



Full wwPDB X-ray Structure Validation Report ⓘ

Sep 18, 2017 – 05:05 PM EDT

PDB ID : 4U24
Title : Crystal structure of the E. coli ribosome bound to dalfopristin.
Authors : Noeske, J.; Huang, J.; Olivier, N.B.; Giacobbe, R.A.; Zambrowski, M.; Cate, J.H.D.
Deposited on : unknown
Resolution : 2.90 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

<http://wwpdb.org/validation/2016/XrayValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

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

MolProbity : 4.02b-467
Mogul : 1.7.2 (RC1), CSD as538be (2017)
Xtriage (Phenix) : 1.9-1692
EDS : rb-20029824
Percentile statistics : 20161228.v01 (using entries in the PDB archive December 28th 2016)
Refmac : 5.8.0135
CCP4 : 6.5.0
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : rb-20029824

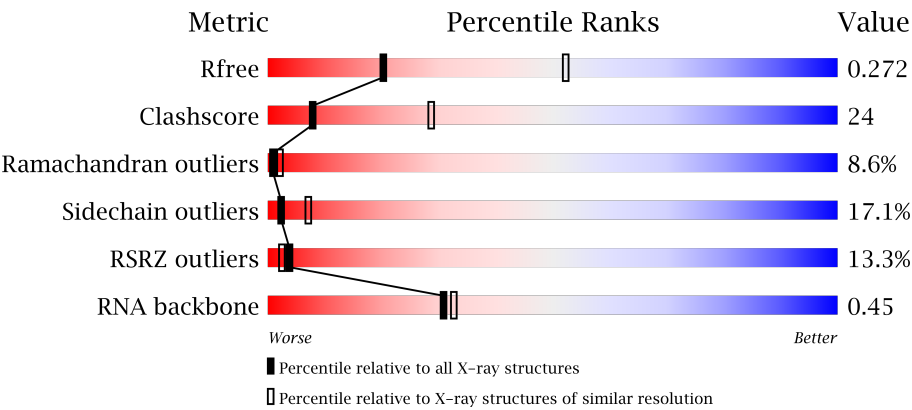
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.90 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}	100719	1586 (2.90-2.90)
Clashscore	112137	1807 (2.90-2.90)
Ramachandran outliers	110173	1768 (2.90-2.90)
Sidechain outliers	110143	1770 (2.90-2.90)
RSRZ outliers	101464	1596 (2.90-2.90)
RNA backbone	2435	1004 (3.20-2.60)

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 on the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	AA	1539	<div><div>2%</div><div><div></div><div>30%</div><div>54%</div><div>16%</div></div></div>
1	CA	1539	<div><div>8%</div><div><div></div><div>30%</div><div>55%</div><div>15%</div></div></div>
2	AB	218	<div><div>17%</div><div><div></div><div>23%</div><div>51%</div><div>21%</div><div>5%</div></div></div>
2	CB	218	<div><div>22%</div><div><div></div><div>31%</div><div>49%</div><div>18%</div><div>•</div></div></div>

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
3	AC	206	
3	CC	206	
4	AD	205	
4	CD	205	
5	AE	150	
5	CE	150	
6	AF	100	
6	CF	100	
7	AG	151	
7	CG	151	
8	AH	129	
8	CH	129	
9	AI	127	
9	CI	127	
10	AJ	98	
10	CJ	98	
11	AK	117	
11	CK	117	
12	AL	123	
12	CL	123	
13	AM	114	
13	CM	114	
14	AN	100	
14	CN	100	
15	AO	88	



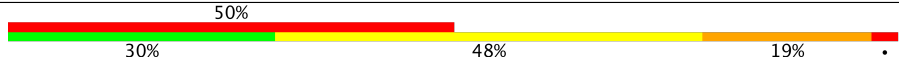
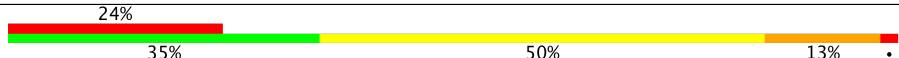

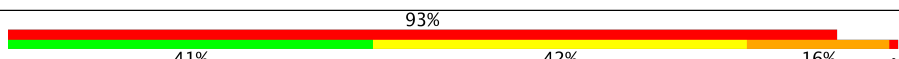
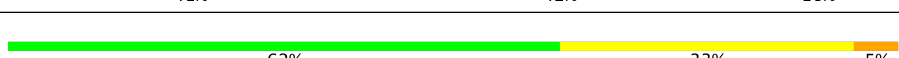

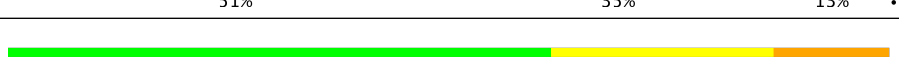

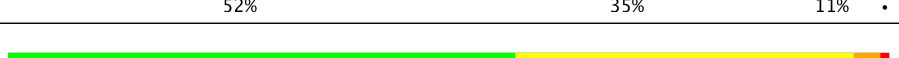





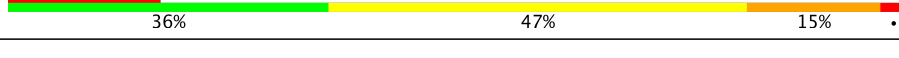


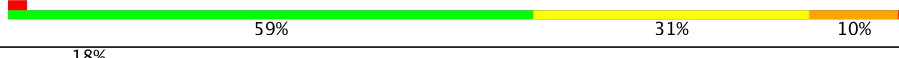

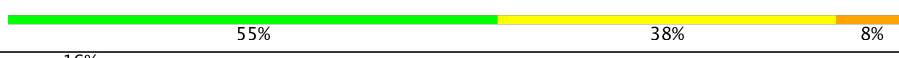



Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
15	CO	88	
16	AP	82	
16	CP	82	
17	AQ	80	
17	CQ	80	
18	AR	55	
18	CR	55	
19	AS	79	
19	CS	79	
20	AT	85	
20	CT	85	
21	AU	51	
21	CU	51	
22	BA	2903	
22	DA	2903	
23	BB	119	
23	DB	119	
24	BC	271	
24	DC	271	
25	BD	209	
25	DD	209	
26	BE	201	
26	DE	201	
27	BF	177	
27	DF	177	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
28	BG	176	
28	DG	176	
29	BH	149	
29	DH	149	
30	BI	141	
30	DI	141	
31	BJ	142	
31	DJ	142	
32	BK	122	
32	DK	122	
33	BL	143	
33	DL	143	
34	BM	136	
34	DM	136	
35	BN	120	
35	DN	120	
36	BO	116	
36	DO	116	
37	BP	114	
37	DP	114	
38	BQ	117	
38	DQ	117	
39	BR	103	
39	DR	103	
40	BS	110	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
40	DS	110	
41	BT	93	
41	DT	93	
42	BU	102	
42	DU	102	
43	BV	94	
43	DV	94	
44	BW	76	
44	DW	76	
45	BX	77	
45	DX	77	
46	BY	63	
46	DY	63	
47	BZ	58	
47	DZ	58	
48	B0	56	
48	D0	56	
49	B1	50	
49	D1	50	
50	B2	46	
50	D2	46	
51	B3	64	
51	D3	64	
52	B4	38	
52	D4	38	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
53	B5	228	

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
54	MG	AA	1621	-	-	-	X
54	MG	AA	1622	-	-	-	X
54	MG	AA	1629	-	-	-	X
54	MG	AA	1634	-	-	-	X
54	MG	AA	1653	-	-	-	X
54	MG	AA	1661	-	-	-	X
54	MG	AA	1668	-	-	-	X
54	MG	AA	1669	-	-	-	X
54	MG	BA	3013	-	-	-	X
54	MG	BA	3042	-	-	-	X
54	MG	BA	3049	-	-	-	X
54	MG	BA	3075	-	-	-	X
54	MG	BA	3085	-	-	-	X
54	MG	BA	3107	-	-	-	X
54	MG	BA	3110	-	-	-	X
54	MG	BA	3131	-	-	-	X
54	MG	BA	3137	-	-	-	X
54	MG	BA	3139	-	-	-	X
54	MG	BA	3146	-	-	-	X
54	MG	BA	3158	-	-	-	X
54	MG	BA	3169	-	-	-	X
54	MG	BA	3177	-	-	-	X
54	MG	BA	3178	-	-	-	X
54	MG	BA	3195	-	-	-	X
54	MG	CA	1612	-	-	-	X
54	MG	CA	1617	-	-	-	X
54	MG	CA	1626	-	-	-	X
54	MG	DA	3003	-	-	-	X
54	MG	DA	3027	-	-	-	X
54	MG	DA	3028	-	-	-	X
54	MG	DA	3071	-	-	-	X
54	MG	DA	3072	-	-	-	X
54	MG	DA	3093	-	-	-	X
54	MG	DA	3110	-	-	-	X
54	MG	DA	3113	-	-	-	X

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
54	MG	DA	3116	-	-	-	X
54	MG	DA	3137	-	-	-	X
54	MG	DA	3161	-	-	-	X
55	DOL	BA	3001	-	-	-	X
55	DOL	DA	3001	-	-	X	X

2 Entry composition

There are 57 unique types of molecules in this entry. The entry contains 288276 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	AA	1538	Total	C	N	O	P	0	0	0
			32995	14716	6050	10691	1538			
1	CA	1539	Total	C	N	O	P	0	0	0
			33015	14725	6052	10699	1539			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	AB	218	Total	C	N	O	S	0	0	0
			1705	1081	305	312	7			
2	CB	218	Total	C	N	O	S	0	0	0
			1705	1081	305	312	7			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	AC	206	Total	C	N	O	S	0	0	0
			1625	1028	305	289	3			
3	CC	206	Total	C	N	O	S	0	0	0
			1625	1028	305	289	3			

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	AE	150	Total	C	N	O	S	0	0	0
			1106	687	211	202	6			
5	CE	150	Total	C	N	O	S	0	0	0
			1106	687	211	202	6			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	AF	100	Total	C	N	O	S	0	0	0
			818	515	148	149	6			
6	CF	100	Total	C	N	O	S	0	0	0
			818	515	148	149	6			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	AG	151	Total	C	N	O	S	0	0	0
			1182	735	227	216	4			
7	CG	151	Total	C	N	O	S	0	0	0
			1182	735	227	216	4			

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	AJ	98	Total	C	N	O	S	0	0	0
			787	493	150	143	1			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	CJ	98	Total	C	N	O	S	0	0	0
			787	493	150	143	1			

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	AM	114	Total	C	N	O	S	0	0	0
			884	546	178	157	3			
13	CM	114	Total	C	N	O	S	0	0	0
			884	546	178	157	3			

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	AO	88	Total	C	N	O	S	0	0	0
			710	437	143	129	1			
15	CO	88	Total	C	N	O	S	0	0	0
			710	437	143	129	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	AP	82	Total	C	N	O	S	0	0	0
			649	406	128	114	1			
16	CP	82	Total	C	N	O	S	0	0	0
			649	406	128	114	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	AQ	80	Total	C	N	O	S	0	0	0
			649	411	121	114	3			
17	CQ	80	Total	C	N	O	S	0	0	0
			649	411	121	114	3			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	AR	55	Total	C	N	O	0	0	0
			456	288	86	82			
18	CR	55	Total	C	N	O	0	0	0
			456	288	86	82			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AS	79	Total	C	N	O	S	0	0	0
			638	408	120	108	2			
19	CS	79	Total	C	N	O	S	0	0	0
			638	408	120	108	2			

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	AU	51	Total	C	N	O	S	0	0	0
			426	265	86	74	1			
21	CU	51	Total	C	N	O	S	0	0	0
			426	265	86	74	1			

- Molecule 22 is a RNA chain called 23S rRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	BA	2897	Total	C	N	O	P	0	0	0
			62195	27745	11446	20107	2897			
22	DA	2897	Total	C	N	O	P	0	0	0
			62195	27745	11446	20107	2897			

- Molecule 23 is a RNA chain called 5S rRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	BB	119	Total	C	N	O	P	0	0	0
			2549	1135	466	829	119			
23	DB	118	Total	C	N	O	P	0	0	0
			2529	1126	464	821	118			

- Molecule 24 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	BC	271	Total	C	N	O	S	0	0	0
			2083	1288	423	365	7			
24	DC	271	Total	C	N	O	S	0	0	0
			2083	1288	423	365	7			

- Molecule 25 is a protein called 50S ribosomal protein L3.

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

- Molecule 26 is a protein called 50S ribosomal protein L4.

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

Continued on next page...

Continued from previous page...

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

- Molecule 27 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	BF	177	Total	C	N	O	S	0	0	0
			1411	899	249	257	6			
27	DF	177	Total	C	N	O	S	0	0	0
			1411	899	249	257	6			

- Molecule 28 is a protein called 50S ribosomal protein L6.

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

- Molecule 29 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	BH	149	Total	C	N	O	S	0	0	0
			1110	699	197	213	1			
29	DH	149	Total	C	N	O	S	0	0	0
			1110	699	197	213	1			

- Molecule 30 is a protein called 50S ribosomal protein L11.

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

- Molecule 31 is a protein called 50S ribosomal protein L13.

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

- Molecule 32 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	BK	122	Total	C	N	O	S	0	0	0
			939	587	180	166	6			
32	DK	122	Total	C	N	O	S	0	0	0
			939	587	180	166	6			

- Molecule 33 is a protein called 50S ribosomal protein L15.

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

- Molecule 34 is a protein called 50S ribosomal protein L16.

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

- Molecule 35 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	BN	120	Total	C	N	O	S	0	0	0
			961	593	196	167	5			
35	DN	120	Total	C	N	O	S	0	0	0
			961	593	196	167	5			

- Molecule 36 is a protein called 50S ribosomal protein L18.

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

- Molecule 37 is a protein called 50S ribosomal protein L19.

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

- Molecule 38 is a protein called 50S ribosomal protein L20.

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

- Molecule 39 is a protein called 50S ribosomal protein L21.

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

- Molecule 40 is a protein called 50S ribosomal protein L22.

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

- Molecule 41 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	BT	93	Total	C	N	O	S	0	0	0
			739	466	139	132	2			
41	DT	93	Total	C	N	O	S	0	0	0
			739	466	139	132	2			

- Molecule 42 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	BU	102	Total	C	N	O	S	0	0	0
			780	492	146	142				

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
42	DU	102	Total	C	N	O	0	0	0
			780	492	146	142			

- Molecule 43 is a protein called 50S ribosomal protein L25.

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

- Molecule 44 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	BW	76	Total	C	N	O	S	0	0	0
			580	359	117	103	1			
44	DW	75	Total	C	N	O	S	0	0	0
			569	353	113	102	1			

- Molecule 45 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	BX	77	Total	C	N	O	S	0	0	0
			625	388	129	106	2			
45	DX	77	Total	C	N	O	S	0	0	0
			625	388	129	106	2			

- Molecule 46 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	BY	63	Total 509	C 313	N 99	O 95	S 2	0	0	0
46	DY	63	Total 509	C 313	N 99	O 95	S 2	0	0	0

- Molecule 47 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	BZ	58	Total 449	C 281	N 87	O 79	S 2	0	0	0
47	DZ	58	Total 449	C 281	N 87	O 79	S 2	0	0	0

- Molecule 48 is a protein called 50S ribosomal protein L32.

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

- Molecule 49 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
49	B1	50	Total	C	N	O	0	0	0
			410	263	75	72			
49	D1	50	Total	C	N	O	0	0	0
			410	263	75	72			

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

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

- Molecule 51 is a protein called 50S ribosomal protein L35.

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

- Molecule 52 is a protein called 50S ribosomal protein L36.

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

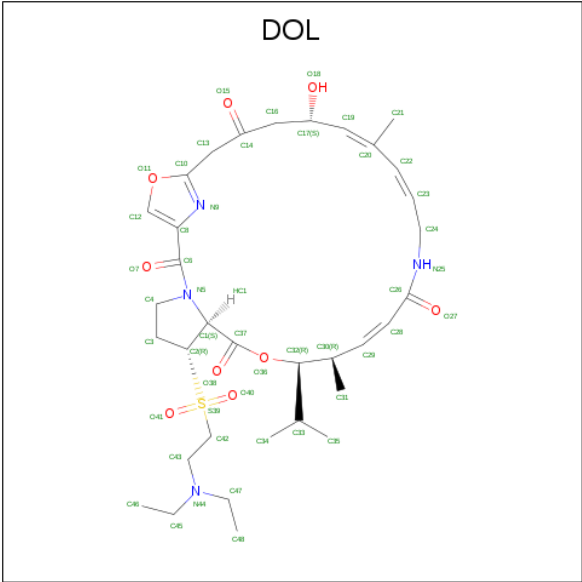
- Molecule 53 is a protein called 50S ribosomal protein L1.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
53	B5	191	Total	C	N	O	0	0	1
			1142	691	221	230			

- Molecule 54 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
54	BB	4	Total	Mg	0	0
			4	4		
54	BA	194	Total	Mg	0	0
			194	194		
54	CA	56	Total	Mg	0	0
			56	56		
54	DQ	1	Total	Mg	0	0
			1	1		
54	DL	1	Total	Mg	0	0
			1	1		
54	D2	1	Total	Mg	0	0
			1	1		
54	DA	164	Total	Mg	0	0
			164	164		
54	AA	70	Total	Mg	0	0
			70	70		
54	BQ	1	Total	Mg	0	0
			1	1		
54	AN	1	Total	Mg	0	0
			1	1		
54	DB	3	Total	Mg	0	0
			3	3		
54	AM	1	Total	Mg	0	0
			1	1		

- Molecule 55 is 5-(2-DIETHYLAMINO-ETHANESULFONYL)-21-HYDROXY-10-ISOPROPYL-11,19-DIMETHYL-9,26-DIOXA-3,15,28-TRIAZA-TRICYCLO[23.2.1.00,255]OCTACOSA-1(27),12,17,19,25(28)-PENTAENE-2,8,14,23-TETRAONE (three-letter code: DOL) (formula: C₃₄H₅₀N₄O₉S).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
55	BA	1	Total	C	N	O	S	0	0
			48	34	4	9	1		
55	DA	1	Total	C	N	O	S	0	0
			48	34	4	9	1		

- Molecule 56 is ZINC ION (three-letter code: ZN) (formula: Zn).

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

- Molecule 57 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
57	AA	195	Total	O	0	0
			195	195		
57	AE	1	Total	O	0	0
			1	1		
57	AL	1	Total	O	0	0
			1	1		
57	AN	3	Total	O	0	0
			3	3		
57	AT	2	Total	O	0	0
			2	2		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
57	AU	1	Total 1	O 1	0	0
57	BA	615	Total 615	O 615	0	0
57	BB	13	Total 13	O 13	0	0
57	BC	8	Total 8	O 8	0	0
57	BD	3	Total 3	O 3	0	0
57	BE	2	Total 2	O 2	0	0
57	BF	1	Total 1	O 1	0	0
57	BL	7	Total 7	O 7	0	0
57	BN	5	Total 5	O 5	0	0
57	BQ	1	Total 1	O 1	0	0
57	BS	1	Total 1	O 1	0	0
57	BT	1	Total 1	O 1	0	0
57	BU	1	Total 1	O 1	0	0
57	BV	1	Total 1	O 1	0	0
57	B2	1	Total 1	O 1	0	0
57	B3	3	Total 3	O 3	0	0
57	B4	2	Total 2	O 2	0	0
57	CA	193	Total 193	O 193	0	0
57	CL	1	Total 1	O 1	0	0
57	CN	1	Total 1	O 1	0	0
57	CT	2	Total 2	O 2	0	0

Continued on next page...

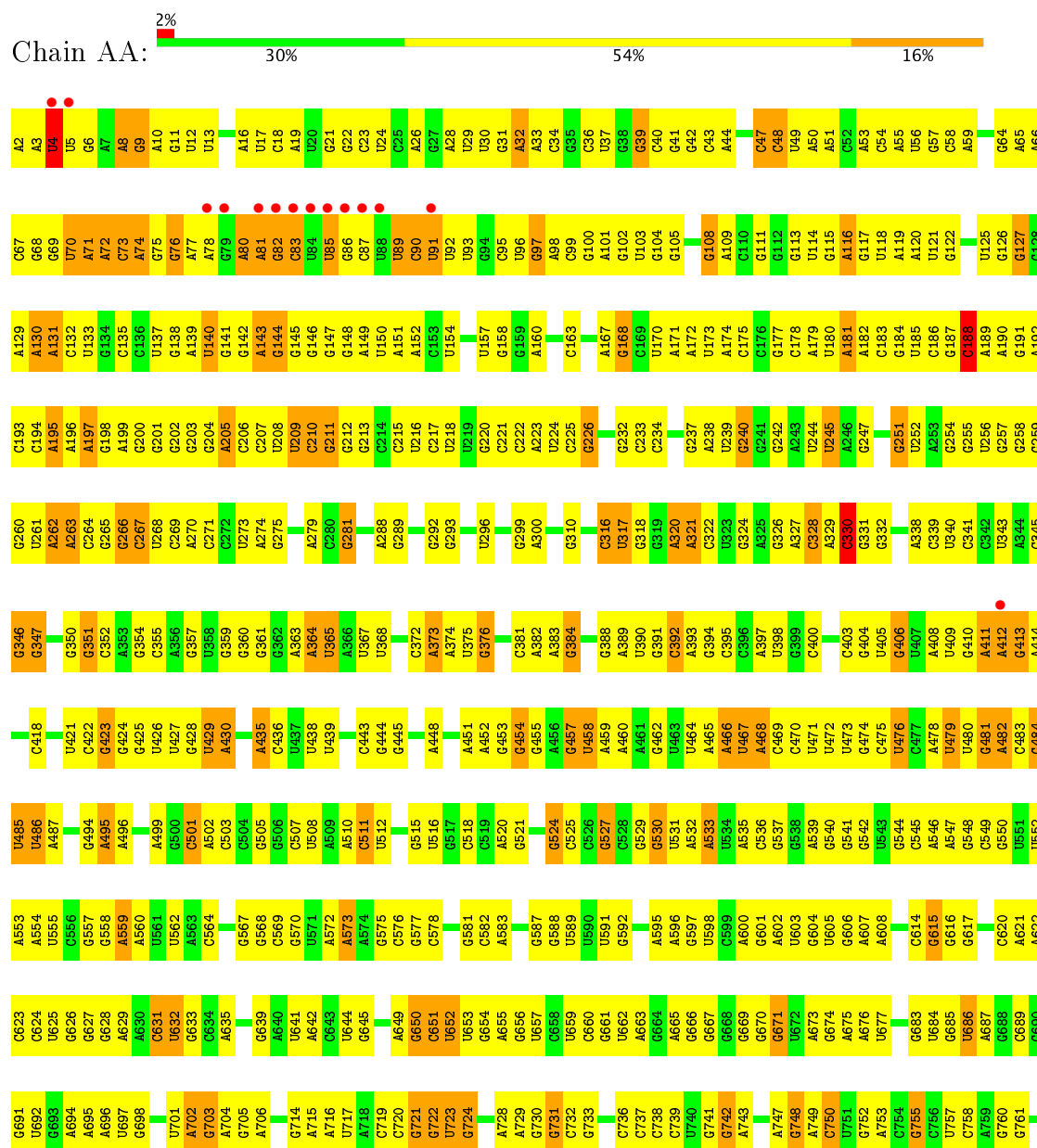
Continued from previous page...

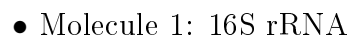
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
57	CU	1	Total 1	O 1	0	0
57	DA	608	Total 608	O 608	0	0
57	DB	13	Total 13	O 13	0	0
57	DC	10	Total 10	O 10	0	0
57	DD	4	Total 4	O 4	0	0
57	DE	4	Total 4	O 4	0	0
57	DJ	1	Total 1	O 1	0	0
57	DL	4	Total 4	O 4	0	0
57	DN	2	Total 2	O 2	0	0
57	DS	2	Total 2	O 2	0	0
57	DT	3	Total 3	O 3	0	0
57	DU	1	Total 1	O 1	0	0
57	DV	1	Total 1	O 1	0	0
57	D2	1	Total 1	O 1	0	0
57	D3	1	Total 1	O 1	0	0
57	D4	1	Total 1	O 1	0	0

3 Residue-property plots

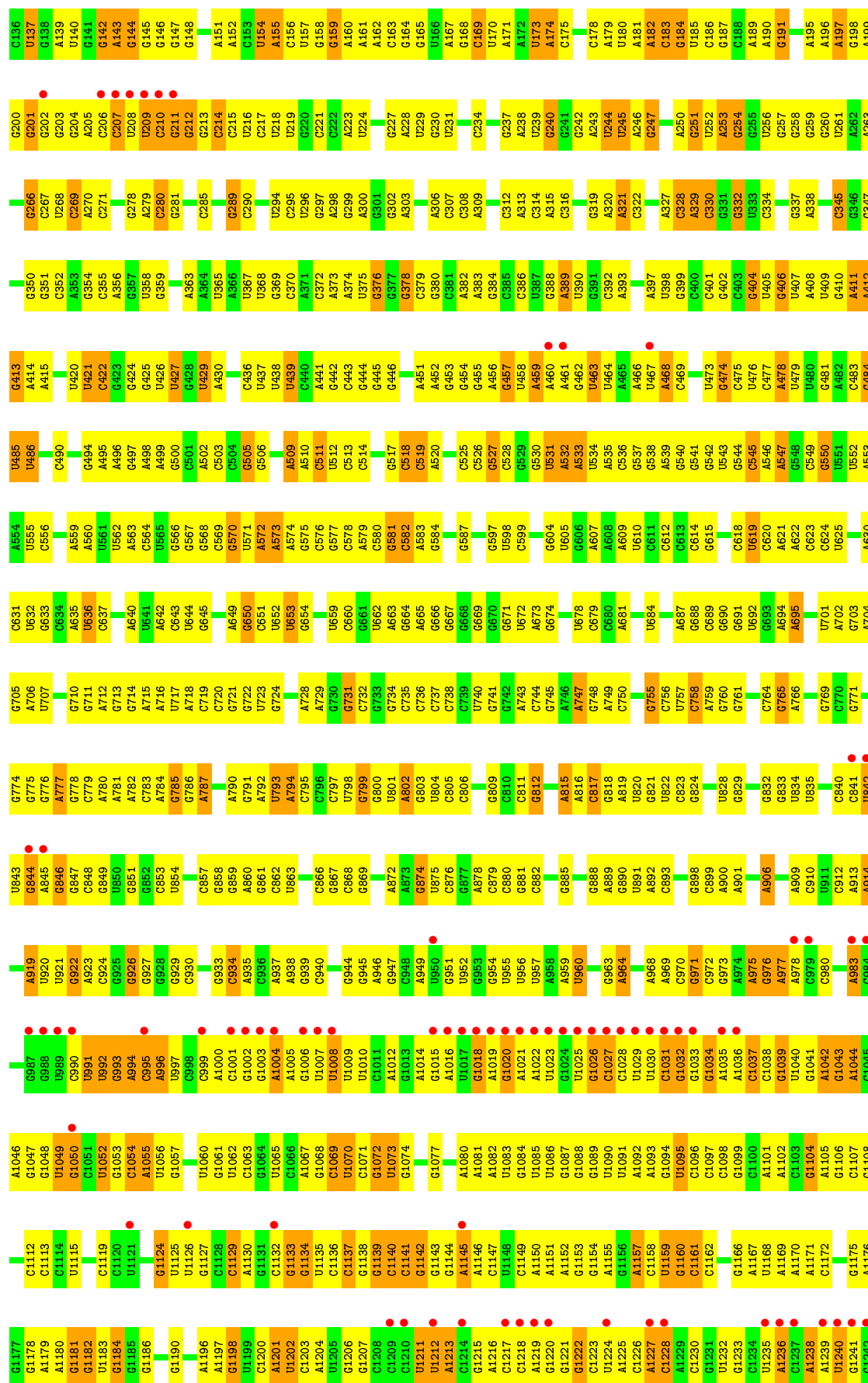
These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are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

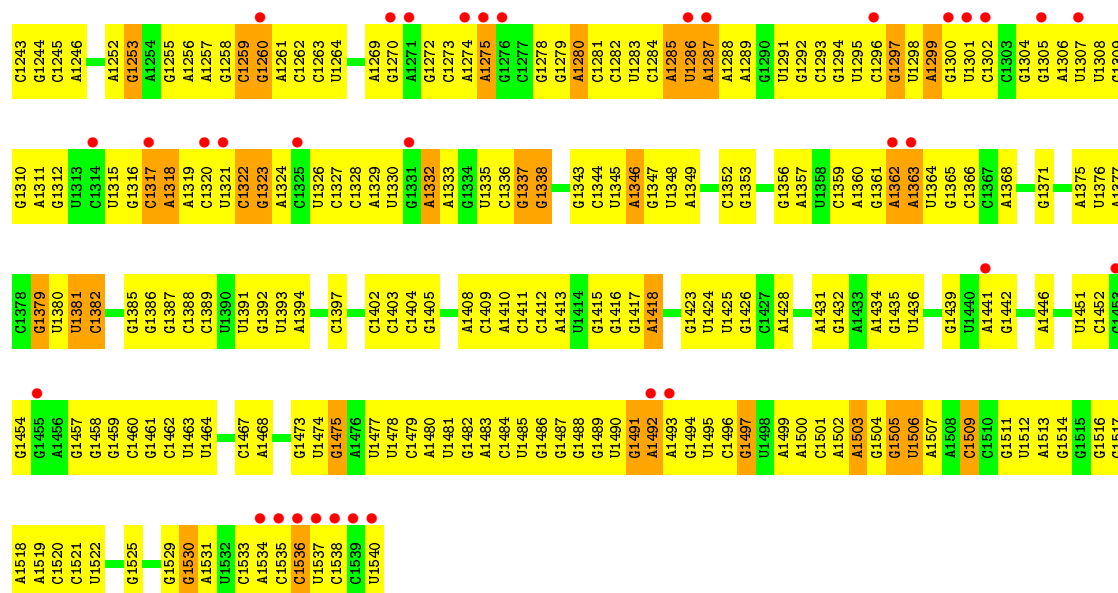
• Molecule 1: 16S rRNA



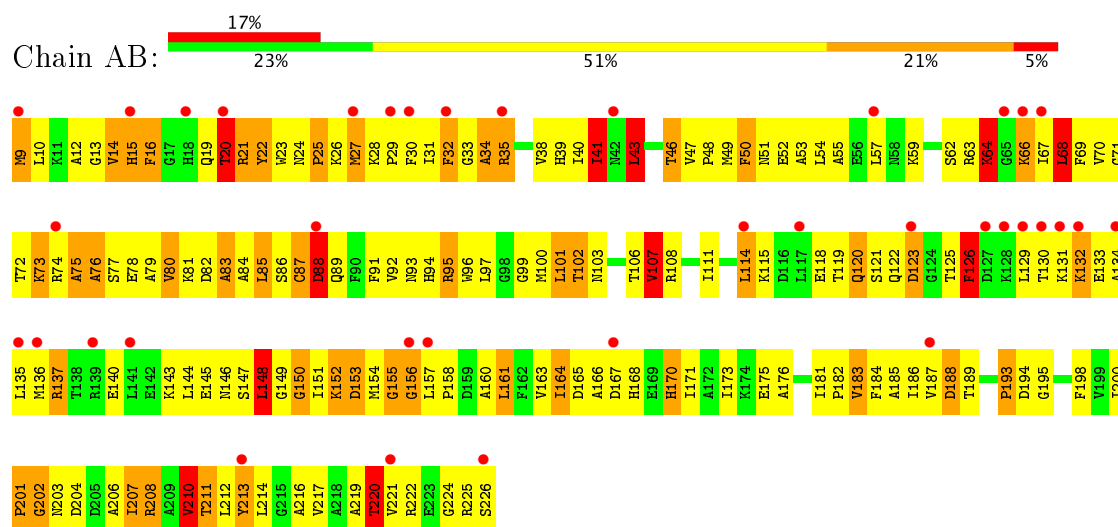


A72	A73	A74	A75	A76	A77	A78	A79	A80	A81	A82	A83	A84	A85	A86	A87	A88	A89	A90	A91	A92	A93	A94	A95	A96	A97	A98	A99	A100	A101	A102	A103	A104	A105	A106	A107	A108	A109	A110	A111	A112	A113	A114	A115	A116	A117	A118	A119	A120	A121	A122	A123	A124	A125	A126	A127	A128	A129	A130	A131	A132	A133	A134	A135	A136	A137	A138	A139	A140	A141	A142	A143	A144	A145	A146	A147	A148	A149	A150	A151	A152	A153	A154	A155	A156	A157	A158	A159	A160	A161	A162	A163	A164	A165	A166	A167	A168	A169	A170	A171	A172	A173	A174	A175	A176	A177	A178	A179	A180	A181	A182	A183	A184	A185	A186	A187	A188	A189	A190	A191	A192	A193	A194	A195	A196	A197	A198	A199	A200	A201	A202	A203	A204	A205	A206	A207	A208	A209	A210	A211	A212	A213	A214	A215	A216	A217	A218	A219	A220	A221	A222	A223	A224	A225	A226	A227	A228	A229	A230	A231	A232	A233	A234	A235	A236	A237	A238	A239	A240	A241	A242	A243	A244	A245	A246	A247	A248	A249	A250	A251	A252	A253	A254	A255	A256	A257	A258	A259	A260	A261	A262	A263	A264	A265	A266	A267	A268	A269	A270	A271	A272	A273	A274	A275	A276	A277	A278	A279	A280	A281	A282	A283	A284	A285	A286	A287	A288	A289	A290	A291	A292	A293	A294	A295	A296	A297	A298	A299	A300	A301	A302	A303	A304	A305	A306	A307	A308	A309	A310	A311	A312	A313	A314	A315	A316	A317	A318	A319	A320	A321	A322	A323	A324	A325	A326	A327	A328	A329	A330	A331	A332	A333	A334	A335	A336	A337	A338	A339	A340	A341	A342	A343	A344	A345	A346	A347	A348	A349	A350	A351	A352	A353	A354	A355	A356	A357	A358	A359	A360	A361	A362	A363	A364	A365	A366	A367	A368	A369	A370	A371	A372	A373	A374	A375	A376	A377	A378	A379	A380	A381	A382	A383	A384	A385	A386	A387	A388	A389	A390	A391	A392	A393	A394	A395	A396	A397	A398	A399	A400	A401	A402	A403	A404	A405	A406	A407	A408	A409	A410	A411	A412	A413	A414	A415	A416	A417	A418	A419	A420	A421	A422	A423	A424	A425	A426	A427	A428	A429	A430	A431	A432	A433	A434	A435	A436	A437	A438	A439	A440	A441	A442	A443	A444	A445	A446	A447	A448	A449	A450	A451	A452	A453	A454	A455	A456	A457	A458	A459	A460	A461	A462	A463	A464	A465	A466	A467	A468	A469	A470	A471	A472	A473	A474	A475	A476	A477	A478	A479	A480	A481	A482	A483	A484	A485	A486	A487	A488	A489	A490	A491	A492	A493	A494	A495	A496	A497	A498	A499	A500	A501	A502	A503	A504	A505	A506	A507	A508	A509	A510	A511	A512	A513	A514	A515	A516	A517	A518	A519	A520	A521	A522	A523	A524	A525	A526	A527	A528	A529	A530	A531	A532	A533	A534	A535	A536	A537	A538	A539	A540	A541	A542	A543	A544	A545	A546	A547	A548	A549	A550	A551	A552	A553	A554	A555	A556	A557	A558	A559	A560	A561	A562	A563	A564	A565	A566	A567	A568	A569	A570	A571	A572	A573	A574	A575	A576	A577	A578	A579	A580	A581	A582	A583	A584	A585	A5
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	----

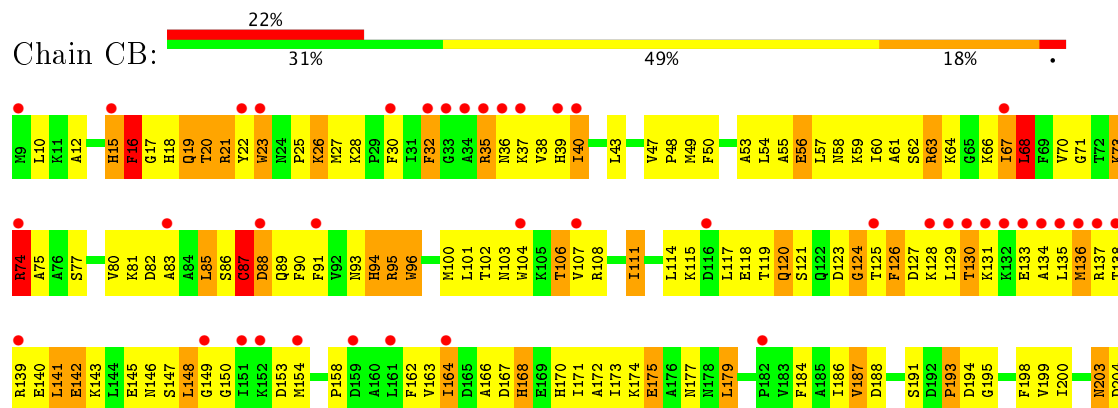


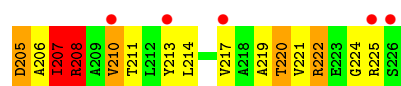


• Molecule 2: 30S ribosomal protein S2

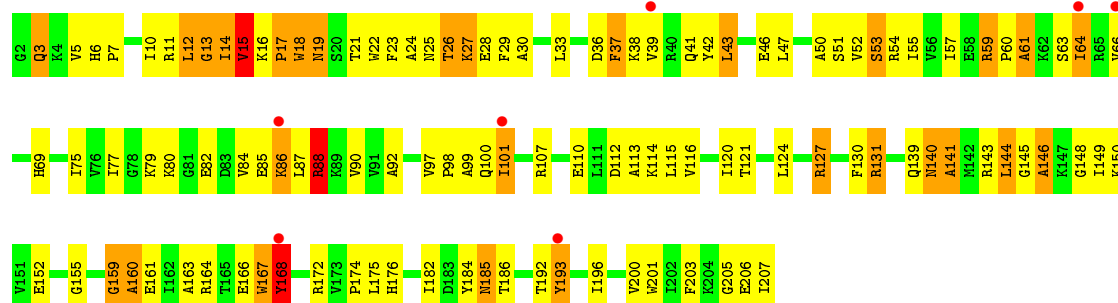


• Molecule 2: 30S ribosomal protein S2

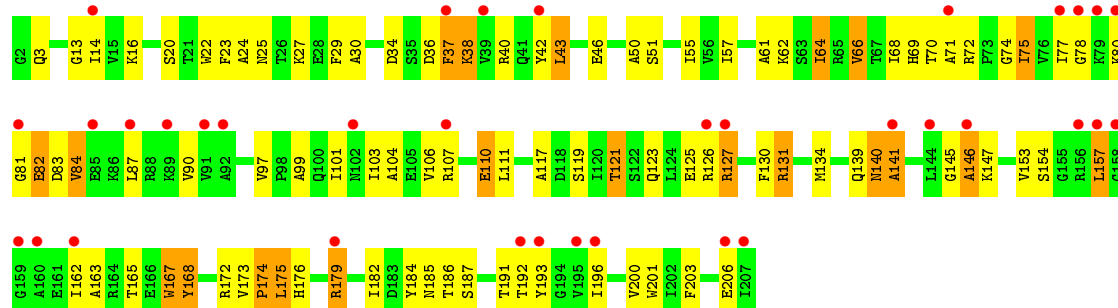




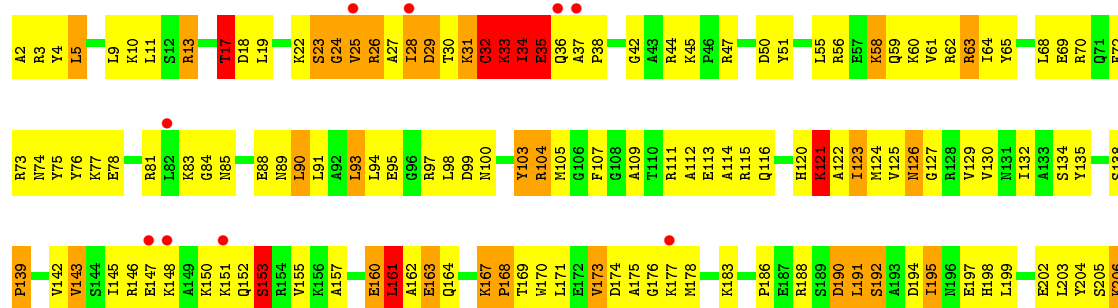
• Molecule 3: 30S ribosomal protein S3



• Molecule 3: 30S ribosomal protein S3

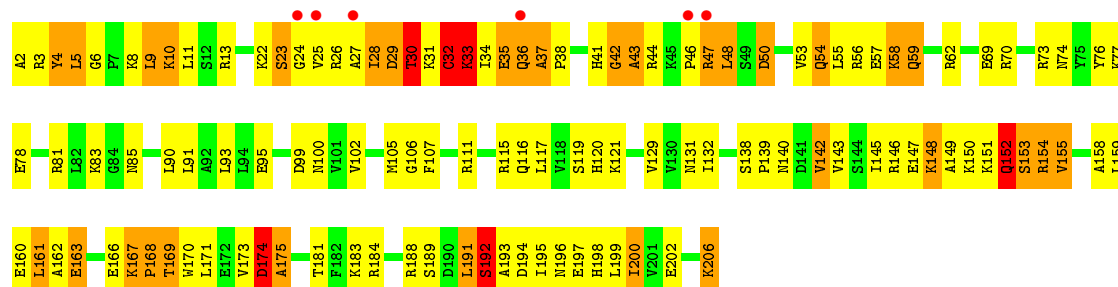


• Molecule 4: 30S ribosomal protein S4

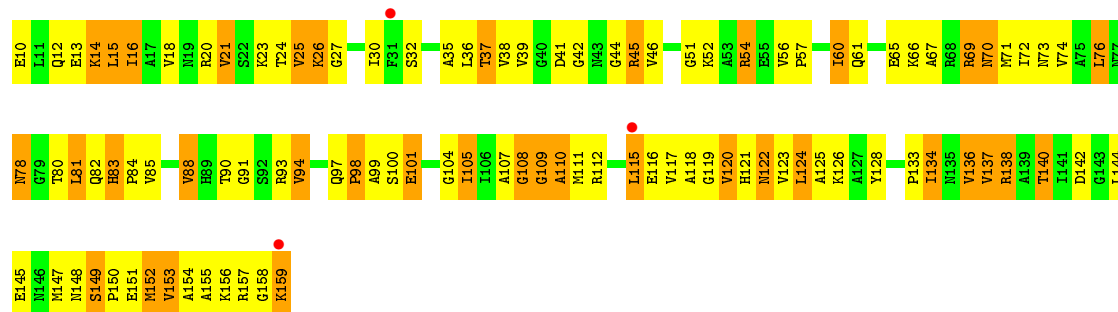


• Molecule 4: 30S ribosomal protein S4

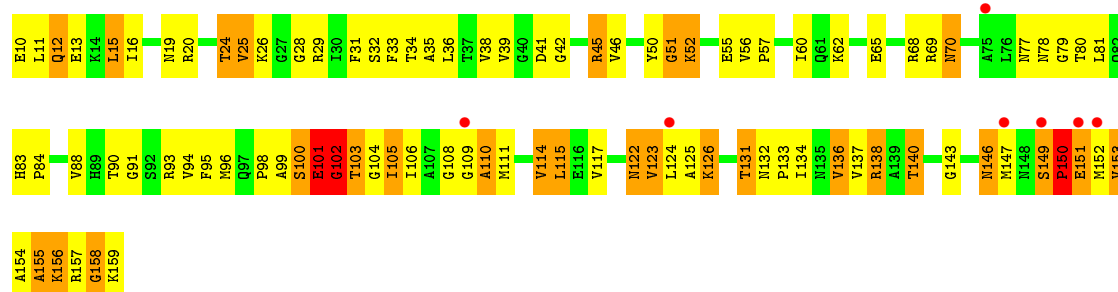


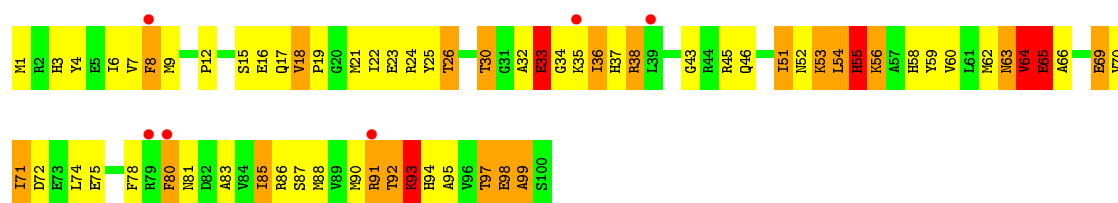


- Molecule 5: 30S ribosomal protein S5

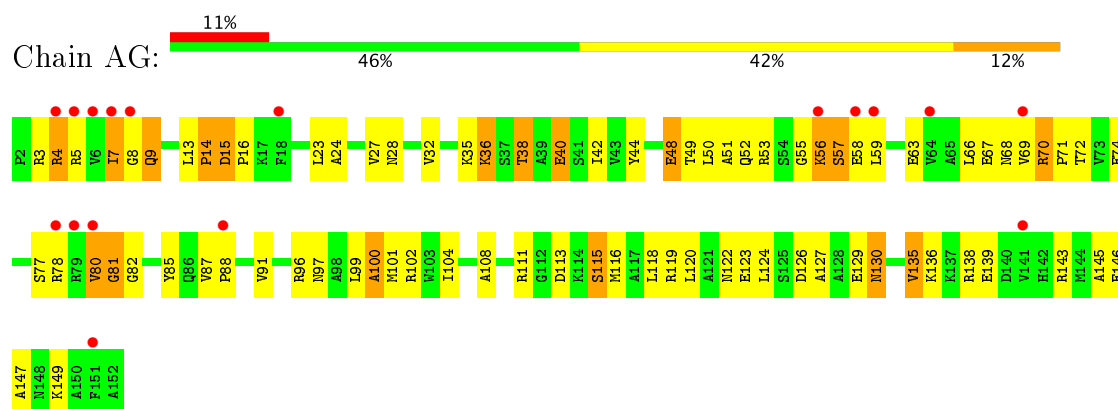


- Molecule 5: 30S ribosomal protein S5

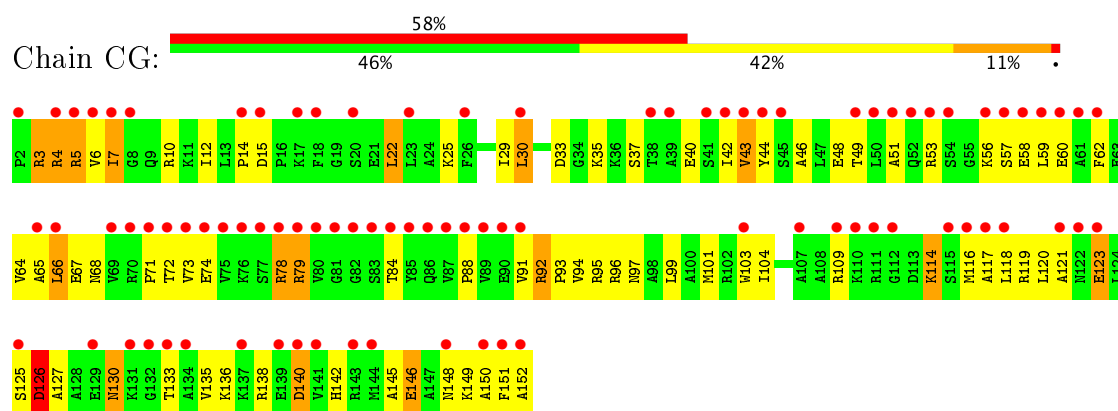




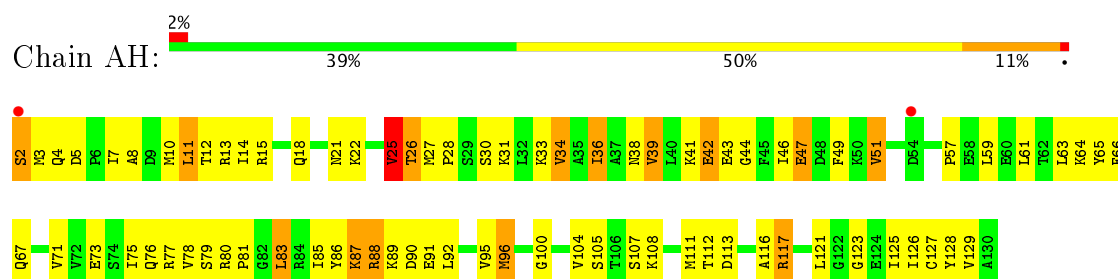
• Molecule 7: 30S ribosomal protein S7



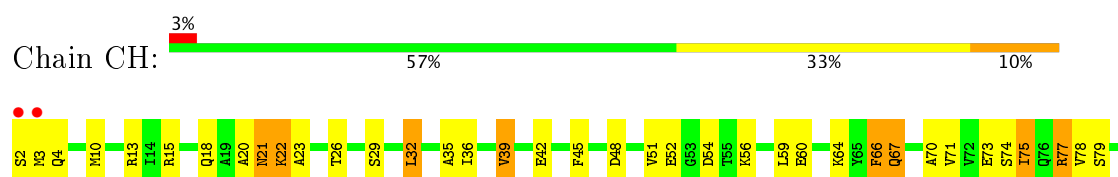
• Molecule 7: 30S ribosomal protein S7

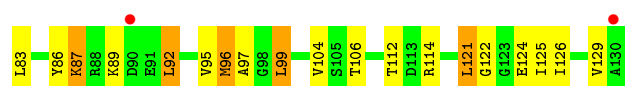


• Molecule 8: 30S ribosomal protein S8

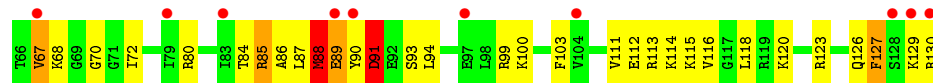
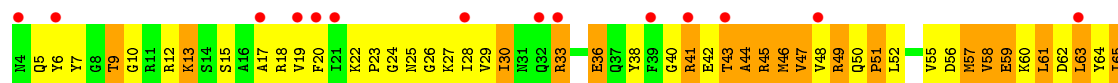


• Molecule 8: 30S ribosomal protein S8

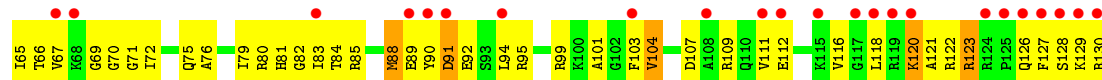
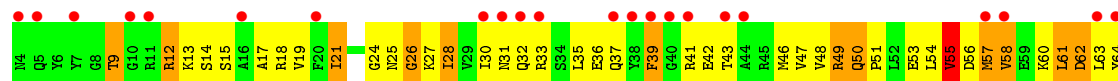




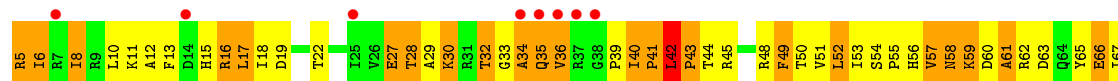
• Molecule 9: 30S ribosomal protein S9



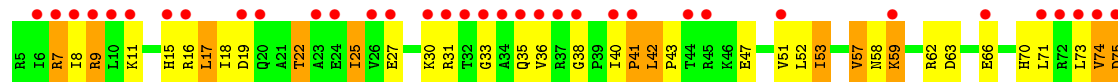
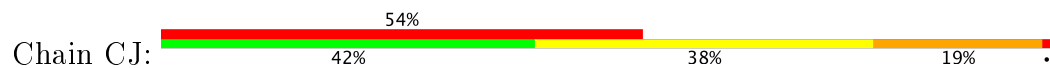
• Molecule 9: 30S ribosomal protein S9



• Molecule 10: 30S ribosomal protein S10

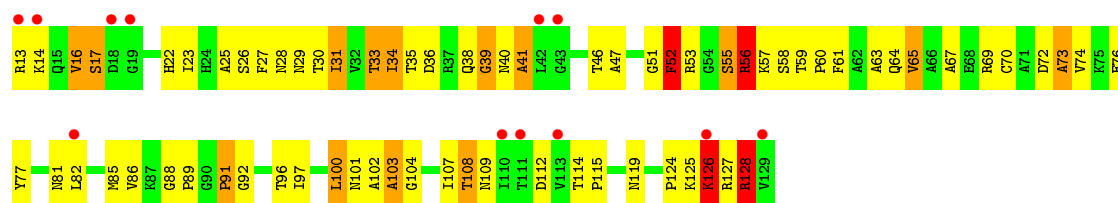


• Molecule 10: 30S ribosomal protein S10

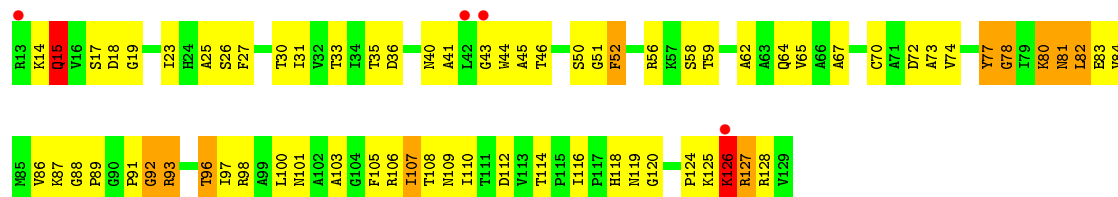


• Molecule 11: 30S ribosomal protein S11

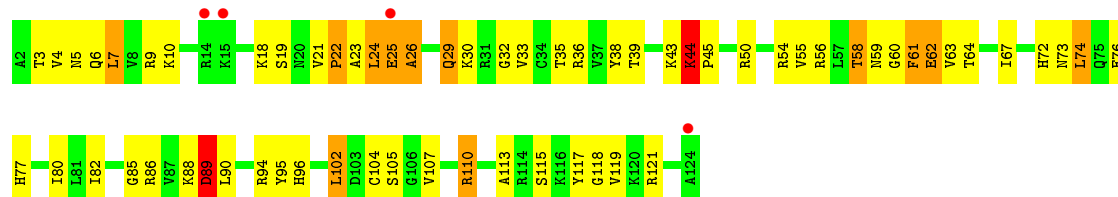




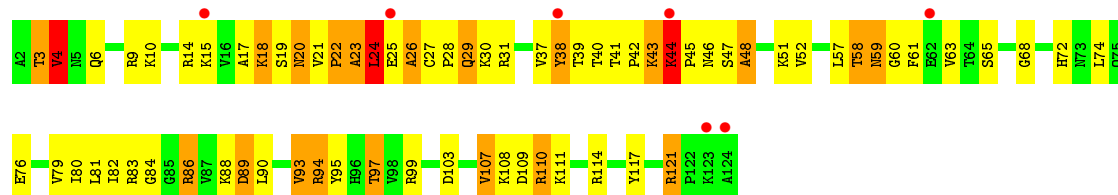
- Molecule 11: 30S ribosomal protein S11



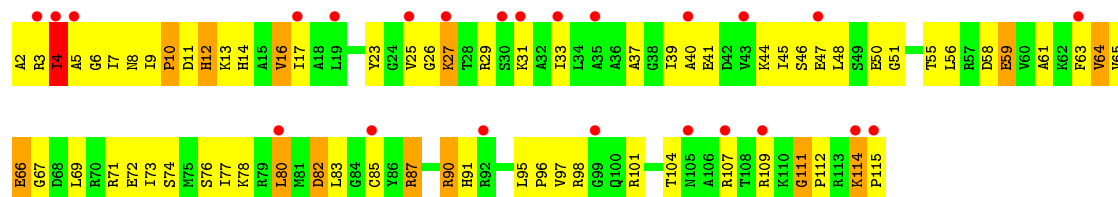
- Molecule 12: 30S ribosomal protein S12



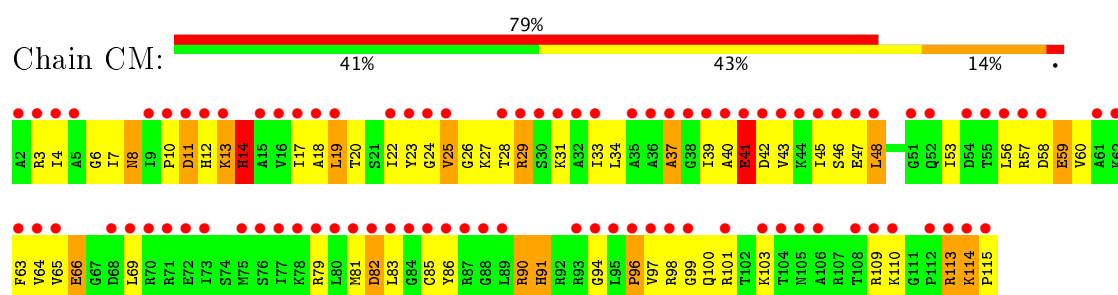
- Molecule 12: 30S ribosomal protein S12



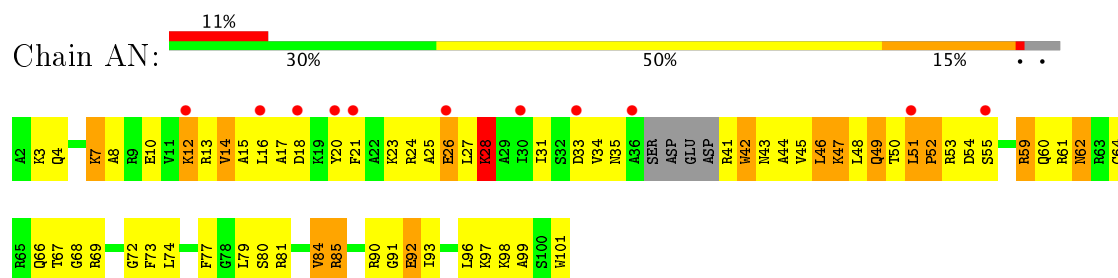
- Molecule 13: 30S ribosomal protein S13



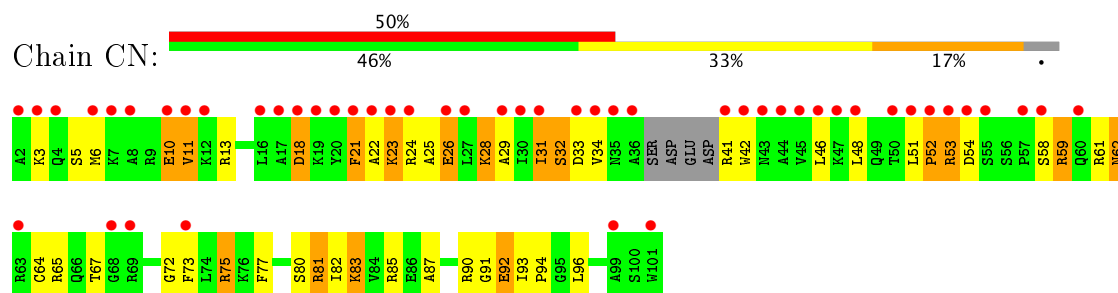
- Molecule 13: 30S ribosomal protein S13



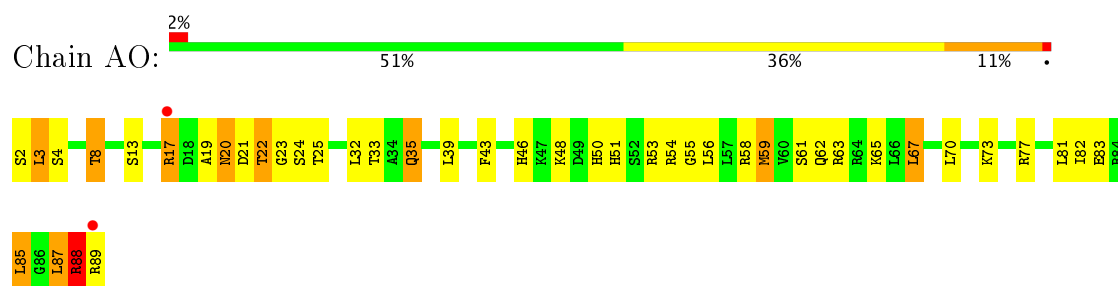
• Molecule 14: 30S ribosomal protein S14



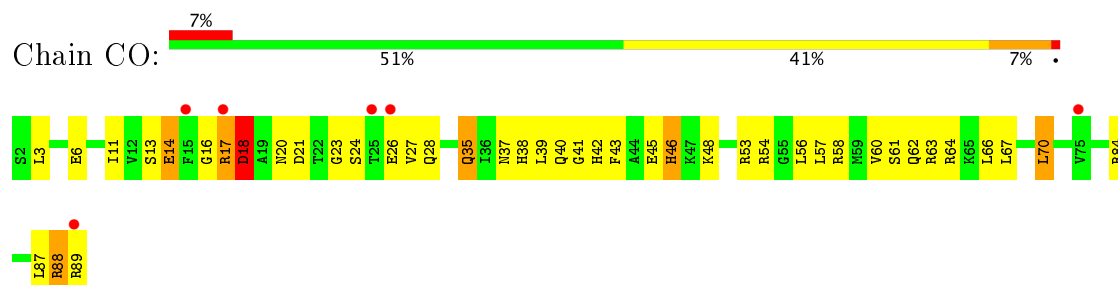
• Molecule 14: 30S ribosomal protein S14



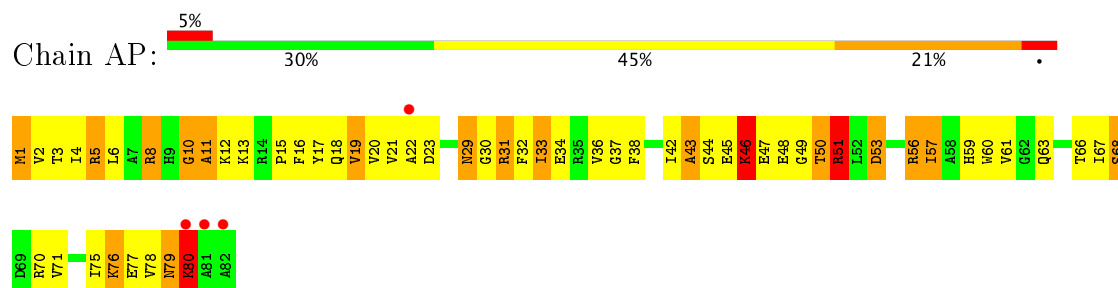
• Molecule 15: 30S ribosomal protein S15



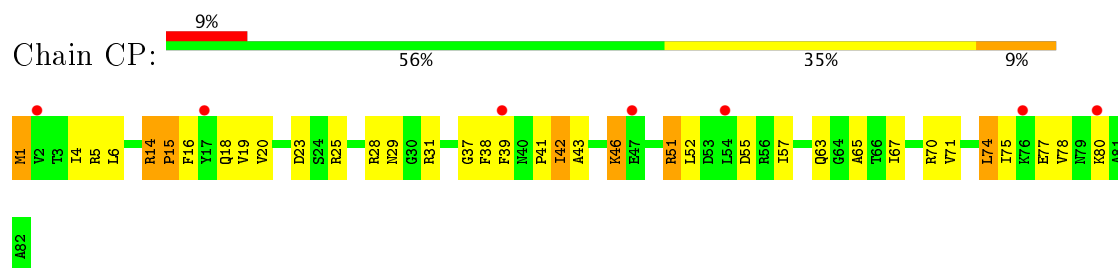
• Molecule 15: 30S ribosomal protein S15



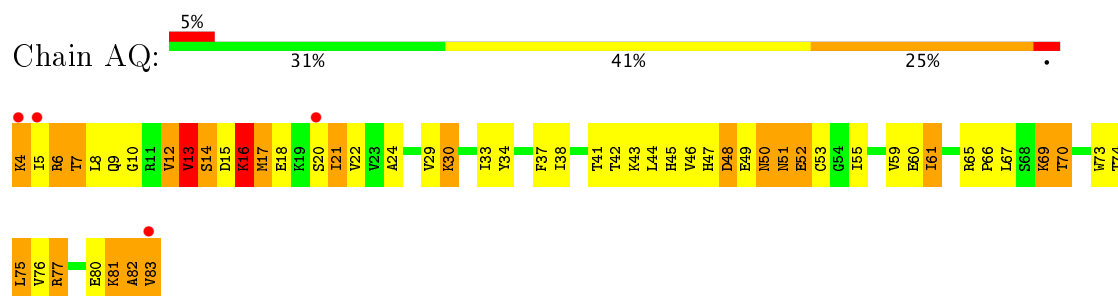
- Molecule 16: 30S ribosomal protein S16



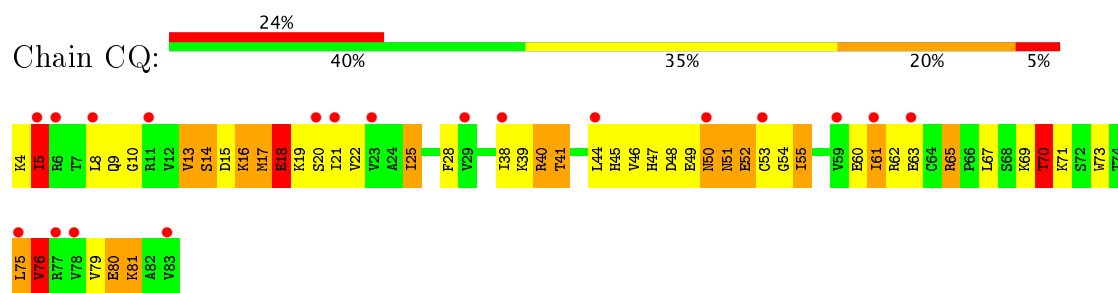
- Molecule 16: 30S ribosomal protein S16



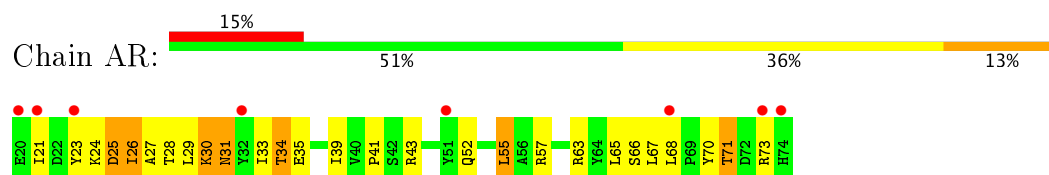
- Molecule 17: 30S ribosomal protein S17



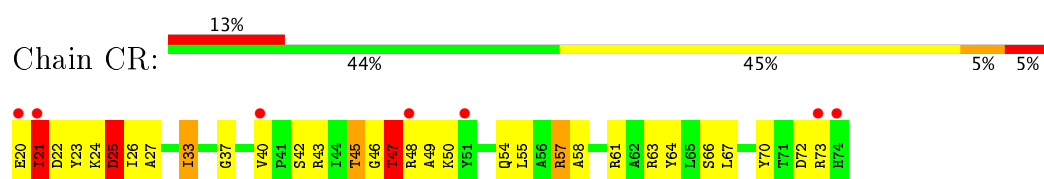
- Molecule 17: 30S ribosomal protein S17



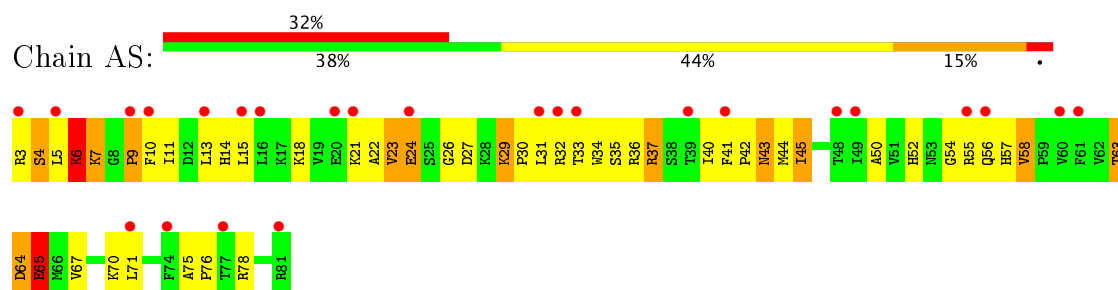
- Molecule 18: 30S ribosomal protein S18



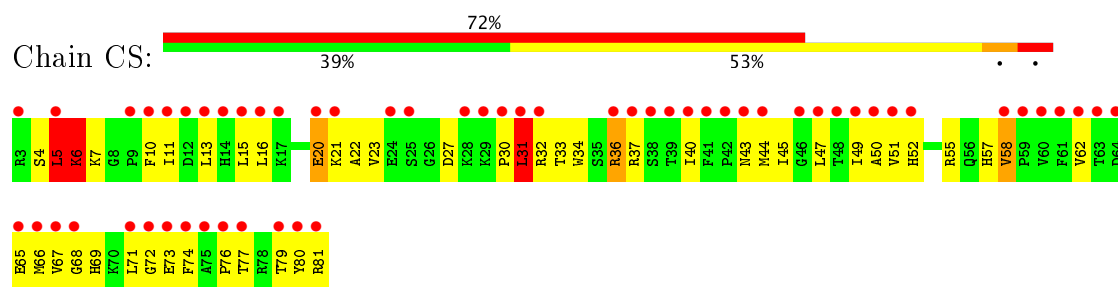
- Molecule 18: 30S ribosomal protein S18



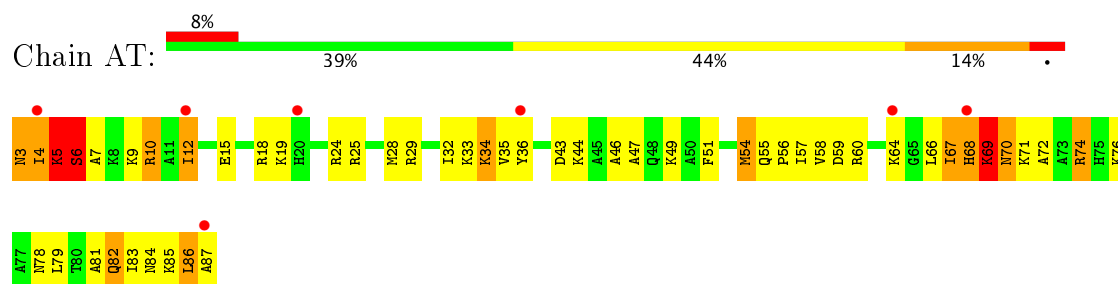
• Molecule 19: 30S ribosomal protein S19



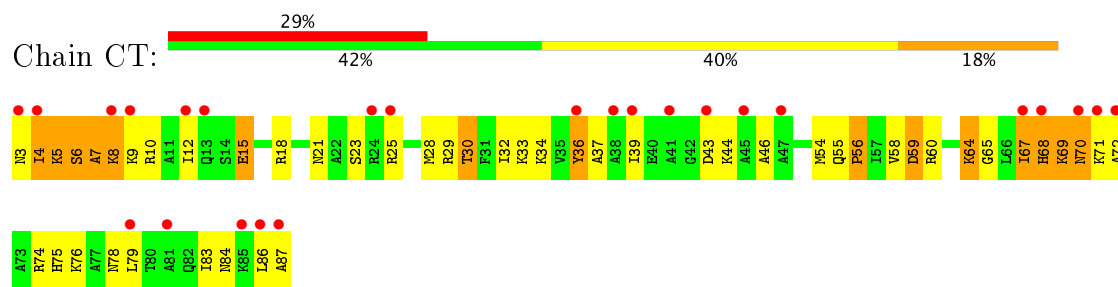
• Molecule 19: 30S ribosomal protein S19



• Molecule 20: 30S ribosomal protein S20

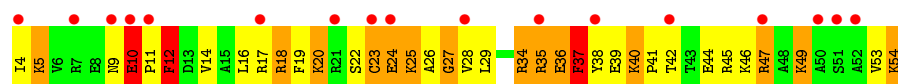


• Molecule 20: 30S ribosomal protein S20

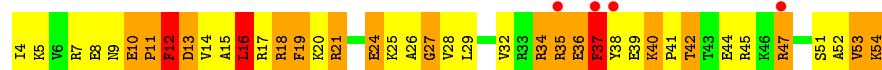
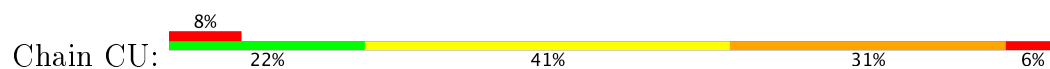


• Molecule 21: 30S ribosomal protein S21

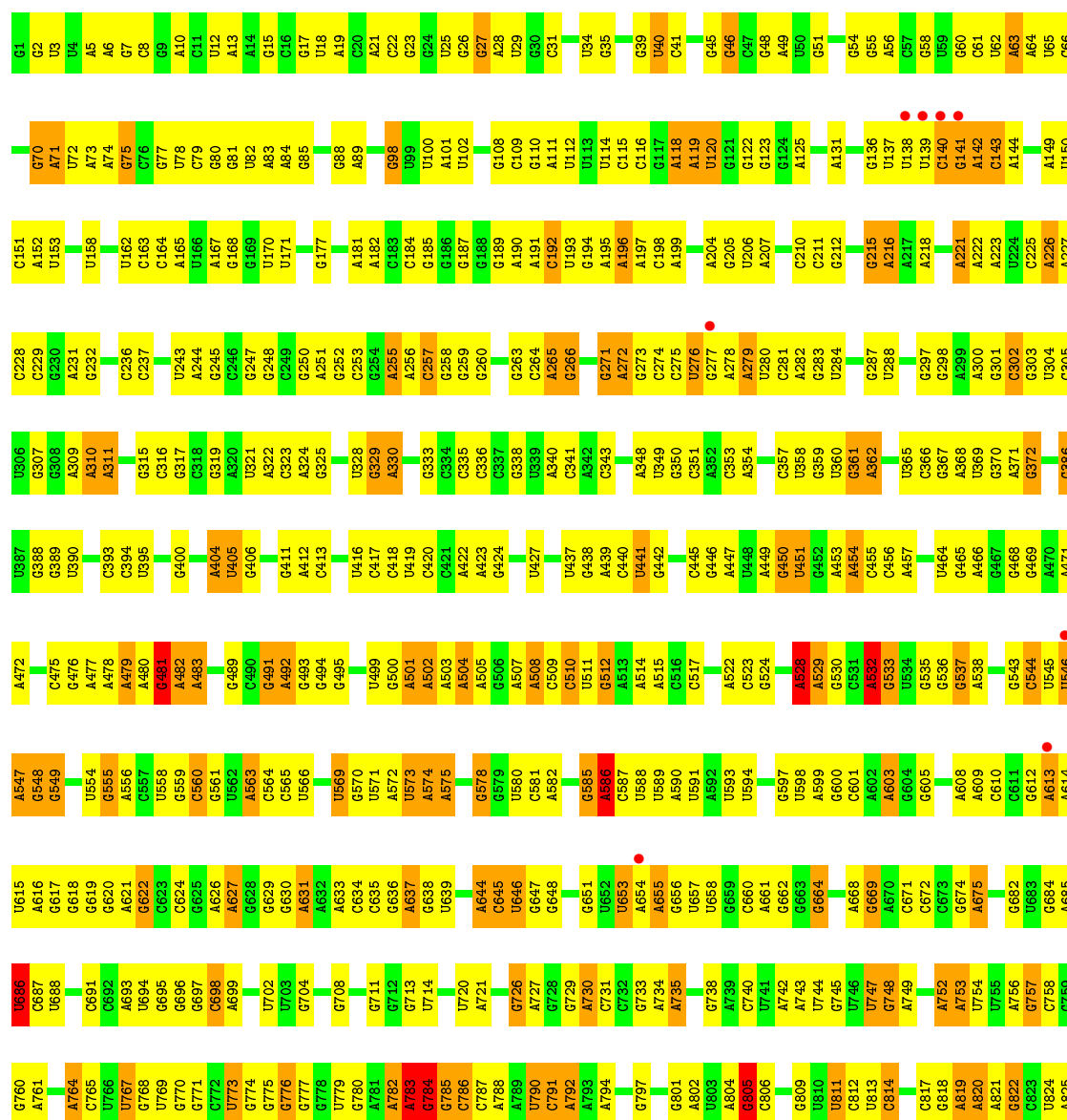




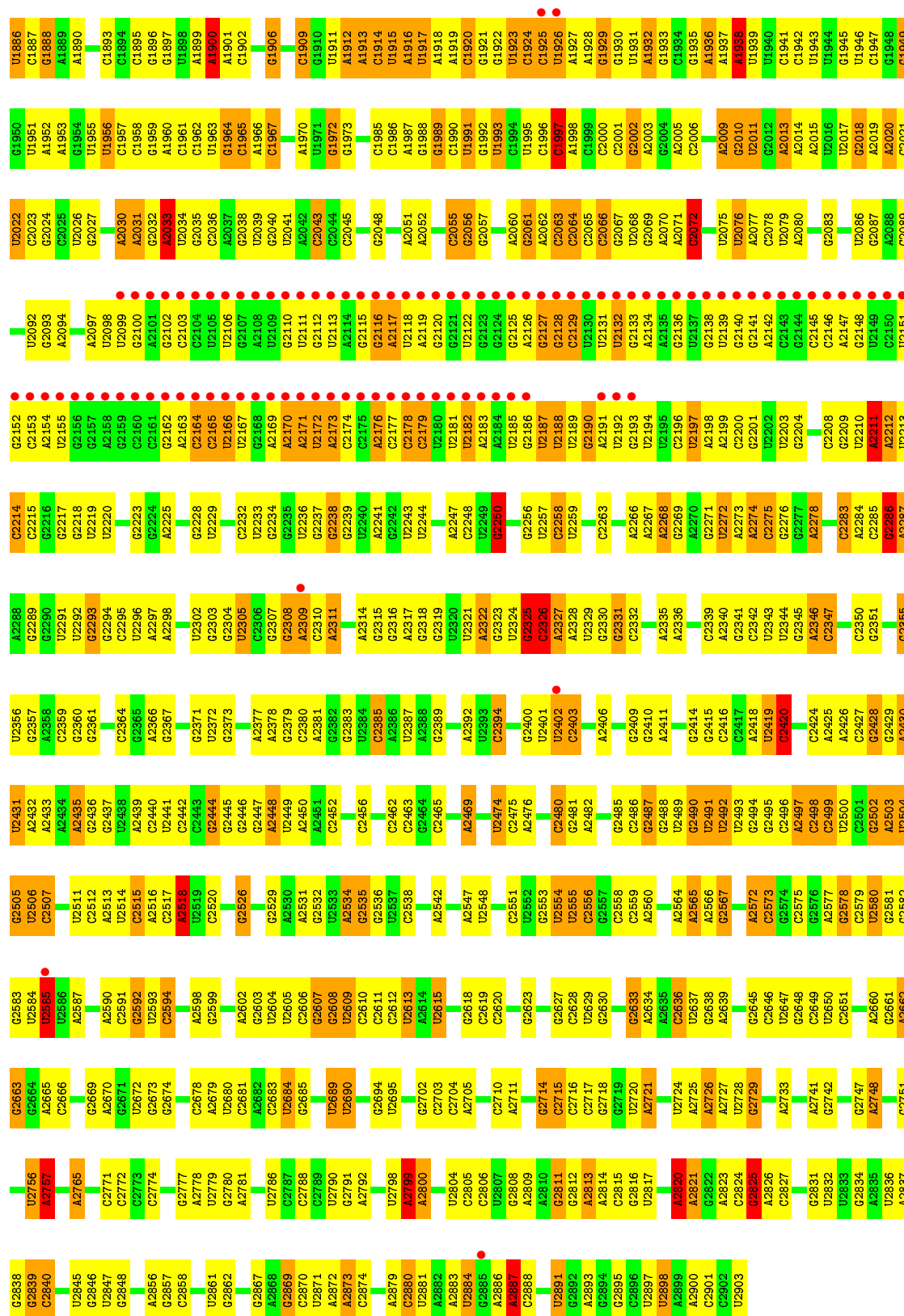
- Molecule 21: 30S ribosomal protein S21



- Molecule 22: 23S rRNA

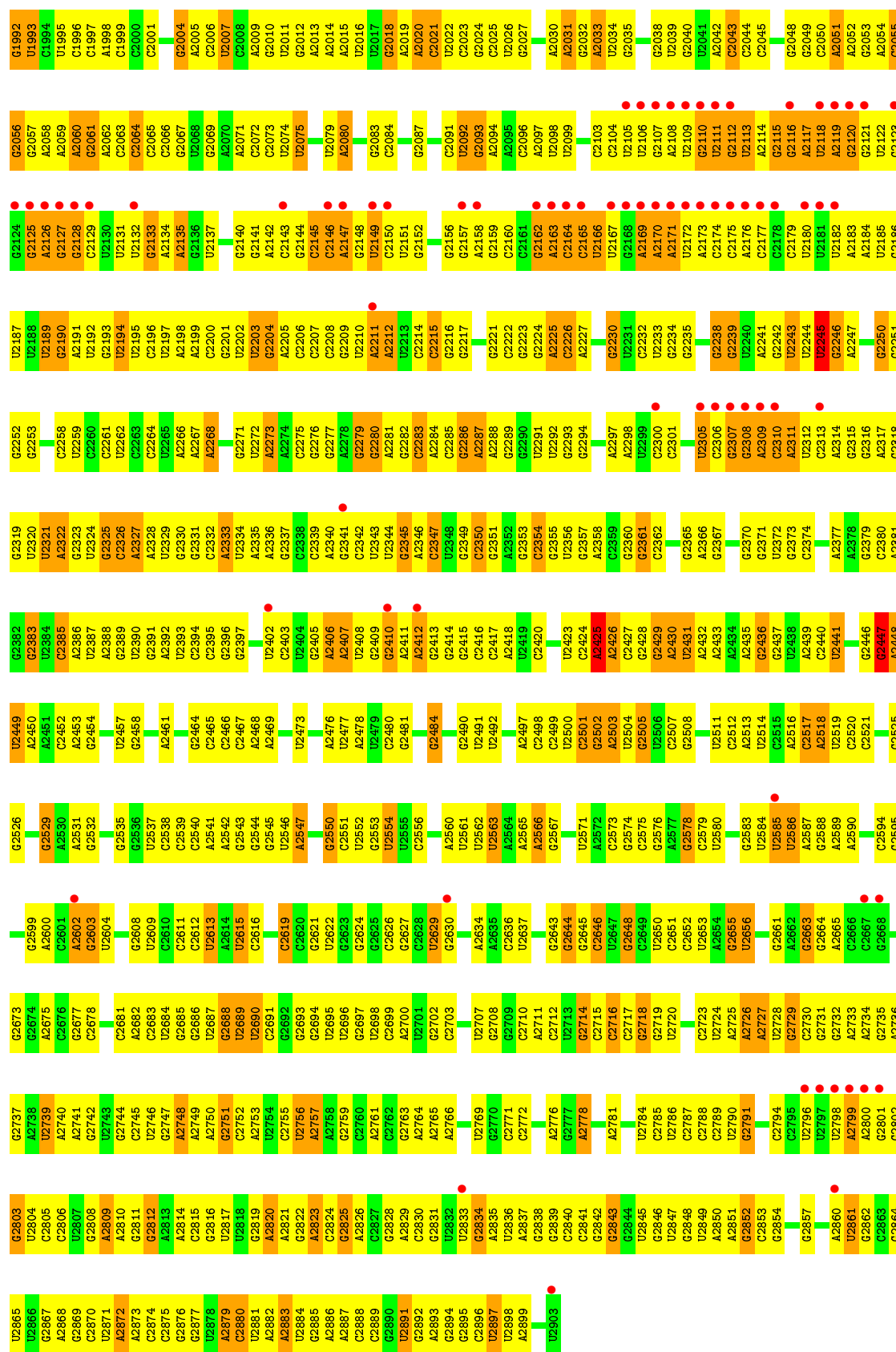


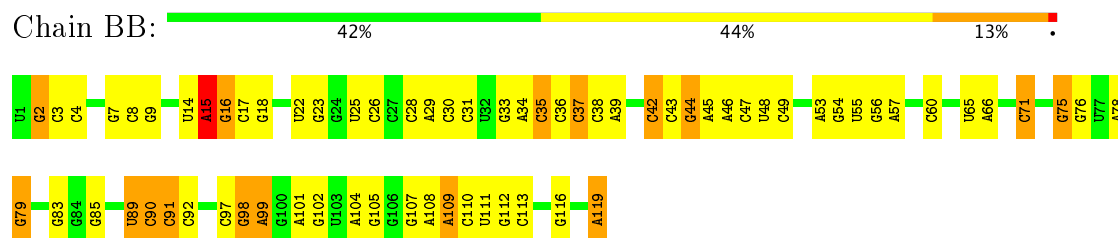
U1820	A1754	A1676	C1604	C1581	C1454	A1392	U1325	G1256	G1182	G1110	G1047	A972	A892	U826
A1821	A1677	A1677	C1605	A1582	G1485	A1393	U1326	G1257	U1183	A1111	A1048	A973	C893	U827
C1822	A1755	A1678	C1606	C1583	G1486	U1394	A1327	A1280	U1184	G1112	C1049	G974	U894	U828
C1823	G1756	A1679	C1607	U1534	U1457	A1395	A1328	C1261	G1185	G1115	A1050	A975	U895	U829
G1824	A1757	U1680	A1608	A1535	U1458	U1396	U1329	A1282	G1186	G1116	G1051	G976	A896	G830
	U1758	G1681	A1609	C1586		C1330	G1331	G1266	U1188		G1056	G978	C898	G831
U1827	A1759	G1682	A1610	G1537	G1484	G1401	G1332	U1267	U1189	G1120	A1057	A979	C899	U832
G1828	C1685		G1613	G1538	G1485	U1402	G1333	U1268	A1189	G1121	U1058	A980	A900	A833
A1829	G1686		G1614	U1539	U1466	A1403	A1269	C1270	G1190	C1121	U1059	A981	C901	G834
C1830	G1687		A1616	U1540	U1467	C1404	G1335	C1271	G1191	G1122	U1060	C982	G836	C835
G1831	G1688		C1617	A1545	U1468	U1405	A1336	G1272	G1192	G1125	U1061	A983	C837	C836
C1832	U1688		A1617	A1546	A1469	U1406	G1337	U1273	G1193		G1062	A984	C838	C837
C1833	A1689		G1620	C1547	A1470	G1407	G1338	U1274	G1194	G1128	G1063	C985	A910	C839
U1834			G1621	A1548	G1471	U1408	G1339	A1275	C1196				A911	U839
G1835	U1769		U1692	U1549	G1472	U1409	G1340	A1276	G1197	G1131	U1065	A988	C912	C940
	U1693		G1623	C1550	G1473	U1410	G1341	G1276	U1198	U1132	U1066	G989	G914	G941
C1838	A1773		U1624		G1474	U1411	A1342	A1277	U1199	A1133	A1067	A990	C915	U842
G1839	G1695		G1625	A1553	U1475	U1412			C1200	A1134	G1068	C991	G916	A845
U1840	G1696		A1626	U1554	G1478	U1413	G1346	U1282	U1203	C1135	A1069	C995	A917	U846
U1841	G1697		G1627	U1555	G1479	C1414	A1347	G1283	A1204	G1136	A1070	C996	A918	U847
U1842	A1698		G1628	U1556	U1480	U1415	C1348	A1286	A1205	G1137	G1071	G997	U919	U850
C1843	G1699		G1629	C1557	U1481	G1416	C1349	A1287	A1206	G1138	A1073	G998	A927	C851
G1844	A1700		A1632	U1558	G1482	G1417	G1350	A1288	G1207	G1139	G1074	U999	A928	U852
U1845	U1781		G1633	U1559	G1483	G1418	C1351	C1289	C1208	U1141	G1075	A1000	U929	C853
G1846	U1782		A1634	G1560	U1484	A1419	U1382	C1290	U1209	A1142	C1076	A1001	G930	
A1847	C1706		A1635		U1485	A1420	A1383	C1291	A1143		A1077		U931	G858
U1848			U1636	U1563	U1486	G1421	A1354	C1292	A1144			C1005	U932	G859
C1849	U1709		G1637	C1564	U1487	G1422	G1355	G1293	U1078		G1079	C1006	U933	U860
G1850	U1712		A1638	U1565	G1488	G1423	G1356	G1294	A1080		U1081	C1007	U934	A861
U1851	A1713		C1639	U1566	U1489	G1424	C1357	U1295	A1081		U1082	A1008	G885	A862
A1852	U1714		A1640	G1567	A1490	G1425	G1358	G1296	U1082		U1083	A1009	A863	A863
U1853	G1715		G1644	U1568	G1491	G1426	A1389	C1297	U1084		G1011	C937	G864	G864
A1854	U1716		G1645	U1569	U1492	A1427	G1360	C1298	C1153		U1012	U1012	G938	G865
U1855	G1717		A1570	C1493	G1493	G1428	G1361	C1299	G1154		A1085	A1013		A866
U1856	G1718		A1571	G1494	U1494	G1429	G1365	G1300	A1086			C1013	A941	
G1857	U1719		U1647	A1495	A1495	G1430	A1366	A1301	G1087		A1087	A1014	G942	C867
A1858	U1720		U1648	C1575	A1496	G1431	A1367	A1302	C1157		A1088	A1015	A943	U868
	G1721		G1649	U1576		G1432		A1303	C1158		A1089	C944	U870	G869
U1864	U1796		A1650	C1577	C1499	A1433	U1372	A1304	U1230		A1090	A1020	A945	U871
U1865	G1797		G1651	U1578	G1500	A1434	A1373	C1305	U1231		G1091	A1021	C946	U872
A1866	U1798		G1652	U1579	U1501	G1435	G1374	C1306	A1237		G1092	G1022	A947	
G1867	G1799		G1653	A1583	A1502	G1436	U1375		U1238		G1093		C948	G875
C1868	G1731		G1653	U1584	A1503	C1437	C1376	G1309	G1238		U1094	G1026	C948	C876
G1869	G1732		G1658	U1585	A1504	U1438	G1377	G1310	U1239		A1095	A1027	G953	C877
C1870	G1733		G1659	A1586		A1439	A1378	G1311	U1240		A1096	A1028	G954	A877
A1871	A1803		G1663	C1587	C1507	U1440	U1379	U1241	G1168		U1097	A1096	U955	G879
A1872	C1804		G1664	U1588	A1508	U1441	U1379	U1242	G1169		G1031	G1031	G956	G880
G1873	A1805		A1664	U1589	A1509	U1442	G1380	U1312	G1170		U1032	U1032	C957	G881
C1874	G1806		A1665	U1590	G1510	U1443	G1381	C1314	G1171		G1100	U1033	U958	G882
G1875	G1807		G1666	A1590	G1511	G1444	G1382	C1315	C1172		U1101		A959	G883
A1876	A1808		G1667	U1591	C1512	G1445	A1383	U1316	U1173		C1102	G1036	G961	U884
U1877	G1740		A1668	C1592	U1513	C1446	A1384	G1317	A1174		A1103	A1040	G962	C885
G1878	A1744		A1669	U1593	G1514	C1447	A1385	U1318	U1175		C1103			A
C1879	G1812		G1670	U1594	G1448	A1448	A1386	G1319	U1176		U105			U
U1880	G1813		U1594	A1595	G1515	G1449	A1387	C1320	G1177		G1106	C1043	U967	C
A1881			A1597	A1528	G1516	G1450	G1388	A1321	C1178		G1107	C1044	G968	C
U1882	U1747		A1597	U1602	A1528	G1450	G1389	A1322	C1179		U1108	C1045	C	C
U1883	G1748		U1602	C1451	G1452	G1451	G1390	C1323	A1254		U1109	A1046	G971	G
G1884	A1749		A1603	U1603	G1530	A1453	U1391	G1324	U1255		C1109			



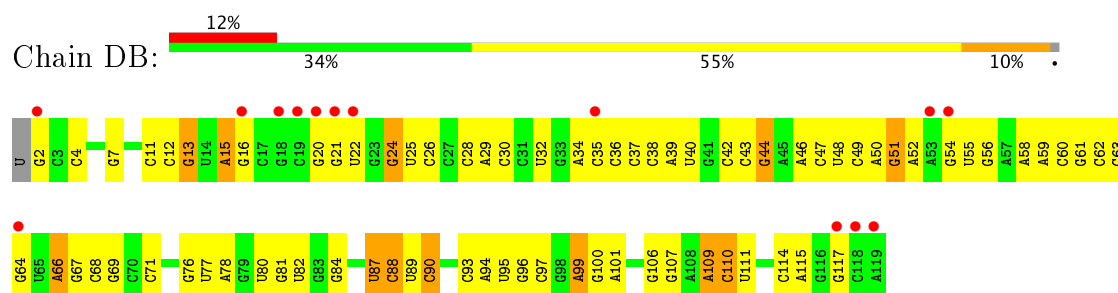


C1924	A1853	G1790	G1724	G1649	G1575	G1510	A1439	G1371	G1311	A1244	G1182	A1103	G1041	C961
C1925	A1854	A1791	U1725	A1650	U1576	G1511	U1440	U1372	U1312	G1245	U1183	C1104	G1042	G962
U1926	U1855	G1792	C1726	G1651	G1577	C1512	U1441	A1373	U1313	A1246	U1184	U1105	C1043	U963
G1927	U1856	C1793	C1727	A1652	U1578	C1513	U1442	G1374	C1314	A1247	G1185	G1106	C1044	C964
A1928	G1857	A1794	G1728	G1653	U1579	G1514	U1443	U1375	U1315	G1248	G1186	G1107	C1045	G965
G1929	A1858	U1797	U1729	G1654	G1581	G1515	G1444	C1376	U1316	U1249	G1187	U1108	A1046	G966
G1930	U1859	G1798	G1730	A1655	C1582	G1519	G1445	G1377	G1317	G1250	U1188	G1109	G1047	G969
U1931	G1860	G1799	G1731	C1656	A1583	U1520	C1446	U1378	U1318	G1251	A1189	G1110	A1048	U970
A1932	G1861	U1799	C1732	U1657	U1584	G1521	G1447	G1379	G1319	G1252	G1190	A1111	C1049	U971
G1933	G1862	C1800	G1733	C1658	C1585	U1523	G1448	G1380	G1381	A1253	G1193	G1112	A1050	A972
C1934	G1863	A1801	G1734	G1659	A1586	G1524	G1449	G1381	A1321	A1254	G1194	G1115	G1051	A973
G1935	G1864	A1802	A1735	G1660	G1587	A1525	G1452	G1382	A1322	G1255	G1195	G1116	C1052	G974
A1936	U1865	A1803	U1736	G1661	G1588	C1526	A1453	A1383	C1323	G1256	G1196	G1118	A1054	
	A1866	U1804	G1737	U1662	U1589	G1527	G1454	A1384	U1325	C1257	C1197			
A1937	G1867	A1805	G1738	G1663	A1591	A1528	G1455	U1390	U1326	A1258	U1198	U1119	G1055	A979
U1938	C1868	C1806	A1739	A1664	G1582	G1529	G1456	U1391	A1327	G1259	G1199	G1120	G1056	A980
	G1869	G1807	G1740	A1665	C1593	G1530	U1457	A1392	G1328	G1261	A1200	G1121	A1057	A981
U1943	C1870	A1808	C1741	G1666	A1593	C1531	U1458	A1393	U1329	A1262	U1203	G1123	U1058	A982
U1944	A1871	A1809	U1742	G1667	U1594	A1532	U1459	U1394	G1330	U1263	U1204	G1124	U1059	A983
G1945	A1872	A1810	G1743	C1668	C1595	C1533	U1460	A1395	C1331	U1264	A1205	G1125	U1060	A984
U1946	G1873	G1811	A1744	A1669	A1596	U1534	G1461	U1396	G1332	A1265	G1206	G1126	U1061	A990
C1947	G1874	A1812	A1745	C1670	A1597	A1535	C1462	U1397	G1333	G1266	G1207	G1127	G1062	
G1948	G1875	G1813	U1745	U1671	A1598	C1536	C1463	C1398	G1334	U1267	C1208	G1128	G1064	C995
G1949	A1876	G1814	G1750	A1672	G1600	G1537	G1464	C1399	C1335	C1268	C1209	G1131	U1065	A996
G1950	A1877	A1815	U1751	G1673	C1601	G1538	G1465	U1400	A1336	A1269	U1209	G1132	U1066	C997
U1951	G1878	C1816	C1752	G1674	U1602	C1539	U1466	G1401	G1337	G1270	G1210	A1133	A1067	C998
A1952	C1879	G1817	G1753	C1675	A1603	G1540	U1467	U1402	G1338	G1271	G1211	A1134	A1069	
G1953	A1880	A1818	A1754	A1676	C1604	C1541	U1468	A1403	G1339	U1272	G1212	A1135	A1070	G1002
G1954	G1881	A1819	G1755	A1677	C1605	U1542	A1469	C1404	U1340	U1273	A1213	G1136	A1071	G1003
U1955	U1882	U1820	G1756	A1678	C1606	G1543	A1470	U1405	G1341	A1274	A1214	G1137	C1072	
U1956	U1883	A1821	A1757	A1679	C1607	A1544	G1471	U1406	A1342	A1275	G1215	G1138	A1073	C1006
C1957	G1884	C1822	U1758	U1680	C1608	A1545	G1472	G1407	G1343	A1276	U1216	G1139	G1074	A1009
G1958	A1885	G1823	U1759	A1681	A1609	C1546	U1475	G1408	U1344	G1277	U1217	C1140	C1075	A1010
G1959	U1886	U1824	G1760	G1682	A1610	G1547	A1476	U1409	G1345	G1281	G1219	U1141	C1076	G1011
		U1825	C1761	A1611	A1548	A1548	A1477	G1410	A1346	U1282	G1221	A1142	A1077	U1012
G1964	A1889	G1826	G1764	U1688	G1613	A1551	C1480	U1411	C1347		G1222	A1143	U1078	G1013
C1965	A1890	U1827	U1765	U1689	A1616	A1552	U1481	U1412	C1348		G1223	A1147	U1082	A1014
A1966	C1892	G1828	U1766	U1692	C1617	A1553	G1482	A1413	C1349	A1286	G1224	G1153	U1083	A1015
C1967		A1829	G1767	U1693	A1618	G1554	G1483		C1350	A1287	G1225	G1154	A1084	G1016
	G1896	G1830	C1768	C1694	A1618	G1555	U1484	G1417	U1352	G1288	A1226	G1155	A1085	A1020
U1970	U1897	G1831	U1769	G1695	U1621	C1556	U1485	G1418	A1353	C1289	G1227	A1155	A1086	A1021
G1972	A1899	C1832			G1622	C1557	U1486	A1419	A1354	C1293	G1228	G1167	G1087	G1022
G1973		A1834	A1773	A1698	G1623	G1558	U1487	A1420	G1355	U1294	C1229	C1167	A1088	U1023
C1974	G1903	G1835	C1774	G1707	U1624	G1560	C1488		C1356	A1297	A1230	G1168	A1089	G1024
G1975	G1904	C1837	G1775	G1708	C1625	C1561	C1489	G1426	C1357	C1298	U1231	A1169	A1090	G1025
U1978	G1906	G1838	U1777	U1709	A1626	U1562		A1427	A1358	G1299	G1232	G1170	G1091	G1026
G1980	U1907	G1839	U1778	G1710	G1627	C1563	G1493	C1428	G1360	G1300	G1233	G1171	G1092	A1027
A1981	G1911	U1712	U1779	U1711	G1628	C1564		G1429	G1361	A1301	U1234	C1172	G1093	A1028
U1982	C1843	A1780	U1781	U1713	C1638	U1565	G1500		C1362	G1293	G1235	U1173	U1094	A1029
G1983	G1844	U1782	U1783	C1639	A1641	A1566	A1501	G1430	C1363	A1304	G1236	U1174	A1095	C1030
C1984	G1845	U1784	G1785	A1640	A1641	G1567	A1502	G1432	G1364	A1305	A1237	A1175	A1096	
G1985	U1915	A1784	U1716	G1568	A1504	C1568	A1503	A1433	A1365	C1306	G1238	G1176	U1097	U1033
C1986	A1916	A1717	A1717	A1569	A1505	A1570	A1506	A1434	A1366	C1307	G1239	G1177	A1098	G1034
	U1917	G1849	A1786	G1645	U1506	A1571	U1507	G1435	A1367	A1308	U1240	C1178	G1099	U1035
G1989	C1918	G1850	A1787	C1646	C1507	A1572	A1508	G1436	A1368	C1437	U1242	G1179	U1101	G1036
C1990	A1919	U1851	C1788	U1647	A1508		A1509	C1437	G1369	G1310	C1243	U1180	C1102	A1040
U1991	C1920	U1852	A1789	G1723	U1648	C1574		U1438	C1370			U1181		

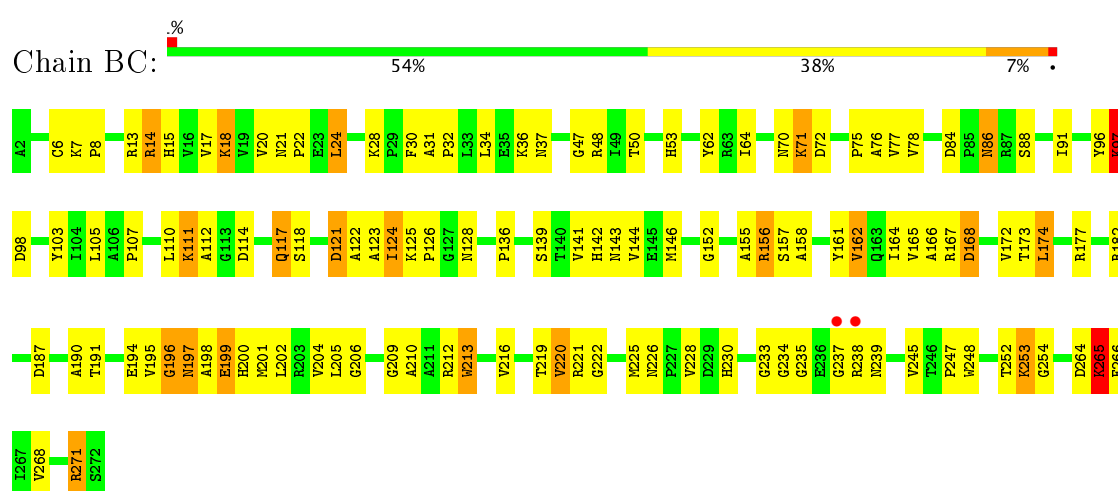




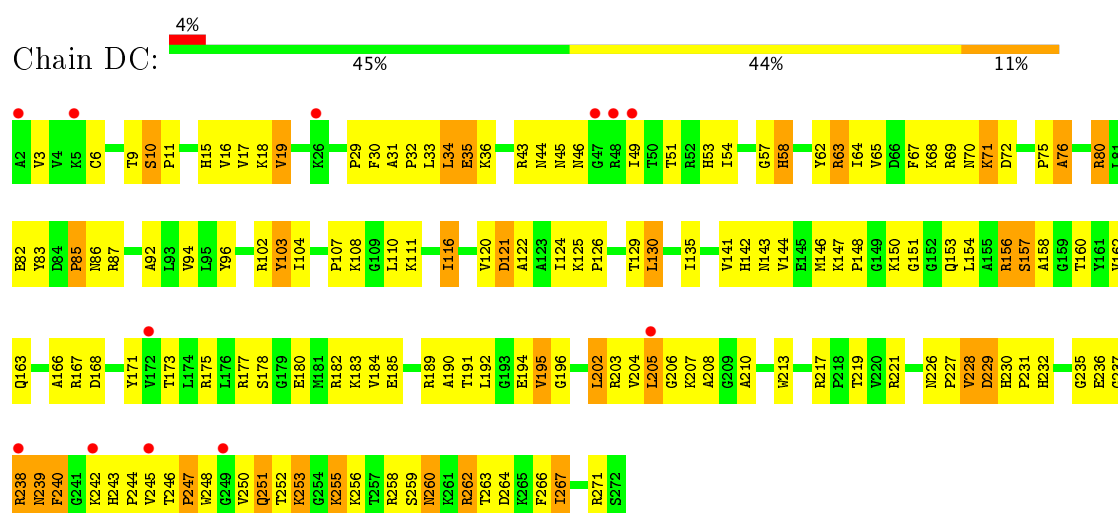
• Molecule 23: 5S rRNA



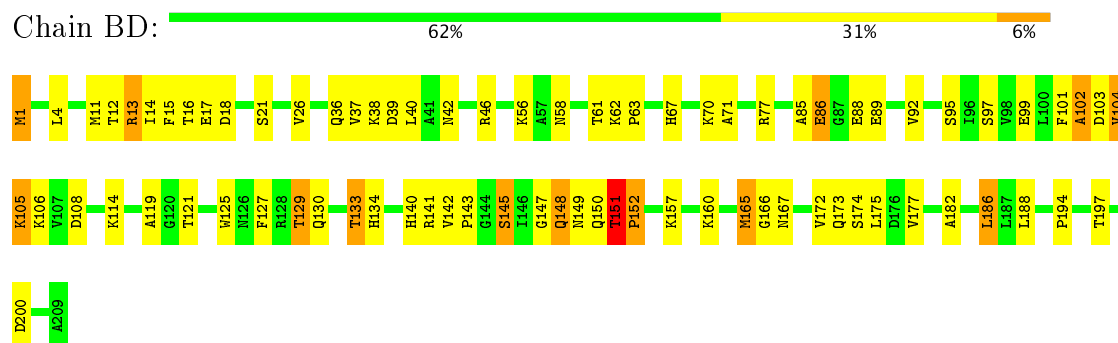
• Molecule 24: 50S ribosomal protein L2



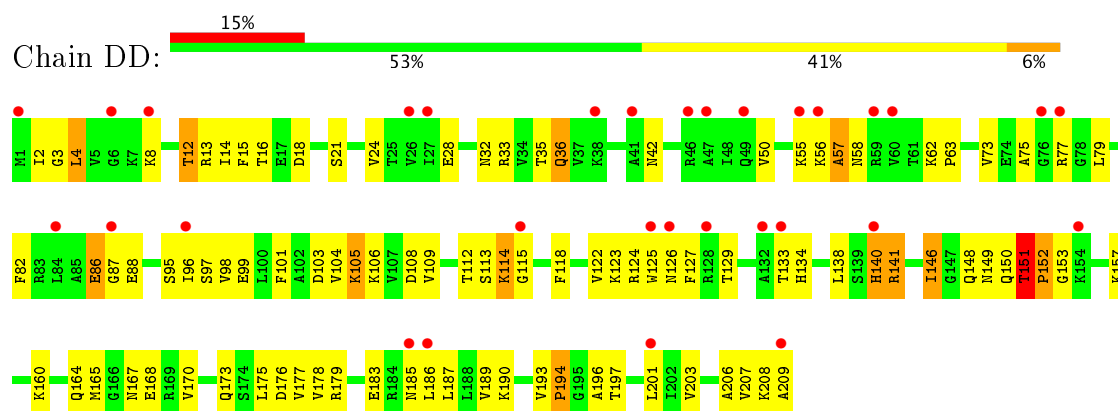
• Molecule 24: 50S ribosomal protein L2



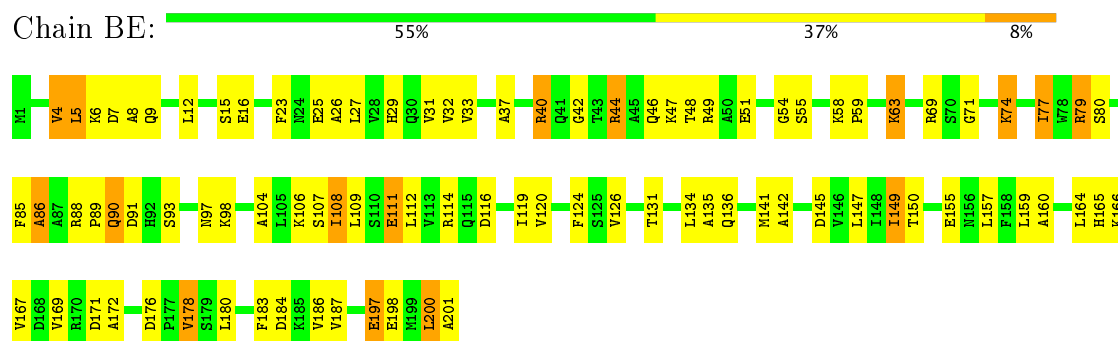
- Molecule 25: 50S ribosomal protein L3



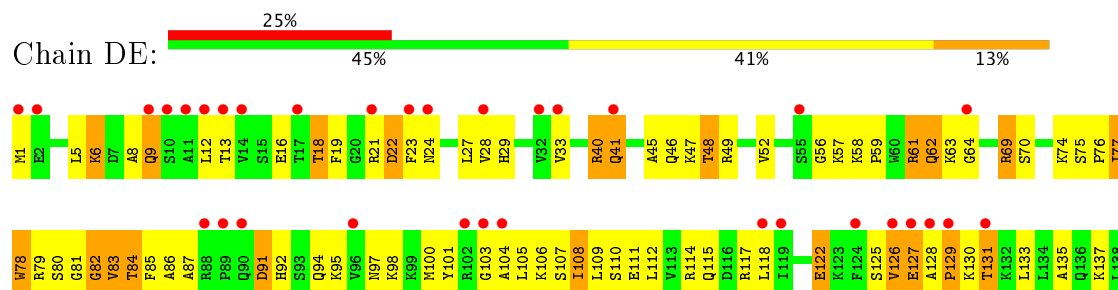
- Molecule 25: 50S ribosomal protein L3

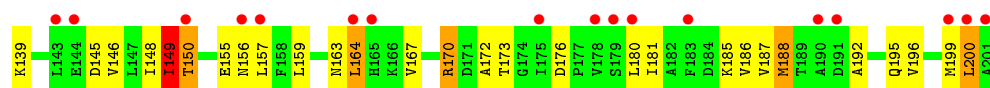


- Molecule 26: 50S ribosomal protein L4

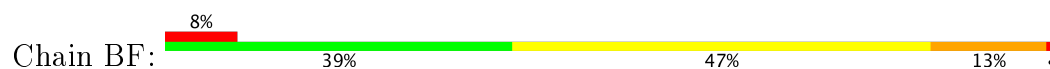


- Molecule 26: 50S ribosomal protein L4





• Molecule 27: 50S ribosomal protein L5



• Molecule 27: 50S ribosomal protein L5



• Molecule 28: 50S ribosomal protein L6

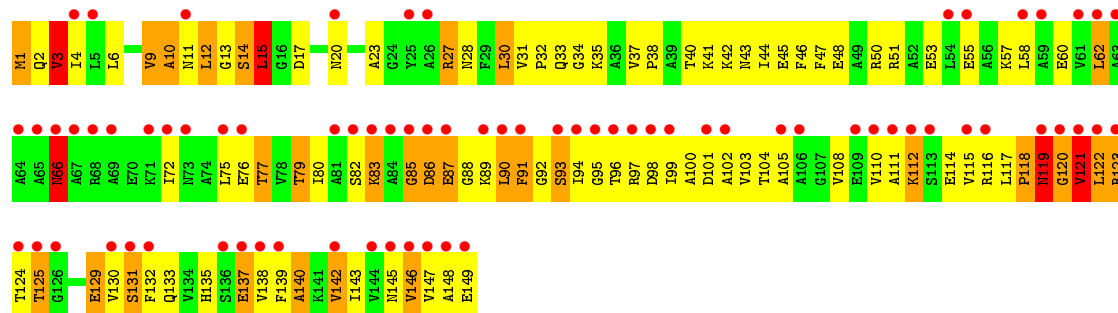


• Molecule 28: 50S ribosomal protein L6

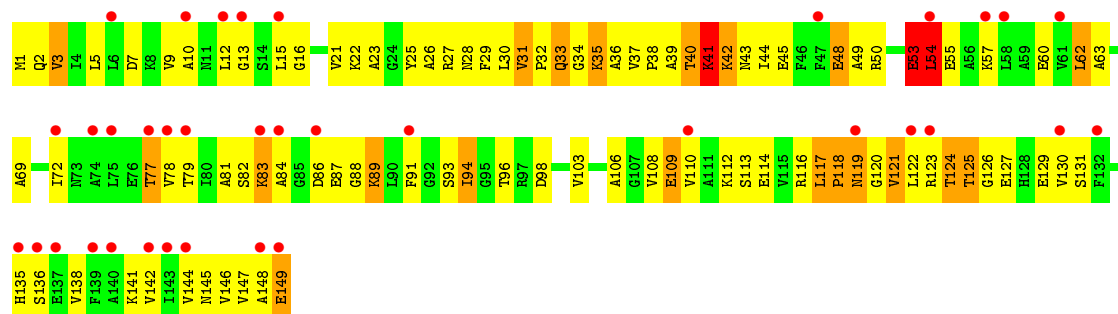




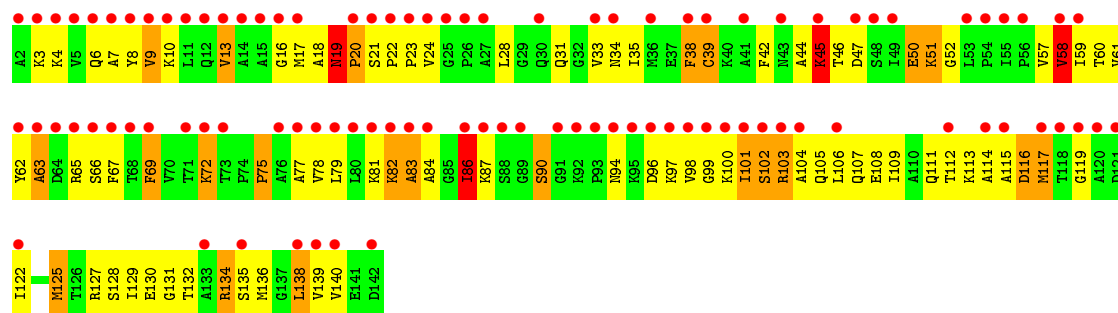
• Molecule 29: 50S ribosomal protein L9



• Molecule 29: 50S ribosomal protein L9

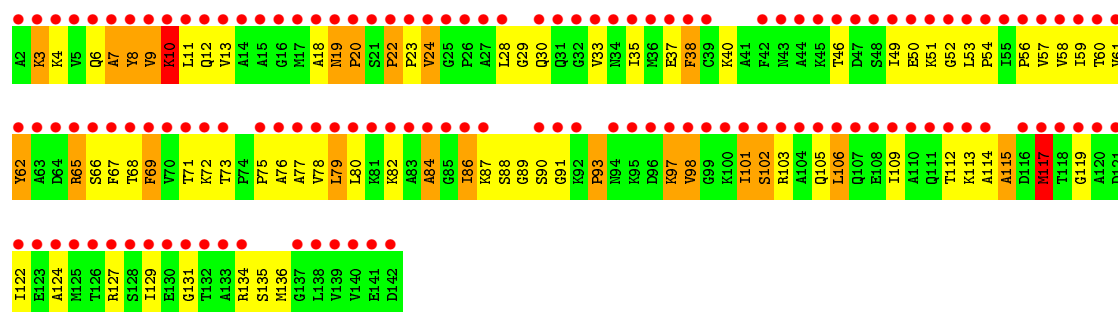


• Molecule 30: 50S ribosomal protein L11



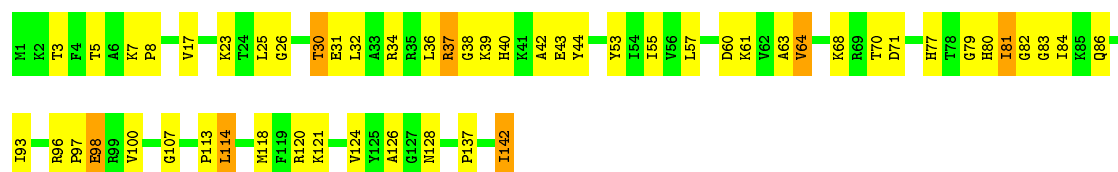
• Molecule 30: 50S ribosomal protein L11





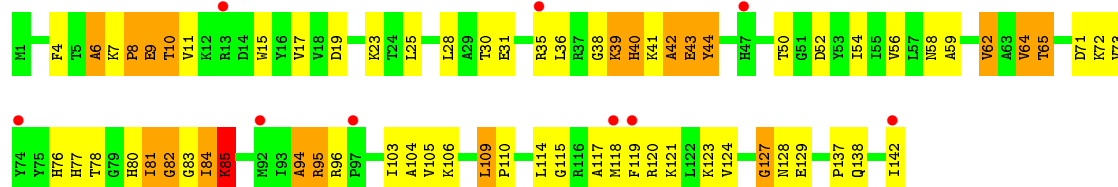
- Molecule 31: 50S ribosomal protein L13

Chain BJ: 62% 33% 5%



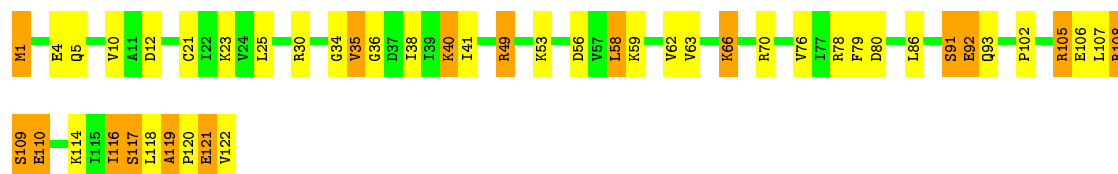
- Molecule 31: 50S ribosomal protein L13

Chain DJ: 6% 51% 35% 13%



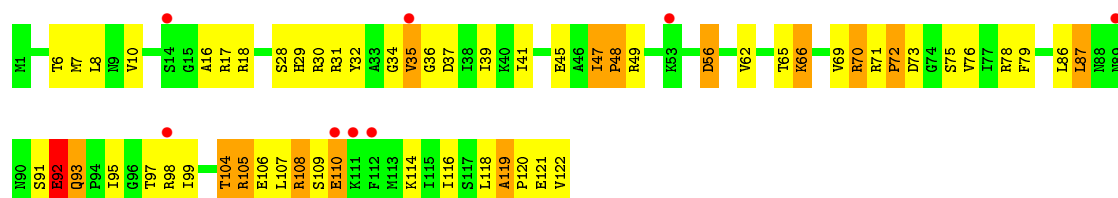
- Molecule 32: 50S ribosomal protein L14

Chain BK: 61% 25% 13%

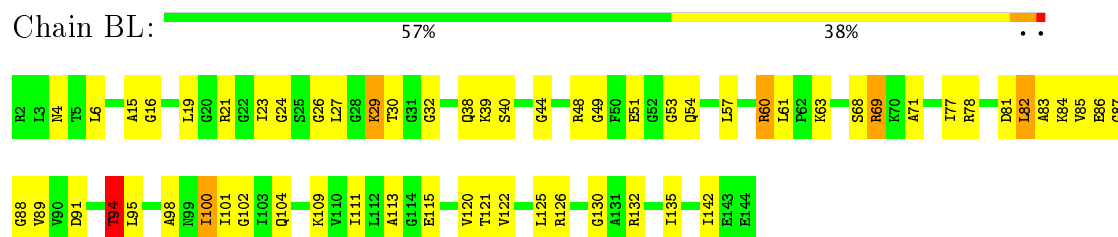


- Molecule 32: 50S ribosomal protein L14

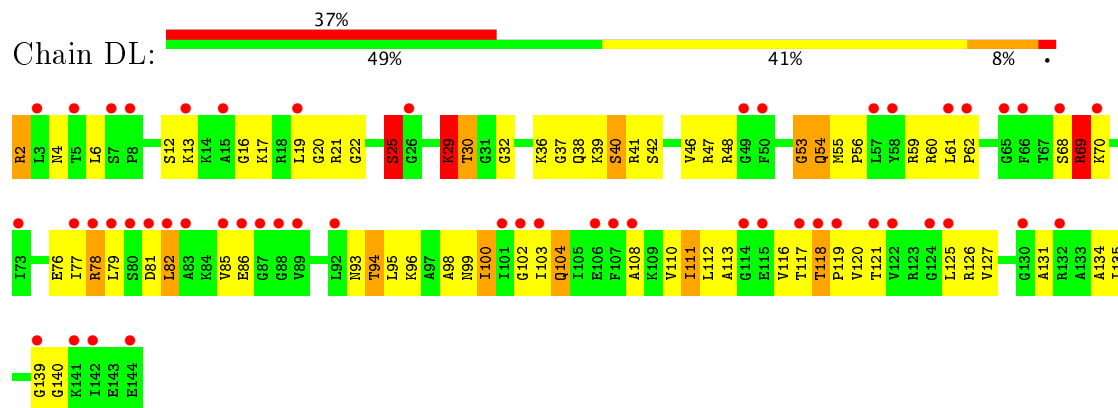
Chain DK: 7% 52% 35% 11%



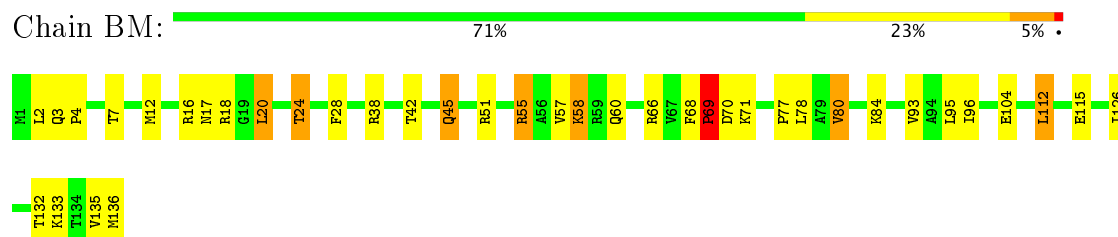
- Molecule 33: 50S ribosomal protein L15



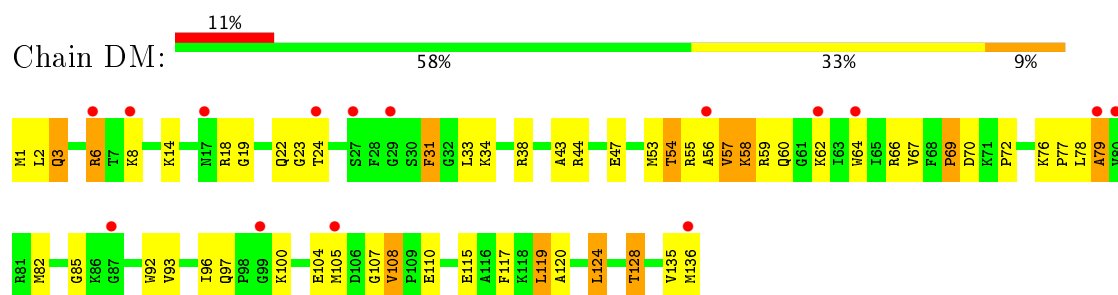
- Molecule 33: 50S ribosomal protein L15



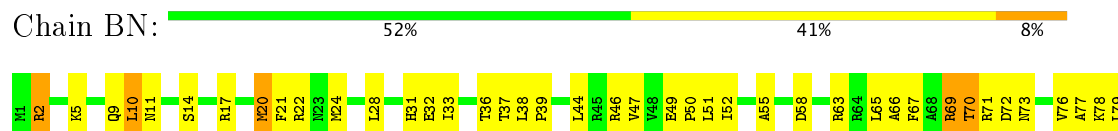
- Molecule 34: 50S ribosomal protein L16



- Molecule 34: 50S ribosomal protein L16

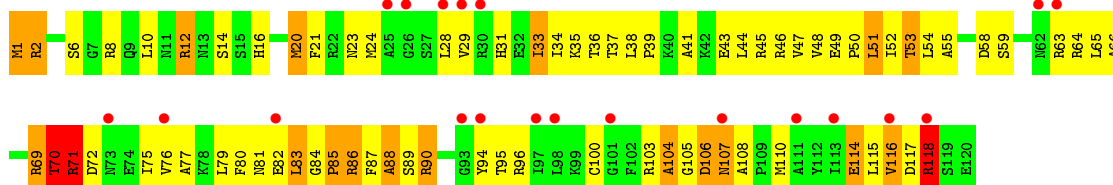


- Molecule 35: 50S ribosomal protein L17

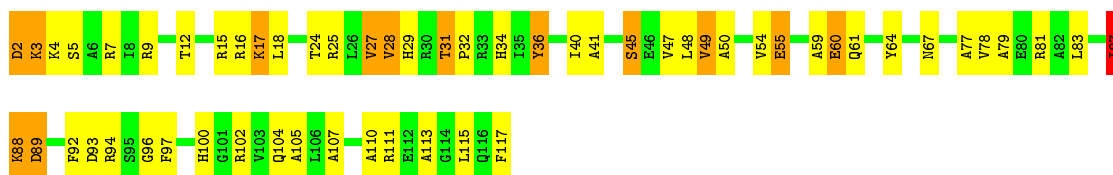




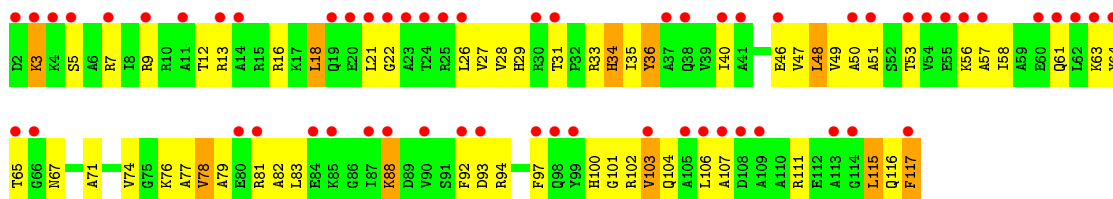
• Molecule 35: 50S ribosomal protein L17



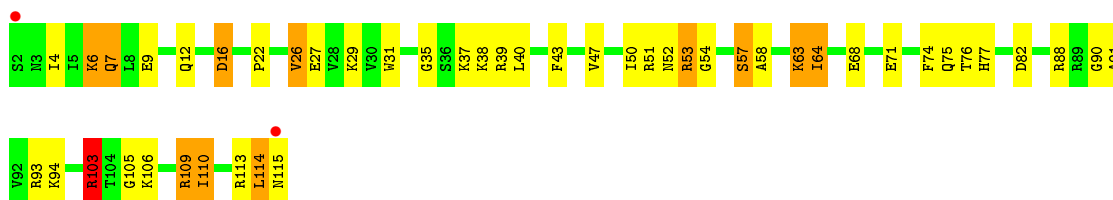
• Molecule 36: 50S ribosomal protein L18



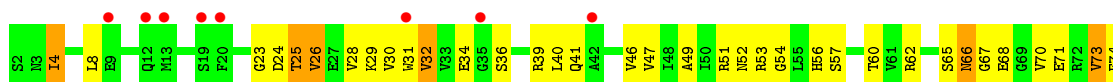
• Molecule 36: 50S ribosomal protein L18

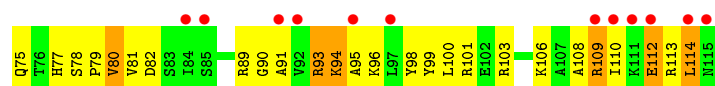


• Molecule 37: 50S ribosomal protein L19

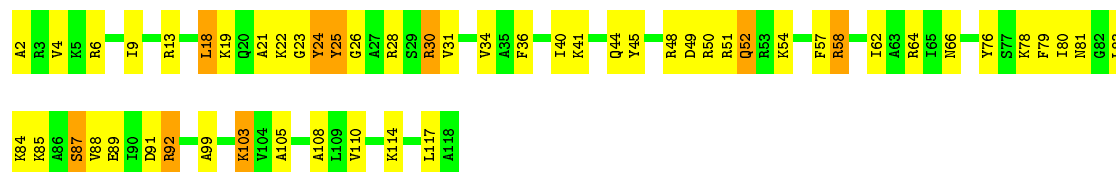


• Molecule 37: 50S ribosomal protein L19

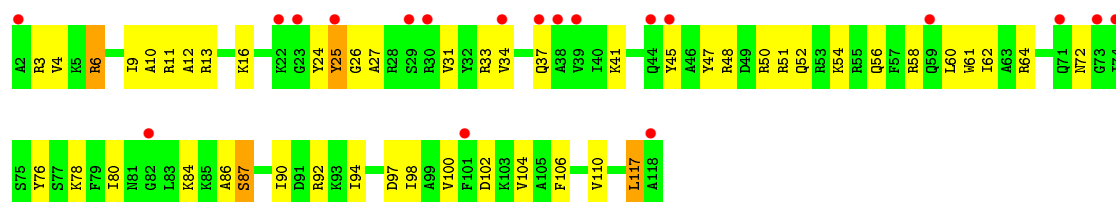




• Molecule 38: 50S ribosomal protein L20



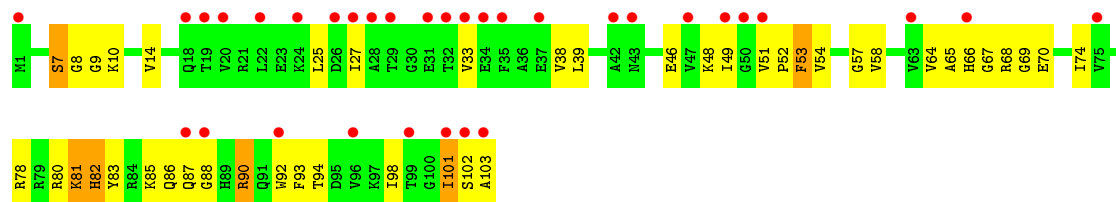
• Molecule 38: 50S ribosomal protein L20



• Molecule 39: 50S ribosomal protein L21

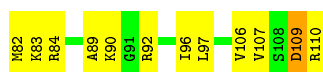


• Molecule 39: 50S ribosomal protein L21



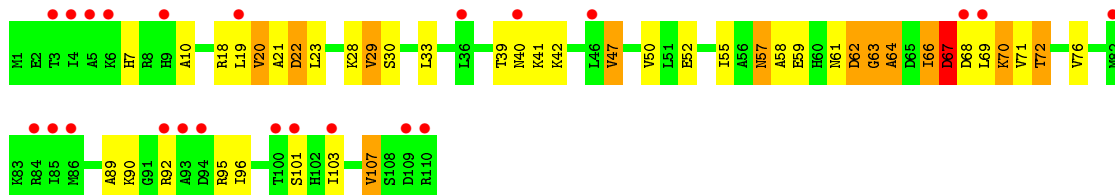
• Molecule 40: 50S ribosomal protein L22





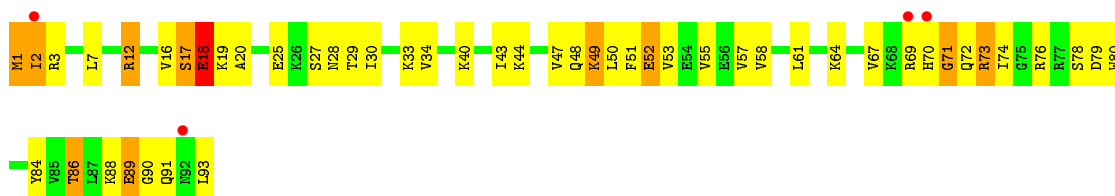
• Molecule 40: 50S ribosomal protein L22

Chain DS: 21% 61% 27% 11%



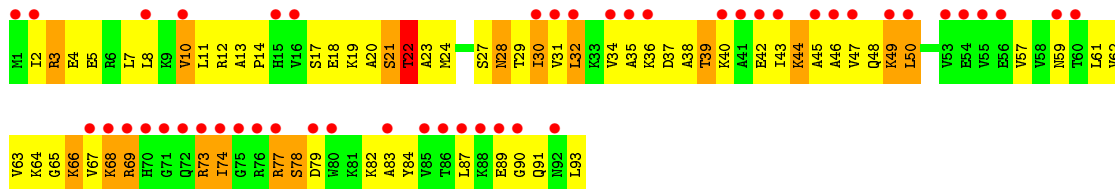
• Molecule 41: 50S ribosomal protein L23

Chain BT: 4% 46% 42% 11%



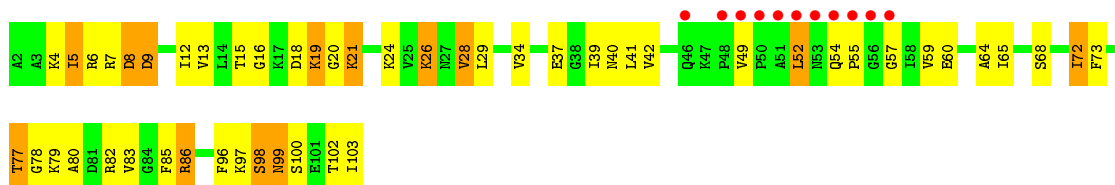
• Molecule 41: 50S ribosomal protein L23

Chain DT: 52% 30% 51% 18%



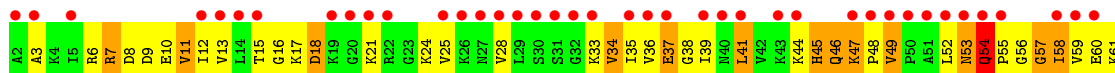
• Molecule 42: 50S ribosomal protein L24

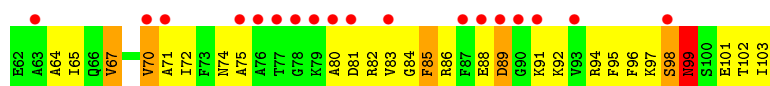
Chain BU: 11% 50% 37% 13%



• Molecule 42: 50S ribosomal protein L24

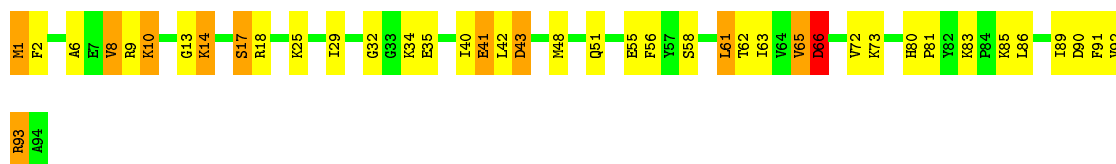
Chain DU: 57% 32% 48% 18%





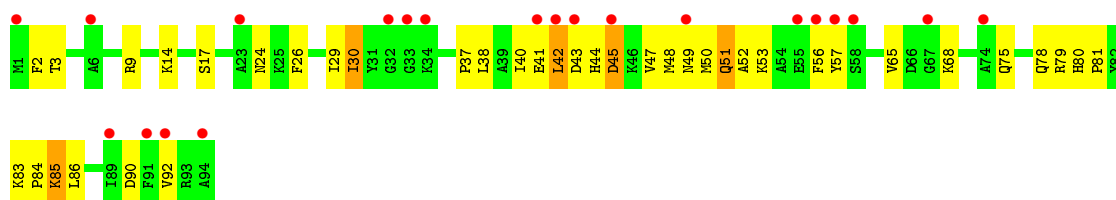
- Molecule 43: 50S ribosomal protein L25

Chain BV: 56% 32% 11% .



- Molecule 43: 50S ribosomal protein L25

Chain DV: 22% 59% 36% 5%



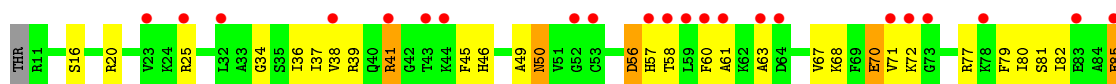
- Molecule 44: 50S ribosomal protein L27

Chain BW: % 67% 29% .



- Molecule 44: 50S ribosomal protein L27

Chain DW: 29% 59% 33% 7% .



