Full wwPDB X-ray Structure Validation Report ⓘ

Mar 9, 2026 – 11:32 PM UTC

PDB ID	:	4WRA / pdb_00004wra
Title	:	Complex of 70S ribosome with tRNA-Tyr and mRNA with A-A mismatch in the first position in the A-site and with antibiotic paromomycin.
Authors	:	Rozov, A.; Demeshkina, N.; Yusupov, M.; Yusupova, G.
Deposited on	:	2014-10-23
Resolution	:	3.05 Å(reported)

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

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

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

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

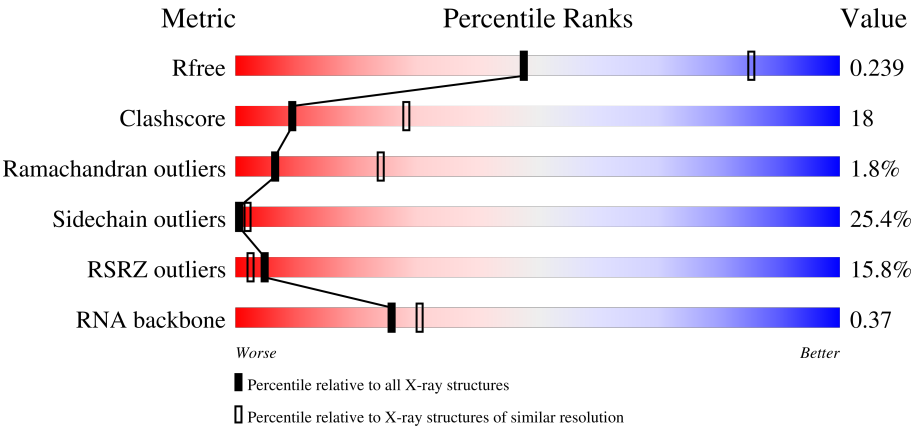
MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.010 (Gargrove)
Density-Fitness	:	1.0.12
Ideal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

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 3.05 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	2469 (3.10-3.02)
Clashscore	190562	2569 (3.10-3.02)
Ramachandran outliers	187476	2424 (3.10-3.02)
Sidechain outliers	187428	2423 (3.10-3.02)
RSRZ outliers	180081	2469 (3.10-3.02)
RNA backbone	3983	1079 (3.30-2.82)

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

Mol	Chain	Length	Quality of chain
1	13	1522	14% 37% 45% 16% ·
1	1G	1522	16% 40% 44% 15% ·
2	12	256	25% 39% 37% 14% · 7%
2	1E	256	20% 36% 44% 12% · 7%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
3	22	239	34% 40% 38% 8% 14%
3	2E	239	10% 49% 28% 9% 14%
4	32	209	22% 48% 39% 11% •
4	3E	209	17% 42% 44% 13%
5	42	162	20% 47% 33% 12% • 7%
5	4E	162	11% 46% 37% 10% 7%
6	52	101	9% 48% 44% 9%
6	5E	101	11% 49% 43% 9%
7	62	156	28% 54% 35% 10% •
7	6E	156	16% 51% 35% 12% •
8	72	138	20% 46% 43% 9% ••
8	7E	138	15% 39% 46% 15%
9	82	128	31% 43% 43% 9% • 5%
9	8E	128	24% 34% 53% 10% ••
10	1A	105	17% 36% 43% 15% 6%
10	1I	105	31% 38% 45% 11% 6%
11	2A	129	18% 43% 34% 13% • 9%
11	2I	129	14% 42% 40% 9% 10%
12	3A	132	16% 48% 36% 11% 5%
12	3I	132	10% 48% 33% 11% • 8%
13	4A	126	17% 44% 34% 14% • 7%
13	4I	126	10% 45% 36% 10% • 8%
14	5A	61	28% 51% 30% 11% • 5%
14	5I	61	13% 33% 52% 10% ••
15	6A	89	10% 60% 34% 6% •

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
15	6I	89	11% 47% 44% 8%
16	7A	88	16% 40% 42% 14% 5%
16	7I	88	11% 33% 47% 15% 5%
17	8A	105	15% 47% 42% 5% 5%
17	8I	105	21% 37% 47% 10% 5%
18	9A	88	9% 41% 31% 9% 19%
18	9I	88	15% 36% 35% 9% 18%
19	AA	93	22% 38% 34% 10% 16%
19	AI	93	16% 40% 40% 6% 11%
20	BA	106	28% 44% 38% 8% 7%
20	BI	106	39% 39% 40% 15% 7%
21	1B	27	19% 37% 48% 7% 7%
21	1F	27	30% 30% 63% 7%
22	1K	85	35% 20% 45% 34%
23	2K	77	16% 34% 51% 14%
23	2L	77	25% 49% 35% 13%
24	1L	85	46% 36% 36% 27%
24	3K	85	20% 32% 47% 21%
25	4K	30	10% 20% 7% 13% 60%
25	4L	30	7% 13% 10% 13% 60%
26	14	2918	10% 41% 43% 15%
26	1H	2918	10% 41% 44% 14%
27	16	122	4% 43% 47% 11%
27	1J	122	8% 30% 48% 22%
28	11	276	3% 49% 39% 10%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
28	19	276	4% 51% 35% 11%
29	21	206	11% 32% 43% 21%
29	29	206	19% 37% 37% 20%
30	31	210	10% 47% 34% 13%
30	39	210	20% 33% 42% 20%
31	41	182	28% 45% 45% 9%
31	49	182	18% 48% 40% 12%
32	51	180	22% 36% 41% 17%
32	59	180	48% 39% 38% 16% 6%
33	61	148	27% 27% 51% 20%
33	69	148	32% 34% 48% 12% 5%
34	15	140	31% 51% 31% 15%
34	58	140	12% 39% 40% 16%
35	25	122	11% 52% 38% 10%
35	68	122	9% 52% 38% 10%
36	35	150	15% 37% 37% 18% 7%
36	78	150	14% 39% 36% 19% 5%
37	45	141	15% 35% 43% 15% 5%
37	88	141	12% 43% 41% 11%
38	55	118	20% 42% 42% 13%
38	98	118	18% 33% 52% 14%
39	65	112	10% 36% 45% 17%
39	A8	112	8% 39% 44% 15%
40	75	146	23% 38% 41% 13% 6%
40	B8	146	26% 39% 35% 18% 6%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
41	85	118	23% 56% 29% 14%
41	C8	118	14% 43% 40% 14%
42	95	101	40% 35% 37% 25%
42	D8	101	30% 43% 43% 12%
43	A5	113	9% 49% 42% 9%
43	E8	113	4% 57% 31% 12%
44	B5	96	6% 44% 42% 9%
44	F8	96	4% 43% 44% 9%
45	C5	110	33% 33% 37% 25% 5%
45	G8	110	13% 33% 43% 14% 5% 5%
46	D5	206	13% 31% 24% 10% 33%
46	H8	206	17% 33% 37% 13% 15%
47	E5	85	8% 42% 35% 11% 9%
47	I8	85	9% 44% 34% 11% 11%
48	F5	98	21% 47% 38% 13%
48	J8	98	9% 52% 31% 15%
49	G5	72	14% 28% 46% 14% 8%
49	K8	72	18% 22% 44% 22% 8%
50	H5	60	18% 52% 38% 8%
50	L8	60	5% 47% 42% 10%
51	I5	71	17% 21% 46% 18% 11%
51	M8	71	27% 32% 39% 17% 7%
52	J5	60	35% 53% 37% 8%
52	N8	60	23% 48% 28% 22%
53	L5	49	6% 53% 37% 8%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
53	P8	49	6% 51% 35% 8% 6%
54	M5	65	22% 34% 29% 23% 9% 5%
54	Q8	65	2% 25% 40% 26% 6%
55	3L	85	22% 24% 52% 25%

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
56	MG	13	1615	-	-	-	X
56	MG	13	1616	-	-	-	X
56	MG	13	1647	-	-	-	X
56	MG	13	1685	-	-	-	X
56	MG	13	1707	-	-	-	X
56	MG	13	1714	-	-	-	X
56	MG	14	3122	-	-	-	X
56	MG	14	3140	-	-	-	X
56	MG	14	3148	-	-	-	X
56	MG	14	3192	-	-	-	X
56	MG	14	3228	-	-	-	X
56	MG	14	3293	-	-	-	X
56	MG	14	3298	-	-	-	X
56	MG	14	3301	-	-	-	X
56	MG	1G	1610	-	-	-	X
56	MG	1G	1648	-	-	-	X
56	MG	1H	3075	-	-	-	X
56	MG	1H	3117	-	-	-	X
56	MG	1H	3163	-	-	-	X
56	MG	1H	3172	-	-	-	X
56	MG	1H	3207	-	-	-	X
56	MG	1H	3290	-	-	-	X
56	MG	1H	3293	-	-	-	X
56	MG	1H	3306	-	-	-	X
56	MG	1H	3311	-	-	-	X
56	MG	1H	3328	-	-	-	X
56	MG	1H	3342	-	-	-	X
56	MG	1H	3349	-	-	-	X
56	MG	1J	203	-	-	-	X
56	MG	25	201	-	-	-	X

2 Entry composition (i)

There are 59 unique types of molecules in this entry. The entry contains 299607 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	13	1505	Total	C	N	O	P	0	0	0
			32352	14399	5994	10454	1505			
1	1G	1504	Total	C	N	O	P	0	0	0
			32327	14389	5989	10446	1503			

- Molecule 2 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	1E	237	Total	C	N	O	S	0	0	0
			1924	1228	344	347	5			
2	12	237	Total	C	N	O	S	0	0	0
			1924	1228	344	347	5			

- Molecule 3 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	2E	205	Total	C	N	O	S	0	0	0
			1605	1011	313	280	1			
3	22	206	Total	C	N	O	S	0	0	0
			1612	1016	314	281	1			

- Molecule 4 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	3E	208	Total	C	N	O	S	0	0	0
			1702	1066	339	290	7			
4	32	208	Total	C	N	O	S	0	0	0
			1702	1066	339	290	7			

- Molecule 5 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	4E	151	Total	C	N	O	S	0	0	0
			1155	729	218	204	4			
5	42	151	Total	C	N	O	S	0	0	0
			1155	729	218	204	4			

- Molecule 6 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	5E	101	Total	C	N	O	S	0	0	0
			842	531	155	153	3			
6	52	101	Total	C	N	O	S	0	0	0
			842	531	155	153	3			

- Molecule 7 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	6E	152	Total	C	N	O	S	0	0	0
			1243	774	249	214	6			
7	62	155	Total	C	N	O	S	0	0	0
			1256	781	252	217	6			

- Molecule 8 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	7E	138	Total	C	N	O	S	0	0	0
			1115	705	215	192	3			
8	72	137	Total	C	N	O	S	0	0	0
			1107	700	214	191	2			

- Molecule 9 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
9	8E	127	Total	C	N	O	0	0	0
			1009	639	197	173			
9	82	122	Total	C	N	O	0	0	0
			971	616	189	166			

- Molecule 10 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	1I	99	Total	C	N	O	S	0	0	0
			801	504	157	139	1			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	1A	99	Total	C	N	O	S	0	0	0
			801	504	157	139	1			

- Molecule 11 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	2I	116	Total	C	N	O	S	0	0	0
			864	537	164	160	3			
11	2A	117	Total	C	N	O	S	0	0	0
			873	543	166	161	3			

- Molecule 12 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	3I	122	Total	C	N	O	S	0	0	0
			956	603	193	159	1			
12	3A	125	Total	C	N	O	S	0	0	0
			975	614	196	164	1			

- Molecule 13 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	4I	116	Total	C	N	O	S	0	0	0
			928	574	191	161	2			
13	4A	117	Total	C	N	O	S	0	0	0
			933	577	192	162	2			

- Molecule 14 is a protein called 30S ribosomal protein S14 type Z.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	5I	59	Total	C	N	O	S	0	0	0
			480	306	100	70	4			
14	5A	58	Total	C	N	O	S	0	0	0
			475	303	99	69	4			

- Molecule 15 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	6I	88	Total	C	N	O	S	0	0	0
			733	459	147	125	2			
15	6A	88	Total	C	N	O	S	0	0	0
			733	459	147	125	2			

- Molecule 16 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	7I	84	Total	C	N	O	S	0	0	0
			705	446	140	118	1			
16	7A	84	Total	C	N	O	S	0	0	0
			705	446	140	118	1			

- Molecule 17 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	8I	100	Total	C	N	O	S	0	0	0
			834	534	155	143	2			
17	8A	100	Total	C	N	O	S	0	0	0
			834	534	155	143	2			

- Molecule 18 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	9I	72	Total	C	N	O	0	0	0
			590	376	117	97			
18	9A	71	Total	C	N	O	0	0	0
			581	370	115	96			

- Molecule 19 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AI	83	Total	C	N	O	S	0	0	0
			665	424	124	115	2			
19	AA	78	Total	C	N	O	S	0	0	0
			624	398	115	109	2			

- Molecule 20 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	BI	99	Total	C	N	O	S	0	0	0
			762	470	162	128	2			
20	BA	99	Total	C	N	O	S	0	0	0
			762	470	162	128	2			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
21	1F	25	Total	C	N	O	0	0	0
			217	134	52	31			
21	1B	25	Total	C	N	O	0	0	0
			217	134	52	31			

- Molecule 22 is a RNA chain called tRNA-Tyr.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
22	1K	85	Total	C	N	O	P	S	0	0	0
			1824	821	323	594	85	1			

- Molecule 23 is a RNA chain called tRNA-fMet.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
23	2K	77	Total	C	N	O	P	S	0	0	0
			1645	734	298	535	77	1			
23	2L	77	Total	C	N	O	P	S	0	0	0
			1645	734	298	535	77	1			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
2K	18	C	U	conflict	GB 723229079
2L	18	C	U	conflict	GB 723229079

- Molecule 24 is a RNA chain called tRNA-Tyr.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	3K	85	Total	C	N	O	P	0	0	0
			1807	807	323	592	85			
24	1L	85	Total	C	N	O	P	0	0	0
			1807	807	323	592	85			

- Molecule 25 is a RNA chain called mRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	4K	12	Total	C	N	O	P	0	1	0
			283	128	60	82	13			
25	4L	12	Total	C	N	O	P	0	0	0
			261	118	55	76	12			

- Molecule 26 is a RNA chain called 23S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	1H	2912	Total	C	N	O	P	0	0	0
			62707	27911	11722	20163	2911			
26	14	2909	Total	C	N	O	P	0	0	0
			62647	27884	11716	20139	2908			

There are 18 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
1H	161	U	-	insertion	GB 48268
1H	493	G	-	insertion	GB 48268
1H	654A	A	G	conflict	GB 48268
1H	654E	C	G	conflict	GB 48268
1H	654P	G	C	conflict	GB 48268
1H	654T	A	C	conflict	GB 48268
1H	1058	U	G	conflict	GB 48268
1H	1080	A	C	conflict	GB 48268
1H	1228	G	-	insertion	GB 48268
14	158	U	-	insertion	GB 48268
14	493	G	-	insertion	GB 48268
14	654A	A	G	conflict	GB 48268
14	654E	C	G	conflict	GB 48268
14	654P	G	C	conflict	GB 48268
14	654T	A	C	conflict	GB 48268
14	1058	U	G	conflict	GB 48268
14	1080	A	C	conflict	GB 48268
14	1228	G	-	insertion	GB 48268

- Molecule 27 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	16	122	Total	C	N	O	P	0	0	0
			2617	1166	486	844	121			
27	1J	122	Total	C	N	O	P	0	0	0
			2617	1166	486	844	121			

- Molecule 28 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	11	273	Total	C	N	O	S	0	0	0
			2120	1338	421	358	3			
28	19	273	Total	C	N	O	S	0	0	0
			2120	1338	421	358	3			

- Molecule 29 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	21	205	Total	C	N	O	S	0	0	0
			1568	991	300	271	6			
29	29	205	Total	C	N	O	S	0	0	0
			1568	991	300	271	6			

- Molecule 30 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	31	202	Total	C	N	O	S	0	0	0
			1585	1011	297	275	2			
30	39	208	Total	C	N	O	S	0	0	0
			1627	1037	304	283	3			

- Molecule 31 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	41	181	Total	C	N	O	S	0	0	0
			1473	942	268	259	4			
31	49	181	Total	C	N	O	S	0	0	0
			1473	942	268	259	4			

- Molecule 32 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	51	173	Total	C	N	O	S	0	0	0
			1321	837	248	235	1			
32	59	170	Total	C	N	O	S	0	0	0
			1307	829	245	232	1			

- Molecule 33 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	61	146	Total	C	N	O	S	0	0	0
			1136	726	201	208	1			
33	69	146	Total	C	N	O	S	0	0	0
			1136	726	201	208	1			

- Molecule 34 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	58	138	Total	C	N	O	S	0	0	0
			1104	712	206	182	4			
34	15	138	Total	C	N	O	S	0	0	0
			1104	712	206	182	4			

- Molecule 35 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	68	122	Total	C	N	O	S	0	0	0
			932	588	171	169	4			
35	25	122	Total	C	N	O	S	0	0	0
			932	588	171	169	4			

- Molecule 36 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	78	150	Total	C	N	O	S	0	0	0
			1144	712	232	197	3			
36	35	150	Total	C	N	O	S	0	0	0
			1144	712	232	197	3			

- Molecule 37 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	88	141	Total	C	N	O	S	0	0	0
			1121	715	212	187	7			
37	45	139	Total	C	N	O	S	0	0	0
			1107	707	209	184	7			

- Molecule 38 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	98	118	Total	C	N	O	S	0	0	0
			967	604	203	159	1			
38	55	117	Total	C	N	O		0	0	0
			959	599	202	158				

- Molecule 39 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
39	A8	110	Total	C	N	O	0	0	0
			876	553	175	148			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
39	65	111	Total 881	C 556	N 176	O 149	0	0	0

- Molecule 40 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	B8	137	Total 1141	C 710	N 234	O 196	S 1	0	0	0
40	75	137	Total 1141	C 710	N 234	O 196	S 1	0	0	0

- Molecule 41 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	C8	117	Total 963	C 610	N 202	O 150	S 1	0	0	0
41	85	117	Total 963	C 610	N 202	O 150	S 1	0	0	0

- Molecule 42 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	D8	101	Total 778	C 501	N 142	O 134	S 1	0	0	0
42	95	101	Total 778	C 501	N 142	O 134	S 1	0	0	0

- Molecule 43 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	E8	113	Total 899	C 566	N 177	O 154	S 2	0	0	0
43	A5	113	Total 899	C 566	N 177	O 154	S 2	0	0	0

- Molecule 44 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
44	F8	93	Total 730	C 474	N 132	O 124	0	0	0
44	B5	92	Total 725	C 471	N 131	O 123	0	0	0

- Molecule 45 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	G8	104	Total	C	N	O	S	0	0	0
			791	510	149	127	5			
45	C5	104	Total	C	N	O	S	0	0	0
			794	510	152	127	5			

- Molecule 46 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	H8	175	Total	C	N	O	S	0	0	0
			1397	892	251	251	3			
46	D5	138	Total	C	N	O	S	0	0	0
			1139	732	205	199	3			

- Molecule 47 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	I8	76	Total	C	N	O	S	0	0	0
			606	376	128	101	1			
47	E5	77	Total	C	N	O	S	0	0	0
			612	379	129	103	1			

- Molecule 48 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	J8	97	Total	C	N	O	S	0	0	0
			762	481	150	130	1			
48	F5	97	Total	C	N	O	S	0	0	0
			762	481	150	130	1			

- Molecule 49 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	K8	66	Total	C	N	O	S	0	0	0
			558	346	113	98	1			
49	G5	66	Total	C	N	O	S	0	0	0
			558	346	113	98	1			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
50	L8	59	Total	C	N	O	0	0	0
			468	298	90	80			
50	H5	59	Total	C	N	O	0	0	0
			468	298	90	80			

- Molecule 51 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	M8	66	Total	C	N	O	S	0	0	0
			533	335	96	97	5			
51	I5	63	Total	C	N	O	S	0	0	0
			515	326	93	91	5			

- Molecule 52 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	N8	59	Total	C	N	O	S	0	0	0
			458	288	90	75	5			
52	J5	59	Total	C	N	O	S	0	0	0
			458	288	90	75	5			

- Molecule 53 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	P8	46	Total	C	N	O	S	0	0	0
			396	243	98	53	2			
53	L5	45	Total	C	N	O	S	0	0	0
			391	240	97	52	2			

- Molecule 54 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	Q8	61	Total	C	N	O	S	0	0	0
			488	312	99	75	2			
54	M5	62	Total	C	N	O	S	0	0	0
			495	317	100	76	2			

- Molecule 55 is a RNA chain called tRNA-Tyr.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
55	3L	85	Total	C	N	O	P	S	0	0	0
			1814	813	323	592	85	1			

- Molecule 56 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

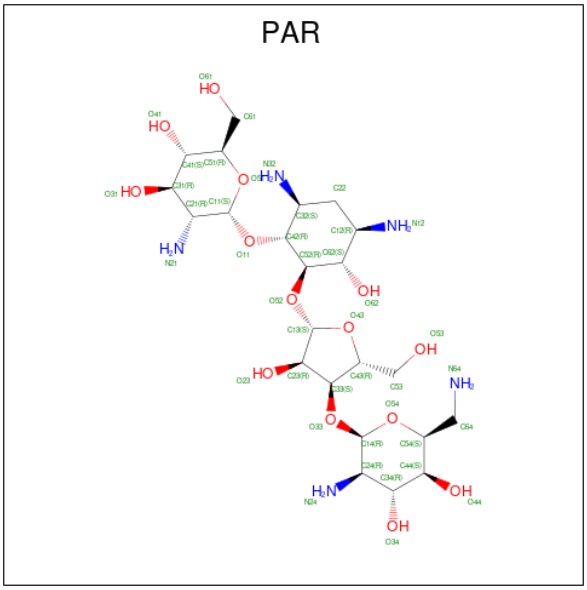
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	13	146	Total Mg 146 146	0	0
56	3E	1	Total Mg 1 1	0	0
56	5E	1	Total Mg 1 1	0	0
56	3I	1	Total Mg 1 1	0	0
56	1K	1	Total Mg 1 1	0	0
56	2K	7	Total Mg 7 7	0	0
56	1H	481	Total Mg 481 481	0	0
56	16	12	Total Mg 12 12	0	0
56	11	2	Total Mg 2 2	0	0
56	21	2	Total Mg 2 2	0	0
56	31	1	Total Mg 1 1	0	0
56	41	1	Total Mg 1 1	0	0
56	78	1	Total Mg 1 1	0	0
56	88	1	Total Mg 1 1	0	0
56	I8	1	Total Mg 1 1	0	0
56	L8	1	Total Mg 1 1	0	0
56	P8	1	Total Mg 1 1	0	0
56	1G	86	Total Mg 86 86	0	0
56	2L	4	Total Mg 4 4	0	0
56	14	391	Total Mg 391 391	0	0
56	1J	6	Total Mg 6 6	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	29	3	Total Mg 3 3	0	0
56	39	1	Total Mg 1 1	0	0
56	25	1	Total Mg 1 1	0	0
56	35	1	Total Mg 1 1	0	0
56	45	1	Total Mg 1 1	0	0
56	85	1	Total Mg 1 1	0	0
56	C5	1	Total Mg 1 1	0	0
56	L5	1	Total Mg 1 1	0	0

- Molecule 57 is PAROMOMYCIN (CCD ID: PAR) (formula: $C_{23}H_{45}N_5O_{14}$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
57	13	1	Total C N O 42 23 5 14	0	0
57	1G	1	Total C N O 42 23 5 14	0	0

- Molecule 58 is ZINC ION (CCD ID: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	3E	1	Total Zn 1 1	0	0
58	5I	1	Total Zn 1 1	0	0
58	G8	1	Total Zn 1 1	0	0
58	32	1	Total Zn 1 1	0	0
58	5A	1	Total Zn 1 1	0	0
58	C5	1	Total Zn 1 1	0	0

- Molecule 59 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	13	141	Total O 141 141	0	0
59	3E	1	Total O 1 1	0	0
59	1I	1	Total O 1 1	0	0
59	3I	2	Total O 2 2	0	0
59	5I	1	Total O 1 1	0	0
59	1K	1	Total O 1 1	0	0
59	2K	6	Total O 6 6	0	0
59	4K	3	Total O 3 3	0	0
59	1H	633	Total O 633 633	0	0
59	16	11	Total O 11 11	0	0
59	11	10	Total O 10 10	0	0
59	21	5	Total O 5 5	0	0
59	31	5	Total O 5 5	0	0
59	78	4	Total O 4 4	0	0

Continued on next page...

Continued from previous page...

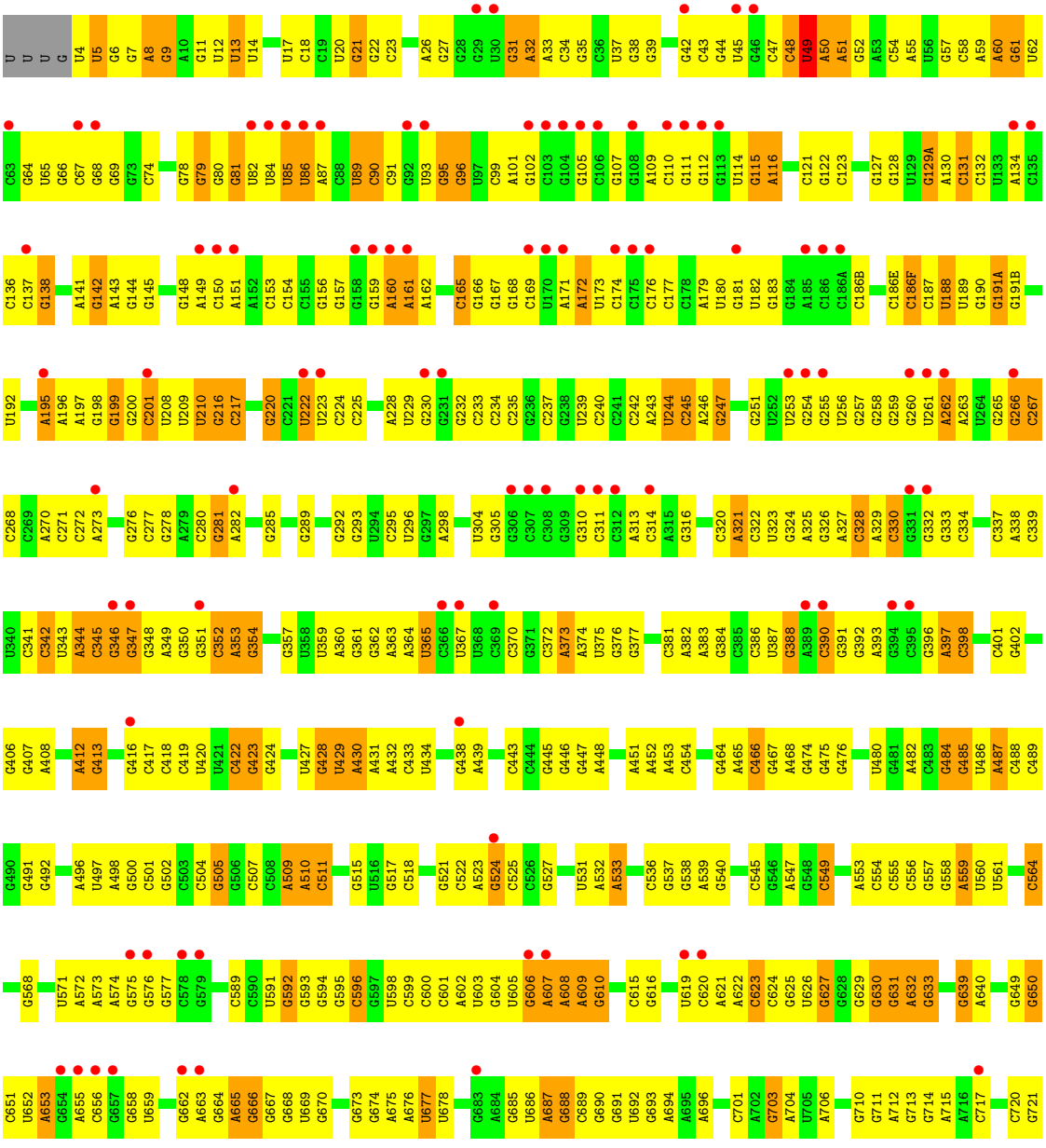
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
59	F8	1	Total O 1 1	0	0
59	G8	2	Total O 2 2	0	0
59	J8	1	Total O 1 1	0	0
59	L8	2	Total O 2 2	0	0
59	1G	87	Total O 87 87	0	0
59	5A	1	Total O 1 1	0	0
59	6A	1	Total O 1 1	0	0
59	BA	1	Total O 1 1	0	0
59	14	474	Total O 474 474	0	0
59	1J	6	Total O 6 6	0	0
59	19	9	Total O 9 9	0	0
59	29	3	Total O 3 3	0	0
59	39	5	Total O 5 5	0	0
59	55	1	Total O 1 1	0	0
59	75	1	Total O 1 1	0	0
59	85	1	Total O 1 1	0	0
59	A5	1	Total O 1 1	0	0
59	M5	2	Total O 2 2	0	0

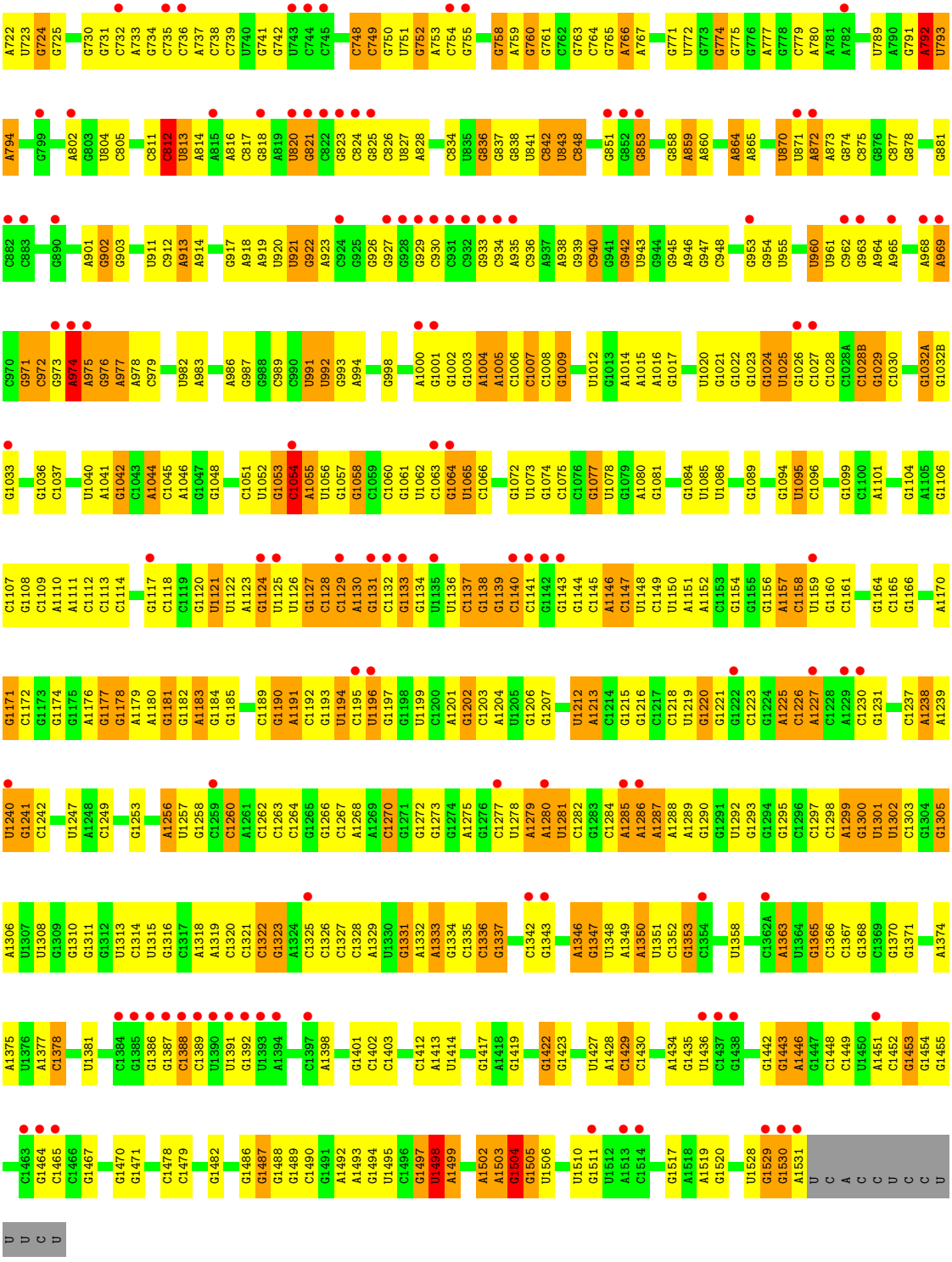
3 Residue-property plots (i)

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

- Molecule 1: 16S ribosomal RNA

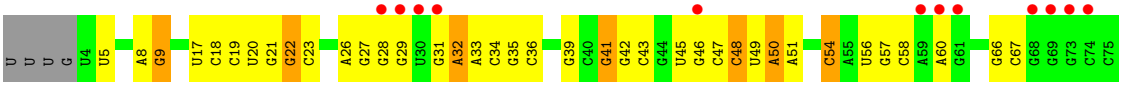
Chain 13:

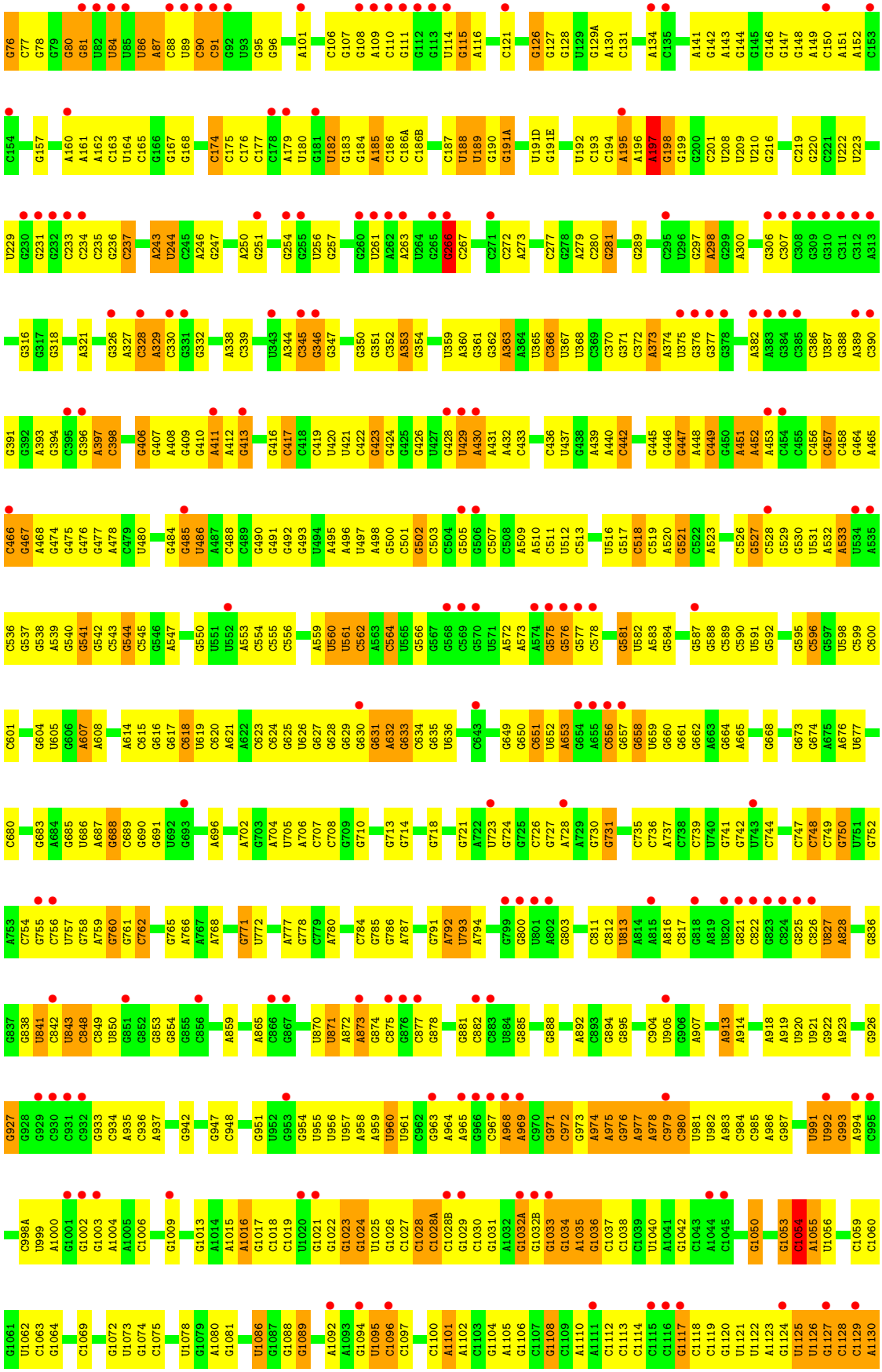


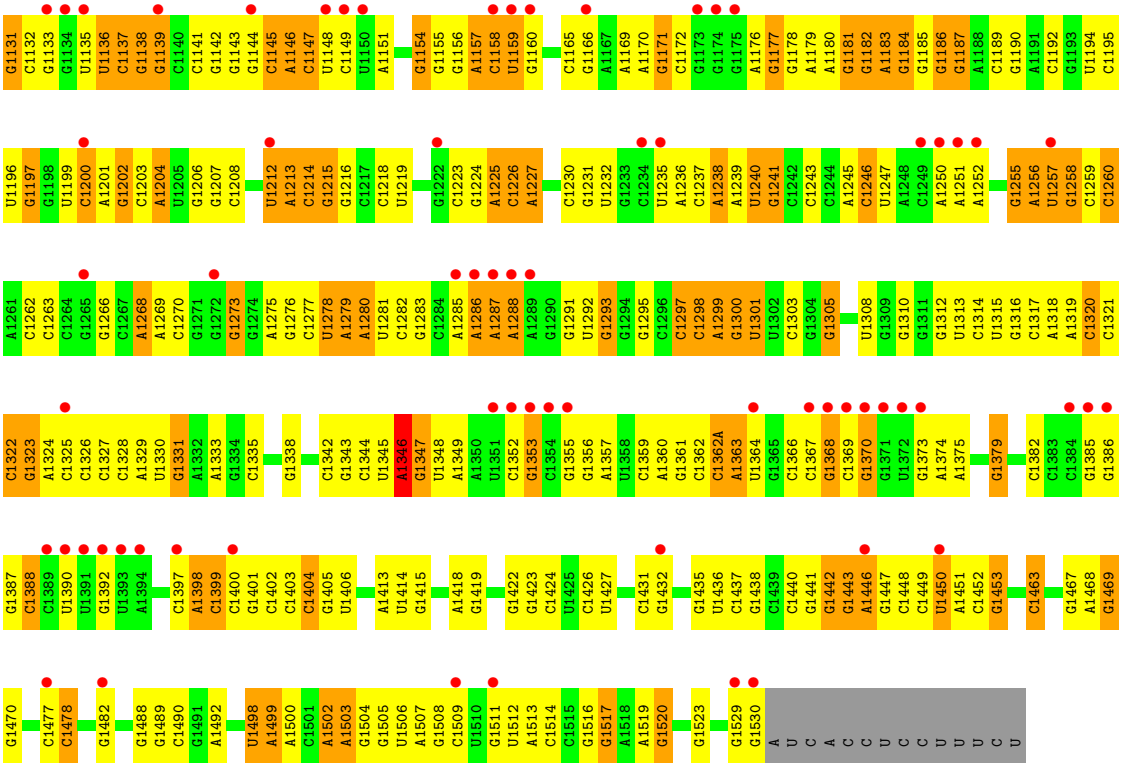


• Molecule 1: 16S ribosomal RNA

Chain 1G:

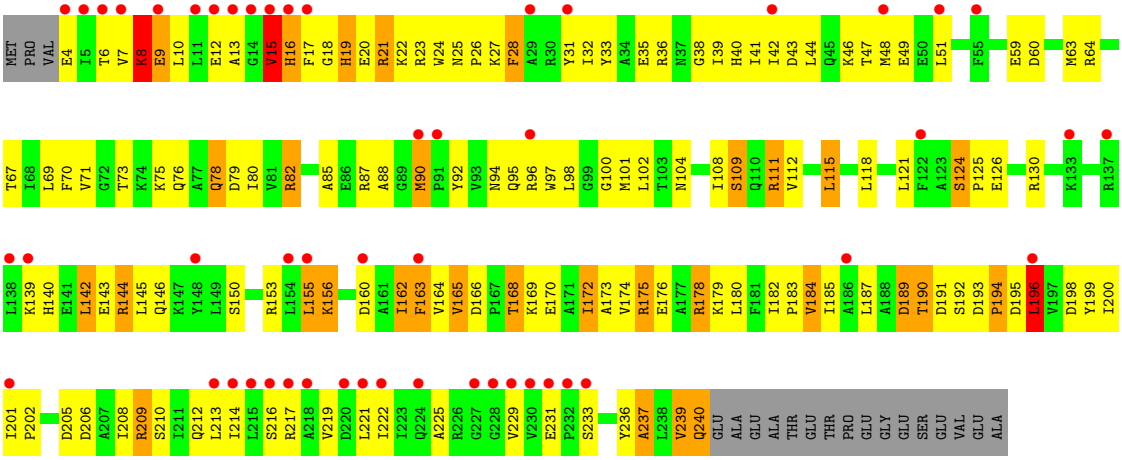






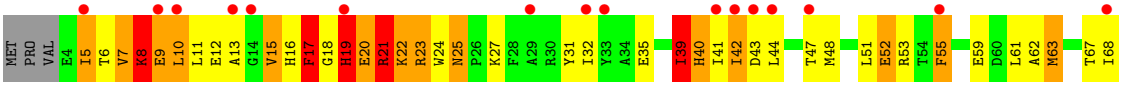
• Molecule 2: 30S ribosomal protein S2

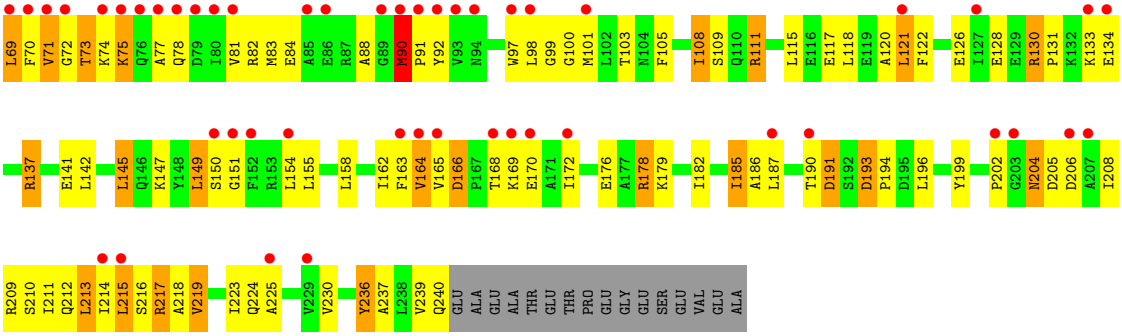
Chain 1E:



• Molecule 2: 30S ribosomal protein S2

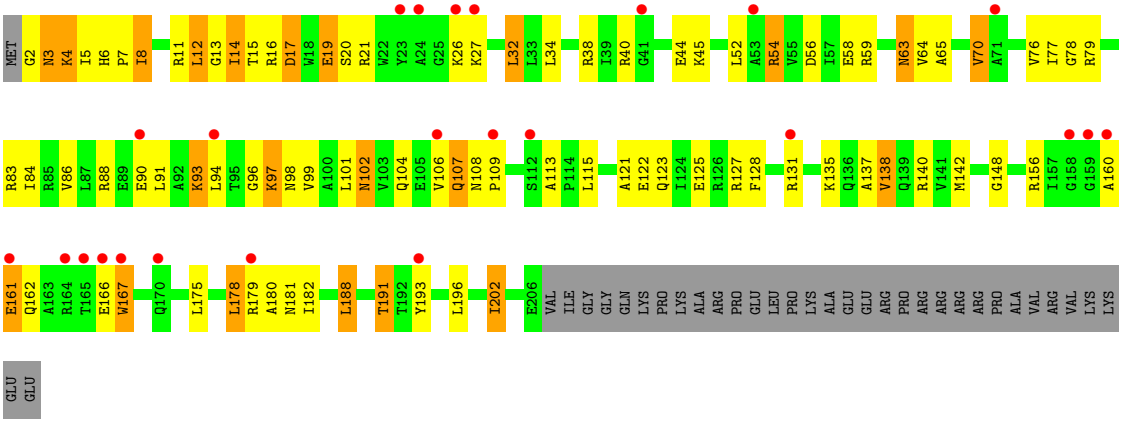
Chain 12:





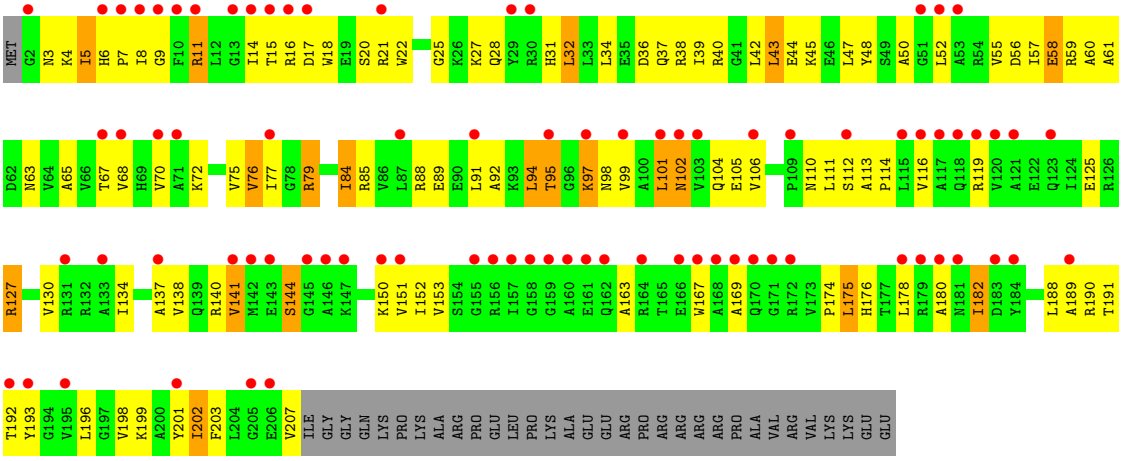
• Molecule 3: 30S ribosomal protein S3

Chain 2E:



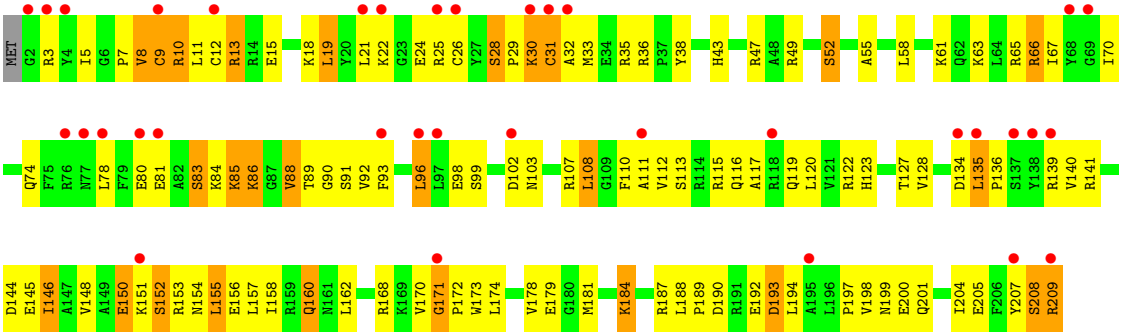
• Molecule 3: 30S ribosomal protein S3

Chain 22:



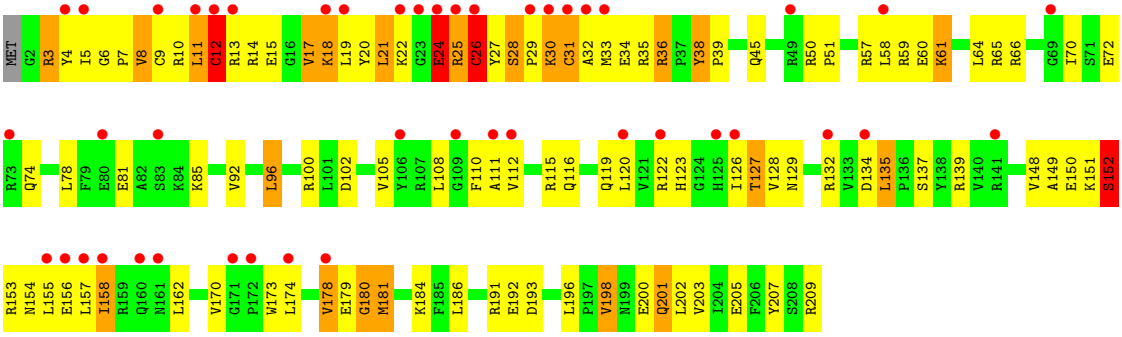
• Molecule 4: 30S ribosomal protein S4

Chain 3E:



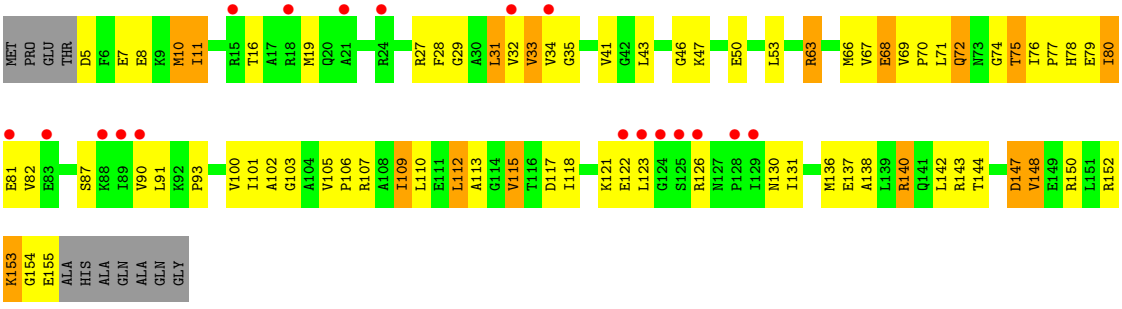
• Molecule 4: 30S ribosomal protein S4

Chain 32:



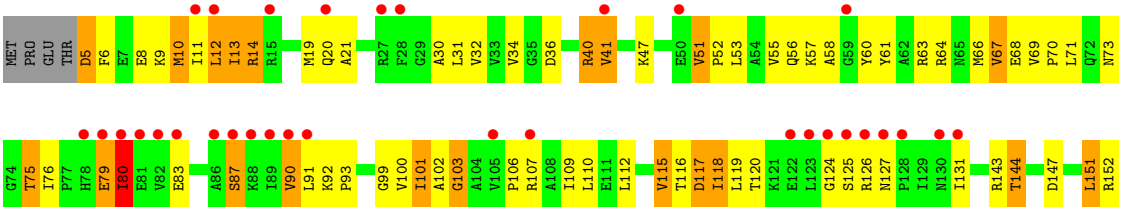
• Molecule 5: 30S ribosomal protein S5

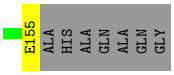
Chain 4E:



• Molecule 5: 30S ribosomal protein S5

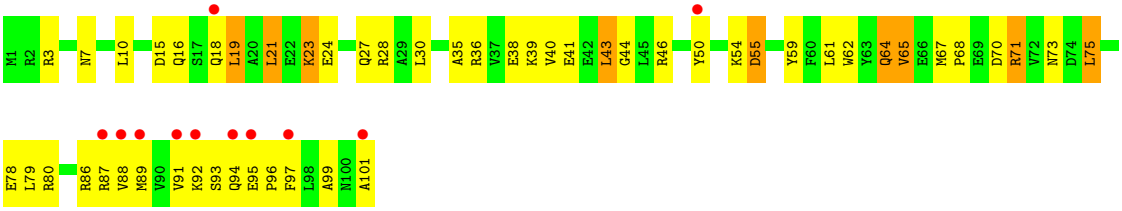
Chain 42:





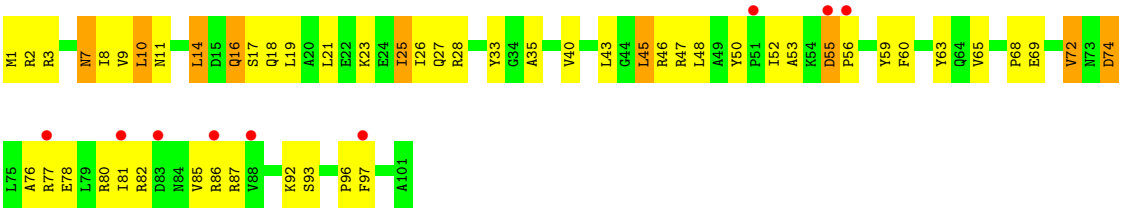
• Molecule 6: 30S ribosomal protein S6

Chain 5E:



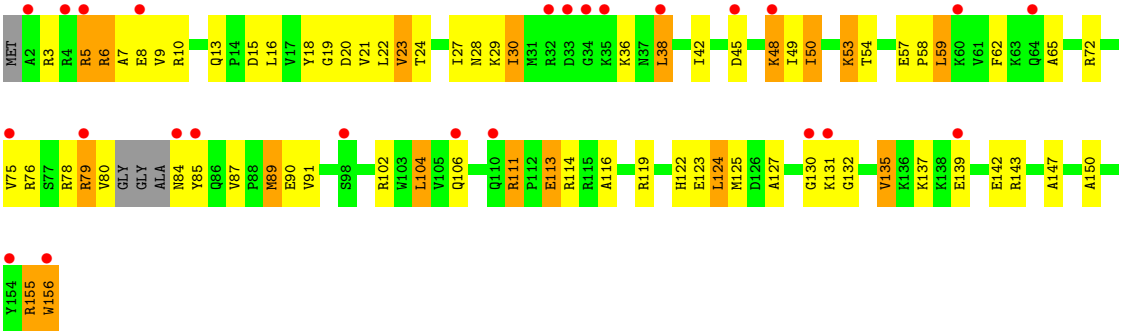
• Molecule 6: 30S ribosomal protein S6

Chain 52:



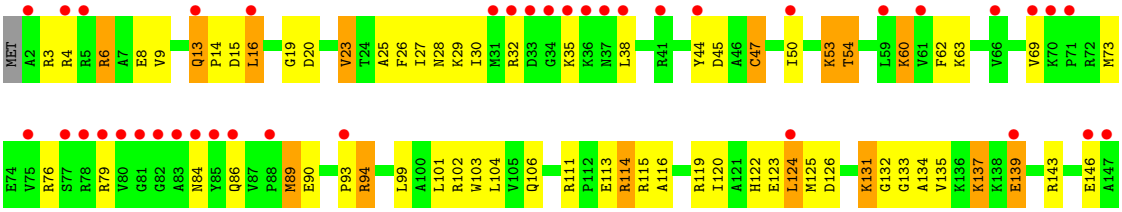
• Molecule 7: 30S ribosomal protein S7

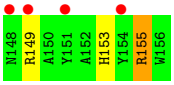
Chain 6E:



• Molecule 7: 30S ribosomal protein S7

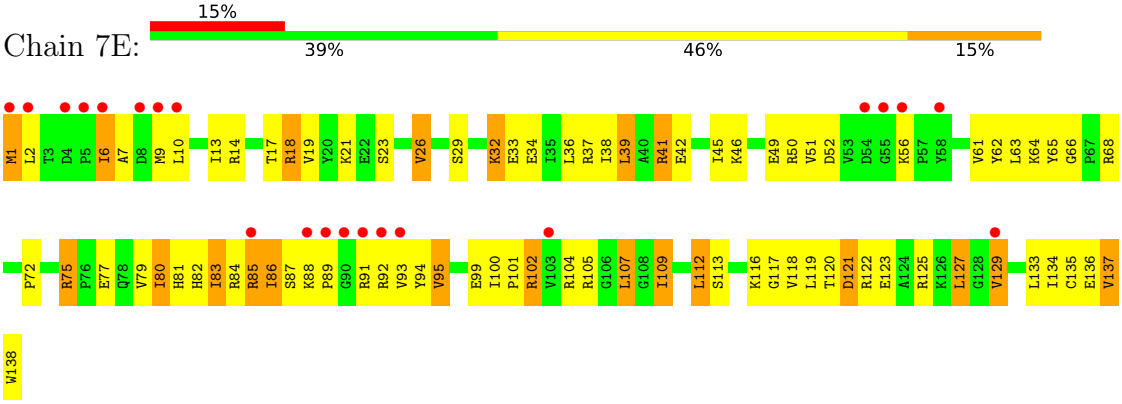
Chain 62:





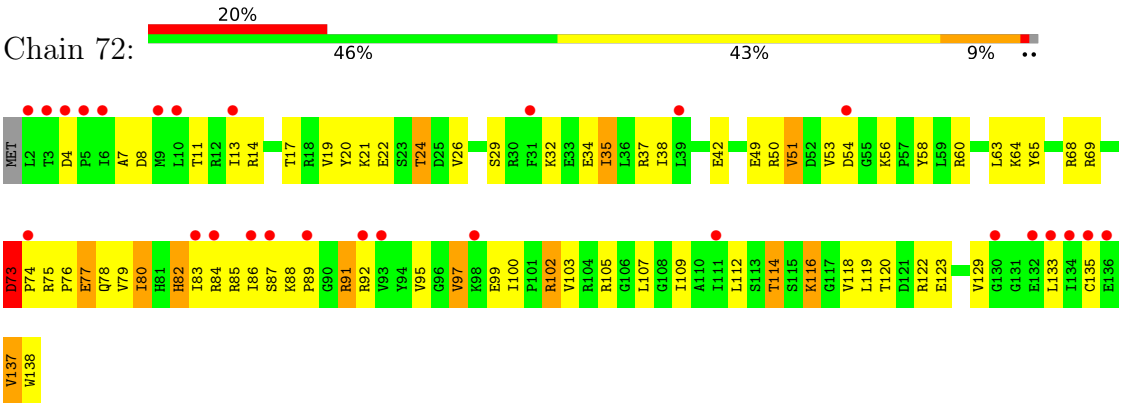
• Molecule 8: 30S ribosomal protein S8

Chain 7E:



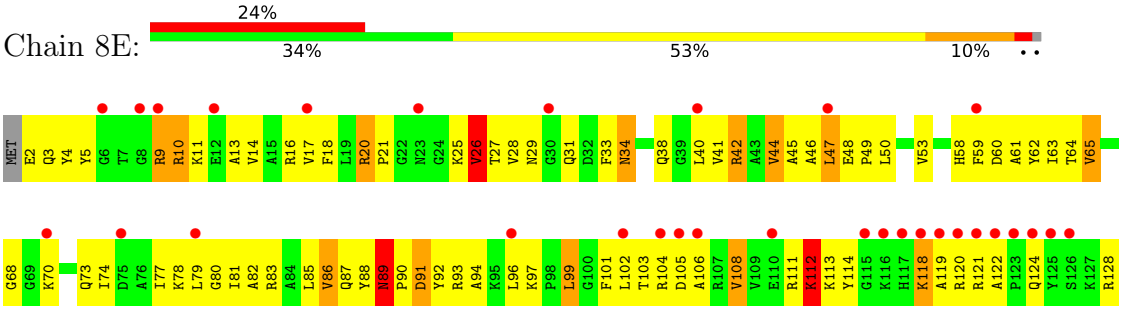
• Molecule 8: 30S ribosomal protein S8

Chain 72:



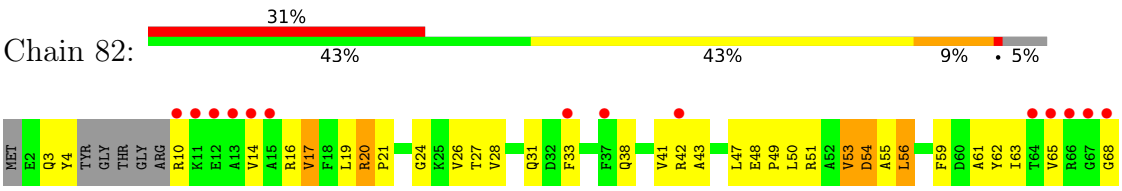
• Molecule 9: 30S ribosomal protein S9

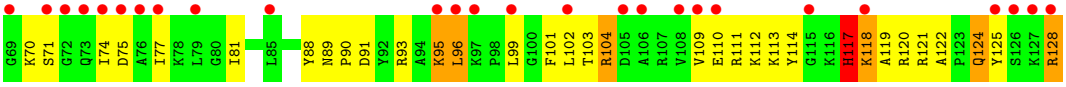
Chain 8E:



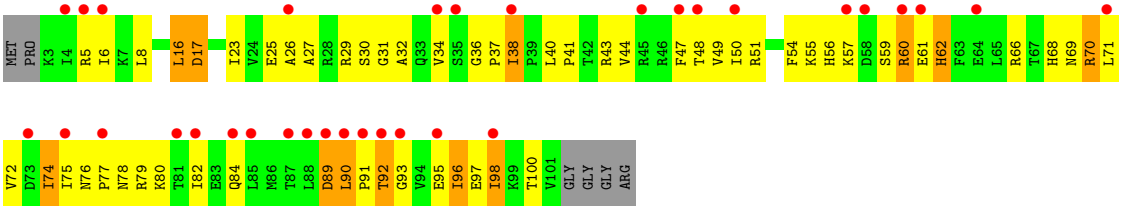
• Molecule 9: 30S ribosomal protein S9

Chain 82:

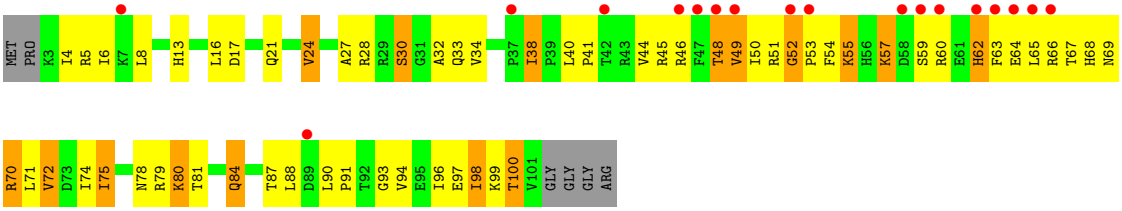




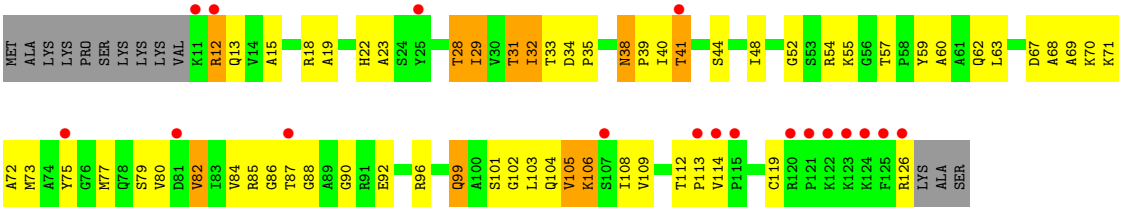
• Molecule 10: 30S ribosomal protein S10



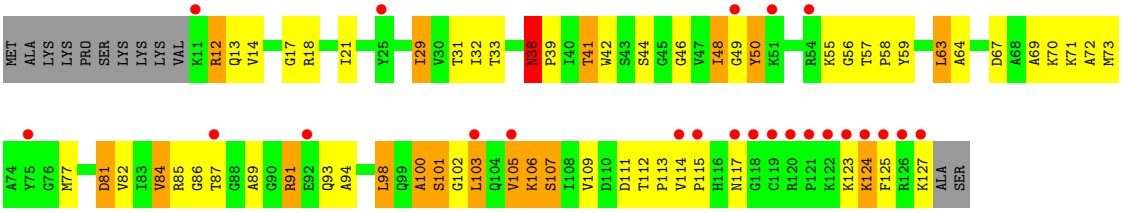
• Molecule 10: 30S ribosomal protein S10



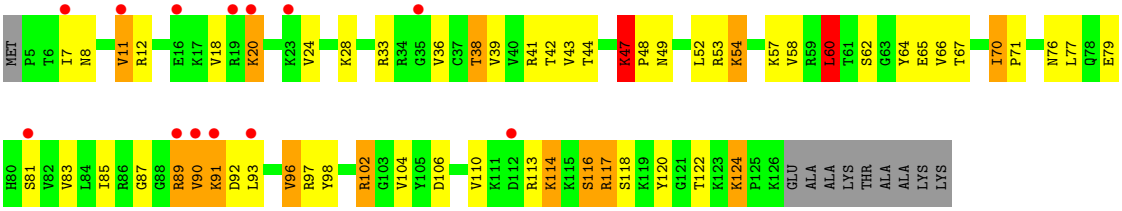
• Molecule 11: 30S ribosomal protein S11



• Molecule 11: 30S ribosomal protein S11

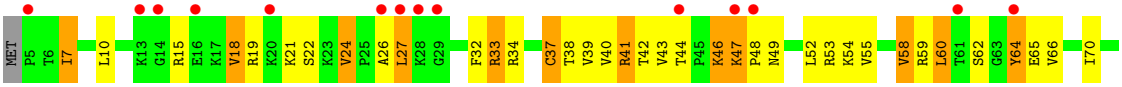


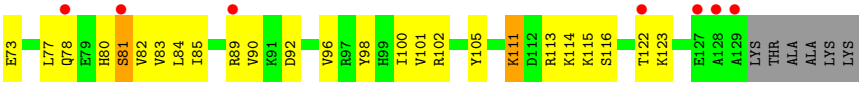
• Molecule 12: 30S ribosomal protein S12



• Molecule 12: 30S ribosomal protein S12

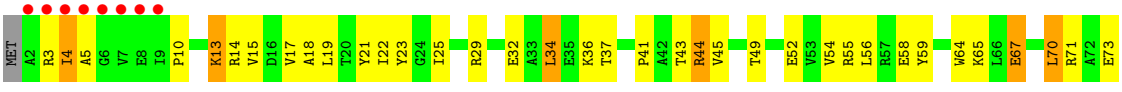
Chain 3A:

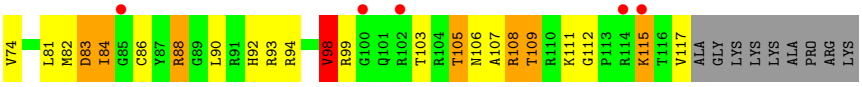




• Molecule 13: 30S ribosomal protein S13

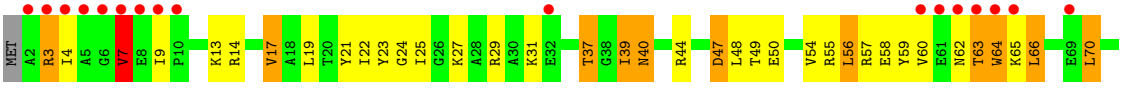
Chain 4I:

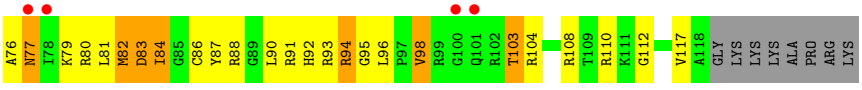




• Molecule 13: 30S ribosomal protein S13

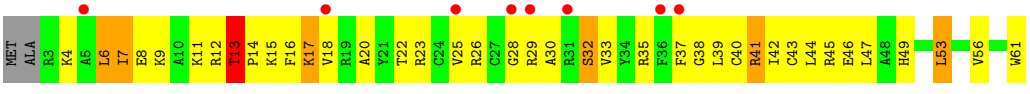
Chain 4A:





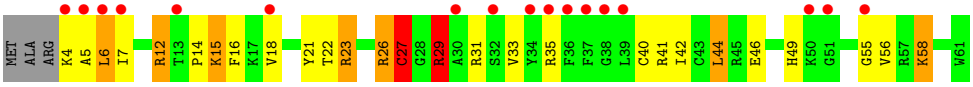
• Molecule 14: 30S ribosomal protein S14 type Z

Chain 5I:

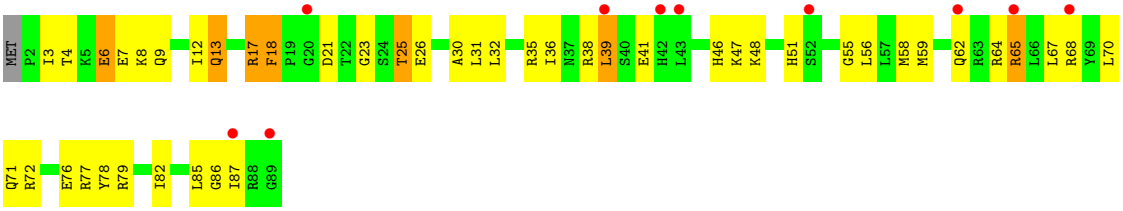


• Molecule 14: 30S ribosomal protein S14 type Z

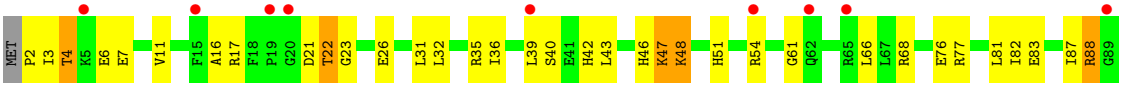
Chain 5A:



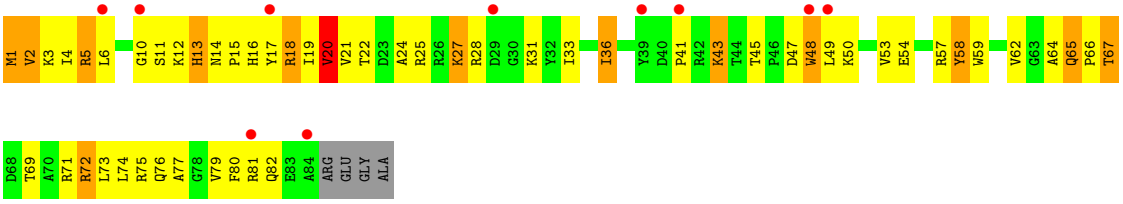
• Molecule 15: 30S ribosomal protein S15



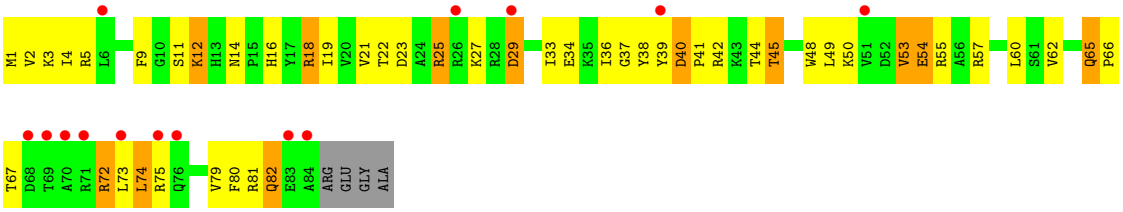
• Molecule 15: 30S ribosomal protein S15



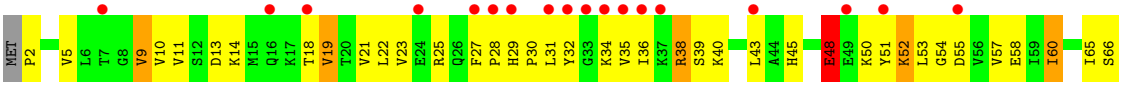
• Molecule 16: 30S ribosomal protein S16

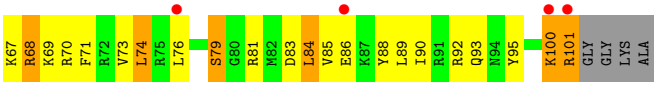


• Molecule 16: 30S ribosomal protein S16



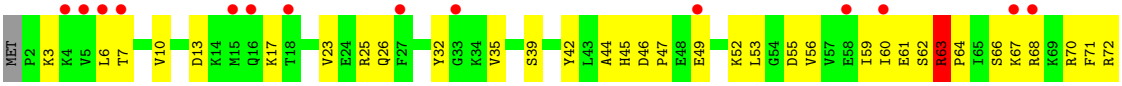
• Molecule 17: 30S ribosomal protein S17

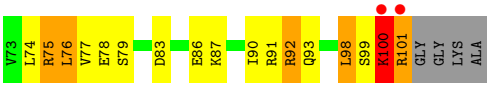




• Molecule 17: 30S ribosomal protein S17

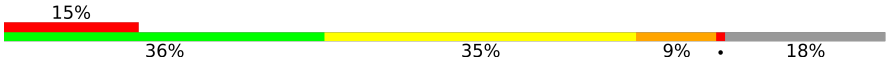
Chain 8A:

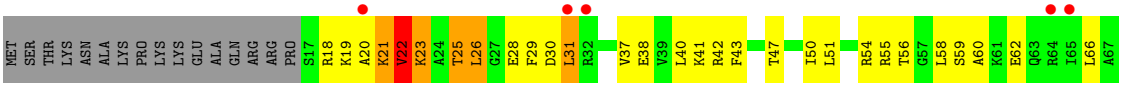


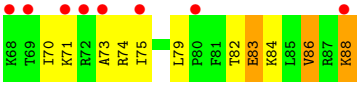


• Molecule 18: 30S ribosomal protein S18

Chain 9I:

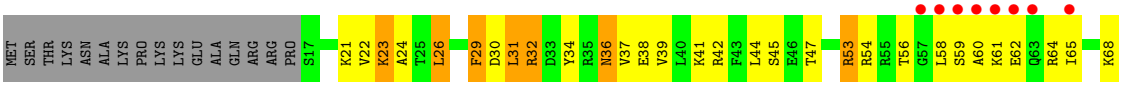


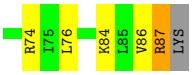




• Molecule 18: 30S ribosomal protein S18

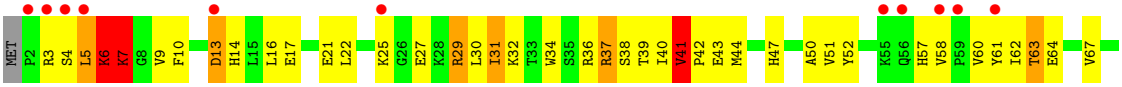
Chain 9A:

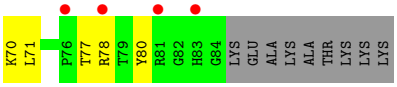




• Molecule 19: 30S ribosomal protein S19

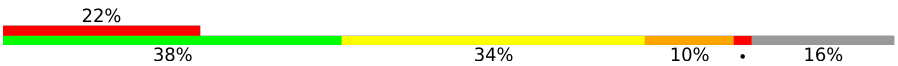
Chain AI:

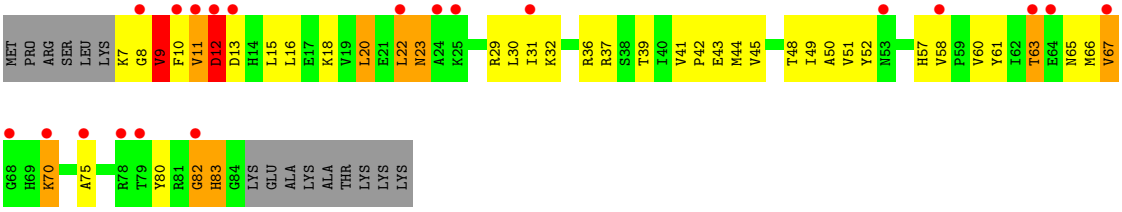




• Molecule 19: 30S ribosomal protein S19

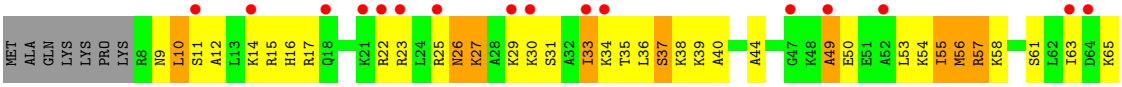
Chain AA:

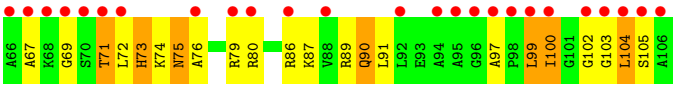




• Molecule 20: 30S ribosomal protein S20

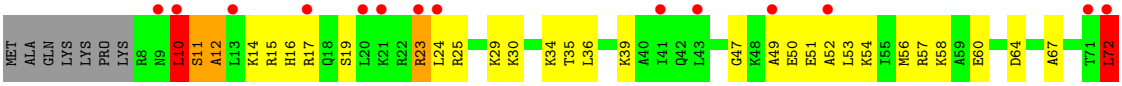
Chain BI:

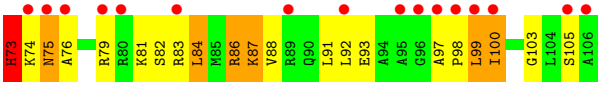




• Molecule 20: 30S ribosomal protein S20

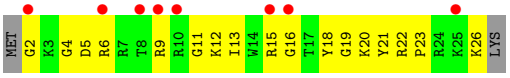
Chain BA:





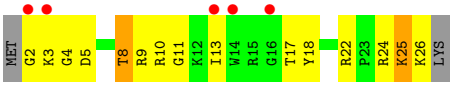
• Molecule 21: 30S ribosomal protein Thx

Chain 1F:



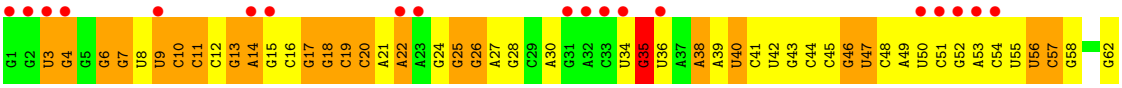
• Molecule 21: 30S ribosomal protein Thx

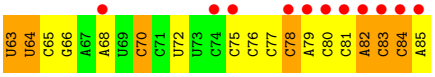
Chain 1B:



• Molecule 22: tRNA-Tyr

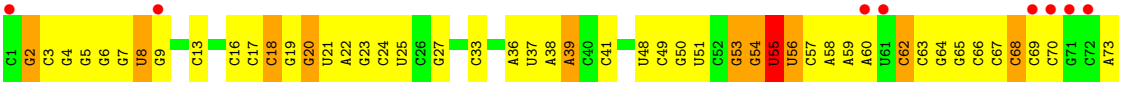
Chain 1K:





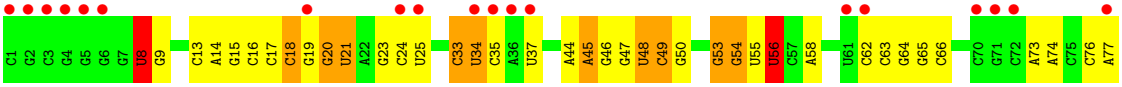
• Molecule 23: tRNA-fMet

Chain 2K:



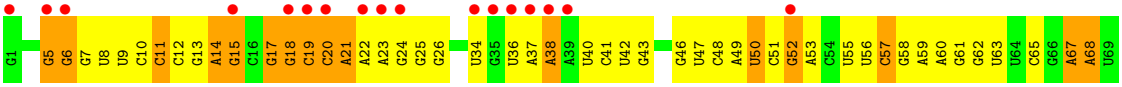
• Molecule 23: tRNA-fMet

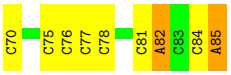
Chain 2L:



• Molecule 24: tRNA-Tyr

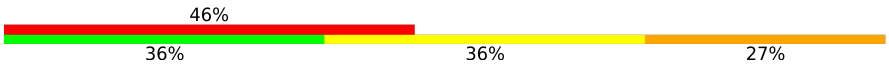
Chain 3K:

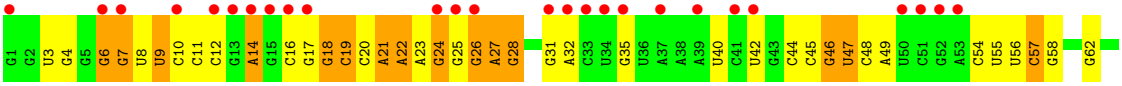


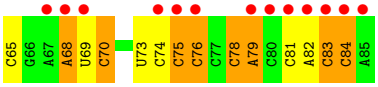


• Molecule 24: tRNA-Tyr

Chain 1L:

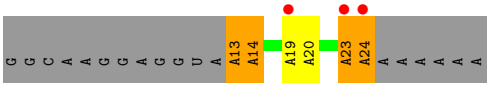






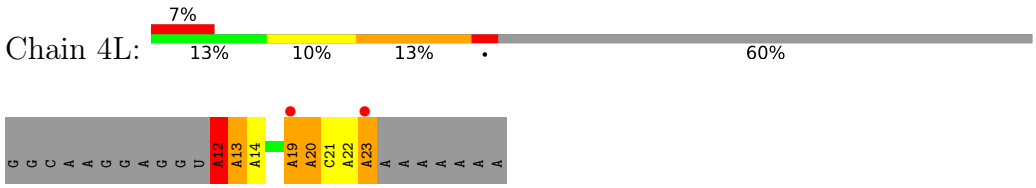
• Molecule 25: mRNA

Chain 4K:



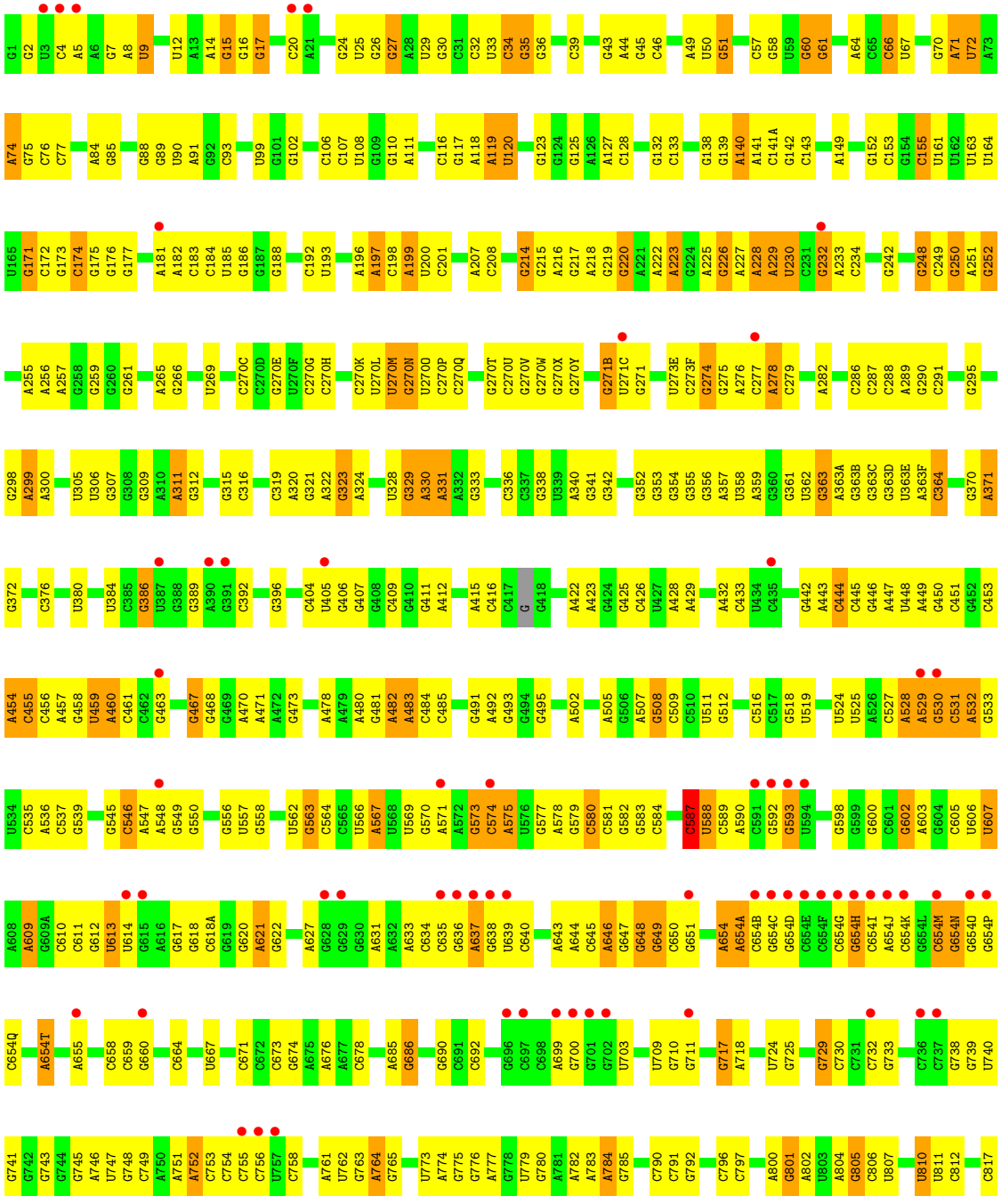
• Molecule 25: mRNA

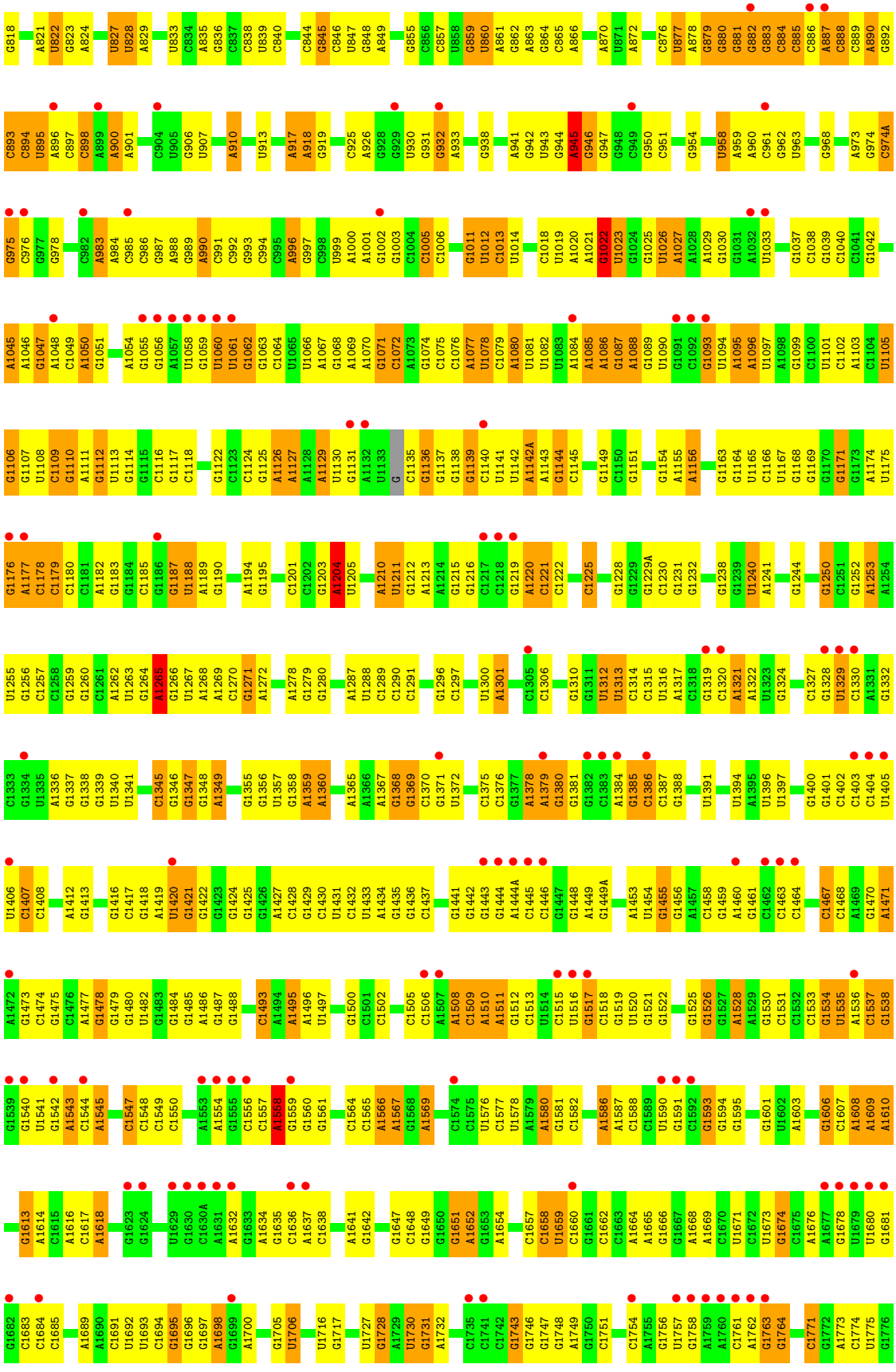
Chain 4L:

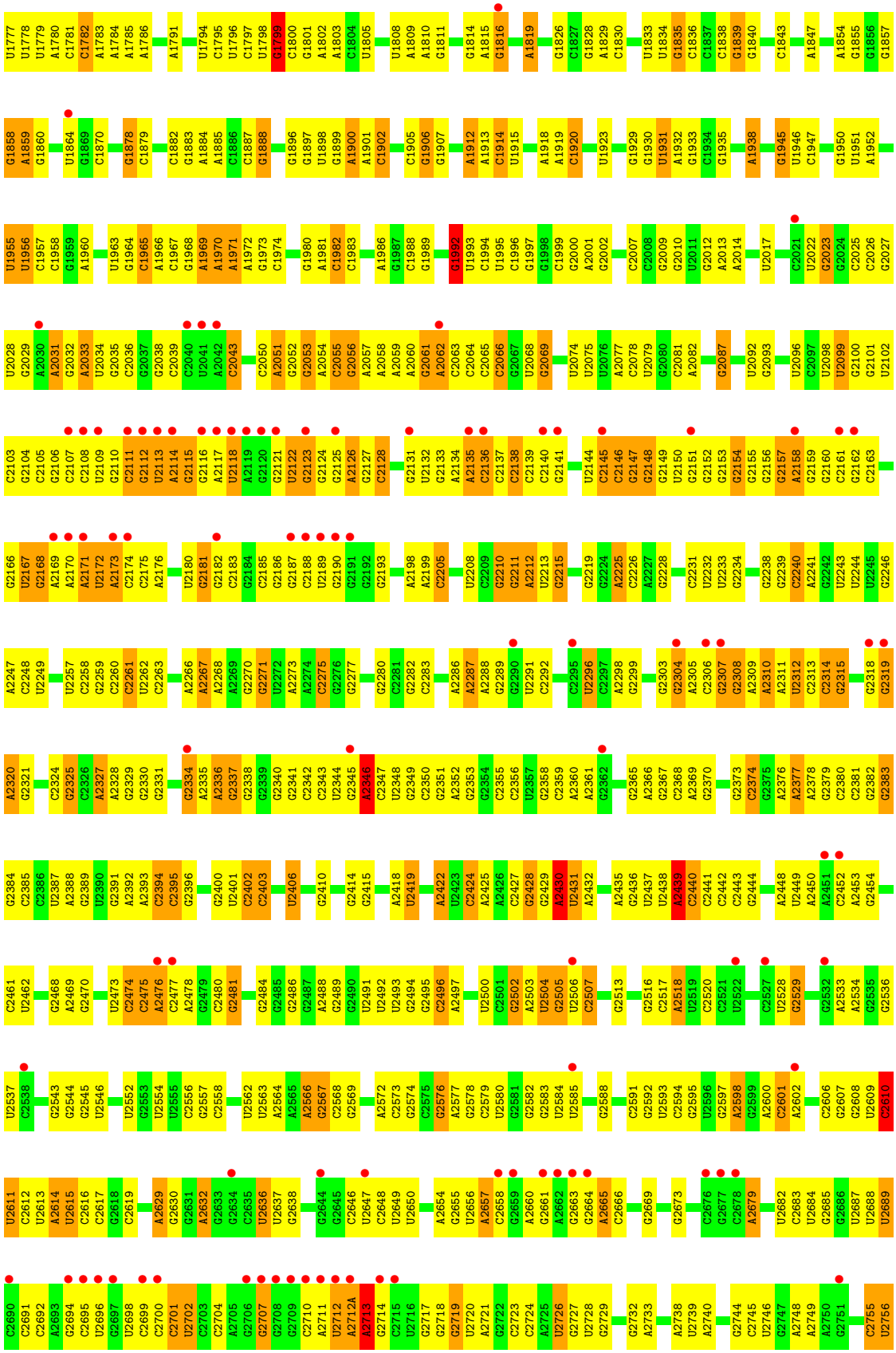


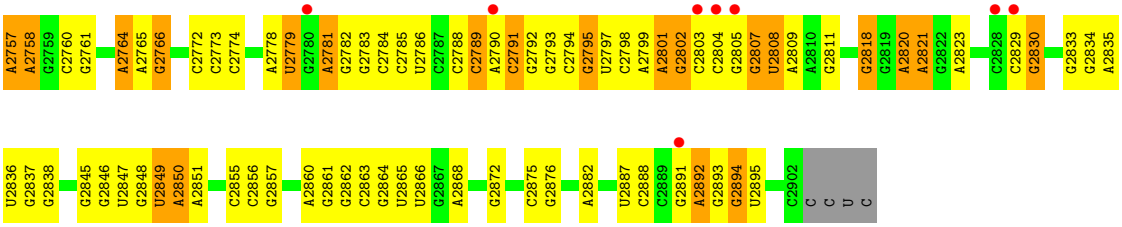
• Molecule 26: 23S ribosomal RNA

Chain 1H:



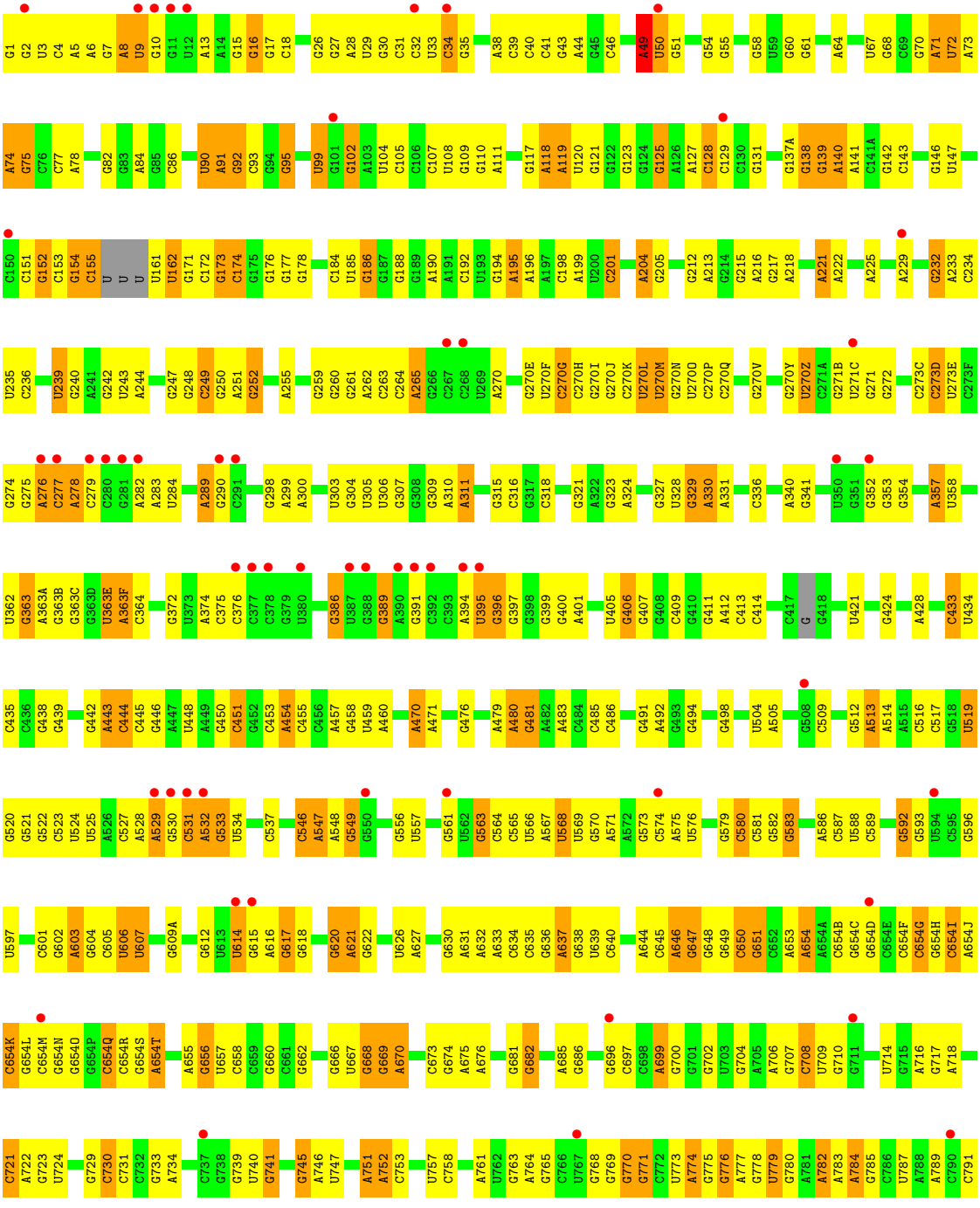


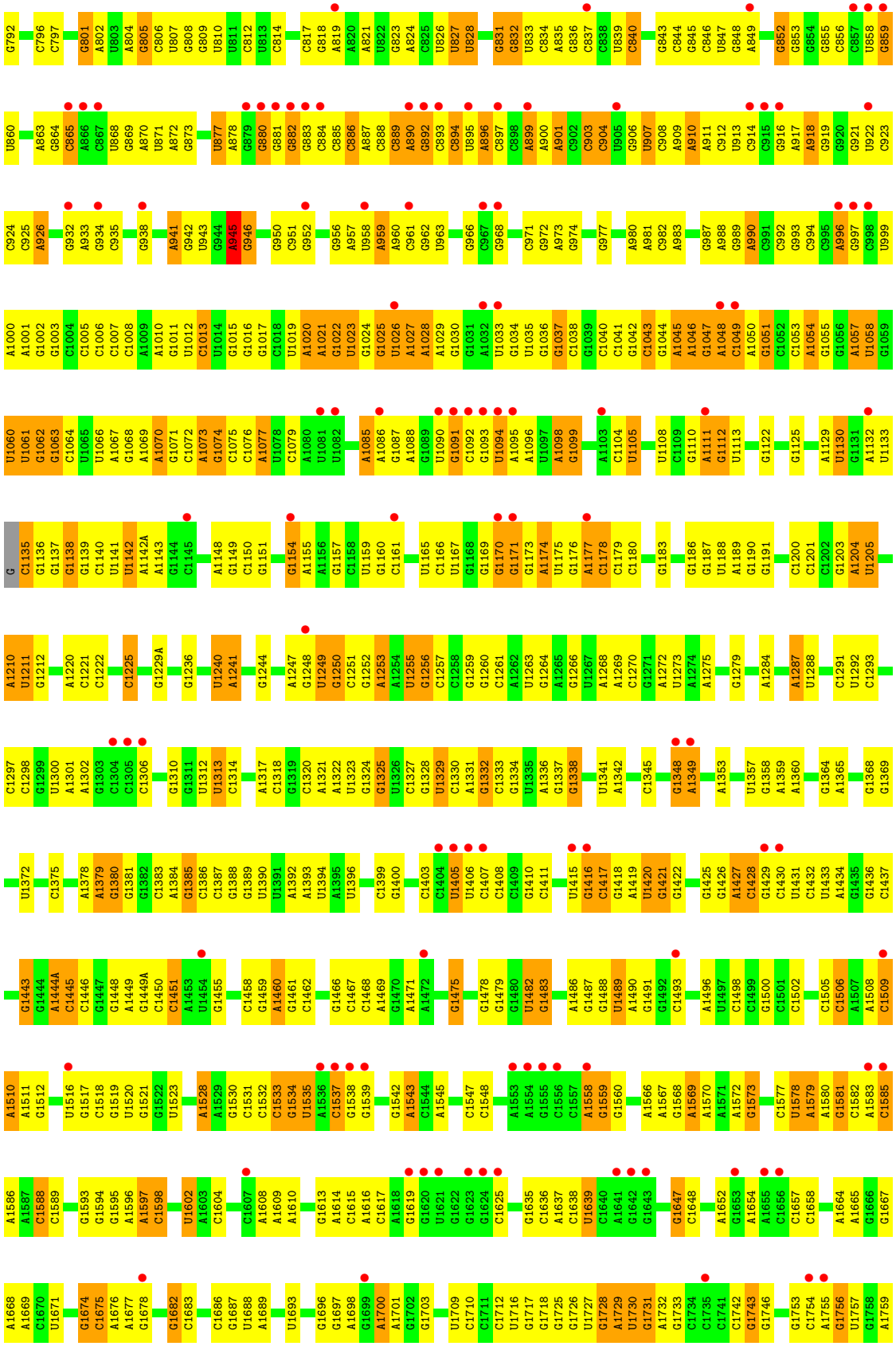

U1777 U1778 U1779 A1780 C1781 C1782 A1783 A1784 A1785 A1786
A1791
U1794 C1795 U1796 C1797 U1798 G1799 C1800 G1801 A1802 A1803 C1804 U1805
U1808 A1809 A1810 G1811
G1814 A1815 G1816
A1819
G1826 C1827 G1828 A1829 C1830
U1833 U1834 G1835 C1836 C1837 C1838 G1839 G1840
C1843
A1847
A1854 G1855 G1856 G1857
G1858 A1859 G1860
U1864 G1869 C1870
G1878 C1879
C1882 G1883 A1884 A1885 C1886 C1887 G1888
G1896 G1897 U1898 G1899 A1900 A1901 C1902
C1905 G1906 G1907
A1912 A1913 C1914 U1915
A1918 A1919 C1920
U1923
G1929 G1930 U1931 A1932 G1933 C1934 G1935
A1938
G1945 U1946 C1947
G1950 U1951 A1952
U1955 U1956 C1957 C1958 G1959 A1960
U1963 G1964 C1965 A1966 C1967 G1968 A1969 A1970 A1971 A1972 G1973 C1974
G1980 A1981 U1982 C1983
A1986 G1987 C1988 G1989
G1992
U1993 C1994 U1995 C1996 G1997 G1998 C1999 G2000 A2001 G2002
C2007 C2008 G2009 G2010 U2011 G2012 A2013 A2014
U2017
C2021 U2022 G2023 G2024 C2025 C2026 C2027
U2028 G2029 A2030 A2031 G2032 A2033 U2034 G2035 C2036 G2037 G2038 C2039 C2040 U2041 A2042 C2043
C2050 A2051 G2052 G2053 A2054 C2055 G2056 A2057 A2058 A2059 A2060 G2061 A2062 C2063 C2064 C2065 C2066 G2067 U2068 G2069
U2074 U2075 U2076 A2077 C2078 U2079 G2080 C2081 A2082
G2087
U2092 G2093
U2096 C2097 U2098 U2099 G2100 G2101 U2102
C2103 G2104 C2105 G2106 C2107 C2108 U2109 G2110 C2111 G2112 U2113 A2114 G2115 G2116 A2117 U2118 A2119 C2120 G2121 U2122 G2123 G2124 G2125 A2126 G2127 C2128
G2131 U2132 C2133 A2134 A2135 C2136 C2137 C2138 C2139 C2140 G2141
U2144 C2145 C2146 G2147 G2148 G2149 U2150 G2151 G2152 G2153 G2154 G2155 G2156 G2157 A2158 G2159 G2160 C2161 G2162 C2163
G2166 U2167 G2168 A2169 A2170 A2171 U2172 A2173 C2174 C2175 A2176
U2180 G2181 G2182 C2183 G2184 C2185 G2186 C2187 C2188 U2189 G2190 G2191 G2192 G2193
A2198 A2199 C2205
U2208 C2209 G2210 G2211 A2212 U2213 G2215
G2219 G2224 A2225 C2226 A2227 G2228
C2231 U2232 U2233 G2234
G2238 G2239 C2240 A2241 G2242 U2243 U2244 U2245 G2246
A2247 C2248 U2249
U2257 C2258 G2259 C2260 C2261 U2262 C2263
A2266 A2267 A2268 A2269 G2270 G2271 U2272 A2273 A2274 C2275 G2276 G2277
G2280 C2281 G2282 C2283
A2286 A2287 A2288 G2289 G2290 U2291 C2292
C2295 U2296 C2297 A2298 G2299
G2303 G2304 A2305 C2306 G2307 G2308 A2309 A2310 A2311 U2312 C2313 C2314 G2315
G2318 G2319
A2320 G2321
C2324 G2325 C2326 A2327 A2328 G2329 G2330 G2331
G2334 A2335 A2336 G2337 G2338 G2339 G2340 G2341 C2342 C2343 U2344 G2345 A2346 C2347 U2348 G2349 C2350 G2351 A2352 G2353 G2354 C2355 C2356 U2357 G2358 C2359 A2360 A2361 G2362
G2365 A2366 G2367 C2368 A2369 G2370
G2373 C2374 G2375 A2376 A2377 A2378 G2379 C2380 C2381 G2382 G2383
G2384 C2385 C2386 U2387 A2388 G2389 U2390 G2391 A2392 A2393 C2394 C2395 G2396
G2400 U2401 C2402 C2403
U2406
G2410
G2414 G2415
A2418 U2419
A2422 U2423 C2424 A2425 A2426 C2427 G2428 G2429 A2430 U2431 A2432
A2435 G2436 U2437 U2438 A2439 C2440 C2441 C2442 C2443 G2444
A2448 U2449 A2450 A2451 C2452 A2453 G2454
C2461 U2462
G2468 A2469 G2470
U2473 C2474 C2475 A2476 C2477 A2478 G2479 C2480 G2481
G2484 G2485 G2486 G2487 A2488 G2489 G2490 U2491 U2492 U2493 G2494 G2495 C2496 A2497
U2500 C2501 G2502 A2503 U2504 G2505 U2506 C2507
G2513
G2516 C2517 A2518 U2519 C2520 C2521 U2522
C2527 U2528 G2529
G2532 A2533 A2534 G2535 G2536
U2537 C2538
G2543 G2544 G2545 U2546
U2552 G2553 U2554 U2555 C2556 G2557 C2558
U2562 U2563 A2564 A2565 A2566 G2567 C2568 G2569
A2572 C2573 G2574 C2575 G2576 A2577 G2578 C2579 U2580 G2581 G2582 G2583 U2584 U2585
G2588
C2591 G2592 U2593 C2594 G2595 U2596 G2597 A2598 G2599 A2600 C2601 A2602
C2606 G2607 G2608 U2609 C2610
U2611 C2612 U2613 A2614 U2615 C2616 C2617 G2618 C2619
A2629 G2630 G2631 A2632 G2633 G2634 C2635 U2636 U2637 G2638
G2644 G2645 C2646 U2647 C2648 U2649 U2650
A2654 G2655 U2656 A2657 C2658 G2659 A2660 G2661 A2662 G2663 G2664 A2665 C2666
G2669
G2673
C2676 G2677 C2678 A2679
U2682 C2683 U2684 G2685 G2686 U2687 U2688 U2689
C2690 C2691 C2692 A2693 G2694 C2695 U2696 G2697 U2698 C2699 C2700 C2701 U2702 C2703 C2704 A2705 G2706 G2707 G2708 G2709 C2710 A2711 U2712 A2712A A2713 G2714 C2715 U2716 G2717 G2718 G2719 U2720 A2721 G2722 C2723 C2724 A2725 U2726 G2727 U2728 G2729
G2732 A2733
A2738 U2739 A2740
G2744 C2745 U2746 G2747 A2748 A2749 A2750 G2751
C2755 U2756

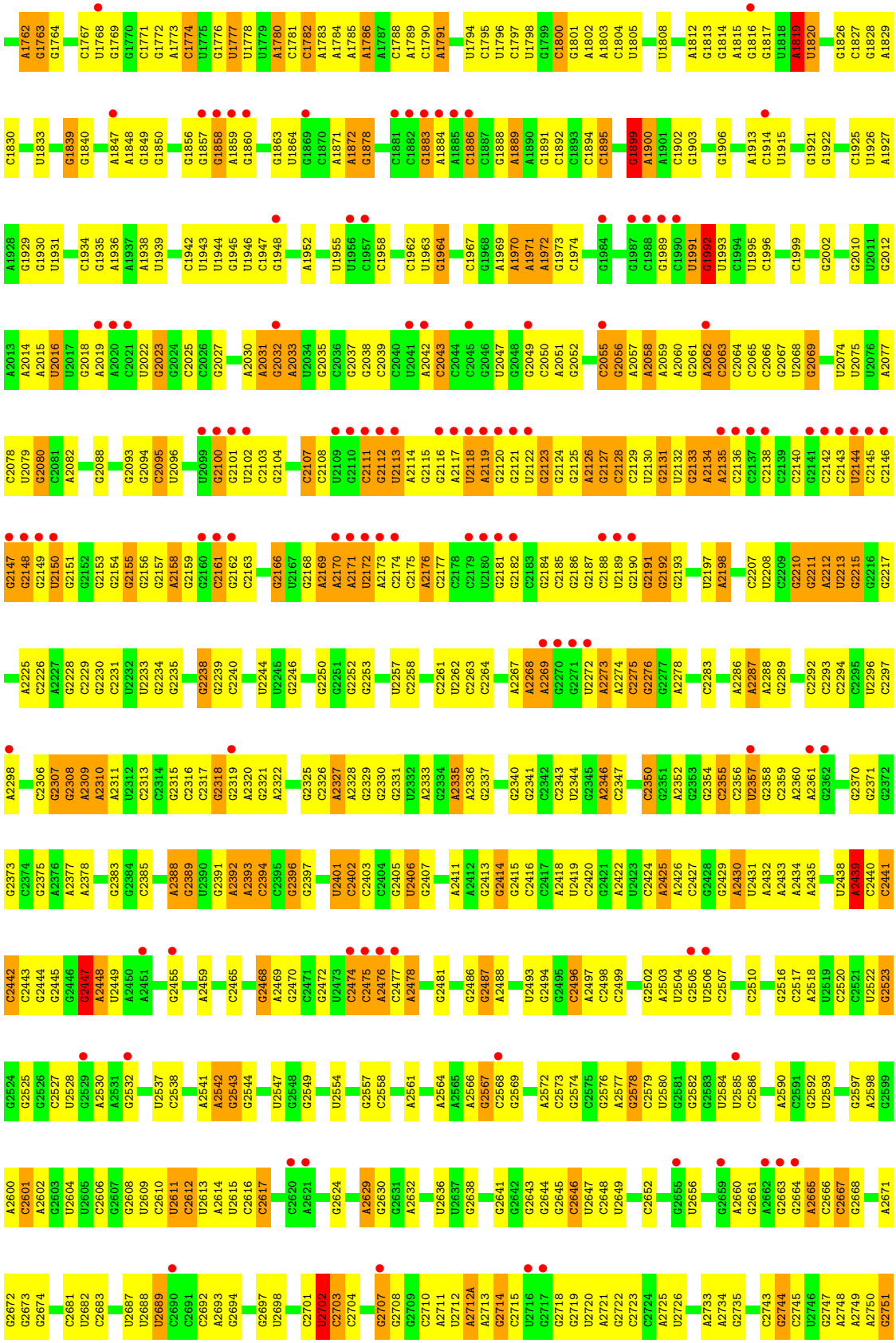


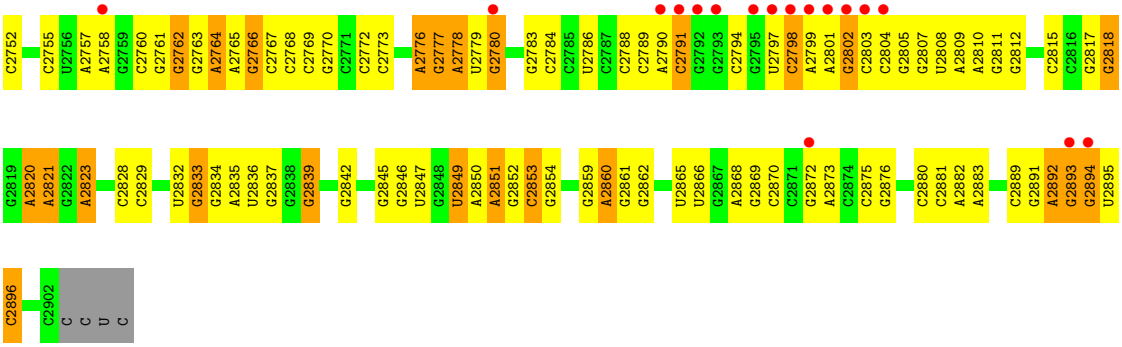
• Molecule 26: 23S ribosomal RNA

Chain 14:



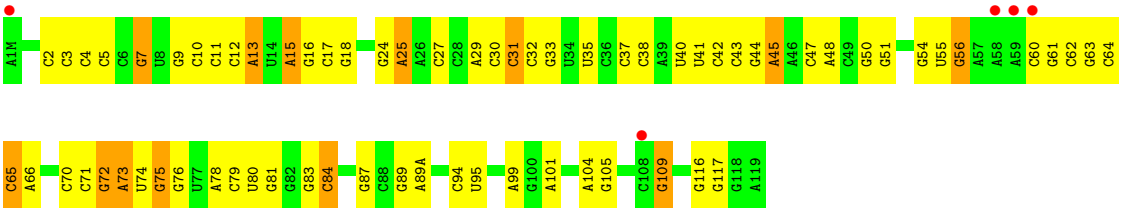

G792 C796 C797 G801 A802 U803 A804 G805 C806 U807 G808 G809 U810 U811 C812 U813 C814 C817 G818 A819 A820 A821 U822 G823 A824 C825 U826 U827 U828 G831 G832 U833 C834 A835 G836 C837 C838 U839 C840 G843 C844 G845 C846 U847 G848 A849 G852 G853 G854 G855 C856 C857 U858 G859
U860 A863 G864 C865 A866 C867 U868 G869 A870 U871 A872 G873 U877 A878 G879 G880 G881 G882 G883 C884 C885 C886 A887 C888 C889 A890 G892 C893 C894 U895 A896 C897 C898 A899 A900 A901 C902 C903 C904 U905 G906 U907 C908 A909 A910 A911 C912 U913 C914 C915 G916 A917 A918 G919 G920 G921 U922 C923
C924 C925 A926 G932 A933 G934 C935 G938 A941 G942 U943 G944 A945 G946 G950 C951 G952 G956 A957 U958 A959 A960 C961 G962 U963 G966 G967 G968 C971 G972 A973 G974 G977 A980 A981 C982 A983 G987 A988 G989 A990 C991 C992 G993 C994 G995 A996 G997 C998 U999
A1000 A1001 G1002 G1003 C1004 C1005 C1006 C1007 C1008 A1009 A1010 G1011 U1012 C1013 U1014 G1015 G1016 G1017 C1018 U1019 A1020 A1021 G1022 U1023 G1024 G1025 U1026 A1027 A1028 A1029 G1030 G1031 A1032 U1033 G1034 U1035 G1036 G1037 C1038 G1039 C1040 C1041 G1042 C1043 G1044 A1045 A1046 G1047 A1048 C1049 A1050 G1051 C1052 C1053 A1054 G1055 G1056 A1057 U1058 G1059
U1060 U1061 G1062 G1063 C1064 U1065 U1066 A1067 G1068 A1069 A1070 G1071 C1072 A1073 G1074 C1075 C1076 A1077 U1078 C1079 A1080 U1081 U1082 A1085 A1086 G1087 A1088 G1089 U1090 G1091 C1092 G1093 U1094 A1095 A1096 U1097 A1098 G1099 A1103 C1104 U1105 U1108 C1109 G1110 A1111 G1112 U1113 G1122 G1125 A1129 U1130 G1131 A1132 U1133
G C1135 G1136 G1137 G1138 G1139 C1140 U1141 U1142 A1142A A1143 G1144 C1145 A1148 G1149 C1150 G1151 G1154 A1155 A1156 G1157 C1158 U1159 G1160 C1161 U1165 C1166 U1167 G1168 G1169 G1170 G1171 G1173 A1174 U1175 G1176 A1177 C1178 C1179 C1180 G1183 G1186 G1187 U1188 A1189 G1190 G1191 C1200 C1201 C1202 G1203 A1204 U1205
A1210 U1211 G1212 A1220 C1221 C1222 C1225 G1229A G1236 U1240 A1241 G1244 A1247 G1248 U1249 G1250 C1251 G1252 A1253 A1254 U1255 G1256 C1257 C1258 G1259 G1260 C1261 A1262 U1263 G1264 A1265 G1266 U1267 A1268 A1269 C1270 G1271 A1272 U1273 A1274 A1275 G1279 A1284 A1287 U1288 C1291 U1292 C1293
C1297 C1298 G1299 U1300 A1301 A1302 G1303 C1304 C1305 C1306 G1310 G1311 U1312 U1313 C1314 A1317 C1318 G1319 C1320 A1321 A1322 U1323 G1324 G1325 U1326 C1327 G1328 U1329 C1330 A1331 G1332 C1333 G1334 U1335 A1336 G1337 G1338 U1341 A1342 C1345 G1348 A1349 A1353 U1357 G1358 A1359 A1360 G1364 A1365 G1368 G1369
U1372 C1375 A1378 A1379 G1380 G1381 G1382 C1383 A1384 G1385 C1386 C1387 G1388 G1389 U1390 U1391 A1392 A1393 U1394 A1395 U1396 C1399 G1400 C1403 C1404 U1405 U1406 C1407 C1408 C1409 G1410 C1411 U1415 G1416 C1417 G1418 A1419 U1420 G1421 G1422 G1425 G1426 A1427 C1428 G1429 C1430 U1431 C1432 U1433 A1434 G1435 G1436 C1437
G1443 G1444 A1444A C1445 C1446 G1447 G1448 A1449 G1449A C1450 C1451 A1453 U1454 G1455 C1458 G1459 A1460 G1461 C1462 G1466 C1467 C1468 A1469 G1470 A1471 A1472 G1475 G1478 G1479 G1480 U1482 G1483 A1486 G1487 G1488 U1489 A1490 G1491 G1492 C1493 A1496 U1497 C1498 C1499 G1500 C1501 C1502 C1505 C1506 A1507 A1508 C1509
A1510 A1511 G1512 U1516 G1517 C1518 G1519 U1520 G1521 G1522 U1523 A1528 A1529 G1530 C1531 C1532 C1533 G1534 U1535 A1536 C1537 G1538 G1539 G1542 A1543 C1544 A1545 C1547 C1548 A1553 A1554 G1555 C1556 C1557 A1558 G1559 G1560 A1566 A1567 G1568 A1569 A1570 A1571 A1572 G1573 C1577 U1578 A1579 A1580 G1581 C1582 A1583 C1585
A1586 A1587 C1588 C1589 G1593 G1594 G1595 A1596 A1597 C1598 U1602 A1603 C1604 C1607 A1608 A1609 A1610 G1613 A1614 C1615 A1616 C1617 A1618 G1619 G1620 U1621 G1622 G1623 G1624 C1625 G1635 C1636 A1637 C1638 U1639 C1640 A1641 G1642 G1643 G1647 C1648 A1652 G1653 A1654 A1655 C1656 C1657 C1658 A1664 A1665 G1666 G1667
A1668 A1669 C1670 U1671 G1674 C1675 A1676 A1677 G1678 G1682 C1683 C1686 G1687 U1688 A1689 U1693 G1696 G1697 A1698 G1699 A1700 A1701 G1702 G1703 U1709 C1710 C1711 C1712 U1716 G1717 G1718 G1725 G1726 U1727 G1728 A1729 U1730 G1731 A1732 G1733 C1734 C1735 C1741 C1742 G1743 G1746 G1753 C1754 A1755 G1756 U1757 G1758 A1759





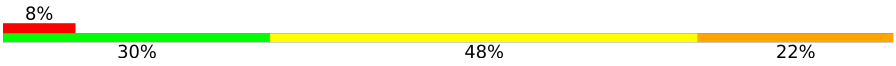
• Molecule 27: 5S ribosomal RNA

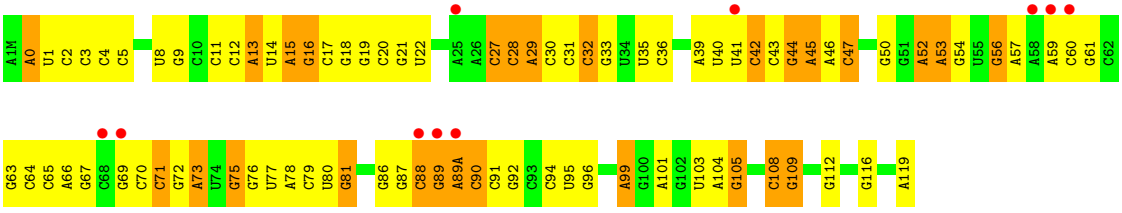
Chain 16:



• Molecule 27: 5S ribosomal RNA

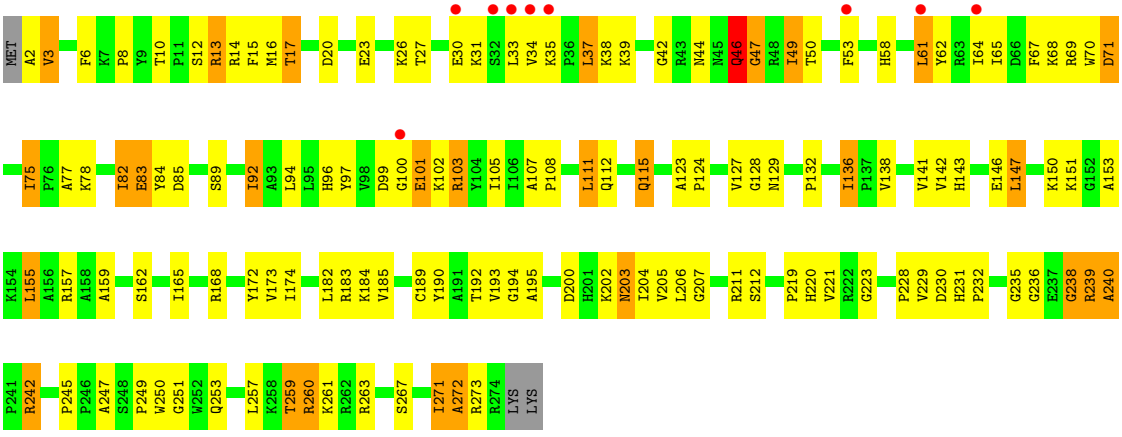
Chain 1J:





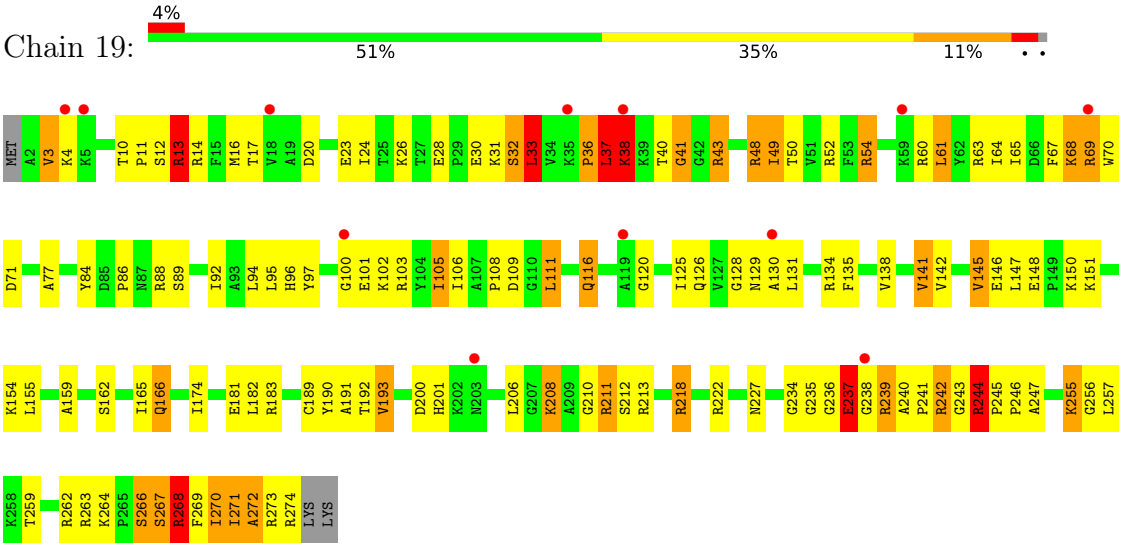
• Molecule 28: 50S ribosomal protein L2

Chain 11:



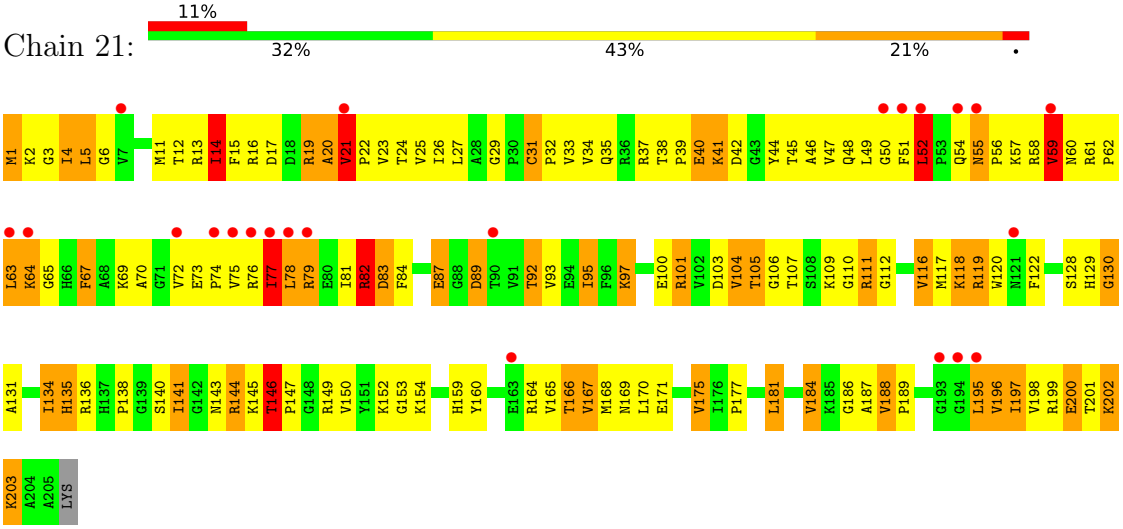
• Molecule 28: 50S ribosomal protein L2

Chain 19:



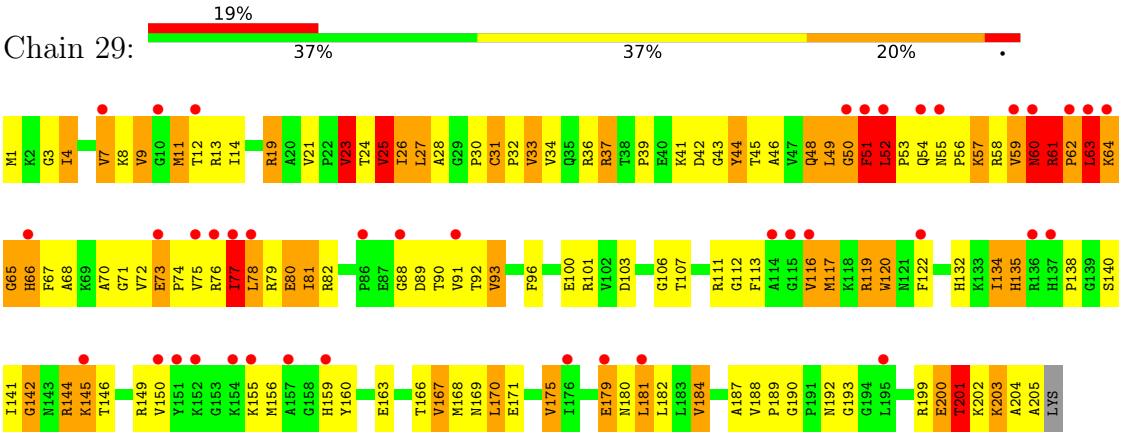
• Molecule 29: 50S ribosomal protein L3

Chain 21:

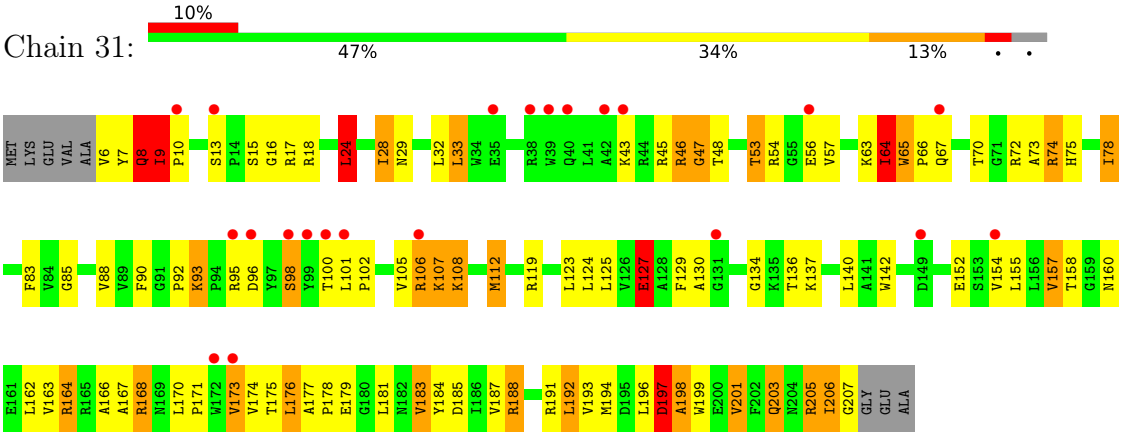


• Molecule 29: 50S ribosomal protein L3

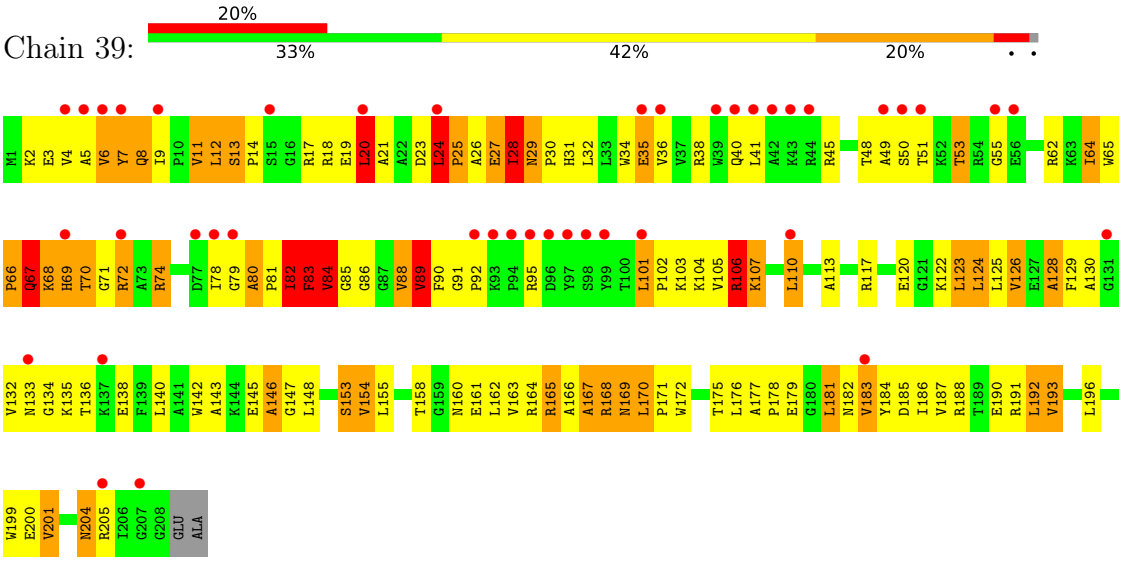
Chain 29:



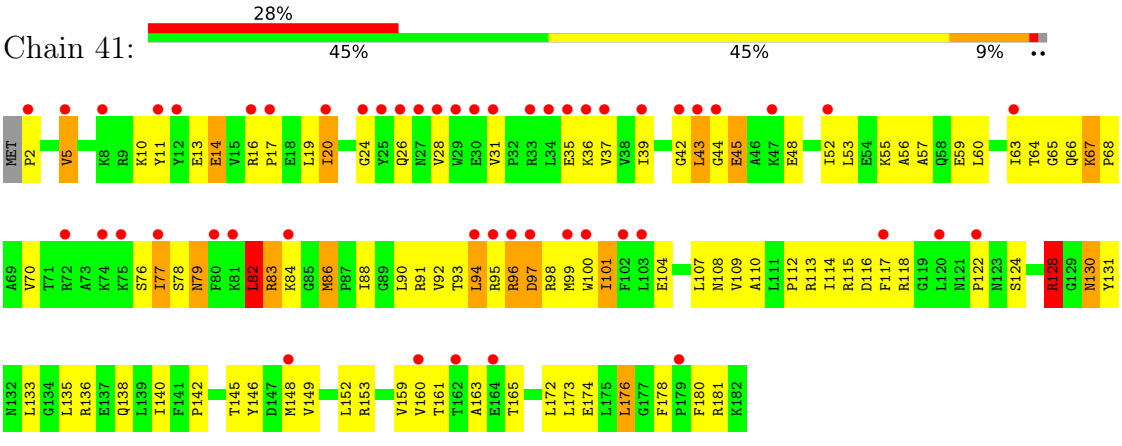
• Molecule 30: 50S ribosomal protein L4



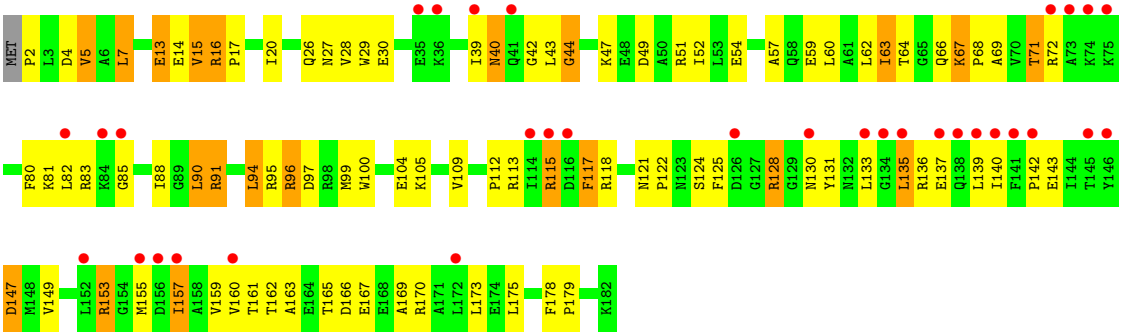
• Molecule 30: 50S ribosomal protein L4



• Molecule 31: 50S ribosomal protein L5

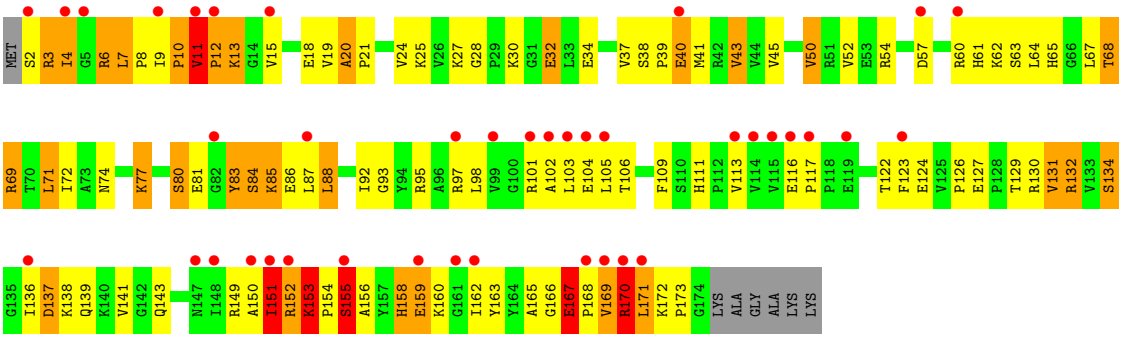


• Molecule 31: 50S ribosomal protein L5



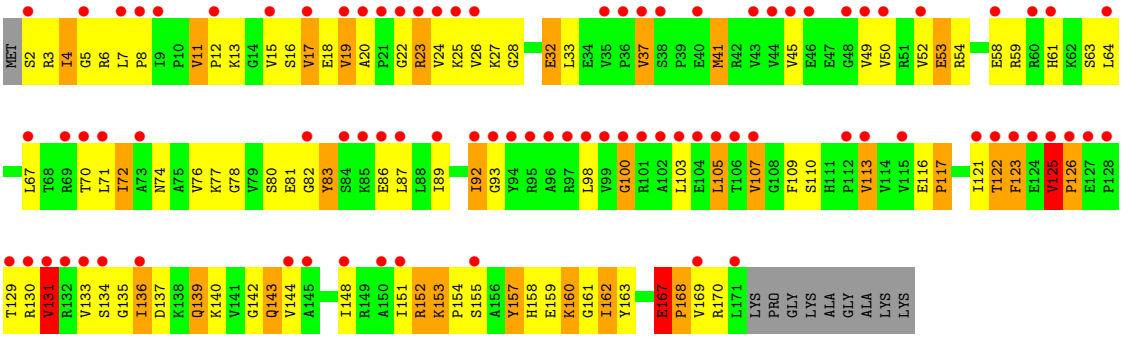
• Molecule 32: 50S ribosomal protein L6

Chain 51:



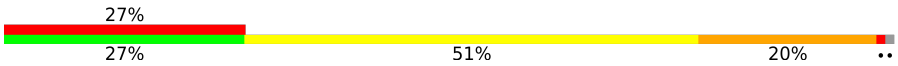
• Molecule 32: 50S ribosomal protein L6

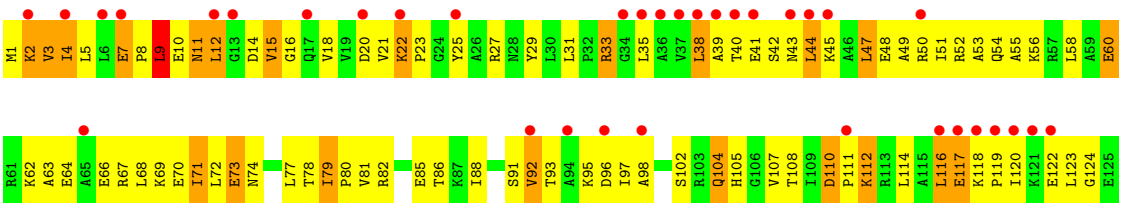
Chain 59:

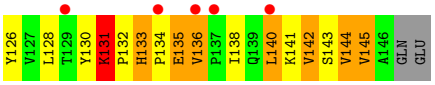


• Molecule 33: 50S ribosomal protein L9

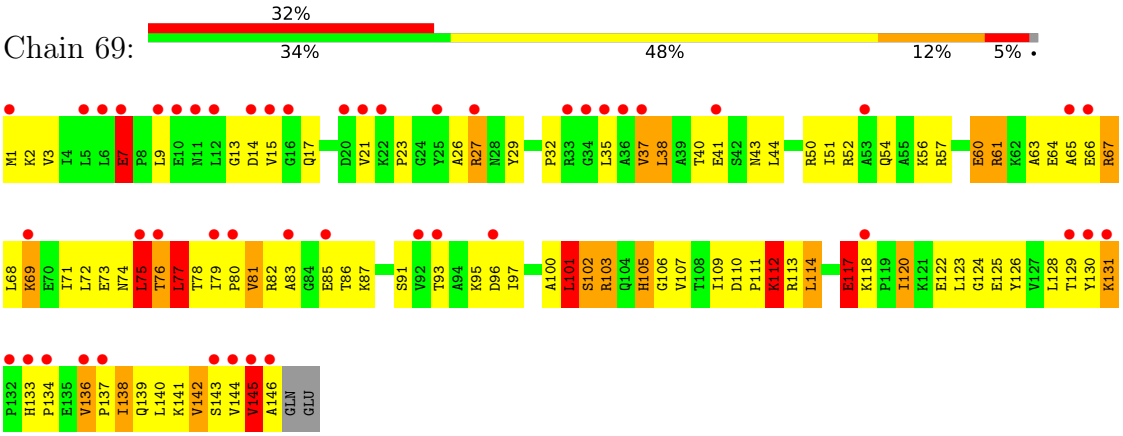
Chain 61:



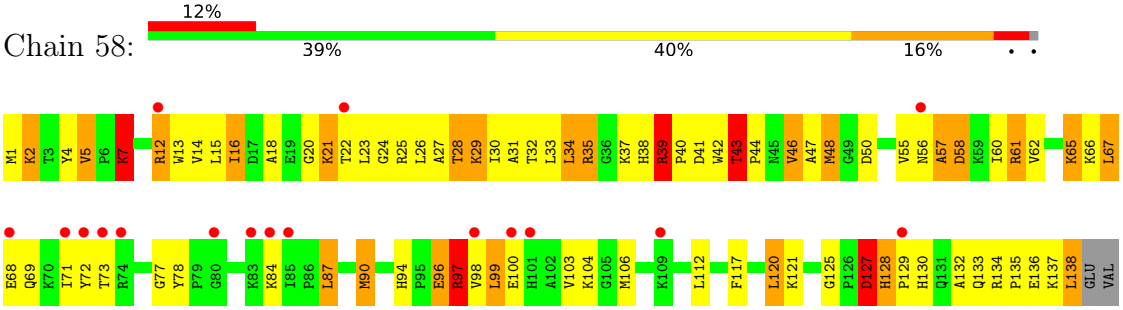




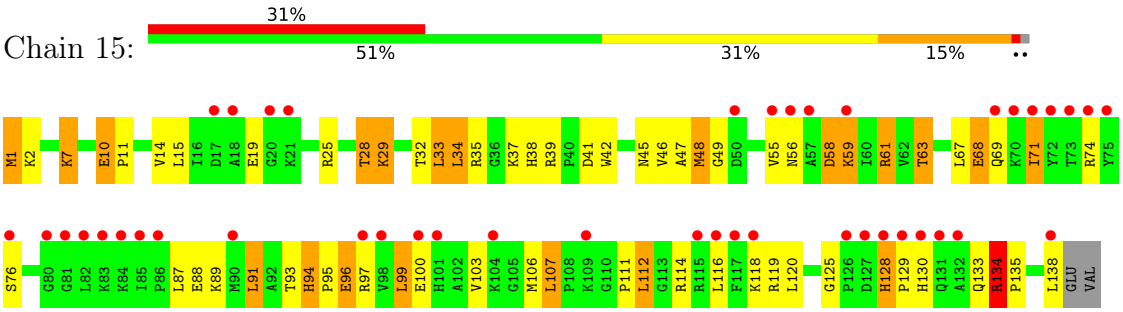
• Molecule 33: 50S ribosomal protein L9



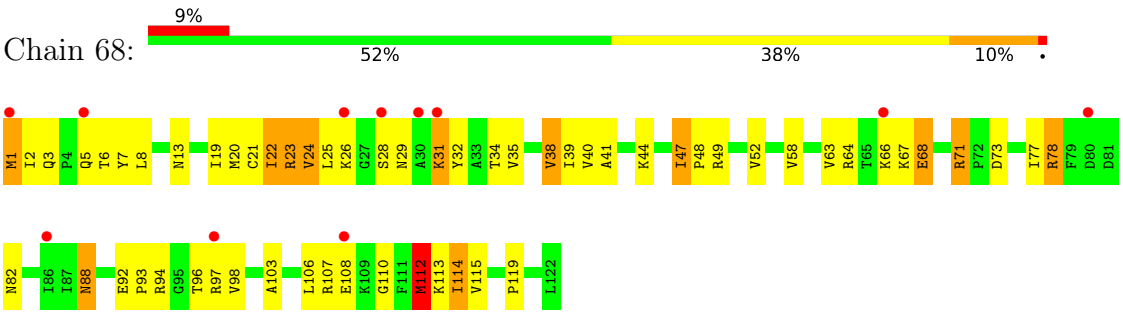
• Molecule 34: 50S ribosomal protein L13



• Molecule 34: 50S ribosomal protein L13

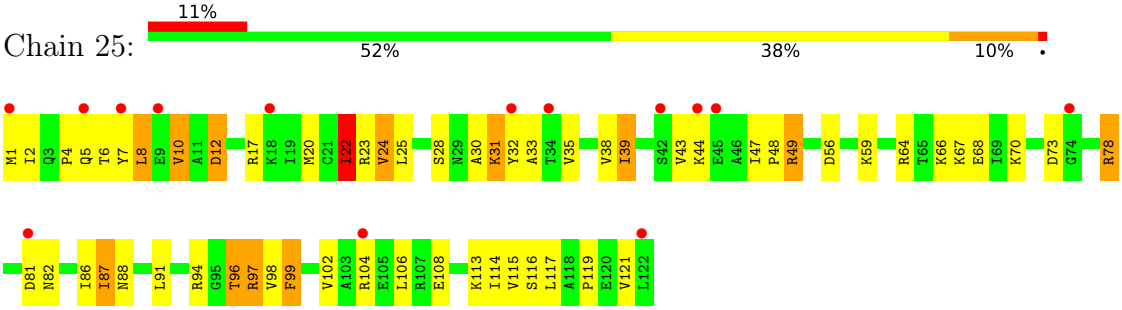


• Molecule 35: 50S ribosomal protein L14



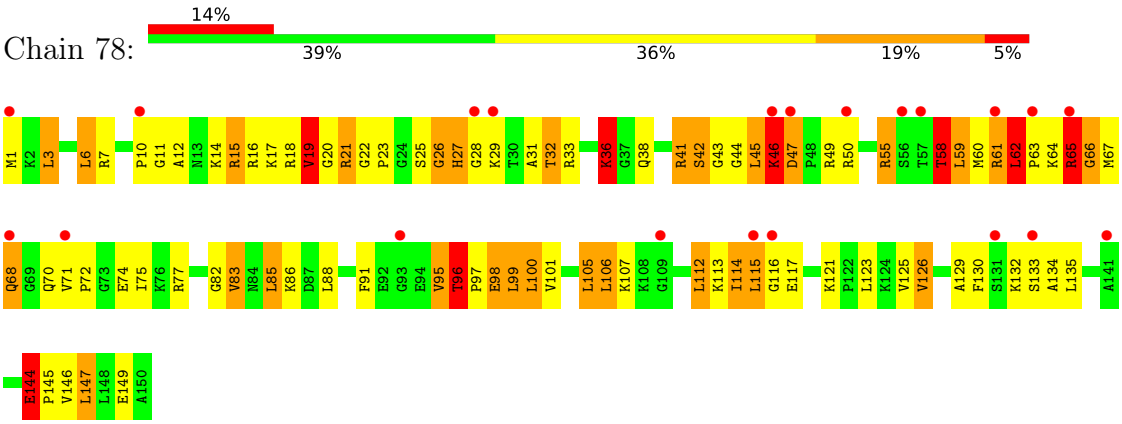
• Molecule 35: 50S ribosomal protein L14

Chain 25:



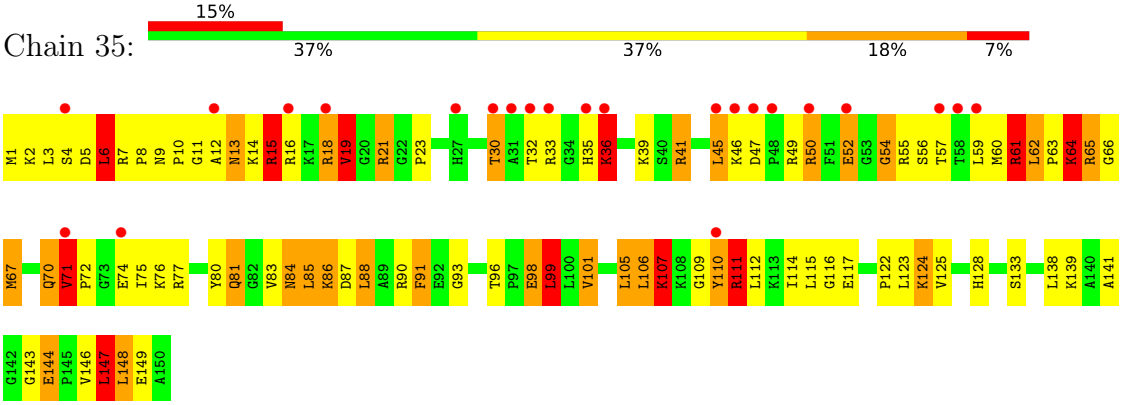
• Molecule 36: 50S ribosomal protein L15

Chain 78:



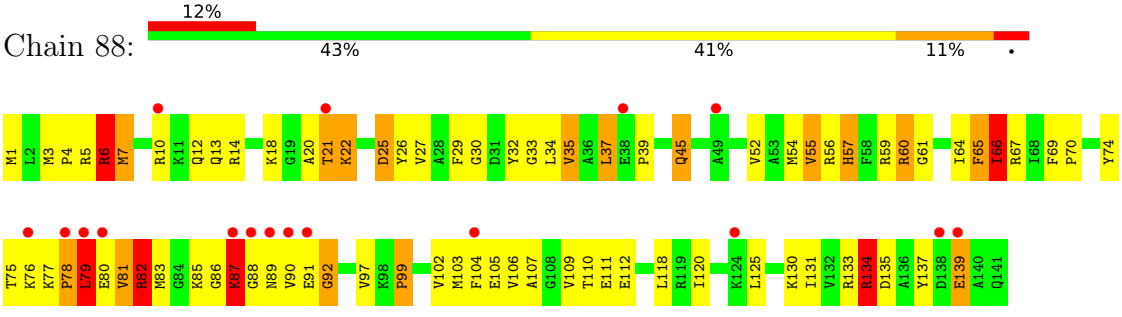
• Molecule 36: 50S ribosomal protein L15

Chain 35:



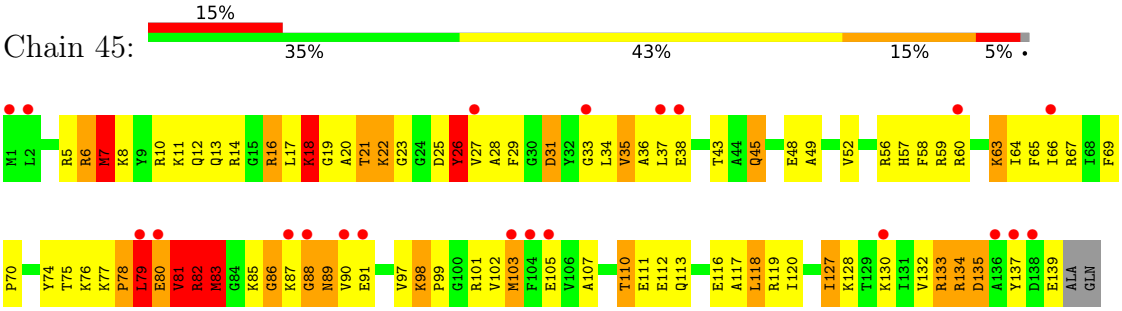
• Molecule 37: 50S ribosomal protein L16

Chain 88:



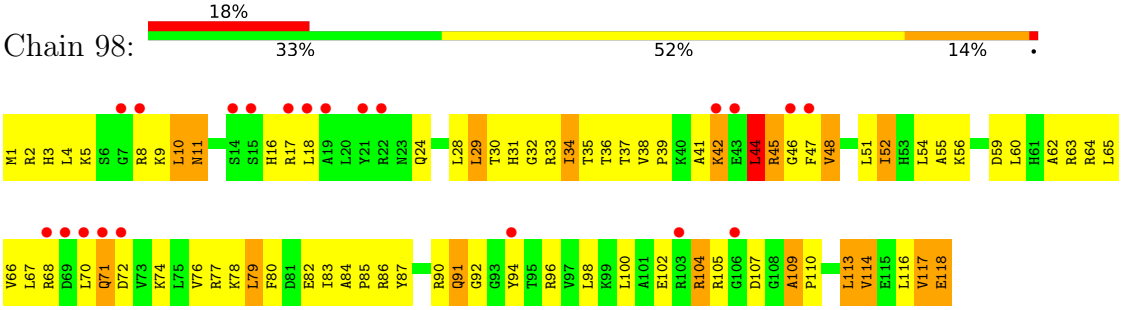
• Molecule 37: 50S ribosomal protein L16

Chain 45:



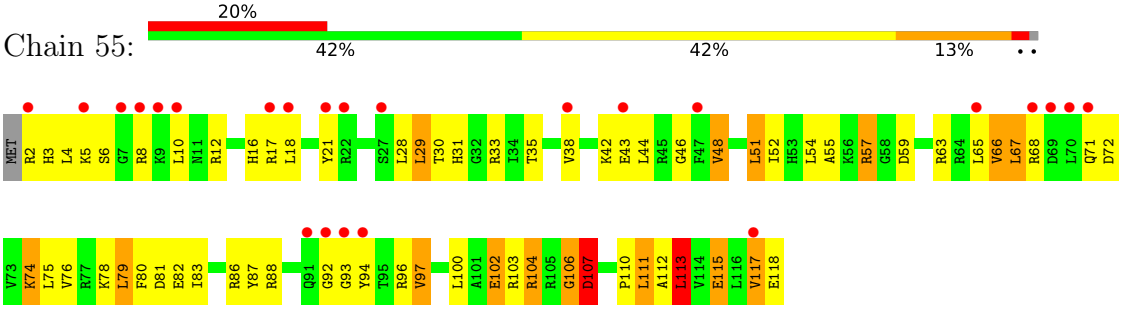
• Molecule 38: 50S ribosomal protein L17

Chain 98:



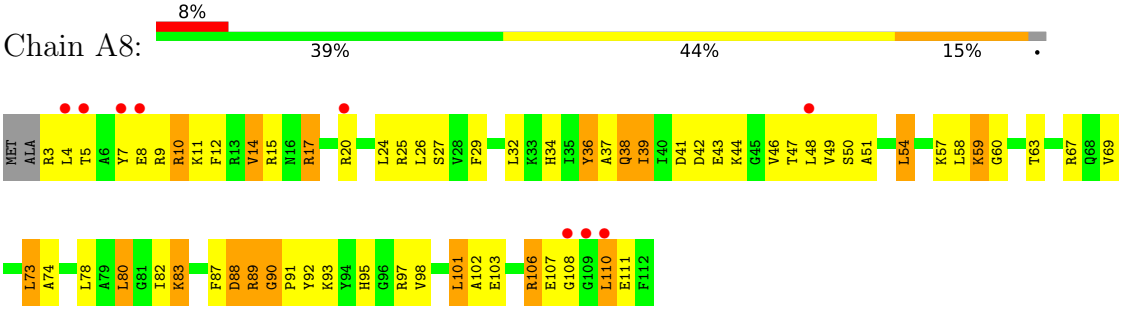
• Molecule 38: 50S ribosomal protein L17

Chain 55:



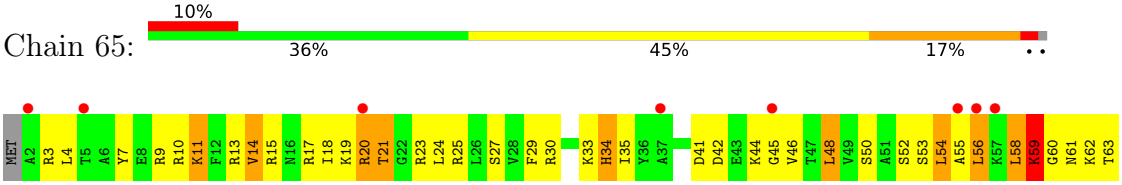
• Molecule 39: 50S ribosomal protein L18

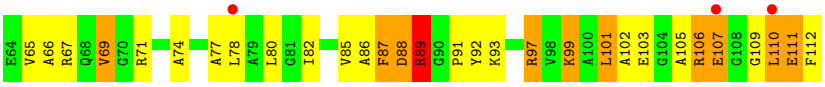
Chain A8:



• Molecule 39: 50S ribosomal protein L18

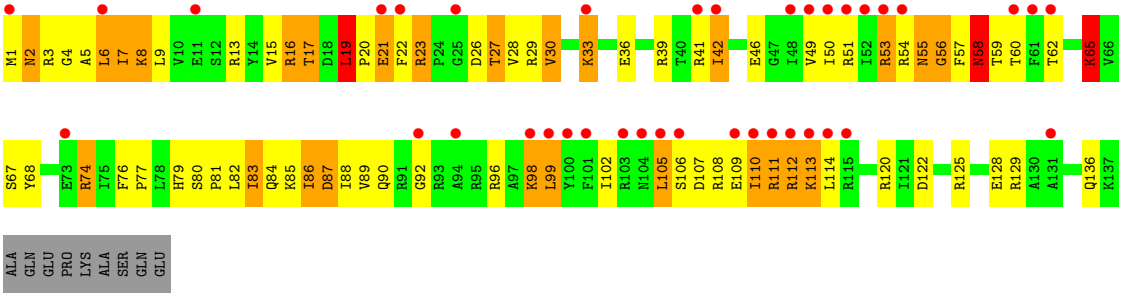
Chain 65:





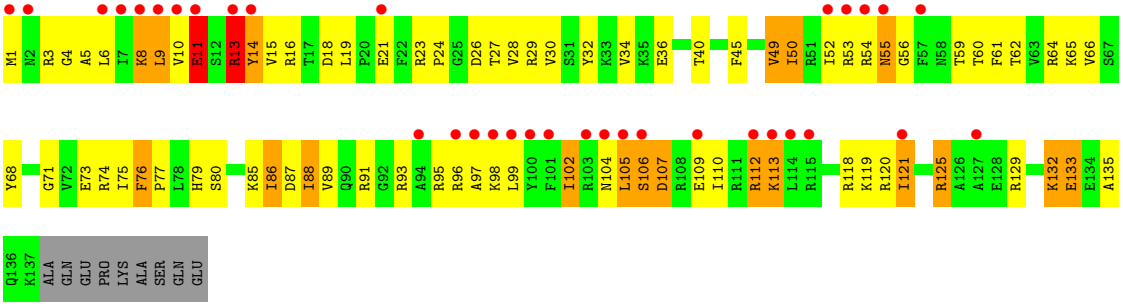
• Molecule 40: 50S ribosomal protein L19

Chain B8:



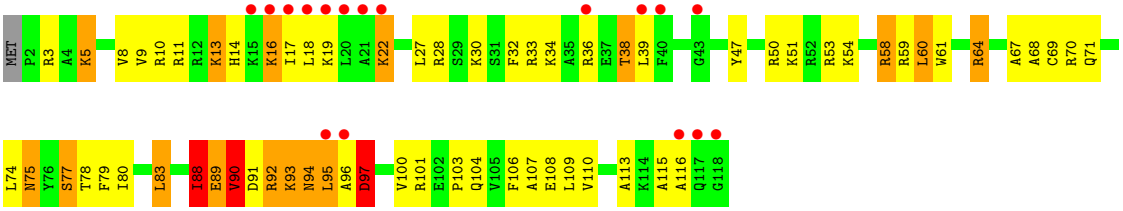
• Molecule 40: 50S ribosomal protein L19

Chain 75:



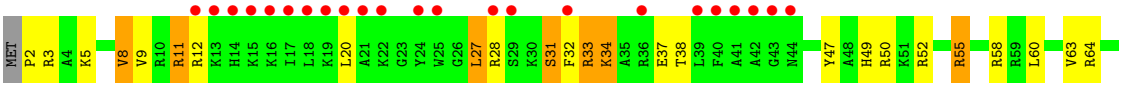
• Molecule 41: 50S ribosomal protein L20

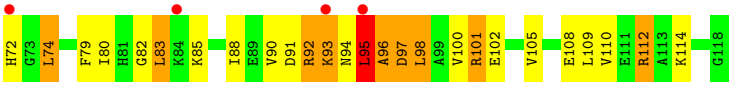
Chain C8:



• Molecule 41: 50S ribosomal protein L20

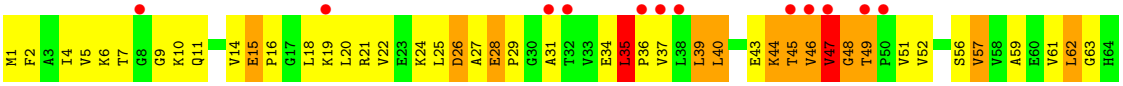
Chain 85:

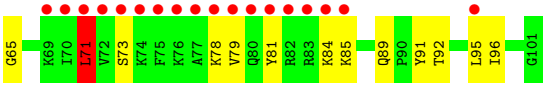




• Molecule 42: 50S ribosomal protein L21

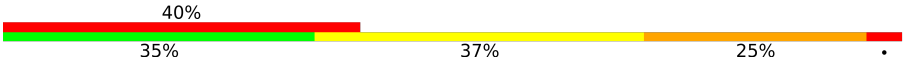
Chain D8:

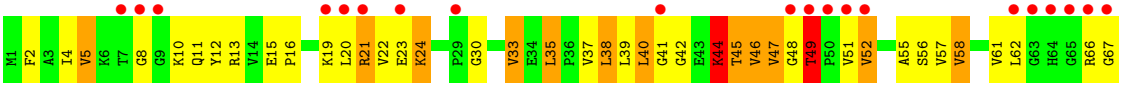


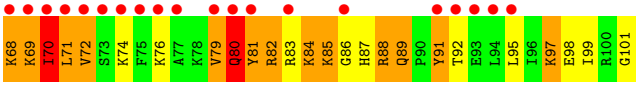


• Molecule 42: 50S ribosomal protein L21

Chain 95:

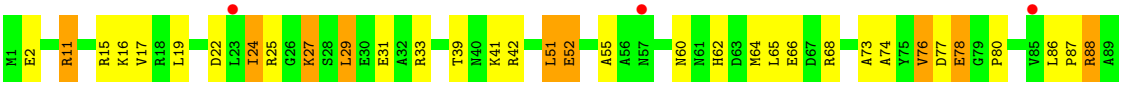


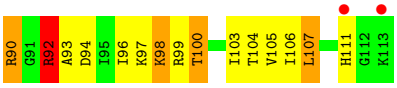




• Molecule 43: 50S ribosomal protein L22

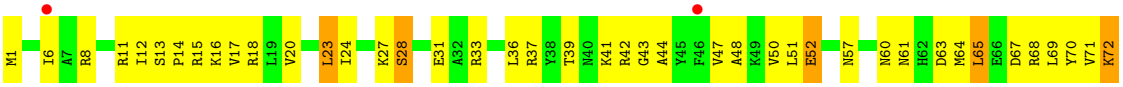
Chain E8:

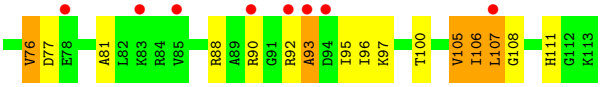




• Molecule 43: 50S ribosomal protein L22

Chain A5:





• Molecule 44: 50S ribosomal protein L23

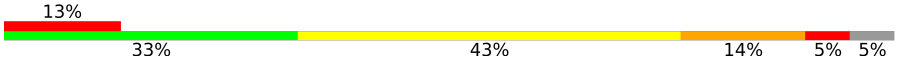
Chain F8:

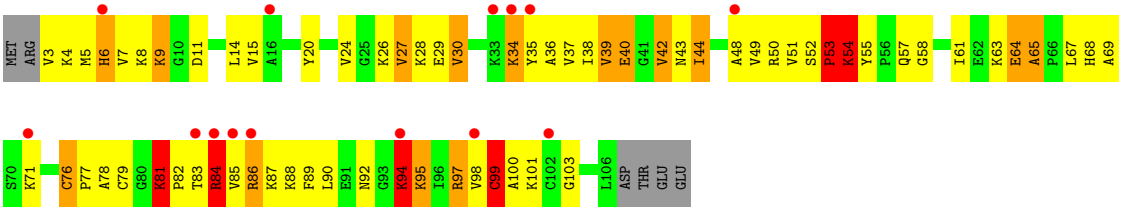
• Molecule 44: 50S ribosomal protein L23

Chain B5:

• Molecule 45: 50S ribosomal protein L24

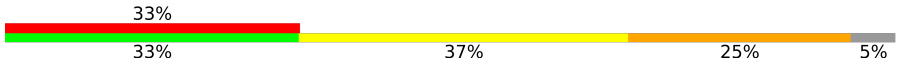
Chain G8:

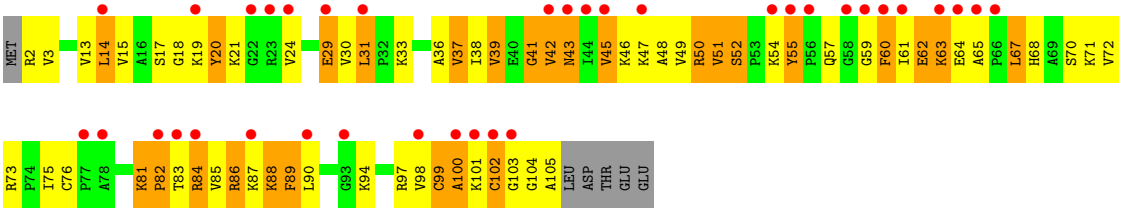




• Molecule 45: 50S ribosomal protein L24

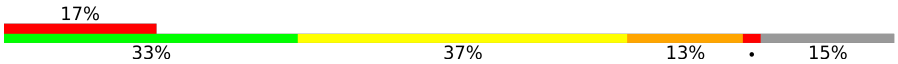
Chain C5:

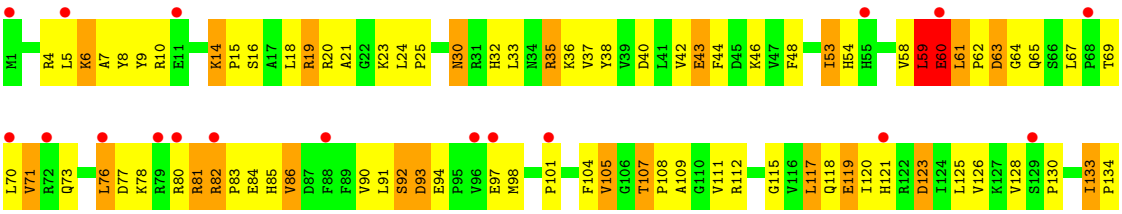


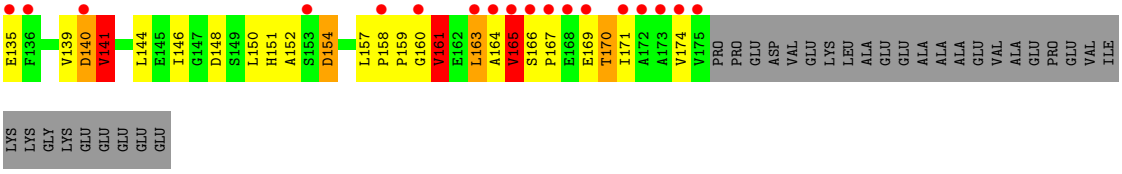


• Molecule 46: 50S ribosomal protein L25

Chain H8:

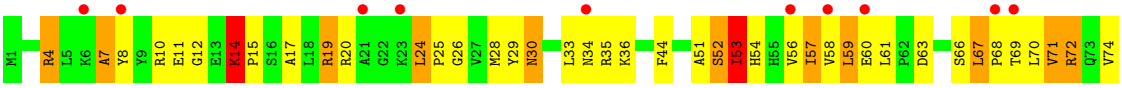


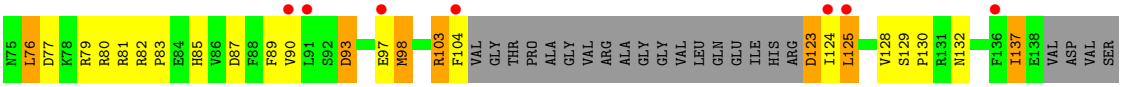


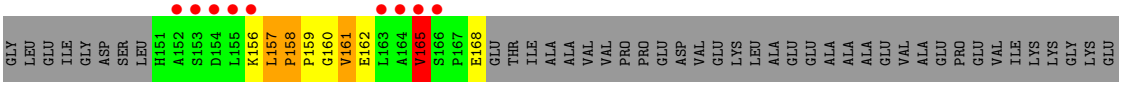


• Molecule 46: 50S ribosomal protein L25

Chain D5:

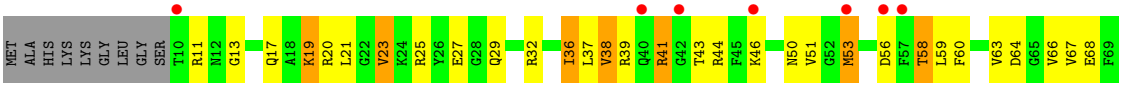






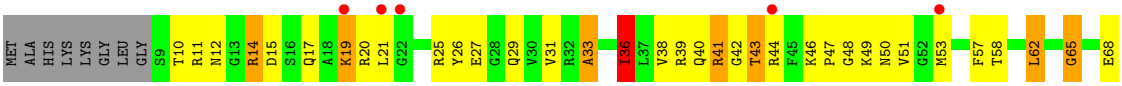
• Molecule 47: 50S ribosomal protein L27

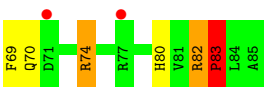
Chain I8:



• Molecule 47: 50S ribosomal protein L27

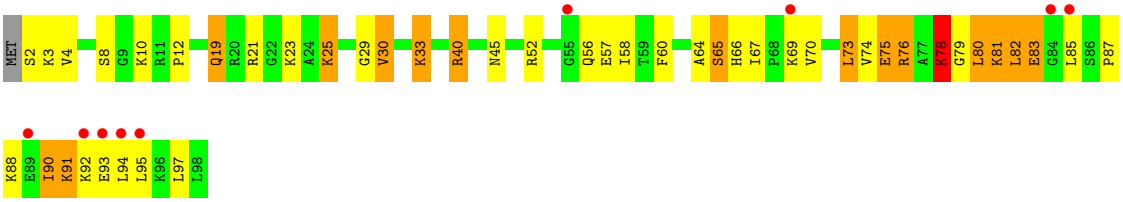
Chain E5:





