LEU:HD22	1.79	0.65
47:CN:84:ARG:NH1	47:CN:203:PHE:O	2.29	0.65
79:DT:102:GLN:NE2	79:DT:103:ARG:O	2.29	0.65
1:1:477:U:H2'	1:1:478:G:C8	2.32	0.65
1:1:2155:G:OP2	4:j:128:ARG:NH1	2.30	0.65
51:G:148:ARG:NH2	53:I:201:GLN:OE1	2.29	0.65
1:AS:3014:U:OP2	1:AS:3064:C:N4	2.29	0.65
46:CM:1067:C:H4'	68:DI:58:TYR:CE1	2.31	0.65
55:CV:22:ARG:NH2	55:CV:25:ARG:HG3	2.11	0.65
1:1:2740:U:O2	43:AP:82:GLN:NE2	2.28	0.65
1:1:3254:G:H2'	1:1:3255:G:H8	1.61	0.65
8:n:65:SER:HB2	8:n:75:LEU:HD23	1.77	0.65
46:B:55:A:OP1	71:a:112:LYS:NZ	2.26	0.65
46:B:870:G:N2	61:Q:118:SER:O	2.30	0.65
46:B:1387:A:OP1	64:T:56:HIS:NE2	2.28	0.65
70:Z:3:LYS:HD2	70:Z:7:ARG:HH21	1.62	0.65
79:AR:50:GLY:H	79:AR:55:TYR:HA	1.62	0.65
14:t:115:ARG:NH2	14:t:147:PHE:O	2.30	0.65
46:B:1301:G:O2'	64:T:10:LYS:NZ	2.28	0.65
46:B:1350:C:H5''	63:S:27:LEU:HD22	1.79	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:1011:C:H4'	1:AS:1012:U:H6	1.62	0.65
46:CM:122:U:H2'	46:CM:123:G:H5''	1.78	0.65
46:CM:515:U:H2'	46:CM:516:A:H8	1.62	0.65
46:CM:1512:A:H4'	66:DG:83:ALA:HB2	1.79	0.65
63:DD:12:LYS:HG3	63:DD:13:LYS:H	1.62	0.65
13:s:61:ARG:NH1	45:i:43:PRO:O	2.30	0.65
16:v:159:ARG:HB2	16:v:164:LEU:HB2	1.79	0.65
45:i:103:LEU:HG	45:i:109:GLN:HG3	1.79	0.65
46:B:1354:U:N3	46:B:1355:A:N7	2.45	0.65
46:B:1410:A:H2'	49:E:87:ALA:HB3	1.77	0.65
47:C:47:ILE:HD12	64:T:106:THR:HG22	1.78	0.65
1:AS:2191:A:H2'	1:AS:2192:A:C8	2.32	0.65
25:BR:98:PRO:O	25:BR:102:LYS:N	2.15	0.65
46:CM:869:A:OP1	48:CO:136:ARG:NH2	2.29	0.65
50:CQ:23:ASN:ND2	76:DQ:49:ASP:OD2	2.30	0.65
72:DM:78:VAL:HG12	72:DM:81:ARG:HH21	1.62	0.65
1:1:1059:G:N7	1:1:1093:G:O2'	2.23	0.64
16:v:90:ASN:O	43:AP:50:TYR:OH	2.13	0.64
45:i:53:LYS:O	45:i:55:LYS:N	2.30	0.64
46:B:1145:A:H2'	46:B:1146:C:H6	1.63	0.64
13:BF:133:ARG:NH2	13:BF:153:LYS:O	2.30	0.64
46:CM:12:U:H2'	46:CM:13:C:C6	2.33	0.64
46:CM:1026:G:H2'	46:CM:1027:G:C8	2.32	0.64
80:l:34:LEU:HD22	80:l:206:ILE:HD13	1.78	0.64
1:1:662:U:H2'	1:1:663:A:H8	1.61	0.64
1:1:1774:G:O2'	1:1:1776:G:OP2	2.15	0.64
46:B:1:U:H1'	49:E:174:VAL:HG13	1.79	0.64
77:g:50:THR:OG1	77:g:53:LYS:HB2	1.98	0.64
1:AS:3260:A:H2'	1:AS:3261:A:C8	2.32	0.64
46:CM:518:A:H2'	46:CM:519:A:C8	2.32	0.64
46:CM:741:A:H5'	51:CR:16:SER:HB3	1.79	0.64
45:i:65:LYS:HE3	45:i:66:ASN:OD1	1.98	0.64
79:AR:235:ALA:HB3	79:AR:253:THR:HB	1.79	0.64
1:AS:437:G:N2	1:AS:620:A:H61	1.95	0.64
1:AS:438:A:N1	1:AS:489:G:O2'	2.26	0.64
14:BG:158:LEU:HB3	29:BV:98:ALA:HB1	1.79	0.64
54:CU:14:GLU:HA	54:CU:42:ILE:HD12	1.78	0.64
57:CX:22:VAL:HG12	57:CX:63:TYR:CE2	2.29	0.64
75:DP:19:THR:HG23	75:DP:25:VAL:HG13	1.78	0.64
1:1:337:G:O4'	6:l:49:GLN:NE2	2.31	0.64
1:AS:538:G:N2	1:AS:547:U:O2	2.29	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:3028:U:O2	32:BY:27:ARG:NH2	2.31	0.64
6:AY:113:LYS:HG2	16:BI:202:TYR:HB3	1.78	0.64
65:DF:36:ARG:HH22	65:DF:105:LEU:HD22	1.62	0.64
1:1:1379:G:O2'	6:1:139:ARG:NH1	2.30	0.64
70:Z:107:PHE:HE2	70:Z:114:LYS:HD3	1.63	0.64
1:AS:595:G:OP2	9:BB:32:LYS:NZ	2.30	0.64
1:AS:870:U:N3	1:AS:2950:U:OP1	2.27	0.64
1:AS:1674:G:OP2	23:BP:80:LYS:NZ	2.25	0.64
1:AS:2370:C:H1'	5:AX:266:ARG:NH2	2.13	0.64
1:AS:2655:U:H2'	1:AS:2656:C:C6	2.33	0.64
46:CM:79:C:H1'	53:CT:174:LYS:HB2	1.79	0.64
48:CO:82:ARG:HG2	48:CO:105:PHE:HE1	1.61	0.64
53:CT:159:ARG:NH1	53:CT:170:THR:OG1	2.30	0.64
4:j:204:MET:SD	4:j:209:HIS:HB2	2.38	0.64
16:v:46:ASP:OD2	16:v:50:ARG:NH2	2.28	0.64
48:D:190:PRO:HG2	48:D:192:VAL:HG23	1.78	0.64
53:I:57:ASP:HA	53:I:106:LEU:HA	1.79	0.64
63:S:38:VAL:HG12	63:S:40:PRO:HD2	1.80	0.64
1:AS:1691:U:O2'	1:AS:1745:A:N1	2.29	0.64
24:BQ:80:ARG:NH1	24:BQ:97:ASP:OD1	2.31	0.64
46:CM:1719:A:H2'	46:CM:1720:C:H6	1.63	0.64
69:DJ:37:PHE:CE1	69:DJ:103:ILE:HG13	2.31	0.64
1:1:976:A:N6	1:1:1100:G:O2'	2.27	0.64
1:1:2444:G:OP2	80:11:60:ARG:NH2	2.31	0.64
3:4:57:C:OP2	38:AK:68:LYS:NZ	2.31	0.64
4:j:27:ALA:O	4:j:128:ARG:NH2	2.30	0.64
4:j:80:GLU:HG3	44:AQ:66:GLY:HA2	1.80	0.64
46:B:518:A:H2'	46:B:519:A:C8	2.33	0.64
46:B:853:G:OP1	60:P:121:ARG:NH1	2.27	0.64
64:T:14:LYS:HB2	64:T:69:ILE:HD11	1.79	0.64
1:AS:1576:A:N3	1:AS:2500:G:N2	2.45	0.64
11:BD:107:ASP:O	11:BD:109:GLN:NE2	2.30	0.64
46:CM:759:A:H61	46:CM:770:C:N4	1.94	0.64
11:q:80:THR:HA	11:q:83:THR:HG22	1.79	0.64
46:B:1543:A:OP1	62:R:115:TYR:OH	2.14	0.64
52:H:200:ASN:HB3	52:H:208:SER:HB3	1.79	0.64
23:BP:80:LYS:HG2	23:BP:84:LYS:NZ	2.13	0.64
46:CM:345:G:H5''	58:CY:85:ILE:HD11	1.80	0.64
63:DD:98:GLU:HG3	63:DD:101:LYS:HE3	1.80	0.64
1:1:2458:G:N2	1:1:2458:G:OP2	2.31	0.64
1:1:2771:A:O2'	29:AB:42:ARG:NH2	2.30	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:AF:97:ILE:HG21	33:AF:106:ARG:HG3	1.80	0.64
46:B:515:U:H2'	46:B:516:A:H8	1.62	0.64
68:X:15:ARG:NH1	68:X:33:GLN:OE1	2.31	0.64
70:Z:70:LYS:HB3	70:Z:93:LEU:HD22	1.79	0.64
1:AS:292:U:OP2	16:BI:68:ARG:NH2	2.30	0.64
25:BR:113:LYS:HG3	25:BR:114:GLU:HG2	1.80	0.64
46:CM:530:U:OP2	56:CW:132:ARG:NH2	2.31	0.64
46:CM:721:C:H2'	46:CM:722:A:C8	2.33	0.64
46:CM:1409:U:OP1	50:CQ:152:LYS:NZ	2.27	0.64
1:1:1208:A:O2'	21:O:92:LYS:NZ	2.31	0.64
1:1:2331:G:H5''	18:x:86:LYS:HB2	1.80	0.64
1:1:3268:G:O2'	1:1:3270:A:N6	2.31	0.64
5:k:92:TYR:HB2	5:k:157:VAL:HB	1.79	0.64
47:C:200:ASP:HB2	64:T:85:VAL:HG23	1.79	0.64
1:AS:93:G:H2'	1:AS:94:A:C8	2.33	0.64
46:CM:784:U:H2'	46:CM:785:G:H8	1.62	0.64
80:l1:59:PRO:HD2	80:l1:153:SER:HB3	1.79	0.64
46:B:697:U:O2	46:B:724:G:N2	2.29	0.63
46:B:1475:U:O2'	46:B:1501:A:N6	2.29	0.63
46:B:1668:A:H8	53:I:65:GLN:HG3	1.62	0.63
1:AS:214:G:OP1	27:BT:12:ARG:NH1	2.31	0.63
1:AS:793:U:O2	14:BG:12:ASN:ND2	2.31	0.63
1:AS:1018:U:H2'	1:AS:1019:U:H5''	1.80	0.63
1:1:1713:U:H2'	1:1:1714:G:C8	2.33	0.63
46:B:397:A:H4'	51:G:3:ARG:HG2	1.79	0.63
53:I:21:GLU:OE2	53:I:28:TYR:OH	2.17	0.63
1:AS:925:A:O2'	38:CE:49:TRP:O	2.15	0.63
1:AS:1504:C:O2'	1:AS:2331:G:O2'	2.16	0.63
13:BF:101:ASN:HD22	13:BF:131:MET:H	1.46	0.63
46:CM:271:G:H1	46:CM:281:U:H3	1.46	0.63
78:DS:144:VAL:HA	78:DS:147:TYR:HD2	1.62	0.63
1:1:1662:G:H2'	1:1:1663:A:C8	2.33	0.63
1:1:2171:U:H5'	1:1:2172:G:H5'	1.81	0.63
1:1:2347:G:H2'	1:1:2348:G:C8	2.34	0.63
1:1:2445:G:O2'	1:1:2446:A:O4'	2.16	0.63
83:1:3465:PAR:O44	83:1:3465:PAR:N64	2.32	0.63
13:s:46:VAL:HG12	45:i:33:ASN:HB3	1.80	0.63
50:F:124:LEU:HD11	50:F:153:TYR:HB3	1.81	0.63
46:CM:636:C:OP2	69:DJ:32:LYS:NZ	2.28	0.63
46:CM:698:C:H2'	46:CM:699:U:C6	2.33	0.63
46:CM:1219:A:OP1	76:DQ:2:ALA:N	2.32	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:CM:1460:G:H2'	46:CM:1461:A:H8	1.63	0.63
69:DJ:88:ARG:O	69:DJ:92:ASN:ND2	2.31	0.63
72:DM:54:VAL:HG13	72:DM:60:VAL:HG11	1.79	0.63
76:DQ:19:ARG:HD2	76:DQ:32:ARG:HD3	1.81	0.63
1:1:1247:A:H3'	1:1:1248:A:H8	1.63	0.63
1:1:1344:U:OP1	19:y:39:ARG:NH2	2.31	0.63
5:k:71:GLU:OE2	5:k:357:LYS:NZ	2.30	0.63
32:AE:54:LEU:HB2	32:AE:94:PRO:HD3	1.81	0.63
46:B:317:U:H4'	46:B:321:A:C8	2.32	0.63
46:B:501:G:H2'	46:B:502:U:C6	2.33	0.63
46:B:1719:A:H2'	46:B:1720:C:H6	1.62	0.63
79:AR:110:ASP:OD2	79:AR:128:ARG:NH1	2.32	0.63
1:AS:1652:A:OP2	35:CB:37:LYS:NZ	2.28	0.63
5:AX:218:ILE:HB	5:AX:337:THR:HB	1.79	0.63
10:BC:90:GLN:HA	10:BC:93:LYS:HE3	1.79	0.63
57:CX:15:LEU:HD21	57:CX:68:LEU:HD13	1.80	0.63
79:DT:88:ARG:HA	79:DT:111:VAL:HG23	1.81	0.63
80:11:157:PHE:HB3	80:11:190:LEU:HD13	1.81	0.63
11:q:22:ALA:O	11:q:39:LYS:NZ	2.28	0.63
46:B:1475:U:OP1	50:F:10:LYS:NZ	2.28	0.63
46:B:1715:U:H2'	46:B:1716:C:C6	2.33	0.63
59:O:41:LEU:HD13	59:O:123:VAL:HG22	1.80	0.63
1:AS:1662:G:H2'	1:AS:1663:A:H8	1.64	0.63
1:AS:2244:U:H2'	1:AS:2245:C:C6	2.33	0.63
10:BC:42:GLN:OE1	10:BC:45:ARG:NH2	2.30	0.63
46:CM:924:A:H2'	46:CM:925:A:C8	2.34	0.63
46:CM:1315:G:H2'	46:CM:1316:A:O4'	1.98	0.63
1:1:2311:C:H2'	1:1:2312:U:O4'	1.98	0.63
46:B:1019:C:HO2'	69:Y:2:THR:N	1.97	0.63
54:J:150:LEU:HB2	54:J:181:ILE:HG12	1.81	0.63
59:O:29:LYS:HE2	59:O:100:TRP:CE3	2.34	0.63
1:AS:1035:U:H2'	1:AS:1036:A:C8	2.34	0.63
1:AS:1172:C:H4'	17:BJ:90:PRO:HD3	1.81	0.63
12:BE:193:ASP:OD2	12:BE:198:LYS:HE3	1.99	0.63
63:DD:49:GLU:OE1	63:DD:81:ARG:NH2	2.31	0.63
1:1:1241:A:N7	1:1:1267:A:O2'	2.28	0.63
23:5:34:VAL:HG13	23:5:56:ILE:HG22	1.81	0.63
45:i:64:LEU:HB2	62:R:103:ASN:HD21	1.62	0.63
46:B:233:G:H2'	46:B:234:G:C8	2.34	0.63
46:B:1749:A:H1'	46:B:1770:C:H5'	1.80	0.63
52:H:72:HIS:CD2	52:H:107:LYS:HD3	2.34	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:K:4:SER:OG	55:K:6:ASP:OD1	2.15	0.63
1:AS:62:A:H5'	16:BI:174:ILE:HG21	1.80	0.63
1:AS:1542:A:N7	16:BI:71:ARG:NH1	2.47	0.63
9:BB:119:LYS:HB2	22:BO:133:ALA:HB3	1.79	0.63
1:1:450:G:H1	1:1:478:G:H1	1.47	0.63
1:1:554:U:O2'	83:1:3466:PAR:N24	2.31	0.63
45:i:47:ASP:O	45:i:50:LYS:NZ	2.32	0.63
46:B:1546:G:C5	65:U:134:ARG:HD3	2.34	0.63
63:S:26:GLY:HA2	63:S:62:ILE:O	1.99	0.63
63:DD:89:VAL:HG13	63:DD:101:LYS:HG2	1.80	0.63
45:CL:100:LYS:O	45:CL:104:GLN:HG3	1.99	0.63
1:1:289:A:H2'	1:1:290:G:H8	1.63	0.63
1:1:2435:G:H1	1:1:2438:U:H5'	1.64	0.63
14:t:66:ASN:HD22	29:AB:128:ARG:HH22	1.47	0.63
46:B:1593:C:H2'	46:B:1594:G:C8	2.33	0.63
51:G:123:LEU:HD23	51:G:159:THR:HG21	1.81	0.63
53:I:135:PRO:HB2	53:I:141:ILE:HG12	1.79	0.63
65:U:24:GLY:HA2	65:U:58:ALA:HB3	1.81	0.63
46:CM:1487:C:OP1	66:DG:122:ARG:NH2	2.30	0.63
79:DT:81:ALA:HB3	79:DT:93:TRP:HB2	1.80	0.63
4:j:101:ILE:HG12	4:j:165:VAL:HG22	1.81	0.62
46:B:1596:U:OP1	63:S:75:SER:N	2.31	0.62
46:B:1670:U:H3	46:B:1705:G:H1	1.46	0.62
60:P:46:THR:O	60:P:50:ILE:HD12	1.99	0.62
62:R:77:LYS:HB3	62:R:102:PHE:CE1	2.34	0.62
1:AS:442:G:C2	1:AS:443:G:H1'	2.33	0.62
1:AS:498:C:H2'	1:AS:499:G:H8	1.64	0.62
1:AS:1104:U:H2'	1:AS:1105:U:C6	2.34	0.62
46:CM:119:A:H1'	46:CM:395:A:C5	2.34	0.62
1:1:527:G:H2'	1:1:528:A:C8	2.35	0.62
1:1:1080:A:H2'	1:1:1081:A:C8	2.34	0.62
46:B:1276:G:H22	46:B:1309:G:N2	1.95	0.62
46:B:1410:A:H2'	49:E:87:ALA:CB	2.29	0.62
46:CM:605:G:H5'	46:CM:611:G:N2	2.15	0.62
46:CM:1335:U:H2'	46:CM:1336:G:C8	2.34	0.62
1:1:1199:A:H2'	1:1:1200:A:C8	2.34	0.62
1:1:1651:G:N2	1:1:1797:U:O4	2.32	0.62
59:O:34:THR:O	59:O:37:VAL:HG22	2.00	0.62
59:O:78:LEU:HG	78:h:156:VAL:HB	1.80	0.62
1:AS:3136:C:H2'	1:AS:3137:A:C8	2.34	0.62
9:BB:185:GLU:HG2	9:BB:196:VAL:HG21	1.81	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:CM:1073:A:O3'	73:DN:89:ARG:NH2	2.31	0.62
46:CM:1265:C:H2'	46:CM:1266:G:H8	1.65	0.62
46:CM:1578:C:H2'	46:CM:1579:A:H8	1.63	0.62
57:CX:77:ARG:HD2	57:CX:84:GLU:HG3	1.81	0.62
64:DE:25:THR:HG23	64:DE:27:ASP:H	1.63	0.62
77:DR:50:THR:OG1	77:DR:53:LYS:HB2	1.98	0.62
1:1:431:A:H2'	1:1:432:G:C8	2.34	0.62
1:1:1841:G:H5''	1:1:1842:C:H5'	1.81	0.62
46:CM:91:G:OP1	46:CM:395:A:N6	2.31	0.62
46:CM:511:U:H2'	46:CM:512:G:C8	2.33	0.62
46:CM:736:G:H2'	46:CM:737:A:H8	1.63	0.62
54:CU:8:GLU:OE1	54:CU:9:ASN:ND2	2.30	0.62
11:q:106:LYS:NZ	11:q:125:GLU:OE1	2.32	0.62
46:B:703:U:C5	46:B:712:A:H5'	2.35	0.62
1:AS:647:A:OP2	1:AS:2840:U:O2'	2.18	0.62
12:BE:43:VAL:HG21	12:BE:197:VAL:HG13	1.82	0.62
46:CM:1158:C:H5''	65:DF:132:LYS:NZ	2.13	0.62
1:1:1663:A:H2'	1:1:1664:G:C8	2.35	0.62
46:B:1265:C:H2'	46:B:1266:G:H8	1.64	0.62
1:AS:682:G:OP2	14:BG:28:GLN:NE2	2.24	0.62
1:AS:3153:A:H2	1:AS:3158:G:H4'	1.64	0.62
12:BE:101:LYS:HE2	12:BE:101:LYS:HA	1.81	0.62
45:CL:71:LYS:HE3	45:CL:74:ALA:HB2	1.81	0.62
1:1:1895:G:N2	1:1:2313:G:OP2	2.27	0.62
6:l:114:VAL:HB	6:l:119:LYS:HE3	1.81	0.62
46:B:1300:U:HO2'	46:B:1301:G:H8	1.48	0.62
54:J:5:ILE:HG22	54:J:7:SER:H	1.64	0.62
1:AS:527:G:H2'	1:AS:528:A:C8	2.35	0.62
1:AS:649:G:O2'	1:AS:1431:A:OP1	2.17	0.62
70:DK:107:PHE:CD2	70:DK:114:LYS:HD3	2.30	0.62
79:DT:257:ILE:HB	79:DT:271:LEU:HB2	1.81	0.62
1:1:269:G:H5''	16:v:14:LYS:HE2	1.80	0.62
1:1:627:U:H2'	1:1:628:A:H8	1.64	0.62
25:7:4:GLU:HB2	25:7:13:ILE:HB	1.81	0.62
31:AD:45:ILE:HD12	31:AD:92:LEU:HD11	1.82	0.62
45:i:96:LYS:HA	46:B:575:G:C6	2.35	0.62
59:O:35:SER:OG	59:O:41:LEU:HB2	2.00	0.62
8:BA:54:LEU:HD21	8:BA:145:LEU:HD11	1.81	0.62
32:BY:45:THR:HG22	32:BY:47:ASP:H	1.64	0.62
46:CM:1600:U:OP1	52:CS:169:ASN:HB2	2.00	0.62
50:CQ:218:VAL:HG21	79:DT:193:THR:HB	1.82	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:B:878:U:H5'	46:B:879:U:OP2	2.00	0.62
46:B:1130:U:O2'	49:E:84:GLN:O	2.16	0.62
46:B:1160:U:H2'	46:B:1161:G:H8	1.65	0.62
1:AS:627:U:H2'	1:AS:628:A:C8	2.35	0.62
46:CM:1596:U:O2'	52:CS:105:GLY:O	2.14	0.62
46:CM:1719:A:H2'	46:CM:1720:C:C6	2.35	0.62
52:CS:225:ARG:HD2	75:DP:58:GLU:CD	2.25	0.62
45:CL:67:LYS:HD2	45:CL:69:PHE:CE2	2.34	0.62
1:1:411:U:H2'	1:1:412:G:H8	1.65	0.62
1:1:653:C:H2'	1:1:654:A:C8	2.35	0.62
1:1:654:A:H2'	1:1:655:A:C8	2.35	0.62
1:1:1021:A:C2	1:1:1022:A:H1'	2.35	0.62
1:1:2334:A:N3	18:x:131:ARG:NH2	2.46	0.62
27:9:39:LEU:HD22	27:9:43:TYR:HE2	1.65	0.62
50:F:141:GLY:HA3	50:F:183:LEU:HD23	1.81	0.62
57:M:11:ILE:HD13	57:M:35:ILE:HG21	1.82	0.62
31:BX:26:THR:OG1	31:BX:93:SER:OG	2.18	0.62
46:CM:563:C:H2'	46:CM:575:G:C2	2.34	0.62
79:DT:52:ASP:O	79:DT:53:ASN:ND2	2.33	0.62
80:l1:156:LYS:HG2	80:l1:158:GLN:HB3	1.82	0.62
1:1:2234:A:H61	77:g:3:LYS:HE3	1.65	0.61
1:1:2789:A:H4'	1:1:2790:U:OP2	2.00	0.61
64:T:96:THR:HG23	64:T:98:GLY:H	1.65	0.61
79:AR:33:LEU:HB3	79:AR:45:TRP:HB2	1.81	0.61
1:AS:1057:A:O2'	22:BO:102:ARG:NH2	2.33	0.61
1:AS:2244:U:H2'	1:AS:2245:C:H6	1.65	0.61
1:AS:2333:G:OP1	18:BK:141:SER:OG	2.12	0.61
1:AS:2988:A:H2'	1:AS:2989:A:H8	1.65	0.61
46:CM:778:U:O2'	46:CM:779:U:O2	2.17	0.61
46:CM:1193:A:H4'	46:CM:1255:G:P	2.40	0.61
1:1:93:G:H2'	1:1:94:A:C8	2.35	0.61
1:1:307:A:H2'	1:1:308:A:C8	2.35	0.61
1:1:3287:A:H2'	1:1:3288:A:C8	2.35	0.61
3:4:29:U:H5''	14:t:27:ASP:HB3	1.82	0.61
46:B:151:G:O6	71:a:128:ARG:NH2	2.32	0.61
56:L:101:PRO:O	56:L:105:LEU:HD12	2.01	0.61
63:S:98:GLU:HG3	63:S:101:LYS:HE3	1.81	0.61
3:AU:21:C:OP1	6:AY:194:LYS:NZ	2.31	0.61
46:CM:576:U:OP1	45:CL:96:LYS:HE2	2.00	0.61
48:CO:48:ILE:HD13	48:CO:61:LEU:HD12	1.81	0.61
1:1:647:A:OP2	1:1:2840:U:O2'	2.15	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:1006:G:OP1	12:r:39:LYS:NZ	2.30	0.61
67:W:81:TYR:HB3	76:f:52:PHE:HB3	1.80	0.61
70:Z:69:ARG:HG3	70:Z:117:ILE:HG12	1.81	0.61
1:AS:2634:G:H2'	1:AS:2635:A:H8	1.65	0.61
46:CM:79:C:OP1	53:CT:159:ARG:NH2	2.32	0.61
46:CM:1127:A:H5''	73:DN:2:PRO:HB3	1.82	0.61
46:CM:1715:U:H2'	46:CM:1716:C:C6	2.35	0.61
80:l1:116:LEU:HD13	80:l1:119:GLN:HB2	1.82	0.61
1:1:581:A:H5''	34:AG:106:ASN:ND2	2.15	0.61
1:1:2138:G:H2'	1:1:2139:G:H8	1.64	0.61
1:1:2634:G:H2'	1:1:2635:A:C8	2.36	0.61
42:AO:7:LYS:NZ	46:B:1761:G:OP1	2.32	0.61
46:B:1472:G:N2	46:B:1580:A:OP1	2.32	0.61
1:AS:1415:A:OP1	3:AU:20:U:O2'	2.17	0.61
3:AU:83:U:O2	27:BT:51:ARG:NH2	2.33	0.61
6:AY:6:GLN:HB2	6:AY:20:GLN:OE1	1.99	0.61
11:BD:47:LYS:HE2	15:BH:3:SER:HB3	1.82	0.61
46:CM:336:C:H5''	55:CV:10:LYS:HD2	1.82	0.61
46:CM:870:G:OP1	48:CO:216:LYS:NZ	2.27	0.61
46:CM:1659:G:H2'	46:CM:1660:G:C8	2.35	0.61
49:CP:74:ASP:OD2	49:CP:181:ARG:NE	2.31	0.61
79:DT:195:TYR:HE2	79:DT:213:LYS:HE2	1.66	0.61
79:DT:195:TYR:CE2	79:DT:213:LYS:HE2	2.35	0.61
80:l1:73:ASP:O	80:l1:77:ALA:N	2.31	0.61
1:1:1387:C:C2	33:AF:104:ARG:HD3	2.36	0.61
62:R:60:LEU:HD21	62:R:94:VAL:HG12	1.82	0.61
3:AU:22:U:H5''	27:BT:16:ARG:NH1	2.16	0.61
6:AY:260:ASP:OD1	6:AY:265:SER:HB3	2.01	0.61
46:CM:15:U:O2'	46:CM:618:A:N6	2.34	0.61
46:CM:267:G:H2'	46:CM:268:C:C6	2.35	0.61
48:CO:68:VAL:HG12	48:CO:86:LEU:HD23	1.83	0.61
63:DD:30:ILE:HG12	63:DD:35:ILE:HG22	1.82	0.61
9:o:182:LEU:HD21	9:o:200:LEU:HD11	1.83	0.61
54:J:4:LYS:NZ	54:J:34:LEU:O	2.34	0.61
1:AS:289:A:H2'	1:AS:290:G:H8	1.65	0.61
1:AS:638:U:OP1	29:BV:21:ARG:NH1	2.34	0.61
5:AX:372:THR:HG22	5:AX:374:ALA:H	1.66	0.61
46:CM:142:G:O2'	46:CM:143:A:O5'	2.16	0.61
46:CM:271:G:N2	46:CM:281:U:O2	2.34	0.61
80:l1:216:ILE:HG22	80:l1:217:TYR:H	1.65	0.61
1:1:660:U:H2'	1:1:661:C:C6	2.36	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:2744:C:H5	83:1:3462:PAR:H31	1.65	0.61
46:B:852:G:OP2	60:P:3:ARG:NH2	2.26	0.61
1:AS:896:G:H1'	1:AS:1585:A:N6	2.16	0.61
1:AS:2171:U:H5'	1:AS:2172:G:H5'	1.82	0.61
1:AS:3287:A:H2'	1:AS:3288:A:C8	2.36	0.61
46:CM:696:U:H6	46:CM:696:U:OP1	1.84	0.61
60:DA:136:PRO:HG2	60:DA:139:TRP:HB2	1.83	0.61
80:l1:15:LYS:HB2	80:l1:214:PHE:CZ	2.36	0.61
80:l1:31:THR:OG1	80:l1:60:ARG:NH1	2.33	0.61
1:1:504:G:OP2	9:o:209:ASN:ND2	2.33	0.61
1:1:1892:A:H61	1:1:2317:C:H42	1.47	0.61
1:1:2254:G:OP1	42:AO:16:LYS:NZ	2.31	0.61
1:1:2391:A:H2'	1:1:2392:G:H8	1.66	0.61
1:1:2736:C:O2	84:1:3463:3K5:H36	2.01	0.61
27:9:51:ARG:HG2	27:9:52:GLN:H	1.66	0.61
1:AS:2669:A:H2'	1:AS:2670:G:C8	2.36	0.61
13:BF:109:HIS:HD2	13:BF:123:TYR:H	1.46	0.61
46:CM:55:A:OP1	71:DL:112:LYS:NZ	2.30	0.61
46:CM:108:A:H2'	46:CM:109:G:C8	2.35	0.61
1:1:800:C:OP1	6:l:99:ARG:NH2	2.33	0.61
1:1:2445:G:N2	1:1:2468:C:OP2	2.34	0.61
9:o:185:GLU:HG2	9:o:196:VAL:HG21	1.82	0.61
46:B:63:G:O2'	46:B:168:U:OP1	2.19	0.61
46:B:1445:C:OP2	65:U:138:THR:OG1	2.17	0.61
1:AS:1774:G:O2'	1:AS:1776:G:OP2	2.17	0.61
1:AS:2503:G:OP2	4:AW:37:ARG:NH2	2.34	0.61
46:CM:405:A:H2'	46:CM:406:C:H6	1.66	0.61
46:CM:432:G:N2	46:CM:435:A:OP2	2.34	0.61
46:CM:575:G:C8	45:CL:96:LYS:HD3	2.36	0.61
54:CU:25:GLU:HG3	54:CU:35:ARG:HH12	1.65	0.61
54:CU:109:PRO:HG2	54:CU:112:ARG:HD3	1.82	0.61
58:CY:34:TRP:HH2	58:CY:36:LYS:HE2	1.66	0.61
61:DB:76:ILE:HD12	61:DB:110:ILE:HG13	1.82	0.61
80:l1:113:SER:HB3	80:l1:116:LEU:HD23	1.81	0.61
1:1:3262:U:O4	5:k:124:LYS:NZ	2.34	0.61
5:k:50:LYS:NZ	5:k:328:ILE:O	2.33	0.61
45:i:90:ARG:NH1	46:B:1622:A:OP2	2.34	0.61
46:B:583:A:OP1	77:g:15:LYS:NZ	2.33	0.61
50:F:214:ASP:OD1	50:F:215:GLU:N	2.26	0.61
52:H:98:MET:O	52:H:99:MET:HE2	2.00	0.61
63:S:68:VAL:HG11	63:S:80:ILE:HD11	1.83	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:619:A:H2'	1:AS:620:A:C8	2.36	0.61
8:BA:3:GLN:HG2	33:BZ:76:LEU:H	1.66	0.61
30:BW:1:MET:O	30:BW:3:LYS:N	2.34	0.61
46:CM:52:U:H2'	46:CM:53:G:C8	2.36	0.61
46:CM:1158:C:H5''	65:DF:132:LYS:HZ1	1.65	0.61
46:CM:1750:A:H5''	46:CM:1758:U:H5''	1.83	0.61
53:CT:32:MET:HE2	53:CT:100:CYS:HB2	1.83	0.61
1:1:348:A:N3	1:1:352:A:O2'	2.33	0.60
1:1:2876:U:H2'	1:1:2877:U:C6	2.36	0.60
46:B:823:G:H2'	46:B:824:U:C6	2.36	0.60
48:D:180:THR:CG2	48:D:183:GLN:OE1	2.41	0.60
1:AS:2651:A:O2'	13:BF:52:TYR:OH	2.17	0.60
16:BI:146:ALA:HA	16:BI:149:ASN:OD1	2.00	0.60
46:CM:1266:G:O3'	67:DH:75:SER:OG	2.19	0.60
80:11:100:ILE:HG22	80:11:128:LEU:HD13	1.83	0.60
1:1:2191:A:H2'	1:1:2192:A:H8	1.65	0.60
1:1:2445:G:O6	1:1:2456:C:O2'	2.18	0.60
29:AB:59:ARG:NH2	43:AP:38:GLN:HG2	2.16	0.60
39:AL:24:ILE:HB	39:AL:44:LYS:HB2	1.83	0.60
46:B:1156:A:H2'	46:B:1157:G:H8	1.64	0.60
46:B:1463:G:H2'	46:B:1464:G:H8	1.66	0.60
55:K:120:THR:HG21	55:K:133:ALA:HA	1.81	0.60
79:AR:134:VAL:HG23	79:AR:142:MET:HB2	1.83	0.60
1:AS:654:A:H2'	1:AS:655:A:C8	2.36	0.60
1:AS:1443:G:N7	18:BK:25:SER:OG	2.32	0.60
46:CM:1199:U:HO2'	76:DQ:3:HIS:HD1	1.48	0.60
46:CM:1282:G:N2	46:CM:1285:A:OP2	2.24	0.60
61:DB:79:ARG:HB3	61:DB:113:VAL:HG23	1.82	0.60
1:1:2370:C:H1'	5:k:266:ARG:NH2	2.16	0.60
1:1:2634:G:H2'	1:1:2635:A:H8	1.64	0.60
20:z:160:GLU:OE1	20:z:163:ARG:NH1	2.35	0.60
23:5:22:PRO:HB2	23:5:28:PHE:HB2	1.83	0.60
46:B:903:U:H2'	46:B:904:A:C8	2.37	0.60
46:B:1131:G:H2'	46:B:1132:A:C8	2.36	0.60
1:AS:2334:A:H61	1:AS:2955:C:H5	1.48	0.60
16:BI:183:THR:HG22	16:BI:187:ARG:HB2	1.84	0.60
46:CM:813:U:H2'	46:CM:814:A:H5'	1.83	0.60
46:CM:1543:A:OP1	62:DC:115:TYR:OH	2.18	0.60
51:CR:100:ARG:HG2	51:CR:102:VAL:HG13	1.83	0.60
61:DB:59:ALA:HB1	61:DB:100:LEU:HG	1.83	0.60
1:1:62:A:H5''	16:v:174:ILE:HG21	1.83	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:AF:106:ARG:HH22	33:AF:122:ASN:HD22	1.49	0.60
56:L:38:ASN:HA	77:g:36:MET:HE3	1.84	0.60
59:O:123:VAL:HG11	59:O:133:ARG:HH22	1.66	0.60
1:AS:627:U:H2'	1:AS:628:A:H8	1.65	0.60
1:AS:2273:A:N3	1:AS:2901:C:O2'	2.32	0.60
1:AS:2650:A:O4'	45:CL:56:SER:OG	2.19	0.60
46:CM:821:U:H2'	46:CM:822:G:C8	2.36	0.60
46:CM:1024:A:O2'	46:CM:1025:G:O5'	2.20	0.60
5:k:372:THR:HG22	5:k:374:ALA:H	1.66	0.60
21:0:8:GLN:HB2	21:0:64:ILE:HD11	1.83	0.60
46:B:1578:C:H2'	46:B:1579:A:C8	2.36	0.60
46:CM:405:A:H2'	46:CM:406:C:C6	2.36	0.60
63:DD:27:LEU:HD11	63:DD:29:LYS:HE3	1.83	0.60
80:11:204:LEU:HD22	80:11:217:TYR:HE1	1.65	0.60
1:1:1199:A:H2'	1:1:1200:A:H8	1.65	0.60
1:1:1784:C:H41	83:1:3459:PAR:H532	1.65	0.60
1:1:1785:G:O6	83:1:3459:PAR:O62	2.18	0.60
1:1:2084:A:H2'	1:1:2085:A:C8	2.37	0.60
46:B:1238:U:H5''	78:h:172:ILE:HD12	1.83	0.60
56:L:108:ARG:NH1	56:L:110:GLN:OE1	2.34	0.60
58:N:7:VAL:HG23	58:N:8:GLN:HG2	1.82	0.60
1:AS:408:A:N3	1:AS:653:C:O2'	2.35	0.60
1:AS:1489:G:N2	1:AS:1489:G:OP2	2.34	0.60
50:CQ:172:ALA:HB1	50:CQ:174:ARG:NH1	2.16	0.60
69:DJ:2:THR:HG22	69:DJ:3:ARG:H	1.66	0.60
1:1:2941:A:N7	4:j:215:ASN:ND2	2.49	0.60
8:n:3:GLN:OE1	33:AF:78:LYS:NZ	2.35	0.60
14:t:133:SER:HB3	14:BG:130:THR:HG22	1.83	0.60
46:B:345:G:H5''	58:N:80:MET:HE2	1.83	0.60
46:B:944:U:OP2	74:d:20:LYS:NZ	2.34	0.60
46:B:1242:U:HO2'	57:M:8:ARG:HH22	1.46	0.60
1:AS:653:C:H2'	1:AS:654:A:C8	2.35	0.60
1:AS:1662:G:H2'	1:AS:1663:A:C8	2.37	0.60
4:AW:27:ALA:O	4:AW:128:ARG:NH2	2.33	0.60
4:AW:54:ARG:HG2	4:AW:56:ALA:H	1.65	0.60
4:AW:64:ARG:NH2	10:BC:39:GLN:O	2.28	0.60
7:AZ:85:ARG:NH2	7:AZ:250:ASP:OD2	2.34	0.60
20:BM:170:ARG:NH2	46:CM:838:G:H3'	2.17	0.60
31:BX:42:LYS:NZ	31:BX:96:ASP:HA	2.17	0.60
46:CM:573:C:N4	70:DK:65:ASN:OD1	2.32	0.60
46:CM:1245:U:H2'	46:CM:1246:G:H8	1.66	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:CP:134:ILE:HD13	49:CP:186:ALA:HB1	1.83	0.60
79:DT:71:ASP:HB3	79:DT:113:SER:HA	1.82	0.60
1:1:2655:U:H2'	1:1:2656:C:C6	2.35	0.60
25:7:123:ARG:NE	46:B:270:U:OP1	2.34	0.60
35:AH:81:CYS:SG	35:AH:82:ALA:N	2.75	0.60
45:i:116:GLU:HA	45:i:119:VAL:HG12	1.81	0.60
46:B:52:U:H2'	46:B:53:G:C8	2.37	0.60
46:B:768:C:H2'	46:B:769:U:O4'	2.02	0.60
54:J:25:GLU:HB2	54:J:31:LYS:HG3	1.82	0.60
70:Z:62:LYS:H	70:Z:116:ASP:HB2	1.65	0.60
1:AS:1309:G:O2'	1:AS:1314:A:N1	2.26	0.60
5:AX:211:GLN:NE2	5:AX:283:TYR:O	2.34	0.60
46:CM:1145:A:H2'	46:CM:1146:C:H6	1.66	0.60
50:CQ:49:VAL:HB	50:CQ:87:ILE:HD13	1.84	0.60
51:CR:175:PHE:HE1	51:CR:198:ARG:HD2	1.66	0.60
62:DC:121:ILE:HG12	65:DF:122:HIS:HD2	1.67	0.60
64:DE:99:GLN:OE1	64:DE:99:GLN:N	2.35	0.60
1:1:365:A:OP1	6:l:85:ARG:NH1	2.34	0.60
1:1:1631:G:N2	1:1:1634:A:OP2	2.33	0.60
26:8:103:TYR:O	26:8:138:ARG:NH2	2.32	0.60
46:B:578:A:O2'	46:B:580:U:OP1	2.20	0.60
46:B:876:A:H2'	46:B:877:G:H8	1.66	0.60
78:h:160:ARG:O	78:h:162:GLU:N	2.35	0.60
1:AS:411:U:H2'	1:AS:412:G:H8	1.65	0.60
1:AS:2592:G:OP1	30:BW:1:MET:N	2.35	0.60
6:AY:12:VAL:HG12	6:AY:157:PHE:HB2	1.84	0.60
23:BP:14:LYS:NZ	23:BP:105:GLN:OE1	2.35	0.60
46:CM:63:G:O2'	46:CM:168:U:OP1	2.20	0.60
46:CM:509:A:OP2	56:CW:176:ASN:ND2	2.27	0.60
46:CM:759:A:N6	46:CM:770:C:H42	1.99	0.60
50:CQ:146:ALA:HB2	45:CL:96:LYS:HZ1	1.65	0.60
1:1:649:G:O2'	1:1:1431:A:OP1	2.20	0.60
1:1:694:C:OP2	6:l:120:ARG:NH2	2.35	0.60
46:B:648:U:H2'	46:B:649:G:C8	2.36	0.60
46:B:1193:A:H4'	46:B:1255:G:P	2.42	0.60
59:O:26:ASP:HA	59:O:29:LYS:CG	2.32	0.60
1:AS:185:U:H3	1:AS:229:C:N4	1.98	0.60
16:BI:155:VAL:O	16:BI:162:ARG:NH2	2.27	0.60
46:CM:1279:G:H1	46:CM:1288:U:H3	1.50	0.60
46:CM:1668:A:H8	53:CT:65:GLN:HG3	1.66	0.60
48:CO:56:ASN:OD1	48:CO:57:ALA:N	2.34	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:CS:57:SER:HA	75:DP:53:ILE:HB	1.83	0.60
79:DT:216:VAL:HA	79:DT:232:GLU:HA	1.83	0.60
45:CL:79:THR:O	45:CL:81:THR:N	2.35	0.60
1:1:1493:C:H2'	1:1:1494:A:H8	1.67	0.59
1:1:2473:C:H2'	1:1:2474:C:C6	2.37	0.59
3:4:103:G:OP2	3:4:105:A:O2'	2.17	0.59
43:AP:61:LYS:NZ	43:AP:63:LYS:O	2.34	0.59
46:B:635:C:O2	54:J:110:ARG:NH2	2.34	0.59
46:B:1544:U:OP2	46:B:1546:G:O2'	2.18	0.59
79:AR:90:LEU:HB2	79:AR:104:PHE:HB2	1.84	0.59
1:AS:581:A:H5''	34:CA:106:ASN:HD21	1.67	0.59
64:DE:20:PHE:O	64:DE:24:LEU:HD12	2.02	0.59
68:DI:58:TYR:OH	69:DJ:20:THR:HA	2.02	0.59
1:1:1224:C:H2'	1:1:1225:G:H8	1.67	0.59
45:i:101:LYS:HD3	46:B:573:C:H4'	1.83	0.59
46:B:985:C:H5	46:B:988:A:H5''	1.67	0.59
47:C:30:GLN:NE2	47:C:151:SER:O	2.35	0.59
55:K:76:THR:HG21	55:K:104:ILE:HD12	1.82	0.59
1:AS:431:A:H2'	1:AS:432:G:C8	2.37	0.59
1:AS:783:G:H2'	1:AS:784:C:C6	2.38	0.59
1:AS:1030:U:H2'	1:AS:1031:A:C8	2.37	0.59
1:AS:1575:A:H5''	1:AS:1576:A:H2	1.67	0.59
31:BX:29:TYR:OH	31:BX:57:GLU:OE2	2.20	0.59
47:CN:13:ASP:OD2	47:CN:179:ARG:NH2	2.34	0.59
79:DT:247:TYR:HB3	79:DT:262:LEU:HB2	1.83	0.59
80:11:157:PHE:HD2	80:11:190:LEU:HB2	1.67	0.59
1:1:654:A:H2'	1:1:655:A:H8	1.67	0.59
7:m:119:TYR:OH	7:m:139:PRO:O	2.16	0.59
46:B:66:U:H1'	53:I:160:ARG:HH21	1.67	0.59
46:B:1335:U:H2'	46:B:1336:G:C8	2.38	0.59
73:c:3:LYS:NZ	73:c:6:ALA:HA	2.17	0.59
1:AS:1493:C:H2'	1:AS:1494:A:H8	1.67	0.59
1:AS:1530:A:H2'	1:AS:1531:A:C8	2.37	0.59
1:AS:2740:U:H2'	1:AS:2741:A:H8	1.67	0.59
2:AT:4:U:H2'	2:AT:5:G:H8	1.67	0.59
3:AU:34:U:H4'	36:CC:85:THR:HG21	1.84	0.59
5:AX:58:ARG:HD2	5:AX:354:VAL:HG13	1.84	0.59
46:CM:1351:U:H5'	63:DD:32:GLY:HA2	1.85	0.59
47:CN:57:ILE:HG23	47:CN:177:LEU:HD23	1.85	0.59
79:DT:40:LYS:NZ	79:DT:66:SER:O	2.32	0.59
1:1:1115:C:H2'	1:1:1116:A:H8	1.68	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:2385:C:H2'	1:1:2386:U:H6	1.68	0.59
46:B:515:U:H2'	46:B:516:A:C8	2.37	0.59
46:B:801:A:O4'	54:J:106:GLN:NE2	2.36	0.59
57:M:22:VAL:O	57:M:32:HIS:NE2	2.28	0.59
78:h:161:ARG:HH12	78:h:181:GLN:HE22	1.51	0.59
24:BQ:32:ARG:NH2	46:CM:1722:U:OP1	2.35	0.59
46:CM:1156:A:O2'	46:CM:1557:A:N3	2.32	0.59
46:CM:1602:C:N4	52:CS:80:LYS:O	2.35	0.59
46:CM:1739:U:H2'	46:CM:1740:A:H8	1.67	0.59
56:CW:87:SER:OG	56:CW:89:ASP:OD1	2.18	0.59
58:CY:118:GLU:OE1	58:CY:118:GLU:N	2.35	0.59
64:DE:26:LEU:HG	64:DE:59:LYS:HG3	1.84	0.59
64:DE:37:GLU:OE1	79:DT:151:TRP:NE1	2.32	0.59
79:DT:218:ILE:HG23	79:DT:230:THR:HG22	1.84	0.59
1:1:248:U:H2'	1:1:249:G:H4'	1.84	0.59
1:1:498:C:H2'	1:1:499:G:H8	1.67	0.59
1:1:3133:G:H2'	1:1:3134:C:H6	1.68	0.59
40:AM:23:LEU:HD12	40:AM:24:PRO:HD2	1.84	0.59
46:B:1087:G:OP2	70:Z:7:ARG:NH1	2.33	0.59
79:AR:202:SER:HB3	79:AR:207:LEU:HB2	1.84	0.59
1:AS:314:U:H2'	1:AS:315:C:C6	2.38	0.59
1:AS:487:C:H2'	1:AS:488:G:O4'	2.02	0.59
46:CM:1463:G:H2'	46:CM:1464:G:H8	1.68	0.59
46:CM:1486:G:OP2	66:DG:73:VAL:HG12	2.03	0.59
46:CM:1659:G:H2'	46:CM:1660:G:H8	1.67	0.59
73:DN:3:LYS:NZ	73:DN:6:ALA:HA	2.16	0.59
25:7:39:LEU:HD22	25:7:44:LYS:HG3	1.83	0.59
1:AS:662:U:H2'	1:AS:663:A:H8	1.66	0.59
1:AS:1190:G:H2'	1:AS:1191:A:C8	2.38	0.59
1:AS:2669:A:H2'	1:AS:2670:G:H8	1.66	0.59
1:AS:2925:U:H2'	1:AS:2926:U:H2'	1.83	0.59
2:AT:23:A:H2'	2:AT:24:A:C8	2.37	0.59
11:BD:110:ASP:HB3	11:BD:128:ILE:HD12	1.83	0.59
19:BL:123:THR:OG1	19:BL:125:ASP:OD1	2.21	0.59
25:BR:96:GLN:H	25:BR:99:SER:HB3	1.66	0.59
46:CM:326:A:OP2	58:CY:56:LYS:NZ	2.29	0.59
1:1:574:C:OP1	9:o:238:LYS:NZ	2.29	0.59
1:1:581:A:H5''	34:AG:106:ASN:HD21	1.68	0.59
1:1:1735:U:HO2'	35:AH:56:THR:HG1	1.49	0.59
6:l:300:VAL:HB	19:y:39:ARG:HG2	1.84	0.59
13:s:136:ALA:HA	13:s:148:ILE:HD11	1.84	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:i:137:ASP:OD1	45:i:138:GLU:N	2.36	0.59
73:c:32:LYS:O	73:c:37:LYS:NZ	2.36	0.59
1:AS:294:U:OP2	16:BI:15:GLN:NE2	2.22	0.59
1:AS:1199:A:H2'	1:AS:1200:A:C8	2.38	0.59
1:AS:2138:G:H2'	1:AS:2139:G:C8	2.37	0.59
21:BN:8:GLN:HB2	21:BN:64:ILE:HD11	1.85	0.59
46:CM:655:U:O2'	46:CM:674:C:N4	2.35	0.59
50:CQ:116:ILE:HD11	45:CL:107:TRP:HA	1.83	0.59
1:1:71:C:H4'	14:t:66:ASN:HD21	1.68	0.59
1:1:115:A:OP2	16:v:2:GLY:N	2.35	0.59
1:1:1057:A:O2'	22:2:102:ARG:NH2	2.36	0.59
54:J:92:ARG:NH1	54:J:120:LYS:HB3	2.17	0.59
1:AS:2391:A:H2'	1:AS:2392:G:H8	1.66	0.59
1:AS:2753:U:H4'	14:BG:187:LYS:HD3	1.85	0.59
4:AW:80:GLU:HG3	44:CK:66:GLY:HA2	1.85	0.59
46:CM:870:G:H2'	46:CM:871:U:C6	2.37	0.59
46:CM:1448:G:OP2	65:DF:143:ARG:NH1	2.36	0.59
47:CN:53:THR:OG1	47:CN:161:PRO:HG2	2.02	0.59
1:1:2461:G:N7	80:l:101:LYS:NZ	2.49	0.59
13:s:61:ARG:NH2	45:i:41:ALA:O	2.36	0.59
46:B:1301:G:OP1	64:T:7:LYS:N	2.32	0.59
1:AS:417:A:H2'	1:AS:418:A:C8	2.37	0.59
83:1:3460:PAR:O53	83:1:3460:PAR:N21	2.35	0.59
2:3:23:A:H2'	2:3:24:A:C8	2.37	0.59
46:B:79:C:OP1	53:I:159:ARG:NH2	2.36	0.59
46:B:142:G:O2'	46:B:143:A:O5'	2.18	0.59
46:B:1460:G:H2'	46:B:1461:A:C8	2.38	0.59
1:AS:504:G:OP2	9:BB:209:ASN:ND2	2.35	0.59
1:AS:1560:U:H3	1:AS:1571:G:H1	1.51	0.59
48:CO:69:CYS:SG	48:CO:70:LEU:N	2.75	0.59
79:DT:202:SER:HA	79:DT:242:PHE:HD2	1.68	0.59
1:1:1099:A:N6	1:1:1359:A:H1'	2.19	0.58
1:1:1530:A:H2'	1:1:1531:A:C8	2.38	0.58
43:AP:99:GLN:HB3	43:AP:102:GLN:HE22	1.68	0.58
46:B:605:G:H5'	46:B:611:G:N2	2.17	0.58
46:B:1486:G:OP2	66:V:73:VAL:HG12	2.03	0.58
1:AS:3294:U:H5''	5:AX:308:MET:HE2	1.85	0.58
46:CM:700:G:H2'	46:CM:701:G:O4'	2.02	0.58
1:1:563:U:H2'	1:1:564:G:C8	2.37	0.58
1:1:730:A:H4'	1:1:730:A:OP1	2.03	0.58
1:1:1795:A:H2'	1:1:1796:A:H8	1.68	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:2625:C:OP1	43:AP:89:LYS:HB2	2.02	0.58
1:1:3046:G:H4'	32:AE:61:ARG:HD2	1.84	0.58
3:4:36:G:C5	36:AI:86:ARG:HD3	2.38	0.58
66:V:53:TRP:HH2	66:V:100:ILE:HD12	1.68	0.58
1:AS:554:U:H2'	83:AS:3406:PAR:H12	1.85	0.58
1:AS:2347:G:H2'	1:AS:2348:G:C8	2.38	0.58
23:BP:59:GLU:HG2	23:BP:63:LYS:NZ	2.19	0.58
46:CM:575:G:C5	45:CL:96:LYS:HA	2.39	0.58
75:DP:42:ARG:NH1	75:DP:58:GLU:O	2.35	0.58
79:DT:90:LEU:HD11	79:DT:125:SER:HB3	1.84	0.58
1:1:2107:U:H2'	1:1:2108:G:C8	2.38	0.58
3:4:85:G:H5'	27:BT:113:LYS:CD	2.33	0.58
53:I:58:LYS:HZ2	53:I:105:ASP:HA	1.66	0.58
55:K:57:ALA:HB2	55:K:183:GLY:HA2	1.86	0.58
63:S:30:ILE:HG12	63:S:35:ILE:HG22	1.85	0.58
1:AS:856:G:O2'	1:AS:891:A:H4'	2.03	0.58
1:AS:2270:U:O2'	46:CM:1643:U:O2'	2.21	0.58
1:AS:2535:A:OP1	4:AW:69:TYR:OH	2.14	0.58
4:AW:45:VAL:HG22	4:AW:61:VAL:HG22	1.86	0.58
18:BK:40:LYS:HD2	18:BK:113:VAL:HG22	1.85	0.58
51:CR:18:TRP:O	51:CR:51:ARG:NH2	2.35	0.58
51:CR:104:ASP:HB3	51:CR:110:ALA:HB2	1.84	0.58
77:DR:34:ALA:O	77:DR:37:ARG:HG2	2.03	0.58
1:1:428:U:H2'	1:1:429:U:C6	2.38	0.58
1:1:662:U:H5'	6:l:108:ARG:HA	1.84	0.58
1:1:2679:U:O2'	45:i:37:LYS:O	2.22	0.58
46:B:1026:G:H2'	46:B:1027:G:H8	1.68	0.58
46:B:1048:U:O2'	48:D:203:THR:OG1	2.19	0.58
46:B:1459:U:OP1	52:H:183:SER:OG	2.21	0.58
55:K:136:VAL:O	55:K:141:ARG:NH2	2.36	0.58
39:CF:24:ILE:HB	39:CF:44:LYS:HB2	1.84	0.58
46:CM:768:C:H2'	46:CM:769:U:O4'	2.03	0.58
46:CM:1549:G:OP1	66:DG:89:ARG:NH1	2.36	0.58
46:CM:1579:A:H2'	46:CM:1580:A:C8	2.39	0.58
80:l1:171:ASN:HB3	80:l1:174:MET:HE2	1.86	0.58
13:s:132:GLY:HA2	13:s:154:THR:HG21	1.84	0.58
46:B:405:A:H2'	46:B:406:C:H6	1.68	0.58
46:B:1742:A:H2'	46:B:1743:A:O4'	2.04	0.58
46:CM:310:A:OP1	83:CM:1803:PAR:N21	2.26	0.58
46:CM:855:C:H1'	74:DO:51:GLN:HE22	1.69	0.58
75:DP:25:VAL:HG11	75:DP:66:LEU:HD22	1.84	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:2384:C:H2'	1:1:2385:C:C6	2.39	0.58
1:1:2427:A:H3'	1:1:2428:G:H8	1.67	0.58
8:n:175:LYS:HD3	15:u:104:GLN:HA	1.85	0.58
45:i:114:GLU:OE1	50:F:117:ARG:NH2	2.37	0.58
46:B:309:U:OP2	70:Z:20:ARG:HD3	2.03	0.58
46:B:870:G:H2'	46:B:871:U:C6	2.39	0.58
1:AS:547:U:H2'	1:AS:548:G:H8	1.66	0.58
13:BF:109:HIS:CD2	13:BF:122:ILE:HD12	2.39	0.58
46:CM:1399:U:O2'	46:CM:1400:U:OP1	2.21	0.58
46:CM:1479:A:H4'	46:CM:1480:G:O5'	2.04	0.58
56:CW:44:ARG:O	56:CW:48:GLN:HG3	2.04	0.58
80:l1:179:LEU:O	80:l1:181:ASN:N	2.36	0.58
1:1:480:G:H2'	1:1:480:G:N3	2.17	0.58
1:1:1099:A:H62	1:1:1338:G:H21	1.50	0.58
1:1:1592:C:H2'	1:1:1593:C:C6	2.39	0.58
1:AS:478:G:H2'	1:AS:478:G:N3	2.18	0.58
1:AS:3022:U:O2'	25:BR:16:GLY:O	2.21	0.58
1:AS:3240:U:OP2	34:CA:66:VAL:HG21	2.03	0.58
46:CM:76:A:N6	46:CM:80:A:O2'	2.37	0.58
46:CM:1472:G:N2	46:CM:1580:A:OP1	2.30	0.58
49:CP:177:PRO:HG3	56:CW:17:ARG:HH12	1.69	0.58
61:DB:13:ARG:HH12	61:DB:77:LYS:HD2	1.67	0.58
79:DT:134:VAL:HG23	79:DT:142:MET:HE2	1.86	0.58
1:1:172:C:O2'	1:1:173:C:OP1	2.21	0.58
1:1:2334:A:H61	1:1:2955:C:H5	1.51	0.58
19:y:123:THR:OG1	19:y:125:ASP:OD1	2.19	0.58
23:5:23:VAL:HG11	23:5:62:ASN:ND2	2.18	0.58
46:B:1160:U:H2'	46:B:1161:G:C8	2.39	0.58
46:B:1469:A:H2'	46:B:1470:G:C8	2.39	0.58
46:B:1470:G:H5'	63:S:14:THR:HG21	1.85	0.58
46:B:1592:G:OP2	63:S:126:LYS:NZ	2.31	0.58
46:B:1744:G:C8	83:B:1803:PAR:H612	2.39	0.58
1:AS:547:U:H2'	1:AS:548:G:C8	2.38	0.58
1:AS:563:U:H2'	1:AS:564:G:C8	2.39	0.58
1:AS:1943:G:O2'	1:AS:1944:G:OP1	2.19	0.58
1:AS:2191:A:H2'	1:AS:2192:A:H8	1.69	0.58
51:CR:100:ARG:NH2	51:CR:121:TYR:O	2.37	0.58
64:DE:36:SER:OG	64:DE:47:ARG:NH1	2.35	0.58
73:DN:12:LYS:HA	73:DN:15:ARG:HH12	1.68	0.58
80:l1:174:MET:HB3	80:l1:178:VAL:HB	1.84	0.58
1:1:592:U:O2'	6:l:309:LYS:NZ	2.34	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:802:A:N3	1:1:2784:C:O2'	2.35	0.58
1:1:1561:U:H2'	1:1:1562:G:C8	2.39	0.58
1:1:2084:A:H2'	1:1:2085:A:H8	1.68	0.58
1:AS:362:U:O4	38:CE:24:ARG:NH2	2.36	0.58
1:AS:531:G:N2	1:AS:552:G:O2'	2.34	0.58
1:AS:654:A:H2'	1:AS:655:A:H8	1.68	0.58
1:AS:1592:C:H2'	1:AS:1593:C:C6	2.39	0.58
11:BD:80:THR:HA	11:BD:83:THR:HG22	1.86	0.58
14:BG:122:LYS:HB3	36:CC:118:ILE:HG23	1.86	0.58
46:CM:515:U:H2'	46:CM:516:A:C8	2.39	0.58
46:CM:1783:C:O2'	73:DN:95:ARG:NE	2.36	0.58
52:CS:159:ALA:HB3	52:CS:225:ARG:HB3	1.86	0.58
1:1:1187:U:OP2	17:w:50:ARG:HD2	2.04	0.58
1:1:1735:U:O2'	35:AH:56:THR:OG1	2.20	0.58
1:1:2583:U:H2'	1:1:2584:U:C6	2.39	0.58
37:AJ:57:ILE:HG23	37:AJ:93:ILE:HD11	1.86	0.58
46:B:222:C:H2'	46:B:223:A:C8	2.38	0.58
46:B:530:U:OP1	71:a:64:PHE:HA	2.02	0.58
46:B:829:A:H2'	46:B:830:G:H8	1.67	0.58
46:B:1127:A:H5''	73:c:2:PRO:HB3	1.85	0.58
46:B:1485:G:H4'	66:V:121:GLY:H	1.68	0.58
50:F:56:THR:O	50:F:60:LEU:HG	2.04	0.58
54:J:29:ASP:OD1	54:J:30:LEU:HD23	2.03	0.58
17:BJ:126:ARG:HG2	17:BJ:130:LEU:HD12	1.86	0.58
21:BN:8:GLN:HG3	21:BN:26:ARG:HD2	1.85	0.58
46:CM:876:A:H2'	46:CM:877:G:H8	1.69	0.58
46:CM:1516:C:H2'	46:CM:1517:C:C6	2.39	0.58
46:CM:1531:U:H5''	65:DF:132:LYS:HG2	1.85	0.58
46:CM:1749:A:H1'	46:CM:1770:C:H5'	1.86	0.58
50:CQ:140:SER:O	50:CQ:184:GLY:N	2.36	0.58
55:CV:109:PHE:CE2	55:CV:189:ILE:HD11	2.38	0.58
58:CY:7:VAL:HG23	58:CY:8:GLN:HG2	1.86	0.58
65:DF:35:ILE:HG23	65:DF:102:ALA:HB2	1.84	0.58
80:l1:118:LYS:HA	80:l1:122:ARG:HH21	1.69	0.58
1:1:582:G:H2'	1:1:583:A:H8	1.69	0.57
1:1:1250:C:N4	1:1:1259:A:O4'	2.37	0.57
1:1:1611:U:H2'	1:1:1612:U:C6	2.39	0.57
46:B:64:U:O2'	46:B:166:A:N3	2.34	0.57
46:B:829:A:H2'	46:B:830:G:C8	2.39	0.57
46:B:1144:C:N4	46:B:1270:U:OP1	2.37	0.57
59:O:96:LEU:HD12	59:O:100:TRP:CZ3	2.38	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AW:117:GLU:OE2	4:AW:163:ARG:NH2	2.36	0.57
17:BJ:15:HIS:HD2	17:BJ:20:LEU:HD13	1.68	0.57
20:BM:159:ALA:HA	20:BM:162:ARG:HE	1.69	0.57
46:CM:1515:U:OP1	52:CS:109:LYS:HG3	2.03	0.57
65:DF:114:GLU:OE1	65:DF:114:GLU:N	2.37	0.57
1:1:1473:A:OP1	1:1:3047:G:O2'	2.17	0.57
1:1:1794:A:H2'	1:1:1795:A:C8	2.39	0.57
23:5:19:VAL:O	23:5:21:ALA:N	2.37	0.57
46:B:1637:U:H2'	46:B:1638:A:C8	2.39	0.57
64:T:71:PHE:HD1	64:T:73:LEU:H	1.52	0.57
79:AR:102:GLN:NE2	79:AR:139:GLY:HA3	2.19	0.57
79:AR:200:THR:HG21	79:AR:241:ALA:HA	1.85	0.57
1:AS:660:U:H2'	1:AS:661:C:C6	2.39	0.57
1:AS:2589:U:H3	30:BW:1:MET:HE3	1.68	0.57
1:AS:3260:A:H2'	1:AS:3261:A:H8	1.69	0.57
18:BK:54:HIS:O	18:BK:72:GLN:NE2	2.37	0.57
51:CR:91:THR:HG23	51:CR:98:HIS:CE1	2.39	0.57
52:CS:148:ARG:HG2	52:CS:150:GLY:H	1.68	0.57
55:CV:65:PHE:CZ	55:CV:78:ILE:HD11	2.39	0.57
79:DT:40:LYS:HD3	79:DT:65:HIS:O	2.04	0.57
80:l1:204:LEU:HG	80:l1:206:ILE:HG12	1.86	0.57
1:1:1782:G:H2'	1:1:1783:A:C8	2.38	0.57
1:1:2086:C:N4	83:1:3464:PAR:H241	2.01	0.57
21:0:109:ASP:OD2	21:0:113:ARG:NH1	2.38	0.57
47:C:124:THR:O	47:C:164:ASN:ND2	2.37	0.57
64:T:25:THR:HG23	64:T:27:ASP:H	1.69	0.57
71:a:10:ARG:NH1	71:a:26:ASP:OD2	2.37	0.57
51:CR:126:VAL:HG13	51:CR:139:VAL:HG13	1.86	0.57
57:CX:70:ASP:OD1	57:CX:71:GLU:N	2.37	0.57
78:DS:159:LEU:HD23	78:DS:159:LEU:H	1.68	0.57
1:1:538:G:H2'	1:1:539:G:C8	2.39	0.57
1:1:591:C:O2	9:o:24:ARG:NH1	2.37	0.57
1:1:1253:C:N4	1:1:1257:G:H22	2.01	0.57
1:1:2079:C:HO2'	1:1:2080:U:H6	1.52	0.57
1:1:2742:G:H5''	43:AP:79:THR:HG23	1.87	0.57
10:p:144:ILE:HG23	10:p:176:VAL:HG21	1.86	0.57
12:r:42:THR:O	12:r:139:ARG:NH2	2.37	0.57
46:B:1669:U:O4	46:B:1707:G:N2	2.37	0.57
53:I:136:LYS:HG3	53:I:173:PRO:HB2	1.86	0.57
57:M:1:MET:HE2	57:M:44:LYS:HB2	1.86	0.57
57:M:86:ILE:CG1	57:M:87:LEU:H	2.12	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:1436:G:OP1	6:AY:84:HIS:NE2	2.38	0.57
1:AS:2196:G:H2'	1:AS:2197:A:H8	1.70	0.57
6:AY:220:LEU:HD22	6:AY:226:VAL:HG11	1.85	0.57
46:CM:1240:G:N7	59:CZ:46:ARG:NH2	2.51	0.57
59:CZ:59:LEU:HD21	59:CZ:136:LEU:HD23	1.86	0.57
60:DA:101:HIS:NE2	60:DA:108:ASP:OD2	2.26	0.57
80:I1:87:VAL:O	80:I1:89:ASP:N	2.38	0.57
46:B:739:A:H5''	46:B:740:A:H5'	1.86	0.57
46:B:1209:A:OP2	59:O:114:LYS:HE2	2.04	0.57
72:b:50:ILE:HG12	72:b:69:LEU:HD13	1.85	0.57
79:AR:96:GLU:HG2	79:AR:97:THR:HG23	1.86	0.57
1:AS:69:A:N1	1:AS:313:A:O2'	2.35	0.57
1:AS:783:G:H2'	1:AS:784:C:H6	1.68	0.57
46:CM:728:U:OP1	54:CU:104:LYS:N	2.36	0.57
46:CM:1254:U:H5'	46:CM:1418:U:OP2	2.04	0.57
46:CM:1495:U:H2'	46:CM:1496:C:C6	2.40	0.57
57:CX:18:GLU:HG3	57:CX:89:LEU:HD23	1.85	0.57
1:1:72:A:N7	14:t:66:ASN:HB3	2.19	0.57
1:1:948:A:H4'	1:1:964:G:N2	2.19	0.57
5:k:260:VAL:HG11	5:k:266:ARG:NH1	2.19	0.57
20:z:23:TRP:HB3	20:z:51:VAL:HG12	1.87	0.57
46:B:635:C:OP1	69:Y:32:LYS:N	2.32	0.57
46:B:1245:U:H2'	46:B:1246:G:H8	1.69	0.57
46:B:1454:U:O2'	66:V:87:GLY:O	2.20	0.57
57:M:80:LEU:HB3	57:M:82:ILE:HG23	1.86	0.57
79:AR:302:TYR:CE2	79:AR:308:ARG:HD2	2.40	0.57
1:AS:2634:G:H2'	1:AS:2635:A:C8	2.39	0.57
16:BI:151:ILE:HG13	16:BI:152:VAL:H	1.70	0.57
46:CM:501:G:H2'	46:CM:502:U:C6	2.39	0.57
46:CM:961:G:N1	46:CM:1008:A:O2'	2.33	0.57
46:CM:1219:A:O2'	78:DS:182:TYR:OH	2.16	0.57
47:CN:88:LYS:NZ	64:DE:83:GLN:OE1	2.36	0.57
50:CQ:107:LYS:HB2	50:CQ:176:VAL:HG22	1.85	0.57
55:CV:57:ALA:HB2	55:CV:183:GLY:HA2	1.85	0.57
59:CZ:96:LEU:O	59:CZ:99:GLU:HG3	2.05	0.57
1:1:638:U:OP1	29:AB:21:ARG:NH1	2.36	0.57
24:6:32:ARG:HH21	24:6:64:LYS:HD3	1.69	0.57
46:B:92:A:OP1	51:G:7:LYS:NZ	2.38	0.57
53:I:180:THR:HG23	53:I:183:THR:H	1.70	0.57
1:AS:1735:U:O2'	35:CB:56:THR:OG1	2.13	0.57
23:BP:43:VAL:HG21	23:BP:50:LEU:HA	1.87	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:CE:21:ARG:NH2	38:CE:41:ALA:O	2.34	0.57
46:CM:220:A:C4	46:CM:221:U:H5	2.23	0.57
46:CM:458:A:HO2'	51:CR:27:TYR:HH	1.40	0.57
46:CM:1245:U:H2'	46:CM:1246:G:C8	2.39	0.57
54:CU:67:ARG:NH2	54:CU:124:ASP:OD1	2.38	0.57
46:B:1279:G:O2'	46:B:1306:A:N1	2.37	0.57
54:J:72:ARG:HG2	54:J:75:ARG:HH21	1.69	0.57
58:N:46:LYS:O	58:N:50:GLU:HG2	2.05	0.57
62:R:97:TYR:HE1	62:R:102:PHE:CZ	2.21	0.57
1:AS:1060:A:H4'	1:AS:1061:A:O5'	2.04	0.57
4:AW:54:ARG:HH21	4:AW:58:LEU:HD11	1.69	0.57
20:BM:162:ARG:HB3	20:BM:165:ARG:HH22	1.69	0.57
25:BR:107:SER:HA	25:BR:110:ALA:HB3	1.86	0.57
46:CM:338:U:H2'	46:CM:339:A:H8	1.70	0.57
75:DP:40:ILE:HG23	75:DP:62:GLU:HG3	1.87	0.57
75:DP:58:GLU:OE2	75:DP:61:ARG:NE	2.35	0.57
1:1:907:C:N4	4:j:3:ARG:HD3	2.20	0.57
1:1:1632:C:H1'	28:AA:76:ASN:HB2	1.87	0.57
46:B:653:G:H4'	46:B:654:G:H5'	1.86	0.57
46:B:1265:C:H2'	46:B:1266:G:C8	2.40	0.57
1:AS:3163:U:O2'	1:AS:3164:U:OP1	2.18	0.57
3:AU:13:A:O2'	18:BK:121:HIS:O	2.21	0.57
5:AX:50:LYS:NZ	5:AX:328:ILE:O	2.34	0.57
32:BY:18:ARG:HD3	32:BY:34:GLU:HB3	1.87	0.57
46:CM:829:A:H2'	46:CM:830:G:C8	2.37	0.57
46:CM:845:U:O4'	54:CU:110:ARG:HG3	2.05	0.57
46:CM:871:U:C2	46:CM:872:A:C8	2.93	0.57
74:DO:47:PHE:HE1	74:DO:49:HIS:HB2	1.68	0.57
1:1:629:A:H2'	1:1:630:G:C8	2.39	0.57
1:1:2855:U:H2'	1:1:2856:C:C6	2.40	0.57
4:j:247:ARG:HB3	46:B:997:U:H4'	1.87	0.57
14:t:122:LYS:HB3	36:AI:119:LYS:H	1.70	0.57
1:AS:1312:C:OP2	17:BJ:134:ARG:NE	2.35	0.57
1:AS:2322:U:H2'	1:AS:2323:A:C8	2.40	0.57
2:AT:113:C:H2'	2:AT:114:U:O4'	2.04	0.57
28:BU:53:VAL:HG11	28:BU:62:VAL:HG13	1.87	0.57
31:BX:53:LEU:HD13	35:CB:91[B]:ARG:HD3	1.86	0.57
46:CM:726:C:N3	54:CU:103:ARG:NH2	2.41	0.57
46:CM:834:C:H2'	46:CM:835:A:C8	2.40	0.57
46:CM:1300:U:OP1	46:CM:1313:G:N2	2.38	0.57
46:CM:1393:U:H2'	46:CM:1394:G:C8	2.40	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:CM:1399:U:O2'	46:CM:1402:G:OP1	2.21	0.57
48:CO:70:LEU:HD11	48:CO:74:GLN:HE22	1.70	0.57
1:1:252:U:H5'	1:1:253:A:H8	1.68	0.56
1:1:411:U:H2'	1:1:412:G:C8	2.39	0.56
1:1:2587:G:H2'	1:1:2588:C:H6	1.69	0.56
1:1:3260:A:H2'	1:1:3261:A:C8	2.40	0.56
25:7:81:ALA:HB3	53:I:130:PRO:HB3	1.87	0.56
46:B:31:C:OP1	70:Z:140:LYS:NZ	2.38	0.56
46:B:1240:G:N7	59:O:46:ARG:NH2	2.50	0.56
71:a:6:THR:HB	71:a:28:LEU:HB2	1.87	0.56
79:AR:127:SER:OG	79:AR:129:ASP:OD1	2.18	0.56
1:AS:347:G:O6	38:CE:55:ARG:NH1	2.38	0.56
1:AS:1762:G:N7	20:BM:46:LYS:HE2	2.20	0.56
1:AS:2090:U:H4'	1:AS:2091:A:O5'	2.05	0.56
1:AS:2194:G:H1	1:AS:2207:A:H61	1.53	0.56
1:AS:3261:A:H2'	1:AS:3262:U:H6	1.69	0.56
46:CM:52:U:H2'	46:CM:53:G:H8	1.69	0.56
46:CM:680:C:H2'	46:CM:681:C:C6	2.39	0.56
57:CX:15:LEU:HD23	57:CX:76:LEU:HD11	1.87	0.56
80:l1:61:PRO:HG3	80:l1:171:ASN:HD22	1.68	0.56
1:1:2260:U:O2	1:1:2288:U:H4'	2.05	0.56
16:v:27:CYS:HB2	16:v:122:ASN:ND2	2.20	0.56
23:5:16:VAL:HG12	23:5:65:VAL:HG22	1.86	0.56
41:AN:22:LYS:HG3	41:AN:39:CYS:HB2	1.87	0.56
43:AP:38:GLN:OE1	43:AP:41:ARG:NH2	2.37	0.56
46:B:717:G:H4'	46:B:719:A:N6	2.20	0.56
1:AS:496:A:H4'	8:BA:27:GLN:HG3	1.86	0.56
1:AS:892:A:H5'	4:AW:183:GLY:HA2	1.88	0.56
1:AS:1079:G:H2'	1:AS:1080:A:H8	1.70	0.56
1:AS:1517:G:C6	26:BS:116:PRO:HG2	2.40	0.56
1:AS:1575:A:OP1	1:AS:2500:G:N2	2.38	0.56
10:BC:155:ALA:HB2	10:BC:187:LEU:HD12	1.87	0.56
28:BU:46:ILE:HG23	28:BU:68:VAL:HG13	1.87	0.56
46:CM:1232:U:H2'	46:CM:1233:C:H6	1.69	0.56
1:1:1110:U:OP1	29:AB:23:GLY:N	2.29	0.56
1:1:2345:A:H2'	1:1:2346:A:C8	2.41	0.56
1:1:2669:A:H2'	1:1:2670:G:C8	2.40	0.56
18:x:125:GLN:HB2	18:x:141:SER:HB2	1.86	0.56
46:B:1265:C:O2'	67:W:69:THR:HG22	2.05	0.56
62:R:41:VAL:HG13	62:R:84:ILE:HD13	1.87	0.56
63:S:45:PHE:HA	63:S:48:TYR:HB2	1.87	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
66:V:113:VAL:O	66:V:125:SER:N	2.27	0.56
70:Z:37:ALA:HA	70:Z:41:SER:HB3	1.86	0.56
1:AS:736:G:N7	83:AS:3404:PAR:N32	2.54	0.56
1:AS:1692:A:H2'	1:AS:1693:A:C8	2.40	0.56
1:AS:1795:A:H2'	1:AS:1796:A:H8	1.69	0.56
1:AS:2933:G:H2'	1:AS:2934:U:C6	2.39	0.56
8:BA:39:LEU:HD11	8:BA:53:TYR:HB2	1.86	0.56
18:BK:103:GLU:OE2	18:BK:109:SER:OG	2.23	0.56
25:BR:104:ALA:O	25:BR:108:LYS:HG3	2.04	0.56
25:BR:113:LYS:HA	25:BR:116:LYS:HE2	1.87	0.56
46:CM:151:G:H2'	46:CM:152:G:C8	2.40	0.56
46:CM:233:G:H2'	46:CM:234:G:C8	2.41	0.56
46:CM:970:G:H2'	46:CM:971:G:O4'	2.05	0.56
79:DT:42:LEU:HD11	79:DT:83:SER:HB3	1.85	0.56
45:CL:94:THR:OG1	45:CL:95:GLY:N	2.38	0.56
1:1:48:A:N7	16:v:187:ARG:HD2	2.20	0.56
1:1:1493:C:H2'	1:1:1494:A:C8	2.40	0.56
24:6:10:LYS:NZ	24:6:54:ALA:O	2.39	0.56
45:i:132:GLU:OE2	45:i:136:ASN:ND2	2.38	0.56
46:B:1205:C:OP1	57:M:48:SER:OG	2.24	0.56
46:B:1635:A:H2'	46:B:1636:C:C6	2.40	0.56
46:B:1659:G:H2'	46:B:1660:G:C8	2.40	0.56
1:AS:1148:G:N2	1:AS:1148:G:OP2	2.39	0.56
1:AS:1760:U:OP1	20:BM:43:LYS:HE2	2.06	0.56
15:BH:57:LEU:HG	21:BN:172:TYR:OH	2.06	0.56
46:CM:553:A:N3	46:CM:588:C:O2'	2.30	0.56
46:CM:676:G:N3	46:CM:677:G:N2	2.48	0.56
1:1:152:U:H4'	1:1:157:G:H4'	1.86	0.56
1:1:1020:G:H3'	1:1:1021:A:C5'	2.34	0.56
1:1:1580:U:H2'	1:1:1581:C:H6	1.70	0.56
46:B:826:U:H2'	46:B:827:C:O4'	2.06	0.56
5:AX:92:TYR:HB2	5:AX:157:VAL:HB	1.86	0.56
7:AZ:119:TYR:OH	7:AZ:139:PRO:O	2.17	0.56
15:BH:14:GLU:HG2	15:BH:17:ARG:HG2	1.87	0.56
46:CM:859:C:OP1	48:CO:159:SER:OG	2.23	0.56
46:CM:1181:A:OP2	46:CM:1450:G:N2	2.35	0.56
49:CP:211:ALA:O	49:CP:215:ASN:ND2	2.30	0.56
70:DK:69:ARG:HG3	70:DK:117:ILE:HG12	1.88	0.56
1:1:525:A:OP2	83:1:3466:PAR:O31	2.16	0.56
1:1:689:A:N6	6:l:49:GLN:OE1	2.38	0.56
30:AC:11:ASN:O	30:AC:11:ASN:ND2	2.38	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:B:108:A:H2'	46:B:109:G:C8	2.41	0.56
46:B:1205:C:H2'	46:B:1206:A:C8	2.41	0.56
59:O:36:LEU:O	59:O:38:HIS:N	2.35	0.56
4:AW:54:ARG:HD2	4:AW:56:ALA:HB3	1.86	0.56
44:CK:28:LYS:O	44:CK:32:GLN:HG3	2.05	0.56
46:CM:1168:A:N6	62:DC:98:ASN:OD1	2.39	0.56
46:CM:1341:U:H1'	46:CM:1353:G:N2	2.21	0.56
61:DB:7:GLN:HG3	61:DB:9:PHE:HE1	1.69	0.56
1:1:476:C:H2'	1:1:477:U:O4'	2.06	0.56
1:1:619:A:H2'	1:1:620:A:C8	2.41	0.56
1:1:729:C:H3'	1:1:730:A:H5''	1.88	0.56
1:1:1649:G:OP2	83:1:3465:PAR:N24	2.38	0.56
1:1:2808:C:O2	12:r:158:LYS:NZ	2.31	0.56
1:1:2876:U:H2'	1:1:2877:U:H6	1.68	0.56
46:B:932:U:H2'	46:B:933:A:H8	1.70	0.56
60:P:26:PHE:HE2	60:P:60:VAL:HA	1.71	0.56
66:V:86:ARG:NH2	66:V:92:LYS:HD2	2.20	0.56
75:e:14:LYS:HB3	75:e:29:ARG:HB3	1.88	0.56
1:AS:1302:G:C6	17:BJ:63:THR:HA	2.40	0.56
1:AS:2086:C:H1'	1:AS:3309:A:C8	2.40	0.56
1:AS:2958:U:H2'	1:AS:2959:A:H8	1.71	0.56
22:BO:66:ASN:ND2	30:BW:35:VAL:HA	2.20	0.56
23:BP:59:GLU:CD	23:BP:60:SER:H	2.13	0.56
25:BR:80:ARG:NH1	53:CT:129:VAL:O	2.31	0.56
36:CC:12:LYS:HD3	36:CC:16:GLN:HB3	1.87	0.56
46:CM:1669:U:HO2'	46:CM:1670:U:H6	1.53	0.56
63:DD:78:TYR:HA	63:DD:81:ARG:HD2	1.87	0.56
69:DJ:7:LEU:HD11	69:DJ:37:PHE:HD2	1.71	0.56
79:DT:90:LEU:HB2	79:DT:104:PHE:CD2	2.39	0.56
1:1:779:A:H5''	1:1:780:A:H5''	1.88	0.56
1:1:1443:G:N7	18:x:25:SER:OG	2.36	0.56
38:AK:21:ARG:HD3	38:AK:44:MET:SD	2.46	0.56
46:B:223:A:H61	46:B:821:U:H3	1.52	0.56
57:M:54:TYR:HD1	57:M:72:GLY:HA2	1.71	0.56
64:T:99:GLN:OE1	64:T:99:GLN:N	2.38	0.56
1:AS:582:G:H2'	1:AS:583:A:H8	1.69	0.56
1:AS:729:C:H3'	1:AS:730:A:H5''	1.87	0.56
25:BR:82:ILE:HG22	25:BR:85:ALA:CB	2.36	0.56
46:CM:1516:C:O2'	66:DG:12:GLN:OE1	2.17	0.56
65:DF:69:ILE:HG22	65:DF:73:MET:HE2	1.87	0.56
80:l:1:79:SER:O	80:l:1:80:LEU:HB2	2.05	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:2395:U:H5''	4:j:221:LYS:HE3	1.88	0.56
1:1:3159:A:H5'	1:1:3160:C:OP2	2.06	0.56
1:1:3196:U:H2'	1:1:3197:G:H8	1.70	0.56
16:v:62:TYR:HD2	16:v:106:VAL:HG13	1.71	0.56
43:AP:8:ARG:HG2	43:AP:10:THR:HG23	1.86	0.56
46:B:774:U:H2'	46:B:775:A:C8	2.37	0.56
51:G:199:GLU:OE2	51:G:201:HIS:NE2	2.38	0.56
57:M:70:ASP:OD1	57:M:71:GLU:N	2.39	0.56
75:e:12:VAL:HG12	75:e:30:VAL:HG12	1.86	0.56
1:AS:498:C:H2'	1:AS:499:G:C8	2.40	0.56
1:AS:1580:U:H2'	1:AS:1581:C:H6	1.70	0.56
1:AS:1617:A:H2'	1:AS:1618:U:C6	2.40	0.56
46:CM:644:U:H2'	46:CM:645:G:H8	1.70	0.56
52:CS:222:LYS:HG3	52:CS:225:ARG:NH2	2.21	0.56
65:DF:30:TYR:O	65:DF:33:THR:OG1	2.24	0.56
65:DF:41:ARG:HD2	66:DG:46:PRO:HD3	1.87	0.56
1:1:498:C:H2'	1:1:499:G:C8	2.41	0.56
18:x:18:ARG:NH1	18:x:147:GLU:OE1	2.39	0.56
46:B:17:C:H2'	46:B:18:C:C6	2.41	0.56
46:B:52:U:H2'	46:B:53:G:H8	1.71	0.56
46:B:784:U:H2'	46:B:785:G:C8	2.39	0.56
63:S:34:PRO:HB2	63:S:36:THR:HG22	1.88	0.56
1:AS:437:G:O2'	1:AS:438:A:OP1	2.24	0.56
1:AS:1690:U:H4'	35:CB:24:LYS:HE2	1.88	0.56
1:AS:1713:U:H2'	1:AS:1714:G:H8	1.66	0.56
1:AS:2587:G:H2'	1:AS:2588:C:H6	1.71	0.56
3:AU:22:U:H5''	27:BT:16:ARG:HH12	1.71	0.56
13:BF:106:ILE:HD11	13:BF:125:MET:HB3	1.88	0.56
28:BU:70:PRO:HG2	28:BU:111:LYS:HB3	1.88	0.56
37:CD:61:ARG:HH21	37:CD:93:ILE:HG23	1.71	0.56
46:CM:903:U:H2'	46:CM:904:A:C8	2.41	0.56
46:CM:1248:G:H2'	46:CM:1249:G:O4'	2.06	0.56
1:1:896:G:H1'	1:1:1585:A:N6	2.21	0.55
1:1:1035:U:H2'	1:1:1036:A:C8	2.41	0.55
25:7:4:GLU:HB3	25:7:30:ARG:HD3	1.88	0.55
46:B:29:U:H2'	46:B:30:G:H8	1.70	0.55
46:B:1487:C:P	66:V:122:ARG:HH22	2.29	0.55
52:H:149:ILE:HG13	52:H:156:ARG:O	2.05	0.55
61:Q:98:ARG:HD2	73:c:49:ALA:HB2	1.87	0.55
1:AS:1206:U:H5''	11:BD:62:ARG:HD3	1.88	0.55
1:AS:1428:C:O2'	1:AS:1430:G:OP2	2.23	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:1611:U:H2'	1:AS:1612:U:C6	2.41	0.55
1:AS:1841:G:H5''	1:AS:1842:C:H5'	1.88	0.55
1:AS:3110:U:OP2	5:AX:30:LYS:HG3	2.05	0.55
33:BZ:10:ILE:HA	33:BZ:64:THR:HG21	1.88	0.55
46:CM:1275:U:H2'	46:CM:1276:G:C8	2.41	0.55
46:CM:1669:U:O4	46:CM:1707:G:N2	2.38	0.55
78:DS:160:ARG:HB3	78:DS:173:PHE:HD2	1.69	0.55
80:l1:60:ARG:HG2	80:l1:63:MET:HE3	1.88	0.55
1:1:783:G:H2'	1:1:784:C:C6	2.41	0.55
1:1:1642:G:O2'	1:1:1804:G:N2	2.37	0.55
1:1:1663:A:H2'	1:1:1664:G:H8	1.71	0.55
1:1:2244:U:H2'	1:1:2245:C:H6	1.72	0.55
1:1:2445:G:O2'	1:1:2446:A:N3	2.37	0.55
1:1:2638:C:O3'	45:i:39:SER:OG	2.20	0.55
1:1:2873:G:O2'	1:1:2996:A:N1	2.39	0.55
3:4:26:U:O2'	6:l:52:ALA:O	2.22	0.55
6:l:6:GLN:HB3	6:l:20:GLN:HB3	1.88	0.55
9:o:149:ARG:HD2	9:o:205:LEU:HD23	1.88	0.55
24:6:15:LEU:HD13	24:6:51:ALA:HB3	1.88	0.55
46:B:1149:G:O2'	46:B:1599:U:O2	2.23	0.55
1:AS:1014:G:N2	1:AS:1030:U:O2	2.29	0.55
1:AS:1481:G:N2	35:CB:4:ARG:HD2	2.21	0.55
17:BJ:122:PRO:HA	17:BJ:125:LEU:HD12	1.87	0.55
46:CM:65:A:OP1	53:CT:174:LYS:HD3	2.06	0.55
46:CM:677:G:H2'	46:CM:678:A:C8	2.41	0.55
50:CQ:7:SER:HB3	50:CQ:10:LYS:HG3	1.89	0.55
51:CR:194:VAL:HG11	51:CR:232:ALA:HB2	1.88	0.55
62:DC:18:LYS:NZ	65:DF:90:LYS:O	2.26	0.55
65:DF:36:ARG:HH12	65:DF:105:LEU:HB3	1.71	0.55
1:1:2244:U:H2'	1:1:2245:C:C6	2.41	0.55
1:1:2740:U:H2'	1:1:2741:A:H8	1.72	0.55
1:1:3136:C:H2'	1:1:3137:A:C8	2.40	0.55
45:i:67:LYS:HD3	62:R:125:PRO:HD3	1.87	0.55
46:B:761:G:O6	71:a:11:LYS:HE2	2.06	0.55
1:AS:1303:G:H5'	17:BJ:61:LYS:HE3	1.89	0.55
1:AS:1782:G:H2'	1:AS:1783:A:C8	2.41	0.55
1:AS:2981:G:OP1	17:BJ:67:LYS:NZ	2.39	0.55
5:AX:95:THR:OG1	5:AX:98:GLY:O	2.23	0.55
6:AY:186:LYS:HE3	6:AY:200:PHE:HB3	1.88	0.55
14:BG:31:LYS:O	14:BG:35:ARG:HB2	2.05	0.55
21:BN:96:ASP:OD1	21:BN:97:VAL:N	2.39	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:CB:54:ILE:HD11	35:CB:78:GLY:HA2	1.89	0.55
35:CB:57:LEU:HB2	35:CB:62:TYR:CE1	2.42	0.55
46:CM:885:A:H2'	46:CM:886:G:H8	1.72	0.55
64:DE:96:THR:HG23	64:DE:98:GLY:H	1.71	0.55
71:DL:32:ARG:HH11	71:DL:35:VAL:HG22	1.70	0.55
1:1:374:A:N3	1:1:376:G:H5''	2.21	0.55
1:1:1227:A:N6	1:1:1273:C:OP2	2.32	0.55
1:1:3133:G:H2'	1:1:3134:C:C6	2.40	0.55
1:1:3138:U:H2'	1:1:3139:U:C6	2.42	0.55
1:1:3148:A:C2	17:w:116:LYS:HD2	2.42	0.55
83:1:3461:PAR:N21	83:1:3461:PAR:O23	2.39	0.55
8:n:46:PHE:CD1	8:n:73:VAL:HG22	2.41	0.55
8:n:170:ARG:HB3	8:n:172:HIS:CE1	2.41	0.55
10:p:134:LYS:HD2	10:p:139:HIS:HE1	1.72	0.55
16:v:73:ARG:HG2	16:v:75:VAL:HG13	1.88	0.55
46:B:15:U:H2'	46:B:16:G:O4'	2.06	0.55
79:AR:80:TYR:HD2	79:AR:92:LEU:HD21	1.71	0.55
1:AS:2107:U:H2'	1:AS:2108:G:C8	2.41	0.55
1:AS:3136:C:H2'	1:AS:3137:A:H8	1.72	0.55
4:AW:195:SER:O	4:AW:198:LYS:NZ	2.40	0.55
18:BK:31:GLU:OE2	18:BK:63:TYR:N	2.37	0.55
23:BP:59:GLU:HG2	23:BP:63:LYS:HZ1	1.71	0.55
25:BR:95:SER:HB3	25:BR:99:SER:HB3	1.89	0.55
27:BT:58:VAL:HA	27:BT:104:VAL:HG12	1.89	0.55
42:CI:12:ARG:NH1	46:CM:1766:U:O4	2.36	0.55
46:CM:638:U:C4	54:CU:114:LEU:HD21	2.41	0.55
46:CM:784:U:H2'	46:CM:785:G:C8	2.41	0.55
50:CQ:172:ALA:HB1	50:CQ:174:ARG:HH11	1.72	0.55
59:CZ:33:ARG:O	59:CZ:37:VAL:HG23	2.06	0.55
74:DO:36:LYS:HZ1	74:DO:42:ASN:C	2.14	0.55
1:1:510:G:O2'	6:l:342:SER:HB3	2.06	0.55
1:1:1384:U:OP1	33:AF:105:LYS:NZ	2.33	0.55
1:1:1518:U:O2'	26:8:113:LEU:HD11	2.07	0.55
1:1:2196:G:H2'	1:1:2197:A:H8	1.70	0.55
1:1:2756:G:N7	83:1:3462:PAR:N24	2.54	0.55
1:1:3318:G:P	55:K:77:ARG:HH22	2.29	0.55
22:2:82:ASN:HB2	30:AC:20:GLY:HA3	1.88	0.55
46:B:216:A:H1'	46:B:217:A:O5'	2.07	0.55
46:B:1457:A:H2	46:B:1460:G:N3	2.03	0.55
50:F:143:LEU:O	50:F:145:ALA:N	2.34	0.55
78:h:147:TYR:HD2	78:h:173:PHE:CD2	2.25	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:AR:38:ARG:HA	79:AR:68:ILE:HG23	1.87	0.55
1:AS:948:A:H4'	1:AS:964:G:N2	2.21	0.55
1:AS:1479:G:O6	35:CB:4:ARG:NH2	2.36	0.55
3:AU:29:U:H5''	14:BG:27:ASP:HB3	1.89	0.55
46:CM:12:U:H2'	46:CM:13:C:H6	1.71	0.55
65:DF:86:LEU:HD12	65:DF:97:ASP:HB3	1.88	0.55
77:DR:55:LYS:HB2	77:DR:58:PRO:HG3	1.87	0.55
80:11:59:PRO:HB3	80:11:182:GLN:HE21	1.71	0.55
45:CL:130:GLU:N	45:CL:130:GLU:OE1	2.40	0.55
1:1:532:U:OP1	21:0:146:LYS:NZ	2.39	0.55
1:1:636:C:N4	1:1:637:G:O6	2.39	0.55
1:1:3207:G:OP1	17:w:160:LYS:NZ	2.20	0.55
1:1:3287:A:H2'	1:1:3288:A:H8	1.71	0.55
4:j:30:ARG:HG2	4:j:74:GLU:HG3	1.88	0.55
5:k:293:ASN:HB2	5:k:304:THR:HA	1.88	0.55
46:B:553:A:N3	46:B:588:C:O2'	2.34	0.55
46:B:871:U:O2'	61:Q:116:VAL:O	2.23	0.55
49:E:53:LEU:HA	68:X:12:TYR:HE1	1.72	0.55
1:AS:1106:U:H2'	1:AS:1107:U:C6	2.41	0.55
1:AS:1302:G:C5	17:BJ:63:THR:HA	2.42	0.55
1:AS:2158:A:H2'	1:AS:2159:C:C6	2.42	0.55
1:AS:2675:A:OP2	7:AZ:23:ARG:NH2	2.37	0.55
4:AW:20:THR:HA	4:AW:23:ARG:HG3	1.89	0.55
32:BY:54:LEU:HA	32:BY:94:PRO:HG3	1.89	0.55
46:CM:43:A:O2'	46:CM:99:C:OP1	2.16	0.55
46:CM:1055:A:H4'	74:DO:17:LYS:NZ	2.21	0.55
48:CO:123:ALA:HB2	48:CO:165:ARG:HG3	1.87	0.55
1:1:438:A:N1	1:1:489:G:O2'	2.36	0.55
1:1:745:C:H5''	30:AC:32:LEU:HD12	1.87	0.55
1:1:1060:A:H4'	1:1:1061:A:O5'	2.06	0.55
1:1:1104:U:H2'	1:1:1105:U:C6	2.41	0.55
1:1:2322:U:H2'	1:1:2323:A:C8	2.42	0.55
83:1:3465:PAR:O33	83:1:3465:PAR:H641	2.07	0.55
18:x:11:PRO:O	18:x:105:LYS:NZ	2.40	0.55
20:z:81:ARG:HG2	20:z:88:ARG:NH1	2.20	0.55
26:8:75:LYS:HB3	26:8:81:THR:CG2	2.37	0.55
66:V:73:VAL:O	66:V:77:ASN:ND2	2.40	0.55
1:AS:269:G:OP2	16:BI:44:ARG:NH1	2.39	0.55
1:AS:932:A:OP2	29:BV:27:LYS:HE2	2.07	0.55
1:AS:1663:A:H2'	1:AS:1664:G:H8	1.69	0.55
3:AU:8:C:H2'	3:AU:9:A:H8	1.72	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:BM:158:GLU:O	20:BM:162:ARG:HG2	2.07	0.55
40:CG:23:LEU:HD12	40:CG:24:PRO:HD2	1.89	0.55
46:CM:1520:C:OP2	72:DM:77:ARG:NH1	2.37	0.55
46:CM:1649:G:H2'	46:CM:1650:G:H8	1.72	0.55
48:CO:180:THR:HG23	48:CO:183:GLN:H	1.72	0.55
62:DC:127:ARG:HH21	45:CL:71:LYS:CG	2.17	0.55
65:DF:63:GLN:O	65:DF:67:GLU:HG3	2.06	0.55
67:DH:81:TYR:HB3	76:DQ:52:PHE:HB3	1.88	0.55
1:1:793:U:O2	14:t:12:ASN:ND2	2.40	0.55
1:1:1504:C:OP1	18:x:127:ARG:NH1	2.36	0.55
8:n:39:LEU:HD13	8:n:83:VAL:HG11	1.89	0.55
15:u:19:VAL:HG12	15:u:57:LEU:HA	1.89	0.55
28:AA:27:LYS:HE3	28:AA:97:THR:HG22	1.89	0.55
46:B:676:G:N3	46:B:677:G:N2	2.54	0.55
51:G:71:GLN:HB2	51:G:91:THR:HB	1.89	0.55
1:AS:119:G:O6	10:BC:124:LYS:NZ	2.29	0.55
1:AS:1493:C:H2'	1:AS:1494:A:C8	2.41	0.55
1:AS:2334:A:N3	18:BK:131:ARG:NH2	2.54	0.55
13:BF:90:GLN:HG3	13:BF:170:GLU:HB2	1.87	0.55
17:BJ:62:ALA:HA	17:BJ:71:PRO:HD2	1.89	0.55
46:CM:15:U:H2'	46:CM:16:G:O4'	2.07	0.55
48:CO:27:LYS:HG2	48:CO:47:LEU:HD13	1.88	0.55
1:1:437:G:N2	1:1:620:A:H62	2.04	0.55
1:1:1360:C:H5''	19:y:3:ARG:HD2	1.89	0.55
46:B:1602:C:OP1	52:H:81:ARG:NH2	2.40	0.55
66:V:10:PRO:HB2	66:V:13:ASP:OD1	2.06	0.55
1:AS:290:G:H1'	16:BI:93:LYS:HD2	1.89	0.55
1:AS:486:C:H2'	1:AS:487:C:C6	2.41	0.55
1:AS:581:A:H5''	34:CA:106:ASN:ND2	2.22	0.55
1:AS:827:G:O2'	1:AS:1860:A:N3	2.33	0.55
1:AS:1007:A:H2'	1:AS:1008:A:C8	2.42	0.55
1:AS:2787:G:N2	1:AS:2790:U:O2	2.39	0.55
46:CM:1149:G:H2'	46:CM:1150:G:H8	1.71	0.55
46:CM:1578:C:H2'	46:CM:1579:A:C8	2.42	0.55
48:CO:28:ASP:OD1	48:CO:28:ASP:N	2.40	0.55
69:DJ:81:VAL:HG21	69:DJ:125:ILE:HB	1.89	0.55
80:l:51:GLY:HA3	80:l:193:LEU:HD11	1.89	0.55
1:1:88:G:H21	1:1:281:G:H4'	1.71	0.55
1:1:2925:U:H2'	1:1:2926:U:H2'	1.88	0.55
1:1:3136:C:H2'	1:1:3137:A:H8	1.72	0.55
1:1:3256:G:H2'	1:1:3257:A:H8	1.72	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:j:29:LEU:HD22	4:j:101:ILE:HD13	1.89	0.55
38:AK:36:SER:OG	38:AK:57:ARG:NH2	2.39	0.55
46:B:1463:G:H2'	46:B:1464:G:C8	2.42	0.55
51:G:194:VAL:HG11	51:G:232:ALA:HB2	1.88	0.55
57:M:70:ASP:O	57:M:73:VAL:HG22	2.07	0.55
1:AS:97:G:OP1	14:BG:16:LYS:NZ	2.37	0.55
1:AS:1651:G:OP1	35:CB:40:SER:OG	2.25	0.55
1:AS:1795:A:H2'	1:AS:1796:A:C8	2.42	0.55
1:AS:2645:A:O2'	13:BF:126:ASP:OD1	2.15	0.55
34:CA:42:LYS:HA	34:CA:45:LEU:HG	1.89	0.55
46:CM:17:C:H2'	46:CM:18:C:C6	2.42	0.55
46:CM:405:A:O2'	46:CM:1658:A:N3	2.38	0.55
46:CM:871:U:H1'	61:DB:118:SER:OG	2.06	0.55
45:CL:67:LYS:HD2	45:CL:69:PHE:HE2	1.72	0.55
1:1:1580:U:H2'	1:1:1581:C:C6	2.42	0.54
1:1:2717:G:N2	1:1:2720:A:OP2	2.29	0.54
1:1:2988:A:H2'	1:1:2989:A:H8	1.70	0.54
17:w:76:ALA:HB3	17:w:79:ARG:HG2	1.89	0.54
46:B:839:U:O4	46:B:840:A:N6	2.40	0.54
63:S:98:GLU:OE1	79:AR:61:SER:N	2.40	0.54
79:AR:257:ILE:O	79:AR:271:LEU:N	2.39	0.54
1:AS:2659:G:H4'	7:AZ:7:PHE:HE2	1.72	0.54
46:CM:458:A:O2'	51:CR:27:TYR:OH	2.14	0.54
46:CM:1350:C:H5''	63:DD:27:LEU:HD22	1.89	0.54
70:DK:56:LYS:HD3	70:DK:93:LEU:HG	1.88	0.54
1:1:486:C:H2'	1:1:487:C:C6	2.42	0.54
1:1:549:U:H2'	1:1:550:G:C8	2.40	0.54
1:1:827:G:O2'	1:1:1860:A:N3	2.29	0.54
1:1:1617:A:H2'	1:1:1618:U:C6	2.42	0.54
1:1:2183:U:O2'	1:1:2184:G:OP1	2.25	0.54
1:1:3285:A:H2'	1:1:3286:C:C6	2.42	0.54
83:1:3458:PAR:N64	83:1:3458:PAR:O44	2.40	0.54
18:x:126:ARG:HG3	18:x:140:GLN:HG2	1.90	0.54
46:B:1167:U:H4'	62:R:124:THR:HG23	1.89	0.54
47:C:48:ILE:HD12	47:C:149:MET:HE3	1.88	0.54
1:AS:797:A:OP1	29:BV:27:LYS:HE3	2.07	0.54
1:AS:1779:U:H2'	1:AS:1780:A:C8	2.42	0.54
1:AS:1837:A:H1'	40:CG:45:ARG:HH22	1.73	0.54
1:AS:2084:A:H2'	1:AS:2085:A:H8	1.73	0.54
1:AS:2696:U:OP1	22:BO:78:LYS:NZ	2.38	0.54
1:AS:3344:U:H4'	5:AX:315:GLY:HA2	1.89	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:BF:110:ILE:HG23	13:BF:122:ILE:HD13	1.90	0.54
32:BY:19:LEU:HD11	32:BY:31:ALA:HB2	1.90	0.54
37:CD:57:ILE:HG23	37:CD:93:ILE:HD11	1.90	0.54
46:CM:1452:G:O2'	46:CM:1589:C:OP1	2.24	0.54
47:CN:59:LEU:HD22	68:DI:79:LEU:HD11	1.89	0.54
47:CN:180:GLU:OE2	47:CN:191:ARG:NH2	2.40	0.54
56:CW:148:VAL:HG11	56:CW:156:ILE:HD11	1.88	0.54
58:CY:101:GLU:OE1	70:DK:16:ARG:NH2	2.40	0.54
72:DM:57:TYR:O	72:DM:103:ARG:NH2	2.40	0.54
80:l1:191:VAL:HG22	80:l1:194:LEU:HD23	1.88	0.54
1:1:72:A:C4	37:AJ:14:ARG:HD2	2.42	0.54
1:1:292:U:OP2	16:v:68:ARG:NH2	2.37	0.54
1:1:2899:C:H2'	1:1:2900:C:H6	1.71	0.54
8:n:70:VAL:HG13	8:n:160:ALA:HB2	1.89	0.54
9:o:52:GLU:OE2	9:o:184:HIS:NE2	2.39	0.54
12:r:140:THR:HG21	12:r:148:VAL:HG21	1.90	0.54
12:r:189:GLU:HG3	12:r:200:LEU:HB3	1.89	0.54
46:B:1145:A:H2'	46:B:1146:C:C6	2.42	0.54
46:B:1232:U:H2'	46:B:1233:C:H6	1.73	0.54
49:E:138:TYR:OH	49:E:144:GLY:O	2.24	0.54
1:AS:1593:C:H2'	1:AS:1594:G:C8	2.43	0.54
1:AS:2331:G:H5''	18:BK:86:LYS:HB2	1.90	0.54
5:AX:87:VAL:O	5:AX:107:ALA:N	2.37	0.54
14:BG:115:ARG:NH2	14:BG:147:PHE:O	2.40	0.54
21:BN:164:GLN:HE21	21:BN:166:THR:HG23	1.72	0.54
46:CM:685:C:H5'	69:DJ:119:LYS:HE2	1.89	0.54
46:CM:1265:C:H2'	46:CM:1266:G:C8	2.41	0.54
46:CM:1276:G:H22	46:CM:1309:G:N2	2.04	0.54
46:CM:1511:A:N3	46:CM:1577:G:O2'	2.35	0.54
47:CN:33:ASN:HD22	47:CN:149:MET:HA	1.72	0.54
48:CO:103:LEU:HD22	48:CO:188:LEU:HD11	1.88	0.54
52:CS:42:LEU:HB3	52:CS:46:TRP:HB2	1.88	0.54
79:DT:117:ALA:HB2	79:DT:157:ILE:HD13	1.88	0.54
80:l1:39:LYS:HA	80:l1:163:LEU:HD21	1.89	0.54
1:1:2466:A:H5'	1:1:2467:C:C6	2.43	0.54
4:j:4:VAL:HG13	4:j:8:GLN:HE21	1.71	0.54
46:B:405:A:H2'	46:B:406:C:C6	2.42	0.54
46:B:558:U:H2'	46:B:559:G:H8	1.73	0.54
51:G:99:PHE:HE1	51:G:113:ARG:HG2	1.71	0.54
52:H:42:LEU:HB3	52:H:46:TRP:HB2	1.89	0.54
1:AS:85:G:O2'	1:AS:97:G:O6	2.23	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:1017:G:H2'	1:AS:1018:U:C6	2.42	0.54
1:AS:2206:A:H2'	1:AS:2207:A:C8	2.43	0.54
1:AS:2345:A:H2'	1:AS:2346:A:C8	2.41	0.54
1:AS:3166:A:H2'	1:AS:3167:G:H8	1.72	0.54
3:AU:70:G:H5''	27:BT:28:ARG:CZ	2.38	0.54
27:BT:86:GLN:HB3	27:BT:94:SER:HB3	1.89	0.54
46:CM:578:A:H5''	50:CQ:144:ARG:HH21	1.72	0.54
46:CM:739:A:H5''	46:CM:740:A:H5'	1.89	0.54
46:CM:1149:G:H2'	46:CM:1150:G:C8	2.42	0.54
46:CM:1475:U:O2'	46:CM:1501:A:N6	2.39	0.54
68:DI:11:LEU:HD23	68:DI:11:LEU:H	1.72	0.54
69:DJ:28:ARG:HD2	69:DJ:60:LYS:HE2	1.89	0.54
45:CL:123:GLU:OE1	45:CL:123:GLU:N	2.32	0.54
1:1:981:U:H5''	9:o:96:LYS:HE2	1.88	0.54
1:1:1269:A:H3'	1:1:1270:A:H8	1.71	0.54
1:1:1575:A:OP1	1:1:2500:G:N2	2.39	0.54
1:1:1593:C:H2'	1:1:1594:G:C8	2.42	0.54
1:1:2405:U:H2'	1:1:2406:U:C6	2.42	0.54
1:1:2520:A:H1'	1:1:2521:C:C5	2.43	0.54
14:t:63:VAL:HA	14:t:66:ASN:ND2	2.23	0.54
21:0:44:PHE:O	21:0:48:LEU:HD12	2.07	0.54
46:B:4:C:H4'	49:E:176:SER:HB3	1.89	0.54
47:C:52:LYS:HD3	68:X:82:VAL:HG23	1.90	0.54
1:AS:151:U:OP2	36:CC:103:LYS:HB2	2.08	0.54
1:AS:1151:C:O2'	1:AS:1193:A:N1	2.39	0.54
1:AS:1790:U:C2	4:AW:187:HIS:HD2	2.26	0.54
1:AS:2084:A:H2'	1:AS:2085:A:C8	2.43	0.54
6:AY:204:ARG:NH2	6:AY:227:GLU:OE2	2.38	0.54
10:BC:117:ILE:HG12	10:BC:123:ALA:HA	1.89	0.54
15:BH:17:ARG:HD2	15:BH:61:VAL:HG22	1.89	0.54
25:BR:85:ALA:HB1	25:BR:90:ILE:HD11	1.90	0.54
46:CM:871:U:H2'	46:CM:872:A:H8	1.72	0.54
46:CM:1220:C:H3'	46:CM:1221:A:H8	1.72	0.54
52:CS:25:LEU:HD12	63:DD:26:GLY:HA3	1.90	0.54
54:CU:48:ASN:ND2	54:CU:167:GLN:OE1	2.41	0.54
16:v:113:LEU:HB2	16:v:134:LEU:HD23	1.90	0.54
46:B:1067:C:H4'	68:X:58:TYR:CE2	2.43	0.54
46:B:1219:A:H5''	46:B:1230:G:H2'	1.89	0.54
49:E:151:CYS:HB2	69:Y:95:PRO:HB2	1.90	0.54
64:T:89:SER:C	64:T:91:LEU:H	2.15	0.54
70:Z:109:ARG:HB3	70:Z:112:LYS:HG3	1.89	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:248:U:H2'	1:AS:249:G:H4'	1.89	0.54
1:AS:623:A:H2'	1:AS:624:U:C6	2.42	0.54
1:AS:730:A:H4'	1:AS:730:A:OP1	2.07	0.54
1:AS:981:U:H2'	1:AS:982:U:H6	1.73	0.54
1:AS:1617:A:H2'	1:AS:1618:U:H6	1.73	0.54
1:AS:2492:U:OP2	1:AS:2558:G:N2	2.35	0.54
3:AU:26:U:O2'	6:AY:52:ALA:O	2.25	0.54
8:BA:39:LEU:HB3	8:BA:83:VAL:HG13	1.90	0.54
24:BQ:17:LEU:HD13	24:BQ:23:MET:HE2	1.90	0.54
41:CH:22:LYS:HG3	41:CH:42:THR:HG21	1.90	0.54
43:CJ:38:GLN:OE1	43:CJ:41:ARG:NH2	2.40	0.54
46:CM:78:A:H2	53:CT:174:LYS:HG3	1.71	0.54
46:CM:1396:A:O2'	46:CM:1397:A:OP1	2.25	0.54
79:DT:217:ILE:N	79:DT:231:LEU:O	2.37	0.54
1:1:671:U:H2'	1:1:672:G:C8	2.43	0.54
1:1:941:C:H2'	1:1:942:U:C6	2.43	0.54
1:1:2385:C:H2'	1:1:2386:U:C6	2.43	0.54
2:3:64:A:H61	12:r:200:LEU:HD21	1.73	0.54
25:7:1:MET:HE2	25:7:15:PRO:HG2	1.89	0.54
46:B:1485:G:H2'	46:B:1486:G:H8	1.73	0.54
46:B:1600:U:OP1	52:H:169:ASN:HB2	2.08	0.54
52:H:164:PRO:HD3	75:e:54:LEU:HB3	1.88	0.54
59:O:36:LEU:HB2	59:O:41:LEU:HD23	1.90	0.54
79:AR:40:LYS:HG2	79:AR:67:HIS:O	2.08	0.54
1:AS:620:A:OP1	34:CA:59:ILE:HD11	2.08	0.54
1:AS:2330:A:H5''	18:BK:83:TRP:O	2.07	0.54
46:CM:78:A:H2'	46:CM:79:C:C6	2.43	0.54
46:CM:701:G:N2	46:CM:702:G:N7	2.55	0.54
46:CM:1354:U:N3	46:CM:1355:A:N7	2.56	0.54
46:CM:1635:A:H2'	46:CM:1636:C:C6	2.43	0.54
57:CX:5:LYS:HE2	59:CZ:39:ASP:CG	2.33	0.54
71:DL:10:ARG:NH1	71:DL:26:ASP:OD2	2.41	0.54
7:m:164:LYS:NZ	7:m:168:ASP:OD1	2.40	0.54
11:q:8:GLN:HB3	11:q:72:LYS:HD2	1.88	0.54
28:AA:101:LEU:HB3	28:AA:107:ARG:HH21	1.71	0.54
46:B:810:U:H2'	46:B:811:U:C6	2.43	0.54
46:B:1776:G:OP2	61:Q:127:ARG:NH2	2.32	0.54
56:L:31:ALA:HB2	56:L:42:ILE:HD11	1.89	0.54
62:R:81:ARG:HB2	62:R:117:GLY:HA3	1.90	0.54
1:AS:437:G:H22	1:AS:620:A:N6	2.05	0.54
1:AS:1616:U:H2'	1:AS:1617:A:C8	2.42	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:BI:113:LEU:HB2	16:BI:134:LEU:HD23	1.89	0.54
46:CM:638:U:H2'	46:CM:639:G:O4'	2.07	0.54
48:CO:151:LYS:NZ	48:CO:153:THR:O	2.40	0.54
51:CR:141:THR:OG1	51:CR:143:ASP:OD1	2.17	0.54
53:CT:57:ASP:HA	53:CT:106:LEU:HA	1.89	0.54
70:DK:70:LYS:HB3	70:DK:93:LEU:HD22	1.90	0.54
79:DT:67:HIS:CG	79:DT:68:ILE:H	2.25	0.54
1:1:690:A:OP1	16:v:201:ARG:NH2	2.32	0.54
1:1:1023:A:C6	1:1:1025:G:H1'	2.43	0.54
1:1:1148:G:OP2	1:1:1148:G:N2	2.40	0.54
26:8:141:TYR:HB3	36:AI:33:VAL:HG13	1.90	0.54
36:AI:22:VAL:O	36:AI:26:GLN:HG3	2.08	0.54
45:i:114:GLU:O	45:i:118:GLU:HG3	2.07	0.54
46:B:1597:G:N7	63:S:13:LYS:NZ	2.55	0.54
49:E:36:LEU:HD21	49:E:51:ILE:HD12	1.88	0.54
51:G:256:ARG:HA	51:G:259:GLN:HG2	1.89	0.54
1:AS:2814:U:OP1	1:AS:2816:C:N4	2.41	0.54
1:AS:3161:U:H2'	1:AS:3162:U:C6	2.43	0.54
5:AX:260:VAL:HG11	5:AX:266:ARG:NH1	2.22	0.54
5:AX:280:HIS:HD1	5:AX:328:ILE:HG22	1.72	0.54
16:BI:151:ILE:C	16:BI:153:ASN:H	2.16	0.54
46:CM:1552:C:H5''	65:DF:41:ARG:HG2	1.89	0.54
51:CR:105:VAL:HG22	51:CR:246:LYS:HD2	1.90	0.54
79:DT:104:PHE:CD1	79:DT:139:GLY:HA2	2.43	0.54
1:1:158:A:H2'	1:1:159:A:H8	1.73	0.54
1:1:1568:U:C4	1:1:1569:C:H1'	2.43	0.54
1:1:1762:G:O2'	1:1:1763:C:OP1	2.24	0.54
1:1:3153:A:H2'	1:1:3154:A:H8	1.73	0.54
46:B:1479:A:H4'	46:B:1480:G:O5'	2.08	0.54
46:B:1659:G:H2'	46:B:1660:G:H8	1.71	0.54
50:F:66:ARG:HA	50:F:69:GLU:HG2	1.90	0.54
68:X:73:ALA:HB1	68:X:78:LEU:HB2	1.88	0.54
78:h:172:ILE:HG13	78:h:185:LYS:HE2	1.90	0.54
79:AR:218:ILE:HG23	79:AR:230:THR:HG22	1.90	0.54
1:AS:538:G:H2'	1:AS:539:G:C8	2.42	0.54
1:AS:1077:U:H5'	1:AS:1078:U:H5	1.73	0.54
1:AS:1104:U:H2'	1:AS:1105:U:H6	1.72	0.54
1:AS:1922:C:H5'	44:CK:8:VAL:CG1	2.38	0.54
1:AS:2183:U:O2'	1:AS:2184:G:OP1	2.22	0.54
1:AS:3218:U:H2'	1:AS:3219:G:C8	2.43	0.54
1:AS:3256:G:H2'	1:AS:3257:A:C8	2.43	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:BK:118:GLN:OE1	18:BK:120:ASN:ND2	2.35	0.54
32:BY:71:ARG:HH11	32:BY:103:LEU:HD13	1.73	0.54
46:CM:1131:G:H2'	46:CM:1132:A:C8	2.43	0.54
69:DJ:11:LEU:HD11	69:DJ:37:PHE:CE2	2.40	0.54
80:11:109:ALA:HA	80:11:133:LYS:HE2	1.89	0.54
1:1:951:U:H2'	1:1:952:U:C6	2.44	0.53
1:1:997:G:O2'	1:1:1037:U:OP2	2.24	0.53
1:1:2669:A:H2'	1:1:2670:G:H8	1.74	0.53
1:1:3235:A:N6	18:x:178:SER:OG	2.34	0.53
45:i:65:LYS:HD3	62:R:105:VAL:HG12	1.90	0.53
46:B:1582:U:H5'	46:B:1583:C:OP2	2.08	0.53
47:C:35:PRO:O	47:C:52:LYS:NZ	2.38	0.53
48:D:174:ARG:NH2	48:D:196:GLU:OE2	2.42	0.53
1:AS:782:A:H4'	1:AS:783:G:H5'	1.89	0.53
1:AS:3179:U:H2'	15:BH:114:MET:HE1	1.90	0.53
2:AT:96:U:H4'	21:BN:119:ARG:HB2	1.91	0.53
46:CM:586:U:OP2	77:DR:26:LYS:HE2	2.07	0.53
46:CM:821:U:H2'	46:CM:822:G:H8	1.72	0.53
51:CR:253:ARG:HD3	56:CW:71:PHE:HE1	1.73	0.53
61:DB:55:ALA:HB1	61:DB:96:ALA:HB2	1.90	0.53
1:1:484:U:H2'	1:1:485:A:H8	1.73	0.53
1:1:783:G:H2'	1:1:784:C:H6	1.73	0.53
1:1:1795:A:H2'	1:1:1796:A:C8	2.43	0.53
2:3:96:U:H4'	21:0:119:ARG:HB3	1.91	0.53
46:B:418:A:OP1	53:I:96:SER:OG	2.21	0.53
46:B:871:U:C2	46:B:872:A:C8	2.96	0.53
46:B:1772:U:H2'	46:B:1773:G:H8	1.73	0.53
52:H:109:LYS:O	52:H:113:ILE:HD12	2.08	0.53
53:I:68:MET:O	53:I:69:HIS:ND1	2.41	0.53
53:I:163:THR:HA	53:I:168:THR:HG22	1.90	0.53
75:e:42:ARG:NH1	75:e:58:GLU:O	2.41	0.53
1:AS:411:U:H2'	1:AS:412:G:C8	2.43	0.53
1:AS:431:A:H2'	1:AS:432:G:H8	1.72	0.53
1:AS:939:U:H3'	29:BV:13:GLY:HA2	1.91	0.53
1:AS:1191:A:H2'	1:AS:1305:U:O2	2.08	0.53
4:AW:47:GLN:HG2	4:AW:49:ILE:HG23	1.90	0.53
46:CM:543:A:H2'	77:DR:31:GLN:NE2	2.22	0.53
46:CM:1205:C:H2'	46:CM:1206:A:C8	2.43	0.53
46:CM:1220:C:H41	78:DS:180:ARG:HH21	1.55	0.53
46:CM:1474:G:O2'	46:CM:1481:C:O2	2.16	0.53
49:CP:83:LYS:HG2	49:CP:84:GLN:H	1.73	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:DT:127:SER:OG	79:DT:129:ASP:OD1	2.19	0.53
1:1:1209:G:H5'	21:0:137:ARG:HH21	1.72	0.53
1:1:2560:U:OP1	10:p:242:LYS:NZ	2.36	0.53
1:1:2718:A:H5'	7:m:178:ASN:OD1	2.09	0.53
1:1:3194:G:H5'	15:u:129:VAL:HG21	1.90	0.53
25:7:57:ARG:HE	25:7:63:ILE:HD11	1.73	0.53
29:AB:36:GLY:HA3	29:AB:40:HIS:CE1	2.44	0.53
46:B:706:C:H2'	46:B:707:C:C5	2.43	0.53
46:B:1212:A:C2	59:O:43:ARG:HB2	2.42	0.53
51:G:141:THR:OG1	51:G:143:ASP:OD1	2.21	0.53
53:I:161:GLU:HB3	53:I:170:THR:HG22	1.90	0.53
1:AS:3021:A:C5	5:AX:75:ALA:HB2	2.43	0.53
83:AS:3406:PAR:H52	83:AS:3406:PAR:HN21	1.72	0.53
22:BO:41:ASP:N	22:BO:97:LYS:O	2.38	0.53
46:CM:16:G:H2'	46:CM:17:C:C6	2.44	0.53
46:CM:364:A:OP1	46:CM:743:U:O2'	2.24	0.53
58:CY:127:GLN:HA	58:CY:137:PHE:HD1	1.73	0.53
65:DF:126:ARG:CZ	65:DF:131:LEU:HD11	2.38	0.53
73:DN:35:ALA:O	73:DN:37:LYS:HD3	2.08	0.53
80:l1:14:HIS:HA	80:l1:17:LEU:HB2	1.90	0.53
1:1:69:A:N1	1:1:313:A:O2'	2.41	0.53
1:1:2958:U:H2'	1:1:2959:A:C8	2.44	0.53
6:l:4:ARG:NH2	6:l:28:ALA:HB2	2.23	0.53
39:AL:34:ASN:ND2	39:AL:34:ASN:O	2.41	0.53
46:B:102:U:H3'	46:B:358:A:H61	1.74	0.53
46:B:1486:G:OP1	66:V:122:ARG:NH1	2.41	0.53
1:AS:437:G:H22	1:AS:620:A:H61	1.55	0.53
1:AS:995:G:N3	1:AS:998:A:N6	2.57	0.53
1:AS:1762:G:O2'	1:AS:1763:C:OP1	2.26	0.53
46:CM:399:A:H1'	51:CR:3:ARG:HH21	1.72	0.53
46:CM:723:G:C2'	46:CM:724:G:H4'	2.36	0.53
46:CM:1597:G:N7	63:DD:13:LYS:NZ	2.57	0.53
54:CU:30:LEU:HD22	54:CU:72:ARG:HE	1.72	0.53
80:l1:3:LYS:HB3	80:l1:198:TRP:CE3	2.43	0.53
80:l1:191:VAL:HA	80:l1:194:LEU:HB3	1.90	0.53
1:1:1007:A:H2'	1:1:1008:A:C8	2.43	0.53
1:1:3153:A:H2'	1:1:3154:A:C8	2.42	0.53
35:AH:54:ILE:HD11	35:AH:78:GLY:HA2	1.90	0.53
46:B:1192:C:N3	46:B:1442:C:H5	2.07	0.53
46:B:1615:U:H2'	46:B:1616:G:C8	2.43	0.53
51:G:94:ALA:HB3	71:a:17:LEU:HD23	1.91	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
59:O:97:LEU:HA	59:O:100:TRP:CH2	2.44	0.53
67:W:32:GLN:OE1	67:W:32:GLN:N	2.41	0.53
67:W:41:ILE:HD12	67:W:51:LYS:HD3	1.89	0.53
1:AS:588:G:OP1	33:BZ:63:LYS:NZ	2.24	0.53
7:AZ:41:LYS:HB2	22:BO:68:THR:O	2.08	0.53
26:BS:67:ILE:HD12	26:BS:121:LYS:HG3	1.91	0.53
42:CI:8:LYS:O	42:CI:12:ARG:HG3	2.09	0.53
46:CM:520:U:H5''	71:DL:37:LYS:HG3	1.91	0.53
46:CM:1074:U:O2'	46:CM:1078:A:N1	2.33	0.53
46:CM:1463:G:H2'	46:CM:1464:G:C8	2.44	0.53
50:CQ:28:ARG:HD2	57:CX:60:SER:HB2	1.89	0.53
53:CT:180:THR:HG23	53:CT:183:THR:H	1.74	0.53
65:DF:36:ARG:HG3	65:DF:102:ALA:HA	1.90	0.53
67:DH:63:LYS:NZ	67:DH:80:ALA:HB1	2.24	0.53
1:1:1140:U:OP1	1:1:1363:G:O2'	2.22	0.53
19:y:147:ARG:HB3	19:y:150:VAL:HG23	1.90	0.53
25:7:123:ARG:HD2	46:B:270:U:H5'	1.90	0.53
45:i:107:TRP:HA	50:F:116:ILE:HD11	1.90	0.53
46:B:1610:C:H2'	46:B:1611:C:H6	1.73	0.53
70:Z:57:ILE:HG23	70:Z:58:GLY:H	1.73	0.53
70:Z:59:ILE:HG23	77:g:4:VAL:HG22	1.91	0.53
1:AS:638:U:H2'	1:AS:639:C:C6	2.44	0.53
1:AS:1443:G:N2	1:AS:2334:A:OP2	2.38	0.53
1:AS:3153:A:H2'	1:AS:3154:A:C8	2.43	0.53
1:AS:3287:A:H2'	1:AS:3288:A:H8	1.72	0.53
46:CM:977:A:O2'	46:CM:1772:U:O2	2.24	0.53
46:CM:1258:G:N7	46:CM:1416:U:H3'	2.24	0.53
50:CQ:128:MET:HE3	50:CQ:155:ASP:HB3	1.90	0.53
1:1:981:U:H2'	1:1:982:U:H6	1.72	0.53
1:1:2852:U:H1'	5:k:250:ALA:HB3	1.91	0.53
3:4:75:G:OP2	27:9:74:TYR:OH	2.25	0.53
46:B:16:G:H2'	46:B:17:C:C6	2.44	0.53
46:B:921:G:OP1	46:B:1059:G:N2	2.38	0.53
47:C:49:ASN:ND2	47:C:52:LYS:HG3	2.24	0.53
49:E:173:ILE:HG21	49:E:180:LYS:HA	1.89	0.53
53:I:116:GLN:NE2	53:I:125:THR:HB	2.23	0.53
1:AS:148:U:O2'	16:BI:56:LYS:NZ	2.41	0.53
1:AS:498:C:H5''	8:BA:25:ARG:NH2	2.23	0.53
1:AS:1093:G:H4'	22:BO:129:LYS:HG2	1.91	0.53
8:BA:148:GLU:OE1	8:BA:151:LYS:NZ	2.40	0.53
10:BC:113:GLU:O	10:BC:117:ILE:HG13	2.09	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:BM:44:LEU:HB3	20:BM:49:THR:HB	1.91	0.53
23:BP:19:VAL:O	23:BP:21:ALA:N	2.37	0.53
23:BP:19:VAL:HG12	23:BP:108:LEU:HG	1.91	0.53
33:BZ:106:ARG:NH2	33:BZ:122:ASN:O	2.42	0.53
36:CC:105:ARG:HG3	36:CC:108:ARG:HH21	1.73	0.53
46:CM:1160:U:OP2	65:DF:137:HIS:ND1	2.42	0.53
48:CO:62:LYS:HE3	48:CO:90:GLU:HA	1.90	0.53
55:CV:162:VAL:HG21	55:CV:191:GLU:HG3	1.91	0.53
59:CZ:104:CYS:SG	59:CZ:105:GLN:N	2.82	0.53
45:CL:65:LYS:H	45:CL:65:LYS:HD2	1.72	0.53
1:1:487:C:H2'	1:1:488:G:O4'	2.09	0.53
1:1:782:A:H4'	1:1:783:G:H5'	1.91	0.53
1:1:1018:U:H2'	1:1:1019:U:H6	1.73	0.53
5:k:117:ARG:HD2	5:k:176:ALA:O	2.09	0.53
31:AD:26:THR:HB	31:AD:31:SER:HB3	1.90	0.53
46:B:335:G:O2'	55:K:10:LYS:NZ	2.42	0.53
46:B:697:U:H3	46:B:724:G:H1	1.56	0.53
46:B:854:A:H61	46:B:943:U:H5	1.56	0.53
59:O:107:ASP:CG	59:O:112:ALA:H	2.16	0.53
1:AS:46:C:OP2	1:AS:47:A:O2'	2.20	0.53
1:AS:442:G:H3'	1:AS:443:G:H8	1.73	0.53
1:AS:3135:A:H2'	1:AS:3136:C:C6	2.43	0.53
1:AS:3268:G:O2'	1:AS:3270:A:N6	2.36	0.53
29:BV:36:GLY:HA3	29:BV:40:HIS:CE1	2.43	0.53
42:CI:21:ARG:HD2	46:CM:1102:U:OP1	2.09	0.53
46:CM:221:U:N3	46:CM:824:U:O2	2.42	0.53
46:CM:400:C:OP1	51:CR:3:ARG:NH1	2.42	0.53
50:CQ:114:LEU:HD23	50:CQ:118:ARG:HD3	1.90	0.53
52:CS:108:LEU:HD21	63:DD:43:LEU:HD11	1.90	0.53
53:CT:74:ARG:NH1	53:CT:96:SER:OG	2.38	0.53
1:1:427:C:OP1	33:AF:14:TYR:OH	2.14	0.53
1:1:612:U:H2'	1:1:613:U:C6	2.44	0.53
46:B:1399:U:O2'	46:B:1400:U:OP1	2.27	0.53
48:D:36:THR:HG23	48:D:231:LEU:O	2.08	0.53
79:AR:214:ASP:OD1	79:AR:214:ASP:N	2.41	0.53
1:AS:405:U:H4'	1:AS:1412:C:H4'	1.91	0.53
1:AS:619:A:H2'	1:AS:620:A:N7	2.24	0.53
1:AS:2385:C:H2'	1:AS:2386:U:H6	1.73	0.53
1:AS:3093:U:H1'	1:AS:3094:A:H5''	1.91	0.53
8:BA:91:ASN:O	8:BA:148:GLU:HG2	2.09	0.53
46:CM:1339:G:O6	46:CM:1354:U:O2	2.25	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:CM:1494:G:H2'	46:CM:1495:U:C6	2.44	0.53
1:1:2094:G:OP1	1:1:2096:C:N4	2.41	0.53
1:1:2186:A:O2'	1:1:2187:U:H5'	2.09	0.53
1:1:2428:G:H1	1:1:2475:U:H3	1.55	0.53
1:1:2473:C:H2'	1:1:2474:C:H6	1.74	0.53
1:1:2933:G:H2'	1:1:2934:U:C6	2.44	0.53
1:1:2978:A:H2'	1:1:2979:U:O4'	2.09	0.53
3:4:21:C:H5''	6:l:195:LEU:HD21	1.91	0.53
21:0:171:PHE:O	21:0:172:TYR:HB2	2.09	0.53
46:B:71:A:H2'	46:B:72:A:C8	2.43	0.53
46:B:457:G:OP1	71:a:109:LYS:NZ	2.39	0.53
46:B:1131:G:H1'	49:E:84:GLN:HG2	1.91	0.53
46:B:1468:C:H5''	46:B:1508:G:H22	1.74	0.53
51:G:126:VAL:HG13	51:G:139:VAL:HG13	1.90	0.53
54:J:69:VAL:HG12	54:J:72:ARG:NH2	2.24	0.53
1:AS:3256:G:H2'	1:AS:3257:A:H8	1.74	0.53
19:BL:67:ILE:HG23	19:BL:81:ILE:HG13	1.90	0.53
20:BM:170:ARG:NH2	46:CM:838:G:O5'	2.38	0.53
46:CM:65:A:O5'	53:CT:136:LYS:NZ	2.43	0.53
46:CM:840:A:O2'	46:CM:841:A:H3'	2.08	0.53
46:CM:1064:U:H2'	46:CM:1065:U:C6	2.44	0.53
46:CM:1615:U:H2'	46:CM:1616:G:C8	2.44	0.53
46:CM:1663:U:H5''	55:CV:58:LEU:HD21	1.89	0.53
51:CR:94:ALA:HB3	71:DL:17:LEU:HD23	1.90	0.53
52:CS:72:HIS:CD2	52:CS:107:LYS:HD3	2.44	0.53
57:CX:46:LEU:HD23	57:CX:66:TYR:CG	2.44	0.53
61:DB:7:GLN:HB2	61:DB:72:THR:OG1	2.09	0.53
1:1:1746:A:OP1	39:AL:44:LYS:NZ	2.36	0.52
1:1:2391:A:H2'	1:1:2392:G:C8	2.45	0.52
28:AA:41:ALA:HB2	28:AA:77:TYR:HE1	1.74	0.52
38:AK:39:TYR:CD1	38:AK:40:PRO:HA	2.44	0.52
46:B:485:G:O6	46:B:499:U:O4	2.27	0.52
46:B:1220:C:H3'	46:B:1221:A:H8	1.73	0.52
57:M:76:LEU:O	57:M:80:LEU:HB2	2.09	0.52
59:O:32:LEU:HG	59:O:100:TRP:CD1	2.44	0.52
68:X:79:LEU:HD13	68:X:82:VAL:HG11	1.90	0.52
1:AS:208:A:H4'	1:AS:210:A:N7	2.24	0.52
1:AS:624:U:H2'	1:AS:625:C:C6	2.44	0.52
1:AS:1680:U:OP2	23:BP:89:LYS:NZ	2.42	0.52
2:AT:4:U:H2'	2:AT:5:G:C8	2.44	0.52
6:AY:36:VAL:HG21	6:AY:245:LEU:HD21	1.89	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AZ:95:TRP:CD1	7:AZ:158:ARG:HA	2.44	0.52
19:BL:125:ASP:OD1	19:BL:126:GLN:N	2.41	0.52
20:BM:70:LYS:HB3	20:BM:76:MET:HE2	1.91	0.52
20:BM:172:ARG:NH1	20:BM:172:ARG:O	2.42	0.52
27:BT:60:ARG:HB2	27:BT:103:LYS:HB3	1.91	0.52
31:BX:43:LEU:HD23	31:BX:94:ILE:HD12	1.91	0.52
46:CM:518:A:H2'	46:CM:519:A:H8	1.72	0.52
51:CR:32:SER:OG	51:CR:81:THR:HG23	2.09	0.52
57:CX:12:HIS:HB3	57:CX:80:LEU:HD21	1.90	0.52
64:DE:33:ARG:NE	79:DT:110:ASP:OD2	2.42	0.52
1:1:1021:A:C2	62:R:75:VAL:HB	2.44	0.52
1:1:2371:G:O2'	1:1:2954:A:N6	2.40	0.52
1:1:2520:A:H1'	1:1:2521:C:H5	1.74	0.52
1:1:3334:G:O5'	25:7:56:ARG:NH2	2.42	0.52
2:3:4:U:H2'	2:3:5:G:H8	1.75	0.52
3:4:75:G:H2'	3:4:76:C:C6	2.44	0.52
36:AI:11:THR:HG21	27:BT:125:LYS:NZ	2.24	0.52
46:B:1129:U:H2'	46:B:1130:U:C6	2.43	0.52
1:AS:65:A:OP2	14:BG:100:ARG:NH1	2.43	0.52
1:AS:339:C:OP1	1:AS:1376:G:O2'	2.25	0.52
1:AS:546:C:H2'	1:AS:547:U:O4'	2.09	0.52
1:AS:1801:C:H2'	1:AS:1802:A:H8	1.73	0.52
1:AS:2239:G:O2'	1:AS:2241:C:N4	2.42	0.52
2:AT:84:A:H2'	2:AT:85:G:C8	2.43	0.52
7:AZ:143:LYS:HE3	7:AZ:145:PHE:CZ	2.44	0.52
46:CM:239:U:H4'	46:CM:240:U:H5''	1.91	0.52
46:CM:1503:A:OP2	67:DH:60:LYS:NZ	2.30	0.52
58:CY:8:GLN:HE22	58:CY:14:GLN:HB2	1.73	0.52
1:1:158:A:H2'	1:1:159:A:C8	2.44	0.52
1:1:656:G:N2	6:l:94:MET:HB2	2.24	0.52
1:1:1620:G:O2'	1:1:1639:A:N1	2.35	0.52
1:1:1705:C:H2'	1:1:1706:C:H6	1.75	0.52
4:j:117:GLU:OE2	4:j:163:ARG:NE	2.42	0.52
27:9:11:SER:HB3	27:9:14:LYS:HB2	1.91	0.52
46:B:924:A:H2'	46:B:925:A:C8	2.44	0.52
46:B:1064:U:H2'	46:B:1065:U:C6	2.44	0.52
54:J:146:GLN:HB2	54:J:177:VAL:HG23	1.90	0.52
55:K:11:ARG:O	58:N:133:LYS:NZ	2.41	0.52
1:AS:478:G:C5'	1:AS:479:C:H5''	2.39	0.52
1:AS:740:A:OP1	19:BL:66:ARG:NH2	2.43	0.52
1:AS:1560:U:H3	1:AS:1571:G:H22	1.57	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:1610:C:OP1	39:CF:50:TYR:OH	2.16	0.52
1:AS:1810:A:H4'	1:AS:1811:U:O4'	2.10	0.52
1:AS:2583:U:H2'	1:AS:2584:U:C6	2.44	0.52
1:AS:3153:A:H2'	1:AS:3154:A:H8	1.73	0.52
1:AS:3313:G:N2	1:AS:3322:U:O2	2.34	0.52
5:AX:108:GLU:HG2	5:AX:109:HIS:CE1	2.44	0.52
46:CM:1:U:C2	46:CM:3:U:C4	2.97	0.52
46:CM:29:U:H2'	46:CM:30:G:H8	1.75	0.52
46:CM:330:U:O2'	55:CV:5:ARG:NH2	2.42	0.52
65:DF:112:ASP:O	65:DF:116:LEU:HD12	2.10	0.52
79:DT:224:LYS:HE3	79:DT:226:LYS:HE2	1.91	0.52
1:1:58:G:H2'	3:4:33:A:O2'	2.09	0.52
1:1:339:C:OP1	1:1:1376:G:O2'	2.26	0.52
1:1:1275:C:H2'	1:1:1276:C:C6	2.45	0.52
1:1:2404:U:H2'	1:1:2405:U:C6	2.45	0.52
21:0:77:ILE:HG23	21:0:126:VAL:HG22	1.92	0.52
31:AD:77:ASN:ND2	44:AQ:43:GLY:O	2.38	0.52
46:B:1003:U:OP1	60:P:107:LYS:NZ	2.42	0.52
46:B:1237:C:O2'	78:h:184:GLY:N	2.41	0.52
46:B:1398:G:H4'	46:B:1399:U:O5'	2.09	0.52
54:J:8:GLU:H	54:J:8:GLU:CD	2.16	0.52
1:AS:712:G:HO2'	1:AS:749:C:HO2'	1.48	0.52
1:AS:2384:C:H2'	1:AS:2385:C:C6	2.45	0.52
1:AS:2941:A:N7	4:AW:215:ASN:ND2	2.57	0.52
27:BT:51:ARG:HG2	27:BT:52:GLN:H	1.73	0.52
30:BW:28:LYS:HG2	30:BW:29:TYR:CD1	2.44	0.52
51:CR:129:VAL:HG22	51:CR:139:VAL:HG22	1.92	0.52
61:DB:52:PRO:HB3	61:DB:95:SER:OG	2.09	0.52
75:DP:12:VAL:HG22	75:DP:52:ASP:H	1.75	0.52
79:DT:242:PHE:CE1	79:DT:249:LEU:HD13	2.45	0.52
1:1:2720:A:H1'	7:m:36:LEU:HD23	1.92	0.52
1:1:3338:U:H5''	32:AE:68:ASN:ND2	2.23	0.52
7:m:50:ARG:NH2	7:m:72:ASP:OD2	2.43	0.52
19:y:165:ILE:HD11	19:y:172:PHE:HB3	1.92	0.52
38:AK:63:ARG:O	38:AK:68:LYS:HE3	2.10	0.52
79:AR:16:HIS:CD2	79:AR:43:ILE:HD12	2.45	0.52
1:AS:544:U:H5'	1:AS:546:C:H5''	1.92	0.52
1:AS:1185:C:N4	1:AS:1312:C:OP2	2.42	0.52
1:AS:2094:G:OP1	1:AS:2096:C:N4	2.43	0.52
1:AS:2869:A:H2'	1:AS:2871:C:H5''	1.91	0.52
1:AS:2988:A:H2'	1:AS:2989:A:C8	2.45	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AU:122:U:H3	3:AU:131:G:H1	1.57	0.52
9:BB:119:LYS:N	22:BO:133:ALA:O	2.43	0.52
15:BH:116:LEU:HD22	17:BJ:191:ALA:HA	1.92	0.52
46:CM:476:A:OP1	77:DR:37:ARG:NH1	2.36	0.52
46:CM:1425:C:H2'	46:CM:1426:C:H6	1.75	0.52
61:DB:82:GLY:HA3	61:DB:115:PRO:HG2	1.90	0.52
72:DM:99:ALA:HB1	72:DM:101:TYR:CE1	2.42	0.52
1:1:25:A:H2'	1:1:26:C:H6	1.75	0.52
1:1:2210:A:H2'	1:1:2211:A:C8	2.43	0.52
1:1:3300:A:H2'	1:1:3301:A:C8	2.45	0.52
8:n:39:LEU:HD11	8:n:53:TYR:HB2	1.90	0.52
16:v:23:TYR:O	16:v:122:ASN:ND2	2.40	0.52
46:B:700:G:C2	46:B:701:G:N7	2.78	0.52
46:B:874:U:H2'	46:B:875:C:H6	1.75	0.52
48:D:56:ASN:OD1	48:D:57:ALA:N	2.43	0.52
1:AS:1022:A:H3'	1:AS:1023:A:H5''	1.92	0.52
1:AS:2186:A:O2'	1:AS:2187:U:H5'	2.08	0.52
1:AS:2876:U:H2'	1:AS:2877:U:C6	2.44	0.52
11:BD:86:TYR:CE2	11:BD:151:LEU:HB2	2.44	0.52
46:CM:477:C:H4'	56:CW:120:ARG:HG3	1.92	0.52
46:CM:510:A:O2'	56:CW:133:HIS:NE2	2.42	0.52
46:CM:1387:A:OP1	64:DE:56:HIS:NE2	2.29	0.52
48:CO:174:ARG:NH2	48:CO:196:GLU:OE2	2.35	0.52
1:1:2855:U:H2'	1:1:2856:C:H6	1.75	0.52
32:AE:3:LEU:O	32:AE:3:LEU:HD23	2.10	0.52
46:B:233:G:H2'	46:B:234:G:H8	1.73	0.52
52:H:55:ASP:OD1	52:H:57:SER:OG	2.26	0.52
52:H:61:TYR:HD2	52:H:164:PRO:HB2	1.75	0.52
79:AR:10:ARG:NH1	79:AR:311:GLN:OE1	2.43	0.52
1:AS:88:G:OP1	19:BL:170:ARG:NH2	2.42	0.52
1:AS:139:U:H2'	1:AS:140:C:C6	2.44	0.52
1:AS:479:C:H5'	1:AS:480:G:OP1	2.09	0.52
1:AS:583:A:H2'	1:AS:584:C:C6	2.44	0.52
1:AS:2625:C:OP1	43:CJ:89:LYS:HB2	2.10	0.52
1:AS:3138:U:H2'	1:AS:3139:U:C6	2.45	0.52
83:AS:3402:PAR:N64	83:AS:3402:PAR:O44	2.43	0.52
2:AT:92:A:O2'	12:BE:57:LEU:O	2.26	0.52
21:BN:71:LYS:O	21:BN:73:LYS:NZ	2.40	0.52
46:CM:78:A:H2'	46:CM:79:C:H6	1.75	0.52
46:CM:904:A:H2'	46:CM:905:C:C6	2.44	0.52
49:CP:93:MET:HG3	49:CP:116:VAL:HG23	1.92	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
61:DB:98:ARG:HD2	73:DN:49:ALA:HB2	1.92	0.52
68:DI:36:ILE:HD12	68:DI:78:LEU:HD13	1.92	0.52
80:I:39:LYS:H	80:I:200:ASN:HB2	1.74	0.52
1:1:2854:U:H2'	1:1:2855:U:C6	2.45	0.52
1:1:2958:U:H2'	1:1:2959:A:H8	1.73	0.52
8:n:39:LEU:HB3	8:n:83:VAL:HG13	1.91	0.52
11:q:110:ASP:HB3	11:q:128:ILE:HD12	1.90	0.52
17:w:11:ASP:HB2	17:w:118:ARG:HB3	1.92	0.52
17:w:28:ILE:HD11	17:w:89:ILE:HD11	1.91	0.52
35:AH:58:ARG:CD	35:AH:59:PRO:HD2	2.37	0.52
46:B:1230:G:H1	46:B:1235:U:H3	1.56	0.52
50:F:193:PRO:HG3	50:F:203:LEU:HD12	1.92	0.52
51:G:122:LYS:HG2	51:G:162:ILE:HB	1.91	0.52
61:Q:107:ILE:HG13	73:c:53:LEU:HD23	1.92	0.52
62:R:94:VAL:HG21	62:R:116:LEU:HD11	1.91	0.52
68:X:55:LEU:HD11	68:X:69:LEU:HD21	1.92	0.52
79:AR:16:HIS:HE1	79:AR:39:ASP:OD1	1.93	0.52
1:AS:1023:A:C6	1:AS:1025:G:H1'	2.44	0.52
17:BJ:63:THR:HG21	17:BJ:69:LYS:HB2	1.90	0.52
23:BP:96:ILE:HG21	23:BP:108:LEU:HD13	1.92	0.52
46:CM:834:C:H2'	46:CM:835:A:H8	1.75	0.52
46:CM:878:U:H5'	46:CM:879:U:OP2	2.09	0.52
46:CM:1716:C:H2'	46:CM:1717:A:O4'	2.10	0.52
49:CP:55:SER:OG	68:DI:25:LYS:O	2.28	0.52
1:1:964:G:H2'	1:1:965:C:H6	1.75	0.52
8:n:64:VAL:O	8:n:75:LEU:HA	2.10	0.52
8:n:167:ASN:OD1	34:AG:6:ARG:NH2	2.43	0.52
29:AB:62:HIS:CE1	29:AB:64:GLN:HE21	2.28	0.52
46:B:85:A:N3	46:B:146:A:O2'	2.41	0.52
46:B:234:G:H2'	46:B:235:C:O4'	2.10	0.52
46:B:518:A:O2'	46:B:519:A:OP1	2.26	0.52
46:B:696:U:OP1	46:B:696:U:H6	1.92	0.52
46:B:813:U:H2'	46:B:814:A:C8	2.45	0.52
46:B:1205:C:O3'	57:M:52:LYS:NZ	2.40	0.52
46:B:1635:A:H2'	46:B:1636:C:H6	1.73	0.52
46:B:1774:C:OP1	61:Q:122:ARG:NH2	2.42	0.52
47:C:41:ARG:HG2	47:C:42:PRO:HD2	1.91	0.52
49:E:96:VAL:HG22	49:E:110:ILE:HG12	1.92	0.52
67:W:52:LYS:HB2	67:W:91:ASP:HB2	1.92	0.52
1:AS:16:G:H1	3:AU:142:C:H42	1.57	0.52
1:AS:716:G:OP2	1:AS:716:G:N2	2.35	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:2174:C:O2'	1:AS:2248:A:N3	2.38	0.52
8:BA:6:PRO:HB3	33:BZ:93:TYR:CE1	2.44	0.52
11:BD:180:TYR:CD1	41:CH:13:TYR:HD2	2.27	0.52
14:BG:143:VAL:HG13	14:BG:147:PHE:HD2	1.75	0.52
21:BN:66:GLU:HB2	21:BN:98:THR:HG23	1.92	0.52
46:CM:151:G:H2'	46:CM:152:G:H8	1.75	0.52
46:CM:610:U:OP2	70:DK:5:LYS:NZ	2.43	0.52
46:CM:1536:C:OP1	62:DC:42:ARG:NH1	2.38	0.52
73:DN:3:LYS:HZ1	73:DN:6:ALA:HA	1.74	0.52
79:DT:62:PHE:HB3	79:DT:93:TRP:CZ3	2.45	0.52
79:DT:261:LYS:HZ2	79:DT:268:LEU:HD13	1.75	0.52
1:1:212:A:OP1	27:9:2:ALA:N	2.43	0.52
1:1:1672:A:H4'	23:5:103:GLN:HE22	1.73	0.52
1:1:2138:G:H2'	1:1:2139:G:C8	2.45	0.52
1:1:2694:U:O2'	22:2:88:ARG:O	2.24	0.52
14:t:57:VAL:HG22	14:t:69:VAL:HG22	1.91	0.52
46:B:1007:C:H4'	46:B:1110:A:H61	1.75	0.52
46:B:1478:A:O2'	46:B:1479:A:O4'	2.27	0.52
46:B:1495:U:H2'	46:B:1496:C:C6	2.44	0.52
46:B:1609:G:H2'	46:B:1610:C:C6	2.45	0.52
83:B:1802:PAR:H241	83:B:1802:PAR:H43	1.75	0.52
59:O:26:ASP:HA	59:O:29:LYS:HG2	1.92	0.52
59:O:27:ALA:HB1	59:O:132:GLU:HG2	1.92	0.52
66:V:38:LYS:NZ	66:V:41:ALA:HA	2.24	0.52
1:AS:399:A:O2'	1:AS:403:C:O2'	2.28	0.52
1:AS:1115:C:H2'	1:AS:1116:A:H8	1.73	0.52
1:AS:1526:U:O3'	3:AU:114:G:O2'	2.28	0.52
1:AS:3285:A:H2'	1:AS:3286:C:C6	2.44	0.52
46:CM:1398:G:H4'	46:CM:1399:U:O5'	2.09	0.52
48:CO:47:LEU:O	61:DB:32:GLU:HG3	2.09	0.52
57:CX:80:LEU:HB3	57:CX:82:ILE:HG23	1.91	0.52
65:DF:114:GLU:O	65:DF:118:LYS:N	2.32	0.52
80:l1:196:LYS:HB3	80:l1:199:GLN:HB3	1.92	0.52
1:1:583:A:H2'	1:1:584:C:C6	2.45	0.51
1:1:842:A:N6	46:B:956:A:N1	2.58	0.51
1:1:1042:A:H2'	1:1:1045:C:C5	2.45	0.51
1:1:1701:U:O2	1:1:1783:A:H5'	2.09	0.51
7:m:48:LYS:HG2	7:m:145:PHE:HE2	1.74	0.51
46:B:82:U:H2'	46:B:83:G:O4'	2.10	0.51
46:B:1024:A:O2'	46:B:1025:G:O5'	2.24	0.51
54:J:33:GLU:HG2	54:J:34:LEU:HD12	1.91	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
74:d:33:MET:HE1	74:d:73:LEU:HD21	1.92	0.51
1:AS:2234:A:H3'	1:AS:2234:A:N3	2.26	0.51
1:AS:2876:U:H2'	1:AS:2877:U:H6	1.76	0.51
1:AS:3153:A:C2	1:AS:3158:G:H4'	2.45	0.51
16:BI:143:ARG:O	16:BI:149:ASN:ND2	2.43	0.51
34:CA:52:VAL:HG22	34:CA:66:VAL:HG12	1.92	0.51
46:CM:164:C:O2'	53:CT:131:LYS:HB2	2.10	0.51
46:CM:561:U:O2'	77:DR:13:LYS:NZ	2.43	0.51
47:CN:205:ARG:HD2	47:CN:209:GLU:HG3	1.91	0.51
60:DA:69:ASN:HB3	60:DA:73:ARG:HD2	1.92	0.51
80:l1:48:ARG:HD2	80:l1:159:LEU:HB3	1.92	0.51
1:1:164:U:H2'	1:1:165:C:C6	2.44	0.51
1:1:623:A:H2'	1:1:624:U:C6	2.45	0.51
1:1:1007:A:H2'	1:1:1008:A:H8	1.74	0.51
1:1:1436:G:OP1	6:l:84:HIS:NE2	2.42	0.51
1:1:2442:U:H5'	80:l1:160:LYS:NZ	2.25	0.51
1:1:2655:U:H2'	1:1:2656:C:H6	1.76	0.51
1:1:2832:U:C2	1:1:2910:G:H4'	2.45	0.51
1:1:3244:A:O2'	1:1:3245:A:H5'	2.10	0.51
46:B:302:U:H2'	46:B:303:C:C6	2.45	0.51
46:B:933:A:H2'	46:B:934:C:H6	1.76	0.51
46:B:1341:U:H1'	46:B:1353:G:N2	2.26	0.51
46:B:1516:C:H2'	46:B:1517:C:C6	2.45	0.51
46:B:1741:A:H1'	77:g:2:GLY:HA2	1.92	0.51
53:I:58:LYS:HG2	53:I:105:ASP:O	2.11	0.51
55:K:101:VAL:HG22	55:K:174:VAL:HG22	1.92	0.51
64:T:71:PHE:CZ	64:T:74:GLN:HB2	2.46	0.51
65:U:63:GLN:O	65:U:67:GLU:HG3	2.09	0.51
1:AS:634:C:O2	1:AS:2355:G:O2'	2.24	0.51
1:AS:1406:C:O2'	33:BZ:96:GLU:OE1	2.26	0.51
10:BC:147:LYS:HG3	10:BC:174:MET:HE3	1.92	0.51
14:BG:27:ASP:OD2	14:BG:31:LYS:HE3	2.11	0.51
46:CM:740:A:O2'	46:CM:741:A:OP1	2.27	0.51
46:CM:1302:C:H2'	46:CM:1303:G:O4'	2.10	0.51
49:CP:224:LEU:O	68:DI:16:LYS:NZ	2.42	0.51
50:CQ:128:MET:HE1	50:CQ:134:GLY:HA2	1.90	0.51
56:CW:128:LEU:HD23	56:CW:133:HIS:HD2	1.75	0.51
63:DD:45:PHE:HA	63:DD:48:TYR:HB2	1.91	0.51
45:CL:122:THR:HG22	45:CL:126:GLU:HG2	1.91	0.51
1:1:1248:A:H2'	1:1:1249:U:H5'	1.92	0.51
1:1:1258:G:O6	1:1:1260:G:N2	2.43	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:AQ:28:LYS:O	44:AQ:32:GLN:HG3	2.11	0.51
46:B:125:U:OP1	53:I:201:GLN:NE2	2.39	0.51
46:B:874:U:H2'	46:B:875:C:C6	2.46	0.51
51:G:19:MET:HE2	51:G:108:LYS:HG2	1.93	0.51
54:J:169:TYR:OH	54:J:175:LYS:HE3	2.10	0.51
64:T:100:LEU:HB3	64:T:102:ILE:HG23	1.93	0.51
1:AS:72:A:N7	14:BG:66:ASN:HB3	2.25	0.51
1:AS:1199:A:H2'	1:AS:1200:A:H8	1.74	0.51
1:AS:2126:U:H2'	1:AS:2127:A:C8	2.46	0.51
1:AS:2273:A:C4	24:BQ:37:LEU:HD22	2.45	0.51
21:BN:60:SER:OG	21:BN:62:ASN:OD1	2.28	0.51
46:CM:30:G:H4'	70:DK:131:SER:HB2	1.93	0.51
46:CM:310:A:P	83:CM:1803:PAR:HN22	2.32	0.51
46:CM:417:G:O5'	53:CT:72:ARG:NH2	2.42	0.51
46:CM:566:G:N7	70:DK:69:ARG:NH1	2.47	0.51
46:CM:1637:U:H2'	46:CM:1638:A:C8	2.46	0.51
47:CN:50:ILE:HA	47:CN:53:THR:HB	1.93	0.51
57:CX:43:ILE:HG22	57:CX:44:LYS:HE2	1.91	0.51
69:DJ:14:ILE:HG12	69:DJ:25:VAL:HG11	1.91	0.51
79:DT:19:TRP:HB2	79:DT:38:ARG:HD2	1.91	0.51
1:1:437:G:O2'	1:1:438:A:OP1	2.28	0.51
1:1:2744:C:N4	83:1:3462:PAR:O41	2.40	0.51
3:4:135:G:OP1	26:8:49:LYS:NZ	2.30	0.51
5:k:313:ARG:O	5:k:333:LYS:HE3	2.11	0.51
19:y:67:ILE:HG12	19:y:81:ILE:HG21	1.92	0.51
46:B:589:A:P	77:g:43:ARG:HH22	2.33	0.51
46:B:1277:G:H21	47:C:111:ILE:HD11	1.75	0.51
46:B:1283:U:H2'	46:B:1284:G:O4'	2.10	0.51
52:H:61:TYR:OH	75:e:52:ASP:OD1	2.19	0.51
62:R:77:LYS:HD2	62:R:102:PHE:CE1	2.45	0.51
70:Z:62:LYS:HE3	70:Z:118:PRO:HB3	1.92	0.51
1:AS:2650:A:H1'	45:CL:53:LYS:HB2	1.91	0.51
1:AS:3019:U:OP1	5:AX:222:LYS:N	2.40	0.51
46:CM:283:G:H2'	46:CM:284:C:C6	2.45	0.51
49:CP:53:LEU:HA	68:DI:12:TYR:HE1	1.74	0.51
1:1:314:U:H2'	1:1:315:C:C6	2.46	0.51
1:1:1678:U:O2	23:5:85:LYS:HG2	2.10	0.51
1:1:2200:A:H2'	1:1:2201:A:C8	2.45	0.51
1:1:2709:C:O2'	30:AC:36:ASP:OD2	2.29	0.51
1:1:2902:A:H2'	1:1:2903:C:H6	1.75	0.51
5:k:260:VAL:HG11	5:k:266:ARG:HH11	1.75	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:m:187:ALA:O	7:m:189:GLU:N	2.42	0.51
12:r:38:ARG:HG2	12:r:41:ALA:HB2	1.93	0.51
46:B:680:C:H2'	46:B:681:C:H6	1.74	0.51
51:G:59:ARG:NH1	71:a:87:PRO:HG3	2.25	0.51
63:S:128:PHE:O	63:S:136:ARG:NH1	2.42	0.51
1:AS:1021:A:H2'	1:AS:1022:A:H4'	1.92	0.51
1:AS:2394:U:H2'	1:AS:2395:U:C6	2.46	0.51
1:AS:2958:U:H2'	1:AS:2959:A:C8	2.46	0.51
1:AS:3111:A:O4'	5:AX:18:PRO:HD2	2.10	0.51
1:AS:3302:G:H2'	1:AS:3303:C:C6	2.46	0.51
2:AT:59:U:H2'	2:AT:60:G:C8	2.46	0.51
25:BR:80:ARG:HD3	53:CT:129:VAL:O	2.11	0.51
25:BR:108:LYS:HE3	53:CT:150:GLU:O	2.09	0.51
46:CM:68:A:OP1	53:CT:160:ARG:NH2	2.39	0.51
46:CM:985:C:H5	46:CM:988:A:H5''	1.75	0.51
46:CM:1413:A:O2'	46:CM:1414:G:OP1	2.26	0.51
46:CM:1516:C:H2'	46:CM:1517:C:H6	1.74	0.51
53:CT:57:ASP:O	53:CT:107:SER:OG	2.21	0.51
64:DE:7:LYS:O	64:DE:11:ARG:HG2	2.10	0.51
65:DF:91:ASP:OD1	65:DF:92:GLN:N	2.43	0.51
71:DL:27:VAL:O	71:DL:68:LYS:HA	2.11	0.51
1:1:357:A:O4'	6:l:82:GLY:HA3	2.11	0.51
1:1:1456:A:H2'	1:1:1457:A:C8	2.46	0.51
1:1:1469:G:H5''	20:z:23:TRP:CD1	2.46	0.51
5:k:106:TRP:HB2	5:k:133:TYR:CE2	2.45	0.51
6:l:38:SER:OG	6:l:42:ARG:NH2	2.43	0.51
7:m:40:HIS:CE1	7:m:42:ALA:HB3	2.45	0.51
7:m:94:ASN:ND2	7:m:204:VAL:HG21	2.26	0.51
28:AA:101:LEU:O	28:AA:107:ARG:NH2	2.44	0.51
46:B:655:U:P	46:B:676:G:H22	2.34	0.51
46:B:809:G:H2'	46:B:810:U:C6	2.46	0.51
46:B:947:C:OP2	60:P:70:LYS:NZ	2.30	0.51
46:B:1217:U:H5	78:h:137:HIS:NE2	2.05	0.51
46:B:1265:C:H5'	76:f:44:ARG:HH12	1.76	0.51
47:C:14:ALA:O	47:C:18:LEU:HD12	2.11	0.51
49:E:165:ILE:HB	49:E:192:TYR:HB2	1.93	0.51
54:J:92:ARG:HH12	54:J:120:LYS:HB3	1.75	0.51
59:O:64:ASP:H	59:O:92:SER:HB3	1.76	0.51
59:O:105:GLN:HG3	59:O:113:ARG:HB3	1.92	0.51
78:h:160:ARG:CG	78:h:173:PHE:HB3	2.41	0.51
79:AR:175:VAL:HB	79:AR:189:PHE:HB2	1.91	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:164:U:H2'	1:AS:165:C:C6	2.46	0.51
1:AS:307:A:H2'	1:AS:308:A:H8	1.70	0.51
1:AS:1456:A:H2'	1:AS:1457:A:C8	2.45	0.51
1:AS:1580:U:H2'	1:AS:1581:C:C6	2.45	0.51
1:AS:2702:G:H4'	19:BL:184:PHE:CG	2.45	0.51
1:AS:3154:A:N3	1:AS:3157:A:O2'	2.30	0.51
83:AS:3403:PAR:N64	83:AS:3403:PAR:O44	2.44	0.51
2:AT:7:G:OP1	7:AZ:33:ARG:NH1	2.44	0.51
3:AU:8:C:H2'	3:AU:9:A:C8	2.45	0.51
9:BB:130:PRO:HG2	9:BB:131:TYR:CE1	2.45	0.51
15:BH:47:ARG:NH1	15:BH:69:SER:O	2.42	0.51
23:BP:101:VAL:HG23	23:BP:102:LYS:H	1.74	0.51
35:CB:58:ARG:CD	35:CB:59:PRO:HD2	2.33	0.51
46:CM:68:A:N6	53:CT:132:ARG:HG3	2.25	0.51
46:CM:291:U:H2'	46:CM:292:C:C6	2.46	0.51
46:CM:1007:C:H4'	46:CM:1110:A:H61	1.76	0.51
46:CM:1307:A:O2'	47:CN:104:PRO:HG2	2.10	0.51
46:CM:1478:A:O2'	46:CM:1479:A:O4'	2.20	0.51
50:CQ:149:LYS:HZ1	45:CL:103:LEU:HD11	1.75	0.51
67:DH:32:GLN:OE1	67:DH:32:GLN:N	2.43	0.51
80:11:96:ASN:O	80:11:100:ILE:HG12	2.10	0.51
1:1:964:G:H2'	1:1:965:C:C6	2.46	0.51
1:1:2130:A:H2'	1:1:2131:U:H6	1.76	0.51
5:k:95:THR:OG1	5:k:98:GLY:O	2.26	0.51
46:B:518:A:H2'	46:B:519:A:H8	1.76	0.51
46:B:789:U:O3'	69:Y:78:ARG:NH1	2.43	0.51
46:B:1596:U:O2'	52:H:105:GLY:O	2.23	0.51
52:H:144:GLU:OE1	52:H:225:ARG:NH2	2.44	0.51
1:AS:172:C:O2'	1:AS:173:C:OP1	2.24	0.51
1:AS:629:A:H2'	1:AS:630:G:C8	2.45	0.51
1:AS:1385:G:H5''	33:BZ:102:SER:HB3	1.92	0.51
1:AS:1593:C:H2'	1:AS:1594:G:H8	1.76	0.51
1:AS:2079:C:HO2'	1:AS:2080:U:H6	1.56	0.51
1:AS:2639:A:OP1	45:CL:40:ASP:HA	2.10	0.51
1:AS:2694:U:O2'	22:BO:88:ARG:O	2.27	0.51
3:AU:75:G:H2'	3:AU:76:C:C6	2.46	0.51
22:BO:116:LYS:O	22:BO:120:LYS:HG3	2.10	0.51
46:CM:165:U:H2'	46:CM:166:A:H5''	1.93	0.51
46:CM:291:U:H2'	46:CM:292:C:H6	1.75	0.51
46:CM:703:U:H2'	46:CM:704:A:N7	2.25	0.51
46:CM:1335:U:H2'	46:CM:1336:G:H8	1.74	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:CO:88:VAL:HG22	48:CO:98:THR:HG22	1.92	0.51
51:CR:185:GLY:HA2	51:CR:189:LEU:HD12	1.93	0.51
53:CT:231:ALA:HA	53:CT:234:LEU:HG	1.93	0.51
62:DC:25:LEU:HA	62:DC:28:MET:HE2	1.92	0.51
80:l1:67:ILE:HG12	80:l1:83:ASP:HB2	1.92	0.51
1:1:362:U:O4	38:AK:24:ARG:NH2	2.44	0.51
1:1:417:A:H2'	1:1:418:A:C8	2.46	0.51
1:1:2116:A:C4	38:AK:3:LYS:HB3	2.46	0.51
1:1:2739:U:H2'	1:1:2740:U:C6	2.46	0.51
83:1:3461:PAR:H322	83:1:3461:PAR:H51	1.74	0.51
45:i:158:LEU:O	45:i:162:LYS:HG2	2.10	0.51
46:B:1057:C:N4	83:B:1802:PAR:O53	2.44	0.51
46:B:1241:A:H5'	46:B:1242:U:C5	2.45	0.51
46:B:1317:C:O2'	50:F:163:GLN:HB3	2.11	0.51
46:B:1383:U:O2'	46:B:1386:A:N6	2.41	0.51
46:B:1410:A:H8	49:E:87:ALA:HB2	1.76	0.51
46:B:1431:G:N2	78:h:129:THR:O	2.43	0.51
59:O:35:SER:HA	59:O:126:TRP:CH2	2.45	0.51
59:O:124:LYS:O	59:O:126:TRP:HE3	1.94	0.51
1:AS:964:G:H2'	1:AS:965:C:H6	1.76	0.51
1:AS:3207:G:N2	1:AS:3210:A:OP2	2.44	0.51
2:AT:19:C:H2'	2:AT:20:A:H8	1.76	0.51
2:AT:112:G:H2'	2:AT:113:C:C6	2.46	0.51
3:AU:78:G:H2'	3:AU:79:A:N3	2.25	0.51
25:BR:110:ALA:HA	25:BR:113:LYS:CD	2.39	0.51
28:BU:25:ILE:HG23	28:BU:41:ALA:HB1	1.92	0.51
46:CM:849:U:H3'	69:DJ:28:ARG:HH22	1.75	0.51
46:CM:1324:C:O2'	46:CM:1326:A:N7	2.39	0.51
53:CT:159:ARG:HB2	53:CT:170:THR:HB	1.93	0.51
59:CZ:31:VAL:HG11	59:CZ:132:GLU:HB3	1.92	0.51
59:CZ:99:GLU:HB2	59:CZ:111:ASN:ND2	2.25	0.51
1:1:477:U:H2'	1:1:478:G:H8	1.76	0.51
1:1:1079:G:H2'	1:1:1080:A:C8	2.46	0.51
1:1:1556:G:O2'	1:1:1557:U:H5'	2.11	0.51
1:1:1593:C:H2'	1:1:1594:G:H8	1.76	0.51
1:1:2902:A:H2'	1:1:2903:C:C6	2.45	0.51
11:q:59:ASN:ND2	15:u:35:GLN:HG3	2.26	0.51
26:8:105:VAL:HG23	26:8:130:TYR:CG	2.45	0.51
45:i:96:LYS:HG2	46:B:575:G:C4	2.46	0.51
46:B:68:A:N6	53:I:132:ARG:HG2	2.25	0.51
51:G:192:VAL:HG23	51:G:244:GLY:HA3	1.92	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:H:81:ARG:NH1	52:H:82:PHE:HE2	2.09	0.51
56:L:34:TYR:HA	56:L:122:ILE:HD13	1.93	0.51
57:M:70:ASP:OD1	57:M:71:GLU:HG3	2.10	0.51
61:Q:52:PRO:HB3	61:Q:95:SER:OG	2.11	0.51
69:Y:28:ARG:HD3	69:Y:60:LYS:HE2	1.93	0.51
1:AS:1079:G:H2'	1:AS:1080:A:C8	2.46	0.51
1:AS:1202:G:OP1	12:BE:157:TYR:OH	2.23	0.51
1:AS:3163:U:H1'	1:AS:3165:U:O4	2.10	0.51
1:AS:3290:G:O3'	32:BY:102:GLY:HA2	2.10	0.51
2:AT:39:U:H3	13:BF:70:THR:HB	1.75	0.51
3:AU:36:G:OP1	38:CE:66:TYR:OH	2.18	0.51
3:AU:52:A:N6	40:CG:27:ILE:HD13	2.26	0.51
14:BG:187:LYS:O	14:BG:191:GLU:HG2	2.11	0.51
29:BV:112:VAL:HB	29:BV:130:VAL:HG12	1.92	0.51
39:CF:46:ARG:NH1	39:CF:47:GLY:O	2.44	0.51
46:CM:1350:C:O2'	63:DD:29:LYS:NZ	2.43	0.51
46:CM:1573:A:H2'	46:CM:1574:A:O4'	2.11	0.51
48:CO:69:CYS:HA	48:CO:83:LYS:HA	1.92	0.51
50:CQ:124:LEU:HD11	50:CQ:153:TYR:HB3	1.91	0.51
53:CT:1:MET:HE2	53:CT:106:LEU:HB2	1.91	0.51
57:CX:73:VAL:HG21	57:CX:91:ARG:HH12	1.75	0.51
45:CL:110:SER:HB3	45:CL:113:ARG:H	1.76	0.51
1:1:541:U:H3	1:1:543:C:HO2'	1.56	0.51
1:1:856:G:O2'	1:1:891:A:H4'	2.11	0.51
1:1:1022:A:H8	1:1:1022:A:OP2	1.94	0.51
1:1:1116:A:H2'	1:1:1117:U:H6	1.76	0.51
1:1:1153:G:H2'	1:1:1154:A:O4'	2.11	0.51
1:1:3302:G:H2'	1:1:3303:C:C6	2.46	0.51
1:1:3336:G:H2'	1:1:3337:A:H8	1.76	0.51
7:m:95:TRP:CD1	7:m:158:ARG:HA	2.46	0.51
28:AA:23:VAL:HG12	28:AA:45:GLY:HA3	1.93	0.51
29:AB:73:ILE:HB	29:AB:109:TYR:CD2	2.46	0.51
54:J:40:LYS:HG3	54:J:59:PRO:HD3	1.93	0.51
1:AS:158:A:H2'	1:AS:159:A:H8	1.76	0.51
1:AS:442:G:C4	1:AS:443:G:C8	2.99	0.51
1:AS:1561:U:H6	1:AS:1561:U:H5''	1.76	0.51
3:AU:154:C:OP1	10:BC:182:LYS:HE2	2.11	0.51
7:AZ:41:LYS:NZ	22:BO:32:LYS:O	2.44	0.51
23:BP:28:PHE:CE1	23:BP:33:TYR:HB2	2.46	0.51
31:BX:42:LYS:HZ1	31:BX:96:ASP:HA	1.76	0.51
46:CM:1265:C:O2'	67:DH:69:THR:HG22	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:CQ:104:GLU:O	50:CQ:107:LYS:HG2	2.10	0.51
56:CW:70:LEU:O	56:CW:74:ASN:HB2	2.11	0.51
62:DC:42:ARG:HH22	65:DF:90:LYS:HE3	1.76	0.51
79:DT:240:LEU:HD22	79:DT:249:LEU:HD11	1.93	0.51
1:1:352:A:N1	1:1:365:A:H5''	2.26	0.50
1:1:629:A:H2'	1:1:630:G:H8	1.75	0.50
1:1:2196:G:H2'	1:1:2197:A:C8	2.46	0.50
1:1:2853:C:H2'	1:1:2854:U:C6	2.46	0.50
1:1:3233:A:OP1	18:x:181:ARG:NH2	2.34	0.50
1:1:3320:U:H5''	1:1:3321:G:OP1	2.11	0.50
46:B:221:U:C4	46:B:823:G:C6	2.99	0.50
46:B:812:C:O2'	46:B:813:U:H5'	2.11	0.50
46:B:904:A:H2'	46:B:905:C:C6	2.46	0.50
46:B:1314:A:OP2	50:F:161:SER:OG	2.19	0.50
46:B:1393:U:H2'	46:B:1394:G:C8	2.46	0.50
52:H:91:GLU:HA	52:H:94:THR:HG22	1.93	0.50
59:O:77:ALA:HB1	78:h:155:ASN:HA	1.93	0.50
63:S:86:LYS:HG2	63:S:116:LEU:HD13	1.93	0.50
66:V:37:VAL:HG21	66:V:100:ILE:HD11	1.92	0.50
79:AR:263:GLN:O	79:AR:264:GLU:HG2	2.12	0.50
1:AS:659:G:H4'	1:AS:660:U:H6	1.75	0.50
1:AS:2404:U:H2'	1:AS:2405:U:C6	2.45	0.50
1:AS:2587:G:H2'	1:AS:2588:C:C6	2.46	0.50
1:AS:2933:G:H2'	1:AS:2934:U:H6	1.77	0.50
1:AS:3079:U:H2'	1:AS:3080:G:C8	2.46	0.50
7:AZ:278:THR:N	7:AZ:281:GLU:OE1	2.26	0.50
16:BI:46:ASP:OD2	16:BI:50:ARG:NH2	2.35	0.50
21:BN:77:ILE:HG23	21:BN:126:VAL:HG22	1.92	0.50
22:BO:113:ALA:O	22:BO:117:ARG:HG3	2.11	0.50
46:CM:82:U:H2'	46:CM:83:G:O4'	2.11	0.50
49:CP:135:ARG:NH2	49:CP:223:ASN:OD1	2.44	0.50
50:CQ:183:LEU:HD23	50:CQ:183:LEU:H	1.76	0.50
54:CU:18:ALA:HA	54:CU:21:PHE:HB2	1.93	0.50
55:CV:37:LYS:NZ	55:CV:93:THR:HB	2.26	0.50
75:DP:14:LYS:HB3	75:DP:29:ARG:HB3	1.92	0.50
80:l1:187:ALA:O	80:l1:191:VAL:HB	2.11	0.50
1:1:109:G:OP2	14:t:73:ARG:NH2	2.43	0.50
1:1:1254:U:N3	1:1:1257:G:OP2	2.35	0.50
1:1:1591:U:O2'	1:1:1602:U:O2	2.28	0.50
1:1:2638:C:H4'	45:i:39:SER:HA	1.94	0.50
1:1:3042:A:OP1	20:z:62:ARG:NH1	2.43	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:t:2:ALA:HB1	29:AB:33:GLY:O	2.12	0.50
14:t:143:VAL:HG13	14:t:147:PHE:HD2	1.76	0.50
46:B:151:G:H2'	46:B:152:G:H8	1.76	0.50
46:B:859:C:OP1	48:D:159:SER:OG	2.15	0.50
46:B:871:U:H2'	46:B:872:A:H8	1.76	0.50
46:B:1245:U:H2'	46:B:1246:G:C8	2.46	0.50
46:B:1523:G:O2'	46:B:1524:C:OP1	2.27	0.50
52:H:145:ASP:OD1	52:H:146:SER:N	2.44	0.50
59:O:32:LEU:HG	59:O:100:TRP:HD1	1.75	0.50
67:W:68:LYS:O	76:f:44:ARG:NH1	2.44	0.50
78:h:168:CYS:HB3	78:h:172:ILE:HG13	1.92	0.50
1:AS:381:U:O4	83:AS:3402:PAR:N64	2.44	0.50
1:AS:1080:A:H2'	1:AS:1081:A:C8	2.46	0.50
1:AS:1561:U:H5''	1:AS:1561:U:C6	2.47	0.50
1:AS:3019:U:O2'	1:AS:3020:A:H5'	2.11	0.50
84:AS:3405:3K5:H7	84:AS:3405:3K5:C33	2.33	0.50
2:AT:3:U:H2'	2:AT:4:U:H6	1.76	0.50
25:BR:80:ARG:HG2	25:BR:81:ALA:H	1.76	0.50
46:CM:86:A:H5'	71:DL:119:PHE:CE1	2.46	0.50
46:CM:239:U:C5	53:CT:216:LEU:HD21	2.46	0.50
46:CM:537:G:OP2	46:CM:537:G:N2	2.37	0.50
46:CM:1518:G:N2	66:DG:48:GLN:OE1	2.44	0.50
54:CU:29:ASP:OD1	54:CU:30:LEU:N	2.44	0.50
1:1:157:G:H2'	1:1:158:A:H8	1.75	0.50
1:1:294:U:OP2	16:v:15:GLN:NE2	2.27	0.50
1:1:1318:U:O2'	21:0:108:GLN:OE1	2.23	0.50
1:1:2483:U:H2'	1:1:2484:U:C6	2.47	0.50
1:1:2504:C:H2'	1:1:2505:G:H8	1.77	0.50
2:3:31:U:H4'	7:m:218:LYS:NZ	2.27	0.50
4:j:77:ILE:HD13	4:j:128:ARG:HB3	1.92	0.50
14:t:195:ALA:O	14:t:199:LYS:HG2	2.12	0.50
45:i:112:LYS:HG2	45:i:113:ARG:H	1.77	0.50
46:B:638:U:H2'	46:B:639:G:O4'	2.11	0.50
46:B:733:U:OP1	69:Y:82:LYS:NZ	2.34	0.50
46:B:736:G:H2'	46:B:737:A:H8	1.76	0.50
46:B:1521:G:N7	72:b:77:ARG:NH2	2.55	0.50
46:B:1670:U:O2'	46:B:1671:G:O5'	2.28	0.50
47:C:10:THR:OG1	47:C:12:GLU:OE1	2.29	0.50
52:H:200:ASN:CB	52:H:208:SER:HB3	2.42	0.50
54:J:72:ARG:HG2	54:J:75:ARG:NH2	2.27	0.50
55:K:38:ILE:HG12	55:K:96:LEU:HD11	1.93	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:M:86:ILE:HG13	57:M:87:LEU:N	2.11	0.50
73:c:41:ILE:HG12	73:c:68:TYR:CD2	2.46	0.50
1:AS:2130:A:H2'	1:AS:2131:U:H6	1.76	0.50
1:AS:2590:G:OP1	12:BE:116:ARG:HG3	2.11	0.50
1:AS:3143:G:C2	34:CA:96:ALA:HB2	2.46	0.50
1:AS:3317:U:C3'	55:CV:168:SER:HA	2.39	0.50
22:BO:119:ALA:HB1	22:BO:124:GLU:O	2.11	0.50
23:BP:19:VAL:C	23:BP:21:ALA:H	2.19	0.50
46:CM:726:C:O2	54:CU:103:ARG:NE	2.26	0.50
46:CM:1351:U:H5'	63:DD:32:GLY:CA	2.41	0.50
53:CT:85:ARG:NH2	53:CT:87:ARG:HH12	2.09	0.50
67:DH:24:THR:HB	67:DH:114:GLU:HG3	1.93	0.50
73:DN:87:ARG:HE	73:DN:92:ARG:HA	1.76	0.50
78:DS:163:CYS:HA	78:DS:174:MET:HE2	1.92	0.50
79:DT:96:GLU:HG2	79:DT:97:THR:HG23	1.93	0.50
80:l1:85:MET:HG2	80:l1:86:SER:H	1.76	0.50
1:l:88:G:N7	19:y:171:LYS:NZ	2.59	0.50
1:l:2430:G:H3'	1:l:2440:A:H62	1.76	0.50
3:4:58:G:O6	38:AK:63:ARG:NH1	2.44	0.50
5:k:66:LYS:NZ	24:6:9:ASN:H	2.05	0.50
13:s:108:GLU:OE1	65:U:110:ARG:NH1	2.26	0.50
46:B:12:U:H2'	46:B:13:C:H6	1.74	0.50
46:B:345:G:C5'	58:N:80:MET:HE2	2.41	0.50
46:B:940:A:H4'	46:B:1058:G:O2'	2.11	0.50
46:B:1187:A:H1'	46:B:1192:C:N4	2.27	0.50
83:B:1801:PAR:H13	83:B:1801:PAR:H11	1.93	0.50
48:D:121:VAL:HG13	48:D:168:MET:HE1	1.93	0.50
66:V:74:GLY:HA2	66:V:77:ASN:HD22	1.77	0.50
67:W:32:GLN:HB3	67:W:108:GLU:HG2	1.94	0.50
76:f:12:ARG:HB2	76:f:12:ARG:HH11	1.76	0.50
1:AS:119:G:H21	1:AS:120:A:H62	1.59	0.50
1:AS:726:G:H5''	19:BL:43:PRO:HB2	1.93	0.50
2:AT:3:U:H2'	2:AT:4:U:C6	2.46	0.50
3:AU:37:A:OP2	36:CC:86:ARG:HD2	2.12	0.50
4:AW:49:ILE:HD11	4:AW:60:LYS:HE2	1.93	0.50
5:AX:117:ARG:HD2	5:AX:176:ALA:O	2.11	0.50
6:AY:296:VAL:O	6:AY:300:VAL:HG13	2.12	0.50
13:BF:81:GLU:O	13:BF:85:LYS:HG3	2.11	0.50
39:CF:46:ARG:HD2	39:CF:47:GLY:O	2.12	0.50
46:CM:724:G:H2'	46:CM:725:A:C8	2.47	0.50
1:l:95:G:H5'	14:t:15:ARG:CZ	2.41	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:431:A:H2'	1:1:432:G:H8	1.72	0.50
1:1:671:U:H2'	1:1:672:G:H8	1.76	0.50
1:1:1176:A:C4	1:1:1178:G:C8	2.99	0.50
1:1:3256:G:H2'	1:1:3257:A:C8	2.46	0.50
3:4:23:U:OP1	27:9:16:ARG:NH1	2.43	0.50
8:n:175:LYS:NZ	15:u:104:GLN:OE1	2.33	0.50
17:w:151:GLU:O	17:w:155:GLU:HG2	2.11	0.50
46:B:226:G:C5	46:B:819:G:C6	3.00	0.50
46:B:714:G:H5''	46:B:715:G:OP2	2.12	0.50
46:B:1649:G:H2'	46:B:1650:G:H8	1.77	0.50
46:B:1674:U:H2'	46:B:1675:U:C5	2.47	0.50
47:C:84:ARG:NE	64:T:82:ASP:OD1	2.45	0.50
51:G:64:ILE:O	51:G:67:GLN:HG3	2.12	0.50
53:I:159:ARG:HB2	53:I:170:THR:HB	1.94	0.50
66:V:63:ARG:HH12	66:V:67:LEU:HD11	1.77	0.50
79:AR:273:PRO:O	79:AR:275:PHE:HD1	1.94	0.50
1:AS:94:A:H5''	29:BV:34:LYS:HB2	1.92	0.50
1:AS:142:G:H4'	3:AU:145:U:OP1	2.12	0.50
1:AS:2960:C:OP1	17:BJ:66:ASN:ND2	2.28	0.50
7:AZ:95:TRP:HD1	7:AZ:158:ARG:HA	1.76	0.50
12:BE:63:GLU:OE1	12:BE:63:GLU:N	2.44	0.50
46:CM:1129:U:H2'	46:CM:1130:U:C6	2.47	0.50
46:CM:1147:C:H4'	75:DP:22:ARG:HD3	1.93	0.50
75:DP:38:ARG:O	75:DP:40:ILE:HG12	2.11	0.50
1:1:549:U:C2	1:1:550:G:C8	3.00	0.50
1:1:948:A:H4'	1:1:964:G:H21	1.76	0.50
1:1:1029:U:H2'	1:1:1030:U:C6	2.46	0.50
1:1:1115:C:H2'	1:1:1116:A:C8	2.47	0.50
1:1:2206:A:H2'	1:1:2207:A:C8	2.47	0.50
1:1:2435:G:H4'	1:1:2460:U:H4'	1.93	0.50
1:1:2995:U:H2'	1:1:2996:A:H8	1.77	0.50
83:1:3460:PAR:H21	83:1:3460:PAR:H33	1.94	0.50
6:l:111:ASN:HB2	16:v:201:ARG:O	2.10	0.50
11:q:86:TYR:CE2	11:q:151:LEU:HB2	2.46	0.50
14:t:69:VAL:O	14:t:151:GLN:NE2	2.44	0.50
23:5:34:VAL:HG21	23:5:58:ALA:HB2	1.92	0.50
45:i:61:GLU:O	45:i:63:ALA:N	2.40	0.50
46:B:217:A:H2'	46:B:218:A:O4'	2.11	0.50
46:B:226:G:H2'	46:B:227:C:H6	1.77	0.50
46:B:521:G:OP2	71:a:37:LYS:NZ	2.37	0.50
46:B:1575:G:H1	46:B:1595:U:H3	1.59	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:252:U:H5'	1:AS:253:A:H8	1.76	0.50
1:AS:428:U:H2'	1:AS:429:U:C6	2.46	0.50
1:AS:2345:A:H2'	1:AS:2346:A:H8	1.77	0.50
1:AS:2912:A:OP2	5:AX:2:SER:N	2.44	0.50
1:AS:3244:A:H62	34:CA:54:ARG:HH21	1.60	0.50
46:CM:697:U:H3'	46:CM:698:C:H5''	1.94	0.50
46:CM:932:U:H2'	46:CM:933:A:H8	1.74	0.50
46:CM:1460:G:H2'	46:CM:1461:A:C8	2.45	0.50
1:1:849:G:OP2	44:AQ:2:THR:HG21	2.11	0.50
1:1:1079:G:H2'	1:1:1080:A:H8	1.77	0.50
1:1:1233:G:H22	1:1:1247:A:H2	1.59	0.50
1:1:2474:C:H2'	1:1:2475:U:C6	2.46	0.50
1:1:2492:U:OP2	1:1:2558:G:N2	2.40	0.50
1:1:3313:G:H2'	1:1:3314:C:C6	2.47	0.50
46:B:119:A:H1'	46:B:395:A:C5	2.47	0.50
46:B:151:G:H2'	46:B:152:G:C8	2.47	0.50
46:B:932:U:H2'	46:B:933:A:C8	2.47	0.50
46:B:933:A:H2'	46:B:934:C:C6	2.47	0.50
46:B:1181:A:OP2	46:B:1450:G:N2	2.29	0.50
46:B:1609:G:H2'	46:B:1610:C:H6	1.76	0.50
57:M:17:GLN:O	57:M:18:GLU:HB2	2.11	0.50
65:U:29:MET:HB2	65:U:54:LEU:HD22	1.92	0.50
66:V:84:LYS:HZ2	66:V:86:ARG:HG3	1.77	0.50
24:BQ:17:LEU:HD11	24:BQ:98:ASN:HB3	1.93	0.50
46:CM:415:A:H4'	46:CM:416:G:O5'	2.12	0.50
46:CM:744:U:C2	46:CM:745:A:C8	2.99	0.50
46:CM:947:C:H2'	46:CM:948:A:O4'	2.12	0.50
46:CM:1230:G:N2	46:CM:1235:U:O4	2.40	0.50
46:CM:1670:U:O2'	46:CM:1671:G:O5'	2.30	0.50
58:CY:121:ASP:OD1	58:CY:145:GLY:N	2.45	0.50
61:DB:124:LYS:HG3	61:DB:125:GLY:N	2.26	0.50
1:1:1257:G:H4'	1:1:1274:A:N1	2.27	0.50
83:1:3462:PAR:H322	83:1:3462:PAR:H51	1.77	0.50
25:7:9:SER:HA	25:7:52:THR:HB	1.93	0.50
47:C:144:ILE:HG12	47:C:158:VAL:HB	1.93	0.50
51:G:100:ARG:HB2	51:G:114:ILE:HD13	1.93	0.50
63:S:112:ASP:HB3	63:S:115:LEU:HD13	1.92	0.50
70:Z:3:LYS:HD2	70:Z:7:ARG:NH2	2.25	0.50
78:h:175:ALA:O	78:h:177:MET:HG3	2.12	0.50
1:AS:867:U:H5''	1:AS:2120:A:OP1	2.12	0.50
1:AS:1007:A:H2'	1:AS:1008:A:H8	1.76	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:1658:G:H22	1:AS:1783:A:H2	1.60	0.50
1:AS:3300:A:H2'	1:AS:3301:A:C8	2.47	0.50
3:AU:26:U:H2'	3:AU:27:U:C6	2.46	0.50
22:BO:66:ASN:HD21	30:BW:36:ASP:H	1.60	0.50
23:BP:28:PHE:CZ	23:BP:33:TYR:HB2	2.47	0.50
32:BY:5:ASP:HB3	32:BY:88:LEU:HD11	1.92	0.50
46:CM:726:C:H2'	46:CM:727:U:O4'	2.10	0.50
46:CM:965:G:H4'	46:CM:1763:A:H4'	1.93	0.50
46:CM:1218:G:N1	46:CM:1238:U:O2	2.45	0.50
47:CN:48:ILE:HG21	47:CN:161:PRO:HB2	1.94	0.50
48:CO:85:LYS:HB2	48:CO:102:GLY:N	2.26	0.50
49:CP:233:SER:OG	49:CP:236:GLU:HG2	2.11	0.50
1:1:21:G:H5''	38:AK:43:LYS:HG2	1.94	0.50
1:1:85:G:N7	14:t:13:HIS:ND1	2.60	0.50
1:1:2464:A:O2'	1:1:2465:U:H5'	2.12	0.50
1:1:2587:G:H2'	1:1:2588:C:C6	2.46	0.50
2:3:19:C:H2'	2:3:20:A:H8	1.77	0.50
4:j:7:ASN:ND2	4:j:234:LYS:O	2.45	0.50
14:t:158:LEU:HB3	29:AB:98:ALA:HB1	1.93	0.50
21:0:12:ARG:HB3	21:0:24:LEU:HD23	1.93	0.50
36:AI:7:PHE:CD1	27:BT:125:LYS:HB2	2.46	0.50
46:B:685:C:O2'	46:B:686:G:OP1	2.26	0.50
46:B:1413:A:O2'	46:B:1414:G:OP1	2.25	0.50
65:U:11:PHE:CZ	65:U:25:ARG:HG2	2.47	0.50
1:AS:716:G:OP1	29:BV:117:ARG:NH2	2.45	0.50
1:AS:792:U:H2'	1:AS:793:U:C6	2.46	0.50
1:AS:1116:A:H2'	1:AS:1117:U:H6	1.76	0.50
1:AS:2316:C:H1'	24:BQ:49:LEU:HD12	1.92	0.50
3:AU:95:G:OP2	38:CE:72:ARG:NE	2.45	0.50
14:BG:184:ILE:HD12	14:BG:187:LYS:HE2	1.93	0.50
46:CM:562:G:O2'	46:CM:575:G:H4'	2.11	0.50
46:CM:734:U:H2'	46:CM:735:U:C6	2.47	0.50
46:CM:1529:G:N2	46:CM:1555:C:H1'	2.27	0.50
46:CM:1593:C:H2'	46:CM:1594:G:C8	2.47	0.50
53:CT:161:GLU:HB3	53:CT:170:THR:HG22	1.94	0.50
59:CZ:77:ALA:HB1	78:DS:155:ASN:HA	1.93	0.50
78:DS:160:ARG:HB3	78:DS:173:PHE:CD2	2.47	0.50
1:1:68:C:OP1	16:v:178:HIS:ND1	2.33	0.49
1:1:72:A:C5	37:AJ:14:ARG:HD2	2.46	0.49
1:1:407:A:C2	3:4:17:A:H1'	2.47	0.49
1:1:1241:A:H3'	1:1:1242:G:H5''	1.93	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:k:284:ARG:HH11	5:k:356:LEU:HD12	1.76	0.49
14:t:7:LEU:O	29:AB:49:HIS:NE2	2.42	0.49
20:z:134:HIS:CE1	20:z:136:ARG:HB2	2.48	0.49
34:AG:43:PHE:HZ	34:AG:107:ILE:HD11	1.77	0.49
36:AI:83:LYS:O	38:AK:73:ARG:NH1	2.33	0.49
51:G:31:PRO:HD2	51:G:38:LEU:HD11	1.93	0.49
52:H:82:PHE:CE2	75:e:49:ARG:HG3	2.47	0.49
53:I:28:TYR:CZ	53:I:104:GLN:HG3	2.47	0.49
56:L:75:ALA:O	56:L:79:ARG:HG3	2.12	0.49
59:O:36:LEU:HG	59:O:102:GLY:HA3	1.93	0.49
79:AR:102:GLN:HE22	79:AR:139:GLY:HA3	1.76	0.49
1:AS:130:U:H2'	1:AS:131:C:C6	2.47	0.49
1:AS:442:G:H3'	1:AS:443:G:C8	2.47	0.49
1:AS:565:A:H2'	1:AS:566:C:C6	2.46	0.49
1:AS:659:G:H4'	1:AS:660:U:C6	2.46	0.49
1:AS:964:G:H2'	1:AS:965:C:C6	2.47	0.49
1:AS:1020:G:H4'	1:AS:1020:G:OP1	2.10	0.49
1:AS:1172:C:H2'	1:AS:1173:G:N2	2.27	0.49
1:AS:1204:U:C5	41:CH:32:THR:HG21	2.47	0.49
1:AS:2234:A:N6	46:CM:1742:A:O2'	2.42	0.49
1:AS:2852:U:H1'	5:AX:250:ALA:HB3	1.92	0.49
8:BA:170:ARG:HB3	8:BA:172:HIS:CE1	2.47	0.49
28:BU:78:ASN:OD1	31:BX:37:ARG:NH2	2.45	0.49
46:CM:799:G:H8	46:CM:799:G:OP1	1.95	0.49
46:CM:817:U:H4'	46:CM:818:U:OP2	2.11	0.49
47:CN:84:ARG:NE	64:DE:82:ASP:OD1	2.40	0.49
1:1:744:U:H5''	30:AC:31:SER:HA	1.93	0.49
1:1:892:A:H4'	4:j:186:PHE:CD2	2.46	0.49
1:1:1106:U:H2'	1:1:1107:U:C6	2.47	0.49
1:1:1779:U:H2'	1:1:1780:A:C8	2.47	0.49
1:1:1789:C:H2'	4:j:184:ARG:HH22	1.77	0.49
1:1:2130:A:HO2'	1:1:2221:A:HO2'	1.54	0.49
1:1:2239:G:O2'	1:1:2241:C:N4	2.45	0.49
1:1:2443:G:O6	1:1:2468:C:N4	2.45	0.49
1:1:2557:G:H2'	1:1:2557:G:N3	2.26	0.49
3:4:8:C:H2'	3:4:9:A:H8	1.77	0.49
27:9:51:ARG:HG2	27:9:52:GLN:N	2.26	0.49
36:AI:3:GLY:HA3	36:AI:50:ASN:OD1	2.11	0.49
46:B:880:G:H4'	61:Q:32:GLU:OE1	2.13	0.49
50:F:46:LYS:HD2	50:F:86:ALA:HB2	1.93	0.49
57:M:1:MET:HE1	57:M:41:PHE:HD1	1.76	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:179:C:H2'	1:AS:180:U:H6	1.76	0.49
1:AS:624:U:H2'	1:AS:625:C:H6	1.76	0.49
1:AS:1852:C:H2'	1:AS:1853:C:H6	1.77	0.49
1:AS:2196:G:H2'	1:AS:2197:A:C8	2.47	0.49
1:AS:3318:G:H5''	1:AS:3319:U:H4'	1.94	0.49
14:BG:132:ALA:HA	14:BG:135:VAL:HG12	1.92	0.49
42:CI:8:LYS:NZ	46:CM:1764:G:N7	2.60	0.49
44:CK:13:LYS:HG3	44:CK:14:PHE:CD1	2.47	0.49
46:CM:723:G:C4	46:CM:724:G:H1'	2.47	0.49
59:CZ:67:THR:O	59:CZ:68:GLU:HG3	2.11	0.49
68:DI:53:TYR:OH	68:DI:76:ASP:OD2	2.24	0.49
80:11:28:PHE:HD1	80:11:29:LEU:H	1.60	0.49
1:1:437:G:H21	1:1:620:A:H62	1.60	0.49
1:1:2384:C:H2'	1:1:2385:C:H6	1.76	0.49
2:3:112:G:H2'	2:3:113:C:C6	2.48	0.49
3:4:8:C:H2'	3:4:9:A:C8	2.47	0.49
3:4:85:G:H4'	3:4:86:U:OP1	2.12	0.49
5:k:21:ARG:HE	5:k:269:GLN:HG3	1.78	0.49
6:l:303:ALA:HB2	19:y:39:ARG:HH12	1.77	0.49
6:l:360:VAL:HG22	21:0:64:ILE:HG12	1.94	0.49
7:m:85:ARG:NH2	7:m:250:ASP:OD2	2.44	0.49
13:s:101:ASN:ND2	13:s:130:VAL:HG13	2.27	0.49
17:w:122:PRO:HA	17:w:125:LEU:HD12	1.95	0.49
31:AD:46:ILE:HG21	31:AD:55:LYS:HG3	1.93	0.49
46:B:824:U:O2'	46:B:825:U:OP2	2.29	0.49
46:B:1551:U:H2'	46:B:1552:C:C6	2.46	0.49
1:AS:348:A:N3	1:AS:352:A:O2'	2.45	0.49
1:AS:997:G:O2'	1:AS:1037:U:OP2	2.31	0.49
1:AS:2155:G:OP2	4:AW:128:ARG:NH1	2.45	0.49
6:AY:11:SER:OG	6:AY:15:GLU:OE1	2.29	0.49
35:CB:103:ARG:HG2	35:CB:104:VAL:N	2.26	0.49
46:CM:752:U:C5	56:CW:143:ILE:HG12	2.45	0.49
46:CM:1032:G:H2'	46:CM:1033:U:H6	1.77	0.49
46:CM:1050:A:N3	48:CO:146:GLN:NE2	2.59	0.49
46:CM:1571:G:H22	46:CM:1598:A:P	2.34	0.49
47:CN:79:ARG:NH2	47:CN:165:LYS:HG2	2.27	0.49
47:CN:205:ARG:HD2	47:CN:209:GLU:CG	2.43	0.49
48:CO:52:THR:HG23	48:CO:55:LYS:H	1.77	0.49
54:CU:4:LYS:NZ	54:CU:34:LEU:O	2.45	0.49
54:CU:85:HIS:CD2	54:CU:161:LYS:HG2	2.47	0.49
64:DE:78:ARG:NH1	64:DE:81:LYS:HD3	2.27	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
80:l1:160:LYS:HE3	80:l1:165:LEU:HD11	1.94	0.49
1:1:208:A:H4'	1:1:210:A:N7	2.28	0.49
1:1:1182:G:P	15:u:36:LYS:HZ2	2.34	0.49
1:1:1692:A:H2'	1:1:1693:A:C8	2.48	0.49
6:l:65:SER:HA	6:l:76:PRO:HA	1.95	0.49
38:AK:28:HIS:HB3	38:AK:31:LYS:HB2	1.93	0.49
46:B:78:A:H2'	46:B:79:C:H6	1.77	0.49
46:B:1149:G:H2'	46:B:1150:G:C8	2.48	0.49
46:B:1309:G:H4'	47:C:113:ARG:NH2	2.27	0.49
46:B:1753:A:N1	73:c:80:HIS:ND1	2.58	0.49
63:S:76:GLN:O	63:S:80:ILE:HG13	2.12	0.49
1:AS:364:G:OP1	6:AY:61:THR:HG23	2.12	0.49
1:AS:559:C:H2'	1:AS:560:C:C6	2.48	0.49
1:AS:629:A:C2	34:CA:91:PRO:HG2	2.46	0.49
1:AS:911:A:H8	1:AS:2114:C:HO2'	1.60	0.49
1:AS:1456:A:H2'	1:AS:1457:A:H8	1.77	0.49
1:AS:2206:A:H2'	1:AS:2207:A:H8	1.77	0.49
1:AS:2283:G:OP2	1:AS:2283:G:N2	2.38	0.49
1:AS:2899:C:H2'	1:AS:2900:C:C6	2.47	0.49
1:AS:3159:A:O2'	1:AS:3160:C:OP1	2.27	0.49
1:AS:3196:U:H2'	1:AS:3197:G:H8	1.77	0.49
9:BB:87:ILE:HD11	9:BB:226:THR:HG22	1.93	0.49
16:BI:42:PRO:HD3	16:BI:61:ILE:HG13	1.94	0.49
19:BL:79:LYS:HE3	19:BL:138:LEU:HD12	1.94	0.49
46:CM:584:G:H2'	46:CM:585:C:C6	2.47	0.49
46:CM:823:G:O5'	58:CY:26:LYS:HD2	2.12	0.49
46:CM:876:A:H2'	46:CM:877:G:C8	2.46	0.49
46:CM:1099:G:O2'	46:CM:1115:G:O6	2.25	0.49
46:CM:1262:G:O3'	50:CQ:184:GLY:HA3	2.11	0.49
57:CX:59:PHE:CZ	57:CX:62:GLN:HA	2.48	0.49
65:DF:114:GLU:HA	65:DF:117:LYS:HB2	1.94	0.49
80:l1:115:VAL:HG23	80:l1:119:GLN:HE22	1.78	0.49
1:1:1456:A:H2'	1:1:1457:A:H8	1.78	0.49
1:1:2236:U:C2	1:1:2237:A:C8	3.01	0.49
3:4:37:A:OP2	36:AI:86:ARG:HD2	2.13	0.49
4:j:66:PRO:HG2	4:j:67:TYR:CE2	2.47	0.49
15:u:47:ARG:NH1	15:u:69:SER:O	2.37	0.49
31:AD:19:THR:HG23	31:AD:97:ALA:HA	1.93	0.49
46:B:352:C:H5''	55:K:16:ALA:HB2	1.94	0.49
46:B:511:U:O4	56:L:171:ARG:NH2	2.45	0.49
46:B:1432:A:O2'	46:B:1433:C:H3'	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
59:O:37:VAL:HG23	59:O:39:ASP:OD1	2.13	0.49
66:V:28:LEU:HA	66:V:111:ILE:HG13	1.93	0.49
71:a:57:VAL:HB	71:a:60:PHE:HE2	1.78	0.49
75:e:35:ASP:O	75:e:37:SER:N	2.44	0.49
1:AS:843:A:H2'	1:AS:844:A:C8	2.48	0.49
1:AS:1777:C:H2'	1:AS:1778:U:C6	2.47	0.49
1:AS:2405:U:H2'	1:AS:2406:U:C6	2.48	0.49
1:AS:2786:G:OP1	6:AY:74:ARG:NH1	2.43	0.49
1:AS:2919:G:C2	5:AX:250:ALA:HB1	2.48	0.49
6:AY:326:LEU:O	9:BB:39:ARG:NH2	2.45	0.49
23:BP:16:VAL:HB	23:BP:63:LYS:HD2	1.94	0.49
56:CW:64:GLU:OE1	56:CW:69:ARG:NH1	2.46	0.49
57:CX:73:VAL:HG21	57:CX:91:ARG:NH1	2.28	0.49
63:DD:21:VAL:HG22	63:DD:64:ILE:HG12	1.93	0.49
68:DI:79:LEU:HD13	68:DI:82:VAL:HG11	1.95	0.49
79:DT:145:LEU:HD13	79:DT:178:TRP:CD2	2.48	0.49
1:1:150:A:C5	1:1:151:U:C5	3.00	0.49
1:1:171:G:H2'	1:1:172:C:C6	2.47	0.49
1:1:631:U:H2'	1:1:632:C:C6	2.48	0.49
1:1:1230:G:H2'	1:1:1231:U:C5	2.46	0.49
1:1:1660:G:H2'	1:1:1661:U:C6	2.47	0.49
1:1:2467:C:H2'	1:1:2468:C:H2'	1.93	0.49
45:i:67:LYS:HD3	62:R:125:PRO:CD	2.42	0.49
46:B:972:G:N2	46:B:998:A:OP1	2.42	0.49
46:B:1337:C:H2'	46:B:1338:U:O4'	2.12	0.49
52:H:148:ARG:HB3	52:H:157:ARG:HH11	1.77	0.49
72:b:60:VAL:HG23	72:b:101:TYR:HB2	1.95	0.49
1:AS:89:C:OP1	29:BV:59:ARG:NH1	2.42	0.49
1:AS:538:G:O6	1:AS:547:U:O4	2.31	0.49
1:AS:1153:G:H2'	1:AS:1154:A:O4'	2.12	0.49
7:AZ:143:LYS:HE3	7:AZ:145:PHE:HZ	1.77	0.49
46:CM:78:A:C8	53:CT:154:ARG:HG2	2.48	0.49
46:CM:191:U:H4'	46:CM:192:U:H5'	1.94	0.49
46:CM:231:C:H5'	46:CM:232:G:N3	2.28	0.49
46:CM:234:G:H2'	46:CM:235:C:C6	2.47	0.49
46:CM:518:A:O2'	46:CM:519:A:OP1	2.27	0.49
46:CM:815:U:H2'	46:CM:816:U:C5	2.48	0.49
46:CM:1214:G:O2'	46:CM:1240:G:N2	2.36	0.49
48:CO:26:ARG:O	48:CO:50:ARG:HB2	2.13	0.49
79:DT:195:TYR:O	79:DT:212:GLY:HA3	2.12	0.49
1:1:1017:G:H2'	1:1:1018:U:C6	2.48	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:1396:U:H2'	1:1:1397:G:O4'	2.13	0.49
1:1:2345:A:H2'	1:1:2346:A:H8	1.76	0.49
1:1:2988:A:H2'	1:1:2989:A:C8	2.48	0.49
2:3:31:U:H4'	7:m:218:LYS:HZ2	1.78	0.49
8:n:104:TYR:OH	8:n:134:ARG:HA	2.12	0.49
10:p:261:SER:HB3	48:D:225:LEU:HB3	1.94	0.49
45:i:129:LEU:HD12	45:i:130:GLU:N	2.27	0.49
46:B:1783:C:H6	73:c:7:SER:HB3	1.78	0.49
49:E:85:THR:OG1	49:E:88:GLY:O	2.23	0.49
59:O:35:SER:HA	59:O:126:TRP:HH2	1.78	0.49
63:S:124:GLU:HG2	63:S:133:ALA:HB1	1.94	0.49
1:AS:388:G:OP1	83:AS:3402:PAR:H12	2.13	0.49
1:AS:1077:U:H5'	1:AS:1078:U:C5	2.46	0.49
1:AS:1556:G:O2'	1:AS:1557:U:H5'	2.12	0.49
1:AS:2391:A:H2'	1:AS:2392:G:C8	2.47	0.49
1:AS:2646:A:H5''	13:BF:105:GLY:HA3	1.95	0.49
7:AZ:6:GLU:OE1	7:AZ:7:PHE:N	2.44	0.49
14:BG:136:ALA:O	14:BG:138:PHE:N	2.46	0.49
25:BR:101:ARG:HG3	53:CT:150:GLU:OE2	2.12	0.49
28:BU:22:LYS:NZ	28:BU:129:TRP:O	2.41	0.49
46:CM:1205:C:H2'	46:CM:1206:A:H8	1.78	0.49
60:DA:67:THR:OG1	60:DA:68:GLY:N	2.46	0.49
64:DE:96:THR:HG21	64:DE:99:GLN:O	2.13	0.49
69:DJ:18:GLU:OE2	69:DJ:67:GLY:HA2	2.13	0.49
71:DL:60:PHE:CD1	71:DL:71:GLY:HA3	2.47	0.49
80:l1:1:MET:SD	80:l1:2:SER:N	2.86	0.49
1:1:3142:A:H1'	17:w:102:ARG:HH21	1.77	0.49
17:w:9:VAL:HG12	17:w:118:ARG:HG3	1.94	0.49
21:0:155:ARG:HE	21:0:172:TYR:HB2	1.77	0.49
26:8:43:SER:O	26:8:43:SER:OG	2.27	0.49
33:AF:60:SER:HB2	33:AF:65:LYS:HG3	1.94	0.49
46:B:213:A:O2'	46:B:816:U:OP1	2.24	0.49
46:B:415:A:H4'	46:B:416:G:O5'	2.12	0.49
46:B:1584:A:C8	76:f:14:PHE:HD1	2.31	0.49
63:S:112:ASP:HB3	63:S:115:LEU:CD1	2.43	0.49
64:T:71:PHE:HE1	64:T:74:GLN:N	2.10	0.49
1:AS:125:U:OP1	16:BI:144:ARG:NH1	2.37	0.49
1:AS:756:G:O2'	1:AS:766:G:N2	2.45	0.49
1:AS:785:A:H2'	1:AS:786:U:H6	1.78	0.49
1:AS:787:A:H2'	1:AS:788:G:H8	1.78	0.49
1:AS:911:A:H8	1:AS:2114:C:O2'	1.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:951:U:H2'	1:AS:952:U:C6	2.48	0.49
1:AS:1376:G:OP1	6:AY:192:LYS:HG3	2.12	0.49
1:AS:1718:U:H5''	20:BM:99:LEU:HD23	1.95	0.49
1:AS:2771:A:O2'	29:BV:42:ARG:NH1	2.46	0.49
5:AX:57:VAL:HG12	5:AX:357:LYS:HB2	1.94	0.49
46:CM:237:C:H41	46:CM:819:G:H2'	1.78	0.49
46:CM:338:U:H2'	46:CM:339:A:C8	2.47	0.49
46:CM:921:G:OP1	46:CM:1059:G:N2	2.34	0.49
46:CM:1022:C:O2	69:DJ:16:ASN:ND2	2.46	0.49
46:CM:1446:A:H1'	45:CL:74:ALA:CB	2.38	0.49
46:CM:1772:U:H2'	46:CM:1773:G:H8	1.77	0.49
47:CN:49:ASN:HD22	64:DE:109:LEU:HD11	1.78	0.49
1:1:547:U:H2'	1:1:548:G:H8	1.78	0.49
1:1:1020:G:H3'	1:1:1021:A:H5''	1.93	0.49
1:1:1834:C:H4'	1:1:1835:A:O4'	2.12	0.49
1:1:2220:A:H5''	4:j:244:GLY:HA3	1.94	0.49
1:1:3146:G:OP1	34:AG:6:ARG:NE	2.45	0.49
2:3:3:U:H2'	2:3:4:U:C6	2.48	0.49
6:l:143:VAL:HG11	6:l:149:LEU:HD11	1.94	0.49
46:B:4:C:H5	46:B:20:G:H1	1.60	0.49
46:B:824:U:OP2	58:N:28:ASN:ND2	2.46	0.49
46:B:857:G:H2'	46:B:858:U:O4'	2.13	0.49
46:B:915:A:H2'	48:D:114:VAL:HG11	1.95	0.49
47:C:179:ARG:HH21	47:C:183:ARG:HH12	1.60	0.49
52:H:63:GLN:NE2	52:H:66:ASN:H	2.11	0.49
54:J:156:THR:HA	54:J:159:ASP:OD2	2.13	0.49
1:AS:606:A:C5	8:BA:21:ARG:HD3	2.48	0.49
1:AS:1743:G:H5''	39:CF:42:LYS:HE2	1.94	0.49
6:AY:360:VAL:HG22	21:BN:64:ILE:HG12	1.95	0.49
13:BF:92:ARG:HG2	13:BF:94:LYS:H	1.77	0.49
46:CM:1128:A:O2'	46:CM:1285:A:N1	2.41	0.49
46:CM:1302:C:O2'	46:CM:1386:A:N3	2.38	0.49
79:DT:214:ASP:N	79:DT:214:ASP:OD1	2.42	0.49
80:l1:15:LYS:HD2	80:l1:214:PHE:HE1	1.74	0.49
1:1:70:A:P	29:AB:67:HIS:HE2	2.36	0.49
1:1:185:U:H3	1:1:229:C:H42	1.61	0.49
1:1:788:G:H2'	1:1:789:C:C6	2.47	0.49
1:1:2158:A:H2'	1:1:2159:C:C6	2.47	0.49
1:1:2428:G:H2'	1:1:2429:G:C8	2.47	0.49
3:4:9:A:H2'	3:4:10:A:C8	2.48	0.49
46:B:156:U:O2'	46:B:157:U:H3'	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:B:265:U:H2'	46:B:266:C:H6	1.78	0.49
46:B:721:C:O2'	46:B:722:A:H8	1.93	0.49
46:B:786:G:H21	69:Y:107:SER:HB3	1.78	0.49
46:B:1213:G:H1'	78:h:141:LYS:HZ3	1.78	0.49
46:B:1241:A:H5'	46:B:1242:U:C6	2.48	0.49
46:B:1399:U:OP2	64:T:3:ARG:NH2	2.46	0.49
46:B:1553:U:H5''	65:U:39:GLY:H	1.78	0.49
46:B:1753:A:H61	73:c:80:HIS:HA	1.78	0.49
46:B:1774:C:H2'	46:B:1775:G:C8	2.48	0.49
47:C:10:THR:HG23	47:C:13:ASP:H	1.77	0.49
52:H:98:MET:HB2	52:H:103:ASN:O	2.13	0.49
59:O:107:ASP:HB3	59:O:113:ARG:HG2	1.93	0.49
60:P:54:LEU:HB3	60:P:60:VAL:HB	1.92	0.49
61:Q:12:ALA:HB3	61:Q:76:ILE:HD13	1.95	0.49
65:U:91:ASP:OD1	65:U:92:GLN:N	2.45	0.49
78:h:172:ILE:C	78:h:173:PHE:HD1	2.21	0.49
1:AS:671:U:H2'	1:AS:672:G:C8	2.48	0.49
1:AS:1165:A:H2'	1:AS:1166:A:C8	2.48	0.49
1:AS:2415:G:C6	1:AS:2489:A:C5	3.01	0.49
1:AS:2546:U:H5'	1:AS:2547:G:O4'	2.12	0.49
8:BA:39:LEU:HD13	8:BA:83:VAL:HG11	1.95	0.49
8:BA:55:LYS:NZ	8:BA:97:VAL:O	2.34	0.49
22:BO:8:ARG:HG2	22:BO:11:THR:OG1	2.13	0.49
35:CB:67:LYS:O	35:CB:71:THR:HG22	2.13	0.49
46:CM:237:C:C5	46:CM:820:U:H5'	2.47	0.49
46:CM:1003:U:OP1	60:DA:107:LYS:NZ	2.46	0.49
46:CM:1016:U:H4'	46:CM:1017:G:OP2	2.13	0.49
48:CO:168:MET:O	48:CO:172:MET:HG3	2.13	0.49
64:DE:75:GLU:O	64:DE:79:GLU:HG3	2.13	0.49
1:1:164:U:H2'	1:1:165:C:H6	1.77	0.48
1:1:242:C:O2'	1:1:243:G:H8	1.96	0.48
1:1:2434:A:H2'	1:1:2435:G:O4'	2.13	0.48
1:1:2481:G:H2'	1:1:2482:U:H6	1.78	0.48
1:1:2663:A:O2'	1:1:2664:A:OP1	2.29	0.48
1:1:3150:A:C4	17:w:115:LYS:HA	2.48	0.48
46:B:29:U:H2'	46:B:30:G:C8	2.48	0.48
46:B:70:C:OP2	53:I:164:LYS:NZ	2.46	0.48
46:B:391:C:H2'	46:B:392:C:C6	2.48	0.48
46:B:511:U:H2'	46:B:512:G:C8	2.47	0.48
46:B:946:U:H5''	60:P:71:ILE:HD12	1.95	0.48
46:B:1099:G:O2'	46:B:1115:G:O6	2.27	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:C:70:ALA:HB2	47:C:185:ARG:HH22	1.78	0.48
52:H:103:ASN:HA	52:H:106:LYS:HD2	1.94	0.48
59:O:28:LEU:HA	59:O:31:VAL:HG22	1.93	0.48
1:AS:293:C:O2'	37:CD:75:ARG:NE	2.30	0.48
1:AS:1018:U:C2'	1:AS:1019:U:H5''	2.42	0.48
1:AS:3171:C:H5''	1:AS:3172:U:O5'	2.14	0.48
14:BG:100:ARG:O	14:BG:102:GLN:NE2	2.45	0.48
21:BN:42:TRP:O	21:BN:46:GLN:HG3	2.13	0.48
23:BP:53:ASP:O	23:BP:68:VAL:HA	2.13	0.48
46:CM:220:A:OP2	46:CM:818:U:O2'	2.22	0.48
46:CM:913:U:H2'	46:CM:930:U:OP2	2.13	0.48
49:CP:220:LEU:HD23	69:DJ:68:ARG:HA	1.93	0.48
51:CR:123:LEU:HD23	51:CR:159:THR:HG21	1.94	0.48
80:I1:99:LEU:O	80:I1:103:LEU:N	2.43	0.48
1:1:941:C:H2'	1:1:942:U:H6	1.78	0.48
1:1:1807:G:H2'	1:1:1808:G:O4'	2.14	0.48
1:1:2992:U:H2'	1:1:3005:A:H61	1.77	0.48
83:1:3459:PAR:N64	83:1:3459:PAR:O44	2.46	0.48
46:B:470:U:O2'	46:B:754:A:N3	2.34	0.48
46:B:652:C:H5''	46:B:653:G:H8	1.78	0.48
46:B:699:U:C2	46:B:723:G:N2	2.82	0.48
46:B:700:G:HO2'	46:B:701:G:P	2.32	0.48
60:P:83:GLU:OE1	60:P:83:GLU:N	2.44	0.48
68:X:4:ASP:OD1	68:X:5:LYS:N	2.46	0.48
1:AS:169:G:C6	1:AS:249:G:H1'	2.48	0.48
1:AS:401:U:H1'	1:AS:403:C:C4	2.48	0.48
1:AS:699:G:H2'	1:AS:700:C:C6	2.48	0.48
1:AS:941:C:H2'	1:AS:942:U:C6	2.48	0.48
1:AS:2115:U:OP2	1:AS:2120:A:N6	2.42	0.48
1:AS:2584:U:H2'	1:AS:2585:U:O4'	2.13	0.48
1:AS:2854:U:H2'	1:AS:2855:U:C6	2.47	0.48
1:AS:3082:C:H2'	1:AS:3083:U:C6	2.48	0.48
9:BB:118:THR:H	9:BB:121:THR:HG1	1.59	0.48
14:BG:127:ASP:OD1	14:BG:128:LYS:N	2.40	0.48
46:CM:302:U:H2'	46:CM:303:C:C6	2.48	0.48
46:CM:384:G:OP2	55:CV:25:ARG:NH2	2.42	0.48
46:CM:560:G:H2'	46:CM:561:U:O2	2.12	0.48
46:CM:1155:G:C2	46:CM:1156:A:C8	3.02	0.48
46:CM:1193:A:H8	46:CM:1254:U:H6	1.60	0.48
46:CM:1440:G:H4'	62:DC:122:THR:HB	1.96	0.48
62:DC:126:VAL:O	62:DC:127:ARG:HD2	2.12	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:DD:28:ILE:HG22	63:DD:35:ILE:HG21	1.95	0.48
80:11:34:LEU:HD21	80:11:183:ILE:HG23	1.94	0.48
80:11:214:PHE:O	80:11:214:PHE:HD1	1.96	0.48
1:1:2290:A:O2'	1:1:2293:G:N3	2.40	0.48
1:1:2919:G:N3	5:k:250:ALA:HB1	2.28	0.48
1:1:3171:C:H5''	1:1:3172:U:O5'	2.13	0.48
1:1:3190:C:H2'	1:1:3191:A:H8	1.78	0.48
5:k:123:TYR:CZ	5:k:124:LYS:HG3	2.49	0.48
23:5:19:VAL:C	23:5:21:ALA:H	2.22	0.48
25:7:80:ARG:NH2	46:B:163:G:O2'	2.46	0.48
46:B:30:G:H2'	46:B:31:C:C6	2.48	0.48
46:B:481:A:H2	46:B:504:A:C6	2.31	0.48
46:B:1262:G:O3'	50:F:184:GLY:HA3	2.13	0.48
46:B:1566:U:H2'	46:B:1567:C:C6	2.48	0.48
52:H:57:SER:OG	52:H:167:ARG:NH2	2.44	0.48
65:U:126:ARG:HB2	65:U:133:VAL:HG12	1.96	0.48
1:AS:679:U:O2	1:AS:694:C:N4	2.33	0.48
22:BO:45:ASN:H	22:BO:95:HIS:CD2	2.31	0.48
33:BZ:97:ILE:HG21	33:BZ:106:ARG:HG3	1.95	0.48
46:CM:25:C:H4'	46:CM:26:A:O5'	2.13	0.48
46:CM:69:G:P	71:DL:123:ARG:HH12	2.36	0.48
46:CM:862:G:N2	60:DA:110:ASP:OD2	2.32	0.48
46:CM:1326:A:O2'	79:DT:103:ARG:NH1	2.46	0.48
49:CP:78:ILE:HD11	49:CP:120:ILE:HD11	1.95	0.48
56:CW:31:ALA:HB2	56:CW:42:ILE:HD11	1.95	0.48
57:CX:4:PRO:HG2	57:CX:7:ASP:HB2	1.95	0.48
59:CZ:59:LEU:HD22	59:CZ:133:ARG:NH1	2.29	0.48
62:DC:127:ARG:HD3	45:CL:69:PHE:HB3	1.94	0.48
65:DF:92:GLN:HE21	65:DF:115:ARG:NH2	2.11	0.48
68:DI:36:ILE:HG13	68:DI:51:ILE:HB	1.94	0.48
81:12:133:LEU:O	81:12:137:GLN:HG2	2.13	0.48
1:1:792:U:H2'	1:1:793:U:C6	2.48	0.48
1:1:2130:A:H2'	1:1:2131:U:C6	2.48	0.48
1:1:2481:G:H2'	1:1:2482:U:C6	2.48	0.48
1:1:2992:U:H2'	1:1:3005:A:N6	2.29	0.48
1:1:3153:A:H2	1:1:3158:G:H4'	1.78	0.48
3:4:37:A:H5''	3:4:39:G:O4'	2.14	0.48
14:t:83:VAL:HG23	14:t:85:ILE:HG13	1.95	0.48
46:B:444:A:N6	46:B:459:G:H21	2.12	0.48
46:B:770:C:H6	46:B:770:C:OP1	1.96	0.48
46:B:809:G:H2'	46:B:810:U:H6	1.78	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:B:1214:G:N2	46:B:1240:G:O2'	2.45	0.48
46:B:1354:U:C2	46:B:1355:A:N7	2.81	0.48
62:R:68:GLU:N	62:R:69:PRO:HD3	2.29	0.48
64:T:71:PHE:CE1	64:T:74:GLN:HB2	2.48	0.48
1:AS:582:G:H2'	1:AS:583:A:C8	2.49	0.48
1:AS:1311:U:H4'	1:AS:1313:A:C4	2.49	0.48
1:AS:1937:C:O2'	1:AS:3309:A:N6	2.46	0.48
1:AS:2680:C:H2'	1:AS:2681:C:H6	1.78	0.48
1:AS:3261:A:H2'	1:AS:3262:U:C6	2.47	0.48
2:AT:19:C:H2'	2:AT:20:A:C8	2.48	0.48
16:BI:116:LEU:O	16:BI:159:ARG:NH1	2.42	0.48
29:BV:28:HIS:CD2	29:BV:32:ARG:HG2	2.47	0.48
33:BZ:33:TRP:CH2	33:BZ:53:GLN:HG2	2.48	0.48
34:CA:16:TYR:OH	34:CA:89:LEU:O	2.21	0.48
34:CA:48[A]:ARG:HG3	34:CA:104:PRO:HD3	1.95	0.48
46:CM:1102:U:H2'	46:CM:1103:G:C8	2.49	0.48
46:CM:1262:G:H5'	50:CQ:141:GLY:HA2	1.95	0.48
46:CM:1546:G:C5	65:DF:134:ARG:HD3	2.49	0.48
46:CM:1628:C:H2'	46:CM:1629:G:C8	2.49	0.48
50:CQ:117:ARG:CG	45:CL:108:GLY:HA3	2.43	0.48
54:CU:92:ARG:CZ	54:CU:120:LYS:HB3	2.44	0.48
63:DD:93:GLN:HB2	63:DD:101:LYS:HG3	1.95	0.48
1:1:148:U:OP2	16:v:49:ARG:NH2	2.41	0.48
1:1:514:G:OP2	1:1:514:G:N2	2.34	0.48
1:1:657:G:H2'	1:1:1428:C:H42	1.78	0.48
1:1:1174:G:N3	1:1:1324:U:O2'	2.43	0.48
1:1:1600:A:H4'	1:1:1831:A:H4'	1.95	0.48
1:1:1713:U:H2'	1:1:1714:G:H8	1.75	0.48
1:1:2740:U:H2'	1:1:2741:A:C8	2.48	0.48
1:1:3241:G:N2	18:x:172:GLN:HE21	2.11	0.48
35:AH:21:LYS:HG2	35:AH:22:VAL:N	2.28	0.48
46:B:219:A:H3'	46:B:818:U:O2	2.13	0.48
46:B:1498:G:H2'	46:B:1499:G:H8	1.76	0.48
49:E:53:LEU:O	68:X:15:ARG:NE	2.44	0.48
59:O:36:LEU:C	59:O:38:HIS:N	2.71	0.48
65:U:41:ARG:HD2	66:V:46:PRO:HD3	1.94	0.48
75:e:60:GLU:OE1	75:e:60:GLU:N	2.45	0.48
1:AS:158:A:H2'	1:AS:159:A:C8	2.48	0.48
1:AS:275:U:H2'	1:AS:276:U:C6	2.48	0.48
1:AS:1189:A:H2'	1:AS:1190:G:C8	2.49	0.48
1:AS:1794:A:H2'	1:AS:1795:A:C8	2.48	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:2560:U:OP1	10:BC:242:LYS:NZ	2.37	0.48
1:AS:2814:U:H2'	1:AS:2814:U:O2	2.13	0.48
23:BP:33:TYR:O	23:BP:37:LEU:HD23	2.13	0.48
23:BP:99:VAL:HG12	23:BP:107:LYS:O	2.14	0.48
46:CM:391:C:H2'	46:CM:392:C:C6	2.48	0.48
46:CM:515:U:C2	46:CM:516:A:C8	3.01	0.48
83:CM:1802:PAR:N21	83:CM:1802:PAR:O43	2.47	0.48
52:CS:187:ILE:HD13	72:DM:66:VAL:HG21	1.95	0.48
56:CW:110:GLN:OE1	56:CW:126:ARG:NH2	2.47	0.48
60:DA:127:ARG:O	60:DA:131:THR:HG23	2.14	0.48
1:1:85:G:O2'	1:1:97:G:O6	2.29	0.48
1:1:624:U:H2'	1:1:625:C:C6	2.48	0.48
1:1:3185:G:C6	1:1:3231:G:C6	3.01	0.48
1:1:3323:U:H2'	1:1:3324:A:H8	1.78	0.48
2:3:107:A:H2'	2:3:108:U:C6	2.48	0.48
4:j:112:ILE:HG13	44:AQ:79:VAL:HG22	1.94	0.48
8:n:165:LEU:HD11	34:AG:102:LEU:HD11	1.96	0.48
19:y:89:ASP:OD1	19:y:90:ASP:N	2.46	0.48
25:7:80:ARG:HE	53:I:131:LYS:HG2	1.78	0.48
46:B:830:G:C6	46:B:831:G:C2	3.01	0.48
46:B:1140:G:H2'	46:B:1141:C:C6	2.48	0.48
46:B:1396:A:O2'	46:B:1397:A:OP1	2.27	0.48
50:F:68:HIS:NE2	57:M:94:ASN:HB3	2.29	0.48
64:T:99:GLN:HB2	64:T:118:PRO:O	2.13	0.48
70:Z:63:GLN:OE1	70:Z:64:PRO:HA	2.14	0.48
78:h:160:ARG:HG2	78:h:173:PHE:HB3	1.95	0.48
79:AR:88:ARG:HA	79:AR:111:VAL:HG23	1.95	0.48
1:AS:249:G:H2'	1:AS:251:G:OP2	2.13	0.48
1:AS:374:A:N3	1:AS:376:G:H5''	2.29	0.48
1:AS:730:A:H2'	1:AS:731:U:H2'	1.95	0.48
1:AS:1067:U:H3	1:AS:1083:G:H1	1.62	0.48
1:AS:1186:A:H2'	1:AS:1186:A:N3	2.28	0.48
1:AS:1632:C:O2'	28:BU:79:HIS:ND1	2.41	0.48
1:AS:3197:G:H2'	1:AS:3198:C:C6	2.48	0.48
3:AU:38:U:OP2	36:CC:78:LYS:NZ	2.33	0.48
42:CI:2:ARG:NH1	42:CI:4:LYS:HB3	2.29	0.48
43:CJ:99:GLN:HB3	43:CJ:102:GLN:OE1	2.14	0.48
46:CM:107:C:OP1	46:CM:381:G:O2'	2.29	0.48
46:CM:203:U:C2	46:CM:204:A:C8	3.02	0.48
46:CM:267:G:H2'	46:CM:268:C:H6	1.78	0.48
46:CM:1306:A:H4'	46:CM:1307:A:O5'	2.14	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
60:DA:26:PHE:HZ	60:DA:60:VAL:HG22	1.78	0.48
60:DA:62:GLN:HB2	60:DA:65:VAL:HG22	1.96	0.48
1:1:715:C:OP1	1:1:747:A:O2'	2.30	0.48
1:1:1180:A:H2'	1:1:1181:C:C6	2.49	0.48
1:1:2068:U:H4'	1:1:2069:U:H5'	1.95	0.48
1:1:2090:U:H4'	1:1:2091:A:O5'	2.14	0.48
1:1:2766:G:N3	84:1:3463:3K5:H1	2.29	0.48
10:p:201:LEU:HD23	10:p:203:GLU:H	1.78	0.48
14:t:164:PRO:O	29:AB:139:ARG:NH2	2.43	0.48
28:AA:87:LEU:HD11	28:AA:121:LYS:HD2	1.96	0.48
41:AN:22:LYS:HG3	41:AN:39:CYS:CB	2.43	0.48
46:B:17:C:H2'	46:B:18:C:H6	1.79	0.48
46:B:122:U:C2'	46:B:123:G:H5''	2.43	0.48
46:B:165:U:H2'	46:B:166:A:H5''	1.94	0.48
46:B:327:G:H2'	46:B:328:G:H8	1.79	0.48
47:C:49:ASN:HD22	47:C:52:LYS:HG3	1.79	0.48
52:H:81:ARG:HH11	52:H:82:PHE:HE2	1.62	0.48
60:P:127:ARG:O	60:P:131:THR:HG23	2.14	0.48
1:AS:412:G:H2'	1:AS:413:U:C6	2.49	0.48
1:AS:445:A:H2'	1:AS:446:U:C6	2.49	0.48
1:AS:976:A:C2'	1:AS:977:U:H5'	2.39	0.48
1:AS:1773:U:H4'	1:AS:2077:A:H4'	1.94	0.48
1:AS:2557:G:N3	1:AS:2557:G:H2'	2.29	0.48
21:BN:5:ASN:HB2	21:BN:7:TYR:CE1	2.49	0.48
31:BX:20:ILE:HG13	31:BX:83:CYS:HA	1.96	0.48
46:CM:472:A:H5''	56:CW:144:PRO:HD2	1.95	0.48
46:CM:623:C:H2'	46:CM:624:U:C6	2.49	0.48
46:CM:857:G:N2	46:CM:1032:G:H4'	2.29	0.48
46:CM:982:G:C6	46:CM:993:G:C6	3.01	0.48
49:CP:145:GLN:O	49:CP:169:ARG:NH2	2.46	0.48
62:DC:98:ASN:ND2	62:DC:101:VAL:HG12	2.27	0.48
1:1:277:G:H2'	1:1:278:U:C6	2.48	0.48
1:1:689:A:N1	3:4:28:C:O2'	2.39	0.48
1:1:907:C:OP1	4:j:14:SER:OG	2.31	0.48
1:1:1560:U:H3	1:1:1571:G:H22	1.62	0.48
1:1:1829:G:H5''	40:AM:10:LYS:HD2	1.96	0.48
1:1:3193:C:H4'	1:1:3194:G:O5'	2.14	0.48
12:r:5:PRO:HB2	12:r:7:ARG:HG2	1.95	0.48
46:B:30:G:OP1	70:Z:126:LYS:NZ	2.46	0.48
46:B:338:U:H2'	46:B:339:A:H8	1.79	0.48
46:B:648:U:H2'	46:B:649:G:H8	1.76	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:B:1307:A:O2'	47:C:104:PRO:HG2	2.14	0.48
46:B:1491:G:H5'	66:V:97:SER:HA	1.96	0.48
46:B:1636:C:H2'	46:B:1637:U:C6	2.49	0.48
47:C:147:THR:CG2	47:C:159:ALA:HB1	2.43	0.48
48:D:83:LYS:NZ	48:D:105:PHE:O	2.46	0.48
52:H:194:LEU:O	52:H:198:LEU:HG	2.13	0.48
74:d:36:LYS:O	74:d:77:CYS:HA	2.13	0.48
78:h:160:ARG:O	78:h:161:ARG:C	2.57	0.48
1:AS:289:A:H2'	1:AS:290:G:C8	2.48	0.48
1:AS:1780:A:OP1	35:CB:19:LYS:NZ	2.47	0.48
1:AS:2236:U:C2	1:AS:2237:A:C8	3.02	0.48
1:AS:2646:A:C2	13:BF:124:GLY:HA3	2.49	0.48
1:AS:3233:A:OP1	8:BA:45:ARG:NH2	2.43	0.48
2:AT:39:U:O2'	13:BF:43:GLN:HB3	2.13	0.48
10:BC:160:PRO:HB2	10:BC:162:GLU:OE1	2.14	0.48
12:BE:31:ILE:HA	12:BE:66:GLU:OE1	2.14	0.48
18:BK:49:ASP:OD1	18:BK:92:LYS:NZ	2.40	0.48
25:BR:83:VAL:HG11	46:CM:68:A:C2	2.48	0.48
42:CI:21:ARG:NH1	46:CM:1640:C:O3'	2.46	0.48
46:CM:85:A:N3	46:CM:146:A:O2'	2.39	0.48
46:CM:789:U:O4	54:CU:100:ARG:NH2	2.33	0.48
46:CM:1092:G:O2'	46:CM:1093:G:H5'	2.14	0.48
46:CM:1199:U:OP1	46:CM:1231:C:H1'	2.14	0.48
48:CO:64:ARG:CZ	61:DB:31:LYS:HB2	2.43	0.48
62:DC:98:ASN:HD21	62:DC:101:VAL:HG12	1.78	0.48
1:1:1589:A:O4'	35:AH:60:ARG:HD3	2.14	0.48
1:1:2467:C:H3'	1:1:2468:C:H2'	1.94	0.48
1:1:2546:U:H5'	1:1:2547:G:O4'	2.13	0.48
1:1:2681:C:H2'	1:1:2682:C:C6	2.49	0.48
17:w:62:ALA:HA	17:w:71:PRO:HD2	1.96	0.48
46:B:1072:A:H2'	46:B:1073:A:C8	2.49	0.48
55:K:190:LEU:HB3	55:K:195:LEU:HB2	1.96	0.48
59:O:27:ALA:HB1	59:O:132:GLU:CG	2.44	0.48
65:U:4:VAL:HG22	72:b:82:GLN:OE1	2.14	0.48
68:X:58:TYR:OH	69:Y:20:THR:HA	2.14	0.48
70:Z:107:PHE:CD2	70:Z:114:LYS:HD3	2.48	0.48
1:AS:164:U:H2'	1:AS:165:C:H6	1.79	0.48
1:AS:716:G:O2'	1:AS:717:A:OP1	2.28	0.48
1:AS:2718:A:H5'	7:AZ:178:ASN:OD1	2.14	0.48
1:AS:2766:G:C2	84:AS:3405:3K5:H1	2.49	0.48
1:AS:3259:A:H2'	1:AS:3260:A:O4'	2.14	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AU:37:A:H5''	3:AU:39:G:O4'	2.13	0.48
3:AU:126:A:O2'	3:AU:129:C:N4	2.47	0.48
46:CM:64:U:H2'	46:CM:65:A:H5''	1.96	0.48
46:CM:642:C:H2'	46:CM:643:U:H6	1.79	0.48
46:CM:652:C:H5''	46:CM:653:G:C8	2.44	0.48
46:CM:1369:G:O2'	46:CM:1370:A:H8	1.96	0.48
53:CT:162:VAL:O	53:CT:168:THR:OG1	2.16	0.48
55:CV:74:ARG:HB2	55:CV:109:PHE:CE1	2.48	0.48
61:DB:50:SER:O	61:DB:91:PRO:HG2	2.14	0.48
68:DI:38:LYS:HD3	68:DI:49:GLU:HG3	1.94	0.48
78:DS:162:GLU:HA	78:DS:173:PHE:HA	1.96	0.48
80:l1:143:ASP:HB2	80:l1:146:SER:HB2	1.95	0.48
1:1:179:C:H2'	1:1:180:U:H6	1.79	0.48
1:1:394:G:N1	1:1:397:A:OP2	2.47	0.48
1:1:634:C:O2	1:1:2355:G:O2'	2.23	0.48
1:1:972:U:H2'	1:1:973:C:O4'	2.14	0.48
1:1:1130:G:O2'	1:1:2614:A:N3	2.39	0.48
1:1:1509:G:OP1	20:z:5:ARG:NH1	2.47	0.48
1:1:1810:A:H4'	1:1:1811:U:O4'	2.14	0.48
1:1:2713:C:O2	43:AP:20:HIS:HE1	1.97	0.48
4:j:117:GLU:OE1	4:j:121:GLY:N	2.42	0.48
6:l:42:ARG:HD2	6:l:114:VAL:HG22	1.95	0.48
16:v:73:ARG:NH1	16:v:86:ASN:O	2.47	0.48
28:AA:4:PHE:O	28:AA:9:LYS:NZ	2.47	0.48
44:AQ:84:ARG:O	44:AQ:88:GLU:HG2	2.14	0.48
46:B:1369:G:O2'	46:B:1370:A:H8	1.97	0.48
46:B:1628:C:H2'	46:B:1629:G:C8	2.48	0.48
51:G:63:ALA:O	51:G:67:GLN:HG2	2.14	0.48
52:H:157:ARG:HB3	52:H:224:ASN:OD1	2.14	0.48
57:M:18:GLU:H	57:M:89:LEU:HB2	1.78	0.48
66:V:57:ARG:NH2	66:V:101:ASN:OD1	2.35	0.48
1:AS:130:U:H2'	1:AS:131:C:H6	1.78	0.48
1:AS:545:G:O5'	1:AS:546:C:H4'	2.13	0.48
1:AS:554:U:O2'	83:AS:3406:PAR:N21	2.47	0.48
1:AS:694:C:H2'	1:AS:695:G:C8	2.49	0.48
1:AS:716:G:H3'	1:AS:717:A:H5''	1.96	0.48
1:AS:785:A:H2'	1:AS:786:U:C6	2.49	0.48
1:AS:2242:U:H2'	1:AS:2243:C:H6	1.78	0.48
7:AZ:84:PRO:HG3	7:AZ:89:LYS:HA	1.96	0.48
7:AZ:235:ASP:OD1	7:AZ:235:ASP:N	2.47	0.48
13:BF:77:GLU:OE1	13:BF:166:ARG:NH2	2.47	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BP:80:LYS:HG3	23:BP:98:PHE:CD1	2.48	0.48
46:CM:17:C:H2'	46:CM:18:C:H6	1.79	0.48
46:CM:295:U:O2'	51:CR:33:ALA:HA	2.14	0.48
46:CM:1457:A:H2	46:CM:1460:G:N3	2.12	0.48
47:CN:157:ASP:O	68:DI:66:ASP:HA	2.13	0.48
59:CZ:64:ASP:OD2	59:CZ:90:LYS:NZ	2.39	0.48
1:1:413:U:H2'	1:1:414:U:H6	1.79	0.47
1:1:1936:G:N2	1:1:3327:A:H8	2.04	0.47
1:1:2335:A:H2'	1:1:2336:A:H8	1.78	0.47
1:1:2535:A:OP1	4:j:69:TYR:OH	2.27	0.47
1:1:2636:C:O2'	1:1:2637:U:H5'	2.14	0.47
1:1:2853:C:H2'	1:1:2854:U:H6	1.77	0.47
1:1:3066:A:H2'	1:1:3067:U:C6	2.49	0.47
3:4:78:G:H2'	3:4:79:A:N3	2.28	0.47
11:q:47:LYS:HB2	15:u:5:VAL:HB	1.96	0.47
11:q:89:LYS:HB2	11:q:183:GLU:HB3	1.96	0.47
17:w:59:LEU:HD23	17:w:73:HIS:CD2	2.49	0.47
46:B:753:C:C2	56:L:143:ILE:HG21	2.49	0.47
46:B:1512:A:H4'	66:V:83:ALA:HB2	1.95	0.47
46:B:1551:U:H2'	46:B:1552:C:H6	1.79	0.47
79:AR:26:THR:HG23	79:AR:29:HIS:H	1.78	0.47
1:AS:46:C:H5''	14:BG:16:LYS:HG2	1.95	0.47
1:AS:122:A:C6	1:AS:149:A:C5	3.02	0.47
1:AS:352:A:N1	1:AS:365:A:H5''	2.30	0.47
1:AS:559:C:H2'	1:AS:560:C:H6	1.78	0.47
1:AS:565:A:H2'	1:AS:566:C:H6	1.78	0.47
1:AS:602:A:H2'	1:AS:603:C:C6	2.49	0.47
1:AS:1176:A:C4	1:AS:1178:G:C8	3.02	0.47
1:AS:1882:A:O2'	5:AX:226:PHE:O	2.30	0.47
1:AS:3244:A:O2'	1:AS:3245:A:H5'	2.13	0.47
1:AS:3323:U:H2'	1:AS:3324:A:H8	1.78	0.47
21:BN:7:TYR:HE2	21:BN:34:THR:HG22	1.79	0.47
30:BW:28:LYS:HG2	30:BW:29:TYR:CE1	2.49	0.47
35:CB:57:LEU:HB3	35:CB:61:GLN:HB2	1.96	0.47
46:CM:636:C:O2'	54:CU:108:ARG:NH2	2.47	0.47
46:CM:1148:A:H2'	46:CM:1149:G:O4'	2.13	0.47
56:CW:30:LEU:HD11	56:CW:105:LEU:HD13	1.96	0.47
72:DM:42:LEU:HD21	72:DM:47:TYR:HD1	1.78	0.47
1:1:289:A:H2'	1:1:290:G:C8	2.48	0.47
1:1:538:G:O2'	1:1:539:G:OP1	2.29	0.47
46:B:30:G:H4'	70:Z:131:SER:HB2	1.95	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:B:583:A:H2'	46:B:584:G:H8	1.79	0.47
46:B:1242:U:O2	46:B:1242:U:H2'	2.13	0.47
46:B:1275:U:H2'	46:B:1276:G:H8	1.76	0.47
49:E:134:ILE:HD13	49:E:186:ALA:HB1	1.96	0.47
1:AS:25:A:H2'	1:AS:26:C:H6	1.79	0.47
1:AS:293:C:HO2'	37:CD:75:ARG:HE	1.59	0.47
1:AS:657:G:H2'	1:AS:1428:C:H42	1.79	0.47
1:AS:2498:A:H2'	1:AS:2499:U:C6	2.49	0.47
1:AS:2655:U:H2'	1:AS:2656:C:H6	1.79	0.47
1:AS:3163:U:HO2'	1:AS:3164:U:P	2.37	0.47
5:AX:10:ARG:HH21	5:AX:263:THR:HB	1.79	0.47
46:CM:334:G:O6	55:CV:5:ARG:NH1	2.45	0.47
46:CM:828:U:H5''	46:CM:829:A:OP2	2.15	0.47
46:CM:1029:U:H2'	46:CM:1030:C:C6	2.48	0.47
46:CM:1072:A:H2'	46:CM:1073:A:C8	2.48	0.47
51:CR:59:ARG:HH12	71:DL:87:PRO:HB3	1.79	0.47
62:DC:81:ARG:NH2	62:DC:117:GLY:O	2.47	0.47
71:DL:63:GLN:CD	71:DL:68:LYS:HD3	2.38	0.47
75:DP:35:ASP:O	75:DP:37:SER:N	2.45	0.47
78:DS:158:ARG:HD2	78:DS:162:GLU:OE2	2.14	0.47
80:11:204:LEU:HD22	80:11:217:TYR:CE1	2.49	0.47
1:1:892:A:H5'	4:j:183:GLY:HA2	1.97	0.47
1:1:1182:G:N3	21:0:112:ALA:HB1	2.28	0.47
1:1:1448:A:N3	1:1:2324:C:O2'	2.39	0.47
1:1:3290:G:O3'	32:AE:102:GLY:HA2	2.14	0.47
3:4:26:U:H2'	3:4:27:U:C6	2.49	0.47
6:l:181:LYS:O	6:l:185:SER:HB3	2.15	0.47
46:B:103:A:H4'	46:B:105:A:C8	2.50	0.47
46:B:739:A:H5''	46:B:740:A:C5'	2.45	0.47
46:B:876:A:H2'	46:B:877:G:C8	2.47	0.47
46:B:1132:A:O2'	46:B:1623:C:OP2	2.30	0.47
48:D:115:ARG:HD3	48:D:115:ARG:HA	1.71	0.47
52:H:58:LEU:HD12	52:H:138:VAL:HG12	1.96	0.47
1:AS:157:G:H2'	1:AS:158:A:H8	1.80	0.47
1:AS:252:U:H5'	1:AS:253:A:C8	2.50	0.47
1:AS:478:G:H5''	1:AS:479:C:H5''	1.96	0.47
1:AS:659:G:P	29:BV:12:ARG:HH22	2.37	0.47
1:AS:1552:C:H5''	1:AS:2147:G:N2	2.28	0.47
1:AS:1637:U:O2'	1:AS:1638:A:H3'	2.14	0.47
1:AS:1787:U:H2'	1:AS:1788:C:C6	2.49	0.47
4:AW:180:LEU:HD23	44:CK:18:TYR:CD2	2.49	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:BE:38:ARG:HG2	12:BE:41:ALA:HB2	1.96	0.47
27:BT:11:SER:HB3	27:BT:14:LYS:HB2	1.94	0.47
46:CM:904:A:H2'	46:CM:905:C:H6	1.78	0.47
46:CM:974:U:H2'	46:CM:975:C:C6	2.50	0.47
46:CM:1315:G:C2	46:CM:1316:A:H1'	2.48	0.47
61:DB:20:ASP:OD1	61:DB:49:GLU:HB3	2.14	0.47
64:DE:89:SER:C	64:DE:91:LEU:H	2.23	0.47
66:DG:108:LEU:HA	66:DG:111:ILE:HG22	1.95	0.47
1:1:386:A:C5	1:1:387:A:H1'	2.50	0.47
1:1:1705:C:H2'	1:1:1706:C:C6	2.49	0.47
1:1:2473:C:OP1	80:11:39:LYS:NZ	2.33	0.47
1:1:2504:C:H2'	1:1:2505:G:C8	2.49	0.47
2:3:84:A:H2'	2:3:85:G:C8	2.48	0.47
46:B:644:U:H2'	46:B:645:G:H8	1.78	0.47
46:B:744:U:C2	46:B:745:A:C8	3.03	0.47
46:B:1277:G:H2'	46:B:1278:U:C6	2.50	0.47
46:B:1716:C:H2'	46:B:1717:A:O4'	2.13	0.47
51:G:100:ARG:HG2	51:G:102:VAL:HG13	1.96	0.47
57:M:29:GLN:OE1	57:M:39:ASN:ND2	2.47	0.47
66:V:107:ALA:O	66:V:111:ILE:HG12	2.15	0.47
75:e:19:THR:HG23	75:e:25:VAL:HG13	1.95	0.47
79:AR:19:TRP:HB2	79:AR:38:ARG:HD2	1.96	0.47
1:AS:206:U:H2'	1:AS:207:C:C6	2.49	0.47
1:AS:843:A:H5'	60:DA:123:HIS:CE1	2.50	0.47
2:AT:13:A:H2	7:AZ:21:ARG:HB2	1.80	0.47
4:AW:57:PRO:HG3	44:CK:53:GLY:HA3	1.96	0.47
10:BC:150:LYS:HE3	10:BC:202:THR:O	2.14	0.47
18:BK:29:THR:HA	18:BK:32:THR:HG22	1.96	0.47
46:CM:269:A:C2	46:CM:283:G:C6	3.02	0.47
46:CM:582:C:C4	46:CM:583:A:N7	2.82	0.47
46:CM:1326:A:H5''	79:DT:64:GLY:HA2	1.96	0.47
46:CM:1367:U:O4	46:CM:1368:A:N6	2.48	0.47
46:CM:1539:U:H2'	46:CM:1540:G:C8	2.50	0.47
46:CM:1739:U:H2'	46:CM:1740:A:C8	2.48	0.47
47:CN:79:ARG:O	47:CN:83:GLN:HG3	2.15	0.47
51:CR:123:LEU:HD13	51:CR:237:VAL:HG13	1.97	0.47
51:CR:151:ASP:HB3	51:CR:154:ILE:HG13	1.95	0.47
51:CR:176:ASP:OD1	51:CR:177:THR:N	2.45	0.47
80:11:64:THR:HB	80:11:107:TYR:CD1	2.47	0.47
45:CL:129:LEU:O	45:CL:132:GLU:HG3	2.15	0.47
1:1:126:G:H2'	1:1:127:G:H8	1.80	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:496:A:H2'	1:1:497:U:C6	2.50	0.47
1:1:582:G:H2'	1:1:583:A:C8	2.48	0.47
1:1:1760:U:C5	1:1:1761:U:H1'	2.49	0.47
1:1:1791:U:H2'	4:j:50:HIS:CD2	2.50	0.47
1:1:1801:C:H2'	1:1:1802:A:H8	1.78	0.47
1:1:2418:A:H4'	48:D:53:GLY:HA3	1.96	0.47
1:1:3088:G:H4'	11:q:69:ARG:HH12	1.80	0.47
2:3:26:C:H2'	2:3:27:A:O4'	2.14	0.47
5:k:35:ASP:HA	5:k:184:ASN:OD1	2.15	0.47
9:o:108:GLN:HG3	9:o:111:ALA:HB2	1.96	0.47
15:u:17:ARG:HD2	15:u:61:VAL:HG22	1.95	0.47
46:B:583:A:H2'	46:B:584:G:C8	2.49	0.47
46:B:773:A:OP1	51:G:108:LYS:NZ	2.28	0.47
46:B:1487:C:OP1	66:V:122:ARG:NH2	2.46	0.47
60:P:48:SER:OG	60:P:86:GLU:OE2	2.22	0.47
72:b:42:LEU:HD21	72:b:47:TYR:HD1	1.78	0.47
79:AR:67:HIS:CG	79:AR:68:ILE:H	2.32	0.47
1:AS:907:C:N4	4:AW:3:ARG:HD3	2.29	0.47
1:AS:1017:G:H2'	1:AS:1018:U:H6	1.78	0.47
4:AW:66:PRO:HG2	4:AW:67:TYR:CE2	2.49	0.47
24:BQ:104:ASN:OD1	24:BQ:108:GLU:HG3	2.14	0.47
46:CM:1308:C:H2'	46:CM:1309:G:O4'	2.14	0.47
46:CM:1498:G:H2'	46:CM:1499:G:H8	1.79	0.47
48:CO:136:ARG:NE	48:CO:218:LEU:HD11	2.29	0.47
50:CQ:125:ARG:NH2	45:CL:118:GLU:OE1	2.47	0.47
1:1:94:A:H5''	29:AB:34:LYS:HB2	1.95	0.47
1:1:169:G:N1	1:1:249:G:H1'	2.30	0.47
1:1:422:A:C2	1:1:2341:A:H4'	2.49	0.47
1:1:831:G:HO2'	1:1:853:G:N2	2.11	0.47
1:1:1099:A:H62	1:1:1338:G:N2	2.13	0.47
1:1:1635:C:OP2	35:AH:74:ARG:NH1	2.45	0.47
6:l:352:PRO:HB2	9:o:69:ALA:HB2	1.96	0.47
15:u:21:VAL:HG22	15:u:55:ILE:HG22	1.96	0.47
39:AL:58:ASP:OD1	39:AL:61:LYS:N	2.35	0.47
46:B:68:A:H61	53:I:132:ARG:HG2	1.79	0.47
46:B:291:U:H2'	46:B:292:C:H6	1.80	0.47
46:B:712:A:N3	46:B:712:A:H2'	2.30	0.47
46:B:788:A:C8	69:Y:107:SER:HA	2.50	0.47
78:h:156:VAL:HG22	78:h:158:ARG:HG2	1.96	0.47
1:AS:62:A:N3	1:AS:77:U:O2'	2.43	0.47
1:AS:169:G:N1	1:AS:249:G:H1'	2.30	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:1504:C:HO2'	1:AS:2331:G:HO2'	1.46	0.47
1:AS:1895:G:O2'	1:AS:2312:U:O4	2.30	0.47
1:AS:2557:G:O6	10:BC:48:SER:OG	2.28	0.47
23:BP:17:VAL:HG23	23:BP:64:VAL:HB	1.97	0.47
46:CM:685:C:O2'	46:CM:686:G:OP1	2.27	0.47
46:CM:702:G:H3'	46:CM:702:G:OP2	2.14	0.47
46:CM:886:G:H2'	46:CM:887:G:C8	2.49	0.47
46:CM:1341:U:H2'	46:CM:1342:A:C8	2.50	0.47
46:CM:1469:A:H2'	46:CM:1470:G:C8	2.50	0.47
53:CT:2:LYS:O	53:CT:108:VAL:HA	2.13	0.47
55:CV:76:THR:HG21	55:CV:104:ILE:HD12	1.96	0.47
63:DD:124:GLU:HG3	63:DD:125:PRO:HD2	1.97	0.47
65:DF:129:TRP:CZ2	45:CL:67:LYS:HG3	2.50	0.47
1:1:79:G:H2'	1:1:80:C:H6	1.80	0.47
1:1:377:A:C2	83:1:3460:PAR:H221	2.49	0.47
1:1:448:U:H2'	1:1:449:U:H6	1.80	0.47
1:1:513:G:P	6:l:347:GLN:HE22	2.38	0.47
1:1:629:A:C2	34:AG:91:PRO:HG2	2.50	0.47
1:1:1302:G:C6	17:w:63:THR:HA	2.50	0.47
1:1:1451:U:H1'	32:AE:25:LYS:HE3	1.97	0.47
1:1:1632:C:OP1	28:AA:36:HIS:NE2	2.47	0.47
1:1:1655:U:H2'	1:1:1656:C:C6	2.50	0.47
1:1:2296:U:H2'	1:1:2297:U:O4'	2.15	0.47
1:1:2796:G:H2'	1:1:2797:C:H6	1.79	0.47
1:1:2869:A:H2'	1:1:2871:C:H5''	1.96	0.47
1:1:2888:U:H5	1:1:2907:U:HO2'	1.62	0.47
1:1:3019:U:O2'	1:1:3020:A:H5'	2.15	0.47
2:3:3:U:H2'	2:3:4:U:H6	1.79	0.47
7:m:94:ASN:HB2	7:m:97:ALA:H	1.80	0.47
8:n:20:THR:HG22	8:n:22:LYS:H	1.80	0.47
9:o:70:SER:O	9:o:70:SER:OG	2.29	0.47
11:q:12:ILE:HD11	11:q:53:ILE:HG13	1.97	0.47
13:s:4:LYS:HG3	13:s:6:GLN:H	1.80	0.47
19:y:76:ALA:HA	19:y:79:LYS:HG3	1.97	0.47
25:7:57:ARG:NH2	25:7:61:LYS:O	2.47	0.47
46:B:974:U:H2'	46:B:975:C:C6	2.50	0.47
46:B:985:C:H6	46:B:988:A:H8	1.63	0.47
46:B:1214:G:OP1	78:h:141:LYS:HD2	2.15	0.47
46:B:1529:G:H5''	66:V:87:GLY:C	2.39	0.47
51:G:45:VAL:HA	51:G:61:VAL:HG21	1.97	0.47
52:H:81:ARG:NH1	52:H:82:PHE:CE2	2.83	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:H:165:LEU:HD23	75:e:47:PRO:HG2	1.97	0.47
54:J:48:ASN:OD1	54:J:167:GLN:NE2	2.46	0.47
57:M:11:ILE:HD11	57:M:37:THR:HG21	1.97	0.47
59:O:59:LEU:HD22	59:O:123:VAL:CG2	2.45	0.47
60:P:46:THR:OG1	60:P:49:GLN:HG3	2.15	0.47
61:Q:117:PRO:CB	61:Q:120:SER:HB3	2.45	0.47
1:AS:116:U:O2	1:AS:118:U:H2'	2.15	0.47
1:AS:117:U:O2	1:AS:120:A:H5'	2.15	0.47
1:AS:437:G:O2'	1:AS:438:A:H5''	2.15	0.47
1:AS:632:C:O3'	33:BZ:48:ARG:NH2	2.43	0.47
1:AS:640:U:OP1	29:BV:22:ILE:HG23	2.14	0.47
1:AS:784:C:H2'	1:AS:785:A:H8	1.80	0.47
1:AS:979:A:O3'	9:BB:99:LYS:NZ	2.47	0.47
1:AS:1444:U:H5''	18:BK:66:SER:O	2.13	0.47
1:AS:1787:U:O4	83:AS:3403:PAR:H221	2.14	0.47
1:AS:2648:A:H5'	1:AS:2649:G:C8	2.49	0.47
1:AS:2871:C:C5	11:BD:171:ASP:HA	2.50	0.47
5:AX:217:VAL:HG11	5:AX:328:ILE:HB	1.96	0.47
6:AY:303:ALA:HB2	19:BL:39:ARG:HH12	1.79	0.47
7:AZ:95:TRP:CE3	7:AZ:198:TYR:HB3	2.50	0.47
32:BY:15:LEU:HD11	32:BY:35:ILE:HD11	1.97	0.47
46:CM:78:A:H8	53:CT:154:ARG:HG2	1.78	0.47
46:CM:723:G:C6	46:CM:724:G:H1'	2.48	0.47
46:CM:1026:G:H2'	46:CM:1027:G:H8	1.79	0.47
46:CM:1399:U:OP2	64:DE:3:ARG:NH2	2.48	0.47
46:CM:1548:U:H2'	46:CM:1549:G:H8	1.80	0.47
46:CM:1636:C:H2'	46:CM:1637:U:C6	2.50	0.47
46:CM:1656:U:H2'	46:CM:1657:G:O4'	2.15	0.47
46:CM:1668:A:H1'	53:CT:66:GLY:HA2	1.96	0.47
52:CS:58:LEU:HD12	52:CS:138:VAL:HG12	1.96	0.47
65:DF:22:ILE:HD11	65:DF:35:ILE:HG13	1.95	0.47
80:l1:9:VAL:O	80:l1:13:VAL:HG13	2.14	0.47
1:1:139:U:H2'	1:1:140:C:C6	2.50	0.47
1:1:624:U:H2'	1:1:625:C:H6	1.80	0.47
1:1:690:A:O4'	6:l:47:LYS:HG3	2.14	0.47
1:1:1124:U:H2'	1:1:1125:A:O4'	2.14	0.47
1:1:1468:U:H5'	20:z:4:LEU:HB2	1.96	0.47
1:1:2404:U:H2'	1:1:2405:U:H6	1.80	0.47
1:1:3150:A:OP1	17:w:172:LYS:NZ	2.47	0.47
8:n:7:LYS:H	8:n:10:GLN:HG3	1.80	0.47
20:z:62:ARG:O	20:z:66:LEU:HD23	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:AE:95:VAL:HG12	32:AE:97:VAL:HG13	1.95	0.47
45:i:114:GLU:CD	50:F:117:ARG:HH21	2.23	0.47
46:B:697:U:H2'	46:B:698:C:C5	2.50	0.47
46:B:987:G:N2	46:B:1747:G:O3'	2.47	0.47
48:D:61:LEU:HD21	48:D:96:LEU:HD21	1.97	0.47
59:O:25:GLU:HG2	59:O:26:ASP:N	2.30	0.47
62:R:15:PHE:CE1	62:R:110:GLU:HG3	2.50	0.47
1:AS:2376:A:OP1	1:AS:2845:U:H4'	2.14	0.47
1:AS:2385:C:H2'	1:AS:2386:U:C6	2.50	0.47
1:AS:3315:C:H4'	1:AS:3316:U:OP1	2.15	0.47
4:AW:107:CYS:O	4:AW:139:HIS:NE2	2.45	0.47
11:BD:146:VAL:HG12	11:BD:154:VAL:HG13	1.97	0.47
15:BH:19:VAL:HG11	15:BH:55:ILE:HD12	1.96	0.47
38:CE:21:ARG:HD2	38:CE:37:CYS:SG	2.54	0.47
83:CM:1802:PAR:N64	83:CM:1802:PAR:O44	2.48	0.47
69:DJ:11:LEU:HD12	69:DJ:74:VAL:HG13	1.96	0.47
80:l:92:LYS:HD2	80:l:93:LEU:H	1.80	0.47
1:l:1122:G:H5''	12:r:119:TRP:HZ3	1.79	0.47
1:l:1286:A:H2'	1:l:1287:A:C8	2.50	0.47
1:l:1322:A:O2'	34:AG:77:ASN:OD1	2.24	0.47
1:l:1761:U:H2'	1:l:1762:G:C4'	2.44	0.47
1:l:2466:A:H3'	1:l:2467:C:C5'	2.45	0.47
1:l:2482:U:H2'	1:l:2483:U:H5'	1.97	0.47
1:l:2698:C:O2'	1:l:2699:A:H2'	2.15	0.47
46:B:78:A:H2'	46:B:79:C:C6	2.50	0.47
46:B:1127:A:H2'	46:B:1128:A:C8	2.50	0.47
46:B:1149:G:H2'	46:B:1150:G:H8	1.79	0.47
46:B:1335:U:H5'	63:S:67:LYS:NZ	2.30	0.47
46:B:1508:G:O2'	46:B:1510:G:OP2	2.29	0.47
53:I:48:TYR:CD2	53:I:117:GLY:HA3	2.50	0.47
57:M:1:MET:HG3	57:M:44:LYS:HB3	1.97	0.47
79:AR:71:ASP:HB3	79:AR:113:SER:HA	1.97	0.47
1:AS:268:A:C4	16:BI:12:ARG:HG2	2.50	0.47
1:AS:1417:G:H2'	1:AS:1418:G:H8	1.80	0.47
1:AS:1513:A:OP1	40:CG:41:ARG:NH2	2.38	0.47
1:AS:2753:U:H2'	1:AS:2754:U:C6	2.50	0.47
1:AS:3135:A:H2'	1:AS:3136:C:H6	1.79	0.47
1:AS:3209:A:OP1	5:AX:97:ARG:NH2	2.36	0.47
3:AU:103:G:H5''	38:CE:39:TYR:HE2	1.80	0.47
6:AY:205:GLY:O	6:AY:247:ARG:NH2	2.41	0.47
13:BF:99:THR:O	13:BF:154:THR:HG23	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:BG:2:ALA:HB1	29:BV:33:GLY:O	2.15	0.47
14:BG:83:VAL:HG23	14:BG:85:ILE:HG13	1.96	0.47
16:BI:123:GLN:OE1	16:BI:128:LYS:NZ	2.48	0.47
20:BM:167:ARG:O	20:BM:168:ALA:C	2.58	0.47
27:BT:85:LEU:HD23	27:BT:85:LEU:HA	1.81	0.47
46:CM:12:U:HO2'	46:CM:1284:G:HO2'	1.48	0.47
46:CM:188:U:H2'	46:CM:189:G:C8	2.50	0.47
46:CM:813:U:O2'	46:CM:814:A:H5'	2.15	0.47
46:CM:1233:C:C2	46:CM:1234:U:C5	3.03	0.47
46:CM:1414:G:H3'	46:CM:1414:G:OP2	2.15	0.47
46:CM:1551:U:H2'	46:CM:1552:C:H6	1.80	0.47
57:CX:52:LYS:HG3	57:CX:54:TYR:CD2	2.50	0.47
58:CY:56:LYS:HE2	58:CY:57:LYS:HE3	1.96	0.47
74:DO:15:GLU:OE1	74:DO:23:THR:HG22	2.15	0.47
75:DP:49:ARG:HG2	75:DP:50:GLU:O	2.15	0.47
79:DT:199:ILE:HD11	79:DT:208:CYS:SG	2.55	0.47
1:1:744:U:H2'	1:1:745:C:C6	2.50	0.47
1:1:815:U:H2'	1:1:816:A:H8	1.80	0.47
1:1:1277:G:H2'	1:1:1278:G:H8	1.79	0.47
1:1:2895:U:H2'	1:1:2896:U:C6	2.50	0.47
1:1:3093:U:H1'	1:1:3094:A:H5''	1.96	0.47
1:1:3234:U:H3	8:n:134:ARG:NH1	2.13	0.47
1:1:3285:A:H2'	1:1:3286:C:H6	1.80	0.47
3:4:141:C:O3'	16:v:62:TYR:OH	2.32	0.47
22:2:29:THR:HG21	22:2:94:GLU:HA	1.97	0.47
46:B:1375:C:O2'	64:T:52:GLY:HA3	2.15	0.47
46:B:1668:A:H2'	46:B:1669:U:H5'	1.97	0.47
49:E:233:SER:HB3	49:E:236:GLU:HG3	1.96	0.47
50:F:106:LEU:HD21	50:F:139:ILE:HD11	1.97	0.47
50:F:143:LEU:C	50:F:145:ALA:H	2.23	0.47
52:H:32:ASP:OD1	52:H:33:VAL:N	2.48	0.47
55:K:56:ARG:NH1	55:K:180:GLY:O	2.48	0.47
62:R:77:LYS:HD2	62:R:102:PHE:CZ	2.50	0.47
69:Y:77:PRO:HD2	69:Y:79:PHE:CZ	2.50	0.47
1:AS:222:U:OP1	1:AS:224:C:N4	2.37	0.47
1:AS:234:A:H2'	1:AS:235:G:O4'	2.15	0.47
1:AS:314:U:H2'	1:AS:315:C:H6	1.79	0.47
1:AS:2740:U:H2'	1:AS:2741:A:C8	2.48	0.47
1:AS:2995:U:H2'	1:AS:2996:A:H8	1.80	0.47
1:AS:3016:A:H4'	5:AX:13:SER:HB2	1.98	0.47
1:AS:3166:A:H2'	1:AS:3167:G:C8	2.49	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:3216:U:H2'	1:AS:3217:G:C8	2.50	0.47
1:AS:3309:A:H2	1:AS:3326:G:H21	1.62	0.47
2:AT:11:A:N1	2:AT:67:G:O2'	2.46	0.47
3:AU:9:A:H2'	3:AU:10:A:C8	2.50	0.47
3:AU:143:U:H2'	3:AU:144:G:O4'	2.14	0.47
8:BA:65:SER:HB3	8:BA:75:LEU:HD23	1.96	0.47
12:BE:19:LYS:HE2	12:BE:19:LYS:HB3	1.74	0.47
25:BR:80:ARG:HG2	25:BR:81:ALA:N	2.30	0.47
46:CM:66:U:H1'	53:CT:160:ARG:HH21	1.80	0.47
46:CM:322:U:O2'	58:CY:80:MET:SD	2.68	0.47
46:CM:787:A:O2'	54:CU:100:ARG:NE	2.41	0.47
46:CM:932:U:H2'	46:CM:933:A:C8	2.49	0.47
46:CM:1152:G:H21	63:DD:138:GLN:HE22	1.62	0.47
52:CS:82:PHE:CZ	75:DP:49:ARG:HB2	2.50	0.47
62:DC:73:PRO:HD2	62:DC:93:VAL:HG23	1.97	0.47
66:DG:65:ILE:HG12	66:DG:71:VAL:CG2	2.44	0.47
45:CL:129:LEU:HB3	45:CL:130:GLU:OE1	2.14	0.47
1:1:1658:G:H22	1:1:1783:A:H2	1.63	0.46
1:1:1827:U:H4'	83:4:201:PAR:O44	2.15	0.46
1:1:2663:A:H2'	1:1:2664:A:C8	2.49	0.46
2:3:40:C:H2'	2:3:42:A:N7	2.30	0.46
19:y:96:PHE:CD1	19:y:97:PRO:HD2	2.50	0.46
25:7:80:ARG:HH21	53:I:131:LYS:HG2	1.80	0.46
45:i:112:LYS:C	45:i:114:GLU:H	2.22	0.46
46:B:25:C:H4'	46:B:26:A:O5'	2.15	0.46
46:B:79:C:H1'	53:I:174:LYS:HB2	1.97	0.46
46:B:989:U:H3'	46:B:990:A:H5''	1.97	0.46
46:B:1477:U:H4'	46:B:1478:A:H5'	1.97	0.46
46:B:1573:A:H2'	46:B:1574:A:O4'	2.15	0.46
46:B:1656:U:H2'	46:B:1657:G:O4'	2.15	0.46
50:F:151:GLN:OE1	50:F:153:TYR:OH	2.28	0.46
54:J:33:GLU:HG3	54:J:69:VAL:HG11	1.97	0.46
55:K:87:ASN:HB3	55:K:90:LEU:HG	1.97	0.46
59:O:107:ASP:OD1	59:O:110:GLY:N	2.37	0.46
64:T:77:GLU:HG2	64:T:80:ARG:CZ	2.45	0.46
78:h:175:ALA:HB3	78:h:182:TYR:H	1.81	0.46
79:AR:16:HIS:CE1	79:AR:37:SER:CB	2.98	0.46
1:AS:436:A:H2'	1:AS:437:G:C8	2.50	0.46
1:AS:648:C:H2'	1:AS:649:G:C8	2.50	0.46
1:AS:1791:U:OP1	4:AW:191:VAL:HG11	2.15	0.46
1:AS:3285:A:H2'	1:AS:3286:C:H6	1.80	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AX:296:THR:OG1	5:AX:357:LYS:O	2.30	0.46
6:AY:300:VAL:HB	19:BL:39:ARG:HG2	1.96	0.46
8:BA:29:LEU:HD22	8:BA:33:LEU:HD12	1.96	0.46
12:BE:4:ARG:NH1	12:BE:99:ILE:HG13	2.30	0.46
38:CE:52:LYS:O	38:CE:56:ARG:HG3	2.15	0.46
38:CE:64:MET:O	38:CE:68:LYS:HB2	2.14	0.46
46:CM:504:A:O2'	46:CM:505:U:OP1	2.31	0.46
46:CM:558:U:H2'	46:CM:559:G:H8	1.80	0.46
46:CM:916:C:H4'	48:CO:115:ARG:O	2.15	0.46
46:CM:1326:A:H1'	79:DT:66:SER:OG	2.15	0.46
46:CM:1537:A:H2'	46:CM:1538:U:H6	1.80	0.46
46:CM:1668:A:H2'	46:CM:1669:U:H5'	1.96	0.46
59:CZ:87:PRO:HB3	59:CZ:139:HIS:C	2.40	0.46
62:DC:68:GLU:N	62:DC:69:PRO:HD3	2.30	0.46
65:DF:72:ILE:HD13	65:DF:79:TYR:CD2	2.50	0.46
79:DT:5:GLU:HB3	79:DT:248:TRP:CH2	2.50	0.46
79:DT:26:THR:HG23	79:DT:29:HIS:H	1.80	0.46
79:DT:113:SER:OG	79:DT:155:VAL:N	2.47	0.46
80:11:171:ASN:OD1	80:11:174:MET:HG2	2.15	0.46
1:1:19:A:H2'	1:1:20:G:C8	2.51	0.46
1:1:602:A:H2'	1:1:603:C:C6	2.50	0.46
1:1:1717:U:OP2	20:z:124:TYR:OH	2.29	0.46
3:4:5:U:H2'	3:4:6:U:C6	2.51	0.46
3:4:83:U:O2	27:9:51:ARG:NH2	2.48	0.46
4:j:3:ARG:HB2	4:j:207:VAL:HG22	1.97	0.46
13:s:53:THR:HG23	13:s:60:ARG:HA	1.97	0.46
46:B:520:U:H2'	46:B:521:G:O4'	2.16	0.46
46:B:1364:U:O2'	46:B:1365:C:H5'	2.15	0.46
53:I:149:LYS:HB3	53:I:149:LYS:HE2	1.71	0.46
1:AS:357:A:O4'	6:AY:82:GLY:HA3	2.15	0.46
1:AS:386:A:C5	1:AS:387:A:H1'	2.50	0.46
1:AS:867:U:H2'	1:AS:868:U:C6	2.51	0.46
1:AS:1852:C:H2'	1:AS:1853:C:C6	2.50	0.46
1:AS:2739:U:H2'	1:AS:2740:U:C6	2.49	0.46
3:AU:72:A:P	27:BT:52:GLN:HB2	2.54	0.46
4:AW:147:ARG:HG2	4:AW:157:ILE:HG12	1.97	0.46
6:AY:284:ASN:HB3	6:AY:290:LEU:HD11	1.97	0.46
6:AY:290:LEU:HD22	19:BL:129:LEU:HD11	1.97	0.46
13:BF:109:HIS:CD2	13:BF:123:TYR:H	2.31	0.46
16:BI:115:VAL:HB	16:BI:160:GLU:HB3	1.97	0.46
46:CM:885:A:H2'	46:CM:886:G:C8	2.50	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
71:DL:132:ARG:HA	71:DL:132:ARG:HE	1.81	0.46
1:1:1019:U:H2'	1:1:1020:G:O4'	2.15	0.46
1:1:1556:G:N7	26:8:36:LYS:HE2	2.31	0.46
1:1:1559:C:O2'	1:1:1560:U:OP1	2.27	0.46
1:1:2493:A:H5''	16:v:28:TRP:CD1	2.51	0.46
1:1:3064:C:O2'	1:1:3066:A:OP2	2.27	0.46
1:1:3240:U:H5''	34:AG:68:TRP:HZ2	1.79	0.46
3:4:52:A:OP1	40:AM:21:ARG:NH1	2.48	0.46
3:4:126:A:O2'	3:4:128:U:OP2	2.22	0.46
6:l:182:VAL:HG11	6:l:225:GLY:HA3	1.97	0.46
10:p:179:ALA:HB2	10:p:219:ILE:HD12	1.97	0.46
17:w:160:LYS:O	17:w:164:GLN:HG3	2.15	0.46
32:AE:45:THR:HG22	32:AE:47:ASP:N	2.28	0.46
46:B:81:G:H2'	46:B:82:U:C6	2.50	0.46
46:B:655:U:H4'	46:B:675:U:H3	1.80	0.46
46:B:857:G:N2	46:B:1032:G:H4'	2.30	0.46
52:H:57:SER:HB2	75:e:53:ILE:O	2.14	0.46
54:J:152:SER:OG	54:J:183:GLY:O	2.21	0.46
61:Q:73:ALA:HB2	61:Q:106:ARG:HB2	1.98	0.46
69:Y:40:VAL:HG11	69:Y:103:ILE:HD12	1.97	0.46
70:Z:46:SER:OG	70:Z:78:LYS:NZ	2.49	0.46
78:h:160:ARG:HB3	78:h:173:PHE:HD2	1.78	0.46
79:AR:40:LYS:HD2	79:AR:65:HIS:O	2.15	0.46
1:AS:126:G:H2'	1:AS:127:G:H8	1.80	0.46
1:AS:538:G:H2'	1:AS:539:G:N7	2.31	0.46
1:AS:2139:G:H5''	4:AW:227:ARG:HH12	1.80	0.46
1:AS:2504:C:H2'	1:AS:2505:G:H8	1.80	0.46
1:AS:2681:C:H2'	1:AS:2682:C:C6	2.51	0.46
1:AS:2915:G:H2'	1:AS:2916:U:O4'	2.15	0.46
83:AS:3401:PAR:N21	83:AS:3401:PAR:O43	2.47	0.46
2:AT:27:A:H2'	2:AT:28:C:C6	2.50	0.46
13:BF:32:ARG:HD2	13:BF:120:ILE:HA	1.98	0.46
14:BG:49:ARG:O	14:BG:140:GLN:NE2	2.36	0.46
22:BO:41:ASP:HB2	22:BO:97:LYS:HE3	1.98	0.46
26:BS:133:LEU:O	26:BS:137:ASN:ND2	2.45	0.46
30:BW:20:GLY:HA3	30:BW:21:ILE:HA	1.75	0.46
46:CM:157:U:H5'	71:DL:117:LYS:HB3	1.97	0.46
46:CM:903:U:H2'	46:CM:904:A:H8	1.78	0.46
46:CM:1145:A:H2'	46:CM:1146:C:C6	2.48	0.46
46:CM:1145:A:OP2	63:DD:141:TYR:OH	2.31	0.46
51:CR:139:VAL:HG23	51:CR:150:PRO:HG3	1.96	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:CS:32:ASP:OD1	52:CS:33:VAL:N	2.49	0.46
56:CW:27:GLU:OE1	56:CW:39:LYS:NZ	2.47	0.46
62:DC:94:VAL:HG21	62:DC:116:LEU:HD11	1.96	0.46
80:l1:143:ASP:O	80:l1:147:LYS:HG2	2.15	0.46
45:CL:100:LYS:H	45:CL:100:LYS:HD2	1.80	0.46
45:CL:116:GLU:HA	45:CL:119:VAL:HG22	1.97	0.46
1:1:642:G:H2'	1:1:2350:A:N7	2.30	0.46
1:1:1661:U:H2'	1:1:1662:G:H8	1.80	0.46
1:1:2807:U:C2	1:1:2808:C:C5	3.03	0.46
1:1:3166:A:H8	1:1:3166:A:OP2	1.99	0.46
2:3:65:G:O3'	12:r:204:GLY:HA2	2.15	0.46
2:3:113:C:H2'	2:3:114:U:O4'	2.14	0.46
3:4:7:U:H2'	3:4:8:C:C6	2.50	0.46
4:j:107:CYS:HB2	4:j:136:ILE:HD12	1.98	0.46
24:6:87:ARG:HH22	24:6:137:VAL:C	2.23	0.46
46:B:283:G:H2'	46:B:284:C:C6	2.51	0.46
46:B:597:A:H2'	46:B:598:U:C6	2.50	0.46
46:B:1016:U:H4'	46:B:1017:G:OP2	2.14	0.46
46:B:1306:A:H4'	46:B:1307:A:O5'	2.15	0.46
48:D:59:ASP:OD1	48:D:60:GLY:N	2.48	0.46
48:D:109:LYS:HE3	48:D:113:LEU:HD11	1.96	0.46
51:G:258:ALA:C	51:G:260:GLN:H	2.24	0.46
61:Q:76:ILE:HG21	61:Q:97:LEU:HD13	1.96	0.46
72:b:54:VAL:HA	72:b:57:TYR:CD2	2.50	0.46
1:AS:635:C:C2	1:AS:636:C:C5	3.03	0.46
1:AS:1655:U:H2'	1:AS:1656:C:C6	2.51	0.46
1:AS:1761:U:C5	20:BM:43:LYS:HE3	2.50	0.46
1:AS:2902:A:H2'	1:AS:2903:C:C6	2.51	0.46
4:AW:54:ARG:NH2	4:AW:58:LEU:HD11	2.29	0.46
10:BC:144:ILE:HD11	10:BC:152:VAL:HG21	1.98	0.46
12:BE:54:SER:HB2	12:BE:135:ILE:HD11	1.95	0.46
15:BH:23:ASN:HD22	15:BH:23:ASN:C	2.17	0.46
16:BI:15:GLN:HB3	37:CD:51:PRO:HD2	1.97	0.46
19:BL:94:LEU:HD22	29:BV:119:PRO:HG3	1.97	0.46
20:BM:162:ARG:HB3	20:BM:165:ARG:NH2	2.31	0.46
27:BT:112:ASP:OD1	27:BT:115:ARG:HG2	2.16	0.46
28:BU:103:GLU:HB2	28:BU:106:GLN:HB2	1.98	0.46
46:CM:433:C:OP2	70:DK:77:ILE:HD11	2.15	0.46
46:CM:511:U:O4	56:CW:171:ARG:NH2	2.48	0.46
46:CM:1055:A:H4'	74:DO:17:LYS:HZ2	1.81	0.46
46:CM:1489:G:N2	46:CM:1492:A:OP2	2.47	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:CM:1494:G:H2'	46:CM:1495:U:H6	1.80	0.46
46:CM:1566:U:H2'	46:CM:1567:C:C6	2.50	0.46
46:CM:1582:U:H5'	46:CM:1583:C:OP2	2.16	0.46
83:CM:1803:PAR:H23	83:CM:1803:PAR:HN21	1.80	0.46
50:CQ:173:ILE:HG12	50:CQ:186:LYS:NZ	2.31	0.46
63:DD:14:THR:HB	63:DD:71:GLY:HA2	1.97	0.46
65:DF:36:ARG:NH2	65:DF:105:LEU:HD22	2.29	0.46
74:DO:38:GLN:HB2	74:DO:76:GLY:O	2.15	0.46
79:DT:219:LEU:HD11	79:DT:242:PHE:HZ	1.80	0.46
45:CL:53:LYS:C	45:CL:55:LYS:H	2.23	0.46
1:1:708:A:H2'	1:1:709:A:C8	2.51	0.46
1:1:1104:U:H2'	1:1:1105:U:H6	1.81	0.46
1:1:1230:G:H2'	1:1:1231:U:C6	2.51	0.46
1:1:2469:A:H1'	80:l1:210:MET:HA	1.98	0.46
1:1:2874:A:H2'	1:1:2875:A:O4'	2.16	0.46
1:1:3233:A:OP1	8:n:45:ARG:NH2	2.48	0.46
1:1:3315:C:H2'	1:1:3316:U:H4'	1.97	0.46
13:s:20:ASN:HB3	13:s:126:ASP:HB3	1.98	0.46
34:AG:20:LYS:HE2	34:AG:20:LYS:HB2	1.61	0.46
46:B:903:U:H2'	46:B:904:A:H8	1.79	0.46
46:B:1516:C:H2'	46:B:1517:C:H6	1.80	0.46
46:B:1774:C:H2'	46:B:1775:G:H8	1.79	0.46
57:M:46:LEU:HD23	57:M:66:TYR:CG	2.51	0.46
59:O:50:LYS:HB2	78:h:171:GLY:HA3	1.97	0.46
1:AS:623:A:H2'	1:AS:624:U:H6	1.79	0.46
1:AS:2649:G:H2'	1:AS:2649:G:N3	2.30	0.46
1:AS:2855:U:H2'	1:AS:2856:C:C6	2.50	0.46
1:AS:3310:G:P	55:CV:92:ARG:HG3	2.55	0.46
3:AU:5:U:H2'	3:AU:6:U:C6	2.51	0.46
11:BD:47:LYS:HE2	15:BH:3:SER:CB	2.45	0.46
13:BF:47:GLN:OE1	13:BF:64:LYS:HD3	2.16	0.46
22:BO:97:LYS:HB3	22:BO:97:LYS:HE2	1.61	0.46
25:BR:104:ALA:O	25:BR:108:LYS:N	2.48	0.46
46:CM:290:U:H2'	46:CM:291:U:C6	2.50	0.46
46:CM:699:U:H2'	46:CM:700:G:O4'	2.14	0.46
46:CM:1215:A:H2	46:CM:1243:U:O2	1.99	0.46
46:CM:1226:G:H4'	62:DC:78:THR:HA	1.98	0.46
46:CM:1464:G:OP1	66:DG:43:ASN:ND2	2.48	0.46
48:CO:214:LYS:HE2	48:CO:216:LYS:HD2	1.96	0.46
55:CV:190:LEU:HD22	55:CV:194:GLU:HG2	1.98	0.46
57:CX:62:GLN:CD	76:DQ:25:SER:HB3	2.41	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:CY:27:ALA:O	58:CY:28:ASN:C	2.58	0.46
63:DD:124:GLU:HG2	63:DD:133:ALA:HB1	1.98	0.46
79:DT:168:SER:HB3	79:DT:178:TRP:HE1	1.80	0.46
80:l1:15:LYS:CD	80:l1:214:PHE:CD1	2.92	0.46
1:1:387:A:H5''	83:1:3460:PAR:H611	1.98	0.46
1:1:623:A:H2'	1:1:624:U:H6	1.79	0.46
1:1:1721:C:H2'	1:1:1722:C:C6	2.51	0.46
1:1:2234:A:H62	83:B:1803:PAR:C61	2.29	0.46
1:1:2367:C:H2'	1:1:2368:A:C8	2.51	0.46
2:3:19:C:H2'	2:3:20:A:C8	2.50	0.46
4:j:96:LEU:HD21	4:j:108:PRO:HD2	1.97	0.46
46:B:221:U:C2	46:B:823:G:C2	3.03	0.46
46:B:302:U:H2'	46:B:303:C:H6	1.80	0.46
46:B:904:A:H2'	46:B:905:C:H6	1.81	0.46
46:B:1238:U:H2'	46:B:1239:U:H6	1.81	0.46
46:B:1453:C:O2'	66:V:88:PHE:O	2.23	0.46
63:S:72:GLY:H	63:S:75:SER:HB3	1.79	0.46
64:T:14:LYS:HB2	64:T:69:ILE:CD1	2.45	0.46
64:T:77:GLU:HG2	64:T:80:ARG:NH2	2.31	0.46
79:AR:84:ALA:HA	79:AR:90:LEU:HD23	1.97	0.46
1:AS:343:U:H1'	6:AY:96:ARG:HG3	1.97	0.46
1:AS:2210:A:H2'	1:AS:2211:A:C8	2.50	0.46
1:AS:2260:U:O2	1:AS:2288:U:H4'	2.15	0.46
1:AS:3005:A:H2'	1:AS:3006:C:H6	1.80	0.46
3:AU:5:U:H2'	3:AU:6:U:H6	1.80	0.46
16:BI:177:GLY:H	16:BI:184:LYS:NZ	2.14	0.46
22:BO:52:MET:HA	22:BO:95:HIS:CE1	2.51	0.46
27:BT:27:ARG:NH1	27:BT:76:LEU:HA	2.30	0.46
28:BU:68:VAL:O	28:BU:115:LYS:HE2	2.15	0.46
46:CM:699:U:H2'	46:CM:700:G:C8	2.51	0.46
46:CM:874:U:HO2'	46:CM:875:C:P	2.39	0.46
46:CM:1204:A:O2'	57:CX:48:SER:HA	2.16	0.46
46:CM:1211:A:N6	59:CZ:114:LYS:HD2	2.31	0.46
46:CM:1626:C:H2'	46:CM:1627:C:O4'	2.15	0.46
47:CN:13:ASP:CG	47:CN:179:ARG:HH22	2.22	0.46
52:CS:225:ARG:NH1	75:DP:58:GLU:OE1	2.48	0.46
70:DK:36:THR:O	70:DK:40:SER:OG	2.32	0.46
80:l1:17:LEU:O	80:l1:21:THR:OG1	2.24	0.46
1:1:641:U:O2'	1:1:1149:A:N1	2.41	0.46
1:1:1198:A:C2	1:1:2829:C:H5'	2.51	0.46
1:1:1382:A:H5''	6:l:142:ARG:NH2	2.31	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:2145:A:H2'	1:1:2146:A:C8	2.51	0.46
1:1:2583:U:H2'	1:1:2584:U:H6	1.79	0.46
1:1:2920:C:H4'	5:k:242:THR:HG23	1.98	0.46
1:1:3038:U:H2'	1:1:3039:C:H6	1.81	0.46
1:1:3197:G:H2'	1:1:3198:C:C6	2.51	0.46
2:3:4:U:H2'	2:3:5:G:C8	2.50	0.46
5:k:142:LYS:O	5:k:146:THR:OG1	2.30	0.46
11:q:16:VAL:HG11	11:q:79:ILE:HG12	1.97	0.46
15:u:39:LEU:HD22	21:0:72:VAL:HG23	1.98	0.46
31:AD:26:THR:HG23	31:AD:95:LEU:HD11	1.98	0.46
34:AG:38:PRO:HD3	34:AG:77:ASN:O	2.15	0.46
45:i:101:LYS:HD2	46:B:580:U:C5	2.50	0.46
46:B:1425:C:H2'	46:B:1426:C:H6	1.79	0.46
46:B:1539:U:O2'	46:B:1584:A:N3	2.41	0.46
51:G:65:MET:HG2	51:G:70:VAL:HG21	1.96	0.46
52:H:48:PHE:CD1	52:H:67:PRO:HB3	2.51	0.46
62:R:52:LYS:HB2	62:R:53:PRO:HD3	1.98	0.46
79:AR:302:TYR:HE2	79:AR:308:ARG:HD2	1.78	0.46
1:AS:777:G:OP1	19:BL:151:ARG:HD2	2.16	0.46
1:AS:988:A:O2'	1:AS:989:G:H5'	2.15	0.46
1:AS:1011:C:H4'	1:AS:1012:U:C6	2.45	0.46
1:AS:1014:G:H2'	1:AS:1015:G:H8	1.81	0.46
1:AS:1330:U:H2'	1:AS:1331:U:C6	2.51	0.46
1:AS:2335:A:H2'	1:AS:2336:A:H8	1.81	0.46
1:AS:2408:A:H2'	1:AS:2409:C:C6	2.51	0.46
1:AS:3176:C:H2'	1:AS:3177:C:C6	2.51	0.46
1:AS:3319:U:C2	55:CV:107:THR:HG23	2.51	0.46
11:BD:16:VAL:HG11	11:BD:79:ILE:HG13	1.98	0.46
20:BM:170:ARG:HH21	46:CM:838:G:P	2.39	0.46
24:BQ:32:ARG:HH22	46:CM:1722:U:P	2.39	0.46
25:BR:1:MET:HE2	25:BR:15:PRO:HG2	1.98	0.46
46:CM:151:G:C6	46:CM:160:A:C6	3.04	0.46
46:CM:246:U:C4'	58:CY:36:LYS:HD3	2.46	0.46
46:CM:575:G:H8	45:CL:96:LYS:HD3	1.78	0.46
46:CM:770:C:OP1	46:CM:770:C:H6	1.98	0.46
46:CM:1635:A:H2'	46:CM:1636:C:H6	1.78	0.46
54:CU:40:LYS:HG3	54:CU:59:PRO:HD3	1.98	0.46
54:CU:134:LYS:C	54:CU:135:ARG:HD2	2.40	0.46
57:CX:35:ILE:HG22	57:CX:37:THR:HG22	1.97	0.46
61:DB:76:ILE:HD11	61:DB:107:ILE:HG23	1.97	0.46
79:DT:211:ALA:HB2	79:DT:217:ILE:HG12	1.96	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:258:U:H2'	1:1:259:C:C6	2.50	0.46
1:1:413:U:H2'	1:1:414:U:C6	2.51	0.46
1:1:1224:C:H2'	1:1:1225:G:C8	2.49	0.46
1:1:1330:U:H2'	1:1:1331:U:C6	2.50	0.46
1:1:2516:U:O2'	1:1:2519:A:N6	2.48	0.46
1:1:3336:G:H2'	1:1:3337:A:C8	2.50	0.46
13:s:110:ILE:HG21	13:s:116:TYR:HD2	1.81	0.46
17:w:75:ARG:HD2	17:w:146:VAL:O	2.16	0.46
46:B:286:A:H2'	46:B:287:U:O4'	2.16	0.46
46:B:1219:A:OP2	46:B:1230:G:O2'	2.32	0.46
53:I:20:ASP:HB3	53:I:23:LYS:HE3	1.98	0.46
57:M:47:GLN:O	57:M:51:SER:HB3	2.16	0.46
1:AS:276:U:O2	16:BI:93:LYS:HE2	2.16	0.46
1:AS:442:G:O2'	1:AS:443:G:OP1	2.32	0.46
1:AS:516:U:OP1	6:AY:352:PRO:HD2	2.16	0.46
1:AS:1922:C:H5'	44:CK:8:VAL:HG13	1.98	0.46
1:AS:3133:G:C6	1:AS:3253:G:C6	3.04	0.46
8:BA:20:THR:HG22	8:BA:22:LYS:H	1.81	0.46
16:BI:172:ARG:NH1	16:BI:174:ILE:HG13	2.31	0.46
19:BL:155:PHE:HD1	19:BL:161:LYS:HB2	1.81	0.46
22:BO:16:GLN:HG2	22:BO:17:ARG:O	2.16	0.46
23:BP:25:ASN:HB3	23:BP:27:VAL:HG23	1.98	0.46
27:BT:106:ILE:HG21	27:BT:109:LEU:HD23	1.97	0.46
31:BX:42:LYS:HE2	31:BX:103:LEU:HD11	1.97	0.46
46:CM:788:A:C8	69:DJ:107:SER:HA	2.51	0.46
1:1:787:A:H2'	1:1:788:G:H8	1.81	0.46
1:1:2408:A:H2'	1:1:2409:C:C6	2.50	0.46
1:1:3038:U:H2'	1:1:3039:C:C6	2.51	0.46
83:1:3457:PAR:H14	83:1:3457:PAR:H43	1.50	0.46
2:3:1:G:C4	7:m:266:LYS:HA	2.50	0.46
11:q:137:SER:HB3	11:q:143:GLU:HB3	1.97	0.46
12:r:47:PRO:HB3	12:r:171:TRP:CZ2	2.51	0.46
21:0:99:ARG:NH1	21:0:126:VAL:O	2.49	0.46
24:6:45:ARG:HG2	24:6:48:ARG:CZ	2.44	0.46
31:AD:11:ASN:O	31:AD:14:SER:OG	2.34	0.46
38:AK:27:PHE:HA	38:AK:34:CYS:HA	1.98	0.46
46:B:565:A:O2'	70:Z:90:ASP:OD1	2.30	0.46
46:B:1040:U:H3	46:B:1049:G:H1	1.64	0.46
46:B:1423:U:O2'	50:F:182:VAL:HG23	2.16	0.46
46:B:1604:U:H2'	46:B:1605:C:C6	2.51	0.46
61:Q:79:ARG:HB3	61:Q:113:VAL:HG23	1.96	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
65:U:6:GLN:OE1	65:U:6:GLN:N	2.47	0.46
72:b:67:ASP:O	72:b:70:LYS:NZ	2.49	0.46
1:AS:95:G:H5'	14:BG:15:ARG:CZ	2.46	0.46
1:AS:480:G:H2'	1:AS:480:G:N3	2.30	0.46
1:AS:831:G:HO2'	1:AS:853:G:H22	1.62	0.46
1:AS:1767:G:H4'	23:BP:103:GLN:HE21	1.81	0.46
1:AS:2184:G:N2	1:AS:2186:A:N6	2.49	0.46
1:AS:2191:A:N3	1:AS:2573:A:O2'	2.43	0.46
83:AS:3403:PAR:O43	83:AS:3403:PAR:N21	2.49	0.46
8:BA:150:LYS:C	8:BA:152:THR:H	2.24	0.46
24:BQ:68:GLU:OE1	24:BQ:68:GLU:N	2.47	0.46
27:BT:39:LEU:HD22	27:BT:43:TYR:CE2	2.43	0.46
46:CM:1062:C:H2'	46:CM:1063:C:H6	1.79	0.46
46:CM:1238:U:H2'	46:CM:1239:U:H6	1.81	0.46
46:CM:1648:U:H2'	46:CM:1649:G:H8	1.81	0.46
59:CZ:108:ARG:NH1	59:CZ:113:ARG:HH21	2.14	0.46
61:DB:76:ILE:HD13	61:DB:97:LEU:HD11	1.98	0.46
70:DK:29:TYR:HA	70:DK:32:ARG:HH12	1.81	0.46
79:DT:245:ASN:OD1	79:DT:245:ASN:N	2.48	0.46
1:1:716:G:H3'	1:1:717:A:H5''	1.98	0.46
1:1:983:U:H2'	1:1:984:U:C6	2.51	0.46
1:1:1228:C:H2'	1:1:1229:G:C8	2.50	0.46
1:1:1625:U:O3'	28:AA:115:LYS:HE3	2.16	0.46
1:1:2729:U:H4'	22:2:7:TYR:HB3	1.98	0.46
1:1:2959:A:H2'	1:1:2960:C:H6	1.80	0.46
1:1:3260:A:H2'	1:1:3261:A:H8	1.80	0.46
37:AJ:98:ARG:HB3	80:11:215:ARG:HH11	1.80	0.46
46:B:97:C:H2'	46:B:98:U:C6	2.51	0.46
46:B:445:U:H2'	46:B:446:C:O4'	2.16	0.46
46:B:484:G:H2'	46:B:485:G:C8	2.51	0.46
46:B:1423:U:H2'	46:B:1424:G:C8	2.50	0.46
57:M:1:MET:HE1	57:M:41:PHE:CD1	2.51	0.46
61:Q:15:PHE:HB3	61:Q:22:PHE:HB2	1.99	0.46
61:Q:20:ASP:OD1	61:Q:21:THR:N	2.43	0.46
79:AR:145:LEU:HD23	79:AR:145:LEU:HA	1.85	0.46
1:AS:206:U:H2'	1:AS:207:C:H6	1.81	0.46
1:AS:243:G:H2'	1:AS:244:G:H8	1.81	0.46
1:AS:1642:G:H1'	1:AS:1805:A:N6	2.31	0.46
1:AS:1678:U:O2	23:BP:85:LYS:HG2	2.16	0.46
1:AS:3193:C:H4'	1:AS:3194:G:O5'	2.15	0.46
3:AU:6:U:H2'	3:AU:7:U:H6	1.81	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:BL:54:LEU:HD22	19:BL:58:ASN:HB3	1.97	0.46
46:CM:309:U:OP2	70:DK:20:ARG:HD3	2.16	0.46
46:CM:746:G:H4'	56:CW:72:GLU:OE1	2.16	0.46
46:CM:908:A:H2'	46:CM:909:A:C8	2.50	0.46
46:CM:938:G:H2'	46:CM:939:G:H8	1.80	0.46
46:CM:1354:U:C2	46:CM:1355:A:N7	2.84	0.46
46:CM:1529:G:H5''	66:DG:87:GLY:C	2.41	0.46
47:CN:205:ARG:HE	47:CN:205:ARG:HB3	1.59	0.46
58:CY:34:TRP:CH2	58:CY:36:LYS:HE2	2.50	0.46
62:DC:127:ARG:NH2	45:CL:71:LYS:HG2	2.23	0.46
65:DF:87:ASN:HB2	65:DF:99:HIS:CE1	2.51	0.46
80:l1:15:LYS:HB2	80:l1:214:PHE:CE1	2.51	0.46
1:1:656:G:H21	6:l:94:MET:HB2	1.81	0.45
1:1:1882:A:O2'	5:k:226:PHE:O	2.28	0.45
1:1:1936:G:O6	83:1:3464:PAR:N24	2.49	0.45
1:1:2590:G:OP1	12:r:116:ARG:HG3	2.15	0.45
1:1:2663:A:HO2'	1:1:2664:A:P	2.39	0.45
7:m:83:LEU:HD13	7:m:88:ILE:HD12	1.97	0.45
13:s:148:ILE:O	13:s:153:LYS:NZ	2.45	0.45
15:u:12:PHE:O	15:u:17:ARG:HG3	2.16	0.45
20:z:44:LEU:HB3	20:z:49:THR:HB	1.97	0.45
46:B:17:C:O2'	46:B:1122:A:N1	2.44	0.45
46:B:226:G:H2'	46:B:227:C:C6	2.51	0.45
46:B:769:U:O2'	46:B:770:C:OP2	2.30	0.45
46:B:824:U:O2'	46:B:825:U:P	2.73	0.45
48:D:129:THR:OG1	48:D:131:ASP:OD1	2.30	0.45
54:J:29:ASP:OD1	54:J:30:LEU:N	2.49	0.45
54:J:52:LYS:HD2	54:J:84:ARG:HH12	1.80	0.45
57:M:83:PRO:C	57:M:85:GLY:H	2.24	0.45
64:T:71:PHE:HE1	64:T:74:GLN:H	1.63	0.45
1:AS:656:G:H21	6:AY:94:MET:HB2	1.80	0.45
1:AS:764:C:O2'	14:BG:177:ASN:ND2	2.48	0.45
1:AS:2525:A:H2'	1:AS:2526:C:O4'	2.16	0.45
2:AT:96:U:O2	9:BB:222:GLN:NE2	2.49	0.45
6:AY:17:GLY:O	6:AY:18:SER:OG	2.30	0.45
8:BA:25:ARG:HB3	8:BA:26:PRO:HD2	1.99	0.45
9:BB:186:ILE:HD11	9:BB:196:VAL:HG12	1.98	0.45
46:CM:184:C:H2'	46:CM:185:G:O4'	2.15	0.45
46:CM:1350:C:H5''	63:DD:27:LEU:CD2	2.45	0.45
46:CM:1517:C:O5'	72:DM:96:SER:OG	2.34	0.45
47:CN:6:SER:O	47:CN:191:ARG:NH1	2.49	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:CR:48:LEU:HD11	51:CR:70:VAL:HG21	1.98	0.45
53:CT:48:TYR:CD1	53:CT:117:GLY:HA3	2.52	0.45
56:CW:3:ARG:HH22	56:CW:6:ARG:HH21	1.63	0.45
62:DC:127:ARG:HD3	45:CL:69:PHE:CB	2.46	0.45
79:DT:34:LEU:HD11	79:DT:42:LEU:HB3	1.98	0.45
79:DT:155:VAL:O	79:DT:156:ARG:NH1	2.41	0.45
80:l1:160:LYS:HE3	80:l1:160:LYS:HB2	1.69	0.45
1:1:46:C:OP2	1:1:47:A:O2'	2.25	0.45
1:1:182:G:C6	1:1:233:G:C6	3.04	0.45
1:1:883:G:H2'	1:1:884:A:C8	2.51	0.45
1:1:892:A:H5'	4:j:183:GLY:CA	2.46	0.45
1:1:1617:A:H2'	1:1:1618:U:H6	1.81	0.45
1:1:2131:U:OP1	4:j:246:LEU:HB2	2.16	0.45
1:1:3082:C:H2'	1:1:3083:U:C6	2.51	0.45
1:1:3190:C:C2	1:1:3191:A:C8	3.04	0.45
15:u:57:LEU:HG	21:0:172:TYR:OH	2.16	0.45
46:B:551:G:N2	46:B:569:G:N7	2.61	0.45
46:B:1494:G:H2'	46:B:1495:U:C6	2.51	0.45
52:H:128:ASN:OD1	52:H:130:ILE:HG12	2.17	0.45
54:J:51:LYS:HD2	54:J:85:HIS:NE2	2.31	0.45
71:a:3:ASP:OD1	71:a:4:ALA:N	2.50	0.45
1:AS:2672:G:H5''	22:BO:17:ARG:HG2	1.98	0.45
20:BM:134:HIS:CD2	20:BM:136:ARG:HB3	2.51	0.45
32:BY:18:ARG:HB3	32:BY:34:GLU:HG3	1.99	0.45
46:CM:573:C:OP1	45:CL:99:SER:HB2	2.16	0.45
46:CM:610:U:P	70:DK:5:LYS:HZ1	2.40	0.45
46:CM:1277:G:H2'	46:CM:1278:U:C6	2.52	0.45
46:CM:1316:A:H61	50:CQ:162:GLY:HA3	1.81	0.45
46:CM:1489:G:N7	66:DG:102:ARG:NH2	2.63	0.45
46:CM:1551:U:H2'	46:CM:1552:C:C6	2.50	0.45
46:CM:1553:U:H5''	65:DF:39:GLY:H	1.81	0.45
46:CM:1649:G:H2'	46:CM:1650:G:C8	2.50	0.45
47:CN:135:GLU:HA	47:CN:138:TYR:HD2	1.81	0.45
53:CT:104:GLN:OE1	53:CT:104:GLN:N	2.50	0.45
64:DE:99:GLN:HB2	64:DE:118:PRO:O	2.16	0.45
65:DF:134:ARG:HB2	65:DF:136:GLN:OE1	2.16	0.45
67:DH:29:LYS:NZ	67:DH:110:GLY:HA3	2.31	0.45
45:CL:63:ALA:HB1	45:CL:65:LYS:HZ3	1.81	0.45
1:1:178:U:H2'	1:1:179:C:H6	1.81	0.45
1:1:680:U:H5''	1:1:681:U:H5	1.81	0.45
1:1:1172:C:H2'	1:1:1173:G:N2	2.31	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:1269:A:C2	1:1:1270:A:H1'	2.51	0.45
1:1:1468:U:H5''	20:z:24:LEU:HD12	1.98	0.45
1:1:1477:A:N3	35:AH:4:ARG:NH1	2.64	0.45
1:1:1937:C:H2'	1:1:1938:U:C6	2.52	0.45
1:1:2205:C:OP1	43:AP:32:LYS:NZ	2.49	0.45
1:1:2396:G:N3	1:1:2396:G:H2'	2.31	0.45
1:1:2441:G:OP1	1:1:2441:G:C8	2.70	0.45
1:1:2956:C:H2'	1:1:2957:C:H6	1.81	0.45
2:3:85:G:H1'	9:o:218:GLN:NE2	2.32	0.45
5:k:133:TYR:O	5:k:136:LYS:HB2	2.17	0.45
25:7:83:VAL:HG11	46:B:68:A:C2	2.52	0.45
26:8:62:ILE:CD1	26:8:94:GLN:HB3	2.47	0.45
26:8:62:ILE:HD13	26:8:94:GLN:HB3	1.97	0.45
46:B:78:A:H2	53:I:174:LYS:HG3	1.81	0.45
46:B:255:A:H1'	55:K:73:SER:HB2	1.98	0.45
46:B:569:G:H5''	70:Z:114:LYS:HD2	1.98	0.45
46:B:1552:C:H5''	65:U:41:ARG:HG2	1.98	0.45
46:B:1763:A:H2'	46:B:1764:G:C8	2.51	0.45
50:F:224:VAL:HG12	79:AR:188:ASP:HB2	1.98	0.45
1:AS:1439:G:H2'	1:AS:1440:G:C8	2.51	0.45
1:AS:2131:U:OP1	4:AW:246:LEU:HB2	2.16	0.45
1:AS:2367:C:H2'	1:AS:2368:A:C8	2.52	0.45
1:AS:2502:A:H1'	1:AS:2503:G:C8	2.52	0.45
1:AS:3106:A:OP1	17:BJ:75:ARG:NH1	2.49	0.45
83:AS:3403:PAR:H24	83:AS:3403:PAR:H33	1.74	0.45
2:AT:59:U:H2'	2:AT:60:G:H8	1.81	0.45
3:AU:142:C:H2'	3:AU:143:U:C6	2.52	0.45
15:BH:14:GLU:HB3	21:BN:149:LYS:HG2	1.99	0.45
19:BL:96:PHE:CD1	19:BL:97:PRO:HD2	2.52	0.45
46:CM:530:U:OP1	71:DL:64:PHE:HA	2.16	0.45
46:CM:1116:A:OP1	83:CM:1803:PAR:O44	2.34	0.45
46:CM:1206:A:H2'	46:CM:1207:C:O4'	2.16	0.45
46:CM:1211:A:H61	59:CZ:114:LYS:HD2	1.80	0.45
46:CM:1421:G:HO2'	57:CX:59:PHE:HE2	1.65	0.45
51:CR:17:HIS:O	51:CR:108:LYS:HG2	2.16	0.45
52:CS:98:MET:HB2	52:CS:103:ASN:O	2.16	0.45
57:CX:56:LYS:HD2	57:CX:69:THR:HG22	1.97	0.45
80:I1:111:ILE:HA	80:I1:136:THR:H	1.81	0.45
1:1:1097:G:OP2	9:o:194:LYS:NZ	2.46	0.45
1:1:1586:G:C2	1:1:1587:G:C8	3.05	0.45
1:1:2117:A:C4	38:AK:3:LYS:HE2	2.51	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:2196:G:OP1	37:AJ:67:ARG:NH2	2.49	0.45
1:1:2427:A:H3'	1:1:2428:G:C8	2.51	0.45
2:3:28:C:OP1	13:s:137:ARG:NE	2.50	0.45
16:v:28:TRP:CE2	16:v:32:GLN:HG3	2.51	0.45
24:6:121:GLU:OE1	24:6:121:GLU:N	2.49	0.45
30:AC:17:HIS:NE2	30:AC:21:ILE:HG13	2.32	0.45
37:AJ:60:ILE:HG21	37:AJ:90:THR:HG22	1.99	0.45
46:B:137:A:O4'	46:B:139:U:H5'	2.16	0.45
46:B:875:C:H2'	46:B:876:A:H8	1.82	0.45
46:B:1198:G:N2	46:B:1436:U:O2	2.38	0.45
73:c:7:SER:OG	73:c:10:ARG:O	2.33	0.45
1:AS:533:G:H2'	1:AS:534:G:O4'	2.17	0.45
1:AS:538:G:O2'	1:AS:539:G:OP1	2.33	0.45
1:AS:663:A:OP1	16:BI:203:ARG:HD2	2.17	0.45
1:AS:1330:U:P	9:BB:108:GLN:HE22	2.40	0.45
1:AS:2242:U:H2'	1:AS:2243:C:C6	2.52	0.45
1:AS:3318:G:C6	1:AS:3321:G:C5	3.04	0.45
1:AS:3357:U:H5'	18:BK:56:ARG:NH2	2.31	0.45
5:AX:106:TRP:HB2	5:AX:133:TYR:CE1	2.51	0.45
5:AX:214:MET:HE2	5:AX:281:LYS:HD2	1.98	0.45
26:BS:96:LYS:HG3	26:BS:107:ALA:HB3	1.99	0.45
31:BX:63:MET:HE3	31:BX:63:MET:HB3	1.80	0.45
34:CA:38:PRO:HD3	34:CA:77:ASN:O	2.16	0.45
46:CM:339:A:H2'	46:CM:340:C:H6	1.82	0.45
46:CM:722:A:H1'	46:CM:723:G:O4'	2.16	0.45
46:CM:916:C:H5''	48:CO:116:LYS:HG2	1.97	0.45
66:DG:69:LYS:HB2	66:DG:70:GLN:OE1	2.16	0.45
70:DK:59:ILE:HD12	70:DK:71:CYS:SG	2.56	0.45
79:DT:37:SER:O	79:DT:69:VAL:HB	2.16	0.45
80:l1:49:PHE:CE2	80:l1:159:LEU:HD22	2.51	0.45
80:l1:204:LEU:O	80:l1:216:ILE:HD12	2.17	0.45
1:1:37:U:H2'	1:1:38:A:O4'	2.16	0.45
1:1:1248:A:C2'	1:1:1249:U:H5'	2.45	0.45
1:1:1756:A:C2	1:1:1759:U:H5	2.34	0.45
1:1:2441:G:N1	1:1:2443:G:O6	2.49	0.45
1:1:2628:A:OP2	43:AP:97:LYS:HD3	2.14	0.45
1:1:3316:U:C4	55:K:167:GLY:HA2	2.52	0.45
3:4:123:G:C6	3:4:131:G:C6	3.04	0.45
11:q:171:ASP:OD1	11:q:173:ARG:HB2	2.17	0.45
14:t:124:VAL:HG21	36:AI:120:ALA:HB3	1.98	0.45
24:6:108:GLU:HG2	24:6:128:ARG:HD2	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:AL:24:ILE:HD13	39:AL:76:THR:HB	1.98	0.45
46:B:191:U:H4'	46:B:192:U:H5'	1.97	0.45
46:B:290:U:H2'	46:B:291:U:C6	2.51	0.45
46:B:830:G:H2'	46:B:831:G:O4'	2.16	0.45
46:B:1512:A:H2'	46:B:1513:A:C8	2.52	0.45
46:B:1636:C:H2'	46:B:1637:U:H6	1.81	0.45
79:AR:169:ALA:HB2	79:AR:199:ILE:HD12	1.98	0.45
1:AS:208:A:H4'	1:AS:210:A:C8	2.51	0.45
1:AS:908:G:N7	4:AW:9:ARG:NH2	2.64	0.45
1:AS:1725:A:N6	44:CK:42:CYS:HA	2.31	0.45
1:AS:1755:U:O4	1:AS:1762:G:O6	2.35	0.45
1:AS:1755:U:H3	1:AS:1762:G:H1	1.64	0.45
1:AS:2384:C:H2'	1:AS:2385:C:H6	1.82	0.45
1:AS:2739:U:H2'	1:AS:2740:U:H6	1.81	0.45
1:AS:2985:U:H2'	1:AS:2986:U:C6	2.51	0.45
5:AX:66:LYS:HZ1	24:BQ:9:ASN:H	1.63	0.45
36:CC:70:TYR:HA	36:CC:73:LYS:HG3	1.98	0.45
43:CJ:90[B]:HIS:NE2	43:CJ:92:GLU:OE1	2.49	0.45
46:CM:403:C:O2'	53:CT:92:ARG:O	2.26	0.45
46:CM:502:U:O2'	46:CM:503:A:OP1	2.31	0.45
46:CM:644:U:H2'	46:CM:645:G:C8	2.50	0.45
46:CM:1234:U:C4	46:CM:1235:U:C4	3.05	0.45
46:CM:1575:G:H1	46:CM:1595:U:H3	1.63	0.45
55:CV:114:GLU:OE2	55:CV:132:HIS:NE2	2.48	0.45
56:CW:23:ARG:NH1	56:CW:27:GLU:OE1	2.49	0.45
72:DM:39:ILE:O	72:DM:72:GLY:N	2.47	0.45
1:1:502:U:H2'	1:1:503:U:C6	2.51	0.45
1:1:1163:U:H2'	1:1:1164:U:O4'	2.17	0.45
1:1:1632:C:O2'	28:AA:79:HIS:ND1	2.41	0.45
1:1:1852:C:H2'	1:1:1853:C:H6	1.80	0.45
1:1:2431:U:H5'	1:1:2438:U:C2	2.52	0.45
1:1:2719:A:H2'	1:1:2720:A:C8	2.52	0.45
1:1:3067:U:H2'	1:1:3068:C:H6	1.82	0.45
83:1:3465:PAR:H62	83:1:3465:PAR:H13	1.84	0.45
11:q:7:ASP:OD1	11:q:56:THR:HG23	2.16	0.45
13:s:88:GLU:OE2	13:s:90:GLN:NE2	2.50	0.45
19:y:94:LEU:HD22	29:AB:119:PRO:HG3	1.98	0.45
24:6:90:GLY:O	25:7:16:GLY:HA2	2.16	0.45
32:AE:18:ARG:HB3	32:AE:34:GLU:HG3	1.99	0.45
45:i:105:GLN:NE2	46:B:579:U:C2	2.85	0.45
45:i:125:ALA:O	45:i:129:LEU:HG	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:B:65:A:H2	46:B:84:A:H62	1.65	0.45
46:B:217:A:N6	46:B:828:U:H1'	2.32	0.45
46:B:944:U:H5'	60:P:15:ALA:O	2.17	0.45
46:B:953:U:H2'	46:B:954:C:O4'	2.15	0.45
46:B:1187:A:N6	46:B:1443:C:O5'	2.49	0.45
83:B:1801:PAR:H13	83:B:1801:PAR:H42	1.69	0.45
50:F:66:ARG:HH22	57:M:56:LYS:NZ	2.15	0.45
63:S:19:ALA:HB2	63:S:83:ALA:HB1	1.98	0.45
63:S:27:LEU:O	63:S:64:ILE:N	2.35	0.45
78:h:158:ARG:HB3	78:h:162:GLU:OE2	2.16	0.45
1:AS:478:G:H3'	1:AS:479:C:O4'	2.17	0.45
1:AS:912:G:N1	4:AW:207:VAL:HG11	2.31	0.45
1:AS:975:U:H4'	1:AS:976:A:O4'	2.16	0.45
1:AS:1387:C:C2	33:BZ:104:ARG:HD3	2.51	0.45
8:BA:59:ASP:OD2	8:BA:77:ARG:NH1	2.49	0.45
13:BF:86:VAL:HG21	13:BF:112:LEU:HD22	1.98	0.45
14:BG:57:VAL:HG22	14:BG:69:VAL:HG22	1.97	0.45
18:BK:30:ARG:CZ	18:BK:34:GLN:HG3	2.46	0.45
19:BL:181:SER:OG	19:BL:182:ARG:NH1	2.50	0.45
21:BN:7:TYR:CE2	21:BN:34:THR:HG22	2.51	0.45
23:BP:15:PHE:CE2	23:BP:74:PHE:HD2	2.34	0.45
26:BS:141:TYR:HB3	36:CC:33:VAL:HG13	1.99	0.45
46:CM:740:A:HO2'	46:CM:741:A:P	2.40	0.45
46:CM:1515:U:H2'	46:CM:1516:C:C6	2.52	0.45
54:CU:11:THR:HG23	54:CU:14:GLU:H	1.81	0.45
63:DD:27:LEU:HB3	63:DD:63:ASP:HB2	1.99	0.45
73:DN:12:LYS:HA	73:DN:15:ARG:NH1	2.30	0.45
1:1:275:U:H2'	1:1:276:U:C6	2.52	0.45
1:1:1121:U:OP1	12:r:15:LYS:HG3	2.17	0.45
1:1:1218:G:HO2'	1:1:1281:G:H1	1.64	0.45
1:1:1466:U:H2'	1:1:1467:U:C6	2.50	0.45
1:1:1852:C:C2	1:1:1853:C:C5	3.05	0.45
1:1:2339:A:H2'	1:1:2340:C:H6	1.82	0.45
1:1:2467:C:H5''	1:1:2468:C:H3'	1.98	0.45
1:1:2584:U:H2'	1:1:2585:U:O4'	2.16	0.45
1:1:2589:U:OP1	30:AC:3:LYS:HA	2.16	0.45
3:4:70:G:H5''	27:9:28:ARG:CZ	2.47	0.45
5:k:160:VAL:HB	5:k:183:ILE:HD11	1.99	0.45
10:p:163:LEU:HA	16:v:7:LEU:HD21	1.99	0.45
11:q:10:LEU:HD21	11:q:79:ILE:HD12	1.98	0.45
18:x:29:THR:HA	18:x:32:THR:HG22	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:i:101:LYS:CB	46:B:573:C:H5''	2.47	0.45
46:B:152:G:OP1	53:I:2:LYS:HD2	2.17	0.45
46:B:1062:C:H2'	46:B:1063:C:H6	1.81	0.45
46:B:1237:C:H2'	46:B:1238:U:H6	1.82	0.45
46:B:1293:G:H2'	46:B:1294:C:C6	2.52	0.45
46:B:1302:C:H2'	46:B:1303:G:O4'	2.16	0.45
46:B:1626:C:H2'	46:B:1627:C:O4'	2.16	0.45
51:G:42:LEU:N	51:G:84:ALA:O	2.44	0.45
54:J:42:ILE:HD13	54:J:56:VAL:HA	1.99	0.45
63:S:22:LYS:HG2	63:S:23:ALA:N	2.32	0.45
64:T:7:LYS:O	64:T:11:ARG:HG2	2.17	0.45
65:U:100:VAL:HG11	65:U:108:LYS:HD3	1.99	0.45
1:AS:148:U:P	16:BI:49:ARG:HH12	2.39	0.45
1:AS:185:U:OP1	27:BT:122:LYS:NZ	2.28	0.45
1:AS:531:G:O2'	1:AS:552:G:N1	2.28	0.45
1:AS:941:C:H2'	1:AS:942:U:H6	1.82	0.45
1:AS:947:A:H5''	1:AS:1139:A:N1	2.32	0.45
1:AS:964:G:O2'	30:BW:15:LYS:HE2	2.16	0.45
1:AS:1338:G:H2'	1:AS:1339:A:O4'	2.17	0.45
1:AS:2116:A:C4	38:CE:3:LYS:HB3	2.52	0.45
1:AS:2201:A:H2'	1:AS:2202:A:C8	2.51	0.45
1:AS:2680:C:H2'	1:AS:2681:C:C6	2.51	0.45
1:AS:2937:U:O2'	4:AW:221:LYS:HD3	2.16	0.45
1:AS:2956:C:H2'	1:AS:2957:C:H6	1.81	0.45
9:BB:108:GLN:HG2	9:BB:109:ILE:N	2.30	0.45
14:BG:59:ARG:NH2	14:BG:152:PRO:HG2	2.32	0.45
31:BX:101:ASP:N	31:BX:101:ASP:OD1	2.49	0.45
46:CM:565:A:H5''	70:DK:70:LYS:NZ	2.32	0.45
46:CM:736:G:H2'	46:CM:737:A:C8	2.47	0.45
46:CM:875:C:H2'	46:CM:876:A:H8	1.80	0.45
46:CM:1032:G:H2'	46:CM:1033:U:C6	2.51	0.45
46:CM:1325:U:O4	63:DD:8:THR:HA	2.17	0.45
46:CM:1740:A:H2'	46:CM:1741:A:H8	1.80	0.45
50:CQ:91:ARG:HD2	50:CQ:95:ARG:HH21	1.81	0.45
50:CQ:110:LEU:HD21	50:CQ:116:ILE:HG22	1.98	0.45
70:DK:107:PHE:CD2	70:DK:114:LYS:HB3	2.52	0.45
79:DT:69:VAL:HG22	79:DT:85:SER:OG	2.17	0.45
1:1:1172:C:H4'	17:w:90:PRO:HD3	1.98	0.45
1:1:2525:A:H2'	1:1:2526:C:O4'	2.17	0.45
1:1:2985:U:H2'	1:1:2986:U:C6	2.51	0.45
1:1:3019:U:H5'	5:k:329:PRO:HA	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:3039:C:H3'	20:z:62:ARG:HH22	1.82	0.45
4:j:4:VAL:HG13	4:j:8:GLN:NE2	2.32	0.45
10:p:201:LEU:HD13	10:p:212:LEU:CD1	2.47	0.45
29:AB:28:HIS:CD2	29:AB:32:ARG:HG2	2.52	0.45
29:AB:112:VAL:HB	29:AB:130:VAL:HG12	1.98	0.45
46:B:634:A:H5''	69:Y:31:SER:HB3	1.98	0.45
46:B:965:G:H4'	46:B:1763:A:H4'	1.99	0.45
46:B:1105:U:H2'	46:B:1106:C:C6	2.51	0.45
46:B:1167:U:H4'	62:R:124:THR:CG2	2.46	0.45
46:B:1637:U:H2'	46:B:1638:A:H8	1.82	0.45
62:R:1:MET:O	62:R:3:ASP:N	2.48	0.45
78:h:175:ALA:O	78:h:181:GLN:HA	2.16	0.45
1:AS:381:U:H2'	1:AS:382:U:C6	2.52	0.45
1:AS:662:U:H5'	6:AY:108:ARG:HA	1.99	0.45
1:AS:1286:A:H2'	1:AS:1287:A:C8	2.52	0.45
1:AS:1303:G:H4'	1:AS:1304:A:O5'	2.16	0.45
1:AS:1755:U:C2'	1:AS:1756:A:H5'	2.46	0.45
1:AS:1758:U:H6	1:AS:1759:U:H4'	1.81	0.45
1:AS:1791:U:H2'	4:AW:50:HIS:CD2	2.52	0.45
6:AY:85:ARG:O	6:AY:85:ARG:HG3	2.16	0.45
12:BE:140:THR:HG21	12:BE:148:VAL:HG21	1.98	0.45
15:BH:62:LEU:HD22	15:BH:65:LEU:HB2	1.98	0.45
16:BI:180:PHE:C	16:BI:182:LYS:H	2.25	0.45
22:BO:112:ASN:HB3	22:BO:128:LEU:HD13	1.99	0.45
23:BP:90:ASN:O	23:BP:92:ILE:HG13	2.17	0.45
46:CM:122:U:C2'	46:CM:123:G:H5''	2.46	0.45
46:CM:147:C:C2	46:CM:148:C:C5	3.05	0.45
46:CM:156:U:O2'	46:CM:157:U:H3'	2.16	0.45
46:CM:265:U:H2'	46:CM:266:C:H6	1.81	0.45
46:CM:339:A:H2'	46:CM:340:C:C6	2.52	0.45
46:CM:1300:U:O2'	46:CM:1301:G:H8	1.99	0.45
53:CT:58:LYS:HG2	53:CT:105:ASP:O	2.16	0.45
57:CX:58:GLN:HB3	57:CX:65:TYR:HB2	1.99	0.45
66:DG:131:ASP:O	66:DG:135:ILE:HG12	2.17	0.45
80:l1:36:VAL:HG22	80:l1:204:LEU:CD1	2.47	0.45
80:l1:185:MET:HA	80:l1:188:ASN:ND2	2.26	0.45
1:1:222:U:OP1	1:1:224:C:N4	2.41	0.45
1:1:911:A:H8	1:1:2114:C:O2'	1.99	0.45
1:1:1302:G:O6	1:1:2344:C:O2'	2.35	0.45
1:1:2354:G:H2'	1:1:2355:G:C8	2.51	0.45
1:1:2407:G:H2'	1:1:2408:A:H8	1.82	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:2627:U:H4'	1:1:2628:A:O4'	2.17	0.45
1:1:2921:U:H4'	5:k:241:LYS:NZ	2.32	0.45
12:r:4:ARG:NH1	12:r:99:ILE:HG13	2.32	0.45
13:s:52:TYR:HB2	45:i:45:SER:HA	1.98	0.45
22:2:88:ARG:NH1	30:AC:33:LYS:O	2.50	0.45
29:AB:103:ASP:HA	29:AB:126:LYS:HB2	1.99	0.45
46:B:167:A:H8	46:B:167:A:OP2	2.00	0.45
46:B:338:U:H2'	46:B:339:A:C8	2.52	0.45
46:B:560:G:H2'	46:B:561:U:O2	2.16	0.45
46:B:1596:U:H5''	63:S:74:VAL:HB	1.99	0.45
47:C:36:TYR:OH	47:C:56:LYS:NZ	2.49	0.45
51:G:139:VAL:HG23	51:G:150:PRO:HG3	1.98	0.45
64:T:24:LEU:HD23	64:T:34:LEU:HD23	1.98	0.45
1:AS:179:C:H2'	1:AS:180:U:C6	2.52	0.45
1:AS:972:U:H2'	1:AS:973:C:O4'	2.17	0.45
3:AU:71:A:N1	3:AU:82:U:O2'	2.40	0.45
7:AZ:51:LEU:HB2	7:AZ:144:VAL:CG1	2.47	0.45
9:BB:143:ARG:HG2	9:BB:183:ILE:HD13	1.99	0.45
12:BE:82:ARG:NH1	12:BE:83:ASP:OD1	2.50	0.45
17:BJ:11:ASP:HB2	17:BJ:118:ARG:HB3	1.99	0.45
21:BN:164:GLN:HE21	21:BN:166:THR:CG2	2.29	0.45
39:CF:42:LYS:HD3	39:CF:44:LYS:NZ	2.32	0.45
46:CM:383:A:H2'	46:CM:384:G:C8	2.52	0.45
46:CM:580:U:C5	45:CL:101:LYS:HD2	2.51	0.45
46:CM:940:A:H4'	46:CM:1058:G:O2'	2.17	0.45
46:CM:1083:U:OP1	49:CP:154:THR:OG1	2.30	0.45
46:CM:1220:C:H5	78:DS:180:ARG:NE	2.14	0.45
46:CM:1442:C:OP1	46:CM:1443:C:H2'	2.16	0.45
46:CM:1523:G:O2'	46:CM:1524:C:OP1	2.32	0.45
48:CO:64:ARG:HD3	61:DB:29:SER:OG	2.17	0.45
55:CV:190:LEU:HB3	55:CV:195:LEU:HB2	1.98	0.45
57:CX:50:THR:HB	57:CX:55:VAL:HG23	1.99	0.45
71:DL:102:LYS:HD3	71:DL:108:ARG:NH1	2.31	0.45
77:DR:13:LYS:O	77:DR:17:GLN:HG2	2.17	0.45
80:11:53:LEU:HB3	80:11:189:PHE:CD2	2.51	0.45
80:11:188:ASN:O	80:11:192:SER:HB3	2.17	0.45
45:CL:46:ALA:O	45:CL:48:PRO:HD3	2.17	0.45
1:1:171:G:H2'	1:1:172:C:H6	1.82	0.45
1:1:1149:A:O2'	1:1:1150:A:H5'	2.17	0.45
1:1:1298:A:N7	1:1:2829:C:O2'	2.49	0.45
1:1:1611:U:H2'	1:1:1612:U:H6	1.82	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:1754:G:OP1	23:5:109:GLN:NE2	2.50	0.45
1:1:2077:A:O2'	1:1:2078:A:H5'	2.16	0.45
1:1:2649:G:O2'	1:1:2651:A:N1	2.44	0.45
1:1:2668:A:H2'	1:1:2669:A:C8	2.52	0.45
45:i:101:LYS:HB3	46:B:573:C:H5''	1.99	0.45
46:B:252:A:H2'	46:B:253:U:H6	1.82	0.45
46:B:561:U:H4'	77:g:17:GLN:OE1	2.17	0.45
46:B:1205:C:H5'	57:M:51:SER:OG	2.17	0.45
46:B:1537:A:H2'	46:B:1538:U:C6	2.52	0.45
49:E:82:GLN:OE1	49:E:89:GLN:HG2	2.16	0.45
50:F:72:SER:O	50:F:76:LYS:HD2	2.17	0.45
54:J:11:THR:HG23	54:J:14:GLU:H	1.82	0.45
1:AS:385:A:H2'	1:AS:386:A:C8	2.52	0.45
1:AS:548:G:H2'	1:AS:549:U:C6	2.52	0.45
1:AS:596:G:H4'	6:AY:326:LEU:HD13	1.98	0.45
1:AS:673:C:O2'	1:AS:677:U:OP1	2.35	0.45
1:AS:710:G:OP1	14:BG:176:ARG:NH1	2.50	0.45
1:AS:788:G:H2'	1:AS:789:C:C6	2.52	0.45
1:AS:1059:G:N7	1:AS:1093:G:O2'	2.45	0.45
1:AS:1110:U:OP1	29:BV:23:GLY:N	2.32	0.45
1:AS:1357:U:H2'	1:AS:1358:C:C6	2.52	0.45
1:AS:1586:G:C2	1:AS:1587:G:C8	3.05	0.45
1:AS:1671:G:H2'	1:AS:1672:A:H8	1.81	0.45
1:AS:1695:A:C6	1:AS:1743:G:C6	3.05	0.45
1:AS:2919:G:N3	5:AX:250:ALA:HB1	2.32	0.45
1:AS:3044:C:H2'	1:AS:3045:A:O4'	2.17	0.45
1:AS:3066:A:H2'	1:AS:3067:U:C6	2.52	0.45
1:AS:3315:C:O2'	1:AS:3316:U:O5'	2.22	0.45
6:AY:251:TRP:CZ3	6:AY:259:LEU:HD11	2.52	0.45
16:BI:67:ARG:HG2	16:BI:127:TYR:CE1	2.52	0.45
27:BT:84:LYS:HE2	27:BT:84:LYS:HB3	1.86	0.45
31:BX:77:ASN:ND2	44:CK:43:GLY:O	2.45	0.45
32:BY:95:VAL:HG12	32:BY:97:VAL:HG13	1.99	0.45
33:BZ:112:LYS:HE2	33:BZ:116:LEU:HD11	1.99	0.45
40:CG:20:ASN:OD1	40:CG:42:ARG:HG2	2.17	0.45
46:CM:372:U:O2'	46:CM:601:U:OP1	2.34	0.45
48:CO:88:VAL:CG2	48:CO:98:THR:HG22	2.47	0.45
59:CZ:57:ALA:HB1	59:CZ:126:TRP:HZ3	1.81	0.45
60:DA:83:GLU:OE1	60:DA:83:GLU:N	2.47	0.45
62:DC:60:LEU:HD21	62:DC:94:VAL:HG12	1.99	0.45
62:DC:81:ARG:NH1	62:DC:122:THR:HG22	2.32	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
66:DG:15:ILE:HG23	66:DG:59:ALA:HB3	1.99	0.45
66:DG:42:GLY:HA3	66:DG:94:VAL:HG21	1.98	0.45
80:l1:160:LYS:C	80:l1:162:VAL:H	2.25	0.45
1:1:1291:G:H1'	21:0:113:ARG:O	2.18	0.44
1:1:1724:G:N3	1:1:1724:G:H5'	2.32	0.44
1:1:1949:G:H22	20:z:114:LYS:HE3	1.82	0.44
1:1:2407:G:H2'	1:1:2408:A:C8	2.51	0.44
4:j:201:GLY:O	4:j:204:MET:HG3	2.17	0.44
5:k:218:ILE:HB	5:k:337:THR:HB	1.99	0.44
6:l:303:ALA:CA	19:y:39:ARG:HH12	2.30	0.44
7:m:110:LEU:HD22	7:m:115:LEU:HB2	1.99	0.44
14:t:27:ASP:OD1	14:t:31:LYS:HE2	2.17	0.44
32:AE:18:ARG:HD3	32:AE:34:GLU:HB3	1.99	0.44
39:AL:46:ARG:HD3	39:AL:47:GLY:O	2.16	0.44
46:B:452:A:O4'	51:G:66:MET:HG3	2.17	0.44
46:B:558:U:H2'	46:B:559:G:C8	2.52	0.44
46:B:1092:G:O2'	46:B:1093:G:H5'	2.17	0.44
46:B:1105:U:H2'	46:B:1106:C:H6	1.82	0.44
46:B:1396:A:HO2'	46:B:1397:A:P	2.40	0.44
46:B:1763:A:H2'	46:B:1764:G:H8	1.81	0.44
50:F:109:LYS:HE3	50:F:114:LEU:HD22	1.99	0.44
50:F:110:LEU:HD21	50:F:116:ILE:HG22	2.00	0.44
61:Q:82:GLY:HA3	61:Q:115:PRO:HG2	1.98	0.44
67:W:68:LYS:HE2	67:W:79:ASP:OD1	2.17	0.44
1:AS:435:C:H2'	1:AS:436:A:C8	2.53	0.44
1:AS:844:A:N3	46:CM:958:A:H4'	2.31	0.44
1:AS:982:U:O2'	9:BB:120:ALA:O	2.34	0.44
1:AS:2589:U:H3'	30:BW:3:LYS:HE2	1.99	0.44
1:AS:2957:C:H2'	1:AS:2958:U:H6	1.82	0.44
9:BB:15:LYS:HE3	9:BB:15:LYS:HB2	1.74	0.44
31:BX:36:LEU:HD13	31:BX:61:TYR:HB3	1.99	0.44
32:BY:78:ARG:HA	32:BY:88:LEU:HD23	1.99	0.44
36:CC:78:LYS:HA	36:CC:81:ARG:HD2	2.00	0.44
46:CM:415:A:H5'	46:CM:416:G:C5	2.51	0.44
46:CM:636:C:O2'	54:CU:97:LYS:HE2	2.17	0.44
46:CM:642:C:H2'	46:CM:643:U:C6	2.52	0.44
46:CM:1102:U:H2'	46:CM:1103:G:H8	1.81	0.44
46:CM:1105:U:H2'	46:CM:1106:C:C6	2.52	0.44
46:CM:1279:G:O2'	46:CM:1306:A:N1	2.48	0.44
46:CM:1315:G:H2'	46:CM:1316:A:H8	1.83	0.44
46:CM:1469:A:H2	46:CM:1594:G:H1'	1.82	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:CM:1610:C:H2'	46:CM:1611:C:H6	1.82	0.44
50:CQ:166:ARG:NH2	76:DQ:54:LYS:O	2.32	0.44
52:CS:122:HIS:HB2	52:CS:129:PRO:HG3	1.99	0.44
56:CW:63:ASP:OD1	56:CW:64:GLU:N	2.50	0.44
63:DD:93:GLN:HG3	63:DD:101:LYS:HE2	1.99	0.44
65:DF:45:LEU:HD21	65:DF:81:ILE:HG12	1.99	0.44
73:DN:97:PRO:HA	73:DN:98:PRO:HD3	1.91	0.44
79:DT:33:LEU:HB3	79:DT:45:TRP:HB2	1.99	0.44
1:1:269:G:N2	1:1:295:A:OP2	2.31	0.44
1:1:559:C:H2'	1:1:560:C:H6	1.82	0.44
1:1:785:A:H2'	1:1:786:U:C6	2.52	0.44
1:1:1251:C:H1'	81:12:131:GLU:HG3	1.98	0.44
1:1:1338:G:H2'	1:1:1339:A:O4'	2.17	0.44
1:1:1360:C:OP1	19:y:3:ARG:NE	2.50	0.44
1:1:1385:G:H5''	33:AF:102:SER:HB3	1.99	0.44
1:1:1761:U:H2'	1:1:1762:G:O4'	2.17	0.44
1:1:2680:C:H2'	1:1:2681:C:H6	1.81	0.44
7:m:60:ILE:HB	7:m:80:ALA:HB2	1.98	0.44
15:u:11:ARG:N	21:0:172:TYR:O	2.46	0.44
33:AF:33:TRP:CH2	33:AF:53:GLN:HG2	2.52	0.44
46:B:180:A:H2'	46:B:181:U:C6	2.53	0.44
46:B:291:U:H2'	46:B:292:C:C6	2.52	0.44
46:B:432:G:OP1	70:Z:78:LYS:HA	2.17	0.44
46:B:457:G:P	71:a:105:ARG:HH22	2.40	0.44
46:B:472:A:N1	46:B:592:A:H5'	2.32	0.44
46:B:886:G:H2'	46:B:887:G:C8	2.52	0.44
46:B:1537:A:H2'	46:B:1538:U:H6	1.82	0.44
50:F:71:THR:HB	50:F:87:ILE:HD12	2.00	0.44
52:H:140:SER:OG	52:H:171:ALA:HB1	2.17	0.44
72:b:61:SER:H	72:b:64:VAL:HB	1.82	0.44
1:AS:63:G:O2'	1:AS:76:A:N3	2.43	0.44
1:AS:129:G:H2'	1:AS:130:U:C6	2.53	0.44
1:AS:383:G:N2	1:AS:386:A:OP2	2.43	0.44
1:AS:762:U:H4'	1:AS:763:U:O4'	2.17	0.44
1:AS:1344:U:OP2	19:BL:38:ARG:NH1	2.49	0.44
1:AS:1434:U:H2'	1:AS:1435:U:C6	2.52	0.44
1:AS:1500:A:N1	1:AS:1511:A:O2'	2.43	0.44
1:AS:1944:G:C2	1:AS:2077:A:C2	3.05	0.44
1:AS:2583:U:H2'	1:AS:2584:U:H6	1.82	0.44
2:AT:90:A:H2'	2:AT:91:G:O4'	2.17	0.44
10:BC:66:LEU:HD23	16:BI:25:VAL:HG13	1.98	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BT:82:VAL:HG21	27:BT:85:LEU:HD12	1.99	0.44
42:CI:2:ARG:HH22	42:CI:4:LYS:HE3	1.82	0.44
46:CM:189:G:N7	55:CV:143:ARG:NH2	2.65	0.44
46:CM:387:G:H4'	83:CM:1802:PAR:H34	1.98	0.44
46:CM:649:G:O6	46:CM:682:A:N6	2.51	0.44
46:CM:739:A:H5''	46:CM:740:A:C5'	2.47	0.44
46:CM:1140:G:H2'	46:CM:1141:C:C6	2.53	0.44
46:CM:1202:A:H4'	57:CX:44:LYS:HD2	1.98	0.44
46:CM:1720:C:H2'	46:CM:1721:U:H6	1.81	0.44
51:CR:100:ARG:NH1	51:CR:118:GLU:OE2	2.50	0.44
58:CY:102:LYS:H	70:DK:13:ARG:HH12	1.65	0.44
80:l1:12:ASN:O	80:l1:214:PHE:HZ	2.00	0.44
80:l1:41:TYR:CD1	80:l1:196:LYS:HD2	2.52	0.44
80:l1:196:LYS:HB3	80:l1:199:GLN:CB	2.47	0.44
1:1:145:U:C5	10:p:193:LYS:HE2	2.52	0.44
1:1:524:G:OP2	83:1:3466:PAR:H612	2.17	0.44
1:1:875:U:O2'	18:x:135:ARG:NH2	2.47	0.44
1:1:1247:A:C4	1:1:1248:A:C8	3.05	0.44
1:1:1478:A:H4'	1:1:1479:G:OP2	2.18	0.44
1:1:1746:A:H1'	1:1:1748:A:N7	2.33	0.44
1:1:2394:U:H2'	1:1:2395:U:C6	2.53	0.44
1:1:2581:A:H2'	1:1:2582:G:C8	2.52	0.44
1:1:2628:A:C8	1:1:2630:G:C8	3.05	0.44
1:1:3314:C:H2'	1:1:3315:C:C6	2.52	0.44
7:m:99:TYR:HA	7:m:161:GLY:O	2.18	0.44
9:o:146:VAL:HG12	9:o:179:ILE:HD11	1.98	0.44
16:v:68:ARG:HG2	16:v:128:LYS:HG3	1.99	0.44
21:0:46:GLN:HG2	21:0:51:VAL:O	2.17	0.44
22:2:44:ALA:HB2	22:2:53:PRO:HG2	1.99	0.44
27:9:58:VAL:HA	27:9:104:VAL:HG12	1.99	0.44
27:9:106:ILE:HG21	27:9:109:LEU:HD23	1.99	0.44
45:i:65:LYS:CD	62:R:105:VAL:HG12	2.48	0.44
46:B:4:C:H5	46:B:20:G:N1	2.14	0.44
46:B:1045:U:H2'	46:B:1046:A:O4'	2.18	0.44
46:B:1298:A:N3	46:B:1300:U:H5'	2.32	0.44
46:B:1581:G:H2'	46:B:1582:U:O4'	2.17	0.44
47:C:88:LYS:HA	47:C:88:LYS:HD3	1.82	0.44
65:U:57:ARG:NH1	72:b:40:VAL:HB	2.32	0.44
1:AS:605:U:OP2	8:BA:21:ARG:HG2	2.17	0.44
1:AS:976:A:H8	1:AS:976:A:H3'	1.81	0.44
1:AS:1468:U:H5'	20:BM:4:LEU:HB2	2.00	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:2298:A:H2	44:CK:16:VAL:HG12	1.82	0.44
1:AS:3129:C:H4'	1:AS:3360:G:C4	2.52	0.44
4:AW:101:ILE:HG13	4:AW:165:VAL:HG22	2.00	0.44
5:AX:80:ASP:OD1	5:AX:82:PRO:HD3	2.17	0.44
5:AX:143:GLN:O	5:AX:147:GLU:HG2	2.16	0.44
17:BJ:160:LYS:O	17:BJ:163:VAL:HG12	2.17	0.44
20:BM:162:ARG:NH1	46:CM:799:G:N3	2.66	0.44
36:CC:31:LEU:HB3	36:CC:44:ILE:HG12	1.99	0.44
46:CM:384:G:H2'	46:CM:385:A:C8	2.52	0.44
46:CM:443:A:H1'	46:CM:523:A:H5'	1.99	0.44
46:CM:813:U:O5'	46:CM:813:U:H6	2.00	0.44
46:CM:1132:A:H2'	46:CM:1133:C:C6	2.53	0.44
46:CM:1141:C:H2'	46:CM:1142:A:C8	2.53	0.44
46:CM:1181:A:H4'	46:CM:1182:C:H5''	1.99	0.44
46:CM:1243:U:C6	46:CM:1244:U:H5	2.35	0.44
48:CO:29:TRP:CZ3	61:DB:8:VAL:HG11	2.52	0.44
59:CZ:99:GLU:OE1	59:CZ:111:ASN:ND2	2.44	0.44
80:II:155:ILE:HD12	80:II:157:PHE:CE1	2.52	0.44
1:1:430:G:H2'	1:1:431:A:H8	1.82	0.44
1:1:1642:G:H1'	1:1:1805:A:N6	2.31	0.44
1:1:1908:U:O2'	1:1:2099:G:N7	2.48	0.44
83:1:3462:PAR:H43	83:1:3462:PAR:H14	1.41	0.44
2:3:27:A:H2'	2:3:28:C:C6	2.52	0.44
14:t:8:PRO:HA	19:y:164:ARG:O	2.18	0.44
14:t:109:PHE:CD1	37:AJ:19:LYS:HE2	2.52	0.44
22:2:39:ILE:HG12	22:2:63:ILE:CD1	2.48	0.44
29:AB:76:ASP:OD1	29:AB:76:ASP:N	2.43	0.44
29:AB:105:LEU:HD13	29:AB:128:ARG:HD2	1.98	0.44
32:AE:43:MET:HE3	32:AE:76:ARG:HB2	2.00	0.44
39:AL:17:ARG:NE	39:AL:19:ASP:OD1	2.38	0.44
46:B:481:A:H8	46:B:481:A:O5'	2.01	0.44
46:B:603:A:OP2	46:B:604:A:O2'	2.31	0.44
46:B:1515:U:H2'	46:B:1516:C:C6	2.52	0.44
46:B:1610:C:H2'	46:B:1611:C:C6	2.52	0.44
46:B:1672:G:H2'	46:B:1674:U:C4	2.52	0.44
50:F:44:PRO:C	50:F:46:LYS:H	2.26	0.44
54:J:74:THR:HG22	54:J:88:PHE:HE1	1.82	0.44
56:L:10:LYS:HE3	56:L:12:TYR:O	2.16	0.44
59:O:35:SER:OG	59:O:123:VAL:HG13	2.18	0.44
68:X:53:TYR:OH	68:X:76:ASP:OD2	2.26	0.44
68:X:64:GLU:OE2	74:d:2:VAL:N	2.50	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
70:Z:70:LYS:HD3	77:g:8:LEU:HD22	1.99	0.44
1:AS:19:A:H2'	1:AS:20:G:C8	2.52	0.44
1:AS:37:U:H2'	1:AS:38:A:O4'	2.17	0.44
1:AS:208:A:O2'	1:AS:210:A:OP2	2.33	0.44
1:AS:1852:C:C2	1:AS:1853:C:C5	3.06	0.44
1:AS:2890:G:C2	1:AS:2891:A:N7	2.86	0.44
1:AS:3013:U:H2'	1:AS:3014:U:C6	2.52	0.44
3:AU:70:G:P	27:BT:121:ARG:HH22	2.40	0.44
5:AX:312:VAL:O	5:AX:332:LYS:HD3	2.17	0.44
10:BC:134:LYS:HD2	10:BC:139:HIS:HE1	1.83	0.44
13:BF:7:ASN:ND2	13:BF:9:MET:H	2.14	0.44
14:BG:61:PRO:C	14:BG:62:THR:HG23	2.43	0.44
46:CM:1269:C:OP2	46:CM:1610:C:H4'	2.18	0.44
46:CM:1286:U:H5'	49:CP:83:LYS:HD2	1.99	0.44
46:CM:1410:A:H2'	49:CP:87:ALA:HB3	1.98	0.44
48:CO:30:PHE:CE2	48:CO:96:LEU:HD11	2.52	0.44
56:CW:65:LYS:HA	56:CW:70:LEU:HD11	1.99	0.44
62:DC:18:LYS:N	65:DF:92:GLN:O	2.36	0.44
65:DF:88:ARG:HH21	65:DF:92:GLN:H	1.66	0.44
79:DT:7:LEU:HG	79:DT:312:VAL:HG12	1.98	0.44
1:1:425:G:H2'	1:1:426:G:H8	1.82	0.44
1:1:777:G:OP1	19:y:151:ARG:HD2	2.18	0.44
1:1:1358:C:H2'	1:1:1359:A:C8	2.53	0.44
1:1:1651:G:H5''	35:AH:58:ARG:NH1	2.33	0.44
1:1:1892:A:H61	1:1:2317:C:N4	2.13	0.44
1:1:2785:A:H2'	1:1:2786:G:O4'	2.18	0.44
1:1:3023:U:C2	1:1:3024:G:C8	3.05	0.44
11:q:49:ASN:ND2	11:q:51:ARG:H	2.16	0.44
46:B:57:G:OP2	71:a:116:LYS:HD3	2.17	0.44
46:B:708:A:H2'	46:B:710:U:OP1	2.17	0.44
46:B:1581:G:H5''	76:f:33:LYS:HG3	1.99	0.44
53:I:136:LYS:NZ	53:I:174:LYS:O	2.42	0.44
58:N:102:LYS:O	70:Z:13:ARG:NH1	2.51	0.44
79:AR:126:ALA:HB1	79:AR:152:VAL:HG23	1.99	0.44
1:AS:412:G:N2	18:BK:118:GLN:HE22	2.03	0.44
1:AS:1494:A:H2'	1:AS:1495:U:C6	2.52	0.44
1:AS:1539:G:OP1	16:BI:35:VAL:N	2.48	0.44
1:AS:1660:G:H2'	1:AS:1661:U:C6	2.52	0.44
1:AS:2261:G:H1'	1:AS:2263:C:N4	2.32	0.44
1:AS:2853:C:H2'	1:AS:2854:U:C6	2.52	0.44
1:AS:3317:U:O2'	55:CV:168:SER:HB2	2.16	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:BA:58:GLU:H	8:BA:58:GLU:CD	2.25	0.44
46:CM:67:A:C6	46:CM:84:A:C8	3.06	0.44
46:CM:584:G:H2'	46:CM:585:C:H6	1.82	0.44
46:CM:724:G:C5	46:CM:725:A:C5	3.05	0.44
46:CM:1160:U:H2'	46:CM:1161:G:H8	1.82	0.44
47:CN:127:ARG:NH1	47:CN:152:PRO:HG3	2.33	0.44
58:CY:24:LYS:HB3	58:CY:24:LYS:HE2	1.76	0.44
71:DL:34:ASN:OD1	71:DL:34:ASN:N	2.50	0.44
79:DT:23:LEU:HD21	79:DT:307:ILE:HD13	2.00	0.44
45:CL:110:SER:HB3	45:CL:113:ARG:HG2	2.00	0.44
1:1:236:A:OP1	3:4:95:G:N2	2.39	0.44
1:1:437:G:O2'	1:1:438:A:H5''	2.18	0.44
1:1:788:G:H2'	1:1:789:C:H6	1.83	0.44
1:1:976:A:C2'	1:1:977:U:H5'	2.45	0.44
1:1:1313:A:O2'	1:1:1314:A:H3'	2.18	0.44
1:1:2206:A:H2'	1:1:2207:A:H8	1.83	0.44
1:1:2397:A:H2'	1:1:2398:C:C6	2.53	0.44
1:1:2498:A:H2'	1:1:2499:U:C6	2.52	0.44
10:p:114:ALA:HA	10:p:117:ILE:HG22	1.99	0.44
16:v:62:TYR:HE2	16:v:110:ALA:HB2	1.83	0.44
16:v:143:ARG:HB3	36:AI:96:GLU:OE1	2.18	0.44
46:B:960:C:H5''	60:P:109:LYS:HD3	1.99	0.44
46:B:1300:U:OP1	46:B:1313:G:N2	2.37	0.44
46:B:1664:C:H42	46:B:1711:C:H42	1.65	0.44
46:B:1754:G:OP2	46:B:1757:U:O2'	2.35	0.44
49:E:137:GLY:N	49:E:148:SER:O	2.37	0.44
52:H:213:LYS:HD3	52:H:213:LYS:HA	1.74	0.44
59:O:105:GLN:H	59:O:105:GLN:HG2	1.57	0.44
66:V:108:LEU:HB3	66:V:114:LEU:HD21	2.00	0.44
1:AS:58:G:H2'	3:AU:33:A:O2'	2.18	0.44
1:AS:270:U:H2'	1:AS:271:C:H6	1.83	0.44
1:AS:403:C:O2'	1:AS:404:G:OP1	2.29	0.44
1:AS:945:C:O2'	1:AS:967:G:OP1	2.33	0.44
1:AS:976:A:H3'	1:AS:976:A:C8	2.53	0.44
1:AS:2874:A:H2'	1:AS:2875:A:O4'	2.17	0.44
1:AS:3163:U:O2'	1:AS:3164:U:P	2.76	0.44
5:AX:123:TYR:CZ	5:AX:124:LYS:HG3	2.53	0.44
7:AZ:187:ALA:O	7:AZ:189:GLU:N	2.50	0.44
14:BG:70:ARG:HA	14:BG:149:VAL:HG11	1.99	0.44
26:BS:105:VAL:HG23	26:BS:130:TYR:CG	2.53	0.44
31:BX:27:LEU:HD11	31:BX:85:LYS:HE3	2.00	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:CM:451:C:O2	46:CM:451:C:H2'	2.16	0.44
46:CM:700:G:C2	46:CM:722:A:C2	3.05	0.44
48:CO:32:ILE:O	48:CO:32:ILE:HG13	2.18	0.44
48:CO:229:LEU:HD23	48:CO:229:LEU:HA	1.86	0.44
50:CQ:30:LEU:HD22	50:CQ:59:VAL:HG22	2.00	0.44
51:CR:185:GLY:HA3	51:CR:224:ASN:OD1	2.17	0.44
55:CV:22:ARG:HH21	55:CV:25:ARG:CG	2.27	0.44
64:DE:14:LYS:HB2	64:DE:69:ILE:HG12	2.00	0.44
65:DF:49:LYS:HA	65:DF:49:LYS:HD3	1.77	0.44
79:DT:80:TYR:HE1	79:DT:92:LEU:HG	1.83	0.44
1:1:130:U:H2'	1:1:131:C:H6	1.83	0.44
1:1:381:U:H2'	1:1:382:U:C6	2.53	0.44
1:1:1228:C:H2'	1:1:1229:G:H8	1.81	0.44
1:1:2191:A:N7	1:1:2210:A:N6	2.65	0.44
1:1:2402:A:H61	4:j:230:VAL:HG11	1.83	0.44
16:v:28:TRP:NE1	16:v:32:GLN:HE21	2.15	0.44
28:AA:23:VAL:HA	28:AA:45:GLY:HA2	1.99	0.44
46:B:224:A:C2	46:B:821:U:C2	3.06	0.44
46:B:261:C:O2'	46:B:262:G:H5'	2.17	0.44
50:F:58:GLY:O	50:F:66:ARG:HD3	2.17	0.44
54:J:37:LEU:HD22	54:J:66:TYR:CE1	2.52	0.44
54:J:134:LYS:C	54:J:135:ARG:HD2	2.42	0.44
57:M:35:ILE:O	57:M:37:THR:N	2.49	0.44
68:X:37:ALA:HA	68:X:50:ASN:OD1	2.18	0.44
75:e:10:ALA:HB1	75:e:30:VAL:HB	2.00	0.44
78:h:157:GLU:CG	78:h:159:LEU:HG	2.48	0.44
1:AS:57:G:H5''	16:BI:154:PRO:HB2	2.00	0.44
1:AS:291:C:C2	1:AS:292:U:C5	3.05	0.44
1:AS:435:C:H2'	1:AS:436:A:H8	1.82	0.44
1:AS:521:G:H22	1:AS:565:A:H2	1.66	0.44
1:AS:524:G:N7	83:AS:3406:PAR:H24	2.33	0.44
1:AS:1671:G:OP1	23:BP:75:SER:OG	2.34	0.44
1:AS:1671:G:P	23:BP:75:SER:OG	2.76	0.44
1:AS:1830:U:OP2	40:CG:10:LYS:NZ	2.35	0.44
7:AZ:84:PRO:HB3	7:AZ:89:LYS:HG2	1.99	0.44
14:BG:126:PHE:HB3	14:BG:130:THR:OG1	2.17	0.44
16:BI:180:PHE:O	16:BI:184:LYS:HG3	2.17	0.44
27:BT:66:SER:HB3	27:BT:85:LEU:HD21	2.00	0.44
43:CJ:99:GLN:OE1	43:CJ:99:GLN:HA	2.17	0.44
46:CM:583:A:H2'	46:CM:584:G:C8	2.53	0.44
46:CM:1219:A:O2'	78:DS:187:HIS:ND1	2.42	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:CT:10:ASN:ND2	53:CT:127:THR:O	2.46	0.44
73:DN:12:LYS:HB2	73:DN:33:ASP:OD2	2.18	0.44
74:DO:36:LYS:HB2	74:DO:78:SER:OG	2.18	0.44
80:l1:133:LYS:HD2	80:l1:133:LYS:HA	1.78	0.44
1:1:122:A:C6	1:1:149:A:C5	3.06	0.44
1:1:1012:U:H5'	1:1:1013:U:H4'	2.00	0.44
1:1:1684:U:H2'	1:1:1685:U:C6	2.53	0.44
1:1:2204:U:H2'	1:1:2205:C:C6	2.53	0.44
1:1:2439:A:H1'	1:1:2440:A:C4	2.53	0.44
1:1:2933:G:H2'	1:1:2934:U:H6	1.80	0.44
1:1:3061:C:H2'	1:1:3062:U:O4'	2.18	0.44
1:1:3079:U:H2'	1:1:3080:G:C8	2.53	0.44
3:4:63:G:O2'	36:AI:49:LYS:NZ	2.41	0.44
46:B:692:U:N3	54:J:92:ARG:O	2.47	0.44
46:B:715:G:H3'	46:B:715:G:N3	2.32	0.44
46:B:793:A:H2'	46:B:794:G:C8	2.53	0.44
46:B:908:A:H2'	46:B:909:A:C8	2.53	0.44
46:B:1071:A:H2'	46:B:1072:A:C8	2.52	0.44
46:B:1468:C:H5''	46:B:1508:G:N2	2.32	0.44
49:E:97:VAL:HG11	49:E:124:ILE:HG12	2.00	0.44
50:F:159:ILE:HG23	50:F:165:THR:HG22	1.99	0.44
61:Q:65:LYS:O	61:Q:69:VAL:HG23	2.17	0.44
1:AS:246:U:H2'	1:AS:247:C:C6	2.52	0.44
1:AS:422:A:C2	1:AS:2341:A:H4'	2.53	0.44
1:AS:629:A:H2	34:CA:91:PRO:HG2	1.82	0.44
1:AS:656:G:N2	6:AY:94:MET:HB2	2.32	0.44
1:AS:849:G:OP2	44:CK:2:THR:HG21	2.17	0.44
1:AS:1015:G:H2'	1:AS:1016:G:H8	1.83	0.44
1:AS:1141:G:O6	1:AS:1154:A:H2	2.01	0.44
1:AS:1486:A:O2'	38:CE:12:HIS:O	2.25	0.44
1:AS:1513:A:P	40:CG:41:ARG:HH22	2.38	0.44
1:AS:1762:G:HO2'	1:AS:1763:C:P	2.41	0.44
1:AS:2801:U:C2	1:AS:2802:G:C8	3.06	0.44
1:AS:2920:C:H5''	5:AX:243:HIS:HB3	1.99	0.44
1:AS:3148:A:OP1	17:BJ:6:LYS:NZ	2.41	0.44
83:AS:3402:PAR:HN21	83:AS:3402:PAR:H13	1.82	0.44
83:AS:3406:PAR:H13	83:AS:3406:PAR:H42	1.81	0.44
4:AW:109:GLU:HG3	4:AW:138:GLY:HA2	2.00	0.44
6:AY:109:ARG:HG2	16:BI:203:ARG:HG3	1.99	0.44
6:AY:157:PHE:O	6:AY:157:PHE:CD1	2.71	0.44
11:BD:45:PHE:CE2	11:BD:55:ILE:HG12	2.52	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BR:86:SER:O	25:BR:90:ILE:HG12	2.18	0.44
46:CM:569:G:H5''	70:DK:114:LYS:HE2	2.00	0.44
46:CM:852:G:H5''	60:DA:4:MET:HE2	1.99	0.44
46:CM:874:U:H2'	46:CM:875:C:H6	1.82	0.44
54:CU:60:PRO:N	54:CU:61:PRO:HD2	2.33	0.44
56:CW:3:ARG:HH22	56:CW:6:ARG:NH2	2.16	0.44
57:CX:14:TYR:HD1	57:CX:21:VAL:HG22	1.82	0.44
71:DL:37:LYS:NZ	71:DL:93:ARG:HD3	2.33	0.44
79:DT:117:ALA:CB	79:DT:157:ILE:HG21	2.48	0.44
79:DT:150:ASP:HB3	79:DT:171:TRP:HB2	1.99	0.44
1:1:173:C:H2'	1:1:174:C:C6	2.53	0.44
1:1:843:A:H2'	1:1:844:A:C8	2.52	0.44
1:1:1018:U:H2'	1:1:1019:U:C6	2.53	0.44
1:1:1074:U:H4'	7:m:46:SER:HB3	2.00	0.44
1:1:1301:U:C2	5:k:257:PRO:HG3	2.52	0.44
1:1:1485:A:OP1	35:AH:10:ARG:HD2	2.18	0.44
1:1:1556:G:C2	1:1:1575:A:C8	3.06	0.44
1:1:2375:A:H8	1:1:2913:A:N1	2.16	0.44
1:1:2628:A:C4	1:1:2630:G:N7	2.86	0.44
1:1:2699:A:OP2	1:1:2700:G:N2	2.46	0.44
1:1:2787:G:N2	1:1:2790:U:O2	2.47	0.44
1:1:3010:U:H5''	5:k:62:ARG:HG2	2.00	0.44
1:1:3216:U:H2'	1:1:3217:G:C8	2.53	0.44
7:m:197:LYS:HG2	7:m:202:GLY:HA3	2.00	0.44
9:o:118:THR:HB	22:2:132:ALA:HB3	1.99	0.44
21:0:42:TRP:O	21:0:46:GLN:HG3	2.17	0.44
24:6:36:VAL:HG22	24:6:58:VAL:HG11	1.99	0.44
27:9:39:LEU:HD12	27:9:106:ILE:O	2.18	0.44
45:i:112:LYS:HG2	45:i:113:ARG:N	2.32	0.44
46:B:740:A:HO2'	46:B:741:A:P	2.38	0.44
46:B:1086:G:H4'	69:Y:76:GLN:HG3	1.99	0.44
46:B:1530:A:N6	46:B:1555:C:O4'	2.51	0.44
46:B:1546:G:C6	65:U:134:ARG:HD3	2.52	0.44
51:G:99:PHE:CE1	51:G:113:ARG:HG2	2.51	0.44
52:H:148:ARG:HB3	52:H:157:ARG:NH1	2.32	0.44
57:M:4:PRO:HG2	57:M:7:ASP:HB2	2.00	0.44
59:O:32:LEU:HA	59:O:35:SER:HB3	1.99	0.44
59:O:98:GLY:O	59:O:103:LEU:HB2	2.17	0.44
70:Z:130:VAL:HG21	70:Z:143:PRO:HD3	2.00	0.44
1:AS:486:C:C2	1:AS:487:C:C5	3.06	0.44
1:AS:2077:A:O2'	1:AS:2078:A:H5'	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:2183:U:HO2'	1:AS:2184:G:P	2.41	0.44
1:AS:2203:U:H4'	43:CJ:36:PHE:CE2	2.53	0.44
1:AS:2659:G:H4'	7:AZ:7:PHE:CE2	2.51	0.44
1:AS:2696:U:H4'	22:BO:54:HIS:CD2	2.53	0.44
6:AY:60:GLN:OE1	38:CE:55:ARG:NH1	2.51	0.44
11:BD:167:VAL:HB	11:BD:172:ILE:HG22	1.99	0.44
25:BR:113:LYS:HG3	25:BR:114:GLU:N	2.33	0.44
27:BT:51:ARG:HG2	27:BT:52:GLN:N	2.32	0.44
46:CM:160:A:H3'	46:CM:161:G:H21	1.83	0.44
46:CM:583:A:H2'	46:CM:584:G:H8	1.82	0.44
46:CM:1438:U:P	76:DQ:10:HIS:HD1	2.41	0.44
46:CM:1581:G:H2'	46:CM:1582:U:O4'	2.18	0.44
46:CM:1740:A:H2'	46:CM:1741:A:C8	2.52	0.44
48:CO:48:ILE:HD13	48:CO:61:LEU:CD1	2.48	0.44
52:CS:63:GLN:HE22	52:CS:66:ASN:HB2	1.83	0.44
59:CZ:24:ILE:HG13	59:CZ:25:GLU:N	2.32	0.44
65:DF:131:LEU:HD12	65:DF:132:LYS:O	2.18	0.44
74:DO:47:PHE:CE1	74:DO:49:HIS:HB2	2.51	0.44
79:DT:173:LYS:HB3	79:DT:192:HIS:O	2.16	0.44
45:CL:89:ASP:OD1	45:CL:89:ASP:N	2.46	0.44
1:1:725:G:O6	1:1:738:G:O2'	2.32	0.43
1:1:2367:C:H2'	1:1:2368:A:H8	1.82	0.43
1:1:2477:U:H2'	1:1:2478:A:O4'	2.18	0.43
1:1:2912:A:OP2	5:k:2:SER:N	2.51	0.43
4:j:70:LYS:HG3	4:j:71:LEU:N	2.33	0.43
6:l:30:PRO:HB3	19:y:25:TYR:HE2	1.83	0.43
6:l:61:THR:HG21	6:l:78:VAL:HG22	2.00	0.43
11:q:161:ILE:O	11:q:164:ILE:HG22	2.18	0.43
14:t:55:ARG:NH1	14:t:73:ARG:O	2.47	0.43
16:v:65:ARG:HG2	16:v:127:TYR:CD1	2.53	0.43
21:0:96:ASP:OD1	21:0:97:VAL:N	2.51	0.43
31:AD:77:ASN:O	31:AD:81:THR:HG23	2.17	0.43
31:AD:101:ASP:OD1	31:AD:101:ASP:N	2.51	0.43
46:B:184:C:H2'	46:B:185:G:O4'	2.18	0.43
46:B:386:G:OP1	46:B:400:C:H5	2.01	0.43
46:B:526:U:H2'	46:B:527:A:O4'	2.18	0.43
59:O:58:GLN:HB2	59:O:87:PRO:CD	2.48	0.43
59:O:67:THR:C	59:O:69:GLU:H	2.26	0.43
64:T:89:SER:C	64:T:91:LEU:N	2.75	0.43
66:V:67:LEU:HB2	66:V:68:ARG:HD2	2.00	0.43
1:AS:279:U:O4	43:CJ:45:ARG:NH2	2.51	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:430:G:H2'	1:AS:431:A:H8	1.83	0.43
1:AS:1474:C:H2'	1:AS:1475:U:C6	2.53	0.43
1:AS:1792:G:H5''	4:AW:22:LEU:HD22	2.00	0.43
1:AS:2908:A:H2'	1:AS:2909:G:C8	2.53	0.43
1:AS:2959:A:H2'	1:AS:2960:C:H6	1.83	0.43
5:AX:284:ARG:HH11	5:AX:356:LEU:HD12	1.81	0.43
5:AX:296:THR:HB	5:AX:356:LEU:O	2.18	0.43
10:BC:83:LEU:HA	10:BC:83:LEU:HD23	1.81	0.43
18:BK:30:ARG:NH1	18:BK:31:GLU:OE1	2.50	0.43
21:BN:52:LYS:HG3	21:BN:55:SER:HB3	2.00	0.43
21:BN:77:ILE:HD12	21:BN:94:TYR:CD1	2.53	0.43
46:CM:119:A:H1'	46:CM:395:A:C4	2.52	0.43
46:CM:593:G:H2'	46:CM:594:C:C6	2.53	0.43
46:CM:740:A:H2'	46:CM:741:A:H8	1.83	0.43
52:CS:200:ASN:HB3	52:CS:208:SER:HB3	2.00	0.43
60:DA:141:TYR:HE1	60:DA:146:ALA:HB2	1.83	0.43
1:1:1018:U:O2'	1:1:1019:U:H5'	2.18	0.43
1:1:1571:G:H2'	1:1:1572:G:C8	2.53	0.43
1:1:1863:A:H2'	1:1:1864:G:H8	1.82	0.43
1:1:3166:A:N6	1:1:3167:G:O6	2.52	0.43
10:p:256:ALA:O	10:p:260:THR:HG22	2.19	0.43
11:q:77:ASN:HA	11:q:80:THR:HG22	2.00	0.43
12:r:31:ILE:HA	12:r:66:GLU:OE1	2.18	0.43
21:0:79:LEU:HD13	21:0:110:LEU:HD21	2.00	0.43
46:B:330:U:P	55:K:56:ARG:HH22	2.41	0.43
46:B:333:U:O2'	58:N:130:PRO:O	2.28	0.43
46:B:1351:U:OP1	63:S:29:LYS:HD2	2.17	0.43
46:B:1410:A:C2'	49:E:87:ALA:HB3	2.43	0.43
46:B:1772:U:P	61:Q:128:ARG:HH22	2.41	0.43
49:E:133:PRO:HB2	49:E:217:TYR:HE2	1.83	0.43
52:H:43:PHE:HE1	52:H:70:VAL:HG23	1.82	0.43
55:K:121:LEU:HD13	55:K:166:PHE:CE2	2.53	0.43
1:AS:831:G:HO2'	1:AS:853:G:N2	2.16	0.43
1:AS:2298:A:C2	44:CK:16:VAL:HG12	2.52	0.43
1:AS:2407:G:H2'	1:AS:2408:A:C8	2.53	0.43
1:AS:2978:A:H2'	1:AS:2979:U:O4'	2.18	0.43
1:AS:3197:G:H2'	1:AS:3198:C:H6	1.84	0.43
3:AU:10:A:H2'	3:AU:11:C:C6	2.53	0.43
3:AU:45:C:H3'	40:CG:15:LYS:NZ	2.33	0.43
7:AZ:125:VAL:HG11	7:AZ:199:ILE:HD13	2.00	0.43
16:BI:68:ARG:NH1	16:BI:124:ASP:O	2.41	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:BQ:131:SER:HA	46:CM:415:A:C2	2.52	0.43
28:BU:23:VAL:HG12	28:BU:45:GLY:HA3	1.99	0.43
46:CM:331:A:H2'	46:CM:332:G:C8	2.53	0.43
46:CM:1253:G:H1'	46:CM:1434:G:H4'	2.00	0.43
46:CM:1307:A:H2'	46:CM:1308:C:C6	2.53	0.43
46:CM:1647:A:H2'	46:CM:1648:U:C6	2.53	0.43
52:CS:145:ASP:OD1	52:CS:146:SER:N	2.51	0.43
52:CS:163:SER:HB2	75:DP:48:VAL:HG22	2.00	0.43
54:CU:89:LEU:HD23	54:CU:124:ASP:HB2	1.99	0.43
64:DE:90:ALA:HA	64:DE:95:HIS:CD2	2.54	0.43
68:DI:5:LYS:HB3	68:DI:7:GLN:OE1	2.18	0.43
80:I1:194:LEU:HD21	80:I1:200:ASN:OD1	2.18	0.43
1:1:40:G:N2	1:1:2775:A:N7	2.66	0.43
1:1:208:A:OP1	6:I:162:LYS:NZ	2.32	0.43
1:1:590:A:H5'	8:n:16:ALA:O	2.18	0.43
1:1:647:A:H2'	1:1:648:C:C6	2.54	0.43
1:1:976:A:H8	1:1:976:A:H3'	1.82	0.43
1:1:1165:A:H2'	1:1:1166:A:C8	2.53	0.43
1:1:1229:G:C6	1:1:1230:G:C6	3.07	0.43
1:1:1422:C:OP2	29:AB:4:ARG:NH2	2.51	0.43
1:1:1439:G:H2'	1:1:1440:G:C8	2.53	0.43
1:1:2917:G:O2'	1:1:2920:C:OP2	2.29	0.43
83:1:3458:PAR:H43	83:1:3458:PAR:H14	1.81	0.43
2:3:69:A:C6	2:3:110:G:C6	3.06	0.43
8:n:44:GLY:O	8:n:47:ARG:NH1	2.39	0.43
24:6:61:THR:OG1	24:6:63:LYS:NZ	2.51	0.43
46:B:94:U:H2'	46:B:95:G:O4'	2.18	0.43
46:B:260:U:O2'	46:B:261:C:H5'	2.18	0.43
46:B:1243:U:C6	46:B:1244:U:H5	2.36	0.43
46:B:1750:A:H5''	46:B:1758:U:H5''	2.00	0.43
47:C:57:ILE:HG23	47:C:177:LEU:HD23	2.00	0.43
48:D:131:ASP:OD1	48:D:131:ASP:N	2.45	0.43
51:G:36:HIS:CG	51:G:85:GLY:HA3	2.53	0.43
66:V:124:ILE:HD11	66:V:132:LEU:HD12	2.00	0.43
1:AS:419:G:H1	3:AU:4:C:H42	1.66	0.43
1:AS:1365:A:O2'	29:BV:20:GLY:HA2	2.19	0.43
1:AS:1416:C:OP1	3:AU:20:U:H5''	2.17	0.43
1:AS:1756:A:C2	1:AS:1759:U:H5	2.36	0.43
1:AS:2946:U:H2'	1:AS:2947:U:C6	2.52	0.43
1:AS:3146:G:N2	1:AS:3178:A:H1'	2.33	0.43
1:AS:3316:U:O2'	1:AS:3317:U:OP1	2.36	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AT:45:A:H2'	2:AT:46:A:C8	2.53	0.43
9:BB:143:ARG:HG2	9:BB:183:ILE:HG21	2.00	0.43
10:BC:134:LYS:HG3	10:BC:202:THR:HG23	2.00	0.43
11:BD:76:ALA:O	11:BD:79:ILE:HG22	2.18	0.43
12:BE:194:GLY:C	12:BE:196:TYR:H	2.26	0.43
31:BX:43:LEU:HD12	31:BX:68:PRO:O	2.18	0.43
46:CM:98:U:H2'	46:CM:99:C:C6	2.53	0.43
46:CM:566:G:H4'	70:DK:90:ASP:OD1	2.18	0.43
46:CM:635:C:OP1	69:DJ:32:LYS:N	2.38	0.43
46:CM:854:A:H61	46:CM:943:U:H5	1.66	0.43
46:CM:880:G:OP1	48:CO:49:ASN:ND2	2.51	0.43
46:CM:962:A:H2'	46:CM:963:A:O4'	2.18	0.43
46:CM:975:C:H2'	46:CM:976:G:O4'	2.18	0.43
46:CM:1071:A:H2'	46:CM:1072:A:C8	2.53	0.43
46:CM:1485:G:H2'	46:CM:1486:G:H8	1.82	0.43
52:CS:128:ASN:OD1	52:CS:130:ILE:HG12	2.18	0.43
53:CT:121:ILE:O	53:CT:123:GLY:N	2.42	0.43
59:CZ:56:GLU:HG3	59:CZ:124:LYS:HD3	2.00	0.43
66:DG:112:GLY:O	66:DG:125:SER:OG	2.29	0.43
67:DH:63:LYS:HZ1	67:DH:80:ALA:HB1	1.82	0.43
45:CL:42:ALA:O	45:CL:43:PRO:C	2.61	0.43
1:1:39:A:N7	1:1:933:G:C5	2.86	0.43
1:1:169:G:N2	1:1:248:U:O2	2.48	0.43
1:1:942:U:H2'	1:1:943:G:H8	1.82	0.43
1:1:2516:U:H3'	1:1:2517:C:O4'	2.18	0.43
7:m:83:LEU:HB3	7:m:88:ILE:HB	1.99	0.43
17:w:83:LYS:HB3	17:w:83:LYS:HE3	1.77	0.43
21:0:125:LYS:HG2	21:0:127:VAL:HG23	1.99	0.43
22:2:12:ARG:O	22:2:16:GLN:HG3	2.18	0.43
28:AA:22:LYS:NZ	28:AA:129:TRP:O	2.45	0.43
38:AK:28:HIS:N	38:AK:33:THR:O	2.44	0.43
45:i:108:GLY:HA3	50:F:117:ARG:HG3	1.98	0.43
60:P:55:ARG:O	74:d:47:PHE:HB2	2.19	0.43
1:AS:414:U:H2'	1:AS:415:G:H8	1.84	0.43
1:AS:1365:A:H4'	29:BV:21:ARG:HG3	2.01	0.43
1:AS:1575:A:H5''	1:AS:1576:A:C2	2.52	0.43
1:AS:2194:G:H1	1:AS:2207:A:N6	2.16	0.43
1:AS:2710:A:H5'	30:BW:36:ASP:OD1	2.18	0.43
1:AS:2802:G:H1'	1:AS:2833:U:C2	2.54	0.43
1:AS:2978:A:C2	1:AS:3113:A:C4	3.06	0.43
2:AT:70:A:H2'	2:AT:71:U:C6	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:BN:46:GLN:HG2	21:BN:51:VAL:O	2.18	0.43
21:BN:55:SER:O	21:BN:55:SER:OG	2.35	0.43
27:BT:27:ARG:HH12	27:BT:76:LEU:HA	1.83	0.43
46:CM:31:C:OP1	70:DK:140:LYS:NZ	2.34	0.43
46:CM:74:U:O2'	46:CM:76:A:OP1	2.33	0.43
46:CM:1166:U:O2'	62:DC:126:VAL:HG22	2.17	0.43
46:CM:1218:G:H22	46:CM:1238:U:H1'	1.83	0.43
46:CM:1226:G:H4'	62:DC:77:LYS:O	2.18	0.43
46:CM:1481:C:H2'	46:CM:1482:C:C6	2.53	0.43
48:CO:91:VAL:HG13	48:CO:91:VAL:O	2.19	0.43
53:CT:28:TYR:CZ	53:CT:104:GLN:HG3	2.53	0.43
57:CX:17:GLN:O	57:CX:18:GLU:HB2	2.18	0.43
59:CZ:97:LEU:HD21	59:CZ:118:ALA:O	2.18	0.43
61:DB:107:ILE:HG21	73:DN:53:LEU:HD11	2.01	0.43
66:DG:22:LEU:HD21	66:DG:28:LEU:HD22	2.00	0.43
69:DJ:106:THR:HA	69:DJ:123:GLY:HA3	1.99	0.43
79:DT:132:VAL:O	79:DT:145:LEU:HB2	2.18	0.43
1:1:943:G:H2'	1:1:944:C:C6	2.53	0.43
1:1:1754:G:H2'	1:1:1755:U:O4'	2.17	0.43
1:1:1922:C:H3'	44:AQ:7:LYS:HG2	2.00	0.43
1:1:1943:G:O2'	1:1:1944:G:OP1	2.28	0.43
1:1:2679:U:H2'	1:1:2680:C:C6	2.52	0.43
1:1:2718:A:H2'	1:1:2719:A:O4'	2.18	0.43
1:1:2919:G:C2	5:k:250:ALA:HB1	2.52	0.43
6:l:17:GLY:C	6:l:19:SER:H	2.26	0.43
6:l:139:ARG:NH2	6:l:241:PRO:HB2	2.34	0.43
46:B:147:C:C2	46:B:148:C:C5	3.07	0.43
46:B:1258:G:N7	46:B:1416:U:H3'	2.33	0.43
46:B:1410:A:C8	49:E:87:ALA:HB2	2.51	0.43
46:B:1595:U:O3'	63:S:72:GLY:HA3	2.19	0.43
49:E:135:ARG:HB3	49:E:216:THR:HB	2.00	0.43
51:G:103:TYR:CD1	51:G:189:LEU:HD21	2.53	0.43
63:S:30:ILE:HD12	63:S:80:ILE:HG21	2.00	0.43
65:U:110:ARG:O	65:U:113:LEU:N	2.51	0.43
79:AR:112:LEU:N	79:AR:126:ALA:O	2.35	0.43
1:AS:112:C:P	16:BI:147:ARG:HH21	2.41	0.43
1:AS:1328:A:H2'	1:AS:1329:C:H6	1.84	0.43
1:AS:1516:G:H2'	1:AS:1517:G:O4'	2.18	0.43
1:AS:1754:G:H2'	1:AS:1755:U:O4'	2.18	0.43
1:AS:2374:G:OP1	1:AS:2375:A:O2'	2.26	0.43
1:AS:3315:C:O2'	1:AS:3316:U:H2'	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AT:77:G:H3'	21:BN:46:GLN:O	2.18	0.43
11:BD:23:ARG:NH1	11:BD:41:ILE:O	2.52	0.43
11:BD:47:LYS:HB2	15:BH:5:VAL:HB	1.99	0.43
16:BI:88:GLY:HA3	43:CJ:50:TYR:CE2	2.54	0.43
46:CM:66:U:H5'	53:CT:173:PRO:HA	1.99	0.43
46:CM:167:A:OP2	46:CM:167:A:H8	2.02	0.43
46:CM:222:C:H2'	46:CM:223:A:C8	2.53	0.43
46:CM:857:G:H2'	46:CM:858:U:O4'	2.18	0.43
46:CM:938:G:H2'	46:CM:939:G:C8	2.54	0.43
46:CM:1105:U:H2'	46:CM:1106:C:H6	1.83	0.43
46:CM:1198:G:H1	46:CM:1436:U:H3	1.66	0.43
46:CM:1435:U:H2'	46:CM:1436:U:C6	2.54	0.43
46:CM:1574:A:O2'	52:CS:104:ASN:OD1	2.32	0.43
48:CO:84:ILE:HD13	48:CO:103:LEU:HD13	1.99	0.43
51:CR:51:ARG:HA	51:CR:51:ARG:HD3	1.86	0.43
51:CR:103:TYR:HE2	51:CR:184:THR:HG23	1.84	0.43
67:DH:52:LYS:HB3	67:DH:91:ASP:HB2	2.00	0.43
70:DK:86:PHE:HE1	70:DK:88:PRO:HA	1.83	0.43
80:l1:43:PRO:HB2	80:l1:44:GLN:H	1.63	0.43
80:l1:78:LYS:HE2	80:l1:78:LYS:HB2	1.84	0.43
45:CL:64:LEU:O	45:CL:67:LYS:NZ	2.21	0.43
1:1:94:A:C5	1:1:95:G:H1'	2.54	0.43
1:1:269:G:H5'	16:v:120:TRP:CE3	2.54	0.43
1:1:1911:A:H2'	1:1:1912:U:C6	2.54	0.43
1:1:2184:G:O2'	1:1:2187:U:O4	2.33	0.43
1:1:2807:U:H2'	1:1:2808:C:C6	2.54	0.43
5:k:60:LEU:HD11	5:k:62:ARG:NH1	2.34	0.43
7:m:232:GLU:HB3	7:m:234:GLU:OE1	2.18	0.43
11:q:27:VAL:HG12	11:q:82:VAL:HG21	2.01	0.43
14:t:115:ARG:HH22	14:t:148:PRO:C	2.26	0.43
33:AF:10:ILE:HG12	33:AF:64:THR:HB	1.99	0.43
46:B:5:U:O2'	46:B:551:G:H4'	2.19	0.43
46:B:76:A:N6	46:B:80:A:O2'	2.52	0.43
52:H:80:LYS:HB2	52:H:83:ARG:HG3	2.00	0.43
61:Q:76:ILE:HB	61:Q:110:ILE:HG12	1.99	0.43
62:R:97:TYR:HE1	62:R:102:PHE:CE1	2.36	0.43
75:e:32:PHE:HZ	75:e:59:SER:HG	1.65	0.43
79:AR:62:PHE:HB3	79:AR:93:TRP:CE3	2.54	0.43
1:AS:713:A:H8	29:BV:115:LYS:HG3	1.83	0.43
1:AS:787:A:H2'	1:AS:788:G:C8	2.54	0.43
1:AS:1466:U:H2'	1:AS:1467:U:C6	2.54	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:2920:C:OP1	5:AX:244:ARG:NH1	2.51	0.43
2:AT:6:C:O2'	7:AZ:72:ASP:OD2	2.32	0.43
4:AW:180:LEU:HD11	44:CK:26:THR:OG1	2.19	0.43
5:AX:4:ARG:NE	5:AX:6:TYR:O	2.51	0.43
6:AY:4:ARG:HH22	6:AY:24:PRO:C	2.25	0.43
8:BA:33:LEU:HD23	8:BA:33:LEU:HA	1.86	0.43
21:BN:171:PHE:O	21:BN:172:TYR:HB2	2.16	0.43
37:CD:76:LEU:HD11	37:CD:85:LYS:HE2	2.01	0.43
38:CE:21:ARG:HD3	38:CE:44:MET:SD	2.58	0.43
46:CM:1303:G:H2'	46:CM:1304:A:C8	2.54	0.43
46:CM:1463:G:H1'	66:DG:48:GLN:HG2	2.01	0.43
46:CM:1579:A:O2'	46:CM:1580:A:OP1	2.33	0.43
46:CM:1606:C:HO2'	52:CS:152:SER:HA	1.83	0.43
46:CM:1634:U:H2'	46:CM:1635:A:C8	2.54	0.43
48:CO:82:ARG:HG2	48:CO:105:PHE:CE1	2.48	0.43
50:CQ:19:TYR:HE1	50:CQ:38:VAL:HG13	1.83	0.43
50:CQ:149:LYS:NZ	45:CL:103:LEU:HD11	2.32	0.43
53:CT:79:LYS:HD2	53:CT:86:PRO:HG3	2.01	0.43
1:1:412:G:H2'	1:1:413:U:C6	2.53	0.43
1:1:718:A:OP1	1:1:780:A:N6	2.51	0.43
1:1:933:G:N2	1:1:957:C:OP1	2.52	0.43
1:1:1357:U:H2'	1:1:1358:C:C6	2.53	0.43
1:1:1482:G:N2	35:AH:6:THR:HG22	2.33	0.43
5:k:71:GLU:OE2	25:7:1:MET:N	2.44	0.43
6:l:142:ARG:HB3	6:l:177:LYS:HG2	2.01	0.43
27:9:5:SER:HB3	27:9:8:VAL:HG23	2.01	0.43
44:AQ:41:PHE:CG	44:AQ:62:LYS:HD2	2.53	0.43
46:B:178:A:H2'	46:B:179:A:O4'	2.19	0.43
46:B:221:U:C2	46:B:222:C:C5	3.07	0.43
46:B:1148:A:H2'	46:B:1149:G:O4'	2.18	0.43
46:B:1634:U:H2'	46:B:1635:A:H8	1.83	0.43
46:B:1780:G:N1	73:c:75:VAL:HB	2.33	0.43
54:J:169:TYR:HE1	54:J:175:LYS:HG3	1.83	0.43
59:O:62:LEU:HD22	59:O:75:VAL:HG11	2.01	0.43
60:P:26:PHE:CE1	60:P:28:LEU:HB2	2.53	0.43
63:S:22:LYS:HB3	63:S:63:ASP:OD1	2.19	0.43
66:V:70:GLN:OE1	66:V:70:GLN:N	2.51	0.43
79:AR:76:ALA:HB3	79:AR:120:LEU:HD21	2.01	0.43
1:AS:21:G:H1'	3:AU:104:A:N3	2.34	0.43
1:AS:291:C:H2'	1:AS:292:U:C6	2.54	0.43
1:AS:699:G:H2'	1:AS:700:C:H6	1.82	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:1163:U:H2'	1:AS:1164:U:O4'	2.18	0.43
1:AS:1863:A:H2'	1:AS:1864:G:C8	2.54	0.43
1:AS:2388:U:H3	1:AS:2773:A:H2	1.67	0.43
3:AU:149:A:H2'	3:AU:150:G:C8	2.54	0.43
13:BF:92:ARG:HH11	13:BF:94:LYS:HE3	1.82	0.43
18:BK:32:THR:HG21	18:BK:87:SER:HB3	2.01	0.43
46:CM:29:U:H2'	46:CM:30:G:C8	2.53	0.43
46:CM:510:A:OP1	56:CW:170:GLY:N	2.36	0.43
46:CM:1436:U:H2'	46:CM:1437:C:H6	1.83	0.43
46:CM:1634:U:H2'	46:CM:1635:A:H8	1.84	0.43
48:CO:131:ASP:OD1	48:CO:131:ASP:N	2.45	0.43
49:CP:155:GLY:N	49:CP:212:ALA:HB2	2.33	0.43
52:CS:26:ALA:HB3	63:DD:26:GLY:C	2.43	0.43
62:DC:96:VAL:N	62:DC:103:ASN:O	2.39	0.43
65:DF:132:LYS:HD3	65:DF:136:GLN:HB2	2.01	0.43
80:11:165:LEU:HD23	80:11:165:LEU:HA	1.79	0.43
1:1:288:C:O2'	16:v:95:GLN:O	2.37	0.43
1:1:1434:U:H4'	6:l:89:ALA:HB3	1.99	0.43
1:1:2443:G:C2	1:1:2469:A:N6	2.87	0.43
1:1:2680:C:H2'	1:1:2681:C:C6	2.54	0.43
1:1:2814:U:O2	1:1:2814:U:H2'	2.18	0.43
1:1:3072:U:O2'	1:1:3073:G:O5'	2.36	0.43
2:3:47:C:OP2	7:m:158:ARG:HD3	2.19	0.43
5:k:159:ARG:HG2	5:k:182:GLN:HA	2.00	0.43
7:m:41:LYS:HB2	22:2:68:THR:O	2.19	0.43
7:m:95:TRP:HD1	7:m:158:ARG:HA	1.84	0.43
7:m:179:ARG:HD3	7:m:179:ARG:HA	1.81	0.43
10:p:79:PHE:HA	10:p:180:ILE:HD13	2.01	0.43
32:AE:71:ARG:HH11	32:AE:103:LEU:HD13	1.83	0.43
36:AI:3:GLY:O	36:AI:5:LYS:NZ	2.52	0.43
45:i:82:LYS:HB3	46:B:1164:G:OP1	2.18	0.43
46:B:597:A:H2'	46:B:598:U:H6	1.84	0.43
46:B:741:A:H5'	51:G:16:SER:OG	2.19	0.43
47:C:179:ARG:HE	47:C:183:ARG:NH1	2.17	0.43
50:F:110:LEU:HD23	50:F:110:LEU:HA	1.91	0.43
52:H:136:ALA:HA	52:H:202:ALA:HA	2.00	0.43
57:M:59:PHE:CZ	57:M:62:GLN:HA	2.53	0.43
63:S:30:ILE:N	63:S:33:SER:O	2.27	0.43
69:Y:11:LEU:HD12	69:Y:74:VAL:HG13	1.99	0.43
74:d:31:PHE:CD2	74:d:81:ARG:HG3	2.54	0.43
79:AR:69:VAL:HA	79:AR:85:SER:HA	2.01	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:291:C:H2'	1:AS:292:U:H6	1.84	0.43
1:AS:684:G:C2	1:AS:693:C:C2	3.07	0.43
1:AS:830:U:H2'	1:AS:831:G:O4'	2.19	0.43
1:AS:962:U:H2'	1:AS:963:A:C8	2.54	0.43
1:AS:983:U:H2'	1:AS:984:U:C6	2.53	0.43
1:AS:1746:A:H1'	1:AS:1748:A:N7	2.34	0.43
1:AS:1746:A:OP2	39:CF:28:ASN:ND2	2.51	0.43
1:AS:2747:U:O2'	1:AS:2749:G:N1	2.51	0.43
1:AS:2781:C:H5''	1:AS:2928:A:H4'	2.00	0.43
1:AS:3165:U:H2'	1:AS:3166:A:O4'	2.17	0.43
10:BC:162:GLU:CD	16:BI:26:ARG:HH22	2.26	0.43
23:BP:37:LEU:HD13	23:BP:82:LEU:HD22	2.01	0.43
38:CE:18:LEU:HD11	40:CG:51:ILE:HD12	2.01	0.43
46:CM:17:C:O2'	46:CM:1122:A:N1	2.47	0.43
46:CM:507:G:H2'	46:CM:508:G:C8	2.53	0.43
46:CM:1354:U:C2'	46:CM:1355:A:H5'	2.49	0.43
50:CQ:133:LYS:HB2	50:CQ:192:ASP:HA	1.99	0.43
54:CU:25:GLU:CG	54:CU:35:ARG:HH12	2.32	0.43
63:DD:2:SER:OG	63:DD:3:THR:N	2.52	0.43
71:DL:29:HIS:HB2	71:DL:32:ARG:HB3	2.01	0.43
79:DT:5:GLU:HB3	79:DT:248:TRP:HH2	1.83	0.43
79:DT:246:ARG:HB3	79:DT:248:TRP:CD1	2.54	0.43
1:1:307:A:H2'	1:1:308:A:H8	1.80	0.43
1:1:599:U:C6	1:1:600:U:H5	2.37	0.43
1:1:762:U:H4'	1:1:763:U:O4'	2.19	0.43
1:1:1099:A:N3	1:1:1099:A:H2'	2.34	0.43
1:1:1249:U:H3'	1:1:1250:C:H5'	2.01	0.43
1:1:1263:U:H3'	1:1:1264:G:H8	1.84	0.43
1:1:1830:U:OP2	40:AM:10:LYS:NZ	2.40	0.43
1:1:2388:U:H3	1:1:2773:A:H2	1.67	0.43
1:1:2959:A:H2'	1:1:2960:C:C6	2.54	0.43
1:1:3132:U:H2'	1:1:3133:G:C8	2.54	0.43
5:k:296:THR:OG1	5:k:357:LYS:O	2.29	0.43
7:m:127:GLY:O	7:m:195:LEU:HD23	2.19	0.43
10:p:83:LEU:HD23	10:p:83:LEU:HA	1.80	0.43
11:q:21:LYS:HD2	15:u:6:LYS:HD3	2.00	0.43
22:2:45:ASN:OD1	22:2:47:SER:OG	2.37	0.43
46:B:451:C:O2	46:B:451:C:H2'	2.18	0.43
46:B:964:A:H4'	46:B:1773:G:N2	2.34	0.43
46:B:1126:G:H2'	46:B:1127:A:C8	2.54	0.43
50:F:210:ALA:O	64:T:19:ARG:NH1	2.52	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:N:84:ILE:HG21	58:N:117:VAL:HG21	2.00	0.43
64:T:6:THR:OG1	64:T:7:LYS:N	2.50	0.43
1:AS:210:A:OP2	6:AY:222:ASN:HB2	2.19	0.43
1:AS:1471:A:H4'	32:BY:56:ILE:HD12	2.01	0.43
1:AS:1814:U:O2'	1:AS:1815:U:O5'	2.36	0.43
1:AS:3179:U:C6	15:BH:114:MET:HE1	2.53	0.43
2:AT:47:C:OP2	7:AZ:158:ARG:HD3	2.19	0.43
3:AU:27:U:H2'	3:AU:28:C:H6	1.84	0.43
5:AX:280:HIS:ND1	5:AX:328:ILE:HG22	2.34	0.43
6:AY:61:THR:HG22	6:AY:63:ALA:N	2.33	0.43
7:AZ:60:ILE:HB	7:AZ:80:ALA:HB2	2.00	0.43
25:BR:124:LYS:HG3	25:BR:125:ALA:N	2.20	0.43
35:CB:36[B]:LYS:HE2	35:CB:36[B]:LYS:HB3	1.53	0.43
46:CM:933:A:H2'	46:CM:934:C:C6	2.53	0.43
46:CM:1500:G:H1'	46:CM:1505:C:C2	2.54	0.43
58:CY:127:GLN:HA	58:CY:137:PHE:CD1	2.54	0.43
73:DN:28:ARG:HD3	73:DN:74:CYS:SG	2.59	0.43
80:11:214:PHE:CD1	80:11:214:PHE:O	2.72	0.43
1:1:130:U:H2'	1:1:131:C:C6	2.53	0.43
1:1:364:G:OP1	6:1:61:THR:HG23	2.18	0.43
1:1:515:A:N7	6:1:361:LEU:HD11	2.33	0.43
1:1:661:C:H2'	1:1:662:U:C6	2.54	0.43
1:1:962:U:H2'	1:1:963:A:C8	2.54	0.43
1:1:975:U:H4'	1:1:976:A:O4'	2.19	0.43
1:1:1058:A:O2'	22:2:108:ARG:NH2	2.51	0.43
1:1:1303:G:H4'	1:1:1304:A:O5'	2.17	0.43
1:1:1633:A:OP1	28:AA:73:LYS:HE2	2.19	0.43
1:1:1672:A:H4'	23:5:103:GLN:NE2	2.33	0.43
1:1:2107:U:H2'	1:1:2108:G:H8	1.83	0.43
1:1:2649:G:H2'	1:1:2649:G:N3	2.33	0.43
1:1:2807:U:H2'	1:1:2808:C:H6	1.83	0.43
83:1:3461:PAR:H43	83:1:3461:PAR:H14	1.55	0.43
2:3:11:A:N1	2:3:67:G:O2'	2.49	0.43
3:4:49:G:OP1	36:AI:45:HIS:HB2	2.19	0.43
6:1:139:ARG:O	6:1:139:ARG:HG3	2.19	0.43
11:q:134:MET:SD	11:q:146:VAL:HG22	2.59	0.43
15:u:87:TRP:CE2	15:u:93:ALA:HB2	2.54	0.43
27:9:45:VAL:HG21	27:9:119:ILE:HG23	2.00	0.43
28:AA:57:MET:HB3	28:AA:61:LYS:HB3	2.01	0.43
38:AK:26:SER:HB3	38:AK:35:SER:OG	2.19	0.43
44:AQ:38:ASP:HA	44:AQ:45:ARG:HA	2.01	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:B:260:U:C2'	46:B:261:C:H5'	2.48	0.43
46:B:267:G:H2'	46:B:268:C:C6	2.53	0.43
46:B:449:G:H2'	46:B:451:C:C5	2.53	0.43
46:B:885:A:H2'	46:B:886:G:H8	1.84	0.43
46:B:1038:G:H5''	46:B:1038:G:N3	2.34	0.43
46:B:1141:C:H2'	46:B:1142:A:C8	2.54	0.43
46:B:1332:U:P	67:W:22:ARG:HH12	2.41	0.43
46:B:1336:G:H2'	46:B:1337:C:O4'	2.19	0.43
46:B:1365:C:O2	63:S:18:VAL:HG21	2.19	0.43
46:B:1546:G:C4	65:U:134:ARG:HB3	2.53	0.43
50:F:116:ILE:HG13	50:F:117:ARG:N	2.34	0.43
56:L:63:ASP:OD1	56:L:64:GLU:N	2.52	0.43
57:M:43:ILE:HG22	57:M:44:LYS:HE2	2.00	0.43
61:Q:20:ASP:N	61:Q:50:SER:HB3	2.34	0.43
1:AS:117:U:C5	1:AS:122:A:N6	2.86	0.43
1:AS:925:A:H2'	1:AS:926:U:C6	2.54	0.43
1:AS:1060:A:C6	1:AS:1092:U:C4	3.07	0.43
1:AS:1328:A:H2'	1:AS:1329:C:C6	2.54	0.43
1:AS:1501:C:OP2	18:BK:23:ARG:NH1	2.44	0.43
1:AS:1828:C:H2'	1:AS:1829:G:H8	1.84	0.43
1:AS:1863:A:H2'	1:AS:1864:G:H8	1.84	0.43
1:AS:2117:A:C4	38:CE:3:LYS:HE2	2.53	0.43
2:AT:107:A:H2'	2:AT:108:U:C6	2.54	0.43
5:AX:260:VAL:HG11	5:AX:266:ARG:HH11	1.82	0.43
20:BM:38:ARG:O	20:BM:42:ARG:HG3	2.19	0.43
21:BN:73:LYS:NZ	21:BN:97:VAL:O	2.52	0.43
46:CM:607:U:O2	70:DK:19:ARG:NH1	2.52	0.43
46:CM:1127:A:H2'	46:CM:1128:A:C8	2.54	0.43
46:CM:1436:U:H2'	46:CM:1437:C:C6	2.54	0.43
57:CX:76:LEU:O	57:CX:80:LEU:HB2	2.19	0.43
59:CZ:54:LYS:HB2	59:CZ:56:GLU:HG2	2.01	0.43
65:DF:33:THR:HA	65:DF:38:VAL:O	2.19	0.43
78:DS:178:LYS:O	78:DS:180:ARG:HG2	2.19	0.43
80:l1:181:ASN:O	80:l1:185:MET:HG3	2.18	0.43
1:1:149:A:C4	1:1:150:A:C8	3.07	0.42
1:1:1020:G:H21	1:1:1023:A:H8	1.67	0.42
1:1:1069:U:H2'	1:1:1070:U:C6	2.54	0.42
1:1:1177:U:O4	17:w:22:SER:OG	2.37	0.42
1:1:1235:C:H2'	1:1:1236:A:C8	2.54	0.42
1:1:1434:U:H2'	1:1:1435:U:C6	2.54	0.42
1:1:2234:A:N6	77:g:3:LYS:HE3	2.32	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:2239:G:H21	1:1:2240:A:N6	2.16	0.42
1:1:2975:G:O2'	5:k:92:TYR:OH	2.37	0.42
8:n:3:GLN:HG2	33:AF:76:LEU:HB3	2.01	0.42
10:p:122:THR:C	10:p:124:LYS:H	2.26	0.42
46:B:444:A:C6	46:B:445:U:C4	3.07	0.42
46:B:1056:U:O3'	74:d:19:HIS:HB2	2.18	0.42
46:B:1238:U:C2	46:B:1239:U:C5	3.07	0.42
46:B:1370:A:OP1	67:W:34:GLU:HG3	2.19	0.42
46:B:1503:A:O2'	46:B:1504:U:H5'	2.19	0.42
49:E:168:PRO:HG3	56:L:57:ARG:HG3	2.01	0.42
51:G:104:ASP:HB3	51:G:110:ALA:HB2	2.00	0.42
59:O:33:ARG:O	59:O:33:ARG:HD3	2.19	0.42
59:O:51:ALA:HB1	59:O:56:GLU:HB3	1.99	0.42
64:T:71:PHE:HZ	64:T:74:GLN:CD	2.26	0.42
1:AS:28:C:OP1	16:BI:189:HIS:HB2	2.19	0.42
1:AS:406:G:H1'	3:AU:16:G:N2	2.34	0.42
1:AS:412:G:H2'	1:AS:413:U:H6	1.83	0.42
1:AS:883:G:H2'	1:AS:884:A:C8	2.54	0.42
1:AS:1945:A:H2'	1:AS:1946:U:C6	2.53	0.42
1:AS:2604:G:O6	1:AS:2619:A:N6	2.52	0.42
1:AS:2958:U:C2	1:AS:2959:A:C8	3.07	0.42
7:AZ:17:GLN:NE2	22:BO:22:HIS:O	2.27	0.42
7:AZ:179:ARG:HD3	7:AZ:179:ARG:HA	1.86	0.42
11:BD:180:TYR:HD1	41:CH:13:TYR:HD2	1.66	0.42
13:BF:63:GLU:O	13:BF:65:ILE:HG12	2.19	0.42
15:BH:125:LYS:O	15:BH:129:VAL:HG13	2.19	0.42
24:BQ:42:THR:HG21	24:BQ:50:PRO:HG3	2.01	0.42
44:CK:84:ARG:O	44:CK:88:GLU:HG3	2.19	0.42
46:CM:520:U:O3'	71:DL:60:PHE:HB2	2.19	0.42
46:CM:598:U:P	70:DK:108:GLY:HA2	2.59	0.42
46:CM:852:G:N2	60:DA:87:ASP:OD2	2.33	0.42
46:CM:933:A:H2'	46:CM:934:C:H6	1.84	0.42
46:CM:1227:A:O2'	46:CM:1229:A:OP1	2.36	0.42
46:CM:1469:A:C2	46:CM:1594:G:H1'	2.54	0.42
46:CM:1745:U:C2	46:CM:1746:C:C5	3.07	0.42
52:CS:27:THR:OG1	63:DD:27:LEU:HD12	2.18	0.42
55:CV:39:GLY:O	55:CV:61:GLU:HG3	2.18	0.42
62:DC:127:ARG:CG	45:CL:69:PHE:HB3	2.49	0.42
66:DG:105:VAL:HB	66:DG:122:ARG:HD3	2.01	0.42
70:DK:92:CYS:HA	70:DK:95:PHE:HD2	1.84	0.42
75:DP:16:LEU:HB2	75:DP:27:GLN:HB2	2.02	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:DT:122:GLN:CB	79:DT:180:LEU:HD13	2.49	0.42
80:11:17:LEU:O	80:11:21:THR:N	2.52	0.42
1:1:33:A:N3	1:1:806:A:O2'	2.49	0.42
1:1:757:A:H2'	1:1:758:U:C6	2.53	0.42
1:1:867:U:H5''	1:1:2120:A:OP1	2.18	0.42
1:1:1272:U:H2'	1:1:1273:C:H6	1.84	0.42
1:1:1852:C:H2'	1:1:1853:C:C6	2.54	0.42
1:1:1892:A:N6	1:1:2317:C:H42	2.16	0.42
1:1:2545:C:O2'	1:1:2547:G:H1'	2.19	0.42
1:1:2871:C:O2'	1:1:2873:G:OP2	2.26	0.42
83:1:3460:PAR:H11	83:1:3460:PAR:H612	1.72	0.42
4:j:180:LEU:HD22	44:AQ:18:TYR:HB3	2.02	0.42
9:o:212:PHE:HB3	9:o:225:ASP:OD2	2.19	0.42
20:z:176:ARG:NH1	46:B:837:C:OP1	2.46	0.42
23:5:13:LYS:HD2	23:5:15:PHE:CZ	2.54	0.42
28:AA:103:GLU:HB2	28:AA:106:GLN:HB2	2.00	0.42
42:AO:1:MET:HB3	46:B:1629:G:H5'	2.00	0.42
46:B:112:A:O2'	46:B:113:U:H5'	2.18	0.42
46:B:515:U:C2	46:B:516:A:C8	3.07	0.42
46:B:692:U:O2	54:J:93:ARG:HD3	2.18	0.42
46:B:694:C:C2'	46:B:718:A:H61	2.28	0.42
46:B:1161:G:C6	46:B:1450:G:C6	3.08	0.42
50:F:139:ILE:HG12	50:F:185:ILE:HG22	2.00	0.42
50:F:165:THR:O	50:F:169:ILE:HB	2.20	0.42
57:M:11:ILE:HA	57:M:35:ILE:HD13	2.00	0.42
57:M:73:VAL:HB	57:M:86:ILE:HD12	2.01	0.42
58:N:46:LYS:HE2	58:N:50:GLU:OE2	2.19	0.42
65:U:136:GLN:OE1	65:U:136:GLN:N	2.48	0.42
75:e:18:ARG:CD	75:e:26:THR:HG22	2.49	0.42
1:AS:261:U:H2'	1:AS:262:U:C6	2.54	0.42
1:AS:393:U:H2'	1:AS:394:G:O4'	2.19	0.42
1:AS:1018:U:C3'	1:AS:1019:U:H5''	2.49	0.42
1:AS:1116:A:H2'	1:AS:1117:U:C6	2.53	0.42
1:AS:1478:A:H4'	1:AS:1479:G:OP2	2.19	0.42
1:AS:2504:C:H2'	1:AS:2505:G:C8	2.55	0.42
1:AS:2902:A:H2'	1:AS:2903:C:H6	1.83	0.42
7:AZ:143:LYS:HG3	7:AZ:172:TYR:CD2	2.54	0.42
9:BB:39:ARG:HA	9:BB:42:ILE:HG12	1.99	0.42
13:BF:101:ASN:ND2	13:BF:131:MET:H	2.15	0.42
27:BT:69:LYS:HE2	27:BT:69:LYS:HB3	1.86	0.42
46:CM:66:U:O2	53:CT:160:ARG:NE	2.29	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:CM:165:U:C2'	46:CM:166:A:H5''	2.49	0.42
46:CM:591:A:OP1	56:CW:40:ARG:HB2	2.19	0.42
53:CT:121:ILE:HB	53:CT:124:LEU:HB3	2.01	0.42
58:CY:127:GLN:HG3	58:CY:137:PHE:HE1	1.84	0.42
61:DB:65:LYS:O	61:DB:69:VAL:HG23	2.20	0.42
71:DL:76:TYR:OH	71:DL:86:GLU:OE1	2.35	0.42
78:DS:144:VAL:HA	78:DS:147:TYR:CD2	2.49	0.42
79:DT:91:ARG:HD2	79:DT:100:THR:HG21	2.01	0.42
80:ll:151:VAL:HA	80:ll:154:THR:HB	2.01	0.42
45:CL:50:LYS:C	45:CL:50:LYS:HD3	2.44	0.42
1:1:117:U:O2	1:1:120:A:H5''	2.19	0.42
1:1:200:A:H2'	1:1:201:G:H8	1.84	0.42
1:1:377:A:H1'	1:1:392:G:N2	2.33	0.42
1:1:447:U:H2'	1:1:448:U:C2	2.54	0.42
1:1:897:G:OP1	38:AK:12:HIS:NE2	2.52	0.42
1:1:1029:U:O2'	1:1:1030:U:OP1	2.27	0.42
1:1:1277:G:H2'	1:1:1278:G:C8	2.55	0.42
1:1:1379:G:OP1	6:l:204:ARG:HD3	2.20	0.42
1:1:1434:U:H4'	6:l:89:ALA:CB	2.49	0.42
1:1:1459:U:H2'	1:1:1460:G:O4'	2.19	0.42
1:1:1630:G:C6	1:1:1636:G:C6	3.07	0.42
1:1:1791:U:OP1	4:j:191:VAL:HG11	2.19	0.42
1:1:2176:A:C2	1:1:2177:G:C8	3.07	0.42
1:1:2482:U:H2'	1:1:2482:U:O2	2.18	0.42
1:1:2749:G:H5''	1:1:2750:G:OP1	2.19	0.42
1:1:2866:C:H2'	1:1:2867:G:H8	1.83	0.42
1:1:3313:G:H2'	1:1:3314:C:H6	1.84	0.42
3:4:60:U:OP1	26:8:54:TYR:OH	2.30	0.42
6:l:171:LYS:HA	6:l:176:HIS:HB2	2.00	0.42
10:p:201:LEU:HD13	10:p:212:LEU:HD12	2.00	0.42
21:0:27:MET:HE2	21:0:27:MET:HB3	1.92	0.42
46:B:404:U:H2'	46:B:405:A:H8	1.83	0.42
46:B:433:C:H5''	70:Z:50:LYS:HE3	2.01	0.42
46:B:602:A:H2'	46:B:603:A:O4'	2.18	0.42
46:B:746:G:O2'	56:L:72:GLU:OE2	2.28	0.42
46:B:1083:U:OP1	49:E:154:THR:OG1	2.35	0.42
46:B:1187:A:H1'	46:B:1192:C:H41	1.83	0.42
46:B:1744:G:C2	46:B:1745:U:C5	3.07	0.42
49:E:155:GLY:N	49:E:212:ALA:HB2	2.34	0.42
49:E:220:LEU:HD23	69:Y:68:ARG:HA	2.00	0.42
57:M:27:PHE:N	57:M:27:PHE:CD1	2.87	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:M:70:ASP:HB3	57:M:91:ARG:NH2	2.30	0.42
79:AR:132:VAL:O	79:AR:145:LEU:HB2	2.19	0.42
1:AS:538:G:C2	1:AS:539:G:C6	3.08	0.42
1:AS:1758:U:C6	1:AS:1759:U:H4'	2.54	0.42
1:AS:1923:G:P	44:CK:6:LYS:H	2.42	0.42
5:AX:313:ARG:O	5:AX:333:LYS:HE3	2.19	0.42
6:AY:72:VAL:HB	6:AY:77:ARG:NH2	2.35	0.42
13:BF:16:LYS:HB3	13:BF:72:ARG:HG2	2.01	0.42
13:BF:25:GLU:OE2	13:BF:29:ARG:HD3	2.19	0.42
16:BI:122:ASN:OD1	16:BI:123:GLN:N	2.47	0.42
22:BO:40:VAL:HB	22:BO:96:VAL:HG13	2.01	0.42
38:CE:27:PHE:HA	38:CE:34:CYS:HA	2.01	0.42
39:CF:16:ARG:HB3	39:CF:70:PRO:HG3	2.00	0.42
46:CM:457:G:OP1	71:DL:109:LYS:NZ	2.47	0.42
46:CM:702:G:H1'	46:CM:703:U:O3'	2.19	0.42
46:CM:874:U:H2'	46:CM:875:C:C6	2.54	0.42
46:CM:943:U:OP2	74:DO:20:LYS:NZ	2.48	0.42
46:CM:963:A:H2'	46:CM:964:A:O4'	2.19	0.42
46:CM:1131:G:H1'	49:CP:84:GLN:HG2	2.00	0.42
50:CQ:8:LYS:HA	50:CQ:8:LYS:HD3	1.74	0.42
57:CX:16:PHE:CD1	57:CX:17:GLN:N	2.86	0.42
57:CX:25:LYS:HD2	57:CX:59:PHE:CZ	2.53	0.42
59:CZ:64:ASP:N	59:CZ:92:SER:OG	2.51	0.42
79:DT:46:LYS:O	79:DT:56:GLY:HA2	2.19	0.42
79:DT:65:HIS:ND1	79:DT:85:SER:OG	2.12	0.42
79:DT:200:THR:HG21	79:DT:242:PHE:H	1.84	0.42
1:1:169:G:H5''	36:AI:109:ILE:HD13	2.01	0.42
1:1:429:U:H5''	34:AG:87:LYS:HE3	2.01	0.42
1:1:1828:C:H2'	1:1:1829:G:H8	1.84	0.42
1:1:1949:G:O6	1:1:2070:A:H2'	2.20	0.42
1:1:2330:A:H5''	18:x:83:TRP:O	2.19	0.42
1:1:2658:A:H2'	1:1:2659:G:O4'	2.18	0.42
3:4:68:A:H2'	3:4:69:U:C6	2.54	0.42
9:o:36:LYS:HE2	9:o:36:LYS:HB2	1.91	0.42
9:o:39:ARG:HA	9:o:42:ILE:HG12	1.99	0.42
16:v:120:TRP:HZ2	16:v:123:GLN:HG2	1.84	0.42
25:7:112:ASP:HB3	46:B:278:U:O4	2.19	0.42
27:9:87:LYS:HB2	27:9:97:ILE:HD11	2.01	0.42
34:AG:103:TYR:HA	34:AG:104:PRO:C	2.45	0.42
46:B:504:A:HO2'	46:B:505:U:P	2.41	0.42
46:B:963:A:H2'	46:B:964:A:O4'	2.18	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:B:1046:A:H2	46:B:1048:U:H5'	1.85	0.42
46:B:1532:A:H2'	46:B:1533:G:C8	2.54	0.42
48:D:145:ARG:NH2	48:D:151:LYS:O	2.52	0.42
50:F:168:PHE:CE2	50:F:193:PRO:HB3	2.55	0.42
51:G:252:GLU:HB3	51:G:256:ARG:NH1	2.34	0.42
77:g:49:LEU:HD12	77:g:52:GLY:H	1.83	0.42
1:AS:539:G:H8	1:AS:539:G:O5'	2.02	0.42
1:AS:911:A:OP1	1:AS:2123:A:O2'	2.32	0.42
1:AS:2182:C:H2'	1:AS:2183:U:H6	1.84	0.42
1:AS:3023:U:C2	1:AS:3024:G:C8	3.06	0.42
5:AX:160:VAL:HB	5:AX:183:ILE:HD11	2.02	0.42
6:AY:40:PHE:CD2	6:AY:243:ALA:HB2	2.53	0.42
6:AY:105:LYS:HD2	6:AY:107:TRP:CZ2	2.55	0.42
12:BE:56:GLU:HB3	12:BE:58:GLU:HG3	2.00	0.42
15:BH:20:LEU:HD23	15:BH:21:VAL:N	2.34	0.42
26:BS:105:VAL:HG21	26:BS:126:LEU:HD13	2.00	0.42
36:CC:29:ALA:O	36:CC:33:VAL:HG23	2.19	0.42
46:CM:160:A:H2'	46:CM:161:G:N3	2.35	0.42
46:CM:540:A:N6	77:DR:25:GLU:OE2	2.51	0.42
46:CM:702:G:C6	46:CM:719:A:C6	3.08	0.42
46:CM:1316:A:OP2	46:CM:1317:C:H5	2.02	0.42
46:CM:1335:U:O2'	46:CM:1336:G:OP1	2.31	0.42
46:CM:1368:A:O3'	67:DH:88:ARG:NH2	2.51	0.42
46:CM:1602:C:H5''	46:CM:1603:G:O5'	2.18	0.42
48:CO:36:THR:HG23	48:CO:232:HIS:HA	2.01	0.42
50:CQ:66:ARG:HA	50:CQ:69:GLU:HG2	2.01	0.42
66:DG:7:ARG:NH2	66:DG:67:LEU:HB3	2.34	0.42
80:l1:65:ILE:CD1	80:l1:151:VAL:HG11	2.49	0.42
1:1:35:C:H4'	1:1:804:A:C2	2.54	0.42
1:1:814:C:H2'	1:1:815:U:O4'	2.19	0.42
1:1:988:A:O2'	1:1:989:G:H5'	2.18	0.42
1:1:1044:A:H2'	12:r:22:TYR:CZ	2.54	0.42
1:1:1923:G:C8	44:AQ:16:VAL:HG12	2.54	0.42
1:1:2946:U:H2'	1:1:2947:U:C6	2.55	0.42
1:1:3196:U:H2'	1:1:3197:G:C8	2.51	0.42
5:k:77:THR:HG21	5:k:328:ILE:HG12	2.02	0.42
28:AA:78:ASN:OD1	31:AD:37:ARG:NH2	2.53	0.42
35:AH:100:ILE:O	35:AH:104:VAL:HG22	2.19	0.42
46:B:151:G:C6	46:B:160:A:C6	3.08	0.42
46:B:327:G:H2'	46:B:328:G:C8	2.55	0.42
46:B:627:U:C2	46:B:628:A:C8	3.07	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:B:855:C:HO2'	46:B:856:G:P	2.41	0.42
49:E:71:LEU:HB3	49:E:99:ILE:HD11	2.02	0.42
50:F:8:LYS:HD3	50:F:8:LYS:HA	1.84	0.42
50:F:70:LEU:O	50:F:74:ILE:HD12	2.20	0.42
58:N:56:LYS:HE2	58:N:57:LYS:HE3	2.02	0.42
59:O:90:LYS:HE2	59:O:90:LYS:HB3	1.83	0.42
74:d:36:LYS:HE3	74:d:43:ILE:HD13	2.00	0.42
1:AS:539:G:H2'	1:AS:540:C:O4'	2.19	0.42
1:AS:907:C:H42	4:AW:3:ARG:HD3	1.84	0.42
1:AS:948:A:H4'	1:AS:964:G:H21	1.84	0.42
1:AS:1434:U:H4'	6:AY:89:ALA:HB3	2.00	0.42
3:AU:12:A:OP1	18:BK:3:ARG:NE	2.52	0.42
3:AU:12:A:C6	3:AU:13:A:N7	2.88	0.42
3:AU:85:G:H4'	3:AU:86:U:OP1	2.19	0.42
11:BD:134:MET:SD	11:BD:146:VAL:HG22	2.59	0.42
14:BG:167:THR:HB	29:BV:135:GLU:OE1	2.19	0.42
18:BK:131:ARG:HB2	18:BK:135:ARG:HB2	2.02	0.42
19:BL:104:LEU:HD23	19:BL:104:LEU:HA	1.91	0.42
21:BN:125:LYS:HG2	21:BN:127:VAL:HG23	2.00	0.42
25:BR:42:GLN:HB3	25:BR:44:LYS:HE2	2.00	0.42
34:CA:90:PRO:HA	34:CA:91:PRO:HD3	1.92	0.42
43:CJ:6:LYS:NZ	43:CJ:93:LEU:O	2.53	0.42
46:CM:71:A:H2'	46:CM:72:A:C8	2.54	0.42
46:CM:598:U:OP2	70:DK:108:GLY:HA2	2.19	0.42
46:CM:810:U:H2'	46:CM:811:U:H6	1.85	0.42
46:CM:1555:C:H4'	46:CM:1556:A:O5'	2.19	0.42
58:CY:102:LYS:N	70:DK:13:ARG:HH12	2.16	0.42
62:DC:42:ARG:HH22	65:DF:90:LYS:CE	2.32	0.42
62:DC:81:ARG:NH2	62:DC:120:SER:O	2.46	0.42
70:DK:79:ASN:OD1	70:DK:79:ASN:N	2.51	0.42
78:DS:156:VAL:HG22	78:DS:158:ARG:HG2	2.02	0.42
79:DT:22:SER:HB2	79:DT:70:GLN:O	2.19	0.42
45:CL:71:LYS:HA	45:CL:71:LYS:HD2	1.74	0.42
1:1:50:A:C4	1:1:51:A:C8	3.08	0.42
1:1:430:G:H2'	1:1:431:A:C8	2.55	0.42
1:1:544:U:H5'	1:1:546:C:H5''	2.01	0.42
1:1:631:U:O2'	34:AG:21:SER:O	2.30	0.42
1:1:698:C:H2'	1:1:699:G:H8	1.85	0.42
1:1:1235:C:C2	1:1:1236:A:C8	3.07	0.42
1:1:1922:C:H5''	44:AQ:8:VAL:CG1	2.50	0.42
1:1:1945:A:H2'	1:1:1946:U:C6	2.55	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:2957:C:H2'	1:1:2958:U:H6	1.85	0.42
3:4:13:A:C6	3:4:14:C:C4	3.08	0.42
7:m:155:THR:HG22	7:m:179:ARG:CD	2.46	0.42
11:q:44:THR:HG23	11:q:56:THR:HB	2.01	0.42
18:x:120:ASN:HB2	18:x:145:HIS:HB2	2.02	0.42
24:6:37:LEU:HG	24:6:59:MET:O	2.19	0.42
33:AF:98:ALA:HB3	33:AF:101:VAL:HG23	2.00	0.42
36:AI:7:PHE:HD1	27:BT:125:LYS:HD3	1.84	0.42
46:B:110:U:OP1	46:B:738:A:O2'	2.27	0.42
46:B:231:C:H4'	46:B:232:G:N2	2.35	0.42
46:B:1183:G:OP1	46:B:1184:G:O2'	2.30	0.42
46:B:1227:A:O2'	46:B:1229:A:OP1	2.32	0.42
49:E:138:TYR:CD1	49:E:142:ASN:HA	2.54	0.42
50:F:158:MET:HE2	50:F:158:MET:HB2	1.90	0.42
53:I:64:LYS:HB2	53:I:97:VAL:HG21	2.02	0.42
55:K:107:THR:OG1	55:K:108:PRO:HD3	2.20	0.42
63:S:38:VAL:CG1	63:S:40:PRO:HD2	2.49	0.42
66:V:30:VAL:HG13	66:V:34:VAL:HG11	2.02	0.42
75:e:38:ARG:O	75:e:40:ILE:HG13	2.19	0.42
79:AR:92:LEU:HB2	79:AR:104:PHE:HE1	1.83	0.42
1:AS:895:U:H2'	1:AS:896:G:H8	1.84	0.42
1:AS:1347:U:O2	1:AS:1347:U:H2'	2.19	0.42
1:AS:1391:G:O2'	3:AU:18:U:O2	2.37	0.42
1:AS:2497:A:H2'	1:AS:2498:A:C8	2.55	0.42
1:AS:3289:C:C2	1:AS:3290:G:C8	3.07	0.42
8:BA:28:LYS:HD2	8:BA:28:LYS:HA	1.89	0.42
10:BC:162:GLU:OE2	16:BI:22:LEU:HD13	2.20	0.42
20:BM:148:GLU:OE1	20:BM:151:ARG:NH1	2.53	0.42
30:BW:41:ARG:O	30:BW:44:ARG:HB3	2.20	0.42
34:CA:20:LYS:HB2	34:CA:20:LYS:HE2	1.71	0.42
44:CK:16:VAL:HG12	44:CK:16:VAL:O	2.18	0.42
46:CM:226:G:C6	46:CM:819:G:C4	3.08	0.42
46:CM:393:U:H2'	46:CM:394:G:O4'	2.20	0.42
46:CM:1491:G:H5'	66:DG:97:SER:HA	2.01	0.42
53:CT:206:ALA:O	53:CT:210:GLN:HG2	2.19	0.42
57:CX:22:VAL:HG12	57:CX:63:TYR:CZ	2.54	0.42
60:DA:84:ILE:CD1	60:DA:149:LEU:HB3	2.50	0.42
69:DJ:119:LYS:HG3	69:DJ:121:VAL:HG22	2.02	0.42
71:DL:60:PHE:CE1	71:DL:71:GLY:HA3	2.54	0.42
1:1:1521:G:N3	1:1:1521:G:H2'	2.35	0.42
1:1:2545:C:O2'	1:1:2546:U:OP1	2.33	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:2650:A:C6	45:i:52:LYS:HG3	2.55	0.42
1:1:2749:G:C2	29:AB:60:TYR:CE2	3.08	0.42
1:1:3318:G:OP1	55:K:77:ARG:NH2	2.53	0.42
3:4:142:C:H2'	3:4:143:U:C6	2.53	0.42
3:4:142:C:H2'	3:4:143:U:H6	1.84	0.42
3:4:143:U:H2'	3:4:144:G:O4'	2.19	0.42
8:n:154:LEU:HD23	8:n:157:GLN:OE1	2.19	0.42
11:q:90:MET:HE3	11:q:181:VAL:HG23	2.02	0.42
11:q:93:VAL:HG22	41:AN:6:LEU:HD13	2.00	0.42
13:s:87:LYS:O	13:s:88:GLU:HG3	2.19	0.42
13:s:131:MET:HG3	13:s:159:THR:HG23	2.02	0.42
14:t:69:VAL:HG12	14:t:151:GLN:OE1	2.20	0.42
45:i:71:LYS:HA	45:i:71:LYS:HD2	1.76	0.42
46:B:30:G:C6	46:B:595:G:C6	3.08	0.42
46:B:1183:G:O4'	67:W:72:GLY:HA3	2.20	0.42
46:B:1239:U:H2'	46:B:1240:G:C8	2.54	0.42
46:B:1307:A:H2'	46:B:1308:C:C6	2.54	0.42
46:B:1498:G:H2'	46:B:1499:G:C8	2.54	0.42
46:B:1537:A:C6	46:B:1549:G:C6	3.07	0.42
62:R:3:ASP:CG	62:R:4:ALA:H	2.28	0.42
66:V:11:ALA:HB2	66:V:63:ARG:HH21	1.85	0.42
67:W:101:ARG:O	67:W:105:ILE:HG12	2.20	0.42
1:AS:379:C:H2'	1:AS:380:U:H6	1.85	0.42
1:AS:602:A:H2'	1:AS:603:C:H6	1.84	0.42
1:AS:1329:C:C2	1:AS:1330:U:C5	3.07	0.42
1:AS:1705:C:H2'	1:AS:1706:C:H6	1.84	0.42
1:AS:1721:C:H2'	1:AS:1722:C:C6	2.54	0.42
1:AS:1900:C:H2'	1:AS:1901:G:O4'	2.20	0.42
1:AS:2397:A:H2'	1:AS:2398:C:C6	2.55	0.42
3:AU:79:A:C6	3:AU:81:A:C5	3.07	0.42
3:AU:83:U:O4'	3:AU:85:G:N2	2.53	0.42
4:AW:66:PRO:HG2	4:AW:67:TYR:CD2	2.54	0.42
16:BI:73:ARG:HG2	16:BI:75:VAL:HG13	2.00	0.42
46:CM:298:A:H2'	46:CM:299:A:C8	2.54	0.42
46:CM:415:A:H5'	46:CM:416:G:C4	2.54	0.42
46:CM:578:A:H5''	50:CQ:144:ARG:NH2	2.33	0.42
46:CM:725:A:H2'	46:CM:726:C:O4'	2.20	0.42
46:CM:1187:A:N6	46:CM:1443:C:O5'	2.53	0.42
46:CM:1376:U:C5	64:DE:3:ARG:HG3	2.54	0.42
46:CM:1535:G:H5'	65:DF:89:GLN:O	2.20	0.42
46:CM:1580:A:O2'	46:CM:1581:G:H5'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:CN:119:ARG:NH1	49:CP:235:LEU:HD12	2.34	0.42
48:CO:64:ARG:O	48:CO:87:ARG:HA	2.20	0.42
48:CO:110:LEU:O	48:CO:114:VAL:HG23	2.20	0.42
49:CP:151:CYS:SG	69:DJ:99:PHE:HZ	2.43	0.42
51:CR:73:ASP:HB3	51:CR:164:LEU:HD11	2.01	0.42
51:CR:152:PRO:HG3	53:CT:212:LEU:HD23	2.02	0.42
52:CS:166:ARG:HB2	75:DP:46:GLY:HA3	2.02	0.42
54:CU:44:GLU:HB3	54:CU:54:LEU:HD12	2.02	0.42
60:DA:38:ILE:HD11	60:DA:78:ASN:OD1	2.20	0.42
62:DC:81:ARG:NH1	62:DC:98:ASN:HA	2.34	0.42
62:DC:121:ILE:HG12	65:DF:122:HIS:CD2	2.50	0.42
63:DD:4:GLN:HG2	63:DD:95:TYR:CD1	2.55	0.42
66:DG:125:SER:OG	66:DG:128:GLY:N	2.53	0.42
1:1:99:A:H3'	1:1:100:G:H21	1.84	0.42
1:1:208:A:H4'	1:1:210:A:C8	2.54	0.42
1:1:276:U:O2'	16:v:91:GLN:OE1	2.28	0.42
1:1:705:U:OP2	19:y:168:LYS:NZ	2.49	0.42
1:1:1017:G:H2'	1:1:1018:U:H6	1.85	0.42
2:3:24:A:H2'	2:3:25:G:O4'	2.20	0.42
10:p:98:TYR:HB2	10:p:133:VAL:HG23	2.01	0.42
10:p:255:ALA:O	10:p:259:SER:HB2	2.20	0.42
12:r:68:ALA:HB2	12:r:158:LYS:HB2	2.01	0.42
45:i:112:LYS:O	45:i:113:ARG:HB2	2.19	0.42
46:B:330:U:O2'	55:K:5:ARG:NH2	2.52	0.42
46:B:399:A:O2'	46:B:400:C:H4'	2.19	0.42
46:B:728:U:OP1	54:J:104:LYS:N	2.52	0.42
46:B:804:U:H2'	46:B:805:U:H5	1.85	0.42
46:B:1744:G:H8	83:B:1803:PAR:H612	1.84	0.42
49:E:148:SER:OG	49:E:149:LEU:N	2.53	0.42
50:F:65:ARG:HD3	57:M:91:ARG:NE	2.35	0.42
54:J:135:ARG:O	54:J:147:LYS:N	2.35	0.42
63:S:22:LYS:HG2	63:S:23:ALA:H	1.85	0.42
65:U:49:LYS:HA	65:U:49:LYS:HD3	1.74	0.42
79:AR:50:GLY:N	79:AR:55:TYR:HA	2.33	0.42
1:AS:83:C:O2'	1:AS:100:G:O6	2.28	0.42
1:AS:94:A:C5	1:AS:95:G:H1'	2.55	0.42
1:AS:266:C:N4	37:CD:29:LYS:HA	2.35	0.42
1:AS:907:C:OP2	4:AW:9:ARG:HD2	2.20	0.42
1:AS:912:G:H5'	1:AS:913:A:OP1	2.20	0.42
1:AS:1045:C:H2'	1:AS:1046:U:C6	2.54	0.42
1:AS:1128:C:H2'	1:AS:1129:A:H8	1.84	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:1676:G:H2'	1:AS:1677:U:H6	1.85	0.42
1:AS:2650:A:C1'	45:CL:56:SER:HG	2.31	0.42
1:AS:3300:A:H2'	1:AS:3301:A:H8	1.84	0.42
5:AX:159:ARG:HA	5:AX:182:GLN:HA	2.02	0.42
20:BM:159:ALA:O	20:BM:162:ARG:HG3	2.20	0.42
21:BN:137:ARG:HB3	21:BN:139:TYR:CE1	2.55	0.42
46:CM:302:U:H2'	46:CM:303:C:H6	1.85	0.42
46:CM:565:A:H1'	77:DR:14:VAL:HG23	2.02	0.42
46:CM:855:C:O2	74:DO:51:GLN:NE2	2.53	0.42
46:CM:1188:A:C2	46:CM:1543:A:C4	3.07	0.42
46:CM:1609:G:H2'	46:CM:1610:C:C6	2.55	0.42
48:CO:224:ASP:OD1	48:CO:227:SER:N	2.39	0.42
50:CQ:27:THR:O	50:CQ:31:ALA:HB2	2.19	0.42
53:CT:214:LYS:HD3	53:CT:214:LYS:HA	1.79	0.42
54:CU:25:GLU:CD	54:CU:35:ARG:HH22	2.28	0.42
63:DD:89:VAL:HG11	63:DD:105:LYS:HE3	2.02	0.42
66:DG:7:ARG:CG	66:DG:67:LEU:HD22	2.49	0.42
80:11:5:THR:HG23	80:11:9:VAL:HG23	2.02	0.42
1:1:437:G:H21	1:1:620:A:N6	2.17	0.42
1:1:1225:G:H2'	1:1:1226:G:C8	2.54	0.42
1:1:1242:G:N3	1:1:1260:G:H2'	2.35	0.42
1:1:1746:A:OP2	39:AL:28:ASN:ND2	2.45	0.42
1:1:2316:C:OP2	1:1:2317:C:O2'	2.36	0.42
1:1:2403:G:H2'	1:1:2404:U:O4'	2.20	0.42
1:1:2477:U:N3	1:1:2478:A:H8	2.17	0.42
2:3:77:G:H3'	21:0:46:GLN:O	2.20	0.42
14:t:61:PRO:C	14:t:62:THR:HG23	2.45	0.42
18:x:19:GLY:HA3	18:x:22:LEU:HD11	2.01	0.42
46:B:116:U:H2'	46:B:117:U:C6	2.53	0.42
46:B:303:C:H2'	46:B:304:U:C6	2.55	0.42
46:B:776:U:H2'	46:B:777:A:O4'	2.20	0.42
46:B:891:A:H2'	46:B:892:A:C8	2.55	0.42
46:B:1602:C:H5''	46:B:1603:G:O5'	2.20	0.42
46:B:1612:C:H2'	46:B:1613:U:H6	1.85	0.42
47:C:79:ARG:O	47:C:83:GLN:HG3	2.20	0.42
57:M:32:HIS:O	57:M:32:HIS:CG	2.73	0.42
66:V:42:GLY:HA2	66:V:84:LYS:HG3	2.00	0.42
68:X:1:MET:HB3	68:X:10:GLU:HB2	2.01	0.42
71:a:20:ARG:HB3	71:a:76:TYR:CD2	2.55	0.42
1:AS:360:G:N2	1:AS:811:G:H1'	2.34	0.42
1:AS:493:A:O2'	1:AS:3238:A:N1	2.49	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:1021:A:C5	1:AS:1022:A:H1'	2.55	0.42
1:AS:1213:A:H2	1:AS:1284:U:H3	1.65	0.42
1:AS:1612:U:H2'	1:AS:1613:G:H8	1.84	0.42
1:AS:1615:A:H2'	1:AS:1616:U:O4'	2.20	0.42
1:AS:2111:U:O4	1:AS:2125:A:H2	2.03	0.42
1:AS:2195:U:H2'	1:AS:2196:G:H8	1.84	0.42
1:AS:2367:C:H2'	1:AS:2368:A:H8	1.83	0.42
1:AS:2407:G:H2'	1:AS:2408:A:H8	1.85	0.42
1:AS:2627:U:H4'	1:AS:2628:A:O4'	2.19	0.42
1:AS:2855:U:H2'	1:AS:2856:C:H6	1.85	0.42
2:AT:24:A:H2'	2:AT:25:G:C8	2.55	0.42
6:AY:155:ASN:OD1	6:AY:253:GLN:HB3	2.20	0.42
11:BD:90:MET:HE3	11:BD:181:VAL:HG23	2.02	0.42
29:BV:75:LEU:HD22	29:BV:118:LEU:HD11	2.01	0.42
36:CC:15:GLU:OE1	36:CC:15:GLU:N	2.49	0.42
46:CM:165:U:H4'	53:CT:134:GLY:O	2.19	0.42
46:CM:324:G:H2'	46:CM:325:U:C6	2.55	0.42
46:CM:326:A:H2'	46:CM:327:G:O4'	2.20	0.42
46:CM:823:G:N2	46:CM:824:U:H3	2.18	0.42
46:CM:1508:G:O2'	46:CM:1510:G:OP2	2.30	0.42
46:CM:1610:C:H2'	46:CM:1611:C:C6	2.54	0.42
49:CP:171:LYS:HE2	56:CW:57:ARG:NH1	2.35	0.42
51:CR:199:GLU:OE1	51:CR:209:HIS:NE2	2.40	0.42
52:CS:89:ILE:HD12	52:CS:89:ILE:HA	1.91	0.42
55:CV:113:TYR:CZ	55:CV:121:LEU:HD21	2.55	0.42
58:CY:28:ASN:HD21	58:CY:30:LYS:NZ	2.18	0.42
60:DA:3:ARG:HB3	60:DA:6:SER:HB3	2.02	0.42
63:DD:9:PHE:CE2	63:DD:11:LYS:HE3	2.54	0.42
64:DE:72:LYS:HA	64:DE:72:LYS:HD2	1.83	0.42
65:DF:81:ILE:O	65:DF:82:PRO:C	2.63	0.42
71:DL:63:GLN:OE1	71:DL:68:LYS:HD3	2.20	0.42
79:DT:16:HIS:NE2	79:DT:35:SER:OG	2.33	0.42
79:DT:117:ALA:HB2	79:DT:157:ILE:HG21	2.00	0.42
1:1:396:A:O2'	1:1:399:A:OP1	2.37	0.42
1:1:542:U:O5'	1:1:542:U:H6	2.03	0.42
1:1:630:G:H2'	1:1:631:U:C6	2.55	0.42
1:1:663:A:OP1	16:v:203:ARG:HD2	2.20	0.42
1:1:1279:C:H2'	1:1:1280:C:C6	2.55	0.42
1:1:1323:C:O2'	34:AG:76:GLY:HA2	2.20	0.42
1:1:1347:U:O2'	1:1:1348:U:OP2	2.31	0.42
1:1:1611:U:H5''	35:AH:64:GLN:NE2	2.35	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:1655:U:H2'	1:1:1656:C:H6	1.85	0.42
1:1:1787:U:H2'	1:1:1788:C:C6	2.54	0.42
1:1:2784:C:H2'	1:1:2785:A:C8	2.54	0.42
1:1:2957:C:H2'	1:1:2958:U:C6	2.55	0.42
1:1:3088:G:H4'	11:q:69:ARG:NH1	2.35	0.42
13:s:85:LYS:O	62:R:10:ARG:NE	2.46	0.42
15:u:14:GLU:HG2	15:u:17:ARG:CG	2.47	0.42
19:y:78:GLU:OE1	19:y:78:GLU:N	2.53	0.42
28:AA:36:HIS:HB3	28:AA:38:PHE:CZ	2.55	0.42
40:AM:41:ARG:HA	40:AM:41:ARG:HD2	1.81	0.42
45:i:97:THR:N	46:B:575:G:O6	2.52	0.42
46:B:154:A:H2'	46:B:155:A:O4'	2.19	0.42
46:B:218:A:N6	46:B:817:U:C4	2.88	0.42
46:B:822:G:H3'	46:B:823:G:H5''	2.02	0.42
46:B:982:G:C6	46:B:993:G:C6	3.07	0.42
46:B:1012:A:OP1	46:B:1776:G:O2'	2.16	0.42
46:B:1326:A:H1'	79:AR:66:SER:HB2	2.02	0.42
48:D:62:LYS:NZ	48:D:90:GLU:HA	2.34	0.42
63:S:30:ILE:CG1	63:S:35:ILE:HG22	2.49	0.42
78:h:157:GLU:HG3	78:h:159:LEU:HG	2.01	0.42
1:AS:624:U:OP1	33:BZ:15:THR:OG1	2.36	0.42
1:AS:1478:A:H2	1:AS:1863:A:H5''	1.85	0.42
1:AS:1494:A:OP1	20:BM:6:THR:OG1	2.29	0.42
1:AS:1504:C:OP1	18:BK:127:ARG:NH1	2.45	0.42
1:AS:1639:A:H2'	1:AS:1640:C:C2	2.54	0.42
1:AS:2326:A:O2'	1:AS:2369:G:OP1	2.28	0.42
1:AS:2354:G:H2'	1:AS:2355:G:C8	2.55	0.42
1:AS:2592:G:H5''	30:BW:1:MET:HE2	2.02	0.42
1:AS:2807:U:C2	1:AS:2808:C:C5	3.08	0.42
1:AS:2957:C:H2'	1:AS:2958:U:C6	2.55	0.42
3:AU:139:U:H2'	3:AU:140:G:H8	1.85	0.42
7:AZ:50:ARG:NH2	7:AZ:72:ASP:OD2	2.53	0.42
7:AZ:94:ASN:HB2	7:AZ:97:ALA:H	1.84	0.42
13:BF:6:GLN:HA	13:BF:10:ARG:HD3	2.01	0.42
14:BG:28:GLN:HB3	16:BI:201:ARG:HD2	2.02	0.42
21:BN:24:LEU:HD21	22:BO:141:ILE:HG21	2.01	0.42
21:BN:73:LYS:HD2	21:BN:75:PHE:CZ	2.54	0.42
46:CM:14:C:H2'	46:CM:15:U:C6	2.55	0.42
46:CM:602:A:H2'	46:CM:603:A:O4'	2.20	0.42
46:CM:609:U:H5''	70:DK:5:LYS:NZ	2.35	0.42
46:CM:913:U:H1'	61:DB:119:ASP:OD2	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:CO:32:ILE:C	48:CO:33:LYS:HD3	2.45	0.42
58:CY:30:LYS:O	58:CY:31:THR:O	2.38	0.42
59:CZ:67:THR:C	59:CZ:69:GLU:H	2.28	0.42
63:DD:42:ILE:H	63:DD:42:ILE:HG13	1.69	0.42
71:DL:12:VAL:HG22	71:DL:23:PHE:HB3	2.01	0.42
79:DT:13:LEU:HB3	79:DT:45:TRP:CZ3	2.55	0.42
80:11:93:LEU:HD21	80:11:99:LEU:HD22	2.02	0.42
1:1:29:G:C6	1:1:54:G:C6	3.08	0.41
1:1:778:U:H2'	1:1:779:A:O4'	2.20	0.41
1:1:1190:G:H2'	1:1:1191:A:C8	2.54	0.41
1:1:1274:A:H2'	1:1:1274:A:N3	2.34	0.41
1:1:1777:C:H2'	1:1:1778:U:C6	2.55	0.41
1:1:1824:A:H2'	1:1:1825:A:C8	2.55	0.41
1:1:2201:A:H2'	1:1:2202:A:C8	2.54	0.41
1:1:2263:C:OP2	1:1:2264:U:O2'	2.28	0.41
1:1:2449:U:H2'	1:1:2451:C:C2	2.55	0.41
1:1:2621:G:H4'	1:1:2668:A:O4'	2.20	0.41
1:1:3021:A:C5	5:k:75:ALA:HB2	2.55	0.41
1:1:3335:A:H2'	1:1:3336:G:C8	2.55	0.41
2:3:107:A:H2'	2:3:108:U:H6	1.85	0.41
3:4:4:C:H2'	3:4:5:U:C6	2.55	0.41
4:j:102:LEU:HD13	4:j:166:ILE:HD12	2.02	0.41
5:k:81:THR:OG1	5:k:205:VAL:HG11	2.20	0.41
8:n:58:GLU:H	8:n:58:GLU:CD	2.27	0.41
15:u:109:GLU:HG2	17:w:198:PHE:CE1	2.55	0.41
28:AA:15:ARG:HD2	28:AA:79:HIS:CD2	2.55	0.41
44:AQ:11:THR:HG21	44:AQ:23:ARG:O	2.20	0.41
46:B:364:A:OP1	46:B:743:U:O2'	2.33	0.41
46:B:574:G:H4'	46:B:578:A:C4	2.55	0.41
46:B:831:G:C6	46:B:832:A:C5	3.08	0.41
46:B:1102:U:H2'	46:B:1103:G:H8	1.85	0.41
46:B:1218:G:N1	46:B:1237:C:H5	2.09	0.41
46:B:1324:C:O2'	46:B:1326:A:N7	2.49	0.41
46:B:1529:G:N2	46:B:1555:C:H1'	2.35	0.41
46:B:1701:A:H2'	46:B:1702:A:O4'	2.20	0.41
47:C:134:LYS:HE3	47:C:138:TYR:HE1	1.85	0.41
48:D:38:PHE:HB3	48:D:73:LEU:HB3	2.02	0.41
49:E:44:LYS:HA	49:E:44:LYS:HD3	1.81	0.41
50:F:9:LYS:HB3	67:W:62:LEU:HD21	2.01	0.41
51:G:12:LEU:HD23	51:G:12:LEU:HA	1.89	0.41
51:G:87:MET:SD	51:G:123:LEU:HB2	2.60	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
59:O:24:ILE:HG13	59:O:25:GLU:N	2.34	0.41
4:AW:24:LYS:HG3	4:AW:49:ILE:HD12	2.00	0.41
21:BN:44:PHE:HE1	21:BN:122:HIS:ND1	2.18	0.41
23:BP:86:TYR:O	23:BP:90:ASN:ND2	2.42	0.41
26:BS:142:ILE:HD12	26:BS:142:ILE:HA	1.90	0.41
46:CM:261:C:O2'	46:CM:262:G:H5'	2.19	0.41
46:CM:699:U:C2	46:CM:723:G:N2	2.88	0.41
46:CM:904:A:O4'	61:DB:30:GLY:HA3	2.20	0.41
46:CM:953:U:H2'	46:CM:954:C:O4'	2.19	0.41
46:CM:1157:G:H2'	46:CM:1158:C:C6	2.54	0.41
46:CM:1293:G:H2'	46:CM:1294:C:C6	2.54	0.41
46:CM:1648:U:H2'	46:CM:1649:G:C8	2.54	0.41
50:CQ:146:ALA:HB2	45:CL:96:LYS:NZ	2.33	0.41
62:DC:60:LEU:HD23	62:DC:60:LEU:HA	1.91	0.41
75:DP:67:ARG:HA	75:DP:67:ARG:HD2	1.85	0.41
1:1:179:C:H2'	1:1:180:U:C6	2.54	0.41
1:1:393:U:H2'	1:1:394:G:O4'	2.20	0.41
1:1:925:A:H2'	1:1:926:U:C6	2.55	0.41
1:1:1059:G:C6	22:2:109:VAL:HG22	2.55	0.41
1:1:2351:A:N3	1:1:2796:G:O2'	2.49	0.41
1:1:2426:G:C2	1:1:2427:A:H1'	2.56	0.41
1:1:3044:C:H2'	1:1:3045:A:O4'	2.20	0.41
2:3:96:U:H2'	2:3:97:A:H8	1.84	0.41
3:4:86:U:C5'	27:BT:120:GLN:HE22	2.33	0.41
7:m:41:LYS:HD3	7:m:41:LYS:HA	1.89	0.41
11:q:42:ASP:HB2	11:q:64:HIS:NE2	2.35	0.41
17:w:55:TYR:OH	17:w:74:PHE:O	2.32	0.41
43:AP:28:TYR:HB3	43:AP:69:VAL:HB	2.02	0.41
46:B:94:U:O2'	51:G:8:HIS:ND1	2.49	0.41
46:B:267:G:H2'	46:B:268:C:H6	1.84	0.41
46:B:652:C:H5''	46:B:653:G:C8	2.55	0.41
46:B:723:G:C5	46:B:724:G:C8	3.08	0.41
46:B:946:U:C2	46:B:947:C:C5	3.08	0.41
46:B:1167:U:O2'	46:B:1169:A:N7	2.50	0.41
47:C:98:ILE:HG12	47:C:116:LYS:NZ	2.35	0.41
61:Q:100:LEU:HD22	61:Q:105:LEU:HD12	2.01	0.41
65:U:22:ILE:HD11	65:U:35:ILE:HD11	2.03	0.41
74:d:55:THR:HG22	74:d:61:THR:O	2.20	0.41
79:AR:22:SER:OG	79:AR:72:VAL:N	2.53	0.41
1:AS:561:U:H2'	1:AS:562:C:C6	2.55	0.41
1:AS:569:U:H2'	1:AS:570:A:H8	1.84	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:1021:A:C6	1:AS:1022:A:H1'	2.55	0.41
1:AS:1322:A:O2'	34:CA:77:ASN:OD1	2.27	0.41
1:AS:1358:C:H2'	1:AS:1359:A:C8	2.55	0.41
1:AS:1434:U:H4'	6:AY:89:ALA:CB	2.50	0.41
1:AS:3110:U:OP1	5:AX:274:HIS:ND1	2.50	0.41
1:AS:3182:C:N4	18:BK:182:LEU:O	2.53	0.41
3:AU:14:C:C4	3:AU:15:G:C6	3.08	0.41
3:AU:67:U:O3'	38:CE:85:ALA:HA	2.20	0.41
5:AX:212:ASP:O	5:AX:281:LYS:NZ	2.53	0.41
5:AX:283:TYR:CD1	5:AX:354:VAL:HG21	2.55	0.41
19:BL:173:GLU:HA	29:BV:51:GLY:C	2.45	0.41
31:BX:12:ILE:H	31:BX:12:ILE:HD12	1.85	0.41
46:CM:575:G:N7	45:CL:96:LYS:HA	2.35	0.41
46:CM:590:A:OP1	56:CW:39:LYS:HG3	2.20	0.41
46:CM:756:A:H4'	56:CW:7:THR:O	2.21	0.41
46:CM:806:A:OP1	46:CM:806:A:H3'	2.20	0.41
46:CM:1070:G:H2'	46:CM:1072:A:OP2	2.20	0.41
46:CM:1414:G:C2'	46:CM:1415:G:H5'	2.50	0.41
46:CM:1424:G:H2'	46:CM:1425:C:C6	2.55	0.41
46:CM:1425:C:H2'	46:CM:1426:C:C6	2.54	0.41
46:CM:1604:U:H2'	46:CM:1605:C:C6	2.55	0.41
48:CO:84:ILE:HD13	48:CO:103:LEU:CD1	2.50	0.41
64:DE:71:PHE:CE2	64:DE:74:GLN:HB2	2.55	0.41
74:DO:19:HIS:HB3	74:DO:22:LYS:HG3	2.02	0.41
79:DT:145:LEU:HD23	79:DT:145:LEU:HA	1.91	0.41
80:11:63:MET:HB3	80:11:152:LYS:HA	2.02	0.41
80:11:93:LEU:HD11	80:11:99:LEU:HD13	2.02	0.41
1:1:96:U:H2'	1:1:97:G:C8	2.55	0.41
1:1:614:G:H2'	1:1:615:G:C8	2.55	0.41
1:1:910:A:C2	4:j:204:MET:HE2	2.55	0.41
1:1:935:U:OP2	29:AB:26:ARG:NH2	2.53	0.41
1:1:1312:C:OP2	17:w:134:ARG:HG3	2.19	0.41
1:1:1391:G:O2'	3:4:18:U:O2	2.38	0.41
1:1:1791:U:H2'	4:j:50:HIS:HD2	1.84	0.41
1:1:1836:U:H4'	1:1:1837:A:H5''	2.02	0.41
1:1:1908:U:H2'	1:1:1909:A:O4'	2.21	0.41
1:1:1944:G:C2	1:1:2077:A:C2	3.08	0.41
1:1:2308:C:H2'	1:1:2309:C:H6	1.84	0.41
1:1:2915:G:H2'	1:1:2916:U:O4'	2.19	0.41
1:1:3095:A:OP1	17:w:135:LYS:NZ	2.48	0.41
2:3:90:A:H2'	2:3:91:G:O4'	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:o:118:THR:H	9:o:121:THR:HG1	1.68	0.41
13:s:85:LYS:O	62:r:10:ARG:NH2	2.53	0.41
18:x:42:GLU:HG2	18:x:43:LYS:N	2.34	0.41
33:AF:83:LEU:HD11	33:AF:109:ILE:HG23	2.02	0.41
38:AK:84:LYS:HB2	38:AK:84:LYS:HE3	1.77	0.41
40:AM:9:THR:O	40:AM:13:LEU:HG	2.20	0.41
46:B:1102:U:H2'	46:B:1103:G:C8	2.55	0.41
46:B:1236:U:O2'	46:B:1237:C:H5''	2.21	0.41
46:B:1265:C:C5'	76:f:44:ARG:HH12	2.32	0.41
46:B:1409:U:OP1	50:F:152:LYS:NZ	2.54	0.41
46:B:1489:G:N2	46:B:1492:A:OP2	2.52	0.41
49:E:139:TRP:CE2	69:Y:97:ARG:HD2	2.55	0.41
51:G:87:MET:O	51:G:122:LYS:HE3	2.20	0.41
52:H:63:GLN:HE22	52:H:66:ASN:HB2	1.85	0.41
59:O:74:LEU:HA	78:h:150:VAL:HG11	2.03	0.41
61:Q:42:LYS:NZ	61:Q:61:ASP:OD2	2.32	0.41
79:AR:29:HIS:C	79:AR:31:ASP:H	2.28	0.41
1:AS:45:U:O4	16:BI:83:LYS:NZ	2.34	0.41
1:AS:106:A:O2'	1:AS:324:A:N3	2.50	0.41
1:AS:780:A:O2'	1:AS:781:G:OP2	2.37	0.41
1:AS:1030:U:H2'	1:AS:1031:A:H8	1.84	0.41
1:AS:1396:U:H2'	1:AS:1397:G:O4'	2.20	0.41
1:AS:1721:C:H2'	1:AS:1722:C:H6	1.85	0.41
1:AS:2679:U:H2'	1:AS:2680:C:C6	2.55	0.41
1:AS:2983:A:N1	1:AS:3015:C:O2'	2.48	0.41
2:AT:91:G:H2'	2:AT:92:A:C8	2.55	0.41
6:AY:4:ARG:HH12	6:AY:25:ALA:HA	1.86	0.41
25:BR:123:ARG:NE	25:BR:123:ARG:HA	2.35	0.41
46:CM:138:C:O4'	53:CT:179:VAL:HG11	2.20	0.41
46:CM:186:A:P	55:CV:142:SER:HB3	2.61	0.41
46:CM:446:C:H2'	46:CM:447:C:H6	1.85	0.41
46:CM:821:U:C2	46:CM:822:G:N7	2.89	0.41
46:CM:916:C:OP2	73:DN:70:LYS:NZ	2.54	0.41
46:CM:1161:G:C6	46:CM:1450:G:C6	3.08	0.41
46:CM:1445:C:H4'	62:DC:127:ARG:HH12	1.85	0.41
46:CM:1502:A:O2'	46:CM:1504:U:OP2	2.30	0.41
46:CM:1647:A:H2'	46:CM:1648:U:H6	1.85	0.41
46:CM:1720:C:C2	46:CM:1721:U:C5	3.08	0.41
47:CN:49:ASN:ND2	64:DE:109:LEU:HD11	2.35	0.41
48:CO:136:ARG:HG3	48:CO:218:LEU:HD11	2.01	0.41
53:CT:214:LYS:O	53:CT:218:GLU:HG3	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
59:CZ:134:ASN:ND2	59:CZ:135:ILE:HG23	2.35	0.41
60:DA:26:PHE:CZ	60:DA:60:VAL:HG22	2.53	0.41
63:DD:96:VAL:HG12	63:DD:97:ASP:N	2.36	0.41
70:DK:126:LYS:HE2	70:DK:126:LYS:HB2	1.79	0.41
80:l1:92:LYS:O	80:l1:93:LEU:HB3	2.20	0.41
80:l1:111:ILE:HD13	80:l1:138:VAL:HG21	2.01	0.41
1:1:238:G:C2	1:1:241:C:N4	2.89	0.41
1:1:712:G:N2	29:AB:72:GLU:OE1	2.49	0.41
1:1:1309:G:O2'	1:1:1314:A:N1	2.46	0.41
1:1:2472:A:O4'	80:l1:164:CYS:HB2	2.20	0.41
1:1:3207:G:N2	1:1:3210:A:OP2	2.53	0.41
3:4:102:U:H2'	3:4:103:G:C8	2.56	0.41
14:t:46:ILE:O	14:t:49:ARG:HB2	2.20	0.41
46:B:98:U:H2'	46:B:99:C:C6	2.56	0.41
46:B:704:A:HO2'	46:B:705:G:H8	1.60	0.41
46:B:1237:C:H2'	46:B:1238:U:C6	2.56	0.41
46:B:1305:U:O2	46:B:1307:A:H5'	2.20	0.41
46:B:1335:U:O2'	46:B:1336:G:OP1	2.33	0.41
46:B:1436:U:H2'	46:B:1437:C:C6	2.55	0.41
46:B:1720:C:H2'	46:B:1721:U:C6	2.55	0.41
47:C:59:LEU:HD22	68:X:79:LEU:HD11	2.02	0.41
51:G:59:ARG:HH12	71:a:87:PRO:HG3	1.86	0.41
56:L:150:LEU:HD23	56:L:150:LEU:HA	1.90	0.41
58:N:24:LYS:HE3	58:N:24:LYS:HB3	1.76	0.41
64:T:103:ASP:O	64:T:106:THR:OG1	2.36	0.41
68:X:65:ALA:O	68:X:69:LEU:HD23	2.20	0.41
79:AR:200:THR:OG1	79:AR:240:LEU:O	2.34	0.41
1:AS:366:A:OP1	6:AY:96:ARG:NH2	2.50	0.41
1:AS:442:G:N1	1:AS:488:G:C2	2.89	0.41
1:AS:1099:A:H62	1:AS:1359:A:H1'	1.86	0.41
1:AS:2581:A:H2'	1:AS:2582:G:C8	2.55	0.41
1:AS:3259:A:OP1	5:AX:128:LYS:NZ	2.52	0.41
3:AU:113:U:H5''	40:CG:7:PHE:CB	2.51	0.41
6:AY:299:VAL:HG21	19:BL:133:LYS:HG3	2.02	0.41
9:BB:36:LYS:HE2	9:BB:36:LYS:HB2	1.92	0.41
9:BB:124:LEU:HD23	9:BB:124:LEU:HA	1.86	0.41
46:CM:331:A:P	55:CV:48:THR:HG1	2.43	0.41
46:CM:1484:U:C4	46:CM:1498:G:C2	3.09	0.41
46:CM:1606:C:O2'	52:CS:152:SER:HA	2.20	0.41
51:CR:19:MET:SD	51:CR:108:LYS:HD2	2.61	0.41
53:CT:152:ASP:OD1	53:CT:154:ARG:HB2	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:DC:45:PHE:CD2	62:DC:49:LEU:HD21	2.55	0.41
66:DG:30:VAL:HG13	66:DG:34:VAL:HG11	2.01	0.41
68:DI:78:LEU:HD23	68:DI:78:LEU:HA	1.87	0.41
78:DS:182:TYR:CE2	78:DS:184:GLY:HA2	2.56	0.41
79:DT:119:ASN:O	79:DT:121:ARG:HD2	2.21	0.41
80:l1:55:LEU:HD12	80:l1:59:PRO:HB3	2.01	0.41
1:1:36:U:OP1	1:1:930:G:N2	2.49	0.41
1:1:206:U:H2'	1:1:207:C:C6	2.55	0.41
1:1:559:C:H2'	1:1:560:C:C6	2.55	0.41
1:1:1714:G:H2'	1:1:1715:G:H8	1.85	0.41
1:1:2806:G:C4	1:1:2807:U:C5	3.09	0.41
1:1:2983:A:H62	5:k:13:SER:HA	1.85	0.41
6:l:236:LEU:HD12	6:l:236:LEU:HA	1.92	0.41
13:s:37:LEU:HD23	13:s:37:LEU:HA	1.83	0.41
13:s:109:HIS:ND1	13:s:114:ILE:HD11	2.36	0.41
14:t:64:LYS:HD3	29:AB:66:ASN:OD1	2.21	0.41
14:t:126:PHE:HE2	14:t:135:VAL:HG13	1.85	0.41
17:w:42:LEU:C	17:w:43:ASN:HD22	2.28	0.41
24:6:80:ARG:HB2	24:6:95:PHE:CG	2.56	0.41
31:AD:12:ILE:H	31:AD:12:ILE:HD12	1.85	0.41
32:AE:7:VAL:HG13	32:AE:43:MET:HE1	2.03	0.41
32:AE:61:ARG:HH12	32:AE:67:GLU:CD	2.29	0.41
35:AH:106:LYS:HE2	35:AH:106:LYS:HB2	1.78	0.41
38:AK:79:GLN:H	38:AK:79:GLN:HG3	1.62	0.41
46:B:552:C:N4	46:B:569:G:O6	2.53	0.41
46:B:883:A:N3	46:B:884:G:H1'	2.36	0.41
46:B:945:U:H5'	60:P:55:ARG:CD	2.41	0.41
46:B:1581:G:H5'	76:f:33:LYS:HD2	2.02	0.41
46:B:1648:U:H2'	46:B:1649:G:H8	1.85	0.41
47:C:197:VAL:HG13	47:C:201:LEU:HD23	2.01	0.41
51:G:11:ARG:HA	51:G:28:ALA:HB2	2.02	0.41
54:J:122:LEU:HB2	54:J:169:TYR:HE2	1.86	0.41
59:O:64:ASP:OD2	59:O:90:LYS:HD2	2.21	0.41
71:a:12:VAL:HG22	71:a:23:PHE:HB3	2.01	0.41
78:h:147:TYR:HB3	78:h:173:PHE:CE2	2.55	0.41
1:AS:680:U:H5''	1:AS:681:U:H5	1.84	0.41
1:AS:961:A:O2'	29:BV:44:ASN:HB2	2.21	0.41
1:AS:1051:A:H5''	2:AT:100:C:O2'	2.20	0.41
1:AS:1096:U:OP1	9:BB:116:ARG:NH2	2.48	0.41
1:AS:1149:A:O2'	1:AS:1150:A:H5'	2.20	0.41
1:AS:1182:G:N3	21:BN:112:ALA:HB1	2.35	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:1558:G:H5'	1:AS:1559:C:OP2	2.20	0.41
1:AS:2184:G:H5'	1:AS:2185:A:C2	2.56	0.41
1:AS:2404:U:H2'	1:AS:2405:U:H6	1.84	0.41
1:AS:3061:C:H2'	1:AS:3062:U:O4'	2.21	0.41
1:AS:3240:U:N3	1:AS:3242:U:O4'	2.53	0.41
7:AZ:113:LEU:HD11	7:AZ:142:PHE:CD2	2.56	0.41
15:BH:26:LEU:HD11	15:BH:87:TRP:CG	2.56	0.41
16:BI:6:TYR:CZ	37:CD:39:VAL:HG22	2.55	0.41
25:BR:95:SER:HB2	25:BR:100:ASP:HB3	2.03	0.41
36:CC:85:THR:O	36:CC:89:ARG:HG3	2.20	0.41
46:CM:138:C:H5''	46:CM:139:U:C6	2.56	0.41
46:CM:218:A:N7	46:CM:219:A:C8	2.89	0.41
46:CM:219:A:C2	46:CM:826:U:C2	3.08	0.41
46:CM:349:C:OP1	46:CM:628:A:O2'	2.31	0.41
46:CM:462:A:C2	46:CM:463:G:C8	3.09	0.41
46:CM:538:G:N2	77:DR:25:GLU:OE2	2.49	0.41
46:CM:901:U:H3	61:DB:36:ARG:NH1	2.19	0.41
46:CM:1251:U:H2'	46:CM:1252:G:C8	2.56	0.41
46:CM:1584:A:C8	76:DQ:14:PHE:HD1	2.38	0.41
46:CM:1720:C:H2'	46:CM:1721:U:C6	2.55	0.41
48:CO:129:THR:OG1	48:CO:131:ASP:OD1	2.32	0.41
62:DC:50:ASP:O	62:DC:53:PRO:HD2	2.20	0.41
63:DD:126:LYS:NZ	63:DD:130:GLY:O	2.53	0.41
79:DT:4:GLN:O	79:DT:268:LEU:HD11	2.21	0.41
79:DT:162:GLN:C	79:DT:164:SER:H	2.28	0.41
45:CL:134:GLU:HA	45:CL:137:ASP:OD2	2.21	0.41
1:1:173:C:C2	1:1:245:G:C2	3.09	0.41
1:1:495:C:H2'	1:1:496:A:H8	1.86	0.41
1:1:504:G:O2'	34:AG:42:LYS:NZ	2.35	0.41
1:1:1228:C:C2	1:1:1229:G:N7	2.89	0.41
1:1:1528:C:H2'	1:1:1529:U:C6	2.56	0.41
1:1:1883:A:H4'	5:k:227:GLU:HA	2.02	0.41
1:1:2972:A:H2'	1:1:2973:U:C6	2.55	0.41
6:l:16:GLN:NE2	6:l:147:LYS:HD2	2.36	0.41
6:l:143:VAL:O	6:l:143:VAL:HG12	2.19	0.41
11:q:57:VAL:HG13	11:q:64:HIS:CE1	2.56	0.41
24:6:13:MET:HE3	24:6:85:TRP:CE2	2.56	0.41
25:7:96:GLN:NE2	25:7:101:ARG:HE	2.18	0.41
46:B:218:A:N6	46:B:817:U:O4	2.53	0.41
46:B:728:U:C4	46:B:793:A:C6	3.08	0.41
46:B:907:G:O2'	46:B:908:A:H5'	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:B:1206:A:H2'	46:B:1207:C:O4'	2.21	0.41
46:B:1484:U:C2	46:B:1485:G:C8	3.09	0.41
49:E:163:ARG:HD3	49:E:165:ILE:HD11	2.02	0.41
50:F:219:ILE:HD12	50:F:222:PRO:HG3	2.03	0.41
52:H:149:ILE:HG21	75:e:66:LEU:HG	2.03	0.41
57:M:87:LEU:HD13	57:M:92:LEU:HD12	2.03	0.41
59:O:105:GLN:O	59:O:113:ARG:HB2	2.20	0.41
66:V:63:ARG:HH12	66:V:67:LEU:CD1	2.33	0.41
76:f:33:LYS:HE2	76:f:34:TYR:CZ	2.56	0.41
79:AR:38:ARG:HB3	79:AR:68:ILE:HG12	2.03	0.41
1:AS:346:C:C2	1:AS:348:A:N7	2.88	0.41
1:AS:515:A:N7	6:AY:361:LEU:HD11	2.36	0.41
1:AS:725:G:O6	1:AS:738:G:O2'	2.30	0.41
1:AS:788:G:H2'	1:AS:789:C:H6	1.84	0.41
1:AS:1374:U:H2'	1:AS:1375:G:H8	1.85	0.41
1:AS:1443:G:OP1	18:BK:65:SER:HB2	2.20	0.41
1:AS:1559:C:C2	1:AS:1560:U:C5	3.09	0.41
1:AS:1708:G:N2	1:AS:1729:G:O6	2.53	0.41
1:AS:2197:A:H2'	1:AS:2198:A:C8	2.55	0.41
1:AS:3035:C:H2'	1:AS:3036:U:H6	1.86	0.41
2:AT:24:A:H2'	2:AT:25:G:O4'	2.20	0.41
3:AU:145:U:H2'	3:AU:146:U:C6	2.56	0.41
7:AZ:29:ASP:HB2	7:AZ:150:LEU:HD23	2.02	0.41
11:BD:159:ALA:HA	11:BD:162:GLN:HG2	2.02	0.41
17:BJ:4:PHE:CD2	34:CA:12:LYS:HE3	2.55	0.41
46:CM:221:U:H3	46:CM:823:G:H21	1.68	0.41
46:CM:559:G:H2'	46:CM:560:G:H8	1.86	0.41
46:CM:691:U:H5'	46:CM:692:U:H5''	2.02	0.41
46:CM:1298:A:N3	46:CM:1300:U:H5'	2.36	0.41
46:CM:1571:G:N2	46:CM:1598:A:OP2	2.27	0.41
46:CM:1774:C:H2'	46:CM:1775:G:C8	2.55	0.41
52:CS:222:LYS:HG3	52:CS:225:ARG:HH21	1.86	0.41
53:CT:145:PHE:HB2	53:CT:147:LEU:HG	2.03	0.41
61:DB:7:GLN:HG3	61:DB:9:PHE:CE1	2.53	0.41
61:DB:47:ARG:HG3	61:DB:48:ASP:OD1	2.20	0.41
80:l1:33:GLU:HA	80:l1:168:ALA:HB3	2.02	0.41
80:l1:34:LEU:HA	80:l1:207:LYS:HG2	2.03	0.41
80:l1:112:ALA:HB1	80:l1:116:LEU:HB2	2.01	0.41
80:l1:145:TYR:O	80:l1:149:THR:OG1	2.26	0.41
1:l:4:G:C6	3:4:155:G:C6	3.09	0.41
1:l:290:G:H1'	16:v:93:LYS:HD2	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:291:C:H2'	1:1:292:U:C6	2.55	0.41
1:1:699:G:H2'	1:1:700:C:C6	2.55	0.41
1:1:787:A:H2'	1:1:788:G:C8	2.56	0.41
1:1:1116:A:H2'	1:1:1117:U:C6	2.54	0.41
1:1:1277:G:C2	1:1:1278:G:N7	2.89	0.41
1:1:1377:A:C2	1:1:1422:C:C2	3.08	0.41
1:1:1837:A:H1'	40:AM:45:ARG:HH22	1.86	0.41
1:1:2081:U:H2'	1:1:2082:A:C8	2.55	0.41
9:o:71:ASN:O	22:2:143:THR:OG1	2.35	0.41
11:q:41:ILE:HG22	11:q:43:VAL:HG13	2.02	0.41
46:B:457:G:OP2	71:a:105:ARG:NH2	2.54	0.41
46:B:696:U:OP1	46:B:696:U:C6	2.72	0.41
46:B:840:A:O2'	46:B:841:A:H3'	2.21	0.41
46:B:975:C:H2'	46:B:976:G:O4'	2.21	0.41
46:B:1532:A:H2'	46:B:1533:G:H8	1.85	0.41
46:B:1584:A:C8	76:f:14:PHE:CD1	3.08	0.41
46:B:1634:U:H2'	46:B:1635:A:C8	2.55	0.41
50:F:69:GLU:O	57:M:20:VAL:HG11	2.21	0.41
59:O:103:LEU:C	59:O:104:CYS:SG	3.04	0.41
62:R:10:ARG:HD3	62:R:10:ARG:HA	1.53	0.41
62:R:60:LEU:HD22	62:R:92:SER:OG	2.20	0.41
64:T:37:GLU:CD	79:AR:151:TRP:HE1	2.27	0.41
65:U:89:GLN:HA	65:U:97:ASP:HA	2.01	0.41
67:W:56:ARG:HG3	67:W:88:ARG:HH11	1.84	0.41
79:AR:90:LEU:O	79:AR:104:PHE:HD1	2.04	0.41
1:AS:564:G:H2'	1:AS:565:A:H8	1.77	0.41
1:AS:759:G:HO2'	1:AS:760:U:P	2.44	0.41
1:AS:814:C:H2'	1:AS:815:U:O4'	2.21	0.41
1:AS:1004:U:O2'	12:BE:35:ASP:OD2	2.38	0.41
1:AS:1690:U:O2'	1:AS:1691:U:H5'	2.20	0.41
1:AS:1779:U:H2'	1:AS:1780:A:H8	1.84	0.41
1:AS:2184:G:C2	1:AS:2186:A:N6	2.84	0.41
7:AZ:21:ARG:HD2	7:AZ:21:ARG:C	2.46	0.41
14:BG:173:ARG:HA	14:BG:173:ARG:HD2	1.86	0.41
18:BK:169:ASN:N	18:BK:172:GLN:HB2	2.36	0.41
25:BR:101:ARG:O	25:BR:105:ARG:HG3	2.20	0.41
44:CK:38:ASP:HA	44:CK:45:ARG:HA	2.01	0.41
46:CM:149:G:O6	71:DL:124:ARG:NH2	2.53	0.41
46:CM:767:G:O2'	46:CM:768:C:H6	2.03	0.41
46:CM:769:U:O2'	46:CM:770:C:OP2	2.34	0.41
46:CM:786:G:H21	69:DJ:107:SER:HB3	1.86	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:CM:830:G:C6	46:CM:831:G:C2	3.09	0.41
46:CM:913:U:H3'	46:CM:929:A:O2'	2.21	0.41
48:CO:135:LEU:HD21	48:CO:217:LEU:HD23	2.03	0.41
53:CT:215:ARG:HA	53:CT:215:ARG:HD3	1.67	0.41
60:DA:100:LYS:O	60:DA:103:GLU:HG2	2.20	0.41
63:DD:46:LYS:HA	63:DD:46:LYS:HD2	1.75	0.41
79:DT:50:GLY:H	79:DT:55:TYR:HA	1.86	0.41
79:DT:110:ASP:HB2	79:DT:128:ARG:HD2	2.03	0.41
1:1:99:A:H2'	1:1:100:G:N3	2.36	0.41
1:1:291:C:H2'	1:1:292:U:H6	1.85	0.41
1:1:484:U:C5	1:1:485:A:N7	2.89	0.41
1:1:851:U:H4'	20:z:95:TRP:CE2	2.55	0.41
1:1:1489:G:OP2	1:1:1489:G:N2	2.52	0.41
1:1:1561:U:O2'	1:1:1562:G:OP1	2.38	0.41
1:1:1714:G:H2'	1:1:1715:G:C8	2.55	0.41
1:1:1863:A:H2'	1:1:1864:G:C8	2.55	0.41
1:1:2269:A:H2'	1:1:2270:U:C6	2.55	0.41
1:1:2741:A:OP2	83:1:3462:PAR:O61	2.32	0.41
1:1:3172:U:O4	21:0:159:SER:HB3	2.20	0.41
3:4:10:A:H2'	3:4:11:C:C6	2.56	0.41
3:4:83:U:H4'	3:4:85:G:N3	2.36	0.41
6:l:36:VAL:HG21	6:l:245:LEU:HD21	2.02	0.41
8:n:39:LEU:HB3	8:n:83:VAL:CG1	2.50	0.41
17:w:114:ASP:OD2	17:w:115:LYS:NZ	2.50	0.41
46:B:446:C:H2'	46:B:447:C:C6	2.55	0.41
83:B:1803:PAR:N21	83:B:1803:PAR:O53	2.54	0.41
48:D:168:MET:O	48:D:172:MET:HG3	2.21	0.41
48:D:225:LEU:O	48:D:229:LEU:HG	2.21	0.41
52:H:121:ILE:HD11	52:H:198:LEU:HD12	2.03	0.41
54:J:60:PRO:N	54:J:61:PRO:HD2	2.35	0.41
62:R:60:LEU:HD23	62:R:60:LEU:HA	1.79	0.41
64:T:11:ARG:O	64:T:15:VAL:HG23	2.20	0.41
71:a:57:VAL:HB	71:a:60:PHE:CE2	2.55	0.41
1:AS:1075:A:C2	7:AZ:113:LEU:HD22	2.56	0.41
1:AS:1105:U:H2'	1:AS:1106:U:C6	2.56	0.41
1:AS:1302:G:O6	1:AS:2344:C:O2'	2.30	0.41
1:AS:1576:A:H5''	1:AS:1577:C:H5	1.86	0.41
1:AS:1724:G:H5'	1:AS:1724:G:N3	2.36	0.41
1:AS:2589:U:N3	30:BW:1:MET:HE3	2.33	0.41
1:AS:3321:G:C6	1:AS:3322:U:C4	3.09	0.41
3:AU:62:C:OP1	36:CC:48:ARG:NH2	2.52	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AU:81:A:H2'	3:AU:82:U:C6	2.55	0.41
5:AX:160:VAL:HG12	5:AX:181:ILE:O	2.20	0.41
9:BB:171:LEU:HB3	9:BB:176:ILE:HB	2.03	0.41
11:BD:8:GLN:HB3	11:BD:72:LYS:HD2	2.03	0.41
13:BF:87:LYS:HG2	13:BF:91:LEU:HD23	2.02	0.41
16:BI:36:ILE:HG12	16:BI:64:ILE:HG13	2.02	0.41
18:BK:18:ARG:NH1	18:BK:147:GLU:OE1	2.54	0.41
46:CM:188:U:H2'	46:CM:189:G:H8	1.85	0.41
46:CM:327:G:H2'	46:CM:328:G:H8	1.85	0.41
46:CM:399:A:O2'	46:CM:400:C:H4'	2.20	0.41
46:CM:589:A:P	77:DR:43:ARG:HH22	2.44	0.41
46:CM:728:U:P	54:CU:104:LYS:H	2.43	0.41
46:CM:869:A:N6	46:CM:913:U:H3	2.12	0.41
51:CR:181:VAL:HG11	51:CR:225:VAL:HG13	2.02	0.41
53:CT:102:VAL:HG13	53:CT:106:LEU:HD12	2.02	0.41
54:CU:37:LEU:HD22	54:CU:66:TYR:CE1	2.56	0.41
59:CZ:55:ARG:NH1	59:CZ:82:PRO:HB3	2.35	0.41
60:DA:4:MET:HE2	60:DA:4:MET:HB3	1.95	0.41
75:DP:53:ILE:O	75:DP:53:ILE:HG22	2.20	0.41
77:DR:37:ARG:O	77:DR:41:THR:HG23	2.21	0.41
1:1:186:A:H2'	1:1:187:U:C6	2.56	0.41
1:1:602:A:H2'	1:1:603:C:H6	1.85	0.41
1:1:815:U:O2'	1:1:914:C:O2'	2.31	0.41
1:1:925:A:O2'	38:AK:49:TRP:O	2.38	0.41
1:1:939:U:H3'	29:AB:13:GLY:HA2	2.02	0.41
1:1:1023:A:N6	1:1:1025:G:H1'	2.35	0.41
1:1:1248:A:H2'	1:1:1248:A:N3	2.36	0.41
1:1:1493:C:O2'	1:1:1598:A:N3	2.51	0.41
1:1:1648:G:H5''	83:1:3465:PAR:H24	2.02	0.41
1:1:2079:C:O2'	1:1:2080:U:H6	2.02	0.41
1:1:2081:U:H2'	1:1:2082:A:H8	1.84	0.41
1:1:2360:G:C5	1:1:2361:C:H1'	2.56	0.41
1:1:2401:U:H2'	1:1:2402:A:C8	2.55	0.41
1:1:2425:G:H5'	1:1:2426:G:OP2	2.21	0.41
1:1:2502:A:C2	10:p:45:ARG:HD2	2.56	0.41
1:1:2826:U:P	12:r:3:ARG:HH22	2.43	0.41
1:1:3176:C:H2'	1:1:3177:C:C6	2.56	0.41
1:1:3302:G:H2'	1:1:3303:C:H6	1.86	0.41
2:3:1:G:C2	2:3:2:G:C8	3.09	0.41
4:j:147:ARG:HH21	4:j:155:LYS:HD3	1.86	0.41
5:k:47:LEU:HB2	5:k:84:MET:SD	2.60	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:k:136:LYS:HE2	5:k:143:GLN:OE1	2.21	0.41
6:l:105:LYS:HD2	6:l:107:TRP:CZ2	2.56	0.41
14:t:191:GLU:O	14:t:194:GLU:HG3	2.20	0.41
24:6:63:LYS:HD3	24:6:63:LYS:HA	1.92	0.41
34:AG:90:PRO:HG2	34:AG:93:THR:HG23	2.03	0.41
46:B:30:G:H2'	46:B:31:C:H6	1.84	0.41
46:B:153:U:H5	71:a:132:ARG:HH11	1.69	0.41
46:B:382:G:H2'	46:B:383:A:C8	2.56	0.41
46:B:411:U:H2'	46:B:412:C:C6	2.56	0.41
46:B:1181:A:H8	46:B:1451:C:O2	2.03	0.41
46:B:1227:A:OP1	62:R:59:LYS:NZ	2.31	0.41
46:B:1276:G:H1	46:B:1309:G:N2	2.06	0.41
46:B:1400:U:H5''	64:T:3:ARG:HE	1.85	0.41
46:B:1470:G:H2'	46:B:1471:C:H6	1.86	0.41
46:B:1484:U:C4	46:B:1498:G:C2	3.09	0.41
46:B:1712:U:H2'	46:B:1713:G:C8	2.55	0.41
83:B:1801:PAR:H43	83:B:1801:PAR:H14	1.68	0.41
47:C:77:SER:HB2	47:C:124:THR:HG21	2.02	0.41
60:P:132:VAL:HG23	60:P:134:VAL:HG23	2.03	0.41
63:S:18:VAL:O	63:S:66:VAL:HA	2.21	0.41
66:V:62:ALA:HB2	66:V:108:LEU:HD21	2.02	0.41
68:X:71:ARG:O	68:X:75:GLN:HG3	2.20	0.41
79:AR:130:LYS:HG2	79:AR:150:ASP:C	2.45	0.41
1:AS:40:G:N2	1:AS:2775:A:H62	2.19	0.41
1:AS:561:U:H2'	1:AS:562:C:H6	1.86	0.41
1:AS:636:C:N4	1:AS:637:G:O6	2.54	0.41
1:AS:798:C:C2	1:AS:799:C:C5	3.09	0.41
1:AS:989:G:N3	1:AS:2609:A:H2'	2.36	0.41
1:AS:1015:G:H2'	1:AS:1016:G:C8	2.56	0.41
1:AS:1115:C:H2'	1:AS:1116:A:C8	2.53	0.41
1:AS:1123:G:N2	1:AS:1126:A:OP2	2.53	0.41
1:AS:1130:G:O2'	1:AS:2614:A:N3	2.53	0.41
1:AS:1153:G:H5''	9:BB:217:PHE:CE2	2.55	0.41
1:AS:1208:A:O3'	21:BN:92:LYS:NZ	2.53	0.41
1:AS:1329:C:O2'	9:BB:205:LEU:O	2.37	0.41
1:AS:1521:G:H2'	1:AS:1521:G:N3	2.36	0.41
1:AS:1596:U:OP1	20:BM:42:ARG:NH2	2.51	0.41
1:AS:1620:G:O2'	1:AS:1639:A:N1	2.47	0.41
1:AS:1911:A:H2'	1:AS:1912:U:C6	2.55	0.41
1:AS:1931:G:H2'	1:AS:1932:A:C8	2.56	0.41
1:AS:2410:A:C2	16:BI:125:SER:HB2	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AS:2641:G:H2'	1:AS:2642:G:H8	1.86	0.41
1:AS:2658:A:H2'	1:AS:2659:G:O4'	2.21	0.41
1:AS:2698:C:O2'	1:AS:2699:A:H2'	2.21	0.41
1:AS:2870:G:H5''	1:AS:2871:C:H5'	2.02	0.41
1:AS:2937:U:O2'	4:AW:220:GLY:O	2.38	0.41
1:AS:3208:A:OP1	17:BJ:160:LYS:NZ	2.48	0.41
1:AS:3218:U:H2'	1:AS:3219:G:H8	1.85	0.41
1:AS:3249:G:H2'	1:AS:3250:C:C6	2.55	0.41
1:AS:3310:G:OP2	55:CV:92:ARG:HG3	2.21	0.41
1:AS:3318:G:OP2	1:AS:3318:G:C4	2.73	0.41
3:AU:6:U:C2	3:AU:7:U:C5	3.09	0.41
3:AU:126:A:O2'	3:AU:128:U:OP2	2.27	0.41
10:BC:126:VAL:O	10:BC:127:SER:OG	2.29	0.41
11:BD:12:ILE:HD11	11:BD:53:ILE:HG13	2.03	0.41
11:BD:41:ILE:HG22	11:BD:43:VAL:HG13	2.02	0.41
12:BE:47:PRO:HB3	12:BE:171:TRP:CZ2	2.55	0.41
18:BK:17:ALA:HB2	18:BK:98:ALA:HB2	2.03	0.41
21:BN:79:LEU:HD13	21:BN:110:LEU:HD21	2.02	0.41
25:BR:117:LYS:HD2	25:BR:117:LYS:HA	1.69	0.41
33:BZ:33:TRP:HH2	33:BZ:53:GLN:HG2	1.86	0.41
35:CB:17:SER:O	35:CB:17:SER:OG	2.39	0.41
35:CB:65:VAL:HG23	35:CB:70:LYS:HD3	2.03	0.41
37:CD:66:LYS:HA	37:CD:69[A]:LYS:HE3	2.02	0.41
46:CM:154:A:H2'	46:CM:155:A:O4'	2.21	0.41
46:CM:382:G:H2'	46:CM:383:A:C8	2.55	0.41
46:CM:446:C:H2'	46:CM:447:C:C6	2.56	0.41
46:CM:648:U:H2'	46:CM:649:G:C8	2.56	0.41
46:CM:919:C:N3	46:CM:1062:C:H4'	2.36	0.41
46:CM:1205:C:OP1	57:CX:48:SER:HB2	2.20	0.41
46:CM:1218:G:H1	46:CM:1237:C:H5	1.69	0.41
46:CM:1277:G:H21	47:CN:111:ILE:HD11	1.86	0.41
46:CM:1315:G:H21	64:DE:8:THR:HG21	1.86	0.41
46:CM:1341:U:H2'	46:CM:1342:A:H8	1.84	0.41
46:CM:1636:C:H2'	46:CM:1637:U:H6	1.85	0.41
46:CM:1741:A:H2'	46:CM:1742:A:C8	2.56	0.41
47:CN:23:HIS:CD2	64:DE:106:THR:HG21	2.56	0.41
47:CN:48:ILE:CG2	47:CN:161:PRO:HB2	2.50	0.41
48:CO:34:ALA:O	48:CO:41:ARG:HG2	2.20	0.41
48:CO:38:PHE:CG	48:CO:73:LEU:HD13	2.56	0.41
49:CP:104:GLY:O	49:CP:134:ILE:HG12	2.21	0.41
50:CQ:72:SER:O	50:CQ:76:LYS:HD2	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:CQ:202:ALA:HB3	64:DE:42:GLN:NE2	2.35	0.41
52:CS:213:LYS:HA	52:CS:213:LYS:HD3	1.78	0.41
53:CT:75:LEU:O	53:CT:94:ARG:HD3	2.20	0.41
55:CV:26:LYS:HG2	55:CV:29:LEU:HD23	2.01	0.41
69:DJ:40:VAL:HG11	69:DJ:103:ILE:HD12	2.02	0.41
72:DM:36:ALA:HB1	72:DM:38:HIS:CE1	2.56	0.41
77:DR:24:GLN:OE1	77:DR:24:GLN:N	2.51	0.41
1:1:6:C:H2'	1:1:7:C:C6	2.56	0.41
1:1:389:A:H62	83:1:3460:PAR:H13	1.86	0.41
1:1:813:A:H2'	1:1:916:A:C2	2.56	0.41
1:1:1762:G:HO2'	1:1:1763:C:P	2.44	0.41
84:1:3463:3K5:H7	84:1:3463:3K5:H10	1.24	0.41
7:m:98:ALA:HB1	7:m:162:VAL:HG23	2.03	0.41
10:p:70:LEU:O	10:p:236:GLY:HA3	2.21	0.41
10:p:178:TYR:CZ	10:p:223:TYR:HB3	2.56	0.41
11:q:44:THR:CG2	11:q:56:THR:HB	2.51	0.41
11:q:114:ILE:HB	11:q:124:ARG:HB2	2.02	0.41
13:s:108:GLU:CD	65:U:110:ARG:HH22	2.29	0.41
14:t:154:PRO:HB3	29:AB:106:ALA:HB1	2.04	0.41
15:u:19:VAL:HG11	15:u:55:ILE:HD12	2.02	0.41
16:v:177:GLY:O	16:v:184:LYS:NZ	2.54	0.41
18:x:4:TYR:CZ	18:x:18:ARG:HG3	2.55	0.41
19:y:150:VAL:HA	19:y:153:PHE:CD2	2.56	0.41
20:z:38:ARG:O	20:z:42:ARG:HG3	2.21	0.41
23:5:15:PHE:HB2	23:5:66:VAL:HB	2.03	0.41
27:9:32:SER:HA	27:9:49:PRO:HA	2.03	0.41
46:B:265:U:H2'	46:B:266:C:C6	2.56	0.41
46:B:384:G:H2'	46:B:385:A:C8	2.56	0.41
46:B:846:U:H5'	46:B:847:A:OP2	2.20	0.41
46:B:931:U:H4'	48:D:165:ARG:HD3	2.03	0.41
46:B:962:A:H2'	46:B:963:A:O4'	2.20	0.41
46:B:1334:G:H1'	46:B:1365:C:N4	2.36	0.41
46:B:1414:G:C2'	46:B:1415:G:H5'	2.50	0.41
46:B:1469:A:C2	46:B:1594:G:H1'	2.56	0.41
46:B:1520:C:H4'	46:B:1526:G:O6	2.21	0.41
47:C:201:LEU:O	47:C:202:TYR:HB2	2.21	0.41
54:J:69:VAL:HG12	54:J:72:ARG:HH21	1.84	0.41
64:T:5:ARG:O	64:T:10:LYS:HE3	2.21	0.41
64:T:10:LYS:HG2	64:T:53:TYR:CE2	2.56	0.41
67:W:56:ARG:HG3	67:W:88:ARG:NH1	2.35	0.41
70:Z:59:ILE:HD12	70:Z:71:CYS:SG	2.62	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:AR:37:SER:O	79:AR:69:VAL:HB	2.21	0.41
79:AR:80:TYR:CD2	79:AR:92:LEU:HD21	2.54	0.41
79:AR:91:ARG:NH1	79:AR:103:ARG:HH11	2.19	0.41
79:AR:136:ASN:ND2	79:AR:140:GLU:OE1	2.52	0.41
1:AS:35:C:H4'	1:AS:804:A:C2	2.56	0.41
1:AS:122:A:OP1	10:BC:106:LYS:NZ	2.32	0.41
1:AS:294:U:P	16:BI:15:GLN:HE22	2.37	0.41
1:AS:413:U:H2'	1:AS:414:U:H6	1.85	0.41
1:AS:592:U:H2'	1:AS:607:G:O6	2.20	0.41
1:AS:1448:A:N3	1:AS:2324:C:O2'	2.53	0.41
1:AS:1711:A:C5	31:BX:86:LEU:HD12	2.56	0.41
1:AS:2183:U:O4	1:AS:2216:G:N1	2.54	0.41
1:AS:2716:U:H2'	1:AS:2717:G:C8	2.56	0.41
1:AS:2784:C:H2'	1:AS:2785:A:C8	2.55	0.41
1:AS:2974:C:O2'	5:AX:180:GLU:OE2	2.35	0.41
3:AU:113:U:H5''	40:CG:7:PHE:HB3	2.03	0.41
4:AW:71:LEU:HD23	4:AW:71:LEU:HA	1.87	0.41
6:AY:46:ASN:N	6:AY:46:ASN:HD22	2.19	0.41
7:AZ:29:ASP:HB2	7:AZ:150:LEU:CD2	2.51	0.41
29:BV:89:GLU:HG3	29:BV:93:LYS:NZ	2.36	0.41
46:CM:116:U:H2'	46:CM:117:U:C6	2.55	0.41
46:CM:286:A:H2'	46:CM:287:U:O4'	2.20	0.41
46:CM:404:U:H2'	46:CM:405:A:H8	1.85	0.41
46:CM:600:U:H2'	46:CM:601:U:C6	2.56	0.41
46:CM:700:G:C2	46:CM:701:G:H1'	2.55	0.41
46:CM:804:U:H2'	46:CM:805:U:H5	1.85	0.41
46:CM:1007:C:O2'	46:CM:1110:A:N1	2.50	0.41
46:CM:1253:G:O2'	46:CM:1434:G:H5''	2.21	0.41
46:CM:1537:A:H2'	46:CM:1538:U:C6	2.56	0.41
52:CS:58:LEU:HD22	52:CS:168:VAL:HG23	2.03	0.41
54:CU:59:PRO:HG2	54:CU:62:SER:HB3	2.03	0.41
56:CW:60:LEU:HD12	56:CW:97:LEU:HD11	2.02	0.41
59:CZ:30:VAL:O	59:CZ:34:THR:HG23	2.22	0.41
64:DE:47:ARG:O	64:DE:50:ILE:HG22	2.20	0.41
79:DT:156:ARG:HD3	79:DT:156:ARG:HA	1.72	0.41
80:I1:20:SER:HA	80:I1:25:LYS:HD3	2.02	0.41
45:CL:47:ASP:C	45:CL:49:ALA:H	2.28	0.41
1:1:185:U:OP1	27:9:122:LYS:NZ	2.25	0.40
1:1:236:A:P	3:4:95:G:H22	2.44	0.40
1:1:268:A:C4	16:v:12:ARG:HG2	2.56	0.40
1:1:273:A:H2'	1:1:274:G:H8	1.85	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:436:A:H2'	1:1:437:G:C8	2.57	0.40
1:1:448:U:H2'	1:1:449:U:C6	2.56	0.40
1:1:755:U:H2'	1:1:756:G:O4'	2.21	0.40
1:1:844:A:C5	1:1:845:C:H1'	2.57	0.40
1:1:976:A:H3'	1:1:976:A:C8	2.55	0.40
1:1:976:A:H2	1:1:1100:G:H21	1.69	0.40
1:1:1105:U:H2'	1:1:1106:U:C6	2.57	0.40
1:1:1229:G:C6	1:1:1252:G:N1	2.89	0.40
1:1:1255:A:OP1	1:1:1255:A:C8	2.74	0.40
1:1:1380:U:OP2	6:l:203:ARG:HA	2.20	0.40
1:1:2420:G:H1	1:1:2483:U:H3	1.69	0.40
1:1:2465:U:H4'	1:1:2467:C:N3	2.36	0.40
1:1:2808:C:H2'	1:1:2809:A:O4'	2.21	0.40
1:1:3133:G:H2'	1:1:3134:C:O4'	2.21	0.40
1:1:3199:G:H1	1:1:3218:U:H3	1.68	0.40
33:AF:106:ARG:HH22	33:AF:122:ASN:ND2	2.16	0.40
43:AP:16:GLU:OE2	43:AP:77:CYS:HB2	2.21	0.40
46:B:325:U:H2'	46:B:326:A:C8	2.56	0.40
46:B:326:A:H2'	46:B:327:G:O4'	2.21	0.40
46:B:446:C:OP1	51:G:29:PRO:HD3	2.21	0.40
46:B:504:A:O2'	46:B:505:U:P	2.79	0.40
46:B:609:U:C5	58:N:96:LYS:HE2	2.56	0.40
46:B:781:G:H4'	58:N:69:LYS:NZ	2.36	0.40
46:B:935:C:H2'	46:B:936:A:C8	2.56	0.40
46:B:1214:G:OP1	78:h:141:LYS:HA	2.21	0.40
46:B:1300:U:O2'	46:B:1301:G:H8	2.04	0.40
50:F:72:SER:HA	50:F:75:VAL:HG22	2.04	0.40
50:F:183:LEU:HD23	50:F:183:LEU:HA	1.88	0.40
54:J:5:ILE:HD13	54:J:10:PRO:CB	2.51	0.40
59:O:99:GLU:OE2	59:O:111:ASN:HB3	2.21	0.40
63:S:67:LYS:HG2	63:S:67:LYS:O	2.21	0.40
65:U:4:VAL:HG12	72:b:78:VAL:HG23	2.02	0.40
70:Z:50:LYS:HD3	70:Z:101:GLU:OE2	2.21	0.40
74:d:57:ASP:OD1	74:d:58:SER:N	2.55	0.40
75:e:12:VAL:CG2	75:e:52:ASP:H	2.30	0.40
79:AR:133:LYS:HD3	79:AR:141:CYS:SG	2.60	0.40
1:AS:442:G:N2	1:AS:488:G:H1'	2.36	0.40
1:AS:966:A:OP1	30:BW:18:ARG:HD2	2.21	0.40
1:AS:1807:G:H2'	1:AS:1808:G:O4'	2.21	0.40
1:AS:1944:G:C2	1:AS:1945:A:C5	3.10	0.40
1:AS:2744:C:H4'	1:AS:2745:C:H5'	2.03	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AT:12:U:OP2	2:AT:68:C:O2'	2.38	0.40
7:AZ:7:PHE:O	7:AZ:9:THR:HG23	2.21	0.40
46:CM:57:G:OP2	71:DL:116:LYS:HD3	2.21	0.40
46:CM:432:G:OP1	70:DK:78:LYS:HA	2.21	0.40
46:CM:634:A:H5''	69:DJ:31:SER:HB2	2.02	0.40
46:CM:907:G:O2'	46:CM:908:A:H5'	2.21	0.40
46:CM:1131:G:H2'	46:CM:1132:A:H8	1.83	0.40
46:CM:1259:C:H5	45:CL:89:ASP:O	2.04	0.40
46:CM:1378:U:H2'	46:CM:1379:C:C6	2.55	0.40
49:CP:221:THR:HB	49:CP:222:PRO:HD2	2.03	0.40
59:CZ:71:ILE:HD12	59:CZ:71:ILE:H	1.86	0.40
61:DB:13:ARG:N	61:DB:24:HIS:O	2.52	0.40
80:11:13:VAL:HG21	80:11:180:VAL:HG22	2.03	0.40
1:1:450:G:N3	1:1:450:G:H2'	2.37	0.40
1:1:1021:A:N3	62:R:75:VAL:HB	2.36	0.40
1:1:2203:U:H2'	1:1:2204:U:C6	2.55	0.40
1:1:2739:U:H2'	1:1:2740:U:H6	1.86	0.40
1:1:2927:U:H2'	1:1:2928:A:O4'	2.21	0.40
3:4:19:C:H2'	3:4:20:U:C6	2.56	0.40
3:4:40:A:H2'	3:4:41:A:C8	2.56	0.40
3:4:57:C:H4'	3:4:63:G:N7	2.36	0.40
5:k:148:LEU:HD13	5:k:196:LYS:HD2	2.04	0.40
7:m:290:ILE:HG13	12:r:206:LEU:HD21	2.03	0.40
8:n:45:ARG:HH12	18:x:178:SER:CB	2.34	0.40
10:p:65:ILE:O	10:p:69:ARG:HG2	2.20	0.40
10:p:167:LEU:HD23	10:p:167:LEU:HA	1.85	0.40
16:v:37:HIS:NE2	16:v:63:ARG:HB3	2.36	0.40
16:v:45:PRO:O	16:v:49:ARG:HG3	2.21	0.40
31:AD:55:LYS:O	31:AD:59:GLU:HG2	2.21	0.40
34:AG:43:PHE:CZ	34:AG:107:ILE:HD11	2.55	0.40
46:B:446:C:H2'	46:B:447:C:H6	1.85	0.40
46:B:1131:G:H2'	46:B:1132:A:H8	1.80	0.40
46:B:1188:A:C2	46:B:1543:A:C4	3.10	0.40
46:B:1202:A:N3	57:M:27:PHE:HD2	2.18	0.40
46:B:1436:U:H2'	46:B:1437:C:H6	1.87	0.40
46:B:1543:A:H1'	46:B:1547:U:OP2	2.21	0.40
50:F:12:LEU:HD12	67:W:85:ILE:HG12	2.01	0.40
53:I:69:HIS:HD2	53:I:73:VAL:HG11	1.85	0.40
56:L:112:GLN:OE1	56:L:153:GLN:NE2	2.54	0.40
64:T:90:ALA:HA	64:T:95:HIS:CD2	2.56	0.40
75:e:8:THR:HG23	75:e:56:LEU:HB2	2.03	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:AR:68:ILE:O	79:AR:86:TRP:N	2.39	0.40
79:AR:145:LEU:HD13	79:AR:178:TRP:CE2	2.57	0.40
1:AS:258:U:H2'	1:AS:259:C:C6	2.56	0.40
1:AS:269:G:H5''	16:BI:14:LYS:HE2	2.02	0.40
1:AS:622:G:H2'	1:AS:623:A:C8	2.56	0.40
1:AS:994:A:H4'	2:AT:103:A:C2	2.56	0.40
1:AS:1065:C:H2'	1:AS:1066:U:H6	1.86	0.40
1:AS:1611:U:H2'	1:AS:1612:U:H6	1.86	0.40
1:AS:1634:A:N1	1:AS:1732:G:O2'	2.50	0.40
1:AS:2130:A:H2'	1:AS:2131:U:C6	2.55	0.40
1:AS:2270:U:H2'	1:AS:2271:C:C6	2.57	0.40
1:AS:2681:C:H2'	1:AS:2682:C:H6	1.86	0.40
1:AS:3182:C:O4'	1:AS:3231:G:N2	2.54	0.40
1:AS:3267:U:H2'	1:AS:3268:G:C8	2.57	0.40
3:AU:4:C:H2'	3:AU:5:U:H6	1.87	0.40
7:AZ:164:LYS:HB2	7:AZ:180:PHE:CE1	2.56	0.40
10:BC:95:LEU:HD22	10:BC:133:VAL:HG22	2.03	0.40
10:BC:141:VAL:HG21	16:BI:3:ALA:HB2	2.02	0.40
17:BJ:131:LYS:HB3	17:BJ:134:ARG:HG2	2.04	0.40
27:BT:48:LEU:HD13	27:BT:115:ARG:HH21	1.86	0.40
46:CM:176:U:O2'	46:CM:177:A:OP2	2.35	0.40
46:CM:229:U:H1'	46:CM:232:G:H1	1.86	0.40
46:CM:325:U:H2'	46:CM:326:A:C8	2.56	0.40
46:CM:526:U:H2'	46:CM:527:A:O4'	2.21	0.40
46:CM:638:U:HO2'	46:CM:639:G:P	2.43	0.40
46:CM:1312:C:C2	46:CM:1313:G:C8	3.09	0.40
46:CM:1332:U:P	67:DH:22:ARG:HH12	2.45	0.40
46:CM:1571:G:O2'	46:CM:1597:G:O6	2.28	0.40
50:CQ:116:ILE:HD11	45:CL:108:GLY:H	1.86	0.40
52:CS:102:ARG:HG3	52:CS:103:ASN:OD1	2.21	0.40
55:CV:17:LYS:HA	55:CV:17:LYS:HD3	1.80	0.40
64:DE:93:LEU:HD12	64:DE:99:GLN:HA	2.02	0.40
65:DF:81:ILE:O	65:DF:82:PRO:O	2.39	0.40
75:DP:18:ARG:HD2	75:DP:26:THR:HG22	2.03	0.40
79:DT:65:HIS:HD1	79:DT:85:SER:HG	0.53	0.40
45:CL:53:LYS:O	45:CL:55:LYS:N	2.54	0.40
1:1:69:A:C5'	29:AB:64:GLN:HE22	2.34	0.40
1:1:304:G:OP2	1:1:304:G:H3'	2.22	0.40
1:1:385:A:H2'	1:1:386:A:C8	2.55	0.40
1:1:412:G:H2'	1:1:413:U:H6	1.85	0.40
1:1:530:U:O2	21:O:146:LYS:HA	2.22	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:706:G:N2	1:1:709:A:OP2	2.45	0.40
1:1:1204:U:H6	1:1:1204:U:H2'	1.72	0.40
1:1:1501:C:OP1	18:x:23:ARG:NH2	2.54	0.40
1:1:2090:U:H1'	1:1:2091:A:OP2	2.21	0.40
1:1:3197:G:H2'	1:1:3198:C:H6	1.85	0.40
3:4:156:U:OP2	10:p:85:LYS:HE3	2.22	0.40
5:k:226:PHE:CE2	5:k:268:GLY:HA2	2.56	0.40
18:x:4:TYR:CE2	18:x:16:SER:HB3	2.56	0.40
30:AC:28:LYS:HG2	30:AC:29:TYR:CD1	2.56	0.40
46:B:60:U:H4'	46:B:452:A:OP1	2.21	0.40
46:B:252:A:H2'	46:B:253:U:C6	2.57	0.40
46:B:649:G:O6	46:B:682:A:N6	2.55	0.40
46:B:1181:A:H4'	46:B:1182:C:H5''	2.02	0.40
46:B:1238:U:H2'	46:B:1239:U:C6	2.57	0.40
46:B:1323:C:H1'	46:B:1396:A:C5	2.56	0.40
46:B:1369:G:H5''	67:W:88:ARG:HH12	1.86	0.40
83:B:1803:PAR:H322	83:B:1803:PAR:H51	1.87	0.40
57:M:1:MET:HE3	57:M:1:MET:HB3	1.99	0.40
61:Q:13:ARG:N	61:Q:24:HIS:O	2.52	0.40
63:S:19:ALA:HA	63:S:66:VAL:HG12	2.03	0.40
78:h:163:CYS:HA	78:h:164:PRO:HD3	1.96	0.40
79:AR:110:ASP:HB2	79:AR:128:ARG:HG3	2.03	0.40
1:AS:295:A:N3	37:CD:81:ARG:NH1	2.69	0.40
1:AS:661:C:H2'	1:AS:662:U:C6	2.56	0.40
1:AS:1524:G:O2'	1:AS:1584:A:N3	2.45	0.40
1:AS:1714:G:H2'	1:AS:1715:G:H8	1.87	0.40
1:AS:2653:U:O2	13:BF:20:ASN:ND2	2.55	0.40
1:AS:2796:G:H2'	1:AS:2797:C:H6	1.86	0.40
1:AS:3134:C:H2'	1:AS:3135:A:C8	2.57	0.40
2:AT:45:A:H2'	2:AT:46:A:H8	1.86	0.40
19:BL:175:ALA:HB3	29:BV:53:PHE:O	2.21	0.40
21:BN:41:TYR:O	21:BN:45:LEU:HD23	2.21	0.40
21:BN:49:HIS:CD2	21:BN:50:LYS:H	2.40	0.40
21:BN:57:GLU:OE2	22:BO:139:ARG:HD2	2.22	0.40
46:CM:182:C:H2'	46:CM:183:C:H6	1.86	0.40
46:CM:390:G:OP1	46:CM:1716:C:O2'	2.39	0.40
46:CM:444:A:C6	46:CM:445:U:C4	3.08	0.40
46:CM:655:U:C4'	46:CM:675:U:H3	2.34	0.40
46:CM:914:A:H5'	61:DB:119:ASP:OD1	2.22	0.40
46:CM:1416:U:H1'	67:DH:71:ASN:HB3	2.02	0.40
46:CM:1538:U:H2'	46:CM:1539:U:C6	2.56	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:CM:1589:C:H2'	46:CM:1590:U:C6	2.56	0.40
46:CM:1766:U:H2'	46:CM:1768:A:OP2	2.21	0.40
50:CQ:116:ILE:CD1	45:CL:107:TRP:HA	2.51	0.40
51:CR:42:LEU:N	51:CR:84:ALA:O	2.48	0.40
51:CR:147:ILE:HG21	51:CR:169:ILE:HG13	2.02	0.40
55:CV:107:THR:N	55:CV:108:PRO:HD2	2.36	0.40
57:CX:61:TRP:NE1	76:DQ:23:HIS:HD2	2.20	0.40
79:DT:80:TYR:CE1	79:DT:92:LEU:HG	2.57	0.40
80:11:10:ARG:O	80:11:13:VAL:HG22	2.22	0.40
1:1:40:G:N2	1:1:2775:A:H62	2.19	0.40
1:1:152:U:O2'	1:1:153:U:H5'	2.21	0.40
1:1:879:A:O4'	18:x:133:HIS:HA	2.20	0.40
1:1:1235:C:H2'	1:1:1236:A:H8	1.85	0.40
1:1:1690:U:O2'	1:1:1691:U:H5'	2.21	0.40
1:1:2592:G:C4	1:1:2593:G:C8	3.09	0.40
1:1:2814:U:N3	1:1:2815:U:C5	2.89	0.40
1:1:2894:G:H1'	1:1:2923:G:N3	2.36	0.40
1:1:2956:C:H2'	1:1:2957:C:C6	2.55	0.40
1:1:3038:U:C2	1:1:3039:C:C5	3.09	0.40
1:1:3041:G:C2	1:1:3042:A:C8	3.09	0.40
1:1:3238:A:H1'	8:n:82:TYR:CE2	2.56	0.40
10:p:95:LEU:HD22	10:p:133:VAL:HG22	2.02	0.40
32:AE:11:TYR:O	32:AE:71:ARG:HD2	2.22	0.40
46:B:704:A:N6	46:B:717:G:OP2	2.54	0.40
46:B:1269:C:OP2	46:B:1610:C:H4'	2.22	0.40
52:H:25:LEU:HD22	63:S:56:LEU:HD22	2.04	0.40
64:T:72:LYS:HA	64:T:72:LYS:HD3	1.88	0.40
1:AS:266:C:H2'	37:CD:29:LYS:NZ	2.37	0.40
1:AS:560:C:C2	1:AS:561:U:C5	3.10	0.40
1:AS:948:A:OP1	30:BW:11:ASN:ND2	2.33	0.40
1:AS:1171:C:O2	17:BJ:88:MET:HG2	2.21	0.40
1:AS:1192:C:OP1	1:AS:1305:U:O2'	2.38	0.40
1:AS:1328:A:H2	9:BB:207:ASN:ND2	2.20	0.40
1:AS:1905:A:H2'	1:AS:1906:A:C8	2.57	0.40
1:AS:2351:A:N3	1:AS:2796:G:O2'	2.49	0.40
1:AS:2628:A:C8	1:AS:2630:G:C8	3.09	0.40
1:AS:2806:G:C4	1:AS:2807:U:C5	3.10	0.40
3:AU:6:U:H2'	3:AU:7:U:C6	2.56	0.40
14:BG:71:ALA:HB2	14:BG:149:VAL:HG21	2.03	0.40
22:BO:39:ILE:HG12	22:BO:63:ILE:CD1	2.51	0.40
23:BP:85:LYS:O	23:BP:89:LYS:HG2	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BR:95:SER:HB3	25:BR:99:SER:CB	2.50	0.40
42:CI:3:ASP:HB2	46:CM:1760:C:OP1	2.22	0.40
46:CM:12:U:H1'	46:CM:1285:A:H1'	2.03	0.40
46:CM:1242:U:O2'	57:CX:8:ARG:NH1	2.54	0.40
46:CM:1486:G:H5''	66:DG:122:ARG:NH1	2.36	0.40
46:CM:1760:C:H2'	46:CM:1761:G:C8	2.56	0.40
49:CP:36:LEU:HD12	49:CP:36:LEU:HA	1.94	0.40
55:CV:62:THR:HA	55:CV:77:ARG:HA	2.03	0.40
57:CX:22:VAL:HG12	57:CX:63:TYR:OH	2.22	0.40
70:DK:74:VAL:HG11	70:DK:104:LEU:HD11	2.04	0.40
71:DL:20:ARG:HB3	71:DL:76:TYR:CD2	2.57	0.40
79:DT:20:VAL:HG11	79:DT:307:ILE:HG12	2.04	0.40
79:DT:34:LEU:HG	79:DT:72:VAL:HG11	2.04	0.40
1:1:149:A:C5	1:1:150:A:C8	3.09	0.40
1:1:293:C:H2'	1:1:294:U:O4'	2.21	0.40
1:1:359:U:H4'	1:1:813:A:N6	2.36	0.40
1:1:547:U:H2'	1:1:548:G:C8	2.57	0.40
1:1:1062:G:H2'	1:1:1063:U:C6	2.57	0.40
1:1:1466:U:H2'	1:1:1467:U:H6	1.87	0.40
1:1:1467:U:H2'	1:1:1468:U:C6	2.57	0.40
1:1:1832:C:O2'	1:1:1838:A:N1	2.54	0.40
1:1:2111:U:O4	1:1:2125:A:H2	2.05	0.40
1:1:2571:U:H2'	1:1:2572:C:C6	2.56	0.40
1:1:3308:G:H21	1:1:3327:A:H2	1.69	0.40
1:1:3309:A:H2'	1:1:3309:A:N3	2.36	0.40
5:k:29:VAL:HG13	5:k:339:ARG:HD3	2.04	0.40
13:s:81:GLU:O	13:s:85:LYS:HG3	2.21	0.40
21:0:73:LYS:HD2	21:0:75:PHE:CZ	2.56	0.40
21:0:106:MET:HE3	21:0:106:MET:HB3	1.94	0.40
21:0:152:LEU:HD12	21:0:172:TYR:HE2	1.86	0.40
26:8:58:ASP:OD2	36:AI:25:LYS:NZ	2.40	0.40
30:AC:52:LYS:O	30:AC:56:LYS:HG2	2.21	0.40
45:i:90:ARG:NH2	46:B:1413:A:OP2	2.55	0.40
46:B:55:A:N6	46:B:401:G:H1'	2.36	0.40
46:B:627:U:H2'	46:B:628:A:H8	1.86	0.40
46:B:734:U:H2'	46:B:735:U:C6	2.57	0.40
46:B:944:U:O2	60:P:17:PRO:HG3	2.22	0.40
46:B:1366:U:H2'	46:B:1367:U:H6	1.86	0.40
46:B:1725:U:H2'	46:B:1726:C:C6	2.57	0.40
47:C:32:HIS:ND1	47:C:153:SER:OG	2.53	0.40
47:C:124:THR:HG22	47:C:174:TRP:NE1	2.31	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:D:82:ARG:NH2	48:D:188:LEU:O	2.52	0.40
48:D:117:TRP:CE2	48:D:152:LYS:HE2	2.56	0.40
51:G:31:PRO:HG3	51:G:43:PRO:HG3	2.03	0.40
52:H:129:PRO:O	52:H:133:VAL:HG23	2.22	0.40
53:I:1:MET:HE2	53:I:106:LEU:HB2	2.04	0.40
53:I:2:LYS:HE3	53:I:2:LYS:HB2	1.81	0.40
57:M:16:PHE:CD1	57:M:17:GLN:N	2.89	0.40
60:P:45:LEU:HB3	60:P:49:GLN:HB2	2.03	0.40
79:AR:59:LYS:HA	79:AR:59:LYS:HD3	1.76	0.40
1:AS:671:U:H2'	1:AS:672:G:H8	1.87	0.40
1:AS:1089:A:N3	1:AS:1092:U:C4	2.89	0.40
1:AS:1210:U:H2'	1:AS:1211:U:C6	2.57	0.40
1:AS:1487:A:N6	40:CG:2:PRO:HA	2.35	0.40
1:AS:1745:A:H5''	1:AS:1747:G:N7	2.36	0.40
1:AS:2738:U:H2'	1:AS:2739:U:C6	2.56	0.40
1:AS:2956:C:H2'	1:AS:2957:C:C6	2.56	0.40
1:AS:3146:G:C6	1:AS:3178:A:C2	3.09	0.40
5:AX:256:HIS:HA	5:AX:257:PRO:C	2.47	0.40
7:AZ:40:HIS:CE1	22:BO:69:LYS:HA	2.56	0.40
7:AZ:160:PHE:HA	7:AZ:163:LEU:HB3	2.04	0.40
8:BA:91:ASN:HD22	8:BA:148:GLU:CD	2.30	0.40
16:BI:78:GLY:HA2	16:BI:89:VAL:HG21	2.03	0.40
31:BX:55:LYS:O	31:BX:59:GLU:HG2	2.21	0.40
37:CD:89:MET:HA	37:CD:92:VAL:HG12	2.03	0.40
46:CM:770:C:O4'	46:CM:770:C:P	2.80	0.40
46:CM:852:G:H21	60:DA:87:ASP:CG	2.25	0.40
46:CM:1581:G:O2'	46:CM:1582:U:OP1	2.36	0.40
50:CQ:72:SER:O	50:CQ:75:VAL:HG22	2.21	0.40
67:DH:22:ARG:NH2	67:DH:91:ASP:OD2	2.36	0.40
80:II:49:PHE:HB2	80:II:193:LEU:HB3	2.03	0.40
45:CL:113:ARG:HH11	45:CL:113:ARG:HG3	1.85	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	
4	AW	246/254 (97%)	239 (97%)	7 (3%)	0	100	100
4	j	247/254 (97%)	238 (96%)	9 (4%)	0	100	100
5	AX	384/389 (99%)	372 (97%)	12 (3%)	0	100	100
5	k	385/389 (99%)	373 (97%)	12 (3%)	0	100	100
6	AY	357/363 (98%)	347 (97%)	10 (3%)	0	100	100
6	l	359/363 (99%)	347 (97%)	12 (3%)	0	100	100
7	AZ	290/298 (97%)	278 (96%)	12 (4%)	0	100	100
7	m	294/298 (99%)	282 (96%)	11 (4%)	1 (0%)	36	63
8	BA	149/176 (85%)	146 (98%)	3 (2%)	0	100	100
8	n	153/176 (87%)	149 (97%)	4 (3%)	0	100	100
9	BB	225/241 (93%)	218 (97%)	6 (3%)	1 (0%)	30	58
9	o	226/241 (94%)	220 (97%)	5 (2%)	1 (0%)	30	58
10	BC	224/262 (86%)	211 (94%)	11 (5%)	2 (1%)	14	41
10	p	235/262 (90%)	228 (97%)	6 (3%)	1 (0%)	30	58
11	BD	187/191 (98%)	182 (97%)	5 (3%)	0	100	100
11	q	188/191 (98%)	183 (97%)	5 (3%)	0	100	100
12	BE	202/220 (92%)	198 (98%)	4 (2%)	0	100	100
12	r	204/220 (93%)	202 (99%)	2 (1%)	0	100	100
13	BF	169/174 (97%)	161 (95%)	8 (5%)	0	100	100
13	s	169/174 (97%)	161 (95%)	8 (5%)	0	100	100
14	BG	198/202 (98%)	190 (96%)	6 (3%)	2 (1%)	12	38
14	t	198/202 (98%)	196 (99%)	2 (1%)	0	100	100
15	BH	126/131 (96%)	122 (97%)	4 (3%)	0	100	100
15	u	128/131 (98%)	125 (98%)	3 (2%)	0	100	100
16	BI	201/204 (98%)	194 (96%)	6 (3%)	1 (0%)	24	52
16	v	201/204 (98%)	197 (98%)	4 (2%)	0	100	100
17	BJ	197/200 (98%)	195 (99%)	2 (1%)	0	100	100
17	w	197/200 (98%)	195 (99%)	2 (1%)	0	100	100
18	BK	170/185 (92%)	166 (98%)	4 (2%)	0	100	100
18	x	168/185 (91%)	165 (98%)	3 (2%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
19	BL	183/186 (98%)	178 (97%)	5 (3%)	0	100	100
19	y	183/186 (98%)	179 (98%)	4 (2%)	0	100	100
20	BM	169/190 (89%)	164 (97%)	3 (2%)	2 (1%)	10	33
20	z	177/190 (93%)	174 (98%)	3 (2%)	0	100	100
21	0	168/172 (98%)	166 (99%)	2 (1%)	0	100	100
21	BN	168/172 (98%)	166 (99%)	2 (1%)	0	100	100
22	2	157/160 (98%)	153 (98%)	4 (2%)	0	100	100
22	BO	157/160 (98%)	154 (98%)	3 (2%)	0	100	100
23	5	101/124 (82%)	94 (93%)	6 (6%)	1 (1%)	12	38
23	BP	101/124 (82%)	88 (87%)	11 (11%)	2 (2%)	6	24
24	6	129/137 (94%)	126 (98%)	3 (2%)	0	100	100
24	BQ	129/137 (94%)	126 (98%)	3 (2%)	0	100	100
25	7	114/155 (74%)	108 (95%)	6 (5%)	0	100	100
25	BR	107/155 (69%)	101 (94%)	6 (6%)	0	100	100
26	8	119/142 (84%)	119 (100%)	0	0	100	100
26	BS	116/142 (82%)	115 (99%)	1 (1%)	0	100	100
27	9	124/127 (98%)	122 (98%)	2 (2%)	0	100	100
27	BT	122/127 (96%)	121 (99%)	1 (1%)	0	100	100
28	AA	133/136 (98%)	132 (99%)	1 (1%)	0	100	100
28	BU	133/136 (98%)	132 (99%)	1 (1%)	0	100	100
29	AB	146/149 (98%)	139 (95%)	7 (5%)	0	100	100
29	BV	146/149 (98%)	138 (94%)	8 (6%)	0	100	100
30	AC	60/63 (95%)	57 (95%)	1 (2%)	2 (3%)	3	17
30	BW	59/63 (94%)	57 (97%)	1 (2%)	1 (2%)	7	27
31	AD	97/106 (92%)	95 (98%)	1 (1%)	1 (1%)	12	38
31	BX	94/106 (89%)	92 (98%)	2 (2%)	0	100	100
32	AE	108/112 (96%)	105 (97%)	3 (3%)	0	100	100
32	BY	107/112 (96%)	103 (96%)	4 (4%)	0	100	100
33	AF	122/131 (93%)	122 (100%)	0	0	100	100
33	BZ	123/131 (94%)	122 (99%)	1 (1%)	0	100	100
34	AG	104/107 (97%)	101 (97%)	3 (3%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
34	CA	107/107 (100%)	104 (97%)	3 (3%)	0	100	100
35	AH	109/122 (89%)	107 (98%)	2 (2%)	0	100	100
35	CB	114/122 (93%)	111 (97%)	3 (3%)	0	100	100
36	AI	118/120 (98%)	114 (97%)	4 (3%)	0	100	100
36	CC	115/120 (96%)	113 (98%)	2 (2%)	0	100	100
37	AJ	95/99 (96%)	94 (99%)	1 (1%)	0	100	100
37	CD	97/99 (98%)	95 (98%)	1 (1%)	1 (1%)	12	38
38	AK	84/90 (93%)	81 (96%)	3 (4%)	0	100	100
38	CE	84/90 (93%)	80 (95%)	4 (5%)	0	100	100
39	AL	75/78 (96%)	69 (92%)	6 (8%)	0	100	100
39	CF	75/78 (96%)	71 (95%)	4 (5%)	0	100	100
40	AM	48/51 (94%)	46 (96%)	1 (2%)	1 (2%)	5	23
40	CG	48/51 (94%)	45 (94%)	2 (4%)	1 (2%)	5	23
41	AN	50/52 (96%)	50 (100%)	0	0	100	100
41	CH	51/52 (98%)	51 (100%)	0	0	100	100
42	AO	23/25 (92%)	22 (96%)	1 (4%)	0	100	100
42	CI	22/25 (88%)	22 (100%)	0	0	100	100
43	AP	101/106 (95%)	99 (98%)	2 (2%)	0	100	100
43	CJ	103/106 (97%)	102 (99%)	1 (1%)	0	100	100
44	AQ	89/92 (97%)	85 (96%)	4 (4%)	0	100	100
44	CK	89/92 (97%)	85 (96%)	4 (4%)	0	100	100
45	CL	105/267 (39%)	76 (72%)	24 (23%)	5 (5%)	2	11
45	i	117/267 (44%)	81 (69%)	30 (26%)	6 (5%)	1	10
47	C	206/261 (79%)	201 (98%)	5 (2%)	0	100	100
47	CN	206/261 (79%)	201 (98%)	5 (2%)	0	100	100
48	CO	212/256 (83%)	199 (94%)	11 (5%)	2 (1%)	14	41
48	D	212/256 (83%)	207 (98%)	5 (2%)	0	100	100
49	CP	214/249 (86%)	207 (97%)	7 (3%)	0	100	100
49	E	215/249 (86%)	209 (97%)	6 (3%)	0	100	100
50	CQ	221/251 (88%)	214 (97%)	7 (3%)	0	100	100
50	F	221/251 (88%)	212 (96%)	9 (4%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
51	CR	258/262 (98%)	252 (98%)	6 (2%)	0	100	100
51	G	257/262 (98%)	251 (98%)	5 (2%)	1 (0%)	30	58
52	CS	204/225 (91%)	197 (97%)	7 (3%)	0	100	100
52	H	204/225 (91%)	190 (93%)	14 (7%)	0	100	100
53	CT	233/236 (99%)	226 (97%)	6 (3%)	1 (0%)	30	58
53	I	224/236 (95%)	219 (98%)	5 (2%)	0	100	100
54	CU	180/186 (97%)	169 (94%)	9 (5%)	2 (1%)	11	36
54	J	183/186 (98%)	173 (94%)	9 (5%)	1 (0%)	24	52
55	CV	201/206 (98%)	200 (100%)	1 (0%)	0	100	100
55	K	201/206 (98%)	200 (100%)	1 (0%)	0	100	100
56	CW	176/189 (93%)	175 (99%)	1 (1%)	0	100	100
56	L	176/189 (93%)	175 (99%)	1 (1%)	0	100	100
57	CX	91/118 (77%)	85 (93%)	5 (6%)	1 (1%)	11	36
57	M	96/118 (81%)	81 (84%)	13 (14%)	2 (2%)	5	23
58	CY	139/155 (90%)	131 (94%)	5 (4%)	3 (2%)	5	23
58	N	142/155 (92%)	134 (94%)	7 (5%)	1 (1%)	18	46
59	CZ	114/143 (80%)	97 (85%)	17 (15%)	0	100	100
59	O	114/143 (80%)	90 (79%)	19 (17%)	5 (4%)	2	12
60	DA	148/151 (98%)	142 (96%)	5 (3%)	1 (1%)	18	46
60	P	148/151 (98%)	146 (99%)	2 (1%)	0	100	100
61	DB	125/132 (95%)	121 (97%)	4 (3%)	0	100	100
61	Q	125/132 (95%)	120 (96%)	5 (4%)	0	100	100
62	DC	116/142 (82%)	105 (90%)	11 (10%)	0	100	100
62	R	127/142 (89%)	112 (88%)	14 (11%)	1 (1%)	16	44
63	DD	138/142 (97%)	134 (97%)	4 (3%)	0	100	100
63	S	137/142 (96%)	132 (96%)	5 (4%)	0	100	100
64	DE	123/137 (90%)	120 (98%)	3 (2%)	0	100	100
64	T	121/137 (88%)	117 (97%)	4 (3%)	0	100	100
65	DF	140/145 (97%)	133 (95%)	5 (4%)	2 (1%)	9	30
65	U	142/145 (98%)	136 (96%)	6 (4%)	0	100	100
66	DG	139/145 (96%)	136 (98%)	3 (2%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
66	V	137/145 (94%)	133 (97%)	3 (2%)	1 (1%)	18	46
67	DH	98/119 (82%)	95 (97%)	3 (3%)	0	100	100
67	W	100/119 (84%)	96 (96%)	4 (4%)	0	100	100
68	DI	85/87 (98%)	83 (98%)	2 (2%)	0	100	100
68	X	85/87 (98%)	83 (98%)	2 (2%)	0	100	100
69	DJ	127/130 (98%)	125 (98%)	2 (2%)	0	100	100
69	Y	127/130 (98%)	125 (98%)	2 (2%)	0	100	100
70	DK	141/145 (97%)	138 (98%)	3 (2%)	0	100	100
70	Z	141/145 (97%)	137 (97%)	4 (3%)	0	100	100
71	DL	130/135 (96%)	130 (100%)	0	0	100	100
71	a	132/135 (98%)	130 (98%)	2 (2%)	0	100	100
72	DM	70/105 (67%)	67 (96%)	3 (4%)	0	100	100
72	b	69/105 (66%)	68 (99%)	1 (1%)	0	100	100
73	DN	95/119 (80%)	93 (98%)	2 (2%)	0	100	100
73	c	96/119 (81%)	94 (98%)	2 (2%)	0	100	100
74	DO	79/82 (96%)	72 (91%)	7 (9%)	0	100	100
74	d	79/82 (96%)	75 (95%)	4 (5%)	0	100	100
75	DP	60/67 (90%)	55 (92%)	5 (8%)	0	100	100
75	e	60/67 (90%)	57 (95%)	3 (5%)	0	100	100
76	DQ	53/56 (95%)	51 (96%)	2 (4%)	0	100	100
76	f	53/56 (95%)	51 (96%)	2 (4%)	0	100	100
77	DR	54/63 (86%)	52 (96%)	2 (4%)	0	100	100
77	g	58/63 (92%)	54 (93%)	4 (7%)	0	100	100
78	DS	68/193 (35%)	61 (90%)	7 (10%)	0	100	100
78	h	68/193 (35%)	53 (78%)	13 (19%)	2 (3%)	3	18
79	AR	308/317 (97%)	285 (92%)	22 (7%)	1 (0%)	36	63
79	DT	309/317 (98%)	286 (93%)	22 (7%)	1 (0%)	36	63
80	l1	215/217 (99%)	132 (61%)	74 (34%)	9 (4%)	2	13
81	12	12/165 (7%)	12 (100%)	0	0	100	100
All	All	22290/24658 (90%)	21374 (96%)	847 (4%)	69 (0%)	36	63