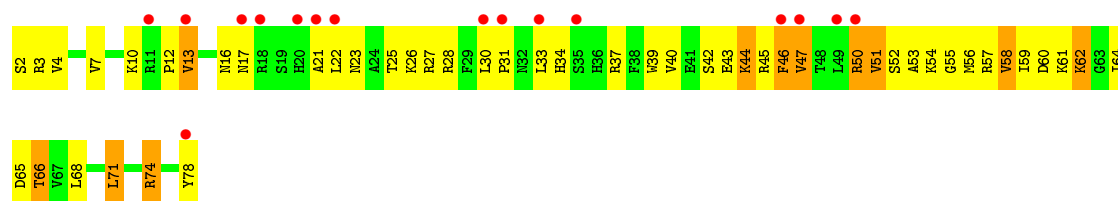
- Molecule 45: 50S ribosomal protein L28

Chain BX: 64% 30% 6%

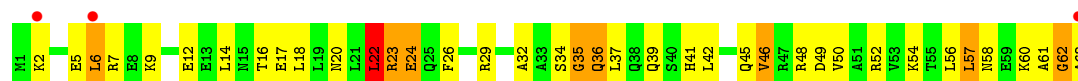
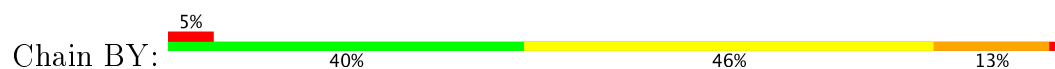


- Molecule 45: 50S ribosomal protein L28

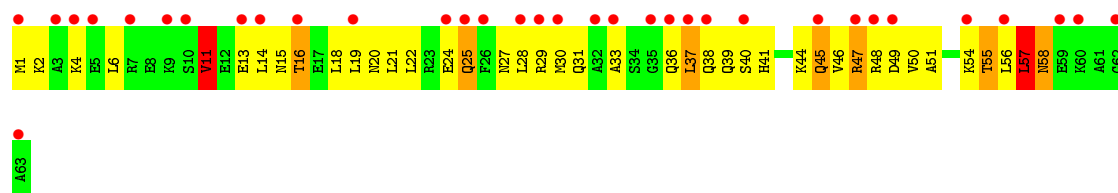
Chain DX: 21% 36% 49% 14%



- Molecule 46: 50S ribosomal protein L29



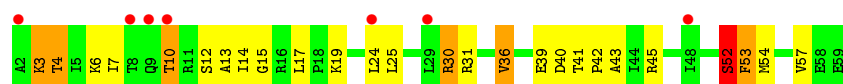
- Molecule 46: 50S ribosomal protein L29



- Molecule 47: 50S ribosomal protein L30



- Molecule 47: 50S ribosomal protein L30

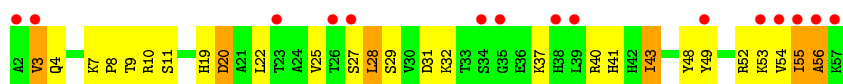


- Molecule 48: 50S ribosomal protein L32

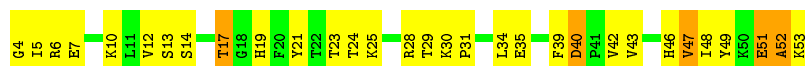


- Molecule 48: 50S ribosomal protein L32

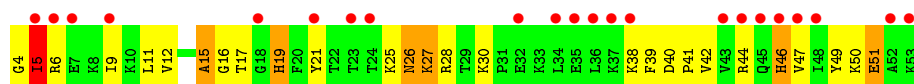




- Molecule 49: 50S ribosomal protein L33



- Molecule 49: 50S ribosomal protein L33



- Molecule 50: 50S ribosomal protein L34



- Molecule 50: 50S ribosomal protein L34



- Molecule 51: 50S ribosomal protein L35



- Molecule 51: 50S ribosomal protein L35

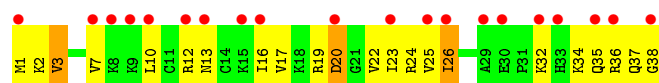
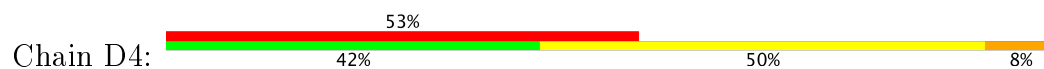


- Molecule 52: 50S ribosomal protein L36

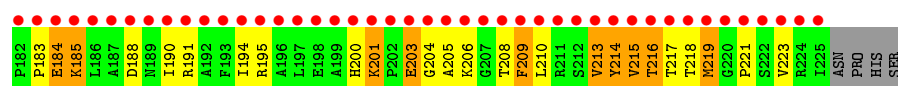
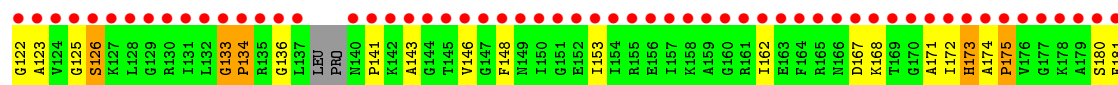
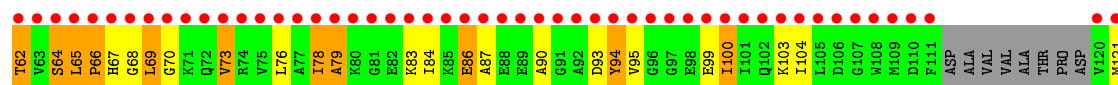
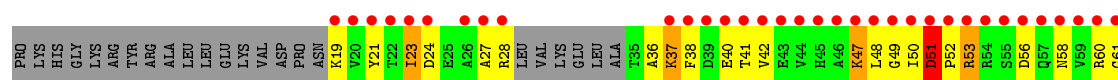
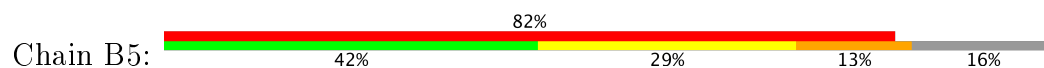




- Molecule 52: 50S ribosomal protein L36



- Molecule 53: 50S ribosomal protein L1



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	210.21Å 433.03Å 619.20Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	39.97 – 2.90 39.97 – 2.90	Depositor EDS
% Data completeness (in resolution range)	94.9 (39.97-2.90) 94.9 (39.97-2.90)	Depositor EDS
R_{merge}	0.12	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.40 (at 2.90Å)	Xtriage
Refinement program	PHENIX (phenix.refine: 1.8.1_1168)	Depositor
R, R_{free}	0.220 , 0.264 0.228 , 0.272	Depositor DCC
R_{free} test set	4701 reflections (0.40%)	DCC
Wilson B-factor (Å ²)	44.0	Xtriage
Anisotropy	0.529	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.27 , 51.6	EDS
L-test for twinning ²	$\langle L \rangle = 0.45$, $\langle L^2 \rangle = 0.27$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.91	EDS
Total number of atoms	288276	wwPDB-VP
Average B, all atoms (Å ²)	62.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.55% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

5 Model quality ⓘ

5.1 Standard geometry ⓘ

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

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# $ Z > 5$	RMSZ	# $ Z > 5$
1	AA	0.46	0/36944	0.92	22/57632 (0.0%)
1	CA	0.39	0/36966	0.86	4/57666 (0.0%)
2	AB	0.36	0/1736	0.58	0/2338
2	CB	0.32	0/1736	0.53	0/2338
3	AC	0.35	0/1652	0.57	0/2225
3	CC	0.31	0/1652	0.51	0/2225
4	AD	0.36	0/1665	0.61	0/2227
4	CD	0.39	0/1665	0.61	0/2227
5	AE	0.38	0/1119	0.66	0/1504
5	CE	0.37	0/1119	0.65	0/1504
6	AF	0.39	0/836	0.60	0/1128
6	CF	0.33	0/836	0.58	0/1128
7	AG	0.34	0/1196	0.52	0/1602
7	CG	0.31	0/1196	0.51	0/1602
8	AH	0.38	0/989	0.57	0/1326
8	CH	0.31	0/989	0.52	0/1326
9	AI	0.33	0/1034	0.58	0/1375
9	CI	0.31	0/1034	0.55	0/1375
10	AJ	0.36	0/797	0.59	0/1077
10	CJ	0.31	0/797	0.52	0/1077
11	AK	0.36	0/893	0.67	1/1205 (0.1%)
11	CK	0.32	0/893	0.55	0/1205
12	AL	0.41	0/969	0.65	0/1300
12	CL	0.37	0/969	0.63	0/1300
13	AM	0.36	0/893	0.59	0/1193
13	CM	0.32	0/893	0.52	0/1193
14	AN	0.36	0/785	0.58	0/1043
14	CN	0.30	0/785	0.50	0/1043
15	AO	0.36	0/718	0.58	0/959
15	CO	0.32	0/718	0.50	0/959
16	AP	0.38	0/659	0.69	1/884 (0.1%)
16	CP	0.32	0/659	0.55	0/884

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	AQ	0.41	0/658	0.63	0/881
17	CQ	0.33	0/658	0.54	0/881
18	AR	0.35	0/463	0.57	0/621
18	CR	0.33	0/463	0.52	0/621
19	AS	0.36	0/653	0.53	0/877
19	CS	0.32	0/653	0.56	0/877
20	AT	0.36	0/671	0.58	0/888
20	CT	0.30	0/671	0.54	0/888
21	AU	0.45	0/431	0.63	0/570
21	CU	0.42	0/431	0.62	0/570
22	BA	0.84	18/69659 (0.0%)	1.25	413/108672 (0.4%)
22	DA	0.37	0/69659	0.85	11/108672 (0.0%)
23	BB	0.73	0/2850	1.17	11/4444 (0.2%)
23	DB	0.32	0/2828	0.80	0/4410
24	BC	0.50	0/2122	0.70	0/2852
24	DC	0.33	0/2122	0.56	0/2852
25	BD	0.58	0/1586	0.75	1/2134 (0.0%)
25	DD	0.31	0/1586	0.55	0/2134
26	BE	0.50	0/1571	0.67	0/2113
26	DE	0.31	0/1571	0.53	0/2113
27	BF	0.40	0/1435	0.61	0/1926
27	DF	0.29	0/1435	0.48	0/1926
28	BG	0.40	0/1343	0.60	0/1816
28	DG	0.30	0/1343	0.48	0/1816
29	BH	0.36	0/1121	0.66	1/1515 (0.1%)
29	DH	0.35	0/1121	0.56	0/1515
30	BI	0.35	0/1046	0.55	0/1410
30	DI	0.35	0/1046	0.53	0/1410
31	BJ	0.61	0/1152	0.73	0/1551
31	DJ	0.31	0/1152	0.54	0/1551
32	BK	0.61	0/948	0.75	0/1268
32	DK	0.34	0/948	0.55	0/1268
33	BL	0.55	0/1054	0.74	0/1403
33	DL	0.31	0/1054	0.53	0/1403
34	BM	0.58	0/1093	0.73	0/1460
34	DM	0.30	0/1093	0.50	0/1460
35	BN	0.62	0/974	0.79	0/1301
35	DN	0.33	0/974	0.58	1/1301 (0.1%)
36	BO	0.48	0/902	0.64	0/1209
36	DO	0.29	0/902	0.47	0/1209
37	BP	0.55	0/929	0.75	3/1242 (0.2%)
37	DP	0.32	0/929	0.51	0/1242
38	BQ	0.67	0/960	0.78	0/1278

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
38	DQ	0.33	0/960	0.50	0/1278
39	BR	0.64	0/829	0.84	0/1107
39	DR	0.30	0/829	0.53	0/1107
40	BS	0.69	0/864	0.81	0/1156
40	DS	0.32	0/864	0.54	0/1156
41	BT	0.46	0/745	0.69	0/994
41	DT	0.31	0/745	0.51	0/994
42	BU	0.47	0/788	0.66	0/1051
42	DU	0.34	0/788	0.56	0/1051
43	BV	0.51	0/766	0.68	0/1025
43	DV	0.28	0/766	0.44	0/1025
44	BW	0.60	0/587	0.74	0/776
44	DW	0.30	0/576	0.50	0/762
45	BX	0.44	0/635	0.66	0/848
45	DX	0.33	0/635	0.55	0/848
46	BY	0.44	0/510	0.71	0/677
46	DY	0.29	0/510	0.53	0/677
47	BZ	0.55	0/453	0.69	0/605
47	DZ	0.31	0/453	0.51	0/605
48	B0	0.61	0/450	0.77	0/599
48	D0	0.33	0/450	0.54	0/599
49	B1	0.48	0/417	0.62	0/554
49	D1	0.31	0/417	0.50	0/554
50	B2	0.62	0/380	0.81	0/498
50	D2	0.34	0/380	0.55	0/498
51	B3	0.57	0/513	0.69	0/676
51	D3	0.29	0/513	0.49	0/676
52	B4	0.57	0/303	0.70	0/397
52	D4	0.30	0/303	0.54	0/397
53	B5	0.32	0/1145	0.50	0/1556
All	All	0.54	18/310626 (0.0%)	0.92	469/464366 (0.1%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
4	CD	0	1
5	AE	0	1
5	CE	0	1
6	CF	0	1

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
11	AK	0	1
12	CL	0	1
25	BD	0	1
25	DD	0	1
All	All	0	8

All (18) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	BA	1142	A	N9-C4	-11.42	1.31	1.37
22	BA	984	A	N9-C4	-10.72	1.31	1.37
22	BA	1936	A	N9-C4	-9.94	1.31	1.37
22	BA	528	A	N9-C4	-8.18	1.32	1.37
22	BA	783	A	N9-C4	-6.66	1.33	1.37
22	BA	561	G	N9-C4	-6.57	1.32	1.38
22	BA	984	A	N3-C4	-6.25	1.31	1.34
22	BA	528	A	N3-C4	-6.13	1.31	1.34
22	BA	571	U	N1-C2	-5.70	1.33	1.38
22	BA	528	A	N7-C5	-5.56	1.35	1.39
22	BA	1787	A	N9-C4	-5.50	1.34	1.37
22	BA	528	A	C5-C6	-5.49	1.36	1.41
22	BA	2241	A	N9-C4	-5.44	1.34	1.37
22	BA	675	A	N9-C4	-5.21	1.34	1.37
22	BA	974	G	N9-C8	5.21	1.41	1.37
22	BA	802	A	N7-C5	-5.10	1.36	1.39
22	BA	2623	G	N3-C4	-5.01	1.31	1.35
22	BA	2274	A	N9-C4	-5.01	1.34	1.37

All (469) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	984	A	C2-N3-C4	-12.81	104.20	110.60
22	BA	974	G	C4-C5-N7	12.41	115.76	110.80
22	BA	1142	A	C2-N3-C4	-11.77	104.72	110.60
22	BA	1936	A	C2-N3-C4	-11.57	104.81	110.60
22	BA	974	G	C5-C6-O6	-11.27	121.84	128.60
22	BA	984	A	N3-C4-N9	-10.86	118.71	127.40
25	BD	151	THR	C-N-CD	-10.79	96.87	120.60
22	BA	974	G	C5-N7-C8	-10.53	99.04	104.30
22	BA	528	A	C2-N3-C4	-10.43	105.39	110.60
22	BA	1997	C	C6-N1-C2	10.29	124.42	120.30
22	BA	752	A	C5-N7-C8	-9.95	98.92	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	2286	G	N3-C4-C5	9.86	133.53	128.60
22	BA	984	A	N3-C4-C5	9.84	133.69	126.80
22	BA	1936	A	N1-C6-N6	9.82	124.49	118.60
22	BA	1783	A	O5'-P-OP2	-9.21	97.41	105.70
22	BA	752	A	N7-C8-N9	8.88	118.24	113.80
22	BA	783	A	C2-N3-C4	-8.83	106.18	110.60
22	BA	1142	A	N3-C4-C5	8.78	132.94	126.80
22	BA	784	G	O4'-C1'-N9	-8.69	101.25	108.20
22	BA	1779	U	C5-C4-O4	8.68	131.11	125.90
22	BA	528	A	N1-C6-N6	8.60	123.76	118.60
22	BA	586	A	O5'-P-OP1	-8.52	98.03	105.70
22	BA	561	G	N3-C4-C5	8.48	132.84	128.60
22	BA	2263	C	C6-N1-C2	8.34	123.64	120.30
22	BA	1985	C	C6-N1-C2	8.26	123.60	120.30
16	AP	51	ARG	NE-CZ-NH1	8.25	124.42	120.30
22	BA	974	G	N1-C6-O6	8.20	124.82	119.90
22	BA	2030	A	C5-C6-N1	-8.20	113.60	117.70
22	BA	1936	A	N3-C4-C5	8.16	132.51	126.80
22	BA	824	U	O5'-P-OP2	-8.13	98.38	105.70
22	BA	783	A	C5-N7-C8	-8.12	99.84	103.90
22	BA	532	A	O5'-P-OP1	-8.11	98.40	105.70
37	BP	103	ARG	NE-CZ-NH1	8.00	124.30	120.30
22	BA	528	A	C5-C6-N1	-7.97	113.71	117.70
22	BA	691	C	C6-N1-C2	7.96	123.48	120.30
22	BA	555	G	O5'-P-OP1	-7.86	98.62	105.70
22	BA	850	U	O5'-P-OP1	-7.85	98.64	105.70
22	BA	2250	G	C5-N7-C8	-7.79	100.41	104.30
22	BA	1795	C	O5'-P-OP1	-7.74	98.74	105.70
22	BA	752	A	C4-C5-N7	7.72	114.56	110.70
22	BA	1645	G	C4-C5-N7	7.72	113.89	110.80
22	BA	2359	C	O5'-P-OP2	7.72	119.97	110.70
22	BA	1997	C	N3-C4-C5	7.71	124.98	121.90
22	BA	1142	A	N3-C4-N9	-7.68	121.25	127.40
22	BA	2606	C	N3-C4-C5	7.66	124.97	121.90
22	BA	2705	A	N1-C6-N6	7.62	123.17	118.60
22	BA	1779	U	N3-C4-O4	-7.61	114.07	119.40
22	BA	974	G	C6-C5-N7	-7.56	125.86	130.40
22	BA	2286	G	C2-N3-C4	-7.52	108.14	111.90
22	BA	2606	C	C6-N1-C2	7.50	123.30	120.30
22	BA	1658	C	C5-C4-N4	-7.50	114.95	120.20
22	BA	1658	C	C6-N1-C2	7.47	123.29	120.30
22	BA	974	G	N7-C8-N9	7.43	116.82	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	757	G	C8-N9-C4	7.40	109.36	106.40
22	BA	528	A	C5-N7-C8	-7.39	100.20	103.90
22	BA	1663	G	C8-N9-C4	7.37	109.35	106.40
35	DN	71	ARG	NE-CZ-NH2	7.37	123.98	120.30
22	BA	1266	G	O5'-P-OP1	-7.30	99.13	105.70
22	BA	1788	C	C5-C4-N4	-7.29	115.10	120.20
22	BA	2250	G	C4-C5-N7	7.27	113.71	110.80
22	BA	752	A	N1-C6-N6	7.24	122.94	118.60
22	BA	783	A	N1-C6-N6	7.21	122.93	118.60
22	BA	1142	A	C5-N7-C8	-7.21	100.29	103.90
22	BA	783	A	C4-C5-N7	7.20	114.30	110.70
22	BA	1764	C	C6-N1-C2	7.18	123.17	120.30
22	BA	837	C	N1-C2-O2	-7.17	114.60	118.90
22	BA	2585	U	O4'-C1'-N1	7.16	113.93	108.20
22	BA	1617	C	O5'-P-OP2	-7.16	99.26	105.70
22	BA	957	C	C6-N1-C2	7.13	123.15	120.30
22	BA	752	A	C6-C5-N7	-7.13	127.31	132.30
22	BA	1045	C	C6-N1-C2	7.12	123.15	120.30
22	BA	2045	C	C6-N1-C2	7.09	123.14	120.30
22	BA	794	A	N1-C6-N6	7.07	122.84	118.60
22	BA	1663	G	C2-N3-C4	-7.06	108.37	111.90
22	BA	704	G	O4'-C1'-N9	7.05	113.84	108.20
22	BA	2286	G	N3-C4-N9	-7.00	121.80	126.00
22	BA	783	A	N3-C4-C5	6.95	131.66	126.80
22	BA	784	G	P-O3'-C3'	6.93	128.01	119.70
22	BA	1645	G	N3-C2-N2	6.92	124.74	119.90
22	BA	2325	G	O5'-P-OP2	-6.91	99.48	105.70
22	BA	2715	C	N3-C2-O2	-6.91	117.07	121.90
22	BA	528	A	N3-C4-C5	6.89	131.62	126.80
22	BA	574	A	N1-C6-N6	-6.87	114.48	118.60
22	BA	1646	C	C6-N1-C2	6.83	123.03	120.30
22	BA	2009	A	O5'-P-OP2	-6.83	99.56	105.70
22	BA	2035	G	O5'-P-OP2	-6.82	99.56	105.70
22	BA	984	A	C5-C6-N1	-6.81	114.29	117.70
22	BA	1900	A	O5'-P-OP1	-6.81	99.57	105.70
22	BA	672	C	C6-N1-C2	6.80	123.02	120.30
22	BA	2326	C	C6-N1-C2	-6.79	117.59	120.30
22	BA	1157	G	O5'-P-OP2	-6.76	99.62	105.70
22	BA	2639	A	C5-C6-N6	-6.76	118.29	123.70
22	BA	2013	A	O5'-P-OP2	-6.75	99.63	105.70
22	BA	2817	U	C6-N1-C2	6.71	125.03	121.00
22	BA	1649	G	C8-N9-C4	-6.70	103.72	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	2874	C	N3-C4-C5	6.69	124.58	121.90
22	BA	1779	U	C5-C6-N1	-6.68	119.36	122.70
22	BA	2814	A	N1-C6-N6	6.67	122.60	118.60
23	BB	79	G	C5-C6-O6	-6.65	124.61	128.60
22	BA	1790	C	N3-C4-C5	6.62	124.55	121.90
22	BA	1478	G	N3-C2-N2	-6.62	115.27	119.90
22	BA	664	G	O5'-P-OP2	-6.58	99.78	105.70
22	BA	2518	A	O4'-C1'-N9	-6.58	102.94	108.20
22	BA	2580	U	OP2-P-O3'	6.56	119.64	105.20
22	BA	395	U	O4'-C1'-N1	6.56	113.45	108.20
22	BA	835	C	C6-N1-C2	6.56	122.92	120.30
22	BA	2033	A	N1-C6-N6	-6.55	114.67	118.60
22	BA	2612	C	N3-C4-C5	6.54	124.52	121.90
22	BA	1606	C	P-O3'-C3'	6.53	127.54	119.70
22	BA	1452	G	C5-N7-C8	-6.53	101.04	104.30
22	BA	2463	C	O5'-P-OP1	-6.51	99.84	105.70
22	BA	1478	G	N1-C6-O6	6.50	123.80	119.90
22	BA	2820	A	N1-C6-N6	6.50	122.50	118.60
22	BA	2607	G	C5-C6-O6	-6.49	124.71	128.60
22	DA	2427	C	C6-N1-C2	-6.49	117.70	120.30
22	BA	1640	A	N1-C6-N6	-6.48	114.71	118.60
22	BA	2716	C	O5'-P-OP2	-6.47	99.87	105.70
1	AA	1530	G	N3-C4-C5	6.46	131.83	128.60
22	BA	1663	G	N3-C4-C5	6.42	131.81	128.60
22	BA	1340	U	C5-C4-O4	6.41	129.75	125.90
22	BA	1134	A	O5'-P-OP1	-6.40	99.94	105.70
22	BA	2715	C	N1-C2-O2	6.39	122.73	118.90
22	BA	1549	A	N1-C6-N6	6.38	122.43	118.60
22	BA	938	G	C4-N9-C1'	-6.38	118.21	126.50
22	BA	2030	A	C5-C6-N6	6.38	128.80	123.70
22	BA	2250	G	N3-C4-C5	6.37	131.79	128.60
22	BA	1645	G	C6-C5-N7	-6.36	126.58	130.40
22	BA	748	G	O4'-C1'-N9	6.35	113.28	108.20
22	BA	2645	G	O4'-C1'-N9	6.35	113.28	108.20
22	BA	1138	G	C8-N9-C4	-6.35	103.86	106.40
11	AK	128	ARG	NE-CZ-NH1	6.34	123.47	120.30
22	BA	2825	G	N3-C4-C5	-6.34	125.43	128.60
22	BA	2499	C	N1-C2-O2	-6.34	115.10	118.90
22	DA	691	C	C6-N1-C2	-6.33	117.77	120.30
22	BA	2250	G	C2-N3-C4	-6.32	108.74	111.90
22	BA	967	U	N3-C4-O4	-6.30	114.99	119.40
22	BA	1762	A	N1-C6-N6	6.30	122.38	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	529	A	C8-N9-C4	6.29	108.32	105.80
22	BA	1779	U	N3-C2-O2	-6.29	117.80	122.20
22	BA	560	C	C6-N1-C2	6.24	122.80	120.30
23	BB	99	A	C2-N3-C4	-6.24	107.48	110.60
22	BA	1652	A	C8-N9-C4	-6.23	103.31	105.80
22	BA	2076	U	C5-C4-O4	6.23	129.64	125.90
22	BA	1147	A	O5'-P-OP2	-6.22	100.10	105.70
1	AA	578	C	O5'-P-OP1	-6.22	100.11	105.70
1	AA	742	G	C8-N9-C4	6.20	108.88	106.40
22	BA	1550	C	N1-C2-O2	-6.19	115.18	118.90
22	BA	1620	G	C2-N3-C4	-6.16	108.82	111.90
22	BA	2010	G	C4-C5-N7	-6.16	108.33	110.80
22	BA	528	A	C4-C5-N7	6.15	113.78	110.70
1	AA	1514	G	C5-C6-O6	-6.14	124.91	128.60
22	BA	1296	G	N3-C2-N2	6.14	124.20	119.90
22	BA	2799	A	N1-C6-N6	6.12	122.27	118.60
22	BA	2874	C	C5-C4-N4	-6.12	115.92	120.20
22	BA	752	A	C8-N9-C4	-6.12	103.35	105.80
22	BA	675	A	C8-N9-C4	6.11	108.24	105.80
22	BA	2011	U	N3-C2-O2	6.11	126.47	122.20
22	BA	1937	A	O4'-C1'-N9	6.11	113.08	108.20
22	BA	2639	A	N1-C6-N6	6.11	122.26	118.60
22	BA	967	U	C5-C4-O4	6.09	129.56	125.90
22	BA	2825	G	C4-N9-C1'	6.09	134.41	126.50
22	BA	1223	G	N1-C6-O6	-6.08	116.25	119.90
22	BA	691	C	N3-C4-C5	6.07	124.33	121.90
22	BA	2490	G	N3-C4-N9	6.07	129.64	126.00
22	BA	1936	A	N3-C4-N9	-6.05	122.56	127.40
1	AA	365	U	C2-N1-C1'	-6.04	110.45	117.70
22	BA	2283	C	N1-C2-O2	-6.04	115.28	118.90
22	BA	2837	A	O5'-P-OP1	-6.04	100.26	105.70
22	DA	1313	U	C2-N1-C1'	6.04	124.95	117.70
22	BA	243	U	C5-C4-O4	-6.03	122.28	125.90
22	BA	2505	G	C8-N9-C4	-6.03	103.99	106.40
22	BA	1645	G	N1-C2-N2	-6.02	110.79	116.20
22	BA	752	A	O4'-C1'-N9	6.01	113.01	108.20
22	BA	1812	U	O5'-P-OP2	-6.01	100.29	105.70
22	BA	2705	A	C5-C6-N6	-5.99	118.91	123.70
22	BA	2355	G	N3-C2-N2	-5.97	115.72	119.90
22	BA	2536	G	C8-N9-C4	5.97	108.79	106.40
22	BA	1936	A	C5-N7-C8	-5.96	100.92	103.90
22	BA	2811	G	O5'-P-OP2	-5.95	100.35	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1997	C	C2-N1-C1'	-5.94	112.26	118.80
22	BA	1229	C	N1-C2-O2	-5.94	115.33	118.90
22	BA	1645	G	N9-C4-C5	-5.94	103.02	105.40
22	BA	1134	A	OP1-P-OP2	5.93	128.50	119.60
22	BA	2827	C	C5-C4-N4	-5.92	116.05	120.20
22	BA	2283	C	C6-N1-C2	5.91	122.67	120.30
22	BA	512	G	O4'-C1'-N9	5.91	112.93	108.20
22	BA	561	G	C5-C6-O6	-5.90	125.06	128.60
22	BA	758	C	C2-N3-C4	-5.89	116.95	119.90
22	BA	554	U	O5'-P-OP1	5.89	117.77	110.70
22	BA	535	G	N3-C2-N2	5.89	124.02	119.90
22	BA	2083	G	N3-C4-C5	5.87	131.54	128.60
22	BA	2480	C	N1-C2-O2	-5.86	115.38	118.90
1	AA	819	A	O5'-P-OP1	-5.86	100.43	105.70
22	BA	2490	G	O5'-P-OP2	-5.85	100.43	105.70
22	BA	1288	G	O4'-C1'-N9	5.85	112.88	108.20
23	BB	75	G	O5'-P-OP2	5.85	117.72	110.70
22	BA	1706	C	C6-N1-C2	5.84	122.64	120.30
22	BA	489	G	C5-C6-O6	-5.84	125.10	128.60
1	AA	4	U	C2-N1-C1'	5.84	124.71	117.70
22	BA	2385	C	C6-N1-C2	5.83	122.63	120.30
22	BA	711	G	C4-N9-C1'	-5.82	118.93	126.50
22	BA	2715	C	O5'-P-OP2	-5.82	100.46	105.70
1	CA	1397	C	C6-N1-C2	-5.81	117.97	120.30
23	BB	83	G	O5'-P-OP2	-5.80	100.48	105.70
22	BA	454	A	O5'-P-OP2	-5.80	100.48	105.70
22	BA	1444	G	O5'-P-OP2	-5.80	100.48	105.70
22	BA	2534	A	N1-C6-N6	5.80	122.08	118.60
22	BA	2083	G	N1-C6-O6	5.80	123.38	119.90
22	BA	2419	U	C2-N1-C1'	-5.79	110.75	117.70
22	BA	1763	G	N3-C4-C5	5.79	131.50	128.60
22	BA	561	G	N3-C4-N9	-5.79	122.53	126.00
22	BA	956	G	N1-C6-O6	5.78	123.37	119.90
22	BA	535	G	OP2-P-O3'	5.77	117.89	105.20
22	BA	1260	A	O5'-P-OP2	-5.76	100.51	105.70
23	BB	26	C	C6-N1-C2	5.75	122.60	120.30
22	BA	2538	C	C6-N1-C2	5.74	122.59	120.30
22	BA	2526	G	N3-C4-N9	-5.73	122.56	126.00
22	BA	711	G	C8-N9-C1'	5.73	134.45	127.00
22	BA	2827	C	N3-C4-N4	5.72	122.01	118.00
22	BA	2283	C	N3-C2-O2	5.72	125.90	121.90
22	BA	824	U	O5'-P-OP1	5.71	117.55	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	984	A	C8-N9-C1'	5.71	137.98	127.70
1	AA	971	G	O4'-C1'-N9	5.70	112.76	108.20
22	BA	528	A	N3-C4-N9	-5.70	122.84	127.40
22	BA	853	C	N1-C2-O2	-5.70	115.48	118.90
22	BA	446	G	N9-C4-C5	-5.69	103.12	105.40
22	BA	1295	C	N1-C2-O2	-5.69	115.48	118.90
22	BA	1616	A	N1-C6-N6	5.69	122.01	118.60
22	BA	2387	U	N3-C2-O2	-5.69	118.22	122.20
22	BA	2840	C	O5'-P-OP2	-5.68	100.59	105.70
22	BA	1989	G	C5-C6-O6	-5.68	125.19	128.60
22	BA	2276	G	O5'-P-OP1	-5.68	100.59	105.70
22	BA	1452	G	C4-C5-N7	5.67	113.07	110.80
22	BA	1997	C	C5-C6-N1	-5.67	118.16	121.00
22	BA	1790	C	C2-N3-C4	-5.67	117.06	119.90
22	BA	1658	C	N3-C4-N4	5.67	121.97	118.00
1	AA	330	C	N3-C4-C5	5.65	124.16	121.90
22	BA	2608	G	N3-C2-N2	-5.64	115.95	119.90
1	AA	188	C	C2-N1-C1'	5.64	125.00	118.80
22	BA	837	C	C2-N1-C1'	-5.64	112.60	118.80
22	BA	528	A	C6-C5-N7	-5.63	128.36	132.30
22	BA	1645	G	N3-C4-N9	5.62	129.37	126.00
22	BA	2295	C	C6-N1-C2	-5.61	118.05	120.30
22	BA	820	A	OP2-P-O3'	5.61	117.53	105.20
22	BA	192	C	N1-C2-O2	-5.60	115.54	118.90
22	BA	2492	U	O5'-P-OP2	-5.60	100.66	105.70
23	BB	15	A	N1-C6-N6	5.59	121.96	118.60
22	BA	698	C	C6-N1-C2	5.59	122.53	120.30
22	BA	2607	G	C6-C5-N7	-5.58	127.05	130.40
22	BA	735	A	N1-C6-N6	5.58	121.95	118.60
22	BA	1692	U	N3-C2-O2	5.58	126.10	122.20
1	CA	4	U	C2-N1-C1'	5.57	124.39	117.70
22	BA	533	G	N9-C4-C5	-5.57	103.17	105.40
22	BA	2444	G	OP2-P-O3'	5.57	117.45	105.20
22	BA	1223	G	C5-C6-O6	5.57	131.94	128.60
22	BA	2618	G	O5'-P-OP1	-5.57	100.69	105.70
22	BA	1653	G	N9-C4-C5	5.56	107.62	105.40
22	BA	1677	A	C6-C5-N7	-5.56	128.41	132.30
22	BA	2494	G	C5-C6-O6	5.56	131.94	128.60
22	BA	2036	C	OP2-P-O3'	5.56	117.43	105.20
22	BA	1472	C	C6-N1-C2	5.55	122.52	120.30
22	BA	2579	C	OP1-P-O3'	5.55	117.42	105.20
22	BA	1681	G	C5-C6-O6	-5.55	125.27	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1799	G	C8-N9-C4	5.55	108.62	106.40
22	BA	2418	A	O5'-P-OP2	-5.55	100.71	105.70
22	BA	1638	C	C6-N1-C2	5.55	122.52	120.30
22	BA	2076	U	N3-C4-O4	-5.55	115.52	119.40
22	BA	2089	C	C2-N3-C4	-5.54	117.13	119.90
22	BA	2462	C	O5'-P-OP1	-5.54	100.71	105.70
22	BA	1817	G	C2-N3-C4	-5.54	109.13	111.90
22	BA	2887	A	N1-C6-N6	5.54	121.92	118.60
22	BA	2490	G	N3-C4-C5	-5.52	125.84	128.60
22	BA	2684	U	OP2-P-O3'	5.51	117.33	105.20
22	BA	40	U	O5'-P-OP1	-5.51	100.74	105.70
22	BA	765	C	O5'-P-OP2	-5.50	100.75	105.70
1	AA	365	U	C5-C4-O4	5.50	129.20	125.90
23	BB	71	C	N3-C4-C5	5.50	124.10	121.90
22	BA	805	G	N3-C4-C5	5.49	131.35	128.60
22	BA	1616	A	C4-C5-N7	5.49	113.44	110.70
22	BA	177	G	O4'-C1'-N9	5.48	112.58	108.20
22	BA	2439	A	N1-C6-N6	5.48	121.89	118.60
22	BA	1138	G	N7-C8-N9	5.47	115.84	113.10
22	BA	1938	A	C8-N9-C4	5.47	107.99	105.80
22	BA	2615	U	C5-C4-O4	-5.46	122.62	125.90
1	AA	400	C	C6-N1-C2	5.46	122.48	120.30
22	BA	1761	C	O5'-P-OP1	-5.46	100.79	105.70
22	BA	2815	C	N1-C2-O2	-5.46	115.63	118.90
22	BA	711	G	N3-C4-N9	-5.45	122.73	126.00
22	BA	2351	G	O5'-P-OP2	-5.45	100.80	105.70
22	BA	456	C	O5'-P-OP2	-5.44	100.81	105.70
22	BA	1804	C	N1-C2-O2	-5.44	115.64	118.90
22	BA	2332	C	N1-C2-O2	-5.44	115.64	118.90
22	BA	2839	G	OP2-P-O3'	5.44	117.16	105.20
22	BA	1799	G	N3-C4-C5	5.43	131.32	128.60
22	BA	2003	A	O5'-P-OP2	5.43	117.22	110.70
22	BA	1936	A	N1-C2-N3	5.43	132.01	129.30
22	BA	1340	U	N3-C4-O4	-5.43	115.60	119.40
22	BA	2072	C	C5-C4-N4	-5.43	116.40	120.20
22	BA	995	C	O4'-C1'-N1	-5.43	103.86	108.20
22	BA	2275	C	C6-N1-C2	-5.43	118.13	120.30
22	DA	793	A	C8-N9-C4	5.43	107.97	105.80
23	BB	55	U	N1-C2-O2	-5.42	119.00	122.80
22	BA	938	G	C8-N9-C1'	5.42	134.04	127.00
22	BA	753	A	OP1-P-OP2	5.41	127.72	119.60
1	AA	330	C	C6-N1-C2	5.41	122.46	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1048	A	N1-C6-N6	5.41	121.84	118.60
22	BA	2276	G	C5-C6-O6	5.41	131.84	128.60
22	DA	1246	A	N1-C6-N6	5.41	121.84	118.60
22	BA	532	A	OP1-P-OP2	5.40	127.71	119.60
22	BA	2045	C	N3-C4-C5	5.40	124.06	121.90
22	BA	2503	A	C2-N3-C4	5.39	113.30	110.60
22	BA	560	C	N3-C4-C5	5.39	124.06	121.90
22	BA	1779	U	O4'-C1'-N1	5.38	112.51	108.20
22	BA	2887	A	C5-C6-N6	-5.38	119.39	123.70
22	BA	502	A	O5'-P-OP1	-5.38	100.86	105.70
22	BA	1326	U	N1-C2-O2	-5.37	119.04	122.80
22	BA	1783	A	N1-C6-N6	5.37	121.82	118.60
22	BA	243	U	N3-C2-O2	5.37	125.96	122.20
1	AA	1504	G	O4'-C1'-N9	5.37	112.49	108.20
22	BA	1786	A	C2-N3-C4	5.36	113.28	110.60
22	BA	998	C	C6-N1-C2	-5.36	118.16	120.30
37	BP	53	ARG	NE-CZ-NH1	5.36	122.98	120.30
22	BA	1651	G	OP1-P-O3'	5.35	116.98	105.20
22	BA	2420	C	N1-C2-O2	-5.35	115.69	118.90
22	BA	836	G	C5-C6-O6	-5.35	125.39	128.60
22	BA	2499	C	N3-C2-O2	5.35	125.64	121.90
22	BA	530	G	O4'-C1'-N9	-5.34	103.92	108.20
22	BA	974	G	O4'-C1'-N9	5.34	112.47	108.20
22	BA	2211	A	P-O3'-C3'	5.34	126.11	119.70
1	AA	1414	U	C2-N1-C1'	-5.34	111.30	117.70
22	BA	1677	A	N1-C6-N6	5.33	121.80	118.60
22	BA	2002	G	C5-C6-O6	-5.33	125.41	128.60
22	BA	2813	A	N3-C4-C5	5.33	130.53	126.80
22	BA	1262	A	C8-N9-C4	-5.32	103.67	105.80
22	BA	822	G	C8-N9-C4	5.32	108.53	106.40
22	BA	2869	G	C5-C6-O6	-5.32	125.41	128.60
22	BA	984	A	C4-N9-C1'	-5.31	116.74	126.30
22	BA	2286	G	C4-N9-C1'	-5.31	119.60	126.50
22	BA	2607	G	N3-C4-N9	5.31	129.19	126.00
22	BA	2572	A	O5'-P-OP2	-5.31	100.92	105.70
22	BA	1640	A	N9-C4-C5	5.30	107.92	105.80
22	DA	2425	A	P-O3'-C3'	5.30	126.06	119.70
22	BA	2565	A	N9-C4-C5	-5.30	103.68	105.80
22	BA	491	G	N3-C4-N9	-5.30	122.82	126.00
22	BA	2825	G	C8-N9-C4	-5.30	104.28	106.40
22	BA	1763	G	C4-N9-C1'	-5.30	119.61	126.50
22	BA	510	C	OP1-P-O3'	5.29	116.83	105.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	773	U	C5-C4-O4	5.28	129.07	125.90
22	BA	752	A	N9-C1'-C2'	5.27	120.85	114.00
22	BA	561	G	C4-C5-N7	5.26	112.91	110.80
22	BA	561	G	C4-N9-C1'	-5.26	119.66	126.50
22	BA	1567	G	C4-C5-N7	5.26	112.90	110.80
22	BA	1817	G	C8-N9-C4	5.26	108.50	106.40
1	CA	47	C	C6-N1-C2	5.26	122.40	120.30
22	BA	984	A	O4'-C1'-N9	5.25	112.40	108.20
22	BA	2585	U	C5'-C4'-O4'	5.25	115.40	109.10
22	BA	942	G	N1-C6-O6	5.25	123.05	119.90
22	DA	757	G	N3-C4-C5	5.25	131.22	128.60
22	BA	1758	U	N3-C4-O4	-5.25	115.73	119.40
22	BA	2646	C	C6-N1-C2	-5.25	118.20	120.30
22	BA	2869	G	N1-C6-O6	5.24	123.04	119.90
22	DA	2501	C	O4'-C1'-N1	5.23	112.39	108.20
37	BP	103	ARG	NE-CZ-NH2	-5.23	117.69	120.30
22	BA	787	C	C6-N1-C2	5.22	122.39	120.30
22	BA	1961	C	C6-N1-C2	5.22	122.39	120.30
22	BA	806	C	C6-N1-C2	-5.22	118.21	120.30
22	BA	1997	C	C2-N3-C4	-5.22	117.29	119.90
22	BA	794	A	C5-C6-N6	-5.21	119.53	123.70
22	BA	2076	U	N1-C2-N3	5.21	118.03	114.90
22	BA	2813	A	C8-N9-C4	5.21	107.89	105.80
22	BA	1678	A	N1-C6-N6	5.21	121.73	118.60
22	BA	2275	C	O5'-P-OP2	-5.21	101.01	105.70
22	BA	752	A	C4-N9-C1'	5.21	135.68	126.30
22	DA	2447	G	O4'-C1'-N9	5.21	112.37	108.20
22	BA	867	C	N1-C2-O2	-5.21	115.78	118.90
22	BA	919	U	C5-C4-O4	-5.21	122.78	125.90
22	BA	1007	C	O5'-P-OP1	-5.21	101.02	105.70
22	BA	2505	G	N9-C4-C5	5.21	107.48	105.40
22	BA	1956	U	N1-C2-O2	-5.20	119.16	122.80
22	BA	481	G	O4'-C1'-N9	5.20	112.36	108.20
22	BA	1653	G	C8-N9-C4	-5.20	104.32	106.40
22	BA	961	C	O5'-P-OP2	-5.20	101.03	105.70
22	BA	1681	G	N3-C2-N2	-5.20	116.26	119.90
22	BA	1377	G	N3-C4-C5	-5.19	126.00	128.60
22	BA	1389	G	C8-N9-C4	5.19	108.48	106.40
22	BA	2636	C	C5-C4-N4	-5.19	116.56	120.20
22	BA	1262	A	OP1-P-O3'	5.19	116.62	105.20
22	BA	2813	A	C2-N3-C4	-5.19	108.00	110.60
22	BA	1121	C	C2-N3-C4	-5.18	117.31	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	537	G	N1-C6-O6	5.18	123.01	119.90
22	BA	578	G	N1-C6-O6	5.18	123.01	119.90
22	BA	740	C	OP1-P-OP2	-5.17	111.85	119.60
22	BA	914	G	N1-C6-O6	5.17	123.00	119.90
22	BA	708	G	N1-C6-O6	5.16	123.00	119.90
22	BA	2858	C	N3-C4-C5	5.16	123.97	121.90
22	BA	41	C	C6-N1-C2	5.16	122.36	120.30
29	BH	121	VAL	C-N-CA	5.16	134.59	121.70
22	BA	1658	C	N1-C2-O2	-5.16	115.81	118.90
1	AA	1502	A	O5'-P-OP2	-5.16	101.06	105.70
22	BA	1936	A	C4-C5-N7	5.16	113.28	110.70
22	BA	1784	A	C2-N3-C4	-5.15	108.03	110.60
1	AA	330	C	N3-C4-N4	-5.15	114.40	118.00
22	BA	1985	C	C5-C6-N1	-5.15	118.43	121.00
1	AA	1514	G	N1-C6-O6	5.15	122.99	119.90
22	BA	1223	G	N3-C4-N9	-5.15	122.91	126.00
22	BA	2757	A	N1-C6-N6	5.14	121.69	118.60
22	BA	1296	G	N1-C2-N2	-5.14	111.57	116.20
22	BA	708	G	C5-C6-O6	-5.14	125.52	128.60
22	BA	2063	C	N1-C2-O2	5.14	121.98	118.90
23	BB	85	G	C8-N9-C4	5.14	108.45	106.40
22	BA	492	A	C8-N9-C4	5.13	107.85	105.80
22	BA	2036	C	N3-C4-C5	5.13	123.95	121.90
1	AA	365	U	C5-C6-N1	-5.12	120.14	122.70
22	BA	2499	C	C5-C4-N4	-5.12	116.61	120.20
22	DA	1821	A	O5'-P-OP2	-5.12	101.09	105.70
22	BA	1215	G	C5-C6-O6	5.12	131.67	128.60
22	BA	2020	A	N1-C6-N6	-5.12	115.53	118.60
22	BA	2283	C	C2-N1-C1'	-5.11	113.18	118.80
22	BA	2874	C	C2-N3-C4	-5.11	117.34	119.90
22	BA	2814	A	C5-C6-N6	-5.11	119.61	123.70
22	BA	1377	G	C8-N9-C4	-5.11	104.36	106.40
22	BA	528	A	O4'-C1'-N9	-5.11	104.11	108.20
22	BA	1401	G	N1-C6-O6	5.11	122.96	119.90
22	BA	2276	G	N1-C6-O6	-5.10	116.84	119.90
22	BA	569	U	N1-C2-O2	-5.10	119.23	122.80
22	BA	1987	A	N1-C6-N6	-5.10	115.54	118.60
22	BA	1949	G	N3-C4-N9	-5.10	122.94	126.00
22	BA	1291	C	O5'-P-OP2	-5.09	101.11	105.70
22	BA	1311	G	C4-C5-N7	5.09	112.84	110.80
22	BA	805	G	C8-N9-C4	5.09	108.44	106.40
22	BA	2898	U	O5'-P-OP2	-5.09	101.12	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1357	C	N1-C2-O2	-5.09	115.85	118.90
22	BA	2272	U	C5-C4-O4	-5.09	122.85	125.90
1	AA	1279	G	N7-C8-N9	5.08	115.64	113.10
22	BA	1669	A	C5-C6-N1	5.08	120.24	117.70
22	BA	2721	A	C5-C6-N1	5.08	120.24	117.70
22	BA	2633	G	C2-N3-C4	-5.07	109.36	111.90
23	BB	79	G	O5'-P-OP1	5.07	116.79	110.70
1	AA	890	G	O4'-C1'-N9	5.07	112.26	108.20
22	BA	811	U	N3-C4-O4	-5.07	115.85	119.40
22	BA	1616	A	C5-N7-C8	-5.07	101.36	103.90
22	BA	2278	A	C8-N9-C4	5.07	107.83	105.80
22	BA	1787	A	C2-N3-C4	-5.05	108.07	110.60
22	BA	2089	C	N3-C4-C5	5.05	123.92	121.90
22	DA	2245	U	C6-N1-C1'	5.04	128.26	121.20
22	BA	2606	C	C2-N3-C4	-5.04	117.38	119.90
22	BA	1783	A	O5'-P-OP1	5.04	116.75	110.70
22	BA	2066	C	OP1-P-O3'	5.04	116.28	105.20
22	BA	2447	G	O4'-C1'-N9	5.04	112.23	108.20
22	BA	1338	G	C8-N9-C4	-5.04	104.39	106.40
22	BA	1669	A	C2-N3-C4	5.04	113.12	110.60
22	BA	1452	G	N3-C4-C5	5.03	131.12	128.60
22	BA	1324	G	C5-C6-O6	-5.03	125.58	128.60
22	BA	2440	C	N3-C4-C5	5.03	123.91	121.90
22	BA	2607	G	N1-C6-O6	5.03	122.92	119.90
22	BA	767	U	O5'-P-OP2	-5.02	101.18	105.70
22	BA	2774	C	C5-C4-N4	-5.02	116.69	120.20
1	AA	1201	A	P-O3'-C3'	5.02	125.72	119.70
22	BA	686	U	C2-N1-C1'	-5.02	111.68	117.70
22	BA	786	C	C6-N1-C2	5.02	122.31	120.30
22	BA	2293	G	O5'-P-OP2	-5.02	101.18	105.70
22	BA	919	U	N3-C4-O4	5.02	122.91	119.40
22	BA	1786	A	O5'-P-OP2	-5.01	101.19	105.70
22	BA	2592	G	C8-N9-C4	-5.01	104.39	106.40
23	BB	98	G	O5'-P-OP2	-5.01	101.19	105.70
22	BA	1282	U	N3-C2-O2	5.01	125.71	122.20
22	BA	1677	A	C4-C5-N7	5.01	113.20	110.70
22	BA	1774	C	N1-C2-O2	-5.00	115.90	118.90
1	CA	536	C	C6-N1-C2	5.00	122.30	120.30

There are no chirality outliers.

All (8) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
5	AE	152	MET	Peptide
11	AK	126	LYS	Peptide
25	BD	151	THR	Peptide
4	CD	152	GLN	Peptide
5	CE	102	GLY	Peptide
6	CF	54	LEU	Peptide
12	CL	24	LEU	Peptide
25	DD	151	THR	Peptide

5.2 Too-close contacts

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	AA	32995	0	16607	1101	3
1	CA	33015	0	16617	1197	0
2	AB	1705	0	1732	163	0
2	CB	1705	0	1732	125	0
3	AC	1625	0	1696	81	0
3	CC	1625	0	1696	76	0
4	AD	1643	0	1707	138	0
4	CD	1643	0	1707	144	0
5	AE	1106	0	1148	98	0
5	CE	1106	0	1148	111	0
6	AF	818	0	808	52	0
6	CF	818	0	808	62	0
7	AG	1182	0	1238	56	0
7	CG	1182	0	1238	70	0
8	AH	979	0	1031	74	0
8	CH	979	0	1031	49	0
9	AI	1022	0	1070	96	0
9	CI	1022	0	1070	76	0
10	AJ	787	0	828	97	0
10	CJ	787	0	828	49	0
11	AK	877	0	887	70	0
11	CK	877	0	887	62	0
12	AL	955	0	1016	57	0
12	CL	955	0	1016	70	0
13	AM	884	0	941	63	0
13	CM	884	0	941	56	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
14	AN	774	0	824	72	0
14	CN	774	0	824	53	0
15	AO	710	0	728	38	0
15	CO	710	0	728	31	0
16	AP	649	0	666	61	0
16	CP	649	0	666	33	0
17	AQ	649	0	691	71	0
17	CQ	649	0	691	50	0
18	AR	456	0	478	19	0
18	CR	456	0	478	23	0
19	AS	638	0	665	50	0
19	CS	638	0	665	37	0
20	AT	665	0	714	60	0
20	CT	665	0	714	49	0
21	AU	426	0	449	51	0
21	CU	426	0	449	50	0
22	BA	62195	0	31280	1688	0
22	DA	62195	0	31280	2474	0
23	BB	2549	0	1291	64	0
23	DB	2529	0	1281	68	0
24	BC	2083	0	2154	110	0
24	DC	2083	0	2154	136	0
25	BD	1565	0	1616	73	0
25	DD	1565	0	1616	95	0
26	BE	1552	0	1619	73	0
26	DE	1552	0	1619	105	0
27	BF	1411	0	1444	106	0
27	DF	1411	0	1444	58	0
28	BG	1323	0	1371	43	0
28	DG	1323	0	1371	55	0
29	BH	1110	0	1147	145	0
29	DH	1110	0	1148	89	3
30	BI	1032	0	1085	75	0
30	DI	1032	0	1085	85	0
31	BJ	1129	0	1162	44	0
31	DJ	1129	0	1162	54	0
32	BK	939	0	1012	43	0
32	DK	939	0	1012	45	0
33	BL	1045	0	1117	65	0
33	DL	1045	0	1117	79	0
34	BM	1074	0	1157	38	0
34	DM	1074	0	1157	39	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
35	BN	961	0	1000	55	0
35	DN	961	0	1000	77	0
36	BO	892	0	923	51	0
36	DO	892	0	923	44	0
37	BP	917	0	962	42	0
37	DP	917	0	962	60	0
38	BQ	947	0	1019	50	0
38	DQ	947	0	1019	50	0
39	BR	816	0	839	68	0
39	DR	816	0	839	42	0
40	BS	857	0	922	43	0
40	DS	857	0	922	42	0
41	BT	739	0	807	52	0
41	DT	739	0	807	60	0
42	BU	780	0	831	40	0
42	DU	780	0	831	69	0
43	BV	753	0	780	33	0
43	DV	753	0	780	24	0
44	BW	580	0	594	15	0
44	DW	569	0	581	24	0
45	BX	625	0	652	19	0
45	DX	625	0	652	44	0
46	BY	509	0	543	34	0
46	DY	509	0	543	29	0
47	BZ	449	0	488	13	0
47	DZ	449	0	488	22	0
48	B0	444	0	458	24	0
48	D0	444	0	458	26	0
49	B1	410	0	440	30	0
49	D1	410	0	440	21	0
50	B2	377	0	418	13	0
50	D2	377	0	418	33	0
51	B3	504	0	572	25	0
51	D3	504	0	572	24	0
52	B4	302	0	340	12	0
52	D4	302	0	340	15	0
53	B5	1142	0	865	66	0
54	AA	70	0	0	0	0
54	AM	1	0	0	0	0
54	AN	1	0	0	0	0
54	BA	194	0	0	0	0
54	BB	4	0	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
54	BQ	1	0	0	0	0
54	CA	56	0	0	0	0
54	D2	1	0	0	0	0
54	DA	164	0	0	0	0
54	DB	3	0	0	0	0
54	DL	1	0	0	0	0
54	DQ	1	0	0	0	0
55	BA	48	0	50	11	0
55	DA	48	0	50	27	0
56	B4	1	0	0	0	0
56	D4	1	0	0	0	0
57	AA	195	0	0	19	0
57	AE	1	0	0	0	0
57	AL	1	0	0	0	0
57	AN	3	0	0	0	0
57	AT	2	0	0	0	0
57	AU	1	0	0	0	0
57	B2	1	0	0	0	0
57	B3	3	0	0	0	0
57	B4	2	0	0	0	0
57	BA	615	0	0	86	0
57	BB	13	0	0	1	0
57	BC	8	0	0	4	0
57	BD	3	0	0	2	0
57	BE	2	0	0	0	0
57	BF	1	0	0	1	0
57	BL	7	0	0	0	0
57	BN	5	0	0	0	0
57	BQ	1	0	0	0	0
57	BS	1	0	0	0	0
57	BT	1	0	0	0	0
57	BU	1	0	0	0	0
57	BV	1	0	0	0	0
57	CA	193	0	0	17	0
57	CL	1	0	0	0	0
57	CN	1	0	0	0	0
57	CT	2	0	0	0	0
57	CU	1	0	0	1	0
57	D2	1	0	0	1	0
57	D3	1	0	0	0	0
57	D4	1	0	0	1	0
57	DA	608	0	0	96	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
57	DB	13	0	0	4	0
57	DC	10	0	0	1	0
57	DD	4	0	0	2	0
57	DE	4	0	0	0	0
57	DJ	1	0	0	0	0
57	DL	4	0	0	1	0
57	DN	2	0	0	0	0
57	DS	2	0	0	0	0
57	DT	3	0	0	1	0
57	DU	1	0	0	0	0
57	DV	1	0	0	0	0
All	All	288276	0	192887	11371	3

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 24.

All (11371) 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)
29:BH:117:LEU:O	29:BH:121:VAL:HG23	1.34	1.22
22:DA:2711:A:OP2	57:DA:3546:HOH:O	1.61	1.18
1:AA:111:G:O6	1:AA:330:C:N4	1.78	1.16
22:BA:627:A:OP1	33:BL:78:ARG:NH1	1.79	1.16
22:BA:730:A:OP2	57:BA:3695:HOH:O	1.61	1.16
25:DD:151:THR:O	25:DD:153:GLY:N	1.79	1.14
29:BH:117:LEU:O	29:BH:121:VAL:CG2	1.95	1.14
22:BA:1153:C:OP2	57:BA:3361:HOH:O	1.66	1.12
22:BA:1603:A:OP1	57:BA:3414:HOH:O	1.64	1.11
22:BA:2498:C:OP2	57:BA:3686:HOH:O	1.68	1.09
22:BA:1395:A:OP1	57:BA:3414:HOH:O	1.71	1.09
29:BH:123:ARG:O	29:BH:124:THR:CG2	2.01	1.09
5:CE:101:GLU:O	5:CE:103:THR:N	1.86	1.08
22:BA:1342:A:OP2	57:BA:3714:HOH:O	1.71	1.06
22:BA:2720:U:OP1	37:BP:53:ARG:NH2	1.89	1.06
22:BA:842:U:O4	57:BA:3588:HOH:O	1.73	1.04
1:AA:533:A:OP1	57:AA:1849:HOH:O	1.76	1.04
22:BA:1602:U:O4	57:BA:3714:HOH:O	1.76	1.04
22:DA:621:A:OP2	57:DA:3292:HOH:O	1.74	1.03
55:DA:3001:DOL:H463	55:DA:3001:DOL:H483	1.06	1.03
22:BA:731:C:OP2	57:BA:3695:HOH:O	1.76	1.03
22:DA:789:A:N1	57:DA:3310:HOH:O	1.89	1.03

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1062:G:N2	22:BA:1077:A:N1	2.07	1.02
22:DA:602:A:O2'	22:DA:604:G:O2'	1.77	1.01
1:AA:800:G:O6	57:AA:1814:HOH:O	1.79	1.01
36:BO:31:THR:O	36:BO:102:ARG:NH1	1.93	1.01
22:DA:2056:G:OP2	57:DA:3485:HOH:O	1.77	1.00
55:DA:3001:DOL:HC1	55:DA:3001:DOL:H431	1.42	1.00
29:BH:117:LEU:HD21	29:BH:121:VAL:H	1.23	1.00
22:DA:842:U:O4	57:DA:3577:HOH:O	1.77	1.00
1:AA:516:U:O4	57:AA:1849:HOH:O	1.78	0.99
22:DA:2349:G:OP1	51:D3:45:ARG:NH2	1.95	0.99
23:DB:28:C:OP1	36:DO:36:TYR:OH	1.79	0.99
29:BH:123:ARG:O	29:BH:124:THR:HG23	1.61	0.99
55:DA:3001:DOL:C48	55:DA:3001:DOL:H463	1.91	0.99
22:DA:2504:U:C5	55:DA:3001:DOL:H161	1.98	0.98
22:BA:1509:A:O2'	22:BA:1510:G:OP2	1.81	0.98
55:DA:3001:DOL:C46	55:DA:3001:DOL:H483	1.92	0.98
5:CE:157:ARG:O	5:CE:159:LYS:N	1.96	0.98
2:CB:73:LYS:O	2:CB:75:ALA:N	1.95	0.98
22:BA:2428:G:OP1	57:BA:3701:HOH:O	1.80	0.97
13:AM:11:ASP:OD1	13:AM:12:HIS:N	1.96	0.97
4:CD:41:HIS:O	4:CD:43:ALA:N	1.98	0.97
29:DH:40:THR:O	29:DH:42:LYS:N	1.98	0.97
1:CA:858:G:N7	57:CA:1819:HOH:O	1.97	0.96
1:CA:912:C:OP1	12:CL:43:LYS:NZ	1.97	0.96
22:BA:2611:C:OP2	57:BA:3546:HOH:O	1.82	0.96
22:BA:2269:G:OP1	57:BA:3515:HOH:O	1.84	0.95
22:DA:1464:G:N7	57:DA:3633:HOH:O	1.99	0.95
22:DA:450:G:O6	57:DA:3242:HOH:O	1.83	0.95
2:AB:21:ARG:O	2:AB:23:TRP:N	1.99	0.95
29:BH:120:GLY:C	29:BH:122:LEU:HA	1.85	0.95
22:DA:1268:A:OP1	57:DA:3378:HOH:O	1.84	0.95
22:DA:784:G:OP1	57:DA:3314:HOH:O	1.81	0.95
22:DA:1378:A:O2'	22:DA:1380:G:N7	1.98	0.95
4:CD:29:ASP:O	4:CD:31:LYS:N	1.99	0.95
22:DA:1010:A:OP2	57:DA:3778:HOH:O	1.85	0.94
2:AB:193:PRO:O	2:AB:195:GLY:N	2.01	0.94
22:BA:1923:U:H2'	22:BA:1924:C:H5'	1.47	0.94
22:DA:514:A:N3	22:DA:581:C:O2'	2.00	0.94
22:DA:2243:U:OP1	57:DA:3737:HOH:O	1.85	0.93
22:DA:299:A:N3	22:DA:319:G:O2'	2.00	0.93
22:BA:1093:G:N3	22:BA:1098:A:N6	2.16	0.93

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:729:G:OP2	24:DC:207:LYS:NZ	2.02	0.93
48:B0:20:ASP:N	48:B0:20:ASP:OD2	2.00	0.93
22:DA:1378:A:O2'	57:DA:3751:HOH:O	1.86	0.93
22:DA:1050:A:N6	22:DA:1109:C:O2	2.01	0.93
22:BA:1909:C:N4	22:BA:1921:G:O6	2.02	0.93
29:BH:27:ARG:NH2	45:BX:60:ASP:OD2	2.02	0.92
1:AA:537:G:OP1	12:AL:110:ARG:NH2	2.02	0.92
6:AF:91:ARG:O	6:AF:92:THR:OG1	1.86	0.92
40:DS:28:LYS:O	40:DS:30:SER:N	2.02	0.92
22:BA:819:A:OP2	22:BA:1187:G:N2	2.02	0.91
1:CA:1500:A:OP2	57:CA:1884:HOH:O	1.87	0.91
1:CA:1198:G:N7	57:CA:1853:HOH:O	2.02	0.91
22:BA:517:C:OP2	48:B0:10:ARG:NH2	2.03	0.91
22:DA:370:G:OP2	57:DA:3556:HOH:O	1.88	0.91
22:BA:1998:A:OP2	25:BD:141:ARG:NH2	2.04	0.91
22:DA:528:A:OP1	57:DA:3246:HOH:O	1.89	0.91
1:AA:880:C:OP1	12:AL:9:ARG:NH1	2.04	0.90
29:DH:83:LYS:HG3	29:DH:149:GLU:CG	2.02	0.90
1:AA:1198:G:N7	57:AA:1788:HOH:O	2.03	0.90
1:AA:1232:U:OP1	9:AI:126:GLN:NE2	2.04	0.90
4:CD:174:ASP:OD1	4:CD:175:ALA:N	2.04	0.90
22:BA:2728:U:O2'	22:BA:2729:G:OP2	1.90	0.90
22:DA:1995:U:OP1	57:DA:3805:HOH:O	1.89	0.90
7:AG:55:GLY:O	7:AG:57:SER:N	2.05	0.90
3:AC:36:ASP:OD1	3:AC:59:ARG:NH1	2.04	0.90
22:DA:2714:G:OP2	57:DA:3546:HOH:O	1.87	0.90
22:BA:1924:C:H2'	22:BA:1925:C:H5''	1.55	0.89
22:BA:2445:G:OP1	26:BE:69:ARG:NH2	2.05	0.89
41:DT:21:SER:O	41:DT:23:ALA:N	2.04	0.89
22:DA:188:G:O2'	22:DA:1365:A:N6	2.06	0.89
40:BS:53:SER:O	40:BS:57:ASN:ND2	2.06	0.89
28:DG:158:LYS:O	28:DG:160:LYS:N	2.06	0.89
5:AE:157:ARG:O	5:AE:159:LYS:N	2.04	0.89
55:DA:3001:DOL:HC1	55:DA:3001:DOL:C43	2.00	0.89
22:DA:2615:U:OP1	57:DA:3745:HOH:O	1.89	0.89
22:DA:300:A:N6	57:DA:3551:HOH:O	2.06	0.89
25:BD:140:HIS:NE2	57:BD:302:HOH:O	2.06	0.88
1:CA:32:A:C2	1:CA:33:A:C5	2.60	0.88
22:DA:18:U:O4	57:DA:3205:HOH:O	1.92	0.88
1:AA:1312:G:N7	19:AS:3:ARG:N	2.21	0.88
22:BA:944:C:OP2	57:BA:3261:HOH:O	1.90	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2271:G:O6	57:DA:3508:HOH:O	1.89	0.88
22:DA:2627:G:O2'	22:DA:2781:A:N1	2.06	0.88
29:BH:123:ARG:O	29:BH:124:THR:HG22	1.74	0.88
39:DR:101:ILE:O	39:DR:103:ALA:N	2.06	0.88
29:BH:117:LEU:C	29:BH:121:VAL:HG23	1.93	0.87
24:BC:70:ASN:O	24:BC:72:ASP:N	2.07	0.87
23:DB:43:C:O2	27:DF:92:ARG:NH2	2.07	0.87
20:CT:5:LYS:O	20:CT:7:ALA:N	2.07	0.87
22:DA:1613:G:O6	57:DA:3638:HOH:O	1.90	0.87
22:DA:2588:G:OP1	57:DA:3314:HOH:O	1.92	0.87
31:DJ:80:HIS:O	31:DJ:82:GLY:N	2.07	0.87
1:AA:928:G:O2'	1:AA:1533:C:OP1	1.93	0.87
22:DA:1300:G:O6	22:DA:1626:A:O2'	1.91	0.87
29:BH:123:ARG:HD3	1:CA:358:U:OP1	1.74	0.87
17:CQ:19:LYS:O	17:CQ:71:LYS:NZ	2.08	0.87
29:DH:83:LYS:HG3	29:DH:149:GLU:HG2	1.56	0.86
22:BA:1073:A:H3'	22:BA:1074:G:C5'	2.05	0.86
22:DA:182:A:HO2'	22:DA:433:C:HO2'	1.11	0.86
1:AA:452:A:N6	1:AA:480:U:O2	2.08	0.86
1:AA:825:A:O2'	8:AH:13:ARG:NH1	2.07	0.86
22:BA:1001:A:OP2	57:BA:3736:HOH:O	1.93	0.86
22:DA:182:A:O2'	22:DA:433:C:O2'	1.91	0.86
1:AA:965:U:OP2	57:AA:1833:HOH:O	1.92	0.86
1:CA:484:G:H4'	1:CA:485:U:O5'	1.75	0.86
22:DA:613:A:O2'	22:DA:614:A:OP1	1.91	0.86
1:AA:980:C:OP2	57:AA:1837:HOH:O	1.92	0.86
3:AC:85:GLU:OE1	3:AC:88:ARG:NH1	2.07	0.86
22:DA:310:A:O2'	22:DA:311:A:OP2	1.92	0.86
9:CI:107:ASP:OD1	9:CI:109:ARG:NH1	2.09	0.86
22:DA:1359:A:OP1	57:DA:3610:HOH:O	1.92	0.86
22:BA:2116:G:O6	22:BA:2171:A:N6	2.09	0.86
29:BH:147:VAL:HG12	29:BH:149:GLU:HG3	1.57	0.86
22:DA:370:G:N7	57:DA:3555:HOH:O	2.08	0.86
22:BA:1916:A:C4	22:BA:1917:U:H1'	2.11	0.86
31:DJ:41:LYS:O	31:DJ:43:GLU:N	2.08	0.86
1:CA:1256:A:O2'	1:CA:1278:G:O6	1.94	0.85
22:DA:1287:A:O4'	35:DN:103:ARG:NH1	2.10	0.85
22:BA:1064:C:N4	22:BA:1070:A:OP2	2.10	0.85
4:CD:28:ILE:O	4:CD:31:LYS:NZ	2.08	0.85
22:DA:258:G:O2'	33:DL:104:GLN:OE1	1.93	0.85
47:DZ:52:SER:O	47:DZ:54:MET:N	2.08	0.85