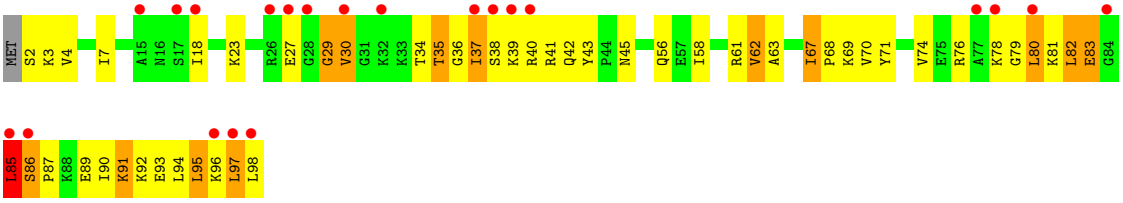
• Molecule 48: 50S ribosomal protein L28

Chain J8:



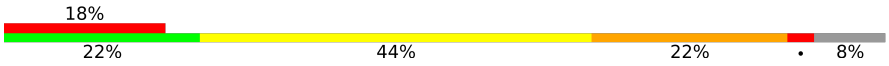
• Molecule 48: 50S ribosomal protein L28

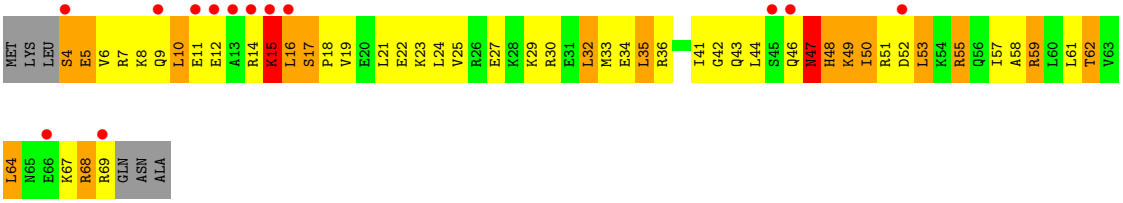
Chain F5:



• Molecule 49: 50S ribosomal protein L29

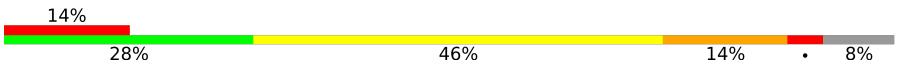
Chain K8:

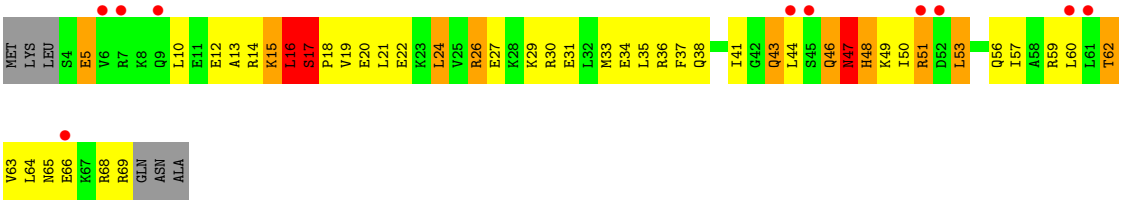




• Molecule 49: 50S ribosomal protein L29

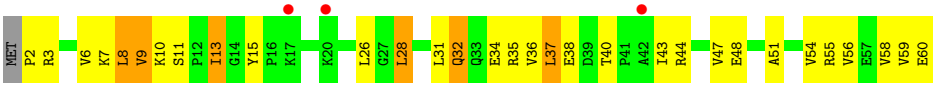
Chain G5:





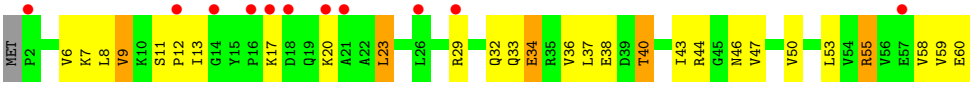
• Molecule 50: 50S ribosomal protein L30

Chain L8:



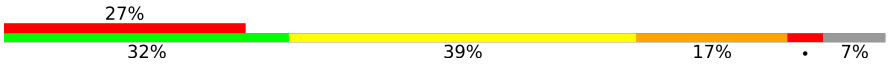
• Molecule 50: 50S ribosomal protein L30

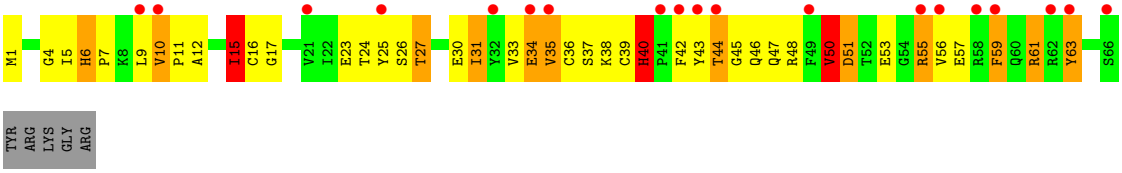
Chain H5:



• Molecule 51: 50S ribosomal protein L31

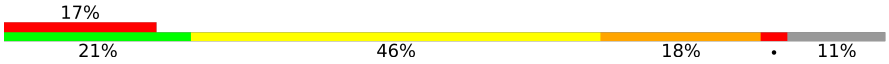
Chain M8:

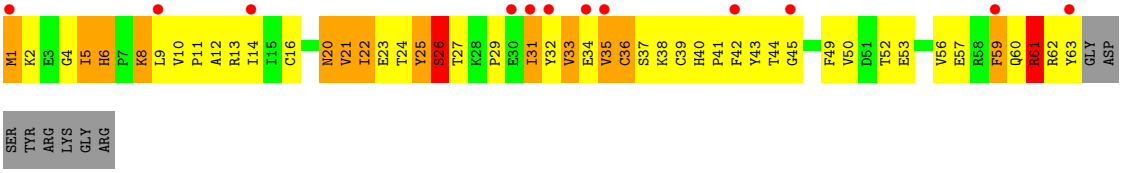




• Molecule 51: 50S ribosomal protein L31

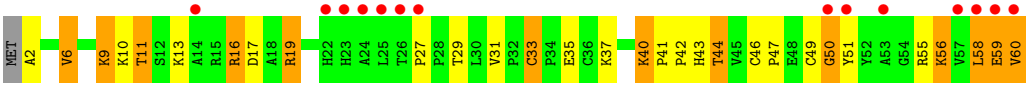
Chain I5:





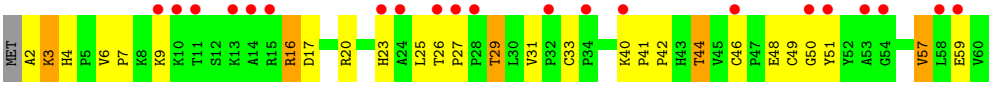
• Molecule 52: 50S ribosomal protein L32

Chain N8:



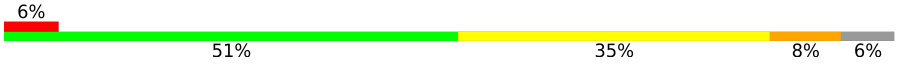
• Molecule 52: 50S ribosomal protein L32

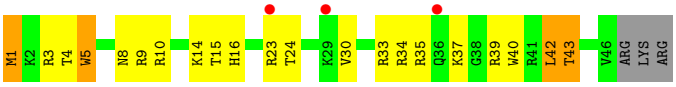
Chain J5:



• Molecule 53: 50S ribosomal protein L34

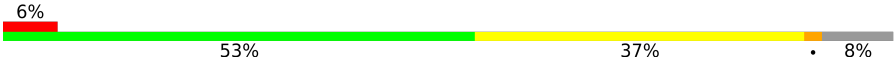
Chain P8:

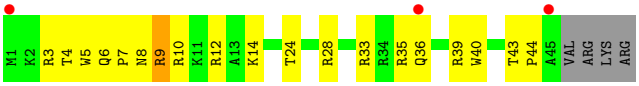




• Molecule 53: 50S ribosomal protein L34

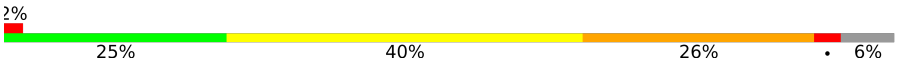
Chain L5:

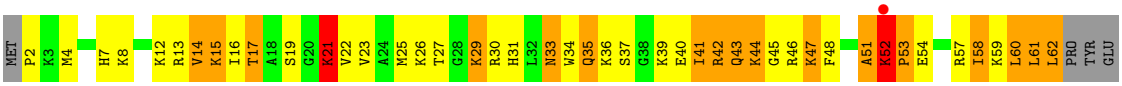




• Molecule 54: 50S ribosomal protein L35

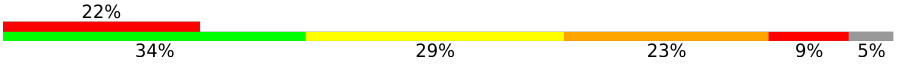
Chain Q8:

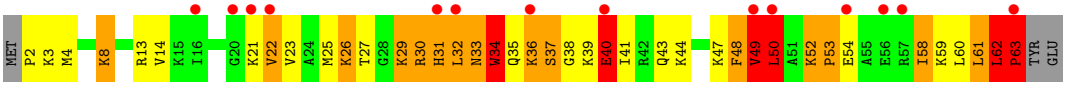




• Molecule 54: 50S ribosomal protein L35

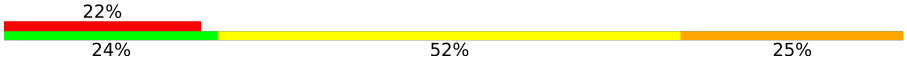
Chain M5:

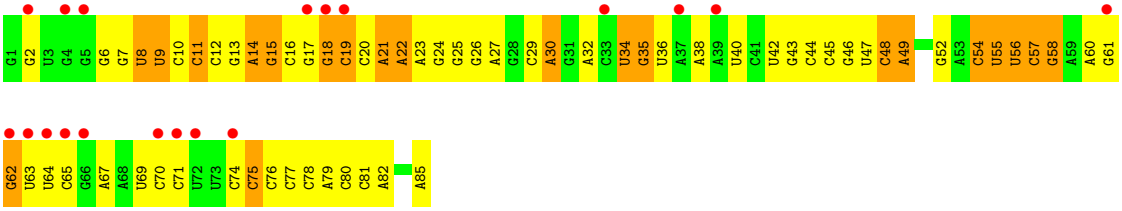




• Molecule 55: tRNA-Tyr

Chain 3L:





4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	209.90Å 450.90Å 622.70Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	225.45 – 3.05 225.45 – 3.05	Depositor EDS
% Data completeness (in resolution range)	99.9 (225.45-3.05) 92.8 (225.45-3.05)	Depositor EDS
R_{merge}	0.38	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	0.76 (at 3.07Å)	Xtriage
Refinement program	PHENIX	Depositor
R, R_{free}	0.195 , 0.249 (Not available) , 0.239	Depositor DCC
R_{free} test set	1999 reflections (0.18%)	wwPDB-VP
Wilson B-factor (Å^2)	77.5	Xtriage
Anisotropy	0.277	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.35 , 179.9	EDS
L-test for twinning[2]	$< \|L\| > = 0.43$, $< L^2 > = 0.26$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.89	EDS
Total number of atoms	299607	wwPDB-VP
Average B, all atoms (Å^2)	101.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.46% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

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

5 Model quality

5.1 Standard geometry

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

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	13	0.42	0/36215	0.67	12/56524 (0.0%)
1	1G	0.37	0/36187	0.61	9/56481 (0.0%)
2	12	0.50	0/1959	1.09	20/2642 (0.8%)
2	1E	0.57	1/1959 (0.1%)	1.08	10/2642 (0.4%)
3	22	0.55	0/1636	1.01	4/2205 (0.2%)
3	2E	0.65	0/1629	1.05	0/2195
4	32	0.62	1/1732 (0.1%)	1.20	18/2318 (0.8%)
4	3E	0.71	0/1732	1.13	8/2318 (0.3%)
5	42	0.61	0/1171	1.04	5/1576 (0.3%)
5	4E	0.69	0/1171	1.10	6/1576 (0.4%)
6	52	0.65	0/855	0.98	3/1154 (0.3%)
6	5E	0.66	0/855	0.98	1/1154 (0.1%)
7	62	0.58	0/1275	1.02	3/1709 (0.2%)
7	6E	0.57	0/1261	1.00	9/1689 (0.5%)
8	72	0.56	0/1127	1.13	3/1517 (0.2%)
8	7E	0.63	0/1135	1.15	9/1527 (0.6%)
9	82	0.53	0/988	1.04	5/1324 (0.4%)
9	8E	0.56	0/1028	1.07	10/1379 (0.7%)
10	1A	0.50	0/814	1.07	5/1095 (0.5%)
10	1I	0.67	0/814	1.04	0/1095
11	2A	0.58	0/888	1.10	3/1198 (0.3%)
11	2I	0.67	0/879	1.17	4/1187 (0.3%)
12	3A	0.74	0/991	1.15	4/1327 (0.3%)
12	3I	0.95	1/972 (0.1%)	1.38	9/1301 (0.7%)
13	4A	0.52	0/943	1.03	6/1265 (0.5%)
13	4I	0.61	0/938	1.05	1/1258 (0.1%)
14	5A	0.57	0/484	0.98	0/643
14	5I	0.77	0/489	1.21	3/650 (0.5%)
15	6A	0.60	0/744	0.99	1/992 (0.1%)
15	6I	0.70	0/744	1.10	5/992 (0.5%)
16	7A	0.76	2/721 (0.3%)	1.14	3/970 (0.3%)
16	7I	0.63	0/721	1.09	5/970 (0.5%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
17	8A	0.63	1/847 (0.1%)	1.04	5/1131 (0.4%)
17	8I	0.65	0/847	1.13	3/1131 (0.3%)
18	9A	0.60	0/586	1.03	1/779 (0.1%)
18	9I	0.62	0/595	1.12	2/790 (0.3%)
19	AA	0.60	0/638	1.14	6/860 (0.7%)
19	AI	0.72	0/680	1.22	5/915 (0.5%)
20	BA	0.64	0/764	1.13	4/1007 (0.4%)
20	BI	0.56	0/764	0.99	1/1007 (0.1%)
21	1B	0.65	0/221	1.05	0/288
21	1F	0.57	0/221	0.99	1/288 (0.3%)
22	1K	0.27	0/1899	0.53	0/2952
23	2K	0.45	1/1747 (0.1%)	0.65	0/2723
23	2L	0.39	1/1747 (0.1%)	0.61	0/2723
24	1L	0.26	0/1996	0.48	0/3108
24	3K	0.24	0/1996	0.46	0/3108
25	4K	0.43	0/319	0.59	0/495
25	4L	0.45	0/294	0.73	1/456 (0.2%)
26	14	0.48	0/70167	0.73	20/109541 (0.0%)
26	1H	0.55	0/70233	0.80	34/109643 (0.0%)
27	16	0.45	0/2928	0.75	0/4568
27	1J	0.40	0/2928	0.67	0/4568
28	11	0.95	2/2170 (0.1%)	1.38	19/2926 (0.6%)
28	19	0.92	2/2170 (0.1%)	1.40	21/2926 (0.7%)
29	21	0.88	1/1601 (0.1%)	1.50	29/2160 (1.3%)
29	29	0.87	1/1601 (0.1%)	1.48	29/2160 (1.3%)
30	31	0.89	0/1620	1.29	19/2194 (0.9%)
30	39	0.78	1/1662 (0.1%)	1.40	22/2249 (1.0%)
31	41	0.65	0/1498	1.13	5/2016 (0.2%)
31	49	0.55	0/1498	1.12	6/2016 (0.3%)
32	51	0.83	0/1346	1.47	21/1821 (1.2%)
32	59	0.58	0/1332	1.26	21/1802 (1.2%)
33	61	0.69	0/1151	1.26	11/1558 (0.7%)
33	69	0.66	1/1151 (0.1%)	1.21	14/1558 (0.9%)
34	15	0.65	0/1131	1.17	8/1525 (0.5%)
34	58	0.76	0/1131	1.22	12/1525 (0.8%)
35	25	0.77	0/942	1.17	2/1269 (0.2%)
35	68	0.84	0/942	1.21	6/1269 (0.5%)
36	35	0.90	2/1161 (0.2%)	1.57	20/1544 (1.3%)
36	78	0.95	1/1161 (0.1%)	1.54	21/1544 (1.4%)
37	45	0.89	2/1128 (0.2%)	1.37	13/1508 (0.9%)
37	88	1.05	5/1142 (0.4%)	1.63	25/1527 (1.6%)
38	55	0.82	0/973	1.18	4/1302 (0.3%)
38	98	0.76	0/981	1.14	3/1312 (0.2%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
39	65	0.67	0/891	1.22	3/1187 (0.3%)
39	A8	0.76	0/886	1.21	6/1180 (0.5%)
40	75	0.74	0/1155	1.14	7/1542 (0.5%)
40	B8	0.78	0/1155	1.24	10/1542 (0.6%)
41	85	0.72	0/981	1.12	3/1306 (0.2%)
41	C8	0.87	1/981 (0.1%)	1.21	8/1306 (0.6%)
42	95	0.87	2/789 (0.3%)	1.34	6/1057 (0.6%)
42	D8	0.75	0/789	1.28	9/1057 (0.9%)
43	A5	0.92	0/910	1.20	2/1220 (0.2%)
43	E8	0.83	0/910	1.13	1/1220 (0.1%)
44	B5	0.95	0/739	1.23	4/993 (0.4%)
44	F8	0.87	0/744	1.19	1/1000 (0.1%)
45	C5	0.80	0/807	1.35	7/1076 (0.7%)
45	G8	0.87	0/804	1.36	11/1073 (1.0%)
46	D5	0.59	0/1165	1.27	12/1574 (0.8%)
46	H8	0.65	0/1427	1.20	10/1935 (0.5%)
47	E5	0.78	0/620	1.34	6/827 (0.7%)
47	I8	0.83	0/614	1.30	3/819 (0.4%)
48	F5	0.81	0/769	1.35	8/1022 (0.8%)
48	J8	0.88	0/769	1.22	5/1022 (0.5%)
49	G5	0.67	0/560	1.22	4/741 (0.5%)
49	K8	0.87	0/560	1.31	7/741 (0.9%)
50	H5	0.59	0/473	1.30	4/635 (0.6%)
50	L8	0.73	0/473	1.29	3/635 (0.5%)
51	I5	0.77	0/527	1.29	4/709 (0.6%)
51	M8	0.67	0/545	1.18	4/733 (0.5%)
52	J5	0.82	0/472	1.25	4/639 (0.6%)
52	N8	0.83	0/472	1.33	8/639 (1.3%)
53	L5	0.90	0/399	1.31	2/526 (0.4%)
53	P8	1.10	1/404 (0.2%)	1.25	3/533 (0.6%)
54	M5	1.19	4/502 (0.8%)	1.64	10/661 (1.5%)
54	Q8	1.06	1/494 (0.2%)	1.59	9/649 (1.4%)
55	3L	0.23	0/1970	0.45	0/3065
All	All	0.56	35/322722 (0.0%)	0.87	782/483529 (0.2%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand.A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
1	13	1	0

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
2	12	0	1
2	1E	0	3
4	32	0	2
4	3E	0	1
9	82	0	1
10	1A	0	1
11	2A	0	1
12	3I	0	2
13	4A	0	1
13	4I	0	2
14	5A	0	2
19	AA	0	1
19	AI	0	1
20	BA	0	2
26	14	1	0
28	11	0	1
28	19	0	4
29	21	0	5
29	29	0	4
30	39	0	6
31	41	0	1
31	49	0	2
32	51	0	3
32	59	0	1
33	61	0	4
33	69	0	2
34	58	0	1
36	35	0	4
36	78	0	7
37	45	0	8
37	88	0	2
38	55	0	1
38	98	0	1
39	A8	0	1
40	75	0	2
40	B8	0	2
41	85	0	4
41	C8	0	4
42	95	0	1
42	D8	0	2
43	A5	0	1
44	B5	0	1

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
45	C5	0	2
45	G8	0	3
46	D5	0	1
46	H8	0	3
47	E5	0	1
47	I8	0	1
48	F5	0	1
48	J8	0	2
49	G5	0	3
49	K8	0	3
51	I5	0	2
51	M8	0	1
52	N8	0	1
54	M5	0	5
54	Q8	0	3
All	All	2	128

All (35) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	M5	62	LEU	CA-C	8.05	1.58	1.53
36	78	19	VAL	CA-CB	7.75	1.65	1.54
29	29	135	HIS	CA-C	-7.73	1.45	1.52
2	1E	8	LYS	CA-C	7.65	1.56	1.52
53	P8	5	TRP	NE1-CE2	-7.49	1.29	1.37
42	95	72	VAL	CA-CB	7.32	1.64	1.54
29	21	21	VAL	CA-CB	6.88	1.63	1.54
37	88	82	ARG	CA-C	6.86	1.60	1.53
37	88	79	LEU	CA-C	6.54	1.61	1.52
37	45	82	ARG	CA-C	6.52	1.61	1.52
37	88	79	LEU	N-CA	6.48	1.54	1.46
54	M5	49	VAL	N-CA	6.38	1.54	1.46
36	35	61	ARG	CA-C	6.29	1.60	1.52
54	M5	48	PHE	CA-C	6.11	1.60	1.52
28	19	272	ALA	CA-C	6.11	1.60	1.52
30	39	84	VAL	CA-CB	6.08	1.62	1.54
42	95	80	GLN	CA-C	6.07	1.60	1.52
37	88	82	ARG	N-CA	5.90	1.54	1.47
37	45	82	ARG	N-CA	5.83	1.54	1.45
28	11	174	ILE	CA-CB	-5.77	1.47	1.54
12	3I	64	TYR	CA-C	5.74	1.56	1.52
41	C8	9	VAL	CA-CB	-5.50	1.48	1.54

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	2K	8	4SU	O3'-P	5.49	1.61	1.56
54	M5	62	LEU	CA-CB	5.47	1.57	1.52
17	8A	100	LYS	CA-C	5.45	1.57	1.52
16	7A	16	HIS	ND1-CE1	5.36	1.38	1.32
28	19	236	GLY	C-O	5.33	1.29	1.23
37	88	81	VAL	CA-C	5.31	1.59	1.52
16	7A	16	HIS	CE1-NE2	-5.30	1.27	1.32
4	32	24	GLU	CA-C	-5.21	1.49	1.52
28	11	271	ILE	CA-C	5.15	1.59	1.52
36	35	62	LEU	CA-C	5.15	1.59	1.52
54	Q8	17	THR	CA-CB	-5.09	1.45	1.53
33	69	145	VAL	CA-CB	5.04	1.61	1.54
23	2L	8	4SU	O3'-P	5.01	1.61	1.56

All (782) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	88	92	GLY	N-CA-C	16.13	132.21	110.43
8	72	73	ASP	CA-C-N	15.61	135.41	119.64
8	72	73	ASP	C-N-CA	15.61	135.41	119.64
28	19	235	GLY	N-CA-C	15.31	126.49	111.95
28	19	272	ALA	N-CA-C	14.94	131.79	107.73
50	H5	11	SER	CA-C-N	14.26	134.70	119.87
50	H5	11	SER	C-N-CA	14.26	134.70	119.87
28	11	271	ILE	N-CA-C	13.53	125.02	112.17
11	2I	102	GLY	N-CA-C	-12.84	92.03	111.42
32	59	153	LYS	CA-C-N	-12.69	103.97	119.84
32	59	153	LYS	C-N-CA	-12.69	103.97	119.84
37	45	82	ARG	N-CA-C	12.69	133.94	113.89
37	88	21	THR	N-CA-C	12.39	124.33	107.73
42	95	49	THR	CA-C-N	-12.36	104.39	119.84
42	95	49	THR	C-N-CA	-12.36	104.39	119.84
42	D8	49	THR	CA-C-N	-12.32	106.16	118.97
42	D8	49	THR	C-N-CA	-12.32	106.16	118.97
45	C5	39	VAL	N-CA-C	12.13	123.69	112.17
29	21	52	LEU	CA-C-N	12.04	131.62	119.82
29	21	52	LEU	C-N-CA	12.04	131.62	119.82
36	35	62	LEU	N-CA-C	12.00	136.33	109.81
37	88	82	ARG	N-CA-C	11.80	127.92	107.28
32	51	11	VAL	CA-C-N	11.61	134.35	119.84
32	51	11	VAL	C-N-CA	11.61	134.35	119.84
36	35	65	ARG	N-CA-C	-11.34	91.89	109.25

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	39	24	LEU	CA-C-N	-11.05	106.03	119.84
30	39	24	LEU	C-N-CA	-11.05	106.03	119.84
37	88	87	LYS	N-CA-C	-10.72	100.40	113.15
29	21	65	GLY	N-CA-C	-10.65	98.10	115.46
48	F5	29	GLY	N-CA-C	10.56	125.56	110.46
30	39	68	LYS	CA-C-N	-10.46	107.23	123.12
30	39	68	LYS	C-N-CA	-10.46	107.23	123.12
30	39	80	ALA	CA-C-N	-10.37	106.88	119.84
30	39	80	ALA	C-N-CA	-10.37	106.88	119.84
51	I5	61	ARG	N-CA-C	-10.36	100.64	113.38
29	29	73	GLU	CA-C-N	10.32	130.42	119.89
29	29	73	GLU	C-N-CA	10.32	130.42	119.89
50	L8	11	SER	CA-C-N	10.10	130.37	119.87
50	L8	11	SER	C-N-CA	10.10	130.37	119.87
28	11	272	ALA	N-CA-C	10.01	121.10	108.19
54	M5	34	TRP	N-CA-C	9.93	125.18	108.20
46	D5	67	LEU	CA-C-N	9.89	132.21	119.84
46	D5	67	LEU	C-N-CA	9.89	132.21	119.84
4	32	12	CYS	N-CA-C	-9.71	100.69	111.28
36	78	17	LYS	N-CA-C	9.58	121.80	111.36
47	E5	82	ARG	CA-C-N	9.54	129.64	119.05
47	E5	82	ARG	C-N-CA	9.54	129.64	119.05
41	85	9	VAL	N-CA-C	9.45	120.05	110.23
32	51	20	ALA	N-CA-C	-9.36	99.71	108.13
12	3I	44	THR	CA-C-N	9.34	129.46	120.31
12	3I	44	THR	C-N-CA	9.34	129.46	120.31
52	J5	46	CYS	CA-C-N	9.32	129.56	119.87
52	J5	46	CYS	C-N-CA	9.32	129.56	119.87
32	51	167	GLU	CA-C-N	9.28	131.44	119.84
32	51	167	GLU	C-N-CA	9.28	131.44	119.84
16	7A	40	ASP	CA-C-N	9.16	128.79	119.82
16	7A	40	ASP	C-N-CA	9.16	128.79	119.82
36	35	71	VAL	CA-C-N	-9.15	110.31	119.56
36	35	71	VAL	C-N-CA	-9.15	110.31	119.56
29	21	31	CYS	CA-C-N	9.12	131.24	119.84
29	21	31	CYS	C-N-CA	9.12	131.24	119.84
32	59	167	GLU	CA-C-N	9.10	131.22	119.84
32	59	167	GLU	C-N-CA	9.10	131.22	119.84
49	G5	44	LEU	N-CA-C	-9.07	102.22	113.38
36	78	71	VAL	CA-C-N	-9.05	110.45	119.87
36	78	71	VAL	C-N-CA	-9.05	110.45	119.87
2	1E	16	HIS	N-CA-C	9.03	124.03	112.92

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	1A	90	LEU	CA-C-N	-8.96	111.18	120.85
10	1A	90	LEU	C-N-CA	-8.96	111.18	120.85
4	3E	198	VAL	N-CA-C	8.95	121.03	109.30
33	61	136	VAL	CA-C-N	8.95	129.62	120.14
33	61	136	VAL	C-N-CA	8.95	129.62	120.14
33	69	120	ILE	N-CA-C	8.92	118.85	110.74
26	14	1992	G	C2'-C3'-O3'	8.70	122.55	109.50
26	14	945	A	N9-C1'-C2'	8.68	125.02	112.00
53	L5	6	GLN	CA-C-N	8.67	129.20	119.93
53	L5	6	GLN	C-N-CA	8.67	129.20	119.93
26	1H	271(B)	G	P-O3'-C3'	8.63	130.06	119.70
29	29	80	GLU	N-CA-C	8.62	124.03	113.17
29	29	67	PHE	N-CA-C	-8.60	102.04	112.54
30	39	29	ASN	CA-C-N	8.57	128.19	118.85
30	39	29	ASN	C-N-CA	8.57	128.19	118.85
28	11	235	GLY	N-CA-C	8.54	122.68	110.46
7	6E	57	GLU	CA-C-N	8.50	129.33	119.47
7	6E	57	GLU	C-N-CA	8.50	129.33	119.47
46	D5	82	ARG	CA-C-N	8.50	128.82	119.90
46	D5	82	ARG	C-N-CA	8.50	128.82	119.90
37	88	22	LYS	N-CA-C	8.41	120.75	110.91
46	D5	52	SER	N-CA-C	8.29	120.61	110.91
40	B8	4	GLY	N-CA-C	-8.29	102.61	112.64
29	29	63	LEU	N-CA-C	-8.29	103.65	112.93
31	49	44	GLY	N-CA-C	-8.22	104.46	114.66
19	AA	8	GLY	N-CA-C	-8.12	104.56	115.36
10	1A	52	GLY	CA-C-N	8.10	128.04	119.05
10	1A	52	GLY	C-N-CA	8.10	128.04	119.05
29	21	61	ARG	CA-C-N	-8.09	110.27	120.23
29	21	61	ARG	C-N-CA	-8.09	110.27	120.23
40	75	13	ARG	N-CA-C	-8.07	103.43	113.28
4	32	25	ARG	CA-C-N	-8.05	109.39	122.26
4	32	25	ARG	C-N-CA	-8.05	109.39	122.26
37	45	81	VAL	N-CA-C	7.98	125.94	109.34
36	35	107	LYS	N-CA-C	7.91	122.34	111.90
29	29	52	LEU	CA-C-N	7.89	129.70	119.84
29	29	52	LEU	C-N-CA	7.89	129.70	119.84
54	M5	48	PHE	CA-C-N	7.88	136.16	121.97
54	M5	48	PHE	C-N-CA	7.88	136.16	121.97
54	Q8	52	LYS	CA-C-N	7.87	127.59	119.64
54	Q8	52	LYS	C-N-CA	7.87	127.59	119.64
45	C5	103	GLY	N-CA-C	7.87	129.49	115.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
41	C8	116	ALA	N-CA-C	-7.84	95.85	108.55
34	15	134	ARG	CA-C-N	7.82	129.61	119.84
34	15	134	ARG	C-N-CA	7.82	129.61	119.84
9	82	20	ARG	CA-C-N	7.81	127.86	119.89
9	82	20	ARG	C-N-CA	7.81	127.86	119.89
26	1H	1992	G	C2'-C3'-O3'	7.77	121.16	109.50
4	32	31	CYS	N-CA-C	-7.76	103.71	113.02
28	19	218	ARG	CA-C-N	7.76	127.81	119.90
28	19	218	ARG	C-N-CA	7.76	127.81	119.90
33	69	110	ASP	CA-C-N	7.72	129.49	119.84
33	69	110	ASP	C-N-CA	7.72	129.49	119.84
29	21	58	ARG	N-CA-C	-7.69	103.46	112.92
29	21	97	LYS	CA-C-N	-7.68	112.42	120.03
29	21	97	LYS	C-N-CA	-7.68	112.42	120.03
4	3E	31	CYS	N-CA-C	-7.68	103.97	112.72
48	F5	79	GLY	N-CA-C	7.67	122.94	110.97
42	95	82	ARG	N-CA-C	7.67	121.87	108.75
19	AA	13	ASP	N-CA-C	7.66	122.76	111.96
32	51	9	ILE	CA-C-N	-7.66	110.26	119.84
32	51	9	ILE	C-N-CA	-7.66	110.26	119.84
15	6I	36	ILE	CB-CA-C	-7.65	102.24	111.81
12	3A	49	ASN	N-CA-C	7.63	120.38	110.53
46	H8	14	LYS	CA-C-N	7.59	127.97	119.32
46	H8	14	LYS	C-N-CA	7.59	127.97	119.32
46	D5	157	LEU	CA-C-N	7.58	128.19	120.38
46	D5	157	LEU	C-N-CA	7.58	128.19	120.38
35	68	29	ASN	N-CA-C	7.56	122.22	112.92
15	6I	18	PHE	CA-C-N	-7.56	112.20	119.76
15	6I	18	PHE	C-N-CA	-7.56	112.20	119.76
29	21	134	ILE	N-CA-C	7.55	120.15	112.90
51	I5	20	ASN	N-CA-C	7.52	118.19	108.34
54	Q8	33	ASN	N-CA-C	7.51	123.36	113.30
30	39	83	PHE	N-CA-C	7.51	122.63	113.17
37	45	83	MET	N-CA-C	7.51	122.41	107.62
42	D8	39	LEU	N-CA-C	7.49	123.46	113.72
29	29	31	CYS	CA-C-N	7.47	127.52	119.90
29	29	31	CYS	C-N-CA	7.47	127.52	119.90
36	35	36	LYS	N-CA-C	7.47	119.06	108.00
40	B8	113	LYS	N-CA-C	-7.44	103.03	112.93
19	AI	3	ARG	N-CA-C	7.43	119.60	110.91
20	BA	12	ALA	N-CA-C	-7.42	103.31	112.88
45	G8	99	CYS	N-CA-C	7.41	120.30	111.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	31	24	LEU	CA-C-N	7.40	127.84	119.93
30	31	24	LEU	C-N-CA	7.40	127.84	119.93
39	A8	5	THR	N-CA-C	7.39	120.11	110.43
2	12	166	ASP	CA-C-N	7.38	127.01	119.19
2	12	166	ASP	C-N-CA	7.38	127.01	119.19
41	85	8	VAL	N-CA-C	7.37	119.03	110.62
26	14	204	A	C2'-C3'-O3'	7.32	120.48	109.50
2	1E	8	LYS	N-CA-C	7.30	119.70	108.30
52	N8	6	VAL	CA-C-N	-7.30	112.46	119.76
52	N8	6	VAL	C-N-CA	-7.30	112.46	119.76
36	78	36	LYS	CB-CA-C	-7.29	106.13	116.34
4	32	70	ILE	N-CA-C	7.27	118.49	108.89
45	G8	65	ALA	CA-C-N	-7.25	113.21	120.31
45	G8	65	ALA	C-N-CA	-7.25	113.21	120.31
45	G8	81	LYS	CA-C-N	7.25	144.40	127.00
45	G8	81	LYS	C-N-CA	7.25	144.40	127.00
30	39	67	GLN	CA-C-N	-7.23	112.96	121.64
30	39	67	GLN	C-N-CA	-7.23	112.96	121.64
28	11	107	ALA	CA-C-N	7.21	127.63	119.92
28	11	107	ALA	C-N-CA	7.21	127.63	119.92
34	15	10	GLU	CA-C-N	7.21	127.25	119.90
34	15	10	GLU	C-N-CA	7.21	127.25	119.90
49	K8	16	LEU	N-CA-C	-7.17	97.26	109.24
30	31	7	TYR	N-CA-C	7.17	122.42	112.45
52	N8	27	PRO	O-C-N	7.17	124.61	121.31
7	62	13	GLN	CA-C-N	7.15	128.12	120.11
7	62	13	GLN	C-N-CA	7.15	128.12	120.11
5	4E	67	VAL	N-CA-C	7.14	117.78	108.35
29	29	190	GLY	CA-C-N	-7.12	113.47	120.52
29	29	190	GLY	C-N-CA	-7.12	113.47	120.52
32	51	92	ILE	N-CA-C	7.12	117.21	110.30
29	29	49	LEU	N-CA-C	7.12	120.32	110.35
32	51	171	LEU	N-CA-C	7.11	125.95	110.80
36	78	23	PRO	CA-C-O	-7.11	112.92	121.03
4	3E	12	CYS	N-CA-C	-7.11	102.58	111.11
3	22	101	LEU	N-CA-C	7.10	119.22	110.91
52	J5	4	HIS	CA-C-N	7.04	127.03	119.78
52	J5	4	HIS	C-N-CA	7.04	127.03	119.78
26	14	752	A	C2'-C3'-O3'	7.04	120.06	109.50
26	14	669	G	C2'-C3'-O3'	7.01	120.02	109.50
31	49	143	GLU	N-CA-C	-7.00	104.35	113.17
13	4I	98	VAL	N-CA-C	7.00	117.96	111.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	A8	110	LEU	N-CA-C	6.98	120.75	109.02
34	58	43	THR	CA-C-N	6.97	126.79	119.05
34	58	43	THR	C-N-CA	6.97	126.79	119.05
44	F8	3	THR	N-CA-C	6.97	118.69	108.86
12	3I	18	VAL	N-CA-C	6.95	120.76	111.44
1	13	812	C	C2'-C3'-O3'	6.93	119.90	109.50
2	1E	196	LEU	N-CA-C	-6.90	104.60	113.16
42	D8	35	LEU	CA-C-N	6.90	128.46	119.84
42	D8	35	LEU	C-N-CA	6.90	128.46	119.84
42	95	81	TYR	N-CA-C	6.90	120.75	109.85
33	61	118	LYS	CA-C-N	6.90	126.93	119.90
33	61	118	LYS	C-N-CA	6.90	126.93	119.90
43	E8	92	ARG	N-CA-C	6.90	119.81	111.40
13	4A	40	ASN	CA-C-N	6.90	126.37	118.85
13	4A	40	ASN	C-N-CA	6.90	126.37	118.85
2	1E	90	MET	CA-C-N	6.87	126.78	119.85
2	1E	90	MET	C-N-CA	6.87	126.78	119.85
29	21	19	ARG	N-CA-C	-6.85	101.69	110.53
28	11	194	GLY	N-CA-C	6.85	118.46	111.95
5	42	80	ILE	N-CA-C	6.85	118.17	108.17
32	51	28	GLY	CA-C-N	6.84	127.40	119.47
32	51	28	GLY	C-N-CA	6.84	127.40	119.47
44	B5	40	LYS	CA-C-N	-6.83	112.78	122.41
44	B5	40	LYS	C-N-CA	-6.83	112.78	122.41
37	88	57	HIS	CA-C-N	-6.82	112.52	123.23
37	88	57	HIS	C-N-CA	-6.82	112.52	123.23
32	51	159	GLU	N-CA-C	6.82	120.57	111.30
29	29	23	VAL	N-CA-C	6.81	123.50	109.34
45	C5	41	GLY	N-CA-C	-6.80	100.94	112.77
29	29	61	ARG	CA-C-N	6.80	128.33	119.84
29	29	61	ARG	C-N-CA	6.80	128.33	119.84
32	59	117	PRO	CA-C-N	6.78	128.31	119.84
32	59	117	PRO	C-N-CA	6.78	128.31	119.84
33	69	83	ALA	N-CA-C	6.77	118.08	108.74
28	19	13	ARG	N-CA-C	-6.76	104.50	112.89
37	88	139	GLU	CB-CA-C	-6.76	107.74	115.79
33	69	102	SER	N-CA-C	-6.73	96.46	110.80
49	K8	17	SER	N-CA-C	6.73	119.05	108.55
4	3E	28	SER	CA-C-N	-6.73	112.83	121.91
4	3E	28	SER	C-N-CA	-6.73	112.83	121.91
40	B8	13	ARG	N-CA-C	-6.72	104.71	113.17
32	59	160	LYS	N-CA-C	6.71	119.71	110.24

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
46	H8	161	VAL	CB-CA-C	-6.71	100.29	111.29
31	41	65	GLY	N-CA-C	-6.71	105.85	115.64
2	1E	231	GLU	CA-C-N	6.70	126.73	119.89
2	1E	231	GLU	C-N-CA	6.70	126.73	119.89
31	41	44	GLY	N-CA-C	-6.69	103.82	113.86
40	B8	19	LEU	CA-C-N	6.67	126.62	120.21
40	B8	19	LEU	C-N-CA	6.67	126.62	120.21
37	88	106	VAL	N-CA-C	6.66	120.31	109.78
30	39	71	GLY	N-CA-C	-6.65	105.33	114.64
14	5I	53	LEU	CA-C-N	6.63	126.99	119.83
14	5I	53	LEU	C-N-CA	6.63	126.99	119.83
29	21	141	ILE	N-CA-C	6.63	118.47	112.17
12	3I	60	LEU	N-CA-C	6.62	120.48	109.95
5	4E	69	VAL	CA-C-N	6.59	128.08	119.84
5	4E	69	VAL	C-N-CA	6.59	128.08	119.84
36	78	23	PRO	CA-C-N	-6.59	108.49	121.41
36	78	23	PRO	C-N-CA	-6.59	108.49	121.41
1	13	1498	U	C2'-C3'-O3'	6.58	119.37	109.50
1	13	792	A	N9-C1'-C2'	6.57	121.86	112.00
31	41	82	LEU	N-CA-C	6.55	118.58	110.91
36	35	19	VAL	N-CA-C	6.54	117.04	107.75
37	88	65	PHE	N-CA-C	6.54	121.42	113.38
11	2A	50	TYR	N-CA-C	6.53	119.36	109.95
5	4E	105	VAL	CA-C-N	-6.52	112.97	119.56
5	4E	105	VAL	C-N-CA	-6.52	112.97	119.56
47	E5	65	GLY	N-CA-C	6.51	118.14	111.95
29	29	187	ALA	N-CA-C	6.51	119.16	111.02
32	59	125	VAL	CA-C-N	6.48	142.56	127.00
32	59	125	VAL	C-N-CA	6.48	142.56	127.00
29	29	142	GLY	N-CA-C	6.48	122.08	111.27
36	35	144	GLU	N-CA-C	6.46	118.70	108.23
41	C8	96	ALA	N-CA-C	-6.46	104.55	112.88
36	78	26	GLY	N-CA-C	-6.46	98.98	110.86
2	12	8	LYS	CB-CA-C	-6.45	109.14	116.63
44	B5	25	LYS	N-CA-C	6.45	119.41	107.99
28	11	42	GLY	N-CA-C	-6.45	106.42	115.32
33	61	131	LYS	CA-C-N	6.44	142.45	127.00
33	61	131	LYS	C-N-CA	6.44	142.45	127.00
35	68	71	ARG	CA-C-N	6.43	126.05	119.56
35	68	71	ARG	C-N-CA	6.43	126.05	119.56
45	C5	82	PRO	N-CA-C	6.43	121.30	111.34
30	31	64	ILE	N-CA-C	6.42	117.94	110.62

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	21	135	HIS	N-CA-C	6.41	119.08	111.33
29	29	48	GLN	N-CA-C	6.40	120.10	112.93
1	13	812	C	P-O3'-C3'	6.40	129.80	120.20
33	69	75	LEU	N-CA-C	6.40	118.58	108.79
29	21	130	GLY	N-CA-C	6.39	120.37	112.64
26	1H	1204	A	O4'-C1'-N9	6.38	117.78	108.20
12	3I	117	ARG	N-CA-C	6.37	120.62	112.34
33	61	79	ILE	N-CA-C	6.36	114.41	107.60
48	F5	36	GLY	N-CA-C	6.36	128.25	113.18
29	29	51	PHE	N-CA-C	6.35	124.33	110.80
29	21	188	VAL	N-CA-C	6.35	114.93	109.02
36	78	36	LYS	N-CA-C	6.34	117.39	108.00
30	31	65	TRP	CA-C-N	6.33	126.03	119.82
30	31	65	TRP	C-N-CA	6.33	126.03	119.82
26	14	2447	G	P-O3'-C3'	6.33	129.70	120.20
15	6A	47	LYS	N-CA-C	-6.32	105.32	113.16
30	39	82	ILE	N-CA-C	-6.32	105.53	112.80
28	19	268	ARG	N-CA-C	-6.32	105.15	112.86
37	88	77	LYS	CA-C-N	6.31	127.73	119.84
37	88	77	LYS	C-N-CA	6.31	127.73	119.84
28	11	236	GLY	N-CA-C	6.31	124.65	115.32
8	7E	56	LYS	CA-C-N	6.31	127.72	119.84
8	7E	56	LYS	C-N-CA	6.31	127.72	119.84
1	13	49	U	P-O3'-C3'	6.28	129.62	120.20
29	29	64	LYS	CB-CA-C	-6.27	107.61	115.89
48	J8	56	GLN	N-CA-C	6.26	119.34	110.14
20	BI	49	ALA	CB-CA-C	-6.24	108.75	117.23
32	51	153	LYS	CA-C-N	6.24	127.64	119.84
32	51	153	LYS	C-N-CA	6.24	127.64	119.84
2	12	90	MET	CA-C-N	6.23	126.26	119.90
2	12	90	MET	C-N-CA	6.23	126.26	119.90
54	M5	48	PHE	N-CA-C	6.23	124.06	110.80
29	21	188	VAL	CA-C-N	6.20	127.05	120.11
29	21	188	VAL	C-N-CA	6.20	127.05	120.11
26	14	669	G	P-O3'-C3'	6.20	129.50	120.20
26	14	1786	A	N9-C1'-C2'	6.20	123.29	114.00
41	C8	97	ASP	N-CA-C	-6.19	104.59	111.71
30	31	47	GLY	CA-C-O	6.18	126.87	119.82
28	19	259	THR	N-CA-C	6.18	120.98	113.38
32	59	125	VAL	C-N-CD	-6.16	107.06	120.60
18	9I	23	LYS	N-CA-C	-6.15	104.69	111.82
32	59	157	TYR	N-CA-C	-6.15	104.69	111.82

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	31	9	ILE	CA-C-N	6.15	127.52	119.84
30	31	9	ILE	C-N-CA	6.15	127.52	119.84
33	69	131	LYS	CA-C-N	6.14	141.74	127.00
33	69	131	LYS	C-N-CA	6.14	141.74	127.00
33	61	131	LYS	C-N-CD	-6.14	107.09	120.60
11	2I	52	GLY	N-CA-C	6.13	118.14	110.29
17	8I	79	SER	N-CA-C	6.13	118.93	110.35
19	AA	75	ALA	CA-C-N	6.12	126.03	119.85
19	AA	75	ALA	C-N-CA	6.12	126.03	119.85
28	19	41	GLY	N-CA-C	-6.12	100.96	112.64
26	1H	752	A	C2'-C3'-O3'	6.12	118.67	109.50
33	69	142	VAL	N-CA-C	6.11	116.66	107.75
34	58	69	GLN	N-CA-C	6.10	118.90	111.82
31	49	147	ASP	N-CA-C	-6.10	105.48	113.17
54	M5	63	PRO	CA-N-CD	-6.09	103.48	112.00
37	45	78	PRO	N-CA-C	6.09	125.01	112.47
49	G5	16	LEU	N-CA-C	-6.08	98.16	108.26
4	32	85	LYS	N-CA-C	-6.08	98.17	108.26
32	59	5	GLY	N-CA-C	-6.08	106.64	114.85
9	8E	118	LYS	N-CA-C	6.08	120.39	112.92
2	12	130	ARG	CA-C-N	6.07	126.09	119.90
2	12	130	ARG	C-N-CA	6.07	126.09	119.90
8	7E	6	ILE	N-CA-C	6.06	116.23	110.53
3	22	110	ASN	N-CA-C	-6.04	105.95	113.38
48	F5	85	LEU	CA-C-N	6.03	127.24	120.06
48	F5	85	LEU	C-N-CA	6.03	127.24	120.06
18	9A	26	LEU	N-CA-C	6.03	116.05	108.45
45	G8	81	LYS	C-N-CD	-6.03	107.34	120.60
54	M5	29	LYS	N-CA-C	-6.02	105.80	113.02
20	BA	10	LEU	CA-C-N	-6.01	112.72	122.34
20	BA	10	LEU	C-N-CA	-6.01	112.72	122.34
7	6E	132	GLY	N-CA-C	6.00	118.38	111.36
4	3E	171	GLY	CA-C-N	6.00	127.33	119.84
4	3E	171	GLY	C-N-CA	6.00	127.33	119.84
45	G8	7	VAL	N-CA-C	5.99	117.81	109.55
26	14	2702	U	N1-C1'-C2'	5.98	120.97	112.00
37	45	98	LYS	CA-C-N	-5.98	113.54	119.99
37	45	98	LYS	C-N-CA	-5.98	113.54	119.99
29	29	50	GLY	N-CA-C	5.97	127.34	113.18
37	45	18	LYS	N-CA-C	5.97	120.74	112.45
28	11	220	HIS	CA-C-N	-5.96	115.33	123.14
28	11	220	HIS	C-N-CA	-5.96	115.33	123.14

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	78	15	ARG	CA-C-N	5.96	132.44	121.70
36	78	15	ARG	C-N-CA	5.96	132.44	121.70
30	39	170	LEU	CA-C-N	5.96	125.58	119.56
30	39	170	LEU	C-N-CA	5.96	125.58	119.56
26	14	1819	A	C4'-C3'-O3'	5.95	118.33	109.40
39	65	56	LEU	N-CA-C	-5.95	106.06	113.38
43	A5	64	MET	N-CA-C	5.95	120.67	113.17
30	31	154	VAL	N-CA-C	5.95	116.44	108.11
6	52	55	ASP	CA-C-N	5.94	125.56	119.56
6	52	55	ASP	C-N-CA	5.94	125.56	119.56
26	1H	2346	A	O4'-C1'-N9	5.93	117.10	108.20
28	19	48	ARG	CA-C-N	-5.93	113.49	121.80
28	19	48	ARG	C-N-CA	-5.93	113.49	121.80
37	88	81	VAL	CA-C-O	-5.93	113.37	120.78
26	1H	1265	A	C5'-C4'-C3'	-5.92	106.33	115.20
53	P8	43	THR	CA-C-N	-5.91	114.53	120.21
53	P8	43	THR	C-N-CA	-5.91	114.53	120.21
13	4A	112	GLY	CA-C-N	5.91	126.37	120.52
13	4A	112	GLY	C-N-CA	5.91	126.37	120.52
17	8A	63	ARG	CA-C-N	5.91	126.25	119.93
17	8A	63	ARG	C-N-CA	5.91	126.25	119.93
26	14	1248	G	O5'-P-OP1	5.91	125.72	108.00
26	1H	2430	A	O5'-P-OP2	-5.90	90.30	108.00
32	51	151	ILE	CA-C-N	5.90	132.81	121.54
32	51	151	ILE	C-N-CA	5.90	132.81	121.54
30	39	147	GLY	N-CA-C	-5.90	106.84	115.63
34	58	39	ARG	CA-C-N	-5.89	112.47	119.84
34	58	39	ARG	C-N-CA	-5.89	112.47	119.84
29	29	184	VAL	CA-C-N	-5.89	114.66	122.85
29	29	184	VAL	C-N-CA	-5.89	114.66	122.85
1	1G	1498	U	C2'-C3'-O3'	5.89	118.33	109.50
1	13	49	U	C2'-C3'-O3'	5.88	118.33	109.50
35	68	5	GLN	N-CA-CB	-5.88	108.22	114.10
34	58	46	VAL	N-CA-C	5.88	117.26	111.67
37	88	29	PHE	N-CA-C	5.88	121.36	113.72
47	E5	83	PRO	N-CA-C	5.87	121.70	113.53
4	32	38	TYR	CA-C-N	5.87	126.42	120.38
4	32	38	TYR	C-N-CA	5.87	126.42	120.38
45	C5	86	ARG	N-CA-C	5.87	118.47	110.55
26	1H	2610	C	C4'-C3'-O3'	5.86	118.19	109.40
19	AI	6	LYS	N-CA-C	5.86	123.28	110.80
1	13	792	A	O4'-C1'-N9	5.86	117.29	108.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	78	62	LEU	N-CA-C	5.85	122.75	109.81
33	61	144	VAL	N-CA-C	5.85	115.95	107.88
36	35	62	LEU	CA-C-N	5.85	127.15	119.84
36	35	62	LEU	C-N-CA	5.85	127.15	119.84
40	B8	114	LEU	N-CA-C	5.85	119.48	112.93
30	31	157	VAL	N-CA-C	5.84	116.02	107.37
30	31	197	ASP	N-CA-C	-5.84	98.36	110.80
26	1H	1799	G	C2'-C3'-O3'	5.84	118.25	109.50
45	G8	79	CYS	N-CA-C	5.83	123.23	110.80
46	D5	69	THR	N-CA-C	5.83	119.22	109.95
37	45	88	GLY	N-CA-C	-5.82	106.47	116.01
16	7I	65	GLN	CA-C-N	5.81	126.01	120.31
16	7I	65	GLN	C-N-CA	5.81	126.01	120.31
29	29	61	ARG	N-CA-C	5.81	122.65	109.81
8	7E	75	ARG	CA-C-N	5.79	126.59	120.11
8	7E	75	ARG	C-N-CA	5.79	126.59	120.11
49	K8	16	LEU	CA-C-N	-5.78	112.76	123.11
49	K8	16	LEU	C-N-CA	-5.78	112.76	123.11
1	1G	1346	A	P-O3'-C3'	5.78	128.87	120.20
46	H8	133	ILE	CA-C-N	5.78	127.06	119.84
46	H8	133	ILE	C-N-CA	5.78	127.06	119.84
1	1G	197	A	P-O3'-C3'	5.78	128.87	120.20
2	1E	182	ILE	N-CA-C	5.78	114.31	107.73
28	19	36	PRO	CA-C-N	-5.78	114.41	123.13
28	19	36	PRO	C-N-CA	-5.78	114.41	123.13
40	75	29	ARG	CA-C-N	-5.77	115.58	123.14
40	75	29	ARG	C-N-CA	-5.77	115.58	123.14
26	1H	587	C	C4'-C3'-O3'	5.77	118.06	109.40
36	35	144	GLU	CA-C-N	5.76	126.23	120.52
36	35	144	GLU	C-N-CA	5.76	126.23	120.52
9	8E	112	LYS	N-CA-C	-5.76	99.55	108.42
11	2A	38	ASN	CA-C-N	5.76	126.05	119.83
11	2A	38	ASN	C-N-CA	5.76	126.05	119.83
12	3A	105	TYR	CB-CA-C	-5.75	109.40	117.23
2	12	20	GLU	N-CA-C	5.75	117.71	110.24
5	4E	103	GLY	N-CA-C	-5.74	105.19	112.54
16	7I	20	VAL	N-CA-C	5.74	116.55	108.17
26	1H	1835	G	C5'-C4'-C3'	-5.74	107.40	116.00
26	1H	1992	G	P-O3'-C3'	5.73	128.80	120.20
29	21	104	VAL	N-CA-C	5.72	116.38	107.28
28	11	230	ASP	N-CA-C	5.72	118.38	111.40
1	1G	266	G	C2'-C3'-O3'	5.72	118.08	109.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	21	55	ASN	CA-C-N	-5.71	112.70	119.84
29	21	55	ASN	C-N-CA	-5.71	112.70	119.84
30	39	106	ARG	N-CA-C	-5.71	104.96	111.07
1	13	1498	U	P-O3'-C3'	5.71	128.76	120.20
54	Q8	45	GLY	N-CA-C	-5.71	104.48	112.13
8	7E	66	GLY	CA-C-N	5.70	125.89	120.31
8	7E	66	GLY	C-N-CA	5.70	125.89	120.31
36	78	144	GLU	CA-C-N	5.70	125.89	120.31
36	78	144	GLU	C-N-CA	5.70	125.89	120.31
28	19	270	ILE	N-CA-C	5.69	117.41	109.55
4	32	180	GLY	N-CA-C	-5.69	107.60	114.66
47	I8	82	ARG	CA-C-N	5.68	126.95	119.84
47	I8	82	ARG	C-N-CA	5.68	126.95	119.84
34	15	107	LEU	CA-C-N	-5.68	114.76	120.21
34	15	107	LEU	C-N-CA	-5.68	114.76	120.21
3	22	25	GLY	N-CA-C	-5.68	106.09	112.33
7	6E	87	VAL	N-CA-C	5.67	114.07	107.89
26	1H	1955	U	P-O3'-C3'	5.67	128.71	120.20
16	7I	5	ARG	N-CA-C	5.66	116.02	108.38
36	35	99	LEU	N-CA-C	-5.66	104.73	111.69
9	8E	91	ASP	N-CA-C	-5.65	106.05	113.17
35	25	22	ILE	N-CA-C	-5.65	107.16	111.62
41	85	74	LEU	N-CA-C	5.64	118.25	110.35
36	35	36	LYS	CB-CA-C	-5.64	108.44	116.34
29	21	59	VAL	N-CA-C	5.64	118.13	111.09
26	14	1899	G	C8-N9-C1'	5.64	143.91	127.00
26	1H	226	G	O4'-C1'-N9	5.63	116.65	108.20
2	12	193	ASP	CA-C-N	5.63	124.82	118.97
2	12	193	ASP	C-N-CA	5.63	124.82	118.97
28	19	256	GLY	N-CA-C	5.62	121.38	114.69
37	88	82	ARG	CB-CA-C	-5.62	103.76	111.51
19	AI	34	TRP	CA-C-N	-5.62	115.05	122.85
19	AI	34	TRP	C-N-CA	-5.62	115.05	122.85
32	59	28	GLY	CA-C-N	5.61	124.81	118.97
32	59	28	GLY	C-N-CA	5.61	124.81	118.97
45	G8	95	LYS	N-CA-C	-5.61	100.18	108.99
35	68	58	VAL	N-CA-C	5.61	115.37	108.53
37	45	31	ASP	N-CA-C	5.61	118.59	111.69
45	G8	92	ASN	N-CA-C	5.61	115.79	107.88
28	11	247	ALA	N-CA-C	5.60	117.92	109.23
30	39	69	HIS	N-CA-C	5.60	117.81	107.73
30	39	85	GLY	N-CA-C	-5.60	105.87	115.61

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	AA	83	HIS	N-CA-C	5.59	118.47	110.24
45	G8	81	LYS	N-CA-C	-5.59	97.45	109.81
48	J8	40	ARG	CA-C-N	-5.59	113.43	122.82
48	J8	40	ARG	C-N-CA	-5.59	113.43	122.82
12	3I	70	ILE	CA-C-N	5.59	126.07	120.14
12	3I	70	ILE	C-N-CA	5.59	126.07	120.14
36	35	111	ARG	N-CA-C	5.59	119.21	110.32
35	68	112	MET	N-CA-C	5.59	119.60	112.34
36	35	54	GLY	CA-C-O	5.59	124.99	118.96
26	1H	945	A	C4-N9-C1'	5.58	143.06	126.30
54	Q8	52	LYS	N-CA-C	5.58	122.14	109.81
4	32	28	SER	N-CA-C	5.58	113.15	108.13
44	B5	54	VAL	N-CA-C	5.58	116.51	108.48
33	61	9	LEU	N-CA-C	5.57	120.07	112.88
42	D8	40	LEU	N-CA-C	5.57	117.56	108.76
26	1H	2430	A	O5'-P-OP1	5.57	124.71	108.00
46	D5	14	LYS	CA-C-N	5.57	125.09	119.19
46	D5	14	LYS	C-N-CA	5.57	125.09	119.19
29	21	146	THR	N-CA-C	-5.57	101.73	110.14
51	M8	15	ILE	N-CA-C	5.57	116.72	108.65
52	N8	50	GLY	N-CA-C	5.57	126.37	113.18
46	D5	7	ALA	CB-CA-C	-5.57	109.17	115.79
31	49	160	VAL	N-CA-C	5.56	115.87	107.75
48	J8	19	GLN	N-CA-C	5.56	117.36	108.41
34	58	136	GLU	N-CA-C	5.55	118.47	109.86
8	7E	117	GLY	N-CA-C	5.55	119.70	111.76
39	A8	90	GLY	CA-C-N	-5.55	112.90	119.84
39	A8	90	GLY	C-N-CA	-5.55	112.90	119.84
53	P8	5	TRP	CD2-CE2-CZ2	-5.55	116.85	122.40
37	88	91	GLU	CA-C-N	-5.55	110.84	122.66
37	88	91	GLU	C-N-CA	-5.55	110.84	122.66
1	1G	266	G	P-O3'-C3'	5.54	128.51	120.20
26	14	741	G	O5'-P-OP1	-5.54	91.38	108.00
37	88	69	PHE	CA-C-N	5.54	126.76	119.84
37	88	69	PHE	C-N-CA	5.54	126.76	119.84
39	65	59	LYS	N-CA-C	-5.53	101.05	108.19
30	31	75	HIS	N-CA-C	5.53	117.48	109.07
50	L8	11	SER	N-CA-C	5.53	117.44	109.48
17	8A	100	LYS	N-CA-C	5.52	119.70	112.13
46	H8	161	VAL	N-CA-C	5.52	120.83	109.34
45	C5	101	LYS	N-CA-C	5.52	122.56	110.80
6	5E	65	VAL	N-CA-C	5.52	120.82	109.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	11	75	ILE	CA-C-N	-5.52	115.08	120.98
28	11	75	ILE	C-N-CA	-5.52	115.08	120.98
41	C8	94	ASN	CA-C-N	-5.51	114.64	122.41
41	C8	94	ASN	C-N-CA	-5.51	114.64	122.41
47	E5	14	ARG	N-CA-C	5.51	118.61	110.46
42	D8	71	LEU	CA-C-N	-5.50	115.98	123.12
42	D8	71	LEU	C-N-CA	-5.50	115.98	123.12
29	29	60	ASN	N-CA-C	5.49	117.54	108.48
36	35	116	GLY	N-CA-C	5.49	119.32	112.73
30	31	8	GLN	N-CA-C	5.49	118.43	107.62
26	14	49	A	P-O3'-C3'	5.49	128.43	120.20
7	6E	111	ARG	CA-C-N	5.48	125.10	119.56
7	6E	111	ARG	C-N-CA	5.48	125.10	119.56
51	I5	59	PHE	N-CA-C	-5.48	106.09	112.89
26	1H	2610	C	P-O3'-C3'	5.48	128.42	120.20
41	C8	95	LEU	CA-C-N	5.48	131.15	122.60
41	C8	95	LEU	C-N-CA	5.48	131.15	122.60
37	45	33	GLY	N-CA-C	5.48	121.49	110.97
50	H5	40	THR	CA-C-N	5.48	125.83	119.47
50	H5	40	THR	C-N-CA	5.48	125.83	119.47
32	51	11	VAL	N-CA-C	5.48	120.71	108.88
33	69	131	LYS	C-N-CD	-5.48	108.55	120.60
33	61	116	LEU	N-CA-C	-5.47	106.37	113.16
19	AI	25	LYS	N-CA-C	-5.47	99.15	110.80
30	39	70	THR	N-CA-C	-5.46	105.73	112.72
31	49	15	VAL	N-CA-C	5.46	116.95	111.00
42	D8	14	VAL	N-CA-C	5.45	116.44	108.53
36	35	9	ASN	CA-C-N	5.45	126.66	119.84
36	35	9	ASN	C-N-CA	5.45	126.66	119.84
1	13	1502	A	N9-C1'-C2'	5.45	122.17	114.00
15	6I	87	ILE	N-CA-C	5.45	120.68	109.34
43	A5	77	ASP	N-CA-C	-5.45	101.47	109.81
7	6E	130	GLY	N-CA-C	5.45	121.17	114.69
12	3I	124	LYS	CA-C-N	5.45	126.65	119.84
12	3I	124	LYS	C-N-CA	5.45	126.65	119.84
49	K8	14	ARG	N-CA-C	-5.44	101.99	110.10
1	1G	913	A	P-O3'-C3'	5.44	128.36	120.20
46	H8	107	THR	CA-C-N	-5.44	113.17	119.47
46	H8	107	THR	C-N-CA	-5.44	113.17	119.47
9	82	89	ASN	CA-C-N	5.43	126.63	119.84
9	82	89	ASN	C-N-CA	5.43	126.63	119.84
34	58	24	GLY	N-CA-C	-5.43	105.82	112.77

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	45	79	LEU	N-CA-C	5.42	120.77	113.72
40	75	4	GLY	N-CA-C	-5.42	106.22	112.83
28	19	244	ARG	N-CA-C	-5.42	103.25	108.13
5	42	67	VAL	N-CA-C	5.41	116.16	108.42
28	11	238	GLY	N-CA-C	5.41	117.69	111.36
34	58	21	LYS	N-CA-C	-5.41	102.87	110.50
4	32	135	LEU	CA-C-N	5.41	125.48	119.32
4	32	135	LEU	C-N-CA	5.41	125.48	119.32
26	1H	271(B)	G	C2'-C3'-O3'	5.41	117.61	109.50
9	8E	26	VAL	N-CA-C	5.40	115.87	107.28
26	1H	1613	G	O3'-P-O5'	5.40	112.09	104.00
39	A8	59	LYS	N-CA-C	5.40	116.48	108.60
26	1H	1698	A	N9-C1'-C2'	5.39	122.09	114.00
28	19	243	GLY	N-CA-C	-5.39	107.68	115.27
48	F5	29	GLY	CA-C-N	5.38	131.66	121.97
48	F5	29	GLY	C-N-CA	5.38	131.66	121.97
2	12	17	PHE	N-CA-C	5.38	118.44	110.48
49	G5	5	GLU	N-CA-C	-5.37	105.34	111.14
40	75	135	ALA	CB-CA-C	-5.37	109.93	117.23
38	98	71	GLN	N-CA-CB	-5.36	108.06	114.17
29	29	204	ALA	N-CA-C	-5.36	104.86	113.28
38	55	113	LEU	CA-C-N	-5.36	115.95	123.13
38	55	113	LEU	C-N-CA	-5.36	115.95	123.13
6	52	60	PHE	N-CA-C	5.36	117.47	107.99
30	39	101	LEU	CA-C-N	-5.36	114.04	119.83
30	39	101	LEU	C-N-CA	-5.36	114.04	119.83
4	32	39	PRO	CA-C-N	5.36	126.11	120.11
4	32	39	PRO	C-N-CA	5.36	126.11	120.11
35	25	99	PHE	N-CA-C	5.36	117.12	108.34
26	1H	845	G	P-O3'-C3'	5.35	128.23	120.20
36	35	147	LEU	CA-CB-CG	5.35	135.03	116.30
9	8E	63	ILE	N-CA-C	5.35	115.98	108.17
21	1F	19	GLY	N-CA-C	5.35	118.07	110.74
29	29	61	ARG	C-N-CD	-5.35	103.06	125.00
26	14	2447	G	C2'-C3'-O3'	5.35	117.52	109.50
1	13	974	A	O4'-C1'-N9	5.34	116.52	108.50
38	98	109	ALA	CA-C-N	5.34	125.64	119.93
38	98	109	ALA	C-N-CA	5.34	125.64	119.93
26	1H	752	A	C4'-C3'-O3'	5.34	117.41	109.40
1	1G	913	A	C2'-C3'-O3'	5.33	117.50	109.50
38	55	107	ASP	N-CA-C	5.33	122.16	110.80
32	59	153	LYS	N-CA-C	5.33	121.60	109.81

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	1G	1054	C	C2'-C3'-O3'	5.33	117.50	109.50
13	4A	37	THR	N-CA-C	-5.33	106.78	113.28
9	82	17	VAL	N-CA-C	5.32	115.56	108.11
4	32	6	GLY	CA-C-N	5.32	126.49	119.84
4	32	6	GLY	C-N-CA	5.32	126.49	119.84
17	8A	100	LYS	CA-C-N	5.32	131.27	121.70
17	8A	100	LYS	C-N-CA	5.32	131.27	121.70
28	19	247	ALA	N-CA-C	5.31	117.06	109.14
26	1H	2712	U	P-O3'-C3'	5.31	126.07	119.70
28	19	37	LEU	CA-CB-CG	5.31	134.89	116.30
14	5I	13	THR	N-CA-C	5.31	121.54	109.81
39	A8	110	LEU	CB-CA-C	-5.31	108.88	115.89
29	21	14	ILE	N-CA-C	5.31	115.81	111.62
26	1H	609	A	OP2-P-O3'	5.30	116.86	105.20
26	1H	774	A	C8-N9-C1'	5.30	143.59	127.70
36	78	55	ARG	N-CA-C	-5.30	102.64	110.48
26	1H	2712	U	OP2-P-O3'	5.29	116.84	105.20
11	2I	101	SER	CA-C-N	5.29	128.91	120.55
11	2I	101	SER	C-N-CA	5.29	128.91	120.55
19	AA	82	GLY	N-CA-C	5.29	125.72	113.18
49	G5	26	ARG	N-CA-C	-5.29	105.68	111.82
5	42	100	VAL	N-CA-C	5.29	115.59	107.77
37	88	82	ARG	O-C-N	-5.28	118.64	123.50
29	29	132	HIS	N-CA-C	5.28	117.09	110.91
33	69	113	ARG	N-CA-C	-5.28	105.48	113.51
29	21	21	VAL	CA-C-N	5.28	127.16	120.51
29	21	21	VAL	C-N-CA	5.28	127.16	120.51
32	51	69	ARG	N-CA-C	-5.27	105.43	111.07
32	51	155	SER	CA-C-N	-5.27	113.59	123.03
32	51	155	SER	C-N-CA	-5.27	113.59	123.03
54	Q8	53	PRO	N-CA-C	-5.27	106.86	114.18
8	72	95	VAL	N-CA-C	5.26	116.30	108.46
18	9I	21	LYS	N-CA-C	5.26	118.16	111.69
36	78	133	SER	N-CA-C	5.26	116.70	111.07
36	78	47	ASP	CA-C-N	5.26	125.31	119.32
36	78	47	ASP	C-N-CA	5.26	125.31	119.32
51	M8	45	GLY	N-CA-C	-5.25	100.73	113.18
7	6E	50	ILE	N-CA-C	-5.25	107.63	112.83
29	29	120	TRP	N-CA-C	5.25	119.78	113.17
47	I8	13	GLY	N-CA-C	5.25	122.55	115.00
4	32	154	ASN	N-CA-C	5.24	119.16	112.87
26	14	784	A	C4'-C3'-O3'	-5.24	105.14	113.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	45	26	TYR	CA-CB-CG	5.24	123.34	113.90
37	88	78	PRO	CA-C-O	-5.24	111.06	120.60
52	N8	19	ARG	N-CA-C	-5.24	105.57	111.28
4	3E	9	CYS	N-CA-C	-5.24	105.69	111.71
54	Q8	21	LYS	N-CA-C	-5.24	103.00	110.59
30	31	93	LYS	CA-C-N	-5.23	114.18	119.83
30	31	93	LYS	C-N-CA	-5.23	114.18	119.83
31	49	155	MET	N-CA-C	5.23	116.09	108.14
33	69	7	GLU	CA-C-N	-5.23	114.59	120.14
33	69	7	GLU	C-N-CA	-5.23	114.59	120.14
1	13	1504	G	C4'-C3'-O3'	5.23	117.24	109.40
37	88	103	MET	N-CA-C	-5.23	102.04	110.14
54	Q8	42	ARG	N-CA-C	-5.23	106.85	113.18
26	1H	1558	A	P-O3'-C3'	5.22	128.03	120.20
29	21	89	ASP	N-CA-C	5.22	116.46	108.42
26	1H	2598	A	O5'-P-OP2	5.22	123.65	108.00
5	42	103	GLY	N-CA-C	-5.22	104.53	112.51
28	19	243	GLY	CA-C-O	5.22	124.80	119.01
26	1H	2261	C	OP1-P-O3'	-5.21	92.36	108.00
26	14	204	A	P-O3'-C3'	5.21	128.02	120.20
28	11	46	GLN	N-CA-C	-5.21	103.65	110.53
26	1H	2439	A	P-O3'-C3'	5.21	128.01	120.20
26	1H	740	U	OP1-P-O3'	-5.20	92.41	108.00
32	59	100	GLY	N-CA-C	5.20	121.68	112.64
13	4A	83	ASP	N-CA-C	-5.19	103.54	110.55
45	C5	42	VAL	N-CA-C	5.19	116.10	109.30
48	F5	37	ILE	N-CA-C	5.19	115.78	108.36
37	88	99	PRO	N-CA-C	5.18	119.19	111.41
54	M5	59	LYS	CA-C-N	-5.18	116.28	122.44
54	M5	59	LYS	C-N-CA	-5.18	116.28	122.44
37	88	106	VAL	CB-CA-C	-5.18	103.47	111.08
26	14	2439	A	P-O3'-C3'	5.18	127.96	120.20
30	31	173	VAL	N-CA-C	5.17	115.35	108.11
34	58	5	VAL	CA-C-N	-5.17	115.45	120.98
34	58	5	VAL	C-N-CA	-5.17	115.45	120.98
36	78	46	LYS	N-CA-C	5.17	118.61	112.72
32	59	130	ARG	CB-CA-C	-5.17	109.64	115.79
20	BA	76	ALA	N-CA-C	-5.17	105.83	111.82
2	12	164	VAL	N-CA-C	5.16	117.04	108.99
16	7I	82	GLN	N-CA-C	5.16	119.67	113.17
32	51	156	ALA	N-CA-C	5.16	117.70	109.81
30	31	127	GLU	N-CA-C	5.15	117.81	108.69

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
51	I5	35	VAL	N-CA-C	-5.15	102.42	109.37
26	14	2439	A	C2'-C3'-O3'	5.14	117.22	109.50
32	59	122	THR	N-CA-C	5.14	116.89	109.07
30	31	16	GLY	N-CA-C	5.14	121.46	112.10
28	11	53	PHE	N-CA-C	5.14	118.68	111.74
52	N8	59	GLU	N-CA-C	-5.14	106.60	112.92
34	58	7	LYS	N-CA-C	-5.14	102.29	109.69
46	D5	12	GLY	N-CA-C	5.13	120.10	114.40
2	12	25	ASN	CA-C-N	5.13	124.85	119.82
2	12	25	ASN	C-N-CA	5.13	124.85	119.82
7	6E	6	ARG	N-CA-C	-5.13	107.04	113.15
51	M8	40	HIS	N-CA-C	5.13	121.14	109.81
37	45	49	ALA	N-CA-C	-5.13	105.77	111.36
54	M5	38	GLY	N-CA-C	-5.13	106.58	112.83
29	21	77	ILE	N-CA-C	-5.12	106.66	111.48
33	69	77	LEU	CB-CA-C	-5.12	110.69	116.63
2	1E	201	ILE	CA-C-N	5.12	126.24	119.84
2	1E	201	ILE	C-N-CA	5.12	126.24	119.84
37	88	21	THR	CB-CA-C	-5.12	101.71	112.82
15	6I	36	ILE	N-CA-C	5.12	115.26	110.30
17	8I	48	GLU	CA-C-N	-5.11	113.89	122.17
17	8I	48	GLU	C-N-CA	-5.11	113.89	122.17
26	1H	1022	G	C2'-C3'-O3'	5.11	117.17	109.50
40	75	76	PHE	CA-C-N	5.11	125.26	119.90
40	75	76	PHE	C-N-CA	5.11	125.26	119.90
26	1H	2713	A	OP1-P-O3'	-5.11	92.69	108.00
7	62	133	GLY	N-CA-C	-5.11	101.08	113.18
49	K8	17	SER	CA-C-N	5.10	126.22	119.84
49	K8	17	SER	C-N-CA	5.10	126.22	119.84
25	4L	12	A	P-O3'-C3'	5.10	127.86	120.20
2	12	224	GLN	CA-C-N	-5.10	115.22	123.23
2	12	224	GLN	C-N-CA	-5.10	115.22	123.23
42	95	20	LEU	N-CA-C	5.10	117.14	109.23
47	E5	36	ILE	N-CA-C	-5.10	102.27	109.21
52	N8	33	CYS	CA-C-N	5.10	125.39	119.47
52	N8	33	CYS	C-N-CA	5.10	125.39	119.47
38	55	117	VAL	N-CA-C	5.10	115.67	109.30
32	59	116	GLU	CA-C-N	5.10	125.63	120.38
32	59	116	GLU	C-N-CA	5.10	125.63	120.38
2	12	23	ARG	N-CA-C	-5.09	97.61	107.44
46	H8	92	SER	CA-C-N	-5.09	115.66	122.42
46	H8	92	SER	C-N-CA	-5.09	115.66	122.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
48	J8	78	LYS	N-CA-C	5.09	116.46	107.61
12	3A	39	VAL	N-CA-C	5.08	115.29	107.77
3	22	180	ALA	N-CA-C	5.08	117.47	111.33
1	13	1054	C	C2-N1-C1'	5.07	134.02	118.80
16	7A	16	HIS	ND1-CG-CD2	5.07	111.17	106.10
26	14	1602	U	O5'-P-OP2	5.07	123.21	108.00
42	95	70	ILE	N-CA-C	5.07	117.85	112.83
10	1A	49	VAL	N-CA-C	5.07	117.12	108.86
28	11	203	ASN	CA-C-N	-5.07	113.51	121.62
28	11	203	ASN	C-N-CA	-5.07	113.51	121.62
40	B8	65	LYS	CA-C-N	-5.07	116.55	122.93
40	B8	65	LYS	C-N-CA	-5.07	116.55	122.93
51	M8	4	GLY	N-CA-C	-5.06	103.50	111.00
28	19	41	GLY	CA-C-N	-5.06	111.48	121.41
28	19	41	GLY	C-N-CA	-5.06	111.48	121.41
5	42	57	LYS	N-CA-C	-5.06	105.77	111.28
2	12	21	ARG	CA-C-N	-5.06	114.25	122.34
2	12	21	ARG	C-N-CA	-5.06	114.25	122.34
54	M5	39	LYS	N-CA-C	-5.05	102.16	109.59
9	8E	86	VAL	N-CA-C	-5.05	107.83	112.83
12	3A	22	SER	N-CA-C	5.05	116.99	108.96
1	1G	1498	U	P-O3'-C3'	5.05	127.77	120.20
31	41	79	ASN	N-CA-C	5.04	117.16	111.11
40	B8	56	GLY	N-CA-C	5.04	120.45	111.73
41	C8	30	LYS	N-CA-C	5.03	119.56	113.38
54	Q8	44	LYS	N-CA-C	5.03	117.33	107.57
32	59	152	ARG	N-CA-C	5.03	116.16	108.52
34	15	2	LYS	CA-C-N	-5.03	115.64	122.93
34	15	2	LYS	C-N-CA	-5.03	115.64	122.93
9	8E	94	ALA	CA-C-N	-5.02	115.35	123.23
9	8E	94	ALA	C-N-CA	-5.02	115.35	123.23
31	41	128	ARG	N-CA-C	-5.02	106.74	112.92
36	78	96	THR	CA-C-N	-5.02	113.56	119.84
36	78	96	THR	C-N-CA	-5.02	113.56	119.84
4	32	201	GLN	N-CA-C	-5.01	105.91	112.23
8	7E	129	VAL	N-CA-C	5.01	119.76	109.34
39	65	34	HIS	N-CA-C	5.01	116.90	109.69
9	8E	89	ASN	CA-C-N	-5.00	113.59	119.84
9	8E	89	ASN	C-N-CA	-5.00	113.59	119.84
26	1H	801	G	O5'-P-OP2	-5.00	92.99	108.00
2	12	186	ALA	N-CA-C	5.00	115.78	107.73
29	21	120	TRP	N-CA-C	5.00	119.07	112.92

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
40	B8	41	ARG	N-CA-C	-5.00	103.34	110.59

All (2) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	13	792	A	C1'
26	14	945	A	C1'

All (128) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
28	11	47	GLY	Peptide
2	12	19	HIS	Peptide
28	19	237	GLU	Peptide
28	19	271	ILE	Peptide
28	19	32	SER	Peptide
28	19	37	LEU	Peptide
10	1A	87	THR	Peptide
2	1E	15	VAL	Peptide
2	1E	194	PRO	Peptide
2	1E	237	ALA	Peptide
29	21	153	GLY	Peptide
29	21	20	ALA	Peptide
29	21	21	VAL	Peptide
29	21	77	ILE	Peptide
29	21	82	ARG	Peptide
29	29	201	THR	Peptide
29	29	203	LYS	Peptide
29	29	61	ARG	Peptide
29	29	65	GLY	Peptide
11	2A	49	GLY	Peptide
4	32	152	SER	Peptide
4	32	26	CYS	Peptide
36	35	110	TYR	Peptide
36	35	36	LYS	Peptide
36	35	64	LYS	Peptide
36	35	70	GLN	Peptide
30	39	146	ALA	Peptide
30	39	166	ALA	Peptide
30	39	2	LYS	Peptide
30	39	20	LEU	Peptide
30	39	24	LEU	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
30	39	26	ALA	Peptide
4	3E	29	PRO	Peptide
12	3I	47	LYS	Peptide
12	3I	87	GLY	Peptide
31	41	95	ARG	Peptide
37	45	134	ARG	Peptide
37	45	135	ASP	Peptide
37	45	26	TYR	Peptide
37	45	79	LEU	Peptide
37	45	80	GLU	Peptide
37	45	82	ARG	Peptide
37	45	86	GLY	Peptide
37	45	87	LYS	Peptide
31	49	117	PHE	Peptide
31	49	13	GLU	Peptide
13	4A	7	VAL	Peptide
13	4I	105	THR	Peptide
13	4I	107	ALA	Peptide
32	51	137	ASP	Peptide
32	51	153	LYS	Peptide
32	51	158	HIS	Peptide
38	55	106	GLY	Peptide
34	58	57	ALA	Peptide
32	59	125	VAL	Peptide
14	5A	27	CYS	Peptide
14	5A	29	ARG	Peptide
33	61	11	ASN	Peptide
33	61	114	LEU	Peptide
33	61	134	PRO	Peptide
33	61	82	ARG	Peptide
33	69	101	LEU	Peptide
33	69	112	LYS	Peptide
40	75	104	ASN	Peptide
40	75	11	GLU	Peptide
36	78	115	LEU	Peptide
36	78	14	LYS	Peptide
36	78	19	VAL	Peptide
36	78	22	GLY	Peptide
36	78	36	LYS	Peptide
36	78	58	THR	Peptide
36	78	66	GLY	Peptide
9	82	117	HIS	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
41	85	72	HIS	Peptide
41	85	95	LEU	Peptide
41	85	96	ALA	Peptide
41	85	98	LEU	Peptide
37	88	21	THR	Peptide
37	88	87	LYS	Peptide
42	95	44	LYS	Peptide
38	98	44	LEU	Peptide
43	A5	43	GLY	Peptide
39	A8	110	LEU	Peptide
19	AA	12	ASP	Peptide
19	AI	7	LYS	Peptide
44	B5	61	GLY	Peptide
40	B8	2	ASN	Peptide
40	B8	58	ASN	Peptide
20	BA	11	SER	Peptide
20	BA	72	LEU	Peptide
45	C5	100	ALA	Peptide
45	C5	81	LYS	Peptide
41	C8	115	ALA	Peptide
41	C8	75	ASN	Peptide
41	C8	90	VAL	Peptide
41	C8	92	ARG	Peptide
46	D5	61	LEU	Peptide
42	D8	44	LYS	Peptide
42	D8	48	GLY	Peptide
47	E5	83	PRO	Peptide
48	F5	85	LEU	Peptide
49	G5	15	LYS	Peptide
49	G5	17	SER	Peptide
49	G5	43	GLN	Peptide
45	G8	53	PRO	Peptide
45	G8	54	LYS	Peptide
45	G8	94	LYS	Peptide
46	H8	165	VAL	Peptide
46	H8	59	LEU	Peptide
46	H8	63	ASP	Peptide
51	I5	26	SER	Peptide
51	I5	60	GLN	Peptide
47	I8	83	PRO	Peptide
48	J8	45	ASN	Peptide
48	J8	75	GLU	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
49	K8	15	LYS	Peptide
49	K8	17	SER	Peptide
49	K8	46	GLN	Peptide
54	M5	34	TRP	Peptide
54	M5	36	LYS	Peptide
54	M5	40	GLU	Peptide
54	M5	49	VAL	Peptide
54	M5	53	PRO	Peptide
51	M8	40	HIS	Peptide
52	N8	58	LEU	Peptide
54	Q8	51	ALA	Peptide
54	Q8	52	LYS	Peptide
54	Q8	60	LEU	Peptide

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	13	32352	0	16325	789	1
1	1G	32327	0	16316	748	3
2	12	1924	0	1975	109	0
2	1E	1924	0	1975	105	0
3	22	1612	0	1677	73	0
3	2E	1605	0	1668	59	0
4	32	1702	0	1763	85	0
4	3E	1702	0	1761	95	0
5	42	1155	0	1213	56	0
5	4E	1155	0	1213	51	0
6	52	842	0	857	34	0
6	5E	842	0	857	38	0
7	62	1256	0	1296	52	0
7	6E	1243	0	1284	51	0
8	72	1107	0	1165	53	0
8	7E	1115	0	1177	58	0
9	82	971	0	1001	59	0
9	8E	1009	0	1037	67	0
10	1A	801	0	849	54	0
10	1I	801	0	849	45	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
11	2A	873	0	894	51	0
11	2I	864	0	881	41	0
12	3A	975	0	1062	40	0
12	3I	956	0	1046	41	0
13	4A	933	0	992	54	0
13	4I	928	0	987	43	0
14	5A	475	0	511	25	0
14	5I	480	0	513	36	0
15	6A	733	0	771	31	0
15	6I	733	0	771	30	0
16	7A	705	0	725	41	0
16	7I	705	0	725	52	0
17	8A	834	0	904	40	0
17	8I	834	0	904	56	0
18	9A	581	0	649	35	0
18	9I	590	0	662	30	0
19	AA	624	0	636	34	0
19	AI	665	0	686	40	0
20	BA	762	0	861	32	0
20	BI	762	0	861	53	0
21	1B	217	0	234	13	0
21	1F	217	0	234	11	0
22	1K	1824	0	945	57	0
23	2K	1645	0	841	30	0
23	2L	1645	0	841	33	0
24	1L	1807	0	920	32	0
24	3K	1807	0	920	46	0
25	4K	283	0	143	11	0
25	4L	261	0	132	6	0
26	14	62647	0	31582	1378	1
26	1H	62707	0	31612	1458	1
27	16	2617	0	1328	55	0
27	1J	2617	0	1328	81	0
28	11	2120	0	2197	97	0
28	19	2120	0	2197	91	0
29	21	1568	0	1634	116	0
29	29	1568	0	1634	119	0
30	31	1585	0	1632	89	0
30	39	1627	0	1680	112	0
31	41	1473	0	1535	74	0
31	49	1473	0	1535	64	0
32	51	1321	0	1388	85	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
32	59	1307	0	1382	65	1
33	61	1136	0	1223	67	1
33	69	1136	0	1223	51	0
34	15	1104	0	1180	55	0
34	58	1104	0	1180	84	0
35	25	932	0	996	42	0
35	68	932	0	996	46	0
36	35	1144	0	1228	97	0
36	78	1144	0	1228	92	0
37	45	1107	0	1166	77	0
37	88	1121	0	1179	59	0
38	55	959	0	1021	48	0
38	98	967	0	1033	67	0
39	65	881	0	943	63	0
39	A8	876	0	938	48	0
40	75	1141	0	1202	73	0
40	B8	1141	0	1202	66	0
41	85	963	0	1022	44	0
41	C8	963	0	1022	70	0
42	95	778	0	852	69	0
42	D8	778	0	852	41	0
43	A5	899	0	964	28	0
43	E8	899	0	964	32	0
44	B5	725	0	778	37	0
44	F8	730	0	780	33	0
45	C5	794	0	884	53	0
45	G8	791	0	882	54	0
46	D5	1139	0	1163	58	0
46	H8	1397	0	1430	81	0
47	E5	612	0	633	33	0
47	I8	606	0	628	24	0
48	F5	762	0	848	37	0
48	J8	762	0	848	35	0
49	G5	558	0	610	30	0
49	K8	558	0	610	37	0
50	H5	468	0	518	13	0
50	L8	468	0	518	20	0
51	I5	515	0	514	59	0
51	M8	533	0	526	37	0
52	J5	458	0	480	21	0
52	N8	458	0	480	25	0
53	L5	391	0	432	9	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
53	P8	396	0	434	13	0
54	M5	495	0	567	64	0
54	Q8	488	0	560	59	0
55	3L	1814	0	932	51	0
56	11	2	0	0	0	0
56	13	146	0	0	0	0
56	14	391	0	0	0	0
56	16	12	0	0	0	0
56	1G	86	0	0	0	0
56	1H	481	0	0	0	0
56	1J	6	0	0	0	0
56	1K	1	0	0	0	0
56	21	2	0	0	0	0
56	25	1	0	0	0	0
56	29	3	0	0	0	0
56	2K	7	0	0	0	0
56	2L	4	0	0	0	0
56	31	1	0	0	0	0
56	35	1	0	0	0	0
56	39	1	0	0	0	0
56	3E	1	0	0	0	0
56	3I	1	0	0	0	0
56	41	1	0	0	0	0
56	45	1	0	0	0	0
56	5E	1	0	0	0	0
56	78	1	0	0	0	0
56	85	1	0	0	0	0
56	88	1	0	0	0	0
56	C5	1	0	0	0	0
56	I8	1	0	0	0	0
56	L5	1	0	0	0	0
56	L8	1	0	0	0	0
56	P8	1	0	0	0	0
57	13	42	0	45	2	0
57	1G	42	0	45	0	0
58	32	1	0	0	0	0
58	3E	1	0	0	0	0
58	5A	1	0	0	0	0
58	5I	1	0	0	0	0
58	C5	1	0	0	0	0
58	G8	1	0	0	0	0
59	11	10	0	0	1	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
59	13	141	0	0	25	0
59	14	474	0	0	139	0
59	16	11	0	0	2	0
59	19	9	0	0	4	0
59	1G	87	0	0	19	0
59	1H	633	0	0	156	0
59	1I	1	0	0	0	0
59	1J	6	0	0	0	0
59	1K	1	0	0	0	0
59	21	5	0	0	3	0
59	29	3	0	0	1	0
59	2K	6	0	0	0	0
59	31	5	0	0	0	0
59	39	5	0	0	0	0
59	3E	1	0	0	0	0
59	3I	2	0	0	0	0
59	4K	3	0	0	0	0
59	55	1	0	0	0	0
59	5A	1	0	0	0	0
59	5I	1	0	0	0	0
59	6A	1	0	0	0	0
59	75	1	0	0	0	0
59	78	4	0	0	2	0
59	85	1	0	0	1	0
59	A5	1	0	0	0	0
59	BA	1	0	0	0	0
59	F8	1	0	0	0	0
59	G8	2	0	0	0	0
59	J8	1	0	0	0	0
59	L8	2	0	0	1	0
59	M5	2	0	0	0	0
All	All	299607	0	199932	8690	4

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 18.

All (8690) 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)
22:1K:35:QUO:N3	22:1K:35:QUO:C4	1.70	1.51
4:32:26:CYS:HB3	4:32:31:CYS:SG	1.85	1.17

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2701:C:H3'	26:14:2702:U:H5"	1.31	1.12
26:14:2711:A:OP2	59:14:3464:HOH:O	1.70	1.09
26:1H:229:A:H4'	26:1H:230:U:H5'	1.33	1.08
26:1H:2588:G:OP2	59:1H:3558:HOH:O	1.70	1.07
26:14:2032:G:N7	59:14:3630:HOH:O	1.87	1.07
26:14:662:G:H5'	36:35:15:ARG:HA	1.40	1.03
26:1H:913:U:O4	59:1H:3818:HOH:O	1.76	1.02
26:1H:862:G:OP2	59:1H:3827:HOH:O	1.76	1.01
40:B8:26:ASP:HB3	40:B8:92:GLY:H	1.24	1.01
26:1H:1138:G:H21	34:58:106:MET:HE3	1.24	1.00
26:1H:784:A:OP1	59:1H:3741:HOH:O	1.79	0.99
26:1H:2308:G:H1	26:1H:2311:A:H2	1.03	0.98
26:14:602:G:N2	26:14:655:A:N7	2.11	0.98
26:14:676:A:H8	26:14:2069:G:H21	1.07	0.97
37:88:76:LYS:H	37:88:88:GLY:HA3	1.29	0.97
26:1H:2056:G:OP2	59:1H:3516:HOH:O	1.81	0.97
26:14:2593:U:O4	59:14:3527:HOH:O	1.83	0.96
41:85:92:ARG:HD3	41:85:94:ASN:HB3	1.46	0.96
26:1H:676:A:H8	26:1H:2069:G:H21	1.04	0.96
26:14:2035:G:OP1	59:14:3636:HOH:O	1.84	0.96
26:14:1418:G:N2	26:14:1580:A:N7	2.13	0.96
26:1H:1771:C:HO2'	26:1H:1786:A:H8	0.98	0.96
14:5I:43:CYS:HA	14:5I:46:GLU:HG3	1.47	0.95
26:14:1416:G:H1	26:14:1582:C:H42	1.11	0.95
26:1H:2593:U:O4	59:1H:3563:HOH:O	1.84	0.95
26:14:1664:A:OP2	59:14:3540:HOH:O	1.84	0.95
26:1H:192:C:N3	59:1H:3537:HOH:O	2.00	0.95
10:1A:51:ARG:HB2	10:1A:60:ARG:HA	1.46	0.95
26:14:2057:A:OP2	59:14:3437:HOH:O	1.84	0.95
42:95:85:LYS:HD2	42:95:86:GLY:H	1.31	0.95
26:1H:2061:G:OP2	59:1H:3526:HOH:O	1.86	0.94
26:1H:943:U:OP2	36:78:36:LYS:NZ	2.00	0.94
26:14:1359:A:H62	26:14:1372:U:H3	0.95	0.94
26:1H:1169:G:H1	26:1H:1180:C:H42	1.14	0.94
26:14:801:G:OP2	59:14:3765:HOH:O	1.86	0.93
26:14:1774:C:OP1	59:14:3493:HOH:O	1.84	0.93
26:14:2598:A:OP1	59:14:3524:HOH:O	1.85	0.93
59:14:3537:HOH:O	29:29:135:HIS:NE2	2.00	0.93
1:13:171:A:H2'	1:13:172:A:H8	1.33	0.93
54:M5:61:LEU:HB2	54:M5:63:PRO:HG3	1.51	0.93
26:1H:450:G:OP2	59:1H:3722:HOH:O	1.84	0.93

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1647:G:OP2	59:14:3558:HOH:O	1.83	0.93
26:14:733:G:N7	59:14:3413:HOH:O	2.02	0.93
2:12:185:ILE:HG22	2:12:199:TYR:HB2	1.50	0.92
26:1H:1774:C:OP1	59:1H:3644:HOH:O	1.85	0.92
26:1H:2533:A:OP2	59:1H:4074:HOH:O	1.86	0.92
26:14:945:A:OP1	59:14:3700:HOH:O	1.86	0.92
1:13:877:C:OP1	8:7E:88:LYS:NZ	2.01	0.92
26:1H:2053:G:OP2	59:1H:3653:HOH:O	1.88	0.92
1:13:780:A:OP2	59:13:1912:HOH:O	1.86	0.92
2:1E:111:ARG:HG2	2:1E:111:ARG:HH11	1.33	0.92
26:1H:1496:A:H8	26:1H:1577:C:HO2'	1.04	0.91
26:14:1048:A:N6	26:14:1112:G:O2'	2.02	0.91
39:65:41:ASP:HB2	39:65:48:LEU:HD21	1.51	0.91
31:41:161:THR:HG22	31:41:163:ALA:H	1.35	0.91
26:14:1614:A:OP1	59:14:3419:HOH:O	1.88	0.90
26:1H:805:G:OP1	59:1H:3667:HOH:O	1.89	0.90
41:85:28:ARG:NH1	41:85:38:THR:OG1	2.04	0.90
26:14:84:A:N6	26:14:102:G:O2'	2.02	0.90
26:14:1658:C:OP1	59:14:3537:HOH:O	1.89	0.90
40:B8:102:ILE:HA	40:B8:105:LEU:HD22	1.53	0.90
1:13:664:G:H22	1:13:741:G:H1	1.17	0.90
26:14:1138:G:H21	34:15:106:MET:HE3	1.35	0.90
1:1G:411:A:H62	1:1G:413:G:H21	1.20	0.89
26:1H:631:A:OP2	54:Q8:46:ARG:NH2	2.06	0.89
26:1H:2588:G:OP1	59:1H:3743:HOH:O	1.90	0.89
1:1G:766:A:OP2	59:1G:1703:HOH:O	1.88	0.89
26:14:2393:A:H4'	36:35:62:LEU:H	1.37	0.89
36:35:85:LEU:HA	36:35:88:LEU:HB3	1.53	0.89
26:14:1780:A:OP1	59:14:3403:HOH:O	1.91	0.89
1:13:1297:C:OP1	13:4I:13:LYS:NZ	2.04	0.89
1:1G:1189:C:O2	59:1G:1763:HOH:O	1.89	0.89
26:1H:974(A):C:OP1	59:1H:3979:HOH:O	1.90	0.89
26:14:761:A:N7	59:14:3413:HOH:O	2.05	0.89
26:1H:741:G:OP1	59:1H:3775:HOH:O	1.90	0.88
55:3L:61:G:H1	55:3L:71:C:H42	1.22	0.88
34:15:14:VAL:HA	34:15:135:PRO:HD2	1.56	0.88
46:H8:111:VAL:HG11	46:H8:146:ILE:HG12	1.55	0.88
26:1H:2406:U:OP1	59:1H:3605:HOH:O	1.89	0.88
26:14:1298:C:OP2	59:14:3433:HOH:O	1.91	0.88
26:1H:958:U:OP2	37:88:14:ARG:NH1	2.07	0.88
26:14:654(D):G:N2	26:14:654(Q):C:N3	2.22	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1828:G:OP1	59:1H:3791:HOH:O	1.92	0.87
1:13:1004:A:O5'	1:13:1025:U:N3	2.08	0.87
26:14:1783:A:OP2	59:14:3404:HOH:O	1.91	0.87
30:39:181:LEU:HD21	30:39:186:ILE:HD11	1.56	0.87
4:3E:9:CYS:HB3	4:3E:32:ALA:HB2	1.57	0.87
1:1G:957:U:H1'	1:1G:960:U:H5	1.37	0.87
26:14:1639:U:OP2	59:14:3432:HOH:O	1.92	0.87
26:1H:219:G:N7	59:1H:3634:HOH:O	2.08	0.87
26:14:1225:C:H4'	42:95:85:LYS:HG2	1.57	0.87
1:13:8:A:N7	4:3E:208:SER:OG	2.06	0.86
26:14:733:G:OP2	59:14:3417:HOH:O	1.90	0.86
26:14:1428:C:N4	26:14:1570:A:OP2	2.08	0.86
26:14:1782:C:OP1	59:14:3406:HOH:O	1.92	0.86
9:82:3:GLN:HG2	9:82:20:ARG:HD2	1.57	0.86
26:1H:1187:G:OP2	59:1H:3713:HOH:O	1.92	0.86
3:22:95:THR:HG22	3:22:97:LYS:HG3	1.57	0.86
26:1H:1783:A:OP2	59:1H:3522:HOH:O	1.92	0.86
31:49:67:LYS:H	51:I5:6:HIS:CD2	1.92	0.86
29:21:119:ARG:HH11	29:21:119:ARG:HG3	1.40	0.86
1:13:171:A:H2'	1:13:172:A:C8	2.11	0.86
20:BI:73:HIS:HB3	20:BI:74:LYS:HG2	1.55	0.86
26:1H:1264:G:OP1	52:N8:19:ARG:NH2	2.08	0.86
1:13:1182:G:H4'	1:13:1183:A:H5'	1.56	0.86
26:1H:142:G:H1'	44:F8:37:THR:HG21	1.56	0.86
1:1G:1127:G:H22	1:1G:1144:G:H1	1.17	0.86
54:M5:30:ARG:O	54:M5:32:LEU:N	2.09	0.86
1:1G:377:G:H1	1:1G:386:C:H42	1.19	0.85
26:14:450:G:O6	59:14:3661:HOH:O	1.92	0.85
26:14:1364:G:OP2	48:F5:2:SER:N	2.09	0.85
26:1H:2469:A:H2	26:1H:2481:G:H21	1.21	0.85
26:14:2032:G:H21	29:29:146:THR:HG23	1.40	0.85
42:D8:59:ALA:HB2	42:D8:96:ILE:HD13	1.56	0.85
1:1G:533:A:OP1	59:1G:1747:HOH:O	1.91	0.85
26:14:2448:A:N1	59:14:3705:HOH:O	2.09	0.85
31:49:67:LYS:H	51:I5:6:HIS:HD2	1.21	0.85
26:1H:801:G:OP2	59:1H:3975:HOH:O	1.94	0.85
34:58:96:GLU:C	34:58:98:VAL:H	1.84	0.85
1:1G:664:G:H22	1:1G:741:G:H1	1.18	0.85
29:21:135:HIS:NE2	59:21:401:HOH:O	2.09	0.85
39:65:58:LEU:HD12	39:65:65:VAL:HG13	1.57	0.85
26:1H:392:C:OP1	59:1H:3607:HOH:O	1.93	0.85