All (69) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
10	p	206	SER
45	i	54	LYS
54	J	162	LEU
59	O	37	VAL
59	O	130	SER
59	O	131	ASP
62	R	7	PRO
78	h	134	LYS
78	h	161	ARG
9	BB	17	GLN
10	BC	125	ASP
14	BG	136	ALA
20	BM	168	ALA
30	BW	2	ALA
37	CD	29	LYS
48	CO	75	GLY
58	CY	27	ALA
58	CY	31	THR
65	DF	80	LYS
65	DF	82	PRO
79	DT	291	TRP
80	l1	43	PRO
80	l1	80	LEU
80	l1	88	ASP
80	l1	95	LYS
45	CL	43	PRO
45	CL	80	ALA
45	CL	94	THR
40	AM	49	LEU
45	i	43	PRO
45	i	62	ALA
45	i	76	PRO
57	M	88	PRO
66	V	113	VAL
16	BI	152	VAL
40	CG	49	LEU
53	CT	122	GLU
80	l1	180	VAL
9	o	230	GLU
23	5	20	ALA
58	N	30	LYS
20	BM	171	GLU
31	AD	99	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
51	G	259	GLN
23	BP	20	ALA
23	BP	24	GLU
80	l1	87	VAL
45	CL	51	ALA
45	i	60	ASN
54	CU	156	THR
60	DA	12	SER
7	m	44	TYR
30	AC	3	LYS
45	i	40	ASP
59	O	41	LEU
14	BG	137	SER
48	CO	29	TRP
57	CX	17	GLN
58	CY	29	LYS
80	l1	176	GLU
59	O	110	GLY
79	AR	147	GLY
30	AC	21	ILE
10	BC	127	SER
54	CU	141	GLY
80	l1	36	VAL
57	M	86	ILE
80	l1	167	VAL
45	CL	56	SER