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2834:G:O6	22:DA:2879:A:O2'	1.95	0.85
5:CE:102:GLY:O	5:CE:104:GLY:N	2.10	0.85
22:DA:1439:A:OP2	57:DA:3627:HOH:O	1.94	0.85
26:BE:7:ASP:OD2	26:BE:8:ALA:N	2.10	0.85
28:DG:126:PRO:O	28:DG:127:THR:OG1	1.92	0.85
14:CN:41:ARG:NH1	14:CN:42:TRP:O	2.10	0.84
22:BA:1823:G:N7	57:BA:3659:HOH:O	2.10	0.84
22:DA:83:A:OP2	42:DU:92:LYS:NZ	2.10	0.84
17:AQ:17:MET:N	17:AQ:17:MET:SD	2.51	0.84
23:DB:22:U:O4	57:DB:302:HOH:O	1.94	0.84
18:CR:20:GLU:O	18:CR:22:ASP:N	2.10	0.84
22:DA:1508:A:O2'	22:DA:1509:A:O4'	1.95	0.84
34:DM:66:ARG:NH1	34:DM:104:GLU:OE1	2.11	0.84
29:BH:117:LEU:O	29:BH:119:ASN:N	2.07	0.84
29:BH:117:LEU:HD21	29:BH:121:VAL:N	1.93	0.84
10:CJ:63:ASP:OD1	14:CN:85:ARG:NH1	2.10	0.84
29:DH:82:SER:O	29:DH:84:ALA:N	2.10	0.84
22:BA:1779:U:H5	22:BA:1784:A:N7	1.76	0.84
22:BA:560:C:OP2	57:BA:3250:HOH:O	1.93	0.84
35:DN:87:PHE:O	35:DN:89:SER:N	2.11	0.84
22:DA:2505:G:OP2	55:DA:3001:DOL:HC17	1.77	0.84
14:AN:33:ASP:O	14:AN:35:ASN:N	2.10	0.84
4:AD:27:ALA:O	4:AD:31:LYS:NZ	2.10	0.83
22:BA:797:G:O6	57:BA:3324:HOH:O	1.95	0.83
22:DA:1344:U:O2'	22:DA:1345:C:OP2	1.96	0.83
22:DA:990:A:N1	39:DR:78:ARG:NH1	2.26	0.83
29:DH:94:ILE:HB	29:DH:122:LEU:HD12	1.60	0.83
22:DA:58:G:OP1	41:DT:78:SER:OG	1.95	0.83
1:CA:736:C:OP1	18:CR:61:ARG:NH1	2.10	0.83
1:CA:319:G:O6	57:CA:1735:HOH:O	1.95	0.83
22:DA:1667:G:O2'	22:DA:1991:U:O4	1.97	0.83
22:BA:1179:G:N7	22:BA:1180:U:C6	2.47	0.83
1:CA:201:G:N2	1:CA:469:C:O2	2.11	0.83
9:AI:57:MET:N	9:AI:57:MET:SD	2.52	0.83
22:BA:2757:A:N1	28:BG:67:THR:HG21	1.93	0.82
20:CT:59:ASP:OD2	20:CT:76:LYS:NZ	2.11	0.82
22:DA:581:C:OP2	38:DQ:33:ARG:NH1	2.12	0.82
7:CG:93:PRO:O	7:CG:97:ASN:ND2	2.11	0.82
50:D2:11:LYS:NZ	57:D2:201:HOH:O	2.10	0.82
22:DA:1371:G:N7	57:DA:3399:HOH:O	2.11	0.82
9:AI:42:GLU:O	9:AI:45:ARG:NH1	2.13	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BH:120:GLY:C	29:BH:122:LEU:CA	2.47	0.82
26:DE:111:GLU:OE2	26:DE:114:ARG:NH1	2.13	0.82
22:BA:2572:A:N7	25:BD:150:GLN:HG3	1.95	0.82
1:CA:1046:A:N6	1:CA:1211:U:O2	2.13	0.82
1:CA:495:A:C2	1:CA:496:A:C6	2.68	0.82
1:CA:992:U:O4'	1:CA:993:G:N2	2.13	0.82
1:CA:409:U:OP1	4:CD:24:GLY:HA3	1.78	0.81
43:BV:80:HIS:CE1	43:BV:83:LYS:HG3	2.15	0.81
1:CA:209:U:H4'	1:CA:210:C:OP2	1.80	0.81
39:DR:8:GLY:O	39:DR:10:LYS:NZ	2.11	0.81
22:BA:1603:A:OP1	57:BA:3412:HOH:O	1.97	0.81
1:CA:1007:U:O4	1:CA:1022:A:N6	2.14	0.81
22:DA:1269:A:OP2	57:DA:3385:HOH:O	1.98	0.81
27:BF:40:VAL:O	27:BF:42:GLU:N	2.13	0.81
23:DB:40:U:N3	23:DB:44:G:OP2	2.13	0.81
41:BT:64:LYS:HA	41:BT:79:ASP:OD1	1.81	0.81
22:DA:1817:G:OP1	24:DC:62:TYR:OH	1.99	0.81
22:BA:974:G:H8	22:BA:990:A:H62	1.26	0.81
22:DA:443:A:N7	26:DE:40:ARG:HG3	1.96	0.81
1:CA:243:A:H4'	1:CA:244:U:C5'	2.10	0.81
1:CA:243:A:H4'	1:CA:244:U:H5'	1.62	0.81
22:BA:198:C:OP2	57:BA:3760:HOH:O	1.99	0.80
1:CA:1308:U:OP1	13:CM:97:VAL:N	2.14	0.80
22:DA:279:A:N6	22:DA:361:G:O2'	2.14	0.80
22:DA:618:G:O6	57:DA:3291:HOH:O	2.00	0.80
1:CA:205:A:N6	1:CA:213:G:O6	2.14	0.80
1:AA:207:C:O2	1:AA:213:G:N2	2.14	0.80
7:AG:80:VAL:O	7:AG:82:GLY:N	2.14	0.80
22:BA:1061:U:O2'	22:BA:1062:G:O5'	1.98	0.80
25:BD:77:ARG:NH2	25:BD:200:ASP:OD1	2.14	0.80
1:CA:266:G:H3'	17:CQ:69:LYS:HB2	1.64	0.80
5:CE:99:ALA:O	5:CE:101:GLU:N	2.14	0.80
6:CF:91:ARG:O	6:CF:92:THR:OG1	1.98	0.80
55:DA:3001:DOL:H432	55:DA:3001:DOL:C6	2.11	0.79
55:DA:3001:DOL:O15	55:DA:3001:DOL:H212	1.82	0.79
22:BA:2005:A:OP1	57:BA:3387:HOH:O	1.98	0.79
11:CK:17:SER:O	11:CK:80:LYS:N	2.15	0.79
20:AT:59:ASP:OD1	20:AT:76:LYS:NZ	2.15	0.79
22:BA:622:G:OP2	57:BA:3293:HOH:O	2.00	0.79
2:CB:103:ASN:ND2	2:CB:106:THR:OG1	2.15	0.79
1:AA:1108:G:O6	57:AA:1862:HOH:O	1.98	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:163:GLU:OE2	4:AD:164:GLN:N	2.16	0.79
22:DA:2261:C:C2	22:DA:2280:G:N2	2.51	0.79
22:BA:58:G:OP1	41:BT:78:SER:CB	2.31	0.79
22:DA:1091:G:O2'	22:DA:1092:C:OP2	2.01	0.79
22:DA:374:A:N6	22:DA:400:G:O2'	2.16	0.79
39:DR:82:HIS:ND1	39:DR:82:HIS:O	2.16	0.79
14:AN:64:CYS:SG	14:AN:67:THR:OG1	2.38	0.79
22:BA:1925:C:H4'	22:BA:1926:U:OP1	1.81	0.79
22:DA:777:G:C2	22:DA:778:G:C8	2.71	0.79
22:DA:2199:A:OP1	45:DX:37:ARG:NH1	2.15	0.79
14:AN:90:ARG:NH1	14:AN:92:GLU:OE2	2.16	0.79
22:BA:1379:U:C6	22:BA:1379:U:OP1	2.36	0.79
22:DA:622:G:OP2	57:DA:3292:HOH:O	2.01	0.79
23:DB:29:A:O2'	23:DB:58:A:N1	2.16	0.79
24:DC:45:ASN:OD1	24:DC:46:ASN:N	2.16	0.79
22:DA:488:G:N2	22:DA:493:G:O6	2.16	0.78
1:AA:8:A:C6	4:AD:206:LYS:HB3	2.18	0.78
16:AP:43:ALA:O	16:AP:44:SER:OG	2.00	0.78
22:BA:1746:A:H2'	22:BA:1747:U:C6	2.18	0.78
22:BA:404:A:O2'	22:BA:405:U:OP2	2.01	0.78
1:AA:684:U:O2'	11:AK:40:ASN:O	2.01	0.78
22:DA:1141:U:OP2	31:DJ:65:THR:OG1	1.99	0.78
35:DN:1:MET:H1	35:DN:1:MET:HE2	1.48	0.78
50:D2:43:THR:OG1	50:D2:44:VAL:N	2.15	0.78
22:DA:1627:G:C2	22:DA:1628:G:N7	2.52	0.78
1:AA:652:U:O4	1:AA:752:G:O2'	2.00	0.78
1:CA:195:A:OP1	20:CT:60:ARG:NH1	2.16	0.78
1:CA:537:G:OP1	12:CL:110:ARG:NH2	2.16	0.78
22:DA:1973:G:OP1	57:DA:3462:HOH:O	2.00	0.78
22:DA:2579:C:OP1	57:DA:3538:HOH:O	2.02	0.78
22:BA:1179:G:C4	22:BA:1180:U:H1'	2.19	0.78
4:AD:125:VAL:O	4:AD:127:GLY:N	2.17	0.78
22:DA:2576:G:O2'	22:DA:2579:C:OP2	2.02	0.77
22:BA:831:G:OP1	57:BA:3263:HOH:O	2.01	0.77
1:AA:650:G:H2'	1:AA:651:C:H5'	1.64	0.77
1:AA:1422:G:O3'	32:BK:49:ARG:NH2	2.17	0.77
4:CD:192:SER:OG	4:CD:193:ALA:N	2.14	0.77
4:AD:22:LYS:O	4:AD:24:GLY:N	2.17	0.77
22:BA:481:G:C4	22:BA:507:A:C2	2.72	0.77
1:CA:1499:A:OP2	57:CA:1884:HOH:O	2.00	0.77
13:CM:40:ALA:O	13:CM:42:ASP:N	2.17	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:99:ALA:O	5:AE:101:GLU:N	2.17	0.77
28:BG:104:ASN:ND2	28:BG:114:ASP:OD1	2.17	0.77
22:DA:856:G:N2	22:DA:922:C:C2	2.53	0.77
22:BA:324:A:N6	22:BA:338:G:O2'	2.16	0.77
22:DA:761:A:OP2	57:DA:3294:HOH:O	2.02	0.77
1:CA:72:A:C6	1:CA:73:C:N4	2.52	0.77
22:BA:2831:G:OP1	25:BD:56:LYS:NZ	2.17	0.77
1:CA:890:G:O2'	1:CA:906:A:N6	2.17	0.77
29:DH:1:MET:SD	29:DH:27:ARG:NH1	2.58	0.77
37:DP:65:SER:O	37:DP:67:GLY:N	2.18	0.77
1:AA:1018:G:C2	1:AA:1019:A:C8	2.73	0.76
2:AB:50:PHE:HA	2:AB:213:TYR:OH	1.85	0.76
22:BA:2287:A:OP1	49:B1:30:LYS:NZ	2.18	0.76
22:DA:1515:A:O2'	22:DA:1556:C:O2'	2.02	0.76
22:DA:2507:C:OP1	57:DA:3708:HOH:O	2.02	0.76
1:AA:1278:G:H4'	1:AA:1279:G:C8	2.21	0.76
7:AG:99:LEU:O	7:AG:102:ARG:N	2.17	0.76
1:AA:31:G:O2'	1:AA:48:C:N4	2.18	0.76
1:AA:993:G:O2'	1:AA:994:A:N7	2.18	0.76
22:BA:1922:G:N2	22:BA:1923:U:H1'	2.00	0.76
29:DH:53:GLU:O	29:DH:55:GLU:N	2.19	0.76
1:CA:718:A:C8	1:CA:719:C:C5	2.74	0.76
22:DA:332:A:O2'	22:DA:334:C:OP2	2.03	0.76
29:DH:45:GLU:O	29:DH:49:ALA:N	2.19	0.76
5:AE:69:ARG:O	5:AE:71:MET:N	2.18	0.76
40:BS:29:VAL:HG13	40:BS:55:ILE:HD11	1.68	0.76
22:DA:1009:A:N3	22:DA:1153:C:O2'	2.18	0.76
22:DA:2504:U:C4	55:DA:3001:DOL:H161	2.21	0.76
24:DC:258:ARG:NH1	24:DC:264:ASP:OD2	2.18	0.76
22:BA:2305:U:C2	27:BF:151:GLY:HA3	2.20	0.76
2:AB:23:TRP:CH2	2:AB:25:PRO:HA	2.21	0.76
22:BA:2271:G:O6	57:BA:3514:HOH:O	2.04	0.76
22:BA:276:U:O2'	22:BA:278:A:N7	2.19	0.76
49:D1:15:ALA:O	49:D1:17:THR:N	2.19	0.76
22:DA:444:C:OP1	26:DE:40:ARG:NH1	2.19	0.76
1:AA:792:A:H4'	1:AA:793:U:O5'	1.85	0.76
1:CA:527:G:C2	1:CA:528:C:C6	2.74	0.76
1:CA:567:G:O2'	57:CA:1705:HOH:O	2.04	0.76
2:CB:193:PRO:O	2:CB:195:GLY:N	2.18	0.76
22:DA:1340:U:C5	22:DA:1603:A:C8	2.75	0.76
22:DA:1677:A:N7	57:DA:3765:HOH:O	2.17	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:111:G:C6	1:AA:330:C:N4	2.53	0.75
2:CB:58:ASN:ND2	2:CB:220:THR:O	2.19	0.75
13:CM:13:LYS:O	13:CM:14:HIS:ND1	2.19	0.75
21:AU:35:ARG:O	21:AU:37:PHE:N	2.18	0.75
22:BA:1474:U:H2'	22:BA:1475:G:H5'	1.68	0.75
29:BH:91:PHE:O	1:CA:55:A:C6	2.40	0.75
21:CU:51:SER:O	21:CU:53:VAL:N	2.19	0.75
1:AA:208:U:C5	1:AA:210:C:C4	2.75	0.75
1:AA:338:A:N1	1:AA:351:G:O6	2.18	0.75
1:CA:1124:G:O2'	1:CA:1145:A:N6	2.18	0.75
17:CQ:69:LYS:O	17:CQ:70:THR:OG1	2.04	0.75
22:DA:2286:G:H4'	22:DA:2287:A:O5'	1.86	0.75
24:DC:70:ASN:O	24:DC:72:ASP:N	2.20	0.75
29:DH:124:THR:OG1	29:DH:125:THR:N	2.17	0.75
2:AB:63:ARG:O	2:AB:64:LYS:HB2	1.87	0.75
22:BA:2448:A:OP2	57:BA:3686:HOH:O	2.03	0.75
6:AF:91:ARG:C	6:AF:92:THR:HG1	1.89	0.75
22:BA:653:U:OP2	22:BA:653:U:C6	2.38	0.75
34:BM:42:THR:HG22	34:BM:93:VAL:HG12	1.67	0.75
1:CA:1181:G:O2'	1:CA:1182:G:N7	2.19	0.75
4:AD:11:LEU:HD22	4:AD:63:ARG:HD3	1.69	0.75
22:BA:731:C:OP2	57:BA:3697:HOH:O	2.04	0.75
5:CE:41:ASP:OD1	5:CE:42:GLY:N	2.20	0.75
22:BA:1464:G:O6	57:BA:3642:HOH:O	2.05	0.75
1:CA:734:G:C2	1:CA:735:C:C6	2.74	0.75
1:CA:684:U:O2'	11:CK:40:ASN:O	2.04	0.75
22:DA:49:A:C8	22:DA:51:G:N2	2.55	0.75
22:DA:788:A:OP1	22:DA:791:C:N4	2.19	0.75
46:DY:11:VAL:O	46:DY:15:ASN:ND2	2.18	0.75
22:BA:1509:A:O2'	22:BA:1510:G:P	2.45	0.75
42:DU:9:ASP:OD2	42:DU:10:GLU:N	2.20	0.75
5:AE:104:GLY:O	5:AE:105:ILE:HG22	1.87	0.75
11:AK:13:ARG:NE	22:BA:2142:A:OP1	2.20	0.75
16:AP:42:ILE:O	16:AP:44:SER:N	2.20	0.75
53:B5:50:ILE:C	53:B5:52:PRO:HD3	2.06	0.75
22:BA:617:G:N7	57:BA:3291:HOH:O	2.19	0.75
1:AA:82:G:N2	1:AA:89:U:OP1	2.19	0.74
22:BA:2711:A:OP2	57:BA:3550:HOH:O	2.05	0.74
22:DA:225:C:N4	22:DA:419:U:O2'	2.18	0.74
22:DA:2407:A:OP1	57:DA:3560:HOH:O	2.04	0.74
1:AA:251:G:C6	1:AA:266:G:C6	2.75	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1266:G:O2'	22:DA:2012:G:O6	2.03	0.74
22:DA:2127:G:O2'	22:DA:2173:A:N3	2.20	0.74
1:AA:131:A:H2'	1:AA:132:C:C6	2.23	0.74
32:BK:78:ARG:NH1	37:BP:71:GLU:OE2	2.20	0.74
2:CB:87:CYS:O	2:CB:89:GLN:N	2.20	0.74
22:BA:1378:A:O2'	22:BA:1380:G:OP2	2.05	0.74
29:BH:117:LEU:HD11	29:BH:122:LEU:HD12	1.69	0.74
22:DA:2550:G:OP1	57:DA:3720:HOH:O	2.05	0.74
22:DA:27:G:O2'	22:DA:28:A:OP2	2.05	0.74
1:AA:411:A:OP1	4:AD:26:ARG:NH2	2.20	0.74
22:BA:2125:G:N3	22:BA:2173:A:N6	2.36	0.74
29:BH:88:GLY:O	29:BH:125:THR:OG1	2.04	0.74
22:BA:1179:G:C6	22:BA:1180:U:C2	2.74	0.74
22:BA:1921:G:C2	22:BA:1922:G:C8	2.76	0.74
29:BH:123:ARG:C	29:BH:124:THR:HG23	2.06	0.74
33:BL:87:GLY:O	33:BL:89:VAL:N	2.21	0.74
1:CA:533:A:OP1	57:CA:1763:HOH:O	2.05	0.74
22:DA:306:U:O2	22:DA:312:G:N2	2.21	0.74
11:AK:29:ASN:OD1	11:AK:30:THR:N	2.21	0.74
22:DA:2063:C:H4'	55:DA:3001:DOL:H343	1.69	0.74
22:DA:998:C:OP2	38:DQ:58:ARG:NH2	2.20	0.74
14:AN:61:ARG:O	14:AN:62:ASN:HB2	1.86	0.74
51:B3:31:HIS:CD2	51:B3:32:ILE:HG13	2.22	0.74
4:CD:95:GLU:OE2	4:CD:100:ASN:ND2	2.20	0.74
1:AA:1225:A:H2'	1:AA:1226:C:C5	2.22	0.74
24:BC:143:ASN:OD1	24:BC:152:GLY:HA3	1.87	0.74
1:AA:568:G:C2	1:AA:569:C:C5	2.76	0.73
13:AM:82:ASP:OD1	27:BF:112:ARG:NH2	2.21	0.73
1:AA:667:G:H4'	15:AO:51:HIS:ND1	2.03	0.73
22:BA:1669:A:OP2	57:BA:3723:HOH:O	2.06	0.73
14:CN:21:PHE:O	14:CN:23:LYS:N	2.21	0.73
35:DN:90:ARG:CZ	35:DN:116:VAL:HG11	2.18	0.73
17:AQ:81:LYS:O	17:AQ:83:VAL:N	2.22	0.73
22:BA:1179:G:C5	22:BA:1180:U:H1'	2.22	0.73
1:CA:1147:C:O2	9:CI:18:ARG:NH2	2.21	0.73
4:AD:95:GLU:OE2	4:AD:104:ARG:NH1	2.20	0.73
22:DA:561:G:HO2'	38:DQ:45:TYR:HH	1.32	0.73
4:AD:11:LEU:CD2	4:AD:63:ARG:HD3	2.19	0.73
21:AU:36:GLU:O	21:AU:37:PHE:HB2	1.86	0.73
27:BF:158:THR:O	57:BF:201:HOH:O	2.05	0.73
22:BA:997:G:OP1	38:BQ:92:ARG:HG2	1.88	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2506:U:C5	55:BA:3001:DOL:H422	2.23	0.73
22:BA:58:G:OP1	41:BT:78:SER:HB3	1.88	0.73
46:BY:61:ALA:O	46:BY:63:ALA:N	2.21	0.73
22:DA:1153:C:OP1	57:DA:3359:HOH:O	2.07	0.73
22:DA:1475:G:O2'	22:DA:1476:U:OP1	2.07	0.73
22:DA:1715:G:O2'	22:DA:1743:G:O6	2.07	0.73
22:BA:455:C:N3	22:BA:472:A:H2'	2.04	0.73
22:DA:684:G:C2	22:DA:794:A:C2	2.77	0.73
25:DD:56:LYS:O	25:DD:58:ASN:N	2.22	0.73
1:AA:844:G:C6	1:AA:846:G:O2'	2.42	0.73
22:BA:1061:U:HO2'	22:BA:1062:G:P	2.12	0.73
22:BA:2189:U:H2'	22:BA:2190:G:C8	2.24	0.73
22:DA:1342:A:OP2	57:DA:3711:HOH:O	2.05	0.73
22:DA:1604:C:OP1	57:DA:3403:HOH:O	2.07	0.73
22:DA:503:A:C2	22:DA:506:G:C4	2.77	0.73
14:AN:46:LEU:O	14:AN:48:LEU:N	2.22	0.72
17:AQ:16:LYS:C	17:AQ:17:MET:SD	2.68	0.72
22:BA:730:A:P	57:BA:3695:HOH:O	2.38	0.72
22:BA:84:A:N1	22:BA:98:G:O2'	2.21	0.72
39:BR:39:LEU:HA	39:BR:49:ILE:CG2	2.19	0.72
26:DE:21:ARG:NH1	26:DE:103:GLY:O	2.21	0.72
1:AA:1074:G:OP1	5:AE:69:ARG:NH2	2.22	0.72
1:CA:1525:G:O6	57:CA:1892:HOH:O	2.05	0.72
1:CA:679:C:O2	1:CA:712:A:C2	2.42	0.72
10:CJ:87:LEU:HD13	10:CJ:88:MET:N	2.04	0.72
1:AA:984:C:N4	57:AA:1838:HOH:O	2.21	0.72
22:BA:245:G:O6	51:B3:8:ARG:HD3	1.88	0.72
1:CA:552:U:C4	1:CA:553:A:N7	2.57	0.72
42:DU:36:VAL:O	42:DU:38:GLY:N	2.22	0.72
1:AA:203:G:N2	1:AA:215:C:C2	2.58	0.72
22:BA:1182:G:H2'	22:BA:1183:U:O4'	1.89	0.72
23:BB:8:C:O3'	36:BO:25:ARG:NH1	2.21	0.72
22:DA:1935:G:H1'	22:DA:1964:G:N2	2.03	0.72
22:DA:2684:U:O4'	32:DK:70:ARG:NH1	2.22	0.72
14:AN:64:CYS:HG	14:AN:67:THR:HG1	1.34	0.72
22:BA:1916:A:H2'	22:BA:1917:U:C1'	2.20	0.72
31:BJ:81:ILE:HG23	31:BJ:82:GLY:N	2.04	0.72
22:DA:583:G:C6	22:DA:584:C:C4	2.78	0.72
35:DN:106:ASP:O	35:DN:108:ALA:N	2.22	0.72
1:CA:1385:G:N7	57:CA:1874:HOH:O	2.22	0.72
5:CE:80:THR:OG1	5:CE:122:ASN:ND2	2.22	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:116:C:O2'	22:DA:126:A:O2'	2.05	0.72
22:DA:981:A:OP2	22:DA:982:C:N4	2.22	0.72
22:BA:193:U:OP2	57:BA:3741:HOH:O	2.08	0.72
22:BA:626:A:H2'	33:BL:78:ARG:NH1	2.03	0.72
41:BT:49:LYS:N	41:BT:49:LYS:HD3	2.05	0.72
1:CA:734:G:N3	1:CA:735:C:C6	2.57	0.72
27:BF:36:LEU:HD21	27:BF:99:PHE:CE1	2.25	0.72
19:CS:4:SER:O	19:CS:5:LEU:HB2	1.90	0.72
22:DA:2057:G:OP2	57:DA:3485:HOH:O	2.07	0.72
22:DA:2355:G:OP1	44:DW:25:ARG:NH2	2.23	0.72
16:AP:22:ALA:HA	16:AP:33:ILE:HG13	1.72	0.72
1:AA:178:C:OP2	20:AT:60:ARG:NH2	2.23	0.72
22:BA:495:G:H1'	40:BS:57:ASN:OD1	1.90	0.72
5:CE:101:GLU:CD	5:CE:101:GLU:O	2.28	0.72
22:DA:1469:A:H2'	22:DA:1470:A:C8	2.25	0.72
22:DA:79:C:O2'	22:DA:346:A:N3	2.21	0.72
1:CA:1219:A:N6	1:CA:1220:G:O6	2.23	0.72
4:CD:100:ASN:OD1	4:CD:111:ARG:NH1	2.21	0.72
2:AB:82:ASP:O	2:AB:85:LEU:N	2.23	0.71
22:DA:616:A:H4'	26:DE:101:TYR:CZ	2.24	0.71
1:AA:1222:G:O6	57:AA:1837:HOH:O	2.08	0.71
24:BC:230:HIS:CD2	24:BC:247:PRO:HA	2.24	0.71
1:CA:374:A:H5''	1:CA:452:A:N1	2.05	0.71
22:DA:2622:U:O2'	22:DA:2825:G:N7	2.22	0.71
9:AI:49:ARG:NH2	9:AI:52:LEU:O	2.23	0.71
5:CE:132:ASN:O	5:CE:136:VAL:HG12	1.91	0.71
16:AP:50:THR:O	16:AP:50:THR:HG22	1.90	0.71
21:AU:34:ARG:CZ	21:AU:35:ARG:HB2	2.20	0.71
22:BA:1653:G:H3'	35:BN:2:ARG:HG3	1.72	0.71
37:BP:54:GLY:O	37:BP:57:SER:OG	2.07	0.71
22:DA:1335:C:N4	57:DA:3392:HOH:O	2.23	0.71
29:DH:31:VAL:HB	29:DH:32:PRO:CD	2.20	0.71
1:AA:64:G:C8	1:AA:99:C:N4	2.58	0.71
25:BD:103:ASP:O	25:BD:105:LYS:N	2.23	0.71
22:DA:698:C:O2'	22:DA:734:A:N6	2.23	0.71
1:AA:109:A:H2'	1:AA:326:G:N2	2.06	0.71
22:BA:1917:U:C4	22:BA:1918:A:C6	2.78	0.71
22:BA:500:G:N2	22:BA:502:A:H3'	2.06	0.71
49:D1:5:ILE:O	49:D1:28:ARG:NH1	2.23	0.71
1:AA:154:U:C2	1:AA:168:G:N2	2.58	0.71
46:BY:6:LEU:O	46:BY:60:LYS:NZ	2.24	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1259:G:H2'	22:DA:1260:A:C8	2.25	0.71
22:DA:910:A:N3	22:DA:2264:C:O2'	2.23	0.71
22:BA:1385:A:H1'	22:BA:1386:C:C6	2.26	0.71
39:BR:49:ILE:HG22	39:BR:53:PHE:CA	2.21	0.71
22:DA:1187:G:H5''	39:DR:83:TYR:CE2	2.26	0.71
22:DA:2061:G:O6	55:DA:3001:DOL:H162	1.90	0.71
22:DA:58:G:N3	22:DA:70:G:N2	2.39	0.71
2:AB:151:ILE:HD12	2:AB:154:MET:SD	2.31	0.70
22:BA:1779:U:C5	22:BA:1784:A:N7	2.58	0.70
39:BR:48:LYS:HG2	39:BR:48:LYS:O	1.91	0.70
39:BR:49:ILE:HG22	39:BR:53:PHE:N	2.06	0.70
1:CA:1108:G:O6	57:CA:1858:HOH:O	2.05	0.70
4:CD:26:ARG:HG3	4:CD:27:ALA:N	2.06	0.70
22:DA:126:A:C2	50:D2:18:PHE:CE2	2.79	0.70
22:DA:1251:C:OP2	38:DQ:6:ARG:NH2	2.24	0.70
22:DA:300:A:HO2'	22:DA:318:C:HO2'	1.33	0.70
22:BA:2555:U:C5	22:BA:2556:C:C2	2.78	0.70
4:AD:174:ASP:OD2	4:AD:176:GLY:N	2.24	0.70
5:AE:82:GLN:NE2	5:AE:150:PRO:HD3	2.06	0.70
22:BA:2291:U:H2'	22:BA:2292:U:C6	2.26	0.70
55:DA:3001:DOL:C48	55:DA:3001:DOL:C46	2.58	0.70
26:DE:21:ARG:O	26:DE:114:ARG:NH2	2.24	0.70
11:AK:76:GLU:C	22:BA:2141:G:OP1	2.29	0.70
22:BA:1604:C:OP2	57:BA:3414:HOH:O	2.08	0.70
22:BA:2189:U:H2'	22:BA:2190:G:C1'	2.21	0.70
22:BA:265:A:N1	22:BA:427:U:O2'	2.24	0.70
1:CA:1124:G:N2	1:CA:1127:G:C2	2.60	0.70
12:CL:57:LEU:O	12:CL:60:GLY:N	2.23	0.70
1:CA:1302:C:C4	13:CM:17:ILE:HD13	2.26	0.70
1:AA:1406:U:C5	1:AA:1407:C:C5	2.79	0.70
31:BJ:114:LEU:HG	31:BJ:118:MET:HE3	1.72	0.70
42:BU:12:ILE:HG21	42:BU:80:ALA:HB2	1.73	0.70
22:DA:134:G:C2	22:DA:146:A:C2	2.79	0.70
22:BA:181:A:H2'	22:BA:182:A:C8	2.26	0.70
22:BA:2192:U:H2'	22:BA:2193:G:H5'	1.72	0.70
22:BA:620:G:H4'	22:BA:621:A:O5'	1.91	0.70
27:BF:127:ASN:OD1	27:BF:157:THR:HA	1.92	0.70
22:DA:2004:G:OP1	57:DA:3798:HOH:O	2.09	0.70
22:DA:733:G:OP2	57:DA:3295:HOH:O	2.09	0.70
17:AQ:69:LYS:O	17:AQ:70:THR:CB	2.39	0.70
1:CA:811:C:O2'	1:CA:901:A:N1	2.24	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:CU:18:ARG:O	21:CU:21:ARG:N	2.24	0.70
41:DT:17:SER:O	41:DT:19:LYS:N	2.24	0.70
43:DV:51:GLN:HB3	43:DV:56:PHE:CG	2.27	0.70
11:AK:26:SER:O	11:AK:28:ASN:N	2.24	0.70
22:BA:1923:U:C2'	22:BA:1924:C:H5'	2.19	0.70
22:BA:2258:C:O2'	22:BA:2427:C:OP2	2.10	0.70
29:BH:94:ILE:HG22	29:BH:99:ILE:HG13	1.72	0.70
1:CA:977:A:N3	1:CA:977:A:H3'	2.07	0.70
2:CB:15:HIS:O	2:CB:17:GLY:N	2.25	0.70
12:AL:44:LYS:CB	12:AL:45:PRO:CD	2.70	0.70
22:BA:2191:A:C6	22:BA:2192:U:O4	2.45	0.70
22:BA:2308:G:O6	22:BA:2311:A:N7	2.24	0.70
39:BR:49:ILE:HB	39:BR:52:PRO:C	2.11	0.70
22:DA:1649:G:C6	22:DA:2009:A:C6	2.80	0.70
22:DA:192:C:OP1	57:DA:3737:HOH:O	2.09	0.70
22:DA:2415:G:C6	22:DA:2416:C:C4	2.80	0.70
22:DA:526:A:N6	22:DA:2626:C:H4'	2.06	0.70
22:DA:1993:U:H4'	25:DD:133:THR:HG22	1.73	0.70
22:BA:1141:U:H4'	22:BA:1142:A:O4'	1.92	0.70
22:DA:2816:G:N3	22:DA:2883:A:O2'	2.22	0.70
1:AA:1304:G:OP2	57:AA:1797:HOH:O	2.10	0.69
20:AT:43:ASP:OD1	20:AT:46:ALA:N	2.24	0.69
22:BA:194:G:N7	57:BA:3758:HOH:O	2.25	0.69
22:BA:528:A:C2	22:BA:2043:C:H5'	2.27	0.69
32:DK:34:GLY:O	32:DK:36:GLY:N	2.25	0.69
39:DR:49:ILE:HG22	39:DR:54:VAL:N	2.07	0.69
1:AA:144:G:C4	1:AA:179:A:C2	2.79	0.69
11:AK:76:GLU:O	11:AK:77:TYR:CD1	2.45	0.69
35:BN:65:LEU:HD11	35:BN:69:ARG:NH2	2.05	0.69
1:CA:496:A:C2	1:CA:497:G:C5	2.80	0.69
1:CA:582:C:N3	1:CA:760:G:C6	2.60	0.69
5:CE:155:ALA:HB1	8:CH:66:PHE:CD2	2.26	0.69
1:CA:376:G:H5'	16:CP:5:ARG:HB3	1.74	0.69
22:DA:2134:A:OP2	22:DA:2157:G:N2	2.24	0.69
22:DA:864:G:C6	22:DA:865:C:N4	2.60	0.69
4:AD:174:ASP:OD2	4:AD:177:LYS:N	2.25	0.69
22:BA:1073:A:H3'	22:BA:1074:G:H5'	1.74	0.69
22:BA:370:G:OP2	57:BA:3561:HOH:O	2.09	0.69
22:DA:118:A:C8	22:DA:119:A:C8	2.80	0.69
22:DA:1809:A:H2'	22:DA:1810:A:C8	2.27	0.69
11:AK:102:ALA:O	11:AK:104:GLY:N	2.26	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:125:A:OP2	50:B2:19:ARG:NH2	2.25	0.69
23:BB:91:C:OP2	34:BM:18:ARG:HG2	1.91	0.69
1:CA:495:A:C2	1:CA:496:A:N6	2.60	0.69
22:DA:1509:A:O2'	22:DA:1510:G:P	2.51	0.69
1:AA:692:U:O2'	1:AA:694:A:N7	2.17	0.69
28:BG:155:GLU:OE2	28:BG:158:LYS:N	2.26	0.69
22:DA:1358:G:O2'	22:DA:1359:A:H5'	1.92	0.69
22:DA:1544:A:N1	22:DA:1545:A:C2	2.61	0.69
28:DG:111:HIS:O	28:DG:111:HIS:ND1	2.26	0.69
1:AA:484:G:H4'	1:AA:485:U:OP1	1.92	0.69
22:BA:747:U:C5	22:BA:2613:U:C5	2.81	0.69
22:DA:46:G:C2	22:DA:47:C:C5	2.79	0.69
22:DA:2821:A:OP2	25:DD:115:GLY:N	2.26	0.69
22:DA:2032:G:H1'	25:DD:150:GLN:NE2	2.06	0.69
22:DA:1088:A:N6	30:DI:135:SER:OG	2.24	0.69
2:AB:21:ARG:HA	2:AB:21:ARG:CZ	2.22	0.69
4:AD:120:HIS:O	4:AD:122:ALA:N	2.26	0.69
33:BL:82:LEU:HD23	33:BL:83:ALA:N	2.07	0.69
1:CA:1348:U:H4'	9:CI:122:ARG:HG3	1.74	0.69
1:CA:533:A:O2'	1:CA:535:A:OP2	2.11	0.69
22:DA:1208:C:C4	22:DA:1209:U:C4	2.81	0.69
25:DD:151:THR:O	25:DD:152:PRO:C	2.30	0.69
1:CA:688:G:O2'	1:CA:704:A:N1	2.21	0.69
22:DA:152:A:C2	22:DA:175:G:C2	2.81	0.69
22:DA:2115:G:O2'	22:DA:2117:A:N6	2.25	0.69
22:DA:39:G:C6	22:DA:40:U:C4	2.81	0.69
22:DA:763:G:OP1	57:DA:3691:HOH:O	2.11	0.69
22:BA:997:G:OP1	38:BQ:92:ARG:CG	2.41	0.69
9:CI:12:ARG:NH1	9:CI:107:ASP:OD2	2.26	0.69
22:DA:608:A:H2'	22:DA:609:A:C8	2.27	0.69
22:DA:740:C:H5'	22:DA:1784:A:H3'	1.75	0.69
35:DN:1:MET:CE	35:DN:1:MET:H1	2.05	0.69
2:AB:87:CYS:O	2:AB:89:GLN:N	2.26	0.69
22:BA:2191:A:H2'	22:BA:2192:U:C6	2.28	0.69
1:CA:1095:U:OP2	57:CA:1858:HOH:O	2.09	0.69
1:CA:66:A:C6	1:CA:67:C:C5	2.81	0.69
1:CA:875:U:O2'	8:CH:15:ARG:NH1	2.26	0.69
22:DA:362:A:C5	22:DA:363:G:C8	2.81	0.69
22:DA:377:G:C6	22:DA:378:C:C4	2.81	0.69
1:AA:858:G:O6	57:AA:1824:HOH:O	2.09	0.69
22:BA:1494:A:C2'	22:BA:1495:A:O5'	2.41	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:686:U:H2'	22:BA:788:A:N1	2.08	0.69
37:BP:52:ASN:O	37:BP:53:ARG:HG2	1.93	0.69
1:CA:8:A:C6	4:CD:206:LYS:HB3	2.28	0.69
22:DA:2886:A:C2	22:DA:2887:A:H1'	2.28	0.69
22:DA:414:C:O2	22:DA:2410:G:N2	2.25	0.69
22:DA:53:A:N7	22:DA:54:G:C4	2.61	0.69
11:AK:38:GLN:O	11:AK:40:ASN:ND2	2.26	0.68
12:AL:24:LEU:O	12:AL:25:GLU:C	2.30	0.68
13:AM:64:VAL:HG12	13:AM:64:VAL:O	1.93	0.68
1:CA:1004:A:O2'	1:CA:1036:A:N1	2.26	0.68
22:DA:1773:A:N7	22:DA:1829:A:H1'	2.08	0.68
22:DA:732:C:OP2	57:DA:3297:HOH:O	2.11	0.68
32:DK:76:VAL:HG12	37:DP:73:VAL:HG22	1.74	0.68
1:AA:254:G:OP1	17:AQ:70:THR:HB	1.92	0.68
5:AE:137:VAL:O	5:AE:138:ARG:HB2	1.93	0.68
16:AP:46:LYS:HD3	16:AP:47:GLU:N	2.07	0.68
22:BA:1433:A:O2'	22:BA:1434:A:H5'	1.93	0.68
22:BA:2448:A:OP2	57:BA:3687:HOH:O	2.10	0.68
22:BA:752:A:C2	22:BA:1781:U:C2	2.82	0.68
24:BC:71:LYS:NZ	24:BC:98:ASP:OD2	2.26	0.68
29:BH:117:LEU:O	29:BH:121:VAL:HG22	1.93	0.68
1:CA:511:C:C2	1:CA:512:U:C5	2.82	0.68
22:DA:2297:A:C2	22:DA:2298:A:C8	2.81	0.68
22:DA:2502:G:OP2	57:DA:3491:HOH:O	2.11	0.68
1:AA:1093:A:N3	1:AA:1109:C:O2'	2.20	0.68
53:B5:50:ILE:O	53:B5:203:GLU:CB	2.41	0.68
22:DA:1469:A:C2	22:DA:1470:A:C6	2.81	0.68
22:DA:1973:G:C6	22:DA:1974:C:C4	2.82	0.68
22:DA:2199:A:C6	22:DA:2200:C:C2	2.81	0.68
23:DB:84:G:N2	23:DB:93:C:C2	2.61	0.68
24:DC:204:VAL:O	24:DC:206:GLY:N	2.27	0.68
4:AD:59:GLN:O	4:AD:63:ARG:HG2	1.94	0.68
25:BD:99:GLU:HG2	25:BD:182:ALA:HB2	1.73	0.68
1:CA:475:C:H2'	1:CA:476:U:C6	2.28	0.68
1:CA:620:C:C2	4:CD:132:ILE:HD13	2.29	0.68
1:CA:801:U:C2	1:CA:802:A:C8	2.81	0.68
35:DN:63:ARG:NH1	35:DN:81:ASN:OD1	2.26	0.68
1:AA:1299:A:H2'	1:AA:1299:A:N3	2.09	0.68
16:AP:60:TRP:O	16:AP:63:GLN:N	2.27	0.68
12:CL:20:ASN:N	12:CL:20:ASN:OD1	2.26	0.68
22:DA:2146:C:H5''	22:DA:2147:A:OP1	1.92	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2788:C:O2'	22:DA:2809:A:N3	2.23	0.68
22:DA:287:G:C2	22:DA:354:A:C2	2.82	0.68
22:BA:2584:U:C5	22:BA:2585:U:C6	2.81	0.68
22:BA:357:C:H2'	22:BA:358:U:C6	2.28	0.68
22:DA:1351:C:OP2	57:DA:3397:HOH:O	2.11	0.68
22:DA:2575:C:OP2	57:DA:3707:HOH:O	2.10	0.68
22:DA:1638:C:H5''	22:DA:2710:C:O2'	1.93	0.68
22:DA:590:A:C6	22:DA:591:U:C4	2.82	0.68
30:DI:80:LEU:HD13	30:DI:136:MET:SD	2.33	0.68
25:BD:62:LYS:HB2	25:BD:63:PRO:HD3	1.76	0.68
1:CA:1408:A:C2	1:CA:1494:G:C4	2.82	0.68
22:DA:1411:U:H2'	22:DA:1412:U:O4'	1.94	0.68
22:DA:2453:A:N7	57:DA:3525:HOH:O	2.25	0.68
22:DA:827:U:OP2	57:DA:3696:HOH:O	2.11	0.68
35:DN:55:ALA:HA	35:DN:80:PHE:CE1	2.28	0.68
1:AA:81:A:H2'	1:AA:82:G:H5''	1.76	0.68
4:AD:3:ARG:CZ	4:AD:115:ARG:HD3	2.23	0.68
22:BA:2032:G:N7	57:BA:3537:HOH:O	2.25	0.68
22:BA:618:G:N7	57:BA:3287:HOH:O	2.27	0.68
22:BA:792:A:N3	22:BA:2072:C:O2'	2.22	0.68
22:DA:301:G:O4'	22:DA:317:G:N2	2.27	0.68
22:DA:593:U:H2'	22:DA:594:U:C6	2.29	0.68
22:DA:826:U:O2'	33:DL:53:GLY:HA3	1.94	0.68
1:AA:1370:G:O5'	9:AI:111:VAL:HG21	1.94	0.68
1:CA:227:G:H2'	1:CA:228:A:O4'	1.93	0.68
27:DF:123:ASP:OD1	27:DF:124:GLY:N	2.27	0.68
1:CA:1297:G:O2'	7:CG:114:LYS:NZ	2.21	0.68
1:CA:1316:G:N1	1:CA:1319:A:OP2	2.27	0.68
1:CA:706:A:C5	1:CA:707:U:C5	2.82	0.68
22:DA:271:G:C2	22:DA:367:G:C2	2.82	0.68
22:DA:425:G:C2	22:DA:426:C:C4	2.81	0.68
19:AS:22:ALA:O	19:AS:26:GLY:N	2.27	0.67
22:BA:1435:G:O2'	22:BA:1436:G:H5'	1.93	0.67
22:BA:555:G:O2'	22:BA:556:A:OP2	2.11	0.67
42:BU:82:ARG:O	42:BU:97:LYS:HG2	1.93	0.67
1:CA:802:A:C2	1:CA:803:G:H1'	2.28	0.67
4:CD:105:MET:SD	4:CD:143:VAL:HG13	2.33	0.67
22:DA:1737:G:C6	22:DA:1738:G:N1	2.63	0.67
22:DA:185:G:C6	22:DA:212:G:C2	2.82	0.67
22:DA:2655:G:O2'	22:DA:2656:U:P	2.51	0.67
25:BD:125:TRP:CD2	25:BD:160:LYS:HD2	2.29	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BH:122:LEU:HD23	29:BH:123:ARG:N	2.10	0.67
1:CA:1490:U:H2'	1:CA:1491:G:O4'	1.93	0.67
22:DA:1638:C:O2	22:DA:2698:U:O2'	2.11	0.67
22:DA:2504:U:C5	55:DA:3001:DOL:C16	2.77	0.67
25:DD:97:SER:O	25:DD:99:GLU:N	2.27	0.67
32:DK:107:LEU:O	32:DK:109:SER:N	2.27	0.67
22:BA:1421:G:C2	22:BA:1422:G:C8	2.83	0.67
23:BB:116:G:H4'	36:BO:54:VAL:HG13	1.75	0.67
33:BL:68:SER:O	33:BL:69:ARG:HB2	1.94	0.67
22:DA:2874:C:H2'	22:DA:2875:C:C6	2.29	0.67
25:BD:101:PHE:O	25:BD:103:ASP:N	2.26	0.67
1:CA:1279:G:H2'	1:CA:1279:G:N3	2.08	0.67
1:CA:499:A:C6	1:CA:547:A:C8	2.82	0.67
1:CA:718:A:C5	11:CK:118:HIS:CD2	2.83	0.67
9:CI:19:VAL:HG21	9:CI:82:GLY:HA3	1.77	0.67
22:DA:2091:C:H3'	22:DA:2092:U:H5''	1.75	0.67
22:DA:2111:U:C5	22:DA:2145:C:H2'	2.29	0.67
14:AN:91:GLY:O	14:AN:93:ILE:N	2.27	0.67
22:BA:1494:A:C2	22:BA:1495:A:C4	2.83	0.67
12:CL:25:GLU:O	12:CL:27:CYS:N	2.27	0.67
22:DA:2171:A:O2'	22:DA:2173:A:OP1	2.12	0.67
25:DD:140:HIS:NE2	57:DD:303:HOH:O	2.28	0.67
23:DB:48:U:H4'	36:DO:100:HIS:CD2	2.30	0.67
22:BA:2728:U:O2'	22:BA:2729:G:P	2.53	0.67
22:BA:682:G:H5'	50:B2:26:ASN:OD1	1.95	0.67
1:CA:1151:A:C2	1:CA:1152:A:C5	2.82	0.67
2:CB:96:TRP:CE2	2:CB:172:ALA:HB2	2.29	0.67
2:CB:21:ARG:HA	2:CB:21:ARG:CZ	2.25	0.67
4:CD:174:ASP:CG	4:CD:175:ALA:N	2.48	0.67
5:CE:146:ASN:OD1	5:CE:146:ASN:N	2.27	0.67
7:AG:13:LEU:O	7:AG:15:ASP:N	2.27	0.67
1:AA:1322:C:OP1	19:AS:78:ARG:NH2	2.28	0.67
22:BA:475:C:C4	22:BA:481:G:O6	2.48	0.67
22:DA:1223:G:N2	22:DA:1226:A:OP2	2.24	0.67
22:DA:1607:C:N4	22:DA:1622:G:N7	2.43	0.67
22:DA:271:G:H4'	22:DA:272:A:OP1	1.94	0.67
22:DA:453:A:OP1	57:DA:3242:HOH:O	2.12	0.67
22:DA:846:U:O2'	22:DA:847:U:O5'	2.12	0.67
1:AA:258:G:O6	57:AA:1811:HOH:O	2.12	0.67
15:AO:63:ARG:HG2	15:AO:67:LEU:HD12	1.77	0.67
22:BA:726:G:O2'	22:BA:727:A:OP2	2.13	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BE:111:GLU:HG2	26:BE:114:ARG:NH1	2.10	0.67
22:DA:1138:G:O2'	31:DJ:104:ALA:O	2.12	0.67
22:DA:2707:U:O2	35:DN:71:ARG:NH1	2.28	0.67
22:BA:1057:A:N6	22:BA:1087:G:OP2	2.28	0.67
22:BA:1924:C:C2'	22:BA:1925:C:H5''	2.24	0.67
22:BA:2346:A:H4'	22:BA:2347:C:OP2	1.93	0.67
30:BI:39:CYS:HA	30:BI:42:PHE:CB	2.25	0.67
22:BA:826:U:O2'	33:BL:53:GLY:HA3	1.94	0.67
22:DA:247:G:H4'	22:DA:386:G:C4	2.30	0.67
28:DG:118:PRO:CG	28:DG:144:VAL:HG21	2.25	0.67
42:DU:38:GLY:HA2	42:DU:41:LEU:CD2	2.25	0.67
8:AH:111:MET:HE1	8:AH:116:ALA:HA	1.77	0.67
22:BA:2886:A:C5	22:BA:2887:A:C8	2.83	0.67
22:BA:2063:C:O2'	55:BA:3001:DOL:H343	1.95	0.67
29:BH:27:ARG:O	29:BH:28:ASN:HB2	1.95	0.67
40:BS:83:LYS:O	40:BS:84:ARG:HD3	1.95	0.67
1:CA:1381:U:C2'	1:CA:1382:C:O5'	2.43	0.67
1:CA:919:A:C2	1:CA:920:U:C5	2.83	0.67
2:CB:203:ASN:OD1	2:CB:204:ASP:N	2.27	0.67
1:CA:427:U:OP1	4:CD:13:ARG:NH2	2.28	0.67
30:DI:58:VAL:HG12	30:DI:59:ILE:N	2.10	0.67
1:AA:209:U:H4'	1:AA:210:C:OP2	1.94	0.66
22:BA:1277:G:H5'	35:BN:20:MET:CE	2.25	0.66
22:BA:1922:G:N3	22:BA:1922:G:H2'	2.10	0.66
22:BA:2499:C:OP2	57:BA:3687:HOH:O	2.13	0.66
22:DA:577:G:O2'	22:DA:1254:A:OP1	2.13	0.66
22:DA:912:C:N4	22:DA:913:U:O4	2.28	0.66
22:DA:2603:G:C6	22:DA:2604:U:C4	2.83	0.66
55:DA:3001:DOL:C1	55:DA:3001:DOL:C43	2.73	0.66
32:DK:87:LEU:HD22	32:DK:92:GLU:HA	1.76	0.66
14:AN:51:LEU:O	14:AN:53:ARG:N	2.28	0.66
22:BA:1584:U:H2'	22:BA:1584:U:O2	1.95	0.66
22:BA:1838:C:C5	22:BA:1899:A:C6	2.83	0.66
29:BH:94:ILE:CG2	29:BH:99:ILE:HG13	2.26	0.66
1:CA:309:A:O2'	1:CA:607:A:N1	2.27	0.66
4:CD:105:MET:SD	4:CD:143:VAL:CG1	2.84	0.66
18:CR:20:GLU:N	18:CR:55:LEU:HD12	2.09	0.66
22:DA:2453:A:C2	57:DA:3529:HOH:O	2.48	0.66
1:AA:1018:G:N3	1:AA:1018:G:H2'	2.11	0.66
1:AA:582:C:C2	1:AA:583:A:C8	2.83	0.66
39:BR:24:LYS:HA	39:BR:94:THR:HG23	1.77	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1345:U:C2	1:CA:1377:A:C2	2.84	0.66
22:DA:1131:G:O6	22:DA:2024:G:O2'	2.13	0.66
22:DA:1525:A:C2	22:DA:1526:C:C2	2.82	0.66
22:DA:2594:C:N4	22:DA:2595:G:O6	2.28	0.66
22:DA:2843:G:N2	22:DA:2875:C:C2	2.64	0.66
42:DU:7:ARG:HG3	42:DU:8:ASP:N	2.11	0.66
1:AA:1204:A:OP1	57:AA:1782:HOH:O	2.13	0.66
1:AA:89:U:O2'	1:AA:90:C:C5'	2.44	0.66
2:AB:181:ILE:O	2:AB:183:VAL:HG23	1.95	0.66
22:BA:2325:G:C6	22:BA:2326:C:N4	2.63	0.66
25:BD:133:THR:CG2	25:BD:134:HIS:CD2	2.78	0.66
39:BR:66:HIS:ND1	39:BR:94:THR:HG22	2.10	0.66
5:CE:56:VAL:N	5:CE:57:PRO:HD2	2.11	0.66
22:DA:2056:G:O6	22:DA:2612:C:N3	2.28	0.66
24:BC:15:HIS:O	24:BC:204:VAL:HG21	1.95	0.66
27:BF:21:ASN:O	27:BF:21:ASN:ND2	2.28	0.66
1:AA:1191:A:OP2	3:AC:3:GLN:NE2	2.29	0.66
22:BA:1924:C:H2'	22:BA:1925:C:C5'	2.26	0.66
22:BA:528:A:C2	22:BA:2043:C:H4'	2.30	0.66
11:CK:27:PHE:CZ	11:CK:89:PRO:HG2	2.30	0.66
22:DA:1509:A:O2'	22:DA:1510:G:OP2	2.14	0.66
22:DA:2580:U:OP2	57:DA:3540:HOH:O	2.13	0.66
22:DA:363:G:H2'	22:DA:364:C:C6	2.31	0.66
22:DA:674:G:H1'	26:DE:69:ARG:NE	2.11	0.66
20:AT:83:ILE:O	20:AT:87:ALA:HB3	1.95	0.66
1:CA:1356:G:H2'	1:CA:1357:A:C8	2.30	0.66
6:CF:45:ARG:O	6:CF:56:LYS:HA	1.96	0.66
22:DA:1141:U:H4'	22:DA:1142:A:O4'	1.95	0.66
22:DA:2452:C:C4'	55:DA:3001:DOL:H461	2.25	0.66
26:DE:149:ILE:CD1	26:DE:172:ALA:HA	2.24	0.66
1:AA:859:G:H2'	1:AA:860:A:C8	2.30	0.66
15:AO:63:ARG:HG2	15:AO:67:LEU:CD1	2.26	0.66
22:BA:817:C:OP1	57:BA:3583:HOH:O	2.12	0.66
22:BA:933:A:H5'	22:BA:934:U:OP2	1.95	0.66
24:BC:136:PRO:O	24:BC:139:SER:OG	2.09	0.66
22:BA:2683:C:OP1	37:BP:51:ARG:NH2	2.28	0.66
1:CA:1225:A:H2'	1:CA:1226:C:C5	2.29	0.66
1:CA:70:U:H2'	1:CA:94:G:N7	2.11	0.66
8:CH:2:SER:O	8:CH:4:GLN:N	2.29	0.66
18:CR:22:ASP:OD1	18:CR:23:TYR:N	2.28	0.66
22:DA:1475:G:O2'	22:DA:1476:U:P	2.53	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:226:A:N6	22:DA:227:A:N1	2.44	0.66
22:DA:341:C:H2'	22:DA:342:A:C8	2.30	0.66
22:DA:2838:G:O2'	35:DN:45:ARG:NH1	2.28	0.66
22:DA:1454:C:OP1	35:DN:63:ARG:NH2	2.29	0.66
1:AA:1493:A:OP2	1:AA:1493:A:C8	2.49	0.66
30:BI:97:LYS:CG	30:BI:139:VAL:HG22	2.26	0.66
35:BN:73:ASN:HA	35:BN:76:VAL:HG12	1.78	0.66
4:CD:99:ASP:OD1	4:CD:100:ASN:N	2.29	0.66
6:CF:8:PHE:CZ	6:CF:60:VAL:HB	2.31	0.66
22:DA:1607:C:O2	22:DA:1621:U:C4	2.49	0.66
30:DI:69:PHE:N	30:DI:69:PHE:CD1	2.64	0.66
22:BA:2189:U:H2'	22:BA:2190:G:N9	2.10	0.65
22:BA:2711:A:OP2	57:BA:3552:HOH:O	2.14	0.65
22:BA:622:G:OP2	57:BA:3294:HOH:O	2.14	0.65
41:BT:2:ILE:CA	41:BT:3:ARG:HB2	2.26	0.65
1:CA:1391:U:H2'	1:CA:1392:G:C8	2.30	0.65
1:CA:485:U:OP2	1:CA:485:U:H4'	1.96	0.65
1:CA:604:G:H2'	1:CA:605:U:O4'	1.96	0.65
5:CE:133:PRO:O	5:CE:137:VAL:HG12	1.95	0.65
22:DA:104:A:N7	22:DA:105:C:C4	2.64	0.65
22:DA:1623:G:C5	22:DA:1624:U:C5	2.84	0.65
22:DA:2550:G:O6	22:DA:2551:C:N4	2.28	0.65
1:AA:926:G:N2	1:AA:1505:G:H2'	2.12	0.65
16:AP:10:GLY:HA3	16:AP:15:PRO:HA	1.78	0.65
27:BF:132:VAL:HG22	27:BF:152:LEU:HB3	1.78	0.65
2:CB:206:ALA:O	2:CB:208:ARG:N	2.29	0.65
22:DA:1444:G:C2	22:DA:1548:A:C2	2.84	0.65
48:B0:55:ILE:O	48:B0:56:ALA:CB	2.44	0.65
22:BA:1509:A:HO2'	22:BA:1510:G:P	2.16	0.65
29:BH:14:SER:O	29:BH:15:LEU:HB2	1.95	0.65
32:BK:70:ARG:HD3	32:BK:76:VAL:HG22	1.78	0.65
46:BY:35:GLY:O	46:BY:36:GLN:O	2.14	0.65
1:CA:1105:A:C2	1:CA:1106:G:N7	2.65	0.65
22:DA:2788:C:H2'	22:DA:2789:C:C6	2.31	0.65
22:DA:618:G:N7	57:DA:3289:HOH:O	2.28	0.65
32:DK:73:ASP:OD2	32:DK:75:SER:OG	2.14	0.65
22:BA:1688:U:H1'	22:BA:1701:A:C6	2.32	0.65
22:BA:447:A:OP2	57:BA:3210:HOH:O	2.14	0.65
26:BE:108:ILE:HD11	26:BE:180:LEU:HB3	1.79	0.65
42:BU:49:VAL:O	42:BU:49:VAL:CG2	2.44	0.65
22:DA:2061:G:H2'	22:DA:2501:C:O2'	1.96	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:443:A:N7	26:DE:40:ARG:CG	2.59	0.65
22:DA:1203:U:H1'	33:DL:4:ASN:HB3	1.79	0.65
22:DA:564:C:O4'	38:DQ:37:GLN:NE2	2.29	0.65
48:B0:33:THR:O	48:B0:33:THR:HG22	1.97	0.65
22:BA:1439:A:C2	22:BA:1553:A:C5	2.85	0.65
11:AK:13:ARG:N	22:BA:2141:G:H4'	2.11	0.65
27:BF:2:ALA:O	27:BF:4:LEU:N	2.30	0.65
29:BH:139:PHE:O	29:BH:140:ALA:CB	2.44	0.65
30:BI:19:ASN:N	30:BI:20:PRO:CD	2.60	0.65
1:CA:1127:G:H5'	1:CA:1280:A:O2'	1.96	0.65
1:CA:378:G:C2	1:CA:386:C:O2	2.50	0.65
1:CA:858:G:O6	1:CA:869:G:H3'	1.96	0.65
22:DA:192:C:N4	22:DA:193:U:O2	2.29	0.65
26:DE:108:ILE:HD13	26:DE:181:ILE:CG1	2.26	0.65
7:AG:111:ARG:NH1	7:AG:123:GLU:OE2	2.29	0.65
11:AK:34:ILE:HB	11:AK:74:VAL:HG11	1.77	0.65
17:AQ:12:VAL:HG12	17:AQ:13:VAL:N	2.10	0.65
17:AQ:53:CYS:SG	17:AQ:75:LEU:HD23	2.37	0.65
22:BA:2043:C:OP1	22:BA:2777:G:O2'	2.12	0.65
22:BA:636:G:N7	33:BL:109:LYS:NZ	2.39	0.65
25:BD:104:VAL:O	25:BD:105:LYS:HB2	1.97	0.65
29:BH:114:GLU:HB3	29:BH:133:GLN:O	1.97	0.65
1:CA:160:A:H2'	1:CA:161:A:O4'	1.97	0.65
22:DA:2164:C:H2'	22:DA:2165:C:C6	2.32	0.65
22:DA:2226:C:H2'	22:DA:2227:A:O4'	1.97	0.65
22:DA:2306:C:OP2	22:DA:2307:G:O2'	2.07	0.65
22:DA:2467:C:N4	22:DA:2468:A:C6	2.65	0.65
22:DA:277:G:H3'	22:DA:277:G:N3	2.11	0.65
22:DA:35:G:C4	22:DA:454:A:C2	2.84	0.65
22:DA:866:A:O4'	22:DA:914:G:N2	2.30	0.65
46:DY:56:LEU:O	46:DY:57:LEU:CB	2.45	0.65
1:AA:1320:C:N3	19:AS:36:ARG:NH1	2.43	0.65
1:AA:89:U:O2'	1:AA:90:C:H5''	1.96	0.65
5:AE:90:THR:HG22	5:AE:91:GLY:N	2.11	0.65
48:B0:48:TYR:CE2	48:B0:53:LYS:HB2	2.32	0.65
22:BA:2063:C:O2	22:BA:2450:A:N1	2.29	0.65
22:BA:2269:G:OP1	57:BA:3513:HOH:O	2.14	0.65
1:CA:1460:C:N4	1:CA:1461:G:C6	2.65	0.65
1:CA:801:U:H2'	1:CA:802:A:H8	1.62	0.65
22:DA:2079:U:H2'	22:DA:2080:A:O4'	1.96	0.65
22:DA:2599:G:N7	24:DC:236:GLU:HB3	2.12	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:70:G:N2	22:DA:71:A:N1	2.44	0.65
35:DN:107:ASN:O	35:DN:107:ASN:ND2	2.30	0.65
1:AA:657:U:O2	15:AO:22:THR:CG2	2.45	0.65
22:BA:2800:A:C2	22:BA:2895:G:H1'	2.31	0.65
22:BA:747:U:C4	22:BA:2613:U:C5	2.84	0.65
11:CK:88:GLY:N	11:CK:114:THR:HG22	2.11	0.65
22:DA:996:A:C2	22:DA:997:G:C8	2.85	0.65
34:DM:19:GLY:O	34:DM:38:ARG:NH1	2.29	0.65
22:BA:1358:G:N7	57:BA:3406:HOH:O	2.30	0.65
22:BA:813:U:H2'	22:BA:814:C:C6	2.32	0.65
39:BR:39:LEU:HA	39:BR:49:ILE:HG23	1.79	0.65
1:CA:17:U:H2'	1:CA:18:C:C6	2.31	0.65
1:CA:485:U:O2'	1:CA:486:U:OP1	2.14	0.65
22:DA:1359:A:C8	22:DA:1373:A:N1	2.65	0.65
22:DA:2589:A:OP1	57:DA:3311:HOH:O	2.14	0.65
22:DA:301:G:H1'	22:DA:302:C:C6	2.32	0.65
22:DA:757:G:N7	57:DA:3303:HOH:O	2.29	0.65
1:AA:597:G:C2	1:AA:644:U:C2	2.84	0.65
12:AL:21:VAL:HG23	12:AL:95:TYR:CE1	2.31	0.65
14:AN:54:ASP:OD1	14:AN:59:ARG:NH1	2.27	0.65
53:B5:121:MET:CB	53:B5:143:ALA:HB1	2.27	0.65
22:BA:1078:U:H1'	22:BA:1088:A:C2	2.32	0.65
22:BA:2711:A:P	57:BA:3550:HOH:O	2.55	0.65
22:BA:858:G:H3'	22:BA:859:G:C8	2.32	0.65
1:CA:154:U:C2	1:CA:168:G:N2	2.65	0.65
1:CA:64:G:C8	1:CA:99:C:N4	2.65	0.65
4:CD:174:ASP:O	4:CD:175:ALA:CB	2.44	0.65
19:CS:66:MET:SD	19:CS:74:PHE:CZ	2.90	0.65
22:DA:1237:A:H4'	22:DA:1238:G:OP1	1.96	0.65
1:AA:1062:U:H2'	1:AA:1063:C:C6	2.32	0.64
5:AE:82:GLN:HG2	5:AE:150:PRO:HB3	1.78	0.64
7:AG:40:GLU:HB2	7:AG:44:TYR:CE2	2.32	0.64
16:AP:79:ASN:O	16:AP:80:LYS:HB2	1.96	0.64
22:BA:2637:U:C2'	22:BA:2638:G:H5'	2.27	0.64
1:CA:8:A:C5	4:CD:206:LYS:HB3	2.31	0.64
50:D2:35:ARG:O	50:D2:38:GLY:N	2.30	0.64
22:DA:1566:A:C2	24:DC:213:TRP:CD2	2.85	0.64
22:DA:2307:G:OP1	22:DA:2308:G:N2	2.29	0.64
22:DA:290:U:C4	22:DA:291:G:N7	2.65	0.64
22:DA:54:G:C2	22:DA:55:G:C8	2.85	0.64
34:DM:2:LEU:O	34:DM:3:GLN:HB3	1.96	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:DN:71:ARG:CG	35:DN:71:ARG:HH21	2.10	0.64
1:AA:11:G:C5	1:AA:12:U:C5	2.85	0.64
4:AD:130:VAL:HG11	4:AD:135:TYR:CD1	2.33	0.64
8:AH:10:MET:HE1	8:AH:33:LYS:HB3	1.79	0.64
51:B3:27:ALA:O	51:B3:28:ASN:HB2	1.98	0.64
22:BA:1428:C:C5	22:BA:1569:A:H5''	2.32	0.64
22:BA:733:G:OP2	57:BA:3296:HOH:O	2.14	0.64
29:BH:122:LEU:C	29:BH:123:ARG:HG2	2.17	0.64
4:CD:59:GLN:OE1	4:CD:59:GLN:HA	1.96	0.64
16:CP:39:PHE:CD1	16:CP:74:LEU:HD11	2.32	0.64
1:AA:1006:G:OP1	1:AA:1037:C:O2'	2.15	0.64
1:AA:1053:G:O5'	1:AA:1054:C:H3'	1.96	0.64
17:AQ:12:VAL:O	17:AQ:13:VAL:HG12	1.97	0.64
22:BA:1700:A:H5'	22:BA:1701:A:OP2	1.97	0.64
23:BB:30:C:H2'	23:BB:31:C:H5'	1.79	0.64
28:BG:121:ILE:HD12	28:BG:141:ILE:HG22	1.78	0.64
35:BN:33:ILE:HG13	35:BN:114:GLU:HB3	1.79	0.64
1:CA:1007:U:H2'	1:CA:1008:U:C5'	2.27	0.64
12:CL:57:LEU:O	12:CL:59:ASN:N	2.29	0.64
22:DA:1416:G:C4	22:DA:1417:C:C5	2.86	0.64
22:DA:1603:A:OP1	57:DA:3409:HOH:O	2.14	0.64
22:DA:1802:A:C2	22:DA:1803:A:C4	2.85	0.64
22:DA:2199:A:C5	22:DA:2225:A:C6	2.85	0.64
22:DA:2824:C:N4	22:DA:2825:G:N7	2.45	0.64
22:DA:694:U:C2'	22:DA:695:G:H5''	2.27	0.64
22:DA:878:A:N6	22:DA:899:A:O2'	2.31	0.64
1:AA:683:G:N2	11:AK:39:GLY:O	2.30	0.64
17:AQ:16:LYS:N	17:AQ:17:MET:SD	2.71	0.64
22:BA:2591:C:OP1	24:BC:238:ARG:NH1	2.29	0.64
22:BA:747:U:C4	22:BA:2613:U:C4	2.86	0.64
27:BF:176:PRO:O	27:BF:177:PHE:CG	2.51	0.64
1:CA:1211:U:O2'	1:CA:1212:U:OP2	2.15	0.64
1:CA:1255:G:C6	1:CA:1279:G:C8	2.86	0.64
1:CA:945:G:C2	1:CA:946:A:C8	2.85	0.64
2:CB:35:ARG:O	2:CB:37:LYS:N	2.31	0.64
10:CJ:91:ASP:N	10:CJ:91:ASP:OD1	2.30	0.64
22:DA:1438:U:C5	22:DA:1552:A:C2	2.86	0.64
22:DA:1440:U:O4	57:DA:3628:HOH:O	2.14	0.64
22:DA:72:U:O2'	22:DA:73:A:O5'	2.14	0.64
1:AA:1310:G:OP2	13:AM:87:ARG:NH2	2.31	0.64
5:AE:81:LEU:HB3	5:AE:147:MET:HE3	1.79	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AN:21:PHE:HA	14:AN:25:ALA:HB3	1.78	0.64
22:BA:1153:C:P	57:BA:3364:HOH:O	2.54	0.64
22:BA:1474:U:C2'	22:BA:1475:G:H5'	2.27	0.64
24:BC:252:THR:O	24:BC:253:LYS:C	2.33	0.64
26:BE:155:GLU:HA	26:BE:155:GLU:OE1	1.97	0.64
39:BR:68:ARG:HD3	39:BR:92:TRP:CZ2	2.33	0.64
2:CB:119:THR:O	2:CB:120:GLN:HB2	1.98	0.64
9:CI:33:ARG:NE	9:CI:37:GLN:OE1	2.30	0.64
22:DA:2147:A:H2'	22:DA:2148:G:O4'	1.98	0.64
25:DD:12:THR:OG1	25:DD:13:ARG:N	2.30	0.64
31:DJ:41:LYS:NZ	31:DJ:52:ASP:OD2	2.19	0.64
33:DL:38:GLN:O	33:DL:40:SER:N	2.29	0.64
37:DP:103:ARG:HB3	37:DP:108:ALA:HB2	1.80	0.64
13:AM:114:LYS:CB	13:AM:115:PRO:HD3	2.26	0.64
48:B0:15:MET:O	48:B0:18:SER:HB3	1.98	0.64
1:CA:1061:G:O4'	10:CJ:58:ASN:ND2	2.31	0.64
19:CS:55:ARG:NE	19:CS:79:THR:HG22	2.13	0.64
22:DA:1027:A:C6	22:DA:1126:A:N3	2.66	0.64
22:DA:583:G:C5	22:DA:584:C:C5	2.86	0.64
10:AJ:35:GLN:CG	10:AJ:77:VAL:HB	2.27	0.64
48:B0:55:ILE:O	48:B0:56:ALA:HB3	1.98	0.64
22:BA:1869:G:H3'	22:BA:1870:C:H5'	1.80	0.64
22:BA:2128:G:H2'	22:BA:2129:C:O4'	1.97	0.64
35:BN:66:ALA:O	35:BN:69:ARG:O	2.15	0.64
23:BB:116:G:H4'	36:BO:54:VAL:O	1.97	0.64
1:CA:829:G:C5	1:CA:858:G:N2	2.66	0.64
5:CE:65:GLU:OE1	5:CE:69:ARG:NH2	2.31	0.64
9:CI:120:LYS:HG3	9:CI:123:ARG:HB3	1.78	0.64
22:DA:1907:G:C2	22:DA:1924:C:C2	2.85	0.64
1:AA:1500:A:OP2	57:AA:1872:HOH:O	2.14	0.64
1:AA:49:U:O4	1:AA:365:U:H5	1.81	0.64
1:AA:663:A:C2	1:AA:743:A:C2	2.86	0.64
22:BA:2419:U:O2'	22:BA:2420:C:H5'	1.97	0.64
1:CA:563:A:H2'	1:CA:567:G:C8	2.33	0.64
1:CA:706:A:O2'	11:CK:31:ILE:HD11	1.98	0.64
22:DA:144:A:C2	22:DA:145:C:C2	2.85	0.64
22:DA:388:G:N7	22:DA:390:U:H2'	2.12	0.64
22:DA:668:A:C2	22:DA:670:A:C5	2.86	0.64
1:AA:650:G:C2'	1:AA:651:C:H5'	2.28	0.64
3:AC:139:GLN:O	3:AC:141:ALA:N	2.29	0.64
22:BA:1246:A:H2'	22:BA:1247:A:O5'	1.98	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2343:U:HO2'	22:BA:2373:G:HO2'	1.43	0.64
22:BA:645:C:O2'	22:BA:646:U:H5''	1.98	0.64
42:BU:12:ILE:CG2	42:BU:80:ALA:HB2	2.28	0.64
1:CA:527:G:C6	1:CA:528:C:C5	2.86	0.64
22:DA:192:C:C5	22:DA:193:U:C2	2.86	0.64
22:DA:422:A:C2	22:DA:423:A:C4	2.86	0.64
25:DD:208:LYS:O	25:DD:209:ALA:CB	2.46	0.64
40:DS:66:ILE:O	40:DS:68:ASP:N	2.31	0.64
1:AA:841:C:O2'	2:CB:153:ASP:OD1	2.16	0.64
4:AD:32:CYS:O	4:AD:33:LYS:HB2	1.98	0.64
20:AT:81:ALA:O	20:AT:85:LYS:HG2	1.96	0.64
22:BA:1916:A:H2'	22:BA:1917:U:H1'	1.80	0.64
22:BA:2430:A:H5'	22:BA:2431:U:OP2	1.98	0.64
22:BA:265:A:H4'	22:BA:266:G:OP1	1.98	0.64
40:BS:73:LYS:HB2	40:BS:106:VAL:HB	1.79	0.64
17:CQ:21:ILE:N	17:CQ:48:ASP:OD1	2.30	0.64
22:DA:1359:A:C8	22:DA:1373:A:C2	2.86	0.64
22:DA:187:G:C2	22:DA:210:C:C2	2.86	0.64
26:DE:128:ALA:O	26:DE:130:LYS:N	2.31	0.64
34:DM:136:MET:O	43:DV:79:ARG:NH2	2.31	0.64
22:BA:2048:G:O6	57:BA:3680:HOH:O	2.11	0.63
24:BC:8:PRO:HB3	24:BC:14:ARG:HB2	1.80	0.63
22:BA:1009:A:OP1	31:BJ:39:LYS:NZ	2.31	0.63
1:CA:664:G:N2	1:CA:666:G:C8	2.66	0.63
15:CO:18:ASP:OD1	15:CO:20:ASN:N	2.30	0.63
22:DA:1440:U:O4	57:DA:3627:HOH:O	2.13	0.63
22:DA:1676:A:H2'	22:DA:1677:A:O4'	1.99	0.63
22:DA:2004:G:P	57:DA:3798:HOH:O	2.56	0.63
22:DA:200:U:O4	22:DA:248:G:C2	2.51	0.63
1:AA:663:A:N1	1:AA:743:A:C2	2.66	0.63
53:B5:65:LEU:HD11	53:B5:191:ARG:CB	2.28	0.63
22:BA:2820:A:N1	25:BD:197:THR:HG22	2.13	0.63
38:BQ:79:PHE:CZ	38:BQ:83:LEU:HD11	2.34	0.63
43:BV:80:HIS:CE1	43:BV:83:LYS:CG	2.81	0.63
44:BW:37:ILE:HG21	44:BW:80:ILE:HG21	1.79	0.63
8:CH:2:SER:C	8:CH:4:GLN:H	2.01	0.63
22:DA:1097:U:C5	22:DA:1098:A:H1'	2.33	0.63
22:DA:1668:A:O4'	22:DA:1669:A:C2	2.51	0.63
22:DA:297:G:C8	57:DA:3229:HOH:O	2.49	0.63
22:DA:352:A:H2'	22:DA:353:C:O4'	1.99	0.63
29:DH:117:LEU:CD1	29:DH:130:VAL:HG22	2.28	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:123:ASP:OD1	2:AB:123:ASP:N	2.30	0.63
22:BA:545:U:H3'	22:BA:546:U:H4'	1.80	0.63
22:BA:996:A:C2	22:BA:997:G:C8	2.85	0.63
24:BC:144:VAL:HG21	24:BC:162:VAL:HG21	1.79	0.63
37:BP:53:ARG:CG	37:BP:53:ARG:HH11	2.11	0.63
41:BT:1:MET:O	41:BT:2:ILE:HG13	1.97	0.63
22:BA:58:G:OP1	41:BT:78:SER:HB2	1.98	0.63
16:CP:14:ARG:N	16:CP:15:PRO:CD	2.61	0.63
21:CU:21:ARG:HD3	21:CU:21:ARG:N	2.12	0.63
22:DA:1363:C:O2	22:DA:1369:G:C2	2.51	0.63
22:DA:276:U:H2'	22:DA:276:U:O2	1.98	0.63
22:DA:668:A:N6	22:DA:670:A:O2'	2.32	0.63
22:DA:727:A:H2'	22:DA:728:G:C8	2.34	0.63
39:DR:38:VAL:HG11	39:DR:57:GLY:HA3	1.79	0.63
11:AK:16:VAL:O	11:AK:17:SER:CB	2.46	0.63
53:B5:87:ALA:HB2	53:B5:153:ILE:CB	2.28	0.63
22:BA:322:A:C5	22:BA:340:A:C2	2.86	0.63
39:BR:49:ILE:HB	39:BR:51:VAL:O	1.99	0.63
1:CA:1167:A:N7	1:CA:1169:A:C5	2.67	0.63
1:CA:404:G:N7	4:CD:2:ALA:N	2.46	0.63
4:CD:34:ILE:O	4:CD:35:GLU:HB3	1.98	0.63
15:CO:17:ARG:O	15:CO:18:ASP:CB	2.46	0.63
22:DA:1096:A:H2'	22:DA:1097:U:O4'	1.97	0.63
22:DA:2048:G:OP1	57:DA:3380:HOH:O	2.15	0.63
22:DA:2408:U:O4	57:DA:3559:HOH:O	2.12	0.63
22:DA:2636:C:H2'	22:DA:2637:U:C6	2.34	0.63
22:DA:682:G:N2	22:DA:683:U:C2	2.66	0.63
25:DD:149:ASN:OD1	25:DD:150:GLN:N	2.31	0.63
29:DH:117:LEU:HG	29:DH:120:GLY:O	1.98	0.63
35:DN:87:PHE:O	35:DN:90:ARG:N	2.32	0.63
1:AA:373:A:C2	1:AA:374:A:C8	2.86	0.63
1:AA:77:A:N1	1:AA:91:U:O4	2.30	0.63
40:BS:38:TYR:CD2	48:B0:39:LEU:HD21	2.33	0.63
22:BA:1087:G:N2	22:BA:1090:A:C8	2.67	0.63
22:BA:1768:C:C4	22:BA:1769:U:C5	2.87	0.63
22:BA:572:A:OP2	39:BR:80:ARG:NH2	2.29	0.63
1:CA:1150:A:N6	1:CA:1151:A:H62	1.96	0.63
3:CC:139:GLN:O	3:CC:141:ALA:N	2.31	0.63
22:DA:1094:U:H2'	22:DA:1096:A:OP2	1.99	0.63
22:DA:1805:A:C2	22:DA:1813:G:C2	2.86	0.63
22:DA:945:A:C8	22:DA:2448:A:C2	2.86	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2563:U:O4'	22:DA:2566:A:N6	2.31	0.63
2:AB:219:ALA:O	2:AB:220:THR:HB	1.98	0.63
4:AD:120:HIS:O	4:AD:121:LYS:C	2.37	0.63
5:AE:65:GLU:OE1	5:AE:66:LYS:N	2.32	0.63
22:BA:1317:G:C2	22:BA:1336:A:C2	2.86	0.63
28:BG:80:THR:HG22	28:BG:81:GLU:N	2.12	0.63
36:BO:31:THR:HG22	36:BO:34:HIS:H	1.64	0.63
1:CA:1141:C:O2'	1:CA:1142:G:O5'	2.15	0.63
13:CM:98:ARG:O	13:CM:100:GLN:N	2.31	0.63
22:DA:1627:G:C2	22:DA:1628:G:C8	2.86	0.63
22:DA:53:A:C8	22:DA:54:G:C8	2.87	0.63
23:DB:44:G:N2	23:DB:48:U:O2	2.32	0.63
33:DL:93:ASN:OD1	33:DL:94:THR:N	2.31	0.63
1:AA:1161:C:H2'	1:AA:1162:C:C6	2.34	0.63
22:BA:1746:A:H2'	22:BA:1747:U:H6	1.62	0.63
22:BA:1917:U:C4	22:BA:1918:A:C5	2.87	0.63
22:BA:1939:U:OP1	22:BA:2604:U:O2'	2.17	0.63
11:CK:125:LYS:O	21:CU:34:ARG:NE	2.32	0.63
22:DA:2652:C:C4	22:DA:2653:U:C4	2.86	0.63
24:DC:33:LEU:O	24:DC:64:ILE:HD12	1.99	0.63
25:DD:104:VAL:O	25:DD:105:LYS:CB	2.46	0.63
1:AA:1181:G:O2'	1:AA:1182:G:C5	2.51	0.63
23:BB:33:G:O2'	23:BB:34:A:H5'	1.99	0.63
24:BC:237:GLY:C	57:BC:407:HOH:O	2.36	0.63
25:BD:151:THR:HG22	25:BD:152:PRO:CD	2.29	0.63
30:BI:39:CYS:HA	30:BI:42:PHE:HB3	1.80	0.63
1:CA:1521:C:N3	1:CA:1522:U:C5	2.67	0.63
22:DA:1258:U:H2'	22:DA:1259:G:C8	2.33	0.63
22:DA:1313:U:H4'	22:DA:1332:G:H4'	1.79	0.63
22:DA:1390:U:H2'	22:DA:1391:U:H5'	1.81	0.63
22:DA:1447:C:H2'	22:DA:1448:G:C8	2.34	0.63
22:DA:1805:A:N3	22:DA:1813:G:C2	2.67	0.63
22:DA:333:G:C5	22:DA:334:C:C5	2.87	0.63
22:DA:980:A:C4	22:DA:1136:G:O4'	2.51	0.63
31:DJ:41:LYS:O	31:DJ:44:TYR:N	2.32	0.63
22:BA:1695:G:H1'	24:BC:8:PRO:O	1.98	0.63
22:BA:1717:A:C2'	22:BA:1718:G:O5'	2.47	0.63
22:BA:1917:U:C2'	22:BA:1918:A:H5'	2.28	0.63
26:BE:145:ASP:HB3	26:BE:184:ASP:OD2	1.99	0.63
37:BP:64:ILE:O	37:BP:64:ILE:HG22	1.97	0.63
12:CL:47:SER:O	12:CL:48:ALA:CB	2.47	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2121:G:N2	22:DA:2177:C:O2	2.31	0.63
1:AA:71:A:O2'	1:AA:72:A:OP2	2.16	0.62
1:AA:807:A:C5	1:AA:808:C:C5	2.86	0.62
14:AN:72:GLY:O	14:AN:80:SER:HA	1.99	0.62
22:BA:2448:A:P	57:BA:3687:HOH:O	2.57	0.62
22:BA:64:A:H2'	22:BA:65:U:C6	2.33	0.62
1:CA:183:C:O2'	1:CA:184:G:O5'	2.16	0.62
6:CF:32:ALA:O	6:CF:34:GLY:N	2.32	0.62
24:DC:237:GLY:O	24:DC:239:ASN:N	2.32	0.62
1:AA:1160:G:O6	1:AA:1181:G:C6	2.51	0.62
1:AA:381:C:H2'	1:AA:382:A:O4'	1.97	0.62
2:AB:73:LYS:O	2:AB:75:ALA:N	2.30	0.62
11:AK:69:ARG:HD3	22:BA:2146:C:N3	2.14	0.62
22:BA:731:C:P	57:BA:3695:HOH:O	2.52	0.62
41:BT:33:LYS:HG3	41:BT:80:TRP:CE3	2.34	0.62
1:CA:495:A:N1	1:CA:496:A:N6	2.46	0.62
1:CA:815:A:N7	1:CA:1509:C:O2'	2.25	0.62
22:DA:1707:G:N2	22:DA:1752:C:C2	2.67	0.62
22:DA:197:A:H62	22:DA:2430:A:H2'	1.64	0.62
22:DA:2339:C:H2'	22:DA:2340:A:C8	2.34	0.62
22:DA:2504:U:C6	55:DA:3001:DOL:H161	2.33	0.62
22:DA:1993:U:H4'	25:DD:133:THR:CG2	2.29	0.62
22:DA:2531:A:H5'	28:DG:157:TYR:CZ	2.35	0.62
22:DA:2262:U:OP2	44:DW:16:SER:HB2	1.99	0.62
1:AA:1504:G:OP2	1:AA:1507:A:O2'	2.16	0.62
1:AA:232:G:H2'	1:AA:233:C:O4'	2.00	0.62
1:AA:1226:C:OP2	13:AM:90:ARG:NH2	2.32	0.62
22:BA:2192:U:C2'	22:BA:2193:G:H5'	2.29	0.62
22:BA:757:G:N7	57:BA:3304:HOH:O	2.31	0.62
40:BS:84:ARG:HB2	40:BS:96:ILE:CG1	2.29	0.62
4:CD:9:LEU:CD2	4:CD:22:LYS:HD2	2.29	0.62
22:DA:223:A:C5	22:DA:422:A:C8	2.87	0.62
22:DA:2484:G:OP1	34:DM:44:ARG:NH2	2.32	0.62
22:DA:2550:G:C6	22:DA:2551:C:N4	2.68	0.62
22:DA:450:G:N1	22:DA:454:A:OP2	2.29	0.62
30:DI:6:GLN:O	30:DI:7:ALA:CB	2.48	0.62
39:DR:52:PRO:O	39:DR:53:PHE:CG	2.52	0.62
1:AA:1493:A:O2'	1:AA:1494:G:OP2	2.17	0.62
4:AD:58:LYS:HG3	4:AD:59:GLN:N	2.13	0.62
10:AJ:48:ARG:NH1	10:AJ:66:GLU:OE1	2.31	0.62
22:BA:1073:A:H3'	22:BA:1074:G:H5''	1.80	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:587:C:OP2	33:BL:21:ARG:NH1	2.32	0.62
1:CA:1364:U:O2	1:CA:1364:U:H2'	1.99	0.62
22:DA:1210:G:O6	22:DA:1237:A:O2'	2.11	0.62
22:DA:1623:G:C6	22:DA:1624:U:C5	2.88	0.62
22:DA:669:G:N2	22:DA:670:A:C2	2.67	0.62
2:AB:186:ILE:HA	2:AB:200:ILE:HB	1.81	0.62
22:BA:2188:U:H2'	22:BA:2189:U:C6	2.35	0.62
32:BK:34:GLY:O	32:BK:35:VAL:C	2.37	0.62
3:CC:173:VAL:O	3:CC:175:LEU:N	2.32	0.62
1:CA:409:U:OP1	4:CD:24:GLY:CA	2.46	0.62
18:CR:24:LYS:O	18:CR:26:ILE:N	2.32	0.62
22:DA:2142:A:C2	22:DA:2150:C:N3	2.67	0.62
22:DA:2407:A:OP2	57:DA:3558:HOH:O	2.15	0.62
22:DA:2800:A:C2	22:DA:2895:G:H1'	2.34	0.62
22:DA:247:G:H4'	22:DA:386:G:C5	2.34	0.62
22:DA:511:U:H5''	22:DA:1235:G:H4'	1.81	0.62
41:DT:69:ARG:NH1	57:DT:102:HOH:O	2.32	0.62
13:AM:16:VAL:HG23	13:AM:41:GLU:O	2.00	0.62
22:BA:2066:C:OP1	57:BA:3512:HOH:O	2.16	0.62
22:BA:2321:U:H5'	22:BA:2322:A:OP2	2.00	0.62
25:BD:133:THR:HG23	25:BD:134:HIS:N	2.15	0.62
33:BL:61:LEU:O	51:B3:13:ARG:HD3	1.99	0.62
1:CA:1007:U:H2'	1:CA:1008:U:H5'	1.81	0.62
22:DA:1627:G:N2	22:DA:1628:G:C8	2.68	0.62
1:AA:1446:A:H2'	1:AA:1447:A:H5'	1.81	0.62
2:AB:49:MET:O	2:AB:53:ALA:CB	2.47	0.62
22:BA:1246:A:C2'	22:BA:1247:A:O5'	2.48	0.62
46:BY:46:VAL:O	46:BY:50:VAL:HG23	2.00	0.62
1:CA:1217:C:H2'	1:CA:1218:C:C6	2.35	0.62
1:CA:72:A:N6	1:CA:73:C:N4	2.48	0.62
1:CA:801:U:H2'	1:CA:802:A:C8	2.35	0.62
22:DA:78:U:H2'	22:DA:79:C:O4'	1.99	0.62
36:DO:111:ARG:NH2	36:DO:117:PHE:O	2.33	0.62
2:AB:41:ILE:HG21	2:AB:202:GLY:HA2	1.82	0.62
7:AG:56:LYS:O	7:AG:57:SER:CB	2.48	0.62
15:AO:2:SER:O	15:AO:3:LEU:CB	2.48	0.62
22:BA:1802:A:N1	22:BA:1822:C:H1'	2.15	0.62
22:BA:1838:C:C5	22:BA:1899:A:C5	2.87	0.62
26:BE:106:LYS:HG3	26:BE:200:LEU:HG	1.82	0.62
38:BQ:49:ASP:HA	38:BQ:52:GLN:HB2	1.81	0.62
1:CA:1089:G:N2	1:CA:1090:U:H1'	2.15	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2133:G:H2'	22:DA:2157:G:N2	2.14	0.62
1:AA:411:A:C5	1:AA:429:U:C5	2.88	0.62
2:AB:75:ALA:O	2:AB:76:ALA:HB2	2.00	0.62
13:AM:64:VAL:O	13:AM:69:LEU:HB2	2.00	0.62
14:AN:14:VAL:HA	14:AN:60:GLN:OE1	1.99	0.62
53:B5:213:VAL:O	53:B5:214:TYR:CB	2.46	0.62
22:BA:1078:U:H1'	22:BA:1088:A:N1	2.15	0.62
22:BA:2327:A:H2'	22:BA:2328:A:C8	2.34	0.62
22:BA:572:A:H5''	22:BA:573:U:OP2	2.00	0.62
25:BD:13:ARG:HD2	25:BD:15:PHE:CZ	2.35	0.62
28:BG:174:ALA:O	28:BG:175:LYS:CB	2.47	0.62
1:CA:1521:C:C4	1:CA:1522:U:C5	2.87	0.62
15:CO:18:ASP:OD1	15:CO:20:ASN:HB2	1.99	0.62
22:DA:1582:C:O2'	22:DA:1585:C:N3	2.30	0.62
22:DA:2146:C:C5'	22:DA:2147:A:OP1	2.48	0.62
22:DA:237:C:C4	22:DA:238:C:C5	2.87	0.62
5:AE:101:GLU:HB3	5:AE:122:ASN:CB	2.30	0.62
20:AT:58:VAL:HG12	20:AT:59:ASP:N	2.14	0.62
37:BP:103:ARG:CG	37:BP:103:ARG:HH11	2.13	0.62
1:CA:790:A:C6	1:CA:791:G:C6	2.87	0.62
2:CB:58:ASN:CG	2:CB:220:THR:O	2.37	0.62
7:CG:5:ARG:HA	7:CG:5:ARG:NE	2.15	0.62
9:CI:15:SER:OG	9:CI:69:GLY:O	2.10	0.62
22:DA:1544:A:C6	22:DA:1545:A:N1	2.68	0.62
22:DA:160:A:N3	22:DA:2208:C:O2'	2.32	0.62
22:DA:1827:U:O4'	22:DA:1970:A:O2'	2.17	0.62
24:DC:80:ARG:NE	24:DC:82:GLU:OE2	2.32	0.62
1:AA:1366:C:O2'	10:AJ:62:ARG:NH2	2.33	0.61
1:AA:723:U:H5'	1:AA:724:G:OP1	2.00	0.61
10:AJ:10:LEU:CD1	10:AJ:98:VAL:HG12	2.30	0.61
17:AQ:69:LYS:O	17:AQ:70:THR:HB	2.00	0.61
22:BA:253:C:OP2	51:B3:5:LYS:HE3	2.00	0.61
22:BA:2584:U:H2'	22:BA:2585:U:H5'	1.81	0.61
22:BA:2820:A:C6	25:BD:197:THR:HG22	2.35	0.61
27:BF:108:VAL:HG11	27:BF:176:PRO:HG2	1.81	0.61
1:CA:243:A:H4'	1:CA:244:U:H5''	1.81	0.61
29:BH:93:SER:O	1:CA:368:U:C6	2.53	0.61
22:DA:1060:U:O4'	22:DA:1062:G:H5'	2.00	0.61
22:DA:129:C:H2'	22:DA:130:C:C6	2.35	0.61
22:DA:1805:A:C2	22:DA:1813:G:N1	2.68	0.61
22:DA:2726:A:O2'	22:DA:2727:A:O5'	2.18	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:46:G:C2	22:DA:47:C:C6	2.87	0.61
22:DA:497:A:H2'	22:DA:498:G:O4'	2.00	0.61
22:DA:1248:G:N7	26:DE:46:GLN:NE2	2.47	0.61
1:AA:1167:A:N7	1:AA:1169:A:C6	2.68	0.61
1:AA:1491:G:H2'	1:AA:1492:A:O4'	2.00	0.61
1:AA:872:A:C5	1:AA:874:G:C8	2.89	0.61
1:AA:263:A:OP2	20:AT:74:ARG:NH1	2.33	0.61
22:BA:1106:G:N2	22:BA:1107:G:H1'	2.15	0.61
22:BA:2820:A:N1	25:BD:197:THR:CG2	2.63	0.61
42:BU:18:ASP:O	42:BU:19:LYS:C	2.39	0.61
43:BV:48:MET:SD	43:BV:86:LEU:HD12	2.40	0.61
44:BW:68:LYS:HD3	44:BW:83:GLU:OE2	2.00	0.61
1:CA:1467:C:H2'	1:CA:1468:A:C8	2.35	0.61
1:CA:1417:G:C6	1:CA:1482:G:C6	2.88	0.61
4:CD:29:ASP:C	4:CD:31:LYS:H	2.04	0.61
7:CG:101:MET:HA	7:CG:104:ILE:HD12	1.81	0.61
20:CT:67:ILE:O	20:CT:67:ILE:CG2	2.49	0.61
22:DA:1790:C:O2'	24:DC:208:ALA:HB2	2.00	0.61
22:DA:1855:U:C5	22:DA:1856:U:C5	2.88	0.61
22:DA:200:U:C4	22:DA:248:G:C2	2.88	0.61
22:DA:2590:A:O3'	24:DC:238:ARG:NH1	2.33	0.61
22:DA:196:A:O2'	22:DA:805:G:O6	2.11	0.61
29:DH:32:PRO:O	29:DH:33:GLN:CB	2.48	0.61
1:AA:1077:G:N2	1:AA:1080:A:OP2	2.33	0.61
5:AE:45:ARG:HG2	5:AE:73:ASN:HB3	1.82	0.61
22:BA:1450:G:C6	22:BA:1451:C:N4	2.68	0.61
22:BA:1585:C:H2'	22:BA:1586:A:O4'	1.99	0.61
22:BA:319:G:C4	22:BA:333:G:N2	2.67	0.61
37:BP:26:VAL:HG13	37:BP:47:VAL:HG23	1.81	0.61
42:BU:16:GLY:O	42:BU:18:ASP:N	2.33	0.61
1:CA:1169:A:C2	1:CA:1170:A:C4	2.88	0.61
1:CA:728:A:C8	15:CO:54:ARG:CZ	2.83	0.61
2:CB:21:ARG:HA	2:CB:21:ARG:NH1	2.16	0.61
7:CG:68:ASN:ND2	7:CG:130:ASN:OD1	2.34	0.61
12:CL:25:GLU:O	12:CL:26:ALA:C	2.37	0.61
22:DA:1430:G:H2'	22:DA:1431:A:O4'	1.99	0.61
28:DG:169:VAL:O	28:DG:169:VAL:HG12	2.00	0.61
4:AD:26:ARG:HD2	4:AD:31:LYS:HE3	1.82	0.61
19:AS:64:ASP:O	19:AS:65:GLU:HB3	2.00	0.61
20:AT:3:ASN:OD1	20:AT:3:ASN:C	2.39	0.61
22:BA:1028:A:N6	22:BA:1125:G:H2'	2.15	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1590:A:H2'	22:BA:1591:A:C8	2.35	0.61
22:BA:528:A:C8	22:BA:528:A:H3'	2.35	0.61
22:BA:566:U:OP1	33:BL:29:LYS:HD2	2.00	0.61
22:BA:877:A:N6	22:BA:899:A:C6	2.69	0.61
22:BA:983:A:N6	22:BA:984:A:N1	2.49	0.61
27:BF:52:ASN:CB	27:BF:147:ASP:OD1	2.49	0.61
22:BA:1251:C:OP2	38:BQ:6:ARG:HD2	2.00	0.61
39:BR:49:ILE:HB	39:BR:52:PRO:O	1.99	0.61
39:BR:14:VAL:CG1	39:BR:98:ILE:HG13	2.30	0.61
1:CA:1345:U:N3	1:CA:1377:A:C2	2.68	0.61
4:CD:58:LYS:NZ	4:CD:59:GLN:OE1	2.30	0.61
16:CP:28:ARG:HG3	16:CP:29:ASN:OD1	2.01	0.61
22:DA:1674:G:N2	22:DA:1677:A:H61	1.98	0.61
22:DA:740:C:H5'	22:DA:1784:A:C3'	2.30	0.61
22:DA:1951:U:H2'	22:DA:1953:A:OP2	2.01	0.61
22:DA:242:G:O2'	22:DA:254:G:O6	2.15	0.61
22:DA:425:G:N2	22:DA:426:C:C2	2.68	0.61
22:DA:771:G:C2	22:DA:772:C:C6	2.89	0.61
23:DB:29:A:H2'	23:DB:30:C:C6	2.36	0.61
40:DS:67:ASP:OD1	40:DS:67:ASP:N	2.32	0.61
6:AF:3:HIS:N	6:AF:92:THR:HG23	2.15	0.61
22:BA:1132:U:H3'	22:BA:1133:A:H5''	1.81	0.61
22:BA:1936:A:H2	22:BA:1943:U:H3	1.48	0.61
38:BQ:24:TYR:O	38:BQ:25:TYR:HB2	2.00	0.61
40:BS:37:THR:HG22	40:BS:38:TYR:CD1	2.35	0.61
40:BS:63:GLY:O	40:BS:64:ALA:CB	2.48	0.61
41:BT:67:VAL:HG22	41:BT:76:ARG:HG2	1.82	0.61
1:CA:1151:A:N3	1:CA:1152:A:C5	2.68	0.61
1:CA:511:C:C2	1:CA:512:U:C6	2.88	0.61
6:CF:98:GLU:O	6:CF:99:ALA:HB3	2.00	0.61
12:CL:47:SER:O	12:CL:48:ALA:HB2	2.01	0.61
22:DA:2056:G:C2	22:DA:2057:G:C8	2.88	0.61
22:DA:749:A:C5	22:DA:750:A:N7	2.69	0.61
1:AA:1151:A:C4	1:AA:1152:A:N7	2.69	0.61
1:AA:119:A:OP2	1:AA:288:A:N6	2.30	0.61
1:AA:64:G:C8	1:AA:99:C:C4	2.89	0.61
9:AI:120:LYS:HG3	9:AI:123:ARG:CB	2.31	0.61
13:AM:74:SER:O	13:AM:78:LYS:HG3	2.01	0.61
17:AQ:14:SER:HB3	17:AQ:22:VAL:CG1	2.30	0.61
53:B5:184:GLU:O	53:B5:185:LYS:CB	2.49	0.61
22:BA:18:U:OP1	38:BQ:30:ARG:NH2	2.33	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AK:69:ARG:CD	22:BA:2146:C:N3	2.64	0.61
4:CD:57:GLU:OE2	4:CD:196:ASN:N	2.34	0.61
22:DA:136:G:N2	22:DA:144:A:N7	2.48	0.61
1:AA:1062:U:H2'	1:AA:1063:C:C5	2.36	0.61
4:AD:26:ARG:HD2	4:AD:31:LYS:HD2	1.82	0.61
4:AD:3:ARG:NE	4:AD:115:ARG:HD3	2.14	0.61
9:AI:43:THR:O	9:AI:44:ALA:HB3	1.99	0.61
9:AI:91:ASP:OD2	9:AI:93:SER:N	2.34	0.61
10:AJ:80:THR:O	10:AJ:82:LYS:N	2.33	0.61
17:AQ:45:HIS:CD2	17:AQ:70:THR:HG23	2.36	0.61
22:BA:1563:U:H2'	22:BA:1564:C:C6	2.36	0.61
22:BA:980:A:C6	22:BA:981:A:N1	2.68	0.61
35:BN:73:ASN:HA	35:BN:76:VAL:CG1	2.30	0.61
38:BQ:76:TYR:OH	38:BQ:92:ARG:NH1	2.33	0.61
41:BT:48:GLN:O	41:BT:52:GLU:HA	2.01	0.61
1:CA:955:U:O2'	1:CA:1227:A:N6	2.33	0.61
22:DA:1779:U:H5	22:DA:1784:A:N7	1.99	0.61
22:DA:1868:C:N4	22:DA:1869:G:O6	2.34	0.61
22:DA:2550:G:C6	22:DA:2551:C:C4	2.88	0.61
22:DA:2742:G:O6	57:DA:3787:HOH:O	2.12	0.61
22:DA:724:U:H2'	22:DA:725:G:O4'	2.00	0.61
29:DH:83:LYS:H	29:DH:149:GLU:HG2	1.64	0.61
33:DL:56:PRO:O	33:DL:60:ARG:HB2	2.00	0.61
1:AA:923:A:O4'	1:AA:1398:A:C2	2.54	0.61
5:AE:105:ILE:O	5:AE:112:ARG:NH1	2.33	0.61
13:AM:46:SER:O	13:AM:47:GLU:HB3	2.00	0.61
29:BH:97:ARG:HH11	1:CA:370:C:H5'	1.66	0.61
29:BH:97:ARG:NH1	1:CA:369:G:O2'	2.33	0.61
1:CA:570:G:H5''	1:CA:571:U:OP2	2.01	0.61
18:CR:33:ILE:HA	18:CR:40:VAL:HG23	1.82	0.61
24:DC:210:ALA:HA	24:DC:213:TRP:CE2	2.36	0.61
35:DN:69:ARG:O	35:DN:71:ARG:N	2.34	0.61
1:AA:448:A:C4	1:AA:487:A:C2	2.88	0.61
10:AJ:33:GLY:O	10:AJ:34:ALA:CB	2.49	0.61
11:AK:125:LYS:O	11:AK:126:LYS:O	2.19	0.61
49:B1:28:ARG:HG2	49:B1:28:ARG:O	2.01	0.61
22:BA:1131:G:OP1	31:BJ:82:GLY:HA2	2.00	0.61
22:BA:1674:G:N2	22:BA:1677:A:N1	2.47	0.61
32:BK:107:LEU:O	32:BK:109:SER:N	2.33	0.61
22:BA:1187:G:H5''	39:BR:83:TYR:CE2	2.35	0.61
1:CA:154:U:C2'	1:CA:155:A:H5'	2.31	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:518:C:H4'	1:CA:519:C:O5'	2.00	0.61
1:CA:811:C:N4	1:CA:812:G:C6	2.69	0.61
6:CF:9:MET:SD	6:CF:59:TYR:CE1	2.94	0.61
22:DA:467:G:OP1	50:D2:33:ARG:NH1	2.34	0.61
22:DA:2001:C:H4'	22:DA:2689:U:H2'	1.82	0.61
22:DA:2058:A:N6	22:DA:2059:A:N6	2.49	0.61
22:DA:38:A:H2'	22:DA:39:G:O4'	2.00	0.61
24:DC:16:VAL:HG22	24:DC:206:GLY:HA3	1.82	0.61
25:DD:35:THR:O	25:DD:36:GLN:CB	2.49	0.61
32:DK:18:ARG:HB2	32:DK:45:GLU:HB3	1.82	0.61
2:AB:118:GLU:O	2:AB:121:SER:N	2.32	0.61
5:AE:83:HIS:HB2	5:AE:84:PRO:HD2	1.83	0.61
1:AA:1539:C:H5''	21:AU:18:ARG:CG	2.31	0.61
22:BA:1014:A:C5	22:BA:1015:U:C5	2.88	0.61
22:BA:142:A:C5	22:BA:143:C:C4	2.89	0.61
22:BA:301:G:OP2	42:BU:82:ARG:NH1	2.34	0.61
43:BV:10:LYS:HE2	43:BV:10:LYS:N	2.15	0.61
46:BY:45:GLN:O	46:BY:46:VAL:HB	2.01	0.61
1:CA:577:G:C8	1:CA:816:A:C6	2.89	0.61
1:CA:791:G:C6	1:CA:792:A:N7	2.68	0.61
2:CB:167:ASP:O	2:CB:168:HIS:CB	2.48	0.61
5:CE:25:VAL:N	5:CE:28:GLY:O	2.34	0.61
6:CF:69:GLU:O	6:CF:72:ASP:HB3	2.00	0.61
22:DA:1360:G:C2	22:DA:1361:G:H1'	2.36	0.61
22:DA:2293:G:OP1	22:DA:2377:A:N6	2.34	0.61
22:DA:893:C:H2'	22:DA:894:U:O4'	2.01	0.61
22:DA:636:G:N1	33:DL:76:GLU:OE2	2.33	0.61
44:DW:45:PHE:CD2	44:DW:80:ILE:HD11	2.35	0.61
14:AN:43:ASN:OD1	14:AN:47:LYS:NZ	2.34	0.60
22:BA:1206:G:C5	22:BA:1207:C:C5	2.89	0.60
22:BA:2243:U:OP1	57:BA:3740:HOH:O	2.16	0.60
1:CA:718:A:N7	1:CA:719:C:C5	2.69	0.60
1:CA:829:G:C6	1:CA:858:G:N2	2.69	0.60
22:DA:1914:C:H3'	22:DA:1915:U:C6	2.36	0.60
22:DA:200:U:C4	22:DA:248:G:N2	2.69	0.60
22:DA:353:C:H2'	22:DA:354:A:C8	2.35	0.60
22:DA:56:A:C2	22:DA:57:C:C2	2.89	0.60
22:DA:834:G:H1'	22:DA:2358:A:N3	2.16	0.60
37:DP:103:ARG:CB	37:DP:108:ALA:HB2	2.31	0.60
1:AA:151:A:H2'	1:AA:152:A:O4'	2.01	0.60
1:AA:792:A:N3	1:AA:794:A:C5	2.69	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:33:GLY:HA3	2:AB:40:ILE:N	2.16	0.60
5:AE:101:GLU:CB	5:AE:122:ASN:HB2	2.31	0.60
22:BA:1917:U:H2'	22:BA:1918:A:H5'	1.83	0.60
22:BA:608:A:N1	22:BA:609:A:C2	2.68	0.60
22:BA:1798:U:OP2	24:BC:271:ARG:NH2	2.34	0.60
15:CO:17:ARG:O	15:CO:18:ASP:HB3	2.01	0.60
21:CU:12:PHE:O	21:CU:13:ASP:HB2	2.01	0.60
21:CU:14:VAL:HG12	21:CU:16:LEU:HG	1.83	0.60
22:DA:182:A:H2'	22:DA:183:C:C6	2.36	0.60
22:DA:2790:U:H5'	22:DA:2893:A:N7	2.15	0.60
22:DA:43:G:N2	22:DA:437:U:C6	2.70	0.60
22:DA:2720:U:OP1	37:DP:53:ARG:NH2	2.35	0.60
37:DP:54:GLY:O	37:DP:77:HIS:NE2	2.34	0.60
49:B1:29:THR:C	49:B1:31:PRO:HD3	2.22	0.60
53:B5:99:GLU:O	53:B5:103:LYS:CB	2.50	0.60
22:BA:1360:G:C6	22:BA:1372:U:C2	2.89	0.60
22:BA:1923:U:O2'	22:BA:1924:C:C5'	2.49	0.60
22:BA:756:A:N7	57:BA:3301:HOH:O	2.31	0.60
27:BF:2:ALA:O	27:BF:3:LYS:C	2.38	0.60
29:BH:121:VAL:N	29:BH:122:LEU:HB2	2.16	0.60
1:CA:717:U:O2'	1:CA:734:G:O4'	2.13	0.60
8:CH:10:MET:HE1	8:CH:36:ILE:HB	1.83	0.60
14:CN:52:PRO:O	14:CN:53:ARG:CB	2.49	0.60
22:DA:1361:G:C2	22:DA:1362:C:C6	2.88	0.60
22:DA:362:A:C4	22:DA:363:G:C8	2.90	0.60
37:DP:29:LYS:HB3	37:DP:40:LEU:HD21	1.83	0.60
1:AA:587:G:N2	1:AA:755:G:C5	2.69	0.60
4:AD:26:ARG:CD	4:AD:31:LYS:HD2	2.32	0.60
22:BA:1065:U:O4	22:BA:1074:G:O2'	2.17	0.60
22:BA:2318:G:C6	22:BA:2319:G:N1	2.70	0.60
29:BH:100:ALA:HB1	29:BH:112:LYS:HA	1.83	0.60
39:BR:29:THR:O	39:BR:63:VAL:HB	2.01	0.60
1:CA:1071:C:H2'	1:CA:1072:G:C8	2.37	0.60
1:CA:1240:U:OP2	7:CG:116:MET:N	2.34	0.60
22:DA:1427:A:N6	22:DA:1571:A:OP2	2.35	0.60
22:DA:2645:G:H3'	22:DA:2646:C:H5'	1.83	0.60
22:DA:528:A:N1	22:DA:2043:C:O5'	2.34	0.60
29:DH:126:GLY:O	29:DH:146:VAL:HG23	2.00	0.60
1:AA:1528:U:O3'	1:AA:1529:G:H3'	2.02	0.60
22:BA:1485:U:H2'	22:BA:1486:U:C6	2.36	0.60
22:BA:1717:A:H2'	22:BA:1718:G:O5'	2.01	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:695:G:C2	22:BA:696:G:C8	2.89	0.60
33:BL:68:SER:O	33:BL:69:ARG:CB	2.50	0.60
1:CA:1062:U:H2'	1:CA:1063:C:C6	2.37	0.60
1:CA:73:C:O2'	1:CA:74:A:O5'	2.18	0.60
6:CF:36:ILE:HG12	6:CF:36:ILE:O	2.01	0.60
15:CO:53:ARG:O	15:CO:56:LEU:N	2.35	0.60
22:DA:1753:G:C2	22:DA:1756:G:N2	2.70	0.60
22:DA:1973:G:C5	22:DA:1974:C:C4	2.89	0.60
31:DJ:35:ARG:HG2	31:DJ:40:HIS:CD2	2.37	0.60
38:DQ:25:TYR:CD2	38:DQ:26:GLY:N	2.69	0.60
1:AA:1304:G:N1	1:AA:1305:G:N2	2.49	0.60
1:AA:1391:U:H2'	1:AA:1392:G:C8	2.36	0.60
1:AA:67:C:O2'	1:AA:171:A:N3	2.26	0.60
1:AA:781:A:C5	1:AA:802:A:C2	2.90	0.60
2:AB:154:MET:O	2:AB:156:GLY:N	2.34	0.60
13:AM:114:LYS:HB2	13:AM:115:PRO:HD3	1.82	0.60
1:AA:265:G:H4'	17:AQ:67:LEU:O	2.01	0.60
1:AA:719:C:O2'	18:AR:39:ILE:O	2.16	0.60
22:BA:1585:C:C2'	22:BA:1586:A:H5'	2.31	0.60
22:BA:608:A:C6	22:BA:609:A:C6	2.90	0.60
45:BX:2:SER:O	45:BX:4:VAL:N	2.34	0.60
1:CA:1285:A:H4'	1:CA:1286:U:C5	2.37	0.60
5:CE:157:ARG:HD3	5:CE:158:GLY:N	2.16	0.60
20:CT:44:LYS:NZ	20:CT:86:LEU:O	2.31	0.60
22:DA:1055:G:O2'	22:DA:1085:A:N1	2.34	0.60
22:DA:1317:G:C2	22:DA:1336:A:C2	2.89	0.60
22:DA:2162:G:C4'	22:DA:2163:A:OP1	2.50	0.60
22:DA:2820:A:C8	25:DD:196:ALA:HB1	2.35	0.60
27:DF:122:PHE:O	27:DF:124:GLY:N	2.34	0.60
1:AA:1269:A:C2	1:AA:1313:U:O4'	2.54	0.60
9:AI:120:LYS:HG3	9:AI:123:ARG:HB3	1.84	0.60
13:AM:29:ARG:CZ	13:AM:63:PHE:HB2	2.32	0.60
29:BH:117:LEU:CD2	29:BH:121:VAL:HA	2.31	0.60
22:BA:2380:C:OP1	36:BO:17:LYS:NZ	2.34	0.60
42:BU:49:VAL:O	42:BU:49:VAL:HG22	2.01	0.60
5:CE:106:ILE:HD11	5:CE:124:LEU:HD23	1.84	0.60
1:CA:716:A:N3	11:CK:119:ASN:O	2.35	0.60
22:DA:1197:G:H2'	22:DA:1198:U:C6	2.37	0.60
28:DG:96:ALA:N	28:DG:128:GLN:O	2.34	0.60
39:DR:78:ARG:HB3	39:DR:83:TYR:CD1	2.37	0.60
52:B4:24:ARG:NH1	52:B4:36:ARG:HD2	2.17	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:136:G:N2	22:BA:144:A:C5	2.70	0.60
1:AA:702:A:N6	22:BA:1846:G:O2'	2.35	0.60
24:BC:117:GLN:N	24:BC:128:ASN:OD1	2.33	0.60
22:BA:1224:U:H4'	39:BR:88:GLY:O	2.00	0.60
5:CE:101:GLU:O	5:CE:103:THR:CA	2.50	0.60
5:CE:83:HIS:CD2	8:CH:96:MET:CE	2.84	0.60
14:CN:31:ILE:O	14:CN:33:ASP:N	2.35	0.60
50:D2:10:LEU:O	50:D2:14:ARG:HG3	2.02	0.60
52:D4:19:ARG:O	52:D4:20:ASP:HB2	2.01	0.60
22:DA:2563:U:H1'	22:DA:2566:A:C6	2.37	0.60
22:DA:280:U:O4	22:DA:361:G:N2	2.35	0.60
1:AA:1074:G:O2'	1:AA:1101:A:N1	2.29	0.60
1:AA:1202:U:C2	1:AA:1203:C:C6	2.90	0.60
4:AD:17:THR:CG2	4:AD:18:ASP:N	2.64	0.60
4:AD:2:ALA:O	4:AD:68:LEU:HD21	2.02	0.60
1:AA:1123:U:O2'	10:AJ:39:PRO:O	2.17	0.60
22:BA:2211:A:H1'	22:BA:2212:A:OP1	2.02	0.60
22:BA:2297:A:N1	22:BA:2321:U:C5	2.69	0.60
22:BA:278:A:C2	22:BA:362:A:C8	2.88	0.60
22:BA:2799:A:O2'	22:BA:2800:A:O5'	2.20	0.60
22:BA:273:G:N2	22:BA:365:U:C2	2.69	0.60
22:BA:686:U:H2'	22:BA:788:A:C2	2.36	0.60
22:BA:927:A:H2'	22:BA:928:A:C8	2.37	0.60
1:CA:268:U:H2'	1:CA:269:C:C6	2.36	0.60
29:BH:97:ARG:NH1	1:CA:370:C:H5'	2.16	0.60
1:CA:779:C:C2'	1:CA:780:A:H5'	2.32	0.60
4:CD:34:ILE:O	4:CD:35:GLU:CB	2.49	0.60
5:CE:137:VAL:O	5:CE:138:ARG:HG2	2.01	0.60
6:CF:36:ILE:CG1	6:CF:36:ILE:O	2.49	0.60
22:DA:2854:G:C2	22:DA:2864:G:C2	2.89	0.60
22:DA:537:G:N1	22:DA:555:G:C2	2.70	0.60
1:AA:890:G:O2'	1:AA:906:A:N6	2.34	0.60
10:AJ:33:GLY:O	10:AJ:34:ALA:HB3	2.02	0.60
10:AJ:53:ILE:HG22	10:AJ:61:ALA:HB1	1.84	0.60
22:BA:1439:A:C2	22:BA:1553:A:C4	2.90	0.60
22:BA:1997:C:OP2	25:BD:129:THR:HG22	2.02	0.60
22:BA:2318:G:C6	22:BA:2319:G:C6	2.89	0.60
1:CA:1151:A:C2	1:CA:1152:A:C6	2.90	0.60
1:CA:154:U:H2'	1:CA:155:A:H5'	1.84	0.60
1:CA:375:U:C2	1:CA:376:G:C8	2.90	0.60
1:CA:388:G:O2'	1:CA:389:A:OP1	2.18	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:692:U:O2'	1:CA:694:A:N7	2.29	0.60
4:CD:4:TYR:O	4:CD:5:LEU:HB2	2.01	0.60
9:CI:57:MET:HB3	9:CI:61:LEU:CD2	2.32	0.60
12:CL:21:VAL:O	12:CL:23:ALA:N	2.35	0.60
22:DA:1006:C:OP2	57:DA:3779:HOH:O	2.17	0.60
42:DU:18:ASP:N	42:DU:18:ASP:OD2	2.35	0.60
1:AA:591:U:P	8:AH:31:LYS:HD2	2.42	0.59
9:AI:113:ARG:NH2	14:AN:101:TRP:CZ2	2.69	0.59
22:BA:1075:C:H2'	22:BA:1076:C:C2	2.37	0.59
22:BA:1736:U:H2'	22:BA:1737:G:O4'	2.02	0.59
22:BA:2444:G:P	26:BE:63:LYS:HD3	2.41	0.59
29:BH:93:SER:O	1:CA:368:U:C5	2.55	0.59
32:BK:4:GLU:O	32:BK:5:GLN:HB2	2.02	0.59
22:BA:1322:A:O3'	40:BS:84:ARG:NH1	2.35	0.59
1:CA:511:C:O2	1:CA:512:U:C6	2.55	0.59
1:CA:527:G:N1	1:CA:528:C:C5	2.70	0.59
22:DA:1127:A:C2'	22:DA:1128:G:H5''	2.32	0.59
22:DA:118:A:N7	22:DA:119:A:C8	2.70	0.59
22:DA:1875:G:C2'	22:DA:1876:A:OP2	2.50	0.59
22:DA:395:U:H4'	22:DA:396:G:OP1	2.02	0.59
30:DI:114:ALA:O	30:DI:115:ALA:CB	2.49	0.59
31:DJ:77:HIS:HA	31:DJ:83:GLY:O	2.00	0.59
42:DU:53:ASN:O	42:DU:53:ASN:ND2	2.35	0.59
47:DZ:52:SER:OG	47:DZ:53:PHE:N	2.33	0.59
4:AD:191:LEU:O	4:AD:192:SER:HB3	2.02	0.59
4:AD:25:VAL:HG12	4:AD:26:ARG:N	2.18	0.59
6:AF:63:ASN:OD1	6:AF:96:VAL:CG2	2.50	0.59
24:BC:6:CYS:SG	24:BC:18:LYS:HD2	2.43	0.59
27:BF:83:TYR:O	27:BF:85:ILE:HG22	2.03	0.59
29:BH:99:ILE:HB	29:BH:115:VAL:HG11	1.84	0.59
35:BN:49:GLU:OE2	35:BN:95:THR:HG22	2.01	0.59
1:CA:577:G:C8	1:CA:816:A:N1	2.70	0.59
22:DA:1109:C:H5''	22:DA:1110:G:OP2	2.01	0.59
22:DA:1226:A:OP1	38:DQ:16:LYS:NZ	2.35	0.59
22:DA:1436:G:C2	22:DA:1437:C:H1'	2.37	0.59
22:DA:2551:C:OP2	57:DA:3719:HOH:O	2.16	0.59
22:DA:2840:C:H2'	22:DA:2841:C:C6	2.37	0.59
1:AA:131:A:O2'	1:AA:262:A:N3	2.32	0.59
1:AA:468:A:C2	1:AA:469:C:C4	2.90	0.59
10:AJ:35:GLN:HG2	10:AJ:77:VAL:HB	1.84	0.59
33:BL:57:LEU:CD2	51:B3:54:ASP:HB3	2.33	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BH:94:ILE:HG22	29:BH:99:ILE:CG1	2.32	0.59
33:BL:77:ILE:HG23	33:BL:100:ILE:HD11	1.84	0.59
1:CA:1072:G:C6	1:CA:1073:U:C4	2.90	0.59
50:D2:44:VAL:HG13	50:D2:45:SER:N	2.17	0.59
22:DA:2159:G:H2'	22:DA:2160:C:C6	2.36	0.59
22:DA:2234:G:C6	22:DA:2235:G:N7	2.70	0.59
22:DA:230:G:C2	22:DA:231:A:C8	2.90	0.59
22:DA:2681:C:C2	22:DA:2724:U:O4	2.55	0.59
22:DA:82:U:C2	22:DA:83:A:C8	2.90	0.59
23:DB:37:C:C5	23:DB:38:C:C5	2.90	0.59
28:DG:176:LYS:O	28:DG:177:LYS:HB2	2.02	0.59
30:DI:76:ALA:CB	30:DI:129:ILE:HG23	2.33	0.59
39:DR:39:LEU:HA	39:DR:49:ILE:HG21	1.83	0.59
1:AA:135:C:N3	16:AP:1:MET:N	2.41	0.59
1:AA:16:A:O2'	1:AA:17:U:H5'	2.03	0.59
22:BA:1794:A:H2'	22:BA:1795:C:H6	1.65	0.59
22:BA:2187:U:H2'	22:BA:2188:U:C1'	2.33	0.59
22:BA:361:G:O2'	22:BA:362:A:O5'	2.17	0.59
22:BA:877:A:C6	22:BA:899:A:C6	2.90	0.59
22:BA:983:A:C6	22:BA:984:A:C2	2.90	0.59
1:CA:1005:A:O3'	1:CA:1037:C:O2'	2.15	0.59
1:CA:1259:C:H3'	1:CA:1260:G:H5''	1.85	0.59
1:CA:992:U:C4	1:CA:1043:G:C8	2.90	0.59
14:CN:61:ARG:O	14:CN:62:ASN:HB2	2.02	0.59
22:DA:1688:U:C4	22:DA:1698:A:C2	2.90	0.59
22:DA:2432:A:N1	45:DX:21:ALA:HA	2.17	0.59
22:DA:2811:G:H2'	22:DA:2812:G:O4'	2.02	0.59
23:DB:4:C:C2	23:DB:117:G:N2	2.70	0.59
1:AA:1055:A:C6	1:AA:1206:G:C5	2.90	0.59
1:AA:205:A:H4'	1:AA:205:A:OP1	2.01	0.59
1:AA:601:G:H2'	1:AA:602:A:C8	2.37	0.59
22:BA:2017:U:H4'	48:B0:5:GLN:O	2.02	0.59
22:BA:1178:C:H2'	22:BA:1179:G:N7	2.17	0.59
22:BA:1731:G:C2	22:BA:1733:G:C4	2.91	0.59
22:BA:1827:U:O4	57:BA:3786:HOH:O	2.16	0.59
22:BA:1190:G:OP1	33:BL:32:GLY:HA2	2.01	0.59
6:CF:26:THR:O	6:CF:30:THR:OG1	2.20	0.59
52:D4:22:VAL:O	52:D4:24:ARG:N	2.35	0.59
22:DA:1343:G:H1'	22:DA:1597:A:C4	2.37	0.59
22:DA:1869:G:H3'	22:DA:1870:C:H5'	1.84	0.59
22:DA:2199:A:O4'	29:DH:28:ASN:ND2	2.36	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2452:C:O4'	55:DA:3001:DOL:H461	2.03	0.59
22:DA:484:C:N4	22:DA:497:A:C2	2.70	0.59
30:DI:58:VAL:CG1	30:DI:59:ILE:N	2.65	0.59
22:DA:396:G:C5'	45:DX:13:VAL:HG21	2.31	0.59
1:AA:1378:C:C5	1:AA:1379:G:C8	2.91	0.59
1:AA:587:G:C2	1:AA:755:G:C5	2.90	0.59
9:AI:63:LEU:HD23	9:AI:63:LEU:N	2.17	0.59
18:AR:67:LEU:O	18:AR:68:LEU:HG	2.02	0.59
20:AT:70:ASN:N	20:AT:70:ASN:OD1	2.28	0.59
22:BA:1045:C:C3'	22:BA:1046:A:H5'	2.32	0.59
22:BA:1359:A:C8	22:BA:1373:A:C2	2.91	0.59
22:BA:2714:G:C2'	22:BA:2715:C:H5'	2.32	0.59
22:BA:947:A:HO2'	22:BA:984:A:H2	1.42	0.59
24:BC:204:VAL:O	24:BC:205:LEU:HB2	2.02	0.59
18:CR:63:ARG:HB3	18:CR:70:TYR:CE1	2.37	0.59
22:DA:1315:C:OP2	57:DA:3760:HOH:O	2.16	0.59
22:DA:424:G:C2	22:DA:425:G:C8	2.90	0.59
22:DA:861:A:H2'	22:DA:862:G:O4'	2.02	0.59
29:DH:126:GLY:O	29:DH:146:VAL:N	2.35	0.59
36:DO:64:TYR:O	36:DO:67:ASN:ND2	2.33	0.59
1:AA:1157:A:N6	1:AA:1180:A:N7	2.51	0.59
1:AA:345:C:O2'	32:BK:116:ILE:HD11	2.02	0.59
14:AN:41:ARG:O	14:AN:43:ASN:N	2.36	0.59
52:B4:36:ARG:HG2	52:B4:37:GLN:N	2.16	0.59
22:BA:1735:A:C2	22:BA:1736:U:C1'	2.86	0.59
22:BA:1867:G:O2'	22:BA:1868:C:H5'	2.02	0.59
29:BH:1:MET:O	29:BH:20:ASN:ND2	2.35	0.59
40:BS:29:VAL:CG1	40:BS:55:ILE:HD11	2.32	0.59
1:CA:1309:G:C6	1:CA:1329:A:C2	2.90	0.59
1:CA:518:C:H5''	1:CA:519:C:C6	2.37	0.59
12:CL:18:LYS:HD2	12:CL:18:LYS:C	2.23	0.59
22:DA:1364:G:H2'	22:DA:1365:A:H5'	1.84	0.59
22:DA:9:G:C6	22:DA:2629:U:C6	2.91	0.59
42:DU:72:ILE:HD13	42:DU:83:VAL:CG2	2.32	0.59
1:AA:1134:G:C2	1:AA:1135:U:C2	2.90	0.59
10:AJ:17:LEU:HD23	10:AJ:17:LEU:C	2.22	0.59
15:AO:87:LEU:O	15:AO:88:ARG:CB	2.50	0.59
22:BA:1199:U:H2'	22:BA:1200:C:C6	2.38	0.59
22:BA:1768:C:C2	22:BA:1769:U:C6	2.90	0.59
22:BA:2191:A:C2	22:BA:2192:U:C4	2.91	0.59
34:BM:24:THR:HG23	34:BM:24:THR:O	2.01	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1211:U:C2'	1:CA:1212:U:OP2	2.51	0.59
1:CA:33:A:H2'	1:CA:34:C:H6	1.67	0.59
1:CA:411:A:C5	1:CA:429:U:C5	2.91	0.59
1:CA:254:G:O2'	17:CQ:18:GLU:O	2.20	0.59
48:D0:55:ILE:O	48:D0:56:ALA:HB3	2.03	0.59
22:DA:1773:A:N3	22:DA:1978:A:C2	2.71	0.59
22:DA:2343:U:O2'	22:DA:2373:G:O2'	2.19	0.59
30:DI:58:VAL:O	30:DI:69:PHE:HB3	2.03	0.59
1:AA:328:C:O2	1:AA:328:C:H2'	2.01	0.59
1:AA:760:G:N7	1:AA:761:G:C8	2.71	0.59
20:AT:6:SER:OG	20:AT:7:ALA:N	2.36	0.59
22:BA:1406:U:C2	22:BA:1407:G:C8	2.91	0.59
22:BA:142:A:H2'	22:BA:143:C:C6	2.38	0.59
30:BI:117:MET:HE3	30:BI:129:ILE:HD11	1.84	0.59
32:BK:121:GLU:O	32:BK:122:VAL:O	2.21	0.59
39:BR:49:ILE:CG2	39:BR:53:PHE:N	2.65	0.59
1:CA:55:A:C6	1:CA:56:U:C2	2.91	0.59
12:CL:68:GLY:O	12:CL:99:ARG:NH1	2.36	0.59
21:CU:8:GLU:HB3	21:CU:12:PHE:CD2	2.38	0.59
22:DA:1753:G:C2	22:DA:1756:G:C2	2.90	0.59
22:DA:532:A:N1	22:DA:2020:A:H1'	2.18	0.59
22:DA:53:A:N7	22:DA:54:G:C5	2.71	0.59
1:AA:340:U:H2'	1:AA:341:C:H6	1.67	0.59
1:AA:340:U:C2	1:AA:341:C:C5	2.91	0.59
5:AE:46:VAL:CG2	5:AE:118:ALA:HA	2.33	0.59
16:AP:42:ILE:O	16:AP:43:ALA:C	2.41	0.59
22:BA:142:A:N7	22:BA:143:C:N4	2.51	0.59
22:BA:2495:G:C2'	22:BA:2496:C:H5'	2.33	0.59
27:BF:106:ILE:C	27:BF:109:PRO:HD2	2.22	0.59
40:BS:84:ARG:HB2	40:BS:96:ILE:HG13	1.85	0.59
1:CA:214:C:H2'	1:CA:215:C:C6	2.37	0.59
22:DA:1121:C:C2	22:DA:1122:G:C8	2.91	0.59
22:DA:2297:A:N1	22:DA:2321:U:C5	2.71	0.59
26:DE:47:LYS:O	26:DE:83:VAL:HB	2.03	0.59
31:DJ:9:GLU:O	31:DJ:10:THR:HG23	2.03	0.59
1:AA:68:G:C5	1:AA:69:G:H1'	2.38	0.58
5:AE:101:GLU:HB3	5:AE:122:ASN:HB2	1.84	0.58
10:AJ:53:ILE:HG22	10:AJ:61:ALA:CB	2.33	0.58
11:AK:16:VAL:HG22	11:AK:17:SER:N	2.18	0.58
22:BA:1084:A:H2'	22:BA:1085:A:C8	2.38	0.58
22:BA:1167:C:H2'	22:BA:1168:G:H5''	1.85	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:644:A:H2'	22:BA:645:C:O4'	2.03	0.58
22:BA:783:A:C8	22:BA:784:G:H4'	2.38	0.58
22:BA:784:G:OP2	57:BA:3313:HOH:O	2.16	0.58
1:CA:1006:G:H2'	1:CA:1007:U:C6	2.38	0.58
1:CA:152:A:N6	1:CA:170:U:C2	2.71	0.58
2:CB:134:ALA:O	2:CB:138:THR:OG1	2.08	0.58
2:CB:47:VAL:HB	2:CB:48:PRO:HD3	1.84	0.58
9:CI:57:MET:SD	9:CI:58:VAL:N	2.76	0.58
21:CU:14:VAL:O	21:CU:16:LEU:HG	2.03	0.58
21:CU:15:ALA:O	21:CU:17:ARG:N	2.36	0.58
22:DA:1304:A:N1	22:DA:1305:C:C4	2.72	0.58
22:DA:2111:U:C4	22:DA:2145:C:H2'	2.39	0.58
22:DA:20:C:H2'	22:DA:21:A:C8	2.38	0.58
22:DA:454:A:H4'	22:DA:455:C:OP2	2.01	0.58
22:DA:777:G:N7	22:DA:793:A:H2	2.00	0.58
22:DA:856:G:C2	22:DA:922:C:N3	2.71	0.58
23:DB:87:U:O2'	23:DB:88:C:H5'	2.02	0.58
1:AA:152:A:N6	1:AA:170:U:C2	2.70	0.58
1:AA:792:A:H1'	1:AA:794:A:N7	2.18	0.58
10:AJ:15:HIS:O	10:AJ:17:LEU:N	2.32	0.58
21:AU:4:ILE:N	21:AU:20:LYS:HZ1	2.01	0.58
49:B1:4:GLY:O	49:B1:6:ARG:N	2.37	0.58
22:BA:481:G:N3	22:BA:507:A:C2	2.71	0.58
24:BC:167:ARG:O	24:BC:168:ASP:HB2	2.03	0.58
36:BO:15:ARG:NE	36:BO:93:ASP:OD1	2.36	0.58
1:CA:1499:A:H3'	57:CA:1884:HOH:O	2.02	0.58
1:CA:570:G:H1'	1:CA:820:U:C4	2.38	0.58
1:CA:920:U:H2'	1:CA:921:U:C6	2.36	0.58
1:CA:994:A:N3	1:CA:994:A:H2'	2.17	0.58
2:CB:133:GLU:O	2:CB:137:ARG:HB3	2.03	0.58
5:CE:56:VAL:O	5:CE:60:ILE:HG23	2.03	0.58
17:CQ:47:HIS:HB2	17:CQ:67:LEU:HD12	1.85	0.58
20:CT:55:GLN:N	20:CT:56:PRO:CD	2.65	0.58
22:DA:1380:G:OP2	57:DA:3751:HOH:O	2.17	0.58
22:DA:2074:U:H2'	22:DA:2075:U:C6	2.38	0.58
22:DA:2746:U:H1'	28:DG:139:GLN:HG3	1.85	0.58
22:DA:308:G:N1	22:DA:309:A:C2	2.70	0.58
22:DA:307:G:N2	22:DA:310:A:C8	2.71	0.58
22:DA:319:G:O6	22:DA:323:C:N4	2.35	0.58
2:AB:147:SER:O	2:AB:148:LEU:CB	2.51	0.58
4:AD:68:LEU:HD22	4:AD:68:LEU:N	2.18	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:78:GLU:OE1	4:AD:81:ARG:NH1	2.37	0.58
14:AN:21:PHE:HA	14:AN:25:ALA:CB	2.33	0.58
22:BA:973:A:O4'	22:BA:1188:U:C6	2.56	0.58
22:BA:2578:G:N7	25:BD:145:SER:HB2	2.18	0.58
22:BA:257:C:H5''	22:BA:258:G:OP2	2.03	0.58
25:BD:133:THR:HG23	25:BD:134:HIS:CD2	2.38	0.58
25:BD:151:THR:HG22	25:BD:152:PRO:HD2	1.84	0.58
27:BF:143:TYR:O	27:BF:146:VAL:HG22	2.03	0.58
32:BK:116:ILE:O	32:BK:118:LEU:O	2.21	0.58
1:CA:692:U:H1'	1:CA:695:A:N7	2.19	0.58
1:CA:755:G:C2	1:CA:756:C:C5	2.91	0.58
1:CA:994:A:C8	1:CA:1216:A:H4'	2.39	0.58
2:CB:90:PHE:CZ	2:CB:154:MET:HA	2.38	0.58
1:CA:1108:G:H5''	3:CC:176:HIS:CD2	2.37	0.58
4:CD:35:GLU:O	4:CD:38:PRO:HD3	2.02	0.58
11:CK:126:LYS:O	11:CK:127:ARG:HB2	2.03	0.58
17:CQ:46:VAL:HG21	17:CQ:61:ILE:CD1	2.34	0.58
22:DA:120:U:H1'	22:DA:149:A:C8	2.37	0.58
22:DA:2104:C:H2'	22:DA:2105:U:O4'	2.04	0.58
22:DA:2182:U:H2'	22:DA:2183:A:C8	2.38	0.58
22:DA:2334:U:C4	36:DO:16:ARG:HD3	2.38	0.58
22:DA:2857:G:N2	22:DA:2860:A:OP2	2.34	0.58
22:DA:847:U:O2	22:DA:847:U:H2'	2.03	0.58
27:DF:122:PHE:CE1	27:DF:166:GLY:HA3	2.38	0.58
46:DY:56:LEU:O	46:DY:57:LEU:HB2	2.04	0.58
1:AA:1107:C:C4	1:AA:1108:G:N7	2.72	0.58
1:AA:1171:A:C2	1:AA:1172:C:C2	2.92	0.58
2:AB:133:GLU:O	2:AB:137:ARG:HB2	2.03	0.58
5:AE:137:VAL:O	5:AE:138:ARG:CB	2.51	0.58
8:AH:113:ASP:OD2	8:AH:117:ARG:NH2	2.36	0.58
21:AU:4:ILE:N	21:AU:19:PHE:CD1	2.71	0.58
22:BA:1361:G:N7	57:BA:3618:HOH:O	2.32	0.58
22:BA:1696:G:C6	22:BA:1697:G:C4	2.91	0.58
27:BF:123:ASP:OD2	27:BF:127:ASN:HB2	2.02	0.58
1:CA:190:A:C8	1:CA:191:G:H1'	2.38	0.58
1:CA:257:G:C2	1:CA:270:A:N1	2.71	0.58
1:CA:681:A:C2	1:CA:710:G:C2	2.92	0.58
1:CA:765:G:C6	1:CA:812:G:C4	2.92	0.58
1:CA:960:U:C5	1:CA:1225:A:C8	2.91	0.58
4:CD:30:THR:C	4:CD:31:LYS:HD3	2.23	0.58
5:CE:122:ASN:O	5:CE:123:VAL:O	2.22	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1091:G:N3	22:DA:1092:C:C5	2.71	0.58
22:DA:1606:C:O2'	22:DA:1607:C:OP2	2.19	0.58
22:DA:2744:G:C6	22:DA:2761:A:N6	2.72	0.58
22:DA:546:U:O2'	22:DA:547:A:O4'	2.21	0.58
23:DB:78:A:C6	23:DB:99:A:C8	2.90	0.58
23:DB:7:G:H5'	36:DO:29:HIS:CE1	2.38	0.58
1:AA:1211:U:HO2'	1:AA:1212:U:P	2.26	0.58
1:AA:524:G:H5''	1:AA:525:C:OP2	2.02	0.58
1:AA:596:A:C6	1:AA:645:G:C2	2.92	0.58
2:AB:151:ILE:HG23	2:AB:152:LYS:N	2.18	0.58
3:AC:206:GLU:O	3:AC:207:ILE:HG22	2.03	0.58
14:AN:49:GLN:OE1	14:AN:49:GLN:HA	2.03	0.58
22:BA:1095:A:C6	22:BA:1096:A:N6	2.71	0.58
22:BA:999:U:C5	22:BA:1154:G:C5	2.91	0.58
22:BA:1915:U:C2'	22:BA:1916:A:H5'	2.33	0.58
22:BA:871:U:H2'	22:BA:872:U:C6	2.38	0.58
24:BC:70:ASN:O	24:BC:71:LYS:C	2.41	0.58
37:BP:90:GLY:O	37:BP:113:ARG:NH1	2.37	0.58
1:CA:1343:G:H2'	1:CA:1344:C:C6	2.39	0.58
1:CA:373:A:C2	1:CA:374:A:C8	2.91	0.58
1:CA:728:A:H2'	1:CA:729:A:C8	2.38	0.58
2:CB:120:GLN:HG2	2:CB:125:THR:O	2.03	0.58
22:DA:2128:G:N3	22:DA:2173:A:O2'	2.36	0.58
22:DA:1154:G:OP2	38:DQ:58:ARG:NH1	2.36	0.58
1:AA:108:G:N3	1:AA:108:G:H5'	2.19	0.58
1:AA:212:G:C2	1:AA:213:G:C4	2.91	0.58
1:AA:4:U:O2	1:AA:4:U:H2'	2.04	0.58
11:AK:31:ILE:HB	11:AK:46:THR:HG22	1.85	0.58
12:AL:24:LEU:HB2	12:AL:59:ASN:ND2	2.18	0.58
15:AO:63:ARG:CG	15:AO:67:LEU:HD12	2.33	0.58
22:BA:123:G:N7	57:BA:3213:HOH:O	2.32	0.58
1:AA:1492:A:O2'	22:BA:1913:A:N1	2.27	0.58
22:BA:1916:A:H2'	22:BA:1917:U:O2'	2.04	0.58
22:BA:2564:A:C2	22:BA:2647:U:H4'	2.38	0.58
27:BF:171:ALA:O	27:BF:174:ASP:N	2.36	0.58
29:BH:31:VAL:N	29:BH:32:PRO:HD2	2.19	0.58
34:BM:12:MET:HE3	34:BM:71:LYS:HG3	1.86	0.58
47:BZ:11:ARG:NH1	47:BZ:53:PHE:O	2.37	0.58
1:CA:938:A:N6	1:CA:939:G:C6	2.71	0.58
2:CB:119:THR:O	2:CB:120:GLN:CB	2.52	0.58
22:DA:1363:C:H2'	22:DA:1364:G:H8	1.69	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1640:A:H2'	22:DA:1641:A:C8	2.39	0.58
22:DA:2314:A:C2	22:DA:2315:G:C4	2.91	0.58
22:DA:2883:A:OP2	48:D0:49:TYR:OH	2.18	0.58
22:DA:607:U:N3	22:DA:620:G:O4'	2.36	0.58
31:DJ:110:PRO:O	31:DJ:115:GLY:HA3	2.03	0.58
31:DJ:19:ASP:O	31:DJ:23:LYS:HE3	2.03	0.58
31:DJ:30:THR:HG22	31:DJ:31:GLU:N	2.18	0.58
1:AA:1362:A:H5''	1:AA:1363:A:OP2	2.03	0.58
1:AA:572:A:H5'	1:AA:573:A:OP2	2.02	0.58
1:AA:757:U:O2'	1:AA:879:C:O2	2.21	0.58
1:AA:577:G:C8	1:AA:816:A:C6	2.91	0.58
22:BA:1405:U:H2'	22:BA:1406:U:C6	2.39	0.58
22:BA:1423:G:O6	57:BA:3628:HOH:O	2.17	0.58
22:BA:1916:A:P	22:BA:1917:U:OP2	2.62	0.58
30:BI:62:TYR:O	30:BI:63:ALA:CB	2.51	0.58
1:CA:1381:U:H2'	1:CA:1382:C:O5'	2.04	0.58
1:CA:17:U:C2	1:CA:18:C:C5	2.92	0.58
4:CD:29:ASP:C	4:CD:31:LYS:N	2.56	0.58
12:CL:44:LYS:O	12:CL:46:ASN:N	2.37	0.58
22:DA:1062:G:C5	22:DA:1088:A:H2'	2.39	0.58
22:DA:1075:C:H2'	22:DA:1076:C:C6	2.39	0.58
22:DA:30:G:O2'	22:DA:1214:A:N3	2.36	0.58
22:DA:150:U:H2'	22:DA:151:C:C6	2.38	0.58
22:DA:2563:U:C1'	22:DA:2566:A:N6	2.65	0.58
22:DA:453:A:H4'	22:DA:472:A:N6	2.17	0.58
22:DA:699:A:H2'	22:DA:700:G:O4'	2.04	0.58
22:DA:699:A:N6	22:DA:733:G:O2'	2.36	0.58
29:DH:34:GLY:O	29:DH:35:LYS:CB	2.51	0.58
17:AQ:45:HIS:CD2	17:AQ:70:THR:CG2	2.87	0.58
22:BA:1206:G:C6	22:BA:1207:C:C4	2.92	0.58
22:BA:1253:A:N7	57:BA:3337:HOH:O	2.32	0.58
22:BA:1593:A:H2'	22:BA:1594:U:O4'	2.03	0.58
22:BA:1624:U:N3	22:BA:1625:C:C5	2.72	0.58
22:BA:580:U:O3'	38:BQ:31:VAL:HG13	2.04	0.58
22:BA:674:G:O2'	26:BE:69:ARG:HB3	2.03	0.58
39:BR:9:GLY:C	39:BR:10:LYS:HG2	2.24	0.58
1:CA:1027:C:N4	1:CA:1034:G:C6	2.72	0.58
1:CA:649:A:H2'	1:CA:650:G:O4'	2.04	0.58
5:CE:109:GLY:O	5:CE:110:ALA:HB3	2.04	0.58
19:CS:31:LEU:O	19:CS:33:THR:N	2.36	0.58
22:DA:126:A:N7	22:DA:127:A:C2	2.72	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2330:G:N2	22:DA:2386:A:C2	2.71	0.58
22:DA:53:A:N3	22:DA:179:C:H4'	2.18	0.58
24:DC:108:LYS:N	24:DC:194:GLU:O	2.36	0.58
25:DD:123:LYS:HG2	25:DD:165:MET:SD	2.44	0.58
28:DG:27:LYS:O	28:DG:27:LYS:HG3	2.03	0.58
31:DJ:78:THR:OG1	31:DJ:80:HIS:HB2	2.04	0.58
34:DM:76:LYS:NZ	34:DM:85:GLY:O	2.37	0.58
39:DR:14:VAL:HG21	39:DR:98:ILE:HG13	1.84	0.58
41:DT:82:LYS:HG2	41:DT:83:ALA:N	2.18	0.58
1:AA:1306:A:C4	1:AA:1307:U:C6	2.92	0.58
1:AA:568:G:C4	1:AA:569:C:C5	2.92	0.58
1:AA:684:U:HO2'	11:AK:40:ASN:C	2.05	0.58
1:AA:760:G:C5	1:AA:761:G:C8	2.92	0.58
5:AE:25:VAL:O	5:AE:27:GLY:N	2.37	0.58
48:B0:55:ILE:HG22	48:B0:56:ALA:N	2.18	0.58
30:BI:79:LEU:HD22	30:BI:109:ILE:CG2	2.34	0.58
30:BI:81:LYS:HA	30:BI:86:ILE:O	2.03	0.58
31:BJ:17:VAL:HG23	31:BJ:137:PRO:HB2	1.85	0.58
36:BO:100:HIS:O	36:BO:104:GLN:CB	2.52	0.58
46:BY:23:ARG:O	46:BY:24:GLU:C	2.42	0.58
1:CA:115:G:H4'	1:CA:116:A:O5'	2.04	0.58
1:CA:1167:A:N7	1:CA:1169:A:C6	2.71	0.58
1:CA:624:C:H2'	1:CA:625:U:O4'	2.04	0.58
4:CD:9:LEU:HD12	4:CD:32:CYS:SG	2.43	0.58
6:CF:97:THR:O	6:CF:98:GLU:HB3	2.04	0.58
20:CT:15:GLU:OE2	20:CT:18:ARG:NH2	2.35	0.58
20:CT:67:ILE:HG22	20:CT:67:ILE:O	2.03	0.58
22:DA:2328:A:H2'	22:DA:2329:U:C6	2.38	0.58
22:DA:2552:U:C2	22:DA:2554:U:H5'	2.39	0.58
22:DA:647:G:C5	22:DA:648:G:N7	2.71	0.58
42:DU:13:VAL:HG21	42:DU:39:ILE:CG2	2.33	0.58
1:AA:475:C:H2'	1:AA:476:U:O4'	2.04	0.58
1:AA:721:G:H4'	1:AA:722:G:O4'	2.03	0.58
8:AH:125:ILE:O	8:AH:125:ILE:HG13	2.04	0.58
21:AU:37:PHE:HB3	21:AU:41:PRO:CG	2.34	0.58
22:BA:1022:G:N2	22:BA:1142:A:C2	2.71	0.58
22:BA:1563:U:H2'	22:BA:1564:C:H6	1.69	0.58
22:BA:2192:U:C4	22:BA:2193:G:C8	2.92	0.58
22:BA:2584:U:O2'	55:BA:3001:DOL:H482	2.03	0.58
22:BA:481:G:H1'	22:BA:507:A:N1	2.19	0.58
22:BA:603:A:C8	22:BA:655:A:C6	2.92	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:65:U:H2'	22:BA:66:C:H6	1.68	0.58
22:BA:846:U:O2'	22:BA:847:U:P	2.62	0.58
22:BA:1248:G:C6	26:BE:46:GLN:NE2	2.72	0.58
27:BF:108:VAL:N	27:BF:109:PRO:CD	2.66	0.58
39:BR:51:VAL:O	39:BR:52:PRO:O	2.22	0.58
41:BT:34:VAL:HG21	41:BT:43:ILE:HD11	1.85	0.58
3:CC:72:ARG:HB3	3:CC:75:ILE:HG23	1.85	0.58
6:CF:43:GLY:HA2	6:CF:58:HIS:NE2	2.19	0.58
10:CJ:84:VAL:O	10:CJ:88:MET:HB2	2.04	0.58
12:CL:21:VAL:N	12:CL:22:PRO:HD3	2.19	0.58
22:DA:1551:A:N6	57:DA:3628:HOH:O	2.35	0.58
22:DA:1806:C:C5	22:DA:1807:G:N7	2.72	0.58
22:DA:1817:G:H2'	22:DA:1818:U:H5'	1.86	0.58
22:DA:2061:G:C5	55:DA:3001:DOL:HC19	2.38	0.58
22:DA:2478:A:C8	22:DA:2529:G:C5	2.92	0.58
29:DH:108:VAL:O	29:DH:110:VAL:N	2.36	0.58
36:DO:7:ARG:HD2	36:DO:97:PHE:CE1	2.38	0.58
42:DU:41:LEU:HD12	42:DU:60:GLU:HG2	1.86	0.58
1:AA:251:G:C6	1:AA:266:G:O6	2.56	0.57
1:AA:673:A:H2'	1:AA:674:G:C8	2.39	0.57
5:AE:109:GLY:O	5:AE:110:ALA:HB2	2.04	0.57
22:BA:1922:G:H22	22:BA:1923:U:H1'	1.67	0.57
22:BA:2190:G:C6	22:BA:2191:A:C5	2.91	0.57
22:BA:2474:U:H5''	22:BA:2475:C:OP2	2.04	0.57
22:BA:2520:C:C6	22:BA:2567:G:H1'	2.38	0.57
22:BA:2531:A:OP2	28:BG:174:ALA:O	2.22	0.57
22:BA:372:G:O2'	22:BA:400:G:O6	2.16	0.57
30:BI:82:LYS:O	30:BI:83:ALA:HB2	2.04	0.57
1:CA:1003:G:C2	1:CA:1038:C:C4	2.92	0.57
1:CA:992:U:N3	1:CA:1043:G:N7	2.52	0.57
4:CD:166:GLU:O	4:CD:167:LYS:HB2	2.04	0.57
9:CI:30:ILE:HA	9:CI:65:ILE:O	2.03	0.57
22:DA:1544:A:N6	22:DA:1545:A:N1	2.52	0.57
22:DA:1774:C:O2	24:DC:11:PRO:HB2	2.04	0.57
22:DA:776:G:O2'	22:DA:2241:A:OP1	2.19	0.57
22:DA:2571:U:C4	22:DA:2574:G:C8	2.92	0.57
22:DA:13:A:N1	22:DA:525:U:H2'	2.19	0.57
22:DA:696:G:C2	22:DA:767:U:O2	2.57	0.57
30:DI:79:LEU:HD13	30:DI:109:ILE:CG2	2.33	0.57
35:DN:49:GLU:N	35:DN:50:PRO:CD	2.67	0.57
1:AA:1157:A:N7	1:AA:1180:A:N6	2.51	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AJ:92:LEU:O	10:AJ:93:ALA:CB	2.52	0.57
53:B5:40:GLU:HA	53:B5:181:PHE:HA	1.85	0.57
22:BA:1061:U:O2'	22:BA:1062:G:C5'	2.52	0.57
22:BA:1008:A:N6	22:BA:1136:G:C6	2.71	0.57
22:BA:742:A:H2'	22:BA:743:A:C8	2.39	0.57
24:BC:125:LYS:HG2	24:BC:128:ASN:ND2	2.19	0.57
22:BA:2009:A:OP1	40:BS:41:LYS:HE2	2.04	0.57
1:CA:1093:A:C5	1:CA:1095:U:O4'	2.56	0.57
1:CA:1245:C:C4	1:CA:1246:A:N7	2.72	0.57
1:CA:1224:U:C4	1:CA:1322:C:O2	2.56	0.57
29:BH:91:PHE:O	1:CA:55:A:C5	2.56	0.57
2:CB:21:ARG:O	2:CB:23:TRP:N	2.37	0.57
12:CL:38:TYR:CB	12:CL:52:VAL:HG13	2.34	0.57
14:CN:54:ASP:HA	14:CN:59:ARG:HD3	1.86	0.57
14:CN:91:GLY:O	14:CN:93:ILE:N	2.37	0.57
17:CQ:50:ASN:O	17:CQ:52:GLU:N	2.37	0.57
22:DA:1668:A:C4	22:DA:1674:G:N7	2.72	0.57
22:DA:1965:C:OP1	22:DA:1966:A:H2'	2.03	0.57
22:DA:2114:A:N6	22:DA:2119:A:N7	2.52	0.57
22:DA:2293:G:H2'	22:DA:2294:G:O4'	2.04	0.57
22:DA:2387:U:H1'	44:DW:41:ARG:CD	2.34	0.57
22:DA:247:G:C8	22:DA:249:C:C6	2.91	0.57
22:DA:746:U:HO2'	22:DA:2611:C:HO2'	1.50	0.57
29:DH:62:LEU:C	29:DH:62:LEU:HD13	2.25	0.57
33:DL:77:ILE:O	33:DL:110:VAL:O	2.21	0.57
22:DA:2469:A:H4'	34:DM:55:ARG:HD3	1.84	0.57
42:DU:13:VAL:HG21	42:DU:39:ILE:HD12	1.86	0.57
1:AA:208:U:C5	1:AA:210:C:N3	2.72	0.57
4:AD:78:GLU:HG3	4:AD:93:LEU:HD21	1.86	0.57
22:BA:1414:C:C4	22:BA:1415:U:C5	2.91	0.57
24:BC:36:LYS:O	24:BC:37:ASN:CB	2.52	0.57
35:BN:58:ASP:OD1	35:BN:63:ARG:NH2	2.37	0.57
1:CA:1092:A:C6	1:CA:1183:U:O2	2.57	0.57
1:CA:927:G:O2'	1:CA:1503:A:N7	2.31	0.57
22:DA:1125:G:C6	22:DA:1126:A:N6	2.72	0.57
22:DA:740:C:C5'	22:DA:1784:A:H3'	2.34	0.57
22:DA:1827:U:C2'	22:DA:1828:G:O5'	2.52	0.57
22:DA:1838:C:H4'	22:DA:1839:G:C8	2.39	0.57
22:DA:2110:G:O2'	22:DA:2120:G:OP2	2.17	0.57
22:DA:2267:A:H5''	22:DA:2268:A:H5'	1.85	0.57
22:DA:2499:C:N4	22:DA:2500:U:O4	2.37	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2537:U:H2'	22:DA:2538:C:C6	2.39	0.57
22:DA:55:G:C2	22:DA:56:A:C8	2.92	0.57
23:DB:32:U:C2	23:DB:51:G:N2	2.72	0.57
29:DH:117:LEU:HB3	29:DH:120:GLY:O	2.04	0.57
1:AA:90:C:C2	1:AA:91:U:C6	2.92	0.57
2:AB:222:ARG:CZ	2:AB:222:ARG:HB3	2.34	0.57
4:AD:58:LYS:NZ	4:AD:69:GLU:OE2	2.33	0.57
11:AK:52:PHE:CB	11:AK:56:ARG:HB3	2.35	0.57
16:AP:75:ILE:HG22	16:AP:80:LYS:HE2	1.86	0.57
22:BA:1179:G:C5	22:BA:1180:U:C1'	2.86	0.57
23:BB:48:U:H2'	23:BB:49:C:C6	2.39	0.57
1:CA:1096:C:H2'	1:CA:1097:C:C6	2.39	0.57
1:CA:1478:U:H2'	1:CA:1479:C:C6	2.39	0.57
1:CA:206:C:H2'	1:CA:207:C:H5'	1.87	0.57
1:CA:33:A:H2'	1:CA:34:C:C6	2.39	0.57
4:CD:32:CYS:O	4:CD:33:LYS:CB	2.53	0.57
8:CH:89:LYS:HA	8:CH:92:LEU:CD1	2.34	0.57
22:DA:1344:U:O2'	22:DA:1345:C:P	2.63	0.57
22:DA:1651:G:C2	22:DA:2007:U:O2	2.57	0.57
22:DA:223:A:C4	22:DA:408:G:H1'	2.39	0.57
23:DB:81:G:C5	23:DB:82:U:C5	2.92	0.57
24:DC:9:THR:O	24:DC:10:SER:CB	2.52	0.57
39:DR:81:LYS:O	39:DR:82:HIS:C	2.42	0.57
22:DA:76:C:HO2'	46:DY:55:THR:HG1	1.51	0.57
1:AA:144:G:C2	1:AA:179:A:N3	2.72	0.57
1:AA:262:A:C6	1:AA:263:A:C6	2.93	0.57
1:AA:299:G:H2'	1:AA:300:A:C8	2.40	0.57
5:AE:13:GLU:CB	5:AE:39:VAL:HG12	2.34	0.57
11:AK:51:GLY:O	11:AK:52:PHE:O	2.23	0.57
22:BA:1079:C:C5	22:BA:1088:A:C2	2.93	0.57
22:BA:1795:C:C4	22:BA:1796:U:C4	2.92	0.57
22:BA:1958:C:O2'	22:BA:1959:G:H5'	2.04	0.57
22:BA:2615:U:C2	48:B0:4:GLN:HA	2.40	0.57
22:BA:588:U:H2'	22:BA:589:U:C6	2.39	0.57
22:BA:784:G:O2'	22:BA:785:G:H5''	2.04	0.57
1:CA:455:G:N2	1:CA:478:A:C2	2.72	0.57
1:CA:577:G:C4	1:CA:816:A:C2	2.92	0.57
2:CB:210:VAL:O	2:CB:214:LEU:HB2	2.04	0.57
7:CG:125:SER:O	7:CG:127:ALA:N	2.37	0.57
9:CI:116:VAL:CG2	10:CJ:62:ARG:HD3	2.35	0.57
22:DA:247:G:OP2	22:DA:249:C:N4	2.37	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2612:C:H5''	22:DA:2613:U:OP1	2.05	0.57
22:DA:411:G:OP1	57:DA:3558:HOH:O	2.17	0.57
22:DA:616:A:C2	22:DA:617:G:O4'	2.57	0.57
22:DA:634:C:H2'	22:DA:635:C:C6	2.40	0.57
24:DC:31:ALA:N	24:DC:32:PRO:HD2	2.18	0.57
24:DC:34:LEU:O	24:DC:35:GLU:HB3	2.03	0.57
22:DA:674:G:H1'	26:DE:69:ARG:HE	1.69	0.57
1:AA:1349:A:C2	1:AA:1374:A:C4	2.92	0.57
1:AA:316:C:C2	1:AA:317:U:C5	2.92	0.57
1:AA:32:A:C2	1:AA:33:A:C5	2.92	0.57
1:AA:620:C:H2'	1:AA:621:A:O4'	2.04	0.57
2:AB:147:SER:O	2:AB:148:LEU:HB2	2.04	0.57
9:AI:57:MET:O	9:AI:59:GLU:N	2.38	0.57
21:AU:10:GLU:CG	21:AU:11:PRO:HD3	2.35	0.57
22:BA:1066:U:O2	22:BA:1069:A:N7	2.37	0.57
22:BA:1712:U:OP2	22:BA:1713:A:O2'	2.20	0.57
22:BA:2182:U:O4	22:BA:2183:A:N6	2.38	0.57
24:BC:91:ILE:HD12	24:BC:103:TYR:CD1	2.40	0.57
24:BC:141:VAL:HG11	24:BC:190:ALA:HB1	1.87	0.57
43:BV:56:PHE:O	43:BV:61:LEU:HD11	2.04	0.57
1:CA:145:G:C2	1:CA:146:G:C8	2.92	0.57
1:CA:543:U:O2'	1:CA:544:G:H5'	2.03	0.57
48:D0:55:ILE:O	48:D0:56:ALA:CB	2.53	0.57
22:DA:1355:G:H2'	22:DA:1356:G:H5'	1.86	0.57
22:DA:1446:C:H2'	22:DA:1447:C:O4'	2.04	0.57
22:DA:1917:U:H2'	22:DA:1918:A:H5'	1.87	0.57
22:DA:197:A:N6	22:DA:2430:A:H2'	2.18	0.57
22:DA:2586:U:C5	22:DA:2587:A:C8	2.92	0.57
1:AA:1154:G:C2	1:AA:1155:A:C5	2.92	0.57
1:AA:65:A:C4	1:AA:381:C:C5	2.92	0.57
1:AA:81:A:C2'	1:AA:82:G:H5''	2.35	0.57
2:AB:184:PHE:CZ	2:AB:198:PHE:CD2	2.92	0.57
5:AE:46:VAL:HG21	5:AE:118:ALA:HB2	1.87	0.57
10:AJ:52:LEU:HB2	14:AN:81:ARG:NE	2.20	0.57
1:AA:1492:A:OP1	12:AL:44:LYS:N	2.37	0.57
17:AQ:48:ASP:C	17:AQ:48:ASP:OD2	2.43	0.57
22:BA:1853:A:N1	22:BA:2087:G:H1'	2.19	0.57
22:BA:482:A:H5''	22:BA:483:A:OP1	2.04	0.57
22:BA:558:U:OP1	31:BJ:113:PRO:HD2	2.04	0.57
22:BA:686:U:O4	50:B2:12:ARG:HB2	2.04	0.57
32:BK:21:CYS:HA	32:BK:41:ILE:HG22	1.86	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1178:G:N2	1:CA:1181:G:OP2	2.38	0.57
1:CA:1365:G:H2'	1:CA:1366:C:O4'	2.05	0.57
2:CB:100:MET:HA	2:CB:107:VAL:HG21	1.87	0.57
1:CA:1302:C:C5	13:CM:17:ILE:HD13	2.40	0.57
21:CU:10:GLU:HB2	21:CU:11:PRO:HD3	1.87	0.57
22:DA:2360:G:H1'	33:DL:60:ARG:HD3	1.86	0.57
22:DA:2504:U:C4	55:DA:3001:DOL:C16	2.88	0.57
22:DA:2888:C:H2'	22:DA:2889:C:C6	2.39	0.57
22:DA:498:G:C2	22:DA:499:U:C6	2.93	0.57
22:DA:841:G:N2	22:DA:937:C:O2	2.33	0.57
29:DH:21:VAL:HG22	29:DH:22:LYS:N	2.19	0.57
35:DN:1:MET:CE	35:DN:1:MET:N	2.67	0.57
1:AA:1107:C:N3	1:AA:1108:G:C8	2.73	0.57
1:AA:345:C:N3	32:BK:117:SER:OG	2.37	0.57
1:AA:903:G:H2'	1:AA:904:U:H6	1.68	0.57
1:AA:19:A:N3	1:AA:917:G:C2	2.73	0.57
2:AB:187:VAL:HG23	2:AB:187:VAL:O	2.04	0.57
3:AC:64:ILE:HG23	3:AC:99:ALA:HB2	1.86	0.57
5:AE:46:VAL:HG21	5:AE:118:ALA:CB	2.35	0.57
10:AJ:53:ILE:CG2	10:AJ:61:ALA:HB1	2.35	0.57
19:AS:5:LEU:HD23	19:AS:9:PRO:HA	1.87	0.57
53:B5:125:GLY:O	53:B5:126:SER:CB	2.53	0.57
53:B5:174:ALA:O	53:B5:175:PRO:CB	2.52	0.57
22:BA:2897:U:H2'	22:BA:2898:U:C6	2.38	0.57
29:BH:132:PHE:CE2	29:BH:142:VAL:HG21	2.40	0.57
29:BH:95:GLY:HA2	29:BH:117:LEU:HD22	1.87	0.57
31:BJ:81:ILE:HG23	31:BJ:82:GLY:H	1.69	0.57
41:BT:17:SER:O	41:BT:20:ALA:N	2.37	0.57
46:BY:18:LEU:O	46:BY:22:LEU:HB2	2.05	0.57
4:CD:32:CYS:O	4:CD:33:LYS:HB3	2.05	0.57
5:CE:154:ALA:HA	5:CE:157:ARG:HB3	1.86	0.57
6:CF:86:ARG:HH11	6:CF:86:ARG:CG	2.17	0.57
8:CH:96:MET:HB2	8:CH:99:LEU:O	2.03	0.57
14:CN:80:SER:O	14:CN:82:ILE:N	2.37	0.57
20:CT:28:MET:HE3	20:CT:58:VAL:HG22	1.87	0.57
22:DA:2176:A:H2'	22:DA:2177:C:C6	2.39	0.57
22:DA:2266:A:C2	22:DA:2272:U:C5	2.92	0.57
22:DA:2697:G:C2	22:DA:2711:A:C2	2.92	0.57
22:DA:324:A:N6	22:DA:338:G:O2'	2.37	0.57
22:DA:67:U:C2	22:DA:68:G:C8	2.93	0.57
22:DA:747:U:O4'	40:DS:92:ARG:NH1	2.37	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1101:A:H4'	1:AA:1102:A:O5'	2.04	0.57
1:AA:1313:U:P	19:AS:6:LYS:HB3	2.45	0.57
1:AA:154:U:O2	1:AA:168:G:N2	2.37	0.57
14:AN:51:LEU:CB	14:AN:52:PRO:HD2	2.34	0.57
14:AN:52:PRO:O	14:AN:53:ARG:HB3	2.04	0.57
22:BA:1378:A:C4	22:BA:1380:G:N7	2.73	0.57
22:BA:2582:G:C2	22:BA:2583:G:C8	2.92	0.57
22:BA:304:U:H2'	22:BA:305:C:C6	2.40	0.57
24:BC:15:HIS:O	24:BC:204:VAL:CG2	2.52	0.57
28:BG:87:LEU:N	28:BG:87:LEU:HD12	2.20	0.57
29:BH:117:LEU:HD21	29:BH:121:VAL:CA	2.35	0.57
29:BH:117:LEU:CD2	29:BH:121:VAL:H	2.08	0.57
38:BQ:87:SER:HB3	39:BR:51:VAL:HA	1.87	0.57
1:CA:992:U:C4	1:CA:1043:G:N7	2.73	0.57
1:CA:60:A:N3	1:CA:61:G:H1'	2.20	0.57
1:CA:636:U:H2'	1:CA:637:C:C6	2.39	0.57
2:CB:210:VAL:HG22	2:CB:211:THR:N	2.18	0.57
5:CE:104:GLY:O	5:CE:105:ILE:CG2	2.53	0.57
5:CE:24:THR:HA	5:CE:29:ARG:HA	1.86	0.57
12:CL:80:ILE:HD12	12:CL:97:THR:HG21	1.87	0.57
16:CP:38:PHE:CE2	16:CP:51:ARG:HD2	2.40	0.57
16:CP:51:ARG:C	16:CP:51:ARG:HD3	2.25	0.57
20:CT:25:ARG:HD2	20:CT:29:ARG:NH1	2.19	0.57
22:DA:1826:G:C6	22:DA:1827:U:C4	2.92	0.57
22:DA:2019:A:H4'	38:DQ:34:VAL:CG2	2.35	0.57
22:DA:2148:G:C2	22:DA:2149:U:C5	2.93	0.57
22:DA:2308:G:C5'	22:DA:2309:A:OP2	2.51	0.57
22:DA:249:C:P	22:DA:2394:C:HO2'	2.27	0.57
30:DI:10:LYS:HB2	30:DI:56:PRO:CB	2.34	0.57
36:DO:33:ARG:O	36:DO:34:HIS:CB	2.52	0.57
1:AA:502:A:H2'	1:AA:503:C:O4'	2.05	0.57
5:AE:25:VAL:O	5:AE:26:LYS:C	2.43	0.57
22:BA:253:C:OP2	51:B3:5:LYS:CE	2.53	0.57
53:B5:180:SER:CB	53:B5:188:ASP:CB	2.83	0.57
53:B5:51:ASP:N	53:B5:52:PRO:HD3	2.20	0.57
22:BA:2153:C:H2'	22:BA:2154:A:O4'	2.05	0.57
22:BA:2485:G:OP1	34:BM:45:GLN:NE2	2.37	0.57
22:BA:70:G:H4'	22:BA:71:A:OP1	2.04	0.57
22:BA:877:A:N6	22:BA:899:A:N6	2.53	0.57
4:CD:173:VAL:O	4:CD:174:ASP:HB3	2.05	0.57
7:CG:92:ARG:HB3	7:CG:93:PRO:HD2	1.86	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:CS:55:ARG:CZ	19:CS:79:THR:HG22	2.34	0.57
22:DA:1313:U:H2'	22:DA:1313:U:O2	2.05	0.57
22:DA:1570:A:H5'	24:DC:36:LYS:HB3	1.85	0.57
22:DA:1651:G:N2	22:DA:2007:U:O2	2.38	0.57
22:DA:235:U:C4	22:DA:236:C:C5	2.92	0.57
22:DA:2707:U:H2'	22:DA:2708:G:C8	2.39	0.57
22:DA:106:C:HO2'	22:DA:294:A:HO2'	0.58	0.57
22:DA:445:C:O2'	22:DA:449:A:N3	2.37	0.57
22:DA:807:U:OP2	33:DL:41:ARG:NH1	2.37	0.57
1:AA:582:C:C4	1:AA:583:A:N7	2.73	0.56
9:AI:47:VAL:HA	9:AI:50:GLN:HB2	1.87	0.56
1:CA:575:G:C6	1:CA:821:G:N7	2.73	0.56
2:CB:184:PHE:CE1	2:CB:198:PHE:CD2	2.93	0.56
5:CE:98:PRO:O	5:CE:122:ASN:ND2	2.33	0.56
6:CF:45:ARG:HD2	6:CF:59:TYR:CE2	2.40	0.56
8:CH:126:ILE:HD12	8:CH:126:ILE:N	2.20	0.56
9:CI:32:GLN:NE2	9:CI:64:TYR:OH	2.38	0.56
15:CO:62:GLN:O	15:CO:66:LEU:HD23	2.05	0.56
22:DA:2429:G:N7	33:DL:55:MET:HE3	2.19	0.56
22:DA:88:G:C2	22:DA:89:A:C8	2.93	0.56
32:DK:104:THR:O	32:DK:106:GLU:N	2.38	0.56
40:DS:29:VAL:CG1	40:DS:55:ILE:HD11	2.35	0.56
42:DU:34:VAL:HG23	42:DU:65:ILE:O	2.04	0.56
1:AA:1520:C:C2	1:AA:1521:C:C5	2.93	0.56
1:AA:832:G:C2	1:AA:833:G:C8	2.93	0.56
2:AB:67:ILE:HG21	2:AB:69:PHE:CE2	2.40	0.56
2:AB:88:ASP:C	2:AB:89:GLN:HG3	2.25	0.56
20:AT:71:LYS:HD2	20:AT:74:ARG:NH2	2.20	0.56
22:BA:2394:C:OP2	51:B3:30:ARG:HD3	2.04	0.56
22:BA:1436:G:N2	22:BA:1557:C:C2	2.73	0.56
22:BA:578:G:OP1	22:BA:1255:U:O2'	2.22	0.56
40:BS:62:ASP:O	40:BS:63:GLY:O	2.23	0.56
2:CB:83:ALA:O	2:CB:86:SER:OG	2.22	0.56
12:CL:107:VAL:CG2	12:CL:117:TYR:HB3	2.35	0.56
22:DA:1068:G:N3	22:DA:1068:G:H2'	2.19	0.56
22:DA:1530:G:C2	22:DA:1542:U:O2	2.58	0.56
22:DA:1683:U:O5'	22:DA:1683:U:H6	1.87	0.56
22:DA:1826:G:C5	22:DA:1827:U:C5	2.93	0.56
25:DD:176:ASP:HB2	25:DD:190:LYS:HB3	1.87	0.56
31:DJ:41:LYS:O	31:DJ:42:ALA:C	2.44	0.56
33:DL:94:THR:O	33:DL:98:ALA:N	2.37	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:429:U:H1'	1:AA:430:A:H5''	1.88	0.56
3:AC:12:LEU:O	3:AC:13:GLY:C	2.44	0.56
7:AG:99:LEU:O	7:AG:101:MET:N	2.38	0.56
21:AU:44:GLU:OE2	21:AU:45:ARG:NH1	2.38	0.56
22:BA:1324:G:C4	22:BA:1328:A:N6	2.73	0.56
22:BA:1901:A:OP2	24:BC:253:LYS:NZ	2.33	0.56
22:BA:1922:G:N2	22:BA:1923:U:C1'	2.68	0.56
22:BA:45:G:H5''	22:BA:46:G:H5'	1.87	0.56
22:BA:967:U:H2'	22:BA:968:C:C6	2.40	0.56
23:BB:110:C:C4	23:BB:111:U:C5	2.94	0.56
30:BI:18:ALA:C	30:BI:20:PRO:HD3	2.26	0.56
34:BM:51:ARG:O	34:BM:55:ARG:HG3	2.05	0.56
22:BA:1808:A:N1	45:BX:28:ARG:HD2	2.21	0.56
1:CA:1394:A:C5	1:CA:1501:C:H4'	2.40	0.56
1:CA:411:A:C6	1:CA:429:U:C5	2.93	0.56
5:CE:96:MET:HE3	5:CE:111:MET:CE	2.34	0.56
1:CA:562:U:OP2	12:CL:14:ARG:NE	2.38	0.56
15:CO:37:ASN:O	15:CO:40:GLN:CB	2.52	0.56
52:D4:36:ARG:HG2	52:D4:37:GLN:N	2.20	0.56
22:DA:1410:G:C2	22:DA:1411:U:C4	2.93	0.56
22:DA:783:A:O2'	22:DA:1779:U:O2	2.14	0.56
22:DA:2757:A:N1	28:DG:67:THR:HG21	2.20	0.56
22:DA:491:G:C6	22:DA:492:A:C6	2.93	0.56
22:DA:971:G:H2'	22:DA:972:A:O4'	2.04	0.56
28:DG:86:LYS:HB3	28:DG:165:ALA:HB2	1.87	0.56
1:AA:1367:C:OP2	9:AI:114:LYS:NZ	2.37	0.56
1:AA:604:G:C2	1:AA:635:A:C2	2.93	0.56
5:AE:157:ARG:C	5:AE:159:LYS:N	2.58	0.56
10:AJ:34:ALA:O	10:AJ:35:GLN:CB	2.52	0.56
20:AT:44:LYS:CD	20:AT:87:ALA:HA	2.36	0.56
48:B0:15:MET:O	48:B0:18:SER:CB	2.53	0.56
22:BA:1352:U:O2'	22:BA:1353:A:H5'	2.05	0.56
22:BA:1926:U:O2	22:BA:1928:A:N7	2.38	0.56
22:BA:894:U:H2'	22:BA:895:U:C6	2.39	0.56
27:BF:123:ASP:CG	27:BF:127:ASN:HB2	2.26	0.56
1:CA:1330:U:H4'	13:CM:23:TYR:CE1	2.39	0.56
3:CC:77:ILE:HA	3:CC:84:VAL:CG2	2.35	0.56
12:CL:44:LYS:CB	12:CL:45:PRO:CD	2.83	0.56
13:CM:91:HIS:CD2	13:CM:97:VAL:HG21	2.40	0.56
22:DA:1353:A:C8	22:DA:1378:A:N6	2.73	0.56
22:DA:2093:G:O2'	22:DA:2094:A:H5'	2.04	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2379:G:H4'	36:DO:21:LEU:HD11	1.87	0.56
22:DA:457:A:N1	22:DA:470:A:H5''	2.20	0.56
22:DA:64:A:H2'	22:DA:65:U:O4'	2.05	0.56
22:DA:1844:C:O3'	24:DC:256:LYS:NZ	2.38	0.56
22:DA:2310:C:C4	27:DF:77:PHE:CZ	2.94	0.56
37:DP:93:ARG:O	37:DP:94:LYS:CB	2.54	0.56
41:DT:21:SER:O	41:DT:22:THR:C	2.43	0.56
41:DT:89:GLU:O	41:DT:91:GLN:N	2.38	0.56
1:AA:1135:U:C2'	1:AA:1136:C:O5'	2.54	0.56
1:AA:1068:G:O2'	1:AA:1191:A:N1	2.24	0.56
2:AB:186:ILE:HA	2:AB:200:ILE:O	2.06	0.56
22:BA:1073:A:C3'	22:BA:1074:G:H5''	2.35	0.56
22:BA:878:A:N6	22:BA:899:A:O2'	2.36	0.56
23:BB:34:A:O2'	23:BB:35:C:H5''	2.05	0.56
37:BP:31:TRP:CE2	37:BP:40:LEU:CD1	2.88	0.56
39:BR:51:VAL:HG23	39:BR:52:PRO:HD2	1.87	0.56
1:CA:991:U:C4	1:CA:1212:U:O4'	2.58	0.56
1:CA:922:G:H4'	5:CE:25:VAL:HA	1.88	0.56
1:CA:972:C:H4'	10:CJ:59:LYS:HG2	1.88	0.56
21:CU:35:ARG:NH2	57:CU:101:HOH:O	2.38	0.56
22:DA:1181:U:H2'	22:DA:1182:G:C8	2.40	0.56
22:DA:1817:G:C2'	22:DA:1818:U:H5'	2.36	0.56
22:DA:1973:G:C6	22:DA:1974:C:N4	2.73	0.56
22:DA:2189:U:H2'	22:DA:2190:G:H5'	1.87	0.56
22:DA:2341:G:C6	22:DA:2342:C:C4	2.94	0.56
22:DA:749:A:C4	22:DA:750:A:C8	2.94	0.56
29:DH:83:LYS:N	29:DH:149:GLU:HG2	2.20	0.56
1:AA:1289:A:O3'	7:AG:35:LYS:NZ	2.37	0.56
1:AA:631:C:C5'	1:AA:632:U:O5'	2.54	0.56
1:AA:880:C:O2'	1:AA:881:G:H5'	2.06	0.56
9:AI:57:MET:CG	9:AI:58:VAL:H	2.18	0.56
13:AM:95:LEU:HB3	13:AM:96:PRO:HD2	1.87	0.56
18:AR:34:THR:OG1	18:AR:35:GLU:N	2.38	0.56
20:AT:54:MET:HE1	20:AT:58:VAL:HG21	1.87	0.56
48:B0:55:ILE:HG22	48:B0:57:LYS:H	1.70	0.56
22:BA:2191:A:N1	22:BA:2192:U:O4	2.39	0.56
30:BI:82:LYS:O	30:BI:83:ALA:CB	2.53	0.56
40:BS:57:ASN:O	40:BS:61:ASN:HB2	2.04	0.56
1:CA:106:C:C2'	1:CA:107:G:H5'	2.35	0.56
1:CA:1224:U:N3	1:CA:1322:C:O2	2.38	0.56
1:CA:169:C:H2'	1:CA:170:U:C6	2.40	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:32:A:H2'	1:CA:32:A:N3	2.20	0.56
8:CH:64:LYS:HB3	8:CH:71:VAL:HG21	1.87	0.56
22:DA:1986:C:OP1	57:DA:3429:HOH:O	2.18	0.56
22:DA:858:G:C4	22:DA:2268:A:C2	2.94	0.56
22:DA:2845:U:H2'	22:DA:2846:G:O4'	2.05	0.56
22:DA:983:A:N6	22:DA:984:A:C2	2.73	0.56
1:AA:375:U:C4	1:AA:376:G:N7	2.74	0.56
1:AA:71:A:O2'	1:AA:72:A:P	2.62	0.56
10:AJ:43:PRO:O	10:AJ:71:LEU:HD23	2.06	0.56
22:BA:2502:G:C5'	22:BA:2503:A:H5''	2.36	0.56
22:BA:2680:U:O2'	22:BA:2681:C:H5'	2.05	0.56
34:BM:70:ASP:OD2	34:BM:70:ASP:C	2.44	0.56
1:CA:1262:C:C4	1:CA:1263:C:C4	2.94	0.56
1:CA:802:A:N3	1:CA:802:A:H2'	2.21	0.56
2:CB:143:LYS:O	2:CB:147:SER:OG	2.19	0.56
3:CC:61:ALA:O	3:CC:62:LYS:HB2	2.05	0.56
4:CD:62:ARG:NH1	4:CD:69:GLU:OE1	2.38	0.56
4:CD:70:ARG:O	4:CD:74:ASN:ND2	2.39	0.56
5:CE:34:THR:HB	5:CE:50:TYR:CZ	2.41	0.56
5:CE:98:PRO:O	5:CE:99:ALA:HB3	2.05	0.56
8:CH:21:ASN:O	8:CH:22:LYS:C	2.42	0.56
9:CI:55:VAL:CG2	9:CI:55:VAL:O	2.53	0.56
11:CK:25:ALA:HB3	11:CK:87:LYS:O	2.05	0.56
16:CP:70:ARG:O	16:CP:74:LEU:HD23	2.05	0.56
22:DA:12:U:O2	22:DA:12:U:H2'	2.06	0.56
22:DA:1581:G:C5	22:DA:1582:C:C4	2.94	0.56
22:DA:2325:G:C6	22:DA:2326:C:N4	2.73	0.56
22:DA:295:G:H2'	22:DA:295:G:N3	2.20	0.56
22:DA:571:U:C4	22:DA:575:A:C5	2.94	0.56
22:DA:696:G:N1	22:DA:767:U:C2	2.73	0.56
22:DA:936:A:C2	22:DA:937:C:C2	2.94	0.56
24:DC:18:LYS:O	24:DC:19:VAL:HB	2.04	0.56
28:DG:118:PRO:HG3	28:DG:144:VAL:HG21	1.87	0.56
38:DQ:50:ARG:O	38:DQ:54:LYS:NZ	2.36	0.56
5:AE:109:GLY:O	5:AE:110:ALA:CB	2.52	0.56
13:AM:4:ILE:O	13:AM:6:GLY:N	2.39	0.56
22:BA:1073:A:C3'	22:BA:1074:G:C5'	2.80	0.56
22:BA:77:G:N2	22:BA:110:G:H1'	2.21	0.56
22:BA:1180:U:C2'	22:BA:1181:U:H5'	2.36	0.56
22:BA:137:U:H2'	22:BA:140:C:C2	2.41	0.56
22:BA:1680:U:H2'	22:BA:1681:G:O4'	2.06	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2888:C:O2	22:BA:2888:C:H2'	2.06	0.56
22:BA:523:C:O2'	22:BA:524:G:H5'	2.06	0.56
22:BA:563:A:C2	22:BA:564:C:C2	2.94	0.56
29:BH:40:THR:OG1	29:BH:43:ASN:OD1	2.24	0.56
36:BO:41:ALA:HB2	36:BO:48:LEU:HD21	1.88	0.56
40:BS:8:ARG:O	40:BS:9:HIS:HB2	2.06	0.56
43:BV:6:ALA:HB1	43:BV:40:ILE:HG23	1.88	0.56
46:BY:34:SER:O	46:BY:36:GLN:N	2.39	0.56
1:CA:1069:C:C2'	1:CA:1070:U:O5'	2.54	0.56
3:CC:130:PHE:CZ	3:CC:131:ARG:HD2	2.41	0.56
12:CL:90:LEU:HB3	12:CL:93:VAL:CG2	2.36	0.56
21:CU:47:ARG:HE	21:CU:47:ARG:HA	1.70	0.56
22:DA:1310:G:C2'	22:DA:1311:G:H5'	2.35	0.56
22:DA:2216:G:H2'	22:DA:2217:G:C8	2.40	0.56
22:DA:629:G:N3	22:DA:639:U:O2'	2.37	0.56
22:DA:686:U:H2'	22:DA:788:A:N1	2.21	0.56
26:DE:149:ILE:HG12	26:DE:188:MET:SD	2.45	0.56
26:DE:196:VAL:O	26:DE:196:VAL:HG12	2.04	0.56
30:DI:101:ILE:O	30:DI:102:SER:HB3	2.05	0.56
34:DM:72:PRO:HB3	34:DM:92:TRP:CZ3	2.40	0.56
39:DR:52:PRO:O	39:DR:53:PHE:CB	2.53	0.56
1:AA:542:G:OP1	4:AD:10:LYS:CE	2.54	0.56
1:AA:821:G:H4'	57:AA:1741:HOH:O	2.05	0.56
5:AE:157:ARG:HD2	8:AH:43:GLU:O	2.05	0.56
8:AH:95:VAL:HG12	8:AH:96:MET:N	2.20	0.56
10:AJ:27:GLU:C	10:AJ:29:ALA:H	2.10	0.56
17:AQ:45:HIS:CG	17:AQ:70:THR:CG2	2.88	0.56
22:BA:2120:G:N2	22:BA:2179:C:O2	2.39	0.56
22:BA:2820:A:C6	25:BD:197:THR:CG2	2.88	0.56
22:BA:936:A:H2'	22:BA:937:C:C6	2.41	0.56
23:BB:30:C:OP1	36:BO:3:LYS:NZ	2.39	0.56
43:BV:58:SER:O	43:BV:73:LYS:HE2	2.06	0.56
1:CA:1069:C:H2'	1:CA:1070:U:O5'	2.06	0.56
1:CA:1190:G:H5'	3:CC:176:HIS:CE1	2.41	0.56
1:CA:1394:A:N1	1:CA:1500:A:O2'	2.36	0.56
1:CA:182:A:C5	1:CA:184:G:N7	2.74	0.56
1:CA:635:A:C6	1:CA:636:U:C4	2.93	0.56
1:CA:577:G:N9	1:CA:816:A:C2	2.74	0.56
2:CB:54:LEU:HA	2:CB:57:LEU:HB3	1.86	0.56
4:CD:168:PRO:CB	4:CD:171:LEU:HD12	2.36	0.56
1:CA:426:U:H5''	4:CD:37:ALA:HB1	1.87	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:CK:84:VAL:HG11	11:CK:97:ILE:HG22	1.88	0.56
16:CP:16:PHE:CE1	16:CP:38:PHE:HB2	2.41	0.56
22:DA:126:A:N7	22:DA:127:A:N1	2.53	0.56
22:DA:1315:C:O2'	22:DA:1392:A:N3	2.36	0.56
22:DA:1638:C:H4'	22:DA:2710:C:O2	2.05	0.56
22:DA:491:G:C6	22:DA:492:A:C5	2.93	0.56
22:DA:1843:C:H4'	24:DC:251:GLN:CD	2.25	0.56
32:DK:31:ARG:HB3	32:DK:32:TYR:CE2	2.41	0.56
35:DN:54:LEU:HD21	35:DN:66:ALA:HB2	1.87	0.56
1:AA:1109:C:OP2	3:AC:176:HIS:ND1	2.32	0.56
1:AA:11:G:C6	1:AA:12:U:C4	2.94	0.56
1:AA:205:A:H2'	1:AA:205:A:N3	2.21	0.56
1:AA:527:G:O2'	1:AA:535:A:N1	2.36	0.56
1:AA:57:G:H2'	1:AA:58:C:C6	2.41	0.56
1:AA:858:G:O6	1:AA:869:G:C8	2.58	0.56
4:AD:37:ALA:HA	4:AD:42:GLY:HA3	1.87	0.56
6:AF:91:ARG:HG3	6:AF:92:THR:N	2.19	0.56
22:BA:1838:C:C6	22:BA:1899:A:C6	2.94	0.56
22:BA:572:A:C2	22:BA:2033:A:C2	2.94	0.56
22:BA:1565:C:OP1	24:BC:18:LYS:NZ	2.39	0.56
24:BC:86:ASN:N	24:BC:86:ASN:OD1	2.37	0.56
25:BD:103:ASP:O	25:BD:104:VAL:HG22	2.06	0.56
32:BK:106:GLU:OE2	32:BK:106:GLU:N	2.38	0.56
46:BY:9:LYS:O	46:BY:12:GLU:N	2.38	0.56
1:CA:496:A:C2	1:CA:497:G:C6	2.93	0.56
1:CA:502:A:H2'	1:CA:503:C:O4'	2.06	0.56
2:CB:10:LEU:CD2	2:CB:12:ALA:O	2.54	0.56
2:CB:15:HIS:O	2:CB:15:HIS:CG	2.58	0.56
2:CB:162:PHE:HA	2:CB:184:PHE:O	2.06	0.56
3:CC:75:ILE:O	3:CC:75:ILE:HG13	2.05	0.56
5:CE:125:ALA:O	5:CE:126:LYS:HB3	2.05	0.56
49:D1:21:TYR:CD1	49:D1:38:LYS:HD2	2.41	0.56