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1664:A:OP2	59:1H:3904:HOH:O	1.93	0.85
26:1H:2135:A:N6	26:1H:2156:G:O2'	2.10	0.85
26:14:741:G:OP1	59:14:3490:HOH:O	1.94	0.85
34:15:61:ARG:HA	34:15:61:ARG:HE	1.40	0.85
54:M5:40:GLU:H	54:M5:43:GLN:HG3	1.42	0.84
1:13:972:C:OP1	59:13:1829:HOH:O	1.93	0.84
28:11:146:GLU:HB2	28:11:189:CYS:HB3	1.58	0.84
30:31:29:ASN:H	30:31:112:MET:HE1	1.41	0.84
6:5E:68:PRO:HG2	6:5E:71:ARG:HG3	1.59	0.84
1:13:79:G:N2	1:13:89:U:O4	2.09	0.84
1:13:1305:G:N2	1:13:1331:G:H2'	1.92	0.84
11:2I:18:ARG:NH2	11:2I:35:PRO:O	2.10	0.84
5:42:102:ALA:HB1	5:42:106:PRO:HG2	1.60	0.84
11:2I:79:SER:HB2	11:2I:106:LYS:HD2	1.59	0.84
2:12:42:ILE:HD11	2:12:202:PRO:HB2	1.59	0.84
26:14:2875:C:O2	40:75:3:ARG:NH2	2.10	0.84
1:13:1318:A:H1'	19:AI:37:ARG:HH21	1.43	0.84
26:1H:67:U:H3	26:1H:74:A:H2	1.20	0.84
26:1H:2032:G:H21	29:21:146:THR:HG23	1.42	0.84
34:58:96:GLU:HG2	34:58:97:ARG:H	1.43	0.84
9:8E:13:ALA:HB2	9:8E:68:GLY:HA3	1.59	0.84
1:13:974:A:OP2	14:5I:29:ARG:NH2	2.10	0.83
1:1G:1305:G:H22	1:1G:1331:G:H2'	1.43	0.83
29:29:55:ASN:O	29:29:57:LYS:NZ	2.10	0.83
26:14:1022:G:H22	26:14:1142(A):A:H2	1.24	0.83
26:14:2420:C:H41	54:M5:31:HIS:HB3	1.43	0.83
15:6I:6:GLU:HA	15:6I:9:GLN:HB2	1.61	0.83
26:1H:1887:C:H2'	26:1H:1888:G:H5"	1.59	0.83
33:61:7:GLU:HA	33:61:15:VAL:HG22	1.59	0.83
9:82:128:ARG:HH22	23:2L:33:OMC:HM23	1.43	0.83
26:14:1828:G:OP1	59:14:3503:HOH:O	1.96	0.83
26:14:2414:G:H21	36:35:67:MET:HE1	1.43	0.83
10:1I:48:THR:HA	10:1I:62:HIS:HB3	1.60	0.83
1:13:1502:A:H2	1:13:1505:G:H1	1.27	0.83
26:1H:2576:G:OP1	59:1H:3654:HOH:O	1.96	0.83
26:14:847:U:O4	26:14:933:A:N6	2.11	0.83
41:C8:92:ARG:HD2	42:D8:11:GLN:HB2	1.61	0.83
1:13:330:C:O2	59:13:1860:HOH:O	1.96	0.83
34:58:132:ALA:O	34:58:134:ARG:NH1	2.12	0.83
26:1H:732:C:OP2	59:1H:3894:HOH:O	1.96	0.83
26:1H:2058:A:N6	59:1H:3514:HOH:O	2.07	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:780:A:OP2	59:1G:1768:HOH:O	1.95	0.83
36:78:64:LYS:O	36:78:66:GLY:N	2.12	0.83
12:3I:38:THR:HG22	12:3I:39:VAL:HG23	1.59	0.82
16:7I:4:ILE:HB	16:7I:66:PRO:HB3	1.61	0.82
26:1H:2062:A:OP1	59:1H:3672:HOH:O	1.97	0.82
26:1H:1658:C:OP1	59:1H:3580:HOH:O	1.98	0.82
26:1H:1780:A:OP1	59:1H:3523:HOH:O	1.97	0.82
26:1H:1728:G:H8	26:1H:1732:A:H62	1.27	0.82
26:1H:2789:C:O2	26:1H:2894:G:N2	2.12	0.82
1:13:974:A:OP2	14:5I:41:ARG:NH1	2.12	0.82
26:1H:1970:A:OP1	59:1H:3803:HOH:O	1.96	0.82
2:12:75:LYS:HA	2:12:78:GLN:HB2	1.61	0.82
12:3A:47:LYS:HG3	12:3A:48:PRO:HD2	1.62	0.82
1:1G:1028(A):C:O2	1:1G:1032(B):G:N2	2.11	0.82
26:14:907:U:O2'	37:45:101:ARG:NH2	2.11	0.82
26:14:2056:G:OP2	59:14:3441:HOH:O	1.96	0.82
10:1I:50:ILE:HD11	10:1I:57:LYS:HD2	1.62	0.81
26:1H:1250:G:N7	36:78:18:ARG:NH1	2.28	0.81
26:1H:2597:G:O3'	59:1H:3544:HOH:O	1.97	0.81
31:41:83:ARG:H	31:41:86:MET:HE2	1.44	0.81
48:J8:83:GLU:HG2	48:J8:85:LEU:H	1.44	0.81
32:51:153:LYS:O	32:51:155:SER:OG	1.97	0.81
1:1G:235:C:H5'	17:8A:70:ARG:HG2	1.62	0.81
15:6A:26:GLU:OE2	15:6A:77:ARG:NH1	2.13	0.81
26:14:1225:C:O3'	42:95:85:LYS:HA	1.78	0.81
4:3E:90:GLY:HA3	4:3E:204:ILE:HD11	1.61	0.81
28:11:69:ARG:NH2	28:11:128:GLY:O	2.13	0.81
15:6A:87:ILE:HG22	15:6A:88:ARG:H	1.43	0.81
26:14:259:G:H21	26:14:621:A:H8	1.29	0.81
26:1H:2582:G:OP2	59:1H:3662:HOH:O	1.98	0.81
26:14:450:G:O6	59:14:3658:HOH:O	1.96	0.81
1:13:186(E):C:H42	1:13:191(B):G:H1	1.27	0.81
26:1H:945:A:N3	59:1H:3690:HOH:O	2.13	0.81
1:13:1009:G:N1	1:13:1020:U:O2	2.10	0.81
30:31:9:ILE:HD11	30:31:125:LEU:HG	1.61	0.81
26:14:399:G:OP2	59:14:3743:HOH:O	1.98	0.81
26:14:1331:A:OP2	59:14:3676:HOH:O	1.99	0.81
26:1H:860:U:H5	26:1H:917:A:C2	1.99	0.81
26:1H:2432:A:C5	48:J8:33:LYS:HG2	2.15	0.81
1:1G:1133:G:N2	1:1G:1141:C:O2	2.14	0.81
26:14:729:G:OP2	28:19:13:ARG:NH1	2.12	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:19:242:ARG:O	59:19:307:HOH:O	1.97	0.81
1:13:201:C:H42	1:13:216:G:H1	1.29	0.81
20:BI:53:LEU:HB3	20:BI:57:ARG:HH12	1.46	0.81
26:1H:2615:U:OP2	59:1H:3510:HOH:O	1.98	0.81
40:B8:51:ARG:HB2	40:B8:98:LYS:HD3	1.60	0.81
14:5I:26:ARG:HH11	14:5I:43:CYS:HB2	1.46	0.81
26:1H:751:A:OP1	59:1H:3750:HOH:O	1.98	0.81
26:1H:761:A:N7	59:1H:3893:HOH:O	2.13	0.81
46:H8:165:VAL:HB	46:H8:167:PRO:HD3	1.64	0.80
26:14:2714:G:OP2	59:14:3464:HOH:O	1.98	0.80
30:39:188:ARG:HA	36:35:3:LEU:HD11	1.61	0.80
26:1H:1614:A:OP1	59:1H:3748:HOH:O	1.97	0.80
26:14:2296:U:OP2	39:65:9:ARG:NH1	2.14	0.80
41:85:92:ARG:HD2	41:85:95:LEU:HD12	1.64	0.80
36:35:39:LYS:HD2	36:35:45:LEU:HD21	1.63	0.80
45:G8:94:LYS:HA	45:G8:94:LYS:HZ2	1.44	0.80
26:14:2447:G:O3'	59:14:3621:HOH:O	1.97	0.80
9:8E:3:GLN:OE1	9:8E:20:ARG:NH1	2.15	0.80
1:1G:1368:G:H5'	9:82:112:LYS:HB3	1.64	0.80
3:22:199:LYS:HB3	3:22:201:TYR:HE1	1.46	0.80
26:1H:2057:A:OP2	59:1H:3517:HOH:O	2.00	0.80
26:1H:2393:A:H5"	36:78:62:LEU:HB3	1.64	0.80
15:6A:16:ALA:HB1	15:6A:21:ASP:HB3	1.63	0.80
26:14:2102:U:H3	26:14:2187:G:H1	1.28	0.80
26:14:71:A:OP2	26:14:71:A:H3'	1.79	0.80
26:1H:535:C:O3'	41:C8:53:ARG:NH1	2.15	0.80
26:14:1019:U:H2'	26:14:1020:A:C8	2.17	0.80
26:14:1381:G:N7	59:14:3723:HOH:O	2.13	0.80
1:1G:544:G:OP1	4:32:59:ARG:NH2	2.13	0.80
26:14:67:U:H3	26:14:74:A:H2	1.27	0.80
26:1H:780:G:H21	26:1H:783:A:N6	1.80	0.79
29:21:117:MET:HE1	29:21:136:ARG:HA	1.64	0.79
26:1H:2502:G:OP2	59:1H:3528:HOH:O	1.99	0.79
42:D8:71:LEU:HD21	42:D8:84:LYS:HE2	1.63	0.79
33:69:81:VAL:HG23	33:69:143:SER:HB2	1.61	0.79
1:13:1178:G:OP2	9:8E:93:ARG:NH2	2.15	0.79
2:1E:63:MET:HB3	2:1E:225:ALA:HB1	1.62	0.79
26:1H:1534:G:H2'	26:1H:1535:U:H4'	1.64	0.79
1:1G:870:U:H4'	1:1G:871:U:H5"	1.65	0.79
33:69:130:TYR:HB3	33:69:136:VAL:HG13	1.63	0.79
51:I5:56:VAL:HG22	51:I5:57:GLU:HG3	1.63	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:510:A:OP2	59:13:1816:HOH:O	2.00	0.79
26:1H:2271:G:N7	59:1H:4019:HOH:O	2.16	0.79
1:13:1007:C:H42	1:13:1022:G:H1	1.30	0.79
26:1H:1381:G:N7	59:1H:3843:HOH:O	2.16	0.79
46:H8:62:PRO:C	46:H8:64:GLY:HA2	2.08	0.79
30:39:24:LEU:HD12	30:39:25:PRO:HD3	1.63	0.79
26:1H:2503:A:OP1	59:1H:3968:HOH:O	2.01	0.79
26:14:808:G:OP2	59:14:3599:HOH:O	2.00	0.79
26:14:399:G:OP2	59:14:3741:HOH:O	2.00	0.79
44:B5:63:LYS:H	44:B5:63:LYS:HE3	1.48	0.79
1:13:1321:C:H3'	1:13:1322:C:H5"	1.63	0.79
26:1H:1265:A:OP2	59:1H:3507:HOH:O	2.01	0.79
51:M8:37:SER:HA	51:M8:42:PHE:HB3	1.64	0.79
26:14:1970:A:OP2	59:14:3512:HOH:O	2.01	0.79
26:14:2126:A:N6	26:14:2163:C:O2'	2.16	0.79
1:1G:1298:C:OP2	7:62:114:ARG:NH2	2.16	0.79
26:14:1327:C:OP2	59:14:3574:HOH:O	2.00	0.79
26:14:2681:C:H5	26:14:2725:A:H62	1.30	0.79
26:14:2744:G:N2	32:59:143:GLN:OE1	2.15	0.79
1:13:362:G:N7	59:13:1895:HOH:O	2.15	0.79
26:1H:1042:G:H1	26:1H:1113:U:H3	1.31	0.79
26:1H:1332:G:H21	26:1H:1610:A:H8	1.31	0.79
32:51:4:ILE:HG13	32:51:6:ARG:CZ	2.13	0.79
41:C8:92:ARG:NH1	42:D8:11:GLN:O	2.16	0.79
26:14:833:U:O2	36:35:55:ARG:NH1	2.14	0.79
26:14:1858:G:O2'	26:14:1884:A:N6	2.16	0.79
52:J5:41:PRO:O	52:J5:44:THR:OG1	2.00	0.79
26:1H:309:G:N3	26:1H:329:G:O2'	2.16	0.78
26:14:242:G:H5"	54:M5:63:PRO:C	2.08	0.78
42:95:69:LYS:HG3	42:95:86:GLY:HA3	1.66	0.78
54:Q8:33:ASN:HA	54:Q8:36:LYS:HD2	1.65	0.78
26:1H:574:C:OP2	59:1H:3841:HOH:O	2.00	0.78
45:G8:87:LYS:H	45:G8:94:LYS:HG2	1.47	0.78
26:14:571:A:OP2	59:14:3612:HOH:O	2.01	0.78
32:59:152:ARG:HG3	32:59:153:LYS:HB2	1.64	0.78
26:14:635:C:O2'	26:14:639:U:OP1	1.99	0.78
1:1G:446:G:O6	59:1G:1774:HOH:O	2.02	0.78
26:14:517:C:OP1	52:J5:16:ARG:NH2	2.16	0.78
26:14:2597:G:O3'	59:14:3523:HOH:O	2.02	0.78
30:39:123:LEU:O	30:39:125:LEU:N	2.15	0.78
26:1H:1021:A:H62	26:1H:1141:U:H3	1.30	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:7:G:H1	26:14:2896:C:H42	1.31	0.78
36:35:50:ARG:HG2	36:35:50:ARG:HH11	1.47	0.78
42:95:37:VAL:HG21	42:95:57:VAL:H	1.48	0.78
2:1E:178:ARG:NH1	2:1E:196:LEU:O	2.16	0.78
52:J5:16:ARG:HH11	52:J5:16:ARG:HG2	1.49	0.78
46:H8:165:VAL:HB	46:H8:166:SER:HA	1.66	0.78
34:58:42:TRP:HA	34:58:48:MET:HE1	1.66	0.78
41:C8:92:ARG:O	41:C8:94:ASN:N	2.16	0.78
26:14:1434:A:H61	26:14:1558:A:N6	1.81	0.78
26:1H:1782:C:OP1	59:1H:3523:HOH:O	2.01	0.77
40:B8:6:LEU:HA	40:B8:9:LEU:HB2	1.66	0.77
55:3L:18:G:O6	55:3L:65:C:N4	2.15	0.77
1:13:1256:A:OP2	3:2E:26:LYS:NZ	2.16	0.77
4:3E:30:LYS:HD3	4:3E:35:ARG:HE	1.47	0.77
26:1H:2380:C:OP1	39:A8:20:ARG:NH2	2.17	0.77
29:21:82:ARG:O	29:21:84:PHE:N	2.17	0.77
26:14:2499:C:N3	59:14:3631:HOH:O	2.16	0.77
1:13:445:G:H1	1:13:489:C:H42	1.32	0.77
1:13:677:U:H3	1:13:713:G:H22	1.32	0.77
26:1H:620:G:H4'	26:1H:621:A:H5"	1.65	0.77
26:1H:1900:A:H5'	26:1H:1900:A:H8	1.48	0.77
26:1H:2406:U:OP1	59:1H:3604:HOH:O	2.03	0.77
26:14:30:G:O6	59:14:3838:HOH:O	2.01	0.77
26:14:1225:C:O2'	42:95:85:LYS:N	2.17	0.77
28:11:228:PRO:O	59:11:409:HOH:O	2.02	0.77
2:12:91:PRO:HG3	2:12:154:LEU:HB2	1.67	0.77
19:AA:11:VAL:HG22	19:AA:12:ASP:H	1.49	0.77
26:14:576:U:OP1	59:14:3587:HOH:O	2.01	0.77
26:1H:1061:U:H4'	26:1H:1070:A:H1'	1.65	0.77
1:1G:363:A:OP2	12:3A:34:ARG:NH2	2.16	0.77
55:3L:24:G:H2'	55:3L:25:G:H8	1.49	0.77
1:13:187:C:O2	1:13:191(A):G:N1	2.18	0.77
1:13:523:A:H61	12:3I:92:ASP:HB2	1.48	0.77
26:1H:2577:A:OP1	59:1H:3654:HOH:O	2.03	0.77
45:G8:76:CYS:HB2	45:G8:82:PRO:HD3	1.65	0.77
26:14:321:G:OP1	30:39:135:LYS:NZ	2.18	0.77
36:35:146:VAL:HG13	36:35:147:LEU:HD12	1.66	0.77
1:13:1133:G:N2	1:13:1141:C:N3	2.32	0.77
26:1H:71:A:H2	44:F8:31:HIS:HE2	1.31	0.77
1:1G:1223:C:H5"	1:1G:1224:G:H5"	1.64	0.77
38:55:100:LEU:HD21	38:55:113:LEU:HD13	1.64	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:453:C:OP1	59:14:3661:HOH:O	2.01	0.77
26:14:486:C:O2'	43:A5:60:ASN:OD1	2.01	0.77
26:1H:2308:G:N1	26:1H:2311:A:H2	1.82	0.77
29:29:55:ASN:O	29:29:57:LYS:N	2.18	0.77
29:21:128:SER:OG	29:21:129:HIS:N	2.18	0.77
30:31:32:LEU:HD21	30:31:105:VAL:HG13	1.66	0.77
49:K8:47:ASN:O	49:K8:49:LYS:N	2.17	0.77
26:1H:2115:G:N2	26:1H:2172:U:O2	2.18	0.76
27:16:101:A:OP2	59:16:307:HOH:O	2.01	0.76
38:98:56:LYS:NZ	38:98:90:ARG:O	2.18	0.76
1:1G:998(A):C:H42	1:1G:1042:G:H1	1.33	0.76
36:35:23:PRO:HB3	42:95:80:GLN:HG3	1.67	0.76
40:75:3:ARG:HG2	40:75:6:LEU:H	1.50	0.76
46:H8:82:ARG:HG2	46:H8:83:PRO:HD2	1.66	0.76
34:15:47:ALA:HB2	34:15:112:LEU:HD21	1.68	0.76
26:1H:879:G:N1	26:1H:898:C:N3	2.32	0.76
52:N8:41:PRO:O	52:N8:44:THR:OG1	2.04	0.76
26:14:2415:G:H4'	36:35:67:MET:H	1.49	0.76
26:14:2499:C:OP2	59:14:3446:HOH:O	2.03	0.76
29:29:81:ILE:HG22	29:29:82:ARG:H	1.51	0.76
37:45:75:THR:HG21	37:45:85:LYS:HE3	1.67	0.76
4:32:20:TYR:HA	4:32:26:CYS:HB2	1.67	0.76
37:45:25:ASP:HA	37:45:102:VAL:HG23	1.67	0.76
45:C5:19:LYS:HG3	45:C5:20:TYR:H	1.50	0.76
2:1E:16:HIS:HD2	2:1E:210:SER:HA	1.49	0.76
2:1E:166:ASP:HB3	2:1E:169:LYS:HB2	1.68	0.76
26:1H:2781:A:H5"	26:1H:2782:G:H5'	1.67	0.76
53:P8:35:ARG:HG3	53:P8:42:LEU:HD11	1.67	0.76
7:6E:62:PHE:HD1	7:6E:124:LEU:HD11	1.51	0.76
26:1H:751:A:OP1	59:1H:3749:HOH:O	2.03	0.76
46:H8:7:ALA:HB3	46:H8:61:LEU:HB2	1.67	0.76
46:H8:128:VAL:HA	46:H8:161:VAL:HG11	1.67	0.76
54:Q8:16:ILE:HD11	54:Q8:57:ARG:HG2	1.67	0.76
26:14:273(D):C:N4	26:14:363(B):G:O6	2.18	0.76
1:13:64:G:O6	1:13:99:C:N4	2.19	0.76
1:13:1202:G:H21	14:5I:43:CYS:HB3	1.49	0.76
26:14:1019:U:H2'	26:14:1020:A:H8	1.51	0.76
20:BI:49:ALA:HB1	20:BI:99:LEU:HB2	1.68	0.76
26:1H:2502:G:OP2	59:1H:3529:HOH:O	2.03	0.76
30:39:40:GLN:HE22	30:39:182:ASN:HB2	1.51	0.76
33:69:112:LYS:HA	33:69:114:LEU:H	1.51	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1129:C:H4'	1:13:1130:A:H5'	1.68	0.76
26:1H:646:A:H2'	26:1H:647:G:O4'	1.85	0.76
26:1H:1171:G:N2	26:1H:1178:C:N3	2.34	0.76
27:16:25:A:OP1	59:16:301:HOH:O	2.03	0.76
26:14:453:C:OP1	59:14:3662:HOH:O	2.04	0.76
26:14:2701:C:H3'	26:14:2702:U:C5'	2.13	0.76
26:14:2808:U:H3	26:14:2892:A:H62	1.34	0.76
1:1G:957:U:H1'	1:1G:960:U:C5	2.21	0.75
3:22:152:ILE:HB	3:22:199:LYS:HB2	1.69	0.75
26:14:1022:G:O2'	26:14:1023:U:OP2	2.04	0.75
46:D5:157:LEU:HA	46:D5:161:VAL:HG11	1.67	0.75
17:8I:66:SER:O	17:8I:70:ARG:NH1	2.19	0.75
23:2K:54:G:H2'	23:2K:55:5MU:H6	1.49	0.75
26:1H:1062:G:N2	26:1H:1076:C:N3	2.33	0.75
23:2L:48:U:O2'	23:2L:49:C:OP2	2.05	0.75
1:13:1128:C:O2'	1:13:1139:G:O6	2.05	0.75
26:1H:2683:C:OP1	40:B8:53:ARG:NH2	2.19	0.75
1:1G:1157:A:H61	1:1G:1178:G:H21	1.32	0.75
26:1H:1794:U:H2'	26:1H:1795:C:H6	1.51	0.75
27:16:15:A:H5'	27:16:16:G:H8	1.52	0.75
28:11:223:GLY:HA3	28:11:231:HIS:ND1	2.01	0.75
26:1H:567:A:OP1	59:1H:3504:HOH:O	2.05	0.75
26:14:2503:A:OP1	59:14:3591:HOH:O	2.04	0.75
31:49:161:THR:HG22	31:49:163:ALA:H	1.51	0.75
26:1H:2615:U:OP1	59:1H:3507:HOH:O	2.05	0.75
32:51:153:LYS:HB3	32:51:162:ILE:H	1.51	0.75
18:9A:59:SER:HB3	18:9A:62:GLU:HG3	1.69	0.75
36:35:14:LYS:O	36:35:16:ARG:N	2.19	0.75
36:35:47:ASP:OD2	36:35:50:ARG:NH1	2.20	0.75
4:3E:98:GLU:OE2	4:3E:103:ASN:ND2	2.17	0.75
26:1H:1798:U:H5'	28:11:259:THR:HG22	1.69	0.75
26:1H:2315:G:OP1	31:41:36:LYS:NZ	2.19	0.75
30:31:179:GLU:OE1	30:31:179:GLU:N	2.19	0.75
1:13:505:G:N7	59:13:1848:HOH:O	2.20	0.75
26:1H:1782:C:OP1	59:1H:3522:HOH:O	2.05	0.75
26:1H:1997:G:OP2	59:1H:3834:HOH:O	2.05	0.75
1:1G:662:G:O2'	1:1G:836:G:OP1	2.03	0.75
26:14:273(C):C:H42	26:14:363(C):G:H1	1.34	0.75
26:14:1616:A:O2'	59:14:3561:HOH:O	1.94	0.75
26:14:2298:A:H62	26:14:2318:G:H8	1.35	0.75
1:13:736:C:H2'	1:13:737:A:H8	1.52	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:4I:4:ILE:HG22	13:4I:5:ALA:H	1.51	0.75
28:11:96:HIS:CE1	28:11:102:LYS:HE2	2.22	0.75
26:14:1568:G:OP1	28:19:63:ARG:NH1	2.19	0.75
16:7I:3:LYS:HG3	16:7I:24:ALA:HB2	1.68	0.74
26:1H:298:G:OP2	45:G8:84:ARG:NH1	2.17	0.74
26:1H:459:U:H5"	53:P8:40:TRP:CD2	2.21	0.74
26:1H:1997:G:OP2	59:1H:3835:HOH:O	2.05	0.74
45:G8:30:VAL:HG22	45:G8:37:VAL:HG12	1.69	0.74
26:14:1693:U:O2'	28:19:14:ARG:NH2	2.21	0.74
47:I8:27:GLU:HG3	47:I8:68:GLU:HA	1.69	0.74
1:1G:1502:A:H2	1:1G:1505:G:H1	1.33	0.74
26:14:1828:G:OP2	59:14:3451:HOH:O	2.04	0.74
24:3K:18:G:O6	24:3K:65:C:N4	2.20	0.74
26:1H:61:G:OP1	49:K8:51:ARG:NH1	2.21	0.74
26:1H:848:G:H2'	26:1H:849:A:C8	2.23	0.74
41:C8:92:ARG:HH21	42:D8:10:LYS:HG2	1.52	0.74
46:H8:7:ALA:HB2	46:H8:59:LEU:HD22	1.69	0.74
8:72:4:ASP:OD1	8:72:7:ALA:N	2.20	0.74
8:72:86:ILE:HG21	8:72:133:LEU:HD22	1.69	0.74
11:2A:29:ILE:HG22	11:2A:44:SER:HB2	1.66	0.74
28:19:95:LEU:HD11	28:19:105:ILE:HD12	1.69	0.74
1:13:186(F):C:N3	1:13:191(B):G:N2	2.34	0.74
24:3K:19:C:H2'	24:3K:20:C:H4'	1.70	0.74
26:1H:138:G:N2	44:F8:44:GLU:OE2	2.19	0.74
26:1H:945:A:OP1	59:1H:3934:HOH:O	2.06	0.74
26:14:1639:U:OP1	59:14:3469:HOH:O	2.05	0.74
33:69:54:GLN:HA	33:69:57:ARG:HB3	1.69	0.74
35:25:115:VAL:HG13	35:25:121:VAL:HG21	1.68	0.74
36:35:52:GLU:HG2	36:35:55:ARG:HB3	1.69	0.74
26:1H:2580:U:H4'	29:21:130:GLY:HA3	1.70	0.74
28:11:182:LEU:H	28:11:272:ALA:HB3	1.51	0.74
26:14:751:A:OP1	59:14:3418:HOH:O	2.05	0.74
26:14:1716:U:H2'	26:14:1717:G:H8	1.52	0.74
1:1G:1125:U:O4	10:1A:5:ARG:NH1	2.21	0.74
26:14:1019:U:OP1	26:14:1035:U:O2'	2.04	0.74
26:1H:287:C:H2'	26:1H:288:C:H6	1.52	0.74
2:12:236:TYR:HB2	2:12:239:VAL:HB	1.68	0.74
32:59:3:ARG:HH21	32:59:4:ILE:HD11	1.52	0.74
9:8E:27:THR:HB	9:8E:62:TYR:HA	1.69	0.74
26:1H:2168:G:H22	26:1H:2170:A:H62	1.35	0.74
40:B8:27:THR:HG23	40:B8:90:GLN:HB3	1.69	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:22:8:ILE:HG23	3:22:16:ARG:HG2	1.70	0.74
8:72:17:THR:O	8:72:78:GLN:NE2	2.19	0.74
26:14:1443:G:H1	26:14:1548:C:H42	1.34	0.74
26:14:1689:A:H62	26:14:1698:A:H2	1.34	0.74
34:15:42:TRP:HA	34:15:48:MET:HE1	1.69	0.74
45:C5:87:LYS:HB2	45:C5:94:LYS:HA	1.70	0.74
17:8I:76:LEU:HD11	17:8I:79:SER:HB3	1.70	0.73
26:1H:2452:C:OP1	59:1H:4086:HOH:O	2.04	0.73
30:31:46:ARG:HG2	30:31:46:ARG:HH11	1.53	0.73
2:12:43:ASP:O	2:12:47:THR:OG1	2.06	0.73
26:14:1754:C:OP1	40:75:96:ARG:NH1	2.21	0.73
26:14:2523:G:H5'	26:14:2523:G:H8	1.52	0.73
26:1H:1022:G:N2	26:1H:1023:U:O4	2.20	0.73
1:1G:575:G:O2'	59:1G:1724:HOH:O	2.06	0.73
1:1G:768:A:OP2	59:1G:1711:HOH:O	2.05	0.73
1:1G:1127:G:N1	1:1G:1145:C:N3	2.36	0.73
1:1G:1298:C:H41	7:62:114:ARG:HB3	1.51	0.73
30:39:103:LYS:HA	30:39:106:ARG:HG3	1.70	0.73
9:8E:26:VAL:HA	9:8E:61:ALA:HB3	1.70	0.73
42:D8:15:GLU:HG3	42:D8:16:PRO:HD2	1.68	0.73
26:14:574:C:OP2	59:14:3584:HOH:O	2.06	0.73
37:45:36:ALA:HB2	37:45:103:MET:HE3	1.69	0.73
1:13:737:A:H2'	1:13:738:C:H6	1.52	0.73
7:6E:79:ARG:HE	7:6E:84:ASN:HB2	1.52	0.73
10:1I:61:GLU:OE2	14:5I:45:ARG:NH1	2.21	0.73
26:1H:890:A:H3'	26:1H:892:G:H8	1.53	0.73
26:1H:2849:U:O4	40:B8:23:ARG:NH2	2.18	0.73
26:14:531:C:OP1	26:14:561:G:N2	2.22	0.73
28:19:146:GLU:HB2	28:19:189:CYS:HB3	1.70	0.73
5:4E:81:GLU:HG2	5:4E:90:VAL:HG23	1.70	0.73
26:14:617:G:OP1	30:39:40:GLN:NE2	2.22	0.73
26:14:2498:C:OP2	59:14:3442:HOH:O	2.06	0.73
1:13:352:C:OP1	59:13:1859:HOH:O	2.06	0.73
4:3E:26:CYS:HB3	4:3E:31:CYS:SG	2.28	0.73
2:12:19:HIS:CE1	2:12:204:ASN:HB3	2.24	0.73
26:14:1043:C:O2	26:14:1112:G:N2	2.20	0.73
26:14:2168:G:N2	26:14:2170:A:OP2	2.20	0.73
26:14:2712(A):A:OP2	59:14:3467:HOH:O	2.05	0.73
31:49:109:VAL:HG11	31:49:142:PRO:HG3	1.69	0.73
52:J5:16:ARG:NH1	52:J5:17:ASP:OD1	2.21	0.73
1:13:453:A:H4'	16:7I:72:ARG:HB2	1.71	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1305:G:H22	1:13:1331:G:H2'	1.51	0.73
26:1H:800:A:OP1	59:1H:3538:HOH:O	2.06	0.73
26:1H:1026:U:H1'	26:1H:1027:A:O5'	1.88	0.73
26:1H:1676:A:OP2	59:1H:3587:HOH:O	2.05	0.73
26:14:1537:C:H2'	26:14:1538:G:C8	2.23	0.73
26:14:1614:A:OP1	59:14:3420:HOH:O	2.06	0.73
26:1H:1665:A:N7	59:1H:3906:HOH:O	2.21	0.73
39:A8:11:LYS:HD3	39:A8:91:PRO:HD3	1.70	0.73
1:1G:1446:A:N7	40:75:118:ARG:NH1	2.37	0.73
3:22:7:PRO:O	3:22:11:ARG:NH1	2.22	0.73
26:14:1007:C:OP1	34:15:37:LYS:NZ	2.22	0.73
36:78:15:ARG:HA	36:78:16:ARG:HB3	1.71	0.73
26:14:2135:A:N7	26:14:2156:G:N2	2.37	0.73
1:13:991:U:O4	1:13:1212:U:O2'	2.06	0.73
1:13:1226:C:H4'	19:AI:80:TYR:CZ	2.23	0.73
19:AI:40:ILE:HG23	19:AI:41:VAL:HG13	1.70	0.73
32:51:86:GLU:HG2	32:51:87:LEU:H	1.54	0.73
29:29:33:VAL:HG11	29:29:88:GLY:HA3	1.71	0.73
34:15:56:ASN:H	34:15:125:GLY:HA3	1.54	0.73
35:25:24:VAL:HB	35:25:33:ALA:HB2	1.71	0.73
26:1H:1968:G:OP1	59:1H:3814:HOH:O	2.05	0.72
11:2I:32:ILE:HD11	11:2I:68:ALA:HB1	1.69	0.72
26:1H:973:A:OP2	59:1H:3706:HOH:O	2.07	0.72
31:41:59:GLU:HG2	31:41:148:MET:HE2	1.70	0.72
41:C8:8:VAL:HG23	41:C8:11:ARG:HH21	1.53	0.72
1:1G:1348:U:H3	1:1G:1374:A:H2	1.35	0.72
26:14:177:G:OP2	26:14:177:G:N2	2.20	0.72
37:45:75:THR:HA	37:45:89:ASN:HA	1.70	0.72
49:G5:31:GLU:HB2	49:G5:53:LEU:HD11	1.72	0.72
31:41:17:PRO:HA	31:41:20:ILE:HD12	1.71	0.72
1:1G:1158:C:O2'	2:12:133:LYS:NZ	2.17	0.72
2:12:131:PRO:HG2	2:12:134:GLU:HB2	1.72	0.72
14:5A:23:ARG:NH1	14:5A:29:ARG:O	2.22	0.72
26:14:1420:U:O2'	26:14:1421:G:OP1	2.05	0.72
26:14:2250:G:C4	37:45:82:ARG:HG3	2.24	0.72
27:1J:80:U:H2'	27:1J:81:G:H21	1.54	0.72
37:45:135:ASP:OD2	46:D5:81:ARG:NH1	2.21	0.72
1:1G:742:G:OP2	15:6A:35:ARG:NH2	2.19	0.72
28:19:16:MET:HE2	28:19:208:LYS:HG2	1.70	0.72
20:BI:86:ARG:O	20:BI:90:GLN:NE2	2.23	0.72
22:1K:3:U:O2'	22:1K:4:G:O5'	2.07	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2340:G:H2'	26:14:2341:G:H8	1.54	0.72
2:1E:67:THR:HG21	2:1E:155:LEU:HG	1.71	0.72
2:1E:82:ARG:NE	2:1E:92:TYR:OH	2.23	0.72
20:BI:14:LYS:HG3	20:BI:17:ARG:HE	1.52	0.72
26:1H:945:A:OP1	59:1H:3937:HOH:O	2.07	0.72
26:1H:2127:G:H22	26:1H:2162:G:H1'	1.53	0.72
36:78:64:LYS:HD2	54:Q8:25:MET:SD	2.28	0.72
46:H8:19:ARG:NH1	46:H8:84:GLU:O	2.22	0.72
1:1G:176:C:OP1	20:BA:29:LYS:NZ	2.23	0.72
1:1G:516:U:O4	59:1G:1747:HOH:O	2.07	0.72
9:82:112:LYS:HA	9:82:119:ALA:HB2	1.71	0.72
24:1L:62:G:H1	24:1L:70:C:H42	1.36	0.72
26:14:71:A:H5'	26:14:71:A:C8	2.24	0.72
26:14:1783:A:OP2	59:14:3406:HOH:O	2.08	0.72
26:14:2472:G:H2'	26:14:2475:C:H41	1.55	0.72
32:59:159:GLU:O	32:59:163:TYR:OH	2.07	0.72
1:13:962:C:N4	1:13:973:G:O6	2.13	0.72
29:21:21:VAL:HB	29:21:22:PRO:HD3	1.69	0.72
1:1G:1251:A:H2'	1:1G:1252:A:C8	2.24	0.72
26:14:249:C:OP1	59:14:3426:HOH:O	2.07	0.72
26:14:309:G:H4'	45:C5:18:GLY:HA3	1.72	0.72
13:4I:108:ARG:NH1	13:4I:112:GLY:O	2.23	0.72
26:14:674:G:O2'	30:39:74:ARG:HG3	1.88	0.72
26:14:1359:A:N6	26:14:1372:U:H3	1.80	0.72
2:1E:69:LEU:HB3	2:1E:162:ILE:HG22	1.71	0.72
26:1H:2415:G:H4'	36:78:67:MET:N	2.05	0.72
15:6A:17:ARG:HD3	15:6A:26:GLU:HG3	1.70	0.72
26:14:2784:C:H1'	29:29:37:ARG:HH21	1.55	0.72
1:13:507:C:OP2	59:13:1815:HOH:O	2.07	0.72
26:1H:1406:U:H2'	26:1H:1407:C:C6	2.24	0.72
26:1H:1678:G:H22	26:1H:1989:G:H22	1.38	0.72
26:1H:2656:U:H3	26:1H:2665:A:H2	1.38	0.72
32:51:4:ILE:HG13	32:51:6:ARG:NE	2.03	0.72
26:14:2350:C:OP2	59:14:3834:HOH:O	2.08	0.72
44:F8:61:GLY:N	44:F8:75:ASP:OD1	2.23	0.71
1:1G:803:G:OP1	59:1G:1716:HOH:O	2.08	0.71
52:J5:49:CYS:SG	52:J5:50:GLY:N	2.62	0.71
1:13:509:A:OP2	59:13:1814:HOH:O	2.08	0.71
1:13:517:G:N1	1:13:533:A:OP2	2.23	0.71
8:7E:41:ARG:NH2	8:7E:123:GLU:OE1	2.23	0.71
26:1H:987:G:OP2	59:1H:3832:HOH:O	2.06	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2287:A:N6	26:1H:2344:U:H3	1.88	0.71
1:1G:1157:A:N6	1:1G:1178:G:H21	1.88	0.71
1:1G:1343:G:H2'	1:1G:1344:C:C6	2.25	0.71
37:45:27:VAL:HG13	46:D5:81:ARG:HH22	1.55	0.71
1:13:1000:A:H2'	1:13:1001:G:C8	2.25	0.71
26:1H:409:C:OP1	59:1H:3607:HOH:O	2.07	0.71
29:21:2:LYS:NZ	29:21:100:GLU:OE2	2.22	0.71
26:14:1141:U:OP2	34:15:63:THR:OG1	2.08	0.71
26:14:1782:C:OP1	59:14:3402:HOH:O	2.06	0.71
1:13:509:A:OP2	59:13:1818:HOH:O	2.08	0.71
45:G8:76:CYS:O	45:G8:78:ALA:N	2.21	0.71
4:32:4:TYR:HE2	4:32:11:LEU:HD11	1.54	0.71
26:14:2611:U:H6	26:14:2611:U:H5'	1.53	0.71
30:39:25:PRO:HB2	30:39:27:GLU:H	1.55	0.71
1:13:736:C:H2'	1:13:737:A:C8	2.26	0.71
26:1H:442:G:H1'	30:31:48:THR:HG21	1.70	0.71
26:1H:1689:A:H62	26:1H:1698:A:H2	1.36	0.71
32:51:152:ARG:HB3	32:51:153:LYS:HZ3	1.55	0.71
26:14:1568:G:H5'	28:19:60:ARG:HA	1.72	0.71
26:14:2592:G:N7	59:14:3528:HOH:O	2.24	0.71
11:2I:28:THR:HG21	11:2I:90:GLY:HA3	1.73	0.71
26:1H:2023:G:H5'	26:1H:2617:C:H4'	1.72	0.71
26:1H:2228:G:OP2	28:11:263:ARG:NH2	2.24	0.71
26:1H:2296:U:OP2	39:A8:9:ARG:NH2	2.22	0.71
34:58:39:ARG:NH1	34:58:41:ASP:OD2	2.22	0.71
1:1G:1435:G:H2'	1:1G:1436:U:C6	2.26	0.71
26:14:2123:G:H2'	26:14:2124:G:H8	1.55	0.71
29:29:52:LEU:C	29:29:74:PRO:HB3	2.16	0.71
44:F8:55:ASN:HB2	44:F8:80:ILE:HG13	1.72	0.71
16:7A:74:LEU:HD13	16:7A:79:VAL:HG21	1.73	0.71
21:1B:8:THR:HG22	21:1B:11:GLY:H	1.56	0.71
26:14:821:A:N1	59:14:3609:HOH:O	2.22	0.71
29:29:25:VAL:HG12	29:29:26:ILE:H	1.55	0.71
44:B5:41:ASN:HA	44:B5:44:GLU:HB2	1.72	0.71
54:M5:30:ARG:C	54:M5:32:LEU:H	1.99	0.71
54:M5:32:LEU:O	54:M5:33:ASN:ND2	2.24	0.71
26:1H:654(D):G:H1	26:1H:654(Q):C:H42	1.37	0.71
28:11:17:THR:HB	28:11:205:VAL:H	1.54	0.71
30:39:182:ASN:ND2	30:39:185:ASP:OD2	2.23	0.71
1:13:156:G:H1	1:13:165:C:H42	1.39	0.71
13:4I:90:LEU:HA	13:4I:93:ARG:HG3	1.73	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:259:G:O2'	26:1H:621:A:O2'	2.07	0.71
26:1H:989:G:N7	50:L8:13:ILE:HD11	2.06	0.71
33:61:144:VAL:HG22	33:61:145:VAL:HG13	1.71	0.71
1:1G:1392:G:H21	1:1G:1502:A:H8	1.37	0.71
16:7A:53:VAL:HG13	16:7A:79:VAL:HG22	1.73	0.71
55:3L:6:G:O6	55:3L:76:C:N4	2.23	0.71
36:35:64:LYS:HB2	54:M5:30:ARG:HH22	1.54	0.71
1:13:186(E):C:N3	1:13:191(B):G:N2	2.38	0.71
1:13:1086:U:H3	1:13:1099:G:H22	1.39	0.71
2:1E:174:VAL:HG13	2:1E:184:VAL:HG11	1.71	0.71
26:1H:780:G:H21	26:1H:783:A:H62	1.36	0.71
29:21:105:THR:OG1	29:21:199:ARG:NH2	2.21	0.71
1:1G:1503:A:O2'	25:4L:13:A:N1	2.24	0.71
8:72:64:LYS:HG2	8:72:79:VAL:HG21	1.71	0.71
21:1B:18:TYR:HE1	21:1B:22:ARG:HD3	1.56	0.71
26:14:900:A:H3'	26:14:901:A:H8	1.56	0.71
26:14:2102:U:O2	26:14:2187:G:N2	2.21	0.71
26:14:2250:G:C6	37:45:82:ARG:HD2	2.26	0.71
26:1H:1189:A:OP2	59:1H:3708:HOH:O	2.06	0.70
27:16:15:A:H5'	27:16:16:G:C8	2.25	0.70
43:E8:86:LEU:HD12	43:E8:87:PRO:HD2	1.71	0.70
1:1G:1286:A:C8	1:1G:1287:A:H4'	2.26	0.70
26:14:2577:A:OP2	52:J5:3:LYS:NZ	2.18	0.70
9:8E:89:ASN:ND2	9:8E:91:ASP:OD1	2.23	0.70
29:21:105:THR:HG1	29:21:199:ARG:HH21	1.38	0.70
9:82:50:LEU:HB3	9:82:56:LEU:HA	1.72	0.70
26:14:273(E):U:O4	26:14:363(A):A:N6	2.18	0.70
1:13:361:G:OP2	59:13:1894:HOH:O	2.08	0.70
20:BI:71:THR:HG22	20:BI:72:LEU:H	1.54	0.70
26:14:1111:A:H4'	32:59:3:ARG:HD3	1.72	0.70
26:14:1772:G:N3	59:14:3493:HOH:O	2.23	0.70
26:14:2638:G:OP2	29:29:82:ARG:NH2	2.24	0.70
26:14:2839:G:H5'	38:55:46:GLY:HA2	1.73	0.70
48:F5:91:LYS:HG3	48:F5:92:LYS:H	1.56	0.70
54:M5:61:LEU:HB2	54:M5:63:PRO:CG	2.20	0.70
26:1H:2001:A:H2'	26:1H:2002:G:C8	2.27	0.70
48:J8:85:LEU:HD12	48:J8:88:LYS:HB2	1.71	0.70
1:1G:353:A:H5'	1:1G:353:A:H8	1.53	0.70
26:1H:338:G:OP2	59:1H:3941:HOH:O	2.08	0.70
26:1H:1525:G:H2'	26:1H:1526:G:H8	1.55	0.70
26:1H:2400:G:H2'	26:1H:2401:U:C6	2.26	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:58:56:ASN:N	34:58:125:GLY:O	2.19	0.70
37:88:86:GLY:C	37:88:88:GLY:H	1.97	0.70
1:1G:377:G:OP1	16:7A:3:LYS:NZ	2.25	0.70
1:1G:474:G:H2'	1:1G:475:G:H8	1.56	0.70
26:14:2131:G:H5"	26:14:2158:A:H61	1.57	0.70
26:14:2415:G:H4'	36:35:67:MET:N	2.07	0.70
14:5I:4:LYS:O	14:5I:7:ILE:N	2.23	0.70
1:1G:600:C:H2'	1:1G:601:C:H6	1.56	0.70
26:14:2130:U:H2'	26:14:2158:A:N1	2.06	0.70
38:55:67:LEU:HD12	38:55:76:VAL:HG21	1.72	0.70
1:13:310:G:OP2	16:7I:27:LYS:NZ	2.25	0.70
1:13:396:G:O2'	1:13:398:C:OP1	2.08	0.70
26:1H:7:G:H2'	26:1H:8:A:O4'	1.91	0.70
26:1H:450:G:O6	59:1H:3724:HOH:O	2.05	0.70
26:1H:2210:G:H5'	26:1H:2211:G:N7	2.07	0.70
2:12:208:ILE:HA	2:12:211:ILE:HD12	1.74	0.70
18:9A:53:ARG:HH21	18:9A:60:ALA:H	1.36	0.70
26:14:491:G:H2'	26:14:492:A:C8	2.26	0.70
1:13:838:G:H1	1:13:848:C:N4	1.89	0.70
24:3K:13:G:H2'	24:3K:14:A:H8	1.57	0.70
26:1H:155:C:H42	26:1H:171:G:H1	1.37	0.70
26:1H:1187:G:OP2	59:1H:3716:HOH:O	2.09	0.70
1:1G:1438:G:O6	1:1G:1463:C:N4	2.20	0.70
26:14:1154:G:OP2	41:85:58:ARG:NH1	2.22	0.70
26:14:1856:G:H1	26:14:1886:C:H42	1.40	0.70
13:4I:23:TYR:HD2	13:4I:67:GLU:HA	1.55	0.70
26:1H:2123:G:H22	26:1H:2175:C:H42	1.38	0.70
32:51:86:GLU:HG3	32:51:165:ALA:HB3	1.73	0.70
32:51:149:ARG:NH1	32:51:167:GLU:OE2	2.24	0.70
47:I8:64:ASP:HB2	47:I8:85:ALA:HB1	1.73	0.70
1:1G:474:G:H2'	1:1G:475:G:C8	2.27	0.70
1:1G:1255:G:O2'	1:1G:1258:G:O2'	2.10	0.70
13:4A:58:GLU:O	13:4A:62:ASN:ND2	2.25	0.70
26:14:2499:C:OP1	59:14:3621:HOH:O	2.09	0.70
26:1H:249:C:O2	54:Q8:12:LYS:NZ	2.24	0.70
26:1H:607:U:H3	26:1H:621:A:H2	1.38	0.70
26:1H:2502:G:N7	59:1H:3679:HOH:O	2.25	0.70
2:12:5:ILE:HG12	2:12:6:THR:HG22	1.72	0.70
39:65:11:LYS:HG3	39:65:91:PRO:HD3	1.73	0.70
44:B5:60:ARG:HH11	44:B5:60:ARG:HG2	1.57	0.70
47:E5:27:GLU:HG3	47:E5:68:GLU:HA	1.74	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:3K:22:A:N7	24:3K:57:C:N4	2.40	0.69
26:1H:2270:G:OP2	59:1H:4021:HOH:O	2.09	0.69
37:88:89:ASN:O	37:88:92:GLY:N	2.17	0.69
26:14:1727:U:H3	26:14:1733:G:H1	1.40	0.69
26:14:2720:U:H3	26:14:2873:A:H2	1.39	0.69
37:45:88:GLY:O	37:45:89:ASN:ND2	2.25	0.69
5:4E:63:ARG:HA	5:4E:66:MET:HE2	1.73	0.69
26:1H:1078:U:H1'	26:1H:1088:A:H2	1.55	0.69
42:D8:44:LYS:O	42:D8:46:VAL:N	2.24	0.69
1:1G:673:G:H2'	1:1G:674:G:C8	2.27	0.69
18:9I:26:LEU:HD22	18:9I:42:ARG:HH22	1.57	0.69
22:1K:38:MIA:H111	25:4K:19[B]:A:C8	2.27	0.69
26:1H:273(F):C:H3'	26:1H:274:G:H5"	1.73	0.69
26:1H:1138:G:N2	34:58:106:MET:HE3	2.03	0.69
30:31:65:TRP:CH2	30:31:72:ARG:HD2	2.27	0.69
51:M8:9:LEU:H	51:M8:27:THR:HG23	1.57	0.69
26:14:1614:A:H61	43:A5:88:ARG:H	1.40	0.69
2:1E:80:ILE:HD11	2:1E:208:ILE:HG23	1.74	0.69
36:78:47:ASP:OD2	36:78:50:ARG:NH2	2.25	0.69
1:1G:45:U:H2'	1:1G:46:G:C8	2.26	0.69
11:2A:100:ALA:O	11:2A:102:GLY:N	2.23	0.69
26:14:141:A:H8	26:14:1595:G:H21	1.41	0.69
26:14:607:U:H3	26:14:621:A:H2	1.39	0.69
31:49:104:GLU:HG2	51:I5:23:GLU:HG2	1.74	0.69
40:B8:84:GLN:HG2	40:B8:85:LYS:HG2	1.73	0.69
1:13:1023:G:H3'	1:13:1024:G:H5"	1.74	0.69
26:1H:860:U:H5	26:1H:917:A:H2	1.39	0.69
26:1H:1434:A:H61	26:1H:1558:A:N6	1.91	0.69
36:78:61:ARG:CZ	36:78:61:ARG:HB2	2.22	0.69
1:1G:957:U:O2'	1:1G:959:A:N7	2.20	0.69
3:22:36:ASP:HA	3:22:39:ILE:HD12	1.74	0.69
4:3E:88:VAL:HB	4:3E:91:SER:HB3	1.73	0.69
26:1H:1779:U:H2'	59:1H:3519:HOH:O	1.91	0.69
26:1H:1815:A:O3'	59:1H:3870:HOH:O	2.11	0.69
1:1G:619:U:O2	4:32:135:LEU:HD22	1.93	0.69
17:8A:66:SER:O	17:8A:70:ARG:NH1	2.25	0.69
1:13:1122:U:O4	1:13:1123:A:N6	2.26	0.69
2:1E:8:LYS:HG2	2:1E:9:GLU:H	1.57	0.69
26:1H:76:C:O2'	49:K8:62:THR:HG21	1.92	0.69
26:1H:218:A:OP2	59:1H:3635:HOH:O	2.10	0.69
26:1H:376:C:OP2	59:1H:3608:HOH:O	2.10	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1386:C:H2'	26:1H:1387:C:H6	1.55	0.69
34:58:21:LYS:HE2	34:58:138:LEU:HD12	1.74	0.69
35:68:88:ASN:ND2	35:68:92:GLU:H	1.91	0.69
36:78:64:LYS:C	36:78:66:GLY:H	1.97	0.69
41:C8:32:PHE:HZ	41:C8:36:ARG:HH21	1.39	0.69
41:C8:97:ASP:OD2	41:C8:101:ARG:NH1	2.25	0.69
50:L8:13:ILE:O	59:L8:201:HOH:O	2.11	0.69
54:Q8:61:LEU:HD13	54:Q8:62:LEU:HD12	1.73	0.69
1:1G:1347:G:O2'	1:1G:1373:G:O6	2.08	0.69
3:22:63:ASN:HA	3:22:98:ASN:HB2	1.75	0.69
8:72:114:THR:HG21	8:72:119:LEU:HG	1.75	0.69
26:14:1170:G:O6	26:14:1179:C:N4	2.25	0.69
26:14:1652:A:OP1	38:55:8:ARG:NH1	2.25	0.69
26:14:1786:A:OP1	59:14:3496:HOH:O	2.10	0.69
26:14:2019:A:N7	52:J5:9:LYS:HE3	2.08	0.69
26:14:2101:G:H1	26:14:2188:C:H42	1.38	0.69
26:14:2791:C:H42	26:14:2805:G:H1	1.39	0.69
33:69:67:ARG:HB3	33:69:68:LEU:HD12	1.74	0.69
39:65:30:ARG:HG3	39:65:35:ILE:HD13	1.74	0.69
42:95:5:VAL:HB	42:95:37:VAL:HG12	1.73	0.69
1:13:1346:A:H5"	9:8E:120:ARG:HH12	1.57	0.69
26:1H:2141:G:H22	26:1H:2150:U:H1'	1.58	0.69
26:1H:2343:C:O2'	26:1H:2373:G:O2'	2.11	0.69
46:H8:76:LEU:HA	46:H8:83:PRO:HA	1.73	0.69
7:62:44:TYR:HA	7:62:47:CYS:HB2	1.75	0.69
26:14:249:C:OP1	59:14:3428:HOH:O	2.10	0.69
26:14:2882:A:H5'	38:55:96:ARG:HG3	1.75	0.69
40:75:105:LEU:HD23	40:75:109:GLU:HG3	1.74	0.69
5:4E:142:LEU:O	5:4E:143:ARG:NH1	2.26	0.69
26:1H:583:G:H5"	41:C8:10:ARG:HH12	1.58	0.69
26:14:570:G:O6	59:14:3619:HOH:O	2.09	0.69
1:13:235:C:H5'	17:8I:70:ARG:HG2	1.75	0.68
31:49:135:LEU:HD23	31:49:140:ILE:HD11	1.75	0.68
35:25:25:LEU:HB2	35:25:38:VAL:HG23	1.76	0.68
44:B5:8:ILE:O	49:G5:36:ARG:NH2	2.26	0.68
1:13:200:G:H1	1:13:217:C:H42	1.41	0.68
1:13:1075:C:OP1	2:1E:179:LYS:NZ	2.22	0.68
12:3I:117:ARG:HB3	12:3I:122:THR:HB	1.76	0.68
46:H8:30:ASN:HD22	46:H8:32:HIS:H	1.41	0.68
1:1G:1239:A:O2'	1:1G:1298:C:N4	2.26	0.68
26:14:751:A:OP1	59:14:3421:HOH:O	2.12	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:957:A:OP1	37:45:76:LYS:NZ	2.24	0.68
26:14:1310:G:OP2	53:L5:9:ARG:NH1	2.26	0.68
26:14:2150:U:H2'	26:14:2151:G:H8	1.57	0.68
40:75:6:LEU:HD12	40:75:9:LEU:HD13	1.73	0.68
22:1K:56:U:H3	22:1K:57:C:H5	1.40	0.68
26:1H:1316:U:H2'	26:1H:1317:A:H8	1.58	0.68
26:1H:1728:G:N1	26:1H:1730:U:OP2	2.27	0.68
1:1G:411:A:C5	1:1G:413:G:H1'	2.29	0.68
1:13:4:U:O4	8:7E:105:ARG:HG3	1.93	0.68
1:13:1292:U:H2'	1:13:1293:G:C8	2.29	0.68
26:1H:453:C:OP1	59:1H:3724:HOH:O	2.11	0.68
26:14:1676:A:OP2	59:14:3458:HOH:O	2.11	0.68
26:14:1778:U:H2'	26:14:1784:A:N6	2.09	0.68
28:19:148:GLU:HB2	28:19:151:LYS:HD2	1.76	0.68
32:59:18:GLU:HG3	32:59:25:LYS:HB2	1.75	0.68
36:35:55:ARG:HG2	36:35:56:SER:H	1.57	0.68
51:I5:22:ILE:HG12	51:I5:23:GLU:N	2.09	0.68
16:7I:53:VAL:HG13	16:7I:79:VAL:HG22	1.76	0.68
17:8I:67:LYS:HA	17:8I:70:ARG:HH12	1.59	0.68
30:31:134:GLY:H	30:31:162:LEU:HD22	1.57	0.68
26:14:29:U:H2'	26:14:30:G:C8	2.28	0.68
26:14:1061:U:H4'	26:14:1070:A:H1'	1.76	0.68
26:14:2444:G:OP2	30:39:68:LYS:NZ	2.25	0.68
30:39:101:LEU:O	30:39:106:ARG:NH1	2.25	0.68
1:13:74:C:H42	1:13:96:G:H1	1.40	0.68
26:1H:1060:U:H3	26:1H:1088:A:H8	1.41	0.68
26:1H:1086:A:H1'	26:1H:1103:A:H61	1.59	0.68
1:1G:560:U:O2'	1:1G:561:U:OP2	2.11	0.68
26:14:400:G:O6	59:14:3744:HOH:O	2.08	0.68
12:3I:58:VAL:O	12:3I:65:GLU:HA	1.94	0.68
22:1K:7:G:H1	22:1K:75:C:H42	1.40	0.68
32:51:74:ASN:HA	32:51:77:LYS:HD3	1.75	0.68
36:78:50:ARG:HD3	54:Q8:7:HIS:CD2	2.29	0.68
1:1G:664:G:N2	1:1G:741:G:H1	1.91	0.68
11:2A:85:ARG:HE	11:2A:111:ASP:HB3	1.58	0.68
51:I5:38:LYS:HA	51:I5:44:THR:HG21	1.76	0.68
24:3K:51:C:H3'	24:3K:52:G:O4'	1.94	0.68
26:1H:249:C:OP1	59:1H:3553:HOH:O	2.11	0.68
26:1H:2349:G:OP2	54:Q8:42:ARG:HD3	1.93	0.68
26:1H:2583:G:OP2	59:1H:3666:HOH:O	2.11	0.68
1:1G:362:G:O2'	12:3A:33:ARG:NH2	2.25	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:974:A:OP2	14:5A:41:ARG:NH1	2.27	0.68
12:3A:70:ILE:HD13	12:3A:77:LEU:HD12	1.74	0.68
26:14:2142:C:O2	26:14:2149:G:N2	2.23	0.68
42:95:85:LYS:CD	42:95:86:GLY:H	2.07	0.68
1:13:1160:G:H1	1:13:1177:G:H22	1.42	0.68
1:13:1279:A:O2'	1:13:1281:U:OP2	2.11	0.68
16:7I:45:THR:HG22	16:7I:47:ASP:H	1.57	0.68
17:8I:11:VAL:HG12	17:8I:85:VAL:HG13	1.76	0.68
26:1H:739:G:OP1	59:1H:3785:HOH:O	2.10	0.68
26:1H:963:U:OP1	59:1H:3684:HOH:O	2.09	0.68
26:1H:1190:G:N7	59:1H:3709:HOH:O	2.26	0.68
13:4A:37:THR:O	13:4A:55:ARG:NE	2.26	0.68
20:BA:16:HIS:O	20:BA:19:SER:OG	2.08	0.68
27:1J:92:G:OP1	46:D5:79:ARG:NH2	2.27	0.68
26:1H:739:G:OP1	59:1H:3782:HOH:O	2.11	0.68
37:88:65:PHE:O	37:88:66:ILE:HG13	1.93	0.68
45:G8:95:LYS:HE2	45:G8:97:ARG:HH22	1.59	0.68
1:13:13:U:OP1	59:13:1837:HOH:O	2.12	0.67
26:1H:1828:G:OP1	59:1H:3788:HOH:O	2.11	0.67
26:1H:2701:C:H3'	26:1H:2702:U:H5"	1.75	0.67
36:78:116:GLY:H	36:78:134:ALA:HB2	1.58	0.67
26:14:1971:A:OP1	59:14:3507:HOH:O	2.11	0.67
1:13:5:U:OP1	1:13:5:U:H4'	1.93	0.67
1:13:975:A:H4'	1:13:976:G:H5"	1.75	0.67
26:1H:2292:C:P	39:A8:17:ARG:HH22	2.17	0.67
29:21:97:LYS:N	29:21:100:GLU:OE1	2.23	0.67
42:D8:26:ASP:OD1	42:D8:26:ASP:N	2.24	0.67
46:H8:120:ILE:HG21	46:H8:170:THR:HB	1.75	0.67
10:1A:48:THR:HA	10:1A:62:HIS:HB3	1.77	0.67
26:14:1418:G:OP2	59:14:3730:HOH:O	2.12	0.67
26:14:2210:G:H3'	26:14:2211:G:C5	2.29	0.67
26:14:2572:A:OP1	26:14:2574:G:O2'	2.12	0.67
40:75:56:GLY:O	40:75:59:THR:HG23	1.94	0.67
1:13:688:G:H2'	1:13:689:C:H6	1.59	0.67
1:13:1000:A:H2'	1:13:1001:G:H8	1.57	0.67
1:13:1346:A:H5"	9:8E:120:ARG:NH1	2.08	0.67
26:1H:817:C:O2'	26:1H:839:U:OP1	2.12	0.67
26:1H:2439:A:H5'	26:1H:2439:A:C8	2.30	0.67
30:31:28:ILE:HG22	30:31:112:MET:HB3	1.76	0.67
31:41:67:LYS:HE2	51:M8:6:HIS:CE1	2.28	0.67
1:1G:126:G:O2'	1:1G:634:C:O2'	2.10	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:222:U:H2'	1:1G:223:U:H6	1.59	0.67
1:1G:971:G:N2	1:1G:1363:A:OP2	2.24	0.67
42:95:15:GLU:HG3	42:95:16:PRO:HD2	1.76	0.67
1:13:963:G:H21	10:1I:55:LYS:CE	2.07	0.67
8:7E:85:ARG:HD3	8:7E:88:LYS:HG2	1.75	0.67
26:1H:587:C:N3	36:78:33:ARG:NH1	2.41	0.67
1:1G:1055:A:N7	1:1G:1200:C:N4	2.42	0.67
1:13:652:U:OP2	59:13:1922:HOH:O	2.12	0.67
1:13:766:A:OP2	59:13:1803:HOH:O	2.12	0.67
1:13:972:C:OP2	10:1I:57:LYS:NZ	2.27	0.67
1:1G:261:U:OP2	20:BA:79:ARG:NH2	2.28	0.67
26:14:1417:C:OP2	59:14:3733:HOH:O	2.13	0.67
46:D5:10:ARG:NH2	46:D5:26:GLY:O	2.28	0.67
1:13:963:G:H21	10:1I:55:LYS:HE2	1.57	0.67
19:AI:41:VAL:HG21	19:AI:67:VAL:HG22	1.75	0.67
26:1H:2784:C:O2'	29:21:37:ARG:NH1	2.27	0.67
3:22:50:ALA:HB2	3:22:75:VAL:HB	1.76	0.67
26:14:634:C:H2'	26:14:635:C:C6	2.29	0.67
26:14:2447:G:O2'	59:14:3446:HOH:O	2.12	0.67
1:13:353:A:H8	1:13:353:A:H5'	1.59	0.67
13:4I:108:ARG:HA	13:4I:108:ARG:HH11	1.57	0.67
26:1H:879:G:O6	26:1H:898:C:N4	2.19	0.67
26:1H:1534:G:H1	26:1H:1538:G:N2	1.92	0.67
26:1H:2496:C:OP1	37:88:81:VAL:HG13	1.94	0.67
49:K8:4:SER:OG	49:K8:5:GLU:OE2	2.12	0.67
1:1G:60:A:N6	1:1G:110:C:N3	2.41	0.67
26:14:566:U:O3'	59:14:3600:HOH:O	2.11	0.67
36:35:52:GLU:N	36:35:52:GLU:OE2	2.28	0.67
39:65:110:LEU:HG	39:65:112:PHE:CZ	2.30	0.67
40:75:3:ARG:HG2	40:75:6:LEU:HB2	1.77	0.67
44:B5:49:VAL:HB	44:B5:83:VAL:HG21	1.77	0.67
1:13:352:C:OP2	59:13:1861:HOH:O	2.11	0.67
2:1E:82:ARG:HH21	2:1E:150:SER:HB3	1.60	0.67
22:1K:38:MIA:H111	25:4K:19[A]:A:H1'	1.77	0.67
26:1H:2314:C:H2'	26:1H:2315:G:H8	1.59	0.67
3:22:14:ILE:HG12	3:22:15:THR:H	1.60	0.67
26:14:2420:C:P	54:M5:34:TRP:H	2.18	0.67
34:15:38:HIS:CE1	34:15:39:ARG:HG3	2.29	0.67
1:13:1301:U:H3'	1:13:1302:U:H5'	1.75	0.67
1:1G:1059:C:O2	10:1A:53:PRO:HG3	1.95	0.67
26:14:34:C:O2'	26:14:35:G:OP2	2.11	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:620:G:N3	26:14:620:G:H5"	2.09	0.67
29:29:3:GLY:HA3	29:29:81:ILE:HD12	1.76	0.67
1:13:1029:G:O2'	1:13:1032(A):G:N2	2.28	0.67
26:1H:1316:U:H2'	26:1H:1317:A:C8	2.30	0.67
37:88:66:ILE:HD12	37:88:67:ARG:H	1.59	0.67
20:BA:25:ARG:HG3	20:BA:29:LYS:HE3	1.77	0.67
26:14:2405:G:N7	59:14:3802:HOH:O	2.28	0.67
27:1J:12:C:O2'	47:E5:74:ARG:HG3	1.95	0.67
37:45:31:ASP:H	37:45:107:ALA:HB2	1.59	0.67
1:13:177:C:OP1	20:BI:65:LYS:NZ	2.22	0.66
2:1E:16:HIS:CD2	2:1E:210:SER:HA	2.30	0.66
40:B8:60:THR:HG22	40:B8:77:PRO:HA	1.77	0.66
39:65:102:ALA:HA	39:65:105:ALA:HB3	1.76	0.66
43:A5:18:ARG:HG3	43:A5:76:VAL:HG13	1.77	0.66
1:13:619:U:H3	4:3E:134:ASP:HB2	1.59	0.66
22:1K:34:U:H1'	22:1K:38:MIA:H161	1.78	0.66
26:1H:252:G:OP2	36:78:50:ARG:NH1	2.28	0.66
35:68:7:TYR:HE1	35:68:20:MET:HE3	1.60	0.66
5:42:101:ILE:HD11	5:42:119:LEU:HD23	1.77	0.66
9:82:112:LYS:HE3	9:82:118:LYS:H	1.60	0.66
26:14:852:G:H2'	26:14:853:G:H8	1.60	0.66
26:14:1035:U:H2'	26:14:1036:G:C8	2.31	0.66
26:14:1899:G:H22	26:14:1902:C:N4	1.93	0.66
26:14:2836:U:H2'	26:14:2837:G:C8	2.30	0.66
1:13:27:G:H4'	4:3E:209:ARG:HB3	1.77	0.66
1:13:1348:U:H2'	1:13:1349:A:H8	1.60	0.66
14:5I:26:ARG:NH1	14:5I:43:CYS:HB2	2.11	0.66
26:1H:993:G:OP1	41:C8:50:ARG:NH2	2.28	0.66
26:14:2880:C:H1'	38:55:92:GLY:HA3	1.76	0.66
30:39:6:VAL:HB	30:39:124:LEU:HA	1.77	0.66
26:1H:524:U:H2'	26:1H:525:U:C6	2.29	0.66
26:1H:1021:A:H8	26:1H:1022:G:H5"	1.59	0.66
46:H8:105:VAL:HG22	46:H8:140:ASP:HB3	1.78	0.66
52:N8:40:LYS:HE2	52:N8:47:PRO:HD2	1.76	0.66
1:1G:1095:U:OP1	1:1G:1108:G:N1	2.28	0.66
26:14:654(B):C:H2'	26:14:654(C):G:C8	2.30	0.66
26:14:1329:U:H5"	26:14:1330:C:H5	1.60	0.66
26:14:2499:C:OP1	59:14:3619:HOH:O	2.12	0.66
30:39:8:GLN:HG2	30:39:124:LEU:HD11	1.76	0.66
30:39:168:ARG:HG3	30:39:175:THR:HG21	1.77	0.66
25:4K:13:A:O2'	25:4K:14:A:OP1	2.14	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:49:A:N7	26:1H:120:U:H5	1.94	0.66
1:1G:1023:G:H3'	1:1G:1024:G:H5"	1.76	0.66
26:14:213:A:OP2	59:14:3853:HOH:O	2.14	0.66
26:14:943:U:OP2	36:35:36:LYS:HG3	1.95	0.66
54:M5:34:TRP:HA	54:M5:34:TRP:CE3	2.31	0.66
18:9I:59:SER:HB3	18:9I:62:GLU:HB2	1.77	0.66
1:1G:800:G:O6	59:1G:1771:HOH:O	2.09	0.66
1:1G:1154:G:H2'	1:1G:1155:G:H8	1.60	0.66
5:42:143:ARG:NH1	8:72:77:GLU:OE2	2.28	0.66
10:1A:50:ILE:HD13	10:1A:60:ARG:HD3	1.78	0.66
26:14:528:A:OP2	34:15:114:ARG:NH1	2.26	0.66
26:14:1341:U:OP2	26:14:1394:U:O2'	2.08	0.66
26:14:2016:U:OP1	59:14:3804:HOH:O	2.14	0.66
1:13:1301:U:O3'	13:4I:21:TYR:OH	2.13	0.66
1:13:1328:C:OP1	21:1F:21:TYR:OH	2.13	0.66
26:1H:2504:U:OP1	59:1H:3969:HOH:O	2.12	0.66
49:K8:42:GLY:O	49:K8:44:LEU:N	2.28	0.66
51:M8:51:ASP:OD1	51:M8:51:ASP:N	2.27	0.66
26:14:1342:A:H2	26:14:1602:U:H3	1.43	0.66
26:14:1417:C:OP2	59:14:3731:HOH:O	2.13	0.66
26:14:2074:U:OP1	59:14:3408:HOH:O	2.13	0.66
26:14:2287:A:N6	26:14:2344:U:H3	1.94	0.66
31:49:64:THR:HG23	31:49:66:GLN:H	1.61	0.66
1:13:827:U:H5	1:13:872:A:N1	1.93	0.66
3:2E:96:GLY:H	3:2E:97:LYS:NZ	1.93	0.66
26:1H:141:A:H8	26:1H:1595:G:H21	1.44	0.66
26:1H:1778:U:H2'	26:1H:1784:A:N6	2.10	0.66
33:61:144:VAL:HG13	33:61:145:VAL:HG22	1.78	0.66
41:C8:69:CYS:HG	41:C8:79:PHE:HD2	1.43	0.66
20:BA:87:LYS:O	20:BA:91:LEU:HG	1.96	0.66
26:14:918:A:O2'	27:1J:96:G:N2	2.28	0.66
26:1H:563:G:OP2	59:1H:3535:HOH:O	2.13	0.66
26:1H:1037:G:O6	26:1H:1118:C:N4	2.14	0.66
26:1H:2062:A:H62	26:1H:2503:A:H62	1.44	0.66
26:1H:2113:U:H5	26:1H:2167:U:H3	1.44	0.66
39:A8:26:LEU:HD12	39:A8:39:ILE:HD11	1.78	0.66
1:1G:1246:C:H2'	1:1G:1247:U:H6	1.60	0.66
26:14:476:G:N1	26:14:479:A:OP2	2.25	0.66
26:14:1899:G:H22	26:14:1902:C:H41	1.41	0.66
34:15:35:ARG:HB3	34:15:42:TRP:CZ3	2.30	0.66
7:6E:62:PHE:HA	7:6E:124:LEU:HD21	1.78	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:7E:86:ILE:HG21	8:7E:133:LEU:HD13	1.77	0.66
26:1H:1858:G:H2'	26:1H:1883:G:H22	1.61	0.66
26:1H:1997:G:H5"	59:1H:3835:HOH:O	1.95	0.66
3:22:20:SER:HB2	3:22:40:ARG:HH22	1.59	0.66
21:1B:5:ASP:O	21:1B:11:GLY:HA3	1.96	0.66
34:15:28:THR:HG22	34:15:29:LYS:HE3	1.78	0.66
26:1H:1265:A:H3'	52:N8:19:ARG:NH1	2.11	0.65
26:1H:1786:A:H1'	26:1H:1938:A:N6	2.11	0.65
26:1H:2607:G:O3'	59:1H:3780:HOH:O	2.12	0.65
2:12:48:MET:O	2:12:52:GLU:N	2.29	0.65
2:12:97:TRP:HZ3	2:12:99:GLY:HA2	1.61	0.65
26:14:570:G:OP1	59:14:3610:HOH:O	2.14	0.65
26:14:1324:G:N7	59:14:3571:HOH:O	2.28	0.65
26:14:2406:U:O5'	59:14:3484:HOH:O	2.13	0.65
26:14:2652:C:H42	26:14:2668:G:H1	1.42	0.65
26:14:2777:G:H5"	26:14:2778:A:H5'	1.77	0.65
42:95:76:LYS:HD2	42:95:80:GLN:O	1.96	0.65
1:13:1133:G:H2'	1:13:1134:G:H8	1.60	0.65
26:1H:1430:C:H2'	26:1H:1431:U:H6	1.60	0.65
26:1H:1697:G:OP2	26:1H:1698:A:O2'	2.12	0.65
26:1H:1781:C:H3'	59:1H:3523:HOH:O	1.94	0.65
26:1H:2513:G:N2	29:21:143:ASN:HD21	1.94	0.65
26:1H:2588:G:OP1	59:1H:3741:HOH:O	2.13	0.65
28:11:71:ASP:OD2	28:11:103:ARG:NH2	2.29	0.65
28:11:162:SER:HB3	28:11:195:ALA:HA	1.79	0.65
29:21:3:GLY:HA3	29:21:81:ILE:HG21	1.77	0.65
37:88:35:VAL:HG13	37:88:130:LYS:HB3	1.78	0.65
1:1G:1343:G:H4'	9:82:122:ALA:HB3	1.77	0.65
13:4A:81:LEU:HD21	13:4A:88:ARG:CZ	2.26	0.65
26:14:2065:C:H1'	26:14:2449:U:H3	1.60	0.65
27:1J:40:U:O2'	27:1J:45:A:N6	2.28	0.65
29:29:39:PRO:HA	29:29:43:GLY:HA2	1.79	0.65
1:13:838:G:H1	1:13:848:C:H42	1.42	0.65
3:2E:40:ARG:O	3:2E:44:GLU:HG2	1.96	0.65
10:1I:40:LEU:HB2	10:1I:69:ASN:HB2	1.78	0.65
13:4I:13:LYS:O	13:4I:44:ARG:NH1	2.30	0.65
26:1H:1164:G:H2'	26:1H:1165:U:C6	2.32	0.65
26:1H:1798:U:C5'	28:11:259:THR:HG22	2.27	0.65
29:21:29:GLY:H	29:21:51:PHE:HE1	1.44	0.65
38:98:117:VAL:O	38:98:118:GLU:HB2	1.96	0.65
46:H8:115:GLY:HA3	46:H8:174:VAL:HG21	1.78	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:H8:152:ALA:HB3	46:H8:167:PRO:HA	1.76	0.65
1:1G:345:C:H1'	1:1G:346:G:C2	2.32	0.65
1:1G:1300:G:O2'	1:1G:1301:U:O5'	2.14	0.65
55:3L:13:G:H1'	55:3L:23:A:H61	1.61	0.65
26:14:1060:U:H4'	26:14:1061:U:H5"	1.78	0.65
26:14:2074:U:OP1	59:14:3410:HOH:O	2.13	0.65
39:65:27:SER:HA	39:65:88:ASP:HB2	1.77	0.65
46:D5:4:ARG:HA	46:D5:58:VAL:HB	1.79	0.65
48:F5:87:PRO:HA	48:F5:90:ILE:HG22	1.79	0.65
5:4E:102:ALA:HB1	5:4E:106:PRO:HG2	1.78	0.65
26:1H:323:G:C8	30:31:171:PRO:HG3	2.31	0.65
26:1H:857:C:H4'	47:I8:23:VAL:HG21	1.79	0.65
26:1H:1257:C:H4'	30:31:83:PHE:CD1	2.31	0.65
30:31:183:VAL:O	30:31:187:VAL:HG23	1.97	0.65
31:41:112:PRO:HB3	51:M8:36:CYS:HA	1.79	0.65
41:C8:92:ARG:CZ	42:D8:11:GLN:H	2.08	0.65
45:G8:28:LYS:HD2	45:G8:40:GLU:HG2	1.77	0.65
46:H8:150:LEU:HD22	46:H8:171:ILE:HG13	1.76	0.65
1:1G:266:G:N3	1:1G:266:G:H5'	2.10	0.65
12:3A:27:LEU:HD23	12:3A:33:ARG:HG2	1.78	0.65
26:14:323:G:O2'	26:14:1205:U:N3	2.29	0.65
26:14:872:A:H4'	37:45:66:ILE:HD11	1.78	0.65
26:14:1130:U:O2	29:29:149:ARG:NH2	2.29	0.65
28:19:69:ARG:NH2	28:19:128:GLY:O	2.29	0.65
1:13:524:G:H2'	1:13:525:C:C6	2.32	0.65
49:K8:47:ASN:C	49:K8:49:LYS:H	2.04	0.65
1:1G:1237:C:O2'	1:1G:1300:G:N2	2.29	0.65
1:1G:1288:A:N3	1:1G:1352:C:O2'	2.28	0.65
7:62:116:ALA:HA	7:62:119:ARG:HE	1.62	0.65
10:1A:34:VAL:HG22	10:1A:74:ILE:HG22	1.76	0.65
34:15:133:GLN:HG2	34:15:135:PRO:HD3	1.79	0.65
1:13:376:G:O3'	16:7I:5:ARG:NH1	2.28	0.65
4:3E:25:ARG:NH1	4:3E:30:LYS:HG3	2.11	0.65
26:1H:1780:A:OP1	59:1H:3519:HOH:O	2.13	0.65
1:1G:811:C:N4	59:1G:1702:HOH:O	2.21	0.65
2:12:69:LEU:HB3	2:12:162:ILE:HG22	1.78	0.65
5:42:79:GLU:HG2	5:42:92:LYS:HG2	1.78	0.65
55:3L:14:A:H3'	55:3L:15:G:H5"	1.78	0.65
26:14:855:G:O2'	47:E5:27:GLU:OE2	2.14	0.65
26:14:859:G:O2'	26:14:916:G:O6	2.13	0.65
26:14:1388:G:H2'	26:14:1389:G:H8	1.60	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2207:C:H42	26:14:2217:G:H1	1.45	0.65
29:29:32:PRO:HA	29:29:90:THR:HG22	1.79	0.65
10:1I:49:VAL:HG23	14:5I:41:ARG:HB2	1.79	0.65
11:2I:86:GLY:N	11:2I:112:THR:OG1	2.19	0.65
26:1H:1058:U:H3	26:1H:1080:A:H61	1.42	0.65
26:1H:2593:U:H2'	26:1H:2594:C:C6	2.32	0.65
29:21:152:LYS:HG2	34:58:78:TYR:CE1	2.32	0.65
3:2E:11:ARG:HB3	3:2E:15:THR:HB	1.78	0.65
4:3E:172:PRO:HB2	4:3E:187:ARG:HH12	1.61	0.65
26:1H:220:G:O6	59:1H:3636:HOH:O	2.11	0.65
26:1H:918:A:N3	27:16:80:U:O2'	2.28	0.65
26:1H:1935:G:H1'	26:1H:1964:G:N2	2.12	0.65
1:1G:1268:A:H2'	1:1G:1269:A:C8	2.32	0.65
5:42:60:TYR:HB3	5:42:64:ARG:HE	1.61	0.65
26:14:567:A:OP1	59:14:3600:HOH:O	2.13	0.65
30:39:51:THR:HG23	30:39:92:PRO:HG2	1.79	0.65
8:7E:82:HIS:NE2	8:7E:136:GLU:OE2	2.29	0.65
26:1H:1495:A:OP2	59:1H:4081:HOH:O	2.14	0.65
26:1H:2820:A:OP1	38:98:2:ARG:NH2	2.30	0.65
36:78:64:LYS:C	36:78:66:GLY:N	2.54	0.65
1:1G:179:A:H2'	1:1G:180:U:C6	2.32	0.65
26:14:993:G:OP1	41:85:50:ARG:NH2	2.29	0.65
26:14:1111:A:H4'	32:59:3:ARG:HH11	1.62	0.65
26:14:1210:A:H5"	26:14:1211:U:H3'	1.78	0.65
26:14:2138:C:O2	26:14:2154:G:N2	2.30	0.65
26:14:2238:G:N7	59:14:3646:HOH:O	2.30	0.65
36:35:52:GLU:OE1	36:35:54:GLY:N	2.29	0.65
1:13:176:C:OP1	20:BI:29:LYS:NZ	2.29	0.65
1:13:538:G:H5"	12:3I:114:LYS:HB2	1.78	0.65
26:1H:589:C:H2'	26:1H:590:A:C8	2.32	0.65
26:1H:1430:C:H2'	26:1H:1431:U:C6	2.32	0.65
26:1H:1441:G:H2'	26:1H:1442:G:H8	1.62	0.65
28:11:85:ASP:HB2	28:11:92:ILE:HG12	1.79	0.65
33:61:92:VAL:HG13	33:61:120:ILE:HG23	1.79	0.65
51:M8:9:LEU:HD12	51:M8:26:SER:HA	1.79	0.65
1:1G:538:G:H5"	12:3A:114:LYS:HB2	1.78	0.65
1:1G:617:G:H1	1:1G:623:C:H42	1.45	0.65
26:14:329:G:O6	45:C5:19:LYS:HG2	1.96	0.65
31:49:125:PHE:HB3	31:49:166:ASP:HB2	1.77	0.65
38:55:51:LEU:HD23	38:55:66:VAL:HG22	1.79	0.65
1:13:1015:A:H2'	1:13:1016:A:C8	2.32	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1332:G:H5'	26:1H:1332:G:C8	2.33	0.64
26:1H:2392:A:H2	26:1H:2424:C:H42	1.45	0.64
1:1G:877:C:OP1	8:72:88:LYS:NZ	2.30	0.64
2:12:74:LYS:NZ	2:12:206:ASP:OD1	2.29	0.64
26:14:2448:A:OP1	59:14:3616:HOH:O	2.13	0.64
26:14:2468:G:OP1	37:45:119:ARG:NH2	2.27	0.64
26:14:2503:A:OP2	59:14:3589:HOH:O	2.14	0.64
1:13:165:C:H2'	1:13:166:G:C8	2.33	0.64
7:6E:50:ILE:HB	7:6E:58:PRO:HB3	1.79	0.64
17:8I:22:LEU:HD11	17:8I:39:SER:HB3	1.79	0.64
26:1H:1129:A:N6	26:1H:2491:U:OP1	2.27	0.64
26:1H:1900:A:H5'	26:1H:1900:A:C8	2.31	0.64
36:78:50:ARG:HD3	54:Q8:59:LYS:HE3	1.79	0.64
44:F8:15:GLU:H	44:F8:15:GLU:CD	2.02	0.64
1:1G:1348:U:N3	1:1G:1374:A:H2	1.94	0.64
2:12:27:LYS:NZ	2:12:193:ASP:OD2	2.30	0.64
16:7A:37:GLY:HA2	16:7A:50:LYS:HD3	1.80	0.64
5:4E:147:ASP:HA	5:4E:150:ARG:HH12	1.63	0.64
17:8I:81:ARG:NH2	17:8I:83:ASP:OD2	2.29	0.64
22:1K:51:C:C5	22:1K:52:G:H1'	2.32	0.64
26:1H:1512:G:H2'	26:1H:1513:C:C6	2.32	0.64
37:88:135:ASP:HB3	37:88:137:TYR:H	1.62	0.64
52:N8:42:PRO:O	52:N8:44:THR:OG1	2.15	0.64
1:1G:1292:U:H2'	1:1G:1293:G:C8	2.32	0.64
37:45:7:MET:HE2	37:45:7:MET:HA	1.78	0.64
1:13:750:G:N3	15:6I:23:GLY:HA3	2.13	0.64
24:3K:25:G:H2'	24:3K:26:G:H8	1.61	0.64
26:1H:1228:G:OP2	41:C8:16:LYS:NZ	2.31	0.64
26:1H:1279:G:H4'	38:98:31:HIS:CD2	2.32	0.64
29:21:27:LEU:HD22	40:B8:1:MET:HE1	1.80	0.64
39:A8:10:ARG:O	39:A8:14:VAL:HG12	1.97	0.64
51:M8:12:ALA:HB1	51:M8:30:GLU:H	1.63	0.64
1:1G:363:A:OP1	12:3A:33:ARG:HG3	1.97	0.64
1:1G:1385:G:H2'	1:1G:1386:G:H8	1.63	0.64
26:14:2264:C:N4	47:E5:15:ASP:OD2	2.29	0.64
28:19:255:LYS:CE	28:19:255:LYS:H	2.10	0.64
37:45:26:TYR:CD2	37:45:26:TYR:O	2.50	0.64
1:13:320:C:H42	1:13:333:G:H1	1.45	0.64
1:13:1314:C:N4	19:AI:4:SER:O	2.27	0.64
26:1H:1156:A:C8	41:C8:51:LYS:HD3	2.33	0.64
2:12:40:HIS:CE1	2:12:190:THR:HG21	2.33	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AA:66:MET:SD	19:AA:66:MET:N	2.71	0.64
26:14:34:C:OP2	26:14:34:C:H6	1.80	0.64
26:14:528:A:C2	26:14:2042:A:H2'	2.33	0.64
26:14:1788:C:H2'	26:14:1789:A:H8	1.62	0.64
1:13:1368:G:H5"	9:8E:112:LYS:HB3	1.79	0.64
10:1I:77:PRO:HB2	10:1I:79:ARG:HH12	1.61	0.64
26:1H:1525:G:H2'	26:1H:1526:G:C8	2.33	0.64
32:51:12:PRO:HG2	32:51:13:LYS:HG2	1.79	0.64
36:78:65:ARG:HH21	54:Q8:15:LYS:HB2	1.62	0.64
1:1G:588:G:H1	1:1G:651:C:H42	1.44	0.64
26:14:1183:G:O3'	50:H5:29:ARG:NH2	2.30	0.64
33:69:57:ARG:HA	33:69:60:GLU:HG2	1.79	0.64
11:2I:32:ILE:HD12	11:2I:72:ALA:HB2	1.80	0.64
26:1H:2584:U:H2'	26:1H:2585:U:H2'	1.79	0.64
30:31:101:LEU:O	30:31:106:ARG:NH1	2.31	0.64
31:41:35:GLU:HG3	31:41:36:LYS:HB2	1.80	0.64
32:51:30:LYS:HG3	32:51:80:SER:HA	1.79	0.64
39:A8:38:GLN:HG2	39:A8:47:THR:HG21	1.77	0.64
20:BA:51:GLU:HA	20:BA:54:LYS:HE3	1.80	0.64
26:14:323:G:HO2'	26:14:1205:U:H3	1.43	0.64
26:14:592:G:H21	54:M5:4:MET:CE	2.10	0.64
1:13:730:G:C5	1:13:731:G:H1'	2.33	0.64
6:5E:97:PHE:N	18:9I:30:ASP:OD1	2.25	0.64
13:4I:88:ARG:HD3	13:4I:98:VAL:HG11	1.80	0.64
26:1H:2334:G:H5'	39:A8:9:ARG:HG2	1.77	0.64
30:31:28:ILE:HG22	30:31:112:MET:HE3	1.79	0.64
40:B8:3:ARG:HG3	40:B8:3:ARG:O	1.96	0.64
41:C8:92:ARG:HD3	41:C8:94:ASN:HB3	1.80	0.64
2:12:91:PRO:HG2	2:12:155:LEU:HB2	1.78	0.64
9:82:28:VAL:HG22	9:82:63:ILE:HB	1.78	0.64
26:14:607:U:OP1	30:39:102:PRO:HA	1.97	0.64
26:14:1840:G:OP2	59:14:3754:HOH:O	2.15	0.64
45:C5:15:VAL:HG12	45:C5:21:LYS:HA	1.78	0.64
4:3E:152:SER:HB2	4:3E:155:LEU:HG	1.80	0.64
13:4I:82:MET:HE2	13:4I:92:HIS:HB3	1.79	0.64
26:1H:2065:C:H2'	26:1H:2066:C:H6	1.62	0.64
26:1H:2543:G:H2'	26:1H:2544:G:C8	2.33	0.64
37:88:37:LEU:HD21	37:88:130:LYS:HE3	1.80	0.64
40:B8:55:ASN:N	40:B8:59:THR:HG22	2.12	0.64
1:1G:179:A:H2'	1:1G:180:U:H6	1.62	0.64
10:1A:6:ILE:HG22	10:1A:98:ILE:HG23	1.79	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:29:199:ARG:HB3	29:29:200:GLU:OE1	1.96	0.64
13:4I:54:VAL:O	13:4I:58:GLU:HG2	1.98	0.64
24:3K:18:G:H1'	24:3K:19:C:OP2	1.97	0.64
24:3K:59:A:H2'	24:3K:60:A:C8	2.32	0.64
26:1H:587:C:OP2	36:78:21:ARG:NH2	2.31	0.64
26:1H:1165:U:H2'	26:1H:1166:C:C6	2.33	0.64
28:11:206:LEU:HD22	28:11:211:ARG:HB3	1.80	0.64
37:88:76:LYS:N	37:88:88:GLY:HA3	2.08	0.64
1:1G:838:G:H1	1:1G:848:C:H42	1.46	0.64
2:12:163:PHE:HD2	2:12:185:ILE:HG13	1.63	0.64
24:1L:54:C:N3	24:1L:55:U:N3	2.46	0.64
26:14:1024:G:H3'	26:14:1025:G:H5"	1.80	0.64
26:1H:2210:G:H3'	26:1H:2211:G:N7	2.12	0.63
45:G8:34:LYS:HD3	45:G8:36:ALA:HB2	1.81	0.63
26:14:86:C:HO2'	26:14:104:U:HO2'	1.42	0.63
26:14:593:G:H4'	54:M5:61:LEU:HD22	1.79	0.63
26:14:2419:U:O4	54:M5:31:HIS:ND1	2.30	0.63
45:C5:14:LEU:HD22	45:C5:15:VAL:H	1.63	0.63
2:1E:126:GLU:OE1	2:1E:130:ARG:NH2	2.29	0.63
4:3E:108:LEU:HB3	4:3E:110:PHE:HD1	1.62	0.63
19:AI:5:LEU:HD13	19:AI:10:PHE:CD1	2.33	0.63
26:1H:355:G:H2'	26:1H:356:G:H8	1.63	0.63
26:1H:1794:U:H2'	26:1H:1795:C:C6	2.33	0.63
26:1H:2212:A:H1'	26:1H:2215:G:C5	2.32	0.63
26:1H:2610:C:H4'	26:1H:2611:U:OP2	1.99	0.63
37:88:20:ALA:HB1	37:88:99:PRO:HB2	1.80	0.63
1:1G:960:U:H3	1:1G:1225:A:H1'	1.63	0.63
21:1B:2:GLY:O	21:1B:4:GLY:N	2.31	0.63
37:45:57:HIS:CD2	37:45:117:ALA:HB2	2.34	0.63
51:I5:2:LYS:HB3	51:I5:6:HIS:HB2	1.78	0.63
26:1H:1478:G:H2'	26:1H:1479:G:H8	1.63	0.63
29:21:77:ILE:O	29:21:79:ARG:N	2.31	0.63
29:21:105:THR:HG22	29:21:106:GLY:H	1.61	0.63
38:98:55:ALA:HA	38:98:80:PHE:CE1	2.33	0.63
45:G8:84:ARG:NE	45:G8:84:ARG:O	2.31	0.63
51:M8:16:CYS:SG	51:M8:17:GLY:N	2.71	0.63
1:1G:657:G:H21	15:6A:22:THR:HB	1.63	0.63
1:1G:1157:A:O2'	1:1G:1158:C:O5'	2.17	0.63
26:14:1817:G:OP1	28:19:88:ARG:NH2	2.31	0.63
27:1J:42:C:H4'	31:49:67:LYS:HD3	1.80	0.63
29:29:11:MET:HA	29:29:24:THR:HA	1.79	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:3E:9:CYS:HB3	4:3E:32:ALA:CB	2.27	0.63
26:1H:229:A:H4'	26:1H:230:U:C5'	2.22	0.63
26:1H:1371:G:H2'	26:1H:1372:U:H5	1.63	0.63
40:B8:54:ARG:HA	40:B8:59:THR:HG22	1.79	0.63
1:1G:1499:A:H1'	1:1G:1520:G:H5'	1.80	0.63
2:12:137:ARG:HH22	2:12:141:GLU:HB2	1.61	0.63
8:72:29:SER:HB3	8:72:32:LYS:HG3	1.81	0.63
26:14:446:G:OP2	59:14:3737:HOH:O	2.16	0.63
26:14:1537:C:O2'	26:14:1538:G:O4'	2.16	0.63
3:2E:12:LEU:C	3:2E:14:ILE:H	2.07	0.63
26:1H:33:U:H4'	26:1H:34:C:OP1	1.98	0.63
26:1H:1586:A:H3'	26:1H:1587:A:H8	1.63	0.63
30:31:66:PRO:O	30:31:67:GLN:HB3	1.99	0.63
31:41:5:VAL:H	51:M8:25:TYR:HE2	1.46	0.63
1:1G:36:C:OP1	12:3A:123:LYS:NZ	2.31	0.63
17:8A:100:LYS:HB2	17:8A:101:ARG:HB2	1.81	0.63
26:14:71:A:H5"	26:14:73:A:C8	2.34	0.63
26:14:2107:C:H42	26:14:2182:G:H1	1.45	0.63
39:65:88:ASP:O	39:65:89:ARG:HB3	1.99	0.63
17:8I:60:ILE:HB	17:8I:74:LEU:HD23	1.81	0.63
22:1K:18:G:H4'	22:1K:19:C:OP2	1.98	0.63
27:16:7:G:H4'	39:A8:29:PHE:CD2	2.34	0.63
32:51:88:LEU:HB3	32:51:130:ARG:HG2	1.80	0.63
26:14:602:G:O2'	26:14:604:G:O2'	2.16	0.63
26:14:1027:A:C2	26:14:2488:A:H5'	2.33	0.63
26:14:1478:G:H2'	26:14:1479:G:H8	1.64	0.63
26:14:1665:A:H4'	35:25:67:LYS:HB2	1.80	0.63
26:14:2185:C:H2'	26:14:2186:G:H8	1.64	0.63
26:14:2475:C:O2'	26:14:2476:A:H5'	1.98	0.63
37:45:81:VAL:O	37:45:82:ARG:NE	2.32	0.63
1:13:89:U:O2'	1:13:90:C:O5'	2.17	0.63
6:5E:50:TYR:OH	18:9I:74:ARG:O	2.14	0.63
15:6I:56:LEU:HA	15:6I:59:MET:HE2	1.80	0.63
23:2K:54:G:H2'	23:2K:55:5MU:C6	2.32	0.63
26:1H:1614:A:P	59:1H:3748:HOH:O	2.56	0.63
35:68:107:ARG:NH1	40:B8:36:GLU:OE2	2.31	0.63
50:L8:10:LYS:NZ	50:L8:15:TYR:OH	2.24	0.63
17:8A:63:ARG:HG2	17:8A:64:PRO:HD2	1.79	0.63
26:14:479:A:N3	26:14:481:G:H5"	2.13	0.63
32:59:87:LEU:HB2	32:59:131:VAL:HG12	1.79	0.63
1:13:4:U:O2'	1:13:5:U:OP1	2.16	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:953:G:H2'	1:13:954:G:O4'	1.98	0.63
1:13:1053:G:H5'	1:13:1054:C:H5'	1.81	0.63
26:1H:620:G:H4'	26:1H:621:A:C5'	2.28	0.63
26:1H:676:A:H8	26:1H:2069:G:N2	1.87	0.63
26:1H:2065:C:H2'	26:1H:2066:C:C6	2.34	0.63
37:88:78:PRO:HB2	37:88:80:GLU:HG2	1.80	0.63
15:6A:4:THR:OG1	15:6A:7:GLU:OE2	2.11	0.63
26:14:90:U:H1'	26:14:91:A:C8	2.34	0.63
26:14:2111:C:N4	26:14:2147:G:H21	1.97	0.63
1:13:649:G:H2'	1:13:650:G:H8	1.64	0.63
19:AI:50:ALA:HB1	19:AI:57:HIS:HB3	1.80	0.63
22:1K:35:QUO:C4	22:1K:35:QUO:C2	2.70	0.63
26:1H:256:A:OP2	59:1H:4094:HOH:O	2.16	0.63
26:1H:1069:A:H4'	26:1H:1070:A:H5"	1.80	0.63
26:1H:1088:A:H5'	26:1H:1089:G:H5'	1.81	0.63
26:1H:1537:C:H2'	26:1H:1538:G:O4'	1.98	0.63
29:21:117:MET:CE	29:21:136:ARG:HA	2.29	0.63
9:82:128:ARG:NH2	23:2L:33:OMC:HM23	2.11	0.63
26:14:640:C:H42	26:14:648:G:H1	1.47	0.63
26:14:823:G:H2'	26:14:824:A:C8	2.34	0.63
26:14:1416:G:H1	26:14:1582:C:N4	1.90	0.63
26:14:1636:C:H2'	26:14:1637:A:C8	2.34	0.63
26:14:2656:U:H3	26:14:2665:A:H2	1.46	0.63
32:59:11:VAL:HB	32:59:13:LYS:HG3	1.79	0.63
36:35:13:ASN:C	36:35:15:ARG:H	2.07	0.63
51:I5:22:ILE:HG12	51:I5:23:GLU:H	1.64	0.63
3:2E:58:GLU:H	3:2E:65:ALA:HB3	1.63	0.62
12:3I:53:ARG:HG3	12:3I:93:LEU:HD21	1.81	0.62
13:4I:10:PRO:HB2	13:4I:18:ALA:HB1	1.81	0.62
26:1H:527:C:H4'	26:1H:528:A:O5'	1.99	0.62
26:1H:987:G:OP2	59:1H:3831:HOH:O	2.15	0.62
26:1H:1778:U:OP2	59:1H:3786:HOH:O	2.15	0.62
29:21:166:THR:HG21	29:21:199:ARG:HH22	1.64	0.62
34:58:67:LEU:HA	34:58:87:LEU:HD12	1.80	0.62
54:Q8:15:LYS:HD2	54:Q8:16:ILE:H	1.63	0.62
10:1A:40:LEU:HB3	10:1A:69:ASN:HB3	1.81	0.62
26:14:162:U:H4'	26:14:171:G:C4	2.34	0.62
26:14:2287:A:H62	26:14:2344:U:H3	1.47	0.62
26:14:2476:A:N3	26:14:2476:A:H5"	2.14	0.62
32:59:153:LYS:O	32:59:161:GLY:HA3	1.99	0.62
40:75:62:THR:HG22	40:75:75:ILE:HG12	1.79	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:C5:52:SER:HA	45:C5:55:TYR:O	1.99	0.62
1:13:1226:C:O2'	13:4I:111:LYS:NZ	2.32	0.62
2:1E:124:SER:HB2	2:1E:125:PRO:HD2	1.81	0.62
26:1H:588:U:H2'	26:1H:589:C:C6	2.34	0.62
26:1H:732:C:H3'	59:1H:3892:HOH:O	1.98	0.62
26:1H:1515:C:H2'	26:1H:1516:U:H6	1.64	0.62
26:1H:2309:A:H2'	26:1H:2310:A:O4'	1.99	0.62
1:1G:371:G:H1	1:1G:390:C:H42	1.47	0.62
26:14:2762:G:H5'	26:14:2763:G:OP2	1.98	0.62
35:25:68:GLU:HB3	35:25:78:ARG:NH1	2.14	0.62
41:85:88:ILE:HB	41:85:90:VAL:HG23	1.81	0.62
3:2E:17:ASP:O	3:2E:54:ARG:NH2	2.32	0.62
24:3K:7:G:N2	24:3K:76:C:O2	2.32	0.62
26:1H:2577:A:OP1	59:1H:3651:HOH:O	2.16	0.62
32:51:54:ARG:HD3	32:51:65:HIS:ND1	2.14	0.62
39:A8:7:TYR:HA	39:A8:10:ARG:HH21	1.65	0.62
1:1G:1441:G:H4'	1:1G:1442:G:C8	2.34	0.62
26:14:603:A:H8	26:14:604:G:H1'	1.64	0.62
26:14:1496:A:H8	26:14:1577:C:HO2'	1.46	0.62
26:14:1796:U:H2'	26:14:1797:C:C6	2.34	0.62
26:14:2318:G:H5'	26:14:2319:G:OP2	1.99	0.62
32:59:77:LYS:HE2	32:59:81:GLU:HB3	1.80	0.62
35:25:68:GLU:OE2	35:25:78:ARG:NH1	2.28	0.62
51:I5:37:SER:C	51:I5:39:CYS:H	2.05	0.62
23:2K:24:C:H2'	23:2K:25:U:C6	2.34	0.62
26:1H:1509:C:N4	26:1H:1511:A:H62	1.97	0.62
26:1H:2306:C:H3'	26:1H:2307:G:H5"	1.82	0.62
26:1H:2355:C:O2	47:I8:39:ARG:NH2	2.32	0.62
31:41:107:LEU:HD21	31:41:178:PHE:CE1	2.34	0.62
4:32:31:CYS:C	4:32:33:MET:H	2.06	0.62
26:14:1657:C:H2'	26:14:1658:C:H6	1.64	0.62
28:19:40:THR:OG1	28:19:41:GLY:N	2.30	0.62
38:55:104:ARG:HD2	38:55:111:LEU:HD21	1.79	0.62
39:65:87:PHE:CE1	39:65:102:ALA:HB2	2.34	0.62
1:13:1182:G:C4'	1:13:1183:A:H5'	2.29	0.62
26:1H:460:A:H5"	26:1H:461:C:OP2	2.00	0.62
26:1H:606:U:H4'	26:1H:658:C:H4'	1.81	0.62
26:1H:1405:U:H2'	26:1H:1406:U:C6	2.33	0.62
26:1H:2836:U:H2'	26:1H:2837:G:C8	2.34	0.62
41:C8:88:ILE:O	41:C8:90:VAL:N	2.33	0.62
46:H8:4:ARG:HA	46:H8:58:VAL:HG22	1.81	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:H8:119:GLU:H	46:H8:119:GLU:CD	2.05	0.62
26:14:729:G:O5'	28:19:208:LYS:NZ	2.31	0.62
26:14:2058:A:N6	59:14:3438:HOH:O	2.23	0.62
26:14:2392:A:H2	26:14:2424:C:H42	1.44	0.62
1:13:393:A:OP2	16:7I:12:LYS:NZ	2.29	0.62
2:1E:98:LEU:HB2	2:1E:101:MET:HG3	1.81	0.62
17:8I:13:ASP:HA	17:8I:19:VAL:HG12	1.80	0.62
19:AI:5:LEU:HD13	19:AI:10:PHE:HD1	1.64	0.62
26:1H:1607:C:H4'	26:1H:1608:A:O5'	2.00	0.62
26:1H:2646:C:OP2	26:1H:2732:G:O2'	2.16	0.62
42:D8:1:MET:SD	42:D8:43:GLU:HG2	2.39	0.62
1:1G:600:C:H2'	1:1G:601:C:C6	2.34	0.62
1:1G:1352:C:H42	1:1G:1370:G:H1	1.47	0.62
5:42:152:ARG:O	8:72:64:LYS:NZ	2.31	0.62
37:45:133:ARG:O	37:45:134:ARG:HB3	1.99	0.62
42:95:44:LYS:O	42:95:46:VAL:N	2.26	0.62
9:8E:97:LYS:HB2	9:8E:102:LEU:HD12	1.81	0.62
26:1H:1221:C:H2'	26:1H:1222:C:H6	1.64	0.62
26:1H:1678:G:H22	26:1H:1989:G:N2	1.98	0.62
36:78:125:VAL:O	36:78:144:GLU:HB2	1.98	0.62
26:14:1678:G:H22	26:14:1989:G:H22	1.47	0.62
26:14:2357:U:OP1	47:E5:20:ARG:NH1	2.32	0.62
26:14:2812:G:N2	26:14:2889:C:O2	2.32	0.62
31:49:124:SER:HB2	31:49:131:TYR:CE2	2.35	0.62
11:2I:73:MET:HG2	11:2I:103:LEU:HD13	1.81	0.62
45:G8:49:VAL:HG21	45:G8:55:TYR:HE2	1.63	0.62
1:1G:411:A:H62	1:1G:413:G:N2	1.94	0.62
1:1G:656:C:H42	1:1G:750:G:H1	1.48	0.62
1:1G:933:G:O6	7:62:3:ARG:NH2	2.33	0.62
1:1G:1297:C:OP1	13:4A:44:ARG:NH2	2.27	0.62
4:32:150:GLU:HA	4:32:153:ARG:HG2	1.81	0.62
6:52:74:ASP:OD1	6:52:74:ASP:N	2.32	0.62
26:14:987:G:O2'	26:14:1000:A:N3	2.33	0.62
26:14:1716:U:H2'	26:14:1717:G:C8	2.34	0.62
1:13:838:G:OP2	1:13:842:C:N4	2.33	0.62
3:2E:12:LEU:O	3:2E:14:ILE:N	2.31	0.62
5:4E:126:ARG:HG3	5:4E:126:ARG:HH11	1.64	0.62
11:2I:19:ALA:O	11:2I:82:VAL:HA	1.99	0.62
18:9I:54:ARG:HG3	18:9I:55:ARG:HG3	1.81	0.62
26:1H:319:C:OP1	30:31:137:LYS:NZ	2.26	0.62
26:1H:1063:G:N2	26:1H:1076:C:O2	2.33	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2210:G:H3'	26:1H:2211:G:C8	2.35	0.62
34:58:47:ALA:HB2	34:58:112:LEU:HD11	1.81	0.62
45:G8:20:TYR:CE1	45:G8:43:ASN:HA	2.35	0.62
1:1G:426:G:OP1	4:32:38:TYR:OH	2.17	0.62
10:1A:6:ILE:HG13	10:1A:72:VAL:HG23	1.82	0.62
25:4L:19:A:H4'	25:4L:20:A:OP1	1.98	0.62
26:14:639:U:H2'	26:14:640:C:C6	2.35	0.62
26:14:2849:U:OP1	40:75:95:ARG:NH1	2.32	0.62
30:39:74:ARG:O	30:39:74:ARG:HG2	2.00	0.62
30:39:130:ALA:H	30:39:142:TRP:CD1	2.18	0.62
33:69:133:HIS:CG	33:69:134:PRO:HD3	2.35	0.62
26:1H:2845:G:N7	59:1H:4114:HOH:O	2.31	0.62
1:1G:1095:U:P	1:1G:1108:G:H1	2.23	0.62
1:1G:1452:C:H4'	1:1G:1453:G:H5'	1.80	0.62
5:42:68:GLU:HG3	5:42:70:PRO:HD3	1.81	0.62
26:14:459:U:H5"	53:L5:40:TRP:CD2	2.34	0.62
26:14:2127:G:H1	26:14:2161:C:N4	1.98	0.62
27:1J:52:A:N6	39:65:33:LYS:HG3	2.15	0.62
29:29:101:ARG:HB2	29:29:203:LYS:HD2	1.81	0.62
29:29:111:ARG:HA	38:55:2:ARG:HH12	1.65	0.62
1:13:86:U:O2'	1:13:87:A:O4'	2.12	0.61
7:6E:62:PHE:CD1	7:6E:124:LEU:HD11	2.33	0.61
26:1H:1204:A:H2	26:1H:1241:A:N1	1.97	0.61
26:1H:1210:A:H5'	26:1H:1210:A:H8	1.65	0.61
26:1H:2313:C:H4'	31:41:91:ARG:HG3	1.82	0.61
4:32:30:LYS:HB3	4:32:35:ARG:HD2	1.81	0.61
17:8A:98:LEU:O	17:8A:100:LYS:NZ	2.33	0.61
26:14:8:A:H2'	26:14:9:U:C6	2.35	0.61
26:14:2016:U:O2	52:J5:7:PRO:HG2	1.98	0.61
41:85:11:ARG:HH11	41:85:11:ARG:HG3	1.64	0.61
1:13:539:A:H2'	1:13:540:G:C8	2.34	0.61
1:13:963:G:N2	10:1I:55:LYS:HZ1	1.97	0.61
1:13:1148:U:H2'	1:13:1149:C:O4'	2.01	0.61
3:2E:14:ILE:HG12	3:2E:15:THR:N	2.13	0.61
26:1H:607:U:OP1	30:31:102:PRO:HA	2.00	0.61
26:1H:1859:A:N6	26:1H:1883:G:O2'	2.34	0.61
26:1H:2695:C:H2'	26:1H:2696:U:H6	1.63	0.61
31:41:66:GLN:NE2	31:41:93:THR:O	2.22	0.61
38:98:72:ASP:O	38:98:76:VAL:HG23	2.00	0.61
55:3L:12:C:H3'	55:3L:13:G:C8	2.35	0.61
26:14:2378:A:H4'	39:65:23:ARG:HH12	1.65	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:69:102:SER:O	33:69:106:GLY:N	2.33	0.61
37:45:110:THR:HG23	37:45:113:GLN:HB2	1.82	0.61
45:C5:42:VAL:O	45:C5:65:ALA:N	2.30	0.61
1:13:1062:U:H2'	1:13:1063:C:C6	2.35	0.61
5:4E:11:ILE:HG13	5:4E:31:LEU:HB3	1.81	0.61
24:3K:75:C:H2'	24:3K:76:C:C6	2.35	0.61
26:1H:589:C:H2'	26:1H:590:A:H8	1.65	0.61
26:1H:1087:G:C5	26:1H:1089:G:H1'	2.35	0.61
26:1H:2331:G:O3'	47:I8:43:THR:HG22	1.99	0.61
26:1H:2702:U:H6	26:1H:2702:U:OP1	1.84	0.61
37:88:66:ILE:O	37:88:104:PHE:N	2.33	0.61
38:98:32:GLY:HA2	38:98:116:LEU:HD12	1.82	0.61
39:A8:25:ARG:NH1	39:A8:42:ASP:OD2	2.33	0.61
1:1G:1347:G:N2	1:1G:1373:G:H2'	2.15	0.61
26:14:91:A:H2'	26:14:92:G:H5'	1.80	0.61
26:14:2273:A:H2'	26:14:2274:A:C8	2.36	0.61
29:29:9:VAL:HG12	40:75:8:LYS:HZ1	1.66	0.61
29:29:62:PRO:C	29:29:64:LYS:H	2.07	0.61
34:15:61:ARG:HA	34:15:61:ARG:NE	2.14	0.61
54:M5:30:ARG:CD	54:M5:31:HIS:H	2.12	0.61
1:13:81:G:O6	1:13:87:A:N6	2.33	0.61
1:13:601:C:H2'	1:13:602:A:H8	1.65	0.61
22:1K:13:G:H2'	22:1K:14:A:H8	1.64	0.61
26:1H:2593:U:H2'	26:1H:2594:C:H6	1.64	0.61
36:78:50:ARG:HD3	54:Q8:7:HIS:HD2	1.65	0.61
43:E8:52:GLU:O	43:E8:55:ALA:N	2.32	0.61
45:G8:97:ARG:NH1	45:G8:103:GLY:O	2.33	0.61
26:14:2096:U:H3	26:14:2193:G:H1	1.48	0.61
45:C5:76:CYS:SG	45:C5:97:ARG:HG3	2.39	0.61
1:13:1213:A:O2'	1:13:1215:G:N7	2.27	0.61
16:7I:1:MET:SD	16:7I:1:MET:N	2.68	0.61
1:1G:426:G:OP1	4:32:36:ARG:NH2	2.34	0.61
1:13:134:A:H1'	1:13:325:A:C5	2.36	0.61
1:13:690:G:H22	11:2I:55:LYS:HE2	1.65	0.61
1:13:1177:G:OP1	1:13:1177:G:H4'	1.99	0.61
1:13:1346:A:OP1	9:8E:120:ARG:NH1	2.31	0.61
2:1E:189:ASP:OD1	2:1E:190:THR:N	2.34	0.61
32:51:43:VAL:HB	32:51:52:VAL:HG22	1.83	0.61
37:88:133:ARG:O	37:88:134:ARG:HB2	1.99	0.61
45:G8:54:LYS:O	45:G8:54:LYS:NZ	2.26	0.61
50:L8:44:ARG:O	50:L8:48:GLU:HG2	2.00	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1143:G:H2'	1:1G:1144:G:C8	2.35	0.61
20:BA:82:SER:HG	20:BA:86:ARG:HH22	1.49	0.61
26:14:780:G:H21	26:14:783:A:H62	1.49	0.61
26:14:1379:A:H1'	26:14:1380:G:OP1	2.01	0.61
48:F5:91:LYS:HG3	48:F5:92:LYS:N	2.16	0.61
1:13:688:G:H2'	1:13:689:C:C6	2.36	0.61
1:13:1378:C:O2	7:6E:76:ARG:NH1	2.34	0.61
6:5E:101:ALA:HB2	18:9I:28:GLU:HG2	1.83	0.61
11:2I:109:VAL:HG12	18:9I:86:VAL:HA	1.82	0.61
22:1K:11:C:H2'	22:1K:12:C:H6	1.64	0.61
26:1H:1858:G:O2'	26:1H:1859:A:O5'	2.19	0.61
11:2A:57:THR:HG22	11:2A:59:TYR:H	1.65	0.61
26:14:848:G:H2'	26:14:849:A:C8	2.36	0.61
26:14:1558:A:O2'	26:14:1559:G:OP2	2.17	0.61
1:13:991:U:O2'	1:13:992:U:O5'	2.17	0.61
3:2E:79:ARG:HH22	11:2A:105:VAL:HG13	1.66	0.61
10:1I:32:ALA:HB3	10:1I:76:ASN:O	2.00	0.61
10:1I:34:VAL:HG12	10:1I:74:ILE:HG23	1.83	0.61
26:1H:355:G:H2'	26:1H:356:G:C8	2.35	0.61
26:1H:746:A:C5	26:1H:2611:U:H5"	2.36	0.61
26:1H:1594:G:H5'	59:1H:3501:HOH:O	1.99	0.61
29:21:70:ALA:O	29:21:73:GLU:N	2.34	0.61
31:41:37:VAL:HG22	31:41:159:VAL:HG12	1.81	0.61
35:68:64:ARG:O	35:68:82:ASN:HA	1.99	0.61
1:1G:683:G:N2	1:1G:707:C:O2	2.31	0.61
1:1G:964:A:H1'	10:1A:55:LYS:HE2	1.81	0.61
9:82:24:GLY:HA2	9:82:59:PHE:O	2.01	0.61
26:14:2873:A:C8	38:55:5:LYS:HA	2.36	0.61
27:1J:90:C:P	37:45:16:ARG:HH21	2.23	0.61
1:13:272:C:H2'	1:13:273:A:H8	1.66	0.61
1:13:343:U:O2'	1:13:346:G:O6	2.14	0.61
1:13:601:C:H2'	1:13:602:A:C8	2.36	0.61
8:7E:83:ILE:HB	8:7E:137:VAL:HG13	1.82	0.61
8:7E:87:SER:HB2	8:7E:93:VAL:H	1.65	0.61
26:1H:1520:U:H2'	26:1H:1521:G:O4'	2.01	0.61
26:1H:2400:G:H2'	26:1H:2401:U:H6	1.65	0.61
41:C8:68:ALA:O	41:C8:71:GLN:HB2	2.01	0.61
50:L8:9:VAL:HG21	50:L8:55:ARG:HB2	1.82	0.61
1:1G:501:C:H2'	1:1G:502:G:H8	1.65	0.61
26:14:198:C:H5'	26:14:2244:U:OP1	2.00	0.61
26:14:395:U:H2'	26:14:396:G:N7	2.16	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:29:58:ARG:O	29:29:60:ASN:ND2	2.33	0.61
41:85:82:GLY:HA2	41:85:85:LYS:HB2	1.83	0.61
42:95:33:VAL:HG22	42:95:35:LEU:HD23	1.82	0.61
4:3E:8:VAL:HG13	4:3E:21:LEU:HB2	1.83	0.61
11:2I:99:GLN:HA	11:2I:105:VAL:HG11	1.83	0.61
26:1H:315:G:H2'	26:1H:316:C:C6	2.36	0.61
26:1H:320:A:H2'	30:31:136:THR:HG21	1.81	0.61
26:1H:1018:C:H2'	26:1H:1019:U:H6	1.65	0.61
26:1H:2156:G:H2'	26:1H:2157:G:C2	2.35	0.61
26:1H:2591:C:OP1	28:11:239:ARG:HG3	2.00	0.61
34:58:62:VAL:HG22	34:58:66:LYS:HD2	1.82	0.61
36:78:61:ARG:O	36:78:62:LEU:HD23	1.99	0.61
51:M8:42:PHE:HD1	51:M8:43:TYR:HB3	1.65	0.61
1:1G:187:C:H2'	1:1G:188:U:O4'	2.01	0.61
1:1G:735:C:H2'	1:1G:736:C:H6	1.66	0.61
26:14:889:C:H2'	26:14:890:A:H4'	1.82	0.61
26:14:2378:A:O2'	39:65:21:THR:HG21	2.01	0.61
28:19:96:HIS:HD2	28:19:102:LYS:HG2	1.66	0.61
29:29:66:HIS:CE1	29:29:71:GLY:HA2	2.35	0.61
30:39:110:LEU:HD21	30:39:181:LEU:HD13	1.82	0.61
31:49:40:ASN:HB2	31:49:91:ARG:HG3	1.81	0.61
42:95:70:ILE:N	42:95:86:GLY:O	2.27	0.61
1:13:1133:G:H2'	1:13:1134:G:C8	2.36	0.60
4:3E:158:ILE:O	4:3E:162:LEU:N	2.32	0.60
26:1H:207:A:H2'	26:1H:208:C:O4'	2.01	0.60
26:1H:1265:A:H3'	52:N8:19:ARG:HH12	1.64	0.60
26:1H:1510:A:H2'	26:1H:1510:A:N3	2.15	0.60
26:1H:2544:G:H8	26:1H:2544:G:O5'	1.84	0.60
26:1H:2572:A:N7	29:21:144:ARG:HD2	2.16	0.60
33:61:73:GLU:HG3	33:61:136:VAL:HG23	1.83	0.60
2:12:73:THR:HG21	2:12:97:TRP:H	1.64	0.60
11:2A:98:LEU:O	11:2A:101:SER:OG	2.19	0.60
26:14:5:A:H2'	26:14:6:A:C8	2.36	0.60
26:14:77:C:H5"	49:G5:10:LEU:HD21	1.81	0.60
29:29:54:GLN:HG2	29:29:56:PRO:HD3	1.83	0.60
37:45:110:THR:OG1	37:45:112:GLU:OE2	2.19	0.60
40:75:3:ARG:CG	40:75:6:LEU:H	2.14	0.60
42:95:71:LEU:N	42:95:86:GLY:HA2	2.16	0.60
2:1E:212:GLN:O	2:1E:216:SER:OG	2.17	0.60
11:2I:87:THR:HG22	11:2I:88:GLY:H	1.65	0.60
26:1H:299:A:H5'	26:1H:300:A:OP2	2.01	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1143:A:OP1	34:58:25:ARG:NH1	2.28	0.60
26:1H:2695:C:H2'	26:1H:2696:U:C6	2.35	0.60
29:21:131:ALA:HB1	59:21:401:HOH:O	2.01	0.60
34:58:22:THR:OG1	34:58:23:LEU:N	2.34	0.60
35:68:35:VAL:HG11	35:68:103:ALA:HB3	1.82	0.60
40:B8:55:ASN:H	40:B8:59:THR:HG22	1.66	0.60
2:12:16:HIS:HD2	2:12:210:SER:HA	1.66	0.60
2:12:21:ARG:HA	2:12:39:ILE:HA	1.83	0.60
5:42:70:PRO:HB3	5:42:144:THR:HG22	1.83	0.60
11:2A:48:ILE:HD11	11:2A:64:ALA:HA	1.83	0.60
26:14:2155:G:H2'	26:14:2156:G:O4'	2.00	0.60
30:39:117:ARG:HH22	36:35:1:MET:H2	1.48	0.60
42:95:58:VAL:HG23	42:95:98:GLU:HB2	1.83	0.60
49:G5:29:LYS:HG2	49:G5:57:ILE:HD13	1.82	0.60
1:13:963:G:H21	10:1I:55:LYS:NZ	1.99	0.60
6:5E:99:ALA:HB1	18:9I:23:LYS:HE3	1.82	0.60
33:61:56:LYS:O	33:61:60:GLU:HB3	2.01	0.60
40:B8:77:PRO:HG2	40:B8:80:SER:HB2	1.83	0.60
46:H8:140:ASP:N	46:H8:140:ASP:OD1	2.33	0.60
1:1G:330:C:O2	59:1G:1733:HOH:O	2.15	0.60
26:14:852:G:H2'	26:14:853:G:C8	2.35	0.60
26:14:1036:G:OP1	32:59:59:ARG:N	2.29	0.60
26:14:1678:G:N2	26:14:1989:G:H22	1.99	0.60
27:1J:112:G:H21	39:65:45:GLY:C	2.09	0.60
1:13:859:A:H2'	1:13:860:A:H8	1.65	0.60
24:3K:25:G:H2'	24:3K:26:G:C8	2.36	0.60
26:1H:67:U:N3	26:1H:74:A:H2	1.97	0.60
26:1H:270(E):G:N2	26:1H:270(U):C:N3	2.49	0.60
26:1H:593:G:H1'	54:Q8:4:MET:HE1	1.82	0.60
26:1H:2126:A:N6	26:1H:2163:C:O2'	2.34	0.60
26:1H:2287:A:H2	26:1H:2346:A:H2	1.49	0.60
32:51:3:ARG:HH21	32:51:7:LEU:HD11	1.65	0.60
36:78:95:VAL:O	36:78:126:VAL:HG23	2.01	0.60
38:98:30:THR:HG22	38:98:31:HIS:ND1	2.17	0.60
1:1G:56:U:H2'	1:1G:57:G:C8	2.36	0.60
1:1G:445:G:N7	59:1G:1777:HOH:O	2.32	0.60
1:1G:975:A:H4'	1:1G:976:G:H5"	1.83	0.60
26:14:270(I):G:H2'	26:14:270(J):G:H8	1.66	0.60
26:14:567:A:P	59:14:3600:HOH:O	2.59	0.60
26:14:2122:U:H2'	26:14:2123:G:O4'	2.01	0.60
29:29:68:ALA:C	29:29:70:ALA:H	2.09	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:25:24:VAL:HA	35:25:39:ILE:HG22	1.83	0.60
37:45:97:VAL:HG11	37:45:103:MET:HE2	1.81	0.60
38:55:97:VAL:HA	38:55:113:LEU:O	2.02	0.60
14:5I:6:LEU:HB3	14:5I:23:ARG:HH22	1.66	0.60
26:1H:107:C:H2'	26:1H:108:U:H6	1.67	0.60
26:1H:583:G:H5"	41:C8:10:ARG:NH1	2.16	0.60
26:1H:881:G:H3'	26:1H:882:G:O4'	2.00	0.60
1:1G:1110:A:OP2	59:1G:1761:HOH:O	2.15	0.60
18:9A:22:VAL:HG22	18:9A:23:LYS:H	1.65	0.60
24:1L:11:C:H2'	24:1L:12:C:C6	2.36	0.60
26:14:243:U:OP2	54:M5:8:LYS:HE2	2.01	0.60
26:14:2103:C:H2'	26:14:2104:G:C8	2.37	0.60
29:29:37:ARG:HD3	29:29:44:TYR:CE2	2.36	0.60
29:29:58:ARG:HG3	29:29:59:VAL:HG23	1.84	0.60
1:13:737:A:H2'	1:13:738:C:C6	2.35	0.60
1:13:1036:G:N7	1:13:1037:C:N4	2.50	0.60
26:1H:1614:A:H2	59:1H:3748:HOH:O	1.84	0.60
26:14:10:G:N2	26:14:2802:G:OP1	2.34	0.60
26:14:588:U:H2'	26:14:589:C:C6	2.35	0.60
26:14:1328:G:H2'	26:14:1330:C:C5	2.37	0.60
26:14:2352:A:C2	47:E5:33:ALA:HB1	2.37	0.60
26:1H:277:C:H3'	26:1H:278:A:O4'	2.01	0.60
26:1H:654(B):C:H2'	26:1H:654(C):G:H8	1.67	0.60
26:1H:1535:U:H5"	26:1H:1537:C:N4	2.16	0.60
26:1H:1748:G:H2'	26:1H:1749:A:H8	1.66	0.60
26:1H:2168:G:N2	26:1H:2170:A:H62	2.00	0.60
32:51:152:ARG:C	32:51:153:LYS:HD2	2.25	0.60
49:K8:18:PRO:HA	49:K8:21:LEU:HB2	1.83	0.60
1:1G:45:U:H2'	1:1G:46:G:H8	1.66	0.60
1:1G:999:U:H2'	1:1G:1000:A:C8	2.36	0.60
21:1B:18:TYR:CE1	21:1B:22:ARG:HD3	2.37	0.60
26:14:273(C):C:N4	26:14:363(C):G:H1	2.00	0.60
26:14:770:G:OP2	59:14:3821:HOH:O	2.17	0.60
26:14:2378:A:H4'	39:65:23:ARG:NH1	2.17	0.60
46:D5:14:LYS:NZ	46:D5:14:LYS:H	1.99	0.60
54:M5:40:GLU:HA	54:M5:43:GLN:HB2	1.82	0.60
4:3E:141:ARG:HB2	4:3E:141:ARG:NH1	2.17	0.60
6:5E:39:LYS:HB2	6:5E:64:GLN:HB2	1.82	0.60
7:6E:15:ASP:HB3	7:6E:19:GLY:H	1.66	0.60
8:7E:88:LYS:HB3	8:7E:89:PRO:HD2	1.84	0.60
26:1H:270(L):U:O2	33:61:50:ARG:HG2	2.01	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:600:G:N2	26:1H:605:C:O3'	2.34	0.60
26:1H:1049:C:C2'	26:1H:1050:A:H5'	2.32	0.60
26:1H:1113:U:H5'	32:51:2:SER:HB2	1.84	0.60
28:11:16:MET:CE	28:11:211:ARG:HD2	2.32	0.60
31:41:138:GLN:OE1	31:41:153:ARG:N	2.27	0.60
44:F8:25:LYS:HA	44:F8:81:VAL:O	2.01	0.60
1:1G:198:G:H2'	1:1G:199:G:C8	2.36	0.60
1:1G:407:G:OP1	4:32:115:ARG:NE	2.30	0.60
26:14:957:A:H5'	37:45:76:LYS:HD2	1.83	0.60
26:14:2415:G:O3'	36:35:66:GLY:HA3	2.01	0.60
29:29:11:MET:SD	29:29:24:THR:HG22	2.41	0.60
36:35:71:VAL:HG13	36:35:72:PRO:HD3	1.83	0.60
26:1H:883:G:H2'	26:1H:884:C:O4'	2.01	0.60
26:1H:2846:G:N7	59:1H:4110:HOH:O	2.30	0.60
38:98:91:GLN:O	38:98:91:GLN:NE2	2.33	0.60
41:C8:17:ILE:HD12	41:C8:32:PHE:HE1	1.67	0.60
41:C8:108:GLU:HG3	42:D8:44:LYS:HE3	1.82	0.60
44:F8:18:TYR:O	44:F8:20:GLY:N	2.35	0.60
48:J8:52:ARG:HH11	48:J8:57:GLU:HG3	1.66	0.60
3:22:119:ARG:HH22	3:22:140:ARG:HG2	1.67	0.60
12:3A:52:LEU:O	12:3A:54:LYS:NZ	2.35	0.60
19:AA:80:TYR:CZ	19:AA:82:GLY:HA2	2.36	0.60
26:14:152:G:H1	26:14:174:C:H42	1.50	0.60
26:14:2275:C:O2	37:45:83:MET:HG2	2.02	0.60
42:95:35:LEU:C	42:95:37:VAL:HG13	2.27	0.60
54:M5:49:VAL:HB	54:M5:50:LEU:HD13	1.82	0.60
1:13:271:C:H2'	1:13:272:C:H6	1.67	0.60
1:13:1529:G:H4'	1:13:1530:G:OP2	2.02	0.60
26:1H:1093:G:O2'	26:1H:1099:G:N2	2.34	0.60
27:16:44:G:H1'	27:16:47:C:H42	1.66	0.60
30:31:67:GLN:HG3	30:31:67:GLN:O	2.02	0.60
33:61:21:VAL:HG21	33:61:25:TYR:HD2	1.67	0.60
1:1G:542:G:OP1	4:32:10:ARG:NH2	2.34	0.60
1:1G:991:U:O4	1:1G:1212:U:O2'	2.14	0.60
23:2L:8:4SU:C2	23:2L:14:A:H62	2.15	0.60
23:2L:62:C:H2'	23:2L:63:C:C6	2.37	0.60
55:3L:8:U:H3	55:3L:14:A:H62	1.50	0.60
26:14:275:G:N2	26:14:276:A:N1	2.43	0.60
26:14:2185:C:H2'	26:14:2186:G:C8	2.37	0.60
26:14:2693:A:H2'	26:14:2694:G:H8	1.66	0.60
28:19:242:ARG:N	28:19:242:ARG:HD3	2.16	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:59:121:ILE:HG23	32:59:133:VAL:HG11	1.83	0.60
51:I5:42:PHE:O	51:I5:43:TYR:HB3	2.02	0.60
1:13:67:C:H2'	1:13:68:G:H8	1.67	0.59
1:13:1095:U:H5'	1:13:1109:C:O2	2.02	0.59
18:9I:50:ILE:HG12	18:9I:70:ILE:HD12	1.84	0.59
26:1H:2418:A:OP2	54:Q8:29:LYS:HE3	2.01	0.59
26:1H:2592:G:OP1	59:1H:3811:HOH:O	2.15	0.59
30:31:65:TRP:CZ3	30:31:72:ARG:HB3	2.36	0.59
34:58:73:THR:HG22	34:58:84:LYS:HG3	1.84	0.59
1:1G:1353:G:N2	1:1G:1370:G:N3	2.49	0.59
14:5A:21:TYR:OH	14:5A:23:ARG:NH2	2.35	0.59
26:14:1252:G:O4'	41:85:33:ARG:HD3	2.02	0.59
1:13:595:G:H1'	1:13:596:C:H5	1.67	0.59
25:4K:24:A:H8	25:4K:24:A:O5'	1.85	0.59
26:1H:1105:U:H2'	26:1H:1106:G:C8	2.36	0.59
26:1H:1259:G:H2'	26:1H:1260:G:H8	1.66	0.59
26:1H:2123:G:H22	26:1H:2175:C:N4	2.00	0.59
36:78:98:GLU:O	36:78:101:VAL:HG12	2.02	0.59
44:F8:24:GLY:O	44:F8:83:VAL:HG22	2.02	0.59
1:1G:345:C:O2'	1:1G:346:G:O5'	2.20	0.59
2:12:92:TYR:CE1	2:12:151:GLY:HA3	2.37	0.59
4:32:153:ARG:HD3	4:32:181:MET:HE3	1.85	0.59
5:42:91:LEU:HD12	5:42:120:THR:HG22	1.84	0.59
26:14:2439:A:H5'	26:14:2439:A:C8	2.37	0.59
28:19:70:TRP:CH2	28:19:150:LYS:HA	2.36	0.59
35:25:2:ILE:HD12	35:25:6:THR:HG21	1.82	0.59
1:13:1078:U:O2'	5:4E:130:ASN:OD1	2.12	0.59
1:13:1118:C:H1'	1:13:1179:A:C4	2.36	0.59
1:13:1490:C:OP2	57:13:1745:PAR:N64	2.35	0.59
9:8E:99:LEU:HD12	9:8E:101:PHE:HE1	1.67	0.59
28:11:231:HIS:CD2	28:11:232:PRO:HD2	2.38	0.59
44:F8:67:GLY:O	44:F8:68:ARG:HB3	2.03	0.59
1:1G:8:A:N6	4:32:209:ARG:HB2	2.17	0.59
1:1G:920:U:H2'	1:1G:921:U:C6	2.37	0.59
4:32:30:LYS:C	4:32:32:ALA:H	2.10	0.59
13:4A:22:ILE:HB	13:4A:25:ILE:HG13	1.85	0.59
14:5A:12:ARG:HB2	14:5A:14:PRO:HD3	1.83	0.59
26:14:2645:G:H3'	26:14:2646:C:H5'	1.85	0.59
29:29:9:VAL:HG12	40:75:8:LYS:NZ	2.17	0.59
40:75:107:ASP:H	40:75:110:ILE:HG13	1.66	0.59
45:C5:17:SER:O	45:C5:21:LYS:HB2	2.01	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:C5:42:VAL:HG13	45:C5:65:ALA:HB3	1.84	0.59
1:13:1239:A:H62	1:13:1299:A:H62	1.50	0.59
4:3E:22:LYS:HB2	4:3E:26:CYS:SG	2.42	0.59
11:2I:67:ASP:O	11:2I:71:LYS:HG3	2.02	0.59
24:3K:13:G:H2'	24:3K:14:A:C8	2.38	0.59
26:1H:192:C:P	59:1H:3591:HOH:O	2.60	0.59
26:1H:2108:C:O2	26:1H:2181:G:N2	2.30	0.59
30:31:6:VAL:N	30:31:24:LEU:O	2.36	0.59
38:98:52:ILE:HG12	38:98:79:LEU:HD21	1.83	0.59
1:1G:757:U:H2'	1:1G:758:G:O4'	2.03	0.59
1:1G:1148:U:H2'	1:1G:1149:C:O4'	2.02	0.59
4:32:78:LEU:HD12	4:32:96:LEU:HB3	1.84	0.59
9:82:27:THR:OG1	9:82:31:GLN:O	2.12	0.59
24:1L:23:A:H3'	24:1L:24:G:H5"	1.85	0.59
26:14:910:A:H62	37:45:12:GLN:HA	1.67	0.59
26:14:1757:U:H3	26:14:1762:A:H2	1.51	0.59
26:1H:1486:A:H2'	26:1H:1487:G:H8	1.67	0.59
26:1H:2393:A:H5"	36:78:62:LEU:CB	2.30	0.59
26:1H:2496:C:P	37:88:81:VAL:HG13	2.42	0.59
46:H8:154:ASP:OD1	46:H8:154:ASP:N	2.36	0.59
49:K8:50:ILE:HD12	49:K8:51:ARG:H	1.67	0.59
1:1G:1342:C:H4'	9:82:125:TYR:HB3	1.83	0.59
26:14:1252:G:N2	41:85:37:GLU:OE2	2.32	0.59
1:13:21:G:OP1	59:13:1833:HOH:O	2.16	0.59
9:8E:114:TYR:CE2	10:1I:59:SER:HA	2.38	0.59
19:AI:41:VAL:HB	19:AI:42:PRO:HA	1.84	0.59
22:1K:40:PSU:H2'	22:1K:41:C:H6	1.68	0.59
26:1H:330:A:O2'	26:1H:331:A:H8	1.85	0.59
29:21:104:VAL:HG22	29:21:198:VAL:HG22	1.83	0.59
30:31:29:ASN:H	30:31:112:MET:CE	2.13	0.59
32:51:77:LYS:HE2	32:51:138:LYS:HD2	1.83	0.59
34:58:96:GLU:CG	34:58:97:ARG:H	2.14	0.59
40:B8:5:ALA:HA	40:B8:8:LYS:HD3	1.84	0.59
46:H8:9:TYR:HE2	46:H8:35:ARG:HD3	1.67	0.59
13:4A:23:TYR:HE2	13:4A:70:LEU:HB3	1.68	0.59
26:14:95:G:H4'	49:G5:46:GLN:HB2	1.84	0.59
26:14:2068:U:H3	26:14:2430:A:H2	1.49	0.59
29:29:134:ILE:HD12	29:29:134:ILE:O	2.02	0.59
30:39:126:VAL:HG11	30:39:142:TRP:HH2	1.68	0.59
34:15:19:GLU:HA	34:15:59:LYS:O	2.03	0.59
26:1H:467:G:OP1	53:P8:33:ARG:NH1	2.35	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:569:U:O2'	26:1H:983:A:N1	2.32	0.59
26:1H:1265:A:H8	26:1H:1265:A:OP1	1.85	0.59
26:1H:1728:G:C2	26:1H:1730:U:OP2	2.56	0.59
26:1H:1796:U:H2'	26:1H:1797:C:C6	2.37	0.59
26:1H:2396:G:H5"	48:J8:25:LYS:HD3	1.84	0.59
40:B8:58:ASN:O	40:B8:58:ASN:ND2	2.34	0.59
46:H8:117:LEU:HD13	46:H8:118:GLN:H	1.67	0.59
1:1G:1379:G:OP1	7:62:6:ARG:NH1	2.35	0.59
26:14:1839:G:H2'	26:14:1839:G:N3	2.16	0.59
26:14:2815:C:H5'	52:J5:29:THR:HG21	1.84	0.59
33:69:101:LEU:HB2	33:69:105:HIS:HB2	1.83	0.59
36:35:122:PRO:HB3	36:35:141:ALA:HB1	1.84	0.59
40:75:24:PRO:HD3	40:75:52:ILE:HD12	1.85	0.59
47:E5:48:GLY:HA3	47:E5:80:HIS:ND1	2.17	0.59
1:13:559:A:OP1	5:4E:126:ARG:NH2	2.35	0.59
1:13:1054:C:H6	1:13:1196:U:HO2'	1.50	0.59
1:13:1180:A:OP1	9:8E:103:THR:OG1	2.19	0.59
2:1E:17:PHE:HB3	2:1E:44:LEU:HD21	1.83	0.59
4:3E:110:PHE:HE2	4:3E:148:VAL:HG23	1.67	0.59
26:1H:217:G:OP2	59:1H:3622:HOH:O	2.17	0.59
26:1H:569:U:C4	26:1H:570:G:C6	2.90	0.59
26:14:1025:G:O2'	26:14:1026:U:OP1	2.20	0.59
26:14:1188:U:O2'	26:14:1189:A:H5'	2.02	0.59
26:14:1900:A:OP2	59:14:3513:HOH:O	2.17	0.59
41:85:34:LYS:NZ	41:85:37:GLU:OE1	2.36	0.59
1:13:751:U:OP2	59:13:1919:HOH:O	2.17	0.59
1:13:791:G:C6	1:13:792:A:C2	2.91	0.59
1:13:824:C:H4'	8:7E:1:MET:HB2	1.85	0.59
1:13:1117:G:H5"	9:8E:104:ARG:NH1	2.17	0.59
1:13:1202:G:N2	14:5I:43:CYS:HB3	2.17	0.59
2:1E:178:ARG:HG3	8:7E:72:PRO:HA	1.85	0.59
26:1H:270(C):C:H42	26:1H:270(W):G:H1	1.49	0.59
26:1H:287:C:H2'	26:1H:288:C:C6	2.36	0.59
26:1H:1221:C:H2'	26:1H:1222:C:C6	2.38	0.59
26:1H:1417:C:N3	26:1H:1581:G:N2	2.46	0.59
45:G8:68:HIS:O	45:G8:71:LYS:HB2	2.03	0.59
1:1G:1238:A:N3	1:1G:1241:G:O2'	2.28	0.59
3:22:44:GLU:HG2	3:22:52:LEU:HD11	1.83	0.59
4:32:9:CYS:SG	4:32:22:LYS:HD2	2.43	0.59
12:3A:58:VAL:O	12:3A:65:GLU:HA	2.02	0.59
29:29:14:ILE:HB	40:75:14:TYR:CE2	2.37	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:49:44:GLY:HA2	31:49:88:ILE:HD11	1.85	0.59
50:H5:7:LYS:HE2	50:H5:32:GLN:HG3	1.84	0.59
1:13:407:G:OP1	4:3E:115:ARG:NH1	2.36	0.59
5:4E:8:GLU:HG2	5:4E:34:VAL:HG22	1.84	0.59
18:9I:59:SER:OG	18:9I:60:ALA:N	2.36	0.59
24:3K:24:G:H2'	24:3K:25:G:C8	2.38	0.59
26:1H:1814:G:O6	59:1H:3866:HOH:O	2.15	0.59
26:1H:1857:G:O2'	26:1H:1885:A:N6	2.31	0.59
29:21:201:THR:HG22	29:21:203:LYS:H	1.68	0.59
30:31:155:LEU:HD11	30:31:176:LEU:HD23	1.85	0.59
33:61:126:TYR:HB2	33:61:140:LEU:HD11	1.84	0.59
35:68:110:GLY:HA2	35:68:112:MET:HE2	1.84	0.59
45:G8:40:GLU:HB3	45:G8:64:GLU:HG3	1.83	0.59
46:H8:105:VAL:N	46:H8:139:VAL:O	2.28	0.59
48:J8:78:LYS:N	48:J8:78:LYS:HD2	2.18	0.59
1:1G:114:U:H2'	1:1G:115:G:C8	2.38	0.59
18:9A:31:LEU:HD23	18:9A:31:LEU:H	1.68	0.59
23:2L:62:C:H2'	23:2L:63:C:H6	1.68	0.59
55:3L:34:U:H2'	55:3L:36:U:OP2	2.01	0.59
26:14:2327:A:H2'	26:14:2328:A:C8	2.38	0.59
26:14:2544:G:O5'	26:14:2544:G:H8	1.86	0.59
26:14:2818:G:OP2	38:55:42:LYS:NZ	2.35	0.59
35:25:96:THR:OG1	35:25:97:ARG:N	2.36	0.59
40:75:16:ARG:HD3	40:75:79:HIS:HA	1.84	0.59
1:13:1160:G:H1	1:13:1177:G:H1	1.50	0.58
2:1E:46:LYS:HA	2:1E:49:GLU:HG3	1.85	0.58
26:1H:531:C:H4'	26:1H:532:A:H5"	1.84	0.58
26:1H:2205:C:H42	26:1H:2219:G:H1	1.51	0.58
26:1H:2785:C:H2'	26:1H:2786:U:O4'	2.03	0.58
28:11:108:PRO:HG3	28:11:143:HIS:CE1	2.38	0.58
31:41:66:GLN:OE1	31:41:98:ARG:NH1	2.36	0.58
33:61:4:ILE:HG21	33:61:47:LEU:HD13	1.85	0.58
33:61:131:LYS:HB3	33:61:132:PRO:HA	1.84	0.58
38:98:62:ALA:O	38:98:66:VAL:HG23	2.02	0.58
44:F8:57:LEU:HD11	44:F8:78:LYS:HD2	1.85	0.58
1:1G:1235:U:O2'	1:1G:1305:G:O5'	2.21	0.58
8:72:51:VAL:HG11	8:72:60:ARG:HH21	1.68	0.58
26:14:1759:A:O2'	26:14:2714:G:O2'	2.21	0.58
26:14:1899:G:N2	26:14:1902:C:H41	2.00	0.58
29:29:8:LYS:HG2	29:29:192:ASN:HA	1.84	0.58
44:B5:63:LYS:H	44:B5:63:LYS:CE	2.15	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:M5:62:LEU:N	54:M5:63:PRO:HD3	2.18	0.58
1:13:272:C:H2'	1:13:273:A:C8	2.37	0.58
8:7E:7:ALA:HB2	8:7E:85:ARG:HD2	1.85	0.58
12:3I:90:VAL:O	12:3I:91:LYS:HB3	2.02	0.58
26:1H:872:A:H4'	37:88:66:ILE:HD11	1.85	0.58
29:21:38:THR:HG23	29:21:40:GLU:HG2	1.86	0.58
30:31:201:VAL:O	30:31:205:ARG:N	2.36	0.58
31:41:122:PRO:HB3	31:41:180:PHE:HD2	1.68	0.58
33:61:110:ASP:HB2	33:61:112:LYS:H	1.68	0.58
40:B8:56:GLY:O	40:B8:59:THR:HG23	2.03	0.58
9:82:77:ILE:O	9:82:81:ILE:HG12	2.03	0.58
12:3A:47:LYS:CG	12:3A:48:PRO:HD2	2.33	0.58
26:14:574:C:OP2	59:14:3581:HOH:O	2.17	0.58
26:14:1225:C:H4'	42:95:85:LYS:CG	2.30	0.58
26:14:2111:C:C2	26:14:2118:U:H4'	2.38	0.58
37:45:66:ILE:HG13	37:45:67:ARG:H	1.69	0.58
40:75:107:ASP:N	40:75:107:ASP:OD1	2.35	0.58
49:G5:53:LEU:O	49:G5:57:ILE:HG13	2.03	0.58
1:13:142:G:H2'	1:13:143:A:C8	2.39	0.58
1:13:714:G:H2'	1:13:715:A:C8	2.38	0.58
1:13:1366:C:O2'	10:1I:60:ARG:NH1	2.36	0.58
4:3E:156:GLU:O	4:3E:160:GLN:HB3	2.04	0.58
6:5E:18:GLN:HA	6:5E:21:LEU:HD22	1.85	0.58
26:1H:90:U:H4'	26:1H:91:A:H5'	1.85	0.58
26:1H:958:U:OP1	37:88:74:TYR:OH	2.12	0.58
26:1H:2876:G:H5'	40:B8:2:ASN:HB3	1.84	0.58
1:1G:176:C:H2'	1:1G:177:C:H6	1.68	0.58
1:1G:1117:G:H4'	9:82:104:ARG:HH11	1.68	0.58
12:3A:60:LEU:HD23	12:3A:64:TYR:HB3	1.84	0.58
26:14:389:G:H1	36:35:71:VAL:HG12	1.68	0.58
26:14:1815:A:OP2	28:19:54:ARG:NH2	2.33	0.58
28:19:36:PRO:HA	28:19:61:LEU:HD12	1.85	0.58
54:M5:60:LEU:O	54:M5:61:LEU:HD12	2.03	0.58
1:13:1327:C:OP2	21:1F:12:LYS:NZ	2.36	0.58
15:6I:39:LEU:HD13	15:6I:56:LEU:HB2	1.83	0.58
17:8I:43:LEU:HD12	17:8I:68:ARG:HG2	1.86	0.58
20:BI:49:ALA:HB2	20:BI:99:LEU:HD23	1.85	0.58
26:1H:1533:C:H3'	26:1H:1534:G:H5"	1.85	0.58
26:1H:1614:A:C2	59:1H:3748:HOH:O	2.51	0.58
26:1H:1899:G:H22	26:1H:1902:C:N4	2.01	0.58
30:31:197:ASP:O	30:31:199:TRP:N	2.36	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:58:127:ASP:OD1	34:58:127:ASP:N	2.36	0.58
37:88:6:ARG:HG2	37:88:6:ARG:HH11	1.69	0.58
43:E8:27:LYS:HB3	43:E8:31:GLU:HG3	1.86	0.58
1:1G:980:C:H5'	1:1G:981:U:C5	2.38	0.58
3:22:150:LYS:HG3	3:22:169:ALA:HB2	1.85	0.58
4:32:21:LEU:HD12	4:32:21:LEU:H	1.67	0.58
26:14:309:G:N3	26:14:329:G:O2'	2.36	0.58
26:14:972:G:OP2	26:14:973:A:O2'	2.17	0.58
26:14:1579:A:H2'	26:14:1580:A:C8	2.38	0.58
26:14:2074:U:H2'	26:14:2075:U:C6	2.38	0.58
26:14:2331:G:O3'	47:E5:43:THR:HG22	2.03	0.58
26:14:2542:A:N3	26:14:2542:A:H5"	2.19	0.58
27:1J:17:C:H2'	27:1J:18:G:O4'	2.04	0.58
30:39:79:GLY:HA2	30:39:86:GLY:HA2	1.84	0.58
1:13:342:C:H2'	1:13:343:U:O4'	2.03	0.58
4:3E:26:CYS:CB	4:3E:31:CYS:SG	2.87	0.58
8:7E:121:ASP:HB2	8:7E:125:ARG:NH2	2.18	0.58
12:3I:47:LYS:HA	12:3I:49:ASN:H	1.69	0.58
17:8I:70:ARG:O	17:8I:71:PHE:HD1	1.86	0.58
17:8I:90:ILE:HA	17:8I:93:GLN:HB3	1.86	0.58
26:1H:634:C:H2'	26:1H:635:C:C6	2.39	0.58
26:1H:1748:G:H2'	26:1H:1749:A:C8	2.37	0.58
31:41:112:PRO:HB3	51:M8:37:SER:H	1.69	0.58
46:H8:63:ASP:HB2	46:H8:65:GLN:HG3	1.85	0.58
1:1G:134:A:H61	16:7A:25:ARG:NH1	2.01	0.58
1:1G:564:C:O2'	8:72:91:ARG:NH2	2.35	0.58
1:1G:1216:G:H5"	14:5A:5:ALA:HB3	1.85	0.58
26:14:1338:G:N3	26:14:1393:A:H2	2.01	0.58
26:14:2786:U:H4'	29:29:64:LYS:HA	1.85	0.58
32:59:137:ASP:HB3	32:59:140:LYS:HB3	1.86	0.58
1:13:1124:G:H3'	1:13:1145:C:H41	1.68	0.58
2:1E:21:ARG:HB2	2:1E:39:ILE:HA	1.86	0.58
10:1I:37:PRO:HA	10:1I:72:VAL:HG22	1.85	0.58
26:1H:49:A:N7	26:1H:120:U:C5	2.71	0.58
26:1H:1086:A:H1'	26:1H:1103:A:N6	2.19	0.58
26:1H:1843:C:H5'	28:11:253:GLN:OE1	2.03	0.58
41:C8:95:LEU:HD22	42:D8:4:ILE:HD13	1.84	0.58
7:62:113:GLU:HB2	7:62:119:ARG:HG2	1.84	0.58
24:1L:44:C:H2'	24:1L:45:C:H5'	1.85	0.58
26:14:375:C:H2'	26:14:376:C:C6	2.38	0.58
27:1J:3:C:H2'	27:1J:4:C:C6	2.38	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:B5:8:ILE:H	44:B5:8:ILE:HD12	1.69	0.58
47:E5:53:MET:HE3	47:E5:57:PHE:HD1	1.69	0.58
54:M5:48:PHE:O	54:M5:50:LEU:HD22	2.03	0.58
26:1H:1278:A:OP1	38:98:36:THR:HG22	2.02	0.58
26:1H:2689:U:P	26:1H:2719:G:H22	2.27	0.58
36:78:50:ARG:HH21	36:78:50:ARG:HG3	1.67	0.58
40:B8:26:ASP:HB3	40:B8:92:GLY:N	2.08	0.58
43:E8:73:ALA:HB3	43:E8:106:ILE:HB	1.85	0.58
48:J8:2:SER:O	48:J8:2:SER:OG	2.15	0.58
54:Q8:44:LYS:HD2	54:Q8:44:LYS:N	2.18	0.58
3:22:17:ASP:OD1	3:22:18:TRP:N	2.37	0.58
26:14:2392:A:H8	36:35:61:ARG:HD2	1.68	0.58
41:85:90:VAL:HG22	42:95:39:LEU:HB3	1.86	0.58
49:G5:47:ASN:O	49:G5:49:LYS:N	2.29	0.58
1:13:598:U:H4'	8:7E:94:TYR:CD2	2.38	0.58
1:13:1227:A:O3'	13:4I:115:LYS:NZ	2.36	0.58
1:13:1319:A:O2'	1:13:1323:G:N7	2.35	0.58
9:8E:112:LYS:HD2	9:8E:113:LYS:N	2.19	0.58
19:AI:40:ILE:HD11	19:AI:62:ILE:HG23	1.84	0.58
26:1H:692:C:O2'	28:11:38:LYS:HE2	2.03	0.58
26:1H:1257:C:H4'	30:31:83:PHE:CE1	2.38	0.58
26:1H:1266:G:O2'	26:1H:2012:G:O6	2.21	0.58
26:1H:2312:U:H5'	31:41:88:ILE:HG13	1.86	0.58
26:1H:2394:C:OP1	36:78:63:PRO:HD2	2.04	0.58
1:1G:1292:U:H2'	1:1G:1293:G:H8	1.69	0.58
5:42:71:LEU:HD21	5:42:115:VAL:HG22	1.86	0.58
21:1B:25:LYS:HZ1	21:1B:26:LYS:HG3	1.69	0.58
26:14:2294:C:P	39:65:89:ARG:HH22	2.26	0.58
26:14:2702:U:HO2'	26:14:2703:C:H6	1.51	0.58
26:14:2745:C:O2	32:59:139:GLN:NE2	2.37	0.58
45:C5:47:LYS:HA	45:C5:60:PHE:CD2	2.39	0.58
54:M5:22:VAL:HG12	54:M5:49:VAL:HG21	1.86	0.58
1:13:1022:G:H2'	1:13:1023:G:H8	1.69	0.58
14:5I:13:THR:HG23	14:5I:20:ALA:HB2	1.86	0.58
19:AI:7:LYS:NZ	19:AI:7:LYS:HB3	2.18	0.58
26:1H:773:U:C4'	28:11:47:GLY:HA3	2.33	0.58
26:1H:2712:U:H1'	26:1H:2712(A):A:C8	2.39	0.58
5:42:75:THR:OG1	5:42:117:ASP:O	2.20	0.58
7:62:15:ASP:HB3	7:62:19:GLY:H	1.69	0.58
9:82:21:PRO:HA	9:82:59:PHE:HA	1.86	0.58
10:1A:99:LYS:HD3	10:1A:100:THR:H	1.69	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:BA:67:ALA:HA	20:BA:73:HIS:HA	1.85	0.58
26:14:942:G:O2'	26:14:1189:A:N3	2.33	0.58
26:14:2448:A:O5'	59:14:3618:HOH:O	2.17	0.58
31:49:60:LEU:O	31:49:64:THR:HG22	2.03	0.58
40:75:66:VAL:HA	40:75:71:GLY:HA2	1.85	0.58
4:3E:30:LYS:HB2	4:3E:32:ALA:H	1.68	0.58
13:4I:37:THR:O	13:4I:55:ARG:NH2	2.28	0.58
18:9I:37:VAL:HG12	18:9I:41:LYS:HD3	1.85	0.58
26:1H:1076:C:H2'	26:1H:1077:A:H5"	1.85	0.58
26:1H:1590:U:H2'	26:1H:1591:G:C8	2.38	0.58
26:1H:2298:A:H62	26:1H:2318:G:H8	1.51	0.58
26:1H:2801:A:H2'	26:1H:2802:G:C4'	2.34	0.58
28:11:111:LEU:HD23	28:11:127:VAL:HG12	1.86	0.58
33:61:3:VAL:HG12	33:61:38:LEU:HA	1.85	0.58
42:D8:24:LYS:HA	42:D8:92:THR:HG23	1.85	0.58
6:52:7:ASN:N	6:52:7:ASN:OD1	2.37	0.58
21:1B:9:ARG:HG3	21:1B:10:ARG:N	2.18	0.58
26:14:1782:C:H5"	59:14:3406:HOH:O	2.04	0.58
45:C5:45:VAL:HG12	45:C5:60:PHE:HB3	1.86	0.58
1:13:1004:A:P	1:13:1025:U:H3	2.27	0.57
6:5E:36:ARG:NH2	6:5E:38:GLU:OE2	2.36	0.57
18:9I:22:VAL:HA	18:9I:25:THR:OG1	2.04	0.57
22:1K:22:A:N7	22:1K:57:C:N4	2.51	0.57
26:1H:612:G:H2'	26:1H:613:U:O2	2.03	0.57
26:1H:1680:U:H2'	26:1H:1681:G:O4'	2.05	0.57
28:11:13:ARG:NH1	28:11:16:MET:SD	2.76	0.57
32:51:86:GLU:H	32:51:86:GLU:CD	2.12	0.57
39:A8:48:LEU:HD23	39:A8:82:ILE:HD11	1.85	0.57
1:1G:20:U:H2'	1:1G:21:G:O4'	2.04	0.57
1:1G:1181:G:O2'	1:1G:1182:G:O5'	2.20	0.57
1:1G:1406:U:O2	1:1G:1517:G:N2	2.37	0.57
26:14:592:G:H21	54:M5:4:MET:HE2	1.68	0.57
26:14:1074:G:N2	26:14:1075:C:O2	2.36	0.57
26:14:1425:G:N2	26:14:1573:G:N7	2.52	0.57
26:14:1786:A:H2	26:14:2606:C:H1'	1.69	0.57
46:D5:158:PRO:HB2	46:D5:159:PRO:HD2	1.86	0.57
1:13:233:C:H2'	1:13:234:C:H6	1.67	0.57
1:13:447:G:H8	1:13:447:G:O5'	1.87	0.57
1:13:963:G:H5'	59:13:1905:HOH:O	2.03	0.57
1:13:1060:C:OP1	14:5I:45:ARG:NH2	2.36	0.57
2:1E:42:ILE:HD11	2:1E:202:PRO:HB2	1.86	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:4I:34:LEU:HG	13:4I:41:PRO:HG3	1.85	0.57
22:1K:19:C:O2'	22:1K:20:C:OP1	2.21	0.57
26:1H:2233:U:H2'	26:1H:2234:G:C8	2.39	0.57
29:21:103:ASP:OD1	29:21:201:THR:HG23	2.04	0.57
35:68:25:LEU:HD12	35:68:38:VAL:HG22	1.85	0.57
38:98:51:LEU:HD22	38:98:66:VAL:HG13	1.86	0.57
1:1G:827:U:H3	1:1G:872:A:H62	1.50	0.57
8:72:19:VAL:HG23	8:72:21:LYS:HB3	1.86	0.57
8:72:120:THR:HG23	8:72:123:GLU:H	1.70	0.57
26:14:71:A:H2	44:B5:31:HIS:CE1	2.22	0.57
26:14:443:A:H1'	26:14:1201:C:O4'	2.04	0.57
26:14:651:G:OP2	54:M5:21:LYS:NZ	2.30	0.57
26:14:805:G:OP2	26:14:806:C:N4	2.36	0.57
26:14:962:G:H2'	26:14:963:U:C6	2.39	0.57
28:19:71:ASP:N	28:19:71:ASP:OD1	2.33	0.57
29:29:8:LYS:HB3	29:29:193:GLY:H	1.68	0.57
33:69:3:VAL:HG12	33:69:38:LEU:HA	1.86	0.57
37:45:20:ALA:HB2	46:D5:79:ARG:HG3	1.86	0.57
46:D5:54:HIS:NE2	46:D5:123:ASP:HB3	2.18	0.57
51:I5:16:CYS:HA	51:I5:33:VAL:HG13	1.85	0.57
1:13:362:G:OP2	59:13:1892:HOH:O	2.18	0.57
1:13:1117:G:O3'	9:8E:104:ARG:HD2	2.04	0.57
19:AI:13:ASP:HA	19:AI:16:LEU:HB3	1.85	0.57
24:3K:15:G:OP1	24:3K:15:G:H4'	2.03	0.57
26:1H:1705:G:C2'	26:1H:1706:U:H5'	2.35	0.57
26:1H:2027:G:N7	59:1H:3889:HOH:O	2.33	0.57
26:1H:2636:U:OP1	29:21:79:ARG:HA	2.05	0.57
26:1H:2789:C:H2'	26:1H:2790:A:H5"	1.87	0.57
1:1G:1128:C:H42	1:1G:1143:G:H22	1.50	0.57
1:1G:1238:A:H62	1:1G:1301:U:H3	1.50	0.57
2:12:98:LEU:O	2:12:101:MET:HG2	2.04	0.57
3:22:58:GLU:HB2	3:22:65:ALA:HB3	1.85	0.57
10:1A:33:GLN:HB3	10:1A:75:ILE:HG12	1.87	0.57
18:9A:38:GLU:OE2	18:9A:38:GLU:N	2.24	0.57
26:14:2111:C:H42	26:14:2147:G:H21	1.52	0.57
36:35:90:ARG:HG3	36:35:91:PHE:H	1.70	0.57
50:H5:9:VAL:HG11	50:H5:55:ARG:HB2	1.86	0.57
1:13:1128:C:H5"	9:8E:16:ARG:HH22	1.68	0.57
14:5I:9:LYS:HA	14:5I:12:ARG:HG2	1.85	0.57
26:1H:882:G:H22	26:1H:894:C:H42	1.53	0.57
26:1H:910:A:C5	37:88:13:GLN:HG3	2.39	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1614:A:H62	43:E8:93:ALA:HB2	1.69	0.57
26:1H:2369:A:H2'	26:1H:2370:G:H8	1.69	0.57
28:11:75:ILE:HG21	28:11:99:ASP:HB2	1.87	0.57
45:G8:85:VAL:HG13	45:G8:98:VAL:HB	1.86	0.57
1:1G:661:G:H1	1:1G:744:C:H42	1.51	0.57
5:42:69:VAL:O	5:42:71:LEU:N	2.37	0.57
17:8A:75:ARG:HB2	17:8A:75:ARG:HH11	1.68	0.57
55:3L:60:A:H2'	55:3L:61:G:H8	1.70	0.57
1:13:339:C:OP2	35:68:97:ARG:HD3	2.05	0.57
1:13:686:U:O4	1:13:703:G:H1'	2.04	0.57
1:13:1448:C:H42	1:13:1455:G:H1	1.52	0.57
22:1K:40:PSU:H2'	22:1K:41:C:C6	2.40	0.57
26:1H:2845:G:H2'	26:1H:2846:G:C8	2.39	0.57
59:1H:3721:HOH:O	30:31:85:GLY:HA2	2.05	0.57
29:21:119:ARG:HG3	29:21:119:ARG:NH1	2.16	0.57
34:58:41:ASP:OD1	34:58:41:ASP:N	2.35	0.57
35:68:67:LYS:HG3	35:68:68:GLU:N	2.20	0.57
45:G8:53:PRO:O	45:G8:54:LYS:NZ	2.37	0.57
1:1G:543:C:OP1	4:32:14:ARG:HD2	2.04	0.57
26:14:1007:C:OP1	34:15:35:ARG:NH1	2.38	0.57
26:14:1310:G:H1	26:14:1604:C:H42	1.52	0.57
26:14:1962:C:O2'	26:14:1964:G:OP2	2.22	0.57
26:14:2420:C:N4	54:M5:31:HIS:HB3	2.17	0.57
27:1J:15:A:O2'	27:1J:109:G:N7	2.29	0.57
31:49:94:LEU:HD12	31:49:99:MET:HA	1.85	0.57
36:35:62:LEU:HD13	54:M5:25:MET:HB2	1.85	0.57
1:13:142:G:H2'	1:13:143:A:H8	1.70	0.57
1:13:427:U:OP2	4:3E:36:ARG:NH1	2.38	0.57
1:13:962:C:N3	1:13:973:G:N1	2.39	0.57
1:13:971:G:N2	1:13:1363:A:OP2	2.26	0.57
16:7I:17:TYR:HE2	16:7I:41:PRO:HG3	1.69	0.57
26:1H:32:C:O2'	26:1H:33:U:H5'	2.04	0.57
26:1H:270(G):C:H2'	26:1H:270(H):C:C6	2.40	0.57
26:1H:2688:U:H5	26:1H:2720:U:OP2	1.87	0.57
27:16:50:G:OP1	39:A8:63:THR:HG23	2.05	0.57
28:11:231:HIS:CD2	28:11:249:PRO:HA	2.40	0.57
36:78:44:GLY:O	59:78:302:HOH:O	2.18	0.57
1:1G:222:U:H2'	1:1G:223:U:C6	2.38	0.57
1:1G:632:A:H1'	1:1G:633:G:OP2	2.04	0.57
1:1G:937:A:N6	1:1G:1345:U:O4	2.35	0.57
1:1G:1122:U:O4	1:1G:1123:A:N6	2.38	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1126:U:H4'	1:1G:1127:G:C8	2.38	0.57
4:32:13:ARG:C	4:32:15:GLU:H	2.11	0.57
26:14:49:A:H5"	26:14:51:G:O4'	2.03	0.57
26:14:247:G:H4'	26:14:386:G:C5	2.39	0.57
26:14:580:C:H2'	26:14:581:C:C6	2.38	0.57
26:14:2402:C:H41	26:14:2416:C:H1'	1.69	0.57
27:1J:15:A:H1'	27:1J:109:G:C8	2.40	0.57
28:19:60:ARG:HD2	28:19:86:PRO:HB2	1.87	0.57
30:39:34:TRP:CZ3	36:35:8:PRO:HB3	2.39	0.57
42:95:71:LEU:O	42:95:72:VAL:HG12	2.04	0.57
1:13:223:U:H2'	1:13:224:C:C6	2.40	0.57
1:13:631:G:H2'	1:13:632:A:N3	2.19	0.57
1:13:963:G:H21	10:1I:55:LYS:HZ1	1.52	0.57
2:1E:118:LEU:HD13	2:1E:142:LEU:HA	1.87	0.57
10:1I:6:ILE:HG12	10:1I:72:VAL:O	2.04	0.57
10:1I:90:LEU:N	10:1I:91:PRO:HD3	2.20	0.57
1:1G:1256:A:H62	1:1G:1277:C:H3'	1.70	0.57
3:22:199:LYS:HB3	3:22:201:TYR:CE1	2.35	0.57
4:32:19:LEU:HB2	4:32:21:LEU:HD11	1.85	0.57
4:32:26:CYS:CB	4:32:31:CYS:SG	2.66	0.57
9:82:112:LYS:HA	9:82:119:ALA:CB	2.34	0.57
25:4L:12:A:O2'	25:4L:13:A:OP1	2.20	0.57
26:14:71:A:H4'	26:14:72:U:H5"	1.87	0.57
26:14:1921:G:H2'	26:14:1922:G:H8	1.70	0.57
27:1J:44:G:H1'	27:1J:47:C:H42	1.70	0.57
28:19:145:VAL:HG13	28:19:191:ALA:HB2	1.87	0.57
28:19:166:GLN:OE1	28:19:166:GLN:HA	2.05	0.57
53:L5:24:THR:O	53:L5:28:ARG:HG3	2.04	0.57
2:1E:18:GLY:N	2:1E:42:ILE:HG22	2.20	0.57
2:1E:31:TYR:O	2:1E:42:ILE:HG13	2.04	0.57
3:2E:107:GLN:OE1	3:2E:107:GLN:N	2.36	0.57
7:6E:16:LEU:HD13	9:8E:44:VAL:HG22	1.86	0.57
10:1I:23:ILE:HA	10:1I:26:ALA:HB3	1.87	0.57
26:1H:2327:A:H2'	26:1H:2328:A:C8	2.40	0.57
37:88:54:MET:HE3	37:88:64:ILE:HD13	1.86	0.57
16:7A:1:MET:HE1	16:7A:65:GLN:HB2	1.87	0.57
26:14:531:C:H4'	26:14:532:A:H5"	1.87	0.57
26:14:739:G:OP1	59:14:3675:HOH:O	2.18	0.57
26:14:2712:U:O2'	59:14:3466:HOH:O	2.17	0.57
31:49:27:ASN:HB3	31:49:30:GLU:HG3	1.86	0.57
46:D5:29:TYR:CE2	46:D5:87:ASP:HB3	2.40	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:J5:31:VAL:HG13	52:J5:42:PRO:HG3	1.86	0.57
1:13:159:G:N2	1:13:162:A:OP2	2.38	0.57
1:13:1238:A:N3	1:13:1241:G:O2'	2.36	0.57
2:1E:185:ILE:HG22	2:1E:199:TYR:HB2	1.87	0.57
8:7E:120:THR:H	8:7E:123:GLU:HB2	1.69	0.57
11:2I:34:ASP:HB3	11:2I:40:ILE:HD11	1.85	0.57
13:4I:81:LEU:HD22	13:4I:88:ARG:HB3	1.87	0.57
26:1H:751:A:H5'	43:E8:90:ARG:HA	1.87	0.57
26:1H:1371:G:H2'	26:1H:1372:U:C5	2.40	0.57
31:41:43:LEU:HB3	31:41:45:GLU:HG2	1.87	0.57
38:98:2:ARG:NH1	38:98:5:LYS:O	2.37	0.57
47:I8:23:VAL:HA	47:I8:38:VAL:HG22	1.86	0.57
39:65:99:LYS:HG3	39:65:103:GLU:HG3	1.86	0.57
1:13:859:A:H2'	1:13:860:A:C8	2.40	0.57
4:3E:92:VAL:HG12	4:3E:96:LEU:HD21	1.86	0.57
4:3E:192:GLU:OE1	4:3E:192:GLU:N	2.34	0.57
6:5E:35:ALA:HA	6:5E:67:MET:HB3	1.86	0.57
26:1H:1803:A:O2'	28:11:259:THR:HG21	2.05	0.57
26:1H:2845:G:H2'	26:1H:2846:G:H8	1.66	0.57
27:16:73:A:C4	27:16:104:A:C2	2.93	0.57
29:21:200:GLU:N	29:21:200:GLU:OE2	2.37	0.57
45:G8:94:LYS:HZ2	45:G8:94:LYS:CA	2.17	0.57
46:H8:125:LEU:HG	46:H8:164:ALA:HB3	1.87	0.57
54:Q8:29:LYS:HB3	54:Q8:44:LYS:HG2	1.87	0.57
1:1G:853:G:H2'	1:1G:854:G:H8	1.68	0.57
10:1A:49:VAL:O	10:1A:60:ARG:HB2	2.04	0.57
13:4A:13:LYS:HA	13:4A:44:ARG:NH1	2.20	0.57
26:14:140:A:H8	26:14:1408:C:HO2'	1.51	0.57
26:14:780:G:H21	26:14:783:A:N6	2.03	0.57
26:14:2638:G:P	29:29:82:ARG:HH22	2.28	0.57
27:1J:9:G:H5'	39:65:25:ARG:HH12	1.69	0.57
1:13:633:G:OP2	1:13:633:G:H8	1.87	0.56
1:13:1075:C:H4'	2:1E:175:ARG:HH22	1.70	0.56
26:1H:860:U:C5	26:1H:917:A:H2	2.22	0.56
26:1H:1357:U:H2'	26:1H:1358:G:C8	2.40	0.56
26:1H:2615:U:P	59:1H:3510:HOH:O	2.62	0.56
29:21:64:LYS:O	29:21:70:ALA:HB2	2.04	0.56
36:78:96:THR:C	36:78:98:GLU:H	2.13	0.56
42:D8:19:LYS:HG3	42:D8:95:LEU:HD23	1.86	0.56
42:D8:27:ALA:HB3	42:D8:61:VAL:HG11	1.86	0.56
1:1G:490:G:P	4:32:132:ARG:HH22	2.27	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:29:U:H2'	26:14:30:G:H8	1.70	0.56
26:14:666:G:H5"	36:35:47:ASP:O	2.05	0.56
33:69:93:THR:OG1	33:69:96:ASP:OD1	2.21	0.56
1:13:1120:G:H2'	1:13:1121:U:C6	2.40	0.56
20:BI:23:ARG:O	20:BI:27:LYS:HB3	2.05	0.56
26:1H:2657:A:O2'	32:51:160:LYS:NZ	2.28	0.56
30:31:8:GLN:H	30:31:8:GLN:CD	2.12	0.56
38:98:86:ARG:HH21	38:98:118:GLU:HB2	1.70	0.56
42:D8:28:GLU:CD	42:D8:28:GLU:H	2.11	0.56
42:D8:29:PRO:HG3	42:D8:63:GLY:HA2	1.87	0.56
49:K8:15:LYS:HD3	49:K8:67:LYS:HZ3	1.70	0.56
1:1G:192:U:H2'	1:1G:193:C:H6	1.70	0.56
1:1G:618:C:H5'	1:1G:619:U:H5"	1.86	0.56
1:1G:1177:G:O2'	1:1G:1178:G:O4'	2.22	0.56
2:12:12:GLU:HB3	2:12:213:LEU:HD22	1.87	0.56
4:32:14:ARG:HH11	4:32:14:ARG:HG3	1.70	0.56
9:82:54:ASP:OD1	9:82:54:ASP:N	2.25	0.56
26:14:831:G:H5"	26:14:832:G:OP2	2.05	0.56
26:14:1040:C:H2'	26:14:1041:C:C6	2.40	0.56
26:14:1675:C:OP2	59:14:3458:HOH:O	2.18	0.56
26:14:2261:C:H1'	26:14:2388:A:N3	2.20	0.56
26:14:2340:G:H2'	26:14:2341:G:C8	2.40	0.56
34:15:67:LEU:HG	34:15:88:GLU:HG2	1.87	0.56
40:75:11:GLU:OE1	40:75:11:GLU:N	2.38	0.56
45:C5:61:ILE:HG22	45:C5:62:GLU:HG3	1.85	0.56
1:13:67:C:H2'	1:13:68:G:C8	2.40	0.56
1:13:448:A:OP2	1:13:485:G:N2	2.35	0.56
1:13:1346:A:C5	7:6E:10:ARG:NH1	2.73	0.56
1:13:1504:G:H3'	1:13:1504:G:P	2.45	0.56
4:3E:7:PRO:HB2	4:3E:10:ARG:HG2	1.87	0.56
4:3E:107:ARG:HH22	4:3E:194:LEU:HD22	1.69	0.56
7:6E:15:ASP:HB3	7:6E:19:GLY:N	2.21	0.56
9:8E:77:ILE:O	9:8E:81:ILE:HG12	2.05	0.56
16:7I:19:ILE:HB	16:7I:36:ILE:O	2.05	0.56
19:AI:51:VAL:HG12	19:AI:52:TYR:H	1.68	0.56
26:1H:270(V):G:H2'	26:1H:270(W):G:H8	1.69	0.56
26:1H:459:U:H2'	26:1H:460:A:C8	2.40	0.56
26:1H:492:A:H2'	26:1H:493:G:O4'	2.05	0.56
26:1H:592:G:N3	54:Q8:4:MET:HE2	2.20	0.56
26:1H:863:A:H2'	26:1H:864:G:C8	2.40	0.56
26:1H:1140:C:OP1	34:58:23:LEU:HB3	2.05	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2394:C:H2'	26:1H:2395:C:H6	1.70	0.56
29:21:11:MET:HE3	29:21:186:GLY:HA2	1.87	0.56
29:21:51:PHE:O	29:21:74:PRO:HB2	2.05	0.56
29:21:78:LEU:HD23	29:21:79:ARG:HE	1.71	0.56
42:D8:47:VAL:HG22	42:D8:48:GLY:N	2.20	0.56
45:G8:76:CYS:SG	45:G8:97:ARG:HG2	2.45	0.56
1:1G:108:G:H5'	1:1G:109:A:H5"	1.88	0.56
1:1G:1024:G:H4'	1:1G:1024:G:OP1	2.03	0.56
4:32:17:VAL:HA	4:32:33:MET:HE2	1.86	0.56
4:32:18:LYS:HB3	4:32:31:CYS:SG	2.45	0.56
12:3A:100:ILE:HG22	12:3A:101:VAL:N	2.19	0.56
24:1L:14:A:H61	24:1L:22:A:H1'	1.70	0.56
24:1L:23:A:H3'	24:1L:24:G:C5'	2.35	0.56
26:14:323:G:H5'	30:39:169:ASN:HD21	1.70	0.56
26:14:751:A:H5'	43:A5:90:ARG:HA	1.86	0.56
26:14:1416:G:O2'	26:14:1417:C:O5'	2.18	0.56
26:14:1530:G:H2'	26:14:1531:C:O4'	2.05	0.56
26:14:1657:C:H2'	26:14:1658:C:C6	2.40	0.56
26:14:2153:G:H2'	26:14:2154:G:C8	2.41	0.56
26:14:2707:G:H5'	38:55:68:ARG:NH2	2.20	0.56
26:14:2786:U:H4'	29:29:64:LYS:C	2.31	0.56
32:59:92:ILE:HG22	32:59:93:GLY:N	2.19	0.56
49:G5:13:ALA:HA	49:G5:16:LEU:HD23	1.86	0.56
51:I5:37:SER:HB3	51:I5:39:CYS:HB2	1.86	0.56
54:M5:29:LYS:HB3	54:M5:44:LYS:CB	2.34	0.56
26:1H:1210:A:H5'	26:1H:1210:A:C8	2.41	0.56
26:1H:1658:C:OP1	59:1H:3582:HOH:O	2.18	0.56
26:1H:2598:A:P	59:1H:3544:HOH:O	2.63	0.56
26:1H:2688:U:C5	26:1H:2720:U:OP2	2.59	0.56
27:16:7:G:H4'	39:A8:29:PHE:HD2	1.70	0.56
27:16:43:C:OP1	31:41:67:LYS:NZ	2.38	0.56
32:51:8:PRO:HG2	32:51:69:ARG:NH2	2.21	0.56
36:78:88:LEU:HD12	36:78:95:VAL:HG11	1.86	0.56
40:B8:58:ASN:HD22	40:B8:58:ASN:C	2.12	0.56
1:1G:841:U:H3'	1:1G:841:U:H6	1.70	0.56
1:1G:972:C:O3'	10:1A:57:LYS:HG3	2.05	0.56
1:1G:1129:C:C4	1:1G:1139:G:N1	2.73	0.56
1:1G:1226:C:N4	13:4A:104:ARG:HD2	2.21	0.56
1:1G:1305:G:H22	1:1G:1331:G:C2'	2.17	0.56
2:12:9:GLU:O	2:12:12:GLU:HG3	2.05	0.56
2:12:82:ARG:HA	2:12:92:TYR:CE2	2.41	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:12:215:LEU:HA	2:12:218:ALA:HB3	1.88	0.56
26:14:1257:C:H4'	30:39:83:PHE:CE1	2.41	0.56
26:14:1488:G:H5'	26:14:1489:U:OP2	2.06	0.56
36:35:86:LYS:HB3	36:35:117:GLU:O	2.05	0.56
40:75:77:PRO:HG2	40:75:80:SER:HB2	1.87	0.56
45:C5:31:LEU:HD12	45:C5:36:ALA:HB3	1.86	0.56
45:C5:68:HIS:HB3	45:C5:71:LYS:HG3	1.87	0.56
46:D5:53:ILE:HG22	46:D5:71:VAL:HG13	1.87	0.56
14:5I:29:ARG:HD3	14:5I:40:CYS:SG	2.46	0.56
26:1H:39:C:O2	30:31:46:ARG:NH2	2.38	0.56
26:1H:528:A:C2	26:1H:2043:C:H4'	2.41	0.56
26:1H:839:U:H2'	26:1H:840:C:C6	2.41	0.56
31:41:130:ASN:HB3	31:41:160:VAL:HA	1.88	0.56
33:61:2:LYS:HB2	33:61:39:ALA:HB3	1.86	0.56
28:19:43:ARG:HH11	28:19:43:ARG:CG	2.19	0.56
30:39:176:LEU:HD12	30:39:177:ALA:H	1.71	0.56
35:25:31:LYS:HB3	35:25:32:TYR:CD1	2.40	0.56
38:55:106:GLY:O	38:55:107:ASP:HB3	2.05	0.56
39:65:59:LYS:HD2	39:65:60:GLY:H	1.71	0.56
46:D5:124:ILE:HD11	46:D5:165:VAL:HG11	1.88	0.56
47:E5:36:ILE:HD11	47:E5:39:ARG:HG2	1.87	0.56
54:M5:52:LYS:H	54:M5:52:LYS:HD2	1.69	0.56
1:13:1077:G:N2	1:13:1080:A:OP2	2.35	0.56
2:1E:166:ASP:C	2:1E:168:THR:H	2.14	0.56
8:7E:39:LEU:HB3	8:7E:45:ILE:HG12	1.87	0.56
11:2I:59:TYR:CZ	11:2I:63:LEU:HD11	2.40	0.56
17:8I:55:ASP:HA	17:8I:79:SER:HA	1.87	0.56
26:1H:1835:G:H5'	26:1H:1836:C:OP2	2.06	0.56
29:21:197:ILE:HD11	29:21:199:ARG:HE	1.71	0.56
34:58:39:ARG:HB3	34:58:41:ASP:OD1	2.06	0.56
34:58:43:THR:HB	34:58:46:VAL:HB	1.87	0.56
35:68:71:ARG:HH21	35:68:77:ILE:HG21	1.70	0.56
38:98:100:LEU:HD11	38:98:113:LEU:HD13	1.87	0.56
40:B8:57:PHE:O	40:B8:58:ASN:ND2	2.39	0.56
1:1G:280:C:H3'	1:1G:281:G:H5'	1.88	0.56
1:1G:649:G:H2'	1:1G:650:G:H8	1.69	0.56
1:1G:954:G:H2'	1:1G:955:U:C6	2.40	0.56
4:32:31:CYS:HB3	4:32:33:MET:HB2	1.88	0.56
10:1A:84:GLN:HB3	10:1A:88:LEU:HD22	1.87	0.56
26:14:5:A:H2'	26:14:6:A:H8	1.70	0.56
26:14:38:A:H2'	26:14:39:C:C6	2.41	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:568:U:N3	59:14:3612:HOH:O	2.24	0.56
26:14:660:G:H21	36:35:12:ALA:HB2	1.71	0.56
33:69:27:ARG:HG2	48:F5:71:TYR:CZ	2.40	0.56
39:65:77:ALA:O	39:65:80:LEU:N	2.39	0.56
42:95:40:LEU:HD23	42:95:41:GLY:H	1.70	0.56
1:13:276:G:O3'	17:8I:68:ARG:NH1	2.39	0.56
9:8E:34:ASN:OD1	9:8E:34:ASN:N	2.37	0.56
17:8I:52:LYS:HD2	17:8I:55:ASP:OD1	2.06	0.56
26:1H:1337:G:H2'	26:1H:1338:G:H8	1.71	0.56
26:1H:1899:G:N2	26:1H:1902:C:C5	2.74	0.56
31:41:16:ARG:O	31:41:20:ILE:HG13	2.06	0.56
40:B8:16:ARG:HE	40:B8:19:LEU:HD11	1.71	0.56
1:1G:370:C:H42	1:1G:391:G:H1	1.53	0.56
1:1G:429:U:H1'	1:1G:430:A:H5"	1.88	0.56
1:1G:963:G:H21	10:1A:55:LYS:CE	2.17	0.56
10:1A:13:HIS:O	10:1A:17:ASP:N	2.26	0.56
12:3A:7:ILE:HA	12:3A:10:LEU:HD12	1.87	0.56
26:14:414:C:O2	26:14:1864:U:O2'	2.24	0.56
26:14:882:G:H1	26:14:894:C:H42	1.54	0.56
27:1J:52:A:H62	39:65:33:LYS:HG3	1.71	0.56
32:59:107:VAL:HG11	32:59:152:ARG:HG2	1.87	0.56
54:M5:29:LYS:HB3	54:M5:44:LYS:HB2	1.86	0.56
1:13:1319:A:OP1	19:AI:70:LYS:NZ	2.39	0.56
7:6E:20:ASP:HB3	7:6E:23:VAL:HG23	1.88	0.56
12:3I:91:LYS:HG3	12:3I:91:LYS:O	2.06	0.56
20:BI:97:ALA:O	20:BI:99:LEU:HD22	2.06	0.56
26:1H:219:G:O2'	26:1H:220:G:H5'	2.06	0.56
26:1H:232:G:H8	26:1H:232:G:OP2	1.89	0.56
26:1H:930:U:H4'	26:1H:931:G:O5'	2.05	0.56
26:1H:1486:A:H2'	26:1H:1487:G:C8	2.40	0.56
42:D8:65:GLY:N	42:D8:91:TYR:O	2.36	0.56
46:H8:9:TYR:CE2	46:H8:35:ARG:HD3	2.41	0.56
50:L8:8:LEU:HD13	50:L8:31:LEU:HD23	1.87	0.56
50:L8:8:LEU:HB3	50:L8:31:LEU:HA	1.88	0.56
1:1G:1095:U:H2'	1:1G:1096:C:C6	2.41	0.56
2:12:22:LYS:NZ	2:12:35:GLU:OE1	2.34	0.56
55:3L:57:C:H4'	55:3L:58:G:O5'	2.06	0.56
26:14:1859:A:N6	26:14:1883:G:O2'	2.39	0.56
28:19:37:LEU:HA	28:19:38:LYS:HD3	1.88	0.56
32:59:82:GLY:HA3	32:59:135:GLY:O	2.06	0.56
46:D5:157:LEU:CA	46:D5:161:VAL:HG11	2.36	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1305:G:O2'	1:13:1331:G:N2	2.39	0.56
1:13:1329:A:H5'	13:4I:29:ARG:HD2	1.88	0.56
19:AI:51:VAL:O	19:AI:57:HIS:HA	2.06	0.56
22:1K:85:A:H1'	26:1H:2583:G:H21	1.70	0.56
26:1H:1061:U:H4'	26:1H:1070:A:C1'	2.33	0.56
26:1H:1515:C:H2'	26:1H:1516:U:C6	2.40	0.56
26:1H:2061:G:P	59:1H:3526:HOH:O	2.58	0.56
26:1H:2151:G:H2'	26:1H:2152:G:H8	1.70	0.56
26:1H:2308:G:N1	26:1H:2311:A:C2	2.66	0.56
27:16:116:G:H2'	27:16:117:G:O4'	2.06	0.56
49:K8:42:GLY:C	49:K8:44:LEU:H	2.14	0.56
1:1G:979:C:H3'	1:1G:980:C:H5"	1.86	0.56
1:1G:1158:C:H2'	1:1G:1158:C:O2	2.06	0.56
4:32:119:GLN:HG2	4:32:123:HIS:CD2	2.40	0.56
20:BA:50:GLU:N	20:BA:100:ILE:HG12	2.20	0.56
1:13:429:U:OP2	4:3E:36:ARG:NH2	2.38	0.56
1:13:1190:G:OP1	3:2E:4:LYS:HA	2.06	0.56
1:13:1263:C:H2'	1:13:1264:C:H6	1.70	0.56
22:1K:44:C:H2'	22:1K:45:C:H5'	1.88	0.56
26:1H:184:C:H2'	26:1H:185:U:C6	2.41	0.56
26:1H:2557:G:H2'	26:1H:2558:C:C6	2.41	0.56
33:61:69:LYS:O	33:61:73:GLU:HB2	2.06	0.56
35:68:47:ILE:HG13	35:68:48:PRO:HD2	1.87	0.56
44:F8:12:VAL:HG13	44:F8:27:THR:O	2.06	0.56
2:12:6:THR:OG1	2:12:7:VAL:N	2.36	0.56
4:32:50:ARG:NH1	5:42:10:MET:HE2	2.21	0.56
8:72:85:ARG:NH1	8:72:87:SER:O	2.38	0.56
12:3A:46:LYS:HG2	12:3A:47:LYS:N	2.21	0.56
26:14:71:A:H2	44:B5:31:HIS:HE1	1.53	0.56
26:14:184:C:H2'	26:14:185:U:C6	2.40	0.56
26:14:2287:A:N1	26:14:2346:A:H2	2.04	0.56
26:14:2557:G:H2'	26:14:2558:C:C6	2.41	0.56
38:55:103:ARG:HH11	38:55:110:PRO:HB3	1.71	0.56
1:13:881:G:OP2	12:3I:12:ARG:NH2	2.38	0.55
1:13:1014:A:C2	1:13:1219:U:H1'	2.40	0.55
1:13:1132:C:H2'	1:13:1133:G:C8	2.41	0.55
1:13:1374:A:O2'	7:6E:28:ASN:HB3	2.07	0.55
2:1E:6:THR:OG1	2:1E:7:VAL:N	2.38	0.55
2:1E:19:HIS:NE2	2:1E:206:ASP:OD2	2.38	0.55
4:3E:110:PHE:CE2	4:3E:148:VAL:HG23	2.41	0.55
10:1I:89:ASP:OD1	10:1I:89:ASP:N	2.32	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:8I:76:LEU:HD21	17:8I:79:SER:HB3	1.87	0.55
24:3K:77:C:H2'	24:3K:78:C:H6	1.71	0.55
26:1H:307:G:H21	26:1H:330:A:H62	1.55	0.55
26:1H:1259:G:H2'	26:1H:1260:G:C8	2.41	0.55
26:1H:1290:C:H2'	26:1H:1291:C:C6	2.41	0.55
26:1H:1405:U:H2'	26:1H:1406:U:H6	1.71	0.55
26:1H:2110:G:H5"	26:1H:2145:C:H42	1.69	0.55
27:16:2:C:H2'	27:16:3:C:C6	2.42	0.55
36:78:18:ARG:O	36:78:19:VAL:HG22	2.06	0.55
45:G8:35:TYR:CD2	45:G8:69:ALA:HB3	2.42	0.55
1:1G:17:U:H2'	1:1G:18:C:C6	2.42	0.55
4:32:162:LEU:HD11	4:32:181:MET:SD	2.46	0.55
55:3L:15:G:N1	55:3L:57:C:O2	2.30	0.55
26:14:91:A:C2'	26:14:92:G:H5'	2.35	0.55
26:14:413:C:H2'	26:14:414:C:H6	1.71	0.55
26:14:910:A:C5	37:45:13:GLN:HG3	2.41	0.55
26:14:1112:G:H5'	32:59:3:ARG:HB3	1.87	0.55
26:14:2310:A:H5'	26:14:2311:A:OP2	2.06	0.55
28:19:134:ARG:HG3	28:19:135:PHE:HD1	1.71	0.55
29:29:61:ARG:HA	29:29:63:LEU:HD22	1.88	0.55
29:29:171:GLU:O	29:29:184:VAL:HA	2.06	0.55
30:39:31:HIS:NE2	30:39:35:GLU:HG3	2.21	0.55
32:59:109:PHE:CZ	32:59:152:ARG:HD3	2.41	0.55
40:75:99:LEU:O	40:75:102:ILE:HG12	2.07	0.55
41:85:91:ASP:O	41:85:92:ARG:HG3	2.06	0.55
1:13:376:G:H1	1:13:387:U:H3	1.53	0.55
29:21:51:PHE:CD2	29:21:52:LEU:HG	2.40	0.55
32:51:7:LEU:H	32:51:7:LEU:HD12	1.72	0.55
34:58:34:LEU:HD21	34:58:120:LEU:HB2	1.89	0.55
46:H8:120:ILE:O	46:H8:121:HIS:ND1	2.39	0.55
51:M8:24:THR:OG1	51:M8:25:TYR:N	2.39	0.55
1:1G:34:C:H2'	1:1G:35:G:C8	2.42	0.55
7:62:15:ASP:OD1	7:62:44:TYR:OH	2.24	0.55
7:62:26:PHE:O	7:62:30:ILE:HG13	2.06	0.55
9:82:16:ARG:O	9:82:63:ILE:HG23	2.06	0.55
12:3A:24:VAL:HG12	12:3A:98:TYR:CE1	2.41	0.55
26:14:1450:C:H2'	26:14:1451:C:C6	2.42	0.55
26:14:1496:A:H1'	26:14:1577:C:O2'	2.07	0.55
26:14:2343:C:HO2'	26:14:2373:G:HO2'	1.54	0.55
26:14:2889:C:H2'	26:14:2891:G:O4'	2.07	0.55
27:1J:13:A:N1	27:1J:69:G:O2'	2.31	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:1J:15:A:H1'	27:1J:109:G:C5	2.41	0.55
28:19:70:TRP:CD1	28:19:70:TRP:C	2.84	0.55
30:39:107:LYS:HE2	30:39:205:ARG:HD2	1.88	0.55
35:25:119:PRO:HB2	40:75:68:TYR:CE2	2.42	0.55
1:13:1320:C:H2'	1:13:1321:C:O4'	2.05	0.55
1:13:1494:G:O2'	26:1H:1912:A:O2'	2.24	0.55
4:3E:148:VAL:HG21	4:3E:158:ILE:HG21	1.89	0.55
9:8E:47:LEU:H	9:8E:47:LEU:HD22	1.72	0.55
11:2I:18:ARG:HG2	11:2I:33:THR:OG1	2.06	0.55
20:BI:30:LYS:NZ	20:BI:80:ARG:HH12	2.04	0.55
22:1K:35:QUO:H8	22:1K:35:QUO:O5'	2.07	0.55
26:1H:943:U:OP2	36:78:36:LYS:HG3	2.07	0.55
26:1H:1590:U:H2'	26:1H:1591:G:H8	1.70	0.55
45:G8:28:LYS:CD	45:G8:40:GLU:HG2	2.35	0.55
52:N8:49:CYS:H	52:N8:59:GLU:HB2	1.72	0.55
1:1G:448:A:P	1:1G:485:G:H22	2.28	0.55
1:1G:1118:C:H1'	1:1G:1179:A:C4	2.40	0.55
1:1G:1275:A:H2'	1:1G:1276:G:O4'	2.06	0.55
1:1G:1368:G:OP1	9:82:111:ARG:NH2	2.39	0.55
16:7A:57:ARG:HA	16:7A:60:LEU:HD12	1.88	0.55
20:BA:72:LEU:O	20:BA:73:HIS:HB2	2.07	0.55
26:14:70:G:H21	26:14:71:A:N6	2.04	0.55
26:14:2250:G:C8	26:14:2496:C:H5'	2.41	0.55
26:14:2743:C:H2'	26:14:2744:G:O4'	2.05	0.55
30:39:7:TYR:CD1	30:39:18:ARG:HB2	2.41	0.55
42:95:38:LEU:O	42:95:52:VAL:HG23	2.06	0.55
1:13:464:G:C6	1:13:466:C:H5'	2.40	0.55
4:3E:108:LEU:HB3	4:3E:110:PHE:CD1	2.42	0.55
7:6E:156:TRP:CD1	7:6E:156:TRP:H	2.25	0.55
10:1I:27:ALA:O	10:1I:31:GLY:N	2.38	0.55
14:5I:6:LEU:HB3	14:5I:23:ARG:NH2	2.22	0.55
26:1H:1542:G:OP2	26:1H:1543:A:O2'	2.23	0.55
36:78:19:VAL:HG23	36:78:20:GLY:N	2.21	0.55
36:78:65:ARG:HH11	36:78:65:ARG:HG3	1.69	0.55
2:12:16:HIS:CD2	2:12:210:SER:HA	2.41	0.55
11:2A:41:THR:OG1	11:2A:42:TRP:N	2.39	0.55
24:1L:46:G:O2'	24:1L:47:U:OP1	2.20	0.55
23:2L:44:A:H2'	23:2L:45:A:C8	2.40	0.55
26:14:1359:A:N7	26:14:1372:U:O4	2.39	0.55
26:14:1500:G:O2'	28:19:100:GLY:O	2.23	0.55
26:14:2845:G:H2'	26:14:2846:G:C8	2.41	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:19:134:ARG:HG3	28:19:135:PHE:CD1	2.42	0.55
32:59:12:PRO:HD2	32:59:49:VAL:HA	1.89	0.55
32:59:81:GLU:HG3	32:59:83:TYR:H	1.71	0.55
32:59:92:ILE:HG22	32:59:93:GLY:H	1.71	0.55
33:69:65:ALA:O	33:69:69:LYS:N	2.39	0.55
1:13:1054:C:O2'	1:13:1055:A:O5'	2.24	0.55
1:13:1218:C:H2'	1:13:1219:U:C6	2.41	0.55
1:13:1226:C:H4'	19:AI:80:TYR:OH	2.06	0.55
1:13:1497:G:H2'	1:13:1498:U:H5'	1.87	0.55
4:3E:83:SER:HA	4:3E:89:THR:HG23	1.89	0.55
19:AI:39:THR:HG22	19:AI:40:ILE:H	1.72	0.55
25:4K:19[B]:A:N3	25:4K:19[B]:A:H5'	2.22	0.55
26:1H:2061:G:H5"	26:1H:2503:A:C2	2.41	0.55
1:1G:458:C:H2'	1:1G:464:G:H8	1.72	0.55
1:1G:976:G:N2	1:1G:1362(A):C:OP2	2.27	0.55
3:22:91:LEU:O	3:22:95:THR:OG1	2.19	0.55
4:32:72:GLU:OE1	4:32:207:TYR:OH	2.24	0.55
7:62:53:LYS:HB3	7:62:53:LYS:NZ	2.21	0.55
14:5A:15:LYS:HZ3	14:5A:15:LYS:HA	1.71	0.55
23:2L:24:C:H2'	23:2L:25:U:H6	1.71	0.55
55:3L:61:G:H1	55:3L:71:C:N4	1.97	0.55
26:14:1417:C:H42	26:14:1581:G:H1	1.55	0.55
26:14:1839:G:C8	26:14:1927:A:H1'	2.42	0.55
36:35:124:LYS:HA	36:35:143:GLY:O	2.06	0.55
1:13:141:A:H1'	1:13:182:U:O2	2.06	0.55
1:13:377:G:H5'	16:7I:5:ARG:HH12	1.71	0.55
1:13:392:G:H5'	16:7I:12:LYS:HE3	1.89	0.55
2:1E:33:TYR:HB2	2:1E:43:ASP:HB2	1.87	0.55
6:5E:55:ASP:HB2	6:5E:86:ARG:HH12	1.71	0.55
12:3I:52:LEU:O	12:3I:54:LYS:NZ	2.40	0.55
21:1F:2:GLY:O	21:1F:4:GLY:N	2.39	0.55
31:41:142:PRO:HB2	51:M8:31:ILE:HG21	1.87	0.55
46:H8:104:PHE:CZ	46:H8:119:GLU:HB3	2.41	0.55
1:1G:963:G:N3	10:1A:55:LYS:NZ	2.52	0.55
1:1G:1326:C:H2'	1:1G:1327:C:C6	2.41	0.55
6:52:10:LEU:HB2	6:52:59:TYR:HB3	1.86	0.55
12:3A:60:LEU:HB2	12:3A:64:TYR:HB2	1.89	0.55
55:3L:62:G:H2'	55:3L:63:U:C6	2.42	0.55
26:14:239:U:H2'	26:14:240:G:O4'	2.07	0.55
26:14:882:G:H22	26:14:894:C:H42	1.55	0.55
26:14:1427:A:H4'	26:14:1428:C:O4'	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1729:A:H2'	26:14:1731:G:N2	2.21	0.55
26:14:2308:G:O2'	26:14:2309:A:OP1	2.21	0.55
26:14:2392:A:H2	26:14:2424:C:N4	2.04	0.55
28:19:264:LYS:HG2	28:19:266:SER:HB3	1.88	0.55
30:39:4:VAL:HA	30:39:19:GLU:HB3	1.87	0.55
1:13:955:U:H1'	1:13:1227:A:H61	1.72	0.55
1:13:1178:G:N2	1:13:1181:G:H8	2.04	0.55
1:13:1363:A:H1'	1:13:1365:G:N7	2.22	0.55
4:3E:111:ALA:HB2	4:3E:120:LEU:HD12	1.87	0.55
26:1H:71:A:H4'	26:1H:72:U:H5"	1.88	0.55
26:1H:495:G:O2'	43:E8:62:HIS:HE1	1.90	0.55
26:1H:1973:G:H2'	26:1H:1974:C:C6	2.42	0.55
26:1H:2144:U:H1'	26:1H:2148:G:N2	2.22	0.55
26:1H:2232:U:P	48:J8:40:ARG:HH12	2.30	0.55
27:16:13:A:N6	27:16:70:C:H5'	2.22	0.55
28:11:136:ILE:O	28:11:168:ARG:NH2	2.40	0.55
29:21:52:LEU:O	29:21:75:VAL:N	2.34	0.55
38:98:33:ARG:NH1	52:N8:55:ARG:O	2.38	0.55
51:M8:36:CYS:HB2	51:M8:39:CYS:SG	2.47	0.55
1:1G:457:C:H2'	1:1G:458:C:C6	2.41	0.55
9:82:102:LEU:O	9:82:103:THR:OG1	2.22	0.55
13:4A:66:LEU:HA	13:4A:70:LEU:HB2	1.87	0.55
26:14:1047:G:HO2'	26:14:1110:G:H22	1.55	0.55
26:14:1677:A:N6	59:14:3463:HOH:O	2.34	0.55
26:14:2131:G:N2	26:14:2158:A:OP2	2.40	0.55
27:1J:56:G:H4'	27:1J:57:A:C8	2.42	0.55
28:19:68:LYS:HD3	28:19:70:TRP:CZ2	2.42	0.55
43:A5:13:SER:HB3	43:A5:16:LYS:HD2	1.89	0.55
2:1E:112:VAL:O	2:1E:115:LEU:N	2.40	0.55
11:2I:41:THR:HG21	11:2I:71:LYS:HB2	1.88	0.55
17:8I:13:ASP:OD1	17:8I:14:LYS:NZ	2.40	0.55
23:2K:20:G:C2	23:2K:58:A:N3	2.75	0.55
34:58:38:HIS:O	41:C8:67:ALA:HB1	2.07	0.55
36:78:85:LEU:O	36:78:88:LEU:HD23	2.07	0.55
48:J8:83:GLU:HG2	48:J8:85:LEU:N	2.19	0.55
1:1G:967:C:H3'	1:1G:968:A:H2'	1.89	0.55
1:1G:1259:C:O2'	1:1G:1283:G:N2	2.31	0.55
3:22:112:SER:O	3:22:116:VAL:HG23	2.06	0.55
8:72:97:VAL:HA	8:72:100:ILE:HD11	1.89	0.55
18:9A:53:ARG:HH21	18:9A:60:ALA:N	2.03	0.55
26:14:2065:C:H2'	26:14:2066:C:H6	1.72	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:39:160:ASN:HB3	30:39:163:VAL:HB	1.88	0.55
39:65:106:ARG:HB3	39:65:112:PHE:O	2.07	0.55
54:M5:49:VAL:HG12	54:M5:50:LEU:H	1.71	0.55
1:13:792:A:O2'	1:13:794:A:N7	2.36	0.55
3:2E:34:LEU:O	3:2E:38:ARG:N	2.35	0.55
4:3E:173:TRP:CD1	4:3E:174:LEU:HG	2.41	0.55
8:7E:87:SER:HB2	8:7E:93:VAL:N	2.21	0.55
14:5I:23:ARG:HH11	14:5I:30:ALA:HB2	1.72	0.55
26:1H:580:C:H2'	26:1H:581:C:H6	1.72	0.55
26:1H:821:A:H2'	26:1H:946:G:H5"	1.87	0.55
26:1H:1332:G:N2	26:1H:1610:A:C8	2.74	0.55
26:1H:2361:A:OP1	54:Q8:27:THR:HG23	2.05	0.55
32:51:97:ARG:HG2	32:51:98:LEU:H	1.72	0.55
35:68:112:MET:HA	35:68:115:VAL:HG22	1.88	0.55
38:98:55:ALA:HB2	38:98:79:LEU:HD13	1.88	0.55
41:C8:47:TYR:CD1	41:C8:47:TYR:C	2.85	0.55
24:1L:78:C:O2'	24:1L:79:A:H5"	2.06	0.55
55:3L:60:A:H2'	55:3L:61:G:C8	2.42	0.55
26:14:138:G:H22	44:B5:44:GLU:CD	2.14	0.55
26:14:1784:A:H4'	26:14:1785:A:O5'	2.06	0.55
29:29:13:ARG:HH21	40:75:77:PRO:HB3	1.70	0.55
31:49:7:LEU:N	51:I5:23:GLU:OE2	2.29	0.55
31:49:14:GLU:O	31:49:17:PRO:HG2	2.07	0.55
37:45:89:ASN:ND2	37:45:89:ASN:O	2.36	0.55
39:65:20:ARG:HH21	39:65:21:THR:HA	1.71	0.55
40:75:26:ASP:OD1	40:75:120:ARG:NH2	2.37	0.55
41:85:92:ARG:C	41:85:94:ASN:H	2.15	0.55
42:95:67:GLY:O	42:95:88:ARG:HD2	2.07	0.55
1:13:454:C:OP1	16:7I:75:ARG:NH2	2.40	0.55
9:8E:10:ARG:NH2	9:8E:105:ASP:OD2	2.39	0.55
17:8I:29:HIS:CD2	17:8I:30:PRO:HD2	2.41	0.55
20:BI:89:ARG:NH2	20:BI:104:LEU:HD21	2.22	0.55
26:1H:315:G:H2'	26:1H:316:C:H6	1.72	0.55
27:16:43:C:P	31:41:67:LYS:HZ2	2.30	0.55
49:K8:59:ARG:O	49:K8:62:THR:HG23	2.06	0.55
1:1G:146:G:H2'	1:1G:147:G:H8	1.72	0.55
26:14:329:G:H8	26:14:329:G:OP1	1.89	0.55
26:14:528:A:O2'	26:14:529:A:H5'	2.07	0.55
26:14:586:A:H5'	30:39:89:VAL:HG21	1.89	0.55
26:14:805:G:OP2	36:35:41:ARG:HG2	2.07	0.55
26:14:990:A:H5'	26:14:990:A:H8	1.72	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2025:C:N4	59:14:3639:HOH:O	2.40	0.55
26:14:2632:A:O2'	26:14:2811:G:O2'	2.18	0.55
30:39:185:ASP:OD1	30:39:188:ARG:NH2	2.29	0.55
48:F5:3:LYS:H	48:F5:61:ARG:HH22	1.55	0.55
48:F5:85:LEU:HA	48:F5:87:PRO:HD2	1.88	0.55
1:13:7:G:H5'	1:13:298:A:O4'	2.07	0.54
1:13:1060:C:C5	3:2E:2:GLY:HA3	2.41	0.54
1:13:1349:A:H2'	1:13:1350:A:C8	2.41	0.54
2:1E:27:LYS:HD2	2:1E:193:ASP:HB2	1.88	0.54
3:2E:96:GLY:H	3:2E:97:LYS:HZ3	1.55	0.54
5:4E:147:ASP:HA	5:4E:150:ARG:NH1	2.21	0.54
13:4I:15:VAL:O	13:4I:19:LEU:HD22	2.07	0.54
26:1H:573:G:O2'	26:1H:574:C:H3'	2.06	0.54
26:1H:1786:A:H2	26:1H:2606:C:H1'	1.72	0.54
26:1H:2101:G:H1	26:1H:2188:C:H42	1.56	0.54
26:1H:2516:G:O2'	26:1H:2517:C:H5'	2.07	0.54
26:1H:2567:G:H2'	26:1H:2568:C:C6	2.42	0.54
26:1H:2632:A:O2'	26:1H:2811:G:O2'	2.14	0.54
26:1H:2712:U:O2'	26:1H:2713:A:H5'	2.07	0.54
27:16:87:G:N2	27:16:89(A):A:OP2	2.39	0.54
34:58:13:TRP:HB2	34:58:133:GLN:HG2	1.87	0.54
39:A8:34:HIS:O	39:A8:97:ARG:NH2	2.40	0.54
1:1G:162:A:O5'	1:1G:162:A:H8	1.90	0.54
1:1G:456:C:H42	1:1G:476:G:H1	1.55	0.54
1:1G:750:G:H21	15:6A:23:GLY:HA3	1.72	0.54
1:1G:963:G:N2	1:1G:972:C:N3	2.45	0.54
4:32:148:VAL:HG12	4:32:152:SER:HB2	1.88	0.54
26:14:988:A:N6	50:H5:13:ILE:HG21	2.22	0.54
26:14:2166:G:N3	26:14:2171:A:N6	2.53	0.54
26:14:2441:C:OP2	26:14:2586:C:O2'	2.23	0.54
29:29:179:GLU:HB3	29:29:181:LEU:HD22	1.89	0.54
36:35:96:THR:HG22	36:35:99:LEU:HD22	1.89	0.54
42:95:85:LYS:CG	42:95:87:HIS:H	2.20	0.54
44:B5:11:PRO:HD3	49:G5:37:PHE:CD2	2.42	0.54
46:D5:30:ASN:HA	46:D5:89:PHE:HE1	1.72	0.54
1:13:1348:U:H4'	9:8E:120:ARG:HD2	1.90	0.54
5:4E:150:ARG:CZ	5:4E:150:ARG:HB3	2.38	0.54
12:3I:57:LYS:HE3	12:3I:67:THR:HG22	1.89	0.54
22:1K:83:C:H2'	22:1K:84:C:H5'	1.89	0.54
26:1H:518:G:H2'	26:1H:519:U:C6	2.42	0.54
26:1H:863:A:H2'	26:1H:864:G:H8	1.71	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1101:U:H2'	26:1H:1102:C:C6	2.42	0.54
26:1H:1107:G:H2'	26:1H:1108:U:C6	2.42	0.54
26:1H:2050:C:H2'	26:1H:2051:A:O4'	2.07	0.54
26:1H:2577:A:H5"	26:1H:2578:G:H5'	1.88	0.54
26:1H:2600:A:N6	59:1H:3563:HOH:O	2.30	0.54
26:1H:2726:U:O2'	26:1H:2727:G:H8	1.90	0.54
33:61:93:THR:HG22	33:61:119:PRO:HB3	1.88	0.54
37:88:34:LEU:HB2	37:88:118:LEU:HD22	1.89	0.54
46:H8:97:GLU:HB3	46:H8:125:LEU:HD11	1.89	0.54
1:1G:555:C:H2'	1:1G:556:C:C6	2.41	0.54
1:1G:624:C:H2'	1:1G:625:G:H8	1.72	0.54
1:1G:691:G:O6	11:2A:55:LYS:NZ	2.37	0.54
1:1G:718:G:H5'	11:2A:117:ASN:CG	2.32	0.54
1:1G:793:U:O2	1:1G:1516:G:H4'	2.07	0.54
1:1G:1310:G:OP1	13:4A:77:ASN:ND2	2.41	0.54
10:1A:99:LYS:HD3	10:1A:100:THR:N	2.23	0.54
26:14:375:C:H2'	26:14:376:C:H6	1.71	0.54
26:14:646:A:H2'	26:14:647:G:O4'	2.07	0.54
26:14:1434:A:H61	26:14:1558:A:H62	1.54	0.54
26:14:1871:A:H2'	26:14:1872:A:C8	2.41	0.54
26:14:2590:A:OP2	28:19:237:GLU:HB3	2.07	0.54
35:25:73:ASP:OD2	40:75:32:TYR:OH	2.17	0.54
37:45:110:THR:OG1	37:45:111:GLU:N	2.39	0.54
1:13:390:C:H2'	1:13:391:G:C8	2.42	0.54
1:13:1143:G:H8	1:13:1143:G:O5'	1.90	0.54
9:8E:26:VAL:HB	9:8E:33:PHE:HB2	1.89	0.54
15:6I:9:GLN:HA	15:6I:12:ILE:HD12	1.88	0.54
26:1H:250:G:H2'	26:1H:251:A:C8	2.43	0.54
26:1H:1077:A:H5'	26:1H:1078:U:H5"	1.90	0.54
26:1H:1839:G:H5"	26:1H:1839:G:H8	1.71	0.54
26:1H:2820:A:O2'	26:1H:2821:A:OP1	2.24	0.54
30:31:107:LYS:HE3	30:31:207:GLY:H	1.71	0.54
33:61:78:THR:HB	33:61:141:LYS:HD2	1.89	0.54
1:1G:963:G:H1	1:1G:972:C:H42	1.55	0.54
9:82:112:LYS:HG2	9:82:119:ALA:HB2	1.90	0.54
10:1A:78:ASN:HD22	10:1A:80:LYS:HB3	1.72	0.54
26:14:273(C):C:H5'	26:14:273(D):C:OP2	2.06	0.54
26:14:817:C:H2'	26:14:818:G:O4'	2.07	0.54
26:14:910:A:N7	37:45:13:GLN:HG3	2.22	0.54
26:14:1024:G:H8	26:14:1024:G:O5'	1.91	0.54
26:14:1133:U:O2	26:14:1137:G:H5"	2.07	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1754:C:H2'	26:14:1755:A:C8	2.42	0.54
26:14:1784:A:H5"	59:14:3491:HOH:O	2.06	0.54
26:14:1819:A:H4'	26:14:1820:U:O5'	2.06	0.54
26:14:2418:A:H2'	26:14:2419:U:C6	2.42	0.54
26:14:2441:C:O2'	26:14:2442:C:H5'	2.07	0.54
26:14:2760:C:H2'	26:14:2761:G:H8	1.72	0.54
29:29:66:HIS:CE1	29:29:73:GLU:HG3	2.41	0.54
46:D5:103:ARG:HB2	46:D5:137:ILE:O	2.07	0.54
1:13:1391:U:H2'	1:13:1392:G:C8	2.42	0.54
4:3E:90:GLY:O	4:3E:93:PHE:HB3	2.06	0.54
16:7I:49:LEU:HD12	16:7I:50:LYS:N	2.22	0.54
26:1H:631:A:P	54:Q8:46:ARG:HH21	2.30	0.54
31:41:97:ASP:O	31:41:100:TRP:N	2.40	0.54
37:88:111:GLU:OE1	37:88:133:ARG:NH2	2.40	0.54
1:1G:80:G:O2'	1:1G:81:G:OP1	2.16	0.54
1:1G:503:C:OP2	12:3A:116:SER:HB3	2.08	0.54
1:1G:1348:U:H4'	9:82:120:ARG:HD2	1.90	0.54
9:82:70:LYS:O	9:82:74:ILE:HG13	2.07	0.54
24:1L:6:G:O2'	24:1L:7:G:OP1	2.25	0.54
26:14:674:G:H1'	30:39:74:ARG:HD3	1.88	0.54
26:14:1568:G:P	28:19:63:ARG:HH12	2.30	0.54
26:14:1856:G:H1	26:14:1886:C:N4	2.03	0.54
1:13:838:G:N2	1:13:848:C:N3	2.52	0.54
1:13:1015:A:H2'	1:13:1016:A:H8	1.72	0.54
5:4E:113:ALA:O	5:4E:115:VAL:HG23	2.08	0.54
5:4E:148:VAL:HG21	8:7E:107:LEU:HD13	1.88	0.54
12:3I:89:ARG:HH21	12:3I:91:LYS:HD2	1.72	0.54
13:4I:14:ARG:HB2	13:4I:17:VAL:HG23	1.90	0.54
26:1H:1434:A:H61	26:1H:1558:A:H62	1.54	0.54
26:1H:1899:G:H22	26:1H:1902:C:H41	1.54	0.54
26:1H:2146:C:H4'	26:1H:2147:G:N7	2.22	0.54
26:1H:2257:U:O2'	26:1H:2258:C:H5'	2.08	0.54
26:1H:2335:A:C8	26:1H:2337:G:C5	2.95	0.54
26:1H:2376:A:H2'	26:1H:2377:A:O4'	2.07	0.54
30:31:6:VAL:HG21	30:31:119:ARG:HB2	1.90	0.54
30:31:197:ASP:N	30:31:197:ASP:OD1	2.41	0.54
33:61:93:THR:OG1	33:61:96:ASP:OD1	2.22	0.54
37:88:135:ASP:HB3	37:88:137:TYR:N	2.22	0.54
51:M8:57:GLU:OE2	51:M8:61:ARG:NH1	2.41	0.54
1:1G:501:C:H2'	1:1G:502:G:C8	2.42	0.54
1:1G:730:G:C5	1:1G:731:G:H1'	2.43	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1127:G:H1'	1:1G:1148:U:N3	2.22	0.54
1:1G:1240:U:H5'	1:1G:1241:G:C8	2.42	0.54
4:32:105:VAL:HG13	4:32:110:PHE:HB2	1.88	0.54
18:9A:38:GLU:HG2	18:9A:39:VAL:H	1.73	0.54
26:14:184:C:H2'	26:14:185:U:H6	1.73	0.54
26:14:579:G:H2'	26:14:580:C:C6	2.42	0.54
26:14:660:G:H21	36:35:12:ALA:CB	2.20	0.54
26:14:856:C:O5'	26:14:856:C:H6	1.89	0.54
26:14:1416:G:N2	26:14:1582:C:N3	2.45	0.54
26:14:2320:A:H61	26:14:2333:A:H2'	1.73	0.54
26:14:2688:U:H1'	26:14:2721:A:N6	2.22	0.54
26:14:2748:A:H2'	26:14:2749:A:C8	2.42	0.54
27:1J:44:G:H1'	27:1J:47:C:N4	2.23	0.54
28:19:255:LYS:H	28:19:255:LYS:HE3	1.70	0.54
34:15:99:LEU:O	34:15:103:VAL:HG23	2.07	0.54
26:1H:1021:A:C8	26:1H:1022:G:H5"	2.42	0.54
26:1H:1156:A:OP2	59:1H:3655:HOH:O	2.18	0.54
26:1H:1805:U:O2	28:11:50:THR:HB	2.08	0.54
26:1H:1899:G:N2	26:1H:1902:C:H41	2.05	0.54
26:1H:2112:G:O2'	26:1H:2113:U:O2	2.19	0.54
26:1H:2168:G:H3'	26:1H:2168:G:N3	2.23	0.54
26:1H:2820:A:O5'	38:98:4:LEU:HD23	2.08	0.54
1:1G:1312:G:H2'	1:1G:1313:U:O4'	2.07	0.54
7:62:45:ASP:OD2	7:62:115:ARG:NH2	2.41	0.54
9:82:3:GLN:OE1	9:82:20:ARG:NH1	2.41	0.54
26:14:587:C:O2	36:35:33:ARG:NH1	2.40	0.54
26:14:654(C):G:H2'	26:14:654(D):G:O4'	2.07	0.54
26:14:1255:U:H5"	26:14:1256:G:O5'	2.07	0.54
26:14:2647:U:H2'	26:14:2648:C:C6	2.42	0.54
36:35:111:ARG:HG2	36:35:128:HIS:CG	2.43	0.54
38:55:78:LYS:O	38:55:83:ILE:HG13	2.08	0.54
39:65:74:ALA:HB1	39:65:107:GLU:HB2	1.90	0.54
1:13:674:G:N2	1:13:717:C:O2	2.40	0.54
1:13:1292:U:H2'	1:13:1293:G:H8	1.72	0.54
7:6E:155:ARG:O	7:6E:155:ARG:NH2	2.40	0.54
9:8E:48:GLU:HB2	9:8E:78:LYS:HE3	1.89	0.54
10:1I:49:VAL:CG2	14:5I:41:ARG:HB2	2.38	0.54
16:7I:5:ARG:HE	16:7I:22:THR:HG21	1.72	0.54
26:1H:484:C:H2'	26:1H:485:C:C6	2.43	0.54
26:1H:633:A:H2'	26:1H:634:C:H5'	1.89	0.54
29:21:38:THR:HG22	29:21:41:LYS:HB2	1.89	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:61:29:TYR:O	33:61:33:ARG:HB2	2.07	0.54
45:G8:40:GLU:HA	45:G8:42:VAL:N	2.23	0.54
46:H8:60:GLU:O	46:H8:61:LEU:HB3	2.07	0.54
1:1G:48:C:H5"	1:1G:365:U:O4	2.07	0.54
1:1G:373:A:C2	1:1G:374:A:C8	2.96	0.54
8:72:86:ILE:HG12	8:72:135:CYS:HA	1.89	0.54
26:14:814:C:O3'	42:95:84:LYS:HD3	2.07	0.54
36:35:50:ARG:HG2	36:35:50:ARG:NH1	2.18	0.54
40:75:5:ALA:O	40:75:8:LYS:HB3	2.08	0.54
1:13:304:U:H2'	1:13:305:G:C8	2.42	0.54
1:13:626:U:C2	1:13:627:G:C8	2.96	0.54
1:13:1160:G:H1	1:13:1177:G:N2	2.05	0.54
1:13:1240:U:OP2	7:6E:116:ALA:N	2.41	0.54
4:3E:209:ARG:HA	4:3E:209:ARG:HE	1.72	0.54
8:7E:36:LEU:HA	8:7E:39:LEU:HB2	1.89	0.54
10:1I:16:LEU:HD12	10:1I:68:HIS:HB2	1.90	0.54
11:2I:23:ALA:HA	11:2I:28:THR:HG22	1.89	0.54
17:8I:66:SER:OG	17:8I:69:LYS:HB2	2.08	0.54
24:3K:5:G:H1	24:3K:77:C:H42	1.55	0.54
26:1H:270(V):G:H2'	26:1H:270(W):G:C8	2.43	0.54
26:1H:524:U:H2'	26:1H:525:U:H6	1.73	0.54
26:1H:2572:A:N7	29:21:145:LYS:HB2	2.23	0.54
32:51:87:LEU:HB2	32:51:131:VAL:HG12	1.90	0.54
33:61:63:ALA:HA	33:61:66:GLU:OE2	2.08	0.54
42:D8:65:GLY:HA3	42:D8:91:TYR:CE2	2.42	0.54
1:1G:32:A:H2'	1:1G:33:A:C8	2.43	0.54
1:1G:198:G:H2'	1:1G:199:G:H8	1.72	0.54
1:1G:956:U:H4'	19:AA:83:HIS:HB3	1.90	0.54
4:32:7:PRO:HB2	4:32:10:ARG:HD2	1.90	0.54
9:82:43:ALA:HA	9:82:74:ILE:HD13	1.89	0.54
10:1A:46:ARG:HA	10:1A:64:GLU:HA	1.90	0.54
15:6A:87:ILE:HG22	15:6A:88:ARG:N	2.16	0.54
16:7A:34:GLU:OE2	16:7A:55:ARG:NH1	2.41	0.54
23:2L:64:G:H2'	23:2L:65:G:H8	1.72	0.54
27:1J:16:G:H2'	27:1J:17:C:H6	1.72	0.54
33:69:133:HIS:CD2	33:69:134:PRO:HD3	2.42	0.54
42:95:35:LEU:O	42:95:37:VAL:HG22	2.07	0.54
44:B5:34:ALA:O	44:B5:77:LYS:NZ	2.41	0.54
54:M5:48:PHE:CG	54:M5:49:VAL:N	2.76	0.54
1:13:1139:G:N2	1:13:1143:G:H1	2.06	0.54
2:1E:24:TRP:CZ3	2:1E:26:PRO:HA	2.42	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:4I:23:TYR:CD2	13:4I:67:GLU:HA	2.41	0.54
20:BI:26:ASN:HB2	20:BI:71:THR:OG1	2.07	0.54
26:1H:84:A:OP2	45:G8:8:LYS:NZ	2.32	0.54
26:1H:443:A:H1'	26:1H:1201:C:O4'	2.08	0.54
26:1H:1049:C:H2'	26:1H:1050:A:H5'	1.89	0.54
26:1H:1069:A:O2'	26:1H:1072:C:OP1	2.26	0.54
26:1H:1401:G:H2'	26:1H:1402:C:C6	2.42	0.54
27:16:11:C:OP2	27:16:12:C:N4	2.30	0.54
40:B8:6:LEU:HG	40:B8:9:LEU:HD12	1.90	0.54
40:B8:50:ILE:O	40:B8:99:LEU:HD12	2.08	0.54
46:H8:63:ASP:OD2	46:H8:65:GLN:NE2	2.41	0.54
1:1G:19:C:OP1	5:42:125:SER:OG	2.23	0.54
1:1G:922:G:H4'	5:42:20:GLN:HA	1.90	0.54
1:1G:1224:G:C6	1:1G:1322:C:H1'	2.43	0.54
2:12:70:PHE:HB2	2:12:92:TYR:HB2	1.90	0.54
26:14:137(A):G:H2'	26:14:139:G:N7	2.23	0.54
26:14:639:U:H2'	26:14:640:C:H6	1.73	0.54
26:14:1266:G:O4'	43:A5:15:ARG:NH2	2.40	0.54
26:14:2532:G:H1'	26:14:2663:G:N2	2.22	0.54
26:14:2720:U:N3	26:14:2873:A:H2	2.06	0.54
27:1J:103:U:O2'	46:D5:72:ARG:HG3	2.08	0.54
28:19:238:GLY:O	59:19:308:HOH:O	2.18	0.54
30:39:129:PHE:HA	30:39:142:TRP:NE1	2.22	0.54
39:65:89:ARG:HG3	39:65:92:TYR:O	2.07	0.54
49:G5:17:SER:N	49:G5:20:GLU:OE1	2.35	0.54
1:13:1151:A:H5'	10:1I:41:PRO:HA	1.89	0.54
1:13:1315:U:H2'	1:13:1316:G:O4'	2.07	0.54
14:5I:6:LEU:HD12	14:5I:23:ARG:HH22	1.72	0.54
26:1H:944:G:H5"	26:1H:945:A:O5'	2.07	0.54
26:1H:1858:G:H1'	26:1H:1884:A:N6	2.23	0.54
26:1H:1971:A:OP1	59:1H:3795:HOH:O	2.18	0.54
26:1H:2392:A:H8	36:78:60:MET:HB2	1.72	0.54
26:1H:2818:G:OP2	38:98:42:LYS:NZ	2.40	0.54
33:61:9:LEU:HD21	33:61:35:LEU:HD11	1.88	0.54
36:78:116:GLY:N	36:78:134:ALA:HB2	2.23	0.54
39:A8:88:ASP:OD1	39:A8:90:GLY:N	2.41	0.54
41:C8:83:LEU:HD13	41:C8:113:ALA:HB2	1.89	0.54
15:6A:17:ARG:HH11	15:6A:17:ARG:HG3	1.72	0.54
55:3L:55:U:OP1	55:3L:55:U:H4'	2.08	0.54
26:14:30:G:H2'	26:14:31:C:C6	2.42	0.54
26:14:580:C:H2'	26:14:581:C:H6	1.73	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:796:C:H2'	26:14:797:C:C6	2.43	0.54
26:14:1098:A:H2'	26:14:1099:G:H5'	1.90	0.54
26:14:1171:G:H1	26:14:1178:C:H42	1.56	0.54
26:14:1425:G:H2'	26:14:1426:G:C8	2.43	0.54
26:14:2065:C:H1'	26:14:2449:U:N3	2.23	0.54
34:15:116:LEU:O	34:15:119:ARG:N	2.37	0.54
41:85:92:ARG:NH2	42:95:10:LYS:HA	2.23	0.54
1:13:345:C:O2'	1:13:346:G:N2	2.41	0.53
1:13:1502:A:H2	1:13:1505:G:N1	2.01	0.53
5:4E:75:THR:OG1	5:4E:76:ILE:N	2.41	0.53
26:1H:1336:A:H2'	26:1H:1337:G:H8	1.73	0.53
26:1H:2500:U:O2'	26:1H:2504:U:OP1	2.25	0.53
26:1H:2726:U:H4'	35:68:1:MET:HE1	1.90	0.53
38:98:104:ARG:HB3	38:98:107:ASP:HB3	1.90	0.53
1:1G:1131:G:C8	1:1G:1132:C:H5	2.26	0.53
3:22:84:ILE:HG12	3:22:88:ARG:NH2	2.22	0.53
5:42:51:VAL:HG23	5:42:52:PRO:HD3	1.89	0.53
12:3A:41:ARG:HB3	12:3A:41:ARG:NH1	2.24	0.53
13:4A:91:ARG:HB2	13:4A:98:VAL:HG13	1.90	0.53
14:5A:12:ARG:H	14:5A:12:ARG:HD3	1.72	0.53
18:9A:22:VAL:C	18:9A:24:ALA:H	2.14	0.53
26:14:15:G:H1	26:14:525:U:H3	1.55	0.53
26:14:138:G:N2	44:B5:44:GLU:OE2	2.37	0.53
26:14:1780:A:OP1	59:14:3402:HOH:O	2.18	0.53
26:14:2100:G:N2	26:14:2190:G:H1'	2.22	0.53
26:14:2820:A:O2'	26:14:2821:A:OP1	2.23	0.53
27:1J:101:A:OP2	27:1J:101:A:H8	1.90	0.53
30:39:66:PRO:O	30:39:67:GLN:HB3	2.06	0.53
31:49:115:ARG:NH2	31:49:137:GLU:OE1	2.40	0.53
35:25:10:VAL:HG13	35:25:17:ARG:O	2.07	0.53
41:85:92:ARG:CZ	42:95:11:GLN:H	2.21	0.53
44:B5:36:LYS:HA	44:B5:39:ILE:HD12	1.90	0.53
45:C5:19:LYS:HG3	45:C5:20:TYR:HD1	1.72	0.53
1:13:17:U:O4'	1:13:1080:A:H1'	2.07	0.53
1:13:138:G:H1	1:13:225:C:H42	1.56	0.53
2:1E:88:ALA:HB2	2:1E:219:VAL:HG13	1.90	0.53
3:2E:78:GLY:HA3	3:2E:83:ARG:HB3	1.90	0.53
4:3E:80:GLU:HA	4:3E:83:SER:HB2	1.88	0.53
4:3E:145:GLU:HG2	4:3E:184:LYS:HG3	1.90	0.53
26:1H:2698:U:H2'	26:1H:2699:C:C6	2.42	0.53
30:31:70:THR:OG1	30:31:72:ARG:HB2	2.07	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:E8:17:VAL:HG13	43:E8:76:VAL:HG11	1.90	0.53
1:1G:167:G:H2'	1:1G:168:G:H8	1.72	0.53
1:1G:1343:G:H1'	9:82:121:ARG:HH11	1.72	0.53
3:22:92:ALA:HA	3:22:95:THR:HB	1.91	0.53
7:62:26:PHE:HD1	7:62:101:LEU:HD22	1.72	0.53
13:4A:47:ASP:OD1	13:4A:47:ASP:N	2.41	0.53
13:4A:65:LYS:HB3	51:I5:49:PHE:HE2	1.72	0.53
23:2L:76:C:H2'	23:2L:77:A:C8	2.44	0.53
26:14:1588:C:H5'	26:14:1589:C:OP2	2.09	0.53
26:14:1952:A:C6	35:25:22:ILE:HD12	2.44	0.53
26:14:2611:U:H5'	26:14:2611:U:C6	2.40	0.53
27:1J:15:A:H3'	27:1J:16:G:H5'	1.90	0.53
27:1J:89(A):A:C8	27:1J:90:C:H1'	2.43	0.53
46:D5:29:TYR:HE2	46:D5:87:ASP:HB3	1.72	0.53
1:13:933:G:OP2	7:6E:3:ARG:HG3	2.08	0.53
1:13:1074:G:O4'	2:1E:104:ASN:ND2	2.42	0.53
1:13:1145:C:H4'	1:13:1146:A:H8	1.73	0.53
2:1E:98:LEU:HG	2:1E:101:MET:HE3	1.89	0.53
7:6E:111:ARG:NH1	7:6E:113:GLU:OE2	2.36	0.53
26:1H:176:G:O2'	26:1H:177:G:H5'	2.08	0.53
26:1H:859:G:H5'	26:1H:2268:A:HO2'	1.73	0.53
26:1H:1063:G:H22	26:1H:1076:C:H1'	1.74	0.53
26:1H:2154:G:H2'	26:1H:2155:G:H8	1.73	0.53
28:11:146:GLU:HB2	28:11:189:CYS:CB	2.35	0.53
30:31:107:LYS:HD2	30:31:206:ILE:HA	1.90	0.53
38:98:2:ARG:O	38:98:5:LYS:HG2	2.08	0.53
1:1G:677:U:H3	1:1G:713:G:H22	1.56	0.53
1:1G:927:G:H1	1:1G:1390:U:H3	1.56	0.53
55:3L:61:G:N2	55:3L:71:C:N3	2.42	0.53
26:14:154:G:O6	26:14:172:C:N4	2.41	0.53
26:14:2126:A:N1	26:14:2163:C:H1'	2.24	0.53
26:14:2786:U:H5"	29:29:65:GLY:HA3	1.89	0.53
30:39:25:PRO:C	30:39:27:GLU:N	2.66	0.53
30:39:146:ALA:CB	30:39:148:LEU:HG	2.39	0.53
42:95:71:LEU:CA	42:95:86:GLY:HA2	2.38	0.53
43:A5:88:ARG:HB3	43:A5:92:ARG:HB3	1.89	0.53
1:13:1015:A:H1'	1:13:1219:U:H5'	1.91	0.53
1:13:1029:G:H1'	1:13:1032(A):G:H1	1.73	0.53
19:AI:32:LYS:HD3	19:AI:57:HIS:ND1	2.22	0.53
26:1H:120:U:C5	26:1H:149:A:N6	2.77	0.53
26:1H:429:A:OP2	59:1H:3623:HOH:O	2.18	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:960:A:C8	26:1H:962:G:C8	2.95	0.53
26:1H:1021:A:OP2	34:58:65:LYS:NZ	2.41	0.53
30:31:184:TYR:O	30:31:188:ARG:HG3	2.08	0.53
54:Q8:29:LYS:NZ	54:Q8:44:LYS:HB2	2.22	0.53
1:1G:749:C:H2'	1:1G:750:G:H8	1.73	0.53
1:1G:1443:G:N2	40:75:119:LYS:HB2	2.24	0.53
7:62:102:ARG:O	7:62:106:GLN:HG3	2.07	0.53
9:82:117:HIS:O	9:82:118:LYS:HB2	2.09	0.53
26:14:582:G:H2'	26:14:583:G:C8	2.42	0.53
26:14:1159:U:H2'	26:14:1160:G:H8	1.74	0.53
26:14:2629:A:O2'	26:14:2895:U:O4	2.17	0.53
29:29:167:VAL:HG11	29:29:189:PRO:HD3	1.90	0.53
30:39:113:ALA:HB1	30:39:186:ILE:HG21	1.90	0.53
30:39:161:GLU:HB3	30:39:162:LEU:HD12	1.89	0.53
42:95:22:VAL:HG22	42:95:23:GLU:H	1.72	0.53
43:A5:72:LYS:HG2	43:A5:106:ILE:HD11	1.91	0.53
51:I5:34:GLU:HG2	51:I5:35:VAL:H	1.74	0.53
1:13:1113:C:H2'	1:13:1114:C:H6	1.72	0.53
1:13:1120:G:H2'	1:13:1121:U:H6	1.73	0.53
1:13:1133:G:H1	1:13:1141:C:H42	1.56	0.53
1:13:1486:G:H2'	1:13:1487:G:O4'	2.09	0.53
6:5E:44:GLY:HA2	6:5E:59:TYR:CZ	2.44	0.53
19:AI:63:THR:OG1	19:AI:64:GLU:N	2.42	0.53
26:1H:468:G:N7	53:P8:39:ARG:NH2	2.56	0.53
26:1H:516:C:OP1	52:N8:13:LYS:NZ	2.38	0.53
26:1H:1177:A:H4'	26:1H:1178:C:O5'	2.08	0.53
26:1H:1332:G:N2	26:1H:1609:A:O2'	2.42	0.53
26:1H:1533:C:H3'	26:1H:1534:G:C5'	2.37	0.53
26:1H:1778:U:P	59:1H:3786:HOH:O	2.66	0.53
26:1H:1839:G:H5"	26:1H:1839:G:C8	2.43	0.53
29:21:181:LEU:HD21	40:B8:7:ILE:HG23	1.91	0.53
31:41:138:GLN:HE21	31:41:149:VAL:HG12	1.74	0.53
34:58:42:TRP:O	41:C8:60:LEU:HD21	2.08	0.53
36:78:1:MET:HE1	36:78:6:LEU:HA	1.90	0.53
36:78:144:GLU:OE2	36:78:144:GLU:N	2.41	0.53
37:88:75:THR:HA	37:88:88:GLY:C	2.32	0.53
48:J8:52:ARG:NH1	48:J8:57:GLU:HG3	2.22	0.53
48:J8:79:GLY:O	48:J8:80:LEU:HD13	2.09	0.53
1:1G:1080:A:OP1	5:42:14:ARG:NH2	2.41	0.53
4:32:150:GLU:C	4:32:152:SER:H	2.15	0.53
7:62:50:ILE:HD12	7:62:125:MET:HG3	1.89	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:62:116:ALA:O	7:62:120:ILE:HG12	2.09	0.53
55:3L:18:G:H1'	55:3L:19:C:OP2	2.08	0.53
26:14:908:C:O2'	26:14:909:A:H5'	2.09	0.53
26:14:2031:A:N3	26:14:2455:G:O2'	2.35	0.53
26:14:2068:U:N3	26:14:2430:A:C2	2.72	0.53
26:14:2134:A:OP2	26:14:2157:G:N2	2.41	0.53
26:14:2542:A:O2'	26:14:2543:G:OP2	2.25	0.53
26:14:2600:A:H2'	26:14:2601:C:C6	2.43	0.53
26:14:2745:C:H4'	32:59:142:GLY:O	2.08	0.53
34:15:94:HIS:HB2	34:15:97:ARG:HG3	1.90	0.53
48:F5:41:ARG:HD3	48:F5:43:TYR:OH	2.09	0.53
49:G5:47:ASN:HD22	49:G5:47:ASN:N	2.06	0.53
1:13:142:G:C2	1:13:143:A:C5	2.96	0.53
2:1E:8:LYS:HE2	2:1E:10:LEU:H	1.74	0.53
6:5E:10:LEU:HD13	6:5E:61:LEU:HD13	1.90	0.53
19:AI:5:LEU:HB2	19:AI:10:PHE:HE1	1.74	0.53
24:3K:17:G:H4'	24:3K:18:G:OP2	2.08	0.53
26:1H:249:C:P	59:1H:3553:HOH:O	2.66	0.53
26:1H:270(T):G:H2'	26:1H:270(U):C:C6	2.43	0.53
26:1H:1109:C:HO2'	26:1H:1110:G:C4'	2.19	0.53
26:1H:1952:A:N3	35:68:22:ILE:HD11	2.23	0.53
26:1H:2148:G:H2'	26:1H:2149:G:H8	1.72	0.53
26:1H:2340:G:O2'	26:1H:2341:G:H5'	2.09	0.53
34:58:4:TYR:O	41:C8:64:ARG:NH1	2.27	0.53
1:1G:467:G:N2	16:7A:82:GLN:OE1	2.42	0.53
1:1G:1387:G:H2'	1:1G:1388:C:C6	2.43	0.53
2:12:77:ALA:HB2	2:12:211:ILE:HD13	1.89	0.53
15:6A:36:ILE:O	15:6A:40:SER:N	2.40	0.53
26:14:1486:A:H2'	26:14:1487:G:C8	2.44	0.53
26:14:1731:G:H2'	26:14:1732:A:H8	1.74	0.53
26:14:2064:C:H2'	26:14:2065:C:C6	2.43	0.53
26:14:2392:A:OP2	54:M5:32:LEU:HD12	2.08	0.53
29:29:33:VAL:HG11	29:29:88:GLY:CA	2.38	0.53
30:39:67:GLN:HG3	30:39:67:GLN:O	2.07	0.53
32:59:153:LYS:C	32:59:155:SER:H	2.15	0.53
40:75:53:ARG:NH1	40:75:60:THR:HG23	2.23	0.53
46:D5:123:ASP:N	46:D5:123:ASP:OD1	2.41	0.53
1:13:322:C:H41	1:13:328:C:H6	1.57	0.53
1:13:323:U:H2'	1:13:324:G:O4'	2.08	0.53
2:1E:73:THR:HB	2:1E:169:LYS:HD2	1.91	0.53
3:2E:59:ARG:HA	3:2E:63:ASN:O	2.08	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:7E:13:ILE:O	8:7E:17:THR:HG23	2.08	0.53
26:1H:1188:U:H4'	42:D8:79:VAL:HG22	1.91	0.53
26:1H:1401:G:H2'	26:1H:1402:C:H6	1.73	0.53
26:1H:1683:C:H2'	26:1H:1684:C:C6	2.44	0.53
26:1H:2151:G:H2'	26:1H:2152:G:C8	2.43	0.53
33:61:110:ASP:OD1	33:61:130:TYR:HE1	1.91	0.53
36:78:95:VAL:HA	36:78:99:LEU:HD23	1.91	0.53
47:I8:25:ARG:HG3	47:I8:37:LEU:HD23	1.91	0.53
1:1G:1262:C:H42	1:1G:1273:G:H1	1.54	0.53
1:1G:1322:C:O2'	1:1G:1323:G:O5'	2.24	0.53
5:42:80:ILE:HG13	5:42:91:LEU:HB2	1.91	0.53
17:8A:100:LYS:CB	17:8A:101:ARG:HB2	2.38	0.53
26:14:413:C:H2'	26:14:414:C:C6	2.43	0.53
26:14:459:U:H2'	26:14:460:A:C8	2.44	0.53
26:14:630:G:N2	26:14:633:A:OP2	2.42	0.53
26:14:2438:U:O3'	26:14:2439:A:H3'	2.09	0.53
39:65:106:ARG:HA	39:65:110:LEU:HD21	1.90	0.53
41:85:91:ASP:OD1	41:85:96:ALA:N	2.41	0.53
50:H5:59:VAL:HG12	50:H5:60:GLU:H	1.72	0.53
54:M5:33:ASN:ND2	54:M5:33:ASN:O	2.40	0.53
1:13:129(A):G:N1	1:13:188:U:O2'	2.41	0.53
1:13:154:C:N3	1:13:168:G:N2	2.57	0.53
1:13:156:G:H1'	1:13:166:G:N2	2.24	0.53
1:13:710:G:H5"	6:5E:54:LYS:NZ	2.23	0.53
1:13:1131:G:H2'	1:13:1132:C:C6	2.44	0.53
2:1E:189:ASP:HB3	2:1E:205:ASP:CG	2.34	0.53
8:7E:86:ILE:HG22	8:7E:87:SER:H	1.73	0.53
9:8E:46:ALA:HB2	9:8E:74:ILE:HG23	1.90	0.53
18:9I:31:LEU:HD11	18:9I:62:GLU:HG2	1.90	0.53
24:3K:5:G:N2	24:3K:77:C:N3	2.47	0.53
28:11:8:PRO:HB3	28:11:14:ARG:HG2	1.90	0.53
29:21:50:GLY:HA2	29:21:77:ILE:HA	1.91	0.53
29:21:119:ARG:HH11	29:21:119:ARG:CG	2.17	0.53
31:41:77:ILE:HB	31:41:82:LEU:HD12	1.90	0.53
36:78:61:ARG:HH22	54:Q8:13:ARG:HD3	1.74	0.53
38:98:38:VAL:HB	38:98:39:PRO:HD3	1.89	0.53
39:A8:37:ALA:HB2	39:A8:101:LEU:HD21	1.91	0.53
42:D8:47:VAL:HG22	42:D8:48:GLY:H	1.74	0.53
48:J8:83:GLU:CD	48:J8:85:LEU:HB2	2.34	0.53
1:1G:409:G:H1	1:1G:433:C:H42	1.56	0.53
3:22:127:ARG:HH21	3:22:191:THR:HG22	1.71	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:62:53:LYS:HB3	7:62:53:LYS:HZ3	1.73	0.53
19:AA:18:LYS:O	19:AA:22:LEU:HB2	2.09	0.53
26:14:885:C:H3'	26:14:886:C:H4'	1.91	0.53
26:14:1496:A:H8	26:14:1577:C:O2'	1.91	0.53
26:14:1945:G:H2'	26:14:1946:U:C6	2.43	0.53
29:29:79:ARG:N	29:29:79:ARG:HD2	2.23	0.53
40:75:19:LEU:HD22	40:75:86:ILE:HG22	1.91	0.53
24:3K:6:G:C6	24:3K:7:G:C6	2.97	0.53
24:3K:85:A:H5"	48:J8:30:VAL:HG21	1.89	0.53
26:1H:270(G):C:H2'	26:1H:270(H):C:H6	1.74	0.53
26:1H:910:A:H62	37:88:12:GLN:HA	1.74	0.53
26:1H:2749:A:H1'	32:51:63:SER:OG	2.07	0.53
32:51:154:PRO:HD3	32:51:162:ILE:O	2.09	0.53
34:58:46:VAL:HG11	34:58:48:MET:HG3	1.90	0.53
34:58:137:LYS:HZ1	34:58:138:LEU:HD23	1.72	0.53
36:78:43:GLY:N	59:78:303:HOH:O	2.37	0.53
38:98:41:ALA:O	38:98:44:LEU:N	2.37	0.53
46:H8:108:PRO:HB2	46:H8:112:ARG:HA	1.90	0.53
1:1G:987:G:H1	1:1G:1218:C:H42	1.54	0.53
1:1G:1176:A:C2'	1:1G:1177:G:H5'	2.39	0.53
1:1G:1245:A:H61	1:1G:1292:U:H3	1.56	0.53
11:2A:32:ILE:HD13	11:2A:72:ALA:HB2	1.91	0.53
13:4A:65:LYS:HE3	51:I5:50:VAL:HG21	1.90	0.53
26:14:667:U:O2	54:M5:2:PRO:HD2	2.09	0.53
26:14:2143:C:H2'	26:14:2144:U:O4'	2.09	0.53
26:14:2499:C:OP2	59:14:3445:HOH:O	2.18	0.53
26:14:2786:U:H4'	29:29:64:LYS:CA	2.39	0.53
30:39:53:THR:HG23	30:39:55:GLY:H	1.74	0.53
1:13:295:C:H2'	1:13:296:U:O4'	2.08	0.53
1:13:864:A:H3'	1:13:865:A:C8	2.44	0.53
5:4E:144:THR:OG1	5:4E:147:ASP:OD1	2.22	0.53
10:1I:92:THR:HG23	10:1I:93:GLY:H	1.73	0.53
24:3K:34:U:H2'	24:3K:36:U:OP2	2.08	0.53
26:1H:270(T):G:H2'	26:1H:270(U):C:H6	1.74	0.53
26:1H:557:U:H2'	26:1H:558:G:C8	2.44	0.53
28:11:23:GLU:HG3	28:11:82:ILE:HG21	1.91	0.53
37:88:88:GLY:C	37:88:90:VAL:N	2.63	0.53
38:98:117:VAL:HG22	38:98:118:GLU:H	1.74	0.53
41:C8:17:ILE:HG23	41:C8:39:LEU:HD12	1.90	0.53
49:K8:52:ASP:N	49:K8:52:ASP:OD1	2.41	0.53
52:N8:40:LYS:HG2	52:N8:46:CYS:HA	1.91	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:Q8:33:ASN:OD1	54:Q8:36:LYS:NZ	2.24	0.53
5:42:60:TYR:HB3	5:42:64:ARG:NE	2.24	0.53
9:82:95:LYS:HZ3	9:82:96:LEU:HB2	1.73	0.53
26:14:768:G:O2'	26:14:769:G:H5'	2.09	0.53
26:14:1789:A:H2'	26:14:1790:C:C6	2.44	0.53
26:14:2648:C:H2'	26:14:2649:U:C6	2.44	0.53
29:29:93:VAL:HG21	29:29:180:ASN:HA	1.90	0.53
30:39:143:ALA:O	30:39:148:LEU:HB2	2.09	0.53
40:75:18:ASP:OD1	40:75:18:ASP:N	2.27	0.53
51:I5:50:VAL:HG23	51:I5:52:THR:H	1.74	0.53
1:13:454:C:P	16:7I:75:ARG:HH22	2.32	0.52
1:13:631:G:H8	1:13:632:A:H2	1.57	0.52
4:3E:170:VAL:HG13	4:3E:171:GLY:O	2.09	0.52
10:1I:38:ILE:HG23	10:1I:71:LEU:O	2.09	0.52
12:3I:8:ASN:O	12:3I:11:VAL:HG23	2.08	0.52
26:1H:764:A:H2	28:11:219:PRO:HG3	1.73	0.52
26:1H:963:U:OP1	59:1H:3686:HOH:O	2.18	0.52
26:1H:1899:G:N2	26:1H:1902:C:H5	2.06	0.52
26:1H:2287:A:H2	26:1H:2346:A:C2	2.27	0.52
28:11:182:LEU:N	28:11:272:ALA:HB3	2.21	0.52
28:11:223:GLY:HA3	28:11:231:HIS:HD1	1.73	0.52
29:21:20:ALA:O	29:21:21:VAL:HG22	2.09	0.52
30:31:6:VAL:HG11	30:31:119:ARG:HA	1.90	0.52
54:Q8:15:LYS:HD2	54:Q8:16:ILE:N	2.24	0.52
54:Q8:29:LYS:HZ3	54:Q8:44:LYS:HB2	1.74	0.52
5:42:20:GLN:OE1	5:42:21:ALA:N	2.42	0.52
17:8A:67:LYS:HA	17:8A:70:ARG:HH12	1.73	0.52
26:14:300:A:O2'	26:14:318:C:O2	2.26	0.52
26:14:993:G:H1'	42:95:87:HIS:NE2	2.24	0.52
26:14:1025:G:C4	26:14:1135:C:H1'	2.44	0.52
26:14:2667:C:N3	32:59:110:SER:OG	2.41	0.52
29:29:56:PRO:HD2	29:29:58:ARG:NH2	2.23	0.52
33:69:1:MET:HG3	33:69:23:PRO:HB3	1.90	0.52
1:13:222:U:H2'	1:13:223:U:H6	1.73	0.52
1:13:501:C:H2'	1:13:502:G:C8	2.44	0.52
1:13:504:C:OP1	59:13:1849:HOH:O	2.19	0.52
2:1E:60:ASP:HB3	2:1E:64:ARG:HH12	1.74	0.52
2:1E:78:GLN:NE2	2:1E:94:ASN:O	2.42	0.52
17:8I:5:VAL:HG22	17:8I:60:ILE:HG13	1.92	0.52
26:1H:286:C:H2'	26:1H:287:C:H6	1.74	0.52
26:1H:994:C:O2'	26:1H:996:A:OP1	2.23	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2756:U:H4'	26:1H:2757:A:OP1	2.08	0.52
28:11:67:PHE:HB3	28:11:153:ALA:HB3	1.91	0.52
33:61:93:THR:O	33:61:97:ILE:HG12	2.10	0.52
51:M8:23:GLU:OE1	51:M8:24:THR:N	2.43	0.52
1:1G:747:C:OP2	1:1G:748:C:N4	2.39	0.52
1:1G:1127:G:N3	1:1G:1147:C:N4	2.57	0.52
1:1G:1250:A:H4'	9:82:68:GLY:N	2.24	0.52
1:1G:1279:A:O2'	1:1G:1281:U:OP2	2.17	0.52
1:1G:1404:C:H2'	1:1G:1405:G:C8	2.44	0.52
3:22:60:ALA:HA	10:1A:93:GLY:HA2	1.90	0.52
4:32:153:ARG:HH11	4:32:181:MET:HE3	1.74	0.52
6:52:33:TYR:HE2	6:52:74:ASP:HB2	1.73	0.52
8:72:24:THR:HG22	8:72:63:LEU:HD21	1.91	0.52
19:AA:18:LYS:HE3	19:AA:22:LEU:HD23	1.90	0.52
19:AA:51:VAL:HG12	19:AA:52:TYR:H	1.73	0.52
26:14:2783:G:H2'	26:14:2784:C:C6	2.44	0.52
26:14:2784:C:H1'	29:29:37:ARG:NH2	2.24	0.52
29:29:30:PRO:HA	29:29:92:THR:HG22	1.91	0.52
39:65:18:ILE:HD13	39:65:87:PHE:O	2.09	0.52
40:75:106:SER:HA	40:75:110:ILE:HD11	1.91	0.52
1:13:348:G:C2	1:13:349:A:C8	2.98	0.52
1:13:939:G:H2'	1:13:940:C:C6	2.45	0.52
1:13:1089:G:O6	1:13:1096:C:N4	2.41	0.52
1:13:1225:A:H2'	1:13:1225:A:N3	2.24	0.52
7:6E:5:ARG:HG2	7:6E:7:ALA:H	1.75	0.52
20:BI:75:ASN:O	20:BI:79:ARG:N	2.41	0.52
23:2K:57:C:O2'	31:41:78:SER:HB2	2.09	0.52
26:1H:1050:A:H2'	26:1H:1051:G:C8	2.44	0.52
26:1H:2135:A:O2'	26:1H:2136:C:OP1	2.26	0.52
26:1H:2379:G:O2'	39:A8:17:ARG:NH1	2.42	0.52
29:21:3:GLY:HA3	29:21:81:ILE:CG2	2.39	0.52
30:31:185:ASP:OD1	30:31:188:ARG:NH1	2.38	0.52
32:51:153:LYS:HG2	32:51:162:ILE:HB	1.90	0.52
34:58:26:LEU:O	34:58:30:ILE:HG13	2.10	0.52
46:H8:130:PRO:O	46:H8:133:ILE:HG13	2.09	0.52
49:K8:29:LYS:HG2	49:K8:57:ILE:HD13	1.91	0.52
1:1G:160:A:H1'	1:1G:344:A:C5	2.44	0.52
1:1G:619:U:H3	4:32:135:LEU:HD13	1.74	0.52
2:12:84:GLU:OE2	2:12:212:GLN:NE2	2.34	0.52
2:12:105:PHE:O	2:12:109:SER:N	2.38	0.52
4:32:127:THR:HG21	4:32:149:ALA:HB2	1.90	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:9A:36:ASN:HB2	18:9A:38:GLU:OE1	2.09	0.52
19:AA:41:VAL:HG13	51:I5:63:TYR:HB3	1.91	0.52
26:14:26:G:N2	26:14:513:A:OP2	2.34	0.52
29:29:119:ARG:HA	29:29:160:TYR:CD2	2.45	0.52
36:35:80:TYR:HA	36:35:111:ARG:O	2.10	0.52
39:65:34:HIS:CE1	39:65:54:LEU:HB2	2.44	0.52
52:J5:20:ARG:HA	52:J5:23:HIS:ND1	2.24	0.52
1:13:8:A:H5'	5:4E:101:ILE:HG22	1.90	0.52
1:13:710:G:H5"	6:5E:54:LYS:HZ1	1.75	0.52
1:13:963:G:N3	10:1I:55:LYS:NZ	2.53	0.52
1:13:1085:U:H3'	1:13:1086:U:C5	2.44	0.52
9:8E:106:ALA:O	9:8E:108:VAL:HG22	2.08	0.52
13:4I:108:ARG:NH1	13:4I:111:LYS:HB3	2.24	0.52
26:1H:155:C:N4	26:1H:171:G:H1	2.04	0.52
26:1H:747:U:O2	26:1H:2014:A:H1'	2.10	0.52
26:1H:1442:G:C2	26:1H:1550:C:O2	2.63	0.52
28:11:16:MET:HE3	28:11:211:ARG:HD2	1.91	0.52
35:68:26:LYS:NZ	35:68:32:TYR:O	2.43	0.52
35:68:63:VAL:HG12	35:68:106:LEU:HD11	1.91	0.52
36:78:62:LEU:O	36:78:62:LEU:HG	2.03	0.52
1:1G:328:C:H4'	1:1G:329:A:H5"	1.92	0.52
1:1G:575:G:OP1	1:1G:575:G:H4'	2.09	0.52
1:1G:690:G:H2'	1:1G:691:G:O4'	2.09	0.52
1:1G:1179:A:H2'	1:1G:1180:A:O4'	2.09	0.52
1:1G:1194:U:H2'	1:1G:1195:C:C6	2.43	0.52
3:22:22:TRP:HB3	3:22:59:ARG:HB2	1.90	0.52
26:14:2414:G:N2	36:35:67:MET:HE1	2.19	0.52
26:14:2757:A:N1	32:59:67:LEU:HD22	2.25	0.52
28:19:37:LEU:HB2	28:19:38:LYS:HG2	1.91	0.52
30:39:3:GLU:HG3	30:39:20:LEU:O	2.10	0.52
46:D5:93:ASP:N	46:D5:130:PRO:HG2	2.24	0.52
46:D5:98:MET:O	46:D5:125:LEU:HA	2.09	0.52
47:E5:38:VAL:HG12	47:E5:40:GLN:HG2	1.91	0.52
1:13:57:G:H2'	1:13:58:C:C6	2.44	0.52
1:13:280:C:C2	17:8I:38:ARG:HG3	2.45	0.52
1:13:1336:C:H4'	1:13:1336:C:OP1	2.09	0.52
2:1E:15:VAL:H	2:1E:16:HIS:CE1	2.27	0.52
8:7E:121:ASP:OD1	8:7E:121:ASP:N	2.35	0.52
22:1K:85:A:H8	26:1H:2583:G:H21	1.56	0.52
26:1H:447:A:N1	26:1H:454:A:O2'	2.40	0.52
26:1H:566:U:OP1	36:78:29:LYS:NZ	2.39	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:593:G:C1'	54:Q8:4:MET:HE1	2.40	0.52
26:1H:1111:A:N3	26:1H:1112:G:H1'	2.25	0.52
26:1H:1441:G:H2'	26:1H:1442:G:C8	2.42	0.52
27:16:29:A:H2'	27:16:30:C:C6	2.44	0.52
32:51:101:ARG:NH1	32:51:122:THR:OG1	2.43	0.52
41:C8:88:ILE:O	41:C8:88:ILE:HG22	2.10	0.52
43:E8:92:ARG:NH1	43:E8:94:ASP:OD1	2.43	0.52
48:J8:78:LYS:HD2	48:J8:78:LYS:H	1.75	0.52
1:1G:409:G:OP1	4:32:24:GLU:HB2	2.10	0.52
1:1G:984:C:H2'	1:1G:985:C:H6	1.74	0.52
1:1G:1154:G:H2'	1:1G:1155:G:C8	2.43	0.52
5:42:8:GLU:HB3	5:42:34:VAL:HG23	1.91	0.52
5:42:41:VAL:O	5:42:67:VAL:HG12	2.08	0.52
8:72:37:ARG:NH2	8:72:118:VAL:O	2.43	0.52
11:2A:59:TYR:CE1	11:2A:63:LEU:HD21	2.45	0.52
55:3L:24:G:H2'	55:3L:25:G:C8	2.36	0.52
26:14:582:G:H2'	26:14:583:G:H8	1.74	0.52
26:14:2561:A:H2	35:25:23:ARG:NH1	2.07	0.52
27:1J:21:G:H2'	27:1J:22:U:O4'	2.08	0.52
30:39:25:PRO:HB3	30:39:28:ILE:HG23	1.92	0.52
35:25:12:ASP:HA	35:25:99:PHE:HD2	1.75	0.52
40:75:11:GLU:O	40:75:13:ARG:HD3	2.10	0.52
46:D5:10:ARG:HH21	46:D5:26:GLY:H	1.58	0.52
50:H5:20:LYS:HA	50:H5:23:LEU:HD12	1.92	0.52
1:13:153:C:H42	1:13:168:G:H22	1.55	0.52
1:13:376:G:H5"	16:7I:5:ARG:HD2	1.90	0.52
1:13:417:C:H2'	1:13:418:C:C6	2.45	0.52
1:13:1262:C:H42	1:13:1273:G:H1	1.57	0.52
2:1E:19:HIS:HB3	2:1E:189:ASP:OD1	2.09	0.52
2:1E:82:ARG:NH2	2:1E:150:SER:HB3	2.23	0.52
4:3E:19:LEU:HB3	4:3E:21:LEU:HD21	1.90	0.52
14:5I:6:LEU:CD1	14:5I:23:ARG:HH22	2.23	0.52
15:6I:25:THR:HG21	15:6I:70:LEU:HB2	1.92	0.52
18:9I:88:LYS:NZ	18:9I:88:LYS:HB3	2.23	0.52
26:1H:90:U:H6	26:1H:90:U:OP1	1.92	0.52
26:1H:172:C:H2'	26:1H:173:G:H8	1.75	0.52
26:1H:991:C:H2'	26:1H:992:C:H6	1.75	0.52
26:1H:1782:C:H3'	59:1H:3522:HOH:O	2.10	0.52
26:1H:1858:G:H2'	26:1H:1883:G:N2	2.24	0.52
26:1H:2110:G:H5"	26:1H:2145:C:N4	2.24	0.52
26:1H:2171:A:O2'	26:1H:2172:U:O5'	2.27	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2505:G:O6	26:1H:2576:G:H2'	2.09	0.52
36:78:121:LYS:O	36:78:123:LEU:N	2.43	0.52
46:H8:160:GLY:O	46:H8:161:VAL:HG13	2.09	0.52
51:M8:15:ILE:O	51:M8:33:VAL:HB	2.10	0.52
1:1G:32:A:C2	1:1G:33:A:C4	2.98	0.52
1:1G:78:G:O6	1:1G:91:C:N4	2.42	0.52
2:12:18:GLY:O	2:12:19:HIS:ND1	2.38	0.52
7:62:16:LEU:HD12	9:82:41:VAL:O	2.10	0.52
17:8A:87:LYS:O	17:8A:91:ARG:HG3	2.09	0.52
20:BA:49:ALA:HA	20:BA:52:ALA:HB3	1.92	0.52
23:2L:20:G:H1	31:49:83:ARG:HH22	1.58	0.52
26:14:1639:U:P	59:14:3469:HOH:O	2.67	0.52
26:14:2577:A:H2'	26:14:2614:A:N6	2.24	0.52
29:29:90:THR:OG1	29:29:90:THR:O	2.27	0.52
30:39:65:TRP:CZ3	30:39:72:ARG:HB3	2.44	0.52
33:69:72:LEU:HD21	33:69:107:VAL:HG11	1.92	0.52
37:45:35:VAL:HG12	37:45:36:ALA:H	1.74	0.52
40:75:8:LYS:HB2	40:75:8:LYS:HZ2	1.75	0.52
4:3E:197:PRO:HD3	6:52:16:GLN:HG3	1.92	0.52
12:3I:90:VAL:HG11	12:3I:93:LEU:HG	1.91	0.52
18:9I:38:GLU:HA	18:9I:41:LYS:HE3	1.92	0.52
21:1F:5:ASP:O	21:1F:11:GLY:HA3	2.10	0.52
26:1H:1093:G:HO2'	26:1H:1099:G:N2	2.07	0.52
26:1H:1406:U:H2'	26:1H:1407:C:H6	1.72	0.52
27:16:80:U:H2'	27:16:81:G:H21	1.75	0.52
28:11:231:HIS:HD2	28:11:249:PRO:HA	1.73	0.52
29:21:48:GLN:OE1	29:21:77:ILE:HG21	2.10	0.52
30:31:96:ASP:OD1	30:31:98:SER:HB3	2.09	0.52
31:41:124:SER:HB2	31:41:131:TYR:CE1	2.44	0.52
42:D8:27:ALA:HB1	42:D8:31:ALA:HB3	1.92	0.52
1:1G:420:U:O2'	1:1G:423:G:O6	2.14	0.52
1:1G:994:A:C2	14:5A:5:ALA:HB2	2.45	0.52
9:82:99:LEU:HB3	9:82:101:PHE:HE1	1.75	0.52
13:4A:77:ASN:O	13:4A:80:ARG:HB2	2.09	0.52
23:2L:44:A:H2'	23:2L:45:A:H8	1.75	0.52
26:14:557:U:O2'	34:15:45:ASN:O	2.26	0.52
26:14:1291:C:H2'	26:14:1292:U:C6	2.44	0.52
26:14:2057:A:H2'	26:14:2058:A:O4'	2.10	0.52
26:14:2624:G:O6	59:14:3644:HOH:O	2.19	0.52
27:1J:16:G:H2'	27:1J:17:C:C6	2.44	0.52
34:15:58:ASP:OD1	34:15:58:ASP:N	2.37	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:243:A:H4'	1:13:244:U:H3'	1.92	0.52
1:13:987:G:H1	1:13:1218:C:H42	1.58	0.52
1:13:1130:A:H62	1:13:1144:G:H21	1.57	0.52
5:4E:126:ARG:HG3	5:4E:126:ARG:NH1	2.25	0.52
15:6I:4:THR:OG1	15:6I:7:GLU:OE2	2.28	0.52
26:1H:459:U:H2'	26:1H:460:A:H8	1.75	0.52
26:1H:1386:C:H2'	26:1H:1387:C:C6	2.41	0.52
26:1H:2025:C:H2'	26:1H:2026:C:C6	2.44	0.52
26:1H:2199:A:H5'	26:1H:2205:C:OP2	2.09	0.52
29:21:135:HIS:CE1	59:21:401:HOH:O	2.58	0.52
36:78:82:GLY:HA2	36:78:113:LYS:O	2.10	0.52
38:98:1:MET:O	38:98:3:HIS:N	2.42	0.52
38:98:78:LYS:O	38:98:83:ILE:HG13	2.10	0.52
1:1G:111:G:H8	1:1G:111:G:O5'	1.92	0.52
1:1G:1194:U:H2'	1:1G:1195:C:H6	1.74	0.52
2:12:17:PHE:CE2	2:12:44:LEU:HA	2.45	0.52
6:52:7:ASN:HD21	18:9A:34:TYR:HE1	1.58	0.52
55:3L:9:U:H5	55:3L:22:A:H61	1.58	0.52
26:14:64:A:O3'	44:B5:71:GLY:HA3	2.10	0.52
26:14:839:U:H2'	26:14:840:C:C6	2.45	0.52
26:14:1337:G:H2'	26:14:1338:G:H8	1.75	0.52
26:14:1794:U:H2'	26:14:1795:C:H6	1.75	0.52
26:14:1839:G:OP2	59:14:3751:HOH:O	2.19	0.52
26:14:2394:C:OP1	36:35:63:PRO:HG2	2.10	0.52
27:1J:11:C:OP2	27:1J:12:C:N4	2.37	0.52
44:B5:57:LEU:N	44:B5:57:LEU:HD23	2.25	0.52
1:13:1007:C:N4	1:13:1022:G:H1	2.03	0.52
4:3E:81:GLU:OE1	4:3E:139:ARG:NH2	2.26	0.52
6:5E:23:LYS:O	6:5E:27:GLN:HG3	2.10	0.52
26:1H:507:A:H5"	26:1H:508:G:H5'	1.91	0.52
26:1H:2495:G:H5"	37:88:81:VAL:HG22	1.92	0.52
26:1H:2504:U:P	59:1H:3969:HOH:O	2.67	0.52
26:1H:2801:A:H2'	26:1H:2802:G:H4'	1.92	0.52
28:11:26:LYS:HB3	28:11:83:GLU:HG2	1.91	0.52
35:68:2:ILE:HD12	35:68:6:THR:HG21	1.92	0.52
39:A8:74:ALA:HB1	39:A8:107:GLU:O	2.10	0.52
47:I8:51:VAL:HG21	47:I8:79:VAL:HG12	1.91	0.52
54:Q8:60:LEU:O	54:Q8:61:LEU:HD12	2.09	0.52
1:1G:1127:G:H1'	1:1G:1148:U:H3	1.73	0.52
2:12:100:GLY:HA2	2:12:103:THR:OG1	2.09	0.52
17:8A:3:LYS:HB3	17:8A:61:GLU:HB3	1.92	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:111:A:H4'	49:G5:69:ARG:NH2	2.25	0.52
26:14:250:G:P	36:35:60:MET:HE1	2.49	0.52
30:39:25:PRO:O	30:39:27:GLU:HB2	2.10	0.52
30:39:32:LEU:O	30:39:36:VAL:HG23	2.10	0.52
34:15:47:ALA:O	34:15:119:ARG:NH2	2.42	0.52
37:45:26:TYR:O	37:45:28:ALA:N	2.43	0.52
39:65:42:ASP:C	39:65:44:LYS:H	2.17	0.52
42:95:48:GLY:HA3	42:95:51:VAL:C	2.35	0.52
1:13:429:U:H1'	1:13:430:A:H5"	1.92	0.52
1:13:789:U:H5	1:13:792:A:OP2	1.93	0.52
26:1H:319:C:C2	26:1H:333:G:N2	2.78	0.52
26:1H:432:A:H2'	26:1H:433:C:C6	2.44	0.52
26:1H:618:G:H2'	26:1H:618(A):C:H6	1.75	0.52
26:1H:1055:G:HO2'	26:1H:1086:A:H62	1.58	0.52
26:1H:1614:A:H61	43:E8:88:ARG:H	1.58	0.52
26:1H:2647:U:H2'	26:1H:2648:C:C6	2.45	0.52
26:1H:2773:C:H5"	29:21:164:ARG:HG2	1.92	0.52
26:1H:2855:C:H2'	26:1H:2856:C:H6	1.74	0.52
26:1H:2882:A:OP1	38:98:96:ARG:NH1	2.37	0.52
46:H8:30:ASN:OD1	46:H8:90:VAL:HB	2.10	0.52
47:I8:36:ILE:O	47:I8:36:ILE:HD13	2.08	0.52
1:1G:141:A:H1'	1:1G:182:U:O2	2.09	0.52
8:72:11:THR:OG1	8:72:14:ARG:NH1	2.41	0.52
9:82:99:LEU:HB3	9:82:101:PHE:CE1	2.44	0.52
11:2A:59:TYR:CZ	11:2A:63:LEU:HD21	2.45	0.52
26:14:13:A:H61	26:14:525:U:H3'	1.74	0.52
26:14:1478:G:H2'	26:14:1479:G:C8	2.45	0.52
26:14:1585:C:O2	26:14:1585:C:H2'	2.09	0.52
26:14:2127:G:N2	26:14:2161:C:N3	2.50	0.52
26:14:2666:C:H3'	26:14:2667:C:H6	1.75	0.52
27:1J:70:C:H2'	27:1J:71:C:H6	1.75	0.52
31:49:42:GLY:O	31:49:43:LEU:HD13	2.09	0.52
31:49:173:LEU:HD22	31:49:178:PHE:CE1	2.45	0.52
46:D5:128:VAL:HG22	46:D5:129:SER:H	1.75	0.52
47:E5:27:GLU:HB2	47:E5:69:PHE:HD1	1.74	0.52
1:13:123:C:OP1	1:13:311:C:O2'	2.25	0.51
8:7E:109:ILE:HD11	8:7E:120:THR:HG22	1.91	0.51
9:8E:82:ALA:O	9:8E:86:VAL:HG23	2.10	0.51
24:3K:8:U:H3	24:3K:14:A:H62	1.58	0.51
26:1H:64:A:H1'	44:F8:66:LEU:HB2	1.93	0.51
26:1H:762:U:H4'	26:1H:763:G:O5'	2.09	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:881:G:H3'	26:1H:882:G:C4'	2.41	0.51
26:1H:2125:G:H1'	26:1H:2173:A:H61	1.74	0.51
26:1H:2152:G:H2'	26:1H:2153:G:O4'	2.10	0.51
27:16:78:A:C2	27:16:99:A:C4	2.98	0.51
31:41:96:ARG:O	31:41:97:ASP:HB2	2.10	0.51
37:88:75:THR:HA	37:88:88:GLY:O	2.10	0.51
49:K8:33:MET:O	49:K8:36:ARG:HB2	2.10	0.51
1:1G:1352:C:N3	1:1G:1370:G:N2	2.50	0.51
55:3L:75:C:H2'	55:3L:76:C:C6	2.44	0.51
26:14:459:U:H2'	26:14:460:A:H8	1.74	0.51
29:29:34:VAL:HG21	29:29:78:LEU:HD22	1.92	0.51
48:F5:87:PRO:HA	48:F5:90:ILE:CG2	2.39	0.51
50:H5:43:ILE:O	50:H5:47:VAL:HG23	2.11	0.51
10:1I:17:ASP:OD1	10:1I:70:ARG:HD3	2.11	0.51
26:1H:26:G:C6	26:1H:27:G:N1	2.78	0.51
26:1H:1252:G:H4'	26:1H:1253:A:OP1	2.10	0.51
28:11:2:ALA:HA	28:11:20:ASP:HB2	1.92	0.51
32:51:150:ALA:C	32:51:152:ARG:H	2.19	0.51
33:61:64:GLU:O	33:61:67:ARG:N	2.43	0.51
33:61:98:ALA:HB2	33:61:111:PRO:HB3	1.90	0.51
1:1G:539:A:OP2	12:3A:115:LYS:NZ	2.43	0.51
1:1G:878:G:H5'	8:72:89:PRO:HG2	1.92	0.51
1:1G:1131:G:H2'	1:1G:1132:C:H6	1.75	0.51
1:1G:1295:G:O2'	13:4A:14:ARG:NH1	2.43	0.51
3:22:134:ILE:HG23	3:22:151:VAL:HB	1.91	0.51
6:52:33:TYR:CE2	6:52:74:ASP:HB2	2.45	0.51
16:7A:29:ASP:OD1	16:7A:29:ASP:N	2.43	0.51
26:14:445:C:O2'	26:14:446:G:H5'	2.10	0.51
26:14:1048:A:H2	26:14:1112:G:H21	1.58	0.51
26:14:1132:A:H2'	26:14:1133:U:C6	2.46	0.51
26:14:1771:C:H1'	26:14:1786:A:C8	2.44	0.51
26:14:2493:U:H2'	26:14:2494:G:O4'	2.11	0.51
26:14:2689:U:P	26:14:2719:G:H22	2.32	0.51
29:29:116:VAL:HG13	29:29:122:PHE:HB2	1.91	0.51
29:29:203:LYS:C	29:29:205:ALA:H	2.18	0.51
40:75:16:ARG:HB3	40:75:18:ASP:OD1	2.11	0.51
43:A5:36:LEU:HD13	43:A5:48:ALA:HA	1.93	0.51
48:F5:93:GLU:O	48:F5:97:LEU:HB3	2.10	0.51
1:13:413:G:N2	1:13:428:G:H1'	2.25	0.51
1:13:417:C:H2'	1:13:418:C:H6	1.74	0.51
2:1E:237:ALA:O	2:1E:239:VAL:N	2.44	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:3E:11:LEU:HD22	4:3E:66:ARG:HG2	1.92	0.51
7:6E:143:ARG:NH1	24:3K:42:U:O2'	2.43	0.51
22:1K:77:C:N3	22:1K:78:C:N4	2.59	0.51
26:1H:882:G:H22	26:1H:894:C:N4	2.07	0.51
26:1H:1012:U:O4	34:58:25:ARG:HA	2.10	0.51
26:1H:1475:G:C2	26:1H:1519:G:C2	2.98	0.51
26:1H:2033:A:OP1	59:1H:3887:HOH:O	2.19	0.51
26:1H:2157:G:O2'	26:1H:2158:A:O5'	2.29	0.51
26:1H:2298:A:H2'	26:1H:2299:G:O4'	2.11	0.51
31:41:2:PRO:HB3	51:M8:25:TYR:CE1	2.45	0.51
32:51:102:ALA:HA	32:51:117:PRO:HD3	1.92	0.51
32:51:153:LYS:HG2	32:51:162:ILE:CG1	2.41	0.51
40:B8:29:ARG:NH1	40:B8:46:GLU:OE1	2.42	0.51
40:B8:107:ASP:O	40:B8:110:ILE:HG23	2.10	0.51
1:1G:500:G:N2	1:1G:545:C:O2	2.43	0.51
1:1G:888:G:O2'	1:1G:1488:G:O2'	2.28	0.51
2:12:55:PHE:HZ	2:12:218:ALA:HA	1.75	0.51
23:2L:20:G:H3'	23:2L:21:U:H5"	1.93	0.51
26:14:660:G:H21	36:35:12:ALA:CA	2.23	0.51
26:14:660:G:H21	36:35:12:ALA:HA	1.75	0.51
26:14:746:A:H2'	26:14:2612:C:H5"	1.91	0.51
26:14:890:A:O2'	26:14:892:G:H5'	2.09	0.51
26:14:2120:G:H2'	26:14:2121:G:H8	1.76	0.51
26:14:2274:A:C6	26:14:2276:G:C8	2.98	0.51
30:39:18:ARG:HE	30:39:19:GLU:N	2.09	0.51
36:35:55:ARG:HG2	36:35:56:SER:N	2.24	0.51
36:35:93:GLY:H	36:35:123:LEU:HD12	1.74	0.51
46:D5:4:ARG:NH1	46:D5:60:GLU:OE2	2.35	0.51
1:13:143:A:H2	1:13:220:G:H1	1.57	0.51
1:13:1064:G:H4'	1:13:1065:U:OP1	2.10	0.51
1:13:1085:U:H3'	1:13:1086:U:H5	1.73	0.51
1:13:1277:C:O2'	1:13:1279:A:H8	1.93	0.51
12:3I:71:PRO:O	12:3I:102:ARG:HD3	2.11	0.51
13:4I:13:LYS:HA	13:4I:13:LYS:HZ3	1.75	0.51
26:1H:536:A:H5'	41:C8:53:ARG:HD3	1.92	0.51
26:1H:1047:G:O2'	26:1H:1111:A:N6	2.44	0.51
26:1H:1094:U:C2	26:1H:1096:A:H5'	2.46	0.51
26:1H:1126:A:H4'	26:1H:1127:A:O5'	2.10	0.51
26:1H:1637:A:H4'	26:1H:2711:A:O2'	2.09	0.51
26:1H:1728:G:C6	26:1H:1730:U:OP2	2.63	0.51
26:1H:1731:G:H2'	26:1H:1732:A:H8	1.74	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2000:G:HO2'	26:1H:2689:U:H5	1.59	0.51
26:1H:2324:C:H5"	26:1H:2325:G:H5"	1.92	0.51
27:16:2:C:H2'	27:16:3:C:H6	1.76	0.51
30:31:64:ILE:HG23	30:31:65:TRP:CD1	2.45	0.51
36:78:38:GLN:HG2	36:78:45:LEU:HD12	1.92	0.51
1:1G:409:G:H2'	1:1G:410:G:O4'	2.11	0.51
1:1G:1256:A:N6	1:1G:1277:C:H3'	2.26	0.51
1:1G:1442:G:C5	1:1G:1446:A:N1	2.78	0.51
1:1G:1508:G:H2'	1:1G:1509:C:C6	2.45	0.51
2:12:21:ARG:HB3	2:12:39:ILE:HG12	1.93	0.51
2:12:115:LEU:HD13	2:12:145:LEU:HD12	1.92	0.51
15:6A:4:THR:HG22	15:6A:6:GLU:H	1.76	0.51
26:14:389:G:N1	36:35:71:VAL:HG12	2.25	0.51
26:14:2250:G:C5	37:45:82:ARG:HD2	2.45	0.51
26:14:2272:U:H5"	26:14:2273:A:OP1	2.11	0.51
26:14:2388:A:C2'	26:14:2389:G:H5'	2.40	0.51
26:14:2547:U:O2	35:25:23:ARG:NH2	2.40	0.51
49:G5:22:GLU:HG2	49:G5:64:LEU:HD11	1.92	0.51
50:H5:46:ASN:O	50:H5:50:VAL:HG22	2.09	0.51
4:3E:13:ARG:NH1	4:3E:38:TYR:O	2.43	0.51
7:6E:102:ARG:O	7:6E:106:GLN:HG3	2.11	0.51
9:8E:118:LYS:O	9:8E:119:ALA:HB3	2.11	0.51
26:1H:975:G:H1'	26:1H:990:A:C2	2.45	0.51
26:1H:1771:C:H1'	26:1H:1786:A:C8	2.45	0.51
26:1H:2127:G:H2'	26:1H:2128:C:O4'	2.09	0.51
35:68:21:CYS:HB2	35:68:39:ILE:HD12	1.91	0.51
38:98:83:ILE:HG22	38:98:87:TYR:HE2	1.76	0.51
39:A8:34:HIS:HB2	39:A8:36:TYR:CE1	2.46	0.51
1:1G:1321:C:C4	1:1G:1322:C:N3	2.78	0.51
3:22:38:ARG:NH1	3:22:94:LEU:HD22	2.26	0.51
4:32:96:LEU:HD13	4:32:139:ARG:NH1	2.25	0.51
13:4A:37:THR:HG21	13:4A:56:LEU:HA	1.92	0.51
16:7A:22:THR:HA	16:7A:33:ILE:HG13	1.93	0.51
18:9A:29:PHE:N	18:9A:29:PHE:HD1	2.09	0.51
26:14:271(B):G:N7	26:14:421:U:H2'	2.25	0.51
26:14:934:G:H2'	26:14:935:C:C6	2.45	0.51
26:14:1430:C:H2'	26:14:1431:U:C6	2.46	0.51
26:14:1697:G:OP2	26:14:1698:A:O2'	2.28	0.51
26:14:1914:C:H2'	26:14:1915:U:O4'	2.11	0.51
1:13:116:A:H61	1:13:313:A:H1'	1.75	0.51
1:13:919:A:O2'	1:13:920:U:H5'	2.09	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:939:G:H5”	7:6E:102:ARG:NH2	2.26	0.51
1:13:1060:C:O2’	10:1I:56:HIS:ND1	2.43	0.51
1:13:1127:G:H21	1:13:1147:C:H41	1.57	0.51
4:3E:13:ARG:HA	4:3E:33:MET:SD	2.51	0.51
5:4E:5:ASP:OD1	5:4E:5:ASP:N	2.44	0.51
22:1K:62:G:H1	22:1K:70:C:H42	1.59	0.51
26:1H:631:A:O2’	36:78:67:MET:HB3	2.11	0.51
26:1H:2153:G:H2’	26:1H:2154:G:O4’	2.10	0.51
34:58:96:GLU:C	34:58:98:VAL:N	2.55	0.51
40:B8:3:ARG:HB2	40:B8:6:LEU:HB2	1.92	0.51
45:G8:82:PRO:HB2	45:G8:98:VAL:HG12	1.93	0.51
1:1G:81:G:H1	1:1G:88:C:H42	1.57	0.51
1:1G:1359:C:H5”	59:1G:1779:HOH:O	2.11	0.51
4:32:3:ARG:HH11	4:32:115:ARG:HD2	1.74	0.51
10:1A:24:VAL:O	10:1A:28:ARG:HB3	2.11	0.51
26:14:1709:U:H2’	26:14:1710:C:C6	2.46	0.51
26:14:1814:G:H5”	28:19:54:ARG:HH12	1.74	0.51
26:14:2611:U:C4	52:J5:3:LYS:HG3	2.45	0.51
27:1J:5:C:O2’	27:1J:27:C:O2	2.27	0.51
28:19:32:SER:O	28:19:32:SER:OG	2.27	0.51
34:15:35:ARG:HB3	34:15:42:TRP:HZ3	1.74	0.51
37:45:19:GLY:O	37:45:99:PRO:HD2	2.11	0.51
50:H5:12:PRO:HB2	50:H5:20:LYS:HD3	1.92	0.51
54:M5:49:VAL:HG12	54:M5:50:LEU:N	2.26	0.51
1:13:156:G:H1	1:13:165:C:N4	2.08	0.51
1:13:228:A:H2’	1:13:229:U:O4’	2.11	0.51
1:13:232:G:H2’	1:13:233:C:C6	2.46	0.51
1:13:554:C:H2’	1:13:555:C:H6	1.75	0.51
1:13:765:G:N2	1:13:813:U:OP2	2.43	0.51
13:4I:82:MET:O	13:4I:84:ILE:N	2.44	0.51
20:BI:25:ARG:O	20:BI:29:LYS:HG3	2.11	0.51
23:2K:76:C:H3’	23:2K:77:A:H3’	1.92	0.51
26:1H:70:G:H21	26:1H:71:A:H62	1.57	0.51
26:1H:804:A:P	59:1H:3667:HOH:O	2.68	0.51
33:61:4:ILE:HG23	33:61:18:VAL:HG22	1.93	0.51
39:A8:51:ALA:HB3	39:A8:73:LEU:HG	1.93	0.51
40:B8:2:ASN:O	40:B8:3:ARG:HG2	2.09	0.51
50:L8:43:ILE:O	50:L8:47:VAL:HG23	2.11	0.51
1:1G:624:C:H2’	1:1G:625:G:C8	2.45	0.51
1:1G:1016:A:H2’	1:1G:1017:G:O4’	2.10	0.51
1:1G:1448:C:H2’	1:1G:1449:C:O4’	2.10	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:12:15:VAL:HG12	2:12:209:ARG:NH2	2.25	0.51
9:82:17:VAL:HG22	9:82:63:ILE:HG12	1.93	0.51
19:AA:66:MET:HE1	51:I5:56:VAL:HA	1.92	0.51
55:3L:77:C:H2'	55:3L:78:C:H6	1.75	0.51
26:14:363(E):U:H5'	26:14:363(F):A:OP2	2.10	0.51
26:14:668:G:H2'	26:14:670:A:H62	1.75	0.51
26:14:776:G:H4'	26:14:777:A:O5'	2.11	0.51
26:14:1665:A:C4'	35:25:67:LYS:HB2	2.41	0.51
26:14:2068:U:N3	26:14:2430:A:H2	2.08	0.51
26:14:2176:A:H2'	26:14:2177:C:C6	2.46	0.51
26:14:2577:A:O4'	52:J5:3:LYS:HB2	2.09	0.51
27:1J:103:U:HO2'	46:D5:29:TYR:HH	1.53	0.51
37:45:34:LEU:HB2	37:45:118:LEU:HD13	1.93	0.51
1:13:1349:A:H2'	1:13:1350:A:H8	1.75	0.51
1:13:1375:A:O2'	7:6E:29:LYS:NZ	2.44	0.51
1:13:1493:A:O2'	25:4K:19[A]:A:O2'	2.28	0.51
2:1E:165:VAL:HG23	2:1E:166:ASP:H	1.76	0.51
7:6E:72:ARG:HG3	7:6E:142:GLU:OE1	2.10	0.51
16:7I:72:ARG:HD3	16:7I:73:LEU:HG	1.92	0.51
20:BI:67:ALA:HA	20:BI:72:LEU:O	2.11	0.51
26:1H:1508:A:O2'	26:1H:1509:C:O4'	2.28	0.51
26:1H:1914:C:H2'	26:1H:1915:U:O4'	2.11	0.51
26:1H:2162:G:H2'	26:1H:2163:C:O4'	2.11	0.51
26:1H:2406:U:H5"	59:1H:3605:HOH:O	2.10	0.51
29:21:4:ILE:C	29:21:5:LEU:HD23	2.35	0.51
34:58:35:ARG:O	34:58:42:TRP:HZ3	1.93	0.51
40:B8:65:LYS:HE3	40:B8:67:SER:HB2	1.92	0.51
40:B8:107:ASP:OD1	40:B8:107:ASP:N	2.33	0.51
46:H8:98:MET:O	46:H8:125:LEU:HA	2.11	0.51
1:1G:157:G:H1	1:1G:164:U:H3	1.59	0.51
1:1G:1127:G:N3	1:1G:1127:G:H2'	2.25	0.51
1:1G:1246:C:H2'	1:1G:1247:U:C6	2.43	0.51
2:12:92:TYR:CD1	2:12:151:GLY:HA3	2.46	0.51
55:3L:48:C:H3'	55:3L:49:A:H8	1.74	0.51
26:14:244:A:C2	26:14:255:A:C4	2.98	0.51
26:14:438:G:H2'	26:14:439:G:H8	1.75	0.51
26:14:1636:C:H2'	26:14:1637:A:H8	1.72	0.51
26:14:2123:G:H2'	26:14:2124:G:C8	2.40	0.51
26:14:2274:A:C5	26:14:2276:G:C8	2.98	0.51
26:14:2671:A:H2'	26:14:2672:G:O4'	2.11	0.51
27:1J:19:G:N2	27:1J:64:C:O2	2.37	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:15:49:GLY:H	34:15:119:ARG:NH1	2.09	0.51
39:65:86:ALA:O	39:65:87:PHE:HB2	2.10	0.51
45:C5:51:VAL:HA	45:C5:57:GLN:HA	1.91	0.51
52:J5:40:LYS:HE3	52:J5:44:THR:O	2.11	0.51
1:13:271:C:H2'	1:13:272:C:C6	2.46	0.51
1:13:375:U:O3'	16:7I:6:LEU:HB2	2.11	0.51
1:13:922:G:C6	1:13:923:A:C6	2.98	0.51
4:3E:18:LYS:HD2	4:3E:31:CYS:HB2	1.93	0.51
15:6I:82:ILE:O	15:6I:86:GLY:N	2.44	0.51
26:1H:322:A:H5'	26:1H:340:A:H1'	1.93	0.51
26:1H:1855:G:H1	26:1H:1887:C:H42	1.58	0.51
26:1H:2056:G:C2	26:1H:2057:A:C8	2.99	0.51
28:11:17:THR:CG2	28:11:204:ILE:HA	2.41	0.51
32:51:152:ARG:O	32:51:153:LYS:HB2	2.10	0.51
33:61:62:LYS:HG3	33:61:133:HIS:NE2	2.26	0.51
44:F8:39:ILE:O	44:F8:43:VAL:HG23	2.10	0.51
1:1G:1281:U:H3'	1:1G:1282:C:C5	2.46	0.51
2:12:16:HIS:O	2:12:204:ASN:ND2	2.43	0.51
20:BA:23:ARG:HH11	20:BA:23:ARG:HG3	1.76	0.51
26:14:2050:C:H1'	29:29:156:MET:HE2	1.92	0.51
35:25:87:ILE:HG23	35:25:88:ASN:O	2.11	0.51
40:75:112:ARG:HD2	40:75:113:LYS:HD2	1.91	0.51
48:F5:91:LYS:HZ3	48:F5:91:LYS:HA	1.76	0.51
1:13:652:U:O4	1:13:752:G:O2'	2.19	0.51
1:13:1044:A:C5	1:13:1045:C:H1'	2.46	0.51
8:7E:87:SER:CB	8:7E:93:VAL:H	2.24	0.51
22:1K:38:MIA:HN6	22:1K:38:MIA:H163	1.76	0.51
26:1H:2154:G:O6	26:1H:2156:G:N2	2.43	0.51
26:1H:2212:A:H1'	26:1H:2215:G:C4	2.46	0.51
26:1H:2857:G:N2	26:1H:2860:A:OP2	2.40	0.51
26:1H:2876:G:C5'	40:B8:2:ASN:HB3	2.41	0.51
34:58:46:VAL:CG1	34:58:48:MET:HG3	2.41	0.51
1:1G:130:A:C8	17:8A:63:ARG:HG3	2.45	0.51
1:1G:491:G:H2'	1:1G:492:G:O4'	2.10	0.51
1:1G:589:C:H42	1:1G:650:G:H1	1.59	0.51
1:1G:1299:A:C6	1:1G:1301:U:C2	2.99	0.51
1:1G:1319:A:OP1	19:AA:10:PHE:HB3	2.10	0.51
3:22:70:VAL:HG12	3:22:72:LYS:H	1.76	0.51
5:42:60:TYR:HB3	5:42:64:ARG:HH21	1.77	0.51
6:52:82:ARG:HB2	6:52:85:VAL:HG23	1.92	0.51
26:14:70:G:H21	26:14:71:A:H62	1.59	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1812:A:H2'	26:14:1813:G:C8	2.46	0.51
26:14:1849:G:H2'	26:14:1850:G:H8	1.76	0.51
30:39:49:ALA:O	30:39:92:PRO:HB2	2.11	0.51
34:15:96:GLU:H	34:15:96:GLU:CD	2.19	0.51
34:15:97:ARG:O	34:15:100:GLU:N	2.44	0.51
1:13:591:U:H2'	1:13:592:G:C8	2.46	0.50
1:13:1138:G:C6	1:13:1140:C:H1'	2.46	0.50
1:13:1423:G:P	35:68:49:ARG:HH22	2.33	0.50
3:2E:32:LEU:HD13	3:2E:59:ARG:HD3	1.93	0.50
4:3E:74:GLN:O	4:3E:78:LEU:HD13	2.12	0.50
17:8I:28:PRO:HA	17:8I:34:LYS:O	2.11	0.50
20:BI:14:LYS:HG3	20:BI:17:ARG:NE	2.24	0.50
25:4K:13:A:HO2'	25:4K:14:A:P	2.34	0.50
26:1H:1021:A:C8	26:1H:1021:A:H3'	2.46	0.50
26:1H:1142(A):A:H4'	34:58:25:ARG:HH22	1.76	0.50
26:1H:1432:C:H2'	26:1H:1433:U:O4'	2.11	0.50
28:11:2:ALA:HA	28:11:20:ASP:CB	2.41	0.50
32:51:149:ARG:HG3	32:51:162:ILE:HG22	1.91	0.50
48:J8:92:LYS:HA	48:J8:95:LEU:HB2	1.93	0.50
50:L8:7:LYS:HG3	50:L8:34:GLU:CG	2.42	0.50
1:1G:1443:G:H22	40:75:119:LYS:HB2	1.76	0.50
2:12:212:GLN:O	2:12:216:SER:N	2.42	0.50
13:4A:57:ARG:NH1	51:I5:34:GLU:O	2.43	0.50
13:4A:65:LYS:HB3	51:I5:49:PHE:CE2	2.45	0.50
26:14:270(L):U:H3	33:69:50:ARG:NH1	2.09	0.50
26:14:1171:G:H1	26:14:1178:C:N4	2.09	0.50
26:14:1405:U:H2'	26:14:1406:U:C6	2.46	0.50
26:14:1416:G:O2'	26:14:1417:C:O4'	2.29	0.50
26:14:1939:U:OP1	26:14:2604:U:O2'	2.27	0.50
26:14:2133:G:C4	26:14:2157:G:O6	2.65	0.50
26:14:2275:C:H6	26:14:2275:C:H5'	1.77	0.50
31:49:131:TYR:HE1	31:49:133:LEU:HD23	1.76	0.50
38:55:107:ASP:C	38:55:107:ASP:OD1	2.55	0.50
1:13:621:A:H2'	1:13:622:A:O4'	2.11	0.50
1:13:1022:G:H2'	1:13:1023:G:C8	2.46	0.50
1:13:1104:G:OP1	2:1E:144:ARG:NH2	2.44	0.50
1:13:1184:G:H2'	1:13:1185:G:C8	2.46	0.50
2:1E:17:PHE:CD2	2:1E:44:LEU:HD11	2.46	0.50
2:1E:185:ILE:CG2	2:1E:199:TYR:HB2	2.41	0.50
7:6E:22:LEU:HD23	7:6E:62:PHE:HE2	1.76	0.50
26:1H:270(M):U:H1'	26:1H:270(N):G:N7	2.26	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:574:C:OP2	59:1H:3838:HOH:O	2.18	0.50
26:1H:1359:A:N1	26:1H:1372:U:C4	2.78	0.50
26:1H:1412:A:H2'	26:1H:1413:G:C8	2.47	0.50
26:1H:2096:U:H3	26:1H:2193:G:H1	1.59	0.50
39:A8:27:SER:HA	39:A8:88:ASP:HB2	1.93	0.50
52:N8:50:GLY:H	52:N8:56:LYS:HG3	1.76	0.50
2:12:63:MET:HE2	2:12:225:ALA:HB3	1.93	0.50
2:12:168:THR:HG21	2:12:191:ASP:O	2.11	0.50
6:52:8:ILE:HG12	6:52:26:ILE:HD13	1.93	0.50
7:62:126:ASP:HB3	7:62:131:LYS:O	2.11	0.50
10:1A:78:ASN:ND2	10:1A:81:THR:HG23	2.26	0.50
26:14:176:G:O2'	26:14:177:G:H5'	2.12	0.50
26:14:397:G:O2'	26:14:2231:C:H1'	2.12	0.50
26:14:451:C:H41	26:14:454:A:H5'	1.76	0.50
26:14:2056:G:C2	26:14:2057:A:C8	2.99	0.50
26:14:2292:C:H4'	26:14:2375:G:H4'	1.94	0.50
26:14:2411:A:H8	26:14:2411:A:OP2	1.93	0.50
30:39:128:ALA:O	30:39:129:PHE:C	2.55	0.50
31:49:39:ILE:HG12	31:49:157:ILE:HG23	1.93	0.50
33:69:123:LEU:HD22	33:69:143:SER:HB3	1.93	0.50
41:85:88:ILE:HA	42:95:49:THR:O	2.10	0.50
48:F5:80:LEU:HD22	48:F5:80:LEU:H	1.75	0.50
1:13:160:A:H61	1:13:347:G:H1'	1.75	0.50
2:1E:100:GLY:O	2:1E:104:ASN:N	2.41	0.50
11:2I:57:THR:HG23	11:2I:60:ALA:H	1.75	0.50
16:7I:4:ILE:HG12	16:7I:21:VAL:HG12	1.92	0.50
16:7I:43:LYS:HA	16:7I:48:TRP:HB2	1.92	0.50
26:1H:1433:U:O2	26:1H:1561:G:C2	2.64	0.50
26:1H:1443:G:C2	26:1H:1549:C:N3	2.80	0.50
26:1H:1973:G:H2'	26:1H:1974:C:H6	1.75	0.50
36:78:97:PRO:HB3	36:78:112:LEU:HD12	1.93	0.50
39:A8:38:GLN:HG2	39:A8:47:THR:CG2	2.42	0.50
46:H8:33:LEU:HD11	46:H8:35:ARG:HG3	1.92	0.50
50:L8:51:ALA:HA	50:L8:54:VAL:HG12	1.93	0.50
1:1G:243:A:H4'	1:1G:244:U:O5'	2.11	0.50
1:1G:468:A:H2'	1:1G:474:G:H5'	1.92	0.50
1:1G:827:U:H5"	1:1G:828:A:OP2	2.12	0.50
1:1G:1141:C:H2'	1:1G:1142:G:H8	1.75	0.50
1:1G:1386:G:C2	1:1G:1387:G:C8	2.99	0.50
11:2A:18:ARG:HB3	11:2A:33:THR:OG1	2.11	0.50
26:14:249:C:H4'	26:14:250:G:O5'	2.12	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:654(I):C:H5”	26:14:654(M):C:H41	1.75	0.50
26:14:997:G:OP1	41:85:93:LYS:HB2	2.11	0.50
26:14:1057:A:H2’	26:14:1058:U:O4’	2.11	0.50
26:14:1171:G:H1’	26:14:1173:G:O4’	2.11	0.50
26:14:1333:C:H2’	26:14:1334:G:H8	1.76	0.50
26:14:2749:A:O4’	32:59:63:SER:HA	2.10	0.50
26:14:2873:A:H8	38:55:6:SER:H	1.57	0.50
27:1J:4:C:H42	27:1J:116:G:H1	1.58	0.50
54:M5:14:VAL:HG13	54:M5:22:VAL:HG13	1.92	0.50
1:13:58:C:O2’	1:13:388:G:N7	2.34	0.50
1:13:412:A:H4’	1:13:413:G:O5’	2.11	0.50
1:13:622:A:C8	1:13:623:C:C6	2.99	0.50
3:2E:107:GLN:H	3:2E:107:GLN:CD	2.15	0.50
4:3E:107:ARG:HH22	4:3E:194:LEU:CD2	2.24	0.50
4:3E:113:SER:O	4:3E:117:ALA:N	2.40	0.50
6:5E:18:GLN:O	6:5E:21:LEU:HB2	2.11	0.50
11:2I:40:ILE:HG22	11:2I:75:TYR:HD2	1.76	0.50
17:8I:9:VAL:O	17:8I:21:VAL:HA	2.12	0.50
26:1H:16:G:H2’	26:1H:17:G:H8	1.76	0.50
26:1H:1174:A:H1’	26:1H:1178:C:H41	1.75	0.50
26:1H:1210:A:OP1	26:1H:1211:U:O2’	2.20	0.50
26:1H:1420:U:O2’	26:1H:1421:G:OP1	2.30	0.50
26:1H:1593:G:H2’	26:1H:1594:G:C8	2.47	0.50
26:1H:1649:G:O2’	38:98:107:ASP:OD1	2.23	0.50
26:1H:2772:C:H2’	26:1H:2773:C:H6	1.76	0.50
26:1H:2849:U:H4’	26:1H:2868:A:C2	2.47	0.50
33:61:8:PRO:HA	33:61:14:ASP:HA	1.92	0.50
33:61:48:GLU:HG3	33:61:52:ARG:NH1	2.26	0.50
35:68:88:ASN:HD21	35:68:92:GLU:H	1.55	0.50
36:78:65:ARG:HG3	36:78:65:ARG:NH1	2.26	0.50
39:A8:27:SER:HA	39:A8:88:ASP:CB	2.41	0.50
40:B8:109:GLU:OE2	40:B8:112:ARG:NH1	2.45	0.50
45:G8:55:TYR:HB2	45:G8:58:GLY:HA3	1.93	0.50
1:1G:963:G:H21	10:1A:55:LYS:NZ	2.09	0.50
1:1G:1022:G:H2’	1:1G:1023:G:O4’	2.10	0.50
2:12:141:GLU:O	2:12:145:LEU:HB2	2.12	0.50
6:52:97:PHE:O	18:9A:31:LEU:HD23	2.11	0.50
9:82:128:ARG:NH2	23:2L:33:OMC:OP2	2.37	0.50
13:4A:92:HIS:HE2	13:4A:98:VAL:HG21	1.76	0.50
17:8A:6:LEU:HD13	17:8A:42:TYR:HE2	1.77	0.50
26:14:1487:G:H1	26:14:1502:C:H42	1.59	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1786:A:C2	26:14:2606:C:H1'	2.47	0.50
26:14:2018:G:OP1	52:J5:9:LYS:NZ	2.44	0.50
26:14:2418:A:OP1	54:M5:29:LYS:NZ	2.45	0.50
26:14:2499:C:OP1	59:14:3616:HOH:O	2.19	0.50
26:14:2880:C:O2	38:55:93:GLY:N	2.31	0.50
29:29:112:GLY:O	29:29:159:HIS:HA	2.11	0.50
30:39:123:LEU:HB2	30:39:192:LEU:HB3	1.94	0.50
31:49:166:ASP:HA	31:49:169:ALA:HB3	1.94	0.50
36:35:147:LEU:HD22	36:35:148:LEU:O	2.11	0.50
38:55:57:ARG:HH11	38:55:57:ARG:HG3	1.77	0.50
40:75:118:ARG:O	40:75:121:ILE:HG22	2.11	0.50
42:95:69:LYS:CG	42:95:86:GLY:HA3	2.38	0.50
1:13:182:U:H5	1:13:183:G:C4	2.29	0.50
1:13:556:C:H2'	1:13:557:G:H8	1.76	0.50
1:13:603:U:H2'	1:13:604:G:C8	2.47	0.50
1:13:651:C:H2'	1:13:652:U:C6	2.46	0.50
1:13:1417:G:N2	1:13:1482:G:H2'	2.26	0.50
11:2I:34:ASP:HB2	11:2I:35:PRO:HD2	1.92	0.50
15:6I:39:LEU:HB3	15:6I:56:LEU:HD12	1.92	0.50
17:8I:27:PHE:CE1	17:8I:36:ILE:HD11	2.46	0.50
22:1K:10:C:H2'	22:1K:11:C:C6	2.47	0.50
26:1H:634:C:H2'	26:1H:635:C:H6	1.75	0.50
26:1H:780:G:N2	26:1H:783:A:N6	2.56	0.50
26:1H:1387:C:C2	26:1H:1388:G:C8	3.00	0.50
26:1H:2291:U:H2'	26:1H:2292:C:C6	2.46	0.50
32:51:143:GLN:HE21	32:51:143:GLN:HA	1.76	0.50
43:E8:11:ARG:CZ	43:E8:98:LYS:HB3	2.42	0.50
46:H8:19:ARG:NH1	46:H8:84:GLU:HB2	2.26	0.50
23:2L:24:C:H2'	23:2L:25:U:C6	2.46	0.50
55:3L:48:C:H3'	55:3L:49:A:C8	2.46	0.50
26:14:127:A:H5"	26:14:128:C:C6	2.47	0.50
26:14:1073:A:OP2	26:14:1094:U:N3	2.45	0.50
26:14:1353:A:OP2	59:14:3476:HOH:O	2.20	0.50
26:14:1416:G:O2'	26:14:1417:C:H6	1.94	0.50
26:14:2648:C:H2'	26:14:2649:U:H6	1.75	0.50
27:1J:3:C:H2'	27:1J:4:C:H6	1.77	0.50
27:1J:40:U:H1'	27:1J:45:A:H61	1.75	0.50
30:39:192:LEU:O	30:39:193:VAL:HG23	2.12	0.50
37:45:134:ARG:N	37:45:135:ASP:OD1	2.45	0.50
39:65:7:TYR:HA	39:65:10:ARG:HH21	1.76	0.50
41:85:110:VAL:O	41:85:114:LYS:HG2	2.12	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:186(E):C:N4	1:13:191(B):G:H1	2.03	0.50
1:13:554:C:H2'	1:13:555:C:C6	2.46	0.50
2:1E:189:ASP:OD2	2:1E:191:ASP:HB2	2.11	0.50
4:3E:30:LYS:C	4:3E:32:ALA:H	2.20	0.50
4:3E:201:GLN:O	4:3E:205:GLU:HG3	2.11	0.50
10:1I:6:ILE:HD11	10:1I:72:VAL:HB	1.92	0.50
12:3I:43:VAL:HG23	12:3I:93:LEU:HD22	1.93	0.50
22:1K:85:A:H1'	26:1H:2583:G:N2	2.27	0.50
26:1H:1580:A:H8	26:1H:1580:A:OP2	1.94	0.50
26:1H:1996:C:OP1	35:68:31:LYS:HE3	2.11	0.50
26:1H:2171:A:O2'	26:1H:2172:U:O4'	2.25	0.50
26:1H:2314:C:H2'	26:1H:2315:G:C8	2.44	0.50
29:21:38:THR:HG23	29:21:41:LYS:H	1.77	0.50
31:41:11:TYR:OH	31:41:16:ARG:NH1	2.40	0.50
34:58:62:VAL:CG2	34:58:66:LYS:HD2	2.42	0.50
41:C8:88:ILE:C	41:C8:90:VAL:H	2.20	0.50
45:G8:35:TYR:CE2	45:G8:69:ALA:HB3	2.46	0.50
46:H8:10:ARG:HG3	46:H8:36:LYS:HB3	1.93	0.50
46:H8:93:ASP:HA	46:H8:130:PRO:HG2	1.93	0.50
1:1G:1278:U:H5'	1:1G:1279:A:O4'	2.12	0.50
11:2A:111:ASP:CG	18:9A:84:LYS:HD2	2.36	0.50
55:3L:74:C:N3	55:3L:75:C:N4	2.56	0.50
26:14:1358:G:N2	26:14:1372:U:C5	2.80	0.50
26:14:1771:C:O2'	26:14:1786:A:H8	1.94	0.50
26:14:1788:C:H2'	26:14:1789:A:C8	2.45	0.50
26:14:2080:G:H5'	48:F5:35:THR:OG1	2.12	0.50
26:14:2308:G:HO2'	26:14:2309:A:P	2.34	0.50
26:14:2420:C:N4	54:M5:31:HIS:O	2.44	0.50
27:1J:43:C:P	51:I5:6:HIS:HE1	2.34	0.50
39:65:85:VAL:HG22	39:65:110:LEU:HB2	1.94	0.50
45:C5:87:LYS:H	45:C5:94:LYS:HG2	1.77	0.50
1:13:129(A):G:C2	1:13:188:U:O2'	2.64	0.50
1:13:431:A:H2'	1:13:432:A:O4'	2.11	0.50
1:13:942:G:C2	1:13:943:U:C6	2.99	0.50
1:13:1051:C:H2'	1:13:1052:U:C6	2.46	0.50
1:13:1118:C:P	9:8E:104:ARG:HH11	2.35	0.50
1:13:1412:C:H2'	1:13:1413:A:C8	2.46	0.50
5:4E:29:GLY:HA2	5:4E:46:GLY:O	2.12	0.50
9:8E:114:TYR:HE2	10:1I:59:SER:HA	1.76	0.50
10:1I:47:PHE:CZ	14:5I:37:PHE:HE2	2.29	0.50
17:8I:48:GLU:O	17:8I:50:LYS:HG2	2.12	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:BI:25:ARG:HH11	20:BI:25:ARG:HG3	1.77	0.50
22:1K:13:G:H2'	22:1K:14:A:C8	2.45	0.50
26:1H:660:G:H21	36:78:12:ALA:HA	1.77	0.50
26:1H:870:A:OP1	37:88:6:ARG:NH2	2.45	0.50
26:1H:1001:A:H2'	26:1H:1002:G:O4'	2.12	0.50
26:1H:2749:A:H4'	32:51:62:LYS:HB3	1.93	0.50
1:1G:1324:A:H2'	1:1G:1325:C:C6	2.47	0.50
13:4A:60:VAL:HG13	13:4A:64:TRP:HE1	1.75	0.50
13:4A:90:LEU:HA	13:4A:93:ARG:HG3	1.94	0.50
15:6A:87:ILE:CG2	15:6A:88:ARG:H	2.20	0.50
26:14:773:U:O2'	28:19:48:ARG:HD3	2.11	0.50
26:14:882:G:H22	26:14:894:C:N4	2.08	0.50
26:14:981:A:N1	26:14:2027:G:O2'	2.33	0.50
26:14:1062:G:H2'	26:14:1063:G:C8	2.46	0.50
26:14:1330:C:OP1	59:14:3681:HOH:O	2.19	0.50
26:14:1432:C:H2'	26:14:1433:U:O4'	2.11	0.50
26:14:1569:A:H5'	28:19:61:LEU:HD21	1.93	0.50
26:14:2037:G:H2'	26:14:2038:G:C8	2.46	0.50
26:14:2748:A:H2'	26:14:2749:A:H8	1.77	0.50
26:14:2893:G:H4'	26:14:2894:G:O5'	2.12	0.50
28:19:267:SER:C	28:19:269:PHE:N	2.68	0.50
35:25:88:ASN:OD1	35:25:91:LEU:N	2.45	0.50
38:55:33:ARG:HA	38:55:115:GLU:HA	1.94	0.50
1:13:114:U:H2'	1:13:115:G:C8	2.47	0.50
1:13:352:C:O2'	1:13:354:G:OP1	2.19	0.50
1:13:692:U:O2'	1:13:694:A:N7	2.31	0.50
1:13:964:A:N3	1:13:969:A:O2'	2.34	0.50
17:8I:45:HIS:O	17:8I:73:VAL:HG23	2.12	0.50
20:BI:25:ARG:HG2	20:BI:29:LYS:HE3	1.94	0.50
20:BI:35:THR:HA	20:BI:38:LYS:HD3	1.94	0.50
24:3K:20:C:H5"	24:3K:68:A:H62	1.77	0.50
26:1H:152:G:H2'	26:1H:153:C:C6	2.47	0.50
26:1H:322:A:P	30:31:168:ARG:HH21	2.35	0.50
26:1H:483:A:O4'	45:G8:48:ALA:HB1	2.12	0.50
26:1H:1359:A:C2	26:1H:1372:U:O4	2.65	0.50
26:1H:1408:C:C2	26:1H:1595:G:N2	2.79	0.50
26:1H:2154:G:H2'	26:1H:2155:G:C8	2.47	0.50
30:31:10:PRO:O	30:31:124:LEU:HD12	2.12	0.50
32:51:25:LYS:HG2	32:51:34:GLU:HG2	1.94	0.50
41:C8:28:ARG:HH11	41:C8:38:THR:HG1	1.58	0.50
46:H8:48:PHE:HE1	46:H8:71:VAL:HG11	1.76	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:604:G:H2'	1:1G:605:U:O4'	2.11	0.50
1:1G:1053:G:H4'	1:1G:1054:C:H5'	1.93	0.50
1:1G:1129:C:C4	1:1G:1142:G:O6	2.65	0.50
9:82:42:ARG:NH1	9:82:71:SER:O	2.45	0.50
10:1A:30:SER:HB2	10:1A:81:THR:HG22	1.93	0.50
11:2A:86:GLY:N	11:2A:112:THR:OG1	2.44	0.50
18:9A:53:ARG:NH2	18:9A:60:ALA:H	2.07	0.50
20:BA:99:LEU:HD12	20:BA:99:LEU:H	1.77	0.50
55:3L:18:G:O2'	26:14:2112:G:O4'	2.29	0.50
26:14:51:G:N3	26:14:119:A:C2	2.80	0.50
26:14:614:U:H4'	26:14:615:G:OP1	2.12	0.50
26:14:635:C:H2'	26:14:636:G:O4'	2.12	0.50
26:14:1022:G:C6	26:14:1140:C:C4	3.00	0.50
26:14:1190:G:OP1	36:35:32:THR:HA	2.12	0.50
26:14:1790:C:H5"	26:14:1791:A:OP1	2.12	0.50
26:14:1820:U:O2	28:19:201:HIS:HB3	2.12	0.50
26:14:2275:C:H5'	26:14:2275:C:C6	2.47	0.50
26:14:2773:C:OP1	29:29:166:THR:OG1	2.29	0.50
27:1J:44:G:H5"	27:1J:45:A:OP1	2.12	0.50
33:69:68:LEU:HA	33:69:71:ILE:HG22	1.94	0.50
33:69:129:THR:HA	33:69:137:PRO:HA	1.93	0.50
37:45:21:THR:HB	37:45:23:GLY:HA3	1.94	0.50
38:55:10:LEU:O	38:55:12:ARG:HG3	2.11	0.50
39:65:59:LYS:HD2	39:65:60:GLY:N	2.27	0.50
40:75:26:ASP:O	40:75:49:VAL:HG22	2.11	0.50
41:85:98:LEU:C	41:85:100:VAL:H	2.18	0.50
51:I5:34:GLU:HG2	51:I5:35:VAL:N	2.27	0.50
1:13:438:G:H4'	4:3E:123:HIS:CE1	2.47	0.50
1:13:953:G:H5'	1:13:965:A:H61	1.76	0.50
1:13:1497:G:C2'	1:13:1498:U:H5'	2.42	0.50
26:1H:277:C:C5	26:1H:278:A:H1'	2.46	0.50
26:1H:879:G:O5'	26:1H:879:G:H8	1.95	0.50
26:1H:1288:U:C2	26:1H:1327:C:O2	2.64	0.50
26:1H:1337:G:H2'	26:1H:1338:G:C8	2.46	0.50
28:11:10:THR:OG1	28:11:13:ARG:HB2	2.12	0.50
1:1G:980:C:H3'	1:1G:981:U:H6	1.77	0.50
3:22:22:TRP:CZ3	3:22:32:LEU:HB3	2.47	0.50
9:82:119:ALA:O	9:82:120:ARG:HB2	2.12	0.50
24:1L:6:G:O6	24:1L:75:C:N4	2.44	0.50
26:14:389:G:H22	36:35:72:PRO:HD3	1.77	0.50
26:14:833:U:O4'	36:35:52:GLU:HA	2.12	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2875:C:O2'	40:75:3:ARG:NE	2.45	0.50
44:B5:50:LYS:H	44:B5:83:VAL:HG23	1.77	0.50
45:C5:75:ILE:O	45:C5:76:CYS:HB3	2.11	0.50
1:13:128:G:H5'	17:8I:2:PRO:O	2.12	0.49
1:13:377:G:H1	1:13:386:C:H42	1.58	0.49
1:13:665:A:N3	1:13:732:C:H2'	2.27	0.49
1:13:812:C:OP1	1:13:903:G:H1'	2.11	0.49
1:13:1266:G:N2	1:13:1270:C:N3	2.60	0.49
2:1E:60:ASP:HB3	2:1E:64:ARG:NH1	2.27	0.49
2:1E:97:TRP:HZ2	2:1E:102:LEU:HD13	1.76	0.49
2:1E:144:ARG:HG3	2:1E:145:LEU:N	2.25	0.49
4:3E:128:VAL:HG22	4:3E:146:ILE:HG23	1.92	0.49
5:4E:27:ARG:HG3	5:4E:28:PHE:N	2.28	0.49
17:8I:9:VAL:HG12	17:8I:10:VAL:H	1.77	0.49
26:1H:7:G:C2	26:1H:8:A:H1'	2.47	0.49
26:1H:298:G:N7	59:1H:3942:HOH:O	2.35	0.49
26:1H:699:A:H2'	26:1H:700:G:O4'	2.11	0.49
26:1H:1336:A:H2'	26:1H:1337:G:C8	2.47	0.49
26:1H:1479:G:O2'	26:1H:1558:A:H5'	2.12	0.49
26:1H:1900:A:C8	26:1H:1900:A:C5'	2.94	0.49
26:1H:2788:C:O2'	26:1H:2809:A:N3	2.45	0.49
36:78:31:ALA:O	36:78:32:THR:HG22	2.11	0.49
36:78:68:GLN:OE1	36:78:68:GLN:HA	2.10	0.49
38:98:24:GLN:OE1	38:98:36:THR:HG21	2.10	0.49
1:1G:543:C:C2'	1:1G:544:G:H5'	2.42	0.49
13:4A:23:TYR:CE2	13:4A:70:LEU:HB3	2.47	0.49
19:AA:42:PRO:HA	19:AA:45:VAL:HG13	1.94	0.49
26:14:836:G:H2'	26:14:837:C:C6	2.46	0.49
26:14:2682:U:C5	29:29:11:MET:HE2	2.47	0.49
29:29:103:ASP:OD2	29:29:168:MET:HE2	2.12	0.49
37:45:27:VAL:HG13	46:D5:81:ARG:NH2	2.25	0.49
2:1E:76:GLN:HA	2:1E:208:ILE:HG12	1.93	0.49
3:2E:83:ARG:O	3:2E:86:VAL:HG22	2.12	0.49
7:6E:65:ALA:HB1	7:6E:127:ALA:HB3	1.94	0.49
11:2I:29:ILE:HB	11:2I:44:SER:HB2	1.92	0.49
12:3I:47:LYS:HG3	12:3I:47:LYS:O	2.11	0.49
15:6I:55:GLY:HA2	15:6I:58:MET:HE3	1.93	0.49
26:1H:270(K):C:N3	26:1H:270(M):U:H5"	2.27	0.49
26:1H:674:G:H1'	30:31:74:ARG:HD3	1.94	0.49
26:1H:919:G:H4'	27:16:81:G:H4'	1.94	0.49
26:1H:2134:A:OP2	26:1H:2157:G:N2	2.45	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:11:12:SER:O	28:11:16:MET:HB2	2.12	0.49
30:31:29:ASN:N	30:31:112:MET:HE1	2.19	0.49
31:41:84:LYS:O	31:41:84:LYS:HG2	2.12	0.49
32:51:43:VAL:HG12	32:51:52:VAL:HG13	1.93	0.49
45:G8:11:ASP:O	45:G8:26:LYS:HG3	2.11	0.49
45:G8:39:VAL:HB	45:G8:42:VAL:HG11	1.94	0.49
1:1G:464:G:C6	1:1G:466:C:H5'	2.47	0.49
1:1G:620:C:H2'	1:1G:621:A:O4'	2.12	0.49
1:1G:713:G:H2'	1:1G:714:G:C8	2.47	0.49
5:42:34:VAL:HG21	5:42:63:ARG:HG2	1.93	0.49
7:62:120:ILE:O	7:62:124:LEU:HB2	2.12	0.49
9:82:26:VAL:HG22	9:82:61:ALA:N	2.28	0.49
10:1A:65:LEU:HD12	14:5A:55:GLY:O	2.12	0.49
17:8A:45:HIS:CD2	17:8A:47:PRO:HD3	2.47	0.49
19:AA:50:ALA:HB1	19:AA:57:HIS:HB3	1.94	0.49
24:1L:9:U:H5"	24:1L:11:C:H5	1.77	0.49
26:14:77:C:OP1	49:G5:59:ARG:HD3	2.11	0.49
26:14:730:C:H2'	26:14:731:C:H6	1.77	0.49
26:14:768:G:H2'	26:14:769:G:H8	1.77	0.49
26:14:770:G:H5"	26:14:771:G:OP2	2.12	0.49
26:14:1141:U:H3'	34:15:63:THR:HG21	1.94	0.49
26:14:1249:U:O2'	26:14:1250:G:O5'	2.30	0.49
26:14:1462:C:H4'	26:14:2703:C:H5'	1.94	0.49
26:14:2401:U:H2'	26:14:2402:C:H5"	1.95	0.49
26:14:2873:A:H8	38:55:6:SER:N	2.10	0.49
27:1J:28:C:H2'	27:1J:29:A:H8	1.77	0.49
27:1J:104:A:H2'	27:1J:105:G:O4'	2.12	0.49
28:19:120:GLY:HA2	28:19:190:TYR:OH	2.11	0.49
48:F5:7:ILE:HD13	48:F5:91:LYS:HE3	1.93	0.49
1:13:1014:A:H2	1:13:1219:U:H1'	1.77	0.49
1:13:1342:C:O2'	9:8E:124:GLN:HG3	2.12	0.49
1:13:1434:A:H2'	1:13:1435:G:O4'	2.13	0.49
5:4E:76:ILE:HG13	5:4E:93:PRO:HB3	1.92	0.49
6:5E:16:GLN:HA	6:5E:19:LEU:HB2	1.93	0.49
11:2I:85:ARG:HG2	11:2I:113:PRO:HD3	1.94	0.49
22:1K:18:G:N2	22:1K:66:G:H1'	2.27	0.49
26:1H:274:G:H8	26:1H:274:G:H3'	1.76	0.49
26:1H:580:C:H2'	26:1H:581:C:C6	2.46	0.49
26:1H:1055:G:H1'	26:1H:1085:A:C2	2.46	0.49
26:1H:1287:A:N7	38:98:107:ASP:HB2	2.27	0.49
26:1H:2081:C:H2'	26:1H:2082:A:C8	2.47	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:11:146:GLU:HG3	28:11:190:TYR:H	1.77	0.49
30:31:101:LEU:HD22	30:31:102:PRO:HD2	1.93	0.49
37:88:45:GLN:CD	37:88:45:GLN:H	2.20	0.49
41:C8:75:ASN:HB3	41:C8:77:SER:N	2.27	0.49
45:G8:29:GLU:HB3	45:G8:38:ILE:CG2	2.42	0.49
53:P8:23:ARG:HH11	53:P8:23:ARG:HG3	1.77	0.49
1:1G:338:A:C5	1:1G:339:C:C5	3.01	0.49
1:1G:371:G:O2'	1:1G:373:A:N7	2.43	0.49
1:1G:406:G:C2	1:1G:407:G:C8	3.00	0.49
5:42:51:VAL:O	5:42:55:VAL:HG23	2.13	0.49
9:82:4:TYR:HB2	9:82:19:LEU:HB2	1.94	0.49
26:14:33:U:H4'	26:14:34:C:OP1	2.11	0.49
26:14:270:A:H5"	48:F5:98:LEU:HD22	1.93	0.49
26:14:1252:G:N3	41:85:33:ARG:HD2	2.28	0.49
26:14:1385:G:O2'	26:14:1396:U:H6	1.96	0.49
26:14:1658:C:OP1	59:14:3535:HOH:O	2.19	0.49
26:14:1856:G:N2	26:14:1886:C:N3	2.50	0.49
26:14:2557:G:H2'	26:14:2558:C:H6	1.76	0.49
28:19:41:GLY:HA3	28:19:43:ARG:HD3	1.95	0.49
29:29:103:ASP:OD1	29:29:201:THR:HG23	2.13	0.49
30:39:21:ALA:C	30:39:23:ASP:H	2.19	0.49
30:39:122:LYS:HD2	30:39:191:ARG:HB3	1.94	0.49
39:65:87:PHE:HD2	39:65:88:ASP:O	1.95	0.49
1:13:244:U:H4'	1:13:245:C:O5'	2.12	0.49
1:13:615:C:C2	1:13:616:G:C8	3.01	0.49
1:13:664:G:N2	1:13:741:G:H1	1.98	0.49
1:13:706:A:N3	11:2I:31:THR:HG21	2.28	0.49
1:13:748:C:H6	1:13:748:C:O5'	1.95	0.49
1:13:1306:A:H61	1:13:1331:G:H1'	1.78	0.49
1:13:1510:U:H2'	1:13:1511:G:C8	2.47	0.49
8:7E:123:GLU:O	8:7E:127:LEU:HB2	2.13	0.49
14:5I:25:VAL:HG22	14:5I:38:GLY:O	2.13	0.49
26:1H:507:A:H5"	26:1H:508:G:H3'	1.94	0.49
26:1H:674:G:C1'	30:31:74:ARG:HD3	2.42	0.49
26:1H:1731:G:H2'	26:1H:1732:A:C8	2.46	0.49
26:1H:2862:G:H2'	26:1H:2863:C:H6	1.78	0.49
37:88:33:GLY:HA2	37:88:105:GLU:HA	1.95	0.49
46:H8:77:ASP:HB3	46:H8:84:GLU:CD	2.38	0.49
1:1G:595:G:H1'	1:1G:596:C:H5	1.76	0.49
1:1G:1281:U:OP2	1:1G:1282:C:N4	2.42	0.49
4:32:111:ALA:HB2	4:32:120:LEU:HD12	1.93	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:62:62:PHE:HA	7:62:124:LEU:HD21	1.94	0.49
8:72:82:HIS:CD2	8:72:82:HIS:C	2.90	0.49
8:72:82:HIS:HB3	8:72:138:TRP:CZ3	2.47	0.49
23:2L:73:A:C6	23:2L:74:A:C6	3.00	0.49
26:14:278:A:H8	26:14:278:A:OP2	1.95	0.49
26:14:1176:G:H5'	26:14:1177:A:OP1	2.11	0.49
26:14:1291:C:H2'	26:14:1292:U:H6	1.77	0.49
26:14:2062:A:HO2'	26:14:2063:C:P	2.35	0.49
26:14:2197:U:H1'	26:14:2198:A:C8	2.47	0.49
26:14:2313:C:OP1	31:49:71:THR:HG21	2.12	0.49
26:14:2578:G:C5	29:29:140:SER:HB3	2.48	0.49
26:14:2842:G:N2	40:75:3:ARG:HH22	2.10	0.49
27:1J:45:A:OP2	31:49:96:ARG:HD2	2.12	0.49
34:15:111:PRO:HA	34:15:114:ARG:NH1	2.26	0.49
36:35:30:THR:HG21	36:35:35:HIS:H	1.77	0.49
45:C5:86:ARG:HG3	45:C5:87:LYS:N	2.27	0.49
46:D5:7:ALA:O	46:D5:8:TYR:CG	2.65	0.49
48:F5:86:SER:N	48:F5:87:PRO:HD2	2.27	0.49
1:13:110:C:H2'	1:13:111:G:O4'	2.13	0.49
1:13:246:A:C2	1:13:282:A:C5	3.01	0.49
1:13:1347:G:H22	1:13:1374:A:P	2.35	0.49
3:2E:15:THR:HG22	3:2E:16:ARG:N	2.27	0.49
9:8E:21:PRO:HA	9:8E:59:PHE:HA	1.95	0.49
26:1H:733:G:C8	59:1H:3893:HOH:O	2.66	0.49
26:1H:822:U:OP2	59:1H:3930:HOH:O	2.20	0.49
26:1H:1055:G:H2'	26:1H:1056:G:O4'	2.12	0.49
26:1H:2305:A:O2'	31:41:136:ARG:NH1	2.45	0.49
26:1H:2432:A:C4	48:J8:33:LYS:HG2	2.46	0.49
27:16:71:C:C2	27:16:72:G:C8	3.00	0.49
28:11:70:TRP:CD1	28:11:70:TRP:C	2.90	0.49
30:31:185:ASP:HA	30:31:188:ARG:HD3	1.95	0.49
38:98:44:LEU:O	38:98:45:ARG:C	2.55	0.49
1:1G:233:C:H2'	1:1G:234:C:H6	1.76	0.49
1:1G:421:U:O2'	1:1G:423:G:N7	2.45	0.49
1:1G:986:A:H2'	1:1G:987:G:O4'	2.13	0.49
1:1G:1002:G:H2'	1:1G:1003:G:H8	1.78	0.49
26:14:142:G:H2'	26:14:143:C:C6	2.47	0.49
26:14:1505:C:H2'	26:14:1506:C:C6	2.48	0.49
26:14:2802:G:H2'	26:14:2803:C:O4'	2.13	0.49
27:1J:28:C:H2'	27:1J:29:A:C8	2.48	0.49
29:29:7:VAL:HG12	29:29:8:LYS:H	1.77	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:29:41:LYS:HG3	29:29:42:ASP:H	1.76	0.49
30:39:135:LYS:HB3	30:39:138:GLU:HG3	1.94	0.49
48:F5:29:GLY:O	48:F5:30:VAL:HG22	2.12	0.49
1:13:280:C:H3'	1:13:281:G:H5'	1.94	0.49
26:1H:219:G:C2'	26:1H:220:G:H5'	2.43	0.49
26:1H:1319:G:C6	26:1H:1320:C:N4	2.80	0.49
26:1H:2261:C:H1'	26:1H:2388:A:N3	2.27	0.49
49:K8:53:LEU:O	49:K8:57:ILE:HG13	2.11	0.49
1:1G:192:U:O4'	20:BA:103:GLY:HA2	2.13	0.49
1:1G:999:U:H2'	1:1G:1000:A:H8	1.74	0.49
7:62:14:PRO:HB3	7:62:19:GLY:O	2.13	0.49
55:3L:8:U:H3	55:3L:14:A:N6	2.11	0.49
55:3L:35:G:H2'	55:3L:36:U:H6	1.78	0.49
26:14:596:G:H2'	26:14:597:U:O4'	2.13	0.49
26:14:601:C:O2	26:14:605:C:H4'	2.13	0.49
26:14:1321:A:H2'	26:14:1322:A:O4'	2.13	0.49
26:14:1329:U:H5"	26:14:1330:C:C5	2.46	0.49
26:14:1894:C:C2'	26:14:1895:C:H5'	2.42	0.49
26:14:2150:U:H2'	26:14:2151:G:C8	2.44	0.49
26:14:2262:U:O2'	26:14:2263:C:H5'	2.12	0.49
27:1J:116:G:C5'	39:65:55:ALA:HB2	2.43	0.49
30:39:36:VAL:HG11	30:39:183:VAL:HG11	1.95	0.49
31:49:131:TYR:O	31:49:159:VAL:HG22	2.12	0.49
32:59:6:ARG:HG2	32:59:7:LEU:N	2.28	0.49
42:95:37:VAL:HG21	42:95:57:VAL:HG12	1.95	0.49
43:A5:71:VAL:HA	43:A5:107:LEU:HD12	1.93	0.49
45:C5:54:LYS:C	45:C5:55:TYR:CG	2.90	0.49
49:G5:38:GLN:O	49:G5:41:ILE:HG12	2.13	0.49
51:I5:13:ARG:HA	51:I5:22:ILE:HB	1.94	0.49
1:13:624:C:O3'	16:7I:10:GLY:HA2	2.13	0.49
1:13:989:C:H42	1:13:1216:G:H1	1.60	0.49
1:13:1003:G:N2	1:13:1004:A:O2'	2.46	0.49
2:1E:102:LEU:HB3	2:1E:180:LEU:CD1	2.43	0.49
7:6E:147:ALA:HB1	24:3K:41:C:H4'	1.93	0.49
10:1I:77:PRO:HB2	10:1I:79:ARG:NH1	2.27	0.49
13:4I:82:MET:C	13:4I:84:ILE:H	2.20	0.49
19:AI:7:LYS:HB3	19:AI:7:LYS:HZ3	1.78	0.49
23:2K:6:G:H1	23:2K:68:C:H42	1.60	0.49
26:1H:1509:C:H3'	26:1H:1510:A:H4'	1.95	0.49
26:1H:2658:C:H5"	32:51:158:HIS:CE1	2.47	0.49
30:31:178:PRO:HB3	30:31:198:ALA:HA	1.94	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:51:153:LYS:CB	32:51:162:ILE:H	2.23	0.49
42:D8:65:GLY:HA3	42:D8:91:TYR:CZ	2.48	0.49
54:Q8:58:ILE:HG22	54:Q8:59:LYS:HG2	1.95	0.49
1:1G:80:G:H2'	1:1G:81:G:C8	2.47	0.49
1:1G:431:A:H2'	1:1G:432:A:C8	2.47	0.49
1:1G:742:G:P	15:6A:35:ARG:HH22	2.34	0.49
1:1G:1112:C:C4	3:22:178:LEU:HD23	2.47	0.49
1:1G:1280:A:OP1	10:1A:40:LEU:HD21	2.13	0.49
1:1G:1321:C:H4'	13:4A:87:TYR:CE1	2.48	0.49
1:1G:1356:G:H2'	1:1G:1357:A:C8	2.47	0.49
8:72:37:ARG:HH21	8:72:38:ILE:HD11	1.78	0.49
17:8A:67:LYS:O	17:8A:68:ARG:HB3	2.11	0.49
23:2L:48:U:HO2'	23:2L:49:C:P	2.36	0.49
26:14:2023:G:OP2	26:14:2617:C:H4'	2.13	0.49
26:14:2805:G:H2'	26:14:2807:G:C8	2.48	0.49
27:1J:42:C:H5"	31:49:69:ALA:HB2	1.95	0.49
28:19:267:SER:C	28:19:269:PHE:H	2.20	0.49
1:13:324:G:OP1	20:BI:22:ARG:HG2	2.13	0.49
1:13:1004:A:H1'	1:13:1036:G:N2	2.27	0.49
24:3K:12:C:H2'	24:3K:13:G:O4'	2.13	0.49
26:1H:748:G:OP2	43:E8:88:ARG:HG3	2.13	0.49
26:1H:749:C:C5	26:1H:1618:A:C6	3.01	0.49
26:1H:773:U:H4'	28:11:47:GLY:HA3	1.95	0.49
26:1H:1359:A:N6	26:1H:1372:U:H3	2.10	0.49
29:21:195:LEU:HG	29:21:196:VAL:N	2.28	0.49
32:51:86:GLU:HG3	32:51:165:ALA:CB	2.42	0.49
33:61:128:LEU:O	33:61:138:ILE:HG22	2.13	0.49
36:78:59:LEU:H	36:78:61:ARG:HD3	1.78	0.49
39:A8:93:LYS:HG2	39:A8:95:HIS:HB2	1.94	0.49
43:E8:24:ILE:HD12	43:E8:24:ILE:O	2.13	0.49
1:1G:164:U:H2'	1:1G:165:C:H6	1.78	0.49
1:1G:537:G:H5"	12:3A:113:ARG:NH1	2.28	0.49
1:1G:1218:C:H2'	1:1G:1219:U:C6	2.48	0.49
1:1G:1287:A:H2'	1:1G:1288:A:C8	2.48	0.49
1:1G:1422:G:O3'	35:25:49:ARG:NH1	2.38	0.49
4:32:9:CYS:O	4:32:13:ARG:HG2	2.12	0.49
14:5A:15:LYS:HG3	14:5A:16:PHE:CD2	2.48	0.49
15:6A:48:LYS:HA	15:6A:48:LYS:HZ3	1.77	0.49
26:14:270:A:OP2	26:14:270(Y):G:N2	2.32	0.49
26:14:717:G:H2'	26:14:718:A:O4'	2.13	0.49
26:14:934:G:H2'	26:14:935:C:H6	1.78	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2355:C:H5”	26:14:2356:C:OP2	2.12	0.49
26:14:2361:A:OP1	54:M5:26:LYS:HD3	2.12	0.49
27:1J:39:A:N1	51:I5:1:MET:N	2.49	0.49
28:19:67:PHE:HE1	28:19:106:ILE:HD11	1.78	0.49
30:39:117:ARG:HH12	36:35:1:MET:H2	1.60	0.49
1:13:501:C:OP2	12:3I:124:LYS:HE2	2.13	0.49
1:13:735:C:O2’	1:13:736:C:H5’	2.13	0.49
1:13:1455:G:OP1	20:BI:35:THR:OG1	2.16	0.49
4:3E:207:TYR:O	4:3E:209:ARG:HG2	2.13	0.49
6:5E:39:LYS:HD3	6:5E:64:GLN:HG3	1.94	0.49
22:1K:18:G:O2’	26:1H:883:G:OP1	2.29	0.49
26:1H:336:C:OP1	45:G8:83:THR:HG23	2.12	0.49
26:1H:667:U:O2	54:Q8:2:PRO:HD2	2.12	0.49
26:1H:1443:G:N2	26:1H:1549:C:C2	2.81	0.49
26:1H:2208:U:H4’	28:11:151:LYS:HG2	1.94	0.49
28:11:124:PRO:HG2	28:11:129:ASN:ND2	2.28	0.49
29:21:147:PRO:HB2	29:21:149:ARG:HG2	1.95	0.49
30:31:164:ARG:HG3	30:31:175:THR:OG1	2.13	0.49
35:68:23:ARG:HG3	35:68:24:VAL:N	2.25	0.49
36:78:20:GLY:HA2	36:78:27:HIS:O	2.13	0.49
39:A8:34:HIS:CE1	39:A8:54:LEU:HD23	2.48	0.49
46:H8:61:LEU:HD22	46:H8:67:LEU:HD12	1.95	0.49
1:1G:428:G:O4’	1:1G:430:A:C8	2.66	0.49
1:1G:485:G:HO2’	1:1G:486:U:H6	1.61	0.49
1:1G:1108:G:H5’	3:22:176:HIS:HD1	1.77	0.49
4:32:126:ILE:HG22	4:32:127:THR:H	1.78	0.49
5:42:147:ASP:O	5:42:151:LEU:HG	2.13	0.49
55:3L:19:C:O2’	55:3L:21:A:OP1	2.19	0.49
26:14:276:A:H2’	26:14:277:C:C6	2.48	0.49
26:14:2208:U:H4’	28:19:151:LYS:HG2	1.95	0.49
26:14:2523:G:H5’	26:14:2523:G:C8	2.41	0.49
38:55:48:VAL:HA	38:55:51:LEU:HD12	1.94	0.49
41:85:88:ILE:HG22	42:95:49:THR:HA	1.94	0.49
42:95:30:GLY:H	42:95:61:VAL:HB	1.78	0.49
45:C5:87:LYS:CG	45:C5:88:LYS:H	2.26	0.49
48:F5:45:ASN:O	48:F5:63:ALA:HA	2.13	0.49
54:M5:30:ARG:HD2	54:M5:31:HIS:H	1.78	0.49
1:13:667:G:H4’	15:6I:51:HIS:CE1	2.48	0.49
1:13:820:U:H4’	1:13:821:G:OP2	2.12	0.49
1:13:1060:C:C4	3:2E:2:GLY:HA3	2.47	0.49
2:1E:21:ARG:C	2:1E:23:ARG:H	2.21	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:3E:9:CYS:O	4:3E:13:ARG:HG2	2.12	0.49
4:3E:30:LYS:HB2	4:3E:32:ALA:HA	1.95	0.49
4:3E:111:ALA:HB2	4:3E:120:LEU:CD1	2.43	0.49
4:3E:150:GLU:HA	4:3E:153:ARG:HG3	1.95	0.49
26:1H:139:G:N3	26:1H:141:A:N1	2.61	0.49
26:1H:242:G:H5"	54:Q8:62:LEU:HD13	1.95	0.49
26:1H:537:C:H2'	26:1H:539:G:C8	2.48	0.49
26:1H:1021:A:H8	26:1H:1021:A:H3'	1.77	0.49
26:1H:1310:G:OP2	53:P8:9:ARG:NH1	2.46	0.49
26:1H:1478:G:O2'	26:1H:1558:A:H2	1.96	0.49
26:1H:1635:G:H2'	26:1H:1636:C:C6	2.48	0.49
26:1H:1882:C:H2'	26:1H:1883:G:O4'	2.12	0.49
26:1H:2033:A:H8	59:1H:3887:HOH:O	1.95	0.49
26:1H:2068:U:N3	26:1H:2430:A:C2	2.78	0.49
26:1H:2246:G:H2'	26:1H:2247:A:C8	2.47	0.49
27:16:5:C:O2'	27:16:27:C:O2	2.31	0.49
28:11:147:LEU:HD22	28:11:155:LEU:HD11	1.93	0.49
29:21:51:PHE:HD2	29:21:52:LEU:HG	1.75	0.49
33:61:86:THR:HA	33:61:123:LEU:HD13	1.94	0.49
33:61:130:TYR:O	33:61:135:GLU:HB2	2.13	0.49
35:68:7:TYR:CE1	35:68:20:MET:HE3	2.46	0.49
46:H8:19:ARG:HD3	46:H8:25:PRO:HD2	1.95	0.49
47:I8:53:MET:HB2	47:I8:59:LEU:CD2	2.42	0.49
52:N8:50:GLY:N	52:N8:56:LYS:HG3	2.28	0.49
1:1G:54:C:N4	1:1G:353:A:OP2	2.37	0.49
1:1G:186:C:C1'	20:BA:81:LYS:HZ3	2.25	0.49
1:1G:306:G:H2'	1:1G:307:C:H6	1.78	0.49
1:1G:353:A:H5'	1:1G:353:A:C8	2.42	0.49
1:1G:1281:U:H3'	1:1G:1282:C:H5	1.77	0.49
3:22:111:LEU:HD11	3:22:144:SER:HB3	1.95	0.49
4:32:149:ALA:O	4:32:153:ARG:HG2	2.13	0.49
5:42:10:MET:HA	5:42:32:VAL:HG22	1.95	0.49
14:5A:27:CYS:O	14:5A:27:CYS:SG	2.70	0.49
16:7A:9:PHE:CE1	16:7A:18:ARG:HG3	2.48	0.49
18:9A:29:PHE:N	18:9A:29:PHE:CD1	2.79	0.49
26:14:54:G:O2'	53:L5:35:ARG:HD3	2.12	0.49
26:14:751:A:P	59:14:3418:HOH:O	2.70	0.49
26:14:2306:C:H3'	26:14:2307:G:H5"	1.94	0.49
26:14:2791:C:H4'	26:14:2791:C:OP2	2.13	0.49
30:39:11:VAL:HG23	30:39:12:LEU:H	1.78	0.49
32:59:58:GLU:HB2	32:59:61:HIS:CD2	2.48	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:59:136:ILE:H	32:59:136:ILE:HD12	1.78	0.49
44:B5:36:LYS:HG2	44:B5:54:VAL:HB	1.95	0.49
45:C5:86:ARG:NE	45:C5:87:LYS:O	2.46	0.49
51:I5:40:HIS:CG	51:I5:45:GLY:HA3	2.48	0.49
54:M5:36:LYS:HG3	54:M5:37:SER:H	1.76	0.49
1:13:61:G:H2'	1:13:62:U:O4'	2.13	0.48
1:13:1060:C:H5"	10:1I:51:ARG:HG2	1.94	0.48
1:13:1288:A:H2'	1:13:1289:A:C8	2.47	0.48
1:13:1288:A:H2'	1:13:1289:A:H8	1.78	0.48
6:5E:23:LYS:NZ	6:5E:23:LYS:HB2	2.26	0.48
26:1H:143:C:H4'	44:F8:38:GLU:OE2	2.13	0.48
26:1H:2002:G:H8	26:1H:2002:G:O5'	1.96	0.48
26:1H:2239:G:H5'	28:11:251:GLY:HA3	1.95	0.48
26:1H:2453:A:H2'	26:1H:2454:G:O4'	2.13	0.48
26:1H:2663:G:H3'	26:1H:2664:G:H8	1.78	0.48
26:1H:2804:C:H2'	26:1H:2805:G:C8	2.47	0.48
33:61:110:ASP:HB2	33:61:112:LYS:HG2	1.95	0.48
39:A8:59:LYS:HD3	39:A8:60:GLY:H	1.77	0.48
40:B8:42:ILE:HG21	40:B8:84:GLN:NE2	2.28	0.48
41:C8:5:LYS:H	41:C8:5:LYS:HG3	1.44	0.48
51:M8:12:ALA:C	51:M8:24:THR:HG21	2.38	0.48
54:Q8:26:LYS:HE2	54:Q8:47:LYS:HG2	1.94	0.48
1:1G:27:G:H2'	1:1G:28:G:O4'	2.13	0.48
1:1G:448:A:H2'	1:1G:449:C:O2	2.12	0.48
1:1G:628:G:H2'	1:1G:629:G:C8	2.48	0.48
1:1G:750:G:N3	15:6A:23:GLY:HA3	2.28	0.48
1:1G:1159:U:C4'	1:1G:1181:G:H22	2.25	0.48
1:1G:1259:C:N4	1:1G:1260:C:O2	2.46	0.48
1:1G:1270:C:OP2	21:1B:24:ARG:NH2	2.45	0.48
1:1G:1277:C:HO2'	1:1G:1279:A:H8	1.54	0.48
5:42:93:PRO:HG3	8:72:105:ARG:HG3	1.95	0.48
8:72:53:VAL:HB	8:72:58:TYR:CD1	2.47	0.48
16:7A:75:ARG:HG3	16:7A:80:PHE:CD2	2.48	0.48
19:AA:66:MET:HE2	51:I5:59:PHE:HD2	1.78	0.48
26:14:903:C:H2'	26:14:904:C:C6	2.48	0.48
26:14:1028:A:N6	26:14:1125:G:H2'	2.28	0.48
26:14:1054:A:H3'	26:14:1055:G:H8	1.78	0.48
26:14:1444(A):A:H2'	26:14:1444(A):A:N3	2.27	0.48
26:14:1688:U:O2	26:14:1700:A:H5'	2.14	0.48
26:14:1769:G:O2'	26:14:1958:C:OP1	2.20	0.48
30:39:80:ALA:O	30:39:83:PHE:HB2	2.12	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:35:107:LYS:O	36:35:109:GLY:N	2.44	0.48
37:45:89:ASN:HD22	37:45:89:ASN:C	2.20	0.48
49:G5:47:ASN:HD22	49:G5:47:ASN:H	1.61	0.48
54:M5:61:LEU:C	54:M5:63:PRO:HD3	2.38	0.48
1:13:153:C:N4	1:13:168:G:H22	2.11	0.48
2:1E:209:ARG:HG3	2:1E:240:GLN:OE1	2.13	0.48
14:5I:39:LEU:HD11	14:5I:47:LEU:HD12	1.94	0.48
22:1K:20:C:O2'	22:1K:68:A:N6	2.43	0.48
26:1H:265:A:H1'	26:1H:266:G:O4'	2.13	0.48
26:1H:1543:A:C8	26:1H:1545:A:H5"	2.48	0.48
26:1H:1816:G:O6	28:11:35:LYS:NZ	2.37	0.48
26:1H:2470:G:H5'	37:88:56:ARG:NH2	2.28	0.48
33:61:38:LEU:H	33:61:38:LEU:HD12	1.77	0.48
34:58:90:MET:O	34:58:94:HIS:N	2.43	0.48
35:68:7:TYR:CZ	35:68:44:LYS:HG3	2.48	0.48
40:B8:17:THR:O	40:B8:17:THR:OG1	2.30	0.48
46:H8:107:THR:H	46:H8:109:ALA:HB2	1.78	0.48
49:K8:58:ALA:O	49:K8:62:THR:HG22	2.12	0.48
1:1G:736:C:H2'	1:1G:737:A:C8	2.48	0.48
1:1G:1240:U:H5'	1:1G:1241:G:H8	1.77	0.48
5:42:40:ARG:HH21	5:42:66:MET:HG2	1.77	0.48
5:42:76:ILE:O	5:42:93:PRO:HB3	2.14	0.48
8:72:20:TYR:HA	8:72:65:TYR:CZ	2.48	0.48
24:1L:23:A:N6	24:1L:24:G:N7	2.61	0.48
26:14:362:U:H5'	26:14:363:G:OP2	2.13	0.48
26:14:374:A:C2	26:14:401:A:C4	3.01	0.48
26:14:612:G:O2'	26:14:616:A:N1	2.43	0.48
26:14:843:G:H1	26:14:935:C:H42	1.61	0.48
26:14:1049:C:H42	26:14:2751:G:H1	1.60	0.48
26:14:1510:A:H2'	26:14:1511:A:O4'	2.13	0.48
26:14:1899:G:N2	26:14:1902:C:C5	2.81	0.48
26:14:2419:U:H2'	26:14:2420:C:H6	1.78	0.48
26:14:2791:C:N4	26:14:2805:G:H1	2.09	0.48
26:14:2850:A:C2	26:14:2851:A:C4	3.01	0.48
26:14:2869:G:H2'	26:14:2870:C:O4'	2.14	0.48
28:19:141:VAL:HG23	28:19:162:SER:HB2	1.95	0.48
29:29:7:VAL:HG21	40:75:1:MET:HE3	1.95	0.48
30:39:110:LEU:HD13	30:39:205:ARG:HG2	1.95	0.48
32:59:74:ASN:O	32:59:78:GLY:N	2.46	0.48
33:69:79:ILE:O	33:69:143:SER:N	2.41	0.48
41:85:49:HIS:HA	41:85:52:ARG:HB2	1.94	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:F5:92:LYS:O	48:F5:94:LEU:N	2.46	0.48
1:13:961:U:OP1	1:13:1223:C:O2'	2.25	0.48
4:3E:170:VAL:HG11	4:3E:174:LEU:HB2	1.94	0.48
9:8E:9:ARG:HD2	9:8E:14:VAL:HG13	1.94	0.48
19:AI:7:LYS:HG2	19:AI:7:LYS:O	2.12	0.48
26:1H:1204:A:H61	26:1H:1240:U:H2'	1.77	0.48
26:1H:1296:G:O2'	26:1H:1297:C:H5'	2.13	0.48
26:1H:1754:C:OP1	40:B8:96:ARG:NH1	2.46	0.48
26:1H:2864:G:H2'	26:1H:2865:U:O4'	2.12	0.48
30:31:152:GLU:HG3	30:31:191:ARG:HD2	1.95	0.48
31:41:178:PHE:HB3	31:41:180:PHE:HE1	1.78	0.48
35:68:34:THR:OG1	35:68:35:VAL:N	2.46	0.48
42:D8:35:LEU:HD23	42:D8:35:LEU:O	2.13	0.48
1:1G:1126:U:N3	1:1G:1281:U:O4'	2.46	0.48
1:1G:1137:C:O2'	1:1G:1138:G:N2	2.46	0.48
1:1G:1299:A:N1	1:1G:1301:U:N3	2.61	0.48
4:32:29:PRO:HD2	4:32:30:LYS:HE2	1.94	0.48
7:62:62:PHE:HA	7:62:124:LEU:CD2	2.43	0.48
11:2A:67:ASP:OD1	11:2A:71:LYS:NZ	2.35	0.48
18:9A:53:ARG:HA	18:9A:56:THR:OG1	2.13	0.48
19:AA:39:THR:OG1	19:AA:70:LYS:NZ	2.43	0.48
20:BA:79:ARG:O	20:BA:83:ARG:HG3	2.13	0.48
26:14:232:G:H8	26:14:232:G:OP2	1.97	0.48
26:14:1418:G:H2'	26:14:1579:A:N6	2.29	0.48
26:14:1614:A:N6	43:A5:88:ARG:H	2.10	0.48
26:14:1794:U:H2'	26:14:1795:C:C6	2.48	0.48
26:14:2537:U:H2'	26:14:2538:C:C6	2.48	0.48
26:14:2615:U:C2	52:J5:7:PRO:HA	2.47	0.48
28:19:32:SER:O	28:19:33:LEU:HB2	2.12	0.48
29:29:32:PRO:HA	29:29:90:THR:CG2	2.42	0.48
29:29:169:ASN:OD1	29:29:203:LYS:HG2	2.13	0.48
39:65:15:ARG:HD3	39:65:88:ASP:OD2	2.12	0.48
42:95:58:VAL:HB	42:95:97:LYS:HB3	1.94	0.48
46:D5:14:LYS:H	46:D5:14:LYS:HZ2	1.61	0.48
49:G5:18:PRO:O	49:G5:21:LEU:HB2	2.13	0.48
1:13:498:A:H4'	1:13:500:G:OP1	2.11	0.48
1:13:609:A:H2'	1:13:610:G:H5'	1.95	0.48
8:7E:6:ILE:HD13	8:7E:32:LYS:HG3	1.95	0.48
26:1H:547:A:H2'	26:1H:548:A:C8	2.49	0.48
26:1H:1448:G:H1'	26:1H:1528:A:H62	1.78	0.48
26:1H:1754:C:H5	40:B8:96:ARG:NH2	2.11	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1897:G:H2'	26:1H:1898:U:O4'	2.13	0.48
26:1H:2392:A:OP2	54:Q8:31:HIS:ND1	2.32	0.48
26:1H:2789:C:H1'	26:1H:2892:A:H2	1.78	0.48
28:11:68:LYS:HB3	28:11:70:TRP:CZ3	2.47	0.48
29:21:101:ARG:HG2	29:21:169:ASN:OD1	2.13	0.48
29:21:201:THR:HG22	29:21:202:LYS:N	2.27	0.48
31:41:104:GLU:CD	51:M8:23:GLU:HG3	2.39	0.48
31:41:109:VAL:O	31:41:113:ARG:HG3	2.13	0.48
33:61:1:MET:C	33:61:20:ASP:HB2	2.37	0.48
34:58:96:GLU:HG2	34:58:97:ARG:N	2.20	0.48
35:68:78:ARG:HB3	35:68:78:ARG:HH11	1.78	0.48
36:78:101:VAL:HG23	36:78:107:LYS:O	2.13	0.48
38:98:52:ILE:O	38:98:55:ALA:N	2.45	0.48
46:H8:126:VAL:HA	46:H8:164:ALA:H	1.78	0.48
1:1G:578:C:OP1	59:1G:1720:HOH:O	2.19	0.48
1:1G:1281:U:P	1:1G:1282:C:H41	2.36	0.48
2:12:71:VAL:HG21	2:12:164:VAL:HG22	1.94	0.48
2:12:74:LYS:HD2	2:12:166:ASP:HB2	1.94	0.48
2:12:178:ARG:HH22	2:12:196:LEU:HA	1.78	0.48
8:72:21:LYS:N	8:72:65:TYR:OH	2.47	0.48
26:14:152:G:O6	26:14:174:C:N4	2.46	0.48
26:14:654(J):A:H5'	26:14:654(K):C:OP2	2.13	0.48
26:14:774:A:H5'	26:14:778:G:H4'	1.95	0.48
26:14:2166:G:N2	26:14:2171:A:N7	2.61	0.48
26:14:2776:A:OP1	26:14:2776:A:H3'	2.13	0.48
26:14:2817:G:OP1	38:55:42:LYS:NZ	2.42	0.48
27:1J:19:G:H2'	27:1J:20:C:O4'	2.13	0.48
32:59:105:LEU:HG	32:59:113:VAL:O	2.14	0.48
37:45:22:LYS:N	37:45:23:GLY:HA3	2.28	0.48
1:13:136:C:O2'	16:7I:65:GLN:HG3	2.14	0.48
1:13:872:A:C4	1:13:874:G:N7	2.82	0.48
2:1E:20:GLU:HB3	2:1E:23:ARG:HB2	1.95	0.48
2:1E:28:PHE:O	2:1E:32:ILE:HG13	2.14	0.48
20:BI:50:GLU:HB2	20:BI:100:ILE:HB	1.94	0.48
26:1H:172:C:H2'	26:1H:173:G:C8	2.48	0.48
26:1H:1124:C:H2'	26:1H:1125:G:O4'	2.13	0.48
26:1H:1212:G:O2'	26:1H:1213:A:OP2	2.28	0.48
26:1H:1784:A:H5"	59:1H:3777:HOH:O	2.13	0.48
26:1H:2439:A:C8	26:1H:2439:A:C5'	2.95	0.48
26:1H:2638:G:OP2	29:21:82:ARG:NH2	2.46	0.48
28:11:17:THR:HG21	28:11:204:ILE:HA	1.95	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:11:245:PRO:HB2	28:11:253:GLN:HE21	1.78	0.48