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	
4	AW	189/194 (97%)	189 (100%)	0	100	100
4	j	190/194 (98%)	190 (100%)	0	100	100
5	AX	325/328 (99%)	325 (100%)	0	100	100
5	k	326/328 (99%)	326 (100%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
6	AY	288/292 (99%)	288 (100%)	0	100	100
6	l	290/292 (99%)	290 (100%)	0	100	100
7	AZ	247/252 (98%)	247 (100%)	0	100	100
7	m	250/252 (99%)	250 (100%)	0	100	100
8	BA	132/154 (86%)	132 (100%)	0	100	100
8	n	136/154 (88%)	136 (100%)	0	100	100
9	BB	191/204 (94%)	191 (100%)	0	100	100
9	o	192/204 (94%)	192 (100%)	0	100	100
10	BC	192/216 (89%)	192 (100%)	0	100	100
10	p	197/216 (91%)	197 (100%)	0	100	100
11	BD	168/170 (99%)	168 (100%)	0	100	100
11	q	169/170 (99%)	169 (100%)	0	100	100
12	BE	176/186 (95%)	176 (100%)	0	100	100
12	r	178/186 (96%)	178 (100%)	0	100	100
13	BF	146/149 (98%)	146 (100%)	0	100	100
13	s	146/149 (98%)	146 (100%)	0	100	100
14	BG	166/168 (99%)	166 (100%)	0	100	100
14	t	166/168 (99%)	166 (100%)	0	100	100
15	BH	107/109 (98%)	107 (100%)	0	100	100
15	u	108/109 (99%)	108 (100%)	0	100	100
16	BI	177/178 (99%)	177 (100%)	0	100	100
16	v	177/178 (99%)	177 (100%)	0	100	100
17	BJ	166/167 (99%)	166 (100%)	0	100	100
17	w	166/167 (99%)	166 (100%)	0	100	100
18	BK	145/154 (94%)	145 (100%)	0	100	100
18	x	143/154 (93%)	143 (100%)	0	100	100
19	BL	153/154 (99%)	153 (100%)	0	100	100
19	y	153/154 (99%)	153 (100%)	0	100	100
20	BM	139/153 (91%)	139 (100%)	0	100	100
20	z	146/153 (95%)	146 (100%)	0	100	100
21	0	155/157 (99%)	155 (100%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
21	BN	155/157 (99%)	155 (100%)	0	100	100
22	2	133/134 (99%)	133 (100%)	0	100	100
22	BO	133/134 (99%)	133 (100%)	0	100	100
23	5	93/112 (83%)	93 (100%)	0	100	100
23	BP	94/112 (84%)	94 (100%)	0	100	100
24	6	101/104 (97%)	101 (100%)	0	100	100
24	BQ	101/104 (97%)	101 (100%)	0	100	100
25	7	97/127 (76%)	97 (100%)	0	100	100
25	BR	93/127 (73%)	93 (100%)	0	100	100
26	8	108/121 (89%)	108 (100%)	0	100	100
26	BS	106/121 (88%)	106 (100%)	0	100	100
27	9	111/112 (99%)	111 (100%)	0	100	100
27	BT	110/112 (98%)	110 (100%)	0	100	100
28	AA	117/118 (99%)	117 (100%)	0	100	100
28	BU	117/118 (99%)	117 (100%)	0	100	100
29	AB	120/121 (99%)	120 (100%)	0	100	100
29	BV	120/121 (99%)	120 (100%)	0	100	100
30	AC	48/49 (98%)	48 (100%)	0	100	100
30	BW	48/49 (98%)	48 (100%)	0	100	100
31	AD	84/90 (93%)	84 (100%)	0	100	100
31	BX	81/90 (90%)	81 (100%)	0	100	100
32	AE	98/100 (98%)	98 (100%)	0	100	100
32	BY	98/100 (98%)	98 (100%)	0	100	100
33	AF	109/115 (95%)	109 (100%)	0	100	100
33	BZ	110/115 (96%)	108 (98%)	2 (2%)	51	66
34	AG	91/92 (99%)	91 (100%)	0	100	100
34	CA	94/92 (102%)	94 (100%)	0	100	100
35	AH	94/102 (92%)	94 (100%)	0	100	100
35	CB	99/102 (97%)	97 (98%)	2 (2%)	48	65
36	AI	106/106 (100%)	106 (100%)	0	100	100
36	CC	104/106 (98%)	104 (100%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
37	AJ	77/79 (98%)	77 (100%)	0	100	100
37	CD	79/79 (100%)	79 (100%)	0	100	100
38	AK	70/73 (96%)	70 (100%)	0	100	100
38	CE	70/73 (96%)	70 (100%)	0	100	100
39	AL	68/69 (99%)	68 (100%)	0	100	100
39	CF	69/69 (100%)	69 (100%)	0	100	100
40	AM	46/47 (98%)	46 (100%)	0	100	100
40	CG	46/47 (98%)	46 (100%)	0	100	100
41	AN	47/47 (100%)	47 (100%)	0	100	100
41	CH	48/47 (102%)	48 (100%)	0	100	100
42	AO	24/24 (100%)	24 (100%)	0	100	100
42	CI	23/24 (96%)	23 (100%)	0	100	100
43	AP	88/91 (97%)	88 (100%)	0	100	100
43	CJ	90/91 (99%)	90 (100%)	0	100	100
44	AQ	72/73 (99%)	72 (100%)	0	100	100
44	CK	72/73 (99%)	72 (100%)	0	100	100
45	CL	86/212 (41%)	86 (100%)	0	100	100
45	i	99/212 (47%)	99 (100%)	0	100	100
47	C	176/215 (82%)	176 (100%)	0	100	100
47	CN	176/215 (82%)	176 (100%)	0	100	100
48	CO	194/229 (85%)	194 (100%)	0	100	100
48	D	194/229 (85%)	194 (100%)	0	100	100
49	CP	174/198 (88%)	174 (100%)	0	100	100
49	E	175/198 (88%)	175 (100%)	0	100	100
50	CQ	174/196 (89%)	174 (100%)	0	100	100
50	F	174/196 (89%)	174 (100%)	0	100	100
51	CR	218/220 (99%)	218 (100%)	0	100	100
51	G	218/220 (99%)	218 (100%)	0	100	100
52	CS	178/197 (90%)	178 (100%)	0	100	100
52	H	178/197 (90%)	178 (100%)	0	100	100
53	CT	203/204 (100%)	203 (100%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
53	I	195/204 (96%)	195 (100%)	0	100	100
54	CU	163/167 (98%)	163 (100%)	0	100	100
54	J	166/167 (99%)	166 (100%)	0	100	100
55	CV	157/160 (98%)	157 (100%)	0	100	100
55	K	157/160 (98%)	157 (100%)	0	100	100
56	CW	153/160 (96%)	153 (100%)	0	100	100
56	L	153/160 (96%)	153 (100%)	0	100	100
57	CX	87/104 (84%)	87 (100%)	0	100	100
57	M	90/104 (86%)	90 (100%)	0	100	100
58	CY	122/134 (91%)	122 (100%)	0	100	100
58	N	124/134 (92%)	124 (100%)	0	100	100
59	CZ	98/123 (80%)	98 (100%)	0	100	100
59	O	98/123 (80%)	98 (100%)	0	100	100
60	DA	129/130 (99%)	129 (100%)	0	100	100
60	P	129/130 (99%)	129 (100%)	0	100	100
61	DB	97/102 (95%)	97 (100%)	0	100	100
61	Q	97/102 (95%)	97 (100%)	0	100	100
62	DC	102/121 (84%)	102 (100%)	0	100	100
62	R	111/121 (92%)	111 (100%)	0	100	100
63	DD	114/116 (98%)	114 (100%)	0	100	100
63	S	113/116 (97%)	113 (100%)	0	100	100
64	DE	112/122 (92%)	112 (100%)	0	100	100
64	T	111/122 (91%)	111 (100%)	0	100	100
65	DF	126/129 (98%)	126 (100%)	0	100	100
65	U	128/129 (99%)	128 (100%)	0	100	100
66	DG	113/117 (97%)	113 (100%)	0	100	100
66	V	112/117 (96%)	112 (100%)	0	100	100
67	DH	90/105 (86%)	90 (100%)	0	100	100
67	W	92/105 (88%)	92 (100%)	0	100	100
68	DI	71/71 (100%)	71 (100%)	0	100	100
68	X	71/71 (100%)	71 (100%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
69	DJ	112/113 (99%)	112 (100%)	0	100	100
69	Y	112/113 (99%)	112 (100%)	0	100	100
70	DK	116/118 (98%)	116 (100%)	0	100	100
70	Z	116/118 (98%)	116 (100%)	0	100	100
71	DL	109/112 (97%)	109 (100%)	0	100	100
71	a	111/112 (99%)	111 (100%)	0	100	100
72	DM	64/85 (75%)	64 (100%)	0	100	100
72	b	63/85 (74%)	63 (100%)	0	100	100
73	DN	83/102 (81%)	83 (100%)	0	100	100
73	c	84/102 (82%)	84 (100%)	0	100	100
74	DO	72/73 (99%)	72 (100%)	0	100	100
74	d	72/73 (99%)	72 (100%)	0	100	100
75	DP	54/58 (93%)	54 (100%)	0	100	100
75	e	54/58 (93%)	54 (100%)	0	100	100
76	DQ	47/48 (98%)	47 (100%)	0	100	100
76	f	47/48 (98%)	47 (100%)	0	100	100
77	DR	48/54 (89%)	48 (100%)	0	100	100
77	g	51/54 (94%)	51 (100%)	0	100	100
78	DS	62/175 (35%)	62 (100%)	0	100	100
78	h	62/175 (35%)	61 (98%)	1 (2%)	55	67
79	AR	258/263 (98%)	258 (100%)	0	100	100
79	DT	259/263 (98%)	259 (100%)	0	100	100
80	l1	196/196 (100%)	196 (100%)	0	100	100
81	12	11/137 (8%)	11 (100%)	0	100	100
All	All	19118/20781 (92%)	19113 (100%)	5 (0%)	100	100