22:DA:1153:C:H5'	38:DQ:62:ILE:HD13	1.87	0.56
22:DA:1351:C:H2'	22:DA:1352:U:O4'	2.06	0.56
22:DA:1973:G:C5	22:DA:1974:C:C5	2.94	0.56
22:DA:2262:U:H1'	22:DA:2328:A:H1'	1.87	0.56
31:DJ:105:VAL:HG12	31:DJ:109:LEU:HD12	1.88	0.56
47:DZ:40:ASP:OD2	47:DZ:45:ARG:NH1	2.38	0.56
1:AA:452:A:H2'	1:AA:453:G:C5'	2.36	0.56
4:AD:32:CYS:O	4:AD:33:LYS:CB	2.54	0.56
15:AO:19:ALA:O	15:AO:20:ASN:HB2	2.06	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1115:G:N3	22:BA:1116:G:C8	2.73	0.56
22:BA:2286:G:O6	49:B1:23:THR:OG1	2.10	0.56
37:BP:40:LEU:HD21	37:BP:82:ASP:OD2	2.06	0.56
46:BY:9:LYS:HB3	46:BY:12:GLU:HG3	1.87	0.56
1:CA:898:G:N2	1:CA:901:A:OP2	2.36	0.56
2:CB:219:ALA:O	2:CB:220:THR:HB	2.05	0.56
12:CL:82:ILE:HD11	12:CL:95:TYR:HB2	1.88	0.56
22:DA:1355:G:C2'	22:DA:1356:G:H5'	2.36	0.56
22:DA:1440:U:H2'	22:DA:1441:G:O4'	2.06	0.56
45:DX:31:PRO:HB2	45:DX:33:LEU:CD1	2.36	0.56
22:DA:927:A:O2'	47:DZ:39:GLU:OE1	2.23	0.56
1:AA:764:C:H5''	15:AO:50:HIS:CD2	2.40	0.55
17:AQ:16:LYS:C	17:AQ:17:MET:HE3	2.26	0.55
49:B1:7:GLU:OE1	49:B1:53:LYS:O	2.24	0.55
51:B3:27:ALA:O	51:B3:28:ASN:CB	2.53	0.55
22:BA:1179:G:C5	22:BA:1180:U:N1	2.74	0.55
22:BA:1422:G:C4	22:BA:1423:G:C8	2.94	0.55
22:BA:2492:U:C2	22:BA:2493:U:C5	2.93	0.55
36:BO:25:ARG:HG3	36:BO:27:VAL:HG12	1.88	0.55
36:BO:31:THR:HG22	36:BO:34:HIS:N	2.20	0.55
38:BQ:9:ILE:O	38:BQ:13:ARG:HG3	2.07	0.55
1:CA:1255:G:N1	1:CA:1279:G:C8	2.74	0.55
3:CC:74:GLY:O	3:CC:78:GLY:N	2.39	0.55
4:CD:107:PHE:CG	4:CD:145:ILE:HD11	2.41	0.55
20:CT:67:ILE:HD12	20:CT:71:LYS:HE3	1.87	0.55
21:CU:37:PHE:HA	21:CU:40:LYS:HE3	1.87	0.55
22:DA:948:C:O2	22:DA:984:A:O2'	2.21	0.55
44:DW:49:ALA:O	44:DW:50:ASN:HB2	2.06	0.55
1:AA:108:G:C5'	1:AA:108:G:N3	2.70	0.55
1:AA:1287:A:H2'	1:AA:1288:A:C8	2.41	0.55
1:AA:554:A:H2'	1:AA:555:U:C6	2.41	0.55
1:AA:782:A:C2	1:AA:801:U:C2	2.95	0.55
2:AB:93:ASN:OD1	2:AB:94:HIS:ND1	2.38	0.55
3:AC:145:GLY:O	3:AC:146:ALA:C	2.44	0.55
5:AE:151:GLU:O	5:AE:153:VAL:N	2.38	0.55
6:AF:3:HIS:H	6:AF:92:THR:HG23	1.71	0.55
9:AI:9:THR:HG22	9:AI:10:GLY:N	2.21	0.55
22:BA:1181:U:H2'	22:BA:1182:G:C8	2.41	0.55
22:BA:1327:A:N6	22:BA:1328:A:C2	2.74	0.55
22:BA:1385:A:C4	22:BA:1386:C:C5	2.95	0.55
22:BA:1832:C:C4	22:BA:1833:C:C5	2.94	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1857:G:N2	22:BA:1884:G:H1'	2.20	0.55
22:BA:511:U:C5	22:BA:512:G:C5	2.95	0.55
22:BA:574:A:OP2	57:BA:3267:HOH:O	2.18	0.55
22:BA:84:A:H4'	22:BA:85:G:O5'	2.06	0.55
22:BA:588:U:H1'	26:BE:85:PHE:CD1	2.41	0.55
27:BF:108:VAL:HG13	27:BF:114:PHE:CE2	2.42	0.55
32:BK:109:SER:O	32:BK:110:GLU:C	2.44	0.55
40:BS:30:SER:OG	40:BS:31:GLN:N	2.36	0.55
43:BV:32:GLY:O	43:BV:93:ARG:NH1	2.38	0.55
1:CA:1041:G:H2'	1:CA:1042:A:C8	2.40	0.55
1:CA:109:A:C6	1:CA:327:A:C6	2.94	0.55
1:CA:1296:C:H4'	1:CA:1302:C:N4	2.21	0.55
1:CA:1439:G:C2	1:CA:1463:U:O2	2.59	0.55
4:CD:160:GLU:O	4:CD:163:GLU:HB2	2.06	0.55
22:DA:1034:G:C6	22:DA:1035:U:N3	2.74	0.55
22:DA:1179:G:C5	22:DA:1180:U:H1'	2.41	0.55
22:DA:770:G:H1'	22:DA:1379:U:C4	2.41	0.55
22:DA:1754:A:C6	22:DA:1755:A:C6	2.94	0.55
22:DA:2202:U:H5''	22:DA:2203:U:OP1	2.06	0.55
22:DA:269:C:O2	22:DA:269:C:H2'	2.06	0.55
22:DA:2725:A:C4	22:DA:2727:A:C8	2.93	0.55
55:DA:3001:DOL:N9	55:DA:3001:DOL:HC41	2.21	0.55
22:DA:319:G:C4	22:DA:333:G:N2	2.75	0.55
22:DA:694:U:H2'	22:DA:695:G:H5''	1.87	0.55
22:DA:842:U:N3	22:DA:843:G:N7	2.54	0.55
25:DD:151:THR:HG22	25:DD:152:PRO:N	2.22	0.55
36:DO:100:HIS:CD2	36:DO:101:GLY:N	2.75	0.55
1:AA:1064:G:O2'	1:AA:1190:G:N2	2.39	0.55
2:AB:24:ASN:O	2:AB:26:LYS:N	2.40	0.55
5:AE:97:GLN:HB3	5:AE:124:LEU:HD12	1.87	0.55
6:AF:98:GLU:CG	6:AF:99:ALA:N	2.69	0.55
53:B5:19:LYS:HG3	53:B5:23:ILE:CG1	2.37	0.55
22:BA:1916:A:C2	22:BA:1917:U:O2	2.59	0.55
22:BA:422:A:N1	22:BA:423:A:C2	2.74	0.55
23:BB:15:A:O2'	23:BB:16:G:H5'	2.06	0.55
22:BA:2845:U:H5''	37:BP:52:ASN:O	2.04	0.55
1:CA:466:A:C2	1:CA:468:A:C8	2.95	0.55
1:CA:798:U:H2'	1:CA:799:G:O5'	2.07	0.55
8:CH:18:GLN:NE2	8:CH:70:ALA:HB1	2.21	0.55
52:D4:36:ARG:CG	52:D4:37:GLN:N	2.68	0.55
22:DA:1562:U:H2'	22:DA:1563:U:O4'	2.07	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2112:G:N3	22:DA:2112:G:H2'	2.22	0.55
22:DA:2805:C:H2'	22:DA:2806:C:C6	2.40	0.55
22:DA:2815:C:H2'	22:DA:2816:G:C8	2.42	0.55
31:DJ:36:LEU:O	31:DJ:121:LYS:NZ	2.39	0.55
1:AA:1236:A:H2'	1:AA:1237:C:C6	2.40	0.55
1:AA:1387:G:H2'	1:AA:1388:C:C6	2.41	0.55
1:AA:872:A:C8	1:AA:874:G:C8	2.95	0.55
2:AB:49:MET:O	2:AB:53:ALA:HB2	2.05	0.55
11:AK:25:ALA:HA	11:AK:30:THR:HG22	1.87	0.55
22:BA:142:A:C5	22:BA:143:C:N4	2.75	0.55
22:BA:1688:U:N3	22:BA:1698:A:C2	2.75	0.55
22:BA:1731:G:C6	22:BA:1733:G:C5	2.94	0.55
22:BA:528:A:H3'	22:BA:528:A:H8	1.71	0.55
22:BA:580:U:H2'	22:BA:581:C:C6	2.41	0.55
25:BD:71:ALA:HB1	25:BD:92:VAL:HG13	1.87	0.55
31:BJ:60:ASP:HA	31:BJ:97:PRO:HB3	1.89	0.55
22:BA:1199:U:H1'	38:BQ:4:VAL:HG22	1.89	0.55
41:BT:2:ILE:HA	41:BT:3:ARG:HB2	1.88	0.55
1:CA:1012:A:C2	1:CA:1018:G:C2	2.94	0.55
1:CA:1071:C:H2'	1:CA:1072:G:H8	1.71	0.55
1:CA:734:G:C4	1:CA:735:C:C5	2.94	0.55
4:CD:161:LEU:HD23	4:CD:162:ALA:N	2.21	0.55
9:CI:25:ASN:O	9:CI:27:LYS:N	2.39	0.55
22:DA:1360:G:O6	22:DA:1372:U:C2	2.60	0.55
22:DA:1532:A:C2	22:DA:1540:G:C6	2.93	0.55
22:DA:1826:G:O2'	22:DA:1971:U:OP2	2.23	0.55
22:DA:1767:G:O6	22:DA:1986:C:N4	2.39	0.55
22:DA:526:A:C6	22:DA:2626:C:H4'	2.41	0.55
22:DA:2718:G:C6	22:DA:2719:G:C4	2.94	0.55
22:DA:406:G:H2'	22:DA:407:G:O4'	2.06	0.55
22:DA:449:A:C5	22:DA:450:G:C8	2.94	0.55
22:DA:584:C:N4	22:DA:585:G:C6	2.75	0.55
23:DB:39:A:H2'	23:DB:40:U:C6	2.41	0.55
30:DI:80:LEU:HA	30:DI:84:ALA:CB	2.35	0.55
41:DT:12:ARG:O	41:DT:13:ALA:HB2	2.05	0.55
1:AA:1441:A:H2'	1:AA:1442:G:O5'	2.05	0.55
1:AA:340:U:H2'	1:AA:341:C:C6	2.42	0.55
1:AA:403:C:OP1	4:AD:134:SER:OG	2.18	0.55
1:AA:781:A:H4'	1:AA:1522:U:O2'	2.06	0.55
2:AB:53:ALA:O	2:AB:57:LEU:HB2	2.06	0.55
4:AD:103:TYR:HB2	4:AD:114:ALA:CB	2.36	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:B5:56:ASP:OD2	53:B5:58:ASN:ND2	2.40	0.55
22:BA:1176:U:C4	22:BA:1177:G:O6	2.60	0.55
22:BA:1494:A:O2'	22:BA:1495:A:O5'	2.24	0.55
22:BA:973:A:H5'	22:BA:1188:U:H1'	1.88	0.55
27:BF:175:PHE:HD1	27:BF:177:PHE:CE1	2.25	0.55
29:BH:91:PHE:CD1	1:CA:55:A:C8	2.94	0.55
36:BO:29:HIS:CD2	36:BO:29:HIS:C	2.79	0.55
44:BW:23:VAL:HA	44:BW:38:VAL:HG12	1.89	0.55
1:CA:328:C:O2	1:CA:328:C:C2'	2.54	0.55
1:CA:427:U:O2'	1:CA:541:G:OP1	2.17	0.55
3:CC:134:MET:SD	3:CC:153:VAL:CG1	2.95	0.55
4:CD:107:PHE:O	4:CD:117:LEU:HD11	2.07	0.55
9:CI:19:VAL:HG21	9:CI:82:GLY:CA	2.36	0.55
22:DA:1360:G:N1	22:DA:1361:G:H1'	2.22	0.55
22:DA:1801:A:C5	24:DC:262:ARG:NH2	2.75	0.55
22:DA:1810:A:H5''	22:DA:1811:G:OP2	2.05	0.55
22:DA:2420:C:OP1	51:D3:34:THR:HB	2.06	0.55
22:DA:483:A:C2	42:DU:58:ILE:HD11	2.41	0.55
25:DD:16:THR:OG1	25:DD:18:ASP:OD2	2.12	0.55
31:DJ:39:LYS:HZ3	31:DJ:39:LYS:HB2	1.72	0.55
36:DO:33:ARG:O	36:DO:34:HIS:HB2	2.06	0.55
1:AA:1419:G:C5	1:AA:1420:U:C5	2.95	0.55
1:AA:320:A:H2'	1:AA:321:A:C1'	2.36	0.55
4:AD:152:GLN:O	4:AD:153:SER:C	2.44	0.55
4:AD:91:LEU:HD11	4:AD:195:ILE:HD11	1.89	0.55
6:AF:17:GLN:OE1	6:AF:24:ARG:NH2	2.39	0.55
7:AG:120:LEU:HD13	7:AG:124:LEU:HD23	1.88	0.55
9:AI:114:LYS:HG2	9:AI:120:LYS:HA	1.86	0.55
9:AI:6:TYR:HB3	9:AI:89:GLU:HG2	1.87	0.55
12:AL:56:ARG:NH1	12:AL:62:GLU:HG3	2.21	0.55
18:AR:25:ASP:O	18:AR:27:ALA:N	2.39	0.55
22:BA:1915:U:C2	22:BA:1916:A:C8	2.94	0.55
22:BA:1268:A:C2	22:BA:2013:A:C4	2.94	0.55
22:BA:2286:G:H5''	22:BA:2287:A:O4'	2.06	0.55
22:BA:2318:G:C5	22:BA:2319:G:C6	2.95	0.55
22:BA:2820:A:C2'	22:BA:2821:A:OP1	2.55	0.55
22:BA:528:A:N1	22:BA:2043:C:H5'	2.22	0.55
27:BF:85:ILE:O	27:BF:85:ILE:CG1	2.55	0.55
29:BH:98:ASP:O	29:BH:102:ALA:HB3	2.07	0.55
29:BH:86:ASP:O	29:BH:87:GLU:CB	2.53	0.55
42:BU:13:VAL:HG12	42:BU:19:LYS:HA	1.88	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1000:A:C2	1:CA:1041:G:N2	2.74	0.55
1:CA:1255:G:C6	1:CA:1279:G:N7	2.74	0.55
1:CA:1288:A:N1	1:CA:1371:G:H1'	2.21	0.55
1:CA:137:U:H1'	1:CA:227:G:N2	2.21	0.55
5:CE:90:THR:HG22	5:CE:91:GLY:N	2.21	0.55
22:DA:1323:C:C4	22:DA:1324:G:N7	2.74	0.55
22:DA:749:A:C5	22:DA:1618:A:C2	2.95	0.55
22:DA:1645:G:OP1	22:DA:1646:C:H5'	2.06	0.55
22:DA:2353:G:H2'	22:DA:2354:C:O4'	2.06	0.55
26:DE:108:ILE:HD11	26:DE:180:LEU:HB2	1.87	0.55
28:DG:176:LYS:O	28:DG:177:LYS:CB	2.54	0.55
33:DL:55:MET:SD	33:DL:59:ARG:NH2	2.80	0.55
33:DL:81:ASP:O	33:DL:82:LEU:HB3	2.05	0.55
22:DA:484:C:OP1	42:DU:48:PRO:HG3	2.07	0.55
46:DY:27:ASN:HA	46:DY:30:MET:HB2	1.89	0.55
22:DA:95:A:O2'	46:DY:40:SER:N	2.39	0.55
1:AA:1144:G:H5''	1:AA:1145:A:OP2	2.07	0.55
1:AA:1418:A:C2	1:AA:1483:A:C2	2.94	0.55
1:AA:957:U:H1'	1:AA:960:U:N3	2.22	0.55
3:AC:11:ARG:NH1	3:AC:182:ILE:HB	2.22	0.55
3:AC:155:GLY:HA2	3:AC:163:ALA:HB1	1.88	0.55
5:AE:81:LEU:HA	5:AE:147:MET:HE1	1.88	0.55
11:AK:30:THR:HG21	11:AK:91:PRO:O	2.06	0.55
22:BA:1789:A:OP2	24:BC:221:ARG:NH1	2.40	0.55
1:CA:1007:U:C4	1:CA:1008:U:C5	2.95	0.55
1:CA:1107:C:C4	1:CA:1108:G:N7	2.75	0.55
1:CA:1363:A:O2'	1:CA:1365:G:N7	2.36	0.55
1:CA:1491:G:C6	1:CA:1492:A:N1	2.75	0.55
1:CA:718:A:H5'	11:CK:119:ASN:CG	2.27	0.55
9:CI:12:ARG:CZ	9:CI:107:ASP:OD2	2.53	0.55
19:CS:80:TYR:O	19:CS:81:ARG:CB	2.54	0.55
50:D2:18:PHE:O	50:D2:21:ARG:N	2.40	0.55
22:DA:1510:G:H2'	22:DA:1511:G:O4'	2.06	0.55
22:DA:1606:C:C2'	22:DA:1607:C:OP2	2.55	0.55
22:DA:1917:U:C2'	22:DA:1918:A:H5'	2.37	0.55
22:DA:2395:C:H2'	22:DA:2396:G:O4'	2.06	0.55
22:DA:669:G:C2	22:DA:801:G:N1	2.74	0.55
1:AA:92:U:H2'	1:AA:93:U:C6	2.41	0.55
22:BA:1949:G:N2	22:BA:1958:C:O2	2.40	0.55
22:BA:1959:G:H2'	22:BA:1960:A:O5'	2.07	0.55
22:BA:2580:U:C5	22:BA:2581:G:C6	2.94	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:350:G:H2'	22:BA:351:C:O4'	2.06	0.55
29:BH:121:VAL:N	29:BH:122:LEU:CA	2.69	0.55
29:BH:120:GLY:CA	29:BH:122:LEU:HA	2.37	0.55
39:BR:49:ILE:C	39:BR:51:VAL:O	2.45	0.55
1:CA:1521:C:C2	1:CA:1522:U:C6	2.94	0.55
1:CA:786:G:N2	1:CA:787:A:H1'	2.22	0.55
1:CA:840:C:N3	1:CA:842:U:H4'	2.22	0.55
1:CA:909:A:H2'	1:CA:910:C:O4'	2.07	0.55
22:DA:1020:A:C2	22:DA:1141:U:C2	2.95	0.55
22:DA:1395:A:O2'	22:DA:1397:U:C6	2.59	0.55
22:DA:187:G:N2	22:DA:210:C:H1'	2.22	0.55
22:DA:320:A:H4'	22:DA:322:A:C8	2.42	0.55
22:DA:667:U:C4	22:DA:668:A:N7	2.75	0.55
22:DA:753:A:C2	22:DA:754:U:C2	2.94	0.55
25:DD:151:THR:HG22	25:DD:152:PRO:CD	2.37	0.55
29:DH:31:VAL:HB	29:DH:32:PRO:HD3	1.89	0.55
46:DY:31:GLN:HG2	46:DY:36:GLN:HB2	1.89	0.55
1:AA:1138:G:C2	1:AA:1140:C:C5	2.94	0.55
1:AA:1462:C:H2'	1:AA:1463:U:O4'	2.06	0.55
1:AA:1464:U:OP2	37:BP:109:ARG:NH1	2.40	0.55
1:AA:451:A:H61	1:AA:481:G:H5'	1.72	0.55
1:AA:66:A:C6	1:AA:67:C:C5	2.95	0.55
1:AA:89:U:O2'	1:AA:90:C:H5'	2.07	0.55
1:AA:995:C:N3	1:AA:1046:A:O2'	2.36	0.55
4:AD:195:ILE:HG13	4:AD:195:ILE:O	2.04	0.55
12:AL:94:ARG:HB2	12:AL:95:TYR:CE2	2.42	0.55
13:AM:37:ALA:CB	13:AM:56:LEU:HD23	2.37	0.55
20:AT:28:MET:O	20:AT:32:ILE:HG13	2.06	0.55
22:BA:1309:G:H4'	50:B2:7:PRO:HB2	1.88	0.55
22:BA:1080:A:H2'	22:BA:1080:A:N3	2.22	0.55
22:BA:1355:G:O2'	22:BA:1356:G:H5'	2.07	0.55
22:BA:1494:A:H2'	22:BA:1495:A:O5'	2.06	0.55
22:BA:1668:A:H4'	22:BA:1669:A:O5'	2.07	0.55
22:BA:2480:C:C2'	22:BA:2481:G:H5'	2.37	0.55
22:BA:2765:A:N3	22:BA:2765:A:H2'	2.22	0.55
22:BA:2846:G:OP2	37:BP:52:ASN:HB2	2.07	0.55
22:BA:78:U:H2'	22:BA:79:C:C6	2.42	0.55
29:BH:121:VAL:N	29:BH:122:LEU:CB	2.70	0.55
2:CB:141:LEU:O	2:CB:145:GLU:N	2.37	0.55
6:CF:18:VAL:HG12	6:CF:19:PRO:N	2.22	0.55
6:CF:97:THR:O	6:CF:98:GLU:CB	2.55	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:CH:2:SER:C	8:CH:4:GLN:N	2.60	0.55
12:CL:90:LEU:CB	12:CL:93:VAL:HG21	2.37	0.55
22:DA:1060:U:H4'	22:DA:1061:U:H5'	1.89	0.55
22:DA:1127:A:H2'	22:DA:1128:G:H5''	1.89	0.55
22:DA:1992:G:N2	22:DA:1996:C:O2'	2.39	0.55
22:DA:2307:G:N2	22:DA:2312:U:N3	2.55	0.55
22:DA:411:G:OP2	22:DA:2406:A:O2'	2.20	0.55
22:DA:419:U:C4	22:DA:420:C:C5	2.95	0.55
22:DA:672:C:C2	22:DA:809:G:N2	2.75	0.55
22:DA:1808:A:N1	45:DX:28:ARG:HD2	2.21	0.55
45:DX:43:GLU:O	45:DX:44:LYS:C	2.44	0.55
1:AA:144:G:C5	1:AA:179:A:C2	2.95	0.55
1:AA:66:A:H4'	1:AA:173:U:C5	2.42	0.55
4:AD:152:GLN:O	4:AD:155:VAL:HG12	2.06	0.55
13:AM:16:VAL:HG22	13:AM:41:GLU:HB2	1.88	0.55
22:BA:26:G:H1'	22:BA:514:A:N6	2.22	0.55
35:BN:79:LEU:O	35:BN:80:PHE:HB2	2.06	0.55
1:CA:106:C:H2'	1:CA:107:G:H5'	1.89	0.55
1:CA:280:C:N3	17:CQ:40:ARG:HA	2.22	0.55
1:CA:31:G:O4'	1:CA:306:A:C2	2.60	0.55
1:CA:769:G:H4'	1:CA:1513:A:H4'	1.88	0.55
3:CC:172:ARG:HG3	3:CC:174:PRO:HD3	1.89	0.55
21:CU:8:GLU:HB3	21:CU:12:PHE:CE2	2.42	0.55
51:D3:4:ILE:HG21	51:D3:63:PRO:HG3	1.89	0.55
22:DA:1318:U:H2'	22:DA:1319:C:C6	2.42	0.55
22:DA:2107:G:C2	22:DA:2183:A:C2	2.95	0.55
22:DA:2261:C:C2	22:DA:2280:G:C2	2.95	0.55
22:DA:315:G:H2'	22:DA:316:C:O4'	2.06	0.55
22:DA:420:C:H2'	22:DA:421:C:C6	2.42	0.55
23:DB:52:A:C4	36:DO:33:ARG:NH2	2.75	0.55
24:DC:141:VAL:HG11	24:DC:190:ALA:HB1	1.88	0.55
25:DD:125:TRP:CE3	25:DD:160:LYS:HD3	2.42	0.55
5:AE:149:SER:CB	5:AE:152:MET:HB2	2.37	0.54
5:AE:81:LEU:HB3	5:AE:147:MET:CE	2.36	0.54
12:AL:72:HIS:ND1	12:AL:72:HIS:O	2.40	0.54
22:BA:1965:C:OP1	22:BA:1966:A:O2'	2.07	0.54
22:BA:2196:C:C2'	22:BA:2197:U:H5'	2.36	0.54
22:BA:2415:G:H2'	22:BA:2416:C:C6	2.42	0.54
22:BA:2694:G:H2'	22:BA:2695:U:C6	2.42	0.54
22:BA:2506:U:C4	55:BA:3001:DOL:H422	2.41	0.54
22:BA:55:G:C2	22:BA:56:A:C8	2.95	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BH:10:ALA:O	29:BH:12:LEU:N	2.40	0.54
30:BI:16:GLY:HA2	30:BI:51:LYS:HB3	1.89	0.54
38:BQ:110:VAL:O	38:BQ:114:LYS:HG3	2.07	0.54
1:CA:1072:G:C5	1:CA:1073:U:C5	2.95	0.54
1:CA:53:A:C2	1:CA:359:G:C6	2.95	0.54
1:CA:466:A:N1	1:CA:468:A:N7	2.55	0.54
1:CA:939:G:C6	1:CA:940:C:N4	2.75	0.54
1:CA:97:G:C5	1:CA:98:A:H1'	2.42	0.54
5:CE:36:LEU:HD21	5:CE:137:VAL:HG11	1.89	0.54
1:CA:1240:U:C5	7:CG:109:ARG:NH1	2.76	0.54
12:CL:3:THR:HB	12:CL:6:GLN:HG3	1.89	0.54
12:CL:83:ARG:CG	12:CL:84:GLY:N	2.70	0.54
12:CL:88:LYS:O	12:CL:88:LYS:HG3	2.07	0.54
15:CO:27:VAL:HG12	15:CO:28:GLN:N	2.21	0.54
22:DA:1027:A:N7	22:DA:1126:A:C2	2.74	0.54
22:DA:1352:U:C5	22:DA:1377:G:C6	2.95	0.54
22:DA:565:C:H4'	22:DA:1253:A:N6	2.23	0.54
22:DA:581:C:OP2	38:DQ:33:ARG:CZ	2.54	0.54
22:DA:630:G:H3'	22:DA:631:A:C5'	2.37	0.54
22:DA:732:C:H2'	22:DA:733:G:O4'	2.06	0.54
42:DU:96:PHE:CZ	42:DU:103:ILE:HG13	2.41	0.54
42:DU:54:GLN:N	42:DU:55:PRO:CD	2.70	0.54
1:AA:266:G:H4'	1:AA:267:C:OP1	2.06	0.54
1:AA:91:U:H2'	1:AA:92:U:O4'	2.08	0.54
6:AF:84:VAL:O	6:AF:84:VAL:HG22	2.07	0.54
22:BA:2517:C:C6	22:BA:2542:A:N7	2.75	0.54
29:BH:90:LEU:CD2	29:BH:93:SER:HA	2.37	0.54
39:BR:49:ILE:CG2	39:BR:52:PRO:C	2.76	0.54
47:BZ:14:ILE:HG22	47:BZ:15:GLY:N	2.21	0.54
1:CA:577:G:H1'	1:CA:816:A:N3	2.23	0.54
1:CA:801:U:C2	1:CA:802:A:N7	2.75	0.54
2:CB:53:ALA:O	2:CB:57:LEU:HB2	2.07	0.54
4:CD:22:LYS:O	4:CD:23:SER:C	2.45	0.54
1:CA:614:C:OP1	4:CD:83:LYS:NZ	2.39	0.54
9:CI:54:LEU:O	9:CI:55:VAL:HG22	2.08	0.54
22:DA:1096:A:C5	22:DA:1097:U:C5	2.95	0.54
22:DA:1131:G:OP1	31:DJ:82:GLY:HA2	2.07	0.54
22:DA:277:G:C2'	22:DA:361:G:O6	2.55	0.54
22:DA:569:U:H5''	22:DA:821:A:C2	2.43	0.54
22:DA:919:U:H2'	22:DA:920:A:O4'	2.07	0.54
23:DB:78:A:C5	23:DB:99:A:C8	2.96	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:DC:92:ALA:HB3	24:DC:104:ILE:CD1	2.37	0.54
26:DE:108:ILE:HD11	26:DE:180:LEU:CB	2.37	0.54
29:DH:79:THR:HA	29:DH:145:ASN:HB2	1.89	0.54
42:DU:44:LYS:HE3	42:DU:46:GLN:HB2	1.89	0.54
1:AA:1417:G:C6	1:AA:1482:G:C6	2.95	0.54
1:AA:616:G:C2	1:AA:617:G:C8	2.95	0.54
2:AB:27:MET:HG2	2:AB:189:THR:HA	1.89	0.54
4:AD:123:ILE:N	4:AD:123:ILE:HD13	2.22	0.54
4:AD:151:LYS:HB3	4:AD:178:MET:HE3	1.90	0.54
1:AA:1152:A:OP1	10:AJ:70:HIS:ND1	2.40	0.54
10:AJ:73:LEU:O	10:AJ:74:VAL:HB	2.08	0.54
13:AM:10:PRO:O	13:AM:11:ASP:HB3	2.07	0.54
53:B5:50:ILE:HB	53:B5:52:PRO:HD3	1.89	0.54
22:BA:1441:G:H2'	22:BA:1442:U:C6	2.42	0.54
22:BA:2308:G:C5	27:BF:77:PHE:CE2	2.95	0.54
22:BA:2511:U:O4	22:BA:2575:C:N3	2.40	0.54
22:BA:627:A:C6	22:BA:637:A:C8	2.95	0.54
29:BH:90:LEU:HA	29:BH:125:THR:HG23	1.89	0.54
41:BT:17:SER:O	41:BT:18:GLU:C	2.45	0.54
1:CA:1181:G:O2'	1:CA:1182:G:C8	2.56	0.54
1:CA:66:A:H4'	1:CA:173:U:C5	2.42	0.54
1:CA:736:C:H2'	1:CA:737:C:C6	2.42	0.54
21:CU:12:PHE:O	21:CU:13:ASP:CB	2.54	0.54
22:DA:1011:G:O2'	22:DA:1013:C:H5''	2.07	0.54
22:DA:1316:U:C2	22:DA:1337:G:N2	2.76	0.54
22:DA:1343:G:C6	22:DA:1344:U:O4	2.60	0.54
22:DA:1428:C:O2'	22:DA:1569:A:OP2	2.20	0.54
22:DA:1847:A:C2'	22:DA:1848:A:OP2	2.55	0.54
22:DA:2267:A:H5''	22:DA:2268:A:C5'	2.38	0.54
22:DA:792:A:H1'	22:DA:2072:C:O2'	2.07	0.54
22:DA:867:C:C5	22:DA:868:U:C5	2.96	0.54
24:DC:121:ASP:N	24:DC:121:ASP:OD1	2.41	0.54
42:DU:34:VAL:HG22	42:DU:67:VAL:HG23	1.88	0.54
1:AA:100:G:N7	1:AA:101:A:N7	2.55	0.54
1:AA:769:G:H4'	1:AA:1513:A:H4'	1.89	0.54
1:AA:258:G:C4	1:AA:259:G:C8	2.95	0.54
1:AA:876:C:OP1	8:AH:76:GLN:NE2	2.40	0.54
14:AN:20:TYR:O	14:AN:24:ARG:N	2.40	0.54
15:AO:19:ALA:O	15:AO:20:ASN:CB	2.54	0.54
19:AS:5:LEU:O	19:AS:7:LYS:N	2.40	0.54
22:BA:1071:G:C8	22:BA:1089:A:N6	2.76	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1319:C:C2'	22:BA:1320:C:H5'	2.37	0.54
22:BA:1583:A:O2'	22:BA:1584:U:O5'	2.25	0.54
22:BA:1242:U:O2	33:BL:4:ASN:ND2	2.40	0.54
39:BR:14:VAL:HG11	39:BR:98:ILE:HG13	1.89	0.54
34:BM:20:LEU:HD12	43:BV:81:PRO:HG2	1.88	0.54
44:BW:47:ALA:HB1	44:BW:51:VAL:O	2.07	0.54
1:CA:1027:C:N4	1:CA:1034:G:N1	2.56	0.54
1:CA:1296:C:C5'	1:CA:1297:G:OP2	2.55	0.54
1:CA:203:G:N2	1:CA:215:C:N3	2.56	0.54
1:CA:748:G:H2'	1:CA:749:A:H8	1.71	0.54
2:CB:167:ASP:O	2:CB:168:HIS:HB3	2.07	0.54
3:CC:42:TYR:CE1	3:CC:90:VAL:HG21	2.42	0.54
4:CD:35:GLU:HG3	4:CD:36:GLN:N	2.22	0.54
17:CQ:69:LYS:HG2	17:CQ:69:LYS:O	2.07	0.54
21:CU:12:PHE:N	21:CU:12:PHE:CD1	2.74	0.54
22:DA:104:A:H2'	22:DA:105:C:O4'	2.07	0.54
22:DA:118:A:O4'	22:DA:178:G:O2'	2.24	0.54
22:DA:1581:G:C5	22:DA:1582:C:N4	2.76	0.54
22:DA:1856:U:O4	22:DA:1857:G:N1	2.41	0.54
22:DA:2412:A:H3'	22:DA:2413:G:C8	2.43	0.54
22:DA:303:G:C6	22:DA:304:U:N3	2.76	0.54
24:DC:246:THR:C	24:DC:248:TRP:H	2.10	0.54
22:DA:2019:A:H4'	38:DQ:34:VAL:HG21	1.90	0.54
22:DA:2365:G:H4'	44:DW:60:PHE:CE2	2.42	0.54
45:DX:33:LEU:HD23	45:DX:50:ARG:CZ	2.38	0.54
1:AA:971:G:C8	1:AA:1365:G:H4'	2.43	0.54
1:AA:173:U:C2	1:AA:197:A:N1	2.76	0.54
1:AA:701:U:H4'	1:AA:702:A:H5''	1.89	0.54
4:AD:174:ASP:O	4:AD:175:ALA:HB3	2.07	0.54
22:BA:1098:A:C8	22:BA:1099:G:N7	2.76	0.54
22:BA:2831:G:P	25:BD:56:LYS:NZ	2.80	0.54
22:BA:538:A:H5''	31:BJ:7:LYS:HE3	1.89	0.54
23:BB:54:G:H21	27:BF:26:MET:HE2	1.72	0.54
29:BH:14:SER:OG	29:BH:17:ASP:CG	2.46	0.54
1:CA:1235:U:H2'	1:CA:1236:A:O4'	2.07	0.54
1:CA:369:G:OP2	1:CA:388:G:N1	2.39	0.54
1:CA:374:A:H5''	1:CA:452:A:C2	2.43	0.54
1:CA:632:U:O2	1:CA:632:U:C2'	2.56	0.54
1:CA:743:A:C6	1:CA:744:C:C4	2.96	0.54
1:CA:1202:U:N3	14:CN:82:ILE:HG21	2.22	0.54
14:CN:87:ALA:O	14:CN:90:ARG:N	2.41	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:CS:73:GLU:HB2	19:CS:74:PHE:CD1	2.42	0.54
20:CT:60:ARG:O	20:CT:64:LYS:N	2.38	0.54
51:D3:31:HIS:ND1	51:D3:32:ILE:HG13	2.22	0.54
22:DA:1027:A:C6	22:DA:1126:A:C4	2.95	0.54
22:DA:1343:G:N2	22:DA:1405:U:C2	2.76	0.54
22:DA:1693:U:OP2	22:DA:1694:C:N4	2.37	0.54
22:DA:2326:C:H1'	22:DA:2327:A:OP1	2.08	0.54
22:DA:2849:U:H4'	22:DA:2868:A:C2	2.43	0.54
22:DA:471:A:OP1	26:DE:79:ARG:NH1	2.41	0.54
22:DA:479:A:H4'	22:DA:480:A:OP1	2.08	0.54
27:DF:5:HIS:O	27:DF:9:LYS:HG3	2.07	0.54
33:DL:100:ILE:HG13	33:DL:100:ILE:O	2.07	0.54
38:DQ:72:ASN:HB3	38:DQ:110:VAL:HG11	1.89	0.54
1:AA:1118:U:H1'	1:AA:1179:A:C4	2.42	0.54
3:AC:79:LYS:O	3:AC:82:GLU:HG3	2.06	0.54
7:AG:15:ASP:OD2	7:AG:44:TYR:OH	2.26	0.54
7:AG:49:THR:O	7:AG:53:ARG:CB	2.56	0.54
7:AG:74:GLU:HG2	7:AG:91:VAL:HB	1.90	0.54
10:AJ:28:THR:O	10:AJ:28:THR:HG22	2.07	0.54
10:AJ:6:ILE:HD12	10:AJ:76:ILE:HB	1.90	0.54
16:AP:51:ARG:HH11	16:AP:51:ARG:HG2	1.71	0.54
51:B3:31:HIS:CD2	51:B3:31:HIS:C	2.80	0.54
22:BA:1355:G:C2'	22:BA:1356:G:H5'	2.38	0.54
22:BA:2328:A:H2'	22:BA:2329:U:C6	2.43	0.54
22:BA:2869:G:H2'	22:BA:2870:C:O4'	2.08	0.54
22:BA:360:U:H3'	22:BA:361:G:C8	2.42	0.54
22:BA:813:U:H2'	22:BA:814:C:H6	1.72	0.54
22:BA:998:C:H2'	22:BA:999:U:O5'	2.07	0.54
22:BA:1993:U:H4'	25:BD:133:THR:HG21	1.90	0.54
29:BH:103:VAL:HG21	29:BH:132:PHE:CE1	2.42	0.54
29:BH:77:THR:O	29:BH:77:THR:CG2	2.56	0.54
30:BI:116:ASP:O	30:BI:117:MET:CB	2.56	0.54
46:BY:18:LEU:O	46:BY:22:LEU:N	2.38	0.54
1:CA:1386:G:C2	1:CA:1387:G:C8	2.96	0.54
1:CA:1513:A:H2'	1:CA:1514:G:C8	2.43	0.54
1:CA:237:G:C6	1:CA:238:A:C5	2.95	0.54
1:CA:818:G:O2'	1:CA:819:A:H5'	2.07	0.54
4:CD:147:GLU:O	4:CD:150:LYS:HB3	2.07	0.54
9:CI:118:LEU:HD23	9:CI:121:ALA:O	2.08	0.54
22:DA:125:A:OP2	50:D2:19:ARG:NH2	2.41	0.54
22:DA:1054:A:H2'	22:DA:1055:G:C8	2.43	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1364:G:C6	22:DA:1368:G:C6	2.95	0.54
22:DA:192:C:P	57:DA:3739:HOH:O	2.65	0.54
22:DA:2038:G:H2'	22:DA:2039:U:O4'	2.07	0.54
22:DA:2297:A:H2'	22:DA:2297:A:N3	2.23	0.54
22:DA:2308:G:H5'	22:DA:2309:A:OP2	2.08	0.54
22:DA:2448:A:HO2'	22:DA:2449:U:H5	1.50	0.54
22:DA:425:G:N2	22:DA:426:C:N3	2.56	0.54
22:DA:528:A:H2'	22:DA:529:A:H5''	1.89	0.54
41:DT:61:LEU:HD12	41:DT:62:VAL:N	2.23	0.54
1:AA:1452:C:O4'	1:AA:1453:G:C2	2.61	0.54
1:AA:259:G:N2	1:AA:260:G:H1'	2.22	0.54
10:AJ:51:VAL:HB	14:AN:81:ARG:HB2	1.90	0.54
22:BA:1737:G:C6	22:BA:1738:G:N1	2.75	0.54
27:BF:25:VAL:O	27:BF:28:VAL:HG12	2.07	0.54
1:CA:252:U:O4	1:CA:253:A:N6	2.40	0.54
6:CF:81:ASN:OD1	6:CF:81:ASN:C	2.45	0.54
11:CK:107:ILE:O	11:CK:107:ILE:HG23	2.06	0.54
19:CS:22:ALA:CB	19:CS:47:LEU:HD13	2.37	0.54
22:DA:1529:G:O6	22:DA:1543:G:C2	2.60	0.54
22:DA:2563:U:H1'	22:DA:2566:A:N6	2.23	0.54
22:DA:2615:U:C2	48:D0:4:GLN:HA	2.43	0.54
22:DA:2688:G:N1	22:DA:2720:U:OP2	2.31	0.54
22:DA:370:G:O2'	22:DA:423:A:H3'	2.06	0.54
35:DN:12:ARG:HG2	35:DN:16:HIS:HB3	1.89	0.54
1:AA:1435:G:H2'	1:AA:1436:U:C6	2.42	0.54
10:AJ:66:GLU:HB3	14:AN:99:ALA:CB	2.38	0.54
53:B5:100:ILE:HG22	53:B5:104:ILE:CB	2.38	0.54
22:BA:2014:A:H2'	22:BA:2015:A:C8	2.43	0.54
22:BA:63:A:C2	22:BA:64:A:C5	2.96	0.54
32:BK:36:GLY:HA2	32:BK:62:VAL:O	2.08	0.54
1:CA:1000:A:H2'	1:CA:1001:C:O4'	2.08	0.54
1:CA:528:C:O2	1:CA:528:C:H2'	2.08	0.54
1:CA:749:A:O2'	1:CA:750:C:H5'	2.08	0.54
1:CA:779:C:H2'	1:CA:780:A:H5'	1.88	0.54
1:CA:853:C:C4	1:CA:854:U:C5	2.95	0.54
1:CA:890:G:N2	1:CA:906:A:H2'	2.23	0.54
2:CB:85:LEU:HG	2:CB:85:LEU:O	2.08	0.54
3:CC:43:LEU:HD21	3:CC:68:ILE:HD11	1.88	0.54
4:CD:196:ASN:HB3	4:CD:198:HIS:CE1	2.42	0.54
5:CE:150:PRO:C	5:CE:152:MET:H	2.10	0.54
11:CK:18:ASP:HB3	11:CK:81:ASN:OD1	2.07	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:CQ:70:THR:O	17:CQ:71:LYS:C	2.46	0.54
20:CT:55:GLN:N	20:CT:56:PRO:HD2	2.23	0.54
21:CU:36:GLU:HG3	21:CU:37:PHE:H	1.72	0.54
22:DA:1230:A:H2'	22:DA:1231:U:C6	2.43	0.54
22:DA:1345:C:H5'	22:DA:1396:U:O4	2.06	0.54
22:DA:1782:U:O4	22:DA:2586:U:H5	1.89	0.54
22:DA:2814:A:C6	22:DA:2815:C:C4	2.95	0.54
55:DA:3001:DOL:H432	55:DA:3001:DOL:N5	2.22	0.54
22:DA:19:A:C2	22:DA:522:A:C2	2.96	0.54
24:DC:108:LYS:HA	24:DC:196:GLY:HA3	1.89	0.54
24:DC:267:ILE:O	24:DC:267:ILE:HG22	2.06	0.54
24:DC:43:ARG:NH2	24:DC:49:ILE:HD11	2.23	0.54
22:DA:1245:G:H4'	26:DE:33:VAL:HG11	1.88	0.54
39:DR:80:ARG:C	39:DR:82:HIS:H	2.11	0.54
1:AA:66:A:O4'	1:AA:173:U:C4	2.61	0.54
1:AA:705:G:C5	1:AA:706:A:C8	2.96	0.54
1:AA:723:U:H2'	1:AA:855:U:H4'	1.90	0.54
13:AM:73:ILE:O	13:AM:76:SER:OG	2.25	0.54
22:BA:1794:A:H2'	22:BA:1795:C:C6	2.42	0.54
22:BA:283:G:N7	22:BA:284:U:C5	2.76	0.54
23:BB:42:C:C6	27:BF:66:LEU:HD13	2.42	0.54
26:BE:119:ILE:HB	26:BE:187:VAL:HG22	1.88	0.54
27:BF:173:PHE:O	27:BF:175:PHE:N	2.40	0.54
30:BI:21:SER:N	30:BI:22:PRO:CD	2.71	0.54
22:BA:560:C:O2	38:BQ:48:ARG:NH1	2.39	0.54
1:CA:142:G:C2	1:CA:143:A:H1'	2.42	0.54
1:CA:780:A:C2	1:CA:803:G:N1	2.76	0.54
10:CJ:92:LEU:O	10:CJ:93:ALA:HB2	2.08	0.54
22:DA:1476:U:H1'	22:DA:1732:C:C2	2.43	0.54
22:DA:2214:C:H2'	22:DA:2215:C:O5'	2.08	0.54
22:DA:2552:U:C2	22:DA:2554:U:C5'	2.91	0.54
22:DA:289:G:N2	22:DA:352:A:C2	2.76	0.54
22:DA:586:A:H1'	22:DA:672:C:H1'	1.89	0.54
22:DA:588:U:H1'	26:DE:85:PHE:CD1	2.43	0.54
25:DD:187:LEU:CD2	25:DD:203:VAL:HG11	2.38	0.54
26:DE:77:ILE:HG13	26:DE:77:ILE:O	2.08	0.54
47:DZ:13:ALA:HB2	47:DZ:24:LEU:CD1	2.38	0.54
1:AA:826:C:H5'	8:AH:13:ARG:NH1	2.22	0.54
4:AD:29:ASP:C	4:AD:30:THR:O	2.43	0.54
5:AE:108:GLY:O	5:AE:109:GLY:C	2.47	0.54
5:AE:119:GLY:O	5:AE:121:HIS:ND1	2.41	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AI:58:VAL:O	9:AI:59:GLU:HG2	2.08	0.54
12:AL:76:GLU:O	12:AL:77:HIS:HB2	2.07	0.54
20:AT:83:ILE:HD12	20:AT:84:ASN:N	2.22	0.54
22:BA:1413:A:H2'	22:BA:1414:C:O4'	2.08	0.54
22:BA:1474:U:C3'	22:BA:1475:G:H5'	2.38	0.54
22:BA:1607:C:N4	22:BA:1622:G:N7	2.57	0.54
22:BA:1782:U:OP1	57:BA:3693:HOH:O	2.19	0.54
22:BA:2532:G:N2	22:BA:2663:G:O2'	2.41	0.54
22:BA:388:G:N7	22:BA:390:U:H2'	2.22	0.54
36:BO:100:HIS:O	36:BO:104:GLN:HB3	2.08	0.54
1:CA:1041:G:C6	1:CA:1042:A:N6	2.75	0.54
4:CD:168:PRO:HB2	4:CD:171:LEU:HD12	1.90	0.54
5:CE:137:VAL:O	5:CE:138:ARG:CB	2.56	0.54
16:CP:19:VAL:HG13	16:CP:37:GLY:N	2.22	0.54
17:CQ:8:LEU:HD13	17:CQ:73:TRP:CZ3	2.43	0.54
18:CR:22:ASP:OD2	18:CR:24:LYS:NZ	2.41	0.54
22:DA:1182:G:H2'	22:DA:1183:U:O4'	2.08	0.54
22:DA:1445:G:C2	22:DA:1547:C:N3	2.76	0.54
22:DA:2480:C:N4	22:DA:2481:G:C6	2.76	0.54
22:DA:2751:G:OP1	28:DG:3:ARG:NH1	2.41	0.54
22:DA:607:U:H5	22:DA:619:G:C5	2.26	0.54
22:DA:694:U:C3'	22:DA:695:G:H5''	2.38	0.54
22:DA:71:A:H5'	22:DA:73:A:C4	2.43	0.54
23:DB:80:U:H2'	23:DB:81:G:C8	2.43	0.54
22:DA:1566:A:C2	24:DC:213:TRP:CE3	2.95	0.54
35:DN:69:ARG:O	35:DN:70:THR:HG23	2.08	0.54
1:AA:1182:G:H4'	1:AA:1183:U:H5'	1.90	0.53
1:AA:260:G:H2'	1:AA:261:U:C6	2.42	0.53
1:AA:858:G:C2'	1:AA:859:G:H5'	2.38	0.53
1:AA:874:G:C6	1:AA:875:U:C4	2.96	0.53
1:AA:90:C:C2	1:AA:91:U:C5	2.96	0.53
2:AB:51:ASN:O	2:AB:52:GLU:HB2	2.09	0.53
5:AE:155:ALA:HB1	8:AH:66:PHE:CZ	2.43	0.53
12:AL:39:THR:OG1	12:AL:39:THR:O	2.20	0.53
22:BA:1315:C:C2	22:BA:1338:G:N2	2.76	0.53
22:BA:528:A:H2'	22:BA:529:A:H5''	1.90	0.53
22:BA:974:G:H8	22:BA:990:A:N6	2.01	0.53
22:BA:1997:C:OP2	25:BD:129:THR:CG2	2.57	0.53
37:BP:22:PRO:HD3	37:BP:50:ILE:HD12	1.90	0.53
38:BQ:105:ALA:O	38:BQ:108:ALA:HB3	2.07	0.53
46:BY:9:LYS:HB3	46:BY:12:GLU:CG	2.38	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:425:G:H2'	1:CA:426:U:O4'	2.08	0.53
1:CA:562:U:H2'	12:CL:14:ARG:HD3	1.89	0.53
7:CG:92:ARG:NE	7:CG:93:PRO:CD	2.71	0.53
9:CI:21:ILE:HG12	9:CI:62:ASP:O	2.07	0.53
22:DA:1715:G:O2'	22:DA:1716:U:OP2	2.25	0.53
22:DA:2058:A:C6	22:DA:2059:A:N6	2.76	0.53
22:DA:2742:G:H5''	52:D4:1:MET:HE1	1.89	0.53
22:DA:359:G:H2'	22:DA:360:U:O4'	2.08	0.53
22:DA:630:G:C3'	22:DA:631:A:H5''	2.38	0.53
22:DA:813:U:H2'	22:DA:814:C:C6	2.42	0.53
25:DD:133:THR:HG23	25:DD:134:HIS:N	2.24	0.53
1:AA:1157:A:C5	1:AA:1180:A:C6	2.95	0.53
1:AA:211:G:N2	1:AA:212:G:C8	2.76	0.53
1:AA:266:G:H3'	17:AQ:69:LYS:HB3	1.91	0.53
1:AA:58:C:O2'	1:AA:59:A:H5'	2.06	0.53
22:BA:589:U:H2'	22:BA:590:A:C8	2.43	0.53
34:BM:12:MET:CE	34:BM:71:LYS:HG3	2.38	0.53
38:BQ:36:PHE:CZ	38:BQ:40:ILE:HD11	2.43	0.53
1:CA:121:U:H3'	1:CA:122:G:H5'	1.91	0.53
1:CA:805:C:C2	1:CA:806:C:C5	2.96	0.53
6:CF:8:PHE:CE2	6:CF:60:VAL:HB	2.42	0.53
6:CF:98:GLU:O	6:CF:99:ALA:CB	2.56	0.53
12:CL:25:GLU:C	12:CL:27:CYS:N	2.59	0.53
19:CS:6:LYS:CB	19:CS:7:LYS:HE2	2.37	0.53
22:DA:1378:A:C2'	22:DA:1380:G:N7	2.71	0.53
22:DA:2146:C:H4'	22:DA:2147:A:OP1	2.07	0.53
22:DA:2214:C:C2'	22:DA:2215:C:O5'	2.56	0.53
22:DA:2747:G:O2'	28:DG:67:THR:HG22	2.08	0.53
22:DA:291:G:N2	22:DA:350:G:C5	2.77	0.53
23:DB:62:C:H2'	23:DB:63:C:C6	2.42	0.53
24:DC:251:GLN:NE2	24:DC:253:LYS:O	2.41	0.53
41:DT:10:VAL:HG12	41:DT:11:LEU:N	2.23	0.53
1:AA:1160:G:O2'	1:AA:1161:C:P	2.67	0.53
1:AA:195:A:H1'	1:AA:222:C:O2'	2.08	0.53
3:AC:7:PRO:HG2	3:AC:184:TYR:CG	2.43	0.53
13:AM:3:ARG:O	13:AM:4:ILE:HG12	2.08	0.53
20:AT:44:LYS:CB	20:AT:87:ALA:HB1	2.39	0.53
11:AK:126:LYS:CA	21:AU:34:ARG:HH21	2.21	0.53
49:B1:52:ALA:O	49:B1:53:LYS:OXT	2.27	0.53
22:BA:1417:C:H2'	22:BA:1418:G:O4'	2.08	0.53
22:BA:1916:A:C6	22:BA:1917:U:C2	2.96	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:198:C:P	57:BA:3760:HOH:O	2.64	0.53
22:BA:228:C:H4'	22:BA:229:C:H5''	1.90	0.53
22:BA:2329:U:H2'	22:BA:2330:G:C8	2.43	0.53
22:BA:2748:A:H1'	28:BG:67:THR:HG22	1.90	0.53
22:BA:2683:C:H4'	25:BD:13:ARG:NH1	2.23	0.53
26:BE:149:ILE:C	26:BE:149:ILE:HD12	2.29	0.53
22:BA:585:G:N7	38:BQ:6:ARG:NH1	2.56	0.53
1:CA:1201:A:H4'	1:CA:1202:U:O5'	2.08	0.53
1:CA:242:G:N2	1:CA:285:C:C2	2.77	0.53
3:CC:162:ILE:HD12	3:CC:162:ILE:O	2.08	0.53
7:CG:78:ARG:O	7:CG:79:ARG:HB2	2.08	0.53
22:DA:1246:A:OP2	33:DL:13:LYS:NZ	2.41	0.53
22:DA:1435:G:C2'	22:DA:1436:G:H5'	2.38	0.53
22:DA:1441:G:H2'	22:DA:1442:U:C6	2.43	0.53
22:DA:1605:C:H2'	22:DA:1606:C:H5'	1.89	0.53
22:DA:1814:G:C6	22:DA:1815:A:C6	2.96	0.53
22:DA:185:G:N1	22:DA:212:G:C2	2.76	0.53
22:DA:2815:C:O2'	48:D0:41:HIS:ND1	2.40	0.53
22:DA:548:G:H4'	22:DA:549:G:C2	2.43	0.53
22:DA:704:G:H1'	22:DA:726:G:H22	1.73	0.53
22:DA:776:G:C8	22:DA:793:A:C4	2.95	0.53
22:DA:852:U:H2'	22:DA:853:C:O4'	2.09	0.53
25:DD:32:ASN:HB3	25:DD:50:VAL:HB	1.90	0.53
22:DA:600:G:C5'	26:DE:27:LEU:HD22	2.37	0.53
30:DI:62:TYR:HB2	30:DI:66:SER:O	2.08	0.53
36:DO:49:VAL:HG21	36:DO:82:ALA:HA	1.91	0.53
47:DZ:7:ILE:N	47:DZ:36:VAL:O	2.40	0.53
1:AA:1064:G:O4'	1:AA:1066:C:C6	2.61	0.53
1:AA:1352:C:H2'	1:AA:1353:G:C8	2.44	0.53
1:AA:203:G:O2'	1:AA:465:A:N1	2.36	0.53
1:AA:659:U:C2	1:AA:660:C:C6	2.96	0.53
17:AQ:16:LYS:HG3	17:AQ:16:LYS:O	2.07	0.53
22:BA:948:C:O2	22:BA:984:A:O2'	2.26	0.53
23:BB:14:U:O2	23:BB:107:G:H4'	2.09	0.53
26:BE:108:ILE:HD11	26:BE:180:LEU:HD13	1.90	0.53
1:CA:572:A:H5'	1:CA:573:A:OP2	2.08	0.53
1:CA:748:G:H2'	1:CA:749:A:C8	2.44	0.53
4:CD:35:GLU:HG3	4:CD:36:GLN:HG3	1.90	0.53
7:CG:5:ARG:HE	7:CG:5:ARG:HA	1.72	0.53
51:D3:32:ILE:HG22	51:D3:32:ILE:O	2.07	0.53
22:DA:2209:G:C5	22:DA:2210:U:C4	2.97	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:30:G:H2'	22:DA:31:C:O4'	2.09	0.53
22:DA:392:U:H2'	22:DA:393:C:C6	2.43	0.53
22:DA:747:U:O2	22:DA:2014:A:H1'	2.07	0.53
22:DA:981:A:H5''	57:DA:3588:HOH:O	2.08	0.53
22:DA:2882:A:H5'	35:DN:96:ARG:HB2	1.90	0.53
38:DQ:10:ALA:O	38:DQ:13:ARG:HG3	2.08	0.53
1:AA:1031:C:H4'	1:AA:1032:G:O5'	2.08	0.53
4:AD:138:SER:HB2	4:AD:139:PRO:HD2	1.89	0.53
1:AA:9:G:OP2	5:AE:126:LYS:HG3	2.09	0.53
6:AF:15:SER:O	6:AF:18:VAL:HG23	2.09	0.53
6:AF:16:GLU:HB3	4:CD:189:SER:HA	1.91	0.53
6:AF:4:TYR:CD2	6:AF:71:ILE:HD13	2.44	0.53
6:AF:92:THR:O	6:AF:93:LYS:HG2	2.07	0.53
7:AG:13:LEU:HD22	7:AG:13:LEU:N	2.24	0.53
9:AI:30:ILE:O	9:AI:33:ARG:HB2	2.08	0.53
13:AM:27:LYS:O	13:AM:31:LYS:HG3	2.08	0.53
22:BA:1288:G:C4	22:BA:1327:A:C2	2.96	0.53
22:BA:1464:G:H2'	22:BA:1465:G:C8	2.43	0.53
22:BA:1735:A:C2	22:BA:1736:U:H1'	2.43	0.53
22:BA:630:G:N2	22:BA:633:A:OP2	2.40	0.53
26:BE:149:ILE:HD12	26:BE:150:THR:N	2.23	0.53
30:BI:69:PHE:CD1	30:BI:69:PHE:O	2.62	0.53
35:BN:2:ARG:HA	35:BN:5:LYS:HD2	1.91	0.53
35:BN:28:LEU:O	35:BN:32:GLU:N	2.42	0.53
38:BQ:24:TYR:O	38:BQ:25:TYR:CB	2.57	0.53
1:CA:1387:G:H2'	1:CA:1388:C:C6	2.43	0.53
1:CA:1491:G:H3'	1:CA:1492:A:C8	2.44	0.53
1:CA:374:A:C2	1:CA:375:U:C6	2.96	0.53
5:CE:38:VAL:HG12	5:CE:117:VAL:HG21	1.91	0.53
9:CI:88:MET:O	9:CI:88:MET:HG2	2.08	0.53
11:CK:45:ALA:HB3	11:CK:70:CYS:HB2	1.90	0.53
13:CM:114:LYS:HB2	13:CM:115:PRO:HD3	1.90	0.53
22:DA:1077:A:C2	22:DA:1088:A:C2	2.97	0.53
22:DA:1154:G:OP1	38:DQ:58:ARG:HD3	2.08	0.53
22:DA:1343:G:C5	22:DA:1344:U:C4	2.96	0.53
22:DA:1645:G:H5''	22:DA:1646:C:O5'	2.09	0.53
22:DA:2103:C:H2'	22:DA:2104:C:C6	2.43	0.53
22:DA:2831:G:OP1	25:DD:56:LYS:NZ	2.36	0.53
22:DA:693:A:C5	22:DA:694:U:C4	2.97	0.53
22:DA:720:U:H2'	22:DA:721:A:C8	2.43	0.53
24:DC:147:LYS:HB2	24:DC:150:LYS:HB2	1.91	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DE:8:ALA:HB2	26:DE:122:GLU:HG3	1.91	0.53
1:AA:390:U:H2'	1:AA:391:G:C8	2.44	0.53
1:AA:771:G:O2'	1:AA:772:U:H5'	2.08	0.53
1:AA:872:A:C4	1:AA:874:G:N7	2.77	0.53
12:AL:44:LYS:HB2	12:AL:45:PRO:CD	2.38	0.53
18:AR:26:ILE:O	18:AR:30:LYS:HG3	2.08	0.53
1:AA:322:C:O2'	20:AT:18:ARG:HG3	2.08	0.53
20:AT:67:ILE:HG13	20:AT:71:LYS:HG2	1.89	0.53
22:BA:1224:U:C4	22:BA:1225:G:C6	2.96	0.53
22:BA:1584:U:O2	22:BA:1584:U:C2'	2.56	0.53
22:BA:1936:A:C2	22:BA:1945:G:C8	2.97	0.53
22:BA:2070:A:C2	22:BA:2442:C:C2	2.97	0.53
38:BQ:50:ARG:O	38:BQ:54:LYS:HE3	2.08	0.53
39:BR:21:ARG:CZ	39:BR:93:PHE:CE1	2.91	0.53
1:CA:256:U:H2'	1:CA:257:G:O4'	2.08	0.53
1:CA:355:C:C4	1:CA:356:A:N7	2.77	0.53
1:CA:632:U:H3'	1:CA:633:G:H5'	1.90	0.53
1:CA:664:G:H2'	1:CA:666:G:OP1	2.08	0.53
1:CA:892:A:C5	1:CA:893:C:C5	2.96	0.53
2:CB:102:THR:HB	2:CB:175:GLU:HG3	1.91	0.53
1:CA:1126:U:O4	10:CJ:73:LEU:HD12	2.09	0.53
10:CJ:83:THR:O	10:CJ:87:LEU:HD12	2.08	0.53
49:D1:50:LYS:O	49:D1:51:GLU:HB3	2.07	0.53
51:D3:31:HIS:CE1	51:D3:32:ILE:CD1	2.92	0.53
22:DA:1223:G:N2	22:DA:1225:G:H3'	2.23	0.53
22:DA:1301:A:H2'	22:DA:1301:A:N3	2.24	0.53
22:DA:1330:C:C2'	22:DA:1331:G:O5'	2.57	0.53
22:DA:1362:C:C2'	22:DA:1363:C:H5'	2.38	0.53
22:DA:1566:A:C2	24:DC:213:TRP:CG	2.97	0.53
22:DA:2720:U:C6	22:DA:2872:A:N1	2.77	0.53
29:DH:32:PRO:O	29:DH:33:GLN:HB2	2.09	0.53
29:DH:2:GLN:O	29:DH:3:VAL:HG22	2.09	0.53
31:DJ:58:ASN:OD1	31:DJ:127:GLY:O	2.26	0.53
22:DA:626:A:C2	33:DL:78:ARG:HD3	2.43	0.53
35:DN:20:MET:HG3	35:DN:21:PHE:CD1	2.43	0.53
35:DN:28:LEU:HG	35:DN:28:LEU:O	2.07	0.53
22:DA:2840:C:H5''	35:DN:53:THR:OG1	2.08	0.53
44:DW:50:ASN:OD1	44:DW:63:ALA:HB2	2.09	0.53
1:AA:1179:A:H2'	1:AA:1180:A:O4'	2.07	0.53
1:AA:1296:C:H4'	1:AA:1302:C:C4	2.43	0.53
1:AA:1446:A:C2'	1:AA:1447:A:H5'	2.39	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:41:ASP:OD1	5:AE:42:GLY:N	2.42	0.53
13:AM:83:LEU:HD21	19:AS:65:GLU:HG2	1.89	0.53
20:AT:58:VAL:CG1	20:AT:72:ALA:HB1	2.38	0.53
53:B5:204:GLY:O	53:B5:205:ALA:HB3	2.08	0.53
22:BA:1432:G:O2'	22:BA:1433:A:H5'	2.09	0.53
22:BA:480:A:H2'	22:BA:481:G:OP1	2.08	0.53
22:BA:544:C:H5'	22:BA:545:U:OP2	2.08	0.53
27:BF:121:SER:HB2	27:BF:128:TYR:CE1	2.44	0.53
29:BH:147:VAL:CG1	29:BH:149:GLU:HG3	2.37	0.53
38:BQ:58:ARG:O	38:BQ:62:ILE:HG13	2.09	0.53
40:BS:4:ILE:HG12	40:BS:106:VAL:HG22	1.90	0.53
1:CA:1388:C:C2	1:CA:1389:C:C5	2.97	0.53
1:CA:31:G:C5	1:CA:306:A:H1'	2.44	0.53
1:CA:451:A:H4'	1:CA:452:A:O4'	2.08	0.53
1:CA:991:U:N3	1:CA:1212:U:O4'	2.42	0.53
1:CA:1302:C:C4	13:CM:17:ILE:CD1	2.92	0.53
22:DA:2044:C:N3	22:DA:2045:C:C5	2.77	0.53
22:DA:2146:C:C4'	22:DA:2147:A:OP1	2.55	0.53
22:DA:2119:A:C6	22:DA:2170:A:C5	2.96	0.53
22:DA:2307:G:H4'	22:DA:2308:G:O5'	2.08	0.53
22:DA:511:U:O4	22:DA:512:G:N1	2.41	0.53
22:DA:613:A:O2'	22:DA:614:A:P	2.66	0.53
22:DA:864:G:O6	22:DA:865:C:N4	2.42	0.53
23:DB:11:C:C5	23:DB:12:C:C5	2.97	0.53
23:DB:25:U:C4	23:DB:26:C:C4	2.96	0.53
24:DC:240:PHE:CE1	24:DC:242:LYS:O	2.62	0.53
29:DH:103:VAL:HA	29:DH:106:ALA:HB3	1.89	0.53
29:DH:37:VAL:CG2	29:DH:38:PRO:HD2	2.39	0.53
33:DL:56:PRO:HD2	33:DL:59:ARG:HB2	1.91	0.53
1:AA:1076:U:O2	1:AA:1082:A:C2	2.62	0.53
1:AA:1355:G:O2'	1:AA:1356:G:H5'	2.09	0.53
1:AA:39:G:C2	1:AA:40:C:C6	2.97	0.53
1:AA:901:A:N7	1:AA:902:G:H1'	2.24	0.53
3:AC:148:GLY:HA3	3:AC:172:ARG:O	2.09	0.53
4:AD:203:LEU:HD23	4:AD:204:TYR:CE2	2.44	0.53
6:AF:85:ILE:O	6:AF:86:ARG:HG2	2.09	0.53
1:AA:1373:G:H5''	7:AG:36:LYS:HB2	1.91	0.53
9:AI:58:VAL:HG12	9:AI:58:VAL:O	2.08	0.53
9:AI:80:ARG:NH1	9:AI:103:PHE:CD1	2.77	0.53
22:BA:1713:A:C2	22:BA:1716:U:C6	2.96	0.53
22:BA:1734:G:C4	22:BA:1735:A:C8	2.95	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1923:U:C2'	22:BA:1924:C:C5'	2.86	0.53
26:BE:149:ILE:HD11	26:BE:172:ALA:HA	1.89	0.53
35:BN:32:GLU:HA	35:BN:115:LEU:HD12	1.91	0.53
38:BQ:89:GLU:H	39:BR:49:ILE:CD1	2.22	0.53
39:BR:59:ILE:HG12	39:BR:101:ILE:HD12	1.90	0.53
40:BS:1:MET:N	40:BS:109:ASP:OD1	2.41	0.53
41:BT:16:VAL:O	41:BT:17:SER:HB3	2.09	0.53
1:CA:892:A:O2'	1:CA:1415:G:H4'	2.09	0.53
1:CA:350:G:C6	1:CA:351:G:C6	2.96	0.53
7:CG:65:ALA:O	7:CG:127:ALA:HB1	2.09	0.53
9:CI:84:THR:HG21	9:CI:103:PHE:HB3	1.91	0.53
12:CL:28:PRO:HB2	12:CL:29:GLN:OE1	2.08	0.53
22:DA:1695:G:H3'	22:DA:1695:G:N3	2.24	0.53
22:DA:1874:C:H3'	22:DA:1875:G:C8	2.44	0.53
22:DA:1938:A:C6	22:DA:2590:A:H1'	2.43	0.53
22:DA:513:A:C2	22:DA:514:A:C5	2.96	0.53
22:DA:563:A:C4	22:DA:2018:G:C2	2.97	0.53
32:DK:66:LYS:NZ	32:DK:79:PHE:O	2.34	0.53
1:AA:1425:U:O2'	1:AA:1426:G:H5'	2.08	0.53
1:AA:269:C:H2'	1:AA:270:A:C8	2.44	0.53
1:AA:858:G:O2'	1:AA:859:G:H5'	2.08	0.53
2:AB:126:PHE:N	2:AB:126:PHE:HD2	2.07	0.53
2:AB:219:ALA:O	2:AB:220:THR:CB	2.56	0.53
3:AC:92:ALA:HB2	3:AC:99:ALA:HB3	1.91	0.53
8:AH:10:MET:O	8:AH:12:THR:N	2.42	0.53
8:AH:25:VAL:HG12	8:AH:61:LEU:HB2	1.90	0.53
9:AI:30:ILE:HD11	9:AI:38:TYR:CD2	2.43	0.53
22:BA:1319:C:H2'	22:BA:1320:C:H5'	1.91	0.53
22:BA:1667:G:O2'	22:BA:1991:U:O4	2.17	0.53
22:BA:2514:U:H2'	22:BA:2515:C:C6	2.44	0.53
22:BA:2673:G:C2	22:BA:2674:G:C8	2.97	0.53
22:BA:2685:G:OP1	32:BK:78:ARG:NH2	2.39	0.53
22:BA:280:U:H2'	22:BA:281:C:O4'	2.08	0.53
22:BA:846:U:O2'	22:BA:847:U:OP2	2.27	0.53
30:BI:127:ARG:HA	30:BI:130:GLU:CG	2.38	0.53
39:BR:16:GLU:OE1	39:BR:100:GLY:HA2	2.09	0.53
1:CA:1053:G:O5'	1:CA:1054:C:H3'	2.08	0.53
1:CA:1151:A:H1'	1:CA:1152:A:C8	2.43	0.53
1:CA:1417:G:N2	1:CA:1484:C:C4	2.76	0.53
1:CA:1461:G:H2'	1:CA:1462:C:O4'	2.08	0.53
1:CA:891:U:C5	1:CA:906:A:C2	2.97	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1228:C:H5'	13:CM:113:ARG:HB2	1.91	0.53
13:CM:20:THR:O	13:CM:20:THR:HG22	2.09	0.53
22:DA:1099:G:N7	22:DA:1100:C:N4	2.57	0.53
22:DA:1120:G:C6	22:DA:1121:C:C4	2.97	0.53
22:DA:1027:A:N6	22:DA:1126:A:N3	2.57	0.53
22:DA:1544:A:C6	22:DA:1545:A:C6	2.97	0.53
22:DA:176:A:N7	22:DA:177:G:C6	2.77	0.53
22:DA:1907:G:C2	22:DA:1924:C:O2	2.61	0.53
1:CA:1483:A:N1	22:DA:1959:G:O2'	2.41	0.53
22:DA:2162:G:H4'	22:DA:2163:A:OP1	2.08	0.53
22:DA:2520:C:HO2'	22:DA:2565:A:HO2'	1.57	0.53
22:DA:2656:U:OP2	22:DA:2664:G:N1	2.42	0.53
22:DA:2820:A:C8	25:DD:196:ALA:CB	2.92	0.53
22:DA:294:A:C6	22:DA:345:A:C4	2.97	0.53
22:DA:640:C:C4	22:DA:641:U:C5	2.97	0.53
22:DA:848:C:H2'	22:DA:849:A:C8	2.44	0.53
28:DG:67:THR:O	28:DG:71:LEU:N	2.42	0.53
30:DI:18:ALA:O	30:DI:19:ASN:CB	2.56	0.53
36:DO:100:HIS:CG	36:DO:101:GLY:N	2.77	0.53
42:DU:98:SER:O	42:DU:99:ASN:HB3	2.07	0.53
1:AA:1508:A:H2'	1:AA:1509:C:O4'	2.09	0.53
1:AA:33:A:H2'	1:AA:34:C:C6	2.44	0.53
1:AA:834:U:C4	1:AA:835:U:C4	2.97	0.53
3:AC:12:LEU:O	3:AC:14:ILE:N	2.42	0.53
8:AH:25:VAL:CG1	8:AH:25:VAL:O	2.57	0.53
9:AI:58:VAL:O	9:AI:59:GLU:CB	2.57	0.53
15:AO:35:GLN:HB3	15:AO:59:MET:CE	2.39	0.53
17:AQ:82:ALA:O	17:AQ:83:VAL:O	2.27	0.53
22:BA:1289:C:O2'	22:BA:1330:C:H4'	2.09	0.53
22:BA:1587:G:C4	22:BA:1588:G:C8	2.97	0.53
22:BA:1747:U:H2'	22:BA:1748:C:C6	2.44	0.53
22:BA:2314:A:O2'	22:BA:2315:G:H5'	2.09	0.53
22:BA:475:C:C5	22:BA:481:G:O6	2.61	0.53
37:BP:106:LYS:O	37:BP:109:ARG:HD3	2.09	0.53
39:BR:51:VAL:HB	39:BR:52:PRO:CD	2.39	0.53
29:BH:27:ARG:NH2	45:BX:60:ASP:CG	2.62	0.53
1:CA:106:C:O2	1:CA:379:C:H4'	2.09	0.53
1:CA:1161:C:O2	1:CA:1176:A:C2	2.62	0.53
1:CA:223:A:H2'	1:CA:224:U:C6	2.45	0.53
1:CA:619:U:H3	4:CD:131:ASN:HB3	1.74	0.53
22:DA:1438:U:C5	22:DA:1552:A:N1	2.76	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1779:U:C5	22:DA:1784:A:N7	2.76	0.53
22:DA:858:G:O2'	22:DA:2268:A:N3	2.23	0.53
22:DA:324:A:C2	22:DA:325:G:H1'	2.44	0.53
22:DA:370:G:O2'	22:DA:424:G:OP1	2.22	0.53
24:DC:62:TYR:CE1	24:DC:63:ARG:O	2.62	0.53
22:DA:600:G:H1'	26:DE:100:MET:CG	2.39	0.53
27:DF:33:LYS:HD3	27:DF:92:ARG:NH1	2.24	0.53
28:DG:11:VAL:O	28:DG:48:ASN:ND2	2.42	0.53
30:DI:33:VAL:HG13	30:DI:67:PHE:CZ	2.44	0.53
30:DI:8:TYR:HA	30:DI:59:ILE:HB	1.91	0.53
37:DP:91:ALA:HB2	37:DP:113:ARG:HG3	1.91	0.53
1:AA:1010:U:H2'	1:AA:1011:C:C6	2.44	0.52
1:AA:109:A:C6	1:AA:326:G:C6	2.96	0.52
1:AA:1157:A:C6	1:AA:1180:A:C5	2.98	0.52
1:AA:374:A:H5''	1:AA:452:A:C2	2.43	0.52
1:AA:57:G:C5	1:AA:58:C:C4	2.96	0.52
5:AE:56:VAL:N	5:AE:57:PRO:HD2	2.24	0.52
10:AJ:80:THR:O	10:AJ:83:THR:N	2.41	0.52
12:AL:117:TYR:O	12:AL:119:VAL:HG23	2.09	0.52
13:AM:16:VAL:CG2	13:AM:41:GLU:HB2	2.38	0.52
49:B1:14:SER:HB3	49:B1:48:ILE:O	2.09	0.52
53:B5:83:LYS:HB3	53:B5:87:ALA:HB3	1.90	0.52
22:BA:1179:G:O6	22:BA:1180:U:N3	2.43	0.52
22:BA:1346:G:O2'	22:BA:1347:A:H5'	2.10	0.52
22:BA:1467:U:C4	22:BA:1546:G:C2	2.98	0.52
22:BA:1916:A:OP2	22:BA:1917:U:OP2	2.27	0.52
22:BA:2000:C:O2'	22:BA:2001:C:H5'	2.09	0.52
22:BA:2061:G:C2	55:BA:3001:DOL:HC22	2.44	0.52
22:BA:244:A:C2	22:BA:255:A:C4	2.97	0.52
22:BA:2593:U:C2'	22:BA:2594:C:O5'	2.57	0.52
22:BA:287:G:C2	22:BA:354:A:C2	2.97	0.52
22:BA:580:U:H2'	22:BA:581:C:H6	1.73	0.52
35:BN:14:SER:HA	35:BN:17:ARG:NH1	2.24	0.52
37:BP:31:TRP:CZ2	37:BP:40:LEU:CD1	2.92	0.52
22:BA:929:U:H1'	47:BZ:26:GLY:O	2.10	0.52
1:CA:119:A:H4'	1:CA:120:A:O5'	2.09	0.52
5:CE:153:VAL:O	5:CE:157:ARG:N	2.42	0.52
5:CE:96:MET:HE3	5:CE:111:MET:HE3	1.91	0.52
7:CG:68:ASN:O	7:CG:138:ARG:NH2	2.42	0.52
12:CL:90:LEU:CB	12:CL:93:VAL:CG2	2.87	0.52
13:CM:20:THR:HG23	13:CM:26:GLY:O	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:CT:83:ILE:O	20:CT:87:ALA:HB3	2.09	0.52
22:DA:1288:G:C4	22:DA:1327:A:C2	2.98	0.52
22:DA:1308:A:H2'	22:DA:1309:G:O4'	2.09	0.52
22:DA:1410:G:N1	22:DA:1411:U:O4	2.42	0.52
22:DA:2031:A:C6	22:DA:2498:C:H1'	2.44	0.52
22:DA:2575:C:H2'	22:DA:2578:G:O6	2.09	0.52
22:DA:450:G:H2'	22:DA:451:U:H5''	1.90	0.52
22:DA:9:G:C6	22:DA:2629:U:C5	2.98	0.52
25:DD:208:LYS:O	25:DD:209:ALA:HB2	2.08	0.52
27:DF:108:VAL:HG11	27:DF:176:PRO:CG	2.39	0.52
46:DY:36:GLN:O	46:DY:37:LEU:C	2.48	0.52
1:AA:1028:C:O2	1:AA:1034:G:C6	2.62	0.52
1:AA:1130:A:C1'	1:AA:1146:A:C2	2.92	0.52
1:AA:1145:A:HO2'	1:AA:1146:A:P	2.32	0.52
1:AA:1277:C:HO2'	1:AA:1279:G:H8	1.54	0.52
1:AA:173:U:C6	1:AA:197:A:C2	2.97	0.52
1:AA:373:A:N3	1:AA:374:A:C8	2.78	0.52
1:AA:568:G:N3	1:AA:569:C:C5	2.78	0.52
4:AD:76:TYR:CD1	4:AD:76:TYR:C	2.83	0.52
4:AD:84:GLY:O	4:AD:89:ASN:ND2	2.42	0.52
8:AH:111:MET:HE2	8:AH:116:ALA:N	2.23	0.52
22:BA:1384:A:H1'	22:BA:1405:U:H1'	1.91	0.52
22:BA:1754:A:C6	22:BA:1755:A:C6	2.97	0.52
22:BA:1857:G:C2	22:BA:1884:G:N3	2.77	0.52
22:BA:2314:A:OP1	27:BF:88:LYS:NZ	2.42	0.52
22:BA:744:U:P	57:BA:3655:HOH:O	2.67	0.52
22:BA:768:G:C5	22:BA:769:U:C5	2.97	0.52
29:BH:77:THR:HA	29:BH:143:ILE:O	2.09	0.52
39:BR:52:PRO:O	39:BR:53:PHE:O	2.27	0.52
41:BT:88:LYS:O	41:BT:89:GLU:HG2	2.09	0.52
43:BV:48:MET:O	43:BV:51:GLN:HG3	2.09	0.52
43:BV:8:VAL:HG23	43:BV:9:ARG:N	2.24	0.52
1:CA:1068:G:C2'	1:CA:1069:C:H5'	2.38	0.52
1:CA:718:A:C8	1:CA:719:C:C6	2.97	0.52
4:CD:148:LYS:O	4:CD:149:ALA:HB3	2.07	0.52
7:CG:46:ALA:HA	7:CG:121:ALA:HB2	1.92	0.52
22:DA:1009:A:O2'	22:DA:1153:C:H4'	2.09	0.52
22:DA:1071:G:O2'	22:DA:1072:C:O4'	2.21	0.52
22:DA:1127:A:C3'	22:DA:1128:G:H5''	2.38	0.52
22:DA:971:G:O2'	22:DA:983:A:N3	2.41	0.52
29:DH:31:VAL:CB	29:DH:32:PRO:CD	2.86	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:DH:40:THR:O	29:DH:41:LYS:C	2.48	0.52
35:DN:58:ASP:HA	35:DN:80:PHE:CD1	2.44	0.52
1:AA:76:G:H2'	1:AA:76:G:N3	2.23	0.52
1:AA:855:U:N3	1:AA:856:C:C5	2.78	0.52
2:AB:126:PHE:N	2:AB:126:PHE:CD2	2.76	0.52
1:AA:1108:G:H5'	3:AC:176:HIS:ND1	2.24	0.52
1:AA:1342:C:O2'	9:AI:126:GLN:HG3	2.09	0.52
9:AI:45:ARG:HG2	9:AI:46:MET:SD	2.49	0.52
10:AJ:36:VAL:HA	10:AJ:76:ILE:HA	1.90	0.52
1:AA:683:G:N2	11:AK:40:ASN:HA	2.24	0.52
22:BA:1083:U:O2	22:BA:1085:A:C8	2.62	0.52
22:BA:1508:A:O2'	22:BA:1509:A:O4'	2.25	0.52
22:BA:2590:A:C2	22:BA:2605:U:C2	2.98	0.52
22:BA:362:A:C8	22:BA:362:A:OP2	2.62	0.52
22:BA:479:A:N3	22:BA:481:G:H5''	2.25	0.52
23:BB:37:C:C5	23:BB:38:C:C4	2.98	0.52
26:BE:91:ASP:OD1	26:BE:91:ASP:C	2.48	0.52
45:BX:3:ARG:CD	45:BX:30:LEU:HD13	2.39	0.52
1:CA:669:G:N2	1:CA:738:C:C2	2.77	0.52
1:CA:978:A:O2'	1:CA:1322:C:C5	2.63	0.52
3:CC:130:PHE:CZ	3:CC:131:ARG:CD	2.92	0.52
4:CD:3:ARG:HD2	4:CD:115:ARG:NE	2.25	0.52
6:CF:93:LYS:O	6:CF:93:LYS:HG2	2.09	0.52
9:CI:120:LYS:CG	9:CI:123:ARG:HB3	2.38	0.52
1:CA:718:A:C5'	11:CK:119:ASN:ND2	2.73	0.52
14:CN:52:PRO:O	14:CN:53:ARG:HB3	2.09	0.52
22:DA:1786:A:H1'	22:DA:1938:A:N6	2.24	0.52
22:DA:2111:U:C4	22:DA:2147:A:C2	2.97	0.52
22:DA:237:C:N3	22:DA:238:C:C5	2.77	0.52
22:DA:2562:U:C2'	22:DA:2563:U:H5'	2.40	0.52
22:DA:2586:U:C6	22:DA:2587:A:C8	2.98	0.52
22:DA:27:G:N2	22:DA:512:G:H1'	2.23	0.52
22:DA:32:C:H5''	22:DA:33:C:OP2	2.10	0.52
25:DD:183:GLU:OE1	25:DD:183:GLU:N	2.42	0.52
29:DH:72:ILE:HG22	29:DH:72:ILE:O	2.09	0.52
36:DO:79:ALA:O	36:DO:83:LEU:HG	2.08	0.52
1:AA:1311:A:C2	1:AA:1327:C:N3	2.77	0.52
1:AA:1337:G:C5'	1:AA:1338:G:OP1	2.56	0.52
1:AA:602:A:C2	1:AA:603:U:O2	2.62	0.52
1:AA:832:G:N3	1:AA:833:G:C8	2.78	0.52
15:AO:4:SER:O	15:AO:8:THR:OG1	2.26	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AK:126:LYS:O	21:AU:34:ARG:NE	2.42	0.52
33:BL:48:ARG:HD2	51:B3:60:ALA:O	2.10	0.52
53:B5:19:LYS:HG3	53:B5:23:ILE:HG12	1.92	0.52
22:BA:686:U:H4'	22:BA:687:C:OP2	2.09	0.52
42:BU:86:ARG:NH1	42:BU:100:SER:O	2.41	0.52
1:CA:1055:A:C6	1:CA:1206:G:C5	2.98	0.52
1:CA:632:U:H2'	1:CA:632:U:O2	2.08	0.52
1:CA:747:A:C6	1:CA:748:G:C6	2.97	0.52
2:CB:167:ASP:OD2	2:CB:191:SER:HA	2.10	0.52
16:CP:28:ARG:CG	16:CP:29:ASN:OD1	2.56	0.52
22:DA:2372:U:O4'	49:D1:46:HIS:ND1	2.42	0.52
22:DA:1390:U:C2'	22:DA:1391:U:H5'	2.40	0.52
22:DA:307:G:N1	22:DA:310:A:OP2	2.43	0.52
22:DA:498:G:C2	22:DA:499:U:C5	2.97	0.52
22:DA:830:G:C2	22:DA:2448:A:N7	2.77	0.52
28:DG:19:ILE:O	28:DG:21:GLY:N	2.43	0.52
30:DI:80:LEU:HD23	30:DI:84:ALA:HB2	1.91	0.52
34:DM:31:PHE:CZ	34:DM:110:GLU:HA	2.45	0.52
36:DO:33:ARG:O	36:DO:34:HIS:CD2	2.62	0.52
40:DS:28:LYS:O	40:DS:29:VAL:C	2.48	0.52
1:AA:1076:U:C2	1:AA:1082:A:C2	2.97	0.52
1:AA:1167:A:N7	1:AA:1169:A:C5	2.78	0.52
1:AA:1260:G:OP1	1:AA:1284:C:O2'	2.27	0.52
1:AA:262:A:H2'	1:AA:263:A:C8	2.43	0.52
1:AA:268:U:H2'	1:AA:269:C:C6	2.44	0.52
1:AA:542:G:OP1	4:AD:10:LYS:HE2	2.10	0.52
4:AD:51:TYR:CE2	4:AD:55:LEU:HD12	2.45	0.52
5:AE:46:VAL:HG22	5:AE:118:ALA:HA	1.91	0.52
6:AF:36:ILE:O	6:AF:36:ILE:HG23	2.09	0.52
6:AF:3:HIS:O	6:AF:92:THR:HG23	2.09	0.52
9:AI:52:LEU:HD13	9:AI:57:MET:HG3	1.91	0.52
10:AJ:63:ASP:HB3	10:AJ:65:TYR:CE2	2.45	0.52
20:AT:25:ARG:HG2	20:AT:29:ARG:NH1	2.23	0.52
20:AT:29:ARG:O	20:AT:33:LYS:HG2	2.10	0.52
22:BA:2055:C:H5'	22:BA:2056:G:O5'	2.10	0.52
22:BA:2308:G:O6	22:BA:2311:A:C8	2.62	0.52
22:BA:2747:G:O2'	28:BG:67:THR:HB	2.09	0.52
22:BA:2771:C:H2'	22:BA:2772:C:C6	2.45	0.52
22:BA:573:U:O2'	22:BA:574:A:H3'	2.09	0.52
22:BA:998:C:C2'	22:BA:999:U:O5'	2.58	0.52
26:BE:15:SER:N	26:BE:197:GLU:OE2	2.42	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BG:121:ILE:CD1	28:BG:141:ILE:HG22	2.40	0.52
29:BH:51:ARG:NH1	29:BH:55:GLU:OE1	2.43	0.52
37:BP:31:TRP:CE2	37:BP:40:LEU:HD11	2.45	0.52
39:BR:49:ILE:CB	39:BR:52:PRO:O	2.57	0.52
39:BR:74:ILE:CD1	39:BR:74:ILE:N	2.71	0.52
1:CA:1232:U:OP1	9:CI:126:GLN:HG2	2.10	0.52
1:CA:32:A:H2'	1:CA:33:A:C8	2.44	0.52
1:CA:519:C:H2'	1:CA:520:A:O4'	2.10	0.52
1:CA:644:U:H2'	1:CA:645:G:O4'	2.10	0.52
1:CA:73:C:C2	1:CA:74:A:C8	2.98	0.52
17:CQ:48:ASP:N	17:CQ:48:ASP:OD2	2.41	0.52
22:DA:2615:U:C4	48:D0:3:VAL:O	2.62	0.52
22:DA:1567:G:C8	24:DC:83:TYR:CE1	2.98	0.52
22:DA:1645:G:H4'	22:DA:1646:C:C6	2.44	0.52
22:DA:1678:A:C5	22:DA:1679:A:C8	2.97	0.52
22:DA:1800:C:OP1	24:DC:258:ARG:NH2	2.42	0.52
22:DA:1799:G:N1	22:DA:1819:A:OP2	2.40	0.52
22:DA:2016:U:O2	48:D0:4:GLN:NE2	2.43	0.52
22:DA:2060:A:O4'	22:DA:2502:G:H1'	2.10	0.52
22:DA:2341:G:C5	22:DA:2342:C:C4	2.98	0.52
22:DA:1783:A:C6	22:DA:2587:A:C2	2.97	0.52
22:DA:2772:C:H5'	25:DD:173:GLN:NE2	2.25	0.52
22:DA:2842:G:C2	22:DA:2843:G:H1'	2.45	0.52
29:DH:34:GLY:O	29:DH:35:LYS:HD2	2.10	0.52
33:DL:29:LYS:HG3	33:DL:30:THR:HG23	1.91	0.52
34:DM:119:LEU:O	34:DM:119:LEU:HD13	2.10	0.52
40:DS:63:GLY:O	40:DS:64:ALA:HB3	2.10	0.52
1:AA:189:A:H2'	1:AA:190:A:O4'	2.10	0.52
2:AB:20:THR:HA	2:AB:38:VAL:HA	1.90	0.52
2:AB:81:LYS:HG3	2:AB:91:PHE:CZ	2.45	0.52
4:AD:130:VAL:HG11	4:AD:135:TYR:CG	2.45	0.52
5:AE:104:GLY:HA3	5:AE:122:ASN:HA	1.91	0.52
5:AE:94:VAL:CG2	5:AE:111:MET:SD	2.98	0.52
10:AJ:57:VAL:O	10:AJ:58:ASN:HB2	2.09	0.52
1:AA:1014:A:H4'	19:AS:14:HIS:CE1	2.45	0.52
20:AT:33:LYS:O	20:AT:34:LYS:C	2.48	0.52
22:BA:852:U:H2'	22:BA:853:C:C6	2.44	0.52
1:CA:1298:U:O2	1:CA:1298:U:C2'	2.57	0.52
1:CA:151:A:H2'	1:CA:152:A:O4'	2.09	0.52
1:CA:542:G:C2	1:CA:543:U:C5	2.98	0.52
2:CB:91:PHE:CD2	2:CB:150:GLY:HA3	2.44	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:22:LYS:O	4:CD:24:GLY:N	2.43	0.52
7:CG:74:GLU:O	7:CG:88:PRO:HA	2.10	0.52
15:CO:53:ARG:O	15:CO:56:LEU:HB3	2.09	0.52
19:CS:15:LEU:HD13	19:CS:33:THR:HG21	1.92	0.52
20:CT:32:ILE:HG12	20:CT:54:MET:HE3	1.90	0.52
22:DA:1087:G:C2	22:DA:1089:A:C2	2.98	0.52
22:DA:1101:U:C5	22:DA:1102:C:C5	2.97	0.52
22:DA:1980:G:O2'	22:DA:1982:U:OP2	2.26	0.52
22:DA:2258:C:H4'	22:DA:2259:U:OP2	2.10	0.52
22:DA:2747:G:O6	22:DA:2755:C:H5''	2.09	0.52
22:DA:481:G:C4	22:DA:507:A:C2	2.98	0.52
22:DA:881:G:N1	22:DA:895:U:O2	2.42	0.52
22:DA:2599:G:N7	24:DC:236:GLU:CB	2.73	0.52
25:DD:15:PHE:CD2	37:DP:78:SER:HA	2.45	0.52
30:DI:114:ALA:O	30:DI:115:ALA:HB2	2.10	0.52
32:DK:121:GLU:O	32:DK:122:VAL:O	2.28	0.52
34:DM:124:LEU:N	34:DM:124:LEU:CD2	2.72	0.52
22:DA:2870:C:H5''	35:DN:65:LEU:HD21	1.90	0.52
37:DP:39:ARG:HA	37:DP:39:ARG:HE	1.73	0.52
1:AA:1070:U:C2	1:AA:1071:C:C5	2.98	0.52
1:AA:887:G:H2'	1:AA:888:G:H5'	1.91	0.52
2:AB:67:ILE:O	2:AB:68:LEU:CB	2.57	0.52
4:AD:107:PHE:CD1	4:AD:145:ILE:CD1	2.93	0.52
20:AT:68:HIS:HB3	20:AT:69:LYS:NZ	2.25	0.52
21:AU:17:ARG:NH1	21:AU:20:LYS:CG	2.73	0.52
53:B5:65:LEU:HD21	53:B5:191:ARG:CB	2.39	0.52
22:BA:1288:G:C5	22:BA:1327:A:C2	2.98	0.52
22:BA:1923:U:HO2'	22:BA:1924:C:C5'	2.22	0.52
22:BA:790:U:O2'	22:BA:791:C:O5'	2.26	0.52
24:BC:123:ALA:O	24:BC:125:LYS:N	2.43	0.52
19:AS:64:ASP:HB3	27:BF:115:ARG:NH2	2.24	0.52
27:BF:36:LEU:HD22	27:BF:91:LEU:HD11	1.91	0.52
29:BH:94:ILE:HD12	29:BH:98:ASP:HB3	1.92	0.52
34:BM:78:LEU:N	34:BM:78:LEU:HD12	2.24	0.52
35:BN:21:PHE:HB3	35:BN:47:VAL:HG21	1.92	0.52
38:BQ:41:LYS:HG3	38:BQ:45:TYR:CE1	2.44	0.52
46:BY:14:LEU:HA	46:BY:17:GLU:HB3	1.92	0.52
1:CA:1296:C:H5''	1:CA:1297:G:OP2	2.09	0.52
1:CA:1306:A:H1'	1:CA:1332:A:C5	2.45	0.52
1:CA:421:U:O5'	1:CA:422:C:C5	2.62	0.52
1:CA:484:G:N7	1:CA:486:U:H1'	2.24	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:518:C:OP2	1:CA:530:G:H1'	2.08	0.52
1:CA:71:A:C2	1:CA:72:A:C8	2.98	0.52
2:CB:15:HIS:ND1	2:CB:15:HIS:C	2.63	0.52
4:CD:46:PRO:O	4:CD:48:LEU:N	2.42	0.52
11:CK:40:ASN:O	11:CK:41:ALA:HB3	2.10	0.52
1:CA:553:A:O2'	12:CL:26:ALA:O	2.27	0.52
16:CP:23:ASP:OD2	16:CP:25:ARG:CG	2.58	0.52
20:CT:36:TYR:CD1	20:CT:36:TYR:C	2.83	0.52
22:DA:1327:A:H2'	22:DA:1328:A:O4'	2.10	0.52
22:DA:1726:C:H2'	22:DA:1727:C:C6	2.45	0.52
22:DA:1869:G:C2	22:DA:1873:G:N1	2.78	0.52
22:DA:1875:G:O2'	22:DA:1876:A:OP2	2.28	0.52
22:DA:1957:C:H5'	22:DA:1984:G:O2'	2.09	0.52
22:DA:2234:G:C5	22:DA:2235:G:C8	2.98	0.52
22:DA:2301:C:C2	22:DA:2316:G:N2	2.77	0.52
22:DA:2546:U:O4'	22:DA:2565:A:C2	2.62	0.52
22:DA:2810:A:C8	22:DA:2811:G:C8	2.98	0.52
22:DA:305:C:H1'	22:DA:313:G:N2	2.24	0.52
22:DA:574:A:H4'	22:DA:575:A:C5'	2.39	0.52
22:DA:621:A:C5	22:DA:622:G:H1'	2.44	0.52
29:DH:34:GLY:O	29:DH:35:LYS:HB2	2.08	0.52
33:DL:56:PRO:O	33:DL:60:ARG:CB	2.57	0.52
37:DP:91:ALA:HB2	37:DP:113:ARG:HA	1.90	0.52
1:AA:1425:U:O2	1:AA:1476:A:C2	2.62	0.52
1:AA:622:A:C8	1:AA:623:C:C6	2.98	0.52
1:AA:80:A:C2	1:AA:90:C:N3	2.77	0.52
1:AA:968:A:H4'	1:AA:969:A:OP2	2.10	0.52
1:AA:980:C:C5	1:AA:981:U:C5	2.97	0.52
1:AA:9:G:C6	1:AA:26:A:N6	2.78	0.52
2:AB:75:ALA:O	2:AB:76:ALA:CB	2.58	0.52
49:B1:6:ARG:HG2	49:B1:24:THR:HB	1.92	0.52
22:BA:591:U:HO2'	51:B3:2:PRO:N	2.07	0.52
22:BA:1142:A:C2	22:BA:1144:A:C1'	2.92	0.52
22:BA:1424:G:H2'	22:BA:1425:G:O4'	2.10	0.52
22:BA:2199:A:C8	22:BA:2200:C:C5	2.97	0.52
22:BA:226:A:C6	22:BA:227:A:C6	2.97	0.52
22:BA:264:C:O2'	22:BA:265:A:H2'	2.10	0.52
22:BA:624:C:O2'	22:BA:657:U:H5''	2.09	0.52
24:BC:141:VAL:HG13	24:BC:191:THR:O	2.10	0.52
29:BH:2:GLN:O	29:BH:3:VAL:HG22	2.10	0.52
32:BK:58:LEU:HD23	32:BK:59:LYS:O	2.10	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BS:36:LEU:HD13	40:BS:48:LYS:CA	2.40	0.52
1:CA:1416:G:N2	1:CA:1485:U:H1'	2.24	0.52
2:CB:62:SER:HA	2:CB:224:GLY:HA3	1.91	0.52
1:CA:643:C:H5'	8:CH:32:LEU:HD22	1.92	0.52
21:CU:14:VAL:C	21:CU:16:LEU:HG	2.29	0.52
22:DA:1340:U:H4'	22:DA:1341:G:OP2	2.10	0.52
22:DA:389:G:O4'	22:DA:2413:G:H5'	2.10	0.52
22:DA:1782:U:O4	22:DA:2586:U:C5	2.62	0.52
25:DD:86:GLU:HG3	25:DD:87:GLY:N	2.24	0.52
29:DH:25:TYR:CZ	29:DH:30:LEU:HD21	2.45	0.52
37:DP:113:ARG:O	37:DP:114:LEU:C	2.48	0.52
40:DS:7:HIS:HB2	40:DS:50:VAL:HG21	1.92	0.52
42:DU:41:LEU:HD12	42:DU:60:GLU:CG	2.40	0.52
1:AA:1004:A:H2'	1:AA:1005:A:O4'	2.10	0.52
1:AA:1327:C:C2'	1:AA:1328:C:H5'	2.40	0.52
1:AA:1410:A:C4	1:AA:1491:G:N2	2.78	0.52
2:AB:68:LEU:HD21	2:AB:92:VAL:HG23	1.92	0.52
1:AA:1080:A:O3'	5:AE:21:VAL:HG21	2.09	0.52
7:AG:42:ILE:HG21	7:AG:116:MET:HB3	1.92	0.52
9:AI:50:GLN:C	9:AI:52:LEU:H	2.12	0.52
49:B1:34:LEU:H	49:B1:52:ALA:CB	2.23	0.52
22:BA:1020:A:C2	22:BA:1141:U:C2	2.98	0.52
22:BA:1179:G:O6	22:BA:1180:U:C2	2.63	0.52
22:BA:1820:U:O4	24:BC:198:ALA:HB1	2.09	0.52
22:BA:2355:G:O3'	44:BW:24:LYS:NZ	2.43	0.52
22:BA:2554:U:C4	22:BA:2555:U:O4	2.63	0.52
22:BA:528:A:C8	22:BA:528:A:C3'	2.93	0.52
39:BR:47:VAL:HG12	39:BR:54:VAL:HG21	1.92	0.52
40:BS:17:VAL:HG12	40:BS:76:VAL:HG21	1.92	0.52
47:BZ:8:THR:OG1	47:BZ:35:THR:OG1	2.28	0.52
1:CA:154:U:O2	1:CA:168:G:N2	2.43	0.52
1:CA:517:G:H5'	1:CA:519:C:O2	2.10	0.52
1:CA:609:A:N7	1:CA:610:U:C5	2.78	0.52
13:CM:10:PRO:O	13:CM:11:ASP:HB2	2.10	0.52
22:DA:1858:A:C2	22:DA:1859:U:C2	2.98	0.52
22:DA:228:C:N3	22:DA:418:C:O4'	2.43	0.52
25:DD:140:HIS:CE1	57:DD:303:HOH:O	2.63	0.52
26:DE:77:ILE:CG1	26:DE:77:ILE:O	2.57	0.52
27:DF:121:SER:O	27:DF:123:ASP:N	2.43	0.52
28:DG:87:LEU:HD12	28:DG:87:LEU:N	2.25	0.52
29:DH:23:ALA:O	29:DH:27:ARG:N	2.38	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DM:135:VAL:O	34:DM:136:MET:CB	2.57	0.52
36:DO:36:TYR:CD1	36:DO:36:TYR:N	2.77	0.52
1:AA:1018:G:N2	1:AA:1019:A:C8	2.77	0.52
1:AA:1135:U:H2'	1:AA:1136:C:O5'	2.10	0.52
1:AA:1356:G:N2	1:AA:1357:A:C2	2.78	0.52
1:AA:188:C:O2	1:AA:188:C:H2'	2.09	0.52
17:AQ:6:ARG:O	17:AQ:7:THR:HG23	2.09	0.52
49:B1:47:VAL:HG13	49:B1:48:ILE:N	2.24	0.52
22:BA:1132:U:C3'	22:BA:1133:A:H5''	2.39	0.52
22:BA:1721:G:O2'	22:BA:1739:A:N6	2.43	0.52
22:BA:2534:A:H2'	22:BA:2535:G:O5'	2.10	0.52
22:BA:2684:U:C4	22:BA:2685:G:N7	2.78	0.52
22:BA:760:G:H2'	22:BA:761:A:O4'	2.09	0.52
27:BF:108:VAL:HG12	27:BF:109:PRO:HD3	1.91	0.52
23:BB:54:G:H21	27:BF:26:MET:CE	2.23	0.52
33:BL:95:LEU:HD22	33:BL:100:ILE:CD1	2.39	0.52
37:BP:75:GLN:O	37:BP:77:HIS:N	2.43	0.52
39:BR:66:HIS:CE1	39:BR:94:THR:CG2	2.92	0.52
45:BX:68:LEU:HD13	45:BX:78:TYR:CE1	2.45	0.52
1:CA:34:C:H2'	1:CA:35:G:C8	2.45	0.52
1:CA:885:G:O2'	1:CA:914:A:N1	2.32	0.52
3:CC:111:LEU:CD1	3:CC:146:ALA:HB2	2.40	0.52
3:CC:77:ILE:HA	3:CC:84:VAL:HG23	1.92	0.52
5:CE:105:ILE:H	5:CE:122:ASN:C	2.13	0.52
5:CE:153:VAL:HG23	5:CE:157:ARG:HB2	1.90	0.52
17:CQ:15:ASP:OD1	17:CQ:54:GLY:HA2	2.10	0.52
22:DA:1293:C:H2'	22:DA:1294:U:O4'	2.10	0.52
22:DA:2091:C:C3'	22:DA:2092:U:H5''	2.38	0.52
22:DA:2502:G:H5'	22:DA:2503:A:H5''	1.92	0.52
22:DA:2819:G:H2'	22:DA:2821:A:N7	2.25	0.52
22:DA:2061:G:C6	55:DA:3001:DOL:HC19	2.44	0.52
22:DA:582:A:N7	57:DA:3286:HOH:O	2.34	0.52
22:DA:621:A:C6	22:DA:622:G:H1'	2.45	0.52
31:DJ:117:ALA:HA	31:DJ:120:ARG:HD2	1.91	0.52
39:DR:82:HIS:CG	39:DR:82:HIS:O	2.63	0.52
40:DS:20:VAL:CG2	40:DS:39:THR:HG21	2.40	0.52
42:DU:54:GLN:N	42:DU:55:PRO:HD3	2.25	0.52
22:DA:396:G:OP2	45:DX:10:LYS:HG2	2.09	0.52
1:AA:1010:U:O2	1:AA:1019:A:N1	2.43	0.51
1:AA:1201:A:H1'	1:AA:1202:U:OP2	2.10	0.51
1:AA:1202:U:C4	1:AA:1203:C:C5	2.98	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1343:G:H2'	1:AA:1344:C:C6	2.45	0.51
1:AA:208:U:C6	1:AA:210:C:C4	2.99	0.51
1:AA:560:A:C6	5:AE:128:TYR:CE1	2.98	0.51
1:AA:685:G:N1	1:AA:686:U:O4	2.43	0.51
3:AC:140:ASN:O	3:AC:141:ALA:HB2	2.11	0.51
4:AD:60:LYS:NZ	4:AD:194:ASP:O	2.43	0.51
9:AI:43:THR:O	9:AI:44:ALA:CB	2.57	0.51
10:AJ:56:HIS:ND1	10:AJ:57:VAL:HG12	2.25	0.51
12:AL:25:GLU:O	12:AL:26:ALA:C	2.48	0.51
15:AO:63:ARG:CG	15:AO:67:LEU:CD1	2.88	0.51
22:BA:1627:G:C2	22:BA:1628:G:C8	2.98	0.51
22:BA:2553:G:N1	22:BA:2554:U:O2	2.43	0.51
15:AO:89:ARG:NH1	22:BA:714:U:C5	2.78	0.51
22:BA:988:A:OP2	47:BZ:12:SER:HB3	2.10	0.51
30:BI:75:PRO:O	30:BI:79:LEU:HD12	2.10	0.51
44:BW:56:ASP:OD1	44:BW:56:ASP:N	2.39	0.51
1:CA:1060:U:C5'	10:CJ:53:ILE:HG23	2.41	0.51
1:CA:179:A:H2'	1:CA:180:U:C6	2.45	0.51
1:CA:949:A:C2	1:CA:1233:G:N3	2.78	0.51
1:CA:957:U:O2	1:CA:959:A:C8	2.62	0.51
4:CD:192:SER:O	4:CD:193:ALA:HB3	2.10	0.51
5:CE:157:ARG:HD3	5:CE:158:GLY:H	1.75	0.51
11:CK:77:TYR:N	11:CK:77:TYR:CD1	2.78	0.51
11:CK:92:GLY:O	11:CK:93:ARG:C	2.49	0.51
22:DA:1050:A:C2	22:DA:2751:G:C4	2.98	0.51
22:DA:1362:C:H2'	22:DA:1363:C:H5'	1.91	0.51
22:DA:1649:G:O6	22:DA:2009:A:N6	2.43	0.51
22:DA:1874:C:C4	22:DA:1875:G:C6	2.99	0.51
22:DA:1906:G:OP1	22:DA:1930:G:C8	2.62	0.51
22:DA:2156:G:C6	22:DA:2157:G:C2	2.97	0.51
22:DA:2283:C:C2	22:DA:2389:G:C2	2.98	0.51
22:DA:294:A:N6	22:DA:345:A:C4	2.78	0.51
22:DA:600:G:H1'	26:DE:100:MET:HG2	1.92	0.51
22:DA:607:U:O4	22:DA:619:G:H2'	2.08	0.51
22:DA:686:U:H6	22:DA:788:A:N1	2.08	0.51
26:DE:149:ILE:HD12	26:DE:172:ALA:HA	1.92	0.51
39:DR:49:ILE:HD12	39:DR:52:PRO:HA	1.92	0.51
42:DU:88:GLU:O	42:DU:89:ASP:CB	2.59	0.51
42:DU:82:ARG:O	42:DU:97:LYS:HB2	2.10	0.51
1:AA:142:G:H3'	1:AA:143:A:C8	2.46	0.51
1:AA:29:U:O2'	1:AA:30:U:H5'	2.10	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:34:ILE:O	4:AD:34:ILE:HD13	2.11	0.51
5:AE:136:VAL:O	5:AE:140:THR:HG23	2.10	0.51
8:AH:125:ILE:O	8:AH:125:ILE:CG1	2.59	0.51
20:AT:55:GLN:N	20:AT:56:PRO:HD2	2.25	0.51
53:B5:191:ARG:O	53:B5:195:ARG:CB	2.57	0.51
22:BA:1028:A:H61	22:BA:1125:G:H2'	1.76	0.51
22:BA:1138:G:H5''	22:BA:1139:G:OP2	2.10	0.51
22:BA:1429:G:O2'	22:BA:1430:G:H5'	2.10	0.51
22:BA:1731:G:C6	22:BA:1733:G:C6	2.98	0.51
22:BA:1935:G:C6	22:BA:1962:C:C6	2.98	0.51
22:BA:2547:A:H2'	22:BA:2548:U:C6	2.45	0.51
25:BD:140:HIS:CE1	57:BD:302:HOH:O	2.57	0.51
29:BH:110:VAL:HG22	29:BH:114:GLU:HB2	1.90	0.51
37:BP:91:ALA:HB2	37:BP:113:ARG:HA	1.93	0.51
44:BW:56:ASP:O	44:BW:57:HIS:HB2	2.10	0.51
46:BY:26:PHE:C	46:BY:26:PHE:CD1	2.83	0.51
46:BY:45:GLN:O	46:BY:46:VAL:CB	2.58	0.51
1:CA:1105:A:N3	1:CA:1106:G:C8	2.78	0.51
1:CA:1157:A:H4'	1:CA:1158:C:O5'	2.10	0.51
1:CA:1238:A:N3	1:CA:1241:G:O2'	2.35	0.51
1:CA:575:G:C6	1:CA:821:G:C5	2.98	0.51
19:CS:73:GLU:HB2	19:CS:74:PHE:CE1	2.45	0.51
22:DA:1407:G:N2	22:DA:1596:A:N3	2.58	0.51
22:DA:2651:C:O2'	22:DA:2652:C:H5'	2.10	0.51
22:DA:2824:C:N4	22:DA:2825:G:C5	2.78	0.51
22:DA:777:G:N7	22:DA:793:A:C2	2.79	0.51
30:DI:86:ILE:HD13	30:DI:89:GLY:N	2.26	0.51
35:DN:90:ARG:NH2	35:DN:116:VAL:HG11	2.25	0.51
22:DA:483:A:H4'	42:DU:47:LYS:HA	1.92	0.51
47:DZ:14:ILE:HG22	47:DZ:15:GLY:N	2.26	0.51
1:AA:1253:G:N1	1:AA:1285:A:N6	2.58	0.51
1:AA:1370:G:C5'	9:AI:111:VAL:HG21	2.40	0.51
3:AC:87:LEU:O	3:AC:88:ARG:C	2.48	0.51
16:AP:29:ASN:N	16:AP:29:ASN:OD1	2.43	0.51
21:AU:12:PHE:CD2	21:AU:12:PHE:N	2.75	0.51
11:AK:112:ASP:CB	21:AU:20:LYS:HD2	2.41	0.51
22:BA:136:G:H2'	22:BA:137:U:C6	2.46	0.51
22:BA:1394:U:P	57:BA:3410:HOH:O	2.68	0.51
22:BA:1313:U:H2'	22:BA:1610:A:C2	2.45	0.51
22:BA:1820:U:H4'	22:BA:1821:A:OP2	2.10	0.51
22:BA:981:A:H5''	57:BA:3596:HOH:O	2.09	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BL:100:ILE:HG13	33:BL:100:ILE:O	2.10	0.51
1:CA:1337:G:C5'	1:CA:1338:G:OP1	2.59	0.51
1:CA:1537:U:C5	1:CA:1538:C:C4	2.98	0.51
1:CA:583:A:C2	1:CA:759:A:C5	2.98	0.51
2:CB:128:LYS:O	2:CB:129:LEU:HB2	2.09	0.51
7:CG:25:LYS:O	7:CG:29:ILE:HG12	2.10	0.51
10:CJ:7:ARG:HD3	10:CJ:75:ASP:OD1	2.11	0.51
22:DA:1068:G:H2'	22:DA:1096:A:C5'	2.40	0.51
22:DA:122:G:H2'	22:DA:123:G:O4'	2.10	0.51
22:DA:1344:U:HO2'	22:DA:1345:C:P	2.30	0.51
22:DA:1740:G:C2	22:DA:1741:C:C2	2.99	0.51
22:DA:1798:U:O2'	22:DA:1802:A:N3	2.41	0.51
22:DA:1853:A:N3	22:DA:2233:U:O2'	2.36	0.51
22:DA:193:U:C5	22:DA:194:G:N7	2.79	0.51
22:DA:2024:G:C4	22:DA:2040:G:N2	2.79	0.51
22:DA:186:G:N2	22:DA:211:C:C2	2.78	0.51
22:DA:2507:C:C4	22:DA:2508:G:C5	2.99	0.51
22:DA:2531:A:C5'	28:DG:157:TYR:CZ	2.92	0.51
22:DA:2624:G:H1'	48:D0:19:HIS:HE1	1.75	0.51
22:DA:2739:U:C5	22:DA:2763:G:C5	2.98	0.51
22:DA:1789:A:H5''	24:DC:219:THR:O	2.10	0.51
24:DC:34:LEU:O	24:DC:35:GLU:CB	2.58	0.51
27:DF:147:ASP:O	27:DF:148:ARG:HB2	2.10	0.51
29:DH:121:VAL:O	29:DH:122:LEU:HB2	2.11	0.51
37:DP:40:LEU:HD23	37:DP:41:GLN:N	2.25	0.51
42:DU:34:VAL:O	42:DU:64:ALA:HA	2.10	0.51
42:DU:67:VAL:HA	42:DU:70:VAL:CG2	2.41	0.51
46:DY:48:ARG:O	46:DY:51:ALA:HB3	2.11	0.51
1:AA:1238:A:C2	1:AA:1303:C:H4'	2.45	0.51
1:AA:1419:G:C6	1:AA:1420:U:C4	2.98	0.51
1:AA:393:A:C2	1:AA:394:G:C8	2.99	0.51
1:AA:701:U:H4'	1:AA:702:A:C5'	2.40	0.51
1:AA:957:U:C2	1:AA:959:A:OP2	2.63	0.51
3:AC:25:ASN:O	3:AC:27:LYS:N	2.42	0.51
1:AA:545:C:H5'	4:AD:69:GLU:CG	2.41	0.51
20:AT:44:LYS:HG2	20:AT:87:ALA:CB	2.40	0.51
21:AU:20:LYS:CE	21:AU:20:LYS:HA	2.40	0.51
22:BA:1586:A:N7	22:BA:1587:G:C8	2.78	0.51
22:BA:1850:G:C6	22:BA:1851:U:C4	2.98	0.51
22:BA:1880:U:H2'	22:BA:1881:C:C6	2.46	0.51
22:BA:1996:C:H4'	22:BA:1997:C:OP1	2.10	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2033:A:H4'	22:BA:2034:U:OP1	2.10	0.51
22:BA:2140:G:N3	22:BA:2140:G:H2'	2.25	0.51
22:BA:2558:C:C2'	22:BA:2559:C:H5'	2.41	0.51
22:BA:2703:C:H2'	22:BA:2704:C:H6	1.75	0.51
29:BH:99:ILE:O	29:BH:103:VAL:CG2	2.58	0.51
29:BH:85:GLY:HA2	29:BH:91:PHE:CE2	2.46	0.51
42:BU:72:ILE:HD12	42:BU:72:ILE:O	2.09	0.51
1:CA:474:G:H2'	1:CA:475:C:O4'	2.11	0.51
1:CA:597:G:H2'	1:CA:598:U:H5'	1.92	0.51
4:CD:29:ASP:O	4:CD:30:THR:C	2.49	0.51
10:CJ:52:LEU:HB2	14:CN:81:ARG:HD2	1.92	0.51
12:CL:40:THR:HG22	12:CL:41:THR:N	2.26	0.51
12:CL:38:TYR:HB2	12:CL:52:VAL:HG13	1.92	0.51
14:CN:80:SER:O	14:CN:83:LYS:N	2.43	0.51
1:CA:1014:A:O4'	19:CS:34:TRP:CZ3	2.63	0.51
22:DA:1178:C:C2	22:DA:1179:G:N7	2.79	0.51
22:DA:1213:A:N3	22:DA:1238:G:O2'	2.40	0.51
22:DA:1330:C:O2'	22:DA:1331:G:H5'	2.10	0.51
22:DA:1528:A:N6	22:DA:1543:G:O2'	2.44	0.51
22:DA:2461:A:C2	22:DA:2490:G:N2	2.78	0.51
22:DA:669:G:N2	22:DA:670:A:N1	2.58	0.51
29:DH:26:ALA:HA	29:DH:30:LEU:HB2	1.92	0.51
32:DK:28:SER:O	32:DK:29:HIS:HB2	2.09	0.51
1:AA:1350:A:OP1	9:AI:123:ARG:NE	2.44	0.51
1:AA:392:C:C2	1:AA:393:A:C8	2.99	0.51
12:AL:44:LYS:HB3	12:AL:45:PRO:CD	2.40	0.51
16:AP:51:ARG:HH11	16:AP:51:ARG:CG	2.24	0.51
16:AP:70:ARG:O	16:AP:70:ARG:HG3	2.09	0.51
16:AP:79:ASN:O	16:AP:80:LYS:HE3	2.10	0.51
17:AQ:45:HIS:CB	17:AQ:70:THR:HG22	2.41	0.51
22:BA:141:G:H5''	22:BA:142:A:C6	2.45	0.51
22:BA:2177:C:O2'	53:B5:47:LYS:NZ	2.39	0.51
22:BA:2267:A:H2	57:BA:3514:HOH:O	1.93	0.51
22:BA:2266:A:H4'	22:BA:2267:A:O5'	2.11	0.51
29:BH:117:LEU:CD2	29:BH:121:VAL:N	2.70	0.51
29:BH:132:PHE:O	29:BH:139:PHE:HB3	2.11	0.51
29:BH:94:ILE:CG2	29:BH:99:ILE:CG1	2.88	0.51
30:BI:86:ILE:N	30:BI:86:ILE:HD12	2.26	0.51
39:BR:37:GLU:OE2	39:BR:53:PHE:CE2	2.64	0.51
1:CA:1067:A:N1	1:CA:1108:G:O2'	2.28	0.51
1:CA:1068:G:H2'	1:CA:1069:C:H5'	1.92	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1133:G:H2'	1:CA:1133:G:N3	2.26	0.51
1:CA:1291:U:OP1	7:CG:37:SER:HB3	2.10	0.51
1:CA:409:U:H2'	1:CA:410:G:O4'	2.10	0.51
3:CC:62:LYS:O	3:CC:97:VAL:HB	2.10	0.51
12:CL:24:LEU:HD22	12:CL:59:ASN:OD1	2.11	0.51
12:CL:61:PHE:CD1	12:CL:61:PHE:N	2.75	0.51
20:CT:3:ASN:N	20:CT:8:LYS:HD3	2.26	0.51
22:DA:125:A:H3'	50:D2:19:ARG:HG3	1.93	0.51
22:DA:1519:G:C6	22:DA:1520:U:C2	2.99	0.51
22:DA:1827:U:H2'	22:DA:1828:G:O5'	2.10	0.51
22:DA:310:A:O2'	22:DA:311:A:P	2.67	0.51
22:DA:85:G:OP2	42:DU:28:VAL:HG12	2.11	0.51
22:DA:914:G:H5'	22:DA:915:C:OP2	2.10	0.51
24:DC:9:THR:O	24:DC:10:SER:HB3	2.10	0.51
25:DD:114:LYS:HE2	25:DD:196:ALA:CB	2.41	0.51
26:DE:108:ILE:HD13	26:DE:181:ILE:HG12	1.91	0.51
29:DH:53:GLU:O	29:DH:54:LEU:C	2.49	0.51
33:DL:135:ILE:O	33:DL:140:GLY:HA3	2.09	0.51
37:DP:39:ARG:HG3	37:DP:40:LEU:N	2.26	0.51
45:DX:54:LYS:O	45:DX:57:ARG:N	2.42	0.51
1:AA:1154:G:H2'	1:AA:1155:A:C8	2.46	0.51
1:AA:130:A:N7	17:AQ:65:ARG:HB2	2.25	0.51
1:AA:887:G:C2'	1:AA:888:G:H5'	2.40	0.51
2:AB:50:PHE:CA	2:AB:213:TYR:OH	2.58	0.51
3:AC:155:GLY:N	3:AC:164:ARG:O	2.43	0.51
10:AJ:15:HIS:CG	10:AJ:16:ARG:N	2.79	0.51
11:AK:88:GLY:H	11:AK:114:THR:HG22	1.76	0.51
16:AP:50:THR:O	16:AP:50:THR:CG2	2.57	0.51
53:B5:122:GLY:HA3	53:B5:146:VAL:CB	2.41	0.51
22:BA:1274:A:N1	22:BA:1644:C:O2'	2.29	0.51
22:BA:1415:U:O2	22:BA:1415:U:H2'	2.11	0.51
22:BA:1949:G:C2	22:BA:1958:C:O2	2.64	0.51
22:BA:2019:A:H4'	38:BQ:34:VAL:HG21	1.93	0.51
22:BA:693:A:O2'	22:BA:694:U:H5'	2.11	0.51
33:BL:91:ASP:O	33:BL:94:THR:HB	2.11	0.51
1:CA:1084:G:C5	1:CA:1085:U:C4	2.98	0.51
1:CA:1089:G:C4	1:CA:1090:U:C6	2.99	0.51
1:CA:402:G:H4'	1:CA:620:C:O2	2.11	0.51
3:CC:87:LEU:HA	3:CC:90:VAL:HG22	1.93	0.51
4:CD:173:VAL:HG13	4:CD:174:ASP:N	2.26	0.51
5:CE:19:ASN:O	5:CE:33:PHE:HA	2.10	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:CJ:17:LEU:HD23	10:CJ:18:ILE:N	2.25	0.51
16:CP:14:ARG:N	16:CP:15:PRO:HD2	2.25	0.51
22:DA:121:G:H1'	22:DA:131:A:C2	2.45	0.51
22:DA:762:U:N3	22:DA:1431:A:OP1	2.44	0.51
22:DA:1737:G:O6	22:DA:1738:G:N1	2.42	0.51
22:DA:531:C:C5	22:DA:2035:G:C2	2.98	0.51
22:DA:207:A:H2'	22:DA:207:A:N3	2.25	0.51
22:DA:2164:C:H2'	22:DA:2165:C:C5	2.45	0.51
22:DA:2645:G:H3'	22:DA:2646:C:C5'	2.38	0.51
22:DA:37:C:H2'	22:DA:38:A:O4'	2.11	0.51
22:DA:38:A:C2	22:DA:442:G:C6	2.99	0.51
22:DA:647:G:N7	22:DA:648:G:N7	2.59	0.51
22:DA:681:G:C2	22:DA:797:G:C2	2.98	0.51
30:DI:51:LYS:N	30:DI:51:LYS:HD3	2.25	0.51
33:DL:117:THR:HG22	33:DL:118:THR:N	2.25	0.51
1:AA:495:A:C2	1:AA:496:A:N6	2.79	0.51
1:AA:702:A:H3'	1:AA:703:G:C5'	2.40	0.51
1:AA:961:U:C4	1:AA:962:C:C5	2.98	0.51
4:AD:170:TRP:O	4:AD:183:LYS:HB3	2.10	0.51
5:AE:101:GLU:CB	5:AE:122:ASN:CB	2.87	0.51
20:AT:58:VAL:CG1	20:AT:72:ALA:CB	2.89	0.51
22:BA:752:A:H3'	50:B2:1:MET:SD	2.51	0.51
22:BA:2526:G:C2'	52:B4:1:MET:H1	2.23	0.51
53:B5:52:PRO:O	53:B5:53:ARG:CB	2.59	0.51
22:BA:1559:U:H4'	22:BA:1560:G:OP2	2.10	0.51
22:BA:2326:C:H1'	22:BA:2327:A:OP1	2.11	0.51
22:BA:2341:G:H2'	22:BA:2342:C:C6	2.46	0.51
22:BA:71:A:H5''	22:BA:72:U:H3'	1.93	0.51
22:BA:947:A:O2'	22:BA:984:A:C2	2.61	0.51
22:BA:2310:C:C4	27:BF:77:PHE:CZ	2.99	0.51
29:BH:100:ALA:CB	29:BH:112:LYS:HA	2.41	0.51
30:BI:62:TYR:O	30:BI:63:ALA:HB2	2.10	0.51
32:BK:116:ILE:HG13	32:BK:117:SER:N	2.26	0.51
36:BO:94:ARG:O	36:BO:96:GLY:N	2.43	0.51
40:BS:20:VAL:HA	40:BS:23:LEU:HD12	1.92	0.51
41:BT:51:PHE:O	41:BT:52:GLU:C	2.48	0.51
45:BX:43:GLU:OE2	45:BX:45:ARG:NH2	2.43	0.51
1:CA:1004:A:C6	1:CA:1005:A:C6	2.98	0.51
2:CB:102:THR:HB	2:CB:175:GLU:CG	2.41	0.51
5:CE:78:ASN:OD1	5:CE:79:GLY:N	2.44	0.51
8:CH:86:TYR:CD2	8:CH:124:GLU:HB2	2.45	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:CK:35:THR:OG1	11:CK:40:ASN:N	2.44	0.51
22:DA:1222:U:H1'	22:DA:1228:G:N2	2.26	0.51
22:DA:1567:G:C8	24:DC:83:TYR:CD1	2.98	0.51
22:DA:1734:G:H2'	22:DA:1735:A:C8	2.46	0.51
22:DA:2145:C:H5''	22:DA:2146:C:P	2.51	0.51
22:DA:2324:U:O2	22:DA:2385:C:C5	2.64	0.51
22:DA:2740:A:N6	22:DA:2764:A:C8	2.79	0.51
22:DA:635:C:O2'	22:DA:639:U:H5''	2.10	0.51
22:DA:1671:U:H1'	25:DD:134:HIS:CE1	2.46	0.51
27:DF:2:ALA:N	27:DF:94:GLU:OE2	2.43	0.51
22:DA:2531:A:H5'	28:DG:157:TYR:CE2	2.46	0.51
30:DI:54:PRO:HG2	30:DI:78:VAL:HB	1.92	0.51
31:DJ:42:ALA:O	38:DQ:64:ARG:HD3	2.10	0.51
38:DQ:86:ALA:O	38:DQ:87:SER:CB	2.59	0.51
1:AA:1040:U:H2'	1:AA:1041:G:C8	2.46	0.51
1:AA:737:C:H2'	1:AA:738:C:H6	1.75	0.51
1:AA:858:G:O2'	1:AA:859:G:C5'	2.59	0.51
2:AB:22:TYR:CD1	2:AB:22:TYR:N	2.78	0.51
5:AE:14:LYS:CE	5:AE:116:GLU:OE2	2.59	0.51
16:AP:75:ILE:HG22	16:AP:80:LYS:CE	2.40	0.51
19:AS:11:ILE:HG13	19:AS:15:LEU:HD23	1.91	0.51
20:AT:5:LYS:O	20:AT:6:SER:C	2.49	0.51
52:B4:37:GLN:HG2	52:B4:37:GLN:O	2.10	0.51
22:BA:1735:A:N3	22:BA:1735:A:H2'	2.25	0.51
22:BA:2555:U:C5	22:BA:2556:C:N1	2.79	0.51
22:BA:662:G:O3'	33:BL:16:GLY:HA2	2.11	0.51
22:BA:869:G:H2'	22:BA:870:U:O4'	2.11	0.51
29:BH:117:LEU:CD2	29:BH:121:VAL:CA	2.89	0.51
22:BA:1138:G:O2'	31:BJ:107:GLY:HA3	2.11	0.51
1:CA:121:U:H3'	1:CA:122:G:C5'	2.41	0.51
1:CA:211:G:N3	1:CA:211:G:H2'	2.25	0.51
1:CA:32:A:C2	1:CA:33:A:C4	2.98	0.51
1:CA:618:C:H5''	1:CA:619:U:H5''	1.92	0.51
1:CA:72:A:C6	1:CA:73:C:C4	2.99	0.51
1:CA:840:C:C4	1:CA:842:U:H4'	2.46	0.51
1:CA:861:G:C5	1:CA:862:C:C5	2.98	0.51
2:CB:94:HIS:CD2	2:CB:146:ASN:HB2	2.45	0.51
4:CD:11:LEU:HD23	4:CD:11:LEU:N	2.25	0.51
4:CD:168:PRO:HB2	4:CD:171:LEU:CD1	2.41	0.51
1:CA:728:A:C8	15:CO:54:ARG:NH1	2.78	0.51
21:CU:53:VAL:HG13	21:CU:54:LYS:N	2.26	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1109:C:C4	22:DA:1110:G:C6	2.99	0.51
22:DA:1413:A:C2	22:DA:1590:A:C2	2.98	0.51
22:DA:1601:G:C5	22:DA:1602:U:C4	2.99	0.51
22:DA:1850:G:O6	22:DA:1892:C:N3	2.44	0.51
22:DA:677:A:O2'	22:DA:2071:A:H5'	2.11	0.51
26:DE:23:PHE:CG	26:DE:111:GLU:HG3	2.46	0.51
29:DH:5:LEU:HA	29:DH:36:ALA:HA	1.93	0.51
30:DI:28:LEU:C	30:DI:28:LEU:HD12	2.31	0.51
22:DA:1651:G:H4'	35:DN:39:PRO:HG2	1.93	0.51
35:DN:84:GLY:N	35:DN:85:PRO:CD	2.73	0.51
1:AA:760:G:N7	1:AA:761:G:N7	2.58	0.51
1:AA:575:G:C6	1:AA:821:G:N7	2.78	0.51
2:AB:79:ALA:O	2:AB:214:LEU:CD2	2.59	0.51
2:AB:68:LEU:HD22	2:AB:70:VAL:HG23	1.93	0.51
4:AD:26:ARG:HD2	4:AD:31:LYS:CD	2.41	0.51
6:AF:18:VAL:N	6:AF:19:PRO:HD2	2.26	0.51
8:AH:18:GLN:O	8:AH:21:ASN:N	2.44	0.51
9:AI:40:GLY:O	9:AI:41:ARG:CB	2.59	0.51
9:AI:86:ALA:C	9:AI:88:MET:N	2.63	0.51
19:AS:14:HIS:O	19:AS:18:LYS:HB2	2.11	0.51
22:BA:1411:U:H2'	22:BA:1412:U:O4'	2.10	0.51
22:BA:2291:U:H2'	22:BA:2292:U:C5	2.45	0.51
22:BA:2507:C:H5''	22:BA:2573:C:N4	2.26	0.51
22:BA:2669:G:O2'	22:BA:2670:A:H5'	2.11	0.51
22:BA:404:A:H1'	22:BA:405:U:OP2	2.10	0.51
22:BA:480:A:C2'	22:BA:481:G:OP1	2.59	0.51
22:BA:1824:G:N3	24:BC:252:THR:HG21	2.26	0.51
27:BF:122:PHE:HB3	27:BF:163:ASP:OD2	2.09	0.51
29:BH:83:LYS:HA	29:BH:148:ALA:HA	1.93	0.51
38:BQ:76:TYR:CZ	38:BQ:80:ILE:HG13	2.46	0.51
1:CA:1053:G:N7	1:CA:1200:C:H5'	2.26	0.51
1:CA:1105:A:C2	1:CA:1106:G:C8	2.99	0.51
1:CA:913:A:H4'	1:CA:914:A:OP1	2.11	0.51
2:CB:85:LEU:CG	2:CB:85:LEU:O	2.59	0.51
6:CF:22:ILE:O	6:CF:26:THR:OG1	2.27	0.51
5:CE:83:HIS:NE2	8:CH:96:MET:HE3	2.26	0.51
22:DA:1304:A:C6	22:DA:1305:C:C4	2.99	0.51
22:DA:1876:A:C8	22:DA:1877:A:N7	2.79	0.51
22:DA:2843:G:N2	22:DA:2875:C:N3	2.59	0.51
22:DA:532:A:N3	22:DA:532:A:H2'	2.26	0.51
22:DA:2621:G:OP1	25:DD:124:ARG:NH2	2.44	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:DF:44:ILE:CG2	27:DF:79:ILE:HG22	2.41	0.51
32:DK:47:ILE:HB	32:DK:48:PRO:HD2	1.92	0.51
35:DN:51:LEU:N	35:DN:51:LEU:HD23	2.25	0.51
36:DO:7:ARG:CD	36:DO:97:PHE:CE1	2.93	0.51
22:DA:17:G:H4'	38:DQ:25:TYR:CE1	2.46	0.51
38:DQ:61:TRP:HB3	38:DQ:92:ARG:O	2.11	0.51
1:AA:71:A:H3'	1:AA:71:A:OP2	2.10	0.51
1:AA:862:C:C2'	1:AA:863:U:H5'	2.40	0.51
1:AA:903:G:H2'	1:AA:904:U:C6	2.45	0.51
1:AA:949:A:C5	1:AA:950:U:C5	2.99	0.51
2:AB:64:LYS:HD3	2:AB:64:LYS:C	2.31	0.51
3:AC:11:ARG:O	3:AC:12:LEU:C	2.48	0.51
1:AA:1093:A:OP2	7:AG:4:ARG:NH2	2.44	0.51
7:AG:99:LEU:O	7:AG:100:ALA:C	2.49	0.51
8:AH:89:LYS:HG3	8:AH:90:ASP:N	2.26	0.51
14:AN:31:ILE:CG2	14:AN:31:ILE:O	2.58	0.51
14:AN:61:ARG:O	14:AN:62:ASN:CB	2.58	0.51
22:BA:1088:A:H5''	22:BA:1088:A:N3	2.25	0.51
22:BA:1495:A:C6	22:BA:1496:A:C6	2.99	0.51
22:BA:1651:G:O6	57:BA:3798:HOH:O	2.20	0.51
24:BC:195:VAL:CG1	24:BC:196:GLY:N	2.73	0.51
22:BA:636:G:C6	33:BL:111:ILE:HD11	2.45	0.51
36:BO:2:ASP:OD1	36:BO:3:LYS:N	2.44	0.51
36:BO:88:LYS:HA	36:BO:115:LEU:HD12	1.93	0.51
38:BQ:88:VAL:HG13	39:BR:49:ILE:HD11	1.93	0.51
43:BV:72:VAL:HG12	43:BV:93:ARG:HA	1.93	0.51
1:CA:115:G:C2	1:CA:289:G:N7	2.78	0.51
1:CA:1463:U:H2'	1:CA:1464:U:C6	2.46	0.51
1:CA:1505:G:H4'	1:CA:1506:U:H5''	1.93	0.51
1:CA:332:G:OP2	20:CT:5:LYS:HB3	2.11	0.51
1:CA:4:U:H2'	1:CA:4:U:O2	2.10	0.51
1:CA:747:A:N6	1:CA:748:G:C6	2.79	0.51
1:CA:756:C:O2'	1:CA:757:U:H5'	2.11	0.51
11:CK:31:ILE:HB	11:CK:46:THR:HG22	1.93	0.51
16:CP:75:ILE:HA	16:CP:78:VAL:HG12	1.92	0.51
21:CU:44:GLU:OE1	21:CU:45:ARG:NH1	2.44	0.51
22:DA:1257:C:N4	22:DA:1258:U:O4	2.43	0.51
22:DA:1343:G:C5	22:DA:1344:U:O4	2.64	0.51
22:DA:1351:C:H2'	22:DA:1352:U:C1'	2.41	0.51
22:DA:1866:A:N3	22:DA:1876:A:C6	2.79	0.51
22:DA:2186:G:C5	22:DA:2187:U:C5	2.99	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2326:C:C1'	22:DA:2327:A:OP1	2.59	0.51
22:DA:622:G:H2'	22:DA:623:C:C6	2.46	0.51
22:DA:675:A:H4'	26:DE:62:GLN:OE1	2.11	0.51
22:DA:836:G:C5	22:DA:837:C:C4	2.99	0.51
32:DK:41:ILE:HD11	32:DK:86:LEU:CD2	2.40	0.51
22:DA:559:G:N3	38:DQ:56:GLN:NE2	2.59	0.51
43:DV:80:HIS:CE1	43:DV:83:LYS:HB2	2.46	0.51
1:AA:1535:C:C6	1:AA:1535:C:OP2	2.64	0.50
1:AA:947:G:C5	1:AA:948:C:C4	2.99	0.50
10:AJ:30:LYS:HA	10:AJ:34:ALA:HA	1.92	0.50
22:BA:1073:A:OP1	22:BA:1073:A:C8	2.64	0.50
22:BA:1098:A:N7	22:BA:1099:G:O6	2.44	0.50
22:BA:1439:A:C8	22:BA:1440:U:C6	2.98	0.50
22:BA:1606:C:HO2'	22:BA:1607:C:P	2.34	0.50
22:BA:1870:C:H4'	22:BA:1871:A:OP2	2.10	0.50
22:BA:1924:C:OP2	22:BA:1924:C:H3'	2.11	0.50
22:BA:2086:U:H2'	22:BA:2087:G:C8	2.46	0.50
22:BA:543:G:C2	22:BA:544:C:H1'	2.47	0.50
23:BB:35:C:H2'	23:BB:36:C:H5'	1.93	0.50
23:BB:78:A:H2'	23:BB:79:G:O4'	2.10	0.50
24:BC:72:ASP:HA	24:BC:118:SER:O	2.11	0.50
25:BD:36:GLN:OE1	25:BD:67:HIS:HE1	1.94	0.50
30:BI:116:ASP:O	30:BI:117:MET:HB2	2.11	0.50
46:BY:42:LEU:O	46:BY:45:GLN:O	2.29	0.50
1:CA:653:U:C2	8:CH:56:LYS:HG2	2.46	0.50
2:CB:135:LEU:O	2:CB:139:ARG:HG3	2.11	0.50
4:CD:148:LYS:CD	4:CD:148:LYS:H	2.24	0.50
7:CG:46:ALA:HB2	7:CG:117:ALA:HA	1.92	0.50
8:CH:20:ALA:O	8:CH:22:LYS:N	2.44	0.50
17:CQ:61:ILE:HG23	17:CQ:73:TRP:CE3	2.45	0.50
22:DA:250:G:OP2	51:D3:13:ARG:NH1	2.44	0.50
22:DA:1076:C:H2'	22:DA:1077:A:O4'	2.12	0.50
22:DA:1317:G:C6	22:DA:1318:U:N3	2.79	0.50
22:DA:142:A:C5	22:DA:143:C:N4	2.79	0.50
22:DA:1607:C:O2	22:DA:1621:U:C5	2.64	0.50
22:DA:1616:A:H2	22:DA:1647:U:C5	2.28	0.50
22:DA:410:G:H2'	22:DA:2407:A:C8	2.46	0.50
22:DA:658:U:N3	22:DA:659:G:N7	2.59	0.50
30:DI:6:GLN:O	30:DI:7:ALA:HB3	2.10	0.50
37:DP:51:ARG:HG3	37:DP:51:ARG:O	2.11	0.50
44:DW:36:ILE:HG23	44:DW:58:THR:CG2	2.40	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:DW:45:PHE:CD2	44:DW:80:ILE:CD1	2.94	0.50
1:AA:1037:C:H2'	1:AA:1038:C:C6	2.46	0.50
1:AA:1397:C:O2'	1:AA:1398:A:OP1	2.27	0.50
1:AA:1450:U:H2'	1:AA:1452:C:C5	2.46	0.50
1:AA:764:C:H2'	1:AA:765:G:O4'	2.12	0.50
2:AB:21:ARG:NE	2:AB:21:ARG:HA	2.26	0.50
2:AB:59:LYS:O	2:AB:63:ARG:HG3	2.12	0.50
16:AP:10:GLY:O	16:AP:11:ALA:HB2	2.11	0.50
21:AU:18:ARG:HD2	21:AU:18:ARG:N	2.26	0.50
21:AU:35:ARG:O	21:AU:36:GLU:C	2.48	0.50
53:B5:68:GLY:O	53:B5:70:GLY:N	2.44	0.50
22:BA:1586:A:C8	22:BA:1587:G:C8	2.98	0.50
22:BA:1845:G:C6	22:BA:1896:G:C6	2.99	0.50
22:BA:1916:A:OP2	22:BA:1916:A:H3'	2.11	0.50
22:BA:1917:U:H2'	22:BA:1917:U:O2	2.10	0.50
22:BA:2217:G:O2'	22:BA:2218:G:H5'	2.11	0.50
34:BM:28:PHE:HB2	34:BM:104:GLU:OE2	2.11	0.50
37:BP:114:LEU:O	37:BP:115:ASN:HB3	2.11	0.50
39:BR:49:ILE:O	39:BR:51:VAL:O	2.30	0.50
1:CA:1010:U:C2	1:CA:1020:G:C2	3.00	0.50
1:CA:518:C:H2'	1:CA:530:G:C8	2.46	0.50
1:CA:667:G:C2	1:CA:740:U:O2	2.64	0.50
2:CB:56:GLU:HG2	2:CB:198:PHE:CZ	2.47	0.50
2:CB:26:LYS:HB2	2:CB:193:PRO:HD2	1.94	0.50
7:CG:51:ALA:CB	7:CG:58:GLU:HA	2.41	0.50
13:CM:4:ILE:HA	13:CM:57:ARG:CZ	2.41	0.50
17:CQ:45:HIS:O	17:CQ:71:LYS:HA	2.11	0.50
22:DA:1314:C:OP1	22:DA:1332:G:OP1	2.29	0.50
22:DA:1596:A:N6	22:DA:1597:A:C6	2.80	0.50
22:DA:158:U:H2'	22:DA:159:G:H5'	1.93	0.50
22:DA:1605:C:H4'	22:DA:1610:A:C6	2.46	0.50
22:DA:1736:U:H2'	22:DA:1737:G:O4'	2.11	0.50
22:DA:1788:C:H2'	22:DA:1789:A:O4'	2.11	0.50
22:DA:2297:A:N1	22:DA:2321:U:H5	2.09	0.50
22:DA:2824:C:C4	22:DA:2825:G:C5	3.00	0.50
22:DA:590:A:C5	22:DA:591:U:C5	2.99	0.50
22:DA:66:C:C4	22:DA:67:U:C5	2.99	0.50
22:DA:933:A:C5'	22:DA:934:U:OP2	2.59	0.50
24:DC:51:THR:CG2	24:DC:54:ILE:HD11	2.41	0.50
30:DI:80:LEU:HD23	30:DI:84:ALA:CB	2.41	0.50
35:DN:106:ASP:O	35:DN:107:ASN:C	2.49	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DT:69:ARG:HB2	41:DT:74:ILE:HG22	1.92	0.50
45:DX:52:SER:OG	45:DX:55:GLY:N	2.40	0.50
1:AA:1069:C:H4'	1:AA:1192:C:O2	2.11	0.50
1:AA:1236:A:H4'	1:AA:1304:G:H4'	1.92	0.50
1:AA:118:U:O4	1:AA:288:A:H2'	2.12	0.50
1:AA:405:U:OP1	1:AA:406:G:O2'	2.21	0.50
1:AA:625:U:H5''	16:AP:16:PHE:CD1	2.47	0.50
12:AL:22:PRO:C	12:AL:24:LEU:H	2.14	0.50
12:AL:56:ARG:CZ	12:AL:62:GLU:HG3	2.41	0.50
12:AL:88:LYS:HG3	12:AL:88:LYS:O	2.11	0.50
17:AQ:52:GLU:N	17:AQ:52:GLU:CD	2.64	0.50
49:B1:17:THR:HG21	49:B1:43:VAL:HG13	1.94	0.50
53:B5:40:GLU:O	53:B5:42:VAL:N	2.42	0.50
53:B5:50:ILE:HG22	53:B5:51:ASP:N	2.26	0.50
22:BA:1056:G:H5''	22:BA:1057:A:O4'	2.11	0.50
22:BA:1068:G:H2'	22:BA:1069:A:H5'	1.94	0.50
22:BA:1613:G:O2'	50:B2:3:ARG:HD3	2.11	0.50
22:BA:2196:C:O2'	22:BA:2197:U:H5'	2.10	0.50
22:BA:2243:U:P	57:BA:3740:HOH:O	2.70	0.50
22:BA:2649:C:H2'	22:BA:2650:U:C6	2.45	0.50
22:BA:492:A:H2'	22:BA:493:G:O4'	2.10	0.50
26:BE:145:ASP:CB	26:BE:184:ASP:OD2	2.60	0.50
27:BF:14:LYS:O	27:BF:18:THR:HG23	2.12	0.50
32:BK:118:LEU:O	32:BK:119:ALA:HB3	2.11	0.50
32:BK:4:GLU:O	32:BK:5:GLN:CB	2.57	0.50
35:BN:24:MET:HE3	35:BN:44:LEU:HD22	1.94	0.50
42:BU:99:ASN:OD1	42:BU:99:ASN:C	2.50	0.50
1:CA:134:G:H2'	1:CA:135:C:O4'	2.11	0.50
1:CA:412:A:HO2'	1:CA:413:G:P	2.33	0.50
1:CA:580:C:H2'	1:CA:581:G:O4'	2.12	0.50
4:CD:46:PRO:O	4:CD:47:ARG:C	2.49	0.50
7:CG:88:PRO:HD2	7:CG:152:ALA:HA	1.92	0.50
11:CK:72:ASP:OD1	11:CK:73:ALA:N	2.44	0.50
18:CR:58:ALA:O	18:CR:61:ARG:N	2.45	0.50
49:D1:21:TYR:CE1	49:D1:38:LYS:HD2	2.46	0.50
22:DA:1363:C:H2'	22:DA:1364:G:C8	2.46	0.50
22:DA:1453:A:C2	35:DN:77:ALA:CB	2.95	0.50
22:DA:1754:A:N6	22:DA:1755:A:C6	2.79	0.50
22:DA:2091:C:H1'	45:DX:34:HIS:CD2	2.46	0.50
22:DA:2733:A:C2	22:DA:2734:A:C4	2.98	0.50
22:DA:833:A:H2'	22:DA:834:G:C8	2.46	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:DI:57:VAL:CG2	30:DI:69:PHE:HB2	2.42	0.50
30:DI:53:LEU:HG	30:DI:82:LYS:HE2	1.92	0.50
32:DK:6:THR:O	32:DK:8:LEU:HD12	2.11	0.50
39:DR:14:VAL:CG2	39:DR:98:ILE:HG13	2.42	0.50
29:DH:32:PRO:HB3	45:DX:39:TRP:HB3	1.93	0.50
5:AE:15:LEU:HB3	5:AE:37:THR:CG2	2.42	0.50
6:AF:91:ARG:CG	6:AF:92:THR:N	2.75	0.50
11:AK:128:ARG:CG	11:AK:128:ARG:HH11	2.24	0.50
11:AK:89:PRO:HG3	21:AU:29:LEU:HD21	1.93	0.50
18:AR:63:ARG:HB3	18:AR:70:TYR:CZ	2.46	0.50
20:AT:25:ARG:O	20:AT:29:ARG:HG2	2.11	0.50
22:BA:1356:G:C6	22:BA:1357:C:C4	3.00	0.50
22:BA:2131:U:OP2	22:BA:2132:U:C6	2.64	0.50
22:BA:2449:U:H4'	22:BA:2450:A:OP1	2.11	0.50
22:BA:321:U:C1'	26:BE:159:LEU:HD12	2.41	0.50
24:BC:107:PRO:HB3	24:BC:142:HIS:CE1	2.47	0.50
24:BC:71:LYS:HB3	24:BC:96:TYR:CE2	2.46	0.50
29:BH:80:ILE:O	29:BH:147:VAL:N	2.44	0.50
29:BH:66:ASN:OD1	29:BH:138:VAL:HG21	2.11	0.50
30:BI:117:MET:SD	30:BI:129:ILE:HD11	2.51	0.50
36:BO:36:TYR:CD2	36:BO:36:TYR:N	2.79	0.50
1:CA:1007:U:H2'	1:CA:1008:U:H5''	1.92	0.50
1:CA:1072:G:C5	1:CA:1073:U:C4	3.00	0.50
1:CA:1096:C:H2'	1:CA:1097:C:H6	1.76	0.50
1:CA:1098:C:H2'	1:CA:1099:G:O4'	2.12	0.50
1:CA:1167:A:C8	1:CA:1169:A:C5	2.98	0.50
1:CA:218:U:H2'	1:CA:219:U:O4'	2.12	0.50
1:CA:369:G:OP2	1:CA:388:G:N2	2.43	0.50
1:CA:945:G:N3	1:CA:945:G:H2'	2.25	0.50
2:CB:139:ARG:HD2	2:CB:139:ARG:C	2.32	0.50
3:CC:145:GLY:O	3:CC:146:ALA:O	2.29	0.50
11:CK:51:GLY:O	11:CK:52:PHE:O	2.28	0.50
17:CQ:25:ILE:O	17:CQ:41:THR:HA	2.11	0.50
22:DA:1203:U:OP2	22:DA:1204:A:H2'	2.11	0.50
22:DA:1439:A:N7	22:DA:1552:A:C2	2.79	0.50
22:DA:1529:G:O6	22:DA:1543:G:N2	2.44	0.50
22:DA:1791:A:H2'	22:DA:1792:G:H5'	1.94	0.50
22:DA:1881:C:H2'	22:DA:1882:U:O4'	2.11	0.50
22:DA:1838:C:C5	22:DA:1899:A:C5	3.00	0.50
22:DA:2013:A:N6	22:DA:2014:A:C6	2.79	0.50
22:DA:204:A:O4'	22:DA:206:U:C6	2.64	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2195:U:O2'	22:DA:2196:C:H5'	2.12	0.50
22:DA:498:G:C4	22:DA:499:U:C5	2.99	0.50
26:DE:27:LEU:HG	26:DE:104:ALA:HB2	1.94	0.50
29:DH:5:LEU:HD11	29:DH:13:GLY:HA2	1.93	0.50
29:DH:44:ILE:O	29:DH:48:GLU:HB2	2.12	0.50
35:DN:38:LEU:HB3	35:DN:39:PRO:HD3	1.92	0.50
1:AA:1338:G:H2'	1:AA:1339:A:C8	2.47	0.50
1:AA:197:A:N3	1:AA:198:G:H1'	2.26	0.50
1:AA:662:U:H2'	1:AA:663:A:C8	2.46	0.50
1:AA:737:C:H2'	1:AA:738:C:C6	2.46	0.50
2:AB:119:THR:O	2:AB:120:GLN:CB	2.58	0.50
2:AB:154:MET:O	2:AB:155:GLY:C	2.49	0.50
7:AG:71:PRO:HD2	7:AG:96:ARG:O	2.12	0.50
33:BL:63:LYS:HA	51:B3:13:ARG:HG3	1.93	0.50
53:B5:83:LYS:HB3	53:B5:87:ALA:CB	2.41	0.50
22:BA:1091:G:H2'	22:BA:1092:C:C5	2.45	0.50
22:BA:136:G:C2	22:BA:144:A:C6	2.99	0.50
22:BA:585:G:H5''	22:BA:586:A:P	2.52	0.50
22:BA:876:C:H2'	22:BA:877:A:O4'	2.10	0.50
24:BC:182:ARG:NH2	24:BC:266:PHE:HB3	2.26	0.50
26:BE:149:ILE:HD12	26:BE:150:THR:O	2.10	0.50
27:BF:52:ASN:HB3	27:BF:147:ASP:OD1	2.11	0.50
27:BF:41:GLY:HA2	27:BF:85:ILE:HG13	1.94	0.50
31:BJ:84:ILE:HG23	31:BJ:84:ILE:O	2.11	0.50
38:BQ:76:TYR:CD2	38:BQ:76:TYR:C	2.85	0.50
42:BU:18:ASP:O	42:BU:20:GLY:N	2.45	0.50
43:BV:61:LEU:HD13	43:BV:61:LEU:N	2.26	0.50
1:CA:1068:G:C6	1:CA:1069:C:C4	3.00	0.50
1:CA:546:A:P	4:CD:69:GLU:HB3	2.51	0.50
1:CA:846:G:OP2	18:CR:48:ARG:NH2	2.44	0.50
1:CA:81:A:C2	1:CA:89:U:C2	2.99	0.50
3:CC:69:HIS:HA	3:CC:104:ALA:HB3	1.93	0.50
12:CL:38:TYR:N	12:CL:52:VAL:O	2.44	0.50
20:CT:43:ASP:HB3	20:CT:46:ALA:HB3	1.92	0.50
22:DA:1176:U:H2'	22:DA:1177:G:C8	2.47	0.50
22:DA:1196:C:H1'	22:DA:1226:A:C4	2.47	0.50
22:DA:1262:A:N1	22:DA:1263:U:C2	2.79	0.50
22:DA:1364:G:C4	22:DA:1368:G:C2	2.99	0.50
22:DA:1831:G:C6	22:DA:1832:C:C4	3.00	0.50
22:DA:2201:G:C6	22:DA:2202:U:C4	3.00	0.50
22:DA:2513:A:C5	22:DA:2514:U:C4	2.99	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2718:G:C2	22:DA:2719:G:H1'	2.47	0.50
22:DA:2720:U:C5	22:DA:2872:A:N1	2.79	0.50
22:DA:404:A:H1'	22:DA:405:U:OP2	2.12	0.50
22:DA:329:G:O4'	22:DA:477:A:H1'	2.12	0.50
22:DA:1806:C:O2	24:DC:44:ASN:ND2	2.44	0.50
30:DI:28:LEU:HD13	30:DI:38:PHE:CD2	2.46	0.50
36:DO:33:ARG:O	36:DO:34:HIS:CG	2.64	0.50
1:AA:1161:C:H2'	1:AA:1162:C:H6	1.76	0.50
1:AA:642:A:C5	8:AH:107:SER:HA	2.47	0.50
1:AA:90:C:O2'	1:AA:91:U:P	2.70	0.50
2:AB:140:GLU:O	2:AB:144:LEU:HG	2.11	0.50
14:AN:10:GLU:OE2	14:AN:61:ARG:HB3	2.11	0.50
1:AA:130:A:C8	17:AQ:65:ARG:HB2	2.46	0.50
22:BA:1071:G:O2'	22:BA:1072:C:O4'	2.30	0.50
22:BA:1168:G:C2	22:BA:1182:G:C4	2.99	0.50
22:BA:1389:G:H2'	22:BA:1390:U:O4'	2.12	0.50
22:BA:1794:A:C2'	22:BA:1795:C:O5'	2.59	0.50
22:BA:1883:U:O4	22:BA:1884:G:C6	2.65	0.50
22:BA:1786:A:C4	22:BA:1938:A:C6	3.00	0.50
22:BA:1963:U:H6	22:BA:1963:U:O5'	1.95	0.50
22:BA:2075:U:C4	22:BA:2238:G:C6	2.99	0.50
22:BA:2512:C:H2'	22:BA:2513:A:O4'	2.11	0.50
22:BA:276:U:O2	22:BA:276:U:H2'	2.11	0.50
22:BA:2812:G:H2'	22:BA:2813:A:O4'	2.11	0.50
22:BA:586:A:N1	22:BA:809:G:O2'	2.35	0.50
22:BA:675:A:OP1	26:BE:58:LYS:CE	2.60	0.50
27:BF:158:THR:CG2	27:BF:160:ALA:H	2.25	0.50
36:BO:79:ALA:HB2	36:BO:110:ALA:HA	1.93	0.50
38:BQ:21:ALA:HA	38:BQ:24:TYR:CE1	2.46	0.50
1:CA:1474:U:H2'	1:CA:1475:G:H5''	1.93	0.50
1:CA:1490:U:C2'	1:CA:1491:G:O4'	2.60	0.50
1:CA:247:G:C6	1:CA:278:G:N1	2.78	0.50
1:CA:298:A:H2'	1:CA:299:G:O4'	2.11	0.50
12:CL:65:SER:OG	12:CL:97:THR:HG23	2.12	0.50
13:CM:79:ARG:HD2	19:CS:65:GLU:HG2	1.93	0.50
15:CO:42:HIS:O	15:CO:45:GLU:O	2.30	0.50
22:DA:2083:G:N7	22:DA:2084:C:C5	2.80	0.50
22:DA:2122:U:H2'	22:DA:2123:G:O4'	2.12	0.50
22:DA:219:A:N6	22:DA:220:G:C6	2.80	0.50
22:DA:2250:G:C2	34:DM:82:MET:HB2	2.47	0.50
22:DA:24:G:C5	22:DA:25:U:C5	2.99	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:301:G:N3	22:DA:302:C:C2	2.80	0.50
22:DA:547:A:H3'	22:DA:548:G:H5'	1.94	0.50
22:DA:54:G:N1	22:DA:55:G:N7	2.60	0.50
22:DA:629:G:O6	22:DA:630:G:C6	2.65	0.50
26:DE:75:SER:O	26:DE:78:TRP:HB2	2.12	0.50
27:DF:128:TYR:CG	27:DF:170:LEU:CD1	2.95	0.50
32:DK:71:ARG:HB3	32:DK:72:PRO:HD2	1.93	0.50
37:DP:89:ARG:O	37:DP:112:GLU:HA	2.12	0.50
37:DP:75:GLN:O	37:DP:78:SER:HB3	2.11	0.50
1:AA:149:A:C2	1:AA:150:U:C2	2.99	0.50
1:AA:484:G:C5	1:AA:486:U:H1'	2.47	0.50
1:AA:596:A:N6	1:AA:645:G:C6	2.80	0.50
1:AA:738:C:H2'	1:AA:739:C:H6	1.77	0.50
2:AB:151:ILE:O	2:AB:152:LYS:C	2.50	0.50
7:AG:42:ILE:HG21	7:AG:116:MET:CG	2.42	0.50
1:AA:1123:U:H4'	10:AJ:39:PRO:HD2	1.93	0.50
13:AM:11:ASP:OD1	13:AM:45:ILE:HB	2.11	0.50
22:BA:1070:A:H2'	22:BA:1097:U:OP1	2.12	0.50
22:BA:1714:U:H2'	22:BA:1714:U:O2	2.11	0.50
22:BA:1800:C:H3'	24:BC:146:MET:HE1	1.94	0.50
22:BA:2018:G:O2'	22:BA:2019:A:H5'	2.11	0.50
22:BA:2273:A:H2'	22:BA:2274:A:C8	2.46	0.50
22:BA:2297:A:N1	22:BA:2321:U:H5	2.07	0.50
22:BA:769:U:C2	22:BA:770:G:C8	3.00	0.50
30:BI:101:ILE:O	30:BI:102:SER:HB2	2.11	0.50
31:BJ:114:LEU:O	31:BJ:114:LEU:HD12	2.12	0.50
31:BJ:30:THR:HG22	31:BJ:31:GLU:N	2.26	0.50
36:BO:117:PHE:CD1	36:BO:117:PHE:O	2.65	0.50
1:CA:206:C:C2'	1:CA:207:C:H5'	2.40	0.50
1:CA:786:G:H2'	1:CA:786:G:N3	2.26	0.50
1:CA:821:G:H2'	1:CA:822:U:H6	1.76	0.50
3:CC:40:ARG:HG2	3:CC:55:ILE:HD11	1.94	0.50
9:CI:12:ARG:CD	9:CI:107:ASP:HB3	2.42	0.50
10:CJ:22:THR:HA	10:CJ:25:ILE:HG22	1.93	0.50
11:CK:23:ILE:HG21	11:CK:96:THR:HG21	1.94	0.50
14:CN:18:ASP:OD2	14:CN:18:ASP:N	2.45	0.50
49:D1:5:ILE:HG22	49:D1:28:ARG:NH1	2.27	0.50
50:D2:43:THR:O	50:D2:44:VAL:HB	2.11	0.50
22:DA:1524:G:H2'	22:DA:1524:G:N3	2.26	0.50
22:DA:2583:G:H2'	22:DA:2584:U:O4'	2.11	0.50
22:DA:583:G:C5	22:DA:584:C:C4	3.00	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:915:C:C4	22:DA:916:G:C5	3.00	0.50
24:DC:230:HIS:ND1	24:DC:231:PRO:HD2	2.27	0.50
30:DI:77:ALA:HA	30:DI:80:LEU:HD12	1.93	0.50
32:DK:118:LEU:O	32:DK:119:ALA:HB3	2.12	0.50
33:DL:68:SER:O	33:DL:69:ARG:HB2	2.12	0.50
41:DT:3:ARG:CZ	41:DT:5:GLU:OE1	2.60	0.50
22:DA:396:G:H5''	45:DX:13:VAL:HG21	1.93	0.50
45:DX:17:ASN:HB2	45:DX:25:THR:HB	1.94	0.50
1:AA:1060:U:H4'	10:AJ:53:ILE:HG23	1.94	0.50
1:AA:988:G:C6	1:AA:989:U:C4	3.00	0.50
8:AH:51:VAL:CG2	8:AH:51:VAL:O	2.59	0.50
9:AI:57:MET:C	9:AI:59:GLU:H	2.15	0.50
17:AQ:16:LYS:O	17:AQ:17:MET:HE3	2.11	0.50
20:AT:56:PRO:O	20:AT:60:ARG:HB2	2.12	0.50
22:BA:1452:G:H2'	22:BA:1457:U:O4	2.12	0.50
22:BA:1717:A:H2'	22:BA:1718:G:O4'	2.12	0.50
22:BA:1832:C:N4	22:BA:1833:C:C5	2.80	0.50
22:BA:2024:G:OP2	22:BA:2034:U:H4'	2.11	0.50
22:BA:2064:C:H2'	22:BA:2065:C:C6	2.47	0.50
22:BA:2414:G:C2'	22:BA:2415:G:H5'	2.42	0.50
22:BA:274:C:C4	22:BA:275:C:C4	3.00	0.50
24:BC:141:VAL:CG1	24:BC:190:ALA:HB1	2.42	0.50
22:BA:1829:A:O2'	24:BC:15:HIS:CD2	2.65	0.50
25:BD:177:VAL:CG2	25:BD:177:VAL:O	2.60	0.50
29:BH:14:SER:HG	29:BH:17:ASP:CG	2.13	0.50
43:BV:1:MET:SD	43:BV:1:MET:C	2.91	0.50
1:CA:1197:A:H2'	1:CA:1198:G:H5'	1.92	0.50
1:CA:1364:U:O2	1:CA:1364:U:C2'	2.60	0.50
1:CA:32:A:C2	1:CA:33:A:C6	2.99	0.50
3:CC:64:ILE:HG12	3:CC:66:VAL:HG23	1.94	0.50
1:CA:1376:U:O4	7:CG:10:ARG:NH1	2.45	0.50
19:CS:40:ILE:HA	19:CS:44:MET:SD	2.52	0.50
20:CT:68:HIS:C	20:CT:69:LYS:HG3	2.32	0.50
20:CT:74:ARG:O	20:CT:78:ASN:ND2	2.44	0.50
48:D0:54:VAL:O	48:D0:55:ILE:HB	2.12	0.50
22:DA:1257:C:C4	22:DA:1258:U:C4	2.99	0.50
22:DA:1288:G:C5	22:DA:1327:A:C2	3.00	0.50
22:DA:1378:A:C4'	22:DA:1379:U:OP1	2.59	0.50
22:DA:1662:U:O2	22:DA:2687:U:H5''	2.12	0.50
22:DA:945:A:C5	22:DA:2448:A:C2	2.99	0.50
22:DA:247:G:N7	22:DA:249:C:C2	2.80	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:289:G:H2'	22:DA:290:U:O4'	2.12	0.50
22:DA:36:G:N1	22:DA:445:C:C4	2.79	0.50
22:DA:694:U:C3'	22:DA:695:G:C5'	2.89	0.50
33:DL:78:ARG:HB3	33:DL:113:ALA:CB	2.42	0.50
25:DD:15:PHE:CE2	37:DP:78:SER:HA	2.47	0.50
38:DQ:98:ILE:HG22	38:DQ:106:PHE:HB2	1.94	0.50
39:DR:68:ARG:HB3	39:DR:90:ARG:HG2	1.93	0.50
1:AA:1399:C:C4	1:AA:1502:A:N1	2.80	0.50
1:AA:233:C:H2'	1:AA:234:C:H6	1.77	0.50
1:AA:374:A:N1	1:AA:390:U:O2'	2.43	0.50
11:AK:16:VAL:O	11:AK:17:SER:OG	2.25	0.50
13:AM:11:ASP:O	13:AM:12:HIS:HB2	2.11	0.50
17:AQ:16:LYS:CG	17:AQ:16:LYS:O	2.59	0.50
21:AU:20:LYS:N	21:AU:20:LYS:HE2	2.27	0.50
22:BA:586:A:C2	22:BA:1254:A:C2	3.00	0.50
22:BA:2243:U:H2'	22:BA:2244:U:C6	2.47	0.50
22:BA:437:U:H2'	22:BA:438:G:C8	2.46	0.50
27:BF:21:ASN:O	27:BF:21:ASN:CG	2.50	0.50
27:BF:8:TYR:HA	27:BF:12:VAL:CG2	2.41	0.50
29:BH:43:ASN:O	29:BH:46:PHE:HB3	2.12	0.50
30:BI:105:GLN:O	30:BI:106:LEU:HB2	2.12	0.50
41:BT:1:MET:O	41:BT:2:ILE:CG1	2.60	0.50
42:BU:20:GLY:O	42:BU:21:LYS:O	2.29	0.50
1:CA:1072:G:OP1	5:CE:62:LYS:NZ	2.44	0.50
1:CA:1089:G:C5	1:CA:1090:U:C5	3.00	0.50
1:CA:1279:G:OP2	10:CJ:11:LYS:NZ	2.42	0.50
1:CA:1347:G:O2'	1:CA:1348:U:P	2.70	0.50
1:CA:147:G:N2	1:CA:148:G:C6	2.80	0.50
1:CA:380:G:N2	1:CA:383:A:OP2	2.37	0.50
1:CA:963:G:C2'	1:CA:964:A:H5'	2.42	0.50
11:CK:110:ILE:HG22	21:CU:17:ARG:NH1	2.27	0.50
12:CL:3:THR:CB	12:CL:6:GLN:HG3	2.42	0.50
17:CQ:69:LYS:C	17:CQ:70:THR:OG1	2.49	0.50
20:CT:60:ARG:O	20:CT:64:LYS:HB2	2.12	0.50
22:DA:1026:G:H1'	22:DA:1134:A:C2	2.46	0.50
22:DA:1352:U:C5	22:DA:1377:G:C5	2.99	0.50
22:DA:1627:G:N2	22:DA:1628:G:C5	2.80	0.50
22:DA:1731:G:C6	22:DA:1733:G:C5	3.00	0.50
22:DA:1754:A:N6	22:DA:1755:A:N6	2.60	0.50
22:DA:1998:A:OP2	25:DD:141:ARG:NH2	2.45	0.50
22:DA:2223:G:H2'	22:DA:2224:G:H5'	1.94	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:270:A:C2	22:DA:369:U:H4'	2.46	0.50
22:DA:419:U:N3	22:DA:420:C:C5	2.80	0.50
22:DA:533:G:H5'	38:DQ:24:TYR:CE2	2.47	0.50
22:DA:89:A:C2	22:DA:90:U:C2	3.00	0.50
23:DB:37:C:C5	23:DB:38:C:C4	3.00	0.50
24:DC:18:LYS:O	24:DC:19:VAL:CB	2.59	0.50
25:DD:106:LYS:HA	25:DD:175:LEU:O	2.12	0.50
31:DJ:142:ILE:OXT	31:DJ:142:ILE:HG23	2.11	0.50
33:DL:68:SER:O	33:DL:69:ARG:CB	2.58	0.50
22:DA:634:C:P	33:DL:70:LYS:HE2	2.52	0.50
43:DV:9:ARG:HG2	43:DV:41:GLU:HB3	1.94	0.50
1:AA:1315:U:C4	1:AA:1316:G:C6	3.00	0.49
1:AA:223:A:C6	1:AA:224:U:C4	2.99	0.49
1:AA:453:G:H2'	1:AA:454:G:C8	2.47	0.49
1:AA:645:G:N7	57:AA:1749:HOH:O	2.35	0.49
1:AA:723:U:O5'	21:AU:49:LYS:HG2	2.11	0.49
1:AA:844:G:N3	1:AA:845:A:N7	2.60	0.49
3:AC:145:GLY:O	3:AC:146:ALA:O	2.30	0.49
5:AE:56:VAL:O	5:AE:60:ILE:HG23	2.11	0.49
9:AI:30:ILE:HA	9:AI:65:ILE:O	2.12	0.49
10:AJ:35:GLN:HG3	10:AJ:77:VAL:HB	1.93	0.49
12:AL:107:VAL:HG23	12:AL:117:TYR:HB3	1.94	0.49
16:AP:38:PHE:CZ	16:AP:51:ARG:HB2	2.47	0.49
6:AF:9:MET:HE2	18:AR:65:LEU:HD22	1.93	0.49
21:AU:40:LYS:N	21:AU:41:PRO:CD	2.75	0.49
22:BA:684:G:OP1	50:B2:21:ARG:NH1	2.45	0.49
53:B5:50:ILE:HG22	53:B5:51:ASP:H	1.77	0.49
22:BA:1316:U:C2	22:BA:1337:G:N2	2.80	0.49
22:BA:1439:A:N3	22:BA:1553:A:C6	2.80	0.49
22:BA:1926:U:O2	22:BA:1926:U:H2'	2.12	0.49
22:BA:2057:G:OP2	57:BA:3492:HOH:O	2.18	0.49
22:BA:2298:A:C4	22:BA:2321:U:C5	2.99	0.49
22:BA:2636:C:H2'	22:BA:2637:U:C6	2.47	0.49
22:BA:1297:C:OP1	22:BA:2710:C:H4'	2.12	0.49
22:BA:2771:C:H2'	22:BA:2772:C:H6	1.77	0.49
24:BC:247:PRO:HD2	24:BC:248:TRP:CZ3	2.47	0.49
27:BF:63:GLN:OE1	27:BF:95:ARG:HD2	2.12	0.49
29:BH:99:ILE:O	29:BH:99:ILE:HG22	2.12	0.49
34:BM:66:ARG:NH1	34:BM:104:GLU:OE1	2.45	0.49
25:BD:12:THR:CG2	37:BP:9:GLU:OE2	2.59	0.49
1:CA:109:A:C6	1:CA:327:A:C5	3.00	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:74:A:C2	1:CA:75:G:C5	3.00	0.49
1:CA:844:G:N3	1:CA:844:G:H2'	2.27	0.49
2:CB:219:ALA:O	2:CB:220:THR:CB	2.60	0.49
3:CC:57:ILE:HG13	3:CC:66:VAL:HG22	1.93	0.49
4:CD:116:GLN:HG3	4:CD:120:HIS:CE1	2.47	0.49
9:CI:30:ILE:HA	9:CI:65:ILE:HG13	1.94	0.49
10:CJ:33:GLY:HA3	10:CJ:83:THR:HB	1.93	0.49
48:D0:31:ASP:OD1	48:D0:48:TYR:HB3	2.12	0.49
52:D4:20:ASP:OD2	57:D4:201:HOH:O	2.20	0.49
22:DA:1082:U:H5'	30:DI:119:GLY:HA2	1.94	0.49
22:DA:132:G:N2	22:DA:148:U:C2	2.80	0.49
22:DA:158:U:C4	22:DA:159:G:C5	2.99	0.49
22:DA:1667:G:N3	22:DA:1991:U:C5	2.80	0.49
22:DA:2478:A:N7	22:DA:2529:G:C6	2.80	0.49
22:DA:532:A:N7	22:DA:2021:C:H2'	2.26	0.49
22:DA:681:G:C4	22:DA:682:G:C8	3.00	0.49
22:DA:695:G:C5	22:DA:768:G:C6	3.00	0.49
23:DB:109:A:C6	23:DB:110:C:C4	2.99	0.49
24:DC:178:SER:O	24:DC:271:ARG:HB2	2.12	0.49
24:DC:87:ARG:NH1	24:DC:87:ARG:HB3	2.27	0.49
29:DH:127:GLU:HG3	29:DH:145:ASN:HA	1.93	0.49
30:DI:97:LYS:HD2	30:DI:97:LYS:N	2.27	0.49
34:DM:53:MET:HG3	34:DM:54:THR:N	2.27	0.49
37:DP:24:ASP:O	37:DP:25:THR:OG1	2.28	0.49
37:DP:99:TYR:CE2	37:DP:100:LEU:CD2	2.95	0.49
1:AA:1144:G:N1	1:AA:1145:A:C2	2.80	0.49
1:AA:1296:C:H4'	1:AA:1302:C:C5	2.47	0.49
1:AA:22:G:H2'	1:AA:23:C:H6	1.77	0.49
1:AA:451:A:H4'	1:AA:452:A:O4'	2.12	0.49
2:AB:24:ASN:O	2:AB:27:MET:N	2.42	0.49
13:AM:14:HIS:HB2	13:AM:17:ILE:HD13	1.94	0.49
14:AN:43:ASN:C	14:AN:45:VAL:N	2.65	0.49
1:AA:261:U:C5	20:AT:74:ARG:NH1	2.79	0.49
22:BA:1734:G:H2'	22:BA:1735:A:C8	2.48	0.49
22:BA:1783:A:N1	22:BA:2587:A:H2'	2.27	0.49
22:BA:2415:G:H2'	22:BA:2416:C:H6	1.75	0.49
22:BA:2619:C:OP1	25:BD:157:LYS:HE2	2.12	0.49
22:BA:348:A:H2'	22:BA:349:U:O4'	2.11	0.49
22:BA:510:C:OP1	22:BA:512:G:O6	2.30	0.49
31:BJ:77:HIS:HA	31:BJ:83:GLY:O	2.12	0.49
34:BM:57:VAL:HG12	34:BM:112:LEU:HD23	1.94	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BQ:89:GLU:H	39:BR:49:ILE:HD12	1.76	0.49
45:BX:11:ARG:HB2	45:BX:12:PRO:CD	2.41	0.49
46:BY:20:ASN:O	46:BY:24:GLU:HB2	2.11	0.49
1:CA:1134:G:C6	1:CA:1135:U:C2	2.99	0.49
1:CA:1179:A:OP2	9:CI:99:ARG:NH2	2.45	0.49
1:CA:1252:A:H2'	1:CA:1253:G:O4'	2.12	0.49
1:CA:183:C:O2'	1:CA:184:G:C5'	2.61	0.49
1:CA:216:U:H5''	1:CA:464:U:H4'	1.93	0.49
1:CA:29:U:H4'	1:CA:295:C:O3'	2.12	0.49
4:CD:22:LYS:C	4:CD:24:GLY:N	2.64	0.49
6:CF:32:ALA:O	6:CF:33:GLU:C	2.51	0.49
6:CF:86:ARG:HH11	6:CF:86:ARG:HG2	1.77	0.49
8:CH:75:ILE:HD13	8:CH:129:VAL:HG22	1.94	0.49
9:CI:63:LEU:O	9:CI:63:LEU:HG	2.12	0.49
6:CF:59:TYR:HE2	18:CR:67:LEU:CD2	2.25	0.49
21:CU:4:ILE:HG22	21:CU:4:ILE:O	2.13	0.49
48:D0:20:ASP:N	48:D0:20:ASP:OD2	2.44	0.49
50:D2:15:SER:OG	50:D2:16:HIS:CE1	2.65	0.49
22:DA:591:U:H1'	51:D3:2:PRO:HD2	1.94	0.49
22:DA:1076:C:O2'	30:DI:93:PRO:HD2	2.12	0.49
22:DA:1299:G:H5''	22:DA:1300:G:H5''	1.93	0.49
22:DA:1355:G:C2	22:DA:1356:G:C8	3.00	0.49
22:DA:1476:U:H1'	22:DA:1732:C:O2	2.12	0.49
22:DA:2127:G:N3	22:DA:2162:G:C8	2.80	0.49
22:DA:776:G:N7	22:DA:793:A:C4	2.81	0.49
22:DA:86:G:O2'	22:DA:104:A:H4'	2.12	0.49
24:DC:246:THR:O	24:DC:248:TRP:N	2.45	0.49
25:DD:148:GLN:N	25:DD:148:GLN:OE1	2.45	0.49
27:DF:16:LEU:HD11	27:DF:169:LEU:CD1	2.43	0.49
22:DA:1654:A:OP1	35:DN:1:MET:HA	2.11	0.49
46:DY:50:VAL:O	46:DY:54:LYS:HG3	2.12	0.49
1:AA:1255:G:O2'	1:AA:1258:G:N3	2.43	0.49
1:AA:1277:C:O2'	1:AA:1279:G:C8	2.63	0.49
1:AA:1347:G:N2	1:AA:1373:G:H2'	2.27	0.49
1:AA:142:G:H2'	1:AA:142:G:N3	2.27	0.49
1:AA:255:G:C6	1:AA:256:U:C4	3.01	0.49
1:AA:49:U:C2	1:AA:361:G:N2	2.81	0.49
1:AA:651:C:C2'	1:AA:652:U:O5'	2.60	0.49
3:AC:193:TYR:CD2	3:AC:193:TYR:N	2.79	0.49
5:AE:74:VAL:HG11	5:AE:144:LEU:HB3	1.93	0.49
19:AS:58:VAL:HG11	19:AS:75:ALA:HA	1.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:B5:65:LEU:O	53:B5:67:HIS:N	2.44	0.49
22:BA:1026:G:H2'	22:BA:1027:A:C8	2.46	0.49
22:BA:1209:U:O2'	22:BA:1237:A:N1	2.42	0.49
22:BA:2469:A:H4'	34:BM:55:ARG:HH12	1.76	0.49
22:BA:2662:A:H5''	22:BA:2663:G:OP2	2.12	0.49
22:BA:393:C:H2'	22:BA:394:C:H6	1.77	0.49
22:BA:478:A:C6	22:BA:480:A:C6	3.01	0.49
26:BE:23:PHE:HB2	26:BE:111:GLU:HG3	1.94	0.49
22:BA:674:G:H1'	26:BE:69:ARG:HD3	1.94	0.49
29:BH:86:ASP:O	29:BH:87:GLU:HB2	2.11	0.49
31:BJ:23:LYS:O	31:BJ:63:ALA:HB3	2.12	0.49
37:BP:26:VAL:CG1	37:BP:47:VAL:HG23	2.43	0.49
40:BS:84:ARG:HB2	40:BS:96:ILE:HD11	1.94	0.49
1:CA:1002:G:C2	1:CA:1003:G:H1'	2.47	0.49
1:CA:1000:A:C2	1:CA:1041:G:C2	3.00	0.49
1:CA:1315:U:O2'	1:CA:1360:A:N3	2.34	0.49
1:CA:1412:C:H2'	1:CA:1413:A:C8	2.47	0.49
1:CA:213:G:C8	1:CA:214:C:C5	3.00	0.49
1:CA:321:A:C8	1:CA:328:C:C2	3.00	0.49
1:CA:771:G:C4	1:CA:809:G:N2	2.80	0.49
5:CE:150:PRO:HA	8:CH:99:LEU:CD2	2.41	0.49
9:CI:88:MET:HA	9:CI:92:GLU:OE2	2.12	0.49
22:DA:579:G:N2	22:DA:1262:A:C4	2.80	0.49
22:DA:1356:G:C2	22:DA:1357:C:H1'	2.47	0.49
22:DA:1530:G:N2	22:DA:1542:U:O2	2.45	0.49
1:CA:1409:C:H4'	22:DA:1915:U:O4	2.12	0.49
22:DA:411:G:OP1	22:DA:2407:A:OP2	2.29	0.49
22:DA:2454:G:H1'	57:DA:3531:HOH:O	2.12	0.49
22:DA:547:A:H3'	22:DA:548:G:C5'	2.42	0.49
22:DA:655:A:H4'	22:DA:656:G:OP1	2.11	0.49
22:DA:971:G:C2	22:DA:972:A:H1'	2.47	0.49
24:DC:57:GLY:HA3	24:DC:213:TRP:HA	1.94	0.49
30:DI:22:PRO:HB2	30:DI:23:PRO:HD3	1.95	0.49
33:DL:108:ALA:HB3	33:DL:125:LEU:HG	1.94	0.49
35:DN:36:THR:HG23	35:DN:41:ALA:HB2	1.95	0.49
42:DU:7:ARG:CG	42:DU:8:ASP:N	2.75	0.49
41:DT:14:PRO:HD2	46:DY:33:ALA:HB1	1.93	0.49
47:DZ:3:LYS:O	47:DZ:4:THR:HG22	2.12	0.49
1:AA:254:G:OP1	17:AQ:69:LYS:O	2.30	0.49
4:AD:190:ASP:O	4:AD:191:LEU:O	2.30	0.49
1:AA:406:G:O5'	4:AD:5:LEU:HD11	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:65:TYR:CG	4:AD:94:LEU:HD22	2.48	0.49
9:AI:40:GLY:O	9:AI:41:ARG:HB2	2.10	0.49
9:AI:26:GLY:CA	9:AI:59:GLU:HA	2.42	0.49
12:AL:50:ARG:NH1	12:AL:89:ASP:OD1	2.35	0.49
13:AM:29:ARG:O	13:AM:33:ILE:HG12	2.12	0.49
19:AS:10:PHE:CG	19:AS:11:ILE:N	2.80	0.49
19:AS:34:TRP:O	19:AS:36:ARG:HG3	2.13	0.49
22:BA:1239:G:H2'	22:BA:1240:U:O4'	2.12	0.49
22:BA:1377:G:H5''	22:BA:1378:A:OP2	2.12	0.49
22:BA:1487:U:C2	22:BA:1503:A:C2	2.99	0.49
22:BA:1952:A:C6	22:BA:1953:A:N1	2.80	0.49
22:BA:2077:A:O2'	22:BA:2078:C:H5'	2.12	0.49
22:BA:236:C:O2'	22:BA:237:C:H5'	2.13	0.49
22:BA:2582:G:OP2	22:BA:2583:G:OP2	2.31	0.49
22:BA:2665:A:C2	22:BA:2666:C:C6	3.00	0.49
22:BA:2808:G:N2	22:BA:2891:U:C6	2.80	0.49
22:BA:601:C:O2	22:BA:605:G:H4'	2.13	0.49
22:BA:783:A:H8	22:BA:784:G:H4'	1.76	0.49
22:BA:825:A:H4'	22:BA:2428:G:C5	2.47	0.49
23:BB:2:G:C2	23:BB:119:A:C2	3.00	0.49
22:BA:1791:A:O2'	24:BC:206:GLY:HA2	2.13	0.49
30:BI:106:LEU:HA	30:BI:109:ILE:HB	1.94	0.49
37:BP:51:ARG:O	37:BP:57:SER:HA	2.12	0.49
22:BA:1340:U:OP1	41:BT:19:LYS:NZ	2.45	0.49
1:CA:1004:A:C2	1:CA:1026:G:N3	2.80	0.49
1:CA:101:A:C4	1:CA:102:G:C8	3.01	0.49
1:CA:1124:G:N2	1:CA:1127:G:N2	2.59	0.49
1:CA:1162:C:C2	1:CA:1175:G:N2	2.80	0.49
1:CA:927:G:N2	1:CA:1391:U:H1'	2.28	0.49
1:CA:145:G:N2	1:CA:146:G:C4	2.81	0.49
1:CA:666:G:C6	1:CA:741:G:C6	3.01	0.49
4:CD:9:LEU:HD11	4:CD:29:ASP:OD1	2.12	0.49
9:CI:50:GLN:N	9:CI:51:PRO:HD2	2.28	0.49
22:DA:1187:G:N7	57:DA:3574:HOH:O	2.35	0.49
22:DA:1231:U:H2'	22:DA:1232:G:H8	1.76	0.49
22:DA:1317:G:H2'	22:DA:1318:U:O4'	2.12	0.49
22:DA:1464:G:C2	22:DA:1465:G:C4	3.01	0.49
22:DA:1627:G:N2	22:DA:1628:G:N7	2.60	0.49
22:DA:2223:G:C2'	22:DA:2224:G:H5'	2.41	0.49
22:DA:2331:G:N2	22:DA:2385:C:C2	2.80	0.49
22:DA:2518:A:H2'	22:DA:2518:A:N3	2.26	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:40:U:C2	23:DB:44:G:OP2	2.65	0.49
23:DB:42:C:O2'	27:DF:63:GLN:NE2	2.45	0.49
26:DE:170:ARG:CZ	26:DE:176:ASP:OD1	2.61	0.49
29:DH:81:ALA:C	29:DH:149:GLU:HB3	2.33	0.49
22:DA:1097:U:H1'	30:DI:9:VAL:HG11	1.94	0.49
22:DA:810:U:C4	33:DL:30:THR:HA	2.47	0.49
39:DR:78:ARG:CB	39:DR:83:TYR:CD1	2.94	0.49
23:DB:76:G:O2'	43:DV:78:GLN:OE1	2.16	0.49
45:DX:40:VAL:HG22	45:DX:45:ARG:O	2.13	0.49
22:DA:931:U:OP1	47:DZ:30:ARG:NH1	2.46	0.49
1:AA:104:G:C2	1:AA:105:G:C5	3.01	0.49
1:AA:1307:U:H2'	1:AA:1308:U:C6	2.48	0.49
1:AA:1457:G:H2'	1:AA:1458:G:O4'	2.12	0.49
1:AA:119:A:C2	1:AA:240:G:C8	3.01	0.49
1:AA:32:A:N3	1:AA:32:A:H2'	2.27	0.49
1:AA:383:A:C5	1:AA:384:G:H1'	2.48	0.49
4:AD:99:ASP:OD2	4:AD:115:ARG:NH2	2.45	0.49
4:AD:34:ILE:O	4:AD:35:GLU:CB	2.60	0.49
4:AD:35:GLU:O	4:AD:38:PRO:HD3	2.13	0.49
9:AI:112:GLU:OE2	9:AI:115:LYS:NZ	2.45	0.49
10:AJ:49:PHE:CD1	10:AJ:49:PHE:N	2.81	0.49
22:BA:1061:U:H3'	22:BA:1062:G:H5'	1.94	0.49
22:BA:108:G:C6	22:BA:109:C:C4	3.01	0.49
22:BA:1153:C:H2'	22:BA:1154:G:O4'	2.13	0.49
22:BA:1168:G:H2'	22:BA:1169:A:O4'	2.13	0.49
22:BA:1747:U:O2'	22:BA:1748:C:H5'	2.13	0.49
22:BA:2032:G:C8	57:BA:3537:HOH:O	2.64	0.49
22:BA:2302:U:O2'	22:BA:2303:G:H5'	2.12	0.49
26:BE:104:ALA:O	26:BE:108:ILE:HG23	2.13	0.49
27:BF:135:GLN:OE1	27:BF:135:GLN:N	2.43	0.49
27:BF:158:THR:HG22	27:BF:160:ALA:HB3	1.94	0.49
41:BT:28:ASN:HD21	41:BT:91:GLN:HB2	1.78	0.49
42:BU:96:PHE:O	42:BU:100:SER:HA	2.12	0.49
1:CA:1171:A:C2	1:CA:1172:C:C2	3.00	0.49
1:CA:1201:A:H1'	1:CA:1202:U:OP2	2.13	0.49
1:CA:1363:A:N3	1:CA:1363:A:H2'	2.27	0.49
1:CA:1502:A:H5'	1:CA:1504:G:N7	2.27	0.49
1:CA:307:C:H5''	1:CA:308:C:OP2	2.12	0.49
4:CD:168:PRO:O	4:CD:170:TRP:N	2.46	0.49
6:CF:4:TYR:CD2	6:CF:71:ILE:HG21	2.48	0.49
6:CF:78:PHE:N	6:CF:78:PHE:CD2	2.80	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:CQ:16:LYS:C	17:CQ:17:MET:SD	2.91	0.49
22:DA:1097:U:C4	22:DA:1098:A:H1'	2.48	0.49
22:DA:1262:A:C6	22:DA:1263:U:N3	2.80	0.49
22:DA:1330:C:H2'	22:DA:1331:G:O5'	2.11	0.49
22:DA:1343:G:C6	22:DA:1344:U:C4	3.01	0.49
22:DA:1366:A:OP1	45:DX:2:SER:OG	2.25	0.49
22:DA:1360:G:C6	22:DA:1372:U:C2	3.00	0.49
22:DA:1648:U:H2'	22:DA:1649:G:O4'	2.12	0.49
22:DA:1847:A:HO2'	22:DA:1848:A:P	2.35	0.49
22:DA:189:G:C4	22:DA:205:G:N2	2.80	0.49
22:DA:2066:C:H5''	57:DA:3504:HOH:O	2.12	0.49
22:DA:2300:C:C4	22:DA:2317:A:C2	3.00	0.49
22:DA:2335:A:C6	22:DA:2337:G:H1'	2.47	0.49
22:DA:2602:A:H4'	22:DA:2603:G:H5'	1.94	0.49
22:DA:747:U:C5	22:DA:2613:U:C5	3.00	0.49
22:DA:2796:U:C4	22:DA:2798:U:O4	2.66	0.49
22:DA:2854:G:N2	22:DA:2864:G:C2	2.81	0.49