34:58:96:GLU:O	34:58:98:VAL:N	2.45	0.48
41:C8:92:ARG:HB2	42:D8:11:GLN:NE2	2.28	0.48
45:G8:89:PHE:HD1	45:G8:90:LEU:N	2.11	0.48
1:1G:576:G:N2	1:1G:759:A:OP1	2.41	0.48
1:1G:991:U:O2	1:1G:993:G:H8	1.96	0.48
1:1G:1227:A:OP1	19:AA:80:TYR:OH	2.12	0.48
1:1G:1256:A:H4'	1:1G:1257:U:OP1	2.13	0.48
1:1G:1403:C:H1'	1:1G:1500:A:N1	2.28	0.48
2:12:88:ALA:HB2	2:12:219:VAL:HG23	1.96	0.48
2:12:101:MET:HA	2:12:101:MET:HE2	1.95	0.48
2:12:101:MET:O	2:12:105:PHE:HB2	2.14	0.48
11:2A:69:ALA:O	11:2A:73:MET:HG3	2.12	0.48
13:4A:57:ARG:NH2	51:I5:34:GLU:HB2	2.28	0.48
26:14:259:G:N2	26:14:621:A:H8	2.04	0.48
26:14:631:A:H2'	26:14:632:A:O4'	2.13	0.48
26:14:922:U:H2'	26:14:923:C:C6	2.49	0.48
26:14:1022:G:H8	34:15:69:GLN:HE22	1.61	0.48
26:14:1190:G:H2'	26:14:1191:G:H8	1.78	0.48
26:14:2065:C:H2'	26:14:2066:C:C6	2.48	0.48
26:14:2233:U:H2'	26:14:2234:G:C8	2.48	0.48
29:29:64:LYS:HB2	29:29:66:HIS:CD2	2.49	0.48
32:59:86:GLU:H	32:59:86:GLU:CD	2.22	0.48
35:25:7:TYR:CE1	35:25:20:MET:HB2	2.48	0.48
36:35:15:ARG:NH1	36:35:15:ARG:HB2	2.29	0.48
44:B5:67:GLY:C	44:B5:69:TYR:H	2.20	0.48
47:E5:26:TYR:N	47:E5:29:GLN:OE1	2.47	0.48
1:13:975:A:C4'	1:13:976:G:H5"	2.40	0.48
1:13:1149:C:H2'	1:13:1150:U:C6	2.49	0.48
5:4E:122:GLU:O	5:4E:123:LEU:HD23	2.14	0.48
7:6E:45:ASP:O	7:6E:49:ILE:HG13	2.13	0.48
8:7E:87:SER:HB2	8:7E:93:VAL:HB	1.95	0.48
12:3I:93:LEU:O	12:3I:96:VAL:HG13	2.14	0.48
12:3I:117:ARG:NH2	12:3I:124:LYS:HB2	2.29	0.48
15:6I:18:PHE:CZ	15:6I:21:ASP:HB2	2.48	0.48
16:7I:58:TYR:C	16:7I:58:TYR:CD1	2.91	0.48
20:BI:22:ARG:O	20:BI:26:ASN:ND2	2.47	0.48
26:1H:265:A:C8	26:1H:266:G:H1'	2.49	0.48
26:1H:274:G:H3'	26:1H:274:G:C8	2.49	0.48
26:1H:529:A:H8	26:1H:530:G:C6	2.32	0.48
26:1H:2377:A:H2'	26:1H:2378:A:C8	2.48	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2591:C:O3'	59:1H:3815:HOH:O	2.20	0.48
31:41:83:ARG:H	31:41:86:MET:CE	2.21	0.48
37:88:59:ARG:C	37:88:61:GLY:H	2.21	0.48
38:98:84:ALA:HB3	38:98:85:PRO:HD3	1.95	0.48
1:1G:34:C:H2'	1:1G:35:G:H8	1.76	0.48
1:1G:107:G:C2	1:1G:108:G:H1'	2.49	0.48
1:1G:1054:C:O2'	1:1G:1055:A:O5'	2.31	0.48
1:1G:1320:C:H2'	1:1G:1321:C:C6	2.49	0.48
1:1G:1512:U:H2'	1:1G:1513:A:H8	1.79	0.48
7:62:99:LEU:HD22	7:62:103:TRP:CZ2	2.48	0.48
26:14:702:G:C2	26:14:731:C:C2	3.02	0.48
26:14:1776:G:P	59:14:3454:HOH:O	2.70	0.48
26:14:2708:G:H5'	38:55:68:ARG:HG2	1.95	0.48
27:1J:0:A:H2'	27:1J:1:U:C6	2.48	0.48
33:69:131:LYS:HD2	33:69:131:LYS:N	2.28	0.48
37:45:18:LYS:H	37:45:98:LYS:NZ	2.11	0.48
44:B5:15:GLU:CD	44:B5:15:GLU:H	2.22	0.48
45:C5:63:LYS:NZ	45:C5:63:LYS:HA	2.27	0.48
1:13:341:C:C2'	1:13:342:C:H5'	2.43	0.48
1:13:703:G:H8	1:13:703:G:O5'	1.97	0.48
2:1E:94:ASN:OD1	2:1E:95:GLN:N	2.46	0.48
4:3E:173:TRP:CZ3	4:3E:193:ASP:HB3	2.49	0.48
5:4E:68:GLU:O	5:4E:70:PRO:HD3	2.13	0.48
7:6E:80:VAL:HG11	7:6E:85:TYR:HE2	1.78	0.48
24:3K:81:C:H2'	24:3K:82:A:O4'	2.13	0.48
26:1H:140:A:C8	26:1H:1408:C:O2'	2.66	0.48
26:1H:226:G:H21	26:1H:228:A:H2	1.62	0.48
26:1H:425:G:H2'	26:1H:426:C:H6	1.77	0.48
29:21:1:MET:HG2	29:21:83:ASP:O	2.13	0.48
46:H8:14:LYS:HA	46:H8:15:PRO:HD2	1.65	0.48
52:N8:16:ARG:HG3	52:N8:17:ASP:N	2.29	0.48
1:1G:562:C:H1'	12:3A:15:ARG:HD2	1.96	0.48
1:1G:1129:C:N4	1:1G:1139:G:H22	2.12	0.48
1:1G:1280:A:H5"	10:1A:40:LEU:HD11	1.96	0.48
12:3A:111:LYS:H	12:3A:111:LYS:HD2	1.78	0.48
26:14:1784:A:H4'	26:14:1785:A:C5'	2.44	0.48
26:14:2402:C:H5	26:14:2415:G:H22	1.61	0.48
27:1J:64:C:H2'	27:1J:65:C:C6	2.48	0.48
47:E5:51:VAL:C	47:E5:62:LEU:HD12	2.38	0.48
48:F5:91:LYS:NZ	48:F5:95:LEU:HD12	2.28	0.48
1:13:129(A):G:H4'	1:13:130:A:H5"	1.95	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:186(B):C:O4'	20:BI:89:ARG:NH2	2.47	0.48
1:13:253:U:OP2	17:8I:67:LYS:NZ	2.40	0.48
1:13:975:A:O2'	14:5I:32:SER:OG	2.23	0.48
1:13:1285:A:H4'	1:13:1286:A:O5'	2.14	0.48
6:5E:19:LEU:O	6:5E:23:LYS:NZ	2.32	0.48
8:7E:64:LYS:HG2	8:7E:79:VAL:HG21	1.95	0.48
8:7E:112:LEU:HD12	8:7E:113:SER:N	2.28	0.48
11:2I:126:ARG:HG2	11:2I:126:ARG:HH11	1.77	0.48
26:1H:198:C:H4'	26:1H:2243:U:O2'	2.14	0.48
26:1H:566:U:OP1	36:78:29:LYS:HD2	2.14	0.48
26:1H:1287:A:C8	38:98:107:ASP:HB2	2.49	0.48
26:1H:1952:A:C5	35:68:22:ILE:HG13	2.49	0.48
26:1H:2123:G:N2	26:1H:2175:C:H42	2.07	0.48
26:1H:2199:A:H3'	26:1H:2205:C:H6	1.78	0.48
33:61:31:LEU:HD21	33:61:38:LEU:HG	1.96	0.48
49:K8:30:ARG:O	49:K8:34:GLU:HG3	2.14	0.48
52:N8:58:LEU:HD22	52:N8:60:VAL:HG13	1.96	0.48
1:1G:109:A:H5'	1:1G:110:C:C5	2.48	0.48
1:1G:664:G:P	18:9A:64:ARG:HH21	2.37	0.48
1:1G:768:A:N6	59:1G:1704:HOH:O	2.45	0.48
1:1G:1145:C:H4'	1:1G:1146:A:O5'	2.14	0.48
1:1G:1333:A:O5'	1:1G:1333:A:H8	1.97	0.48
1:1G:1516:G:N2	1:1G:1519:A:OP2	2.45	0.48
3:22:44:GLU:HA	3:22:52:LEU:HD11	1.95	0.48
4:32:128:VAL:HG12	4:32:129:ASN:ND2	2.29	0.48
13:4A:25:ILE:O	13:4A:29:ARG:HB2	2.14	0.48
15:6A:51:HIS:O	15:6A:54:ARG:HB3	2.14	0.48
23:2L:33:OMC:O2'	23:2L:34:U:H6	1.97	0.48
55:3L:15:G:H2'	55:3L:16:C:C5	2.49	0.48
55:3L:21:A:H2	55:3L:54:C:H42	1.62	0.48
26:14:26:G:C6	26:14:27:G:C6	3.01	0.48
26:14:311:A:C6	26:14:328:U:C4	3.02	0.48
26:14:730:C:H2'	26:14:731:C:C6	2.48	0.48
26:14:2212:A:H1'	26:14:2215:G:C5	2.49	0.48
26:14:2359:C:H2'	26:14:2360:A:O4'	2.13	0.48
26:14:2714:G:P	59:14:3464:HOH:O	2.66	0.48
27:1J:88:C:P	27:1J:88:C:H6	2.37	0.48
29:29:13:ARG:NH2	40:75:77:PRO:HB3	2.28	0.48
31:49:16:ARG:O	31:49:20:ILE:HG13	2.14	0.48
36:35:15:ARG:HB2	36:35:15:ARG:CZ	2.43	0.48
39:65:109:GLY:O	39:65:111:GLU:N	2.40	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:D5:51:ALA:HB1	46:D5:57:ILE:HD11	1.95	0.48
46:D5:81:ARG:HG3	46:D5:81:ARG:O	2.13	0.48
46:D5:103:ARG:O	46:D5:104:PHE:HB2	2.14	0.48
48:F5:80:LEU:HD22	48:F5:80:LEU:N	2.29	0.48
51:I5:12:ALA:H	51:I5:25:TYR:HA	1.78	0.48
2:1E:20:GLU:HG2	2:1E:189:ASP:OD1	2.13	0.48
20:BI:75:ASN:N	20:BI:75:ASN:OD1	2.47	0.48
21:1F:12:LYS:O	21:1F:16:GLY:N	2.47	0.48
24:3K:13:G:H1'	24:3K:24:G:H22	1.79	0.48
26:1H:71:A:H2	44:F8:31:HIS:NE2	2.05	0.48
26:1H:300:A:N3	26:1H:319:C:H1'	2.29	0.48
26:1H:882:G:N2	26:1H:895:U:N3	2.62	0.48
26:1H:1006:C:H5'	34:58:28:THR:HG23	1.95	0.48
26:1H:1011:G:OP2	41:C8:70:ARG:NH2	2.47	0.48
26:1H:1470:G:H5"	26:1H:1471:A:OP1	2.14	0.48
26:1H:2646:C:H2'	26:1H:2647:U:O4'	2.14	0.48
26:1H:2772:C:H2'	26:1H:2773:C:C6	2.49	0.48
35:68:67:LYS:HG3	35:68:68:GLU:H	1.78	0.48
44:F8:53:LYS:H	44:F8:82:GLN:HB3	1.79	0.48
53:P8:37:LYS:O	53:P8:37:LYS:HG2	2.13	0.48
1:1G:598:U:H2'	1:1G:599:C:H6	1.79	0.48
1:1G:1318:A:O2'	19:AA:37:ARG:HB3	2.14	0.48
8:72:116:LYS:HD2	8:72:129:VAL:HG11	1.94	0.48
16:7A:18:ARG:HA	16:7A:38:TYR:HA	1.95	0.48
23:2L:9:G:H21	23:2L:46:G:H3'	1.79	0.48
26:14:1204:A:O2'	26:14:1205:U:OP2	2.29	0.48
26:14:1298:C:OP2	59:14:3434:HOH:O	2.20	0.48
26:14:2184:G:C2	26:14:2185:C:C2	3.02	0.48
26:14:2441:C:C2'	26:14:2442:C:H5'	2.44	0.48
26:14:2532:G:O5'	26:14:2532:G:H8	1.97	0.48
26:14:2666:C:H3'	26:14:2667:C:C6	2.49	0.48
39:65:53:SER:OG	39:65:54:LEU:N	2.45	0.48
46:D5:24:LEU:HD12	46:D5:25:PRO:O	2.13	0.48
49:G5:47:ASN:C	49:G5:49:LYS:H	2.19	0.48
1:13:1084:G:C5	1:13:1085:U:C4	3.02	0.48
1:13:1128:C:C2	1:13:1144:G:N2	2.82	0.48
1:13:1263:C:H2'	1:13:1264:C:C6	2.49	0.48
1:13:1352:C:H2'	1:13:1353:G:C8	2.49	0.48
4:3E:150:GLU:OE1	4:3E:150:GLU:N	2.47	0.48
6:5E:23:LYS:HB2	6:5E:23:LYS:HZ3	1.78	0.48
17:8I:53:LEU:H	17:8I:53:LEU:HD12	1.79	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:1K:9:U:H5	22:1K:22:A:C2	2.31	0.48
24:3K:77:C:H2'	24:3K:78:C:C6	2.48	0.48
26:1H:270(P):C:H2'	26:1H:270(Q):C:C6	2.49	0.48
26:1H:910:A:N7	37:88:13:GLN:HG3	2.29	0.48
26:1H:994:C:H3'	41:C8:54:LYS:HE3	1.96	0.48
26:1H:1835:G:H5"	26:1H:1835:G:C8	2.49	0.48
26:1H:2469:A:O2'	37:88:56:ARG:HG2	2.14	0.48
26:1H:2865:U:C4	26:1H:2866:U:C4	3.02	0.48
30:31:188:ARG:HG3	30:31:188:ARG:H	1.47	0.48
30:31:192:LEU:HD23	30:31:193:VAL:N	2.29	0.48
31:41:67:LYS:HD2	31:41:67:LYS:O	2.13	0.48
42:D8:62:LEU:HD21	42:D8:95:LEU:HB2	1.96	0.48
1:1G:148:G:H1	1:1G:174:C:H42	1.62	0.48
1:1G:194:C:H2'	1:1G:195:A:H5"	1.95	0.48
1:1G:1239:A:C2'	1:1G:1298:C:H42	2.27	0.48
1:1G:1286:A:C8	1:1G:1286:A:H3'	2.49	0.48
9:82:19:LEU:C	9:82:20:ARG:HD3	2.37	0.48
23:2L:33:OMC:HM22	23:2L:34:U:OP2	2.14	0.48
55:3L:42:U:H2'	55:3L:43:G:C8	2.49	0.48
55:3L:70:C:H2'	55:3L:71:C:C5	2.48	0.48
26:14:146:G:H2'	26:14:147:U:O4'	2.13	0.48
26:14:340:A:H2'	26:14:341:G:O4'	2.13	0.48
26:14:839:U:H2'	26:14:840:C:H6	1.79	0.48
26:14:1022:G:N2	26:14:1142(A):A:C2	2.77	0.48
29:29:66:HIS:NE2	29:29:73:GLU:OE1	2.47	0.48
32:59:61:HIS:HA	32:59:64:LEU:HD12	1.96	0.48
47:E5:51:VAL:N	47:E5:62:LEU:HD12	2.28	0.48
51:I5:21:VAL:HG22	51:I5:22:ILE:H	1.77	0.48
1:13:1284:C:H2'	1:13:1285:A:N7	2.29	0.47
1:13:1316:G:N2	1:13:1318:A:H3'	2.29	0.47
1:13:1435:G:H2'	1:13:1436:U:C6	2.49	0.47
7:6E:79:ARG:HA	7:6E:84:ASN:HA	1.96	0.47
8:7E:118:VAL:O	8:7E:119:LEU:HD23	2.14	0.47
13:4I:70:LEU:O	13:4I:74:VAL:HG23	2.13	0.47
17:8I:54:GLY:HA2	17:8I:81:ARG:O	2.14	0.47
20:BI:26:ASN:HB2	20:BI:71:THR:HG23	1.96	0.47
26:1H:2287:A:C2	26:1H:2346:A:C2	3.02	0.47
26:1H:2292:C:OP2	39:A8:17:ARG:NH2	2.47	0.47
27:16:40:U:O2'	27:16:45:A:N6	2.40	0.47
27:16:75:G:H5"	27:16:76:G:OP2	2.14	0.47
29:21:14:ILE:HD12	29:21:14:ILE:HA	1.60	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:21:37:ARG:HB2	29:21:46:ALA:HB3	1.96	0.47
1:1G:1189:C:O5'	1:1G:1189:C:H6	1.97	0.47
1:1G:1320:C:O2	19:AA:36:ARG:NH2	2.47	0.47
7:62:113:GLU:HB2	7:62:119:ARG:CG	2.44	0.47
9:82:14:VAL:O	9:82:65:VAL:HG23	2.13	0.47
9:82:17:VAL:HA	9:82:63:ILE:HG12	1.96	0.47
26:14:458:G:O2'	53:L5:39:ARG:HD3	2.14	0.47
26:14:480:A:H2'	26:14:480:A:N3	2.29	0.47
27:1J:116:G:H5'	39:65:55:ALA:HB2	1.96	0.47
39:65:13:ARG:HG2	39:65:14:VAL:N	2.28	0.47
39:65:62:LYS:O	39:65:66:ALA:N	2.45	0.47
46:D5:60:GLU:HA	46:D5:66:SER:HA	1.96	0.47
46:D5:97:GLU:HB3	46:D5:125:LEU:HD21	1.95	0.47
48:F5:62:VAL:HG21	48:F5:70:VAL:HG21	1.95	0.47
54:M5:34:TRP:HA	54:M5:34:TRP:HE3	1.79	0.47
1:13:44:G:C2	1:13:45:U:H1'	2.49	0.47
1:13:606:G:H5"	1:13:607:A:H5'	1.96	0.47
1:13:1003:G:H1	1:13:1037:C:H42	1.62	0.47
3:2E:88:ARG:HA	3:2E:91:LEU:HD12	1.96	0.47
4:3E:99:SER:HB3	4:3E:139:ARG:HG2	1.96	0.47
8:7E:23:SER:HA	8:7E:61:VAL:O	2.13	0.47
9:8E:20:ARG:O	9:8E:60:ASP:N	2.34	0.47
9:8E:70:LYS:O	9:8E:74:ILE:HG13	2.14	0.47
18:9I:73:ALA:HB3	18:9I:79:LEU:HD12	1.95	0.47
26:1H:729:G:C2	26:1H:1775:U:C2	3.02	0.47
26:1H:1263:U:O2'	52:N8:11:THR:HG23	2.14	0.47
26:1H:1509:C:H2'	26:1H:1511:A:C8	2.49	0.47
26:1H:1662:C:O2'	26:1H:2687:U:OP1	2.31	0.47
26:1H:1695:G:H2'	26:1H:1696:G:O4'	2.13	0.47
26:1H:2121:G:H2'	26:1H:2122:U:C6	2.49	0.47
27:16:40:U:H1'	27:16:45:A:H61	1.78	0.47
47:I8:63:VAL:HG23	47:I8:64:ASP:O	2.14	0.47
48:J8:91:LYS:O	48:J8:93:GLU:N	2.47	0.47
49:K8:23:LYS:O	49:K8:27:GLU:HG3	2.14	0.47
49:K8:64:LEU:HD11	49:K8:68:ARG:HH11	1.78	0.47
1:1G:35:G:N2	1:1G:550:G:H1'	2.29	0.47
1:1G:1053:G:N7	1:1G:1199:U:H3'	2.28	0.47
1:1G:1239:A:H4'	1:1G:1240:U:C5'	2.44	0.47
9:82:95:LYS:NZ	9:82:96:LEU:HD13	2.28	0.47
11:2A:106:LYS:NZ	11:2A:106:LYS:HB2	2.29	0.47
21:1B:8:THR:HG22	21:1B:11:GLY:N	2.26	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:142:G:H2'	26:14:143:C:H6	1.79	0.47
26:14:270(F):U:H2'	26:14:270(G):C:C6	2.49	0.47
26:14:533:G:H2'	26:14:534:U:O4'	2.14	0.47
26:14:900:A:H2'	26:14:900:A:N3	2.30	0.47
26:14:952:G:C6	26:14:966:G:C6	3.02	0.47
26:14:992:C:OP1	41:85:47:TYR:OH	2.23	0.47
26:14:1005:C:H2'	26:14:1006:C:C6	2.48	0.47
26:14:1011:G:N2	26:14:1150:C:O2	2.47	0.47
26:14:1777:U:O2'	26:14:1778:U:H5'	2.13	0.47
26:14:2162:G:H2'	26:14:2163:C:H5'	1.95	0.47
26:14:2520:C:H41	26:14:2542:A:H62	1.60	0.47
30:39:172:TRP:CD1	30:39:172:TRP:H	2.31	0.47
35:25:17:ARG:NH1	35:25:47:ILE:HD11	2.29	0.47
36:35:49:ARG:HD2	54:M5:58:ILE:CG2	2.45	0.47
40:75:19:LEU:HD22	40:75:86:ILE:CG2	2.44	0.47
45:C5:83:THR:HG22	45:C5:84:ARG:H	1.78	0.47
1:13:341:C:O2'	1:13:342:C:H5'	2.14	0.47
1:13:666:G:H8	1:13:666:G:OP1	1.97	0.47
1:13:1230:C:H2'	1:13:1231:G:H8	1.79	0.47
2:1E:184:VAL:HG23	2:1E:198:ASP:H	1.79	0.47
3:2E:161:GLU:HG3	3:2E:162:GLN:N	2.29	0.47
8:7E:95:VAL:HG12	8:7E:99:GLU:HB2	1.96	0.47
16:7I:49:LEU:HD12	16:7I:50:LYS:H	1.78	0.47
26:1H:340:A:H2'	26:1H:341:G:O4'	2.14	0.47
26:1H:639:U:H2'	26:1H:640:C:C6	2.50	0.47
26:1H:654(H):G:H2'	26:1H:654(H):G:N3	2.29	0.47
26:1H:1094:U:O2	26:1H:1096:A:H5'	2.13	0.47
26:1H:2115:G:N1	26:1H:2117:A:N7	2.62	0.47
26:1H:2173:A:H3'	26:1H:2174:C:C6	2.49	0.47
26:1H:2702:U:OP1	26:1H:2702:U:C6	2.65	0.47
36:78:113:LYS:HA	36:78:129:ALA:O	2.15	0.47
40:B8:20:PRO:HG2	40:B8:86:ILE:O	2.15	0.47
41:C8:58:ARG:HA	41:C8:61:TRP:CE3	2.49	0.47
50:L8:35:ARG:HB3	50:L8:37:LEU:HD21	1.96	0.47
1:1G:1062:U:H2'	1:1G:1063:C:C6	2.49	0.47
8:72:97:VAL:HG22	8:72:129:VAL:C	2.39	0.47
19:AA:20:LEU:HA	19:AA:23:ASN:HB3	1.94	0.47
24:1L:45:C:H5"	24:1L:46:G:P	2.54	0.47
26:14:999:U:O2'	26:14:1000:A:H5'	2.14	0.47
26:14:1788:C:C2	26:14:1789:A:C8	3.01	0.47
26:14:1805:U:O2	28:19:50:THR:HB	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2067:G:O2'	26:14:2069:G:H5"	2.14	0.47
26:14:2292:C:OP1	39:65:17:ARG:NH2	2.47	0.47
26:14:2734:A:C8	26:14:2735:G:C8	3.02	0.47
26:14:2747:G:O6	26:14:2755:C:H5"	2.14	0.47
28:19:3:VAL:H	28:19:20:ASP:HB2	1.77	0.47
29:29:50:GLY:HA2	29:29:78:LEU:HD23	1.96	0.47
30:39:155:LEU:HD23	30:39:186:ILE:HD13	1.96	0.47
30:39:187:VAL:HG11	36:35:6:LEU:HD21	1.95	0.47
30:39:204:ASN:OD1	30:39:204:ASN:N	2.47	0.47
31:49:59:GLU:CD	31:49:153:ARG:HH21	2.22	0.47
32:59:148:ILE:HA	32:59:151:ILE:HG12	1.96	0.47
33:69:75:LEU:HD23	33:69:76:THR:H	1.79	0.47
36:35:85:LEU:CA	36:35:88:LEU:HB3	2.36	0.47
36:35:124:LYS:HE2	36:35:143:GLY:O	2.13	0.47
41:85:108:GLU:OE2	42:95:44:LYS:HB3	2.15	0.47
43:A5:6:ILE:HG22	43:A5:8:ARG:HG3	1.96	0.47
47:E5:50:ASN:C	47:E5:62:LEU:HB2	2.39	0.47
1:13:631:G:C8	1:13:632:A:H2	2.33	0.47
1:13:1386:G:O2'	1:13:1387:G:H5'	2.14	0.47
2:1E:46:LYS:HA	2:1E:49:GLU:HB2	1.97	0.47
5:4E:10:MET:HB2	5:4E:32:VAL:HG22	1.96	0.47
8:7E:29:SER:OG	8:7E:32:LYS:HE3	2.14	0.47
15:6I:9:GLN:O	15:6I:13:GLN:HG3	2.14	0.47
16:7I:5:ARG:HB3	16:7I:67:THR:OG1	2.14	0.47
26:1H:478:A:C6	26:1H:480:A:C6	3.03	0.47
26:1H:962:G:H2'	26:1H:963:U:C6	2.49	0.47
26:1H:1728:G:H2'	26:1H:1731:G:O6	2.15	0.47
26:1H:2692:C:H42	26:1H:2717:G:H1	1.62	0.47
26:1H:2761:G:H1'	32:51:143:GLN:OE1	2.14	0.47
26:1H:2820:A:P	38:98:2:ARG:HH21	2.37	0.47
28:11:70:TRP:CZ2	28:11:150:LYS:HD3	2.49	0.47
29:21:111:ARG:HG3	29:21:160:TYR:CD2	2.50	0.47
30:31:101:LEU:HA	30:31:101:LEU:HD23	1.59	0.47
32:51:124:GLU:HB3	32:51:132:ARG:HG2	1.96	0.47
37:88:66:ILE:CD1	37:88:67:ARG:H	2.25	0.47
1:1G:658:G:H2'	1:1G:659:U:C6	2.49	0.47
1:1G:872:A:O2'	1:1G:873:A:H5"	2.13	0.47
1:1G:1112:C:C2	3:22:178:LEU:HB2	2.49	0.47
1:1G:1346:A:H3'	1:1G:1346:A:OP2	2.14	0.47
2:12:133:LYS:O	2:12:137:ARG:HB2	2.14	0.47
2:12:187:LEU:HD13	2:12:205:ASP:HA	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:4A:79:LYS:O	13:4A:82:MET:HB3	2.14	0.47
14:5A:4:LYS:N	14:5A:6:LEU:HD12	2.29	0.47
16:7A:1:MET:HB2	16:7A:1:MET:HE3	1.58	0.47
19:AA:66:MET:HA	19:AA:67:VAL:O	2.15	0.47
19:AA:66:MET:HA	19:AA:67:VAL:C	2.39	0.47
26:14:305:U:H2'	26:14:306:U:C6	2.50	0.47
26:14:569:U:C4	26:14:570:G:C6	3.03	0.47
26:14:606:U:OP1	30:39:104:LYS:HG3	2.14	0.47
26:14:780:G:OP1	28:19:218:ARG:NH2	2.46	0.47
26:14:1252:G:N1	41:85:37:GLU:OE2	2.46	0.47
26:14:1420:U:HO2'	26:14:1421:G:P	2.34	0.47
27:1J:46:A:H2'	27:1J:47:C:C6	2.50	0.47
29:29:57:LYS:HA	29:29:57:LYS:HD3	1.60	0.47
32:59:19:VAL:HG12	32:59:20:ALA:H	1.78	0.47
33:69:80:PRO:HA	33:69:143:SER:HA	1.94	0.47
37:45:57:HIS:CG	37:45:117:ALA:HB2	2.49	0.47
37:45:102:VAL:O	37:45:102:VAL:HG12	2.14	0.47
40:75:55:ASN:N	40:75:59:THR:HG22	2.30	0.47
44:B5:4:ALA:C	44:B5:6:ASP:N	2.73	0.47
1:13:160:A:H2'	1:13:161:A:O4'	2.13	0.47
1:13:416:G:C5	1:13:417:C:C4	3.02	0.47
1:13:501:C:H2'	1:13:502:G:H8	1.78	0.47
1:13:1028(B):C:N4	1:13:1032(B):G:O6	2.48	0.47
1:13:1178:G:H5"	9:8E:93:ARG:NH2	2.30	0.47
1:13:1280:A:H3'	1:13:1281:U:H5'	1.97	0.47
1:13:1454:G:OP1	20:BI:39:LYS:NZ	2.43	0.47
2:1E:183:PRO:HA	2:1E:198:ASP:OD2	2.14	0.47
6:5E:24:GLU:HB3	6:5E:28:ARG:NH1	2.30	0.47
12:3I:76:ASN:ND2	12:3I:106:ASP:O	2.47	0.47
17:8I:70:ARG:C	17:8I:71:PHE:HD1	2.22	0.47
26:1H:1345:C:H2'	26:1H:1346:G:H8	1.80	0.47
26:1H:1417:C:H42	26:1H:1581:G:H1	1.62	0.47
26:1H:1676:A:P	59:1H:3587:HOH:O	2.73	0.47
26:1H:1918:A:O2'	26:1H:1920:C:N4	2.48	0.47
27:16:15:A:H3'	27:16:16:G:H5'	1.96	0.47
28:11:70:TRP:CG	28:11:150:LYS:HZ2	2.32	0.47
28:11:238:GLY:O	28:11:240:ALA:N	2.47	0.47
31:41:53:LEU:O	31:41:56:ALA:N	2.48	0.47
31:41:64:THR:HG21	31:41:94:LEU:HD22	1.97	0.47
32:51:6:ARG:HH21	32:51:7:LEU:HD21	1.79	0.47
38:98:34:ILE:HG22	38:98:114:VAL:HB	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:C8:92:ARG:NH2	42:D8:10:LYS:HG2	2.26	0.47
48:J8:3:LYS:O	48:J8:12:PRO:HD3	2.14	0.47
1:1G:297:G:N2	1:1G:300:A:OP2	2.48	0.47
1:1G:668:G:H4'	15:6A:48:LYS:HB3	1.96	0.47
1:1G:1086:U:O5'	1:1G:1086:U:H6	1.97	0.47
1:1G:1113:C:H2'	1:1G:1114:C:H6	1.79	0.47
1:1G:1230:C:H2'	1:1G:1231:G:C8	2.49	0.47
2:12:61:LEU:HD23	2:12:68:ILE:HD11	1.96	0.47
3:22:39:ILE:HG21	3:22:57:ILE:HD11	1.97	0.47
11:2A:103:LEU:HD12	11:2A:103:LEU:HA	1.64	0.47
15:6A:88:ARG:HD3	15:6A:88:ARG:HA	1.47	0.47
16:7A:57:ARG:HH21	16:7A:79:VAL:C	2.22	0.47
26:14:111:A:H4'	49:G5:69:ARG:HH22	1.79	0.47
26:14:706:A:H2'	26:14:707:G:O4'	2.15	0.47
26:14:2397:G:N2	26:14:2420:C:H1'	2.30	0.47
26:14:2643:G:H2'	26:14:2644:G:O4'	2.14	0.47
28:19:11:PRO:O	28:19:12:SER:OG	2.32	0.47
31:49:67:LYS:NZ	51:I5:5:ILE:HB	2.29	0.47
33:69:120:ILE:HG22	33:69:122:GLU:H	1.79	0.47
35:25:7:TYR:HE1	35:25:20:MET:HE3	1.80	0.47
35:25:64:ARG:NH1	35:25:81:ASP:OD1	2.45	0.47
41:85:91:ASP:C	41:85:92:ARG:HG3	2.38	0.47
48:F5:92:LYS:O	48:F5:93:GLU:C	2.55	0.47
1:13:198:G:H2'	1:13:199:G:H8	1.80	0.47
5:4E:11:ILE:H	5:4E:11:ILE:HG12	1.50	0.47
26:1H:1340:U:H4'	26:1H:1341:U:OP2	2.14	0.47
26:1H:2081:C:H2'	26:1H:2082:A:H8	1.78	0.47
29:21:167:VAL:HG21	29:21:187:ALA:HB3	1.96	0.47
37:88:39:PRO:HA	37:88:97:VAL:O	2.14	0.47
1:1G:1002:G:H2'	1:1G:1003:G:C8	2.49	0.47
3:22:36:ASP:OD1	3:22:57:ILE:HG21	2.14	0.47
6:52:86:ARG:O	6:52:87:ARG:HG2	2.14	0.47
7:62:149:ARG:HD3	11:2A:59:TYR:CE1	2.50	0.47
20:BA:56:MET:HG3	20:BA:84:LEU:HD13	1.96	0.47
26:14:108:U:H2'	26:14:109:G:C8	2.49	0.47
26:14:1149:G:H2'	26:14:1150:C:C6	2.50	0.47
26:14:1614:A:H2	59:14:3419:HOH:O	1.96	0.47
26:14:2296:U:H4'	26:14:2297:C:OP1	2.13	0.47
31:49:117:PHE:HZ	31:49:179:PRO:HG2	1.80	0.47
32:59:26:VAL:HG12	32:59:33:LEU:H	1.79	0.47
34:15:128:HIS:HB2	34:15:129:PRO:HD2	1.96	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:55:21:TYR:OH	38:55:43:GLU:HG2	2.15	0.47
46:D5:19:ARG:HE	46:D5:19:ARG:HB2	1.24	0.47
48:F5:67:ILE:N	48:F5:68:PRO:HD2	2.30	0.47
1:13:37:U:O2'	1:13:500:G:H4'	2.15	0.47
1:13:354:G:N7	59:13:1862:HOH:O	2.35	0.47
1:13:607:A:C2	16:7I:31:LYS:HG3	2.49	0.47
1:13:811:C:N4	59:13:1802:HOH:O	2.46	0.47
1:13:901:A:C5	1:13:902:G:H1'	2.49	0.47
1:13:1308:U:OP1	13:4I:98:VAL:HG23	2.15	0.47
1:13:1423:G:OP1	35:68:49:ARG:NH2	2.48	0.47
2:1E:88:ALA:HB2	2:1E:219:VAL:CG1	2.44	0.47
3:2E:156:ARG:HB3	3:2E:160:ALA:O	2.14	0.47
5:4E:152:ARG:HA	8:7E:64:LYS:HZ3	1.80	0.47
7:6E:122:HIS:HA	7:6E:125:MET:HE2	1.96	0.47
16:7I:58:TYR:C	16:7I:58:TYR:HD1	2.23	0.47
20:BI:33:ILE:O	20:BI:37:SER:OG	2.32	0.47
26:1H:15:G:C2	26:1H:16:G:C8	3.02	0.47
26:1H:132:G:H2'	26:1H:133:C:O4'	2.15	0.47
26:1H:370:G:H5"	26:1H:423:A:N6	2.30	0.47
26:1H:654(D):G:H22	26:1H:654(Q):C:N4	2.12	0.47
26:1H:845:G:H8	26:1H:845:G:OP2	1.98	0.47
26:1H:884:C:N3	26:1H:885:C:N4	2.61	0.47
26:1H:1021:A:H3'	26:1H:1022:G:H5"	1.95	0.47
26:1H:1093:G:N2	26:1H:1099:G:O6	2.47	0.47
26:1H:1215:G:C5	26:1H:1216:G:C8	3.02	0.47
26:1H:1268:A:C2	26:1H:2013:A:C4	3.03	0.47
26:1H:1396:U:O2	26:1H:1396:U:H2'	2.14	0.47
26:1H:2074:U:H2'	26:1H:2075:U:C6	2.50	0.47
26:1H:2211:G:O2'	26:1H:2212:A:OP1	2.23	0.47
26:1H:2287:A:O2'	26:1H:2288:A:H3'	2.14	0.47
26:1H:2309:A:C6	26:1H:2310:A:N7	2.83	0.47
26:1H:2394:C:H2'	26:1H:2395:C:C6	2.50	0.47
26:1H:2592:G:C6	26:1H:2593:U:N3	2.82	0.47
29:21:37:ARG:O	29:21:45:THR:HA	2.15	0.47
29:21:170:LEU:HD21	29:21:187:ALA:HB3	1.97	0.47
30:31:198:ALA:O	30:31:201:VAL:HG13	2.14	0.47
32:51:68:THR:O	32:51:72:ILE:HG13	2.14	0.47
32:51:137:ASP:OD1	32:51:138:LYS:N	2.42	0.47
33:61:42:SER:O	33:61:45:LYS:HB2	2.15	0.47
33:61:71:ILE:HG12	33:61:72:LEU:HD12	1.96	0.47
33:61:78:THR:HA	33:61:141:LYS:HB3	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:61:120:ILE:HG12	33:61:126:TYR:CE2	2.49	0.47
34:58:35:ARG:HB2	34:58:42:TRP:CH2	2.49	0.47
40:B8:29:ARG:HB2	40:B8:46:GLU:HG3	1.95	0.47
43:E8:107:LEU:HD12	43:E8:107:LEU:HA	1.69	0.47
46:H8:7:ALA:HB3	46:H8:61:LEU:CB	2.42	0.47
46:H8:58:VAL:O	46:H8:60:GLU:N	2.46	0.47
46:H8:105:VAL:O	46:H8:140:ASP:HA	2.15	0.47
53:P8:1:MET:O	53:P8:3:ARG:HD3	2.14	0.47
54:Q8:52:LYS:O	54:Q8:52:LYS:HG3	2.13	0.47
1:1G:390:C:H2'	1:1G:391:G:C8	2.49	0.47
1:1G:1050:G:N2	1:1G:1208:C:O2	2.48	0.47
1:1G:1151:A:H5'	10:1A:41:PRO:HA	1.96	0.47
1:1G:1325:C:H2'	1:1G:1326:C:C6	2.49	0.47
1:1G:1436:U:H2'	1:1G:1437:C:O4'	2.14	0.47
2:12:11:LEU:HD23	2:12:217:ARG:NH2	2.30	0.47
3:22:111:LEU:HD11	3:22:144:SER:O	2.15	0.47
4:32:9:CYS:HA	4:32:12:CYS:HB2	1.97	0.47
6:52:33:TYR:CE1	6:52:78:GLU:HG3	2.50	0.47
7:62:153:HIS:NE2	11:2A:57:THR:HG23	2.29	0.47
8:72:17:THR:HG21	8:72:80:ILE:HD12	1.97	0.47
10:1A:69:ASN:O	10:1A:70:ARG:NE	2.46	0.47
13:4A:3:ARG:HG3	13:4A:9:ILE:CG1	2.45	0.47
18:9A:41:LYS:O	18:9A:41:LYS:HD3	2.15	0.47
19:AA:36:ARG:HD2	19:AA:52:TYR:O	2.15	0.47
55:3L:15:G:H4'	55:3L:15:G:OP1	2.12	0.47
26:14:195:A:H4'	26:14:251:A:O2'	2.15	0.47
26:14:270(I):G:H2'	26:14:270(J):G:C8	2.49	0.47
26:14:868:U:C4	26:14:869:G:N7	2.83	0.47
26:14:899:A:H5'	26:14:900:A:OP2	2.15	0.47
26:14:1448:G:H1'	26:14:1528:A:H62	1.79	0.47
26:14:1597:A:H5"	26:14:1598:C:OP1	2.15	0.47
26:14:2402:C:N4	26:14:2416:C:H1'	2.30	0.47
26:14:2576:G:O2'	26:14:2579:C:OP2	2.24	0.47
27:1J:15:A:H1'	27:1J:109:G:C4	2.50	0.47
29:29:81:ILE:HG22	29:29:82:ARG:N	2.25	0.47
30:39:133:ASN:HA	30:39:162:LEU:HD23	1.97	0.47
31:49:109:VAL:HG13	51:I5:33:VAL:HG23	1.97	0.47
31:49:115:ARG:HB3	31:49:115:ARG:CZ	2.43	0.47
34:15:10:GLU:OE2	34:15:11:PRO:HD2	2.15	0.47
38:55:55:ALA:HA	38:55:80:PHE:CZ	2.49	0.47
38:55:55:ALA:HB2	38:55:79:LEU:HD13	1.96	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:75:52:ILE:O	40:75:98:LYS:NZ	2.47	0.47
42:95:2:PHE:H	42:95:42:GLY:HA2	1.78	0.47
42:95:79:VAL:C	42:95:80:GLN:OE1	2.57	0.47
42:95:84:LYS:HA	42:95:84:LYS:HD2	1.48	0.47
45:C5:48:ALA:HB3	45:C5:59:GLY:HA2	1.95	0.47
46:D5:76:LEU:HA	46:D5:83:PRO:HA	1.96	0.47
47:E5:49:LYS:HG2	47:E5:80:HIS:HB3	1.95	0.47
1:13:568:G:O2'	1:13:574:A:N1	2.36	0.47
1:13:1157:A:N6	1:13:1178:G:H21	2.12	0.47
1:13:1453:G:H2'	20:BI:39:LYS:HE2	1.96	0.47
3:2E:123:GLN:O	3:2E:128:PHE:HB2	2.15	0.47
3:2E:180:ALA:HB1	3:2E:182:ILE:HG13	1.97	0.47
8:7E:14:ARG:O	8:7E:18:ARG:HD3	2.15	0.47
8:7E:87:SER:HB2	8:7E:93:VAL:CB	2.43	0.47
20:BI:26:ASN:HB2	20:BI:71:THR:CG2	2.45	0.47
22:1K:55:U:H3'	22:1K:56:U:H5"	1.96	0.47
26:1H:307:G:H21	26:1H:330:A:N6	2.12	0.47
26:1H:817:C:H2'	26:1H:818:G:O4'	2.15	0.47
26:1H:1443:G:N2	26:1H:1549:C:O2	2.46	0.47
26:1H:2106:G:C6	26:1H:2107:C:C4	3.03	0.47
27:16:29:A:P	39:A8:32:LEU:HD12	2.55	0.47
29:21:15:PHE:HA	29:21:19:ARG:O	2.14	0.47
30:31:136:THR:HG22	30:31:166:ALA:O	2.14	0.47
32:51:154:PRO:HB3	32:51:163:TYR:CE2	2.50	0.47
45:G8:84:ARG:HH11	45:G8:86:ARG:HE	1.63	0.47
46:H8:30:ASN:HD22	46:H8:32:HIS:N	2.10	0.47
46:H8:30:ASN:ND2	46:H8:32:HIS:H	2.11	0.47
48:J8:58:ILE:HG12	48:J8:87:PRO:HD3	1.96	0.47
1:1G:108:G:H5'	1:1G:109:A:C5'	2.45	0.47
1:1G:236:G:H2'	1:1G:237:C:O4'	2.15	0.47
1:1G:1385:G:H2'	1:1G:1386:G:C8	2.46	0.47
11:2A:57:THR:HG22	11:2A:59:TYR:N	2.28	0.47
26:14:218:A:H2	26:14:235:U:H4'	1.78	0.47
26:14:1019:U:H3	26:14:1142(A):A:H62	1.61	0.47
26:14:2019:A:O4'	41:85:34:LYS:HD2	2.14	0.47
26:14:2615:U:H2'	26:14:2616:C:H6	1.79	0.47
26:14:2772:C:H2'	26:14:2773:C:H6	1.80	0.47
32:59:92:ILE:HD13	32:59:160:LYS:HD3	1.96	0.47
36:35:13:ASN:C	36:35:15:ARG:N	2.72	0.47
48:F5:58:ILE:HG23	48:F5:87:PRO:HG3	1.97	0.47
51:I5:49:PHE:CD2	51:I5:50:VAL:HG22	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:265:G:N2	1:13:267:C:H5'	2.30	0.47
1:13:276:G:C6	1:13:277:C:C4	3.03	0.47
1:13:278:G:N2	17:8I:95:TYR:HB3	2.29	0.47
1:13:360:A:H2'	1:13:361:G:C8	2.50	0.47
1:13:448:A:P	1:13:485:G:H22	2.38	0.47
1:13:491:G:H2'	1:13:492:G:C8	2.50	0.47
1:13:511:C:H4'	4:3E:43:HIS:CD2	2.50	0.47
1:13:1023:G:H3'	1:13:1024:G:C5'	2.45	0.47
1:13:1029:G:H1'	1:13:1032(A):G:H22	1.80	0.47
5:4E:136:MET:O	5:4E:140:ARG:HD2	2.15	0.47
9:8E:11:LYS:C	9:8E:13:ALA:H	2.23	0.47
19:AI:40:ILE:O	19:AI:41:VAL:HG22	2.15	0.47
26:1H:279:C:N4	26:1H:361:G:H1	2.13	0.47
26:1H:363(A):A:H2'	26:1H:363(B):G:H8	1.79	0.47
26:1H:882:G:N2	26:1H:895:U:H3	2.13	0.47
26:1H:1803:A:H4'	28:11:259:THR:CG2	2.44	0.47
26:1H:2124:G:N2	26:1H:2174:C:O2	2.42	0.47
26:1H:2591:C:H2'	26:1H:2592:G:C8	2.50	0.47
32:51:8:PRO:O	32:51:10:PRO:HD3	2.15	0.47
34:58:38:HIS:NE2	34:58:50:ASP:OD2	2.43	0.47
48:J8:85:LEU:HA	48:J8:85:LEU:HD13	1.61	0.47
50:L8:7:LYS:HG3	50:L8:34:GLU:HG2	1.97	0.47
51:M8:10:VAL:HG22	51:M8:11:PRO:HD2	1.96	0.47
1:1G:761:G:H2'	1:1G:762:C:O4'	2.15	0.47
1:1G:1413:A:H2'	1:1G:1414:U:O4'	2.15	0.47
5:42:107:ARG:O	5:42:110:LEU:N	2.48	0.47
8:72:42:GLU:HG3	8:72:109:ILE:HD12	1.97	0.47
12:3A:60:LEU:HD21	12:3A:66:VAL:HG22	1.97	0.47
13:4A:76:ALA:O	13:4A:80:ARG:HG3	2.15	0.47
13:4A:80:ARG:HH22	19:AA:66:MET:HG2	1.80	0.47
26:14:491:G:H2'	26:14:492:A:H8	1.78	0.47
26:14:617:G:OP1	30:39:40:GLN:HG3	2.15	0.47
26:14:649:G:C5	26:14:650:C:C4	3.03	0.47
26:14:962:G:H2'	26:14:963:U:H6	1.80	0.47
26:14:1064:C:O2	26:14:1074:G:N2	2.48	0.47
26:14:1389:G:C2	26:14:1399:C:O2	2.68	0.47
26:14:1593:G:H2'	26:14:1594:G:C8	2.50	0.47
26:14:1686:C:H2'	26:14:1687:G:O4'	2.15	0.47
26:14:2250:G:N3	37:45:82:ARG:HG3	2.30	0.47
30:39:102:PRO:HB2	30:39:105:VAL:HG23	1.97	0.47
32:59:6:ARG:HH21	32:59:54:ARG:HH22	1.61	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:35:11:GLY:C	36:35:13:ASN:H	2.22	0.47
36:35:81:GLN:CD	36:35:106:LEU:HA	2.40	0.47
40:75:14:TYR:N	40:75:14:TYR:CD1	2.82	0.47
42:95:35:LEU:O	42:95:37:VAL:HG13	2.15	0.47
49:G5:33:MET:O	49:G5:37:PHE:HD1	1.97	0.47
50:H5:6:VAL:O	50:H5:34:GLU:HA	2.14	0.47
1:13:31:G:O2'	1:13:48:C:N4	2.48	0.47
1:13:545:C:O2'	1:13:549:C:OP1	2.30	0.47
1:13:662:G:H2'	1:13:663:A:C8	2.50	0.47
1:13:1003:G:H2'	1:13:1004:A:H5'	1.96	0.47
1:13:1227:A:OP2	13:4I:111:LYS:NZ	2.32	0.47
1:13:1343:G:O2'	9:8E:121:ARG:HD3	2.14	0.47
8:7E:102:ARG:NE	8:7E:102:ARG:H	2.13	0.47
26:1H:270(T):G:H5"	48:J8:97:LEU:HD23	1.97	0.47
26:1H:270(X):G:C6	26:1H:270(Y):G:N1	2.82	0.47
26:1H:1264:G:H5'	52:N8:11:THR:HG23	1.97	0.47
26:1H:1569:A:H5'	28:11:61:LEU:HD21	1.97	0.47
26:1H:2108:C:H2'	26:1H:2109:U:O4'	2.14	0.47
26:1H:2475:C:H4'	26:1H:2476:A:OP1	2.14	0.47
28:11:102:LYS:C	28:11:103:ARG:HG2	2.40	0.47
28:11:249:PRO:HD2	28:11:250:TRP:CZ3	2.50	0.47
30:31:112:MET:HB3	30:31:112:MET:HE3	1.62	0.47
30:31:125:LEU:HD21	30:31:199:TRP:CE3	2.50	0.47
32:51:166:GLY:O	32:51:167:GLU:HG2	2.15	0.47
40:B8:26:ASP:O	40:B8:49:VAL:HG12	2.15	0.47
40:B8:74:ARG:HD3	40:B8:76:PHE:CZ	2.50	0.47
43:E8:51:LEU:HD23	43:E8:105:VAL:HG11	1.95	0.47
51:M8:12:ALA:HB3	51:M8:24:THR:HB	1.97	0.47
1:1G:452:A:HO2'	1:1G:453:A:C4'	2.28	0.47
1:1G:1513:A:H2'	1:1G:1514:C:C6	2.50	0.47
3:22:14:ILE:HG12	3:22:15:THR:N	2.28	0.47
4:32:173:TRP:CZ3	4:32:193:ASP:HB3	2.50	0.47
9:82:42:ARG:HH11	9:82:71:SER:HB3	1.80	0.47
10:1A:78:ASN:ND2	10:1A:80:LYS:HB3	2.30	0.47
11:2A:81:ASP:HB3	11:2A:107:SER:OG	2.15	0.47
12:3A:89:ARG:HG2	12:3A:90:VAL:N	2.30	0.47
20:BA:12:ALA:O	20:BA:15:ARG:HB2	2.15	0.47
26:14:15:G:C2	26:14:16:G:C8	3.03	0.47
26:14:61:G:H1	26:14:93:C:H42	1.62	0.47
26:14:546:C:H2'	26:14:547:A:C8	2.50	0.47
26:14:1509:C:H5'	26:14:1510:A:O4'	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2472:G:N3	26:14:2475:C:N4	2.63	0.47
26:14:2660:A:H8	26:14:2660:A:OP1	1.98	0.47
29:29:116:VAL:O	29:29:117:MET:HB3	2.15	0.47
30:39:146:ALA:HB3	30:39:148:LEU:HG	1.97	0.47
30:39:154:VAL:HA	30:39:191:ARG:O	2.15	0.47
31:49:7:LEU:HB2	31:49:104:GLU:OE1	2.15	0.47
36:35:63:PRO:O	36:35:64:LYS:HB2	2.15	0.47
38:55:72:ASP:O	38:55:76:VAL:HG23	2.15	0.47
39:65:89:ARG:O	39:65:92:TYR:N	2.48	0.47
1:13:1348:U:C2	1:13:1349:A:C8	3.03	0.46
3:2E:19:GLU:O	3:2E:40:ARG:NH2	2.49	0.46
3:2E:91:LEU:HB2	3:2E:99:VAL:HG21	1.97	0.46
4:3E:155:LEU:HD22	4:3E:155:LEU:HA	1.76	0.46
23:2K:62:C:H2'	23:2K:63:C:H6	1.80	0.46
23:2K:73:A:C6	23:2K:74:A:C6	3.02	0.46
26:1H:1105:U:H2'	26:1H:1106:G:H8	1.80	0.46
26:1H:1359:A:H2'	26:1H:1360:A:H5'	1.96	0.46
26:1H:2057:A:P	59:1H:3517:HOH:O	2.68	0.46
26:1H:2785:C:H1'	29:21:64:LYS:HZ1	1.80	0.46
28:11:238:GLY:O	28:11:239:ARG:C	2.56	0.46
29:21:92:THR:O	29:21:95:ILE:HG12	2.16	0.46
30:31:63:LYS:CE	30:31:67:GLN:HB2	2.44	0.46
30:31:157:VAL:HB	30:31:194:MET:HG2	1.97	0.46
37:88:32:TYR:HE1	37:88:133:ARG:HE	1.63	0.46
49:K8:47:ASN:C	49:K8:49:LYS:N	2.70	0.46
54:Q8:39:LYS:HA	54:Q8:42:ARG:HH21	1.79	0.46
1:1G:490:G:OP2	4:32:132:ARG:NH1	2.43	0.46
1:1G:591:U:H2'	1:1G:592:G:C8	2.50	0.46
1:1G:626:U:C2	1:1G:627:G:C8	3.03	0.46
1:1G:1214:C:H3'	1:1G:1215:G:H8	1.78	0.46
1:1G:1328:C:H2'	1:1G:1329:A:O4'	2.15	0.46
5:42:118:ILE:HG12	5:42:119:LEU:N	2.30	0.46
26:14:1104:C:H2'	26:14:1105:U:C6	2.51	0.46
26:14:2119:A:C2	26:14:2171:A:H1'	2.50	0.46
26:14:2391:G:HO2'	26:14:2424:C:H41	1.58	0.46
26:14:2772:C:H2'	26:14:2773:C:C6	2.50	0.46
29:29:119:ARG:HD2	29:29:120:TRP:CE2	2.51	0.46
30:39:120:GLU:OE1	30:39:122:LYS:NZ	2.46	0.46
31:49:72:ARG:HD2	31:49:85:GLY:O	2.14	0.46
36:35:47:ASP:HB3	36:35:49:ARG:N	2.30	0.46
39:65:101:LEU:O	39:65:105:ALA:N	2.38	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:D5:30:ASN:N	46:D5:33:LEU:O	2.48	0.46
1:13:266:G:H5'	1:13:268:C:H41	1.81	0.46
1:13:827:U:C5	1:13:872:A:N1	2.80	0.46
1:13:1015:A:N3	1:13:1218:C:O2'	2.44	0.46
1:13:1313:U:OP1	19:AI:6:LYS:HG2	2.15	0.46
3:2E:90:GLU:HA	3:2E:93:LYS:HB2	1.97	0.46
4:3E:52:SER:O	4:3E:55:ALA:N	2.48	0.46
22:1K:48:C:H42	22:1K:52:G:H1	1.63	0.46
26:1H:155:C:H5'	26:1H:161:U:OP2	2.15	0.46
26:1H:530:G:C5	26:1H:2022:U:H5"	2.49	0.46
26:1H:1219:G:OP2	41:C8:19:LYS:HE3	2.14	0.46
26:1H:1252:G:H5"	59:1H:3616:HOH:O	2.13	0.46
26:1H:1496:A:H8	26:1H:1577:C:O2'	1.83	0.46
26:1H:1906:G:C2	26:1H:1907:G:C8	3.03	0.46
26:1H:2156:G:H2'	26:1H:2157:G:N2	2.30	0.46
27:16:42:C:O2'	31:41:67:LYS:HE3	2.15	0.46
46:H8:54:HIS:O	46:H8:98:MET:HE1	2.15	0.46
47:I8:53:MET:HB2	47:I8:59:LEU:HD23	1.97	0.46
54:Q8:37:SER:O	54:Q8:40:GLU:N	2.48	0.46
54:Q8:52:LYS:N	54:Q8:53:PRO:HD2	2.29	0.46
1:1G:765:G:N2	1:1G:813:U:OP2	2.42	0.46
1:1G:1023:G:H3'	1:1G:1024:G:C5'	2.45	0.46
1:1G:1207:G:C6	1:1G:1208:C:C4	3.04	0.46
1:1G:1263:C:N3	1:1G:1273:G:N2	2.63	0.46
2:12:67:THR:HG21	2:12:155:LEU:HG	1.96	0.46
12:3A:60:LEU:HB2	12:3A:64:TYR:CB	2.45	0.46
20:BA:49:ALA:HB2	20:BA:92:LEU:HD22	1.98	0.46
26:14:631:A:N3	26:14:2415:G:O2'	2.41	0.46
26:14:1021:A:H3'	26:14:1021:A:C8	2.50	0.46
26:14:1288:U:C2	26:14:1327:C:O2	2.68	0.46
26:14:1322:A:N1	26:14:1333:C:O2'	2.37	0.46
26:14:2010:G:H5"	43:A5:42:ARG:HB2	1.96	0.46
26:14:2123:G:C4	26:14:2124:G:C8	3.03	0.46
26:14:2572:A:C8	29:29:144:ARG:HD2	2.50	0.46
29:29:9:VAL:HG23	29:29:26:ILE:O	2.14	0.46
43:A5:92:ARG:HD3	43:A5:93:ALA:O	2.15	0.46
54:M5:23:VAL:HG22	54:M5:47:LYS:HB3	1.97	0.46
1:13:102:G:O2'	1:13:151:A:N3	2.46	0.46
1:13:242:C:C2	1:13:285:G:N2	2.84	0.46
1:13:323:U:H5'	20:BI:23:ARG:HB2	1.97	0.46
1:13:390:C:O2'	16:7I:28:ARG:NH2	2.47	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:658:G:H2'	1:13:659:U:H6	1.80	0.46
1:13:1310:G:O2'	1:13:1311:G:H5'	2.15	0.46
1:13:1446:A:OP1	1:13:1446:A:H4'	2.16	0.46
1:13:1478:C:H2'	1:13:1479:C:C6	2.50	0.46
2:1E:239:VAL:O	2:1E:239:VAL:HG12	2.15	0.46
3:2E:102:ASN:OD1	3:2E:102:ASN:N	2.48	0.46
26:1H:412:A:H2'	26:1H:412:A:N3	2.31	0.46
26:1H:1359:A:H5'	26:1H:1359:A:N3	2.31	0.46
26:1H:1429:G:O2'	26:1H:1430:C:H5'	2.15	0.46
26:1H:1505:C:H2'	26:1H:1506:C:C6	2.49	0.46
26:1H:2173:A:H3'	26:1H:2174:C:C5	2.49	0.46
26:1H:2567:G:H2'	26:1H:2568:C:H6	1.78	0.46
26:1H:2838:G:H1'	38:98:45:ARG:NH2	2.31	0.46
28:11:77:ALA:HB2	28:11:97:TYR:HA	1.97	0.46
28:11:260:ARG:NH1	28:11:267:SER:OG	2.49	0.46
30:31:46:ARG:HH11	30:31:46:ARG:CG	2.24	0.46
32:51:27:LYS:HA	32:51:32:GLU:HA	1.96	0.46
34:58:48:MET:SD	34:58:48:MET:O	2.73	0.46
36:78:61:ARG:NH1	54:Q8:14:VAL:HG23	2.30	0.46
40:B8:81:PRO:HG2	40:B8:82:LEU:HD12	1.96	0.46
51:M8:43:TYR:CG	51:M8:44:THR:N	2.84	0.46
1:1G:366:C:O2'	1:1G:394:G:N2	2.49	0.46
1:1G:826:C:O2	1:1G:874:G:N2	2.32	0.46
1:1G:841:U:H3'	1:1G:841:U:C6	2.51	0.46
1:1G:979:C:C5	1:1G:980:C:C6	3.03	0.46
1:1G:991:U:O2'	1:1G:992:U:O5'	2.33	0.46
1:1G:1159:U:O4'	1:1G:1181:G:N2	2.47	0.46
1:1G:1266:G:N2	1:1G:1270:C:N3	2.63	0.46
2:12:108:ILE:HD13	2:12:108:ILE:HA	1.62	0.46
4:32:8:VAL:O	4:32:11:LEU:HD12	2.16	0.46
4:32:201:GLN:O	4:32:205:GLU:HG3	2.15	0.46
10:1A:63:PHE:HD1	14:5A:58:LYS:HA	1.80	0.46
16:7A:36:ILE:O	16:7A:36:ILE:HG13	2.15	0.46
17:8A:10:VAL:HG21	17:8A:52:LYS:O	2.15	0.46
26:14:110:G:C2	26:14:111:A:C8	3.04	0.46
26:14:957:A:N6	26:14:2459:A:C8	2.82	0.46
26:14:1729:A:C5	26:14:1731:G:C6	3.03	0.46
26:14:1743:G:C2	26:14:1746:G:C8	3.03	0.46
26:14:1991:U:H2'	26:14:1992:G:H5"	1.96	0.46
26:14:2418:A:H2'	26:14:2419:U:H6	1.80	0.46
26:14:2516:G:C6	26:14:2517:C:N4	2.84	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2520:C:H41	26:14:2542:A:N6	2.13	0.46
27:1J:116:G:H4'	39:65:54:LEU:HD21	1.98	0.46
29:29:135:HIS:CE1	59:29:402:HOH:O	2.68	0.46
37:45:69:PHE:CD1	37:45:70:PRO:HD2	2.50	0.46
46:D5:52:SER:O	46:D5:52:SER:OG	2.16	0.46
1:13:749:C:H2'	1:13:750:G:H8	1.81	0.46
1:13:1326:C:H2'	1:13:1327:C:C6	2.50	0.46
3:2E:137:ALA:HA	3:2E:140:ARG:HG2	1.98	0.46
4:3E:92:VAL:O	4:3E:96:LEU:HD22	2.16	0.46
5:4E:100:VAL:O	5:4E:107:ARG:NH2	2.48	0.46
13:4I:65:LYS:HB3	51:M8:50:VAL:HG11	1.96	0.46
16:7I:74:LEU:HA	16:7I:77:ALA:HB2	1.96	0.46
18:9I:47:THR:C	18:9I:83:GLU:HG2	2.40	0.46
22:1K:27:A:H3'	22:1K:28:G:H8	1.80	0.46
26:1H:654:A:H2'	26:1H:654(A):A:C8	2.51	0.46
26:1H:660:G:N2	36:78:12:ALA:HA	2.31	0.46
26:1H:806:C:O2	26:1H:2444:G:O2'	2.30	0.46
26:1H:1095:A:H2'	26:1H:1095:A:N3	2.29	0.46
26:1H:1116:C:H2'	26:1H:1117:G:O4'	2.16	0.46
26:1H:1174:A:H2'	26:1H:1176:G:OP1	2.15	0.46
26:1H:1368:G:C2	26:1H:1369:G:C8	3.03	0.46
26:1H:2111:C:C6	26:1H:2118:U:H4'	2.50	0.46
26:1H:2125:G:H1'	26:1H:2173:A:N6	2.30	0.46
26:1H:2159:G:H2'	26:1H:2160:G:O4'	2.16	0.46
27:16:15:A:H1'	27:16:109:G:C4	2.51	0.46
32:51:153:LYS:HG2	32:51:162:ILE:CB	2.45	0.46
33:61:110:ASP:CB	33:61:112:LYS:H	2.27	0.46
35:68:22:ILE:HG22	35:68:41:ALA:HA	1.97	0.46
38:98:70:LEU:HA	38:98:70:LEU:HD23	1.62	0.46
41:C8:14:HIS:O	41:C8:18:LEU:HD12	2.15	0.46
1:1G:9:G:C8	5:42:126:ARG:NH2	2.84	0.46
1:1G:272:C:H2'	1:1G:273:A:C8	2.51	0.46
1:1G:756:C:H2'	1:1G:757:U:O4'	2.15	0.46
1:1G:1179:A:H4'	9:82:103:THR:HA	1.96	0.46
1:1G:1298:C:O2'	1:1G:1299:A:OP2	2.33	0.46
9:82:95:LYS:HZ3	9:82:96:LEU:HD13	1.81	0.46
13:4A:27:LYS:HE3	13:4A:31:LYS:NZ	2.29	0.46
26:14:194:G:H2'	26:14:195:A:O4'	2.15	0.46
26:14:638:G:C5	26:14:639:U:C4	3.04	0.46
26:14:747:U:O2	26:14:2014:A:H1'	2.16	0.46
26:14:779:U:OP1	28:19:49:ILE:HG22	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:877:U:O4	26:14:899:A:N6	2.48	0.46
26:14:1161:C:H1'	42:95:8:GLY:O	2.15	0.46
26:14:1247:A:OP1	30:39:95:ARG:NH2	2.48	0.46
26:14:1298:C:P	59:14:3433:HOH:O	2.66	0.46
26:14:1517:G:H2'	26:14:1518:C:C6	2.50	0.46
26:14:2116:G:N1	26:14:2162:G:OP1	2.49	0.46
26:14:2147:G:C4	26:14:2148:G:H1'	2.50	0.46
26:14:2647:U:H2'	26:14:2648:C:H6	1.80	0.46
26:14:2707:G:H5'	38:55:68:ARG:HH21	1.80	0.46
33:69:37:VAL:HB	33:69:43:ASN:ND2	2.29	0.46
36:35:62:LEU:HD13	54:M5:25:MET:CB	2.46	0.46
39:65:88:ASP:HB3	39:65:89:ARG:H	1.57	0.46
42:95:82:ARG:C	42:95:83:ARG:HD2	2.40	0.46
45:C5:48:ALA:HB3	45:C5:59:GLY:C	2.40	0.46
49:G5:13:ALA:HA	49:G5:16:LEU:CD2	2.46	0.46
1:13:825:G:H2'	1:13:826:C:H6	1.80	0.46
1:13:1298:C:P	7:6E:114:ARG:HH22	2.39	0.46
1:13:1494:G:N7	57:13:1745:PAR:N32	2.63	0.46
2:1E:172:ILE:O	2:1E:176:GLU:HG3	2.15	0.46
4:3E:199:ASN:OD1	4:3E:201:GLN:HB3	2.16	0.46
5:4E:82:VAL:HB	5:4E:138:ALA:HB2	1.97	0.46
10:1I:6:ILE:HG22	10:1I:98:ILE:HG13	1.96	0.46
18:9I:70:ILE:O	18:9I:74:ARG:HG3	2.15	0.46
26:1H:507:A:C5'	26:1H:508:G:H5'	2.45	0.46
26:1H:637:A:H2'	36:78:117:GLU:OE1	2.15	0.46
26:1H:724:U:H2'	26:1H:725:G:O4'	2.15	0.46
26:1H:878:A:C6	26:1H:900:A:C8	3.03	0.46
26:1H:893:C:O2'	26:1H:894:C:OP1	2.28	0.46
26:1H:1290:C:H2'	26:1H:1291:C:H6	1.80	0.46
26:1H:2123:G:H2'	26:1H:2124:G:H8	1.80	0.46
26:1H:2168:G:H22	26:1H:2170:A:N6	2.08	0.46
26:1H:2592:G:P	59:1H:3815:HOH:O	2.73	0.46
27:16:32:C:C2	27:16:51:G:N2	2.84	0.46
28:11:68:LYS:HB3	28:11:70:TRP:CH2	2.50	0.46
32:51:154:PRO:HB3	32:51:163:TYR:CZ	2.51	0.46
39:A8:87:PHE:CE1	39:A8:102:ALA:HB2	2.51	0.46
41:C8:90:VAL:HG12	41:C8:91:ASP:HA	1.98	0.46
54:Q8:60:LEU:C	54:Q8:61:LEU:HG	2.41	0.46
1:1G:490:G:OP2	4:32:132:ARG:NH2	2.48	0.46
4:32:61:LYS:NZ	4:32:72:GLU:OE2	2.34	0.46
11:2A:46:GLY:HA2	11:2A:50:TYR:H	1.80	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:2A:85:ARG:HD3	11:2A:113:PRO:HD3	1.98	0.46
11:2A:124:LYS:HE2	11:2A:125:PHE:CZ	2.50	0.46
55:3L:22:A:H2'	55:3L:22:A:N3	2.29	0.46
26:14:234:C:H2'	26:14:235:U:H6	1.81	0.46
26:14:925:C:H2'	26:14:926:A:H8	1.80	0.46
26:14:1021:A:H3'	26:14:1021:A:H8	1.80	0.46
26:14:1113:U:H5'	32:59:2:SER:HA	1.98	0.46
26:14:1204:A:H2	26:14:1241:A:N1	2.14	0.46
26:14:1222:C:C2	26:14:1229(A):G:C2	3.04	0.46
26:14:2331:G:H4'	47:E5:43:THR:H	1.80	0.46
26:14:2377:A:H4'	39:65:111:GLU:HB3	1.98	0.46
26:14:2600:A:H2'	26:14:2601:C:H6	1.79	0.46
27:1J:40:U:H1'	27:1J:45:A:N6	2.31	0.46
32:59:41:MET:HE1	32:59:64:LEU:HB2	1.96	0.46
38:55:12:ARG:HD3	38:55:16:HIS:CG	2.51	0.46
40:75:85:LYS:HD3	40:75:87:ASP:OD2	2.16	0.46
1:13:350:G:C6	1:13:351:G:O6	2.69	0.46
1:13:986:A:H2'	1:13:987:G:O4'	2.16	0.46
8:7E:37:ARG:O	8:7E:41:ARG:HB2	2.16	0.46
8:7E:49:GLU:HG2	8:7E:62:TYR:HE2	1.79	0.46
13:4I:36:LYS:HE2	13:4I:59:TYR:CE1	2.51	0.46
15:6I:30:ALA:HB2	15:6I:85:LEU:HD11	1.98	0.46
26:1H:270(E):G:H1	26:1H:270(U):C:H42	1.64	0.46
26:1H:305:U:H2'	26:1H:306:U:C6	2.51	0.46
26:1H:654(A):A:H2	26:1H:654(T):A:N1	2.14	0.46
26:1H:1683:C:H2'	26:1H:1684:C:H6	1.80	0.46
26:1H:1952:A:C6	35:68:22:ILE:HG13	2.51	0.46
26:1H:2579:C:H2'	26:1H:2580:U:O4'	2.14	0.46
26:1H:2591:C:P	28:11:239:ARG:HG3	2.55	0.46
26:1H:2594:C:H2'	26:1H:2595:G:C8	2.50	0.46
26:1H:2791:C:H42	26:1H:2805:G:H1	1.62	0.46
29:21:17:ASP:C	29:21:19:ARG:H	2.22	0.46
29:21:112:GLY:O	29:21:159:HIS:HA	2.16	0.46
32:51:3:ARG:NE	32:51:3:ARG:HA	2.29	0.46
36:78:121:LYS:HE2	36:78:123:LEU:HD11	1.98	0.46
41:C8:75:ASN:HB2	41:C8:78:THR:OG1	2.16	0.46
43:E8:78:GLU:OE1	43:E8:99:ARG:HD3	2.16	0.46
1:1G:142:G:H2'	1:1G:143:A:H8	1.81	0.46
1:1G:1178:G:H5'	9:82:93:ARG:HH21	1.81	0.46
2:12:24:TRP:HD1	2:12:25:ASN:C	2.22	0.46
4:32:25:ARG:CZ	4:32:30:LYS:HG3	2.45	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:32:57:ARG:HH22	5:42:107:ARG:CZ	2.29	0.46
11:2A:124:LYS:HB2	11:2A:124:LYS:HE3	1.78	0.46
26:14:1033:U:H3'	26:14:1033:U:H6	1.81	0.46
26:14:1999:C:H4'	26:14:2723:C:O2	2.15	0.46
26:14:2394:C:H1'	59:14:3424:HOH:O	2.16	0.46
26:14:2687:U:C4	26:14:2688:U:C5	3.03	0.46
27:1J:0:A:H2'	27:1J:1:U:H6	1.80	0.46
31:49:51:ARG:NH1	31:49:51:ARG:HB3	2.31	0.46
42:95:87:HIS:NE2	42:95:89:GLN:HB2	2.30	0.46
45:C5:97:ARG:HG2	45:C5:102:CYS:O	2.15	0.46
46:D5:52:SER:C	46:D5:54:HIS:H	2.24	0.46
1:13:262:A:H5"	1:13:263:A:OP2	2.16	0.46
1:13:407:G:H2'	1:13:408:A:C8	2.50	0.46
1:13:474:G:H2'	1:13:475:G:C8	2.51	0.46
1:13:609:A:H5'	16:7I:18:ARG:NH2	2.31	0.46
1:13:1206:G:C6	1:13:1207:G:C5	3.03	0.46
1:13:1260:C:O5'	1:13:1284:C:H4'	2.16	0.46
1:13:1443:G:O2'	40:B8:122:ASP:OD2	2.30	0.46
3:2E:58:GLU:HB2	3:2E:65:ALA:CB	2.46	0.46
3:2E:58:GLU:HB2	3:2E:65:ALA:HB3	1.97	0.46
13:4I:52:GLU:HA	13:4I:55:ARG:HB2	1.98	0.46
26:1H:455:C:N3	26:1H:473:G:H5'	2.31	0.46
26:1H:1280:G:N2	26:1H:1291:C:C2	2.84	0.46
26:1H:1530:G:C5	26:1H:1531:C:C4	3.04	0.46
26:1H:2287:A:C2	26:1H:2346:A:H2	2.31	0.46
28:11:223:GLY:HA3	28:11:231:HIS:CE1	2.51	0.46
34:58:120:LEU:HD22	34:58:121:LYS:N	2.31	0.46
1:1G:493:G:H8	1:1G:493:G:O5'	1.99	0.46
2:12:8:LYS:NZ	2:12:217:ARG:HE	2.13	0.46
3:22:95:THR:C	3:22:97:LYS:H	2.23	0.46
7:62:15:ASP:HB3	7:62:19:GLY:N	2.30	0.46
12:3A:44:THR:HG22	12:3A:52:LEU:HD23	1.97	0.46
26:14:38:A:H1'	30:39:48:THR:HB	1.97	0.46
26:14:480:A:OP2	45:C5:46:LYS:HE3	2.15	0.46
26:14:919:G:N2	26:14:2269:A:OP2	2.48	0.46
26:14:950:G:C2	26:14:968:G:C2	3.04	0.46
26:14:1511:A:H2'	26:14:1512:G:O4'	2.15	0.46
26:14:1800:C:OP2	28:19:183:ARG:NH2	2.48	0.46
26:14:2786:U:H5"	29:29:65:GLY:CA	2.46	0.46
26:14:2850:A:H2'	26:14:2851:A:C8	2.51	0.46
30:39:192:LEU:HD23	30:39:193:VAL:H	1.81	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:49:113:ARG:NH1	31:49:142:PRO:HB3	2.31	0.46
36:35:46:LYS:HE2	36:35:46:LYS:HB3	1.66	0.46
44:B5:63:LYS:HA	44:B5:72:LYS:HA	1.98	0.46
49:G5:63:VAL:O	49:G5:66:GLU:HG2	2.16	0.46
1:13:26:A:H2'	1:13:27:G:H5'	1.97	0.46
1:13:112:G:P	16:7I:27:LYS:HD2	2.56	0.46
1:13:180:U:H2'	1:13:181:G:O4'	2.16	0.46
1:13:381:C:H2'	1:13:382:A:O4'	2.16	0.46
2:1E:47:THR:HG22	2:1E:51:LEU:HD12	1.98	0.46
3:2E:7:PRO:O	3:2E:11:ARG:HG2	2.16	0.46
4:3E:108:LEU:HD23	4:3E:110:PHE:HE1	1.81	0.46
6:5E:67:MET:HB2	6:5E:68:PRO:HD2	1.98	0.46
26:1H:529:A:H4'	26:1H:530:G:H5'	1.98	0.46
26:1H:571:A:OP2	59:1H:3702:HOH:O	2.20	0.46
26:1H:1011:G:OP1	41:C8:77:SER:OG	2.25	0.46
26:1H:1324:G:C4	26:1H:1328:G:O6	2.69	0.46
26:1H:1534:G:H1	26:1H:1538:G:H22	1.63	0.46
26:1H:2032:G:N2	29:21:146:THR:HG23	2.21	0.46
26:1H:2262:U:H4'	26:1H:2328:A:C2	2.51	0.46
29:21:24:THR:HG21	29:21:188:VAL:CG2	2.46	0.46
29:21:67:PHE:C	29:21:69:LYS:H	2.24	0.46
29:21:152:LYS:HE2	34:58:77:GLY:HA3	1.96	0.46
45:G8:9:LYS:HA	45:G8:27:VAL:HG22	1.98	0.46
49:K8:5:GLU:H	49:K8:5:GLU:HG3	1.31	0.46
1:1G:371:G:H1	1:1G:390:C:N4	2.12	0.46
1:1G:690:G:H22	11:2A:55:LYS:HE2	1.81	0.46
1:1G:1114:C:H42	1:1G:1186:G:H1	1.64	0.46
1:1G:1142:G:H3'	1:1G:1143:G:C8	2.51	0.46
3:22:43:LEU:HD12	3:22:52:LEU:HD13	1.98	0.46
9:82:95:LYS:HB2	9:82:95:LYS:HE2	1.69	0.46
11:2A:85:ARG:NE	11:2A:111:ASP:HB3	2.28	0.46
17:8A:75:ARG:HH22	17:8A:77:VAL:HA	1.81	0.46
18:9A:37:VAL:O	18:9A:41:LYS:N	2.36	0.46
26:14:443:A:N7	30:39:45:ARG:HD2	2.31	0.46
26:14:602:G:N2	26:14:655:A:C8	2.80	0.46
26:14:1516:U:H2'	26:14:1517:G:C8	2.51	0.46
26:14:2419:U:H2'	26:14:2420:C:C6	2.51	0.46
26:14:2542:A:H4'	26:14:2542:A:OP1	2.15	0.46
28:19:126:GLN:HB2	28:19:129:ASN:ND2	2.31	0.46
28:19:181:GLU:HA	28:19:272:ALA:HB1	1.98	0.46
36:35:52:GLU:H	36:35:52:GLU:CD	2.24	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:75:133:GLU:H	40:75:133:GLU:HG3	1.53	0.46
46:D5:72:ARG:HD2	46:D5:72:ARG:HA	1.52	0.46
50:H5:9:VAL:HG22	50:H5:53:LEU:O	2.16	0.46
1:13:230:G:O2'	16:7I:25:ARG:NH2	2.49	0.46
1:13:620:C:H5"	59:13:1917:HOH:O	2.16	0.46
1:13:738:C:H2'	1:13:739:C:C6	2.51	0.46
1:13:1139:G:H22	1:13:1144:G:H1	1.63	0.46
1:13:1528:U:C2	1:13:1530:G:C8	3.03	0.46
2:1E:109:SER:O	2:1E:112:VAL:HB	2.16	0.46
4:3E:30:LYS:HB2	4:3E:32:ALA:CA	2.46	0.46
7:6E:123:GLU:O	7:6E:127:ALA:N	2.48	0.46
8:7E:9:MET:HG3	8:7E:26:VAL:HG21	1.98	0.46
13:4I:84:ILE:HD12	13:4I:84:ILE:HA	1.77	0.46
15:6I:4:THR:O	15:6I:7:GLU:HB3	2.15	0.46
24:3K:84:C:H5'	48:J8:30:VAL:HG11	1.98	0.46
26:1H:482:A:H5"	26:1H:483:A:OP1	2.16	0.46
26:1H:1045:A:H1'	26:1H:1047:G:C4	2.51	0.46
26:1H:1270:C:H5"	26:1H:1271:G:O5'	2.16	0.46
26:1H:1312:U:H4'	26:1H:1313:U:O5'	2.16	0.46
26:1H:1424:G:H2'	26:1H:1425:G:O4'	2.15	0.46
26:1H:2243:U:O2'	26:1H:2244:U:H5'	2.15	0.46
26:1H:2611:U:H2'	52:N8:2:ALA:O	2.16	0.46
30:31:108:LYS:HB3	30:31:108:LYS:HE2	1.69	0.46
31:41:16:ARG:N	31:41:17:PRO:HD2	2.31	0.46
31:41:178:PHE:HB3	31:41:180:PHE:CE1	2.51	0.46
37:88:78:PRO:O	37:88:79:LEU:HB2	2.14	0.46
39:A8:78:LEU:HD12	39:A8:108:GLY:HA3	1.98	0.46
41:C8:8:VAL:HG23	41:C8:11:ARG:NH2	2.27	0.46
41:C8:92:ARG:C	41:C8:94:ASN:N	2.74	0.46
46:H8:63:ASP:CB	46:H8:65:GLN:HG3	2.44	0.46
1:1G:298:A:O5'	1:1G:298:A:H8	1.99	0.46
1:1G:406:G:H1	1:1G:436:C:H42	1.64	0.46
1:1G:1423:G:OP1	35:25:49:ARG:NH2	2.47	0.46
4:32:126:ILE:HG22	4:32:127:THR:N	2.30	0.46
9:82:51:ARG:HG2	9:82:56:LEU:HD13	1.98	0.46
14:5A:40:CYS:O	14:5A:44:LEU:HB3	2.16	0.46
15:6A:4:THR:HB	15:6A:7:GLU:H	1.81	0.46
18:9A:29:PHE:HD1	18:9A:29:PHE:H	1.64	0.46
24:1L:73:U:H2'	24:1L:74:C:C6	2.51	0.46
26:14:977:G:N3	26:14:1001:A:H2	2.14	0.46
26:14:1013:C:H42	26:14:1149:G:H1	1.64	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1055:G:O2'	26:14:1085:A:N1	2.41	0.46
26:14:1221:C:H2'	26:14:1222:C:C6	2.51	0.46
26:14:1572:A:H2'	26:14:1573:G:O4'	2.14	0.46
26:14:1677:A:H2'	26:14:1678:G:C8	2.51	0.46
26:14:1729:A:C2	26:14:1730:U:H5	2.34	0.46
26:14:2031:A:C6	26:14:2498:C:H1'	2.51	0.46
26:14:2124:G:H2'	26:14:2125:G:H5'	1.97	0.46
26:14:2528:U:O2'	26:14:2530:A:OP1	2.27	0.46
26:14:2876:G:H1'	40:75:3:ARG:NH1	2.31	0.46
29:29:52:LEU:O	29:29:74:PRO:HB3	2.14	0.46
32:59:20:ALA:HB3	32:59:23:ARG:O	2.16	0.46
36:35:111:ARG:HG2	36:35:128:HIS:CD2	2.51	0.46
37:45:134:ARG:O	37:45:134:ARG:HG3	2.14	0.46
45:C5:104:GLY:HA2	45:C5:105:ALA:HA	1.69	0.46
54:M5:23:VAL:HA	54:M5:49:VAL:HG23	1.97	0.46
1:13:1427:U:H2'	1:13:1428:A:C8	2.51	0.46
2:1E:7:VAL:HG22	2:1E:8:LYS:NZ	2.31	0.46
7:6E:113:GLU:HG3	7:6E:119:ARG:HG2	1.98	0.46
24:3K:17:G:N1	24:3K:67:A:C6	2.84	0.46
26:1H:64:A:C5	44:F8:66:LEU:HD22	2.51	0.46
26:1H:270(V):G:H2'	26:1H:270(W):G:O4'	2.16	0.46
26:1H:357:A:H2'	26:1H:358:U:H6	1.79	0.46
26:1H:1429:G:H2'	26:1H:1430:C:C6	2.50	0.46
26:1H:1535:U:C4	26:1H:1537:C:H1'	2.51	0.46
26:1H:1567:A:H5"	28:11:58:HIS:ND1	2.31	0.46
26:1H:2032:G:H21	29:21:146:THR:CG2	2.19	0.46
33:61:110:ASP:OD1	33:61:111:PRO:HA	2.16	0.46
40:B8:50:ILE:HD11	40:B8:102:ILE:HD11	1.98	0.46
46:H8:157:LEU:HD21	46:H8:163:LEU:HG	1.99	0.46
50:L8:37:LEU:HD12	50:L8:43:ILE:HD13	1.98	0.46
1:1G:452:A:O2'	1:1G:453:A:O5'	2.34	0.46
1:1G:964:A:N3	1:1G:969:A:O2'	2.39	0.46
1:1G:977:A:H2'	1:1G:978:A:H5'	1.98	0.46
1:1G:1053:G:O6	1:1G:1199:U:H2'	2.17	0.46
1:1G:1181:G:N2	1:1G:1182:G:H1'	2.31	0.46
1:1G:1199:U:H4'	10:1A:54:PHE:CD2	2.51	0.46
2:12:16:HIS:CE1	2:12:213:LEU:HD13	2.51	0.46
3:22:18:TRP:H	3:22:18:TRP:HE3	1.64	0.46
5:42:90:VAL:O	5:42:120:THR:HA	2.16	0.46
15:6A:82:ILE:HB	15:6A:87:ILE:HB	1.98	0.46
26:14:1279:G:H4'	38:55:31:HIS:CD2	2.51	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1532:C:H42	26:14:1539:G:H1	1.64	0.46
26:14:1946:U:H2'	26:14:1947:C:C6	2.51	0.46
26:14:2176:A:H2'	26:14:2177:C:H6	1.81	0.46
26:14:2853:C:O2'	26:14:2854:G:H5'	2.15	0.46
27:1J:60:C:H2'	27:1J:61:G:H8	1.81	0.46
27:1J:76:G:H2'	27:1J:77:U:O4'	2.16	0.46
28:19:273:ARG:O	28:19:274:ARG:C	2.59	0.46
30:39:64:ILE:HG13	30:39:65:TRP:CD1	2.51	0.46
36:35:64:LYS:HE3	54:M5:31:HIS:NE2	2.31	0.46
38:55:94:TYR:O	38:55:117:VAL:HG12	2.15	0.46
38:55:102:GLU:HG3	38:55:103:ARG:N	2.30	0.46
51:I5:36:CYS:SG	51:I5:39:CYS:HB3	2.56	0.46
1:13:598:U:H2'	1:13:599:C:H6	1.81	0.45
1:13:1333:A:H2'	1:13:1334:G:O4'	2.16	0.45
12:3I:110:VAL:CG2	12:3I:120:TYR:HB3	2.46	0.45
23:2K:53:G:C6	23:2K:54:G:N7	2.84	0.45
24:3K:41:C:H2'	24:3K:42:U:H6	1.81	0.45
26:1H:8:A:H2'	26:1H:9:U:C6	2.51	0.45
26:1H:184:C:H2'	26:1H:185:U:H6	1.80	0.45
26:1H:1102:C:H2'	26:1H:1103:A:C8	2.50	0.45
26:1H:1968:G:P	59:1H:3814:HOH:O	2.72	0.45
26:1H:2140:C:N3	26:1H:2151:G:N2	2.48	0.45
26:1H:2150:U:H2'	26:1H:2151:G:C8	2.51	0.45
26:1H:2369:A:H2'	26:1H:2370:G:C8	2.51	0.45
26:1H:2430:A:H8	26:1H:2431:U:C5	2.34	0.45
26:1H:2478:A:C8	26:1H:2529:G:C5	3.03	0.45
27:16:10:C:H2'	27:16:11:C:H6	1.80	0.45
28:11:112:GLN:H	28:11:115:GLN:HG3	1.82	0.45
29:21:101:ARG:HE	29:21:171:GLU:HB2	1.81	0.45
45:G8:99:CYS:SG	45:G8:100:ALA:N	2.88	0.45
46:H8:111:VAL:CG1	46:H8:146:ILE:HG12	2.38	0.45
1:1G:452:A:O2'	1:1G:453:A:O4'	2.28	0.45
1:1G:1157:A:H1'	1:1G:1158:C:C2	2.51	0.45
3:22:37:GLN:O	3:22:40:ARG:N	2.49	0.45
6:52:33:TYR:CZ	6:52:78:GLU:HG3	2.51	0.45
7:62:93:PRO:HG2	7:62:94:ARG:HD3	1.98	0.45
23:2L:64:G:H2'	23:2L:65:G:C8	2.51	0.45
26:14:708:C:H42	26:14:723:G:H1	1.64	0.45
26:14:710:G:H1	26:14:721:C:H42	1.62	0.45
26:14:858:U:O2	26:14:2268:A:H2'	2.16	0.45
26:14:1054:A:H5'	26:14:1055:G:OP2	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1578:U:C2'	26:14:1579:A:H5'	2.46	0.45
26:14:1812:A:H2'	26:14:1813:G:H8	1.79	0.45
26:14:2396:G:H4'	48:F5:30:VAL:H	1.80	0.45
30:39:107:LYS:HA	30:39:107:LYS:HE3	1.97	0.45
30:39:132:VAL:HG13	30:39:133:ASN:HB2	1.98	0.45
31:49:4:ASP:OD2	31:49:5:VAL:N	2.48	0.45
36:35:101:VAL:HA	36:35:105:LEU:O	2.16	0.45
1:13:247:G:OP2	17:8I:100:LYS:HB2	2.16	0.45
1:13:558:G:C4	1:13:559:A:C2	3.05	0.45
1:13:1004:A:H1'	1:13:1036:G:H22	1.81	0.45
3:2E:12:LEU:C	3:2E:14:ILE:N	2.75	0.45
3:2E:58:GLU:N	3:2E:65:ALA:HB3	2.30	0.45
7:6E:79:ARG:HG2	7:6E:84:ASN:ND2	2.32	0.45
7:6E:150:ALA:HA	11:2I:59:TYR:HD2	1.81	0.45
8:7E:81:HIS:N	8:7E:138:TRP:O	2.46	0.45
10:1I:31:GLY:HA2	10:1I:78:ASN:ND2	2.31	0.45
12:3I:89:ARG:NH2	12:3I:91:LYS:HD2	2.31	0.45
12:3I:102:ARG:HE	12:3I:102:ARG:HB3	1.54	0.45
15:6I:7:GLU:OE1	15:6I:38:ARG:NH2	2.49	0.45
19:AI:14:HIS:CD2	19:AI:14:HIS:N	2.84	0.45
26:1H:598:G:H5'	36:78:11:GLY:HA3	1.98	0.45
26:1H:838:C:H2'	26:1H:839:U:O4'	2.16	0.45
26:1H:1230:C:H2'	26:1H:1231:G:C8	2.51	0.45
26:1H:1329:U:H5"	26:1H:1330:C:H5	1.81	0.45
26:1H:1448:G:H1'	26:1H:1528:A:N6	2.31	0.45
26:1H:1705:G:C6	26:1H:1706:U:C4	3.04	0.45
26:1H:1971:A:H5"	59:1H:3797:HOH:O	2.15	0.45
26:1H:2345:G:N3	26:1H:2381:C:H2'	2.31	0.45
30:31:199:TRP:NE1	30:31:203:GLN:OE1	2.48	0.45
31:41:82:LEU:HD21	31:41:88:ILE:HD11	1.98	0.45
40:B8:111:ARG:O	40:B8:112:ARG:HB3	2.16	0.45
42:D8:79:VAL:CG1	42:D8:81:TYR:HB3	2.46	0.45
49:K8:6:VAL:O	49:K8:10:LEU:HD12	2.16	0.45
54:Q8:23:VAL:HG12	54:Q8:46:ARG:HD3	1.97	0.45
1:1G:396:G:O2'	1:1G:398:C:OP1	2.18	0.45
1:1G:518:C:H5"	1:1G:519:C:C6	2.51	0.45
1:1G:1169:A:C6	1:1G:1170:A:C6	3.04	0.45
1:1G:1315:U:H2'	1:1G:1316:G:O4'	2.16	0.45
12:3A:32:PHE:O	12:3A:33:ARG:HD2	2.17	0.45
14:5A:42:ILE:O	14:5A:46:GLU:HG3	2.15	0.45
26:14:603:A:C8	26:14:604:G:H1'	2.48	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:654(D):G:H1	26:14:654(Q):C:H42	1.64	0.45
26:14:1049:C:H1'	26:14:1113:U:O2'	2.17	0.45
26:14:1266:G:O2'	26:14:2012:G:O6	2.32	0.45
26:14:1421:G:C2	26:14:1422:G:C8	3.05	0.45
26:14:1542:G:O6	26:14:1543:A:N6	2.49	0.45
26:14:1780:A:P	59:14:3402:HOH:O	2.75	0.45
26:14:2228:G:C6	26:14:2229:C:C4	3.04	0.45
26:14:2319:G:O6	39:65:4:LEU:HB3	2.16	0.45
26:14:2710:C:P	59:14:3465:HOH:O	2.74	0.45
27:1J:46:A:H2'	27:1J:47:C:H6	1.80	0.45
37:45:48:GLU:O	37:45:52:VAL:HG23	2.16	0.45
40:75:88:ILE:HG12	40:75:91:ARG:NH1	2.31	0.45
45:C5:73:ARG:NH2	45:C5:81:LYS:O	2.46	0.45
48:F5:82:LEU:HB2	48:F5:83:GLU:H	1.62	0.45
1:13:652:U:O2'	1:13:653:A:O5'	2.33	0.45
1:13:656:C:H4'	15:6I:62:GLN:HE21	1.82	0.45
1:13:946:A:H2'	1:13:947:G:C8	2.51	0.45
4:3E:99:SER:O	4:3E:140:VAL:HG22	2.16	0.45
5:4E:71:LEU:HD22	5:4E:115:VAL:H	1.82	0.45
6:5E:75:LEU:HD22	6:5E:79:LEU:HD11	1.98	0.45
9:8E:112:LYS:HD2	9:8E:113:LYS:H	1.81	0.45
9:8E:128:ARG:HH21	23:2K:36:A:P	2.40	0.45
11:2I:79:SER:HA	11:2I:104:GLN:O	2.17	0.45
14:5I:29:ARG:HD3	14:5I:40:CYS:CB	2.47	0.45
17:8I:13:ASP:H	17:8I:14:LYS:NZ	2.14	0.45
19:AI:42:PRO:HD3	51:M8:63:TYR:OH	2.16	0.45
20:BI:100:ILE:HD12	20:BI:100:ILE:HA	1.87	0.45
26:1H:1488:G:N2	26:1H:1502:C:O2	2.49	0.45
26:1H:1528:A:H2	26:1H:1542:G:C2	2.34	0.45
26:1H:1680:U:O2	26:1H:1763:G:H3'	2.15	0.45
26:1H:2104:G:C2	26:1H:2186:G:C2	3.04	0.45
27:16:43:C:H5"	51:M8:1:MET:HG2	1.97	0.45
29:21:75:VAL:HG12	29:21:76:ARG:HD2	1.97	0.45
34:58:32:THR:HG23	34:58:37:LYS:HB2	1.98	0.45
34:58:43:THR:HA	34:58:44:PRO:HD2	1.73	0.45
37:88:54:MET:O	37:88:57:HIS:N	2.50	0.45
39:A8:83:LYS:HE2	39:A8:83:LYS:O	2.16	0.45
54:Q8:22:VAL:HB	54:Q8:53:PRO:HB3	1.98	0.45
1:1G:106:C:H2'	1:1G:107:G:H5'	1.99	0.45
1:1G:151:A:H2'	1:1G:152:A:O4'	2.17	0.45
1:1G:430:A:OP2	4:32:8:VAL:HG23	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:607:A:H2'	1:1G:608:A:O4'	2.17	0.45
1:1G:741:G:H2'	1:1G:742:G:O4'	2.17	0.45
1:1G:1171:G:H2'	1:1G:1172:C:C6	2.52	0.45
1:1G:1226:C:H2'	13:4A:103:THR:HB	1.99	0.45
24:1L:9:U:H5'	24:1L:11:C:OP2	2.16	0.45
23:2L:65:G:C6	23:2L:66:C:C4	3.03	0.45
55:3L:22:A:N6	55:3L:56:U:H3	2.15	0.45
26:14:155:C:N3	26:14:171:G:N2	2.64	0.45
26:14:275:G:N2	26:14:276:A:C6	2.84	0.45
26:14:413:C:O5'	26:14:413:C:H6	1.98	0.45
26:14:653:A:H5"	26:14:654:A:OP2	2.16	0.45
26:14:1005:C:H2'	26:14:1006:C:H6	1.82	0.45
26:14:1678:G:N2	26:14:1989:G:N2	2.64	0.45
27:1J:60:C:H2'	27:1J:61:G:C8	2.51	0.45
31:49:97:ASP:HA	31:49:100:TRP:HD1	1.82	0.45
31:49:99:MET:HG3	31:49:100:TRP:N	2.32	0.45
31:49:121:ASN:HA	31:49:122:PRO:HD2	1.81	0.45
33:69:77:LEU:HD12	33:69:78:THR:H	1.81	0.45
34:15:29:LYS:H	34:15:29:LYS:HG2	1.38	0.45
37:45:29:PHE:HB3	37:45:65:PHE:CD2	2.51	0.45
37:45:58:PHE:HB3	37:45:113:GLN:NE2	2.31	0.45
54:M5:30:ARG:HA	54:M5:30:ARG:HD3	1.88	0.45
1:13:255:G:C2	1:13:272:C:C2	3.04	0.45
1:13:721:G:C6	1:13:733:A:C2	3.04	0.45
1:13:1503:A:O2'	25:4K:13:A:N1	2.50	0.45
17:8I:65:ILE:HG21	17:8I:69:LYS:HE2	1.98	0.45
18:9I:38:GLU:CD	18:9I:41:LYS:HE3	2.41	0.45
26:1H:107:C:H2'	26:1H:108:U:C6	2.48	0.45
26:1H:783:A:C8	26:1H:783:A:H3'	2.51	0.45
26:1H:910:A:N1	26:1H:2277:G:H1'	2.31	0.45
26:1H:1632:A:H8	26:1H:1632:A:O5'	1.99	0.45
26:1H:2038:G:H2'	26:1H:2039:C:H6	1.81	0.45
26:1H:2182:G:H2'	26:1H:2183:C:C6	2.51	0.45
26:1H:2231:C:H2'	26:1H:2232:U:O4'	2.16	0.45
26:1H:2436:G:C6	26:1H:2437:U:C4	3.05	0.45
26:1H:2600:A:C6	26:1H:2601:C:N4	2.85	0.45
26:1H:2689:U:OP1	26:1H:2719:G:N2	2.47	0.45
26:1H:2760:C:O2'	26:1H:2761:G:H5'	2.17	0.45
31:41:68:PRO:HB3	31:41:92:VAL:HB	1.99	0.45
32:51:93:GLY:O	32:51:95:ARG:NH2	2.50	0.45
33:61:10:GLU:HG3	33:61:10:GLU:O	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:61:67:ARG:O	33:61:71:ILE:HG22	2.17	0.45
39:A8:34:HIS:HB2	39:A8:36:TYR:HE1	1.80	0.45
1:1G:736:C:OP2	18:9A:68:LYS:HE2	2.17	0.45
1:1G:977:A:O2'	1:1G:981:U:N3	2.50	0.45
1:1G:1288:A:O5'	1:1G:1288:A:H8	1.99	0.45
1:1G:1325:C:H2'	1:1G:1326:C:H6	1.81	0.45
2:12:214:ILE:O	2:12:218:ALA:HB2	2.16	0.45
3:22:45:LYS:O	3:22:48:TYR:HB3	2.16	0.45
16:7A:19:ILE:HB	16:7A:36:ILE:O	2.16	0.45
24:1L:31:G:H2'	24:1L:32:A:H8	1.81	0.45
26:14:519:U:H2'	26:14:520:G:C8	2.52	0.45
26:14:2292:C:H2'	26:14:2293:C:C6	2.51	0.45
29:29:203:LYS:HB2	29:29:205:ALA:HB3	1.97	0.45
30:39:9:ILE:O	30:39:128:ALA:HB2	2.16	0.45
30:39:29:ASN:HA	30:39:30:PRO:HD3	1.58	0.45
30:39:89:VAL:O	30:39:90:PHE:C	2.55	0.45
30:39:132:VAL:O	30:39:134:GLY:N	2.50	0.45
37:45:74:TYR:O	37:45:89:ASN:HB2	2.16	0.45
40:75:97:ALA:C	40:75:98:LYS:HD3	2.41	0.45
41:85:94:ASN:O	41:85:97:ASP:N	2.45	0.45
45:C5:97:ARG:NH1	45:C5:104:GLY:O	2.47	0.45
51:I5:37:SER:C	51:I5:39:CYS:N	2.73	0.45
1:13:60:A:N6	1:13:110:C:N3	2.62	0.45
1:13:280:C:H4'	1:13:281:G:OP2	2.15	0.45
1:13:960:U:C2	1:13:1225:A:N7	2.84	0.45
6:5E:41:GLU:HB2	6:5E:62:TRP:HB3	1.97	0.45
9:8E:48:GLU:HB2	9:8E:101:PHE:HE2	1.82	0.45
11:2I:99:GLN:HA	11:2I:105:VAL:CG1	2.45	0.45
12:3I:42:THR:HG22	12:3I:54:LYS:HG3	1.98	0.45
26:1H:66:C:H2'	26:1H:67:U:H6	1.80	0.45
26:1H:717:G:H2'	26:1H:718:A:O4'	2.17	0.45
26:1H:810:U:H5"	26:1H:811:U:OP1	2.16	0.45
26:1H:1000:A:N6	26:1H:1154:G:O2'	2.49	0.45
26:1H:1210:A:H5"	26:1H:1212:G:O4'	2.17	0.45
26:1H:2010:G:H5"	43:E8:42:ARG:HB2	1.98	0.45
26:1H:2700:C:C2'	26:1H:2701:C:H5'	2.46	0.45
26:1H:2875:C:H4'	40:B8:5:ALA:HB2	1.99	0.45
27:16:24:G:N7	27:16:56:G:H2'	2.32	0.45
28:11:146:GLU:HG3	28:11:190:TYR:N	2.31	0.45
30:31:53:THR:HG23	30:31:56:GLU:OE1	2.16	0.45
32:51:20:ALA:HB1	32:51:21:PRO:HD2	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:68:68:GLU:OE2	35:68:78:ARG:NH1	2.49	0.45
48:J8:69:LYS:HD2	48:J8:69:LYS:HA	1.81	0.45
51:M8:6:HIS:ND1	51:M8:7:PRO:HD2	2.32	0.45
51:M8:37:SER:CA	51:M8:42:PHE:HB3	2.42	0.45
52:N8:16:ARG:O	52:N8:19:ARG:HB3	2.17	0.45
1:1G:458:C:H2'	1:1G:464:G:C8	2.50	0.45
1:1G:1015:A:H2'	1:1G:1016:A:C8	2.52	0.45
1:1G:1326:C:OP1	21:1B:17:THR:OG1	2.22	0.45
1:1G:1382:C:H1'	7:62:79:ARG:HD2	1.98	0.45
4:32:150:GLU:C	4:32:152:SER:N	2.75	0.45
6:52:11:ASN:O	6:52:14:LEU:HD22	2.16	0.45
6:52:48:LEU:HD22	6:52:52:ILE:HD12	1.98	0.45
8:72:34:GLU:O	8:72:37:ARG:HB3	2.15	0.45
26:14:172:C:H2'	26:14:173:G:H8	1.80	0.45
26:14:235:U:H2'	26:14:236:C:C6	2.51	0.45
26:14:638:G:C5	26:14:651:G:C2	3.05	0.45
26:14:873:G:H1'	37:45:29:PHE:HE2	1.81	0.45
26:14:1410:G:H2'	26:14:1411:C:H6	1.81	0.45
26:14:1482:U:H5'	26:14:1483:G:OP2	2.16	0.45
26:14:1826:G:H4'	28:19:242:ARG:CZ	2.46	0.45
26:14:2107:C:N4	26:14:2182:G:H1	2.12	0.45
26:14:2808:U:H3	26:14:2892:A:N6	2.08	0.45
29:29:39:PRO:HA	29:29:43:GLY:CA	2.46	0.45
51:I5:13:ARG:HE	51:I5:22:ILE:HG21	1.81	0.45
1:13:20:U:H2'	1:13:21:G:O4'	2.16	0.45
1:13:571:U:O2	1:13:918:A:H5'	2.16	0.45
1:13:1199:U:H4'	10:1I:54:PHE:CE2	2.52	0.45
2:1E:115:LEU:HD22	2:1E:145:LEU:HB3	1.99	0.45
3:2E:15:THR:HG23	3:2E:181:ASN:HA	1.98	0.45
3:2E:20:SER:HG	3:2E:40:ARG:HH22	1.62	0.45
6:5E:41:GLU:O	6:5E:43:LEU:HD12	2.16	0.45
9:8E:59:PHE:HZ	9:8E:88:TYR:CD2	2.34	0.45
17:8I:52:LYS:HG2	17:8I:53:LEU:N	2.32	0.45
20:BI:40:ALA:HB2	20:BI:55:ILE:HG22	1.99	0.45
26:1H:50:U:H3'	26:1H:51:G:H5'	1.99	0.45
26:1H:654(M):C:H5'	26:1H:654(N):G:N7	2.31	0.45
26:1H:1136:G:H2'	26:1H:1136:G:N3	2.32	0.45
26:1H:1264:G:H5'	52:N8:11:THR:CG2	2.47	0.45
26:1H:1516:U:H2'	26:1H:1517:G:H8	1.82	0.45
26:1H:1541:U:H2'	26:1H:1542:G:O4'	2.16	0.45
26:1H:2503:A:P	59:1H:3968:HOH:O	2.73	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2785:C:OP1	29:21:41:LYS:NZ	2.49	0.45
28:11:101:GLU:HG3	28:11:102:LYS:N	2.29	0.45
29:21:63:LEU:HD23	29:21:63:LEU:O	2.16	0.45
31:41:57:ALA:HB2	31:41:90:LEU:HG	1.99	0.45
31:41:109:VAL:HG11	31:41:142:PRO:HD3	1.98	0.45
32:51:86:GLU:CG	32:51:165:ALA:H	2.30	0.45
33:61:49:ALA:O	33:61:53:ALA:N	2.44	0.45
33:61:55:ALA:HA	33:61:58:LEU:HB3	1.97	0.45
37:88:130:LYS:NZ	46:H8:81:ARG:HG2	2.32	0.45
1:1G:193:C:H2'	1:1G:194:C:H6	1.82	0.45
1:1G:652:U:H1'	1:1G:653:A:H2	1.82	0.45
1:1G:1015:A:C6	1:1G:1016:A:C6	3.04	0.45
1:1G:1054:C:O2'	1:1G:1055:A:P	2.74	0.45
1:1G:1072:G:H2'	1:1G:1073:U:O4'	2.16	0.45
1:1G:1189:C:P	10:1A:51:ARG:HH22	2.35	0.45
1:1G:1325:C:H5"	21:1B:17:THR:HG21	1.99	0.45
1:1G:1414:U:H2'	1:1G:1415:G:C8	2.52	0.45
2:12:8:LYS:HE3	2:12:11:LEU:HD22	1.98	0.45
3:22:39:ILE:O	3:22:43:LEU:HB2	2.17	0.45
3:22:113:ALA:HB2	3:22:202:ILE:HG13	1.98	0.45
7:62:13:GLN:HA	7:62:14:PRO:HD3	1.67	0.45
7:62:50:ILE:O	7:62:54:THR:HG23	2.17	0.45
8:72:97:VAL:O	8:72:100:ILE:HG13	2.16	0.45
10:1A:6:ILE:HA	10:1A:97:GLU:O	2.17	0.45
15:6A:42:HIS:HD2	15:6A:43:LEU:HD23	1.82	0.45
26:14:1169:G:H1	26:14:1180:C:H42	1.65	0.45
26:14:1753:G:N1	26:14:1756:G:C2	2.85	0.45
26:14:1942:C:OP2	26:14:1943:U:O2'	2.16	0.45
26:14:2212:A:O2'	26:14:2213:U:O5'	2.32	0.45
26:14:2808:U:H5"	26:14:2891:G:O6	2.17	0.45
28:19:237:GLU:OE2	28:19:239:ARG:HA	2.17	0.45
32:59:53:GLU:HG3	32:59:54:ARG:N	2.31	0.45
36:35:2:LYS:O	36:35:5:ASP:HB2	2.16	0.45
41:85:92:ARG:HG2	42:95:11:GLN:OE1	2.15	0.45
43:A5:23:LEU:HD13	43:A5:23:LEU:HA	1.77	0.45
46:D5:15:PRO:HB2	46:D5:19:ARG:NH2	2.31	0.45
47:E5:26:TYR:O	47:E5:29:GLN:HB2	2.17	0.45
1:13:626:U:N3	1:13:627:G:N7	2.65	0.45
1:13:692:U:H2'	1:13:694:A:OP2	2.17	0.45
1:13:975:A:H5"	1:13:976:G:H5"	1.97	0.45
1:13:1048:G:OP1	14:5I:4:LYS:HB2	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:3E:112:VAL:HG12	4:3E:116:GLN:CD	2.42	0.45
5:4E:34:VAL:HG21	5:4E:63:ARG:HD3	1.98	0.45
8:7E:49:GLU:O	8:7E:51:VAL:HG13	2.16	0.45
15:6I:17:ARG:NE	15:6I:17:ARG:HA	2.31	0.45
23:2K:8:4SU:O5'	23:2K:8:4SU:H6	2.16	0.45
23:2K:19:G:C2	23:2K:59:A:C5	3.05	0.45
23:2K:38:A:C4	23:2K:39:A:C8	3.05	0.45
26:1H:1268:A:H2'	26:1H:1269:A:O4'	2.16	0.45
26:1H:2438:U:O3'	26:1H:2439:A:H3'	2.16	0.45
26:1H:2439:A:C5'	26:1H:2439:A:H8	2.30	0.45
29:21:31:CYS:HA	29:21:32:PRO:HD3	1.63	0.45
29:21:87:GLU:H	29:21:87:GLU:CD	2.24	0.45
30:31:92:PRO:O	30:31:93:LYS:HD2	2.16	0.45
32:51:86:GLU:HG2	32:51:87:LEU:N	2.28	0.45
34:58:40:PRO:CB	41:C8:68:ALA:HB2	2.46	0.45
45:G8:5:MET:HG3	45:G8:6:HIS:H	1.81	0.45
45:G8:39:VAL:O	45:G8:39:VAL:HG12	2.16	0.45
1:1G:43:C:H5"	16:7A:12:LYS:HB2	1.98	0.45
1:1G:128:G:H4'	17:8A:3:LYS:HG2	1.97	0.45
1:1G:1121:U:H2'	1:1G:1122:U:C6	2.52	0.45
2:12:59:GLU:HA	2:12:62:ALA:HB3	1.99	0.45
3:22:91:LEU:HD11	3:22:101:LEU:HG	1.98	0.45
3:22:137:ALA:O	3:22:141:VAL:HG23	2.16	0.45
6:52:9:VAL:HB	6:52:87:ARG:HB2	1.97	0.45
6:52:76:ALA:HB1	6:52:80:ARG:HH21	1.81	0.45
26:14:105:C:O2'	45:C5:2:ARG:HD3	2.16	0.45
26:14:118:A:N3	26:14:178:G:H1'	2.32	0.45
26:14:118:A:H1'	26:14:178:G:O4'	2.17	0.45
26:14:142:G:H5"	26:14:1598:C:O2'	2.17	0.45
26:14:155:C:H42	26:14:171:G:H1	1.64	0.45
26:14:675:A:C8	26:14:804:A:C6	3.04	0.45
26:14:912:C:C2	26:14:913:U:C5	3.04	0.45
26:14:1386:C:H2'	26:14:1387:C:C6	2.52	0.45
26:14:1796:U:H2'	26:14:1797:C:H6	1.80	0.45
26:14:2697:G:H2'	26:14:2698:U:O4'	2.17	0.45
26:14:2783:G:H2'	26:14:2784:C:H6	1.82	0.45
26:14:2873:A:H8	38:55:5:LYS:HA	1.79	0.45
28:19:108:PRO:HG2	28:19:111:LEU:HB2	1.99	0.45
30:39:78:ILE:HA	30:39:83:PHE:CD2	2.51	0.45
30:39:178:PRO:HB2	30:39:201:VAL:HG11	1.98	0.45
36:35:52:GLU:N	36:35:52:GLU:CD	2.74	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:55:29:LEU:HD12	38:55:29:LEU:HA	1.83	0.45
39:65:61:ASN:OD1	39:65:62:LYS:N	2.41	0.45
39:65:62:LYS:HB3	39:65:97:ARG:HD2	1.99	0.45
41:85:27:LEU:HD13	41:85:31:SER:HB3	1.98	0.45
44:B5:11:PRO:HG2	44:B5:13:LEU:HD21	1.98	0.45
1:13:452:A:H62	1:13:480:U:H3	1.65	0.45
1:13:593:G:H2'	1:13:594:G:H8	1.82	0.45
1:13:911:U:OP2	12:3I:97:ARG:NH1	2.50	0.45
1:13:977:A:O2'	1:13:979:C:OP2	2.28	0.45
1:13:1242:C:H42	1:13:1295:G:H1	1.63	0.45
1:13:1325:C:H2'	1:13:1326:C:H6	1.80	0.45
2:1E:162:ILE:O	2:1E:185:ILE:HG13	2.15	0.45
6:5E:86:ARG:O	6:5E:87:ARG:HG2	2.16	0.45
7:6E:16:LEU:HD21	9:8E:45:ALA:HB2	1.99	0.45
8:7E:87:SER:OG	8:7E:92:ARG:HA	2.17	0.45
17:8I:58:GLU:O	17:8I:74:LEU:N	2.41	0.45
18:9I:26:LEU:HD22	18:9I:42:ARG:NH2	2.27	0.45
26:1H:458:G:C8	53:P8:37:LYS:HG2	2.51	0.45
26:1H:844:C:H3'	26:1H:845:G:C8	2.51	0.45
26:1H:1045:A:H1'	26:1H:1047:G:N3	2.31	0.45
26:1H:1228:G:OP1	41:C8:13:LYS:NZ	2.50	0.45
26:1H:1375:C:H2'	26:1H:1376:C:H6	1.81	0.45
26:1H:1858:G:O2'	26:1H:1859:A:H8	2.00	0.45
26:1H:2051:A:H4'	29:21:141:ILE:HG12	1.98	0.45
26:1H:2110:G:N2	26:1H:2180:U:O2	2.49	0.45
26:1H:2320:A:H2'	26:1H:2320:A:N3	2.31	0.45
30:31:160:ASN:ND2	30:31:163:VAL:HG23	2.32	0.45
36:78:61:ARG:HH22	54:Q8:13:ARG:CD	2.30	0.45
37:88:32:TYR:CE1	37:88:133:ARG:HG3	2.52	0.45
38:98:100:LEU:CD1	38:98:113:LEU:HB2	2.47	0.45
43:E8:29:LEU:HD12	43:E8:33:ARG:HG3	1.98	0.45
44:F8:63:LYS:O	44:F8:64:LYS:HG2	2.17	0.45
51:M8:34:GLU:HG2	51:M8:35:VAL:N	2.32	0.45
51:M8:42:PHE:CD1	51:M8:43:TYR:HB3	2.50	0.45
1:1G:9:G:C6	1:1G:26:A:N6	2.84	0.45
1:1G:1349:A:OP2	9:82:118:LYS:NZ	2.50	0.45
4:32:60:GLU:HG2	4:32:202:LEU:HB2	1.98	0.45
10:1A:8:LEU:HB3	10:1A:16:LEU:HD22	1.99	0.45
10:1A:54:PHE:CE2	10:1A:55:LYS:HD2	2.52	0.45
11:2A:33:THR:HG22	11:2A:39:PRO:HA	1.98	0.45
13:4A:7:VAL:HG21	31:49:115:ARG:NH1	2.31	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:4A:84:ILE:C	13:4A:86:CYS:H	2.25	0.45
16:7A:72:ARG:NH1	16:7A:72:ARG:HB3	2.32	0.45
55:3L:77:C:H2'	55:3L:78:C:C6	2.52	0.45
26:14:656:G:H2'	26:14:657:U:O4'	2.16	0.45
26:14:827:U:H2'	26:14:2430:A:H2	1.81	0.45
26:14:959:A:N6	26:14:960:A:N1	2.65	0.45
26:14:971:C:H2'	26:14:972:G:O4'	2.17	0.45
26:14:1762:A:H4'	26:14:1763:G:OP2	2.17	0.45
26:14:2275:C:O2'	37:45:83:MET:HG3	2.17	0.45
29:29:201:THR:HB	29:29:203:LYS:HG3	1.98	0.45
36:35:6:LEU:O	36:35:7:ARG:HG2	2.16	0.45
36:35:52:GLU:CD	36:35:52:GLU:C	2.85	0.45
36:35:56:SER:O	36:35:57:THR:HB	2.17	0.45
44:B5:41:ASN:HB3	44:B5:44:GLU:OE2	2.17	0.45
45:C5:30:VAL:C	45:C5:31:LEU:HG	2.42	0.45
45:C5:36:ALA:HA	45:C5:67:LEU:O	2.17	0.45
54:M5:33:ASN:O	54:M5:34:TRP:CE3	2.69	0.45
1:13:78:G:C5	1:13:79:G:H1'	2.52	0.45
1:13:468:A:H5"	16:7I:80:PHE:HB3	1.99	0.45
1:13:920:U:H2'	1:13:921:U:C6	2.52	0.45
1:13:1286:A:H5"	21:1F:26:LYS:HG2	1.99	0.45
1:13:1387:G:C6	1:13:1388:C:N4	2.85	0.45
17:8I:88:TYR:CD1	17:8I:88:TYR:C	2.95	0.45
22:1K:25:G:H2'	22:1K:26:G:H8	1.82	0.45
23:2K:63:C:O2	23:2K:64:G:C8	2.70	0.45
23:2K:65:G:H2'	23:2K:66:C:C6	2.52	0.45
26:1H:29:U:H2'	26:1H:30:G:C8	2.52	0.45
26:1H:242:G:H5'	54:Q8:62:LEU:HD22	1.98	0.45
26:1H:363(C):G:H2'	26:1H:363(D):G:C8	2.52	0.45
26:1H:1418:G:OP1	26:1H:1588:C:O2'	2.27	0.45
26:1H:1887:C:C2'	26:1H:1888:G:H5"	2.40	0.45
26:1H:2027:G:C5	26:1H:2028:U:C5	3.05	0.45
26:1H:2783:G:H2'	26:1H:2784:C:C6	2.52	0.45
28:11:206:LEU:HA	28:11:206:LEU:HD23	1.80	0.45
34:58:23:LEU:O	34:58:27:ALA:N	2.44	0.45
37:88:104:PHE:HE2	37:88:125:LEU:HD11	1.82	0.45
40:B8:30:VAL:HG23	40:B8:83:ILE:HG23	1.99	0.45
47:I8:56:ASP:OD1	47:I8:58:THR:HB	2.16	0.45
1:1G:983:A:H2	1:1G:984:C:C6	2.34	0.45
1:1G:1177:G:H8	1:1G:1177:G:OP2	1.99	0.45
2:12:237:ALA:C	2:12:239:VAL:H	2.25	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:52:96:PRO:HB3	18:9A:30:ASP:OD2	2.16	0.45
10:1A:54:PHE:C	10:1A:55:LYS:HG3	2.40	0.45
12:3A:37:CYS:HA	12:3A:58:VAL:HA	1.99	0.45
13:4A:39:ILE:HG22	13:4A:40:ASN:H	1.81	0.45
16:7A:23:ASP:OD1	16:7A:25:ARG:HG3	2.17	0.45
17:8A:7:THR:O	17:8A:23:VAL:HG13	2.17	0.45
17:8A:56:VAL:O	17:8A:77:VAL:N	2.44	0.45
26:14:657:U:H2'	26:14:658:C:C6	2.52	0.45
26:14:827:U:H4'	26:14:828:U:O2	2.17	0.45
26:14:1169:G:H2'	26:14:1170:G:O4'	2.17	0.45
26:14:1178:C:H2'	26:14:1179:C:C6	2.52	0.45
26:14:1251:C:H5	59:14:3848:HOH:O	1.99	0.45
26:14:1731:G:H2'	26:14:1732:A:C8	2.52	0.45
26:14:2154:G:H2'	26:14:2155:G:H5'	1.99	0.45
26:14:2579:C:H4'	29:29:134:ILE:HG12	1.98	0.45
26:14:2860:A:N7	26:14:2861:G:H1'	2.32	0.45
28:19:206:LEU:HD22	28:19:211:ARG:HG2	1.98	0.45
31:49:113:ARG:HH12	31:49:142:PRO:HB3	1.81	0.45
38:55:74:LYS:HA	38:55:74:LYS:HD2	1.76	0.45
43:A5:33:ARG:NH2	43:A5:52:GLU:OE2	2.46	0.45
1:13:321:A:H62	1:13:328:C:H1'	1.82	0.45
1:13:337:C:H2'	1:13:338:A:C8	2.52	0.45
1:13:693:G:H2'	1:13:694:A:C8	2.52	0.45
1:13:1003:G:C2'	1:13:1004:A:H5'	2.47	0.45
1:13:1029:G:C1'	1:13:1032(A):G:H22	2.30	0.45
2:1E:59:GLU:HB2	2:1E:221:LEU:HD21	1.99	0.45
4:3E:107:ARG:NH2	4:3E:194:LEU:HD22	2.32	0.45
5:4E:35:GLY:HA3	5:4E:112:LEU:O	2.17	0.45
7:6E:104:LEU:HA	7:6E:104:LEU:HD13	1.81	0.45
8:7E:29:SER:O	8:7E:33:GLU:HG3	2.16	0.45
11:2I:112:THR:HA	11:2I:113:PRO:HD3	1.78	0.45
17:8I:13:ASP:H	17:8I:14:LYS:HZ2	1.65	0.45
26:1H:1337:G:C4	26:1H:1338:G:C8	3.05	0.45
26:1H:1358:G:N2	26:1H:1372:U:C5	2.85	0.45
26:1H:1429:G:N2	26:1H:1430:C:C2	2.85	0.45
26:1H:1474:C:H2'	26:1H:1475:G:C8	2.52	0.45
26:1H:1516:U:H2'	26:1H:1517:G:C8	2.52	0.45
26:1H:1684:C:C2	26:1H:1705:G:N2	2.84	0.45
26:1H:2246:G:H2'	26:1H:2247:A:H8	1.81	0.45
27:16:3:C:H42	27:16:117:G:H1	1.64	0.45
30:31:167:ALA:HB1	30:31:173:VAL:HG11	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:41:39:ILE:HG13	31:41:94:LEU:HD21	1.99	0.45
44:F8:37:THR:O	44:F8:40:LYS:HB3	2.16	0.45
45:G8:89:PHE:CD1	45:G8:90:LEU:N	2.85	0.45
1:1G:581:G:N2	1:1G:760:G:N7	2.64	0.45
1:1G:963:G:H21	10:1A:55:LYS:HE3	1.81	0.45
7:62:25:ALA:HA	7:62:28:ASN:ND2	2.32	0.45
14:5A:29:ARG:HD3	14:5A:31:ARG:O	2.16	0.45
16:7A:3:LYS:N	16:7A:22:THR:O	2.50	0.45
19:AA:18:LYS:HG2	19:AA:31:ILE:HG12	1.99	0.45
20:BA:73:HIS:HB3	20:BA:74:LYS:HG2	1.98	0.45
55:3L:35:G:H2'	55:3L:36:U:C6	2.52	0.45
26:14:16:G:H5"	52:J5:17:ASP:HB2	1.99	0.45
26:14:1667:G:H22	26:14:1992:G:H5'	1.81	0.45
26:14:1972:A:OP2	59:14:3503:HOH:O	2.21	0.45
26:14:2335:A:C8	26:14:2337:G:C5	3.05	0.45
26:14:2438:U:H5"	26:14:2600:A:OP1	2.17	0.45
26:14:2468:G:N2	26:14:2481:G:O2'	2.45	0.45
28:19:49:ILE:HD11	28:19:52:ARG:HA	1.99	0.45
30:39:167:ALA:O	30:39:170:LEU:HD12	2.17	0.45
32:59:76:VAL:O	32:59:80:SER:OG	2.26	0.45
39:65:7:TYR:CZ	39:65:91:PRO:HG3	2.52	0.45
40:75:45:PHE:CD2	40:75:74:ARG:HD3	2.52	0.45
49:G5:43:GLN:O	49:G5:43:GLN:HG2	2.17	0.45
1:13:130:A:O2'	1:13:131:C:O5'	2.35	0.44
1:13:438:G:H4'	4:3E:123:HIS:ND1	2.32	0.44
1:13:491:G:H2'	1:13:492:G:H8	1.82	0.44
1:13:605:U:C2	1:13:606:G:H8	2.34	0.44
1:13:711:G:O2'	1:13:712:A:H5'	2.17	0.44
1:13:945:G:N1	1:13:1337:G:C2	2.86	0.44
1:13:1132:C:H2'	1:13:1133:G:H8	1.82	0.44
3:2E:15:THR:CG2	3:2E:181:ASN:HA	2.47	0.44
6:5E:24:GLU:O	6:5E:27:GLN:N	2.50	0.44
14:5I:11:LYS:C	14:5I:13:THR:H	2.23	0.44
19:AI:31:ILE:O	19:AI:31:ILE:HG12	2.17	0.44
23:2K:2:G:H2'	23:2K:3:C:C6	2.52	0.44
26:1H:311:A:C6	26:1H:328:U:C4	3.06	0.44
26:1H:638:G:C5	26:1H:651:G:C2	3.05	0.44
26:1H:654(C):G:C2	26:1H:654(D):G:H1'	2.52	0.44
26:1H:987:G:P	59:1H:3831:HOH:O	2.74	0.44
26:1H:2646:C:O5'	26:1H:2646:C:H6	2.00	0.44
29:21:57:LYS:HE2	29:21:59:VAL:HG12	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:41:37:VAL:O	31:41:94:LEU:HG	2.17	0.44
36:78:38:GLN:O	36:78:41:ARG:HB2	2.17	0.44
41:C8:92:ARG:NE	42:D8:11:GLN:H	2.15	0.44
48:J8:83:GLU:C	48:J8:85:LEU:H	2.26	0.44
54:Q8:16:ILE:CD1	54:Q8:57:ARG:HG2	2.44	0.44
1:1G:370:C:N4	1:1G:391:G:H1	2.14	0.44
1:1G:849:C:H2'	1:1G:850:U:O4'	2.18	0.44
1:1G:1426:C:H2'	1:1G:1427:U:C6	2.52	0.44
6:52:33:TYR:OH	6:52:78:GLU:HG3	2.16	0.44
7:62:111:ARG:HD2	7:62:123:GLU:HB2	1.97	0.44
10:1A:32:ALA:CB	10:1A:81:THR:HG21	2.47	0.44
23:2L:24:C:C2	23:2L:25:U:C5	3.06	0.44
26:14:26:G:C6	26:14:27:G:N1	2.85	0.44
26:14:171:G:H2'	26:14:172:C:C6	2.52	0.44
26:14:307:G:N2	26:14:309:G:H3'	2.32	0.44
26:14:633:A:H2'	26:14:634:C:H5'	2.00	0.44
26:14:1581:G:H2'	26:14:1582:C:O4'	2.17	0.44
26:14:1639:U:P	59:14:3432:HOH:O	2.68	0.44
26:14:2317:C:H2'	26:14:2318:G:O4'	2.17	0.44
26:14:2543:G:H2'	26:14:2544:G:C8	2.51	0.44
26:14:2667:C:H1'	32:59:109:PHE:CD1	2.52	0.44
26:14:2823:A:OP1	29:29:113:PHE:HB2	2.17	0.44
29:29:23:VAL:HA	29:29:184:VAL:O	2.17	0.44
29:29:56:PRO:HD2	29:29:58:ARG:HH22	1.81	0.44
30:39:117:ARG:HA	30:39:117:ARG:HD3	1.73	0.44
34:15:134:ARG:N	34:15:135:PRO:HD3	2.32	0.44
47:E5:31:VAL:HG22	47:E5:65:GLY:O	2.17	0.44
51:I5:61:ARG:HB3	51:I5:62:ARG:NH1	2.33	0.44
54:M5:52:LYS:C	54:M5:54:GLU:H	2.25	0.44
54:M5:60:LEU:O	54:M5:63:PRO:HD3	2.18	0.44
1:13:80:G:H2'	1:13:80:G:N3	2.31	0.44
1:13:258:G:H2'	1:13:259:G:H8	1.81	0.44
1:13:451:A:N6	1:13:480:U:H2'	2.33	0.44
1:13:991:U:HO2'	1:13:992:U:P	2.40	0.44
1:13:1260:C:OP1	1:13:1284:C:O2'	2.23	0.44
2:1E:156:LYS:HD3	2:1E:156:LYS:HA	1.77	0.44
2:1E:236:TYR:HA	2:1E:239:VAL:HG21	1.99	0.44
7:6E:48:LYS:HD2	7:6E:49:ILE:HG12	1.99	0.44
8:7E:6:ILE:HD13	8:7E:6:ILE:HA	1.81	0.44
9:8E:17:VAL:HG11	9:8E:81:ILE:HD13	1.99	0.44
16:7I:22:THR:HA	16:7I:33:ILE:HG13	1.98	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:2K:63:C:H2'	23:2K:64:G:H8	1.82	0.44
26:1H:35:G:H2'	26:1H:36:G:O4'	2.16	0.44
26:1H:445:C:O2'	26:1H:446:G:H5'	2.17	0.44
26:1H:631:A:N3	26:1H:2415:G:O2'	2.49	0.44
26:1H:881:G:C5	26:1H:882:G:H1'	2.52	0.44
26:1H:1467:C:C2'	26:1H:1468:C:H5'	2.47	0.44
26:1H:1510:A:OP1	26:1H:1511:A:H5'	2.17	0.44
26:1H:2114:A:H2'	26:1H:2114:A:N3	2.32	0.44
26:1H:2243:U:H2'	26:1H:2244:U:C6	2.53	0.44
26:1H:2275:C:H5'	26:1H:2275:C:H6	1.81	0.44
26:1H:2345:G:H4'	26:1H:2346:A:O5'	2.17	0.44
26:1H:2440:C:H5'	59:1H:3744:HOH:O	2.17	0.44
26:1H:2723:C:OP1	29:21:109:LYS:HD3	2.18	0.44
28:11:44:ASN:O	28:11:46:GLN:O	2.35	0.44
31:41:108:ASN:OD1	31:41:108:ASN:N	2.50	0.44
31:41:128:ARG:CZ	31:41:128:ARG:HB2	2.47	0.44
34:58:96:GLU:HG2	34:58:100:GLU:HG3	1.98	0.44
34:58:120:LEU:HD22	34:58:120:LEU:C	2.41	0.44
36:78:106:LEU:O	36:78:106:LEU:HD22	2.17	0.44
37:88:4:PRO:HD3	37:88:70:PRO:O	2.17	0.44
37:88:81:VAL:HG12	37:88:82:ARG:N	2.31	0.44
41:C8:39:LEU:HD23	41:C8:39:LEU:HA	1.63	0.44
44:F8:5:TYR:CE1	49:K8:30:ARG:HG3	2.52	0.44
45:G8:44:ILE:HA	45:G8:64:GLU:HA	1.97	0.44
47:I8:82:ARG:HA	47:I8:83:PRO:HD2	1.83	0.44
1:1G:107:G:H2'	1:1G:108:G:O4'	2.17	0.44
1:1G:539:A:H2'	1:1G:540:G:C8	2.52	0.44
1:1G:942:G:C2	1:1G:1342:C:C2	3.05	0.44
1:1G:1060:C:N4	1:1G:1197:G:O6	2.50	0.44
1:1G:1202:G:N1	14:5A:42:ILE:HG21	2.32	0.44
1:1G:1449:C:H3'	1:1G:1450:U:H4'	1.98	0.44
2:12:72:GLY:C	2:12:74:LYS:H	2.24	0.44
10:1A:91:PRO:HB2	10:1A:93:GLY:H	1.82	0.44
13:4A:3:ARG:NH1	51:I5:34:GLU:OE2	2.49	0.44
14:5A:23:ARG:HD3	14:5A:29:ARG:O	2.17	0.44
16:7A:14:ASN:HA	16:7A:42:ARG:NH2	2.31	0.44
20:BA:97:ALA:HA	20:BA:98:PRO:HD3	1.72	0.44
25:4L:23:A:N3	25:4L:23:A:H3'	2.31	0.44
26:14:588:U:O4	26:14:670:A:H1'	2.17	0.44
26:14:702:G:N2	26:14:731:C:C2	2.86	0.44
26:14:826:U:H2'	26:14:828:U:O4'	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1174:A:N6	26:14:1176:G:O2'	2.51	0.44
26:14:1786:A:P	59:14:3496:HOH:O	2.75	0.44
27:1J:72:G:O2'	27:1J:104:A:N6	2.48	0.44
30:39:41:LEU:HD21	30:39:184:TYR:CD1	2.51	0.44
35:25:22:ILE:HA	35:25:22:ILE:HD13	1.53	0.44
38:55:54:LEU:HD12	38:55:54:LEU:HA	1.77	0.44
1:13:166:G:H2'	1:13:167:G:H8	1.82	0.44
1:13:262:A:H2'	1:13:263:A:C8	2.52	0.44
1:13:827:U:C5	1:13:870:U:C4	3.05	0.44
4:3E:63:LYS:O	4:3E:67:ILE:HG13	2.17	0.44
8:7E:95:VAL:HG12	8:7E:99:GLU:CB	2.47	0.44
9:8E:128:ARG:NH2	23:2K:36:A:OP2	2.43	0.44
17:8I:76:LEU:HD21	17:8I:79:SER:CB	2.47	0.44
26:1H:34:C:O2'	26:1H:35:G:OP2	2.30	0.44
26:1H:550:G:O2'	26:1H:1220:A:N3	2.50	0.44
26:1H:733:G:N7	59:1H:3893:HOH:O	2.36	0.44
26:1H:833:U:O2	36:78:55:ARG:NH2	2.47	0.44
26:1H:1060:U:N3	26:1H:1088:A:C8	2.85	0.44
26:1H:1980:G:O2'	26:1H:1982:C:OP2	2.27	0.44
26:1H:2383:G:O2'	26:1H:2384:G:H5'	2.17	0.44
26:1H:2422:A:N7	54:Q8:31:HIS:HE1	2.14	0.44
26:1H:2427:C:H5"	26:1H:2428:G:OP1	2.17	0.44
26:1H:2724:C:OP1	29:21:118:LYS:HE3	2.17	0.44
31:41:131:TYR:O	31:41:159:VAL:HG22	2.18	0.44
33:61:102:SER:HA	33:61:107:VAL:O	2.17	0.44
34:58:96:GLU:CG	34:58:97:ARG:N	2.78	0.44
39:A8:29:PHE:CD1	39:A8:29:PHE:C	2.93	0.44
44:F8:32:PRO:O	44:F8:77:LYS:HE3	2.18	0.44
45:G8:40:GLU:HA	45:G8:42:VAL:H	1.81	0.44
45:G8:40:GLU:O	45:G8:40:GLU:HG3	2.14	0.44
49:K8:32:LEU:HA	49:K8:35:LEU:HD23	2.00	0.44
1:1G:28:G:C6	1:1G:29:G:C5	3.06	0.44
1:1G:84:U:O2	1:1G:84:U:H2'	2.16	0.44
1:1G:279:A:C8	1:1G:281:G:C2	3.05	0.44
1:1G:625:G:H2'	1:1G:626:U:H6	1.83	0.44
1:1G:1402:C:H2'	1:1G:1403:C:O4'	2.17	0.44
2:12:81:VAL:HG12	2:12:92:TYR:HD2	1.83	0.44
5:42:5:ASP:HA	5:42:63:ARG:NH1	2.32	0.44
6:52:35:ALA:HB1	6:52:65:VAL:HG11	1.99	0.44
6:52:81:ILE:HD11	28:19:125:ILE:CG1	2.47	0.44
7:62:113:GLU:OE1	7:62:122:HIS:ND1	2.48	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:3A:78:GLN:O	12:3A:81:SER:OG	2.36	0.44
26:14:43:G:H2'	26:14:44:A:O4'	2.17	0.44
26:14:192:C:O2'	26:14:802:A:N3	2.50	0.44
26:14:780:G:C2	26:14:782:A:C2	3.04	0.44
26:14:1533:C:C4	26:14:1534:G:H1'	2.52	0.44
26:14:2155:G:C8	26:14:2156:G:C8	3.05	0.44
26:14:2370:G:C6	26:14:2371:G:C6	3.04	0.44
26:14:2393:A:H2'	26:14:2394:C:O4'	2.16	0.44
33:69:54:GLN:HA	33:69:57:ARG:CB	2.45	0.44
33:69:76:THR:HG23	33:69:77:LEU:H	1.83	0.44
42:95:48:GLY:N	42:95:52:VAL:HG22	2.32	0.44
44:B5:26:TYR:OH	44:B5:88:LYS:HB2	2.17	0.44
50:H5:7:LYS:HG3	50:H5:34:GLU:HG3	1.98	0.44
52:J5:33:CYS:SG	52:J5:40:LYS:HB3	2.57	0.44
1:13:160:A:H1'	1:13:344:A:C8	2.52	0.44
1:13:631:G:H8	1:13:632:A:C2	2.34	0.44
1:13:690:G:H2'	1:13:691:G:O4'	2.18	0.44
1:13:1113:C:H2'	1:13:1114:C:C6	2.51	0.44
1:13:1164:G:C6	1:13:1165:C:C4	3.05	0.44
1:13:1184:G:H2'	1:13:1185:G:H8	1.83	0.44
1:13:1350:A:C6	1:13:1351:U:N3	2.86	0.44
4:3E:98:GLU:HG2	4:3E:189:PRO:HG2	1.99	0.44
7:6E:13:GLN:O	7:6E:24:THR:HG21	2.17	0.44
7:6E:89:MET:HE2	7:6E:89:MET:HB3	1.70	0.44
21:1F:9:ARG:O	21:1F:13:ILE:HG13	2.18	0.44
22:1K:7:G:H1	22:1K:75:C:N4	2.11	0.44
22:1K:81:C:N4	22:1K:82:A:N1	2.66	0.44
26:1H:456:C:C4	44:F8:69:TYR:CE1	3.06	0.44
26:1H:562:U:O4	26:1H:2036:C:H1'	2.17	0.44
26:1H:805:G:H4'	26:1H:806:C:OP2	2.17	0.44
26:1H:1652:A:OP1	38:98:8:ARG:NH1	2.51	0.44
26:1H:1931:U:H5	26:1H:1969:A:N7	2.15	0.44
26:1H:2262:U:O2'	26:1H:2263:C:H5'	2.16	0.44
29:21:134:ILE:C	29:21:134:ILE:HD12	2.42	0.44
30:31:129:PHE:O	30:31:130:ALA:HB3	2.18	0.44
36:78:61:ARG:NH2	36:78:61:ARG:C	2.76	0.44
37:88:87:LYS:HE3	37:88:90:VAL:HG23	2.00	0.44
38:98:109:ALA:HA	38:98:110:PRO:HD2	1.70	0.44
46:H8:8:TYR:HB2	46:H8:38:TYR:CZ	2.52	0.44
46:H8:18:LEU:O	46:H8:21:ALA:HB3	2.18	0.44
54:Q8:4:MET:HE3	54:Q8:4:MET:HB2	1.76	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:57:G:C6	1:1G:58:C:C4	3.05	0.44
1:1G:615:C:C2	1:1G:616:G:C8	3.06	0.44
1:1G:1126:U:H4'	1:1G:1127:G:N7	2.32	0.44
1:1G:1317:C:O2	19:AA:37:ARG:NH2	2.50	0.44
2:12:204:ASN:N	2:12:204:ASN:OD1	2.50	0.44
5:42:12:LEU:O	5:42:30:ALA:HA	2.17	0.44
9:82:48:GLU:N	9:82:49:PRO:HD2	2.32	0.44
16:7A:57:ARG:NH2	16:7A:79:VAL:O	2.46	0.44
20:BA:47:GLY:C	20:BA:49:ALA:H	2.24	0.44
24:1L:11:C:O2	24:1L:26:G:N2	2.51	0.44
55:3L:14:A:H61	55:3L:15:G:H21	1.65	0.44
25:4L:19:A:O2'	25:4L:20:A:H5'	2.18	0.44
26:14:49:A:H4'	26:14:50:U:H5"	1.98	0.44
26:14:234:C:H2'	26:14:235:U:C6	2.53	0.44
26:14:270(E):G:C2	26:14:270(F):U:C2	3.06	0.44
26:14:774:A:H5'	26:14:778:G:C4'	2.47	0.44
26:14:956:G:H5"	37:45:77:LYS:HD2	2.00	0.44
26:14:1264:G:H2'	26:14:2014:A:N6	2.32	0.44
26:14:1572:A:H8	26:14:1572:A:O5'	2.01	0.44
26:14:1889:A:N1	26:14:2234:G:H1'	2.33	0.44
26:14:2112:G:O2'	26:14:2113:U:O4'	2.35	0.44
26:14:2262:U:OP2	47:E5:19:LYS:HE2	2.17	0.44
26:14:2893:G:H5'	26:14:2894:G:OP1	2.17	0.44
29:29:106:GLY:HA3	29:29:189:PRO:HB2	1.99	0.44
31:49:104:GLU:CG	51:I5:23:GLU:HG2	2.44	0.44
36:35:19:VAL:HG13	36:35:21:ARG:H	1.83	0.44
36:35:98:GLU:HA	36:35:101:VAL:HG12	1.98	0.44
49:G5:64:LEU:O	49:G5:64:LEU:HD23	2.18	0.44
1:13:179:A:H2'	1:13:180:U:C6	2.53	0.44
1:13:266:G:H5"	1:13:267:C:C5	2.53	0.44
1:13:377:G:P	16:7I:5:ARG:HH11	2.41	0.44
1:13:401:C:H2'	1:13:402:G:C8	2.53	0.44
1:13:1002:G:C4	1:13:1003:G:C8	3.05	0.44
1:13:1106:G:C4	1:13:1107:C:C5	3.06	0.44
1:13:1203:C:H2'	1:13:1204:A:O4'	2.18	0.44
1:13:1422:G:H5'	35:68:48:PRO:HB3	1.99	0.44
4:3E:153:ARG:HH12	4:3E:181:MET:HB2	1.83	0.44
9:8E:85:LEU:O	9:8E:92:TYR:HD2	2.01	0.44
22:1K:3:U:HO2'	22:1K:4:G:P	2.38	0.44
26:1H:242:G:C5'	54:Q8:62:LEU:HD13	2.47	0.44
26:1H:249:C:O5'	59:1H:3553:HOH:O	2.21	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:286:C:H2'	26:1H:287:C:C6	2.52	0.44
26:1H:796:C:H2'	26:1H:797:C:C6	2.53	0.44
26:1H:954:G:H4'	37:88:13:GLN:NE2	2.32	0.44
26:1H:1029:A:H2'	26:1H:1030:G:O4'	2.18	0.44
26:1H:1131:G:C8	26:1H:2025:C:H4'	2.53	0.44
26:1H:1315:C:H42	26:1H:1337:G:H1	1.64	0.44
26:1H:1400:G:H2'	26:1H:1401:G:C8	2.52	0.44
26:1H:1509:C:H3'	26:1H:1510:A:H5"	2.00	0.44
26:1H:1826:G:H4'	28:11:242:ARG:CZ	2.48	0.44
26:1H:1945:G:H2'	26:1H:1946:U:C6	2.52	0.44
26:1H:2488:A:H2'	26:1H:2489:G:O4'	2.16	0.44
27:16:7:G:H5"	27:16:7:G:H8	1.81	0.44
30:31:129:PHE:HA	30:31:142:TRP:NE1	2.33	0.44
35:68:8:LEU:HB2	35:68:19:ILE:HG13	2.00	0.44
36:78:46:LYS:O	36:78:47:ASP:HB3	2.17	0.44
39:A8:59:LYS:HD3	39:A8:60:GLY:N	2.32	0.44
46:H8:69:THR:HG22	46:H8:90:VAL:HG22	1.98	0.44
1:1G:256:U:H2'	1:1G:257:G:C8	2.52	0.44
1:1G:393:A:OP2	16:7A:12:LYS:NZ	2.43	0.44
1:1G:456:C:N4	1:1G:476:G:H1	2.14	0.44
1:1G:1018:C:H2'	1:1G:1019:C:O4'	2.16	0.44
1:1G:1375:A:H4'	7:62:29:LYS:HE3	1.99	0.44
2:12:27:LYS:HB2	2:12:194:PRO:HD2	1.99	0.44
2:12:41:ILE:HG22	2:12:42:ILE:O	2.17	0.44
2:12:166:ASP:CG	2:12:169:LYS:HB2	2.42	0.44
3:22:38:ARG:HH11	3:22:94:LEU:HD22	1.82	0.44
5:42:93:PRO:HG2	8:72:105:ARG:NE	2.33	0.44
7:62:132:GLY:H	7:62:135:VAL:HB	1.83	0.44
10:1A:13:HIS:HB3	10:1A:68:HIS:ND1	2.32	0.44
13:4A:80:ARG:NH2	19:AA:66:MET:HG2	2.32	0.44
14:5A:46:GLU:O	14:5A:49:HIS:HB2	2.18	0.44
26:14:270(Z):U:H6	26:14:270(Z):U:H2'	1.62	0.44
26:14:739:G:P	59:14:3675:HOH:O	2.76	0.44
26:14:783:A:C8	26:14:783:A:H3'	2.53	0.44
26:14:827:U:O2	26:14:2246:G:H4'	2.17	0.44
26:14:864:G:C6	26:14:865:C:N4	2.85	0.44
26:14:959:A:C6	26:14:960:A:N1	2.85	0.44
26:14:1292:U:H2'	26:14:1293:C:C6	2.52	0.44
26:14:1798:U:C4	26:14:1819:A:C2	3.05	0.44
26:14:2393:A:OP1	54:M5:30:ARG:HB2	2.18	0.44
26:14:2577:A:H5'	52:J5:3:LYS:HD3	2.00	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2641:G:P	34:15:74:ARG:HH21	2.41	0.44
29:29:26:ILE:HG22	29:29:27:LEU:C	2.42	0.44
29:29:51:PHE:O	29:29:52:LEU:HB2	2.16	0.44
29:29:200:GLU:OE1	29:29:200:GLU:N	2.50	0.44
31:49:130:ASN:HB3	31:49:159:VAL:O	2.18	0.44
34:15:94:HIS:O	34:15:97:ARG:HG3	2.18	0.44
35:25:31:LYS:HB3	35:25:32:TYR:CE1	2.53	0.44
41:85:92:ARG:NH2	42:95:11:GLN:H	2.15	0.44
45:C5:20:TYR:CZ	45:C5:42:VAL:HA	2.53	0.44
47:E5:42:GLY:H	47:E5:57:PHE:HD2	1.66	0.44
1:13:210:U:O2'	1:13:216:G:C8	2.71	0.44
1:13:750:G:H2'	1:13:751:U:H6	1.82	0.44
1:13:826:C:H2'	1:13:827:U:O2	2.17	0.44
1:13:1202:G:C4	14:5I:42:ILE:HD13	2.52	0.44
6:5E:24:GLU:HB3	6:5E:28:ARG:HH12	1.83	0.44
15:6I:39:LEU:HA	15:6I:39:LEU:HD23	1.70	0.44
26:1H:2766:G:H2'	26:1H:2766:G:N3	2.32	0.44
29:21:35:GLN:HB3	29:21:48:GLN:HB2	2.00	0.44
32:51:10:PRO:O	32:51:11:VAL:HG13	2.18	0.44
33:61:11:ASN:O	33:61:12:LEU:HB2	2.17	0.44
34:58:99:LEU:HD22	34:58:103:VAL:HG23	2.00	0.44
37:88:80:GLU:CD	37:88:80:GLU:N	2.76	0.44
46:H8:141:VAL:O	46:H8:144:LEU:HG	2.17	0.44
1:1G:587:G:N2	1:1G:754:C:OP2	2.51	0.44
1:1G:977:A:C8	1:1G:1223:C:C4	3.05	0.44
1:1G:1100:C:O2'	1:1G:1102:A:O5'	2.32	0.44
1:1G:1322:C:O2	1:1G:1322:C:H2'	2.17	0.44
2:12:35:GLU:HA	2:12:40:HIS:HA	2.00	0.44
3:22:79:ARG:H	3:22:79:ARG:NE	2.15	0.44
3:22:182:ILE:HG22	3:22:203:PHE:HA	2.00	0.44
4:32:15:GLU:OE1	4:32:66:ARG:NH1	2.51	0.44
8:72:35:ILE:H	8:72:35:ILE:HG13	1.61	0.44
8:72:84:ARG:O	8:72:135:CYS:HB2	2.18	0.44
11:2A:56:GLY:O	11:2A:89:ALA:HB3	2.17	0.44
17:8A:92:ARG:HG3	17:8A:93:GLN:N	2.32	0.44
18:9A:38:GLU:HG2	18:9A:39:VAL:HG23	2.00	0.44
23:2L:20:G:C2	23:2L:58:A:N3	2.86	0.44
55:3L:35:G:C2	25:4L:14:A:C2	3.06	0.44
26:14:880:G:C2	26:14:881:G:C8	3.06	0.44
26:14:1204:A:H61	26:14:1240:U:H2'	1.82	0.44
26:14:1945:G:H2'	26:14:1946:U:H6	1.80	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2832:U:H3'	26:14:2833:G:C8	2.52	0.44
28:19:13:ARG:HA	28:19:13:ARG:HD2	1.37	0.44
28:19:142:VAL:HG12	28:19:193:VAL:HA	1.99	0.44
42:95:5:VAL:HB	42:95:37:VAL:CG1	2.43	0.44
51:I5:13:ARG:NE	51:I5:22:ILE:HG21	2.31	0.44
1:13:575:G:C5	1:13:881:G:C2	3.06	0.44
1:13:591:U:H2'	1:13:592:G:H8	1.82	0.44
1:13:1402:C:H2'	1:13:1403:C:O4'	2.17	0.44
2:1E:8:LYS:NZ	2:1E:8:LYS:H	2.16	0.44
2:1E:178:ARG:HD3	2:1E:178:ARG:HA	1.76	0.44
6:5E:80:ARG:NH1	6:5E:88:VAL:O	2.50	0.44
12:3I:70:ILE:HD13	12:3I:77:LEU:HD12	2.00	0.44
22:1K:38:MIA:H163	22:1K:38:MIA:N6	2.32	0.44
26:1H:20:C:OP1	41:C8:22:LYS:HE2	2.18	0.44
26:1H:88:G:O2'	26:1H:89:G:H5'	2.18	0.44
26:1H:363(D):G:C2	26:1H:363(E):U:C2	3.05	0.44
26:1H:442:G:O4'	30:31:46:ARG:HD3	2.18	0.44
26:1H:806:C:H2'	26:1H:807:U:H6	1.81	0.44
26:1H:883:G:H22	26:1H:894:C:N4	2.15	0.44
26:1H:1047:G:H2'	26:1H:1110:G:N1	2.33	0.44
26:1H:1493:C:N3	26:1H:2210:G:H1'	2.33	0.44
26:1H:2478:A:C8	26:1H:2529:G:C6	3.05	0.44
26:1H:2837:G:H21	38:98:45:ARG:HH21	1.65	0.44
26:1H:2855:C:H2'	26:1H:2856:C:C6	2.52	0.44
26:1H:2887:U:H2'	26:1H:2888:C:C6	2.52	0.44
27:16:37:C:H2'	27:16:38:C:H5'	2.00	0.44
33:61:16:GLY:O	33:61:47:LEU:HD11	2.17	0.44
33:61:40:THR:O	33:61:44:LEU:HD22	2.18	0.44
36:78:144:GLU:HA	36:78:145:PRO:HD3	1.67	0.44
45:G8:76:CYS:CB	45:G8:97:ARG:HG2	2.47	0.44
45:G8:81:LYS:HB3	45:G8:82:PRO:HA	1.99	0.44
1:1G:186(A):C:H2'	1:1G:186(B):C:H6	1.82	0.44
1:1G:192:U:H2'	1:1G:193:C:C6	2.50	0.44
1:1G:222:U:C2	1:1G:223:U:C5	3.06	0.44
1:1G:416:G:C5	1:1G:417:C:C4	3.06	0.44
1:1G:520:A:N1	1:1G:536:C:H1'	2.31	0.44
1:1G:680:C:H42	1:1G:710:G:H1	1.66	0.44
1:1G:784:C:H2'	1:1G:785:G:O4'	2.17	0.44
1:1G:921:U:O2	5:42:19:MET:HB3	2.18	0.44
1:1G:1036:G:H3'	1:1G:1037:C:C6	2.53	0.44
1:1G:1347:G:H22	1:1G:1373:G:H2'	1.83	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1399:C:C2	1:1G:1502:A:N6	2.86	0.44
1:1G:1502:A:H2	1:1G:1505:G:N1	2.08	0.44
6:52:96:PRO:HB3	18:9A:30:ASP:CG	2.43	0.44
8:72:82:HIS:CD2	8:72:138:TRP:CE2	3.06	0.44
19:AA:63:THR:OG1	19:AA:65:ASN:OD1	2.35	0.44
26:14:243:U:C2'	26:14:244:A:H5'	2.48	0.44
26:14:451:C:N4	26:14:454:A:H5'	2.33	0.44
26:14:864:G:H1'	26:14:914:C:H42	1.82	0.44
26:14:1154:G:O5'	26:14:1154:G:H8	2.00	0.44
26:14:1445:C:H2'	26:14:1446:C:C6	2.52	0.44
29:29:120:TRP:CE3	29:29:155:LYS:HD3	2.53	0.44
32:59:83:TYR:HA	32:59:134:SER:OG	2.17	0.44
33:69:13:GLY:HA3	33:69:17:GLN:OE1	2.18	0.44
33:69:60:GLU:HG3	33:69:61:ARG:N	2.32	0.44
34:15:34:LEU:O	34:15:49:GLY:HA3	2.18	0.44
37:45:37:LEU:HD11	37:45:130:LYS:HB2	2.00	0.44
54:M5:49:VAL:O	54:M5:50:LEU:HB2	2.17	0.44
1:13:115:G:H4'	1:13:116:A:O5'	2.17	0.44
1:13:328:C:H4'	1:13:329:A:H5'	2.00	0.44
1:13:792:A:H4'	1:13:793:U:O5'	2.18	0.44
1:13:1368:G:H5'	9:8E:111:ARG:HH21	1.83	0.44
5:4E:33:VAL:HG11	5:4E:109:ILE:HA	1.99	0.44
9:8E:121:ARG:NH1	9:8E:122:ALA:O	2.51	0.44
15:6I:6:GLU:CD	15:6I:6:GLU:H	2.25	0.44
20:BI:26:ASN:O	20:BI:30:LYS:HB2	2.18	0.44
21:1F:12:LYS:HB3	21:1F:22:ARG:HD2	1.99	0.44
26:1H:821:A:C2'	26:1H:946:G:H5"	2.48	0.44
26:1H:942:G:H4'	26:1H:1190:G:H5'	2.00	0.44
26:1H:1445:C:H2'	26:1H:1446:C:H6	1.82	0.44
26:1H:1537:C:O2	26:1H:1538:G:H1'	2.18	0.44
26:1H:1693:U:O2'	28:11:14:ARG:NH2	2.51	0.44
26:1H:1970:A:H4'	26:1H:1971:A:OP1	2.18	0.44
26:1H:2360:A:H2'	26:1H:2361:A:O4'	2.17	0.44
26:1H:2636:U:OP2	29:21:79:ARG:NH1	2.51	0.44
39:A8:103:GLU:O	39:A8:106:ARG:HD3	2.17	0.44
40:B8:57:PHE:CE1	40:B8:79:HIS:HB2	2.52	0.44
48:J8:73:LEU:HD23	48:J8:73:LEU:HA	1.80	0.44
1:1G:34:C:O2'	1:1G:35:G:H5'	2.17	0.44
1:1G:183:G:H1	1:1G:194:C:H42	1.65	0.44
1:1G:838:G:H2'	1:1G:841:U:H5"	2.00	0.44
1:1G:1119:C:H2'	1:1G:1120:G:C8	2.52	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1182:G:H4'	1:1G:1183:A:H5"	1.99	0.44
1:1G:1356:G:N2	1:1G:1367:C:C2	2.86	0.44
2:12:8:LYS:HB3	2:12:9:GLU:H	1.45	0.44
2:12:63:MET:HE3	2:12:63:MET:HB2	1.91	0.44
3:22:28:GLN:O	3:22:32:LEU:HB2	2.18	0.44
3:22:113:ALA:HB3	3:22:114:PRO:HD3	2.00	0.44
16:7A:40:ASP:HA	16:7A:41:PRO:HD2	1.70	0.44
17:8A:78:GLU:HG2	17:8A:79:SER:O	2.18	0.44
17:8A:86:GLU:O	17:8A:90:ILE:HG12	2.17	0.44
24:1L:83:C:H5'	24:1L:84:C:C5	2.53	0.44
23:2L:17:C:OP2	23:2L:18:C:O2'	2.27	0.44
23:2L:45:A:H5"	23:2L:46:G:OP2	2.18	0.44
26:14:329:G:N7	45:C5:71:LYS:NZ	2.66	0.44
26:14:654(S):G:C2	26:14:654(T):A:C6	3.06	0.44
26:14:723:G:H2'	26:14:724:U:O4'	2.18	0.44
26:14:1024:G:C3'	26:14:1025:G:H5"	2.48	0.44
26:14:1664:A:P	59:14:3540:HOH:O	2.69	0.44
26:14:1970:A:P	59:14:3512:HOH:O	2.74	0.44
34:15:103:VAL:O	34:15:107:LEU:HG	2.18	0.44
36:35:85:LEU:CD2	36:35:85:LEU:H	2.31	0.44
49:G5:47:ASN:N	49:G5:47:ASN:ND2	2.65	0.44
1:13:370:C:C2	1:13:392:G:N2	2.86	0.44
1:13:376:G:H5"	16:7I:5:ARG:HB2	2.00	0.44
1:13:474:G:H5"	16:7I:81:ARG:NH2	2.33	0.44
1:13:742:G:H4'	15:6I:58:MET:HE1	2.00	0.44
1:13:1226:C:OP2	13:4I:103:THR:OG1	2.20	0.44
2:1E:9:GLU:HA	2:1E:12:GLU:HB3	1.98	0.44
4:3E:85:LYS:HE2	4:3E:85:LYS:HB2	1.78	0.44
6:5E:27:GLN:HA	6:5E:30:LEU:HD12	1.99	0.44
8:7E:87:SER:HB2	8:7E:93:VAL:HG23	2.00	0.44
17:8I:74:LEU:HD22	17:8I:74:LEU:HA	1.64	0.44
23:2K:69:C:H2'	23:2K:70:C:C6	2.53	0.44
24:3K:49:A:C2'	24:3K:50:U:H5"	2.48	0.44
26:1H:1074:G:H2'	26:1H:1075:C:C6	2.53	0.44
26:1H:1179:C:H2'	26:1H:1180:C:H6	1.83	0.44
26:1H:1339:G:N2	26:1H:1603:A:H1'	2.33	0.44
26:1H:1378:A:OP1	53:P8:10:ARG:NH2	2.50	0.44
26:1H:1404:C:O2'	26:1H:1405:U:H5'	2.18	0.44
26:1H:1557:C:H5"	26:1H:1558:A:OP2	2.18	0.44
26:1H:1799:G:H5'	26:1H:1819:A:H61	1.83	0.44
26:1H:2054:A:H5"	26:1H:2055:C:O5'	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2078:C:H2'	26:1H:2079:U:C6	2.53	0.44
26:1H:2473:U:C2'	26:1H:2474:C:H5'	2.48	0.44
32:51:40:GLU:OE1	32:51:61:HIS:NE2	2.50	0.44
34:58:96:GLU:O	34:58:98:VAL:HG12	2.17	0.44
1:1G:186(A):C:H2'	1:1G:186(B):C:C6	2.53	0.44
1:1G:431:A:H2'	1:1G:432:A:H8	1.81	0.44
1:1G:978:A:H5'	1:1G:979:C:OP2	2.18	0.44
1:1G:1230:C:H2'	1:1G:1231:G:H8	1.83	0.44
4:32:15:GLU:OE1	4:32:59:ARG:NE	2.46	0.44
4:32:18:LYS:H	4:32:18:LYS:HG3	1.51	0.44
6:52:10:LEU:N	6:52:59:TYR:O	2.46	0.44
15:6A:26:GLU:OE2	15:6A:77:ARG:HD2	2.18	0.44
18:9A:38:GLU:HG2	18:9A:39:VAL:N	2.33	0.44
19:AA:51:VAL:O	19:AA:57:HIS:HA	2.17	0.44
24:1L:18:G:OP1	24:1L:69:U:N3	2.49	0.44
26:14:906:G:OP1	37:45:26:TYR:OH	2.35	0.44
26:14:1027:A:H2	26:14:2487:G:O2'	2.01	0.44
26:14:1030:G:OP2	37:45:128:LYS:HE2	2.17	0.44
26:14:1638:C:H1'	26:14:2698:U:O2'	2.17	0.44
26:14:2115:G:H21	26:14:2172:U:H3	1.64	0.44
26:14:2187:G:C6	26:14:2188:C:N4	2.86	0.44
26:14:2850:A:H2'	26:14:2851:A:H8	1.82	0.44
28:19:77:ALA:O	28:19:116:GLN:HA	2.18	0.44
29:29:77:ILE:C	29:29:78:LEU:HG	2.43	0.44
32:59:6:ARG:NH2	32:59:54:ARG:HH22	2.16	0.44
45:C5:82:PRO:HB3	45:C5:97:ARG:HB3	2.00	0.44
1:13:280:C:O2	17:8I:38:ARG:HG3	2.18	0.43
1:13:446:G:H1	1:13:488:C:H42	1.65	0.43
1:13:484:G:O2'	1:13:485:G:OP2	2.31	0.43
1:13:598:U:H2'	1:13:599:C:C6	2.53	0.43
1:13:825:G:O4'	8:7E:2:LEU:HD21	2.18	0.43
1:13:1131:G:OP2	1:13:1131:G:H8	2.01	0.43
1:13:1366:C:H2'	1:13:1367:C:C6	2.53	0.43
16:7I:12:LYS:C	16:7I:14:ASN:H	2.25	0.43
18:9I:56:THR:HB	18:9I:58:LEU:HD13	2.00	0.43
26:1H:225:A:O2'	26:1H:257:A:H4'	2.18	0.43
26:1H:827:U:H5'	26:1H:828:U:O5'	2.18	0.43
26:1H:1026:U:H4'	26:1H:1027:A:OP1	2.18	0.43
26:1H:1038:C:H2'	26:1H:1039:G:O4'	2.18	0.43
26:1H:2093:G:C6	26:1H:2225:A:C8	3.06	0.43
26:1H:2262:U:OP1	26:1H:2387:U:O2'	2.20	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2820:A:P	38:98:2:ARG:NH2	2.91	0.43
27:16:54:G:H2'	27:16:55:U:H6	1.83	0.43
27:16:61:G:C6	27:16:62:C:C4	3.06	0.43
29:21:116:VAL:HG11	29:21:138:PRO:HB3	2.00	0.43
31:41:96:ARG:H	31:41:99:MET:HE2	1.83	0.43
31:41:173:LEU:HB3	31:41:178:PHE:CD2	2.53	0.43
32:51:19:VAL:HG12	32:51:20:ALA:H	1.83	0.43
32:51:97:ARG:O	32:51:103:LEU:HD12	2.18	0.43
34:58:15:LEU:C	34:58:16:ILE:HG12	2.42	0.43
36:78:96:THR:O	36:78:98:GLU:N	2.42	0.43
37:88:118:LEU:HA	37:88:118:LEU:HD23	1.74	0.43
38:98:29:LEU:HA	38:98:29:LEU:HD12	1.70	0.43
39:A8:41:ASP:OD2	39:A8:44:LYS:HB2	2.18	0.43
41:C8:32:PHE:O	41:C8:32:PHE:CG	2.71	0.43
43:E8:97:LYS:HE3	43:E8:99:ARG:CZ	2.48	0.43
45:G8:87:LYS:O	45:G8:94:LYS:HB2	2.18	0.43
47:I8:21:LEU:HD23	47:I8:21:LEU:HA	1.79	0.43
49:K8:61:LEU:HD23	49:K8:61:LEU:HA	1.79	0.43
1:1G:1108:G:OP2	3:22:174:PRO:HA	2.17	0.43
1:1G:1130:A:N6	1:1G:1131:G:O6	2.51	0.43
2:12:75:LYS:H	2:12:78:GLN:HG3	1.83	0.43
24:1L:18:G:H4'	24:1L:19:C:OP2	2.15	0.43
26:14:107:C:H2'	26:14:108:U:C6	2.53	0.43
26:14:424:G:N7	59:14:3865:HOH:O	2.36	0.43
26:14:531:C:OP1	26:14:561:G:C2	2.71	0.43
26:14:631:A:O2'	36:35:67:MET:HB3	2.18	0.43
26:14:994:C:O2'	26:14:996:A:OP1	2.35	0.43
26:14:1203:G:H3'	26:14:1204:A:H5"	2.00	0.43
26:14:1849:G:H2'	26:14:1850:G:C8	2.53	0.43
26:14:1886:C:OP2	26:14:1886:C:H6	2.01	0.43
26:14:1935:G:H1'	26:14:1964:G:N2	2.33	0.43
26:14:2002:G:C6	59:14:3810:HOH:O	2.70	0.43
26:14:2116:G:H2'	26:14:2117:A:C4	2.54	0.43
26:14:2541:A:H4'	26:14:2764:A:N1	2.33	0.43
26:14:2646:C:H2'	26:14:2647:U:O4'	2.17	0.43
27:1J:1:U:C4	27:1J:2:C:C4	3.06	0.43
28:19:33:LEU:HD12	28:19:33:LEU:HA	1.82	0.43
33:69:21:VAL:HG21	33:69:26:ALA:HB2	2.01	0.43
37:45:11:LYS:NZ	37:45:86:GLY:O	2.42	0.43
40:75:132:LYS:HB3	40:75:132:LYS:NZ	2.33	0.43
41:85:79:PHE:CZ	41:85:83:LEU:HD11	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:B5:3:THR:HG22	44:B5:6:ASP:OD2	2.18	0.43
45:C5:99:CYS:SG	45:C5:100:ALA:N	2.91	0.43
1:13:114:U:O2'	1:13:115:G:H5'	2.17	0.43
1:13:254:G:O3'	17:8I:69:LYS:NZ	2.37	0.43
1:13:1428:A:H2'	1:13:1429:C:C6	2.53	0.43
7:6E:18:TYR:HB3	7:6E:59:LEU:HD11	2.00	0.43
9:8E:112:LYS:HA	9:8E:119:ALA:HB2	2.00	0.43
22:1K:11:C:O2'	22:1K:12:C:H5'	2.18	0.43
23:2K:7:G:H1	23:2K:67:C:H42	1.66	0.43
23:2K:37:U:H2'	23:2K:38:A:H8	1.83	0.43
26:1H:7:G:N1	26:1H:8:A:N3	2.66	0.43
26:1H:200:U:O2	26:1H:386:G:N2	2.51	0.43
26:1H:270(K):C:C4	26:1H:270(M):U:H5"	2.53	0.43
26:1H:887:A:H5'	26:1H:888:C:OP1	2.18	0.43
26:1H:1011:G:C2	26:1H:1151:G:C2	3.07	0.43
26:1H:1657:C:H2'	26:1H:1658:C:C6	2.53	0.43
26:1H:2098:U:H2'	26:1H:2099:U:O4'	2.17	0.43
26:1H:2115:G:H1'	26:1H:2171:A:N1	2.34	0.43
26:1H:2436:G:C5	26:1H:2437:U:C5	3.06	0.43
26:1H:2619:C:H5'	29:21:150:VAL:O	2.18	0.43
31:41:145:THR:O	31:41:146:TYR:HB3	2.17	0.43
32:51:84:SER:O	32:51:85:LYS:HB2	2.18	0.43
33:61:64:GLU:O	33:61:68:LEU:N	2.40	0.43
33:61:104:GLN:HG2	33:61:105:HIS:CE1	2.53	0.43
41:C8:90:VAL:HA	42:D8:39:LEU:HD23	1.99	0.43
46:H8:44:PHE:CD1	46:H8:44:PHE:C	2.96	0.43
1:1G:109:A:H5'	1:1G:110:C:H5	1.83	0.43
1:1G:142:G:H2'	1:1G:143:A:C8	2.53	0.43
1:1G:147:G:N2	1:1G:148:G:C4	2.86	0.43
1:1G:474:G:O5'	1:1G:474:G:H8	2.02	0.43
1:1G:750:G:N2	15:6A:23:GLY:HA3	2.33	0.43
1:1G:1157:A:O2'	1:1G:1158:C:P	2.76	0.43
1:1G:1287:A:H2	1:1G:1353:G:N3	2.16	0.43
59:1G:1782:HOH:O	14:5A:21:TYR:HB3	2.17	0.43
4:32:78:LEU:O	4:32:81:GLU:HB3	2.18	0.43
17:8A:56:VAL:HG12	17:8A:77:VAL:HB	2.00	0.43
55:3L:22:A:N7	55:3L:57:C:N4	2.66	0.43
26:14:270(E):G:C6	26:14:270(F):U:C4	3.06	0.43
26:14:446:G:P	59:14:3740:HOH:O	2.77	0.43
26:14:516:C:H6	26:14:516:C:O5'	2.01	0.43
26:14:636:G:O2'	26:14:638:G:O2'	2.26	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:860:U:C2	26:14:2268:A:C8	3.06	0.43
26:14:870:A:P	37:45:6:ARG:HH11	2.41	0.43
26:14:1053:C:H2'	26:14:1054:A:O4'	2.17	0.43
26:14:1188:U:C2'	26:14:1189:A:H5'	2.47	0.43
26:14:1858:G:H8	26:14:1858:G:OP2	2.00	0.43
26:14:2101:G:H1	26:14:2188:C:N4	2.12	0.43
28:19:3:VAL:HG12	28:19:17:THR:HB	2.00	0.43
28:19:267:SER:O	28:19:268:ARG:HG2	2.17	0.43
29:29:26:ILE:HD12	29:29:26:ILE:HG23	1.73	0.43
29:29:61:ARG:HG2	29:29:61:ARG:O	2.18	0.43
29:29:117:MET:HB2	29:29:122:PHE:O	2.17	0.43
32:59:87:LEU:HA	32:59:163:TYR:O	2.18	0.43
32:59:125:VAL:HG22	32:59:126:PRO:HD3	2.00	0.43
37:45:16:ARG:HB2	37:45:18:LYS:HD3	2.00	0.43
1:13:420:U:H2'	1:13:422:C:H5	1.84	0.43
1:13:422:C:O2'	1:13:423:G:O5'	2.36	0.43
1:13:564:C:C6	17:8I:31:LEU:HD11	2.53	0.43
1:13:763:G:H2'	1:13:764:C:H6	1.81	0.43
1:13:1388:C:H2'	1:13:1389:C:H6	1.81	0.43
1:13:1429:C:H2'	1:13:1430:C:C6	2.54	0.43
3:2E:115:LEU:HA	3:2E:115:LEU:HD23	1.78	0.43
8:7E:39:LEU:HD12	8:7E:39:LEU:HA	1.83	0.43
9:8E:112:LYS:CA	9:8E:119:ALA:HB2	2.48	0.43
15:6I:18:PHE:CE1	15:6I:21:ASP:HB2	2.54	0.43
20:BI:26:ASN:HD22	20:BI:26:ASN:H	1.66	0.43
24:3K:21:A:H4'	24:3K:22:A:O5'	2.17	0.43
24:3K:37:A:C2	24:3K:38:A:H1'	2.54	0.43
24:3K:62:G:H1	24:3K:70:C:H42	1.65	0.43
26:1H:127:A:H5"	26:1H:128:C:C6	2.52	0.43
26:1H:232:G:OP2	26:1H:232:G:C8	2.70	0.43
26:1H:409:C:P	59:1H:3609:HOH:O	2.76	0.43
26:1H:755:C:H2'	26:1H:756:C:C6	2.53	0.43
26:1H:883:G:H1	26:1H:893:C:N4	2.16	0.43
26:1H:1061:U:O3'	26:1H:1070:A:H4'	2.17	0.43
26:1H:1174:A:C4	26:1H:1178:C:N4	2.86	0.43
26:1H:1454:U:O2'	26:1H:1455:G:N7	2.46	0.43
26:1H:1480:G:C6	26:1H:1482:U:N3	2.87	0.43
26:1H:1488:G:N2	26:1H:1502:C:C2	2.86	0.43
26:1H:1564:C:O2'	26:1H:1565:C:H5'	2.18	0.43
26:1H:1681:G:N2	26:1H:1763:G:O5'	2.49	0.43
26:1H:2353:G:O6	26:1H:2365:G:C2	2.72	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2492:U:H2'	26:1H:2493:U:C6	2.53	0.43
26:1H:2577:A:H2'	26:1H:2614:A:N6	2.32	0.43
32:51:10:PRO:C	32:51:11:VAL:HG22	2.44	0.43
32:51:150:ALA:C	32:51:152:ARG:N	2.75	0.43
33:61:5:LEU:HD23	33:61:5:LEU:HA	1.63	0.43
36:78:105:LEU:O	36:78:106:LEU:HB3	2.17	0.43
38:98:10:LEU:O	38:98:11:ASN:C	2.61	0.43
43:E8:22:ASP:HA	43:E8:25:ARG:NH1	2.34	0.43
46:H8:40:ASP:OD2	46:H8:43:GLU:N	2.41	0.43
49:K8:50:ILE:HD12	49:K8:51:ARG:N	2.31	0.43
1:1G:598:U:H2'	1:1G:599:C:C6	2.54	0.43
2:12:7:VAL:HG22	2:12:8:LYS:H	1.83	0.43
2:12:10:LEU:HA	2:12:13:ALA:HB2	2.01	0.43
2:12:70:PHE:HB2	2:12:92:TYR:CB	2.48	0.43
2:12:185:ILE:CG2	2:12:199:TYR:HB2	2.33	0.43
3:22:91:LEU:HD11	3:22:101:LEU:CG	2.49	0.43
5:42:13:ILE:O	5:42:13:ILE:HD12	2.18	0.43
7:62:69:VAL:HG13	7:62:134:ALA:O	2.19	0.43
11:2A:106:LYS:H	11:2A:106:LYS:HG3	1.41	0.43
17:8A:75:ARG:HH12	17:8A:76:LEU:C	2.25	0.43
19:AA:12:ASP:O	19:AA:16:LEU:HD13	2.18	0.43
26:14:72:U:H3	49:G5:62:THR:HG23	1.83	0.43
26:14:696:G:H2'	26:14:697:C:H6	1.84	0.43
26:14:1045:A:O2'	26:14:1046:A:OP2	2.30	0.43
26:14:1475:G:C2	26:14:1519:G:N3	2.86	0.43
26:14:1899:G:N2	26:14:1902:C:H5	2.16	0.43
26:14:2056:G:H3'	59:14:3437:HOH:O	2.16	0.43
26:14:2420:C:C5	54:M5:31:HIS:O	2.71	0.43
26:14:2542:A:C8	26:14:2544:G:O6	2.71	0.43
26:14:2579:C:H2'	26:14:2580:U:O4'	2.18	0.43
27:1J:87:G:N2	27:1J:89:G:H3'	2.33	0.43
34:15:7:LYS:HZ2	34:15:7:LYS:HG2	1.43	0.43
34:15:91:LEU:O	34:15:95:PRO:HB3	2.19	0.43
37:45:98:LYS:HB3	37:45:99:PRO:HD2	2.00	0.43
39:65:7:TYR:O	39:65:11:LYS:HB2	2.18	0.43
39:65:30:ARG:HE	39:65:30:ARG:HB3	1.50	0.43
43:A5:57:ASN:HA	43:A5:61:ASN:HD22	1.83	0.43
46:D5:77:ASP:CG	46:D5:80:ARG:HD2	2.43	0.43
1:13:51:A:OP2	1:13:52:G:H8	2.01	0.43
1:13:364:A:O2'	1:13:365:U:H5'	2.18	0.43
1:13:501:C:OP1	12:3I:117:ARG:NH2	2.46	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:955:U:H1'	1:13:1227:A:N6	2.32	0.43
1:13:1351:U:O2'	1:13:1352:C:H5'	2.17	0.43
1:13:1352:C:H2'	1:13:1353:G:H8	1.83	0.43
2:1E:8:LYS:H	2:1E:8:LYS:HD3	1.83	0.43
2:1E:160:ASP:O	2:1E:183:PRO:HD2	2.19	0.43
3:2E:3:ASN:C	3:2E:4:LYS:HG2	2.43	0.43
3:2E:178:LEU:HD13	3:2E:178:LEU:HA	1.81	0.43
4:3E:8:VAL:HG12	4:3E:9:CYS:N	2.33	0.43
5:4E:137:GLU:HA	5:4E:140:ARG:CD	2.48	0.43
6:5E:3:ARG:HB3	6:5E:93:SER:HB2	2.00	0.43
6:5E:96:PRO:HB3	18:9I:30:ASP:CG	2.44	0.43
20:BI:73:HIS:O	20:BI:76:ALA:HB3	2.18	0.43
23:2K:55:5MU:H5'	23:2K:56:PSU:OP2	2.18	0.43
26:1H:192:C:OP2	59:1H:3591:HOH:O	2.21	0.43
26:1H:270(V):G:C2	26:1H:270(W):G:C4	3.07	0.43
26:1H:610:C:H2'	26:1H:611:C:H6	1.82	0.43
26:1H:646:A:C8	26:1H:647:G:H1'	2.54	0.43
26:1H:659:C:H4'	30:31:100:THR:O	2.19	0.43
26:1H:996:A:H4'	41:C8:92:ARG:HG2	1.99	0.43
26:1H:1142(A):A:C5	26:1H:1144:G:C5	3.06	0.43
26:1H:1665:A:C2'	26:1H:1666:G:H5'	2.48	0.43
26:1H:2402:C:O2'	26:1H:2403:C:OP1	2.34	0.43
27:16:18:G:H1	27:16:65:C:H42	1.66	0.43
28:11:30:GLU:HB3	28:11:33:LEU:HB2	2.00	0.43
30:31:65:TRP:HZ3	30:31:73:ALA:O	2.00	0.43
31:41:112:PRO:HB3	51:M8:36:CYS:CA	2.47	0.43
32:51:10:PRO:HD2	32:51:50:VAL:O	2.18	0.43
32:51:130:ARG:HH11	32:51:130:ARG:HB3	1.83	0.43
33:61:33:ARG:HB3	33:61:35:LEU:HB2	2.00	0.43
35:68:119:PRO:HB2	40:B8:68:TYR:CE2	2.53	0.43
39:A8:80:LEU:HD22	39:A8:80:LEU:HA	1.86	0.43
45:G8:29:GLU:HG2	45:G8:30:VAL:N	2.33	0.43
48:J8:64:ALA:HA	48:J8:67:ILE:HG13	1.99	0.43
1:1G:397:A:H3'	1:1G:397:A:N3	2.32	0.43
1:1G:718:G:H5'	11:2A:117:ASN:ND2	2.33	0.43
1:1G:980:C:H5'	1:1G:981:U:H5	1.79	0.43
1:1G:1241:G:OP1	7:62:35:LYS:NZ	2.51	0.43
1:1G:1423:G:P	35:25:49:ARG:HH12	2.41	0.43
3:22:47:LEU:CD2	3:22:68:VAL:HG11	2.48	0.43
4:32:61:LYS:HA	4:32:203:VAL:HG22	2.01	0.43
4:32:65:ARG:HD2	4:32:72:GLU:HA	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:32:74:GLN:O	4:32:78:LEU:HD23	2.18	0.43
5:42:87:SER:HB3	5:42:125:SER:O	2.18	0.43
13:4A:7:VAL:HG11	31:49:115:ARG:CZ	2.48	0.43
17:8A:75:ARG:NH2	17:8A:77:VAL:HG22	2.33	0.43
26:14:107:C:H2'	26:14:108:U:H6	1.83	0.43
26:14:173:G:N3	26:14:173:G:H2'	2.33	0.43
26:14:190:A:OP2	48:F5:39:LYS:NZ	2.52	0.43
26:14:1062:G:H8	26:14:1062:G:OP1	2.01	0.43
26:14:1250:G:H5'	59:85:301:HOH:O	2.19	0.43
26:14:1257:C:H4'	30:39:83:PHE:CD1	2.53	0.43
26:14:1332:G:H8	26:14:1332:G:H2'	1.44	0.43
26:14:1827:C:OP2	28:19:222:ARG:NH1	2.49	0.43
26:14:2014:A:H2'	26:14:2015:A:C8	2.54	0.43
37:45:135:ASP:O	37:45:137:TYR:HD1	2.00	0.43
42:95:85:LYS:HE3	42:95:88:ARG:H	1.82	0.43
1:13:575:G:C4	1:13:881:G:C2	3.07	0.43
1:13:1202:G:O2'	14:5I:29:ARG:HB2	2.18	0.43
1:13:1489:G:H2'	1:13:1490:C:O4'	2.18	0.43
4:3E:8:VAL:CG1	4:3E:21:LEU:HB2	2.48	0.43
11:2I:38:ASN:HA	11:2I:39:PRO:HD3	1.85	0.43
15:6I:35:ARG:HE	15:6I:35:ARG:HB2	1.71	0.43
17:8I:50:LYS:HG3	17:8I:51:TYR:CD2	2.53	0.43
20:BI:50:GLU:HG3	20:BI:100:ILE:HG12	2.00	0.43
22:1K:3:U:H1'	22:1K:4:G:OP1	2.19	0.43
25:4K:19[A]:A:H2'	25:4K:19[A]:A:N3	2.34	0.43
26:1H:141(A):C:H2'	26:1H:142:G:O4'	2.18	0.43
26:1H:198:C:O2'	26:1H:199:A:H5"	2.18	0.43
26:1H:602:G:O2'	26:1H:655:A:N6	2.52	0.43
26:1H:1163:G:C2	26:1H:1164:G:C8	3.06	0.43
26:1H:1313:U:OP1	59:1H:3765:HOH:O	2.21	0.43
26:1H:1649:G:C6	26:1H:2009:G:O6	2.71	0.43
26:1H:1761:C:H42	26:1H:1762:A:H62	1.66	0.43
26:1H:1780:A:P	59:1H:3523:HOH:O	2.73	0.43
26:1H:1814:G:H3'	26:1H:1815:A:H2'	1.99	0.43
26:1H:2286:A:H4'	26:1H:2287:A:O4'	2.18	0.43
26:1H:2337:G:H2'	26:1H:2338:G:H8	1.84	0.43
27:16:44:G:C2	27:16:48:A:C2	3.06	0.43
27:16:83:G:C6	27:16:84:C:C5	3.07	0.43
31:41:114:ILE:HG22	31:41:115:ARG:O	2.19	0.43
33:61:79:ILE:HA	33:61:80:PRO:HD2	1.85	0.43
35:68:22:ILE:HG22	35:68:40:VAL:C	2.44	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:78:91:PHE:O	36:78:121:LYS:NZ	2.35	0.43
42:D8:36:PRO:HA	42:D8:56:SER:HB3	2.00	0.43
46:H8:150:LEU:HB3	46:H8:171:ILE:HB	2.00	0.43
54:Q8:17:THR:OG1	54:Q8:21:LYS:N	2.42	0.43
54:Q8:52:LYS:H	54:Q8:54:GLU:HG3	1.83	0.43
1:1G:80:G:HO2'	1:1G:81:G:P	2.36	0.43
1:1G:95:G:H2'	1:1G:96:G:C8	2.53	0.43
1:1G:330:C:H2'	59:1G:1732:HOH:O	2.17	0.43
1:1G:451:A:N6	1:1G:480:U:H2'	2.34	0.43
1:1G:553:A:C6	1:1G:554:C:C4	3.06	0.43
1:1G:560:U:HO2'	1:1G:561:U:P	2.35	0.43
1:1G:617:G:H1	1:1G:623:C:N4	2.13	0.43
1:1G:957:U:C1'	1:1G:960:U:H5	2.20	0.43
1:1G:1135:U:O2'	1:1G:1136:U:H5	2.01	0.43
7:62:26:PHE:CE2	7:62:30:ILE:HD11	2.54	0.43
17:8A:83:ASP:O	17:8A:86:GLU:HB2	2.19	0.43
24:1L:22:A:N7	24:1L:57:C:N4	2.66	0.43
23:2L:33:OMC:H6	23:2L:33:OMC:O5'	2.02	0.43
23:2L:53:G:C4	23:2L:54:G:C8	3.07	0.43
55:3L:26:G:H2'	55:3L:27:A:O4'	2.18	0.43
26:14:242:G:H8	54:M5:4:MET:O	2.02	0.43
26:14:654(R):C:N4	26:14:654(S):G:O6	2.52	0.43
26:14:782:A:H5'	26:14:783:A:C2	2.53	0.43
26:14:834:C:O3'	54:M5:52:LYS:HG2	2.18	0.43
26:14:950:G:C5	26:14:951:C:C4	3.06	0.43
26:14:1015:G:C2	26:14:1016:G:C4	3.06	0.43
26:14:1142:U:O2	26:14:1142:U:H2'	2.18	0.43
26:14:1729:A:C6	26:14:1731:G:C5	3.06	0.43
26:14:1759:A:H4'	26:14:2715:C:O4'	2.17	0.43
26:14:1991:U:C2'	26:14:1992:G:H5"	2.48	0.43
26:14:2052:G:O4'	29:29:142:GLY:HA3	2.18	0.43
26:14:2154:G:C6	26:14:2155:G:N7	2.86	0.43
26:14:2315:G:H2'	26:14:2316:C:C6	2.54	0.43
26:14:2360:A:H2'	26:14:2361:A:O4'	2.18	0.43
26:14:2760:C:H2'	26:14:2761:G:C8	2.53	0.43
26:14:2849:U:O4	40:75:23:ARG:NH2	2.42	0.43
36:35:86:LYS:HG3	36:35:87:ASP:N	2.34	0.43
41:85:90:VAL:O	41:85:92:ARG:N	2.52	0.43
42:95:85:LYS:CB	42:95:87:HIS:H	2.32	0.43
45:C5:76:CYS:HB2	45:C5:97:ARG:HG3	2.00	0.43
46:D5:28:MET:O	46:D5:34:ASN:HA	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:I5:8:LYS:O	51:I5:10:VAL:HG12	2.18	0.43
51:I5:24:THR:C	51:I5:25:TYR:HD1	2.27	0.43
54:M5:36:LYS:HG3	54:M5:37:SER:N	2.34	0.43
1:13:452:A:O2'	1:13:453:A:O4'	2.28	0.43
1:13:515:G:N2	1:13:537:G:C4	2.87	0.43
1:13:629:G:N1	1:13:630:G:C6	2.86	0.43
1:13:677:U:H2'	1:13:678:U:C6	2.53	0.43
1:13:939:G:H2'	1:13:940:C:H6	1.84	0.43
1:13:963:G:N2	10:1I:55:LYS:NZ	2.61	0.43
1:13:1061:G:O6	3:2E:2:GLY:N	2.52	0.43
11:2I:103:LEU:HD12	11:2I:103:LEU:HA	1.81	0.43
16:7I:4:ILE:HA	16:7I:20:VAL:O	2.18	0.43
18:9I:19:LYS:HB3	18:9I:20:ALA:H	1.60	0.43
26:1H:49:A:H4'	26:1H:50:U:H5"	2.00	0.43
26:1H:287:C:O2'	26:1H:288:C:H5'	2.18	0.43
26:1H:389:G:H22	36:78:72:PRO:HD3	1.83	0.43
26:1H:818:G:H4'	26:1H:838:C:O3'	2.19	0.43
26:1H:1113:U:H2'	26:1H:1114:G:C8	2.54	0.43
26:1H:1174:A:C1'	26:1H:1178:C:H41	2.31	0.43
26:1H:1231:G:H2'	26:1H:1232:G:C8	2.54	0.43
26:1H:1288:U:H4'	26:1H:1289:C:OP2	2.18	0.43
26:1H:1783:A:P	59:1H:3522:HOH:O	2.70	0.43
26:1H:2616:C:H2'	26:1H:2617:C:C6	2.53	0.43
26:1H:2694:G:C6	26:1H:2695:C:C4	3.07	0.43
30:31:125:LEU:HD11	30:31:199:TRP:CD2	2.53	0.43
36:78:130:PHE:CZ	36:78:144:GLU:HG2	2.53	0.43
40:B8:19:LEU:HA	40:B8:20:PRO:HD3	1.78	0.43
41:C8:34:LYS:HE2	41:C8:34:LYS:HA	1.99	0.43
46:H8:125:LEU:HG	46:H8:164:ALA:CB	2.49	0.43
48:J8:23:LYS:HB3	48:J8:29:GLY:HA3	2.01	0.43
52:N8:9:LYS:HD3	52:N8:9:LYS:HA	1.62	0.43
54:Q8:43:GLN:C	54:Q8:44:LYS:HD2	2.43	0.43
1:1G:843:U:H3'	1:1G:848:C:O4'	2.18	0.43
1:1G:992:U:H4'	1:1G:993:G:O5'	2.18	0.43
1:1G:1286:A:H3'	1:1G:1286:A:H8	1.84	0.43
1:1G:1418:A:H2	26:14:1948:G:N3	2.15	0.43
3:22:56:ASP:OD1	3:22:57:ILE:N	2.51	0.43
4:32:50:ARG:HA	4:32:51:PRO:HD3	1.79	0.43
5:42:34:VAL:O	5:42:41:VAL:HG12	2.19	0.43
7:62:131:LYS:NZ	7:62:131:LYS:HB3	2.34	0.43
8:72:88:LYS:O	8:72:92:ARG:HD2	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:9A:61:LYS:O	18:9A:65:ILE:HG23	2.18	0.43
26:14:1337:G:H2'	26:14:1338:G:C8	2.53	0.43
26:14:1491:G:O2'	28:19:101:GLU:HB2	2.19	0.43
26:14:2128:C:H5'	26:14:2129:C:OP2	2.19	0.43
26:14:2330:G:O2'	47:E5:41:ARG:O	2.27	0.43
26:14:2352:A:N1	47:E5:33:ALA:O	2.52	0.43
26:14:2498:C:H3'	59:14:3445:HOH:O	2.18	0.43
26:14:2721:A:H2'	26:14:2722:G:C8	2.54	0.43
26:14:2788:C:O2'	26:14:2809:A:N3	2.52	0.43
28:19:69:ARG:CD	28:19:105:ILE:HD11	2.48	0.43
28:19:239:ARG:NE	59:19:302:HOH:O	2.50	0.43
30:39:83:PHE:O	30:39:84:VAL:HB	2.18	0.43
32:59:33:LEU:HD11	32:59:78:GLY:HA3	1.99	0.43
36:35:35:HIS:HB3	36:35:36:LYS:H	1.55	0.43
37:45:19:GLY:O	37:45:98:LYS:HB3	2.18	0.43
38:55:30:THR:HG22	38:55:31:HIS:ND1	2.32	0.43
39:65:80:LEU:HD23	39:65:80:LEU:HA	1.78	0.43
41:85:55:ARG:H	41:85:55:ARG:HG2	1.36	0.43
48:F5:34:THR:O	48:F5:34:THR:HG22	2.17	0.43
1:13:524:G:H2'	1:13:525:C:C5	2.53	0.43
1:13:675:A:H2'	1:13:676:A:O4'	2.19	0.43
1:13:881:G:P	12:3I:12:ARG:HH22	2.41	0.43
1:13:947:G:H2'	1:13:948:C:O4'	2.19	0.43
1:13:1158:C:C2	1:13:1160:G:C8	3.06	0.43
1:13:1160:G:H22	1:13:1177:G:N2	2.17	0.43
1:13:1388:C:H2'	1:13:1389:C:C6	2.53	0.43
1:13:1470:G:H2'	1:13:1471:G:O4'	2.19	0.43
3:2E:12:LEU:HD22	3:2E:12:LEU:HA	1.89	0.43
3:2E:70:VAL:N	3:2E:106:VAL:HG23	2.34	0.43
16:7I:58:TYR:O	16:7I:62:VAL:HG22	2.19	0.43
26:1H:298:G:H5"	26:1H:299:A:OP1	2.19	0.43
26:1H:975:G:C2	26:1H:976:C:C6	3.07	0.43
26:1H:984:A:H5"	26:1H:985:C:H5	1.83	0.43
26:1H:1013:C:O2'	26:1H:1014:U:H5'	2.19	0.43
26:1H:1167:U:C2	26:1H:1183:G:N2	2.87	0.43
26:1H:1453:A:O2'	26:1H:1454:U:H2'	2.18	0.43
26:1H:1999:C:H4'	26:1H:2723:C:O2	2.19	0.43
26:1H:2545:G:H2'	26:1H:2546:U:O4'	2.19	0.43
27:16:4:C:H42	27:16:116:G:H1	1.65	0.43
27:16:89:G:H2'	27:16:89(A):A:C8	2.54	0.43
28:11:97:TYR:CE1	28:11:103:ARG:HG3	2.54	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:41:13:GLU:O	31:41:14:GLU:HB3	2.18	0.43
31:41:42:GLY:O	31:41:43:LEU:HD13	2.19	0.43
36:78:61:ARG:HB3	54:Q8:27:THR:HG22	1.99	0.43
36:78:121:LYS:HE2	36:78:121:LYS:HB3	1.72	0.43
40:B8:108:ARG:HA	40:B8:111:ARG:NE	2.33	0.43
42:D8:45:THR:O	42:D8:47:VAL:HG12	2.18	0.43
49:K8:4:SER:N	49:K8:7:ARG:HD2	2.34	0.43
51:M8:38:LYS:C	51:M8:40:HIS:H	2.27	0.43
54:Q8:41:ILE:HG13	54:Q8:42:ARG:N	2.33	0.43
1:1G:176:C:H2'	1:1G:177:C:C6	2.51	0.43
1:1G:448:A:OP2	1:1G:485:G:N2	2.45	0.43
1:1G:617:G:H4'	16:7A:44:THR:HB	2.00	0.43
1:1G:1054:C:N4	24:1L:35:G:C8	2.86	0.43
2:12:12:GLU:HB2	2:12:16:HIS:ND1	2.34	0.43
3:22:18:TRP:HE1	14:5A:56:VAL:H	1.66	0.43
5:42:55:VAL:O	5:42:58:ALA:HB3	2.19	0.43
5:42:124:GLY:O	5:42:126:ARG:HG3	2.19	0.43
13:4A:96:LEU:N	13:4A:110:ARG:HH21	2.16	0.43
16:7A:14:ASN:OD1	16:7A:42:ARG:NH2	2.52	0.43
26:14:221:A:N6	26:14:265:A:C8	2.86	0.43
26:14:817:C:C5	26:14:818:G:N7	2.87	0.43
26:14:844:C:C5	26:14:845:G:C6	3.07	0.43
26:14:1496:A:C8	26:14:1577:C:O2'	2.69	0.43
26:14:1496:A:H2'	26:14:1498:C:C5	2.54	0.43
26:14:2852:G:H2'	26:14:2853:C:C6	2.54	0.43
26:14:2861:G:C2	26:14:2862:G:C4	3.06	0.43
26:14:2876:G:H4'	40:75:3:ARG:HD2	2.01	0.43
29:29:4:ILE:HD12	29:29:28:ALA:HB1	2.01	0.43
31:49:122:PRO:HB3	31:49:170:ARG:HH12	1.83	0.43
38:55:86:ARG:NH2	38:55:87:TYR:OH	2.52	0.43
44:B5:83:VAL:HG22	44:B5:87:GLN:HB2	2.00	0.43
1:13:593:G:H2'	1:13:594:G:C8	2.54	0.43
1:13:593:G:H2'	1:13:594:G:O4'	2.18	0.43
3:2E:79:ARG:NH2	11:2A:105:VAL:HG13	2.32	0.43
11:2I:13:GLN:HG3	11:2I:75:TYR:O	2.18	0.43
13:4I:15:VAL:HG23	13:4I:43:THR:O	2.18	0.43
13:4I:36:LYS:HG3	13:4I:59:TYR:OH	2.18	0.43
23:2K:2:G:H2'	23:2K:3:C:H6	1.83	0.43
23:2K:63:C:H2'	23:2K:64:G:C8	2.54	0.43
24:3K:17:G:H1'	24:3K:18:G:OP1	2.19	0.43
26:1H:116:C:O2'	26:1H:117:G:H5'	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:312:G:H5'	26:1H:331:A:O2'	2.18	0.43
26:1H:575:A:OP2	26:1H:2055:C:N4	2.50	0.43
26:1H:583:G:C5	26:1H:584:C:C5	3.06	0.43
26:1H:882:G:H2'	26:1H:883:G:N7	2.33	0.43
26:1H:1255:U:H1'	59:1H:4012:HOH:O	2.18	0.43
26:1H:1484:G:C2	26:1H:1485:G:C8	3.07	0.43
26:1H:1654:A:OP2	38:98:1:MET:N	2.50	0.43
26:1H:1858:G:H8	26:1H:1858:G:OP2	2.02	0.43
26:1H:1946:U:H2'	26:1H:1947:C:C6	2.54	0.43
26:1H:2017:U:O2	52:N8:10:LYS:HB2	2.19	0.43
26:1H:2607:G:H4'	59:1H:3780:HOH:O	2.17	0.43
26:1H:2679:A:H4'	29:21:165:VAL:HG11	2.01	0.43
27:16:31:C:N4	39:A8:32:LEU:HD22	2.34	0.43
28:11:61:LEU:HD13	28:11:61:LEU:HA	1.70	0.43
28:11:92:ILE:H	28:11:92:ILE:HG13	1.72	0.43
29:21:6:GLY:HA2	29:21:51:PHE:CZ	2.54	0.43
30:31:78:ILE:HA	30:31:83:PHE:CD2	2.54	0.43
30:31:185:ASP:HA	30:31:188:ARG:CD	2.48	0.43
32:51:19:VAL:HG12	32:51:20:ALA:N	2.33	0.43
32:51:170:ARG:HA	32:51:170:ARG:HD3	1.89	0.43
34:58:4:TYR:CD2	41:C8:100:VAL:HG11	2.54	0.43
34:58:78:TYR:CD1	34:58:78:TYR:N	2.84	0.43
36:78:147:LEU:HA	36:78:147:LEU:HD12	1.74	0.43
39:A8:89:ARG:HG3	39:A8:92:TYR:O	2.19	0.43
40:B8:125:ARG:O	40:B8:129:ARG:N	2.49	0.43
45:G8:5:MET:HE2	45:G8:5:MET:HB2	1.80	0.43
46:H8:92:SER:O	46:H8:130:PRO:HG2	2.18	0.43
1:1G:106:C:C2'	1:1G:107:G:H5'	2.48	0.43
1:1G:440:A:H8	1:1G:440:A:OP2	2.02	0.43
1:1G:540:G:H2'	1:1G:541:G:O4'	2.19	0.43
1:1G:581:G:OP1	15:6A:61:GLY:HA3	2.18	0.43
1:1G:1190:G:H5'	3:22:176:HIS:NE2	2.34	0.43
1:1G:1213:A:N6	1:1G:1215:G:N3	2.67	0.43
1:1G:1342:C:H1'	9:82:124:GLN:NE2	2.33	0.43
1:1G:1367:C:H5'	10:1A:60:ARG:HH21	1.84	0.43
1:1G:1369:C:H2'	1:1G:1370:G:O4'	2.19	0.43
3:22:5:ILE:HG12	3:22:6:HIS:N	2.34	0.43
3:22:76:VAL:HG22	3:22:77:ILE:HG13	2.00	0.43
8:72:109:ILE:HG22	8:72:137:VAL:HB	1.99	0.43
13:4A:22:ILE:HB	13:4A:25:ILE:CG1	2.49	0.43
17:8A:44:ALA:HA	17:8A:71:PHE:O	2.16	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:8A:52:LYS:N	17:8A:55:ASP:OD2	2.51	0.43
20:BA:35:THR:O	20:BA:39:LYS:N	2.48	0.43
26:14:27:G:N2	26:14:512:G:O2'	2.45	0.43
26:14:298:G:O5'	26:14:298:G:H8	2.01	0.43
26:14:729:G:O4'	28:19:208:LYS:NZ	2.50	0.43
26:14:941:A:H2'	26:14:942:G:C8	2.54	0.43
27:1J:79:C:H2'	27:1J:80:U:O4'	2.19	0.43
29:29:63:LEU:CD2	29:29:63:LEU:H	2.31	0.43
29:29:170:LEU:HA	29:29:170:LEU:HD13	1.62	0.43
29:29:182:LEU:HD12	29:29:182:LEU:HA	1.65	0.43
30:39:5:ALA:HB1	30:39:125:LEU:HD21	2.01	0.43
32:59:3:ARG:HG3	32:59:4:ILE:H	1.83	0.43
32:59:17:VAL:C	32:59:18:GLU:HG2	2.43	0.43
36:35:59:LEU:O	36:35:59:LEU:HD22	2.18	0.43
39:65:29:PHE:O	39:65:35:ILE:HD12	2.19	0.43
39:65:66:ALA:HA	39:65:69:VAL:HG12	1.99	0.43
42:95:55:ALA:HA	42:95:101:GLY:HA2	2.00	0.43
47:E5:82:ARG:HA	47:E5:83:PRO:HD2	1.71	0.43
51:I5:23:GLU:O	51:I5:24:THR:OG1	2.37	0.43
1:13:9:G:C6	1:13:26:A:N6	2.87	0.43
1:13:38:G:C2	1:13:397:A:C2	3.07	0.43
1:13:55:A:H2	33:69:82:ARG:HD3	1.83	0.43
1:13:109:A:N7	1:13:326:G:H2'	2.34	0.43
1:13:134:A:H1'	1:13:325:A:C4	2.54	0.43
1:13:445:G:H1	1:13:489:C:N4	2.09	0.43
1:13:539:A:OP1	12:3I:114:LYS:HE2	2.18	0.43
1:13:658:G:OP1	15:6I:8:LYS:NZ	2.49	0.43
1:13:804:U:H5"	1:13:805:C:OP2	2.17	0.43
2:1E:8:LYS:HD3	2:1E:8:LYS:N	2.34	0.43
2:1E:179:LYS:HA	8:7E:72:PRO:HD3	2.00	0.43
5:4E:53:LEU:HD23	5:4E:53:LEU:HA	1.69	0.43
8:7E:34:GLU:HB3	8:7E:118:VAL:HG21	2.00	0.43
9:8E:48:GLU:N	9:8E:49:PRO:HD2	2.33	0.43
13:4I:22:ILE:HB	13:4I:25:ILE:HD12	2.01	0.43
20:BI:31:SER:HA	20:BI:34:LYS:HE3	2.01	0.43
22:1K:11:C:H2'	22:1K:12:C:C6	2.48	0.43
26:1H:754:C:H2'	26:1H:755:C:C6	2.53	0.43
26:1H:755:C:H2'	26:1H:756:C:H6	1.84	0.43
26:1H:997:G:OP1	41:C8:93:LYS:N	2.46	0.43
26:1H:1385:G:O2'	26:1H:1396:U:C6	2.67	0.43
26:1H:2518:A:H8	26:1H:2518:A:H5'	1.84	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:31:181:LEU:HD23	30:31:181:LEU:HA	1.85	0.43
30:31:196:LEU:C	30:31:197:ASP:O	2.59	0.43
32:51:98:LEU:HD12	32:51:98:LEU:HA	1.76	0.43
33:61:68:LEU:HA	33:61:71:ILE:CG2	2.49	0.43
35:68:31:LYS:HB3	35:68:32:TYR:CE2	2.54	0.43
45:G8:29:GLU:HB3	45:G8:38:ILE:HG22	2.01	0.43
1:1G:110:C:H2'	1:1G:111:G:O4'	2.19	0.43
1:1G:707:C:H2'	1:1G:708:C:C6	2.53	0.43
1:1G:825:G:H1	1:1G:875:C:H42	1.65	0.43
2:12:111:ARG:HD3	2:12:111:ARG:HA	1.44	0.43
2:12:176:GLU:HA	2:12:179:LYS:HB3	2.01	0.43
2:12:182:ILE:H	2:12:182:ILE:HD12	1.84	0.43
4:32:9:CYS:SG	4:32:31:CYS:O	2.77	0.43
4:32:31:CYS:C	4:32:33:MET:N	2.73	0.43
5:42:36:ASP:OD2	5:42:40:ARG:HG3	2.19	0.43
5:42:118:ILE:HG12	5:42:119:LEU:H	1.84	0.43
7:62:143:ARG:NH1	55:3L:43:G:H5'	2.33	0.43
10:1A:16:LEU:HD23	10:1A:16:LEU:HA	1.85	0.43
10:1A:84:GLN:O	10:1A:88:LEU:HB2	2.19	0.43
13:4A:96:LEU:C	13:4A:110:ARG:HE	2.27	0.43
19:AA:7:LYS:HE3	19:AA:7:LYS:HB3	1.87	0.43
24:1L:31:G:H2'	24:1L:32:A:C8	2.54	0.43
26:14:74:A:H4'	26:14:75:G:O5'	2.18	0.43
26:14:77:C:H2'	26:14:78:A:O4'	2.19	0.43
26:14:521:G:H2'	26:14:522:G:H8	1.84	0.43
26:14:528:A:C8	26:14:528:A:H3'	2.54	0.43
26:14:699:A:H2'	26:14:700:G:O4'	2.18	0.43
26:14:996:A:C2	26:14:997:G:C8	3.07	0.43
26:14:1036:G:H2'	26:14:1037:G:O4'	2.19	0.43
26:14:1210:A:H5'	26:14:1212:G:O4'	2.18	0.43
26:14:1332:G:C8	26:14:1332:G:H5'	2.54	0.43
26:14:1357:U:C4	26:14:1358:G:C5	3.07	0.43
26:14:1496:A:H1'	26:14:1577:C:HO2'	1.83	0.43
26:14:1925:C:O2'	26:14:1926:U:H5'	2.19	0.43
26:14:2078:C:H2'	26:14:2079:U:C6	2.54	0.43
26:14:2157:G:O2'	26:14:2158:A:O5'	2.34	0.43
26:14:2798:C:N4	26:14:2799:A:H62	2.17	0.43
27:1J:14:U:H4'	27:1J:15:A:OP2	2.18	0.43
27:1J:35:U:H2'	27:1J:36:C:O4'	2.19	0.43
31:49:63:ILE:HG13	31:49:64:THR:N	2.33	0.43
34:15:33:LEU:HD12	34:15:33:LEU:HA	1.77	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:35:2:LYS:HB2	36:35:2:LYS:HE3	1.85	0.43
37:45:133:ARG:HB3	37:45:135:ASP:HB3	2.00	0.43
41:85:97:ASP:OD2	41:85:101:ARG:NE	2.51	0.43
44:B5:49:VAL:HB	44:B5:83:VAL:CG2	2.48	0.43
44:B5:65:ARG:HB3	44:B5:70:LEU:HA	2.00	0.43
46:D5:24:LEU:HA	46:D5:25:PRO:HD3	1.89	0.43
51:I5:43:TYR:O	51:I5:43:TYR:CG	2.72	0.43
1:13:156:G:H1'	1:13:166:G:H22	1.84	0.43
1:13:192:U:H4'	20:BI:103:GLY:HA2	2.00	0.43
2:1E:21:ARG:O	2:1E:23:ARG:N	2.52	0.43
4:3E:28:SER:OG	4:3E:30:LYS:HE3	2.18	0.43
9:8E:25:LYS:N	9:8E:60:ASP:OD1	2.49	0.43
12:3I:20:LYS:H	12:3I:20:LYS:HD3	1.84	0.43
12:3I:85:ILE:HA	12:3I:85:ILE:HD13	1.79	0.43
15:6I:17:ARG:HH11	15:6I:77:ARG:HH11	1.66	0.43
16:7I:57:ARG:HH21	16:7I:79:VAL:HA	1.84	0.43
19:AI:67:VAL:HG12	51:M8:59:PHE:HB3	2.00	0.43
21:1F:9:ARG:NH2	21:1F:23:PRO:HD2	2.34	0.43
26:1H:219:G:N3	26:1H:234:C:O2'	2.50	0.43
26:1H:991:C:H2'	26:1H:992:C:C6	2.53	0.43
26:1H:2105:C:H2'	26:1H:2106:G:H8	1.84	0.43
26:1H:2137:C:H1'	26:1H:2155:G:N2	2.33	0.43
26:1H:2473:U:O2	26:1H:2473:U:H2'	2.19	0.43
28:11:12:SER:HB2	28:11:207:GLY:O	2.18	0.43
29:21:116:VAL:HG13	29:21:122:PHE:CD2	2.54	0.43
32:51:152:ARG:HB3	32:51:153:LYS:NZ	2.28	0.43
33:61:33:ARG:C	33:61:35:LEU:N	2.77	0.43
33:61:44:LEU:HD12	33:61:44:LEU:HA	1.94	0.43
35:68:2:ILE:HG23	35:68:6:THR:HG21	2.01	0.43
41:C8:79:PHE:CD1	41:C8:79:PHE:C	2.96	0.43
42:D8:9:GLY:O	42:D8:10:LYS:HG3	2.18	0.43
46:H8:81:ARG:HG3	46:H8:81:ARG:O	2.19	0.43
46:H8:101:PRO:HA	46:H8:123:ASP:HB3	1.99	0.43
48:J8:81:LYS:HA	48:J8:81:LYS:HD2	1.57	0.43
49:K8:64:LEU:HD21	49:K8:68:ARG:NH1	2.33	0.43
53:P8:15:THR:HG22	53:P8:16:HIS:CE1	2.54	0.43
1:1G:440:A:H3'	1:1G:442:C:C6	2.54	0.43
1:1G:537:G:H5"	12:3A:113:ARG:HH12	1.83	0.43
1:1G:973:G:H3'	1:1G:974:A:H5"	2.01	0.43
1:1G:1512:U:H2'	1:1G:1513:A:C8	2.53	0.43
2:12:91:PRO:HG3	2:12:154:LEU:CB	2.44	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:22:47:LEU:HD23	3:22:68:VAL:HG11	1.99	0.43
3:22:61:ALA:C	3:22:63:ASN:H	2.26	0.43
4:32:178:VAL:C	4:32:180:GLY:H	2.27	0.43
4:32:193:ASP:OD1	4:32:193:ASP:N	2.52	0.43
7:62:76:ARG:HB2	7:62:89:MET:HG3	2.00	0.43
11:2A:100:ALA:C	11:2A:102:GLY:H	2.24	0.43
13:4A:94:ARG:O	13:4A:96:LEU:N	2.52	0.43
15:6A:7:GLU:O	15:6A:11:VAL:HG23	2.19	0.43
19:AA:9:VAL:HG13	19:AA:10:PHE:N	2.33	0.43
55:3L:13:G:H1'	55:3L:23:A:N6	2.29	0.43
26:14:61:G:OP1	49:G5:51:ARG:HD2	2.19	0.43
26:14:270(E):G:C2	26:14:270(V):G:C2	3.06	0.43
26:14:330:A:H2	26:14:1210:A:HO2'	1.63	0.43
26:14:654(F):C:H2'	26:14:654(G):C:O4'	2.19	0.43
26:14:1260:G:H2'	26:14:1261:C:C6	2.54	0.43
26:14:2286:A:H4'	26:14:2287:A:O4'	2.19	0.43
26:14:2567:G:H2'	26:14:2568:C:C6	2.53	0.43
27:1J:63:G:H2'	27:1J:64:C:C6	2.54	0.43
28:19:43:ARG:HA	28:19:49:ILE:HA	2.01	0.43
33:69:73:GLU:HG3	33:69:136:VAL:HG23	2.00	0.43
34:15:1:MET:HG2	42:95:13:ARG:H	1.84	0.43
34:15:71:ILE:HD12	34:15:71:ILE:H	1.84	0.43
42:95:37:VAL:CG2	42:95:57:VAL:H	2.27	0.43
46:D5:29:TYR:HA	46:D5:33:LEU:O	2.19	0.43
53:L5:12:ARG:NH2	53:L5:44:PRO:HB3	2.34	0.43
1:13:49:U:O2'	1:13:50:A:H3'	2.18	0.42
1:13:60:A:N1	1:13:107:G:O2'	2.48	0.42
1:13:122:G:H1	1:13:239:U:H3	1.67	0.42
1:13:375:U:OP1	16:7I:69:THR:HG21	2.19	0.42
1:13:720:C:N3	1:13:721:G:C6	2.87	0.42
1:13:1286:A:C2	21:1F:18:TYR:OH	2.72	0.42
3:2E:97:LYS:HE2	3:2E:97:LYS:HB2	1.76	0.42
4:3E:141:ARG:HB2	4:3E:141:ARG:HH11	1.84	0.42
13:4I:4:ILE:HG22	13:4I:5:ALA:N	2.27	0.42
22:1K:20:C:O2'	22:1K:68:A:N7	2.52	0.42
23:2K:59:A:H4'	23:2K:60:A:OP1	2.19	0.42
26:1H:432:A:H2'	26:1H:433:C:H6	1.83	0.42
26:1H:511:U:C5	26:1H:512:G:C5	3.07	0.42
26:1H:743:G:O3'	59:1H:3579:HOH:O	2.22	0.42
26:1H:844:C:H2'	26:1H:845:G:O4'	2.19	0.42
26:1H:945:A:OP2	26:1H:945:A:H4'	2.18	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1137:G:H2'	26:1H:1138:G:C8	2.53	0.42
26:1H:1138:G:H2'	26:1H:1139:G:O4'	2.19	0.42
26:1H:1178:C:H1'	26:1H:1179:C:O5'	2.18	0.42
26:1H:1321:A:H2'	26:1H:1322:A:O4'	2.19	0.42
26:1H:1339:G:H21	26:1H:1603:A:H1'	1.84	0.42
26:1H:1348:G:C2'	26:1H:1349:A:H5"	2.49	0.42
26:1H:1509:C:H42	26:1H:1511:A:H62	1.65	0.42
26:1H:1716:U:O2'	26:1H:1717:G:H5'	2.18	0.42
26:1H:1931:U:O2	26:1H:1931:U:O4'	2.36	0.42
26:1H:2052:G:H4'	29:21:143:ASN:O	2.18	0.42
26:1H:2358:G:C5	26:1H:2359:C:C5	3.07	0.42
26:1H:2616:C:H2'	26:1H:2617:C:H6	1.84	0.42
27:16:15:A:H1'	27:16:109:G:C8	2.54	0.42
31:41:107:LEU:O	51:M8:38:LYS:HD3	2.19	0.42
34:58:31:ALA:O	34:58:35:ARG:HG2	2.19	0.42
34:58:128:HIS:HB2	34:58:129:PRO:HD2	2.01	0.42
48:J8:60:PHE:HE2	48:J8:91:LYS:NZ	2.17	0.42
1:1G:362:G:H3'	12:3A:34:ARG:HH21	1.83	0.42
1:1G:445:G:H2'	1:1G:446:G:C8	2.54	0.42
1:1G:498:A:H4'	1:1G:500:G:OP1	2.20	0.42
1:1G:652:U:C5	1:1G:752:G:N3	2.86	0.42
1:1G:1053:G:N7	1:1G:1200:C:H5"	2.34	0.42
1:1G:1075:C:OP1	2:12:179:LYS:HE2	2.19	0.42
1:1G:1137:C:HO2'	1:1G:1138:G:N2	2.17	0.42
8:72:69:ARG:HD3	8:72:75:ARG:O	2.19	0.42
8:72:75:ARG:HA	8:72:76:PRO:HD2	1.83	0.42
8:72:83:ILE:HB	8:72:137:VAL:HG13	2.01	0.42
9:82:17:VAL:HG11	9:82:81:ILE:HD13	2.01	0.42
12:3A:62:SER:O	12:3A:64:TYR:N	2.52	0.42
20:BA:75:ASN:OD1	20:BA:75:ASN:N	2.42	0.42
26:14:108:U:H2'	26:14:109:G:H8	1.82	0.42
26:14:125:G:C6	53:L5:10:ARG:HG3	2.54	0.42
26:14:809:G:H2'	26:14:810:U:C6	2.54	0.42
26:14:809:G:H2'	26:14:810:U:H6	1.84	0.42
26:14:1050:A:N3	26:14:2751:G:H2'	2.34	0.42
26:14:1076:C:H2'	26:14:1077:A:H5'	2.01	0.42
26:14:1171:G:H2'	26:14:1171:G:OP2	2.19	0.42
26:14:1186:G:H2'	26:14:1187:G:O4'	2.18	0.42
26:14:1682:G:C2	26:14:1683:C:C2	3.07	0.42
26:14:2135:A:C5	26:14:2156:G:N2	2.86	0.42
26:14:2142:C:H2'	26:14:2143:C:C6	2.53	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2420:C:H41	54:M5:31:HIS:CB	2.22	0.42
26:14:2734:A:H2'	26:14:2735:G:O4'	2.18	0.42
26:14:2849:U:H4'	26:14:2868:A:C2	2.54	0.42
27:1J:33:G:N3	27:1J:50:G:N2	2.67	0.42
28:19:89:SER:HB2	28:19:159:ALA:HB2	2.01	0.42
31:49:2:PRO:HG2	51:I5:25:TYR:CE2	2.54	0.42
33:69:126:TYR:O	33:69:139:GLN:HA	2.19	0.42
37:45:66:ILE:HG13	37:45:67:ARG:N	2.33	0.42
42:95:37:VAL:HG23	42:95:56:SER:HA	1.99	0.42
43:A5:24:ILE:O	43:A5:27:LYS:HG3	2.18	0.42
47:E5:12:ASN:HA	47:E5:14:ARG:NH2	2.34	0.42
53:L5:5:TRP:NE1	53:L5:7:PRO:HG3	2.33	0.42
1:13:33:A:C6	1:13:34:C:N4	2.87	0.42
1:13:42:G:H2'	1:13:43:C:O4'	2.19	0.42
1:13:112:G:OP1	16:7I:27:LYS:HD2	2.19	0.42
1:13:257:G:N1	1:13:258:G:C5	2.87	0.42
1:13:668:G:O2'	15:6I:46:HIS:HB3	2.19	0.42
1:13:712:A:C6	1:13:713:G:C6	3.07	0.42
1:13:814:A:N7	1:13:816:A:C4	2.87	0.42
1:13:843:U:H5'	1:13:848:C:C5	2.55	0.42
1:13:1124:G:C8	1:13:1145:C:C5	3.07	0.42
1:13:1132:C:O2'	1:13:1133:G:H5'	2.19	0.42
1:13:1318:A:H5"	19:AI:10:PHE:CD2	2.54	0.42
1:13:1320:C:O2	19:AI:36:ARG:NH2	2.45	0.42
1:13:1413:A:H2'	1:13:1414:U:O4'	2.19	0.42
2:1E:97:TRP:CH2	2:1E:173:ALA:HA	2.54	0.42
13:4I:84:ILE:CG2	13:4I:86:CYS:HB2	2.48	0.42
16:7I:3:LYS:O	16:7I:21:VAL:HA	2.18	0.42
20:BI:23:ARG:HA	20:BI:26:ASN:HD21	1.84	0.42
22:1K:35:QUO:H5"	22:1K:36:U:OP2	2.19	0.42
26:1H:182:A:H2'	26:1H:183:C:C6	2.54	0.42
26:1H:282:A:C4	26:1H:359:A:C2	3.07	0.42
26:1H:962:G:C2	26:1H:963:U:C2	3.07	0.42
26:1H:1164:G:H2'	26:1H:1165:U:H6	1.83	0.42
26:1H:1225:C:O2'	42:D8:85:LYS:HA	2.20	0.42
26:1H:1387:C:O2	26:1H:1388:G:C8	2.72	0.42
26:1H:2746:U:O4	26:1H:2755:C:H4'	2.19	0.42
26:1H:2830:G:H5"	26:1H:2830:G:H8	1.84	0.42
26:1H:2850:A:OP2	26:1H:2866:U:N3	2.31	0.42
26:1H:2860:A:N7	26:1H:2861:G:H1'	2.34	0.42
28:11:202:LYS:HG3	28:11:203:ASN:OD1	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:41:116:ASP:HB3	31:41:117:PHE:H	1.61	0.42
32:51:124:GLU:HG2	32:51:126:PRO:HG3	2.00	0.42
34:58:20:GLY:HA2	34:58:61:ARG:HD3	2.01	0.42
36:78:106:LEU:HD13	36:78:107:LYS:O	2.19	0.42
37:88:85:LYS:HG2	37:88:86:GLY:N	2.34	0.42
38:98:60:LEU:O	38:98:64:ARG:HG3	2.19	0.42
46:H8:30:ASN:HD22	46:H8:30:ASN:C	2.27	0.42
47:I8:41:ARG:NE	47:I8:41:ARG:HA	2.33	0.42
48:J8:90:ILE:HG22	48:J8:94:LEU:HD12	2.00	0.42
1:1G:90:C:H2'	1:1G:91:C:O4'	2.19	0.42
1:1G:197:A:H8	1:1G:198:G:N9	2.17	0.42
1:1G:374:A:C6	1:1G:375:U:C4	3.07	0.42
1:1G:512:U:H2'	1:1G:513:C:C6	2.55	0.42
1:1G:631:G:H3'	1:1G:632:A:H8	1.84	0.42
1:1G:696:A:N3	1:1G:786:G:O2'	2.38	0.42
1:1G:993:G:O2'	1:1G:994:A:N7	2.51	0.42
1:1G:1301:U:O3'	13:4A:21:TYR:OH	2.29	0.42
4:32:24:GLU:O	4:32:27:TYR:N	2.52	0.42
5:42:11:ILE:HB	5:42:31:LEU:HD12	2.01	0.42
6:52:53:ALA:HB3	6:52:86:ARG:HD3	2.00	0.42
8:72:83:ILE:HG13	8:72:137:VAL:HG22	2.01	0.42
10:1A:38:ILE:HB	10:1A:71:LEU:O	2.19	0.42
24:1L:46:G:N2	24:1L:55:U:O4	2.52	0.42
26:14:7:G:C2	26:14:8:A:C4	3.07	0.42
26:14:521:G:H2'	26:14:522:G:C8	2.55	0.42
26:14:768:G:H2'	26:14:769:G:C8	2.52	0.42
26:14:1324:G:H4'	26:14:1616:A:C2	2.54	0.42
26:14:1336:A:OP2	44:B5:64:LYS:NZ	2.43	0.42
26:14:1468:C:H2'	26:14:1469:A:C8	2.54	0.42
26:14:2051:A:H8	26:14:2051:A:OP2	2.03	0.42
26:14:2319:G:H4'	26:14:2320:A:O4'	2.19	0.42
26:14:2439:A:C8	26:14:2439:A:C5'	3.02	0.42
26:14:2612:C:OP2	52:J5:2:ALA:HB3	2.18	0.42
26:14:2847:U:OP1	40:75:98:LYS:HE2	2.19	0.42
27:1J:73:A:C4	27:1J:104:A:C2	3.07	0.42
30:39:20:LEU:HD12	30:39:199:TRP:CH2	2.55	0.42
30:39:170:LEU:HA	30:39:171:PRO:HD3	1.70	0.42
32:59:22:GLY:O	32:59:37:VAL:HG12	2.18	0.42
32:59:125:VAL:HG22	32:59:126:PRO:CD	2.49	0.42
33:69:7:GLU:HA	33:69:15:VAL:HG22	2.01	0.42
33:69:102:SER:OG	33:69:103:ARG:N	2.51	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:69:145:VAL:HB	33:69:146:ALA:H	1.53	0.42
37:45:117:ALA:HA	37:45:120:ILE:HB	2.00	0.42
39:65:67:ARG:CZ	39:65:67:ARG:HB2	2.49	0.42
40:75:112:ARG:CZ	40:75:113:LYS:HE2	2.50	0.42
40:75:125:ARG:HB3	40:75:129:ARG:NH2	2.34	0.42
42:95:24:LYS:HA	42:95:92:THR:OG1	2.19	0.42
45:C5:2:ARG:HE	45:C5:2:ARG:HB3	1.40	0.42
47:E5:26:TYR:HB2	47:E5:29:GLN:OE1	2.18	0.42
54:M5:60:LEU:C	54:M5:62:LEU:H	2.27	0.42
1:13:11:G:C6	1:13:12:U:C4	3.06	0.42
1:13:131:C:H2'	1:13:132:C:C6	2.54	0.42
1:13:515:G:O5'	1:13:515:G:H8	2.01	0.42
1:13:724:G:O2'	1:13:725:G:H5'	2.19	0.42
1:13:917:G:H2'	1:13:918:A:C8	2.54	0.42
1:13:1240:U:P	7:6E:116:ALA:HB2	2.60	0.42
11:2I:12:ARG:HE	11:2I:12:ARG:HB2	1.43	0.42
17:8I:100:LYS:HB3	17:8I:101:ARG:NE	2.34	0.42
22:1K:38:MIA:H111	25:4K:19[B]:A:N9	2.34	0.42
22:1K:53:A:H2'	22:1K:54:C:H5'	2.02	0.42
26:1H:197:A:N6	26:1H:2430:A:H2'	2.34	0.42
26:1H:649:G:C5	26:1H:650:C:C4	3.07	0.42
26:1H:686:G:N7	53:P8:5:TRP:CH2	2.88	0.42
26:1H:1419:A:C8	26:1H:1421:G:C6	3.07	0.42
26:1H:1858:G:HO2'	26:1H:1859:A:P	2.43	0.42
26:1H:1999:C:H5"	26:1H:2723:C:O2'	2.18	0.42
26:1H:2092:U:H4'	26:1H:2093:G:O5'	2.19	0.42
26:1H:2807:G:H3'	26:1H:2808:U:H5"	1.99	0.42
28:11:78:LYS:HA	28:11:115:GLN:O	2.19	0.42
30:31:123:LEU:HD13	30:31:192:LEU:HD22	2.02	0.42
32:51:117:PRO:HB3	32:51:123:PHE:CE2	2.55	0.42
34:58:72:TYR:OH	34:58:98:VAL:HG23	2.19	0.42
34:58:137:LYS:HG3	34:58:138:LEU:O	2.19	0.42
51:M8:43:TYR:CE2	51:M8:44:THR:HG23	2.54	0.42
1:1G:277:C:P	17:8A:68:ARG:HH12	2.41	0.42
1:1G:620:C:C2	4:32:135:LEU:HD23	2.55	0.42
1:1G:972:C:OP2	10:1A:57:LYS:NZ	2.45	0.42
1:1G:1032(B):G:H2'	1:1G:1033:G:C8	2.53	0.42
1:1G:1053:G:C6	1:1G:1199:U:H2'	2.54	0.42
1:1G:1423:G:H2'	1:1G:1424:C:C6	2.53	0.42
5:42:103:GLY:O	5:42:106:PRO:HD2	2.18	0.42
6:52:25:ILE:H	6:52:25:ILE:HG12	1.64	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:BA:30:LYS:O	20:BA:34:LYS:HG3	2.19	0.42
24:1L:57:C:C2	24:1L:68:A:H1'	2.54	0.42
55:3L:23:A:C6	55:3L:24:G:C2	3.07	0.42
26:14:195:A:H61	26:14:198:C:H3'	1.83	0.42
26:14:745:G:H5"	26:14:746:A:OP2	2.20	0.42
26:14:1062:G:H2'	26:14:1063:G:H8	1.83	0.42
26:14:1165:U:H2'	26:14:1166:C:C6	2.55	0.42
26:14:1408:C:C2	26:14:1595:G:N2	2.87	0.42
26:14:2252:G:H2'	26:14:2253:G:O4'	2.18	0.42
26:14:2375:G:O2'	26:14:2377:A:N7	2.44	0.42
26:14:2472:G:H2'	26:14:2475:C:N4	2.27	0.42
26:14:2674:G:H4'	35:25:30:ALA:HB2	2.00	0.42
29:29:55:ASN:C	29:29:57:LYS:N	2.78	0.42
36:35:47:ASP:HB3	36:35:49:ARG:H	1.83	0.42
51:I5:40:HIS:N	51:I5:41:PRO:HD3	2.35	0.42
1:13:522:C:H2'	1:13:523:A:O4'	2.19	0.42
1:13:836:G:C6	1:13:851:G:C6	3.07	0.42
1:13:1332:A:C2	1:13:1333:A:C4	3.08	0.42
2:1E:70:PHE:HB2	2:1E:92:TYR:CB	2.49	0.42
4:3E:135:LEU:HA	4:3E:136:PRO:HD2	1.81	0.42
5:4E:35:GLY:H	5:4E:112:LEU:HD13	1.84	0.42
5:4E:110:LEU:HD13	5:4E:118:ILE:HG21	2.01	0.42
6:5E:97:PHE:O	18:9I:31:LEU:HD22	2.19	0.42
8:7E:100:ILE:HA	8:7E:101:PRO:HD3	1.74	0.42
10:1I:5:ARG:O	10:1I:98:ILE:HA	2.20	0.42
10:1I:25:GLU:O	10:1I:29:ARG:HB3	2.20	0.42
20:BI:30:LYS:HZ3	20:BI:80:ARG:HH12	1.68	0.42
22:1K:38:MIA:H2'	22:1K:39:A:O4'	2.19	0.42
24:3K:52:G:H2'	24:3K:53:A:O4'	2.18	0.42
26:1H:185:U:C2	26:1H:186:G:C8	3.07	0.42
26:1H:270(O):U:O5'	26:1H:270(O):U:H6	2.03	0.42
26:1H:363(F):A:H4'	26:1H:364:C:H5'	2.01	0.42
26:1H:1509:C:C2	26:1H:1511:A:N7	2.88	0.42
26:1H:1637:A:H4'	26:1H:2711:A:HO2'	1.85	0.42
26:1H:1665:A:H1'	35:68:1:MET:HG3	2.02	0.42
26:1H:2287:A:N3	26:1H:2289:G:C8	2.87	0.42
26:1H:2442:C:H2'	26:1H:2443:C:H6	1.83	0.42
26:1H:2864:G:O2'	26:1H:2865:U:H5'	2.19	0.42
27:16:31:C:H2'	27:16:32:C:C6	2.54	0.42
34:58:7:LYS:HD2	34:58:7:LYS:H	1.83	0.42
34:58:12:ARG:HD2	34:58:50:ASP:OD1	2.18	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:98:91:GLN:H	38:98:91:GLN:CD	2.27	0.42
45:G8:43:ASN:OD1	45:G8:65:ALA:HB3	2.19	0.42
46:H8:163:LEU:H	46:H8:163:LEU:HD12	1.84	0.42
1:1G:76:G:C6	1:1G:77:C:C4	3.08	0.42
1:1G:229:U:H5"	16:7A:33:ILE:HD13	2.02	0.42
1:1G:254:G:OP1	17:8A:67:LYS:O	2.36	0.42
1:1G:272:C:H2'	1:1G:273:A:H8	1.84	0.42
1:1G:521:G:H4'	12:3A:73:GLU:HG3	2.00	0.42
1:1G:791:G:O6	1:1G:792:A:N6	2.49	0.42
1:1G:1227:A:H8	1:1G:1227:A:H3'	1.85	0.42
1:1G:1286:A:C8	1:1G:1286:A:C3'	3.02	0.42
4:32:108:LEU:HD11	4:32:174:LEU:HB3	2.01	0.42
7:62:115:ARG:O	7:62:119:ARG:HG3	2.19	0.42
11:2A:58:PRO:HB2	11:2A:93:GLN:HG3	2.01	0.42
13:4A:59:TYR:O	13:4A:63:THR:OG1	2.38	0.42
16:7A:53:VAL:O	16:7A:57:ARG:HG3	2.20	0.42
26:14:528:A:H3'	26:14:528:A:H8	1.84	0.42
26:14:673:C:H5"	30:39:81:PRO:HD2	2.01	0.42
26:14:714:U:O2	26:14:716:A:C8	2.73	0.42
26:14:807:U:C2	26:14:808:G:C8	3.08	0.42
26:14:883:G:C6	26:14:884:C:N4	2.87	0.42
26:14:1317:A:H2'	26:14:1318:C:C6	2.53	0.42
26:14:2780:G:OP2	34:15:118:LYS:HD3	2.20	0.42
26:14:2845:G:H5"	40:75:54:ARG:O	2.20	0.42
27:1J:31:C:H4'	31:49:29:TRP:CH2	2.54	0.42
28:19:26:LYS:HZ3	28:19:30:GLU:HB2	1.83	0.42
30:39:153:SER:OG	30:39:190:GLU:HB2	2.19	0.42
32:59:6:ARG:HG2	32:59:7:LEU:H	1.84	0.42
33:69:77:LEU:HA	33:69:141:LYS:HB3	2.00	0.42
40:75:14:TYR:HD1	40:75:14:TYR:H	1.66	0.42
41:85:27:LEU:HD22	41:85:27:LEU:HA	1.81	0.42
41:85:98:LEU:HB2	41:85:102:GLU:HB2	2.01	0.42
45:C5:43:ASN:OD1	45:C5:43:ASN:N	2.53	0.42
46:D5:156:LYS:H	46:D5:156:LYS:HG2	1.60	0.42
50:H5:59:VAL:HG12	50:H5:60:GLU:N	2.34	0.42
1:13:109:A:C6	1:13:326:G:C6	3.08	0.42
1:13:192:U:C4'	20:BI:103:GLY:HA2	2.49	0.42
1:13:443:C:H42	1:13:491:G:H1	1.66	0.42
1:13:509:A:H5"	4:3E:55:ALA:HB2	2.00	0.42
1:13:834:C:C2	1:13:853:G:C2	3.08	0.42
3:2E:142:MET:SD	3:2E:148:GLY:HA2	2.59	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:3E:7:PRO:CB	4:3E:10:ARG:HG2	2.49	0.42
7:6E:27:ILE:HA	7:6E:30:ILE:HD12	2.00	0.42
7:6E:113:GLU:H	7:6E:113:GLU:HG2	1.58	0.42
12:3I:41:ARG:HE	12:3I:41:ARG:HB2	1.70	0.42
23:2K:41:C:H5'	24:3K:36:U:O2'	2.19	0.42
26:1H:563:G:P	59:1H:3533:HOH:O	2.77	0.42
26:1H:1372:U:O5'	26:1H:1372:U:H6	2.02	0.42
26:1H:1705:G:C6	26:1H:1706:U:N3	2.88	0.42
26:1H:2111:C:H5	26:1H:2147:G:H1	1.66	0.42
26:1H:2710:C:H2'	26:1H:2711:A:O4'	2.19	0.42
30:31:33:LEU:HD23	36:78:1:MET:HG3	2.00	0.42
30:31:47:GLY:HA3	30:31:95:ARG:O	2.18	0.42
35:68:1:MET:HE2	35:68:1:MET:HB3	1.93	0.42
35:68:13:ASN:ND2	35:68:97:ARG:HB2	2.34	0.42
41:C8:106:PHE:O	41:C8:109:LEU:HB2	2.20	0.42
44:F8:89:ILE:HG22	44:F8:92:LEU:HB2	2.01	0.42
52:N8:40:LYS:HD3	52:N8:46:CYS:SG	2.59	0.42
54:Q8:61:LEU:CD1	54:Q8:62:LEU:HD12	2.47	0.42
1:1G:49:U:C2	1:1G:361:G:N2	2.87	0.42
1:1G:407:G:P	4:32:115:ARG:HH21	2.43	0.42
1:1G:453:A:H4'	16:7A:72:ARG:HG3	2.01	0.42
1:1G:523:A:H61	12:3A:92:ASP:HB2	1.83	0.42
1:1G:652:U:O2'	1:1G:653:A:O5'	2.37	0.42
1:1G:918:A:H2'	1:1G:919:A:O4'	2.20	0.42
1:1G:960:U:O2	1:1G:1225:A:C8	2.72	0.42
1:1G:1056:U:OP1	3:22:163:ALA:N	2.50	0.42
1:1G:1069:C:O2'	1:1G:1192:C:H1'	2.18	0.42
1:1G:1112:C:N3	3:22:178:LEU:HD23	2.35	0.42
1:1G:1469:G:H2'	1:1G:1470:G:C8	2.55	0.42
2:12:47:THR:HG23	2:12:202:PRO:HG2	2.02	0.42
3:22:9:GLY:HA3	14:5A:49:HIS:HA	2.01	0.42
4:32:13:ARG:C	4:32:15:GLU:N	2.77	0.42
5:42:10:MET:HE3	5:42:10:MET:H	1.83	0.42
11:2A:29:ILE:CG2	11:2A:44:SER:HB2	2.42	0.42
11:2A:48:ILE:HG21	11:2A:63:LEU:HB2	2.01	0.42
20:BA:86:ARG:NH1	20:BA:86:ARG:HB3	2.34	0.42
26:14:797:C:OP2	30:39:62:ARG:HG3	2.18	0.42
26:14:864:G:N2	26:14:913:U:C2	2.87	0.42
26:14:1069:A:H2	26:14:1094:U:N3	2.17	0.42
26:14:1259:G:O2'	26:14:1260:G:H5'	2.19	0.42
26:14:1266:G:O5'	43:A5:15:ARG:NH2	2.52	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:19:244:ARG:HB2	28:19:245:PRO:HD2	2.01	0.42
31:49:109:VAL:C	31:49:112:PRO:HD2	2.45	0.42
35:25:87:ILE:HG13	35:25:91:LEU:HA	2.00	0.42
45:C5:36:ALA:O	45:C5:37:VAL:HG13	2.20	0.42
49:G5:10:LEU:HD12	49:G5:10:LEU:HA	1.88	0.42
54:M5:25:MET:O	54:M5:48:PHE:HE1	2.03	0.42
1:13:34:C:H2'	1:13:35:G:C8	2.55	0.42
1:13:486:U:H2'	1:13:487:A:H8	1.84	0.42
1:13:687:A:H2'	1:13:701:C:N4	2.34	0.42
1:13:960:U:C2	1:13:1225:A:C5	3.07	0.42
1:13:1057:G:H2'	1:13:1058:G:O4'	2.19	0.42
4:3E:30:LYS:HB2	4:3E:32:ALA:N	2.35	0.42
10:1I:8:LEU:HB3	10:1I:16:LEU:HD21	2.01	0.42
11:2I:73:MET:CG	11:2I:103:LEU:HD13	2.49	0.42
22:1K:46:G:N2	22:1K:47:U:O2	2.52	0.42
22:1K:57:C:C2	22:1K:68:A:H1'	2.55	0.42
24:3K:49:A:H2'	24:3K:50:U:H5"	2.01	0.42
26:1H:57:C:H2'	26:1H:58:G:O4'	2.18	0.42
26:1H:654(M):C:H5'	26:1H:654(N):G:C5	2.55	0.42
26:1H:751:A:P	59:1H:3749:HOH:O	2.73	0.42
26:1H:884:C:N4	26:1H:885:C:H41	2.18	0.42
26:1H:1142(A):A:C4	26:1H:1144:G:C8	3.07	0.42
26:1H:1692:U:O2'	26:1H:1693:U:H2'	2.19	0.42
26:1H:1994:C:O2'	26:1H:1995:U:H5'	2.19	0.42
26:1H:2102:U:H2'	26:1H:2103:C:C6	2.54	0.42
26:1H:2266:A:H4'	26:1H:2267:A:N3	2.35	0.42
27:16:37:C:C2'	27:16:38:C:H5'	2.50	0.42
28:11:37:LEU:HD22	28:11:62:TYR:HB2	2.00	0.42
30:31:127:GLU:OE2	30:31:127:GLU:HA	2.15	0.42
30:31:176:LEU:HB3	30:31:177:ALA:O	2.20	0.42
31:41:79:ASN:OD1	31:41:79:ASN:N	2.53	0.42
32:51:130:ARG:HB3	32:51:130:ARG:NH1	2.34	0.42
37:88:104:PHE:CE2	37:88:125:LEU:HD11	2.55	0.42
40:B8:22:PHE:N	40:B8:22:PHE:CD1	2.88	0.42
41:C8:88:ILE:C	41:C8:90:VAL:N	2.78	0.42
54:Q8:23:VAL:CG1	54:Q8:46:ARG:HD3	2.49	0.42
1:1G:219:C:H2'	1:1G:220:G:O4'	2.20	0.42
1:1G:410:G:H21	1:1G:432:A:H62	1.66	0.42
1:1G:446:G:H1	1:1G:488:C:H42	1.67	0.42
1:1G:668:G:O2'	15:6A:46:HIS:HB3	2.19	0.42
1:1G:676:A:H1'	11:2A:115:PRO:HB3	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:923:A:H1'	1:1G:1398:A:C2	2.54	0.42
1:1G:1035:A:H2'	1:1G:1036:G:H4'	2.02	0.42
2:12:117:GLU:O	2:12:120:ALA:HB3	2.19	0.42
5:42:60:TYR:HB3	5:42:64:ARG:NH2	2.34	0.42
9:82:33:PHE:HE2	9:82:47:LEU:HD23	1.84	0.42
11:2A:87:THR:HA	11:2A:91:ARG:HD3	2.01	0.42
12:3A:10:LEU:HB3	17:8A:32:TYR:CE2	2.55	0.42
12:3A:100:ILE:CG2	12:3A:101:VAL:N	2.82	0.42
26:14:528:A:C2	26:14:2043:C:H4'	2.55	0.42
26:14:734:A:O2'	26:14:1635:G:H5'	2.19	0.42
26:14:761:A:C5	59:14:3413:HOH:O	2.65	0.42
26:14:1287:A:N7	38:55:106:GLY:HA3	2.35	0.42
26:14:1728:G:C5	26:14:1730:U:OP2	2.73	0.42
26:14:2002:G:N7	59:14:3810:HOH:O	2.37	0.42
26:14:2062:A:O2'	26:14:2063:C:OP1	2.36	0.42
26:14:2328:A:H2'	26:14:2329:G:C8	2.55	0.42
30:39:13:SER:HA	30:39:14:PRO:HD3	1.83	0.42
31:49:67:LYS:N	51:I5:6:HIS:CD2	2.73	0.42
36:35:18:ARG:O	36:35:19:VAL:HG23	2.20	0.42
37:45:38:GLU:HB2	37:45:127:ILE:HG22	2.02	0.42
41:85:50:ARG:HH12	42:95:72:VAL:HG23	1.85	0.42
42:95:85:LYS:HB3	42:95:87:HIS:H	1.85	0.42
45:C5:48:ALA:HB1	45:C5:50:ARG:HD3	2.02	0.42
51:I5:37:SER:OG	51:I5:38:LYS:N	2.52	0.42
54:M5:34:TRP:CE3	54:M5:34:TRP:CA	3.02	0.42
1:13:255:G:C5	1:13:256:U:C5	3.07	0.42
1:13:266:G:H8	1:13:266:G:H2'	1.72	0.42
1:13:553:A:H5"	12:3I:24:VAL:HG21	2.02	0.42
1:13:626:U:N3	1:13:627:G:C5	2.88	0.42
1:13:1286:A:H2'	1:13:1287:A:H4'	2.02	0.42
1:13:1449:C:H42	1:13:1454:G:H1	1.68	0.42
4:3E:83:SER:HB3	4:3E:84:LYS:HD2	2.02	0.42
5:4E:90:VAL:HG12	5:4E:121:LYS:O	2.20	0.42
8:7E:134:ILE:HG22	8:7E:135:CYS:SG	2.60	0.42
9:8E:42:ARG:HE	9:8E:42:ARG:HB2	1.73	0.42
9:8E:87:GLN:O	9:8E:90:PRO:HD3	2.19	0.42
11:2I:22:HIS:HB3	11:2I:29:ILE:HG23	2.01	0.42
11:2I:69:ALA:HB1	11:2I:73:MET:HE2	2.01	0.42
14:5I:15:LYS:HG2	14:5I:16:PHE:CD2	2.55	0.42
20:BI:12:ALA:O	20:BI:15:ARG:HB2	2.20	0.42
26:1H:353:G:H2'	26:1H:354:G:H8	1.84	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:536:A:H2'	26:1H:537:C:C6	2.55	0.42
26:1H:582:G:H2'	26:1H:583:G:C8	2.55	0.42
26:1H:882:G:N2	26:1H:894:C:H42	2.17	0.42
26:1H:931:G:C4	26:1H:933:A:C8	3.07	0.42
26:1H:1060:U:H4'	26:1H:1061:U:H5'	2.02	0.42
26:1H:1379:A:O3'	26:1H:1380:G:H8	2.02	0.42
26:1H:1542:G:C8	26:1H:1543:A:C2	3.07	0.42
26:1H:1988:C:H2'	26:1H:1989:G:O4'	2.19	0.42
26:1H:2029:G:H2'	26:1H:2031:A:OP1	2.20	0.42
26:1H:2212:A:O2'	26:1H:2215:G:C8	2.67	0.42
26:1H:2334:G:C2	39:A8:12:PHE:CE1	3.07	0.42
26:1H:2395:C:H5"	26:1H:2396:G:OP2	2.19	0.42
26:1H:2562:U:H1'	35:68:23:ARG:NH1	2.34	0.42
28:11:16:MET:HE2	28:11:211:ARG:HD2	2.00	0.42
29:21:13:ARG:HH21	40:B8:77:PRO:HB3	1.85	0.42
29:21:13:ARG:NH2	40:B8:77:PRO:HB3	2.34	0.42
30:31:9:ILE:HD11	30:31:125:LEU:CG	2.41	0.42
32:51:109:PHE:CE1	32:51:152:ARG:NH1	2.87	0.42
32:51:151:ILE:O	32:51:151:ILE:HG22	2.20	0.42
36:78:64:LYS:HB2	54:Q8:25:MET:HG3	2.00	0.42
36:78:100:LEU:O	36:78:105:LEU:HD12	2.19	0.42
44:F8:9:LEU:O	49:K8:36:ARG:HD2	2.20	0.42
46:H8:165:VAL:CB	46:H8:166:SER:HA	2.43	0.42
1:1G:23:C:OP2	1:1G:561:U:N3	2.37	0.42
1:1G:149:A:O2'	1:1G:150:C:H5'	2.20	0.42
1:1G:475:G:OP1	16:7A:81:ARG:NH2	2.53	0.42
1:1G:590:C:H2'	1:1G:591:U:C6	2.55	0.42
1:1G:894:G:C6	1:1G:895:G:C5	3.08	0.42
1:1G:965:A:C2	1:1G:969:A:C2	3.08	0.42
1:1G:1104:G:C6	1:1G:1105:A:C5	3.07	0.42
1:1G:1128:C:C4	1:1G:1139:G:C6	3.07	0.42
1:1G:1155:G:H2'	1:1G:1156:G:O4'	2.20	0.42
1:1G:1187:G:N3	1:1G:1187:G:H2'	2.35	0.42
1:1G:1348:U:N3	1:1G:1374:A:C2	2.81	0.42
1:1G:1489:G:H2'	1:1G:1490:C:O4'	2.20	0.42
2:12:16:HIS:NE2	2:12:213:LEU:HD13	2.34	0.42
6:52:14:LEU:HB2	6:52:18:GLN:OE1	2.20	0.42
7:62:113:GLU:CD	7:62:122:HIS:HD1	2.28	0.42
8:72:68:ARG:HD3	8:72:69:ARG:O	2.19	0.42
10:1A:78:ASN:HD21	10:1A:81:THR:HG23	1.84	0.42
16:7A:4:ILE:O	16:7A:66:PRO:HA	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:9A:36:ASN:ND2	18:9A:36:ASN:O	2.52	0.42
20:BA:10:LEU:O	20:BA:10:LEU:HD13	2.19	0.42
23:2L:56:PSU:O4	23:2L:58:A:C8	2.73	0.42
26:14:1:G:H2'	26:14:2:G:O4'	2.19	0.42
26:14:470:A:C5'	26:14:470:A:H8	2.32	0.42
26:14:871:U:OP1	37:45:5:ARG:HG2	2.20	0.42
26:14:1138:G:N2	34:15:106:MET:HE3	2.18	0.42
27:1J:31:C:H4'	31:49:29:TRP:HH2	1.84	0.42
30:39:163:VAL:O	30:39:167:ALA:HB2	2.20	0.42
38:55:48:VAL:O	38:55:52:ILE:HG12	2.20	0.42
39:65:3:ARG:HD2	39:65:4:LEU:H	1.84	0.42
43:A5:13:SER:HA	43:A5:14:PRO:HD3	1.94	0.42
45:C5:87:LYS:HG2	45:C5:88:LYS:H	1.83	0.42
45:C5:88:LYS:O	45:C5:89:PHE:HB3	2.19	0.42
1:13:313:A:H2'	1:13:314:C:C6	2.54	0.42
1:13:313:A:H2'	1:13:314:C:H6	1.85	0.42
1:13:938:A:C6	1:13:939:G:N7	2.87	0.42
2:1E:140:HIS:HA	2:1E:143:GLU:OE2	2.19	0.42
4:3E:155:LEU:O	4:3E:156:GLU:C	2.62	0.42
6:5E:7:ASN:OD1	6:5E:62:TRP:HD1	2.02	0.42
8:7E:17:THR:HG21	8:7E:80:ILE:HG13	2.01	0.42
14:5I:47:LEU:HD23	14:5I:47:LEU:HA	1.84	0.42
24:3K:63:U:H3	24:3K:67:A:H62	1.67	0.42
26:1H:442:G:C6	26:1H:444:C:N4	2.87	0.42
26:1H:640:C:O2	26:1H:649:G:C2	2.73	0.42
26:1H:779:U:P	28:11:49:ILE:HG13	2.59	0.42
26:1H:1058:U:N3	26:1H:1059:G:N7	2.68	0.42
26:1H:1266:G:O4'	43:E8:15:ARG:NH2	2.52	0.42
26:1H:1519:G:H2'	26:1H:1520:U:O4'	2.20	0.42
26:1H:1649:G:N1	26:1H:2009:G:C6	2.88	0.42
26:1H:1878:G:H2'	26:1H:1879:C:H6	1.85	0.42
26:1H:2137:C:N3	26:1H:2138:C:N4	2.67	0.42
26:1H:2801:A:H2'	26:1H:2802:G:O4'	2.20	0.42
26:1H:2850:A:C2	26:1H:2851:A:C4	3.07	0.42
27:16:60:C:C2	27:16:61:G:C8	3.08	0.42
29:21:81:ILE:O	29:21:81:ILE:HG22	2.20	0.42
31:41:10:LYS:HG2	31:41:14:GLU:OE1	2.18	0.42
31:41:11:TYR:O	31:41:16:ARG:HG3	2.19	0.42
33:61:54:GLN:C	33:61:56:LYS:N	2.78	0.42
34:58:12:ARG:HG2	34:58:13:TRP:H	1.84	0.42
34:58:13:TRP:O	34:58:135:PRO:HD2	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:58:130:HIS:HA	34:58:134:ARG:NH2	2.35	0.42
35:68:93:PRO:HG3	35:68:114:ILE:HG12	2.00	0.42
37:88:59:ARG:C	37:88:61:GLY:N	2.78	0.42
37:88:59:ARG:O	37:88:61:GLY:N	2.52	0.42
41:C8:5:LYS:HB2	41:C8:5:LYS:NZ	2.35	0.42
41:C8:75:ASN:ND2	41:C8:77:SER:OG	2.52	0.42
42:D8:35:LEU:O	42:D8:37:VAL:N	2.53	0.42
44:F8:8:ILE:HD11	44:F8:43:VAL:HG22	2.02	0.42
45:G8:100:ALA:HB1	45:G8:101:LYS:CB	2.49	0.42
1:1G:157:G:C2	1:1G:165:C:C2	3.08	0.42
1:1G:1073:U:H2'	1:1G:1074:G:C8	2.55	0.42
1:1G:1129:C:H5	1:1G:1141:C:H42	1.68	0.42
1:1G:1250:A:H4'	9:82:68:GLY:H	1.83	0.42
2:12:145:LEU:O	2:12:149:LEU:HB2	2.19	0.42
5:42:6:PHE:HD2	5:42:36:ASP:HB3	1.85	0.42
6:52:50:TYR:OH	18:9A:74:ARG:O	2.37	0.42
6:52:97:PHE:CD1	18:9A:65:ILE:HD11	2.55	0.42
7:62:20:ASP:O	7:62:23:VAL:HG23	2.19	0.42
8:72:102:ARG:H	8:72:102:ARG:HG3	1.61	0.42
10:1A:69:ASN:C	10:1A:70:ARG:HE	2.27	0.42
11:2A:21:ILE:HB	11:2A:84:VAL:HG13	2.01	0.42
11:2A:73:MET:SD	11:2A:103:LEU:HD13	2.60	0.42
13:4A:13:LYS:HG2	13:4A:14:ARG:H	1.85	0.42
13:4A:54:VAL:HA	13:4A:57:ARG:HB3	2.00	0.42
16:7A:82:GLN:HE21	16:7A:82:GLN:HB3	1.61	0.42
20:BA:49:ALA:HA	20:BA:52:ALA:CB	2.49	0.42
24:1L:27:A:H3'	24:1L:28:G:H8	1.85	0.42
26:14:1771:C:C1'	26:14:1786:A:H8	2.33	0.42
26:14:1863:G:H2'	26:14:1864:U:O4'	2.20	0.42
26:14:2660:A:H2'	26:14:2661:G:O4'	2.19	0.42
27:1J:94:C:H2'	27:1J:95:U:C6	2.54	0.42
29:29:19:ARG:O	29:29:21:VAL:HG23	2.20	0.42
30:39:117:ARG:NH2	36:35:1:MET:H2	2.15	0.42
31:49:47:LYS:HD3	31:49:81:LYS:HG3	2.01	0.42
33:69:75:LEU:HG	33:69:139:GLN:OE1	2.20	0.42
35:25:20:MET:HE3	35:25:44:LYS:HE3	2.02	0.42
35:25:43:VAL:HG23	35:25:56:ASP:O	2.20	0.42
39:65:20:ARG:C	39:65:20:ARG:HE	2.27	0.42
39:65:106:ARG:O	39:65:106:ARG:HD2	2.20	0.42
40:75:21:GLU:O	40:75:91:ARG:NH2	2.52	0.42
42:95:21:ARG:HD3	42:95:91:TYR:HB3	2.02	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:A5:28:SER:OG	43:A5:31:GLU:OE1	2.38	0.42
46:D5:161:VAL:HG23	46:D5:162:GLU:H	1.85	0.42
54:M5:60:LEU:O	54:M5:62:LEU:N	2.52	0.42
1:13:247:G:O6	1:13:278:G:C6	2.73	0.42
1:13:486:U:H2'	1:13:487:A:C8	2.55	0.42
1:13:639:G:C2	1:13:640:A:C8	3.08	0.42
1:13:874:G:C4	1:13:875:C:C5	3.08	0.42
1:13:976:G:H5'	1:13:1358:U:O2'	2.20	0.42
1:13:1053:G:C5'	1:13:1054:C:H5'	2.49	0.42
1:13:1177:G:O2'	1:13:1178:G:O4'	2.23	0.42
1:13:1316:G:H2'	1:13:1318:A:OP2	2.20	0.42
1:13:1316:G:H5"	14:5I:17:LYS:NZ	2.34	0.42
1:13:1413:A:C2	1:13:1488:G:C2	3.08	0.42
2:1E:209:ARG:O	2:1E:213:LEU:HD13	2.20	0.42
3:2E:8:ILE:O	3:2E:11:ARG:N	2.53	0.42
5:4E:11:ILE:HG13	5:4E:31:LEU:HD13	2.02	0.42
5:4E:47:LYS:HE2	5:4E:47:LYS:HB2	1.85	0.42
7:6E:49:ILE:O	7:6E:53:LYS:HB2	2.20	0.42
9:8E:114:TYR:CD2	10:1I:59:SER:HA	2.54	0.42
16:7I:13:HIS:C	16:7I:15:PRO:HD3	2.44	0.42
17:8I:9:VAL:CG2	17:8I:84:LEU:HD12	2.49	0.42
17:8I:22:LEU:HD12	17:8I:40:LYS:O	2.20	0.42
19:AI:27:GLU:HG3	19:AI:29:ARG:HG3	2.02	0.42
23:2K:17:C:OP2	23:2K:18:C:O2'	2.27	0.42
26:1H:581:C:OP1	41:C8:33:ARG:HG3	2.20	0.42
26:1H:671:C:OP1	36:78:42:SER:O	2.38	0.42
26:1H:783:A:C8	26:1H:783:A:C3'	3.02	0.42
26:1H:1063:G:H22	26:1H:1076:C:C1'	2.33	0.42
26:1H:1174:A:N3	26:1H:1178:C:N4	2.67	0.42
26:1H:1210:A:H5"	26:1H:1212:G:H5'	2.01	0.42
26:1H:1385:G:O6	26:1H:1403:C:N4	2.52	0.42
26:1H:1517:G:H2'	26:1H:1518:C:C6	2.54	0.42
26:1H:1858:G:HO2'	26:1H:1859:A:C5'	2.31	0.42
26:1H:1900:A:N1	26:1H:1970:A:C6	2.88	0.42
26:1H:2248:C:H2'	26:1H:2249:U:O4'	2.20	0.42
26:1H:2637:U:H5'	29:21:44:TYR:CE1	2.55	0.42
26:1H:2707:G:O3'	38:98:68:ARG:HG2	2.20	0.42
26:1H:2728:U:H2'	26:1H:2729:G:C8	2.55	0.42
29:21:144:ARG:HB3	29:21:145:LYS:H	1.68	0.42
31:41:76:SER:HB2	31:41:84:LYS:HB2	2.02	0.42
36:78:26:GLY:O	36:78:28:GLY:N	2.53	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:98:44:LEU:O	38:98:47:PHE:N	2.44	0.42
39:A8:26:LEU:HD22	39:A8:87:PHE:HD1	1.83	0.42
41:C8:36:ARG:O	41:C8:36:ARG:HG2	2.20	0.42
46:H8:98:MET:O	46:H8:125:LEU:HD12	2.19	0.42
47:I8:50:ASN:HB3	47:I8:63:VAL:HG22	2.02	0.42
48:J8:79:GLY:C	48:J8:80:LEU:HD13	2.45	0.42
52:N8:33:CYS:HB2	52:N8:40:LYS:HD3	2.01	0.42
52:N8:56:LYS:HD3	52:N8:60:VAL:CG1	2.49	0.42
1:1G:109:A:C6	1:1G:326:G:C6	3.08	0.42
1:1G:188:U:O2'	1:1G:189:U:H5'	2.19	0.42
1:1G:635:G:C6	1:1G:636:U:C4	3.07	0.42
1:1G:726:C:H2'	1:1G:727:G:H8	1.85	0.42
1:1G:771:G:H2'	1:1G:772:U:C6	2.55	0.42
1:1G:1239:A:H4'	1:1G:1240:U:H5'	2.02	0.42
2:12:21:ARG:H	2:12:21:ARG:HG2	1.59	0.42
4:32:18:LYS:NZ	4:32:31:CYS:HB2	2.35	0.42
4:32:153:ARG:HD3	4:32:153:ARG:HA	1.83	0.42
12:3A:18:VAL:O	12:3A:19:ARG:HB2	2.20	0.42
17:8A:63:ARG:HG2	17:8A:64:PRO:CD	2.48	0.42
19:AA:41:VAL:O	19:AA:44:MET:HB2	2.20	0.42
20:BA:25:ARG:O	20:BA:29:LYS:HG3	2.20	0.42
24:1L:25:G:C2	24:1L:26:G:C4	3.08	0.42
26:14:336:C:OP1	45:C5:83:THR:HG23	2.20	0.42
26:14:548:A:C4	26:14:549:G:H1'	2.55	0.42
26:14:637:A:H2'	36:35:117:GLU:OE2	2.19	0.42
26:14:821:A:O2'	26:14:946:G:OP2	2.20	0.42
26:14:921:G:H4'	26:14:2269:A:C5	2.55	0.42
26:14:1025:G:H8	26:14:1025:G:OP1	2.03	0.42
26:14:1269:A:O2'	26:14:1325:G:O6	2.36	0.42
26:14:1767:C:H2'	26:14:1768:U:O4'	2.19	0.42
26:14:2414:G:H21	36:35:67:MET:CE	2.24	0.42
26:14:2522:U:H2'	26:14:2523:G:H5"	2.01	0.42
27:1J:22:U:H3	27:1J:61:G:H1	1.68	0.42
29:29:26:ILE:HG21	29:29:28:ALA:HB2	2.01	0.42
30:39:68:LYS:HB3	30:39:69:HIS:CD2	2.55	0.42
34:15:28:THR:HG22	34:15:29:LYS:N	2.34	0.42
37:45:43:THR:OG1	37:45:45:GLN:HG2	2.19	0.42
42:95:76:LYS:HB2	42:95:79:VAL:HG23	2.02	0.42
47:E5:46:LYS:HA	47:E5:47:PRO:HD3	1.80	0.42
51:I5:8:LYS:HD3	51:I5:8:LYS:HA	1.70	0.42
51:I5:11:PRO:HB3	51:I5:25:TYR:CD2	2.55	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:812:C:H6	1:13:812:C:H2'	1.68	0.42
1:13:953:G:C2	1:13:954:G:H1'	2.55	0.42
1:13:1112:C:O2	3:2E:179:ARG:HG2	2.19	0.42
2:1E:27:LYS:CB	2:1E:194:PRO:HD2	2.49	0.42
9:8E:17:VAL:HG21	9:8E:80:GLY:HA3	2.02	0.42
9:8E:40:LEU:HD11	9:8E:70:LYS:HG2	2.02	0.42
19:AI:51:VAL:HG12	19:AI:52:TYR:N	2.34	0.42
26:1H:321:G:O3'	30:31:168:ARG:NH2	2.53	0.42
26:1H:746:A:C6	26:1H:2611:U:H5"	2.55	0.42
26:1H:876:C:H2'	26:1H:877:U:O4'	2.20	0.42
26:1H:1444:G:H1	26:1H:1547:C:N4	2.18	0.42
26:1H:1945:G:N2	26:1H:1946:U:C2	2.88	0.42
26:1H:2114:A:H4'	26:1H:2167:U:O4	2.20	0.42
26:1H:2185:C:H2'	26:1H:2186:G:C8	2.54	0.42
26:1H:2419:U:H5"	54:Q8:33:ASN:HB2	2.02	0.42
27:16:94:C:H2'	27:16:95:U:C6	2.53	0.42
29:21:175:VAL:O	29:21:177:PRO:HD3	2.20	0.42
32:51:122:THR:O	32:51:134:SER:OG	2.30	0.42
34:58:132:ALA:C	34:58:134:ARG:HH11	2.23	0.42
39:A8:25:ARG:O	39:A8:39:ILE:HA	2.20	0.42
40:B8:33:LYS:H	40:B8:33:LYS:HG2	1.58	0.42
43:E8:86:LEU:HD12	43:E8:87:PRO:CD	2.47	0.42
44:F8:18:TYR:C	44:F8:20:GLY:H	2.28	0.42
45:G8:15:VAL:HG21	45:G8:42:VAL:HG21	2.01	0.42
46:H8:44:PHE:CE2	46:H8:86:VAL:HG11	2.55	0.42
47:I8:51:VAL:HG23	47:I8:81:VAL:HG23	2.02	0.42
48:J8:65:SER:HB2	48:J8:66:HIS:ND1	2.35	0.42
50:L8:2:PRO:HB2	50:L8:3:ARG:H	1.64	0.42
1:1G:42:G:H2'	1:1G:43:C:O4'	2.19	0.42
1:1G:376:G:H1	1:1G:387:U:H3	1.67	0.42
1:1G:1477:C:C2'	1:1G:1478:C:H5'	2.49	0.42
6:52:45:LEU:O	6:52:46:ARG:HG2	2.20	0.42
7:62:137:LYS:HB3	7:62:137:LYS:NZ	2.34	0.42
16:7A:9:PHE:CD1	16:7A:18:ARG:HG3	2.55	0.42
24:1L:57:C:H2'	24:1L:68:A:H4'	2.01	0.42
23:2L:34:U:N3	23:2L:37:U:OP2	2.53	0.42
55:3L:29:C:H2'	55:3L:30:A:C8	2.55	0.42
26:14:783:A:C8	26:14:783:A:C3'	3.01	0.42
26:14:981:A:H8	26:14:982:C:C5	2.38	0.42
26:14:1317:A:H2'	26:14:1318:C:H6	1.85	0.42
27:1J:9:G:P	39:65:25:ARG:HH22	2.43	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:1J:78:A:C2	27:1J:99:A:C4	3.08	0.42
29:29:68:ALA:C	29:29:70:ALA:N	2.78	0.42
33:69:63:ALA:HA	33:69:66:GLU:HG2	2.02	0.42
35:25:78:ARG:HG2	40:75:73:GLU:HB2	2.02	0.42
40:75:76:PHE:HA	40:75:77:PRO:HD2	1.86	0.42
42:95:4:ILE:HA	42:95:12:TYR:O	2.20	0.42
46:D5:30:ASN:HA	46:D5:89:PHE:CE1	2.52	0.42
48:F5:91:LYS:HA	48:F5:91:LYS:NZ	2.35	0.42
51:I5:2:LYS:HG3	51:I5:8:LYS:NZ	2.34	0.42
1:13:78:G:H3'	1:13:79:G:O4'	2.19	0.41
1:13:247:G:OP2	17:8I:100:LYS:N	2.52	0.41
1:13:259:G:H1	1:13:267:C:H42	1.68	0.41
1:13:1194:U:H2'	1:13:1195:C:C6	2.55	0.41
1:13:1288:A:N1	1:13:1371:G:H1'	2.35	0.41
1:13:1499:A:O2'	1:13:1520:G:H5'	2.20	0.41
4:3E:102:ASP:OD1	4:3E:103:ASN:N	2.53	0.41
4:3E:108:LEU:HD23	4:3E:110:PHE:CE1	2.54	0.41
6:5E:67:MET:SD	6:5E:75:LEU:HD12	2.60	0.41
7:6E:5:ARG:NH1	7:6E:7:ALA:HA	2.35	0.41
18:9I:66:LEU:O	18:9I:70:ILE:HG13	2.20	0.41
19:AI:37:ARG:H	19:AI:37:ARG:HG3	1.44	0.41
22:1K:14:A:H61	22:1K:22:A:H1'	1.84	0.41
22:1K:17:G:O6	22:1K:64:PSU:H1'	2.20	0.41
26:1H:511:U:H5"	26:1H:512:G:OP2	2.19	0.41
26:1H:602:G:N2	26:1H:655:A:C8	2.85	0.41
26:1H:888:C:H2'	26:1H:889:C:C2	2.55	0.41
26:1H:1060:U:N3	26:1H:1088:A:H8	2.12	0.41
26:1H:1301:A:N3	26:1H:1301:A:H2'	2.35	0.41
26:1H:1665:A:H2'	26:1H:1666:G:O4'	2.20	0.41
26:1H:1680:U:N3	26:1H:1764:G:OP2	2.45	0.41
26:1H:1854:A:C2	26:1H:2087:G:N3	2.88	0.41
26:1H:1956:U:H1'	26:1H:2552:U:OP1	2.20	0.41
26:1H:2757:A:N1	32:51:67:LEU:HD22	2.35	0.41
29:21:103:ASP:CG	29:21:168:MET:HG2	2.45	0.41
32:51:41:MET:HB2	32:51:41:MET:HE3	1.69	0.41
32:51:105:LEU:HD23	32:51:105:LEU:H	1.84	0.41
32:51:168:PRO:O	32:51:169:VAL:HG12	2.19	0.41
33:61:68:LEU:HA	33:61:68:LEU:HD12	1.69	0.41
34:58:90:MET:HE3	34:58:90:MET:HB2	1.84	0.41
38:98:67:LEU:HD22	38:98:76:VAL:HG21	2.02	0.41
38:98:92:GLY:N	38:98:94:TYR:CE1	2.88	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:I8:19:LYS:HD3	47:I8:19:LYS:HA	1.38	0.41
1:1G:50:A:N1	1:1G:360:A:O2'	2.52	0.41
1:1G:192:U:H4'	20:BA:57:ARG:HD3	2.02	0.41
1:1G:581:G:O2'	1:1G:582:U:H5'	2.19	0.41
1:1G:904:C:C4	1:1G:905:U:C4	3.08	0.41
1:1G:991:U:HO2'	1:1G:992:U:P	2.44	0.41
1:1G:1037:C:H2'	1:1G:1038:C:C6	2.54	0.41
4:32:112:VAL:HG12	4:32:116:GLN:OE1	2.20	0.41
7:62:60:LYS:HA	7:62:60:LYS:HD2	1.51	0.41
13:4A:3:ARG:N	51:I5:34:GLU:HG3	2.34	0.41
15:6A:81:LEU:HD12	15:6A:81:LEU:HA	1.83	0.41
17:8A:63:ARG:HE	17:8A:63:ARG:HB3	1.62	0.41
55:3L:79:A:H2'	55:3L:80:C:O4'	2.20	0.41
26:14:185:U:H2'	26:14:186:G:H8	1.85	0.41
26:14:513:A:C2	26:14:514:A:C5	3.08	0.41
26:14:925:C:H2'	26:14:926:A:C8	2.55	0.41
26:14:1036:G:P	32:59:59:ARG:HB2	2.60	0.41
26:14:1263:U:H2'	26:14:1264:G:C8	2.54	0.41
26:14:1872:A:H5'	26:14:1878:G:OP2	2.20	0.41
26:14:1973:G:H2'	26:14:1974:C:C6	2.54	0.41
26:14:2030:A:H2	59:14:3619:HOH:O	2.02	0.41
26:14:2712:U:H1'	26:14:2712(A):A:C8	2.55	0.41
27:1J:86:G:H1	27:1J:90:C:H42	1.67	0.41
38:55:38:VAL:HG22	38:55:112:ALA:HB2	2.01	0.41
45:C5:60:PHE:CD1	45:C5:60:PHE:N	2.88	0.41
46:D5:160:GLY:O	46:D5:162:GLU:HG3	2.20	0.41
47:E5:49:LYS:HE3	47:E5:82:ARG:HD3	2.01	0.41
1:13:1041:A:H2'	1:13:1042:G:O4'	2.20	0.41
1:13:1051:C:H2'	1:13:1052:U:H6	1.85	0.41
1:13:1054:C:H6	1:13:1196:U:O2'	2.01	0.41
1:13:1160:G:N3	1:13:1160:G:H2'	2.35	0.41
1:13:1464:G:H2'	1:13:1465:C:H6	1.85	0.41
5:4E:19:MET:HE3	5:4E:19:MET:HB3	1.94	0.41
8:7E:42:GLU:OE2	8:7E:120:THR:HG21	2.19	0.41
18:9I:47:THR:O	18:9I:83:GLU:HG2	2.19	0.41
22:1K:6:G:HO2'	22:1K:7:G:P	2.43	0.41
22:1K:83:C:N4	26:1H:2507:C:O3'	2.53	0.41
26:1H:357:A:H2'	26:1H:358:U:C6	2.54	0.41
26:1H:835:A:N6	26:1H:836:G:C6	2.88	0.41
26:1H:864:G:O2'	26:1H:865:C:H5'	2.21	0.41
26:1H:1137:G:H2'	26:1H:1138:G:H8	1.85	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1678:G:N2	26:1H:1989:G:N2	2.66	0.41
26:1H:1965:C:H2'	26:1H:1966:A:C8	2.55	0.41
26:1H:2240:C:O2'	26:1H:2241:A:H5'	2.20	0.41
26:1H:2260:C:OP1	47:I8:17:GLN:NE2	2.53	0.41
26:1H:2292:C:P	39:A8:17:ARG:NH2	2.90	0.41
26:1H:2528:U:O2'	26:1H:2529:G:H3'	2.19	0.41
28:11:77:ALA:HB1	28:11:96:HIS:O	2.20	0.41
29:21:105:THR:HG21	29:21:164:ARG:CZ	2.49	0.41
31:41:110:ALA:HA	31:41:140:ILE:O	2.20	0.41
34:58:18:ALA:H	34:58:21:LYS:HZ2	1.67	0.41
38:98:45:ARG:HB3	38:98:46:GLY:H	1.47	0.41
38:98:98:LEU:HD23	38:98:98:LEU:HA	1.82	0.41
39:A8:51:ALA:CB	39:A8:73:LEU:HG	2.50	0.41
43:E8:29:LEU:HD12	43:E8:29:LEU:O	2.20	0.41
51:M8:43:TYR:O	51:M8:46:GLN:HA	2.20	0.41
1:1G:407:G:C2	1:1G:436:C:C2	3.09	0.41
1:1G:436:C:H2'	1:1G:437:U:O4'	2.19	0.41
1:1G:561:U:O2'	1:1G:562:C:P	2.78	0.41
1:1G:688:G:H2'	1:1G:689:C:H6	1.84	0.41
1:1G:739:C:OP1	15:6A:2:PRO:HD3	2.21	0.41
1:1G:1519:A:H5"	1:1G:1520:G:OP2	2.20	0.41
2:12:162:ILE:O	2:12:185:ILE:HG12	2.20	0.41
5:42:99:GLY:O	5:42:117:ASP:HA	2.20	0.41
8:72:32:LYS:HA	8:72:35:ILE:HD12	2.03	0.41
8:72:51:VAL:HG11	8:72:60:ARG:HE	1.85	0.41
14:5A:26:ARG:NH2	14:5A:46:GLU:OE2	2.54	0.41
16:7A:45:THR:O	16:7A:48:TRP:HD1	2.03	0.41
26:14:162:U:H5'	26:14:171:G:O4'	2.19	0.41
26:14:218:A:C2	26:14:235:U:H4'	2.54	0.41
26:14:270(M):U:H4'	26:14:270(N):G:C2	2.55	0.41
26:14:282:A:C6	26:14:284:U:C2	3.08	0.41
26:14:289:A:H3'	26:14:290:G:H8	1.85	0.41
26:14:406:G:H1	26:14:421:U:H3	1.68	0.41
26:14:565:C:H4'	26:14:1253:A:C6	2.55	0.41
26:14:710:G:H1	26:14:721:C:N4	2.18	0.41
26:14:848:G:H2'	26:14:849:A:H8	1.81	0.41
26:14:868:U:N3	26:14:869:G:N7	2.69	0.41
26:14:1348:G:C6	26:14:1349:A:N1	2.88	0.41
26:14:1903:G:OP1	28:19:241:PRO:HB2	2.20	0.41
26:14:2191:G:O2'	26:14:2192:G:OP1	2.34	0.41
26:14:2327:A:H2'	26:14:2328:A:H8	1.85	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2474:C:H5”	26:14:2475:C:OP2	2.20	0.41
27:1J:33:G:C2	27:1J:50:G:C2	3.08	0.41
28:19:33:LEU:HD21	28:19:103:ARG:HA	2.02	0.41
29:29:31:CYS:O	29:29:90:THR:HA	2.20	0.41
29:29:37:ARG:HA	29:29:42:ASP:OD2	2.20	0.41
29:29:52:LEU:HA	29:29:53:PRO:HD2	1.88	0.41
29:29:96:PHE:O	29:29:175:VAL:HG11	2.20	0.41
31:49:15:VAL:HG13	31:49:175:LEU:HD13	2.01	0.41
33:69:97:ILE:O	33:69:100:ALA:HB3	2.20	0.41
33:69:112:LYS:CA	33:69:114:LEU:H	2.29	0.41
33:69:138:ILE:HG12	33:69:139:GLN:N	2.34	0.41
34:15:68:GLU:HA	34:15:88:GLU:HG3	2.02	0.41
36:35:47:ASP:OD1	36:35:49:ARG:NE	2.34	0.41
40:75:8:LYS:NZ	40:75:8:LYS:HB2	2.17	0.41
40:75:99:LEU:HD23	40:75:99:LEU:HA	1.79	0.41
44:B5:60:ARG:HG2	44:B5:60:ARG:NH1	2.28	0.41
1:13:17:U:H2’	1:13:18:C:C6	2.55	0.41
1:13:35:G:O2’	12:3I:118:SER:O	2.29	0.41
1:13:57:G:C5	1:13:58:C:C4	3.07	0.41
1:13:243:A:H5”	1:13:244:U:H3’	2.02	0.41
1:13:763:G:H2’	1:13:764:C:C6	2.54	0.41
1:13:1171:G:H2’	1:13:1172:C:C6	2.55	0.41
3:2E:121:ALA:HB1	3:2E:188:LEU:O	2.21	0.41
4:3E:85:LYS:HG3	4:3E:86:LYS:N	2.35	0.41
5:4E:131:ILE:HD13	5:4E:131:ILE:HA	1.91	0.41
7:6E:135:VAL:O	7:6E:139:GLU:HG3	2.20	0.41
19:AI:6:LYS:O	19:AI:7:LYS:HB3	2.19	0.41
26:1H:315:G:C5	26:1H:316:C:C5	3.08	0.41
26:1H:1671:U:O2’	26:1H:1673:U:H5	2.03	0.41
26:1H:2064:C:H2’	26:1H:2065:C:C6	2.55	0.41
26:1H:2392:A:H2	26:1H:2424:C:N4	2.13	0.41
26:1H:2580:U:H4’	29:21:130:GLY:CA	2.46	0.41
26:1H:2740:A:C6	26:1H:2764:A:C8	3.07	0.41
28:11:70:TRP:CD1	28:11:70:TRP:O	2.73	0.41
32:51:38:SER:HA	32:51:39:PRO:HD3	1.92	0.41
33:61:23:PRO:O	33:61:27:ARG:HG3	2.19	0.41
34:58:71:ILE:HG21	34:58:84:LYS:HG2	2.03	0.41
34:58:132:ALA:N	34:58:134:ARG:HH11	2.18	0.41
37:88:32:TYR:CZ	37:88:111:GLU:HG3	2.54	0.41
42:D8:39:LEU:HD12	42:D8:51:VAL:HG22	2.03	0.41
43:E8:2:GLU:HB2	43:E8:107:LEU:O	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:G8:54:LYS:O	45:G8:55:TYR:CG	2.73	0.41
46:H8:133:ILE:HA	46:H8:134:PRO:HD2	1.79	0.41
50:L8:26:LEU:HB2	50:L8:28:LEU:HD12	2.02	0.41
52:N8:42:PRO:HB2	52:N8:43:HIS:ND1	2.34	0.41
54:Q8:39:LYS:HA	54:Q8:42:ARG:NH2	2.36	0.41
1:1G:526:C:H2'	1:1G:527:G:H4'	2.02	0.41
1:1G:626:U:H2'	1:1G:627:G:H8	1.84	0.41
1:1G:892:A:C2	1:1G:907:A:C4	3.08	0.41
1:1G:1088:G:N2	1:1G:1097:C:O2	2.47	0.41
2:12:118:LEU:HB3	2:12:142:LEU:HD12	2.02	0.41
3:22:125:GLU:OE2	3:22:189:ALA:HA	2.21	0.41
8:72:20:TYR:HA	8:72:65:TYR:CE1	2.56	0.41
12:3A:100:ILE:HG22	12:3A:101:VAL:H	1.83	0.41
21:1B:18:TYR:CD2	21:1B:24:ARG:HD3	2.54	0.41
26:14:152:G:H1	26:14:174:C:N4	2.17	0.41
26:14:832:G:H5'	36:35:45:LEU:CD1	2.50	0.41
26:14:1042:G:H2'	26:14:1043:C:O4'	2.20	0.41
26:14:1312:U:H4'	26:14:1313:U:O5'	2.20	0.41
26:14:1519:G:C6	26:14:1520:U:C4	3.08	0.41
26:14:1668:A:C8	26:14:1674:G:C6	3.09	0.41
26:14:2156:G:C5	26:14:2157:G:N2	2.89	0.41
26:14:2402:C:H5'	26:14:2403:C:OP2	2.20	0.41
26:14:2425:A:H5'	26:14:2427:C:O4'	2.21	0.41
26:14:2432:A:H2'	26:14:2433:A:C8	2.56	0.41
26:14:2666:C:O2	32:59:152:ARG:NH1	2.53	0.41
27:1J:32:C:C2	27:1J:33:G:C8	3.09	0.41
27:1J:66:A:C2	27:1J:108:C:C4	3.09	0.41
28:19:210:GLY:O	28:19:213:ARG:N	2.53	0.41
29:29:4:ILE:HD12	29:29:28:ALA:CB	2.50	0.41
29:29:36:ARG:HH21	29:29:88:GLY:N	2.18	0.41
32:59:167:GLU:HA	32:59:168:PRO:HD3	1.69	0.41
34:15:39:ARG:C	34:15:41:ASP:H	2.28	0.41
37:45:25:ASP:HA	37:45:102:VAL:CG2	2.45	0.41
37:45:34:LEU:HD12	37:45:130:LYS:O	2.21	0.41
42:95:2:PHE:H	42:95:42:GLY:CA	2.33	0.41
42:95:85:LYS:HG3	42:95:87:HIS:HA	2.02	0.41
45:C5:82:PRO:CB	45:C5:97:ARG:HB3	2.51	0.41
49:G5:24:LEU:O	49:G5:27:GLU:HB2	2.20	0.41
51:I5:9:LEU:HD22	51:I5:9:LEU:H	1.84	0.41
1:13:93:U:H2'	1:13:95:G:H5"	2.02	0.41
1:13:182:U:C5	1:13:183:G:C4	3.07	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:864:A:H5"	1:13:865:A:OP2	2.20	0.41
1:13:872:A:C5	1:13:874:G:C8	3.08	0.41
1:13:929:G:C6	1:13:930:C:C4	3.09	0.41
1:13:975:A:C5'	1:13:976:G:H5"	2.51	0.41
1:13:1110:A:H5"	1:13:1183:A:C2	2.55	0.41
1:13:1247:U:H3	1:13:1290:G:H1	1.67	0.41
2:1E:32:ILE:HG21	2:1E:40:HIS:ND1	2.34	0.41
2:1E:63:MET:HE3	2:1E:63:MET:HB2	1.85	0.41
16:7I:79:VAL:HG12	16:7I:80:PHE:HD1	1.85	0.41
18:9I:43:PHE:O	18:9I:51:LEU:HG	2.20	0.41
20:BI:53:LEU:HD13	20:BI:56:MET:HB3	2.01	0.41
26:1H:973:A:O4'	26:1H:1188:U:C6	2.73	0.41
26:1H:1055:G:O2'	26:1H:1086:A:N6	2.43	0.41
26:1H:1357:U:H2'	26:1H:1358:G:H8	1.86	0.41
26:1H:1668:A:C8	26:1H:1674:G:C6	3.08	0.41
26:1H:1838:C:H4'	26:1H:1839:G:H5"	2.03	0.41
26:1H:2056:G:N3	26:1H:2056:G:H2'	2.35	0.41
26:1H:2331:G:N3	26:1H:2336:A:C2	2.88	0.41
26:1H:2348:U:O4	26:1H:2382:G:C2	2.73	0.41
26:1H:2536:G:C6	26:1H:2537:U:C4	3.07	0.41
26:1H:2663:G:C6	26:1H:2664:G:C4	3.09	0.41
26:1H:2685:G:OP2	40:B8:51:ARG:NH2	2.53	0.41
26:1H:2795:G:C5	26:1H:2802:G:C6	3.08	0.41
28:11:132:PRO:HG3	28:11:190:TYR:CE1	2.55	0.41
29:21:78:LEU:HD23	29:21:79:ARG:NE	2.35	0.41
34:58:35:ARG:O	34:58:42:TRP:CZ3	2.73	0.41
36:78:96:THR:C	36:78:98:GLU:N	2.77	0.41
37:88:52:VAL:HA	37:88:55:VAL:HG13	2.03	0.41
47:I8:60:PHE:CD1	47:I8:60:PHE:N	2.88	0.41
48:J8:8:SER:OG	48:J8:10:LYS:HG3	2.19	0.41
1:1G:164:U:H2'	1:1G:165:C:C6	2.56	0.41
1:1G:685:G:C2	1:1G:686:U:C4	3.08	0.41
1:1G:947:G:C6	1:1G:948:C:C4	3.09	0.41
1:1G:1072:G:C6	1:1G:1073:U:N3	2.89	0.41
1:1G:1080:A:H5'	5:42:14:ARG:NH2	2.36	0.41
1:1G:1179:A:O3'	9:82:103:THR:HG23	2.19	0.41
1:1G:1203:C:H2'	1:1G:1204:A:O4'	2.20	0.41
1:1G:1277:C:O2'	1:1G:1279:A:H8	2.03	0.41
1:1G:1308:U:OP1	13:4A:98:VAL:HG23	2.21	0.41
1:1G:1321:C:H4'	13:4A:87:TYR:CZ	2.55	0.41
1:1G:1511:G:H2'	1:1G:1512:U:O4'	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:22:102:ASN:OD1	3:22:102:ASN:N	2.53	0.41
3:22:130:VAL:O	3:22:134:ILE:HG12	2.20	0.41
3:22:152:ILE:HA	3:22:167:TRP:HB2	2.02	0.41
5:42:61:TYR:HA	5:42:64:ARG:HD2	2.02	0.41
7:62:139:GLU:HB3	7:62:143:ARG:NH2	2.35	0.41
11:2A:38:ASN:HA	11:2A:39:PRO:HD3	1.79	0.41
18:9A:87:ARG:HD2	18:9A:87:ARG:HA	1.71	0.41
19:AA:18:LYS:HE2	19:AA:31:ILE:HG12	2.03	0.41
24:1L:75:C:O2'	24:1L:76:C:OP1	2.30	0.41
26:14:31:C:O2'	26:14:32:C:H5'	2.20	0.41
26:14:262:A:H2'	26:14:263:C:O4'	2.21	0.41
26:14:303:U:H2'	26:14:304:G:O4'	2.20	0.41
26:14:315:G:H2'	26:14:316:C:C6	2.55	0.41
26:14:943:U:P	36:35:36:LYS:HG3	2.59	0.41
26:14:1091:G:C6	26:14:1092:C:C4	3.08	0.41
26:14:2055:C:OP1	26:14:2056:G:H4'	2.21	0.41
26:14:2572:A:N7	29:29:145:LYS:HB2	2.36	0.41
27:1J:53:A:H2'	27:1J:54:G:O4'	2.21	0.41
29:29:81:ILE:HD12	29:29:81:ILE:HG23	1.74	0.41
37:45:118:LEU:HD23	37:45:118:LEU:HA	1.87	0.41
46:D5:59:LEU:HB3	46:D5:60:GLU:H	1.68	0.41
52:J5:26:THR:HA	52:J5:27:PRO:HD2	1.91	0.41
1:13:556:C:H2'	1:13:557:G:C8	2.55	0.41
1:13:669:U:C2	1:13:670:G:C8	3.07	0.41
1:13:717:C:H5"	1:13:717:C:H6	1.85	0.41
1:13:758:G:H8	1:13:758:G:O5'	2.04	0.41
1:13:825:G:H2'	1:13:826:C:C6	2.55	0.41
1:13:938:A:C6	1:13:939:G:C5	3.09	0.41
1:13:948:C:OP1	13:4I:109:THR:OG1	2.38	0.41
1:13:1176:A:H2'	1:13:1177:G:H4'	2.02	0.41
1:13:1249:C:O2'	9:8E:73:GLN:OE1	2.31	0.41
2:1E:27:LYS:HB3	2:1E:194:PRO:HD2	2.02	0.41
2:1E:85:ALA:O	2:1E:90:MET:N	2.54	0.41
2:1E:192:SER:OG	2:1E:193:ASP:N	2.53	0.41
3:2E:84:ILE:HD11	3:2E:101:LEU:HD22	2.02	0.41
9:8E:4:TYR:CZ	9:8E:88:TYR:HB2	2.56	0.41
26:1H:44:A:O2'	26:1H:45:G:H5'	2.20	0.41
26:1H:77:C:H5"	49:K8:10:LEU:HD21	2.01	0.41
26:1H:193:U:H5	59:1H:3591:HOH:O	2.01	0.41
26:1H:443:A:N7	30:31:45:ARG:HG2	2.35	0.41
26:1H:1287:A:C5	26:1H:1288:U:C4	3.08	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1576:U:N3	26:1H:1577:C:C5	2.88	0.41
26:1H:1638:C:H5"	26:1H:2710:C:O2'	2.20	0.41
26:1H:1727:U:H2'	26:1H:1728:G:O4'	2.20	0.41
26:1H:2533:A:H2'	26:1H:2534:A:O4'	2.21	0.41
26:1H:2638:G:P	29:21:82:ARG:HH22	2.42	0.41
26:1H:2649:U:H2'	26:1H:2650:U:C6	2.55	0.41
26:1H:2783:G:H2'	26:1H:2784:C:H6	1.85	0.41
29:21:4:ILE:HG22	29:21:198:VAL:HB	2.01	0.41
29:21:167:VAL:HG13	29:21:189:PRO:HD3	2.01	0.41
30:31:33:LEU:HB3	36:78:6:LEU:HD11	2.02	0.41
34:58:14:VAL:HG12	34:58:15:LEU:H	1.86	0.41
36:78:63:PRO:HB3	54:Q8:12:LYS:O	2.20	0.41
38:98:38:VAL:HG23	38:98:110:PRO:O	2.20	0.41
41:C8:107:ALA:O	41:C8:110:VAL:HB	2.21	0.41
49:K8:18:PRO:O	49:K8:22:GLU:HG3	2.21	0.41
51:M8:55:ARG:NH2	51:M8:56:VAL:HB	2.35	0.41
1:1G:407:G:H2'	1:1G:408:A:C8	2.54	0.41
2:12:22:LYS:HB3	2:12:40:HIS:NE2	2.34	0.41
2:12:121:LEU:HD21	2:12:126:GLU:HB3	2.02	0.41
3:22:18:TRP:NE1	14:5A:55:GLY:H	2.18	0.41
4:32:158:ILE:O	4:32:162:LEU:HG	2.20	0.41
5:42:12:LEU:HD13	5:42:13:ILE:N	2.35	0.41
8:72:73:ASP:HA	8:72:74:PRO:HD2	1.53	0.41
8:72:103:VAL:HG11	8:72:109:ILE:O	2.20	0.41
9:82:53:VAL:C	9:82:55:ALA:H	2.29	0.41
16:7A:54:GLU:CD	16:7A:54:GLU:H	2.28	0.41
18:9A:31:LEU:HD11	18:9A:62:GLU:HB3	2.02	0.41
24:1L:18:G:H3'	24:1L:19:C:C5	2.54	0.41
26:14:140:A:C8	26:14:1408:C:O2'	2.70	0.41
26:14:442:G:C6	26:14:444:C:N4	2.88	0.41
26:14:676:A:H2	26:14:802:A:H61	1.64	0.41
26:14:757:U:H2'	26:14:758:C:O4'	2.20	0.41
26:14:872:A:C6	26:14:873:G:C6	3.08	0.41
26:14:908:C:P	37:45:22:LYS:HD3	2.60	0.41
26:14:1543:A:H1'	26:14:1545:A:H1'	2.02	0.41
26:14:1891:G:C6	26:14:1892:C:C4	3.09	0.41
26:14:2094:G:C2'	26:14:2095:C:H5'	2.50	0.41
26:14:2465:C:O2	26:14:2486:G:C2	2.73	0.41
26:14:2683:C:OP1	40:75:53:ARG:NH2	2.53	0.41
26:14:2766:G:H2'	26:14:2766:G:N3	2.36	0.41
30:39:132:VAL:HG22	30:39:133:ASN:N	2.35	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:39:205:ARG:HB2	30:39:205:ARG:NH1	2.36	0.41
31:49:105:LYS:NZ	51:I5:26:SER:HA	2.35	0.41
33:69:124:GLY:H	33:69:142:VAL:HB	1.84	0.41
34:15:59:LYS:HD2	34:15:59:LYS:HA	1.89	0.41
35:25:4:PRO:O	35:25:5:GLN:CB	2.68	0.41
35:25:87:ILE:HA	35:25:87:ILE:HD12	1.69	0.41
38:55:96:ARG:HD2	38:55:115:GLU:OE1	2.21	0.41
41:85:55:ARG:HH11	41:85:55:ARG:HD3	1.73	0.41
44:B5:12:VAL:HG13	44:B5:27:THR:O	2.20	0.41
46:D5:44:PHE:C	46:D5:44:PHE:CD1	2.98	0.41
1:13:32:A:C2	1:13:33:A:C4	3.09	0.41
1:13:774:G:H3'	1:13:775:G:H8	1.85	0.41
1:13:823:G:C2	1:13:878:G:C2	3.09	0.41
1:13:1004:A:H2'	1:13:1005:A:O4'	2.21	0.41
1:13:1024:G:H2'	1:13:1025:U:C6	2.56	0.41
1:13:1075:C:O3'	2:1E:175:ARG:NH2	2.54	0.41
1:13:1347:G:N2	1:13:1374:A:OP2	2.48	0.41
5:4E:11:ILE:HD11	5:4E:43:LEU:HD11	2.02	0.41
13:4I:23:TYR:CE2	13:4I:71:ARG:HG3	2.56	0.41
13:4I:115:LYS:HB2	13:4I:115:LYS:HZ2	1.85	0.41
18:9I:26:LEU:HD12	18:9I:29:PHE:CD1	2.56	0.41
20:BI:10:LEU:HD11	20:BI:12:ALA:HB3	2.01	0.41
26:1H:24:G:O2'	43:E8:77:ASP:HB3	2.21	0.41
26:1H:174:C:H2'	26:1H:175:G:O4'	2.20	0.41
26:1H:415:A:H2'	26:1H:416:C:O4'	2.20	0.41
26:1H:643:A:O2'	26:1H:644:A:H5'	2.21	0.41
26:1H:648:G:O2'	26:1H:2351:G:OP1	2.26	0.41
26:1H:758:C:O2	26:1H:1981:A:H2	2.04	0.41
26:1H:978:G:C2	26:1H:986:C:C2	3.09	0.41
26:1H:1131:G:H8	26:1H:2025:C:H4'	1.84	0.41
26:1H:1500:G:O2'	28:11:100:GLY:O	2.34	0.41
26:1H:1567:A:C8	28:11:84:TYR:CE2	3.09	0.41
26:1H:1641:A:N6	26:1H:1642:G:C2	2.89	0.41
26:1H:1878:G:H2'	26:1H:1879:C:C6	2.55	0.41
26:1H:2212:A:N3	26:1H:2215:G:N1	2.69	0.41
26:1H:2259:G:C2	26:1H:2282:G:N1	2.88	0.41
26:1H:2572:A:C4	29:21:144:ARG:NH1	2.88	0.41
26:1H:2837:G:H21	38:98:45:ARG:NH2	2.18	0.41
32:51:86:GLU:HG2	32:51:165:ALA:H	1.85	0.41
35:68:68:GLU:H	35:68:68:GLU:HG2	1.58	0.41
43:E8:74:ALA:HA	43:E8:104:THR:O	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:F8:52:VAL:HG23	44:F8:82:GLN:HB3	2.03	0.41
46:H8:6:LYS:HE3	46:H8:6:LYS:HB2	1.79	0.41
47:I8:25:ARG:HA	47:I8:29:GLN:NE2	2.36	0.41
50:L8:31:LEU:HB3	50:L8:32:GLN:OE1	2.20	0.41
53:P8:30:VAL:O	53:P8:34:ARG:HG3	2.21	0.41
1:1G:280:C:N3	17:8A:39:SER:N	2.68	0.41
1:1G:726:C:H2'	1:1G:727:G:C8	2.56	0.41
6:52:19:LEU:HD11	6:52:59:TYR:CE1	2.55	0.41
8:72:105:ARG:HD3	8:72:105:ARG:HA	1.83	0.41
18:9A:22:VAL:HG22	18:9A:23:LYS:N	2.33	0.41
18:9A:37:VAL:N	18:9A:38:GLU:OE2	2.53	0.41
19:AA:66:MET:HE2	51:I5:59:PHE:CD2	2.55	0.41
24:1L:21:A:C2	24:1L:56:U:C2	3.08	0.41
55:3L:65:C:N4	26:14:2169:A:H62	2.17	0.41
26:14:2472:G:H1'	26:14:2478:A:H61	1.85	0.41
26:14:2527:C:C4	26:14:2528:U:C5	3.09	0.41
26:14:2881:C:O2'	38:55:96:ARG:HA	2.21	0.41
28:19:239:ARG:CZ	59:19:302:HOH:O	2.69	0.41
29:29:37:ARG:HE	29:29:42:ASP:CG	2.27	0.41
30:39:107:LYS:HE2	30:39:205:ARG:HG3	2.02	0.41
44:B5:4:ALA:C	44:B5:6:ASP:H	2.29	0.41
44:B5:21:PHE:CZ	44:B5:92:LEU:HD22	2.56	0.41
44:B5:50:LYS:HB3	44:B5:84:ALA:H	1.86	0.41
46:D5:28:MET:HE2	46:D5:28:MET:HB3	1.72	0.41
46:D5:67:LEU:HA	46:D5:68:PRO:HD3	1.57	0.41
51:I5:4:GLY:C	51:I5:5:ILE:HG13	2.44	0.41
51:I5:31:ILE:HG22	51:I5:32:TYR:CG	2.55	0.41
1:13:68:G:C2	1:13:69:G:C4	3.09	0.41
1:13:257:G:C2	1:13:258:G:C4	3.09	0.41
1:13:428:G:C5	1:13:430:A:C6	3.09	0.41
1:13:760:G:H2'	1:13:761:G:H5'	2.02	0.41
1:13:942:G:C2	1:13:1342:C:C2	3.08	0.41
1:13:1284:C:H3'	1:13:1285:A:C8	2.55	0.41
1:13:1285:A:O5'	1:13:1285:A:H8	2.04	0.41
1:13:1346:A:N7	1:13:1374:A:H2	2.18	0.41
2:1E:142:LEU:O	2:1E:146:GLN:N	2.46	0.41
3:2E:135:LYS:O	3:2E:138:VAL:HG12	2.20	0.41
4:3E:13:ARG:HG2	4:3E:13:ARG:H	1.49	0.41
4:3E:85:LYS:HG3	4:3E:86:LYS:H	1.86	0.41
9:8E:34:ASN:O	9:8E:38:GLN:HB2	2.21	0.41
22:1K:3:U:O2'	22:1K:4:G:H8	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:44:A:C2	26:1H:45:G:C4	3.09	0.41
26:1H:223:A:O4'	26:1H:422:A:H5'	2.20	0.41
26:1H:547:A:C5	26:1H:548:A:C6	3.09	0.41
26:1H:562:U:H6	26:1H:562:U:H2'	1.73	0.41
26:1H:654(A):A:C2	26:1H:654(T):A:N1	2.88	0.41
26:1H:991:C:C4	26:1H:1185:C:N4	2.89	0.41
26:1H:1338:G:N7	44:F8:62:LYS:NZ	2.60	0.41
26:1H:1429:G:C2	26:1H:1430:C:C2	3.09	0.41
26:1H:1517:G:H2'	26:1H:1518:C:H6	1.85	0.41
26:1H:1582:C:O2'	26:1H:1586:A:C8	2.71	0.41
26:1H:2138:C:H42	26:1H:2153:G:H1	1.68	0.41
26:1H:2329:G:H2'	26:1H:2330:G:C8	2.56	0.41
28:11:33:LEU:HD23	28:11:33:LEU:HA	1.78	0.41
30:31:64:ILE:HA	30:31:64:ILE:HD13	1.76	0.41
32:51:167:GLU:HA	32:51:168:PRO:HD3	1.62	0.41
33:61:124:GLY:O	33:61:142:VAL:HG23	2.21	0.41
40:B8:21:GLU:H	40:B8:21:GLU:HG3	1.73	0.41
44:F8:43:VAL:HG13	44:F8:47:PHE:CD2	2.56	0.41
46:H8:8:TYR:HB2	46:H8:38:TYR:CE1	2.56	0.41
1:1G:22:G:H2'	1:1G:23:C:C6	2.56	0.41
1:1G:41:G:H2'	1:1G:42:G:C8	2.55	0.41
1:1G:108:G:OP1	1:1G:326:G:N2	2.48	0.41
1:1G:167:G:H2'	1:1G:168:G:C8	2.53	0.41
1:1G:246:A:OP1	17:8A:101:ARG:NH2	2.54	0.41
1:1G:447:G:H2'	1:1G:485:G:N2	2.36	0.41
1:1G:625:G:H2'	1:1G:626:U:C6	2.55	0.41
1:1G:626:U:H2'	1:1G:627:G:C8	2.55	0.41
1:1G:827:U:C4	1:1G:870:U:C4	3.08	0.41
1:1G:954:G:H21	1:1G:1227:A:H62	1.68	0.41
1:1G:1127:G:N2	1:1G:1144:G:H1	1.99	0.41
1:1G:1236:A:H2'	1:1G:1237:C:C6	2.56	0.41
1:1G:1359:C:OP2	14:5A:35:ARG:HD3	2.20	0.41
2:12:19:HIS:NE2	2:12:204:ASN:HB3	2.34	0.41
3:22:42:LEU:HD13	3:22:42:LEU:HA	1.95	0.41
10:1A:27:ALA:HA	10:1A:81:THR:HB	2.03	0.41
11:2A:12:ARG:NH2	11:2A:13:GLN:O	2.54	0.41
15:6A:48:LYS:HA	15:6A:48:LYS:NZ	2.36	0.41
16:7A:48:TRP:CD1	16:7A:48:TRP:H	2.36	0.41
19:AA:48:THR:HG22	19:AA:61:TYR:HB2	2.02	0.41
26:14:270(G):C:H2'	26:14:270(H):C:H6	1.84	0.41
26:14:353:G:H2'	26:14:354:G:H8	1.85	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:654(B):C:H2'	26:14:654(C):G:H8	1.81	0.41
26:14:824:A:H1'	26:14:2358:G:N7	2.36	0.41
26:14:913:U:H4'	26:14:914:C:OP1	2.20	0.41
26:14:1051:G:H8	26:14:1051:G:OP2	2.03	0.41
26:14:1486:A:H2'	26:14:1487:G:H8	1.85	0.41
26:14:1783:A:P	59:14:3401:HOH:O	2.79	0.41
26:14:2181:G:C2	26:14:2182:G:C4	3.09	0.41
30:39:51:THR:HB	30:39:88:VAL:HG11	2.02	0.41
33:69:117:GLU:HB2	33:69:118:LYS:H	1.73	0.41
36:35:84:ASN:HA	36:35:115:LEU:H	1.86	0.41
37:45:88:GLY:C	37:45:89:ASN:CG	2.89	0.41
42:95:68:LYS:HA	42:95:68:LYS:HE3	2.02	0.41
43:A5:50:VAL:HG22	43:A5:105:VAL:HG23	2.03	0.41
44:B5:31:HIS:HA	44:B5:32:PRO:HD3	1.81	0.41
46:D5:124:ILE:HD12	46:D5:125:LEU:H	1.85	0.41
1:13:373:A:C2	1:13:374:A:C8	3.08	0.41
1:13:447:G:C6	1:13:485:G:H1'	2.55	0.41
1:13:673:G:H2'	1:13:674:G:C8	2.56	0.41
1:13:954:G:H2'	1:13:955:U:C6	2.56	0.41
1:13:976:G:OP1	14:5I:32:SER:N	2.52	0.41
1:13:1123:A:O2'	10:1I:36:GLY:O	2.38	0.41
1:13:1219:U:H2'	1:13:1220:G:O4'	2.21	0.41
2:1E:163:PHE:HA	2:1E:185:ILE:HG13	2.01	0.41
12:3I:60:LEU:HB2	12:3I:65:GLU:H	1.85	0.41
15:6I:65:ARG:O	15:6I:68:ARG:HB3	2.21	0.41
17:8I:9:VAL:HG21	17:8I:84:LEU:HD12	2.03	0.41
17:8I:31:LEU:HD23	17:8I:32:TYR:CZ	2.56	0.41
19:AI:38:SER:O	19:AI:70:LYS:HA	2.21	0.41
22:1K:42:U:H3'	22:1K:43:G:H8	1.86	0.41
26:1H:51:G:N3	26:1H:119:A:C2	2.89	0.41
26:1H:182:A:C6	26:1H:183:C:C4	3.08	0.41
26:1H:315:G:C5	26:1H:316:C:C4	3.09	0.41
26:1H:751:A:C5'	43:E8:90:ARG:HA	2.50	0.41
26:1H:984:A:H5"	26:1H:985:C:C5	2.56	0.41
26:1H:1189:A:P	59:1H:3711:HOH:O	2.79	0.41
26:1H:1346:G:C6	26:1H:1601:G:N1	2.89	0.41
26:1H:2093:G:OP2	33:61:22:LYS:HD2	2.21	0.41
28:11:89:SER:C	28:11:159:ALA:HB2	2.45	0.41
31:41:20:ILE:O	31:41:24:GLY:HA2	2.20	0.41
33:61:40:THR:HB	33:61:43:ASN:H	1.85	0.41
34:58:30:ILE:HG22	34:58:34:LEU:HD22	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:78:58:THR:HA	36:78:60:MET:H	1.86	0.41
37:88:37:LEU:HD21	37:88:130:LYS:HB2	2.02	0.41
38:98:47:PHE:HE1	38:98:51:LEU:HD11	1.85	0.41
40:B8:87:ASP:OD1	40:B8:87:ASP:N	2.53	0.41
46:H8:35:ARG:HB3	46:H8:35:ARG:HH11	1.86	0.41
49:K8:50:ILE:H	49:K8:50:ILE:HG13	1.59	0.41
1:1G:792:A:H4'	1:1G:793:U:C5'	2.50	0.41
1:1G:881:G:H2'	1:1G:882:C:O4'	2.21	0.41
1:1G:1028:C:C4	1:1G:1034:G:N2	2.87	0.41
1:1G:1033:G:H2'	1:1G:1034:G:O4'	2.20	0.41
1:1G:1126:U:O2'	1:1G:1127:G:OP1	2.35	0.41
1:1G:1366:C:H5"	1:1G:1367:C:OP2	2.21	0.41
1:1G:1469:G:H2'	1:1G:1470:G:H8	1.86	0.41
2:12:130:ARG:HD3	2:12:130:ARG:HA	1.79	0.41
4:32:92:VAL:O	4:32:96:LEU:HD23	2.21	0.41
11:2A:17:GLY:HA3	11:2A:77:MET:SD	2.60	0.41
11:2A:81:ASP:N	11:2A:81:ASP:OD1	2.53	0.41
16:7A:11:SER:HB2	16:7A:14:ASN:HB3	2.03	0.41
17:8A:99:SER:O	17:8A:100:LYS:NZ	2.43	0.41
26:14:28:A:OP2	59:14:3842:HOH:O	2.22	0.41
26:14:251:A:C5	26:14:252:G:H1'	2.56	0.41
26:14:1026:U:OP2	26:14:1026:U:H6	2.03	0.41
26:14:1141:U:P	34:15:25:ARG:HH21	2.44	0.41
26:14:2828:C:H2'	26:14:2829:C:C6	2.56	0.41
26:14:2865:U:C4	26:14:2866:U:C4	3.09	0.41
29:29:50:GLY:HA2	29:29:78:LEU:HB3	2.02	0.41
29:29:66:HIS:ND1	29:29:71:GLY:HA2	2.35	0.41
30:39:20:LEU:HD12	30:39:199:TRP:HH2	1.86	0.41
30:39:27:GLU:O	30:39:28:ILE:HG12	2.20	0.41
30:39:178:PRO:HG2	30:39:179:GLU:OE1	2.20	0.41
32:59:27:LYS:HA	32:59:32:GLU:HB3	2.03	0.41
32:59:72:ILE:H	32:59:72:ILE:HG13	1.52	0.41
32:59:158:HIS:O	32:59:158:HIS:ND1	2.50	0.41
40:75:118:ARG:HA	40:75:118:ARG:HD3	1.88	0.41
47:E5:12:ASN:HA	47:E5:14:ARG:HH21	1.85	0.41
1:13:78:G:O6	1:13:79:G:N2	2.53	0.41
1:13:127:G:N2	1:13:235:C:C2	2.89	0.41
1:13:260:G:C6	1:13:261:U:O4	2.74	0.41
1:13:607:A:H2'	1:13:608:A:O4'	2.21	0.41
1:13:685:G:O2'	1:13:686:U:H5'	2.21	0.41
1:13:721:G:H4'	1:13:722:A:O4'	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:771:G:O2'	1:13:772:U:H5'	2.21	0.41
1:13:779:C:H2'	1:13:780:A:O4'	2.21	0.41
1:13:987:G:H1	1:13:1218:C:N4	2.19	0.41
1:13:1132:C:C2'	1:13:1133:G:H5'	2.51	0.41
1:13:1325:C:H2'	1:13:1326:C:C6	2.56	0.41
1:13:1350:A:C5	1:13:1351:U:C4	3.09	0.41
1:13:1365:G:C6	1:13:1366:C:C4	3.09	0.41
2:1E:25:ASN:ND2	2:1E:193:ASP:HB3	2.36	0.41
2:1E:130:ARG:H	2:1E:130:ARG:HG2	1.52	0.41
3:2E:122:GLU:HA	3:2E:125:GLU:HG3	2.03	0.41
3:2E:167:TRP:CD1	3:2E:167:TRP:C	2.97	0.41
5:4E:71:LEU:C	5:4E:72:GLN:HG2	2.46	0.41
5:4E:77:PRO:HG2	5:4E:78:HIS:CD2	2.55	0.41
6:5E:44:GLY:HA2	6:5E:59:TYR:CE2	2.55	0.41
9:8E:5:TYR:OH	9:8E:16:ARG:HG2	2.20	0.41
9:8E:111:ARG:HD2	14:5I:61:TRP:CD1	2.56	0.41
11:2I:15:ALA:HA	11:2I:77:MET:HA	2.02	0.41
11:2I:29:ILE:HD13	11:2I:29:ILE:HG21	1.88	0.41
12:3I:66:VAL:HG21	12:3I:98:TYR:CE1	2.56	0.41
12:3I:90:VAL:HG11	12:3I:93:LEU:CG	2.50	0.41
12:3I:113:ARG:HH21	12:3I:116:SER:HB2	1.85	0.41
18:9I:50:ILE:HG21	18:9I:50:ILE:HD13	1.84	0.41
24:3K:12:C:H42	24:3K:24:G:H1	1.67	0.41
26:1H:255:A:O2'	26:1H:384:U:OP1	2.39	0.41
26:1H:444:C:H2'	26:1H:445:C:H6	1.86	0.41
26:1H:518:G:H2'	26:1H:519:U:H6	1.82	0.41
26:1H:651:G:OP1	54:Q8:19:SER:OG	2.22	0.41
26:1H:673:C:H5"	30:31:54:ARG:NH1	2.35	0.41
26:1H:709:U:H2'	26:1H:710:G:C8	2.56	0.41
26:1H:996:A:H4'	41:C8:92:ARG:CG	2.51	0.41
26:1H:1048:A:C4	26:1H:1049:C:C5	3.09	0.41
26:1H:1144:G:C6	26:1H:1145:C:C4	3.09	0.41
26:1H:1348:G:H2'	26:1H:1349:A:H5"	2.03	0.41
26:1H:1355:G:C6	26:1H:1356:G:C5	3.08	0.41
26:1H:1606:G:H5"	26:1H:1607:C:OP1	2.20	0.41
26:1H:1651:G:N2	26:1H:2007:C:C2	2.89	0.41
26:1H:1658:C:H2'	26:1H:1659:U:C6	2.56	0.41
26:1H:1743:G:C2	26:1H:1746:G:C8	3.08	0.41
26:1H:1799:G:H5'	26:1H:1819:A:N6	2.36	0.41
26:1H:1809:A:N6	26:1H:1810:A:N1	2.68	0.41
26:1H:1899:G:N2	26:1H:1901:A:C5	2.88	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1999:C:H2'	26:1H:2000:G:O4'	2.20	0.41
26:1H:2038:G:H2'	26:1H:2039:C:C6	2.56	0.41
26:1H:2058:A:H5"	26:1H:2059:A:OP2	2.21	0.41
26:1H:2078:C:H2'	26:1H:2079:U:H6	1.85	0.41
26:1H:2127:G:H22	26:1H:2162:G:C1'	2.28	0.41
26:1H:2304:G:H5"	31:41:124:SER:HB3	2.02	0.41
26:1H:2311:A:H8	31:41:88:ILE:HD12	1.86	0.41
26:1H:2352:A:C4	26:1H:2366:A:C2	3.09	0.41
26:1H:2419:U:O4	54:Q8:30:ARG:NH2	2.54	0.41
26:1H:2533:A:OP1	26:1H:2665:A:H1'	2.20	0.41
26:1H:2556:C:H2'	26:1H:2557:G:O4'	2.20	0.41
26:1H:2687:U:C4	26:1H:2688:U:C5	3.08	0.41
26:1H:2692:C:H1'	26:1H:2847:U:H1'	2.02	0.41
27:16:63:G:C2	27:16:64:C:C2	3.09	0.41
28:11:183:ARG:HG3	28:11:184:LYS:O	2.21	0.41
29:21:29:GLY:N	29:21:51:PHE:HE1	2.16	0.41
29:21:39:PRO:HD3	29:21:45:THR:HG22	2.03	0.41
29:21:110:GLY:O	38:98:3:HIS:HE1	2.04	0.41
29:21:110:GLY:O	38:98:3:HIS:CE1	2.74	0.41
31:41:98:ARG:HA	31:41:101:ILE:HG23	2.03	0.41
31:41:172:LEU:O	31:41:176:LEU:HB2	2.20	0.41
34:58:65:LYS:HE3	34:58:65:LYS:HB2	1.60	0.41
34:58:127:ASP:O	34:58:128:HIS:HB3	2.19	0.41
35:68:71:ARG:HB2	35:68:73:ASP:OD1	2.21	0.41
38:98:70:LEU:O	38:98:71:GLN:HB3	2.20	0.41
40:B8:26:ASP:OD2	40:B8:120:ARG:NH2	2.28	0.41
40:B8:53:ARG:NH1	40:B8:60:THR:OG1	2.54	0.41
41:C8:103:PRO:O	41:C8:106:PHE:N	2.53	0.41
42:D8:2:PHE:CD1	42:D8:2:PHE:C	2.98	0.41
44:F8:35:THR:HG23	44:F8:38:GLU:H	1.86	0.41
44:F8:66:LEU:HD12	44:F8:66:LEU:HA	1.64	0.41
44:F8:72:LYS:HD2	44:F8:73:ARG:O	2.21	0.41
45:G8:94:LYS:HG3	45:G8:95:LYS:N	2.35	0.41
46:H8:67:LEU:HD22	46:H8:90:VAL:HG11	2.02	0.41
47:I8:72:ARG:HB3	47:I8:75:LEU:HB2	2.03	0.41
48:J8:82:LEU:H	48:J8:82:LEU:HD22	1.85	0.41
49:K8:55:ARG:O	49:K8:58:ALA:HB3	2.20	0.41
1:1G:87:A:N3	1:1G:87:A:H2'	2.36	0.41
1:1G:130:A:H1'	1:1G:263:A:O2'	2.21	0.41
1:1G:174:C:O2'	1:1G:175:C:H5'	2.21	0.41
1:1G:338:A:C6	1:1G:339:C:C4	3.09	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:359:U:H2'	1:1G:360:A:C8	2.56	0.41
1:1G:376:G:H5"	16:7A:5:ARG:HB2	2.02	0.41
1:1G:954:G:H2'	1:1G:955:U:H6	1.83	0.41
1:1G:1122:U:C4	1:1G:1123:A:N7	2.89	0.41
1:1G:1165:C:H2'	1:1G:1166:G:O4'	2.21	0.41
1:1G:1431:C:H2'	1:1G:1432:G:O4'	2.20	0.41
1:1G:1447:G:O5'	1:1G:1447:G:H8	2.04	0.41
2:12:98:LEU:HD23	2:12:98:LEU:HA	1.86	0.41
3:22:134:ILE:HD11	3:22:153:VAL:HG21	2.02	0.41
6:52:1:MET:HG2	6:52:68:PRO:HA	2.02	0.41
11:2A:87:THR:O	11:2A:87:THR:OG1	2.33	0.41
12:3A:53:ARG:HH12	12:3A:92:ASP:CB	2.34	0.41
16:7A:49:LEU:HD13	16:7A:73:LEU:HD22	2.02	0.41
17:8A:23:VAL:O	17:8A:39:SER:HA	2.20	0.41
23:2L:20:G:C2	23:2L:58:A:C2	3.09	0.41
55:3L:76:C:H2'	55:3L:77:C:H6	1.85	0.41
26:14:17:G:H2'	26:14:18:C:C6	2.55	0.41
26:14:117:G:OP2	26:14:119:A:O2'	2.32	0.41
26:14:117:G:C6	26:14:119:A:C6	3.09	0.41
26:14:201:C:O2'	26:14:251:A:N1	2.54	0.41
26:14:681:G:H2'	26:14:682:G:O4'	2.21	0.41
26:14:807:U:H2'	26:14:808:G:H8	1.85	0.41
26:14:1200:C:H1'	41:85:2:PRO:HG3	2.02	0.41
26:14:1269:A:H2'	26:14:1270:C:C6	2.56	0.41
26:14:1378:A:O2'	26:14:1380:G:N7	2.47	0.41
26:14:1389:G:C2	26:14:1390:U:C2	3.08	0.41
26:14:1392:A:N6	26:14:1393:A:N6	2.68	0.41
26:14:1459:G:O2'	26:14:1460:A:H5'	2.20	0.41
26:14:1510:A:OP2	26:14:1510:A:H8	2.04	0.41
26:14:1538:G:H2'	26:14:1539:G:H8	1.85	0.41
26:14:2692:C:H1'	26:14:2847:U:H1'	2.03	0.41
28:19:71:ASP:OD2	28:19:103:ARG:NH1	2.50	0.41
28:19:77:ALA:HB2	28:19:97:TYR:CD2	2.56	0.41
28:19:130:ALA:C	28:19:131:LEU:HD12	2.46	0.41
28:19:227:ASN:C	28:19:234:GLY:HA3	2.46	0.41
29:29:64:LYS:HB3	29:29:65:GLY:H	1.39	0.41
29:29:119:ARG:HG2	29:29:160:TYR:HB2	2.02	0.41
29:29:141:ILE:HD12	29:29:150:VAL:HG21	2.03	0.41
30:39:165:ARG:HD3	30:39:168:ARG:HH12	1.86	0.41
31:49:68:PRO:HB2	31:49:90:LEU:HD22	2.02	0.41
31:49:131:TYR:CE1	31:49:133:LEU:HD23	2.56	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:25:102:VAL:HB	35:25:106:LEU:HD12	2.03	0.41
35:25:119:PRO:HB2	40:75:68:TYR:CZ	2.56	0.41
36:35:14:LYS:C	36:35:16:ARG:H	2.28	0.41
37:45:57:HIS:NE2	37:45:116:GLU:HB3	2.36	0.41
38:55:94:TYR:C	38:55:117:VAL:HG12	2.46	0.41
41:85:112:ARG:NH2	42:95:47:VAL:HG13	2.36	0.41
42:95:37:VAL:HG11	42:95:57:VAL:HG12	2.01	0.41
46:D5:17:ALA:HA	46:D5:20:ARG:HE	1.86	0.41
47:E5:21:LEU:HA	47:E5:21:LEU:HD23	1.81	0.41
47:E5:25:ARG:HD3	47:E5:25:ARG:HA	1.90	0.41
1:13:22:G:H2'	1:13:23:C:C6	2.55	0.41
1:13:51:A:N7	1:13:114:U:O2'	2.54	0.41
1:13:237:C:H5"	17:8I:25:ARG:CZ	2.50	0.41
1:13:475:G:H2'	1:13:476:G:H8	1.86	0.41
1:13:1178:G:N2	1:13:1181:G:C8	2.87	0.41
1:13:1178:G:H5"	9:8E:93:ARG:HH22	1.86	0.41
1:13:1365:G:H2'	1:13:1366:C:C6	2.56	0.41
1:13:1423:G:P	35:68:49:ARG:NH2	2.94	0.41
2:1E:13:ALA:HA	2:1E:17:PHE:HE2	1.85	0.41
5:4E:74:GLY:O	5:4E:115:VAL:HA	2.21	0.41
9:8E:29:ASN:OD1	9:8E:65:VAL:N	2.54	0.41
15:6I:32:LEU:O	15:6I:35:ARG:N	2.54	0.41
17:8I:100:LYS:HB3	17:8I:101:ARG:NH1	2.36	0.41
20:BI:55:ILE:O	20:BI:58:LYS:N	2.54	0.41
26:1H:9:U:O4	26:1H:2629:A:H8	2.03	0.41
26:1H:60:G:C2	26:1H:74:A:C5	3.09	0.41
26:1H:248:G:H5'	26:1H:250:G:N7	2.35	0.41
26:1H:289:A:H2'	26:1H:290:G:O4'	2.20	0.41
26:1H:527:C:OP2	26:1H:2779:U:H5	2.03	0.41
26:1H:546:C:N4	26:1H:547:A:N1	2.69	0.41
26:1H:562:U:C4	26:1H:2036:C:O4'	2.74	0.41
26:1H:1329:U:H3'	26:1H:1330:C:H6	1.86	0.41
26:1H:1614:A:N6	43:E8:88:ARG:H	2.18	0.41
26:1H:2054:A:OP1	26:1H:2055:C:O2'	2.36	0.41
26:1H:2148:G:N2	26:1H:2149:G:H1'	2.35	0.41
26:1H:2157:G:HO2'	26:1H:2158:A:P	2.44	0.41
26:1H:2773:C:H2'	26:1H:2774:C:H6	1.86	0.41
27:16:17:C:H2'	27:16:18:G:O4'	2.22	0.41
28:11:17:THR:HB	28:11:205:VAL:N	2.28	0.41
28:11:172:TYR:HD1	28:11:185:VAL:C	2.29	0.41
29:21:105:THR:HA	29:21:166:THR:HG23	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:61:117:GLU:H	33:61:117:GLU:HG2	1.31	0.41
36:78:3:LEU:HA	36:78:3:LEU:HD23	1.76	0.41
41:C8:93:LYS:H	41:C8:93:LYS:HG3	1.67	0.41
42:D8:29:PRO:HA	42:D8:61:VAL:HG23	2.03	0.41
45:G8:84:ARG:NE	45:G8:84:ARG:C	2.79	0.41
49:K8:4:SER:HB3	49:K8:7:ARG:HG2	2.01	0.41
49:K8:21:LEU:HD13	49:K8:64:LEU:HA	2.03	0.41
1:1G:81:G:H8	1:1G:81:G:O5'	2.03	0.41
1:1G:440:A:H3'	1:1G:442:C:H6	1.86	0.41
1:1G:957:U:H2'	1:1G:959:A:OP2	2.21	0.41
1:1G:1028(B):C:N3	1:1G:1032(A):G:N2	2.69	0.41
1:1G:1523:G:OP1	11:2A:123:LYS:HD2	2.21	0.41
2:12:48:MET:HE2	2:12:48:MET:HB3	2.00	0.41
4:32:64:LEU:HB2	4:32:198:VAL:HG11	2.02	0.41
6:52:69:GLU:O	6:52:72:VAL:HG12	2.20	0.41
13:4A:3:ARG:O	51:I5:34:GLU:HG3	2.20	0.41
13:4A:60:VAL:C	13:4A:62:ASN:H	2.29	0.41
18:9A:32:ARG:HD3	18:9A:65:ILE:HD12	2.02	0.41
26:14:563:G:C6	26:14:564:C:C4	3.08	0.41
26:14:823:G:H2'	26:14:824:A:H8	1.82	0.41
26:14:895:U:H4'	26:14:896:A:C5	2.55	0.41
26:14:1006:C:C2	26:14:1138:G:N2	2.89	0.41
26:14:1046:A:H4'	26:14:1047:G:OP2	2.21	0.41
26:14:1287:A:C5	26:14:1288:U:C4	3.09	0.41
26:14:1410:G:H2'	26:14:1411:C:C6	2.56	0.41
26:14:1729:A:C6	26:14:1731:G:C6	3.09	0.41
26:14:1803:A:C8	26:14:1804:C:C5	3.08	0.41
26:14:1833:U:O2	26:14:1969:A:H2	2.02	0.41
26:14:1857:G:C6	26:14:1858:G:N1	2.89	0.41
26:14:1894:C:H2'	26:14:1895:C:H5'	2.03	0.41
26:14:2663:G:H3'	26:14:2664:G:H8	1.86	0.41
27:1J:57:A:O5'	27:1J:57:A:H8	2.04	0.41
31:49:57:ALA:HB2	31:49:90:LEU:HD11	2.02	0.41
34:15:10:GLU:HA	34:15:11:PRO:HD2	1.75	0.41
34:15:56:ASN:H	34:15:125:GLY:CA	2.28	0.41
35:25:10:VAL:HG13	35:25:17:ARG:C	2.46	0.41
37:45:63:LYS:NZ	37:45:63:LYS:HA	2.36	0.41
40:75:24:PRO:HA	40:75:49:VAL:HG23	2.02	0.41
43:A5:65:LEU:HD13	43:A5:68:ARG:CD	2.51	0.41
43:A5:69:LEU:HA	43:A5:108:GLY:O	2.20	0.41
1:13:359:U:H2'	1:13:360:A:C8	2.56	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:452:A:C6	1:13:453:A:C6	3.09	0.40
1:13:696:A:O5'	1:13:696:A:H8	2.04	0.40
1:13:1267:C:O2	21:1F:20:LYS:NZ	2.34	0.40
3:2E:108:ASN:HA	3:2E:109:PRO:HD2	1.98	0.40
4:3E:65:ARG:HD2	4:3E:70:ILE:O	2.21	0.40
7:6E:59:LEU:HD23	7:6E:59:LEU:HA	1.93	0.40
9:8E:18:PHE:HB2	9:8E:62:TYR:O	2.21	0.40
11:2I:87:THR:HG22	11:2I:88:GLY:N	2.33	0.40
13:4I:34:LEU:HD13	13:4I:34:LEU:HA	1.86	0.40
15:6I:71:GLN:O	15:6I:71:GLN:HG2	2.20	0.40
16:7I:53:VAL:O	16:7I:57:ARG:HG2	2.20	0.40
25:4K:23:A:H2'	25:4K:24:A:N7	2.35	0.40
26:1H:25:U:O2'	26:1H:26:G:H5'	2.21	0.40
26:1H:111:A:H4'	49:K8:69:ARG:NH2	2.36	0.40
26:1H:577:G:C6	26:1H:578:A:C6	3.09	0.40
26:1H:583:G:OP2	41:C8:10:ARG:NH1	2.45	0.40
26:1H:817:C:H4'	26:1H:932:G:C5	2.56	0.40
26:1H:1071:G:H8	26:1H:1071:G:O5'	2.04	0.40
26:1H:1337:G:C2	26:1H:1338:G:C4	3.09	0.40
26:1H:1359:A:H61	26:1H:1372:U:H3	1.67	0.40
26:1H:1394:U:H6	26:1H:1394:U:H3'	1.86	0.40
26:1H:1477:A:C2	26:1H:1517:G:C2	3.09	0.40
26:1H:1566:A:O2'	26:1H:1567:A:H5'	2.20	0.40
26:1H:1932:A:H2'	26:1H:1933:G:O4'	2.20	0.40
26:1H:2186:G:H2'	26:1H:2187:G:H8	1.87	0.40
26:1H:2786:U:O2'	29:21:62:PRO:HA	2.20	0.40
30:31:108:LYS:O	30:31:112:MET:HG3	2.21	0.40
34:58:2:LYS:HD2	34:58:2:LYS:HA	1.69	0.40
34:58:104:LYS:HB2	34:58:117:PHE:CE1	2.56	0.40
36:78:83:VAL:O	36:78:114:ILE:HA	2.22	0.40
37:88:30:GLY:HA2	37:88:107:ALA:HB2	2.03	0.40
38:98:63:ARG:HG3	38:98:80:PHE:CE2	2.56	0.40
40:B8:54:ARG:HA	40:B8:59:THR:CG2	2.47	0.40
43:E8:24:ILE:H	43:E8:24:ILE:HG13	1.72	0.40
50:L8:7:LYS:O	50:L8:54:VAL:HA	2.21	0.40
1:1G:66:G:C2	1:1G:67:C:C6	3.09	0.40
1:1G:1232:U:OP1	9:82:124:GLN:HG2	2.21	0.40
2:12:10:LEU:HA	2:12:10:LEU:HD13	1.79	0.40
8:72:107:LEU:HA	8:72:107:LEU:HD23	1.84	0.40
10:1A:54:PHE:CD2	10:1A:55:LYS:HD2	2.56	0.40
17:8A:68:ARG:HG3	17:8A:68:ARG:O	2.22	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:1B:9:ARG:O	21:1B:13:ILE:HG13	2.21	0.40
55:3L:44:C:H2'	55:3L:45:C:O4'	2.21	0.40
26:14:433:C:C4	26:14:434:U:O4	2.74	0.40
26:14:654(C):G:C2	26:14:654(D):G:H1'	2.57	0.40
26:14:1615:C:C5	26:14:1617:C:C4	3.09	0.40
26:14:2077:A:O2'	26:14:2078:C:H5'	2.21	0.40
28:19:245:PRO:HA	28:19:246:PRO:HD3	1.99	0.40
30:39:82:ILE:H	30:39:82:ILE:HG13	1.58	0.40
35:25:1:MET:HE3	35:25:67:LYS:HG2	2.03	0.40
40:75:61:PHE:CE1	40:75:76:PHE:HB2	2.56	0.40
41:85:32:PHE:O	41:85:33:ARG:C	2.64	0.40
43:A5:81:ALA:HB1	43:A5:97:LYS:HB2	2.02	0.40
1:13:148:G:C2	1:13:149:A:C8	3.10	0.40
1:13:342:C:N3	1:13:348:G:C2	2.88	0.40
1:13:433:C:H2'	1:13:434:U:C6	2.57	0.40
1:13:600:C:H2'	1:13:601:C:C6	2.55	0.40
1:13:625:G:H4'	16:7I:16:HIS:ND1	2.36	0.40
1:13:1016:A:H8	1:13:1016:A:O5'	2.05	0.40
1:13:1054:C:N3	22:1K:35:QUO:H1'	2.35	0.40
1:13:1191:A:H5"	1:13:1192:C:OP2	2.21	0.40
1:13:1268:A:N3	1:13:1326:C:O2'	2.52	0.40
5:4E:80:ILE:HG12	5:4E:81:GLU:H	1.86	0.40
5:4E:110:LEU:CD1	5:4E:118:ILE:HG21	2.52	0.40
7:6E:38:LEU:O	7:6E:42:ILE:HG13	2.21	0.40
10:1I:95:GLU:HG2	10:1I:96:ILE:H	1.86	0.40
11:2I:54:ARG:O	11:2I:57:THR:HG22	2.21	0.40
11:2I:59:TYR:O	11:2I:62:GLN:HB3	2.21	0.40
17:8I:67:LYS:CA	17:8I:70:ARG:HH12	2.31	0.40
22:1K:57:C:O2'	22:1K:68:A:H4'	2.21	0.40
23:2K:38:A:H2'	23:2K:39:A:H8	1.86	0.40
24:3K:5:G:H2'	24:3K:6:G:O4'	2.20	0.40
24:3K:10:C:N3	24:3K:11:C:N4	2.69	0.40
24:3K:61:G:H2'	24:3K:62:G:O4'	2.20	0.40
26:1H:449:A:C6	26:1H:450:G:C5	3.09	0.40
26:1H:587:C:C2	36:78:33:ARG:NH1	2.88	0.40
26:1H:588:U:C2	30:31:90:PHE:CE1	3.09	0.40
26:1H:859:G:H5'	26:1H:2268:A:O2'	2.21	0.40
26:1H:880:G:N2	26:1H:898:C:C2	2.89	0.40
26:1H:988:A:O5'	26:1H:988:A:H8	2.04	0.40
26:1H:1213:A:H1'	26:1H:1238:G:N3	2.36	0.40
26:1H:1338:G:O2'	26:1H:1339:G:H5'	2.22	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1346:G:C4	26:1H:1347:G:C8	3.09	0.40
26:1H:1535:U:N3	26:1H:1537:C:H1'	2.36	0.40
26:1H:1641:A:H2'	26:1H:1642:G:O4'	2.21	0.40
26:1H:1691:C:C2'	26:1H:1692:U:H5'	2.51	0.40
26:1H:1833:U:C4	26:1H:1834:U:C4	3.09	0.40
26:1H:1992:G:H5'	26:1H:1994:C:H41	1.86	0.40
26:1H:2012:G:OP2	43:E8:16:LYS:NZ	2.52	0.40
26:1H:2291:U:O2'	26:1H:2374:C:O2	2.38	0.40
26:1H:2303:G:C2'	26:1H:2304:G:H5'	2.50	0.40
26:1H:2655:G:O2'	26:1H:2664:G:O6	2.31	0.40
26:1H:2660:A:C2	26:1H:2661:G:H1'	2.57	0.40
26:1H:2700:C:O2'	26:1H:2701:C:H5'	2.20	0.40
26:1H:2748:A:C2	26:1H:2757:A:C4	3.09	0.40
27:16:29:A:OP2	39:A8:32:LEU:HD12	2.22	0.40
27:16:78:A:H2'	27:16:79:C:O4'	2.22	0.40
28:11:13:ARG:HD2	28:11:13:ARG:HA	1.67	0.40
29:21:50:GLY:HA2	29:21:76:ARG:O	2.21	0.40
30:31:6:VAL:HG21	30:31:119:ARG:CB	2.51	0.40
34:58:4:TYR:CE2	41:C8:100:VAL:HG11	2.56	0.40
34:58:29:LYS:H	34:58:29:LYS:HG2	1.62	0.40
42:D8:21:ARG:HG2	42:D8:91:TYR:CE1	2.56	0.40
50:L8:7:LYS:HG3	50:L8:34:GLU:HG3	2.02	0.40
50:L8:37:LEU:HD12	50:L8:43:ILE:CG2	2.52	0.40
1:1G:129(A):G:C2	1:1G:188:U:O2'	2.72	0.40
1:1G:129(A):G:C2	1:1G:191(A):G:C8	3.09	0.40
1:1G:185:A:O2'	20:BA:81:LYS:NZ	2.51	0.40
1:1G:186:C:O4'	20:BA:81:LYS:NZ	2.50	0.40
1:1G:261:U:H2'	1:1G:263:A:OP2	2.21	0.40
1:1G:1064:G:OP1	1:1G:1386:G:H4'	2.22	0.40
1:1G:1074:G:O2'	1:1G:1101:A:N1	2.49	0.40
1:1G:1206:G:C6	1:1G:1207:G:C5	3.09	0.40
2:12:90:MET:HA	2:12:91:PRO:HD3	1.95	0.40
2:12:236:TYR:HB2	2:12:239:VAL:CB	2.44	0.40
4:32:8:VAL:HG12	4:32:21:LEU:HD22	2.03	0.40
6:52:55:ASP:HA	6:52:56:PRO:HD3	1.84	0.40
7:62:114:ARG:H	7:62:114:ARG:HG2	1.37	0.40
13:4A:17:VAL:HG13	13:4A:27:LYS:NZ	2.37	0.40
13:4A:92:HIS:NE2	13:4A:98:VAL:HG21	2.35	0.40
17:8A:17:LYS:HA	17:8A:46:ASP:O	2.21	0.40
23:2L:15:G:N2	23:2L:49:C:H42	2.19	0.40
26:14:8:A:H2'	26:14:9:U:H6	1.85	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:40:C:H2'	26:14:41:C:C6	2.56	0.40
26:14:523:C:C2'	26:14:524:U:H5'	2.51	0.40
26:14:640:C:N4	26:14:648:G:H1	2.15	0.40
26:14:814:C:OP1	42:95:83:ARG:HG2	2.20	0.40
26:14:835:A:OP1	54:M5:52:LYS:HG2	2.20	0.40
26:14:863:A:H2'	26:14:864:G:C8	2.56	0.40
26:14:1003:G:O2'	26:14:1010:A:N1	2.41	0.40
26:14:1005:C:O2'	34:15:28:THR:HG23	2.21	0.40
26:14:1712:C:H2'	26:14:1716:U:H6	1.86	0.40
26:14:2033:A:O2'	26:14:2035:G:OP2	2.29	0.40
26:14:2212:A:H1'	26:14:2215:G:C4	2.56	0.40
27:1J:9:G:OP1	39:65:25:ARG:NH2	2.54	0.40
33:69:75:LEU:HD22	33:69:77:LEU:HD23	2.04	0.40
33:69:140:LEU:HA	33:69:140:LEU:HD12	1.74	0.40
34:15:15:LEU:HB2	34:15:134:ARG:HG2	2.03	0.40
35:25:8:LEU:HD13	35:25:82:ASN:CB	2.51	0.40
40:75:11:GLU:N	40:75:11:GLU:CD	2.78	0.40
42:95:37:VAL:HG21	42:95:57:VAL:N	2.27	0.40
45:C5:20:TYR:CE2	45:C5:42:VAL:HA	2.56	0.40
46:D5:4:ARG:CZ	46:D5:58:VAL:HG11	2.51	0.40
46:D5:98:MET:HE3	46:D5:98:MET:HB2	1.90	0.40
48:F5:91:LYS:HZ1	48:F5:95:LEU:HD12	1.87	0.40
1:13:354:G:OP1	59:13:1864:HOH:O	2.21	0.40
1:13:475:G:H2'	1:13:476:G:O4'	2.22	0.40
1:13:509:A:H3'	59:13:1814:HOH:O	2.21	0.40
1:13:658:G:H2'	1:13:659:U:C6	2.57	0.40
1:13:912:C:O2'	1:13:913:A:H5'	2.22	0.40
1:13:1072:G:C5	1:13:1073:U:C4	3.09	0.40
1:13:1237:C:O2'	1:13:1300:G:N2	2.42	0.40
2:1E:36:ARG:C	2:1E:38:GLY:H	2.28	0.40
2:1E:178:ARG:HG3	8:7E:72:PRO:CA	2.51	0.40
3:2E:191:THR:HG21	3:2E:193:TYR:CZ	2.57	0.40
7:6E:89:MET:SD	7:6E:155:ARG:HB2	2.61	0.40
12:3I:76:ASN:OD1	12:3I:76:ASN:N	2.43	0.40
14:5I:23:ARG:HD2	14:5I:28:GLY:O	2.21	0.40
15:6I:78:TYR:CZ	15:6I:82:ILE:HD11	2.55	0.40
16:7I:59:TRP:O	16:7I:64:ALA:N	2.53	0.40
19:AI:41:VAL:HG21	19:AI:67:VAL:HG13	2.04	0.40
19:AI:44:MET:O	19:AI:47:HIS:HB2	2.22	0.40
20:BI:69:GLY:O	20:BI:73:HIS:NE2	2.55	0.40
20:BI:75:ASN:O	20:BI:79:ARG:HB2	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:315:G:C6	26:1H:316:C:C4	3.09	0.40
26:1H:363:G:C2	26:1H:363(A):A:C5	3.10	0.40
26:1H:370:G:H4'	26:1H:371:A:OP2	2.21	0.40
26:1H:579:G:C2	26:1H:1262:A:C4	3.10	0.40
26:1H:613:U:O2	26:1H:613:U:O4'	2.38	0.40
26:1H:1194:A:H8	26:1H:1194:A:OP2	2.04	0.40
26:1H:1746:G:H2'	26:1H:1747:G:C8	2.56	0.40
26:1H:1957:C:H2'	26:1H:1958:C:C6	2.57	0.40
26:1H:2366:A:H2'	26:1H:2367:G:O4'	2.21	0.40
26:1H:2461:C:H2'	26:1H:2462:U:C6	2.56	0.40
26:1H:2563:U:H1'	26:1H:2566:A:N6	2.36	0.40
29:21:23:VAL:HA	29:21:184:VAL:O	2.21	0.40
36:78:28:GLY:O	36:78:29:LYS:C	2.65	0.40
39:A8:67:ARG:HB2	39:A8:67:ARG:NH1	2.36	0.40
40:B8:16:ARG:HH21	40:B8:19:LEU:HD21	1.86	0.40
46:H8:150:LEU:HD23	46:H8:151:HIS:N	2.36	0.40
46:H8:158:PRO:HB3	46:H8:159:PRO:HD2	2.02	0.40
48:J8:76:ARG:HD3	48:J8:76:ARG:H	1.85	0.40
50:L8:35:ARG:HB3	50:L8:37:LEU:CD2	2.51	0.40
54:Q8:60:LEU:HD23	54:Q8:60:LEU:HA	1.97	0.40
1:1G:583:A:H2'	1:1G:584:G:O4'	2.22	0.40
1:1G:658:G:C6	1:1G:659:U:C4	3.10	0.40
1:1G:998(A):C:N3	1:1G:1042:G:N2	2.49	0.40
1:1G:1105:A:H2'	1:1G:1106:G:H8	1.86	0.40
1:1G:1184:G:O2'	1:1G:1185:G:H5'	2.20	0.40
1:1G:1243:C:O2	1:1G:1295:G:N2	2.54	0.40
1:1G:1360:A:H2'	1:1G:1361:G:O4'	2.21	0.40
2:12:61:LEU:HD12	2:12:61:LEU:HA	1.86	0.40
3:22:175:LEU:H	3:22:175:LEU:HD12	1.85	0.40
7:62:89:MET:HE3	7:62:155:ARG:HB2	2.04	0.40
9:82:62:TYR:C	9:82:63:ILE:HG13	2.46	0.40
9:82:88:TYR:O	9:82:90:PRO:HD3	2.21	0.40
10:1A:50:ILE:HG22	10:1A:52:GLY:H	1.86	0.40
17:8A:6:LEU:O	17:8A:59:ILE:N	2.52	0.40
26:14:67:U:H2'	26:14:68:G:C8	2.56	0.40
26:14:99:U:H1'	26:14:102:G:N2	2.35	0.40
26:14:357:A:C2	26:14:358:U:C2	3.09	0.40
26:14:1323:U:H2'	26:14:1324:G:H5'	2.04	0.40
26:14:1815:A:P	28:19:54:ARG:HH22	2.43	0.40
26:14:2134:A:N3	26:14:2159:G:H1'	2.36	0.40
26:14:2230:G:H1'	48:F5:45:ASN:OD1	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2767:C:H2'	26:14:2768:C:C6	2.56	0.40
29:29:46:ALA:HB1	29:29:80:GLU:O	2.21	0.40
31:49:95:ARG:HB3	31:49:96:ARG:H	1.72	0.40
33:69:9:LEU:HD21	33:69:35:LEU:HD13	2.02	0.40
38:55:54:LEU:HD23	38:55:66:VAL:HG23	2.03	0.40
39:65:54:LEU:O	39:65:55:ALA:HB3	2.20	0.40
45:C5:39:VAL:HG23	45:C5:41:GLY:N	2.36	0.40
48:F5:83:GLU:H	48:F5:83:GLU:CD	2.29	0.40
48:F5:92:LYS:HG2	48:F5:93:GLU:H	1.86	0.40
48:F5:97:LEU:O	48:F5:98:LEU:HD23	2.21	0.40
49:G5:15:LYS:HA	49:G5:15:LYS:HD2	1.81	0.40
51:I5:12:ALA:O	51:I5:24:THR:OG1	2.38	0.40
1:13:195:A:C5	1:13:196:A:N1	2.89	0.40
1:13:277:C:P	17:8I:68:ARG:HH12	2.44	0.40
1:13:963:G:H1	1:13:972:C:H42	1.69	0.40
1:13:1053:G:N7	1:13:1199:U:H3'	2.37	0.40
1:13:1095:U:P	1:13:1108:G:H1	2.44	0.40
1:13:1221:G:H4'	19:AI:77:THR:HG22	2.04	0.40
1:13:1449:C:N4	1:13:1454:G:H1	2.19	0.40
3:2E:113:ALA:HB2	3:2E:202:ILE:HG13	2.03	0.40
4:3E:26:CYS:HA	4:3E:31:CYS:HA	2.02	0.40
5:4E:137:GLU:HA	5:4E:140:ARG:HD2	2.03	0.40
5:4E:153:LYS:HD3	5:4E:154:GLY:N	2.37	0.40
7:6E:156:TRP:CD1	7:6E:156:TRP:N	2.90	0.40
13:4I:10:PRO:CB	13:4I:18:ALA:HB1	2.49	0.40
14:5I:53:LEU:HB3	14:5I:56:VAL:HG21	2.02	0.40
16:7I:1:MET:O	16:7I:2:VAL:C	2.63	0.40
19:AI:40:ILE:HD11	19:AI:62:ILE:CG2	2.50	0.40
23:2K:4:G:H2'	23:2K:5:G:C8	2.57	0.40
24:3K:41:C:H2'	24:3K:42:U:C6	2.57	0.40
26:1H:192:C:O2'	26:1H:802:A:N3	2.48	0.40
26:1H:214:G:OP1	26:1H:214:G:H4'	2.21	0.40
26:1H:1005:C:O2	26:1H:1005:C:H2'	2.20	0.40
26:1H:1086:A:H5"	26:1H:1087:G:OP1	2.20	0.40
26:1H:1417:C:N4	26:1H:1581:G:H1	2.19	0.40
26:1H:1950:G:C2	26:1H:1951:U:C5	3.09	0.40
26:1H:2266:A:H4'	26:1H:2267:A:C4	2.57	0.40
26:1H:2356:C:O3'	47:I8:20:ARG:HD3	2.21	0.40
26:1H:2592:G:C5	26:1H:2593:U:C4	3.09	0.40
26:1H:2745:C:C4	26:1H:2746:U:C4	3.09	0.40
28:11:155:LEU:HD13	28:11:155:LEU:N	2.36	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:41:60:LEU:HD23	31:41:60:LEU:HA	1.83	0.40
32:51:71:LEU:HA	32:51:71:LEU:HD13	1.76	0.40
34:58:57:ALA:O	34:58:58:ASP:HB3	2.20	0.40
34:58:132:ALA:C	34:58:134:ARG:HD3	2.46	0.40
37:88:25:ASP:OD2	46:H8:78:LYS:NZ	2.30	0.40
38:98:67:LEU:CD2	38:98:76:VAL:HG21	2.51	0.40
38:98:74:LYS:HD3	38:98:77:ARG:HH21	1.86	0.40
40:B8:80:SER:HB3	40:B8:83:ILE:HG13	2.04	0.40
1:1G:389:A:N3	1:1G:389:A:H2'	2.35	0.40
1:1G:518:C:H5"	1:1G:519:C:H6	1.87	0.40
1:1G:659:U:C4	1:1G:660:G:N7	2.89	0.40
1:1G:828:A:H4'	1:1G:828:A:OP1	2.21	0.40
1:1G:865:A:H5'	1:1G:1078:U:C5	2.56	0.40
1:1G:976:G:N2	1:1G:1362:C:H2'	2.36	0.40
1:1G:1088:G:H2'	1:1G:1089:G:O4'	2.21	0.40
1:1G:1126:U:C4	1:1G:1281:U:C6	3.09	0.40
1:1G:1255:G:OP1	10:1A:45:ARG:NH2	2.47	0.40
1:1G:1313:U:H2'	1:1G:1314:C:C6	2.57	0.40
1:1G:1468:A:H5"	1:1G:1469:G:OP2	2.21	0.40
3:22:32:LEU:O	3:22:36:ASP:HB2	2.21	0.40
3:22:119:ARG:HH12	3:22:140:ARG:HG2	1.86	0.40
6:52:23:LYS:O	6:52:27:GLN:HG3	2.22	0.40
11:2A:94:ALA:O	11:2A:98:LEU:HB2	2.22	0.40
11:2A:111:ASP:OD1	18:9A:84:LYS:HD2	2.22	0.40
15:6A:47:LYS:H	15:6A:47:LYS:HG3	1.68	0.40
23:2L:47:G:H5"	23:2L:48:U:OP1	2.20	0.40
55:3L:10:C:H2'	55:3L:11:C:C6	2.56	0.40
26:14:260:G:C6	26:14:261:G:N7	2.89	0.40
26:14:459:U:H4'	53:L5:40:TRP:CZ3	2.56	0.40
26:14:494:G:OP1	43:A5:8:ARG:HD3	2.21	0.40
26:14:945:A:C6	26:14:2448:A:C5	3.10	0.40
26:14:1421:G:C2	26:14:1422:G:N7	2.89	0.40
26:14:1516:U:H2'	26:14:1517:G:H8	1.87	0.40
26:14:1535:U:H6	26:14:1535:U:OP1	2.05	0.40
26:14:2078:C:C4	26:14:2079:U:C4	3.10	0.40
26:14:2892:A:N6	26:14:2893:G:N1	2.69	0.40
28:19:266:SER:O	28:19:270:ILE:HD12	2.21	0.40
30:39:89:VAL:O	30:39:91:GLY:N	2.55	0.40
31:49:125:PHE:HB3	31:49:166:ASP:CB	2.48	0.40
31:49:128:ARG:HD3	31:49:128:ARG:HA	1.86	0.40
32:59:117:PRO:HG3	32:59:123:PHE:HZ	1.85	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:59:154:PRO:HB3	32:59:162:ILE:O	2.22	0.40
33:69:29:TYR:C	33:69:32:PRO:HD2	2.45	0.40
34:15:99:LEU:HD22	34:15:99:LEU:HA	1.86	0.40
40:75:50:ILE:HD11	40:75:102:ILE:HD11	2.03	0.40
43:A5:47:VAL:HA	43:A5:50:VAL:HG12	2.02	0.40
45:C5:17:SER:OG	45:C5:18:GLY:O	2.39	0.40
48:F5:87:PRO:O	48:F5:91:LYS:HB3	2.21	0.40
1:13:292:G:N7	1:13:293:G:H1'	2.36	0.40
1:13:575:G:C4	1:13:881:G:N2	2.90	0.40
1:13:589:C:OP1	8:7E:32:LYS:NZ	2.54	0.40
1:13:1003:G:H1	1:13:1037:C:N4	2.19	0.40
1:13:1014:A:H4'	19:AI:14:HIS:ND1	2.36	0.40
1:13:1111:A:H2'	1:13:1112:C:C6	2.56	0.40
1:13:1137:C:O2	1:13:1138:G:N2	2.54	0.40
1:13:1156:G:O2'	1:13:1179:A:N6	2.54	0.40
1:13:1348:U:H2'	1:13:1349:A:C8	2.48	0.40
6:5E:44:GLY:HA2	6:5E:59:TYR:CE1	2.57	0.40
8:7E:21:LYS:O	8:7E:63:LEU:HD23	2.22	0.40
18:9I:74:ARG:HG2	18:9I:79:LEU:HB2	2.04	0.40
20:BI:44:ALA:O	20:BI:91:LEU:HB3	2.20	0.40
20:BI:61:SER:O	20:BI:65:LYS:HB2	2.21	0.40
20:BI:100:ILE:HG23	20:BI:102:GLY:N	2.36	0.40
26:1H:16:G:N3	26:1H:17:G:C8	2.89	0.40
26:1H:26:G:OP1	43:E8:80:PRO:HB3	2.22	0.40
26:1H:140:A:H8	26:1H:1408:C:HO2'	1.65	0.40
26:1H:184:C:H1'	26:1H:217:G:H1'	2.03	0.40
26:1H:710:G:H2'	26:1H:711:G:C8	2.56	0.40
26:1H:823:G:H2'	26:1H:824:A:C8	2.57	0.40
26:1H:950:G:H2'	26:1H:951:C:C6	2.57	0.40
26:1H:1168:G:C2	26:1H:1182:A:C2	3.10	0.40
26:1H:1203:G:H5'	36:78:3:LEU:HD12	2.03	0.40
26:1H:1435:G:H2'	26:1H:1436:G:C8	2.56	0.40
26:1H:1463:C:N3	26:1H:1464:C:C5	2.89	0.40
26:1H:2319:G:N7	39:A8:3:ARG:HB3	2.37	0.40
26:1H:2393:A:C2'	26:1H:2394:C:H5'	2.51	0.40
26:1H:2758:A:C4	32:51:67:LEU:HD21	2.57	0.40
29:21:73:GLU:HA	29:21:74:PRO:HD3	1.98	0.40
31:41:83:ARG:HG2	31:41:86:MET:HE2	2.04	0.40
32:51:8:PRO:HD2	32:51:69:ARG:HG2	2.02	0.40
33:61:8:PRO:HG3	33:61:14:ASP:CB	2.51	0.40
33:61:110:ASP:HB2	33:61:112:LYS:CG	2.51	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:98:33:ARG:HH11	38:98:113:LEU:HD21	1.86	0.40
38:98:48:VAL:O	38:98:51:LEU:N	2.54	0.40
41:C8:92:ARG:C	41:C8:94:ASN:H	2.29	0.40
42:D8:35:LEU:HD22	42:D8:57:VAL:O	2.21	0.40
43:E8:80:PRO:O	43:E8:100:THR:HB	2.21	0.40
49:K8:8:LYS:HD3	49:K8:12:GLU:HG2	2.03	0.40
1:1G:951:G:C2	1:1G:1231:G:C2	3.10	0.40
1:1G:1053:G:C3'	1:1G:1054:C:H5'	2.52	0.40
1:1G:1330:U:C5'	13:4A:24:GLY:H	2.34	0.40
1:1G:1344:C:O2'	1:1G:1348:U:O2'	2.27	0.40
1:1G:1355:G:H2'	1:1G:1356:G:C8	2.56	0.40
2:12:15:VAL:HB	2:12:16:HIS:CE1	2.56	0.40
2:12:53:ARG:NH1	2:12:199:TYR:HD1	2.19	0.40
2:12:97:TRP:CZ3	2:12:99:GLY:HA2	2.49	0.40
2:12:239:VAL:HG12	2:12:240:GLN:HG3	2.03	0.40
4:32:100:ARG:HB3	4:32:102:ASP:OD1	2.22	0.40
5:42:9:LYS:HG3	5:42:10:MET:O	2.22	0.40
7:62:15:ASP:N	7:62:19:GLY:HA2	2.36	0.40
8:72:51:VAL:HG11	8:72:60:ARG:NH2	2.36	0.40
26:14:270(P):C:H2'	26:14:270(Q):C:C6	2.57	0.40
26:14:1466:G:H2'	26:14:1466:G:N3	2.36	0.40
26:14:1567:A:OP2	28:19:84:TYR:OH	2.28	0.40
26:14:2058:A:OP1	59:14:3595:HOH:O	2.22	0.40
26:14:2134:A:O2'	26:14:2159:G:N2	2.55	0.40
26:14:2188:C:H2'	26:14:2189:U:O4'	2.20	0.40
26:14:2257:U:H2'	26:14:2258:C:C6	2.57	0.40
26:14:2442:C:H2'	26:14:2443:C:H6	1.85	0.40
27:1J:75:G:O2'	46:D5:85:HIS:NE2	2.49	0.40
31:49:135:LEU:HD12	31:49:135:LEU:N	2.37	0.40
32:59:6:ARG:HE	32:59:54:ARG:HH12	1.69	0.40
33:69:2:LYS:H	33:69:2:LYS:HG2	1.72	0.40
35:25:12:ASP:CA	35:25:99:PHE:HD2	2.35	0.40
36:35:14:LYS:O	36:35:14:LYS:HD3	2.21	0.40
43:A5:24:ILE:C	43:A5:27:LYS:HG3	2.46	0.40
44:B5:32:PRO:HA	44:B5:77:LYS:HB2	2.03	0.40
47:E5:49:LYS:CG	47:E5:80:HIS:HB3	2.51	0.40
48:F5:23:LYS:HE3	48:F5:23:LYS:HB2	1.99	0.40