All (5) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
78	h	168	CYS
33	BZ	17[A]	LYS
33	BZ	17[B]	LYS
35	CB	106[A]	LYS
35	CB	106[B]	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (188) such sidechains are listed below:

Mol	Chain	Res	Type
4	j	19	HIS
5	k	109	HIS
5	k	173	GLN
5	k	177	HIS
5	k	256	HIS
5	k	316	ASN
6	l	321	ASN
7	m	17	GLN
7	m	111	GLN
7	m	244	HIS
9	o	17	GLN
9	o	50	GLN
9	o	91	ASN
9	o	144	GLN
9	o	198	ASN
9	o	218	GLN
9	o	228	ASN
10	p	192	HIS
11	q	102	ASN
11	q	116	ASN
11	q	163	GLN
14	t	103	ASN
14	t	117	GLN
16	v	32	GLN
16	v	156	HIS
17	w	51	ASN
18	x	97	ASN
18	x	137	ASN
19	y	9	GLN
23	5	30	GLN
23	5	62	ASN
23	5	105	GLN
27	9	81	GLN
27	9	86	GLN
28	AA	122	HIS
29	AB	11	HIS
29	AB	40	HIS
29	AB	62	HIS
29	AB	65	GLN
31	AD	73	GLN
32	AE	68	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	AG	24	ASN
34	AG	31	GLN
35	AH	64	GLN
36	AI	113	GLN
38	AK	30	GLN
39	AL	40	GLN
39	AL	51	GLN
39	AL	57	ASN
39	AL	77	ASN
44	AQ	32	GLN
44	AQ	48	GLN
47	C	21	ASN
47	C	33	ASN
48	D	209	ASN
49	E	50	GLN
49	E	54	HIS
50	F	57	GLN
51	G	17	HIS
51	G	36	HIS
51	G	197	HIS
51	G	209	HIS
52	H	116	HIS
53	I	119	ASN
53	I	182	GLN
54	J	146	GLN
54	J	167	GLN
55	K	9	HIS
55	K	116	HIS
56	L	153	GLN
58	N	14	GLN
59	O	38	HIS
60	P	5	HIS
63	S	93	GLN
65	U	127	HIS
66	V	23	GLN
66	V	85	ASN
67	W	16	GLN
68	X	29	HIS
69	Y	64	GLN
69	Y	80	ASN
69	Y	120	HIS
71	a	126	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
72	b	37	GLN
73	c	8	ASN
73	c	11	ASN
74	d	26	GLN
76	f	23	HIS
76	f	53	ASN
79	AR	53	ASN
79	AR	102	GLN
4	AW	205	ASN
5	AX	25	GLN
5	AX	182	GLN
5	AX	184	ASN
5	AX	198	HIS
5	AX	259	ASN
6	AY	347	GLN
7	AZ	68	HIS
7	AZ	225	ASN
9	BB	50	GLN
9	BB	108	GLN
9	BB	155	ASN
9	BB	218	GLN
10	BC	146	ASN
11	BD	102	ASN
11	BD	162	GLN
12	BE	55	ASN
12	BE	59	GLN
12	BE	162	GLN
13	BF	101	ASN
13	BF	109	HIS
13	BF	161	GLN
15	BH	23	ASN
18	BK	118	GLN
18	BK	120	ASN
18	BK	125	GLN
18	BK	137	ASN
20	BM	130	ASN
21	BN	157	GLN
21	BN	164	GLN
22	BO	66	ASN
22	BO	95	HIS
23	BP	103	GLN
26	BS	111	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
27	BT	86	GLN
27	BT	120	GLN
28	BU	36	HIS
28	BU	122	HIS
29	BV	40	HIS
29	BV	74	ASN
30	BW	43	HIS
30	BW	48	HIS
34	CA	24	ASN
36	CC	50	ASN
36	CC	113	GLN
38	CE	30	GLN
39	CF	28	ASN
39	CF	67	GLN
41	CH	41	HIS
43	CJ	22	GLN
47	CN	33	ASN
47	CN	49	ASN
48	CO	74	GLN
48	CO	149	GLN
49	CP	84	GLN
49	CP	89	GLN
49	CP	105	HIS
50	CQ	163	GLN
51	CR	67	GLN
51	CR	69	HIS
51	CR	98	HIS
53	CT	81	HIS
53	CT	140	HIS
54	CU	48	ASN
55	CV	32	GLN
55	CV	35	ASN
55	CV	115	ASN
60	DA	21	ASN
62	DC	79	HIS
62	DC	82	ASN
63	DD	39	GLN
63	DD	76	GLN
64	DE	42	GLN
65	DF	74	GLN
65	DF	87	ASN
66	DG	25	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
68	DI	21	ASN
68	DI	33	GLN
68	DI	70	ASN
69	DJ	15	ASN
69	DJ	42	GLN
69	DJ	64	GLN
70	DK	89	ASN
72	DM	44	GLN
74	DO	51	GLN
76	DQ	20	GLN
76	DQ	53	ASN
78	DS	155	ASN
79	DT	53	ASN
79	DT	102	GLN
79	DT	223	ASN
79	DT	238	HIS
80	II	57	GLN
80	II	108	ASN
80	II	119	GLN
45	CL	91	HIS
45	CL	109	GLN