22:DA:503:A:C2	22:DA:506:G:C5	3.01	0.49
22:DA:536:G:C2'	22:DA:537:G:H5'	2.42	0.49
22:DA:646:U:H3'	22:DA:647:G:C4'	2.43	0.49
22:DA:654:A:N3	22:DA:654:A:H3'	2.26	0.49
22:DA:737:C:C2	22:DA:738:G:C8	3.00	0.49
24:DC:146:MET:HE3	24:DC:182:ARG:NH2	2.27	0.49
29:DH:112:LYS:CG	29:DH:113:SER:N	2.76	0.49
30:DI:58:VAL:CG1	30:DI:59:ILE:H	2.26	0.49
33:DL:93:ASN:O	33:DL:95:LEU:N	2.42	0.49
36:DO:78:VAL:HA	36:DO:81:ARG:HB2	1.94	0.49
40:DS:70:LYS:O	40:DS:107:VAL:HG23	2.11	0.49
1:AA:1014:A:H2'	1:AA:1015:G:O4'	2.12	0.49
1:AA:157:U:O2'	1:AA:158:G:H5'	2.12	0.49
1:AA:346:G:P	32:BK:105:ARG:NH1	2.85	0.49
1:AA:474:G:C2	1:AA:475:C:C6	3.00	0.49
1:AA:720:C:H5''	18:AR:41:PRO:HA	1.95	0.49
2:AB:213:TYR:O	2:AB:217:VAL:HG23	2.12	0.49
2:AB:82:ASP:O	2:AB:84:ALA:N	2.46	0.49
4:AD:70:ARG:O	4:AD:74:ASN:ND2	2.45	0.49
5:AE:109:GLY:HA2	5:AE:112:ARG:HB3	1.94	0.49
6:AF:51:ILE:O	6:AF:52:ASN:HB2	2.11	0.49
6:AF:98:GLU:HG3	6:AF:99:ALA:N	2.28	0.49
14:AN:46:LEU:HD12	14:AN:46:LEU:C	2.33	0.49
19:AS:18:LYS:O	19:AS:31:LEU:HD21	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1087:G:O2'	22:BA:1089:A:O4'	2.27	0.49
22:BA:1403:A:H2'	22:BA:1404:C:C6	2.48	0.49
22:BA:1408:G:C6	22:BA:1409:U:C4	3.01	0.49
22:BA:1489:C:C2	22:BA:1501:G:C2	3.00	0.49
22:BA:1886:U:C2'	22:BA:1887:C:H5'	2.43	0.49
22:BA:570:G:H2'	22:BA:2030:A:C8	2.48	0.49
22:BA:570:G:H2'	22:BA:2030:A:N7	2.28	0.49
22:BA:528:A:H2	22:BA:2043:C:H5'	1.74	0.49
26:BE:29:HIS:CE1	26:BE:33:VAL:HG21	2.47	0.49
43:BV:89:ILE:HG21	43:BV:91:PHE:CZ	2.47	0.49
1:CA:1386:G:N3	1:CA:1387:G:C8	2.80	0.49
1:CA:815:A:H4'	1:CA:817:C:C4	2.47	0.49
8:CH:86:TYR:CE2	8:CH:124:GLU:HB2	2.47	0.49
17:CQ:50:ASN:O	17:CQ:51:ASN:C	2.51	0.49
17:CQ:51:ASN:ND2	17:CQ:51:ASN:O	2.46	0.49
50:D2:12:ARG:NH2	50:D2:44:VAL:CG1	2.75	0.49
22:DA:1965:C:OP1	22:DA:1966:A:C2'	2.61	0.49
22:DA:2322:A:H2'	22:DA:2323:G:O4'	2.12	0.49
22:DA:2461:A:H1'	22:DA:2492:U:C2	2.48	0.49
22:DA:273:G:H2'	22:DA:274:C:O4'	2.12	0.49
22:DA:320:A:H4'	22:DA:322:A:N7	2.28	0.49
22:DA:39:G:C6	22:DA:40:U:O4	2.64	0.49
22:DA:508:A:H3'	22:DA:509:C:H5'	1.94	0.49
22:DA:613:A:HO2'	22:DA:614:A:P	2.31	0.49
24:DC:141:VAL:CG1	24:DC:190:ALA:HB1	2.42	0.49
26:DE:146:VAL:O	26:DE:167:VAL:HA	2.12	0.49
27:DF:108:VAL:N	27:DF:109:PRO:CD	2.76	0.49
30:DI:9:VAL:HG23	30:DI:10:LYS:N	2.28	0.49
32:DK:31:ARG:CB	32:DK:32:TYR:CD2	2.96	0.49
33:DL:116:VAL:O	33:DL:116:VAL:HG13	2.12	0.49
33:DL:55:MET:SD	33:DL:59:ARG:CZ	3.01	0.49
22:DA:1454:C:H5'	35:DN:63:ARG:HD3	1.94	0.49
1:AA:1442:G:H2'	1:AA:1443:C:H6	1.77	0.49
1:AA:259:G:C2	1:AA:260:G:H1'	2.47	0.49
1:AA:929:G:N2	1:AA:1389:C:C2	2.81	0.49
1:AA:937:A:N6	1:AA:1345:U:O4	2.46	0.49
2:AB:40:ILE:HD13	2:AB:40:ILE:N	2.27	0.49
6:AF:35:LYS:HD3	6:AF:35:LYS:N	2.27	0.49
6:AF:93:LYS:CG	6:AF:93:LYS:O	2.60	0.49
9:AI:84:THR:HG21	9:AI:103:PHE:CB	2.42	0.49
9:AI:17:ALA:CB	9:AI:67:VAL:HB	2.43	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AK:67:ALA:HB1	11:AK:100:LEU:HD22	1.94	0.49
53:B5:215:VAL:O	53:B5:216:THR:CB	2.60	0.49
53:B5:67:HIS:CD2	53:B5:69:LEU:HD23	2.47	0.49
22:BA:1412:U:H2'	22:BA:1413:A:C8	2.48	0.49
22:BA:2127:G:H4'	22:BA:2128:G:OP1	2.12	0.49
22:BA:2409:G:H2'	22:BA:2410:G:O4'	2.12	0.49
22:BA:866:A:C8	22:BA:914:G:C6	3.00	0.49
25:BD:38:LYS:O	25:BD:46:ARG:HA	2.13	0.49
27:BF:42:GLU:O	27:BF:42:GLU:HG2	2.13	0.49
30:BI:130:GLU:HB3	30:BI:134:ARG:NH2	2.27	0.49
34:BM:69:PRO:O	34:BM:70:ASP:CG	2.51	0.49
35:BN:51:LEU:O	35:BN:52:ILE:C	2.49	0.49
39:BR:49:ILE:CB	39:BR:52:PRO:C	2.78	0.49
42:BU:37:GLU:O	42:BU:39:ILE:HG12	2.12	0.49
1:CA:1048:G:P	57:CA:1849:HOH:O	2.70	0.49
1:CA:1152:A:C4	1:CA:1153:G:C8	3.00	0.49
1:CA:1321:U:C4	1:CA:1322:C:C5	3.00	0.49
1:CA:1380:U:C5	7:CG:3:ARG:HA	2.46	0.49
1:CA:246:A:C4	1:CA:279:A:C6	3.01	0.49
1:CA:728:A:H2'	1:CA:729:A:H8	1.77	0.49
7:CG:114:LYS:HB2	7:CG:118:LEU:HD12	1.95	0.49
12:CL:61:PHE:N	12:CL:61:PHE:HD1	2.11	0.49
12:CL:90:LEU:HB3	12:CL:93:VAL:HG21	1.95	0.49
17:CQ:81:LYS:N	17:CQ:81:LYS:CD	2.75	0.49
22:DA:1029:A:N7	22:DA:1030:C:C2	2.81	0.49
22:DA:1178:C:N4	22:DA:1180:U:N3	2.61	0.49
22:DA:1230:A:C2	22:DA:1231:U:C2	2.99	0.49
22:DA:1357:C:N4	22:DA:1358:G:N1	2.61	0.49
22:DA:1403:A:C2	22:DA:1404:C:C2	3.00	0.49
22:DA:1465:G:C5	22:DA:1466:U:C4	3.00	0.49
22:DA:1488:C:N3	22:DA:1489:C:C5	2.81	0.49
22:DA:1394:U:H4'	22:DA:1603:A:H4'	1.95	0.49
22:DA:2234:G:C6	22:DA:2235:G:C5	3.01	0.49
22:DA:2428:G:H5''	22:DA:2429:G:OP1	2.13	0.49
22:DA:301:G:C2	22:DA:302:C:N3	2.81	0.49
22:DA:804:A:H5''	22:DA:805:G:OP1	2.13	0.49
24:DC:232:HIS:NE2	24:DC:244:PRO:HA	2.28	0.49
22:DA:1097:U:O2	30:DI:9:VAL:CG1	2.61	0.49
31:DJ:94:ALA:O	31:DJ:95:ARG:C	2.51	0.49
35:DN:28:LEU:CG	35:DN:28:LEU:O	2.61	0.49
41:DT:28:ASN:HB3	41:DT:87:LEU:HB2	1.94	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DT:44:LYS:O	41:DT:48:GLN:HG2	2.12	0.49
45:DX:68:LEU:HD22	45:DX:78:TYR:CZ	2.47	0.49
1:AA:1124:G:H3'	1:AA:1145:A:N6	2.28	0.49
1:AA:1160:G:O2'	1:AA:1161:C:O5'	2.27	0.49
1:AA:1452:C:O4'	1:AA:1453:G:N2	2.46	0.49
1:AA:257:G:C2	1:AA:258:G:C5	3.00	0.49
1:AA:568:G:C2	1:AA:569:C:C6	3.01	0.49
1:AA:631:C:H5'	1:AA:632:U:O5'	2.13	0.49
2:AB:96:TRP:HZ2	2:AB:101:LEU:CD2	2.25	0.49
3:AC:59:ARG:HA	3:AC:63:SER:O	2.12	0.49
12:AL:23:ALA:O	12:AL:24:LEU:O	2.30	0.49
17:AQ:15:ASP:OD1	17:AQ:16:LYS:N	2.45	0.49
21:AU:37:PHE:HB3	21:AU:41:PRO:HG3	1.94	0.49
22:BA:1074:G:H2'	22:BA:1075:C:C6	2.47	0.49
22:BA:1583:A:HO2'	22:BA:1584:U:P	2.36	0.49
22:BA:197:A:C6	22:BA:198:C:C2	3.01	0.49
22:BA:2307:G:H4'	22:BA:2308:G:O5'	2.13	0.49
22:BA:2517:C:C5	22:BA:2542:A:C5	3.00	0.49
22:BA:26:G:C6	22:BA:27:G:N1	2.81	0.49
22:BA:574:A:H4'	22:BA:575:A:O5'	2.13	0.49
22:BA:65:U:H2'	22:BA:66:C:C6	2.47	0.49
22:BA:2751:G:C4	28:BG:3:ARG:HD2	2.47	0.49
22:BA:998:C:P	38:BQ:92:ARG:HH21	2.36	0.49
42:BU:42:VAL:O	42:BU:60:GLU:HA	2.13	0.49
1:CA:1296:C:H4'	1:CA:1302:C:C4	2.47	0.49
1:CA:198:G:O2'	1:CA:199:A:H5'	2.12	0.49
1:CA:216:U:H2'	1:CA:217:C:C6	2.47	0.49
1:CA:718:A:H5''	11:CK:119:ASN:ND2	2.28	0.49
1:CA:881:G:C6	1:CA:882:C:C4	3.01	0.49
3:CC:130:PHE:CE1	3:CC:157:LEU:HB3	2.48	0.49
14:CN:87:ALA:HB1	14:CN:92:GLU:HB2	1.95	0.49
21:CU:37:PHE:CD2	21:CU:41:PRO:HG3	2.48	0.49
22:DA:1096:A:C8	22:DA:1096:A:OP2	2.65	0.49
22:DA:1287:A:C2'	22:DA:1288:G:H5'	2.42	0.49
22:DA:1357:C:H2'	22:DA:1358:G:C5'	2.42	0.49
22:DA:1361:G:C5	22:DA:1371:G:N2	2.80	0.49
22:DA:1439:A:N7	22:DA:1552:A:H2	2.10	0.49
22:DA:1819:A:H4'	22:DA:1820:U:H5''	1.93	0.49
22:DA:2098:U:H2'	22:DA:2099:U:C6	2.48	0.49
22:DA:2497:A:N3	22:DA:2498:C:N4	2.61	0.49
22:DA:2507:C:N4	22:DA:2508:G:C6	2.81	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2693:G:N2	22:DA:2717:C:C2	2.81	0.49
22:DA:301:G:C2	22:DA:302:C:C2	3.01	0.49
22:DA:581:C:OP2	38:DQ:33:ARG:NE	2.45	0.49
22:DA:631:A:N3	22:DA:2415:G:O2'	2.45	0.49
22:DA:749:A:C6	22:DA:1618:A:C2	3.01	0.49
22:DA:79:C:C2'	22:DA:346:A:N3	2.76	0.49
22:DA:801:G:C8	26:DE:49:ARG:HG3	2.48	0.49
22:DA:846:U:O2'	22:DA:847:U:P	2.70	0.49
22:DA:969:G:H2'	22:DA:970:U:C6	2.48	0.49
23:DB:30:C:OP1	36:DO:3:LYS:NZ	2.45	0.49
29:DH:72:ILE:O	29:DH:141:LYS:O	2.30	0.49
30:DI:28:LEU:HD13	30:DI:38:PHE:CE2	2.48	0.49
34:DM:69:PRO:O	34:DM:70:ASP:HB3	2.11	0.49
40:DS:61:ASN:O	40:DS:62:ASP:HB3	2.13	0.49
42:DU:86:ARG:NH2	42:DU:95:PHE:HB3	2.28	0.49
45:DX:71:LEU:HA	45:DX:74:ARG:HG2	1.94	0.49
1:AA:976:G:OP2	1:AA:1358:U:O2'	2.30	0.49
1:AA:404:G:N7	4:AD:2:ALA:CB	2.76	0.49
1:AA:771:G:C2'	1:AA:772:U:H5'	2.43	0.49
1:AA:782:A:C8	1:AA:783:C:C5	3.01	0.49
5:AE:13:GLU:HB3	5:AE:39:VAL:HG12	1.94	0.49
6:AF:54:LEU:O	6:AF:54:LEU:HD13	2.12	0.49
7:AG:115:SER:OG	7:AG:118:LEU:HG	2.12	0.49
12:AL:44:LYS:CB	12:AL:45:PRO:HD3	2.43	0.49
17:AQ:17:MET:HG2	17:AQ:20:SER:HB3	1.95	0.49
17:AQ:81:LYS:O	17:AQ:82:ALA:C	2.50	0.49
53:B5:24:ASP:HB3	53:B5:185:LYS:O	2.13	0.49
22:BA:1914:C:C2	22:BA:1915:U:C6	3.00	0.49
22:BA:477:A:H2'	22:BA:478:A:C8	2.47	0.49
22:BA:876:C:N3	22:BA:901:C:N4	2.61	0.49
22:BA:88:G:C6	22:BA:89:A:N7	2.80	0.49
25:BD:62:LYS:N	25:BD:63:PRO:CD	2.75	0.49
30:BI:24:VAL:CG2	30:BI:28:LEU:HD23	2.43	0.49
33:BL:109:LYS:HG2	33:BL:126:ARG:CB	2.43	0.49
34:BM:77:PRO:HD2	34:BM:80:VAL:HG21	1.94	0.49
22:BA:2356:U:O3'	44:BW:20:ARG:HD3	2.13	0.49
1:CA:1337:G:H5''	1:CA:1338:G:OP1	2.13	0.49
1:CA:161:A:H2'	1:CA:162:A:C8	2.48	0.49
1:CA:16:A:C2'	1:CA:17:U:H5'	2.43	0.49
1:CA:630:A:H2'	1:CA:631:C:O4'	2.13	0.49
2:CB:67:ILE:HG22	2:CB:68:LEU:N	2.28	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:146:ARG:O	4:CD:148:LYS:O	2.30	0.49
12:CL:42:PRO:HD3	12:CL:48:ALA:O	2.13	0.49
12:CL:94:ARG:O	12:CL:95:TYR:CD1	2.66	0.49
14:CN:46:LEU:O	14:CN:46:LEU:HG	2.13	0.49
22:DA:123:G:N2	22:DA:129:C:C2	2.80	0.49
22:DA:1312:U:H3'	57:DA:3387:HOH:O	2.13	0.49
22:DA:1566:A:N3	24:DC:213:TRP:CG	2.80	0.49
22:DA:1863:G:H2'	22:DA:1864:U:O4'	2.12	0.49
22:DA:192:C:O2'	22:DA:802:A:N3	2.45	0.49
22:DA:1267:U:N3	22:DA:2013:A:N7	2.60	0.49
22:DA:2111:U:O4	22:DA:2147:A:C2	2.66	0.49
22:DA:308:G:C8	22:DA:501:A:H1'	2.48	0.49
22:DA:680:C:H2'	22:DA:681:G:C8	2.48	0.49
22:DA:846:U:HO2'	22:DA:847:U:P	2.36	0.49
22:DA:858:G:N2	22:DA:919:U:O4	2.43	0.49
24:DC:80:ARG:NH1	24:DC:82:GLU:OE2	2.46	0.49
26:DE:18:THR:HG22	26:DE:19:PHE:CD2	2.47	0.49
22:DA:443:A:C8	26:DE:40:ARG:CG	2.96	0.49
32:DK:17:ARG:HG2	32:DK:47:ILE:CG2	2.43	0.49
32:DK:30:ARG:NH2	32:DK:37:ASP:OD1	2.46	0.49
40:DS:39:THR:O	40:DS:41:LYS:N	2.46	0.49
41:DT:30:ILE:HD13	41:DT:32:LEU:HG	1.93	0.49
1:AA:202:G:N2	1:AA:216:U:O2	2.46	0.49
1:AA:478:A:H2'	1:AA:479:U:C5'	2.42	0.49
1:AA:548:G:O2'	1:AA:549:C:H5'	2.13	0.49
1:AA:649:A:H2'	1:AA:650:G:O4'	2.13	0.49
1:AA:581:G:C5	1:AA:758:C:C5	3.01	0.49
3:AC:23:PHE:CD2	3:AC:24:ALA:N	2.81	0.49
4:AD:125:VAL:O	4:AD:126:ASN:C	2.52	0.49
9:AI:30:ILE:HD11	9:AI:38:TYR:HB3	1.94	0.49
13:AM:2:ALA:O	13:AM:9:ILE:HG23	2.13	0.49
16:AP:70:ARG:O	16:AP:70:ARG:CG	2.61	0.49
17:AQ:47:HIS:HB2	17:AQ:67:LEU:HD23	1.95	0.49
49:B1:19:HIS:HE1	49:B1:21:TYR:CE2	2.31	0.49
22:BA:996:A:N6	22:BA:1160:G:C6	2.81	0.49
22:BA:1513:U:H2'	22:BA:1514:G:O4'	2.13	0.49
22:BA:1686:C:H2'	22:BA:1687:G:O4'	2.13	0.49
22:BA:1915:U:H2'	22:BA:1916:A:H5'	1.94	0.49
22:BA:205:G:O2'	22:BA:206:U:P	2.71	0.49
22:BA:2480:C:H2'	22:BA:2481:G:H5'	1.95	0.49
22:BA:2780:G:OP2	31:BJ:120:ARG:HD3	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:319:G:C5	22:BA:333:G:C2	3.01	0.49
22:BA:475:C:N4	22:BA:476:G:C6	2.80	0.49
22:BA:545:U:H2'	22:BA:546:U:O3'	2.13	0.49
22:BA:861:A:C2	22:BA:917:A:C4	3.01	0.49
24:BC:167:ARG:O	24:BC:168:ASP:CB	2.60	0.49
25:BD:103:ASP:O	25:BD:104:VAL:CG2	2.61	0.49
25:BD:129:THR:HG23	25:BD:130:GLN:O	2.12	0.49
23:BB:42:C:OP1	27:BF:64:LYS:HE2	2.13	0.49
31:BJ:64:VAL:CG1	31:BJ:68:LYS:HB2	2.43	0.49
34:BM:132:THR:CG2	34:BM:133:LYS:N	2.76	0.49
36:BO:100:HIS:O	36:BO:104:GLN:HB2	2.13	0.49
1:CA:1082:A:C6	1:CA:1083:U:N3	2.81	0.49
1:CA:1361:G:C4	1:CA:1362:A:N7	2.81	0.49
1:CA:157:U:O2'	1:CA:158:G:H5'	2.12	0.49
1:CA:215:C:H2'	1:CA:216:U:O4'	2.13	0.49
1:CA:620:C:H2'	1:CA:621:A:O4'	2.13	0.49
1:CA:757:U:OP1	1:CA:822:U:O2'	2.17	0.49
1:CA:786:G:C2	1:CA:787:A:H1'	2.47	0.49
1:CA:834:U:N3	1:CA:835:U:C4	2.81	0.49
1:CA:1074:G:H4'	2:CB:102:THR:O	2.12	0.49
3:CC:81:GLY:O	3:CC:83:ASP:N	2.46	0.49
4:CD:168:PRO:CB	4:CD:171:LEU:CD1	2.91	0.49
5:CE:13:GLU:HB2	5:CE:39:VAL:HG12	1.95	0.49
8:CH:106:THR:HG21	8:CH:121:LEU:HD13	1.95	0.49
21:CU:37:PHE:CD1	21:CU:40:LYS:HE3	2.47	0.49
21:CU:40:LYS:N	21:CU:41:PRO:CD	2.76	0.49
22:DA:1049:C:H2'	22:DA:1050:A:H5'	1.95	0.49
22:DA:1317:G:N7	22:DA:1318:U:C4	2.81	0.49
22:DA:1319:C:H2'	22:DA:1320:C:H5'	1.94	0.49
22:DA:1378:A:N3	22:DA:1379:U:H2'	2.28	0.49
22:DA:1574:C:N4	57:DA:3620:HOH:O	2.46	0.49
22:DA:1826:G:C4	22:DA:1827:U:C5	3.01	0.49
22:DA:1958:C:P	57:DA:3730:HOH:O	2.71	0.49
22:DA:2024:G:N2	22:DA:2040:G:H1'	2.28	0.49
22:DA:204:A:H5'	22:DA:206:U:O4'	2.12	0.49
22:DA:2734:A:C8	22:DA:2735:G:C8	3.01	0.49
22:DA:2791:G:O6	22:DA:2805:C:N3	2.45	0.49
22:DA:2873:A:H4'	57:DA:3802:HOH:O	2.11	0.49
22:DA:362:A:N7	22:DA:363:G:N7	2.61	0.49
22:DA:475:C:N3	22:DA:481:G:C6	2.81	0.49
24:DC:148:PRO:HD3	24:DC:185:GLU:OE2	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DD:2:ILE:HG23	25:DD:88:GLU:OE2	2.12	0.49
22:DA:38:A:H5'	26:DE:45:ALA:HB3	1.93	0.49
22:DA:7:G:H4'	31:DJ:15:TRP:CH2	2.47	0.49
36:DO:76:LYS:O	36:DO:79:ALA:HB3	2.12	0.49
41:DT:61:LEU:C	41:DT:61:LEU:HD12	2.32	0.49
41:DT:77:ARG:O	41:DT:78:SER:CB	2.60	0.49
43:DV:75:GLN:HB3	43:DV:90:ASP:O	2.12	0.49
1:AA:1029:U:O2'	1:AA:1032:G:O6	2.31	0.48
1:AA:1426:G:H2'	1:AA:1427:C:O4'	2.13	0.48
1:AA:452:A:H2'	1:AA:453:G:H5'	1.95	0.48
1:AA:723:U:H4'	1:AA:723:U:OP2	2.11	0.48
1:AA:914:A:C4	1:AA:915:A:C8	3.01	0.48
2:AB:72:THR:O	2:AB:73:LYS:CB	2.60	0.48
8:AH:78:VAL:HG11	8:AH:125:ILE:CD1	2.43	0.48
12:AL:85:GLY:O	12:AL:96:HIS:ND1	2.45	0.48
13:AM:11:ASP:CG	13:AM:12:HIS:N	2.64	0.48
15:AO:81:LEU:CD1	15:AO:85:LEU:CD2	2.91	0.48
22:BA:1624:U:C2	22:BA:1625:C:C6	3.01	0.48
22:BA:2488:G:O2'	22:BA:2489:U:H5'	2.12	0.48
22:BA:2832:U:C2	22:BA:2834:G:C2	3.01	0.48
22:BA:580:U:O3'	38:BQ:31:VAL:CG1	2.61	0.48
22:BA:753:A:H2'	22:BA:754:U:H6	1.78	0.48
24:BC:235:GLY:HA3	24:BC:239:ASN:HB2	1.94	0.48
29:BH:139:PHE:O	29:BH:140:ALA:HB2	2.13	0.48
41:BT:19:LYS:NZ	41:BT:84:TYR:OH	2.46	0.48
1:CA:1211:U:O2'	1:CA:1212:U:P	2.70	0.48
1:CA:1240:U:OP2	7:CG:116:MET:HB3	2.12	0.48
1:CA:9:G:OP2	5:CE:126:LYS:NZ	2.44	0.48
3:CC:83:ASP:O	3:CC:84:VAL:C	2.52	0.48
5:CE:35:ALA:O	5:CE:50:TYR:O	2.31	0.48
5:CE:50:TYR:O	5:CE:51:GLY:O	2.31	0.48
7:CG:42:ILE:HG21	7:CG:116:MET:HG3	1.95	0.48
9:CI:13:LYS:O	9:CI:14:SER:HB3	2.12	0.48
13:CM:29:ARG:NH1	13:CM:59:GLU:O	2.46	0.48
14:CN:10:GLU:O	14:CN:11:VAL:C	2.50	0.48
50:D2:18:PHE:O	50:D2:19:ARG:C	2.51	0.48
22:DA:1338:G:H5''	41:DT:17:SER:HB2	1.94	0.48
22:DA:1352:U:H5	22:DA:1377:G:C5	2.31	0.48
22:DA:1400:U:H2'	22:DA:1401:G:O4'	2.12	0.48
22:DA:1792:G:C5	22:DA:1793:C:C5	3.01	0.48
22:DA:1916:A:H2'	22:DA:1917:U:O4'	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2272:U:H5''	22:DA:2273:A:OP1	2.12	0.48
22:DA:230:G:C2	22:DA:231:A:N7	2.81	0.48
22:DA:245:G:O6	51:D3:8:ARG:HD2	2.12	0.48
22:DA:2446:G:C6	22:DA:2501:C:H2'	2.48	0.48
22:DA:2512:C:H2'	22:DA:2513:A:O4'	2.12	0.48
22:DA:279:A:N6	22:DA:361:G:C2'	2.75	0.48
22:DA:323:C:O4'	22:DA:323:C:O2	2.31	0.48
22:DA:649:G:H2'	22:DA:650:C:C6	2.48	0.48
22:DA:711:G:C2	22:DA:721:A:N3	2.81	0.48
22:DA:920:A:C6	22:DA:921:C:C4	3.01	0.48
24:DC:62:TYR:CD1	24:DC:63:ARG:N	2.80	0.48
25:DD:186:LEU:CD1	37:DP:8:LEU:HD12	2.43	0.48
31:DJ:84:ILE:CG1	31:DJ:84:ILE:O	2.61	0.48
34:DM:1:MET:HE3	34:DM:43:ALA:HB3	1.95	0.48
42:DU:96:PHE:CZ	42:DU:103:ILE:CG1	2.96	0.48
22:DA:310:A:H5''	42:DU:15:THR:HB	1.95	0.48
1:AA:1107:C:C4	1:AA:1108:G:C8	3.01	0.48
1:AA:1195:C:H5''	1:AA:1196:A:OP2	2.13	0.48
1:AA:1349:A:C2	1:AA:1374:A:C5	3.01	0.48
1:AA:233:C:H2'	1:AA:234:C:C6	2.48	0.48
1:AA:747:A:C5'	1:AA:748:G:OP2	2.61	0.48
2:AB:133:GLU:OE2	2:AB:137:ARG:NH1	2.47	0.48
5:AE:16:ILE:CG2	5:AE:110:ALA:HA	2.43	0.48
5:AE:60:ILE:HD13	5:AE:61:GLN:N	2.28	0.48
6:AF:42:TRP:HB2	6:AF:59:TYR:HB2	1.95	0.48
11:AK:112:ASP:OD1	21:AU:24:GLU:OE2	2.31	0.48
12:AL:43:LYS:O	12:AL:44:LYS:C	2.51	0.48
12:AL:35:THR:HG21	12:AL:54:ARG:NH2	2.28	0.48
18:AR:28:THR:O	18:AR:31:ASN:ND2	2.45	0.48
19:AS:58:VAL:CG1	19:AS:75:ALA:HB1	2.43	0.48
21:AU:12:PHE:CD1	21:AU:16:LEU:CD1	2.96	0.48
22:BA:1176:U:H2'	22:BA:1177:G:C4	2.49	0.48
22:BA:150:U:H2'	22:BA:151:C:C6	2.48	0.48
22:BA:2188:U:C4	22:BA:2189:U:C4	3.02	0.48
22:BA:2250:G:O5'	22:BA:2250:G:H8	1.96	0.48
22:BA:2271:G:H2'	22:BA:2272:U:O4'	2.13	0.48
22:BA:2371:G:C2	22:BA:2372:U:C6	3.01	0.48
22:BA:2377:A:O2'	22:BA:2378:A:H5'	2.14	0.48
22:BA:273:G:N2	22:BA:365:U:O2	2.46	0.48
22:BA:2861:U:C2	22:BA:2862:G:C8	3.01	0.48
22:BA:31:C:O3'	22:BA:1238:G:H5''	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BE:42:GLY:HA3	26:BE:90:GLN:O	2.13	0.48
26:BE:77:ILE:O	26:BE:77:ILE:CG1	2.61	0.48
1:CA:734:G:C4	1:CA:735:C:C6	3.01	0.48
2:CB:71:GLY:CA	2:CB:164:ILE:CG2	2.91	0.48
1:CA:8:A:N6	4:CD:54:GLN:OE1	2.46	0.48
5:CE:96:MET:CE	5:CE:111:MET:CE	2.90	0.48
5:CE:149:SER:OG	5:CE:152:MET:HB2	2.13	0.48
5:CE:33:PHE:O	5:CE:52:LYS:HB2	2.13	0.48
6:CF:43:GLY:HA2	6:CF:58:HIS:CD2	2.48	0.48
6:CF:66:ALA:HB3	6:CF:71:ILE:HD11	1.93	0.48
10:CJ:73:LEU:CD2	10:CJ:75:ASP:HB2	2.42	0.48
10:CJ:82:LYS:O	10:CJ:86:ALA:HB3	2.13	0.48
14:CN:62:ASN:HB3	14:CN:73:PHE:CD1	2.48	0.48
51:D3:16:LYS:HE3	51:D3:20:GLY:O	2.13	0.48
22:DA:1577:C:H2'	22:DA:1578:U:O4'	2.13	0.48
22:DA:1731:G:N1	22:DA:1733:G:C4	2.81	0.48
22:DA:1751:U:H2'	22:DA:1752:C:C6	2.48	0.48
22:DA:1856:U:C4	22:DA:1857:G:C6	3.01	0.48
22:DA:1981:A:H5''	22:DA:1982:U:OP2	2.13	0.48
22:DA:2025:C:H2'	22:DA:2026:U:C6	2.48	0.48
22:DA:2174:C:H2'	22:DA:2175:C:O4'	2.12	0.48
22:DA:2543:G:N3	22:DA:2765:A:H2'	2.28	0.48
37:DP:106:LYS:O	37:DP:109:ARG:HD2	2.14	0.48
37:DP:99:TYR:CE2	37:DP:100:LEU:HD21	2.48	0.48
44:DW:46:HIS:CD2	44:DW:77:ARG:HD3	2.48	0.48
47:DZ:10:THR:HG23	47:DZ:54:MET:C	2.32	0.48
1:AA:1149:C:O2'	1:AA:1150:A:H5'	2.14	0.48
1:AA:1349:A:OP1	9:AI:120:LYS:O	2.31	0.48
1:AA:43:C:H2'	1:AA:44:A:O4'	2.13	0.48
1:AA:781:A:C4	1:AA:802:A:C2	3.01	0.48
1:AA:926:G:C6	1:AA:1505:G:C5	3.01	0.48
2:AB:120:GLN:O	2:AB:120:GLN:HG2	2.13	0.48
2:AB:49:MET:O	2:AB:51:ASN:O	2.31	0.48
5:AE:69:ARG:O	5:AE:70:ASN:C	2.50	0.48
5:AE:74:VAL:HG23	5:AE:76:LEU:CD1	2.43	0.48
9:AI:80:ARG:HD2	9:AI:80:ARG:O	2.13	0.48
10:AJ:59:LYS:HD2	10:AJ:59:LYS:N	2.27	0.48
22:BA:1528:A:H2'	22:BA:1529:G:O4'	2.13	0.48
22:BA:1832:C:N4	22:BA:1833:C:C4	2.80	0.48
22:BA:2310:C:H2'	22:BA:2311:A:C5'	2.42	0.48
22:BA:2435:A:C2'	22:BA:2436:G:O5'	2.61	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BE:31:VAL:HG21	26:BE:104:ALA:HB2	1.95	0.48
27:BF:122:PHE:HB3	27:BF:163:ASP:CG	2.33	0.48
29:BH:91:PHE:O	1:CA:55:A:N1	2.47	0.48
30:BI:97:LYS:HG2	30:BI:139:VAL:HG22	1.94	0.48
32:BK:35:VAL:CG1	32:BK:106:GLU:HG2	2.44	0.48
32:BK:86:LEU:N	32:BK:86:LEU:HD23	2.28	0.48
35:BN:70:THR:OG1	35:BN:71:ARG:N	2.46	0.48
39:BR:25:LEU:O	39:BR:94:THR:HG21	2.13	0.48
39:BR:14:VAL:HG13	39:BR:98:ILE:HG13	1.95	0.48
1:CA:1019:A:H2'	1:CA:1020:G:O4'	2.14	0.48
1:CA:1181:G:O2'	1:CA:1182:G:C5	2.64	0.48
1:CA:158:G:C5	1:CA:164:G:C6	3.01	0.48
1:CA:3:A:O2'	1:CA:612:C:O2'	2.26	0.48
1:CA:728:A:C2	1:CA:729:A:C5	3.01	0.48
2:CB:20:THR:OG1	2:CB:21:ARG:N	2.46	0.48
9:CI:116:VAL:HG23	10:CJ:62:ARG:HD3	1.96	0.48
12:CL:21:VAL:N	12:CL:22:PRO:CD	2.76	0.48
22:DA:1153:C:H2'	22:DA:1154:G:O4'	2.14	0.48
22:DA:1211:C:H3'	22:DA:1212:G:H5'	1.94	0.48
22:DA:135:U:H2'	22:DA:136:G:C8	2.48	0.48
22:DA:1524:G:C2	22:DA:1525:A:C8	3.01	0.48
22:DA:158:U:O2	22:DA:169:G:C2	2.66	0.48
22:DA:169:G:C2	22:DA:170:U:C6	3.01	0.48
22:DA:1791:A:O3'	24:DC:205:LEU:HB2	2.13	0.48
22:DA:2056:G:C6	22:DA:2057:G:N7	2.82	0.48
22:DA:2146:C:H4'	22:DA:2147:A:C8	2.47	0.48
22:DA:2321:U:H5'	22:DA:2322:A:OP2	2.13	0.48
22:DA:371:A:N6	22:DA:402:A:OP2	2.46	0.48
22:DA:410:G:C2	22:DA:2407:A:C5	3.01	0.48
24:DC:162:VAL:HG12	24:DC:163:GLN:N	2.27	0.48
22:DA:2032:G:H1'	25:DD:150:GLN:HE22	1.76	0.48
22:DA:441:U:O2'	26:DE:41:GLN:OE1	2.27	0.48
29:DH:127:GLU:HG3	29:DH:144:VAL:O	2.13	0.48
29:DH:21:VAL:CG2	29:DH:22:LYS:N	2.76	0.48
30:DI:20:PRO:HB2	30:DI:23:PRO:HD2	1.95	0.48
31:DJ:71:ASP:O	31:DJ:73:VAL:HG23	2.14	0.48
33:DL:2:ARG:N	33:DL:2:ARG:HD3	2.29	0.48
38:DQ:78:LYS:HE2	38:DQ:117:LEU:HD21	1.95	0.48
39:DR:49:ILE:HG22	39:DR:53:PHE:C	2.33	0.48
42:DU:10:GLU:HG2	42:DU:11:VAL:N	2.28	0.48
42:DU:13:VAL:HG21	42:DU:39:ILE:HG23	1.93	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:DW:34:GLY:N	44:DW:61:ALA:O	2.38	0.48
22:DA:78:U:OP2	46:DY:2:LYS:HD2	2.12	0.48
1:AA:1142:G:H2'	1:AA:1143:G:O4'	2.13	0.48
1:AA:292:G:N7	1:AA:293:G:H1'	2.29	0.48
1:AA:359:G:H2'	1:AA:360:G:O4'	2.13	0.48
1:AA:803:G:C6	1:AA:804:U:N3	2.82	0.48
1:AA:882:C:O2'	1:AA:883:C:H5'	2.12	0.48
1:AA:903:G:C5	1:AA:904:U:C5	3.01	0.48
1:AA:942:G:H2'	1:AA:942:G:N3	2.27	0.48
1:AA:69:G:O6	1:AA:98:A:N6	2.47	0.48
2:AB:82:ASP:C	2:AB:84:ALA:N	2.64	0.48
7:AG:139:GLU:HA	7:AG:139:GLU:OE1	2.13	0.48
16:AP:19:VAL:HG13	16:AP:37:GLY:C	2.34	0.48
19:AS:45:ILE:HG23	19:AS:63:THR:HA	1.94	0.48
51:B3:30:ARG:O	51:B3:31:HIS:HB3	2.13	0.48
22:BA:1031:G:H4'	52:B4:6:SER:HB2	1.94	0.48
22:BA:1075:C:H2'	22:BA:1076:C:C6	2.48	0.48
22:BA:1306:C:O2	22:BA:1306:C:H2'	2.13	0.48
22:BA:1682:G:C8	22:BA:1757:A:C2	3.00	0.48
22:BA:1789:A:P	24:BC:221:ARG:HH11	2.37	0.48
22:BA:1839:G:H2'	22:BA:1840:G:O5'	2.13	0.48
22:BA:2026:U:H2'	22:BA:2027:G:O4'	2.12	0.48
22:BA:2298:A:C6	22:BA:2321:U:O4	2.66	0.48
22:BA:2339:C:H2'	22:BA:2340:A:C8	2.48	0.48
22:BA:2502:G:H5'	22:BA:2503:A:H5''	1.94	0.48
22:BA:271:G:C4	22:BA:367:G:N2	2.82	0.48
22:BA:660:C:H2'	22:BA:661:A:C8	2.48	0.48
24:BC:222:GLY:HA3	24:BC:230:HIS:CE1	2.48	0.48
27:BF:102:ARG:HD2	27:BF:140:GLU:OE2	2.14	0.48
29:BH:121:VAL:H	29:BH:122:LEU:HB2	1.77	0.48
42:BU:4:LYS:O	42:BU:5:ILE:HD12	2.13	0.48
1:CA:1513:A:H2'	1:CA:1514:G:H8	1.78	0.48
1:CA:577:G:C2	1:CA:578:C:C6	3.02	0.48
1:CA:862:C:C4	1:CA:863:U:C5	3.01	0.48
2:CB:186:ILE:HA	2:CB:200:ILE:HB	1.93	0.48
4:CD:73:ARG:O	4:CD:76:TYR:N	2.46	0.48
7:CG:146:GLU:OE1	7:CG:149:LYS:CE	2.61	0.48
7:CG:30:LEU:HD11	7:CG:116:MET:HE2	1.96	0.48
14:CN:54:ASP:HA	14:CN:59:ARG:CD	2.43	0.48
22:DA:2624:G:H1'	48:D0:19:HIS:CE1	2.48	0.48
22:DA:1215:G:H2'	22:DA:1216:G:O4'	2.14	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1262:A:C6	22:DA:1263:U:C2	3.01	0.48
22:DA:12:U:O2	22:DA:12:U:C2'	2.61	0.48
22:DA:1581:G:C6	22:DA:1582:C:C4	3.01	0.48
22:DA:2011:U:H2'	22:DA:2012:G:O4'	2.12	0.48
22:DA:2127:G:N3	22:DA:2162:G:N7	2.61	0.48
22:DA:2250:G:OP1	22:DA:2275:C:O2'	2.16	0.48
22:DA:2327:A:H2'	22:DA:2328:A:C8	2.48	0.48
22:DA:2330:G:N2	22:DA:2386:A:C4	2.81	0.48
22:DA:2603:G:C5	22:DA:2604:U:C5	3.02	0.48
22:DA:265:A:H4'	22:DA:266:G:OP1	2.13	0.48
22:DA:693:A:C6	22:DA:694:U:C4	3.02	0.48
22:DA:931:U:H4'	22:DA:932:U:OP2	2.14	0.48
23:DB:58:A:H2'	23:DB:59:A:O4'	2.13	0.48
24:DC:144:VAL:HB	24:DC:154:LEU:HB2	1.96	0.48
24:DC:267:ILE:CG2	24:DC:267:ILE:O	2.61	0.48
25:DD:101:PHE:HA	25:DD:104:VAL:HG13	1.95	0.48
30:DI:80:LEU:HA	30:DI:84:ALA:HB2	1.94	0.48
31:DJ:109:LEU:HD23	31:DJ:110:PRO:HD2	1.95	0.48
31:DJ:84:ILE:HG13	31:DJ:84:ILE:O	2.13	0.48
33:DL:82:LEU:HA	33:DL:85:VAL:HG13	1.94	0.48
46:DY:46:VAL:O	46:DY:46:VAL:HG12	2.13	0.48
1:AA:104:G:C2	1:AA:105:G:C8	3.01	0.48
1:AA:1095:U:H2'	1:AA:1096:C:O4'	2.13	0.48
1:AA:1129:C:O2	1:AA:1130:A:N6	2.47	0.48
1:AA:1523:G:OP1	11:AK:128:ARG:NH2	2.46	0.48
1:AA:220:G:C5	1:AA:221:C:C5	3.01	0.48
1:AA:455:G:C2	1:AA:478:A:C2	3.01	0.48
1:AA:524:G:C6	1:AA:525:C:N4	2.81	0.48
1:AA:999:C:H2'	1:AA:1000:A:C8	2.48	0.48
14:AN:46:LEU:HG	14:AN:47:LYS:N	2.29	0.48
14:AN:4:GLN:O	14:AN:7:LYS:N	2.47	0.48
50:B2:43:THR:O	50:B2:44:VAL:HB	2.13	0.48
22:BA:1169:A:H2'	22:BA:1170:C:O4'	2.13	0.48
22:BA:1359:A:N7	22:BA:1373:A:C2	2.81	0.48
22:BA:1402:U:H2'	22:BA:1403:A:O5'	2.14	0.48
22:BA:2322:A:H2'	22:BA:2323:G:O4'	2.12	0.48
25:BD:133:THR:HG23	25:BD:134:HIS:CG	2.49	0.48
25:BD:108:ASP:OD1	25:BD:173:GLN:HG2	2.13	0.48
27:BF:28:VAL:O	27:BF:28:VAL:HG13	2.13	0.48
33:BL:109:LYS:HG2	33:BL:126:ARG:HB2	1.94	0.48
33:BL:77:ILE:HD11	33:BL:101:ILE:CG2	2.43	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1029:U:O2	1:CA:1029:U:H2'	2.14	0.48
1:CA:238:A:O2'	1:CA:239:U:H5'	2.13	0.48
1:CA:578:C:C2	1:CA:579:A:C8	3.01	0.48
1:CA:582:C:C4	1:CA:760:G:C6	3.01	0.48
5:CE:16:ILE:HD11	5:CE:38:VAL:HG23	1.95	0.48
7:CG:92:ARG:NE	7:CG:93:PRO:HD2	2.28	0.48
8:CH:86:TYR:O	8:CH:87:LYS:HD2	2.13	0.48
10:CJ:47:GLU:O	10:CJ:66:GLU:HA	2.13	0.48
10:CJ:57:VAL:HG13	10:CJ:58:ASN:N	2.28	0.48
1:CA:1328:C:H5''	13:CM:28:THR:HG21	1.94	0.48
19:CS:34:TRP:HA	19:CS:52:HIS:HB2	1.96	0.48
22:DA:83:A:C2	22:DA:103:A:N7	2.82	0.48
22:DA:126:A:C8	22:DA:127:A:C2	3.01	0.48
22:DA:1369:G:C2	22:DA:1370:C:C6	3.01	0.48
22:DA:1475:G:H4'	22:DA:1732:C:C5	2.49	0.48
22:DA:1936:A:C8	22:DA:1945:G:C6	3.01	0.48
22:DA:2345:G:C6	22:DA:2347:C:N4	2.81	0.48
22:DA:2452:C:N4	22:DA:2453:A:C6	2.82	0.48
22:DA:2478:A:C8	22:DA:2529:G:C6	3.01	0.48
22:DA:2683:C:C5	22:DA:2684:U:C5	3.01	0.48
22:DA:487:C:N4	22:DA:488:G:C6	2.82	0.48
24:DC:252:THR:HG22	24:DC:253:LYS:N	2.27	0.48
25:DD:148:GLN:CD	25:DD:148:GLN:N	2.67	0.48
26:DE:84:THR:O	26:DE:85:PHE:CG	2.67	0.48
30:DI:90:SER:HB3	30:DI:93:PRO:HG3	1.94	0.48
34:DM:120:ALA:O	34:DM:124:LEU:HD23	2.14	0.48
22:DA:2845:U:H5''	37:DP:52:ASN:O	2.14	0.48
44:DW:45:PHE:CG	44:DW:80:ILE:HD11	2.48	0.48
1:AA:1181:G:C2	1:AA:1182:G:N2	2.82	0.48
1:AA:1250:A:H4'	9:AI:70:GLY:N	2.28	0.48
1:AA:1350:A:C5	1:AA:1351:U:C4	3.02	0.48
1:AA:418:C:N4	57:AA:1718:HOH:O	2.46	0.48
1:AA:736:C:H2'	1:AA:737:C:C6	2.49	0.48
2:AB:173:ILE:HG23	2:AB:183:VAL:HG11	1.95	0.48
2:AB:28:LYS:N	2:AB:29:PRO:CD	2.76	0.48
3:AC:60:PRO:O	3:AC:61:ALA:C	2.52	0.48
5:AE:81:LEU:N	5:AE:81:LEU:HD13	2.29	0.48
12:AL:86:ARG:HA	12:AL:94:ARG:HA	1.95	0.48
17:AQ:30:LYS:HG2	17:AQ:37:PHE:CZ	2.48	0.48
22:BA:2742:G:OP1	52:B4:36:ARG:HD3	2.13	0.48
22:BA:1413:A:O2'	22:BA:1414:C:H5'	2.14	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1916:A:N9	22:BA:1917:U:H1'	2.27	0.48
22:BA:2187:U:H2'	22:BA:2188:U:H1'	1.95	0.48
22:BA:2669:G:C2'	22:BA:2670:A:H5'	2.44	0.48
22:BA:2678:C:H2'	22:BA:2679:A:O4'	2.13	0.48
22:BA:2727:A:C2'	22:BA:2728:U:H5'	2.44	0.48
22:BA:287:G:H2'	22:BA:288:U:C6	2.49	0.48
22:BA:499:U:C4	22:BA:500:G:C6	3.02	0.48
22:BA:657:U:H2'	22:BA:658:U:C6	2.48	0.48
23:BB:17:C:H2'	23:BB:18:G:O4'	2.14	0.48
57:BA:3778:HOH:O	31:BJ:39:LYS:HE3	2.14	0.48
32:BK:107:LEU:O	32:BK:108:ARG:C	2.52	0.48
34:BM:77:PRO:HG2	34:BM:80:VAL:CG2	2.44	0.48
43:BV:13:GLY:O	43:BV:17:SER:OG	2.32	0.48
22:BA:102:U:C2	46:BY:2:LYS:HE3	2.49	0.48
1:CA:120:A:OP2	1:CA:120:A:H2'	2.13	0.48
1:CA:158:G:C6	1:CA:159:G:C5	3.02	0.48
1:CA:189:A:N6	1:CA:190:A:N1	2.61	0.48
1:CA:211:G:O2'	1:CA:212:G:C4'	2.62	0.48
1:CA:833:G:N2	1:CA:834:U:H1'	2.29	0.48
2:CB:81:LYS:HG3	2:CB:91:PHE:CZ	2.48	0.48
3:CC:121:THR:O	3:CC:125:GLU:OE2	2.31	0.48
4:CD:107:PHE:O	4:CD:117:LEU:CD1	2.60	0.48
7:CG:92:ARG:NE	7:CG:93:PRO:HD3	2.28	0.48
17:CQ:38:ILE:CG2	17:CQ:39:LYS:N	2.77	0.48
22:DA:1373:A:N6	22:DA:1374:G:C2	2.82	0.48
22:DA:1682:G:H2'	22:DA:1683:U:C6	2.48	0.48
22:DA:1936:A:H3'	22:DA:1937:A:H5'	1.96	0.48
22:DA:2209:G:C6	22:DA:2210:U:O4	2.67	0.48
22:DA:250:G:H2'	22:DA:251:A:C8	2.49	0.48
22:DA:449:A:H2'	22:DA:450:G:H5'	1.96	0.48
22:DA:771:G:C6	22:DA:772:C:C5	3.02	0.48
23:DB:39:A:N6	23:DB:44:G:C6	2.81	0.48
24:DC:69:ARG:NH2	24:DC:116:ILE:CD1	2.76	0.48
24:DC:147:LYS:O	24:DC:150:LYS:HB3	2.13	0.48
25:DD:133:THR:HG23	25:DD:134:HIS:H	1.79	0.48
26:DE:52:VAL:HG21	26:DE:81:GLY:HA2	1.95	0.48
27:DF:122:PHE:CE1	27:DF:166:GLY:C	2.87	0.48
29:DH:27:ARG:HE	45:DX:60:ASP:CG	2.16	0.48
22:DA:1076:C:H1'	30:DI:93:PRO:HG2	1.96	0.48
33:DL:102:GLY:N	57:DL:301:HOH:O	2.47	0.48
22:DA:1277:G:N3	35:DN:23:ASN:HB3	2.29	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:DR:80:ARG:O	39:DR:82:HIS:N	2.42	0.48
1:AA:1356:G:H2'	1:AA:1357:A:C8	2.49	0.48
1:AA:451:A:C5'	16:AP:70:ARG:HH22	2.27	0.48
1:AA:457:G:C5	1:AA:458:U:C5	3.02	0.48
4:AD:75:TYR:OH	4:AD:97:ARG:NH1	2.46	0.48
6:AF:66:ALA:HB1	6:AF:67:PRO:HD2	1.96	0.48
7:AG:49:THR:O	7:AG:53:ARG:HB3	2.13	0.48
11:AK:88:GLY:N	11:AK:114:THR:HG22	2.29	0.48
1:AA:1492:A:OP1	12:AL:44:LYS:HA	2.14	0.48
12:AL:86:ARG:CZ	12:AL:88:LYS:HB3	2.44	0.48
22:BA:1079:C:C5	22:BA:1088:A:N1	2.82	0.48
22:BA:1180:U:H2'	22:BA:1181:U:H5'	1.95	0.48
22:BA:1352:U:C2'	22:BA:1353:A:H5'	2.44	0.48
22:BA:1796:U:H2'	22:BA:1797:G:H8	1.79	0.48
22:BA:2173:A:C8	22:BA:2174:C:C5	3.02	0.48
22:BA:2287:A:C5	22:BA:2289:G:C8	3.02	0.48
22:BA:2435:A:H2'	22:BA:2436:G:O5'	2.14	0.48
22:BA:2665:A:C2	22:BA:2666:C:N1	2.81	0.48
22:BA:2887:A:H3'	22:BA:2888:C:H6	1.77	0.48
22:BA:277:G:C2'	22:BA:361:G:O6	2.61	0.48
22:BA:404:A:C2'	22:BA:405:U:OP2	2.62	0.48
22:BA:655:A:H4'	22:BA:656:G:OP1	2.12	0.48
27:BF:68:THR:N	27:BF:86:GLY:O	2.45	0.48
28:BG:141:ILE:C	28:BG:141:ILE:HD12	2.33	0.48
28:BG:69:ARG:C	28:BG:69:ARG:HD3	2.33	0.48
33:BL:132:ARG:HG3	33:BL:142:ILE:HD12	1.96	0.48
38:BQ:21:ALA:HB1	38:BQ:28:ARG:O	2.13	0.48
22:BA:1248:G:OP1	38:BQ:2:ALA:HB3	2.13	0.48
39:BR:48:LYS:O	39:BR:49:ILE:C	2.51	0.48
1:CA:1160:G:O2'	1:CA:1161:C:P	2.72	0.48
1:CA:1404:C:H2'	1:CA:1405:G:C8	2.48	0.48
1:CA:32:A:N1	1:CA:33:A:C6	2.82	0.48
1:CA:811:C:H4'	1:CA:900:A:N6	2.29	0.48
4:CD:139:PRO:O	4:CD:140:ASN:HB2	2.14	0.48
4:CD:202:GLU:OE1	5:CE:105:ILE:HG23	2.13	0.48
11:CK:82:LEU:HD22	11:CK:105:PHE:HB3	1.95	0.48
22:DA:1095:A:C2	30:DI:30:GLN:HB3	2.49	0.48
22:DA:1262:A:N3	22:DA:1262:A:H2'	2.27	0.48
22:DA:1401:G:C6	22:DA:1402:U:C4	3.01	0.48
22:DA:1523:U:H3'	22:DA:1524:G:H8	1.78	0.48
22:DA:1831:G:C5	22:DA:1832:C:C4	3.02	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2093:G:C6	22:DA:2225:A:C8	3.02	0.48
22:DA:2094:A:C2	22:DA:2196:C:C2	3.01	0.48
22:DA:67:U:H2'	22:DA:68:G:O4'	2.14	0.48
24:DC:157:SER:HB2	24:DC:160:THR:HG21	1.95	0.48
25:DD:146:ILE:HG13	25:DD:146:ILE:O	2.13	0.48
35:DN:114:GLU:OE2	35:DN:118:ARG:HD2	2.13	0.48
40:DS:61:ASN:O	40:DS:62:ASP:CB	2.61	0.48
1:AA:1000:A:C2	1:AA:1041:G:C2	3.01	0.48
1:AA:126:G:H2'	1:AA:127:G:O4'	2.14	0.48
1:AA:1406:U:H2'	1:AA:1407:C:C5'	2.44	0.48
1:AA:119:A:C4	1:AA:240:G:N7	2.81	0.48
1:AA:2:A:N6	1:AA:3:A:N1	2.61	0.48
1:AA:404:G:H4'	1:AA:439:U:O2	2.14	0.48
1:AA:47:C:O2	1:AA:49:U:C5	2.66	0.48
1:AA:702:A:H3'	1:AA:703:G:H5'	1.94	0.48
8:AH:10:MET:CE	8:AH:33:LYS:HD3	2.44	0.48
8:AH:83:LEU:HD22	8:AH:83:LEU:C	2.34	0.48
9:AI:50:GLN:O	9:AI:52:LEU:N	2.46	0.48
12:AL:63:VAL:HG21	12:AL:95:TYR:CE2	2.49	0.48
14:AN:16:LEU:HD23	14:AN:16:LEU:N	2.29	0.48
22:BA:1045:C:C4'	22:BA:1046:A:H5'	2.44	0.48
22:BA:1187:G:P	57:BA:3372:HOH:O	2.71	0.48
22:BA:1672:A:C2	22:BA:2582:G:H5'	2.49	0.48
22:BA:1876:A:C2	22:BA:1877:A:C4	3.02	0.48
22:BA:1912:A:C2	22:BA:1919:A:C5	3.01	0.48
22:BA:2052:A:H4'	25:BD:148:GLN:O	2.13	0.48
22:BA:2308:G:H5''	22:BA:2309:A:OP2	2.14	0.48
22:BA:2344:U:H4'	22:BA:2345:G:OP1	2.13	0.48
22:BA:613:A:C8	22:BA:616:A:C2	3.02	0.48
22:BA:64:A:C5	22:BA:65:U:C4	3.02	0.48
27:BF:174:ASP:O	27:BF:175:PHE:O	2.31	0.48
29:BH:103:VAL:HG21	29:BH:132:PHE:CZ	2.49	0.48
29:BH:135:HIS:CD2	29:BH:137:GLU:HG3	2.48	0.48
39:BR:49:ILE:HG22	39:BR:52:PRO:C	2.33	0.48
1:CA:1001:C:H2'	1:CA:1002:G:C8	2.49	0.48
1:CA:1104:G:C6	1:CA:1105:A:C5	3.02	0.48
1:CA:1298:U:O2	1:CA:1298:U:H2'	2.13	0.48
1:CA:1408:A:C2	1:CA:1494:G:N3	2.82	0.48
1:CA:17:U:H2'	1:CA:18:C:H6	1.76	0.48
1:CA:29:U:H5'	1:CA:296:U:OP1	2.14	0.48
1:CA:722:G:N3	1:CA:722:G:H3'	2.29	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:756:C:C2	1:CA:757:U:C6	3.01	0.48
1:CA:756:C:H2'	1:CA:757:U:C5'	2.43	0.48
1:CA:582:C:C2	1:CA:760:G:N1	2.81	0.48
1:CA:829:G:C6	1:CA:858:G:C2	3.01	0.48
4:CD:151:LYS:C	4:CD:152:GLN:OE1	2.52	0.48
4:CD:53:VAL:HG23	4:CD:54:GLN:N	2.29	0.48
1:CA:1377:A:C6	7:CG:7:ILE:HD12	2.49	0.48
12:CL:44:LYS:HD3	12:CL:44:LYS:N	2.27	0.48
13:CM:27:LYS:O	13:CM:27:LYS:CD	2.62	0.48
14:CN:24:ARG:CZ	14:CN:51:LEU:HD11	2.44	0.48
17:CQ:52:GLU:HG2	17:CQ:53:CYS:N	2.29	0.48
48:D0:28:LEU:HD23	48:D0:37:LYS:HB3	1.96	0.48
22:DA:197:A:N3	22:DA:197:A:H2'	2.29	0.48
22:DA:228:C:N4	22:DA:417:C:O2	2.47	0.48
22:DA:2519:U:C6	22:DA:2542:A:N6	2.82	0.48
22:DA:2562:U:H2'	22:DA:2563:U:H5'	1.95	0.48
22:DA:2736:A:C4	22:DA:2737:G:C8	3.01	0.48
22:DA:477:A:H2'	22:DA:478:A:O5'	2.14	0.48
22:DA:920:A:OP1	47:DZ:19:LYS:HE3	2.14	0.48
24:DC:124:ILE:HG22	24:DC:124:ILE:O	2.14	0.48
24:DC:108:LYS:HA	24:DC:196:GLY:CA	2.44	0.48
26:DE:150:THR:O	26:DE:172:ALA:HB2	2.13	0.48
28:DG:158:LYS:C	28:DG:160:LYS:N	2.67	0.48
45:DX:51:VAL:HG23	45:DX:52:SER:N	2.29	0.48
1:AA:17:U:H2'	1:AA:18:C:C6	2.49	0.48
3:AC:7:PRO:HD2	3:AC:184:TYR:CD2	2.48	0.48
5:AE:144:LEU:O	5:AE:147:MET:HB3	2.13	0.48
7:AG:72:THR:HA	7:AG:96:ARG:NH1	2.29	0.48
21:AU:10:GLU:HG3	21:AU:11:PRO:HD3	1.96	0.48
21:AU:25:LYS:O	21:AU:29:LEU:HB3	2.14	0.48
22:BA:1009:A:H8	22:BA:1009:A:O5'	1.96	0.48
22:BA:1378:A:O2'	57:BA:3753:HOH:O	2.20	0.48
22:BA:2553:G:H5''	22:BA:2554:U:OP2	2.14	0.48
25:BD:101:PHE:O	25:BD:102:ALA:C	2.52	0.48
30:BI:108:GLU:OE2	30:BI:109:ILE:HG13	2.13	0.48
32:BK:63:VAL:HG12	32:BK:107:LEU:HD11	1.96	0.48
34:BM:77:PRO:HG2	34:BM:80:VAL:HG21	1.96	0.48
35:BN:49:GLU:N	35:BN:50:PRO:CD	2.77	0.48
45:BX:33:LEU:O	45:BX:34:HIS:CG	2.66	0.48
45:BX:78:TYR:CG	45:BX:78:TYR:OXT	2.67	0.48
1:CA:1478:U:H2'	1:CA:1479:C:H6	1.79	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:202:G:H2'	1:CA:203:G:O4'	2.14	0.48
1:CA:203:G:N2	1:CA:215:C:C2	2.82	0.48
1:CA:555:U:H2'	1:CA:556:C:C6	2.49	0.48
1:CA:671:G:N1	1:CA:672:U:C2	2.81	0.48
5:CE:20:ARG:HG2	5:CE:20:ARG:O	2.14	0.48
17:CQ:19:LYS:CD	17:CQ:49:GLU:HA	2.44	0.48
51:D3:26:HIS:CE1	51:D3:48:ALA:HB2	2.48	0.48
22:DA:1198:U:O2	38:DQ:4:VAL:HG11	2.13	0.48
22:DA:1255:U:H2'	22:DA:1256:G:OP1	2.14	0.48
22:DA:1280:G:C6	22:DA:1281:G:C5	3.02	0.48
22:DA:134:G:N2	22:DA:146:A:C2	2.82	0.48
22:DA:1403:A:H2'	22:DA:1404:C:C6	2.48	0.48
22:DA:1869:G:C3'	22:DA:1870:C:H5'	2.44	0.48
22:DA:1931:U:C2	22:DA:1932:A:C8	3.02	0.48
22:DA:2283:C:C4	22:DA:2389:G:C4	3.02	0.48
22:DA:2308:G:O6	22:DA:2311:A:N7	2.47	0.48
22:DA:2694:G:C5	22:DA:2695:U:C5	3.01	0.48
22:DA:2699:C:H2'	22:DA:2700:A:O4'	2.14	0.48
22:DA:284:U:H2'	22:DA:284:U:O2	2.12	0.48
22:DA:33:C:O2	22:DA:447:A:N6	2.46	0.48
22:DA:228:C:N3	22:DA:418:C:C4'	2.77	0.48
22:DA:570:G:H2'	22:DA:571:U:H5'	1.94	0.48
22:DA:696:G:C6	22:DA:767:U:C2	3.02	0.48
22:DA:856:G:C2	22:DA:922:C:C2	3.01	0.48
25:DD:104:VAL:O	25:DD:105:LYS:HB2	2.13	0.48
26:DE:97:ASN:HB2	26:DE:100:MET:SD	2.54	0.48
33:DL:61:LEU:O	51:D3:13:ARG:NH2	2.44	0.48
42:DU:83:VAL:CG1	42:DU:84:GLY:N	2.77	0.48
1:AA:102:G:C2	1:AA:103:U:C5	3.01	0.48
1:AA:1163:A:C2	1:AA:1174:G:C2	3.02	0.48
1:AA:1190:G:P	3:AC:5:VAL:HG12	2.54	0.48
1:AA:1314:C:H41	19:AS:4:SER:HA	1.79	0.48
1:AA:1346:A:N1	1:AA:1374:A:H5''	2.28	0.48
1:AA:601:G:C6	1:AA:602:A:C6	3.02	0.48
1:AA:626:G:C6	1:AA:627:G:C5	3.02	0.48
1:AA:728:A:C6	1:AA:729:A:C6	3.02	0.48
2:AB:164:ILE:HG12	2:AB:165:ASP:N	2.28	0.48
2:AB:206:ALA:O	2:AB:208:ARG:N	2.47	0.48
4:AD:116:GLN:HG3	4:AD:120:HIS:CE1	2.48	0.48
7:AG:55:GLY:C	7:AG:57:SER:N	2.66	0.48
10:AJ:52:LEU:HB2	14:AN:81:ARG:CD	2.44	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AL:22:PRO:C	12:AL:24:LEU:N	2.68	0.48
13:AM:11:ASP:O	13:AM:12:HIS:CB	2.62	0.48
13:AM:83:LEU:HD21	19:AS:65:GLU:CG	2.44	0.48
18:AR:25:ASP:C	18:AR:27:ALA:N	2.67	0.48
22:BA:141:G:N1	41:BT:1:MET:HE1	2.28	0.48
22:BA:1501:G:O2'	22:BA:1502:A:H5'	2.14	0.48
22:BA:1805:A:H1'	24:BC:50:THR:O	2.14	0.48
22:BA:1916:A:H2'	22:BA:1917:U:C2'	2.44	0.48
22:BA:2339:C:H2'	22:BA:2340:A:H8	1.78	0.48
22:BA:877:A:O2'	22:BA:900:A:N6	2.46	0.48
22:BA:998:C:OP1	57:BA:3363:HOH:O	2.20	0.48
23:BB:14:U:OP2	23:BB:71:C:H5'	2.14	0.48
24:BC:162:VAL:HG11	24:BC:174:LEU:HB3	1.95	0.48
26:BE:111:GLU:CG	26:BE:114:ARG:NH1	2.77	0.48
27:BF:103:LEU:O	27:BF:108:VAL:HB	2.13	0.48
27:BF:40:VAL:CG1	27:BF:43:ALA:HB3	2.43	0.48
27:BF:73:SER:HB2	27:BF:81:GLN:N	2.29	0.48
31:BJ:17:VAL:HG22	31:BJ:55:ILE:HB	1.96	0.48
36:BO:83:LEU:HD23	36:BO:83:LEU:N	2.28	0.48
37:BP:31:TRP:CD2	37:BP:40:LEU:HD12	2.48	0.48
1:CA:1511:G:C5	1:CA:1512:U:C5	3.01	0.48
1:CA:577:G:C2	1:CA:578:C:C5	3.02	0.48
1:CA:643:C:C5'	8:CH:32:LEU:HD22	2.44	0.48
1:CA:690:G:H2'	1:CA:691:G:O4'	2.14	0.48
3:CC:36:ASP:O	3:CC:40:ARG:HG3	2.13	0.48
4:CD:107:PHE:CD1	4:CD:107:PHE:N	2.80	0.48
8:CH:21:ASN:O	8:CH:23:ALA:N	2.47	0.48
5:CE:83:HIS:NE2	8:CH:96:MET:CE	2.77	0.48
52:D4:16:ILE:HD13	52:D4:25:VAL:HG22	1.96	0.48
22:DA:585:G:C2	22:DA:1256:G:C6	3.01	0.48
22:DA:1356:G:N2	22:DA:1357:C:H1'	2.29	0.48
22:DA:1555:G:N2	22:DA:1556:C:H1'	2.29	0.48
22:DA:1665:A:H5''	32:DK:66:LYS:HG3	1.96	0.48
22:DA:2333:A:OP2	44:DW:77:ARG:NH2	2.39	0.48
22:DA:2345:G:H4'	22:DA:2346:A:H5''	1.96	0.48
22:DA:2373:G:C2	22:DA:2374:C:C2	3.01	0.48
22:DA:389:G:C2	22:DA:2413:G:H1'	2.49	0.48
22:DA:241:A:C6	22:DA:255:A:H5''	2.49	0.48
22:DA:2842:G:H2'	22:DA:2843:G:O4'	2.13	0.48
22:DA:2808:G:N2	22:DA:2891:U:C6	2.82	0.48
22:DA:301:G:H5'	22:DA:334:C:O2	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:382:A:N1	22:DA:383:C:C2	2.82	0.48
22:DA:426:C:H2'	22:DA:427:U:O4'	2.13	0.48
22:DA:749:A:C5	22:DA:750:A:C8	3.02	0.48
22:DA:777:G:N2	22:DA:778:G:C8	2.82	0.48
22:DA:909:A:C6	22:DA:912:C:C2	3.02	0.48
22:DA:915:C:N4	22:DA:916:G:C6	2.82	0.48
26:DE:59:PRO:HB2	26:DE:70:SER:OG	2.13	0.48
22:DA:1250:G:C5'	38:DQ:6:ARG:HD2	2.44	0.48
38:DQ:76:TYR:CZ	38:DQ:80:ILE:HG13	2.49	0.48
42:DU:16:GLY:O	42:DU:17:LYS:HB2	2.14	0.48
1:AA:116:A:C4	1:AA:117:G:C8	3.02	0.47
1:AA:259:G:H2'	1:AA:260:G:O4'	2.15	0.47
1:AA:553:A:O2'	1:AA:554:A:H5'	2.13	0.47
1:AA:65:A:C5	1:AA:381:C:C4	3.01	0.47
1:AA:72:A:H2'	1:AA:73:C:H5'	1.95	0.47
1:AA:74:A:H1'	1:AA:97:G:N2	2.28	0.47
4:AD:17:THR:HG23	4:AD:18:ASP:N	2.28	0.47
1:AA:430:A:OP1	4:AD:9:LEU:HB2	2.13	0.47
10:AJ:57:VAL:O	10:AJ:58:ASN:CB	2.63	0.47
10:AJ:59:LYS:HD2	10:AJ:60:ASP:N	2.29	0.47
1:AA:676:A:H5''	11:AK:115:PRO:HB3	1.96	0.47
13:AM:11:ASP:O	13:AM:12:HIS:ND1	2.47	0.47
17:AQ:12:VAL:O	17:AQ:13:VAL:CB	2.61	0.47
53:B5:218:THR:O	53:B5:219:MET:CB	2.60	0.47
22:BA:1494:A:C2	22:BA:1495:A:N9	2.83	0.47
22:BA:1850:G:C5	22:BA:1851:U:C4	3.02	0.47
22:BA:197:A:N6	22:BA:2430:A:H2'	2.29	0.47
22:BA:2131:U:OP2	22:BA:2132:U:C5	2.67	0.47
23:BB:39:A:C2	23:BB:44:G:C4	3.02	0.47
26:BE:176:ASP:OD1	26:BE:178:VAL:HG13	2.14	0.47
30:BI:28:LEU:HG	30:BI:35:ILE:HD12	1.95	0.47
31:BJ:57:LEU:HD22	31:BJ:128:ASN:HA	1.96	0.47
35:BN:82:GLU:O	35:BN:85:PRO:HG2	2.13	0.47
39:BR:14:VAL:HG13	39:BR:15:SER:N	2.29	0.47
1:CA:1040:U:H2'	1:CA:1041:G:C8	2.49	0.47
1:CA:1273:C:H2'	1:CA:1274:A:O4'	2.13	0.47
1:CA:1255:G:N1	1:CA:1279:G:N7	2.62	0.47
1:CA:1307:U:C4	1:CA:1308:U:C5	3.02	0.47
1:CA:1423:G:H2'	1:CA:1424:U:O4'	2.14	0.47
1:CA:407:U:H2'	1:CA:408:A:C8	2.49	0.47
1:CA:457:G:C6	1:CA:458:U:N3	2.82	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:477:C:H2'	1:CA:478:A:C8	2.50	0.47
1:CA:673:A:H2'	1:CA:674:G:C8	2.48	0.47
2:CB:123:ASP:O	2:CB:124:GLY:C	2.51	0.47
6:CF:81:ASN:OD1	6:CF:83:ALA:N	2.45	0.47
10:CJ:91:ASP:O	10:CJ:92:LEU:HB2	2.14	0.47
11:CK:107:ILE:HD13	11:CK:107:ILE:C	2.33	0.47
11:CK:58:SER:O	11:CK:91:PRO:HG3	2.14	0.47
51:D3:24:HIS:CE1	51:D3:48:ALA:HB3	2.49	0.47
22:DA:1208:C:C4	22:DA:1209:U:C5	3.02	0.47
22:DA:1324:G:O4'	22:DA:1616:A:N6	2.46	0.47
22:DA:1339:G:O4'	22:DA:1393:A:C2	2.67	0.47
22:DA:1682:G:C2	22:DA:1757:A:O4'	2.67	0.47
22:DA:1809:A:C6	22:DA:1810:A:C6	3.02	0.47
22:DA:1819:A:H5''	24:DC:157:SER:HB2	1.96	0.47
22:DA:183:C:C5	22:DA:184:C:C5	3.01	0.47
22:DA:2024:G:OP2	22:DA:2034:U:H4'	2.14	0.47
22:DA:228:C:H4'	22:DA:229:C:H5''	1.96	0.47
22:DA:2464:G:H2'	22:DA:2465:C:O4'	2.13	0.47
22:DA:302:C:C2	22:DA:303:G:C8	3.01	0.47
22:DA:228:C:O2	22:DA:418:C:H4'	2.14	0.47
22:DA:45:G:H2'	22:DA:215:G:N7	2.29	0.47
23:DB:81:G:C6	23:DB:82:U:C4	3.02	0.47
24:DC:3:VAL:HG11	24:DC:202:LEU:HD23	1.95	0.47
26:DE:149:ILE:HG21	26:DE:188:MET:SD	2.54	0.47
30:DI:101:ILE:O	30:DI:102:SER:CB	2.62	0.47
41:DT:35:ALA:O	41:DT:36:LYS:C	2.52	0.47
41:DT:64:LYS:HA	41:DT:79:ASP:OD1	2.14	0.47
42:DU:82:ARG:CZ	42:DU:82:ARG:HB2	2.43	0.47
1:AA:1157:A:N7	1:AA:1180:A:C6	2.82	0.47
1:AA:1306:A:C5	1:AA:1307:U:C5	3.02	0.47
1:AA:1406:U:H2'	1:AA:1407:C:H5'	1.96	0.47
1:AA:411:A:C6	1:AA:429:U:C4	3.02	0.47
1:AA:518:C:H5	1:AA:530:G:OP2	1.97	0.47
1:AA:791:G:C5	1:AA:792:A:N7	2.82	0.47
4:AD:170:TRP:CD2	4:AD:186:PRO:HG3	2.49	0.47
9:AI:26:GLY:N	9:AI:59:GLU:HA	2.29	0.47
9:AI:58:VAL:O	9:AI:59:GLU:CG	2.63	0.47
11:AK:13:ARG:CZ	22:BA:2142:A:OP1	2.61	0.47
11:AK:76:GLU:N	11:AK:76:GLU:OE2	2.47	0.47
17:AQ:60:GLU:OE1	17:AQ:77:ARG:HD3	2.14	0.47
22:BA:1932:A:H5''	22:BA:1933:G:OP2	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2228:G:H2'	22:BA:2229:U:C6	2.50	0.47
22:BA:416:U:C4	22:BA:417:C:C4	3.02	0.47
22:BA:609:A:H2'	22:BA:610:C:O4'	2.14	0.47
24:BC:31:ALA:HB3	24:BC:32:PRO:HD3	1.96	0.47
28:BG:126:PRO:HG2	28:BG:130:GLU:HB3	1.95	0.47
29:BH:116:ARG:O	29:BH:118:PRO:HD3	2.14	0.47
47:BZ:45:ARG:NH1	47:BZ:59:GLU:OE1	2.46	0.47
1:CA:1084:G:H5'	1:CA:1102:A:OP2	2.14	0.47
1:CA:1388:C:N3	1:CA:1389:C:C5	2.83	0.47
1:CA:143:A:H5'	1:CA:144:G:C5'	2.44	0.47
1:CA:1460:C:C4	1:CA:1461:G:C5	3.02	0.47
1:CA:374:A:N3	1:CA:375:U:C6	2.83	0.47
1:CA:38:G:C2	1:CA:397:A:C2	3.02	0.47
1:CA:476:U:O2'	1:CA:477:C:H5'	2.13	0.47
1:CA:609:A:H2'	1:CA:610:U:H5'	1.96	0.47
1:CA:704:A:C6	1:CA:705:G:C4	3.03	0.47
1:CA:755:G:C2	1:CA:756:C:C6	3.02	0.47
1:CA:933:G:OP2	7:CG:3:ARG:HB3	2.14	0.47
1:CA:983:A:N3	1:CA:983:A:C2'	2.78	0.47
1:CA:992:U:C2	1:CA:1043:G:N7	2.83	0.47
2:CB:15:HIS:O	2:CB:16:PHE:C	2.52	0.47
2:CB:35:ARG:O	2:CB:38:VAL:N	2.45	0.47
7:CG:92:ARG:CZ	7:CG:93:PRO:HD3	2.45	0.47
9:CI:81:HIS:O	9:CI:85:ARG:HB2	2.13	0.47
1:CA:1216:A:OP1	14:CN:5:SER:CB	2.63	0.47
22:DA:1138:G:H2'	22:DA:1139:G:O4'	2.14	0.47
22:DA:1365:A:H2'	22:DA:1365:A:N3	2.27	0.47
22:DA:1668:A:C4	22:DA:1674:G:C8	3.01	0.47
22:DA:1692:U:O2'	22:DA:1693:U:H2'	2.14	0.47
22:DA:1735:A:N1	22:DA:1736:U:C2	2.82	0.47
22:DA:2123:G:C2	22:DA:2176:A:C2	3.02	0.47
22:DA:218:A:C2	22:DA:219:A:C4	3.02	0.47
22:DA:2282:G:C5	22:DA:2425:A:N1	2.82	0.47
22:DA:2305:U:C4	22:DA:2306:C:C4	3.02	0.47
22:DA:415:A:C2	22:DA:2409:G:C6	3.02	0.47
22:DA:2513:A:C6	22:DA:2514:U:C4	3.02	0.47
22:DA:430:A:H2'	22:DA:431:U:H5'	1.96	0.47
22:DA:508:A:C3'	22:DA:509:C:H5'	2.43	0.47
22:DA:681:G:C2	22:DA:682:G:C8	3.02	0.47
22:DA:748:G:C8	40:DS:89:ALA:HB1	2.49	0.47
22:DA:85:G:OP2	42:DU:7:ARG:HB2	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:DC:243:HIS:O	24:DC:245:VAL:HG13	2.14	0.47
26:DE:61:ARG:HD2	26:DE:63:LYS:O	2.13	0.47
27:DF:128:TYR:CG	27:DF:170:LEU:HD13	2.49	0.47
28:DG:98:VAL:HG22	28:DG:125:CYS:SG	2.54	0.47
30:DI:59:ILE:HG22	30:DI:60:THR:N	2.29	0.47
36:DO:71:ALA:HB2	36:DO:102:ARG:HB2	1.96	0.47
42:DU:98:SER:O	42:DU:99:ASN:CB	2.62	0.47
22:DA:400:G:N7	45:DX:57:ARG:NH1	2.62	0.47
1:AA:1108:G:H2'	1:AA:1108:G:N3	2.30	0.47
1:AA:1154:G:N3	1:AA:1154:G:H2'	2.28	0.47
1:AA:115:G:H1'	1:AA:116:A:N7	2.30	0.47
1:AA:172:A:N7	1:AA:174:A:N7	2.62	0.47
1:AA:212:G:N2	1:AA:213:G:C4	2.82	0.47
1:AA:939:G:H2'	1:AA:940:C:C6	2.49	0.47
2:AB:91:PHE:CD2	2:AB:150:GLY:HA3	2.49	0.47
10:AJ:91:ASP:OD2	10:AJ:91:ASP:N	2.47	0.47
16:AP:5:ARG:HA	16:AP:68:SER:OG	2.15	0.47
16:AP:61:VAL:HG22	16:AP:67:ILE:HD11	1.94	0.47
53:B5:50:ILE:CB	53:B5:52:PRO:HD3	2.45	0.47
22:BA:1045:C:H3'	22:BA:1046:A:H5'	1.96	0.47
22:BA:1171:G:N3	22:BA:1179:G:N1	2.61	0.47
22:BA:1177:G:C2'	22:BA:1178:C:O5'	2.62	0.47
22:BA:1416:G:O2'	22:BA:1417:C:OP2	2.26	0.47
22:BA:1866:A:N1	22:BA:1876:A:C8	2.82	0.47
22:BA:2502:G:OP2	57:BA:3497:HOH:O	2.20	0.47
22:BA:335:C:O2'	22:BA:336:C:H5'	2.14	0.47
22:BA:481:G:C2	22:BA:507:A:C4	3.02	0.47
43:BV:65:VAL:O	43:BV:66:ASP:C	2.53	0.47
1:CA:1001:C:H2'	1:CA:1002:G:N7	2.29	0.47
1:CA:1004:A:O2'	1:CA:1036:A:C2	2.66	0.47
1:CA:106:C:O2	1:CA:379:C:C5'	2.62	0.47
1:CA:1262:C:C2'	1:CA:1263:C:H5'	2.45	0.47
1:CA:1479:C:C2	1:CA:1480:A:C8	3.02	0.47
1:CA:414:A:H2'	1:CA:415:A:O4'	2.14	0.47
1:CA:811:C:C5	1:CA:812:G:C6	3.02	0.47
1:CA:859:G:H2'	1:CA:860:A:C8	2.49	0.47
3:CC:42:TYR:CZ	3:CC:46:GLU:HG3	2.49	0.47
5:CE:13:GLU:OE1	5:CE:68:ARG:NH1	2.45	0.47
1:CA:824:G:H1'	8:CH:2:SER:N	2.29	0.47
9:CI:17:ALA:HA	9:CI:67:VAL:HA	1.95	0.47
12:CL:38:TYR:HB3	12:CL:52:VAL:HG13	1.95	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:CN:23:LYS:O	14:CN:26:GLU:HG3	2.15	0.47
15:CO:13:SER:O	15:CO:14:GLU:HG3	2.14	0.47
22:DA:1027:A:C5	22:DA:1126:A:C2	3.02	0.47
22:DA:1043:C:C4	22:DA:1044:C:C4	3.03	0.47
22:DA:1063:G:C4'	30:DI:77:ALA:HB1	2.44	0.47
22:DA:1274:A:N3	22:DA:1297:C:H1'	2.30	0.47
22:DA:1514:G:H5''	22:DA:1515:A:P	2.55	0.47
22:DA:170:U:C2	22:DA:171:U:C5	3.02	0.47
22:DA:2093:G:N7	22:DA:2225:A:H2'	2.29	0.47
22:DA:2120:G:C2	22:DA:2121:G:C8	3.02	0.47
22:DA:2186:G:C6	22:DA:2187:U:C4	3.02	0.47
22:DA:2244:U:H2'	22:DA:2245:U:O4'	2.15	0.47
22:DA:790:U:OP2	57:DA:3755:HOH:O	2.20	0.47
26:DE:149:ILE:HG23	26:DE:188:MET:HA	1.95	0.47
29:DH:117:LEU:HD11	29:DH:130:VAL:HG22	1.95	0.47
29:DH:62:LEU:HD22	29:DH:62:LEU:O	2.14	0.47
32:DK:99:ILE:CG2	32:DK:119:ALA:HB2	2.44	0.47
38:DQ:84:LYS:O	38:DQ:87:SER:N	2.39	0.47
41:DT:59:ASN:O	41:DT:84:TYR:N	2.47	0.47
43:DV:38:LEU:HD23	43:DV:40:ILE:HD11	1.96	0.47
22:DA:397:U:OP1	45:DX:31:PRO:HA	2.15	0.47
1:AA:1371:G:OP1	9:AI:13:LYS:HD3	2.15	0.47
1:AA:771:G:H2'	1:AA:772:U:H6	1.78	0.47
1:AA:977:A:H1'	1:AA:982:U:O4	2.14	0.47
2:AB:54:LEU:HD12	2:AB:220:THR:HG21	1.96	0.47
2:AB:82:ASP:OD1	2:AB:84:ALA:HB3	2.13	0.47
3:AC:53:SER:HB2	3:AC:115:LEU:HG	1.95	0.47
4:AD:109:ALA:N	4:AD:113:GLU:OE2	2.44	0.47
7:AG:97:ASN:HA	7:AG:100:ALA:HB3	1.96	0.47
10:AJ:11:LYS:HA	10:AJ:70:HIS:O	2.14	0.47
1:AA:624:C:H4'	16:AP:11:ALA:HB2	1.97	0.47
19:AS:42:PRO:HD3	19:AS:67:VAL:CG1	2.45	0.47
20:AT:5:LYS:O	20:AT:7:ALA:N	2.47	0.47
21:AU:16:LEU:HA	21:AU:18:ARG:CZ	2.43	0.47
11:AK:76:GLU:HA	22:BA:2141:G:P	2.55	0.47
22:BA:2297:A:C2	22:BA:2298:A:C8	3.02	0.47
22:BA:2502:G:H5''	22:BA:2503:A:H5''	1.94	0.47
22:BA:85:G:P	42:BU:28:VAL:HG11	2.54	0.47
23:BB:53:A:C2	23:BB:54:G:C8	3.01	0.47
24:BC:24:LEU:HD12	24:BC:24:LEU:HA	1.78	0.47
26:BE:108:ILE:CD1	26:BE:180:LEU:HB3	2.44	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1064:C:H4'	30:BI:90:SER:HB2	1.95	0.47
31:BJ:23:LYS:HE2	31:BJ:142:ILE:OXT	2.14	0.47
32:BK:53:LYS:NZ	32:BK:56:ASP:OD2	2.40	0.47
33:BL:77:ILE:HD11	33:BL:101:ILE:HG21	1.97	0.47
39:BR:74:ILE:O	39:BR:86:GLN:HA	2.15	0.47
43:BV:48:MET:SD	43:BV:86:LEU:CD1	3.02	0.47
1:CA:1107:C:C2	1:CA:1108:G:C8	3.03	0.47
1:CA:485:U:HO2'	1:CA:486:U:P	2.38	0.47
1:CA:775:G:C2'	1:CA:776:G:H5'	2.44	0.47
1:CA:951:G:N3	1:CA:970:C:O2'	2.34	0.47
14:CN:67:THR:HG23	14:CN:83:LYS:CE	2.45	0.47
11:CK:112:ASP:HB3	21:CU:4:ILE:CG2	2.44	0.47
49:D1:39:PHE:CD2	49:D1:40:ASP:N	2.82	0.47
22:DA:1115:G:O2'	22:DA:1116:G:OP2	2.25	0.47
22:DA:1139:G:O2'	22:DA:1140:C:H5'	2.14	0.47
22:DA:1178:C:H2'	22:DA:1179:G:C8	2.49	0.47
22:DA:1204:A:C2	22:DA:1240:U:N3	2.82	0.47
22:DA:1462:C:N3	22:DA:1463:C:C5	2.83	0.47
22:DA:218:A:N7	57:DA:3226:HOH:O	2.36	0.47
22:DA:2221:G:C2'	22:DA:2222:C:H5'	2.45	0.47
22:DA:228:C:C2	22:DA:418:C:H4'	2.50	0.47
22:DA:2499:C:C4	22:DA:2500:U:C4	3.02	0.47
22:DA:478:A:C2	22:DA:480:A:C4	3.02	0.47
22:DA:575:A:C2	22:DA:576:U:C6	3.02	0.47
22:DA:979:A:C8	22:DA:982:C:N4	2.83	0.47
24:DC:57:GLY:O	24:DC:58:HIS:O	2.32	0.47
24:DC:67:PHE:CE2	24:DC:156:ARG:NH2	2.82	0.47
26:DE:130:LYS:HB2	26:DE:133:LEU:CB	2.45	0.47
34:DM:69:PRO:O	34:DM:93:VAL:O	2.33	0.47
45:DX:25:THR:O	45:DX:25:THR:HG22	2.13	0.47
47:DZ:41:THR:HB	47:DZ:42:PRO:HD2	1.95	0.47
1:AA:1130:A:N3	1:AA:1146:A:C4	2.82	0.47
1:AA:1203:C:C2	1:AA:1204:A:C8	3.02	0.47
1:AA:408:A:C2	1:AA:435:A:C2	3.03	0.47
1:AA:654:G:C2'	1:AA:655:A:H5'	2.45	0.47
1:AA:667:G:H4'	15:AO:51:HIS:CE1	2.50	0.47
1:AA:741:G:H2'	1:AA:742:G:O4'	2.15	0.47
1:AA:880:C:C2'	1:AA:881:G:H5'	2.44	0.47
2:AB:166:ALA:HB2	2:AB:187:VAL:HG12	1.96	0.47
2:AB:64:LYS:HA	2:AB:64:LYS:HE2	1.95	0.47
4:AD:130:VAL:CG1	4:AD:135:TYR:CD1	2.98	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AG:145:ALA:O	7:AG:146:GLU:HB3	2.15	0.47
9:AI:44:ALA:H	9:AI:46:MET:HE1	1.80	0.47
9:AI:23:PRO:HA	9:AI:61:LEU:HA	1.95	0.47
1:AA:1216:A:OP1	14:AN:3:LYS:HE2	2.15	0.47
17:AQ:61:ILE:HG22	17:AQ:73:TRP:CE3	2.50	0.47
49:B1:39:PHE:HB2	49:B1:46:HIS:CE1	2.49	0.47
22:BA:1072:C:C2	22:BA:1093:G:O6	2.68	0.47
22:BA:1171:G:C6	22:BA:1172:C:N3	2.82	0.47
22:BA:1392:A:C6	22:BA:1393:A:C6	3.02	0.47
22:BA:1789:A:H5''	24:BC:219:THR:O	2.14	0.47
22:BA:2038:G:H2'	22:BA:2039:U:O4'	2.13	0.47
22:BA:2495:G:H2'	22:BA:2496:C:H5'	1.96	0.47
22:BA:368:A:N6	22:BA:369:U:O4	2.48	0.47
22:BA:684:G:C6	22:BA:774:G:C4	3.03	0.47
23:BB:91:C:OP2	34:BM:18:ARG:NH2	2.46	0.47
28:BG:101:ASN:CG	28:BG:101:ASN:O	2.53	0.47
28:BG:83:PHE:CE2	28:BG:138:LYS:HB2	2.49	0.47
29:BH:111:ALA:O	29:BH:114:GLU:HB2	2.13	0.47
29:BH:117:LEU:HD23	29:BH:121:VAL:HA	1.95	0.47
39:BR:102:SER:O	39:BR:103:ALA:O	2.33	0.47
42:BU:98:SER:C	42:BU:100:SER:H	2.18	0.47
1:CA:1343:G:O2'	9:CI:123:ARG:HD2	2.15	0.47
1:CA:330:C:O2	1:CA:330:C:H2'	2.13	0.47
1:CA:350:G:C6	1:CA:351:G:O6	2.67	0.47
1:CA:375:U:N3	1:CA:376:G:N7	2.63	0.47
1:CA:302:G:O2'	1:CA:556:C:H5''	2.15	0.47
1:CA:651:C:N4	1:CA:652:U:O4	2.47	0.47
1:CA:771:G:C2	1:CA:809:G:C2	3.03	0.47
1:CA:976:G:H1'	1:CA:1363:A:N6	2.30	0.47
2:CB:186:ILE:HG13	2:CB:200:ILE:O	2.15	0.47
2:CB:71:GLY:HA2	2:CB:164:ILE:CG2	2.45	0.47
5:CE:16:ILE:CD1	5:CE:38:VAL:HG23	2.44	0.47
3:CC:168:TYR:OH	5:CE:55:GLU:OE1	2.31	0.47
9:CI:101:ALA:HB1	9:CI:103:PHE:CZ	2.50	0.47
10:CJ:7:ARG:HD2	10:CJ:73:LEU:HD21	1.97	0.47
12:CL:3:THR:O	12:CL:4:VAL:C	2.53	0.47
20:CT:67:ILE:CD1	20:CT:71:LYS:HE3	2.44	0.47
22:DA:1409:U:H2'	22:DA:1410:G:O4'	2.14	0.47
22:DA:1649:G:C6	22:DA:2009:A:N6	2.82	0.47
22:DA:1855:U:C4	22:DA:1856:U:C4	3.03	0.47
22:DA:241:A:N1	22:DA:255:A:H5''	2.29	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2586:U:H2'	22:DA:2587:A:O4'	2.14	0.47
22:DA:288:U:H2'	22:DA:289:G:O4'	2.14	0.47
22:DA:537:G:C6	22:DA:555:G:C2	3.02	0.47
22:DA:591:U:C2	22:DA:592:A:C8	3.03	0.47
22:DA:658:U:C2	22:DA:659:G:C8	3.02	0.47
22:DA:945:A:N7	22:DA:2448:A:C2	2.83	0.47
23:DB:109:A:C5	23:DB:110:C:C4	3.02	0.47
22:DA:1245:G:H4'	26:DE:33:VAL:CG1	2.44	0.47
33:DL:116:VAL:HG21	33:DL:134:ALA:C	2.35	0.47
36:DO:58:ILE:O	36:DO:58:ILE:HG22	2.14	0.47
1:AA:1269:A:N1	1:AA:1313:U:O4'	2.48	0.47
1:AA:507:C:C4	1:AA:508:U:C4	3.03	0.47
1:AA:520:A:N1	1:AA:536:C:H1'	2.30	0.47
1:AA:820:U:H4'	1:AA:821:G:OP2	2.14	0.47
2:AB:216:ALA:O	2:AB:219:ALA:O	2.33	0.47
5:AE:98:PRO:O	5:AE:99:ALA:HB3	2.14	0.47
7:AG:129:GLU:O	7:AG:130:ASN:C	2.53	0.47
7:AG:68:ASN:O	7:AG:138:ARG:HD3	2.15	0.47
11:AK:128:ARG:HH11	11:AK:128:ARG:HG2	1.79	0.47
15:AO:81:LEU:HD12	15:AO:85:LEU:CD2	2.44	0.47
19:AS:63:THR:O	19:AS:65:GLU:N	2.47	0.47
21:AU:11:PRO:O	21:AU:12:PHE:CB	2.63	0.47
22:BA:1059:G:O2'	30:BI:129:ILE:HA	2.14	0.47
22:BA:1106:G:N3	22:BA:1106:G:H2'	2.29	0.47
22:BA:1107:G:C4	22:BA:1108:U:C6	3.03	0.47
22:BA:1386:C:H2'	22:BA:1387:A:C8	2.49	0.47
22:BA:1914:C:H2'	22:BA:1914:C:O2	2.14	0.47
22:BA:2213:U:H4'	22:BA:2214:C:OP2	2.15	0.47
22:BA:547:A:H3'	22:BA:548:G:C5'	2.44	0.47
22:BA:618:G:C6	22:BA:619:G:C4	3.03	0.47
22:BA:801:G:C4	26:BE:49:ARG:HD3	2.50	0.47
22:BA:811:U:C2	22:BA:1251:C:C5	3.02	0.47
22:BA:997:G:O2'	22:BA:998:C:H5'	2.15	0.47
27:BF:5:HIS:O	27:BF:8:TYR:HB3	2.15	0.47
30:BI:108:GLU:HA	30:BI:111:GLN:HB3	1.96	0.47
32:BK:91:SER:O	32:BK:92:GLU:C	2.53	0.47
33:BL:94:THR:HG22	33:BL:95:LEU:N	2.29	0.47
39:BR:64:VAL:HG23	39:BR:65:ALA:N	2.29	0.47
41:BT:18:GLU:N	41:BT:18:GLU:CD	2.68	0.47
1:CA:1272:G:H2'	1:CA:1273:C:O4'	2.15	0.47
1:CA:211:G:O2'	1:CA:212:G:H4'	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:455:G:C6	1:CA:456:A:C6	3.03	0.47
1:CA:484:G:C5	1:CA:486:U:H1'	2.49	0.47
1:CA:784:A:H2'	1:CA:785:G:C8	2.50	0.47
2:CB:187:VAL:HG23	2:CB:188:ASP:O	2.14	0.47
2:CB:68:LEU:HD22	2:CB:70:VAL:HG23	1.94	0.47
5:CE:105:ILE:HG13	5:CE:105:ILE:O	2.14	0.47
5:CE:83:HIS:CD2	8:CH:96:MET:HE2	2.50	0.47
7:CG:42:ILE:O	7:CG:42:ILE:CG2	2.63	0.47
10:CJ:15:HIS:HB3	10:CJ:70:HIS:CD2	2.50	0.47
10:CJ:15:HIS:HB3	10:CJ:70:HIS:NE2	2.29	0.47
11:CK:50:SER:HB3	11:CK:65:VAL:CG2	2.45	0.47
12:CL:59:ASN:N	12:CL:59:ASN:HD22	2.13	0.47
14:CN:3:LYS:HD3	14:CN:6:MET:HG2	1.97	0.47
20:CT:67:ILE:O	20:CT:68:HIS:C	2.52	0.47
22:DA:1248:G:C5	26:DE:46:GLN:NE2	2.83	0.47
22:DA:1310:G:H2'	22:DA:1311:G:H5'	1.95	0.47
22:DA:1428:C:C5	22:DA:1569:A:H5''	2.50	0.47
22:DA:1577:C:H2'	22:DA:1578:U:C1'	2.45	0.47
22:DA:2199:A:N7	22:DA:2225:A:C6	2.83	0.47
22:DA:2199:A:N7	22:DA:2225:A:N6	2.63	0.47
22:DA:2385:C:H2'	22:DA:2386:A:C8	2.49	0.47
22:DA:2531:A:C4	22:DA:2532:G:C8	3.02	0.47
22:DA:260:G:C6	22:DA:261:G:N7	2.82	0.47
22:DA:2822:G:H2'	22:DA:2823:A:H5''	1.97	0.47
22:DA:371:A:N3	45:DX:61:LYS:NZ	2.62	0.47
22:DA:396:G:H2'	22:DA:397:U:O5'	2.15	0.47
22:DA:39:G:C5	22:DA:40:U:C5	3.01	0.47
22:DA:46:G:N1	22:DA:47:C:C4	2.83	0.47
23:DB:109:A:C6	23:DB:110:C:N3	2.82	0.47
24:DC:125:LYS:O	24:DC:192:LEU:HB2	2.15	0.47
26:DE:8:ALA:O	26:DE:9:GLN:HB2	2.15	0.47
27:DF:72:LYS:HG3	27:DF:74:VAL:HG13	1.96	0.47
28:DG:158:LYS:O	28:DG:159:GLY:C	2.52	0.47
33:DL:82:LEU:O	33:DL:82:LEU:HG	2.15	0.47
43:DV:9:ARG:NH2	43:DV:17:SER:OG	2.48	0.47
43:DV:48:MET:SD	43:DV:86:LEU:HG	2.54	0.47
1:AA:200:G:N2	1:AA:218:U:C2	2.82	0.47
1:AA:443:C:O2'	1:AA:444:G:H5'	2.15	0.47
1:AA:667:G:OP1	1:AA:732:C:O2'	2.26	0.47
1:AA:803:G:C5	1:AA:804:U:C4	3.02	0.47
1:AA:872:A:C4	1:AA:874:G:C8	3.03	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:32:CYS:SG	4:AD:33:LYS:N	2.88	0.47
6:AF:3:HIS:CE1	6:AF:65:GLU:OE2	2.67	0.47
6:AF:29:ILE:HG23	6:AF:66:ALA:HB2	1.97	0.47
6:AF:91:ARG:HG2	6:AF:93:LYS:CE	2.44	0.47
8:AH:80:ARG:HB2	8:AH:81:PRO:HD2	1.96	0.47
9:AI:36:GLU:HA	9:AI:40:GLY:HA3	1.96	0.47
14:AN:73:PHE:CD1	14:AN:74:LEU:N	2.83	0.47
1:AA:261:U:P	20:AT:71:LYS:HE2	2.55	0.47
22:BA:120:U:H5''	22:BA:122:G:OP2	2.14	0.47
22:BA:181:A:C2	22:BA:182:A:C4	3.02	0.47
22:BA:211:C:O2'	22:BA:212:G:H5'	2.14	0.47
22:BA:2492:U:H2'	22:BA:2493:U:H6	1.80	0.47
22:BA:2593:U:H2'	22:BA:2594:C:O5'	2.14	0.47
22:BA:819:A:C4	22:BA:1189:A:C2	3.03	0.47
26:BE:149:ILE:CD1	26:BE:172:ALA:HA	2.45	0.47
30:BI:39:CYS:HA	30:BI:42:PHE:HB2	1.96	0.47
37:BP:37:LYS:HD3	37:BP:39:ARG:NH1	2.30	0.47
47:BZ:24:LEU:HD11	47:BZ:54:MET:HE1	1.97	0.47
1:CA:1014:A:N7	1:CA:1015:G:C6	2.82	0.47
1:CA:1129:C:C6	1:CA:1139:G:C8	3.02	0.47
1:CA:939:G:C6	1:CA:940:C:C4	3.03	0.47
2:CB:57:LEU:HD11	2:CB:221:VAL:CG2	2.45	0.47
3:CC:71:ALA:HA	3:CC:106:VAL:HB	1.96	0.47
4:CD:174:ASP:O	4:CD:175:ALA:HB2	2.14	0.47
9:CI:26:GLY:N	9:CI:61:LEU:O	2.47	0.47
10:CJ:57:VAL:HG22	10:CJ:58:ASN:H	1.79	0.47
22:DA:1357:C:N4	22:DA:1358:G:C6	2.83	0.47
22:DA:143:C:H2'	22:DA:144:A:H5'	1.96	0.47
22:DA:1596:A:C6	22:DA:1597:A:C6	3.03	0.47
22:DA:1343:G:H4'	22:DA:1598:A:OP2	2.15	0.47
22:DA:1776:G:N2	22:DA:1789:A:H1'	2.30	0.47
22:DA:1791:A:C2'	22:DA:1792:G:H5'	2.45	0.47
22:DA:1835:G:C4	22:DA:1836:C:C6	3.02	0.47
22:DA:1652:A:C2	22:DA:2006:C:N3	2.82	0.47
22:DA:2054:A:OP1	22:DA:2055:C:O2'	2.29	0.47
22:DA:2115:G:H2'	22:DA:2117:A:N7	2.30	0.47
22:DA:2449:U:H4'	22:DA:2450:A:OP1	2.15	0.47
22:DA:248:G:H5'	22:DA:250:G:N7	2.28	0.47
22:DA:2511:U:C5	22:DA:2512:C:C5	3.03	0.47
22:DA:2796:U:N3	22:DA:2798:U:C4	2.83	0.47
22:DA:2829:A:H2'	22:DA:2830:C:H5'	1.96	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:526:A:P	57:DA:3247:HOH:O	2.72	0.47
22:DA:892:A:N3	22:DA:892:A:H3'	2.30	0.47
22:DA:965:C:H4'	22:DA:2273:A:H1'	1.96	0.47
22:DA:1797:G:O3'	24:DC:256:LYS:HA	2.15	0.47
25:DD:35:THR:O	25:DD:36:GLN:HB2	2.14	0.47
26:DE:106:LYS:HG3	26:DE:200:LEU:HD23	1.95	0.47
30:DI:56:PRO:HD2	30:DI:75:PRO:HD3	1.97	0.47
32:DK:108:ARG:HB2	32:DK:116:ILE:HD13	1.95	0.47
36:DO:104:GLN:O	36:DO:107:ALA:N	2.47	0.47
36:DO:117:PHE:CD1	36:DO:117:PHE:C	2.88	0.47
40:DS:55:ILE:CG2	40:DS:66:ILE:CD1	2.93	0.47
41:DT:27:SER:O	41:DT:29:THR:N	2.48	0.47
41:DT:7:LEU:HD22	41:DT:46:ALA:CA	2.45	0.47
45:DX:12:PRO:HB3	45:DX:28:ARG:NH2	2.29	0.47
45:DX:56:MET:O	45:DX:60:ASP:N	2.44	0.47
1:AA:1126:U:O2	1:AA:1280:A:H5'	2.15	0.47
1:AA:1330:U:C4	1:AA:1331:G:C6	3.03	0.47
1:AA:1493:A:O2'	1:AA:1494:G:P	2.73	0.47
1:AA:469:C:C5	1:AA:470:C:C4	3.03	0.47
1:AA:568:G:C4	1:AA:569:C:H5	2.31	0.47
2:AB:12:ALA:HB1	2:AB:15:HIS:HB3	1.97	0.47
2:AB:94:HIS:O	2:AB:95:ARG:C	2.52	0.47
3:AC:112:ASP:O	3:AC:116:VAL:HG23	2.14	0.47
10:AJ:17:LEU:HD21	10:AJ:96:VAL:HG22	1.97	0.47
10:AJ:36:VAL:HG22	10:AJ:76:ILE:HG12	1.97	0.47
13:AM:91:HIS:CE1	13:AM:97:VAL:HG21	2.49	0.47
15:AO:70:LEU:HD21	15:AO:77:ARG:HB2	1.97	0.47
21:AU:10:GLU:CB	21:AU:11:PRO:HD3	2.45	0.47
51:B3:26:HIS:HB2	51:B3:44:LEU:O	2.15	0.47
52:B4:25:VAL:HB	52:B4:35:GLN:HB2	1.96	0.47
53:B5:28:ARG:O	53:B5:28:ARG:CG	2.63	0.47
22:BA:1696:G:O6	22:BA:1697:G:C2	2.68	0.47
22:BA:204:A:O4'	22:BA:206:U:C6	2.67	0.47
22:BA:2076:U:O4'	22:BA:2076:U:O2	2.30	0.47
22:BA:2469:A:C2	22:BA:2482:A:C4	3.01	0.47
22:BA:2756:U:H1'	22:BA:2757:A:H5''	1.97	0.47
22:BA:2839:G:H4'	35:BN:49:GLU:OE1	2.15	0.47
22:BA:279:A:N6	22:BA:361:G:O2'	2.46	0.47
22:BA:569:U:H1'	22:BA:947:A:O4'	2.14	0.47
22:BA:975:A:C2	22:BA:990:A:C8	3.03	0.47
25:BD:85:ALA:O	25:BD:86:GLU:C	2.53	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BE:37:ALA:O	26:BE:40:ARG:HB2	2.14	0.47
27:BF:121:SER:HB3	27:BF:129:SER:O	2.15	0.47
29:BH:14:SER:O	29:BH:15:LEU:CB	2.61	0.47
29:BH:97:ARG:HH11	1:CA:370:C:C5'	2.28	0.47
30:BI:6:GLN:O	30:BI:7:ALA:HB3	2.15	0.47
31:BJ:17:VAL:HG23	31:BJ:137:PRO:CB	2.45	0.47
40:BS:46:LEU:O	40:BS:50:VAL:HG23	2.15	0.47
22:BA:748:G:C8	40:BS:89:ALA:HB1	2.49	0.47
1:CA:1152:A:H4'	10:CJ:15:HIS:CD2	2.50	0.47
1:CA:1299:A:N3	1:CA:1299:A:H2'	2.30	0.47
1:CA:421:U:O5'	1:CA:422:C:H5	1.96	0.47
1:CA:505:G:C6	1:CA:535:A:C2	3.03	0.47
1:CA:642:A:H2'	1:CA:643:C:C6	2.50	0.47
1:CA:991:U:H4'	1:CA:992:U:H5''	1.96	0.47
5:CE:111:MET:HG3	5:CE:140:THR:HG21	1.96	0.47
7:CG:66:LEU:HG	7:CG:66:LEU:O	2.15	0.47
17:CQ:14:SER:CB	17:CQ:22:VAL:HG12	2.45	0.47
19:CS:6:LYS:HB2	19:CS:7:LYS:HE2	1.95	0.47
22:DA:1563:U:H2'	22:DA:1564:C:C6	2.49	0.47
22:DA:1724:G:O6	22:DA:1736:U:C2	2.68	0.47
22:DA:1730:C:O2'	22:DA:1731:G:C2	2.67	0.47
22:DA:195:A:C6	22:DA:198:C:C5	3.03	0.47
22:DA:2121:G:C2	22:DA:2177:C:O2	2.68	0.47
22:DA:2415:G:C2	22:DA:2416:C:C2	3.03	0.47
22:DA:2603:G:C6	22:DA:2604:U:C5	3.02	0.47
22:DA:2752:C:C5	22:DA:2753:A:N7	2.82	0.47
22:DA:408:G:C6	22:DA:409:G:C5	3.03	0.47
22:DA:453:A:H4'	22:DA:472:A:H62	1.78	0.47
25:DD:13:ARG:HD3	25:DD:21:SER:OG	2.14	0.47
25:DD:3:GLY:O	25:DD:82:PHE:CE1	2.68	0.47
28:DG:83:PHE:CD2	28:DG:138:LYS:HB2	2.50	0.47
29:DH:5:LEU:HD13	29:DH:13:GLY:HA3	1.96	0.47
31:DJ:19:ASP:O	31:DJ:23:LYS:CE	2.63	0.47
40:DS:55:ILE:HG21	40:DS:66:ILE:CD1	2.44	0.47
22:DA:2387:U:H1'	44:DW:41:ARG:HD2	1.97	0.47
1:AA:1049:U:O4'	1:AA:1201:A:C8	2.67	0.47
1:AA:192:A:C6	1:AA:193:C:C4	3.03	0.47
1:AA:642:A:N7	8:AH:107:SER:HA	2.29	0.47
1:AA:689:C:O2'	1:AA:705:G:O2'	2.24	0.47
1:AA:901:A:C5	1:AA:902:G:H1'	2.50	0.47
2:AB:106:THR:O	2:AB:107:VAL:HG23	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:174:PRO:C	3:AC:176:HIS:H	2.18	0.47
6:AF:63:ASN:OD1	6:AF:96:VAL:HG21	2.13	0.47
10:AJ:6:ILE:CD1	10:AJ:76:ILE:HB	2.45	0.47
14:AN:43:ASN:C	14:AN:45:VAL:H	2.17	0.47
1:AA:263:A:P	20:AT:74:ARG:NH1	2.88	0.47
53:B5:52:PRO:O	53:B5:53:ARG:HB2	2.15	0.47
22:BA:1006:C:P	57:BA:3780:HOH:O	2.72	0.47
22:BA:1107:G:C5	22:BA:1108:U:C5	3.03	0.47
22:BA:1503:A:N6	22:BA:1504:A:N6	2.63	0.47
22:BA:1730:C:O2'	22:BA:1731:G:C4	2.60	0.47
22:BA:2304:G:H4'	27:BF:129:SER:O	2.14	0.47
22:BA:26:G:C2'	22:BA:27:G:O5'	2.63	0.47
22:BA:2681:C:C2	22:BA:2724:U:O4	2.68	0.47
25:BD:125:TRP:CE3	25:BD:160:LYS:HD2	2.49	0.47
36:BO:49:VAL:HG13	36:BO:50:ALA:N	2.30	0.47
41:BT:2:ILE:HG12	41:BT:7:LEU:HD11	1.97	0.47
1:CA:1410:A:H2'	1:CA:1411:C:C6	2.50	0.47
1:CA:1486:G:H2'	1:CA:1487:G:O4'	2.14	0.47
29:BH:97:ARG:NH1	1:CA:370:C:C5'	2.77	0.47
1:CA:570:G:H2'	1:CA:570:G:N3	2.28	0.47
5:CE:56:VAL:N	5:CE:57:PRO:CD	2.77	0.47
13:CM:86:TYR:O	13:CM:90:ARG:CG	2.63	0.47
16:CP:19:VAL:CG1	16:CP:37:GLY:N	2.78	0.47
21:CU:32:VAL:HG12	21:CU:32:VAL:O	2.15	0.47
22:DA:104:A:C5	22:DA:105:C:N3	2.83	0.47
22:DA:504:A:C2	22:DA:1234:U:H4'	2.50	0.47
22:DA:1308:A:N6	22:DA:1309:G:C2	2.83	0.47
22:DA:1357:C:O2'	22:DA:1358:G:H5'	2.15	0.47
22:DA:1588:G:C5	22:DA:1589:U:C4	3.02	0.47
22:DA:178:G:C5	22:DA:179:C:C5	3.03	0.47
22:DA:1965:C:H3'	22:DA:1966:A:H8	1.80	0.47
22:DA:2111:U:O2	22:DA:2111:U:O4'	2.32	0.47
22:DA:2282:G:N3	22:DA:2425:A:N6	2.63	0.47
23:DB:60:C:N4	57:DB:303:HOH:O	2.47	0.47
26:DE:47:LYS:O	26:DE:83:VAL:CB	2.63	0.47
30:DI:10:LYS:HB2	30:DI:56:PRO:HB3	1.96	0.47
30:DI:54:PRO:HB2	30:DI:78:VAL:HG21	1.97	0.47
40:DS:41:LYS:O	40:DS:42:LYS:C	2.51	0.47
42:DU:74:ASN:ND2	42:DU:96:PHE:CD1	2.82	0.47
1:AA:104:G:N2	1:AA:105:G:C4	2.82	0.47
1:AA:1053:G:N2	1:AA:1056:U:C5	2.83	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1402:C:H2'	1:AA:1403:C:O4'	2.15	0.47
1:AA:237:G:OP1	17:AQ:42:THR:OG1	2.33	0.47
1:AA:704:A:C6	1:AA:705:G:C5	3.02	0.47
5:AE:35:ALA:CB	5:AE:60:ILE:HA	2.45	0.47
9:AI:36:GLU:HA	9:AI:40:GLY:CA	2.45	0.47
19:AS:29:LYS:HB3	19:AS:30:PRO:HD2	1.97	0.47
19:AS:42:PRO:O	19:AS:45:ILE:HG13	2.15	0.47
53:B5:50:ILE:C	53:B5:52:PRO:CD	2.82	0.47
22:BA:1178:C:H2'	22:BA:1179:G:C8	2.50	0.47
22:BA:2297:A:C2	22:BA:2321:U:H5	2.33	0.47
22:BA:322:A:C6	22:BA:340:A:N1	2.83	0.47
22:BA:508:A:H4'	22:BA:509:C:OP2	2.15	0.47
22:BA:744:U:OP1	57:BA:3655:HOH:O	2.20	0.47
22:BA:954:G:C5	22:BA:955:U:C5	3.02	0.47
23:BB:104:A:H2'	23:BB:105:G:O4'	2.14	0.47
24:BC:162:VAL:CG1	24:BC:174:LEU:HB3	2.45	0.47
25:BD:172:VAL:HG21	25:BD:194:PRO:HD3	1.96	0.47
27:BF:152:LEU:HD12	27:BF:153:ASP:N	2.29	0.47
28:BG:111:HIS:CD2	28:BG:112:PRO:O	2.68	0.47
31:BJ:81:ILE:HG12	31:BJ:82:GLY:H	1.80	0.47
35:BN:106:ASP:C	35:BN:106:ASP:OD1	2.52	0.47
35:BN:32:GLU:OE1	35:BN:86:ARG:NH2	2.41	0.47
36:BO:31:THR:HG23	36:BO:32:PRO:N	2.30	0.47
22:BA:1250:G:C5'	38:BQ:6:ARG:HD3	2.45	0.47
39:BR:21:ARG:NE	39:BR:93:PHE:CD1	2.83	0.47
44:BW:51:VAL:HG13	44:BW:60:PHE:O	2.15	0.47
1:CA:1034:G:H5'	1:CA:1035:A:OP2	2.15	0.47
1:CA:1092:A:N1	1:CA:1183:U:O2	2.48	0.47
1:CA:1381:U:O2'	1:CA:1382:C:O5'	2.33	0.47
1:CA:162:A:H2'	1:CA:163:C:O4'	2.15	0.47
1:CA:459:A:C8	1:CA:459:A:OP2	2.68	0.47
1:CA:846:G:C2	1:CA:847:G:C8	3.03	0.47
3:CC:30:ALA:HB1	14:CN:65:ARG:NH2	2.30	0.47
10:CJ:19:ASP:HA	10:CJ:22:THR:HB	1.97	0.47
10:CJ:41:PRO:O	10:CJ:42:LEU:HB2	2.14	0.47
13:CM:37:ALA:CB	13:CM:56:LEU:HG	2.44	0.47
22:DA:116:C:O2'	22:DA:126:A:C2'	2.62	0.47
22:DA:1264:A:C8	22:DA:1265:A:C8	3.03	0.47
22:DA:1431:A:C6	22:DA:1432:G:C5	3.03	0.47
22:DA:152:A:C2	22:DA:175:G:N3	2.82	0.47
22:DA:160:A:N6	22:DA:161:A:N6	2.63	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1805:A:C2	22:DA:1813:G:C6	3.03	0.47
22:DA:1896:G:H2'	22:DA:1897:G:O4'	2.15	0.47
22:DA:187:G:N1	22:DA:210:C:C2	2.82	0.47
22:DA:2403:C:H2'	22:DA:2403:C:O2	2.15	0.47
55:DA:3001:DOL:H432	55:DA:3001:DOL:O7	2.13	0.47
22:DA:40:U:C4	22:DA:41:C:N4	2.83	0.47
22:DA:668:A:H3'	22:DA:669:G:H5''	1.96	0.47
22:DA:619:G:O6	26:DE:98:LYS:HE3	2.15	0.47
28:DG:98:VAL:HG11	28:DG:124:GLU:HA	1.96	0.47
32:DK:31:ARG:HB3	32:DK:32:TYR:CD2	2.49	0.47
33:DL:77:ILE:CG2	33:DL:81:ASP:OD2	2.63	0.47
35:DN:24:MET:HE3	35:DN:44:LEU:HD22	1.97	0.47
41:DT:23:ALA:O	41:DT:27:SER:N	2.48	0.47
45:DX:40:VAL:CG2	45:DX:45:ARG:O	2.63	0.47
1:AA:1027:C:C5	1:AA:1028:C:N4	2.82	0.47
1:AA:1305:G:HO2'	1:AA:1306:A:H8	1.60	0.47
1:AA:1381:U:C5	1:AA:1382:C:C5	3.03	0.47
1:AA:186:C:H4'	20:AT:76:LYS:HB2	1.96	0.47
1:AA:65:A:C2	1:AA:381:C:C6	3.03	0.47
2:AB:160:ALA:O	2:AB:161:LEU:HB2	2.15	0.47
2:AB:206:ALA:O	2:AB:210:VAL:HG22	2.14	0.47
2:AB:94:HIS:ND1	2:AB:146:ASN:HB2	2.30	0.47
7:AG:127:ALA:O	7:AG:130:ASN:N	2.46	0.47
16:AP:22:ALA:HA	16:AP:33:ILE:CG1	2.43	0.47
48:B0:44:THR:HG23	48:B0:48:TYR:O	2.15	0.47
50:B2:43:THR:O	50:B2:44:VAL:CB	2.62	0.47
53:B5:122:GLY:CA	53:B5:146:VAL:CB	2.93	0.47
22:BA:1384:A:H1'	22:BA:1405:U:C1'	2.45	0.47
22:BA:1668:A:O2'	22:BA:1674:G:N7	2.36	0.47
22:BA:1959:G:C2'	22:BA:1960:A:O5'	2.62	0.47
22:BA:205:G:O2'	22:BA:206:U:OP2	2.33	0.47
22:BA:309:A:C5	22:BA:330:A:C6	3.03	0.47
23:BB:7:G:H5''	36:BO:29:HIS:CE1	2.50	0.47
28:BG:85:LYS:CG	28:BG:141:ILE:HD13	2.45	0.47
34:BM:2:LEU:O	34:BM:3:GLN:HB3	2.15	0.47
46:BY:6:LEU:HD22	46:BY:56:LEU:HD21	1.97	0.47
1:CA:1052:U:H5''	1:CA:1053:G:OP2	2.15	0.47
1:CA:1311:A:C2	1:CA:1327:C:N3	2.83	0.47
1:CA:1348:U:H4'	9:CI:122:ARG:CG	2.45	0.47
1:CA:1386:G:H2'	1:CA:1387:G:H8	1.80	0.47
1:CA:16:A:C6	1:CA:17:U:C5	3.02	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:581:G:N2	1:CA:761:G:C6	2.83	0.47
1:CA:991:U:H4'	1:CA:992:U:OP1	2.15	0.47
1:CA:427:U:P	4:CD:13:ARG:HH22	2.38	0.47
5:CE:38:VAL:HG11	5:CE:114:VAL:HA	1.96	0.47
17:CQ:81:LYS:N	17:CQ:81:LYS:HD2	2.30	0.47
17:CQ:8:LEU:HD12	17:CQ:8:LEU:N	2.29	0.47
22:DA:1335:C:H2'	22:DA:1336:A:C8	2.50	0.47
22:DA:1434:A:H2'	22:DA:1435:G:C8	2.50	0.47
22:DA:1726:C:H2'	22:DA:1727:C:H6	1.79	0.47
22:DA:1855:U:C5	22:DA:1856:U:C4	3.03	0.47
22:DA:1891:G:H2'	22:DA:1892:C:O4'	2.14	0.47
22:DA:200:U:C5	22:DA:201:C:C4	3.02	0.47
22:DA:2043:C:H2'	22:DA:2043:C:O2	2.14	0.47
22:DA:2148:G:C2	22:DA:2149:U:C4	3.03	0.47
22:DA:2652:C:N4	22:DA:2653:U:O4	2.48	0.47
22:DA:2732:G:O2'	22:DA:2733:A:H5'	2.15	0.47
22:DA:35:G:C5	22:DA:454:A:C2	3.03	0.47
22:DA:5:A:C2	22:DA:2899:A:C2	3.03	0.47
25:DD:175:LEU:HD11	25:DD:193:VAL:HG12	1.97	0.47
33:DL:116:VAL:HG21	33:DL:134:ALA:O	2.15	0.47
33:DL:55:MET:SD	33:DL:59:ARG:HB3	2.55	0.47
35:DN:104:ALA:O	35:DN:106:ASP:N	2.48	0.47
35:DN:106:ASP:CG	35:DN:106:ASP:O	2.51	0.47
1:AA:1009:U:H2'	1:AA:1010:U:C6	2.50	0.46
1:AA:1163:A:C2	1:AA:1174:G:N1	2.82	0.46
1:AA:819:A:H4'	1:AA:820:U:OP2	2.15	0.46
2:AB:164:ILE:O	2:AB:186:ILE:HG12	2.15	0.46
2:AB:63:ARG:O	2:AB:64:LYS:CB	2.60	0.46
2:AB:66:LYS:N	2:AB:66:LYS:HD3	2.30	0.46
3:AC:143:ARG:CG	3:AC:144:LEU:HD13	2.44	0.46
4:AD:107:PHE:CD1	4:AD:145:ILE:HD11	2.49	0.46
1:AA:1377:A:C4	7:AG:7:ILE:HD11	2.49	0.46
5:AE:155:ALA:HB1	8:AH:66:PHE:CE2	2.50	0.46
10:AJ:54:SER:OG	10:AJ:55:PRO:HD2	2.14	0.46
10:AJ:57:VAL:HG22	10:AJ:58:ASN:N	2.30	0.46
12:AL:44:LYS:HB3	12:AL:45:PRO:HD3	1.96	0.46
1:AA:1203:C:H4'	14:AN:67:THR:HG22	1.97	0.46
16:AP:4:ILE:HG13	16:AP:21:VAL:HG22	1.97	0.46
17:AQ:46:VAL:HG13	17:AQ:73:TRP:C	2.35	0.46
19:AS:40:ILE:CG1	19:AS:71:LEU:HD22	2.45	0.46
50:B2:43:THR:C	50:B2:44:VAL:HG12	2.35	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:B4:1:MET:SD	52:B4:36:ARG:HB2	2.55	0.46
53:B5:79:ALA:HB1	53:B5:83:LYS:HB2	1.97	0.46
22:BA:1084:A:C5	22:BA:1085:A:C6	3.03	0.46
22:BA:1855:U:C5	22:BA:1856:U:C5	3.04	0.46
22:BA:190:A:C4	22:BA:207:A:C2	3.03	0.46
22:BA:827:U:H2'	22:BA:2068:U:C2	2.50	0.46
22:BA:2786:U:OP1	25:BD:70:LYS:NZ	2.36	0.46
22:BA:2804:U:H2'	22:BA:2805:C:H6	1.80	0.46
22:BA:2847:U:H2'	22:BA:2848:G:H5'	1.96	0.46
22:BA:39:G:H2'	22:BA:40:U:C6	2.49	0.46
22:BA:465:G:H2'	22:BA:466:A:C8	2.50	0.46
23:BB:35:C:C2'	23:BB:36:C:H5'	2.44	0.46
23:BB:53:A:N3	23:BB:53:A:H2'	2.31	0.46
22:BA:784:G:C5'	24:BC:226:ASN:OD1	2.63	0.46
25:BD:61:THR:CB	25:BD:63:PRO:HD2	2.45	0.46
29:BH:91:PHE:O	1:CA:55:A:C2	2.68	0.46
1:CA:157:U:O2	1:CA:165:G:C2	2.68	0.46
1:CA:872:A:C4	1:CA:874:G:C8	3.02	0.46
2:CB:85:LEU:O	2:CB:85:LEU:HD12	2.15	0.46
11:CK:44:TRP:HA	11:CK:70:CYS:SG	2.55	0.46
50:D2:44:VAL:O	50:D2:45:SER:OG	2.21	0.46
50:D2:46:LYS:HD3	50:D2:46:LYS:C	2.36	0.46
22:DA:1207:C:N3	22:DA:1208:C:C5	2.83	0.46
22:DA:1200:C:O2	22:DA:1246:A:C2	2.68	0.46
22:DA:1350:C:C2	22:DA:1382:G:C2	3.03	0.46
22:DA:1682:G:N3	22:DA:1757:A:H1'	2.30	0.46
22:DA:1833:C:N3	22:DA:1834:U:C4	2.83	0.46
22:DA:2322:A:C6	22:DA:2323:G:C4	3.03	0.46
22:DA:249:C:O5'	22:DA:2394:C:O2'	2.34	0.46
22:DA:362:A:C8	22:DA:363:G:C8	3.04	0.46
22:DA:42:A:C2	22:DA:438:G:C2	3.03	0.46
22:DA:487:C:C2	22:DA:494:G:N2	2.83	0.46
22:DA:708:G:H2'	22:DA:709:U:C6	2.50	0.46
22:DA:727:A:C6	22:DA:728:G:C6	3.03	0.46
22:DA:740:C:H5'	22:DA:1784:A:C2'	2.44	0.46
22:DA:877:A:H2'	22:DA:878:A:OP2	2.14	0.46
25:DD:150:GLN:C	25:DD:151:THR:O	2.52	0.46
26:DE:1:MET:HB2	26:DE:16:GLU:HA	1.96	0.46
34:DM:56:ALA:C	34:DM:58:LYS:H	2.18	0.46
43:DV:38:LEU:HD23	43:DV:40:ILE:CD1	2.45	0.46
1:AA:1133:G:N2	1:AA:1142:G:C4	2.83	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1145:A:O2'	1:AA:1146:A:O5'	2.31	0.46
1:AA:145:G:N2	1:AA:178:C:C2	2.82	0.46
1:AA:2:A:C6	1:AA:3:A:N1	2.84	0.46
1:AA:572:A:H5'	1:AA:573:A:P	2.56	0.46
3:AC:7:PRO:HG2	3:AC:184:TYR:CD1	2.50	0.46
1:AA:8:A:N6	4:AD:202:GLU:O	2.46	0.46
1:AA:404:G:N7	4:AD:2:ALA:HB3	2.30	0.46
4:AD:62:ARG:HG3	4:AD:72:PHE:CD2	2.50	0.46
7:AG:130:ASN:HA	7:AG:135:VAL:HG11	1.96	0.46
8:AH:87:LYS:HG2	8:AH:91:GLU:O	2.16	0.46
10:AJ:32:THR:OG1	10:AJ:33:GLY:N	2.46	0.46
10:AJ:52:LEU:HD23	10:AJ:62:ARG:HG2	1.96	0.46
14:AN:46:LEU:O	14:AN:47:LYS:C	2.54	0.46
10:AJ:53:ILE:HD11	14:AN:85:ARG:NH1	2.31	0.46
20:AT:54:MET:HA	20:AT:57:ILE:HG22	1.96	0.46
22:BA:1006:C:C2	22:BA:1138:G:N2	2.83	0.46
22:BA:1635:A:C6	22:BA:1636:U:C2	3.02	0.46
22:BA:1734:G:H2'	22:BA:1735:A:H8	1.80	0.46
22:BA:1911:U:C4	22:BA:1918:A:C5	3.02	0.46
22:BA:2558:C:O2'	22:BA:2559:C:H5'	2.15	0.46
22:BA:271:G:H4'	22:BA:272:A:OP1	2.16	0.46
22:BA:2790:U:H5'	22:BA:2893:A:N7	2.30	0.46
22:BA:477:A:C6	22:BA:478:A:C6	3.03	0.46
22:BA:697:G:H2'	22:BA:698:C:C6	2.50	0.46
24:BC:209:GLY:O	24:BC:210:ALA:C	2.53	0.46
27:BF:17:MET:SD	27:BF:25:VAL:HA	2.55	0.46
38:BQ:62:ILE:HG23	38:BQ:76:TYR:CE1	2.50	0.46
45:BX:37:ARG:NH1	45:BX:46:PHE:CE1	2.83	0.46
1:CA:1202:U:H2'	1:CA:1203:C:O4'	2.15	0.46
1:CA:681:A:C2	1:CA:710:G:N3	2.83	0.46
1:CA:731:G:H5'	1:CA:766:A:H4'	1.97	0.46
1:CA:774:G:C6	1:CA:775:G:C5	3.03	0.46
5:CE:77:ASN:O	5:CE:80:THR:HG22	2.15	0.46
6:CF:62:MET:O	6:CF:63:ASN:HB2	2.15	0.46
7:CG:116:MET:HA	7:CG:119:ARG:HD3	1.97	0.46
8:CH:66:PHE:CE2	8:CH:67:GLN:OE1	2.67	0.46
1:CA:1060:U:H5'	10:CJ:53:ILE:HG23	1.98	0.46
13:CM:85:CYS:HB3	19:CS:74:PHE:CZ	2.50	0.46
13:CM:3:ARG:HA	13:CM:8:ASN:O	2.15	0.46
15:CO:3:LEU:HD13	15:CO:35:GLN:HG2	1.96	0.46
22:DA:1364:G:H2'	22:DA:1365:A:C5'	2.46	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2064:C:H2'	22:DA:2065:C:C6	2.50	0.46
22:DA:2079:U:C2'	22:DA:2080:A:O4'	2.62	0.46
22:DA:2331:G:N2	22:DA:2385:C:N1	2.64	0.46
22:DA:2566:A:N1	32:DK:28:SER:OG	2.35	0.46
22:DA:276:U:O2'	22:DA:278:A:N7	2.49	0.46
22:DA:2799:A:C2	22:DA:2801:G:H1'	2.50	0.46
22:DA:54:G:C6	22:DA:55:G:N7	2.83	0.46
22:DA:609:A:C6	22:DA:610:C:O2	2.68	0.46
22:DA:618:G:C2	22:DA:619:G:H1'	2.50	0.46
25:DD:56:LYS:O	25:DD:57:ALA:C	2.53	0.46
27:DF:117:LEU:HB3	27:DF:130:MET:SD	2.56	0.46
31:DJ:4:PHE:CD2	38:DQ:100:VAL:HG11	2.50	0.46
32:DK:105:ARG:N	32:DK:122:VAL:OXT	2.48	0.46
33:DL:54:GLN:HG2	33:DL:55:MET:N	2.30	0.46
41:DT:7:LEU:HD21	41:DT:45:ALA:HB3	1.98	0.46
42:DU:96:PHE:CE1	42:DU:103:ILE:HG13	2.51	0.46
34:DM:136:MET:HE2	43:DV:57:TYR:CD2	2.49	0.46
1:AA:553:A:C2'	1:AA:554:A:H5'	2.45	0.46
1:AA:559:A:H2'	1:AA:559:A:N3	2.29	0.46
1:AA:652:U:C4	1:AA:752:G:N3	2.83	0.46
1:AA:896:C:O2'	1:AA:897:C:H5'	2.15	0.46
1:AA:983:A:H5''	1:AA:984:C:OP2	2.14	0.46
2:AB:132:LYS:O	2:AB:136:MET:HB2	2.15	0.46
2:AB:200:ILE:O	2:AB:201:PRO:O	2.33	0.46
2:AB:34:ALA:O	2:AB:35:ARG:C	2.53	0.46
3:AC:113:ALA:HA	3:AC:200:VAL:HG21	1.98	0.46
4:AD:122:ALA:O	4:AD:123:ILE:CG2	2.62	0.46
4:AD:107:PHE:CD1	4:AD:145:ILE:HD13	2.51	0.46
5:AE:116:GLU:HG2	5:AE:117:VAL:N	2.31	0.46
8:AH:105:SER:O	8:AH:123:GLY:HA3	2.15	0.46
8:AH:11:LEU:HD11	8:AH:127:CYS:CB	2.45	0.46
14:AN:93:ILE:HD12	14:AN:96:LEU:HD23	1.96	0.46
15:AO:56:LEU:HD12	15:AO:56:LEU:O	2.15	0.46
17:AQ:69:LYS:O	17:AQ:70:THR:OG1	2.33	0.46
20:AT:67:ILE:HG13	20:AT:71:LYS:CG	2.46	0.46
21:AU:34:ARG:NE	21:AU:35:ARG:HB2	2.30	0.46
53:B5:78:ILE:HG22	53:B5:123:ALA:HA	1.96	0.46
53:B5:73:VAL:CG2	53:B5:162:ILE:CB	2.93	0.46
53:B5:28:ARG:HG3	53:B5:28:ARG:O	2.15	0.46
22:BA:1192:G:O2'	22:BA:1193:G:H5'	2.16	0.46
22:BA:1886:U:O2'	22:BA:1887:C:H5'	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1958:C:C2'	22:BA:1959:G:H5'	2.45	0.46
22:BA:2076:U:C4'	22:BA:2076:U:O2	2.63	0.46
22:BA:2154:A:H2'	22:BA:2155:U:C5	2.51	0.46
22:BA:2310:C:C5	27:BF:77:PHE:CZ	3.03	0.46
22:BA:2584:U:C2'	22:BA:2585:U:H5'	2.43	0.46
22:BA:720:U:H2'	22:BA:721:A:C8	2.51	0.46
22:BA:826:U:O2'	33:BL:53:GLY:CA	2.60	0.46
22:BA:974:G:C8	22:BA:990:A:N6	2.81	0.46
23:BB:75:G:H2'	23:BB:76:G:O4'	2.15	0.46
26:BE:7:ASP:O	26:BE:9:GLN:N	2.48	0.46
29:BH:132:PHE:CD2	29:BH:142:VAL:CG2	2.99	0.46
29:BH:80:ILE:HG21	29:BH:94:ILE:CG1	2.45	0.46
22:BA:973:A:H5''	39:BR:81:LYS:HE3	1.97	0.46
22:BA:927:A:O2'	47:BZ:39:GLU:OE2	2.25	0.46
1:CA:999:C:H2'	1:CA:1000:A:C8	2.50	0.46
1:CA:1361:G:C4	1:CA:1362:A:C8	3.03	0.46
1:CA:1489:G:C5	1:CA:1490:U:C5	3.04	0.46
3:CC:110:GLU:C	3:CC:111:LEU:HD22	2.35	0.46
3:CC:126:ARG:O	3:CC:127:ARG:CB	2.63	0.46
5:CE:109:GLY:O	5:CE:110:ALA:CB	2.63	0.46
6:CF:80:PHE:O	6:CF:80:PHE:CG	2.68	0.46
7:CG:14:PRO:O	7:CG:15:ASP:C	2.54	0.46
19:CS:50:ALA:HB1	19:CS:57:HIS:HB3	1.98	0.46
19:CS:55:ARG:NE	19:CS:79:THR:CG2	2.79	0.46
49:D1:39:PHE:CG	49:D1:40:ASP:N	2.84	0.46
22:DA:2370:G:O2'	49:D1:44:ARG:NH1	2.49	0.46
22:DA:1362:C:H2'	22:DA:1363:C:C5'	2.46	0.46
22:DA:1544:A:N6	22:DA:1545:A:C6	2.83	0.46
22:DA:223:A:H2'	22:DA:408:G:N3	2.31	0.46
22:DA:224:U:OP2	22:DA:408:G:N2	2.48	0.46
22:DA:2892:G:H5''	22:DA:2894:G:N2	2.31	0.46
22:DA:2063:C:C4'	55:DA:3001:DOL:H343	2.43	0.46
22:DA:52:A:C2	22:DA:178:G:N3	2.83	0.46
22:DA:593:U:C2	22:DA:594:U:C5	3.03	0.46
22:DA:784:G:H5''	24:DC:226:ASN:OD1	2.14	0.46
22:DA:864:G:N2	22:DA:913:U:C2	2.83	0.46
24:DC:76:ALA:HB2	24:DC:96:TYR:CD2	2.49	0.46
35:DN:31:HIS:O	35:DN:33:ILE:HG22	2.16	0.46
37:DP:53:ARG:N	37:DP:57:SER:OG	2.48	0.46
44:DW:70:GLU:O	44:DW:79:PHE:N	2.46	0.46
46:DY:45:GLN:O	46:DY:47:ARG:N	2.48	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1026:G:N1	1:AA:1035:A:C2	2.84	0.46
1:AA:199:A:C2	1:AA:200:G:C4	3.04	0.46
1:AA:501:C:H2'	1:AA:502:A:C8	2.49	0.46
1:AA:582:C:N3	1:AA:583:A:C8	2.84	0.46
1:AA:73:C:HO2'	1:AA:74:A:C5'	2.28	0.46
1:AA:867:G:O2'	1:AA:873:A:N1	2.38	0.46
1:AA:994:A:N1	1:AA:1047:G:H4'	2.30	0.46
8:AH:47:GLU:N	8:AH:64:LYS:HG3	2.31	0.46
10:AJ:41:PRO:O	10:AJ:71:LEU:O	2.33	0.46
10:AJ:52:LEU:CB	14:AN:81:ARG:HE	2.28	0.46
11:AK:112:ASP:HB2	21:AU:20:LYS:HD2	1.97	0.46
11:AK:23:ILE:HD11	11:AK:86:VAL:HG13	1.97	0.46
20:AT:68:HIS:C	20:AT:69:LYS:HG3	2.34	0.46
33:BL:57:LEU:HD22	51:B3:54:ASP:HB3	1.98	0.46
22:BA:1087:G:C2'	22:BA:1089:A:H1'	2.45	0.46
22:BA:118:A:C8	22:BA:119:A:C8	3.03	0.46
22:BA:1293:C:H2'	22:BA:1294:U:O4'	2.15	0.46
22:BA:1533:C:H5'	22:BA:1534:U:OP2	2.15	0.46
22:BA:1606:C:O2'	22:BA:1607:C:O5'	2.31	0.46
22:BA:1871:A:C8	22:BA:1872:A:C6	3.03	0.46
22:BA:2233:U:H2'	22:BA:2234:G:C8	2.50	0.46
22:BA:2410:G:C2	22:BA:2411:A:H1'	2.50	0.46
22:BA:25:U:H2'	22:BA:26:G:H5'	1.97	0.46
22:BA:27:G:N2	22:BA:512:G:H1'	2.29	0.46
22:BA:307:G:N2	22:BA:309:A:H3'	2.30	0.46
22:BA:713:G:C6	22:BA:714:U:C4	3.03	0.46
22:BA:776:G:H4'	22:BA:777:G:O5'	2.15	0.46
24:BC:195:VAL:HG12	24:BC:196:GLY:N	2.29	0.46
25:BD:61:THR:HB	25:BD:63:PRO:HD2	1.97	0.46
26:BE:108:ILE:HG13	26:BE:109:LEU:N	2.29	0.46
27:BF:4:LEU:HD22	27:BF:173:PHE:CD2	2.51	0.46
27:BF:58:ALA:O	27:BF:61:SER:O	2.34	0.46
42:BU:4:LYS:O	42:BU:83:VAL:HG21	2.16	0.46
42:BU:73:PHE:CZ	42:BU:78:GLY:HA2	2.50	0.46
1:CA:1279:G:H5''	10:CJ:9:ARG:NH2	2.30	0.46
1:CA:1521:C:C2	1:CA:1522:U:C5	3.03	0.46
1:CA:155:A:C2	1:CA:167:A:C5	3.03	0.46
1:CA:955:U:H2'	1:CA:956:U:O4'	2.14	0.46
1:CA:957:U:O3'	19:CS:79:THR:OG1	2.33	0.46
2:CB:167:ASP:HA	2:CB:170:HIS:HB3	1.97	0.46
4:CD:142:VAL:HG12	4:CD:181:THR:OG1	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:CM:40:ALA:O	13:CM:41:GLU:C	2.54	0.46
13:CM:91:HIS:O	13:CM:109:ARG:NH2	2.49	0.46
15:CO:39:LEU:O	15:CO:42:HIS:HB3	2.16	0.46
20:CT:21:ASN:O	20:CT:25:ARG:HB3	2.15	0.46
22:DA:1208:C:C5	22:DA:1209:U:C5	3.03	0.46
22:DA:1248:G:C4	38:DQ:3:ARG:HG3	2.50	0.46
22:DA:1347:A:C5	22:DA:1348:C:C5	3.03	0.46
22:DA:1351:C:C2	22:DA:1381:G:C2	3.04	0.46
22:DA:1678:A:C4	22:DA:1679:A:C8	3.03	0.46
22:DA:1753:G:N1	22:DA:1756:G:C2	2.84	0.46
22:DA:528:A:N1	22:DA:2042:A:H2'	2.30	0.46
22:DA:2056:G:N3	22:DA:2056:G:H2'	2.30	0.46
22:DA:2209:G:C2	22:DA:2216:G:C2	3.04	0.46
22:DA:2741:A:H2'	22:DA:2742:G:H5'	1.98	0.46
22:DA:2748:A:C2	22:DA:2757:A:C5	3.03	0.46
22:DA:311:A:OP1	22:DA:332:A:C2	2.69	0.46
22:DA:349:U:C2'	22:DA:350:G:H5'	2.45	0.46
22:DA:398:C:OP2	45:DX:53:ALA:HB3	2.16	0.46
22:DA:630:G:H3'	22:DA:631:A:H5''	1.97	0.46
22:DA:883:G:N2	22:DA:894:U:O2	2.49	0.46
24:DC:246:THR:C	24:DC:248:TRP:N	2.69	0.46
24:DC:72:ASP:OD1	24:DC:189:ARG:NH1	2.48	0.46
29:DH:41:LYS:O	29:DH:44:ILE:HG12	2.15	0.46
30:DI:49:ILE:O	30:DI:50:GLU:HB2	2.16	0.46
33:DL:95:LEU:O	33:DL:100:ILE:HG23	2.16	0.46
35:DN:29:VAL:HG13	35:DN:83:LEU:HD11	1.96	0.46
37:DP:65:SER:O	37:DP:66:ASN:C	2.53	0.46
46:DY:18:LEU:O	46:DY:22:LEU:HB3	2.15	0.46
1:AA:1253:G:C4	1:AA:1254:A:C8	3.03	0.46
1:AA:36:C:H2'	1:AA:37:U:O4'	2.15	0.46
1:AA:67:C:O2'	1:AA:171:A:H1'	2.15	0.46
1:AA:832:G:C4	1:AA:833:G:C8	3.03	0.46
1:AA:859:G:H2'	1:AA:860:A:H8	1.76	0.46
1:AA:919:A:O2'	1:AA:920:U:H5'	2.15	0.46
2:AB:163:VAL:HG22	2:AB:185:ALA:HB1	1.98	0.46
2:AB:50:PHE:CD2	2:AB:51:ASN:OD1	2.69	0.46
3:AC:130:PHE:CZ	3:AC:131:ARG:HD3	2.51	0.46
3:AC:84:VAL:HG13	3:AC:101:ILE:HG21	1.98	0.46
4:AD:124:MET:HG3	4:AD:146:ARG:HG2	1.97	0.46
5:AE:136:VAL:HG22	5:AE:137:VAL:N	2.30	0.46
6:AF:45:ARG:HG2	6:AF:46:GLN:N	2.30	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AG:71:PRO:O	7:AG:96:ARG:HG3	2.16	0.46
11:AK:35:THR:OG1	11:AK:41:ALA:N	2.48	0.46
12:AL:29:GLN:HB2	12:AL:82:ILE:O	2.15	0.46
17:AQ:17:MET:CG	17:AQ:20:SER:HB3	2.46	0.46
48:B0:13:ARG:O	48:B0:17:ARG:HG3	2.15	0.46
22:BA:1190:G:OP1	33:BL:32:GLY:CA	2.62	0.46
22:BA:1820:U:O2	24:BC:200:HIS:HB3	2.15	0.46
22:BA:198:C:O5'	22:BA:198:C:H6	1.98	0.46
22:BA:197:A:H62	22:BA:2430:A:H2'	1.81	0.46
22:BA:2551:C:OP1	57:BA:3434:HOH:O	2.21	0.46
22:BA:422:A:C2	22:BA:423:A:C4	3.04	0.46
22:BA:548:G:O2'	22:BA:549:G:C2	2.67	0.46
22:BA:616:A:H2'	22:BA:617:G:O4'	2.16	0.46
22:BA:780:G:H2'	22:BA:782:A:N7	2.31	0.46
23:BB:116:G:H4'	36:BO:54:VAL:CG1	2.44	0.46
25:BD:103:ASP:OD2	25:BD:104:VAL:N	2.49	0.46
27:BF:104:ILE:HG22	27:BF:176:PRO:CD	2.46	0.46
29:BH:37:VAL:CG2	29:BH:38:PRO:HD2	2.45	0.46
1:CA:1157:A:H5'	1:CA:1158:C:C6	2.50	0.46
1:CA:295:C:C4	1:CA:296:U:C5	3.03	0.46
1:CA:373:A:O2'	1:CA:374:A:H5'	2.16	0.46
1:CA:414:A:C2	1:CA:415:A:C4	3.03	0.46
1:CA:421:U:C4'	1:CA:421:U:OP1	2.63	0.46
1:CA:674:G:OP1	6:CF:86:ARG:NH2	2.44	0.46
1:CA:756:C:H2'	1:CA:757:U:O5'	2.16	0.46
3:CC:36:ASP:C	3:CC:38:LYS:H	2.19	0.46
9:CI:56:ASP:C	9:CI:57:MET:HG3	2.36	0.46
49:D1:4:GLY:O	49:D1:6:ARG:N	2.48	0.46
22:DA:1268:A:H2'	22:DA:1269:A:O4'	2.16	0.46
22:DA:1289:C:O2'	22:DA:1330:C:H4'	2.15	0.46
22:DA:1438:U:C4	22:DA:1552:A:C2	3.04	0.46
22:DA:1833:C:C4	22:DA:1834:U:C4	3.04	0.46
22:DA:2199:A:C5	22:DA:2225:A:N1	2.84	0.46
22:DA:2201:G:H2'	22:DA:2202:U:C6	2.51	0.46
22:DA:476:G:O4'	22:DA:505:A:C2	2.69	0.46
22:DA:585:G:H2'	22:DA:586:A:N7	2.31	0.46
22:DA:777:G:N3	22:DA:778:G:C8	2.83	0.46
23:DB:100:G:H2'	23:DB:101:A:O4'	2.15	0.46
24:DC:68:LYS:HG2	24:DC:151:GLY:HA2	1.97	0.46
22:DA:1799:G:O2'	24:DC:180:GLU:OE2	2.26	0.46
24:DC:260:ASN:OD1	24:DC:263:THR:N	2.45	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DD:18:ASP:OD2	25:DD:18:ASP:N	2.49	0.46
27:DF:163:ASP:N	27:DF:163:ASP:OD1	2.49	0.46
32:DK:121:GLU:HG2	32:DK:122:VAL:HG23	1.97	0.46
33:DL:59:ARG:CZ	33:DL:59:ARG:HB3	2.44	0.46
36:DO:27:VAL:HG21	36:DO:40:ILE:HD12	1.98	0.46
36:DO:51:ALA:HB1	36:DO:77:ALA:CB	2.45	0.46
42:DU:9:ASP:OD2	42:DU:10:GLU:O	2.34	0.46
46:DY:21:LEU:HA	46:DY:25:GLN:HB3	1.98	0.46
46:DY:1:MET:HA	46:DY:4:LYS:HB2	1.97	0.46
1:AA:1084:G:C5	1:AA:1085:U:C4	3.02	0.46
1:AA:1107:C:C2	1:AA:1108:G:C8	3.04	0.46
1:AA:345:C:O2'	32:BK:116:ILE:CD1	2.63	0.46
1:AA:515:G:O6	57:AA:1847:HOH:O	2.21	0.46
1:AA:529:G:H4'	1:AA:533:A:C2	2.50	0.46
5:AE:14:LYS:NZ	5:AE:116:GLU:OE2	2.48	0.46
9:AI:127:PHE:O	9:AI:127:PHE:CD2	2.69	0.46
9:AI:20:PHE:O	9:AI:63:LEU:HA	2.15	0.46
16:AP:20:VAL:HG21	16:AP:32:PHE:CG	2.51	0.46
53:B5:36:ALA:O	53:B5:37:LYS:HB2	2.15	0.46
22:BA:1062:G:OP1	22:BA:1070:A:H4'	2.16	0.46
22:BA:140:C:O2	22:BA:140:C:O4'	2.34	0.46
22:BA:1916:A:O3'	22:BA:1917:U:H4'	2.16	0.46
22:BA:1925:C:C4'	22:BA:1926:U:OP1	2.55	0.46
22:BA:528:A:H2	22:BA:2043:C:C5'	2.28	0.46
22:BA:2080:A:H5'	45:BX:19:SER:HB2	1.97	0.46
22:BA:2190:G:N1	22:BA:2191:A:C4	2.84	0.46
22:BA:2284:A:C5	22:BA:2285:C:C5	3.03	0.46
22:BA:2518:A:H2'	22:BA:2518:A:N3	2.30	0.46
22:BA:2637:U:H2'	22:BA:2638:G:H5'	1.97	0.46
22:BA:445:C:OP1	38:BQ:2:ALA:N	2.48	0.46
24:BC:88:SER:HB2	24:BC:200:HIS:CD2	2.51	0.46
26:BE:134:LEU:O	26:BE:135:ALA:C	2.53	0.46
30:BI:57:VAL:HG22	30:BI:58:VAL:N	2.30	0.46
31:BJ:31:GLU:HG3	31:BJ:142:ILE:HD11	1.97	0.46
37:BP:58:ALA:HB1	37:BP:74:PHE:O	2.15	0.46
40:BS:36:LEU:CD1	40:BS:47:VAL:HG12	2.46	0.46
1:CA:146:G:N2	1:CA:147:G:H1'	2.30	0.46
1:CA:577:G:C8	1:CA:816:A:C2	3.03	0.46
7:CG:123:GLU:OE1	7:CG:123:GLU:HA	2.16	0.46
9:CI:90:TYR:O	9:CI:91:ASP:O	2.34	0.46
10:CJ:53:ILE:HD11	14:CN:85:ARG:NH1	2.31	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:CK:100:LEU:O	11:CK:103:ALA:N	2.48	0.46
14:CN:61:ARG:O	14:CN:62:ASN:CB	2.64	0.46
49:D1:19:HIS:C	49:D1:19:HIS:CD2	2.89	0.46
22:DA:2477:U:O4	52:D4:10:LEU:HD21	2.16	0.46
22:DA:1231:U:H2'	22:DA:1232:G:C8	2.51	0.46
22:DA:1281:G:C2'	22:DA:1282:U:H5'	2.45	0.46
22:DA:1306:C:C2	22:DA:1307:A:C8	3.03	0.46
22:DA:1593:A:O2'	22:DA:1594:U:H5'	2.15	0.46
22:DA:1662:U:O2	22:DA:2687:U:C5'	2.64	0.46
22:DA:1709:U:H2'	22:DA:1710:G:C8	2.51	0.46
22:DA:1926:U:H1'	22:DA:1929:G:C6	2.51	0.46
22:DA:2170:A:C2	22:DA:2171:A:C6	3.03	0.46
22:DA:2503:A:H5'	22:DA:2503:A:N3	2.31	0.46
22:DA:2511:U:C4	22:DA:2512:C:C5	3.04	0.46
22:DA:2852:G:H2'	22:DA:2853:C:O4'	2.15	0.46
22:DA:40:U:C5	22:DA:41:C:N4	2.83	0.46
22:DA:744:U:H4'	22:DA:1658:C:H4'	1.98	0.46
22:DA:927:A:H2'	22:DA:928:A:C8	2.51	0.46
24:DC:107:PRO:HB3	24:DC:142:HIS:CE1	2.49	0.46
24:DC:87:ARG:CZ	24:DC:87:ARG:HB3	2.44	0.46
27:DF:4:LEU:O	27:DF:8:TYR:HB3	2.15	0.46
35:DN:85:PRO:O	35:DN:86:ARG:C	2.52	0.46
22:DA:2848:G:OP2	37:DP:95:ALA:N	2.48	0.46
40:DS:29:VAL:HG11	40:DS:55:ILE:HD11	1.97	0.46
1:AA:1070:U:O2	1:AA:1071:C:C6	2.68	0.46
1:AA:1311:A:H2'	1:AA:1312:G:O5'	2.16	0.46
1:AA:670:G:C2'	1:AA:671:G:O5'	2.63	0.46
1:AA:849:G:C6	1:AA:850:U:N3	2.84	0.46
1:AA:1075:U:OP1	2:AB:102:THR:HG21	2.15	0.46
2:AB:222:ARG:NH1	2:AB:222:ARG:HB3	2.31	0.46
3:AC:149:ILE:HG12	3:AC:150:LYS:N	2.30	0.46
5:AE:82:GLN:OE1	5:AE:148:ASN:O	2.33	0.46
12:AL:3:THR:HG22	12:AL:4:VAL:N	2.30	0.46
21:AU:29:LEU:HD23	21:AU:29:LEU:O	2.16	0.46
21:AU:53:VAL:O	21:AU:54:LYS:HB2	2.15	0.46
52:B4:10:LEU:HD12	52:B4:33:HIS:CD2	2.51	0.46
53:B5:200:HIS:O	53:B5:201:LYS:C	2.54	0.46
22:BA:1107:G:H2'	22:BA:1108:U:O4'	2.15	0.46
22:BA:1157:G:N2	22:BA:1158:C:C2	2.84	0.46
22:BA:1188:U:C2'	22:BA:1189:A:H5'	2.46	0.46
22:BA:170:U:H2'	22:BA:171:U:H6	1.79	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1956:U:H2'	22:BA:1957:C:H5'	1.98	0.46
22:BA:323:C:C4	22:BA:333:G:C8	3.04	0.46
22:BA:481:G:C2	22:BA:507:A:N3	2.83	0.46
22:BA:637:A:H4'	22:BA:638:G:O5'	2.15	0.46
22:BA:783:A:H2'	22:BA:784:G:O5'	2.15	0.46
23:BB:34:A:N3	23:BB:36:C:N4	2.61	0.46
24:BC:142:HIS:C	24:BC:142:HIS:CD2	2.89	0.46
24:BC:161:TYR:CD2	24:BC:194:GLU:HG2	2.51	0.46
29:BH:94:ILE:HG23	29:BH:98:ASP:HB2	1.98	0.46
32:BK:66:LYS:O	32:BK:66:LYS:HE3	2.16	0.46
35:BN:32:GLU:OE1	35:BN:118:ARG:HA	2.14	0.46
37:BP:29:LYS:HD3	37:BP:40:LEU:HD23	1.98	0.46
25:BD:186:LEU:HD21	37:BP:4:ILE:HG21	1.97	0.46
1:CA:1009:U:C2	1:CA:1021:A:N6	2.84	0.46
1:CA:1105:A:C2	1:CA:1106:G:C5	3.04	0.46
1:CA:1259:C:N4	1:CA:1260:G:C4	2.84	0.46
1:CA:505:G:C2	1:CA:506:G:C5	3.04	0.46
1:CA:862:C:N3	1:CA:863:U:C5	2.83	0.46
2:CB:166:ALA:HB2	2:CB:187:VAL:HB	1.98	0.46
5:CE:137:VAL:O	5:CE:138:ARG:CG	2.64	0.46
6:CF:93:LYS:HD3	6:CF:93:LYS:N	2.31	0.46
9:CI:57:MET:HA	9:CI:60:LYS:HB3	1.98	0.46
1:CA:718:A:C4	11:CK:118:HIS:CD2	3.03	0.46
14:CN:46:LEU:HG	19:CS:10:PHE:CD2	2.51	0.46
16:CP:23:ASP:OD2	16:CP:25:ARG:HG3	2.16	0.46
16:CP:6:LEU:CD1	16:CP:71:VAL:CG2	2.93	0.46
51:D3:31:HIS:CE1	51:D3:32:ILE:HD12	2.50	0.46
22:DA:1361:G:C6	22:DA:1362:C:C5	3.04	0.46
22:DA:1332:G:C6	22:DA:1609:A:N7	2.84	0.46
22:DA:1677:A:N6	22:DA:1678:A:C6	2.83	0.46
22:DA:1845:G:OP1	24:DC:256:LYS:NZ	2.43	0.46
22:DA:2010:G:C6	22:DA:2011:U:N3	2.84	0.46
22:DA:2209:G:C6	22:DA:2210:U:C4	3.03	0.46
22:DA:2318:G:C6	22:DA:2319:G:C6	3.04	0.46
22:DA:27:G:HO2'	22:DA:28:A:P	2.34	0.46
22:DA:337:C:C2	22:DA:338:G:H1'	2.51	0.46
22:DA:412:A:H2'	22:DA:413:C:H5'	1.97	0.46
22:DA:58:G:C4	22:DA:70:G:N2	2.83	0.46
22:DA:600:G:C5	22:DA:601:C:C4	3.04	0.46
23:DB:52:A:C5	36:DO:33:ARG:NH2	2.83	0.46
28:DG:167:GLU:CG	28:DG:169:VAL:HG23	2.45	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:DH:34:GLY:O	29:DH:35:LYS:CG	2.64	0.46
29:DH:60:GLU:HA	29:DH:60:GLU:OE2	2.15	0.46
30:DI:37:GLU:OE1	30:DI:65:ARG:NH2	2.49	0.46
42:DU:33:LYS:HB3	42:DU:64:ALA:HB1	1.97	0.46
42:DU:12:ILE:CG2	42:DU:80:ALA:HB2	2.46	0.46
47:DZ:7:ILE:O	47:DZ:36:VAL:N	2.49	0.46
1:AA:102:G:N1	1:AA:103:U:C4	2.84	0.46
1:AA:1053:G:H4'	1:AA:1054:C:H5''	1.98	0.46
1:AA:1190:G:OP2	3:AC:5:VAL:HB	2.16	0.46
1:AA:188:C:O2	1:AA:188:C:C2'	2.63	0.46
1:AA:207:C:H2'	1:AA:208:U:O2	2.16	0.46
3:AC:64:ILE:CG2	3:AC:99:ALA:HB2	2.46	0.46
4:AD:26:ARG:HD2	4:AD:31:LYS:CE	2.46	0.46
1:AA:546:A:P	4:AD:69:GLU:HB2	2.56	0.46
5:AE:148:ASN:ND2	8:AH:73:GLU:OE2	2.49	0.46
5:AE:45:ARG:HA	5:AE:72:ILE:O	2.16	0.46
9:AI:120:LYS:HG3	9:AI:123:ARG:HB2	1.97	0.46
10:AJ:73:LEU:O	10:AJ:74:VAL:CB	2.64	0.46
11:AK:102:ALA:O	11:AK:103:ALA:C	2.54	0.46
13:AM:11:ASP:CG	13:AM:45:ILE:HG12	2.37	0.46
13:AM:45:ILE:O	13:AM:45:ILE:CG2	2.63	0.46
16:AP:23:ASP:C	16:AP:23:ASP:OD1	2.54	0.46
1:AA:275:G:O3'	17:AQ:17:MET:HE2	2.15	0.46
17:AQ:48:ASP:OD2	17:AQ:48:ASP:O	2.34	0.46
17:AQ:80:GLU:C	17:AQ:81:LYS:HD3	2.36	0.46
19:AS:3:ARG:O	19:AS:4:SER:HB2	2.15	0.46
21:AU:12:PHE:CD1	21:AU:16:LEU:HD11	2.50	0.46
21:AU:47:ARG:HE	21:AU:47:ARG:HA	1.81	0.46
22:BA:1174:U:O2	22:BA:1174:U:O4'	2.33	0.46
22:BA:1266:G:OP2	48:B0:17:ARG:NE	2.45	0.46
22:BA:1381:G:H1'	22:BA:1571:A:N1	2.31	0.46
22:BA:2256:G:O2'	22:BA:2257:U:H5'	2.15	0.46
22:BA:251:A:H2'	22:BA:252:G:O4'	2.16	0.46
22:BA:25:U:C2'	22:BA:26:G:H5'	2.46	0.46
22:BA:310:A:O2'	22:BA:311:A:P	2.73	0.46
22:BA:340:A:H2'	22:BA:341:C:O4'	2.15	0.46
22:BA:947:A:O2'	22:BA:984:A:H2	1.97	0.46
27:BF:2:ALA:HB2	27:BF:94:GLU:OE1	2.15	0.46
29:BH:90:LEU:HD23	29:BH:93:SER:HA	1.97	0.46
30:BI:79:LEU:HD22	30:BI:109:ILE:HG23	1.97	0.46
33:BL:101:ILE:HG13	33:BL:102:GLY:N	2.30	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BR:39:LEU:CA	39:BR:49:ILE:HG23	2.45	0.46
22:BA:189:G:P	45:BX:26:LYS:HD2	2.55	0.46
1:CA:110:C:H2'	1:CA:111:G:O4'	2.16	0.46
1:CA:1157:A:C5	1:CA:1180:A:C6	3.03	0.46
1:CA:1386:G:C2	1:CA:1387:G:N7	2.84	0.46
1:CA:170:U:O2'	1:CA:171:A:H5'	2.15	0.46
1:CA:461:A:H2'	1:CA:462:G:O4'	2.16	0.46
1:CA:513:C:H2'	1:CA:514:C:C6	2.51	0.46
1:CA:731:G:O2'	1:CA:732:C:H5'	2.16	0.46
1:CA:802:A:C2	1:CA:803:G:C1'	2.98	0.46
1:CA:811:C:C4	1:CA:812:G:C6	3.04	0.46
2:CB:175:GLU:O	2:CB:179:LEU:HD22	2.15	0.46
4:CD:36:GLN:O	4:CD:37:ALA:HB2	2.15	0.46
14:CN:46:LEU:CD2	19:CS:10:PHE:CD2	2.99	0.46
22:DA:579:G:C2	22:DA:1262:A:C5	3.04	0.46
22:DA:1545:A:H2'	22:DA:1546:G:O4'	2.15	0.46
22:DA:160:A:C6	22:DA:161:A:C6	3.04	0.46
22:DA:1712:U:O4	22:DA:1713:A:C2	2.69	0.46
22:DA:1870:C:C3'	22:DA:1871:A:H5'	2.46	0.46
22:DA:1936:A:H2	22:DA:1943:U:H3	1.63	0.46
22:DA:2345:G:N3	22:DA:2381:A:H2'	2.30	0.46
22:DA:2412:A:H3'	22:DA:2413:G:H8	1.80	0.46
22:DA:2715:C:C4	22:DA:2716:C:C5	3.04	0.46
22:DA:2804:U:C4	22:DA:2805:C:C4	3.03	0.46
22:DA:349:U:O2'	22:DA:350:G:H5'	2.15	0.46
22:DA:36:G:H4'	22:DA:451:U:C2	2.51	0.46
22:DA:500:G:N2	22:DA:502:A:C8	2.83	0.46
22:DA:695:G:C6	22:DA:768:G:C5	3.04	0.46
35:DN:71:ARG:HG3	35:DN:71:ARG:HH21	1.81	0.46
37:DP:75:GLN:HB2	37:DP:78:SER:HB2	1.98	0.46
38:DQ:90:ILE:CG2	38:DQ:94:ILE:CG2	2.94	0.46
40:DS:66:ILE:O	40:DS:69:LEU:HB2	2.16	0.46
1:AA:1048:G:N3	1:AA:1050:G:C8	2.83	0.46
1:AA:1080:A:OP1	5:AE:52:LYS:HE3	2.16	0.46
1:AA:202:G:C2	1:AA:216:U:O2	2.69	0.46
1:AA:258:G:C5	1:AA:259:G:C8	3.03	0.46
1:AA:273:U:H2'	1:AA:274:A:H5'	1.97	0.46
1:AA:464:U:N3	1:AA:466:A:H5''	2.31	0.46
1:AA:587:G:N2	1:AA:755:G:C8	2.84	0.46
1:AA:731:G:OP1	1:AA:766:A:H1'	2.15	0.46
1:AA:773:G:H2'	1:AA:774:G:O4'	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:787:A:C5	1:AA:788:U:C5	3.04	0.46
4:AD:34:ILE:HG12	4:AD:35:GLU:N	2.30	0.46
7:AG:13:LEU:HA	7:AG:14:PRO:HD2	1.86	0.46
7:AG:48:GLU:O	7:AG:51:ALA:HB3	2.15	0.46
8:AH:10:MET:HE1	8:AH:33:LYS:CB	2.45	0.46
10:AJ:91:ASP:O	10:AJ:92:LEU:HD12	2.15	0.46
11:AK:55:SER:O	11:AK:58:SER:N	2.48	0.46
20:AT:35:VAL:CG1	20:AT:79:LEU:HD22	2.46	0.46
22:BA:2516:A:O2'	22:BA:2517:C:H5'	2.15	0.46
22:BA:2609:U:O2'	22:BA:2610:C:H5'	2.16	0.46
23:BB:37:C:C5	23:BB:38:C:C5	3.04	0.46
24:BC:252:THR:HG22	24:BC:253:LYS:N	2.30	0.46
26:BE:155:GLU:OE2	26:BE:159:LEU:HD21	2.16	0.46
27:BF:148:ARG:CG	27:BF:149:VAL:N	2.78	0.46
27:BF:17:MET:HE3	27:BF:17:MET:HA	1.98	0.46
30:BI:112:THR:O	30:BI:114:ALA:N	2.48	0.46
34:BM:135:VAL:HG23	34:BM:135:VAL:O	2.16	0.46
35:BN:31:HIS:C	35:BN:33:ILE:H	2.19	0.46
35:BN:65:LEU:HD11	35:BN:69:ARG:HH21	1.78	0.46
1:CA:620:C:N1	4:CD:132:ILE:HD13	2.30	0.46
1:CA:728:A:N1	1:CA:729:A:C6	2.84	0.46
1:CA:798:U:C2'	1:CA:799:G:O5'	2.64	0.46
1:CA:78:A:C2	1:CA:92:U:O2	2.69	0.46
1:CA:93:U:C2'	1:CA:94:G:H5''	2.46	0.46
3:CC:111:LEU:HD22	3:CC:111:LEU:N	2.31	0.46
4:CD:146:ARG:O	4:CD:150:LYS:HB2	2.16	0.46
4:CD:26:ARG:CG	4:CD:27:ALA:N	2.74	0.46
4:CD:58:LYS:CB	4:CD:200:ILE:HB	2.46	0.46
6:CF:86:ARG:NH1	6:CF:86:ARG:CG	2.77	0.46
7:CG:99:LEU:HB3	7:CG:103:TRP:CZ2	2.50	0.46
1:CA:684:U:C2'	11:CK:40:ASN:O	2.64	0.46
1:CA:1227:A:OP2	13:CM:110:LYS:HD2	2.15	0.46
13:CM:23:TYR:O	13:CM:23:TYR:CD2	2.69	0.46
52:D4:25:VAL:HB	52:D4:35:GLN:HB2	1.98	0.46
22:DA:1062:G:C6	22:DA:1063:G:O6	2.69	0.46
22:DA:973:A:O4'	22:DA:1188:U:C6	2.69	0.46
22:DA:583:G:N2	22:DA:1258:U:C2	2.84	0.46
22:DA:1364:G:N7	45:DX:2:SER:N	2.64	0.46
22:DA:1425:G:H2'	22:DA:1426:G:O4'	2.16	0.46
22:DA:1585:C:C5	22:DA:1586:A:N7	2.84	0.46
22:DA:1861:G:N1	22:DA:1882:U:O2	2.48	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2499:C:C4	22:DA:2500:U:O4	2.69	0.46
22:DA:2584:U:OP2	22:DA:2585:U:C5	2.68	0.46
22:DA:2853:C:H2'	22:DA:2854:G:C8	2.51	0.46
22:DA:2893:A:O4'	22:DA:2894:G:C2	2.68	0.46
22:DA:38:A:C2	22:DA:442:G:O6	2.68	0.46
22:DA:477:A:C2'	22:DA:478:A:O5'	2.63	0.46
22:DA:488:G:N1	22:DA:491:G:OP2	2.49	0.46
22:DA:601:C:H2'	22:DA:602:A:O4'	2.16	0.46
22:DA:704:G:H1'	22:DA:726:G:N2	2.31	0.46
25:DD:177:VAL:CG2	25:DD:187:LEU:HD11	2.46	0.46
28:DG:123:ALA:HB2	28:DG:133:LEU:HA	1.98	0.46
28:DG:96:ALA:O	28:DG:128:GLN:HA	2.16	0.46
34:DM:97:GLN:OE1	34:DM:97:GLN:N	2.49	0.46
35:DN:43:GLU:HA	35:DN:43:GLU:OE1	2.15	0.46
42:DU:57:GLY:O	42:DU:59:VAL:HG23	2.16	0.46
42:DU:12:ILE:HG21	42:DU:80:ALA:HB2	1.96	0.46
42:DU:85:PHE:N	42:DU:85:PHE:CD1	2.84	0.46
1:AA:1005:A:H4'	1:AA:1037:C:H1'	1.98	0.46
1:AA:1063:C:H2'	1:AA:1064:G:C8	2.51	0.46
1:AA:23:C:C4	1:AA:24:U:C5	3.04	0.46
1:AA:459:A:N6	1:AA:460:A:N6	2.63	0.46
1:AA:730:G:H2'	1:AA:730:G:N3	2.30	0.46
1:AA:850:U:H2'	1:AA:851:G:O5'	2.16	0.46
1:AA:935:A:C2	1:AA:936:C:C2	3.04	0.46
2:AB:149:GLY:O	2:AB:151:ILE:N	2.49	0.46
2:AB:43:LEU:O	2:AB:46:THR:OG1	2.34	0.46
3:AC:167:TRP:C	3:AC:167:TRP:CE3	2.90	0.46
4:AD:107:PHE:CG	4:AD:145:ILE:HD11	2.50	0.46
5:AE:107:ALA:HB1	5:AE:125:ALA:HB3	1.98	0.46
1:AA:826:C:H5'	8:AH:13:ARG:CZ	2.46	0.46
9:AI:13:LYS:O	9:AI:15:SER:N	2.44	0.46
14:AN:12:LYS:O	14:AN:16:LEU:HG	2.15	0.46
14:AN:41:ARG:O	14:AN:42:TRP:C	2.55	0.46
16:AP:30:GLY:O	16:AP:31:ARG:C	2.54	0.46
17:AQ:12:VAL:O	17:AQ:22:VAL:O	2.34	0.46
22:BA:1000:A:C6	22:BA:1001:A:C6	3.04	0.46
22:BA:1510:G:H2'	22:BA:1511:G:O4'	2.16	0.46
22:BA:1688:U:C5'	22:BA:1689:A:OP1	2.64	0.46
22:BA:1946:U:H2'	22:BA:1947:C:C6	2.51	0.46
22:BA:2164:C:H3'	22:BA:2165:C:H5''	1.98	0.46
22:BA:2725:A:C4	22:BA:2727:A:C8	3.04	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:422:A:C2	22:BA:423:A:N3	2.84	0.46
22:BA:493:G:H2'	22:BA:494:G:O4'	2.16	0.46
22:BA:5:A:H2'	22:BA:6:A:C8	2.51	0.46
22:BA:790:U:O2'	22:BA:791:C:P	2.74	0.46
22:BA:945:A:H4'	22:BA:946:C:OP2	2.16	0.46
22:BA:1818:U:OP2	24:BC:156:ARG:NH1	2.49	0.46
25:BD:104:VAL:HG23	25:BD:105:LYS:N	2.31	0.46
28:BG:94:TYR:C	28:BG:95:ARG:HG2	2.36	0.46
30:BI:65:ARG:NH1	30:BI:66:SER:OG	2.48	0.46
33:BL:132:ARG:HG3	33:BL:142:ILE:CD1	2.46	0.46
35:BN:117:ASP:O	35:BN:119:SER:N	2.49	0.46
1:CA:1260:G:OP1	1:CA:1284:C:O2'	2.19	0.46
1:CA:1315:U:C5	1:CA:1316:G:C5	3.04	0.46
1:CA:1388:C:H2'	1:CA:1389:C:H6	1.81	0.46
1:CA:139:A:O2'	1:CA:140:U:H5'	2.16	0.46
1:CA:441:A:C2	1:CA:497:G:C6	3.04	0.46
1:CA:71:A:C6	1:CA:72:A:N7	2.84	0.46
1:CA:819:A:H4'	1:CA:820:U:OP2	2.16	0.46
2:CB:207:ILE:N	2:CB:207:ILE:HD13	2.30	0.46
1:CA:1056:U:H4'	3:CC:163:ALA:HB2	1.98	0.46
3:CC:184:TYR:CD1	3:CC:201:TRP:CD1	3.04	0.46
4:CD:9:LEU:HG	4:CD:32:CYS:HB2	1.98	0.46
4:CD:33:LYS:NZ	4:CD:33:LYS:HB2	2.31	0.46
5:CE:104:GLY:O	5:CE:105:ILE:HG22	2.16	0.46
1:CA:9:G:H5'	5:CE:108:GLY:HA3	1.97	0.46
8:CH:35:ALA:O	8:CH:39:VAL:HG23	2.16	0.46
9:CI:116:VAL:HG21	10:CJ:62:ARG:HD3	1.97	0.46
12:CL:18:LYS:HD2	12:CL:18:LYS:O	2.16	0.46
14:CN:62:ASN:OD1	14:CN:73:PHE:CE1	2.69	0.46
15:CO:37:ASN:O	15:CO:40:GLN:HB2	2.16	0.46
22:DA:2885:G:N2	48:D0:32:LYS:HA	2.30	0.46
22:DA:1068:G:H2'	22:DA:1096:A:H5'	1.98	0.46
22:DA:1568:G:N3	24:DC:58:HIS:CE1	2.84	0.46
22:DA:1652:A:H3'	22:DA:1653:G:C8	2.51	0.46
22:DA:1817:G:H4'	24:DC:86:ASN:O	2.15	0.46
22:DA:200:U:C6	22:DA:201:C:C5	3.04	0.46
22:DA:528:A:C2	22:DA:2043:C:H4'	2.51	0.46
22:DA:2200:C:O2	22:DA:2226:C:N4	2.48	0.46
22:DA:2439:A:H4'	22:DA:2440:C:H5''	1.98	0.46
22:DA:2473:U:O2	22:DA:2473:U:H2'	2.16	0.46
22:DA:1783:A:C2	22:DA:2588:G:O4'	2.68	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2650:U:H2'	22:DA:2651:C:C6	2.51	0.46
22:DA:523:C:H2'	22:DA:524:G:C8	2.51	0.46
24:DC:107:PRO:HD2	24:DC:110:LEU:HD22	1.98	0.46
28:DG:126:PRO:C	28:DG:127:THR:OG1	2.53	0.46
30:DI:76:ALA:HB2	30:DI:129:ILE:HG23	1.96	0.46
30:DI:80:LEU:HA	30:DI:84:ALA:HB3	1.98	0.46
37:DP:51:ARG:O	37:DP:57:SER:HA	2.16	0.46
39:DR:39:LEU:C	39:DR:49:ILE:HG23	2.36	0.46
1:AA:1227:A:H2'	1:AA:1228:C:O5'	2.17	0.45
1:AA:1319:A:C8	1:AA:1323:G:C5	3.04	0.45
1:AA:141:G:C2	1:AA:142:G:H1'	2.51	0.45
1:AA:142:G:H3'	1:AA:143:A:H8	1.81	0.45
1:AA:186:C:H2'	1:AA:187:G:O4'	2.15	0.45
1:AA:242:G:C2	1:AA:245:U:C4	3.05	0.45
1:AA:614:C:H2'	1:AA:615:G:O4'	2.15	0.45
4:AD:68:LEU:CD2	4:AD:68:LEU:N	2.79	0.45
9:AI:85:ARG:O	9:AI:88:MET:CB	2.64	0.45
12:AL:63:VAL:HG22	12:AL:64:THR:N	2.31	0.45
14:AN:28:LYS:N	14:AN:31:ILE:HB	2.32	0.45
15:AO:61:SER:O	15:AO:65:LYS:HG3	2.16	0.45
16:AP:77:GLU:C	16:AP:79:ASN:H	2.19	0.45
20:AT:3:ASN:O	20:AT:4:ILE:C	2.54	0.45
22:BA:1106:G:C2	22:BA:1107:G:C8	3.04	0.45
22:BA:1936:A:H2	22:BA:1943:U:N3	2.11	0.45
22:BA:1949:G:N2	22:BA:1958:C:C2	2.84	0.45
22:BA:1964:G:O2'	22:BA:1967:C:OP2	2.21	0.45
22:BA:2305:U:H5''	27:BF:131:GLY:HA3	1.97	0.45
22:BA:868:U:C4	22:BA:869:G:N7	2.84	0.45
25:BD:16:THR:O	25:BD:17:GLU:C	2.54	0.45
27:BF:38:MET:HE2	27:BF:152:LEU:HD22	1.98	0.45
28:BG:40:ALA:HB2	28:BG:58:TYR:CD2	2.51	0.45
29:BH:90:LEU:HD21	29:BH:93:SER:HA	1.97	0.45
31:BJ:81:ILE:CG2	31:BJ:82:GLY:N	2.72	0.45
22:BA:1665:A:H5''	32:BK:66:LYS:HB3	1.98	0.45
33:BL:122:VAL:HG21	33:BL:135:ILE:HD13	1.98	0.45
35:BN:24:MET:CE	35:BN:44:LEU:HD13	2.46	0.45
39:BR:39:LEU:HA	39:BR:49:ILE:HG21	1.96	0.45
47:BZ:10:THR:HG23	47:BZ:11:ARG:HG3	1.99	0.45
1:CA:1007:U:C2'	1:CA:1008:U:H5'	2.45	0.45
1:CA:1055:A:N7	1:CA:1206:G:C6	2.84	0.45
1:CA:1244:G:C6	1:CA:1245:C:N4	2.84	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1392:G:O2'	1:CA:1393:U:H5'	2.15	0.45
1:CA:1457:G:H2'	1:CA:1458:G:O4'	2.16	0.45
1:CA:18:C:C2	1:CA:19:A:C8	3.04	0.45
4:CD:42:GLY:C	4:CD:44:ARG:H	2.19	0.45
8:CH:77:ARG:HD3	8:CH:78:VAL:N	2.31	0.45
8:CH:89:LYS:HA	8:CH:92:LEU:HD13	1.98	0.45
10:CJ:40:ILE:HG22	10:CJ:42:LEU:HG	1.96	0.45
11:CK:97:ILE:HG13	11:CK:98:ARG:N	2.30	0.45
13:CM:22:ILE:HD12	13:CM:22:ILE:N	2.31	0.45
14:CN:48:LEU:O	14:CN:48:LEU:HD23	2.16	0.45
17:CQ:14:SER:HB3	17:CQ:22:VAL:CG1	2.46	0.45
21:CU:34:ARG:HE	21:CU:35:ARG:HB2	1.82	0.45
49:D1:11:LEU:HB2	49:D1:21:TYR:HB2	1.98	0.45
22:DA:126:A:N3	50:D2:18:PHE:CE2	2.84	0.45
22:DA:1355:G:C6	22:DA:1377:G:C2	3.03	0.45
22:DA:1379:U:O2	22:DA:1379:U:H2'	2.16	0.45
22:DA:1459:G:C2	22:DA:1461:C:C2	3.04	0.45
22:DA:1651:G:N2	22:DA:2007:U:C2	2.84	0.45
22:DA:170:U:N3	22:DA:171:U:C5	2.84	0.45
22:DA:118:A:N3	22:DA:178:G:H1'	2.31	0.45
22:DA:2291:U:H2'	22:DA:2292:U:C6	2.51	0.45
22:DA:2373:G:C6	22:DA:2381:A:N1	2.84	0.45
22:DA:2725:A:C5	22:DA:2727:A:C8	3.04	0.45
22:DA:2734:A:N7	22:DA:2735:G:N7	2.64	0.45
22:DA:449:A:N7	22:DA:450:G:N7	2.64	0.45
22:DA:609:A:H2'	22:DA:610:C:O4'	2.16	0.45
22:DA:609:A:C5	22:DA:610:C:O2	2.70	0.45
22:DA:712:G:N2	22:DA:720:U:H1'	2.31	0.45
22:DA:982:C:H5'	22:DA:983:A:OP1	2.15	0.45
26:DE:40:ARG:NH2	26:DE:92:HIS:CE1	2.85	0.45
27:DF:111:ILE:HB	27:DF:114:PHE:HB2	1.97	0.45
29:DH:112:LYS:HG2	29:DH:113:SER:N	2.32	0.45
29:DH:39:ALA:O	29:DH:41:LYS:N	2.47	0.45
37:DP:103:ARG:HB3	37:DP:108:ALA:CB	2.46	0.45
41:DT:32:LEU:O	41:DT:32:LEU:HD12	2.16	0.45
46:DY:14:LEU:HD21	46:DY:57:LEU:HD21	1.98	0.45
47:DZ:3:LYS:CD	47:DZ:3:LYS:N	2.78	0.45
1:AA:1024:G:C2'	1:AA:1025:U:O5'	2.65	0.45
1:AA:1144:G:N1	1:AA:1145:A:H2	2.14	0.45
1:AA:181:A:H1'	1:AA:194:C:N4	2.31	0.45
1:AA:427:U:C4	1:AA:428:G:C6	3.04	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:72:THR:O	2:AB:73:LYS:HG2	2.16	0.45
2:AB:84:ALA:O	2:AB:89:GLN:HB2	2.16	0.45
8:AH:42:GLU:N	8:AH:42:GLU:OE1	2.49	0.45
9:AI:50:GLN:N	9:AI:51:PRO:HD2	2.31	0.45
10:AJ:17:LEU:HD23	10:AJ:18:ILE:N	2.32	0.45
12:AL:110:ARG:NH1	12:AL:113:ALA:HB3	2.30	0.45
13:AM:29:ARG:NH2	13:AM:63:PHE:HB2	2.31	0.45
16:AP:67:ILE:HG23	16:AP:71:VAL:CG1	2.46	0.45
17:AQ:10:GLY:HA3	17:AQ:24:ALA:O	2.17	0.45
21:AU:19:PHE:O	21:AU:22:SER:HB3	2.16	0.45
22:BA:1161:C:H1'	39:BR:8:GLY:O	2.17	0.45
22:BA:1333:G:C2	22:BA:1334:G:C8	3.04	0.45
22:BA:1385:A:N3	22:BA:1386:C:C6	2.84	0.45
22:BA:1570:A:C6	22:BA:1571:A:C6	3.05	0.45
22:BA:2293:G:H2'	22:BA:2294:G:O4'	2.17	0.45
22:BA:536:G:C6	22:BA:537:G:C4	3.04	0.45
22:BA:54:G:C5	22:BA:55:G:C8	3.05	0.45
22:BA:784:G:H5'	24:BC:226:ASN:OD1	2.16	0.45
24:BC:77:VAL:HA	24:BC:114:ASP:O	2.16	0.45
26:BE:79:ARG:O	26:BE:80:SER:CB	2.63	0.45
29:BH:79:THR:HG23	29:BH:147:VAL:HB	1.98	0.45
30:BI:105:GLN:O	30:BI:106:LEU:CB	2.65	0.45
30:BI:50:GLU:OE2	30:BI:52:GLY:N	2.50	0.45
30:BI:75:PRO:O	30:BI:78:VAL:HG22	2.16	0.45
1:AA:1423:G:P	32:BK:49:ARG:HH22	2.39	0.45
35:BN:38:LEU:HB3	35:BN:39:PRO:HD3	1.99	0.45
41:BT:57:VAL:HG22	41:BT:58:VAL:N	2.30	0.45
42:BU:85:PHE:N	42:BU:85:PHE:CD1	2.83	0.45
1:CA:1073:U:H5'	1:CA:1074:G:OP2	2.17	0.45
1:CA:124:C:N3	1:CA:125:U:C4	2.84	0.45
1:CA:1310:G:N2	1:CA:1328:C:O2	2.49	0.45
1:CA:1426:G:C4	1:CA:1475:G:C2	3.05	0.45
1:CA:429:U:H3'	4:CD:9:LEU:HD23	1.98	0.45
1:CA:442:G:C6	1:CA:443:C:C4	3.04	0.45
1:CA:510:A:H5''	1:CA:511:C:P	2.56	0.45
1:CA:525:C:N4	1:CA:526:C:N4	2.63	0.45
1:CA:701:U:H4'	1:CA:703:G:C8	2.51	0.45
1:CA:669:G:N2	1:CA:738:C:O2	2.48	0.45
1:CA:756:C:C2'	1:CA:757:U:H5'	2.46	0.45
1:CA:81:A:H2'	1:CA:82:G:C8	2.51	0.45
1:CA:952:U:O4	13:CM:103:LYS:HD3	2.15	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:968:A:C8	1:CA:1062:U:H4'	2.51	0.45
1:CA:992:U:O4'	1:CA:993:G:C2	2.68	0.45
2:CB:186:ILE:HA	2:CB:200:ILE:O	2.16	0.45
2:CB:90:PHE:HB3	2:CB:150:GLY:O	2.16	0.45
4:CD:74:ASN:HA	4:CD:77:LYS:HB2	1.98	0.45
4:CD:78:GLU:CG	4:CD:93:LEU:HD11	2.46	0.45
5:CE:150:PRO:HA	8:CH:99:LEU:HD21	1.98	0.45
6:CF:51:ILE:CG1	6:CF:51:ILE:O	2.63	0.45
12:CL:9:ARG:HB2	12:CL:9:ARG:CZ	2.46	0.45
13:CM:96:PRO:CB	13:CM:100:GLN:OE1	2.65	0.45
15:CO:11:ILE:O	15:CO:14:GLU:HB2	2.16	0.45
17:CQ:14:SER:OG	17:CQ:22:VAL:HG12	2.16	0.45
17:CQ:13:VAL:HG13	17:CQ:22:VAL:HG13	1.98	0.45
20:CT:54:MET:HE2	20:CT:58:VAL:CG2	2.47	0.45
21:CU:29:LEU:C	21:CU:29:LEU:HD23	2.37	0.45
22:DA:1066:U:C2'	22:DA:1067:A:OP1	2.64	0.45
22:DA:1345:C:H5'	22:DA:1396:U:C4	2.51	0.45
22:DA:142:A:C6	22:DA:143:C:N4	2.84	0.45
22:DA:1949:G:C6	22:DA:1950:G:C6	3.04	0.45
22:DA:2051:A:C2	22:DA:2052:A:N6	2.84	0.45
22:DA:2163:A:H2'	22:DA:2164:C:H4'	1.98	0.45
22:DA:2361:G:H2'	22:DA:2362:C:O4'	2.17	0.45
22:DA:2571:U:N3	22:DA:2574:G:C8	2.85	0.45
22:DA:2643:G:C2'	22:DA:2644:G:H5'	2.47	0.45
22:DA:58:G:C2	22:DA:70:G:C2	3.04	0.45
22:DA:609:A:N7	22:DA:610:C:C2	2.85	0.45
23:DB:20:G:C2	23:DB:64:G:C2	3.05	0.45
23:DB:84:G:N2	23:DB:93:C:O2	2.49	0.45
24:DC:120:VAL:O	24:DC:120:VAL:HG12	2.15	0.45
24:DC:148:PRO:CD	24:DC:185:GLU:OE2	2.64	0.45
33:DL:62:PRO:HG3	51:D3:26:HIS:O	2.17	0.45
1:AA:1027:C:C2	1:AA:1034:G:O6	2.69	0.45
1:AA:1086:U:O2'	1:AA:1087:G:H5'	2.17	0.45
1:AA:29:U:H5'	1:AA:296:U:OP1	2.16	0.45
1:AA:55:A:C6	1:AA:56:U:C2	3.05	0.45
1:AA:597:G:C2	1:AA:644:U:O2	2.69	0.45
1:AA:72:A:C2'	1:AA:73:C:H5'	2.46	0.45
1:AA:785:G:N2	1:AA:798:U:C2	2.83	0.45
2:AB:21:ARG:HA	2:AB:21:ARG:NH1	2.30	0.45
3:AC:22:TRP:CD1	3:AC:59:ARG:CD	2.99	0.45
4:AD:3:ARG:CZ	4:AD:115:ARG:CD	2.92	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:7:ILE:HD12	8:AH:7:ILE:N	2.31	0.45
8:AH:79:SER:HA	8:AH:85:ILE:HG12	1.98	0.45
9:AI:22:LYS:HD2	9:AI:23:PRO:O	2.17	0.45
9:AI:57:MET:CG	9:AI:58:VAL:N	2.79	0.45
10:AJ:44:THR:HG22	10:AJ:70:HIS:HA	1.99	0.45
13:AM:51:GLY:O	13:AM:55:THR:HG23	2.17	0.45