All (4) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:85:U:O2'	32:59:100:GLY:O[3_555]	1.97	0.23
1:1G:86:U:N3	26:14:275:G:OP2[3_545]	2.14	0.06
26:1H:2137:C:OP1	1:1G:999:U:O2'[4_555]	2.19	0.01
33:61:91:SER:OG	1:1G:368:U:OP1[4_555]	2.19	0.01

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
2	12	235/256 (92%)	195 (83%)	35 (15%)	5 (2%)	5 21
2	1E	235/256 (92%)	200 (85%)	34 (14%)	1 (0%)	30 57
3	22	204/239 (85%)	184 (90%)	20 (10%)	0	100 100
3	2E	203/239 (85%)	180 (89%)	22 (11%)	1 (0%)	24 52
4	32	206/209 (99%)	181 (88%)	24 (12%)	1 (0%)	24 52
4	3E	206/209 (99%)	191 (93%)	15 (7%)	0	100 100
5	42	149/162 (92%)	140 (94%)	9 (6%)	0	100 100
5	4E	149/162 (92%)	141 (95%)	7 (5%)	1 (1%)	18 45
6	52	99/101 (98%)	94 (95%)	5 (5%)	0	100 100
6	5E	99/101 (98%)	94 (95%)	5 (5%)	0	100 100
7	62	153/156 (98%)	144 (94%)	9 (6%)	0	100 100
7	6E	148/156 (95%)	140 (95%)	8 (5%)	0	100 100
8	72	135/138 (98%)	122 (90%)	11 (8%)	2 (2%)	8 28
8	7E	136/138 (99%)	126 (93%)	9 (7%)	1 (1%)	18 45
9	82	118/128 (92%)	105 (89%)	12 (10%)	1 (1%)	16 42
9	8E	125/128 (98%)	106 (85%)	19 (15%)	0	100 100
10	1A	97/105 (92%)	90 (93%)	7 (7%)	0	100 100
10	1I	97/105 (92%)	90 (93%)	7 (7%)	0	100 100
11	2A	115/129 (89%)	104 (90%)	8 (7%)	3 (3%)	4 17