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1	3215/3359 (95%)	617 (19%)	37 (1%)
1	AS	3054/3359 (90%)	502 (16%)	34 (1%)
2	3	120/121 (99%)	9 (7%)	0
2	AT	120/121 (99%)	9 (7%)	0
3	4	156/158 (98%)	23 (14%)	3 (1%)
3	AU	155/158 (98%)	20 (12%)	2 (1%)
46	B	1725/1787 (96%)	426 (24%)	48 (2%)
46	CM	1697/1787 (94%)	420 (24%)	45 (2%)
All	All	10242/10850 (94%)	2026 (19%)	169 (1%)

All (2026) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1	15	A
1	1	24	U
1	1	25	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1	29	G
1	1	39	A
1	1	42	A
1	1	48	A
1	1	56	A
1	1	58	G
1	1	59	A
1	1	64	A
1	1	65	A
1	1	91	G
1	1	98	A
1	1	104	C
1	1	108	A
1	1	109	G
1	1	110	C
1	1	121	A
1	1	134	U
1	1	135	G
1	1	155	A
1	1	156	A
1	1	164	U
1	1	169	G
1	1	172	C
1	1	173	C
1	1	175	G
1	1	186	A
1	1	189	U
1	1	190	U
1	1	199	C
1	1	205	G
1	1	209	C
1	1	212	A
1	1	217	G
1	1	218	A
1	1	219	G
1	1	230	G
1	1	236	A
1	1	239	A
1	1	240	C
1	1	243	G
1	1	245	G
1	1	249	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1	250	U
1	1	269	G
1	1	286	U
1	1	295	A
1	1	305	U
1	1	311	C
1	1	323	A
1	1	329	U
1	1	337	G
1	1	338	A
1	1	339	C
1	1	349	A
1	1	350	C
1	1	376	G
1	1	377	A
1	1	387	A
1	1	395	A
1	1	398	A
1	1	402	A
1	1	403	C
1	1	404	G
1	1	420	G
1	1	421	G
1	1	422	A
1	1	438	A
1	1	439	C
1	1	445	A
1	1	450	G
1	1	452	A
1	1	453	U
1	1	454	G
1	1	478	G
1	1	479	C
1	1	480	G
1	1	481	G
1	1	482	U
1	1	484	U
1	1	506	A
1	1	517	A
1	1	519	U
1	1	531	G
1	1	532	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1	538	G
1	1	539	G
1	1	540	C
1	1	541	U
1	1	542	U
1	1	543	C
1	1	544	U
1	1	545	G
1	1	546	C
1	1	555	A
1	1	556	U
1	1	557	A
1	1	564	G
1	1	576	A
1	1	577	G
1	1	589	G
1	1	590	A
1	1	598	U
1	1	600	U
1	1	601	U
1	1	602	A
1	1	609	A
1	1	618	U
1	1	619	A
1	1	620	A
1	1	635	C
1	1	647	A
1	1	658	A
1	1	675	A
1	1	679	U
1	1	681	U
1	1	688	A
1	1	689	A
1	1	703	A
1	1	710	G
1	1	713	A
1	1	717	A
1	1	723	G
1	1	730	A
1	1	732	U
1	1	760	U
1	1	763	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1	772	U
1	1	773	U
1	1	776	A
1	1	777	G
1	1	780	A
1	1	781	G
1	1	802	A
1	1	813	A
1	1	826	A
1	1	845	C
1	1	857	C
1	1	861	U
1	1	870	U
1	1	875	U
1	1	892	A
1	1	903	G
1	1	904	G
1	1	910	A
1	1	912	G
1	1	913	A
1	1	917	A
1	1	919	C
1	1	921	A
1	1	933	G
1	1	940	C
1	1	949	G
1	1	955	C
1	1	956	U
1	1	958	A
1	1	959	G
1	1	970	G
1	1	977	U
1	1	990	G
1	1	991	U
1	1	996	C
1	1	997	G
1	1	998	A
1	1	1006	G
1	1	1011	C
1	1	1012	U
1	1	1013	U
1	1	1014	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1	1017	G
1	1	1020	G
1	1	1021	A
1	1	1022	A
1	1	1023	A
1	1	1024	U
1	1	1025	G
1	1	1027	C
1	1	1030	U
1	1	1033	C
1	1	1043	A
1	1	1045	C
1	1	1060	A
1	1	1061	A
1	1	1068	G
1	1	1077	U
1	1	1078	U
1	1	1089	A
1	1	1090	A
1	1	1091	U
1	1	1092	U
1	1	1094	A
1	1	1099	A
1	1	1100	G
1	1	1113	G
1	1	1127	G
1	1	1140	U
1	1	1149	A
1	1	1150	A
1	1	1151	C
1	1	1155	A
1	1	1156	C
1	1	1164	U
1	1	1174	G
1	1	1176	A
1	1	1177	U
1	1	1178	G
1	1	1188	C
1	1	1189	A
1	1	1192	C
1	1	1197	C
1	1	1204	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1	1205	G
1	1	1215	C
1	1	1218	G
1	1	1223	C
1	1	1228	C
1	1	1229	G
1	1	1232	G
1	1	1234	C
1	1	1235	C
1	1	1241	A
1	1	1242	G
1	1	1244	C
1	1	1247	A
1	1	1248	A
1	1	1249	U
1	1	1250	C
1	1	1253	C
1	1	1254	U
1	1	1255	A
1	1	1257	G
1	1	1258	G
1	1	1259	A
1	1	1260	G
1	1	1261	U
1	1	1262	G
1	1	1263	U
1	1	1264	G
1	1	1265	U
1	1	1271	C
1	1	1274	A
1	1	1277	G
1	1	1281	G
1	1	1282	A
1	1	1283	A
1	1	1303	G
1	1	1304	A
1	1	1305	U
1	1	1309	G
1	1	1312	C
1	1	1326	A
1	1	1345	G
1	1	1346	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1	1347	U
1	1	1348	U
1	1	1349	U
1	1	1382	A
1	1	1395	U
1	1	1415	A
1	1	1417	G
1	1	1421	U
1	1	1427	G
1	1	1430	G
1	1	1433	C
1	1	1442	A
1	1	1446	G
1	1	1465	C
1	1	1471	A
1	1	1477	A
1	1	1484	G
1	1	1498	C
1	1	1504	C
1	1	1520	A
1	1	1523	C
1	1	1525	A
1	1	1526	U
1	1	1532	G
1	1	1535	A
1	1	1552	C
1	1	1556	G
1	1	1558	G
1	1	1559	C
1	1	1560	U
1	1	1561	U
1	1	1562	G
1	1	1563	A
1	1	1565	U
1	1	1566	U
1	1	1567	U
1	1	1568	U
1	1	1569	C
1	1	1571	G
1	1	1572	G
1	1	1574	C
1	1	1576	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1	1577	C
1	1	1585	A
1	1	1601	A
1	1	1603	U
1	1	1624	C
1	1	1625	U
1	1	1635	C
1	1	1638	A
1	1	1639	A
1	1	1641	U
1	1	1648	G
1	1	1653	C
1	1	1654	G
1	1	1679	A
1	1	1720	U
1	1	1721	C
1	1	1732	G
1	1	1746	A
1	1	1747	G
1	1	1755	U
1	1	1757	A
1	1	1758	U
1	1	1759	U
1	1	1760	U
1	1	1761	U
1	1	1762	G
1	1	1763	C
1	1	1776	G
1	1	1793	A
1	1	1804	G
1	1	1809	A
1	1	1810	A
1	1	1811	U
1	1	1812	A
1	1	1814	U
1	1	1815	U
1	1	1816	U
1	1	1817	U
1	1	1837	A
1	1	1838	A
1	1	1842	C
1	1	1845	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1	1862	C
1	1	1874	G
1	1	1882	A
1	1	1889	A
1	1	1902	G
1	1	1944	G
1	1	1949	G
1	1	2068	U
1	1	2069	U
1	1	2070	A
1	1	2071	A
1	1	2078	A
1	1	2088	G
1	1	2089	G
1	1	2091	A
1	1	2092	C
1	1	2099	G
1	1	2100	G
1	1	2109	A
1	1	2118	U
1	1	2122	A
1	1	2136	A
1	1	2147	G
1	1	2149	G
1	1	2183	U
1	1	2184	G
1	1	2185	A
1	1	2186	A
1	1	2187	U
1	1	2188	G
1	1	2222	A
1	1	2227	G
1	1	2233	A
1	1	2234	A
1	1	2235	C
1	1	2250	G
1	1	2251	G
1	1	2257	A
1	1	2259	A
1	1	2260	U
1	1	2276	U
1	1	2285	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1	2286	C
1	1	2288	U
1	1	2291	A
1	1	2292	U
1	1	2293	G
1	1	2312	U
1	1	2313	G
1	1	2314	U
1	1	2341	A
1	1	2351	A
1	1	2352	C
1	1	2353	G
1	1	2363	G
1	1	2366	U
1	1	2371	G
1	1	2372	G
1	1	2375	A
1	1	2380	A
1	1	2381	G
1	1	2382	A
1	1	2389	U
1	1	2396	G
1	1	2397	A
1	1	2413	G
1	1	2415	G
1	1	2420	G
1	1	2421	A
1	1	2422	C
1	1	2425	G
1	1	2426	G
1	1	2427	A
1	1	2428	G
1	1	2431	U
1	1	2432	G
1	1	2433	U
1	1	2438	U
1	1	2439	A
1	1	2440	A
1	1	2441	G
1	1	2442	U
1	1	2443	G
1	1	2444	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1	2445	G
1	1	2446	A
1	1	2447	G
1	1	2448	C
1	1	2450	U
1	1	2451	C
1	1	2452	G
1	1	2453	G
1	1	2455	G
1	1	2456	C
1	1	2457	C
1	1	2458	G
1	1	2459	G
1	1	2460	U
1	1	2464	A
1	1	2465	U
1	1	2466	A
1	1	2467	C
1	1	2468	C
1	1	2470	C
1	1	2471	U
1	1	2473	C
1	1	2474	C
1	1	2476	C
1	1	2479	U
1	1	2480	A
1	1	2481	G
1	1	2482	U
1	1	2483	U
1	1	2484	U
1	1	2489	A
1	1	2492	U
1	1	2493	A
1	1	2511	G
1	1	2513	A
1	1	2515	G
1	1	2516	U
1	1	2517	C
1	1	2518	A
1	1	2519	A
1	1	2520	A
1	1	2521	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1	2529	U
1	1	2530	C
1	1	2533	G
1	1	2536	U
1	1	2538	A
1	1	2545	C
1	1	2546	U
1	1	2548	G
1	1	2554	C
1	1	2557	G
1	1	2565	A
1	1	2566	C
1	1	2578	G
1	1	2579	G
1	1	2586	G
1	1	2598	A
1	1	2623	G
1	1	2624	U
1	1	2628	A
1	1	2638	C
1	1	2644	G
1	1	2646	A
1	1	2649	G
1	1	2661	A
1	1	2662	G
1	1	2663	A
1	1	2664	A
1	1	2666	A
1	1	2676	A
1	1	2677	A
1	1	2686	G
1	1	2691	U
1	1	2699	A
1	1	2700	G
1	1	2701	U
1	1	2724	U
1	1	2725	G
1	1	2734	A
1	1	2745	C
1	1	2749	G
1	1	2750	G
1	1	2768	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1	2771	A
1	1	2772	G
1	1	2773	A
1	1	2774	A
1	1	2782	C
1	1	2786	G
1	1	2789	A
1	1	2790	U
1	1	2814	U
1	1	2815	U
1	1	2817	A
1	1	2833	U
1	1	2839	C
1	1	2843	G
1	1	2844	A
1	1	2847	U
1	1	2859	A
1	1	2861	C
1	1	2866	C
1	1	2870	G
1	1	2871	C
1	1	2886	G
1	1	2895	U
1	1	2900	C
1	1	2907	U
1	1	2908	A
1	1	2911	G
1	1	2914	C
1	1	2919	G
1	1	2920	C
1	1	2923	G
1	1	2926	U
1	1	2943	A
1	1	2955	C
1	1	2960	C
1	1	2962	G
1	1	2969	G
1	1	2983	A
1	1	2984	A
1	1	3021	A
1	1	3028	U
1	1	3031	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1	3050	A
1	1	3051	C
1	1	3052	G
1	1	3058	A
1	1	3064	C
1	1	3073	G
1	1	3076	U
1	1	3094	A
1	1	3101	A
1	1	3102	A
1	1	3103	U
1	1	3114	A
1	1	3115	C
1	1	3125	U
1	1	3127	U
1	1	3134	C
1	1	3143	G
1	1	3144	A
1	1	3146	G
1	1	3149	U
1	1	3151	C
1	1	3157	A
1	1	3159	A
1	1	3160	C
1	1	3162	U
1	1	3166	A
1	1	3167	G
1	1	3171	C
1	1	3172	U
1	1	3182	C
1	1	3183	A
1	1	3184	G
1	1	3190	C
1	1	3194	G
1	1	3208	A
1	1	3210	A
1	1	3212	G
1	1	3214	U
1	1	3221	G
1	1	3224	U
1	1	3228	G
1	1	3235	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1	3241	G
1	1	3246	C
1	1	3252	C
1	1	3259	A
1	1	3260	A
1	1	3268	G
1	1	3269	C
1	1	3272	A
1	1	3278	U
1	1	3281	A
1	1	3284	U
1	1	3285	A
1	1	3306	U
1	1	3307	A
1	1	3309	A
1	1	3310	G
1	1	3316	U
1	1	3317	U
1	1	3318	G
1	1	3319	U
1	1	3320	U
1	1	3321	G
1	1	3334	G
1	1	3343	C
1	1	3351	G
1	1	3361	U
2	3	7	G
2	3	22	A
2	3	54	U
2	3	55	A
2	3	65	G
2	3	73	C
2	3	76	A
2	3	102	A
2	3	112	G
3	4	23	U
3	4	34	U
3	4	35	C
3	4	59	A
3	4	62	C
3	4	63	G
3	4	81	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	4	84	C
3	4	85	G
3	4	86	U
3	4	87	G
3	4	92	A
3	4	95	G
3	4	102	U
3	4	104	A
3	4	106	C
3	4	111	A
3	4	113	U
3	4	125	U
3	4	126	A
3	4	148	G
3	4	152	G
3	4	157	U
46	B	17	C
46	B	25	C
46	B	26	A
46	B	27	U
46	B	34	G
46	B	47	A
46	B	57	G
46	B	66	U
46	B	74	U
46	B	75	U
46	B	76	A
46	B	78	A
46	B	79	C
46	B	81	G
46	B	84	A
46	B	93	A
46	B	104	A
46	B	114	C
46	B	115	G
46	B	123	G
46	B	126	A
46	B	127	G
46	B	128	U
46	B	129	A
46	B	130	C
46	B	138	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	B	139	U
46	B	142	G
46	B	143	A
46	B	150	U
46	B	151	G
46	B	152	G
46	B	154	A
46	B	159	U
46	B	166	A
46	B	168	U
46	B	173	G
46	B	174	C
46	B	176	U
46	B	177	A
46	B	179	A
46	B	190	U
46	B	191	U
46	B	193	G
46	B	199	G
46	B	200	A
46	B	202	G
46	B	206	U
46	B	211	A
46	B	214	U
46	B	215	A
46	B	216	A
46	B	217	A
46	B	218	A
46	B	221	U
46	B	224	A
46	B	225	U
46	B	226	G
46	B	230	U
46	B	231	C
46	B	232	G
46	B	233	G
46	B	236	U
46	B	237	C
46	B	238	U
46	B	247	U
46	B	255	A
46	B	259	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	B	260	U
46	B	261	C
46	B	262	G
46	B	266	C
46	B	269	A
46	B	270	U
46	B	274	C
46	B	276	U
46	B	277	G
46	B	278	U
46	B	279	G
46	B	283	G
46	B	285	G
46	B	297	A
46	B	312	C
46	B	314	A
46	B	318	U
46	B	319	C
46	B	320	G
46	B	335	G
46	B	336	C
46	B	350	A
46	B	357	A
46	B	358	A
46	B	359	C
46	B	388	G
46	B	398	A
46	B	400	C
46	B	402	G
46	B	414	A
46	B	416	G
46	B	421	G
46	B	422	C
46	B	423	A
46	B	424	G
46	B	432	G
46	B	437	U
46	B	442	C
46	B	446	C
46	B	452	A
46	B	458	A
46	B	466	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	B	475	A
46	B	480	U
46	B	482	C
46	B	483	A
46	B	485	G
46	B	486	G
46	B	501	G
46	B	502	U
46	B	503	A
46	B	504	A
46	B	505	U
46	B	506	U
46	B	509	A
46	B	512	G
46	B	513	A
46	B	515	U
46	B	518	A
46	B	519	A
46	B	525	A
46	B	530	U
46	B	534	C
46	B	536	A
46	B	537	G
46	B	539	A
46	B	540	A
46	B	547	G
46	B	553	A
46	B	554	A
46	B	555	G
46	B	556	U
46	B	557	C
46	B	563	C
46	B	566	G
46	B	575	G
46	B	576	U
46	B	580	U
46	B	592	A
46	B	593	G
46	B	604	A
46	B	609	U
46	B	617	A
46	B	618	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	B	620	A
46	B	621	A
46	B	639	G
46	B	648	U
46	B	650	G
46	B	652	C
46	B	653	G
46	B	654	G
46	B	656	C
46	B	675	U
46	B	682	A
46	B	686	G
46	B	687	A
46	B	688	G
46	B	694	C
46	B	695	C
46	B	696	U
46	B	697	U
46	B	698	C
46	B	699	U
46	B	700	G
46	B	701	G
46	B	702	G
46	B	703	U
46	B	704	A
46	B	705	G
46	B	707	C
46	B	708	A
46	B	710	U
46	B	711	U
46	B	712	A
46	B	713	U
46	B	714	G
46	B	717	G
46	B	718	A
46	B	719	A
46	B	721	C
46	B	722	A
46	B	723	G
46	B	724	G
46	B	725	A
46	B	729	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	B	739	A
46	B	740	A
46	B	741	A
46	B	750	G
46	B	751	U
46	B	756	A
46	B	759	A
46	B	760	G
46	B	762	C
46	B	764	U
46	B	765	U
46	B	766	U
46	B	767	G
46	B	768	C
46	B	770	C
46	B	771	G
46	B	773	A
46	B	778	U
46	B	779	U
46	B	796	A
46	B	798	A
46	B	799	G
46	B	802	C
46	B	803	G
46	B	804	U
46	B	805	U
46	B	807	U
46	B	808	G
46	B	811	U
46	B	812	C
46	B	813	U
46	B	815	U
46	B	817	U
46	B	819	G
46	B	820	U
46	B	821	U
46	B	824	U
46	B	825	U
46	B	826	U
46	B	829	A
46	B	831	G
46	B	840	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	B	842	U
46	B	847	A
46	B	848	A
46	B	856	G
46	B	857	G
46	B	869	A
46	B	871	U
46	B	875	C
46	B	877	G
46	B	878	U
46	B	879	U
46	B	881	U
46	B	891	A
46	B	909	A
46	B	910	G
46	B	911	A
46	B	918	A
46	B	920	U
46	B	945	U
46	B	951	A
46	B	973	A
46	B	975	C
46	B	977	A
46	B	988	A
46	B	989	U
46	B	990	A
46	B	997	U
46	B	998	A
46	B	1004	A
46	B	1005	A
46	B	1011	A
46	B	1013	C
46	B	1017	G
46	B	1024	A
46	B	1025	G
46	B	1039	U
46	B	1042	U
46	B	1043	U
46	B	1044	U
46	B	1047	U
46	B	1055	A
46	B	1056	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	B	1057	C
46	B	1058	G
46	B	1059	G
46	B	1060	C
46	B	1061	A
46	B	1067	C
46	B	1077	A
46	B	1081	C
46	B	1085	G
46	B	1123	A
46	B	1135	G
46	B	1143	C
46	B	1145	A
46	B	1152	G
46	B	1168	A
46	B	1169	A
46	B	1170	U
46	B	1179	A
46	B	1181	A
46	B	1184	G
46	B	1185	G
46	B	1187	A
46	B	1193	A
46	B	1202	A
46	B	1203	G
46	B	1206	A
46	B	1207	C
46	B	1212	A
46	B	1215	A
46	B	1219	A
46	B	1220	C
46	B	1221	A
46	B	1229	A
46	B	1230	G
46	B	1231	C
46	B	1236	U
46	B	1243	U
46	B	1250	G
46	B	1270	U
46	B	1299	U
46	B	1300	U
46	B	1301	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	B	1306	A
46	B	1325	U
46	B	1330	A
46	B	1336	G
46	B	1339	G
46	B	1342	A
46	B	1343	G
46	B	1345	A
46	B	1346	U
46	B	1348	U
46	B	1349	G
46	B	1352	G
46	B	1355	A
46	B	1356	U
46	B	1357	A
46	B	1359	U
46	B	1360	C
46	B	1364	U
46	B	1369	G
46	B	1370	A
46	B	1376	U
46	B	1380	G
46	B	1381	A
46	B	1382	U
46	B	1384	U
46	B	1385	C
46	B	1392	A
46	B	1397	A
46	B	1398	G
46	B	1399	U
46	B	1400	U
46	B	1401	U
46	B	1410	A
46	B	1413	A
46	B	1414	G
46	B	1415	G
46	B	1422	A
46	B	1431	G
46	B	1433	C
46	B	1445	C
46	B	1446	A
46	B	1455	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	B	1457	A
46	B	1458	C
46	B	1461	A
46	B	1462	C
46	B	1463	G
46	B	1468	C
46	B	1476	A
46	B	1477	U
46	B	1480	G
46	B	1483	U
46	B	1485	G
46	B	1491	G
46	B	1502	A
46	B	1503	A
46	B	1508	G
46	B	1510	G
46	B	1511	A
46	B	1523	G
46	B	1524	C
46	B	1529	G
46	B	1530	A
46	B	1541	U
46	B	1544	U
46	B	1546	G
46	B	1560	A
46	B	1561	G
46	B	1571	G
46	B	1574	A
46	B	1575	G
46	B	1577	G
46	B	1580	A
46	B	1582	U
46	B	1584	A
46	B	1588	G
46	B	1621	C
46	B	1644	U
46	B	1645	G
46	B	1665	C
46	B	1667	G
46	B	1670	U
46	B	1671	G
46	B	1672	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	B	1673	U
46	B	1674	U
46	B	1677	G
46	B	1700	G
46	B	1702	A
46	B	1704	C
46	B	1737	A
46	B	1742	A
46	B	1743	A
46	B	1744	G
46	B	1747	G
46	B	1749	A
46	B	1753	A
46	B	1756	U
46	B	1767	G
46	B	1769	A
46	B	1770	C
46	B	1779	G
46	B	1780	G
46	B	1781	A
46	B	1782	U
46	B	1783	C
1	AS	24	U
1	AS	25	A
1	AS	29	G
1	AS	39	A
1	AS	42	A
1	AS	48	A
1	AS	56	A
1	AS	58	G
1	AS	59	A
1	AS	64	A
1	AS	65	A
1	AS	91	G
1	AS	98	A
1	AS	104	C
1	AS	108	A
1	AS	109	G
1	AS	110	C
1	AS	120	A
1	AS	121	A
1	AS	134	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AS	135	G
1	AS	155	A
1	AS	156	A
1	AS	164	U
1	AS	169	G
1	AS	172	C
1	AS	173	C
1	AS	175	G
1	AS	186	A
1	AS	189	U
1	AS	190	U
1	AS	199	C
1	AS	205	G
1	AS	209	C
1	AS	212	A
1	AS	217	G
1	AS	218	A
1	AS	219	G
1	AS	230	G
1	AS	236	A
1	AS	239	A
1	AS	240	C
1	AS	243	G
1	AS	245	G
1	AS	249	G
1	AS	250	U
1	AS	251	G
1	AS	269	G
1	AS	286	U
1	AS	295	A
1	AS	305	U
1	AS	311	C
1	AS	323	A
1	AS	329	U
1	AS	337	G
1	AS	338	A
1	AS	339	C
1	AS	343	U
1	AS	349	A
1	AS	350	C
1	AS	376	G
1	AS	377	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AS	395	A
1	AS	398	A
1	AS	402	A
1	AS	403	C
1	AS	404	G
1	AS	420	G
1	AS	421	G
1	AS	422	A
1	AS	438	A
1	AS	439	C
1	AS	441	U
1	AS	443	G
1	AS	445	A
1	AS	479	C
1	AS	480	G
1	AS	481	G
1	AS	506	A
1	AS	517	A
1	AS	519	U
1	AS	531	G
1	AS	532	U
1	AS	538	G
1	AS	539	G
1	AS	541	U
1	AS	542	U
1	AS	543	C
1	AS	544	U
1	AS	545	G
1	AS	546	C
1	AS	555	A
1	AS	556	U
1	AS	557	A
1	AS	564	G
1	AS	576	A
1	AS	577	G
1	AS	589	G
1	AS	590	A
1	AS	598	U
1	AS	600	U
1	AS	601	U
1	AS	602	A
1	AS	609	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AS	618	U
1	AS	619	A
1	AS	620	A
1	AS	635	C
1	AS	647	A
1	AS	658	A
1	AS	675	A
1	AS	679	U
1	AS	688	A
1	AS	703	A
1	AS	710	G
1	AS	713	A
1	AS	717	A
1	AS	723	G
1	AS	730	A
1	AS	732	U
1	AS	760	U
1	AS	763	U
1	AS	772	U
1	AS	773	U
1	AS	776	A
1	AS	777	G
1	AS	780	A
1	AS	781	G
1	AS	802	A
1	AS	813	A
1	AS	826	A
1	AS	845	C
1	AS	857	C
1	AS	861	U
1	AS	870	U
1	AS	875	U
1	AS	893	U
1	AS	903	G
1	AS	904	G
1	AS	910	A
1	AS	912	G
1	AS	913	A
1	AS	917	A
1	AS	919	C
1	AS	921	A
1	AS	933	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AS	940	C
1	AS	949	G
1	AS	955	C
1	AS	956	U
1	AS	959	G
1	AS	970	G
1	AS	976	A
1	AS	977	U
1	AS	990	G
1	AS	991	U
1	AS	996	C
1	AS	997	G
1	AS	998	A
1	AS	1006	G
1	AS	1011	C
1	AS	1012	U
1	AS	1014	G
1	AS	1019	U
1	AS	1020	G
1	AS	1022	A
1	AS	1023	A
1	AS	1024	U
1	AS	1025	G
1	AS	1026	A
1	AS	1027	C
1	AS	1030	U
1	AS	1033	C
1	AS	1043	A
1	AS	1045	C
1	AS	1060	A
1	AS	1061	A
1	AS	1068	G
1	AS	1077	U
1	AS	1078	U
1	AS	1089	A
1	AS	1090	A
1	AS	1091	U
1	AS	1092	U
1	AS	1094	A
1	AS	1099	A
1	AS	1100	G
1	AS	1113	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AS	1127	G
1	AS	1140	U
1	AS	1149	A
1	AS	1150	A
1	AS	1151	C
1	AS	1155	A
1	AS	1156	C
1	AS	1164	U
1	AS	1174	G
1	AS	1176	A
1	AS	1177	U
1	AS	1178	G
1	AS	1188	C
1	AS	1189	A
1	AS	1192	C
1	AS	1197	C
1	AS	1204	U
1	AS	1205	G
1	AS	1303	G
1	AS	1304	A
1	AS	1305	U
1	AS	1309	G
1	AS	1312	C
1	AS	1326	A
1	AS	1345	G
1	AS	1346	U
1	AS	1347	U
1	AS	1348	U
1	AS	1350	G
1	AS	1351	A
1	AS	1382	A
1	AS	1395	U
1	AS	1415	A
1	AS	1417	G
1	AS	1421	U
1	AS	1426	U
1	AS	1427	G
1	AS	1430	G
1	AS	1433	C
1	AS	1442	A
1	AS	1446	G
1	AS	1465	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AS	1471	A
1	AS	1477	A
1	AS	1484	G
1	AS	1498	C
1	AS	1504	C
1	AS	1520	A
1	AS	1523	C
1	AS	1532	G
1	AS	1535	A
1	AS	1552	C
1	AS	1556	G
1	AS	1558	G
1	AS	1559	C
1	AS	1560	U
1	AS	1561	U
1	AS	1571	G
1	AS	1572	G
1	AS	1574	C
1	AS	1576	A
1	AS	1577	C
1	AS	1585	A
1	AS	1589	A
1	AS	1601	A
1	AS	1603	U
1	AS	1624	C
1	AS	1625	U
1	AS	1635	C
1	AS	1638	A
1	AS	1639	A
1	AS	1641	U
1	AS	1648	G
1	AS	1654	G
1	AS	1679	A
1	AS	1720	U
1	AS	1721	C
1	AS	1732	G
1	AS	1746	A
1	AS	1747	G
1	AS	1755	U
1	AS	1756	A
1	AS	1757	A
1	AS	1758	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AS	1759	U
1	AS	1761	U
1	AS	1762	G
1	AS	1763	C
1	AS	1776	G
1	AS	1793	A
1	AS	1804	G
1	AS	1809	A
1	AS	1810	A
1	AS	1811	U
1	AS	1812	A
1	AS	1814	U
1	AS	1815	U
1	AS	1816	U
1	AS	1817	U
1	AS	1835	A
1	AS	1838	A
1	AS	1842	C
1	AS	1845	C
1	AS	1862	C
1	AS	1874	G
1	AS	1882	A
1	AS	1889	A
1	AS	1902	G
1	AS	1922	C
1	AS	1944	G
1	AS	2070	A
1	AS	2071	A
1	AS	2078	A
1	AS	2088	G
1	AS	2089	G
1	AS	2091	A
1	AS	2092	C
1	AS	2099	G
1	AS	2100	G
1	AS	2109	A
1	AS	2118	U
1	AS	2122	A
1	AS	2136	A
1	AS	2147	G
1	AS	2149	G
1	AS	2183	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AS	2184	G
1	AS	2185	A
1	AS	2186	A
1	AS	2187	U
1	AS	2188	G
1	AS	2201	A
1	AS	2222	A
1	AS	2227	G
1	AS	2233	A
1	AS	2234	A
1	AS	2250	G
1	AS	2251	G
1	AS	2257	A
1	AS	2259	A
1	AS	2260	U
1	AS	2276	U
1	AS	2285	G
1	AS	2286	C
1	AS	2288	U
1	AS	2291	A
1	AS	2292	U
1	AS	2293	G
1	AS	2312	U
1	AS	2313	G
1	AS	2314	U
1	AS	2351	A
1	AS	2352	C
1	AS	2353	G
1	AS	2363	G
1	AS	2366	U
1	AS	2371	G
1	AS	2372	G
1	AS	2375	A
1	AS	2380	A
1	AS	2381	G
1	AS	2382	A
1	AS	2389	U
1	AS	2413	G
1	AS	2489	A
1	AS	2492	U
1	AS	2493	A
1	AS	2510	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AS	2511	G
1	AS	2513	A
1	AS	2515	G
1	AS	2529	U
1	AS	2530	C
1	AS	2533	G
1	AS	2536	U
1	AS	2538	A
1	AS	2545	C
1	AS	2546	U
1	AS	2554	C
1	AS	2557	G
1	AS	2565	A
1	AS	2566	C
1	AS	2578	G
1	AS	2579	G
1	AS	2586	G
1	AS	2598	A
1	AS	2623	G
1	AS	2624	U
1	AS	2628	A
1	AS	2646	A
1	AS	2649	G
1	AS	2661	A
1	AS	2662	G
1	AS	2663	A
1	AS	2666	A
1	AS	2676	A
1	AS	2677	A
1	AS	2686	G
1	AS	2699	A
1	AS	2700	G
1	AS	2701	U
1	AS	2724	U
1	AS	2725	G
1	AS	2734	A
1	AS	2745	C
1	AS	2749	G
1	AS	2750	G
1	AS	2768	G
1	AS	2770	C
1	AS	2771	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AS	2772	G
1	AS	2773	A
1	AS	2774	A
1	AS	2782	C
1	AS	2786	G
1	AS	2789	A
1	AS	2790	U
1	AS	2814	U
1	AS	2815	U
1	AS	2817	A
1	AS	2833	U
1	AS	2839	C
1	AS	2843	G
1	AS	2844	A
1	AS	2847	U
1	AS	2859	A
1	AS	2861	C
1	AS	2866	C
1	AS	2870	G
1	AS	2871	C
1	AS	2886	G
1	AS	2895	U
1	AS	2907	U
1	AS	2908	A
1	AS	2911	G
1	AS	2914	C
1	AS	2919	G
1	AS	2920	C
1	AS	2923	G
1	AS	2926	U
1	AS	2943	A
1	AS	2955	C
1	AS	2960	C
1	AS	2962	G
1	AS	2969	G
1	AS	2983	A
1	AS	2984	A
1	AS	3021	A
1	AS	3028	U
1	AS	3031	G
1	AS	3050	A
1	AS	3051	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AS	3052	G
1	AS	3058	A
1	AS	3064	C
1	AS	3076	U
1	AS	3094	A
1	AS	3101	A
1	AS	3102	A
1	AS	3103	U
1	AS	3114	A
1	AS	3115	C
1	AS	3134	C
1	AS	3143	G
1	AS	3144	A
1	AS	3146	G
1	AS	3149	U
1	AS	3151	C
1	AS	3157	A
1	AS	3159	A
1	AS	3160	C
1	AS	3161	U
1	AS	3163	U
1	AS	3164	U
1	AS	3165	U
1	AS	3171	C
1	AS	3172	U
1	AS	3182	C
1	AS	3183	A
1	AS	3184	G
1	AS	3194	G
1	AS	3208	A
1	AS	3210	A
1	AS	3212	G
1	AS	3214	U
1	AS	3224	U
1	AS	3228	G
1	AS	3235	A
1	AS	3241	G
1	AS	3246	C
1	AS	3252	C
1	AS	3259	A
1	AS	3260	A
1	AS	3268	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AS	3269	C
1	AS	3272	A
1	AS	3278	U
1	AS	3281	A
1	AS	3284	U
1	AS	3285	A
1	AS	3306	U
1	AS	3307	A
1	AS	3309	A
1	AS	3310	G
1	AS	3316	U
1	AS	3317	U
1	AS	3318	G
1	AS	3319	U
1	AS	3320	U
1	AS	3321	G
1	AS	3334	G
1	AS	3343	C
1	AS	3351	G
1	AS	3361	U
2	AT	7	G
2	AT	22	A
2	AT	54	U
2	AT	55	A
2	AT	65	G
2	AT	73	C
2	AT	76	A
2	AT	102	A
2	AT	112	G
3	AU	23	U
3	AU	34	U
3	AU	35	C
3	AU	59	A
3	AU	62	C
3	AU	63	G
3	AU	81	A
3	AU	84	C
3	AU	85	G
3	AU	86	U
3	AU	87	G
3	AU	92	A
3	AU	95	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	AU	102	U
3	AU	104	A
3	AU	106	C
3	AU	111	A
3	AU	113	U
3	AU	125	U
3	AU	126	A
46	CM	17	C
46	CM	25	C
46	CM	26	A
46	CM	27	U
46	CM	34	G
46	CM	47	A
46	CM	57	G
46	CM	65	A
46	CM	66	U
46	CM	74	U
46	CM	75	U
46	CM	76	A
46	CM	78	A
46	CM	79	C
46	CM	81	G
46	CM	84	A
46	CM	104	A
46	CM	114	C
46	CM	115	G
46	CM	123	G
46	CM	126	A
46	CM	127	G
46	CM	128	U
46	CM	129	A
46	CM	138	C
46	CM	139	U
46	CM	141	G
46	CM	142	G
46	CM	143	A
46	CM	150	U
46	CM	151	G
46	CM	152	G
46	CM	154	A
46	CM	159	U
46	CM	166	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	CM	168	U
46	CM	173	G
46	CM	176	U
46	CM	177	A
46	CM	190	U
46	CM	191	U
46	CM	193	G
46	CM	199	G
46	CM	200	A
46	CM	202	G
46	CM	206	U
46	CM	211	A
46	CM	214	U
46	CM	215	A
46	CM	216	A
46	CM	217	A
46	CM	218	A
46	CM	220	A
46	CM	221	U
46	CM	223	A
46	CM	224	A
46	CM	225	U
46	CM	226	G
46	CM	227	C
46	CM	228	C
46	CM	229	U
46	CM	230	U
46	CM	231	C
46	CM	232	G
46	CM	233	G
46	CM	234	G
46	CM	236	U
46	CM	237	C
46	CM	238	U
46	CM	239	U
46	CM	240	U
46	CM	247	U
46	CM	255	A
46	CM	259	U
46	CM	260	U
46	CM	261	C
46	CM	262	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	CM	266	C
46	CM	269	A
46	CM	270	U
46	CM	273	C
46	CM	274	C
46	CM	275	U
46	CM	276	U
46	CM	277	G
46	CM	278	U
46	CM	279	G
46	CM	283	G
46	CM	285	G
46	CM	297	A
46	CM	312	C
46	CM	314	A
46	CM	318	U
46	CM	319	C
46	CM	320	G
46	CM	335	G
46	CM	336	C
46	CM	350	A
46	CM	357	A
46	CM	358	A
46	CM	359	C
46	CM	388	G
46	CM	398	A
46	CM	400	C
46	CM	402	G
46	CM	414	A
46	CM	416	G
46	CM	421	G
46	CM	422	C
46	CM	423	A
46	CM	424	G
46	CM	432	G
46	CM	437	U
46	CM	442	C
46	CM	446	C
46	CM	452	A
46	CM	458	A
46	CM	466	A
46	CM	475	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	CM	480	U
46	CM	482	C
46	CM	483	A
46	CM	485	G
46	CM	486	G
46	CM	502	U
46	CM	503	A
46	CM	504	A
46	CM	505	U
46	CM	506	U
46	CM	509	A
46	CM	512	G
46	CM	513	A
46	CM	515	U
46	CM	518	A
46	CM	519	A
46	CM	525	A
46	CM	530	U
46	CM	534	C
46	CM	536	A
46	CM	537	G
46	CM	539	A
46	CM	540	A
46	CM	547	G
46	CM	553	A
46	CM	554	A
46	CM	556	U
46	CM	557	C
46	CM	563	C
46	CM	566	G
46	CM	575	G
46	CM	576	U
46	CM	592	A
46	CM	593	G
46	CM	604	A
46	CM	609	U
46	CM	617	A
46	CM	618	A
46	CM	620	A
46	CM	621	A
46	CM	633	A
46	CM	639	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	CM	648	U
46	CM	650	G
46	CM	652	C
46	CM	653	G
46	CM	654	G
46	CM	656	C
46	CM	675	U
46	CM	682	A
46	CM	686	G
46	CM	687	A
46	CM	688	G
46	CM	693	U
46	CM	694	C
46	CM	695	C
46	CM	696	U
46	CM	698	C
46	CM	701	G
46	CM	702	G
46	CM	703	U
46	CM	704	A
46	CM	715	G
46	CM	716	C
46	CM	717	G
46	CM	718	A
46	CM	719	A
46	CM	721	C
46	CM	722	A
46	CM	723	G
46	CM	724	G
46	CM	729	U
46	CM	739	A
46	CM	740	A
46	CM	741	A
46	CM	750	G
46	CM	751	U
46	CM	756	A
46	CM	759	A
46	CM	760	G
46	CM	762	C
46	CM	764	U
46	CM	765	U
46	CM	766	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	CM	767	G
46	CM	768	C
46	CM	770	C
46	CM	771	G
46	CM	773	A
46	CM	775	A
46	CM	778	U
46	CM	779	U
46	CM	796	A
46	CM	798	A
46	CM	799	G
46	CM	802	C
46	CM	803	G
46	CM	804	U
46	CM	805	U
46	CM	807	U
46	CM	808	G
46	CM	811	U
46	CM	814	A
46	CM	815	U
46	CM	817	U
46	CM	818	U
46	CM	819	G
46	CM	820	U
46	CM	821	U
46	CM	822	G
46	CM	823	G
46	CM	824	U
46	CM	825	U
46	CM	826	U
46	CM	829	A
46	CM	831	G
46	CM	840	A
46	CM	848	A
46	CM	856	G
46	CM	857	G
46	CM	869	A
46	CM	871	U
46	CM	875	C
46	CM	877	G
46	CM	878	U
46	CM	879	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	CM	881	U
46	CM	891	A
46	CM	899	G
46	CM	909	A
46	CM	910	G
46	CM	911	A
46	CM	918	A
46	CM	920	U
46	CM	927	G
46	CM	945	U
46	CM	951	A
46	CM	973	A
46	CM	975	C
46	CM	977	A
46	CM	988	A
46	CM	989	U
46	CM	997	U
46	CM	998	A
46	CM	1004	A
46	CM	1005	A
46	CM	1011	A
46	CM	1013	C
46	CM	1017	G
46	CM	1024	A
46	CM	1025	G
46	CM	1039	U
46	CM	1042	U
46	CM	1055	A
46	CM	1056	U
46	CM	1057	C
46	CM	1058	G
46	CM	1059	G
46	CM	1060	C
46	CM	1061	A
46	CM	1067	C
46	CM	1074	U
46	CM	1077	A
46	CM	1081	C
46	CM	1085	G
46	CM	1123	A
46	CM	1135	G
46	CM	1143	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	CM	1145	A
46	CM	1152	G
46	CM	1168	A
46	CM	1169	A
46	CM	1170	U
46	CM	1179	A
46	CM	1181	A
46	CM	1184	G
46	CM	1185	G
46	CM	1186	G
46	CM	1187	A
46	CM	1193	A
46	CM	1202	A
46	CM	1203	G
46	CM	1206	A
46	CM	1207	C
46	CM	1212	A
46	CM	1215	A
46	CM	1219	A
46	CM	1220	C
46	CM	1221	A
46	CM	1229	A
46	CM	1230	G
46	CM	1231	C
46	CM	1236	U
46	CM	1243	U
46	CM	1250	G
46	CM	1270	U
46	CM	1284	G
46	CM	1299	U
46	CM	1300	U
46	CM	1301	G
46	CM	1306	A
46	CM	1325	U
46	CM	1330	A
46	CM	1336	G
46	CM	1339	G
46	CM	1342	A
46	CM	1343	G
46	CM	1345	A
46	CM	1346	U
46	CM	1348	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	CM	1349	G
46	CM	1352	G
46	CM	1355	A
46	CM	1356	U
46	CM	1357	A
46	CM	1359	U
46	CM	1360	C
46	CM	1364	U
46	CM	1365	C
46	CM	1369	G
46	CM	1370	A
46	CM	1376	U
46	CM	1380	G
46	CM	1381	A
46	CM	1382	U
46	CM	1384	U
46	CM	1385	C
46	CM	1392	A
46	CM	1397	A
46	CM	1398	G
46	CM	1399	U
46	CM	1400	U
46	CM	1401	U
46	CM	1410	A
46	CM	1413	A
46	CM	1414	G
46	CM	1415	G
46	CM	1422	A
46	CM	1431	G
46	CM	1433	C
46	CM	1445	C
46	CM	1446	A
46	CM	1455	A
46	CM	1457	A
46	CM	1458	C
46	CM	1461	A
46	CM	1462	C
46	CM	1463	G
46	CM	1468	C
46	CM	1476	A
46	CM	1477	U
46	CM	1480	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	CM	1483	U
46	CM	1491	G
46	CM	1502	A
46	CM	1503	A
46	CM	1508	G
46	CM	1510	G
46	CM	1511	A
46	CM	1523	G
46	CM	1524	C
46	CM	1529	G
46	CM	1530	A
46	CM	1541	U
46	CM	1544	U
46	CM	1546	G
46	CM	1556	A
46	CM	1560	A
46	CM	1561	G
46	CM	1571	G
46	CM	1574	A
46	CM	1575	G
46	CM	1577	G
46	CM	1580	A
46	CM	1582	U
46	CM	1584	A
46	CM	1588	G
46	CM	1621	C
46	CM	1644	U
46	CM	1645	G
46	CM	1665	C
46	CM	1667	G
46	CM	1670	U
46	CM	1671	G
46	CM	1672	G
46	CM	1673	U
46	CM	1737	A
46	CM	1743	A
46	CM	1744	G
46	CM	1747	G
46	CM	1749	A
46	CM	1753	A
46	CM	1756	U
46	CM	1767	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	CM	1769	A
46	CM	1770	C
46	CM	1779	G
46	CM	1780	G
46	CM	1781	A
46	CM	1782	U
46	CM	1783	C

All (169) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1	172	C
1	1	403	C
1	1	538	G
1	1	563	U
1	1	601	U
1	1	759	G
1	1	912	G
1	1	1029	U
1	1	1060	A
1	1	1099	A
1	1	1346	U
1	1	1347	U
1	1	1559	C
1	1	1561	U
1	1	1576	A
1	1	1762	G
1	1	1815	U
1	1	1943	G
1	1	2090	U
1	1	2182	C
1	1	2183	U
1	1	2441	G
1	1	2442	U
1	1	2465	U
1	1	2515	G
1	1	2519	A
1	1	2545	C
1	1	2663	A
1	1	2789	A
1	1	2790	U
1	1	3093	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1	3193	C
1	1	3234	U
1	1	3240	U
1	1	3284	U
1	1	3309	A
1	1	3317	U
3	4	85	G
3	4	125	U
3	4	156	U
46	B	25	C
46	B	78	A
46	B	137	A
46	B	151	G
46	B	176	U
46	B	216	A
46	B	259	U
46	B	265	U
46	B	278	U
46	B	415	A
46	B	451	C
46	B	502	U
46	B	504	A
46	B	505	U
46	B	514	G
46	B	518	A
46	B	529	C
46	B	533	A
46	B	553	A
46	B	556	U
46	B	638	U
46	B	685	C
46	B	695	C
46	B	698	C
46	B	702	G
46	B	711	U
46	B	740	A
46	B	763	C
46	B	769	U
46	B	814	A
46	B	824	U
46	B	855	C
46	B	874	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	B	876	A
46	B	1168	A
46	B	1335	U
46	B	1355	A
46	B	1369	G
46	B	1396	A
46	B	1398	G
46	B	1457	A
46	B	1467	C
46	B	1479	A
46	B	1484	U
46	B	1523	G
46	B	1573	A
46	B	1579	A
46	B	1581	G
1	AS	172	C
1	AS	403	C
1	AS	442	G
1	AS	538	G
1	AS	563	U
1	AS	601	U
1	AS	759	G
1	AS	912	G
1	AS	1029	U
1	AS	1060	A
1	AS	1099	A
1	AS	1346	U
1	AS	1347	U
1	AS	1559	C
1	AS	1576	A
1	AS	1762	G
1	AS	1815	U
1	AS	1943	G
1	AS	2090	U
1	AS	2182	C
1	AS	2183	U
1	AS	2545	C
1	AS	2789	A
1	AS	2790	U
1	AS	3093	U
1	AS	3159	A
1	AS	3163	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AS	3193	C
1	AS	3234	U
1	AS	3240	U
1	AS	3284	U
1	AS	3309	A
1	AS	3315	C
1	AS	3317	U
3	AU	85	G
3	AU	125	U
46	CM	25	C
46	CM	65	A
46	CM	78	A
46	CM	137	A
46	CM	151	G
46	CM	176	U
46	CM	237	C
46	CM	259	U
46	CM	265	U
46	CM	278	U
46	CM	415	A
46	CM	451	C
46	CM	502	U
46	CM	504	A
46	CM	505	U
46	CM	514	G
46	CM	518	A
46	CM	529	C
46	CM	533	A
46	CM	553	A
46	CM	556	U
46	CM	638	U
46	CM	685	C
46	CM	695	C
46	CM	740	A
46	CM	763	C
46	CM	769	U
46	CM	817	U
46	CM	855	C
46	CM	874	U
46	CM	876	A
46	CM	1168	A
46	CM	1335	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	CM	1359	U
46	CM	1369	G
46	CM	1396	A
46	CM	1398	G
46	CM	1457	A
46	CM	1467	C
46	CM	1479	A
46	CM	1523	G
46	CM	1555	C
46	CM	1573	A
46	CM	1579	A
46	CM	1581	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 1429 ligands modelled in this entry, 1406 are monoatomic - leaving 23 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	$\# Z > 2$
83	PAR	AS	3404	-	44,45,45	0.45	0	63,67,67	0.85	1 (1%)
83	PAR	1	3465	-	44,45,45	0.49	0	63,67,67	0.98	3 (4%)
83	PAR	4	201	-	44,45,45	0.44	0	63,67,67	1.06	2 (3%)
83	PAR	1	3459	-	44,45,45	0.47	0	63,67,67	0.83	1 (1%)
83	PAR	AS	3403	-	44,45,45	0.47	0	63,67,67	0.81	2 (3%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
83	PAR	1	3466	-	44,45,45	0.45	0	63,67,67	1.04	4 (6%)
83	PAR	1	3462	-	44,45,45	0.45	0	63,67,67	0.70	1 (1%)
84	3K5	AS	3405	-	63,63,63	0.32	0	84,95,95	0.96	4 (4%)
83	PAR	AS	3402	-	44,45,45	0.45	0	63,67,67	0.94	4 (6%)
83	PAR	AS	3406	-	44,45,45	0.48	0	63,67,67	1.27	6 (9%)
83	PAR	1	3461	-	44,45,45	0.44	0	63,67,67	0.80	1 (1%)
83	PAR	AS	3401	-	44,45,45	0.46	0	63,67,67	0.68	1 (1%)
83	PAR	B	1801	-	44,45,45	0.43	0	63,67,67	0.84	1 (1%)
83	PAR	1	3457	82	44,45,45	0.43	0	63,67,67	0.79	1 (1%)
83	PAR	B	1802	-	44,45,45	0.45	0	63,67,67	0.96	2 (3%)
83	PAR	1	3460	-	44,45,45	0.43	0	63,67,67	1.02	4 (6%)
84	3K5	1	3463	-	63,63,63	0.30	0	84,95,95	0.56	1 (1%)
83	PAR	1	3458	-	44,45,45	0.47	0	63,67,67	1.00	3 (4%)
83	PAR	B	1803	-	44,45,45	0.45	0	63,67,67	0.78	1 (1%)
83	PAR	CM	1803	-	44,45,45	0.43	0	63,67,67	0.90	2 (3%)
83	PAR	1	3464	-	44,45,45	0.44	0	63,67,67	1.00	2 (3%)
83	PAR	1	3456	-	44,45,45	0.43	0	63,67,67	0.75	2 (3%)
83	PAR	CM	1802	-	44,45,45	0.43	0	63,67,67	0.82	1 (1%)

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
83	PAR	AS	3404	-	-	4/18/94/94	0/4/4/4
83	PAR	1	3465	-	-	7/18/94/94	0/4/4/4
83	PAR	4	201	-	-	4/18/94/94	0/4/4/4
83	PAR	1	3459	-	-	6/18/94/94	0/4/4/4
83	PAR	AS	3403	-	-	5/18/94/94	0/4/4/4
83	PAR	1	3466	-	-	6/18/94/94	0/4/4/4
83	PAR	1	3462	-	-	4/18/94/94	0/4/4/4
84	3K5	AS	3405	-	-	8/29/121/121	0/7/7/7
83	PAR	AS	3402	-	-	8/18/94/94	1/4/4/4
83	PAR	AS	3406	-	-	7/18/94/94	0/4/4/4
83	PAR	1	3461	-	-	7/18/94/94	0/4/4/4

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
83	PAR	AS	3401	-	-	4/18/94/94	0/4/4/4
83	PAR	B	1801	-	-	3/18/94/94	0/4/4/4
83	PAR	1	3457	82	-	12/18/94/94	1/4/4/4
83	PAR	B	1802	-	-	4/18/94/94	1/4/4/4
83	PAR	1	3460	-	-	5/18/94/94	0/4/4/4
84	3K5	1	3463	-	-	2/29/121/121	0/7/7/7
83	PAR	1	3458	-	-	8/18/94/94	0/4/4/4
83	PAR	B	1803	-	-	3/18/94/94	0/4/4/4
83	PAR	CM	1803	-	-	6/18/94/94	0/4/4/4
83	PAR	1	3464	-	-	9/18/94/94	0/4/4/4
83	PAR	1	3456	-	-	3/18/94/94	0/4/4/4
83	PAR	CM	1802	-	-	4/18/94/94	0/4/4/4

There are no bond length outliers.

All (50) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	1	3466	PAR	O11-C11-C21	6.05	117.99	108.08
83	4	201	PAR	O11-C11-C21	5.69	117.39	108.08
83	AS	3406	PAR	C52-C42-C32	4.92	120.42	111.31
83	1	3464	PAR	O11-C11-C21	4.91	116.12	108.08
83	AS	3404	PAR	O11-C11-C21	4.88	116.06	108.08
83	AS	3406	PAR	O54-C54-C64	4.80	115.30	106.07
83	B	1803	PAR	O11-C11-C21	4.80	115.94	108.08
83	1	3461	PAR	O11-C11-C21	4.69	115.76	108.08
83	B	1801	PAR	O11-C11-C21	4.60	115.61	108.08
83	1	3457	PAR	O11-C11-C21	4.56	115.54	108.08
84	AS	3405	3K5	O14-C34-C33	4.56	118.23	107.76
83	1	3459	PAR	O11-C11-C21	4.52	115.47	108.08
83	CM	1803	PAR	O11-C11-C21	4.45	115.36	108.08
83	1	3460	PAR	O11-C11-C21	4.40	115.28	108.08
83	1	3458	PAR	O54-C54-C64	4.35	114.43	106.07
84	AS	3405	3K5	C34-O14-C38	4.24	124.31	117.72
83	1	3462	PAR	O11-C11-C21	4.06	114.72	108.08
83	CM	1802	PAR	O11-C11-C21	4.06	114.72	108.08
83	1	3456	PAR	O11-C11-C21	3.93	114.52	108.08
83	AS	3406	PAR	O11-C11-C21	3.82	114.33	108.08
83	AS	3402	PAR	O11-C11-C21	3.81	114.31	108.08
83	1	3458	PAR	O11-C11-C21	3.80	114.29	108.08

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
83	1	3465	PAR	O54-C54-C64	3.76	113.30	106.07
83	AS	3403	PAR	O11-C11-C21	3.64	114.03	108.08
83	4	201	PAR	O54-C54-C64	3.63	113.04	106.07
83	1	3460	PAR	O54-C54-C64	3.56	112.90	106.07
83	B	1802	PAR	C13-C23-C33	-3.50	97.89	102.10
84	AS	3405	3K5	O14-C34-C35	3.32	115.40	107.76
83	AS	3401	PAR	O11-C11-C21	3.30	113.48	108.08
83	B	1802	PAR	O11-C11-C21	3.26	113.41	108.08
83	1	3460	PAR	C32-C22-C12	3.08	116.29	111.02
83	1	3465	PAR	O11-C11-C21	2.97	112.94	108.08
83	AS	3402	PAR	O11-C42-C32	-2.89	102.28	109.18
84	AS	3405	3K5	O1-C5-C1	2.89	111.32	107.23
83	AS	3406	PAR	C62-C52-C42	2.85	118.13	111.72
83	AS	3406	PAR	C32-C22-C12	-2.76	106.30	111.02
83	AS	3406	PAR	O11-C42-C32	-2.73	102.66	109.18
83	1	3465	PAR	C13-C23-C33	-2.69	98.86	102.10
83	1	3466	PAR	O52-C52-C42	2.56	113.92	107.42
83	1	3458	PAR	O33-C14-C24	2.55	112.25	108.08
83	CM	1803	PAR	O51-C11-C21	2.53	115.68	110.08
83	AS	3402	PAR	O54-C54-C64	2.43	110.75	106.07
83	1	3464	PAR	C13-O52-C52	2.34	123.53	117.98
84	1	3463	3K5	O1-C5-C1	-2.27	104.01	107.23
83	1	3460	PAR	C52-C42-C32	2.24	115.46	111.31
83	1	3456	PAR	O54-C54-C64	2.23	110.35	106.07
83	1	3466	PAR	O54-C54-C64	2.18	110.27	106.07
83	AS	3403	PAR	O54-C54-C64	2.08	110.07	106.07
83	1	3466	PAR	C13-O52-C52	2.03	122.79	117.98
83	AS	3402	PAR	C64-C54-C44	-2.02	108.08	112.80

There are no chirality outliers.

All (129) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
83	1	3457	PAR	C43-C33-O33-C14
83	1	3458	PAR	C23-C13-O52-C52
83	1	3458	PAR	O43-C13-O52-C52
83	1	3458	PAR	C43-C33-O33-C14
83	1	3458	PAR	C24-C14-O33-C33
83	1	3458	PAR	O54-C54-C64-N64
83	1	3459	PAR	C24-C14-O33-C33
83	1	3459	PAR	O54-C54-C64-N64
83	1	3460	PAR	C23-C13-O52-C52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
83	1	3460	PAR	O43-C13-O52-C52
83	1	3460	PAR	C24-C14-O33-C33
83	1	3461	PAR	C23-C13-O52-C52
83	1	3461	PAR	C43-C33-O33-C14
83	1	3461	PAR	C24-C14-O33-C33
83	1	3462	PAR	C23-C13-O52-C52
83	1	3462	PAR	O43-C13-O52-C52
83	1	3462	PAR	C43-C33-O33-C14
83	1	3464	PAR	C23-C13-O52-C52
83	1	3464	PAR	O43-C13-O52-C52
83	1	3465	PAR	C23-C13-O52-C52
83	1	3465	PAR	O43-C13-O52-C52
83	1	3465	PAR	C44-C54-C64-N64
83	1	3465	PAR	O54-C54-C64-N64
83	1	3466	PAR	C23-C13-O52-C52
83	1	3466	PAR	O43-C13-O52-C52
83	4	201	PAR	C23-C13-O52-C52
83	B	1801	PAR	C43-C33-O33-C14
83	B	1802	PAR	O54-C54-C64-N64
83	B	1803	PAR	O54-C54-C64-N64
83	AS	3401	PAR	C23-C13-O52-C52
83	AS	3401	PAR	O43-C13-O52-C52
83	AS	3402	PAR	C23-C13-O52-C52
83	AS	3402	PAR	C24-C14-O33-C33
83	AS	3403	PAR	C23-C13-O52-C52
83	AS	3403	PAR	O43-C13-O52-C52
83	AS	3403	PAR	C24-C14-O33-C33
83	AS	3403	PAR	O54-C54-C64-N64
83	AS	3404	PAR	C24-C14-O33-C33
83	CM	1803	PAR	C23-C13-O52-C52
83	CM	1803	PAR	O43-C13-O52-C52
83	CM	1803	PAR	O54-C54-C64-N64
83	1	3459	PAR	O54-C14-O33-C33
83	B	1802	PAR	O54-C14-O33-C33
83	AS	3402	PAR	O54-C14-O33-C33
83	AS	3403	PAR	O54-C14-O33-C33
83	CM	1803	PAR	O54-C14-O33-C33
83	1	3459	PAR	C62-C52-O52-C13
83	1	3465	PAR	C62-C52-O52-C13
83	1	3456	PAR	O54-C14-O33-C33
83	1	3464	PAR	O51-C11-O11-C42
83	4	201	PAR	O51-C11-O11-C42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
83	1	3466	PAR	O51-C11-O11-C42
83	B	1801	PAR	C42-C52-O52-C13
83	AS	3406	PAR	C42-C52-O52-C13
83	1	3457	PAR	O43-C43-C53-O53
83	AS	3406	PAR	C41-C51-C61-O61
84	1	3463	3K5	C39-C38-O14-C34
83	1	3465	PAR	C52-C42-O11-C11
83	AS	3406	PAR	C52-C42-O11-C11
83	1	3457	PAR	C33-C43-C53-O53
84	AS	3405	3K5	C31-C30-O9-C26
84	1	3463	3K5	O15-C38-O14-C34
84	AS	3405	3K5	O15-C38-O14-C34
84	AS	3405	3K5	C39-C38-O14-C34
84	AS	3405	3K5	O10-C30-O9-C26
83	1	3466	PAR	C42-C52-O52-C13
83	1	3460	PAR	O51-C51-C61-O61
83	1	3464	PAR	O51-C51-C61-O61
83	AS	3406	PAR	O51-C51-C61-O61
83	1	3464	PAR	C41-C51-C61-O61
83	AS	3402	PAR	C62-C52-O52-C13
83	1	3464	PAR	O54-C14-O33-C33
83	1	3464	PAR	C62-C52-O52-C13
83	AS	3402	PAR	C42-C52-O52-C13
83	1	3457	PAR	O51-C11-O11-C42
83	B	1803	PAR	O54-C14-O33-C33
83	1	3460	PAR	C41-C51-C61-O61
83	1	3464	PAR	C42-C52-O52-C13
83	1	3457	PAR	O43-C13-O52-C52
83	4	201	PAR	O43-C13-O52-C52
83	AS	3402	PAR	O43-C13-O52-C52
83	1	3457	PAR	O51-C51-C61-O61
83	1	3465	PAR	O51-C51-C61-O61
83	1	3459	PAR	O43-C43-C53-O53
83	AS	3404	PAR	O51-C11-O11-C42
83	CM	1802	PAR	O43-C43-C53-O53
83	1	3461	PAR	O51-C51-C61-O61
83	4	201	PAR	C24-C14-O33-C33
83	1	3457	PAR	C52-C42-O11-C11
83	1	3466	PAR	C62-C52-O52-C13
83	AS	3402	PAR	O43-C43-C53-O53
83	CM	1802	PAR	C33-C43-C53-O53
84	AS	3405	3K5	C33-C34-O14-C38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
84	AS	3405	3K5	C21-C20-C23-O6
83	AS	3406	PAR	O43-C13-O52-C52
83	CM	1802	PAR	C23-C13-O52-C52
83	AS	3402	PAR	C33-C43-C53-O53
83	1	3461	PAR	O54-C14-O33-C33
83	B	1803	PAR	O51-C11-O11-C42
83	AS	3406	PAR	C32-C42-O11-C11
83	1	3457	PAR	O54-C54-C64-N64
83	1	3462	PAR	O54-C54-C64-N64
83	1	3466	PAR	O54-C54-C64-N64
83	AS	3404	PAR	O54-C54-C64-N64
83	1	3458	PAR	O54-C14-O33-C33
84	AS	3405	3K5	C35-C34-O14-C38
83	1	3457	PAR	C24-C14-O33-C33
83	CM	1802	PAR	O43-C13-O52-C52
83	CM	1803	PAR	O51-C11-O11-C42
83	1	3457	PAR	C62-C52-O52-C13
83	1	3456	PAR	C23-C33-O33-C14
84	AS	3405	3K5	C21-C20-C23-O5
83	1	3456	PAR	O51-C11-O11-C42
83	1	3461	PAR	O51-C11-O11-C42
83	AS	3401	PAR	O54-C14-O33-C33
83	1	3457	PAR	C44-C54-C64-N64
83	B	1802	PAR	C21-C11-O11-C42
83	B	1802	PAR	C24-C14-O33-C33
83	AS	3406	PAR	C21-C11-O11-C42
83	CM	1803	PAR	C24-C14-O33-C33
83	1	3458	PAR	C42-C52-O52-C13
83	B	1801	PAR	C62-C52-O52-C13
83	1	3459	PAR	C23-C33-O33-C14
83	1	3461	PAR	C23-C33-O33-C14
83	1	3464	PAR	C43-C33-O33-C14
83	AS	3401	PAR	C23-C33-O33-C14
83	AS	3404	PAR	C23-C33-O33-C14
83	1	3457	PAR	C42-C52-O52-C13
83	1	3458	PAR	C62-C52-O52-C13

All (3) ring outliers are listed below:

Mol	Chain	Res	Type	Atoms
83	B	1802	PAR	C12-C22-C32-C42-C52-C62
83	1	3457	PAR	C12-C22-C32-C42-C52-C62

Continued on next page...

Continued from previous page...

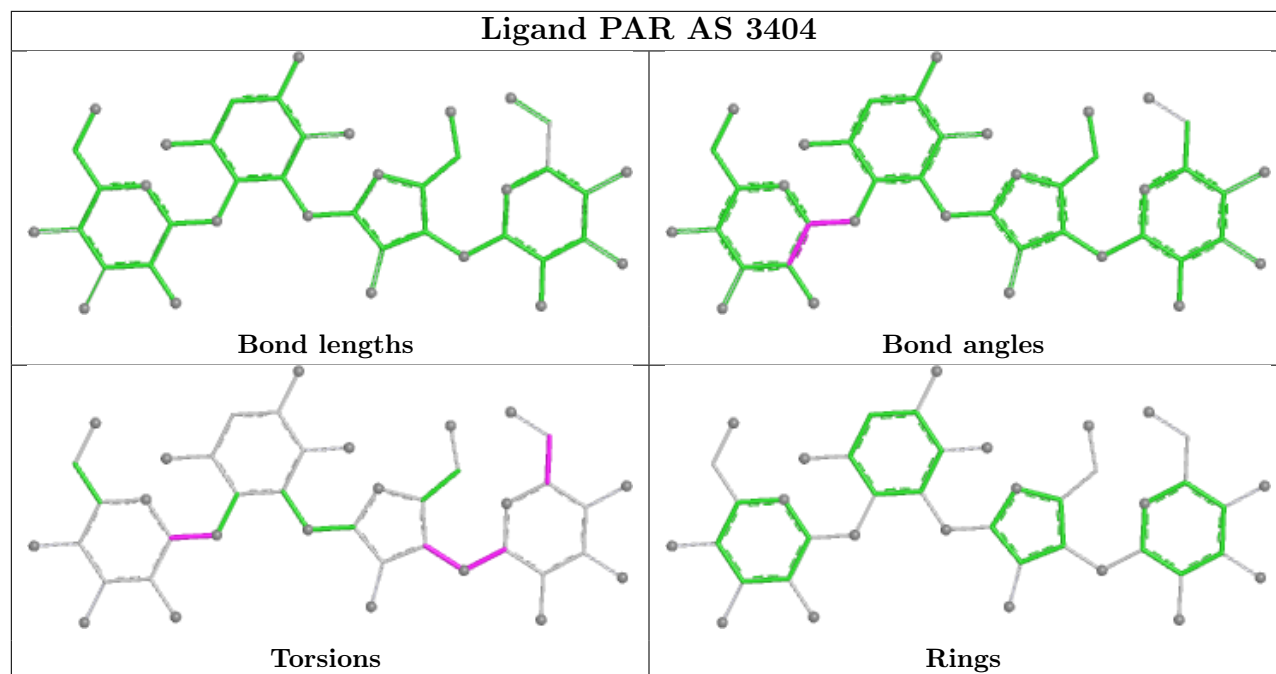
Mol	Chain	Res	Type	Atoms
83	AS	3402	PAR	C12-C22-C32-C42-C52-C62

23 monomers are involved in 76 short contacts:

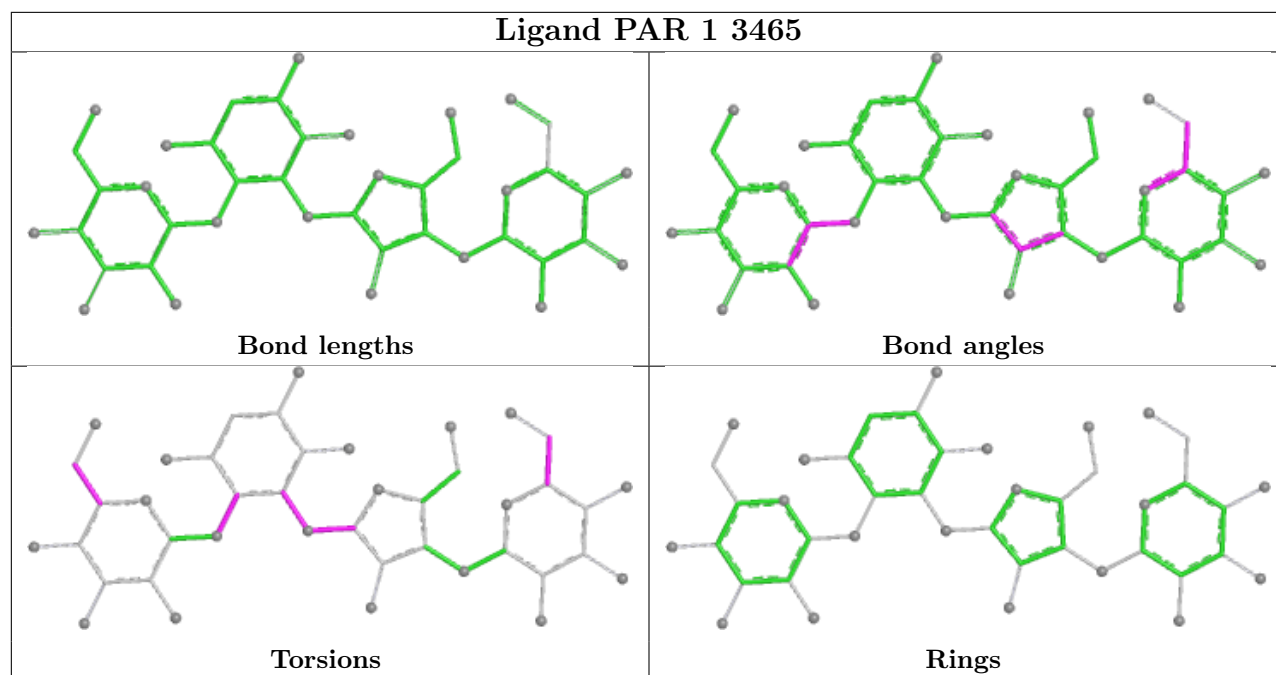
Mol	Chain	Res	Type	Clashes	Symm-Clashes
83	AS	3404	PAR	1	0
83	1	3465	PAR	5	0
83	4	201	PAR	1	0
83	1	3459	PAR	3	0
83	AS	3403	PAR	4	0
83	1	3466	PAR	3	0
83	1	3462	PAR	6	0
84	AS	3405	3K5	4	0
83	AS	3402	PAR	5	0
83	AS	3406	PAR	5	0
83	1	3461	PAR	3	0
83	AS	3401	PAR	1	0
83	B	1801	PAR	4	0
83	1	3457	PAR	1	0
83	B	1802	PAR	2	0
83	1	3460	PAR	6	0
84	1	3463	3K5	3	0
83	1	3458	PAR	2	0
83	B	1803	PAR	6	0
83	CM	1803	PAR	5	0
83	1	3464	PAR	2	0
83	1	3456	PAR	1	0
83	CM	1802	PAR	3	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.

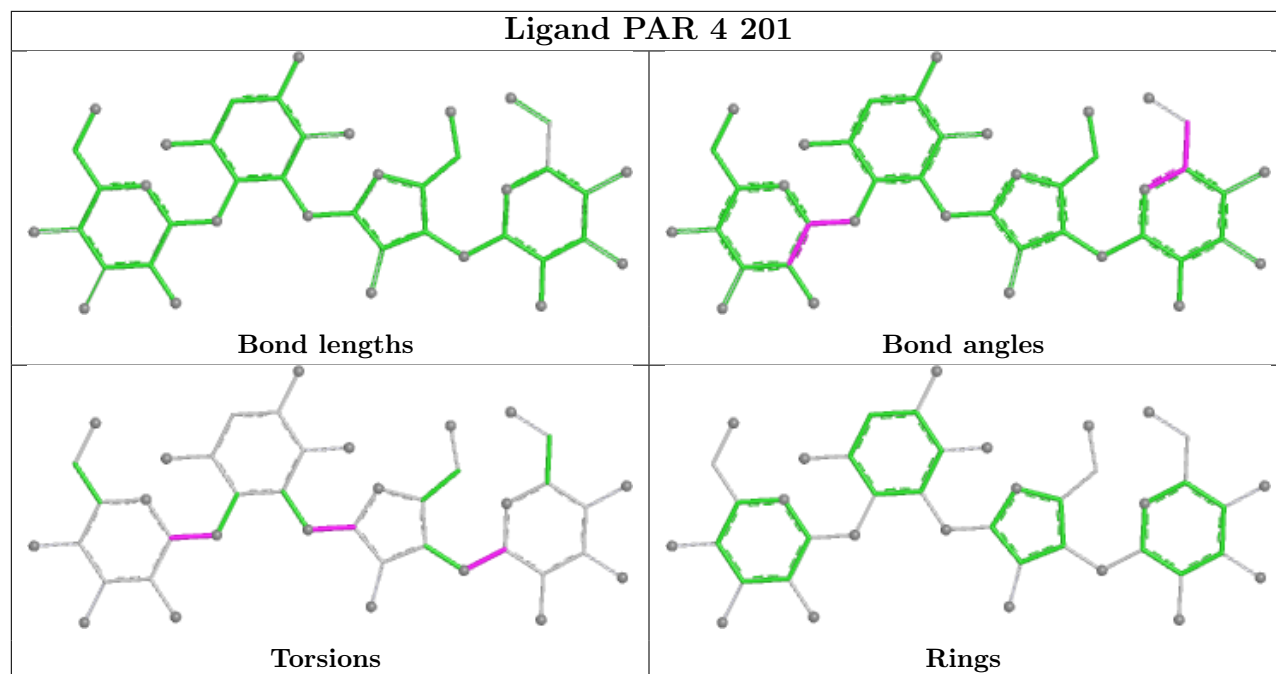
Ligand PAR AS 3404



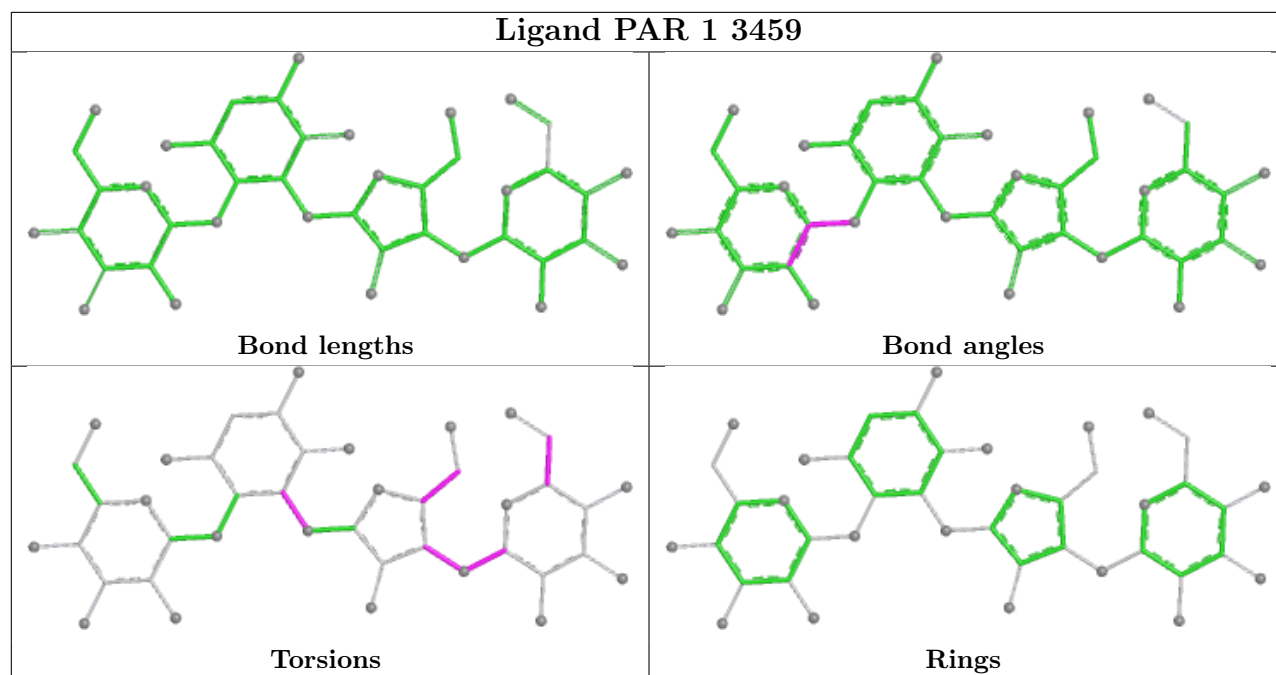
Ligand PAR 1 3465



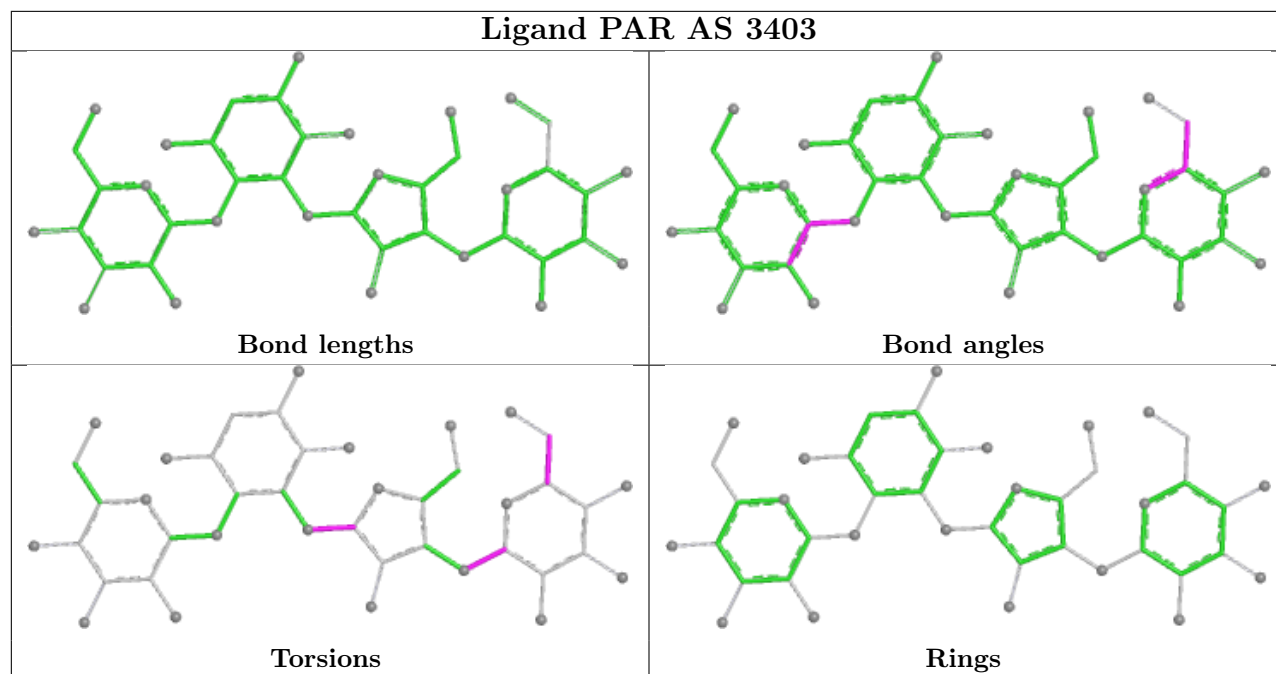
Ligand PAR 4 201



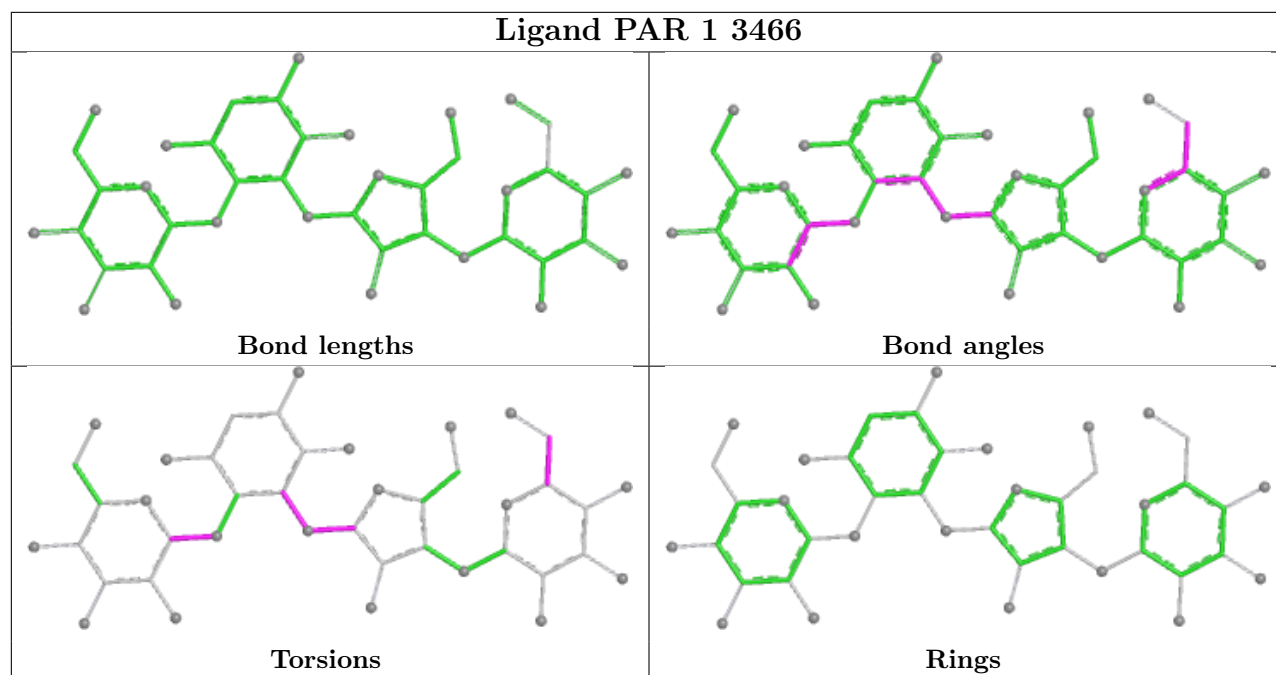
Ligand PAR 1 3459

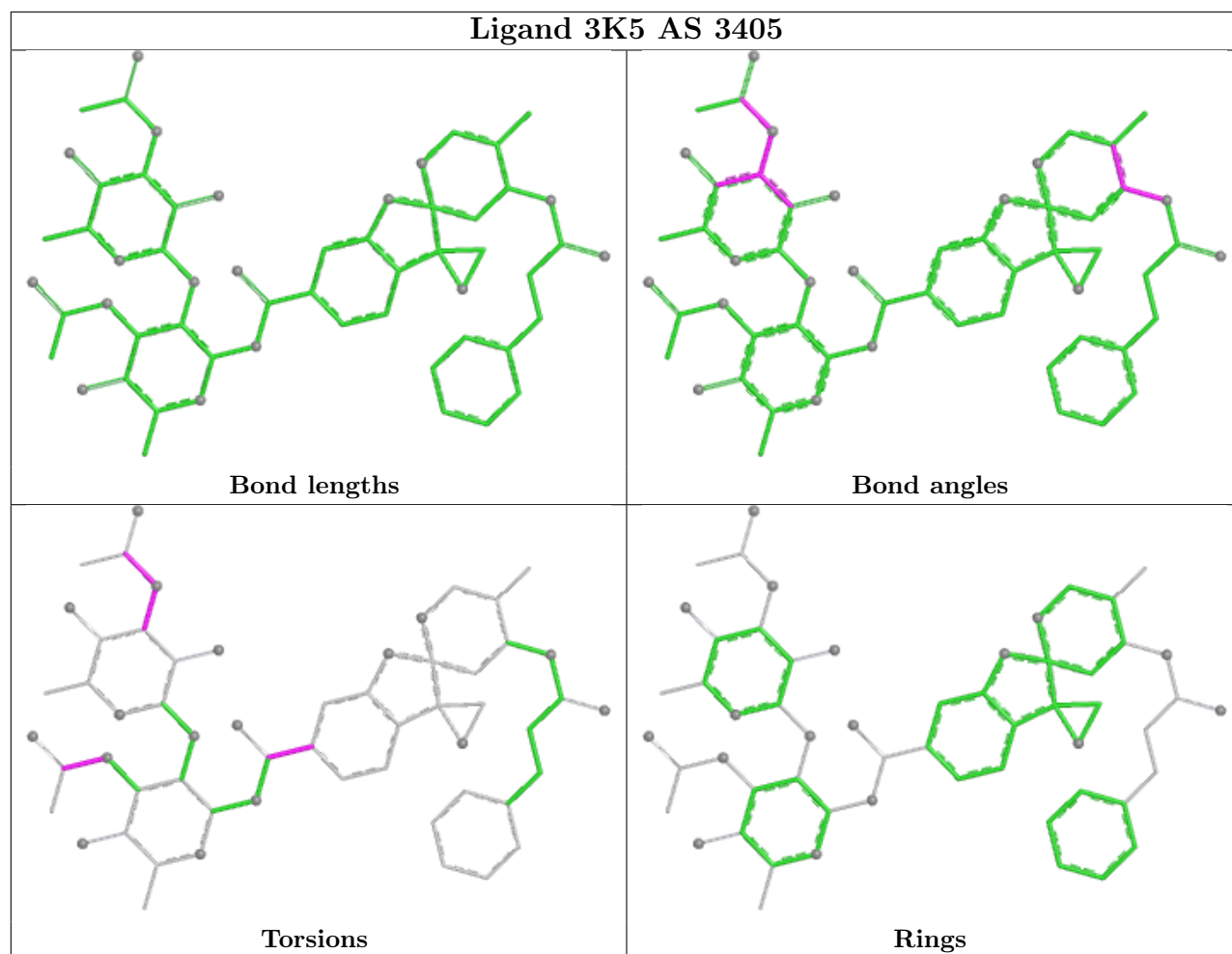
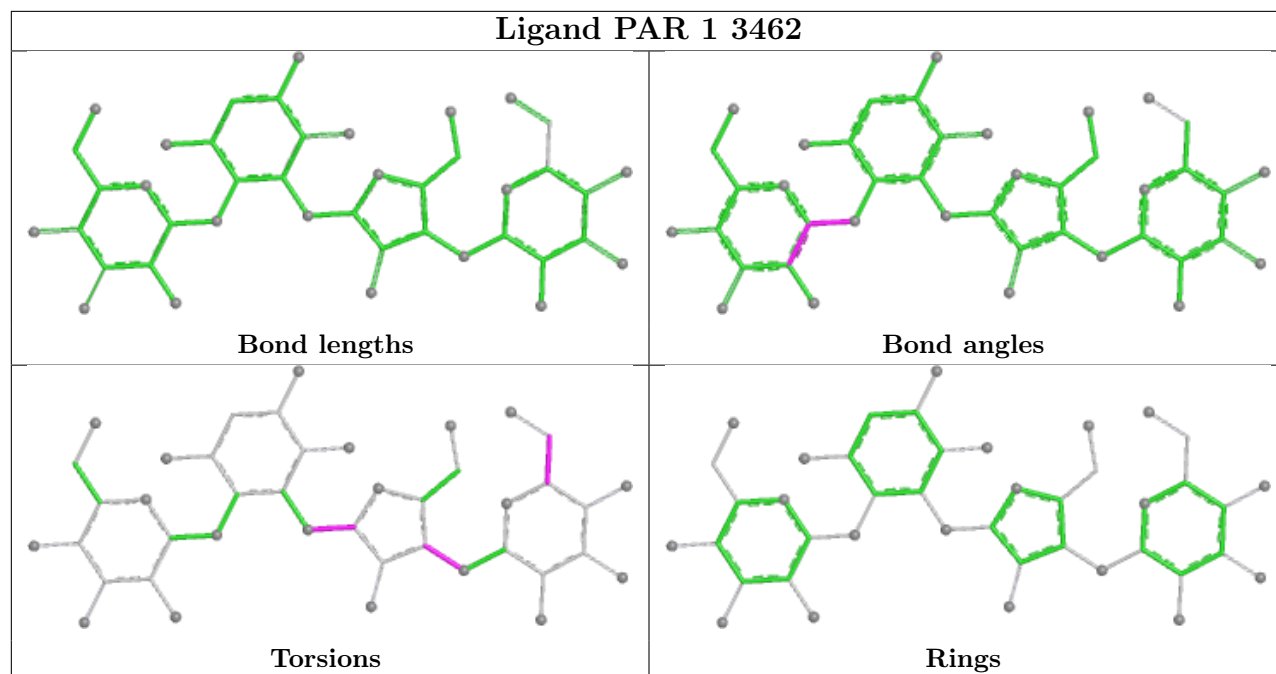


Ligand PAR AS 3403

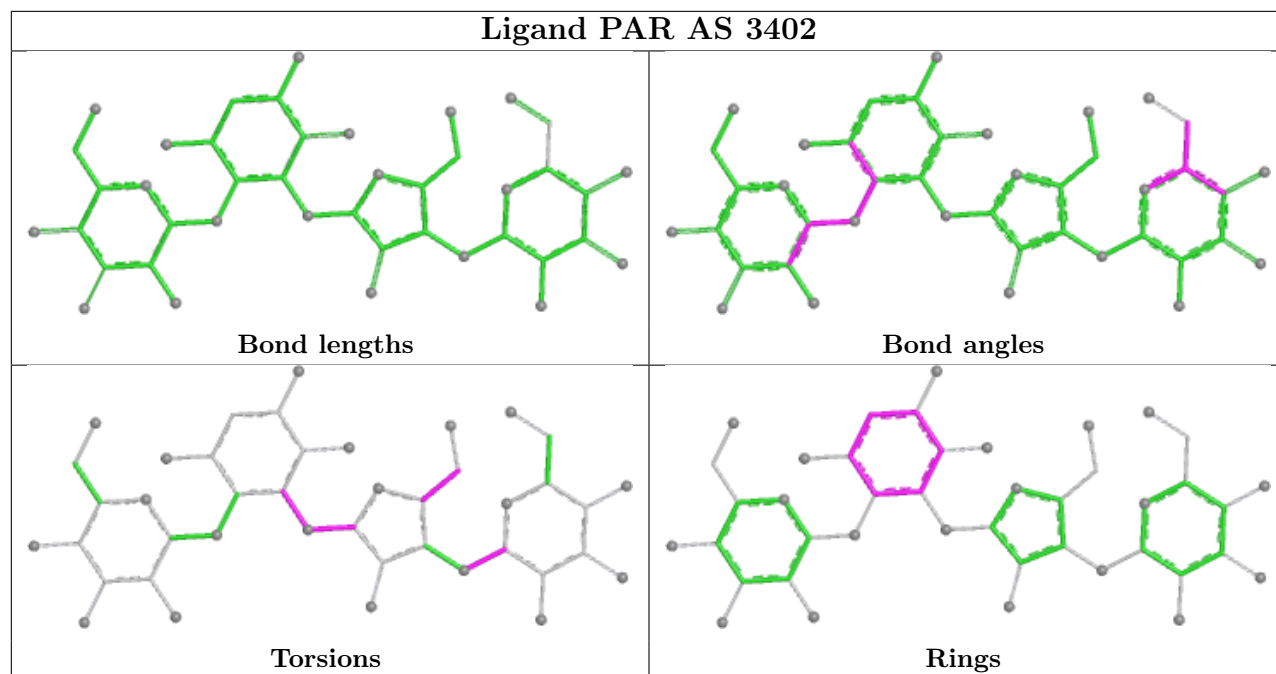


Ligand PAR 1 3466

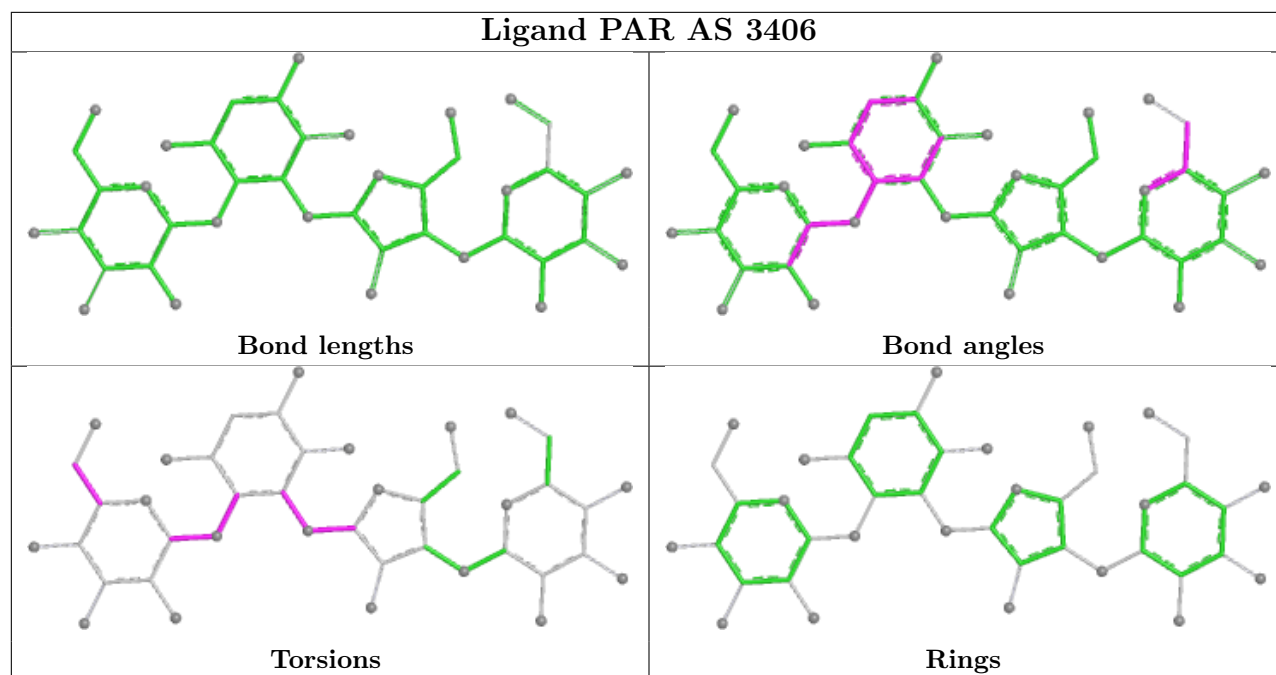


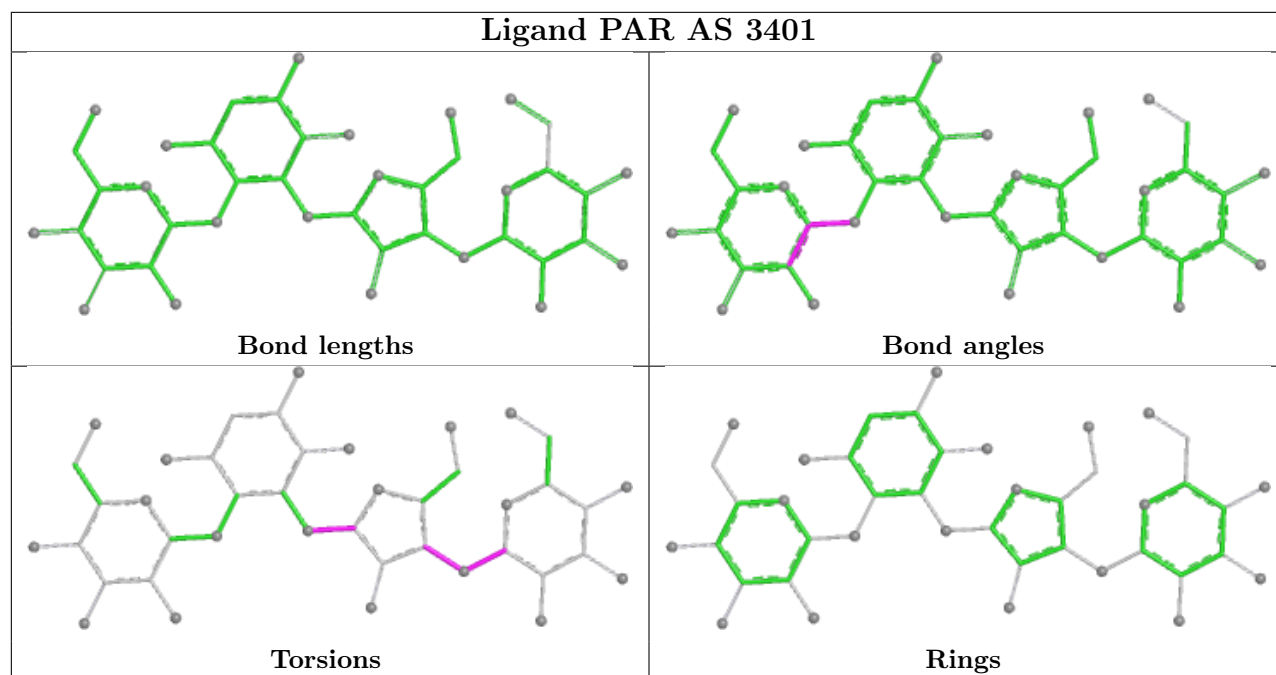
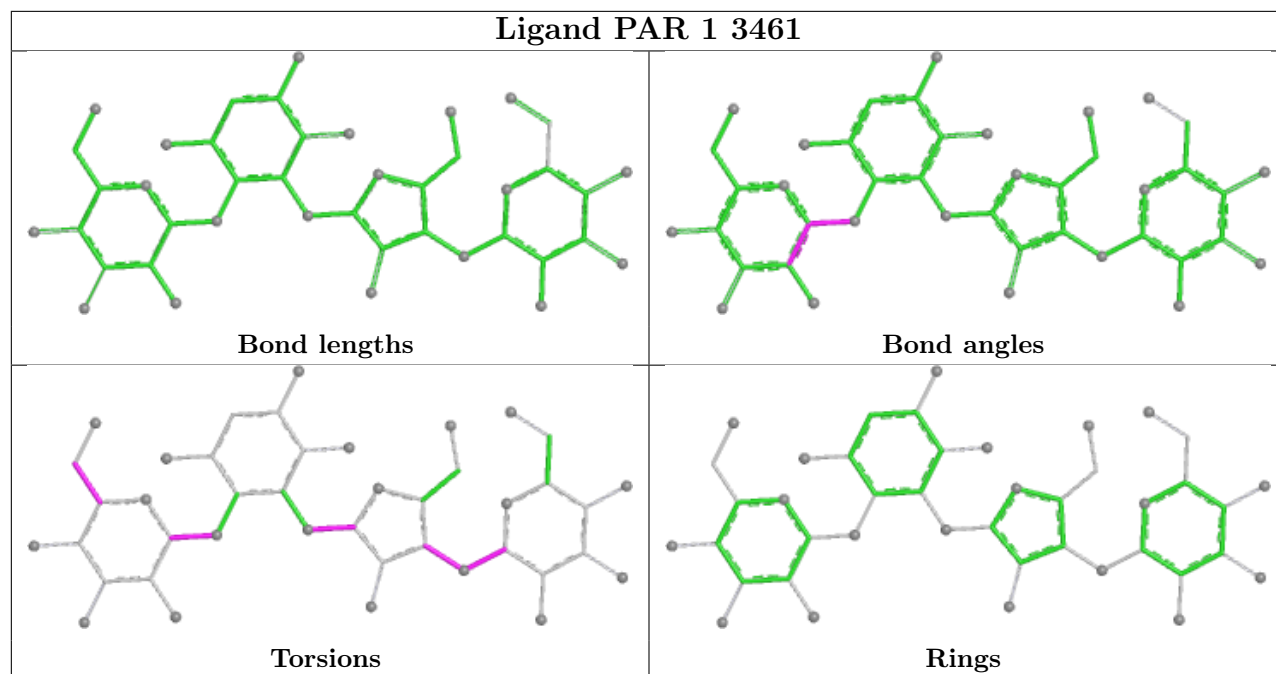


Ligand PAR AS 3402

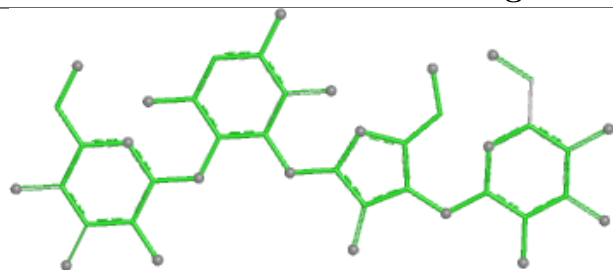


Ligand PAR AS 3406

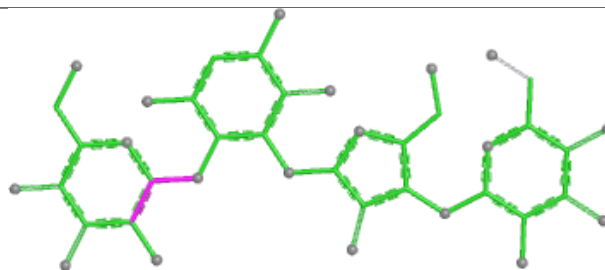




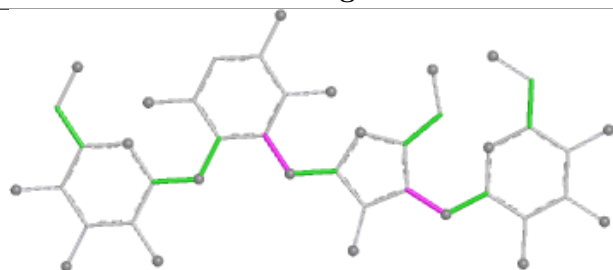
Ligand PAR B 1801



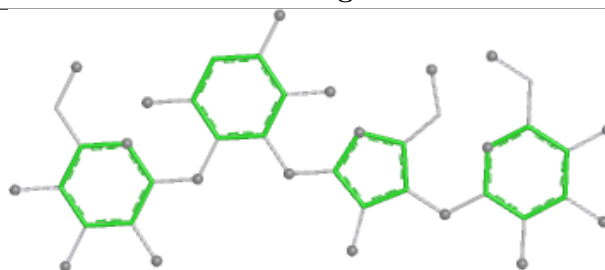
Bond lengths



Bond angles

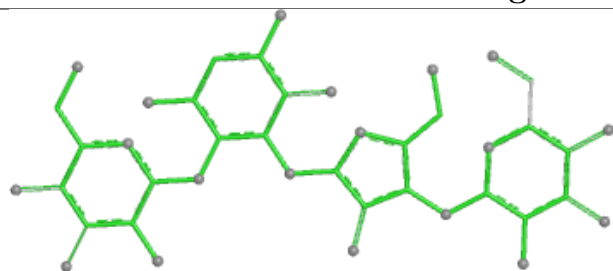


Torsions

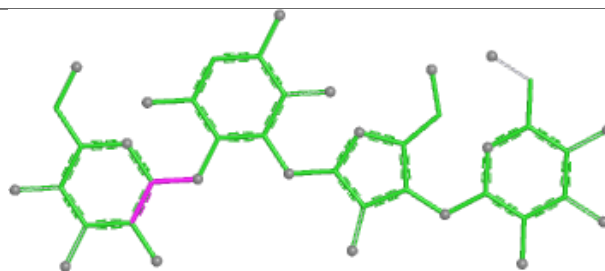


Rings

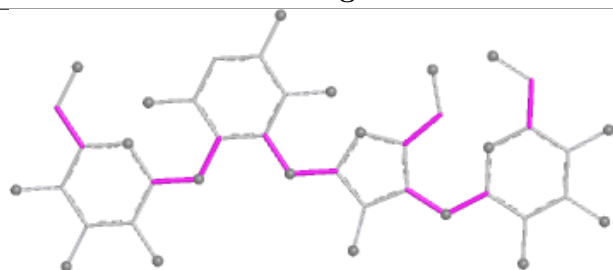
Ligand PAR 1 3457



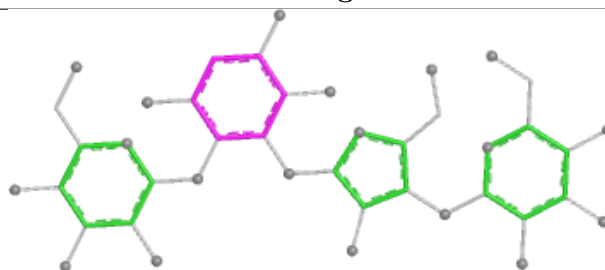
Bond lengths



Bond angles

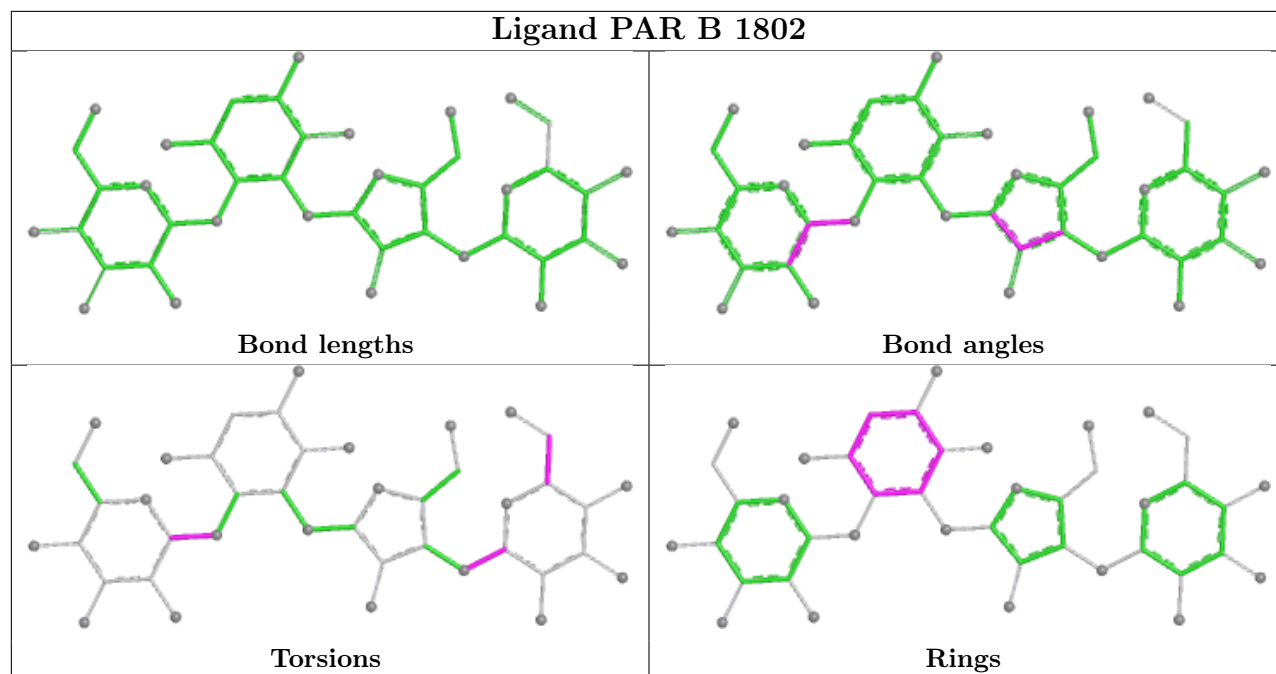


Torsions

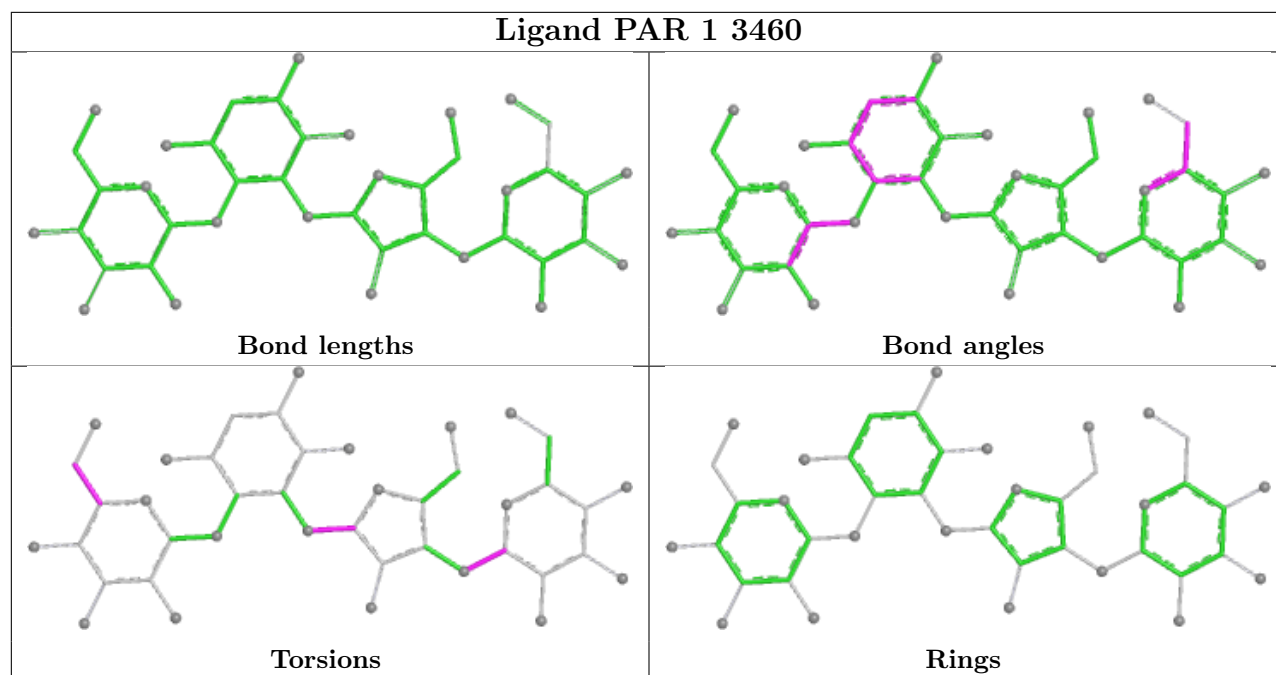


Rings

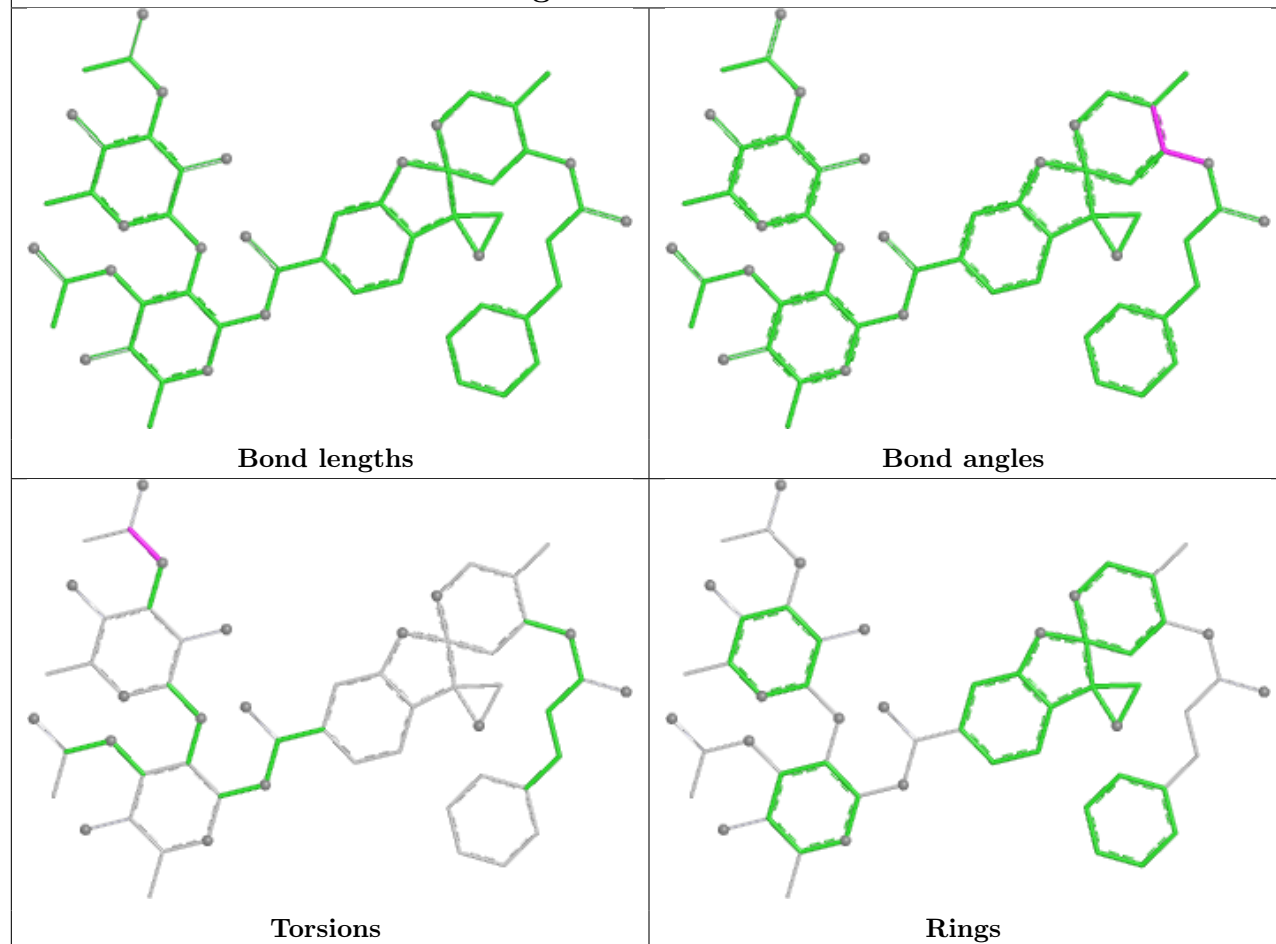
Ligand PAR B 1802



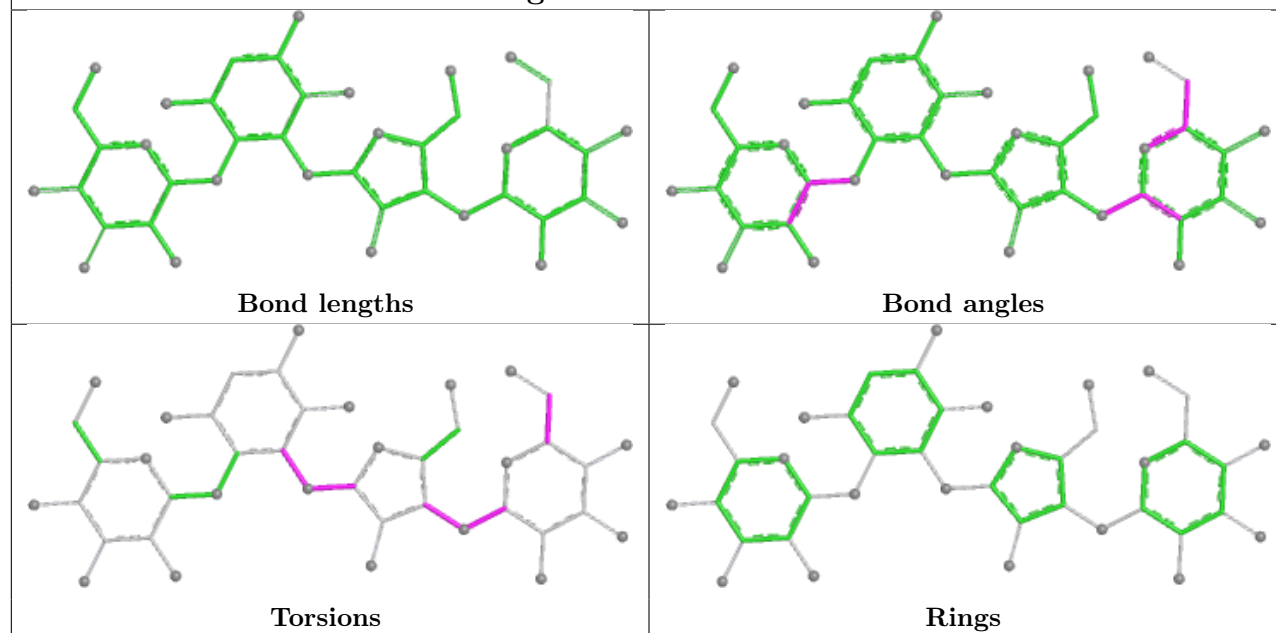
Ligand PAR 1 3460



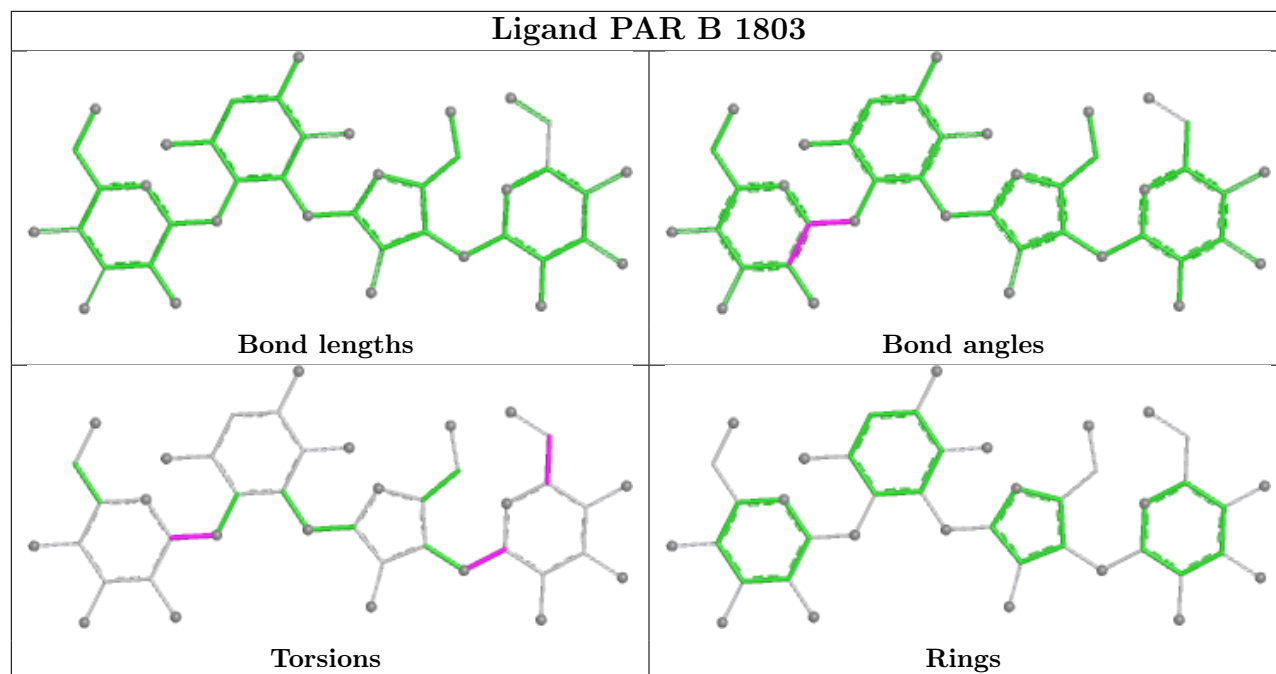
Ligand 3K5 1 3463



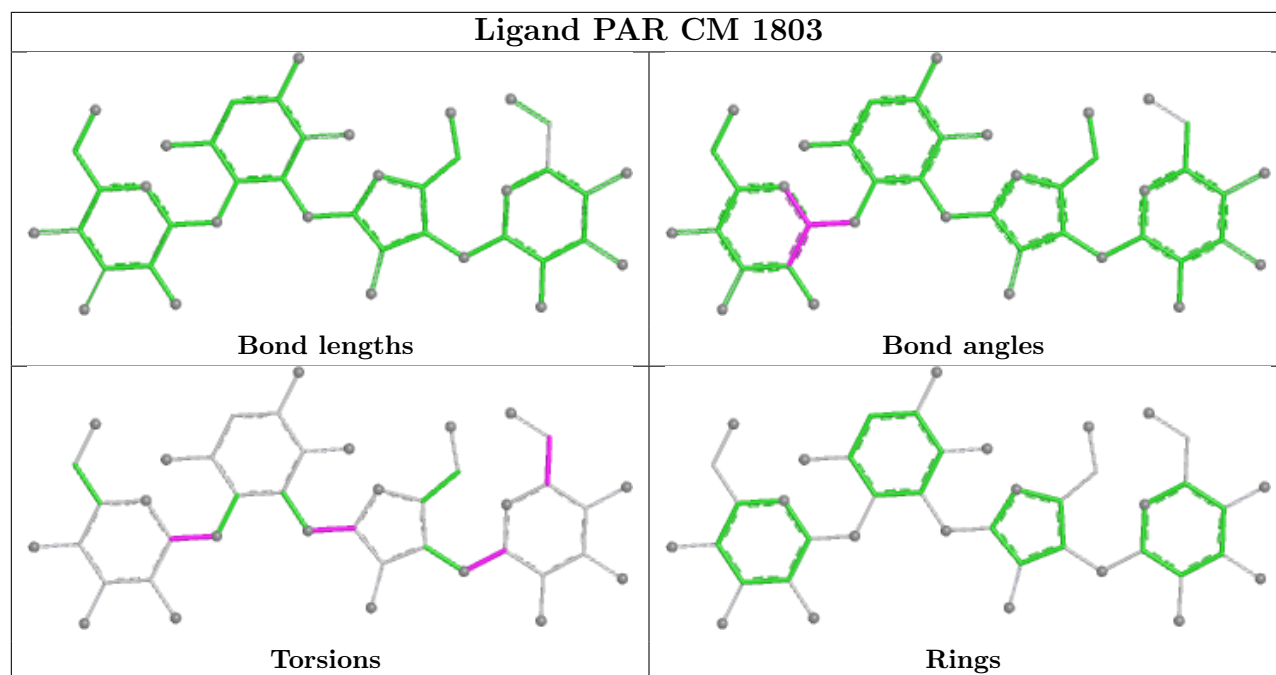
Ligand PAR 1 3458

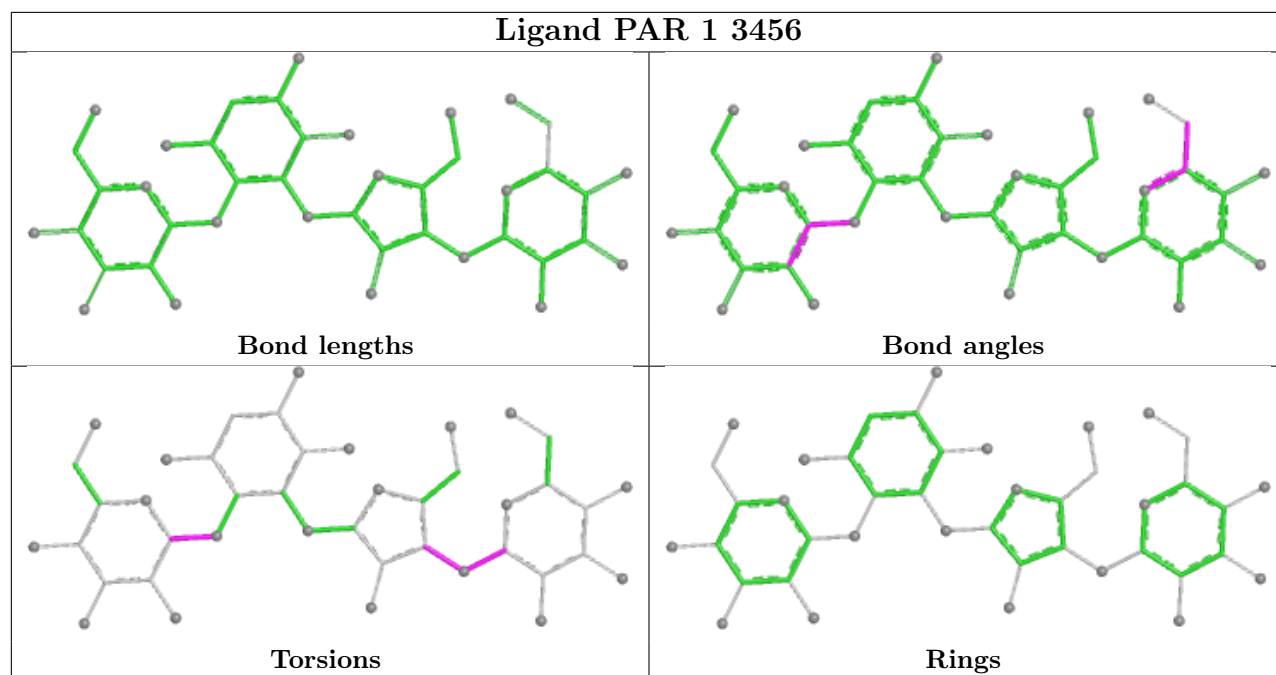
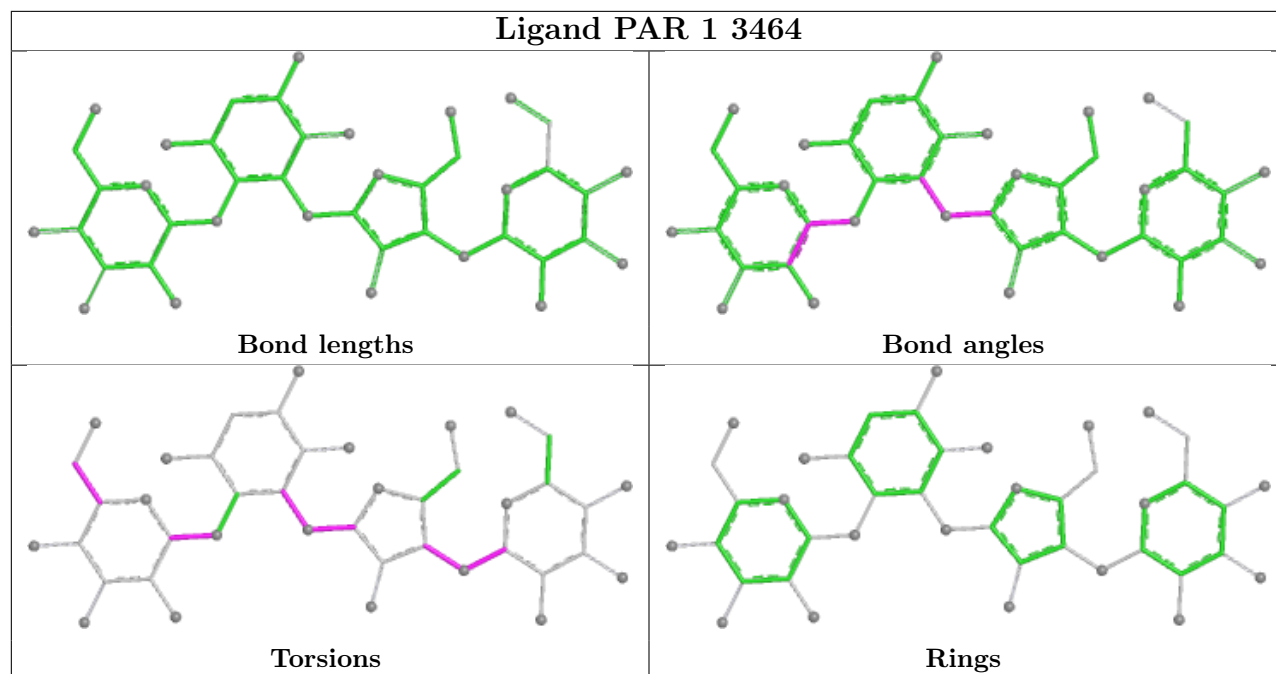


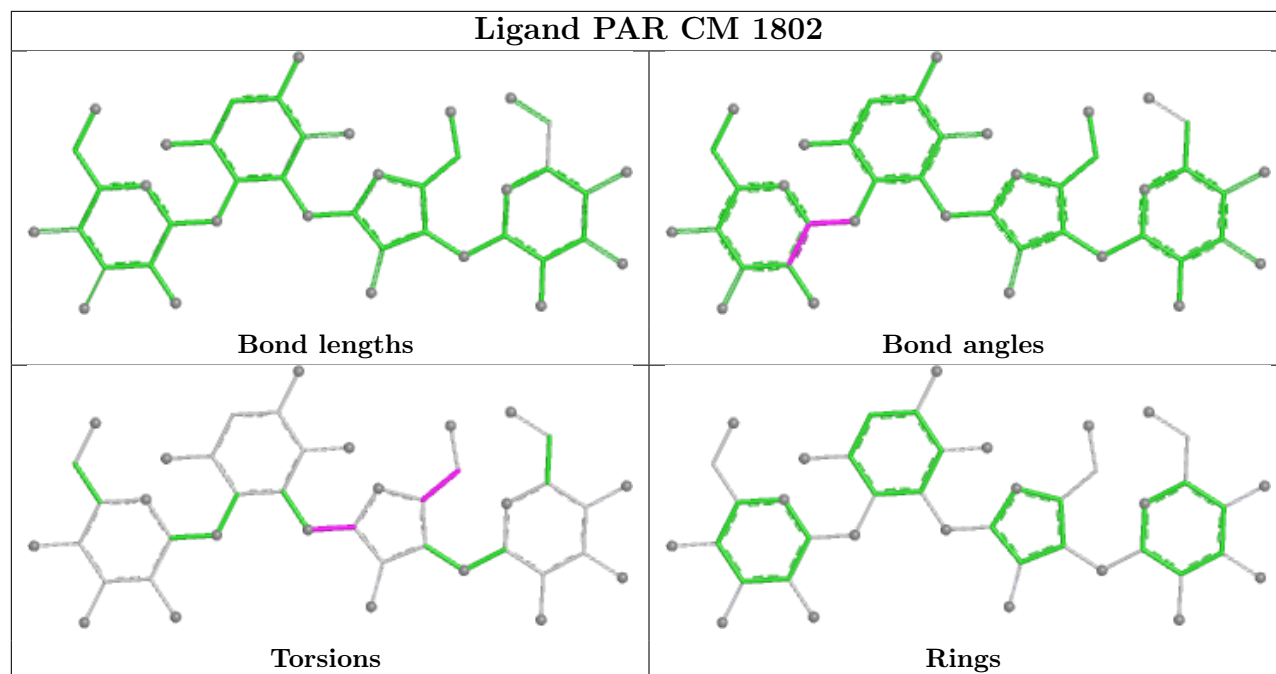
Ligand PAR B 1803



Ligand PAR CM 1803







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	1	3219/3359 (95%)	0.55	122 (3%) 44 31	16, 47, 179, 355	0
1	AS	3061/3359 (91%)	1.03	384 (12%) 8 8	38, 85, 181, 329	0
2	3	121/121 (100%)	0.33	2 (1%) 69 53	27, 70, 89, 129	0
2	AT	121/121 (100%)	0.67	7 (5%) 29 21	40, 98, 127, 132	0
3	4	157/158 (99%)	0.49	7 (4%) 38 27	28, 47, 130, 207	0
3	AU	156/158 (98%)	1.58	42 (26%) 1 2	63, 114, 159, 213	0
4	AW	248/254 (97%)	2.01	99 (39%) 1 0	48, 92, 123, 139	0
4	j	249/254 (98%)	1.10	37 (14%) 5 6	13, 33, 54, 89	0
5	AX	386/389 (99%)	1.53	98 (25%) 1 3	33, 72, 107, 187	0
5	k	386/389 (99%)	1.15	61 (15%) 5 6	19, 45, 69, 111	1 (0%)
6	AY	359/363 (98%)	1.87	136 (37%) 1 1	41, 84, 111, 137	0
6	l	361/363 (99%)	1.05	47 (13%) 7 8	18, 46, 81, 124	0
7	AZ	292/298 (97%)	2.08	118 (40%) 0 0	66, 116, 146, 177	0
7	m	296/298 (99%)	1.13	56 (18%) 3 4	36, 81, 114, 144	0
8	BA	153/176 (86%)	1.75	55 (35%) 1 1	54, 80, 109, 165	0
8	n	157/176 (89%)	1.10	27 (17%) 4 5	33, 61, 101, 142	0
9	BB	227/241 (94%)	1.41	56 (24%) 2 3	40, 65, 92, 112	0
9	o	228/241 (94%)	0.79	15 (6%) 24 18	21, 44, 87, 122	0
10	BC	226/262 (86%)	2.19	93 (41%) 0 0	101, 138, 165, 196	0
10	p	237/262 (90%)	1.06	31 (13%) 7 8	28, 56, 112, 156	0
11	BD	189/191 (98%)	1.37	42 (22%) 2 3	58, 88, 119, 137	0
11	q	190/191 (99%)	0.98	22 (11%) 9 9	36, 53, 81, 99	0
12	BE	206/220 (93%)	0.88	19 (9%) 14 13	39, 65, 110, 143	0
12	r	208/220 (94%)	1.21	35 (16%) 4 5	24, 51, 104, 135	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å²)	Q<0.9
13	BF	171/174 (98%)	1.27	38 (22%)	2	3	74, 102, 126, 146	0
13	s	171/174 (98%)	1.48	43 (25%)	1	3	46, 86, 113, 146	0
14	BG	200/202 (99%)	2.24	91 (45%)	0	0	49, 111, 147, 171	0
14	t	200/202 (99%)	1.03	35 (17%)	4	5	20, 58, 113, 141	0
15	BH	128/131 (97%)	1.61	38 (29%)	1	2	57, 88, 108, 134	0
15	u	130/131 (99%)	0.95	15 (11%)	9	10	20, 54, 81, 113	0
16	BI	203/204 (99%)	3.04	147 (72%)	0	0	58, 109, 134, 149	0
16	v	203/204 (99%)	1.36	45 (22%)	2	3	19, 36, 49, 73	0
17	BJ	199/200 (99%)	1.36	42 (21%)	2	4	36, 60, 106, 125	0
17	w	199/200 (99%)	1.25	36 (18%)	3	4	16, 42, 85, 108	0
18	BK	174/185 (94%)	1.92	64 (36%)	1	1	49, 80, 112, 135	0
18	x	172/185 (92%)	1.20	22 (12%)	7	8	18, 45, 143, 168	0
19	BL	185/186 (99%)	1.83	72 (38%)	1	1	53, 83, 111, 131	0
19	y	185/186 (99%)	1.30	48 (25%)	1	2	25, 47, 64, 79	0
20	BM	171/190 (90%)	2.16	78 (45%)	0	0	66, 100, 123, 136	0
20	z	179/190 (94%)	1.18	35 (19%)	3	4	30, 53, 94, 115	0
21	0	170/172 (98%)	0.86	12 (7%)	22	17	24, 43, 71, 120	0
21	BN	170/172 (98%)	1.47	38 (22%)	2	3	43, 69, 104, 120	0
22	2	159/160 (99%)	1.35	33 (20%)	2	4	29, 49, 115, 157	0
22	BO	159/160 (99%)	2.29	77 (48%)	0	0	48, 84, 118, 170	0
23	5	103/124 (83%)	0.99	12 (11%)	9	9	55, 92, 126, 139	0
23	BP	102/124 (82%)	1.33	22 (21%)	2	4	108, 141, 177, 201	1 (0%)
24	6	131/137 (95%)	1.27	24 (18%)	3	4	17, 39, 61, 82	0
24	BQ	131/137 (95%)	1.62	39 (29%)	1	2	31, 55, 77, 85	0
25	7	118/155 (76%)	1.06	10 (8%)	16	14	25, 61, 144, 161	0
25	BR	111/155 (71%)	1.44	25 (22%)	2	3	51, 87, 138, 179	0
26	8	121/142 (85%)	0.95	9 (7%)	20	16	26, 49, 74, 124	0
26	BS	118/142 (83%)	2.39	66 (55%)	0	0	56, 104, 131, 153	0
27	9	126/127 (99%)	1.44	30 (23%)	2	3	26, 56, 93, 133	0
27	BT	124/127 (97%)	2.22	62 (50%)	0	0	54, 103, 134, 154	0
28	AA	135/136 (99%)	1.26	27 (20%)	3	4	30, 57, 91, 107	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å ²)	Q<0.9
28	BU	135/136 (99%)	1.69	45 (33%)	1	1	92, 124, 146, 157	0
29	AB	148/149 (99%)	1.23	26 (17%)	4	5	16, 47, 71, 82	0
29	BV	148/149 (99%)	2.34	76 (51%)	0	0	46, 95, 118, 131	0
30	AC	62/63 (98%)	1.48	12 (19%)	3	4	26, 59, 116, 143	0
30	BW	60/63 (95%)	2.20	27 (45%)	0	0	50, 103, 122, 131	1 (1%)
31	AD	99/106 (93%)	1.23	24 (24%)	2	3	35, 55, 88, 100	0
31	BX	96/106 (90%)	1.74	31 (32%)	1	1	79, 112, 136, 158	0
32	AE	110/112 (98%)	1.07	15 (13%)	7	7	27, 56, 135, 154	0
32	BY	109/112 (97%)	1.42	27 (24%)	2	3	43, 88, 131, 154	0
33	AF	124/131 (94%)	1.12	20 (16%)	4	5	21, 42, 57, 73	0
33	BZ	124/131 (94%)	1.91	45 (36%)	1	1	40, 62, 94, 113	1 (0%)
34	AG	106/107 (99%)	1.15	17 (16%)	5	5	21, 36, 72, 111	0
34	CA	106/107 (99%)	1.42	25 (23%)	2	3	35, 58, 99, 119	3 (2%)
35	AH	111/122 (90%)	1.74	31 (27%)	1	2	25, 51, 99, 120	0
35	CB	112/122 (91%)	2.85	60 (53%)	0	0	69, 115, 152, 186	4 (3%)
36	AI	120/120 (100%)	1.57	32 (26%)	1	2	31, 53, 86, 120	0
36	CC	117/120 (97%)	2.84	78 (66%)	0	0	78, 111, 131, 140	0
37	AJ	97/99 (97%)	0.86	7 (7%)	21	17	43, 60, 88, 110	0
37	CD	98/99 (98%)	1.86	37 (37%)	1	1	75, 126, 159, 163	1 (1%)
38	AK	86/90 (95%)	1.02	10 (11%)	9	9	19, 29, 75, 109	0
38	CE	86/90 (95%)	2.13	35 (40%)	0	0	52, 80, 129, 160	0
39	AL	77/78 (98%)	1.11	10 (12%)	7	8	44, 75, 121, 178	0
39	CF	76/78 (97%)	1.40	18 (23%)	2	3	88, 145, 194, 210	1 (1%)
40	AM	50/51 (98%)	1.44	8 (16%)	5	5	19, 47, 67, 81	0
40	CG	50/51 (98%)	2.31	25 (50%)	0	0	57, 87, 113, 125	0
41	AN	52/52 (100%)	0.82	6 (11%)	9	10	28, 46, 69, 104	0
41	CH	52/52 (100%)	1.13	9 (17%)	4	5	41, 62, 107, 122	1 (1%)
42	AO	25/25 (100%)	1.75	8 (32%)	1	1	38, 56, 72, 80	0
42	CI	24/25 (96%)	2.70	17 (70%)	0	0	56, 78, 94, 98	0
43	AP	103/106 (97%)	1.19	18 (17%)	4	5	28, 53, 85, 98	0
43	CJ	103/106 (97%)	1.45	29 (28%)	1	2	50, 97, 145, 170	2 (1%)