20:AT:67:ILE:CG1	20:AT:71:LYS:HG2	2.45	0.45
21:AU:11:PRO:O	21:AU:12:PHE:CG	2.69	0.45
21:AU:37:PHE:HA	21:AU:40:LYS:HE3	1.99	0.45
53:B5:79:ALA:CB	53:B5:83:LYS:HB2	2.46	0.45
22:BA:1056:G:C2	22:BA:1102:C:C5	3.04	0.45
22:BA:1402:U:C2'	22:BA:1403:A:O5'	2.64	0.45
22:BA:1768:C:N3	22:BA:1769:U:C5	2.84	0.45
22:BA:1796:U:H2'	22:BA:1797:G:C8	2.51	0.45
22:BA:2714:G:H2'	22:BA:2715:C:H5'	1.98	0.45
22:BA:360:U:C4	22:BA:361:G:C6	3.04	0.45
22:BA:365:U:H2'	22:BA:366:C:C6	2.51	0.45
22:BA:271:G:C5	22:BA:367:G:C2	3.04	0.45
22:BA:593:U:H2'	22:BA:594:U:C6	2.51	0.45
22:BA:675:A:OP1	26:BE:58:LYS:HE3	2.16	0.45
22:BA:979:A:H2'	22:BA:982:C:H42	1.82	0.45
25:BD:166:GLY:O	25:BD:167:ASN:HB3	2.16	0.45
29:BH:94:ILE:HG23	29:BH:98:ASP:CB	2.47	0.45
22:BA:1139:G:O3'	31:BJ:26:GLY:HA3	2.16	0.45
35:BN:22:ARG:HG3	35:BN:70:THR:H	1.80	0.45
35:BN:78:LYS:C	35:BN:79:LEU:O	2.49	0.45
1:CA:1015:G:H2'	1:CA:1016:A:O4'	2.17	0.45
1:CA:1137:C:H1'	1:CA:1138:G:N2	2.31	0.45
1:CA:22:G:O2'	1:CA:913:A:N1	2.43	0.45
5:CE:126:LYS:HE3	5:CE:126:LYS:HA	1.97	0.45
5:CE:154:ALA:C	5:CE:156:LYS:N	2.70	0.45
5:CE:96:MET:CE	5:CE:111:MET:HE3	2.46	0.45
5:CE:95:PHE:CG	5:CE:96:MET:N	2.84	0.45
12:CL:57:LEU:O	12:CL:58:THR:C	2.54	0.45
14:CN:80:SER:O	14:CN:81:ARG:C	2.55	0.45
22:DA:104:A:C8	22:DA:105:C:C4	3.04	0.45
22:DA:1361:G:C5	22:DA:1362:C:C5	3.04	0.45
22:DA:1722:A:C2	22:DA:1739:A:H1'	2.51	0.45
22:DA:1926:U:H2'	22:DA:1928:A:N7	2.31	0.45
22:DA:195:A:C4	22:DA:198:C:N4	2.84	0.45
22:DA:1649:G:N1	22:DA:2009:A:C6	2.84	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2043:C:C2	22:DA:2044:C:C5	3.05	0.45
22:DA:2281:A:C2'	22:DA:2282:G:H5'	2.47	0.45
22:DA:2283:C:N3	22:DA:2389:G:C2	2.84	0.45
22:DA:2347:C:C2	22:DA:2371:G:N2	2.84	0.45
22:DA:2405:G:N2	22:DA:2411:A:C8	2.83	0.45
22:DA:2532:G:N2	22:DA:2663:G:O2'	2.50	0.45
22:DA:2694:G:C4	22:DA:2695:U:C6	3.04	0.45
22:DA:2747:G:C2	22:DA:2756:U:C5	3.04	0.45
22:DA:2817:U:O2	22:DA:2836:U:H1'	2.15	0.45
22:DA:617:G:H2'	22:DA:618:G:O4'	2.16	0.45
22:DA:647:G:C6	22:DA:648:G:C5	3.04	0.45
22:DA:752:A:O2'	22:DA:753:A:P	2.74	0.45
22:DA:806:C:H2'	22:DA:807:U:C6	2.50	0.45
22:DA:7:G:H2'	22:DA:8:C:O4'	2.17	0.45
23:DB:50:A:H2'	23:DB:51:G:O4'	2.16	0.45
29:DH:34:GLY:O	29:DH:35:LYS:CD	2.65	0.45
33:DL:37:GLY:O	33:DL:40:SER:OG	2.34	0.45
41:DT:49:LYS:HD3	41:DT:49:LYS:N	2.31	0.45
41:DT:67:VAL:HG12	41:DT:68:LYS:N	2.32	0.45
1:AA:1202:U:C5	1:AA:1203:C:C5	3.04	0.45
2:AB:33:GLY:HA3	2:AB:40:ILE:H	1.80	0.45
3:AC:88:ARG:HG3	3:AC:99:ALA:O	2.15	0.45
6:AF:8:PHE:CZ	6:AF:60:VAL:HB	2.52	0.45
1:AA:933:G:OP2	7:AG:3:ARG:HB3	2.16	0.45
13:AM:48:LEU:C	13:AM:48:LEU:HD23	2.37	0.45
13:AM:85:CYS:SG	13:AM:87:ARG:HG3	2.56	0.45
1:AA:1048:G:OP1	14:AN:3:LYS:HA	2.15	0.45
17:AQ:59:VAL:HG23	17:AQ:77:ARG:O	2.17	0.45
20:AT:7:ALA:HB1	20:AT:10:ARG:HB2	1.98	0.45
22:BA:1045:C:H3'	22:BA:1046:A:C5'	2.45	0.45
22:BA:1084:A:HO2'	22:BA:1105:U:HO2'	1.64	0.45
22:BA:1098:A:H5'	22:BA:1099:G:OP2	2.16	0.45
22:BA:1153:C:N4	22:BA:1154:G:C6	2.84	0.45
22:BA:1228:G:H2'	22:BA:1229:C:C6	2.52	0.45
22:BA:1366:A:C2	22:BA:1367:A:H1'	2.51	0.45
22:BA:1385:A:C2	22:BA:1386:C:C2	3.05	0.45
22:BA:1385:A:H1'	22:BA:1386:C:H6	1.75	0.45
22:BA:1570:A:H2'	22:BA:1571:A:C8	2.51	0.45
22:BA:1832:C:C4	22:BA:1833:C:C6	3.05	0.45
22:BA:1887:C:C2'	22:BA:1888:G:O5'	2.64	0.45
22:BA:1917:U:O4	22:BA:1918:A:C6	2.69	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:19:A:C2	22:BA:522:A:C2	3.04	0.45
22:BA:581:C:H2'	22:BA:582:A:C8	2.51	0.45
23:BB:65:U:O4	23:BB:108:A:H1'	2.17	0.45
22:BA:2575:C:O2'	25:BD:145:SER:HB2	2.16	0.45
27:BF:111:ILE:O	27:BF:114:PHE:HB2	2.17	0.45
27:BF:43:ALA:O	27:BF:46:ASP:C	2.55	0.45
28:BG:127:THR:HG22	28:BG:128:GLN:N	2.32	0.45
30:BI:97:LYS:HG3	30:BI:139:VAL:HG22	1.95	0.45
31:BJ:77:HIS:CD2	31:BJ:79:GLY:H	2.34	0.45
33:BL:49:GLY:O	33:BL:51:GLU:HG3	2.16	0.45
33:BL:77:ILE:CD1	33:BL:95:LEU:HD13	2.47	0.45
34:BM:24:THR:CG2	34:BM:24:THR:O	2.61	0.45
40:BS:84:ARG:HB2	40:BS:96:ILE:CD1	2.46	0.45
1:CA:1088:G:C6	1:CA:1089:G:N7	2.84	0.45
1:CA:1134:G:H2'	1:CA:1135:U:O4'	2.16	0.45
1:CA:1491:G:C5	1:CA:1492:A:C6	3.04	0.45
1:CA:186:C:O2'	1:CA:187:G:H5'	2.16	0.45
1:CA:569:C:H1'	1:CA:574:A:C4	2.51	0.45
1:CA:68:G:C6	1:CA:69:G:H1'	2.52	0.45
1:CA:784:A:H2'	1:CA:785:G:O4'	2.15	0.45
1:CA:892:A:C6	1:CA:893:C:C4	3.04	0.45
5:CE:99:ALA:HB2	5:CE:124:LEU:HG	1.99	0.45
1:CA:1297:G:HO2'	7:CG:114:LYS:HZ3	1.54	0.45
7:CG:53:ARG:NH2	7:CG:125:SER:OG	2.49	0.45
8:CH:64:LYS:HE2	8:CH:71:VAL:HG21	1.98	0.45
9:CI:19:VAL:HG22	9:CI:65:ILE:HG22	1.97	0.45
9:CI:88:MET:HB2	9:CI:92:GLU:CD	2.37	0.45
13:CM:27:LYS:O	13:CM:27:LYS:HD2	2.17	0.45
13:CM:18:ALA:CB	13:CM:45:ILE:HD11	2.47	0.45
16:CP:19:VAL:HG12	16:CP:37:GLY:C	2.36	0.45
17:CQ:10:GLY:HA3	17:CQ:25:ILE:HD13	1.99	0.45
21:CU:14:VAL:O	21:CU:16:LEU:CD1	2.65	0.45
11:CK:127:ARG:HB2	21:CU:34:ARG:NH1	2.31	0.45
50:D2:1:MET:O	50:D2:2:LYS:C	2.54	0.45
22:DA:1036:G:C6	22:DA:1120:G:C5	3.05	0.45
22:DA:1464:G:N1	22:DA:1465:G:C5	2.84	0.45
22:DA:14:A:H5''	22:DA:15:G:OP2	2.16	0.45
22:DA:155:A:H2'	22:DA:156:A:C8	2.50	0.45
22:DA:1858:A:N1	22:DA:1859:U:C2	2.84	0.45
22:DA:2199:A:C5	22:DA:2200:C:C2	3.05	0.45
22:DA:2204:G:C4	22:DA:2205:A:C8	3.04	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2344:U:H4'	22:DA:2345:G:OP1	2.16	0.45
22:DA:236:C:H2'	22:DA:237:C:H6	1.82	0.45
22:DA:263:G:N2	22:DA:264:C:H1'	2.32	0.45
22:DA:2803:G:N2	22:DA:2804:U:C2	2.85	0.45
22:DA:322:A:O4'	22:DA:340:A:H1'	2.17	0.45
22:DA:419:U:C2	22:DA:420:C:C6	3.04	0.45
22:DA:663:G:C6	22:DA:664:G:C5	3.05	0.45
22:DA:696:G:C6	22:DA:767:U:O2	2.70	0.45
22:DA:902:C:H2'	22:DA:903:C:C6	2.51	0.45
24:DC:171:TYR:CD2	24:DC:185:GLU:HA	2.51	0.45
26:DE:23:PHE:CD1	26:DE:111:GLU:HG3	2.51	0.45
22:DA:2870:C:H5''	35:DN:65:LEU:CD2	2.45	0.45
35:DN:71:ARG:HG2	35:DN:71:ARG:HH21	1.80	0.45
22:DA:1250:G:H5'	38:DQ:6:ARG:HD3	1.99	0.45
22:DA:1263:U:O4	40:DS:95:ARG:NH1	2.49	0.45
43:DV:44:HIS:O	43:DV:45:ASP:C	2.54	0.45
22:DA:372:G:P	45:DX:62:LYS:NZ	2.89	0.45
1:AA:1034:G:C6	1:AA:1035:A:C2	3.04	0.45
1:AA:1122:U:C4	1:AA:1123:U:C5	3.05	0.45
1:AA:129:A:H1'	1:AA:130:A:C8	2.51	0.45
1:AA:1406:U:C2'	1:AA:1407:C:H5'	2.46	0.45
1:AA:184:G:C6	1:AA:185:U:C4	3.04	0.45
1:AA:21:G:N2	1:AA:22:G:C6	2.85	0.45
1:AA:221:C:O2	1:AA:222:C:C6	2.69	0.45
1:AA:374:A:C6	1:AA:375:U:C4	3.05	0.45
1:AA:972:C:H4'	10:AJ:59:LYS:HE3	1.98	0.45
2:AB:57:LEU:CD1	2:AB:221:VAL:HG22	2.46	0.45
3:AC:16:LYS:HG3	3:AC:17:PRO:HD2	1.99	0.45
4:AD:58:LYS:HG2	4:AD:203:LEU:HD22	1.97	0.45
6:AF:46:GLN:HA	6:AF:56:LYS:HA	1.99	0.45
8:AH:41:LYS:O	8:AH:44:GLY:N	2.49	0.45
10:AJ:80:THR:C	10:AJ:82:LYS:N	2.67	0.45
17:AQ:48:ASP:OD2	17:AQ:51:ASN:HA	2.17	0.45
53:B5:172:ILE:O	53:B5:173:HIS:CB	2.64	0.45
22:BA:1109:C:C4	22:BA:1110:G:C6	3.05	0.45
22:BA:1277:G:H5'	35:BN:20:MET:HE2	1.98	0.45
22:BA:1374:G:O2'	22:BA:1375:U:H5'	2.16	0.45
22:BA:1806:C:H2'	22:BA:1807:G:O5'	2.16	0.45
22:BA:686:U:C4'	22:BA:687:C:OP2	2.61	0.45
30:BI:97:LYS:HB3	30:BI:139:VAL:CG2	2.47	0.45
35:BN:67:PHE:CE2	35:BN:71:ARG:NH1	2.84	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BR:29:THR:O	39:BR:30:GLY:C	2.54	0.45
1:CA:1006:G:OP1	1:CA:1038:C:H5''	2.16	0.45
1:CA:1053:G:N7	1:CA:1200:C:C5'	2.79	0.45
1:CA:25:C:H2'	1:CA:26:A:C8	2.51	0.45
1:CA:289:G:C2	1:CA:290:C:C5	3.05	0.45
1:CA:517:G:H4'	1:CA:519:C:C2	2.52	0.45
3:CC:172:ARG:C	3:CC:174:PRO:HD3	2.36	0.45
3:CC:20:SER:HB2	14:CN:92:GLU:O	2.17	0.45
5:CE:102:GLY:C	5:CE:104:GLY:N	2.69	0.45
5:CE:15:LEU:C	5:CE:15:LEU:HD12	2.37	0.45
6:CF:6:ILE:HG22	6:CF:7:VAL:N	2.31	0.45
1:CA:1377:A:C5	7:CG:7:ILE:HD12	2.51	0.45
10:CJ:74:VAL:HG12	10:CJ:75:ASP:N	2.30	0.45
12:CL:107:VAL:HG23	12:CL:117:TYR:HB3	1.97	0.45
20:CT:9:LYS:O	20:CT:12:ILE:HG12	2.16	0.45
20:CT:69:LYS:O	20:CT:71:LYS:N	2.49	0.45
22:DA:1260:A:N6	57:DA:3277:HOH:O	2.50	0.45
22:DA:1398:C:H2'	22:DA:1399:C:O5'	2.17	0.45
22:DA:1437:C:N4	22:DA:1438:U:O4	2.50	0.45
22:DA:1645:G:H4'	22:DA:1646:C:C5	2.51	0.45
22:DA:1740:G:H2'	22:DA:1741:C:C6	2.52	0.45
22:DA:1817:G:O2'	22:DA:1818:U:H5'	2.16	0.45
1:CA:1418:A:O4'	22:DA:1959:G:H4'	2.16	0.45
22:DA:2306:C:OP2	22:DA:2307:G:C2'	2.64	0.45
22:DA:2332:C:H4'	22:DA:2336:A:N6	2.31	0.45
22:DA:2799:A:C6	22:DA:2801:G:C4	3.05	0.45
22:DA:333:G:C6	22:DA:334:C:C5	3.05	0.45
22:DA:349:U:H2'	22:DA:350:G:H8	1.81	0.45
22:DA:466:A:C2	22:DA:796:C:O4'	2.70	0.45
22:DA:467:G:C2	22:DA:468:G:C8	3.05	0.45
22:DA:498:G:N3	22:DA:499:U:C6	2.85	0.45
22:DA:611:C:H2'	22:DA:612:G:O4'	2.16	0.45
22:DA:595:C:O2	22:DA:663:G:C2	2.69	0.45
27:DF:9:LYS:O	27:DF:13:VAL:CG2	2.64	0.45
29:DH:147:VAL:HG12	29:DH:148:ALA:N	2.32	0.45
22:DA:1250:G:H5'	38:DQ:6:ARG:CD	2.47	0.45
39:DR:39:LEU:O	39:DR:49:ILE:HG23	2.16	0.45
41:DT:20:ALA:O	41:DT:24:MET:SD	2.74	0.45
41:DT:48:GLN:HB2	41:DT:49:LYS:CE	2.47	0.45
22:DA:483:A:C1'	42:DU:45:HIS:HB2	2.47	0.45
42:DU:61:LYS:HD2	42:DU:61:LYS:HA	1.82	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DY:18:LEU:O	46:DY:22:LEU:CB	2.63	0.45
1:AA:1054:C:C5	1:AA:1196:A:H2'	2.51	0.45
1:AA:1108:G:H5'	3:AC:176:HIS:CE1	2.51	0.45
1:AA:113:G:O2'	1:AA:114:U:H5'	2.17	0.45
1:AA:1335:U:H5'	1:AA:1336:C:O5'	2.17	0.45
1:AA:1368:A:OP2	9:AI:114:LYS:HD2	2.17	0.45
1:AA:1441:A:C2'	1:AA:1442:G:O5'	2.64	0.45
1:AA:652:U:C2	1:AA:752:G:N2	2.85	0.45
1:AA:654:G:H2'	1:AA:655:A:H5'	1.98	0.45
1:AA:657:U:O2	15:AO:22:THR:HG22	2.16	0.45
3:AC:14:ILE:O	3:AC:15:VAL:HG22	2.16	0.45
3:AC:23:PHE:CE1	10:AJ:13:PHE:CE2	3.04	0.45
4:AD:122:ALA:C	4:AD:123:ILE:HG23	2.36	0.45
4:AD:27:ALA:O	4:AD:28:ILE:C	2.55	0.45
5:AE:151:GLU:HG2	5:AE:152:MET:H	1.82	0.45
10:AJ:83:THR:HA	10:AJ:86:ALA:HB3	1.98	0.45
11:AK:108:THR:HG22	11:AK:109:ASN:ND2	2.31	0.45
11:AK:35:THR:OG1	11:AK:40:ASN:N	2.50	0.45
1:AA:1308:U:OP1	13:AM:96:PRO:HA	2.16	0.45
17:AQ:47:HIS:CB	17:AQ:67:LEU:HD23	2.47	0.45
49:B1:10:LYS:HE3	49:B1:53:LYS:NZ	2.32	0.45
53:B5:64:SER:O	53:B5:65:LEU:CB	2.65	0.45
53:B5:78:ILE:HG23	53:B5:78:ILE:O	2.17	0.45
22:BA:1857:G:C4	22:BA:1884:G:C2	3.04	0.45
22:BA:1935:G:C6	22:BA:1962:C:C5	3.04	0.45
22:BA:250:G:C6	22:BA:251:A:C6	3.05	0.45
22:BA:699:A:H4'	22:BA:1634:A:N7	2.30	0.45
23:BB:15:A:O2'	23:BB:16:G:P	2.74	0.45
24:BC:84:ASP:OD1	24:BC:84:ASP:C	2.55	0.45
27:BF:148:ARG:CG	27:BF:149:VAL:H	2.29	0.45
29:BH:72:ILE:HG23	29:BH:142:VAL:HG22	1.99	0.45
29:BH:40:THR:O	29:BH:42:LYS:N	2.48	0.45
30:BI:77:ALA:HB2	30:BI:132:THR:CG2	2.47	0.45
31:BJ:98:GLU:OE2	31:BJ:126:ALA:HB2	2.16	0.45
41:BT:91:GLN:HG3	41:BT:91:GLN:O	2.17	0.45
1:CA:1091:U:H2'	1:CA:1093:A:OP2	2.16	0.45
1:CA:1408:A:N1	1:CA:1494:G:C5	2.85	0.45
1:CA:505:G:OP2	1:CA:534:U:H2'	2.17	0.45
1:CA:517:G:C8	1:CA:531:U:C4	3.04	0.45
1:CA:681:A:C2	1:CA:710:G:C4	3.05	0.45
1:CA:706:A:O2'	11:CK:31:ILE:CD1	2.64	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:97:G:C6	1:CA:98:A:H1'	2.52	0.45
2:CB:117:LEU:HB3	2:CB:141:LEU:HG	1.98	0.45
2:CB:87:CYS:HB3	2:CB:222:ARG:HA	1.99	0.45
6:CF:6:ILE:HD12	6:CF:6:ILE:N	2.31	0.45
7:CG:126:ASP:N	7:CG:126:ASP:OD1	2.50	0.45
18:CR:25:ASP:OD1	18:CR:25:ASP:N	2.50	0.45
49:D1:9:ILE:CG2	49:D1:25:LYS:HB3	2.46	0.45
22:DA:684:G:OP1	50:D2:16:HIS:ND1	2.49	0.45
22:DA:1184:U:OP1	47:DZ:30:ARG:NH2	2.50	0.45
22:DA:1243:C:H2'	22:DA:1244:A:O4'	2.16	0.45
22:DA:1432:G:O2'	22:DA:1433:A:H5'	2.15	0.45
22:DA:142:A:H2'	22:DA:143:C:C6	2.51	0.45
22:DA:134:G:N2	22:DA:146:A:N3	2.64	0.45
22:DA:1801:A:C8	24:DC:262:ARG:NH2	2.85	0.45
22:DA:1847:A:H2'	22:DA:1848:A:OP2	2.16	0.45
22:DA:2054:A:C2	22:DA:2616:C:C2	3.04	0.45
22:DA:2141:G:N2	22:DA:2151:U:O2	2.50	0.45
22:DA:2250:G:C8	22:DA:2250:G:O5'	2.70	0.45
22:DA:2415:G:C6	22:DA:2416:C:N4	2.85	0.45
22:DA:2574:G:N1	22:DA:2575:C:C2	2.85	0.45
22:DA:445:C:H3'	22:DA:446:G:C8	2.52	0.45
22:DA:49:A:N6	22:DA:177:G:C5	2.84	0.45
22:DA:553:G:H2'	22:DA:554:U:O4'	2.17	0.45
22:DA:693:A:H2'	22:DA:694:U:C6	2.50	0.45
24:DC:158:ALA:HA	24:DC:195:VAL:HG22	1.99	0.45
26:DE:146:VAL:HG12	26:DE:185:LYS:HB2	1.99	0.45
22:DA:38:A:H4'	26:DE:45:ALA:HB2	1.97	0.45
26:DE:5:LEU:O	26:DE:6:LYS:C	2.55	0.45
27:DF:3:LYS:HD3	27:DF:101:GLU:OE2	2.17	0.45
27:DF:29:PRO:HB2	27:DF:169:LEU:HD22	1.98	0.45
27:DF:44:ILE:HG21	27:DF:79:ILE:HG22	1.98	0.45
30:DI:101:ILE:HG22	30:DI:102:SER:N	2.31	0.45
30:DI:76:ALA:HA	30:DI:79:LEU:HB2	1.98	0.45
36:DO:53:THR:HB	36:DO:65:THR:CG2	2.46	0.45
36:DO:28:VAL:CG1	36:DO:94:ARG:HA	2.47	0.45
40:DS:20:VAL:HG23	40:DS:39:THR:HG21	1.97	0.45
40:DS:89:ALA:O	40:DS:90:LYS:HB2	2.16	0.45
46:DY:28:LEU:CD2	46:DY:37:LEU:HD11	2.46	0.45
1:AA:1160:G:HO2'	1:AA:1161:C:P	2.39	0.45
1:AA:1394:A:C5	1:AA:1501:C:H4'	2.52	0.45
1:AA:438:U:C2	1:AA:494:G:C6	3.05	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:6:G:N3	1:AA:6:G:H3'	2.31	0.45
1:AA:96:U:O2'	1:AA:97:G:P	2.75	0.45
2:AB:151:ILE:CG2	2:AB:152:LYS:N	2.79	0.45
2:AB:55:ALA:O	2:AB:59:LYS:N	2.44	0.45
5:AE:80:THR:HB	5:AE:122:ASN:OD1	2.16	0.45
6:AF:9:MET:CE	18:AR:65:LEU:HD22	2.47	0.45
16:AP:4:ILE:HG13	16:AP:21:VAL:CG2	2.47	0.45
17:AQ:50:ASN:O	17:AQ:51:ASN:C	2.53	0.45
21:AU:41:PRO:O	21:AU:45:ARG:HD3	2.16	0.45
53:B5:67:HIS:CD2	53:B5:188:ASP:HA	2.52	0.45
22:BA:142:A:N7	22:BA:143:C:C4	2.85	0.45
22:BA:152:A:H2'	22:BA:153:U:C6	2.52	0.45
22:BA:2315:G:H2'	22:BA:2316:G:C8	2.51	0.45
22:BA:2419:U:OP1	51:B3:41:LYS:HE2	2.16	0.45
22:BA:223:A:C4	22:BA:422:A:C8	3.05	0.45
22:BA:58:G:N2	22:BA:70:G:C4	2.85	0.45
22:BA:60:G:C8	22:BA:62:U:C6	3.04	0.45
22:BA:626:A:H2'	33:BL:78:ARG:CZ	2.47	0.45
22:BA:587:C:C6	22:BA:671:C:H1'	2.52	0.45
22:BA:909:A:O2'	22:BA:911:A:OP2	2.25	0.45
22:BA:975:A:C4	22:BA:990:A:C5	3.05	0.45
24:BC:220:VAL:HB	24:BC:225:MET:CE	2.47	0.45
25:BD:101:PHE:C	25:BD:103:ASP:N	2.68	0.45
26:BE:31:VAL:HG21	26:BE:104:ALA:CB	2.47	0.45
26:BE:26:ALA:O	26:BE:27:LEU:C	2.54	0.45
1:CA:1039:G:C6	1:CA:1040:U:N3	2.85	0.45
1:CA:1070:U:C2	1:CA:1071:C:C5	3.04	0.45
1:CA:1206:G:C6	1:CA:1207:G:C5	3.04	0.45
1:CA:757:U:C2'	1:CA:758:C:O5'	2.65	0.45
1:CA:764:C:C4	1:CA:765:G:C5	3.04	0.45
1:CA:793:U:O2'	1:CA:1516:G:H1'	2.17	0.45
1:CA:803:G:C5	1:CA:804:U:C4	3.05	0.45
2:CB:16:PHE:N	2:CB:16:PHE:CD2	2.85	0.45
1:CA:1113:C:H4'	3:CC:14:ILE:HD12	1.99	0.45
3:CC:182:ILE:HD13	3:CC:203:PHE:HA	1.99	0.45
5:CE:115:LEU:CD2	5:CE:123:VAL:HG21	2.47	0.45
7:CG:145:ALA:O	7:CG:146:GLU:HB2	2.15	0.45
7:CG:37:SER:OG	9:CI:43:THR:HG23	2.16	0.45
12:CL:22:PRO:O	12:CL:24:LEU:N	2.45	0.45
13:CM:33:ILE:HG22	13:CM:56:LEU:HD23	1.98	0.45
16:CP:23:ASP:OD2	16:CP:25:ARG:HG2	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1016:G:C2	22:DA:1147:A:C2	3.04	0.45
22:DA:1087:G:N1	22:DA:1089:A:C2	2.84	0.45
22:DA:1140:C:C2'	22:DA:1141:U:H5'	2.47	0.45
22:DA:1177:G:H2'	22:DA:1178:C:H4'	1.99	0.45
22:DA:1286:A:N6	22:DA:1329:U:C2	2.85	0.45
22:DA:1358:G:H2'	22:DA:1359:A:OP2	2.16	0.45
22:DA:1818:U:H2'	24:DC:156:ARG:HD3	1.99	0.45
22:DA:1998:A:H2'	22:DA:1999:C:O4'	2.16	0.45
22:DA:2156:G:C6	22:DA:2157:G:N2	2.85	0.45
22:DA:28:A:C2	22:DA:513:A:C8	3.05	0.45
22:DA:30:G:C6	22:DA:31:C:N3	2.85	0.45
22:DA:344:A:C2	22:DA:345:A:N7	2.85	0.45
22:DA:663:G:O6	22:DA:664:G:C6	2.70	0.45
23:DB:21:G:N2	23:DB:63:C:O2	2.50	0.45
26:DE:148:ILE:HG21	26:DE:157:LEU:HD21	1.99	0.45
29:DH:31:VAL:CG1	29:DH:32:PRO:HD3	2.47	0.45
32:DK:39:ILE:HG13	32:DK:39:ILE:O	2.16	0.45
32:DK:41:ILE:HD11	32:DK:86:LEU:HD22	1.98	0.45
34:DM:124:LEU:HD23	34:DM:124:LEU:N	2.31	0.45
39:DR:68:ARG:HD3	39:DR:92:TRP:CZ2	2.52	0.45
41:DT:30:ILE:HD13	41:DT:32:LEU:CG	2.47	0.45
1:AA:9:G:C2	1:AA:10:A:C8	3.05	0.45
1:AA:1160:G:O6	1:AA:1181:G:C5	2.70	0.45
1:AA:343:U:H2'	1:AA:345:C:C5	2.52	0.45
1:AA:373:A:O2'	1:AA:374:A:H5'	2.15	0.45
1:AA:624:C:C5	1:AA:625:U:C5	3.04	0.45
1:AA:631:C:H5"	1:AA:632:U:H5'	1.98	0.45
1:AA:659:U:N3	1:AA:660:C:C5	2.85	0.45
1:AA:695:A:N1	1:AA:696:A:C2	2.85	0.45
1:AA:908:A:C2	1:AA:909:A:C4	3.04	0.45
1:AA:914:A:C5	1:AA:915:A:N7	2.84	0.45
2:AB:148:LEU:C	2:AB:151:ILE:HG22	2.36	0.45
2:AB:167:ASP:OD1	2:AB:168:HIS:N	2.50	0.45
3:AC:19:ASN:OD1	3:AC:19:ASN:N	2.49	0.45
3:AC:150:LYS:HG3	3:AC:201:TRP:CE3	2.52	0.45
4:AD:160:GLU:O	4:AD:162:ALA:N	2.49	0.45
4:AD:105:MET:CG	4:AD:171:LEU:HD22	2.47	0.45
5:AE:153:VAL:O	5:AE:156:LYS:HB2	2.17	0.45
8:AH:88:ARG:O	8:AH:92:LEU:HG	2.17	0.45
13:AM:80:LEU:CD2	13:AM:87:ARG:HB2	2.46	0.45
14:AN:64:CYS:SG	14:AN:80:SER:HB3	2.57	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:AQ:16:LYS:CA	17:AQ:17:MET:SD	3.05	0.45
22:BA:1109:C:C5	22:BA:1110:G:C6	3.05	0.45
22:BA:1434:A:C2	22:BA:1435:G:C5	3.04	0.45
22:BA:1324:G:H1'	22:BA:1616:A:N6	2.32	0.45
22:BA:1851:U:O2'	22:BA:1852:U:H5'	2.17	0.45
22:BA:1857:G:N3	22:BA:1884:G:C2	2.85	0.45
22:BA:1921:G:N2	22:BA:1922:G:C8	2.84	0.45
22:BA:2177:C:N4	22:BA:2178:C:O2	2.50	0.45
22:BA:2192:U:C5	22:BA:2193:G:C8	3.05	0.45
22:BA:858:G:C4	22:BA:2268:A:C2	3.05	0.45
22:BA:559:G:H2'	22:BA:560:C:O4'	2.17	0.45
22:BA:7:G:C6	22:BA:8:C:C4	3.05	0.45
22:BA:997:G:OP1	38:BQ:92:ARG:HG3	2.15	0.45
23:BB:78:A:C2	23:BB:99:A:C4	3.05	0.45
24:BC:28:LYS:HD3	24:BC:28:LYS:N	2.32	0.45
22:BA:2311:A:C2	27:BF:41:GLY:CA	3.00	0.45
28:BG:94:TYR:HA	28:BG:106:SER:O	2.16	0.45
29:BH:14:SER:OG	29:BH:17:ASP:OD1	2.29	0.45
30:BI:44:ALA:O	30:BI:45:LYS:HG3	2.17	0.45
32:BK:23:LYS:HB3	32:BK:40:LYS:HB3	1.98	0.45
34:BM:20:LEU:HD12	43:BV:81:PRO:CG	2.46	0.45
39:BR:66:HIS:ND1	39:BR:94:THR:CG2	2.80	0.45
1:CA:1258:G:H2'	1:CA:1259:C:C6	2.51	0.45
1:CA:1291:U:OP1	7:CG:37:SER:CB	2.65	0.45
1:CA:920:U:C2	1:CA:921:U:C5	3.05	0.45
1:CA:9:G:OP2	5:CE:126:LYS:CE	2.65	0.45
5:CE:101:GLU:HA	5:CE:122:ASN:CB	2.46	0.45
5:CE:16:ILE:HD12	5:CE:16:ILE:N	2.32	0.45
6:CF:37:HIS:O	6:CF:38:ARG:HB3	2.17	0.45
9:CI:49:ARG:C	9:CI:49:ARG:HD3	2.37	0.45
9:CI:88:MET:O	9:CI:88:MET:CG	2.65	0.45
11:CK:82:LEU:O	11:CK:82:LEU:HD23	2.17	0.45
14:CN:51:LEU:O	14:CN:53:ARG:N	2.50	0.45
19:CS:51:VAL:O	19:CS:58:VAL:HG13	2.17	0.45
22:DA:136:G:N2	22:DA:144:A:C5	2.85	0.45
22:DA:1623:G:C6	22:DA:1624:U:C4	3.05	0.45
22:DA:192:C:H2'	22:DA:193:U:H5'	1.99	0.45
22:DA:186:G:C2	22:DA:211:C:O2	2.70	0.45
22:DA:2284:A:O2'	22:DA:2288:A:N1	2.37	0.45
22:DA:2751:G:H2'	22:DA:2751:G:N3	2.32	0.45
22:DA:515:A:H2'	22:DA:516:C:H5'	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:533:G:C5	22:DA:534:U:C4	3.04	0.45
22:DA:82:U:O2	22:DA:83:A:C8	2.69	0.45
29:DH:93:SER:HB3	29:DH:123:ARG:HG3	1.99	0.45
29:DH:86:ASP:C	29:DH:88:GLY:H	2.19	0.45
30:DI:57:VAL:HG23	30:DI:71:THR:CA	2.47	0.45
1:AA:1118:U:C1'	1:AA:1179:A:C4	3.00	0.45
1:AA:126:G:O2'	1:AA:635:A:H4'	2.17	0.45
1:AA:221:C:C2	1:AA:222:C:C5	3.05	0.45
1:AA:224:U:H2'	1:AA:225:C:C6	2.51	0.45
1:AA:457:G:C6	1:AA:458:U:C4	3.05	0.45
1:AA:691:G:O6	11:AK:57:LYS:NZ	2.50	0.45
1:AA:765:G:C6	1:AA:812:G:C4	3.05	0.45
3:AC:42:TYR:CZ	3:AC:90:VAL:HG21	2.52	0.45
3:AC:39:VAL:O	3:AC:43:LEU:HB2	2.16	0.45
4:AD:58:LYS:HE2	4:AD:69:GLU:OE2	2.17	0.45
5:AE:13:GLU:HB2	5:AE:39:VAL:HG12	1.99	0.45
10:AJ:57:VAL:CG2	10:AJ:58:ASN:N	2.79	0.45
10:AJ:65:TYR:OH	14:AN:85:ARG:HD2	2.17	0.45
22:BA:1169:A:N1	22:BA:1180:U:O4	2.50	0.45
22:BA:1171:G:C5	22:BA:1172:C:C4	3.05	0.45
22:BA:1242:U:H2'	22:BA:1243:C:C6	2.52	0.45
22:BA:1795:C:C4	22:BA:1796:U:C5	3.05	0.45
22:BA:2094:A:C2	22:BA:2196:C:C2	3.05	0.45
22:BA:2258:C:H4'	22:BA:2259:U:OP2	2.17	0.45
22:BA:2694:G:C5	22:BA:2695:U:C4	3.05	0.45
22:BA:2804:U:H2'	22:BA:2805:C:C6	2.52	0.45
22:BA:2888:C:O2	22:BA:2888:C:C2'	2.64	0.45
22:BA:441:U:H2'	22:BA:442:G:C8	2.52	0.45
22:BA:55:G:N2	22:BA:56:A:C4	2.85	0.45
24:BC:264:ASP:O	24:BC:265:LYS:C	2.55	0.45
29:BH:76:GLU:HA	29:BH:142:VAL:CG1	2.46	0.45
35:BN:72:ASP:O	35:BN:76:VAL:HG12	2.17	0.45
38:BQ:49:ASP:OD2	38:BQ:52:GLN:OE1	2.35	0.45
45:BX:78:TYR:CD1	45:BX:78:TYR:OXT	2.70	0.45
1:CA:1027:C:N4	1:CA:1034:G:O6	2.50	0.45
1:CA:16:A:C2	1:CA:17:U:C6	3.05	0.45
1:CA:218:U:C2'	1:CA:219:U:H5'	2.47	0.45
1:CA:240:G:OP1	1:CA:240:G:H4'	2.16	0.45
1:CA:421:U:H4'	1:CA:421:U:OP1	2.17	0.45
1:CA:444:G:C6	1:CA:445:G:N7	2.85	0.45
1:CA:541:G:H2'	1:CA:542:G:O4'	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:745:G:H5''	1:CA:851:G:O2'	2.17	0.45
1:CA:778:G:C6	1:CA:779:C:N3	2.85	0.45
1:CA:782:A:C8	1:CA:783:C:C5	3.05	0.45
2:CB:10:LEU:HD23	2:CB:12:ALA:O	2.17	0.45
2:CB:71:GLY:HA3	2:CB:164:ILE:HG21	1.99	0.45
4:CD:35:GLU:O	4:CD:37:ALA:N	2.45	0.45
6:CF:17:GLN:O	6:CF:21:MET:HG3	2.17	0.45
22:DA:1062:G:C2	22:DA:1063:G:N1	2.85	0.45
22:DA:1194:A:C2'	22:DA:1195:G:O5'	2.64	0.45
22:DA:1448:G:C4	22:DA:1449:G:C8	3.05	0.45
22:DA:1526:C:N4	22:DA:1527:G:C6	2.85	0.45
22:DA:1598:A:H2'	22:DA:1599:U:C6	2.52	0.45
22:DA:1965:C:H3'	22:DA:1966:A:C8	2.51	0.45
22:DA:1265:A:N6	22:DA:2014:A:OP2	2.40	0.45
22:DA:2059:A:H4'	26:DE:64:GLY:O	2.16	0.45
22:DA:185:G:C6	22:DA:212:G:N2	2.85	0.45
22:DA:2195:U:C2	22:DA:2196:C:C6	3.04	0.45
22:DA:2345:G:C5	22:DA:2381:A:C2	3.05	0.45
22:DA:2729:G:H2'	22:DA:2730:C:O4'	2.16	0.45
22:DA:351:C:H2'	22:DA:352:A:C8	2.52	0.45
22:DA:810:U:O4	33:DL:30:THR:HG22	2.17	0.45
23:DB:66:A:N6	23:DB:107:G:H2'	2.32	0.45
57:DA:3238:HOH:O	26:DE:47:LYS:HD2	2.17	0.45
28:DG:121:ILE:HD12	28:DG:141:ILE:HG22	1.99	0.45
29:DH:83:LYS:HG3	29:DH:149:GLU:HG3	1.94	0.45
30:DI:24:VAL:HB	30:DI:28:LEU:HD23	1.99	0.45
31:DJ:59:ALA:O	31:DJ:62:VAL:HG12	2.16	0.45
33:DL:119:PRO:HB3	33:DL:139:GLY:HA3	1.98	0.45
35:DN:36:THR:OG1	35:DN:37:THR:N	2.49	0.45
37:DP:39:ARG:HG3	37:DP:40:LEU:H	1.80	0.45
41:DT:69:ARG:HA	41:DT:74:ILE:HG22	1.99	0.45
41:DT:73:ARG:HA	41:DT:73:ARG:NH2	2.32	0.45
1:AA:114:U:H2'	1:AA:115:G:C8	2.52	0.45
1:AA:1243:C:H2'	1:AA:1244:G:C8	2.52	0.45
1:AA:203:G:C2	1:AA:215:C:C2	3.05	0.45
1:AA:716:A:C6	1:AA:717:U:N3	2.85	0.45
2:AB:72:THR:O	2:AB:73:LYS:HB3	2.16	0.45
4:AD:147:GLU:O	4:AD:150:LYS:N	2.50	0.45
4:AD:160:GLU:C	4:AD:162:ALA:H	2.20	0.45
8:AH:34:VAL:O	8:AH:36:ILE:N	2.49	0.45
9:AI:114:LYS:NZ	9:AI:118:LEU:O	2.44	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AI:30:ILE:HD11	9:AI:38:TYR:CB	2.47	0.45
13:AM:12:HIS:HA	13:AM:44:LYS:HE3	1.99	0.45
10:AJ:52:LEU:HB2	14:AN:81:ARG:HD2	1.99	0.45
1:AA:310:G:H5''	16:AP:31:ARG:HB2	1.97	0.45
17:AQ:12:VAL:CG1	17:AQ:13:VAL:N	2.80	0.45
20:AT:44:LYS:NZ	20:AT:86:LEU:O	2.43	0.45
53:B5:64:SER:O	53:B5:65:LEU:HB3	2.17	0.45
22:BA:1922:G:N3	22:BA:1922:G:C2'	2.80	0.45
22:BA:1972:G:C2	22:BA:1973:G:C5	3.05	0.45
22:BA:187:G:C2	22:BA:210:C:C2	3.05	0.45
22:BA:2061:G:O6	55:BA:3001:DOL:H132	2.16	0.45
22:BA:982:C:H5''	22:BA:983:A:P	2.57	0.45
28:BG:99:LYS:O	28:BG:100:GLY:C	2.55	0.45
29:BH:12:LEU:HG	29:BH:13:GLY:N	2.31	0.45
30:BI:116:ASP:OD2	30:BI:117:MET:N	2.50	0.45
32:BK:107:LEU:C	32:BK:109:SER:N	2.70	0.45
34:BM:132:THR:HG22	34:BM:133:LYS:N	2.31	0.45
38:BQ:41:LYS:HA	38:BQ:44:GLN:OE1	2.16	0.45
46:BY:56:LEU:O	46:BY:57:LEU:C	2.54	0.45
1:CA:1166:G:N1	1:CA:1169:A:OP2	2.45	0.45
1:CA:33:A:C4	1:CA:34:C:C5	3.04	0.45
1:CA:355:C:H2'	1:CA:356:A:O4'	2.17	0.45
1:CA:714:G:H2'	1:CA:715:A:C8	2.52	0.45
5:CE:101:GLU:HA	5:CE:122:ASN:HB3	1.99	0.45
5:CE:131:THR:O	5:CE:132:ASN:C	2.54	0.45
12:CL:86:ARG:NH1	12:CL:88:LYS:HA	2.32	0.45
13:CM:96:PRO:HB2	13:CM:100:GLN:OE1	2.16	0.45
19:CS:40:ILE:HD13	19:CS:66:MET:HB3	1.97	0.45
21:CU:34:ARG:CD	21:CU:35:ARG:HB2	2.47	0.45
22:DA:1095:A:C2	22:DA:1096:A:C2	3.05	0.45
22:DA:1345:C:H5'	22:DA:1396:U:C5	2.52	0.45
22:DA:1509:A:O2'	22:DA:1510:G:O5'	2.34	0.45
22:DA:1477:A:N6	22:DA:1514:G:H1'	2.30	0.45
22:DA:1559:U:H4'	22:DA:1560:G:OP2	2.17	0.45
22:DA:1567:G:H2'	24:DC:85:PRO:HG3	1.99	0.45
22:DA:1731:G:C6	22:DA:1733:G:N7	2.85	0.45
22:DA:1767:G:N1	22:DA:1986:C:C4	2.85	0.45
22:DA:207:A:C4	22:DA:208:C:C6	3.05	0.45
22:DA:2252:G:H2'	22:DA:2253:G:O4'	2.16	0.45
22:DA:2425:A:H4'	22:DA:2426:A:O5'	2.17	0.45
22:DA:2513:A:C4	22:DA:2514:U:C5	3.05	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:372:G:N2	22:DA:401:A:OP2	2.43	0.45
22:DA:416:U:H2'	22:DA:417:C:O4'	2.17	0.45
22:DA:469:G:O6	50:D2:37:LYS:NZ	2.48	0.45
22:DA:84:A:N6	22:DA:99:U:H4'	2.32	0.45
22:DA:1830:C:H5'	24:DC:15:HIS:CD2	2.52	0.45
25:DD:125:TRP:O	25:DD:126:ASN:HB2	2.17	0.45
29:DH:15:LEU:HD22	29:DH:15:LEU:N	2.32	0.45
37:DP:106:LYS:HA	37:DP:109:ARG:HD2	1.98	0.45
41:DT:62:VAL:HG12	41:DT:63:VAL:N	2.32	0.45
42:DU:7:ARG:HG3	42:DU:8:ASP:H	1.82	0.45
22:DA:1364:G:OP1	45:DX:3:ARG:CG	2.65	0.45
1:AA:1410:A:H2'	1:AA:1411:C:C6	2.52	0.44
1:AA:202:G:O2'	1:AA:468:A:H2'	2.17	0.44
1:AA:631:C:H5''	1:AA:632:U:C5'	2.46	0.44
1:AA:854:U:C6	1:AA:871:U:O4	2.69	0.44
1:AA:858:G:C6	1:AA:869:G:C8	3.05	0.44
1:AA:992:U:O2	1:AA:1043:G:N7	2.50	0.44
2:AB:84:ALA:O	2:AB:89:GLN:CB	2.65	0.44
3:AC:84:VAL:CG1	3:AC:101:ILE:HG21	2.47	0.44
4:AD:50:ASP:C	4:AD:50:ASP:OD2	2.55	0.44
6:AF:45:ARG:O	6:AF:56:LYS:HA	2.17	0.44
8:AH:10:MET:HE2	8:AH:33:LYS:HD3	1.99	0.44
8:AH:95:VAL:CG1	8:AH:96:MET:N	2.80	0.44
12:AL:50:ARG:HG3	12:AL:90:LEU:HD11	1.99	0.44
13:AM:114:LYS:CB	13:AM:115:PRO:CD	2.94	0.44
17:AQ:12:VAL:O	17:AQ:13:VAL:CG1	2.63	0.44
1:AA:196:A:OP1	20:AT:64:LYS:CE	2.66	0.44
21:AU:11:PRO:C	21:AU:12:PHE:CD2	2.90	0.44
22:BA:1022:G:C5	22:BA:1140:C:C4	3.05	0.44
22:BA:1360:G:O6	22:BA:1372:U:C2	2.70	0.44
22:BA:1386:C:H5''	22:BA:1396:U:O2	2.17	0.44
22:BA:2714:G:C5	22:BA:2715:C:C5	3.05	0.44
22:BA:271:G:C4'	22:BA:272:A:OP1	2.65	0.44
22:BA:532:A:H2'	22:BA:532:A:N3	2.32	0.44
22:BA:55:G:C2	22:BA:56:A:C5	3.06	0.44
22:BA:747:U:N3	22:BA:2613:U:C4	2.85	0.44
28:BG:118:PRO:O	28:BG:119:ALA:C	2.55	0.44
30:BI:116:ASP:O	30:BI:117:MET:HG2	2.17	0.44
30:BI:117:MET:CE	30:BI:129:ILE:HD11	2.48	0.44
30:BI:19:ASN:ND2	30:BI:35:ILE:O	2.51	0.44
37:BP:113:ARG:O	37:BP:114:LEU:O	2.35	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1287:A:C6	1:CA:1288:A:C6	3.05	0.44
1:CA:1411:C:H2'	1:CA:1412:C:H6	1.81	0.44
1:CA:197:A:C6	1:CA:221:C:H4'	2.52	0.44
1:CA:951:G:C6	1:CA:952:U:C4	3.05	0.44
2:CB:118:GLU:HA	2:CB:121:SER:OG	2.17	0.44
4:CD:5:LEU:CD1	4:CD:5:LEU:N	2.80	0.44
6:CF:37:HIS:CD2	6:CF:65:GLU:HB2	2.52	0.44
8:CH:59:LEU:HD12	8:CH:60:GLU:N	2.32	0.44
11:CK:19:GLY:O	11:CK:82:LEU:HA	2.17	0.44
12:CL:72:HIS:ND1	12:CL:74:LEU:HB2	2.32	0.44
1:CA:1226:C:N4	13:CM:103:LYS:HB2	2.33	0.44
14:CN:51:LEU:HB3	14:CN:52:PRO:HD2	1.99	0.44
15:CO:35:GLN:NE2	15:CO:39:LEU:HD21	2.32	0.44
20:CT:3:ASN:O	20:CT:4:ILE:C	2.55	0.44
51:D3:32:ILE:HG22	51:D3:35:LYS:HD2	1.99	0.44
22:DA:1246:A:O2'	26:DE:40:ARG:NH2	2.51	0.44
22:DA:1401:G:C5	22:DA:1402:U:C5	3.05	0.44
22:DA:1428:C:C4	22:DA:1569:A:H5''	2.52	0.44
22:DA:1444:G:N2	22:DA:1548:A:N3	2.65	0.44
22:DA:1480:C:C4	22:DA:1481:U:C4	3.05	0.44
22:DA:1773:A:C2	22:DA:1978:A:C2	3.05	0.44
22:DA:1827:U:C4'	22:DA:1970:A:HO2'	2.29	0.44
22:DA:188:G:C2	22:DA:209:C:N3	2.85	0.44
22:DA:2112:G:H5'	22:DA:2113:U:OP2	2.17	0.44
22:DA:2307:G:N2	22:DA:2312:U:C4	2.85	0.44
22:DA:2683:C:H4'	25:DD:13:ARG:NH1	2.31	0.44
22:DA:306:U:O4	22:DA:307:G:C6	2.70	0.44
22:DA:546:U:O2	22:DA:546:U:H2'	2.17	0.44
22:DA:682:G:N3	22:DA:682:G:H2'	2.31	0.44
22:DA:81:G:N7	22:DA:82:U:C4	2.85	0.44
22:DA:868:U:C4	22:DA:869:G:N7	2.85	0.44
25:DD:151:THR:HB	25:DD:152:PRO:HD2	1.98	0.44
29:DH:5:LEU:CD1	29:DH:13:GLY:CA	2.95	0.44
32:DK:32:TYR:CD2	32:DK:32:TYR:N	2.85	0.44
34:DM:67:VAL:HG11	34:DM:96:ILE:HD12	1.99	0.44
35:DN:84:GLY:N	35:DN:85:PRO:HD2	2.32	0.44
37:DP:30:VAL:HG12	37:DP:31:TRP:O	2.18	0.44
40:DS:22:ASP:OD2	40:DS:22:ASP:N	2.50	0.44
57:DB:307:HOH:O	43:DV:14:LYS:HD2	2.17	0.44
1:AA:102:G:C4	1:AA:103:U:C5	3.06	0.44
1:AA:1130:A:H1'	1:AA:1146:A:C2	2.53	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1263:C:H2'	1:AA:1264:U:C6	2.52	0.44
1:AA:1309:G:C6	1:AA:1310:G:C5	3.05	0.44
1:AA:1322:C:O4'	1:AA:1322:C:O2	2.35	0.44
1:AA:1329:A:H5''	13:AM:26:GLY:N	2.33	0.44
1:AA:1353:G:C2	1:AA:1354:U:C6	3.05	0.44
1:AA:412:A:H4'	1:AA:413:G:OP1	2.17	0.44
1:AA:423:G:H2'	1:AA:424:G:O4'	2.17	0.44
1:AA:472:U:C4	1:AA:473:U:O4	2.70	0.44
1:AA:549:C:C2	1:AA:550:G:C8	3.05	0.44
1:AA:598:U:H4'	8:AH:86:TYR:CG	2.52	0.44
1:AA:587:G:N2	1:AA:755:G:C4	2.85	0.44
1:AA:587:G:C2	1:AA:755:G:C6	3.05	0.44
1:AA:800:G:C6	57:AA:1814:HOH:O	2.54	0.44
3:AC:26:THR:O	3:AC:27:LYS:C	2.53	0.44
3:AC:60:PRO:O	3:AC:61:ALA:O	2.35	0.44
3:AC:85:GLU:HA	3:AC:88:ARG:CZ	2.48	0.44
5:AE:115:LEU:CD2	5:AE:123:VAL:HG21	2.47	0.44
5:AE:20:ARG:HG3	5:AE:21:VAL:N	2.32	0.44
1:AA:1081:A:P	5:AE:21:VAL:HG21	2.57	0.44
5:AE:84:PRO:HA	5:AE:98:PRO:HD3	1.99	0.44
10:AJ:36:VAL:HA	10:AJ:75:ASP:O	2.17	0.44
11:AK:56:ARG:O	11:AK:59:THR:HG23	2.17	0.44
11:AK:72:ASP:O	11:AK:73:ALA:HB2	2.18	0.44
12:AL:59:ASN:C	12:AL:59:ASN:OD1	2.54	0.44
19:AS:3:ARG:O	19:AS:4:SER:CB	2.65	0.44
53:B5:65:LEU:HD21	53:B5:195:ARG:CB	2.48	0.44
22:BA:1092:C:N4	22:BA:1098:A:H62	2.14	0.44
22:BA:1378:A:N3	22:BA:1380:G:C8	2.86	0.44
22:BA:1350:C:C2	22:BA:1382:G:C2	3.06	0.44
22:BA:2172:U:OP2	22:BA:2173:A:H8	2.00	0.44
22:BA:2267:A:H5''	22:BA:2268:A:H5'	1.99	0.44
22:BA:2720:U:C2	22:BA:2872:A:C6	3.05	0.44
22:BA:468:G:O6	22:BA:469:G:C2	2.71	0.44
22:BA:864:G:O2'	22:BA:865:C:H5'	2.16	0.44
24:BC:141:VAL:HG11	24:BC:190:ALA:CB	2.47	0.44
25:BD:13:ARG:HD2	25:BD:15:PHE:CE1	2.51	0.44
25:BD:177:VAL:HG23	25:BD:177:VAL:O	2.18	0.44
26:BE:48:THR:HG22	26:BE:86:ALA:HB3	1.99	0.44
27:BF:17:MET:CE	27:BF:22:TYR:HB2	2.47	0.44
28:BG:2:SER:C	28:BG:4:VAL:N	2.66	0.44
29:BH:57:LYS:CG	29:BH:58:LEU:N	2.81	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BN:31:HIS:O	35:BN:33:ILE:N	2.50	0.44
36:BO:59:ALA:O	36:BO:60:GLU:C	2.55	0.44
31:BJ:42:ALA:O	38:BQ:64:ARG:HG2	2.17	0.44
1:CA:937:A:C2	1:CA:1379:G:O6	2.69	0.44
1:CA:178:C:H2'	1:CA:179:A:O4'	2.17	0.44
1:CA:251:G:N1	1:CA:266:G:C6	2.85	0.44
1:CA:517:G:H5'	1:CA:519:C:C2	2.51	0.44
1:CA:540:G:C6	1:CA:541:G:C5	3.05	0.44
1:CA:632:U:H2'	1:CA:633:G:OP1	2.17	0.44
2:CB:148:LEU:N	2:CB:148:LEU:HD12	2.33	0.44
3:CC:117:ALA:HB1	3:CC:187:SER:HB2	1.98	0.44
4:CD:155:VAL:HA	4:CD:158:ALA:HB3	2.00	0.44
5:CE:104:GLY:O	5:CE:105:ILE:HG23	2.17	0.44
5:CE:155:ALA:C	5:CE:156:LYS:HG3	2.36	0.44
9:CI:30:ILE:HD13	9:CI:39:PHE:CE2	2.52	0.44
9:CI:46:MET:O	9:CI:49:ARG:HB3	2.17	0.44
11:CK:25:ALA:O	11:CK:89:PRO:O	2.36	0.44
11:CK:43:GLY:HA3	11:CK:74:VAL:HG12	1.99	0.44
14:CN:41:ARG:HG2	14:CN:42:TRP:N	2.31	0.44
19:CS:36:ARG:NH1	19:CS:72:GLY:HA3	2.32	0.44
48:D0:48:TYR:CE2	48:D0:53:LYS:HD3	2.52	0.44
50:D2:30:VAL:O	50:D2:34:ARG:HG3	2.17	0.44
22:DA:1569:A:C6	22:DA:1570:A:C2	3.05	0.44
22:DA:2103:C:H2'	22:DA:2104:C:C5	2.53	0.44
22:DA:2211:A:C4'	22:DA:2212:A:OP1	2.65	0.44
22:DA:2297:A:N7	22:DA:2320:U:C4	2.85	0.44
22:DA:235:U:C4	22:DA:430:A:C2	3.05	0.44
22:DA:2412:A:H5''	22:DA:2413:G:OP2	2.17	0.44
22:DA:2478:A:C8	22:DA:2529:G:N7	2.85	0.44
22:DA:465:G:N2	22:DA:684:G:H1'	2.32	0.44
22:DA:613:A:OP2	22:DA:614:A:N7	2.51	0.44
22:DA:728:G:C2	22:DA:730:A:C4	3.06	0.44
22:DA:881:G:C2	22:DA:882:G:N7	2.85	0.44
26:DE:76:PRO:HA	26:DE:82:GLY:HA2	1.98	0.44
30:DI:93:PRO:HB3	30:DI:136:MET:HA	1.99	0.44
31:DJ:6:ALA:O	31:DJ:7:LYS:CG	2.65	0.44
33:DL:116:VAL:HG21	33:DL:135:ILE:HA	1.99	0.44
33:DL:96:LYS:HD3	33:DL:103:ILE:HA	1.98	0.44
35:DN:48:VAL:N	35:DN:50:PRO:HD2	2.33	0.44
42:DU:44:LYS:HE3	42:DU:46:GLN:CB	2.48	0.44
44:DW:45:PHE:HB3	44:DW:80:ILE:CD1	2.47	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DX:21:ALA:O	45:DX:22:LEU:HB2	2.17	0.44
1:AA:1050:G:C2	1:AA:1209:C:O2	2.69	0.44
1:AA:1500:A:OP2	1:AA:1505:G:OP1	2.35	0.44
1:AA:394:G:C5	1:AA:395:C:C5	3.05	0.44
1:AA:815:A:N7	1:AA:1509:C:O2'	2.49	0.44
1:AA:844:G:N3	1:AA:845:A:C8	2.85	0.44
2:AB:15:HIS:O	2:AB:16:PHE:C	2.55	0.44
2:AB:70:VAL:O	2:AB:163:VAL:HA	2.17	0.44
4:AD:122:ALA:O	4:AD:123:ILE:HG23	2.16	0.44
7:AG:8:GLY:O	7:AG:9:GLN:HB3	2.17	0.44
9:AI:25:ASN:HB2	9:AI:27:LYS:HG2	1.98	0.44
11:AK:29:ASN:OD1	11:AK:47:ALA:HB3	2.18	0.44
1:AA:980:C:O3'	14:AN:13:ARG:NH2	2.50	0.44
14:AN:26:GLU:HG2	14:AN:27:LEU:N	2.30	0.44
15:AO:55:GLY:O	15:AO:58:ARG:HB3	2.17	0.44
16:AP:20:VAL:HG23	16:AP:34:GLU:O	2.18	0.44
14:AN:47:LYS:HD2	19:AS:13:LEU:HD21	1.99	0.44
49:B1:17:THR:HG21	49:B1:42:VAL:HB	1.98	0.44
49:B1:40:ASP:C	49:B1:40:ASP:OD1	2.55	0.44
53:B5:65:LEU:CD2	53:B5:195:ARG:CB	2.95	0.44
22:BA:1071:G:P	22:BA:1071:G:H8	2.39	0.44
22:BA:1073:A:C2'	22:BA:1074:G:H5''	2.47	0.44
22:BA:1503:A:C6	22:BA:1504:A:C5	3.05	0.44
22:BA:1709:U:C2	22:BA:1750:G:N2	2.85	0.44
22:BA:1718:G:C2	22:BA:1719:G:C8	3.06	0.44
22:BA:1988:G:H2'	22:BA:1989:G:O4'	2.17	0.44
22:BA:2627:G:C6	22:BA:2628:C:C4	3.06	0.44
22:BA:440:C:C2'	22:BA:441:U:H5'	2.47	0.44
22:BA:878:A:H5'	22:BA:879:G:OP2	2.17	0.44
25:BD:142:VAL:HB	25:BD:143:PRO:CD	2.47	0.44
26:BE:197:GLU:O	26:BE:201:ALA:N	2.50	0.44
29:BH:100:ALA:HB2	29:BH:115:VAL:HG21	1.98	0.44
29:BH:62:LEU:O	29:BH:62:LEU:HD12	2.17	0.44
35:BN:55:ALA:HA	35:BN:80:PHE:CE1	2.53	0.44
36:BO:79:ALA:CB	36:BO:113:ALA:HB3	2.47	0.44
36:BO:12:THR:O	36:BO:12:THR:HG22	2.16	0.44
40:BS:55:ILE:CG2	40:BS:66:ILE:HG12	2.48	0.44
44:BW:37:ILE:HD11	44:BW:61:ALA:HB2	1.98	0.44
1:CA:1142:G:H5'	1:CA:1143:G:OP2	2.17	0.44
1:CA:1491:G:C6	1:CA:1492:A:C6	3.05	0.44
1:CA:734:G:C5	1:CA:735:C:C5	3.05	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:18:HIS:O	2:CB:19:GLN:CB	2.65	0.44
3:CC:196:ILE:O	3:CC:196:ILE:HG22	2.17	0.44
4:CD:160:GLU:O	4:CD:163:GLU:CB	2.65	0.44
5:CE:70:ASN:OD1	5:CE:70:ASN:N	2.49	0.44
6:CF:45:ARG:HG2	6:CF:46:GLN:N	2.32	0.44
9:CI:95:ARG:HG2	9:CI:104:VAL:HG11	1.99	0.44
9:CI:54:LEU:O	9:CI:55:VAL:HG13	2.18	0.44
10:CJ:52:LEU:HD23	10:CJ:62:ARG:HG2	1.99	0.44
17:CQ:55:ILE:C	17:CQ:55:ILE:HD13	2.37	0.44
22:DA:1070:A:H2'	22:DA:1097:U:O5'	2.17	0.44
22:DA:1395:A:H2'	22:DA:1397:U:OP2	2.17	0.44
22:DA:1435:G:O2'	22:DA:1436:G:H5'	2.17	0.44
22:DA:1582:C:H2'	22:DA:1583:A:O4'	2.17	0.44
22:DA:1663:G:C6	22:DA:1992:G:N7	2.86	0.44
22:DA:1668:A:N3	22:DA:1674:G:C8	2.85	0.44
22:DA:167:A:C2	22:DA:168:G:H1'	2.52	0.44
22:DA:2038:G:N7	22:DA:2039:U:C5	2.86	0.44
22:DA:2053:G:H2'	22:DA:2054:A:O4'	2.17	0.44
22:DA:2114:A:C4	22:DA:2167:U:H4'	2.53	0.44
22:DA:2440:C:N3	22:DA:2441:U:H1'	2.33	0.44
22:DA:2695:U:O2	22:DA:2696:U:C5	2.71	0.44
22:DA:607:U:H5	22:DA:619:G:C4	2.35	0.44
22:DA:771:G:H2'	22:DA:771:G:N3	2.32	0.44
22:DA:777:G:N2	22:DA:778:G:N9	2.66	0.44
22:DA:1797:G:H4'	24:DC:255:LYS:O	2.18	0.44
27:DF:169:LEU:O	27:DF:169:LEU:HG	2.16	0.44
29:DH:1:MET:CE	29:DH:27:ARG:NH1	2.80	0.44
29:DH:37:VAL:HG22	29:DH:38:PRO:HD2	1.98	0.44
32:DK:34:GLY:O	32:DK:35:VAL:C	2.54	0.44
22:DA:2334:U:O3'	36:DO:13:ARG:HD3	2.17	0.44
38:DQ:10:ALA:C	38:DQ:12:ALA:N	2.71	0.44
22:DA:997:G:OP1	38:DQ:92:ARG:NE	2.50	0.44
1:AA:1154:G:C2	1:AA:1155:A:N7	2.85	0.44
1:AA:1251:A:H2'	1:AA:1252:A:C8	2.53	0.44
1:AA:189:A:C6	1:AA:190:A:N1	2.85	0.44
1:AA:510:A:H5''	1:AA:511:C:OP1	2.18	0.44
1:AA:833:G:N2	1:AA:834:U:H1'	2.32	0.44
2:AB:32:PHE:C	2:AB:32:PHE:CD1	2.90	0.44
3:AC:84:VAL:CG1	3:AC:101:ILE:CG2	2.95	0.44
4:AD:126:ASN:HA	4:AD:142:VAL:HG23	2.00	0.44
4:AD:90:LEU:C	4:AD:90:LEU:HD12	2.38	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AG:56:LYS:O	7:AG:57:SER:OG	2.29	0.44
7:AG:80:VAL:O	7:AG:81:GLY:C	2.56	0.44
10:AJ:5:ARG:HG2	10:AJ:79:PRO:HG3	1.99	0.44
12:AL:44:LYS:O	12:AL:45:PRO:C	2.55	0.44
12:AL:73:ASN:O	12:AL:74:LEU:CD2	2.65	0.44
1:AA:750:C:O2'	15:AO:21:ASP:HA	2.17	0.44
18:AR:71:THR:OG1	18:AR:73:ARG:HB2	2.18	0.44
19:AS:29:LYS:CB	19:AS:30:PRO:HD2	2.47	0.44
20:AT:71:LYS:HD2	20:AT:74:ARG:HH21	1.80	0.44
20:AT:74:ARG:O	20:AT:78:ASN:OD1	2.34	0.44
18:AR:35:GLU:OE2	21:AU:5:LYS:HE3	2.18	0.44
49:B1:29:THR:O	49:B1:31:PRO:CD	2.66	0.44
49:B1:34:LEU:H	49:B1:52:ALA:HB2	1.82	0.44
22:BA:1421:G:N2	22:BA:1495:A:N1	2.65	0.44
22:BA:1501:G:C2'	22:BA:1502:A:H5'	2.48	0.44
22:BA:1846:G:N2	22:BA:1895:C:C2	2.86	0.44
22:BA:225:C:H2'	22:BA:226:A:O4'	2.17	0.44
22:BA:1128:G:O4'	22:BA:2516:A:O2'	2.35	0.44
22:BA:2779:U:C6	22:BA:2781:A:C2	3.06	0.44
22:BA:2846:G:H2'	22:BA:2847:U:O4'	2.18	0.44
22:BA:2856:A:N6	22:BA:2857:G:C6	2.85	0.44
22:BA:482:A:C5'	22:BA:483:A:OP1	2.66	0.44
22:BA:612:G:H2'	22:BA:614:A:C8	2.51	0.44
28:BG:121:ILE:HG22	28:BG:122:THR:N	2.32	0.44
28:BG:85:LYS:HG3	28:BG:141:ILE:CD1	2.47	0.44
29:BH:31:VAL:N	29:BH:32:PRO:CD	2.80	0.44
30:BI:62:TYR:CD2	30:BI:62:TYR:N	2.84	0.44
35:BN:32:GLU:CD	35:BN:86:ARG:HH22	2.20	0.44
36:BO:78:VAL:HG23	36:BO:79:ALA:N	2.32	0.44
37:BP:53:ARG:HG2	37:BP:53:ARG:HH11	1.81	0.44
40:BS:37:THR:HG22	40:BS:38:TYR:CE1	2.53	0.44
47:BZ:24:LEU:HD11	47:BZ:54:MET:CE	2.48	0.44
1:CA:1029:U:O2	1:CA:1031:C:H1'	2.18	0.44
1:CA:1138:G:C2	1:CA:1140:C:C4	3.06	0.44
1:CA:1160:G:O6	1:CA:1181:G:C6	2.70	0.44
1:CA:888:G:H4'	1:CA:1488:G:O2'	2.17	0.44
1:CA:174:A:C4	1:CA:175:C:C6	3.05	0.44
1:CA:144:G:C5	1:CA:179:A:C2	3.06	0.44
1:CA:505:G:H5'	1:CA:534:U:C2	2.53	0.44
1:CA:68:G:C5	1:CA:69:G:H1'	2.52	0.44
1:CA:747:A:C5	1:CA:748:G:C5	3.05	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:765:G:H5''	1:CA:766:A:OP1	2.17	0.44
1:CA:853:C:H2'	1:CA:854:U:O4'	2.18	0.44
1:CA:862:C:C2	1:CA:863:U:C5	3.05	0.44
5:CE:103:THR:O	5:CE:122:ASN:HA	2.18	0.44
1:CA:824:G:H1'	8:CH:2:SER:HA	2.00	0.44
14:CN:93:ILE:HG21	14:CN:96:LEU:HD22	1.99	0.44
15:CO:58:ARG:O	15:CO:62:GLN:HB2	2.18	0.44
16:CP:5:ARG:O	16:CP:19:VAL:HA	2.17	0.44
1:CA:130:A:OP1	17:CQ:65:ARG:HD2	2.18	0.44
20:CT:67:ILE:O	20:CT:68:HIS:O	2.34	0.44
20:CT:72:ALA:O	20:CT:75:HIS:HB2	2.18	0.44
21:CU:34:ARG:HD3	21:CU:35:ARG:CB	2.48	0.44
48:D0:7:LYS:HE2	48:D0:8:PRO:O	2.17	0.44
52:D4:17:VAL:HG11	52:D4:26:ILE:HD13	1.99	0.44
22:DA:1194:A:H2'	22:DA:1195:G:O5'	2.18	0.44
22:DA:158:U:C2'	22:DA:159:G:H5'	2.46	0.44
22:DA:1655:A:C6	22:DA:1656:C:C2	3.05	0.44
22:DA:2051:A:N3	22:DA:2052:A:N6	2.61	0.44
22:DA:2221:G:C5	22:DA:2222:C:C5	3.05	0.44
22:DA:2238:G:H4'	22:DA:2239:G:OP1	2.17	0.44
22:DA:248:G:O2'	22:DA:2432:A:OP1	2.23	0.44
22:DA:2652:C:N4	22:DA:2653:U:C4	2.85	0.44
22:DA:2854:G:N2	22:DA:2864:G:N3	2.66	0.44
22:DA:41:C:H2'	22:DA:42:A:C8	2.52	0.44
22:DA:425:G:N1	22:DA:426:C:C4	2.85	0.44
22:DA:503:A:C6	22:DA:506:G:C6	3.05	0.44
22:DA:841:G:H2'	22:DA:842:U:O4'	2.18	0.44
23:DB:48:U:H2'	23:DB:49:C:C6	2.52	0.44
25:DD:112:THR:O	25:DD:112:THR:HG22	2.16	0.44
25:DD:148:GLN:HB2	25:DD:152:PRO:HG2	2.00	0.44
26:DE:48:THR:OG1	26:DE:49:ARG:N	2.50	0.44
28:DG:167:GLU:HG3	28:DG:169:VAL:HG23	1.98	0.44
29:DH:25:TYR:O	29:DH:29:PHE:HB3	2.18	0.44
31:DJ:35:ARG:HB3	31:DJ:54:ILE:HD11	1.99	0.44
33:DL:17:LYS:HB3	33:DL:19:LEU:HD12	1.98	0.44
33:DL:29:LYS:O	33:DL:30:THR:CB	2.64	0.44
33:DL:78:ARG:CZ	33:DL:113:ALA:HB1	2.48	0.44
36:DO:18:LEU:O	36:DO:22:GLY:N	2.50	0.44
22:DA:580:U:H4'	38:DQ:31:VAL:HG11	2.00	0.44
42:DU:103:ILE:HG22	42:DU:103:ILE:O	2.16	0.44
42:DU:83:VAL:HG11	42:DU:94:ARG:HD2	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:223:A:C4	1:AA:224:U:C5	3.05	0.44
1:AA:471:U:H2'	1:AA:472:U:O4'	2.18	0.44
1:AA:568:G:N3	1:AA:569:C:C6	2.85	0.44
2:AB:125:THR:O	2:AB:126:PHE:HB3	2.17	0.44
2:AB:132:LYS:HA	2:AB:132:LYS:HE3	1.99	0.44
4:AD:105:MET:HG2	4:AD:171:LEU:HD22	1.98	0.44
5:AE:80:THR:OG1	5:AE:81:LEU:N	2.51	0.44
6:AF:38:ARG:HD2	6:AF:40:GLU:OE2	2.17	0.44
10:AJ:35:GLN:OE1	10:AJ:35:GLN:HA	2.17	0.44
11:AK:22:HIS:N	11:AK:33:THR:O	2.50	0.44
12:AL:74:LEU:HD11	12:AL:80:ILE:HG21	2.00	0.44
14:AN:7:LYS:O	14:AN:10:GLU:N	2.50	0.44
15:AO:43:PHE:HB3	15:AO:53:ARG:NH2	2.31	0.44
20:AT:67:ILE:CD1	20:AT:71:LYS:HG2	2.47	0.44
21:AU:40:LYS:N	21:AU:41:PRO:HD2	2.32	0.44
21:AU:53:VAL:O	21:AU:54:LYS:CB	2.66	0.44
48:B0:27:SER:O	48:B0:28:LEU:C	2.56	0.44
22:BA:1050:A:H2'	22:BA:1051:G:O4'	2.17	0.44
22:BA:1444:G:H2'	22:BA:1445:G:C8	2.52	0.44
22:BA:1793:C:O2'	22:BA:1794:A:H5'	2.18	0.44
22:BA:1883:U:O4	22:BA:1884:G:N1	2.51	0.44
22:BA:1858:A:H1'	22:BA:1885:A:C2	2.53	0.44
22:BA:2311:A:H1'	27:BF:85:ILE:HD11	1.99	0.44
22:BA:2345:G:H4'	22:BA:2346:A:H5''	1.99	0.44
22:BA:2379:G:O3'	36:BO:17:LYS:NZ	2.49	0.44
22:BA:412:A:H2'	22:BA:413:C:H5'	1.99	0.44
22:BA:55:G:N3	22:BA:56:A:C8	2.86	0.44
22:BA:581:C:H2'	22:BA:582:A:H8	1.83	0.44
22:BA:599:A:O2'	22:BA:600:G:H5'	2.18	0.44
23:BB:112:G:H2'	23:BB:113:C:C6	2.52	0.44
23:BB:15:A:O2'	23:BB:16:G:OP1	2.35	0.44
23:BB:3:C:C4	23:BB:4:C:C5	3.05	0.44
24:BC:124:ILE:HG22	24:BC:124:ILE:O	2.17	0.44
25:BD:106:LYS:HA	25:BD:175:LEU:O	2.18	0.44
25:BD:85:ALA:O	25:BD:86:GLU:O	2.36	0.44
33:BL:142:ILE:HG22	33:BL:142:ILE:O	2.17	0.44
35:BN:33:ILE:HG23	35:BN:33:ILE:O	2.18	0.44
36:BO:48:LEU:HD12	36:BO:87:ILE:CD1	2.46	0.44
22:BA:1223:G:OP2	39:BR:68:ARG:NH1	2.50	0.44
41:BT:16:VAL:O	41:BT:17:SER:CB	2.65	0.44
1:CA:1007:U:C2'	1:CA:1008:U:C5'	2.95	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1361:G:H3'	1:CA:1362:A:H5''	2.00	0.44
1:CA:159:G:H5'	1:CA:160:A:OP2	2.18	0.44
1:CA:230:G:H2'	1:CA:231:U:O4'	2.17	0.44
1:CA:66:A:N6	1:CA:67:C:N4	2.65	0.44
1:CA:73:C:HO2'	1:CA:74:A:P	2.39	0.44
4:CD:148:LYS:H	4:CD:148:LYS:CE	2.31	0.44
6:CF:91:ARG:HG2	6:CF:93:LYS:NZ	2.32	0.44
7:CG:117:ALA:O	7:CG:121:ALA:CB	2.66	0.44
7:CG:51:ALA:HB1	7:CG:57:SER:O	2.18	0.44
8:CH:20:ALA:C	8:CH:22:LYS:H	2.21	0.44
11:CK:89:PRO:HD3	21:CU:29:LEU:HD11	1.97	0.44
13:CM:6:GLY:O	13:CM:8:ASN:N	2.51	0.44
14:CN:10:GLU:O	14:CN:13:ARG:N	2.51	0.44
15:CO:37:ASN:O	15:CO:40:GLN:HB3	2.17	0.44
17:CQ:46:VAL:HG12	17:CQ:47:HIS:N	2.33	0.44
17:CQ:60:GLU:HB3	17:CQ:76:VAL:HG23	1.98	0.44
22:DA:1584:U:O2	22:DA:1584:U:H3'	2.17	0.44
22:DA:2199:A:C1'	29:DH:28:ASN:ND2	2.80	0.44
22:DA:2502:G:H5'	22:DA:2503:A:C5'	2.47	0.44
22:DA:226:A:H4'	22:DA:258:G:OP1	2.17	0.44
22:DA:26:G:C6	22:DA:27:G:N1	2.86	0.44
22:DA:2822:G:OP1	25:DD:164:GLN:NE2	2.48	0.44
22:DA:749:A:C6	22:DA:750:A:N7	2.85	0.44
22:DA:933:A:H5'	22:DA:934:U:OP2	2.18	0.44
22:DA:2073:C:H5''	24:DC:228:VAL:CB	2.48	0.44
28:DG:133:LEU:CD1	28:DG:141:ILE:HB	2.47	0.44
37:DP:60:THR:HA	37:DP:73:VAL:HA	1.99	0.44
38:DQ:47:TYR:CD2	38:DQ:47:TYR:C	2.90	0.44
44:DW:56:ASP:O	44:DW:57:HIS:HB2	2.16	0.44
1:AA:279:A:H5''	1:AA:281:G:O4'	2.18	0.44
1:AA:355:C:O2'	1:AA:388:G:N3	2.38	0.44
1:AA:451:A:N6	1:AA:481:G:H5'	2.33	0.44
1:AA:767:A:H2'	1:AA:768:A:O4'	2.17	0.44
1:AA:946:A:C2	1:AA:1236:A:C2	3.06	0.44
2:AB:67:ILE:O	2:AB:68:LEU:HB3	2.17	0.44
3:AC:167:TRP:O	3:AC:168:TYR:HB2	2.16	0.44
3:AC:114:LYS:HD3	3:AC:185:ASN:OD1	2.17	0.44
4:AD:58:LYS:HD3	4:AD:203:LEU:CD2	2.48	0.44
7:AG:69:VAL:HG23	7:AG:100:ALA:HB1	2.00	0.44
9:AI:19:VAL:HA	9:AI:65:ILE:HG22	2.00	0.44
14:AN:49:GLN:OE1	14:AN:49:GLN:CA	2.66	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1075:C:N3	22:BA:1076:C:N4	2.66	0.44
22:BA:1356:G:C5	22:BA:1357:C:C5	3.05	0.44
22:BA:1469:A:C2	22:BA:1470:A:C4	3.05	0.44
22:BA:1811:G:C5	22:BA:1812:U:C5	3.06	0.44
22:BA:1866:A:C6	22:BA:1876:A:N7	2.86	0.44
22:BA:2040:G:H2'	22:BA:2041:U:O4'	2.17	0.44
22:BA:2128:G:OP2	53:B5:37:LYS:HB2	2.18	0.44
22:BA:2189:U:C2'	22:BA:2190:G:C1'	2.94	0.44
22:BA:2191:A:C2	22:BA:2192:U:O4	2.71	0.44
22:BA:2218:G:C2'	22:BA:2219:U:H5'	2.48	0.44
22:BA:2366:A:H2'	22:BA:2367:G:O4'	2.17	0.44
22:BA:2400:G:C2'	22:BA:2401:U:H5'	2.48	0.44
22:BA:2503:A:N3	22:BA:2503:A:H5'	2.32	0.44
22:BA:548:G:H4'	22:BA:549:G:N2	2.32	0.44
22:BA:515:A:H1'	22:BA:581:C:H1'	2.00	0.44
22:BA:826:U:O2'	33:BL:53:GLY:N	2.50	0.44
29:BH:57:LYS:HG3	29:BH:58:LEU:N	2.33	0.44
29:BH:97:ARG:O	29:BH:101:ASP:HB2	2.17	0.44
36:BO:92:PHE:HB2	36:BO:117:PHE:CE1	2.52	0.44
36:BO:40:ILE:HG22	36:BO:41:ALA:O	2.17	0.44
41:BT:48:GLN:HG2	41:BT:53:VAL:O	2.18	0.44
43:BV:63:ILE:HD12	43:BV:72:VAL:HG21	1.98	0.44
44:BW:56:ASP:O	44:BW:57:HIS:CB	2.65	0.44
1:CA:1004:A:H2'	1:CA:1005:A:C8	2.52	0.44
1:CA:110:C:C4	1:CA:111:G:C5	3.06	0.44
1:CA:1347:G:HO2'	1:CA:1348:U:P	2.38	0.44
1:CA:862:C:H2'	1:CA:863:U:C6	2.52	0.44
1:CA:954:G:N2	1:CA:1228:C:N3	2.65	0.44
5:CE:11:LEU:HG	5:CE:12:GLN:N	2.33	0.44
8:CH:104:VAL:HA	8:CH:126:ILE:CD1	2.48	0.44
13:CM:81:MET:O	13:CM:82:ASP:C	2.56	0.44
20:CT:67:ILE:HA	20:CT:67:ILE:HD13	1.84	0.44
22:DA:2347:C:O2'	49:D1:39:PHE:HB3	2.18	0.44
22:DA:2539:C:H4'	52:D4:3:VAL:HG11	1.99	0.44
22:DA:117:G:N1	22:DA:119:A:N6	2.66	0.44
22:DA:116:C:H5'	22:DA:128:C:C5	2.53	0.44
22:DA:1355:G:C6	22:DA:1356:G:N7	2.85	0.44
22:DA:153:U:H2'	22:DA:154:U:C6	2.52	0.44
22:DA:1677:A:H5''	57:DA:3436:HOH:O	2.17	0.44
22:DA:1734:G:C2	22:DA:1735:A:C5	3.06	0.44
22:DA:2073:C:H5''	24:DC:228:VAL:HB	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2121:G:C2	22:DA:2122:U:C2	3.06	0.44
22:DA:2127:G:H1'	22:DA:2162:G:N7	2.33	0.44
22:DA:2234:G:C4	22:DA:2235:G:C8	3.05	0.44
22:DA:2392:A:OP2	51:D3:31:HIS:CE1	2.70	0.44
22:DA:2540:C:H2'	22:DA:2541:A:O4'	2.18	0.44
22:DA:389:G:N9	22:DA:2413:G:H4'	2.32	0.44
22:DA:874:G:C2	22:DA:904:G:C2	3.05	0.44
24:DC:3:VAL:CG1	24:DC:202:LEU:HD23	2.47	0.44
31:DJ:35:ARG:HG2	31:DJ:40:HIS:NE2	2.33	0.44
35:DN:65:LEU:HD11	35:DN:69:ARG:NH2	2.33	0.44
36:DO:51:ALA:HB1	36:DO:77:ALA:HB1	2.00	0.44
39:DR:68:ARG:HG3	39:DR:92:TRP:CZ3	2.52	0.44
41:DT:2:ILE:HG23	41:DT:4:GLU:N	2.33	0.44
41:DT:73:ARG:CZ	41:DT:73:ARG:HA	2.47	0.44
44:DW:81:SER:O	44:DW:82:ILE:HG13	2.18	0.44
46:DY:16:THR:O	46:DY:19:LEU:HB2	2.18	0.44
47:DZ:52:SER:C	47:DZ:54:MET:H	2.20	0.44
1:AA:1095:U:H2'	1:AA:1096:C:C6	2.53	0.44
1:AA:239:U:H5''	1:AA:240:G:OP2	2.18	0.44
1:AA:949:A:C4	1:AA:950:U:C6	3.06	0.44
1:AA:963:G:N3	1:AA:963:G:H2'	2.33	0.44
1:AA:978:A:C4	1:AA:1319:A:C2	3.06	0.44
2:AB:46:THR:CG2	2:AB:201:PRO:HB2	2.47	0.44
7:AG:146:GLU:O	7:AG:149:LYS:HB2	2.16	0.44
1:AA:1291:U:OP1	7:AG:38:THR:HG22	2.18	0.44
1:AA:973:G:H1'	10:AJ:56:HIS:CD2	2.52	0.44
10:AJ:91:ASP:C	10:AJ:92:LEU:HG	2.37	0.44
11:AK:53:ARG:O	11:AK:56:ARG:HG3	2.18	0.44
11:AK:60:PRO:N	11:AK:91:PRO:HB2	2.33	0.44
15:AO:2:SER:O	15:AO:3:LEU:HB3	2.18	0.44
19:AS:42:PRO:C	19:AS:44:MET:H	2.20	0.44
53:B5:214:TYR:O	53:B5:215:VAL:CB	2.65	0.44
53:B5:61:GLY:O	53:B5:62:THR:C	2.55	0.44
22:BA:1401:G:C6	22:BA:1402:U:C4	3.06	0.44
22:BA:1536:C:O4'	22:BA:1537:G:C2	2.70	0.44
22:BA:162:U:H4'	22:BA:163:C:OP1	2.17	0.44
22:BA:1664:A:H1'	22:BA:2726:A:N1	2.33	0.44
22:BA:1676:A:H2'	22:BA:1677:A:O4'	2.18	0.44
22:BA:1734:G:H2'	22:BA:1735:A:O4'	2.18	0.44
22:BA:223:A:C5	22:BA:422:A:C8	3.06	0.44
22:BA:2259:U:H1'	22:BA:2427:C:C2	2.52	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2880:C:N3	22:BA:2881:U:C5	2.86	0.44
55:BA:3001:DOL:C37	55:BA:3001:DOL:C29	2.96	0.44
22:BA:630:G:H5''	22:BA:631:A:OP2	2.17	0.44
28:BG:7:ALA:O	28:BG:69:ARG:NE	2.46	0.44
29:BH:4:ILE:HG23	29:BH:17:ASP:O	2.17	0.44
29:BH:89:LYS:CE	29:BH:124:THR:HG22	2.48	0.44
22:BA:1082:U:H5'	30:BI:119:GLY:N	2.33	0.44
36:BO:54:VAL:HG13	36:BO:54:VAL:O	2.17	0.44
39:BR:14:VAL:CG1	39:BR:15:SER:N	2.80	0.44
41:BT:2:ILE:N	41:BT:3:ARG:HB2	2.33	0.44
42:BU:102:THR:HG22	42:BU:103:ILE:N	2.31	0.44
43:BV:14:LYS:CD	43:BV:18:ARG:NH1	2.81	0.44
43:BV:58:SER:O	43:BV:73:LYS:CE	2.66	0.44
1:CA:1073:U:H2'	1:CA:1073:U:O2	2.17	0.44
1:CA:1119:C:O2	1:CA:1155:A:C2	2.71	0.44
1:CA:1149:C:C4	1:CA:1150:A:C6	3.05	0.44
1:CA:1157:A:N6	1:CA:1178:G:H1'	2.32	0.44
1:CA:121:U:C3'	1:CA:122:G:H5'	2.48	0.44
1:CA:1126:U:N1	1:CA:1281:C:C5	2.86	0.44
1:CA:1288:A:N6	1:CA:1289:A:N6	2.66	0.44
1:CA:1304:G:O2'	1:CA:1333:A:N6	2.33	0.44
1:CA:1492:A:N7	1:CA:1493:A:C2	2.86	0.44
1:CA:260:G:C6	1:CA:261:U:C4	3.06	0.44
1:CA:455:G:C2	1:CA:478:A:N1	2.86	0.44
1:CA:483:C:H5''	1:CA:484:G:OP2	2.17	0.44
1:CA:715:A:H1'	1:CA:777:A:C2	2.52	0.44
1:CA:756:C:H2'	1:CA:757:U:H5'	2.00	0.44
1:CA:791:G:C5	1:CA:792:A:N7	2.85	0.44
1:CA:797:C:O2'	1:CA:798:U:H5'	2.18	0.44
1:CA:803:G:C6	1:CA:804:U:N3	2.86	0.44
1:CA:811:C:C5	1:CA:812:G:C5	3.06	0.44
1:CA:834:U:C2	1:CA:835:U:C5	3.06	0.44
1:CA:978:A:OP1	1:CA:1361:G:N2	2.42	0.44
6:CF:70:VAL:HG23	6:CF:71:ILE:CD1	2.48	0.44
7:CG:88:PRO:HD2	7:CG:151:PHE:O	2.17	0.44
11:CK:30:THR:HG21	11:CK:92:GLY:HA3	1.99	0.44
11:CK:56:ARG:O	11:CK:59:THR:HG23	2.17	0.44
13:CM:43:VAL:O	13:CM:43:VAL:HG23	2.18	0.44
15:CO:88:ARG:O	15:CO:88:ARG:HG3	2.18	0.44
17:CQ:4:LYS:HG2	17:CQ:5:ILE:N	2.32	0.44
22:DA:1255:U:C2'	22:DA:1256:G:OP1	2.66	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1512:C:C4	22:DA:1513:U:C4	3.06	0.44
22:DA:1324:G:C1'	22:DA:1616:A:N6	2.80	0.44
22:DA:1768:C:H2'	22:DA:1769:U:O4'	2.18	0.44
22:DA:1926:U:H2'	22:DA:1928:A:C8	2.53	0.44
22:DA:1957:C:O2'	22:DA:1985:C:H1'	2.18	0.44
22:DA:2128:G:H1'	22:DA:2173:A:O2'	2.17	0.44
22:DA:1420:A:C2	22:DA:2211:A:C4	3.05	0.44
22:DA:2230:G:H5'	45:DX:30:LEU:HD13	2.00	0.44
22:DA:2341:G:C6	22:DA:2342:C:N3	2.86	0.44
22:DA:2452:C:N4	22:DA:2453:A:N1	2.66	0.44
22:DA:2602:A:H4'	22:DA:2603:G:C5'	2.48	0.44
22:DA:1638:C:C5'	22:DA:2710:C:O2'	2.63	0.44
22:DA:2744:G:N2	22:DA:2745:C:C2	2.86	0.44
22:DA:2751:G:H4'	28:DG:4:VAL:HG23	1.99	0.44
22:DA:479:A:N3	22:DA:481:G:H5''	2.33	0.44
22:DA:489:G:C2	22:DA:491:G:H1'	2.53	0.44
22:DA:851:C:H2'	22:DA:852:U:C6	2.53	0.44
24:DC:65:VAL:O	24:DC:67:PHE:CD1	2.71	0.44
26:DE:8:ALA:HB2	26:DE:122:GLU:CG	2.48	0.44
29:DH:31:VAL:CB	29:DH:32:PRO:HD3	2.47	0.44
31:DJ:71:ASP:O	31:DJ:73:VAL:CG2	2.66	0.44
32:DK:56:ASP:OD2	32:DK:56:ASP:N	2.51	0.44
38:DQ:13:ARG:O	38:DQ:16:LYS:HB3	2.17	0.44
39:DR:52:PRO:O	39:DR:53:PHE:HB2	2.18	0.44
41:DT:37:ASP:CG	41:DT:38:ALA:N	2.70	0.44
41:DT:91:GLN:O	41:DT:91:GLN:CG	2.66	0.44
44:DW:45:PHE:HB3	44:DW:80:ILE:HD12	1.98	0.44
1:AA:1030:U:OP2	1:AA:1031:C:C5	2.71	0.44
1:AA:1244:G:C2	1:AA:1294:G:C2	3.06	0.44
1:AA:1342:C:O2'	9:AI:126:GLN:CG	2.66	0.44
1:AA:194:C:C2'	1:AA:195:A:H5'	2.48	0.44
1:AA:552:U:O2'	1:AA:553:A:H5'	2.17	0.44
1:AA:569:C:H2'	1:AA:569:C:O2	2.17	0.44
1:AA:85:U:O2	1:AA:85:U:O4'	2.36	0.44
1:AA:981:U:C2	1:AA:982:U:C5	3.06	0.44
2:AB:27:MET:CE	2:AB:193:PRO:HG3	2.48	0.44
3:AC:77:ILE:HA	3:AC:84:VAL:CG2	2.48	0.44
6:AF:17:GLN:O	6:AF:21:MET:HG3	2.18	0.44
7:AG:55:GLY:C	7:AG:57:SER:H	2.21	0.44
11:AK:126:LYS:HA	21:AU:34:ARG:HH21	1.82	0.44
11:AK:63:ALA:CB	11:AK:92:GLY:HA3	2.48	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AN:90:ARG:HB2	14:AN:92:GLU:HG2	1.99	0.44
17:AQ:14:SER:CB	17:AQ:22:VAL:CG1	2.94	0.44
20:AT:66:LEU:HD12	20:AT:66:LEU:C	2.38	0.44
20:AT:44:LYS:HB3	20:AT:87:ALA:HB1	2.00	0.44
50:B2:35:ARG:NE	50:B2:42:LEU:HD21	2.33	0.44
53:B5:66:PRO:HG3	53:B5:194:ILE:CB	2.48	0.44
22:BA:1050:A:C2	22:BA:2751:G:C4	3.06	0.44
22:BA:1056:G:O2'	22:BA:1086:A:H1'	2.18	0.44
22:BA:1094:U:N3	22:BA:1097:U:OP2	2.50	0.44
22:BA:136:G:C6	22:BA:137:U:O4	2.71	0.44
22:BA:1394:U:H2'	22:BA:1395:A:O4'	2.17	0.44
22:BA:1395:A:O2'	22:BA:1397:U:C6	2.67	0.44
22:BA:1479:G:H2'	22:BA:1480:C:O4'	2.17	0.44
22:BA:1492:G:C6	22:BA:1499:C:N3	2.86	0.44
22:BA:1644:C:O2	22:BA:1644:C:H2'	2.17	0.44
22:BA:1744:A:H2'	22:BA:1745:A:O4'	2.17	0.44
22:BA:2191:A:C2	22:BA:2192:U:N3	2.86	0.44
22:BA:263:G:C2'	22:BA:264:C:H5'	2.48	0.44
22:BA:368:A:C6	22:BA:369:U:N3	2.86	0.44
22:BA:616:A:C2	22:BA:617:G:H1'	2.52	0.44
22:BA:863:A:O2'	22:BA:864:G:H5'	2.18	0.44
26:BE:164:LEU:HB3	26:BE:167:VAL:HB	1.99	0.44
27:BF:108:VAL:N	27:BF:109:PRO:HD2	2.33	0.44
28:BG:153:ARG:O	28:BG:154:PRO:C	2.57	0.44
36:BO:7:ARG:HG3	36:BO:96:GLY:HA3	1.99	0.44
39:BR:66:HIS:CE1	39:BR:94:THR:HG22	2.53	0.44
41:BT:1:MET:C	41:BT:2:ILE:HD12	2.38	0.44
47:BZ:35:THR:HG22	47:BZ:36:VAL:N	2.32	0.44
1:CA:1004:A:C6	1:CA:1005:A:N1	2.86	0.44
1:CA:1077:G:N2	1:CA:1080:A:OP2	2.50	0.44
1:CA:1197:A:C2'	1:CA:1198:G:H5'	2.47	0.44
1:CA:147:G:C2	1:CA:148:G:C6	3.06	0.44
1:CA:173:U:H3'	1:CA:174:A:H5'	1.99	0.44
1:CA:327:A:C2	1:CA:329:A:C4	3.05	0.44
1:CA:438:U:C2	1:CA:494:G:C6	3.06	0.44
1:CA:711:G:N2	1:CA:712:A:C4	2.86	0.44
1:CA:774:G:C5	1:CA:775:G:C8	3.06	0.44
1:CA:960:U:O2'	1:CA:1223:C:H4'	2.17	0.44
2:CB:104:TRP:CH2	2:CB:108:ARG:HD3	2.53	0.44
2:CB:173:ILE:HG22	2:CB:177:ASN:ND2	2.33	0.44
2:CB:93:ASN:OD1	2:CB:94:HIS:N	2.50	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CC:30:ALA:O	3:CC:34:ASP:HB2	2.18	0.44
4:CD:188:ARG:NH2	4:CD:197:GLU:OE2	2.49	0.44
4:CD:3:ARG:O	4:CD:5:LEU:HD13	2.18	0.44
5:CE:156:LYS:O	5:CE:159:LYS:NZ	2.48	0.44
6:CF:8:PHE:CD2	6:CF:8:PHE:N	2.86	0.44
7:CG:71:PRO:HD2	7:CG:96:ARG:O	2.18	0.44
9:CI:55:VAL:HG23	9:CI:55:VAL:O	2.17	0.44
11:CK:126:LYS:O	21:CU:34:ARG:CZ	2.66	0.44
12:CL:51:LYS:HD2	12:CL:51:LYS:N	2.33	0.44
13:CM:25:VAL:O	13:CM:25:VAL:HG13	2.18	0.44
13:CM:53:ILE:O	13:CM:57:ARG:HB2	2.17	0.44
18:CR:37:GLY:O	18:CR:63:ARG:NH2	2.47	0.44
19:CS:55:ARG:CZ	19:CS:79:THR:CG2	2.95	0.44
20:CT:32:ILE:CG1	20:CT:54:MET:HE3	2.48	0.44
21:CU:37:PHE:O	21:CU:39:GLU:N	2.44	0.44
22:DA:117:G:C6	22:DA:119:A:N1	2.86	0.44
22:DA:1287:A:H2'	22:DA:1288:G:H5'	2.00	0.44
22:DA:137:U:H2'	22:DA:140:C:C2	2.53	0.44
22:DA:13:A:N3	22:DA:14:A:N6	2.61	0.44
22:DA:1754:A:C6	22:DA:1755:A:C5	3.05	0.44
22:DA:1809:A:H2'	22:DA:1810:A:H8	1.78	0.44
22:DA:1905:C:O4'	22:DA:1928:A:C2	2.71	0.44
22:DA:1906:G:C8	22:DA:1929:G:H2'	2.53	0.44
22:DA:2106:U:H2'	22:DA:2107:G:C8	2.53	0.44
22:DA:2163:A:OP2	22:DA:2171:A:C8	2.71	0.44
22:DA:2431:U:H2'	22:DA:2433:A:OP2	2.17	0.44
22:DA:2544:G:H5'	22:DA:2645:G:C2	2.53	0.44
22:DA:2837:A:H2'	22:DA:2838:G:O4'	2.18	0.44
22:DA:478:A:C6	22:DA:480:A:C6	3.06	0.44
22:DA:560:C:O2	38:DQ:48:ARG:NH1	2.48	0.44
22:DA:568:U:H2'	22:DA:570:G:OP2	2.17	0.44
22:DA:772:C:N3	22:DA:773:U:C5	2.86	0.44
22:DA:79:C:H2'	22:DA:346:A:N3	2.32	0.44
22:DA:810:U:OP1	57:DA:3333:HOH:O	2.21	0.44
22:DA:855:G:C2	22:DA:923:G:N3	2.86	0.44
22:DA:8:C:O2'	22:DA:9:G:H5'	2.18	0.44
26:DE:109:LEU:O	26:DE:112:LEU:HB2	2.17	0.44
33:DL:22:GLY:O	33:DL:25:SER:OG	2.36	0.44
34:DM:2:LEU:N	34:DM:2:LEU:HD12	2.33	0.44
1:AA:1014:A:C2	19:AS:34:TRP:CZ2	3.06	0.44
1:AA:125:U:H2'	1:AA:126:G:O4'	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:815:A:H4'	1:AA:817:C:C4	2.53	0.44
2:AB:101:LEU:CD1	2:AB:158:PRO:HG2	2.48	0.44
2:AB:10:LEU:HD23	2:AB:10:LEU:C	2.38	0.44
4:AD:197:GLU:O	4:AD:199:LEU:N	2.50	0.44
1:AA:933:G:OP2	7:AG:3:ARG:CB	2.66	0.44
8:AH:39:VAL:CG1	8:AH:112:THR:HG22	2.48	0.44
8:AH:111:MET:CE	8:AH:116:ALA:HA	2.44	0.44
8:AH:49:PHE:HB3	8:AH:61:LEU:CD2	2.47	0.44
9:AI:127:PHE:CD2	9:AI:127:PHE:C	2.91	0.44
10:AJ:65:TYR:CB	14:AN:96:LEU:HD11	2.48	0.44
10:AJ:66:GLU:HB3	14:AN:99:ALA:HB2	2.00	0.44
14:AN:41:ARG:HD3	14:AN:42:TRP:CH2	2.53	0.44
16:AP:56:ARG:O	16:AP:59:HIS:HB3	2.18	0.44
17:AQ:48:ASP:CG	17:AQ:52:GLU:OE1	2.56	0.44
17:AQ:5:ILE:N	17:AQ:5:ILE:HD12	2.33	0.44
19:AS:50:ALA:HB1	19:AS:57:HIS:HB3	1.99	0.44
1:AA:1539:C:H5''	21:AU:18:ARG:HG3	1.99	0.44
49:B1:51:GLU:OE2	49:B1:53:LYS:HD3	2.18	0.44
51:B3:32:ILE:O	51:B3:32:ILE:HG22	2.18	0.44
22:BA:108:G:C5	22:BA:109:C:C5	3.06	0.44
22:BA:1688:U:H1'	22:BA:1701:A:C5	2.52	0.44
22:BA:1716:U:O2'	22:BA:1717:A:H5'	2.18	0.44
22:BA:1951:U:H2'	22:BA:1953:A:OP2	2.18	0.44
22:BA:608:A:C2	22:BA:609:A:N3	2.86	0.44
22:BA:785:G:C6	22:BA:786:C:C4	3.05	0.44
27:BF:73:SER:OG	27:BF:80:ARG:HA	2.18	0.44
27:BF:36:LEU:HD11	27:BF:99:PHE:CZ	2.53	0.44
29:BH:99:ILE:CD1	29:BH:117:LEU:HD13	2.48	0.44
30:BI:58:VAL:HG12	30:BI:59:ILE:H	1.82	0.44
35:BN:52:ILE:HG21	35:BN:94:TYR:CG	2.53	0.44
40:BS:36:LEU:CD1	40:BS:48:LYS:HA	2.48	0.44
40:BS:41:LYS:O	40:BS:43:ALA:N	2.50	0.44
41:BT:49:LYS:HD3	41:BT:49:LYS:H	1.82	0.44
42:BU:12:ILE:HG13	42:BU:21:LYS:O	2.18	0.44
43:BV:10:LYS:H	43:BV:10:LYS:CE	2.31	0.44
1:CA:1213:A:C5	1:CA:1215:G:C4	3.06	0.44
1:CA:1345:U:H4'	1:CA:1346:A:H5'	1.99	0.44
1:CA:1462:C:H2'	1:CA:1463:U:C6	2.53	0.44
1:CA:1480:A:H2'	1:CA:1481:U:O4'	2.18	0.44
1:CA:237:G:C4	1:CA:238:A:C8	3.06	0.44
1:CA:246:A:N3	1:CA:279:A:N6	2.65	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:552:U:C2	1:CA:553:A:C8	3.05	0.44
1:CA:73:C:O2'	1:CA:74:A:P	2.76	0.44
1:CA:781:A:OP2	57:CA:1812:HOH:O	2.21	0.44
4:CD:149:ALA:O	4:CD:152:GLN:HB2	2.17	0.44
8:CH:51:VAL:HG22	8:CH:51:VAL:O	2.18	0.44
11:CK:118:HIS:O	11:CK:119:ASN:HB2	2.18	0.44
11:CK:67:ALA:HB1	11:CK:100:LEU:HD13	2.00	0.44
12:CL:51:LYS:N	12:CL:51:LYS:CD	2.81	0.44
13:CM:85:CYS:HB3	19:CS:74:PHE:CE2	2.52	0.44
22:DA:110:G:N3	22:DA:110:G:H2'	2.33	0.44
22:DA:1780:A:OP1	57:DA:3687:HOH:O	2.20	0.44
22:DA:1829:A:H2'	24:DC:15:HIS:NE2	2.33	0.44
22:DA:2199:A:C4	22:DA:2225:A:N1	2.86	0.44
22:DA:2728:U:C2	22:DA:2729:G:C8	3.06	0.44
22:DA:39:G:N2	22:DA:441:U:C2	2.86	0.44
22:DA:546:U:O2	22:DA:546:U:C2'	2.65	0.44
23:DB:34:A:N6	23:DB:44:G:O2'	2.48	0.44
23:DB:21:G:N2	23:DB:63:C:C2	2.86	0.44
24:DC:247:PRO:HG2	24:DC:248:TRP:CZ3	2.53	0.44
25:DD:105:LYS:O	25:DD:177:VAL:HG12	2.18	0.44
22:DA:2784:U:H4'	25:DD:42:ASN:O	2.18	0.44
35:DN:51:LEU:N	35:DN:51:LEU:CD2	2.79	0.44
35:DN:80:PHE:O	35:DN:85:PRO:HD3	2.18	0.44
22:DA:483:A:O2'	42:DU:56:GLY:HA3	2.18	0.44
42:DU:71:ALA:HB3	42:DU:80:ALA:HB1	1.98	0.44
44:DW:71:VAL:HA	44:DW:77:ARG:O	2.17	0.44
1:AA:1014:A:H5''	19:AS:14:HIS:CG	2.53	0.43
1:AA:1048:G:N3	1:AA:1050:G:N7	2.65	0.43
1:AA:1077:G:N1	1:AA:1081:A:C6	2.85	0.43
1:AA:1130:A:C2	1:AA:1146:A:C5	3.06	0.43
1:AA:1136:C:OP2	1:AA:1137:C:C5	2.71	0.43
1:AA:1197:A:OP1	1:AA:1198:G:OP2	2.36	0.43
1:AA:126:G:OP1	1:AA:605:U:O2'	2.28	0.43
1:AA:263:A:H2'	1:AA:264:C:C5	2.53	0.43
1:AA:495:A:C2	1:AA:496:A:C6	3.05	0.43
2:AB:144:LEU:N	2:AB:144:LEU:HD23	2.32	0.43
2:AB:78:GLU:HA	2:AB:81:LYS:HB3	2.00	0.43
2:AB:99:GLY:O	2:AB:103:ASN:N	2.48	0.43
4:AD:112:ALA:O	4:AD:115:ARG:N	2.50	0.43
4:AD:145:ILE:HD12	4:AD:145:ILE:N	2.33	0.43
8:AH:46:ILE:HG22	8:AH:63:LEU:HA	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:49:PHE:CB	8:AH:61:LEU:HD23	2.48	0.43
9:AI:80:ARG:C	9:AI:80:ARG:HD2	2.37	0.43
11:AK:34:ILE:HG13	11:AK:70:CYS:SG	2.58	0.43
10:AJ:49:PHE:CD2	14:AN:77:PHE:CE1	3.05	0.43
17:AQ:4:LYS:C	17:AQ:4:LYS:HD2	2.39	0.43
17:AQ:81:LYS:C	17:AQ:83:VAL:N	2.69	0.43
22:BA:1303:G:O2'	22:BA:1304:A:H5'	2.17	0.43
22:BA:1355:G:C2	22:BA:1356:G:C8	3.06	0.43
22:BA:1851:U:C4	22:BA:1852:U:C4	3.06	0.43
22:BA:1899:A:O2'	22:BA:1900:A:H5''	2.19	0.43
22:BA:1949:G:C2	22:BA:1958:C:C2	3.05	0.43
22:BA:2020:A:C2	22:BA:2022:U:O4'	2.70	0.43
22:BA:2076:U:O5'	22:BA:2076:U:O2	2.36	0.43
22:BA:22:C:C2'	22:BA:23:G:O5'	2.66	0.43
22:BA:2506:U:C6	55:BA:3001:DOL:H422	2.52	0.43
22:BA:996:A:N3	22:BA:997:G:C8	2.86	0.43
23:BB:109:A:C5	23:BB:110:C:C4	3.06	0.43
24:BC:125:LYS:HB2	24:BC:126:PRO:HD2	2.00	0.43
24:BC:107:PRO:HB3	24:BC:142:HIS:HE1	1.82	0.43
22:BA:1813:G:H1'	24:BC:50:THR:OG1	2.18	0.43
27:BF:146:VAL:HG23	27:BF:146:VAL:O	2.18	0.43
27:BF:69:LYS:N	27:BF:69:LYS:HD2	2.33	0.43
28:BG:74:SER:HA	28:BG:77:ILE:CG1	2.48	0.43
29:BH:89:LYS:HE3	29:BH:124:THR:HG22	1.99	0.43
30:BI:38:PHE:O	30:BI:39:CYS:SG	2.76	0.43
22:BA:2009:A:C4'	35:BN:107:ASN:HD22	2.30	0.43
39:BR:39:LEU:C	39:BR:49:ILE:HG23	2.39	0.43
42:BU:102:THR:CG2	42:BU:103:ILE:N	2.81	0.43
43:BV:40:ILE:CG2	43:BV:41:GLU:N	2.81	0.43
1:CA:1077:G:N2	1:CA:1081:A:C4	2.86	0.43
1:CA:1238:A:H2'	1:CA:1241:G:H1'	1.99	0.43
1:CA:971:G:N2	1:CA:1363:A:C8	2.86	0.43
1:CA:1345:U:C2	1:CA:1377:A:N1	2.86	0.43
1:CA:1493:A:H4'	22:DA:1913:A:N1	2.33	0.43
1:CA:1537:U:C4	1:CA:1538:C:C4	3.06	0.43
1:CA:378:G:N2	1:CA:386:C:O2	2.50	0.43
1:CA:376:G:N3	1:CA:389:A:C2	2.86	0.43
1:CA:414:A:C6	1:CA:415:A:C5	3.05	0.43
1:CA:458:U:H2'	1:CA:459:A:C8	2.53	0.43
1:CA:35:G:C2	1:CA:550:G:C2	3.06	0.43
1:CA:57:G:C5	1:CA:58:C:C4	3.05	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:635:A:C5	1:CA:636:U:C5	3.06	0.43
2:CB:60:ILE:HA	2:CB:63:ARG:HB2	2.00	0.43
2:CB:68:LEU:CD2	2:CB:68:LEU:C	2.86	0.43
3:CC:173:VAL:HG12	3:CC:173:VAL:O	2.18	0.43
3:CC:23:PHE:CG	3:CC:24:ALA:N	2.85	0.43
4:CD:129:VAL:O	4:CD:129:VAL:HG13	2.17	0.43
1:CA:8:A:N6	4:CD:206:LYS:HG2	2.33	0.43
13:CM:14:HIS:HB2	13:CM:17:ILE:CD1	2.48	0.43
15:CO:23:GLY:O	15:CO:24:SER:C	2.57	0.43
16:CP:19:VAL:HG12	16:CP:37:GLY:CA	2.48	0.43
22:DA:1317:G:C5	22:DA:1318:U:C4	3.05	0.43
22:DA:162:U:H4'	22:DA:163:C:OP1	2.18	0.43
22:DA:1693:U:H4'	22:DA:1694:C:OP2	2.18	0.43
22:DA:185:G:C5	22:DA:212:G:N2	2.85	0.43
22:DA:2093:G:C2	22:DA:2094:A:C8	3.06	0.43
22:DA:2716:C:H2'	22:DA:2717:C:C6	2.52	0.43
22:DA:466:A:N1	22:DA:795:C:O2'	2.44	0.43
22:DA:704:G:O2'	22:DA:725:G:O6	2.36	0.43
22:DA:1801:A:N7	24:DC:262:ARG:NH2	2.66	0.43
25:DD:104:VAL:HG23	25:DD:105:LYS:N	2.33	0.43
28:DG:24:ILE:HD13	28:DG:72:LEU:HD21	2.00	0.43
29:DH:127:GLU:CG	29:DH:144:VAL:O	2.65	0.43
32:DK:91:SER:O	32:DK:92:GLU:C	2.56	0.43
34:DM:97:GLN:O	34:DM:100:LYS:HB2	2.18	0.43
34:DM:57:VAL:HG11	34:DM:105:MET:SD	2.57	0.43
35:DN:1:MET:HE3	35:DN:1:MET:N	2.31	0.43
39:DR:69:GLY:O	39:DR:70:GLU:C	2.56	0.43
41:DT:61:LEU:CD1	41:DT:62:VAL:N	2.81	0.43
1:AA:1129:C:H4'	1:AA:1130:A:OP1	2.18	0.43
1:AA:1298:U:O4'	1:AA:1299:A:C2	2.71	0.43
1:AA:174:A:C2	1:AA:175:C:H1'	2.54	0.43
1:AA:69:G:N3	1:AA:69:G:H2'	2.33	0.43
1:AA:531:U:H5''	3:AC:161:GLU:OE2	2.18	0.43
4:AD:191:LEU:O	4:AD:192:SER:CB	2.66	0.43
7:AG:24:ALA:O	7:AG:27:VAL:HG22	2.18	0.43
8:AH:15:ARG:HB2	8:AH:75:ILE:CG2	2.48	0.43
9:AI:57:MET:SD	9:AI:58:VAL:N	2.84	0.43
10:AJ:12:ALA:HB2	10:AJ:96:VAL:HA	2.00	0.43
14:AN:17:ALA:HA	14:AN:55:SER:O	2.18	0.43
15:AO:48:LYS:O	15:AO:50:HIS:N	2.49	0.43
17:AQ:16:LYS:C	17:AQ:17:MET:CE	2.86	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1010:A:N3	22:BA:1153:C:H1'	2.33	0.43
22:BA:1340:U:H4'	22:BA:1341:G:OP2	2.18	0.43
22:BA:1419:A:C4	22:BA:1421:G:C8	3.06	0.43
22:BA:1449:G:C4	22:BA:1450:G:C8	3.06	0.43
22:BA:2788:C:O2'	22:BA:2809:A:N3	2.38	0.43
22:BA:451:U:H4'	26:BE:47:LYS:NZ	2.32	0.43
22:BA:479:A:H4'	22:BA:480:A:OP1	2.19	0.43
22:BA:501:A:H5'	22:BA:502:A:OP2	2.18	0.43
22:BA:927:A:H2'	22:BA:928:A:O4'	2.18	0.43
24:BC:21:ASN:O	24:BC:24:LEU:HB2	2.18	0.43
26:BE:124:PHE:C	26:BE:124:PHE:CD1	2.92	0.43
29:BH:1:MET:HE3	29:BH:23:ALA:HA	2.00	0.43
31:BJ:32:LEU:O	31:BJ:36:LEU:HG	2.18	0.43
25:BD:12:THR:HG21	37:BP:9:GLU:OE2	2.19	0.43
40:BS:29:VAL:HG21	40:BS:69:LEU:HB3	2.00	0.43
41:BT:12:ARG:HB2	41:BT:33:LYS:O	2.18	0.43
22:BA:2364:C:OP1	44:BW:55:ARG:NH1	2.50	0.43
1:CA:1321:U:C4	1:CA:1322:C:H5	2.36	0.43
1:CA:135:C:O2	16:CP:1:MET:HB2	2.18	0.43
1:CA:1361:G:H3'	1:CA:1362:A:C5'	2.47	0.43
1:CA:1494:G:C6	1:CA:1495:U:C4	3.07	0.43
1:CA:206:C:H2'	1:CA:207:C:C5'	2.46	0.43
1:CA:32:A:N3	1:CA:33:A:C8	2.87	0.43
1:CA:436:C:C2	1:CA:437:U:C5	3.06	0.43
1:CA:57:G:C6	1:CA:58:C:C4	3.06	0.43
1:CA:651:C:C4	1:CA:652:U:O4	2.72	0.43
1:CA:847:G:C2	1:CA:848:C:C2	3.06	0.43
1:CA:934:C:C5'	57:CA:1827:HOH:O	2.65	0.43
4:CD:32:CYS:SG	4:CD:33:LYS:N	2.91	0.43
8:CH:29:SER:HB2	8:CH:59:LEU:HB2	2.00	0.43
8:CH:78:VAL:HG12	8:CH:79:SER:N	2.33	0.43
12:CL:37:VAL:O	12:CL:37:VAL:HG12	2.18	0.43
14:CN:87:ALA:HA	14:CN:92:GLU:HG3	2.00	0.43
17:CQ:21:ILE:O	17:CQ:21:ILE:HG23	2.18	0.43
17:CQ:75:LEU:C	17:CQ:75:LEU:CD1	2.87	0.43
22:DA:1002:G:H2'	22:DA:1003:G:O5'	2.18	0.43
22:DA:1176:U:N3	22:DA:1177:G:C6	2.86	0.43
22:DA:1230:A:C6	22:DA:1231:U:N3	2.86	0.43
22:DA:1257:C:C4	22:DA:1258:U:O4	2.71	0.43
22:DA:1270:C:O2	22:DA:1325:U:O2'	2.36	0.43
22:DA:1930:G:O2'	22:DA:1931:U:P	2.76	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1980:G:C2	22:DA:1982:U:C4	3.06	0.43
22:DA:379:G:H4'	22:DA:2232:C:H5''	2.00	0.43
22:DA:2264:C:C2	22:DA:2277:G:N2	2.86	0.43
22:DA:2283:C:C2'	22:DA:2284:A:H5'	2.49	0.43
22:DA:2311:A:H3'	22:DA:2312:U:C6	2.53	0.43
22:DA:2370:G:C6	22:DA:2371:G:C6	3.07	0.43
22:DA:2386:A:H2'	22:DA:2387:U:C6	2.53	0.43
22:DA:2727:A:N1	22:DA:2728:U:C4	2.86	0.43
22:DA:538:A:O2'	31:DJ:8:PRO:CG	2.65	0.43
22:DA:579:G:C5'	22:DA:2018:G:OP2	2.66	0.43
22:DA:678:C:H2'	22:DA:679:C:C6	2.54	0.43
25:DD:127:PHE:CE2	25:DD:160:LYS:HD2	2.53	0.43
26:DE:24:ASN:O	26:DE:28:VAL:HG23	2.17	0.43
45:DX:47:VAL:O	45:DX:47:VAL:CG1	2.65	0.43
47:DZ:24:LEU:HD11	47:DZ:54:MET:HE2	1.99	0.43
1:AA:1319:A:C8	1:AA:1323:G:C6	3.06	0.43
1:AA:1337:G:H5''	1:AA:1338:G:OP1	2.17	0.43
1:AA:1369:C:H2'	1:AA:1370:G:C8	2.53	0.43
1:AA:723:U:H5'	1:AA:724:G:P	2.59	0.43
2:AB:24:ASN:HA	2:AB:25:PRO:HD2	1.78	0.43
2:AB:79:ALA:O	2:AB:80:VAL:HG23	2.18	0.43
4:AD:103:TYR:HB2	4:AD:114:ALA:HB2	2.00	0.43
4:AD:121:LYS:HB3	4:AD:129:VAL:HG21	1.99	0.43
4:AD:190:ASP:C	4:AD:191:LEU:HG	2.38	0.43
6:AF:47:LEU:HD13	6:AF:51:ILE:HG23	1.99	0.43
7:AG:145:ALA:C	7:AG:147:ALA:H	2.22	0.43
7:AG:66:LEU:O	7:AG:70:ARG:HD3	2.18	0.43
1:AA:641:U:H4'	8:AH:107:SER:O	2.18	0.43
14:AN:15:ALA:O	14:AN:18:ASP:OD2	2.36	0.43
16:AP:12:LYS:HG2	16:AP:13:LYS:HG2	2.00	0.43
16:AP:8:ARG:HG3	16:AP:17:TYR:CE2	2.53	0.43
19:AS:4:SER:HB2	19:AS:5:LEU:HD12	1.99	0.43
20:AT:54:MET:CE	20:AT:58:VAL:HG21	2.48	0.43
49:B1:34:LEU:HB3	49:B1:52:ALA:HB2	2.01	0.43
53:B5:84:ILE:HG22	53:B5:84:ILE:O	2.18	0.43
22:BA:1063:G:C6	22:BA:1064:C:H1'	2.54	0.43
22:BA:1142:A:C2	22:BA:1144:A:N9	2.86	0.43
22:BA:1168:G:N2	22:BA:1182:G:C4	2.86	0.43
22:BA:1165:A:C2	22:BA:1185:G:C2	3.06	0.43
22:BA:1193:G:O2'	22:BA:1194:A:H5'	2.18	0.43
22:BA:1347:A:C2	22:BA:1348:C:H1'	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1881:C:H2'	22:BA:1882:U:O4'	2.18	0.43
22:BA:2001:C:C2	22:BA:2002:G:C8	3.06	0.43
22:BA:2275:C:O2	34:BM:84:LYS:CD	2.66	0.43
22:BA:255:A:H2'	22:BA:256:A:O4'	2.18	0.43
22:BA:975:A:C8	22:BA:990:A:N6	2.86	0.43
23:BB:99:A:H2'	23:BB:99:A:N3	2.33	0.43
24:BC:209:GLY:O	24:BC:212:ARG:N	2.51	0.43
25:BD:104:VAL:O	25:BD:105:LYS:CB	2.65	0.43
26:BE:149:ILE:HD11	26:BE:172:ALA:CA	2.48	0.43
29:BH:96:THR:O	29:BH:100:ALA:N	2.50	0.43
29:BH:27:ARG:O	29:BH:28:ASN:CB	2.66	0.43
29:BH:80:ILE:HG21	29:BH:94:ILE:HG13	2.00	0.43
29:BH:9:VAL:O	29:BH:10:ALA:O	2.36	0.43
30:BI:19:ASN:N	30:BI:20:PRO:HD2	2.33	0.43
30:BI:42:PHE:O	30:BI:46:THR:OG1	2.32	0.43
39:BR:79:ARG:O	39:BR:80:ARG:HB3	2.18	0.43
40:BS:25:ARG:HB2	40:BS:74:ILE:CG2	2.49	0.43
40:BS:74:ILE:HG23	40:BS:74:ILE:O	2.18	0.43
41:BT:57:VAL:HG13	41:BT:86:THR:OG1	2.18	0.43
43:BV:14:LYS:HD2	43:BV:18:ARG:NH1	2.33	0.43
1:CA:1005:A:N7	1:CA:1006:G:C4	2.86	0.43
1:CA:1018:G:O6	1:CA:1019:A:N6	2.51	0.43
1:CA:1158:C:O2	1:CA:1158:C:C2'	2.66	0.43
1:CA:1411:C:H2'	1:CA:1412:C:C6	2.53	0.43
1:CA:1496:C:H2'	1:CA:1497:G:C1'	2.48	0.43
1:CA:184:G:N2	1:CA:185:U:C2	2.87	0.43
1:CA:420:U:O2'	1:CA:421:U:H5''	2.18	0.43
1:CA:944:G:H5''	1:CA:945:G:OP2	2.18	0.43
1:CA:946:A:H2'	1:CA:947:G:C8	2.53	0.43
2:CB:206:ALA:O	2:CB:207:ILE:C	2.56	0.43
5:CE:104:GLY:HA3	5:CE:122:ASN:O	2.18	0.43
5:CE:12:GLN:HA	5:CE:12:GLN:OE1	2.17	0.43
5:CE:133:PRO:HA	5:CE:136:VAL:HG13	2.00	0.43
8:CH:95:VAL:O	8:CH:99:LEU:O	2.36	0.43
20:CT:32:ILE:HG12	20:CT:54:MET:CE	2.47	0.43
22:DA:1249:U:H4'	38:DQ:4:VAL:HB	1.99	0.43
22:DA:1456:G:C6	22:DA:1457:U:C4	3.06	0.43
22:DA:53:A:C2	22:DA:179:C:H4'	2.52	0.43
22:DA:1905:C:O2'	22:DA:1929:G:H1'	2.18	0.43
22:DA:2128:G:C6	22:DA:2129:C:C4	3.06	0.43
22:DA:2116:G:C6	22:DA:2171:A:N6	2.86	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2234:G:C5	22:DA:2235:G:N7	2.86	0.43
22:DA:2467:C:H41	22:DA:2468:A:N6	2.16	0.43
22:DA:1783:A:H5'	22:DA:2608:G:H4'	1.99	0.43
22:DA:2712:C:C2	22:DA:2715:C:OP1	2.71	0.43
22:DA:2834:G:O6	22:DA:2879:A:C2'	2.65	0.43
22:DA:520:G:H2'	22:DA:521:U:C6	2.54	0.43
22:DA:590:A:H2'	22:DA:591:U:O4'	2.19	0.43
22:DA:623:C:H2'	22:DA:624:C:O4'	2.19	0.43
24:DC:251:GLN:HG2	24:DC:255:LYS:HB2	2.00	0.43
26:DE:131:THR:HB	26:DE:164:LEU:HD22	1.99	0.43
27:DF:123:ASP:N	27:DF:127:ASN:O	2.51	0.43
37:DP:62:ARG:CZ	37:DP:101:ARG:HA	2.48	0.43
38:DQ:27:ALA:HB1	38:DQ:31:VAL:CG2	2.48	0.43
41:DT:20:ALA:HA	41:DT:31:VAL:HG21	2.00	0.43
1:AA:1182:G:C4'	1:AA:1183:U:H5'	2.48	0.43
1:AA:1251:A:H2'	1:AA:1252:A:O4'	2.18	0.43
1:AA:1332:A:C8	1:AA:1333:A:C8	3.07	0.43
1:AA:1415:G:C6	1:AA:1486:G:C6	3.07	0.43
1:AA:174:A:C2'	1:AA:175:C:H5'	2.48	0.43
1:AA:192:A:C2	1:AA:193:C:C2	3.06	0.43
1:AA:32:A:C2	1:AA:33:A:C4	3.06	0.43
1:AA:900:A:N1	1:AA:901:A:C2	2.87	0.43
1:AA:947:G:C6	1:AA:948:C:C4	3.07	0.43
1:AA:980:C:C5	1:AA:981:U:C4	3.06	0.43
2:AB:115:LYS:NZ	2:AB:153:ASP:OD1	2.43	0.43
5:AE:83:HIS:HB2	5:AE:84:PRO:CD	2.49	0.43
6:AF:14:GLN:OE1	6:AF:17:GLN:HB2	2.18	0.43
6:AF:16:GLU:HG3	4:CD:188:ARG:HH12	1.82	0.43
6:AF:76:THR:O	6:AF:79:ARG:N	2.44	0.43
7:AG:16:PRO:HB2	9:AI:46:MET:HE3	2.00	0.43
9:AI:29:VAL:O	9:AI:30:ILE:HG22	2.18	0.43
10:AJ:19:ASP:HA	10:AJ:22:THR:HB	2.00	0.43
15:AO:24:SER:O	15:AO:25:THR:C	2.56	0.43
17:AQ:41:THR:HG22	17:AQ:42:THR:N	2.33	0.43
22:BA:1059:G:C6	22:BA:1060:U:C4	3.07	0.43
22:BA:1064:C:H2'	22:BA:1064:C:O2	2.17	0.43
22:BA:1059:G:C5	22:BA:1080:A:C2	3.06	0.43
22:BA:999:U:C5	22:BA:1154:G:C6	3.06	0.43
22:BA:1864:U:C5	22:BA:1865:U:C4	3.06	0.43
22:BA:1941:C:C4	22:BA:1942:C:C4	3.05	0.43
22:BA:226:A:N6	22:BA:227:A:C6	2.86	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2694:G:H2'	22:BA:2695:U:H6	1.82	0.43
22:BA:315:G:H2'	22:BA:316:C:C6	2.53	0.43
23:BB:29:A:H2'	23:BB:30:C:O4'	2.18	0.43
24:BC:53:HIS:CD2	24:BC:219:THR:HA	2.54	0.43
29:BH:76:GLU:HA	29:BH:142:VAL:HG12	2.00	0.43
29:BH:91:PHE:HB3	1:CA:55:A:C4	2.54	0.43
30:BI:28:LEU:HG	30:BI:35:ILE:CD1	2.48	0.43
1:AA:346:G:P	32:BK:105:ARG:HH12	2.41	0.43
32:BK:10:VAL:CG1	32:BK:12:ASP:OD1	2.67	0.43
33:BL:81:ASP:CB	33:BL:100:ILE:HD12	2.48	0.43
37:BP:103:ARG:HG3	37:BP:103:ARG:HH11	1.81	0.43
38:BQ:76:TYR:CE2	38:BQ:80:ILE:HG13	2.53	0.43
1:CA:1105:A:H2'	1:CA:1106:G:H8	1.83	0.43
1:CA:1211:U:H1'	1:CA:1213:A:C2	2.53	0.43
1:CA:195:A:C6	1:CA:196:A:N1	2.86	0.43
1:CA:256:U:OP1	17:CQ:19:LYS:NZ	2.40	0.43
1:CA:409:U:H5'	4:CD:25:VAL:HG23	2.00	0.43
1:CA:718:A:OP2	1:CA:720:C:N4	2.50	0.43
1:CA:583:A:C6	1:CA:759:A:N7	2.86	0.43
1:CA:764:C:N4	1:CA:765:G:C5	2.87	0.43
1:CA:919:A:N1	1:CA:920:U:C4	2.86	0.43
1:CA:938:A:N6	1:CA:939:G:C5	2.86	0.43
1:CA:983:A:H2'	1:CA:983:A:N3	2.33	0.43
10:CJ:80:THR:O	10:CJ:84:VAL:HG12	2.18	0.43
1:CA:718:A:H5'	11:CK:119:ASN:ND2	2.33	0.43
16:CP:67:ILE:HG23	16:CP:71:VAL:CG1	2.49	0.43
1:CA:1318:A:O2'	19:CS:37:ARG:HD2	2.19	0.43
20:CT:36:TYR:CG	20:CT:37:ALA:N	2.87	0.43
50:D2:43:THR:O	50:D2:44:VAL:CB	2.66	0.43
22:DA:1272:A:C2	22:DA:1618:A:C4	3.06	0.43
22:DA:1364:G:C5	22:DA:1368:G:N1	2.87	0.43
22:DA:1470:A:H2'	22:DA:1471:G:H5'	2.00	0.43
22:DA:1486:U:N3	22:DA:1504:A:C2	2.86	0.43
22:DA:1524:G:N3	22:DA:1525:A:C8	2.86	0.43
22:DA:1595:C:H2'	22:DA:1596:A:O4'	2.19	0.43
22:DA:207:A:C2	22:DA:208:C:H1'	2.53	0.43
22:DA:225:C:H2'	22:DA:226:A:O4'	2.18	0.43
22:DA:305:C:C2	22:DA:313:G:N1	2.86	0.43
22:DA:487:C:N4	22:DA:488:G:N1	2.67	0.43
22:DA:647:G:C4	22:DA:648:G:C8	3.07	0.43
22:DA:64:A:H2'	22:DA:65:U:C6	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:599:A:H1'	22:DA:659:G:N2	2.34	0.43
22:DA:679:C:H2'	22:DA:680:C:H6	1.82	0.43
22:DA:717:C:N4	22:DA:718:A:N3	2.65	0.43
22:DA:776:G:C8	22:DA:793:A:C5	3.07	0.43
23:DB:114:C:O2'	23:DB:115:A:H5'	2.18	0.43
23:DB:13:G:O2'	23:DB:15:A:H5'	2.18	0.43
24:DC:64:ILE:O	24:DC:103:TYR:HB2	2.18	0.43
25:DD:108:ASP:OD1	25:DD:207:VAL:HG12	2.18	0.43
26:DE:130:LYS:CB	26:DE:133:LEU:HB2	2.48	0.43
27:DF:158:THR:OG1	27:DF:169:LEU:CD2	2.67	0.43
27:DF:9:LYS:O	27:DF:13:VAL:HG23	2.18	0.43
28:DG:91:GLY:HA3	28:DG:160:LYS:HG3	2.00	0.43
31:DJ:56:VAL:HB	31:DJ:124:VAL:HG12	2.00	0.43
22:DA:538:A:O2'	31:DJ:8:PRO:HG3	2.18	0.43
32:DK:7:MET:C	32:DK:8:LEU:HD12	2.38	0.43
34:DM:78:LEU:O	34:DM:79:ALA:HB3	2.19	0.43
37:DP:93:ARG:O	37:DP:94:LYS:HB2	2.18	0.43
43:DV:42:LEU:HD12	43:DV:47:VAL:HG21	2.00	0.43
45:DX:30:LEU:HB3	45:DX:31:PRO:CD	2.48	0.43
45:DX:68:LEU:HD22	45:DX:78:TYR:CE1	2.53	0.43
1:AA:1406:U:C6	1:AA:1407:C:C5	3.06	0.43
1:AA:1529:G:H4'	1:AA:1530:G:OP2	2.18	0.43
1:AA:567:G:N2	1:AA:568:G:H1'	2.33	0.43
1:AA:780:A:C8	1:AA:800:G:O6	2.71	0.43
1:AA:77:A:H2'	1:AA:78:A:C8	2.53	0.43
1:AA:841:C:C2	1:AA:843:U:H5'	2.54	0.43
1:AA:895:G:C6	1:AA:896:C:C4	3.06	0.43
2:AB:106:THR:O	2:AB:107:VAL:CB	2.66	0.43
3:AC:159:GLY:O	3:AC:160:ALA:C	2.57	0.43
4:AD:145:ILE:N	4:AD:145:ILE:CD1	2.81	0.43
4:AD:26:ARG:HD3	4:AD:31:LYS:HD2	2.01	0.43
4:AD:88:GLU:O	4:AD:91:LEU:N	2.51	0.43
9:AI:22:LYS:O	9:AI:62:ASP:HB2	2.18	0.43
10:AJ:40:ILE:HB	10:AJ:73:LEU:HB2	2.00	0.43
10:AJ:92:LEU:O	10:AJ:93:ALA:HB2	2.19	0.43
17:AQ:17:MET:HB2	17:AQ:20:SER:HB3	2.01	0.43
18:AR:52:GLN:HA	18:AR:52:GLN:OE1	2.17	0.43
20:AT:54:MET:CE	20:AT:58:VAL:CG2	2.97	0.43
21:AU:34:ARG:O	21:AU:36:GLU:N	2.52	0.43
22:BA:1043:C:N4	22:BA:1044:C:N4	2.65	0.43
22:BA:1189:A:H2'	22:BA:1190:G:O4'	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1404:C:N3	22:BA:1405:U:C5	2.86	0.43
22:BA:2309:A:C6	22:BA:2310:C:C4	3.06	0.43
22:BA:231:A:C6	22:BA:232:G:C2	3.07	0.43
22:BA:2880:C:C2	22:BA:2881:U:C5	3.07	0.43
22:BA:996:A:H4'	38:BQ:91:ASP:OD1	2.19	0.43
24:BC:174:LEU:N	24:BC:174:LEU:CD1	2.82	0.43
24:BC:77:VAL:HG22	24:BC:78:VAL:N	2.34	0.43
25:BD:39:ASP:CG	25:BD:40:LEU:N	2.71	0.43
26:BE:32:VAL:HG21	33:BL:6:LEU:HD13	2.01	0.43
26:BE:88:ARG:HB3	26:BE:89:PRO:HD2	2.01	0.43
29:BH:41:LYS:HA	29:BH:44:ILE:HG12	2.01	0.43
29:BH:94:ILE:CD1	29:BH:98:ASP:HB3	2.48	0.43
30:BI:108:GLU:OE2	30:BI:109:ILE:CG1	2.67	0.43
30:BI:67:PHE:N	30:BI:67:PHE:CD2	2.86	0.43
31:BJ:93:ILE:CD1	31:BJ:100:VAL:HG21	2.49	0.43
36:BO:107:ALA:O	36:BO:111:ARG:HG3	2.17	0.43
22:BA:141:G:N1	41:BT:1:MET:CE	2.82	0.43
46:BY:54:LYS:HA	46:BY:57:LEU:HD23	2.00	0.43
1:CA:1032:G:H2'	1:CA:1032:G:N3	2.34	0.43
1:CA:1141:C:HO2'	1:CA:1142:G:C5'	2.30	0.43
1:CA:947:G:N2	1:CA:1235:U:O2	2.52	0.43
1:CA:1255:G:C6	1:CA:1279:G:C5	3.06	0.43
1:CA:1424:U:H2'	1:CA:1425:U:O4'	2.17	0.43
1:CA:1459:G:H2'	1:CA:1460:C:O4'	2.18	0.43
1:CA:635:A:C5	1:CA:636:U:C4	3.07	0.43
1:CA:678:U:H2'	1:CA:679:C:O4'	2.19	0.43
1:CA:790:A:N6	1:CA:791:G:C6	2.87	0.43
2:CB:141:LEU:O	2:CB:142:GLU:C	2.57	0.43
2:CB:35:ARG:O	2:CB:38:VAL:HG12	2.18	0.43
4:CD:192:SER:HB2	4:CD:195:ILE:HG12	2.01	0.43
9:CI:24:GLY:N	9:CI:61:LEU:HA	2.34	0.43
1:CA:1126:U:O4	10:CJ:73:LEU:CD1	2.66	0.43
12:CL:74:LEU:HD11	12:CL:80:ILE:HG21	2.01	0.43
16:CP:52:LEU:HD22	16:CP:57:ILE:HD11	2.01	0.43
18:CR:25:ASP:C	18:CR:27:ALA:N	2.71	0.43
20:CT:33:LYS:O	20:CT:36:TYR:CE2	2.71	0.43
50:D2:31:LEU:CD2	50:D2:42:LEU:HB3	2.48	0.43
22:DA:1203:U:O4	22:DA:1204:A:C6	2.72	0.43
22:DA:1370:C:H2'	22:DA:1371:G:C8	2.54	0.43
22:DA:186:G:C2	22:DA:211:C:C2	3.06	0.43
22:DA:1838:C:C6	22:DA:1899:A:C6	3.07	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:208:C:H2'	22:DA:209:C:C6	2.53	0.43
22:DA:2415:G:C5	22:DA:2416:C:C5	3.07	0.43
22:DA:2749:A:C8	22:DA:2750:A:H2'	2.52	0.43
22:DA:2823:A:C5	22:DA:2824:C:C5	3.06	0.43
22:DA:2720:U:C6	22:DA:2872:A:C6	3.07	0.43
22:DA:605:G:C5	22:DA:606:U:C5	3.07	0.43
22:DA:605:G:C6	22:DA:606:U:C4	3.07	0.43
22:DA:616:A:H2'	22:DA:616:A:N3	2.33	0.43
22:DA:661:A:H1'	33:DL:12:SER:O	2.17	0.43
22:DA:830:G:C4	22:DA:2448:A:C5	3.06	0.43
22:DA:870:U:OP1	34:DM:6:ARG:CD	2.66	0.43
23:DB:71:C:C2	23:DB:106:G:N2	2.86	0.43
23:DB:94:A:H2'	23:DB:95:U:O4'	2.18	0.43
24:DC:69:ARG:NH2	24:DC:116:ILE:HD11	2.33	0.43
24:DC:147:LYS:HB2	24:DC:150:LYS:CB	2.49	0.43
24:DC:221:ARG:NH2	57:DC:306:HOH:O	2.51	0.43
25:DD:167:ASN:O	25:DD:168:GLU:HB3	2.18	0.43
25:DD:193:VAL:HB	25:DD:194:PRO:CD	2.49	0.43
27:DF:40:VAL:HG13	27:DF:41:GLY:N	2.34	0.43
30:DI:67:PHE:CD2	30:DI:67:PHE:N	2.86	0.43
32:DK:92:GLU:N	32:DK:92:GLU:OE2	2.49	0.43
37:DP:100:LEU:HD22	37:DP:108:ALA:HB1	2.00	0.43
22:DA:1248:G:C5	38:DQ:3:ARG:HB2	2.53	0.43
40:DS:33:LEU:CD2	40:DS:52:GLU:HG3	2.48	0.43
1:AA:1158:C:N3	1:AA:1160:G:N7	2.67	0.43
1:AA:1176:A:H3'	1:AA:1177:G:C8	2.54	0.43
1:AA:130:A:N1	1:AA:233:C:O2'	2.42	0.43
1:AA:39:G:N3	1:AA:40:C:C6	2.87	0.43
1:AA:457:G:H5'	1:AA:458:U:OP2	2.18	0.43
1:AA:474:G:C5	1:AA:475:C:C5	3.06	0.43
1:AA:692:U:O2	1:AA:694:A:C8	2.70	0.43
1:AA:810:C:H2'	1:AA:810:C:O2	2.18	0.43
1:AA:849:G:C5	1:AA:850:U:C4	3.06	0.43
1:AA:927:G:N1	1:AA:1391:U:C2	2.86	0.43
2:AB:119:THR:O	2:AB:120:GLN:HB2	2.18	0.43
2:AB:83:ALA:O	2:AB:86:SER:OG	2.35	0.43
1:AA:1109:C:P	3:AC:176:HIS:CE1	3.12	0.43
3:AC:203:PHE:CE1	3:AC:205:GLY:O	2.72	0.43
4:AD:161:LEU:HD22	4:AD:161:LEU:N	2.34	0.43
4:AD:3:ARG:NH2	4:AD:115:ARG:HD3	2.33	0.43
5:AE:156:LYS:HB3	8:AH:71:VAL:HG13	2.01	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1081:A:H5'	5:AE:23:LYS:HG3	2.01	0.43
8:AH:21:ASN:HA	8:AH:65:TYR:CE1	2.53	0.43
9:AI:30:ILE:O	9:AI:33:ARG:N	2.52	0.43
12:AL:38:TYR:O	12:AL:39:THR:HG22	2.18	0.43
49:B1:29:THR:C	49:B1:31:PRO:CD	2.85	0.43
22:BA:1086:A:O2'	22:BA:1087:G:N7	2.49	0.43
22:BA:1496:A:N3	22:BA:1577:C:O2'	2.46	0.43
22:BA:1607:C:N4	22:BA:1622:G:C5	2.86	0.43
22:BA:1712:U:C4	22:BA:1713:A:C5	3.07	0.43
22:BA:1867:G:C2'	22:BA:1868:C:H5'	2.49	0.43
22:BA:191:A:H2'	22:BA:192:C:C6	2.53	0.43
22:BA:1923:U:H2'	22:BA:1923:U:O2	2.17	0.43
22:BA:2078:C:O2'	22:BA:2079:U:H5'	2.18	0.43
22:BA:2117:A:N1	22:BA:2170:A:N1	2.66	0.43
22:BA:2190:G:N2	22:BA:2191:A:H1'	2.33	0.43
22:BA:2360:G:H4'	33:BL:61:LEU:HD21	2.00	0.43
22:BA:417:C:H2'	22:BA:418:C:H6	1.82	0.43
23:BB:90:C:H5'	34:BM:18:ARG:HG3	2.00	0.43
24:BC:30:PHE:CZ	24:BC:32:PRO:HG2	2.53	0.43
22:BA:773:U:O2'	24:BC:48:ARG:HD3	2.19	0.43
25:BD:13:ARG:HD3	25:BD:21:SER:OG	2.19	0.43
26:BE:59:PRO:HD3	26:BE:71:GLY:O	2.19	0.43
27:BF:158:THR:CG2	27:BF:160:ALA:HB3	2.48	0.43
27:BF:64:LYS:HA	27:BF:65:PRO:HD3	1.90	0.43
28:BG:38:ASN:O	28:BG:39:ASP:HB2	2.19	0.43
29:BH:103:VAL:O	29:BH:108:VAL:O	2.37	0.43
33:BL:68:SER:HB3	33:BL:71:ALA:CB	2.49	0.43
33:BL:81:ASP:O	33:BL:82:LEU:HB3	2.18	0.43
33:BL:82:LEU:C	33:BL:82:LEU:HD23	2.38	0.43
41:BT:29:THR:OG1	41:BT:86:THR:HG22	2.19	0.43
41:BT:89:GLU:O	41:BT:91:GLN:N	2.52	0.43
42:BU:54:GLN:N	42:BU:55:PRO:CD	2.81	0.43
45:BX:74:ARG:NH2	45:BX:76:GLU:HG3	2.33	0.43
1:CA:104:G:C2	1:CA:105:G:C8	3.06	0.43
1:CA:1306:A:H1'	1:CA:1332:A:N7	2.34	0.43
1:CA:129:A:H1'	1:CA:130:A:C8	2.54	0.43
1:CA:1316:G:N2	1:CA:1318:A:H3'	2.33	0.43
1:CA:1323:G:O2'	1:CA:1362:A:N3	2.40	0.43
1:CA:258:G:H2'	1:CA:259:G:O4'	2.18	0.43
1:CA:38:G:N2	1:CA:397:A:C4	2.86	0.43
1:CA:216:U:C5'	1:CA:464:U:H4'	2.47	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:632:U:H5''	1:CA:633:G:C8	2.54	0.43
1:CA:671:G:C6	1:CA:672:U:N3	2.86	0.43
1:CA:794:A:H2'	1:CA:795:C:C6	2.52	0.43
2:CB:68:LEU:HG	2:CB:154:MET:HE1	2.01	0.43
2:CB:87:CYS:SG	2:CB:89:GLN:OE1	2.76	0.43
4:CD:138:SER:HB3	4:CD:139:PRO:CD	2.48	0.43
5:CE:133:PRO:HG2	5:CE:134:ILE:HD12	2.00	0.43
7:CG:42:ILE:CG2	7:CG:116:MET:HG3	2.49	0.43
7:CG:95:ARG:O	7:CG:99:LEU:HG	2.19	0.43
10:CJ:8:ILE:CD1	10:CJ:25:ILE:HD11	2.48	0.43
22:DA:1208:C:N4	22:DA:1209:U:O4	2.52	0.43
22:DA:1277:G:H5'	35:DN:20:MET:HE1	1.99	0.43
22:DA:1365:A:H3'	22:DA:1366:A:C8	2.54	0.43
22:DA:1439:A:C2	22:DA:1553:A:C4	3.06	0.43
22:DA:1594:U:H2'	22:DA:1595:C:C6	2.53	0.43
22:DA:1802:A:N1	22:DA:1803:A:C2	2.86	0.43
22:DA:1803:A:N1	22:DA:1822:C:O2'	2.49	0.43
22:DA:1851:U:H2'	22:DA:1852:U:O4'	2.19	0.43
22:DA:1989:G:H2'	22:DA:1990:C:H5'	2.00	0.43
22:DA:2057:G:H2'	22:DA:2058:A:O4'	2.19	0.43
22:DA:2201:G:C4	22:DA:2202:U:C5	3.06	0.43
22:DA:2335:A:N6	22:DA:2337:G:H1'	2.34	0.43
22:DA:2409:G:H2'	22:DA:2410:G:O4'	2.17	0.43
22:DA:2547:A:C8	22:DA:2566:A:C8	3.06	0.43
22:DA:485:C:C2	22:DA:496:G:C2	3.07	0.43
22:DA:586:A:C8	22:DA:586:A:OP2	2.72	0.43
22:DA:621:A:OP2	33:DL:99:ASN:ND2	2.51	0.43
23:DB:34:A:N6	23:DB:44:G:H1'	2.33	0.43
22:DA:1829:A:HO2'	24:DC:15:HIS:CD2	2.36	0.43
24:DC:183:LYS:O	24:DC:184:VAL:HG23	2.18	0.43
25:DD:28:GLU:HA	25:DD:185:ASN:O	2.19	0.43
26:DE:170:ARG:NH1	26:DE:176:ASP:OD1	2.52	0.43
22:DA:443:A:C8	26:DE:40:ARG:HD3	2.54	0.43
27:DF:31:VAL:O	27:DF:31:VAL:HG13	2.19	0.43
28:DG:91:GLY:O	28:DG:94:TYR:CD1	2.72	0.43
31:DJ:106:LYS:HD2	31:DJ:119:PHE:CZ	2.54	0.43
32:DK:10:VAL:HB	32:DK:16:ALA:O	2.19	0.43
36:DO:49:VAL:HG12	36:DO:50:ALA:N	2.33	0.43
37:DP:79:PRO:O	37:DP:80:VAL:C	2.57	0.43
39:DR:68:ARG:HD3	39:DR:92:TRP:CE2	2.54	0.43
41:DT:67:VAL:CG1	41:DT:68:LYS:N	2.80	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DU:3:ALA:O	42:DU:6:ARG:NH1	2.52	0.43
47:DZ:13:ALA:HB2	47:DZ:24:LEU:HD12	1.99	0.43
1:AA:1173:U:H2'	1:AA:1174:G:C8	2.54	0.43
1:AA:1492:A:OP1	12:AL:44:LYS:CA	2.66	0.43
1:AA:202:G:O2'	1:AA:468:A:C8	2.67	0.43
1:AA:607:A:C6	1:AA:608:A:C6	3.06	0.43
1:AA:686:U:O4	1:AA:703:G:O2'	2.30	0.43
1:AA:895:G:C5	1:AA:896:C:C5	3.07	0.43
1:AA:949:A:C2'	1:AA:950:U:H5'	2.48	0.43
1:AA:986:U:C2	1:AA:987:G:C8	3.07	0.43
2:AB:57:LEU:HD11	2:AB:221:VAL:CG2	2.49	0.43
9:AI:6:TYR:CB	9:AI:89:GLU:OE2	2.67	0.43
10:AJ:65:TYR:HH	14:AN:85:ARG:HD2	1.83	0.43
14:AN:84:VAL:HG12	14:AN:85:ARG:N	2.33	0.43
15:AO:87:LEU:CD2	15:AO:87:LEU:N	2.81	0.43
1:AA:264:C:O2'	17:AQ:66:PRO:O	2.25	0.43
19:AS:40:ILE:HG13	19:AS:71:LEU:HD22	2.00	0.43
49:B1:23:THR:OG1	49:B1:24:THR:N	2.51	0.43
49:B1:17:THR:CG2	49:B1:43:VAL:HG13	2.48	0.43
22:BA:1075:C:H2'	22:BA:1076:C:N1	2.34	0.43
22:BA:1469:A:H2'	22:BA:1470:A:C8	2.54	0.43
22:BA:1499:C:C4	22:BA:1500:G:N7	2.87	0.43
22:BA:1587:G:C5	22:BA:1588:G:N7	2.87	0.43
22:BA:2006:C:O2'	22:BA:2823:A:O2'	2.21	0.43
22:BA:2201:G:C4	22:BA:2223:G:N2	2.87	0.43
22:BA:2555:U:H5''	22:BA:2556:C:OP2	2.19	0.43
22:BA:2598:A:N7	22:BA:2599:G:H1'	2.34	0.43
22:BA:2607:G:H2'	22:BA:2608:G:O4'	2.17	0.43
22:BA:2847:U:C2'	22:BA:2848:G:H5'	2.49	0.43
22:BA:820:A:H2'	22:BA:821:A:O4'	2.17	0.43
22:BA:832:U:H5'	33:BL:38:GLN:OE1	2.19	0.43
23:BB:22:U:H2'	23:BB:23:G:C8	2.54	0.43
24:BC:76:ALA:HB2	24:BC:96:TYR:CG	2.54	0.43
27:BF:158:THR:HG22	27:BF:160:ALA:H	1.83	0.43
36:BO:12:THR:O	36:BO:16:ARG:HG3	2.19	0.43
40:BS:42:LYS:O	40:BS:42:LYS:HG2	2.18	0.43
41:BT:47:VAL:HG12	41:BT:55:VAL:CG2	2.48	0.43
43:BV:40:ILE:HG21	43:BV:42:LEU:HD21	1.99	0.43
43:BV:83:LYS:O	43:BV:85:LYS:N	2.52	0.43
46:BY:49:ASP:O	46:BY:52:ARG:HB2	2.19	0.43
1:CA:1006:G:OP1	1:CA:1038:C:C5'	2.66	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:110:C:N4	1:CA:111:G:C6	2.86	0.43
1:CA:1151:A:C2	1:CA:1152:A:C4	3.07	0.43
1:CA:1359:C:H2'	1:CA:1361:G:OP2	2.18	0.43
1:CA:924:C:O2'	1:CA:1502:A:N1	2.44	0.43
1:CA:68:G:O4'	1:CA:171:A:H1'	2.19	0.43
1:CA:322:C:O2	1:CA:332:G:N2	2.43	0.43
1:CA:538:G:H2'	1:CA:539:A:O4'	2.18	0.43
1:CA:643:C:C5'	8:CH:32:LEU:CD2	2.97	0.43
1:CA:963:G:C2	1:CA:973:G:C6	3.06	0.43
2:CB:16:PHE:CE1	2:CB:18:HIS:CE1	3.06	0.43
3:CC:111:LEU:CD2	3:CC:111:LEU:N	2.82	0.43
6:CF:52:ASN:O	6:CF:53:LYS:HB2	2.19	0.43
9:CI:25:ASN:O	9:CI:27:LYS:HG2	2.18	0.43
11:CK:18:ASP:CB	11:CK:81:ASN:OD1	2.66	0.43
12:CL:14:ARG:NH1	12:CL:15:LYS:HG3	2.33	0.43
3:CC:34:ASP:CG	14:CN:65:ARG:HG2	2.39	0.43
21:CU:39:GLU:HA	21:CU:42:THR:OG1	2.19	0.43
50:D2:34:ARG:HD3	50:D2:42:LEU:O	2.18	0.43
22:DA:1060:U:OP2	30:DI:75:PRO:HA	2.18	0.43
22:DA:1063:G:O4'	30:DI:77:ALA:HB1	2.17	0.43
22:DA:1356:G:C2	22:DA:1376:C:O2	2.72	0.43
22:DA:1671:U:O2'	22:DA:1673:G:N7	2.35	0.43
22:DA:1717:A:H2'	22:DA:1718:G:O4'	2.19	0.43
22:DA:1805:A:N3	22:DA:1813:G:N2	2.66	0.43
22:DA:2320:U:H5'	22:DA:2321:U:C5	2.53	0.43
22:DA:2408:U:H2'	22:DA:2409:G:C8	2.54	0.43
22:DA:2815:C:HO2'	48:D0:41:HIS:CE1	2.36	0.43
22:DA:108:G:H1'	22:DA:347:A:N3	2.33	0.43
22:DA:41:C:O2	22:DA:438:G:N2	2.48	0.43
22:DA:55:G:H2'	22:DA:55:G:N3	2.34	0.43
22:DA:668:A:C2	22:DA:670:A:C6	3.07	0.43
22:DA:772:C:C2	22:DA:773:U:C6	3.07	0.43
22:DA:828:U:H2'	22:DA:829:A:C8	2.54	0.43
22:DA:963:U:H2'	22:DA:964:C:C6	2.53	0.43
24:DC:141:VAL:HG13	24:DC:191:THR:O	2.18	0.43
24:DC:126:PRO:HA	24:DC:192:LEU:O	2.19	0.43
24:DC:67:PHE:CE2	24:DC:156:ARG:CZ	3.02	0.43
27:DF:29:PRO:CB	27:DF:169:LEU:HD22	2.49	0.43
30:DI:8:TYR:CB	30:DI:59:ILE:H	2.32	0.43
31:DJ:114:LEU:O	31:DJ:118:MET:HG2	2.18	0.43
22:DA:2683:C:OP1	37:DP:56:HIS:HB3	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:DV:41:GLU:C	43:DV:42:LEU:HD23	2.39	0.43
1:AA:1014:A:C2	19:AS:34:TRP:CE2	3.07	0.43
1:AA:1501:C:C4	1:AA:1504:G:C5	3.07	0.43
1:AA:41:G:H2'	1:AA:42:G:C8	2.54	0.43
1:AA:482:A:H2'	1:AA:483:C:O4'	2.19	0.43
1:AA:704:A:N6	1:AA:705:G:C6	2.86	0.43
1:AA:946:A:C6	1:AA:947:G:C6	3.06	0.43
5:AE:74:VAL:HG23	5:AE:76:LEU:HD12	1.99	0.43
7:AG:67:GLU:HA	7:AG:70:ARG:HE	1.84	0.43
8:AH:78:VAL:HG21	8:AH:128:TYR:CD1	2.53	0.43
12:AL:5:ASN:HB3	12:AL:9:ARG:NH1	2.34	0.43
16:AP:67:ILE:CG2	16:AP:71:VAL:HG12	2.49	0.43
19:AS:58:VAL:CG1	19:AS:75:ALA:CB	2.97	0.43
20:AT:9:LYS:O	20:AT:12:ILE:HG12	2.19	0.43
22:BA:1115:G:C2	22:BA:1116:G:C5	3.07	0.43
22:BA:1250:G:OP2	33:BL:21:ARG:NH2	2.52	0.43
22:BA:1467:U:C5	22:BA:1546:G:N3	2.87	0.43
22:BA:1603:A:H5''	57:BA:3414:HOH:O	2.18	0.43
22:BA:1717:A:C2	22:BA:1718:G:H1'	2.54	0.43
22:BA:1731:G:C4	22:BA:1733:G:C8	3.07	0.43
22:BA:528:A:C2	22:BA:2043:C:C5'	2.97	0.43
22:BA:2190:G:C6	22:BA:2191:A:C4	3.06	0.43
22:BA:2633:G:H2'	22:BA:2634:A:O4'	2.19	0.43
22:BA:2650:U:C2'	22:BA:2651:C:H5'	2.49	0.43
22:BA:829:A:N7	22:BA:2247:A:O2'	2.49	0.43
22:BA:912:C:C2'	22:BA:913:U:H5'	2.48	0.43
23:BB:91:C:H2'	23:BB:92:C:H6	1.84	0.43
24:BC:157:SER:O	24:BC:158:ALA:C	2.56	0.43
29:BH:45:GLU:HA	29:BH:48:GLU:HB2	2.01	0.43
30:BI:99:GLY:C	30:BI:100:LYS:HG2	2.39	0.43
30:BI:103:ARG:HE	30:BI:104:ALA:N	2.17	0.43
22:BA:538:A:H4'	31:BJ:7:LYS:HG2	2.01	0.43
34:BM:57:VAL:O	34:BM:58:LYS:HG3	2.19	0.43
40:BS:69:LEU:HG	40:BS:107:VAL:HG22	2.01	0.43
1:CA:1124:G:C2'	1:CA:1145:A:H62	2.32	0.43
1:CA:1375:A:C5	1:CA:1376:U:C5	3.06	0.43
1:CA:1412:C:O2	1:CA:1413:A:C8	2.72	0.43
1:CA:280:C:H4'	1:CA:281:G:OP2	2.19	0.43
1:CA:32:A:C2	1:CA:33:A:N7	2.86	0.43
1:CA:794:A:C5	1:CA:795:C:C4	3.06	0.43
1:CA:860:A:N6	1:CA:861:G:C2	2.86	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:996:A:H2'	1:CA:997:U:C5	2.54	0.43
3:CC:22:TRP:CH2	14:CN:94:PRO:HG2	2.53	0.43
7:CG:49:THR:O	7:CG:53:ARG:HD3	2.18	0.43
14:CN:54:ASP:OD1	14:CN:59:ARG:NH1	2.52	0.43
17:CQ:14:SER:HB3	17:CQ:22:VAL:HG12	2.01	0.43
19:CS:16:LEU:O	19:CS:20:GLU:HG2	2.17	0.43
22:DA:2418:A:OP1	51:D3:45:ARG:NH1	2.52	0.43
22:DA:819:A:C8	22:DA:1188:U:O4	2.71	0.43
22:DA:1207:C:O2	22:DA:1239:G:N2	2.42	0.43
22:DA:1219:U:H2'	22:DA:1220:G:C8	2.54	0.43
22:DA:149:A:C2'	22:DA:150:U:H5'	2.49	0.43
22:DA:1668:A:H4'	22:DA:1669:A:O5'	2.18	0.43
22:DA:1670:C:C5	22:DA:1671:U:C4	3.07	0.43
22:DA:1722:A:C6	22:DA:1739:A:C8	3.06	0.43
22:DA:2185:U:H2'	22:DA:2186:G:C8	2.54	0.43
22:DA:2350:C:H2'	22:DA:2351:G:O4'	2.18	0.43
22:DA:2282:G:H1'	22:DA:2390:U:C4	2.54	0.43
22:DA:2786:U:H2'	22:DA:2787:C:C6	2.54	0.43
22:DA:2868:A:C6	22:DA:2869:G:C6	3.06	0.43
22:DA:2898:U:H2'	22:DA:2899:A:C8	2.54	0.43
22:DA:565:C:H2'	22:DA:566:U:O4'	2.19	0.43
22:DA:566:U:C5	39:DR:80:ARG:HD3	2.54	0.43
22:DA:618:G:C6	22:DA:619:G:C4	3.07	0.43
22:DA:77:G:C2	22:DA:78:U:C2	3.06	0.43
24:DC:226:ASN:HB3	24:DC:227:PRO:CD	2.49	0.43
25:DD:178:VAL:HG12	25:DD:179:ARG:HG3	2.01	0.43
26:DE:52:VAL:HG21	26:DE:81:GLY:CA	2.48	0.43
27:DF:161:LYS:HB2	27:DF:165:GLU:OE1	2.19	0.43
29:DH:62:LEU:HD13	29:DH:63:ALA:N	2.34	0.43
22:DA:632:A:H4'	33:DL:68:SER:HB2	2.00	0.43
39:DR:27:ILE:HG13	39:DR:33:VAL:HG11	2.01	0.43
41:DT:11:LEU:CD2	41:DT:34:VAL:HG12	2.49	0.43
1:AA:1049:U:H4'	1:AA:1050:G:OP2	2.18	0.43
1:AA:1202:U:N3	1:AA:1203:C:C6	2.86	0.43
1:AA:1269:A:H2	1:AA:1312:G:N3	2.16	0.43
1:AA:1326:U:H2'	1:AA:1327:C:C6	2.54	0.43
1:AA:1405:G:H1'	1:AA:1519:A:O4'	2.18	0.43
1:AA:425:G:H2'	1:AA:426:U:O4'	2.19	0.43
1:AA:539:A:N6	1:AA:540:G:O6	2.52	0.43
1:AA:722:G:C2'	1:AA:723:U:OP2	2.67	0.43
1:AA:946:A:H2'	1:AA:947:G:C8	2.54	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:960:U:O2'	1:AA:1223:C:C5'	2.67	0.43
2:AB:164:ILE:HD12	2:AB:210:VAL:CG1	2.49	0.43
2:AB:50:PHE:CE2	2:AB:51:ASN:OD1	2.72	0.43
4:AD:26:ARG:NH1	4:AD:31:LYS:HB3	2.34	0.43
9:AI:84:THR:HG21	9:AI:103:PHE:HB2	2.00	0.43
11:AK:23:ILE:HD12	11:AK:23:ILE:C	2.39	0.43
12:AL:107:VAL:CG2	12:AL:117:TYR:HB3	2.48	0.43
17:AQ:9:GLN:HA	17:AQ:59:VAL:O	2.19	0.43
19:AS:23:VAL:HG12	19:AS:24:GLU:N	2.34	0.43
22:BA:1098:A:N7	22:BA:1099:G:C6	2.86	0.43
22:BA:996:A:C6	22:BA:1160:G:C2	3.07	0.43
22:BA:1179:G:C8	22:BA:1180:U:O4'	2.72	0.43
22:BA:1208:C:C4	22:BA:1209:U:C4	3.07	0.43
22:BA:1248:G:O6	26:BE:46:GLN:NE2	2.48	0.43
22:BA:1286:A:N6	22:BA:1329:U:C2	2.87	0.43
22:BA:2185:U:C2'	22:BA:2186:G:H5'	2.49	0.43
22:BA:2187:U:H2'	22:BA:2188:U:O4'	2.19	0.43
22:BA:2323:G:C2'	22:BA:2324:U:H5'	2.49	0.43
22:BA:2871:U:OP1	35:BN:69:ARG:NH1	2.50	0.43
23:BB:112:G:H2'	23:BB:113:C:H6	1.84	0.43
23:BB:43:C:H5''	23:BB:44:G:OP2	2.19	0.43
25:BD:149:ASN:OD1	25:BD:150:GLN:N	2.52	0.43
28:BG:174:ALA:O	28:BG:175:LYS:HB3	2.18	0.43
28:BG:52:PHE:CZ	28:BG:72:LEU:HD22	2.54	0.43
36:BO:55:GLU:OE1	36:BO:81:ARG:NH1	2.50	0.43
36:BO:94:ARG:HD2	36:BO:97:PHE:O	2.19	0.43
43:BV:35:GLU:HB2	43:BV:93:ARG:CZ	2.49	0.43
46:BY:6:LEU:HD13	46:BY:56:LEU:HD22	2.00	0.43
1:CA:1244:G:C2	1:CA:1294:G:C2	3.07	0.43
1:CA:1362:A:OP1	1:CA:1362:A:H4'	2.19	0.43
1:CA:1402:C:H2'	1:CA:1403:C:O4'	2.19	0.43
1:CA:1435:G:H2'	1:CA:1436:U:C6	2.54	0.43
1:CA:1520:C:H2'	1:CA:1521:C:C6	2.54	0.43
1:CA:206:C:H2'	1:CA:207:C:C4'	2.49	0.43
1:CA:439:U:H4'	4:CD:121:LYS:HE3	2.01	0.43
1:CA:84:U:O2'	1:CA:85:U:H5'	2.18	0.43
2:CB:70:VAL:O	2:CB:164:ILE:HG22	2.18	0.43
2:CB:164:ILE:O	2:CB:186:ILE:HG23	2.19	0.43
2:CB:21:ARG:HH12	2:CB:39:HIS:CD2	2.37	0.43
2:CB:32:PHE:N	2:CB:40:ILE:O	2.46	0.43
7:CG:33:ASP:HB3	7:CG:35:LYS:HE3	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:CI:54:LEU:C	9:CI:55:VAL:HG13	2.39	0.43
15:CO:46:HIS:O	15:CO:48:LYS:N	2.41	0.43
50:D2:9:VAL:HG12	50:D2:13:ASN:OD1	2.18	0.43
22:DA:1131:G:N7	22:DA:2025:C:H4'	2.34	0.43
22:DA:1358:G:C2'	22:DA:1359:A:OP2	2.67	0.43
22:DA:1506:U:H2'	22:DA:1507:C:C6	2.54	0.43
22:DA:170:U:C2	22:DA:171:U:C6	3.07	0.43
22:DA:1829:A:C8	22:DA:1830:C:C5	3.07	0.43
22:DA:1914:C:O2	22:DA:1914:C:O4'	2.35	0.43
22:DA:980:A:N6	22:DA:2027:G:O2'	2.52	0.43
22:DA:2143:C:H2'	22:DA:2144:G:O4'	2.19	0.43
22:DA:2215:C:O2'	22:DA:2216:G:H5'	2.19	0.43
22:DA:2314:A:N1	22:DA:2315:G:C5	2.87	0.43
22:DA:2379:G:H2'	22:DA:2380:C:C6	2.54	0.43
22:DA:2388:A:H5'	22:DA:2389:G:OP2	2.19	0.43
22:DA:2473:U:O4	28:DG:176:LYS:NZ	2.47	0.43
22:DA:2655:G:O2'	22:DA:2656:U:OP1	2.30	0.43
22:DA:2648:G:C4	22:DA:2673:G:C2	3.06	0.43
22:DA:2677:G:C4	22:DA:2731:G:N2	2.87	0.43
22:DA:2736:A:C2	22:DA:2769:U:O2	2.71	0.43
22:DA:2740:A:C6	22:DA:2764:A:C8	3.07	0.43
22:DA:729:G:C4	22:DA:1775:U:O2	2.72	0.43
22:DA:815:C:H2'	22:DA:816:C:C6	2.54	0.43
22:DA:8:C:C2'	22:DA:9:G:H5'	2.49	0.43
22:DA:973:A:OP2	39:DR:81:LYS:HD2	2.19	0.43
23:DB:2:G:H8	23:DB:2:G:P	2.41	0.43
25:DD:56:LYS:C	25:DD:58:ASN:N	2.72	0.43
27:DF:36:LEU:HD23	27:DF:57:LEU:HD22	2.01	0.43
29:DH:82:SER:O	29:DH:83:LYS:C	2.57	0.43
30:DI:24:VAL:CG1	30:DI:28:LEU:HB3	2.49	0.43
30:DI:28:LEU:HD11	30:DI:35:ILE:CD1	2.49	0.43
30:DI:65:ARG:HG3	30:DI:66:SER:N	2.32	0.43
30:DI:8:TYR:HB2	30:DI:59:ILE:H	1.84	0.43
34:DM:107:GLY:C	34:DM:108:VAL:HG22	2.39	0.43
22:DA:2873:A:O4'	35:DN:6:SER:HB2	2.18	0.43
37:DP:23:GLY:O	37:DP:90:GLY:HA3	2.19	0.43
39:DR:83:TYR:C	39:DR:83:TYR:CD1	2.92	0.43
45:DX:25:THR:O	45:DX:27:ARG:N	2.52	0.43
1:AA:1150:A:H2'	1:AA:1151:A:H5'	2.01	0.43
1:AA:1225:A:H2'	1:AA:1226:C:C6	2.53	0.43
1:AA:1368:A:OP2	9:AI:114:LYS:CD	2.66	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:639:G:N3	1:AA:639:G:H2'	2.33	0.43
1:AA:82:G:O6	1:AA:87:C:N4	2.52	0.43
1:AA:947:G:H2'	1:AA:948:C:C6	2.54	0.43
2:AB:47:VAL:C	2:AB:49:MET:H	2.22	0.43
6:AF:38:ARG:CG	6:AF:39:LEU:N	2.82	0.43
8:AH:126:ILE:HG22	8:AH:127:CYS:N	2.34	0.43
8:AH:30:SER:O	8:AH:31:LYS:C	2.58	0.43
1:AA:591:U:OP2	8:AH:31:LYS:HD2	2.18	0.43
14:AN:13:ARG:O	14:AN:17:ALA:HB2	2.19	0.43
14:AN:41:ARG:HB2	14:AN:42:TRP:CZ3	2.54	0.43
15:AO:35:GLN:HB3	15:AO:59:MET:HE2	1.99	0.43
21:AU:18:ARG:HD2	21:AU:18:ARG:H	1.84	0.43
22:BA:100:U:H4'	22:BA:101:A:C5'	2.49	0.43
22:BA:1073:A:H2'	22:BA:1074:G:H5''	2.00	0.43
22:BA:108:G:C2'	22:BA:109:C:H5'	2.49	0.43
22:BA:1097:U:H3'	22:BA:1098:A:H4'	2.01	0.43
22:BA:111:A:N1	22:BA:112:U:C2	2.87	0.43
22:BA:1406:U:C2'	22:BA:1407:G:O5'	2.66	0.43
22:BA:1507:C:H2'	22:BA:1508:A:C4'	2.49	0.43
22:BA:1839:G:C2'	22:BA:1840:G:O5'	2.66	0.43
22:BA:18:U:O3'	38:BQ:23:GLY:HA2	2.18	0.43
22:BA:1972:G:C2	22:BA:1973:G:N7	2.86	0.43
22:BA:2192:U:H2'	22:BA:2193:G:C5'	2.43	0.43
22:BA:2258:C:O2'	22:BA:2426:A:H4'	2.19	0.43
22:BA:2356:U:O3'	44:BW:20:ARG:CD	2.67	0.43
22:BA:2564:A:C6	22:BA:2565:A:N1	2.87	0.43
22:BA:278:A:C6	22:BA:362:A:N7	2.87	0.43
22:BA:2838:G:C2'	22:BA:2839:G:H5'	2.48	0.43
22:BA:297:G:H2'	22:BA:298:G:O4'	2.19	0.43
22:BA:638:G:C5	22:BA:651:G:C2	3.07	0.43
22:BA:830:G:H4'	22:BA:831:G:OP2	2.19	0.43
24:BC:22:PRO:C	24:BC:24:LEU:H	2.23	0.43
28:BG:141:ILE:HD12	28:BG:142:GLY:N	2.34	0.43
31:BJ:30:THR:CG2	31:BJ:31:GLU:N	2.82	0.43
22:BA:2684:U:O4'	32:BK:70:ARG:NH2	2.51	0.43
22:BA:626:A:C2'	33:BL:78:ARG:NH1	2.77	0.43
33:BL:81:ASP:O	33:BL:83:ALA:N	2.43	0.43
36:BO:64:TYR:HB3	36:BO:67:ASN:ND2	2.34	0.43
39:BR:49:ILE:HG22	39:BR:53:PHE:C	2.38	0.43
1:CA:1262:C:N4	1:CA:1263:C:N4	2.67	0.43
1:CA:978:A:C6	1:CA:1318:A:N6	2.86	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:179:A:C5	1:CA:180:U:C4	3.06	0.43
1:CA:302:G:C6	1:CA:303:A:C5	3.07	0.43
1:CA:314:C:N4	1:CA:315:A:N6	2.66	0.43
1:CA:328:C:O2	1:CA:328:C:O2'	2.34	0.43
1:CA:320:A:C2	1:CA:334:C:N3	2.87	0.43
1:CA:363:A:OP1	12:CL:31:ARG:N	2.51	0.43
1:CA:484:G:N7	1:CA:486:U:C1'	2.82	0.43
1:CA:957:U:H4'	19:CS:79:THR:O	2.19	0.43
1:CA:992:U:O4	1:CA:1044:A:C8	2.72	0.43
1:CA:1074:G:O2'	2:CB:102:THR:HG23	2.18	0.43
3:CC:119:SER:O	3:CC:123:GLN:HG3	2.19	0.43
1:CA:1112:C:O2	3:CC:179:ARG:HG3	2.19	0.43
3:CC:25:ASN:O	3:CC:29:PHE:HB2	2.18	0.43
4:CD:9:LEU:HD22	4:CD:22:LYS:HD2	2.01	0.43
5:CE:154:ALA:O	5:CE:156:LYS:N	2.52	0.43
5:CE:20:ARG:NH2	5:CE:31:PHE:CZ	2.87	0.43
6:CF:37:HIS:O	6:CF:97:THR:HG23	2.19	0.43
9:CI:28:ILE:HB	9:CI:35:LEU:HB2	2.01	0.43
9:CI:49:ARG:C	9:CI:51:PRO:HD2	2.38	0.43
10:CJ:27:GLU:O	10:CJ:31:ARG:HB3	2.18	0.43
12:CL:44:LYS:HB3	12:CL:45:PRO:CD	2.48	0.43
13:CM:48:LEU:HD22	13:CM:53:ILE:HG13	2.01	0.43
13:CM:64:VAL:O	13:CM:69:LEU:HB2	2.18	0.43
14:CN:25:ALA:O	14:CN:28:LYS:HG2	2.19	0.43
14:CN:64:CYS:SG	14:CN:83:LYS:HG3	2.59	0.43
16:CP:6:LEU:CD1	16:CP:71:VAL:HG23	2.49	0.43
21:CU:34:ARG:HD3	21:CU:35:ARG:HB3	2.00	0.43
22:DA:2021:C:OP1	48:D0:9:THR:HG21	2.19	0.43
22:DA:1304:A:C6	22:DA:1305:C:N4	2.87	0.43
22:DA:1357:C:C2'	22:DA:1358:G:H5'	2.49	0.43
22:DA:1662:U:O2	22:DA:2687:U:H4'	2.19	0.43
22:DA:1765:U:O2'	22:DA:1766:G:H5'	2.19	0.43
22:DA:1884:G:O2'	22:DA:1885:A:OP2	2.34	0.43
22:DA:192:C:C4	22:DA:193:U:C2	3.07	0.43
22:DA:2332:C:H4'	22:DA:2336:A:H62	1.84	0.43
22:DA:2511:U:C4	22:DA:2512:C:C4	3.07	0.43
22:DA:290:U:N3	22:DA:291:G:N7	2.67	0.43
22:DA:303:G:C2	22:DA:315:G:C6	3.07	0.43
22:DA:232:G:N2	22:DA:420:C:OP1	2.51	0.43
22:DA:753:A:H2'	22:DA:754:U:C6	2.54	0.43
25:DD:122:VAL:HG21	25:DD:141:ARG:NH1	2.34	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DD:14:ILE:HG12	25:DD:24:VAL:CG2	2.49	0.43
27:DF:66:LEU:O	27:DF:87:CYS:HA	2.19	0.43
30:DI:91:GLY:O	30:DI:93:PRO:HD3	2.19	0.43
31:DJ:59:ALA:O	31:DJ:62:VAL:CG1	2.67	0.43
35:DN:38:LEU:N	35:DN:39:PRO:CD	2.82	0.43
40:DS:61:ASN:O	40:DS:62:ASP:OD1	2.37	0.43
42:DU:74:ASN:O	42:DU:75:ALA:HB3	2.18	0.43
45:DX:27:ARG:NE	45:DX:28:ARG:O	2.50	0.43
1:AA:1031:C:O2'	1:AA:1032:G:P	2.77	0.42
1:AA:1181:G:H4'	1:AA:1182:G:OP1	2.18	0.42
1:AA:1233:G:OP1	9:AI:126:GLN:HB3	2.19	0.42
1:AA:1310:G:O2'	1:AA:1311:A:H5'	2.18	0.42
1:AA:131:A:C2	1:AA:132:C:C4	3.07	0.42
1:AA:160:A:N6	1:AA:347:G:H1'	2.34	0.42
1:AA:448:A:C5	1:AA:487:A:C2	3.07	0.42
1:AA:670:G:H2'	1:AA:671:G:O5'	2.18	0.42
1:AA:83:C:H2'	1:AA:85:U:OP2	2.18	0.42
1:AA:958:A:C6	1:AA:959:A:N1	2.87	0.42
2:AB:147:SER:O	2:AB:148:LEU:CG	2.67	0.42
3:AC:110:GLU:HG2	3:AC:140:ASN:HB3	2.01	0.42
4:AD:157:ALA:O	4:AD:161:LEU:HD22	2.19	0.42
4:AD:167:LYS:O	4:AD:168:PRO:O	2.37	0.42
6:AF:71:ILE:HG23	6:AF:72:ASP:N	2.33	0.42
12:AL:67:ILE:HG21	12:AL:72:HIS:CD2	2.54	0.42
13:AM:80:LEU:HD21	13:AM:87:ARG:NE	2.34	0.42
15:AO:62:GLN:O	15:AO:63:ARG:C	2.57	0.42
19:AS:34:TRP:O	19:AS:36:ARG:N	2.52	0.42
20:AT:44:LYS:HD3	20:AT:87:ALA:HA	2.01	0.42
53:B5:208:THR:O	53:B5:209:PHE:CB	2.67	0.42
22:BA:1253:A:C8	57:BA:3337:HOH:O	2.72	0.42
22:BA:1515:A:H2'	22:BA:1516:G:O4'	2.19	0.42
22:BA:1535:A:H5'	22:BA:1536:C:C5	2.55	0.42
22:BA:164:C:H2'	22:BA:165:A:O4'	2.18	0.42
22:BA:2308:G:C6	22:BA:2311:A:N7	2.87	0.42
22:BA:2436:G:C2	22:BA:2437:G:C8	3.07	0.42
22:BA:2577:A:C2'	22:BA:2578:G:OP1	2.67	0.42
22:BA:263:G:H2'	22:BA:264:C:C5'	2.49	0.42
22:BA:2:G:H2'	22:BA:3:U:C6	2.54	0.42
22:BA:471:A:H5''	26:BE:79:ARG:NH2	2.34	0.42
22:BA:685:A:H1'	22:BA:688:U:O4	2.19	0.42
22:BA:846:U:HO2'	22:BA:847:U:P	2.39	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:BC:201:MET:HG3	24:BC:202:LEU:CD1	2.49	0.42
25:BD:119:ALA:HB2	25:BD:165:MET:HG2	2.00	0.42
26:BE:77:ILE:HG13	26:BE:77:ILE:O	2.19	0.42
29:BH:79:THR:CG2	29:BH:147:VAL:CG2	2.97	0.42
30:BI:39:CYS:O	30:BI:42:PHE:HB3	2.19	0.42
33:BL:82:LEU:C	33:BL:84:LYS:H	2.22	0.42
39:BR:51:VAL:CG2	39:BR:52:PRO:HD2	2.49	0.42
39:BR:74:ILE:HD13	39:BR:74:ILE:N	2.34	0.42
1:CA:108:G:C6	20:CT:10:ARG:HG2	2.54	0.42
1:CA:1134:G:C6	1:CA:1141:C:N4	2.87	0.42
1:CA:124:C:N4	1:CA:125:U:O4	2.52	0.42
1:CA:1317:C:H2'	1:CA:1318:A:O5'	2.19	0.42
1:CA:1537:U:C5	1:CA:1538:C:N4	2.87	0.42
1:CA:392:C:C2	1:CA:393:A:C8	3.07	0.42
1:CA:411:A:H4'	1:CA:412:A:O5'	2.18	0.42
1:CA:793:U:HO2'	1:CA:1516:G:C2'	2.29	0.42
1:CA:81:A:N1	1:CA:88:U:O4	2.52	0.42
2:CB:140:GLU:O	2:CB:141:LEU:C	2.56	0.42
4:CD:170:TRP:O	4:CD:183:LYS:HB2	2.19	0.42
4:CD:142:VAL:CG1	4:CD:181:THR:OG1	2.67	0.42
4:CD:90:LEU:CD2	4:CD:200:ILE:HD11	2.49	0.42
7:CG:51:ALA:HB2	7:CG:58:GLU:HA	2.00	0.42
10:CJ:17:LEU:HD21	10:CJ:96:VAL:HG22	2.00	0.42
14:CN:21:PHE:CD2	14:CN:25:ALA:HB2	2.54	0.42
17:CQ:21:ILE:HB	17:CQ:48:ASP:OD1	2.18	0.42
18:CR:33:ILE:CA	18:CR:40:VAL:HG23	2.47	0.42
21:CU:26:ALA:O	21:CU:27:GLY:C	2.56	0.42
52:D4:7:VAL:HG13	52:D4:38:GLY:CA	2.49	0.42
22:DA:1462:C:C2	22:DA:1463:C:C5	3.07	0.42
22:DA:158:U:O4	22:DA:159:G:C6	2.72	0.42
22:DA:324:A:C6	22:DA:325:G:C4	3.06	0.42
22:DA:109:C:H5'	22:DA:348:A:C4'	2.49	0.42
22:DA:447:A:O2'	22:DA:473:G:N7	2.40	0.42
22:DA:597:G:C6	22:DA:598:U:C2	3.07	0.42
22:DA:600:G:OP1	26:DE:24:ASN:ND2	2.48	0.42
22:DA:683:U:OP1	50:D2:26:ASN:CB	2.67	0.42
22:DA:779:U:OP1	24:DC:49:ILE:HG13	2.19	0.42
25:DD:109:VAL:CG1	25:DD:201:LEU:HD22	2.48	0.42
26:DE:131:THR:O	26:DE:135:ALA:HB2	2.19	0.42
27:DF:110:ARG:CZ	27:DF:110:ARG:HB3	2.49	0.42
22:DA:2311:A:H2	27:DF:79:ILE:CG2	2.31	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:DI:10:LYS:HB2	30:DI:56:PRO:HB2	2.01	0.42
39:DR:64:VAL:O	39:DR:65:ALA:HB2	2.19	0.42
41:DT:4:GLU:O	41:DT:8:LEU:N	2.51	0.42
43:DV:75:GLN:CB	43:DV:92:VAL:HG23	2.49	0.42
1:AA:1012:A:C2	1:AA:1018:G:N7	2.87	0.42
1:AA:1182:G:C3'	1:AA:1183:U:H5'	2.49	0.42
1:AA:1264:U:O2	1:AA:1272:G:C2	2.71	0.42
1:AA:1418:A:N6	1:AA:1482:G:O2'	2.46	0.42
1:AA:209:U:C4'	1:AA:210:C:OP2	2.64	0.42
1:AA:28:A:C6	1:AA:29:U:N3	2.87	0.42
1:AA:292:G:O2'	1:AA:608:A:N6	2.52	0.42
1:AA:760:G:C8	1:AA:761:G:C8	3.07	0.42
1:AA:812:G:OP1	1:AA:903:G:H1'	2.18	0.42
1:AA:959:A:N7	1:AA:960:U:C6	2.87	0.42
3:AC:141:ALA:O	3:AC:146:ALA:HB3	2.18	0.42
4:AD:188:ARG:O	4:AD:190:ASP:O	2.37	0.42
4:AD:76:TYR:O	4:AD:77:LYS:C	2.57	0.42
4:AD:97:ARG:HB3	4:AD:99:ASP:OD1	2.19	0.42
5:AE:115:LEU:HG	5:AE:120:VAL:HG21	2.01	0.42
5:AE:39:VAL:HG22	5:AE:67:ALA:HB1	2.00	0.42
8:AH:64:LYS:HB3	8:AH:71:VAL:HG21	2.01	0.42
1:AA:1359:C:P	14:AN:62:ASN:HD22	2.43	0.42
16:AP:53:ASP:OD1	16:AP:53:ASP:O	2.37	0.42
19:AS:37:ARG:O	19:AS:70:LYS:HD2	2.18	0.42
53:B5:66:PRO:O	53:B5:190:ILE:CB	2.67	0.42
22:BA:102:U:C4	46:BY:2:LYS:HD2	2.55	0.42
22:BA:1070:A:C2	22:BA:1097:U:O2'	2.68	0.42
22:BA:1140:C:OP2	31:BJ:68:LYS:NZ	2.45	0.42
22:BA:991:C:C2	22:BA:1185:G:N1	2.87	0.42
22:BA:1299:G:O2'	22:BA:1301:A:N7	2.50	0.42
22:BA:2190:G:C2'	22:BA:2191:A:H5'	2.49	0.42
22:BA:2298:A:N6	22:BA:2318:G:H1'	2.34	0.42
22:BA:2500:U:O2	22:BA:2504:U:C4	2.72	0.42
22:BA:2727:A:C6	22:BA:2728:U:O4	2.72	0.42
22:BA:418:C:H2'	22:BA:419:U:O4'	2.19	0.42
22:BA:511:U:O4	22:BA:512:G:N1	2.52	0.42
22:BA:734:A:C5	22:BA:735:A:C8	3.07	0.42
22:BA:866:A:N7	22:BA:914:G:C6	2.88	0.42
27:BF:105:THR:HG23	27:BF:106:ILE:HG12	2.01	0.42
27:BF:3:LYS:HB3	27:BF:101:GLU:OE1	2.19	0.42
30:BI:72:LYS:N	30:BI:72:LYS:CD	2.82	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BL:26:GLY:C	33:BL:27:LEU:HD23	2.40	0.42
33:BL:29:LYS:HB3	33:BL:30:THR:H	1.70	0.42
35:BN:77:ALA:O	35:BN:81:ASN:HB2	2.19	0.42
40:BS:28:LYS:O	40:BS:29:VAL:C	2.57	0.42
1:CA:1179:A:H2'	1:CA:1180:A:O4'	2.19	0.42
1:CA:1115:U:O2	1:CA:1186:G:C2	2.72	0.42
1:CA:959:A:C2	1:CA:1222:G:O4'	2.72	0.42
1:CA:954:G:C2	1:CA:1228:C:N3	2.87	0.42
1:CA:978:A:P	1:CA:1362:A:N6	2.92	0.42
1:CA:158:G:C6	1:CA:164:G:C5	3.07	0.42
1:CA:297:G:N2	1:CA:300:A:OP2	2.47	0.42
1:CA:405:U:OP2	4:CD:3:ARG:NH1	2.52	0.42
1:CA:466:A:C2	1:CA:468:A:N7	2.88	0.42
1:CA:519:C:C4	1:CA:520:A:C6	3.07	0.42
1:CA:542:G:C2	1:CA:543:U:C6	3.08	0.42
1:CA:552:U:N3	1:CA:553:A:N7	2.67	0.42
1:CA:671:G:C2	1:CA:672:U:C2	3.07	0.42
1:CA:6:G:H4'	1:CA:298:A:H4'	2.01	0.42
1:CA:866:C:C4	1:CA:867:G:H1'	2.54	0.42
2:CB:25:PRO:O	2:CB:28:LYS:HB2	2.19	0.42
3:CC:40:ARG:NH1	3:CC:55:ILE:HG13	2.34	0.42
6:CF:92:THR:HG22	6:CF:93:LYS:N	2.34	0.42
9:CI:47:VAL:O	9:CI:80:ARG:HG3	2.19	0.42
13:CM:22:ILE:HB	13:CM:25:VAL:HG12	2.00	0.42
14:CN:31:ILE:N	14:CN:31:ILE:HD12	2.34	0.42
15:CO:67:LEU:O	15:CO:70:LEU:N	2.52	0.42
17:CQ:15:ASP:HA	17:CQ:21:ILE:HD12	2.01	0.42
19:CS:66:MET:O	19:CS:68:GLY:N	2.53	0.42
22:DA:1250:G:H4'	38:DQ:6:ARG:HD2	2.01	0.42
22:DA:1264:A:N7	22:DA:1265:A:C5	2.87	0.42
22:DA:1361:G:C6	22:DA:1371:G:C2	3.07	0.42
22:DA:1394:U:H3'	22:DA:1394:U:H6	1.84	0.42
22:DA:1525:A:H2'	22:DA:1526:C:O4'	2.19	0.42
22:DA:1680:U:H2'	22:DA:1681:G:O4'	2.19	0.42
22:DA:1857:G:N2	22:DA:1884:G:C4	2.87	0.42
22:DA:1875:G:H2'	22:DA:1876:A:OP2	2.19	0.42
22:DA:2013:A:N1	22:DA:2014:A:C2	2.87	0.42
22:DA:2098:U:C4	22:DA:2099:U:O4	2.72	0.42
22:DA:2289:G:O2'	22:DA:2383:G:O2'	2.32	0.42
22:DA:237:C:C4	22:DA:238:C:H5	2.36	0.42