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
11	2I	114/129 (88%)	101 (89%)	12 (10%)	1 (1%)	14 39
12	3A	123/132 (93%)	101 (82%)	19 (15%)	3 (2%)	4 18
12	3I	120/132 (91%)	103 (86%)	16 (13%)	1 (1%)	16 42
13	4A	115/126 (91%)	95 (83%)	18 (16%)	2 (2%)	7 25
13	4I	114/126 (90%)	96 (84%)	16 (14%)	2 (2%)	6 24
14	5A	56/61 (92%)	46 (82%)	9 (16%)	1 (2%)	6 24
14	5I	57/61 (93%)	46 (81%)	9 (16%)	2 (4%)	3 13
15	6A	86/89 (97%)	78 (91%)	8 (9%)	0	100 100
15	6I	86/89 (97%)	76 (88%)	10 (12%)	0	100 100
16	7A	82/88 (93%)	76 (93%)	6 (7%)	0	100 100
16	7I	82/88 (93%)	72 (88%)	10 (12%)	0	100 100
17	8A	98/105 (93%)	92 (94%)	6 (6%)	0	100 100
17	8I	98/105 (93%)	90 (92%)	8 (8%)	0	100 100
18	9A	69/88 (78%)	66 (96%)	3 (4%)	0	100 100
18	9I	70/88 (80%)	62 (89%)	7 (10%)	1 (1%)	9 29
19	AA	76/93 (82%)	62 (82%)	11 (14%)	3 (4%)	2 11
19	AI	81/93 (87%)	67 (83%)	12 (15%)	2 (2%)	4 17
20	BA	97/106 (92%)	83 (86%)	13 (13%)	1 (1%)	12 37
20	BI	97/106 (92%)	83 (86%)	13 (13%)	1 (1%)	12 37
21	1B	23/27 (85%)	21 (91%)	1 (4%)	1 (4%)	2 10
21	1F	23/27 (85%)	21 (91%)	2 (9%)	0	100 100
28	11	271/276 (98%)	249 (92%)	18 (7%)	4 (2%)	8 28
28	19	271/276 (98%)	253 (93%)	13 (5%)	5 (2%)	6 24
29	21	203/206 (98%)	161 (79%)	33 (16%)	9 (4%)	2 9
29	29	203/206 (98%)	158 (78%)	36 (18%)	9 (4%)	2 9
30	31	200/210 (95%)	178 (89%)	21 (10%)	1 (0%)	24 52
30	39	206/210 (98%)	161 (78%)	38 (18%)	7 (3%)	3 13
31	41	179/182 (98%)	157 (88%)	19 (11%)	3 (2%)	7 25
31	49	179/182 (98%)	158 (88%)	20 (11%)	1 (1%)	21 48
32	51	171/180 (95%)	137 (80%)	21 (12%)	13 (8%)	1 3
32	59	168/180 (93%)	128 (76%)	31 (18%)	9 (5%)	1 7

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
33	61	144/148 (97%)	113 (78%)	28 (19%)	3 (2%)	5 21
33	69	144/148 (97%)	113 (78%)	27 (19%)	4 (3%)	4 16
34	15	136/140 (97%)	121 (89%)	14 (10%)	1 (1%)	18 45
34	58	136/140 (97%)	117 (86%)	15 (11%)	4 (3%)	3 16
35	25	120/122 (98%)	112 (93%)	7 (6%)	1 (1%)	16 42
35	68	120/122 (98%)	112 (93%)	8 (7%)	0	100 100
36	35	148/150 (99%)	113 (76%)	32 (22%)	3 (2%)	6 21
36	78	148/150 (99%)	110 (74%)	30 (20%)	8 (5%)	1 7
37	45	137/141 (97%)	110 (80%)	25 (18%)	2 (2%)	8 28
37	88	139/141 (99%)	107 (77%)	26 (19%)	6 (4%)	2 10
38	55	115/118 (98%)	106 (92%)	7 (6%)	2 (2%)	7 25
38	98	116/118 (98%)	106 (91%)	9 (8%)	1 (1%)	14 39
39	65	109/112 (97%)	85 (78%)	22 (20%)	2 (2%)	6 24
39	A8	108/112 (96%)	89 (82%)	18 (17%)	1 (1%)	14 39
40	75	135/146 (92%)	121 (90%)	14 (10%)	0	100 100
40	B8	135/146 (92%)	123 (91%)	12 (9%)	0	100 100
41	85	115/118 (98%)	98 (85%)	17 (15%)	0	100 100
41	C8	115/118 (98%)	107 (93%)	4 (4%)	4 (4%)	3 13
42	95	99/101 (98%)	77 (78%)	18 (18%)	4 (4%)	2 11
42	D8	99/101 (98%)	90 (91%)	6 (6%)	3 (3%)	3 15
43	A5	111/113 (98%)	101 (91%)	7 (6%)	3 (3%)	4 16
43	E8	111/113 (98%)	102 (92%)	9 (8%)	0	100 100
44	B5	90/96 (94%)	76 (84%)	12 (13%)	2 (2%)	5 20
44	F8	91/96 (95%)	83 (91%)	6 (7%)	2 (2%)	5 20
45	C5	102/110 (93%)	76 (74%)	24 (24%)	2 (2%)	6 21
45	G8	102/110 (93%)	83 (81%)	13 (13%)	6 (6%)	1 6
46	D5	132/206 (64%)	104 (79%)	24 (18%)	4 (3%)	3 15
46	H8	173/206 (84%)	133 (77%)	33 (19%)	7 (4%)	2 11
47	E5	75/85 (88%)	68 (91%)	5 (7%)	2 (3%)	4 16
47	I8	74/85 (87%)	66 (89%)	6 (8%)	2 (3%)	4 16
48	F5	95/98 (97%)	86 (90%)	8 (8%)	1 (1%)	11 34

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
48	J8	95/98 (97%)	85 (90%)	8 (8%)	2 (2%)	5 21
49	G5	64/72 (89%)	60 (94%)	2 (3%)	2 (3%)	3 14
49	K8	64/72 (89%)	59 (92%)	2 (3%)	3 (5%)	2 9
50	H5	57/60 (95%)	52 (91%)	5 (9%)	0	100 100
50	L8	57/60 (95%)	54 (95%)	3 (5%)	0	100 100
51	I5	61/71 (86%)	36 (59%)	21 (34%)	4 (7%)	1 5
51	M8	64/71 (90%)	36 (56%)	25 (39%)	3 (5%)	2 9
52	J5	57/60 (95%)	52 (91%)	4 (7%)	1 (2%)	6 24
52	N8	57/60 (95%)	50 (88%)	7 (12%)	0	100 100
53	L5	43/49 (88%)	41 (95%)	2 (5%)	0	100 100
53	P8	44/49 (90%)	42 (96%)	2 (4%)	0	100 100
54	M5	60/65 (92%)	46 (77%)	11 (18%)	3 (5%)	1 8
54	Q8	59/65 (91%)	52 (88%)	3 (5%)	4 (7%)	1 4
All	All	11183/11946 (94%)	9677 (86%)	1306 (12%)	200 (2%)	6 24

All (200) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
18	9I	22	VAL
29	21	83	ASP
32	51	172	LYS
32	51	173	PRO
36	78	19	VAL
41	C8	89	GLU
49	K8	48	HIS
9	82	118	LYS
14	5A	29	ARG
19	AA	9	VAL
28	19	38	LYS
28	19	237	GLU
29	29	25	VAL
29	29	61	ARG
30	39	28	ILE
30	39	84	VAL
36	35	15	ARG
38	55	107	ASP
42	95	45	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	D5	53	ILE
46	D5	165	VAL
48	F5	30	VAL
51	I5	5	ILE
54	M5	31	HIS
54	M5	49	VAL
54	M5	50	LEU
12	3I	48	PRO
32	51	10	PRO
32	51	152	ARG
32	51	169	VAL
36	78	25	SER
36	78	59	LEU
37	88	6	ARG
37	88	66	ILE
37	88	79	LEU
38	98	11	ASN
41	C8	93	LYS
42	D8	45	THR
45	G8	54	LYS
46	H8	6	LYS
46	H8	60	GLU
46	H8	165	VAL
51	M8	50	VAL
2	12	71	VAL
11	2A	48	ILE
11	2A	101	SER
12	3A	18	VAL
12	3A	26	ALA
20	BA	73	HIS
28	19	33	LEU
29	29	81	ILE
30	39	128	ALA
32	59	131	VAL
36	35	6	LEU
36	35	110	TYR
39	65	87	PHE
39	65	89	ARG
42	95	44	LYS
49	G5	47	ASN
49	G5	48	HIS
52	J5	57	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	2E	13	GLY
8	7E	86	ILE
13	4I	83	ASP
29	21	78	LEU
29	21	118	LYS
31	41	97	ASP
32	51	84	SER
33	61	145	VAL
34	58	128	HIS
36	78	27	HIS
36	78	42	SER
45	G8	53	PRO
45	G8	84	ARG
47	I8	83	PRO
48	J8	75	GLU
51	M8	34	GLU
54	Q8	51	ALA
54	Q8	52	LYS
8	72	73	ASP
11	2A	100	ALA
29	29	51	PHE
30	39	124	LEU
32	59	126	PRO
33	69	111	PRO
33	69	117	GLU
37	45	7	MET
43	A5	93	ALA
45	C5	20	TYR
45	C5	29	GLU
46	D5	161	VAL
47	E5	33	ALA
28	11	3	VAL
28	11	239	ARG
29	21	56	PRO
31	41	96	ARG
32	51	83	TYR
32	51	85	LYS
32	51	151	ILE
32	51	170	ARG
33	61	12	LEU
33	61	133	HIS
34	58	58	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	58	97	ARG
34	58	127	ASP
36	78	65	ARG
37	88	7	MET
44	F8	19	ALA
46	H8	59	LEU
47	I8	44	ARG
49	K8	43	GLN
49	K8	47	ASN
54	Q8	35	GLN
2	12	7	VAL
8	72	22	GLU
13	4A	95	GLY
29	29	9	VAL
30	39	25	PRO
30	39	89	VAL
30	39	167	ALA
32	59	92	ILE
32	59	168	PRO
33	69	145	VAL
38	55	3	HIS
42	95	80	GLN
43	A5	44	ALA
47	E5	44	ARG
51	I5	26	SER
11	2I	82	VAL
14	5I	14	PRO
29	21	60	ASN
29	21	82	ARG
31	41	5	VAL
32	51	167	GLU
37	88	60	ARG
39	A8	88	ASP
45	G8	77	PRO
48	J8	76	ARG
51	M8	5	ILE
54	Q8	61	LEU
12	3A	47	LYS
29	29	26	ILE
34	15	128	HIS
35	25	12	ASP
37	45	78	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
44	B5	68	ARG
46	D5	158	PRO
29	21	55	ASN
30	31	198	ALA
32	51	153	LYS
37	88	134	ARG
42	D8	49	THR
44	F8	40	LYS
45	G8	76	CYS
2	12	73	THR
21	1B	3	LYS
28	19	3	VAL
29	29	62	PRO
32	59	4	ILE
32	59	167	GLU
43	A5	12	ILE
51	I5	33	VAL
5	4E	115	VAL
28	11	240	ALA
32	51	12	PRO
31	49	5	VAL
32	59	169	VAL
44	B5	51	VAL
2	1E	239	VAL
29	21	4	ILE
41	C8	90	VAL
45	G8	81	LYS
2	12	32	ILE
19	AA	11	VAL
29	29	77	ILE
33	69	144	VAL
51	I5	29	PRO
14	5I	13	THR
19	AI	41	VAL
36	78	95	VAL
41	C8	88	ILE
46	H8	53	ILE
4	32	178	VAL
19	AA	67	VAL
28	19	240	ALA
13	4I	4	ILE
19	AI	9	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	11	123	ALA
29	21	21	VAL
36	78	7	ARG
42	D8	47	VAL
46	H8	141	VAL
46	H8	161	VAL
2	12	39	ILE
13	4A	84	ILE
29	29	52	LEU
32	59	8	PRO
32	59	17	VAL
20	BI	63	ILE
42	95	99	ILE

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
2	12	205/220 (93%)	157 (77%)	48 (23%)	1 3
2	1E	205/220 (93%)	152 (74%)	53 (26%)	0 2
3	22	160/188 (85%)	120 (75%)	40 (25%)	0 2
3	2E	159/188 (85%)	119 (75%)	40 (25%)	0 2
4	32	180/181 (99%)	142 (79%)	38 (21%)	1 4
4	3E	180/181 (99%)	136 (76%)	44 (24%)	1 2
5	42	116/123 (94%)	86 (74%)	30 (26%)	0 2
5	4E	116/123 (94%)	92 (79%)	24 (21%)	1 4
6	52	90/90 (100%)	70 (78%)	20 (22%)	1 3
6	5E	90/90 (100%)	70 (78%)	20 (22%)	1 3
7	62	126/127 (99%)	98 (78%)	28 (22%)	1 3
7	6E	126/127 (99%)	99 (79%)	27 (21%)	1 4
8	72	118/119 (99%)	96 (81%)	22 (19%)	1 6
8	7E	119/119 (100%)	86 (72%)	33 (28%)	0 1

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
9	82	95/99 (96%)	78 (82%)	17 (18%)	2 7
9	8E	98/99 (99%)	74 (76%)	24 (24%)	1 2
10	1A	89/92 (97%)	66 (74%)	23 (26%)	0 2
10	1I	89/92 (97%)	67 (75%)	22 (25%)	1 2
11	2A	89/99 (90%)	68 (76%)	21 (24%)	1 3
11	2I	88/99 (89%)	69 (78%)	19 (22%)	1 4
12	3A	104/109 (95%)	77 (74%)	27 (26%)	0 2
12	3I	103/109 (94%)	81 (79%)	22 (21%)	1 4
13	4A	94/101 (93%)	71 (76%)	23 (24%)	1 2
13	4I	94/101 (93%)	70 (74%)	24 (26%)	0 2
14	5A	48/50 (96%)	35 (73%)	13 (27%)	0 1
14	5I	48/50 (96%)	36 (75%)	12 (25%)	0 2
15	6A	79/80 (99%)	67 (85%)	12 (15%)	3 10
15	6I	79/80 (99%)	62 (78%)	17 (22%)	1 4
16	7A	72/74 (97%)	55 (76%)	17 (24%)	1 3
16	7I	72/74 (97%)	56 (78%)	16 (22%)	1 3
17	8A	95/97 (98%)	78 (82%)	17 (18%)	2 7
17	8I	95/97 (98%)	77 (81%)	18 (19%)	1 6
18	9A	62/77 (80%)	45 (73%)	17 (27%)	0 1
18	9I	63/77 (82%)	49 (78%)	14 (22%)	1 3
19	AA	67/80 (84%)	52 (78%)	15 (22%)	1 3
19	AI	72/80 (90%)	53 (74%)	19 (26%)	0 1
20	BA	76/82 (93%)	54 (71%)	22 (29%)	0 1
20	BI	76/82 (93%)	54 (71%)	22 (29%)	0 1
21	1B	20/22 (91%)	18 (90%)	2 (10%)	7 25
21	1F	20/22 (91%)	18 (90%)	2 (10%)	7 25
28	11	214/218 (98%)	167 (78%)	47 (22%)	1 4
28	19	214/218 (98%)	163 (76%)	51 (24%)	1 3
29	21	165/166 (99%)	117 (71%)	48 (29%)	0 1
29	29	165/166 (99%)	118 (72%)	47 (28%)	0 1
30	31	161/166 (97%)	123 (76%)	38 (24%)	1 3

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
30	39	165/166 (99%)	117 (71%)	48 (29%)	0	1
31	41	155/156 (99%)	125 (81%)	30 (19%)	1	5
31	49	155/156 (99%)	123 (79%)	32 (21%)	1	4
32	51	142/148 (96%)	98 (69%)	44 (31%)	0	0
32	59	142/148 (96%)	107 (75%)	35 (25%)	1	2
33	61	122/124 (98%)	86 (70%)	36 (30%)	0	1
33	69	122/124 (98%)	84 (69%)	38 (31%)	0	0
34	15	117/119 (98%)	88 (75%)	29 (25%)	1	2
34	58	117/119 (98%)	89 (76%)	28 (24%)	1	3
35	25	100/100 (100%)	74 (74%)	26 (26%)	0	2
35	68	100/100 (100%)	79 (79%)	21 (21%)	1	4
36	35	116/116 (100%)	67 (58%)	49 (42%)	0	0
36	78	116/116 (100%)	77 (66%)	39 (34%)	0	0
37	45	110/111 (99%)	78 (71%)	32 (29%)	0	1
37	88	111/111 (100%)	83 (75%)	28 (25%)	0	2
38	55	100/101 (99%)	71 (71%)	29 (29%)	0	1
38	98	101/101 (100%)	73 (72%)	28 (28%)	0	1
39	65	87/88 (99%)	58 (67%)	29 (33%)	0	0
39	A8	87/88 (99%)	61 (70%)	26 (30%)	0	1
40	75	120/127 (94%)	88 (73%)	32 (27%)	0	1
40	B8	120/127 (94%)	84 (70%)	36 (30%)	0	1
41	85	93/94 (99%)	68 (73%)	25 (27%)	0	1
41	C8	93/94 (99%)	74 (80%)	19 (20%)	1	4
42	95	82/82 (100%)	51 (62%)	31 (38%)	0	0
42	D8	82/82 (100%)	60 (73%)	22 (27%)	0	1
43	A5	92/92 (100%)	68 (74%)	24 (26%)	0	1
43	E8	92/92 (100%)	67 (73%)	25 (27%)	0	1
44	B5	74/78 (95%)	56 (76%)	18 (24%)	1	2
44	F8	74/78 (95%)	57 (77%)	17 (23%)	1	3
45	C5	85/91 (93%)	54 (64%)	31 (36%)	0	0
45	G8	85/91 (93%)	56 (66%)	29 (34%)	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
46	D5	127/179 (71%)	99 (78%)	28 (22%)	1	4
46	H8	154/179 (86%)	114 (74%)	40 (26%)	0	2
47	E5	62/67 (92%)	51 (82%)	11 (18%)	2	7
47	I8	61/67 (91%)	47 (77%)	14 (23%)	1	3
48	F5	82/83 (99%)	56 (68%)	26 (32%)	0	0
48	J8	82/83 (99%)	65 (79%)	17 (21%)	1	4
49	G5	62/67 (92%)	40 (64%)	22 (36%)	0	0
49	K8	62/67 (92%)	39 (63%)	23 (37%)	0	0
50	H5	51/52 (98%)	38 (74%)	13 (26%)	0	2
50	L8	51/52 (98%)	37 (72%)	14 (28%)	0	1
51	I5	57/63 (90%)	44 (77%)	13 (23%)	1	3
51	M8	59/63 (94%)	43 (73%)	16 (27%)	0	1
52	J5	51/52 (98%)	41 (80%)	10 (20%)	1	5
52	N8	51/52 (98%)	38 (74%)	13 (26%)	0	2
53	L5	38/42 (90%)	30 (79%)	8 (21%)	1	4
53	P8	38/42 (90%)	31 (82%)	7 (18%)	1	7
54	M5	52/55 (94%)	31 (60%)	21 (40%)	0	0
54	Q8	51/55 (93%)	37 (72%)	14 (28%)	0	1
All	All	9444/9894 (96%)	7043 (75%)	2401 (25%)	0	2