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å ²)	Q<0.9
44	AQ	91/92 (98%)	1.17	14 (15%)	5	6	24, 34, 69, 99	0
44	CK	91/92 (98%)	1.53	30 (32%)	1	1	45, 90, 107, 119	0
45	CL	107/267 (40%)	1.43	33 (30%)	1	1	71, 110, 149, 174	0
45	i	121/267 (45%)	1.65	36 (29%)	1	2	48, 87, 128, 163	0
46	B	1730/1787 (96%)	0.71	116 (6%)	24	18	17, 66, 198, 403	0
46	CM	1704/1787 (95%)	1.28	334 (19%)	3	4	37, 105, 207, 346	0
47	C	208/261 (79%)	1.20	39 (18%)	3	4	45, 84, 117, 185	0
47	CN	208/261 (79%)	1.35	42 (20%)	3	4	65, 121, 160, 180	0
48	CO	214/256 (83%)	1.48	48 (22%)	2	3	89, 136, 180, 202	0
48	D	214/256 (83%)	0.83	20 (9%)	14	13	42, 71, 101, 120	0
49	CP	216/249 (86%)	1.38	50 (23%)	2	3	52, 82, 118, 138	0
49	E	217/249 (87%)	1.21	44 (20%)	3	4	34, 57, 92, 121	0
50	CQ	223/251 (88%)	1.95	88 (39%)	1	1	92, 134, 178, 204	0
50	F	223/251 (88%)	1.66	63 (28%)	1	2	37, 80, 139, 164	0
51	CR	260/262 (99%)	1.04	36 (13%)	6	7	45, 66, 104, 145	0
51	G	259/262 (98%)	1.14	39 (15%)	5	6	35, 59, 91, 135	0
52	CS	206/225 (91%)	2.27	96 (46%)	0	0	102, 164, 185, 206	0
52	H	206/225 (91%)	1.57	55 (26%)	1	2	53, 90, 128, 172	0
53	CT	235/236 (99%)	1.50	65 (27%)	1	2	53, 94, 124, 154	0
53	I	226/236 (95%)	1.18	41 (18%)	3	4	50, 84, 136, 181	0
54	CU	182/186 (97%)	1.59	54 (29%)	1	2	66, 125, 174, 199	0
54	J	185/186 (99%)	1.47	52 (28%)	1	2	40, 90, 142, 231	0
55	CV	203/206 (98%)	1.82	71 (34%)	1	1	48, 76, 131, 154	0
55	K	203/206 (98%)	0.86	16 (7%)	18	15	35, 54, 120, 151	0
56	CW	178/189 (94%)	1.78	59 (33%)	1	1	58, 90, 119, 148	0
56	L	178/189 (94%)	1.60	50 (28%)	1	2	41, 70, 102, 120	0
57	CX	93/118 (78%)	1.37	23 (24%)	2	3	107, 157, 193, 218	0
57	M	98/118 (83%)	1.33	20 (20%)	3	4	52, 91, 129, 176	0
58	CY	141/155 (90%)	1.71	50 (35%)	1	1	27, 60, 102, 155	0
58	N	144/155 (92%)	0.93	13 (9%)	15	13	24, 47, 102, 133	0
59	CZ	116/143 (81%)	1.13	13 (11%)	10	10	156, 200, 230, 249	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å ²)	Q<0.9
59	O	116/143 (81%)	1.27	20 (17%)	4	5	112, 154, 189, 202	0
60	DA	150/151 (99%)	2.08	72 (48%)	0	0	62, 104, 129, 143	0
60	P	150/151 (99%)	1.09	19 (12%)	8	8	26, 56, 73, 88	0
61	DB	127/132 (96%)	1.80	45 (35%)	1	1	78, 141, 165, 191	0
61	Q	127/132 (96%)	0.95	14 (11%)	10	10	23, 61, 90, 99	0
62	DC	118/142 (83%)	2.44	70 (59%)	0	0	94, 148, 166, 189	0
62	R	129/142 (90%)	1.54	38 (29%)	1	2	40, 85, 140, 173	0
63	DD	140/142 (98%)	2.93	87 (62%)	0	0	111, 156, 187, 203	0
63	S	139/142 (97%)	1.60	39 (28%)	1	2	48, 93, 127, 139	0
64	DE	125/137 (91%)	1.66	38 (30%)	1	1	94, 136, 170, 193	0
64	T	123/137 (89%)	1.65	42 (34%)	1	1	58, 99, 146, 158	0
65	DF	142/145 (97%)	2.49	85 (59%)	0	0	100, 145, 184, 200	0
65	U	144/145 (99%)	1.34	36 (25%)	2	3	41, 75, 111, 159	0
66	DG	141/145 (97%)	2.39	81 (57%)	0	0	116, 155, 177, 210	0
66	V	139/145 (95%)	1.46	33 (23%)	2	3	58, 92, 129, 143	0
67	DH	100/119 (84%)	2.62	47 (47%)	0	0	101, 140, 166, 184	0
67	W	102/119 (85%)	1.79	34 (33%)	1	1	39, 94, 139, 153	0
68	DI	87/87 (100%)	1.22	16 (18%)	3	4	60, 94, 129, 173	0
68	X	87/87 (100%)	0.86	7 (8%)	18	15	35, 71, 109, 130	0
69	DJ	129/130 (99%)	1.53	38 (29%)	1	2	49, 75, 95, 104	0
69	Y	129/130 (99%)	1.33	23 (17%)	4	4	28, 51, 69, 78	0
70	DK	143/145 (98%)	1.91	55 (38%)	1	1	40, 69, 104, 112	0
70	Z	143/145 (98%)	1.18	25 (17%)	4	5	30, 52, 73, 121	0
71	DL	132/135 (97%)	1.08	13 (9%)	13	12	63, 90, 119, 131	0
71	a	134/135 (99%)	1.14	23 (17%)	4	5	52, 79, 114, 136	0
72	DM	72/105 (68%)	1.64	23 (31%)	1	1	138, 173, 196, 208	0
72	b	71/105 (67%)	0.86	4 (5%)	30	22	73, 96, 137, 151	0
73	DN	97/119 (81%)	2.08	43 (44%)	0	0	62, 104, 154, 168	0
73	c	98/119 (82%)	1.51	28 (28%)	1	2	33, 55, 107, 119	0
74	DO	81/82 (98%)	1.68	23 (28%)	1	2	70, 113, 149, 174	0
74	d	81/82 (98%)	1.03	9 (11%)	10	10	43, 64, 130, 161	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å ²)	Q<0.9
75	DP	62/67 (92%)	1.43	15 (24%)	2	3	120, 160, 182, 199	0
75	e	62/67 (92%)	1.45	15 (24%)	2	3	77, 100, 125, 139	0
76	DQ	55/56 (98%)	2.40	29 (52%)	0	0	106, 131, 173, 202	0
76	f	55/56 (98%)	1.74	19 (34%)	1	1	48, 66, 94, 118	0
77	DR	56/63 (88%)	1.85	23 (41%)	0	0	76, 103, 164, 198	0
77	g	60/63 (95%)	1.30	15 (25%)	2	3	51, 81, 136, 166	0
78	DS	70/193 (36%)	1.65	20 (28%)	1	2	131, 203, 236, 256	0
78	h	70/193 (36%)	1.49	21 (30%)	1	2	94, 130, 155, 171	0
79	AR	310/317 (97%)	1.42	67 (21%)	2	4	75, 132, 174, 198	0
79	DT	311/317 (98%)	1.64	87 (27%)	1	2	136, 182, 213, 224	0
80	l1	217/217 (100%)	0.95	24 (11%)	10	10	94, 150, 201, 233	0
81	12	14/165 (8%)	1.08	3 (21%)	2	4	129, 177, 198, 221	0
All	All	32865/35508 (92%)	1.30	6952 (21%)	2	4	13, 78, 169, 403	16 (0%)