22:DA:249:C:P	22:DA:2394:C:O2'	2.77	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2587:A:H5''	22:DA:2588:G:OP2	2.20	0.42
22:DA:426:C:C4	22:DA:427:U:C5	3.07	0.42
22:DA:965:C:C4'	22:DA:2273:A:H1'	2.49	0.42
23:DB:90:C:H5'	34:DM:18:ARG:HG2	2.01	0.42
23:DB:96:G:O2'	23:DB:97:C:H5'	2.19	0.42
24:DC:17:VAL:N	24:DC:204:VAL:HG22	2.34	0.42
26:DE:149:ILE:HG22	26:DE:186:VAL:HG12	2.00	0.42
30:DI:54:PRO:O	30:DI:75:PRO:HD2	2.18	0.42
35:DN:2:ARG:CD	35:DN:2:ARG:O	2.68	0.42
35:DN:47:VAL:O	35:DN:47:VAL:HG12	2.19	0.42
37:DP:114:LEU:HG	37:DP:114:LEU:O	2.20	0.42
39:DR:80:ARG:C	39:DR:82:HIS:N	2.72	0.42
41:DT:24:MET:HG2	41:DT:29:THR:O	2.19	0.42
42:DU:49:VAL:HG13	42:DU:53:ASN:O	2.19	0.42
1:AA:1538:C:O2'	1:AA:1539:C:H5'	2.19	0.42
1:AA:172:A:C5	1:AA:174:A:C8	3.08	0.42
1:AA:457:G:N3	1:AA:457:G:H2'	2.34	0.42
1:AA:939:G:C2	1:AA:940:C:C2	3.07	0.42
2:AB:20:THR:O	2:AB:21:ARG:NH2	2.53	0.42
3:AC:85:GLU:O	3:AC:87:LEU:N	2.52	0.42
5:AE:94:VAL:HG21	5:AE:140:THR:HG22	2.00	0.42
6:AF:99:ALA:O	6:AF:100:SER:CB	2.67	0.42
8:AH:78:VAL:HG11	8:AH:125:ILE:HD11	2.00	0.42
11:AK:35:THR:CG2	11:AK:39:GLY:HA2	2.49	0.42
13:AM:6:GLY:C	13:AM:8:ASN:N	2.70	0.42
49:B1:12:VAL:HG12	49:B1:13:SER:N	2.34	0.42
52:B4:10:LEU:N	52:B4:14:CYS:SG	2.80	0.42
22:BA:122:G:H2'	22:BA:123:G:O4'	2.19	0.42
22:BA:1283:G:N1	22:BA:1286:A:OP2	2.53	0.42
22:BA:1353:A:C8	22:BA:1378:A:N6	2.88	0.42
22:BA:1449:G:C6	22:BA:1450:G:N7	2.88	0.42
22:BA:1738:G:HO2'	22:BA:1739:A:P	2.43	0.42
22:BA:1847:A:C8	22:BA:1847:A:OP2	2.73	0.42
22:BA:2214:C:H2'	22:BA:2215:C:O4'	2.19	0.42
22:BA:2748:A:C2	22:BA:2757:A:C4	3.07	0.42
22:BA:301:G:C6	22:BA:317:G:C6	3.07	0.42
22:BA:476:G:C2	22:BA:479:A:C8	3.07	0.42
22:BA:644:A:H5''	22:BA:645:C:OP2	2.18	0.42
24:BC:75:PRO:HA	24:BC:117:GLN:HG2	2.00	0.42
22:BA:1805:A:N3	24:BC:50:THR:HB	2.33	0.42
28:BG:96:ALA:HB2	28:BG:105:LEU:HD23	2.02	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BI:16:GLY:CA	30:BI:51:LYS:HB3	2.49	0.42
22:BA:1064:C:H4'	30:BI:90:SER:CB	2.48	0.42
22:BA:1277:G:C5'	35:BN:20:MET:CE	2.97	0.42
35:BN:36:THR:HG23	35:BN:37:THR:O	2.19	0.42
23:BB:116:G:C4'	36:BO:54:VAL:HG13	2.46	0.42
37:BP:103:ARG:HH11	37:BP:103:ARG:HG2	1.83	0.42
39:BR:2:TYR:HA	39:BR:14:VAL:O	2.20	0.42
40:BS:109:ASP:O	40:BS:110:ARG:O	2.37	0.42
42:BU:39:ILE:HG22	42:BU:40:ASN:N	2.34	0.42
1:CA:1000:A:N3	1:CA:1041:G:N2	2.67	0.42
1:CA:1087:G:N2	1:CA:1099:G:H1'	2.35	0.42
1:CA:1144:G:N2	1:CA:1145:A:C2	2.87	0.42
1:CA:1362:A:OP1	1:CA:1362:A:C4'	2.67	0.42
1:CA:189:A:N7	1:CA:190:A:C5	2.88	0.42
1:CA:270:A:H2'	1:CA:271:C:C6	2.54	0.42
1:CA:456:A:H2'	1:CA:457:G:O4'	2.19	0.42
1:CA:623:C:C4	1:CA:624:C:C5	3.07	0.42
1:CA:662:U:H2'	1:CA:663:A:C8	2.55	0.42
1:CA:853:C:C2	1:CA:854:U:C6	3.06	0.42
1:CA:244:U:O4	1:CA:906:A:H1'	2.18	0.42
2:CB:21:ARG:HA	2:CB:21:ARG:NE	2.32	0.42
6:CF:3:HIS:O	6:CF:92:THR:HA	2.19	0.42
11:CK:116:ILE:O	11:CK:116:ILE:HG22	2.19	0.42
13:CM:4:ILE:HG22	13:CM:53:ILE:CG2	2.48	0.42
14:CN:87:ALA:HB1	14:CN:92:GLU:CB	2.49	0.42
16:CP:42:ILE:O	16:CP:43:ALA:HB3	2.19	0.42
20:CT:84:ASN:O	20:CT:84:ASN:ND2	2.53	0.42
21:CU:14:VAL:CG1	21:CU:15:ALA:N	2.82	0.42
22:DA:110:G:N2	22:DA:111:A:H1'	2.35	0.42
22:DA:1298:C:N4	22:DA:1299:G:C6	2.87	0.42
22:DA:121:G:N2	22:DA:131:A:C4	2.88	0.42
22:DA:1355:G:N1	22:DA:1356:G:C8	2.88	0.42
22:DA:1361:G:N3	22:DA:1362:C:C6	2.87	0.42
22:DA:1553:A:N7	22:DA:1555:G:C5	2.87	0.42
22:DA:1607:C:H4'	22:DA:1608:A:C5'	2.49	0.42
22:DA:1858:A:C6	22:DA:1859:U:N3	2.87	0.42
22:DA:1267:U:C5	22:DA:2012:G:N2	2.88	0.42
22:DA:2096:C:H2'	22:DA:2097:A:C8	2.54	0.42
22:DA:2225:A:H1'	22:DA:2226:C:OP2	2.20	0.42
22:DA:2393:U:H2'	22:DA:2394:C:O4'	2.20	0.42
22:DA:927:A:H2'	22:DA:928:A:O4'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:94:A:C2'	23:DB:95:U:H5'	2.49	0.42
25:DD:14:ILE:HG12	25:DD:24:VAL:HG21	2.01	0.42
30:DI:46:THR:HG22	30:DI:51:LYS:HG3	2.01	0.42
22:DA:538:A:H5''	31:DJ:7:LYS:NZ	2.35	0.42
35:DN:76:VAL:HA	35:DN:79:LEU:HD12	2.01	0.42
43:DV:80:HIS:CG	43:DV:81:PRO:HD2	2.55	0.42
46:DY:29:ARG:C	46:DY:31:GLN:H	2.22	0.42
1:AA:1178:G:C8	9:AI:99:ARG:NH2	2.87	0.42
1:AA:1270:G:O3'	1:AA:1314:C:H5'	2.19	0.42
1:AA:1359:C:H2'	1:AA:1361:G:OP2	2.20	0.42
1:AA:1468:A:O2'	1:AA:1469:C:H5'	2.19	0.42
1:AA:328:C:C2'	1:AA:328:C:O2	2.68	0.42
1:AA:764:C:O2'	1:AA:765:G:H5'	2.19	0.42
1:AA:694:A:N1	1:AA:787:A:O2'	2.52	0.42
7:AG:49:THR:O	7:AG:53:ARG:HB2	2.18	0.42
7:AG:91:VAL:O	7:AG:96:ARG:NH2	2.53	0.42
10:AJ:67:ILE:HG22	10:AJ:67:ILE:O	2.19	0.42
10:AJ:80:THR:C	10:AJ:82:LYS:H	2.22	0.42
11:AK:16:VAL:HG13	11:AK:17:SER:H	1.84	0.42
13:AM:45:ILE:HG13	13:AM:48:LEU:HD13	2.01	0.42
18:AR:71:THR:OG1	18:AR:73:ARG:N	2.50	0.42
20:AT:79:LEU:O	20:AT:82:GLN:HB2	2.19	0.42
53:B5:23:ILE:HG22	53:B5:23:ILE:O	2.20	0.42
22:BA:1122:G:N3	22:BA:1122:G:H2'	2.33	0.42
22:BA:141:G:C6	41:BT:1:MET:HE1	2.54	0.42
22:BA:1439:A:C2	22:BA:1553:A:C6	3.07	0.42
22:BA:1447:C:H1'	22:BA:1545:A:H1'	2.01	0.42
22:BA:1692:U:H2'	22:BA:1694:C:C5	2.54	0.42
22:BA:189:G:H2'	22:BA:205:G:N2	2.35	0.42
22:BA:196:A:H2'	22:BA:196:A:N3	2.34	0.42
22:BA:2271:G:H2'	22:BA:2272:U:C6	2.55	0.42
22:BA:2315:G:H2'	22:BA:2316:G:H8	1.83	0.42
22:BA:2674:G:H4'	32:BK:30:ARG:HD2	2.02	0.42
22:BA:464:U:C5	22:BA:788:A:C4	3.08	0.42
22:BA:82:U:H2'	22:BA:83:A:O4'	2.19	0.42
22:BA:996:A:C5	22:BA:1160:G:C2	3.08	0.42
24:BC:78:VAL:HG21	24:BC:110:LEU:CD2	2.49	0.42
24:BC:237:GLY:HA3	57:BC:407:HOH:O	2.19	0.42
26:BE:141:MET:O	26:BE:142:ALA:HB3	2.19	0.42
27:BF:95:ARG:HA	27:BF:98:GLU:HB2	2.02	0.42
31:BJ:53:TYR:CD1	31:BJ:121:LYS:HB3	2.55	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BK:25:LEU:HD12	32:BK:38:ILE:HG22	2.01	0.42
35:BN:116:VAL:O	35:BN:116:VAL:HG13	2.19	0.42
38:BQ:25:TYR:O	38:BQ:26:GLY:C	2.57	0.42
41:BT:44:LYS:HG3	41:BT:55:VAL:CG1	2.50	0.42
42:BU:97:LYS:O	42:BU:98:SER:CB	2.67	0.42
46:BY:22:LEU:O	46:BY:23:ARG:O	2.37	0.42
46:BY:7:ARG:HG3	46:BY:7:ARG:O	2.20	0.42
1:CA:47:C:H4'	1:CA:48:C:OP1	2.20	0.42
1:CA:57:G:H2'	1:CA:58:C:C6	2.55	0.42
2:CB:86:SER:O	2:CB:87:CYS:O	2.36	0.42
3:CC:141:ALA:O	3:CC:146:ALA:HB3	2.18	0.42
3:CC:147:LYS:HB2	3:CC:203:PHE:CD2	2.54	0.42
4:CD:145:ILE:HG22	4:CD:146:ARG:O	2.19	0.42
7:CG:130:ASN:HA	7:CG:135:VAL:HG11	2.00	0.42
7:CG:40:GLU:HA	7:CG:43:VAL:HB	2.01	0.42
11:CK:127:ARG:O	21:CU:34:ARG:NH1	2.40	0.42
12:CL:30:LYS:O	12:CL:81:LEU:HD12	2.19	0.42
1:CA:1317:C:C4	14:CN:53:ARG:HD2	2.54	0.42
17:CQ:46:VAL:HG11	17:CQ:61:ILE:CG1	2.49	0.42
18:CR:57:ARG:HG2	18:CR:58:ALA:N	2.34	0.42
19:CS:44:MET:HE1	19:CS:71:LEU:HD21	2.00	0.42
20:CT:58:VAL:CG1	20:CT:72:ALA:HB1	2.49	0.42
20:CT:69:LYS:HD2	20:CT:70:ASN:OD1	2.19	0.42
21:CU:11:PRO:C	21:CU:12:PHE:CG	2.93	0.42
50:D2:9:VAL:O	50:D2:10:LEU:C	2.58	0.42
22:DA:1121:C:N3	22:DA:1122:G:C8	2.88	0.42
22:DA:1027:A:C5	22:DA:1126:A:N3	2.88	0.42
22:DA:1140:C:O4'	22:DA:1143:A:C2	2.72	0.42
22:DA:116:C:H4'	22:DA:127:A:H5'	2.02	0.42
22:DA:1744:A:C5	22:DA:1745:A:C5	3.07	0.42
22:DA:1835:G:C2	22:DA:1836:C:C6	3.08	0.42
22:DA:1835:G:N3	22:DA:1836:C:C6	2.87	0.42
22:DA:1946:U:H2'	22:DA:1947:C:C6	2.54	0.42
22:DA:1973:G:O6	22:DA:1974:C:N4	2.52	0.42
22:DA:2038:G:C5	22:DA:2039:U:C5	3.07	0.42
22:DA:2056:G:N2	22:DA:2057:G:C1'	2.83	0.42
22:DA:2119:A:N1	22:DA:2169:A:H2'	2.34	0.42
22:DA:230:G:N3	22:DA:231:A:C8	2.88	0.42
22:DA:2366:A:H2'	22:DA:2367:G:H5'	2.01	0.42
22:DA:2741:A:C2'	22:DA:2742:G:H5'	2.49	0.42
22:DA:2776:A:O4'	22:DA:2778:A:C8	2.72	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2836:U:H2'	22:DA:2837:A:C8	2.54	0.42
22:DA:308:G:C2	22:DA:309:A:N3	2.86	0.42
22:DA:822:G:O6	22:DA:943:A:H2	2.03	0.42
24:DC:228:VAL:HG13	24:DC:229:ASP:N	2.34	0.42
25:DD:105:LYS:O	25:DD:177:VAL:CG1	2.68	0.42
25:DD:127:PHE:CZ	25:DD:160:LYS:HD2	2.54	0.42
25:DD:3:GLY:C	25:DD:82:PHE:CE1	2.93	0.42
30:DI:19:ASN:OD1	30:DI:35:ILE:HG22	2.18	0.42
31:DJ:42:ALA:C	31:DJ:44:TYR:H	2.23	0.42
33:DL:120:VAL:CG1	33:DL:121:THR:N	2.83	0.42
34:DM:67:VAL:CG1	34:DM:100:LYS:HD2	2.50	0.42
34:DM:62:LYS:HD3	34:DM:64:TRP:CZ2	2.55	0.42
35:DN:103:ARG:HB2	35:DN:110:MET:HE3	2.02	0.42
37:DP:26:VAL:CG1	37:DP:28:VAL:HG22	2.49	0.42
37:DP:46:VAL:HG12	37:DP:47:VAL:N	2.34	0.42
40:DS:29:VAL:HG22	40:DS:71:VAL:HG22	2.01	0.42
1:AA:1241:G:C2	1:AA:1242:G:C5	3.08	0.42
1:AA:1521:C:C2	1:AA:1522:U:C6	3.08	0.42
1:AA:223:A:C6	1:AA:224:U:O4	2.72	0.42
1:AA:22:G:H4'	1:AA:885:G:C8	2.55	0.42
1:AA:466:A:H5'	1:AA:467:U:OP2	2.19	0.42
1:AA:628:G:H2'	1:AA:629:A:O4'	2.20	0.42
1:AA:702:A:N6	22:BA:1846:G:HO2'	2.17	0.42
1:AA:19:A:C2	1:AA:917:G:C4	3.07	0.42
2:AB:118:GLU:O	2:AB:121:SER:HB3	2.19	0.42
2:AB:176:ALA:CB	2:AB:183:VAL:CG2	2.97	0.42
2:AB:32:PHE:O	2:AB:32:PHE:CG	2.72	0.42
4:AD:123:ILE:CD1	4:AD:123:ILE:N	2.83	0.42
4:AD:173:VAL:HG13	4:AD:174:ASP:N	2.34	0.42
5:AE:30:ILE:HD11	5:AE:54:ARG:NH1	2.34	0.42
5:AE:72:ILE:CD1	5:AE:145:GLU:OE2	2.67	0.42
8:AH:10:MET:O	8:AH:11:LEU:C	2.57	0.42
9:AI:84:THR:HG21	9:AI:103:PHE:HB3	2.00	0.42
15:AO:32:LEU:O	15:AO:33:THR:C	2.58	0.42
15:AO:85:LEU:HD13	15:AO:85:LEU:HA	1.83	0.42
15:AO:87:LEU:HD23	15:AO:87:LEU:N	2.34	0.42
18:AR:25:ASP:O	18:AR:26:ILE:C	2.58	0.42
49:B1:29:THR:O	49:B1:31:PRO:HD2	2.20	0.42
22:BA:1091:G:H2'	22:BA:1092:C:C6	2.54	0.42
22:BA:1197:G:H2'	22:BA:1198:U:C6	2.55	0.42
22:BA:1449:G:C2	22:BA:1450:G:C8	3.07	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1812:U:H2'	22:BA:1813:G:H8	1.84	0.42
22:BA:2199:A:N7	22:BA:2200:C:C5	2.87	0.42
22:BA:2553:G:C5'	22:BA:2554:U:OP2	2.67	0.42
22:BA:2665:A:C2	22:BA:2666:C:C2	3.08	0.42
22:BA:278:A:N1	22:BA:362:A:C8	2.87	0.42
22:BA:548:G:O2'	22:BA:549:G:N1	2.52	0.42
27:BF:92:ARG:CA	27:BF:96:MET:HB2	2.49	0.42
29:BH:45:GLU:C	29:BH:47:PHE:N	2.72	0.42
33:BL:78:ARG:HG2	33:BL:113:ALA:HB3	2.02	0.42
41:BT:40:LYS:HD3	41:BT:58:VAL:O	2.19	0.42
45:BX:68:LEU:HD22	45:BX:78:TYR:CD1	2.55	0.42
46:BY:9:LYS:O	46:BY:12:GLU:HB2	2.20	0.42
1:CA:1300:G:C6	1:CA:1335:U:C5	3.07	0.42
1:CA:756:C:N3	1:CA:757:U:C6	2.88	0.42
2:CB:131:LYS:HE2	2:CB:131:LYS:HA	2.02	0.42
2:CB:62:SER:C	2:CB:64:LYS:N	2.73	0.42
1:CA:532:A:N6	3:CC:192:THR:OG1	2.53	0.42
5:CE:122:ASN:ND2	5:CE:123:VAL:N	2.68	0.42
6:CF:18:VAL:HB	6:CF:19:PRO:HD3	2.01	0.42
8:CH:104:VAL:HA	8:CH:126:ILE:HD12	2.01	0.42
11:CK:126:LYS:O	11:CK:127:ARG:CB	2.68	0.42
12:CL:108:LYS:O	12:CL:109:ASP:HB2	2.20	0.42
1:CA:135:C:O2	16:CP:1:MET:CB	2.68	0.42
22:DA:117:G:C2	22:DA:119:A:N6	2.87	0.42
22:DA:1500:G:C6	22:DA:1501:G:N7	2.87	0.42
22:DA:1519:G:H3'	22:DA:1520:U:C6	2.53	0.42
22:DA:1603:A:P	22:DA:1604:C:OP2	2.77	0.42
22:DA:1310:G:N2	22:DA:1605:C:C2	2.88	0.42
22:DA:1793:C:H5''	22:DA:1794:A:OP2	2.19	0.42
22:DA:201:C:C5	22:DA:202:U:C5	3.08	0.42
22:DA:2233:U:H2'	22:DA:2234:G:C8	2.54	0.42
22:DA:2306:C:C5	22:DA:2307:G:C8	3.08	0.42
22:DA:2409:G:C6	22:DA:2410:G:C6	3.07	0.42
22:DA:2452:C:C4	22:DA:2453:A:C6	3.07	0.42
22:DA:2521:C:C2	22:DA:2545:G:N2	2.88	0.42
22:DA:2685:G:C4	22:DA:2686:G:C8	3.07	0.42
22:DA:2714:G:C5	22:DA:2715:C:C5	3.07	0.42
22:DA:282:A:H2'	22:DA:283:G:C8	2.54	0.42
22:DA:2879:A:H8	22:DA:2881:U:O4	2.03	0.42
22:DA:332:A:HO2'	22:DA:334:C:P	2.35	0.42
22:DA:606:U:O2'	26:DE:95:LYS:NZ	2.52	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:747:U:C4'	40:DS:92:ARG:NH1	2.82	0.42
22:DA:770:G:C2	22:DA:771:G:C8	3.08	0.42
22:DA:972:A:C6	22:DA:973:A:C6	3.08	0.42
25:DD:113:SER:O	25:DD:167:ASN:HA	2.19	0.42
30:DI:73:THR:HG21	30:DI:113:LYS:HE3	2.01	0.42
30:DI:24:VAL:CG2	30:DI:28:LEU:HD23	2.50	0.42
30:DI:28:LEU:HD11	30:DI:35:ILE:HD12	2.01	0.42
32:DK:105:ARG:NH1	32:DK:122:VAL:O	2.53	0.42
32:DK:62:VAL:HG11	32:DK:65:THR:CG2	2.48	0.42
33:DL:29:LYS:C	33:DL:30:THR:HG23	2.39	0.42
34:DM:33:LEU:HB2	34:DM:117:PHE:CD2	2.54	0.42
35:DN:34:ILE:HD11	35:DN:44:LEU:CD2	2.50	0.42
35:DN:87:PHE:O	35:DN:88:ALA:C	2.58	0.42
36:DO:74:VAL:HG12	36:DO:106:LEU:HD11	2.01	0.42
39:DR:7:SER:O	39:DR:9:GLY:N	2.47	0.42
40:DS:59:GLU:HG2	40:DS:64:ALA:HA	2.01	0.42
45:DX:65:ASP:O	45:DX:66:THR:C	2.57	0.42
1:AA:1277:C:O2'	1:AA:1279:G:H8	1.99	0.42
1:AA:1317:C:H2'	1:AA:1318:A:H5'	2.02	0.42
1:AA:251:G:H4'	1:AA:252:U:O5'	2.20	0.42
1:AA:340:U:N3	1:AA:341:C:C5	2.88	0.42
1:AA:363:A:O2'	1:AA:364:A:H5'	2.18	0.42
1:AA:651:C:H2'	1:AA:652:U:O5'	2.20	0.42
1:AA:764:C:C2'	1:AA:765:G:H5'	2.49	0.42
1:AA:575:G:C6	1:AA:821:G:C8	3.07	0.42
2:AB:35:ARG:HB3	2:AB:40:ILE:HD11	1.99	0.42
3:AC:47:LEU:HB3	3:AC:50:ALA:HB3	2.00	0.42
8:AH:7:ILE:O	8:AH:11:LEU:HG	2.20	0.42
9:AI:63:LEU:CD2	9:AI:63:LEU:N	2.82	0.42
10:AJ:34:ALA:O	10:AJ:35:GLN:HB3	2.19	0.42
11:AK:55:SER:O	11:AK:57:LYS:N	2.52	0.42
12:AL:18:LYS:HG3	12:AL:18:LYS:O	2.19	0.42
12:AL:21:VAL:O	12:AL:21:VAL:HG13	2.20	0.42
16:AP:76:LYS:O	16:AP:76:LYS:HG3	2.20	0.42
19:AS:15:LEU:CD1	19:AS:33:THR:HG21	2.50	0.42
40:BS:19:LEU:HB3	48:B0:22:LEU:HD11	2.02	0.42
22:BA:2015:A:C6	48:B0:3:VAL:HG23	2.54	0.42
22:BA:2020:A:H5'	48:B0:9:THR:HG22	2.01	0.42
22:BA:2394:C:P	51:B3:30:ARG:HH21	2.43	0.42
22:BA:1177:G:H2'	22:BA:1178:C:O4'	2.20	0.42
22:BA:1564:C:O2'	22:BA:1565:C:H5'	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1730:C:H4'	22:BA:1730:C:OP1	2.19	0.42
22:BA:2208:C:O2'	22:BA:2209:G:H5'	2.20	0.42
22:BA:2236:U:H2'	22:BA:2237:G:O4'	2.20	0.42
22:BA:2660:A:H2'	22:BA:2661:G:O4'	2.18	0.42
22:BA:26:G:H1'	22:BA:514:A:H61	1.83	0.42
22:BA:301:G:H1'	22:BA:302:C:C6	2.55	0.42
23:BB:90:C:H2'	23:BB:91:C:O4'	2.20	0.42
23:BB:97:C:H2'	23:BB:98:G:H5'	2.02	0.42
22:BA:773:U:H5'	24:BC:47:GLY:HA3	2.01	0.42
24:BC:7:LYS:HB3	24:BC:8:PRO:HD2	2.02	0.42
26:BE:54:GLY:O	26:BE:74:LYS:HE2	2.20	0.42
27:BF:119:ALA:HB2	27:BF:177:PHE:CD2	2.54	0.42
27:BF:158:THR:CG2	27:BF:160:ALA:CB	2.98	0.42
29:BH:114:GLU:CB	29:BH:133:GLN:O	2.66	0.42
31:BJ:38:GLY:O	31:BJ:44:TYR:HB2	2.20	0.42
31:BJ:64:VAL:HG11	31:BJ:68:LYS:HB2	2.01	0.42
36:BO:28:VAL:CG2	36:BO:29:HIS:N	2.83	0.42
22:BA:998:C:P	38:BQ:92:ARG:NH2	2.92	0.42
1:CA:1036:A:H3'	1:CA:1037:C:C6	2.54	0.42
1:CA:1139:G:O6	1:CA:1143:G:N2	2.52	0.42
1:CA:1175:G:O6	1:CA:1182:G:O6	2.37	0.42
1:CA:1349:A:OP1	9:CI:123:ARG:N	2.52	0.42
1:CA:411:A:C6	1:CA:429:U:C4	3.07	0.42
1:CA:41:G:H2'	1:CA:42:G:C8	2.55	0.42
1:CA:445:G:C2	1:CA:490:C:C2	3.07	0.42
1:CA:689:C:H2'	1:CA:690:G:O4'	2.19	0.42
1:CA:72:A:N6	1:CA:73:C:H42	2.18	0.42
1:CA:833:G:O2'	1:CA:834:U:H5'	2.19	0.42
1:CA:899:C:OP1	1:CA:899:C:H6	2.02	0.42
4:CD:198:HIS:CE1	4:CD:199:LEU:CD2	3.03	0.42
4:CD:4:TYR:CZ	4:CD:6:GLY:HA3	2.54	0.42
4:CD:53:VAL:CG2	4:CD:54:GLN:N	2.82	0.42
5:CE:122:ASN:ND2	5:CE:123:VAL:H	2.17	0.42
5:CE:57:PRO:O	5:CE:60:ILE:HG13	2.18	0.42
6:CF:64:VAL:HG12	6:CF:65:GLU:H	1.85	0.42
9:CI:130:ARG:HA	9:CI:130:ARG:HD2	1.82	0.42
13:CM:45:ILE:O	13:CM:45:ILE:HG22	2.20	0.42
14:CN:46:LEU:HD23	19:CS:10:PHE:HB2	2.02	0.42
6:CF:86:ARG:HD3	18:CR:64:TYR:CE1	2.54	0.42
21:CU:14:VAL:O	21:CU:16:LEU:CG	2.66	0.42
49:D1:19:HIS:CD2	49:D1:49:TYR:OH	2.72	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1869:G:C2	22:DA:1873:G:C6	3.07	0.42
22:DA:2322:A:C5	22:DA:2323:G:C5	3.07	0.42
22:DA:2446:G:H3'	22:DA:2447:G:H5''	2.01	0.42
22:DA:2560:A:H2'	22:DA:2561:U:O4'	2.19	0.42
22:DA:2702:G:N7	22:DA:2703:C:C5	2.87	0.42
22:DA:2736:A:C2	22:DA:2737:G:C8	3.08	0.42
22:DA:2861:U:C2	22:DA:2862:G:C8	3.07	0.42
22:DA:503:A:N6	22:DA:505:A:N6	2.67	0.42
22:DA:618:G:N2	22:DA:619:G:H1'	2.35	0.42
22:DA:790:U:C4	22:DA:794:A:O2'	2.73	0.42
22:DA:864:G:C6	22:DA:865:C:C4	3.07	0.42
22:DA:87:U:O2	46:DY:44:LYS:NZ	2.48	0.42
24:DC:166:ALA:HB3	24:DC:173:THR:HB	1.99	0.42
27:DF:122:PHE:CE1	27:DF:166:GLY:CA	3.02	0.42
22:DA:2305:U:O4'	27:DF:131:GLY:HA3	2.18	0.42
27:DF:77:PHE:C	27:DF:78:LYS:HG3	2.40	0.42
29:DH:69:ALA:HB2	29:DH:138:VAL:HG12	2.02	0.42
35:DN:52:ILE:HD12	35:DN:94:TYR:HB2	2.02	0.42
36:DO:88:LYS:HA	36:DO:88:LYS:HE3	2.02	0.42
41:DT:65:GLY:O	41:DT:66:LYS:C	2.57	0.42
42:DU:13:VAL:CG2	42:DU:39:ILE:HG21	2.50	0.42
1:AA:1033:G:O2'	1:AA:1034:G:H5'	2.19	0.42
1:AA:1100:C:O2'	1:AA:1102:A:OP1	2.32	0.42
1:AA:1151:A:C4	1:AA:1152:A:C8	3.08	0.42
1:AA:19:A:H1'	1:AA:917:G:N2	2.34	0.42
1:AA:350:G:O2'	1:AA:351:G:H5'	2.20	0.42
1:AA:616:G:C2'	1:AA:617:G:H5'	2.50	0.42
1:AA:596:A:N6	1:AA:645:G:N1	2.68	0.42
1:AA:844:G:H2'	1:AA:845:A:H5''	2.02	0.42
1:AA:244:U:O4	1:AA:906:A:H1'	2.19	0.42
2:AB:148:LEU:HD22	2:AB:148:LEU:HA	1.92	0.42
2:AB:186:ILE:HD11	2:AB:204:ASP:CB	2.50	0.42
9:AI:30:ILE:CG2	9:AI:65:ILE:HD11	2.50	0.42
9:AI:6:TYR:HB2	9:AI:89:GLU:OE2	2.19	0.42
10:AJ:87:LEU:HD13	10:AJ:88:MET:N	2.34	0.42
10:AJ:86:ALA:O	10:AJ:90:LEU:HB2	2.20	0.42
11:AK:102:ALA:C	11:AK:104:GLY:N	2.73	0.42
11:AK:52:PHE:O	11:AK:57:LYS:HB3	2.20	0.42
15:AO:87:LEU:O	15:AO:88:ARG:HB2	2.19	0.42
49:B1:25:LYS:HE3	49:B1:30:LYS:O	2.20	0.42
51:B3:7:VAL:HB	51:B3:61:CYS:HB3	2.00	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1299:G:H8	22:BA:1299:G:O5'	2.03	0.42
22:BA:1366:A:C6	22:BA:1367:A:C4	3.08	0.42
22:BA:136:G:O5'	22:BA:136:G:H8	2.03	0.42
22:BA:1539:U:H2'	22:BA:1540:G:C8	2.53	0.42
22:BA:158:U:O2	22:BA:158:U:H2'	2.18	0.42
22:BA:1927:A:H2'	22:BA:1928:A:C8	2.54	0.42
22:BA:2727:A:H2'	22:BA:2728:U:H5'	2.01	0.42
22:BA:2805:C:C4	22:BA:2806:C:C4	3.07	0.42
22:BA:451:U:C2	22:BA:453:A:N7	2.88	0.42
22:BA:80:G:N2	22:BA:81:G:H1'	2.35	0.42
22:BA:875:G:C2'	22:BA:876:C:H5'	2.49	0.42
22:BA:959:A:N1	22:BA:960:A:C2	2.87	0.42
27:BF:108:VAL:HG13	27:BF:114:PHE:CZ	2.54	0.42
29:BH:116:ARG:HB3	29:BH:131:SER:O	2.20	0.42
29:BH:118:PRO:O	29:BH:119:ASN:CB	2.68	0.42
29:BH:89:LYS:O	29:BH:90:LEU:C	2.58	0.42
30:BI:101:ILE:HD11	30:BI:138:LEU:HD13	2.01	0.42
30:BI:101:ILE:HG22	30:BI:102:SER:N	2.35	0.42
31:BJ:70:THR:OG1	31:BJ:71:ASP:OD2	2.35	0.42
22:BA:637:A:OP1	33:BL:130:GLY:HA3	2.20	0.42
34:BM:68:PHE:CD2	34:BM:68:PHE:C	2.93	0.42
34:BM:4:PRO:HB2	34:BM:7:THR:CG2	2.49	0.42
37:BP:53:ARG:HG3	37:BP:53:ARG:HH11	1.82	0.42
41:BT:2:ILE:HA	41:BT:3:ARG:CB	2.47	0.42
41:BT:71:GLY:O	41:BT:73:ARG:N	2.52	0.42
1:CA:1261:A:C6	1:CA:1275:A:C4	3.08	0.42
1:CA:1286:U:H2'	1:CA:1286:U:O2	2.18	0.42
1:CA:1291:U:H4'	9:CI:42:GLU:HG2	2.01	0.42
1:CA:1377:A:C4	7:CG:7:ILE:HD11	2.54	0.42
1:CA:210:C:OP1	1:CA:211:G:OP1	2.37	0.42
1:CA:408:A:H2'	1:CA:409:U:O4'	2.19	0.42
1:CA:509:A:N3	1:CA:543:U:O2'	2.46	0.42
1:CA:599:C:H4'	8:CH:122:GLY:C	2.40	0.42
1:CA:609:A:C5	1:CA:610:U:C6	3.07	0.42
1:CA:927:G:OP2	1:CA:927:G:H4'	2.20	0.42
1:CA:994:A:C2	1:CA:995:C:C1'	3.02	0.42
2:CB:71:GLY:HA3	2:CB:164:ILE:CG2	2.50	0.42
2:CB:217:VAL:O	2:CB:220:THR:HG22	2.20	0.42
3:CC:179:ARG:HD2	3:CC:179:ARG:C	2.40	0.42
3:CC:75:ILE:O	3:CC:75:ILE:CG1	2.68	0.42
5:CE:126:LYS:HA	5:CE:126:LYS:CE	2.49	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:CG:43:VAL:HG12	7:CG:44:TYR:CD1	2.55	0.42
11:CK:15:GLN:OE1	11:CK:17:SER:N	2.53	0.42
11:CK:77:TYR:O	11:CK:78:GLY:C	2.58	0.42
12:CL:110:ARG:NE	12:CL:117:TYR:CD2	2.88	0.42
13:CM:14:HIS:HB2	13:CM:17:ILE:HD12	2.01	0.42
22:DA:941:A:O2'	22:DA:1190:G:O3'	2.37	0.42
22:DA:1262:A:N1	22:DA:1263:U:O2	2.52	0.42
22:DA:1263:U:C4'	48:D0:7:LYS:HE3	2.49	0.42
22:DA:1562:U:C4	22:DA:1563:U:C4	3.07	0.42
22:DA:1663:G:C6	22:DA:1992:G:C8	3.08	0.42
22:DA:1714:U:O5'	22:DA:1715:G:H5'	2.19	0.42
22:DA:1838:C:H4'	22:DA:1839:G:H8	1.85	0.42
22:DA:2057:G:P	57:DA:3665:HOH:O	2.77	0.42
22:DA:233:A:C2	22:DA:234:U:H1'	2.54	0.42
22:DA:2371:G:C2	22:DA:2372:U:C5	3.07	0.42
22:DA:2461:A:H1'	22:DA:2492:U:N3	2.35	0.42
22:DA:2718:G:O2'	37:DP:96:LYS:HG3	2.20	0.42
22:DA:2735:G:H2'	22:DA:2736:A:H8	1.84	0.42
22:DA:563:A:C6	22:DA:2018:G:C4	3.08	0.42
22:DA:572:A:H5''	22:DA:573:U:OP2	2.19	0.42
22:DA:656:G:O2'	22:DA:657:U:H5'	2.20	0.42
22:DA:717:C:N4	22:DA:718:A:C2	2.87	0.42
22:DA:77:G:H2'	22:DA:78:U:O4'	2.19	0.42
22:DA:7:G:HO2'	31:DJ:15:TRP:HZ2	1.64	0.42
22:DA:84:A:C2	22:DA:103:A:C5	3.08	0.42
23:DB:68:C:H2'	23:DB:69:G:O4'	2.19	0.42
24:DC:130:LEU:HD11	24:DC:135:ILE:HG12	2.02	0.42
22:DA:1824:G:O3'	24:DC:247:PRO:CD	2.67	0.42
24:DC:82:GLU:OE1	24:DC:103:TYR:OH	2.31	0.42
25:DD:187:LEU:HD21	25:DD:203:VAL:HG11	2.01	0.42
26:DE:129:PRO:HG3	26:DE:156:ASN:OD1	2.20	0.42
22:DA:660:C:H5''	26:DE:94:GLN:OE1	2.20	0.42
27:DF:117:LEU:O	27:DF:118:SER:C	2.57	0.42
27:DF:174:ASP:O	27:DF:175:PHE:O	2.37	0.42
28:DG:155:GLU:OE1	28:DG:158:LYS:HG3	2.20	0.42
29:DH:41:LYS:HE2	29:DH:44:ILE:CD1	2.50	0.42
29:DH:72:ILE:O	29:DH:72:ILE:CG2	2.67	0.42
31:DJ:6:ALA:O	31:DJ:7:LYS:CB	2.68	0.42
34:DM:22:GLN:O	34:DM:24:THR:N	2.53	0.42
35:DN:108:ALA:HB3	35:DN:110:MET:HE3	2.02	0.42
40:DS:76:VAL:HG13	40:DS:103:ILE:HG12	2.02	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DT:39:THR:HG23	41:DT:42:GLU:HB2	2.02	0.42
22:DA:927:A:C2	47:DZ:43:ALA:HB1	2.55	0.42
1:AA:102:G:C2	1:AA:103:U:C6	3.08	0.42
1:AA:1053:G:C6	1:AA:1199:U:C2	3.07	0.42
1:AA:1152:A:H5'	10:AJ:15:HIS:CD2	2.55	0.42
1:AA:1217:C:H2'	1:AA:1218:C:H6	1.83	0.42
1:AA:21:G:H2'	1:AA:22:G:C8	2.55	0.42
1:AA:443:C:C2	1:AA:444:G:C8	3.07	0.42
1:AA:53:A:H2'	1:AA:54:C:O5'	2.20	0.42
1:AA:714:G:O2'	1:AA:715:A:H5'	2.19	0.42
1:AA:721:G:H4'	1:AA:722:G:C5'	2.50	0.42
2:AB:151:ILE:O	2:AB:153:ASP:N	2.53	0.42
2:AB:19:GLN:O	2:AB:38:VAL:HG23	2.19	0.42
3:AC:120:ILE:O	3:AC:124:LEU:HG	2.20	0.42
5:AE:133:PRO:HA	5:AE:136:VAL:CG1	2.49	0.42
9:AI:91:ASP:C	9:AI:91:ASP:OD2	2.58	0.42
12:AL:55:VAL:HG21	12:AL:80:ILE:HD11	2.00	0.42
15:AO:2:SER:O	15:AO:3:LEU:HB2	2.19	0.42
16:AP:78:VAL:O	16:AP:79:ASN:HB2	2.20	0.42
18:AR:55:LEU:HD22	18:AR:55:LEU:HA	1.91	0.42
1:AA:958:A:N1	19:AS:54:GLY:HA3	2.34	0.42
22:BA:1735:A:C2'	22:BA:1736:U:H5'	2.50	0.42
22:BA:2076:U:C5'	22:BA:2076:U:O2	2.68	0.42
22:BA:275:C:H3'	22:BA:276:U:H5''	2.01	0.42
22:BA:2884:U:O4'	22:BA:2884:U:O2	2.37	0.42
22:BA:971:G:OP2	22:BA:974:G:N2	2.53	0.42
24:BC:125:LYS:CG	24:BC:128:ASN:ND2	2.83	0.42
24:BC:197:ASN:O	24:BC:197:ASN:CG	2.57	0.42
30:BI:96:ASP:OD1	30:BI:97:LYS:N	2.53	0.42
33:BL:53:GLY:O	33:BL:54:GLN:C	2.58	0.42
38:BQ:19:LYS:O	38:BQ:22:LYS:HG3	2.20	0.42
41:BT:50:LEU:CD1	41:BT:50:LEU:N	2.83	0.42
42:BU:41:LEU:HD13	42:BU:60:GLU:OE2	2.20	0.42
46:BY:32:ALA:HB2	46:BY:37:LEU:CD2	2.50	0.42
1:CA:1130:A:C8	1:CA:1146:A:N1	2.88	0.42
1:CA:1132:C:H2'	1:CA:1133:G:C1'	2.50	0.42
1:CA:1269:A:H1'	1:CA:1326:U:H1'	2.02	0.42
1:CA:155:A:C2	1:CA:167:A:C4	3.08	0.42
1:CA:337:G:H2'	1:CA:338:A:C8	2.55	0.42
1:CA:409:U:C4	1:CA:410:G:C5	3.08	0.42
1:CA:728:A:C2	1:CA:729:A:C4	3.08	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:119:SER:O	4:CD:131:ASN:OD1	2.38	0.42
4:CD:169:THR:HG22	4:CD:184:ARG:NH2	2.34	0.42
4:CD:59:GLN:CA	4:CD:59:GLN:OE1	2.64	0.42
5:CE:157:ARG:C	5:CE:159:LYS:N	2.72	0.42
6:CF:12:PRO:O	6:CF:15:SER:OG	2.23	0.42
7:CG:4:ARG:HG3	7:CG:5:ARG:N	2.35	0.42
18:CR:42:SER:HB2	18:CR:46:GLY:O	2.19	0.42
19:CS:44:MET:CB	19:CS:62:VAL:HG11	2.50	0.42
51:D3:7:VAL:O	51:D3:10:ALA:HB3	2.19	0.42
22:DA:1047:G:H4'	22:DA:1048:A:H5'	2.02	0.42
22:DA:1598:A:C6	22:DA:1599:U:N3	2.88	0.42
22:DA:161:A:P	22:DA:162:U:H3'	2.60	0.42
22:DA:1654:A:N7	22:DA:2005:A:C2	2.88	0.42
22:DA:120:U:O4	22:DA:177:G:C8	2.73	0.42
22:DA:1802:A:C2	22:DA:1803:A:N3	2.88	0.42
22:DA:2166:U:H2'	22:DA:2167:U:H5'	2.02	0.42
22:DA:2186:G:C5	22:DA:2187:U:C4	3.08	0.42
22:DA:2216:G:H2'	22:DA:2217:G:H8	1.83	0.42
22:DA:2320:U:H4'	22:DA:2321:U:C6	2.55	0.42
22:DA:2360:G:H1'	33:DL:60:ARG:CD	2.49	0.42
22:DA:2663:G:H3'	22:DA:2664:G:C8	2.54	0.42
22:DA:2734:A:N7	22:DA:2735:G:C8	2.88	0.42
22:DA:295:G:N2	22:DA:296:U:C6	2.88	0.42
22:DA:83:A:H4'	22:DA:83:A:OP1	2.19	0.42
26:DE:91:ASP:O	26:DE:91:ASP:CG	2.58	0.42
27:DF:128:TYR:CB	27:DF:170:LEU:CD1	2.98	0.42
28:DG:144:VAL:O	28:DG:144:VAL:CG1	2.68	0.42
29:DH:127:GLU:HA	29:DH:144:VAL:O	2.19	0.42
29:DH:31:VAL:HG12	29:DH:32:PRO:HD3	2.02	0.42
22:DA:1082:U:OP1	30:DI:124:ALA:HB2	2.19	0.42
22:DA:1190:G:OP1	33:DL:32:GLY:CA	2.68	0.42
33:DL:86:GLU:HG3	33:DL:86:GLU:O	2.19	0.42
35:DN:33:ILE:HD12	35:DN:118:ARG:NH1	2.34	0.42
35:DN:24:MET:HE3	35:DN:44:LEU:HB2	2.02	0.42
35:DN:46:ARG:O	35:DN:50:PRO:HG2	2.20	0.42
23:DB:7:G:C5'	36:DO:29:HIS:CE1	3.01	0.42
38:DQ:47:TYR:HD1	39:DR:74:ILE:HG23	1.84	0.42
38:DQ:58:ARG:NH2	38:DQ:92:ARG:NH1	2.68	0.42
39:DR:66:HIS:CD2	39:DR:94:THR:HG23	2.55	0.42
57:DB:307:HOH:O	43:DV:14:LYS:CE	2.68	0.42
1:AA:1118:U:O2	1:AA:1179:A:C6	2.73	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:200:G:N2	1:AA:218:U:O2	2.52	0.42
1:AA:198:G:C5	1:AA:220:G:C2	3.08	0.42
1:AA:596:A:C5	1:AA:645:G:C2	3.08	0.42
2:AB:14:VAL:HG23	2:AB:208:ARG:NH2	2.35	0.42
3:AC:152:GLU:HA	3:AC:167:TRP:HA	2.02	0.42
3:AC:37:PHE:O	3:AC:41:GLN:HB2	2.20	0.42
3:AC:42:TYR:CZ	3:AC:46:GLU:HG3	2.54	0.42
6:AF:92:THR:HG22	6:AF:93:LYS:N	2.34	0.42
6:AF:91:ARG:HG2	6:AF:93:LYS:HD3	2.01	0.42
8:AH:105:SER:HB2	8:AH:126:ILE:HD11	2.01	0.42
8:AH:10:MET:C	8:AH:12:THR:N	2.73	0.42
10:AJ:61:ALA:O	10:AJ:62:ARG:HB2	2.18	0.42
12:AL:60:GLY:O	12:AL:61:PHE:C	2.58	0.42
19:AS:29:LYS:HG2	19:AS:30:PRO:HD2	2.02	0.42
22:BA:83:A:C6	22:BA:101:A:C4	3.08	0.42
22:BA:1046:A:H4'	22:BA:1046:A:OP2	2.19	0.42
22:BA:1454:C:H5'	35:BN:63:ARG:CD	2.49	0.42
22:BA:1495:A:O2'	22:BA:1496:A:H5'	2.20	0.42
22:BA:1745:A:C2	22:BA:1746:A:C8	3.08	0.42
22:BA:184:C:H2'	22:BA:185:G:H8	1.85	0.42
22:BA:1131:G:O2'	22:BA:2026:U:H5'	2.20	0.42
22:BA:2151:U:H2'	22:BA:2152:G:N7	2.35	0.42
22:BA:2193:G:C2'	22:BA:2194:U:H5'	2.49	0.42
22:BA:2218:G:O2'	22:BA:2219:U:H5'	2.19	0.42
22:BA:2489:U:O2	22:BA:2491:U:C4	2.72	0.42
22:BA:503:A:H4'	22:BA:504:A:O5'	2.19	0.42
22:BA:622:G:H5''	57:BA:3294:HOH:O	2.20	0.42
23:BB:60:C:N4	57:BB:303:HOH:O	2.52	0.42
26:BE:29:HIS:O	26:BE:33:VAL:HG23	2.20	0.42
27:BF:27:GLN:O	27:BF:29:PRO:HD3	2.20	0.42
28:BG:35:ARG:HD3	28:BG:71:LEU:HD13	2.01	0.42
29:BH:82:SER:HG	29:BH:90:LEU:HG	1.85	0.42
30:BI:131:GLY:O	30:BI:135:SER:N	2.53	0.42
33:BL:85:VAL:HB	33:BL:94:THR:HG23	2.01	0.42
1:CA:1070:U:O2	1:CA:1071:C:C6	2.73	0.42
1:CA:1130:A:N9	1:CA:1146:A:C2	2.87	0.42
1:CA:1221:G:O3'	19:CS:77:THR:HB	2.20	0.42
1:CA:1530:G:H2'	1:CA:1531:A:C8	2.54	0.42
1:CA:373:A:N3	1:CA:374:A:C8	2.88	0.42
1:CA:780:A:N3	1:CA:803:G:C2	2.88	0.42
2:CB:30:PHE:CD1	2:CB:30:PHE:N	2.85	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:82:ASP:N	2:CB:85:LEU:HB3	2.35	0.42
10:CJ:73:LEU:HD23	10:CJ:73:LEU:C	2.40	0.42
18:CR:45:THR:OG1	18:CR:47:THR:HG23	2.20	0.42
6:CF:59:TYR:CE2	18:CR:67:LEU:CD2	3.03	0.42
20:CT:79:LEU:O	20:CT:83:ILE:HG23	2.20	0.42
49:D1:26:ASN:O	49:D1:27:LYS:C	2.58	0.42
22:DA:1126:A:H4'	22:DA:1127:A:O5'	2.20	0.42
22:DA:1190:G:OP1	33:DL:32:GLY:HA2	2.20	0.42
22:DA:1355:G:C6	22:DA:1356:G:C8	3.08	0.42
22:DA:1461:C:N3	22:DA:1462:C:C5	2.88	0.42
22:DA:1340:U:H5	22:DA:1603:A:C8	2.34	0.42
22:DA:1874:C:C5'	22:DA:1875:G:OP2	2.68	0.42
22:DA:2005:A:H5''	57:DA:3382:HOH:O	2.19	0.42
22:DA:2118:U:O4	22:DA:2149:U:C1'	2.68	0.42
22:DA:2191:A:C6	22:DA:2192:U:C4	3.07	0.42
22:DA:2276:G:O2'	22:DA:2277:G:H5'	2.19	0.42
22:DA:2283:C:H2'	22:DA:2284:A:H5'	2.02	0.42
22:DA:2330:G:C2	22:DA:2386:A:C2	3.08	0.42
22:DA:2371:G:C2	22:DA:2372:U:C6	3.07	0.42
22:DA:300:A:O2'	22:DA:318:C:O2'	2.08	0.42
22:DA:303:G:C6	22:DA:304:U:C4	3.08	0.42
22:DA:324:A:H2'	22:DA:325:G:O4'	2.20	0.42
22:DA:681:G:C6	22:DA:682:G:N7	2.88	0.42
22:DA:728:G:HO2'	22:DA:730:A:H8	1.66	0.42
22:DA:966:G:H4'	22:DA:2272:U:O2	2.19	0.42
26:DE:155:GLU:O	26:DE:159:LEU:HG	2.20	0.42
28:DG:95:ARG:HA	28:DG:128:GLN:O	2.19	0.42
29:DH:121:VAL:O	29:DH:122:LEU:CB	2.67	0.42
35:DN:116:VAL:HG13	35:DN:117:ASP:OD1	2.19	0.42
35:DN:72:ASP:OD2	35:DN:75:ILE:HG12	2.20	0.42
1:CA:345:C:OP1	37:DP:39:ARG:HD3	2.20	0.42
22:DA:85:G:OP2	42:DU:28:VAL:CG1	2.68	0.42
42:DU:83:VAL:HG11	42:DU:94:ARG:HB3	2.02	0.42
43:DV:48:MET:SD	43:DV:85:LYS:HA	2.59	0.42
46:DY:2:LYS:O	46:DY:6:LEU:HB2	2.19	0.42
1:AA:944:G:O2'	1:AA:1339:A:N6	2.53	0.42
1:AA:144:G:C4	1:AA:179:A:H2	2.36	0.42
1:AA:167:A:H2'	1:AA:168:G:O4'	2.20	0.42
1:AA:607:A:H2'	1:AA:608:A:C8	2.55	0.42
1:AA:73:C:O2'	1:AA:74:A:P	2.78	0.42
1:AA:787:A:C6	1:AA:788:U:C4	3.08	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:921:U:H2'	1:AA:922:G:O4'	2.20	0.42
2:AB:131:LYS:HA	2:AB:131:LYS:HE2	2.02	0.42
2:AB:80:VAL:HA	2:AB:214:LEU:HD21	2.01	0.42
3:AC:22:TRP:HB3	3:AC:59:ARG:H	1.85	0.42
4:AD:150:LYS:O	4:AD:151:LYS:C	2.57	0.42
4:AD:13:ARG:HD2	4:AD:34:ILE:HA	2.02	0.42
5:AE:105:ILE:HG13	5:AE:105:ILE:O	2.19	0.42
5:AE:126:LYS:CD	5:AE:128:TYR:HE2	2.33	0.42
6:AF:68:GLN:HA	6:AF:71:ILE:CG2	2.50	0.42
6:AF:98:GLU:O	6:AF:99:ALA:O	2.38	0.42
7:AG:27:VAL:HG23	7:AG:28:ASN:N	2.35	0.42
8:AH:5:ASP:OD1	8:AH:8:ALA:HB2	2.20	0.42
9:AI:57:MET:C	9:AI:59:GLU:N	2.73	0.42
10:AJ:10:LEU:O	10:AJ:71:LEU:HA	2.19	0.42
10:AJ:63:ASP:OD1	14:AN:85:ARG:HD2	2.19	0.42
14:AN:7:LYS:O	14:AN:8:ALA:C	2.58	0.42
14:AN:93:ILE:HG21	14:AN:96:LEU:HD22	2.02	0.42
51:B3:8:ARG:O	51:B3:12:LYS:HG3	2.20	0.42
53:B5:65:LEU:C	53:B5:65:LEU:HD13	2.40	0.42
22:BA:1171:G:C2	22:BA:1179:G:N1	2.88	0.42
22:BA:1442:U:H2'	22:BA:1443:U:C6	2.55	0.42
22:BA:1483:G:C6	22:BA:1484:U:C4	3.08	0.42
22:BA:17:G:H2'	22:BA:18:U:C6	2.54	0.42
22:BA:1850:G:C2	22:BA:1893:C:O2	2.73	0.42
22:BA:2311:A:C5	27:BF:77:PHE:HB3	2.55	0.42
22:BA:2672:U:C2'	22:BA:2673:G:O5'	2.68	0.42
22:BA:2717:C:H2'	22:BA:2718:G:O4'	2.19	0.42
22:BA:2808:G:C2	22:BA:2891:U:C6	3.07	0.42
22:BA:2839:G:C5	22:BA:2840:C:C5	3.07	0.42
55:BA:3001:DOL:O38	55:BA:3001:DOL:C29	2.68	0.42
22:BA:54:G:H2'	22:BA:55:G:O5'	2.20	0.42
26:BE:48:THR:HG23	26:BE:51:GLU:OE1	2.20	0.42
33:BL:23:ILE:O	33:BL:24:GLY:C	2.58	0.42
36:BO:87:ILE:HG22	36:BO:88:LYS:N	2.34	0.42
38:BQ:57:PHE:O	38:BQ:58:ARG:C	2.56	0.42
40:BS:41:LYS:O	40:BS:44:ALA:N	2.52	0.42
41:BT:57:VAL:CG2	41:BT:58:VAL:N	2.83	0.42
43:BV:25:LYS:HE2	43:BV:43:ASP:CA	2.49	0.42
45:BX:66:THR:O	45:BX:69:ALA:HB3	2.19	0.42
46:BY:39:GLN:HB3	46:BY:41:HIS:CE1	2.54	0.42
46:BY:61:ALA:O	46:BY:62:GLY:C	2.58	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:68:G:N2	1:CA:152:A:H1'	2.35	0.42
1:CA:457:G:C5	1:CA:458:U:C4	3.08	0.42
1:CA:801:U:N3	1:CA:802:A:N7	2.68	0.42
1:CA:91:U:C4	1:CA:92:U:C4	3.08	0.42
1:CA:990:C:C4	1:CA:991:U:O4	2.73	0.42
2:CB:68:LEU:HD12	2:CB:158:PRO:CG	2.50	0.42
2:CB:187:VAL:HG22	2:CB:187:VAL:O	2.20	0.42
2:CB:207:ILE:HG12	2:CB:208:ARG:N	2.35	0.42
2:CB:73:LYS:O	2:CB:74:ARG:C	2.57	0.42
3:CC:167:TRP:C	3:CC:167:TRP:HE3	2.23	0.42
6:CF:45:ARG:HD2	6:CF:59:TYR:CD2	2.54	0.42
1:CA:1240:U:O4	7:CG:30:LEU:HG	2.20	0.42
9:CI:21:ILE:HG22	9:CI:21:ILE:O	2.20	0.42
1:CA:1280:A:O4'	10:CJ:43:PRO:HG3	2.19	0.42
1:CA:1359:C:OP2	14:CN:75:ARG:NH1	2.53	0.42
19:CS:74:PHE:CD1	19:CS:74:PHE:N	2.87	0.42
22:DA:1221:C:H2'	22:DA:1222:U:O4'	2.20	0.42
22:DA:1312:U:C2	22:DA:1603:A:N1	2.88	0.42
22:DA:1435:G:H2'	22:DA:1436:G:H5'	2.02	0.42
22:DA:1926:U:H5''	22:DA:1927:A:OP2	2.19	0.42
22:DA:2167:U:O2	22:DA:2170:A:OP2	2.38	0.42
22:DA:2553:G:H2'	22:DA:2554:U:H4'	2.02	0.42
22:DA:1051:G:H4'	22:DA:2752:C:O2'	2.19	0.42
22:DA:2800:A:H3'	22:DA:2801:G:H5'	2.02	0.42
22:DA:2864:G:C2'	22:DA:2865:U:H5'	2.50	0.42
22:DA:2839:G:N2	22:DA:2880:C:C2	2.87	0.42
22:DA:2885:G:O6	48:D0:29:SER:HB3	2.20	0.42
22:DA:54:G:C4	22:DA:55:G:C8	3.08	0.42
22:DA:570:G:C2'	22:DA:571:U:H5'	2.49	0.42
22:DA:584:C:N4	22:DA:585:G:O6	2.52	0.42
22:DA:782:A:H4'	22:DA:783:A:O5'	2.19	0.42
22:DA:796:C:H2'	22:DA:797:G:C8	2.55	0.42
26:DE:192:ALA:O	26:DE:196:VAL:HG23	2.20	0.42
26:DE:47:LYS:O	26:DE:83:VAL:HG11	2.20	0.42
28:DG:133:LEU:HD13	28:DG:141:ILE:HB	2.02	0.42
28:DG:121:ILE:HD12	28:DG:141:ILE:CG2	2.50	0.42
28:DG:91:GLY:O	28:DG:92:VAL:O	2.37	0.42
30:DI:33:VAL:O	30:DI:33:VAL:HG12	2.19	0.42
30:DI:86:ILE:HD11	30:DI:89:GLY:HA2	2.01	0.42
32:DK:31:ARG:CB	32:DK:32:TYR:CE2	3.03	0.42
37:DP:70:VAL:HG12	37:DP:71:GLU:N	2.35	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DP:30:VAL:HG22	37:DP:81:VAL:HA	2.01	0.42
40:DS:30:SER:HA	40:DS:33:LEU:HD12	2.01	0.42
22:DA:495:G:O4'	40:DS:57:ASN:ND2	2.53	0.42
43:DV:51:GLN:HB3	43:DV:56:PHE:CD2	2.55	0.42
45:DX:52:SER:O	45:DX:55:GLY:N	2.53	0.42
1:AA:1128:C:H4'	1:AA:1148:U:O2	2.20	0.41
1:AA:1130:A:C4	1:AA:1146:A:C2	3.08	0.41
1:AA:11:G:O2'	1:AA:12:U:H5'	2.20	0.41
1:AA:1237:C:C4	1:AA:1336:C:N3	2.87	0.41
1:AA:1348:U:C5	1:AA:1373:G:N2	2.88	0.41
1:AA:501:C:H2'	1:AA:502:A:H8	1.84	0.41
1:AA:588:G:N1	1:AA:589:U:C2	2.88	0.41
1:AA:588:G:C6	1:AA:589:U:N3	2.88	0.41
1:AA:606:G:N3	1:AA:633:G:C6	2.88	0.41
1:AA:945:G:C6	1:AA:1337:G:C5	3.08	0.41
2:AB:118:GLU:O	2:AB:121:SER:CB	2.68	0.41
2:AB:151:ILE:CD1	2:AB:154:MET:SD	3.06	0.41
3:AC:6:HIS:CD2	3:AC:7:PRO:HD2	2.56	0.41
4:AD:58:LYS:CE	4:AD:69:GLU:OE2	2.67	0.41
5:AE:159:LYS:OXT	8:AH:64:LYS:NZ	2.51	0.41
9:AI:44:ALA:O	9:AI:47:VAL:HG22	2.20	0.41
9:AI:61:LEU:H	9:AI:61:LEU:HD23	1.85	0.41
10:AJ:42:LEU:HA	10:AJ:43:PRO:HD2	1.83	0.41
13:AM:111:GLY:O	13:AM:112:PRO:C	2.58	0.41
13:AM:39:ILE:HG22	13:AM:40:ALA:N	2.34	0.41
16:AP:45:GLU:O	16:AP:46:LYS:C	2.58	0.41
19:AS:52:HIS:CD2	19:AS:54:GLY:N	2.88	0.41
22:BA:1243:C:H1'	33:BL:4:ASN:O	2.20	0.41
22:BA:1320:C:N3	22:BA:1331:G:O6	2.53	0.41
22:BA:1357:C:H2'	22:BA:1357:C:O2	2.20	0.41
22:BA:137:U:H2'	22:BA:140:C:N1	2.35	0.41
22:BA:1491:G:N2	22:BA:1500:G:H1'	2.35	0.41
22:BA:1922:G:C2	22:BA:1923:U:C6	3.07	0.41
22:BA:2043:C:N3	22:BA:2777:G:C2	2.88	0.41
22:BA:2070:A:H2'	22:BA:2071:A:O4'	2.20	0.41
22:BA:2402:U:C2'	22:BA:2403:C:OP2	2.68	0.41
22:BA:2526:G:N3	52:B4:1:MET:N	2.68	0.41
22:BA:2584:U:O2'	55:BA:3001:DOL:C48	2.66	0.41
22:BA:303:G:C5	22:BA:304:U:C5	3.07	0.41
22:BA:545:U:C3'	22:BA:546:U:H4'	2.49	0.41
22:BA:804:A:H5''	22:BA:805:G:OP1	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:825:A:H2'	22:BA:826:U:O4'	2.20	0.41
22:BA:971:G:H2'	22:BA:972:A:O4'	2.20	0.41
22:BA:983:A:C6	22:BA:984:A:N1	2.88	0.41
23:BB:33:G:C2'	23:BB:34:A:H5'	2.50	0.41
22:BA:918:A:H4'	23:BB:97:C:O2	2.19	0.41
24:BC:209:GLY:O	24:BC:212:ARG:HB2	2.20	0.41
24:BC:237:GLY:CA	57:BC:407:HOH:O	2.66	0.41
25:BD:157:LYS:HB2	25:BD:157:LYS:HE3	1.86	0.41
25:BD:37:VAL:HG12	25:BD:38:LYS:N	2.35	0.41
26:BE:112:LEU:HD13	26:BE:186:VAL:HG21	2.02	0.41
28:BG:10:VAL:HG23	28:BG:48:ASN:O	2.20	0.41
28:BG:48:ASN:C	28:BG:49:THR:HG23	2.40	0.41
29:BH:104:THR:CG2	29:BH:110:VAL:O	2.68	0.41
35:BN:55:ALA:HB2	35:BN:79:LEU:HB3	2.01	0.41
22:BA:1266:G:N7	40:BS:16:LYS:HE3	2.35	0.41
1:CA:1022:A:C5	1:CA:1023:U:C5	3.08	0.41
1:CA:1144:G:C2	1:CA:1145:A:C2	3.07	0.41
1:CA:1225:A:C2'	1:CA:1225:A:N3	2.83	0.41
1:CA:1298:U:H4'	1:CA:1299:A:C4	2.54	0.41
1:CA:978:A:O5'	1:CA:1362:A:N6	2.51	0.41
1:CA:247:G:C6	1:CA:278:G:C2	3.08	0.41
1:CA:451:A:OP2	16:CP:70:ARG:NH2	2.48	0.41
1:CA:459:A:C2	1:CA:460:A:C5	3.08	0.41
1:CA:570:G:C4	1:CA:571:U:C5	3.08	0.41
1:CA:919:A:C2	1:CA:920:U:C6	3.08	0.41
2:CB:55:ALA:O	2:CB:59:LYS:HB2	2.20	0.41
6:CF:25:TYR:CD2	6:CF:25:TYR:N	2.84	0.41
9:CI:26:GLY:CA	9:CI:61:LEU:O	2.68	0.41
10:CJ:81:GLU:HA	10:CJ:84:VAL:HG12	2.02	0.41
13:CM:46:SER:O	13:CM:47:GLU:HB3	2.19	0.41
14:CN:58:SER:O	14:CN:59:ARG:HG3	2.20	0.41
16:CP:71:VAL:O	16:CP:75:ILE:HD12	2.21	0.41
17:CQ:15:ASP:O	17:CQ:17:MET:N	2.51	0.41
20:CT:54:MET:CE	20:CT:58:VAL:HG21	2.50	0.41
22:DA:1043:C:C5	22:DA:1044:C:C5	3.08	0.41
22:DA:1222:U:H2'	22:DA:1223:G:C8	2.55	0.41
22:DA:1305:C:N4	22:DA:1607:C:OP2	2.53	0.41
22:DA:1764:C:C2'	22:DA:1765:U:H5'	2.50	0.41
22:DA:1824:G:OP1	24:DC:53:HIS:CE1	2.73	0.41
22:DA:1905:C:N4	22:DA:1930:G:C2	2.87	0.41
22:DA:2061:G:C8	22:DA:2501:C:H4'	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2322:A:C6	22:DA:2323:G:C5	3.08	0.41
22:DA:2334:U:O2'	36:DO:13:ARG:NH1	2.53	0.41
22:DA:2829:A:C2'	22:DA:2830:C:H5'	2.50	0.41
22:DA:2847:U:C2'	22:DA:2848:G:H5'	2.50	0.41
22:DA:2876:G:C6	22:DA:2877:G:C5	3.08	0.41
22:DA:294:A:N6	22:DA:345:A:N9	2.67	0.41
22:DA:322:A:H3'	22:DA:323:C:C5'	2.50	0.41
22:DA:347:A:N6	22:DA:348:A:N6	2.68	0.41
22:DA:287:G:N2	22:DA:354:A:C2	2.88	0.41
22:DA:464:U:H2'	22:DA:465:G:O4'	2.20	0.41
22:DA:470:A:C2	22:DA:471:A:C4	3.08	0.41
22:DA:641:U:C5	22:DA:642:U:O4	2.73	0.41
15:CO:89:ARG:CZ	22:DA:714:U:C5	3.03	0.41
22:DA:711:G:C2	22:DA:721:A:C2	3.08	0.41
22:DA:669:G:N3	22:DA:801:G:C2	2.88	0.41
23:DB:46:A:C5	23:DB:47:C:C5	3.07	0.41
24:DC:266:PHE:CD1	24:DC:266:PHE:N	2.87	0.41
26:DE:56:GLY:O	26:DE:57:LYS:C	2.58	0.41
28:DG:71:LEU:O	28:DG:75:MET:HG3	2.19	0.41
29:DH:31:VAL:HB	29:DH:32:PRO:HD2	2.00	0.41
30:DI:20:PRO:CG	30:DI:23:PRO:HG2	2.50	0.41
32:DK:92:GLU:O	32:DK:93:GLN:HB2	2.19	0.41
33:DL:127:VAL:HG12	33:DL:131:ALA:C	2.41	0.41
38:DQ:58:ARG:CZ	38:DQ:92:ARG:NH1	2.83	0.41
40:DS:10:ALA:HB3	40:DS:101:SER:O	2.20	0.41
42:DU:99:ASN:ND2	42:DU:101:GLU:HB2	2.35	0.41
42:DU:37:GLU:O	42:DU:37:GLU:HG3	2.19	0.41
42:DU:59:VAL:HG12	42:DU:61:LYS:HD3	2.02	0.41
1:AA:1044:A:C5	1:AA:1045:C:H1'	2.54	0.41
1:AA:1121:U:H2'	1:AA:1122:U:O4'	2.20	0.41
1:AA:1134:G:N2	1:AA:1135:U:O2	2.53	0.41
1:AA:1286:U:O2	1:AA:1286:U:H2'	2.20	0.41
1:AA:180:U:H2'	1:AA:181:A:O5'	2.19	0.41
1:AA:203:G:O2'	1:AA:466:A:N1	2.53	0.41
1:AA:666:G:C6	1:AA:741:G:C6	3.08	0.41
1:AA:874:G:O2'	1:AA:875:U:H5'	2.20	0.41
5:AE:41:ASP:OD1	5:AE:44:GLY:O	2.38	0.41
5:AE:88:VAL:HG23	5:AE:93:ARG:HG2	2.02	0.41
7:AG:87:VAL:HA	7:AG:88:PRO:HD3	1.92	0.41
9:AI:5:GLN:OE1	9:AI:5:GLN:HA	2.20	0.41
10:AJ:56:HIS:C	10:AJ:57:VAL:HG12	2.41	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AJ:56:HIS:O	10:AJ:57:VAL:O	2.38	0.41
13:AM:33:ILE:HG23	13:AM:59:GLU:HB3	2.02	0.41
16:AP:45:GLU:O	16:AP:46:LYS:O	2.38	0.41
16:AP:6:LEU:HD13	16:AP:71:VAL:HG23	2.01	0.41
17:AQ:50:ASN:O	17:AQ:51:ASN:O	2.38	0.41
17:AQ:61:ILE:CG2	17:AQ:73:TRP:CE3	3.03	0.41
22:BA:2020:A:H5'	48:B0:9:THR:CG2	2.50	0.41
51:B3:55:LEU:O	51:B3:59:ILE:HG13	2.20	0.41
22:BA:1196:C:O4'	22:BA:1226:A:C2	2.74	0.41
22:BA:1269:A:O5'	22:BA:1269:A:H8	2.03	0.41
22:BA:1588:G:C5	22:BA:1589:U:C5	3.08	0.41
22:BA:163:C:H2'	22:BA:164:C:C6	2.54	0.41
22:BA:1806:C:C2'	22:BA:1807:G:O5'	2.67	0.41
22:BA:1819:A:OP1	24:BC:155:ALA:HA	2.20	0.41
22:BA:1887:C:H2'	22:BA:1888:G:O5'	2.20	0.41
22:BA:1916:A:P	22:BA:1917:U:P	3.18	0.41
22:BA:1990:C:H2'	22:BA:1991:U:C1'	2.50	0.41
22:BA:2078:C:H2'	22:BA:2079:U:O4'	2.20	0.41
22:BA:2345:G:C5	22:BA:2381:A:C2	3.08	0.41
22:BA:2648:G:H2'	22:BA:2649:C:C6	2.55	0.41
22:BA:2748:A:C2	22:BA:2757:A:C5	3.08	0.41
22:BA:31:C:O2'	22:BA:1238:G:H5'	2.21	0.41
22:BA:591:U:H1'	51:B3:2:PRO:N	2.35	0.41
22:BA:660:C:H2'	22:BA:661:A:H8	1.85	0.41
22:BA:71:A:H5'	22:BA:73:A:C8	2.55	0.41
22:BA:953:G:H5''	34:BM:16:ARG:NH1	2.35	0.41
24:BC:142:HIS:HB2	24:BC:195:VAL:HG23	2.02	0.41
25:BD:26:VAL:HG22	25:BD:188:LEU:CD2	2.50	0.41
25:BD:1:MET:HA	25:BD:88:GLU:OE1	2.20	0.41
26:BE:7:ASP:C	26:BE:9:GLN:N	2.73	0.41
29:BH:139:PHE:O	29:BH:140:ALA:HB3	2.20	0.41
36:BO:92:PHE:HB2	36:BO:117:PHE:CD1	2.55	0.41
1:CA:1261:A:C2	1:CA:1262:C:C5	3.08	0.41
1:CA:1282:C:H2'	1:CA:1282:C:O2	2.19	0.41
1:CA:1282:C:N3	1:CA:1283:U:C4	2.88	0.41
1:CA:1289:A:O2'	7:CG:35:LYS:HE2	2.20	0.41
1:CA:1408:A:C2	1:CA:1494:G:C2	3.08	0.41
1:CA:1516:G:C2	1:CA:1518:A:OP2	2.73	0.41
1:CA:313:A:H2'	1:CA:314:C:C6	2.55	0.41
1:CA:50:A:H1'	1:CA:52:C:O4'	2.20	0.41
2:CB:18:HIS:O	2:CB:19:GLN:HB2	2.19	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:57:LEU:O	2:CB:60:ILE:CD1	2.68	0.41
3:CC:81:GLY:O	3:CC:82:GLU:C	2.59	0.41
4:CD:53:VAL:O	4:CD:54:GLN:C	2.58	0.41
5:CE:104:GLY:HA3	5:CE:122:ASN:HA	2.01	0.41
6:CF:38:ARG:HG3	6:CF:63:ASN:HB2	2.00	0.41
7:CG:22:LEU:HG	7:CG:25:LYS:HE2	2.02	0.41
9:CI:15:SER:OG	9:CI:70:GLY:HA3	2.19	0.41
12:CL:90:LEU:HB2	12:CL:93:VAL:CG2	2.49	0.41
16:CP:78:VAL:HG22	16:CP:78:VAL:O	2.20	0.41
18:CR:72:ASP:C	18:CR:73:ARG:HG2	2.41	0.41
11:CK:89:PRO:HD3	21:CU:29:LEU:CD1	2.51	0.41
48:D0:10:ARG:HG2	48:D0:11:SER:N	2.35	0.41
22:DA:1091:G:N2	22:DA:1092:C:C4	2.88	0.41
22:DA:1193:G:C2	22:DA:1194:A:C5	3.08	0.41
22:DA:1288:G:C8	22:DA:1327:A:C6	3.08	0.41
22:DA:1331:G:O2'	22:DA:1332:G:H5'	2.20	0.41
22:DA:1343:G:C4	22:DA:1597:A:C6	3.09	0.41
22:DA:1555:G:C2	22:DA:1556:C:C2	3.08	0.41
22:DA:1999:C:O2	22:DA:2687:U:O2'	2.33	0.41
22:DA:2144:G:C2	22:DA:2146:C:O2	2.73	0.41
22:DA:2238:G:C4'	22:DA:2239:G:OP1	2.68	0.41
22:DA:2286:G:C4'	22:DA:2287:A:O5'	2.63	0.41
22:DA:227:A:H4'	22:DA:228:C:OP1	2.20	0.41
22:DA:2336:A:N3	22:DA:2385:C:H1'	2.35	0.41
22:DA:2477:U:O4	52:D4:10:LEU:CD2	2.68	0.41
22:DA:265:A:N1	22:DA:427:U:O2'	2.53	0.41
22:DA:2718:G:C2	22:DA:2719:G:C1'	3.03	0.41
22:DA:2784:U:H2'	22:DA:2785:C:C6	2.55	0.41
22:DA:381:G:C2'	22:DA:382:A:H5'	2.50	0.41
22:DA:82:U:N3	22:DA:83:A:N7	2.68	0.41
22:DA:875:G:N2	22:DA:903:C:C2	2.88	0.41
22:DA:876:C:N4	22:DA:877:A:N6	2.68	0.41
25:DD:104:VAL:O	25:DD:105:LYS:HB3	2.20	0.41
26:DE:100:MET:O	26:DE:104:ALA:CB	2.68	0.41
27:DF:73:SER:HB2	27:DF:81:GLN:HB2	2.03	0.41
29:DH:40:THR:OG1	29:DH:43:ASN:ND2	2.54	0.41
36:DO:115:LEU:O	36:DO:117:PHE:N	2.48	0.41
39:DR:87:GLN:HG2	39:DR:88:GLY:N	2.35	0.41
1:AA:132:C:H2'	1:AA:133:U:O4'	2.21	0.41
1:AA:748:G:N1	1:AA:749:A:C5	2.88	0.41
1:AA:956:U:H2'	1:AA:957:U:O4'	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:145:GLU:O	2:AB:149:GLY:N	2.54	0.41
3:AC:3:GLN:OE1	3:AC:3:GLN:N	2.53	0.41
3:AC:51:SER:O	3:AC:115:LEU:HD21	2.20	0.41
6:AF:3:HIS:CA	6:AF:92:THR:HG23	2.50	0.41
9:AI:80:ARG:NH1	9:AI:103:PHE:CE1	2.88	0.41
10:AJ:56:HIS:O	10:AJ:57:VAL:CG1	2.68	0.41
12:AL:32:GLY:HA3	12:AL:55:VAL:HG12	2.02	0.41
16:AP:19:VAL:HG13	16:AP:38:PHE:N	2.35	0.41
20:AT:44:LYS:CE	20:AT:87:ALA:HA	2.50	0.41
48:B0:11:SER:O	48:B0:15:MET:HG3	2.20	0.41
22:BA:1180:U:H2'	22:BA:1181:U:O4'	2.19	0.41
22:BA:1203:U:O4	22:BA:1204:A:C6	2.73	0.41
22:BA:136:G:N2	22:BA:144:A:C6	2.88	0.41
22:BA:1739:A:H2'	22:BA:1740:G:O4'	2.19	0.41
22:BA:1846:G:H2'	22:BA:1847:A:C4	2.55	0.41
22:BA:2714:G:O2'	22:BA:2715:C:H5'	2.20	0.41
22:BA:281:C:H2'	22:BA:282:A:C8	2.55	0.41
22:BA:2452:C:N3	55:BA:3001:DOL:H131	2.34	0.41
22:BA:393:C:H2'	22:BA:394:C:C6	2.55	0.41
22:BA:785:G:C5	22:BA:786:C:C5	3.09	0.41
22:BA:870:U:N3	22:BA:871:U:C5	2.89	0.41
24:BC:166:ALA:HB3	24:BC:173:THR:HB	2.02	0.41
27:BF:44:ILE:HG21	27:BF:79:ILE:HG22	2.01	0.41
27:BF:92:ARG:N	27:BF:96:MET:HB2	2.35	0.41
28:BG:74:SER:HA	28:BG:77:ILE:HG12	2.02	0.41
30:BI:59:ILE:HG22	30:BI:61:VAL:HG23	2.01	0.41
34:BM:55:ARG:CZ	34:BM:55:ARG:CB	2.99	0.41
41:BT:12:ARG:CB	41:BT:33:LYS:O	2.68	0.41
22:BA:309:A:H4'	42:BU:16:GLY:HA2	2.01	0.41
42:BU:34:VAL:HG23	42:BU:65:ILE:HG22	2.01	0.41
1:CA:1095:U:N3	1:CA:1096:C:C4	2.88	0.41
1:CA:1159:U:H5''	1:CA:1159:U:O2	2.19	0.41
1:CA:977:A:O2'	1:CA:1223:C:N4	2.52	0.41
1:CA:1243:C:H2'	1:CA:1244:G:C8	2.56	0.41
1:CA:1262:C:N4	1:CA:1263:C:C4	2.88	0.41
1:CA:1300:G:N1	1:CA:1335:U:C6	2.88	0.41
1:CA:1458:G:O3'	20:CT:23:SER:HA	2.20	0.41
1:CA:1394:A:H2'	1:CA:1501:C:O2'	2.20	0.41
1:CA:28:A:H2'	1:CA:29:U:O4'	2.20	0.41
1:CA:436:C:H2'	1:CA:437:U:C6	2.55	0.41
1:CA:743:A:C5	1:CA:744:C:C5	3.08	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:75:G:N2	1:CA:96:U:H1'	2.34	0.41
1:CA:785:G:N3	1:CA:785:G:H2'	2.34	0.41
1:CA:842:U:O2'	1:CA:846:G:C6	2.73	0.41
1:CA:857:C:H2'	1:CA:858:G:O4'	2.20	0.41
1:CA:926:G:C6	1:CA:1505:G:C6	3.08	0.41
1:CA:980:C:OP1	57:CA:1866:HOH:O	2.22	0.41
6:AF:15:SER:HB2	4:CD:193:ALA:CB	2.50	0.41
1:CA:401:C:OP2	4:CD:70:ARG:HD3	2.20	0.41
5:CE:38:VAL:HG12	5:CE:39:VAL:N	2.36	0.41
9:CI:51:PRO:HG2	9:CI:83:ILE:HD12	2.02	0.41
15:CO:35:GLN:NE2	15:CO:39:LEU:CD2	2.83	0.41
20:CT:30:THR:O	20:CT:34:LYS:HG2	2.20	0.41
22:DA:109:C:H5'	22:DA:348:A:O4'	2.20	0.41
22:DA:121:G:H1'	22:DA:131:A:N1	2.35	0.41
22:DA:1319:C:C2	22:DA:1334:G:C2	3.08	0.41
22:DA:1537:G:N3	22:DA:1537:G:H3'	2.36	0.41
22:DA:1623:G:C2	22:DA:1624:U:C6	3.08	0.41
22:DA:1760:C:H2'	22:DA:1761:C:O4'	2.20	0.41
22:DA:1847:A:O2'	22:DA:1848:A:P	2.77	0.41
22:DA:1933:G:H2'	22:DA:1934:C:O4'	2.21	0.41
22:DA:200:U:C5	22:DA:201:C:C5	3.09	0.41
22:DA:2193:G:H2'	22:DA:2194:U:C6	2.55	0.41
22:DA:2345:G:H5'	22:DA:2347:C:O4'	2.20	0.41
22:DA:2896:C:H2'	22:DA:2897:U:O5'	2.20	0.41
22:DA:290:U:N3	22:DA:291:G:C5	2.88	0.41
55:DA:3001:DOL:H432	55:DA:3001:DOL:C1	2.49	0.41
22:DA:372:G:H1'	22:DA:400:G:O6	2.20	0.41
22:DA:435:C:H2'	22:DA:436:C:H5'	2.01	0.41
22:DA:46:G:N3	22:DA:47:C:C6	2.88	0.41
22:DA:485:C:H2'	22:DA:486:C:O4'	2.19	0.41
22:DA:562:U:H2'	22:DA:572:A:O4'	2.20	0.41
22:DA:581:C:H2'	22:DA:582:A:C8	2.55	0.41
22:DA:878:A:C2	22:DA:900:A:C4	3.09	0.41
23:DB:29:A:H2'	23:DB:30:C:O4'	2.20	0.41
24:DC:17:VAL:HB	24:DC:204:VAL:HG22	2.02	0.41
28:DG:80:THR:HG22	28:DG:81:GLU:N	2.35	0.41
31:DJ:80:HIS:C	31:DJ:82:GLY:N	2.73	0.41
33:DL:78:ARG:CB	33:DL:113:ALA:CB	2.98	0.41
33:DL:127:VAL:CG1	33:DL:131:ALA:C	2.89	0.41
26:DE:29:HIS:CD2	33:DL:6:LEU:HB3	2.55	0.41
36:DO:92:PHE:HB2	36:DO:117:PHE:CD1	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DP:49:ALA:HB3	37:DP:60:THR:OG1	2.21	0.41
40:DS:18:ARG:HA	40:DS:21:ALA:HB3	2.02	0.41
41:DT:38:ALA:C	41:DT:39:THR:HG22	2.41	0.41
41:DT:34:VAL:HG11	41:DT:43:ILE:HD13	2.02	0.41
1:AA:1074:G:C2	1:AA:1075:U:C2	3.08	0.41
1:AA:1145:A:O2'	1:AA:1146:A:P	2.78	0.41
1:AA:1238:A:H5'	1:AA:1336:C:H41	1.84	0.41
1:AA:215:C:H2'	1:AA:216:U:O4'	2.21	0.41
1:AA:338:A:H2'	1:AA:339:C:O4'	2.19	0.41
1:AA:411:A:N7	1:AA:429:U:C5	2.89	0.41
1:AA:454:G:C2'	1:AA:455:G:H5'	2.50	0.41
1:AA:602:A:C2	1:AA:603:U:C2	3.09	0.41
1:AA:676:A:C6	1:AA:677:U:C4	3.08	0.41
1:AA:715:A:N6	1:AA:716:A:N6	2.69	0.41
1:AA:872:A:N7	1:AA:874:G:C8	2.88	0.41
1:AA:937:A:C2	1:AA:1379:G:O6	2.73	0.41
2:AB:71:GLY:HA2	2:AB:164:ILE:CG2	2.51	0.41
2:AB:47:VAL:C	2:AB:49:MET:N	2.74	0.41
2:AB:96:TRP:O	2:AB:97:LEU:C	2.59	0.41
4:AD:19:LEU:HD22	4:AD:64:ILE:HG13	2.02	0.41
4:AD:61:VAL:O	4:AD:64:ILE:HB	2.20	0.41
9:AI:85:ARG:O	9:AI:88:MET:HB2	2.20	0.41
10:AJ:51:VAL:O	10:AJ:62:ARG:HA	2.20	0.41
13:AM:109:ARG:O	13:AM:109:ARG:HG3	2.20	0.41
13:AM:23:TYR:O	13:AM:69:LEU:HD23	2.20	0.41
13:AM:58:ASP:O	13:AM:61:ALA:HB3	2.21	0.41
13:AM:90:ARG:NH1	13:AM:95:LEU:HB3	2.35	0.41
13:AM:2:ALA:C	13:AM:9:ILE:HG23	2.41	0.41
17:AQ:15:ASP:HA	17:AQ:21:ILE:CD1	2.51	0.41
21:AU:37:PHE:CD1	21:AU:40:LYS:HG2	2.55	0.41
22:BA:1179:G:N7	22:BA:1180:U:N1	2.69	0.41
22:BA:1206:G:C5	22:BA:1207:C:C4	3.09	0.41
22:BA:1378:A:C4	22:BA:1380:G:C8	3.09	0.41
22:BA:1456:G:C5	22:BA:1457:U:C5	3.08	0.41
22:BA:195:A:C6	22:BA:198:C:C5	3.09	0.41
22:BA:570:G:C4	22:BA:2030:A:N7	2.88	0.41
22:BA:2191:A:C4	22:BA:2192:U:C4	3.09	0.41
22:BA:2259:U:C6	22:BA:2427:C:C4	3.09	0.41
22:BA:247:G:H4'	22:BA:386:G:C5	2.55	0.41
22:BA:2502:G:C5'	22:BA:2503:A:C5'	2.99	0.41
22:BA:2559:C:H2'	22:BA:2560:A:O5'	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:257:C:H3'	22:BA:258:G:C8	2.55	0.41
22:BA:2721:A:C2	22:BA:2873:A:C5	3.09	0.41
22:BA:2765:A:C2'	22:BA:2765:A:N3	2.83	0.41
22:BA:404:A:C8	22:BA:406:G:C6	3.07	0.41
22:BA:494:G:C2'	22:BA:495:G:H5'	2.50	0.41
22:BA:54:G:C2'	22:BA:55:G:O5'	2.68	0.41
22:BA:75:G:H4'	46:BY:48:ARG:NH2	2.34	0.41
24:BC:165:VAL:O	24:BC:166:ALA:HB2	2.20	0.41
26:BE:147:LEU:HB2	26:BE:183:PHE:CD1	2.55	0.41
28:BG:55:ARG:HG2	28:BG:58:TYR:CD1	2.56	0.41
29:BH:90:LEU:HD13	29:BH:125:THR:HA	2.03	0.41
32:BK:53:LYS:HG3	32:BK:56:ASP:OD2	2.20	0.41
37:BP:43:PHE:CE2	37:BP:63:LYS:HD3	2.56	0.41
41:BT:18:GLU:O	41:BT:19:LYS:C	2.58	0.41
42:BU:26:LYS:HA	42:BU:26:LYS:HD2	1.88	0.41
43:BV:41:GLU:O	43:BV:41:GLU:HG2	2.18	0.41
22:BA:78:U:OP2	46:BY:2:LYS:HD3	2.21	0.41
1:CA:312:C:H2'	1:CA:313:A:O4'	2.21	0.41
1:CA:373:A:C2'	1:CA:374:A:H5'	2.50	0.41
1:CA:496:A:H2'	1:CA:496:A:N3	2.35	0.41
1:CA:545:C:O2'	1:CA:549:C:H5''	2.20	0.41
1:CA:64:G:N2	1:CA:67:C:C4	2.89	0.41
1:CA:64:G:C2	1:CA:67:C:N4	2.88	0.41
1:CA:821:G:H2'	1:CA:822:U:C6	2.54	0.41
1:CA:878:A:C5	1:CA:879:C:C5	3.08	0.41
2:CB:60:ILE:HD12	2:CB:61:ALA:N	2.36	0.41
3:CC:101:ILE:HG23	3:CC:101:ILE:O	2.20	0.41
3:CC:153:VAL:HG23	3:CC:196:ILE:CG2	2.50	0.41
4:CD:168:PRO:HB3	4:CD:171:LEU:HD12	2.00	0.41
4:CD:188:ARG:O	4:CD:191:LEU:HD12	2.21	0.41
5:CE:15:LEU:C	5:CE:16:ILE:HD12	2.41	0.41
10:CJ:91:ASP:O	10:CJ:92:LEU:CB	2.68	0.41
12:CL:90:LEU:HB2	12:CL:93:VAL:HG21	2.02	0.41
13:CM:19:LEU:CD1	13:CM:33:ILE:HB	2.50	0.41
17:CQ:48:ASP:O	17:CQ:49:GLU:C	2.57	0.41
11:CK:112:ASP:HB3	21:CU:20:LYS:HE3	2.02	0.41
49:D1:5:ILE:HG22	49:D1:28:ARG:CZ	2.50	0.41
22:DA:102:U:C2	46:DY:2:LYS:HE2	2.56	0.41
22:DA:1022:G:C6	22:DA:1140:C:C5	3.08	0.41
22:DA:1360:G:O6	22:DA:1372:U:N3	2.53	0.41
22:DA:1581:G:N7	22:DA:1582:C:N4	2.69	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:167:A:H2'	22:DA:168:G:O4'	2.21	0.41
22:DA:1710:G:O2'	22:DA:1711:A:H5'	2.21	0.41
22:DA:781:A:H2'	22:DA:1777:U:O2'	2.19	0.41
22:DA:17:G:C6	22:DA:524:G:C6	3.08	0.41
22:DA:1866:A:C2	22:DA:1876:A:C5	3.07	0.41
22:DA:191:A:C6	22:DA:192:C:N4	2.89	0.41
22:DA:201:C:C4	22:DA:202:U:C5	3.08	0.41
22:DA:2196:C:O2'	22:DA:2197:U:H5'	2.20	0.41
22:DA:2064:C:H4'	22:DA:2251:G:N2	2.35	0.41
22:DA:2271:G:H2'	22:DA:2272:U:C6	2.55	0.41
22:DA:2314:A:O4'	27:DF:155:THR:HG21	2.19	0.41
22:DA:2391:G:OP2	51:D3:35:LYS:NZ	2.50	0.41
22:DA:2428:G:H5''	22:DA:2429:G:P	2.60	0.41
22:DA:2802:G:C6	22:DA:2803:G:C5	3.08	0.41
22:DA:2851:A:O2'	35:DN:64:ARG:NH2	2.51	0.41
22:DA:46:G:C2	22:DA:47:C:C4	3.09	0.41
22:DA:609:A:C5	22:DA:610:C:C2	3.09	0.41
22:DA:842:U:C4	22:DA:843:G:N7	2.88	0.41
25:DD:32:ASN:N	25:DD:96:ILE:O	2.53	0.41
26:DE:170:ARG:NH2	26:DE:176:ASP:OD1	2.52	0.41
26:DE:45:ALA:HA	26:DE:87:ALA:O	2.21	0.41
27:DF:135:GLN:HG2	27:DF:141:ILE:HG12	2.03	0.41
28:DG:109:PHE:CD2	28:DG:109:PHE:N	2.89	0.41
28:DG:89:LEU:CD1	28:DG:162:VAL:HG22	2.51	0.41
29:DH:135:HIS:CG	29:DH:136:SER:N	2.89	0.41
31:DJ:84:ILE:O	31:DJ:85:LYS:C	2.59	0.41
36:DO:48:LEU:C	36:DO:49:VAL:HG23	2.41	0.41
22:DA:2010:G:H5''	40:DS:42:LYS:HB2	2.00	0.41
44:DW:50:ASN:OD1	44:DW:63:ALA:CB	2.68	0.41
1:AA:1000:A:N1	1:AA:1041:G:N1	2.69	0.41
1:AA:1307:U:H2'	1:AA:1308:U:H6	1.85	0.41
1:AA:1327:C:O2'	1:AA:1328:C:H5'	2.20	0.41
1:AA:568:G:H2'	1:AA:569:C:H6	1.86	0.41
1:AA:591:U:OP2	8:AH:31:LYS:CD	2.68	0.41
1:AA:69:G:H5'	1:AA:70:U:P	2.61	0.41
1:AA:935:A:C2	1:AA:936:C:N1	2.89	0.41
2:AB:144:LEU:O	2:AB:148:LEU:HB2	2.20	0.41
5:AE:56:VAL:O	5:AE:60:ILE:CG2	2.68	0.41
8:AH:49:PHE:C	8:AH:49:PHE:CD1	2.93	0.41
8:AH:89:LYS:HG3	8:AH:90:ASP:H	1.84	0.41
1:AA:656:G:N2	15:AO:23:GLY:HA3	2.35	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:AP:12:LYS:O	16:AP:13:LYS:HB2	2.20	0.41
19:AS:52:HIS:CD2	19:AS:54:GLY:H	2.39	0.41
21:AU:14:VAL:CG1	21:AU:16:LEU:HD21	2.50	0.41
49:B1:40:ASP:HB2	49:B1:49:TYR:OH	2.20	0.41
22:BA:1070:A:N1	22:BA:1097:U:O2'	2.44	0.41
22:BA:1406:U:N3	22:BA:1407:G:N7	2.68	0.41
22:BA:1414:C:C5	22:BA:1415:U:C5	3.09	0.41
22:BA:1494:A:H2'	22:BA:1495:A:C8	2.55	0.41
22:BA:1592:C:C2'	22:BA:1593:A:H5'	2.50	0.41
22:BA:2154:A:H2'	22:BA:2155:U:C6	2.55	0.41
22:BA:2488:G:C2'	22:BA:2489:U:H5'	2.51	0.41
22:BA:2496:C:C2'	22:BA:2497:A:O5'	2.69	0.41
22:BA:257:C:H3'	22:BA:258:G:H8	1.85	0.41
22:BA:2820:A:H2'	22:BA:2821:A:OP1	2.20	0.41
22:BA:2861:U:O2	22:BA:2862:G:C8	2.74	0.41
22:BA:368:A:C6	22:BA:369:U:C4	3.09	0.41
22:BA:454:A:H4'	22:BA:455:C:OP2	2.20	0.41
22:BA:48:G:N2	22:BA:49:A:N1	2.69	0.41
22:BA:589:U:H2'	22:BA:590:A:H8	1.85	0.41
22:BA:744:U:H2'	22:BA:745:G:O4'	2.20	0.41
23:BB:113:C:H1'	36:BO:45:SER:O	2.20	0.41
23:BB:54:G:N2	27:BF:26:MET:CE	2.83	0.41
24:BC:111:LYS:O	24:BC:112:ALA:C	2.57	0.41
24:BC:31:ALA:HA	24:BC:34:LEU:HD12	2.03	0.41
26:BE:145:ASP:HA	26:BE:166:LYS:O	2.20	0.41
27:BF:175:PHE:CE1	27:BF:177:PHE:CZ	3.08	0.41
29:BH:33:GLN:O	29:BH:35:LYS:N	2.53	0.41
30:BI:140:VAL:O	30:BI:140:VAL:HG13	2.20	0.41
41:BT:29:THR:HG23	41:BT:86:THR:HG23	2.03	0.41
42:BU:6:ARG:O	42:BU:9:ASP:HB2	2.20	0.41
43:BV:14:LYS:CD	43:BV:18:ARG:HH11	2.33	0.41
43:BV:6:ALA:HB2	43:BV:42:LEU:HD23	2.03	0.41
44:BW:49:ALA:O	44:BW:50:ASN:HB2	2.21	0.41
1:CA:1186:G:H4'	9:CI:112:GLU:CD	2.41	0.41
1:CA:1332:A:H2'	1:CA:1333:A:O4'	2.21	0.41
1:CA:406:G:C2	1:CA:407:U:C6	3.09	0.41
1:CA:456:A:C6	1:CA:457:G:C5	3.09	0.41
1:CA:66:A:C4'	1:CA:173:U:C4	3.03	0.41
1:CA:858:G:N7	1:CA:869:G:N7	2.69	0.41
2:CB:111:ILE:O	2:CB:114:LEU:HB3	2.21	0.41
1:CA:429:U:O3'	4:CD:22:LYS:HE3	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:57:GLU:OE1	4:CD:57:GLU:HA	2.20	0.41
7:CG:92:ARG:HA	7:CG:92:ARG:HE	1.84	0.41
14:CN:31:ILE:HG22	14:CN:32:SER:N	2.36	0.41
17:CQ:13:VAL:CG1	17:CQ:22:VAL:HG13	2.50	0.41
21:CU:4:ILE:HA	21:CU:20:LYS:HZ1	1.84	0.41
22:DA:1124:G:O2'	52:D4:37:GLN:O	2.37	0.41
22:DA:1006:C:H6	22:DA:1006:C:O5'	2.04	0.41
22:DA:116:C:C5'	22:DA:128:C:C5	3.03	0.41
22:DA:1184:U:OP1	47:DZ:30:ARG:HD2	2.19	0.41
22:DA:1317:G:N2	22:DA:1336:A:N3	2.68	0.41
22:DA:1359:A:C2	22:DA:1360:G:H1'	2.56	0.41
22:DA:1404:C:H2'	22:DA:1405:U:O5'	2.21	0.41
22:DA:2184:A:H2'	22:DA:2185:U:C6	2.55	0.41
22:DA:1854:A:O4'	22:DA:2233:U:H4'	2.20	0.41
22:DA:2262:U:N3	22:DA:2279:G:C2	2.88	0.41
22:DA:2331:G:C2	22:DA:2385:C:C2	3.08	0.41
22:DA:2544:G:H2'	22:DA:2545:G:O4'	2.20	0.41
22:DA:2785:C:H2'	22:DA:2786:U:O4'	2.20	0.41
22:DA:2811:G:OP1	25:DD:62:LYS:N	2.53	0.41
22:DA:28:A:H2'	22:DA:29:U:O4'	2.21	0.41
22:DA:377:G:O6	22:DA:378:C:N4	2.54	0.41
22:DA:764:A:N1	22:DA:1789:A:O2'	2.49	0.41
24:DC:130:LEU:HD12	24:DC:135:ILE:HG13	2.03	0.41
24:DC:75:PRO:O	24:DC:76:ALA:HB2	2.20	0.41
25:DD:114:LYS:HE2	25:DD:196:ALA:HB1	2.03	0.41
26:DE:12:LEU:HD23	26:DE:13:THR:N	2.35	0.41
26:DE:188:MET:CE	26:DE:192:ALA:HB3	2.50	0.41
26:DE:47:LYS:O	26:DE:83:VAL:CG1	2.69	0.41
27:DF:57:LEU:HB2	27:DF:65:PRO:HG2	2.03	0.41
28:DG:34:THR:HG22	28:DG:35:ARG:N	2.36	0.41
30:DI:109:ILE:HG22	30:DI:109:ILE:O	2.20	0.41
31:DJ:64:VAL:HG23	31:DJ:65:THR:N	2.36	0.41
32:DK:97:THR:C	32:DK:98:ARG:HG2	2.41	0.41
33:DL:77:ILE:HG22	33:DL:78:ARG:N	2.36	0.41
33:DL:82:LEU:C	33:DL:82:LEU:HD23	2.41	0.41
35:DN:12:ARG:CZ	35:DN:20:MET:HE3	2.50	0.41
37:DP:103:ARG:HD3	37:DP:108:ALA:HB2	2.02	0.41
37:DP:31:TRP:O	37:DP:32:VAL:HB	2.20	0.41
22:DA:2718:G:OP1	37:DP:98:TYR:CD1	2.74	0.41
40:DS:55:ILE:O	40:DS:58:ALA:HB3	2.21	0.41
22:DA:1341:G:C2	41:DT:84:TYR:CD2	3.08	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DU:82:ARG:O	42:DU:97:LYS:CG	2.69	0.41
43:DV:75:GLN:HB2	43:DV:92:VAL:CG2	2.50	0.41
1:AA:1147:C:H4'	9:AI:7:TYR:CE1	2.55	0.41
1:AA:1048:G:N2	1:AA:1214:C:O2	2.54	0.41
1:AA:1462:C:C2	1:AA:1463:U:C6	3.09	0.41
1:AA:172:A:C6	1:AA:174:A:C8	3.09	0.41
1:AA:21:G:H1'	1:AA:915:A:N6	2.36	0.41
1:AA:65:A:C5	1:AA:381:C:C5	3.08	0.41
1:AA:426:U:H5''	4:AD:37:ALA:HB1	2.01	0.41
1:AA:457:G:C6	1:AA:458:U:N3	2.88	0.41
1:AA:595:A:C6	1:AA:641:U:C6	3.09	0.41
1:AA:663:A:H5'	1:AA:836:G:OP1	2.20	0.41
4:AD:197:GLU:CD	4:AD:197:GLU:H	2.24	0.41
8:AH:28:PRO:O	8:AH:33:LYS:NZ	2.48	0.41
1:AA:1370:G:H5''	9:AI:111:VAL:HG21	2.03	0.41
12:AL:24:LEU:CB	12:AL:59:ASN:HD22	2.33	0.41
13:AM:6:GLY:HA3	13:AM:66:GLU:HG3	2.02	0.41
17:AQ:45:HIS:CG	17:AQ:70:THR:HG22	2.56	0.41
18:AR:23:TYR:CE1	18:AR:24:LYS:HG3	2.56	0.41
22:BA:250:G:OP2	51:B3:13:ARG:NH1	2.54	0.41
22:BA:1575:C:H2'	22:BA:1576:U:O4'	2.21	0.41
22:BA:2043:C:C4	22:BA:2777:G:C2	3.09	0.41
22:BA:210:C:OP1	50:B2:29:GLN:NE2	2.53	0.41
22:BA:2414:G:O2'	22:BA:2415:G:H5'	2.21	0.41
22:BA:388:G:N7	22:BA:390:U:C2'	2.84	0.41
22:BA:833:A:OP2	33:BL:39:LYS:HE2	2.21	0.41
24:BC:17:VAL:HB	24:BC:204:VAL:HG13	2.03	0.41
24:BC:71:LYS:HB3	24:BC:96:TYR:HE2	1.84	0.41
27:BF:13:VAL:O	27:BF:14:LYS:C	2.59	0.41
34:BM:17:ASN:O	34:BM:38:ARG:HD3	2.21	0.41
36:BO:102:ARG:O	36:BO:105:ALA:HB3	2.20	0.41
38:BQ:66:ASN:CG	38:BQ:76:TYR:HB2	2.40	0.41
42:BU:54:GLN:N	42:BU:55:PRO:HD2	2.35	0.41
1:CA:1088:G:C4	1:CA:1089:G:C8	3.08	0.41
1:CA:1089:G:C2	1:CA:1090:U:H1'	2.56	0.41
1:CA:1106:G:N2	1:CA:1107:C:C2	2.89	0.41
1:CA:1269:A:N7	1:CA:1270:G:H1'	2.35	0.41
1:CA:1346:A:O3'	1:CA:1347:G:H4'	2.21	0.41
1:CA:1431:A:C6	1:CA:1432:G:N1	2.89	0.41
1:CA:144:G:C4	1:CA:179:A:C2	3.09	0.41
1:CA:560:A:N7	1:CA:566:G:C4	2.89	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:846:G:H2'	1:CA:846:G:N3	2.35	0.41
4:CD:150:LYS:O	4:CD:152:GLN:OE1	2.39	0.41
4:CD:50:ASP:O	4:CD:53:VAL:HG22	2.20	0.41
5:CE:38:VAL:HG12	5:CE:117:VAL:CG2	2.50	0.41
6:CF:55:HIS:O	6:CF:56:LYS:O	2.37	0.41
9:CI:118:LEU:CD1	9:CI:118:LEU:N	2.84	0.41
9:CI:35:LEU:HD21	9:CI:48:VAL:HG21	2.02	0.41
19:CS:79:THR:O	19:CS:79:THR:OG1	2.33	0.41
20:CT:33:LYS:HA	20:CT:36:TYR:HD2	1.86	0.41
22:DA:2015:A:C6	48:D0:3:VAL:HG23	2.55	0.41
48:D0:40:ARG:O	48:D0:41:HIS:HB2	2.21	0.41
50:D2:11:LYS:O	50:D2:15:SER:N	2.53	0.41
50:D2:34:ARG:HB2	50:D2:42:LEU:CD1	2.51	0.41
22:DA:1073:A:H2'	22:DA:1074:G:H5'	2.03	0.41
22:DA:1362:C:N4	22:DA:1363:C:C4	2.89	0.41
22:DA:1378:A:H4'	22:DA:1379:U:OP1	2.20	0.41
22:DA:1605:C:C4'	22:DA:1610:A:C6	3.03	0.41
22:DA:1663:G:H3'	57:DA:3423:HOH:O	2.21	0.41
22:DA:171:U:H2'	22:DA:172:A:C8	2.55	0.41
22:DA:1731:G:H2'	22:DA:1732:C:H3'	2.02	0.41
22:DA:2140:G:C6	22:DA:2152:G:C5	3.08	0.41
22:DA:2205:A:C2	22:DA:2206:C:C2	3.08	0.41
22:DA:2280:G:O2'	22:DA:2388:A:N1	2.40	0.41
22:DA:2413:G:O2'	22:DA:2414:G:H5'	2.20	0.41
22:DA:792:A:O2'	22:DA:2440:C:N3	2.42	0.41
22:DA:245:G:O6	51:D3:8:ARG:CD	2.68	0.41
22:DA:447:A:C8	22:DA:473:G:C6	3.08	0.41
22:DA:485:C:C4	22:DA:496:G:C6	3.08	0.41
22:DA:536:G:H2'	22:DA:537:G:O4'	2.21	0.41
22:DA:56:A:C2	22:DA:115:C:C2	3.08	0.41
22:DA:612:G:H2'	22:DA:614:A:C8	2.55	0.41
22:DA:683:U:H2'	22:DA:684:G:O5'	2.20	0.41
22:DA:752:A:N3	22:DA:752:A:H2'	2.36	0.41
22:DA:770:G:O4'	22:DA:1379:U:C5	2.74	0.41
22:DA:900:A:C6	22:DA:901:C:C2	3.09	0.41
22:DA:920:A:C5	22:DA:921:C:C5	3.08	0.41
22:DA:947:A:H2'	22:DA:948:C:C6	2.56	0.41
25:DD:114:LYS:HG2	25:DD:196:ALA:HB2	2.02	0.41
26:DE:40:ARG:CZ	26:DE:92:HIS:CE1	3.03	0.41
27:DF:74:VAL:CG2	27:DF:79:ILE:HD11	2.51	0.41
29:DH:130:VAL:CG1	29:DH:131:SER:N	2.82	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:DH:53:GLU:C	29:DH:55:GLU:N	2.72	0.41
22:DA:2848:G:C8	37:DP:95:ALA:HB2	2.55	0.41
44:DW:37:ILE:HG22	44:DW:38:VAL:CG2	2.51	0.41
1:AA:1099:G:C5	1:AA:1100:C:C5	3.08	0.41
1:AA:1140:C:HO2'	1:AA:1141:C:P	2.44	0.41
1:AA:1162:C:H2'	1:AA:1163:A:O4'	2.21	0.41
1:AA:1195:C:H2'	1:AA:1197:A:O4'	2.20	0.41
1:AA:1299:A:C6	1:AA:1301:U:O2	2.74	0.41
1:AA:18:C:H2'	1:AA:19:A:O4'	2.21	0.41
1:AA:238:A:H2'	1:AA:239:U:O4'	2.21	0.41
1:AA:855:U:C4	1:AA:856:C:C5	3.08	0.41
2:AB:27:MET:HE3	2:AB:193:PRO:HG3	2.02	0.41
2:AB:9:MET:SD	2:AB:9:MET:N	2.94	0.41
3:AC:175:LEU:O	3:AC:175:LEU:HD12	2.21	0.41
4:AD:143:VAL:O	4:AD:143:VAL:CG2	2.65	0.41
4:AD:88:GLU:HG2	4:AD:188:ARG:HD3	2.01	0.41
8:AH:26:THR:O	8:AH:27:MET:HB3	2.21	0.41
8:AH:2:SER:N	8:AH:4:GLN:HG3	2.36	0.41
1:AA:1308:U:OP2	13:AM:98:ARG:HG3	2.21	0.41
16:AP:51:ARG:NH1	16:AP:51:ARG:HB3	2.35	0.41
16:AP:78:VAL:HG13	16:AP:78:VAL:O	2.20	0.41
17:AQ:43:LYS:O	17:AQ:44:LEU:HD23	2.21	0.41
1:AA:1014:A:C4	19:AS:34:TRP:CZ3	3.08	0.41
20:AT:51:PHE:CD1	20:AT:51:PHE:C	2.93	0.41
21:AU:25:LYS:O	21:AU:27:GLY:N	2.53	0.41
49:B1:35:GLU:HA	49:B1:49:TYR:O	2.21	0.41
22:BA:1001:A:P	57:BA:3736:HOH:O	2.73	0.41
22:BA:1350:C:N3	22:BA:1382:G:C2	2.88	0.41
22:BA:1424:G:C2	22:BA:1425:G:H1'	2.56	0.41
22:BA:1584:U:OP1	22:BA:1584:U:C6	2.73	0.41
22:BA:1688:U:O2	22:BA:1688:U:H2'	2.20	0.41
22:BA:1879:C:H2'	22:BA:1880:U:O4'	2.20	0.41
22:BA:2166:U:O4	22:BA:2170:A:N7	2.54	0.41
22:BA:221:A:C4	22:BA:266:G:N7	2.88	0.41
22:BA:2243:U:O2'	22:BA:2244:U:H5'	2.20	0.41
22:BA:2271:G:H2'	22:BA:2272:U:H6	1.86	0.41
22:BA:2534:A:C2'	22:BA:2535:G:O5'	2.69	0.41
22:BA:2592:G:C5	22:BA:2593:U:C4	3.09	0.41
22:BA:439:A:H2'	22:BA:440:C:O4'	2.19	0.41
22:BA:499:U:O4	22:BA:500:G:C6	2.73	0.41
22:BA:779:U:H2'	22:BA:779:U:O2	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:46:A:H2'	23:BB:47:C:O4'	2.21	0.41
24:BC:199:GLU:O	24:BC:200:HIS:C	2.58	0.41
26:BE:134:LEU:HD23	26:BE:160:ALA:O	2.19	0.41
22:BA:2444:G:OP2	26:BE:63:LYS:HD3	2.20	0.41
27:BF:14:LYS:O	27:BF:18:THR:CG2	2.69	0.41
29:BH:82:SER:HB3	29:BH:146:VAL:HG12	2.03	0.41
29:BH:30:LEU:C	29:BH:32:PRO:HD2	2.41	0.41
30:BI:127:ARG:HA	30:BI:130:GLU:HG3	2.02	0.41
34:BM:58:LYS:C	34:BM:60:GLN:H	2.24	0.41
37:BP:53:ARG:NH1	37:BP:53:ARG:CG	2.75	0.41
40:BS:36:LEU:HD13	40:BS:48:LYS:HA	2.01	0.41
41:BT:47:VAL:CG1	41:BT:55:VAL:CG2	2.99	0.41
41:BT:29:THR:HG23	41:BT:86:THR:N	2.35	0.41
43:BV:80:HIS:ND1	43:BV:83:LYS:CG	2.84	0.41
45:BX:18:ARG:CZ	45:BX:24:ALA:HB2	2.51	0.41
1:CA:1000:A:H3'	1:CA:1001:C:C6	2.56	0.41
1:CA:164:G:H2'	1:CA:164:G:N3	2.35	0.41
1:CA:257:G:C2	1:CA:270:A:C6	3.08	0.41
1:CA:382:A:H2'	1:CA:383:A:C8	2.55	0.41
1:CA:587:G:H4'	8:CH:4:GLN:HA	2.03	0.41
1:CA:792:A:H1'	1:CA:794:A:N7	2.35	0.41
1:CA:79:G:N2	1:CA:91:U:O2	2.54	0.41
1:CA:972:C:H4'	10:CJ:59:LYS:CG	2.50	0.41
2:CB:115:LYS:HA	2:CB:118:GLU:HG2	2.03	0.41
2:CB:87:CYS:SG	2:CB:89:GLN:NE2	2.94	0.41
4:CD:76:TYR:O	4:CD:77:LYS:C	2.58	0.41
7:CG:133:THR:HA	7:CG:136:LYS:HB3	2.03	0.41
10:CJ:78:GLU:HA	10:CJ:79:PRO:HD3	1.89	0.41
11:CK:52:PHE:CE2	11:CK:62:ALA:HB1	2.55	0.41
13:CM:22:ILE:HG22	13:CM:23:TYR:N	2.36	0.41
13:CM:81:MET:O	13:CM:83:LEU:N	2.53	0.41
15:CO:43:PHE:CZ	15:CO:53:ARG:HA	2.56	0.41
18:CR:20:GLU:O	18:CR:21:ILE:C	2.57	0.41
48:D0:27:SER:O	48:D0:28:LEU:C	2.59	0.41
22:DA:1040:A:H2'	22:DA:1041:G:O4'	2.20	0.41
22:DA:1120:G:C5	22:DA:1121:C:C5	3.09	0.41
22:DA:1231:U:C2'	22:DA:1232:G:H8	2.33	0.41
22:DA:1366:A:C4	22:DA:1367:A:C8	3.09	0.41
22:DA:1866:A:N7	22:DA:1867:G:C8	2.88	0.41
22:DA:2179:C:H2'	22:DA:2180:U:C6	2.55	0.41
22:DA:218:A:H2'	22:DA:219:A:O4'	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2314:A:C2	22:DA:2315:G:C5	3.09	0.41
22:DA:232:G:N1	22:DA:420:C:OP1	2.53	0.41
22:DA:251:A:H4'	33:DL:47:ARG:NH2	2.35	0.41
22:DA:772:C:H2'	22:DA:773:U:O4'	2.20	0.41
22:DA:804:A:H2'	22:DA:806:C:C4	2.56	0.41
23:DB:29:A:C2	23:DB:30:C:C2	3.09	0.41
24:DC:129:THR:CG2	24:DC:130:LEU:N	2.83	0.41
25:DD:106:LYS:HB2	25:DD:206:ALA:HB2	2.02	0.41
27:DF:111:ILE:HB	27:DF:114:PHE:CB	2.51	0.41
23:DB:55:U:H4'	27:DF:25:VAL:HG12	2.02	0.41
28:DG:91:GLY:O	28:DG:92:VAL:C	2.58	0.41
30:DI:29:GLY:HA2	30:DI:33:VAL:HB	2.03	0.41
30:DI:57:VAL:HG22	30:DI:69:PHE:HB2	2.02	0.41
22:DA:2250:G:C2	34:DM:82:MET:CB	3.03	0.41
36:DO:48:LEU:O	36:DO:49:VAL:CG2	2.69	0.41
40:DS:47:VAL:HB	40:DS:103:ILE:HG21	2.02	0.41
40:DS:95:ARG:CG	40:DS:95:ARG:O	2.68	0.41
41:DT:38:ALA:O	41:DT:39:THR:CB	2.67	0.41
41:DT:8:LEU:CD2	41:DT:50:LEU:HD21	2.50	0.41
41:DT:77:ARG:O	41:DT:78:SER:HB2	2.21	0.41
42:DU:21:LYS:HB2	42:DU:39:ILE:HD12	2.02	0.41
43:DV:42:LEU:N	43:DV:42:LEU:HD23	2.36	0.41
43:DV:49:ASN:O	43:DV:52:ALA:HB3	2.21	0.41
45:DX:39:TRP:HB2	45:DX:46:PHE:CE2	2.56	0.41
46:DY:20:ASN:O	46:DY:24:GLU:HB2	2.20	0.41
1:AA:1125:U:C5	1:AA:1127:G:C5	3.09	0.41
1:AA:1314:C:N4	19:AS:4:SER:HA	2.35	0.41
1:AA:409:U:H2'	1:AA:410:G:O4'	2.21	0.41
1:AA:464:U:N3	1:AA:467:U:OP2	2.50	0.41
1:AA:675:A:OP1	18:AR:71:THR:HG21	2.21	0.41
1:AA:676:A:C2	1:AA:677:U:C2	3.09	0.41
1:AA:691:G:O6	11:AK:57:LYS:HE2	2.20	0.41
1:AA:721:G:C6	1:AA:733:G:C2	3.09	0.41
2:AB:210:VAL:O	2:AB:211:THR:C	2.59	0.41
2:AB:41:ILE:N	2:AB:41:ILE:CD1	2.83	0.41
9:AI:86:ALA:O	9:AI:88:MET:N	2.54	0.41
12:AL:38:TYR:O	12:AL:39:THR:CG2	2.69	0.41
13:AM:64:VAL:CG1	13:AM:64:VAL:O	2.63	0.41
14:AN:64:CYS:HB2	14:AN:80:SER:HB2	2.03	0.41
16:AP:21:VAL:HG21	16:AP:60:TRP:CD1	2.56	0.41
16:AP:38:PHE:CE2	16:AP:51:ARG:HB2	2.56	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:B2:30:VAL:O	50:B2:34:ARG:HG3	2.20	0.41
22:BA:1071:G:O4'	22:BA:1089:A:N7	2.53	0.41
22:BA:1140:C:O4'	22:BA:1143:A:C2	2.73	0.41
22:BA:1735:A:C4	22:BA:1736:U:C6	3.08	0.41
22:BA:2779:U:C5	22:BA:2781:A:C2	3.09	0.41
22:BA:2816:G:O3'	35:BN:99:LYS:HE2	2.21	0.41
22:BA:359:G:H2'	22:BA:360:U:O4'	2.21	0.41
22:BA:629:G:N3	22:BA:639:U:O2'	2.51	0.41
22:BA:826:U:H2'	22:BA:828:U:O4'	2.21	0.41
22:BA:999:U:H5	22:BA:1154:G:N7	2.19	0.41
23:BB:101:A:H2'	23:BB:102:G:O4'	2.21	0.41
23:BB:30:C:C2'	23:BB:31:C:H5'	2.48	0.41
24:BC:71:LYS:HE3	24:BC:96:TYR:CD2	2.56	0.41
29:BH:100:ALA:HB2	29:BH:115:VAL:CG2	2.50	0.41
29:BH:95:GLY:HA2	29:BH:117:LEU:CD2	2.51	0.41
31:BJ:80:HIS:O	31:BJ:81:ILE:C	2.58	0.41
32:BK:41:ILE:HD11	32:BK:58:LEU:CD2	2.51	0.41
22:BA:2392:A:O2'	33:BL:60:ARG:O	2.36	0.41
33:BL:87:GLY:O	33:BL:89:VAL:HG12	2.21	0.41
34:BM:95:LEU:C	34:BM:96:ILE:HD13	2.40	0.41
35:BN:46:ARG:O	35:BN:50:PRO:HG2	2.21	0.41
39:BR:69:GLY:C	39:BR:70:GLU:O	2.58	0.41
42:BU:77:THR:O	42:BU:79:LYS:HG2	2.20	0.41
46:BY:57:LEU:O	46:BY:57:LEU:CG	2.69	0.41
1:CA:101:A:C5	1:CA:102:G:N7	2.88	0.41
1:CA:375:U:C4	1:CA:376:G:N7	2.89	0.41
1:CA:40:C:H2'	1:CA:41:G:O4'	2.20	0.41
1:CA:414:A:N1	1:CA:415:A:C4	2.89	0.41
1:CA:834:U:H2'	1:CA:835:U:C6	2.56	0.41
1:CA:913:A:H4'	1:CA:914:A:H4'	2.03	0.41
3:CC:179:ARG:O	3:CC:206:GLU:O	2.38	0.41
4:CD:149:ALA:O	4:CD:150:LYS:C	2.56	0.41
4:CD:153:SER:O	4:CD:154:ARG:C	2.58	0.41
5:CE:134:ILE:HD12	5:CE:134:ILE:H	1.85	0.41
5:CE:153:VAL:HG23	5:CE:153:VAL:O	2.20	0.41
5:CE:36:LEU:HD21	5:CE:137:VAL:CG1	2.50	0.41
8:CH:78:VAL:N	8:CH:126:ILE:O	2.51	0.41
9:CI:13:LYS:O	9:CI:14:SER:CB	2.69	0.41
11:CK:100:LEU:O	11:CK:101:ASN:C	2.59	0.41
20:CT:44:LYS:HB3	20:CT:87:ALA:HB1	2.02	0.41
50:D2:24:THR:HG23	50:D2:27:GLY:HA3	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1096:A:C5	22:DA:1097:U:H5	2.39	0.41
22:DA:116:C:C4	22:DA:117:G:N7	2.88	0.41
22:DA:1275:A:C5	35:DN:16:HIS:CD2	3.08	0.41
22:DA:128:C:C4	22:DA:129:C:N4	2.89	0.41
22:DA:1358:G:O6	22:DA:1371:G:C8	2.74	0.41
22:DA:1838:C:C4	22:DA:1899:A:C4	3.08	0.41
22:DA:1877:A:H2'	22:DA:1878:G:C8	2.56	0.41
22:DA:1911:U:H2'	22:DA:1918:A:C2	2.55	0.41
22:DA:191:A:C2	22:DA:192:C:N3	2.89	0.41
22:DA:2115:G:N3	22:DA:2117:A:C8	2.89	0.41
22:DA:2134:A:C6	22:DA:2135:A:C5	3.08	0.41
22:DA:410:G:C6	22:DA:2407:A:N6	2.89	0.41
22:DA:2466:C:O2'	22:DA:2467:C:H5'	2.21	0.41
22:DA:2516:A:C2'	22:DA:2517:C:O5'	2.69	0.41
22:DA:2634:A:O2'	25:DD:79:LEU:HD12	2.21	0.41
22:DA:2771:C:H2'	22:DA:2772:C:C6	2.55	0.41
22:DA:36:G:N2	22:DA:445:C:C2	2.89	0.41
22:DA:373:U:C2	22:DA:374:A:C8	3.08	0.41
22:DA:513:A:C2	22:DA:514:A:N7	2.89	0.41
22:DA:515:A:C8	22:DA:516:C:C6	3.08	0.41
23:DB:15:A:H1'	23:DB:109:A:C8	2.56	0.41
23:DB:90:C:C5'	34:DM:18:ARG:HG2	2.50	0.41
24:DC:71:LYS:HG2	24:DC:102:ARG:CZ	2.51	0.41
24:DC:252:THR:O	24:DC:253:LYS:HB2	2.21	0.41
25:DD:8:LYS:HB2	25:DD:201:LEU:CD1	2.51	0.41
26:DE:150:THR:O	26:DE:192:ALA:HB2	2.20	0.41
27:DF:136:ILE:HG22	27:DF:136:ILE:O	2.21	0.41
28:DG:62:TRP:HA	28:DG:62:TRP:CE3	2.56	0.41
40:DS:47:VAL:O	40:DS:47:VAL:CG2	2.69	0.41
41:DT:24:MET:CG	41:DT:29:THR:O	2.69	0.41
42:DU:18:ASP:HB3	42:DU:21:LYS:HG3	2.01	0.41
45:DX:54:LYS:HA	45:DX:57:ARG:CG	2.50	0.41
1:AA:865:A:H5'	1:AA:1078:U:O4	2.20	0.41
1:AA:1080:A:OP1	5:AE:52:LYS:CE	2.68	0.41
1:AA:1154:G:H2'	1:AA:1155:A:H8	1.86	0.41
1:AA:960:U:H2'	1:AA:1225:A:H62	1.85	0.41
1:AA:1323:G:O2'	1:AA:1324:A:H5'	2.21	0.41
1:AA:1340:A:H2'	1:AA:1341:U:O4'	2.21	0.41
1:AA:1401:G:C2	1:AA:1402:C:H1'	2.56	0.41
1:AA:1461:G:H2'	1:AA:1462:C:H6	1.86	0.41
1:AA:225:C:H2'	1:AA:226:G:O4'	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:591:U:H2'	1:AA:592:G:C8	2.56	0.41
1:AA:737:C:C2	1:AA:738:C:C5	3.08	0.41
1:AA:771:G:C5	1:AA:772:U:C5	3.08	0.41
2:AB:68:LEU:HD12	2:AB:154:MET:HE1	2.02	0.41
3:AC:22:TRP:CD1	3:AC:59:ARG:HD2	2.56	0.41
4:AD:28:ILE:HG22	4:AD:28:ILE:O	2.20	0.41
5:AE:107:ALA:CB	5:AE:125:ALA:HB3	2.51	0.41
5:AE:154:ALA:O	5:AE:157:ARG:C	2.59	0.41
7:AG:108:ALA:O	7:AG:119:ARG:HD3	2.19	0.41
7:AG:69:VAL:HG21	7:AG:104:ILE:CD1	2.50	0.41
8:AH:41:LYS:O	8:AH:42:GLU:C	2.59	0.41
9:AI:44:ALA:HB1	9:AI:47:VAL:CG1	2.50	0.41
11:AK:31:ILE:O	11:AK:31:ILE:HG13	2.18	0.41
13:AM:66:GLU:O	13:AM:69:LEU:N	2.54	0.41
13:AM:8:ASN:OD1	13:AM:9:ILE:N	2.54	0.41
16:AP:60:TRP:HA	16:AP:63:GLN:HB3	2.03	0.41
16:AP:78:VAL:CG1	16:AP:78:VAL:O	2.68	0.41
20:AT:67:ILE:HD12	20:AT:71:LYS:HG2	2.01	0.41
53:B5:94:TYR:O	53:B5:95:VAL:HG23	2.20	0.41
22:BA:1071:G:C4	22:BA:1089:A:C6	3.08	0.41
22:BA:1106:G:C2	22:BA:1107:G:N9	2.88	0.41
22:BA:1142:A:N3	22:BA:1144:A:C8	2.89	0.41
22:BA:1301:A:N3	22:BA:1301:A:H2'	2.36	0.41
22:BA:1346:G:C2'	22:BA:1347:A:H5'	2.51	0.41
22:BA:1354:A:H2'	22:BA:1355:G:O4'	2.21	0.41
22:BA:1421:G:H2'	22:BA:1421:G:N3	2.35	0.41
22:BA:1441:G:H2'	22:BA:1442:U:H6	1.84	0.41
22:BA:167:A:H2'	22:BA:168:G:O4'	2.21	0.41
22:BA:1906:G:C5	22:BA:1929:G:N2	2.88	0.41
22:BA:2001:C:H4'	22:BA:2689:U:H2'	2.03	0.41
22:BA:215:G:H4'	22:BA:216:A:OP1	2.20	0.41
22:BA:2317:A:H2'	22:BA:2318:G:H5'	2.03	0.41
22:BA:2486:C:H2'	22:BA:2487:G:O5'	2.19	0.41
22:BA:1452:G:C4	22:BA:2702:G:C6	3.09	0.41
22:BA:2839:G:H2'	22:BA:2840:C:O5'	2.20	0.41
22:BA:28:A:C5	22:BA:29:U:C5	3.08	0.41
22:BA:416:U:H2'	22:BA:417:C:C6	2.55	0.41
22:BA:770:G:O2'	22:BA:771:G:H5'	2.21	0.41
22:BA:817:C:H2'	22:BA:818:G:O4'	2.21	0.41
22:BA:971:G:C6	22:BA:972:A:C4	3.08	0.41
24:BC:252:THR:O	24:BC:254:GLY:N	2.54	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BF:17:MET:HE1	27:BF:22:TYR:HB2	2.01	0.41
29:BH:129:GLU:C	29:BH:130:VAL:HG23	2.41	0.41
29:BH:90:LEU:HG	29:BH:92:GLY:C	2.41	0.41
31:BJ:23:LYS:CE	31:BJ:142:ILE:OXT	2.69	0.41
34:BM:69:PRO:O	34:BM:70:ASP:OD2	2.39	0.41
37:BP:110:ILE:O	37:BP:110:ILE:HG12	2.20	0.41
39:BR:40:MET:O	39:BR:41:ILE:HG12	2.21	0.41
42:BU:7:ARG:O	42:BU:8:ASP:O	2.38	0.41
1:CA:1055:A:C5	1:CA:1206:G:C6	3.09	0.41
1:CA:1090:U:H2'	1:CA:1091:U:C6	2.56	0.41
1:CA:1092:A:C2	1:CA:1183:U:C2	3.09	0.41
1:CA:1261:A:N6	1:CA:1275:A:N9	2.68	0.41
1:CA:1293:C:H2'	1:CA:1294:G:O4'	2.21	0.41
1:CA:1428:A:N1	1:CA:1473:G:C6	2.89	0.41
1:CA:228:A:H2'	1:CA:229:U:O4'	2.21	0.41
1:CA:243:A:C2	1:CA:246:A:C8	3.08	0.41
1:CA:345:C:OP1	37:DP:39:ARG:CD	2.69	0.41
1:CA:49:U:O4	1:CA:365:U:H5	2.03	0.41
1:CA:4:U:C2'	1:CA:4:U:O2	2.68	0.41
1:CA:69:G:H5'	1:CA:70:U:OP1	2.20	0.41
2:CB:94:HIS:CG	2:CB:95:ARG:NH2	2.89	0.41
3:CC:50:ALA:O	3:CC:51:SER:HB2	2.21	0.41
4:CD:152:GLN:N	4:CD:152:GLN:OE1	2.53	0.41
6:AF:17:GLN:HG2	4:CD:189:SER:HB2	2.02	0.41
4:CD:58:LYS:HG3	4:CD:59:GLN:N	2.36	0.41
9:CI:71:GLY:O	9:CI:75:GLN:N	2.46	0.41
1:CA:684:U:O2	11:CK:41:ALA:HB3	2.21	0.41
12:CL:43:LYS:O	12:CL:44:LYS:O	2.39	0.41
12:CL:72:HIS:O	12:CL:72:HIS:ND1	2.54	0.41
15:CO:60:VAL:O	15:CO:63:ARG:HB3	2.20	0.41
20:CT:39:ILE:HD11	20:CT:83:ILE:CG2	2.51	0.41
22:DA:1014:A:C6	22:DA:1015:U:C4	3.09	0.41
22:DA:55:G:C2	22:DA:116:C:C2	3.09	0.41
22:DA:1404:C:C2'	22:DA:1405:U:O5'	2.68	0.41
22:DA:1439:A:C8	22:DA:1440:U:C6	3.09	0.41
22:DA:1806:C:C5	22:DA:1807:G:C8	3.08	0.41
22:DA:2209:G:C2	22:DA:2216:G:N3	2.88	0.41
22:DA:2246:G:H2'	22:DA:2247:A:O4'	2.21	0.41
22:DA:2281:A:H2'	22:DA:2282:G:H5'	2.03	0.41
22:DA:2415:G:C5	22:DA:2416:C:C4	3.08	0.41
22:DA:2646:C:N3	22:DA:2675:A:C2	2.89	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2766:A:H2'	22:DA:2766:A:N3	2.36	0.41
22:DA:2720:U:C4	22:DA:2872:A:C2	3.08	0.41
22:DA:2884:U:O4'	22:DA:2884:U:O2	2.38	0.41
22:DA:291:G:N2	22:DA:350:G:C8	2.89	0.41
22:DA:36:G:C2	22:DA:445:C:N3	2.88	0.41
22:DA:377:G:C6	22:DA:378:C:N4	2.89	0.41
22:DA:459:U:C5	22:DA:469:G:N2	2.88	0.41
22:DA:565:C:C2'	22:DA:566:U:H5'	2.51	0.41
22:DA:569:U:H2'	22:DA:570:G:O4'	2.21	0.41
22:DA:688:U:OP1	50:D2:2:LYS:HD3	2.20	0.41
22:DA:877:A:C2'	22:DA:878:A:OP2	2.68	0.41
22:DA:952:G:C2	22:DA:966:G:C2	3.09	0.41
23:DB:24:G:H4'	23:DB:25:U:C5	2.55	0.41
26:DE:195:GLN:O	26:DE:199:MET:HB2	2.20	0.41
26:DE:22:ASP:OD2	26:DE:22:ASP:N	2.54	0.41
27:DF:69:LYS:HG3	27:DF:84:PRO:HA	2.02	0.41
29:DH:118:PRO:HB2	29:DH:119:ASN:H	1.72	0.41
29:DH:1:MET:HB3	29:DH:21:VAL:O	2.20	0.41
29:DH:2:GLN:O	29:DH:3:VAL:O	2.38	0.41
22:DA:1203:U:C1'	33:DL:4:ASN:HB3	2.47	0.41
40:DS:33:LEU:CD2	40:DS:52:GLU:CG	2.98	0.41
40:DS:57:ASN:N	40:DS:57:ASN:OD1	2.53	0.41
22:DA:1599:U:P	41:DT:40:LYS:HD2	2.60	0.41
43:DV:30:ILE:O	43:DV:37:PRO:HA	2.21	0.41
44:DW:85:GLU:OE2	44:DW:85:GLU:HA	2.21	0.41
46:DY:27:ASN:O	46:DY:31:GLN:HB2	2.21	0.41
47:DZ:3:LYS:HD3	47:DZ:3:LYS:N	2.35	0.41
1:AA:1059:C:N3	1:AA:1060:U:C5	2.89	0.41
1:AA:1101:A:N3	1:AA:1102:A:H1'	2.36	0.41
1:AA:1153:G:C4	1:AA:1154:G:C8	3.09	0.41
1:AA:1258:G:O2'	1:AA:1259:C:H5'	2.21	0.41
1:AA:1296:C:H5''	1:AA:1297:G:OP2	2.21	0.41
1:AA:1239:A:H2'	1:AA:1298:U:O4	2.21	0.41
1:AA:1412:C:H2'	1:AA:1413:A:C8	2.56	0.41
1:AA:178:C:H2'	1:AA:179:A:O4'	2.21	0.41
1:AA:181:A:N6	1:AA:195:A:C8	2.89	0.41
1:AA:257:G:N2	1:AA:258:G:C4	2.89	0.41
1:AA:375:U:C2	1:AA:376:G:C8	3.09	0.41
1:AA:454:G:H2'	1:AA:455:G:H5'	2.02	0.41
1:AA:539:A:H2'	1:AA:540:G:C8	2.56	0.41
1:AA:615:G:C2	1:AA:616:G:C8	3.09	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:616:G:O2'	1:AA:617:G:H5'	2.20	0.41
1:AA:697:U:C5	1:AA:698:G:C8	3.09	0.41
1:AA:69:G:H3'	1:AA:70:U:C6	2.56	0.41
2:AB:111:ILE:O	2:AB:114:LEU:N	2.54	0.41
3:AC:97:VAL:HB	3:AC:98:PRO:HD2	2.02	0.41
4:AD:30:THR:O	4:AD:31:LYS:C	2.58	0.41
4:AD:97:ARG:O	4:AD:100:ASN:HB3	2.20	0.41
8:AH:11:LEU:N	8:AH:11:LEU:HD23	2.36	0.41
10:AJ:42:LEU:HG	10:AJ:43:PRO:HD2	2.02	0.41
1:AA:728:A:OP1	15:AO:54:ARG:NH2	2.53	0.41
16:AP:46:LYS:HD3	16:AP:47:GLU:H	1.82	0.41
49:B1:25:LYS:CD	49:B1:52:ALA:O	2.69	0.41
22:BA:71:A:N1	22:BA:114:U:H1'	2.36	0.41
22:BA:1816:C:C5	24:BC:62:TYR:CE1	3.09	0.41
22:BA:218:A:OP2	57:BA:3225:HOH:O	2.22	0.41
22:BA:2326:C:C1'	22:BA:2327:A:OP1	2.68	0.41
22:BA:2331:G:O2'	22:BA:2336:A:N1	2.49	0.41
22:BA:259:G:O2'	22:BA:260:G:H5'	2.20	0.41
22:BA:2673:G:N3	22:BA:2674:G:C8	2.89	0.41
22:BA:45:G:H5''	22:BA:46:G:OP1	2.21	0.41
22:BA:523:C:C2'	22:BA:524:G:H5'	2.51	0.41
22:BA:585:G:H5''	22:BA:586:A:OP1	2.21	0.41
24:BC:221:ARG:NH2	57:BC:404:HOH:O	2.53	0.41
25:BD:11:MET:O	25:BD:12:THR:CG2	2.68	0.41
22:BA:2311:A:C8	27:BF:77:PHE:CG	3.08	0.41
32:BK:41:ILE:HD11	32:BK:58:LEU:HD22	2.02	0.41
33:BL:81:ASP:HB3	33:BL:100:ILE:CD1	2.51	0.41
22:BA:954:G:OP2	34:BM:16:ARG:NH2	2.54	0.41
1:CA:1183:U:C2'	1:CA:1184:G:OP1	2.69	0.41
1:CA:1219:A:C6	1:CA:1220:G:C6	3.09	0.41
1:CA:1327:C:N4	1:CA:1328:C:N4	2.68	0.41
1:CA:1412:C:C2	1:CA:1413:A:C8	3.09	0.41
1:CA:186:C:O2	1:CA:186:C:H2'	2.21	0.41
1:CA:243:A:C2	1:CA:245:U:C2	3.09	0.41
1:CA:109:A:N1	1:CA:327:A:C6	2.88	0.41
1:CA:463:U:H5'	1:CA:464:U:OP2	2.21	0.41
1:CA:671:G:O2'	1:CA:672:U:H5'	2.21	0.41
1:CA:867:G:C5	1:CA:868:C:C5	3.08	0.41
1:CA:929:G:C5	1:CA:930:C:C5	3.08	0.41
1:CA:976:G:C8	1:CA:1361:G:O6	2.74	0.41
3:CC:134:MET:SD	3:CC:153:VAL:HG12	2.60	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CC:13:GLY:C	3:CC:14:ILE:HD13	2.41	0.41
3:CC:167:TRP:C	3:CC:167:TRP:CE3	2.94	0.41
3:CC:23:PHE:CD2	10:CJ:97:ASP:HB2	2.56	0.41
3:CC:64:ILE:HG23	3:CC:99:ALA:HB2	2.02	0.41
5:CE:156:LYS:HD3	8:CH:71:VAL:HG13	2.03	0.41
6:CF:88:MET:SD	6:CF:90:MET:SD	3.19	0.41
12:CL:38:TYR:O	12:CL:39:THR:HG23	2.21	0.41
13:CM:22:ILE:HB	13:CM:25:VAL:CG1	2.51	0.41
13:CM:34:LEU:HD22	13:CM:39:ILE:HG21	2.02	0.41
15:CO:41:GLY:O	15:CO:42:HIS:C	2.59	0.41
16:CP:28:ARG:CG	16:CP:29:ASN:N	2.84	0.41
16:CP:4:ILE:CD1	16:CP:65:ALA:HB1	2.51	0.41
21:CU:15:ALA:O	21:CU:16:LEU:C	2.59	0.41
21:CU:4:ILE:N	21:CU:19:PHE:CE1	2.89	0.41
22:DA:100:U:O4'	22:DA:101:A:C2	2.73	0.41
22:DA:83:A:H2	22:DA:103:A:N7	2.18	0.41
22:DA:116:C:C2	22:DA:117:G:C8	3.09	0.41
22:DA:1237:A:N3	22:DA:1238:G:H1'	2.35	0.41
22:DA:1483:G:C6	22:DA:1484:U:C4	3.09	0.41
22:DA:1501:G:H2'	22:DA:1502:A:O4'	2.21	0.41
22:DA:1844:C:C2	22:DA:1845:G:C8	3.09	0.41
22:DA:1933:G:O2'	22:DA:1974:C:H4'	2.20	0.41
22:DA:2127:G:O2'	22:DA:2173:A:C4	2.73	0.41
22:DA:2503:A:C5'	22:DA:2503:A:N3	2.84	0.41
22:DA:2553:G:H2'	22:DA:2554:U:C4'	2.50	0.41
22:DA:404:A:C1'	22:DA:405:U:OP2	2.69	0.41
22:DA:420:C:H2'	22:DA:421:C:H6	1.85	0.41
22:DA:826:U:H5''	57:DA:3696:HOH:O	2.19	0.41
22:DA:869:G:H1'	34:DM:8:LYS:HD2	2.01	0.41
24:DC:53:HIS:HA	24:DC:217:ARG:HB2	2.03	0.41
26:DE:135:ALA:O	26:DE:139:LYS:HB2	2.20	0.41
27:DF:99:PHE:HA	27:DF:102:ARG:NE	2.36	0.41
27:DF:9:LYS:O	27:DF:13:VAL:HB	2.21	0.41
30:DI:22:PRO:CB	30:DI:23:PRO:HD3	2.51	0.41
31:DJ:4:PHE:CG	38:DQ:100:VAL:HG11	2.56	0.41
32:DK:78:ARG:NH2	37:DP:73:VAL:CG1	2.84	0.41
34:DM:34:LYS:O	34:DM:128:THR:CG2	2.68	0.41
36:DO:97:PHE:HB3	36:DO:103:VAL:HG11	2.01	0.41
38:DQ:25:TYR:CD2	38:DQ:25:TYR:C	2.94	0.41
38:DQ:58:ARG:NH2	38:DQ:92:ARG:CZ	2.84	0.41
40:DS:58:ALA:O	40:DS:62:ASP:O	2.39	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1130:A:C2	1:AA:1146:A:C4	3.09	0.41
1:AA:1288:A:C6	1:AA:1289:A:C5	3.08	0.41
1:AA:258:G:C5	1:AA:259:G:N7	2.89	0.41
1:AA:451:A:H4'	1:AA:452:A:O5'	2.21	0.41
1:AA:459:A:H2'	1:AA:460:A:C8	2.56	0.41
1:AA:669:G:O2'	1:AA:670:G:H5'	2.21	0.41
1:AA:704:A:C6	1:AA:705:G:C4	3.09	0.41
1:AA:953:G:C2	1:AA:1229:A:C2	3.09	0.41
1:AA:958:A:N6	1:AA:959:A:N1	2.69	0.41
1:AA:987:G:H2'	1:AA:987:G:N3	2.36	0.41
2:AB:101:LEU:HD13	2:AB:101:LEU:HA	1.90	0.41
2:AB:149:GLY:O	2:AB:152:LYS:N	2.53	0.41
2:AB:79:ALA:C	2:AB:82:ASP:OD2	2.58	0.41
9:AI:29:VAL:HB	9:AI:64:TYR:HA	2.03	0.41
11:AK:55:SER:O	11:AK:56:ARG:C	2.58	0.41
11:AK:82:LEU:O	11:AK:82:LEU:HD23	2.20	0.41
13:AM:29:ARG:CZ	13:AM:63:PHE:CB	2.99	0.41
19:AS:4:SER:O	19:AS:5:LEU:HB2	2.21	0.41
19:AS:50:ALA:HB1	19:AS:57:HIS:CB	2.51	0.41
20:AT:43:ASP:O	20:AT:47:ALA:HB2	2.21	0.41
22:BA:1014:A:C2	22:BA:1149:G:C4	3.08	0.41
22:BA:1088:A:N3	22:BA:1088:A:H3'	2.36	0.41
22:BA:1121:C:H2'	22:BA:1122:G:O4'	2.22	0.41
22:BA:1153:C:C4	22:BA:1154:G:C5	3.09	0.41
22:BA:1165:A:H2'	22:BA:1166:G:H8	1.86	0.41
22:BA:2127:G:H5'	22:BA:2128:G:OP1	2.21	0.41
22:BA:2188:U:C4	22:BA:2189:U:O4	2.74	0.41
22:BA:21:A:O2'	22:BA:22:C:H5'	2.21	0.41
22:BA:2516:A:N6	22:BA:2517:C:N4	2.68	0.41
22:BA:300:A:OP2	42:BU:97:LYS:NZ	2.53	0.41
22:BA:49:A:C8	22:BA:51:G:C2	3.09	0.41
22:BA:597:G:C6	22:BA:598:U:C4	3.08	0.41
22:BA:764:A:OP2	24:BC:213:TRP:CZ3	2.74	0.41
22:BA:790:U:HO2'	22:BA:791:C:P	2.43	0.41
23:BB:35:C:C3'	23:BB:36:C:H5'	2.50	0.41
24:BC:36:LYS:O	24:BC:37:ASN:HB3	2.19	0.41
26:BE:25:GLU:O	26:BE:26:ALA:C	2.59	0.41
27:BF:119:ALA:HB1	27:BF:167:ARG:CD	2.51	0.41
27:BF:33:LYS:HG2	27:BF:157:THR:HB	2.02	0.41
29:BH:129:GLU:C	29:BH:130:VAL:CG2	2.90	0.41
29:BH:132:PHE:CE2	29:BH:142:VAL:CG2	3.04	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BI:115:ALA:O	30:BI:116:ASP:HB2	2.21	0.41
30:BI:122:ILE:HG23	30:BI:125:MET:SD	2.61	0.41
30:BI:33:VAL:HG13	30:BI:67:PHE:CZ	2.56	0.41
31:BJ:7:LYS:HA	31:BJ:8:PRO:HD3	1.85	0.41
33:BL:85:VAL:HA	33:BL:98:ALA:HB2	2.02	0.41
34:BM:135:VAL:O	34:BM:136:MET:HB3	2.21	0.41
35:BN:9:GLN:O	35:BN:11:ASN:N	2.54	0.41
35:BN:38:LEU:N	35:BN:39:PRO:CD	2.84	0.41
23:BB:28:C:OP1	36:BO:31:THR:HG21	2.20	0.41
38:BQ:81:ASN:O	38:BQ:84:LYS:HB3	2.21	0.41
39:BR:11:GLN:C	39:BR:12:HIS:CG	2.94	0.41
40:BS:29:VAL:CG1	40:BS:55:ILE:CD1	2.99	0.41
41:BT:61:LEU:HD12	41:BT:61:LEU:C	2.42	0.41
41:BT:69:ARG:CB	41:BT:74:ILE:HG22	2.50	0.41
1:CA:1072:G:C4	1:CA:1104:G:N2	2.89	0.41
1:CA:1263:C:C5	1:CA:1264:U:C5	3.09	0.41
1:CA:1502:A:C8	1:CA:1504:G:C4	3.09	0.41
1:CA:263:A:P	20:CT:74:ARG:NH1	2.94	0.41
1:CA:748:G:C2	1:CA:749:A:C5	3.09	0.41
1:CA:74:A:C2	1:CA:75:G:C8	3.09	0.41
1:CA:77:A:C2	1:CA:93:U:N3	2.89	0.41
1:CA:822:U:C2	1:CA:823:C:C5	3.08	0.41
1:CA:9:G:C2	1:CA:10:A:C8	3.08	0.41
2:CB:102:THR:HA	2:CB:179:LEU:HD21	2.01	0.41
2:CB:199:VAL:C	2:CB:200:ILE:HD12	2.41	0.41
2:CB:207:ILE:O	2:CB:210:VAL:HG13	2.21	0.41
5:CE:83:HIS:HB2	5:CE:84:PRO:HD2	2.01	0.41
6:CF:51:ILE:HG12	6:CF:51:ILE:O	2.21	0.41
6:CF:70:VAL:HG23	6:CF:71:ILE:HD12	2.01	0.41
7:CG:71:PRO:HD2	7:CG:96:ARG:HG2	2.03	0.41
11:CK:36:ASP:CG	11:CK:40:ASN:HB2	2.42	0.41
16:CP:39:PHE:O	16:CP:41:PRO:HD3	2.21	0.41
17:CQ:52:GLU:CD	17:CQ:75:LEU:HD21	2.42	0.41
22:DA:1059:G:N2	30:DI:131:GLY:HA3	2.36	0.41
22:DA:1469:A:C2	22:DA:1470:A:C5	3.09	0.41
22:DA:178:G:C6	22:DA:179:C:C5	3.09	0.41
22:DA:1838:C:C5	22:DA:1899:A:C6	3.09	0.41
22:DA:206:U:C2	22:DA:207:A:C8	3.08	0.41
22:DA:2125:G:H5'	22:DA:2126:A:OP2	2.21	0.41
22:DA:2282:G:OP1	22:DA:2283:C:H1'	2.21	0.41
22:DA:2370:G:H4'	49:D1:44:ARG:NH1	2.35	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2420:C:OP1	51:D3:34:THR:CB	2.68	0.41
22:DA:2728:U:O2'	22:DA:2729:G:H5''	2.21	0.41
22:DA:2819:G:H1'	22:DA:2828:G:N2	2.36	0.41
22:DA:283:G:C5	22:DA:284:U:C5	3.09	0.41
22:DA:396:G:H5'	22:DA:396:G:H8	1.86	0.41
22:DA:79:C:C4	22:DA:80:G:N7	2.89	0.41
22:DA:802:A:H2'	22:DA:803:U:C6	2.56	0.41
23:DB:59:A:H2'	23:DB:60:C:O4'	2.20	0.41
23:DB:67:G:C6	23:DB:68:C:N4	2.89	0.41
28:DG:123:ALA:CB	28:DG:133:LEU:HA	2.50	0.41
28:DG:24:ILE:CD1	28:DG:43:VAL:HG11	2.51	0.41
28:DG:39:ASP:O	28:DG:58:TYR:CE1	2.74	0.41
33:DL:111:ILE:HG22	33:DL:112:LEU:N	2.36	0.41
34:DM:2:LEU:HB2	34:DM:69:PRO:HG2	2.03	0.41
1:AA:1035:A:H2'	1:AA:1036:A:C1'	2.51	0.40
1:AA:1058:G:C5	1:AA:1059:C:C5	3.10	0.40
1:AA:1211:U:O2'	1:AA:1212:U:P	2.78	0.40
1:AA:1385:G:O2'	1:AA:1386:G:H5'	2.21	0.40
1:AA:146:G:C2	1:AA:147:G:C4	3.10	0.40
1:AA:1533:C:C5'	1:AA:1534:A:OP1	2.70	0.40
1:AA:223:A:H2'	1:AA:224:U:C6	2.56	0.40
1:AA:270:A:H2'	1:AA:271:C:O4'	2.21	0.40
1:AA:457:G:O6	1:AA:458:U:N3	2.54	0.40
1:AA:774:G:C4	1:AA:775:G:C8	3.09	0.40
1:AA:790:A:H2'	1:AA:791:G:C8	2.56	0.40
1:AA:827:U:H2'	1:AA:870:U:O4	2.21	0.40
1:AA:955:U:O4'	1:AA:1227:A:N6	2.52	0.40
1:AA:987:G:H5'	1:AA:988:G:OP2	2.21	0.40
2:AB:171:ILE:O	2:AB:175:GLU:HG3	2.21	0.40
2:AB:186:ILE:HD11	2:AB:204:ASP:HA	2.02	0.40
2:AB:62:SER:C	2:AB:64:LYS:N	2.74	0.40
3:AC:10:ILE:HG13	3:AC:10:ILE:O	2.21	0.40
3:AC:14:ILE:N	3:AC:14:ILE:HD13	2.36	0.40
4:AD:4:TYR:CE2	4:AD:11:LEU:HD11	2.56	0.40
4:AD:98:LEU:O	4:AD:99:ASP:C	2.59	0.40
5:AE:151:GLU:C	5:AE:153:VAL:H	2.24	0.40
11:AK:61:PHE:O	11:AK:64:GLN:N	2.54	0.40
13:AM:77:ILE:O	13:AM:80:LEU:HB2	2.21	0.40
14:AN:68:GLY:O	14:AN:69:ARG:C	2.58	0.40
20:AT:35:VAL:HG11	20:AT:79:LEU:HD22	2.03	0.40
22:BA:2615:U:H1'	48:B0:4:GLN:HB3	2.02	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1014:A:C2	22:BA:1149:G:N3	2.89	0.40
22:BA:1366:A:C5	22:BA:1367:A:C8	3.09	0.40
22:BA:1577:C:H2'	22:BA:1578:U:O4'	2.21	0.40
22:BA:1856:U:C4	22:BA:1857:G:C6	3.09	0.40
22:BA:1936:A:C2	22:BA:1943:U:N3	2.87	0.40
22:BA:2001:C:N3	22:BA:2002:G:C8	2.89	0.40
22:BA:2190:G:C4	22:BA:2191:A:C8	3.09	0.40
22:BA:2243:U:H2'	22:BA:2244:U:H6	1.85	0.40
22:BA:2492:U:H2'	22:BA:2493:U:C6	2.55	0.40
22:BA:2498:C:P	57:BA:3686:HOH:O	2.61	0.40
22:BA:2690:U:C4	22:BA:2873:A:C2	3.09	0.40
22:BA:328:U:H2'	22:BA:329:G:OP1	2.20	0.40
22:BA:449:A:C6	22:BA:450:G:C5	3.09	0.40
22:BA:451:U:H5'	57:BA:3238:HOH:O	2.21	0.40
22:BA:958:U:H2'	23:BB:89:U:O2	2.22	0.40
26:BE:157:LEU:HG	26:BE:169:VAL:HG21	2.02	0.40
26:BE:4:VAL:C	26:BE:6:LYS:H	2.24	0.40
27:BF:20:PHE:O	27:BF:21:ASN:C	2.59	0.40
27:BF:44:ILE:HG21	27:BF:79:ILE:CG2	2.51	0.40
29:BH:88:GLY:C	29:BH:125:THR:OG1	2.59	0.40
31:BJ:31:GLU:OE1	31:BJ:34:ARG:NE	2.54	0.40
35:BN:71:ARG:O	35:BN:71:ARG:CG	2.69	0.40
37:BP:16:ASP:OD1	37:BP:16:ASP:C	2.59	0.40
38:BQ:99:ALA:O	38:BQ:103:LYS:HE2	2.21	0.40
41:BT:1:MET:HG3	41:BT:2:ILE:N	2.36	0.40
1:CA:1049:U:OP1	57:CA:1846:HOH:O	2.21	0.40
1:CA:1049:U:H4'	1:CA:1050:G:O5'	2.20	0.40
1:CA:1244:G:H2'	1:CA:1245:C:C6	2.56	0.40
1:CA:128:G:C2	1:CA:234:C:C2	3.09	0.40
1:CA:189:A:N6	1:CA:190:A:C2	2.89	0.40
1:CA:243:A:C5	1:CA:281:G:N2	2.90	0.40
1:CA:263:A:OP1	20:CT:74:ARG:NH1	2.53	0.40
1:CA:453:G:H2'	1:CA:454:G:C8	2.56	0.40
1:CA:782:A:C5	1:CA:801:U:N3	2.89	0.40
1:CA:793:U:HO2'	1:CA:1516:G:C1'	2.34	0.40
1:CA:799:G:C6	1:CA:800:G:C4	3.09	0.40
1:CA:923:A:H2'	1:CA:924:C:O4'	2.21	0.40
1:CA:975:A:N3	1:CA:975:A:H5'	2.36	0.40
2:CB:141:LEU:O	2:CB:143:LYS:N	2.54	0.40
3:CC:154:SER:CB	3:CC:165:THR:HG22	2.51	0.40
4:CD:194:ASP:O	4:CD:195:ILE:CG2	2.69	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:9:LEU:HD13	4:CD:9:LEU:HA	1.80	0.40
7:CG:136:LYS:O	7:CG:136:LYS:HD2	2.21	0.40
8:CH:95:VAL:CG1	8:CH:96:MET:N	2.84	0.40
9:CI:28:ILE:HG21	9:CI:35:LEU:HD22	2.02	0.40
11:CK:124:PRO:HB2	11:CK:126:LYS:CD	2.50	0.40
12:CL:114:ARG:CZ	12:CL:121:ARG:HA	2.51	0.40
16:CP:19:VAL:CG1	16:CP:37:GLY:CA	2.99	0.40
48:D0:43:ILE:HG22	48:D0:49:TYR:HB2	2.03	0.40
49:D1:25:LYS:HE2	49:D1:30:LYS:O	2.20	0.40
49:D1:40:ASP:HA	49:D1:41:PRO:HD2	1.90	0.40
22:DA:1203:U:H1'	33:DL:4:ASN:CB	2.46	0.40
22:DA:140:C:O2	22:DA:140:C:O4'	2.37	0.40
22:DA:1436:G:N2	22:DA:1557:C:C2	2.89	0.40
22:DA:176:A:C5	22:DA:177:G:C6	3.09	0.40
22:DA:120:U:O4	22:DA:177:G:N7	2.54	0.40
22:DA:1783:A:C5'	22:DA:2608:G:H4'	2.51	0.40
22:DA:2128:G:C4	22:DA:2173:A:O2'	2.74	0.40
22:DA:2322:A:N6	22:DA:2323:G:C6	2.89	0.40
22:DA:2457:U:C4	22:DA:2458:G:C6	3.09	0.40
22:DA:2690:U:C5	22:DA:2873:A:N1	2.89	0.40
22:DA:2896:C:C2'	22:DA:2897:U:O5'	2.69	0.40
22:DA:319:G:N9	22:DA:333:G:N2	2.69	0.40
22:DA:270:A:H2	22:DA:369:U:H4'	1.85	0.40
22:DA:46:G:C2'	22:DA:47:C:O5'	2.69	0.40
22:DA:537:G:OP1	22:DA:995:C:N4	2.54	0.40
22:DA:647:G:C5	22:DA:648:G:C5	3.08	0.40
22:DA:690:G:H1'	22:DA:779:U:O3'	2.21	0.40
22:DA:779:U:H5''	24:DC:49:ILE:HD11	2.02	0.40
23:DB:77:U:C2'	23:DB:78:A:H5'	2.50	0.40
22:DA:1820:U:OP1	24:DC:177:ARG:HG3	2.21	0.40
24:DC:192:LEU:N	24:DC:192:LEU:HD22	2.36	0.40
25:DD:4:LEU:HD22	25:DD:101:PHE:CE2	2.56	0.40
22:DA:2052:A:OP1	25:DD:146:ILE:HG12	2.21	0.40
25:DD:186:LEU:HD21	37:DP:4:ILE:CG2	2.51	0.40
22:DA:2820:A:C6	25:DD:197:THR:HB	2.56	0.40
27:DF:16:LEU:HD11	27:DF:169:LEU:HD12	2.03	0.40
27:DF:117:LEU:CD2	27:DF:176:PRO:HG2	2.51	0.40
22:DA:1059:G:H1'	30:DI:117:MET:HE1	2.02	0.40
31:DJ:120:ARG:O	31:DJ:123:LYS:NZ	2.37	0.40
33:DL:77:ILE:HG23	33:DL:81:ASP:OD2	2.21	0.40
35:DN:103:ARG:HD3	35:DN:110:MET:SD	2.60	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:DK:121:GLU:OE2	37:DP:66:ASN:OD1	2.39	0.40
37:DP:31:TRP:NE1	37:DP:82:ASP:OD1	2.54	0.40
39:DR:67:GLY:C	39:DR:93:PHE:CE2	2.94	0.40
42:DU:56:GLY:O	42:DU:57:GLY:C	2.59	0.40
44:DW:67:VAL:HG12	44:DW:68:LYS:N	2.37	0.40
1:AA:1210:C:C4	1:AA:1211:U:C4	3.09	0.40
1:AA:1211:U:H1'	1:AA:1213:A:C2	2.56	0.40
1:AA:1259:C:O2	1:AA:1283:U:H1'	2.21	0.40
1:AA:1324:A:H2'	1:AA:1325:C:C6	2.56	0.40
1:AA:147:G:H2'	1:AA:148:G:C8	2.56	0.40
1:AA:457:G:C6	1:AA:458:U:C2	3.09	0.40
1:AA:53:A:C2'	1:AA:54:C:O5'	2.70	0.40
1:AA:862:C:H2'	1:AA:863:U:H5'	2.02	0.40
1:AA:914:A:C6	1:AA:915:A:C5	3.09	0.40
2:AB:144:LEU:O	2:AB:145:GLU:C	2.60	0.40
2:AB:167:ASP:O	2:AB:170:HIS:ND1	2.55	0.40
4:AD:147:GLU:O	4:AD:148:LYS:C	2.59	0.40
4:AD:78:GLU:CG	4:AD:93:LEU:HD21	2.51	0.40
10:AJ:65:TYR:HB3	14:AN:96:LEU:HD11	2.03	0.40
10:AJ:8:ILE:O	10:AJ:73:LEU:O	2.39	0.40
11:AK:65:VAL:O	11:AK:65:VAL:CG2	2.69	0.40
12:AL:3:THR:HB	12:AL:6:GLN:HG3	2.03	0.40
12:AL:72:HIS:ND1	12:AL:74:LEU:HB2	2.37	0.40
12:AL:74:LEU:HD21	12:AL:104:CYS:HA	2.02	0.40
16:AP:38:PHE:C	16:AP:38:PHE:CD1	2.94	0.40
20:AT:15:GLU:OE1	20:AT:19:LYS:NZ	2.55	0.40
20:AT:46:ALA:HA	20:AT:49:LYS:HB2	2.03	0.40
53:B5:133:GLY:O	53:B5:134:PRO:CB	2.69	0.40
53:B5:49:GLY:CA	53:B5:206:LYS:CB	2.99	0.40
22:BA:1142:A:C4	22:BA:1144:A:C8	3.10	0.40
22:BA:1671:U:O2	22:BA:1673:G:C8	2.75	0.40
22:BA:1759:A:H2'	22:BA:1760:C:C6	2.55	0.40
22:BA:1838:C:N4	22:BA:1899:A:C4	2.90	0.40
22:BA:1844:C:C2	22:BA:1897:G:C2	3.10	0.40
11:AK:69:ARG:HD2	22:BA:2146:C:C4	2.56	0.40
22:BA:2176:A:H2'	22:BA:2177:C:C6	2.56	0.40
22:BA:2345:G:N3	22:BA:2381:A:H2'	2.36	0.40
22:BA:2564:A:C5	22:BA:2565:A:C6	3.10	0.40
22:BA:2824:C:C4	22:BA:2825:G:C5	3.09	0.40
22:BA:669:G:C2'	22:BA:669:G:N3	2.83	0.40
22:BA:767:U:O2'	22:BA:768:G:H5'	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:839:U:H2'	22:BA:840:C:C6	2.56	0.40
24:BC:247:PRO:HG2	24:BC:248:TRP:CZ3	2.56	0.40
24:BC:97:LYS:HD2	24:BC:97:LYS:N	2.35	0.40
26:BE:4:VAL:O	26:BE:4:VAL:HG22	2.21	0.40
30:BI:116:ASP:O	30:BI:117:MET:CG	2.70	0.40
31:BJ:37:ARG:O	31:BJ:37:ARG:HG3	2.21	0.40
32:BK:102:PRO:HB3	32:BK:121:GLU:HB2	2.04	0.40
35:BN:9:GLN:O	35:BN:10:LEU:C	2.60	0.40
1:AA:1442:G:H5'	37:BP:114:LEU:HD13	2.04	0.40
39:BR:49:ILE:HG13	39:BR:49:ILE:O	2.21	0.40
42:BU:57:GLY:O	42:BU:59:VAL:HG23	2.21	0.40
47:BZ:35:THR:CG2	47:BZ:36:VAL:N	2.84	0.40
1:CA:1070:U:H2'	1:CA:1071:C:H6	1.86	0.40
1:CA:1295:U:H2'	1:CA:1296:C:C6	2.56	0.40
1:CA:1500:A:C5	1:CA:1501:C:C5	3.09	0.40
1:CA:207:C:H2'	1:CA:207:C:O2	2.21	0.40
1:CA:374:A:OP1	1:CA:452:A:N1	2.54	0.40
1:CA:577:G:N3	1:CA:578:C:C6	2.90	0.40
1:CA:599:C:C2	1:CA:640:A:C2	3.09	0.40
1:CA:659:U:O2'	1:CA:660:C:H5'	2.21	0.40
2:CB:139:ARG:HD2	2:CB:140:GLU:N	2.36	0.40
4:CD:102:VAL:HG13	4:CD:107:PHE:HB2	2.04	0.40
4:CD:30:THR:O	4:CD:31:LYS:HD3	2.21	0.40
5:CE:147:MET:HG2	5:CE:147:MET:O	2.21	0.40
7:CG:91:VAL:HG21	7:CG:96:ARG:HA	2.03	0.40
17:CQ:38:ILE:HG22	17:CQ:39:LYS:O	2.21	0.40
50:D2:6:GLN:HA	50:D2:6:GLN:OE1	2.21	0.40
22:DA:2351:G:O6	51:D3:39:LYS:HE3	2.21	0.40
22:DA:1090:A:C6	22:DA:1102:C:O2	2.74	0.40
22:DA:1022:G:C5	22:DA:1140:C:C4	3.10	0.40
22:DA:1378:A:O3'	57:DA:3751:HOH:O	2.21	0.40
22:DA:145:C:H2'	22:DA:146:A:C8	2.56	0.40
22:DA:1645:G:H5''	22:DA:1646:C:C5'	2.50	0.40
22:DA:1989:G:C2'	22:DA:1990:C:H5'	2.51	0.40
22:DA:200:U:C6	22:DA:201:C:C6	3.09	0.40
22:DA:2066:C:O2'	22:DA:2067:G:H5'	2.21	0.40
22:DA:2115:G:C4	22:DA:2117:A:C8	3.09	0.40
22:DA:2345:G:C5	22:DA:2347:C:C5	3.09	0.40
22:DA:2392:A:H4'	51:D3:28:ASN:OD1	2.22	0.40
22:DA:2436:G:C2	22:DA:2437:G:C8	3.09	0.40
22:DA:2526:G:O2'	52:D4:34:LYS:HE2	2.22	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1953:A:C2	22:DA:2550:G:O4'	2.74	0.40
22:DA:2619:C:OP1	25:DD:157:LYS:HE2	2.21	0.40
22:DA:2838:G:C6	22:DA:2839:G:C6	3.10	0.40
22:DA:2881:U:H2'	22:DA:2882:A:C8	2.57	0.40
22:DA:432:A:H2'	22:DA:433:C:C6	2.56	0.40
22:DA:825:A:H4'	22:DA:2428:G:C5	2.56	0.40
22:DA:600:G:C1'	26:DE:100:MET:HG2	2.51	0.40
26:DE:108:ILE:HD13	26:DE:181:ILE:HG13	2.03	0.40
29:DH:96:THR:O	29:DH:98:ASP:N	2.54	0.40
30:DI:53:LEU:CG	30:DI:82:LYS:HE2	2.51	0.40
31:DJ:38:GLY:O	31:DJ:40:HIS:N	2.54	0.40
33:DL:29:LYS:CG	33:DL:29:LYS:O	2.68	0.40
35:DN:20:MET:HG3	35:DN:21:PHE:N	2.36	0.40
39:DR:85:LYS:HG2	39:DR:86:GLN:N	2.36	0.40
41:DT:45:ALA:HA	41:DT:49:LYS:HE3	2.02	0.40
41:DT:91:GLN:HG2	41:DT:91:GLN:O	2.20	0.40
47:DZ:24:LEU:HD11	47:DZ:54:MET:CE	2.50	0.40
1:AA:1072:G:H2'	1:AA:1073:U:C6	2.56	0.40
1:AA:1133:G:C6	1:AA:1142:G:C6	3.09	0.40
1:AA:1134:G:H2'	1:AA:1135:U:O4'	2.21	0.40
1:AA:1126:U:O4'	1:AA:1281:C:C2	2.73	0.40
1:AA:1301:U:C5	1:AA:1303:C:C4	3.09	0.40
1:AA:935:A:O2'	1:AA:1383:C:O2	2.38	0.40
1:AA:193:C:H2'	1:AA:194:C:H6	1.86	0.40
1:AA:204:G:N2	1:AA:465:A:C8	2.89	0.40
1:AA:273:U:C2'	1:AA:274:A:H5'	2.51	0.40
1:AA:389:A:C6	1:AA:390:U:H1'	2.56	0.40
1:AA:722:G:H2'	1:AA:723:U:OP2	2.21	0.40
1:AA:666:G:C2	1:AA:741:G:C4	3.09	0.40
1:AA:849:G:N1	1:AA:850:U:C2	2.90	0.40
3:AC:167:TRP:HE3	3:AC:167:TRP:C	2.25	0.40
13:AM:11:ASP:CG	13:AM:45:ILE:CG1	2.90	0.40
14:AN:66:GLN:HG3	14:AN:79:LEU:HD21	2.03	0.40
15:AO:82:ILE:HG22	15:AO:87:LEU:HD21	2.04	0.40
16:AP:36:VAL:CG2	16:AP:57:ILE:HG13	2.51	0.40
16:AP:77:GLU:C	16:AP:79:ASN:N	2.75	0.40
17:AQ:13:VAL:HG12	17:AQ:22:VAL:O	2.21	0.40
17:AQ:81:LYS:N	17:AQ:81:LYS:CD	2.85	0.40
52:B4:36:ARG:HG2	52:B4:37:GLN:H	1.86	0.40
22:BA:752:A:C2	22:BA:1781:U:N1	2.89	0.40
22:BA:1842:G:H5''	22:BA:1843:C:OP2	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2298:A:C2	22:BA:2321:U:C5	3.09	0.40
22:BA:2031:A:C6	22:BA:2498:C:H1'	2.55	0.40
22:BA:2564:A:OP1	22:BA:2648:G:H4'	2.21	0.40
22:BA:272:A:H2'	22:BA:273:G:C8	2.56	0.40
22:BA:2756:U:C1'	22:BA:2757:A:H5''	2.51	0.40
22:BA:744:U:C4	22:BA:745:G:C5	3.09	0.40
22:BA:995:C:O2	31:BJ:3:THR:OG1	2.32	0.40
22:BA:1248:G:C5	26:BE:46:GLN:NE2	2.89	0.40
27:BF:4:LEU:HD22	27:BF:173:PHE:CE2	2.56	0.40
28:BG:25:THR:HG23	28:BG:34:THR:OG1	2.22	0.40
28:BG:52:PHE:N	28:BG:52:PHE:CD2	2.90	0.40
32:BK:66:LYS:HA	32:BK:79:PHE:O	2.21	0.40
33:BL:120:VAL:HG22	33:BL:121:THR:N	2.36	0.40
33:BL:38:GLN:O	33:BL:44:GLY:HA3	2.21	0.40
35:BN:55:ALA:HB1	35:BN:80:PHE:N	2.36	0.40
42:BU:8:ASP:OD2	42:BU:24:LYS:HD3	2.21	0.40
44:BW:75:LYS:O	44:BW:76:ASN:HB2	2.21	0.40
1:CA:1129:C:C5	1:CA:1139:G:C8	3.09	0.40
1:CA:116:A:H2'	1:CA:117:G:O5'	2.21	0.40
1:CA:1057:G:C5	1:CA:1204:A:C2	3.09	0.40
1:CA:1386:G:O2'	1:CA:1387:G:H5'	2.21	0.40
1:CA:53:A:H2'	1:CA:54:C:O4'	2.21	0.40
1:CA:582:C:O2'	1:CA:583:A:H5'	2.21	0.40
1:CA:583:A:C8	1:CA:584:G:C8	3.10	0.40
1:CA:678:U:N3	1:CA:713:G:N2	2.70	0.40
1:CA:890:G:H22	1:CA:906:A:H2'	1.85	0.40
3:CC:130:PHE:CZ	3:CC:131:ARG:HD3	2.55	0.40
7:CG:57:SER:HB3	7:CG:60:GLU:HB2	2.03	0.40
9:CI:101:ALA:HB1	9:CI:103:PHE:CE1	2.56	0.40
15:CO:16:GLY:O	15:CO:18:ASP:N	2.54	0.40
17:CQ:44:LEU:O	17:CQ:46:VAL:HG23	2.21	0.40
21:CU:36:GLU:HA	21:CU:36:GLU:OE1	2.20	0.40
22:DA:1028:A:N6	22:DA:1125:G:H2'	2.36	0.40
22:DA:1198:U:H2'	22:DA:1199:U:C6	2.56	0.40
22:DA:144:A:N1	22:DA:145:C:C2	2.88	0.40
22:DA:1999:C:H5''	22:DA:2723:C:O2'	2.22	0.40
22:DA:2033:A:H4'	22:DA:2034:U:OP1	2.21	0.40
22:DA:2050:C:C4	22:DA:2051:A:C6	3.09	0.40
22:DA:2744:G:C6	22:DA:2761:A:C6	3.10	0.40
55:DA:3001:DOL:O15	55:DA:3001:DOL:C21	2.62	0.40
22:DA:445:C:H2'	22:DA:446:G:C8	2.56	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:491:G:C2	22:DA:492:A:C4	3.09	0.40
22:DA:681:G:N3	22:DA:682:G:C8	2.89	0.40
23:DB:96:G:C2'	23:DB:97:C:H5'	2.51	0.40
25:DD:140:HIS:CD2	25:DD:140:HIS:N	2.88	0.40
26:DE:115:GLN:O	26:DE:117:ARG:HG3	2.22	0.40
32:DK:35:VAL:HG22	32:DK:69:VAL:HG12	2.02	0.40
33:DL:29:LYS:O	33:DL:29:LYS:HG2	2.22	0.40
42:DU:82:ARG:O	42:DU:97:LYS:CB	2.70	0.40
22:DA:380:G:O3'	45:DX:16:ASN:HB2	2.21	0.40
46:DY:55:THR:O	46:DY:58:ASN:CB	2.70	0.40
1:AA:1209:C:O2'	1:AA:1210:C:H5'	2.21	0.40
1:AA:1319:A:C5	1:AA:1323:G:C4	3.10	0.40
1:AA:1419:G:C4	1:AA:1420:U:C5	3.09	0.40
1:AA:270:A:C5	1:AA:271:C:C4	3.09	0.40
1:AA:397:A:C5	1:AA:548:G:N7	2.90	0.40
1:AA:600:A:C2	1:AA:601:G:C4	3.09	0.40
1:AA:945:G:H2'	1:AA:945:G:N3	2.37	0.40
1:AA:957:U:H1'	1:AA:960:U:C4	2.56	0.40
1:AA:982:U:H4'	1:AA:983:A:O5'	2.22	0.40
2:AB:77:SER:O	2:AB:93:ASN:HB2	2.21	0.40
4:AD:147:GLU:O	4:AD:150:LYS:HB2	2.21	0.40
7:AG:122:ASN:O	7:AG:126:ASP:OD1	2.39	0.40
8:AH:64:LYS:HB3	8:AH:64:LYS:HE2	1.94	0.40
9:AI:28:ILE:HG13	9:AI:63:LEU:HD21	2.04	0.40
10:AJ:52:LEU:HD23	10:AJ:62:ARG:CG	2.50	0.40
10:AJ:52:LEU:HD22	10:AJ:62:ARG:HG3	2.02	0.40
10:AJ:32:THR:HG21	10:AJ:86:ALA:CB	2.51	0.40
14:AN:51:LEU:HB3	14:AN:52:PRO:HD2	2.03	0.40
1:AA:451:A:H5''	16:AP:70:ARG:NH2	2.37	0.40
17:AQ:49:GLU:O	17:AQ:51:ASN:N	2.54	0.40
22:BA:1036:G:C5	22:BA:1120:G:C6	3.10	0.40
22:BA:1178:C:O3'	22:BA:1179:G:C8	2.74	0.40
22:BA:1301:A:C2	22:BA:1303:G:C6	3.10	0.40
22:BA:1583:A:O2'	22:BA:1584:U:P	2.80	0.40
22:BA:1840:G:C2'	22:BA:1841:U:H5'	2.52	0.40
22:BA:1851:U:C2'	22:BA:1852:U:H5'	2.51	0.40
22:BA:1920:C:O2	22:BA:1920:C:H2'	2.21	0.40
22:BA:2297:A:C2	22:BA:2321:U:C5	3.09	0.40
22:BA:2432:A:H2'	22:BA:2433:A:O4'	2.21	0.40
22:BA:2512:C:H4'	25:BD:127:PHE:CE1	2.57	0.40
22:BA:2627:G:N2	22:BA:2777:G:OP2	2.54	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2900:A:H2'	22:BA:2901:C:O4'	2.22	0.40
22:BA:64:A:C6	22:BA:65:U:C4	3.09	0.40
22:BA:976:G:C2	22:BA:977:G:C8	3.09	0.40
23:BB:111:U:H2'	23:BB:111:U:O2	2.21	0.40
24:BC:172:VAL:HG23	24:BC:174:LEU:CD1	2.51	0.40
22:BA:1205:A:C6	26:BE:165:HIS:HB2	2.57	0.40
26:BE:97:ASN:O	26:BE:98:LYS:C	2.59	0.40
27:BF:91:LEU:HB3	27:BF:96:MET:HA	2.03	0.40
29:BH:120:GLY:HA2	29:BH:122:LEU:HA	2.04	0.40
22:BA:1665:A:O2'	32:BK:1:MET:HB3	2.21	0.40
35:BN:55:ALA:HB1	35:BN:80:PHE:H	1.87	0.40
39:BR:49:ILE:HB	39:BR:52:PRO:CA	2.52	0.40
1:CA:1179:A:C2'	1:CA:1180:A:H5'	2.52	0.40
1:CA:1292:G:C2	1:CA:1293:C:C2	3.09	0.40
1:CA:1352:C:C2	1:CA:1371:G:N1	2.89	0.40
1:CA:861:G:N7	1:CA:862:C:C5	2.90	0.40
1:CA:88:U:C5	1:CA:89:U:C5	3.09	0.40
2:CB:56:GLU:OE2	2:CB:56:GLU:HA	2.22	0.40
3:CC:117:ALA:HB1	3:CC:187:SER:CB	2.51	0.40
3:CC:184:TYR:CD1	3:CC:201:TRP:NE1	2.89	0.40
4:CD:106:GLY:O	4:CD:158:ALA:HB1	2.21	0.40
6:CF:38:ARG:CG	6:CF:63:ASN:HB2	2.51	0.40
9:CI:91:ASP:OD2	9:CI:91:ASP:C	2.59	0.40
22:DA:684:G:OP1	50:D2:16:HIS:CE1	2.74	0.40
22:DA:1187:G:H5''	39:DR:83:TYR:CZ	2.55	0.40
22:DA:1316:U:H2'	22:DA:1317:G:C8	2.57	0.40
22:DA:1340:U:O2	22:DA:1340:U:H2'	2.20	0.40
22:DA:1651:G:C6	22:DA:1652:A:C5	3.09	0.40
22:DA:201:C:H2'	22:DA:202:U:O5'	2.22	0.40
22:DA:528:A:C2	22:DA:2043:C:C5'	3.05	0.40
22:DA:2043:C:O2	22:DA:2044:C:C5	2.75	0.40
22:DA:2756:U:C4	22:DA:2759:G:O6	2.75	0.40
22:DA:590:A:H2'	22:DA:591:U:C6	2.56	0.40
22:DA:922:C:H2'	22:DA:923:G:C8	2.57	0.40
26:DE:8:ALA:CB	26:DE:122:GLU:CG	2.99	0.40
31:DJ:35:ARG:CG	31:DJ:40:HIS:CD2	3.04	0.40
33:DL:100:ILE:CG1	33:DL:100:ILE:O	2.69	0.40
33:DL:29:LYS:O	33:DL:30:THR:OG1	2.25	0.40
33:DL:29:LYS:O	33:DL:30:THR:HG23	2.22	0.40
33:DL:68:SER:O	33:DL:69:ARG:HG3	2.21	0.40
37:DP:51:ARG:CG	37:DP:51:ARG:O	2.69	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DS:33:LEU:HD21	40:DS:52:GLU:CG	2.51	0.40
1:AA:1030:U:H5'	1:AA:1031:C:OP1	2.22	0.40
1:AA:1239:A:OP1	1:AA:1239:A:H4'	2.22	0.40
1:AA:1316:G:N2	1:AA:1318:A:H3'	2.37	0.40
1:AA:1376:U:H2'	1:AA:1377:A:C8	2.56	0.40
1:AA:1383:C:H2'	1:AA:1384:C:C6	2.56	0.40
1:AA:139:A:C2'	1:AA:140:U:H5'	2.51	0.40
1:AA:201:G:H2'	1:AA:202:G:O4'	2.21	0.40
1:AA:279:A:N3	1:AA:281:G:N2	2.69	0.40
1:AA:324:G:N2	1:AA:326:G:H3'	2.36	0.40
1:AA:557:G:C6	1:AA:558:G:N1	2.89	0.40
1:AA:57:G:C6	1:AA:58:C:C4	3.09	0.40
1:AA:606:G:H1'	1:AA:633:G:C2	2.56	0.40
1:AA:69:G:C3'	1:AA:70:U:H6	2.34	0.40
2:AB:49:MET:C	2:AB:51:ASN:O	2.60	0.40
4:AD:29:ASP:O	4:AD:31:LYS:CE	2.70	0.40
6:AF:72:ASP:O	6:AF:75:GLU:N	2.54	0.40
8:AH:25:VAL:HG13	8:AH:25:VAL:O	2.21	0.40
8:AH:43:GLU:HG3	8:AH:112:THR:HG21	2.03	0.40
9:AI:51:PRO:HD3	9:AI:80:ARG:HG2	2.03	0.40
1:AA:1125:U:O4'	10:AJ:73:LEU:CD1	2.70	0.40
11:AK:38:GLN:O	11:AK:38:GLN:HG2	2.21	0.40
12:AL:7:LEU:HD12	17:AQ:34:TYR:CE2	2.56	0.40
1:AA:1302:C:C4	13:AM:17:ILE:HD13	2.56	0.40
16:AP:20:VAL:CG2	16:AP:34:GLU:O	2.69	0.40
21:AU:17:ARG:NH1	21:AU:20:LYS:HG3	2.36	0.40
22:BA:2021:C:P	48:B0:9:THR:HG21	2.61	0.40
51:B3:45:ARG:N	51:B3:46:PRO:HD2	2.37	0.40
22:BA:1100:C:H2'	22:BA:1101:U:C6	2.56	0.40
22:BA:1109:C:N4	22:BA:1110:G:N1	2.70	0.40
22:BA:115:C:O2'	22:BA:116:C:H5'	2.22	0.40
22:BA:565:C:H4'	22:BA:1253:A:N6	2.37	0.40
22:BA:149:A:C5	22:BA:150:U:C5	3.10	0.40
22:BA:1588:G:C4	22:BA:1589:U:C5	3.10	0.40
22:BA:2010:G:H2'	22:BA:2011:U:O4'	2.21	0.40
22:BA:2127:G:O2'	22:BA:2128:G:O4'	2.39	0.40
22:BA:2232:C:C4	22:BA:2233:U:C5	3.10	0.40
22:BA:2619:C:O2'	22:BA:2620:C:H5'	2.21	0.40
22:BA:2741:A:H2'	22:BA:2742:G:O4'	2.21	0.40
22:BA:319:G:C5	22:BA:333:G:N2	2.90	0.40
22:BA:613:A:C8	22:BA:616:A:H2	2.38	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:634:C:H2'	22:BA:635:C:C6	2.57	0.40
22:BA:735:A:N7	22:BA:761:A:H2	2.20	0.40
23:BB:109:A:C6	23:BB:110:C:N3	2.90	0.40
23:BB:30:C:O2'	23:BB:57:A:N1	2.45	0.40
22:BA:2052:A:O4'	25:BD:147:GLY:HA3	2.22	0.40
26:BE:119:ILE:O	26:BE:187:VAL:HA	2.21	0.40
36:BO:110:ALA:O	36:BO:115:LEU:HB3	2.20	0.40
36:BO:12:THR:O	36:BO:12:THR:CG2	2.69	0.40
36:BO:88:LYS:CG	36:BO:89:ASP:N	2.85	0.40
37:BP:6:LYS:O	37:BP:7:GLN:C	2.59	0.40
38:BQ:18:LEU:HA	38:BQ:18:LEU:HD13	1.99	0.40
45:BX:45:ARG:HG2	45:BX:46:PHE:N	2.37	0.40
46:BY:14:LEU:HG	46:BY:57:LEU:HD11	2.02	0.40
47:BZ:5:ILE:HG23	47:BZ:40:ASP:HB2	2.04	0.40
1:CA:1007:U:C3'	1:CA:1008:U:H5'	2.52	0.40
1:CA:1070:U:H2'	1:CA:1071:C:C6	2.57	0.40
1:CA:1434:A:N6	1:CA:1435:G:C6	2.89	0.40
1:CA:1536:C:H2'	1:CA:1537:U:C6	2.56	0.40
1:CA:1540:U:H4'	21:CU:18:ARG:HG2	2.02	0.40
1:CA:223:A:C6	1:CA:224:U:C4	3.09	0.40
1:CA:420:U:C2'	1:CA:421:U:H5''	2.51	0.40
1:CA:496:A:N3	1:CA:497:G:N7	2.69	0.40
1:CA:505:G:N3	1:CA:505:G:H2'	2.36	0.40
1:CA:563:A:N7	1:CA:567:G:H1'	2.36	0.40
1:CA:844:G:C8	1:CA:844:G:OP2	2.74	0.40
1:CA:91:U:C4	1:CA:92:U:C5	3.10	0.40
4:CD:195:ILE:O	4:CD:195:ILE:CG1	2.69	0.40
4:CD:24:GLY:O	4:CD:161:LEU:CD1	2.70	0.40
4:CD:91:LEU:HD12	4:CD:188:ARG:NE	2.37	0.40
6:CF:71:ILE:N	6:CF:71:ILE:CD1	2.85	0.40
7:CG:148:ASN:C	7:CG:150:ALA:N	2.75	0.40
9:CI:31:ASN:HA	9:CI:66:THR:HG22	2.03	0.40
9:CI:61:LEU:N	9:CI:61:LEU:CD2	2.85	0.40
9:CI:76:ALA:HA	9:CI:79:ILE:HD12	2.03	0.40
12:CL:79:VAL:O	12:CL:103:ASP:HB2	2.21	0.40
13:CM:13:LYS:O	13:CM:14:HIS:CG	2.72	0.40
13:CM:24:GLY:HA3	13:CM:65:VAL:HG12	2.04	0.40
15:CO:57:LEU:O	15:CO:61:SER:N	2.46	0.40
18:CR:49:ALA:O	18:CR:50:LYS:C	2.58	0.40
22:DA:1263:U:H4'	48:D0:7:LYS:HE3	2.04	0.40
22:DA:1275:A:H4'	22:DA:1276:A:OP1	2.19	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1358:G:N2	22:DA:1374:G:C6	2.90	0.40
22:DA:1359:A:C5	22:DA:1360:G:C8	3.09	0.40
22:DA:1409:U:H2'	22:DA:1410:G:C8	2.56	0.40
22:DA:1437:C:C4	22:DA:1438:U:O4	2.75	0.40
22:DA:1737:G:C6	22:DA:1738:G:C6	3.10	0.40
22:DA:190:A:N6	22:DA:191:A:N1	2.70	0.40
22:DA:1924:C:H2'	22:DA:1925:C:O4'	2.21	0.40
22:DA:211:C:H2'	22:DA:212:G:O4'	2.21	0.40
22:DA:2234:G:C6	22:DA:2235:G:C8	3.10	0.40
22:DA:2677:G:H2'	22:DA:2678:C:C6	2.56	0.40
22:DA:299:A:C2	22:DA:319:G:N3	2.89	0.40
22:DA:422:A:N1	22:DA:423:A:C4	2.89	0.40
22:DA:476:G:H4'	22:DA:502:A:N1	2.36	0.40
22:DA:540:C:C2	22:DA:541:A:C8	3.10	0.40
22:DA:563:A:C2	22:DA:2018:G:H1'	2.56	0.40
22:DA:756:A:H2'	22:DA:757:G:O4'	2.21	0.40
22:DA:690:G:O2'	22:DA:780:G:OP1	2.29	0.40
22:DA:7:G:H4'	31:DJ:15:TRP:HH2	1.87	0.40
23:DB:44:G:N2	23:DB:48:U:C2	2.89	0.40
25:DD:62:LYS:N	25:DD:63:PRO:CD	2.84	0.40
26:DE:18:THR:O	26:DE:110:SER:OG	2.40	0.40
22:DA:320:A:H2'	26:DE:131:THR:CG2	2.52	0.40
26:DE:52:VAL:HB	26:DE:74:LYS:HD3	2.03	0.40
31:DJ:17:VAL:HG23	31:DJ:137:PRO:HB2	2.03	0.40
32:DK:31:ARG:HB2	32:DK:32:TYR:CD2	2.56	0.40
37:DP:28:VAL:HG21	37:DP:74:PHE:CE2	2.56	0.40
39:DR:51:VAL:O	39:DR:52:PRO:C	2.58	0.40
41:DT:2:ILE:HG12	41:DT:7:LEU:CD1	2.52	0.40
41:DT:2:ILE:HG12	41:DT:7:LEU:HD12	2.02	0.40
41:DT:93:LEU:HD22	41:DT:93:LEU:N	2.36	0.40
42:DU:38:GLY:HA2	42:DU:41:LEU:HD21	2.01	0.40
45:DX:58:VAL:CG1	45:DX:59:ILE:N	2.85	0.40
22:DA:61:C:OP1	46:DY:44:LYS:HD3	2.21	0.40