All (2401) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	1E	4	GLU
2	1E	8	LYS
2	1E	9	GLU
2	1E	15	VAL
2	1E	19	HIS
2	1E	21	ARG
2	1E	22	LYS
2	1E	28	PHE
2	1E	35	GLU
2	1E	41	ILE
2	1E	48	MET
2	1E	71	VAL
2	1E	75	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	1E	78	GLN
2	1E	79	ASP
2	1E	82	ARG
2	1E	87	ARG
2	1E	96	ARG
2	1E	108	ILE
2	1E	109	SER
2	1E	111	ARG
2	1E	115	LEU
2	1E	121	LEU
2	1E	124	SER
2	1E	139	LYS
2	1E	142	LEU
2	1E	144	ARG
2	1E	153	ARG
2	1E	155	LEU
2	1E	156	LYS
2	1E	162	ILE
2	1E	163	PHE
2	1E	164	VAL
2	1E	165	VAL
2	1E	168	THR
2	1E	170	GLU
2	1E	172	ILE
2	1E	175	ARG
2	1E	178	ARG
2	1E	184	VAL
2	1E	187	LEU
2	1E	189	ASP
2	1E	190	THR
2	1E	195	ASP
2	1E	196	LEU
2	1E	200	ILE
2	1E	209	ARG
2	1E	214	ILE
2	1E	217	ARG
2	1E	222	ILE
2	1E	229	VAL
2	1E	233	SER
2	1E	240	GLN
3	2E	3	ASN
3	2E	4	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	2E	5	ILE
3	2E	6	HIS
3	2E	8	ILE
3	2E	12	LEU
3	2E	14	ILE
3	2E	17	ASP
3	2E	19	GLU
3	2E	21	ARG
3	2E	27	LYS
3	2E	32	LEU
3	2E	45	LYS
3	2E	52	LEU
3	2E	54	ARG
3	2E	56	ASP
3	2E	63	ASN
3	2E	64	VAL
3	2E	70	VAL
3	2E	76	VAL
3	2E	77	ILE
3	2E	93	LYS
3	2E	94	LEU
3	2E	97	LYS
3	2E	98	ASN
3	2E	102	ASN
3	2E	104	GLN
3	2E	107	GLN
3	2E	127	ARG
3	2E	131	ARG
3	2E	138	VAL
3	2E	161	GLU
3	2E	166	GLU
3	2E	167	TRP
3	2E	175	LEU
3	2E	178	LEU
3	2E	188	LEU
3	2E	191	THR
3	2E	196	LEU
3	2E	202	ILE
4	3E	3	ARG
4	3E	5	ILE
4	3E	8	VAL
4	3E	10	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	3E	13	ARG
4	3E	15	GLU
4	3E	19	LEU
4	3E	24	GLU
4	3E	30	LYS
4	3E	47	ARG
4	3E	49	ARG
4	3E	52	SER
4	3E	58	LEU
4	3E	61	LYS
4	3E	66	ARG
4	3E	83	SER
4	3E	85	LYS
4	3E	86	LYS
4	3E	88	VAL
4	3E	96	LEU
4	3E	108	LEU
4	3E	119	GLN
4	3E	122	ARG
4	3E	127	THR
4	3E	135	LEU
4	3E	144	ASP
4	3E	146	ILE
4	3E	150	GLU
4	3E	151	LYS
4	3E	152	SER
4	3E	154	ASN
4	3E	155	LEU
4	3E	157	LEU
4	3E	160	GLN
4	3E	168	ARG
4	3E	178	VAL
4	3E	179	GLU
4	3E	184	LYS
4	3E	188	LEU
4	3E	190	ASP
4	3E	193	ASP
4	3E	200	GLU
4	3E	208	SER
4	3E	209	ARG
5	4E	7	GLU
5	4E	10	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	4E	11	ILE
5	4E	16	THR
5	4E	31	LEU
5	4E	33	VAL
5	4E	41	VAL
5	4E	50	GLU
5	4E	63	ARG
5	4E	68	GLU
5	4E	72	GLN
5	4E	75	THR
5	4E	79	GLU
5	4E	80	ILE
5	4E	87	SER
5	4E	91	LEU
5	4E	109	ILE
5	4E	112	LEU
5	4E	117	ASP
5	4E	140	ARG
5	4E	147	ASP
5	4E	148	VAL
5	4E	153	LYS
5	4E	155	GLU
6	5E	15	ASP
6	5E	19	LEU
6	5E	21	LEU
6	5E	23	LYS
6	5E	40	VAL
6	5E	43	LEU
6	5E	46	ARG
6	5E	55	ASP
6	5E	64	GLN
6	5E	65	VAL
6	5E	70	ASP
6	5E	71	ARG
6	5E	73	ASN
6	5E	75	LEU
6	5E	78	GLU
6	5E	89	MET
6	5E	91	VAL
6	5E	92	LYS
6	5E	94	GLN
6	5E	95	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	6E	5	ARG
7	6E	6	ARG
7	6E	8	GLU
7	6E	9	VAL
7	6E	21	VAL
7	6E	23	VAL
7	6E	30	ILE
7	6E	36	LYS
7	6E	38	LEU
7	6E	48	LYS
7	6E	53	LYS
7	6E	54	THR
7	6E	59	LEU
7	6E	75	VAL
7	6E	78	ARG
7	6E	79	ARG
7	6E	89	MET
7	6E	90	GLU
7	6E	91	VAL
7	6E	104	LEU
7	6E	113	GLU
7	6E	124	LEU
7	6E	131	LYS
7	6E	135	VAL
7	6E	137	LYS
7	6E	155	ARG
7	6E	156	TRP
8	7E	1	MET
8	7E	10	LEU
8	7E	18	ARG
8	7E	19	VAL
8	7E	26	VAL
8	7E	32	LYS
8	7E	38	ILE
8	7E	39	LEU
8	7E	41	ARG
8	7E	46	LYS
8	7E	50	ARG
8	7E	52	ASP
8	7E	65	TYR
8	7E	68	ARG
8	7E	75	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	7E	77	GLU
8	7E	80	ILE
8	7E	83	ILE
8	7E	84	ARG
8	7E	85	ARG
8	7E	91	ARG
8	7E	95	VAL
8	7E	102	ARG
8	7E	104	ARG
8	7E	107	LEU
8	7E	109	ILE
8	7E	112	LEU
8	7E	116	LYS
8	7E	121	ASP
8	7E	122	ARG
8	7E	127	LEU
8	7E	129	VAL
8	7E	137	VAL
9	8E	2	GLU
9	8E	9	ARG
9	8E	10	ARG
9	8E	20	ARG
9	8E	26	VAL
9	8E	28	VAL
9	8E	31	GLN
9	8E	34	ASN
9	8E	41	VAL
9	8E	42	ARG
9	8E	44	VAL
9	8E	47	LEU
9	8E	50	LEU
9	8E	53	VAL
9	8E	58	HIS
9	8E	64	THR
9	8E	65	VAL
9	8E	79	LEU
9	8E	83	ARG
9	8E	89	ASN
9	8E	96	LEU
9	8E	99	LEU
9	8E	108	VAL
9	8E	112	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	1I	16	LEU
10	1I	17	ASP
10	1I	30	SER
10	1I	38	ILE
10	1I	43	ARG
10	1I	44	VAL
10	1I	60	ARG
10	1I	62	HIS
10	1I	66	ARG
10	1I	70	ARG
10	1I	74	ILE
10	1I	75	ILE
10	1I	80	LYS
10	1I	82	ILE
10	1I	84	GLN
10	1I	89	ASP
10	1I	90	LEU
10	1I	92	THR
10	1I	96	ILE
10	1I	97	GLU
10	1I	98	ILE
10	1I	100	THR
11	2I	12	ARG
11	2I	28	THR
11	2I	29	ILE
11	2I	31	THR
11	2I	32	ILE
11	2I	38	ASN
11	2I	41	THR
11	2I	48	ILE
11	2I	70	LYS
11	2I	80	VAL
11	2I	84	VAL
11	2I	92	GLU
11	2I	96	ARG
11	2I	99	GLN
11	2I	105	VAL
11	2I	106	LYS
11	2I	108	ILE
11	2I	114	VAL
11	2I	119	CYS
12	3I	7	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	3I	11	VAL
12	3I	20	LYS
12	3I	28	LYS
12	3I	33	ARG
12	3I	36	VAL
12	3I	38	THR
12	3I	47	LYS
12	3I	54	LYS
12	3I	60	LEU
12	3I	62	SER
12	3I	79	GLU
12	3I	81	SER
12	3I	83	VAL
12	3I	89	ARG
12	3I	90	VAL
12	3I	91	LYS
12	3I	96	VAL
12	3I	102	ARG
12	3I	104	VAL
12	3I	114	LYS
12	3I	116	SER
13	4I	3	ARG
13	4I	13	LYS
13	4I	32	GLU
13	4I	34	LEU
13	4I	44	ARG
13	4I	45	VAL
13	4I	49	THR
13	4I	56	LEU
13	4I	64	TRP
13	4I	67	GLU
13	4I	70	LEU
13	4I	73	GLU
13	4I	83	ASP
13	4I	84	ILE
13	4I	88	ARG
13	4I	94	ARG
13	4I	98	VAL
13	4I	99	ARG
13	4I	105	THR
13	4I	106	ASN
13	4I	108	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	4I	109	THR
13	4I	115	LYS
13	4I	117	VAL
14	5I	6	LEU
14	5I	7	ILE
14	5I	8	GLU
14	5I	17	LYS
14	5I	18	VAL
14	5I	22	THR
14	5I	32	SER
14	5I	33	VAL
14	5I	35	ARG
14	5I	41	ARG
14	5I	44	LEU
14	5I	49	HIS
15	6I	3	ILE
15	6I	6	GLU
15	6I	13	GLN
15	6I	17	ARG
15	6I	25	THR
15	6I	26	GLU
15	6I	31	LEU
15	6I	39	LEU
15	6I	41	GLU
15	6I	47	LYS
15	6I	48	LYS
15	6I	64	ARG
15	6I	65	ARG
15	6I	67	LEU
15	6I	72	ARG
15	6I	76	GLU
15	6I	79	ARG
16	7I	1	MET
16	7I	2	VAL
16	7I	11	SER
16	7I	13	HIS
16	7I	18	ARG
16	7I	20	VAL
16	7I	27	LYS
16	7I	36	ILE
16	7I	43	LYS
16	7I	48	TRP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
16	7I	54	GLU
16	7I	58	TYR
16	7I	67	THR
16	7I	71	ARG
16	7I	72	ARG
16	7I	76	GLN
17	8I	9	VAL
17	8I	18	THR
17	8I	19	VAL
17	8I	23	VAL
17	8I	35	VAL
17	8I	38	ARG
17	8I	48	GLU
17	8I	52	LYS
17	8I	57	VAL
17	8I	60	ILE
17	8I	68	ARG
17	8I	74	LEU
17	8I	84	LEU
17	8I	86	GLU
17	8I	89	LEU
17	8I	92	ARG
17	8I	100	LYS
17	8I	101	ARG
18	9I	18	ARG
18	9I	21	LYS
18	9I	22	VAL
18	9I	25	THR
18	9I	26	LEU
18	9I	31	LEU
18	9I	40	LEU
18	9I	71	LYS
18	9I	75	ILE
18	9I	82	THR
18	9I	83	GLU
18	9I	84	LYS
18	9I	86	VAL
18	9I	88	LYS
19	AI	5	LEU
19	AI	6	LYS
19	AI	7	LYS
19	AI	13	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
19	AI	17	GLU
19	AI	21	GLU
19	AI	22	LEU
19	AI	29	ARG
19	AI	30	LEU
19	AI	31	ILE
19	AI	37	ARG
19	AI	41	VAL
19	AI	43	GLU
19	AI	58	VAL
19	AI	60	VAL
19	AI	61	TYR
19	AI	63	THR
19	AI	71	LEU
19	AI	78	ARG
20	BI	9	ASN
20	BI	10	LEU
20	BI	11	SER
20	BI	16	HIS
20	BI	26	ASN
20	BI	27	LYS
20	BI	33	ILE
20	BI	36	LEU
20	BI	37	SER
20	BI	54	LYS
20	BI	55	ILE
20	BI	56	MET
20	BI	57	ARG
20	BI	71	THR
20	BI	73	HIS
20	BI	75	ASN
20	BI	87	LYS
20	BI	90	GLN
20	BI	99	LEU
20	BI	100	ILE
20	BI	104	LEU
20	BI	105	SER
21	1F	6	ARG
21	1F	15	ARG
28	11	3	VAL
28	11	6	PHE
28	11	13	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	11	15	PHE
28	11	17	THR
28	11	27	THR
28	11	31	LYS
28	11	34	VAL
28	11	37	LEU
28	11	39	LYS
28	11	46	GLN
28	11	49	ILE
28	11	61	LEU
28	11	64	ILE
28	11	65	ILE
28	11	71	ASP
28	11	82	ILE
28	11	83	GLU
28	11	92	ILE
28	11	94	LEU
28	11	101	GLU
28	11	103	ARG
28	11	105	ILE
28	11	111	LEU
28	11	115	GLN
28	11	136	ILE
28	11	138	VAL
28	11	141	VAL
28	11	142	VAL
28	11	147	LEU
28	11	155	LEU
28	11	157	ARG
28	11	165	ILE
28	11	173	VAL
28	11	192	THR
28	11	193	VAL
28	11	200	ASP
28	11	212	SER
28	11	221	VAL
28	11	229	VAL
28	11	242	ARG
28	11	257	LEU
28	11	259	THR
28	11	260	ARG
28	11	261	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	11	271	ILE
28	11	273	ARG
29	21	1	MET
29	21	5	LEU
29	21	12	THR
29	21	14	ILE
29	21	16	ARG
29	21	25	VAL
29	21	26	ILE
29	21	33	VAL
29	21	34	VAL
29	21	40	GLU
29	21	41	LYS
29	21	42	ASP
29	21	47	VAL
29	21	49	LEU
29	21	52	LEU
29	21	54	GLN
29	21	59	VAL
29	21	63	LEU
29	21	64	LYS
29	21	67	PHE
29	21	72	VAL
29	21	79	ARG
29	21	87	GLU
29	21	89	ASP
29	21	92	THR
29	21	93	VAL
29	21	95	ILE
29	21	101	ARG
29	21	105	THR
29	21	107	THR
29	21	111	ARG
29	21	116	VAL
29	21	119	ARG
29	21	140	SER
29	21	144	ARG
29	21	146	THR
29	21	154	LYS
29	21	166	THR
29	21	167	VAL
29	21	175	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	21	181	LEU
29	21	184	VAL
29	21	195	LEU
29	21	196	VAL
29	21	197	ILE
29	21	200	GLU
29	21	202	LYS
29	21	203	LYS
30	31	8	GLN
30	31	9	ILE
30	31	13	SER
30	31	15	SER
30	31	17	ARG
30	31	18	ARG
30	31	24	LEU
30	31	28	ILE
30	31	33	LEU
30	31	43	LYS
30	31	46	ARG
30	31	53	THR
30	31	57	VAL
30	31	64	ILE
30	31	74	ARG
30	31	78	ILE
30	31	88	VAL
30	31	98	SER
30	31	106	ARG
30	31	107	LYS
30	31	108	LYS
30	31	112	MET
30	31	127	GLU
30	31	140	LEU
30	31	158	THR
30	31	164	ARG
30	31	168	ARG
30	31	170	LEU
30	31	174	VAL
30	31	176	LEU
30	31	183	VAL
30	31	188	ARG
30	31	192	LEU
30	31	197	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
30	31	201	VAL
30	31	203	GLN
30	31	205	ARG
30	31	206	ILE
31	41	14	GLU
31	41	19	LEU
31	41	20	ILE
31	41	26	GLN
31	41	28	VAL
31	41	31	VAL
31	41	43	LEU
31	41	45	GLU
31	41	48	GLU
31	41	52	ILE
31	41	55	LYS
31	41	63	ILE
31	41	67	LYS
31	41	70	VAL
31	41	77	ILE
31	41	82	LEU
31	41	83	ARG
31	41	86	MET
31	41	94	LEU
31	41	101	ILE
31	41	118	ARG
31	41	128	ARG
31	41	130	ASN
31	41	133	LEU
31	41	135	LEU
31	41	152	LEU
31	41	165	THR
31	41	174	GLU
31	41	176	LEU
31	41	181	ARG
32	51	3	ARG
32	51	4	ILE
32	51	6	ARG
32	51	7	LEU
32	51	11	VAL
32	51	13	LYS
32	51	15	VAL
32	51	18	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	51	24	VAL
32	51	32	GLU
32	51	37	VAL
32	51	40	GLU
32	51	43	VAL
32	51	45	VAL
32	51	50	VAL
32	51	57	ASP
32	51	60	ARG
32	51	64	LEU
32	51	68	THR
32	51	71	LEU
32	51	77	LYS
32	51	80	SER
32	51	81	GLU
32	51	83	TYR
32	51	88	LEU
32	51	104	GLU
32	51	106	THR
32	51	111	HIS
32	51	113	VAL
32	51	116	GLU
32	51	127	GLU
32	51	129	THR
32	51	131	VAL
32	51	132	ARG
32	51	134	SER
32	51	136	ILE
32	51	139	GLN
32	51	141	VAL
32	51	151	ILE
32	51	153	LYS
32	51	155	SER
32	51	159	GLU
32	51	170	ARG
32	51	171	LEU
33	61	2	LYS
33	61	3	VAL
33	61	4	ILE
33	61	7	GLU
33	61	9	LEU
33	61	15	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	61	22	LYS
33	61	33	ARG
33	61	38	LEU
33	61	41	GLU
33	61	44	LEU
33	61	47	LEU
33	61	51	ILE
33	61	60	GLU
33	61	70	GLU
33	61	71	ILE
33	61	73	GLU
33	61	74	ASN
33	61	77	LEU
33	61	81	VAL
33	61	85	GLU
33	61	88	ILE
33	61	92	VAL
33	61	95	LYS
33	61	104	GLN
33	61	108	THR
33	61	110	ASP
33	61	112	LYS
33	61	116	LEU
33	61	117	GLU
33	61	122	GLU
33	61	131	LYS
33	61	135	GLU
33	61	140	LEU
33	61	142	VAL
33	61	143	SER
34	58	1	MET
34	58	2	LYS
34	58	5	VAL
34	58	7	LYS
34	58	12	ARG
34	58	16	ILE
34	58	28	THR
34	58	29	LYS
34	58	33	LEU
34	58	34	LEU
34	58	35	ARG
34	58	39	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	58	43	THR
34	58	48	MET
34	58	55	VAL
34	58	60	ILE
34	58	61	ARG
34	58	65	LYS
34	58	67	LEU
34	58	68	GLU
34	58	87	LEU
34	58	90	MET
34	58	96	GLU
34	58	97	ARG
34	58	99	LEU
34	58	120	LEU
34	58	127	ASP
34	58	138	LEU
35	68	1	MET
35	68	3	GLN
35	68	22	ILE
35	68	23	ARG
35	68	24	VAL
35	68	28	SER
35	68	31	LYS
35	68	38	VAL
35	68	47	ILE
35	68	52	VAL
35	68	66	LYS
35	68	68	GLU
35	68	78	ARG
35	68	88	ASN
35	68	94	ARG
35	68	96	THR
35	68	98	VAL
35	68	108	GLU
35	68	112	MET
35	68	113	LYS
35	68	114	ILE
36	78	3	LEU
36	78	6	LEU
36	78	10	PRO
36	78	19	VAL
36	78	21	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	78	32	THR
36	78	36	LYS
36	78	41	ARG
36	78	45	LEU
36	78	46	LYS
36	78	49	ARG
36	78	58	THR
36	78	61	ARG
36	78	62	LEU
36	78	65	ARG
36	78	68	GLN
36	78	70	GLN
36	78	74	GLU
36	78	75	ILE
36	78	77	ARG
36	78	83	VAL
36	78	85	LEU
36	78	86	LYS
36	78	96	THR
36	78	98	GLU
36	78	99	LEU
36	78	100	LEU
36	78	105	LEU
36	78	106	LEU
36	78	112	LEU
36	78	114	ILE
36	78	115	LEU
36	78	126	VAL
36	78	132	LYS
36	78	135	LEU
36	78	144	GLU
36	78	146	VAL
36	78	147	LEU
36	78	149	GLU
37	88	1	MET
37	88	3	MET
37	88	5	ARG
37	88	6	ARG
37	88	7	MET
37	88	10	ARG
37	88	18	LYS
37	88	22	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
37	88	25	ASP
37	88	26	TYR
37	88	27	VAL
37	88	35	VAL
37	88	37	LEU
37	88	45	GLN
37	88	55	VAL
37	88	60	ARG
37	88	66	ILE
37	88	82	ARG
37	88	83	MET
37	88	87	LYS
37	88	102	VAL
37	88	109	VAL
37	88	110	THR
37	88	112	GLU
37	88	120	ILE
37	88	131	ILE
37	88	134	ARG
37	88	139	GLU
38	98	9	LYS
38	98	10	LEU
38	98	16	HIS
38	98	17	ARG
38	98	18	LEU
38	98	28	LEU
38	98	29	LEU
38	98	34	ILE
38	98	35	THR
38	98	37	THR
38	98	42	LYS
38	98	44	LEU
38	98	45	ARG
38	98	48	VAL
38	98	52	ILE
38	98	54	LEU
38	98	59	ASP
38	98	65	LEU
38	98	79	LEU
38	98	82	GLU
38	98	91	GLN
38	98	102	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	98	104	ARG
38	98	105	ARG
38	98	113	LEU
38	98	114	VAL
38	98	117	VAL
38	98	118	GLU
39	A8	4	LEU
39	A8	8	GLU
39	A8	10	ARG
39	A8	14	VAL
39	A8	15	ARG
39	A8	17	ARG
39	A8	24	LEU
39	A8	36	TYR
39	A8	38	GLN
39	A8	39	ILE
39	A8	43	GLU
39	A8	46	VAL
39	A8	49	VAL
39	A8	50	SER
39	A8	54	LEU
39	A8	57	LYS
39	A8	58	LEU
39	A8	69	VAL
39	A8	73	LEU
39	A8	80	LEU
39	A8	83	LYS
39	A8	89	ARG
39	A8	98	VAL
39	A8	101	LEU
39	A8	106	ARG
39	A8	111	GLU
40	B8	6	LEU
40	B8	7	ILE
40	B8	8	LYS
40	B8	15	VAL
40	B8	16	ARG
40	B8	17	THR
40	B8	19	LEU
40	B8	21	GLU
40	B8	23	ARG
40	B8	27	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	B8	28	VAL
40	B8	30	VAL
40	B8	33	LYS
40	B8	39	ARG
40	B8	42	ILE
40	B8	53	ARG
40	B8	55	ASN
40	B8	58	ASN
40	B8	62	THR
40	B8	65	LYS
40	B8	74	ARG
40	B8	83	ILE
40	B8	86	ILE
40	B8	87	ASP
40	B8	88	ILE
40	B8	89	VAL
40	B8	98	LYS
40	B8	99	LEU
40	B8	105	LEU
40	B8	106	SER
40	B8	110	ILE
40	B8	111	ARG
40	B8	112	ARG
40	B8	113	LYS
40	B8	128	GLU
40	B8	136	GLN
41	C8	3	ARG
41	C8	5	LYS
41	C8	13	LYS
41	C8	16	LYS
41	C8	22	LYS
41	C8	27	LEU
41	C8	38	THR
41	C8	58	ARG
41	C8	59	ARG
41	C8	60	LEU
41	C8	64	ARG
41	C8	74	LEU
41	C8	77	SER
41	C8	80	ILE
41	C8	83	LEU
41	C8	88	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
41	C8	89	GLU
41	C8	97	ASP
41	C8	104	GLN
42	D8	5	VAL
42	D8	6	LYS
42	D8	7	THR
42	D8	15	GLU
42	D8	18	LEU
42	D8	20	LEU
42	D8	22	VAL
42	D8	25	LEU
42	D8	26	ASP
42	D8	28	GLU
42	D8	34	GLU
42	D8	35	LEU
42	D8	40	LEU
42	D8	46	VAL
42	D8	47	VAL
42	D8	52	VAL
42	D8	57	VAL
42	D8	62	LEU
42	D8	71	LEU
42	D8	73	SER
42	D8	78	LYS
42	D8	89	GLN
43	E8	11	ARG
43	E8	19	LEU
43	E8	24	ILE
43	E8	27	LYS
43	E8	29	LEU
43	E8	39	THR
43	E8	41	LYS
43	E8	51	LEU
43	E8	52	GLU
43	E8	60	ASN
43	E8	64	MET
43	E8	65	LEU
43	E8	66	GLU
43	E8	68	ARG
43	E8	76	VAL
43	E8	78	GLU
43	E8	88	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
43	E8	90	ARG
43	E8	92	ARG
43	E8	96	ILE
43	E8	98	LYS
43	E8	100	THR
43	E8	103	ILE
43	E8	107	LEU
43	E8	111	HIS
44	F8	12	VAL
44	F8	15	GLU
44	F8	23	GLU
44	F8	27	THR
44	F8	40	LYS
44	F8	45	THR
44	F8	49	VAL
44	F8	52	VAL
44	F8	54	VAL
44	F8	57	LEU
44	F8	70	LEU
44	F8	72	LYS
44	F8	76	ARG
44	F8	80	ILE
44	F8	81	VAL
44	F8	87	GLN
44	F8	89	ILE
45	G8	3	VAL
45	G8	4	LYS
45	G8	6	HIS
45	G8	9	LYS
45	G8	14	LEU
45	G8	24	VAL
45	G8	27	VAL
45	G8	30	VAL
45	G8	34	LYS
45	G8	39	VAL
45	G8	40	GLU
45	G8	42	VAL
45	G8	44	ILE
45	G8	50	ARG
45	G8	51	VAL
45	G8	52	SER
45	G8	54	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
45	G8	57	GLN
45	G8	61	ILE
45	G8	63	LYS
45	G8	64	GLU
45	G8	67	LEU
45	G8	81	LYS
45	G8	84	ARG
45	G8	86	ARG
45	G8	88	LYS
45	G8	94	LYS
45	G8	97	ARG
45	G8	99	CYS
46	H8	5	LEU
46	H8	16	SER
46	H8	19	ARG
46	H8	20	ARG
46	H8	23	LYS
46	H8	24	LEU
46	H8	30	ASN
46	H8	35	ARG
46	H8	37	VAL
46	H8	42	VAL
46	H8	43	GLU
46	H8	46	LYS
46	H8	53	ILE
46	H8	60	GLU
46	H8	61	LEU
46	H8	70	LEU
46	H8	71	VAL
46	H8	73	GLN
46	H8	76	LEU
46	H8	80	ARG
46	H8	81	ARG
46	H8	82	ARG
46	H8	85	HIS
46	H8	86	VAL
46	H8	91	LEU
46	H8	93	ASP
46	H8	94	GLU
46	H8	105	VAL
46	H8	117	LEU
46	H8	119	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	H8	123	ASP
46	H8	135	GLU
46	H8	140	ASP
46	H8	141	VAL
46	H8	148	ASP
46	H8	154	ASP
46	H8	161	VAL
46	H8	163	LEU
46	H8	169	GLU
46	H8	170	THR
47	I8	11	ARG
47	I8	19	LYS
47	I8	23	VAL
47	I8	32	ARG
47	I8	36	ILE
47	I8	38	VAL
47	I8	41	ARG
47	I8	46	LYS
47	I8	53	MET
47	I8	58	THR
47	I8	66	VAL
47	I8	67	VAL
47	I8	70	GLN
47	I8	79	VAL
48	J8	4	VAL
48	J8	19	GLN
48	J8	21	ARG
48	J8	25	LYS
48	J8	30	VAL
48	J8	33	LYS
48	J8	65	SER
48	J8	70	VAL
48	J8	73	LEU
48	J8	74	VAL
48	J8	78	LYS
48	J8	80	LEU
48	J8	81	LYS
48	J8	82	LEU
48	J8	83	GLU
48	J8	90	ILE
48	J8	91	LYS
49	K8	4	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
49	K8	5	GLU
49	K8	9	GLN
49	K8	10	LEU
49	K8	11	GLU
49	K8	15	LYS
49	K8	16	LEU
49	K8	19	VAL
49	K8	24	LEU
49	K8	25	VAL
49	K8	32	LEU
49	K8	35	LEU
49	K8	41	ILE
49	K8	47	ASN
49	K8	48	HIS
49	K8	49	LYS
49	K8	50	ILE
49	K8	53	LEU
49	K8	55	ARG
49	K8	59	ARG
49	K8	62	THR
49	K8	64	LEU
49	K8	68	ARG
50	L8	6	VAL
50	L8	8	LEU
50	L8	9	VAL
50	L8	13	ILE
50	L8	28	LEU
50	L8	32	GLN
50	L8	36	VAL
50	L8	37	LEU
50	L8	38	GLU
50	L8	40	THR
50	L8	56	VAL
50	L8	58	VAL
50	L8	59	VAL
50	L8	60	GLU
51	M8	6	HIS
51	M8	10	VAL
51	M8	15	ILE
51	M8	27	THR
51	M8	31	ILE
51	M8	35	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
51	M8	44	THR
51	M8	47	GLN
51	M8	48	ARG
51	M8	50	VAL
51	M8	51	ASP
51	M8	53	GLU
51	M8	55	ARG
51	M8	59	PHE
51	M8	61	ARG
51	M8	63	TYR
52	N8	6	VAL
52	N8	9	LYS
52	N8	11	THR
52	N8	16	ARG
52	N8	29	THR
52	N8	31	VAL
52	N8	35	GLU
52	N8	37	LYS
52	N8	40	LYS
52	N8	44	THR
52	N8	51	TYR
52	N8	56	LYS
52	N8	60	VAL
53	P8	1	MET
53	P8	4	THR
53	P8	8	ASN
53	P8	14	LYS
53	P8	24	THR
53	P8	42	LEU
53	P8	43	THR
54	Q8	8	LYS
54	Q8	14	VAL
54	Q8	15	LYS
54	Q8	21	LYS
54	Q8	29	LYS
54	Q8	34	TRP
54	Q8	35	GLN
54	Q8	41	ILE
54	Q8	43	GLN
54	Q8	47	LYS
54	Q8	48	PHE
54	Q8	52	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
54	Q8	58	ILE
54	Q8	62	LEU
2	12	5	ILE
2	12	8	LYS
2	12	9	GLU
2	12	10	LEU
2	12	15	VAL
2	12	17	PHE
2	12	19	HIS
2	12	20	GLU
2	12	21	ARG
2	12	22	LYS
2	12	23	ARG
2	12	31	TYR
2	12	39	ILE
2	12	40	HIS
2	12	42	ILE
2	12	51	LEU
2	12	52	GLU
2	12	55	PHE
2	12	63	MET
2	12	69	LEU
2	12	75	LYS
2	12	83	MET
2	12	90	MET
2	12	108	ILE
2	12	111	ARG
2	12	121	LEU
2	12	122	PHE
2	12	128	GLU
2	12	137	ARG
2	12	145	LEU
2	12	147	LYS
2	12	149	LEU
2	12	150	SER
2	12	158	LEU
2	12	165	VAL
2	12	170	GLU
2	12	172	ILE
2	12	178	ARG
2	12	185	ILE
2	12	191	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	12	204	ASN
2	12	213	LEU
2	12	215	LEU
2	12	217	ARG
2	12	219	VAL
2	12	223	ILE
2	12	230	VAL
2	12	236	TYR
3	22	3	ASN
3	22	4	LYS
3	22	5	ILE
3	22	11	ARG
3	22	21	ARG
3	22	27	LYS
3	22	31	HIS
3	22	32	LEU
3	22	34	LEU
3	22	43	LEU
3	22	55	VAL
3	22	58	GLU
3	22	67	THR
3	22	76	VAL
3	22	79	ARG
3	22	84	ILE
3	22	85	ARG
3	22	89	GLU
3	22	94	LEU
3	22	95	THR
3	22	97	LYS
3	22	99	VAL
3	22	102	ASN
3	22	104	GLN
3	22	105	GLU
3	22	106	VAL
3	22	127	ARG
3	22	138	VAL
3	22	141	VAL
3	22	144	SER
3	22	175	LEU
3	22	182	ILE
3	22	188	LEU
3	22	190	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	22	192	THR
3	22	193	TYR
3	22	196	LEU
3	22	198	VAL
3	22	202	ILE
3	22	207	VAL
4	32	3	ARG
4	32	5	ILE
4	32	8	VAL
4	32	11	LEU
4	32	12	CYS
4	32	17	VAL
4	32	18	LYS
4	32	21	LEU
4	32	24	GLU
4	32	26	CYS
4	32	28	SER
4	32	30	LYS
4	32	34	GLU
4	32	36	ARG
4	32	45	GLN
4	32	58	LEU
4	32	61	LYS
4	32	96	LEU
4	32	122	ARG
4	32	127	THR
4	32	134	ASP
4	32	137	SER
4	32	151	LYS
4	32	152	SER
4	32	155	LEU
4	32	156	GLU
4	32	157	LEU
4	32	158	ILE
4	32	170	VAL
4	32	179	GLU
4	32	181	MET
4	32	184	LYS
4	32	186	LEU
4	32	191	ARG
4	32	192	GLU
4	32	196	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	32	198	VAL
4	32	200	GLU
5	42	5	ASP
5	42	10	MET
5	42	12	LEU
5	42	13	ILE
5	42	14	ARG
5	42	40	ARG
5	42	41	VAL
5	42	47	LYS
5	42	51	VAL
5	42	53	LEU
5	42	56	GLN
5	42	73	ASN
5	42	75	THR
5	42	79	GLU
5	42	80	ILE
5	42	83	GLU
5	42	87	SER
5	42	90	VAL
5	42	101	ILE
5	42	109	ILE
5	42	112	LEU
5	42	115	VAL
5	42	116	THR
5	42	117	ASP
5	42	118	ILE
5	42	127	ASN
5	42	131	ILE
5	42	144	THR
5	42	151	LEU
5	42	155	GLU
6	52	2	ARG
6	52	3	ARG
6	52	7	ASN
6	52	10	LEU
6	52	14	LEU
6	52	16	GLN
6	52	17	SER
6	52	21	LEU
6	52	25	ILE
6	52	28	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	52	40	VAL
6	52	43	LEU
6	52	45	LEU
6	52	47	ARG
6	52	63	TYR
6	52	72	VAL
6	52	74	ASP
6	52	77	ARG
6	52	92	LYS
6	52	93	SER
7	62	4	ARG
7	62	6	ARG
7	62	8	GLU
7	62	9	VAL
7	62	16	LEU
7	62	23	VAL
7	62	27	ILE
7	62	32	ARG
7	62	38	LEU
7	62	47	CYS
7	62	53	LYS
7	62	54	THR
7	62	60	LYS
7	62	63	LYS
7	62	73	MET
7	62	84	ASN
7	62	86	GLN
7	62	89	MET
7	62	90	GLU
7	62	94	ARG
7	62	104	LEU
7	62	114	ARG
7	62	124	LEU
7	62	131	LYS
7	62	137	LYS
7	62	139	GLU
7	62	146	GLU
7	62	155	ARG
8	72	8	ASP
8	72	13	ILE
8	72	24	THR
8	72	26	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	72	35	ILE
8	72	49	GLU
8	72	50	ARG
8	72	51	VAL
8	72	54	ASP
8	72	56	LYS
8	72	77	GLU
8	72	80	ILE
8	72	82	HIS
8	72	91	ARG
8	72	97	VAL
8	72	99	GLU
8	72	102	ARG
8	72	112	LEU
8	72	114	THR
8	72	116	LYS
8	72	122	ARG
8	72	137	VAL
9	82	10	ARG
9	82	38	GLN
9	82	53	VAL
9	82	54	ASP
9	82	56	LEU
9	82	75	ASP
9	82	91	ASP
9	82	95	LYS
9	82	96	LEU
9	82	104	ARG
9	82	109	VAL
9	82	110	GLU
9	82	113	LYS
9	82	114	TYR
9	82	117	HIS
9	82	124	GLN
9	82	128	ARG
10	1A	4	ILE
10	1A	21	GLN
10	1A	24	VAL
10	1A	30	SER
10	1A	38	ILE
10	1A	44	VAL
10	1A	48	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	1A	55	LYS
10	1A	57	LYS
10	1A	59	SER
10	1A	62	HIS
10	1A	66	ARG
10	1A	67	THR
10	1A	70	ARG
10	1A	72	VAL
10	1A	75	ILE
10	1A	79	ARG
10	1A	80	LYS
10	1A	84	GLN
10	1A	94	VAL
10	1A	96	ILE
10	1A	98	ILE
10	1A	100	THR
11	2A	12	ARG
11	2A	14	VAL
11	2A	29	ILE
11	2A	31	THR
11	2A	38	ASN
11	2A	41	THR
11	2A	63	LEU
11	2A	70	LYS
11	2A	81	ASP
11	2A	82	VAL
11	2A	84	VAL
11	2A	91	ARG
11	2A	98	LEU
11	2A	103	LEU
11	2A	105	VAL
11	2A	106	LYS
11	2A	107	SER
11	2A	109	VAL
11	2A	114	VAL
11	2A	124	LYS
11	2A	127	LYS
12	3A	7	ILE
12	3A	21	LYS
12	3A	24	VAL
12	3A	27	LEU
12	3A	33	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	3A	37	CYS
12	3A	38	THR
12	3A	40	VAL
12	3A	41	ARG
12	3A	42	THR
12	3A	43	VAL
12	3A	46	LYS
12	3A	55	VAL
12	3A	58	VAL
12	3A	59	ARG
12	3A	60	LEU
12	3A	64	TYR
12	3A	80	HIS
12	3A	81	SER
12	3A	82	VAL
12	3A	83	VAL
12	3A	84	LEU
12	3A	85	ILE
12	3A	96	VAL
12	3A	102	ARG
12	3A	111	LYS
12	3A	122	THR
13	4A	3	ARG
13	4A	4	ILE
13	4A	7	VAL
13	4A	17	VAL
13	4A	19	LEU
13	4A	39	ILE
13	4A	47	ASP
13	4A	48	LEU
13	4A	49	THR
13	4A	50	GLU
13	4A	56	LEU
13	4A	63	THR
13	4A	64	TRP
13	4A	66	LEU
13	4A	70	LEU
13	4A	77	ASN
13	4A	82	MET
13	4A	83	ASP
13	4A	94	ARG
13	4A	98	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	4A	103	THR
13	4A	108	ARG
13	4A	117	VAL
14	5A	6	LEU
14	5A	7	ILE
14	5A	12	ARG
14	5A	15	LYS
14	5A	18	VAL
14	5A	22	THR
14	5A	23	ARG
14	5A	26	ARG
14	5A	27	CYS
14	5A	29	ARG
14	5A	33	VAL
14	5A	44	LEU
14	5A	58	LYS
15	6A	3	ILE
15	6A	4	THR
15	6A	22	THR
15	6A	31	LEU
15	6A	32	LEU
15	6A	39	LEU
15	6A	48	LYS
15	6A	66	LEU
15	6A	68	ARG
15	6A	76	GLU
15	6A	83	GLU
15	6A	88	ARG
16	7A	2	VAL
16	7A	12	LYS
16	7A	18	ARG
16	7A	21	VAL
16	7A	25	ARG
16	7A	27	LYS
16	7A	29	ASP
16	7A	39	TYR
16	7A	45	THR
16	7A	53	VAL
16	7A	54	GLU
16	7A	62	VAL
16	7A	65	GLN
16	7A	67	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
16	7A	72	ARG
16	7A	74	LEU
16	7A	82	GLN
17	8A	13	ASP
17	8A	25	ARG
17	8A	26	GLN
17	8A	35	VAL
17	8A	49	GLU
17	8A	53	LEU
17	8A	60	ILE
17	8A	62	SER
17	8A	63	ARG
17	8A	72	ARG
17	8A	74	LEU
17	8A	75	ARG
17	8A	76	LEU
17	8A	92	ARG
17	8A	98	LEU
17	8A	100	LYS
17	8A	101	ARG
18	9A	21	LYS
18	9A	23	LYS
18	9A	26	LEU
18	9A	29	PHE
18	9A	31	LEU
18	9A	32	ARG
18	9A	36	ASN
18	9A	42	ARG
18	9A	44	LEU
18	9A	45	SER
18	9A	47	THR
18	9A	53	ARG
18	9A	54	ARG
18	9A	58	LEU
18	9A	76	LEU
18	9A	86	VAL
18	9A	87	ARG
19	AA	9	VAL
19	AA	12	ASP
19	AA	15	LEU
19	AA	20	LEU
19	AA	22	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
19	AA	23	ASN
19	AA	29	ARG
19	AA	30	LEU
19	AA	32	LYS
19	AA	43	GLU
19	AA	49	ILE
19	AA	58	VAL
19	AA	60	VAL
19	AA	63	THR
19	AA	70	LYS
20	BA	10	LEU
20	BA	11	SER
20	BA	14	LYS
20	BA	17	ARG
20	BA	23	ARG
20	BA	24	LEU
20	BA	36	LEU
20	BA	53	LEU
20	BA	58	LYS
20	BA	60	GLU
20	BA	64	ASP
20	BA	72	LEU
20	BA	73	HIS
20	BA	75	ASN
20	BA	84	LEU
20	BA	86	ARG
20	BA	87	LYS
20	BA	88	VAL
20	BA	93	GLU
20	BA	99	LEU
20	BA	100	ILE
20	BA	105	SER
21	1B	8	THR
21	1B	25	LYS
28	19	4	LYS
28	19	10	THR
28	19	13	ARG
28	19	23	GLU
28	19	24	ILE
28	19	28	GLU
28	19	31	LYS
28	19	33	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	19	37	LEU
28	19	38	LYS
28	19	43	ARG
28	19	49	ILE
28	19	54	ARG
28	19	61	LEU
28	19	64	ILE
28	19	65	ILE
28	19	68	LYS
28	19	69	ARG
28	19	92	ILE
28	19	94	LEU
28	19	105	ILE
28	19	109	ASP
28	19	111	LEU
28	19	116	GLN
28	19	138	VAL
28	19	141	VAL
28	19	145	VAL
28	19	147	LEU
28	19	154	LYS
28	19	155	LEU
28	19	165	ILE
28	19	166	GLN
28	19	174	ILE
28	19	182	LEU
28	19	192	THR
28	19	193	VAL
28	19	200	ASP
28	19	208	LYS
28	19	211	ARG
28	19	212	SER
28	19	239	ARG
28	19	242	ARG
28	19	244	ARG
28	19	255	LYS
28	19	257	LEU
28	19	262	ARG
28	19	263	ARG
28	19	266	SER
28	19	267	SER
28	19	268	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	19	271	ILE
29	29	1	MET
29	29	4	ILE
29	29	7	VAL
29	29	11	MET
29	29	12	THR
29	29	19	ARG
29	29	23	VAL
29	29	25	VAL
29	29	27	LEU
29	29	33	VAL
29	29	37	ARG
29	29	44	TYR
29	29	45	THR
29	29	48	GLN
29	29	49	LEU
29	29	57	LYS
29	29	59	VAL
29	29	60	ASN
29	29	63	LEU
29	29	66	HIS
29	29	72	VAL
29	29	75	VAL
29	29	76	ARG
29	29	77	ILE
29	29	78	LEU
29	29	89	ASP
29	29	91	VAL
29	29	93	VAL
29	29	100	GLU
29	29	107	THR
29	29	116	VAL
29	29	117	MET
29	29	119	ARG
29	29	134	ILE
29	29	138	PRO
29	29	144	ARG
29	29	145	LYS
29	29	163	GLU
29	29	167	VAL
29	29	170	LEU
29	29	175	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	29	179	GLU
29	29	181	LEU
29	29	188	VAL
29	29	200	GLU
29	29	201	THR
29	29	202	LYS
30	39	6	VAL
30	39	7	TYR
30	39	8	GLN
30	39	11	VAL
30	39	12	LEU
30	39	13	SER
30	39	17	ARG
30	39	20	LEU
30	39	24	LEU
30	39	27	GLU
30	39	28	ILE
30	39	35	GLU
30	39	38	ARG
30	39	50	SER
30	39	53	THR
30	39	64	ILE
30	39	66	PRO
30	39	67	GLN
30	39	70	THR
30	39	72	ARG
30	39	74	ARG
30	39	82	ILE
30	39	83	PHE
30	39	88	VAL
30	39	89	VAL
30	39	106	ARG
30	39	107	LYS
30	39	110	LEU
30	39	123	LEU
30	39	126	VAL
30	39	136	THR
30	39	140	LEU
30	39	145	GLU
30	39	153	SER
30	39	154	VAL
30	39	158	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
30	39	164	ARG
30	39	165	ARG
30	39	168	ARG
30	39	169	ASN
30	39	181	LEU
30	39	183	VAL
30	39	192	LEU
30	39	193	VAL
30	39	196	LEU
30	39	200	GLU
30	39	201	VAL
30	39	204	ASN
31	49	7	LEU
31	49	13	GLU
31	49	16	ARG
31	49	26	GLN
31	49	28	VAL
31	49	40	ASN
31	49	49	ASP
31	49	52	ILE
31	49	54	GLU
31	49	62	LEU
31	49	63	ILE
31	49	67	LYS
31	49	71	THR
31	49	80	PHE
31	49	82	LEU
31	49	90	LEU
31	49	91	ARG
31	49	94	LEU
31	49	96	ARG
31	49	115	ARG
31	49	118	ARG
31	49	128	ARG
31	49	135	LEU
31	49	136	ARG
31	49	139	LEU
31	49	147	ASP
31	49	149	VAL
31	49	153	ARG
31	49	157	ILE
31	49	162	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	49	165	THR
31	49	167	GLU
32	59	11	VAL
32	59	15	VAL
32	59	16	SER
32	59	19	VAL
32	59	23	ARG
32	59	24	VAL
32	59	32	GLU
32	59	37	VAL
32	59	41	MET
32	59	45	VAL
32	59	50	VAL
32	59	52	VAL
32	59	53	GLU
32	59	70	THR
32	59	71	LEU
32	59	72	ILE
32	59	83	TYR
32	59	89	ILE
32	59	98	LEU
32	59	103	LEU
32	59	105	LEU
32	59	107	VAL
32	59	113	VAL
32	59	122	THR
32	59	123	PHE
32	59	129	THR
32	59	131	VAL
32	59	136	ILE
32	59	139	GLN
32	59	143	GLN
32	59	144	VAL
32	59	157	TYR
32	59	162	ILE
32	59	167	GLU
32	59	170	ARG
33	69	7	GLU
33	69	14	ASP
33	69	27	ARG
33	69	37	VAL
33	69	38	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	69	40	THR
33	69	41	GLU
33	69	44	LEU
33	69	51	ILE
33	69	52	ARG
33	69	56	LYS
33	69	60	GLU
33	69	61	ARG
33	69	64	GLU
33	69	67	ARG
33	69	69	LYS
33	69	74	ASN
33	69	75	LEU
33	69	76	THR
33	69	77	LEU
33	69	81	VAL
33	69	85	GLU
33	69	86	THR
33	69	87	LYS
33	69	91	SER
33	69	95	LYS
33	69	101	LEU
33	69	103	ARG
33	69	105	HIS
33	69	109	ILE
33	69	112	LYS
33	69	114	LEU
33	69	117	GLU
33	69	125	GLU
33	69	128	LEU
33	69	136	VAL
33	69	138	ILE
33	69	145	VAL
34	15	1	MET
34	15	7	LYS
34	15	28	THR
34	15	29	LYS
34	15	32	THR
34	15	33	LEU
34	15	34	LEU
34	15	46	VAL
34	15	48	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	15	55	VAL
34	15	58	ASP
34	15	59	LYS
34	15	61	ARG
34	15	63	THR
34	15	68	GLU
34	15	71	ILE
34	15	76	SER
34	15	87	LEU
34	15	89	LYS
34	15	91	LEU
34	15	93	THR
34	15	94	HIS
34	15	96	GLU
34	15	99	LEU
34	15	112	LEU
34	15	120	LEU
34	15	130	HIS
34	15	134	ARG
34	15	138	LEU
35	25	8	LEU
35	25	10	VAL
35	25	22	ILE
35	25	24	VAL
35	25	28	SER
35	25	31	LYS
35	25	35	VAL
35	25	39	ILE
35	25	48	PRO
35	25	49	ARG
35	25	59	LYS
35	25	66	LYS
35	25	70	LYS
35	25	78	ARG
35	25	86	ILE
35	25	87	ILE
35	25	94	ARG
35	25	96	THR
35	25	97	ARG
35	25	98	VAL
35	25	104	ARG
35	25	108	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	25	113	LYS
35	25	114	ILE
35	25	116	SER
35	25	117	LEU
36	35	4	SER
36	35	6	LEU
36	35	10	PRO
36	35	13	ASN
36	35	15	ARG
36	35	18	ARG
36	35	19	VAL
36	35	21	ARG
36	35	30	THR
36	35	36	LYS
36	35	41	ARG
36	35	45	LEU
36	35	50	ARG
36	35	52	GLU
36	35	61	ARG
36	35	64	LYS
36	35	65	ARG
36	35	67	MET
36	35	70	GLN
36	35	71	VAL
36	35	74	GLU
36	35	75	ILE
36	35	76	LYS
36	35	77	ARG
36	35	81	GLN
36	35	83	VAL
36	35	84	ASN
36	35	85	LEU
36	35	86	LYS
36	35	88	LEU
36	35	91	PHE
36	35	98	GLU
36	35	99	LEU
36	35	101	VAL
36	35	105	LEU
36	35	106	LEU
36	35	107	LYS
36	35	111	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	35	112	LEU
36	35	114	ILE
36	35	124	LYS
36	35	125	VAL
36	35	133	SER
36	35	138	LEU
36	35	139	LYS
36	35	144	GLU
36	35	147	LEU
36	35	148	LEU
36	35	149	GLU
37	45	6	ARG
37	45	7	MET
37	45	8	LYS
37	45	10	ARG
37	45	14	ARG
37	45	16	ARG
37	45	17	LEU
37	45	18	LYS
37	45	21	THR
37	45	22	LYS
37	45	35	VAL
37	45	45	GLN
37	45	56	ARG
37	45	59	ARG
37	45	60	ARG
37	45	63	LYS
37	45	64	ILE
37	45	79	LEU
37	45	80	GLU
37	45	81	VAL
37	45	83	MET
37	45	89	ASN
37	45	90	VAL
37	45	91	GLU
37	45	103	MET
37	45	105	GLU
37	45	110	THR
37	45	118	LEU
37	45	127	ILE
37	45	132	VAL
37	45	133	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
37	45	139	GLU
38	55	4	LEU
38	55	17	ARG
38	55	18	LEU
38	55	28	LEU
38	55	29	LEU
38	55	35	THR
38	55	44	LEU
38	55	48	VAL
38	55	51	LEU
38	55	57	ARG
38	55	59	ASP
38	55	63	ARG
38	55	65	LEU
38	55	66	VAL
38	55	67	LEU
38	55	71	GLN
38	55	74	LYS
38	55	75	LEU
38	55	79	LEU
38	55	81	ASP
38	55	82	GLU
38	55	88	ARG
38	55	97	VAL
38	55	102	GLU
38	55	104	ARG
38	55	111	LEU
38	55	113	LEU
38	55	115	GLU
38	55	118	GLU
39	65	11	LYS
39	65	14	VAL
39	65	19	LYS
39	65	20	ARG
39	65	21	THR
39	65	24	LEU
39	65	46	VAL
39	65	48	LEU
39	65	50	SER
39	65	52	SER
39	65	54	LEU
39	65	56	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	65	58	LEU
39	65	59	LYS
39	65	63	THR
39	65	69	VAL
39	65	71	ARG
39	65	78	LEU
39	65	82	ILE
39	65	88	ASP
39	65	89	ARG
39	65	93	LYS
39	65	97	ARG
39	65	99	LYS
39	65	101	LEU
39	65	106	ARG
39	65	107	GLU
39	65	110	LEU
39	65	111	GLU
40	75	8	LYS
40	75	9	LEU
40	75	10	VAL
40	75	11	GLU
40	75	13	ARG
40	75	14	TYR
40	75	15	VAL
40	75	27	THR
40	75	28	VAL
40	75	30	VAL
40	75	34	VAL
40	75	36	GLU
40	75	40	THR
40	75	49	VAL
40	75	50	ILE
40	75	55	ASN
40	75	64	ARG
40	75	65	LYS
40	75	86	ILE
40	75	88	ILE
40	75	89	VAL
40	75	93	ARG
40	75	102	ILE
40	75	105	LEU
40	75	106	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	75	107	ASP
40	75	112	ARG
40	75	113	LYS
40	75	121	ILE
40	75	125	ARG
40	75	132	LYS
40	75	133	GLU
41	85	3	ARG
41	85	5	LYS
41	85	8	VAL
41	85	11	ARG
41	85	12	ARG
41	85	20	LEU
41	85	27	LEU
41	85	31	SER
41	85	33	ARG
41	85	34	LYS
41	85	55	ARG
41	85	60	LEU
41	85	63	VAL
41	85	64	ARG
41	85	74	LEU
41	85	80	ILE
41	85	83	LEU
41	85	92	ARG
41	85	93	LYS
41	85	95	LEU
41	85	97	ASP
41	85	101	ARG
41	85	105	VAL
41	85	109	LEU
41	85	112	ARG
42	95	5	VAL
42	95	19	LYS
42	95	21	ARG
42	95	24	LYS
42	95	33	VAL
42	95	35	LEU
42	95	38	LEU
42	95	40	LEU
42	95	45	THR
42	95	46	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	95	47	VAL
42	95	49	THR
42	95	52	VAL
42	95	58	VAL
42	95	62	LEU
42	95	66	ARG
42	95	68	LYS
42	95	69	LYS
42	95	70	ILE
42	95	71	LEU
42	95	74	LYS
42	95	79	VAL
42	95	80	GLN
42	95	81	TYR
42	95	84	LYS
42	95	85	LYS
42	95	88	ARG
42	95	89	GLN
42	95	91	TYR
42	95	95	LEU
42	95	97	LYS
43	A5	1	MET
43	A5	11	ARG
43	A5	17	VAL
43	A5	20	VAL
43	A5	23	LEU
43	A5	28	SER
43	A5	37	ARG
43	A5	39	THR
43	A5	41	LYS
43	A5	51	LEU
43	A5	52	GLU
43	A5	63	ASP
43	A5	65	LEU
43	A5	67	ASP
43	A5	70	TYR
43	A5	72	LYS
43	A5	76	VAL
43	A5	95	ILE
43	A5	96	ILE
43	A5	100	THR
43	A5	105	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
43	A5	106	ILE
43	A5	107	LEU
43	A5	111	HIS
44	B5	12	VAL
44	B5	27	THR
44	B5	30	VAL
44	B5	38	GLU
44	B5	43	VAL
44	B5	45	THR
44	B5	51	VAL
44	B5	53	LYS
44	B5	54	VAL
44	B5	60	ARG
44	B5	63	LYS
44	B5	69	TYR
44	B5	76	ARG
44	B5	78	LYS
44	B5	80	ILE
44	B5	83	VAL
44	B5	88	LYS
44	B5	92	LEU
45	C5	3	VAL
45	C5	13	VAL
45	C5	14	LEU
45	C5	24	VAL
45	C5	29	GLU
45	C5	31	LEU
45	C5	33	LYS
45	C5	37	VAL
45	C5	38	ILE
45	C5	43	ASN
45	C5	45	VAL
45	C5	49	VAL
45	C5	50	ARG
45	C5	51	VAL
45	C5	52	SER
45	C5	55	TYR
45	C5	60	PHE
45	C5	62	GLU
45	C5	63	LYS
45	C5	64	GLU
45	C5	67	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
45	C5	70	SER
45	C5	72	VAL
45	C5	84	ARG
45	C5	85	VAL
45	C5	88	LYS
45	C5	89	PHE
45	C5	90	LEU
45	C5	98	VAL
45	C5	99	CYS
45	C5	102	CYS
46	D5	4	ARG
46	D5	11	GLU
46	D5	14	LYS
46	D5	19	ARG
46	D5	24	LEU
46	D5	30	ASN
46	D5	35	ARG
46	D5	36	LYS
46	D5	53	ILE
46	D5	56	VAL
46	D5	57	ILE
46	D5	59	LEU
46	D5	63	ASP
46	D5	70	LEU
46	D5	71	VAL
46	D5	72	ARG
46	D5	74	VAL
46	D5	76	LEU
46	D5	90	VAL
46	D5	93	ASP
46	D5	98	MET
46	D5	103	ARG
46	D5	123	ASP
46	D5	125	LEU
46	D5	132	ASN
46	D5	137	ILE
46	D5	165	VAL
46	D5	168	GLU
47	E5	10	THR
47	E5	11	ARG
47	E5	17	GLN
47	E5	19	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
47	E5	36	ILE
47	E5	41	ARG
47	E5	43	THR
47	E5	58	THR
47	E5	62	LEU
47	E5	70	GLN
47	E5	74	ARG
48	F5	4	VAL
48	F5	18	ILE
48	F5	27	GLU
48	F5	35	THR
48	F5	37	ILE
48	F5	38	SER
48	F5	40	ARG
48	F5	42	GLN
48	F5	56	GLN
48	F5	62	VAL
48	F5	67	ILE
48	F5	69	LYS
48	F5	74	VAL
48	F5	76	ARG
48	F5	78	LYS
48	F5	80	LEU
48	F5	81	LYS
48	F5	82	LEU
48	F5	83	GLU
48	F5	85	LEU
48	F5	86	SER
48	F5	89	GLU
48	F5	91	LYS
48	F5	95	LEU
48	F5	96	LYS
48	F5	97	LEU
49	G5	5	GLU
49	G5	12	GLU
49	G5	14	ARG
49	G5	16	LEU
49	G5	17	SER
49	G5	19	VAL
49	G5	24	LEU
49	G5	26	ARG
49	G5	30	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
49	G5	34	GLU
49	G5	35	LEU
49	G5	46	GLN
49	G5	47	ASN
49	G5	48	HIS
49	G5	50	ILE
49	G5	51	ARG
49	G5	53	LEU
49	G5	56	GLN
49	G5	60	LEU
49	G5	62	THR
49	G5	65	ASN
49	G5	68	ARG
50	H5	8	LEU
50	H5	9	VAL
50	H5	17	LYS
50	H5	23	LEU
50	H5	33	GLN
50	H5	34	GLU
50	H5	36	VAL
50	H5	37	LEU
50	H5	38	GLU
50	H5	40	THR
50	H5	44	ARG
50	H5	55	ARG
50	H5	58	VAL
51	I5	1	MET
51	I5	6	HIS
51	I5	8	LYS
51	I5	14	ILE
51	I5	20	ASN
51	I5	21	VAL
51	I5	22	ILE
51	I5	25	TYR
51	I5	27	THR
51	I5	31	ILE
51	I5	36	CYS
51	I5	53	GLU
51	I5	61	ARG
52	J5	3	LYS
52	J5	6	VAL
52	J5	16	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
52	J5	25	LEU
52	J5	29	THR
52	J5	44	THR
52	J5	48	GLU
52	J5	51	TYR
52	J5	57	VAL
52	J5	59	GLU
53	L5	3	ARG
53	L5	4	THR
53	L5	8	ASN
53	L5	9	ARG
53	L5	14	LYS
53	L5	33	ARG
53	L5	36	GLN
53	L5	43	THR
54	M5	3	LYS
54	M5	8	LYS
54	M5	13	ARG
54	M5	22	VAL
54	M5	26	LYS
54	M5	27	THR
54	M5	30	ARG
54	M5	32	LEU
54	M5	33	ASN
54	M5	35	GLN
54	M5	37	SER
54	M5	40	GLU
54	M5	41	ILE
54	M5	49	VAL
54	M5	50	LEU
54	M5	52	LYS
54	M5	53	PRO
54	M5	58	ILE
54	M5	61	LEU
54	M5	62	LEU
54	M5	63	PRO

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (63) such sidechains are listed below:

Mol	Chain	Res	Type
2	1E	110	GLN
2	1E	240	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	2E	123	GLN
4	3E	43	HIS
4	3E	74	GLN
6	5E	73	ASN
7	6E	56	GLN
7	6E	84	ASN
7	6E	86	GLN
9	8E	89	ASN
9	8E	124	GLN
13	4I	77	ASN
16	7I	14	ASN
17	8I	94	ASN
19	AI	69	HIS
20	BI	26	ASN
28	11	96	HIS
28	11	201	HIS
28	11	253	GLN
29	21	143	ASN
34	58	45	ASN
34	58	69	GLN
35	68	88	ASN
37	88	13	GLN
39	A8	61	ASN
40	B8	123	GLN
41	C8	75	ASN
45	G8	57	GLN
46	H8	30	ASN
46	H8	34	ASN
46	H8	65	GLN
47	I8	29	GLN
48	J8	47	GLN
49	K8	65	ASN
51	M8	20	ASN
2	12	45	GLN
3	22	37	GLN
3	22	98	ASN
3	22	108	ASN
3	22	118	GLN
3	22	170	GLN
4	32	160	GLN
6	52	13	ASN
6	52	16	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	62	97	GLN
8	72	82	HIS
10	1A	78	ASN
13	4A	77	ASN
15	6A	62	GLN
18	9A	36	ASN
28	19	96	HIS
29	29	60	ASN
29	29	121	ASN
33	69	11	ASN
34	15	69	GLN
35	25	90	GLN
36	35	81	GLN
37	45	13	GLN
38	55	31	HIS
41	85	71	GLN
47	E5	12	ASN
51	I5	6	HIS
51	I5	60	GLN

5.3.3 RNA

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	13	1504/1522 (98%)	381 (25%)	35 (2%)
1	1G	1503/1522 (98%)	362 (24%)	37 (2%)
22	1K	84/85 (98%)	38 (45%)	8 (9%)
23	2K	76/77 (98%)	21 (27%)	3 (3%)
23	2L	76/77 (98%)	17 (22%)	1 (1%)
24	1L	84/85 (98%)	35 (41%)	8 (9%)
24	3K	84/85 (98%)	27 (32%)	4 (4%)
25	4K	11/30 (36%)	4 (36%)	1 (9%)
25	4L	12/30 (40%)	6 (50%)	3 (25%)
26	14	2908/2918 (99%)	763 (26%)	56 (1%)
26	1H	2911/2918 (99%)	727 (24%)	60 (2%)
27	16	121/122 (99%)	20 (16%)	0
27	1J	121/122 (99%)	33 (27%)	3 (2%)
55	3L	84/85 (98%)	34 (40%)	4 (4%)
All	All	9579/9678 (98%)	2468 (25%)	223 (2%)

All (2468) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	13	5	U
1	13	6	G
1	13	8	A
1	13	9	G
1	13	13	U
1	13	14	U
1	13	21	G
1	13	32	A
1	13	39	G
1	13	47	C
1	13	48	C
1	13	49	U
1	13	50	A
1	13	51	A
1	13	54	C
1	13	59	A
1	13	60	A
1	13	61	G
1	13	65	U
1	13	66	G
1	13	79	G
1	13	81	G
1	13	82	U
1	13	84	U
1	13	85	U
1	13	86	U
1	13	89	U
1	13	90	C
1	13	91	C
1	13	95	G
1	13	96	G
1	13	101	A
1	13	105	G
1	13	116	A
1	13	121	C
1	13	129(A)	G
1	13	131	C
1	13	137	C
1	13	138	G
1	13	142	G
1	13	144	G
1	13	145	G
1	13	150	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	13	157	G
1	13	160	A
1	13	161	A
1	13	165	C
1	13	169	C
1	13	172	A
1	13	173	U
1	13	174	C
1	13	186(F)	C
1	13	188	U
1	13	189	U
1	13	190	G
1	13	191(A)	G
1	13	195	A
1	13	197	A
1	13	199	G
1	13	201	C
1	13	208	U
1	13	209	U
1	13	210	U
1	13	216	G
1	13	217	C
1	13	220	G
1	13	222	U
1	13	240	C
1	13	245	C
1	13	247	G
1	13	251	G
1	13	262	A
1	13	266	G
1	13	267	C
1	13	270	A
1	13	281	G
1	13	289	G
1	13	316	G
1	13	321	A
1	13	328	C
1	13	330	C
1	13	332	G
1	13	334	C
1	13	342	C
1	13	344	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	13	345	C
1	13	346	G
1	13	347	G
1	13	352	C
1	13	353	A
1	13	354	G
1	13	357	G
1	13	363	A
1	13	365	U
1	13	367	U
1	13	372	C
1	13	373	A
1	13	383	A
1	13	384	G
1	13	388	G
1	13	390	C
1	13	397	A
1	13	398	C
1	13	406	G
1	13	412	A
1	13	413	G
1	13	419	C
1	13	422	C
1	13	423	G
1	13	424	G
1	13	429	U
1	13	430	A
1	13	439	A
1	13	465	A
1	13	466	C
1	13	467	G
1	13	482	A
1	13	485	G
1	13	487	A
1	13	496	A
1	13	497	U
1	13	505	G
1	13	509	A
1	13	510	A
1	13	511	C
1	13	518	C
1	13	521	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	13	524	G
1	13	527	G
1	13	531	U
1	13	532	A
1	13	533	A
1	13	536	C
1	13	547	A
1	13	549	C
1	13	559	A
1	13	561	U
1	13	564	C
1	13	572	A
1	13	573	A
1	13	576	G
1	13	577	G
1	13	592	G
1	13	596	C
1	13	606	G
1	13	607	A
1	13	608	A
1	13	609	A
1	13	610	G
1	13	623	C
1	13	627	G
1	13	630	G
1	13	631	G
1	13	632	A
1	13	633	G
1	13	639	G
1	13	650	G
1	13	653	A
1	13	655	A
1	13	665	A
1	13	666	G
1	13	677	U
1	13	687	A
1	13	688	G
1	13	703	G
1	13	704	A
1	13	723	U
1	13	724	G
1	13	734	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	13	749	C
1	13	752	G
1	13	753	A
1	13	754	C
1	13	755	G
1	13	759	A
1	13	760	G
1	13	766	A
1	13	767	A
1	13	774	G
1	13	777	A
1	13	793	U
1	13	794	A
1	13	802	A
1	13	813	U
1	13	817	C
1	13	818	G
1	13	821	G
1	13	828	A
1	13	836	G
1	13	837	G
1	13	841	U
1	13	842	C
1	13	843	U
1	13	848	C
1	13	853	G
1	13	858	G
1	13	859	A
1	13	864	A
1	13	870	U
1	13	871	U
1	13	872	A
1	13	873	A
1	13	902	G
1	13	914	A
1	13	921	U
1	13	922	G
1	13	926	G
1	13	927	G
1	13	934	C
1	13	935	A
1	13	936	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	13	940	C
1	13	942	G
1	13	960	U
1	13	968	A
1	13	969	A
1	13	971	G
1	13	972	C
1	13	974	A
1	13	975	A
1	13	976	G
1	13	977	A
1	13	978	A
1	13	982	U
1	13	983	A
1	13	991	U
1	13	992	U
1	13	993	G
1	13	994	A
1	13	998	G
1	13	1004	A
1	13	1005	A
1	13	1006	C
1	13	1007	C
1	13	1008	C
1	13	1009	G
1	13	1012	U
1	13	1017	G
1	13	1021	G
1	13	1024	G
1	13	1025	U
1	13	1026	G
1	13	1028	C
1	13	1028(B)	C
1	13	1029	G
1	13	1030	C
1	13	1032(A)	G
1	13	1033	G
1	13	1040	U
1	13	1042	G
1	13	1044	A
1	13	1046	A
1	13	1053	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	13	1054	C
1	13	1055	A
1	13	1056	U
1	13	1058	G
1	13	1064	G
1	13	1065	U
1	13	1066	C
1	13	1077	G
1	13	1081	G
1	13	1094	G
1	13	1095	U
1	13	1101	A
1	13	1121	U
1	13	1124	G
1	13	1125	U
1	13	1126	U
1	13	1127	G
1	13	1128	C
1	13	1129	C
1	13	1130	A
1	13	1131	G
1	13	1133	G
1	13	1136	U
1	13	1137	C
1	13	1138	G
1	13	1139	G
1	13	1140	C
1	13	1146	A
1	13	1147	C
1	13	1152	A
1	13	1154	G
1	13	1157	A
1	13	1158	C
1	13	1159	U
1	13	1161	C
1	13	1166	G
1	13	1170	A
1	13	1171	G
1	13	1174	G
1	13	1177	G
1	13	1178	G
1	13	1181	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	13	1183	A
1	13	1189	C
1	13	1190	G
1	13	1191	A
1	13	1193	G
1	13	1194	U
1	13	1196	U
1	13	1197	G
1	13	1201	A
1	13	1202	G
1	13	1212	U
1	13	1213	A
1	13	1220	G
1	13	1225	A
1	13	1226	C
1	13	1227	A
1	13	1238	A
1	13	1240	U
1	13	1241	G
1	13	1253	G
1	13	1256	A
1	13	1257	U
1	13	1258	G
1	13	1260	C
1	13	1270	C
1	13	1272	G
1	13	1275	A
1	13	1278	U
1	13	1279	A
1	13	1280	A
1	13	1281	U
1	13	1282	C
1	13	1285	A
1	13	1286	A
1	13	1287	A
1	13	1299	A
1	13	1300	G
1	13	1301	U
1	13	1302	U
1	13	1303	C
1	13	1305	G
1	13	1322	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	13	1323	G
1	13	1331	G
1	13	1333	A
1	13	1335	C
1	13	1336	C
1	13	1337	G
1	13	1346	A
1	13	1347	G
1	13	1350	A
1	13	1353	G
1	13	1363	A
1	13	1365	G
1	13	1370	G
1	13	1377	A
1	13	1378	C
1	13	1381	U
1	13	1388	C
1	13	1398	A
1	13	1401	G
1	13	1419	G
1	13	1422	G
1	13	1429	C
1	13	1442	G
1	13	1443	G
1	13	1446	A
1	13	1451	A
1	13	1452	C
1	13	1453	G
1	13	1467	G
1	13	1487	G
1	13	1492	A
1	13	1495	U
1	13	1497	G
1	13	1498	U
1	13	1499	A
1	13	1503	A
1	13	1504	G
1	13	1505	G
1	13	1506	U
1	13	1517	G
1	13	1519	A
1	13	1529	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	13	1530	G
1	13	1531	A
22	1K	4	G
22	1K	7	G
22	1K	8	U
22	1K	9	U
22	1K	10	C
22	1K	11	C
22	1K	13	G
22	1K	14	A
22	1K	15	G
22	1K	16	C
22	1K	17	G
22	1K	18	G
22	1K	19	C
22	1K	20	C
22	1K	21	A
22	1K	22	A
22	1K	24	G
22	1K	25	G
22	1K	26	G
22	1K	30	A
22	1K	35	QUO
22	1K	46	G
22	1K	47	U
22	1K	49	A
22	1K	50	U
22	1K	56	U
22	1K	58	G
22	1K	63	5MU
22	1K	65	C
22	1K	70	C
22	1K	72	U
22	1K	76	C
22	1K	78	C
22	1K	79	A
22	1K	80	C
22	1K	82	A
22	1K	83	C
22	1K	84	C
23	2K	2	G
23	2K	9	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	2K	13	C
23	2K	16	C
23	2K	18	C
23	2K	20	G
23	2K	21	U
23	2K	22	A
23	2K	23	G
23	2K	27	G
23	2K	39	A
23	2K	48	U
23	2K	49	C
23	2K	50	G
23	2K	51	U
23	2K	53	G
23	2K	54	G
23	2K	55	5MU
23	2K	62	C
23	2K	68	C
23	2K	77	A
24	3K	5	G
24	3K	6	G
24	3K	9	U
24	3K	11	C
24	3K	14	A
24	3K	15	G
24	3K	17	G
24	3K	18	G
24	3K	19	C
24	3K	20	C
24	3K	21	A
24	3K	23	A
24	3K	38	A
24	3K	43	G
24	3K	46	G
24	3K	47	U
24	3K	48	C
24	3K	50	U
24	3K	52	G
24	3K	55	U
24	3K	56	U
24	3K	57	C
24	3K	58	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	3K	67	A
24	3K	68	A
24	3K	82	A
24	3K	85	A
25	4K	14	A
25	4K	20	A
25	4K	23	A
25	4K	24	A
26	1H	2	G
26	1H	4	C
26	1H	5	A
26	1H	9	U
26	1H	12	U
26	1H	14	A
26	1H	15	G
26	1H	17	G
26	1H	27	G
26	1H	34	C
26	1H	35	G
26	1H	43	G
26	1H	46	C
26	1H	51	G
26	1H	60	G
26	1H	61	G
26	1H	66	C
26	1H	71	A
26	1H	72	U
26	1H	74	A
26	1H	75	G
26	1H	85	G
26	1H	93	C
26	1H	99	U
26	1H	102	G
26	1H	106	C
26	1H	110	G
26	1H	118	A
26	1H	119	A
26	1H	120	U
26	1H	123	G
26	1H	125	G
26	1H	140	A
26	1H	155	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	163	U
26	1H	164	U
26	1H	171	G
26	1H	174	C
26	1H	181	A
26	1H	188	G
26	1H	196	A
26	1H	197	A
26	1H	199	A
26	1H	201	C
26	1H	214	G
26	1H	215	G
26	1H	216	A
26	1H	220	G
26	1H	222	A
26	1H	223	A
26	1H	227	A
26	1H	228	A
26	1H	229	A
26	1H	230	U
26	1H	232	G
26	1H	233	A
26	1H	248	G
26	1H	250	G
26	1H	252	G
26	1H	261	G
26	1H	269	U
26	1H	270(M)	U
26	1H	270(N)	G
26	1H	271(B)	G
26	1H	271(C)	U
26	1H	271	G
26	1H	273(E)	U
26	1H	274	G
26	1H	275	G
26	1H	276	A
26	1H	278	A
26	1H	291	C
26	1H	295	G
26	1H	299	A
26	1H	311	A
26	1H	323	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	324	A
26	1H	329	G
26	1H	330	A
26	1H	331	A
26	1H	342	G
26	1H	352	G
26	1H	362	U
26	1H	363	G
26	1H	364	C
26	1H	371	A
26	1H	372	G
26	1H	380	U
26	1H	386	G
26	1H	396	G
26	1H	405	U
26	1H	406	G
26	1H	407	G
26	1H	411	G
26	1H	428	A
26	1H	444	C
26	1H	448	U
26	1H	451	C
26	1H	454	A
26	1H	455	C
26	1H	457	A
26	1H	459	U
26	1H	460	A
26	1H	463	G
26	1H	467	G
26	1H	470	A
26	1H	471	A
26	1H	481	G
26	1H	482	A
26	1H	483	A
26	1H	491	G
26	1H	502	A
26	1H	505	A
26	1H	508	G
26	1H	509	C
26	1H	528	A
26	1H	529	A
26	1H	530	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	531	C
26	1H	532	A
26	1H	533	G
26	1H	545	G
26	1H	546	C
26	1H	549	G
26	1H	556	G
26	1H	563	G
26	1H	564	C
26	1H	567	A
26	1H	573	G
26	1H	575	A
26	1H	580	C
26	1H	587	C
26	1H	588	U
26	1H	593	G
26	1H	602	G
26	1H	603	A
26	1H	607	U
26	1H	609	A
26	1H	613	U
26	1H	614	U
26	1H	617	G
26	1H	621	A
26	1H	622	G
26	1H	627	A
26	1H	636	G
26	1H	637	A
26	1H	645	C
26	1H	646	A
26	1H	648	G
26	1H	649	G
26	1H	654	A
26	1H	654(A)	A
26	1H	654(G)	C
26	1H	654(H)	G
26	1H	654(I)	C
26	1H	654(J)	A
26	1H	654(K)	C
26	1H	654(M)	C
26	1H	654(N)	G
26	1H	654(O)	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	654(P)	G
26	1H	654(T)	A
26	1H	664	C
26	1H	678	C
26	1H	686	G
26	1H	690	G
26	1H	703	U
26	1H	717	G
26	1H	729	G
26	1H	730	C
26	1H	738	G
26	1H	745	G
26	1H	752	A
26	1H	753	C
26	1H	764	A
26	1H	765	G
26	1H	775	G
26	1H	776	G
26	1H	777	A
26	1H	782	A
26	1H	784	A
26	1H	785	G
26	1H	790	C
26	1H	791	C
26	1H	792	G
26	1H	805	G
26	1H	810	U
26	1H	812	C
26	1H	822	U
26	1H	827	U
26	1H	828	U
26	1H	829	A
26	1H	846	C
26	1H	847	U
26	1H	855	G
26	1H	859	G
26	1H	860	U
26	1H	861	A
26	1H	866	A
26	1H	877	U
26	1H	879	G
26	1H	880	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	881	G
26	1H	882	G
26	1H	883	G
26	1H	884	C
26	1H	885	C
26	1H	886	C
26	1H	887	A
26	1H	888	C
26	1H	890	A
26	1H	893	C
26	1H	894	C
26	1H	895	U
26	1H	896	A
26	1H	897	C
26	1H	898	C
26	1H	900	A
26	1H	901	A
26	1H	906	G
26	1H	907	U
26	1H	910	A
26	1H	917	A
26	1H	918	A
26	1H	925	C
26	1H	926	A
26	1H	932	G
26	1H	938	G
26	1H	941	A
26	1H	945	A
26	1H	946	G
26	1H	947	G
26	1H	958	U
26	1H	959	A
26	1H	961	C
26	1H	968	G
26	1H	974	G
26	1H	974(A)	C
26	1H	975	G
26	1H	983	A
26	1H	990	A
26	1H	996	A
26	1H	999	U
26	1H	1003	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	1005	C
26	1H	1011	G
26	1H	1012	U
26	1H	1013	C
26	1H	1020	A
26	1H	1022	G
26	1H	1023	U
26	1H	1025	G
26	1H	1026	U
26	1H	1027	A
26	1H	1033	U
26	1H	1040	C
26	1H	1045	A
26	1H	1046	A
26	1H	1047	G
26	1H	1050	A
26	1H	1054	A
26	1H	1061	U
26	1H	1062	G
26	1H	1064	C
26	1H	1066	U
26	1H	1067	A
26	1H	1068	G
26	1H	1071	G
26	1H	1072	C
26	1H	1077	A
26	1H	1078	U
26	1H	1079	C
26	1H	1080	A
26	1H	1081	U
26	1H	1082	U
26	1H	1084	A
26	1H	1085	A
26	1H	1086	A
26	1H	1087	G
26	1H	1088	A
26	1H	1090	U
26	1H	1093	G
26	1H	1095	A
26	1H	1096	A
26	1H	1097	U
26	1H	1105	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	1106	G
26	1H	1109	C
26	1H	1110	G
26	1H	1112	G
26	1H	1122	G
26	1H	1126	A
26	1H	1127	A
26	1H	1129	A
26	1H	1130	U
26	1H	1135	C
26	1H	1136	G
26	1H	1139	G
26	1H	1142	U
26	1H	1142(A)	A
26	1H	1144	G
26	1H	1149	G
26	1H	1155	A
26	1H	1156	A
26	1H	1171	G
26	1H	1175	U
26	1H	1176	G
26	1H	1178	C
26	1H	1179	C
26	1H	1187	G
26	1H	1188	U
26	1H	1195	G
26	1H	1204	A
26	1H	1205	U
26	1H	1210	A
26	1H	1211	U
26	1H	1220	A
26	1H	1221	C
26	1H	1225	C
26	1H	1229(A)	G
26	1H	1240	U
26	1H	1244	G
26	1H	1250	G
26	1H	1253	A
26	1H	1256	G
26	1H	1265	A
26	1H	1267	U
26	1H	1271	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	1272	A
26	1H	1300	U
26	1H	1301	A
26	1H	1306	C
26	1H	1313	U
26	1H	1314	C
26	1H	1321	A
26	1H	1329	U
26	1H	1345	C
26	1H	1347	G
26	1H	1349	A
26	1H	1359	A
26	1H	1360	A
26	1H	1365	A
26	1H	1367	A
26	1H	1368	G
26	1H	1369	G
26	1H	1370	C
26	1H	1378	A
26	1H	1379	A
26	1H	1380	G
26	1H	1384	A
26	1H	1385	G
26	1H	1386	C
26	1H	1391	U
26	1H	1397	U
26	1H	1407	C
26	1H	1416	G
26	1H	1420	U
26	1H	1421	G
26	1H	1422	G
26	1H	1427	A
26	1H	1428	C
26	1H	1437	C
26	1H	1444(A)	A
26	1H	1449	A
26	1H	1449(A)	G
26	1H	1455	G
26	1H	1456	G
26	1H	1458	C
26	1H	1459	G
26	1H	1460	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	1461	G
26	1H	1467	C
26	1H	1471	A
26	1H	1473	G
26	1H	1478	G
26	1H	1493	C
26	1H	1495	A
26	1H	1497	U
26	1H	1508	A
26	1H	1509	C
26	1H	1510	A
26	1H	1511	A
26	1H	1517	G
26	1H	1522	G
26	1H	1526	G
26	1H	1528	A
26	1H	1534	G
26	1H	1535	U
26	1H	1536	A
26	1H	1537	C
26	1H	1538	G
26	1H	1540	G
26	1H	1543	A
26	1H	1544	C
26	1H	1545	A
26	1H	1547	C
26	1H	1548	C
26	1H	1554	A
26	1H	1556	C
26	1H	1558	A
26	1H	1559	G
26	1H	1560	G
26	1H	1566	A
26	1H	1567	A
26	1H	1569	A
26	1H	1578	U
26	1H	1580	A
26	1H	1586	A
26	1H	1593	G
26	1H	1606	G
26	1H	1608	A
26	1H	1609	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	1610	A
26	1H	1613	G
26	1H	1616	A
26	1H	1617	C
26	1H	1618	A
26	1H	1634	A
26	1H	1647	G
26	1H	1648	C
26	1H	1651	G
26	1H	1652	A
26	1H	1658	C
26	1H	1659	U
26	1H	1660	C
26	1H	1669	A
26	1H	1674	G
26	1H	1685	C
26	1H	1695	G
26	1H	1700	A
26	1H	1706	U
26	1H	1728	G
26	1H	1730	U
26	1H	1731	G
26	1H	1743	G
26	1H	1751	C
26	1H	1756	G
26	1H	1757	U
26	1H	1758	G
26	1H	1763	G
26	1H	1764	G
26	1H	1771	C
26	1H	1773	A
26	1H	1777	U
26	1H	1782	C
26	1H	1785	A
26	1H	1791	A
26	1H	1799	G
26	1H	1800	C
26	1H	1801	G
26	1H	1802	A
26	1H	1808	U
26	1H	1811	G
26	1H	1816	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	1819	A
26	1H	1829	A
26	1H	1830	C
26	1H	1839	G
26	1H	1840	G
26	1H	1847	A
26	1H	1858	G
26	1H	1859	A
26	1H	1860	G
26	1H	1864	U
26	1H	1870	C
26	1H	1878	G
26	1H	1888	G
26	1H	1896	G
26	1H	1900	A
26	1H	1902	C
26	1H	1906	G
26	1H	1913	A
26	1H	1914	C
26	1H	1919	A
26	1H	1920	C
26	1H	1923	U
26	1H	1929	G
26	1H	1930	G
26	1H	1931	U
26	1H	1938	A
26	1H	1945	G
26	1H	1955	U
26	1H	1956	U
26	1H	1960	A
26	1H	1963	U
26	1H	1965	C
26	1H	1967	C
26	1H	1969	A
26	1H	1970	A
26	1H	1971	A
26	1H	1972	A
26	1H	1982	C
26	1H	1983	C
26	1H	1986	A
26	1H	1992	G
26	1H	1993	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	2023	G
26	1H	2031	A
26	1H	2033	A
26	1H	2034	U
26	1H	2035	G
26	1H	2043	C
26	1H	2051	A
26	1H	2053	G
26	1H	2055	C
26	1H	2056	G
26	1H	2060	A
26	1H	2061	G
26	1H	2062	A
26	1H	2063	C
26	1H	2066	C
26	1H	2069	G
26	1H	2077	A
26	1H	2087	G
26	1H	2099	U
26	1H	2100	G
26	1H	2111	C
26	1H	2112	G
26	1H	2113	U
26	1H	2114	A
26	1H	2115	G
26	1H	2116	G
26	1H	2118	U
26	1H	2122	U
26	1H	2123	G
26	1H	2126	A
26	1H	2128	C
26	1H	2131	G
26	1H	2132	U
26	1H	2133	G
26	1H	2135	A
26	1H	2136	C
26	1H	2138	C
26	1H	2139	C
26	1H	2145	C
26	1H	2146	C
26	1H	2147	G
26	1H	2148	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	2154	G
26	1H	2158	A
26	1H	2161	C
26	1H	2166	G
26	1H	2167	U
26	1H	2168	G
26	1H	2169	A
26	1H	2172	U
26	1H	2173	A
26	1H	2176	A
26	1H	2181	G
26	1H	2189	U
26	1H	2190	G
26	1H	2198	A
26	1H	2205	C
26	1H	2210	G
26	1H	2211	G
26	1H	2212	A
26	1H	2213	U
26	1H	2215	G
26	1H	2225	A
26	1H	2226	C
26	1H	2238	G
26	1H	2240	C
26	1H	2267	A
26	1H	2271	G
26	1H	2273	A
26	1H	2275	C
26	1H	2280	G
26	1H	2283	C
26	1H	2287	A
26	1H	2296	U
26	1H	2304	G
26	1H	2307	G
26	1H	2308	G
26	1H	2310	A
26	1H	2312	U
26	1H	2314	C
26	1H	2315	G
26	1H	2319	G
26	1H	2320	A
26	1H	2321	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	2325	G
26	1H	2327	A
26	1H	2334	G
26	1H	2336	A
26	1H	2337	G
26	1H	2342	C
26	1H	2346	A
26	1H	2347	C
26	1H	2350	C
26	1H	2368	C
26	1H	2374	C
26	1H	2377	A
26	1H	2383	G
26	1H	2385	C
26	1H	2389	G
26	1H	2391	G
26	1H	2394	C
26	1H	2395	C
26	1H	2402	C
26	1H	2403	C
26	1H	2406	U
26	1H	2410	G
26	1H	2414	G
26	1H	2419	U
26	1H	2422	A
26	1H	2424	C
26	1H	2425	A
26	1H	2428	G
26	1H	2429	G
26	1H	2430	A
26	1H	2431	U
26	1H	2435	A
26	1H	2439	A
26	1H	2440	C
26	1H	2441	C
26	1H	2448	A
26	1H	2449	U
26	1H	2450	A
26	1H	2468	G
26	1H	2474	C
26	1H	2475	C
26	1H	2476	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	2477	C
26	1H	2480	C
26	1H	2481	G
26	1H	2484	G
26	1H	2486	G
26	1H	2494	G
26	1H	2496	C
26	1H	2497	A
26	1H	2502	G
26	1H	2504	U
26	1H	2505	G
26	1H	2506	U
26	1H	2507	C
26	1H	2518	A
26	1H	2520	C
26	1H	2529	G
26	1H	2554	U
26	1H	2564	A
26	1H	2566	A
26	1H	2567	G
26	1H	2569	G
26	1H	2573	C
26	1H	2574	G
26	1H	2576	G
26	1H	2601	C
26	1H	2602	A
26	1H	2608	G
26	1H	2609	U
26	1H	2611	U
26	1H	2612	C
26	1H	2613	U
26	1H	2614	A
26	1H	2615	U
26	1H	2629	A
26	1H	2630	G
26	1H	2632	A
26	1H	2636	U
26	1H	2654	A
26	1H	2657	A
26	1H	2665	A
26	1H	2666	C
26	1H	2669	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	2673	G
26	1H	2679	A
26	1H	2682	U
26	1H	2684	U
26	1H	2689	U
26	1H	2691	C
26	1H	2701	C
26	1H	2702	U
26	1H	2704	C
26	1H	2707	G
26	1H	2712(A)	A
26	1H	2713	A
26	1H	2714	G
26	1H	2718	G
26	1H	2719	G
26	1H	2721	A
26	1H	2726	U
26	1H	2733	A
26	1H	2738	A
26	1H	2739	U
26	1H	2744	G
26	1H	2755	C
26	1H	2756	U
26	1H	2757	A
26	1H	2758	A
26	1H	2764	A
26	1H	2765	A
26	1H	2766	G
26	1H	2778	A
26	1H	2779	U
26	1H	2781	A
26	1H	2789	C
26	1H	2791	C
26	1H	2792	G
26	1H	2793	G
26	1H	2794	C
26	1H	2795	G
26	1H	2797	U
26	1H	2798	C
26	1H	2799	A
26	1H	2801	A
26	1H	2802	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	2803	C
26	1H	2807	G
26	1H	2808	U
26	1H	2818	G
26	1H	2820	A
26	1H	2821	A
26	1H	2823	A
26	1H	2829	C
26	1H	2830	G
26	1H	2833	G
26	1H	2834	G
26	1H	2835	A
26	1H	2848	G
26	1H	2849	U
26	1H	2850	A
26	1H	2872	G
26	1H	2891	G
26	1H	2892	A
26	1H	2893	G
26	1H	2894	G
26	1H	2895	U
27	16	7	G
27	16	9	G
27	16	13	A
27	16	15	A
27	16	25	A
27	16	31	C
27	16	33	G
27	16	35	U
27	16	41	U
27	16	45	A
27	16	56	G
27	16	65	C
27	16	66	A
27	16	72	G
27	16	73	A
27	16	74	U
27	16	75	G
27	16	84	C
27	16	105	G
27	16	109	G
1	1G	5	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1G	9	G
1	1G	22	G
1	1G	31	G
1	1G	32	A
1	1G	39	G
1	1G	41	G
1	1G	47	C
1	1G	48	C
1	1G	50	A
1	1G	51	A
1	1G	54	C
1	1G	76	G
1	1G	81	G
1	1G	84	U
1	1G	86	U
1	1G	87	A
1	1G	90	C
1	1G	91	C
1	1G	101	A
1	1G	115	G
1	1G	116	A
1	1G	121	C
1	1G	126	G
1	1G	127	G
1	1G	131	C
1	1G	144	G
1	1G	161	A
1	1G	163	C
1	1G	174	C
1	1G	182	U
1	1G	184	G
1	1G	185	A
1	1G	188	U
1	1G	189	U
1	1G	190	G
1	1G	191(A)	G
1	1G	191(D)	U
1	1G	191(E)	G
1	1G	195	A
1	1G	196	A
1	1G	197	A
1	1G	198	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1G	208	U
1	1G	209	U
1	1G	210	U
1	1G	216	G
1	1G	231	G
1	1G	237	C
1	1G	243	A
1	1G	244	U
1	1G	247	G
1	1G	250	A
1	1G	251	G
1	1G	266	G
1	1G	267	C
1	1G	281	G
1	1G	289	G
1	1G	298	A
1	1G	316	G
1	1G	318	G
1	1G	321	A
1	1G	328	C
1	1G	329	A
1	1G	332	G
1	1G	345	C
1	1G	346	G
1	1G	347	G
1	1G	350	G
1	1G	351	G
1	1G	352	C
1	1G	353	A
1	1G	354	G
1	1G	363	A
1	1G	366	C
1	1G	367	U
1	1G	372	C
1	1G	373	A
1	1G	382	A
1	1G	388	G
1	1G	397	A
1	1G	398	C
1	1G	406	G
1	1G	411	A
1	1G	412	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1G	413	G
1	1G	417	C
1	1G	419	C
1	1G	422	C
1	1G	423	G
1	1G	424	G
1	1G	429	U
1	1G	430	A
1	1G	439	A
1	1G	442	C
1	1G	447	G
1	1G	449	C
1	1G	451	A
1	1G	452	A
1	1G	457	C
1	1G	466	C
1	1G	467	G
1	1G	477	G
1	1G	478	A
1	1G	484	G
1	1G	485	G
1	1G	486	U
1	1G	495	A
1	1G	496	A
1	1G	497	U
1	1G	502	G
1	1G	505	G
1	1G	507	C
1	1G	509	A
1	1G	510	A
1	1G	511	C
1	1G	517	G
1	1G	518	C
1	1G	521	G
1	1G	527	G
1	1G	528	C
1	1G	529	G
1	1G	530	G
1	1G	531	U
1	1G	532	A
1	1G	533	A
1	1G	541	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1G	544	G
1	1G	547	A
1	1G	559	A
1	1G	561	U
1	1G	562	C
1	1G	564	C
1	1G	566	G
1	1G	572	A
1	1G	573	A
1	1G	575	G
1	1G	576	G
1	1G	577	G
1	1G	581	G
1	1G	596	C
1	1G	607	A
1	1G	614	A
1	1G	618	C
1	1G	630	G
1	1G	631	G
1	1G	632	A
1	1G	633	G
1	1G	651	C
1	1G	653	A
1	1G	656	C
1	1G	658	G
1	1G	665	A
1	1G	687	A
1	1G	688	G
1	1G	702	A
1	1G	704	A
1	1G	705	U
1	1G	706	A
1	1G	721	G
1	1G	723	U
1	1G	724	G
1	1G	728	A
1	1G	731	G
1	1G	748	C
1	1G	750	G
1	1G	755	G
1	1G	760	G
1	1G	762	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1G	771	G
1	1G	777	A
1	1G	778	G
1	1G	787	A
1	1G	792	A
1	1G	793	U
1	1G	794	A
1	1G	813	U
1	1G	816	A
1	1G	817	C
1	1G	821	G
1	1G	822	C
1	1G	827	U
1	1G	828	A
1	1G	841	U
1	1G	842	C
1	1G	843	U
1	1G	848	C
1	1G	859	A
1	1G	871	U
1	1G	873	A
1	1G	885	G
1	1G	914	A
1	1G	926	G
1	1G	927	G
1	1G	934	C
1	1G	935	A
1	1G	936	C
1	1G	958	A
1	1G	960	U
1	1G	961	U
1	1G	968	A
1	1G	969	A
1	1G	971	G
1	1G	972	C
1	1G	974	A
1	1G	975	A
1	1G	976	G
1	1G	977	A
1	1G	978	A
1	1G	979	C
1	1G	980	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1G	982	U
1	1G	991	U
1	1G	992	U
1	1G	993	G
1	1G	1004	A
1	1G	1006	C
1	1G	1009	G
1	1G	1013	G
1	1G	1016	A
1	1G	1021	G
1	1G	1023	G
1	1G	1024	G
1	1G	1025	U
1	1G	1026	G
1	1G	1027	C
1	1G	1028	C
1	1G	1028(A)	C
1	1G	1029	G
1	1G	1030	C
1	1G	1031	G
1	1G	1032(A)	G
1	1G	1033	G
1	1G	1034	G
1	1G	1035	A
1	1G	1036	G
1	1G	1040	U
1	1G	1050	G
1	1G	1053	G
1	1G	1054	C
1	1G	1055	A
1	1G	1081	G
1	1G	1086	U
1	1G	1089	G
1	1G	1092	A
1	1G	1094	G
1	1G	1095	U
1	1G	1096	C
1	1G	1101	A
1	1G	1108	G
1	1G	1117	G
1	1G	1124	G
1	1G	1125	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1G	1127	G
1	1G	1128	C
1	1G	1129	C
1	1G	1130	A
1	1G	1131	G
1	1G	1136	U
1	1G	1137	C
1	1G	1138	G
1	1G	1139	G
1	1G	1146	A
1	1G	1147	C
1	1G	1154	G
1	1G	1157	A
1	1G	1158	C
1	1G	1159	U
1	1G	1160	G
1	1G	1171	G
1	1G	1177	G
1	1G	1181	G
1	1G	1182	G
1	1G	1183	A
1	1G	1184	G
1	1G	1186	G
1	1G	1187	G
1	1G	1196	U
1	1G	1197	G
1	1G	1200	C
1	1G	1201	A
1	1G	1202	G
1	1G	1204	A
1	1G	1212	U
1	1G	1213	A
1	1G	1214	C
1	1G	1215	G
1	1G	1225	A
1	1G	1226	C
1	1G	1227	A
1	1G	1238	A
1	1G	1240	U
1	1G	1241	G
1	1G	1246	C
1	1G	1255	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1G	1256	A
1	1G	1257	U
1	1G	1258	G
1	1G	1260	C
1	1G	1268	A
1	1G	1273	G
1	1G	1278	U
1	1G	1279	A
1	1G	1280	A
1	1G	1286	A
1	1G	1287	A
1	1G	1288	A
1	1G	1291	G
1	1G	1293	G
1	1G	1297	C
1	1G	1298	C
1	1G	1299	A
1	1G	1301	U
1	1G	1303	C
1	1G	1305	G
1	1G	1320	C
1	1G	1322	C
1	1G	1323	G
1	1G	1331	G
1	1G	1335	C
1	1G	1338	G
1	1G	1346	A
1	1G	1347	G
1	1G	1353	G
1	1G	1362(A)	C
1	1G	1363	A
1	1G	1364	U
1	1G	1368	G
1	1G	1370	G
1	1G	1379	G
1	1G	1388	C
1	1G	1397	C
1	1G	1398	A
1	1G	1399	C
1	1G	1400	C
1	1G	1401	G
1	1G	1404	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1G	1419	G
1	1G	1440	C
1	1G	1442	G
1	1G	1443	G
1	1G	1446	A
1	1G	1450	U
1	1G	1451	A
1	1G	1453	G
1	1G	1463	C
1	1G	1467	G
1	1G	1469	G
1	1G	1478	C
1	1G	1482	G
1	1G	1492	A
1	1G	1498	U
1	1G	1499	A
1	1G	1502	A
1	1G	1503	A
1	1G	1504	G
1	1G	1506	U
1	1G	1507	A
1	1G	1517	G
1	1G	1520	G
1	1G	1529	G
1	1G	1530	G
24	1L	4	G
24	1L	6	G
24	1L	7	G
24	1L	8	U
24	1L	9	U
24	1L	10	C
24	1L	14	A
24	1L	16	C
24	1L	17	G
24	1L	18	G
24	1L	19	C
24	1L	20	C
24	1L	21	A
24	1L	22	A
24	1L	24	G
24	1L	26	G
24	1L	27	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	1L	28	G
24	1L	42	U
24	1L	46	G
24	1L	47	U
24	1L	48	C
24	1L	49	A
24	1L	58	G
24	1L	65	C
24	1L	68	A
24	1L	70	C
24	1L	75	C
24	1L	76	C
24	1L	78	C
24	1L	79	A
24	1L	81	C
24	1L	82	A
24	1L	83	C
24	1L	84	C
23	2L	8	4SU
23	2L	13	C
23	2L	16	C
23	2L	18	C
23	2L	19	G
23	2L	20	G
23	2L	21	U
23	2L	23	G
23	2L	34	U
23	2L	35	C
23	2L	45	A
23	2L	48	U
23	2L	49	C
23	2L	50	G
23	2L	53	G
23	2L	54	G
23	2L	56	PSU
55	3L	2	G
55	3L	7	G
55	3L	8	U
55	3L	9	U
55	3L	11	C
55	3L	14	A
55	3L	15	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
55	3L	17	G
55	3L	18	G
55	3L	19	C
55	3L	20	C
55	3L	21	A
55	3L	22	A
55	3L	30	A
55	3L	32	A
55	3L	34	U
55	3L	35	G
55	3L	46	G
55	3L	47	U
55	3L	48	C
55	3L	49	A
55	3L	52	G
55	3L	54	C
55	3L	55	U
55	3L	56	U
55	3L	58	G
55	3L	62	G
55	3L	64	U
55	3L	67	A
55	3L	69	U
55	3L	75	C
55	3L	81	C
55	3L	82	A
55	3L	85	A
25	4L	13	A
25	4L	19	A
25	4L	20	A
25	4L	21	C
25	4L	22	A
25	4L	23	A
26	14	3	U
26	14	4	C
26	14	8	A
26	14	9	U
26	14	16	G
26	14	34	C
26	14	46	C
26	14	49	A
26	14	50	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	55	G
26	14	58	G
26	14	60	G
26	14	71	A
26	14	72	U
26	14	74	A
26	14	75	G
26	14	82	G
26	14	90	U
26	14	91	A
26	14	92	G
26	14	95	G
26	14	99	U
26	14	102	G
26	14	118	A
26	14	119	A
26	14	120	U
26	14	121	G
26	14	123	G
26	14	125	G
26	14	129	C
26	14	131	G
26	14	138	G
26	14	139	G
26	14	140	A
26	14	151	C
26	14	152	G
26	14	153	C
26	14	154	G
26	14	155	C
26	14	161	U
26	14	162	U
26	14	173	G
26	14	174	C
26	14	186	G
26	14	188	G
26	14	195	A
26	14	196	A
26	14	199	A
26	14	201	C
26	14	204	A
26	14	205	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	212	G
26	14	215	G
26	14	216	A
26	14	217	G
26	14	221	A
26	14	222	A
26	14	225	A
26	14	229	A
26	14	232	G
26	14	233	A
26	14	239	U
26	14	248	G
26	14	249	C
26	14	252	G
26	14	264	C
26	14	265	A
26	14	270(G)	C
26	14	270(K)	C
26	14	270(L)	U
26	14	270(M)	U
26	14	270(O)	U
26	14	270(Z)	U
26	14	271(C)	U
26	14	271	G
26	14	272	G
26	14	273(D)	C
26	14	274	G
26	14	276	A
26	14	277	C
26	14	278	A
26	14	279	C
26	14	283	A
26	14	289	A
26	14	299	A
26	14	310	A
26	14	311	A
26	14	324	A
26	14	327	G
26	14	329	G
26	14	330	A
26	14	331	A
26	14	352	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	357	A
26	14	363	G
26	14	363(E)	U
26	14	363(F)	A
26	14	364	C
26	14	372	G
26	14	386	G
26	14	389	G
26	14	391	G
26	14	394	A
26	14	395	U
26	14	396	G
26	14	405	U
26	14	406	G
26	14	407	G
26	14	409	C
26	14	411	G
26	14	412	A
26	14	428	A
26	14	433	C
26	14	435	C
26	14	443	A
26	14	444	C
26	14	448	U
26	14	451	C
26	14	454	A
26	14	455	C
26	14	457	A
26	14	470	A
26	14	471	A
26	14	480	A
26	14	481	G
26	14	483	A
26	14	485	C
26	14	498	G
26	14	504	U
26	14	505	A
26	14	509	C
26	14	513	A
26	14	519	U
26	14	527	C
26	14	529	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	530	G
26	14	531	C
26	14	532	A
26	14	533	G
26	14	537	C
26	14	546	C
26	14	547	A
26	14	549	G
26	14	556	G
26	14	563	G
26	14	568	U
26	14	573	G
26	14	575	A
26	14	580	C
26	14	583	G
26	14	592	G
26	14	603	A
26	14	606	U
26	14	607	U
26	14	609(A)	G
26	14	614	U
26	14	617	G
26	14	618	G
26	14	620	G
26	14	621	A
26	14	622	G
26	14	626	U
26	14	627	A
26	14	637	A
26	14	645	C
26	14	646	A
26	14	647	G
26	14	650	C
26	14	651	G
26	14	654	A
26	14	654(G)	C
26	14	654(H)	G
26	14	654(I)	C
26	14	654(K)	C
26	14	654(L)	G
26	14	654(N)	G
26	14	654(O)	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	654(Q)	C
26	14	654(T)	A
26	14	656	G
26	14	668	G
26	14	669	G
26	14	670	A
26	14	682	G
26	14	686	G
26	14	699	A
26	14	704	G
26	14	708	C
26	14	709	U
26	14	721	C
26	14	722	A
26	14	730	C
26	14	740	U
26	14	745	G
26	14	751	A
26	14	752	A
26	14	753	C
26	14	763	G
26	14	764	A
26	14	765	G
26	14	770	G
26	14	771	G
26	14	775	G
26	14	776	G
26	14	779	U
26	14	782	A
26	14	784	A
26	14	785	G
26	14	787	U
26	14	789	A
26	14	791	C
26	14	792	G
26	14	801	G
26	14	805	G
26	14	812	C
26	14	819	A
26	14	827	U
26	14	828	U
26	14	831	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	832	G
26	14	840	C
26	14	846	C
26	14	852	G
26	14	859	G
26	14	865	C
26	14	878	A
26	14	880	G
26	14	882	G
26	14	886	C
26	14	887	A
26	14	888	C
26	14	889	C
26	14	890	A
26	14	892	G
26	14	894	C
26	14	896	A
26	14	897	C
26	14	899	A
26	14	901	A
26	14	903	C
26	14	904	C
26	14	907	U
26	14	910	A
26	14	911	A
26	14	917	A
26	14	918	A
26	14	924	C
26	14	926	A
26	14	932	G
26	14	938	G
26	14	941	A
26	14	945	A
26	14	946	G
26	14	958	U
26	14	959	A
26	14	961	C
26	14	974	G
26	14	980	A
26	14	983	A
26	14	989	G
26	14	990	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	996	A
26	14	1002	G
26	14	1008	C
26	14	1012	U
26	14	1013	C
26	14	1017	G
26	14	1020	A
26	14	1021	A
26	14	1022	G
26	14	1023	U
26	14	1025	G
26	14	1026	U
26	14	1027	A
26	14	1028	A
26	14	1029	A
26	14	1034	G
26	14	1037	G
26	14	1038	C
26	14	1043	C
26	14	1044	G
26	14	1045	A
26	14	1046	A
26	14	1047	G
26	14	1048	A
26	14	1049	C
26	14	1051	G
26	14	1054	A
26	14	1057	A
26	14	1058	U
26	14	1060	U
26	14	1061	U
26	14	1062	G
26	14	1063	G
26	14	1066	U
26	14	1067	A
26	14	1068	G
26	14	1070	A
26	14	1071	G
26	14	1072	C
26	14	1073	A
26	14	1074	G
26	14	1077	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	1079	C
26	14	1085	A
26	14	1086	A
26	14	1087	G
26	14	1088	A
26	14	1090	U
26	14	1091	G
26	14	1093	G
26	14	1094	U
26	14	1095	A
26	14	1096	A
26	14	1098	A
26	14	1099	G
26	14	1105	U
26	14	1108	U
26	14	1111	A
26	14	1112	G
26	14	1122	G
26	14	1129	A
26	14	1130	U
26	14	1135	C
26	14	1136	G
26	14	1138	G
26	14	1139	G
26	14	1142	U
26	14	1143	A
26	14	1148	A
26	14	1151	G
26	14	1154	G
26	14	1155	A
26	14	1157	G
26	14	1167	U
26	14	1170	G
26	14	1171	G
26	14	1174	A
26	14	1175	U
26	14	1177	A
26	14	1178	C
26	14	1204	A
26	14	1205	U
26	14	1210	A
26	14	1211	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	1220	A
26	14	1225	C
26	14	1236	G
26	14	1241	A
26	14	1244	G
26	14	1250	G
26	14	1253	A
26	14	1255	U
26	14	1256	G
26	14	1268	A
26	14	1272	A
26	14	1273	U
26	14	1275	A
26	14	1284	A
26	14	1287	A
26	14	1297	C
26	14	1300	U
26	14	1301	A
26	14	1302	A
26	14	1306	C
26	14	1313	U
26	14	1314	C
26	14	1320	C
26	14	1325	G
26	14	1329	U
26	14	1332	G
26	14	1338	G
26	14	1345	C
26	14	1348	G
26	14	1349	A
26	14	1360	A
26	14	1365	A
26	14	1368	G
26	14	1369	G
26	14	1375	C
26	14	1379	A
26	14	1380	G
26	14	1383	C
26	14	1384	A
26	14	1385	G
26	14	1400	G
26	14	1403	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	1405	U
26	14	1407	C
26	14	1415	U
26	14	1416	G
26	14	1417	C
26	14	1419	A
26	14	1420	U
26	14	1421	G
26	14	1427	A
26	14	1428	C
26	14	1429	G
26	14	1436	G
26	14	1437	C
26	14	1443	G
26	14	1444(A)	A
26	14	1445	C
26	14	1449	A
26	14	1449(A)	G
26	14	1451	C
26	14	1455	G
26	14	1458	C
26	14	1460	A
26	14	1461	G
26	14	1467	C
26	14	1471	A
26	14	1475	G
26	14	1482	U
26	14	1483	G
26	14	1489	U
26	14	1490	A
26	14	1493	C
26	14	1506	C
26	14	1508	A
26	14	1509	C
26	14	1510	A
26	14	1521	G
26	14	1523	U
26	14	1528	A
26	14	1533	C
26	14	1534	G
26	14	1535	U
26	14	1537	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	1543	A
26	14	1547	C
26	14	1558	A
26	14	1559	G
26	14	1560	G
26	14	1566	A
26	14	1569	A
26	14	1573	G
26	14	1578	U
26	14	1579	A
26	14	1581	G
26	14	1583	A
26	14	1585	C
26	14	1586	A
26	14	1588	C
26	14	1596	A
26	14	1597	A
26	14	1598	C
26	14	1608	A
26	14	1609	A
26	14	1610	A
26	14	1613	G
26	14	1619	G
26	14	1625	C
26	14	1639	U
26	14	1647	G
26	14	1648	C
26	14	1654	A
26	14	1669	A
26	14	1671	U
26	14	1674	G
26	14	1675	C
26	14	1682	G
26	14	1696	G
26	14	1700	A
26	14	1701	A
26	14	1703	G
26	14	1718	G
26	14	1725	G
26	14	1726	G
26	14	1728	G
26	14	1729	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	1730	U
26	14	1731	G
26	14	1742	C
26	14	1743	G
26	14	1756	G
26	14	1762	A
26	14	1763	G
26	14	1764	G
26	14	1773	A
26	14	1774	C
26	14	1777	U
26	14	1780	A
26	14	1781	C
26	14	1782	C
26	14	1791	A
26	14	1800	C
26	14	1801	G
26	14	1802	A
26	14	1808	U
26	14	1816	G
26	14	1820	U
26	14	1829	A
26	14	1830	C
26	14	1839	G
26	14	1847	A
26	14	1848	A
26	14	1858	G
26	14	1860	G
26	14	1872	A
26	14	1878	G
26	14	1883	G
26	14	1886	C
26	14	1888	G
26	14	1889	A
26	14	1895	C
26	14	1899	G
26	14	1900	A
26	14	1906	G
26	14	1913	A
26	14	1929	G
26	14	1930	G
26	14	1931	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	1934	C
26	14	1936	A
26	14	1938	A
26	14	1944	U
26	14	1955	U
26	14	1963	U
26	14	1964	G
26	14	1967	C
26	14	1970	A
26	14	1971	A
26	14	1972	A
26	14	1991	U
26	14	1992	G
26	14	1993	U
26	14	1995	U
26	14	1996	C
26	14	2016	U
26	14	2022	U
26	14	2023	G
26	14	2031	A
26	14	2032	G
26	14	2033	A
26	14	2039	C
26	14	2043	C
26	14	2047	U
26	14	2049	G
26	14	2055	C
26	14	2056	G
26	14	2058	A
26	14	2059	A
26	14	2060	A
26	14	2061	G
26	14	2062	A
26	14	2063	C
26	14	2069	G
26	14	2080	G
26	14	2082	A
26	14	2088	G
26	14	2093	G
26	14	2095	C
26	14	2100	G
26	14	2107	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	2108	C
26	14	2111	C
26	14	2112	G
26	14	2113	U
26	14	2114	A
26	14	2118	U
26	14	2119	A
26	14	2123	G
26	14	2126	A
26	14	2127	G
26	14	2128	C
26	14	2131	G
26	14	2132	U
26	14	2133	G
26	14	2134	A
26	14	2135	A
26	14	2136	C
26	14	2140	C
26	14	2144	U
26	14	2145	C
26	14	2146	C
26	14	2147	G
26	14	2148	G
26	14	2150	U
26	14	2155	G
26	14	2158	A
26	14	2161	C
26	14	2166	G
26	14	2169	A
26	14	2171	A
26	14	2172	U
26	14	2173	A
26	14	2174	C
26	14	2175	C
26	14	2176	A
26	14	2191	G
26	14	2192	G
26	14	2198	A
26	14	2210	G
26	14	2211	G
26	14	2212	A
26	14	2213	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	2215	G
26	14	2225	A
26	14	2226	C
26	14	2235	G
26	14	2238	G
26	14	2239	G
26	14	2240	C
26	14	2267	A
26	14	2268	A
26	14	2269	A
26	14	2273	A
26	14	2275	C
26	14	2276	G
26	14	2278	A
26	14	2283	C
26	14	2287	A
26	14	2288	A
26	14	2289	G
26	14	2307	G
26	14	2308	G
26	14	2309	A
26	14	2310	A
26	14	2318	G
26	14	2321	G
26	14	2322	A
26	14	2325	G
26	14	2326	C
26	14	2327	A
26	14	2335	A
26	14	2336	A
26	14	2346	A
26	14	2347	C
26	14	2350	C
26	14	2354	G
26	14	2355	C
26	14	2357	U
26	14	2383	G
26	14	2385	C
26	14	2388	A
26	14	2389	G
26	14	2392	A
26	14	2393	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	2394	C
26	14	2396	G
26	14	2401	U
26	14	2402	C
26	14	2406	U
26	14	2407	G
26	14	2413	G
26	14	2414	G
26	14	2422	A
26	14	2425	A
26	14	2426	A
26	14	2429	G
26	14	2430	A
26	14	2431	U
26	14	2434	A
26	14	2435	A
26	14	2439	A
26	14	2440	C
26	14	2441	C
26	14	2442	C
26	14	2445	G
26	14	2447	G
26	14	2448	A
26	14	2468	G
26	14	2469	A
26	14	2470	G
26	14	2474	C
26	14	2475	C
26	14	2476	A
26	14	2477	C
26	14	2478	A
26	14	2487	G
26	14	2496	C
26	14	2497	A
26	14	2502	G
26	14	2504	U
26	14	2505	G
26	14	2506	U
26	14	2507	C
26	14	2510	C
26	14	2518	A
26	14	2523	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	2525	G
26	14	2542	A
26	14	2543	G
26	14	2549	G
26	14	2554	U
26	14	2564	A
26	14	2566	A
26	14	2567	G
26	14	2569	G
26	14	2573	C
26	14	2578	G
26	14	2582	G
26	14	2584	U
26	14	2585	U
26	14	2601	C
26	14	2602	A
26	14	2608	G
26	14	2609	U
26	14	2610	C
26	14	2611	U
26	14	2612	C
26	14	2613	U
26	14	2617	C
26	14	2630	G
26	14	2636	U
26	14	2646	C
26	14	2665	A
26	14	2667	C
26	14	2673	G
26	14	2689	U
26	14	2702	U
26	14	2703	C
26	14	2704	C
26	14	2707	G
26	14	2712(A)	A
26	14	2713	A
26	14	2714	G
26	14	2718	G
26	14	2726	U
26	14	2733	A
26	14	2744	G
26	14	2750	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	2751	G
26	14	2752	C
26	14	2758	A
26	14	2762	G
26	14	2764	A
26	14	2765	A
26	14	2766	G
26	14	2769	C
26	14	2770	G
26	14	2777	G
26	14	2778	A
26	14	2779	U
26	14	2780	G
26	14	2789	C
26	14	2790	A
26	14	2791	C
26	14	2794	C
26	14	2797	U
26	14	2798	C
26	14	2801	A
26	14	2802	G
26	14	2804	C
26	14	2810	A
26	14	2818	G
26	14	2820	A
26	14	2821	A
26	14	2823	A
26	14	2833	G
26	14	2834	G
26	14	2835	A
26	14	2839	G
26	14	2849	U
26	14	2851	A
26	14	2853	C
26	14	2860	A
26	14	2872	G
26	14	2883	A
26	14	2892	A
26	14	2894	G
26	14	2896	C
27	1J	0	A
27	1J	8	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
27	1J	13	A
27	1J	15	A
27	1J	16	G
27	1J	27	C
27	1J	28	C
27	1J	29	A
27	1J	30	C
27	1J	32	C
27	1J	41	U
27	1J	42	C
27	1J	44	G
27	1J	45	A
27	1J	47	C
27	1J	52	A
27	1J	53	A
27	1J	59	A
27	1J	67	G
27	1J	71	C
27	1J	73	A
27	1J	75	G
27	1J	81	G
27	1J	88	C
27	1J	89	G
27	1J	89(A)	A
27	1J	90	C
27	1J	91	C
27	1J	99	A
27	1J	105	G
27	1J	108	C
27	1J	109	G
27	1J	119	A

All (223) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	13	31	G
1	13	49	U
1	13	50	A
1	13	115	G
1	13	244	U
1	13	251	G
1	13	266	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	13	327	A
1	13	412	A
1	13	422	C
1	13	428	G
1	13	429	U
1	13	484	G
1	13	509	A
1	13	560	U
1	13	687	A
1	13	703	G
1	13	748	C
1	13	758	G
1	13	792	A
1	13	793	U
1	13	812	C
1	13	820	U
1	13	871	U
1	13	913	A
1	13	975	A
1	13	991	U
1	13	992	U
1	13	1027	C
1	13	1054	C
1	13	1065	U
1	13	1285	A
1	13	1452	C
1	13	1498	U
1	13	1504	G
22	1K	3	U
22	1K	6	G
22	1K	18	G
22	1K	19	C
22	1K	21	A
22	1K	46	G
22	1K	57	C
22	1K	78	C
23	2K	20	G
23	2K	21	U
23	2K	48	U
24	3K	17	G
24	3K	18	G
24	3K	57	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	3K	67	A
25	4K	13	A
26	1H	196	A
26	1H	197	A
26	1H	222	A
26	1H	229	A
26	1H	232	G
26	1H	271(B)	G
26	1H	404	C
26	1H	508	G
26	1H	528	A
26	1H	574	C
26	1H	587	C
26	1H	645	C
26	1H	685	A
26	1H	752	A
26	1H	764	A
26	1H	776	G
26	1H	974	G
26	1H	1022	G
26	1H	1026	U
26	1H	1060	U
26	1H	1081	U
26	1H	1085	A
26	1H	1109	C
26	1H	1177	A
26	1H	1178	C
26	1H	1210	A
26	1H	1301	A
26	1H	1312	U
26	1H	1378	A
26	1H	1379	A
26	1H	1420	U
26	1H	1493	C
26	1H	1508	A
26	1H	1536	A
26	1H	1558	A
26	1H	1608	A
26	1H	1609	A
26	1H	1694	C
26	1H	1757	U
26	1H	1799	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	1858	G
26	1H	1905	C
26	1H	1912	A
26	1H	1955	U
26	1H	1992	G
26	1H	2062	A
26	1H	2135	A
26	1H	2157	G
26	1H	2171	A
26	1H	2172	U
26	1H	2211	G
26	1H	2402	C
26	1H	2428	G
26	1H	2439	A
26	1H	2448	A
26	1H	2475	C
26	1H	2566	A
26	1H	2610	C
26	1H	2613	U
26	1H	2756	U
1	1G	31	G
1	1G	80	G
1	1G	89	U
1	1G	115	G
1	1G	197	A
1	1G	201	C
1	1G	209	U
1	1G	243	A
1	1G	250	A
1	1G	266	G
1	1G	327	A
1	1G	345	C
1	1G	412	A
1	1G	429	U
1	1G	465	A
1	1G	485	G
1	1G	509	A
1	1G	560	U
1	1G	632	A
1	1G	687	A
1	1G	812	C
1	1G	913	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1G	991	U
1	1G	992	U
1	1G	1025	U
1	1G	1054	C
1	1G	1126	U
1	1G	1145	C
1	1G	1157	A
1	1G	1196	U
1	1G	1285	A
1	1G	1297	C
1	1G	1300	G
1	1G	1346	A
1	1G	1397	C
1	1G	1442	G
1	1G	1498	U
24	1L	3	U
24	1L	6	G
24	1L	18	G
24	1L	19	C
24	1L	46	G
24	1L	57	C
24	1L	75	C
24	1L	78	C
23	2L	48	U
55	3L	17	G
55	3L	18	G
55	3L	21	A
55	3L	57	C
25	4L	12	A
25	4L	19	A
25	4L	22	A
26	14	49	A
26	14	71	A
26	14	128	C
26	14	204	A
26	14	278	A
26	14	310	A
26	14	530	G
26	14	644	A
26	14	668	G
26	14	669	G
26	14	685	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	752	A
26	14	764	A
26	14	774	A
26	14	827	U
26	14	877	U
26	14	888	C
26	14	893	C
26	14	1022	G
26	14	1045	A
26	14	1085	A
26	14	1210	A
26	14	1240	U
26	14	1249	U
26	14	1379	A
26	14	1420	U
26	14	1460	A
26	14	1558	A
26	14	1608	A
26	14	1762	A
26	14	1819	A
26	14	1963	U
26	14	1992	G
26	14	2062	A
26	14	2170	A
26	14	2173	A
26	14	2191	G
26	14	2210	G
26	14	2212	A
26	14	2238	G
26	14	2275	C
26	14	2308	G
26	14	2335	A
26	14	2406	U
26	14	2425	A
26	14	2439	A
26	14	2447	G
26	14	2477	C
26	14	2506	U
26	14	2542	A
26	14	2611	U
26	14	2629	A
26	14	2776	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	2790	A
26	14	2859	G
26	14	2893	G
27	1J	52	A
27	1J	56	G
27	1J	88	C

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

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

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
24	PSU	1L	40	24	18,21,22	1.27	1 (5%)	21,30,33	1.73	4 (19%)
23	PSU	2L	56	23	18,21,22	1.21	1 (5%)	21,30,33	1.91	2 (9%)
23	4SU	2K	8	23	18,21,22	2.03	4 (22%)	25,30,33	2.77	6 (24%)
23	PSU	2K	56	23	18,21,22	1.27	3 (16%)	21,30,33	1.85	4 (19%)
24	PSU	3K	40	24	18,21,22	1.22	1 (5%)	21,30,33	1.77	3 (14%)
55	MIA	3L	38	55	28,31,32	2.37	5 (17%)	38,44,47	2.86	17 (44%)
23	4SU	2L	8	23	18,21,22	1.86	3 (16%)	25,30,33	2.91	5 (20%)
55	PSU	3L	40	55	18,21,22	1.19	1 (5%)	21,30,33	1.58	3 (14%)
23	OMC	2L	33	23	19,22,23	1.78	4 (21%)	25,31,34	1.23	2 (8%)
22	PSU	1K	64	22	18,21,22	1.27	1 (5%)	21,30,33	1.81	4 (19%)
23	5MU	2L	55	23	19,22,23	3.95	5 (26%)	27,32,35	3.36	9 (33%)
22	QUO	1K	35	22,25	32,35,36	4.73	12 (37%)	36,52,55	4.59	12 (33%)
23	OMC	2K	33	23	19,22,23	1.69	3 (15%)	25,31,34	0.63	0
22	MIA	1K	38	22	28,31,32	2.19	4 (14%)	38,44,47	3.21	12 (31%)
22	PSU	1K	40	22	18,21,22	1.06	1 (5%)	21,30,33	1.66	4 (19%)
22	5MU	1K	63	22	19,22,23	3.83	5 (26%)	27,32,35	3.15	7 (25%)
23	5MU	2K	55	23	19,22,23	4.00	5 (26%)	27,32,35	3.23	7 (25%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	PSU	1L	40	24	-	0/7/25/26	0/2/2/2
23	PSU	2L	56	23	-	1/7/25/26	0/2/2/2
23	4SU	2K	8	23	-	0/7/25/26	0/2/2/2
23	PSU	2K	56	23	-	0/7/25/26	0/2/2/2
24	PSU	3K	40	24	-	0/7/25/26	0/2/2/2
55	MIA	3L	38	55	-	4/15/33/34	0/3/3/3
23	4SU	2L	8	23	-	0/7/25/26	0/2/2/2
55	PSU	3L	40	55	-	0/7/25/26	0/2/2/2
23	OMC	2L	33	23	-	1/9/27/28	0/2/2/2
22	PSU	1K	64	22	-	0/7/25/26	0/2/2/2
23	5MU	2L	55	23	-	0/7/25/26	0/2/2/2
22	QUO	1K	35	22,25	-	4/12/43/44	0/4/4/4
23	OMC	2K	33	23	-	0/9/27/28	0/2/2/2
22	MIA	1K	38	22	-	3/15/33/34	0/3/3/3
22	PSU	1K	40	22	-	1/7/25/26	0/2/2/2
22	5MU	1K	63	22	-	3/7/25/26	0/2/2/2
23	5MU	2K	55	23	-	2/7/25/26	0/2/2/2

All (59) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	1K	35	QUO	C4-N3	15.67	1.70	1.34
23	2K	55	5MU	C2-N1	13.40	1.59	1.38
23	2L	55	5MU	C2-N1	12.84	1.58	1.38
22	1K	63	5MU	C2-N1	12.55	1.58	1.38
22	1K	35	QUO	C6-N1	-12.30	1.15	1.38
22	1K	35	QUO	C8-N9	-8.67	1.22	1.38
22	1K	38	MIA	C13-C14	8.37	1.57	1.32
55	3L	38	MIA	C13-C14	8.18	1.56	1.32
22	1K	35	QUO	C2-N3	7.42	1.51	1.33
22	1K	35	QUO	C4-N9	-7.33	1.19	1.38
55	3L	38	MIA	C6-N6	6.69	1.44	1.34
23	2K	55	5MU	C2-N3	6.26	1.48	1.38
23	2K	8	4SU	C5-C4	6.24	1.50	1.42
23	2L	55	5MU	C4-N3	-6.03	1.27	1.38
22	1K	63	5MU	C4-N3	-5.99	1.27	1.38
22	1K	63	5MU	C2-N3	5.88	1.48	1.38
22	1K	35	QUO	C5-C6	-5.75	1.31	1.44

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	2L	8	4SU	C5-C4	5.75	1.49	1.42
22	1K	38	MIA	C6-N6	5.72	1.43	1.34
22	1K	35	QUO	C8-C7	5.70	1.48	1.37
23	2L	55	5MU	C2-N3	5.62	1.47	1.38
23	2K	55	5MU	C4-N3	-5.55	1.28	1.38
23	2K	55	5MU	C6-N1	5.54	1.47	1.38
23	2L	55	5MU	C4-C5	5.53	1.53	1.44
23	2L	55	5MU	C6-N1	5.37	1.47	1.38
22	1K	63	5MU	C6-N1	5.27	1.47	1.38
23	2L	33	OMC	C2-N3	4.85	1.46	1.36
55	3L	38	MIA	C2-S10	4.73	1.79	1.75
22	1K	35	QUO	C13-C12	-4.63	1.48	1.53
22	1K	64	PSU	C6-C5	4.51	1.40	1.35
23	2K	55	5MU	C4-C5	4.43	1.52	1.44
22	1K	63	5MU	C4-C5	4.38	1.52	1.44
23	2L	56	PSU	C6-C5	4.32	1.40	1.35
24	1L	40	PSU	C6-C5	4.32	1.40	1.35
24	3K	40	PSU	C6-C5	4.30	1.40	1.35
23	2K	8	4SU	C2-N1	4.14	1.44	1.38
23	2K	33	OMC	C2-N3	4.12	1.44	1.36
23	2K	33	OMC	C4-N4	4.03	1.43	1.33
23	2L	33	OMC	C4-N4	3.97	1.43	1.33
23	2K	56	PSU	C6-C5	3.90	1.39	1.35
22	1K	35	QUO	C2-N2	3.85	1.43	1.34
55	3L	40	PSU	C6-C5	3.76	1.39	1.35
23	2L	8	4SU	C2-N1	3.71	1.44	1.38
22	1K	40	PSU	C6-C5	3.43	1.39	1.35
23	2K	33	OMC	C5-C4	3.36	1.50	1.42
23	2L	33	OMC	C5-C4	3.18	1.50	1.42
22	1K	35	QUO	C5-C7	2.79	1.57	1.43
22	1K	38	MIA	C2-S10	2.78	1.78	1.75
23	2L	8	4SU	C6-N1	2.72	1.44	1.38
23	2K	8	4SU	C6-N1	2.71	1.44	1.38
55	3L	38	MIA	C5-C4	2.50	1.43	1.39
22	1K	35	QUO	C16-C15	2.46	1.60	1.54
55	3L	38	MIA	C5-N7	-2.28	1.34	1.39
23	2K	56	PSU	C2-N1	2.24	1.39	1.36
22	1K	35	QUO	C14-C13	-2.19	1.50	1.53
23	2L	33	OMC	C6-N1	2.17	1.43	1.38
22	1K	38	MIA	C5-N7	-2.13	1.35	1.39
23	2K	56	PSU	C4-C5	-2.08	1.38	1.44
23	2K	8	4SU	C4-N3	2.08	1.39	1.37

All (101) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	1K	35	QUO	C5-C4-N3	-17.51	107.42	127.53
22	1K	35	QUO	C1'-N9-C8	-10.76	113.53	125.72
22	1K	38	MIA	C11-S10-C2	-10.60	94.30	102.25
23	2L	55	5MU	C5-C4-N3	10.56	124.50	115.32
22	1K	63	5MU	C5-C4-N3	10.53	124.48	115.32
22	1K	35	QUO	N9-C4-N3	10.51	146.97	125.95
23	2K	55	5MU	C5-C4-N3	10.30	124.27	115.32
23	2L	8	4SU	C4-N3-C2	-9.49	118.22	127.31
22	1K	35	QUO	C7-C8-N9	-8.94	102.74	111.08
23	2K	8	4SU	C4-N3-C2	-8.93	118.75	127.31
22	1K	38	MIA	C5-C4-N3	-8.66	118.06	127.18
55	3L	38	MIA	C12-C13-C14	-8.44	111.87	127.01
22	1K	38	MIA	C12-C13-C14	-8.17	112.35	127.01
22	1K	35	QUO	C7-C5-C4	-7.72	103.83	112.68
55	3L	38	MIA	C5-C4-N3	-7.41	119.38	127.18
23	2L	8	4SU	C5-C4-N3	7.21	121.46	114.75
55	3L	38	MIA	N3-C4-N9	6.86	135.70	126.99
23	2K	55	5MU	O4-C4-C5	-6.80	117.14	124.92
23	2L	55	5MU	C4-N3-C2	-6.62	118.66	127.34
23	2L	55	5MU	C5-C6-N1	-6.51	116.24	123.31
23	2K	8	4SU	C5-C4-N3	6.41	120.71	114.75
23	2L	55	5MU	C6-C5-C4	6.03	122.99	118.02
23	2K	55	5MU	C4-N3-C2	-5.98	119.50	127.34
22	1K	63	5MU	O4-C4-C5	-5.95	118.11	124.92
23	2K	55	5MU	C6-C5-C4	5.77	122.78	118.02
22	1K	63	5MU	C4-N3-C2	-5.77	119.77	127.34
22	1K	63	5MU	C5-C6-N1	-5.48	117.36	123.31
22	1K	38	MIA	N3-C4-N9	5.36	133.79	126.99
23	2L	8	4SU	C5-C4-S4	-5.31	118.24	124.31
23	2K	55	5MU	C5-C6-N1	-5.19	117.67	123.31
22	1K	63	5MU	C6-C5-C4	5.17	122.28	118.02
23	2L	56	PSU	C4-N3-C2	-5.15	119.28	126.37
23	2K	8	4SU	C5-C4-S4	-5.13	118.45	124.31
23	2K	56	PSU	C4-N3-C2	-5.00	119.48	126.37
55	3L	38	MIA	C15-C14-C13	-4.72	108.50	122.66
23	2L	56	PSU	N1-C2-N3	4.69	120.12	115.17
23	2L	55	5MU	C5M-C5-C6	-4.67	116.53	122.85
23	2L	8	4SU	N3-C2-N1	4.65	120.95	114.89
24	1L	40	PSU	C4-N3-C2	-4.57	120.07	126.37
24	3K	40	PSU	C4-N3-C2	-4.56	120.09	126.37
22	1K	35	QUO	C5-C6-N1	4.50	127.49	115.10
24	3K	40	PSU	N1-C2-N3	4.47	119.88	115.17

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	3L	40	PSU	C4-N3-C2	-4.44	120.26	126.37
23	2L	55	5MU	O4-C4-C5	-4.38	119.91	124.92
23	2K	8	4SU	N3-C2-N1	4.36	120.57	114.89
23	2K	56	PSU	N1-C2-N3	4.30	119.71	115.17
22	1K	40	PSU	C4-N3-C2	-4.29	120.46	126.37
22	1K	64	PSU	N1-C2-N3	4.28	119.69	115.17
22	1K	40	PSU	N1-C2-N3	4.16	119.55	115.17
24	1L	40	PSU	N1-C2-N3	4.16	119.55	115.17
22	1K	64	PSU	C4-N3-C2	-4.12	120.70	126.37
23	2L	33	OMC	O2'-C2'-C1'	4.10	116.78	108.99
55	3L	38	MIA	C11-S10-C2	4.06	105.30	102.25
55	3L	38	MIA	C16-C14-C13	-3.96	110.77	122.66
22	1K	38	MIA	C4-C5-N7	-3.95	106.07	110.58
22	1K	38	MIA	C16-C14-C13	-3.93	110.87	122.66
22	1K	38	MIA	C15-C14-C13	-3.80	111.25	122.66
22	1K	35	QUO	O6-C6-N1	-3.77	113.03	120.11
22	1K	38	MIA	C5-N7-C8	3.77	109.37	103.45
55	3L	38	MIA	C5-N7-C8	3.63	109.16	103.45
22	1K	63	5MU	C5M-C5-C6	-3.54	118.06	122.85
23	2K	55	5MU	C5M-C5-C6	-3.44	118.19	122.85
22	1K	38	MIA	C2-N3-C4	3.43	121.27	112.29
55	3L	40	PSU	N1-C2-N3	3.29	118.64	115.17
23	2K	8	4SU	C1'-N1-C2	3.22	123.37	117.59
22	1K	38	MIA	C6-C5-N7	3.04	135.75	132.43
22	1K	35	QUO	N1-C2-N3	-3.03	117.78	123.32
55	3L	38	MIA	C4-C5-C6	2.98	119.26	116.78
55	3L	38	MIA	C1'-N9-C8	-2.98	120.48	127.09
22	1K	35	QUO	N2-C2-N1	2.95	122.99	116.76
22	1K	64	PSU	O2-C2-N1	-2.92	119.78	122.79
22	1K	64	PSU	C6-N1-C2	-2.91	119.99	122.69
23	2K	55	5MU	C6-N1-C2	-2.81	118.51	121.30
22	1K	35	QUO	C10-N11-C12	-2.79	109.15	114.83
22	1K	38	MIA	N9-C8-N7	-2.77	110.01	113.94
22	1K	35	QUO	C1'-N9-C4	-2.70	118.52	126.49
23	2L	55	5MU	N3-C2-N1	2.66	118.35	114.89
23	2L	8	4SU	C1'-N1-C2	2.62	122.30	117.59
55	3L	38	MIA	N9-C8-N7	-2.62	110.22	113.94
55	3L	38	MIA	C2-N3-C4	2.52	118.88	112.29
55	3L	38	MIA	C4-C5-N7	-2.44	107.80	110.58
23	2L	55	5MU	O4-C4-N3	-2.40	115.59	120.11
22	1K	40	PSU	C6-N1-C2	-2.39	120.47	122.69
23	2K	56	PSU	C6-N1-C2	-2.36	120.50	122.69

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	1L	40	PSU	O2-C2-N1	-2.25	120.47	122.79
24	1L	40	PSU	C6-N1-C2	-2.19	120.66	122.69
23	2L	33	OMC	C1'-N1-C2	2.18	123.26	118.44
24	3K	40	PSU	C6-N1-C2	-2.15	120.69	122.69
22	1K	38	MIA	C5-C4-N9	2.14	108.15	105.81
55	3L	38	MIA	C4-N9-C1'	2.13	131.61	126.63
22	1K	40	PSU	O2-C2-N1	-2.09	120.64	122.79
23	2K	8	4SU	C1'-N1-C6	-2.08	116.34	120.78
23	2L	55	5MU	C6-N1-C2	-2.07	119.24	121.30
22	1K	63	5MU	C6-N1-C2	-2.07	119.24	121.30
22	1K	35	QUO	O6-C6-C5	-2.07	119.48	125.69
55	3L	38	MIA	C16-C14-C15	-2.06	109.84	114.59
55	3L	38	MIA	C4-N9-C8	2.06	107.90	105.74
23	2K	56	PSU	O4-C4-C5	-2.05	118.92	124.01
55	3L	38	MIA	N3-C2-N1	-2.02	123.31	127.00
55	3L	38	MIA	C2-N1-C6	2.02	121.37	117.54
55	3L	40	PSU	O2-C2-N1	-2.00	120.72	122.79

There are no chirality outliers.

All (19) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
22	1K	35	QUO	O4'-C4'-C5'-O5'
22	1K	35	QUO	C16-C12-N11-C10
22	1K	38	MIA	N6-C12-C13-C14
22	1K	38	MIA	C12-C13-C14-C15
22	1K	38	MIA	C12-C13-C14-C16
23	2K	55	5MU	O4'-C4'-C5'-O5'
55	3L	38	MIA	N1-C2-S10-C11
55	3L	38	MIA	N3-C2-S10-C11
55	3L	38	MIA	C12-C13-C14-C15
55	3L	38	MIA	C12-C13-C14-C16
22	1K	63	5MU	C3'-C4'-C5'-O5'
22	1K	63	5MU	O4'-C4'-C5'-O5'
22	1K	35	QUO	C3'-C4'-C5'-O5'
23	2K	55	5MU	C3'-C4'-C5'-O5'
22	1K	35	QUO	C7-C10-N11-C12
22	1K	40	PSU	O4'-C1'-C5-C4
23	2L	56	PSU	C4'-C5'-O5'-P
22	1K	63	5MU	C4'-C5'-O5'-P
23	2L	33	OMC	C2'-C1'-N1-C6

There are no ring outliers.

10 monomers are involved in 27 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
23	2L	56	PSU	1	0
23	2K	8	4SU	1	0
23	2K	56	PSU	1	0
23	2L	8	4SU	1	0
23	2L	33	OMC	6	0
22	1K	64	PSU	1	0
22	1K	35	QUO	5	0
22	1K	38	MIA	7	0
22	1K	40	PSU	2	0
23	2K	55	5MU	3	0

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

Of 1166 ligands modelled in this entry, 1164 are monoatomic - leaving 2 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	$\#\|Z\| > 2$
57	PAR	13	1745	-	44,45,45	0.84	2 (4%)	63,67,67	2.10	17 (26%)
57	PAR	1G	1686	-	44,45,45	0.71	1 (2%)	63,67,67	1.84	11 (17%)

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
57	PAR	13	1745	-	-	6/18/94/94	0/4/4/4

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
57	PAR	1G	1686	-	-	5/18/94/94	0/4/4/4

All (3) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	1G	1686	PAR	C24-N24	-2.32	1.43	1.47
57	13	1745	PAR	C21-N21	-2.19	1.44	1.47
57	13	1745	PAR	C24-N24	-2.19	1.44	1.47

All (28) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	1G	1686	PAR	C13-O52-C52	-6.92	101.57	117.98
57	13	1745	PAR	C11-O51-C51	5.24	123.95	113.72
57	13	1745	PAR	C14-O54-C54	5.05	123.58	113.72
57	1G	1686	PAR	C11-O51-C51	4.99	123.46	113.72
57	1G	1686	PAR	C14-O54-C54	4.90	123.29	113.72
57	1G	1686	PAR	O52-C13-O43	-4.74	106.53	111.37
57	13	1745	PAR	O51-C51-C41	4.57	117.94	109.70
57	13	1745	PAR	C11-C21-N21	-4.37	102.33	110.20
57	13	1745	PAR	C22-C12-C62	-4.33	103.60	110.08
57	13	1745	PAR	O11-C11-C21	-3.62	102.15	108.08
57	13	1745	PAR	C32-C22-C12	-3.41	105.18	111.02
57	1G	1686	PAR	O51-C11-C21	3.39	117.57	110.08
57	13	1745	PAR	C14-O33-C33	-3.30	110.17	117.98
57	13	1745	PAR	C31-C21-N21	-3.20	104.49	111.05
57	13	1745	PAR	O51-C11-C21	3.19	117.13	110.08
57	1G	1686	PAR	O51-C51-C41	3.16	115.39	109.70
57	13	1745	PAR	O62-C62-C52	3.14	118.00	109.94
57	13	1745	PAR	O54-C54-C44	2.99	115.08	109.70
57	1G	1686	PAR	C62-C12-N12	-2.91	105.19	110.94
57	1G	1686	PAR	O54-C54-C64	2.90	111.64	106.07
57	13	1745	PAR	C11-C21-C31	2.88	117.50	110.29
57	1G	1686	PAR	C14-O33-C33	-2.78	111.39	117.98
57	13	1745	PAR	O62-C62-C12	-2.52	105.20	109.90
57	1G	1686	PAR	C11-O11-C42	-2.31	112.51	117.98
57	13	1745	PAR	O44-C44-C54	2.30	114.98	109.32
57	1G	1686	PAR	O11-C42-C32	-2.29	103.71	109.18
57	13	1745	PAR	C62-C12-N12	-2.20	106.59	110.94
57	13	1745	PAR	O61-C61-C51	-2.04	104.37	111.33

There are no chirality outliers.

All (11) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
57	1G	1686	PAR	O51-C51-C61-O61
57	1G	1686	PAR	C33-C43-C53-O53
57	1G	1686	PAR	C41-C51-C61-O61
57	1G	1686	PAR	O51-C11-O11-C42
57	13	1745	PAR	O43-C43-C53-O53
57	13	1745	PAR	C33-C43-C53-O53
57	1G	1686	PAR	O43-C43-C53-O53
57	13	1745	PAR	C41-C51-C61-O61
57	13	1745	PAR	C23-C13-O52-C52
57	13	1745	PAR	C43-C33-O33-C14
57	13	1745	PAR	O43-C13-O52-C52

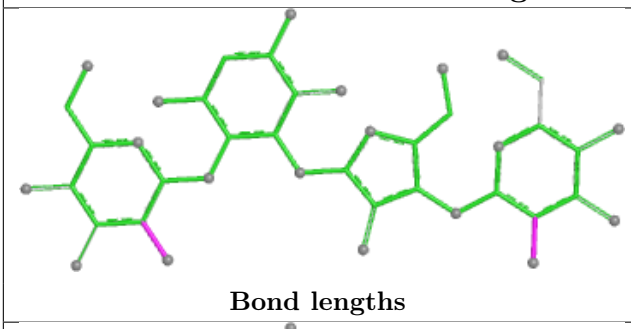
There are no ring outliers.

1 monomer is involved in 2 short contacts:

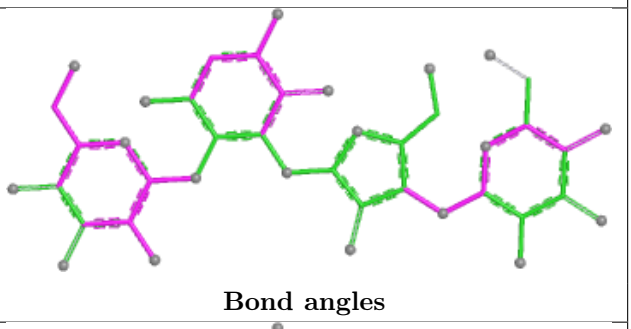
Mol	Chain	Res	Type	Clashes	Symm-Clashes
57	13	1745	PAR	2	0

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less then 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

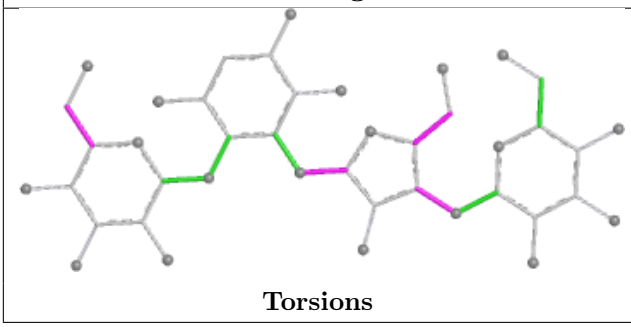
Ligand PAR 13 1745



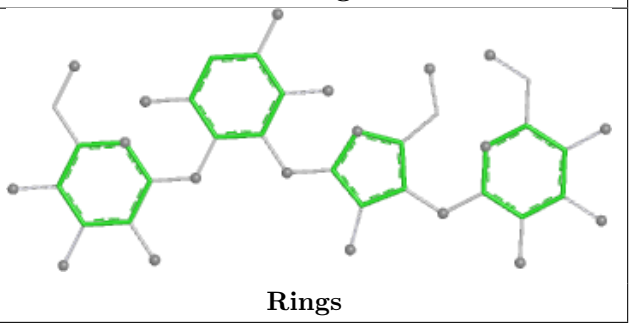
Bond lengths



Bond angles

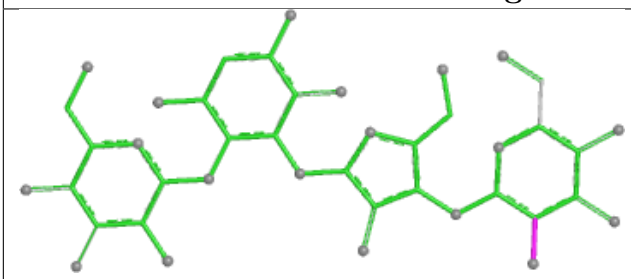


Torsions

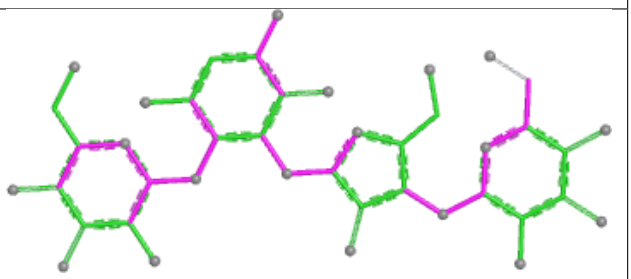


Rings

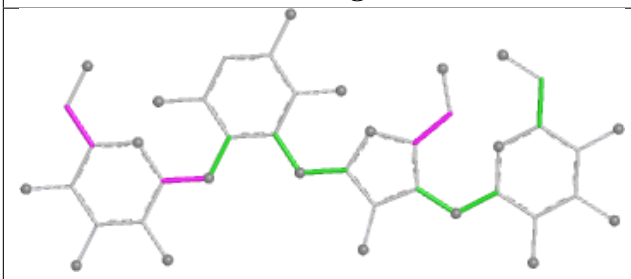
Ligand PAR 1G 1686



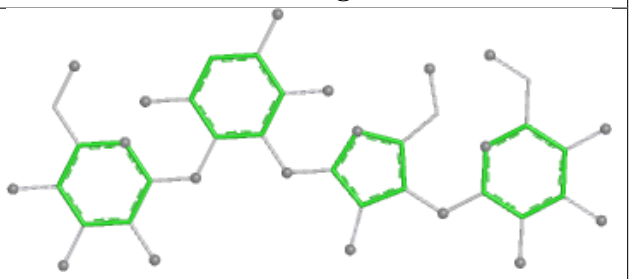
Bond lengths



Bond angles



Torsions



Rings

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

In the following table, the column labelled '#RSRZ> 2' contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95^{th} percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled 'Q< 0.9' lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å^2)	Q<0.9
1	13	1505/1522 (98%)	0.80	207 (13%)	6	4	53, 96, 178, 280	0
1	1G	1504/1522 (98%)	0.96	248 (16%)	4	2	67, 108, 172, 272	0
2	12	237/256 (92%)	1.60	64 (27%)	1	1	122, 156, 179, 190	0
2	1E	237/256 (92%)	1.20	51 (21%)	2	1	101, 137, 165, 175	0
3	22	206/239 (86%)	1.98	82 (39%)	1	0	114, 132, 162, 173	0
3	2E	205/239 (85%)	0.85	24 (11%)	9	5	81, 103, 132, 138	0
4	32	208/209 (99%)	1.31	45 (21%)	2	1	88, 109, 130, 142	0
4	3E	208/209 (99%)	0.89	35 (16%)	4	2	77, 98, 122, 131	0
5	42	151/162 (93%)	1.36	32 (21%)	2	1	99, 115, 136, 155	0
5	4E	151/162 (93%)	0.82	18 (11%)	9	5	72, 91, 112, 150	0
6	52	101/101 (100%)	0.69	9 (8%)	15	8	78, 94, 114, 144	0
6	5E	101/101 (100%)	0.89	11 (10%)	10	5	75, 94, 115, 132	0
7	62	155/156 (99%)	1.99	43 (27%)	1	1	105, 120, 143, 157	0
7	6E	152/156 (97%)	1.26	25 (16%)	4	2	96, 114, 137, 148	0
8	72	137/138 (99%)	1.14	27 (19%)	3	1	98, 119, 131, 137	0
8	7E	138/138 (100%)	0.79	21 (15%)	5	3	81, 100, 114, 126	0
9	82	122/128 (95%)	2.03	40 (32%)	1	0	102, 149, 166, 170	0
9	8E	127/128 (99%)	1.38	31 (24%)	2	1	81, 135, 158, 168	0
10	1A	99/105 (94%)	1.36	18 (18%)	3	2	111, 148, 164, 171	0
10	1I	99/105 (94%)	1.65	33 (33%)	1	0	73, 128, 159, 161	0
11	2A	117/129 (90%)	1.28	23 (19%)	3	1	81, 103, 120, 147	0
11	2I	116/129 (89%)	1.13	18 (15%)	5	2	72, 98, 120, 150	0
12	3A	125/132 (94%)	1.11	21 (16%)	4	2	78, 96, 129, 157	0
12	3I	122/132 (92%)	0.72	13 (10%)	11	6	61, 71, 97, 126	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	4A	117/126 (92%)	1.65	21 (17%) 3 2	102, 137, 157, 170	0
13	4I	116/126 (92%)	1.02	13 (11%) 10 5	78, 117, 136, 144	0
14	5A	58/61 (95%)	1.72	17 (29%) 1 1	116, 131, 146, 154	0
14	5I	59/61 (96%)	0.72	8 (13%) 7 4	82, 92, 108, 118	0
15	6A	88/89 (98%)	0.66	9 (10%) 12 6	80, 105, 121, 127	0
15	6I	88/89 (98%)	0.67	10 (11%) 10 5	67, 93, 110, 123	0
16	7A	84/88 (95%)	1.11	14 (16%) 4 2	85, 98, 124, 154	0
16	7I	84/88 (95%)	1.06	10 (11%) 9 5	90, 104, 132, 160	0
17	8A	100/105 (95%)	1.11	16 (16%) 5 2	91, 106, 124, 128	0
17	8I	100/105 (95%)	1.33	22 (22%) 2 1	81, 99, 111, 121	0
18	9A	71/88 (80%)	0.93	8 (11%) 10 5	84, 107, 134, 164	0
18	9I	72/88 (81%)	1.14	13 (18%) 3 2	80, 98, 126, 161	0
19	AA	78/93 (83%)	1.49	20 (25%) 1 1	124, 142, 171, 180	0
19	AI	83/93 (89%)	1.45	15 (18%) 3 2	90, 116, 137, 145	0
20	BA	99/106 (93%)	1.28	30 (30%) 1 1	83, 105, 133, 143	0
20	BI	99/106 (93%)	2.04	41 (41%) 0 0	101, 115, 146, 151	0
21	1B	25/27 (92%)	1.57	5 (20%) 3 1	110, 126, 143, 163	0
21	1F	25/27 (92%)	1.54	8 (32%) 1 0	90, 102, 116, 142	0
22	1K	80/85 (94%)	2.61	30 (37%) 1 0	81, 190, 249, 257	0
23	2K	73/77 (94%)	1.20	12 (16%) 4 2	68, 96, 122, 140	0
23	2L	73/77 (94%)	1.47	19 (26%) 1 1	76, 105, 138, 160	0
24	1L	84/85 (98%)	2.79	39 (46%) 0 0	107, 214, 302, 318	0
24	3K	84/85 (98%)	1.48	17 (20%) 3 1	68, 209, 252, 259	0
25	4K	12/30 (40%)	1.15	3 (25%) 2 1	48, 89, 132, 145	1 (8%)
25	4L	12/30 (40%)	0.84	2 (16%) 4 2	85, 117, 155, 188	0
26	14	2909/2918 (99%)	0.49	289 (9%) 13 6	48, 80, 223, 333	0
26	1H	2912/2918 (99%)	0.39	278 (9%) 14 7	38, 71, 216, 270	0
27	16	122/122 (100%)	0.43	5 (4%) 41 22	65, 91, 113, 185	0
27	1J	122/122 (100%)	0.84	10 (8%) 17 9	73, 107, 128, 182	0
28	11	273/276 (98%)	0.15	9 (3%) 49 28	39, 62, 80, 92	0
28	19	273/276 (98%)	0.29	12 (4%) 39 20	42, 70, 88, 102	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
29	21	205/206 (99%)	0.82	23 (11%) 10 5	48, 85, 125, 137	0
29	29	205/206 (99%)	1.19	40 (19%) 3 1	56, 87, 129, 148	0
30	31	202/210 (96%)	0.69	22 (10%) 10 5	38, 74, 110, 127	0
30	39	208/210 (99%)	1.19	42 (20%) 3 1	54, 95, 146, 178	0
31	41	181/182 (99%)	1.68	51 (28%) 1 1	79, 102, 133, 149	0
31	49	181/182 (99%)	1.12	33 (18%) 3 2	104, 125, 154, 169	0
32	51	173/180 (96%)	1.23	40 (23%) 2 1	79, 102, 115, 151	0
32	59	170/180 (94%)	2.75	86 (50%) 0 0	134, 183, 210, 241	0
33	61	146/148 (98%)	1.55	40 (27%) 1 1	74, 122, 140, 145	0
33	69	146/148 (98%)	1.64	48 (32%) 1 0	77, 118, 142, 146	0
34	15	138/140 (98%)	1.79	43 (31%) 1 1	75, 100, 129, 137	0
34	58	138/140 (98%)	1.10	17 (12%) 8 5	61, 88, 126, 143	0
35	25	122/122 (100%)	0.79	14 (11%) 9 5	61, 84, 102, 110	0
35	68	122/122 (100%)	0.45	11 (9%) 15 8	55, 74, 92, 101	0
36	35	150/150 (100%)	0.87	23 (15%) 5 3	54, 96, 133, 159	0
36	78	150/150 (100%)	0.91	21 (14%) 6 3	45, 81, 111, 152	0
37	45	139/141 (98%)	1.02	21 (15%) 5 3	69, 98, 116, 136	0
37	88	141/141 (100%)	0.81	17 (12%) 8 5	52, 77, 101, 129	0
38	55	117/118 (99%)	1.14	24 (20%) 2 1	56, 75, 92, 108	0
38	98	118/118 (100%)	1.09	21 (17%) 4 2	56, 80, 101, 107	0
39	65	111/112 (99%)	0.86	11 (9%) 13 6	75, 102, 120, 132	0
39	A8	110/112 (98%)	0.59	9 (8%) 17 9	70, 86, 110, 125	0
40	75	137/146 (93%)	1.44	34 (24%) 2 1	75, 91, 148, 185	0
40	B8	137/146 (93%)	1.69	38 (27%) 1 1	70, 89, 136, 159	0
41	85	117/118 (99%)	1.53	27 (23%) 2 1	62, 88, 122, 143	0
41	C8	117/118 (99%)	0.91	17 (14%) 6 3	50, 76, 107, 141	0
42	95	101/101 (100%)	2.19	40 (39%) 1 0	61, 116, 131, 136	0
42	D8	101/101 (100%)	1.92	30 (29%) 1 1	53, 100, 124, 139	0
43	A5	113/113 (100%)	0.69	10 (8%) 15 8	56, 71, 100, 159	0
43	E8	113/113 (100%)	0.55	5 (4%) 39 20	52, 72, 105, 140	0
44	B5	92/96 (95%)	0.44	6 (6%) 25 12	64, 79, 106, 119	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
44	F8	93/96 (96%)	0.39	4 (4%) 40 21	51, 67, 93, 102	0
45	C5	104/110 (94%)	1.60	36 (34%) 1 0	89, 119, 158, 166	0
45	G8	104/110 (94%)	1.03	14 (13%) 7 4	69, 96, 140, 148	0
46	D5	138/206 (66%)	1.29	26 (18%) 3 2	103, 134, 178, 186	0
46	H8	175/206 (84%)	1.28	36 (20%) 2 1	84, 119, 190, 195	0
47	E5	77/85 (90%)	0.66	7 (9%) 15 8	64, 81, 99, 131	0
47	I8	76/85 (89%)	0.54	8 (10%) 11 6	52, 69, 85, 113	0
48	F5	97/98 (98%)	1.02	21 (21%) 2 1	57, 77, 122, 143	0
48	J8	97/98 (98%)	0.55	9 (9%) 14 7	48, 72, 124, 150	0
49	G5	66/72 (91%)	0.77	10 (15%) 5 3	74, 96, 114, 135	0
49	K8	66/72 (91%)	0.97	13 (19%) 3 1	59, 77, 90, 124	0
50	H5	59/60 (98%)	1.40	11 (18%) 3 2	74, 94, 132, 157	0
50	L8	59/60 (98%)	0.44	3 (5%) 33 17	56, 78, 114, 137	0
51	I5	63/71 (88%)	1.20	12 (19%) 3 1	138, 171, 190, 192	0
51	M8	66/71 (92%)	1.56	19 (28%) 1 1	105, 154, 174, 184	0
52	J5	59/60 (98%)	1.70	21 (35%) 1 0	56, 80, 147, 187	0
52	N8	59/60 (98%)	1.34	14 (23%) 2 1	51, 86, 152, 158	0
53	L5	45/49 (91%)	0.31	3 (6%) 24 12	47, 56, 69, 84	0
53	P8	46/49 (93%)	0.26	3 (6%) 25 12	40, 48, 66, 81	0
54	M5	62/65 (95%)	1.03	14 (22%) 2 1	65, 77, 93, 107	0
54	Q8	61/65 (93%)	0.33	1 (1%) 70 47	56, 66, 80, 98	0
55	3L	83/85 (97%)	1.68	19 (22%) 2 1	72, 217, 260, 269	0
All	All	20954/21624 (96%)	0.92	3312 (15%) 5 2	38, 95, 175, 333	1 (0%)