All (6952) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
67	DH	79	ASP	18.2
52	H	152	SER	17.8
35	CB	64	GLN	13.2
46	CM	726	C	12.1
7	AZ	49	TYR	11.9
63	DD	127	LYS	11.5
67	DH	80	ALA	11.3
63	DD	137	PHE	11.2
33	BZ	125	GLY	11.2
20	BM	16	GLY	11.2
35	CB	34	HIS	11.0
65	DF	100	VAL	10.9
63	DD	130	GLY	10.8
7	AZ	150	LEU	10.5
1	AS	219	G	10.4
4	AW	47	GLN	10.3
36	CC	96	GLU	10.3
7	AZ	47	PRO	10.2
52	CS	112	ARG	10.1
67	DH	65	THR	10.0
16	BI	149	ASN	9.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
67	DH	63	LYS	9.3
63	DD	133	ALA	9.2
20	BM	51	VAL	9.1
63	DD	129	GLY	9.0
46	CM	1270	U	8.9
63	DD	131	ARG	8.8
67	DH	61	VAL	8.7
10	BC	62	GLN	8.7
62	DC	119	PHE	8.5
46	CM	1404	G	8.4
14	BG	21	ARG	8.4
35	CB	21	LYS	8.3
49	CP	191	VAL	8.2
35	CB	22	VAL	8.2
20	BM	67	LYS	8.1
60	DA	65	VAL	8.1
15	u	130	LYS	8.1
46	CM	1590	U	8.1
73	DN	14	GLY	8.1
5	AX	4	ARG	8.0
35	CB	38	ALA	8.0
5	AX	263	THR	8.0
40	CG	11	GLN	7.9
30	BW	31	SER	7.9
52	CS	152	SER	7.9
14	BG	2	ALA	7.9
45	i	36	SER	7.9
63	DD	134	ARG	7.9
10	BC	144	ILE	7.9
61	DB	12	ALA	7.9
46	CM	1571	G	7.8
13	BF	143	ARG	7.8
26	BS	50	SER	7.8
63	DD	126	LYS	7.8
7	AZ	46	SER	7.7
10	BC	66	LEU	7.7
53	I	83	CYS	7.6
14	BG	169	TYR	7.6
67	DH	66	THR	7.6
3	AU	91	C	7.5
67	DH	28	THR	7.5
16	BI	137	PRO	7.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
45	i	64	LEU	7.4
65	DF	101	LEU	7.4
36	CC	78	LYS	7.4
36	CC	80	LEU	7.3
20	BM	45	TYR	7.3
10	BC	65	ILE	7.2
46	CM	258	U	7.2
52	CS	106	LYS	7.2
35	CB	30	LEU	7.2
60	P	7	SER	7.2
22	BO	34	TYR	7.2
6	AY	70	ARG	7.2
3	AU	100	U	7.1
16	BI	184	LYS	7.1
35	CB	36[A]	LYS	7.1
46	CM	727	U	7.1
67	DH	81	TYR	7.1
55	CV	79	ALA	7.1
52	CS	70	VAL	7.1
63	DD	128	PHE	7.1
4	AW	229	ALA	7.0
66	DG	62	ALA	7.0
67	DH	78	TRP	7.0
36	CC	90	ARG	7.0
16	BI	108	ARG	6.9
52	H	150	GLY	6.9
50	F	205	ASP	6.9
14	BG	20	GLU	6.9
6	AY	197	GLY	6.9
5	AX	236	LYS	6.9
52	CS	113	ILE	6.9
15	u	131	ALA	6.9
56	CW	104	PHE	6.8
30	AC	31	SER	6.8
5	AX	12	GLY	6.8
66	DG	92	LYS	6.8
70	DK	85	ALA	6.7
14	BG	17	HIS	6.7
63	DD	136	ARG	6.7
63	DD	141	TYR	6.7
27	BT	79	ALA	6.7
35	CB	35	VAL	6.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
16	BI	45	PRO	6.7
37	CD	8	ALA	6.7
6	AY	189	ARG	6.7
4	AW	48	ILE	6.7
14	BG	149	VAL	6.7
56	CW	62	ARG	6.7
6	AY	202	GLN	6.6
50	CQ	185	ILE	6.6
10	BC	199	ALA	6.6
7	AZ	55	PHE	6.6
10	BC	163	LEU	6.6
16	BI	28	TRP	6.6
7	AZ	38	THR	6.6
1	AS	1862	C	6.6
16	BI	144	ARG	6.6
16	BI	191	TRP	6.6
16	BI	146	ALA	6.5
35	AH	36	LYS	6.5
63	DD	132	GLY	6.5
7	AZ	39	GLN	6.5
53	CT	79	LYS	6.5
3	AU	21	C	6.5
29	BV	68	PHE	6.5
1	AS	1021	A	6.5
22	BO	72	VAL	6.5
15	BH	112	GLN	6.5
29	BV	109	TYR	6.4
46	CM	697	U	6.4
70	DK	21	ASN	6.4
1	AS	826	A	6.4
1	AS	146	U	6.4
54	CU	21	PHE	6.4
16	BI	171	SER	6.4
35	CB	61	GLN	6.3
10	BC	68	LEU	6.3
20	BM	12	ALA	6.3
8	BA	139	LYS	6.3
72	DM	97	LYS	6.3
4	AW	246	LEU	6.3
22	BO	32	LYS	6.3
54	J	180	GLU	6.3
60	DA	5	HIS	6.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
27	9	45	VAL	6.3
45	i	33	ASN	6.3
6	l	353	SER	6.3
30	AC	33	LYS	6.2
50	F	186	LYS	6.2
28	BU	91	SER	6.2
6	AY	188	LEU	6.2
20	BM	14	VAL	6.2
33	BZ	17[A]	LYS	6.2
78	DS	128	THR	6.2
8	BA	136	ALA	6.2
22	BO	86	GLU	6.2
9	BB	98	ARG	6.2
52	H	151	SER	6.2
15	u	128	LEU	6.2
19	BL	71	LEU	6.2
29	BV	111	LYS	6.2
63	S	104	LEU	6.2
67	DH	60	LYS	6.2
1	AS	2396	G	6.2
73	DN	90	THR	6.2
1	AS	1612	U	6.2
1	AS	402	A	6.2
20	BM	19	LYS	6.2
36	CC	84	LYS	6.1
7	m	92	LEU	6.1
46	CM	1184	G	6.1
52	CS	79	SER	6.1
22	BO	94	GLU	6.1
56	CW	14	VAL	6.1
34	CA	83	ALA	6.1
63	DD	125	PRO	6.1
6	l	197	GLY	6.1
16	BI	107	GLY	6.1
52	CS	109	LYS	6.1
7	AZ	42	ALA	6.1
30	AC	32	LEU	6.1
29	BV	72	GLU	6.0
79	DT	257	ILE	6.0
46	CM	725	A	6.0
18	BK	125	GLN	6.0
16	BI	136	ASP	6.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
50	CQ	186	LYS	6.0
61	DB	112	ASP	6.0
19	BL	169	GLY	6.0
26	BS	123	TYR	6.0
65	DF	121	SER	6.0
6	AY	48	ARG	6.0
6	AY	237	LEU	6.0
14	BG	54	LEU	6.0
21	BN	156	VAL	6.0
65	DF	4	VAL	6.0
67	W	81	TYR	6.0
20	BM	73	GLY	5.9
37	CD	9	GLY	5.9
6	AY	55	GLU	5.9
77	DR	39	LEU	5.9
1	AS	1825	A	5.9
51	G	24	SER	5.9
36	CC	9	LEU	5.9
45	CL	60	ASN	5.9
35	AH	34	HIS	5.9
52	CS	71	SER	5.9
46	B	1673	U	5.8
63	DD	43	LEU	5.8
65	DF	5	VAL	5.8
46	CM	1137	A	5.8
50	F	162	GLY	5.8
35	CB	3	GLN	5.8
58	N	97	TYR	5.8
28	BU	82	PRO	5.8
67	DH	64	ILE	5.8
43	CJ	51	GLY	5.8
65	DF	123	ARG	5.8
16	BI	155	VAL	5.8
1	AS	1849	U	5.8
66	DG	91	HIS	5.8
62	DC	117	GLY	5.8
6	I	55	GLU	5.7
22	BO	15	PHE	5.7
4	AW	245	LEU	5.7
5	AX	47	LEU	5.7
67	DH	62	LEU	5.7
52	CS	130	ILE	5.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
7	AZ	26	GLY	5.7
10	BC	236	GLY	5.7
1	AS	1478	A	5.7
20	BM	87	ALA	5.7
35	CB	14	ASN	5.7
36	CC	68	ALA	5.7
8	n	51	VAL	5.7
27	BT	25	VAL	5.7
10	BC	153	LEU	5.7
25	BR	28	ILE	5.7
56	L	45	ILE	5.7
73	c	90	THR	5.7
24	BQ	55	GLY	5.7
47	C	127	ARG	5.7
6	l	107	TRP	5.7
7	AZ	78	ALA	5.7
5	AX	25	GLN	5.7
46	CM	989	U	5.7
46	CM	1144	C	5.7
7	AZ	92	LEU	5.7
36	CC	92	LEU	5.7
6	AY	200	PHE	5.7
22	BO	91	LEU	5.7
62	R	127	ARG	5.7
4	AW	78	ALA	5.7
5	AX	335	VAL	5.7
14	BG	10	LEU	5.7
67	DH	76	LYS	5.6
19	BL	68	SER	5.6
6	AY	175	ALA	5.6
24	BQ	54	ALA	5.6
1	AS	2079	C	5.6
65	DF	74	GLN	5.6
38	CE	73	ARG	5.6
37	CD	7	ALA	5.6
64	T	47	ARG	5.6
6	l	363	ASN	5.6
29	BV	110	GLY	5.6
52	H	79	SER	5.6
6	AY	199	ARG	5.6
38	CE	78	PHE	5.6
18	BK	42	GLU	5.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
57	M	11	ILE	5.6
17	BJ	49	PHE	5.6
21	BN	143	PHE	5.6
22	BO	160	ILE	5.6
70	DK	39	LYS	5.5
36	AI	80	LEU	5.5
56	CW	49	LEU	5.5
70	Z	32	ARG	5.5
4	AW	228	GLY	5.5
35	CB	24	LYS	5.5
19	BL	67	ILE	5.5
1	AS	1851	U	5.5
61	DB	116	VAL	5.5
52	CS	76	LYS	5.5
32	BY	95	VAL	5.5
46	B	1725	U	5.5
79	DT	32	LEU	5.5
50	CQ	202	ALA	5.5
4	AW	248	GLY	5.5
33	BZ	123	PRO	5.5
54	J	179	PHE	5.5
22	BO	30	TYR	5.5
7	m	289	LYS	5.5
10	BC	198	VAL	5.5
38	CE	10	LYS	5.5
35	CB	33	GLN	5.5
20	BM	83	GLY	5.5
1	AS	2847	U	5.5
10	BC	70	LEU	5.4
36	CC	88	LEU	5.4
54	J	125	LEU	5.4
1	AS	2382	A	5.4
26	BS	122	ALA	5.4
18	BK	144	SER	5.4
63	DD	40	PRO	5.4
50	F	188	LYS	5.4
74	DO	7	LEU	5.4
46	CM	1581	G	5.4
60	DA	144	ALA	5.4
22	BO	37	GLY	5.4
29	BV	71	PRO	5.4
17	BJ	100	LEU	5.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
20	BM	17	VAL	5.4
45	i	43	PRO	5.4
48	CO	140	ILE	5.4
49	CP	173	ILE	5.4
49	E	80	SER	5.4
53	CT	196	LYS	5.4
56	CW	93	LEU	5.4
36	CC	57	VAL	5.4
46	CM	1453	C	5.4
66	DG	113	VAL	5.4
42	CI	1	MET	5.4
79	DT	17	ASN	5.4
7	m	201	GLY	5.4
18	x	172	GLN	5.4
11	BD	113	GLU	5.4
50	CQ	188	LYS	5.4
50	CQ	12	LEU	5.3
40	CG	37	TYR	5.3
29	BV	127	ALA	5.3
54	J	130	GLU	5.3
48	CO	86	LEU	5.3
26	BS	90	SER	5.3
16	BI	167	ALA	5.3
47	C	97	ALA	5.3
16	BI	193	LYS	5.3
52	CS	28	THR	5.3
22	2	160	ILE	5.3
79	DT	167	ILE	5.3
80	l1	67	ILE	5.3
9	BB	132	VAL	5.3
1	AS	775	G	5.3
1	AS	1852	C	5.3
3	AU	118	C	5.3
66	DG	27	LYS	5.3
1	1	1934	U	5.3
63	S	42	ILE	5.3
38	CE	13	ASN	5.3
16	BI	143	ARG	5.3
14	BG	96	SER	5.3
49	CP	78	ILE	5.3
52	H	153	GLY	5.3
36	CC	55	LEU	5.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
14	BG	89	TYR	5.3
66	DG	135	ILE	5.3
35	CB	57	LEU	5.2
6	AY	201	THR	5.2
17	BJ	122	PRO	5.2
70	DK	27	GLN	5.2
4	AW	247	ARG	5.2
5	AX	73	VAL	5.2
50	F	166	ARG	5.2
16	BI	195	ASN	5.2
29	BV	74	ASN	5.2
35	CB	7	TYR	5.2
62	R	124	THR	5.2
9	BB	102	GLN	5.2
9	BB	131	TYR	5.2
58	CY	97	TYR	5.2
52	CS	116	HIS	5.2
36	CC	98	SER	5.2
79	DT	166	VAL	5.2
28	BU	44	ALA	5.2
11	BD	92	PHE	5.2
33	AF	97	ILE	5.2
54	J	165	PHE	5.2
16	BI	30	TYR	5.2
32	BY	26	LYS	5.2
46	CM	1570	A	5.2
79	AR	100	THR	5.2
10	BC	67	SER	5.2
26	BS	88	ILE	5.2
53	I	79	LYS	5.2
10	BC	141	VAL	5.2
14	BG	63	VAL	5.2
20	BM	25	ASP	5.2
55	CV	103	GLN	5.2
17	BJ	98	ALA	5.2
63	DD	42	ILE	5.1
30	BW	33	LYS	5.1
79	DT	258	LYS	5.1
4	AW	7	ASN	5.1
5	AX	27	GLY	5.1
7	AZ	68	HIS	5.1
22	2	81	GLY	5.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
38	CE	69	HIS	5.1
8	BA	51	VAL	5.1
1	AS	827	G	5.1
36	CC	18	GLU	5.1
18	x	14	SER	5.1
1	AS	1557	U	5.1
6	AY	186	LYS	5.1
20	BM	70	LYS	5.1
16	BI	153	ASN	5.1
54	J	169	TYR	5.1
1	1	2185	A	5.1
1	AS	240	C	5.1
8	n	1	MET	5.1
50	F	165	THR	5.1
79	AR	250	ALA	5.1
35	CB	19	LYS	5.1
36	CC	83	LYS	5.1
29	BV	75	LEU	5.1
4	j	199	THR	5.1
29	BV	73	ILE	5.1
56	CW	58	ASP	5.1
54	CU	118	HIS	5.1
79	AR	80	TYR	5.1
4	AW	184	ARG	5.1
10	BC	149	ALA	5.1
10	BC	197	ALA	5.1
16	BI	103	GLU	5.1
33	BZ	53	GLN	5.1
36	CC	113	GLN	5.1
55	CV	20	GLN	5.1
55	CV	97	THR	5.1
67	DH	77	THR	5.1
22	BO	84	TYR	5.1
4	AW	234	LYS	5.1
7	AZ	143	LYS	5.1
76	DQ	54	LYS	5.1
50	CQ	203	LEU	5.1
14	BG	51	ILE	5.0
56	CW	45	ILE	5.0
79	DT	233	ALA	5.0
14	BG	102	GLN	5.0
46	CM	1348	U	5.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
62	DC	14	GLN	5.0
61	Q	112	ASP	5.0
50	CQ	40	VAL	5.0
46	B	725	A	5.0
35	CB	20	ILE	5.0
56	CW	56	ALA	5.0
19	y	159	LYS	5.0
62	DC	36	LEU	5.0
70	DK	33	LEU	5.0
37	CD	82	ALA	5.0
36	CC	102	GLU	5.0
62	DC	118	GLU	5.0
16	BI	132	VAL	5.0
48	CO	152	LYS	5.0
16	BI	179	LEU	5.0
60	DA	72	LEU	5.0
65	DF	116	LEU	5.0
1	AS	2080	U	5.0
3	AU	38	U	5.0
31	BX	46	ILE	5.0
26	BS	132	ALA	5.0
61	DB	85	LYS	5.0
1	1	1021	A	5.0
14	BG	77	LEU	5.0
7	AZ	66	SER	5.0
45	i	42	ALA	5.0
17	w	8	VAL	5.0
19	BL	145	ASN	5.0
6	l	64	GLU	5.0
29	BV	65	GLN	5.0
16	BI	76	PRO	4.9
47	C	144	ILE	4.9
7	AZ	198	TYR	4.9
10	BC	200	ALA	4.9
46	B	726	C	4.9
14	BG	4	SER	4.9
44	CK	28	LYS	4.9
15	u	119	GLN	4.9
37	AJ	65	GLU	4.9
46	B	1270	U	4.9
46	CM	1320	U	4.9
46	CM	1615	U	4.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
4	AW	2	GLY	4.9
53	CT	89	THR	4.9
79	DT	271	LEU	4.9
50	F	185	ILE	4.9
6	AY	109	ARG	4.9
67	W	63	LYS	4.9
78	DS	123	LYS	4.9
37	CD	65	GLU	4.9
26	8	62	ILE	4.9
40	CG	35	ILE	4.9
46	B	1359	U	4.9
29	BV	67	HIS	4.9
35	CB	9	ARG	4.9
79	DT	76	ALA	4.9
63	DD	119	ASP	4.9
62	DC	116	LEU	4.9
63	S	56	LEU	4.9
50	CQ	165	THR	4.9
14	BG	93	ILE	4.9
19	BL	81	ILE	4.9
15	BH	117	LYS	4.9
7	AZ	141	PRO	4.9
16	BI	109	ARG	4.9
46	CM	1592	G	4.9
1	1	2090	U	4.9
46	B	1348	U	4.9
65	DF	127	HIS	4.9
50	CQ	17	VAL	4.9
79	DT	34	LEU	4.9
17	w	133	GLY	4.9
49	CP	210	PHE	4.9
35	AH	57	LEU	4.9
71	a	135	ASP	4.9
52	CS	104	ASN	4.8
10	BC	166	PHE	4.8
50	CQ	13	VAL	4.8
18	BK	41	LEU	4.8
61	DB	77	LYS	4.8
5	AX	252	ILE	4.8
4	AW	249	THR	4.8
35	CB	39	ALA	4.8
52	CS	191	ALA	4.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
50	F	73	LEU	4.8
63	DD	47	VAL	4.8
36	CC	70	TYR	4.8
22	BO	76	ILE	4.8
55	CV	38	ILE	4.8
7	AZ	145	PHE	4.8
66	V	118	PRO	4.8
78	DS	130	PRO	4.8
31	BX	25	TYR	4.8
16	BI	187	ARG	4.8
35	CB	60	ARG	4.8
46	CM	701	G	4.8
46	CM	1672	G	4.8
52	CS	177	ILE	4.8
16	BI	57	GLN	4.8
47	CN	74	ALA	4.8
45	i	35	SER	4.8
73	DN	2	PRO	4.8
6	AY	187	LYS	4.8
1	1	1552	C	4.8
16	BI	53	TYR	4.8
7	AZ	201	GLY	4.8
74	d	15	GLU	4.8
7	AZ	63	GLN	4.8
46	B	1135	G	4.8
49	E	108	LEU	4.8
53	CT	76	LEU	4.8
61	Q	119	ASP	4.8
6	AY	45	LYS	4.8
18	BK	23	ARG	4.8
30	BW	14[A]	ARG	4.8
16	BI	175	ASN	4.7
4	AW	232	GLY	4.7
4	AW	58	LEU	4.7
6	AY	66	TRP	4.7
14	BG	24	VAL	4.7
66	DG	73	VAL	4.7
31	BX	96	ASP	4.7
22	2	86	GLU	4.7
42	AO	19	LYS	4.7
20	BM	88	ARG	4.7
28	BU	14	VAL	4.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
46	CM	694	C	4.7
46	CM	1297	A	4.7
46	CM	1323	C	4.7
33	BZ	97	ILE	4.7
26	BS	111	ASN	4.7
4	AW	156	LYS	4.7
16	BI	22	LEU	4.7
23	BP	28	PHE	4.7
30	BW	32	LEU	4.7
56	L	49	LEU	4.7
7	AZ	82	GLU	4.7
8	n	4	VAL	4.7
61	DB	11	VAL	4.7
61	DB	86	THR	4.7
1	1	1091	U	4.7
11	BD	179	ILE	4.7
60	DA	53	ILE	4.7
10	BC	56	TYR	4.7
40	CG	34	LYS	4.7
7	AZ	236	VAL	4.7
16	BI	121	VAL	4.7
65	DF	46	VAL	4.7
77	g	4	VAL	4.7
5	AX	233	TRP	4.7
27	BT	10	SER	4.7
45	CL	64	LEU	4.7
52	CS	102	ARG	4.7
74	DO	24	LEU	4.7
66	V	62	ALA	4.7
64	DE	4	VAL	4.7
49	E	64	ILE	4.6
8	BA	42	LEU	4.6
72	DM	75	LEU	4.6
51	G	13	ALA	4.6
56	CW	47	PHE	4.6
46	CM	719	A	4.6
56	CW	51	LYS	4.6
65	DF	56	LYS	4.6
35	CB	6	THR	4.6
6	AY	176	HIS	4.6
26	BS	108	LEU	4.6
64	DE	24	LEU	4.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
79	AR	249	LEU	4.6
12	r	114	GLY	4.6
12	r	147	VAL	4.6
19	BL	30	VAL	4.6
19	BL	172	PHE	4.6
21	BN	97	VAL	4.6
49	E	210	PHE	4.6
50	F	130	ALA	4.6
76	DQ	43	PHE	4.6
16	BI	198	SER	4.6
63	DD	124	GLU	4.6
34	AG	30	ILE	4.6
60	DA	84	ILE	4.6
62	DC	84	ILE	4.6
69	DJ	35	ILE	4.6
49	E	79	ARG	4.6
19	y	52	LEU	4.6
56	L	36	LEU	4.6
1	AS	1415	A	4.6
8	BA	176	PHE	4.6
73	DN	86	VAL	4.6
35	CB	62	TYR	4.6
66	DG	18	TYR	4.6
10	p	67	SER	4.6
26	BS	89	LYS	4.6
20	BM	50	ILE	4.6
35	CB	18	ASN	4.6
50	CQ	10	LYS	4.6
53	I	164	LYS	4.6
17	BJ	123	GLN	4.6
54	CU	64	GLN	4.6
76	DQ	56	ARG	4.6
10	BC	201	LEU	4.6
49	CP	206	LEU	4.6
7	AZ	65	VAL	4.6
27	BT	45	VAL	4.6
28	AA	95	ALA	4.6
62	DC	76	VAL	4.6
67	DH	68	LYS	4.6
1	1	1197	C	4.6
16	BI	43	SER	4.6
46	CM	1398	G	4.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
50	F	159	ILE	4.6
63	DD	84	ILE	4.6
66	DG	118	PRO	4.6
79	DT	168	SER	4.6
56	L	128	LEU	4.6
17	BJ	133	GLY	4.6
35	CB	15	THR	4.6
79	AR	101	THR	4.6
36	CC	66	VAL	4.6
22	BO	56	TYR	4.5
46	CM	1569	U	4.5
8	BA	130	ILE	4.5
19	BL	166	LEU	4.5
1	1	2091	A	4.5
44	AQ	15	GLY	4.5
16	BI	3	ALA	4.5
79	AR	137	THR	4.5
29	BV	27	LYS	4.5
73	c	4	LYS	4.5
80	ll	183	ILE	4.5
16	BI	32	GLN	4.5
17	BJ	48	PHE	4.5
50	F	17	VAL	4.5
29	BV	149	ALA	4.5
3	AU	99	C	4.5
36	CC	108	ARG	4.5
66	DG	36	ILE	4.5
10	p	168	PRO	4.5
14	BG	48	PRO	4.5
14	BG	116	LEU	4.5
33	BZ	86	LEU	4.5
50	F	12	LEU	4.5
50	CQ	73	LEU	4.5
55	CV	185	CYS	4.5
14	BG	133	SER	4.5
46	B	778	U	4.5
46	CM	1399	U	4.5
15	u	117	LYS	4.5
27	9	125	LYS	4.5
44	AQ	6	LYS	4.5
49	CP	178	VAL	4.5
62	DC	112	VAL	4.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
68	DI	5	LYS	4.5
72	DM	92	VAL	4.5
55	CV	63	GLY	4.5
46	CM	1471	C	4.5
56	CW	101	PRO	4.5
33	BZ	78	LYS	4.5
52	H	109	LYS	4.5
10	BC	165	VAL	4.5
16	BI	115	VAL	4.5
36	AI	66	VAL	4.5
79	DT	309	VAL	4.5
6	AY	50	ALA	4.5
6	AY	353	SER	4.5
6	AY	44	ASN	4.5
54	CU	143	ASN	4.5
58	CY	98	ASN	4.5
4	AW	211	HIS	4.5
10	BC	161	ILE	4.5
23	BP	87	LEU	4.5
56	CW	36	LEU	4.5
32	AE	26	LYS	4.5
34	CA	86[A]	LYS	4.5
45	i	65	LYS	4.5
6	AY	143	VAL	4.5
14	BG	135	VAL	4.5
7	AZ	59	ASP	4.4
16	BI	189	HIS	4.4
60	DA	135	LEU	4.4
80	ll	34	LEU	4.4
14	BG	42	LYS	4.4
16	BI	56	LYS	4.4
34	CA	57	LYS	4.4
18	BK	128	ARG	4.4
35	CB	23	VAL	4.4
27	BT	78	PHE	4.4
55	CV	173	ALA	4.4
22	BO	31	LEU	4.4
27	BT	30	LEU	4.4
29	BV	113	LEU	4.4
49	E	235	LEU	4.4
58	CY	5	LEU	4.4
7	AZ	76	THR	4.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
52	H	154	THR	4.4
46	CM	1514	C	4.4
77	g	30	PRO	4.4
16	BI	26	ARG	4.4
63	DD	122	ARG	4.4
15	BH	13	VAL	4.4
55	CV	197	PHE	4.4
79	AR	260	PHE	4.4
4	j	248	GLY	4.4
45	i	62	ALA	4.4
61	DB	125	GLY	4.4
58	CY	131	ILE	4.4
60	DA	139	TRP	4.4
10	BC	151	LEU	4.4
27	BT	48	LEU	4.4
52	CS	174	LEU	4.4
60	DA	149	LEU	4.4
40	CG	9	THR	4.4
62	DC	124	THR	4.4
67	W	68	LYS	4.4
9	BB	134	TYR	4.4
16	BI	24	ARG	4.4
31	AD	70	TYR	4.4
46	CM	1618	A	4.4
46	CM	1318	C	4.4
28	AA	103	GLU	4.4
7	AZ	62	ALA	4.4
52	CS	74	ALA	4.4
25	BR	84	GLY	4.4
70	Z	2	GLY	4.4
5	AX	43	LEU	4.4
19	BL	152	HIS	4.4
5	k	240	ARG	4.4
36	CC	114	ARG	4.4
22	BO	7	TYR	4.4
8	BA	80	ALA	4.4
1	AS	1584	A	4.4
27	BT	50	ILE	4.4
3	AU	101	U	4.4
46	CM	1582	U	4.4
53	CT	74	ARG	4.4
76	DQ	32	ARG	4.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
6	l	84	HIS	4.4
6	l	61	THR	4.4
66	DG	104	CYS	4.4
4	AW	194	ASN	4.4
16	BI	111	SER	4.4
75	e	21	SER	4.4
27	BT	104	VAL	4.4
75	e	15	VAL	4.4
26	BS	54	TYR	4.4
31	BX	16	LEU	4.3
46	CM	1575	G	4.3
52	CS	108	LEU	4.3
66	DG	112	GLY	4.3
34	AG	14	ILE	4.3
63	DD	67	LYS	4.3
65	U	56	LYS	4.3
15	BH	104	GLN	4.3
20	z	136	ARG	4.3
29	BV	26	ARG	4.3
38	AK	87	THR	4.3
44	CK	63	THR	4.3
66	DG	71	VAL	4.3
69	DJ	121	VAL	4.3
21	BN	172	TYR	4.3
25	BR	29	PHE	4.3
39	AL	33	ALA	4.3
26	BS	120	LYS	4.3
36	AI	88	LEU	4.3
49	E	206	LEU	4.3
80	ll	190	LEU	4.3
18	x	125	GLN	4.3
22	BO	36	VAL	4.3
53	I	153	VAL	4.3
12	r	102	MET	4.3
62	DC	109	PRO	4.3
29	BV	129	PHE	4.3
56	L	138	LYS	4.3
60	DA	7	SER	4.3
62	DC	103	ASN	4.3
76	f	55	TYR	4.3
5	AX	254	ALA	4.3
12	BE	57	LEU	4.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
52	CS	175	LEU	4.3
55	K	57	ALA	4.3
18	BK	36	ILE	4.3
22	BO	75	ILE	4.3
46	B	318	U	4.3
35	AH	64	GLN	4.3
66	DG	37	VAL	4.3
75	DP	15	VAL	4.3
5	AX	237	LYS	4.3
6	AY	248	PHE	4.3
9	BB	126	LYS	4.3
16	BI	183	THR	4.3
44	CK	6	LYS	4.3
53	CT	70	PRO	4.3
62	DC	111	MET	4.3
76	f	43	PHE	4.3
10	p	170	LEU	4.3
10	BC	170	LEU	4.3
51	G	14	ALA	4.3
52	CS	165	LEU	4.3
16	v	153	ASN	4.3
35	AH	45	GLY	4.3
60	DA	119	GLU	4.3
46	CM	1403	A	4.3
3	AU	23	U	4.3
14	BG	57	VAL	4.3
35	AH	35	VAL	4.3
35	CB	31	VAL	4.3
39	AL	6	LYS	4.3
43	AP	100	LYS	4.3
9	BB	232	PHE	4.3
77	DR	36	MET	4.3
53	CT	86	PRO	4.3
57	M	49	LEU	4.3
79	DT	28	ALA	4.3
5	AX	181	ILE	4.3
7	AZ	69	ILE	4.3
31	AD	106	ILE	4.3
57	M	53	GLY	4.3
36	AI	18	GLU	4.3
10	BC	164	VAL	4.3
19	BL	158	HIS	4.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
46	B	75	U	4.2
62	DC	89	MET	4.2
43	CJ	85	LEU	4.2
65	DF	54	LEU	4.2
51	CR	2	ALA	4.2
10	p	144	ILE	4.2
16	BI	61	ILE	4.2
22	BO	141	ILE	4.2
52	H	28	THR	4.2
5	AX	330	GLY	4.2
73	DN	16	GLY	4.2
8	n	2	SER	4.2
5	AX	132	LYS	4.2
18	BK	2	VAL	4.2
33	BZ	77	VAL	4.2
53	CT	158	VAL	4.2
10	BC	160	PRO	4.2
61	DB	34	ILE	4.2
64	T	51	ALA	4.2
79	DT	259	ILE	4.2
78	h	128	THR	4.2
4	AW	127	GLY	4.2
46	CM	1480	G	4.2
42	CI	24	SER	4.2
4	AW	4	VAL	4.2
13	BF	36	VAL	4.2
20	BM	22	VAL	4.2
8	n	3	GLN	4.2
20	BM	102	LEU	4.2
79	AR	92	LEU	4.2
79	DT	260	PHE	4.2
7	AZ	60	ILE	4.2
19	BL	139	ILE	4.2
68	DI	54	ALA	4.2
7	AZ	226	TYR	4.2
56	L	8	TYR	4.2
1	AS	1602	U	4.2
22	BO	89	VAL	4.2
79	AR	134	VAL	4.2
29	BV	66	ASN	4.2
27	BT	109	LEU	4.2
56	L	104	PHE	4.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
5	AX	262	TRP	4.2
14	BG	85	ILE	4.2
43	CJ	81	ALA	4.2
50	CQ	171	ILE	4.2
32	BY	30	LYS	4.2
45	CL	81	THR	4.2
64	DE	23	LYS	4.2
65	DF	70	VAL	4.2
65	DF	114	GLU	4.2
76	f	56	ARG	4.2
7	AZ	147	ASP	4.2
10	BC	50	PHE	4.2
5	k	51	ALA	4.2
64	DE	22	PRO	4.2
1	AS	1850	C	4.2
10	BC	150	LYS	4.2
30	BW	25	LYS	4.2
46	CM	1568	C	4.2
29	BV	48	TYR	4.2
26	BS	51	VAL	4.1
65	DF	115	ARG	4.2
31	BX	18	LEU	4.1
53	CT	156	PHE	4.1
62	DC	15	PHE	4.1
22	BO	77	ASN	4.1
40	CG	51	ILE	4.1
47	CN	144	ILE	4.1
52	H	130	ILE	4.1
10	BC	100	PRO	4.1
71	DL	99	LYS	4.1
73	c	19	LYS	4.1
1	1	1188	C	4.1
31	BX	58	LEU	4.1
14	t	20	GLU	4.1
62	R	111	MET	4.1
53	CT	50	PHE	4.1
62	DC	17	PHE	4.1
4	AW	49	ILE	4.1
80	l1	206	ILE	4.1
6	AY	111	ASN	4.1
34	AG	2	ALA	4.1
49	E	204	ASN	4.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
19	BL	156	GLY	4.1
1	AS	1859	U	4.1
22	BO	93	VAL	4.1
24	BQ	137	VAL	4.1
43	CJ	54	THR	4.1
45	i	34	THR	4.1
15	BH	128	LEU	4.1
28	BU	87	LEU	4.1
74	d	24	LEU	4.1
54	J	184	GLU	4.1
1	AS	1585	A	4.1
55	CV	109	PHE	4.1
7	AZ	61	ILE	4.1
14	t	88	LYS	4.1
40	AM	40	LYS	4.1
47	CN	50	ILE	4.1
62	DC	121	ILE	4.1
3	AU	151	C	4.1
63	DD	135	ALA	4.1
45	i	60	ASN	4.1
67	DH	75	SER	4.1
15	BH	57	LEU	4.1
22	BO	74	VAL	4.1
46	CM	700	G	4.1
64	T	34	LEU	4.1
70	DK	15	LEU	4.1
73	c	29	CYS	4.1
18	BK	70	THR	4.1
31	BX	70	TYR	4.1
1	1	1024	U	4.1
20	BM	68	GLU	4.1
8	BA	163	PHE	4.1
29	BV	63	LYS	4.1
55	K	21	PHE	4.1
73	DN	3	LYS	4.1
78	DS	131	LYS	4.1
11	BD	104	ILE	4.1
35	CB	63	ALA	4.1
73	DN	81	ALA	4.1
27	BT	81	GLN	4.1
53	CT	200	GLN	4.1
27	BT	49	PRO	4.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
16	BI	58	GLY	4.1
62	R	103	ASN	4.1
69	DJ	120	HIS	4.1
7	m	194	LEU	4.1
26	BS	57	LEU	4.1
47	C	158	VAL	4.1
66	DG	6	VAL	4.1
66	DG	9	VAL	4.1
38	CE	5	THR	4.1
48	CO	153	THR	4.1
70	DK	112	LYS	4.1
76	DQ	34	TYR	4.1
9	o	174	PHE	4.1
79	DT	299	PHE	4.1
32	BY	31	ALA	4.1
22	2	5	ARG	4.1
46	CM	1405	G	4.1
22	BO	149	GLN	4.1
46	CM	1644	U	4.1
56	CW	18	PRO	4.1
9	BB	81	LEU	4.0
52	CS	93	LEU	4.0
53	CT	75	LEU	4.0
62	R	76	VAL	4.0
76	DQ	36	LEU	4.0
10	p	261	SER	4.0
48	CO	108	ASP	4.0
55	CV	45	SER	4.0
6	AY	194	LYS	4.0
36	AI	115	LYS	4.0
16	BI	142	ILE	4.0
37	CD	60	ILE	4.0
8	BA	133	GLU	4.0
8	BA	132	ALA	4.0
16	BI	102	ALA	4.0
8	n	6	PRO	4.0
45	i	57	PRO	4.0
14	t	10	LEU	4.0
18	BK	71	GLY	4.0
22	2	91	LEU	4.0
40	CG	13	LEU	4.0
50	F	203	LEU	4.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
51	CR	44	LEU	4.0
64	DE	16	LEU	4.0
76	DQ	51	GLY	4.0
24	BQ	135	VAL	4.0
26	BS	60	HIS	4.0
28	BU	72	VAL	4.0
29	BV	82	VAL	4.0
66	DG	64	HIS	4.0
78	h	156	VAL	4.0
1	AS	32	G	4.0
36	CC	25	LYS	4.0
59	O	111	ASN	4.0
35	CB	40	SER	4.0
63	DD	123	MET	4.0
79	DT	269	ASP	4.0
7	AZ	75	PHE	4.0
31	BX	72	PHE	4.0
67	W	66	THR	4.0
10	BC	162	GLU	4.0
16	BI	161	ALA	4.0
40	AM	39	ALA	4.0
72	DM	79	ALA	4.0
1	AS	707	A	4.0
1	AS	2161	A	4.0
48	CO	110	LEU	4.0
4	AW	202	VAL	4.0
37	CD	10	VAL	4.0
37	CD	80	LYS	4.0
48	CO	68	VAL	4.0
50	F	149	LYS	4.0
52	CS	115	LYS	4.0
30	BW	1	MET	4.0
13	s	5	SER	4.0
19	BL	4	ASP	4.0
21	BN	120	SER	4.0
25	BR	7	SER	4.0
47	CN	119	ARG	4.0
59	CZ	71	ILE	4.0
65	U	68	ARG	4.0
70	DK	26	ASP	4.0
16	BI	29	GLU	4.0
16	BI	160	GLU	4.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
16	BI	185	ALA	4.0
18	BK	6	ALA	4.0
6	AY	192	LYS	4.0
29	BV	77	LYS	4.0
5	AX	310	GLY	4.0
10	BC	158	VAL	4.0
49	CP	81	VAL	4.0
59	CZ	121	VAL	4.0
64	T	9	VAL	4.0
1	AS	2943	A	4.0
6	AY	59	HIS	4.0
19	BL	178	ARG	4.0
35	CB	8	ARG	4.0
16	BI	64	ILE	4.0
16	BI	204	SER	4.0
55	CV	69	SER	4.0
4	AW	235	ALA	4.0
35	CB	43	LYS	4.0
56	L	10	LYS	4.0
60	DA	109	LYS	4.0
10	p	152	VAL	4.0
10	BC	235	GLY	4.0
1	AS	1613	G	4.0
22	BO	159	PHE	4.0
46	CM	357	A	4.0
46	CM	503	A	4.0
46	CM	1574	A	4.0
17	BJ	128	LEU	4.0
53	CT	190	LEU	4.0
35	CB	5	VAL	3.9
47	CN	143	VAL	3.9
3	AU	22	U	3.9
6	AY	87	GLY	3.9
7	m	151	GLN	3.9
46	B	779	U	3.9
27	BT	12	ARG	3.9
33	BZ	106	ARG	3.9
56	CW	6	ARG	3.9
7	AZ	40	HIS	3.9
50	F	160	HIS	3.9
4	AW	112	ILE	3.9
50	CQ	139	ILE	3.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
66	V	21	PHE	3.9
47	CN	60	ALA	3.9
18	BK	64	ASN	3.9
36	CC	106	LYS	3.9
45	i	54	LYS	3.9
8	BA	63	LEU	3.9
19	BL	26	LEU	3.9
56	CW	64	GLU	3.9
63	DD	69	THR	3.9
70	DK	93	LEU	3.9
46	CM	898	G	3.9
1	AS	239	A	3.9
1	AS	2782	C	3.9
7	m	26	GLY	3.9
9	BB	112	GLY	3.9
42	CI	12	ARG	3.9
46	B	25	C	3.9
34	CA	107	ILE	3.9
69	DJ	61	ILE	3.9
16	BI	130	PHE	3.9
47	CN	65	ALA	3.9
74	DO	13	ALA	3.9
22	BO	151	LEU	3.9
48	CO	47	LEU	3.9
50	F	177	LEU	3.9
17	BJ	188	GLU	3.9
36	AI	96	GLU	3.9
11	BD	93	VAL	3.9
70	DK	72	VAL	3.9
35	CB	16	ARG	3.9
54	J	151	ASP	3.9
69	Y	54	ASP	3.9
79	AR	77	ASP	3.9
7	AZ	151	GLN	3.9
4	AW	225	ILE	3.9
52	H	113	ILE	3.9
64	T	28	PHE	3.9
18	BK	124	LYS	3.9
64	T	7	LYS	3.9
66	V	84	LYS	3.9
73	DN	29	CYS	3.9
37	CD	71	LEU	3.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
79	AR	251	ALA	3.9
46	CM	75	U	3.9
14	BG	171	THR	3.9
59	CZ	61	VAL	3.9
32	AE	23	ASN	3.9
64	T	48	ASN	3.9
45	i	75	PRO	3.9
51	CR	254	ASP	3.9
22	BO	25	ILE	3.9
79	AR	138	ILE	3.9
57	M	52	LYS	3.9
34	CA	36	ALA	3.9
35	AH	38	ALA	3.9
56	CW	60	LEU	3.9
65	U	47	CYS	3.9
66	V	83	ALA	3.9
1	AS	1589	A	3.9
36	AI	48	ARG	3.9
46	CM	1136	A	3.9
70	Z	19	ARG	3.9
6	AY	287	VAL	3.9
11	BD	123	VAL	3.9
16	BI	148	TYR	3.9
26	BS	81	THR	3.9
72	DM	84	GLU	3.9
5	k	270	ASN	3.9
16	BI	117	ASN	3.9
52	CS	153	GLY	3.9
21	BN	158	LYS	3.9
28	BU	46	ILE	3.9
31	BX	106	ILE	3.9
35	CB	37	LYS	3.9
66	DG	116	ILE	3.9
71	DL	117	LYS	3.9
17	w	49	PHE	3.9
6	AY	247	ARG	3.8
67	DH	84	ARG	3.8
32	BY	22	VAL	3.8
64	DE	9	VAL	3.8
65	U	46	VAL	3.8
19	BL	148	GLU	3.8
7	AZ	149	GLY	3.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
9	BB	130	PRO	3.8
18	BK	43	LYS	3.8
22	2	46	GLY	3.8
29	AB	20	GLY	3.8
18	BK	136	ILE	3.8
54	J	131	ILE	3.8
36	CC	111	PHE	3.8
46	CM	695	C	3.8
1	1	1557	U	3.8
54	J	21	PHE	3.8
1	AS	2381	G	3.8
3	AU	148	G	3.8
55	CV	12	SER	3.8
69	Y	55	ASP	3.8
71	a	126	GLN	3.8
6	AY	170	LEU	3.8
15	BH	105	LEU	3.8
24	6	17	LEU	3.8
55	CV	96	LEU	3.8
55	CV	171	LEU	3.8
63	DD	51	LEU	3.8
10	BC	58	ARG	3.8
19	BL	149	ALA	3.8
35	AH	69	HIS	3.8
58	N	2	ALA	3.8
6	l	287	VAL	3.8
14	BG	124	VAL	3.8
24	6	36	VAL	3.8
10	BC	134	LYS	3.8
36	CC	64	GLU	3.8
43	CJ	29	LYS	3.8
53	I	161	GLU	3.8
19	BL	163	PRO	3.8
22	BO	46	GLY	3.8
33	AF	125	GLY	3.8
64	T	8	THR	3.8
36	CC	118	ILE	3.8
16	BI	180	PHE	3.8
28	BU	92	PHE	3.8
65	DF	78	ASN	3.8
19	y	73	GLN	3.8
56	L	93	LEU	3.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
76	f	36	LEU	3.8
1	AS	3050	A	3.8
6	AY	185	SER	3.8
42	CI	23	ARG	3.8
61	Q	123	ARG	3.8
5	AX	265	ALA	3.8
27	BT	33	ALA	3.8
27	BT	54	ASP	3.8
1	AS	28	C	3.8
46	B	502	U	3.8
46	CM	696	U	3.8
46	CM	1591	U	3.8
20	BM	93	VAL	3.8
10	BC	63	LYS	3.8
37	CD	1	MET	3.8
16	BI	104	GLU	3.8
47	CN	160	ILE	3.8
56	CW	5	PRO	3.8
63	DD	28	ILE	3.8
65	DF	81	ILE	3.8
64	DE	30	THR	3.8
67	DH	74	GLY	3.8
54	CU	165	PHE	3.8
80	ll	157	PHE	3.8
6	AY	198	ARG	3.8
40	CG	42	ARG	3.8
68	DI	8	LEU	3.8
27	9	86	GLN	3.8
55	K	79	ALA	3.8
7	AZ	167	SER	3.8
66	DG	35	ASP	3.8
22	BO	79	VAL	3.8
62	DC	94	VAL	3.8
52	CS	214	LYS	3.8
1	AS	2792	A	3.8
46	CM	1411	A	3.8
46	CM	1	U	3.8
46	CM	270	U	3.8
1	AS	1523	C	3.8
7	m	226	TYR	3.8
7	AZ	79	TYR	3.8
31	BX	94	ILE	3.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
78	DS	164	PRO	3.8
4	AW	199	THR	3.8
12	r	210	LEU	3.8
29	BV	78	LEU	3.8
52	CS	73	THR	3.8
52	CS	154	THR	3.8
55	CV	149	LEU	3.8
61	DB	114	THR	3.8
73	DN	22	ARG	3.8
1	AS	828	G	3.8
37	CD	72	ALA	3.8
79	AR	76	ALA	3.8
29	BV	112	VAL	3.8
61	DB	113	VAL	3.8
60	DA	87	ASP	3.8
66	DG	100	ILE	3.8
10	BC	145	GLU	3.8
26	BS	118	GLY	3.8
67	DH	67	ARG	3.8
5	AX	246	LEU	3.8
10	BC	47	LEU	3.8
28	BU	118	PHE	3.8
33	BZ	87	LEU	3.8
50	F	22	LEU	3.8
50	CQ	25	PHE	3.8
61	DB	132	LEU	3.8
1	AS	1861	A	3.8
1	AS	3320	U	3.8
58	CY	134	THR	3.8
3	4	21	C	3.7
3	AU	137	C	3.7
28	BU	11	ALA	3.7
32	BY	28	ALA	3.7
52	H	85	ALA	3.7
10	BC	140	VAL	3.7
17	w	51	ASN	3.7
22	BO	90	ASN	3.7
27	BT	98	ASN	3.7
28	BU	75	VAL	3.7
30	BW	5	LYS	3.7
59	O	105	GLN	3.7
32	BY	68	ASN	3.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
38	CE	20	ASN	3.7
16	BI	156	HIS	3.7
63	S	54	VAL	3.7
20	BM	96	MET	3.7
1	1	1345	G	3.7
42	CI	3	ASP	3.7
46	CM	1134	G	3.7
76	DQ	50	ILE	3.7
76	DQ	44	ARG	3.7
17	BJ	53	LEU	3.7
34	CA	7	LEU	3.7
75	DP	50	GLU	3.7
76	f	52	PHE	3.7
77	DR	30	PRO	3.7
79	AR	34	LEU	3.7
40	AM	37	TYR	3.7
7	AZ	109	ALA	3.7
27	BT	15	ALA	3.7
53	CT	187	LYS	3.7
19	y	30	VAL	3.7
43	CJ	27	GLN	3.7
46	CM	692	U	3.7
50	CQ	138	VAL	3.7
52	CS	114	VAL	3.7
46	B	1272	A	3.7
77	g	36	MET	3.7
5	AX	13	SER	3.7
6	AY	204	ARG	3.7
64	T	69	ILE	3.7
33	BZ	82	ASP	3.7
16	BI	88	GLY	3.7
18	BK	22	LEU	3.7
47	CN	87	LEU	3.7
61	DB	10	GLY	3.7
70	Z	15	LEU	3.7
75	e	66	LEU	3.7
45	i	88	PHE	3.7
17	BJ	190	GLU	3.7
50	F	204	PRO	3.7
56	CW	147	THR	3.7
75	e	14	LYS	3.7
1	AS	545	G	3.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
27	9	126	ALA	3.7
35	AH	32	ALA	3.7
70	Z	28	ALA	3.7
50	F	49	VAL	3.7
55	CV	60	VAL	3.7
57	M	42	VAL	3.7
4	j	250	GLN	3.7
11	q	104	ILE	3.7
12	r	166	ILE	3.7
49	CP	64	ILE	3.7
56	CW	52	ILE	3.7
61	DB	110	ILE	3.7
1	AS	824	A	3.7
46	B	739	A	3.7
46	B	740	A	3.7
46	CM	1322	A	3.7
54	CU	125	LEU	3.7
19	BL	155	PHE	3.7
52	CS	43	PHE	3.7
62	DC	24	ASP	3.7
14	BG	88	LYS	3.7
50	CQ	9	LYS	3.7
50	CQ	11	LYS	3.7
63	DD	13	LYS	3.7
69	Y	52	TYR	3.7
34	CA	50	ALA	3.7
64	T	6	THR	3.7
64	T	12	ALA	3.7
7	m	204	VAL	3.7
8	BA	135	VAL	3.7
64	T	45	ARG	3.7
65	DF	73	MET	3.7
65	DF	122	HIS	3.7
28	AA	25	ILE	3.7
36	CC	51	ILE	3.7
66	DG	111	ILE	3.7
1	AS	980	G	3.7
1	AS	1483	G	3.7
7	AZ	163	LEU	3.7
9	BB	103	LEU	3.7
26	BS	82	LEU	3.7
46	CM	723	G	3.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
55	K	96	LEU	3.7
64	T	16	LEU	3.7
74	DO	21	LEU	3.7
79	AR	82	LEU	3.7
27	BT	20	PHE	3.7
35	CB	12	PRO	3.7
46	CM	699	U	3.7
46	CM	1673	U	3.7
63	DD	50	PRO	3.7
10	p	149	ALA	3.7
70	Z	85	ALA	3.7
7	AZ	204	VAL	3.7
36	CC	101	THR	3.7
38	CE	70	VAL	3.7
47	C	75	VAL	3.7
59	O	66	VAL	3.7
70	DK	125	VAL	3.7
4	j	247	ARG	3.7
14	BG	25	HIS	3.7
37	AJ	60	ILE	3.7
37	CD	79	HIS	3.7
73	c	36	ILE	3.7
8	BA	62	LEU	3.7
47	CN	182	LEU	3.7
51	CR	56	LEU	3.7
6	AY	107	TRP	3.7
52	CS	84	LYS	3.7
56	CW	65	LYS	3.7
65	DF	44	ASN	3.7
6	AY	67	GLY	3.7
64	T	2	GLY	3.7
14	t	4	SER	3.6
20	z	87	ALA	3.6
22	BO	44	ALA	3.6
33	BZ	118	VAL	3.6
60	DA	57	ALA	3.6
73	DN	35	ALA	3.6
77	DR	35	TYR	3.6
1	AS	1858	U	3.6
1	AS	2366	U	3.6
46	CM	1346	U	3.6
31	BX	19	THR	3.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	AU	111	A	3.6
18	BK	114	ILE	3.6
36	CC	109	ILE	3.6
38	CE	8	LEU	3.6
46	CM	104	A	3.6
46	CM	704	A	3.6
50	F	47	LEU	3.6
52	CS	97	LEU	3.6
5	AX	5	LYS	3.6
24	BQ	66	LYS	3.6
60	DA	9	LYS	3.6
76	f	54	LYS	3.6
29	BV	79	TRP	3.6
7	AZ	94	ASN	3.6
5	k	6	TYR	3.6
22	BO	5	ARG	3.6
34	AG	98	VAL	3.6
36	AI	90	ARG	3.6
36	CC	100	GLU	3.6
48	CO	141	ALA	3.6
52	H	83	ARG	3.6
56	CW	12	TYR	3.6
69	DJ	5	SER	3.6
40	CG	32	ASP	3.6
5	k	230	THR	3.6
6	AY	245	LEU	3.6
8	n	130	ILE	3.6
18	BK	150	LEU	3.6
27	BT	99	ILE	3.6
48	D	54	LEU	3.6
50	CQ	110	LEU	3.6
73	DN	83	ILE	3.6
30	BW	3	LYS	3.6
54	J	43	LYS	3.6
78	DS	125	LYS	3.6
1	AS	2577	G	3.6
46	CM	1472	G	3.6
46	CM	1765	G	3.6
52	CS	72	HIS	3.6
76	DQ	52	PHE	3.6
5	AX	234	GLY	3.6
46	CM	1142	A	3.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
54	CU	10	PRO	3.6
5	AX	258	ALA	3.6
7	AZ	73	VAL	3.6
26	BS	83	VAL	3.6
38	CE	82	VAL	3.6
43	CJ	68	VAL	3.6
61	DB	23	VAL	3.6
4	AW	10	LYS	3.6
16	BI	51	LEU	3.6
27	BT	118	LEU	3.6
61	DB	81	THR	3.6
67	W	64	ILE	3.6
69	Y	60	LYS	3.6
72	DM	50	ILE	3.6
76	DQ	38	LEU	3.6
38	CE	30	GLN	3.6
65	DF	128	PHE	3.6
71	DL	72	PHE	3.6
1	1	2450	U	3.6
46	CM	1401	U	3.6
62	DC	91	GLY	3.6
38	CE	57	ARG	3.6
67	W	84	ARG	3.6
14	BG	97	VAL	3.6
16	BI	66	VAL	3.6
28	BU	24	VAL	3.6
29	AB	112	VAL	3.6
36	AI	2	ALA	3.6
68	DI	47	ALA	3.6
70	DK	127	VAL	3.6
1	AS	1138	G	3.6
46	CM	402	G	3.6
6	l	291	ILE	3.6
8	BA	84	ILE	3.6
16	BI	164	LEU	3.6
16	BI	176	LYS	3.6
20	BM	15	ILE	3.6
25	BR	39	LEU	3.6
51	CR	42	LEU	3.6
68	X	34	ILE	3.6
22	BO	143	THR	3.6
64	T	35	THR	3.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
9	BB	217	PHE	3.6
19	BL	154	GLY	3.6
28	BU	129	TRP	3.6
4	AW	82	VAL	3.6
14	BG	69	VAL	3.6
32	BY	97	VAL	3.6
45	i	48	PRO	3.6
62	R	94	VAL	3.6
62	DC	101	VAL	3.6
75	DP	48	VAL	3.6
1	1	1933	U	3.6
3	AU	113	U	3.6
56	L	38	ASN	3.6
58	CY	141	LYS	3.6
4	AW	219	ILE	3.6
17	w	10	ILE	3.6
18	BK	63	TYR	3.6
33	BZ	14	TYR	3.6
35	CB	94	LEU	3.6
47	C	110	TYR	3.6
52	CS	194	LEU	3.6
54	CU	95	LEU	3.6
65	DF	45	LEU	3.6
79	DT	207	LEU	3.6
36	CC	76	ILE	3.6
49	E	134	ILE	3.6
55	CV	78	ILE	3.6
4	AW	31	THR	3.6
45	i	45	SER	3.6
48	CO	46	THR	3.6
1	1	1264	G	3.5
1	AS	1848	G	3.5
46	CM	1349	G	3.5
53	I	185	GLN	3.5
16	BI	139	HIS	3.5
27	BT	100	HIS	3.5
5	k	253	GLY	3.5
5	AX	52	GLY	3.5
46	CM	1576	C	3.5
14	t	149	VAL	3.5
20	BM	57	VAL	3.5
56	L	101	PRO	3.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
56	L	119	ALA	3.5
62	DC	125	PRO	3.5
78	h	126	VAL	3.5
78	DS	144	VAL	3.5
9	o	165	ALA	3.5
19	y	103	ALA	3.5
20	z	72	ALA	3.5
79	DT	151	TRP	3.5
14	t	42	LYS	3.5
33	BZ	35	LYS	3.5
42	CI	19	LYS	3.5
63	DD	12	LYS	3.5
76	DQ	16	LYS	3.5
8	BA	174	LEU	3.5
10	p	153	LEU	3.5
16	BI	134	LEU	3.5
21	0	129	LEU	3.5
36	CC	21	LEU	3.5
58	CY	91	LEU	3.5
76	DQ	30	LEU	3.5
62	DC	90	ILE	3.5
1	AS	825	U	3.5
46	CM	356	U	3.5
65	DF	47	CYS	3.5
5	k	263	THR	3.5
19	BL	34	SER	3.5
22	BO	29	THR	3.5
29	BV	70	ARG	3.5
53	CT	87	ARG	3.5
63	S	131	ARG	3.5
57	M	41	PHE	3.5
66	DG	21	PHE	3.5
4	j	228	GLY	3.5
61	DB	126	GLY	3.5
20	BM	52	LYS	3.5
27	9	56	VAL	3.5
29	BV	115	LYS	3.5
40	AM	34	LYS	3.5
50	F	40	VAL	3.5
56	CW	96	VAL	3.5
66	DG	4	VAL	3.5
66	DG	119	LYS	3.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
71	a	27	VAL	3.5
1	AS	47	A	3.5
1	AS	369	A	3.5
16	BI	150	TRP	3.5
46	CM	1122	A	3.5
50	CQ	204	PRO	3.5
64	DE	51	ALA	3.5
66	DG	90	PRO	3.5
4	AW	71	LEU	3.5
6	AY	239	LEU	3.5
6	AY	361	LEU	3.5
31	AD	18	LEU	3.5
52	H	31	LEU	3.5
1	1	2396	G	3.5
46	B	714	G	3.5
6	l	281	ILE	3.5
7	m	290	ILE	3.5
40	CG	20	ASN	3.5
52	CS	61	TYR	3.5
64	T	53	TYR	3.5
16	BI	201	ARG	3.5
22	BO	92	ARG	3.5
21	BN	118	PHE	3.5
1	AS	310	U	3.5
17	BJ	45	SER	3.5
46	B	1644	U	3.5
46	CM	101	U	3.5
46	CM	1454	U	3.5
5	k	5	LYS	3.5
5	k	236	LYS	3.5
19	BL	161	LYS	3.5
39	CF	7	ASP	3.5
69	Y	85	ASP	3.5
78	DS	171	GLY	3.5
33	BZ	120	VAL	3.5
11	q	158	ALA	3.5
25	BR	85	ALA	3.5
47	C	74	ALA	3.5
50	F	194	ALA	3.5
52	CS	195	ALA	3.5
67	W	80	ALA	3.5
9	BB	124	LEU	3.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
10	BC	167	LEU	3.5
64	DE	57	LEU	3.5
73	DN	53	LEU	3.5
49	CP	132	ILE	3.5
50	CQ	87	ILE	3.5
67	DH	85	ILE	3.5
19	BL	179	ARG	3.5
36	AI	64	GLU	3.5
55	CV	170	ARG	3.5
75	e	49	ARG	3.5
1	AS	1542	A	3.5
26	BS	109	TYR	3.5
46	B	503	A	3.5
46	CM	1736	A	3.5
66	V	18	TYR	3.5
30	AC	11	ASN	3.5
51	G	157	ASN	3.5
52	CS	44	ASN	3.5
19	BL	96	PHE	3.5
46	CM	1567	C	3.5
46	CM	1627	C	3.5
51	CR	47	PHE	3.5
32	BY	40	THR	3.5
33	BZ	62	LYS	3.5
34	CA	87	LYS	3.5
46	CM	1452	G	3.5
56	CW	68	LYS	3.5
60	P	112	LYS	3.5
66	V	104	CYS	3.5
67	DH	69	THR	3.5
78	DS	124	LYS	3.5
4	AW	110	GLY	3.5
16	BI	135	VAL	3.5
24	BQ	22	VAL	3.5
29	BV	20	GLY	3.5
30	BW	48	HIS	3.5
50	CQ	176	VAL	3.5
54	J	158	VAL	3.5
54	J	186	HIS	3.5
55	CV	16	ALA	3.5
7	AZ	19	PRO	3.5
14	BG	80	LEU	3.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
77	DR	27	PRO	3.5
79	DT	30	PRO	3.5
28	BU	15	ARG	3.5
38	CE	24	ARG	3.5
47	C	113	ARG	3.5
22	2	94	GLU	3.5
63	DD	78	TYR	3.5
76	DQ	55	TYR	3.5
20	z	19	LYS	3.5
26	BS	117	ASN	3.5
65	DF	103	ASN	3.5
6	AY	36	VAL	3.5
6	AY	193	GLY	3.5
19	BL	64	VAL	3.5
47	CN	158	VAL	3.5
52	CS	111	VAL	3.5
53	CT	180	THR	3.5
60	DA	66	VAL	3.5
70	DK	53	VAL	3.5
77	DR	21	VAL	3.5
4	AW	209	HIS	3.5
50	CQ	63	GLN	3.5
7	AZ	146	LEU	3.5
16	BI	141	ALA	3.5
22	BO	24	ALA	3.5
50	CQ	22	LEU	3.5
62	DC	80	LEU	3.5
65	DF	18	LEU	3.5
66	DG	107	ALA	3.5
79	AR	81	ALA	3.5
79	DT	300	ALA	3.5
1	AS	1527	C	3.5
9	BB	125	ILE	3.5
10	BC	238	ILE	3.5
39	CF	5	ILE	3.5
60	DA	92	ILE	3.5
67	W	79	ASP	3.5
1	1	2453	G	3.5
46	CM	1767	G	3.5
52	H	148	ARG	3.5
78	DS	122	ARG	3.5
52	CS	91	GLU	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
53	CT	161	GLU	3.4
4	AW	63	PHE	3.4
8	n	105	PHE	3.4
16	BI	6	TYR	3.4
24	BQ	92	TYR	3.4
58	CY	53	TYR	3.4
7	AZ	173	VAL	3.4
9	o	132	VAL	3.4
16	BI	152	VAL	3.4
27	BT	56	VAL	3.4
77	DR	45	VAL	3.4
4	AW	236	GLY	3.4
16	BI	163	GLY	3.4
6	AY	238	GLN	3.4
7	AZ	195	LEU	3.4
10	BC	137	LEU	3.4
20	BM	10	LEU	3.4
21	BN	148	LEU	3.4
49	E	36	LEU	3.4
51	CR	48	LEU	3.4
65	DF	102	ALA	3.4
66	V	25	GLN	3.4
6	AY	250	ILE	3.4
19	BL	101	ILE	3.4
20	z	88	ARG	3.4
29	BV	128	ARG	3.4
32	BY	96	ILE	3.4
34	CA	30	ILE	3.4
36	CC	63	ARG	3.4
44	CK	83	ILE	3.4
52	H	71	SER	3.4
52	CS	151	SER	3.4
62	DC	107	ILE	3.4
73	c	94	ILE	3.4
1	1	709	A	3.4
1	1	1585	A	3.4
1	AS	2383	C	3.4
46	B	1726	C	3.4
58	N	43	LYS	3.4
10	p	229	GLU	3.4
62	R	106	GLU	3.4
12	BE	199	PHE	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
14	BG	138	PHE	3.4
47	C	107	PHE	3.4
53	I	27	PHE	3.4
78	DS	148	TYR	3.4
1	AS	2252	U	3.4
1	AS	2852	U	3.4
3	AU	116	G	3.4
4	AW	45	VAL	3.4
46	CM	282	G	3.4
50	F	187	VAL	3.4
16	BI	98	LEU	3.4
50	F	184	GLY	3.4
50	CQ	181	GLY	3.4
70	DK	34	LEU	3.4
79	DT	33	LEU	3.4
5	AX	44	THR	3.4
14	BG	91	ARG	3.4
20	BM	7	GLN	3.4
29	BV	17	ALA	3.4
56	CW	61	THR	3.4
66	DG	41	ALA	3.4
20	BM	100	ARG	3.4
38	CE	12	HIS	3.4
14	t	93	ILE	3.4
16	v	151	ILE	3.4
71	a	25	ILE	3.4
79	AR	58	PRO	3.4
24	BQ	112	SER	3.4
61	DB	87	LYS	3.4
53	I	166	ASP	3.4
21	BN	82	GLU	3.4
48	CO	90	GLU	3.4
53	I	156	PHE	3.4
55	CV	65	PHE	3.4
1	1	1099	A	3.4
1	AS	703	A	3.4
1	AS	1590	A	3.4
46	CM	383	A	3.4
52	H	77	TYR	3.4
52	CS	77	TYR	3.4
58	N	93	TYR	3.4
19	BL	140	VAL	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
37	CD	86	VAL	3.4
50	CQ	38	VAL	3.4
5	AX	338	LEU	3.4
9	BB	104	LEU	3.4
20	z	106	LEU	3.4
29	BV	118	LEU	3.4
30	BW	47	LEU	3.4
35	AH	30	LEU	3.4
63	DD	116	LEU	3.4
78	DS	145	LEU	3.4
1	AS	1828	C	3.4
16	BI	52	GLY	3.4
16	BI	71	ARG	3.4
19	y	183	GLY	3.4
43	AP	52	GLY	3.4
46	CM	721	C	3.4
46	CM	1578	C	3.4
46	CM	1602	C	3.4
45	i	49	ALA	3.4
55	CV	18	ARG	3.4
67	W	67	ARG	3.4
13	s	125	MET	3.4
10	p	62	GLN	3.4
16	BI	90	ASN	3.4
63	S	36	THR	3.4
50	CQ	175	HIS	3.4
70	Z	27	GLN	3.4
80	ll	120	ILE	3.4
26	BS	116	PRO	3.4
1	AS	1521	G	3.4
46	CM	1185	G	3.4
7	AZ	180	PHE	3.4
50	F	136	GLU	3.4
13	s	52	TYR	3.4
27	BT	31	LEU	3.4
50	CQ	70	LEU	3.4
63	DD	66	VAL	3.4
63	DD	77	VAL	3.4
65	DF	52	VAL	3.4
66	DG	94	VAL	3.4
66	DG	114	LEU	3.4
70	DK	102	VAL	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
74	d	21	LEU	3.4
16	BI	19	MET	3.4
22	BO	52	MET	3.4
30	BW	9	ALA	3.4
36	CC	104	ALA	3.4
56	L	35	GLY	3.4
1	AS	743	A	3.4
9	o	125	ILE	3.4
4	AW	233	GLN	3.4
5	AX	221	THR	3.4
7	AZ	48	LYS	3.4
19	y	158	HIS	3.4
26	BS	112	THR	3.4
60	DA	71	ILE	3.4
16	BI	42	PRO	3.4
20	BM	54	PRO	3.4
20	BM	82	LYS	3.4
36	CC	65	ASN	3.4
42	AO	8	LYS	3.4
50	F	33	GLN	3.4
66	V	70	GLN	3.4
76	DQ	53	ASN	3.4
1	AS	3319	U	3.4
46	B	727	U	3.4
7	m	7	PHE	3.4
57	M	27	PHE	3.4
73	DN	88	SER	3.4
4	AW	180	LEU	3.4
5	AX	336	VAL	3.4
6	l	48	ARG	3.4
27	BT	58	VAL	3.4
27	BT	82	VAL	3.4
36	AI	57	VAL	3.4
56	CW	53	ARG	3.4
58	N	94	VAL	3.4
69	DJ	6	VAL	3.4
73	c	89	ARG	3.4
46	CM	1115	G	3.4
46	CM	1431	G	3.4
6	AY	225	GLY	3.4
15	BH	49	ALA	3.4
47	CN	97	ALA	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
52	CS	210	ALA	3.4
55	CV	19	ALA	3.4
58	CY	108	ALA	3.4
63	DD	85	ALA	3.4
16	v	5	LYS	3.4
50	F	171	ILE	3.4
66	V	135	ILE	3.4
69	Y	27	ILE	3.4
5	AX	9	PRO	3.4
5	AX	139	THR	3.4
32	BY	98	PRO	3.4
53	CT	181	PRO	3.4
67	W	54	PRO	3.4
46	CM	722	A	3.3
7	AZ	142	PHE	3.3
10	BC	35	PHE	3.3
1	AS	173	C	3.3
1	AS	2848	C	3.3
4	j	184	ARG	3.3
1	AS	875	U	3.3
16	BI	60	VAL	3.3
18	BK	24	VAL	3.3
49	CP	235	LEU	3.3
46	CM	1459	U	3.3
46	CM	1770	C	3.3
52	CS	90	VAL	3.3
58	CY	142	VAL	3.3
62	DC	85	VAL	3.3
62	DC	106	GLU	3.3
63	DD	120	SER	3.3
70	DK	74	VAL	3.3
79	DT	145	LEU	3.3
9	BB	96	LYS	3.3
20	BM	63	ALA	3.3
25	7	127	LYS	3.3
41	CH	31	ALA	3.3
53	I	95	LYS	3.3
63	DD	46	LYS	3.3
63	DD	139	LYS	3.3
64	DE	58	MET	3.3
76	f	51	GLY	3.3
12	r	50	ILE	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
12	BE	165	ILE	3.3
65	U	22	ILE	3.3
65	DF	26	ILE	3.3
7	AZ	278	THR	3.3
62	DC	114	HIS	3.3
65	U	74	GLN	3.3
52	CS	169	ASN	3.3
71	a	72	PHE	3.3
5	k	47	LEU	3.3
6	AY	72	VAL	3.3
7	AZ	52	VAL	3.3
10	BC	57	VAL	3.3
29	AB	113	LEU	3.3
36	CC	54	VAL	3.3
48	CO	225	LEU	3.3
54	J	149	LEU	3.3
6	AY	64	GLU	3.3
1	AS	1824	A	3.3
5	k	172	SER	3.3
8	BA	65	SER	3.3
14	t	45	LYS	3.3
22	2	70	SER	3.3
22	BO	55	LYS	3.3
27	BT	63	LYS	3.3
34	AG	86	LYS	3.3
13	BF	158	ASP	3.3
28	BU	12	ILE	3.3
28	BU	95	ALA	3.3
35	CB	2	ALA	3.3
35	CB	47	CYS	3.3
37	CD	70	LYS	3.3
46	B	620	A	3.3
46	B	718	A	3.3
46	CM	1622	A	3.3
57	M	44	LYS	3.3
17	BJ	31	GLY	3.3
31	BX	20	ILE	3.3
36	CC	82	ALA	3.3
64	DE	69	ILE	3.3
78	DS	133	ILE	3.3
1	AS	894	U	3.3
46	CM	1143	C	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
46	CM	1583	C	3.3
46	CM	1621	C	3.3
7	AZ	4	GLN	3.3
36	CC	112	PRO	3.3
63	S	40	PRO	3.3
68	DI	7	GLN	3.3
17	w	102	ARG	3.3
35	AH	9	ARG	3.3
18	BK	95	LEU	3.3
20	BM	122	ASN	3.3
26	8	34	LEU	3.3
66	DG	45	LEU	3.3
8	BA	4	VAL	3.3
14	BG	18	TRP	3.3
22	BO	33	VAL	3.3
24	6	22	VAL	3.3
52	CS	133	VAL	3.3
62	DC	86	VAL	3.3
69	DJ	25	VAL	3.3
70	Z	24	TRP	3.3
28	AA	93	LYS	3.3
31	BX	42	LYS	3.3
65	DF	48	LYS	3.3
76	f	33	LYS	3.3
6	AY	227	GLU	3.3
1	AS	368	G	3.3
6	AY	73	ALA	3.3
14	BG	29	ALA	3.3
27	BT	106	ILE	3.3
46	CM	717	G	3.3
52	CS	117	ALA	3.3
54	J	132	ILE	3.3
55	CV	104	ILE	3.3
56	CW	77	ILE	3.3
59	O	102	GLY	3.3
77	DR	6	GLY	3.3
1	AS	1860	A	3.3
46	CM	1410	A	3.3
78	h	164	PRO	3.3
7	AZ	70	THR	3.3
10	BC	192	HIS	3.3
22	BO	88	ARG	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
52	H	112	ARG	3.3
55	CV	53	GLN	3.3
1	AS	1798	C	3.3
1	AS	1842	C	3.3
9	BB	236	LEU	3.3
16	BI	21	PHE	3.3
27	BT	57	LEU	3.3
52	H	108	LEU	3.3
52	CS	198	LEU	3.3
57	CX	27	PHE	3.3
66	V	132	LEU	3.3
5	k	78	VAL	3.3
5	k	120	LYS	3.3
7	m	288	LYS	3.3
13	BF	142	LYS	3.3
18	x	2	VAL	3.3
22	BO	96	VAL	3.3
27	9	8	VAL	3.3
64	T	23	LYS	3.3
66	V	94	VAL	3.3
65	DF	75	ASN	3.3
5	AX	45	ALA	3.3
15	BH	81	ALA	3.3
20	BM	168	ALA	3.3
49	CP	110	ILE	3.3
58	CY	49	ILE	3.3
62	DC	74	ALA	3.3
51	G	107	GLY	3.3
51	CR	25	GLY	3.3
16	v	30	TYR	3.3
76	DQ	18	SER	3.3
49	CP	79	ARG	3.3
54	J	67	ARG	3.3
56	CW	63	ASP	3.3
27	BT	101	PRO	3.3
4	AW	237	LEU	3.3
5	k	178	LEU	3.3
10	BC	60	GLN	3.3
14	BG	76	THR	3.3
16	BI	197	LEU	3.3
25	BR	58	HIS	3.3
38	CE	74	PHE	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
43	CJ	83	LEU	3.3
45	i	58	THR	3.3
45	CL	34	THR	3.3
46	CM	939	G	3.3
46	CM	1402	G	3.3
47	CN	120	LEU	3.3
60	P	5	HIS	3.3
62	DC	104	THR	3.3
70	DK	84	THR	3.3
6	AY	362	LYS	3.3
11	q	71	VAL	3.3
17	w	37	VAL	3.3
17	w	117	LYS	3.3
28	AA	13	VAL	3.3
35	AH	70	LYS	3.3
58	CY	7	VAL	3.3
74	DO	25	VAL	3.3
1	1	1126	A	3.3
1	AS	134	U	3.3
46	B	180	A	3.3
46	CM	1587	A	3.3
9	o	91	ASN	3.3
62	DC	82	ASN	3.3
1	AS	30	C	3.3
6	AY	75	ILE	3.3
6	AY	291	ILE	3.3
7	AZ	199	ILE	3.3
12	r	149	ILE	3.3
16	v	36	ILE	3.3
16	BI	151	ILE	3.3
27	BT	4	ILE	3.3
50	CQ	206	ALA	3.3
63	DD	118	ALA	3.3
9	o	211	GLY	3.3
55	CV	183	GLY	3.3
73	c	14	GLY	3.3
18	x	128	ARG	3.2
73	DN	15	ARG	3.2
14	BG	144	SER	3.2
27	9	13	SER	3.2
30	AC	62	SER	3.2
51	CR	23	LEU	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
57	M	46	LEU	3.2
7	AZ	203	HIS	3.2
26	BS	32	PHE	3.2
44	AQ	3	LYS	3.2
66	DG	38	LYS	3.2
77	DR	29	LYS	3.2
19	y	186	VAL	3.2
39	CF	55	VAL	3.2
53	CT	114	VAL	3.2
12	BE	149	ILE	3.2
14	BG	11	ASN	3.2
14	BG	95	ILE	3.2
17	BJ	30	ASN	3.2
18	x	36	ILE	3.2
18	x	169	ASN	3.2
19	y	67	ILE	3.2
26	BS	67	ILE	3.2
50	CQ	169	ILE	3.2
1	AS	895	U	3.2
1	AS	1543	G	3.2
1	AS	1607	G	3.2
7	m	292	GLU	3.2
33	AF	38	GLY	3.2
46	B	1399	U	3.2
46	CM	288	G	3.2
46	CM	501	G	3.2
46	CM	1603	G	3.2
65	DF	53	GLU	3.2
19	BL	170	ARG	3.2
32	AE	27	ARG	3.2
36	CC	105	ARG	3.2
7	m	198	TYR	3.2
79	DT	183	TYR	3.2
47	CN	9	LEU	3.2
51	CR	6	LYS	3.2
61	DB	89	PRO	3.2
63	DD	140	SER	3.2
75	DP	45	LYS	3.2
23	BP	15	PHE	3.2
36	CC	95	PHE	3.2
4	AW	176	ASP	3.2
15	u	18	VAL	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
29	BV	46	ASP	3.2
36	CC	99	GLN	3.2
43	AP	27	GLN	3.2
47	CN	76	CYS	3.2
6	AY	106	THR	3.2
33	BZ	51	ILE	3.2
69	Y	53	ILE	3.2
10	p	199	ALA	3.2
17	w	145	ALA	3.2
63	DD	19	ALA	3.2
65	DF	50	ALA	3.2
4	AW	115	ASN	3.2
6	AY	359	GLU	3.2
9	BB	211	GLY	3.2
18	BK	31	GLU	3.2
31	AD	13	ASN	3.2
50	CQ	136	GLU	3.2
70	Z	21	ASN	3.2
10	BC	95	LEU	3.2
12	BE	203	LYS	3.2
24	BQ	34	LEU	3.2
24	BQ	46	LEU	3.2
29	AB	78	LEU	3.2
63	DD	56	LEU	3.2
78	DS	127	TYR	3.2
79	DT	82	LEU	3.2
1	AS	1519	U	3.2
1	AS	1881	U	3.2
1	AS	2968	U	3.2
46	B	1047	U	3.2
46	CM	502	U	3.2
46	CM	638	U	3.2
10	BC	73	PRO	3.2
65	DF	76	PRO	3.2
1	AS	1075	A	3.2
9	BB	203	PHE	3.2
18	BK	141	SER	3.2
22	2	15	PHE	3.2
32	AE	32	VAL	3.2
36	CC	116	PHE	3.2
50	F	168	PHE	3.2
62	DC	120	SER	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
66	V	6	VAL	3.2
73	DN	30	VAL	3.2
52	CS	86	GLN	3.2
63	DD	73	HIS	3.2
64	T	42	GLN	3.2
65	DF	99	HIS	3.2
1	1	1900	C	3.2
7	m	70	THR	3.2
35	CB	71	THR	3.2
52	CS	176	THR	3.2
59	O	120	CYS	3.2
62	DC	122	THR	3.2
65	DF	77	THR	3.2
66	DG	39	THR	3.2
66	DG	95	ASP	3.2
5	k	181	ILE	3.2
15	u	60	ILE	3.2
22	BO	48	ILE	3.2
51	CR	249	ILE	3.2
73	DN	36	ILE	3.2
13	s	143	ARG	3.2
15	BH	123	ALA	3.2
16	BI	105	ARG	3.2
53	I	224	ALA	3.2
69	DJ	68	ARG	3.2
20	BM	23	TRP	3.2
55	K	15	GLY	3.2
66	DG	74	GLY	3.2
67	DH	114	GLU	3.2
7	m	197	LYS	3.2
10	BC	46	ASN	3.2
16	BI	96	LYS	3.2
18	BK	37	ASN	3.2
22	BO	50	LYS	3.2
22	BO	69	LYS	3.2
47	C	106	ASN	3.2
13	s	19	LEU	3.2
48	CO	120	LEU	3.2
69	Y	104	LEU	3.2
70	DK	133	LEU	3.2
22	BO	57	TYR	3.2
37	AJ	38	PHE	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
52	CS	88	PRO	3.2
54	J	182	PRO	3.2
13	s	18	VAL	3.2
16	BI	75	VAL	3.2
63	DD	45	PHE	3.2
67	W	55	VAL	3.2
1	1	3127	U	3.2
11	BD	162	GLN	3.2
16	BI	138	SER	3.2
33	AF	53	GLN	3.2
4	AW	238	ILE	3.2
7	AZ	231	ILE	3.2
21	BN	10	ILE	3.2
23	BP	96	ILE	3.2
52	CS	137	ILE	3.2
63	S	69	THR	3.2
64	DE	117	ILE	3.2
73	DN	44	MET	3.2
65	U	145	ARG	3.2
65	DF	120	ARG	3.2
1	AS	1487	A	3.2
1	AS	1541	A	3.2
1	AS	1554	A	3.2
14	BG	33	ALA	3.2
21	BN	102	ALA	3.2
46	CM	718	A	3.2
1	AS	281	G	3.2
34	AG	87	LYS	3.2
50	CQ	129	GLY	3.2
3	4	91	C	3.2
46	CM	1586	C	3.2
5	AX	148	LEU	3.2
7	AZ	194	LEU	3.2
10	BC	143	LEU	3.2
19	BL	32	LEU	3.2
22	BO	27	LEU	3.2
60	DA	75	LEU	3.2
69	DJ	104	LEU	3.2
76	f	30	LEU	3.2
20	z	45	TYR	3.2
9	BB	115	VAL	3.2
23	BP	98	PHE	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
44	AQ	14	PHE	3.2
66	DG	66	TYR	3.2
48	CO	164	VAL	3.2
60	DA	17	PRO	3.2
16	BI	37	HIS	3.2
16	BI	87	GLN	3.2
71	DL	25	ILE	3.2
38	CE	65	ALA	3.2
53	CT	138	ALA	3.2
63	S	114	THR	3.2
64	T	106	THR	3.2
78	DS	129	THR	3.2
6	AY	105	LYS	3.1
11	BD	61	ASP	3.1
26	BS	36	LYS	3.1
29	BV	126	LYS	3.1
46	B	1341	U	3.1
46	CM	776	U	3.1
46	CM	1519	U	3.1
46	CM	1572	U	3.1
60	P	107	LYS	3.1
60	DA	140	LYS	3.1
18	BK	112	LEU	3.1
19	BL	52	LEU	3.1
31	AD	16	LEU	3.1
54	J	150	LEU	3.1
69	Y	26	LEU	3.1
10	p	55	GLU	3.1
51	G	60	GLU	3.1
55	CV	193	GLU	3.1
1	AS	1382	A	3.1
7	AZ	37	VAL	3.1
7	AZ	144	VAL	3.1
15	BH	30	VAL	3.1
26	BS	141	TYR	3.1
33	BZ	85	VAL	3.1
42	CI	10	VAL	3.1
54	CU	58	VAL	3.1
57	M	59	PHE	3.1
60	DA	141	TYR	3.1
60	DA	150	VAL	3.1
63	DD	74	VAL	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
79	DT	223	ASN	3.1
16	BI	84	PRO	3.1
52	CS	164	PRO	3.1
1	AS	131	C	3.1
1	AS	282	G	3.1
46	CM	1147	C	3.1
16	v	73	ARG	3.1
44	AQ	24	ARG	3.1
51	G	257	ARG	3.1
60	DA	130	ARG	3.1
10	BC	247	ILE	3.1
27	BT	97	ILE	3.1
28	BU	57	MET	3.1
36	AI	1	MET	3.1
49	E	132	ILE	3.1
50	CQ	67	ILE	3.1
6	AY	57	ALA	3.1
11	BD	66	ALA	3.1
18	BK	29	THR	3.1
25	BR	38	SER	3.1
34	AG	83	ALA	3.1
51	CR	22	LYS	3.1
48	CO	119	SER	3.1
59	O	70	SER	3.1
65	DF	43	ALA	3.1
79	AR	79	ALA	3.1
79	DT	255	SER	3.1
11	BD	10	LEU	3.1
16	BI	82	GLY	3.1
26	BS	38	LEU	3.1
66	V	45	LEU	3.1
78	h	145	LEU	3.1
79	DT	294	ASP	3.1
29	AB	72	GLU	3.1
19	y	172	PHE	3.1
19	BL	87	VAL	3.1
52	H	155	VAL	3.1
55	CV	21	PHE	3.1
62	R	12	PHE	3.1
70	DK	17	VAL	3.1
76	DQ	8	PHE	3.1
77	g	47	VAL	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
4	AW	6	ARG	3.1
5	AX	10	ARG	3.1
5	AX	19	ARG	3.1
14	BG	8	PRO	3.1
26	BS	125	ARG	3.1
30	BW	24	PRO	3.1
33	BZ	6	PRO	3.1
38	CE	66	TYR	3.1
56	L	120	ARG	3.1
69	Y	70	ASN	3.1
69	Y	77	PRO	3.1
8	BA	99	LYS	3.1
44	CK	58	LYS	3.1
47	C	63	ILE	3.1
49	E	78	ILE	3.1
52	H	76	LYS	3.1
67	DH	87	LYS	3.1
73	DN	79	ILE	3.1
57	CX	12	HIS	3.1
6	AY	54	ALA	3.1
14	BG	82	ALA	3.1
40	CG	14	ALA	3.1
45	i	156	ALA	3.1
54	CU	90	ALA	3.1
2	3	73	C	3.1
38	CE	80	THR	3.1
46	CM	1624	C	3.1
5	AX	14	LEU	3.1
21	BN	129	LEU	3.1
38	CE	46	SER	3.1
45	CL	39	SER	3.1
47	CN	177	LEU	3.1
79	AR	97	THR	3.1
27	BT	65	GLY	3.1
35	CB	45	GLY	3.1
55	K	183	GLY	3.1
61	DB	108	GLY	3.1
79	DT	220	TRP	3.1
6	AY	43	VAL	3.1
10	BC	126	VAL	3.1
16	BI	106	VAL	3.1
25	BR	83	VAL	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
50	CQ	51	VAL	3.1
62	DC	33	PHE	3.1
63	DD	59	PHE	3.1
63	DD	68	VAL	3.1
10	BC	69	ARG	3.1
19	y	180	ARG	3.1
75	DP	22	ARG	3.1
29	BV	2	PRO	3.1
68	DI	14	PRO	3.1
6	AY	51	TYR	3.1
50	CQ	19	TYR	3.1
62	R	97	TYR	3.1
10	BC	174	MET	3.1
14	BG	16	LYS	3.1
22	BO	82	ASN	3.1
49	E	213	ILE	3.1
56	L	134	ILE	3.1
16	BI	55	ALA	3.1
73	DN	80	HIS	3.1
36	AI	62	GLN	3.1
79	DT	293	ALA	3.1
13	BF	19	LEU	3.1
17	w	128	LEU	3.1
39	CF	14	LEU	3.1
64	DE	34	LEU	3.1
1	AS	2967	A	3.1
16	v	163	GLY	3.1
22	BO	2	GLY	3.1
45	i	59	GLY	3.1
51	CR	91	THR	3.1
4	AW	231	SER	3.1
20	z	137	SER	3.1
1	AS	9	C	3.1
1	AS	27	C	3.1
8	BA	108	GLU	3.1
18	BK	62	ARG	3.1
24	BQ	87	ARG	3.1
35	AH	23	VAL	3.1
35	CB	65	VAL	3.1
41	AN	37	ARG	3.1
46	B	1013	C	3.1
51	G	45	VAL	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
62	DC	93	VAL	3.1
63	S	124	GLU	3.1
64	T	3	ARG	3.1
52	H	43	PHE	3.1
65	DF	94	ASP	3.1
67	W	108	GLU	3.1
4	j	181	LYS	3.1
40	CG	18	LYS	3.1
63	S	105	LYS	3.1
73	DN	31	PRO	3.1
1	AS	860	G	3.1
6	AY	249	ILE	3.1
7	AZ	31	TYR	3.1
18	x	166	ILE	3.1
23	BP	36	TYR	3.1
36	AI	109	ILE	3.1
65	DF	35	ILE	3.1
79	DT	157	ILE	3.1
22	2	45	ASN	3.1
73	DN	69	ASN	3.1
6	AY	290	LEU	3.1
7	AZ	36	LEU	3.1
17	w	100	LEU	3.1
25	BR	89	LEU	3.1
28	AA	87	LEU	3.1
31	BX	95	LEU	3.1
36	CC	107	GLN	3.1
43	AP	83	LEU	3.1
50	CQ	143	LEU	3.1
74	DO	26	GLN	3.1
79	DT	231	LEU	3.1
5	AX	230	THR	3.1
16	v	183	THR	3.1
63	S	8	THR	3.1
63	S	129	GLY	3.1
5	AX	159	ARG	3.1
7	AZ	54	ARG	3.1
10	p	58	ARG	3.1
13	s	51	ARG	3.1
16	BI	162	ARG	3.1
56	CW	69	ARG	3.1
63	DD	121	ARG	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
13	s	36	VAL	3.1
32	AE	22	VAL	3.1
49	E	81	VAL	3.1
52	CS	134	VAL	3.1
62	R	112	VAL	3.1
66	V	9	VAL	3.1
68	DI	56	SER	3.1
5	k	365	PHE	3.1
5	AX	365	PHE	3.1
9	BB	114	PHE	3.1
14	BG	134	GLU	3.1
20	BM	157	GLU	3.1
47	C	174	TRP	3.1
50	CQ	26	PHE	3.1
66	DG	53	TRP	3.1
1	1	2943	A	3.1
1	AS	2379	A	3.1
33	BZ	63	LYS	3.1
50	CQ	8	LYS	3.1
50	CQ	167	ASP	3.1
10	BC	76	ILE	3.1
12	r	165	ILE	3.1
26	BS	95	ILE	3.1
50	CQ	159	ILE	3.1
56	CW	42	ILE	3.1
60	P	84	ILE	3.1
78	h	130	PRO	3.1
1	AS	2328	C	3.0
6	AY	102	ALA	3.0
8	BA	101	ASN	3.0
15	BH	52	LEU	3.0
27	BT	111	LEU	3.0
32	BY	19	LEU	3.0
37	AJ	71	LEU	3.0
52	CS	142	ALA	3.0
54	J	63	LEU	3.0
55	CV	100	ALA	3.0
61	DB	59	ALA	3.0
70	Z	34	LEU	3.0
38	CE	28	HIS	3.0
14	BG	151	GLN	3.0
52	CS	170	GLN	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AS	2254	G	3.0
4	AW	64	ARG	3.0
20	BM	38	ARG	3.0
20	BM	62	ARG	3.0
46	CM	999	G	3.0
46	CM	1460	G	3.0
46	CM	1649	G	3.0
49	E	90	ARG	3.0
53	CT	85	ARG	3.0
55	CV	59	ARG	3.0
69	DJ	118	ARG	3.0
13	s	70	THR	3.0
30	BW	8	THR	3.0
61	DB	88	THR	3.0
66	DG	52	THR	3.0
1	AS	1301	U	3.0
1	AS	1797	U	3.0
52	H	160	VAL	3.0
69	Y	63	VAL	3.0
4	j	10	LYS	3.0
7	m	55	PHE	3.0
22	BO	78	LYS	3.0
53	I	191	LYS	3.0
55	K	65	PHE	3.0
57	CX	44	LYS	3.0
63	S	137	PHE	3.0
66	V	119	LYS	3.0
70	Z	30	LYS	3.0
13	s	11	GLU	3.0
70	DK	24	TRP	3.0
6	l	352	PRO	3.0
11	BD	53	ILE	3.0
15	BH	32	ILE	3.0
27	BT	119	ILE	3.0
32	AE	35	ILE	3.0
50	F	139	ILE	3.0
50	CQ	173	ILE	3.0
51	G	249	ILE	3.0
79	AR	157	ILE	3.0
20	z	124	TYR	3.0
5	AX	51	ALA	3.0
9	BB	145	LEU	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
19	y	32	LEU	3.0
19	y	138	LEU	3.0
20	z	102	LEU	3.0
20	BM	72	ALA	3.0
38	CE	18	LEU	3.0
47	CN	172	LEU	3.0
46	CM	988	A	3.0
50	CQ	89	ALA	3.0
51	CR	9	LEU	3.0
54	J	122	LEU	3.0
78	h	170	ALA	3.0
29	AB	49	HIS	3.0
13	s	47	GLN	3.0
13	s	90	GLN	3.0
53	I	88	ARG	3.0
64	T	5	ARG	3.0
70	Z	23	ARG	3.0
1	1	2454	C	3.0
3	AU	119	C	3.0
46	CM	319	C	3.0
5	k	79	VAL	3.0
5	AX	164	THR	3.0
6	l	105	LYS	3.0
7	AZ	56	THR	3.0
18	BK	32	THR	3.0
20	z	133	LYS	3.0
24	BQ	91	VAL	3.0
39	CF	25	VAL	3.0
54	J	177	VAL	3.0
63	DD	36	THR	3.0
63	DD	38	VAL	3.0
50	CQ	168	PHE	3.0
61	DB	15	PHE	3.0
7	AZ	25	GLU	3.0
27	BT	26	GLU	3.0
29	BV	69	TRP	3.0
5	k	328	ILE	3.0
11	BD	75	ILE	3.0
18	x	25	SER	3.0
24	6	57	MET	3.0
27	9	5	SER	3.0
48	CO	212	ILE	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
50	CQ	7	SER	3.0
63	DD	80	ILE	3.0
6	l	5	PRO	3.0
7	AZ	174	PRO	3.0
16	BI	154	PRO	3.0
50	CQ	200	PRO	3.0
1	AS	750	G	3.0
1	AS	1857	G	3.0
46	CM	996	G	3.0
46	CM	1616	G	3.0
6	AY	207	LEU	3.0
19	BL	138	LEU	3.0
56	CW	59	LEU	3.0
59	O	62	LEU	3.0
61	DB	100	LEU	3.0
12	r	75	TYR	3.0
21	0	165	ALA	3.0
35	CB	82	ALA	3.0
36	CC	52	ALA	3.0
50	CQ	172	ALA	3.0
65	DF	112	ASP	3.0
79	AR	290	ALA	3.0
14	t	91	ARG	3.0
52	CS	92	ARG	3.0
43	CJ	88	CYS	3.0
6	l	192	LYS	3.0
8	BA	71	ASN	3.0
14	BG	5	LYS	3.0
21	BN	108	GLN	3.0
42	CI	16	LYS	3.0
52	CS	37	GLN	3.0
52	CS	75	GLY	3.0
1	1	1889	A	3.0
8	BA	83	VAL	3.0
18	BK	91	VAL	3.0
35	AH	22	VAL	3.0
50	CQ	207	VAL	3.0
60	DA	33	VAL	3.0
6	l	201	THR	3.0
17	BJ	63	THR	3.0
4	j	73	GLU	3.0
10	p	65	ILE	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
16	BI	133	ILE	3.0
19	y	165	ILE	3.0
46	CM	698	C	3.0
46	CM	1619	C	3.0
79	AR	96	GLU	3.0
10	BC	177	PRO	3.0
12	r	175	PRO	3.0
47	CN	126	PRO	3.0
58	N	113	PRO	3.0
6	l	170	LEU	3.0
19	BL	13	SER	3.0
21	BN	79	LEU	3.0
29	BV	147	LEU	3.0
32	BY	72	LEU	3.0
51	G	16	SER	3.0
54	CU	149	LEU	3.0
56	L	121	SER	3.0
14	BG	47	ALA	3.0
16	v	109	ARG	3.0
19	y	178	ARG	3.0
19	BL	174	ARG	3.0
60	P	18	TYR	3.0
65	DF	83	ALA	3.0
71	a	8	ARG	3.0
74	DO	29	ARG	3.0
36	CC	79	ASP	3.0
5	k	196	LYS	3.0
14	BG	179	LYS	3.0
28	AA	116	LYS	3.0
34	CA	70	LYS	3.0
35	AH	37	LYS	3.0
1	1	2094	G	3.0
1	AS	949	G	3.0
1	AS	1826	G	3.0
1	AS	2251	G	3.0
1	AS	2527	G	3.0
4	AW	168	VAL	3.0
11	q	112	VAL	3.0
17	w	9	VAL	3.0
36	CC	62	GLN	3.0
46	B	381	G	3.0
50	CQ	180	GLN	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
53	I	200	GLN	3.0
71	DL	22	GLN	3.0
76	DQ	35	GLY	3.0
58	CY	139	VAL	3.0
65	U	100	VAL	3.0
66	V	34	VAL	3.0
71	DL	24	VAL	3.0
52	CS	103	ASN	3.0
51	G	47	PHE	3.0
49	E	154	THR	3.0
77	DR	41	THR	3.0
4	AW	135	ILE	3.0
27	9	99	ILE	3.0
61	DB	14	ILE	3.0
63	S	28	ILE	3.0
76	DQ	31	ILE	3.0
37	CD	20	GLU	3.0
46	B	617	A	3.0
49	E	149	LEU	3.0
49	CP	108	LEU	3.0
50	CQ	47	LEU	3.0
67	W	78	TRP	3.0
1	AS	1414	A	3.0
1	AS	2253	A	3.0
78	h	142	LEU	3.0
73	c	22	ARG	3.0
23	5	73	SER	3.0
35	CB	17	SER	3.0
45	i	56	SER	3.0
49	E	130	SER	3.0
59	O	101	ALA	3.0
60	DA	13	SER	3.0
73	DN	7	SER	3.0
1	AS	1853	C	3.0
4	j	190	LYS	3.0
9	BB	238	LYS	3.0
10	p	172	LYS	3.0
16	BI	33	LYS	3.0
46	CM	875	C	3.0
55	CV	17	LYS	3.0
62	R	18	LYS	3.0
73	DN	73	TYR	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
66	DG	44	ASP	3.0
5	AX	331	VAL	3.0
9	BB	196	VAL	3.0
12	r	151	GLY	3.0
36	CC	4	VAL	3.0
44	CK	31	VAL	3.0
47	CN	123	VAL	3.0
50	CQ	182	VAL	3.0
70	DK	119	GLY	3.0
1	1	1637	U	3.0
14	BG	19	GLN	3.0
46	CM	997	U	3.0
53	CT	185	GLN	3.0
74	DO	27	GLN	3.0
28	BU	127	ASN	3.0
15	BH	29	ILE	3.0
24	BQ	79	ILE	3.0
34	CA	32	ILE	3.0
36	AI	76	ILE	3.0
36	CC	58	ILE	3.0
52	H	147	THR	3.0
53	CT	113	ILE	3.0
56	CW	83	ILE	3.0
58	CY	86	ILE	3.0
67	W	21	ILE	3.0
67	W	28	THR	3.0
6	l	326	LEU	2.9
8	n	42	LEU	2.9
8	BA	173	LEU	2.9
16	BI	199	LEU	2.9
17	BJ	130	LEU	2.9
29	AB	118	LEU	2.9
49	CP	66	LEU	2.9
7	m	25	GLU	2.9
9	BB	86	ARG	2.9
20	BM	55	GLU	2.9
1	AS	277	G	2.9
13	s	45	PRO	2.9
37	CD	58	GLU	2.9
45	CL	75	PRO	2.9
49	CP	90	ARG	2.9
46	B	1480	G	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
46	CM	387	G	2.9
46	CM	1138	G	2.9
65	U	82	PRO	2.9
66	DG	46	PRO	2.9
4	AW	46	LYS	2.9
13	BF	34	ALA	2.9
27	BT	125	LYS	2.9
40	CG	39	ALA	2.9
52	CS	26	ALA	2.9
65	DF	132	LYS	2.9
71	a	134	ALA	2.9
27	9	24	SER	2.9
52	CS	96	SER	2.9
60	DA	6	SER	2.9
64	T	43	SER	2.9
64	T	70	SER	2.9
1	AS	776	A	2.9
46	CM	469	A	2.9
46	CM	777	A	2.9
46	CM	1737	A	2.9
14	t	22	VAL	2.9
15	u	129	VAL	2.9
22	2	72	VAL	2.9
28	BU	20	GLY	2.9
31	AD	44	VAL	2.9
35	AH	31	VAL	2.9
45	i	111	ASP	2.9
45	CL	40	ASP	2.9
56	CW	66	ASP	2.9
56	CW	73	GLY	2.9
76	f	23	HIS	2.9
4	AW	76	PHE	2.9
26	BS	84	PHE	2.9
1	AS	1192	C	2.9
1	AS	2170	C	2.9
46	CM	1605	C	2.9
19	BL	165	ILE	2.9
79	AR	259	ILE	2.9
1	1	1346	U	2.9
7	AZ	153	THR	2.9
10	p	137	LEU	2.9
10	p	205	ASN	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
16	BI	101	THR	2.9
22	2	31	LEU	2.9
25	BR	87	LEU	2.9
47	C	87	LEU	2.9
51	G	52	LEU	2.9
53	CT	128	THR	2.9
66	V	79	LEU	2.9
79	DT	268	LEU	2.9
17	w	190	GLU	2.9
17	BJ	132	PRO	2.9
19	BL	95	GLU	2.9
21	BN	160	LYS	2.9
26	BS	44	PRO	2.9
49	E	77	LYS	2.9
55	CV	37	LYS	2.9
56	CW	16	LYS	2.9
56	CW	20	GLU	2.9
66	DG	2	PRO	2.9
76	DQ	11	PRO	2.9
4	AW	207	VAL	2.9
10	BC	152	VAL	2.9
28	BU	35	SER	2.9
36	CC	75	TYR	2.9
47	CN	110	TYR	2.9
15	u	21	VAL	2.9
19	BL	186	VAL	2.9
22	2	93	VAL	2.9
49	CP	130	SER	2.9
66	DG	40	SER	2.9
67	DH	113	VAL	2.9
17	w	31	GLY	2.9
24	BQ	116	GLY	2.9
67	DH	110	GLY	2.9
1	1	775	G	2.9
1	1	3194	G	2.9
1	AS	245	G	2.9
46	CM	1135	G	2.9
46	CM	1521	G	2.9
53	CT	144	PHE	2.9
11	q	103	ILE	2.9
13	s	43	GLN	2.9
50	F	15	ASP	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
44	AQ	54	ILE	2.9
47	CN	63	ILE	2.9
56	L	48	GLN	2.9
57	CX	3	ILE	2.9
63	S	84	ILE	2.9
63	DD	39	GLN	2.9
64	DE	42	GLN	2.9
65	DF	28	ILE	2.9
72	DM	98	GLN	2.9
74	DO	5	GLN	2.9
1	AS	72	A	2.9
2	3	17	A	2.9
3	AU	3	A	2.9
3	AU	149	A	2.9
5	k	246	LEU	2.9
5	AX	369	ARG	2.9
11	BD	144	LEU	2.9
14	BG	123	LEU	2.9
28	BU	101	LEU	2.9
34	AG	60	ARG	2.9
46	B	621	A	2.9
46	B	1011	A	2.9
64	DE	91	LEU	2.9
6	l	95	CYS	2.9
7	m	118	THR	2.9
11	q	59	ASN	2.9
14	BG	108	THR	2.9
16	BI	72	LYS	2.9
17	BJ	194	LYS	2.9
20	BM	80	LYS	2.9
20	BM	135	LYS	2.9
43	AP	13	LYS	2.9
45	i	67	LYS	2.9
52	CS	147	THR	2.9
53	CT	136	LYS	2.9
55	CV	95	THR	2.9
6	AY	241	PRO	2.9
10	BC	54	PRO	2.9
14	BG	87	PRO	2.9
7	AZ	80	ALA	2.9
37	CD	18	ALA	2.9
38	CE	42	ALA	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
74	DO	53	ALA	2.9
79	AR	140	GLU	2.9
6	AY	114	VAL	2.9
16	BI	4	TYR	2.9
18	BK	51	VAL	2.9
24	BQ	101	VAL	2.9
28	BU	13	VAL	2.9
39	AL	55	VAL	2.9
54	CU	87	VAL	2.9
63	S	78	TYR	2.9
67	DH	111	VAL	2.9
70	Z	29	TYR	2.9
77	g	35	TYR	2.9
4	AW	114	SER	2.9
27	BT	62	SER	2.9
39	AL	35	GLY	2.9
29	BV	62	HIS	2.9
48	CO	211	HIS	2.9
4	j	246	LEU	2.9
9	BB	101	LEU	2.9
18	BK	126	ARG	2.9
50	CQ	219	ILE	2.9
54	CU	94	ILE	2.9
54	CU	121	ILE	2.9
27	BT	85	LEU	2.9
33	AF	86	LEU	2.9
34	AG	31	GLN	2.9
38	CE	67	LEU	2.9
50	CQ	177	LEU	2.9
57	CX	2	LEU	2.9
60	DA	49	GLN	2.9
62	DC	28	MET	2.9
62	DC	60	LEU	2.9
65	U	45	LEU	2.9
65	DF	109	LEU	2.9
72	b	75	LEU	2.9
79	AR	32	LEU	2.9
79	AR	103	ARG	2.9
79	AR	142	MET	2.9
40	CG	5	LYS	2.9
43	CJ	40	LYS	2.9
50	F	11	LYS	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1	219	G	2.9
1	AS	175	G	2.9
2	AT	8	G	2.9
5	k	9	PRO	2.9
6	l	329	ASN	2.9
24	BQ	18	PRO	2.9
31	BX	13	ASN	2.9
39	CF	29	ALA	2.9
40	CG	16	ALA	2.9
46	CM	724	G	2.9
46	CM	923	G	2.9
46	CM	1671	G	2.9
46	CM	1321	A	2.9
46	CM	1345	A	2.9
46	CM	1461	A	2.9
52	CS	87	CYS	2.9
63	DD	109	ALA	2.9
1	1	2466	A	2.9
1	AS	70	A	2.9
1	AS	747	A	2.9
1	AS	813	A	2.9
57	CX	61	TRP	2.9
5	k	87	VAL	2.9
15	u	115	VAL	2.9
27	BT	8	VAL	2.9
49	E	179	VAL	2.9
62	DC	41	VAL	2.9
79	DT	134	VAL	2.9
7	m	44	TYR	2.9
16	BI	94	TYR	2.9
29	BV	30	GLY	2.9
46	B	1207	C	2.9
46	CM	1606	C	2.9
46	B	1016	U	2.9
46	CM	1121	U	2.9
46	CM	1400	U	2.9
53	CT	92	ARG	2.9
55	CV	27	PHE	2.9
62	R	95	GLY	2.9
13	s	145	ARG	2.9
16	BI	159	ARG	2.9
65	DF	40	ARG	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
6	l	75	ILE	2.9
6	l	195	LEU	2.9
6	AY	84	HIS	2.9
8	BA	41	LEU	2.9
14	BG	3	ILE	2.9
16	v	158	HIS	2.9
20	BM	123	LEU	2.9
22	2	141	ILE	2.9
29	BV	131	SER	2.9
30	BW	10	HIS	2.9
39	CF	75	ILE	2.9
50	CQ	60	LEU	2.9
53	CT	111	LEU	2.9
62	R	107	ILE	2.9
66	V	103	LYS	2.9
66	DG	28	LEU	2.9
72	DM	93	LEU	2.9
35	AH	3	GLN	2.9
14	BG	98	ASP	2.9
40	AM	32	ASP	2.9
6	l	54	ALA	2.9
7	AZ	166	ALA	2.9
14	BG	50	PRO	2.9
18	BK	79	THR	2.9
53	I	89	THR	2.9
61	DB	121	THR	2.9
65	DF	58	ALA	2.9
33	BZ	96	GLU	2.9
37	CD	62	ASN	2.9
51	G	57	ASN	2.9
60	P	83	GLU	2.9
67	DH	82	GLU	2.9
6	AY	112	VAL	2.9
12	r	79	VAL	2.9
26	8	51	VAL	2.9
4	AW	81	GLY	2.9
10	BC	61	ARG	2.9
22	2	84	TYR	2.9
28	AA	92	PHE	2.9
31	BX	23	GLY	2.9
55	CV	15	GLY	2.9
1	AS	805	G	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AS	1099	A	2.9
64	DE	53	TYR	2.9
1	AS	1606	G	2.9
5	AX	17	LEU	2.9
6	AY	137	LEU	2.9
8	n	63	LEU	2.9
13	s	17	LEU	2.9
20	BM	155	LEU	2.9
29	BV	22	ILE	2.9
29	BV	124	ILE	2.9
51	G	168	LYS	2.9
51	CR	64	ILE	2.9
52	H	149	ILE	2.9
56	L	60	LEU	2.9
57	CX	40	LEU	2.9
60	DA	16	LEU	2.9
69	Y	69	LEU	2.9
69	DJ	34	ILE	2.9
18	BK	14	SER	2.8
3	AU	141	C	2.8
46	B	374	C	2.8
46	B	616	U	2.8
46	B	713	U	2.8
46	CM	308	C	2.8
46	CM	1599	U	2.8
8	BA	5	ALA	2.8
10	BC	179	ALA	2.8
38	CE	83	ALA	2.8
63	S	19	ALA	2.8
5	AX	337	THR	2.8
6	AY	104	THR	2.8
35	AH	15	THR	2.8
64	T	30	THR	2.8
73	c	2	PRO	2.8
44	CK	30	GLU	2.8
49	E	203	GLU	2.8
6	AY	110	TRP	2.8
6	AY	251	TRP	2.8
16	BI	181	ASN	2.8
29	BV	125	VAL	2.8
48	CO	91	VAL	2.8
49	E	160	VAL	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
6	AY	47	LYS	2.8
10	BC	129	LYS	2.8
44	CK	61	LYS	2.8
54	CU	144	LYS	2.8
73	DN	13	LYS	2.8
13	BF	21	ILE	2.8
20	BM	106	LEU	2.8
20	z	96	MET	2.8
20	BM	32	ILE	2.8
22	BO	140	ILE	2.8
23	5	82	LEU	2.8
33	BZ	116	LEU	2.8
24	6	23	MET	2.8
34	CA	49	ILE	2.8
63	S	51	LEU	2.8
67	W	90	ILE	2.8
1	AS	704	A	2.8
1	AS	806	A	2.8
1	AS	2078	A	2.8
16	v	204	SER	2.8
16	BI	100	SER	2.8
16	BI	118	SER	2.8
26	8	47	GLN	2.8
28	AA	106	GLN	2.8
44	CK	20	SER	2.8
54	J	64	GLN	2.8
5	AX	162	ALA	2.8
16	BI	110	ALA	2.8
31	BX	97	ALA	2.8
47	C	145	ALA	2.8
79	DT	250	ALA	2.8
1	AS	478	G	2.8
1	AS	1489	G	2.8
1	AS	1524	G	2.8
1	AS	2212	G	2.8
3	4	23	U	2.8
46	CM	225	U	2.8
46	CM	1176	U	2.8
30	BW	13	THR	2.8
52	H	145	ASP	2.8
55	CV	62	THR	2.8
58	CY	72	THR	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
65	U	97	ASP	2.8
1	AS	101	C	2.8
8	n	73	VAL	2.8
11	BD	168	ARG	2.8
15	BH	115	VAL	2.8
16	BI	31	ARG	2.8
20	z	71	ARG	2.8
46	CM	1626	C	2.8
49	CP	174	VAL	2.8
70	DK	83	VAL	2.8
71	a	55	VAL	2.8
6	AY	46	ASN	2.8
20	z	135	LYS	2.8
36	CC	74	LYS	2.8
39	AL	34	ASN	2.8
58	CY	57	LYS	2.8
70	DK	50	LYS	2.8
76	DQ	46	LYS	2.8
9	o	81	LEU	2.8
9	o	199	PHE	2.8
10	BC	183	GLY	2.8
14	BG	26	PHE	2.8
16	BI	36	ILE	2.8
42	CI	13	LEU	2.8
43	CJ	72	LEU	2.8
44	CK	54	ILE	2.8
50	CQ	97	LEU	2.8
55	K	63	GLY	2.8
61	DB	9	PHE	2.8
62	R	119	PHE	2.8
65	U	72	ILE	2.8
65	DF	105	LEU	2.8
79	AR	78	GLY	2.8
43	CJ	28	TYR	2.8
50	CQ	88	TYR	2.8
26	BS	47	GLN	2.8
44	CK	25	GLN	2.8
60	DA	62	GLN	2.8
66	DG	109	GLN	2.8
74	d	18	GLN	2.8
5	k	8	ALA	2.8
7	AZ	77	ALA	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
10	BC	91	ALA	2.8
19	BL	175	ALA	2.8
26	BS	68	ALA	2.8
26	BS	72	ALA	2.8
33	BZ	95	ALA	2.8
55	CV	176	SER	2.8
59	O	49	SER	2.8
19	BL	157	PRO	2.8
32	BY	18	ARG	2.8
53	I	173	PRO	2.8
61	DB	115	PRO	2.8
64	DE	5	ARG	2.8
65	U	2	PRO	2.8
5	k	113	GLU	2.8
6	AY	316	LYS	2.8
18	BK	149	THR	2.8
20	z	57	VAL	2.8
38	AK	82	VAL	2.8
19	BL	168	LYS	2.8
22	2	55	LYS	2.8
22	2	78	LYS	2.8
28	AA	31	GLU	2.8
36	AI	84	LYS	2.8
42	AO	25	LYS	2.8
45	CL	58	THR	2.8
52	CS	27	THR	2.8
55	CV	70	GLU	2.8
56	CW	27	GLU	2.8
59	CZ	39	ASP	2.8
60	DA	83	GLU	2.8
62	DC	100	LYS	2.8
1	AS	50	A	2.8
46	CM	1407	A	2.8
79	DT	77	ASP	2.8
1	1	1012	U	2.8
6	l	325	LEU	2.8
9	o	161	LEU	2.8
4	j	48	ILE	2.8
4	AW	77	ILE	2.8
15	u	122	PHE	2.8
16	BI	59	PHE	2.8
17	BJ	16	LEU	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
21	BN	110	LEU	2.8
25	BR	51	TRP	2.8
37	CD	59	LEU	2.8
40	CG	49	LEU	2.8
43	AP	104	LEU	2.8
61	Q	97	LEU	2.8
65	DF	17	LEU	2.8
79	AR	248	TRP	2.8
4	AW	201	GLY	2.8
36	CC	61	ASN	2.8
52	CS	199	ILE	2.8
62	DC	113	GLY	2.8
73	c	16	GLY	2.8
78	h	133	ILE	2.8
1	AS	91	G	2.8
1	AS	135	G	2.8
1	AS	585	C	2.8
1	AS	866	G	2.8
16	BI	62	TYR	2.8
46	B	227	C	2.8
46	CM	1057	C	2.8
46	CM	1149	G	2.8
7	AZ	81	HIS	2.8
12	BE	95	HIS	2.8
43	AP	90	HIS	2.8
53	I	81	HIS	2.8
54	J	118	HIS	2.8
60	DA	123	HIS	2.8
58	CY	136	ARG	2.8
5	k	65	SER	2.8
6	AY	224	PRO	2.8
7	m	52	VAL	2.8
16	v	56	LYS	2.8
18	BK	40	LYS	2.8
20	z	51	VAL	2.8
29	BV	123	VAL	2.8
33	BZ	124	LYS	2.8
43	CJ	75	VAL	2.8
47	C	31	VAL	2.8
47	CN	56	LYS	2.8
52	H	168	VAL	2.8
54	CU	158	VAL	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
56	L	14	VAL	2.8
62	R	101	VAL	2.8
65	DF	117	LYS	2.8
66	DG	47	PRO	2.8
76	f	28	SER	2.8
80	ll	201	VAL	2.8
7	AZ	83	LEU	2.8
8	n	57	LEU	2.8
19	y	124	LEU	2.8
48	D	73	LEU	2.8
51	CR	92	LEU	2.8
53	CT	133	LEU	2.8
68	X	20	THR	2.8
69	DJ	4	THR	2.8
78	h	146	THR	2.8
8	BA	40	ILE	2.8
26	BS	114	ILE	2.8
47	C	133	ILE	2.8
50	F	18	PHE	2.8
51	G	245	ILE	2.8
52	CS	64	ILE	2.8
79	AR	299	PHE	2.8
5	k	330	GLY	2.8
19	y	14	GLY	2.8
65	DF	124	GLY	2.8
14	BG	103	ASN	2.8
18	BK	28	ASN	2.8
47	CN	28	ASN	2.8
1	1	884	A	2.8
46	CM	1116	A	2.8
54	J	66	TYR	2.8
5	AX	177	HIS	2.8
64	T	56	HIS	2.8
4	AW	72	ARG	2.8
25	BR	93	ARG	2.8
1	AS	80	C	2.8
1	AS	241	C	2.8
1	AS	2400	C	2.8
3	AU	117	C	2.8
6	AY	243	ALA	2.8
50	CQ	174	ARG	2.8
51	G	2	ALA	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
52	H	78	ALA	2.8
69	Y	117	ARG	2.8
70	Z	20	ARG	2.8
14	BG	104	LYS	2.8
19	BL	159	LYS	2.8
21	0	157	GLN	2.8
32	BY	36	LYS	2.8
42	CI	8	LYS	2.8
46	CM	1433	C	2.8
52	H	80	LYS	2.8
54	J	153	LYS	2.8
56	L	65	LYS	2.8
65	DF	108	LYS	2.8
1	1	1537	G	2.8
1	AS	170	G	2.8
1	AS	2089	G	2.8
6	AY	179	VAL	2.8
13	BF	138	VAL	2.8
43	CJ	2	VAL	2.8
46	B	127	G	2.8
46	CM	1096	G	2.8
46	CM	1266	G	2.8
47	CN	75	VAL	2.8
52	CS	168	VAL	2.8
62	R	109	PRO	2.8
63	DD	18	VAL	2.8
64	DE	110	VAL	2.8
65	DF	82	PRO	2.8
77	DR	60	PRO	2.8
16	v	179	LEU	2.8
17	BJ	59	LEU	2.8
21	BN	4	LEU	2.8
27	9	9	SER	2.8
53	CT	77	LEU	2.8
60	DA	117	LEU	2.8
68	X	18	SER	2.8
11	q	114	ILE	2.8
16	BI	174	ILE	2.8
19	y	139	ILE	2.8
25	BR	19	THR	2.8
28	BU	83	THR	2.8
41	AN	19	ILE	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
44	CK	10	ILE	2.8
44	CK	46	THR	2.8
50	F	87	ILE	2.8
63	DD	35	ILE	2.8
69	DJ	2	THR	2.8
62	R	54	MET	2.7
7	AZ	161	GLY	2.7
7	AZ	168	ASP	2.7
19	y	160	GLY	2.7
79	AR	17	ASN	2.7
56	L	164	TYR	2.7
20	BM	71	ARG	2.7
64	DE	33	ARG	2.7
64	DE	47	ARG	2.7
74	d	19	HIS	2.7
79	AR	91	ARG	2.7
6	AY	166	ALA	2.7
7	m	97	ALA	2.7
9	o	173	LYS	2.7
16	BI	192	LYS	2.7
24	6	44	ALA	2.7
28	BU	41	ALA	2.7
37	CD	22	ALA	2.7
50	F	146	ALA	2.7
72	DM	76	ALA	2.7
1	1	402	A	2.7
1	1	2078	A	2.7
1	AS	2492	U	2.7
1	AS	2675	A	2.7
6	AY	49	GLN	2.7
13	BF	47	GLN	2.7
16	v	57	GLN	2.7
18	x	179	GLN	2.7
26	BS	26	VAL	2.7
31	BX	33	VAL	2.7
46	B	76	A	2.7
48	CO	206	PRO	2.7
6	l	234	LEU	2.7
16	v	134	LEU	2.7
47	CN	184	LEU	2.7
49	CP	149	LEU	2.7
63	S	37	LEU	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
76	f	38	LEU	2.7
1	1	2448	C	2.7
1	AS	487	C	2.7
1	AS	1697	C	2.7
5	AX	113	GLU	2.7
6	AY	183	ILE	2.7
18	BK	166	ILE	2.7
19	y	34	SER	2.7
22	BO	70	SER	2.7
7	m	56	THR	2.7
24	BQ	121	GLU	2.7
31	AD	46	ILE	2.7
31	BX	102	ILE	2.7
46	B	1081	C	2.7
46	CM	482	C	2.7
46	CM	1259	C	2.7
52	CS	140	SER	2.7
65	DF	119	ILE	2.7
63	DD	114	THR	2.7
65	DF	141	THR	2.7
66	DG	51	GLU	2.7
70	Z	38	PHE	2.7
79	AR	254	THR	2.7
22	BO	81	GLY	2.7
38	CE	62	GLY	2.7
42	CI	5	TRP	2.7
50	CQ	113	GLY	2.7
54	J	133	GLY	2.7
11	BD	37	ASP	2.7
46	CM	1186	G	2.7
14	BG	70	ARG	2.7
61	DB	122	ARG	2.7
12	BE	145	LYS	2.7
14	t	128	LYS	2.7
14	BG	12	ASN	2.7
17	BJ	67	LYS	2.7
17	BJ	180	ASN	2.7
27	BT	19	TYR	2.7
35	AH	21	LYS	2.7
37	CD	27	TYR	2.7
37	CD	52	TYR	2.7
54	CU	66	TYR	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
56	CW	74	ASN	2.7
58	CY	46	LYS	2.7
58	CY	138	ASN	2.7
78	DS	132	LYS	2.7
5	AX	8	ALA	2.7
7	AZ	67	ALA	2.7
29	AB	17	ALA	2.7
54	CU	65	ALA	2.7
8	n	10	GLN	2.7
9	BB	100	VAL	2.7
21	BN	35	VAL	2.7
35	AH	33	GLN	2.7
37	CD	21	VAL	2.7
54	CU	70	GLN	2.7
65	U	93	VAL	2.7
73	DN	39	VAL	2.7
79	DT	124	VAL	2.7
5	k	324	LEU	2.7
5	AX	161	LEU	2.7
8	BA	57	LEU	2.7
19	y	104	LEU	2.7
20	z	99	LEU	2.7
26	BS	113	LEU	2.7
27	BT	35	LEU	2.7
41	CH	6	LEU	2.7
48	D	120	LEU	2.7
66	V	28	LEU	2.7
69	DJ	65	LEU	2.7
79	AR	207	LEU	2.7
1	1	1736	U	2.7
1	AS	1912	U	2.7
1	AS	2950	U	2.7
7	AZ	64	ILE	2.7
15	BH	111	PHE	2.7
16	v	160	GLU	2.7
48	CO	122	GLU	2.7
58	CY	50	GLU	2.7
76	DQ	45	GLU	2.7
1	1	2310	A	2.7
1	AS	69	A	2.7
1	AS	1485	A	2.7
1	AS	1783	A	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
8	BA	66	GLY	2.7
11	BD	150	SER	2.7
18	BK	87	SER	2.7
21	0	85	SER	2.7
24	6	7	SER	2.7
35	CB	68	THR	2.7
45	i	92	SER	2.7
46	CM	1188	A	2.7
46	CM	1473	A	2.7
52	H	94	THR	2.7
53	I	168	THR	2.7
58	N	124	THR	2.7
58	CY	41	GLY	2.7
67	W	65	THR	2.7
67	W	69	THR	2.7
79	DT	191	GLY	2.7
65	DF	129	TRP	2.7
16	BI	73	ARG	2.7
20	BM	9	ARG	2.7
4	AW	155	LYS	2.7
4	AW	190	LYS	2.7
10	BC	71	LYS	2.7
14	BG	131	LYS	2.7
15	u	126	LYS	2.7
64	T	49	LYS	2.7
1	1	1903	C	2.7
1	1	2476	C	2.7
1	AS	2914	C	2.7
2	AT	73	C	2.7
46	CM	1013	C	2.7
53	CT	152	ASP	2.7
55	CV	105	ASP	2.7
56	L	157	ASP	2.7
73	c	73	TYR	2.7
18	BK	133	HIS	2.7
22	2	77	ASN	2.7
24	6	98	ASN	2.7
29	BV	49	HIS	2.7
44	CK	92	ALA	2.7
58	N	61	ALA	2.7
79	DT	209	ALA	2.7
5	AX	192	VAL	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
14	BG	22	VAL	2.7
39	AL	31	VAL	2.7
6	l	137	LEU	2.7
19	BL	94	LEU	2.7
32	AE	19	LEU	2.7
43	AP	70	LEU	2.7
49	E	129	LEU	2.7
52	CS	118	LEU	2.7
53	I	111	LEU	2.7
53	CT	109	LEU	2.7
65	DF	86	LEU	2.7
1	AS	243	G	2.7
1	AS	1930	G	2.7
1	AS	2846	G	2.7
27	9	41	GLN	2.7
46	CM	1140	G	2.7
51	G	240	PRO	2.7
7	m	199	ILE	2.7
33	BZ	109	ILE	2.7
35	CB	89	ILE	2.7
48	CO	105	PHE	2.7
50	CQ	85	ILE	2.7
57	M	3	ILE	2.7
64	T	38	ILE	2.7
64	DE	41	ILE	2.7
64	DE	50	ILE	2.7
65	U	28	ILE	2.7
31	AD	83	CYS	2.7
7	m	82	GLU	2.7
7	AZ	245	GLU	2.7
6	l	198	ARG	2.7
10	BC	237	GLY	2.7
24	BQ	100	GLY	2.7
32	BY	34	GLU	2.7
48	D	122	GLU	2.7
55	CV	28	GLU	2.7
15	BH	73	THR	2.7
34	CA	48[A]	ARG	2.7
47	CN	96	THR	2.7
56	CW	54	ARG	2.7
62	DC	44	ARG	2.7
5	k	125	SER	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
17	w	131	LYS	2.7
18	BK	80	LYS	2.7
26	BS	121	LYS	2.7
30	AC	22	LYS	2.7
1	AS	133	U	2.7
46	CM	318	U	2.7
52	H	46	TRP	2.7
1	1	1590	A	2.7
46	B	129	A	2.7
46	B	504	A	2.7
46	B	619	A	2.7
46	CM	925	A	2.7
4	AW	133	TYR	2.7
19	y	33	TYR	2.7
23	BP	78	TYR	2.7
29	BV	103	ASP	2.7
35	AH	7	TYR	2.7
50	CQ	153	TYR	2.7
54	CU	53	ALA	2.7
60	DA	128	TYR	2.7
61	Q	59	ALA	2.7
69	DJ	52	TYR	2.7
19	y	71	LEU	2.7
20	BM	66	LEU	2.7
21	BN	152	LEU	2.7
27	BT	70	VAL	2.7
28	BU	51	LEU	2.7
30	BW	11	ASN	2.7
32	AE	14	ASN	2.7
32	AE	15	LEU	2.7
36	CC	17	LEU	2.7
41	CH	27	LEU	2.7
45	CL	103	LEU	2.7
49	E	96	VAL	2.7
52	CS	31	LEU	2.7
67	W	19	HIS	2.7
70	DK	54	LEU	2.7
71	a	24	VAL	2.7
72	DM	42	LEU	2.7
75	e	54	LEU	2.7
3	AU	108	C	2.7
46	CM	280	C	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
46	CM	1182	C	2.7
46	CM	1520	C	2.7
46	CM	1593	C	2.7
4	j	101	ILE	2.7
7	AZ	88	ILE	2.7
34	AG	32	ILE	2.7
37	CD	6	ILE	2.7
51	CR	68	GLN	2.7
60	DA	47	PRO	2.7
63	S	30	ILE	2.7
69	DJ	86	ILE	2.7
80	ll	65	ILE	2.7
7	AZ	160	PHE	2.7
38	CE	72	ARG	2.7
59	O	43	ARG	2.7
8	BA	156	LYS	2.7
13	BF	22	CYS	2.7
17	w	104	LYS	2.7
35	AH	19	LYS	2.7
35	CB	29[A]	LYS	2.7
44	CK	19	GLY	2.7
47	C	134	LYS	2.7
52	CS	105	GLY	2.7
52	CS	107	LYS	2.7
63	DD	41	GLU	2.7
65	DF	144	GLY	2.7
66	DG	72	GLY	2.7
78	DS	139	LYS	2.7
6	l	133	THR	2.7
26	BS	31	THR	2.7
67	DH	59	THR	2.7
75	e	19	THR	2.7
1	1	1888	G	2.7
1	AS	20	G	2.7
1	AS	238	G	2.7
1	AS	1829	G	2.7
1	AS	2549	G	2.7
1	AS	2965	G	2.7
10	BC	53	TRP	2.7
46	B	508	G	2.7
46	B	622	G	2.7
46	B	1115	G	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
46	CM	1609	G	2.7
26	8	50	SER	2.7
52	H	96	SER	2.7
79	AR	83	SER	2.7
17	BJ	191	ALA	2.7
25	BR	118	ALA	2.7
29	BV	134	ALA	2.7
35	CB	32	ALA	2.7
1	1	1263	U	2.7
1	AS	2081	U	2.7
1	AS	2536	U	2.7
1	AS	2845	U	2.7
6	AY	26	VAL	2.7
8	n	64	VAL	2.7
8	BA	39	LEU	2.7
16	BI	89	VAL	2.7
22	BO	126	VAL	2.7
24	BQ	62	VAL	2.7
31	BX	61	TYR	2.7
32	BY	54	LEU	2.7
46	CM	779	U	2.7
46	CM	1565	U	2.7
54	CU	172	LEU	2.7
56	CW	70	LEU	2.7
57	CX	65	TYR	2.7
62	R	41	VAL	2.7
65	U	116	LEU	2.7
70	Z	104	LEU	2.7
70	DK	104	LEU	2.7
75	DP	54	LEU	2.7
77	g	40	TYR	2.7
79	AR	145	LEU	2.7
79	AR	183	TYR	2.7
79	DT	95	LEU	2.7
13	BF	109	HIS	2.7
14	BG	52	ASP	2.7
20	BM	75	HIS	2.7
45	CL	98	ASP	2.7
73	DN	91	ASP	2.7
1	AS	19	A	2.6
1	AS	1023	A	2.6
1	AS	2966	A	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
27	9	81	GLN	2.6
28	AA	104	PRO	2.6
28	BU	5	ILE	2.6
4	j	6	ARG	2.6
10	p	50	PHE	2.6
28	BU	71	PHE	2.6
36	CC	20	GLN	2.6
46	CM	990	A	2.6
52	CS	89	ILE	2.6
61	DB	76	ILE	2.6
79	AR	123	ILE	2.6
20	BM	81	ARG	2.6
36	CC	48	ARG	2.6
51	G	109	PHE	2.6
52	CS	82	PHE	2.6
5	AX	24	LYS	2.6
41	CH	7	LYS	2.6
58	CY	15	LYS	2.6
4	AW	171	GLY	2.6
1	AS	1416	C	2.6
1	AS	2352	C	2.6
6	l	227	GLU	2.6
17	w	101	GLU	2.6
29	BV	33	GLY	2.6
31	BX	90	GLY	2.6
34	AG	61	GLY	2.6
35	CB	48	GLY	2.6
46	CM	1451	C	2.6
46	CM	1704	C	2.6
52	CS	218	GLU	2.6
60	DA	103	GLU	2.6
35	AH	68	THR	2.6
49	E	157	CYS	2.6
58	CY	124	THR	2.6
64	T	55	THR	2.6
4	AW	98	VAL	2.6
5	AX	141	ALA	2.6
11	BD	24	VAL	2.6
11	BD	181	VAL	2.6
17	w	109	VAL	2.6
18	x	112	LEU	2.6
23	BP	17	VAL	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	BS	29	SER	2.6
30	BW	51	ALA	2.6
33	BZ	4	SER	2.6
37	CD	47	ALA	2.6
53	I	77	LEU	2.6
54	CU	18	ALA	2.6
55	CV	7	SER	2.6
55	CV	90	LEU	2.6
58	CY	140	LEU	2.6
60	DA	14	SER	2.6
61	Q	132	LEU	2.6
62	R	126	VAL	2.6
62	DC	105	VAL	2.6
65	DF	142	SER	2.6
70	DK	76	LEU	2.6
79	AR	124	VAL	2.6
18	BK	21	TYR	2.6
32	BY	16	HIS	2.6
1	1	2455	G	2.6
1	AS	2788	G	2.6
9	BB	176	ILE	2.6
24	6	129	ILE	2.6
48	CO	169	ILE	2.6
50	F	116	ILE	2.6
45	i	37	LYS	2.6
45	CL	43	PRO	2.6
46	B	898	G	2.6
47	CN	98	ILE	2.6
4	AW	227	ARG	2.6
1	AS	216	U	2.6
3	AU	98	U	2.6
6	AY	40	PHE	2.6
6	AY	91	PHE	2.6
14	t	129	LYS	2.6
17	BJ	27	GLN	2.6
18	BK	27	LYS	2.6
26	BS	96	LYS	2.6
38	AK	78	PHE	2.6
46	CM	874	U	2.6
46	CM	1292	U	2.6
48	D	24	PHE	2.6
48	CO	216	LYS	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
49	CP	86	ARG	2.6
58	CY	33	ARG	2.6
67	W	76	LYS	2.6
73	c	13	LYS	2.6
74	DO	28	PRO	2.6
35	CB	73	GLN	2.6
63	DD	138	GLN	2.6
65	DF	92	GLN	2.6
79	AR	104	PHE	2.6
79	DT	189	PHE	2.6
35	CB	78	GLY	2.6
75	e	24	GLY	2.6
1	AS	803	A	2.6
46	CM	217	A	2.6
46	CM	1101	A	2.6
46	CM	1168	A	2.6
7	m	38	THR	2.6
11	BD	83	THR	2.6
16	BI	80	THR	2.6
4	AW	59	ALA	2.6
5	k	179	ALA	2.6
5	AX	107	ALA	2.6
8	BA	73	VAL	2.6
8	BA	97	VAL	2.6
11	BD	57	VAL	2.6
14	t	44	ALA	2.6
14	BG	7	LEU	2.6
20	BM	44	LEU	2.6
27	9	82	VAL	2.6
27	BT	2	ALA	2.6
31	AD	69	VAL	2.6
41	AN	25	ALA	2.6
43	CJ	70	LEU	2.6
47	C	122	VAL	2.6
52	CS	85	ALA	2.6
54	CU	114	LEU	2.6
58	CY	47	ALA	2.6
63	DD	88	LEU	2.6
64	DE	66	VAL	2.6
66	DG	132	LEU	2.6
68	DI	13	VAL	2.6
74	DO	46	VAL	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
79	DT	7	LEU	2.6
1	AS	2311	C	2.6
1	AS	2737	C	2.6
27	BT	32	SER	2.6
46	CM	38	C	2.6
46	CM	995	C	2.6
50	F	150	SER	2.6
54	J	185	SER	2.6
60	P	12	SER	2.6
23	BP	33	TYR	2.6
6	AY	320	LYS	2.6
7	AZ	50	ARG	2.6
11	BD	79	ILE	2.6
11	BD	136	ILE	2.6
12	r	131	ILE	2.6
30	AC	48	HIS	2.6
31	BX	71	TYR	2.6
14	BG	128	LYS	2.6
23	5	92	ILE	2.6
32	BY	74	ILE	2.6
35	AH	8	ARG	2.6
36	CC	45	HIS	2.6
49	E	61	TYR	2.6
60	DA	90	TYR	2.6
40	CG	46	ARG	2.6
44	CK	23	ARG	2.6
50	F	174	ARG	2.6
50	F	178	MET	2.6
52	H	84	LYS	2.6
52	H	89	ILE	2.6
59	O	89	ILE	2.6
60	DA	4	MET	2.6
61	DB	124	LYS	2.6
65	DF	110	ARG	2.6
69	Y	19	LYS	2.6
72	b	50	ILE	2.6
72	DM	41	ILE	2.6
4	AW	16	PHE	2.6
5	k	84	MET	2.6
5	AX	84	MET	2.6
15	BH	122	PHE	2.6
19	BL	19	PRO	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
29	AB	68	PHE	2.6
33	AF	18	PHE	2.6
63	S	50	PRO	2.6
63	DD	108	PHE	2.6
64	T	58	MET	2.6
67	W	70	PRO	2.6
74	DO	10	PRO	2.6
17	w	11	ASP	2.6
57	CX	17	GLN	2.6
57	CX	28	ASN	2.6
29	BV	108	GLY	2.6
57	M	72	GLY	2.6
64	DE	2	GLY	2.6
69	DJ	123	GLY	2.6
1	AS	3164	U	2.6
24	BQ	96	GLU	2.6
46	CM	693	U	2.6
46	CM	1756	U	2.6
49	CP	203	GLU	2.6
46	CM	702	G	2.6
46	CM	757	G	2.6
46	CM	1588	G	2.6
6	l	23	LEU	2.6
18	BK	94	LEU	2.6
29	AB	5	LEU	2.6
4	j	116	VAL	2.6
6	AY	360	VAL	2.6
16	v	155	VAL	2.6
16	v	185	ALA	2.6
16	v	191	TRP	2.6
20	z	144	ALA	2.6
20	BM	164	VAL	2.6
28	AA	44	ALA	2.6
31	BX	50	THR	2.6
47	C	96	THR	2.6
47	CN	16	LEU	2.6
50	F	143	LEU	2.6
52	H	97	LEU	2.6
54	CU	13	LEU	2.6
54	CU	34	LEU	2.6
61	DB	28	LEU	2.6
61	DB	78	LEU	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
65	U	86	LEU	2.6
77	g	49	LEU	2.6
44	AQ	64	VAL	2.6
45	i	46	ALA	2.6
49	E	125	VAL	2.6
52	H	111	VAL	2.6
56	L	96	VAL	2.6
72	DM	99	ALA	2.6
73	c	18	VAL	2.6
73	DN	6	ALA	2.6
1	1	367	A	2.6
1	AS	1470	A	2.6
1	AS	2304	A	2.6
7	m	5	LYS	2.6
6	AY	130	SER	2.6
20	BM	142	ILE	2.6
22	BO	43	LYS	2.6
26	BS	92	LYS	2.6
27	BT	27	ARG	2.6
33	AF	106	ARG	2.6
36	AI	114	ARG	2.6
40	CG	8	ARG	2.6
46	B	1078	A	2.6
46	CM	398	A	2.6
46	CM	1174	A	2.6
52	H	45	LYS	2.6
66	DG	89	ARG	2.6
77	g	33	ARG	2.6
16	v	37	HIS	2.6
18	BK	47	TYR	2.6
24	6	35	TYR	2.6
49	E	196	SER	2.6
56	L	83	ILE	2.6
56	L	122	ILE	2.6
62	DC	123	TYR	2.6
67	W	40	ILE	2.6
68	DI	34	ILE	2.6
26	BS	93	HIS	2.6
74	DO	30	SER	2.6
7	m	174	PRO	2.6
11	BD	117	PHE	2.6
33	BZ	66	PHE	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
45	CL	69	PHE	2.6
53	CT	45	PHE	2.6
54	CU	179	PHE	2.6
1	AS	652	C	2.6
25	7	41	GLN	2.6
46	B	1417	C	2.6
46	CM	1141	C	2.6
66	DG	25	GLN	2.6
16	BI	122	ASN	2.6
16	BI	177	GLY	2.6
22	BO	66	ASN	2.6
52	CS	150	GLY	2.6
65	DF	37	GLY	2.6
75	DP	51	ASN	2.6
17	w	29	LEU	2.6
26	8	82	LEU	2.6
26	BS	34	LEU	2.6
29	BV	5	LEU	2.6
47	C	177	LEU	2.6
51	G	123	LEU	2.6
56	CW	33	GLU	2.6
57	CX	49	LEU	2.6
59	CZ	74	LEU	2.6
69	DJ	26	LEU	2.6
71	DL	40	LEU	2.6
79	DT	270	GLU	2.6
4	AW	27	ALA	2.6
7	AZ	105	VAL	2.6
10	BC	155	ALA	2.6
17	w	119	VAL	2.6
21	0	167	ALA	2.6
29	BV	101	VAL	2.6
31	BX	69	VAL	2.6
33	BZ	110	VAL	2.6
38	CE	59	THR	2.6
44	AQ	26	THR	2.6
49	E	202	THR	2.6
49	CP	161	ALA	2.6
55	K	97	THR	2.6
60	DA	126	ALA	2.6
1	1	146	U	2.6
1	1	830	U	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AS	18	U	2.6
1	AS	1625	U	2.6
4	AW	54	ARG	2.6
4	AW	181	LYS	2.6
5	AX	152	LYS	2.6
6	l	189	ARG	2.6
7	m	95	TRP	2.6
7	AZ	21	ARG	2.6
24	BQ	85	TRP	2.6
26	BS	49	LYS	2.6
27	BT	46	LYS	2.6
29	BV	4	ARG	2.6
36	CC	67	ARG	2.6
42	AO	14	LYS	2.6
45	CL	90	ARG	2.6
46	B	697	U	2.6
46	B	1572	U	2.6
46	CM	1356	U	2.6
63	DD	16	THR	2.6
50	F	8	LYS	2.6
52	CS	80	LYS	2.6
52	CS	212	LYS	2.6
76	DQ	40	ARG	2.6
11	q	179	ILE	2.6
11	BD	48	ILE	2.6
12	BE	33	ILE	2.6
15	BH	33	ILE	2.6
47	C	173	ILE	2.6
49	E	173	ILE	2.6
49	CP	134	ILE	2.6
65	U	69	ILE	2.6
65	DF	22	ILE	2.6
76	f	50	ILE	2.6
7	m	3	MET	2.6
1	AS	443	G	2.6
1	AS	2557	G	2.6
12	r	11	TYR	2.6
17	BJ	65	TYR	2.6
6	AY	65	SER	2.6
14	BG	14	PHE	2.6
22	2	58	HIS	2.6
29	BV	53	PHE	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
46	CM	1094	G	2.6
46	CM	1577	G	2.6
47	C	138	TYR	2.6
55	CV	198	TYR	2.6
19	y	157	PRO	2.6
49	CP	80	SER	2.6
64	DE	43	SER	2.6
1	AS	42	A	2.6
1	AS	156	A	2.6
1	AS	1139	A	2.6
1	AS	2186	A	2.6
35	AH	61	GLN	2.6
40	CG	17	GLN	2.6
43	AP	53	GLN	2.6
45	i	104	GLN	2.6
46	B	1357	A	2.6
46	CM	978	A	2.6
46	CM	1148	A	2.6
6	AY	355	GLY	2.6
20	z	16	GLY	2.6
12	BE	205	ASN	2.6
22	BO	18	ASP	2.6
26	BS	79	GLY	2.6
38	AK	48	ASN	2.6
62	DC	98	ASN	2.6
66	DG	131	ASP	2.6
70	DK	97	ASP	2.6
5	AX	102	LEU	2.6
13	BF	12	LEU	2.6
15	BH	65	LEU	2.6
19	BL	29	LEU	2.6
20	BM	99	LEU	2.6
29	BV	81	LEU	2.6
36	AI	55	LEU	2.6
36	CC	36	LEU	2.6
56	CW	30	LEU	2.6
65	DF	113	LEU	2.6
78	DS	190	LEU	2.6
79	AR	90	LEU	2.6
11	BD	33	GLU	2.6
16	v	103	GLU	2.6
29	BV	146	GLU	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
46	CM	307	C	2.6
46	CM	1589	C	2.6
56	L	41	GLU	2.6
74	DO	15	GLU	2.6
17	w	35	VAL	2.6
19	y	84	VAL	2.6
10	p	147	LYS	2.6
10	BC	64	LYS	2.6
10	BC	88	ALA	2.6
13	BF	136	ALA	2.6
19	y	179	ARG	2.6
27	BT	16	ARG	2.6
31	AD	82	VAL	2.6
35	CB	88	ARG	2.6
58	CY	135	VAL	2.6
62	R	75	VAL	2.6
62	DC	72	ARG	2.6
63	S	13	LYS	2.6
65	DF	88	ARG	2.6
66	DG	75	ALA	2.6
67	DH	30	VAL	2.6
67	W	29	LYS	2.6
71	a	127	LYS	2.6
73	c	93	LYS	2.6
73	DN	27	ALA	2.6
78	DS	126	VAL	2.6
79	DT	114	VAL	2.6
49	CP	180	LYS	2.6
7	m	153	THR	2.6
49	CP	91	THR	2.6
58	N	3	THR	2.6
9	BB	87	ILE	2.5
11	BD	114	ILE	2.5
15	BH	60	ILE	2.5
22	BO	63	ILE	2.5
65	U	119	ILE	2.5
67	DH	102	ILE	2.5
69	DJ	27	ILE	2.5
5	AX	130	PHE	2.5
6	l	200	PHE	2.5
62	DC	12	PHE	2.5
62	DC	102	PHE	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1	3138	U	2.5
1	AS	1611	U	2.5
1	AS	1927	U	2.5
1	AS	2090	U	2.5
5	k	119	TYR	2.5
9	BB	73	TYR	2.5
19	BL	15	HIS	2.5
46	B	1674	U	2.5
46	CM	1515	U	2.5
46	CM	1725	U	2.5
70	DK	48	HIS	2.5
72	DM	95	HIS	2.5
17	w	132	PRO	2.5
18	BK	59	PRO	2.5
24	BQ	127	PRO	2.5
13	BF	135	GLY	2.5
57	M	62	GLN	2.5
68	DI	33	GLN	2.5
13	s	91	LEU	2.5
14	BG	172	LEU	2.5
48	CO	96	LEU	2.5
49	CP	230	LEU	2.5
51	CR	20	LEU	2.5
56	CW	97	LEU	2.5
59	CZ	36	LEU	2.5
79	DT	249	LEU	2.5
1	1	1901	G	2.5
1	AS	1113	G	2.5
1	AS	1614	G	2.5
4	AW	191	VAL	2.5
5	AX	240	ARG	2.5
6	l	194	LYS	2.5
6	AY	354	LYS	2.5
9	BB	84	VAL	2.5
13	s	150	ASN	2.5
14	BG	6	ASN	2.5
20	z	14	VAL	2.5
20	z	139	VAL	2.5
1	AS	900	A	2.5
1	AS	1081	A	2.5
6	l	57	ALA	2.5
18	BK	33	ALA	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
20	BM	140	GLU	2.5
24	6	10	LYS	2.5
42	CI	18	ARG	2.5
43	AP	2	VAL	2.5
46	B	1571	G	2.5
46	CM	1173	G	2.5
46	CM	1775	G	2.5
46	CM	1780	G	2.5
50	F	92	VAL	2.5
51	CR	194	VAL	2.5
52	CS	100	ASN	2.5
55	CV	41	LYS	2.5
55	CV	102	VAL	2.5
70	Z	83	VAL	2.5
73	c	87	ARG	2.5
20	BM	169	ALA	2.5
22	2	44	ALA	2.5
33	BZ	70	ALA	2.5
36	AI	102	GLU	2.5
75	e	45	LYS	2.5
78	DS	136	LYS	2.5
46	CM	915	A	2.5
46	CM	924	A	2.5
46	CM	1598	A	2.5
50	F	86	ALA	2.5
52	CS	173	ALA	2.5
56	CW	4	ALA	2.5
5	AX	146	THR	2.5
13	BF	154	THR	2.5
20	BM	41	ILE	2.5
50	CQ	50	ILE	2.5
59	O	71	ILE	2.5
60	P	11	ILE	2.5
67	DH	49	ILE	2.5
52	CS	99	MET	2.5
2	AT	10	C	2.5
6	AY	101	PHE	2.5
6	AY	157	PHE	2.5
13	s	127	PHE	2.5
46	CM	1462	C	2.5
50	F	25	PHE	2.5
4	j	178	PRO	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
5	k	224	HIS	2.5
5	AX	3	HIS	2.5
54	CU	169	TYR	2.5
77	g	5	HIS	2.5
5	AX	251	CYS	2.5
14	BG	38	SER	2.5
1	1	599	U	2.5
1	1	601	U	2.5
1	1	1602	U	2.5
4	j	244	GLY	2.5
5	AX	143	GLN	2.5
16	BI	2	GLY	2.5
18	BK	176	LEU	2.5
24	BQ	65	GLY	2.5
27	9	85	LEU	2.5
27	BT	13	SER	2.5
43	CJ	35	LEU	2.5
53	CT	80	GLY	2.5
56	L	137	GLY	2.5
62	R	113	GLY	2.5
63	DD	53	LEU	2.5
75	DP	24	GLY	2.5
79	DT	180	LEU	2.5
79	DT	215	GLY	2.5
7	m	48	LYS	2.5
10	BC	246	LYS	2.5
11	q	2	LYS	2.5
17	BJ	104	LYS	2.5
17	BJ	126	ARG	2.5
26	BS	61	LYS	2.5
27	BT	28	ARG	2.5
31	AD	85	LYS	2.5
40	CG	12	LYS	2.5
48	D	167	LYS	2.5
55	CV	75	LYS	2.5
56	L	126	ARG	2.5
66	DG	84	LYS	2.5
66	DG	86	ARG	2.5
5	AX	29	VAL	2.5
6	AY	53	VAL	2.5
9	BB	82	VAL	2.5
29	BV	148	VAL	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
63	DD	117	VAL	2.5
79	AR	132	VAL	2.5
5	AX	270	ASN	2.5
7	m	98	ALA	2.5
13	BF	144	ALA	2.5
16	BI	48	ALA	2.5
19	BL	173	GLU	2.5
20	z	2	ALA	2.5
22	BO	14	ALA	2.5
30	BW	19	ASN	2.5
53	CT	189	ALA	2.5
65	U	65	GLU	2.5
67	DH	73	GLU	2.5
4	AW	41	ILE	2.5
13	BF	114	ILE	2.5
27	9	97	ILE	2.5
27	BT	80	ILE	2.5
67	DH	18	ILE	2.5
16	v	19	MET	2.5
16	BI	200	TRP	2.5
43	AP	54	THR	2.5
45	CL	107	TRP	2.5
19	y	184	PHE	2.5
63	S	59	PHE	2.5
70	DK	38	PHE	2.5
1	1	717	A	2.5
1	AS	98	A	2.5
1	AS	709	A	2.5
46	CM	1178	A	2.5
1	AS	1071	G	2.5
3	AU	140	G	2.5
14	BG	154	PRO	2.5
16	BI	81	TYR	2.5
16	BI	202	TYR	2.5
53	CT	81	HIS	2.5
60	DA	89	TYR	2.5
73	DN	72	HIS	2.5
5	AX	324	LEU	2.5
15	BH	62	LEU	2.5
16	v	22	LEU	2.5
1	1	240	C	2.5
1	1	2745	C	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AS	23	C	2.5
1	AS	1770	C	2.5
1	AS	2942	C	2.5
1	AS	3246	C	2.5
6	AY	177	LYS	2.5
6	AY	351	LYS	2.5
7	AZ	27	LYS	2.5
9	BB	161	LEU	2.5
11	q	34	LEU	2.5
16	BI	99	ARG	2.5
19	BL	36	LEU	2.5
20	BM	85	LYS	2.5
22	BO	8	ARG	2.5
26	BS	40	LEU	2.5
31	AD	27	LEU	2.5
34	CA	29	LEU	2.5
36	CC	32	LYS	2.5
42	CI	15	ARG	2.5
45	CL	55	LYS	2.5
45	CL	93	ARG	2.5
46	CM	1406	C	2.5
46	CM	1610	C	2.5
46	CM	1623	C	2.5
48	CO	45	LYS	2.5
50	F	97	LEU	2.5
59	O	106	LEU	2.5
65	DF	96	LYS	2.5
67	DH	72	GLY	2.5
76	DQ	22	ARG	2.5
77	DR	32	GLY	2.5
8	BA	162	SER	2.5
15	BH	35	GLN	2.5
34	CA	31	GLN	2.5
50	CQ	163	GLN	2.5
5	k	192	VAL	2.5
11	BD	71	VAL	2.5
23	BP	34	VAL	2.5
50	F	137	VAL	2.5
53	CT	102	VAL	2.5
64	T	40	VAL	2.5
5	AX	250	ALA	2.5
9	BB	128	ALA	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
13	BF	98	ALA	2.5
17	w	170	ALA	2.5
79	AR	241	ALA	2.5
46	B	190	U	2.5
46	B	480	U	2.5
50	CQ	24	GLU	2.5
62	DC	110	GLU	2.5
4	j	194	ASN	2.5
9	BB	192	ASN	2.5
10	BC	154	ILE	2.5
12	BE	50	ILE	2.5
13	BF	111	ASP	2.5
14	BG	46	ILE	2.5
14	BG	66	ASN	2.5
16	v	64	ILE	2.5
26	8	114	ILE	2.5
31	AD	94	ILE	2.5
36	AI	61	ASN	2.5
48	CO	124	ASN	2.5
61	Q	110	ILE	2.5
66	DG	15	ILE	2.5
66	DG	85	ASN	2.5
68	DI	50	ASN	2.5
69	DJ	83	ILE	2.5
79	DT	142	MET	2.5
5	k	233	TRP	2.5
10	BC	122	THR	2.5
19	BL	153	PHE	2.5
25	BR	21	PHE	2.5
26	BS	28	THR	2.5
36	CC	93	THR	2.5
38	CE	17	THR	2.5
47	CN	203	PHE	2.5
64	DE	35	THR	2.5
65	U	140	THR	2.5
79	AR	291	TRP	2.5
9	o	156	LYS	2.5
13	BF	52	TYR	2.5
16	BI	77	LYS	2.5
20	BM	58	HIS	2.5
26	BS	103	TYR	2.5
28	BU	65	ARG	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
28	BU	74	LEU	2.5
28	BU	133	LYS	2.5
29	AB	111	LYS	2.5
29	BV	47	LYS	2.5
30	AC	5	LYS	2.5
33	AF	35	LYS	2.5
33	AF	76	LEU	2.5
34	CA	54	ARG	2.5
42	CI	2	ARG	2.5
51	CR	52	LEU	2.5
55	CV	8	ARG	2.5
60	DA	64	LYS	2.5
60	DA	102	LEU	2.5
60	DA	129	TYR	2.5
63	DD	81	ARG	2.5
64	T	26	LEU	2.5
65	DF	41	ARG	2.5
65	DF	66	LEU	2.5
1	AS	212	A	2.5
1	AS	1180	A	2.5
3	AU	59	A	2.5
20	z	79	GLY	2.5
4	j	202	VAL	2.5
6	AY	182	VAL	2.5
7	AZ	122	VAL	2.5
28	BU	23	VAL	2.5
43	AP	102	GLN	2.5
44	CK	47	VAL	2.5
62	DC	126	VAL	2.5
63	DD	54	VAL	2.5
65	U	52	VAL	2.5
1	AS	420	G	2.5
1	AS	1417	G	2.5
1	AS	2582	G	2.5
10	BC	123	ALA	2.5
18	x	12	ALA	2.5
21	BN	18	SER	2.5
22	BO	4	SER	2.5
36	CC	97	ALA	2.5
43	CJ	33	ALA	2.5
46	CM	979	G	2.5
46	CM	1099	G	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
46	CM	1594	G	2.5
49	CP	194	SER	2.5
50	CQ	154	ALA	2.5
79	DT	79	ALA	2.5
79	DT	235	ALA	2.5
80	l1	79	SER	2.5
81	12	129	SER	2.5
1	1	2848	C	2.5
1	AS	1197	C	2.5
3	AU	30	C	2.5
19	y	173	GLU	2.5
22	2	157	GLU	2.5
28	AA	102	GLU	2.5
33	AF	96	GLU	2.5
36	AI	51	ILE	2.5
47	CN	173	ILE	2.5
66	V	36	ILE	2.5
66	DG	65	ILE	2.5
69	Y	47	ILE	2.5
79	AR	287	ILE	2.5
12	BE	102	MET	2.5
46	B	237	C	2.5
46	CM	1611	C	2.5
69	DJ	41	MET	2.5
14	t	26	PHE	2.5
19	y	145	ASN	2.5
20	z	122	ASN	2.5
29	BV	76	ASP	2.5
64	T	31	ASN	2.5
67	DH	71	ASN	2.5
69	DJ	37	PHE	2.5
71	a	133	ASN	2.5
1	AS	1013	U	2.5
30	BW	50	THR	2.5
46	CM	1614	U	2.5
46	CM	1730	U	2.5
48	CO	106	THR	2.5
63	DD	52	THR	2.5
79	AR	280	THR	2.5
16	BI	140	LYS	2.5
6	AY	220	LEU	2.5
12	BE	210	LEU	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
18	x	126	ARG	2.5
50	CQ	191	LYS	2.5
54	J	134	LYS	2.5
61	Q	65	LYS	2.5
36	CC	60	LEU	2.5
45	CL	115	LEU	2.5
48	D	207	LEU	2.5
51	G	9	LEU	2.5
53	CT	62	PRO	2.5
54	CU	59	PRO	2.5
55	CV	179	PRO	2.5
66	DG	140	LEU	2.5
67	DH	92	LEU	2.5
71	a	44	LEU	2.5
71	a	74	LEU	2.5
72	DM	80	LEU	2.5
75	DP	66	LEU	2.5
5	k	377[A]	HIS	2.5
7	AZ	90	TYR	2.5
16	v	148	TYR	2.5
20	BM	78	TYR	2.5
56	L	12	TYR	2.5
62	DC	115	TYR	2.5
76	f	3	HIS	2.5
79	AR	67	HIS	2.5
4	AW	121	GLY	2.5
35	AH	27	GLY	2.5
43	AP	51	GLY	2.5
51	G	4	GLY	2.5
54	CU	174	GLY	2.5
6	AY	146	VAL	2.5
6	AY	208	VAL	2.5
6	AY	226	VAL	2.5
7	AZ	135	VAL	2.5
14	t	135	VAL	2.5
19	BL	150	VAL	2.5
28	AA	24	VAL	2.5
47	C	73	VAL	2.5
48	CO	215	VAL	2.5
65	DF	133	VAL	2.5
14	t	37	GLN	2.5
54	J	105	GLN	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
9	BB	111	ALA	2.4
14	t	2	ALA	2.4
14	BG	86	ALA	2.4
19	BL	99	ALA	2.4
51	CR	13	ALA	2.4
62	DC	39	ALA	2.4
79	DT	181	ALA	2.4
10	BC	103	SER	2.4
11	BD	99	ILE	2.4
45	CL	78	SER	2.4
59	CZ	120	CYS	2.4
1	AS	2502	A	2.4
7	AZ	6	GLU	2.4
13	BF	125	MET	2.4
29	BV	135	GLU	2.4
32	AE	70	MET	2.4
46	CM	914	A	2.4
46	CM	1078	A	2.4
46	CM	1741	A	2.4
54	CU	14	GLU	2.4
18	BK	90	PHE	2.4
21	BN	25	PHE	2.4
51	CR	99	PHE	2.4
70	DK	122	PHE	2.4
23	BP	97	ARG	2.4
26	8	89	LYS	2.4
6	AY	68	THR	2.4
26	BS	87	ASP	2.4
31	BX	21	LYS	2.4
35	AH	58	ARG	2.4
37	CD	11	ASN	2.4
44	CK	3	LYS	2.4
54	J	135	ARG	2.4
65	U	139	LYS	2.4
65	DF	118	LYS	2.4
74	DO	20	LYS	2.4
1	1	955	C	2.4
1	1	2311	C	2.4
1	AS	75	G	2.4
1	AS	199	C	2.4
1	AS	320	G	2.4
1	AS	1302	G	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AS	1664	G	2.4
3	AU	142	C	2.4
4	AW	150	LEU	2.4
7	m	150	LEU	2.4
12	BE	174	THR	2.4
39	CF	65	LEU	2.4
41	AN	27	LEU	2.4
51	CR	12	LEU	2.4
51	CR	80	THR	2.4
57	M	2	LEU	2.4
63	DD	104	LEU	2.4
64	DE	6	THR	2.4
79	DT	310	TRP	2.4
26	BS	126	LEU	2.4
33	BZ	83	LEU	2.4
36	CC	24	LEU	2.4
54	CU	89	LEU	2.4
78	h	190	LEU	2.4
10	BC	32	PRO	2.4
53	CT	173	PRO	2.4
62	R	73	PRO	2.4
79	DT	27	PRO	2.4
1	AS	401	U	2.4
1	AS	542	U	2.4
1	AS	705	U	2.4
28	BU	85	TYR	2.4
29	AB	62	HIS	2.4
29	BV	90	TYR	2.4
46	CM	1224	U	2.4
73	DN	62	TYR	2.4
5	k	234	GLY	2.4
6	AY	167	VAL	2.4
7	AZ	74	VAL	2.4
10	p	204	VAL	2.4
10	BC	133	VAL	2.4
11	BD	18	VAL	2.4
17	w	36	VAL	2.4
19	y	140	VAL	2.4
34	CA	81	VAL	2.4
48	D	114	VAL	2.4
49	CP	170	GLY	2.4
58	CY	122	VAL	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
62	R	85	VAL	2.4
80	ll	205	VAL	2.4
4	j	182	ALA	2.4
7	m	291	ALA	2.4
13	BF	6	GLN	2.4
14	t	132	ALA	2.4
30	BW	2	ALA	2.4
37	CD	34	GLN	2.4
45	i	63	ALA	2.4
50	CQ	146	ALA	2.4
54	J	146	GLN	2.4
55	CV	57	ALA	2.4
66	DG	83	ALA	2.4
15	BH	83	ILE	2.4
20	z	41	ILE	2.4
35	AH	20	ILE	2.4
43	CJ	57	ILE	2.4
53	I	175	ILE	2.4
58	CY	84	ILE	2.4
60	DA	122	ILE	2.4
18	x	87	SER	2.4
20	BM	13	SER	2.4
23	BP	73	SER	2.4
27	9	127	GLU	2.4
69	DJ	87	GLU	2.4
71	DL	69	SER	2.4
5	k	66	LYS	2.4
10	BC	93	LYS	2.4
13	s	104	PHE	2.4
22	BO	97	LYS	2.4
37	CD	24	LYS	2.4
41	CH	37	ARG	2.4
42	CI	14	LYS	2.4
50	CQ	149	LYS	2.4
54	CU	101	LYS	2.4
58	CY	32	LYS	2.4
60	DA	113	PHE	2.4
77	DR	43	ARG	2.4
16	BI	10	LEU	2.4
24	6	125	LEU	2.4
34	AG	89	LEU	2.4
45	i	103	LEU	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
50	F	60	LEU	2.4
51	CR	247	LEU	2.4
52	H	174	LEU	2.4
75	e	33	LEU	2.4
18	x	89	ASN	2.4
24	BQ	28	ASN	2.4
1	1	707	A	2.4
1	1	1932	A	2.4
1	AS	1608	A	2.4
14	t	130	THR	2.4
33	BZ	84	ASP	2.4
36	CC	56	THR	2.4
62	R	98	ASN	2.4
46	B	216	A	2.4
46	CM	1408	A	2.4
73	DN	33	ASP	2.4
79	AR	25	THR	2.4
70	Z	42	PRO	2.4
77	g	58	PRO	2.4
4	j	82	VAL	2.4
4	AW	167	GLY	2.4
4	AW	230	VAL	2.4
6	AY	169	VAL	2.4
11	q	43	VAL	2.4
12	BE	91	VAL	2.4
21	BN	51	VAL	2.4
26	BS	110	VAL	2.4
31	AD	23	GLY	2.4
32	BY	48	VAL	2.4
50	CQ	187	VAL	2.4
51	G	25	GLY	2.4
51	G	219	VAL	2.4
51	CR	27	TYR	2.4
52	H	70	VAL	2.4
54	J	86	VAL	2.4
63	S	18	VAL	2.4
66	DG	34	VAL	2.4
77	DR	40	TYR	2.4
78	h	127	TYR	2.4
1	AS	486	C	2.4
1	AS	1312	C	2.4
1	AS	1398	C	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AS	1840	C	2.4
46	CM	1443	C	2.4
47	C	95	ALA	2.4
48	CO	34	ALA	2.4
40	CG	4	GLN	2.4
43	CJ	82	GLN	2.4
46	B	1376	U	2.4
46	CM	1095	G	2.4
46	CM	1441	G	2.4
46	CM	1466	G	2.4
46	CM	1613	U	2.4
46	CM	1641	G	2.4
48	CO	150	ILE	2.4
52	CS	29	ILE	2.4
63	S	35	ILE	2.4
65	U	50	ALA	2.4
70	Z	31	ALA	2.4
79	AR	143	ALA	2.4
1	1	600	U	2.4
1	1	2252	U	2.4
1	AS	52	G	2.4
1	AS	777	G	2.4
1	AS	1484	G	2.4
1	AS	2894	G	2.4
1	AS	3088	G	2.4
2	AT	52	G	2.4
25	7	42	GLN	2.4
68	DI	1	MET	2.4
11	q	168	ARG	2.4
11	BD	2	LYS	2.4
13	s	174	LYS	2.4
9	BB	220	PHE	2.4
20	BM	103	ARG	2.4
22	BO	20	LYS	2.4
27	9	89	LYS	2.4
27	BT	17	LYS	2.4
35	CB	86	LYS	2.4
43	CJ	15	LYS	2.4
45	CL	67	LYS	2.4
49	CP	207	LYS	2.4
53	I	143	LYS	2.4
56	CW	3	ARG	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
61	DB	13	ARG	2.4
61	DB	79	ARG	2.4
65	U	34	LYS	2.4
65	DF	139	LYS	2.4
73	DN	89	ARG	2.4
58	CY	65	SER	2.4
60	DA	61	SER	2.4
79	DT	153	SER	2.4
8	BA	33	LEU	2.4
9	BB	177	LEU	2.4
17	w	53	LEU	2.4
19	BL	28	LEU	2.4
20	BM	138	LEU	2.4
40	CG	23	LEU	2.4
51	G	131	LEU	2.4
54	CU	54	LEU	2.4
57	M	40	LEU	2.4
70	Z	33	LEU	2.4
6	AY	330	PRO	2.4
9	BB	107	THR	2.4
12	r	209	ASN	2.4
16	BI	74	PRO	2.4
29	AB	74	ASN	2.4
55	CV	107	THR	2.4
55	CV	203	THR	2.4
61	DB	84	THR	2.4
68	X	14	PRO	2.4
74	d	10	PRO	2.4
79	DT	73	THR	2.4
79	DT	174	THR	2.4
6	AY	223	VAL	2.4
8	n	97	VAL	2.4
24	6	78	VAL	2.4
24	BQ	97	ASP	2.4
27	9	104	VAL	2.4
29	BV	130	VAL	2.4
29	BV	145	VAL	2.4
47	CN	58	VAL	2.4
54	J	178	VAL	2.4
78	h	144	VAL	2.4
4	j	209	HIS	2.4
7	m	30	TYR	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
12	r	117	GLY	2.4
13	s	103	GLY	2.4
55	CV	172	TYR	2.4
63	DD	48	TYR	2.4
68	DI	12	TYR	2.4
4	j	62	ALA	2.4
5	k	76	ALA	2.4
6	AY	219	ALA	2.4
1	AS	2780	A	2.4
1	AS	2844	A	2.4
13	BF	110	ILE	2.4
19	y	81	ILE	2.4
20	z	142	ILE	2.4
38	CE	53	ALA	2.4
45	CL	41	ALA	2.4
46	CM	215	A	2.4
46	CM	358	A	2.4
46	CM	678	A	2.4
48	D	197	ILE	2.4
49	CP	213	ILE	2.4
50	CQ	86	ALA	2.4
52	H	142	ALA	2.4
54	CU	131	ILE	2.4
63	DD	64	ILE	2.4
63	DD	83	ALA	2.4
65	U	35	ILE	2.4
69	Y	86	ILE	2.4
5	AX	241	LYS	2.4
7	AZ	24	GLN	2.4
12	r	113	GLN	2.4
16	BI	172	ARG	2.4
17	BJ	69	LYS	2.4
19	BL	12	ARG	2.4
20	z	80	LYS	2.4
26	BS	56	ARG	2.4
27	BT	103	LYS	2.4
34	CA	12	LYS	2.4
42	AO	1	MET	2.4
45	CL	77	GLN	2.4
50	F	191	LYS	2.4
60	P	109	LYS	2.4
65	DF	29	MET	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
66	DG	138	GLN	2.4
50	CQ	28	ARG	2.4
73	DN	38	ARG	2.4
75	DP	14	LYS	2.4
77	g	42	ARG	2.4
7	AZ	7	PHE	2.4
10	p	166	PHE	2.4
14	BG	126	PHE	2.4
21	BN	150	PHE	2.4
58	CY	115	PHE	2.4
71	a	23	PHE	2.4
1	1	110	C	2.4
1	AS	309	U	2.4
1	AS	893	U	2.4
1	AS	2223	C	2.4
1	AS	2793	C	2.4
1	AS	3163	U	2.4
3	4	22	U	2.4
5	k	171	LEU	2.4
9	o	22	GLU	2.4
13	s	12	LEU	2.4
13	BF	37	LEU	2.4
14	t	9	LEU	2.4
16	v	98	LEU	2.4
18	x	168	LEU	2.4
20	z	140	GLU	2.4
21	BN	124	LEU	2.4
27	9	57	LEU	2.4
27	BT	76	LEU	2.4
46	B	130	C	2.4
46	B	505	U	2.4
46	CM	230	U	2.4
46	CM	1412	C	2.4
46	CM	1467	C	2.4
46	CM	1487	C	2.4
66	V	140	LEU	2.4
70	DK	9	LEU	2.4
77	g	39	LEU	2.4
79	DT	298	LEU	2.4
16	v	171	SER	2.4
20	BM	91	SER	2.4
44	CK	81	SER	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
48	D	119	SER	2.4
1	1	3268	G	2.4
1	AS	337	G	2.4
1	AS	1425	G	2.4
1	AS	1437	G	2.4
1	AS	1776	G	2.4
1	AS	2403	G	2.4
1	AS	2533	G	2.4
33	BZ	42	CYS	2.4
46	CM	870	G	2.4
74	DO	64	CYS	2.4
4	AW	134	VAL	2.4
6	l	223	VAL	2.4
7	m	278	THR	2.4
7	AZ	9	THR	2.4
8	BA	64	VAL	2.4
11	BD	30	PRO	2.4
14	BG	141	VAL	2.4
19	BL	97	PRO	2.4
27	BT	21	THR	2.4
36	AI	101	THR	2.4
39	AL	25	VAL	2.4
53	CT	135	PRO	2.4
54	J	87	VAL	2.4
60	P	65	VAL	2.4
64	DE	25	THR	2.4
4	AW	172	GLY	2.4
5	AX	256	HIS	2.4
6	l	59	HIS	2.4
19	y	177	GLY	2.4
19	BL	5	HIS	2.4
20	z	73	GLY	2.4
24	BQ	107	GLY	2.4
36	CC	50	ASN	2.4
45	i	66	ASN	2.4
48	CO	63	GLY	2.4
49	E	140	GLY	2.4
55	K	88	ASN	2.4
10	p	56	TYR	2.4
69	DJ	55	ASP	2.4
69	DJ	85	ASP	2.4
10	p	200	ALA	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
11	q	41	ILE	2.4
12	r	76	ILE	2.4
16	v	174	ILE	2.4
28	BU	19	ALA	2.4
36	CC	71	ALA	2.4
37	CD	68	ALA	2.4
45	i	41	ALA	2.4
53	I	198	ALA	2.4
57	CX	82	ILE	2.4
66	DG	61	ILE	2.4
76	f	34	TYR	2.4
81	12	132	ILE	2.4
22	2	3	LYS	2.4
22	2	60	LYS	2.4
43	CJ	61	LYS	2.4
54	CU	107	LYS	2.4
63	DD	11	LYS	2.4
19	y	69	ARG	2.4
53	CT	88	ARG	2.4
69	DJ	117	ARG	2.4
70	DK	110	ARG	2.4
73	c	15	ARG	2.4
7	m	39	GLN	2.4
12	r	211	GLN	2.4
36	AI	107	GLN	2.4
56	CW	48	GLN	2.4
66	DG	70	GLN	2.4
79	AR	122	GLN	2.4
8	n	46	PHE	2.4
29	BV	61	PHE	2.4
66	DG	14	PHE	2.4
6	AY	234	LEU	2.4
6	AY	325	LEU	2.4
6	AY	326	LEU	2.4
16	v	164	LEU	2.4
25	7	54	LEU	2.4
55	CV	121	LEU	2.4
63	S	43	LEU	2.4
77	DR	38	LEU	2.4
1	AS	99	A	2.4
1	AS	932	A	2.4
1	AS	2221	A	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
8	n	58	GLU	2.4
13	BF	108	GLU	2.4
46	B	618	A	2.4
46	B	777	A	2.4
46	CM	423	A	2.4
46	CM	773	A	2.4
46	CM	1123	A	2.4
77	DR	25	GLU	2.4
4	AW	226	SER	2.4
22	2	142	SER	2.4
29	BV	92	SER	2.4
44	AQ	20	SER	2.4
61	DB	120	SER	2.4
1	AS	3165	U	2.4
20	BM	90	PRO	2.4
23	BP	38	VAL	2.4
43	AP	68	VAL	2.4
46	CM	259	U	2.4
46	CM	1271	U	2.4
46	CM	1729	U	2.4
47	CN	121	VAL	2.4
58	CY	64	VAL	2.4
62	DC	75	VAL	2.4
64	T	4	VAL	2.4
64	T	65	PRO	2.4
67	W	113	VAL	2.4
67	DH	50	VAL	2.4
69	Y	121	VAL	2.4
73	c	31	PRO	2.4
1	AS	2744	C	2.3
7	AZ	182	GLY	2.3
12	r	174	THR	2.3
46	CM	1194	C	2.3
58	N	72	THR	2.3
63	DD	14	THR	2.3
64	T	54	THR	2.3
7	m	94	ASN	2.3
7	m	100	ALA	2.3
7	AZ	240	TYR	2.3
9	o	33	ALA	2.3
15	BH	53	ALA	2.3
16	v	169	LYS	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
16	v	182	LYS	2.3
16	v	184	LYS	2.3
16	BI	79	ALA	2.3
22	BO	45	ASN	2.3
22	BO	58	HIS	2.3
24	6	24	ASN	2.3
25	BR	47	ARG	2.3
25	BR	49	ILE	2.3
26	BS	107	ALA	2.3
27	9	116	LYS	2.3
30	AC	40	LYS	2.3
37	CD	93	ILE	2.3
44	AQ	56	ASN	2.3
45	CL	62	ALA	2.3
47	C	98	ILE	2.3
48	CO	204	ILE	2.3
49	E	215	ASN	2.3
51	G	17	HIS	2.3
56	CW	95	TYR	2.3
58	CY	48	ALA	2.3
61	Q	101	ALA	2.3
61	DB	80	ALA	2.3
65	U	112	ASP	2.3
65	DF	30	TYR	2.3
65	DF	69	ILE	2.3
71	a	117	LYS	2.3
21	BN	95	ARG	2.3
35	CB	10	ARG	2.3
52	CS	180	ARG	2.3
55	K	92	ARG	2.3
68	X	58	TYR	2.3
80	l1	155	ILE	2.3
67	W	57	MET	2.3
78	h	174	MET	2.3
1	1	949	G	2.3
1	AS	171	G	2.3
1	AS	1136	G	2.3
1	AS	1943	G	2.3
3	AU	107	G	2.3
46	B	939	G	2.3
46	B	1092	G	2.3
46	B	1431	G	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
46	CM	127	G	2.3
46	CM	1070	G	2.3
46	CM	1339	G	2.3
8	n	54	LEU	2.3
25	BR	41	GLN	2.3
34	CA	89	LEU	2.3
40	AM	13	LEU	2.3
44	AQ	29	LEU	2.3
48	CO	142	PHE	2.3
50	F	26	PHE	2.3
50	CQ	111	LEU	2.3
53	I	212	LEU	2.3
56	L	139	GLN	2.3
59	CZ	62	LEU	2.3
65	DF	136	GLN	2.3
72	DM	83	LEU	2.3
8	BA	103	GLU	2.3
20	z	68	GLU	2.3
39	CF	4	GLU	2.3
53	CT	207	GLU	2.3
5	AX	322	VAL	2.3
6	l	152	VAL	2.3
9	BB	154	VAL	2.3
11	BD	112	VAL	2.3
13	BF	171	VAL	2.3
48	D	164	VAL	2.3
55	CV	162	VAL	2.3
70	DK	124	VAL	2.3
45	CL	76	PRO	2.3
1	AS	663	A	2.3
1	AS	1692	A	2.3
3	4	59	A	2.3
50	CQ	226	SER	2.3
69	DJ	77	PRO	2.3
43	CJ	10	THR	2.3
45	CL	100	LYS	2.3
46	B	367	A	2.3
46	B	988	A	2.3
46	B	1331	A	2.3
46	CM	481	A	2.3
70	DK	47	SER	2.3
16	BI	38	ARG	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
16	BI	78	GLY	2.3
18	BK	73	GLY	2.3
6	AY	172	ALA	2.3
12	r	33	ILE	2.3
14	BG	99	HIS	2.3
16	v	167	ALA	2.3
21	BN	116	ALA	2.3
22	2	76	ILE	2.3
29	AB	42	ARG	2.3
48	D	93	GLY	2.3
48	CO	185	THR	2.3
49	E	92	ARG	2.3
51	G	49	ARG	2.3
30	AC	63	ALA	2.3
39	AL	62	ALA	2.3
50	F	206	ALA	2.3
50	CQ	74	ILE	2.3
54	CU	173	THR	2.3
56	L	92	LYS	2.3
63	DD	61	GLY	2.3
65	DF	34	LYS	2.3
52	H	110	ALA	2.3
55	K	185	CYS	2.3
59	O	118	ALA	2.3
60	DA	11	ILE	2.3
63	S	118	ALA	2.3
63	DD	23	ALA	2.3
70	DK	52	ILE	2.3
79	DT	123	ILE	2.3
79	DT	138	ILE	2.3
73	c	17	HIS	2.3
1	1	732	U	2.3
1	1	825	U	2.3
1	AS	13	U	2.3
1	AS	278	U	2.3
1	AS	1518	U	2.3
1	AS	1687	U	2.3
5	AX	6	TYR	2.3
39	AL	32	ASN	2.3
44	CK	56	ASN	2.3
46	B	607	U	2.3
46	B	710	U	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
46	CM	1296	U	2.3
46	CM	1435	U	2.3
49	CP	192	TYR	2.3
52	H	169	ASN	2.3
56	L	95	TYR	2.3
62	R	82	ASN	2.3
65	DF	98	TYR	2.3
79	DT	80	TYR	2.3
1	1	2092	C	2.3
1	AS	1447	C	2.3
1	AS	3051	C	2.3
3	AU	115	C	2.3
33	BZ	40	ASP	2.3
7	m	180	PHE	2.3
7	m	190	LEU	2.3
16	BI	116	LEU	2.3
12	r	163	GLN	2.3
27	9	20	PHE	2.3
28	AA	101	LEU	2.3
29	BV	91	LEU	2.3
31	BX	92	LEU	2.3
33	BZ	88	LEU	2.3
46	B	319	C	2.3
46	CM	400	C	2.3
63	DD	112	ASP	2.3
66	DG	8	ASP	2.3
48	CO	113	LEU	2.3
49	CP	56	LEU	2.3
52	H	165	LEU	2.3
54	CU	168	LEU	2.3
56	L	118	LEU	2.3
60	DA	45	LEU	2.3
62	R	17	PHE	2.3
63	S	116	LEU	2.3
70	DK	132	LEU	2.3
17	w	32	GLN	2.3
22	BO	16	GLN	2.3
18	BK	147	GLU	2.3
59	O	68	GLU	2.3
75	e	50	GLU	2.3
1	AS	863	G	2.3
1	AS	1482	G	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	4	15	G	2.3
4	AW	116	VAL	2.3
12	r	53	VAL	2.3
13	s	171	VAL	2.3
13	BF	8	VAL	2.3
23	5	99	VAL	2.3
28	BU	96	VAL	2.3
46	B	1404	G	2.3
46	B	1765	G	2.3
46	CM	7	G	2.3
54	CU	126	VAL	2.3
58	N	142	VAL	2.3
58	CY	107	VAL	2.3
67	DH	55	VAL	2.3
70	Z	74	VAL	2.3
70	DK	120	VAL	2.3
79	DT	312	VAL	2.3
4	AW	60	LYS	2.3
9	BB	92	LYS	2.3
20	BM	21	LYS	2.3
37	CD	12	LYS	2.3
37	CD	69[A]	LYS	2.3
51	G	6	LYS	2.3
54	CU	104	LYS	2.3
58	CY	30	LYS	2.3
60	P	43	LYS	2.3
65	DF	49	LYS	2.3
70	DK	30	LYS	2.3
5	k	115	ARG	2.3
25	7	46	PRO	2.3
29	BV	100	PRO	2.3
40	AM	24	PRO	2.3
58	CY	129	ARG	2.3
66	DG	123	ARG	2.3
67	DH	70	PRO	2.3
73	DN	98	PRO	2.3
75	DP	6	PRO	2.3
76	f	40	ARG	2.3
77	g	27	PRO	2.3
4	j	2	GLY	2.3
4	j	5	ILE	2.3
6	AY	58	GLY	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
7	AZ	290	ILE	2.3
11	q	75	ILE	2.3
14	t	3	ILE	2.3
14	BG	30	GLY	2.3
16	v	150	TRP	2.3
18	BK	170	SER	2.3
19	y	169	GLY	2.3
22	2	63	ILE	2.3
22	2	85	ILE	2.3
14	BG	71	ALA	2.3
22	BO	28	SER	2.3
23	BP	83	THR	2.3
25	7	119	ALA	2.3
26	BS	37	THR	2.3
27	BT	24	SER	2.3
30	BW	4	SER	2.3
33	AF	51	ILE	2.3
34	CA	64	ILE	2.3
43	AP	39	GLY	2.3
47	C	50	ILE	2.3
52	CS	62	ILE	2.3
56	L	52	ILE	2.3
56	CW	156	ILE	2.3
60	DA	2	GLY	2.3
75	e	13	ILE	2.3
79	AR	139	GLY	2.3
79	DT	295	GLY	2.3
45	CL	79	THR	2.3
56	L	55	ALA	2.3
66	DG	58	ALA	2.3
79	DT	137	THR	2.3
29	BV	107	HIS	2.3
7	AZ	44	TYR	2.3
12	BE	22	TYR	2.3
21	BN	81	TYR	2.3
58	CY	35	TYR	2.3
63	DD	111	TYR	2.3
66	V	66	TYR	2.3
6	AY	195	LEU	2.3
7	m	163	LEU	2.3
13	s	62	ASN	2.3
14	t	116	LEU	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
17	BJ	179	LEU	2.3
19	BL	49	LEU	2.3
31	BX	43	LEU	2.3
56	CW	38	ASN	2.3
57	M	80	LEU	2.3
69	DJ	84	ASN	2.3
69	DJ	92	ASN	2.3
79	AR	95	LEU	2.3
1	1	369	A	2.3
1	1	2436	A	2.3
1	AS	11	A	2.3
1	AS	823	A	2.3
1	AS	878	A	2.3
15	BH	108	PHE	2.3
22	BO	19	PHE	2.3
46	CM	92	A	2.3
46	CM	814	A	2.3
46	CM	1357	A	2.3
56	L	47	PHE	2.3
62	R	33	PHE	2.3
80	ll	214	PHE	2.3
4	AW	51	ASP	2.3
50	F	192	ASP	2.3
1	1	1859	U	2.3
1	1	2080	U	2.3
1	AS	815	U	2.3
1	AS	1699	U	2.3
1	AS	2838	U	2.3
1	AS	3234	U	2.3
46	B	94	U	2.3
46	CM	176	U	2.3
9	BB	123	GLU	2.3
36	AI	100	GLU	2.3
45	CL	61	GLU	2.3
77	DR	22	GLU	2.3
79	AR	285	GLU	2.3
1	AS	172	C	2.3
1	AS	955	C	2.3
1	AS	1764	C	2.3
1	AS	2255	C	2.3
1	AS	2545	C	2.3
5	AX	87	VAL	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
6	AY	184	LYS	2.3
16	BI	25	VAL	2.3
24	BQ	118	VAL	2.3
29	BV	121	VAL	2.3
36	CC	91	LYS	2.3
36	CC	103	LYS	2.3
42	AO	16	LYS	2.3
46	CM	1291	C	2.3
49	E	188	VAL	2.3
51	G	7	LYS	2.3
53	CT	179	VAL	2.3
58	CY	125	VAL	2.3
66	V	113	VAL	2.3
72	DM	60	VAL	2.3
75	e	48	VAL	2.3
79	AR	63	LYS	2.3
29	BV	21	ARG	2.3
37	CD	67	ARG	2.3
64	T	33	ARG	2.3
8	BA	6	PRO	2.3
7	AZ	169	GLY	2.3
19	y	101	ILE	2.3
22	BO	26	PRO	2.3
20	BM	18	GLY	2.3
22	BO	42	ILE	2.3
22	BO	53	PRO	2.3
29	BV	102	ILE	2.3
29	BV	138	ILE	2.3
36	CC	44	ILE	2.3
37	CD	23	PRO	2.3
49	CP	131	ILE	2.3
51	CR	90	ILE	2.3
53	I	226	ILE	2.3
60	DA	10	GLY	2.3
61	DB	83	GLY	2.3
62	R	99	GLY	2.3
64	T	41	ILE	2.3
67	DH	21	ILE	2.3
71	a	13	ILE	2.3
75	DP	53	ILE	2.3
47	CN	145	ALA	2.3
50	F	154	ALA	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
52	H	210	ALA	2.3
53	I	138	ALA	2.3
55	CV	67	TRP	2.3
79	AR	11	GLY	2.3
6	AY	138	ALA	2.3
9	BB	169	ALA	2.3
24	BQ	99	ALA	2.3
60	DA	15	ALA	2.3
8	BA	172	HIS	2.3
10	BC	75	SER	2.3
16	BI	97	SER	2.3
18	BK	109	SER	2.3
18	BK	129	THR	2.3
17	BJ	56	HIS	2.3
20	BM	137	SER	2.3
30	AC	4	SER	2.3
37	AJ	32	SER	2.3
38	CE	87	THR	2.3
52	H	73	THR	2.3
53	CT	53	THR	2.3
60	DA	19	SER	2.3
65	U	121	SER	2.3
77	DR	50	THR	2.3
33	AF	27	HIS	2.3
34	AG	80	LEU	2.3
39	CF	78	LEU	2.3
62	DC	49	LEU	2.3
67	W	92	LEU	2.3
1	1	2923	G	2.3
1	AS	419	G	2.3
1	AS	1190	G	2.3
1	AS	2611	G	2.3
1	AS	2919	G	2.3
3	AU	131	G	2.3
5	AX	119	TYR	2.3
13	BF	116	TYR	2.3
29	AB	60	TYR	2.3
10	BC	92	PHE	2.3
46	CM	1597	G	2.3
48	D	38	PHE	2.3
66	V	54	PHE	2.3
6	AY	93	ASN	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
24	BQ	33	ASN	2.3
36	CC	59	ASN	2.3
45	CL	68	ASN	2.3
73	c	69	ASN	2.3
7	AZ	111	GLN	2.3
13	s	6	GLN	2.3
13	s	161	GLN	2.3
55	CV	138	ASP	2.3
56	L	177	GLN	2.3
80	ll	73	ASP	2.3
14	BG	32	LYS	2.3
22	2	69	LYS	2.3
38	AK	54	LYS	2.3
43	AP	61	LYS	2.3
48	CO	160	LYS	2.3
60	DA	76	LYS	2.3
62	R	77	LYS	2.3
73	c	3	LYS	2.3
1	AS	48	A	2.3
1	AS	780	A	2.3
1	AS	1650	A	2.3
4	j	168	VAL	2.3
5	k	19	ARG	2.3
8	n	129	GLU	2.3
8	BA	81	ARG	2.3
15	BH	31	GLU	2.3
18	BK	153	GLU	2.3
21	0	82	GLU	2.3
41	AN	16	GLU	2.3
46	B	479	A	2.3
46	B	1137	A	2.3
46	CM	872	A	2.3
46	CM	926	A	2.3
47	C	154	GLU	2.3
51	G	39	ARG	2.3
51	G	51	ARG	2.3
55	CV	22	ARG	2.3
61	DB	74	VAL	2.3
62	DC	32	GLU	2.3
65	U	115	ARG	2.3
66	DG	105	VAL	2.3
68	X	22	ARG	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
69	DJ	62	VAL	2.3
74	DO	2	VAL	2.3
74	DO	35	VAL	2.3
1	AS	86	U	2.3
5	AX	239	PRO	2.3
9	BB	97	PRO	2.3
15	BH	50	ILE	2.3
19	BL	48	ILE	2.3
22	BO	39	ILE	2.3
33	AF	123	PRO	2.3
40	AM	35	ILE	2.3
43	CJ	84	PRO	2.3
47	C	118	PRO	2.3
48	CO	190	PRO	2.3
51	G	147	ILE	2.3
56	L	18	PRO	2.3
66	DG	10	PRO	2.3
73	c	83	ILE	2.3
4	j	235	ALA	2.3
7	AZ	202	GLY	2.3
13	s	42	GLY	2.3
17	BJ	145	ALA	2.3
22	BO	145	GLY	2.3
36	CC	87	ALA	2.3
39	CF	15	ALA	2.3
43	CJ	52	GLY	2.3
44	CK	51	ALA	2.3
46	CM	720	C	2.3
46	CM	1628	C	2.3
50	CQ	178	MET	2.3
63	S	23	ALA	2.3
76	DQ	47	ALA	2.3
1	1	1192	C	2.3
1	AS	889	C	2.3
1	AS	1922	C	2.3
4	j	71	LEU	2.3
4	AW	104	LEU	2.3
5	k	338	LEU	2.3
7	AZ	18	THR	2.3
8	BA	75	LEU	2.3
10	BC	27	LEU	2.3
11	q	144	LEU	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
15	u	58	THR	2.3
22	BO	11	THR	2.3
22	BO	95	HIS	2.3
22	BO	158	THR	2.3
25	7	19	THR	2.3
31	AD	26	THR	2.3
31	BX	26	THR	2.3
31	BX	81	THR	2.3
32	BY	46	THR	2.3
34	CA	80	LEU	2.3
39	CF	76	THR	2.3
43	AP	64	THR	2.3
49	E	143	LEU	2.3
50	F	80	LEU	2.3
50	CQ	80	LEU	2.3
52	CS	94	THR	2.3
56	L	70	LEU	2.3
56	L	97	LEU	2.3
62	DC	78	THR	2.3
64	T	73	LEU	2.3
65	U	127	HIS	2.3
65	DF	55	THR	2.3
73	c	53	LEU	2.3
75	DP	9	LEU	2.3
79	AR	219	LEU	2.3
66	DG	93	HIS	2.3
7	AZ	252	SER	2.3
11	BD	45	PHE	2.3
16	BI	23	TYR	2.3
17	BJ	82	TYR	2.3
28	BU	130	PHE	2.3
28	BU	131	PHE	2.3
38	AK	46	SER	2.3
38	CE	39	TYR	2.3
49	CP	219	PHE	2.3
50	CQ	18	PHE	2.3
53	CT	78	SER	2.3
56	L	145	SER	2.3
69	DJ	107	SER	2.3
5	AX	142	LYS	2.3
20	BM	8	LYS	2.3
20	BM	34	ASN	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
7	m	158	ARG	2.3
15	u	48	GLN	2.3
22	2	97	LYS	2.3
29	BV	137	LYS	2.3
33	BZ	115	LYS	2.3
50	CQ	142	LYS	2.3
53	CT	83	CYS	2.3
70	DK	78	LYS	2.3
70	DK	99	ASN	2.3
70	DK	140	LYS	2.3
80	ll	200	ASN	2.3
17	w	60	ARG	2.3
20	BM	136	ARG	2.3
26	BS	48	ARG	2.3
54	CU	135	ARG	2.3
66	DG	23	GLN	2.3
5	AX	93	VAL	2.3
6	AY	173	VAL	2.3
7	m	73	VAL	2.3
28	BU	43	VAL	2.3
45	CL	89	ASP	2.3
49	CP	125	VAL	2.3
50	CQ	205	ASP	2.3
65	U	23	ASP	2.3
6	l	346	GLU	2.2
14	BG	139	GLU	2.2
16	BI	131	GLU	2.2
52	CS	119	GLU	2.2
58	N	4	GLU	2.2
1	1	2108	G	2.2
1	AS	154	G	2.2
1	AS	1893	G	2.2
1	AS	2135	G	2.2
1	AS	2177	G	2.2
1	AS	2944	G	2.2
46	B	715	G	2.2
46	B	1398	G	2.2
46	CM	1183	G	2.2
14	t	51	ILE	2.2
35	CB	54	ILE	2.2
55	K	189	ILE	2.2
55	CV	189	ILE	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
63	DD	30	ILE	2.2
66	V	124	ILE	2.2
67	DH	117	ILE	2.2
79	DT	190	ILE	2.2
14	t	50	PRO	2.2
19	y	19	PRO	2.2
4	j	185	ALA	2.2
5	k	91	GLY	2.2
27	BT	124	GLY	2.2
45	i	87	PRO	2.2
45	CL	57	PRO	2.2
36	CC	110	ALA	2.2
44	CK	75	ALA	2.2
47	C	159	ALA	2.2
49	CP	88	GLY	2.2
53	I	86	PRO	2.2
53	I	205	ALA	2.2
63	DD	87	GLY	2.2
68	DI	26	ALA	2.2
70	DK	49	ALA	2.2
76	DQ	29	GLY	2.2
1	1	2305	U	2.2
1	AS	132	U	2.2
1	AS	506	A	2.2
1	AS	1836	U	2.2
1	AS	1907	A	2.2
1	AS	2162	U	2.2
4	AW	32	LEU	2.2
5	AX	323	LEU	2.2
25	BR	109	LEU	2.2
39	CF	69	LEU	2.2
46	B	678	A	2.2
46	CM	385	A	2.2
46	CM	480	U	2.2
46	CM	962	A	2.2
46	CM	1167	U	2.2
46	CM	1316	A	2.2
46	CM	1479	A	2.2
46	CM	1758	U	2.2
46	CM	1766	U	2.2
75	e	16	LEU	2.2
77	DR	49	LEU	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
7	AZ	13	HIS	2.2
16	BI	158	HIS	2.2
38	AK	69	HIS	2.2
48	D	205	PHE	2.2
49	CP	85	THR	2.2
52	H	82	PHE	2.2
54	J	85	HIS	2.2
54	CU	57	PHE	2.2
58	CY	42	PHE	2.2
66	DG	54	PHE	2.2
71	a	9	THR	2.2
4	j	226	SER	2.2
5	k	327	SER	2.2
7	AZ	197	LYS	2.2
10	BC	112	LYS	2.2
12	r	196	TYR	2.2
17	BJ	25	SER	2.2
24	6	94	TYR	2.2
29	BV	52	TYR	2.2
35	AH	13	TYR	2.2
40	CG	3	SER	2.2
58	CY	143	SER	2.2
74	d	22	LYS	2.2
76	DQ	28	SER	2.2
79	DT	234	LYS	2.2
1	1	1577	C	2.2
1	AS	1845	C	2.2
1	AS	2213	C	2.2
4	AW	9	ARG	2.2
5	k	4	ARG	2.2
7	AZ	15	ARG	2.2
16	BI	147	ARG	2.2
16	BI	188	ARG	2.2
19	BL	151	ARG	2.2
21	BN	115	ARG	2.2
46	B	1360	C	2.2
46	B	1770	C	2.2
46	CM	975	C	2.2
46	CM	1177	C	2.2
50	CQ	144	ARG	2.2
5	k	336	VAL	2.2
14	BG	166	GLN	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
16	v	115	VAL	2.2
17	w	7	VAL	2.2
21	BN	140	VAL	2.2
23	5	12	VAL	2.2
47	C	123	VAL	2.2
48	CO	157	GLN	2.2
50	CQ	92	VAL	2.2
51	CR	139	VAL	2.2
52	CS	138	VAL	2.2
53	CT	41	VAL	2.2
54	J	136	VAL	2.2
58	N	98	ASN	2.2
73	c	30	VAL	2.2
76	f	6	VAL	2.2
79	AR	263	GLN	2.2
7	AZ	29	ASP	2.2
9	BB	168	GLU	2.2
65	U	114	GLU	2.2
72	DM	34	ASP	2.2
5	k	215	ILE	2.2
6	AY	282	ILE	2.2
20	BM	115	ILE	2.2
21	0	58	ILE	2.2
25	7	28	ILE	2.2
26	BS	135	ILE	2.2
49	E	131	ILE	2.2
71	a	7	ILE	2.2
4	j	99	GLY	2.2
6	l	239	LEU	2.2
6	AY	190	ALA	2.2
7	AZ	51	LEU	2.2
8	BA	54	LEU	2.2
10	p	174	MET	2.2
10	BC	130	PRO	2.2
10	BC	59	LEU	2.2
27	9	15	ALA	2.2
34	CA	56	PRO	2.2
33	BZ	67	LEU	2.2
35	CB	75	ALA	2.2
38	CE	40	PRO	2.2
39	CF	59	ALA	2.2
45	CL	63	ALA	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
53	I	178	LEU	2.2
53	CT	1	MET	2.2
55	CV	2	GLY	2.2
56	CW	28	LEU	2.2
57	CX	87	LEU	2.2
61	DB	63	ALA	2.2
63	DD	90	ALA	2.2
66	DG	22	LEU	2.2
79	DT	106	GLY	2.2
79	DT	143	ALA	2.2
13	s	162	TRP	2.2
6	l	91	PHE	2.2
1	1	1016	G	2.2
1	AS	488	G	2.2
1	AS	1767	G	2.2
3	AU	42	G	2.2
5	AX	235	THR	2.2
9	BB	20	THR	2.2
11	BD	64	HIS	2.2
12	r	101	LYS	2.2
13	s	49	LYS	2.2
16	BI	182	LYS	2.2
21	BN	23	LYS	2.2
21	BN	98	THR	2.2
26	BS	30	THR	2.2
28	AA	27	LYS	2.2
37	CD	38	PHE	2.2
32	BY	105	THR	2.2
34	CA	72	THR	2.2
43	CJ	90[A]	HIS	2.2
44	CK	27	LYS	2.2
46	CM	289	G	2.2
46	CM	420	G	2.2
46	CM	861	G	2.2
46	CM	880	G	2.2
46	CM	976	G	2.2
47	CN	92	HIS	2.2
49	CP	54	HIS	2.2
51	CR	17	HIS	2.2
59	O	114	LYS	2.2
60	DA	46	THR	2.2
60	DA	67	THR	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
62	DC	30	THR	2.2
65	DF	140	THR	2.2
66	V	139	THR	2.2
67	W	26	THR	2.2
71	DL	111	LYS	2.2
76	DQ	27	HIS	2.2
79	AR	303	THR	2.2
1	1	618	U	2.2
1	1	1013	U	2.2
1	1	3165	U	2.2
1	1	3319	U	2.2
1	AS	82	U	2.2
1	AS	250	U	2.2
1	AS	1661	U	2.2
1	AS	2485	U	2.2
3	AU	60	U	2.2
19	BL	147	ARG	2.2
21	0	81	TYR	2.2
32	AE	18	ARG	2.2
55	CV	92	ARG	2.2
56	L	171	ARG	2.2
56	CW	120	ARG	2.2
66	V	123	ARG	2.2
1	1	47	A	2.2
1	1	1554	A	2.2
1	AS	2259	A	2.2
5	AX	2	SER	2.2
13	BF	41	SER	2.2
31	AD	93	SER	2.2
46	B	1298	A	2.2
46	B	1410	A	2.2
46	CM	1502	A	2.2
8	n	83	VAL	2.2
10	BC	191	VAL	2.2
13	BF	18	VAL	2.2
24	6	62	VAL	2.2
33	AF	11	VAL	2.2
33	AF	77	VAL	2.2
38	AK	70	VAL	2.2
50	CQ	49	VAL	2.2
53	CT	157	VAL	2.2
58	CY	123	VAL	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
72	b	60	VAL	2.2
79	DT	175	VAL	2.2
12	BE	113	GLN	2.2
50	F	163	GLN	2.2
9	BB	228	ASN	2.2
10	BC	222	ASN	2.2
16	v	149	ASN	2.2
47	CN	49	ASN	2.2
6	AY	95	CYS	2.2
7	m	69	ILE	2.2
11	q	135	GLU	2.2
13	BF	148	ILE	2.2
50	CQ	116	ILE	2.2
51	CR	195	ILE	2.2
55	K	104	ILE	2.2
59	CZ	60	CYS	2.2
66	DG	126	GLU	2.2
69	DJ	47	ILE	2.2
79	DT	232	GLU	2.2
1	AS	2284	C	2.2
1	AS	2321	C	2.2
3	AU	35	C	2.2
16	v	145	ASP	2.2
46	CM	25	C	2.2
46	CM	409	C	2.2
6	AY	103	PRO	2.2
6	AY	150	PRO	2.2
6	AY	151	LEU	2.2
7	AZ	87	GLY	2.2
13	s	112	LEU	2.2
13	BF	17	LEU	2.2
13	BF	40	LEU	2.2
14	BG	44	ALA	2.2
16	v	173	GLY	2.2
17	BJ	103	LEU	2.2
19	y	97	PRO	2.2
24	6	8	GLY	2.2
25	BR	54	LEU	2.2
33	AF	87	LEU	2.2
36	AI	41	LEU	2.2
37	AJ	8	ALA	2.2
48	CO	73	LEU	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
49	CP	220	LEU	2.2
51	CR	19	MET	2.2
56	L	58	ASP	2.2
52	CS	78	ALA	2.2
53	I	165	GLY	2.2
55	CV	154	GLY	2.2
56	L	76	LEU	2.2
56	CW	76	LEU	2.2
60	P	135	LEU	2.2
60	P	151	ALA	2.2
60	DA	23	PRO	2.2
65	U	109	LEU	2.2
74	d	7	LEU	2.2
80	ll	1	MET	2.2
13	s	16	LYS	2.2
21	0	160	LYS	2.2
27	9	69	LYS	2.2
31	AD	21	LYS	2.2
42	AO	4	LYS	2.2
5	k	16	PHE	2.2
8	BA	46	PHE	2.2
17	BJ	74	PHE	2.2
19	BL	184	PHE	2.2
6	l	4	ARG	2.2
8	BA	107	ARG	2.2
15	BH	120	ARG	2.2
26	BS	42	ARG	2.2
29	AB	69	TRP	2.2
42	CI	6	ARG	2.2
48	CO	117	TRP	2.2
48	CO	205	PHE	2.2
54	J	88	PHE	2.2
51	G	3	ARG	2.2
61	DB	127	ARG	2.2
78	h	122	ARG	2.2
5	AX	11	HIS	2.2
21	BN	145	THR	2.2
26	BS	119	THR	2.2
48	D	52	THR	2.2
54	J	129	THR	2.2
58	CY	44	THR	2.2
62	R	78	THR	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
4	AW	69	TYR	2.2
16	v	62	TYR	2.2
38	AK	66	TYR	2.2
49	CP	52	TYR	2.2
53	I	169	TYR	2.2
57	CX	14	TYR	2.2
60	P	90	TYR	2.2
80	ll	217	TYR	2.2
4	AW	165	VAL	2.2
7	m	236	VAL	2.2
15	BH	74	VAL	2.2
24	BQ	78	VAL	2.2
28	AA	96	VAL	2.2
44	CK	71	VAL	2.2
51	G	160	VAL	2.2
53	CT	195	VAL	2.2
71	DL	55	VAL	2.2
73	DN	18	VAL	2.2
79	DT	6	VAL	2.2
17	w	25	SER	2.2
27	BT	47	SER	2.2
29	BV	16	SER	2.2
42	AO	24	SER	2.2
79	AR	197	SER	2.2
1	1	2838	U	2.2
1	AS	168	U	2.2
1	AS	257	U	2.2
1	AS	2399	U	2.2
3	AU	102	U	2.2
30	BW	12	GLN	2.2
46	B	1756	U	2.2
46	CM	1319	U	2.2
54	CU	105	GLN	2.2
59	O	58	GLN	2.2
63	S	7	GLN	2.2
17	BJ	44	ILE	2.2
18	x	114	ILE	2.2
24	6	79	ILE	2.2
28	AA	5	ILE	2.2
47	CN	187	ILE	2.2
51	G	195	ILE	2.2
53	I	141	ILE	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
66	V	65	ILE	2.2
67	W	105	ILE	2.2
67	DH	90	ILE	2.2
79	DT	57	ILE	2.2
1	1	320	G	2.2
1	1	2459	G	2.2
1	AS	550	G	2.2
1	AS	1548	G	2.2
3	AU	75	G	2.2
18	x	28	ASN	2.2
15	u	62	LEU	2.2
19	BL	124	LEU	2.2
24	BQ	125	LEU	2.2
25	7	126	GLU	2.2
46	B	702	G	2.2
46	B	724	G	2.2
46	B	1441	G	2.2
46	CM	355	G	2.2
46	CM	927	G	2.2
41	CH	45	LEU	2.2
46	CM	1272	A	2.2
47	C	9	LEU	2.2
50	F	29	GLU	2.2
57	M	6	GLU	2.2
59	O	69	GLU	2.2
66	DG	77	ASN	2.2
67	W	71	ASN	2.2
70	Z	79	ASN	2.2
28	BU	134	LEU	2.2
36	AI	9	LEU	2.2
53	I	75	LEU	2.2
72	b	83	LEU	2.2
80	l1	80	LEU	2.2
4	j	153	GLY	2.2
6	AY	22	PRO	2.2
7	AZ	134	ALA	2.2
9	BB	94	PRO	2.2
14	t	33	ALA	2.2
19	BL	14	GLY	2.2
20	BM	26	PRO	2.2
24	6	21	ALA	2.2
25	BR	98	PRO	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
28	BU	16	GLY	2.2
41	CH	10	ALA	2.2
44	CK	74	ALA	2.2
50	F	31	ALA	2.2
54	CU	55	ALA	2.2
56	L	46	GLY	2.2
58	CY	61	ALA	2.2
60	P	146	ALA	2.2
62	DC	37	CYS	2.2
63	S	125	PRO	2.2
66	V	137	ALA	2.2
79	DT	208	CYS	2.2
4	AW	161	ASP	2.2
7	AZ	43	LYS	2.2
10	BC	148	LYS	2.2
14	t	127	ASP	2.2
15	BH	24	LYS	2.2
16	v	170	LYS	2.2
23	5	94	ASP	2.2
24	BQ	56	ASP	2.2
61	Q	87	LYS	2.2
66	V	38	LYS	2.2
69	DJ	82	LYS	2.2
78	h	125	LYS	2.2
5	AX	232	ARG	2.2
12	r	116	ARG	2.2
14	t	126	PHE	2.2
20	BM	60	ARG	2.2
27	BT	115	ARG	2.2
33	BZ	25	ARG	2.2
47	C	115	PHE	2.2
51	CR	3	ARG	2.2
53	I	85	ARG	2.2
60	DA	106	ARG	2.2
60	DA	121	ARG	2.2
64	T	80	ARG	2.2
70	Z	107	PHE	2.2
1	AS	742	C	2.2
1	AS	1352	C	2.2
1	AS	1552	C	2.2
1	AS	1667	C	2.2
1	AS	2385	C	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
23	5	95	TRP	2.2
46	B	1385	C	2.2
47	CN	54	TRP	2.2
5	k	103	THR	2.2
33	AF	22	HIS	2.2
36	CC	6	THR	2.2
41	AN	41	HIS	2.2
44	CK	52	THR	2.2
61	Q	33	THR	2.2
67	DH	19	HIS	2.2
72	DM	90	THR	2.2
74	DO	19	HIS	2.2
8	BA	92	VAL	2.2
14	t	124	VAL	2.2
16	v	6	TYR	2.2
16	BI	18	VAL	2.2
17	w	34	VAL	2.2
19	BL	33	TYR	2.2
23	BP	81	TYR	2.2
28	AA	114	VAL	2.2
35	CB	13	TYR	2.2
37	CD	46	VAL	2.2
39	CF	12	VAL	2.2
43	CJ	25	VAL	2.2
48	D	43	VAL	2.2
48	CO	121	VAL	2.2
49	CP	58	VAL	2.2
72	DM	59	TYR	2.2
76	DQ	6	VAL	2.2
5	k	252	ILE	2.2
8	BA	3	GLN	2.2
10	BC	30	SER	2.2
12	r	20	SER	2.2
31	AD	35	SER	2.2
31	BX	45	ILE	2.2
32	BY	56	ILE	2.2
36	AI	99	GLN	2.2
48	D	186	SER	2.2
48	CO	189	ILE	2.2
54	CU	38	GLN	2.2
54	CU	45	ILE	2.2
62	DC	51	SER	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
63	DD	7	GLN	2.2
65	DF	72	ILE	2.2
67	W	27	SER	2.2
70	DK	57	ILE	2.2
16	v	10	LEU	2.2
17	w	81	LEU	2.2
20	BM	24	LEU	2.2
31	AD	86	LEU	2.2
49	CP	129	LEU	2.2
50	F	30	LEU	2.2
54	J	24	LEU	2.2
56	CW	80	LEU	2.2
57	CX	15	LEU	2.2
62	R	49	LEU	2.2
65	U	18	LEU	2.2
65	DF	3	LEU	2.2
70	Z	76	LEU	2.2
80	l1	38	LEU	2.2
16	v	104	GLU	2.2
38	AK	13	ASN	2.2
40	CG	10	LYS	2.2
44	CK	7	LYS	2.2
45	i	70	ASN	2.2
45	CL	42	ALA	2.2
50	CQ	130	ALA	2.2
52	H	221	ALA	2.2
53	I	222	GLU	2.2
56	CW	41	GLU	2.2
79	DT	313	MET	2.2
4	j	149	LYS	2.2
6	l	131	ALA	2.2
6	AY	131	ALA	2.2
16	v	146	ALA	2.2
19	BL	185	LYS	2.2
24	6	47	ASN	2.2
27	BT	3	LYS	2.2
27	BT	37	LYS	2.2
28	AA	2	ALA	2.2
1	1	1881	U	2.2
1	1	2067	U	2.2
1	AS	861	U	2.2
1	AS	2952	U	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AS	3127	U	2.2
5	AX	253	GLY	2.2
6	l	206	PRO	2.2
10	p	44	LYS	2.2
10	p	86	ASN	2.2
10	BC	138	ASN	2.2
55	K	13	ALA	2.2
60	DA	63	ALA	2.2
63	S	46	LYS	2.2
69	DJ	108	ALA	2.2
69	DJ	116	ALA	2.2
79	DT	276	ALA	2.2
10	BC	128	PRO	2.2
14	t	87	PRO	2.2
23	5	45	GLY	2.2
29	AB	50	PRO	2.2
46	B	1400	U	2.2
46	B	1656	U	2.2
46	CM	778	U	2.2
70	DK	42	PRO	2.2
73	DN	97	PRO	2.2
14	t	73	ARG	2.2
16	BI	63	ARG	2.2
27	9	115	ARG	2.2
37	AJ	75	ARG	2.2
60	DA	124	ARG	2.2
4	AW	208	ASP	2.2
5	AX	386	ASP	2.2
13	s	102	PHE	2.2
45	i	40	ASP	2.2
47	CN	115	PHE	2.2
53	CT	27	PHE	2.2
62	R	102	PHE	2.2
1	1	1542	A	2.2
1	1	2437	A	2.2
1	AS	958	A	2.2
46	B	1316	A	2.2
46	CM	105	A	2.2
46	CM	1187	A	2.2
1	1	1613	G	2.2
1	1	2184	G	2.2
1	AS	54	G	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AS	126	G	2.2
1	AS	1020	G	2.2
1	AS	1383	G	2.2
1	AS	2218	G	2.2
2	AT	7	G	2.2
3	AU	56	G	2.2
5	k	122	TRP	2.2
5	AX	255	TRP	2.2
28	AA	129	TRP	2.2
46	CM	382	G	2.2
46	CM	715	G	2.2
46	CM	1097	G	2.2
46	CM	1139	G	2.2
4	AW	187	HIS	2.2
4	AW	75	THR	2.1
5	k	282	VAL	2.1
6	AY	133	THR	2.1
14	BG	58	VAL	2.1
14	BG	62	THR	2.1
16	BI	196	THR	2.1
20	z	93	VAL	2.1
27	BT	95	VAL	2.1
44	AQ	79	VAL	2.1
47	C	143	VAL	2.1
48	D	20	VAL	2.1
52	CS	56	VAL	2.1
56	CW	81	VAL	2.1
60	P	132	VAL	2.1
62	R	86	VAL	2.1
62	DC	20	VAL	2.1
5	AX	49	TYR	2.1
22	2	30	TYR	2.1
31	AD	29	TYR	2.1
1	1	2470	C	2.1
4	AW	88	ILE	2.1
4	AW	137	ILE	2.1
9	BB	93	ILE	2.1
46	B	720	C	2.1
46	B	763	C	2.1
46	CM	261	C	2.1
46	CM	571	C	2.1
46	CM	1390	C	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
66	V	100	ILE	2.1
72	DM	88	ILE	2.1
5	k	173	GLN	2.1
6	l	202	GLN	2.1
18	x	140	GLN	2.1
18	BK	140	GLN	2.1
33	BZ	76	LEU	2.1
40	CG	29	LEU	2.1
53	CT	24	LEU	2.1
54	CU	106	GLN	2.1
55	CV	58	LEU	2.1
62	DC	25	LEU	2.1
65	DF	131	LEU	2.1
79	AR	298	LEU	2.1
7	AZ	41	LYS	2.1
10	BC	44	LYS	2.1
12	r	164	LYS	2.1
5	k	176	ALA	2.1
15	BH	69	SER	2.1
19	y	56	LYS	2.1
19	y	161	LYS	2.1
21	0	27	MET	2.1
19	y	76	ALA	2.1
19	BL	7	SER	2.1
33	BZ	16	LYS	2.1
35	CB	67	LYS	2.1
24	BQ	51	ALA	2.1
32	AE	31	ALA	2.1
41	CH	5	SER	2.1
51	CR	24	SER	2.1
44	AQ	91	GLU	2.1
47	C	130	ALA	2.1
47	CN	95	ALA	2.1
52	H	24	GLU	2.1
54	J	44	GLU	2.1
60	DA	148	ALA	2.1
64	DE	76	GLU	2.1
64	DE	79	GLU	2.1
4	AW	55	GLY	2.1
33	AF	49	GLY	2.1
6	AY	329	ASN	2.1
7	AZ	181	PRO	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
50	CQ	164	PRO	2.1
52	H	164	PRO	2.1
53	I	70	PRO	2.1
55	CV	187	GLY	2.1
57	CX	83	PRO	2.1
60	DA	82	PRO	2.1
65	DF	57	ARG	2.1
67	DH	54	PRO	2.1
72	DM	72	GLY	2.1
73	c	97	PRO	2.1
77	g	2	GLY	2.1
52	H	66	ASN	2.1
79	DT	119	ASN	2.1
8	BA	105	PHE	2.1
1	1	1551	U	2.1
1	AS	1545	U	2.1
1	AS	1668	U	2.1
1	AS	2790	U	2.1
3	AU	86	U	2.1
8	BA	96	ASP	2.1
8	BA	142	ASP	2.1
12	r	192	ASP	2.1
33	AF	40	ASP	2.1
33	AF	42	CYS	2.1
46	B	175	U	2.1
46	CM	15	U	2.1
46	CM	157	U	2.1
46	CM	210	U	2.1
53	CT	151	ASP	2.1
54	CU	23	ASP	2.1
5	AX	105	VAL	2.1
11	q	57	VAL	2.1
18	BK	113	VAL	2.1
47	CN	31	VAL	2.1
51	CR	18	TRP	2.1
57	CX	21	VAL	2.1
59	CZ	123	VAL	2.1
61	DB	25	VAL	2.1
70	DK	87	VAL	2.1
71	a	35	VAL	2.1
78	h	140	HIS	2.1
18	BK	183	THR	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	BS	71	THR	2.1
51	CR	220	THR	2.1
67	DH	116	THR	2.1
1	AS	2117	A	2.1
1	AS	2222	A	2.1
1	AS	2287	A	2.1
3	AU	96	A	2.1
4	j	49	ILE	2.1
13	BF	123	TYR	2.1
18	BK	67	ILE	2.1
24	BQ	129	ILE	2.1
33	BZ	26	TYR	2.1
39	CF	24	ILE	2.1
46	B	968	A	2.1
46	B	1178	A	2.1
46	B	1654	A	2.1
46	CM	224	A	2.1
46	CM	263	A	2.1
46	CM	1743	A	2.1
47	CN	133	ILE	2.1
52	H	199	ILE	2.1
53	CT	49	ILE	2.1
56	CW	8	TYR	2.1
57	CX	43	ILE	2.1
69	Y	61	ILE	2.1
79	DT	229	TYR	2.1
10	p	134	LYS	2.1
13	s	4	LYS	2.1
14	t	131	LYS	2.1
25	BR	60	LYS	2.1
30	AC	3	LYS	2.1
32	AE	41	LEU	2.1
33	BZ	9	LYS	2.1
33	BZ	81	LYS	2.1
48	D	86	LEU	2.1
49	CP	83	LYS	2.1
49	CP	164	LEU	2.1
51	G	12	LEU	2.1
53	I	136	LYS	2.1
53	CT	234	LEU	2.1
54	J	37	LEU	2.1
54	J	54	LEU	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
54	J	73	LEU	2.1
54	J	114	LEU	2.1
54	J	144	LYS	2.1
56	CW	29	LYS	2.1
57	CX	25	LYS	2.1
60	P	39	LYS	2.1
70	DK	82	LYS	2.1
71	a	96	LEU	2.1
73	DN	19	LYS	2.1
1	1	2894	G	2.1
1	AS	706	G	2.1
1	AS	1753	G	2.1
1	AS	2787	G	2.1
1	AS	2849	G	2.1
1	AS	2936	G	2.1
3	AU	39	G	2.1
46	B	1671	G	2.1
46	CM	1155	G	2.1
46	CM	1353	G	2.1
46	CM	1650	G	2.1
49	E	76	MET	2.1
69	Y	41	MET	2.1
4	AW	56	ALA	2.1
8	BA	77	ARG	2.1
12	BE	24	ARG	2.1
13	BF	55	ARG	2.1
17	w	98	ALA	2.1
17	BJ	64	ARG	2.1
21	BN	99	ARG	2.1
27	9	16	ARG	2.1
29	AB	149	ALA	2.1
30	BW	18	ARG	2.1
50	CQ	53	ALA	2.1
50	CQ	166	ARG	2.1
52	CS	202	ALA	2.1
54	CU	108	ARG	2.1
55	CV	34	ALA	2.1
55	CV	56	ARG	2.1
79	DT	122	GLN	2.1
34	CA	41	ALA	2.1
55	CV	128	ALA	2.1
56	L	31	ALA	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
13	s	146	SER	2.1
28	BU	86	SER	2.1
29	AB	57	GLY	2.1
29	BV	116	GLY	2.1
36	AI	98	SER	2.1
1	1	882	C	2.1
1	AS	321	C	2.1
1	AS	877	C	2.1
1	AS	1781	C	2.1
36	CC	39	PRO	2.1
57	M	88	PRO	2.1
63	DD	24	GLY	2.1
63	DD	34	PRO	2.1
66	DG	42	GLY	2.1
70	DK	45	GLY	2.1
80	ll	20	SER	2.1
46	B	274	C	2.1
46	CM	855	C	2.1
4	AW	79	ASN	2.1
8	n	101	ASN	2.1
13	s	95	ASN	2.1
57	M	75	PHE	2.1
71	DL	23	PHE	2.1
77	DR	44	PHE	2.1
7	AZ	72	ASP	2.1
10	BC	159	ASP	2.1
30	BW	36	ASP	2.1
48	CO	192	VAL	2.1
58	CY	34	TRP	2.1
58	CY	94	VAL	2.1
70	DK	96	VAL	2.1
79	AR	161	ASP	2.1
79	DT	291	TRP	2.1
7	m	68	HIS	2.1
13	s	109	HIS	2.1
1	1	2854	U	2.1
1	1	3162	U	2.1
1	AS	329	U	2.1
1	AS	444	U	2.1
1	AS	1522	U	2.1
2	AT	12	U	2.1
4	AW	243	THR	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
7	AZ	58	LYS	2.1
7	AZ	112	LYS	2.1
8	n	62	LEU	2.1
8	n	128	LYS	2.1
8	BA	159	LEU	2.1
9	BB	127	LEU	2.1
11	BD	63	LYS	2.1
11	BD	68	LEU	2.1
12	r	134	ILE	2.1
13	s	139	THR	2.1
13	BF	172	LEU	2.1
15	BH	26	LEU	2.1
18	BK	130	TYR	2.1
19	BL	104	LEU	2.1
23	5	79	LEU	2.1
27	9	80	ILE	2.1
28	BU	52	LYS	2.1
28	BU	121	LYS	2.1
36	CC	85	THR	2.1
44	AQ	27	LYS	2.1
46	B	1652	U	2.1
46	CM	896	U	2.1
48	D	188	LEU	2.1
48	CO	54	LEU	2.1
49	E	201	THR	2.1
50	F	173	ILE	2.1
52	H	194	LEU	2.1
54	J	95	LEU	2.1
57	CX	24	LYS	2.1
59	CZ	59	LEU	2.1
62	R	121	ILE	2.1
62	DC	57	ILE	2.1
63	S	67	LYS	2.1
63	DD	86	LYS	2.1
64	DE	54	THR	2.1
65	DF	15	LEU	2.1
67	W	87	LYS	2.1
78	h	129	THR	2.1
29	BV	60	TYR	2.1
80	ll	103	LEU	2.1
4	AW	163	ARG	2.1
14	t	41	ARG	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
43	AP	18	ARG	2.1
52	CS	143	ARG	2.1
55	K	47	ARG	2.1
4	AW	182	ALA	2.1
4	AW	239	ALA	2.1
6	AY	337	ALA	2.1
7	m	287	ALA	2.1
19	BL	162	ALA	2.1
21	0	102	ALA	2.1
24	6	123	ALA	2.1
24	BQ	113	ALA	2.1
25	BR	121	ALA	2.1
44	CK	65	ALA	2.1
52	H	170	GLN	2.1
54	J	90	ALA	2.1
62	R	74	ALA	2.1
70	DK	75	GLN	2.1
71	a	130	ALA	2.1
1	1	239	A	2.1
1	AS	779	A	2.1
1	AS	1889	A	2.1
1	AS	2552	A	2.1
6	AY	246	GLY	2.1
7	AZ	177	PRO	2.1
14	t	48	PRO	2.1
14	BG	186	GLU	2.1
19	BL	132	PRO	2.1
21	BN	104	GLU	2.1
39	AL	4	GLU	2.1
46	B	473	A	2.1
46	CM	410	A	2.1
46	CM	613	A	2.1
46	CM	740	A	2.1
46	CM	1778	A	2.1
73	c	98	PRO	2.1
79	AR	244	PRO	2.1
79	DT	147	GLY	2.1
14	BG	105	SER	2.1
23	5	11	SER	2.1
23	BP	110	PHE	2.1
24	BQ	95	PHE	2.1
27	BT	36	SER	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
33	BZ	99	SER	2.1
50	F	198	PHE	2.1
56	L	71	PHE	2.1
79	DT	113	SER	2.1
7	m	57	ASN	2.1
14	t	11	ASN	2.1
17	w	30	ASN	2.1
17	BJ	51	ASN	2.1
33	BZ	79	ASN	2.1
45	i	68	ASN	2.1
76	f	13	ASN	2.1
1	1	1014	G	2.1
1	AS	102	G	2.1
1	AS	303	G	2.1
1	AS	1662	G	2.1
1	AS	2163	G	2.1
1	AS	2547	G	2.1
3	AU	114	G	2.1
3	AU	134	G	2.1
5	AX	57	VAL	2.1
7	m	37	VAL	2.1
22	2	36	VAL	2.1
28	AA	68	VAL	2.1
28	AA	113	VAL	2.1
28	BU	53	VAL	2.1
35	CB	72	VAL	2.1
46	CM	972	G	2.1
53	I	41	VAL	2.1
56	CW	85	VAL	2.1
64	DE	88	VAL	2.1
71	a	5	VAL	2.1
79	AR	155	VAL	2.1
1	1	30	C	2.1
1	1	3051	C	2.1
1	AS	110	C	2.1
1	AS	927	C	2.1
1	AS	1555	C	2.1
1	AS	1702	C	2.1
1	AS	2226	C	2.1
1	AS	2344	C	2.1
46	CM	1060	C	2.1
8	BA	131	LYS	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
69	DJ	60	LYS	2.1
6	AY	127	ILE	2.1
10	p	171	CYS	2.1
14	BG	40	LEU	2.1
15	BH	22	ASP	2.1
17	BJ	52	LYS	2.1
17	BJ	92	LYS	2.1
19	y	28	LEU	2.1
21	BN	96	ASP	2.1
23	BP	108	LEU	2.1
34	AG	49	ILE	2.1
49	CP	151	CYS	2.1
56	L	59	LEU	2.1
57	M	76	LEU	2.1
60	DA	118	ILE	2.1
62	DC	56	LEU	2.1
64	DE	46	LEU	2.1
66	DG	79	LEU	2.1
69	DJ	93	LEU	2.1
71	a	28	LEU	2.1
71	DL	18	LEU	2.1
73	DN	94	ILE	2.1
74	d	77	CYS	2.1
79	AR	33	LEU	2.1
5	k	117	ARG	2.1
16	BI	67	ARG	2.1
9	o	147	TYR	2.1
9	BB	121	THR	2.1
17	w	137	THR	2.1
22	BO	102	ARG	2.1
23	5	83	THR	2.1
26	BS	41	THR	2.1
11	BD	90	MET	2.1
29	AB	48	TYR	2.1
33	BZ	90	THR	2.1
43	CJ	42	ARG	2.1
52	H	81	ARG	2.1
53	I	148	THR	2.1
59	CZ	46	ARG	2.1
62	R	11	THR	2.1
63	S	16	THR	2.1
64	T	11	ARG	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
65	DF	20	THR	2.1
68	X	60	ARG	2.1
62	DC	54	MET	2.1
73	c	44	MET	2.1
6	AY	294	ALA	2.1
11	BD	153	ALA	2.1
24	BQ	52	ALA	2.1
35	CB	52	ALA	2.1
45	CL	80	ALA	2.1
47	C	65	ALA	2.1
47	C	132	ALA	2.1
51	G	258	ALA	2.1
52	CS	110	ALA	2.1
63	S	135	ALA	2.1
66	DG	50	ALA	2.1
73	DN	60	ALA	2.1
74	DO	50	ALA	2.1
1	1	2183	U	2.1
1	AS	78	U	2.1
1	AS	1827	U	2.1
1	AS	2260	U	2.1
1	AS	2926	U	2.1
2	AT	16	U	2.1
36	AI	113	GLN	2.1
38	CE	86	GLN	2.1
46	B	1600	U	2.1
46	CM	878	U	2.1
46	CM	879	U	2.1
46	CM	1016	U	2.1
46	CM	1367	U	2.1
49	CP	89	GLN	2.1
5	k	228	GLY	2.1
13	BF	121	GLY	2.1
17	BJ	96	GLY	2.1
18	BK	174	GLY	2.1
23	BP	45	GLY	2.1
59	CZ	127	GLY	2.1
60	DA	44	GLY	2.1
70	DK	106	GLY	2.1
77	DR	12	GLY	2.1
5	k	130	PHE	2.1
19	y	96	PHE	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
19	y	163	PRO	2.1
28	AA	131	PHE	2.1
28	BU	37	PRO	2.1
54	CU	98	PRO	2.1
57	CX	75	PHE	2.1
70	DK	98	GLU	2.1
32	BY	99	SER	2.1
36	AI	13	SER	2.1
64	DE	123	SER	2.1
4	j	207	VAL	2.1
5	AX	205	VAL	2.1
10	p	133	VAL	2.1
16	v	66	VAL	2.1
28	AA	14	VAL	2.1
32	BY	66	VAL	2.1
49	E	178	VAL	2.1
61	Q	69	VAL	2.1
70	Z	17	VAL	2.1
72	DM	54	VAL	2.1
1	1	733	A	2.1
1	1	1584	A	2.1
1	AS	689	A	2.1
1	AS	690	A	2.1
1	AS	854	A	2.1
1	AS	913	A	2.1
1	AS	2774	A	2.1
1	AS	3233	A	2.1
4	AW	149	LYS	2.1
5	AX	121	ASN	2.1
10	BC	250	LYS	2.1
12	r	55	ASN	2.1
31	AD	24	LYS	2.1
36	AI	83	LYS	2.1
46	CM	829	A	2.1
52	H	100	ASN	2.1
54	J	143	ASN	2.1
63	S	12	LYS	2.1
63	DD	113	LYS	2.1
70	DK	137	LYS	2.1
7	AZ	171	LEU	2.1
9	BB	90	ILE	2.1
9	BB	179	ILE	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
11	q	4	ILE	2.1
6	AY	116	HIS	2.1
18	BK	56	ARG	2.1
18	BK	117	ILE	2.1
19	y	94	LEU	2.1
19	y	166	LEU	2.1
29	AB	73	ILE	2.1
31	AD	102	ILE	2.1
32	BY	35	ILE	2.1
35	AH	16	ARG	2.1
49	CP	143	LEU	2.1
50	F	67	ILE	2.1
50	F	197	ARG	2.1
51	G	42	LEU	2.1
53	I	109	LEU	2.1
54	J	42	ILE	2.1
55	CV	5	ARG	2.1
55	CV	77	ARG	2.1
60	DA	28	LEU	2.1
61	DB	71	ILE	2.1
61	DB	75	HIS	2.1
62	DC	61	ARG	2.1
69	Y	110	ILE	2.1
78	h	188	LEU	2.1
69	DJ	44	HIS	2.1
7	m	137	ASP	2.1
8	BA	137	ASP	2.1
20	BM	89	MET	2.1
26	BS	106	ASP	2.1
41	CH	1	MET	2.1
64	DE	103	ASP	2.1
7	AZ	99	TYR	2.1
10	BC	98	TYR	2.1
22	BO	65	TYR	2.1
23	BP	111	TYR	2.1
27	9	21	THR	2.1
31	AD	25	TYR	2.1
50	F	56	THR	2.1
53	CT	7	TYR	2.1
60	DA	131	THR	2.1
65	U	141	THR	2.1
1	1	1156	C	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1	1578	C	2.1
1	AS	26	C	2.1
1	AS	67	C	2.1
1	AS	174	C	2.1
1	AS	1775	C	2.1
1	1	364	G	2.1
1	AS	607	G	2.1
1	AS	2378	G	2.1
1	AS	2578	G	2.1
15	BH	85	ALA	2.1
18	BK	98	ALA	2.1
20	BM	40	ALA	2.1
34	CA	55	ALA	2.1
46	B	379	C	2.1
46	B	695	C	2.1
46	CM	1337	C	2.1
46	CM	1607	C	2.1
46	B	1070	G	2.1
46	B	1339	G	2.1
46	CM	327	G	2.1
46	CM	390	G	2.1
46	CM	572	G	2.1
46	CM	877	G	2.1
46	CM	1388	G	2.1
46	CM	1434	G	2.1
47	CN	132	ALA	2.1
62	DC	63	ALA	2.1
75	DP	36	ALA	2.1
81	12	126	ALA	2.1
4	AW	99	GLY	2.1
5	k	310	GLY	2.1
8	n	48	GLY	2.1
14	BG	28	GLN	2.1
16	BI	70	GLY	2.1
20	z	92	GLN	2.1
50	F	199	GLY	2.1
52	H	34	GLN	2.1
60	DA	79	GLY	2.1
66	DG	87	GLY	2.1
67	W	93	GLN	2.1
6	AY	5	PRO	2.1
7	AZ	253	PHE	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
8	BA	74	PRO	2.1
13	s	15	GLU	2.1
13	BF	15	GLU	2.1
18	BK	123	PRO	2.1
21	BN	57	GLU	2.1
22	2	159	PHE	2.1
24	BQ	67	PRO	2.1
39	CF	13	GLU	2.1
45	CL	88	PHE	2.1
49	CP	234	PRO	2.1
54	J	39	PHE	2.1
62	R	125	PRO	2.1
63	S	34	PRO	2.1
64	DE	65	PRO	2.1
78	h	166	PRO	2.1
1	1	3284	U	2.0
1	AS	774	U	2.0
8	n	102	VAL	2.0
8	BA	78	VAL	2.0
9	BB	51	LYS	2.0
12	r	43	VAL	2.0
12	BE	147	VAL	2.0
14	BG	81	LYS	2.0
18	x	27	LYS	2.0
23	5	68	VAL	2.0
26	BS	75	LYS	2.0
28	AA	89	VAL	2.0
29	BV	15	VAL	2.0
42	CI	4	LYS	2.0
46	B	372	U	2.0
46	CM	281	U	2.0
46	CM	1409	U	2.0
47	C	181	VAL	2.0
48	CO	43	VAL	2.0
53	CT	129	VAL	2.0
55	CV	145	VAL	2.0
60	DA	70	LYS	2.0
62	DC	26	VAL	2.0
63	S	77	VAL	2.0
70	DK	56	LYS	2.0
73	DN	37	LYS	2.0
80	ll	32	VAL	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
14	t	137	SER	2.0
21	BN	55	SER	2.0
49	CP	218	SER	2.0
53	CT	6	SER	2.0
53	CT	233	SER	2.0
54	CU	164	SER	2.0
59	O	119	SER	2.0
60	DA	147	SER	2.0
67	DH	27	SER	2.0
79	DT	125	SER	2.0
4	j	238	ILE	2.0
5	k	232	ARG	2.0
6	l	237	LEU	2.0
7	m	231	ILE	2.0
10	p	161	ILE	2.0
10	BC	83	LEU	2.0
14	BG	23	ARG	2.0
20	BM	3	ASN	2.0
24	6	128	ARG	2.0
26	8	91	ASN	2.0
26	BS	62	ILE	2.0
35	CB	11	ASN	2.0
36	CC	89	ARG	2.0
44	CK	24	ARG	2.0
49	E	66	LEU	2.0
50	F	144	ARG	2.0
52	CS	187	ILE	2.0
60	DA	21	ASN	2.0
63	DD	115	LEU	2.0
64	T	46	LEU	2.0
64	DE	38	ILE	2.0
69	Y	34	ILE	2.0
71	DL	131	ARG	2.0
72	DM	65	LEU	2.0
79	AR	43	ILE	2.0
17	BJ	73	HIS	2.0
1	1	1022	A	2.0
1	1	1882	A	2.0
1	AS	839	A	2.0
1	AS	948	A	2.0
1	AS	1601	A	2.0
1	AS	2573	A	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
5	AX	138	ALA	2.0
5	AX	374	ALA	2.0
5	AX	378	ALA	2.0
6	l	175	ALA	2.0
8	n	5	ALA	2.0
10	p	208	ASP	2.0
11	BD	70	THR	2.0
15	BH	51	ALA	2.0
17	w	82	TYR	2.0
19	BL	6	THR	2.0
22	BO	13	TYR	2.0
36	CC	29	ALA	2.0
43	CJ	50	TYR	2.0
46	B	780	A	2.0
57	CX	23	ALA	2.0
66	DG	80	TYR	2.0
73	DN	68	TYR	2.0
76	f	37	ASP	2.0
79	AR	276	ALA	2.0
79	DT	230	THR	2.0
79	DT	247	TYR	2.0
9	o	114	PHE	2.0
18	x	84	PRO	2.0
19	y	106	PHE	2.0
29	AB	13	GLY	2.0
29	AB	51	GLY	2.0
28	BU	50	PRO	2.0
29	AB	129	PHE	2.0
35	CB	77	GLY	2.0
39	CF	11	PHE	2.0
43	CJ	53	GLN	2.0
50	CQ	78	PHE	2.0
53	CT	146	GLY	2.0
55	CV	68	GLY	2.0
56	CW	112	GLN	2.0
57	CX	41	PHE	2.0
58	CY	51	GLY	2.0
58	CY	60	PHE	2.0
60	DA	8	GLY	2.0
30	BW	30	PRO	2.0
51	CR	29	PRO	2.0
73	DN	65	PRO	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
77	DR	58	PRO	2.0
79	DT	203	PRO	2.0
5	AX	7	GLU	2.0
6	AY	346	GLU	2.0
7	m	41	LYS	2.0
10	BC	147	LYS	2.0
20	z	70	LYS	2.0
20	BM	53	LYS	2.0
36	CC	14	LYS	2.0
36	CC	27	GLU	2.0
38	CE	14	LYS	2.0
38	CE	84	LYS	2.0
46	B	706	C	2.0
46	B	1624	C	2.0
46	CM	1340	C	2.0
52	CS	213	LYS	2.0
59	O	99	GLU	2.0
62	DC	31	GLU	2.0
73	DN	32	LYS	2.0
79	AR	258	LYS	2.0
5	AX	264	VAL	2.0
11	BD	154	VAL	2.0
13	s	71	VAL	2.0
23	BP	43	VAL	2.0
32	AE	97	VAL	2.0
47	C	86	VAL	2.0
51	G	139	VAL	2.0
64	T	15	VAL	2.0
66	V	4	VAL	2.0
67	DH	89	VAL	2.0
1	1	1309	G	2.0
1	1	1931	G	2.0
1	AS	90	G	2.0
1	AS	595	G	2.0
4	j	180	LEU	2.0
6	AY	314	LEU	2.0
7	m	51	LEU	2.0
7	AZ	33	ARG	2.0
8	BA	155	LEU	2.0
11	q	151	LEU	2.0
11	BD	38	LEU	2.0
14	BG	59	ARG	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
19	y	174	ARG	2.0
24	6	49	LEU	2.0
30	BW	44	ARG	2.0
37	CD	56	LEU	2.0
46	CM	1273	G	2.0
46	CM	1293	G	2.0
46	CM	1707	G	2.0
47	C	18	LEU	2.0
49	E	56	LEU	2.0
50	CQ	6	LEU	2.0
53	CT	94	ARG	2.0
54	J	77	LEU	2.0
54	CU	72	ARG	2.0
56	L	105	LEU	2.0
62	DC	22	LEU	2.0
65	U	15	LEU	2.0
68	DI	78	LEU	2.0
5	k	2	SER	2.0
9	BB	221	ILE	2.0
11	q	161	ILE	2.0
18	x	144	SER	2.0
20	z	15	ILE	2.0
23	BP	46	ILE	2.0
27	9	11	SER	2.0
52	CS	172	ILE	2.0
53	CT	52	ILE	2.0
54	J	121	ILE	2.0
56	L	129	ILE	2.0
58	CY	132	SER	2.0
60	P	19	SER	2.0
62	R	84	ILE	2.0
67	W	18	ILE	2.0
75	e	53	ILE	2.0
75	DP	59	SER	2.0
79	DT	288	SER	2.0
80	ll	2	SER	2.0
1	AS	1432	U	2.0
1	AS	1890	U	2.0
6	AY	317	ASN	2.0
9	BB	170	ASN	2.0
46	B	709	U	2.0
46	CM	881	U	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
46	CM	1267	U	2.0
46	CM	1782	U	2.0
7	m	203	HIS	2.0
7	AZ	3	MET	2.0
11	BD	1	MET	2.0
13	s	131	MET	2.0
48	CO	168	MET	2.0
49	CP	183	MET	2.0
77	DR	57	ASN	2.0
63	DD	20	HIS	2.0
69	Y	89	TRP	2.0
5	k	23	ALA	2.0
6	AY	163	THR	2.0
7	m	67	ALA	2.0
24	6	54	ALA	2.0
30	BW	46	ALA	2.0
8	n	9	TYR	2.0
16	BI	129	TYR	2.0
27	9	19	TYR	2.0
34	AG	93	THR	2.0
50	CQ	20	ALA	2.0
53	CT	192	ALA	2.0
54	CU	99	ALA	2.0
55	CV	13	ALA	2.0
66	DG	59	ALA	2.0
66	DG	139	THR	2.0
70	DK	105	ALA	2.0
45	i	98	ASP	2.0
70	DK	90	ASP	2.0
79	DT	182	ASP	2.0
5	AX	226	PHE	2.0
12	r	199	PHE	2.0
16	BI	173	GLY	2.0
19	BL	134	GLY	2.0
36	CC	69	PHE	2.0
51	G	167	GLY	2.0
54	CU	88	PHE	2.0
58	CY	145	GLY	2.0
61	Q	93	GLY	2.0
63	DD	55	GLY	2.0
5	AX	127	LYS	2.0
5	AX	196	LYS	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
6	AY	218	LYS	2.0
13	s	22	CYS	2.0
12	r	59	GLN	2.0
12	r	212	GLN	2.0
16	BI	54	LYS	2.0
19	BL	61	PRO	2.0
20	BM	92	GLN	2.0
21	BN	138	GLN	2.0
31	AD	40	LYS	2.0
31	BX	55	LYS	2.0
34	AG	12	LYS	2.0
53	I	135	PRO	2.0
54	CU	175	LYS	2.0
74	DO	22	LYS	2.0
78	h	123	LYS	2.0
1	1	1023	A	2.0
1	1	1198	A	2.0
1	1	2898	A	2.0
1	1	2913	A	2.0
1	1	3135	A	2.0
1	AS	717	A	2.0
1	AS	909	A	2.0
1	AS	2789	A	2.0
3	AU	65	A	2.0
3	AU	133	A	2.0
6	AY	324	VAL	2.0
11	q	181	VAL	2.0
15	BH	21	VAL	2.0
15	BH	121	ARG	2.0
19	BL	144	ARG	2.0
20	z	22	VAL	2.0
21	0	140	VAL	2.0
23	BP	19	VAL	2.0
24	BQ	103	VAL	2.0
28	AA	99	GLU	2.0
25	7	47	ARG	2.0
25	BR	43	ARG	2.0
29	AB	9	ARG	2.0
29	AB	130	VAL	2.0
32	AE	82	GLU	2.0
32	BY	92	VAL	2.0
34	AG	52	VAL	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
44	CK	79	VAL	2.0
46	B	925	A	2.0
46	CM	1573	A	2.0
46	CM	1727	A	2.0
46	CM	1742	A	2.0
46	CM	1753	A	2.0
53	CT	91	GLU	2.0
36	AI	108	ARG	2.0
56	CW	141	VAL	2.0
62	DC	96	VAL	2.0
67	W	30	VAL	2.0
74	DO	54	VAL	2.0
79	DT	216	VAL	2.0
80	ll	167	VAL	2.0
12	BE	48	LEU	2.0
19	y	26	LEU	2.0
53	CT	106	LEU	2.0
61	Q	78	LEU	2.0
64	DE	100	LEU	2.0
77	g	38	LEU	2.0
7	AZ	185	ILE	2.0
11	q	9	ILE	2.0
13	s	110	ILE	2.0
22	2	25	ILE	2.0
35	AH	100	ILE	2.0
48	CO	32	ILE	2.0
49	E	51	ILE	2.0
49	E	110	ILE	2.0
49	E	126	ILE	2.0
52	CS	121	ILE	2.0
68	DI	46	ILE	2.0
73	c	41	ILE	2.0
1	AS	715	C	2.0
1	AS	923	C	2.0
1	AS	1181	C	2.0
1	AS	1777	C	2.0
1	AS	2839	C	2.0
1	AS	2851	C	2.0
3	4	84	C	2.0
46	CM	359	C	2.0
46	CM	403	C	2.0
46	CM	1269	C	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
46	CM	1481	C	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
82	MG	AS	3842	1/1	0.03	0.16	94,94,94,94	0
82	MG	AS	3808	1/1	0.05	0.23	96,96,96,96	0
82	MG	1	3867	1/1	0.10	0.28	35,35,35,35	0
82	MG	1	3671	1/1	0.12	0.30	49,49,49,49	0
82	MG	1	3948	1/1	0.16	0.16	53,53,53,53	0
82	MG	AS	3736	1/1	0.16	0.25	73,73,73,73	0
82	MG	AS	3872	1/1	0.17	0.14	74,74,74,74	0
82	MG	AS	3521	1/1	0.18	0.21	47,47,47,47	0
82	MG	AS	3596	1/1	0.20	0.19	50,50,50,50	0
82	MG	AS	3418	1/1	0.21	0.49	84,84,84,84	0
82	MG	AS	3574	1/1	0.23	0.24	50,50,50,50	0
82	MG	1	3984	1/1	0.23	0.35	40,40,40,40	0
82	MG	AS	3899	1/1	0.23	0.13	55,55,55,55	0
82	MG	1	3919	1/1	0.24	0.14	38,38,38,38	0
82	MG	AS	3902	1/1	0.24	0.22	36,36,36,36	0
82	MG	1	4046	1/1	0.25	0.35	66,66,66,66	0
82	MG	1	3858	1/1	0.27	0.24	58,58,58,58	0
82	MG	1	3685	1/1	0.27	0.20	52,52,52,52	0
82	MG	1	3659	1/1	0.28	0.24	52,52,52,52	0
82	MG	AS	3516	1/1	0.29	0.34	73,73,73,73	0
82	MG	1	4030	1/1	0.29	0.16	34,34,34,34	0
82	MG	AS	3633	1/1	0.30	0.27	49,49,49,49	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	1	3946	1/1	0.34	0.22	41,41,41,41	0
82	MG	1	3922	1/1	0.35	0.17	50,50,50,50	0
82	MG	AS	3858	1/1	0.36	0.24	64,64,64,64	0
82	MG	AS	3947	1/1	0.36	0.15	25,25,25,25	0
82	MG	1	4047	1/1	0.37	0.26	57,57,57,57	0
82	MG	1	3760	1/1	0.37	0.19	45,45,45,45	0
82	MG	AS	3908	1/1	0.37	0.10	55,55,55,55	0
82	MG	1	4013	1/1	0.37	0.23	55,55,55,55	0
82	MG	1	3743	1/1	0.38	0.16	16,16,16,16	0
82	MG	1	4029	1/1	0.38	0.19	98,98,98,98	0
82	MG	1	4076	1/1	0.39	0.39	52,52,52,52	0
82	MG	1	3731	1/1	0.39	0.19	10,10,10,10	0
82	MG	1	3827	1/1	0.39	0.18	53,53,53,53	0
82	MG	AS	3603	1/1	0.39	0.32	63,63,63,63	0
82	MG	AS	3921	1/1	0.39	0.18	107,107,107,107	0
82	MG	AS	3631	1/1	0.39	0.23	58,58,58,58	0
82	MG	1	3697	1/1	0.40	0.18	26,26,26,26	0
82	MG	AS	3643	1/1	0.40	0.27	35,35,35,35	0
82	MG	1	3917	1/1	0.41	0.20	64,64,64,64	0
82	MG	1	3968	1/1	0.41	0.11	67,67,67,67	0
82	MG	AS	3859	1/1	0.41	0.28	47,47,47,47	0
82	MG	AS	3617	1/1	0.43	0.14	57,57,57,57	0
82	MG	AS	3772	1/1	0.43	0.22	44,44,44,44	0
82	MG	1	3833	1/1	0.43	0.14	22,22,22,22	0
82	MG	1	3589	1/1	0.44	0.30	47,47,47,47	0
82	MG	AS	3701	1/1	0.44	0.19	50,50,50,50	0
82	MG	AS	3426	1/1	0.44	0.26	41,41,41,41	0
82	MG	AS	3752	1/1	0.44	0.12	31,31,31,31	0
82	MG	1	3530	1/1	0.44	0.17	54,54,54,54	0
82	MG	AS	3779	1/1	0.44	0.23	54,54,54,54	0
82	MG	1	4014	1/1	0.44	0.20	62,62,62,62	0
82	MG	AS	3930	1/1	0.44	0.16	57,57,57,57	0
82	MG	1	3978	1/1	0.44	0.47	85,85,85,85	0
82	MG	AS	3588	1/1	0.45	0.30	53,53,53,53	0
82	MG	AS	3681	1/1	0.45	0.30	54,54,54,54	0
82	MG	AS	3764	1/1	0.45	0.16	65,65,65,65	0
82	MG	1	4005	1/1	0.45	0.14	48,48,48,48	0
82	MG	AS	3715	1/1	0.45	0.15	8,8,8,8	0
82	MG	AS	3891	1/1	0.45	0.21	47,47,47,47	0
82	MG	AS	3642	1/1	0.46	0.18	61,61,61,61	0
82	MG	1	3730	1/1	0.46	0.16	24,24,24,24	0
82	MG	1	4064	1/1	0.47	0.41	55,55,55,55	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	1	3620	1/1	0.47	0.13	50,50,50,50	0
82	MG	AI	201	1/1	0.47	0.16	43,43,43,43	0
82	MG	AS	3852	1/1	0.47	0.44	89,89,89,89	0
82	MG	AS	3411	1/1	0.47	0.18	27,27,27,27	0
82	MG	1	4026	1/1	0.47	0.16	53,53,53,53	0
82	MG	1	3840	1/1	0.47	0.22	37,37,37,37	1
82	MG	AS	3822	1/1	0.48	0.15	98,98,98,98	0
82	MG	1	3916	1/1	0.48	0.26	82,82,82,82	0
82	MG	1	3902	1/1	0.48	0.16	49,49,49,49	0
82	MG	1	4009	1/1	0.48	0.23	72,72,72,72	0
82	MG	AS	3918	1/1	0.48	0.15	46,46,46,46	0
82	MG	AF	201	1/1	0.48	0.22	34,34,34,34	0
82	MG	AS	3461	1/1	0.48	0.15	26,26,26,26	0
82	MG	AS	3883	1/1	0.48	0.11	24,24,24,24	0
82	MG	AS	3523	1/1	0.50	0.17	46,46,46,46	0
82	MG	AS	3806	1/1	0.50	0.10	41,41,41,41	0
82	MG	AS	3729	1/1	0.50	0.21	56,56,56,56	0
82	MG	1	3769	1/1	0.51	0.12	9,9,9,9	0
82	MG	AS	3909	1/1	0.51	0.18	56,56,56,56	0
82	MG	1	3754	1/1	0.51	0.10	32,32,32,32	0
82	MG	AS	3895	1/1	0.51	0.35	72,72,72,72	0
82	MG	AS	3407	1/1	0.51	0.39	42,42,42,42	0
82	MG	1	3669	1/1	0.51	0.16	35,35,35,35	0
82	MG	1	4044	1/1	0.52	0.17	57,57,57,57	0
82	MG	1	3974	1/1	0.52	0.23	36,36,36,36	0
82	MG	1	3889	1/1	0.52	0.07	10,10,10,10	0
82	MG	AS	3584	1/1	0.52	0.17	41,41,41,41	0
82	MG	AS	3937	1/1	0.52	0.34	54,54,54,54	0
82	MG	AS	3414	1/1	0.52	0.24	64,64,64,64	0
82	MG	1	3839	1/1	0.53	0.08	16,16,16,16	0
82	MG	1	3627	1/1	0.53	0.14	10,10,10,10	0
82	MG	1	3653	1/1	0.53	0.22	45,45,45,45	0
82	MG	1	3656	1/1	0.53	0.12	36,36,36,36	0
82	MG	1	3619	1/1	0.53	0.25	39,39,39,39	0
82	MG	1	4016	1/1	0.53	0.12	75,75,75,75	0
82	MG	1	4058	1/1	0.53	0.26	56,56,56,56	0
82	MG	AS	3751	1/1	0.53	0.12	25,25,25,25	0
82	MG	1	3938	1/1	0.54	0.30	36,36,36,36	0
82	MG	1	3664	1/1	0.54	0.18	32,32,32,32	0
82	MG	B	1867	1/1	0.54	0.16	43,43,43,43	0
82	MG	1	3771	1/1	0.54	0.20	41,41,41,41	0
82	MG	AX	401	1/1	0.54	0.12	31,31,31,31	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	1	3567	1/1	0.55	0.15	38,38,38,38	0
82	MG	AS	3857	1/1	0.55	0.19	45,45,45,45	0
82	MG	AS	3797	1/1	0.55	0.18	37,37,37,37	0
82	MG	AS	3830	1/1	0.55	0.13	69,69,69,69	0
82	MG	AS	3580	1/1	0.55	0.69	44,44,44,44	0
82	MG	AS	3843	1/1	0.55	0.12	71,71,71,71	0
85	ZN	CB	201	1/1	0.55	0.20	327,327,327,327	0
82	MG	1	3690	1/1	0.56	0.36	35,35,35,35	0
82	MG	CM	1801	1/1	0.56	0.17	42,42,42,42	0
82	MG	AS	3766	1/1	0.56	0.19	50,50,50,50	0
82	MG	1	3861	1/1	0.57	0.14	27,27,27,27	0
82	MG	AS	3735	1/1	0.57	0.12	29,29,29,29	0
82	MG	AS	3676	1/1	0.57	0.13	24,24,24,24	0
82	MG	AT	203	1/1	0.57	0.18	33,33,33,33	0
82	MG	1	4052	1/1	0.57	0.17	23,23,23,23	0
82	MG	AS	3478	1/1	0.57	0.14	15,15,15,15	0
82	MG	1	3995	1/1	0.57	0.14	32,32,32,32	0
82	MG	AS	3835	1/1	0.58	0.18	48,48,48,48	0
82	MG	AS	3809	1/1	0.58	0.15	58,58,58,58	0
82	MG	1	4061	1/1	0.58	0.20	40,40,40,40	0
82	MG	9	201	1/1	0.58	0.25	52,52,52,52	0
82	MG	1	3991	1/1	0.59	0.09	28,28,28,28	0
82	MG	1	3911	1/1	0.59	0.23	24,24,24,24	0
82	MG	AS	3767	1/1	0.59	0.13	57,57,57,57	0
82	MG	1	4020	1/1	0.59	0.16	27,27,27,27	0
82	MG	1	3869	1/1	0.59	0.14	23,23,23,23	0
82	MG	AS	3924	1/1	0.59	0.13	98,98,98,98	0
82	MG	1	3808	1/1	0.59	0.15	12,12,12,12	0
82	MG	AS	3475	1/1	0.59	0.15	40,40,40,40	0
82	MG	1	4060	1/1	0.59	0.13	35,35,35,35	0
82	MG	1	3555	1/1	0.59	0.19	16,16,16,16	0
82	MG	AS	3811	1/1	0.59	0.11	73,73,73,73	0
82	MG	AS	3409	1/1	0.59	0.41	56,56,56,56	0
82	MG	AS	3410	1/1	0.59	0.31	35,35,35,35	0
82	MG	1	3630	1/1	0.60	0.14	40,40,40,40	0
82	MG	1	3945	1/1	0.60	0.29	33,33,33,33	0
82	MG	AS	3592	1/1	0.60	0.14	14,14,14,14	0
82	MG	AS	3763	1/1	0.60	0.09	40,40,40,40	0
82	MG	AS	3879	1/1	0.60	0.19	32,32,32,32	0
82	MG	E	301	1/1	0.60	0.20	24,24,24,24	0
82	MG	AS	3942	1/1	0.60	0.12	28,28,28,28	0
82	MG	1	3424	1/1	0.60	0.17	12,12,12,12	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	AS	3568	1/1	0.60	0.22	42,42,42,42	0
82	MG	AS	3719	1/1	0.60	0.18	43,43,43,43	0
82	MG	1	4040	1/1	0.60	0.30	50,50,50,50	0
82	MG	1	3824	1/1	0.60	0.11	56,56,56,56	0
82	MG	AS	3915	1/1	0.61	0.15	48,48,48,48	0
82	MG	1	4015	1/1	0.61	0.13	216,216,216,216	0
82	MG	AS	3585	1/1	0.61	0.18	43,43,43,43	0
82	MG	AS	3874	1/1	0.61	0.14	29,29,29,29	0
82	MG	1	4036	1/1	0.61	0.32	50,50,50,50	0
82	MG	AS	3509	1/1	0.61	0.09	18,18,18,18	0
82	MG	1	4008	1/1	0.61	0.11	43,43,43,43	0
82	MG	AP	202	1/1	0.61	0.25	24,24,24,24	0
82	MG	1	3707	1/1	0.61	0.14	32,32,32,32	0
82	MG	AS	3422	1/1	0.61	0.34	139,139,139,139	0
82	MG	1	3683	1/1	0.61	0.19	40,40,40,40	0
83	PAR	AS	3404	42/42	0.61	0.14	94,112,135,146	0
82	MG	1	3559	1/1	0.61	0.13	17,17,17,17	0
82	MG	AS	3612	1/1	0.62	0.13	47,47,47,47	0
82	MG	1	3828	1/1	0.62	0.16	57,57,57,57	0
82	MG	AS	3672	1/1	0.62	0.38	26,26,26,26	0
82	MG	AS	3824	1/1	0.62	0.17	28,28,28,28	0
82	MG	BZ	201	1/1	0.62	0.22	49,49,49,49	0
82	MG	1	3631	1/1	0.62	0.13	28,28,28,28	0
82	MG	AS	3731	1/1	0.62	0.14	32,32,32,32	0
82	MG	AS	3544	1/1	0.62	0.15	45,45,45,45	0
82	MG	1	3592	1/1	0.63	0.32	27,27,27,27	0
82	MG	AS	3632	1/1	0.63	0.15	34,34,34,34	0
82	MG	AS	3695	1/1	0.63	0.14	26,26,26,26	0
82	MG	AS	3739	1/1	0.63	0.12	22,22,22,22	0
82	MG	AS	3466	1/1	0.63	0.14	58,58,58,58	0
82	MG	1	3933	1/1	0.63	0.33	27,27,27,27	0
82	MG	1	3602	1/1	0.63	0.09	22,22,22,22	0
82	MG	AS	3844	1/1	0.63	0.12	65,65,65,65	0
82	MG	1	3511	1/1	0.63	0.19	20,20,20,20	0
82	MG	AS	3664	1/1	0.64	0.26	62,62,62,62	0
82	MG	AS	3897	1/1	0.64	0.14	42,42,42,42	0
82	MG	AS	3723	1/1	0.64	0.14	52,52,52,52	0
82	MG	1	4065	1/1	0.64	0.10	31,31,31,31	0
82	MG	1	3538	1/1	0.64	0.20	45,45,45,45	0
82	MG	1	3686	1/1	0.64	0.19	7,7,7,7	0
82	MG	AS	3688	1/1	0.64	0.18	28,28,28,28	0
82	MG	1	4011	1/1	0.64	0.17	36,36,36,36	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	AS	3611	1/1	0.64	0.27	80,80,80,80	0
82	MG	1	4028	1/1	0.64	0.17	20,20,20,20	0
82	MG	1	3829	1/1	0.65	0.12	45,45,45,45	0
82	MG	AS	3604	1/1	0.65	0.15	37,37,37,37	0
82	MG	1	3856	1/1	0.65	0.30	41,41,41,41	0
82	MG	AS	3581	1/1	0.65	0.17	48,48,48,48	0
82	MG	1	3676	1/1	0.65	0.24	69,69,69,69	0
82	MG	AS	3893	1/1	0.65	0.11	15,15,15,15	0
82	MG	AS	3791	1/1	0.65	0.22	44,44,44,44	0
82	MG	1	3751	1/1	0.65	0.18	28,28,28,28	0
82	MG	AW	301	1/1	0.65	0.11	35,35,35,35	0
82	MG	1	3864	1/1	0.65	0.12	12,12,12,12	0
82	MG	2	201	1/1	0.65	0.14	14,14,14,14	0
82	MG	AS	3708	1/1	0.65	0.10	23,23,23,23	0
82	MG	AS	3570	1/1	0.65	0.23	66,66,66,66	0
82	MG	AS	3860	1/1	0.65	0.13	33,33,33,33	0
82	MG	1	3718	1/1	0.66	0.32	32,32,32,32	0
82	MG	1	4004	1/1	0.66	0.10	54,54,54,54	0
82	MG	i	301	1/1	0.66	0.31	36,36,36,36	0
82	MG	1	3857	1/1	0.66	0.26	33,33,33,33	0
82	MG	AS	3737	1/1	0.66	0.11	36,36,36,36	0
82	MG	1	3791	1/1	0.66	0.41	57,57,57,57	0
82	MG	AS	3639	1/1	0.66	0.14	49,49,49,49	0
82	MG	1	3989	1/1	0.66	0.10	45,45,45,45	0
82	MG	AS	3756	1/1	0.66	0.32	44,44,44,44	0
82	MG	AS	3609	1/1	0.66	0.10	41,41,41,41	0
82	MG	AS	3653	1/1	0.66	0.17	27,27,27,27	0
82	MG	1	3844	1/1	0.66	0.17	15,15,15,15	0
82	MG	1	3596	1/1	0.67	0.16	26,26,26,26	0
82	MG	AS	3558	1/1	0.67	0.37	40,40,40,40	0
82	MG	AS	3421	1/1	0.67	0.19	78,78,78,78	0
82	MG	AA	201	1/1	0.67	0.25	40,40,40,40	0
82	MG	1	3959	1/1	0.67	0.41	49,49,49,49	0
82	MG	BE	301	1/1	0.67	0.12	27,27,27,27	0
82	MG	B	1871	1/1	0.67	0.10	11,11,11,11	0
82	MG	AS	3896	1/1	0.67	0.13	42,42,42,42	0
82	MG	AS	3870	1/1	0.67	0.20	54,54,54,54	0
82	MG	1	3658	1/1	0.67	0.11	13,13,13,13	0
82	MG	AS	3817	1/1	0.68	0.10	26,26,26,26	0
82	MG	AR	401	1/1	0.68	0.09	17,17,17,17	0
82	MG	1	3533	1/1	0.68	0.14	46,46,46,46	0
82	MG	AS	3869	1/1	0.68	0.17	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
82	MG	1	3763	1/1	0.68	0.14	30,30,30,30	0
82	MG	1	3810	1/1	0.68	0.33	37,37,37,37	0
82	MG	AS	3671	1/1	0.68	0.58	41,41,41,41	0
82	MG	1	3947	1/1	0.68	0.12	58,58,58,58	0
82	MG	1	3883	1/1	0.68	0.12	12,12,12,12	0
82	MG	1	3706	1/1	0.68	0.19	25,25,25,25	0
83	PAR	1	3466	42/42	0.68	0.11	43,75,94,96	0
82	MG	1	3679	1/1	0.68	0.17	42,42,42,42	0
82	MG	AS	3926	1/1	0.68	0.13	42,42,42,42	0
82	MG	AS	3815	1/1	0.69	0.10	51,51,51,51	0
82	MG	1	3485	1/1	0.69	0.23	5,5,5,5	0
82	MG	1	3520	1/1	0.69	0.19	33,33,33,33	0
82	MG	1	3527	1/1	0.69	0.13	32,32,32,32	0
82	MG	1	3600	1/1	0.69	0.25	37,37,37,37	0
82	MG	AS	3728	1/1	0.69	0.24	37,37,37,37	0
82	MG	AS	3836	1/1	0.69	0.12	28,28,28,28	0
82	MG	1	3576	1/1	0.69	0.16	43,43,43,43	0
82	MG	AS	3586	1/1	0.69	0.11	36,36,36,36	0
82	MG	AS	3625	1/1	0.69	0.22	37,37,37,37	0
82	MG	AS	3561	1/1	0.69	0.24	35,35,35,35	0
82	MG	AS	3803	1/1	0.69	0.18	58,58,58,58	0
82	MG	AS	3682	1/1	0.69	0.17	44,44,44,44	0
83	PAR	1	3457	42/42	0.69	0.19	30,63,83,97	0
82	MG	1	3640	1/1	0.69	0.05	7,7,7,7	0
82	MG	1	3944	1/1	0.69	0.26	40,40,40,40	0
82	MG	AS	3601	1/1	0.69	0.15	41,41,41,41	0
82	MG	AS	3606	1/1	0.70	0.11	40,40,40,40	0
82	MG	AS	3687	1/1	0.70	0.17	32,32,32,32	0
82	MG	1	4048	1/1	0.70	0.28	51,51,51,51	0
82	MG	AS	3734	1/1	0.70	0.17	43,43,43,43	0
82	MG	AS	3665	1/1	0.70	0.16	66,66,66,66	0
82	MG	1	3835	1/1	0.70	0.13	34,34,34,34	0
82	MG	1	4056	1/1	0.70	0.19	18,18,18,18	0
82	MG	AS	3673	1/1	0.70	0.22	16,16,16,16	0
83	PAR	1	3460	42/42	0.70	0.18	49,74,88,100	42
82	MG	1	3931	1/1	0.70	0.14	38,38,38,38	0
82	MG	AS	3868	1/1	0.70	0.23	63,63,63,63	0
82	MG	AS	3412	1/1	0.70	0.14	22,22,22,22	0
82	MG	1	3900	1/1	0.71	0.17	20,20,20,20	0
82	MG	AS	3851	1/1	0.71	0.13	25,25,25,25	0
82	MG	AS	3655	1/1	0.71	0.16	33,33,33,33	0
82	MG	AS	3663	1/1	0.71	0.30	45,45,45,45	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	1	3777	1/1	0.71	0.09	23,23,23,23	0
82	MG	AS	3419	1/1	0.71	0.12	65,65,65,65	0
82	MG	AS	3771	1/1	0.71	0.22	54,54,54,54	0
82	MG	1	3811	1/1	0.71	0.34	22,22,22,22	0
82	MG	AS	3703	1/1	0.71	0.15	39,39,39,39	0
82	MG	AS	3913	1/1	0.71	0.09	47,47,47,47	0
82	MG	AS	3704	1/1	0.71	0.17	41,41,41,41	0
82	MG	AS	3527	1/1	0.71	0.12	53,53,53,53	0
82	MG	AS	3841	1/1	0.71	0.12	52,52,52,52	0
82	MG	1	4078	1/1	0.71	0.16	53,53,53,53	0
83	PAR	AS	3406	42/42	0.71	0.12	89,116,138,142	0
82	MG	AS	3549	1/1	0.71	0.17	51,51,51,51	0
82	MG	AS	3648	1/1	0.72	0.14	24,24,24,24	0
82	MG	B	1829	1/1	0.72	0.16	25,25,25,25	0
82	MG	B	1850	1/1	0.72	0.18	8,8,8,8	0
82	MG	AS	3823	1/1	0.72	0.12	65,65,65,65	0
82	MG	AS	3900	1/1	0.72	0.11	15,15,15,15	0
82	MG	AS	3472	1/1	0.72	0.37	16,16,16,16	0
82	MG	1	3468	1/1	0.72	0.16	11,11,11,11	0
82	MG	1	3920	1/1	0.72	0.09	30,30,30,30	0
82	MG	1	3729	1/1	0.72	0.20	27,27,27,27	0
82	MG	1	3525	1/1	0.72	0.20	21,21,21,21	0
82	MG	AS	3916	1/1	0.72	0.15	33,33,33,33	0
82	MG	1	3834	1/1	0.72	0.15	37,37,37,37	0
82	MG	AS	3753	1/1	0.72	0.08	11,11,11,11	0
82	MG	1	4071	1/1	0.72	0.09	25,25,25,25	0
82	MG	1	3934	1/1	0.72	0.24	31,31,31,31	0
82	MG	1	3548	1/1	0.72	0.14	20,20,20,20	0
82	MG	1	3885	1/1	0.72	0.21	40,40,40,40	0
82	MG	1	3554	1/1	0.72	0.15	29,29,29,29	0
82	MG	AS	3415	1/1	0.72	0.17	56,56,56,56	0
82	MG	AT	202	1/1	0.72	0.10	26,26,26,26	0
82	MG	AS	3622	1/1	0.72	0.17	48,48,48,48	0
82	MG	AS	3867	1/1	0.72	0.25	43,43,43,43	0
82	MG	AS	3773	1/1	0.72	0.31	40,40,40,40	0
82	MG	1	3415	1/1	0.72	0.19	16,16,16,16	0
82	MG	AS	3569	1/1	0.72	0.11	119,119,119,119	0
82	MG	1	3529	1/1	0.72	0.08	9,9,9,9	0
82	MG	AS	3710	1/1	0.72	0.13	44,44,44,44	0
82	MG	AS	3572	1/1	0.72	0.11	51,51,51,51	0
83	PAR	1	3461	42/42	0.72	0.13	76,95,111,114	0
82	MG	AS	3880	1/1	0.72	0.20	58,58,58,58	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	1	3445	1/1	0.72	0.24	26,26,26,26	0
82	MG	1	3826	1/1	0.72	0.17	14,14,14,14	0
82	MG	1	3712	1/1	0.72	0.33	16,16,16,16	0
82	MG	AS	3816	1/1	0.73	0.23	14,14,14,14	0
82	MG	AS	3649	1/1	0.73	0.08	17,17,17,17	0
82	MG	AS	3435	1/1	0.73	0.12	50,50,50,50	0
82	MG	1	3886	1/1	0.73	0.20	31,31,31,31	0
82	MG	B	1820	1/1	0.73	0.17	17,17,17,17	0
82	MG	1	3414	1/1	0.73	0.09	14,14,14,14	0
82	MG	B	1836	1/1	0.73	0.11	20,20,20,20	0
82	MG	AS	3740	1/1	0.73	0.12	15,15,15,15	0
82	MG	AS	3838	1/1	0.73	0.11	18,18,18,18	0
82	MG	AS	3594	1/1	0.73	0.21	44,44,44,44	0
82	MG	1	3847	1/1	0.73	0.16	14,14,14,14	0
82	MG	1	3853	1/1	0.73	0.22	30,30,30,30	0
82	MG	1	3779	1/1	0.73	0.13	12,12,12,12	0
82	MG	AS	3518	1/1	0.73	0.16	71,71,71,71	0
82	MG	1	3955	1/1	0.73	0.15	22,22,22,22	0
82	MG	1	3783	1/1	0.73	0.19	27,27,27,27	0
82	MG	1	3962	1/1	0.73	0.13	46,46,46,46	0
82	MG	1	3598	1/1	0.73	0.15	23,23,23,23	0
82	MG	1	3807	1/1	0.73	0.13	23,23,23,23	0
82	MG	1	3863	1/1	0.73	0.14	12,12,12,12	0
82	MG	1	4079	1/1	0.73	0.12	68,68,68,68	0
82	MG	AS	3780	1/1	0.73	0.10	17,17,17,17	0
82	MG	AS	3707	1/1	0.73	0.18	47,47,47,47	0
82	MG	o	302	1/1	0.73	0.18	73,73,73,73	0
82	MG	AS	3800	1/1	0.73	0.16	29,29,29,29	0
82	MG	AS	3878	1/1	0.73	0.18	33,33,33,33	0
82	MG	1	3667	1/1	0.73	0.32	37,37,37,37	0
82	MG	1	3929	1/1	0.73	0.18	16,16,16,16	0
82	MG	1	3809	1/1	0.73	0.13	27,27,27,27	0
83	PAR	AS	3402	42/42	0.73	0.16	84,103,121,128	42
82	MG	1	3605	1/1	0.73	0.27	19,19,19,19	0
82	MG	1	3722	1/1	0.73	0.13	31,31,31,31	0
82	MG	1	3820	1/1	0.73	0.14	24,24,24,24	0
82	MG	AS	3556	1/1	0.74	0.15	41,41,41,41	0
82	MG	B	1860	1/1	0.74	0.17	24,24,24,24	0
82	MG	AS	3943	1/1	0.74	0.17	22,22,22,22	0
82	MG	1	3758	1/1	0.74	0.13	26,26,26,26	0
82	MG	AS	3416	1/1	0.74	0.20	111,111,111,111	0
82	MG	AS	3595	1/1	0.74	0.12	38,38,38,38	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	k	401	1/1	0.74	0.15	15,15,15,15	0
82	MG	1	3952	1/1	0.74	0.15	12,12,12,12	0
82	MG	AS	3677	1/1	0.74	0.14	30,30,30,30	0
82	MG	B	1804	1/1	0.74	0.15	14,14,14,14	0
82	MG	AS	3911	1/1	0.74	0.10	31,31,31,31	0
82	MG	1	3639	1/1	0.74	0.13	28,28,28,28	0
82	MG	B	1827	1/1	0.74	0.15	4,4,4,4	0
82	MG	1	3519	1/1	0.74	0.29	24,24,24,24	0
82	MG	AS	3690	1/1	0.74	0.16	44,44,44,44	0
82	MG	1	3996	1/1	0.74	0.19	28,28,28,28	0
82	MG	AS	3699	1/1	0.74	0.30	35,35,35,35	0
82	MG	1	3999	1/1	0.74	0.17	32,32,32,32	0
82	MG	AS	3661	1/1	0.74	0.17	27,27,27,27	0
82	MG	1	4081	1/1	0.75	0.12	17,17,17,17	0
82	MG	AS	3917	1/1	0.75	0.12	28,28,28,28	0
82	MG	AS	3658	1/1	0.75	0.17	5,5,5,5	0
82	MG	AS	3575	1/1	0.75	0.10	18,18,18,18	0
82	MG	AS	3628	1/1	0.75	0.13	29,29,29,29	0
82	MG	AS	3600	1/1	0.75	0.22	24,24,24,24	0
82	MG	1	4085	1/1	0.75	0.14	33,33,33,33	0
82	MG	AS	3666	1/1	0.75	0.29	32,32,32,32	0
82	MG	4	203	1/1	0.75	0.11	11,11,11,11	0
82	MG	AS	3884	1/1	0.75	0.08	30,30,30,30	0
82	MG	AS	3888	1/1	0.75	0.15	45,45,45,45	0
82	MG	AS	3890	1/1	0.75	0.17	59,59,59,59	0
82	MG	AS	3794	1/1	0.75	0.22	39,39,39,39	0
82	MG	1	3860	1/1	0.75	0.16	37,37,37,37	0
82	MG	AS	3743	1/1	0.75	0.32	12,12,12,12	0
82	MG	AS	3747	1/1	0.75	0.24	35,35,35,35	0
82	MG	AS	3804	1/1	0.75	0.12	39,39,39,39	0
82	MG	AS	3563	1/1	0.75	0.26	75,75,75,75	0
82	MG	AS	3856	1/1	0.75	0.07	23,23,23,23	0
82	MG	1	3784	1/1	0.75	0.19	14,14,14,14	0
82	MG	1	3546	1/1	0.75	0.13	39,39,39,39	0
83	PAR	1	3465	42/42	0.75	0.16	50,82,98,106	0
82	MG	AS	3542	1/1	0.75	0.36	51,51,51,51	0
83	PAR	B	1803	42/42	0.75	0.14	60,88,102,111	0
82	MG	AS	3812	1/1	0.75	0.09	20,20,20,20	0
82	MG	AS	3912	1/1	0.75	0.09	27,27,27,27	0
82	MG	AS	3722	1/1	0.75	0.10	17,17,17,17	0
82	MG	1	3903	1/1	0.75	0.20	35,35,35,35	0
82	MG	1	4057	1/1	0.76	0.18	15,15,15,15	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	1	3998	1/1	0.76	0.13	17,17,17,17	0
82	MG	AS	3833	1/1	0.76	0.15	55,55,55,55	0
82	MG	AS	3610	1/1	0.76	0.15	92,92,92,92	0
82	MG	AS	3940	1/1	0.76	0.18	43,43,43,43	0
82	MG	1	3759	1/1	0.76	0.13	27,27,27,27	0
82	MG	1	3637	1/1	0.76	0.28	32,32,32,32	0
82	MG	AS	3946	1/1	0.76	0.11	15,15,15,15	0
82	MG	1	3528	1/1	0.76	0.13	30,30,30,30	0
82	MG	AS	3511	1/1	0.76	0.18	75,75,75,75	0
82	MG	AS	3513	1/1	0.76	0.10	42,42,42,42	0
82	MG	AS	3795	1/1	0.76	0.08	46,46,46,46	0
82	MG	1	4031	1/1	0.76	0.15	17,17,17,17	0
82	MG	1	3880	1/1	0.76	0.24	30,30,30,30	0
82	MG	BJ	301	1/1	0.76	0.35	51,51,51,51	0
82	MG	1	3914	1/1	0.76	0.10	52,52,52,52	0
82	MG	B	1807	1/1	0.76	0.30	13,13,13,13	0
82	MG	1	3413	1/1	0.76	0.15	5,5,5,5	0
82	MG	1	3675	1/1	0.76	0.11	41,41,41,41	0
82	MG	1	3588	1/1	0.76	0.10	14,14,14,14	0
82	MG	1	3678	1/1	0.76	0.24	21,21,21,21	0
82	MG	AS	3553	1/1	0.76	0.14	61,61,61,61	0
83	PAR	B	1801	42/42	0.76	0.18	49,65,83,104	0
82	MG	1	4086	1/1	0.76	0.16	17,17,17,17	0
82	MG	1	3921	1/1	0.76	0.15	27,27,27,27	0
82	MG	1	4053	1/1	0.76	0.16	40,40,40,40	0
82	MG	1	3894	1/1	0.76	0.15	26,26,26,26	0
82	MG	AS	3662	1/1	0.76	0.10	32,32,32,32	0
82	MG	AS	3577	1/1	0.77	0.21	68,68,68,68	1
82	MG	1	3512	1/1	0.77	0.14	24,24,24,24	0
82	MG	1	4032	1/1	0.77	0.11	8,8,8,8	0
82	MG	AS	3417	1/1	0.77	0.16	53,53,53,53	0
82	MG	1	3583	1/1	0.77	0.09	35,35,35,35	0
82	MG	1	3473	1/1	0.77	0.34	9,9,9,9	0
82	MG	AS	3738	1/1	0.77	0.12	48,48,48,48	0
82	MG	1	3850	1/1	0.77	0.08	16,16,16,16	0
82	MG	AS	3686	1/1	0.77	0.10	35,35,35,35	0
82	MG	AS	3636	1/1	0.77	0.18	45,45,45,45	0
82	MG	AS	3744	1/1	0.77	0.13	47,47,47,47	0
82	MG	B	1866	1/1	0.77	0.43	21,21,21,21	0
82	MG	AS	3818	1/1	0.77	0.31	17,17,17,17	0
82	MG	AS	3887	1/1	0.77	0.17	10,10,10,10	0
82	MG	1	3665	1/1	0.77	0.14	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
82	MG	AS	3428	1/1	0.77	0.18	17,17,17,17	0
82	MG	AS	3697	1/1	0.77	0.15	32,32,32,32	0
82	MG	1	4073	1/1	0.77	0.34	33,33,33,33	0
82	MG	AS	3760	1/1	0.77	0.13	6,6,6,6	0
82	MG	1	3699	1/1	0.77	0.17	26,26,26,26	0
82	MG	AS	3465	1/1	0.77	0.19	35,35,35,35	0
82	MG	AK	102	1/1	0.77	0.07	11,11,11,11	0
82	MG	1	3877	1/1	0.77	0.15	22,22,22,22	0
82	MG	AS	3659	1/1	0.77	0.17	46,46,46,46	0
82	MG	1	3405	1/1	0.77	0.20	14,14,14,14	0
82	MG	AS	3607	1/1	0.77	0.09	20,20,20,20	0
83	PAR	B	1802	42/42	0.77	0.15	63,92,109,117	0
82	MG	1	3882	1/1	0.77	0.33	39,39,39,39	0
82	MG	1	3469	1/1	0.77	0.16	28,28,28,28	0
82	MG	B	1811	1/1	0.77	0.17	5,5,5,5	0
82	MG	AS	3725	1/1	0.77	0.12	14,14,14,14	0
82	MG	1	3940	1/1	0.77	0.12	30,30,30,30	0
82	MG	AS	3783	1/1	0.78	0.17	63,63,63,63	0
82	MG	B	1857	1/1	0.78	0.15	19,19,19,19	0
82	MG	1	3560	1/1	0.78	0.18	8,8,8,8	0
82	MG	AS	3885	1/1	0.78	0.16	18,18,18,18	0
82	MG	1	3986	1/1	0.78	0.12	18,18,18,18	0
82	MG	AS	3840	1/1	0.78	0.13	30,30,30,30	0
82	MG	AS	3590	1/1	0.78	0.14	41,41,41,41	0
82	MG	1	3778	1/1	0.78	0.10	50,50,50,50	0
82	MG	AS	3802	1/1	0.78	0.07	15,15,15,15	0
82	MG	1	4034	1/1	0.78	0.19	14,14,14,14	0
82	MG	AS	3846	1/1	0.78	0.17	46,46,46,46	0
82	MG	AS	3492	1/1	0.78	0.15	51,51,51,51	0
82	MG	1	3503	1/1	0.78	0.32	34,34,34,34	0
82	MG	AS	3855	1/1	0.78	0.32	20,20,20,20	0
82	MG	1	4038	1/1	0.78	0.13	29,29,29,29	0
82	MG	CM	1816	1/1	0.78	0.10	45,45,45,45	0
83	PAR	1	3456	42/42	0.78	0.12	54,79,95,95	0
82	MG	1	3756	1/1	0.78	0.14	31,31,31,31	0
83	PAR	1	3459	42/42	0.78	0.20	42,69,104,117	0
82	MG	AS	3810	1/1	0.78	0.14	29,29,29,29	0
82	MG	1	3859	1/1	0.78	0.09	41,41,41,41	0
82	MG	1	4083	1/1	0.78	0.47	50,50,50,50	0
82	MG	AS	3727	1/1	0.78	0.18	12,12,12,12	0
82	MG	AS	3520	1/1	0.78	0.12	39,39,39,39	0
82	MG	1	3776	1/1	0.78	0.06	18,18,18,18	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	AS	3445	1/1	0.78	0.12	22,22,22,22	0
82	MG	AS	3456	1/1	0.78	0.11	29,29,29,29	0
82	MG	AS	3538	1/1	0.78	0.07	20,20,20,20	0
82	MG	B	1853	1/1	0.78	0.11	26,26,26,26	0
82	MG	AS	3698	1/1	0.78	0.26	37,37,37,37	0
82	MG	AS	3540	1/1	0.79	0.15	9,9,9,9	0
82	MG	AS	3541	1/1	0.79	0.08	12,12,12,12	0
82	MG	F	301	1/1	0.79	0.10	35,35,35,35	0
82	MG	R	201	1/1	0.79	0.22	45,45,45,45	0
82	MG	AS	3548	1/1	0.79	0.22	44,44,44,44	0
82	MG	AS	3448	1/1	0.79	0.11	51,51,51,51	0
82	MG	1	3545	1/1	0.79	0.13	34,34,34,34	0
82	MG	AS	3796	1/1	0.79	0.08	10,10,10,10	0
82	MG	1	3819	1/1	0.79	0.17	20,20,20,20	0
82	MG	B	1812	1/1	0.79	0.13	8,8,8,8	0
82	MG	1	3594	1/1	0.79	0.20	31,31,31,31	0
82	MG	AS	3866	1/1	0.79	0.25	67,67,67,67	0
82	MG	B	1825	1/1	0.79	0.18	17,17,17,17	0
82	MG	1	3964	1/1	0.79	0.08	37,37,37,37	0
82	MG	1	3569	1/1	0.79	0.46	38,38,38,38	0
82	MG	AS	3487	1/1	0.79	0.10	12,12,12,12	0
82	MG	1	3674	1/1	0.79	0.12	9,9,9,9	0
82	MG	1	3942	1/1	0.79	0.06	37,37,37,37	0
82	MG	1	3983	1/1	0.79	0.33	27,27,27,27	0
82	MG	1	3862	1/1	0.79	0.16	11,11,11,11	0
82	MG	1	3650	1/1	0.79	0.17	17,17,17,17	0
82	MG	1	3635	1/1	0.79	0.09	17,17,17,17	0
82	MG	BQ	201	1/1	0.79	0.08	12,12,12,12	0
82	MG	AS	3745	1/1	0.79	0.12	17,17,17,17	0
82	MG	1	3719	1/1	0.79	0.12	7,7,7,7	0
82	MG	AS	3886	1/1	0.79	0.17	25,25,25,25	0
82	MG	AS	3692	1/1	0.79	0.14	38,38,38,38	0
82	MG	AS	3693	1/1	0.79	0.16	40,40,40,40	0
82	MG	AS	3638	1/1	0.79	0.17	36,36,36,36	0
82	MG	AS	3827	1/1	0.79	0.19	80,80,80,80	0
82	MG	AS	3829	1/1	0.79	0.08	28,28,28,28	0
82	MG	AS	3696	1/1	0.79	0.13	26,26,26,26	0
82	MG	AS	3832	1/1	0.79	0.15	33,33,33,33	0
82	MG	AS	3425	1/1	0.79	0.17	23,23,23,23	0
82	MG	AS	3641	1/1	0.79	0.23	8,8,8,8	0
82	MG	1	3927	1/1	0.79	0.13	32,32,32,32	0
83	PAR	AS	3401	42/42	0.79	0.18	74,102,111,126	42