All (3312) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	13	85	U	22.6
32	59	96	ALA	20.5
32	59	99	VAL	18.1
13	4A	6	GLY	17.9
7	62	81	GLY	16.8
27	1J	88	C	15.6
24	1L	33	C	15.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
42	95	93	GLU	15.1
22	1K	33	C	15.0
32	59	128	PRO	14.6
40	75	104	ASN	14.4
7	62	86	GLN	14.2
13	4A	2	ALA	13.8
22	1K	85	A	13.7
13	4A	7	VAL	13.5
24	1L	85	A	13.4
26	1H	2476	A	13.1
1	13	84	U	12.2
31	41	2	PRO	12.1
7	62	84	ASN	12.1
50	H5	17	LYS	12.0
40	B8	104	ASN	11.9
31	41	26	GLN	11.8
7	62	82	GLY	11.6
1	1G	89	U	11.6
22	1K	32	A	11.5
24	1L	32	A	11.4
26	14	1537	C	11.3
2	12	163	PHE	11.2
22	1K	82	A	11.0
23	2K	1	C	11.0
32	59	106	THR	10.8
2	12	70	PHE	10.8
33	61	118	LYS	10.7
30	39	96	ASP	10.7
3	22	159	GLY	10.7
22	1K	84	C	10.6
3	22	160	ALA	10.6
1	13	86	U	10.5
24	1L	34	U	10.3
22	1K	83	C	10.3
3	22	158	GLY	10.2
24	1L	84	C	10.2
55	3L	63	U	10.1
40	B8	106	SER	10.1
40	75	1	MET	10.1
31	41	35	GLU	10.1
42	95	73	SER	10.0
38	55	69	ASP	9.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
11	2A	126	ARG	9.8
11	2A	125	PHE	9.8
13	4A	8	GLU	9.8
26	14	2119	A	9.7
11	2I	123	LYS	9.7
9	82	75	ASP	9.6
18	9A	59	SER	9.6
7	62	85	TYR	9.6
32	59	131	VAL	9.6
11	2A	127	LYS	9.5
26	1H	2477	C	9.5
13	4A	9	ILE	9.4
24	3K	19	C	9.4
24	3K	37	A	9.4
22	1K	81	C	9.3
33	61	41	GLU	9.3
1	1G	1251	A	9.3
28	19	5	LYS	9.3
26	14	2173	A	9.2
1	1G	965	A	9.2
34	15	72	TYR	9.1
55	3L	71	C	9.1
42	D8	73	SER	9.0
37	88	91	GLU	9.0
41	85	20	LEU	9.0
34	15	84	LYS	9.0
38	98	69	ASP	8.8
32	59	105	LEU	8.8
2	1E	229	VAL	8.8
1	1G	824	C	8.8
14	5A	6	LEU	8.8
29	21	76	ARG	8.8
1	1G	966	G	8.7
13	4A	4	ILE	8.7
26	1H	1761	C	8.6
22	1K	34	U	8.6
26	14	1026	U	8.6
19	AI	56	GLN	8.6
7	62	4	ARG	8.5
24	1L	24	G	8.5
18	9I	32	ARG	8.5
19	AI	2	PRO	8.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	59	103	LEU	8.4
7	62	83	ALA	8.4
1	1G	825	G	8.4
42	D8	71	LEU	8.4
31	41	25	TYR	8.4
23	2K	77	A	8.3
26	14	2111	C	8.2
41	C8	118	GLY	8.2
1	1G	1392	G	8.2
1	1G	1250	A	8.2
9	82	115	GLY	8.2
42	95	68	LYS	8.1
29	21	193	GLY	8.1
26	1H	2119	A	8.1
29	29	76	ARG	8.1
1	1G	377	G	8.1
13	4A	3	ARG	8.1
41	85	43	GLY	8.1
26	14	2476	A	8.1
46	H8	166	SER	8.0
32	59	100	GLY	8.0
13	4A	5	ALA	8.0
26	1H	2117	A	8.0
20	BI	72	LEU	8.0
3	22	15	THR	8.0
7	6E	32	ARG	7.9
32	59	104	GLU	7.9
24	1L	83	C	7.9
19	AI	61	TYR	7.9
1	1G	90	C	7.9
41	85	17	ILE	7.9
42	95	71	LEU	7.8
37	88	80	GLU	7.8
7	6E	84	ASN	7.8
34	15	85	ILE	7.8
26	1H	2116	G	7.7
42	D8	74	LYS	7.7
42	95	74	LYS	7.6
20	BI	18	GLN	7.6
9	82	66	ARG	7.6
52	N8	26	THR	7.6
26	1H	1059	G	7.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
42	D8	84	LYS	7.6
26	1H	1762	A	7.6
26	14	2161	C	7.5
31	49	74	LYS	7.5
26	14	2118	U	7.5
34	58	72	TYR	7.5
23	2L	35	C	7.5
26	14	1885	A	7.4
1	13	104	G	7.4
26	1H	1383	C	7.4
2	1E	228	GLY	7.3
45	C5	29	GLU	7.3
42	D8	81	TYR	7.3
11	2I	125	PHE	7.3
42	95	81	TYR	7.3
42	D8	70	ILE	7.2
42	D8	75	PHE	7.2
33	69	35	LEU	7.2
31	49	155	MET	7.2
33	61	20	ASP	7.2
26	14	2110	G	7.2
37	45	1	MET	7.2
11	2A	123	LYS	7.1
33	69	144	VAL	7.1
9	82	71	SER	7.1
32	59	95	ARG	7.1
3	2E	161	GLU	7.1
12	3A	13	LYS	7.1
26	14	2802	G	7.1
11	2A	121	PRO	7.1
11	2I	124	LYS	7.1
7	6E	4	ARG	7.1
7	62	32	ARG	7.0
4	32	160	GLN	7.0
41	85	40	PHE	7.0
50	H5	20	LYS	7.0
13	4I	8	GLU	7.0
4	3E	139	ARG	7.0
18	9A	61	LYS	7.0
34	58	84	LYS	7.0
6	5E	94	GLN	7.0
1	13	1531	A	7.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
42	95	63	GLY	6.9
26	14	2780	G	6.9
1	13	311	C	6.9
1	1G	1249	C	6.9
26	14	1538	G	6.9
26	1H	1058	U	6.9
26	1H	2170	A	6.9
2	12	71	VAL	6.9
50	H5	18	ASP	6.9
11	2A	120	ARG	6.9
7	6E	5	ARG	6.8
26	1H	756	C	6.8
1	13	965	A	6.8
6	5E	92	LYS	6.8
1	1G	1286	A	6.8
7	62	13	GLN	6.8
26	14	2798	C	6.8
38	55	8	ARG	6.7
32	51	114	VAL	6.7
3	22	170	GLN	6.7
5	42	125	SER	6.7
21	1F	16	GLY	6.7
1	13	1385	G	6.7
31	41	96	ARG	6.7
11	2I	25	TYR	6.7
24	1L	41	C	6.7
40	B8	1	MET	6.7
4	32	161	ASN	6.6
55	3L	64	U	6.6
1	1G	823	G	6.6
11	2I	122	LYS	6.6
34	15	100	GLU	6.6
41	C8	19	LYS	6.6
2	12	165	VAL	6.6
33	69	6	LEU	6.5
32	51	155	SER	6.5
31	41	28	VAL	6.5
33	61	119	PRO	6.5
42	D8	77	ALA	6.5
52	N8	59	GLU	6.5
35	25	45	GLU	6.5
1	13	1386	G	6.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
40	B8	112	ARG	6.5
26	14	2799	A	6.4
40	75	2	ASN	6.4
38	55	43	GLU	6.4
7	62	80	VAL	6.4
1	1G	1370	G	6.4
26	14	2101	G	6.4
40	75	6	LEU	6.4
1	1G	111	G	6.4
41	85	16	LYS	6.4
9	82	10	ARG	6.3
26	1H	1699	G	6.3
1	1G	1354	C	6.3
26	14	2120	G	6.3
7	62	41	ARG	6.3
12	3A	28	LYS	6.3
26	14	2790	A	6.3
3	2E	166	GLU	6.3
9	82	13	ALA	6.3
5	42	124	GLY	6.3
32	59	123	PHE	6.3
26	14	1093	G	6.2
30	39	93	LYS	6.2
30	39	43	LYS	6.2
26	14	2112	G	6.2
29	21	75	VAL	6.2
1	1G	73	G	6.2
49	K8	15	LYS	6.2
31	41	160	VAL	6.1
34	15	74	ARG	6.1
1	1G	91	C	6.1
1	1G	454	C	6.1
26	1H	1218	C	6.1
40	75	101	PHE	6.1
40	B8	51	ARG	6.1
7	6E	8	GLU	6.1
26	14	967	C	6.1
38	98	43	GLU	6.1
26	14	2136	C	6.1
2	12	93	VAL	6.1
55	3L	62	G	6.1
36	78	61	ARG	6.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
42	95	83	ARG	6.0
7	62	37	ASN	6.0
10	1A	58	ASP	6.0
9	82	12	GLU	6.0
18	9A	62	GLU	6.0
28	11	35	LYS	6.0
26	14	352	G	6.0
10	1I	5	ARG	6.0
2	12	133	LYS	6.0
48	F5	27	GLU	6.0
9	82	65	VAL	6.0
11	2A	122	LYS	5.9
32	51	171	LEU	5.9
32	59	122	THR	5.9
36	35	110	TYR	5.9
26	1H	529	A	5.9
53	P8	36	GLN	5.9
6	5E	95	GLU	5.9
2	1E	55	PHE	5.9
38	98	47	PHE	5.9
1	13	1286	A	5.9
32	59	93	GLY	5.9
2	12	86	GLU	5.9
11	2I	12	ARG	5.9
33	61	39	ALA	5.9
26	14	387	U	5.9
13	4I	100	GLY	5.9
31	49	75	LYS	5.9
1	1G	110	C	5.8
19	AI	81	ARG	5.8
26	1H	1630	G	5.8
48	J8	92	LYS	5.8
36	78	57	THR	5.8
1	13	1437	C	5.8
1	1G	121	C	5.8
26	1H	1463	C	5.8
5	42	126	ARG	5.8
7	62	33	ASP	5.8
20	BI	69	GLY	5.8
52	J5	14	ALA	5.8
1	1G	1391	U	5.8
42	D8	82	ARG	5.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	12	92	TYR	5.8
11	2A	124	LYS	5.8
8	7E	4	ASP	5.8
31	41	100	TRP	5.8
26	14	2149	G	5.8
4	32	156	GLU	5.8
1	13	150	C	5.8
10	1A	62	HIS	5.8
51	M8	34	GLU	5.7
1	13	933	G	5.7
41	C8	20	LEU	5.7
55	3L	65	C	5.7
19	AI	3	ARG	5.7
1	13	112	G	5.7
1	13	822	C	5.7
26	14	1884	A	5.7
4	32	122	ARG	5.7
3	22	116	VAL	5.7
26	14	614	U	5.7
2	12	29	ALA	5.7
20	BI	68	LYS	5.6
22	1K	3	U	5.6
4	3E	137	SER	5.6
31	41	33	ARG	5.6
18	9I	68	LYS	5.6
30	31	99	TYR	5.6
51	I5	32	TYR	5.6
9	82	14	VAL	5.6
10	1I	73	ASP	5.6
31	41	34	LEU	5.6
7	62	5	ARG	5.6
26	1H	2712	U	5.6
37	88	90	VAL	5.6
34	15	73	THR	5.6
26	1H	2113	U	5.6
2	1E	213	LEU	5.5
32	59	21	PRO	5.5
34	58	73	THR	5.5
3	22	206	GLU	5.5
3	22	30	ARG	5.5
26	14	11	G	5.5
32	59	89	ILE	5.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
9	82	127	LYS	5.5
1	13	824	C	5.5
1	1G	822	C	5.5
26	14	2506	U	5.5
30	39	98	SER	5.5
55	3L	17	G	5.5
32	59	97	ARG	5.4
40	B8	105	LEU	5.4
1	13	1389	C	5.4
19	AI	59	PRO	5.4
29	29	77	ILE	5.4
12	3A	64	TYR	5.4
15	6I	89	GLY	5.4
32	59	127	GLU	5.4
1	1G	88	C	5.4
1	1G	1045	C	5.4
26	1H	1404	C	5.4
1	1G	655	A	5.4
2	12	14	GLY	5.4
40	B8	109	GLU	5.4
9	82	11	LYS	5.4
41	85	19	LYS	5.4
42	95	62	LEU	5.4
23	2L	4	G	5.4
9	82	69	GLY	5.4
2	12	79	ASP	5.3
1	13	1390	U	5.3
8	7E	2	LEU	5.3
31	41	94	LEU	5.3
3	22	193	TYR	5.3
17	8I	35	VAL	5.3
42	95	75	PHE	5.3
8	72	9	MET	5.3
9	82	67	GLY	5.3
9	82	73	GLN	5.3
20	BA	9	ASN	5.3
1	1G	378	G	5.3
26	1H	2602	A	5.3
17	8A	7	THR	5.3
32	59	129	THR	5.3
1	13	823	G	5.3
7	6E	33	ASP	5.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
10	1A	64	GLU	5.2
20	BI	80	ARG	5.2
1	13	1196	U	5.2
26	1H	2804	C	5.2
2	12	152	PHE	5.2
4	32	134	ASP	5.2
32	59	98	LEU	5.2
38	98	18	LEU	5.2
8	72	5	PRO	5.2
34	58	129	PRO	5.2
46	D5	164	ALA	5.2
1	13	655	A	5.2
1	13	1388	C	5.2
26	1H	887	A	5.2
48	F5	26	ARG	5.2
1	1G	230	G	5.2
8	72	87	SER	5.2
26	14	530	G	5.2
42	D8	79	VAL	5.2
33	61	43	ASN	5.2
29	21	78	LEU	5.2
7	62	151	TYR	5.2
14	5A	38	GLY	5.2
38	55	7	GLY	5.2
8	72	4	ASP	5.2
1	13	1342	C	5.2
26	14	2170	A	5.2
1	1G	821	G	5.2
40	75	100	TYR	5.2
3	22	103	VAL	5.2
4	3E	102	ASP	5.2
52	J5	26	THR	5.2
42	D8	80	GLN	5.2
8	72	2	LEU	5.1
26	1H	1084	A	5.1
38	55	68	ARG	5.1
11	2A	118	GLY	5.1
13	4A	61	GLU	5.1
26	1H	1760	A	5.1
20	BA	20	LEU	5.1
45	C5	90	LEU	5.1
49	K8	11	GLU	5.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	1K	4	G	5.1
24	1L	13	G	5.1
1	13	1391	U	5.1
31	49	146	TYR	5.1
8	7E	1	MET	5.1
20	BI	25	ARG	5.1
26	1H	1032	A	5.1
26	1H	2062	A	5.1
26	14	1305	C	5.1
9	82	76	ALA	5.1
29	21	194	GLY	5.1
2	12	94	ASN	5.1
1	13	871	U	5.1
34	58	71	ILE	5.1
42	95	64	HIS	5.1
31	41	27	ASN	5.1
46	D5	155	LEU	5.1
40	B8	52	ILE	5.0
46	D5	165	VAL	5.0
29	21	79	ARG	5.0
49	K8	14	ARG	5.0
35	25	7	TYR	5.0
4	3E	31	CYS	5.0
1	13	744	C	5.0
1	1G	74	C	5.0
26	14	229	A	5.0
26	14	1509	C	5.0
7	62	146	GLU	5.0
9	82	72	GLY	5.0
31	41	74	LYS	5.0
44	B5	69	TYR	5.0
1	13	1392	G	5.0
1	1G	112	G	5.0
13	4I	114	ARG	5.0
17	8I	86	GLU	5.0
40	75	10	VAL	5.0
40	75	11	GLU	5.0
26	14	529	A	5.0
33	61	137	PRO	5.0
9	8E	126	SER	5.0
16	7I	84	ALA	5.0
26	1H	2189	U	5.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	14	2150	U	5.0
13	4I	3	ARG	5.0
29	29	152	LYS	5.0
41	85	84	LYS	5.0
42	95	79	VAL	5.0
5	42	81	GLU	5.0
1	1G	969	A	4.9
24	3K	38	A	4.9
26	1H	1554	A	4.9
26	14	1886	C	4.9
40	B8	111	ARG	4.9
45	C5	63	LYS	4.9
33	61	117	GLU	4.9
2	1E	232	PRO	4.9
32	59	19	VAL	4.9
1	1G	1149	C	4.9
26	14	34	C	4.9
26	14	914	C	4.9
1	1G	1117	G	4.9
1	1G	1353	G	4.9
26	1H	2190	G	4.9
32	51	104	GLU	4.9
47	E5	21	LEU	4.9
2	12	76	GLN	4.9
11	2A	119	CYS	4.9
26	1H	2188	C	4.9
42	D8	76	LYS	4.9
26	1H	1056	G	4.9
26	14	10	G	4.9
43	A5	85	VAL	4.9
6	5E	89	MET	4.9
53	L5	1	MET	4.9
9	8E	8	GLY	4.9
13	4A	100	GLY	4.9
26	14	2803	C	4.9
38	55	21	TYR	4.9
1	13	105	G	4.9
26	14	2121	G	4.9
8	7E	88	LYS	4.8
28	11	34	VAL	4.8
31	41	12	TYR	4.8
25	4K	19[A]	A	4.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
6	52	83	ASP	4.8
7	62	79	ARG	4.8
5	4E	122	GLU	4.8
7	62	77	SER	4.8
24	3K	36	U	4.8
55	3L	72	U	4.8
34	15	117	PHE	4.8
46	D5	68	PRO	4.8
4	32	31	CYS	4.8
31	49	140	ILE	4.8
20	BI	76	ALA	4.8
26	14	1554	A	4.8
55	3L	70	C	4.8
19	AA	11	VAL	4.8
27	1J	41	U	4.8
31	41	37	VAL	4.8
23	2L	5	G	4.8
5	4E	128	PRO	4.8
13	4A	63	THR	4.8
26	1H	405	U	4.8
26	14	1306	C	4.8
8	72	86	ILE	4.8
2	1E	224	GLN	4.8
26	1H	1678	G	4.8
26	14	1555	G	4.8
32	51	115	VAL	4.8
2	12	72	GLY	4.7
24	3K	20	C	4.7
19	AI	78	ARG	4.7
23	2K	71	G	4.7
26	14	2100	G	4.7
40	B8	101	PHE	4.7
42	95	21	ARG	4.7
26	1H	1759	A	4.7
26	14	2477	C	4.7
9	82	68	GLY	4.7
42	95	91	TYR	4.7
33	69	22	LYS	4.7
2	1E	217	ARG	4.7
6	5E	88	VAL	4.7
38	98	103	ARG	4.7
1	13	1343	G	4.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
24	3K	35	G	4.7
26	14	2148	G	4.7
26	1H	1033	U	4.7
1	1G	1116	C	4.7
23	2L	1	C	4.7
32	59	84	SER	4.7
3	22	164	ARG	4.7
20	BI	67	ALA	4.7
32	51	150	ALA	4.7
5	42	122	GLU	4.7
33	69	1	MET	4.7
32	59	148	ILE	4.7
30	39	97	TYR	4.7
34	15	98	VAL	4.7
31	49	39	ILE	4.6
10	1A	66	ARG	4.6
41	85	39	LEU	4.6
1	1G	1371	G	4.6
26	1H	1559	G	4.6
1	1G	60	A	4.6
1	1G	262	A	4.6
12	3I	91	LYS	4.6
22	1K	51	C	4.6
26	14	377	C	4.6
39	A8	48	LEU	4.6
33	69	143	SER	4.6
13	4A	64	TRP	4.6
29	21	52	LEU	4.6
29	21	195	LEU	4.6
31	49	133	LEU	4.6
1	13	1438	G	4.6
24	1L	14	A	4.6
26	14	1883	G	4.6
1	13	307	C	4.6
4	32	32	ALA	4.6
33	69	83	ALA	4.6
11	2I	11	LYS	4.6
30	39	56	GLU	4.6
10	1A	46	ARG	4.6
18	9I	72	ARG	4.6
2	12	151	GLY	4.6
42	95	86	GLY	4.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
10	1A	47	PHE	4.6
26	14	2117	A	4.6
1	1G	308	C	4.6
1	1G	826	C	4.6
17	8I	101	ARG	4.6
33	69	7	GLU	4.6
34	58	74	ARG	4.6
5	4E	21	ALA	4.6
14	5A	18	VAL	4.6
31	41	102	PHE	4.6
38	98	72	ASP	4.5
30	39	131	GLY	4.5
38	98	7	GLY	4.5
16	7A	84	ALA	4.5
39	65	5	THR	4.5
40	75	113	LYS	4.5
20	BI	70	SER	4.5
21	1B	14	TRP	4.5
29	29	116	VAL	4.5
50	L8	20	LYS	4.5
1	1G	876	G	4.5
16	7A	73	LEU	4.5
26	1H	2709	G	4.5
1	1G	1390	U	4.5
31	41	16	ARG	4.5
1	1G	1287	A	4.5
26	14	1536	A	4.5
26	14	2179	C	4.5
40	75	8	LYS	4.5
33	69	136	VAL	4.5
6	5E	97	PHE	4.5
4	32	25	ARG	4.5
9	8E	106	ALA	4.5
26	14	2792	G	4.5
11	2I	126	ARG	4.5
24	1L	51	C	4.4
26	1H	1462	C	4.4
26	1H	2161	C	4.4
46	D5	166	SER	4.4
26	1H	1679	U	4.4
26	14	1091	G	4.4
33	69	137	PRO	4.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
41	C8	22	LYS	4.4
40	75	112	ARG	4.4
45	C5	98	VAL	4.4
10	1I	47	PHE	4.4
17	8I	33	GLY	4.4
46	H8	173	ALA	4.4
34	15	104	LYS	4.4
42	D8	78	LYS	4.4
5	42	128	PRO	4.4
12	3A	48	PRO	4.4
39	65	57	LYS	4.4
21	1F	15	ARG	4.4
34	15	75	TYR	4.4
40	75	54	ARG	4.4
1	1G	994	A	4.4
29	29	91	VAL	4.4
23	2L	72	C	4.4
26	14	2137	C	4.4
19	AA	10	PHE	4.4
29	29	51	PHE	4.4
31	49	139	LEU	4.4
30	31	172	TRP	4.4
31	41	36	LYS	4.4
19	AA	13	ASP	4.4
30	31	96	ASP	4.4
26	1H	2112	G	4.4
2	12	164	VAL	4.4
32	59	115	VAL	4.4
41	85	24	TYR	4.4
48	F5	28	GLY	4.4
7	62	36	LYS	4.4
1	1G	429	U	4.4
20	BI	95	ALA	4.3
10	1I	4	ILE	4.3
23	2L	71	G	4.3
26	1H	975	G	4.3
28	11	64	ILE	4.3
42	95	69	LYS	4.3
1	1G	311	C	4.3
26	1H	2174	C	4.3
26	14	2180	U	4.3
34	15	90	MET	4.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
5	4E	123	LEU	4.3
12	3I	16	GLU	4.3
15	6I	62	GLN	4.3
1	13	1529	G	4.3
26	1H	654(P)	G	4.3
35	68	31	LYS	4.3
4	32	5	ILE	4.3
51	I5	31	ILE	4.3
40	B8	115	ARG	4.3
29	29	62	PRO	4.3
29	29	195	LEU	4.3
1	13	111	G	4.3
31	41	164	GLU	4.3
1	13	754	C	4.3
1	1G	1235	U	4.3
26	14	1304	C	4.3
26	14	2797	U	4.3
17	8A	5	VAL	4.3
30	31	100	THR	4.3
31	49	135	LEU	4.3
50	L8	17	LYS	4.2
1	1G	818	G	4.2
22	1K	31	G	4.2
24	1L	25	G	4.2
24	1L	31	G	4.2
26	1H	1176	G	4.2
1	1G	1352	C	4.2
20	BA	80	ARG	4.2
26	1H	1515	C	4.2
26	14	1092	C	4.2
26	14	2021	C	4.2
29	21	55	ASN	4.2
40	B8	98	LYS	4.2
44	F8	52	VAL	4.2
31	49	141	PHE	4.2
5	42	86	ALA	4.2
1	1G	1001	G	4.2
1	1G	1400	C	4.2
29	29	145	LYS	4.2
3	22	172	ARG	4.2
7	62	147	ALA	4.2
26	14	2102	U	4.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1G	1289	A	4.2
23	2L	36	A	4.2
24	1L	53	A	4.2
51	M8	9	LEU	4.2
26	1H	701	G	4.2
3	22	6	HIS	4.2
5	4E	89	ILE	4.2
15	6I	20	GLY	4.2
28	11	30	GLU	4.2
34	58	100	GLU	4.2
54	M5	57	ARG	4.2
2	1E	220	ASP	4.2
40	75	106	SER	4.2
1	13	262	A	4.2
26	1H	1057	A	4.2
27	1J	59	A	4.2
45	C5	77	PRO	4.2
1	1G	1367	C	4.2
17	8A	4	LYS	4.2
35	25	18	LYS	4.2
19	AA	8	GLY	4.2
1	13	818	G	4.2
1	1G	68	G	4.2
1	1G	576	G	4.2
1	1G	1032(B)	G	4.2
3	22	184	TYR	4.2
26	14	2147	G	4.2
5	42	123	LEU	4.1
5	42	80	ILE	4.1
9	82	77	ILE	4.1
32	59	102	ALA	4.1
42	95	70	ILE	4.1
24	1L	50	U	4.1
21	1B	16	GLY	4.1
1	1G	968	A	4.1
26	14	1847	A	4.1
39	65	20	ARG	4.1
46	H8	165	VAL	4.1
26	14	2174	C	4.1
1	13	657	G	4.1
1	13	1387	G	4.1
24	1L	1	G	4.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	1H	2805	G	4.1
26	14	859	G	4.1
26	14	2659	G	4.1
31	49	36	LYS	4.1
4	3E	26	CYS	4.1
7	62	34	GLY	4.1
32	59	130	ARG	4.1
1	1G	1372	U	4.1
29	29	52	LEU	4.1
46	D5	163	LEU	4.1
17	8I	36	ILE	4.1
20	BI	21	LYS	4.1
32	59	151	ILE	4.1
1	13	1325	C	4.1
1	1G	1028(B)	C	4.1
20	BI	96	GLY	4.1
1	13	230	G	4.1
1	1G	654	G	4.1
4	32	9	CYS	4.1
26	1H	1816	G	4.1
26	1H	2162	G	4.1
38	98	21	TYR	4.1
2	1E	231	GLU	4.1
5	42	88	LYS	4.1
32	59	86	GLU	4.1
34	58	85	ILE	4.1
40	75	7	ILE	4.1
1	13	1451	A	4.1
1	13	656	C	4.1
2	1E	138	LEU	4.1
31	49	157	ILE	4.1
37	45	66	ILE	4.1
40	75	21	GLU	4.1
26	1H	1555	G	4.1
26	14	1816	G	4.1
43	A5	92	ARG	4.1
43	E8	111	HIS	4.1
10	1I	58	ASP	4.0
36	78	131	SER	4.0
5	4E	88	LYS	4.0
20	BI	71	THR	4.0
1	13	110	C	4.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	22	8	ILE	4.0
7	62	50	ILE	4.0
26	1H	2715	C	4.0
19	AA	64	GLU	4.0
13	4I	2	ALA	4.0
42	95	8	GLY	4.0
42	95	67	GLY	4.0
24	1L	35	G	4.0
26	14	968	G	4.0
27	1J	89	G	4.0
9	8E	9	ARG	4.0
12	3I	89	ARG	4.0
32	51	116	GLU	4.0
26	1H	2828	C	4.0
26	14	378	C	4.0
26	14	1556	C	4.0
14	5A	39	LEU	4.0
30	39	92	PRO	4.0
33	61	44	LEU	4.0
34	15	116	LEU	4.0
36	78	115	LEU	4.0
32	59	125	VAL	4.0
3	2E	164	ARG	4.0
26	1H	1405	U	4.0
34	15	97	ARG	4.0
51	M8	66	SER	4.0
34	58	68	GLU	4.0
26	1H	2141	G	4.0
31	49	138	GLN	4.0
32	59	112	PRO	4.0
40	B8	114	LEU	4.0
32	59	43	VAL	4.0
32	59	113	VAL	4.0
33	61	121	LYS	4.0
54	M5	49	VAL	4.0
16	7I	48	TRP	4.0
30	39	39	TRP	4.0
4	32	49	ARG	4.0
4	32	24	GLU	4.0
17	8A	58	GLU	4.0
26	1H	1629	U	4.0
5	42	82	VAL	4.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
19	AA	67	VAL	4.0
34	15	129	PRO	4.0
1	13	175	C	4.0
1	13	1230	C	4.0
26	14	32	C	4.0
27	1J	60	C	4.0
29	29	73	GLU	4.0
31	41	30	GLU	4.0
42	95	76	LYS	4.0
52	N8	25	LEU	4.0
26	14	1090	U	3.9
9	82	74	ILE	3.9
3	22	169	ALA	3.9
9	82	106	ALA	3.9
32	51	102	ALA	3.9
49	K8	13	ALA	3.9
9	82	125	TYR	3.9
1	13	852	G	3.9
18	9I	69	THR	3.9
42	95	20	LEU	3.9
26	1H	1591	G	3.9
26	14	1429	G	3.9
2	1E	230	VAL	3.9
34	15	86	PRO	3.9
26	14	867	C	3.9
26	14	2145	C	3.9
55	3L	19	C	3.9
3	22	14	ILE	3.9
41	85	25	TRP	3.9
3	22	137	ALA	3.9
32	51	152	ARG	3.9
1	1G	134	A	3.9
1	1G	396	G	3.9
1	1G	1044	A	3.9
26	1H	2171	A	3.9
26	14	2190	G	3.9
1	1G	154	C	3.9
7	6E	60	LYS	3.9
2	1E	11	LEU	3.9
26	1H	1516	U	3.9
26	14	1094	U	3.9
8	72	136	GLU	3.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	59	124	GLU	3.9
32	59	132	ARG	3.9
19	AI	13	ASP	3.9
33	69	34	GLY	3.9
36	35	47	ASP	3.9
46	D5	154	ASP	3.9
52	J5	50	GLY	3.9
20	BA	95	ALA	3.9
2	1E	96	ARG	3.9
24	1L	39	A	3.9
26	1H	1384	A	3.9
1	1G	385	C	3.9
24	1L	52	G	3.9
26	1H	1219	G	3.9
26	1H	2527	C	3.9
39	A8	7	TYR	3.9
34	58	22	THR	3.9
1	13	93	U	3.9
8	7E	9	MET	3.9
11	2A	117	ASN	3.9
3	22	17	ASP	3.9
9	82	105	ASP	3.9
29	21	51	PHE	3.9
5	42	12	LEU	3.9
37	45	2	LEU	3.9
38	98	68	ARG	3.8
4	3E	9	CYS	3.8
32	59	94	TYR	3.8
1	13	663	A	3.8
4	32	30	LYS	3.8
26	14	2801	A	3.8
31	41	17	PRO	3.8
35	25	74	GLY	3.8
52	J5	28	PRO	3.8
41	85	44	ASN	3.8
1	1G	1369	C	3.8
22	1K	74	C	3.8
26	1H	1630(A)	C	3.8
4	3E	76	ARG	3.8
32	59	150	ALA	3.8
40	75	103	ARG	3.8
42	D8	83	ARG	3.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
46	D5	21	ALA	3.8
46	D5	152	ALA	3.8
42	95	72	VAL	3.8
38	55	9	LYS	3.8
7	62	59	LEU	3.8
10	1A	65	LEU	3.8
40	75	105	LEU	3.8
1	1G	383	A	3.8
27	16	59	A	3.8
33	69	36	ALA	3.8
1	13	312	C	3.8
26	14	12	U	3.8
1	13	310	G	3.8
1	1G	92	G	3.8
26	14	1620	G	3.8
26	14	2717	G	3.8
9	8E	125	TYR	3.8
33	61	4	ILE	3.8
33	69	10	GLU	3.8
9	82	64	THR	3.8
51	M8	59	PHE	3.8
3	22	179	ARG	3.8
8	7E	91	ARG	3.8
9	82	128	ARG	3.8
39	65	2	ALA	3.8
4	32	22	LYS	3.8
1	13	389	A	3.8
26	14	350	U	3.8
26	14	395	U	3.8
1	1G	930	C	3.8
26	14	915	C	3.8
3	22	161	GLU	3.8
40	B8	42	ILE	3.8
37	88	78	PRO	3.8
3	22	10	PHE	3.8
10	1I	92	THR	3.8
16	7A	69	THR	3.8
32	59	23	ARG	3.8
26	1H	629	G	3.8
26	1H	638	G	3.8
38	55	71	GLN	3.8
10	1A	59	SER	3.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
17	8I	34	LYS	3.8
29	29	7	VAL	3.8
42	D8	72	VAL	3.8
10	1I	38	ILE	3.8
14	5A	55	GLY	3.8
17	8I	32	TYR	3.8
20	BI	79	ARG	3.8
32	59	71	LEU	3.8
1	13	743	U	3.8
26	1H	2135	A	3.8
26	14	1859	A	3.8
26	14	2172	U	3.8
26	14	1882	C	3.7
36	35	35	HIS	3.7
32	59	38	SER	3.7
1	13	254	G	3.7
1	1G	376	G	3.7
32	59	60	ARG	3.7
7	6E	85	TYR	3.7
13	4A	10	PRO	3.7
26	1H	1060	U	3.7
29	29	75	VAL	3.7
32	59	52	VAL	3.7
1	1G	1394	A	3.7
52	N8	23	HIS	3.7
17	8A	15	MET	3.7
26	1H	886	C	3.7
26	1H	1735	C	3.7
26	1H	2140	C	3.7
10	1I	90	LEU	3.7
31	41	24	GLY	3.7
41	C8	95	LEU	3.7
46	H8	70	LEU	3.7
2	1E	4	GLU	3.7
33	61	134	PRO	3.7
46	H8	68	PRO	3.7
46	H8	135	GLU	3.7
2	12	74	LYS	3.7
1	1G	1529	G	3.7
26	14	2271	G	3.7
26	14	2664	G	3.7
20	BI	22	ARG	3.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
20	BI	86	ARG	3.7
1	1G	84	U	3.7
2	1E	5	ILE	3.7
3	22	167	TRP	3.7
22	1K	50	U	3.7
26	14	2135	A	3.7
31	49	82	LEU	3.7
9	8E	75	ASP	3.7
22	1K	75	C	3.7
26	1H	2803	C	3.7
31	49	137	GLU	3.7
41	C8	15	LYS	3.7
32	59	20	ALA	3.7
33	61	40	THR	3.7
32	59	45	VAL	3.7
32	59	49	VAL	3.7
33	61	136	VAL	3.7
36	78	50	ARG	3.7
37	45	103	MET	3.7
1	1G	113	G	3.7
7	62	38	LEU	3.7
33	61	6	LEU	3.7
48	F5	98	LEU	3.7
55	3L	18	G	3.7
14	5I	28	GLY	3.7
38	55	47	PHE	3.7
38	55	92	GLY	3.7
20	BA	97	ALA	3.7
26	1H	1631	A	3.7
26	14	849	A	3.7
1	1G	656	C	3.7
1	1G	1096	C	3.7
26	1H	2108	C	3.7
26	14	376	C	3.7
26	14	2690	C	3.7
30	39	44	ARG	3.7
40	B8	99	LEU	3.7
32	51	147	ASN	3.7
40	B8	94	ALA	3.6
46	H8	60	GLU	3.6
49	K8	12	GLU	3.6
52	J5	53	ALA	3.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
54	M5	54	GLU	3.6
32	59	107	VAL	3.6
3	22	115	LEU	3.6
15	6A	39	LEU	3.6
26	14	866	A	3.6
37	88	79	LEU	3.6
40	B8	110	ILE	3.6
49	K8	16	LEU	3.6
9	8E	117	HIS	3.6
1	13	308	C	3.6
1	1G	395	C	3.6
1	1G	578	C	3.6
24	1L	75	C	3.6
26	1H	2700	C	3.6
50	H5	2	PRO	3.6
8	7E	93	VAL	3.6
16	7A	83	GLU	3.6
16	7I	49	LEU	3.6
1	13	170	U	3.6
9	8E	70	LYS	3.6
26	14	2041	U	3.6
1	13	102	G	3.6
26	1H	1681	G	3.6
34	15	101	HIS	3.6
30	31	131	GLY	3.6
3	22	7	PRO	3.6
45	C5	23	ARG	3.6
14	5A	34	TYR	3.6
3	22	157	ILE	3.6
13	4I	9	ILE	3.6
20	BI	14	LYS	3.6
32	51	9	ILE	3.6
34	15	83	LYS	3.6
37	45	130	LYS	3.6
39	65	56	LEU	3.6
3	22	2	GLY	3.6
3	22	13	GLY	3.6
42	95	65	GLY	3.6
51	M8	58	ARG	3.6
1	1G	29	G	3.6
1	1G	331	G	3.6
18	9I	31	LEU	3.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	1H	181	A	3.6
26	14	394	A	3.6
29	29	155	LYS	3.6
45	G8	34	LYS	3.6
26	14	280	C	3.6
31	41	80	PHE	3.6
29	29	136	ARG	3.6
41	85	28	ARG	3.6
19	AI	76	PRO	3.6
50	H5	16	PRO	3.6
40	B8	21	GLU	3.6
45	C5	31	LEU	3.6
46	H8	153	SER	3.6
1	13	851	G	3.5
26	14	1860	G	3.5
26	14	1989	G	3.5
41	85	12	ARG	3.5
4	32	69	GLY	3.5
1	1G	307	C	3.5
1	1G	931	C	3.5
26	1H	982	C	3.5
33	69	21	VAL	3.5
50	H5	21	ALA	3.5
18	9I	75	ILE	3.5
32	51	151	ILE	3.5
52	J5	51	TYR	3.5
38	98	71	GLN	3.5
37	45	88	GLY	3.5
45	C5	22	GLY	3.5
5	42	105	VAL	3.5
32	59	17	VAL	3.5
20	BI	66	ALA	3.5
20	BI	97	ALA	3.5
20	BA	49	ALA	3.5
30	39	49	ALA	3.5
42	D8	85	LYS	3.5
26	1H	1177	A	3.5
1	1G	657	G	3.5
1	1G	755	G	3.5
22	1K	2	G	3.5
26	1H	1443	G	3.5
26	14	880	G	3.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
35	68	5	GLN	3.5
2	1E	227	GLY	3.5
4	3E	69	GLY	3.5
32	59	133	VAL	3.5
35	25	44	LYS	3.5
44	B5	33	LYS	3.5
4	3E	32	ALA	3.5
46	H8	1	MET	3.5
14	5I	31	ARG	3.5
38	55	22	ARG	3.5
24	1L	82	A	3.5
26	1H	2114	A	3.5
1	13	366	C	3.5
1	1G	312	C	3.5
1	1G	231	G	3.5
1	1G	1368	G	3.5
11	2A	51	LYS	3.5
26	1H	232	G	3.5
26	1H	636	G	3.5
26	1H	2659	G	3.5
36	78	29	LYS	3.5
55	3L	5	G	3.5
3	22	118	GLN	3.5
9	82	109	VAL	3.5
53	L5	36	GLN	3.5
49	K8	45	SER	3.5
9	82	15	ALA	3.5
2	1E	221	LEU	3.5
2	12	69	LEU	3.5
4	3E	135	LEU	3.5
4	32	120	LEU	3.5
7	6E	38	LEU	3.5
10	1I	88	LEU	3.5
20	BA	13	LEU	3.5
31	41	103	LEU	3.5
23	2L	37	U	3.5
26	1H	1590	U	3.5
4	32	158	ILE	3.5
18	9I	65	ILE	3.5
8	72	92	ARG	3.5
31	49	35	GLU	3.5
1	13	815	A	3.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	22	145	GLY	3.5
54	M5	22	VAL	3.5
32	59	171	LEU	3.5
34	15	76	SER	3.5
1	13	1384	C	3.5
4	32	172	PRO	3.5
26	14	1407	C	3.5
32	59	126	PRO	3.5
2	12	127	ILE	3.5
33	69	20	ASP	3.5
34	15	71	ILE	3.5
1	13	953	G	3.5
26	1H	2319	G	3.5
26	14	615	G	3.5
3	2E	23	TYR	3.4
2	12	81	VAL	3.4
3	22	181	ASN	3.4
13	4I	7	VAL	3.4
8	72	133	LEU	3.4
29	29	63	LEU	3.4
31	41	162	THR	3.4
16	7A	76	GLN	3.4
40	75	99	LEU	3.4
48	F5	77	ALA	3.4
52	N8	24	ALA	3.4
10	1I	91	PRO	3.4
32	51	170	ARG	3.4
50	H5	12	PRO	3.4
26	14	1177	A	3.4
43	A5	94	ASP	3.4
23	2K	72	C	3.4
52	J5	13	LYS	3.4
11	2A	25	TYR	3.4
16	7I	17	TYR	3.4
1	1G	232	G	3.4
1	1G	799	G	3.4
26	14	101	G	3.4
26	14	550	G	3.4
33	69	145	VAL	3.4
31	41	42	GLY	3.4
45	C5	93	GLY	3.4
13	4I	115	LYS	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
17	8A	100	LYS	3.4
4	3E	134	ASP	3.4
23	2K	74	A	3.4
26	1H	390	A	3.4
26	1H	2451	A	3.4
26	14	2020	A	3.4
51	M8	25	TYR	3.4
4	32	157	LEU	3.4
16	7A	6	LEU	3.4
20	BI	104	LEU	3.4
30	31	101	LEU	3.4
1	13	620	C	3.4
1	1G	1115	C	3.4
41	85	41	ALA	3.4
1	1G	82	U	3.4
33	69	129	THR	3.4
12	3A	47	LYS	3.4
1	1G	413	G	3.4
1	1G	1373	G	3.4
26	14	2181	G	3.4
26	14	2793	G	3.4
4	32	80	GLU	3.4
3	22	119	ARG	3.4
10	1I	60	ARG	3.4
17	8A	68	ARG	3.4
4	3E	111	ALA	3.4
13	4I	85	GLY	3.4
52	J5	24	ALA	3.4
1	13	974	A	3.4
8	72	111	ILE	3.4
26	1H	2173	A	3.4
7	6E	110	GLN	3.4
42	D8	45	THR	3.4
26	1H	1556	C	3.4
26	1H	2136	C	3.4
1	1G	1393	U	3.4
26	14	2585	U	3.4
28	11	32	SER	3.4
12	3A	16	GLU	3.4
13	4A	69	GLU	3.4
4	3E	3	ARG	3.4
4	3E	96	LEU	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
5	4E	90	VAL	3.4
37	88	139	GLU	3.4
46	D5	125	LEU	3.4
1	1G	570	G	3.4
1	1G	1029	G	3.4
22	1K	52	G	3.4
26	14	561	G	3.4
26	14	2894	G	3.4
36	78	141	ALA	3.4
45	C5	59	GLY	3.4
45	C5	47	LYS	3.4
30	31	40	GLN	3.4
4	32	58	LEU	3.3
1	13	45	U	3.3
1	13	174	C	3.3
1	13	1132	C	3.3
1	13	1362(A)	C	3.3
12	3I	81	SER	3.3
23	2K	70	C	3.3
26	14	858	U	3.3
26	14	1735	C	3.3
26	14	2791	C	3.3
34	15	138	LEU	3.3
37	45	37	LEU	3.3
24	3K	34	U	3.3
46	H8	168	GLU	3.3
32	51	57	ASP	3.3
3	2E	193	TYR	3.3
9	8E	118	LYS	3.3
31	41	99	MET	3.3
31	49	134	GLY	3.3
35	68	26	LYS	3.3
33	69	79	ILE	3.3
1	13	113	G	3.3
26	14	508	G	3.3
26	14	1642	G	3.3
55	3L	66	G	3.3
30	31	106	ARG	3.3
32	51	60	ARG	3.3
32	59	169	VAL	3.3
48	J8	95	LEU	3.3
2	1E	12	GLU	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	12	75	LYS	3.3
3	22	112	SER	3.3
7	6E	131	LYS	3.3
34	15	70	LYS	3.3
2	1E	14	GLY	3.3
20	BI	49	ALA	3.3
16	7A	29	ASP	3.3
29	29	151	TYR	3.3
33	61	120	ILE	3.3
33	69	96	ASP	3.3
47	E5	22	GLY	3.3
26	1H	1757	U	3.3
26	1H	1403	C	3.3
12	3A	5	PRO	3.3
41	C8	18	LEU	3.3
30	31	173	VAL	3.3
32	59	85	LYS	3.3
1	13	755	G	3.3
1	1G	568	G	3.3
24	1L	26	G	3.3
26	14	2707	G	3.3
4	3E	138	TYR	3.3
52	N8	51	TYR	3.3
26	1H	2790	A	3.3
26	14	1095	A	3.3
26	14	1103	A	3.3
36	35	48	PRO	3.3
1	13	82	U	3.3
1	13	1125	U	3.3
3	22	16	ARG	3.3
3	22	162	GLN	3.3
7	6E	106	GLN	3.3
7	62	78	ARG	3.3
26	14	922	U	3.3
36	35	32	THR	3.3
1	13	924	C	3.3
26	14	2146	C	3.3
28	11	33	LEU	3.3
31	49	152	LEU	3.3
41	85	32	PHE	3.3
3	22	147	LYS	3.3
3	22	168	ALA	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
7	6E	139	GLU	3.3
52	N8	53	ALA	3.3
20	BA	96	GLY	3.3
2	12	150	SER	3.3
30	31	98	SER	3.3
40	B8	100	TYR	3.3
37	45	138	ASP	3.3
9	8E	123	PRO	3.3
52	J5	15	ARG	3.3
1	13	853	G	3.3
24	3K	15	G	3.3
26	14	882	G	3.3
26	14	1987	G	3.3
29	29	59	VAL	3.3
33	69	69	LYS	3.3
1	13	935	A	3.3
26	1H	896	A	3.3
26	1H	1406	U	3.3
26	1H	2118	U	3.3
40	75	55	ASN	3.3
2	12	42	ILE	3.3
3	22	121	ALA	3.3
8	72	6	ILE	3.3
8	72	83	ILE	3.3
19	AA	31	ILE	3.3
26	1H	961	C	3.3
26	1H	1320	C	3.3
32	51	159	GLU	3.3
33	69	41	GLU	3.3
3	2E	158	GLY	3.3
38	55	93	GLY	3.3
41	C8	43	GLY	3.3
42	95	41	GLY	3.3
51	I5	63	TYR	3.2
38	55	18	LEU	3.2
2	1E	6	THR	3.2
1	13	928	G	3.2
4	32	109	GLY	3.2
20	BI	102	GLY	3.2
26	1H	1420	U	3.2
26	14	1624	G	3.2
26	14	1858	G	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
40	75	109	GLU	3.2
54	M5	56	GLU	3.2
1	1G	313	A	3.2
4	3E	209	ARG	3.2
10	1A	60	ARG	3.2
25	4L	23	A	3.2
26	1H	21	A	3.2
26	1H	1472	A	3.2
1	13	1463	C	3.2
1	1G	1509	C	3.2
26	14	2138	C	3.2
38	55	65	LEU	3.2
48	J8	94	LEU	3.2
51	I5	9	LEU	3.2
37	45	104	PHE	3.2
3	22	99	VAL	3.2
9	82	108	VAL	3.2
20	BA	41	ILE	3.2
45	C5	61	ILE	3.2
30	31	39	TRP	3.2
30	39	5	ALA	3.2
45	G8	48	ALA	3.2
50	L8	42	ALA	3.2
3	2E	159	GLY	3.2
8	7E	92	ARG	3.2
9	8E	115	GLY	3.2
15	6I	65	ARG	3.2
15	6A	65	ARG	3.2
21	1F	2	GLY	3.2
7	62	154	TYR	3.2
32	59	64	LEU	3.2
33	69	9	LEU	3.2
34	15	82	LEU	3.2
41	C8	16	LYS	3.2
49	G5	44	LEU	3.2
54	M5	32	LEU	3.2
1	13	223	U	3.2
34	15	126	PRO	3.2
1	13	662	G	3.2
1	1G	384	G	3.2
1	1G	389	A	3.2
30	39	50	SER	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	13	882	C	3.2
26	1H	591	C	3.2
26	14	2620	C	3.2
36	35	58	THR	3.2
10	1I	98	ILE	3.2
32	51	148	ILE	3.2
2	1E	29	ALA	3.2
46	H8	72	ARG	3.2
30	31	35	GLU	3.2
34	15	130	HIS	3.2
1	1G	1150	U	3.2
17	8A	16	GLN	3.2
9	8E	121	ARG	3.2
13	4I	102	ARG	3.2
32	59	121	ILE	3.2
26	14	390	A	3.2
26	14	1755	A	3.2
34	15	132	ALA	3.2
1	1G	28	G	3.2
1	1G	255	G	3.2
19	AA	70	LYS	3.2
26	14	2162	G	3.2
32	59	48	GLY	3.2
37	88	88	GLY	3.2
40	B8	113	LYS	3.2
41	85	13	LYS	3.2
1	13	1054	C	3.2
1	1G	883	C	3.2
7	62	148	ASN	3.2
37	45	27	VAL	3.2
42	D8	46	VAL	3.2
38	55	91	GLN	3.2
11	2I	87	THR	3.2
14	5A	4	LYS	3.1
20	BI	30	LYS	3.1
44	F8	94	GLY	3.1
50	H5	14	GLY	3.1
32	51	103	LEU	3.1
9	8E	110	GLU	3.1
17	8A	49	GLU	3.1
37	45	38	GLU	3.1
39	A8	8	GLU	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	1H	2042	A	3.1
8	72	93	VAL	3.1
29	29	122	PHE	3.1
32	59	35	VAL	3.1
33	69	92	VAL	3.1
51	M8	56	VAL	3.1
2	12	91	PRO	3.1
1	13	266	G	3.1
1	1G	31	G	3.1
1	1G	575	G	3.1
26	1H	654(E)	C	3.1
26	1H	976	C	3.1
26	14	2663	G	3.1
46	H8	82	ARG	3.1
7	62	2	ALA	3.1
47	I8	46	LYS	3.1
4	3E	21	LEU	3.1
4	32	26	CYS	3.1
1	13	261	U	3.1
4	32	112	VAL	3.1
7	62	69	VAL	3.1
9	8E	59	PHE	3.1
10	1A	63	PHE	3.1
29	21	21	VAL	3.1
11	2I	113	PRO	3.1
11	2I	121	PRO	3.1
40	B8	53	ARG	3.1
33	69	133	HIS	3.1
3	22	146	ALA	3.1
26	14	150	C	3.1
26	14	1754	C	3.1
42	95	94	LEU	3.1
1	1G	69	G	3.1
1	1G	1127	G	3.1
26	1H	2131	G	3.1
26	1H	2708	G	3.1
3	22	120	VAL	3.1
3	22	141	VAL	3.1
42	D8	37	VAL	3.1
5	42	15	ARG	3.1
6	52	56	PRO	3.1
1	13	1393	U	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	1H	1680	U	3.1
26	14	380	U	3.1
29	29	64	LYS	3.1
33	69	11	ASN	3.1
34	15	21	LYS	3.1
40	75	52	ILE	3.1
13	4A	101	GLN	3.1
20	BA	52	ALA	3.1
37	45	136	ALA	3.1
43	E8	23	LEU	3.1
1	13	151	A	3.1
3	22	192	THR	3.1
7	6E	130	GLY	3.1
19	AA	82	GLY	3.1
45	G8	83	THR	3.1
45	C5	83	THR	3.1
48	F5	38	SER	3.1
1	13	395	C	3.1
3	22	131	ARG	3.1
4	3E	80	GLU	3.1
4	3E	81	GLU	3.1
9	8E	105	ASP	3.1
10	1A	49	VAL	3.1
26	1H	1741	C	3.1
26	14	574	C	3.1
26	14	1656	C	3.1
38	98	22	ARG	3.1
51	M8	49	PHE	3.1
51	I5	42	PHE	3.1
46	H8	167	PRO	3.1
1	13	821	G	3.1
1	1G	346	G	3.1
1	1G	1033	G	3.1
16	7I	39	TYR	3.1
26	1H	654(D)	G	3.1
40	B8	48	ILE	3.1
13	4A	62	ASN	3.1
33	69	65	ALA	3.1
48	F5	15	ALA	3.1
2	1E	154	LEU	3.1
4	32	155	LEU	3.1
4	32	174	LEU	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
15	6A	62	GLN	3.1
20	BI	99	LEU	3.1
29	29	181	LEU	3.1
3	2E	165	THR	3.1
32	59	22	GLY	3.1
52	J5	11	THR	3.1
8	72	84	ARG	3.1
34	58	98	VAL	3.1
45	C5	24	VAL	3.1
24	3K	22	A	3.1
25	4L	19	A	3.1
27	16	1(M)	A	3.1
34	15	118	LYS	3.1
2	1E	214	ILE	3.1
2	12	68	ILE	3.1
31	41	77	ILE	3.1
52	N8	27	PRO	3.1
26	1H	1592	C	3.0
12	3A	128	ALA	3.0
14	5A	5	ALA	3.0
1	13	579	G	3.0
1	1G	181	G	3.0
1	1G	310	G	3.0
3	22	155	GLY	3.0
4	3E	118	ARG	3.0
14	5A	35	ARG	3.0
26	14	391	G	3.0
55	3L	2	G	3.0
5	42	90	VAL	3.0
11	2I	114	VAL	3.0
22	1K	36	U	3.0
26	1H	2109	U	3.0
26	14	594	U	3.0
26	14	2716	U	3.0
32	51	113	VAL	3.0
46	H8	136	PHE	3.0
20	BI	105	SER	3.0
33	69	85	GLU	3.0
38	98	14	SER	3.0
4	32	33	MET	3.0
6	52	55	ASP	3.0
16	7A	68	ASP	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	12	33	TYR	3.0
3	2E	160	ALA	3.0
41	C8	39	LEU	3.0
5	42	20	GLN	3.0
26	14	1430	C	3.0
29	29	10	GLY	3.0
34	15	20	GLY	3.0
32	59	24	VAL	3.0
33	69	15	VAL	3.0
28	11	53	PHE	3.0
3	22	142	MET	3.0
26	14	2189	U	3.0
41	85	29	SER	3.0
11	2I	115	PRO	3.0
1	13	1133	G	3.0
26	1H	2697	G	3.0
26	14	1416	G	3.0
26	14	2032	G	3.0
26	14	2505	G	3.0
3	22	183	ASP	3.0
3	22	201	TYR	3.0
7	6E	45	ASP	3.0
7	62	124	LEU	3.0
38	55	70	LEU	3.0
43	A5	93	ALA	3.0
4	32	12	CYS	3.0
2	12	89	GLY	3.0
9	82	97	LYS	3.0
18	9I	71	LYS	3.0
28	19	100	GLY	3.0
36	78	93	GLY	3.0
36	78	116	GLY	3.0
42	D8	19	LYS	3.0
1	1G	574	A	3.0
1	1G	873	A	3.0
30	39	51	THR	3.0
13	4I	4	ILE	3.0
26	1H	1092	C	3.0
26	1H	2676	C	3.0
26	14	277	C	3.0
26	14	2804	C	3.0
8	7E	5	PRO	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	1E	31	TYR	3.0
3	22	189	ALA	3.0
4	3E	4	TYR	3.0
30	39	7	TYR	3.0
33	69	146	ALA	3.0
26	1H	639	U	3.0
35	68	80	ASP	3.0
52	J5	10	LYS	3.0
3	2E	41	GLY	3.0
20	BI	103	GLY	3.0
32	51	161	GLY	3.0
42	95	9	GLY	3.0
1	13	346	G	3.0
1	13	576	G	3.0
1	1G	309	G	3.0
1	1G	577	G	3.0
3	22	70	VAL	3.0
23	2L	19	G	3.0
26	1H	702	G	3.0
26	14	2362	G	3.0
11	2A	87	THR	3.0
47	I8	10	THR	3.0
26	1H	1444(A)	A	3.0
41	85	18	LEU	3.0
52	J5	32	PRO	3.0
32	59	69	ARG	3.0
19	AA	24	ALA	3.0
20	BI	106	ALA	3.0
32	59	134	SER	3.0
42	95	77	ALA	3.0
1	13	934	C	3.0
20	BI	29	LYS	3.0
48	F5	96	LYS	3.0
48	F5	84	GLY	3.0
1	13	820	U	3.0
1	13	1436	U	3.0
1	1G	1135	U	3.0
37	88	104	PHE	3.0
5	42	127	ASN	3.0
32	51	136	ILE	3.0
36	78	1	MET	3.0
2	12	121	LEU	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	22	178	LEU	2.9
12	3A	27	LEU	2.9
33	61	116	LEU	2.9
11	2I	120	ARG	2.9
1	1G	81	G	2.9
1	1G	929	G	2.9
1	1G	1530	G	2.9
2	12	97	TRP	2.9
26	14	1623	G	2.9
32	59	8	PRO	2.9
33	69	132	PRO	2.9
37	45	80	GLU	2.9
26	1H	696	G	2.9
7	6E	2	ALA	2.9
20	BI	52	ALA	2.9
32	59	25	LYS	2.9
38	98	42	LYS	2.9
1	13	872	A	2.9
1	1G	101	A	2.9
1	1G	1285	A	2.9
32	51	169	VAL	2.9
26	1H	277	C	2.9
26	1H	949	C	2.9
26	1H	2699	C	2.9
31	41	63	ILE	2.9
40	75	121	ILE	2.9
1	1G	723	U	2.9
2	12	187	LEU	2.9
4	3E	25	ARG	2.9
5	4E	15	ARG	2.9
18	9A	58	LEU	2.9
43	E8	57	ASN	2.9
45	C5	102	CYS	2.9
36	35	33	ARG	2.9
40	75	96	ARG	2.9
41	85	36	ARG	2.9
45	G8	86	ARG	2.9
3	2E	109	PRO	2.9
2	1E	13	ALA	2.9
20	BI	94	ALA	2.9
4	32	83	SER	2.9
15	6I	52	SER	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
19	AA	58	VAL	2.9
38	98	15	SER	2.9
12	3A	14	GLY	2.9
13	4I	6	GLY	2.9
17	8A	33	GLY	2.9
1	13	108	G	2.9
1	13	159	G	2.9
1	13	927	G	2.9
1	13	963	G	2.9
1	1G	630	G	2.9
1	1G	1222	G	2.9
1	1G	1385	G	2.9
26	1H	592	G	2.9
26	1H	628	G	2.9
26	1H	2151	G	2.9
26	1H	2707	G	2.9
26	1H	2714	G	2.9
26	14	1154	G	2.9
26	14	1539	G	2.9
26	14	2872	G	2.9
40	B8	61	PHE	2.9
54	M5	31	HIS	2.9
32	51	4	ILE	2.9
36	78	68	GLN	2.9
40	B8	50	ILE	2.9
1	13	134	A	2.9
20	BA	24	LEU	2.9
32	51	101	ARG	2.9
29	21	90	THR	2.9
1	13	103	C	2.9
1	13	106	C	2.9
1	13	736	C	2.9
20	BA	98	PRO	2.9
23	2K	69	C	2.9
26	1H	654(B)	C	2.9
26	14	1081	U	2.9
5	42	41	VAL	2.9
28	11	100	GLY	2.9
2	1E	16	HIS	2.9
34	15	128	HIS	2.9
20	BI	63	ILE	2.9
2	1E	215	LEU	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
10	1I	85	LEU	2.9
33	61	38	LEU	2.9
42	95	80	GLN	2.9
29	21	64	LYS	2.9
34	15	109	LYS	2.9
1	13	347	G	2.9
1	13	1142	G	2.9
14	5A	30	ALA	2.9
24	3K	52	G	2.9
3	2E	167	TRP	2.9
4	3E	12	CYS	2.9
26	1H	2307	G	2.9
26	14	1643	G	2.9
26	14	2160	G	2.9
26	14	2270	G	2.9
26	14	2019	A	2.9
7	62	61	VAL	2.9
30	39	36	VAL	2.9
46	D5	56	VAL	2.9
1	1G	390	C	2.9
15	6A	20	GLY	2.9
26	1H	654(G)	C	2.9
27	16	60	C	2.9
29	29	88	GLY	2.9
5	4E	126	ARG	2.9
41	C8	40	PHE	2.9
3	2E	94	LEU	2.9
35	68	66	LYS	2.9
30	39	40	GLN	2.9
31	49	116	ASP	2.9
10	1I	48	THR	2.9
33	69	76	THR	2.9
36	35	52	GLU	2.9
46	H8	11	GLU	2.9
48	J8	89	GLU	2.9
48	J8	93	GLU	2.9
7	62	75	VAL	2.9
12	3I	90	VAL	2.9
42	95	52	VAL	2.9
3	2E	179	ARG	2.9
26	14	696	G	2.9
26	14	881	G	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	14	1655	A	2.9
35	25	32	TYR	2.9
51	M8	42	PHE	2.9
1	13	331	G	2.9
1	1G	505	G	2.9
26	1H	1328	G	2.9
30	39	24	LEU	2.9
55	3L	4	G	2.9
1	13	369	C	2.8
1	13	1195	C	2.8
10	1I	84	GLN	2.8
26	1H	1574	C	2.8
26	1H	2829	C	2.8
26	14	958	U	2.8
47	I8	40	GLN	2.8
3	22	71	ALA	2.8
33	61	36	ALA	2.8
36	35	12	ALA	2.8
41	C8	116	ALA	2.8
36	35	30	THR	2.8
29	21	7	VAL	2.8
48	F5	30	VAL	2.8
20	BA	72	LEU	2.8
32	59	7	LEU	2.8
35	25	122	LEU	2.8
47	I8	42	GLY	2.8
2	1E	48	MET	2.8
5	4E	129	ILE	2.8
27	1J	89(A)	A	2.8
46	D5	153	SER	2.8
6	5E	101	ALA	2.8
1	13	619	U	2.8
1	13	1511	G	2.8
1	1G	800	G	2.8
23	2L	34	U	2.8
24	1L	15	G	2.8
26	1H	387	U	2.8
33	69	134	PRO	2.8
1	1G	150	C	2.8
1	1G	1389	C	2.8
26	1H	2111	C	2.8
26	14	737	C	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
30	39	6	VAL	2.8
31	41	95	ARG	2.8
46	H8	174	VAL	2.8
46	H8	175	VAL	2.8
52	N8	60	VAL	2.8
4	3E	151	LYS	2.8
18	9A	65	ILE	2.8
31	41	20	ILE	2.8
35	68	1	MET	2.8
31	41	11	TYR	2.8
9	8E	104	ARG	2.8
36	35	18	ARG	2.8
40	B8	41	ARG	2.8
42	D8	36	PRO	2.8
46	H8	79	ARG	2.8
47	E5	44	ARG	2.8
13	4A	60	VAL	2.8
29	21	72	VAL	2.8
32	51	11	VAL	2.8
3	22	143	GLU	2.8
5	4E	81	GLU	2.8
8	72	132	GLU	2.8
12	3I	23	LYS	2.8
1	13	87	A	2.8
1	1G	1252	A	2.8
22	1K	79	A	2.8
26	1H	571	A	2.8
26	14	1048	A	2.8
26	14	1132	A	2.8
26	14	1553	A	2.8
49	G5	52	ASP	2.8
1	1G	820	U	2.8
9	82	96	LEU	2.8
20	BA	10	LEU	2.8
26	1H	2506	U	2.8
26	14	1082	U	2.8
37	88	89	ASN	2.8
40	B8	22	PHE	2.8
48	F5	85	LEU	2.8
2	12	90	MET	2.8
1	13	314	C	2.8
1	13	578	C	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	13	929	G	2.8
22	1K	1	G	2.8
24	1L	74	C	2.8
26	1H	654(F)	C	2.8
26	1H	700	G	2.8
26	1H	1002	G	2.8
26	1H	1517	G	2.8
26	14	790	C	2.8
26	14	893	C	2.8
26	14	952	G	2.8
26	14	1857	G	2.8
26	14	2055	C	2.8
45	G8	35	TYR	2.8
3	2E	53	ALA	2.8
29	29	114	ALA	2.8
41	85	42	ALA	2.8
9	82	42	ARG	2.8
35	68	97	ARG	2.8
38	98	8	ARG	2.8
49	G5	7	ARG	2.8
11	2A	114	VAL	2.8
20	BI	11	SER	2.8
30	31	13	SER	2.8
31	49	142	PRO	2.8
32	59	50	VAL	2.8
37	88	87	LYS	2.8
5	42	91	LEU	2.8
54	M5	50	LEU	2.8
14	5A	37	PHE	2.8
2	12	203	GLY	2.8
7	62	31	MET	2.8
29	29	176	ILE	2.8
39	A8	109	GLY	2.8
1	13	149	A	2.8
1	1G	30	U	2.8
26	14	2357	U	2.8
1	13	962	C	2.8
1	13	1063	C	2.8
2	1E	218	ALA	2.8
9	8E	122	ALA	2.8
19	AA	78	ARG	2.8
45	G8	84	ARG	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	1H	697	C	2.8
26	1H	2107	C	2.8
26	14	279	C	2.8
26	14	1625	C	2.8
45	G8	33	LYS	2.8
1	13	255	G	2.8
1	13	890	G	2.8
1	1G	953	G	2.8
1	1G	1002	G	2.8
1	1G	1021	G	2.8
2	1E	15	VAL	2.8
3	22	195	VAL	2.8
26	1H	654(C)	G	2.8
26	1H	1758	G	2.8
26	1H	2187	G	2.8
26	1H	2663	G	2.8
26	14	2182	G	2.8
52	N8	57	VAL	2.8
9	8E	102	LEU	2.8
29	21	63	LEU	2.8
48	F5	37	ILE	2.8
12	3I	35	GLY	2.7
31	41	97	ASP	2.7
5	42	130	ASN	2.7
17	8I	29	HIS	2.7
41	C8	36	ARG	2.7
29	29	157	ALA	2.7
39	65	37	ALA	2.7
41	C8	21	ALA	2.7
45	G8	94	LYS	2.7
1	13	1000	A	2.7
14	5I	25	VAL	2.7
23	2K	61	U	2.7
26	14	1033	U	2.7
26	14	1086	A	2.7
27	1J	25	A	2.7
34	15	55	VAL	2.7
36	78	63	PRO	2.7
4	32	11	LEU	2.7
1	13	186(A)	C	2.7
1	1G	995	C	2.7
1	1G	1200	C	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	1E	222	ILE	2.7
10	1I	50	ILE	2.7
13	4A	78	ILE	2.7
20	BA	71	THR	2.7
23	2K	75	C	2.7
24	1L	16	C	2.7
26	1H	2678	C	2.7
33	61	122	GLU	2.7
35	25	1	MET	2.7
46	H8	129	SER	2.7
48	F5	86	SER	2.7
29	21	50	GLY	2.7
30	39	79	GLY	2.7
32	59	82	GLY	2.7
1	1G	265	G	2.7
1	1G	326	G	2.7
19	AA	12	ASP	2.7
26	1H	530	G	2.7
26	1H	1131	G	2.7
26	1H	2532	G	2.7
26	1H	2664	G	2.7
44	B5	60	ARG	2.7
4	3E	68	TYR	2.7
6	5E	50	TYR	2.7
5	42	78	HIS	2.7
16	7I	41	PRO	2.7
36	35	45	LEU	2.7
1	1G	743	U	2.7
1	1G	1212	U	2.7
8	7E	6	ILE	2.7
26	1H	271(C)	U	2.7
26	14	2109	U	2.7
49	K8	66	GLU	2.7
54	M5	40	GLU	2.7
1	13	1280	A	2.7
26	1H	637	A	2.7
42	95	48	GLY	2.7
2	1E	137	ARG	2.7
38	55	17	ARG	2.7
42	D8	69	LYS	2.7
1	1G	882	C	2.7
1	1G	967	C	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	1H	435	C	2.7
26	1H	1445	C	2.7
36	78	47	ASP	2.7
9	8E	119	ALA	2.7
40	75	94	ALA	2.7
46	D5	34	ASN	2.7
9	8E	40	LEU	2.7
33	69	12	LEU	2.7
1	13	92	G	2.7
1	13	1124	G	2.7
1	1G	1003	G	2.7
2	1E	91	PRO	2.7
8	7E	89	PRO	2.7
20	BI	98	PRO	2.7
23	2L	2	G	2.7
26	1H	1382	G	2.7
26	1H	1539	G	2.7
26	14	1248	G	2.7
26	14	2532	G	2.7
9	82	33	PHE	2.7
17	8I	24	GLU	2.7
3	22	21	ARG	2.7
32	51	97	ARG	2.7
36	35	16	ARG	2.7
40	B8	54	ARG	2.7
45	C5	58	GLY	2.7
1	1G	534	U	2.7
1	13	1229	A	2.7
3	22	117	ALA	2.7
31	49	126	ASP	2.7
51	M8	43	TYR	2.7
6	52	88	VAL	2.7
11	2A	103	LEU	2.7
30	39	101	LEU	2.7
32	51	15	VAL	2.7
45	C5	43	ASN	2.7
1	1G	866	C	2.7
1	1G	1325	C	2.7
26	1H	654(M)	C	2.7
26	1H	1330	C	2.7
6	52	81	ILE	2.7
31	49	115	ARG	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
7	6E	34	GLY	2.7
7	6E	48	LYS	2.7
19	AA	25	LYS	2.7
28	19	35	LYS	2.7
31	41	84	LYS	2.7
33	69	16	GLY	2.7
10	1A	42	THR	2.7
1	13	46	G	2.7
1	1G	1134	G	2.7
26	1H	593	G	2.7
26	1H	1055	G	2.7
26	14	892	G	2.7
1	13	367	U	2.7
2	1E	148	TYR	2.7
9	8E	47	LEU	2.7
24	1L	42	U	2.7
26	14	767	U	2.7
26	14	1406	U	2.7
42	D8	47	VAL	2.7
43	A5	107	LEU	2.7
3	22	102	ASN	2.7
10	1I	75	ILE	2.6
26	14	2451	A	2.6
32	59	12	PRO	2.6
8	72	31	PHE	2.6
42	95	19	LYS	2.6
1	13	1129	C	2.6
1	13	1514	C	2.6
1	1G	328	C	2.6
1	1G	569	C	2.6
1	1G	643	C	2.6
1	1G	1477	C	2.6
5	42	79	GLU	2.6
24	1L	12	C	2.6
26	14	2142	C	2.6
51	I5	34	GLU	2.6
35	25	34	THR	2.6
15	6I	39	LEU	2.6
19	AI	5	LEU	2.6
31	41	43	LEU	2.6
31	49	160	VAL	2.6
32	51	99	VAL	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
39	65	55	ALA	2.6
16	7A	39	TYR	2.6
1	1G	108	G	2.6
1	1G	1432	G	2.6
2	12	41	ILE	2.6
4	32	73	ARG	2.6
6	52	77	ARG	2.6
8	7E	85	ARG	2.6
8	72	89	PRO	2.6
15	6I	68	ARG	2.6
23	2K	9	G	2.6
23	2L	6	G	2.6
26	1H	2334	G	2.6
26	1H	2751	G	2.6
48	F5	18	ILE	2.6
38	55	5	LYS	2.6
46	D5	23	LYS	2.6
50	H5	29	ARG	2.6
1	1G	85	U	2.6
26	1H	2041	U	2.6
26	14	271(C)	U	2.6
26	14	2144	U	2.6
51	I5	59	PHE	2.6
1	13	968	A	2.6
23	2L	77	A	2.6
26	1H	2169	A	2.6
42	95	23	GLU	2.6
3	22	133	ALA	2.6
33	61	37	VAL	2.6
41	85	21	ALA	2.6
46	H8	164	ALA	2.6
1	13	717	C	2.6
1	13	732	C	2.6
1	1G	153	C	2.6
26	14	1585	C	2.6
20	BA	17	ARG	2.6
20	BA	100	ILE	2.6
30	39	137	LYS	2.6
46	H8	55	HIS	2.6
48	F5	40	ARG	2.6
17	8A	27	PHE	2.6
29	29	86	PRO	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
52	J5	34	PRO	2.6
7	6E	64	GLN	2.6
20	BI	64	ASP	2.6
31	41	44	GLY	2.6
32	59	5	GLY	2.6
37	45	33	GLY	2.6
2	1E	9	GLU	2.6
12	3A	127	GLU	2.6
52	J5	59	GLU	2.6
1	1G	1173	G	2.6
22	1K	15	G	2.6
24	3K	1	G	2.6
26	1H	391	G	2.6
26	1H	1763	G	2.6
26	1H	2677	G	2.6
26	14	2141	G	2.6
2	12	215	LEU	2.6
31	41	120	LEU	2.6
52	N8	58	LEU	2.6
12	3A	26	ALA	2.6
20	BI	88	VAL	2.6
33	61	65	ALA	2.6
34	15	57	ALA	2.6
37	45	90	VAL	2.6
52	N8	14	ALA	2.6
1	1G	728	A	2.6
1	1G	1092	A	2.6
9	8E	116	LYS	2.6
9	8E	120	ARG	2.6
11	2A	54	ARG	2.6
26	1H	1132	A	2.6
26	1H	2712(A)	A	2.6
26	14	996	A	2.6
26	14	1641	A	2.6
26	14	2361	A	2.6
38	98	17	ARG	2.6
45	C5	87	LYS	2.6
55	3L	39	A	2.6
45	C5	66	PRO	2.6
1	13	930	C	2.6
23	2L	24	C	2.6
2	12	206	ASP	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
4	3E	97	LEU	2.6
9	8E	12	GLU	2.6
32	59	67	LEU	2.6
36	35	74	GLU	2.6
40	B8	6	LEU	2.6
42	D8	95	LEU	2.6
1	13	1240	U	2.6
26	1H	594	U	2.6
26	14	1415	U	2.6
26	14	1621	U	2.6
37	88	21	THR	2.6
8	72	135	CYS	2.6
21	1B	13	ILE	2.6
1	1G	1511	G	2.6
24	1L	7	G	2.6
26	1H	2304	G	2.6
26	1H	2891	G	2.6
26	14	2893	G	2.6
46	D5	8	TYR	2.6
1	13	160	A	2.6
1	13	161	A	2.6
1	1G	815	A	2.6
11	2A	49	GLY	2.6
29	29	115	GLY	2.6
29	29	60	ASN	2.6
33	69	14	ASP	2.6
3	22	101	LEU	2.6
9	82	99	LEU	2.6
17	8I	76	LEU	2.6
1	13	137	C	2.6
1	1G	345	C	2.6
26	1H	1660	C	2.6
40	B8	11	GLU	2.6
14	5I	18	VAL	2.6
8	7E	56	LYS	2.6
18	9I	64	ARG	2.6
34	15	18	ALA	2.6
40	B8	49	VAL	2.6
46	H8	96	VAL	2.6
43	E8	113	LYS	2.6
43	A5	6	ILE	2.5
9	82	37	PHE	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	14	1956	U	2.5
45	G8	102	CYS	2.5
36	78	56	SER	2.5
3	22	9	GLY	2.5
4	32	171	GLY	2.5
34	15	131	GLN	2.5
7	62	16	LEU	2.5
20	BI	92	LEU	2.5
48	F5	80	LEU	2.5
1	13	260	G	2.5
1	13	606	G	2.5
1	1G	46	G	2.5
8	7E	8	ASP	2.5
17	8I	37	LYS	2.5
26	1H	1319	G	2.5
26	1H	1444	G	2.5
1	13	607	A	2.5
1	13	802	A	2.5
5	42	50	GLU	2.5
6	5E	91	VAL	2.5
26	14	281	G	2.5
26	14	1170	G	2.5
30	39	72	ARG	2.5
40	75	53	ARG	2.5
26	14	899	A	2.5
26	14	2042	A	2.5
26	14	2269	A	2.5
30	31	56	GLU	2.5
35	68	108	GLU	2.5
51	M8	21	VAL	2.5
18	9A	60	ALA	2.5
22	1K	14	A	2.5
22	1K	68	A	2.5
2	12	168	THR	2.5
32	51	162	ILE	2.5
1	13	1465	C	2.5
15	6A	15	PHE	2.5
26	1H	4	C	2.5
26	1H	1305	C	2.5
33	69	80	PRO	2.5
18	9A	63	GLN	2.5
26	1H	2696	U	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	51	105	LEU	2.5
33	61	17	GLN	2.5
39	65	45	GLY	2.5
48	F5	97	LEU	2.5
16	7A	26	ARG	2.5
30	31	43	LYS	2.5
31	49	72	ARG	2.5
37	88	124	LYS	2.5
46	H8	80	ARG	2.5
10	1I	64	GLU	2.5
34	15	50	ASP	2.5
37	88	38	GLU	2.5
42	D8	31	ALA	2.5
46	D5	97	GLU	2.5
46	H8	171	ILE	2.5
54	M5	16	ILE	2.5
1	1G	411	A	2.5
26	14	890	A	2.5
1	13	181	G	2.5
1	1G	1133	G	2.5
1	1G	1160	G	2.5
26	1H	1371	G	2.5
26	1H	2345	G	2.5
26	14	388	G	2.5
26	14	1171	G	2.5
3	22	109	PRO	2.5
1	13	176	C	2.5
1	13	735	C	2.5
5	42	27	ARG	2.5
7	62	35	LYS	2.5
20	BA	92	LEU	2.5
30	39	20	LEU	2.5
30	39	110	LEU	2.5
31	41	75	LYS	2.5
32	59	87	LEU	2.5
39	65	110	LEU	2.5
26	1H	574	C	2.5
26	1H	737	C	2.5
26	1H	755	C	2.5
26	1H	2145	C	2.5
26	14	1404	C	2.5
26	14	2188	C	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
29	29	54	GLN	2.5
36	35	4	SER	2.5
9	8E	17	VAL	2.5
30	39	183	VAL	2.5
31	41	31	VAL	2.5
32	59	15	VAL	2.5
2	12	85	ALA	2.5
1	1G	552	U	2.5
1	1G	801	U	2.5
3	22	166	GLU	2.5
26	14	9	U	2.5
30	39	77	ASP	2.5
41	C8	17	ILE	2.5
2	12	101	MET	2.5
17	8I	7	THR	2.5
33	69	93	THR	2.5
46	D5	104	PHE	2.5
33	69	131	LYS	2.5
34	15	115	ARG	2.5
40	B8	33	LYS	2.5
41	85	14	HIS	2.5
44	F8	85	PRO	2.5
2	12	44	LEU	2.5
2	12	98	LEU	2.5
7	6E	79	ARG	2.5
14	5I	29	ARG	2.5
17	8A	6	LEU	2.5
30	31	38	ARG	2.5
32	51	87	LEU	2.5
48	J8	85	LEU	2.5
48	F5	39	LYS	2.5
1	13	1227	A	2.5
1	1G	195	A	2.5
26	1H	1460	A	2.5
40	B8	25	GLY	2.5
52	N8	50	GLY	2.5
54	M5	20	GLY	2.5
29	29	150	VAL	2.5
34	15	69	GLN	2.5
51	I5	35	VAL	2.5
1	1G	867	G	2.5
1	1G	1124	G	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1G	1174	G	2.5
26	1H	932	G	2.5
26	14	2455	G	2.5
26	14	2655	G	2.5
26	14	2795	G	2.5
36	78	133	SER	2.5
1	13	135	C	2.5
1	13	745	C	2.5
1	1G	877	C	2.5
24	1L	80	C	2.5
26	1H	20	C	2.5
26	1H	2658	C	2.5
26	14	1914	C	2.5
32	51	119	GLU	2.5
26	1H	2585	U	2.5
3	22	150	LYS	2.5
3	22	87	LEU	2.5
5	4E	18	ARG	2.5
5	42	107	ARG	2.5
46	H8	76	LEU	2.5
51	M8	55	ARG	2.5
2	12	19	HIS	2.5
45	C5	55	TYR	2.5
8	72	130	GLY	2.5
29	21	59	VAL	2.5
33	61	92	VAL	2.5
17	8I	16	GLN	2.5
2	12	225	ALA	2.4
32	59	2	SER	2.4
51	I5	14	ILE	2.4
52	J5	46	CYS	2.4
1	13	171	A	2.4
1	13	185	A	2.4
1	13	782	A	2.4
1	1G	1446	A	2.4
26	1H	1553	A	2.4
26	14	1558	A	2.4
37	45	105	GLU	2.4
51	I5	1	MET	2.4
55	3L	37	A	2.4
43	A5	46	PHE	2.4
15	6A	5	LYS	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
30	39	133	ASN	2.4
33	61	22	LYS	2.4
33	61	45	LYS	2.4
33	69	118	LYS	2.4
40	B8	103	ARG	2.4
40	75	13	ARG	2.4
41	85	22	LYS	2.4
10	1I	81	THR	2.4
1	13	63	C	2.4
1	13	68	G	2.4
1	13	306	G	2.4
1	13	1117	G	2.4
1	13	1141	C	2.4
1	1G	963	G	2.4
1	1G	1166	G	2.4
23	2K	76	C	2.4
23	2L	3	C	2.4
24	3K	24	G	2.4
26	1H	654(K)	C	2.4
26	1H	1093	G	2.4
26	1H	1544	C	2.4
26	14	857	C	2.4
26	14	879	G	2.4
26	14	884	C	2.4
26	14	897	C	2.4
26	14	1990	C	2.4
10	1A	53	PRO	2.4
1	1G	261	U	2.4
41	85	72	HIS	2.4
4	32	23	GLY	2.4
9	8E	6	GLY	2.4
12	3A	29	GLY	2.4
38	98	106	GLY	2.4
3	22	53	ALA	2.4
12	3A	129	ALA	2.4
20	BA	106	ALA	2.4
31	49	41	GLN	2.4
41	C8	96	ALA	2.4
4	32	126	ILE	2.4
8	72	134	ILE	2.4
14	5A	7	ILE	2.4
32	59	9	ILE	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	2E	90	GLU	2.4
35	25	9	GLU	2.4
14	5A	50	LYS	2.4
20	BA	74	LYS	2.4
45	C5	60	PHE	2.4
3	22	91	LEU	2.4
10	1I	71	LEU	2.4
49	G5	60	LEU	2.4
19	AA	53	ASN	2.4
1	1G	59	A	2.4
1	1G	263	A	2.4
1	1G	453	A	2.4
8	7E	54	ASP	2.4
4	32	29	PRO	2.4
25	4K	24	A	2.4
26	1H	1677	A	2.4
26	1H	2662	A	2.4
26	1H	2711	A	2.4
26	14	276	A	2.4
32	51	12	PRO	2.4
33	61	111	PRO	2.4
2	1E	7	VAL	2.4
9	8E	30	GLY	2.4
45	C5	45	VAL	2.4
1	1G	178	C	2.4
3	22	180	ALA	2.4
26	1H	1506	C	2.4
26	1H	1754	C	2.4
26	1H	614	U	2.4
26	1H	929	G	2.4
26	1H	1624	G	2.4
26	1H	2125	G	2.4
28	19	69	ARG	2.4
34	58	12	ARG	2.4
34	15	59	LYS	2.4
36	78	65	ARG	2.4
45	C5	19	LYS	2.4
5	42	83	GLU	2.4
17	8I	49	GLU	2.4
2	1E	233	SER	2.4
19	AA	63	THR	2.4
31	41	29	TRP	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
42	D8	32	THR	2.4
45	C5	56	PRO	2.4
3	22	68	VAL	2.4
11	2I	81	ASP	2.4
15	6I	42	HIS	2.4
2	12	80	ILE	2.4
26	1H	1507	A	2.4
26	14	1472	A	2.4
26	14	2062	A	2.4
26	14	2621	A	2.4
32	59	92	ILE	2.4
38	98	19	ALA	2.4
22	1K	22	A	2.4
12	3A	20	LYS	2.4
19	AI	55	LYS	2.4
41	85	93	LYS	2.4
49	K8	9	GLN	2.4
32	51	123	PHE	2.4
47	I8	57	PHE	2.4
1	1G	114	U	2.4
1	1G	295	C	2.4
1	1G	1020	U	2.4
1	1G	1257	U	2.4
4	32	19	LEU	2.4
23	2L	25	U	2.4
26	1H	2306	C	2.4
26	14	291	C	2.4
26	14	961	C	2.4
26	14	1607	C	2.4
26	14	1881	C	2.4
32	59	46	GLU	2.4
33	61	12	LEU	2.4
33	69	66	GLU	2.4
9	82	126	SER	2.4
10	1I	35	SER	2.4
38	55	27	SER	2.4
1	13	394	G	2.4
1	13	575	G	2.4
1	13	1001	G	2.4
1	13	1131	G	2.4
1	1G	1265	G	2.4
26	1H	2644	G	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	14	711	G	2.4
3	22	67	THR	2.4
33	61	129	THR	2.4
38	55	38	VAL	2.4
42	95	29	PRO	2.4
52	J5	27	PRO	2.4
9	8E	23	ASN	2.4
28	19	203	ASN	2.4
33	61	13	GLY	2.4
2	1E	42	ILE	2.4
4	32	4	TYR	2.4
11	2A	75	TYR	2.4
33	61	96	ASP	2.4
12	3I	7	ILE	2.4
14	5I	5	ALA	2.4
37	88	49	ALA	2.4
13	4A	65	LYS	2.4
36	35	50	ARG	2.4
49	K8	69	ARG	2.4
42	D8	38	LEU	2.4
1	13	1394	A	2.4
1	1G	535	A	2.4
5	4E	83	GLU	2.4
26	1H	5	A	2.4
26	1H	655	A	2.4
26	14	2758	A	2.4
32	51	2	SER	2.4
35	25	42	SER	2.4
16	7A	51	VAL	2.4
26	14	2113	U	2.4
42	95	50	PRO	2.4
51	M8	41	PRO	2.4
1	1G	875	C	2.3
1	1G	1129	C	2.3
17	8I	18	THR	2.3
24	1L	76	C	2.3
26	1H	1464	C	2.3
26	1H	2452	C	2.3
26	14	1161	C	2.3
26	14	2143	C	2.3
32	51	5	GLY	2.3
11	2A	11	LYS	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
4	32	13	ARG	2.3
5	42	89	ILE	2.3
30	39	205	ARG	2.3
32	59	136	ILE	2.3
33	61	50	ARG	2.3
33	69	130	TYR	2.3
35	68	86	ILE	2.3
37	45	137	TYR	2.3
45	C5	84	ARG	2.3
49	K8	52	ASP	2.3
1	13	683	G	2.3
1	13	799	G	2.3
1	13	1222	G	2.3
1	1G	1094	G	2.3
26	1H	1542	G	2.3
26	1H	1623	G	2.3
26	1H	1682	G	2.3
26	14	290	G	2.3
26	14	1619	G	2.3
2	12	55	PHE	2.3
12	3A	78	GLN	2.3
28	11	61	LEU	2.3
37	45	79	LEU	2.3
39	A8	110	LEU	2.3
46	H8	5	LEU	2.3
32	59	40	GLU	2.3
31	41	179	PRO	2.3
46	H8	158	PRO	2.3
3	22	171	GLY	2.3
12	3I	20	LYS	2.3
14	5A	51	GLY	2.3
22	1K	53	A	2.3
3	2E	71	ALA	2.3
10	1I	6	ILE	2.3
17	8A	18	THR	2.3
20	BA	79	ARG	2.3
21	1F	8	THR	2.3
21	1B	2	GLY	2.3
26	14	532	A	2.3
54	M5	36	LYS	2.3
29	21	77	ILE	2.3
40	75	115	ARG	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1G	343	U	2.3
1	1G	992	U	2.3
26	1H	757	U	2.3
26	14	1516	U	2.3
29	29	55	ASN	2.3
34	15	56	ASN	2.3
5	42	28	PHE	2.3
8	72	10	LEU	2.3
9	82	85	LEU	2.3
9	82	102	LEU	2.3
26	1H	732	C	2.3
26	1H	985	C	2.3
26	14	268	C	2.3
26	14	1988	C	2.3
27	1J	68	C	2.3
34	15	17	ASP	2.3
33	69	5	LEU	2.3
29	21	54	GLN	2.3
13	4A	32	GLU	2.3
39	65	107	GLU	2.3
1	13	351	G	2.3
26	1H	654(O)	G	2.3
26	1H	882	G	2.3
26	14	883	G	2.3
26	14	2116	G	2.3
27	1J	69	G	2.3
32	59	37	VAL	2.3
38	55	117	VAL	2.3
9	82	118	LYS	2.3
34	58	109	LYS	2.3
36	35	46	LYS	2.3
52	J5	9	LYS	2.3
52	J5	40	LYS	2.3
54	M5	21	LYS	2.3
7	62	71	PRO	2.3
7	62	149	ARG	2.3
10	1I	45	ARG	2.3
32	59	36	PRO	2.3
37	88	10	ARG	2.3
17	8A	60	ILE	2.3
45	C5	103	GLY	2.3
46	H8	160	GLY	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
10	1A	48	THR	2.3
33	69	53	ALA	2.3
36	35	31	ALA	2.3
42	D8	49	THR	2.3
42	95	92	THR	2.3
40	75	9	LEU	2.3
1	1G	179	A	2.3
2	1E	122	PHE	2.3
2	1E	163	PHE	2.3
17	8I	27	PHE	2.3
1	1G	1450	U	2.3
1	1G	979	C	2.3
1	1G	1397	C	2.3
26	1H	1636	C	2.3
26	14	392	C	2.3
28	19	4	LYS	2.3
36	78	71	VAL	2.3
51	M8	62	ARG	2.3
6	52	51	PRO	2.3
17	8I	28	PRO	2.3
31	41	39	ILE	2.3
42	D8	50	PRO	2.3
36	78	109	GLY	2.3
48	J8	84	GLY	2.3
2	12	77	ALA	2.3
4	32	111	ALA	2.3
8	72	3	THR	2.3
14	5A	13	THR	2.3
19	AI	4	SER	2.3
20	BA	105	SER	2.3
32	59	70	THR	2.3
40	B8	60	THR	2.3
3	22	52	LEU	2.3
4	32	125	HIS	2.3
8	7E	10	LEU	2.3
32	59	61	HIS	2.3
33	61	140	LEU	2.3
36	35	27	HIS	2.3
1	13	1143	G	2.3
1	1G	485	G	2.3
11	2I	75	TYR	2.3
24	3K	6	G	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
24	1L	6	G	2.3
26	1H	2120	G	2.3
38	98	94	TYR	2.3
20	BA	75	ASN	2.3
12	3I	112	ASP	2.3
16	7I	29	ASP	2.3
47	I8	71	ASP	2.3
49	G5	9	GLN	2.3
4	3E	30	LYS	2.3
34	58	83	LYS	2.3
45	C5	101	LYS	2.3
1	13	195	A	2.3
1	1G	430	A	2.3
5	4E	32	VAL	2.3
15	6A	54	ARG	2.3
26	1H	654(J)	A	2.3
26	1H	1632	A	2.3
26	14	1583	A	2.3
32	59	144	VAL	2.3
1	1G	1148	U	2.3
1	1G	1351	U	2.3
26	1H	2522	U	2.3
10	1I	77	PRO	2.3
30	39	94	PRO	2.3
3	22	205	GLY	2.3
5	4E	124	GLY	2.3
8	7E	55	GLY	2.3
8	7E	90	GLY	2.3
10	1I	93	GLY	2.3
19	AA	75	ALA	2.3
36	78	28	GLY	2.3
1	13	67	C	2.3
23	2L	70	C	2.3
55	3L	33	C	2.3
45	G8	6	HIS	2.3
31	41	117	PHE	2.3
35	68	28	SER	2.3
44	B5	5	TYR	2.3
3	2E	27	LYS	2.3
19	AI	25	LYS	2.3
20	BA	21	LYS	2.3
30	31	67	GLN	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
41	C8	117	GLN	2.3
45	G8	71	LYS	2.3
4	32	141	ARG	2.3
5	4E	34	VAL	2.3
37	88	138	ASP	2.3
51	M8	35	VAL	2.3
7	62	139	GLU	2.2
1	13	42	G	2.2
1	1G	266	G	2.2
26	1H	654(H)	G	2.2
26	14	1653	G	2.2
2	12	214	ILE	2.2
30	39	9	ILE	2.2
30	39	78	ILE	2.2
8	72	74	PRO	2.2
11	2A	115	PRO	2.2
2	1E	186	ALA	2.2
4	3E	171	GLY	2.2
5	42	59	GLY	2.2
10	1I	26	ALA	2.2
30	39	42	ALA	2.2
34	15	81	GLY	2.2
1	13	975	A	2.2
1	13	1285	A	2.2
1	1G	1288	A	2.2
19	AA	22	LEU	2.2
25	4K	23	A	2.2
26	14	1405	U	2.2
26	14	2662	A	2.2
36	35	59	LEU	2.2
12	3A	122	THR	2.2
29	29	159	HIS	2.2
39	A8	5	THR	2.2
46	H8	121	HIS	2.2
2	1E	216	SER	2.2
4	3E	207	TYR	2.2
5	4E	125	SER	2.2
8	7E	58	TYR	2.2
17	8I	100	LYS	2.2
28	19	38	LYS	2.2
31	41	47	LYS	2.2
33	61	2	LYS	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
46	D5	6	LYS	2.2
46	D5	156	LYS	2.2
49	G5	45	SER	2.2
51	M8	63	TYR	2.2
1	13	1140	C	2.2
1	13	1259	C	2.2
1	1G	135	C	2.2
5	4E	24	ARG	2.2
16	7A	75	ARG	2.2
26	1H	654(I)	C	2.2
26	1H	1217	C	2.2
43	A5	90	ARG	2.2
3	22	123	GLN	2.2
4	32	178	VAL	2.2
10	1I	34	VAL	2.2
32	59	26	VAL	2.2
34	58	56	ASN	2.2
36	35	71	VAL	2.2
2	12	43	ASP	2.2
29	21	163	GLU	2.2
32	59	58	GLU	2.2
46	H8	97	GLU	2.2
2	12	32	ILE	2.2
3	2E	24	ALA	2.2
10	1A	37	PRO	2.2
13	4I	5	ALA	2.2
15	6A	89	GLY	2.2
18	9I	73	ALA	2.2
31	49	172	LEU	2.2
45	C5	65	ALA	2.2
52	J5	54	GLY	2.2
14	5A	36	PHE	2.2
1	13	231	G	2.2
1	13	654	G	2.2
1	1G	251	G	2.2
1	1G	260	G	2.2
10	1I	87	THR	2.2
24	3K	5	G	2.2
26	1H	2290	G	2.2
26	1H	2634	G	2.2
26	1H	2706	G	2.2
26	14	997	G	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
37	45	87	LYS	2.2
42	95	49	THR	2.2
55	3L	61	G	2.2
1	13	222	U	2.2
4	32	132	ARG	2.2
6	5E	87	ARG	2.2
20	BA	23	ARG	2.2
38	55	2	ARG	2.2
42	95	66	ARG	2.2
1	13	969	A	2.2
1	1G	1111	A	2.2
22	1K	23	A	2.2
26	1H	2158	A	2.2
26	14	1349	A	2.2
3	2E	106	VAL	2.2
8	7E	129	VAL	2.2
2	12	5	ILE	2.2
5	42	131	ILE	2.2
33	61	7	GLU	2.2
46	D5	60	GLU	2.2
1	13	169	C	2.2
1	13	201	C	2.2
1	13	931	C	2.2
1	13	1027	C	2.2
1	1G	233	C	2.2
22	1K	54	C	2.2
22	1K	80	C	2.2
26	1H	2040	C	2.2
55	3L	74	C	2.2
2	12	202	PRO	2.2
15	6A	19	PRO	2.2
20	BA	99	LEU	2.2
29	29	50	GLY	2.2
30	31	10	PRO	2.2
31	41	122	PRO	2.2
33	69	75	LEU	2.2
46	H8	172	ALA	2.2
46	D5	91	LEU	2.2
50	H5	26	LEU	2.2
2	1E	139	LYS	2.2
4	32	18	LYS	2.2
7	6E	35	LYS	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
10	1A	7	LYS	2.2
21	1B	3	LYS	2.2
36	78	46	LYS	2.2
48	J8	69	LYS	2.2
48	F5	78	LYS	2.2
14	5I	36	PHE	2.2
32	59	101	ARG	2.2
47	E5	77	ARG	2.2
19	AA	79	THR	2.2
29	29	66	HIS	2.2
31	49	145	THR	2.2
34	58	101	HIS	2.2
52	N8	22	HIS	2.2
52	J5	23	HIS	2.2
7	62	66	VAL	2.2
42	95	51	VAL	2.2
12	3A	81	SER	2.2
1	13	253	U	2.2
26	1H	2647	U	2.2
26	14	895	U	2.2
8	72	13	ILE	2.2
1	13	158	G	2.2
1	13	332	G	2.2
1	13	825	G	2.2
1	13	1464	G	2.2
1	1G	306	G	2.2
1	1G	587	G	2.2
26	1H	651	G	2.2
26	1H	1334	G	2.2
8	72	39	LEU	2.2
11	2A	92	GLU	2.2
26	14	916	G	2.2
26	14	1348	G	2.2
26	14	1984	G	2.2
29	29	179	GLU	2.2
37	45	91	GLU	2.2
49	G5	61	LEU	2.2
49	G5	66	GLU	2.2
4	3E	195	ALA	2.2
16	7A	70	ALA	2.2
3	2E	26	LYS	2.2
9	82	95	LYS	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
21	1F	25	LYS	2.2
28	19	59	LYS	2.2
35	25	81	ASP	2.2
36	35	36	LYS	2.2
40	75	98	LYS	2.2
14	5I	37	PHE	2.2
31	41	72	ARG	2.2
1	13	186	C	2.2
1	13	1354	C	2.2
24	1L	81	C	2.2
26	14	998	C	2.2
26	14	1049	C	2.2
26	14	1493	C	2.2
26	14	2045	C	2.2
26	14	2474	C	2.2
30	39	4	VAL	2.2
30	39	99	TYR	2.2
45	G8	85	VAL	2.2
49	G5	6	VAL	2.2
2	12	172	ILE	2.2
9	8E	124	GLN	2.2
30	39	15	SER	2.2
49	K8	46	GLN	2.2
17	8I	43	LEU	2.2
41	85	95	LEU	2.2
52	J5	58	LEU	2.2
9	82	110	GLU	2.2
29	21	121	ASN	2.2
32	51	40	GLU	2.2
7	62	70	LYS	2.2
31	49	84	LYS	2.2
35	68	30	ALA	2.2
16	7I	10	GLY	2.2
20	BI	47	GLY	2.2
32	51	82	GLY	2.2
32	51	168	PRO	2.2
36	78	10	PRO	2.2
47	I8	56	ASP	2.2
1	1G	802	A	2.2
24	1L	68	A	2.2
26	1H	699	A	2.2
26	1H	899	A	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	1H	1048	A	2.2
26	1H	1379	A	2.2
26	1H	1536	A	2.2
26	14	819	A	2.2
27	1J	58	A	2.2
1	13	524	G	2.2
1	13	1033	G	2.2
1	1G	506	G	2.2
1	1G	1175	G	2.2
1	1G	1355	G	2.2
1	1G	1482	G	2.2
7	6E	156	TRP	2.2
26	1H	2123	G	2.2
26	1H	2694	G	2.2
26	14	654(D)	G	2.2
26	14	1699	G	2.2
19	AI	83	HIS	2.2
2	12	190	THR	2.1
12	3A	61	THR	2.1
29	29	12	THR	2.1
40	B8	62	THR	2.1
10	1I	82	ILE	2.1
20	BI	100	ILE	2.1
26	14	1957	C	2.1
45	C5	44	ILE	2.1
9	82	79	LEU	2.1
17	8A	67	LYS	2.1
29	29	154	LYS	2.1
47	E5	19	LYS	2.1
48	F5	17	SER	2.1
48	F5	32	LYS	2.1
2	12	170	GLU	2.1
10	1I	61	GLU	2.1
30	31	42	ALA	2.1
33	61	98	ALA	2.1
45	G8	16	ALA	2.1
45	C5	78	ALA	2.1
53	L5	45	ALA	2.1
7	62	88	PRO	2.1
16	7I	81	ARG	2.1
18	9I	80	PRO	2.1
20	BA	83	ARG	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
20	BA	89	ARG	2.1
30	39	55	GLY	2.1
35	25	104	ARG	2.1
4	3E	93	PHE	2.1
1	1G	905	U	2.1
26	14	905	U	2.1
46	H8	140	ASP	2.1
46	D5	90	VAL	2.1
36	35	57	THR	2.1
42	95	7	THR	2.1
46	D5	69	THR	2.1
1	13	1513	A	2.1
3	22	77	ILE	2.1
7	6E	154	TYR	2.1
26	14	282	A	2.1
2	1E	133	LYS	2.1
2	12	169	LYS	2.1
4	3E	78	LEU	2.1
18	9I	88	LYS	2.1
31	41	8	LYS	2.1
42	95	95	LEU	2.1
1	13	29	G	2.1
1	13	416	G	2.1
1	13	1530	G	2.1
1	1G	254	G	2.1
1	1G	1009	G	2.1
1	1G	1139	G	2.1
1	1G	1386	G	2.1
26	1H	463	G	2.1
26	1H	2121	G	2.1
26	1H	2182	G	2.1
26	1H	2191	G	2.1
26	1H	2318	G	2.1
26	1H	2661	G	2.1
26	14	1678	G	2.1
26	14	2049	G	2.1
31	41	148	MET	2.1
28	19	119	ALA	2.1
40	B8	131	ALA	2.1
7	62	93	PRO	2.1
28	19	238	GLY	2.1
33	61	34	GLY	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	15	80	GLY	2.1
38	98	46	GLY	2.1
51	I5	45	GLY	2.1
26	1H	2295	C	2.1
26	1H	2690	C	2.1
26	14	267	C	2.1
26	14	531	C	2.1
26	14	2475	C	2.1
13	4A	77	ASN	2.1
2	1E	160	ASP	2.1
2	12	229	VAL	2.1
11	2A	105	VAL	2.1
17	8I	55	ASP	2.1
31	49	156	ASP	2.1
1	1G	1159	U	2.1
4	32	106	TYR	2.1
7	62	44	TYR	2.1
9	8E	96	LEU	2.1
12	3A	44	THR	2.1
15	6I	43	LEU	2.1
16	7I	6	LEU	2.1
24	1L	69	U	2.1
26	14	2099	U	2.1
30	39	41	LEU	2.1
38	98	70	LEU	2.1
39	A8	4	LEU	2.1
39	65	78	LEU	2.1
40	75	114	LEU	2.1
41	85	15	LYS	2.1
46	H8	163	LEU	2.1
16	7A	71	ARG	2.1
30	31	95	ARG	2.1
30	39	95	ARG	2.1
2	12	13	ALA	2.1
33	61	94	ALA	2.1
45	C5	100	ALA	2.1
23	2K	60	A	2.1
39	A8	108	GLY	2.1
51	I5	30	GLU	2.1
40	75	57	PHE	2.1
46	D5	136	PHE	2.1
1	13	1026	G	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1G	61	G	2.1
1	1G	693	G	2.1
1	1G	1144	G	2.1
3	22	106	VAL	2.1
8	7E	103	VAL	2.1
26	1H	615	G	2.1
26	1H	1091	G	2.1
26	1H	2362	G	2.1
26	1H	2780	G	2.1
26	14	934	G	2.1
1	13	883	C	2.1
1	13	1277	C	2.1
1	1G	466	C	2.1
23	2L	62	C	2.1
26	1H	2538	C	2.1
26	1H	2695	C	2.1
44	F8	53	LYS	2.1
44	B5	6	ASP	2.1
45	C5	54	LYS	2.1
53	P8	29	LYS	2.1
54	Q8	52	LYS	2.1
2	1E	201	ILE	2.1
2	12	154	LEU	2.1
31	49	114	ILE	2.1
33	61	35	LEU	2.1
2	12	47	THR	2.1
12	3I	19	ARG	2.1
3	22	29	TYR	2.1
3	22	95	THR	2.1
37	45	60	ARG	2.1
17	8I	51	TYR	2.1
47	E5	53	MET	2.1
18	9I	20	ALA	2.1
32	59	145	ALA	2.1
1	1G	375	U	2.1
3	2E	170	GLN	2.1
26	1H	1061	U	2.1
26	1H	1329	U	2.1
26	14	1454	U	2.1
26	14	1768	U	2.1
26	14	2122	U	2.1
26	14	2272	U	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
35	25	5	GLN	2.1
31	49	85	GLY	2.1
34	58	80	GLY	2.1
10	1I	95	GLU	2.1
54	M5	63	PRO	2.1
3	2E	112	SER	2.1
11	2I	107	SER	2.1
7	6E	75	VAL	2.1
28	19	18	VAL	2.1
31	41	5	VAL	2.1
45	G8	98	VAL	2.1
1	1G	160	A	2.1
4	3E	77	ASN	2.1
24	1L	37	A	2.1
24	1L	67	A	2.1
26	1H	548	A	2.1
26	1H	1637	A	2.1
43	A5	83	LYS	2.1
2	1E	155	LEU	2.1
2	1E	196	LEU	2.1
5	42	11	ILE	2.1
9	8E	79	LEU	2.1
21	1F	6	ARG	2.1
29	29	78	LEU	2.1
30	39	69	HIS	2.1
33	69	27	ARG	2.1
44	B5	68	ARG	2.1
49	G5	51	ARG	2.1
53	P8	23	ARG	2.1
2	1E	90	MET	2.1
33	69	25	TYR	2.1
40	75	14	TYR	2.1
1	13	390	C	2.1
1	13	932	C	2.1
1	13	1397	C	2.1
1	1G	234	C	2.1
1	1G	330	C	2.1
1	1G	528	C	2.1
1	1G	756	C	2.1
1	1G	842	C	2.1
1	1G	1158	C	2.1
1	13	1064	G	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	1G	428	G	2.1
1	1G	851	G	2.1
1	1G	1032(A)	G	2.1
1	1G	1272	G	2.1
20	BA	76	ALA	2.1
26	1H	635	C	2.1
26	1H	736	C	2.1
26	1H	904	C	2.1
26	1H	1386	C	2.1
26	1H	1446	C	2.1
26	14	129	C	2.1
26	14	837	C	2.1
26	14	1145	C	2.1
24	1L	17	G	2.1
26	14	938	G	2.1
26	14	1869	G	2.1
28	19	130	ALA	2.1
32	59	73	ALA	2.1
40	75	127	ALA	2.1
2	12	78	GLN	2.1
18	9A	57	GLY	2.1
30	39	207	GLY	2.1
40	B8	92	GLY	2.1
6	52	97	PHE	2.1
29	21	74	PRO	2.1
32	51	117	PRO	2.1
40	B8	73	GLU	2.1
43	A5	78	GLU	2.1
46	H8	101	PRO	2.1
50	H5	57	GLU	2.1
1	13	1135	U	2.0
1	13	1159	U	2.0
3	22	97	LYS	2.0
12	3I	11	VAL	2.0
19	AI	58	VAL	2.0
22	1K	9	U	2.0
23	2L	61	U	2.0
26	1H	1864	U	2.0
26	14	50	U	2.0
31	41	81	LYS	2.0
32	59	44	VAL	2.0
33	69	37	VAL	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
43	E8	85	VAL	2.0
49	K8	4	SER	2.0
3	22	11	ARG	2.0
12	3I	93	LEU	2.0
12	3A	89	ARG	2.0
17	8I	31	LEU	2.0
20	BI	33	ILE	2.0
20	BA	43	LEU	2.0
21	1F	10	ARG	2.0
31	49	130	ASN	2.0
38	55	10	LEU	2.0
29	29	137	HIS	2.0
47	I8	53	MET	2.0
1	13	273	A	2.0
1	1G	109	A	2.0
1	1G	382	A	2.0
2	12	207	ALA	2.0
8	72	54	ASP	2.0
11	2I	41	THR	2.0
24	3K	23	A	2.0
26	14	1111	A	2.0
26	14	2171	A	2.0
26	14	2298	A	2.0
30	31	149	ASP	2.0
31	49	73	ALA	2.0
34	15	127	ASP	2.0
38	55	94	TYR	2.0
47	E5	71	ASP	2.0
51	M8	32	TYR	2.0
51	M8	44	THR	2.0
2	1E	17	PHE	2.0
3	22	51	GLY	2.0
4	3E	2	GLY	2.0
6	5E	18	GLN	2.0
19	AA	68	GLY	2.0
42	D8	8	GLY	2.0
2	12	9	GLU	2.0
2	12	134	GLU	2.0
1	1G	1234	C	2.0
4	3E	22	LYS	2.0
8	72	98	LYS	2.0
10	1I	57	LYS	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
20	BI	34	LYS	2.0
30	39	35	GLU	2.0
45	C5	64	GLU	2.0
46	H8	169	GLU	2.0
22	1K	78	C	2.0
24	1L	10	C	2.0
26	1H	1140	C	2.0
26	1H	2710	C	2.0
26	14	654(M)	C	2.0
26	14	2568	C	2.0
45	C5	42	VAL	2.0
46	D5	58	VAL	2.0
51	M8	10	VAL	2.0
1	13	438	G	2.0
1	13	973	G	2.0
2	1E	51	LEU	2.0
3	2E	131	ARG	2.0
6	52	86	ARG	2.0
17	8A	101	ARG	2.0
24	3K	18	G	2.0
26	1H	660	G	2.0
26	1H	711	G	2.0
26	1H	1186	G	2.0
26	1H	1540	G	2.0
26	14	2	G	2.0
26	14	932	G	2.0
26	14	1948	G	2.0
26	14	2319	G	2.0
26	14	2529	G	2.0
33	69	33	ARG	2.0
5	42	87	SER	2.0
7	6E	98	SER	2.0
14	5A	32	SER	2.0
32	59	155	SER	2.0
46	D5	124	ILE	2.0
1	13	30	U	2.0
1	1G	1364	U	2.0
26	1H	3	U	2.0
40	75	97	ALA	2.0
33	61	25	TYR	2.0
10	1I	89	ASP	2.0
10	1A	89	ASP	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
10	1A	52	GLY	2.0
46	H8	88	PHE	2.0
48	J8	55	GLY	2.0
37	88	76	LYS	2.0
45	C5	82	PRO	2.0
1	13	282	A	2.0
3	22	151	VAL	2.0
24	3K	39	A	2.0
24	1L	79	A	2.0
26	1H	2030	A	2.0
26	14	1032	A	2.0
27	16	58	A	2.0
3	22	156	ARG	2.0
20	BI	23	ARG	2.0
21	1F	9	ARG	2.0
30	31	154	VAL	2.0
39	A8	20	ARG	2.0
2	12	10	LEU	2.0
45	C5	14	LEU	2.0
15	6I	87	ILE	2.0
31	41	52	ILE	2.0
1	1G	271	C	2.0
1	1G	856	C	2.0
1	1G	932	C	2.0
1	1G	1384	C	2.0
26	1H	1684	C	2.0
26	1H	2021	C	2.0
26	14	865	C	2.0
27	16	108	C	2.0

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

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95^{th} percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
23	5MU	2L	55	21/22	0.76	0.14	101,110,116,118	0
23	5MU	2K	55	21/22	0.80	0.14	88,99,104,112	0
24	PSU	1L	40	20/21	0.81	0.30	99,116,121,124	0
24	PSU	3K	40	20/21	0.83	0.14	106,113,117,119	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
23	PSU	2K	56	20/21	0.84	0.10	93,98,101,113	0
23	PSU	2L	56	20/21	0.84	0.10	101,108,114,119	0
55	PSU	3L	40	20/21	0.84	0.24	110,117,123,123	0
55	MIA	3L	38	29/30	0.88	0.22	102,116,135,141	0
23	4SU	2L	8	20/21	0.89	0.14	99,106,113,117	0
22	PSU	1K	64	20/21	0.90	0.10	106,129,138,140	0
23	OMC	2L	33	21/22	0.90	0.14	86,95,99,102	0
22	5MU	1K	63	21/22	0.92	0.11	106,124,138,141	0
22	QUO	1K	35	32/33	0.92	0.35	67,86,101,111	0
22	PSU	1K	40	20/21	0.92	0.14	78,96,104,105	0
22	MIA	1K	38	29/30	0.94	0.21	67,84,98,112	0
23	4SU	2K	8	20/21	0.94	0.11	83,89,99,107	0
23	OMC	2K	33	21/22	0.95	0.13	70,74,82,85	0

6.3 Carbohydrates (i)

There are no oligosaccharides in this entry.

6.4 Ligands (i)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 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
56	MG	1G	1648	1/1	0.14	0.43	121,121,121,121	0
56	MG	14	3254	1/1	0.44	0.36	102,102,102,102	0
56	MG	14	3300	1/1	0.45	0.36	109,109,109,109	0
56	MG	14	3265	1/1	0.47	0.38	121,121,121,121	0
56	MG	14	3148	1/1	0.49	0.56	82,82,82,82	0
56	MG	25	201	1/1	0.49	0.42	107,107,107,107	0
56	MG	14	3283	1/1	0.50	0.35	102,102,102,102	0
56	MG	14	3241	1/1	0.53	0.38	91,91,91,91	0
56	MG	1H	3172	1/1	0.53	0.54	84,84,84,84	0
56	MG	1H	3299	1/1	0.54	0.39	82,82,82,82	0
56	MG	3E	301	1/1	0.55	0.21	112,112,112,112	0
56	MG	1G	1636	1/1	0.58	0.38	84,84,84,84	0
56	MG	1H	3296	1/1	0.58	0.34	90,90,90,90	0
56	MG	13	1710	1/1	0.58	0.26	128,128,128,128	0
56	MG	14	3135	1/1	0.59	0.37	78,78,78,78	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3309	1/1	0.59	0.32	98,98,98,98	0
56	MG	1H	3306	1/1	0.60	0.41	86,86,86,86	0
56	MG	1G	1668	1/1	0.60	0.34	82,82,82,82	0
56	MG	14	3298	1/1	0.62	0.53	103,103,103,103	0
56	MG	1H	3325	1/1	0.62	0.32	96,96,96,96	0
56	MG	1H	3322	1/1	0.62	0.39	80,80,80,80	0
56	MG	14	3228	1/1	0.63	0.46	98,98,98,98	0
56	MG	14	3197	1/1	0.63	0.34	89,89,89,89	0
56	MG	1H	3155	1/1	0.64	0.30	74,74,74,74	0
56	MG	14	3198	1/1	0.64	0.37	78,78,78,78	0
56	MG	13	1649	1/1	0.65	0.35	85,85,85,85	0
56	MG	2L	102	1/1	0.65	0.40	79,79,79,79	0
56	MG	C5	201	1/1	0.65	0.23	104,104,104,104	0
56	MG	1H	3217	1/1	0.66	0.35	93,93,93,93	0
56	MG	14	3301	1/1	0.67	0.41	86,86,86,86	0
56	MG	1H	3056	1/1	0.68	0.37	70,70,70,70	0
56	MG	1G	1669	1/1	0.68	0.36	88,88,88,88	0
56	MG	13	1616	1/1	0.68	0.43	93,93,93,93	0
56	MG	14	3025	1/1	0.68	0.35	84,84,84,84	0
56	MG	1G	1652	1/1	0.68	0.37	74,74,74,74	0
56	MG	1G	1654	1/1	0.68	0.39	101,101,101,101	0
56	MG	1H	3333	1/1	0.69	0.24	93,93,93,93	0
56	MG	1H	3349	1/1	0.69	0.47	85,85,85,85	0
56	MG	14	3104	1/1	0.69	0.27	84,84,84,84	0
56	MG	1H	3293	1/1	0.69	0.44	90,90,90,90	0
56	MG	14	3303	1/1	0.69	0.27	101,101,101,101	0
56	MG	1H	3314	1/1	0.69	0.32	90,90,90,90	0
56	MG	14	3149	1/1	0.69	0.26	84,84,84,84	0
56	MG	1H	3075	1/1	0.70	0.42	70,70,70,70	0
56	MG	13	1617	1/1	0.70	0.23	86,86,86,86	0
56	MG	1G	1616	1/1	0.70	0.36	86,86,86,86	0
56	MG	14	3305	1/1	0.70	0.33	79,79,79,79	0
56	MG	14	3196	1/1	0.70	0.36	90,90,90,90	0
56	MG	14	3299	1/1	0.70	0.20	70,70,70,70	0
56	MG	13	1615	1/1	0.71	0.43	92,92,92,92	0
56	MG	1J	203	1/1	0.71	0.47	81,81,81,81	0
56	MG	14	3258	1/1	0.71	0.37	73,73,73,73	0
56	MG	1H	3328	1/1	0.71	0.51	91,91,91,91	0
56	MG	13	1707	1/1	0.72	0.47	96,96,96,96	0
56	MG	1H	3182	1/1	0.72	0.32	87,87,87,87	0
56	MG	16	205	1/1	0.72	0.25	77,77,77,77	0
56	MG	1G	1610	1/1	0.72	0.44	77,77,77,77	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	13	1690	1/1	0.72	0.25	113,113,113,113	0
56	MG	1J	204	1/1	0.72	0.34	95,95,95,95	0
56	MG	1H	3159	1/1	0.72	0.19	71,71,71,71	0
56	MG	1H	3332	1/1	0.72	0.27	88,88,88,88	0
56	MG	13	1611	1/1	0.73	0.36	70,70,70,70	0
56	MG	14	3133	1/1	0.73	0.23	86,86,86,86	0
56	MG	1H	3117	1/1	0.73	0.41	80,80,80,80	0
56	MG	1G	1664	1/1	0.74	0.37	102,102,102,102	0
56	MG	14	3225	1/1	0.74	0.39	78,78,78,78	0
56	MG	1H	3273	1/1	0.74	0.27	87,87,87,87	0
56	MG	13	1714	1/1	0.74	0.44	99,99,99,99	0
56	MG	14	3284	1/1	0.74	0.29	88,88,88,88	0
56	MG	14	3192	1/1	0.75	0.45	80,80,80,80	0
56	MG	1H	3148	1/1	0.75	0.39	82,82,82,82	0
56	MG	2K	101	1/1	0.75	0.31	79,79,79,79	0
56	MG	2K	102	1/1	0.75	0.40	83,83,83,83	0
56	MG	14	3068	1/1	0.75	0.31	69,69,69,69	0
56	MG	13	1607	1/1	0.75	0.20	77,77,77,77	0
56	MG	14	3122	1/1	0.75	0.41	68,68,68,68	0
56	MG	1H	3300	1/1	0.75	0.21	77,77,77,77	0
56	MG	13	1716	1/1	0.75	0.27	92,92,92,92	0
56	MG	13	1696	1/1	0.75	0.23	116,116,116,116	0
56	MG	1H	3311	1/1	0.75	0.40	78,78,78,78	0
56	MG	13	1703	1/1	0.76	0.25	89,89,89,89	0
56	MG	13	1647	1/1	0.76	0.43	77,77,77,77	0
56	MG	14	3278	1/1	0.76	0.14	98,98,98,98	0
56	MG	1H	3207	1/1	0.76	0.44	73,73,73,73	0
56	MG	14	3161	1/1	0.76	0.25	86,86,86,86	0
56	MG	14	3297	1/1	0.76	0.23	74,74,74,74	0
56	MG	1H	3170	1/1	0.76	0.31	61,61,61,61	0
56	MG	41	201	1/1	0.76	0.32	82,82,82,82	0
56	MG	13	1670	1/1	0.77	0.17	78,78,78,78	0
56	MG	1G	1625	1/1	0.77	0.36	84,84,84,84	0
56	MG	1G	1626	1/1	0.77	0.40	79,79,79,79	0
56	MG	1G	1635	1/1	0.77	0.29	98,98,98,98	0
56	MG	14	3136	1/1	0.77	0.35	73,73,73,73	0
56	MG	14	3292	1/1	0.77	0.30	82,82,82,82	0
56	MG	2K	104	1/1	0.77	0.30	98,98,98,98	0
56	MG	1G	1647	1/1	0.77	0.32	102,102,102,102	0
56	MG	1H	3257	1/1	0.77	0.34	85,85,85,85	0
56	MG	1H	3121	1/1	0.77	0.29	64,64,64,64	0
56	MG	1H	3342	1/1	0.77	0.44	98,98,98,98	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3283	1/1	0.77	0.27	74,74,74,74	0
56	MG	1H	3356	1/1	0.77	0.25	79,79,79,79	0
56	MG	16	201	1/1	0.77	0.24	78,78,78,78	0
56	MG	13	1712	1/1	0.77	0.34	77,77,77,77	0
56	MG	1H	3316	1/1	0.77	0.33	74,74,74,74	0
56	MG	1H	3149	1/1	0.77	0.31	65,65,65,65	0
56	MG	16	202	1/1	0.78	0.30	59,59,59,59	0
56	MG	1H	3135	1/1	0.78	0.12	54,54,54,54	0
56	MG	16	210	1/1	0.78	0.19	89,89,89,89	0
56	MG	1H	3168	1/1	0.78	0.38	79,79,79,79	0
56	MG	13	1685	1/1	0.78	0.42	91,91,91,91	0
56	MG	1H	3171	1/1	0.78	0.16	79,79,79,79	0
56	MG	1H	3312	1/1	0.78	0.33	78,78,78,78	0
56	MG	13	1631	1/1	0.78	0.38	73,73,73,73	0
56	MG	14	3267	1/1	0.78	0.19	81,81,81,81	0
56	MG	14	3168	1/1	0.78	0.35	71,71,71,71	0
56	MG	1H	3153	1/1	0.78	0.37	64,64,64,64	0
56	MG	13	1694	1/1	0.78	0.23	82,82,82,82	0
58	ZN	G8	201	1/1	0.78	0.18	178,178,178,178	0
56	MG	14	3293	1/1	0.79	0.54	88,88,88,88	0
56	MG	1H	3043	1/1	0.79	0.31	84,84,84,84	0
56	MG	14	3240	1/1	0.79	0.22	77,77,77,77	0
56	MG	1G	1628	1/1	0.79	0.36	77,77,77,77	0
56	MG	1H	3290	1/1	0.79	0.54	84,84,84,84	0
56	MG	1H	3229	1/1	0.79	0.26	95,95,95,95	0
56	MG	14	3140	1/1	0.79	0.44	92,92,92,92	0
56	MG	14	3145	1/1	0.79	0.21	81,81,81,81	0
56	MG	14	3147	1/1	0.79	0.27	78,78,78,78	0
56	MG	14	3220	1/1	0.79	0.24	82,82,82,82	0
56	MG	1H	3282	1/1	0.79	0.30	83,83,83,83	0
56	MG	14	3289	1/1	0.79	0.21	79,79,79,79	0
56	MG	14	3227	1/1	0.79	0.26	88,88,88,88	0
56	MG	14	3118	1/1	0.80	0.34	86,86,86,86	0
56	MG	14	3252	1/1	0.80	0.33	96,96,96,96	0
56	MG	1G	1619	1/1	0.80	0.27	84,84,84,84	0
56	MG	13	1656	1/1	0.80	0.23	91,91,91,91	0
56	MG	1H	3335	1/1	0.80	0.14	87,87,87,87	0
56	MG	1H	3280	1/1	0.80	0.32	59,59,59,59	0
56	MG	1H	3348	1/1	0.80	0.41	80,80,80,80	0
56	MG	13	1660	1/1	0.80	0.20	91,91,91,91	0
56	MG	13	1652	1/1	0.80	0.28	80,80,80,80	0
56	MG	13	1708	1/1	0.80	0.28	85,85,85,85	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3163	1/1	0.80	0.45	87,87,87,87	0
56	MG	14	3160	1/1	0.80	0.24	73,73,73,73	0
56	MG	16	204	1/1	0.80	0.31	86,86,86,86	0
56	MG	1H	3295	1/1	0.80	0.27	76,76,76,76	0
56	MG	1H	3032	1/1	0.80	0.32	78,78,78,78	0
56	MG	1H	3326	1/1	0.80	0.25	96,96,96,96	0
56	MG	1G	1607	1/1	0.80	0.24	81,81,81,81	0
56	MG	1H	3246	1/1	0.80	0.22	79,79,79,79	0
56	MG	14	3048	1/1	0.80	0.27	67,67,67,67	0
56	MG	1J	201	1/1	0.80	0.24	87,87,87,87	0
56	MG	13	1719	1/1	0.80	0.29	89,89,89,89	0
56	MG	14	3101	1/1	0.80	0.30	84,84,84,84	0
56	MG	14	3102	1/1	0.80	0.12	49,49,49,49	0
56	MG	14	3235	1/1	0.80	0.32	72,72,72,72	0
56	MG	1G	1618	1/1	0.80	0.19	88,88,88,88	0
56	MG	1H	3201	1/1	0.81	0.22	59,59,59,59	0
56	MG	1H	3310	1/1	0.81	0.25	69,69,69,69	0
56	MG	13	1674	1/1	0.81	0.19	94,94,94,94	0
56	MG	13	1654	1/1	0.81	0.34	75,75,75,75	0
56	MG	13	1623	1/1	0.81	0.44	94,94,94,94	0
56	MG	1G	1615	1/1	0.81	0.31	87,87,87,87	0
56	MG	1H	3112	1/1	0.81	0.22	66,66,66,66	0
56	MG	1H	3254	1/1	0.81	0.15	77,77,77,77	0
56	MG	14	3127	1/1	0.81	0.26	64,64,64,64	0
56	MG	13	1705	1/1	0.81	0.10	94,94,94,94	0
56	MG	1H	3041	1/1	0.81	0.30	87,87,87,87	0
56	MG	1H	3186	1/1	0.81	0.23	83,83,83,83	0
56	MG	14	3139	1/1	0.81	0.25	81,81,81,81	0
56	MG	14	3022	1/1	0.81	0.36	72,72,72,72	0
56	MG	1H	3185	1/1	0.82	0.24	71,71,71,71	0
56	MG	13	1635	1/1	0.82	0.26	59,59,59,59	0
56	MG	14	3132	1/1	0.82	0.41	86,86,86,86	0
56	MG	14	3287	1/1	0.82	0.31	79,79,79,79	0
56	MG	1H	3109	1/1	0.82	0.11	60,60,60,60	0
56	MG	14	3203	1/1	0.82	0.20	55,55,55,55	0
56	MG	1H	3336	1/1	0.82	0.34	79,79,79,79	0
56	MG	14	3224	1/1	0.82	0.14	48,48,48,48	0
56	MG	14	3029	1/1	0.82	0.35	80,80,80,80	0
56	MG	14	3034	1/1	0.82	0.21	86,86,86,86	0
56	MG	14	3042	1/1	0.82	0.27	72,72,72,72	0
56	MG	1G	1650	1/1	0.82	0.18	87,87,87,87	0
56	MG	1H	3158	1/1	0.82	0.26	70,70,70,70	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	14	3089	1/1	0.82	0.30	79,79,79,79	0
56	MG	1H	3343	1/1	0.82	0.37	75,75,75,75	0
56	MG	13	1608	1/1	0.82	0.24	71,71,71,71	0
56	MG	1G	1665	1/1	0.82	0.15	94,94,94,94	0
56	MG	13	1609	1/1	0.82	0.28	86,86,86,86	0
56	MG	14	3178	1/1	0.82	0.17	80,80,80,80	0
56	MG	14	3276	1/1	0.82	0.34	76,76,76,76	0
58	ZN	C5	202	1/1	0.82	0.12	192,192,192,192	0
56	MG	13	1651	1/1	0.83	0.26	87,87,87,87	0
56	MG	1H	3259	1/1	0.83	0.26	81,81,81,81	0
56	MG	1H	3223	1/1	0.83	0.28	102,102,102,102	0
56	MG	14	3282	1/1	0.83	0.24	86,86,86,86	0
56	MG	13	1715	1/1	0.83	0.29	83,83,83,83	0
56	MG	14	3217	1/1	0.83	0.22	68,68,68,68	0
56	MG	14	3138	1/1	0.83	0.43	79,79,79,79	0
56	MG	14	3222	1/1	0.83	0.18	83,83,83,83	0
56	MG	1H	3233	1/1	0.83	0.33	53,53,53,53	0
56	MG	1H	3345	1/1	0.83	0.31	60,60,60,60	0
56	MG	14	3226	1/1	0.83	0.36	82,82,82,82	0
56	MG	1G	1614	1/1	0.83	0.37	72,72,72,72	0
56	MG	1H	3234	1/1	0.83	0.25	75,75,75,75	0
56	MG	14	3233	1/1	0.83	0.26	61,61,61,61	0
56	MG	14	3097	1/1	0.83	0.46	59,59,59,59	0
56	MG	1H	3327	1/1	0.83	0.49	79,79,79,79	0
56	MG	1H	3178	1/1	0.83	0.27	63,63,63,63	0
56	MG	14	3242	1/1	0.83	0.23	74,74,74,74	0
56	MG	1H	3363	1/1	0.83	0.36	68,68,68,68	0
56	MG	1H	3329	1/1	0.83	0.33	73,73,73,73	0
56	MG	13	1663	1/1	0.83	0.20	88,88,88,88	0
56	MG	14	3260	1/1	0.83	0.35	85,85,85,85	0
56	MG	14	3261	1/1	0.83	0.39	93,93,93,93	0
56	MG	14	3015	1/1	0.83	0.25	71,71,71,71	0
56	MG	14	3183	1/1	0.84	0.26	46,46,46,46	0
56	MG	1K	101	1/1	0.84	0.25	75,75,75,75	0
56	MG	1H	3274	1/1	0.84	0.41	80,80,80,80	0
56	MG	1G	1661	1/1	0.84	0.42	73,73,73,73	0
56	MG	1G	1613	1/1	0.84	0.20	87,87,87,87	0
56	MG	1H	3085	1/1	0.84	0.29	66,66,66,66	0
56	MG	14	3210	1/1	0.84	0.29	71,71,71,71	0
56	MG	14	3285	1/1	0.84	0.35	74,74,74,74	0
56	MG	1H	3225	1/1	0.84	0.30	57,57,57,57	0
56	MG	1H	3175	1/1	0.84	0.37	67,67,67,67	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3134	1/1	0.84	0.32	61,61,61,61	0
56	MG	2L	103	1/1	0.84	0.35	89,89,89,89	0
56	MG	2L	104	1/1	0.84	0.17	65,65,65,65	0
56	MG	1H	3101	1/1	0.84	0.21	62,62,62,62	0
56	MG	1H	3294	1/1	0.84	0.26	47,47,47,47	0
56	MG	1H	3139	1/1	0.84	0.13	66,66,66,66	0
56	MG	14	3028	1/1	0.84	0.36	73,73,73,73	0
56	MG	1H	3167	1/1	0.84	0.23	67,67,67,67	0
56	MG	1H	3053	1/1	0.84	0.51	72,72,72,72	0
56	MG	13	1646	1/1	0.84	0.16	95,95,95,95	0
56	MG	1H	3260	1/1	0.84	0.19	72,72,72,72	0
56	MG	1H	3263	1/1	0.84	0.28	76,76,76,76	0
56	MG	14	3081	1/1	0.84	0.43	52,52,52,52	0
56	MG	88	201	1/1	0.84	0.41	78,78,78,78	0
56	MG	14	3170	1/1	0.84	0.37	79,79,79,79	0
56	MG	14	3091	1/1	0.84	0.14	84,84,84,84	0
56	MG	1H	3248	1/1	0.85	0.45	80,80,80,80	0
56	MG	13	1673	1/1	0.85	0.27	73,73,73,73	0
56	MG	14	3239	1/1	0.85	0.21	76,76,76,76	0
56	MG	1H	3330	1/1	0.85	0.36	67,67,67,67	0
56	MG	1H	3037	1/1	0.85	0.24	62,62,62,62	0
56	MG	1G	1670	1/1	0.85	0.30	77,77,77,77	0
56	MG	1H	3258	1/1	0.85	0.22	63,63,63,63	0
56	MG	14	3253	1/1	0.85	0.18	74,74,74,74	0
56	MG	1H	3210	1/1	0.85	0.34	77,77,77,77	0
56	MG	1H	3076	1/1	0.85	0.19	75,75,75,75	0
56	MG	14	3259	1/1	0.85	0.46	82,82,82,82	0
56	MG	14	3007	1/1	0.85	0.23	48,48,48,48	0
56	MG	14	3010	1/1	0.85	0.36	58,58,58,58	0
56	MG	14	3264	1/1	0.85	0.10	67,67,67,67	0
56	MG	1H	3307	1/1	0.85	0.18	80,80,80,80	0
56	MG	14	3153	1/1	0.85	0.23	94,94,94,94	0
56	MG	14	3273	1/1	0.85	0.17	73,73,73,73	0
56	MG	14	3159	1/1	0.85	0.44	73,73,73,73	0
56	MG	1H	3221	1/1	0.85	0.30	80,80,80,80	0
56	MG	1H	3269	1/1	0.85	0.12	62,62,62,62	0
56	MG	14	3163	1/1	0.85	0.27	80,80,80,80	0
56	MG	1H	3127	1/1	0.85	0.37	52,52,52,52	0
56	MG	13	1657	1/1	0.85	0.39	69,69,69,69	0
56	MG	1H	3354	1/1	0.85	0.28	89,89,89,89	0
56	MG	14	3179	1/1	0.85	0.34	64,64,64,64	0
56	MG	14	3290	1/1	0.85	0.13	82,82,82,82	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	14	3291	1/1	0.85	0.42	55,55,55,55	0
56	MG	14	3180	1/1	0.85	0.36	71,71,71,71	0
56	MG	1G	1634	1/1	0.85	0.29	76,76,76,76	0
56	MG	14	3294	1/1	0.85	0.26	74,74,74,74	0
56	MG	1H	3313	1/1	0.85	0.44	65,65,65,65	0
56	MG	1H	3358	1/1	0.85	0.24	80,80,80,80	0
56	MG	1G	1640	1/1	0.85	0.29	80,80,80,80	0
56	MG	1G	1646	1/1	0.85	0.46	79,79,79,79	0
56	MG	1H	3276	1/1	0.85	0.22	55,55,55,55	0
56	MG	14	3302	1/1	0.85	0.32	72,72,72,72	0
56	MG	13	1621	1/1	0.85	0.24	74,74,74,74	0
56	MG	14	3304	1/1	0.85	0.26	68,68,68,68	0
56	MG	1H	3106	1/1	0.85	0.23	58,58,58,58	0
56	MG	1H	3028	1/1	0.85	0.26	67,67,67,67	0
56	MG	1G	1653	1/1	0.85	0.24	90,90,90,90	0
56	MG	14	3115	1/1	0.85	0.34	88,88,88,88	0
56	MG	39	301	1/1	0.85	0.09	71,71,71,71	0
56	MG	1H	3240	1/1	0.85	0.33	73,73,73,73	0
56	MG	1G	1659	1/1	0.85	0.38	93,93,93,93	0
56	MG	1H	3199	1/1	0.85	0.29	57,57,57,57	0
56	MG	14	3131	1/1	0.85	0.35	70,70,70,70	0
56	MG	1H	3122	1/1	0.86	0.28	49,49,49,49	0
56	MG	13	1746	1/1	0.86	0.25	72,72,72,72	0
56	MG	1H	3151	1/1	0.86	0.19	66,66,66,66	0
56	MG	14	3117	1/1	0.86	0.43	76,76,76,76	0
56	MG	1H	3323	1/1	0.86	0.31	82,82,82,82	0
56	MG	1H	3227	1/1	0.86	0.26	74,74,74,74	0
56	MG	1H	3228	1/1	0.86	0.36	74,74,74,74	0
56	MG	14	3207	1/1	0.86	0.11	81,81,81,81	0
56	MG	14	3209	1/1	0.86	0.15	74,74,74,74	0
56	MG	1G	1629	1/1	0.86	0.44	79,79,79,79	0
56	MG	1G	1633	1/1	0.86	0.40	76,76,76,76	0
56	MG	1H	3297	1/1	0.86	0.44	71,71,71,71	0
56	MG	1H	3198	1/1	0.86	0.34	82,82,82,82	0
56	MG	1H	3270	1/1	0.86	0.17	94,94,94,94	0
56	MG	1H	3152	1/1	0.86	0.22	75,75,75,75	0
56	MG	1H	3331	1/1	0.86	0.28	76,76,76,76	0
56	MG	1H	3128	1/1	0.86	0.37	57,57,57,57	0
56	MG	1H	3275	1/1	0.86	0.42	75,75,75,75	0
56	MG	14	3231	1/1	0.86	0.21	74,74,74,74	0
56	MG	1H	3098	1/1	0.86	0.30	87,87,87,87	0
56	MG	1G	1651	1/1	0.86	0.14	84,84,84,84	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	13	1678	1/1	0.86	0.28	74,74,74,74	0
56	MG	14	3069	1/1	0.86	0.30	78,78,78,78	0
56	MG	14	3158	1/1	0.86	0.28	67,67,67,67	0
56	MG	1G	1608	1/1	0.86	0.27	88,88,88,88	0
56	MG	14	3087	1/1	0.86	0.34	62,62,62,62	0
56	MG	1H	3338	1/1	0.86	0.22	60,60,60,60	0
56	MG	1H	3339	1/1	0.86	0.24	88,88,88,88	0
56	MG	14	3166	1/1	0.86	0.32	70,70,70,70	0
56	MG	13	1693	1/1	0.86	0.14	65,65,65,65	0
56	MG	14	3098	1/1	0.86	0.26	54,54,54,54	0
56	MG	14	3100	1/1	0.86	0.23	63,63,63,63	0
56	MG	1H	3219	1/1	0.86	0.14	53,53,53,53	0
56	MG	1H	3036	1/1	0.87	0.26	57,57,57,57	0
56	MG	14	3009	1/1	0.87	0.25	51,51,51,51	0
56	MG	13	1686	1/1	0.87	0.28	69,69,69,69	0
56	MG	1G	1620	1/1	0.87	0.30	78,78,78,78	0
56	MG	1H	3120	1/1	0.87	0.24	60,60,60,60	0
56	MG	13	1743	1/1	0.87	0.14	102,102,102,102	0
56	MG	14	3026	1/1	0.87	0.27	65,65,65,65	0
56	MG	1H	3305	1/1	0.87	0.25	75,75,75,75	0
56	MG	13	1610	1/1	0.87	0.38	72,72,72,72	0
56	MG	14	3031	1/1	0.87	0.32	60,60,60,60	0
56	MG	13	1643	1/1	0.87	0.25	80,80,80,80	0
56	MG	14	3269	1/1	0.87	0.23	59,59,59,59	0
56	MG	14	3272	1/1	0.87	0.36	82,82,82,82	0
56	MG	13	1648	1/1	0.87	0.32	69,69,69,69	0
56	MG	14	3043	1/1	0.87	0.23	67,67,67,67	0
56	MG	1H	3183	1/1	0.87	0.15	66,66,66,66	0
56	MG	14	3280	1/1	0.87	0.41	87,87,87,87	0
56	MG	14	3281	1/1	0.87	0.19	73,73,73,73	0
56	MG	1H	3074	1/1	0.87	0.18	70,70,70,70	0
56	MG	13	1681	1/1	0.87	0.36	81,81,81,81	0
56	MG	14	3080	1/1	0.87	0.14	69,69,69,69	0
56	MG	1G	1641	1/1	0.87	0.18	73,73,73,73	0
56	MG	1G	1642	1/1	0.87	0.37	81,81,81,81	0
56	MG	14	3191	1/1	0.87	0.15	57,57,57,57	0
56	MG	1G	1643	1/1	0.87	0.35	88,88,88,88	0
56	MG	1H	3196	1/1	0.87	0.31	68,68,68,68	0
56	MG	1H	3138	1/1	0.87	0.46	66,66,66,66	0
56	MG	13	1697	1/1	0.87	0.28	82,82,82,82	0
56	MG	13	1698	1/1	0.87	0.17	74,74,74,74	0
56	MG	1H	3089	1/1	0.87	0.29	45,45,45,45	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	16	208	1/1	0.87	0.34	66,66,66,66	0
56	MG	1H	3093	1/1	0.87	0.15	47,47,47,47	0
56	MG	14	3106	1/1	0.87	0.21	50,50,50,50	0
56	MG	1H	3097	1/1	0.87	0.16	67,67,67,67	0
56	MG	1H	3016	1/1	0.87	0.23	45,45,45,45	0
56	MG	1G	1602	1/1	0.87	0.24	64,64,64,64	0
56	MG	1H	3099	1/1	0.87	0.27	53,53,53,53	0
56	MG	14	3124	1/1	0.87	0.26	63,63,63,63	0
56	MG	1H	3222	1/1	0.87	0.28	80,80,80,80	0
56	MG	1J	202	1/1	0.87	0.40	73,73,73,73	0
56	MG	14	3130	1/1	0.87	0.25	71,71,71,71	0
56	MG	1H	3025	1/1	0.87	0.36	53,53,53,53	0
56	MG	1G	1612	1/1	0.87	0.17	63,63,63,63	0
56	MG	1H	3224	1/1	0.87	0.19	61,61,61,61	0
56	MG	13	1672	1/1	0.87	0.22	91,91,91,91	0
56	MG	13	1717	1/1	0.87	0.18	74,74,74,74	0
56	MG	1H	3110	1/1	0.87	0.13	57,57,57,57	0
56	MG	1H	3008	1/1	0.88	0.20	42,42,42,42	0
56	MG	13	1668	1/1	0.88	0.23	76,76,76,76	0
56	MG	1H	3078	1/1	0.88	0.22	63,63,63,63	0
56	MG	1H	3177	1/1	0.88	0.32	55,55,55,55	0
56	MG	1H	3080	1/1	0.88	0.24	53,53,53,53	0
56	MG	14	3248	1/1	0.88	0.34	76,76,76,76	0
56	MG	14	3014	1/1	0.88	0.28	58,58,58,58	0
56	MG	1H	3347	1/1	0.88	0.35	85,85,85,85	0
56	MG	13	1682	1/1	0.88	0.24	86,86,86,86	0
56	MG	1G	1632	1/1	0.88	0.30	70,70,70,70	0
56	MG	13	1669	1/1	0.88	0.14	76,76,76,76	0
56	MG	1H	3249	1/1	0.88	0.28	85,85,85,85	0
56	MG	1H	3137	1/1	0.88	0.30	49,49,49,49	0
56	MG	1H	3092	1/1	0.88	0.18	50,50,50,50	0
56	MG	1H	3194	1/1	0.88	0.24	62,62,62,62	0
56	MG	14	3035	1/1	0.88	0.10	54,54,54,54	0
56	MG	1H	3461	1/1	0.88	0.10	108,108,108,108	0
56	MG	13	1622	1/1	0.88	0.28	79,79,79,79	0
56	MG	1H	3035	1/1	0.88	0.32	61,61,61,61	0
56	MG	14	3275	1/1	0.88	0.17	60,60,60,60	0
56	MG	14	3055	1/1	0.88	0.12	64,64,64,64	0
56	MG	13	1632	1/1	0.88	0.30	63,63,63,63	0
56	MG	14	3279	1/1	0.88	0.12	60,60,60,60	0
56	MG	13	1747	1/1	0.88	0.14	64,64,64,64	0
56	MG	14	3078	1/1	0.88	0.32	50,50,50,50	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	13	1709	1/1	0.88	0.36	89,89,89,89	0
56	MG	14	3177	1/1	0.88	0.41	72,72,72,72	0
56	MG	13	1644	1/1	0.88	0.41	76,76,76,76	0
56	MG	1H	3213	1/1	0.88	0.24	77,77,77,77	0
56	MG	1H	3050	1/1	0.88	0.24	36,36,36,36	0
56	MG	14	3182	1/1	0.88	0.22	72,72,72,72	0
56	MG	1G	1601	1/1	0.88	0.25	65,65,65,65	0
56	MG	14	3188	1/1	0.88	0.13	56,56,56,56	0
56	MG	14	3094	1/1	0.88	0.24	69,69,69,69	0
56	MG	14	3096	1/1	0.88	0.37	78,78,78,78	0
56	MG	14	3195	1/1	0.88	0.36	65,65,65,65	0
56	MG	1H	3157	1/1	0.88	0.30	72,72,72,72	0
56	MG	1G	1657	1/1	0.88	0.09	126,126,126,126	0
56	MG	1H	3279	1/1	0.88	0.17	73,73,73,73	0
56	MG	13	1645	1/1	0.88	0.22	79,79,79,79	0
56	MG	1G	1663	1/1	0.88	0.07	75,75,75,75	0
56	MG	13	1677	1/1	0.88	0.13	71,71,71,71	0
56	MG	1H	3115	1/1	0.88	0.20	51,51,51,51	0
56	MG	14	3108	1/1	0.88	0.14	76,76,76,76	0
56	MG	14	3109	1/1	0.88	0.13	78,78,78,78	0
56	MG	14	3345	1/1	0.88	0.12	81,81,81,81	0
56	MG	14	3110	1/1	0.88	0.42	64,64,64,64	0
56	MG	14	3112	1/1	0.88	0.16	65,65,65,65	0
56	MG	1H	3284	1/1	0.88	0.09	62,62,62,62	0
56	MG	1H	3116	1/1	0.88	0.17	62,62,62,62	0
56	MG	1H	3059	1/1	0.88	0.12	68,68,68,68	0
56	MG	14	3120	1/1	0.88	0.28	75,75,75,75	0
56	MG	1G	1675	1/1	0.88	0.08	110,110,110,110	0
56	MG	14	3232	1/1	0.88	0.18	62,62,62,62	0
56	MG	13	1634	1/1	0.88	0.34	74,74,74,74	0
56	MG	1H	3236	1/1	0.89	0.35	68,68,68,68	0
56	MG	1H	3239	1/1	0.89	0.20	72,72,72,72	0
56	MG	1H	3298	1/1	0.89	0.23	79,79,79,79	0
56	MG	1H	3058	1/1	0.89	0.21	61,61,61,61	0
56	MG	14	3244	1/1	0.89	0.20	65,65,65,65	0
56	MG	14	3033	1/1	0.89	0.27	64,64,64,64	0
56	MG	14	3249	1/1	0.89	0.32	77,77,77,77	0
56	MG	14	3142	1/1	0.89	0.36	59,59,59,59	0
56	MG	14	3144	1/1	0.89	0.39	79,79,79,79	0
56	MG	1H	3241	1/1	0.89	0.23	65,65,65,65	0
56	MG	14	3255	1/1	0.89	0.12	65,65,65,65	0
56	MG	14	3146	1/1	0.89	0.40	69,69,69,69	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3021	1/1	0.89	0.23	45,45,45,45	0
56	MG	1H	3073	1/1	0.89	0.27	63,63,63,63	0
56	MG	1H	3195	1/1	0.89	0.23	65,65,65,65	0
56	MG	1H	3431	1/1	0.89	0.15	99,99,99,99	0
56	MG	1H	3250	1/1	0.89	0.17	68,68,68,68	0
56	MG	13	1614	1/1	0.89	0.17	79,79,79,79	0
56	MG	1H	3255	1/1	0.89	0.27	76,76,76,76	0
56	MG	1H	3197	1/1	0.89	0.32	66,66,66,66	0
56	MG	1H	3154	1/1	0.89	0.38	74,74,74,74	0
56	MG	13	1606	1/1	0.89	0.19	63,63,63,63	0
56	MG	14	3082	1/1	0.89	0.29	67,67,67,67	0
56	MG	14	3169	1/1	0.89	0.31	77,77,77,77	0
56	MG	13	1601	1/1	0.89	0.25	46,46,46,46	0
56	MG	14	3171	1/1	0.89	0.28	80,80,80,80	0
56	MG	14	3173	1/1	0.89	0.27	62,62,62,62	0
56	MG	14	3088	1/1	0.89	0.33	71,71,71,71	0
56	MG	1H	3206	1/1	0.89	0.32	63,63,63,63	0
56	MG	13	1699	1/1	0.89	0.15	75,75,75,75	0
56	MG	14	3092	1/1	0.89	0.31	41,41,41,41	0
56	MG	13	1700	1/1	0.89	0.31	71,71,71,71	0
56	MG	14	3288	1/1	0.89	0.40	74,74,74,74	0
56	MG	1H	3272	1/1	0.89	0.35	69,69,69,69	0
56	MG	1G	1662	1/1	0.89	0.16	73,73,73,73	0
56	MG	14	3190	1/1	0.89	0.27	85,85,85,85	0
56	MG	1H	3162	1/1	0.89	0.33	68,68,68,68	0
56	MG	13	1702	1/1	0.89	0.18	62,62,62,62	0
56	MG	1G	1609	1/1	0.89	0.49	81,81,81,81	0
56	MG	1H	3125	1/1	0.89	0.19	49,49,49,49	0
56	MG	1H	3038	1/1	0.89	0.23	55,55,55,55	0
56	MG	13	1653	1/1	0.89	0.12	75,75,75,75	0
56	MG	13	1636	1/1	0.89	0.37	66,66,66,66	0
56	MG	2L	101	1/1	0.89	0.20	76,76,76,76	0
56	MG	1H	3046	1/1	0.89	0.32	67,67,67,67	0
56	MG	1H	3005	1/1	0.89	0.24	53,53,53,53	0
56	MG	1H	3051	1/1	0.89	0.18	65,65,65,65	0
56	MG	13	1718	1/1	0.89	0.08	90,90,90,90	0
56	MG	1H	3179	1/1	0.89	0.23	55,55,55,55	0
56	MG	14	3119	1/1	0.89	0.37	69,69,69,69	0
56	MG	1H	3341	1/1	0.89	0.25	67,67,67,67	0
56	MG	1H	3147	1/1	0.89	0.35	68,68,68,68	0
56	MG	13	1602	1/1	0.89	0.14	66,66,66,66	0
56	MG	14	3016	1/1	0.89	0.35	54,54,54,54	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	14	3019	1/1	0.89	0.20	74,74,74,74	0
56	MG	1H	3344	1/1	0.89	0.37	87,87,87,87	0
56	MG	14	3024	1/1	0.89	0.35	74,74,74,74	0
56	MG	1G	1631	1/1	0.89	0.28	86,86,86,86	0
56	MG	1G	1658	1/1	0.90	0.40	79,79,79,79	0
56	MG	14	3199	1/1	0.90	0.15	69,69,69,69	0
56	MG	14	3201	1/1	0.90	0.27	72,72,72,72	0
56	MG	14	3274	1/1	0.90	0.13	82,82,82,82	0
56	MG	13	1704	1/1	0.90	0.17	80,80,80,80	0
56	MG	1H	3082	1/1	0.90	0.29	70,70,70,70	0
56	MG	1H	3211	1/1	0.90	0.17	64,64,64,64	0
56	MG	1H	3104	1/1	0.90	0.29	41,41,41,41	0
56	MG	14	3213	1/1	0.90	0.27	85,85,85,85	0
56	MG	P8	101	1/1	0.90	0.19	68,68,68,68	0
56	MG	1H	3215	1/1	0.90	0.15	85,85,85,85	0
56	MG	1H	3142	1/1	0.90	0.21	39,39,39,39	0
56	MG	14	3107	1/1	0.90	0.13	40,40,40,40	0
56	MG	14	3155	1/1	0.90	0.39	75,75,75,75	0
56	MG	1H	3146	1/1	0.90	0.31	75,75,75,75	0
56	MG	1H	3350	1/1	0.90	0.19	67,67,67,67	0
56	MG	13	1667	1/1	0.90	0.15	92,92,92,92	0
56	MG	13	1706	1/1	0.90	0.20	79,79,79,79	0
56	MG	14	3052	1/1	0.90	0.29	62,62,62,62	0
56	MG	14	3116	1/1	0.90	0.27	56,56,56,56	0
56	MG	13	1689	1/1	0.90	0.42	120,120,120,120	0
56	MG	14	3063	1/1	0.90	0.18	66,66,66,66	0
56	MG	14	3296	1/1	0.90	0.23	74,74,74,74	0
56	MG	1H	3359	1/1	0.90	0.43	84,84,84,84	0
56	MG	1H	3042	1/1	0.90	0.29	74,74,74,74	0
56	MG	14	3121	1/1	0.90	0.18	58,58,58,58	0
56	MG	1H	3416	1/1	0.90	0.09	77,77,77,77	0
56	MG	14	3245	1/1	0.90	0.36	70,70,70,70	0
56	MG	1H	3132	1/1	0.90	0.23	45,45,45,45	0
56	MG	1H	3226	1/1	0.90	0.27	69,69,69,69	0
56	MG	14	3250	1/1	0.90	0.27	74,74,74,74	0
56	MG	14	3129	1/1	0.90	0.15	63,63,63,63	0
56	MG	14	3012	1/1	0.90	0.21	77,77,77,77	0
56	MG	14	3083	1/1	0.90	0.19	60,60,60,60	0
56	MG	14	3184	1/1	0.90	0.24	53,53,53,53	0
56	MG	14	3013	1/1	0.90	0.23	54,54,54,54	0
56	MG	1H	3337	1/1	0.90	0.19	94,94,94,94	0
56	MG	1J	205	1/1	0.90	0.11	82,82,82,82	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	14	3134	1/1	0.90	0.29	64,64,64,64	0
56	MG	1H	3133	1/1	0.90	0.27	60,60,60,60	0
56	MG	1H	3077	1/1	0.90	0.24	73,73,73,73	0
56	MG	1G	1656	1/1	0.90	0.28	72,72,72,72	0
56	MG	13	1620	1/1	0.90	0.22	51,51,51,51	0
56	MG	14	3251	1/1	0.91	0.15	48,48,48,48	0
56	MG	1H	3083	1/1	0.91	0.24	69,69,69,69	0
56	MG	1H	3048	1/1	0.91	0.16	48,48,48,48	0
56	MG	1H	3218	1/1	0.91	0.14	61,61,61,61	0
56	MG	1H	3023	1/1	0.91	0.18	51,51,51,51	0
56	MG	1H	3366	1/1	0.91	0.17	74,74,74,74	0
56	MG	14	3176	1/1	0.91	0.19	81,81,81,81	0
56	MG	1H	3319	1/1	0.91	0.39	92,92,92,92	0
56	MG	1H	3024	1/1	0.91	0.27	46,46,46,46	0
56	MG	1H	3180	1/1	0.91	0.16	59,59,59,59	0
56	MG	1H	3480	1/1	0.91	0.22	56,56,56,56	0
56	MG	13	1676	1/1	0.91	0.17	62,62,62,62	0
56	MG	13	1658	1/1	0.91	0.34	70,70,70,70	0
56	MG	14	3270	1/1	0.91	0.22	56,56,56,56	0
56	MG	14	3271	1/1	0.91	0.32	87,87,87,87	0
56	MG	16	203	1/1	0.91	0.20	68,68,68,68	0
56	MG	1H	3030	1/1	0.91	0.25	81,81,81,81	0
56	MG	13	1659	1/1	0.91	0.25	66,66,66,66	0
56	MG	14	3030	1/1	0.91	0.15	55,55,55,55	0
56	MG	1H	3190	1/1	0.91	0.10	67,67,67,67	0
56	MG	1H	3192	1/1	0.91	0.20	72,72,72,72	0
56	MG	11	301	1/1	0.91	0.09	48,48,48,48	0
56	MG	21	301	1/1	0.91	0.18	53,53,53,53	0
56	MG	14	3036	1/1	0.91	0.20	42,42,42,42	0
56	MG	1H	3193	1/1	0.91	0.17	69,69,69,69	0
56	MG	14	3200	1/1	0.91	0.18	66,66,66,66	0
56	MG	2K	103	1/1	0.91	0.39	81,81,81,81	0
56	MG	13	1627	1/1	0.91	0.15	62,62,62,62	0
56	MG	1H	3160	1/1	0.91	0.27	56,56,56,56	0
56	MG	14	3208	1/1	0.91	0.08	68,68,68,68	0
56	MG	1H	3237	1/1	0.91	0.32	57,57,57,57	0
56	MG	1G	1603	1/1	0.91	0.20	76,76,76,76	0
56	MG	14	3211	1/1	0.91	0.11	67,67,67,67	0
56	MG	1G	1604	1/1	0.91	0.12	77,77,77,77	0
56	MG	14	3214	1/1	0.91	0.12	65,65,65,65	0
56	MG	1G	1660	1/1	0.91	0.17	74,74,74,74	0
56	MG	14	3076	1/1	0.91	0.14	54,54,54,54	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3161	1/1	0.91	0.18	55,55,55,55	0
56	MG	13	1711	1/1	0.91	0.21	79,79,79,79	0
56	MG	13	1661	1/1	0.91	0.30	54,54,54,54	0
56	MG	1H	3243	1/1	0.91	0.19	69,69,69,69	0
56	MG	1G	1611	1/1	0.91	0.17	72,72,72,72	0
56	MG	14	3085	1/1	0.91	0.29	50,50,50,50	0
56	MG	14	3229	1/1	0.91	0.26	65,65,65,65	0
56	MG	1H	3245	1/1	0.91	0.17	58,58,58,58	0
56	MG	1H	3015	1/1	0.91	0.21	59,59,59,59	0
56	MG	14	3151	1/1	0.91	0.22	72,72,72,72	0
56	MG	1H	3202	1/1	0.91	0.25	66,66,66,66	0
56	MG	13	1642	1/1	0.91	0.41	72,72,72,72	0
56	MG	14	3156	1/1	0.91	0.20	60,60,60,60	0
56	MG	14	3157	1/1	0.91	0.21	88,88,88,88	0
56	MG	1H	3113	1/1	0.91	0.13	41,41,41,41	0
56	MG	1H	3018	1/1	0.91	0.19	52,52,52,52	0
56	MG	13	1633	1/1	0.91	0.24	77,77,77,77	0
56	MG	85	201	1/1	0.91	0.45	69,69,69,69	0
56	MG	1H	3173	1/1	0.91	0.35	52,52,52,52	0
56	MG	14	3006	1/1	0.91	0.17	48,48,48,48	0
56	MG	1H	3214	1/1	0.91	0.32	68,68,68,68	0
56	MG	13	1683	1/1	0.92	0.12	69,69,69,69	0
56	MG	1H	3045	1/1	0.92	0.51	66,66,66,66	0
56	MG	1H	3118	1/1	0.92	0.38	52,52,52,52	0
56	MG	13	1628	1/1	0.92	0.14	48,48,48,48	0
56	MG	13	1638	1/1	0.92	0.17	53,53,53,53	0
56	MG	1H	3084	1/1	0.92	0.40	48,48,48,48	0
56	MG	1H	3242	1/1	0.92	0.15	58,58,58,58	0
56	MG	14	3257	1/1	0.92	0.20	79,79,79,79	0
56	MG	1G	1623	1/1	0.92	0.37	73,73,73,73	0
56	MG	1H	3123	1/1	0.92	0.14	52,52,52,52	0
56	MG	14	3008	1/1	0.92	0.22	54,54,54,54	0
56	MG	14	3175	1/1	0.92	0.22	56,56,56,56	0
56	MG	1H	3124	1/1	0.92	0.18	52,52,52,52	0
56	MG	13	1655	1/1	0.92	0.23	73,73,73,73	0
56	MG	1H	3360	1/1	0.92	0.36	73,73,73,73	0
56	MG	1H	3361	1/1	0.92	0.16	53,53,53,53	0
56	MG	1H	3247	1/1	0.92	0.40	64,64,64,64	0
56	MG	1H	3204	1/1	0.92	0.39	59,59,59,59	0
56	MG	13	1625	1/1	0.92	0.28	45,45,45,45	0
56	MG	14	3018	1/1	0.92	0.13	68,68,68,68	0
56	MG	14	3111	1/1	0.92	0.22	55,55,55,55	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	14	3189	1/1	0.92	0.17	60,60,60,60	0
56	MG	2K	105	1/1	0.92	0.35	78,78,78,78	0
56	MG	1H	3208	1/1	0.92	0.55	78,78,78,78	0
56	MG	14	3023	1/1	0.92	0.29	40,40,40,40	0
56	MG	1H	3129	1/1	0.92	0.09	68,68,68,68	0
56	MG	1H	3054	1/1	0.92	0.17	59,59,59,59	0
56	MG	13	1742	1/1	0.92	0.06	115,115,115,115	0
56	MG	14	3027	1/1	0.92	0.20	70,70,70,70	0
56	MG	1H	3057	1/1	0.92	0.47	57,57,57,57	0
56	MG	1G	1644	1/1	0.92	0.25	70,70,70,70	0
56	MG	14	3286	1/1	0.92	0.35	78,78,78,78	0
56	MG	1H	3034	1/1	0.92	0.22	51,51,51,51	0
56	MG	1H	3216	1/1	0.92	0.23	67,67,67,67	0
56	MG	1H	3266	1/1	0.92	0.14	64,64,64,64	0
56	MG	1H	3174	1/1	0.92	0.30	63,63,63,63	0
56	MG	1H	3100	1/1	0.92	0.18	43,43,43,43	0
56	MG	1H	3176	1/1	0.92	0.24	60,60,60,60	0
56	MG	1H	3220	1/1	0.92	0.30	50,50,50,50	0
56	MG	1H	3007	1/1	0.92	0.22	46,46,46,46	0
56	MG	14	3047	1/1	0.92	0.22	60,60,60,60	0
56	MG	1G	1655	1/1	0.92	0.40	79,79,79,79	0
56	MG	1H	3064	1/1	0.92	0.44	56,56,56,56	0
56	MG	1H	3140	1/1	0.92	0.43	63,63,63,63	0
56	MG	14	3058	1/1	0.92	0.22	61,61,61,61	0
56	MG	14	3141	1/1	0.92	0.15	76,76,76,76	0
56	MG	1H	3334	1/1	0.92	0.17	60,60,60,60	0
56	MG	14	3143	1/1	0.92	0.09	67,67,67,67	0
56	MG	14	3065	1/1	0.92	0.19	46,46,46,46	0
56	MG	14	3067	1/1	0.92	0.14	48,48,48,48	0
56	MG	14	3306	1/1	0.92	0.24	69,69,69,69	0
56	MG	1H	3105	1/1	0.92	0.24	56,56,56,56	0
56	MG	14	3391	1/1	0.92	0.32	58,58,58,58	0
56	MG	1H	3067	1/1	0.92	0.17	49,49,49,49	0
56	MG	13	1701	1/1	0.92	0.21	80,80,80,80	0
56	MG	14	3234	1/1	0.92	0.25	68,68,68,68	0
56	MG	1H	3012	1/1	0.92	0.30	45,45,45,45	0
56	MG	13	1662	1/1	0.92	0.20	73,73,73,73	0
56	MG	29	303	1/1	0.92	0.36	71,71,71,71	0
56	MG	1H	3288	1/1	0.92	0.08	54,54,54,54	0
56	MG	14	3154	1/1	0.92	0.18	82,82,82,82	0
56	MG	13	1613	1/1	0.92	0.23	71,71,71,71	0
56	MG	1G	1666	1/1	0.92	0.26	74,74,74,74	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	14	3084	1/1	0.92	0.20	43,43,43,43	0
56	MG	13	1695	1/1	0.92	0.07	79,79,79,79	0
56	MG	1H	3386	1/1	0.93	0.08	53,53,53,53	0
56	MG	1H	3094	1/1	0.93	0.20	41,41,41,41	0
56	MG	14	3246	1/1	0.93	0.21	66,66,66,66	0
56	MG	14	3247	1/1	0.93	0.17	67,67,67,67	0
56	MG	1H	3062	1/1	0.93	0.29	65,65,65,65	0
56	MG	1G	1630	1/1	0.93	0.10	75,75,75,75	0
56	MG	1H	3063	1/1	0.93	0.31	65,65,65,65	0
56	MG	1H	3244	1/1	0.93	0.16	39,39,39,39	0
56	MG	13	1675	1/1	0.93	0.19	73,73,73,73	0
56	MG	14	3167	1/1	0.93	0.19	59,59,59,59	0
56	MG	13	1666	1/1	0.93	0.23	58,58,58,58	0
56	MG	1H	3289	1/1	0.93	0.07	62,62,62,62	0
56	MG	1H	3068	1/1	0.93	0.23	67,67,67,67	0
56	MG	1G	1638	1/1	0.93	0.21	75,75,75,75	0
56	MG	1H	3291	1/1	0.93	0.15	40,40,40,40	0
56	MG	14	3020	1/1	0.93	0.13	68,68,68,68	0
56	MG	14	3021	1/1	0.93	0.22	55,55,55,55	0
56	MG	16	207	1/1	0.93	0.20	71,71,71,71	0
56	MG	13	1618	1/1	0.93	0.10	58,58,58,58	0
56	MG	14	3266	1/1	0.93	0.14	68,68,68,68	0
56	MG	16	209	1/1	0.93	0.28	56,56,56,56	0
56	MG	1H	3027	1/1	0.93	0.25	32,32,32,32	0
56	MG	16	211	1/1	0.93	0.07	85,85,85,85	0
56	MG	1H	3047	1/1	0.93	0.27	70,70,70,70	0
56	MG	1H	3251	1/1	0.93	0.09	61,61,61,61	0
56	MG	14	3185	1/1	0.93	0.18	52,52,52,52	0
56	MG	14	3186	1/1	0.93	0.29	54,54,54,54	0
56	MG	31	301	1/1	0.93	0.06	56,56,56,56	0
56	MG	1H	3107	1/1	0.93	0.27	65,65,65,65	0
56	MG	78	201	1/1	0.93	0.33	59,59,59,59	0
56	MG	5E	201	1/1	0.93	0.08	70,70,70,70	0
56	MG	1H	3049	1/1	0.93	0.19	60,60,60,60	0
56	MG	1H	3010	1/1	0.93	0.20	54,54,54,54	0
56	MG	1H	3301	1/1	0.93	0.14	79,79,79,79	0
56	MG	14	3123	1/1	0.93	0.28	60,60,60,60	0
56	MG	14	3037	1/1	0.93	0.41	61,61,61,61	0
56	MG	14	3125	1/1	0.93	0.30	53,53,53,53	0
56	MG	13	1612	1/1	0.93	0.09	63,63,63,63	0
56	MG	14	3128	1/1	0.93	0.32	58,58,58,58	0
56	MG	1H	3013	1/1	0.93	0.16	31,31,31,31	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	14	3205	1/1	0.93	0.43	71,71,71,71	0
56	MG	14	3044	1/1	0.93	0.15	53,53,53,53	0
56	MG	1H	3144	1/1	0.93	0.30	66,66,66,66	0
56	MG	1H	3264	1/1	0.93	0.15	58,58,58,58	0
56	MG	14	3051	1/1	0.93	0.25	78,78,78,78	0
56	MG	1H	3265	1/1	0.93	0.15	54,54,54,54	0
56	MG	14	3212	1/1	0.93	0.19	65,65,65,65	0
56	MG	1H	3014	1/1	0.93	0.23	43,43,43,43	0
56	MG	1H	3353	1/1	0.93	0.27	73,73,73,73	0
56	MG	14	3137	1/1	0.93	0.47	69,69,69,69	0
56	MG	13	1687	1/1	0.93	0.13	70,70,70,70	0
56	MG	14	3064	1/1	0.93	0.16	71,71,71,71	0
56	MG	14	3223	1/1	0.93	0.06	62,62,62,62	0
56	MG	13	1741	1/1	0.93	0.07	110,110,110,110	0
56	MG	13	1679	1/1	0.93	0.17	77,77,77,77	0
56	MG	1H	3209	1/1	0.93	0.35	77,77,77,77	0
56	MG	1H	3238	1/1	0.93	0.34	54,54,54,54	0
56	MG	14	3307	1/1	0.93	0.42	60,60,60,60	0
56	MG	14	3339	1/1	0.93	0.13	94,94,94,94	0
56	MG	14	3072	1/1	0.93	0.19	45,45,45,45	0
56	MG	14	3353	1/1	0.93	0.08	83,83,83,83	0
56	MG	14	3372	1/1	0.93	0.14	84,84,84,84	0
56	MG	14	3376	1/1	0.93	0.09	87,87,87,87	0
56	MG	14	3074	1/1	0.93	0.20	66,66,66,66	0
56	MG	1H	3321	1/1	0.93	0.32	86,86,86,86	0
56	MG	13	1604	1/1	0.93	0.12	68,68,68,68	0
56	MG	1G	1684	1/1	0.93	0.13	122,122,122,122	0
56	MG	1H	3365	1/1	0.93	0.28	64,64,64,64	0
56	MG	1G	1622	1/1	0.93	0.10	72,72,72,72	0
56	MG	14	3236	1/1	0.93	0.14	75,75,75,75	0
56	MG	14	3237	1/1	0.93	0.11	54,54,54,54	0
56	MG	14	3238	1/1	0.93	0.26	85,85,85,85	0
56	MG	1H	3060	1/1	0.93	0.14	74,74,74,74	0
56	MG	1H	3368	1/1	0.93	0.25	74,74,74,74	0
56	MG	14	3004	1/1	0.93	0.16	46,46,46,46	0
56	MG	14	3086	1/1	0.93	0.20	65,65,65,65	0
56	MG	1H	3091	1/1	0.94	0.14	55,55,55,55	0
56	MG	1H	3165	1/1	0.94	0.16	61,61,61,61	0
56	MG	13	1619	1/1	0.94	0.12	64,64,64,64	0
56	MG	14	3113	1/1	0.94	0.17	42,42,42,42	0
56	MG	14	3114	1/1	0.94	0.20	44,44,44,44	0
56	MG	1H	3070	1/1	0.94	0.12	46,46,46,46	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3292	1/1	0.94	0.21	60,60,60,60	0
56	MG	1H	3256	1/1	0.94	0.34	57,57,57,57	0
56	MG	1H	3405	1/1	0.94	0.15	61,61,61,61	0
56	MG	14	3262	1/1	0.94	0.09	66,66,66,66	0
56	MG	14	3039	1/1	0.94	0.21	38,38,38,38	0
56	MG	14	3040	1/1	0.94	0.27	43,43,43,43	0
56	MG	1H	3141	1/1	0.94	0.32	60,60,60,60	0
56	MG	1H	3200	1/1	0.94	0.12	59,59,59,59	0
56	MG	14	3193	1/1	0.94	0.19	59,59,59,59	0
56	MG	1H	3444	1/1	0.94	0.08	59,59,59,59	0
56	MG	14	3045	1/1	0.94	0.21	57,57,57,57	0
56	MG	1G	1617	1/1	0.94	0.07	80,80,80,80	0
56	MG	1H	3454	1/1	0.94	0.11	98,98,98,98	0
56	MG	14	3049	1/1	0.94	0.30	54,54,54,54	0
56	MG	14	3050	1/1	0.94	0.17	63,63,63,63	0
56	MG	13	1639	1/1	0.94	0.18	56,56,56,56	0
56	MG	14	3202	1/1	0.94	0.10	55,55,55,55	0
56	MG	1G	1667	1/1	0.94	0.17	80,80,80,80	0
56	MG	14	3204	1/1	0.94	0.15	51,51,51,51	0
56	MG	1H	3477	1/1	0.94	0.08	106,106,106,106	0
56	MG	14	3206	1/1	0.94	0.22	48,48,48,48	0
56	MG	1G	1621	1/1	0.94	0.24	81,81,81,81	0
56	MG	14	3060	1/1	0.94	0.14	48,48,48,48	0
56	MG	1H	3119	1/1	0.94	0.25	52,52,52,52	0
56	MG	1H	3145	1/1	0.94	0.21	49,49,49,49	0
56	MG	1G	1680	1/1	0.94	0.12	94,94,94,94	0
56	MG	1G	1624	1/1	0.94	0.23	63,63,63,63	0
56	MG	1G	1685	1/1	0.94	0.07	111,111,111,111	0
56	MG	1G	1687	1/1	0.94	0.18	81,81,81,81	0
56	MG	14	3215	1/1	0.94	0.16	50,50,50,50	0
56	MG	1H	3006	1/1	0.94	0.21	49,49,49,49	0
56	MG	13	1691	1/1	0.94	0.08	64,64,64,64	0
56	MG	14	3221	1/1	0.94	0.11	58,58,58,58	0
56	MG	14	3295	1/1	0.94	0.10	64,64,64,64	0
56	MG	13	1684	1/1	0.94	0.27	62,62,62,62	0
56	MG	1H	3304	1/1	0.94	0.20	69,69,69,69	0
56	MG	14	3003	1/1	0.94	0.20	54,54,54,54	0
56	MG	16	206	1/1	0.94	0.42	60,60,60,60	0
56	MG	1H	3340	1/1	0.94	0.15	74,74,74,74	0
56	MG	1H	3026	1/1	0.94	0.17	53,53,53,53	0
56	MG	3I	201	1/1	0.94	0.17	58,58,58,58	0
56	MG	1H	3102	1/1	0.94	0.13	60,60,60,60	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	14	3230	1/1	0.94	0.19	73,73,73,73	0
56	MG	1H	3079	1/1	0.94	0.21	45,45,45,45	0
56	MG	13	1650	1/1	0.94	0.17	68,68,68,68	0
56	MG	1G	1637	1/1	0.94	0.15	81,81,81,81	0
56	MG	11	302	1/1	0.94	0.16	42,42,42,42	0
56	MG	1G	1639	1/1	0.94	0.23	85,85,85,85	0
56	MG	1H	3081	1/1	0.94	0.18	61,61,61,61	0
56	MG	1H	3130	1/1	0.94	0.07	54,54,54,54	0
56	MG	13	1720	1/1	0.94	0.08	62,62,62,62	0
56	MG	13	1605	1/1	0.94	0.21	67,67,67,67	0
56	MG	1H	3281	1/1	0.94	0.09	74,74,74,74	0
56	MG	L8	101	1/1	0.94	0.09	70,70,70,70	0
56	MG	1H	3317	1/1	0.94	0.30	61,61,61,61	0
56	MG	14	3243	1/1	0.94	0.20	72,72,72,72	0
56	MG	13	1630	1/1	0.94	0.15	43,43,43,43	0
56	MG	14	3103	1/1	0.94	0.15	67,67,67,67	0
56	MG	1G	1649	1/1	0.94	0.17	72,72,72,72	0
56	MG	14	3105	1/1	0.94	0.18	47,47,47,47	0
56	MG	1H	3066	1/1	0.94	0.10	67,67,67,67	0
56	MG	13	1688	1/1	0.94	0.21	77,77,77,77	0
56	MG	L5	101	1/1	0.94	0.13	73,73,73,73	0
56	MG	1H	3287	1/1	0.94	0.17	50,50,50,50	0
56	MG	1G	1606	1/1	0.94	0.30	79,79,79,79	0
56	MG	13	1728	1/1	0.95	0.07	85,85,85,85	0
56	MG	1G	1679	1/1	0.95	0.09	90,90,90,90	0
56	MG	1H	3465	1/1	0.95	0.10	94,94,94,94	0
56	MG	1G	1681	1/1	0.95	0.08	110,110,110,110	0
56	MG	1H	3468	1/1	0.95	0.10	71,71,71,71	0
56	MG	14	3054	1/1	0.95	0.44	74,74,74,74	0
56	MG	14	3263	1/1	0.95	0.24	71,71,71,71	0
56	MG	1H	3040	1/1	0.95	0.09	49,49,49,49	0
56	MG	14	3056	1/1	0.95	0.16	51,51,51,51	0
56	MG	14	3126	1/1	0.95	0.24	66,66,66,66	0
56	MG	14	3057	1/1	0.95	0.20	68,68,68,68	0
56	MG	13	1730	1/1	0.95	0.07	86,86,86,86	0
56	MG	1H	3166	1/1	0.95	0.20	72,72,72,72	0
56	MG	1H	3143	1/1	0.95	0.08	49,49,49,49	0
56	MG	13	1692	1/1	0.95	0.11	79,79,79,79	0
56	MG	13	1680	1/1	0.95	0.30	69,69,69,69	0
56	MG	13	1624	1/1	0.95	0.25	48,48,48,48	0
56	MG	1H	3103	1/1	0.95	0.15	30,30,30,30	0
56	MG	1H	3346	1/1	0.95	0.28	73,73,73,73	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	14	3277	1/1	0.95	0.29	66,66,66,66	0
56	MG	14	3070	1/1	0.95	0.13	39,39,39,39	0
56	MG	1H	3315	1/1	0.95	0.08	66,66,66,66	0
56	MG	14	3073	1/1	0.95	0.07	80,80,80,80	0
56	MG	13	1626	1/1	0.95	0.30	68,68,68,68	0
56	MG	14	3075	1/1	0.95	0.13	53,53,53,53	0
56	MG	1H	3253	1/1	0.95	0.09	78,78,78,78	0
56	MG	14	3077	1/1	0.95	0.23	68,68,68,68	0
56	MG	1H	3318	1/1	0.95	0.22	56,56,56,56	0
56	MG	14	3216	1/1	0.95	0.39	83,83,83,83	0
56	MG	14	3079	1/1	0.95	0.17	57,57,57,57	0
56	MG	14	3218	1/1	0.95	0.28	77,77,77,77	0
56	MG	14	3219	1/1	0.95	0.31	56,56,56,56	0
56	MG	14	3011	1/1	0.95	0.17	43,43,43,43	0
56	MG	1H	3351	1/1	0.95	0.18	70,70,70,70	0
56	MG	1H	3029	1/1	0.95	0.38	73,73,73,73	0
56	MG	1H	3320	1/1	0.95	0.08	91,91,91,91	0
56	MG	1H	3355	1/1	0.95	0.19	60,60,60,60	0
56	MG	13	1629	1/1	0.95	0.19	46,46,46,46	0
56	MG	14	3017	1/1	0.95	0.25	49,49,49,49	0
56	MG	1H	3357	1/1	0.95	0.29	62,62,62,62	0
56	MG	1H	3002	1/1	0.95	0.13	40,40,40,40	0
56	MG	1H	3205	1/1	0.95	0.18	62,62,62,62	0
56	MG	1H	3087	1/1	0.95	0.22	43,43,43,43	0
56	MG	1H	3232	1/1	0.95	0.27	43,43,43,43	0
56	MG	1H	3362	1/1	0.95	0.06	69,69,69,69	0
56	MG	1H	3088	1/1	0.95	0.38	73,73,73,73	0
56	MG	1H	3364	1/1	0.95	0.09	68,68,68,68	0
56	MG	13	1640	1/1	0.95	0.14	75,75,75,75	0
56	MG	14	3164	1/1	0.95	0.49	64,64,64,64	0
56	MG	14	3099	1/1	0.95	0.15	46,46,46,46	0
56	MG	1H	3019	1/1	0.95	0.16	38,38,38,38	0
56	MG	1H	3367	1/1	0.95	0.12	66,66,66,66	0
56	MG	14	3349	1/1	0.95	0.09	63,63,63,63	0
56	MG	1H	3114	1/1	0.95	0.16	48,48,48,48	0
56	MG	1H	3052	1/1	0.95	0.16	46,46,46,46	0
56	MG	1H	3393	1/1	0.95	0.09	65,65,65,65	0
56	MG	14	3377	1/1	0.95	0.09	96,96,96,96	0
56	MG	14	3379	1/1	0.95	0.08	72,72,72,72	0
56	MG	14	3380	1/1	0.95	0.11	93,93,93,93	0
56	MG	1H	3396	1/1	0.95	0.07	57,57,57,57	0
56	MG	1H	3212	1/1	0.95	0.18	63,63,63,63	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3409	1/1	0.95	0.10	53,53,53,53	0
56	MG	13	1641	1/1	0.95	0.19	59,59,59,59	0
56	MG	1H	3427	1/1	0.95	0.10	76,76,76,76	0
56	MG	1H	3271	1/1	0.95	0.31	65,65,65,65	0
56	MG	29	301	1/1	0.95	0.13	44,44,44,44	0
56	MG	1H	3303	1/1	0.95	0.24	65,65,65,65	0
56	MG	1H	3451	1/1	0.95	0.09	46,46,46,46	0
56	MG	1H	3453	1/1	0.95	0.09	76,76,76,76	0
56	MG	1H	3022	1/1	0.95	0.20	53,53,53,53	0
56	MG	1H	3456	1/1	0.95	0.08	92,92,92,92	0
56	MG	14	3046	1/1	0.95	0.28	53,53,53,53	0
57	PAR	1G	1686	42/42	0.95	0.10	69,76,87,91	0
56	MG	1G	1672	1/1	0.95	0.07	78,78,78,78	0
56	MG	14	3256	1/1	0.95	0.08	66,66,66,66	0
56	MG	1H	3003	1/1	0.96	0.15	35,35,35,35	0
56	MG	I8	101	1/1	0.96	0.27	53,53,53,53	0
56	MG	14	3005	1/1	0.96	0.24	53,53,53,53	0
56	MG	1H	3424	1/1	0.96	0.07	58,58,58,58	0
56	MG	1H	3235	1/1	0.96	0.11	38,38,38,38	0
56	MG	1H	3191	1/1	0.96	0.08	75,75,75,75	0
56	MG	1G	1645	1/1	0.96	0.18	73,73,73,73	0
56	MG	1H	3433	1/1	0.96	0.07	83,83,83,83	0
56	MG	1H	3435	1/1	0.96	0.07	90,90,90,90	0
56	MG	14	3172	1/1	0.96	0.36	69,69,69,69	0
56	MG	1H	3437	1/1	0.96	0.07	59,59,59,59	0
56	MG	14	3174	1/1	0.96	0.26	66,66,66,66	0
56	MG	14	3066	1/1	0.96	0.13	49,49,49,49	0
56	MG	1H	3438	1/1	0.96	0.10	54,54,54,54	0
56	MG	1H	3004	1/1	0.96	0.37	47,47,47,47	0
56	MG	1H	3446	1/1	0.96	0.08	78,78,78,78	0
56	MG	13	1671	1/1	0.96	0.04	98,98,98,98	0
56	MG	1H	3169	1/1	0.96	0.24	62,62,62,62	0
56	MG	14	3181	1/1	0.96	0.10	55,55,55,55	0
56	MG	1H	3095	1/1	0.96	0.35	49,49,49,49	0
56	MG	1H	3352	1/1	0.96	0.19	61,61,61,61	0
56	MG	1H	3457	1/1	0.96	0.06	92,92,92,92	0
56	MG	1H	3324	1/1	0.96	0.11	87,87,87,87	0
56	MG	1H	3267	1/1	0.96	0.18	60,60,60,60	0
56	MG	1H	3096	1/1	0.96	0.23	54,54,54,54	0
56	MG	1H	3473	1/1	0.96	0.06	73,73,73,73	0
56	MG	13	1665	1/1	0.96	0.10	67,67,67,67	0
56	MG	1H	3478	1/1	0.96	0.11	102,102,102,102	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	13	1664	1/1	0.96	0.07	59,59,59,59	0
56	MG	1H	3481	1/1	0.96	0.06	77,77,77,77	0
56	MG	14	3194	1/1	0.96	0.05	52,52,52,52	0
56	MG	14	3315	1/1	0.96	0.07	68,68,68,68	0
56	MG	14	3332	1/1	0.96	0.10	73,73,73,73	0
56	MG	1H	3017	1/1	0.96	0.11	41,41,41,41	0
56	MG	14	3342	1/1	0.96	0.06	74,74,74,74	0
56	MG	2K	107	1/1	0.96	0.15	59,59,59,59	0
56	MG	1H	3055	1/1	0.96	0.08	61,61,61,61	0
56	MG	1H	3071	1/1	0.96	0.22	53,53,53,53	0
56	MG	14	3359	1/1	0.96	0.06	87,87,87,87	0
56	MG	14	3366	1/1	0.96	0.09	66,66,66,66	0
56	MG	14	3367	1/1	0.96	0.09	70,70,70,70	0
56	MG	1H	3203	1/1	0.96	0.31	80,80,80,80	0
56	MG	1G	1627	1/1	0.96	0.25	57,57,57,57	0
56	MG	14	3090	1/1	0.96	0.16	52,52,52,52	0
56	MG	1H	3009	1/1	0.96	0.20	43,43,43,43	0
56	MG	1H	3031	1/1	0.96	0.22	71,71,71,71	0
56	MG	14	3389	1/1	0.96	0.06	97,97,97,97	0
56	MG	14	3093	1/1	0.96	0.30	48,48,48,48	0
56	MG	1G	1677	1/1	0.96	0.16	104,104,104,104	0
56	MG	14	3095	1/1	0.96	0.31	56,56,56,56	0
56	MG	1H	3308	1/1	0.96	0.20	65,65,65,65	0
56	MG	14	3041	1/1	0.96	0.25	39,39,39,39	0
56	MG	13	1713	1/1	0.96	0.10	70,70,70,70	0
56	MG	1H	3090	1/1	0.96	0.10	44,44,44,44	0
56	MG	29	302	1/1	0.96	0.11	65,65,65,65	0
56	MG	14	3152	1/1	0.96	0.08	67,67,67,67	0
56	MG	1H	3011	1/1	0.96	0.15	48,48,48,48	0
56	MG	1H	3385	1/1	0.96	0.07	54,54,54,54	0
56	MG	1H	3231	1/1	0.96	0.09	31,31,31,31	0
56	MG	1H	3285	1/1	0.96	0.16	61,61,61,61	0
56	MG	1H	3286	1/1	0.96	0.27	70,70,70,70	0
57	PAR	13	1745	42/42	0.96	0.08	57,66,72,75	0
56	MG	1H	3164	1/1	0.96	0.11	52,52,52,52	0
56	MG	1H	3126	1/1	0.96	0.36	60,60,60,60	0
56	MG	14	3001	1/1	0.96	0.15	53,53,53,53	0
56	MG	1H	3061	1/1	0.97	0.08	48,48,48,48	0
56	MG	1H	3150	1/1	0.97	0.10	59,59,59,59	0
56	MG	1H	3458	1/1	0.97	0.07	84,84,84,84	0
56	MG	14	3032	1/1	0.97	0.18	65,65,65,65	0
56	MG	14	3165	1/1	0.97	0.34	58,58,58,58	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1G	1683	1/1	0.97	0.09	104,104,104,104	0
56	MG	1H	3302	1/1	0.97	0.07	59,59,59,59	0
56	MG	1H	3462	1/1	0.97	0.08	92,92,92,92	0
56	MG	1G	1605	1/1	0.97	0.11	74,74,74,74	0
56	MG	1H	3464	1/1	0.97	0.05	92,92,92,92	0
56	MG	1H	3370	1/1	0.97	0.07	54,54,54,54	0
56	MG	14	3308	1/1	0.97	0.06	46,46,46,46	0
56	MG	14	3314	1/1	0.97	0.07	55,55,55,55	0
56	MG	1H	3371	1/1	0.97	0.07	46,46,46,46	0
56	MG	14	3325	1/1	0.97	0.06	63,63,63,63	0
56	MG	14	3331	1/1	0.97	0.12	70,70,70,70	0
56	MG	1H	3379	1/1	0.97	0.07	46,46,46,46	0
56	MG	1H	3475	1/1	0.97	0.06	79,79,79,79	0
56	MG	14	3341	1/1	0.97	0.05	48,48,48,48	0
56	MG	14	3002	1/1	0.97	0.11	43,43,43,43	0
56	MG	1H	3383	1/1	0.97	0.06	52,52,52,52	0
56	MG	13	1733	1/1	0.97	0.05	73,73,73,73	0
56	MG	14	3352	1/1	0.97	0.07	84,84,84,84	0
56	MG	13	1603	1/1	0.97	0.14	58,58,58,58	0
56	MG	1H	3181	1/1	0.97	0.13	54,54,54,54	0
56	MG	14	3365	1/1	0.97	0.05	85,85,85,85	0
56	MG	13	1729	1/1	0.97	0.07	97,97,97,97	0
56	MG	1H	3261	1/1	0.97	0.12	61,61,61,61	0
56	MG	14	3369	1/1	0.97	0.05	97,97,97,97	0
56	MG	14	3370	1/1	0.97	0.05	68,68,68,68	0
56	MG	1H	3065	1/1	0.97	0.16	54,54,54,54	0
56	MG	14	3375	1/1	0.97	0.08	91,91,91,91	0
56	MG	1H	3184	1/1	0.97	0.06	45,45,45,45	0
56	MG	1H	3420	1/1	0.97	0.06	48,48,48,48	0
56	MG	1H	3421	1/1	0.97	0.06	57,57,57,57	0
56	MG	1H	3422	1/1	0.97	0.06	54,54,54,54	0
56	MG	14	3385	1/1	0.97	0.13	72,72,72,72	0
56	MG	14	3387	1/1	0.97	0.05	97,97,97,97	0
56	MG	14	3187	1/1	0.97	0.12	53,53,53,53	0
56	MG	1H	3086	1/1	0.97	0.25	66,66,66,66	0
56	MG	1H	3156	1/1	0.97	0.05	54,54,54,54	0
56	MG	1H	3187	1/1	0.97	0.37	56,56,56,56	0
56	MG	1H	3188	1/1	0.97	0.09	60,60,60,60	0
56	MG	14	3061	1/1	0.97	0.12	50,50,50,50	0
56	MG	14	3062	1/1	0.97	0.07	56,56,56,56	0
56	MG	16	212	1/1	0.97	0.05	73,73,73,73	0
56	MG	1H	3189	1/1	0.97	0.30	63,63,63,63	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	14	3150	1/1	0.97	0.29	51,51,51,51	0
56	MG	13	1724	1/1	0.97	0.10	78,78,78,78	0
56	MG	1H	3131	1/1	0.97	0.35	67,67,67,67	0
56	MG	45	201	1/1	0.97	0.04	50,50,50,50	0
56	MG	21	302	1/1	0.97	0.11	66,66,66,66	0
56	MG	1H	3443	1/1	0.97	0.06	58,58,58,58	0
56	MG	1H	3044	1/1	0.97	0.06	51,51,51,51	0
56	MG	1H	3001	1/1	0.97	0.09	49,49,49,49	0
56	MG	1H	3111	1/1	0.97	0.15	43,43,43,43	0
58	ZN	3E	302	1/1	0.97	0.23	89,89,89,89	0
56	MG	1H	3039	1/1	0.97	0.09	47,47,47,47	0
56	MG	1H	3278	1/1	0.97	0.15	76,76,76,76	0
56	MG	1H	3448	1/1	0.98	0.13	88,88,88,88	0
56	MG	1H	3449	1/1	0.98	0.04	72,72,72,72	0
56	MG	1H	3450	1/1	0.98	0.08	67,67,67,67	0
56	MG	14	3053	1/1	0.98	0.18	52,52,52,52	0
56	MG	1H	3378	1/1	0.98	0.05	55,55,55,55	0
56	MG	14	3310	1/1	0.98	0.04	50,50,50,50	0
56	MG	13	1722	1/1	0.98	0.05	76,76,76,76	0
56	MG	1H	3382	1/1	0.98	0.06	45,45,45,45	0
56	MG	14	3323	1/1	0.98	0.05	55,55,55,55	0
56	MG	1H	3072	1/1	0.98	0.06	43,43,43,43	0
56	MG	14	3326	1/1	0.98	0.06	65,65,65,65	0
56	MG	14	3327	1/1	0.98	0.05	58,58,58,58	0
56	MG	1H	3384	1/1	0.98	0.07	57,57,57,57	0
56	MG	14	3059	1/1	0.98	0.28	52,52,52,52	0
56	MG	14	3336	1/1	0.98	0.04	52,52,52,52	0
56	MG	14	3338	1/1	0.98	0.05	53,53,53,53	0
56	MG	13	1637	1/1	0.98	0.41	61,61,61,61	0
56	MG	14	3340	1/1	0.98	0.05	59,59,59,59	0
56	MG	1H	3459	1/1	0.98	0.10	77,77,77,77	0
56	MG	14	3162	1/1	0.98	0.04	56,56,56,56	0
56	MG	14	3343	1/1	0.98	0.06	46,46,46,46	0
56	MG	13	1726	1/1	0.98	0.05	77,77,77,77	0
56	MG	14	3348	1/1	0.98	0.13	54,54,54,54	0
56	MG	1H	3390	1/1	0.98	0.05	66,66,66,66	0
56	MG	14	3350	1/1	0.98	0.08	83,83,83,83	0
56	MG	1H	3392	1/1	0.98	0.07	64,64,64,64	0
56	MG	14	3268	1/1	0.98	0.30	57,57,57,57	0
56	MG	14	3358	1/1	0.98	0.14	77,77,77,77	0
56	MG	13	1734	1/1	0.98	0.04	86,86,86,86	0
56	MG	14	3362	1/1	0.98	0.05	69,69,69,69	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3467	1/1	0.98	0.04	75,75,75,75	0
56	MG	1H	3394	1/1	0.98	0.05	57,57,57,57	0
56	MG	1H	3469	1/1	0.98	0.07	90,90,90,90	0
56	MG	1H	3268	1/1	0.98	0.14	46,46,46,46	0
56	MG	1H	3474	1/1	0.98	0.07	64,64,64,64	0
56	MG	14	3371	1/1	0.98	0.04	56,56,56,56	0
56	MG	14	3071	1/1	0.98	0.09	61,61,61,61	0
56	MG	14	3373	1/1	0.98	0.05	69,69,69,69	0
56	MG	14	3374	1/1	0.98	0.10	76,76,76,76	0
56	MG	1H	3398	1/1	0.98	0.08	55,55,55,55	0
56	MG	1H	3399	1/1	0.98	0.05	47,47,47,47	0
56	MG	1H	3402	1/1	0.98	0.08	48,48,48,48	0
56	MG	14	3378	1/1	0.98	0.04	79,79,79,79	0
56	MG	2K	106	1/1	0.98	0.05	84,84,84,84	0
56	MG	1H	3406	1/1	0.98	0.04	45,45,45,45	0
56	MG	14	3381	1/1	0.98	0.06	62,62,62,62	0
56	MG	14	3383	1/1	0.98	0.05	86,86,86,86	0
56	MG	13	1736	1/1	0.98	0.04	73,73,73,73	0
56	MG	13	1738	1/1	0.98	0.05	72,72,72,72	0
56	MG	1H	3033	1/1	0.98	0.08	67,67,67,67	0
56	MG	13	1739	1/1	0.98	0.10	73,73,73,73	0
56	MG	13	1740	1/1	0.98	0.08	88,88,88,88	0
56	MG	1G	1671	1/1	0.98	0.07	73,73,73,73	0
56	MG	1H	3136	1/1	0.98	0.05	41,41,41,41	0
56	MG	1G	1673	1/1	0.98	0.05	74,74,74,74	0
56	MG	1H	3426	1/1	0.98	0.04	59,59,59,59	0
56	MG	1J	206	1/1	0.98	0.04	73,73,73,73	0
56	MG	1H	3108	1/1	0.98	0.18	34,34,34,34	0
56	MG	1H	3429	1/1	0.98	0.05	40,40,40,40	0
56	MG	1H	3277	1/1	0.98	0.11	70,70,70,70	0
56	MG	1H	3069	1/1	0.98	0.07	44,44,44,44	0
56	MG	1G	1682	1/1	0.98	0.10	74,74,74,74	0
56	MG	35	201	1/1	0.98	0.17	60,60,60,60	0
56	MG	1H	3434	1/1	0.98	0.10	75,75,75,75	0
56	MG	1H	3369	1/1	0.98	0.05	45,45,45,45	0
56	MG	13	1721	1/1	0.98	0.13	90,90,90,90	0
56	MG	1H	3262	1/1	0.98	0.34	56,56,56,56	0
56	MG	1H	3439	1/1	0.98	0.07	69,69,69,69	0
56	MG	1H	3373	1/1	0.98	0.09	45,45,45,45	0
56	MG	1H	3375	1/1	0.98	0.04	37,37,37,37	0
56	MG	1H	3445	1/1	0.98	0.04	52,52,52,52	0
58	ZN	32	301	1/1	0.98	0.23	96,96,96,96	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3377	1/1	0.98	0.05	44,44,44,44	0
56	MG	1H	3479	1/1	0.99	0.03	90,90,90,90	0
56	MG	14	3334	1/1	0.99	0.03	79,79,79,79	0
56	MG	14	3335	1/1	0.99	0.05	55,55,55,55	0
56	MG	1H	3395	1/1	0.99	0.04	45,45,45,45	0
56	MG	14	3337	1/1	0.99	0.03	55,55,55,55	0
56	MG	13	1732	1/1	0.99	0.05	62,62,62,62	0
56	MG	1H	3436	1/1	0.99	0.04	60,60,60,60	0
56	MG	1H	3397	1/1	0.99	0.06	66,66,66,66	0
56	MG	13	1737	1/1	0.99	0.04	62,62,62,62	0
56	MG	13	1723	1/1	0.99	0.12	86,86,86,86	0
56	MG	1H	3440	1/1	0.99	0.06	61,61,61,61	0
56	MG	14	3344	1/1	0.99	0.04	51,51,51,51	0
56	MG	1H	3441	1/1	0.99	0.11	86,86,86,86	0
56	MG	14	3346	1/1	0.99	0.06	59,59,59,59	0
56	MG	14	3347	1/1	0.99	0.12	56,56,56,56	0
56	MG	1G	1674	1/1	0.99	0.04	70,70,70,70	0
56	MG	1H	3442	1/1	0.99	0.03	42,42,42,42	0
56	MG	1G	1676	1/1	0.99	0.03	75,75,75,75	0
56	MG	1H	3401	1/1	0.99	0.05	64,64,64,64	0
56	MG	1G	1678	1/1	0.99	0.11	98,98,98,98	0
56	MG	14	3354	1/1	0.99	0.04	71,71,71,71	0
56	MG	14	3355	1/1	0.99	0.04	47,47,47,47	0
56	MG	1H	3381	1/1	0.99	0.08	40,40,40,40	0
56	MG	14	3038	1/1	0.99	0.12	34,34,34,34	0
56	MG	14	3360	1/1	0.99	0.04	63,63,63,63	0
56	MG	14	3361	1/1	0.99	0.04	60,60,60,60	0
56	MG	1H	3403	1/1	0.99	0.04	43,43,43,43	0
56	MG	14	3363	1/1	0.99	0.07	74,74,74,74	0
56	MG	14	3364	1/1	0.99	0.02	75,75,75,75	0
56	MG	13	1744	1/1	0.99	0.06	95,95,95,95	0
56	MG	1H	3447	1/1	0.99	0.08	76,76,76,76	0
56	MG	1H	3252	1/1	0.99	0.12	49,49,49,49	0
56	MG	14	3368	1/1	0.99	0.03	53,53,53,53	0
56	MG	1H	3407	1/1	0.99	0.04	57,57,57,57	0
56	MG	13	1731	1/1	0.99	0.05	94,94,94,94	0
56	MG	1H	3410	1/1	0.99	0.06	46,46,46,46	0
56	MG	1H	3452	1/1	0.99	0.04	49,49,49,49	0
56	MG	1H	3412	1/1	0.99	0.03	32,32,32,32	0
56	MG	1H	3415	1/1	0.99	0.17	68,68,68,68	0
56	MG	13	1735	1/1	0.99	0.03	71,71,71,71	0
56	MG	1H	3417	1/1	0.99	0.10	61,61,61,61	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3418	1/1	0.99	0.07	42,42,42,42	0
56	MG	1H	3372	1/1	0.99	0.05	37,37,37,37	0
56	MG	1H	3460	1/1	0.99	0.03	55,55,55,55	0
56	MG	1H	3387	1/1	0.99	0.02	54,54,54,54	0
56	MG	1H	3388	1/1	0.99	0.05	64,64,64,64	0
56	MG	14	3382	1/1	0.99	0.05	69,69,69,69	0
56	MG	1H	3463	1/1	0.99	0.14	101,101,101,101	0
56	MG	14	3384	1/1	0.99	0.03	62,62,62,62	0
56	MG	1H	3389	1/1	0.99	0.04	68,68,68,68	0
56	MG	14	3386	1/1	0.99	0.10	60,60,60,60	0
56	MG	1H	3425	1/1	0.99	0.03	67,67,67,67	0
56	MG	14	3388	1/1	0.99	0.04	88,88,88,88	0
56	MG	1H	3466	1/1	0.99	0.03	56,56,56,56	0
56	MG	14	3390	1/1	0.99	0.11	90,90,90,90	0
56	MG	1H	3230	1/1	0.99	0.09	37,37,37,37	0
56	MG	1H	3391	1/1	0.99	0.05	71,71,71,71	0
56	MG	1H	3428	1/1	0.99	0.04	47,47,47,47	0
56	MG	1H	3470	1/1	0.99	0.05	106,106,106,106	0
56	MG	14	3309	1/1	0.99	0.10	58,58,58,58	0
56	MG	1H	3471	1/1	0.99	0.13	68,68,68,68	0
56	MG	14	3312	1/1	0.99	0.03	67,67,67,67	0
56	MG	1H	3472	1/1	0.99	0.06	56,56,56,56	0
56	MG	1H	3374	1/1	0.99	0.05	50,50,50,50	0
56	MG	14	3316	1/1	0.99	0.04	49,49,49,49	0
56	MG	14	3317	1/1	0.99	0.03	41,41,41,41	0
56	MG	14	3318	1/1	0.99	0.04	57,57,57,57	0
56	MG	14	3319	1/1	0.99	0.03	62,62,62,62	0
56	MG	14	3320	1/1	0.99	0.04	60,60,60,60	0
56	MG	14	3321	1/1	0.99	0.03	62,62,62,62	0
56	MG	14	3322	1/1	0.99	0.10	77,77,77,77	0
56	MG	1H	3430	1/1	0.99	0.05	76,76,76,76	0
56	MG	1H	3020	1/1	0.99	0.12	47,47,47,47	0
56	MG	1H	3476	1/1	0.99	0.04	79,79,79,79	0
56	MG	1H	3432	1/1	0.99	0.08	65,65,65,65	0
58	ZN	5I	101	1/1	0.99	0.04	88,88,88,88	0
56	MG	14	3329	1/1	0.99	0.04	45,45,45,45	0
56	MG	14	3330	1/1	0.99	0.04	48,48,48,48	0
58	ZN	5A	101	1/1	0.99	0.04	121,121,121,121	0
56	MG	1H	3376	1/1	0.99	0.02	36,36,36,36	0
56	MG	14	3356	1/1	1.00	0.02	72,72,72,72	0
56	MG	14	3357	1/1	1.00	0.12	62,62,62,62	0
56	MG	1H	3423	1/1	1.00	0.05	44,44,44,44	0

Continued on next page...

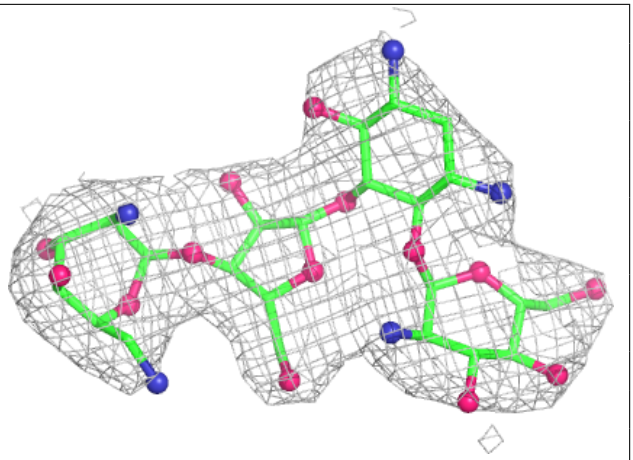
Continued from previous page...

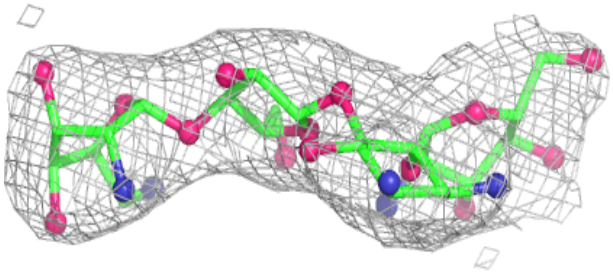
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
56	MG	1H	3413	1/1	1.00	0.10	44,44,44,44	0
56	MG	1H	3414	1/1	1.00	0.05	53,53,53,53	0
56	MG	14	3324	1/1	1.00	0.04	52,52,52,52	0
56	MG	13	1725	1/1	1.00	0.05	62,62,62,62	0
56	MG	14	3311	1/1	1.00	0.05	51,51,51,51	0
56	MG	1H	3380	1/1	1.00	0.02	41,41,41,41	0
56	MG	14	3328	1/1	1.00	0.04	62,62,62,62	0
56	MG	14	3313	1/1	1.00	0.03	50,50,50,50	0
56	MG	1H	3408	1/1	1.00	0.03	47,47,47,47	0
56	MG	13	1727	1/1	1.00	0.05	76,76,76,76	0
56	MG	1H	3419	1/1	1.00	0.04	37,37,37,37	0
56	MG	14	3333	1/1	1.00	0.04	58,58,58,58	0
56	MG	14	3351	1/1	1.00	0.14	43,43,43,43	0
56	MG	1H	3404	1/1	1.00	0.03	45,45,45,45	0
56	MG	1H	3411	1/1	1.00	0.08	53,53,53,53	0
56	MG	1H	3455	1/1	1.00	0.01	57,57,57,57	0
56	MG	1H	3400	1/1	1.00	0.05	47,47,47,47	0

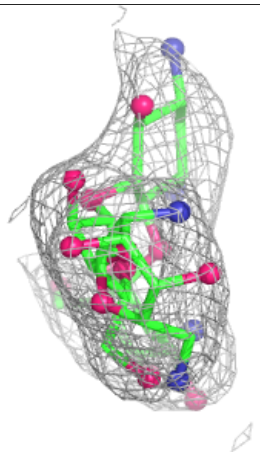
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation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

Electron density around PAR 1G 1686:

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

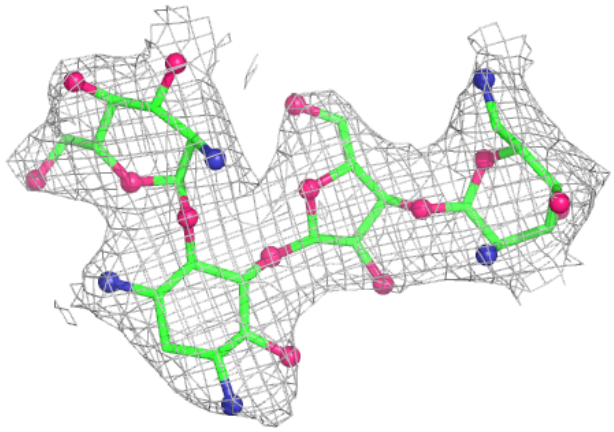


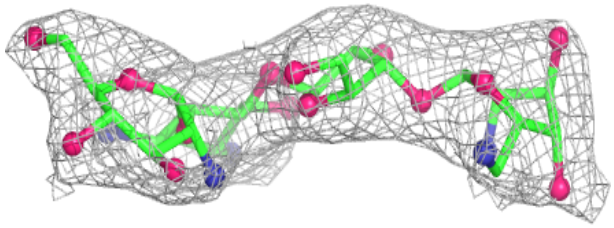


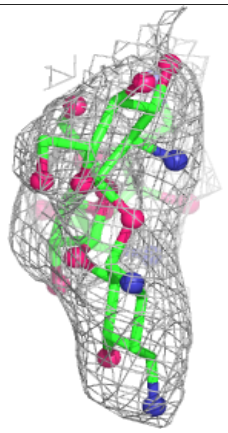


Electron density around PAR 13 1745:

$2mF_o$-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

There are no such residues in this entry.