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	1	3692	1/1	0.79	0.16	7,7,7,7	0
83	PAR	AS	3403	42/42	0.79	0.16	75,109,128,132	0
82	MG	AS	3537	1/1	0.79	0.14	41,41,41,41	0
82	MG	AS	3432	1/1	0.79	0.11	23,23,23,23	0
82	MG	AS	3650	1/1	0.79	0.09	15,15,15,15	0
82	MG	1	3728	1/1	0.80	0.08	34,34,34,34	0
82	MG	AS	3732	1/1	0.80	0.17	32,32,32,32	0
82	MG	AS	3457	1/1	0.80	0.10	34,34,34,34	0
82	MG	1	3668	1/1	0.80	0.11	23,23,23,23	0
82	MG	1	3452	1/1	0.80	0.10	12,12,12,12	0
82	MG	CB	202	1/1	0.80	0.15	36,36,36,36	0
82	MG	1	3830	1/1	0.80	0.12	13,13,13,13	0
82	MG	1	3681	1/1	0.80	0.17	22,22,22,22	0
82	MG	AS	3675	1/1	0.80	0.17	31,31,31,31	0
82	MG	AS	3920	1/1	0.80	0.18	56,56,56,56	0
82	MG	1	3982	1/1	0.80	0.16	37,37,37,37	0
82	MG	1	3868	1/1	0.80	0.12	23,23,23,23	0
82	MG	AN	102	1/1	0.80	0.10	18,18,18,18	0
82	MG	1	4039	1/1	0.80	0.28	50,50,50,50	0
82	MG	AS	3936	1/1	0.80	0.12	26,26,26,26	0
83	PAR	4	201	42/42	0.80	0.19	43,75,89,97	0
82	MG	B	1854	1/1	0.80	0.23	22,22,22,22	0
82	MG	AS	3894	1/1	0.80	0.06	7,7,7,7	0
82	MG	AS	3551	1/1	0.80	0.18	51,51,51,51	0
82	MG	1	4002	1/1	0.80	0.23	40,40,40,40	0
82	MG	AS	3441	1/1	0.80	0.15	21,21,21,21	0
82	MG	1	3633	1/1	0.80	0.12	13,13,13,13	0
82	MG	1	3985	1/1	0.80	0.23	4,4,4,4	0
82	MG	AS	3453	1/1	0.80	0.25	7,7,7,7	0
82	MG	AS	3807	1/1	0.80	0.08	44,44,44,44	0
82	MG	B	1810	1/1	0.81	0.13	11,11,11,11	0
82	MG	1	3557	1/1	0.81	0.15	10,10,10,10	0
82	MG	1	3705	1/1	0.81	0.10	21,21,21,21	0
82	MG	Y	203	1/1	0.81	0.17	33,33,33,33	0
82	MG	o	301	1/1	0.81	0.28	16,16,16,16	0
82	MG	AS	3440	1/1	0.81	0.16	12,12,12,12	0
82	MG	AS	3660	1/1	0.81	0.21	48,48,48,48	0
82	MG	AZ	301	1/1	0.81	0.19	60,60,60,60	0
82	MG	1	3590	1/1	0.81	0.14	19,19,19,19	0
82	MG	1	3898	1/1	0.81	0.16	39,39,39,39	0
82	MG	AS	3750	1/1	0.81	0.20	22,22,22,22	0
82	MG	1	3738	1/1	0.81	0.28	11,11,11,11	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	1	3660	1/1	0.81	0.14	41,41,41,41	0
82	MG	AS	3578	1/1	0.81	0.10	37,37,37,37	0
82	MG	CM	1805	1/1	0.81	0.22	7,7,7,7	0
82	MG	CM	1807	1/1	0.81	0.17	20,20,20,20	0
82	MG	AS	3910	1/1	0.81	0.09	26,26,26,26	0
82	MG	AS	3529	1/1	0.81	0.14	34,34,34,34	0
82	MG	1	3873	1/1	0.81	0.25	19,19,19,19	0
82	MG	1	3440	1/1	0.81	0.10	15,15,15,15	0
82	MG	1	4025	1/1	0.81	0.16	35,35,35,35	0
82	MG	AS	3464	1/1	0.81	0.20	30,30,30,30	0
82	MG	1	3447	1/1	0.81	0.11	16,16,16,16	0
82	MG	B	1859	1/1	0.81	0.23	16,16,16,16	0
82	MG	1	3939	1/1	0.81	0.13	21,21,21,21	0
82	MG	1	3612	1/1	0.81	0.07	15,15,15,15	0
82	MG	AS	3923	1/1	0.81	0.11	16,16,16,16	0
82	MG	AS	3778	1/1	0.81	0.12	23,23,23,23	0
82	MG	AS	3683	1/1	0.81	0.08	23,23,23,23	0
82	MG	1	3696	1/1	0.81	0.21	33,33,33,33	0
82	MG	AS	3781	1/1	0.81	0.07	33,33,33,33	0
82	MG	1	3521	1/1	0.81	0.09	18,18,18,18	0
82	MG	AS	3491	1/1	0.81	0.17	7,7,7,7	0
84	3K5	AS	3405	57/57	0.81	0.21	83,102,131,138	0
82	MG	AS	3689	1/1	0.81	0.13	47,47,47,47	0
82	MG	1	3895	1/1	0.82	0.20	29,29,29,29	0
82	MG	1	3896	1/1	0.82	0.36	23,23,23,23	0
82	MG	1	3565	1/1	0.82	0.27	10,10,10,10	0
82	MG	AS	3939	1/1	0.82	0.18	35,35,35,35	0
82	MG	1	3492	1/1	0.82	0.22	8,8,8,8	0
82	MG	AS	3640	1/1	0.82	0.09	32,32,32,32	0
82	MG	AS	3535	1/1	0.82	0.14	9,9,9,9	0
82	MG	AS	3881	1/1	0.82	0.18	12,12,12,12	0
82	MG	AS	3820	1/1	0.82	0.11	75,75,75,75	0
82	MG	1	3617	1/1	0.82	0.09	33,33,33,33	0
82	MG	AS	3589	1/1	0.82	0.19	65,65,65,65	0
82	MG	AS	3646	1/1	0.82	0.09	21,21,21,21	0
82	MG	1	3638	1/1	0.82	0.20	6,6,6,6	0
82	MG	1	4092	1/1	0.82	0.18	24,24,24,24	0
82	MG	1	3848	1/1	0.82	0.16	48,48,48,48	0
82	MG	j	301	1/1	0.82	0.14	8,8,8,8	0
82	MG	1	3736	1/1	0.82	0.22	58,58,58,58	0
82	MG	1	3523	1/1	0.82	0.13	12,12,12,12	0
82	MG	AS	3468	1/1	0.82	0.17	35,35,35,35	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	1	3401	1/1	0.82	0.14	5,5,5,5	0
82	MG	v	301	1/1	0.82	0.13	13,13,13,13	0
82	MG	AS	3898	1/1	0.82	0.06	23,23,23,23	0
82	MG	1	3647	1/1	0.82	0.09	11,11,11,11	0
82	MG	CM	1819	1/1	0.82	0.27	63,63,63,63	0
82	MG	AS	3479	1/1	0.82	0.12	37,37,37,37	0
82	MG	AS	3724	1/1	0.82	0.19	27,27,27,27	0
82	MG	AS	3608	1/1	0.82	0.12	14,14,14,14	0
82	MG	AS	3483	1/1	0.82	0.15	28,28,28,28	0
82	MG	1	3547	1/1	0.82	0.10	18,18,18,18	0
82	MG	1	3432	1/1	0.82	0.15	16,16,16,16	0
82	MG	1	3720	1/1	0.82	0.17	31,31,31,31	0
82	MG	B	1862	1/1	0.82	0.19	16,16,16,16	0
82	MG	AS	3914	1/1	0.82	0.09	23,23,23,23	0
82	MG	AS	3618	1/1	0.82	0.08	36,36,36,36	0
82	MG	1	3888	1/1	0.82	0.12	25,25,25,25	0
82	MG	AS	3624	1/1	0.82	0.10	38,38,38,38	0
82	MG	1	4035	1/1	0.82	0.19	6,6,6,6	0
82	MG	AS	3865	1/1	0.82	0.17	40,40,40,40	0
82	MG	1	3563	1/1	0.82	0.29	8,8,8,8	0
82	MG	AS	3630	1/1	0.82	0.15	33,33,33,33	0
82	MG	AS	3433	1/1	0.82	0.16	16,16,16,16	0
82	MG	1	3727	1/1	0.82	0.11	52,52,52,52	0
85	ZN	DS	201	1/1	0.82	0.11	278,278,278,278	0
82	MG	1	3450	1/1	0.83	0.09	20,20,20,20	0
82	MG	1	3615	1/1	0.83	0.10	20,20,20,20	0
82	MG	1	3951	1/1	0.83	0.12	45,45,45,45	0
82	MG	BO	201	1/1	0.83	0.09	38,38,38,38	0
82	MG	AS	3451	1/1	0.83	0.13	7,7,7,7	0
82	MG	AS	3652	1/1	0.83	0.08	32,32,32,32	0
82	MG	1	3572	1/1	0.83	0.11	13,13,13,13	0
82	MG	1	4019	1/1	0.83	0.10	46,46,46,46	0
82	MG	1	3932	1/1	0.83	0.34	60,60,60,60	0
82	MG	AS	3460	1/1	0.83	0.20	38,38,38,38	0
82	MG	CM	1812	1/1	0.83	0.20	20,20,20,20	0
82	MG	1	3575	1/1	0.83	0.10	8,8,8,8	0
82	MG	AS	3882	1/1	0.83	0.18	25,25,25,25	0
82	MG	AS	3919	1/1	0.83	0.07	67,67,67,67	0
82	MG	AS	3462	1/1	0.83	0.19	52,52,52,52	0
83	PAR	1	3458	42/42	0.83	0.17	35,50,61,65	0
82	MG	1	3422	1/1	0.83	0.11	11,11,11,11	0
82	MG	1	4051	1/1	0.83	0.13	7,7,7,7	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	1	3818	1/1	0.83	0.16	35,35,35,35	0
83	PAR	1	3464	42/42	0.83	0.16	38,60,76,81	0
82	MG	B	1861	1/1	0.83	0.22	12,12,12,12	0
82	MG	1	3408	1/1	0.83	0.17	13,13,13,13	0
82	MG	AS	3474	1/1	0.83	0.21	10,10,10,10	0
82	MG	1	3765	1/1	0.83	0.12	28,28,28,28	0
82	MG	3	201	1/1	0.83	0.12	28,28,28,28	0
82	MG	AS	3758	1/1	0.83	0.17	44,44,44,44	0
82	MG	B	1809	1/1	0.83	0.20	15,15,15,15	0
82	MG	1	3787	1/1	0.83	0.12	10,10,10,10	0
82	MG	1	3677	1/1	0.83	0.15	32,32,32,32	0
82	MG	AS	3678	1/1	0.83	0.15	37,37,37,37	0
82	MG	1	3797	1/1	0.83	0.10	21,21,21,21	0
82	MG	B	1815	1/1	0.83	0.29	20,20,20,20	0
82	MG	1	3805	1/1	0.83	0.17	24,24,24,24	0
82	MG	AS	3906	1/1	0.83	0.11	26,26,26,26	0
82	MG	1	3794	1/1	0.84	0.07	22,22,22,22	0
82	MG	1	3825	1/1	0.84	0.14	4,4,4,4	0
82	MG	AS	3761	1/1	0.84	0.13	15,15,15,15	0
82	MG	AS	3904	1/1	0.84	0.06	37,37,37,37	0
82	MG	AS	3519	1/1	0.84	0.22	72,72,72,72	0
82	MG	AS	3863	1/1	0.84	0.23	27,27,27,27	0
82	MG	B	1863	1/1	0.84	0.16	16,16,16,16	0
82	MG	1	3740	1/1	0.84	0.13	22,22,22,22	0
82	MG	1	3544	1/1	0.84	0.14	32,32,32,32	0
82	MG	AS	3769	1/1	0.84	0.15	71,71,71,71	0
82	MG	AS	3821	1/1	0.84	0.08	6,6,6,6	0
82	MG	CM	1808	1/1	0.84	0.20	11,11,11,11	0
82	MG	1	3901	1/1	0.84	0.13	30,30,30,30	0
82	MG	CM	1814	1/1	0.84	0.06	14,14,14,14	0
82	MG	AS	3871	1/1	0.84	0.28	87,87,87,87	0
82	MG	CM	1818	1/1	0.84	0.28	52,52,52,52	0
82	MG	1	3570	1/1	0.84	0.14	18,18,18,18	0
82	MG	B	1824	1/1	0.84	0.10	14,14,14,14	0
82	MG	AS	3427	1/1	0.84	0.15	18,18,18,18	0
82	MG	1	3435	1/1	0.84	0.12	13,13,13,13	0
82	MG	AS	3430	1/1	0.84	0.14	14,14,14,14	0
82	MG	1	3483	1/1	0.84	0.18	9,9,9,9	0
82	MG	AS	3627	1/1	0.84	0.28	82,82,82,82	0
83	PAR	1	3462	42/42	0.84	0.19	50,66,105,114	0
82	MG	1	3966	1/1	0.84	0.15	42,42,42,42	0
82	MG	1	3629	1/1	0.84	0.21	17,17,17,17	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	AK	103	1/1	0.84	0.22	15,15,15,15	0
82	MG	AS	3933	1/1	0.84	0.09	49,49,49,49	0
82	MG	1	3556	1/1	0.84	0.22	14,14,14,14	0
82	MG	1	3817	1/1	0.84	0.20	14,14,14,14	0
82	MG	AS	3746	1/1	0.84	0.15	40,40,40,40	0
82	MG	1	3735	1/1	0.84	0.30	12,12,12,12	0
82	MG	AS	3499	1/1	0.84	0.12	21,21,21,21	0
82	MG	1	3614	1/1	0.84	0.11	24,24,24,24	0
82	MG	1	3420	1/1	0.84	0.16	18,18,18,18	0
82	MG	AS	3455	1/1	0.84	0.17	8,8,8,8	0
83	PAR	CM	1803	42/42	0.84	0.24	51,79,99,113	0
82	MG	AS	3854	1/1	0.84	0.09	29,29,29,29	0
82	MG	AS	3755	1/1	0.84	0.14	26,26,26,26	0
82	MG	AS	3720	1/1	0.84	0.18	13,13,13,13	0
82	MG	1	4010	1/1	0.85	0.20	55,55,55,55	0
82	MG	1	3504	1/1	0.85	0.13	14,14,14,14	0
82	MG	AS	3934	1/1	0.85	0.16	40,40,40,40	0
82	MG	AS	3935	1/1	0.85	0.10	34,34,34,34	0
82	MG	AS	3446	1/1	0.85	0.18	45,45,45,45	0
82	MG	AS	3786	1/1	0.85	0.09	11,11,11,11	0
82	MG	B	1846	1/1	0.85	0.15	17,17,17,17	0
82	MG	1	3732	1/1	0.85	0.14	3,3,3,3	0
82	MG	1	3734	1/1	0.85	0.32	12,12,12,12	0
82	MG	1	3603	1/1	0.85	0.26	16,16,16,16	0
82	MG	1	4080	1/1	0.85	0.10	16,16,16,16	0
82	MG	1	3822	1/1	0.85	0.19	6,6,6,6	0
82	MG	1	3433	1/1	0.85	0.06	5,5,5,5	0
82	MG	1	3960	1/1	0.85	0.08	31,31,31,31	0
82	MG	1	3961	1/1	0.85	0.29	21,21,21,21	0
82	MG	1	3913	1/1	0.85	0.11	10,10,10,10	0
82	MG	1	3643	1/1	0.85	0.15	6,6,6,6	0
82	MG	1	3965	1/1	0.85	0.16	23,23,23,23	0
82	MG	B	1868	1/1	0.85	0.13	5,5,5,5	0
82	MG	1	3915	1/1	0.85	0.11	17,17,17,17	0
82	MG	1	3714	1/1	0.85	0.37	43,43,43,43	0
82	MG	1	3970	1/1	0.85	0.11	24,24,24,24	0
82	MG	Q	201	1/1	0.85	0.35	16,16,16,16	0
82	MG	AS	3587	1/1	0.85	0.12	32,32,32,32	0
82	MG	1	3741	1/1	0.85	0.09	12,12,12,12	0
82	MG	1	3975	1/1	0.85	0.13	29,29,29,29	0
82	MG	w	301	1/1	0.85	0.07	6,6,6,6	0
82	MG	CM	1811	1/1	0.85	0.09	10,10,10,10	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	AS	3490	1/1	0.85	0.12	20,20,20,20	0
82	MG	1	3977	1/1	0.85	0.16	18,18,18,18	0
82	MG	1	3866	1/1	0.85	0.10	22,22,22,22	0
82	MG	1	3742	1/1	0.85	0.18	5,5,5,5	0
82	MG	1	3786	1/1	0.85	0.09	20,20,20,20	0
82	MG	CM	1822	1/1	0.85	0.10	19,19,19,19	0
82	MG	1	4041	1/1	0.85	1.37	52,52,52,52	0
82	MG	1	3666	1/1	0.85	0.12	12,12,12,12	0
82	MG	AS	3831	1/1	0.85	0.08	54,54,54,54	0
82	MG	1	3750	1/1	0.85	0.13	17,17,17,17	0
82	MG	1	3876	1/1	0.85	0.08	30,30,30,30	0
82	MG	AS	3754	1/1	0.85	0.13	117,117,117,117	0
82	MG	1	3449	1/1	0.85	0.07	7,7,7,7	0
82	MG	AS	3837	1/1	0.85	0.07	23,23,23,23	0
82	MG	1	3795	1/1	0.85	0.20	23,23,23,23	0
82	MG	1	3648	1/1	0.85	0.12	13,13,13,13	0
82	MG	AS	3522	1/1	0.85	0.10	17,17,17,17	0
82	MG	1	3526	1/1	0.85	0.24	26,26,26,26	0
82	MG	1	4054	1/1	0.85	0.15	21,21,21,21	0
82	MG	1	3841	1/1	0.85	0.12	11,11,11,11	0
82	MG	1	3843	1/1	0.85	0.13	15,15,15,15	0
82	MG	AS	3850	1/1	0.85	0.18	23,23,23,23	0
82	MG	1	3757	1/1	0.85	0.10	35,35,35,35	0
82	MG	1	3652	1/1	0.85	0.21	15,15,15,15	0
82	MG	B	1818	1/1	0.85	0.15	6,6,6,6	0
82	MG	1	3564	1/1	0.85	0.29	17,17,17,17	0
82	MG	1	4062	1/1	0.85	0.08	16,16,16,16	0
82	MG	1	3438	1/1	0.85	0.17	28,28,28,28	0
82	MG	1	3451	1/1	0.85	0.09	8,8,8,8	0
82	MG	1	4095	1/1	0.86	0.14	34,34,34,34	0
82	MG	1	3580	1/1	0.86	0.15	36,36,36,36	0
82	MG	1	3806	1/1	0.86	0.08	18,18,18,18	0
82	MG	1	3490	1/1	0.86	0.29	9,9,9,9	0
82	MG	1	3953	1/1	0.86	0.24	14,14,14,14	0
82	MG	1	3838	1/1	0.86	0.10	55,55,55,55	0
82	MG	AS	3593	1/1	0.86	0.10	53,53,53,53	0
82	MG	1	3958	1/1	0.86	0.15	18,18,18,18	0
82	MG	AS	3437	1/1	0.86	0.15	19,19,19,19	0
82	MG	1	3491	1/1	0.86	0.40	17,17,17,17	0
82	MG	1	3702	1/1	0.86	0.12	7,7,7,7	0
82	MG	1	3540	1/1	0.86	0.08	17,17,17,17	0
82	MG	B	1865	1/1	0.86	0.08	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
82	MG	AS	3670	1/1	0.86	0.15	31,31,31,31	0
82	MG	AS	3531	1/1	0.86	0.17	72,72,72,72	0
82	MG	1	3412	1/1	0.86	0.09	17,17,17,17	0
82	MG	1	3812	1/1	0.86	0.28	9,9,9,9	0
82	MG	AS	3674	1/1	0.86	0.07	21,21,21,21	0
82	MG	1	3493	1/1	0.86	0.11	11,11,11,11	0
82	MG	AS	3454	1/1	0.86	0.31	17,17,17,17	0
82	MG	1	3711	1/1	0.86	0.11	15,15,15,15	0
82	MG	CM	1806	1/1	0.86	0.16	19,19,19,19	0
82	MG	1	3928	1/1	0.86	0.12	30,30,30,30	0
82	MG	AS	3828	1/1	0.86	0.16	43,43,43,43	0
82	MG	1	4018	1/1	0.86	0.09	37,37,37,37	0
82	MG	AS	3614	1/1	0.86	0.14	45,45,45,45	0
82	MG	1	3431	1/1	0.86	0.11	13,13,13,13	0
82	MG	CM	1815	1/1	0.86	0.28	28,28,28,28	0
82	MG	AS	3684	1/1	0.86	0.07	14,14,14,14	0
82	MG	1	3972	1/1	0.86	0.13	8,8,8,8	0
82	MG	1	3478	1/1	0.86	0.31	15,15,15,15	0
82	MG	AS	3757	1/1	0.86	0.07	27,27,27,27	0
82	MG	1	4066	1/1	0.86	0.07	19,19,19,19	0
82	MG	AS	3907	1/1	0.86	0.13	48,48,48,48	0
82	MG	1	3510	1/1	0.86	0.08	9,9,9,9	0
82	MG	AS	3839	1/1	0.86	0.08	31,31,31,31	0
82	MG	1	3823	1/1	0.86	0.13	11,11,11,11	0
82	MG	1	4075	1/1	0.86	0.07	11,11,11,11	0
82	MG	AS	3629	1/1	0.86	0.16	17,17,17,17	0
82	MG	AS	3562	1/1	0.86	0.23	52,52,52,52	0
82	MG	1	3749	1/1	0.86	0.11	4,4,4,4	0
82	MG	1	4077	1/1	0.86	0.09	16,16,16,16	0
82	MG	1	3549	1/1	0.86	0.14	17,17,17,17	0
82	MG	1	3467	1/1	0.86	0.27	8,8,8,8	0
82	MG	1	3446	1/1	0.86	0.13	12,12,12,12	0
82	MG	1	3604	1/1	0.86	0.13	17,17,17,17	0
82	MG	1	3514	1/1	0.86	0.11	10,10,10,10	0
82	MG	1	3607	1/1	0.86	0.11	22,22,22,22	0
82	MG	1	3907	1/1	0.86	0.20	20,20,20,20	0
82	MG	AS	3709	1/1	0.86	0.11	10,10,10,10	0
82	MG	1	3910	1/1	0.86	0.10	6,6,6,6	0
82	MG	AS	3496	1/1	0.86	0.23	35,35,35,35	0
84	3K5	1	3463	57/57	0.86	0.23	47,66,95,131	0
82	MG	B	1838	1/1	0.86	0.10	19,19,19,19	0
82	MG	AS	3503	1/1	0.86	0.12	22,22,22,22	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	AS	3721	1/1	0.86	0.11	19,19,19,19	0
82	MG	1	4070	1/1	0.87	0.17	8,8,8,8	0
82	MG	1	3421	1/1	0.87	0.04	7,7,7,7	0
82	MG	AS	3517	1/1	0.87	0.16	49,49,49,49	0
82	MG	1	3621	1/1	0.87	0.16	28,28,28,28	0
82	MG	AS	3759	1/1	0.87	0.14	15,15,15,15	0
82	MG	1	3846	1/1	0.87	0.22	16,16,16,16	0
82	MG	1	3926	1/1	0.87	0.21	25,25,25,25	0
82	MG	1	4027	1/1	0.87	0.11	11,11,11,11	0
82	MG	1	3684	1/1	0.87	0.29	7,7,7,7	0
82	MG	1	3717	1/1	0.87	0.16	21,21,21,21	0
82	MG	B	1830	1/1	0.87	0.21	18,18,18,18	0
82	MG	1	3584	1/1	0.87	0.09	7,7,7,7	0
82	MG	1	3930	1/1	0.87	0.20	19,19,19,19	0
82	MG	AS	3533	1/1	0.87	0.13	14,14,14,14	0
82	MG	AS	3862	1/1	0.87	0.26	27,27,27,27	0
82	MG	AS	3691	1/1	0.87	0.08	16,16,16,16	0
82	MG	AS	3864	1/1	0.87	0.17	34,34,34,34	0
82	MG	AT	201	1/1	0.87	0.22	10,10,10,10	0
82	MG	AS	3534	1/1	0.87	0.05	11,11,11,11	0
82	MG	AS	3615	1/1	0.87	0.07	35,35,35,35	0
82	MG	1	3568	1/1	0.87	0.24	11,11,11,11	0
82	MG	1	3892	1/1	0.87	0.11	23,23,23,23	0
82	MG	AS	3619	1/1	0.87	0.09	20,20,20,20	0
82	MG	BB	302	1/1	0.87	0.27	17,17,17,17	0
82	MG	1	3746	1/1	0.87	0.15	17,17,17,17	0
82	MG	1	3558	1/1	0.87	0.14	19,19,19,19	0
82	MG	B	1855	1/1	0.87	0.20	20,20,20,20	0
82	MG	1	4037	1/1	0.87	0.27	5,5,5,5	0
82	MG	1	3721	1/1	0.87	0.08	11,11,11,11	0
82	MG	AS	3705	1/1	0.87	0.24	30,30,30,30	0
82	MG	AS	3545	1/1	0.87	0.07	28,28,28,28	0
82	MG	AS	3547	1/1	0.87	0.16	58,58,58,58	0
82	MG	1	3691	1/1	0.87	0.09	13,13,13,13	0
82	MG	1	3753	1/1	0.87	0.25	7,7,7,7	0
82	MG	1	3482	1/1	0.87	0.21	8,8,8,8	0
82	MG	1	3993	1/1	0.87	0.11	35,35,35,35	0
82	MG	1	3542	1/1	0.87	0.13	7,7,7,7	0
82	MG	1	3501	1/1	0.87	0.20	11,11,11,11	0
82	MG	1	3904	1/1	0.87	0.14	62,62,62,62	0
82	MG	x	201	1/1	0.87	0.19	8,8,8,8	0
82	MG	y	201	1/1	0.87	0.14	14,14,14,14	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	B	1872	1/1	0.87	0.18	41,41,41,41	0
82	MG	1	3905	1/1	0.87	0.11	13,13,13,13	0
82	MG	1	3906	1/1	0.87	0.12	30,30,30,30	0
82	MG	1	3803	1/1	0.87	0.15	36,36,36,36	0
82	MG	AS	3819	1/1	0.87	0.25	46,46,46,46	0
82	MG	AB	202	1/1	0.87	0.11	9,9,9,9	0
82	MG	Y	202	1/1	0.87	0.12	22,22,22,22	0
82	MG	AS	3477	1/1	0.87	0.22	10,10,10,10	0
82	MG	AS	3901	1/1	0.87	0.08	17,17,17,17	0
82	MG	1	3804	1/1	0.87	0.21	17,17,17,17	0
82	MG	AS	3656	1/1	0.87	0.11	21,21,21,21	0
82	MG	AS	3905	1/1	0.87	0.14	48,48,48,48	0
82	MG	AS	3579	1/1	0.87	0.09	23,23,23,23	0
82	MG	1	3407	1/1	0.87	0.18	12,12,12,12	0
82	MG	1	3536	1/1	0.87	0.20	13,13,13,13	0
82	MG	AS	3583	1/1	0.87	0.12	38,38,38,38	0
82	MG	1	3581	1/1	0.87	0.15	13,13,13,13	0
82	MG	1	4059	1/1	0.87	0.15	16,16,16,16	0
82	MG	1	3761	1/1	0.87	0.26	16,16,16,16	0
82	MG	1	3875	1/1	0.87	0.14	16,16,16,16	0
82	MG	1	3661	1/1	0.87	0.12	9,9,9,9	0
82	MG	1	3918	1/1	0.87	0.19	27,27,27,27	0
82	MG	AS	3502	1/1	0.87	0.07	22,22,22,22	0
82	MG	1	3963	1/1	0.87	0.15	27,27,27,27	0
82	MG	1	3663	1/1	0.87	0.17	23,23,23,23	0
85	ZN	CJ	201	1/1	0.87	0.09	224,224,224,224	0
82	MG	1	4069	1/1	0.87	0.21	20,20,20,20	0
82	MG	AS	3452	1/1	0.88	0.13	29,29,29,29	0
82	MG	1	3780	1/1	0.88	0.08	4,4,4,4	0
82	MG	1	3628	1/1	0.88	0.14	23,23,23,23	0
82	MG	1	3402	1/1	0.88	0.27	16,16,16,16	0
82	MG	AS	3941	1/1	0.88	0.48	38,38,38,38	0
82	MG	AS	3525	1/1	0.88	0.10	12,12,12,12	0
82	MG	1	3698	1/1	0.88	0.23	18,18,18,18	0
82	MG	AS	3528	1/1	0.88	0.18	14,14,14,14	0
82	MG	1	3507	1/1	0.88	0.30	20,20,20,20	0
82	MG	AS	3458	1/1	0.88	0.23	20,20,20,20	0
82	MG	AS	3876	1/1	0.88	0.07	19,19,19,19	0
82	MG	AS	3599	1/1	0.88	0.15	23,23,23,23	0
82	MG	1	4067	1/1	0.88	0.16	15,15,15,15	0
82	MG	1	3941	1/1	0.88	0.12	69,69,69,69	0
82	MG	AS	3667	1/1	0.88	0.15	26,26,26,26	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	1	3494	1/1	0.88	0.13	16,16,16,16	0
82	MG	1	3726	1/1	0.88	0.19	8,8,8,8	0
82	MG	1	4072	1/1	0.88	0.10	33,33,33,33	0
82	MG	AS	3539	1/1	0.88	0.07	16,16,16,16	0
82	MG	1	3499	1/1	0.88	0.13	5,5,5,5	0
82	MG	AS	3741	1/1	0.88	0.08	13,13,13,13	0
82	MG	1	3486	1/1	0.88	0.10	10,10,10,10	0
82	MG	AS	3470	1/1	0.88	0.12	26,26,26,26	0
82	MG	1	3897	1/1	0.88	0.08	5,5,5,5	0
82	MG	AS	3892	1/1	0.88	0.19	69,69,69,69	0
82	MG	1	3748	1/1	0.88	0.14	15,15,15,15	0
82	MG	1	3979	1/1	0.88	0.23	24,24,24,24	0
82	MG	1	3687	1/1	0.88	0.21	4,4,4,4	0
82	MG	1	3772	1/1	0.88	0.05	21,21,21,21	0
82	MG	1	3874	1/1	0.88	0.08	5,5,5,5	0
82	MG	AS	3482	1/1	0.88	0.12	50,50,50,50	0
82	MG	1	3651	1/1	0.88	0.09	21,21,21,21	0
82	MG	AS	3484	1/1	0.88	0.10	18,18,18,18	0
82	MG	AS	3560	1/1	0.88	0.21	12,12,12,12	0
82	MG	AS	3485	1/1	0.88	0.10	20,20,20,20	0
82	MG	B	1864	1/1	0.88	0.08	8,8,8,8	0
82	MG	1	4084	1/1	0.88	0.10	195,195,195,195	0
82	MG	AS	3566	1/1	0.88	0.21	40,40,40,40	0
82	MG	AS	3431	1/1	0.88	0.30	32,32,32,32	0
82	MG	AS	3762	1/1	0.88	0.08	33,33,33,33	0
82	MG	B	1806	1/1	0.88	0.12	15,15,15,15	0
82	MG	AS	3493	1/1	0.88	0.09	35,35,35,35	0
82	MG	AS	3765	1/1	0.88	0.13	10,10,10,10	0
82	MG	AS	3495	1/1	0.88	0.16	12,12,12,12	0
82	MG	1	3957	1/1	0.88	0.10	22,22,22,22	0
82	MG	AS	3768	1/1	0.88	0.10	7,7,7,7	0
82	MG	1	3488	1/1	0.88	0.13	25,25,25,25	0
82	MG	AS	3436	1/1	0.88	0.07	4,4,4,4	0
82	MG	1	4089	1/1	0.88	0.14	23,23,23,23	0
82	MG	AS	3438	1/1	0.88	0.12	4,4,4,4	0
82	MG	AS	3776	1/1	0.88	0.09	22,22,22,22	0
82	MG	1	3855	1/1	0.88	0.06	9,9,9,9	0
82	MG	1	3517	1/1	0.88	0.11	8,8,8,8	0
82	MG	1	3994	1/1	0.88	0.13	14,14,14,14	0
82	MG	1	3694	1/1	0.88	0.09	37,37,37,37	0
82	MG	AS	3714	1/1	0.88	0.09	59,59,59,59	0
82	MG	AS	3861	1/1	0.88	0.38	41,41,41,41	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	AS	3785	1/1	0.88	0.14	23,23,23,23	0
82	MG	B	1819	1/1	0.88	0.26	15,15,15,15	0
82	MG	Y	201	1/1	0.88	0.12	6,6,6,6	0
82	MG	AS	3925	1/1	0.89	0.07	26,26,26,26	0
82	MG	AS	3501	1/1	0.89	0.10	11,11,11,11	0
82	MG	AS	3929	1/1	0.89	0.08	8,8,8,8	0
82	MG	1	3923	1/1	0.89	0.08	19,19,19,19	0
82	MG	1	3925	1/1	0.89	0.12	19,19,19,19	0
82	MG	1	3410	1/1	0.89	0.24	16,16,16,16	0
82	MG	1	3513	1/1	0.89	0.12	16,16,16,16	0
82	MG	AS	3716	1/1	0.89	0.07	28,28,28,28	0
82	MG	AS	3439	1/1	0.89	0.20	67,67,67,67	0
82	MG	AS	3787	1/1	0.89	0.17	40,40,40,40	0
82	MG	AS	3788	1/1	0.89	0.20	19,19,19,19	0
82	MG	1	3609	1/1	0.89	0.09	5,5,5,5	0
82	MG	AS	3792	1/1	0.89	0.09	158,158,158,158	0
82	MG	AS	3651	1/1	0.89	0.10	31,31,31,31	0
82	MG	AS	3944	1/1	0.89	0.15	9,9,9,9	0
82	MG	1	4017	1/1	0.89	0.09	23,23,23,23	0
82	MG	1	3579	1/1	0.89	0.14	16,16,16,16	0
82	MG	1	3439	1/1	0.89	0.14	31,31,31,31	0
82	MG	AS	3798	1/1	0.89	0.10	21,21,21,21	0
82	MG	1	3899	1/1	0.89	0.17	12,12,12,12	0
82	MG	1	4021	1/1	0.89	0.10	41,41,41,41	0
82	MG	1	3632	1/1	0.89	0.08	11,11,11,11	0
82	MG	1	3475	1/1	0.89	0.22	17,17,17,17	0
82	MG	1	3693	1/1	0.89	0.11	22,22,22,22	0
82	MG	1	3935	1/1	0.89	0.20	27,27,27,27	0
82	MG	1	3655	1/1	0.89	0.12	47,47,47,47	0
82	MG	1	4074	1/1	0.89	0.31	35,35,35,35	0
82	MG	U	201	1/1	0.89	0.17	51,51,51,51	0
82	MG	1	3724	1/1	0.89	0.13	29,29,29,29	0
82	MG	1	3500	1/1	0.89	0.10	4,4,4,4	0
82	MG	CE	102	1/1	0.89	0.10	52,52,52,52	0
82	MG	AS	3814	1/1	0.89	0.18	21,21,21,21	0
82	MG	AS	3668	1/1	0.89	0.13	13,13,13,13	0
82	MG	1	3636	1/1	0.89	0.17	16,16,16,16	0
82	MG	AS	3536	1/1	0.89	0.09	48,48,48,48	0
82	MG	1	3752	1/1	0.89	0.20	4,4,4,4	0
82	MG	1	3908	1/1	0.89	0.17	12,12,12,12	0
82	MG	AS	3605	1/1	0.89	0.20	26,26,26,26	0
82	MG	1	3909	1/1	0.89	0.08	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
82	MG	B	1817	1/1	0.89	0.16	4,4,4,4	0
82	MG	1	3618	1/1	0.89	0.09	13,13,13,13	0
82	MG	1	4082	1/1	0.89	0.11	21,21,21,21	0
82	MG	AS	3413	1/1	0.89	0.15	16,16,16,16	0
82	MG	1	3426	1/1	0.89	0.15	16,16,16,16	0
82	MG	CM	1824	1/1	0.89	0.12	35,35,35,35	0
82	MG	1	3541	1/1	0.89	0.15	9,9,9,9	0
82	MG	1	3851	1/1	0.89	0.09	46,46,46,46	0
82	MG	1	3788	1/1	0.89	0.07	15,15,15,15	0
82	MG	AS	3903	1/1	0.89	0.11	30,30,30,30	0
82	MG	AS	3481	1/1	0.89	0.15	41,41,41,41	0
82	MG	1	3854	1/1	0.89	0.17	40,40,40,40	0
82	MG	AS	3554	1/1	0.89	0.17	8,8,8,8	0
82	MG	1	3954	1/1	0.89	0.28	29,29,29,29	0
82	MG	AS	3557	1/1	0.89	0.07	32,32,32,32	0
82	MG	B	1833	1/1	0.89	0.18	15,15,15,15	0
82	MG	1	3680	1/1	0.89	0.14	27,27,27,27	0
82	MG	1	4003	1/1	0.89	0.15	37,37,37,37	0
82	MG	B	1840	1/1	0.89	0.10	9,9,9,9	0
82	MG	1	4050	1/1	0.89	0.11	11,11,11,11	0
82	MG	AS	3564	1/1	0.89	0.20	25,25,25,25	0
82	MG	1	3887	1/1	0.89	0.14	43,43,43,43	0
82	MG	1	3793	1/1	0.89	0.13	23,23,23,23	0
82	MG	AS	3848	1/1	0.89	0.08	35,35,35,35	0
82	MG	1	3662	1/1	0.89	0.09	36,36,36,36	0
83	PAR	CM	1802	42/42	0.89	0.14	26,58,74,83	0
82	MG	1	3891	1/1	0.89	0.13	8,8,8,8	0
82	MG	1	3561	1/1	0.89	0.07	3,3,3,3	0
82	MG	AS	3853	1/1	0.89	0.20	20,20,20,20	0
82	MG	AS	3922	1/1	0.89	0.23	20,20,20,20	0
82	MG	AS	3774	1/1	0.89	0.11	17,17,17,17	0
82	MG	AS	3573	1/1	0.89	0.20	24,24,24,24	0
82	MG	1	3508	1/1	0.90	0.16	12,12,12,12	0
82	MG	1	3813	1/1	0.90	0.14	29,29,29,29	0
82	MG	AS	3931	1/1	0.90	0.15	6,6,6,6	0
82	MG	AS	3932	1/1	0.90	0.18	16,16,16,16	0
82	MG	1	3815	1/1	0.90	0.18	15,15,15,15	0
82	MG	AS	3420	1/1	0.90	0.11	21,21,21,21	0
82	MG	AS	3489	1/1	0.90	0.18	20,20,20,20	0
82	MG	B	1834	1/1	0.90	0.17	8,8,8,8	0
82	MG	AS	3784	1/1	0.90	0.19	36,36,36,36	0
82	MG	AS	3938	1/1	0.90	0.10	4,4,4,4	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	k	402	1/1	0.90	0.45	26,26,26,26	0
82	MG	AS	3423	1/1	0.90	0.16	43,43,43,43	0
82	MG	AS	3711	1/1	0.90	0.07	30,30,30,30	0
82	MG	1	3816	1/1	0.90	0.16	6,6,6,6	0
82	MG	AS	3789	1/1	0.90	0.18	29,29,29,29	0
82	MG	1	3842	1/1	0.90	0.06	14,14,14,14	0
82	MG	AS	3571	1/1	0.90	0.18	4,4,4,4	0
82	MG	AS	3717	1/1	0.90	0.05	26,26,26,26	0
82	MG	B	1845	1/1	0.90	0.08	17,17,17,17	0
82	MG	AS	3644	1/1	0.90	0.11	7,7,7,7	0
82	MG	AS	3497	1/1	0.90	0.13	18,18,18,18	0
82	MG	AS	3875	1/1	0.90	0.15	22,22,22,22	0
82	MG	1	3792	1/1	0.90	0.17	12,12,12,12	0
82	MG	AS	3877	1/1	0.90	0.10	28,28,28,28	0
82	MG	1	4063	1/1	0.90	0.06	28,28,28,28	0
82	MG	B	1851	1/1	0.90	0.20	17,17,17,17	0
82	MG	1	3872	1/1	0.90	0.11	17,17,17,17	0
82	MG	1	3531	1/1	0.90	0.11	64,64,64,64	0
82	MG	1	3606	1/1	0.90	0.09	9,9,9,9	0
82	MG	B	1856	1/1	0.90	0.18	14,14,14,14	0
82	MG	AS	3730	1/1	0.90	0.16	16,16,16,16	0
82	MG	AS	3514	1/1	0.90	0.26	67,67,67,67	0
82	MG	1	3739	1/1	0.90	0.23	15,15,15,15	0
82	MG	1	3710	1/1	0.90	0.19	13,13,13,13	0
82	MG	AB	201	1/1	0.90	0.18	17,17,17,17	0
82	MG	1	3799	1/1	0.90	0.17	6,6,6,6	0
82	MG	1	4033	1/1	0.90	0.13	5,5,5,5	0
82	MG	AS	3443	1/1	0.90	0.20	20,20,20,20	0
82	MG	1	3997	1/1	0.90	0.10	21,21,21,21	0
82	MG	AS	3591	1/1	0.90	0.24	42,42,42,42	0
82	MG	1	3802	1/1	0.90	0.10	25,25,25,25	0
82	MG	1	3419	1/1	0.90	0.10	10,10,10,10	0
82	MG	1	3587	1/1	0.90	0.10	7,7,7,7	0
82	MG	1	3622	1/1	0.90	0.11	22,22,22,22	0
82	MG	CM	1821	1/1	0.90	0.14	21,21,21,21	0
82	MG	1	3781	1/1	0.90	0.09	8,8,8,8	0
82	MG	1	3912	1/1	0.90	0.14	29,29,29,29	0
82	MG	AS	3748	1/1	0.90	0.06	13,13,13,13	0
82	MG	AS	3532	1/1	0.90	0.16	16,16,16,16	0
82	MG	1	4006	1/1	0.90	0.11	24,24,24,24	0
82	MG	1	4043	1/1	0.90	0.05	10,10,10,10	0
82	MG	B	1808	1/1	0.90	0.18	8,8,8,8	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	1	4007	1/1	0.90	0.19	43,43,43,43	0
82	MG	1	3969	1/1	0.90	0.18	23,23,23,23	0
82	MG	AS	3679	1/1	0.90	0.10	68,68,68,68	0
82	MG	1	3543	1/1	0.90	0.10	14,14,14,14	0
82	MG	1	3971	1/1	0.90	0.11	27,27,27,27	0
82	MG	B	1813	1/1	0.90	0.19	16,16,16,16	0
82	MG	1	3453	1/1	0.90	0.12	34,34,34,34	0
82	MG	1	3973	1/1	0.90	0.09	8,8,8,8	0
82	MG	1	3831	1/1	0.90	0.11	44,44,44,44	0
82	MG	AS	3408	1/1	0.90	0.06	13,13,13,13	0
82	MG	1	4090	1/1	0.90	0.12	5,5,5,5	0
82	MG	1	3496	1/1	0.90	0.23	15,15,15,15	0
82	MG	B	1822	1/1	0.90	0.16	11,11,11,11	0
82	MG	B	1823	1/1	0.90	0.14	8,8,8,8	0
82	MG	AS	3849	1/1	0.90	0.09	29,29,29,29	0
82	MG	1	3764	1/1	0.90	0.08	27,27,27,27	0
82	MG	AS	3623	1/1	0.90	0.14	33,33,33,33	0
82	MG	1	3688	1/1	0.90	0.18	14,14,14,14	0
82	MG	AS	3555	1/1	0.90	0.11	46,46,46,46	0
82	MG	3	204	1/1	0.90	0.08	14,14,14,14	0
82	MG	B	1828	1/1	0.90	0.12	19,19,19,19	0
82	MG	1	3416	1/1	0.91	0.24	8,8,8,8	0
82	MG	AS	3467	1/1	0.91	0.20	39,39,39,39	0
82	MG	AS	3945	1/1	0.91	0.19	18,18,18,18	0
82	MG	1	3704	1/1	0.91	0.10	16,16,16,16	0
82	MG	1	4042	1/1	0.91	0.07	14,14,14,14	0
82	MG	AS	3702	1/1	0.91	0.08	55,55,55,55	0
82	MG	AP	203	1/1	0.91	0.12	8,8,8,8	0
82	MG	AS	3889	1/1	0.91	0.10	15,15,15,15	0
82	MG	AU	201	1/1	0.91	0.10	44,44,44,44	0
82	MG	AU	202	1/1	0.91	0.08	59,59,59,59	0
82	MG	1	3474	1/1	0.91	0.15	25,25,25,25	0
82	MG	1	3418	1/1	0.91	0.07	5,5,5,5	0
82	MG	1	3943	1/1	0.91	0.07	16,16,16,16	0
82	MG	BB	301	1/1	0.91	0.22	15,15,15,15	0
82	MG	1	4012	1/1	0.91	0.12	28,28,28,28	0
82	MG	BB	303	1/1	0.91	0.16	9,9,9,9	0
82	MG	1	3477	1/1	0.91	0.24	15,15,15,15	0
82	MG	1	4049	1/1	0.91	0.11	8,8,8,8	0
82	MG	1	3890	1/1	0.91	0.12	19,19,19,19	0
82	MG	1	4087	1/1	0.91	0.14	21,21,21,21	0
82	MG	1	3550	1/1	0.91	0.31	16,16,16,16	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	AS	3657	1/1	0.91	0.16	19,19,19,19	0
82	MG	1	3551	1/1	0.91	0.21	15,15,15,15	0
82	MG	B	1814	1/1	0.91	0.16	13,13,13,13	0
82	MG	AS	3777	1/1	0.91	0.06	29,29,29,29	0
82	MG	1	3436	1/1	0.91	0.08	9,9,9,9	0
82	MG	AS	3546	1/1	0.91	0.14	19,19,19,19	0
82	MG	1	3785	1/1	0.91	0.14	10,10,10,10	0
82	MG	1	3654	1/1	0.91	0.14	6,6,6,6	0
82	MG	AS	3782	1/1	0.91	0.21	12,12,12,12	0
82	MG	1	3814	1/1	0.91	0.20	21,21,21,21	0
82	MG	1	3737	1/1	0.91	0.35	5,5,5,5	0
82	MG	AS	3726	1/1	0.91	0.10	17,17,17,17	0
82	MG	CM	1817	1/1	0.91	0.17	29,29,29,29	0
82	MG	AS	3552	1/1	0.91	0.10	14,14,14,14	0
82	MG	1	4022	1/1	0.91	0.09	25,25,25,25	0
82	MG	AS	3442	1/1	0.91	0.13	40,40,40,40	0
82	MG	1	4023	1/1	0.91	0.15	30,30,30,30	0
82	MG	CM	1823	1/1	0.91	0.28	18,18,18,18	0
82	MG	AS	3790	1/1	0.91	0.18	34,34,34,34	0
82	MG	CM	1826	1/1	0.91	0.21	22,22,22,22	0
82	MG	1	3988	1/1	0.91	0.06	43,43,43,43	0
82	MG	AS	3500	1/1	0.91	0.07	11,11,11,11	0
82	MG	AS	3733	1/1	0.91	0.12	25,25,25,25	0
82	MG	1	3924	1/1	0.91	0.21	18,18,18,18	0
82	MG	AS	3559	1/1	0.91	0.09	31,31,31,31	0
82	MG	1	3672	1/1	0.91	0.09	10,10,10,10	0
82	MG	AS	3449	1/1	0.91	0.27	3,3,3,3	0
82	MG	AS	3507	1/1	0.91	0.18	57,57,57,57	0
82	MG	AS	3508	1/1	0.91	0.11	9,9,9,9	0
82	MG	c	201	1/1	0.91	0.27	17,17,17,17	0
82	MG	AS	3565	1/1	0.91	0.23	64,64,64,64	0
82	MG	AS	3928	1/1	0.91	0.22	17,17,17,17	0
82	MG	1	3479	1/1	0.91	0.15	8,8,8,8	0
82	MG	1	3518	1/1	0.91	0.16	7,7,7,7	0
82	MG	1	3443	1/1	0.91	0.09	16,16,16,16	0
82	MG	1	3624	1/1	0.91	0.07	18,18,18,18	0
82	MG	1	3767	1/1	0.91	0.14	23,23,23,23	0
82	MG	1	3849	1/1	0.91	0.25	12,12,12,12	0
82	MG	1	3437	1/1	0.91	0.07	7,7,7,7	0
82	MG	AS	3813	1/1	0.91	0.17	44,44,44,44	0
82	MG	1	3879	1/1	0.91	0.11	11,11,11,11	0
82	MG	1	3641	1/1	0.91	0.11	13,13,13,13	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	AS	3635	1/1	0.91	0.06	35,35,35,35	0
82	MG	1	3967	1/1	0.91	0.12	27,27,27,27	0
82	MG	1	3642	1/1	0.91	0.11	38,38,38,38	0
82	MG	1	3774	1/1	0.91	0.19	11,11,11,11	0
82	MG	1	3608	1/1	0.92	0.07	16,16,16,16	0
82	MG	1	3990	1/1	0.92	0.10	9,9,9,9	0
82	MG	1	3441	1/1	0.92	0.07	8,8,8,8	0
82	MG	AS	3506	1/1	0.92	0.20	11,11,11,11	0
82	MG	1	3539	1/1	0.92	0.28	20,20,20,20	0
82	MG	1	3634	1/1	0.92	0.15	15,15,15,15	0
82	MG	1	3782	1/1	0.92	0.12	8,8,8,8	0
82	MG	AS	3634	1/1	0.92	0.18	48,48,48,48	0
82	MG	AS	3510	1/1	0.92	0.17	19,19,19,19	0
82	MG	1	3956	1/1	0.92	0.12	49,49,49,49	0
82	MG	AS	3637	1/1	0.92	0.13	18,18,18,18	0
82	MG	1	3613	1/1	0.92	0.17	24,24,24,24	0
82	MG	1	3755	1/1	0.92	0.16	6,6,6,6	0
82	MG	1	3852	1/1	0.92	0.20	24,24,24,24	0
82	MG	1	4001	1/1	0.92	0.08	25,25,25,25	0
82	MG	AS	3576	1/1	0.92	0.14	11,11,11,11	0
82	MG	CH	101	1/1	0.92	0.18	22,22,22,22	0
82	MG	1	3502	1/1	0.92	0.18	10,10,10,10	0
82	MG	CM	1804	1/1	0.92	0.22	12,12,12,12	0
82	MG	1	3481	1/1	0.92	0.13	17,17,17,17	0
82	MG	1	3595	1/1	0.92	0.20	4,4,4,4	0
82	MG	AS	3713	1/1	0.92	0.07	9,9,9,9	0
82	MG	1	3821	1/1	0.92	0.09	19,19,19,19	0
82	MG	1	4045	1/1	0.92	0.11	33,33,33,33	0
82	MG	1	3709	1/1	0.92	0.11	16,16,16,16	0
82	MG	CM	1813	1/1	0.92	0.08	7,7,7,7	0
82	MG	1	4088	1/1	0.92	0.15	16,16,16,16	0
82	MG	1	3495	1/1	0.92	0.24	15,15,15,15	0
82	MG	1	3516	1/1	0.92	0.17	4,4,4,4	0
82	MG	1	3505	1/1	0.92	0.27	16,16,16,16	0
82	MG	AS	3530	1/1	0.92	0.18	32,32,32,32	0
82	MG	1	4094	1/1	0.92	0.09	11,11,11,11	0
82	MG	CM	1820	1/1	0.92	0.19	11,11,11,11	0
82	MG	B	1821	1/1	0.92	0.18	13,13,13,13	0
82	MG	1	3601	1/1	0.92	0.08	15,15,15,15	0
82	MG	1	3403	1/1	0.92	0.36	16,16,16,16	0
82	MG	3	202	1/1	0.92	0.24	20,20,20,20	0
82	MG	AS	3469	1/1	0.92	0.13	16,16,16,16	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	1	3796	1/1	0.92	0.12	8,8,8,8	0
82	MG	1	3766	1/1	0.92	0.26	16,16,16,16	0
82	MG	4	204	1/1	0.92	0.12	6,6,6,6	0
82	MG	1	3472	1/1	0.92	0.20	9,9,9,9	0
82	MG	1	3800	1/1	0.92	0.11	13,13,13,13	0
82	MG	B	1832	1/1	0.92	0.20	8,8,8,8	0
82	MG	AS	3543	1/1	0.92	0.16	34,34,34,34	0
82	MG	1	3768	1/1	0.92	0.16	8,8,8,8	0
82	MG	1	3532	1/1	0.92	0.08	15,15,15,15	0
82	MG	1	3976	1/1	0.92	0.07	13,13,13,13	0
82	MG	1	3871	1/1	0.92	0.10	23,23,23,23	0
82	MG	1	3649	1/1	0.92	0.13	7,7,7,7	0
82	MG	B	1844	1/1	0.92	0.09	16,16,16,16	0
82	MG	1	3745	1/1	0.92	0.13	18,18,18,18	0
82	MG	1	3981	1/1	0.92	0.21	15,15,15,15	0
82	MG	B	1848	1/1	0.92	0.09	5,5,5,5	0
82	MG	AS	3680	1/1	0.92	0.09	15,15,15,15	0
82	MG	z	201	1/1	0.92	0.08	14,14,14,14	0
82	MG	1	3773	1/1	0.92	0.06	25,25,25,25	0
82	MG	1	3509	1/1	0.92	0.27	17,17,17,17	0
82	MG	1	3775	1/1	0.92	0.09	9,9,9,9	0
82	MG	AS	3685	1/1	0.92	0.21	9,9,9,9	0
82	MG	1	3444	1/1	0.92	0.05	3,3,3,3	0
82	MG	1	3537	1/1	0.92	0.19	8,8,8,8	0
82	MG	AD	201	1/1	0.92	0.21	11,11,11,11	0
82	MG	1	3949	1/1	0.92	0.07	28,28,28,28	0
82	MG	1	3417	1/1	0.93	0.13	11,11,11,11	0
82	MG	1	3506	1/1	0.93	0.36	44,44,44,44	0
82	MG	1	3703	1/1	0.93	0.24	16,16,16,16	0
82	MG	1	3582	1/1	0.93	0.06	8,8,8,8	0
82	MG	AS	3582	1/1	0.93	0.14	41,41,41,41	0
82	MG	1	3571	1/1	0.93	0.17	29,29,29,29	0
82	MG	1	3498	1/1	0.93	0.25	9,9,9,9	0
82	MG	1	3870	1/1	0.93	0.07	12,12,12,12	0
82	MG	AS	3480	1/1	0.93	0.16	28,28,28,28	0
82	MG	AS	3444	1/1	0.93	0.08	34,34,34,34	0
82	MG	AS	3706	1/1	0.93	0.04	14,14,14,14	0
82	MG	B	1826	1/1	0.93	0.09	8,8,8,8	0
82	MG	1	3599	1/1	0.93	0.16	6,6,6,6	0
82	MG	CM	1827	1/1	0.93	0.16	10,10,10,10	0
82	MG	B	1805	1/1	0.93	0.17	16,16,16,16	0
82	MG	1	3708	1/1	0.93	0.07	6,6,6,6	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	1	3790	1/1	0.93	0.21	12,12,12,12	0
82	MG	AS	3526	1/1	0.93	0.13	7,7,7,7	0
82	MG	B	1831	1/1	0.93	0.07	5,5,5,5	0
82	MG	AS	3834	1/1	0.93	0.07	5,5,5,5	0
82	MG	1	3893	1/1	0.93	0.08	15,15,15,15	0
82	MG	1	3566	1/1	0.93	0.17	24,24,24,24	0
82	MG	1	3625	1/1	0.93	0.09	11,11,11,11	0
82	MG	B	1870	1/1	0.93	0.18	21,21,21,21	0
82	MG	AS	3494	1/1	0.93	0.08	8,8,8,8	0
82	MG	AS	3602	1/1	0.93	0.15	56,56,56,56	0
82	MG	AS	3799	1/1	0.93	0.09	10,10,10,10	0
82	MG	1	3626	1/1	0.93	0.16	4,4,4,4	0
82	MG	AS	3567	1/1	0.93	0.09	20,20,20,20	0
82	MG	B	1837	1/1	0.93	0.10	24,24,24,24	0
82	MG	AS	3845	1/1	0.93	0.13	23,23,23,23	0
82	MG	1	3992	1/1	0.93	0.06	39,39,39,39	0
82	MG	B	1839	1/1	0.93	0.19	8,8,8,8	0
82	MG	1	3404	1/1	0.93	0.14	9,9,9,9	0
82	MG	B	1841	1/1	0.93	0.12	9,9,9,9	0
82	MG	1	3578	1/1	0.93	0.19	11,11,11,11	0
82	MG	1	3427	1/1	0.93	0.05	3,3,3,3	0
85	ZN	AK	101	1/1	0.93	0.14	60,60,60,60	0
82	MG	B	1816	1/1	0.93	0.10	13,13,13,13	0
82	MG	1	3881	1/1	0.93	0.23	48,48,48,48	1
82	MG	3	203	1/1	0.93	0.27	12,12,12,12	0
82	MG	1	3428	1/1	0.94	0.09	5,5,5,5	0
82	MG	CM	1809	1/1	0.94	0.15	12,12,12,12	0
82	MG	1	3562	1/1	0.94	0.21	10,10,10,10	0
82	MG	4	202	1/1	0.94	0.12	19,19,19,19	0
82	MG	1	3611	1/1	0.94	0.18	77,77,77,77	0
82	MG	1	3701	1/1	0.94	0.04	5,5,5,5	0
82	MG	AS	3805	1/1	0.94	0.12	13,13,13,13	0
82	MG	1	3837	1/1	0.94	0.24	8,8,8,8	0
82	MG	1	3670	1/1	0.94	0.15	8,8,8,8	0
82	MG	1	4055	1/1	0.94	0.07	7,7,7,7	0
82	MG	1	3987	1/1	0.94	0.07	8,8,8,8	0
82	MG	AS	3645	1/1	0.94	0.11	28,28,28,28	0
82	MG	1	3644	1/1	0.94	0.12	36,36,36,36	0
82	MG	B	1869	1/1	0.94	0.25	23,23,23,23	0
82	MG	AS	3770	1/1	0.94	0.15	46,46,46,46	0
82	MG	o	303	1/1	0.94	0.21	12,12,12,12	0
82	MG	AS	3424	1/1	0.94	0.16	10,10,10,10	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	AS	3459	1/1	0.94	0.14	13,13,13,13	0
82	MG	1	3646	1/1	0.94	0.13	25,25,25,25	0
82	MG	AS	3948	1/1	0.94	0.14	12,12,12,12	0
82	MG	AS	3775	1/1	0.94	0.08	9,9,9,9	0
82	MG	1	3480	1/1	0.94	0.08	16,16,16,16	0
82	MG	1	3801	1/1	0.94	0.09	14,14,14,14	0
82	MG	AS	3463	1/1	0.94	0.11	11,11,11,11	0
82	MG	1	3689	1/1	0.94	0.11	11,11,11,11	0
82	MG	B	1843	1/1	0.94	0.12	5,5,5,5	0
82	MG	1	3476	1/1	0.94	0.23	9,9,9,9	0
82	MG	AS	3825	1/1	0.94	0.16	18,18,18,18	0
82	MG	1	3593	1/1	0.94	0.07	11,11,11,11	0
82	MG	1	3442	1/1	0.94	0.13	9,9,9,9	0
82	MG	AS	3434	1/1	0.94	0.14	5,5,5,5	0
82	MG	B	1847	1/1	0.94	0.08	16,16,16,16	0
82	MG	AS	3471	1/1	0.94	0.14	16,16,16,16	0
82	MG	BK	201	1/1	0.94	0.11	10,10,10,10	0
82	MG	AS	3626	1/1	0.94	0.07	24,24,24,24	0
82	MG	AS	3550	1/1	0.94	0.22	19,19,19,19	0
82	MG	1	3574	1/1	0.94	0.07	9,9,9,9	0
82	MG	1	3406	1/1	0.94	0.13	8,8,8,8	0
82	MG	AS	3669	1/1	0.94	0.10	7,7,7,7	0
82	MG	1	3484	1/1	0.94	0.12	25,25,25,25	0
82	MG	1	4093	1/1	0.94	0.07	17,17,17,17	0
82	MG	1	3770	1/1	0.94	0.12	5,5,5,5	0
82	MG	1	3733	1/1	0.94	0.17	22,22,22,22	0
82	MG	1	3713	1/1	0.94	0.11	6,6,6,6	0
82	MG	1	3980	1/1	0.94	0.06	6,6,6,6	0
82	MG	B	1852	1/1	0.95	0.10	4,4,4,4	0
82	MG	1	3695	1/1	0.95	0.06	3,3,3,3	0
82	MG	1	4091	1/1	0.95	0.06	5,5,5,5	0
82	MG	AS	3486	1/1	0.95	0.11	17,17,17,17	0
82	MG	1	3409	1/1	0.95	0.18	16,16,16,16	0
82	MG	AS	3488	1/1	0.95	0.06	23,23,23,23	0
82	MG	CM	1825	1/1	0.95	0.10	42,42,42,42	0
82	MG	AS	3524	1/1	0.95	0.07	17,17,17,17	0
82	MG	1	3425	1/1	0.95	0.20	26,26,26,26	0
82	MG	1	3597	1/1	0.95	0.09	11,11,11,11	0
82	MG	B	1858	1/1	0.95	0.10	6,6,6,6	0
82	MG	1	3747	1/1	0.95	0.14	15,15,15,15	0
82	MG	1	3673	1/1	0.95	0.06	20,20,20,20	0
82	MG	B	1835	1/1	0.95	0.12	8,8,8,8	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	1	3789	1/1	0.95	0.05	9,9,9,9	0
82	MG	1	4000	1/1	0.95	0.17	12,12,12,12	0
82	MG	AS	3597	1/1	0.95	0.09	26,26,26,26	0
82	MG	AS	3598	1/1	0.95	0.13	35,35,35,35	0
82	MG	1	3700	1/1	0.95	0.23	19,19,19,19	0
82	MG	1	3865	1/1	0.95	0.05	38,38,38,38	0
82	MG	1	3454	1/1	0.95	0.06	12,12,12,12	0
82	MG	1	3725	1/1	0.95	0.09	16,16,16,16	0
82	MG	B	1842	1/1	0.95	0.15	19,19,19,19	0
82	MG	4	205	1/1	0.95	0.10	12,12,12,12	0
82	MG	AS	3505	1/1	0.95	0.16	19,19,19,19	0
82	MG	1	3950	1/1	0.95	0.09	24,24,24,24	0
82	MG	1	3884	1/1	0.95	0.30	26,26,26,26	0
82	MG	AS	3447	1/1	0.95	0.14	15,15,15,15	0
82	MG	AS	3476	1/1	0.95	0.13	31,31,31,31	0
82	MG	1	3535	1/1	0.95	0.17	13,13,13,13	0
82	MG	1	3455	1/1	0.95	0.04	4,4,4,4	0
82	MG	AS	3450	1/1	0.95	0.08	21,21,21,21	0
82	MG	AS	3613	1/1	0.95	0.10	14,14,14,14	0
85	ZN	h	201	1/1	0.95	0.06	126,126,126,126	0
82	MG	1	3553	1/1	0.95	0.08	14,14,14,14	0
82	MG	1	3936	1/1	0.95	0.08	17,17,17,17	0
82	MG	1	3715	1/1	0.95	0.08	8,8,8,8	0
82	MG	1	3682	1/1	0.96	0.14	4,4,4,4	0
82	MG	AS	3700	1/1	0.96	0.13	18,18,18,18	0
82	MG	1	3845	1/1	0.96	0.07	10,10,10,10	0
82	MG	1	3878	1/1	0.96	0.07	13,13,13,13	0
82	MG	1	4068	1/1	0.96	0.07	12,12,12,12	0
82	MG	BP	201	1/1	0.96	0.10	16,16,16,16	0
82	MG	L	201	1/1	0.96	0.14	8,8,8,8	0
82	MG	1	3716	1/1	0.96	0.09	9,9,9,9	0
82	MG	1	3434	1/1	0.96	0.08	12,12,12,12	0
82	MG	1	3832	1/1	0.96	0.10	6,6,6,6	0
82	MG	1	3616	1/1	0.96	0.13	6,6,6,6	0
82	MG	1	3586	1/1	0.96	0.10	12,12,12,12	0
82	MG	1	3423	1/1	0.96	0.16	9,9,9,9	0
82	MG	1	3836	1/1	0.96	0.05	14,14,14,14	0
82	MG	AS	3793	1/1	0.96	0.12	129,129,129,129	0
82	MG	AS	3616	1/1	0.96	0.06	50,50,50,50	0
82	MG	1	3411	1/1	0.96	0.25	20,20,20,20	0
82	MG	1	3657	1/1	0.96	0.16	19,19,19,19	0
82	MG	CM	1810	1/1	0.96	0.15	17,17,17,17	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	AS	3742	1/1	0.96	0.08	10,10,10,10	0
82	MG	AS	3512	1/1	0.96	0.06	21,21,21,21	0
82	MG	1	3798	1/1	0.96	0.24	13,13,13,13	0
82	MG	1	3487	1/1	0.96	0.14	21,21,21,21	0
82	MG	AS	3801	1/1	0.96	0.09	23,23,23,23	0
82	MG	6	201	1/1	0.96	0.12	6,6,6,6	0
82	MG	AS	3694	1/1	0.96	0.11	26,26,26,26	0
82	MG	AS	3647	1/1	0.96	0.08	23,23,23,23	0
85	ZN	AH	202	1/1	0.96	0.05	75,75,75,75	0
82	MG	AS	3749	1/1	0.96	0.20	12,12,12,12	0
85	ZN	AP	201	1/1	0.96	0.05	127,127,127,127	0
82	MG	1	3430	1/1	0.96	0.12	5,5,5,5	0
82	MG	1	3577	1/1	0.96	0.07	15,15,15,15	0
82	MG	AS	3927	1/1	0.96	0.06	25,25,25,25	0
85	ZN	DQ	101	1/1	0.96	0.08	120,120,120,120	0
82	MG	1	3623	1/1	0.96	0.30	25,25,25,25	0
82	MG	AH	201	1/1	0.97	0.21	33,33,33,33	0
82	MG	1	3645	1/1	0.97	0.06	12,12,12,12	0
82	MG	1	3471	1/1	0.97	0.10	8,8,8,8	0
82	MG	BQ	202	1/1	0.97	0.11	7,7,7,7	0
82	MG	AS	3873	1/1	0.97	0.22	39,39,39,39	0
82	MG	1	3591	1/1	0.97	0.12	13,13,13,13	0
82	MG	1	3723	1/1	0.97	0.10	9,9,9,9	0
82	MG	1	3429	1/1	0.97	0.11	8,8,8,8	0
82	MG	1	3489	1/1	0.97	0.09	11,11,11,11	0
82	MG	AS	3847	1/1	0.97	0.07	27,27,27,27	0
82	MG	1	3448	1/1	0.97	0.13	20,20,20,20	0
82	MG	Z	201	1/1	0.97	0.14	8,8,8,8	0
82	MG	1	3937	1/1	0.97	0.06	11,11,11,11	0
82	MG	AS	3620	1/1	0.97	0.07	10,10,10,10	0
82	MG	AS	3621	1/1	0.97	0.05	6,6,6,6	0
82	MG	1	3470	1/1	0.97	0.36	17,17,17,17	0
82	MG	1	4024	1/1	0.97	0.07	14,14,14,14	0
82	MG	AS	3473	1/1	0.97	0.07	16,16,16,16	0
82	MG	AS	3429	1/1	0.97	0.13	17,17,17,17	0
82	MG	AS	3498	1/1	0.97	0.08	8,8,8,8	0
82	MG	AS	3654	1/1	0.97	0.16	9,9,9,9	0
82	MG	1	3522	1/1	0.97	0.04	19,19,19,19	0
82	MG	1	3610	1/1	0.97	0.06	6,6,6,6	0
82	MG	1	3573	1/1	0.97	0.06	11,11,11,11	0
82	MG	1	3585	1/1	0.97	0.05	30,30,30,30	0
82	MG	B	1849	1/1	0.97	0.08	15,15,15,15	0

Continued on next page...

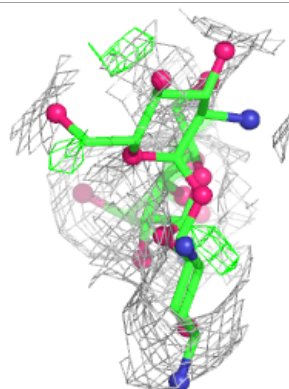
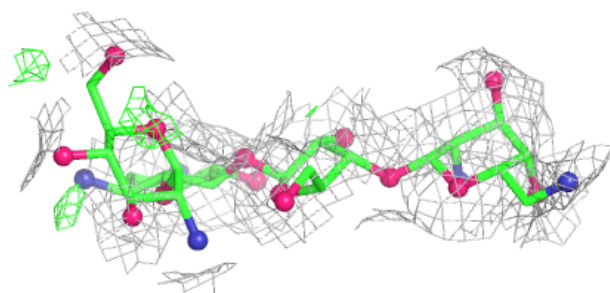
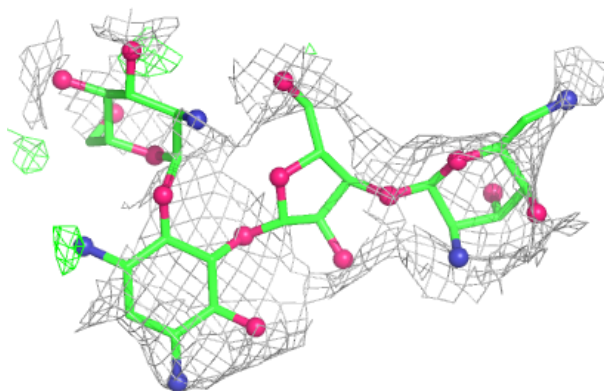
Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	MG	AS	3504	1/1	0.97	0.19	9,9,9,9	0
82	MG	AS	3718	1/1	0.97	0.07	20,20,20,20	0
82	MG	1	3515	1/1	0.97	0.04	5,5,5,5	0
82	MG	1	3524	1/1	0.97	0.06	4,4,4,4	0
82	MG	1	3534	1/1	0.97	0.15	6,6,6,6	0
82	MG	1	3497	1/1	0.97	0.12	7,7,7,7	0
82	MG	AS	3515	1/1	0.98	0.15	41,41,41,41	0
82	MG	1	3762	1/1	0.98	0.13	4,4,4,4	0
82	MG	AS	3712	1/1	0.98	0.06	8,8,8,8	0
82	MG	1	3744	1/1	0.98	0.11	9,9,9,9	0
85	ZN	DN	201	1/1	0.98	0.04	76,76,76,76	0
82	MG	DK	201	1/1	0.98	0.04	9,9,9,9	0
82	MG	AS	3826	1/1	0.98	0.09	24,24,24,24	0
82	MG	1	3552	1/1	0.99	0.06	6,6,6,6	0
85	ZN	CE	101	1/1	0.99	0.03	59,59,59,59	0
85	ZN	CH	102	1/1	0.99	0.06	53,53,53,53	0
85	ZN	AQ	101	1/1	0.99	0.03	35,35,35,35	0
85	ZN	CK	101	1/1	0.99	0.05	92,92,92,92	0
85	ZN	c	202	1/1	0.99	0.04	31,31,31,31	0
85	ZN	f	101	1/1	0.99	0.05	51,51,51,51	0
85	ZN	AN	101	1/1	0.99	0.02	50,50,50,50	0

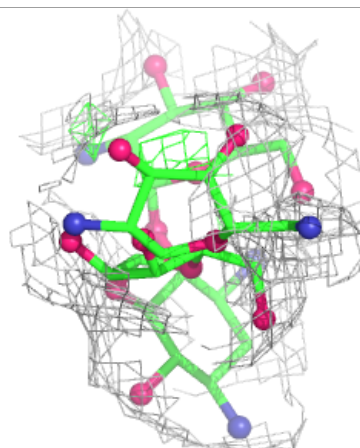
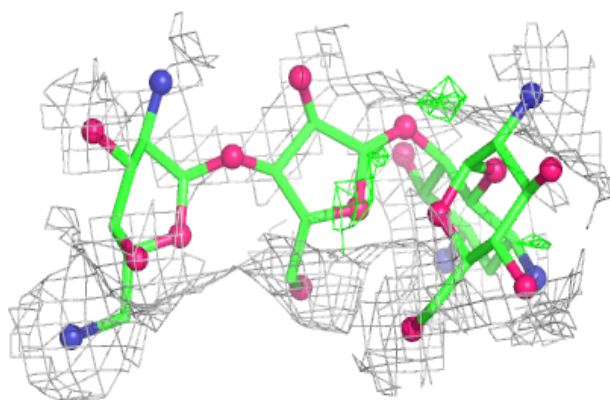
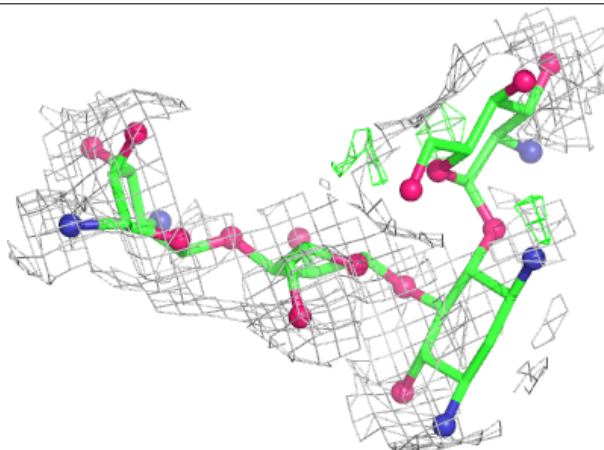
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation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

Electron density around PAR AS 3404:

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

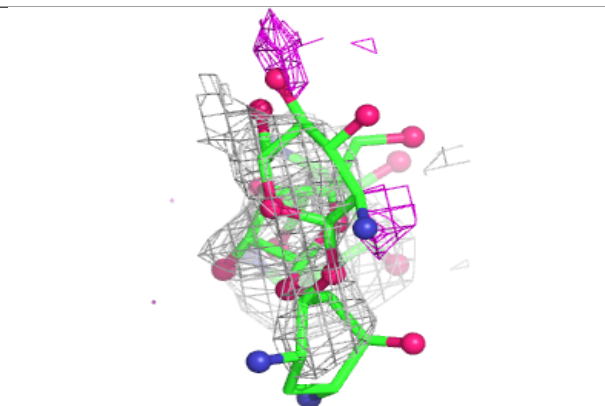
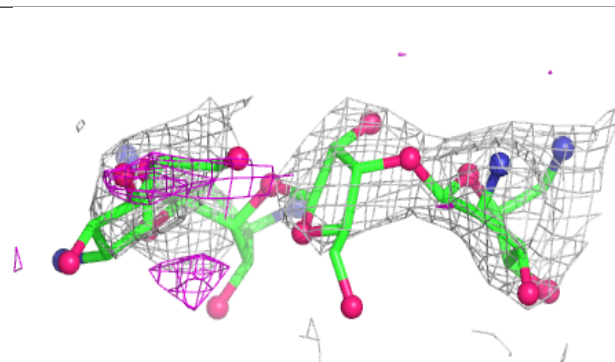
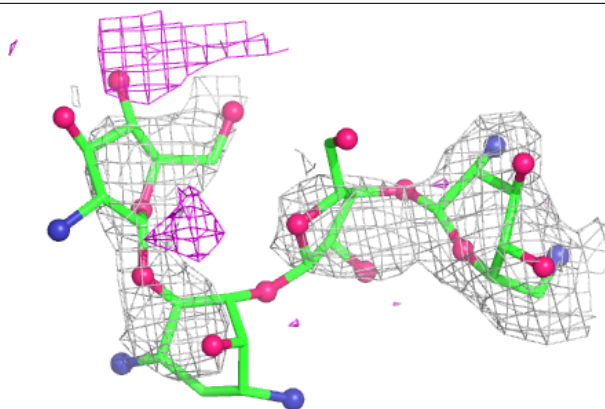
**Electron density around PAR 1 3466:**

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

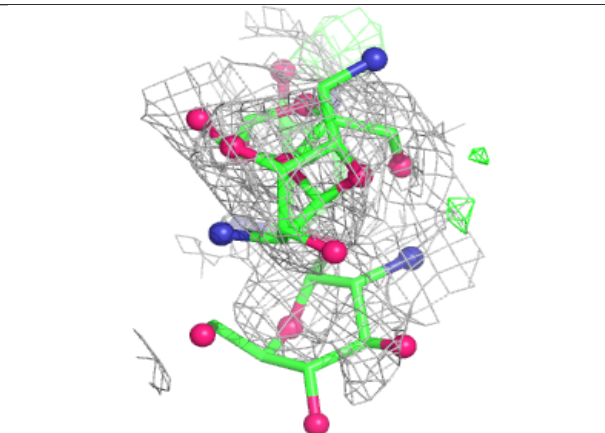
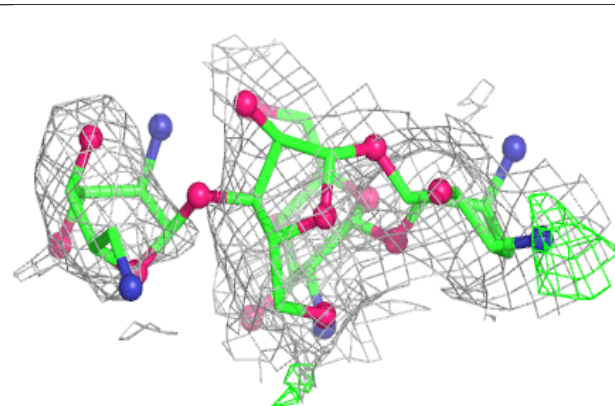
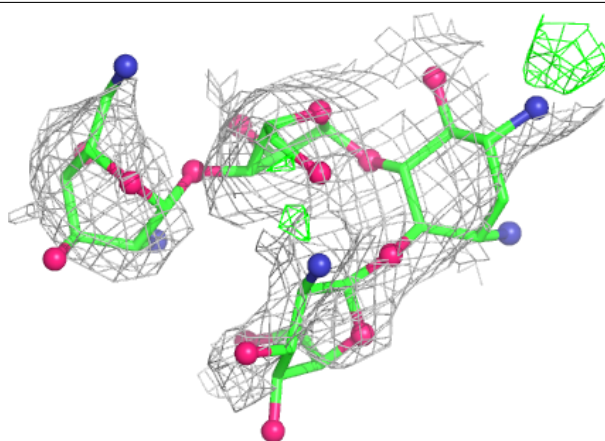


Electron density around PAR 1 3457:

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

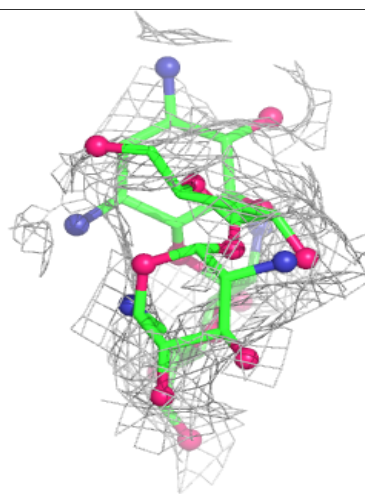
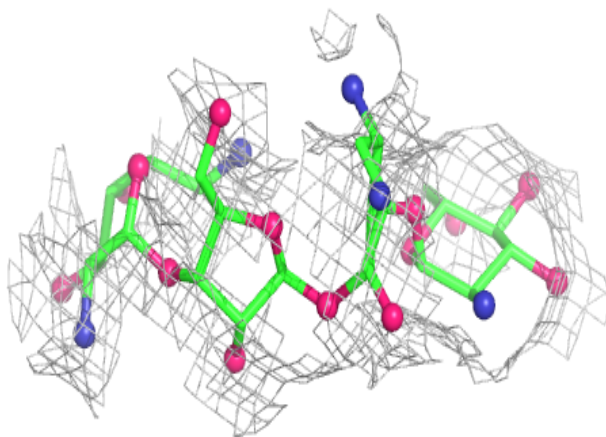
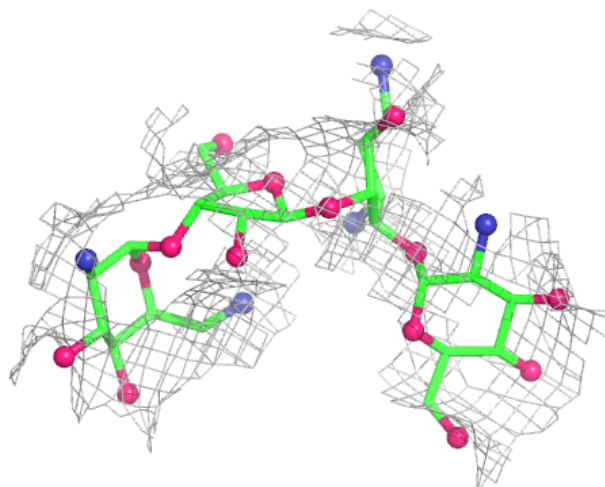
**Electron density around PAR 1 3460:**

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



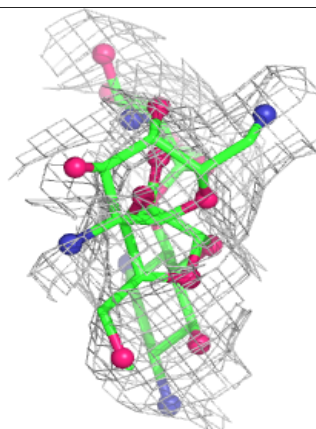
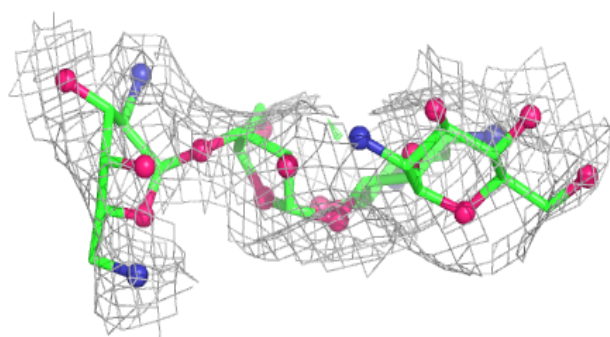
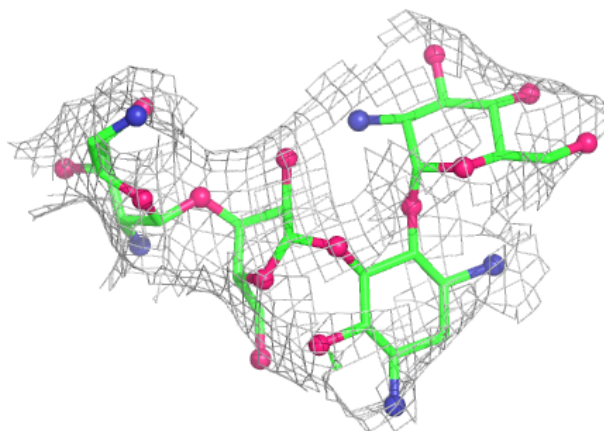
Electron density around PAR AS 3406:

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



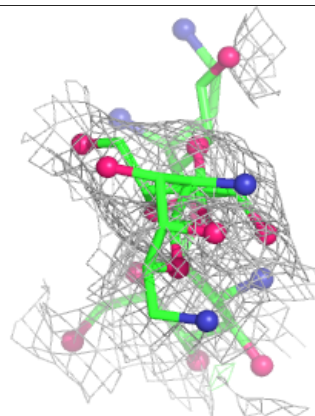
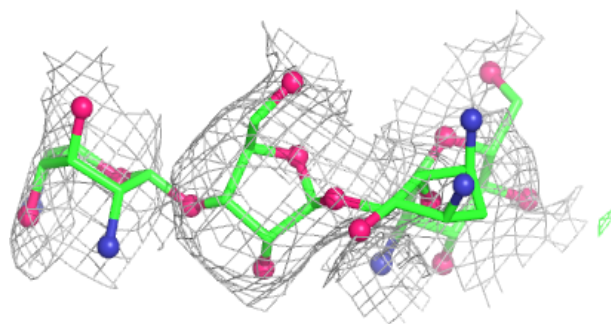
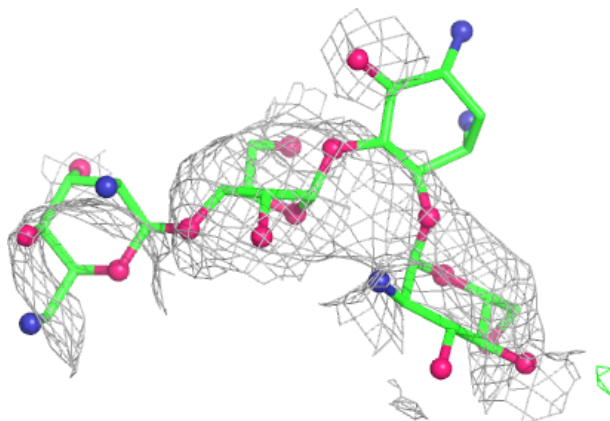
Electron density around PAR 1 3461:

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



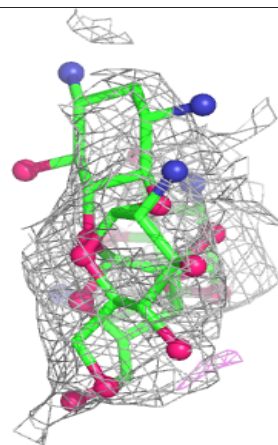
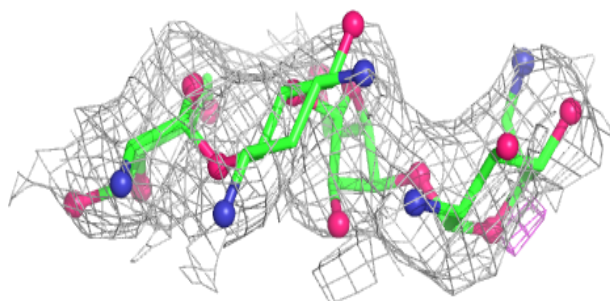
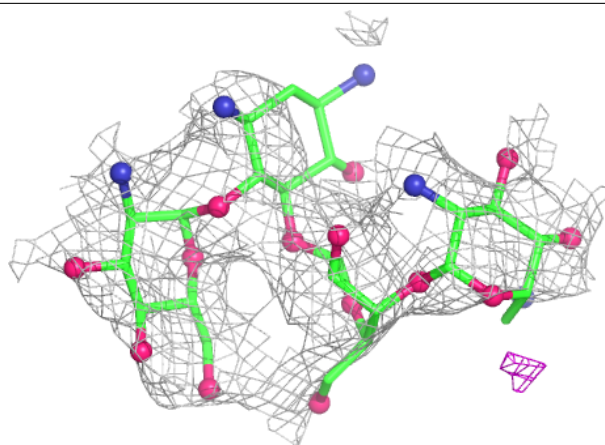
Electron density around PAR AS 3402:

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



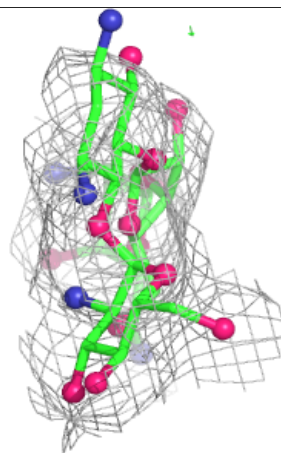
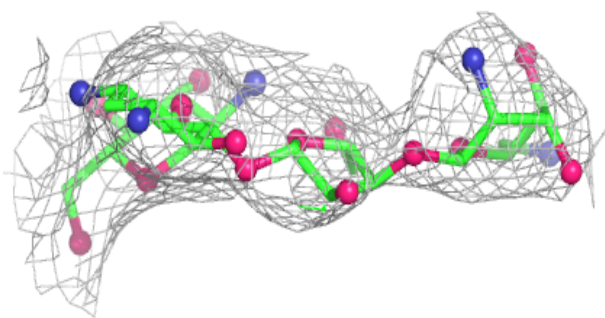
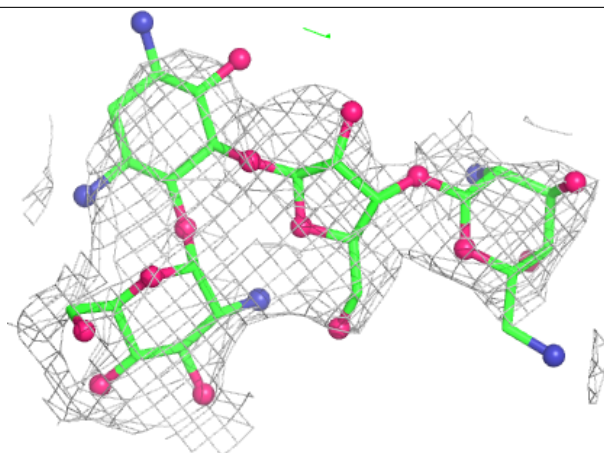
Electron density around PAR 1 3465:

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



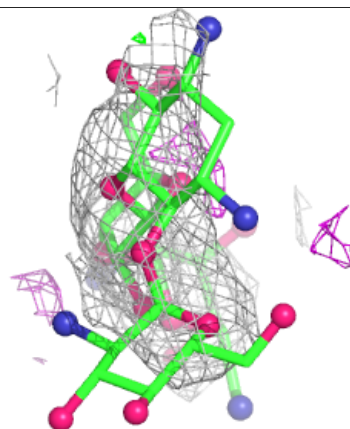
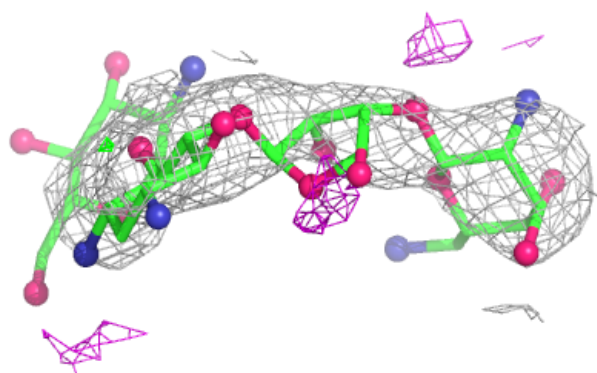
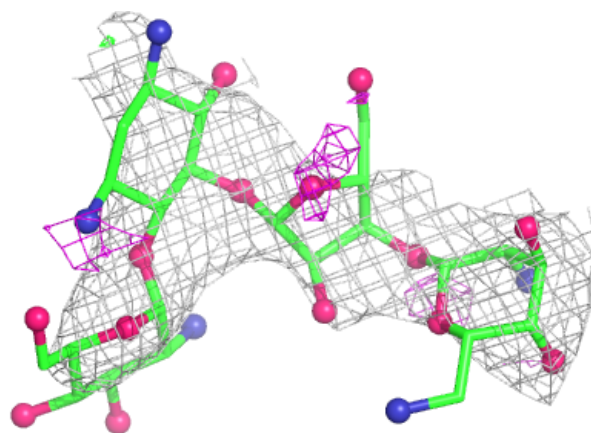
Electron density around PAR B 1803:

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



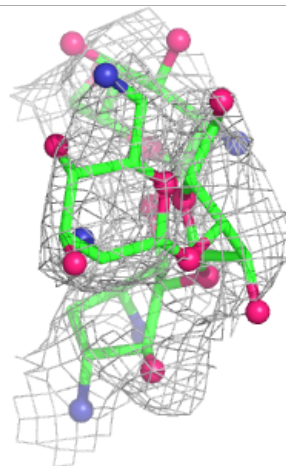
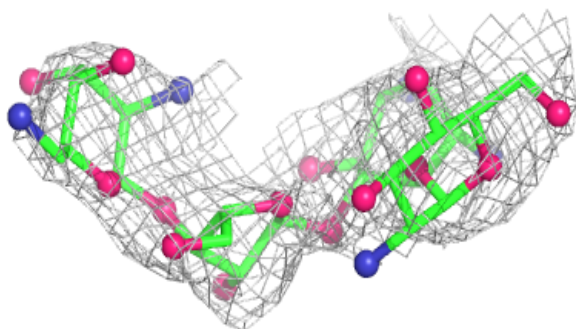
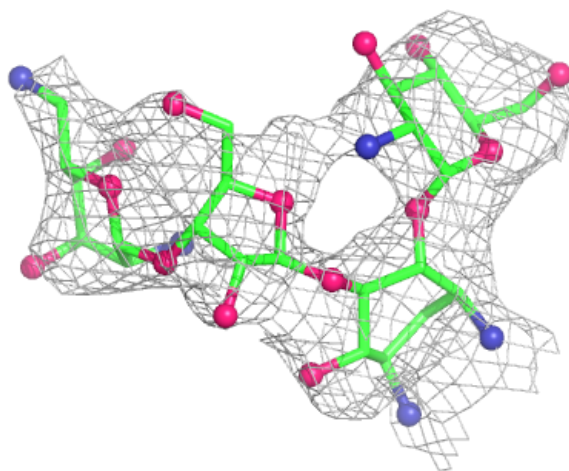
Electron density around PAR B 1801:

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



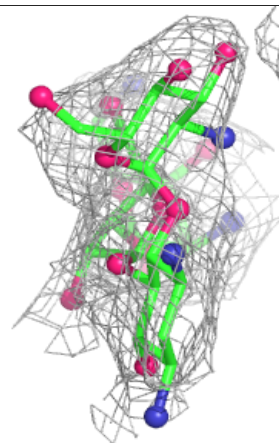
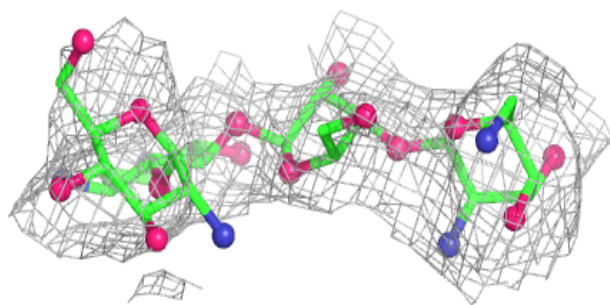
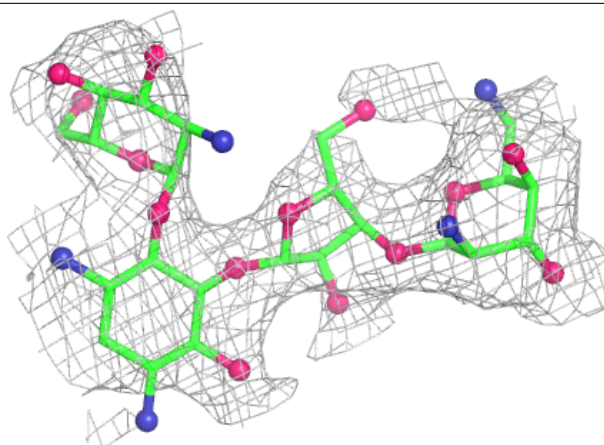
Electron density around PAR B 1802:

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



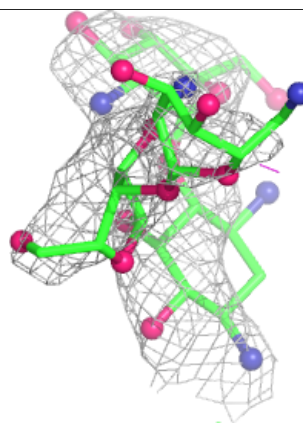
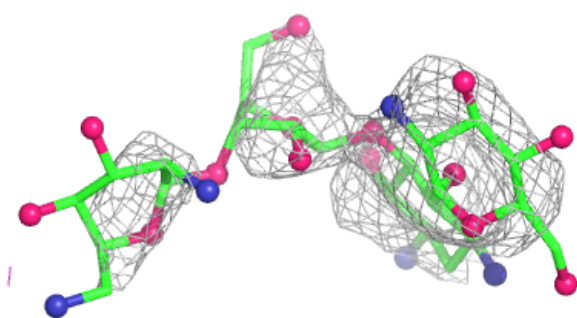
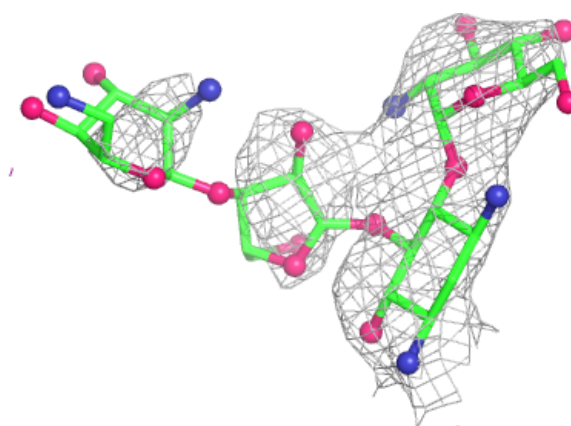
Electron density around PAR 1 3456:

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



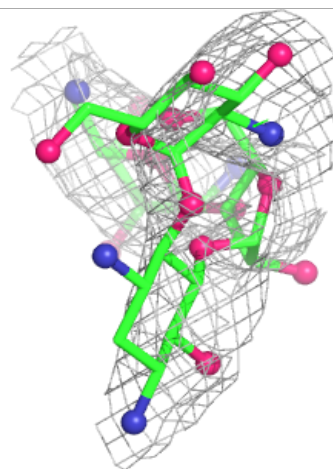
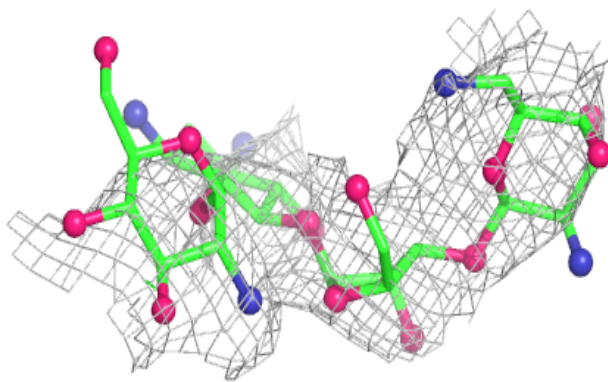
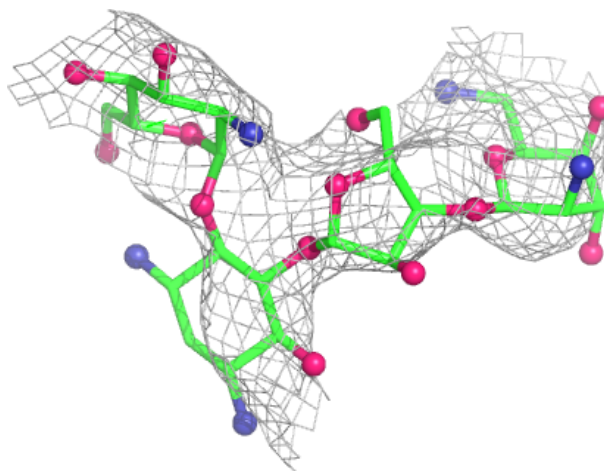
Electron density around PAR 1 3459:

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



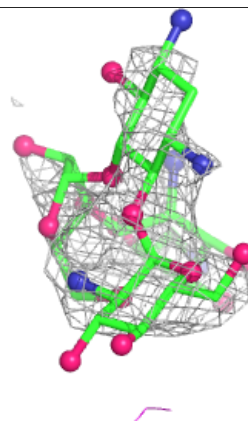
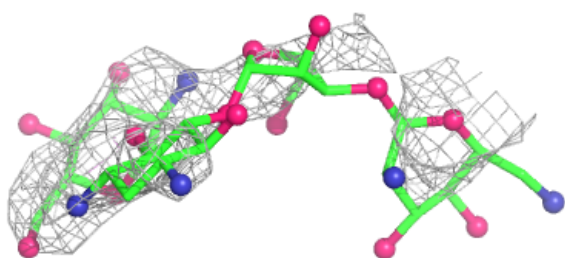
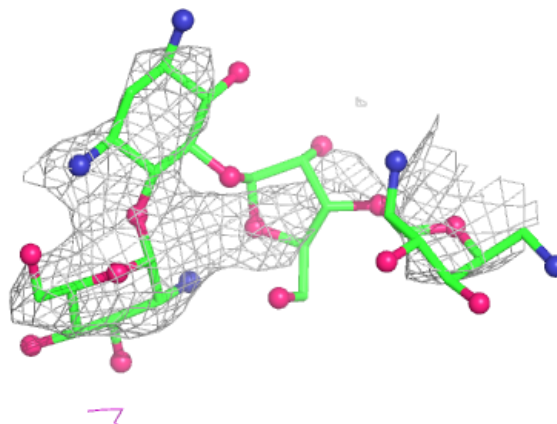
Electron density around PAR AS 3401:

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



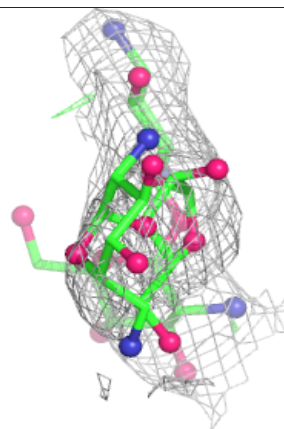
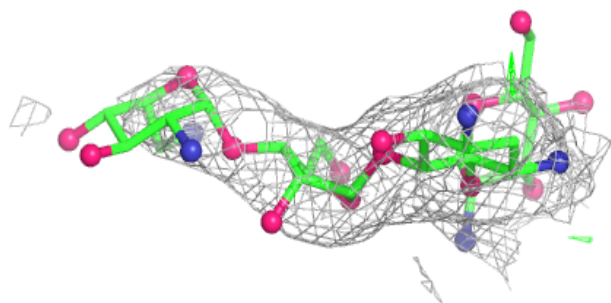
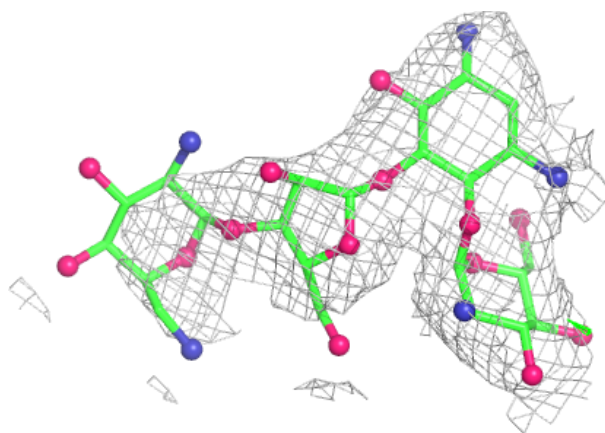
Electron density around PAR AS 3403:

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



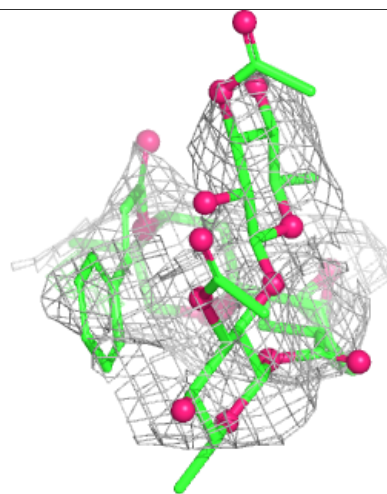
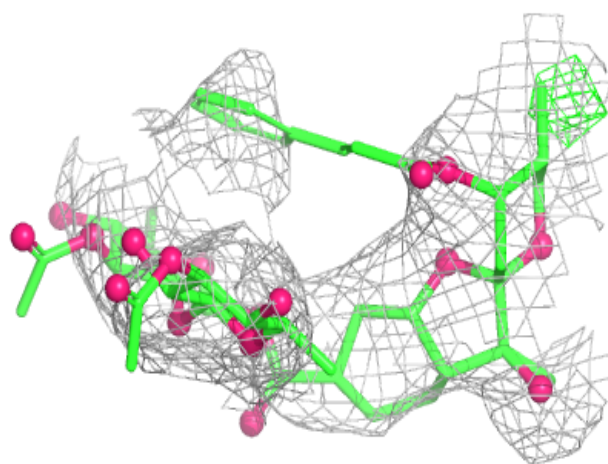
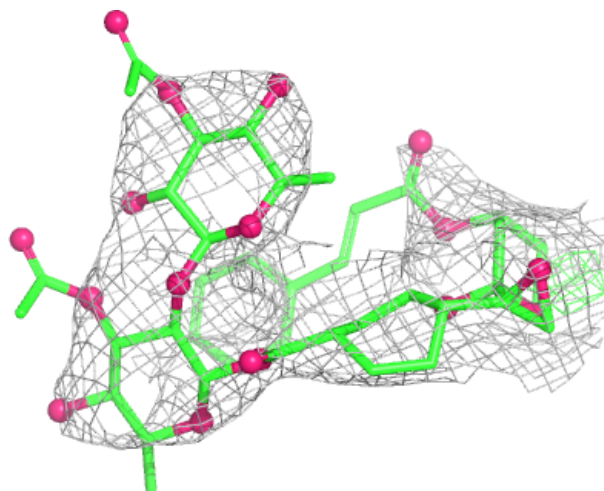
Electron density around PAR 4 201:

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



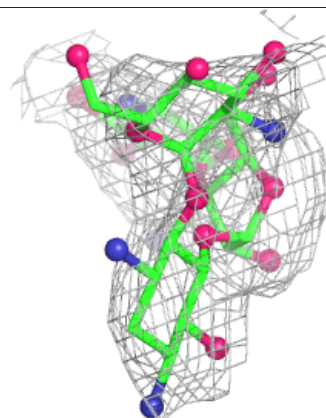
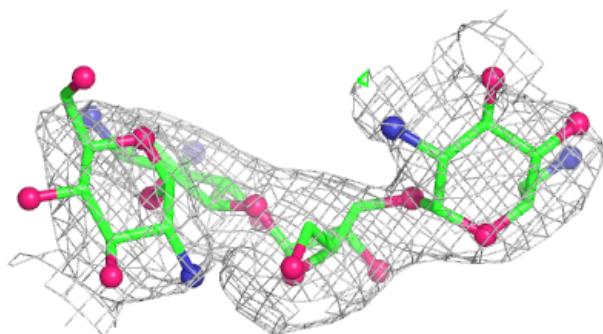
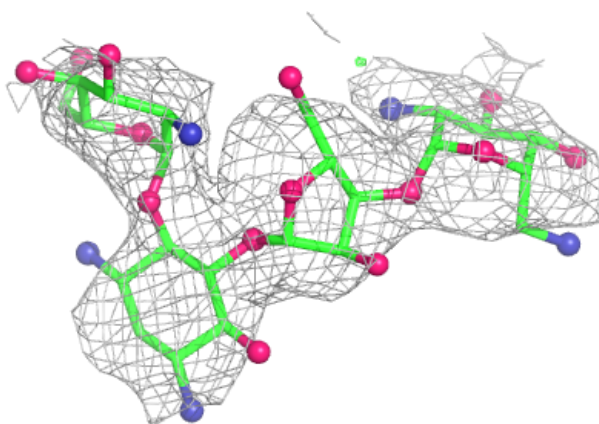
Electron density around 3K5 AS 3405:

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

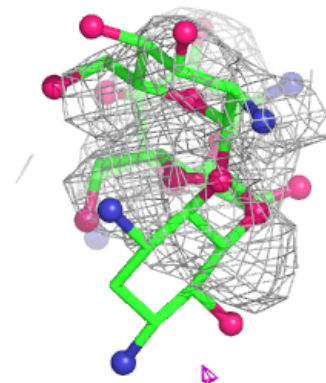
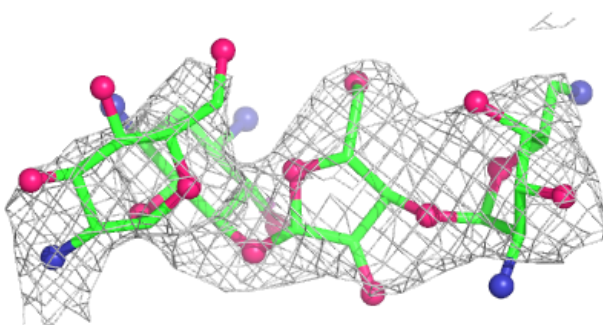
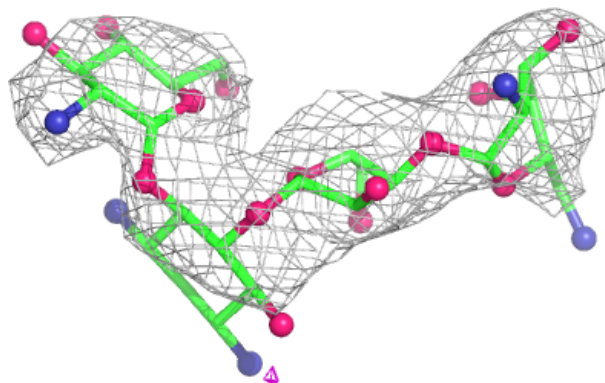


Electron density around PAR 1 3458:

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

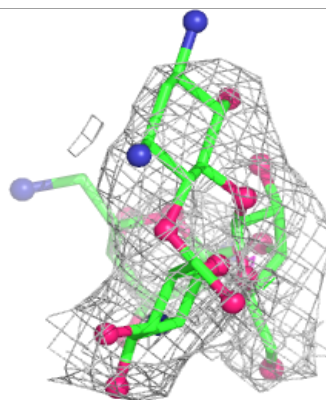
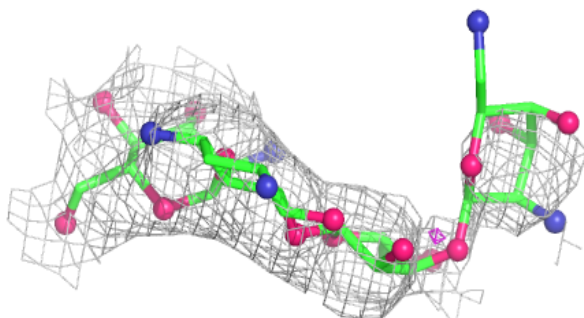
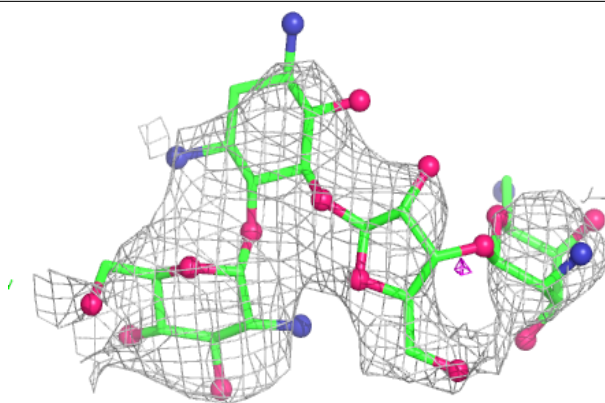
**Electron density around PAR 1 3464:**

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



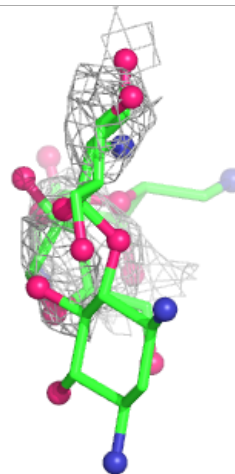
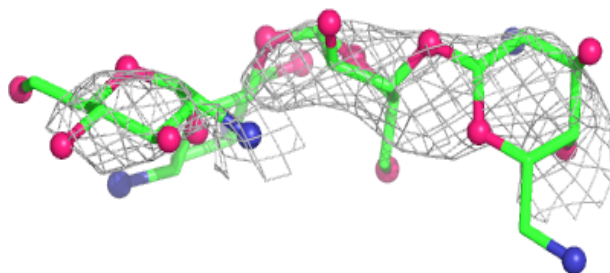
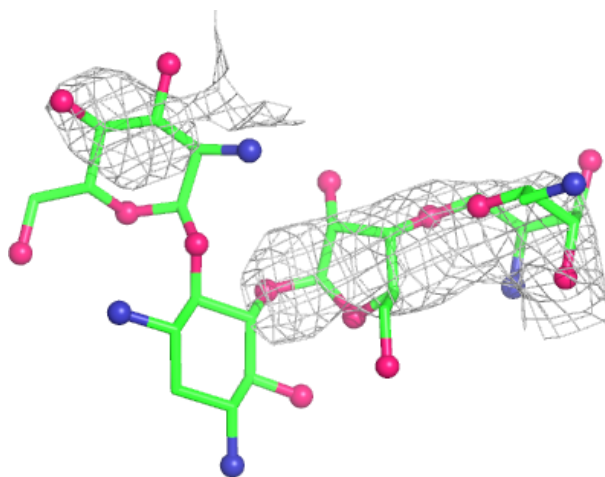
Electron density around PAR 1 3462:

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



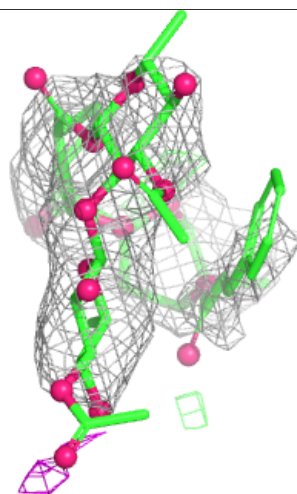
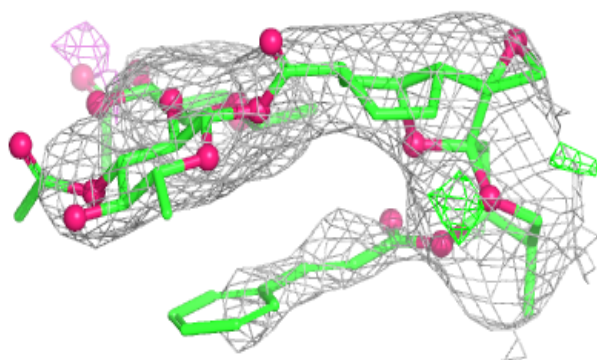
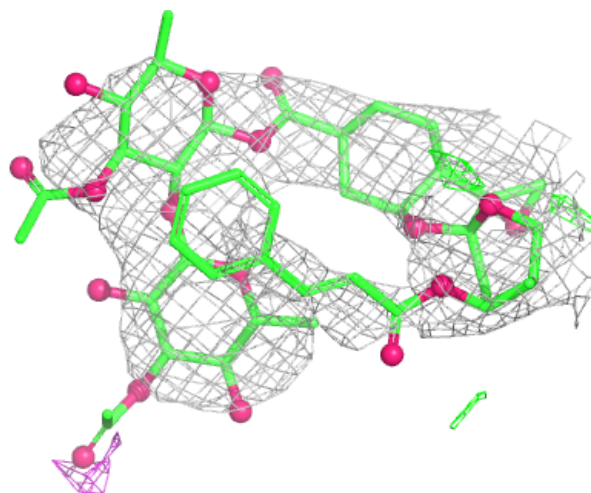
Electron density around PAR CM 1803:

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



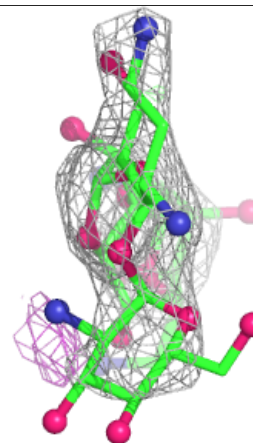
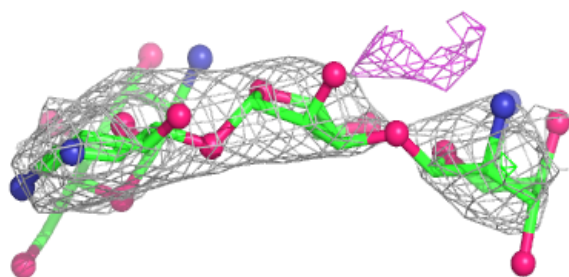
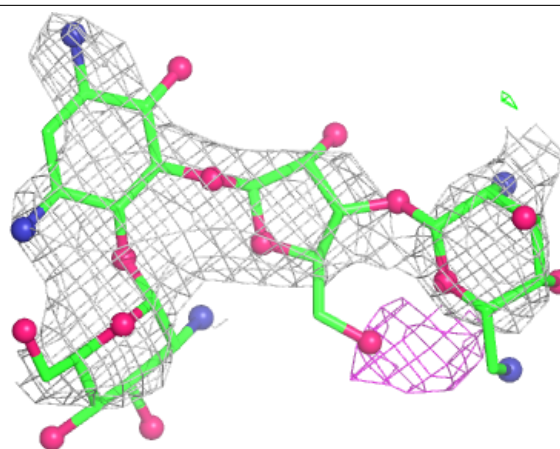
Electron density around 3K5 1 3463:

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



Electron density around PAR CM 1802:

$2mF_o-DF_c$ (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.