All (3) 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:AA:357:G:O2'	29:DH:91:PHE:O[4_455]	2.12	0.08
1:AA:368:U:OP1	29:DH:93:SER:OG[4_455]	2.16	0.04
1:AA:359:G:OP1	29:DH:89:LYS:NZ[4_455]	2.17	0.03

5.3 Torsion angles ⓘ

5.3.1 Protein backbone ⓘ

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	AB	216/218 (99%)	132 (61%)	40 (18%)	44 (20%)	0	0
2	CB	216/218 (99%)	142 (66%)	48 (22%)	26 (12%)	0	1
3	AC	204/206 (99%)	149 (73%)	31 (15%)	24 (12%)	0	1
3	CC	204/206 (99%)	154 (76%)	39 (19%)	11 (5%)	2	7
4	AD	203/205 (99%)	133 (66%)	45 (22%)	25 (12%)	0	1
4	CD	203/205 (99%)	147 (72%)	33 (16%)	23 (11%)	0	1
5	AE	148/150 (99%)	102 (69%)	23 (16%)	23 (16%)	0	0
5	CE	148/150 (99%)	98 (66%)	34 (23%)	16 (11%)	0	1
6	AF	98/100 (98%)	67 (68%)	22 (22%)	9 (9%)	1	2
6	CF	98/100 (98%)	66 (67%)	18 (18%)	14 (14%)	0	0
7	AG	149/151 (99%)	110 (74%)	26 (17%)	13 (9%)	1	2
7	CG	149/151 (99%)	120 (80%)	20 (13%)	9 (6%)	2	5
8	AH	127/129 (98%)	87 (68%)	31 (24%)	9 (7%)	1	3
8	CH	127/129 (98%)	102 (80%)	17 (13%)	8 (6%)	1	4
9	AI	125/127 (98%)	88 (70%)	23 (18%)	14 (11%)	0	1
9	CI	125/127 (98%)	89 (71%)	21 (17%)	15 (12%)	0	1
10	AJ	96/98 (98%)	62 (65%)	14 (15%)	20 (21%)	0	0
10	CJ	96/98 (98%)	74 (77%)	10 (10%)	12 (12%)	0	1
11	AK	115/117 (98%)	81 (70%)	15 (13%)	19 (16%)	0	0
11	CK	115/117 (98%)	80 (70%)	26 (23%)	9 (8%)	1	3
12	AL	121/123 (98%)	91 (75%)	20 (16%)	10 (8%)	1	2
12	CL	121/123 (98%)	89 (74%)	20 (16%)	12 (10%)	1	1
13	AM	112/114 (98%)	80 (71%)	21 (19%)	11 (10%)	1	1
13	CM	112/114 (98%)	82 (73%)	17 (15%)	13 (12%)	0	1
14	AN	92/100 (92%)	54 (59%)	29 (32%)	9 (10%)	1	1

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
14	CN	92/100 (92%)	56 (61%)	22 (24%)	14 (15%)	0	0
15	AO	86/88 (98%)	61 (71%)	19 (22%)	6 (7%)	1	3
15	CO	86/88 (98%)	66 (77%)	16 (19%)	4 (5%)	3	10
16	AP	80/82 (98%)	57 (71%)	11 (14%)	12 (15%)	0	0
16	CP	80/82 (98%)	59 (74%)	16 (20%)	5 (6%)	1	4
17	AQ	78/80 (98%)	55 (70%)	15 (19%)	8 (10%)	0	1
17	CQ	78/80 (98%)	58 (74%)	11 (14%)	9 (12%)	0	1
18	AR	53/55 (96%)	41 (77%)	10 (19%)	2 (4%)	4	15
18	CR	53/55 (96%)	34 (64%)	16 (30%)	3 (6%)	2	6
19	AS	77/79 (98%)	55 (71%)	13 (17%)	9 (12%)	0	1
19	CS	77/79 (98%)	56 (73%)	12 (16%)	9 (12%)	0	1
20	AT	83/85 (98%)	57 (69%)	20 (24%)	6 (7%)	1	3
20	CT	83/85 (98%)	64 (77%)	10 (12%)	9 (11%)	0	1
21	AU	49/51 (96%)	28 (57%)	8 (16%)	13 (26%)	0	0
21	CU	49/51 (96%)	26 (53%)	10 (20%)	13 (26%)	0	0
24	BC	269/271 (99%)	219 (81%)	38 (14%)	12 (4%)	3	11
24	DC	269/271 (99%)	195 (72%)	50 (19%)	24 (9%)	1	2
25	BD	207/209 (99%)	178 (86%)	22 (11%)	7 (3%)	4	18
25	DD	207/209 (99%)	153 (74%)	45 (22%)	9 (4%)	3	12
26	BE	199/201 (99%)	162 (81%)	34 (17%)	3 (2%)	12	39
26	DE	199/201 (99%)	153 (77%)	29 (15%)	17 (8%)	1	2
27	BF	175/177 (99%)	139 (79%)	28 (16%)	8 (5%)	3	11
27	DF	175/177 (99%)	140 (80%)	23 (13%)	12 (7%)	1	3
28	BG	174/176 (99%)	147 (84%)	18 (10%)	9 (5%)	2	8
28	DG	174/176 (99%)	130 (75%)	29 (17%)	15 (9%)	1	2
29	BH	147/149 (99%)	89 (60%)	37 (25%)	21 (14%)	0	0
29	DH	147/149 (99%)	100 (68%)	32 (22%)	15 (10%)	1	1
30	BI	139/141 (99%)	81 (58%)	34 (24%)	24 (17%)	0	0
30	DI	139/141 (99%)	81 (58%)	38 (27%)	20 (14%)	0	0
31	BJ	140/142 (99%)	130 (93%)	7 (5%)	3 (2%)	8	30
31	DJ	140/142 (99%)	112 (80%)	14 (10%)	14 (10%)	1	1

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
32	BK	120/122 (98%)	97 (81%)	16 (13%)	7 (6%)	2	6
32	DK	120/122 (98%)	97 (81%)	13 (11%)	10 (8%)	1	2
33	BL	141/143 (99%)	118 (84%)	18 (13%)	5 (4%)	4	17
33	DL	141/143 (99%)	101 (72%)	25 (18%)	15 (11%)	0	1
34	BM	134/136 (98%)	118 (88%)	14 (10%)	2 (2%)	12	39
34	DM	134/136 (98%)	108 (81%)	19 (14%)	7 (5%)	2	8
35	BN	118/120 (98%)	99 (84%)	16 (14%)	3 (2%)	6	25
35	DN	118/120 (98%)	92 (78%)	16 (14%)	10 (8%)	1	2
36	BO	114/116 (98%)	94 (82%)	17 (15%)	3 (3%)	6	24
36	DO	114/116 (98%)	84 (74%)	23 (20%)	7 (6%)	2	5
37	BP	112/114 (98%)	96 (86%)	10 (9%)	6 (5%)	2	7
37	DP	112/114 (98%)	86 (77%)	19 (17%)	7 (6%)	1	4
38	BQ	115/117 (98%)	109 (95%)	4 (4%)	2 (2%)	11	36
38	DQ	115/117 (98%)	93 (81%)	20 (17%)	2 (2%)	11	36
39	BR	101/103 (98%)	81 (80%)	10 (10%)	10 (10%)	1	1
39	DR	101/103 (98%)	73 (72%)	22 (22%)	6 (6%)	2	6
40	BS	108/110 (98%)	92 (85%)	13 (12%)	3 (3%)	6	22
40	DS	108/110 (98%)	83 (77%)	17 (16%)	8 (7%)	1	3
41	BT	91/93 (98%)	74 (81%)	8 (9%)	9 (10%)	1	1
41	DT	91/93 (98%)	53 (58%)	26 (29%)	12 (13%)	0	0
42	BU	100/102 (98%)	77 (77%)	17 (17%)	6 (6%)	2	5
42	DU	100/102 (98%)	69 (69%)	17 (17%)	14 (14%)	0	0
43	BV	92/94 (98%)	84 (91%)	6 (6%)	2 (2%)	8	29
43	DV	92/94 (98%)	77 (84%)	12 (13%)	3 (3%)	4	18
44	BW	74/76 (97%)	68 (92%)	6 (8%)	0	100	100
44	DW	73/76 (96%)	60 (82%)	13 (18%)	0	100	100
45	BX	75/77 (97%)	66 (88%)	8 (11%)	1 (1%)	14	43
45	DX	75/77 (97%)	57 (76%)	11 (15%)	7 (9%)	1	2
46	BY	61/63 (97%)	42 (69%)	11 (18%)	8 (13%)	0	1
46	DY	61/63 (97%)	46 (75%)	12 (20%)	3 (5%)	2	9
47	BZ	56/58 (97%)	51 (91%)	3 (5%)	2 (4%)	4	17

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
47	DZ	56/58 (97%)	45 (80%)	7 (12%)	4 (7%)	1	3
48	B0	54/56 (96%)	47 (87%)	4 (7%)	3 (6%)	2	6
48	D0	54/56 (96%)	38 (70%)	12 (22%)	4 (7%)	1	3
49	B1	48/50 (96%)	38 (79%)	7 (15%)	3 (6%)	1	4
49	D1	48/50 (96%)	39 (81%)	4 (8%)	5 (10%)	0	1
50	B2	44/46 (96%)	38 (86%)	4 (9%)	2 (4%)	3	11
50	D2	44/46 (96%)	32 (73%)	8 (18%)	4 (9%)	1	2
51	B3	62/64 (97%)	56 (90%)	5 (8%)	1 (2%)	11	37
51	D3	62/64 (97%)	49 (79%)	11 (18%)	2 (3%)	5	19
52	B4	36/38 (95%)	31 (86%)	4 (11%)	1 (3%)	6	22
52	D4	36/38 (95%)	31 (86%)	3 (8%)	2 (6%)	2	6
53	B5	183/228 (80%)	85 (46%)	59 (32%)	39 (21%)	0	0
All	All	11418/11672 (98%)	8535 (75%)	1900 (17%)	983 (9%)	1	2

All (983) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	AB	16	PHE
2	AB	22	TYR
2	AB	25	PRO
2	AB	34	ALA
2	AB	64	LYS
2	AB	73	LYS
2	AB	74	ARG
2	AB	75	ALA
2	AB	76	ALA
2	AB	88	ASP
2	AB	107	VAL
2	AB	120	GLN
2	AB	126	PHE
2	AB	134	ALA
2	AB	148	LEU
2	AB	152	LYS
2	AB	155	GLY
2	AB	194	ASP
2	AB	201	PRO
3	AC	12	LEU
3	AC	15	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	AC	17	PRO
3	AC	18	TRP
3	AC	26	THR
3	AC	61	ALA
3	AC	80	LYS
3	AC	140	ASN
3	AC	141	ALA
3	AC	146	ALA
4	AD	23	SER
4	AD	25	VAL
4	AD	29	ASP
4	AD	33	LYS
4	AD	35	GLU
4	AD	85	ASN
4	AD	121	LYS
4	AD	126	ASN
4	AD	153	SER
4	AD	168	PRO
4	AD	191	LEU
4	AD	192	SER
5	AE	26	LYS
5	AE	69	ARG
5	AE	70	ASN
5	AE	100	SER
5	AE	138	ARG
5	AE	158	GLY
6	AF	91	ARG
6	AF	92	THR
6	AF	99	ALA
7	AG	9	GLN
7	AG	14	PRO
7	AG	15	ASP
7	AG	56	LYS
7	AG	57	SER
7	AG	81	GLY
7	AG	100	ALA
7	AG	130	ASN
9	AI	41	ARG
9	AI	44	ALA
9	AI	58	VAL
9	AI	59	GLU
10	AJ	34	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	AJ	35	GLN
10	AJ	57	VAL
10	AJ	74	VAL
10	AJ	93	ALA
10	AJ	101	SER
11	AK	27	PHE
11	AK	39	GLY
11	AK	41	ALA
11	AK	52	PHE
11	AK	56	ARG
11	AK	73	ALA
11	AK	103	ALA
11	AK	126	LYS
12	AL	24	LEU
12	AL	44	LYS
12	AL	89	ASP
13	AM	5	ALA
13	AM	12	HIS
13	AM	107	ARG
13	AM	114	LYS
14	AN	34	VAL
14	AN	42	TRP
14	AN	47	LYS
14	AN	52	PRO
14	AN	62	ASN
15	AO	17	ARG
16	AP	43	ALA
16	AP	46	LYS
16	AP	80	LYS
17	AQ	13	VAL
17	AQ	51	ASN
17	AQ	82	ALA
19	AS	6	LYS
19	AS	23	VAL
19	AS	64	ASP
19	AS	65	GLU
20	AT	4	ILE
20	AT	6	SER
21	AU	9	ASN
21	AU	12	PHE
21	AU	24	GLU
21	AU	35	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	AU	36	GLU
21	AU	37	PHE
21	AU	40	LYS
24	BC	71	LYS
24	BC	122	ALA
24	BC	196	GLY
24	BC	253	LYS
25	BD	86	GLU
25	BD	152	PRO
26	BE	86	ALA
27	BF	3	LYS
27	BF	41	GLY
27	BF	175	PHE
28	BG	110	SER
28	BG	119	ALA
28	BG	175	LYS
29	BH	10	ALA
29	BH	34	GLY
29	BH	53	GLU
29	BH	87	GLU
29	BH	90	LEU
29	BH	118	PRO
29	BH	121	VAL
29	BH	140	ALA
30	BI	19	ASN
30	BI	45	LYS
30	BI	63	ALA
30	BI	83	ALA
30	BI	86	ILE
30	BI	113	LYS
30	BI	117	MET
32	BK	35	VAL
32	BK	108	ARG
33	BL	69	ARG
33	BL	94	THR
34	BM	69	PRO
37	BP	114	LEU
38	BQ	25	TYR
39	BR	29	THR
39	BR	31	GLU
39	BR	49	ILE
39	BR	51	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	BR	53	PHE
40	BS	64	ALA
41	BT	2	ILE
41	BT	17	SER
41	BT	25	GLU
41	BT	89	GLU
42	BU	21	LYS
42	BU	52	LEU
45	BX	3	ARG
46	BY	22	LEU
46	BY	23	ARG
46	BY	36	GLN
46	BY	58	ASN
46	BY	62	GLY
49	B1	5	ILE
49	B1	17	THR
50	B2	44	VAL
53	B5	53	ARG
53	B5	60	ARG
53	B5	86	GLU
53	B5	126	SER
53	B5	134	PRO
53	B5	141	PRO
53	B5	167	ASP
53	B5	173	HIS
53	B5	175	PRO
53	B5	183	PRO
53	B5	184	GLU
53	B5	185	LYS
53	B5	203	GLU
53	B5	209	PHE
53	B5	214	TYR
53	B5	215	VAL
53	B5	216	THR
53	B5	221	PRO
2	CB	16	PHE
2	CB	35	ARG
2	CB	36	ASN
2	CB	74	ARG
2	CB	87	CYS
2	CB	88	ASP
2	CB	120	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	CB	126	PHE
2	CB	141	LEU
2	CB	168	HIS
2	CB	194	ASP
2	CB	207	ILE
2	CB	220	THR
3	CC	82	GLU
3	CC	127	ARG
3	CC	146	ALA
4	CD	28	ILE
4	CD	30	THR
4	CD	32	CYS
4	CD	33	LYS
4	CD	35	GLU
4	CD	42	GLY
4	CD	169	THR
4	CD	175	ALA
5	CE	100	SER
5	CE	101	GLU
5	CE	102	GLY
5	CE	103	THR
5	CE	123	VAL
5	CE	158	GLY
6	CF	33	GLU
6	CF	55	HIS
6	CF	56	LYS
6	CF	65	GLU
6	CF	92	THR
6	CF	98	GLU
6	CF	99	ALA
7	CG	3	ARG
7	CG	130	ASN
7	CG	146	GLU
8	CH	3	MET
9	CI	26	GLY
9	CI	41	ARG
9	CI	53	GLU
9	CI	91	ASP
9	CI	120	LYS
10	CJ	91	ASP
11	CK	52	PHE
11	CK	93	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	CK	127	ARG
12	CL	4	VAL
12	CL	44	LYS
12	CL	48	ALA
12	CL	58	THR
12	CL	89	ASP
13	CM	7	ILE
13	CM	41	GLU
13	CM	99	GLY
14	CN	22	ALA
14	CN	29	ALA
14	CN	32	SER
14	CN	52	PRO
14	CN	59	ARG
14	CN	81	ARG
14	CN	92	GLU
15	CO	14	GLU
15	CO	18	ASP
17	CQ	51	ASN
17	CQ	70	THR
17	CQ	76	VAL
18	CR	21	ILE
18	CR	25	ASP
19	CS	5	LEU
19	CS	32	ARG
20	CT	4	ILE
20	CT	6	SER
20	CT	68	HIS
21	CU	9	ASN
21	CU	12	PHE
21	CU	13	ASP
21	CU	24	GLU
21	CU	36	GLU
21	CU	37	PHE
21	CU	40	LYS
21	CU	52	ALA
24	DC	10	SER
24	DC	19	VAL
24	DC	29	PRO
24	DC	35	GLU
24	DC	58	HIS
24	DC	71	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	DC	122	ALA
24	DC	238	ARG
25	DD	36	GLN
25	DD	57	ALA
25	DD	98	VAL
25	DD	105	LYS
25	DD	151	THR
25	DD	152	PRO
27	DF	122	PHE
27	DF	123	ASP
27	DF	175	PHE
28	DG	92	VAL
28	DG	119	ALA
28	DG	159	GLY
29	DH	3	VAL
29	DH	10	ALA
29	DH	33	GLN
29	DH	35	LYS
29	DH	41	LYS
29	DH	53	GLU
29	DH	54	LEU
29	DH	83	LYS
29	DH	109	GLU
30	DI	3	LYS
30	DI	7	ALA
30	DI	19	ASN
30	DI	93	PRO
30	DI	101	ILE
30	DI	102	SER
30	DI	115	ALA
31	DJ	6	ALA
31	DJ	11	VAL
31	DJ	42	ALA
31	DJ	81	ILE
31	DJ	94	ALA
32	DK	35	VAL
32	DK	92	GLU
32	DK	105	ARG
32	DK	108	ARG
32	DK	120	PRO
33	DL	39	LYS
33	DL	111	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	DM	3	GLN
35	DN	70	THR
35	DN	88	ALA
35	DN	104	ALA
35	DN	107	ASN
36	DO	12	THR
36	DO	34	HIS
36	DO	57	ALA
37	DP	66	ASN
37	DP	94	LYS
39	DR	102	SER
40	DS	29	VAL
40	DS	62	ASP
40	DS	67	ASP
40	DS	72	THR
41	DT	18	GLU
41	DT	21	SER
41	DT	22	THR
41	DT	28	ASN
41	DT	39	THR
41	DT	78	SER
42	DU	37	GLU
42	DU	89	ASP
47	DZ	52	SER
47	DZ	53	PHE
48	D0	56	ALA
49	D1	16	GLY
50	D2	44	VAL
52	D4	23	ILE
2	AB	13	GLY
2	AB	20	THR
2	AB	35	ARG
2	AB	43	LEU
2	AB	80	VAL
2	AB	83	ALA
2	AB	137	ARG
2	AB	150	GLY
2	AB	156	GLY
2	AB	182	PRO
2	AB	188	ASP
2	AB	193	PRO
2	AB	210	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	AB	212	LEU
2	AB	220	THR
3	AC	30	ALA
3	AC	88	ARG
3	AC	166	GLU
3	AC	168	TYR
4	AD	17	THR
4	AD	24	GLY
4	AD	32	CYS
4	AD	34	ILE
4	AD	160	GLU
5	AE	12	GLN
5	AE	51	GLY
5	AE	88	VAL
5	AE	101	GLU
5	AE	109	GLY
5	AE	110	ALA
5	AE	137	VAL
6	AF	6	ILE
7	AG	5	ARG
8	AH	96	MET
9	AI	13	LYS
9	AI	67	VAL
9	AI	116	VAL
10	AJ	16	ARG
10	AJ	17	LEU
10	AJ	36	VAL
10	AJ	58	ASN
10	AJ	61	ALA
10	AJ	81	GLU
10	AJ	92	LEU
11	AK	14	LYS
11	AK	17	SER
11	AK	36	ASP
11	AK	55	SER
11	AK	108	THR
11	AK	128	ARG
12	AL	25	GLU
12	AL	26	ALA
12	AL	118	GLY
13	AM	4	ILE
13	AM	65	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
14	AN	23	LYS
14	AN	28	LYS
14	AN	92	GLU
15	AO	3	LEU
15	AO	73	LYS
15	AO	88	ARG
16	AP	10	GLY
16	AP	11	ALA
16	AP	31	ARG
16	AP	48	GLU
16	AP	57	ILE
17	AQ	18	GLU
17	AQ	70	THR
18	AR	66	SER
19	AS	35	SER
19	AS	43	ASN
20	AT	5	LYS
21	AU	23	CYS
21	AU	27	GLY
21	AU	39	GLU
24	BC	124	ILE
24	BC	168	ASP
24	BC	265	LYS
25	BD	102	ALA
25	BD	104	VAL
25	BD	114	LYS
27	BF	85	ILE
27	BF	172	ALA
28	BG	39	ASP
29	BH	3	VAL
29	BH	11	ASN
29	BH	14	SER
29	BH	15	LEU
29	BH	66	ASN
29	BH	119	ASN
30	BI	10	LYS
30	BI	39	CYS
30	BI	58	VAL
30	BI	102	SER
30	BI	116	ASP
30	BI	138	LEU
32	BK	109	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	BK	110	GLU
33	BL	15	ALA
33	BL	88	GLY
35	BN	118	ARG
36	BO	87	ILE
37	BP	16	ASP
37	BP	94	LYS
37	BP	105	GLY
39	BR	52	PRO
39	BR	55	ASP
39	BR	57	GLY
40	BS	63	GLY
41	BT	52	GLU
41	BT	71	GLY
41	BT	90	GLY
42	BU	8	ASP
42	BU	19	LYS
43	BV	66	ASP
46	BY	24	GLU
46	BY	35	GLY
48	B0	56	ALA
49	B1	52	ALA
51	B3	28	ASN
53	B5	37	LYS
53	B5	41	THR
53	B5	62	THR
53	B5	69	LEU
53	B5	90	ALA
53	B5	136	GLY
53	B5	217	THR
53	B5	219	MET
2	CB	22	TYR
2	CB	124	GLY
2	CB	130	THR
2	CB	193	PRO
3	CC	66	VAL
3	CC	140	ASN
3	CC	141	ALA
3	CC	174	PRO
4	CD	4	TYR
4	CD	43	ALA
5	CE	45	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	CE	51	GLY
5	CE	122	ASN
5	CE	155	ALA
6	CF	93	LYS
6	CF	94	HIS
7	CG	114	LYS
8	CH	54	ASP
9	CI	57	MET
9	CI	72	ILE
9	CI	123	ARG
10	CJ	38	GLY
10	CJ	41	PRO
10	CJ	57	VAL
10	CJ	90	LEU
10	CJ	93	ALA
11	CK	78	GLY
11	CK	126	LYS
12	CL	76	GLU
13	CM	94	GLY
14	CN	53	ARG
15	CO	21	ASP
16	CP	77	GLU
17	CQ	18	GLU
19	CS	6	LYS
19	CS	45	ILE
21	CU	35	ARG
24	DC	205	LEU
24	DC	239	ASN
24	DC	251	GLN
24	DC	255	LYS
26	DE	6	LYS
26	DE	18	THR
26	DE	61	ARG
26	DE	82	GLY
26	DE	86	ALA
26	DE	122	GLU
26	DE	126	VAL
26	DE	129	PRO
26	DE	145	ASP
27	DF	9	LYS
27	DF	148	ARG
28	DG	20	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	DG	28	GLY
28	DG	127	THR
28	DG	175	LYS
29	DH	31	VAL
29	DH	77	THR
29	DH	118	PRO
30	DI	9	VAL
30	DI	106	LEU
30	DI	134	ARG
33	DL	40	SER
33	DL	53	GLY
33	DL	69	ARG
34	DM	23	GLY
36	DO	115	LEU
37	DP	36	SER
37	DP	80	VAL
38	DQ	102	ASP
39	DR	53	PHE
40	DS	40	ASN
40	DS	64	ALA
40	DS	66	ILE
41	DT	66	LYS
41	DT	90	GLY
42	DU	53	ASN
42	DU	57	GLY
42	DU	98	SER
42	DU	99	ASN
45	DX	7	VAL
45	DX	62	LYS
46	DY	37	LEU
46	DY	57	LEU
47	DZ	4	THR
48	D0	55	ILE
50	D2	8	SER
50	D2	45	SER
51	D3	26	HIS
2	AB	68	LEU
2	AB	202	GLY
2	AB	203	ASN
3	AC	13	GLY
3	AC	54	ARG
3	AC	127	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	AC	160	ALA
4	AD	36	GLN
4	AD	167	LYS
4	AD	169	THR
5	AE	45	ARG
5	AE	76	LEU
5	AE	78	ASN
6	AF	54	LEU
6	AF	69	GLU
8	AH	67	GLN
8	AH	88	ARG
9	AI	91	ASP
10	AJ	32	THR
10	AJ	41	PRO
12	AL	58	THR
12	AL	102	LEU
13	AM	10	PRO
15	AO	20	ASN
16	AP	49	GLY
16	AP	53	ASP
17	AQ	16	LYS
19	AS	4	SER
19	AS	9	PRO
19	AS	76	PRO
20	AT	68	HIS
21	AU	10	GLU
25	BD	105	LYS
27	BF	174	ASP
27	BF	176	PRO
28	BG	79	VAL
29	BH	9	VAL
29	BH	30	LEU
29	BH	85	GLY
29	BH	93	SER
29	BH	105	ALA
30	BI	20	PRO
30	BI	60	THR
30	BI	75	PRO
30	BI	84	ALA
30	BI	101	ILE
31	BJ	25	LEU
31	BJ	98	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	BN	10	LEU
41	BT	18	GLU
41	BT	72	GLN
48	B0	34	SER
48	B0	55	ILE
53	B5	79	ALA
53	B5	133	GLY
2	CB	19	GLN
2	CB	203	ASN
3	CC	64	ILE
4	CD	36	GLN
4	CD	168	PRO
4	CD	174	ASP
5	CE	12	GLN
5	CE	110	ALA
5	CE	138	ARG
5	CE	143	GLY
5	CE	150	PRO
6	CF	91	ARG
6	CF	95	ALA
7	CG	56	LYS
7	CG	126	ASP
8	CH	21	ASN
8	CH	97	ALA
8	CH	114	ARG
9	CI	12	ARG
10	CJ	79	PRO
12	CL	17	ALA
12	CL	22	PRO
12	CL	26	ALA
12	CL	43	LYS
13	CM	11	ASP
13	CM	12	HIS
13	CM	37	ALA
13	CM	66	GLU
13	CM	114	LYS
14	CN	21	PHE
14	CN	31	ILE
16	CP	46	LYS
17	CQ	20	SER
17	CQ	80	GLU
18	CR	47	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
19	CS	31	LEU
20	CT	5	LYS
20	CT	70	ASN
21	CU	10	GLU
21	CU	16	LEU
24	DC	34	LEU
24	DC	143	ASN
24	DC	240	PHE
25	DD	114	LYS
26	DE	48	THR
26	DE	127	GLU
27	DF	21	ASN
28	DG	8	PRO
29	DH	16	GLY
29	DH	40	THR
31	DJ	8	PRO
31	DJ	10	THR
31	DJ	25	LEU
33	DL	16	GLY
33	DL	30	THR
33	DL	42	SER
33	DL	54	GLN
34	DM	57	VAL
34	DM	58	LYS
34	DM	69	PRO
35	DN	59	SER
35	DN	105	GLY
36	DO	63	LYS
36	DO	116	GLN
37	DP	25	THR
37	DP	114	LEU
42	DU	7	ARG
42	DU	41	LEU
42	DU	52	LEU
45	DX	26	LYS
45	DX	44	LYS
48	D0	52	ARG
49	D1	27	LYS
52	D4	20	ASP
2	AB	143	LYS
2	AB	211	THR
3	AC	100	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	AD	26	ARG
4	AD	28	ILE
5	AE	24	THR
5	AE	108	GLY
6	AF	98	GLU
7	AG	77	SER
7	AG	85	TYR
7	AG	113	ASP
8	AH	11	LEU
8	AH	25	VAL
8	AH	57	PRO
9	AI	51	PRO
10	AJ	28	THR
10	AJ	42	LEU
10	AJ	75	ASP
10	AJ	91	ASP
11	AK	16	VAL
11	AK	119	ASN
11	AK	127	ARG
12	AL	61	PHE
13	AM	64	VAL
15	AO	46	HIS
16	AP	50	THR
16	AP	79	ASN
17	AQ	12	VAL
17	AQ	50	ASN
20	AT	69	LYS
24	BC	271	ARG
26	BE	5	LEU
29	BH	83	LYS
30	BI	4	LYS
31	BJ	81	ILE
32	BK	93	GLN
32	BK	119	ALA
39	BR	43	ASN
40	BS	42	LYS
42	BU	64	ALA
43	BV	55	GLU
47	BZ	3	LYS
50	B2	42	LEU
53	B5	27	ALA
53	B5	51	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	B5	65	LEU
53	B5	66	PRO
53	B5	148	PHE
2	CB	136	MET
2	CB	142	GLU
4	CD	23	SER
4	CD	29	ASP
4	CD	153	SER
4	CD	154	ARG
4	CD	192	SER
7	CG	79	ARG
7	CG	84	THR
7	CG	140	ASP
8	CH	66	PHE
9	CI	9	THR
10	CJ	35	GLN
10	CJ	36	VAL
12	CL	23	ALA
12	CL	24	LEU
13	CM	82	ASP
14	CN	62	ASN
15	CO	46	HIS
16	CP	15	PRO
20	CT	7	ALA
24	DC	76	ALA
24	DC	168	ASP
24	DC	247	PRO
24	DC	253	LYS
24	DC	260	ASN
26	DE	125	SER
27	DF	79	ILE
27	DF	174	ASP
29	DH	9	VAL
30	DI	22	PRO
30	DI	65	ARG
30	DI	84	ALA
30	DI	117	MET
31	DJ	127	GLY
31	DJ	128	ASN
32	DK	93	GLN
33	DL	25	SER
33	DL	36	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	DM	79	ALA
35	DN	106	ASP
35	DN	118	ARG
36	DO	3	LYS
37	DP	32	VAL
38	DQ	87	SER
39	DR	82	HIS
40	DS	63	GLY
42	DU	58	ILE
43	DV	84	PRO
47	DZ	30	ARG
49	D1	5	ILE
2	AB	41	ILE
2	AB	207	ILE
3	AC	86	LYS
3	AC	121	THR
3	AC	159	GLY
4	AD	47	ARG
4	AD	161	LEU
5	AE	122	ASN
6	AF	62	MET
8	AH	34	VAL
9	AI	87	LEU
10	AJ	43	PRO
14	AN	44	ALA
21	AU	38	TYR
24	BC	121	ASP
27	BF	177	PHE
28	BG	12	PRO
28	BG	152	ARG
30	BI	8	TYR
30	BI	23	PRO
33	BL	29	LYS
34	BM	58	LYS
36	BO	77	ALA
37	BP	76	THR
39	BR	70	GLU
52	B4	37	GLN
53	B5	168	LYS
53	B5	171	ALA
53	B5	201	LYS
53	B5	210	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	B5	213	VAL
53	B5	223	VAL
2	CB	68	LEU
2	CB	127	ASP
2	CB	149	GLY
3	CC	37	PHE
4	CD	47	ARG
4	CD	85	ASN
5	CE	151	GLU
6	CF	18	VAL
8	CH	22	LYS
8	CH	96	MET
9	CI	55	VAL
10	CJ	95	GLY
11	CK	15	GLN
13	CM	14	HIS
14	CN	11	VAL
17	CQ	16	LYS
19	CS	67	VAL
19	CS	69	HIS
19	CS	76	PRO
21	CU	11	PRO
24	DC	85	PRO
25	DD	75	ALA
25	DD	194	PRO
26	DE	62	GLN
26	DE	200	LEU
27	DF	118	SER
28	DG	46	ALA
28	DG	80	THR
28	DG	158	LYS
28	DG	173	GLU
30	DI	10	LYS
30	DI	20	PRO
32	DK	48	PRO
32	DK	110	GLU
33	DL	29	LYS
33	DL	79	LEU
34	DM	77	PRO
35	DN	86	ARG
39	DR	7	SER
39	DR	81	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	DU	102	THR
43	DV	85	LYS
45	DX	42	SER
45	DX	66	THR
49	D1	15	ALA
49	D1	51	GLU
2	AB	183	VAL
3	AC	66	VAL
5	AE	54	ARG
5	AE	98	PRO
8	AH	14	ILE
9	AI	9	THR
9	AI	88	MET
13	AM	66	GLU
13	AM	67	GLY
20	AT	82	GLN
21	AU	26	ALA
24	BC	97	LYS
25	BD	148	GLN
26	BE	44	ARG
28	BG	61	GLY
29	BH	120	GLY
30	BI	9	VAL
35	BN	119	SER
36	BO	88	LYS
37	BP	35	GLY
38	BQ	24	TYR
42	BU	98	SER
2	CB	205	ASP
2	CB	208	ARG
3	CC	84	VAL
3	CC	191	THR
4	CD	10	LYS
9	CI	39	PHE
9	CI	58	VAL
9	CI	128	SER
10	CJ	75	ASP
11	CK	80	LYS
13	CM	96	PRO
16	CP	14	ARG
17	CQ	5	ILE
20	CT	56	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	CT	65	GLY
24	DC	121	ASP
26	DE	80	SER
26	DE	83	VAL
27	DF	176	PRO
30	DI	61	VAL
31	DJ	85	LYS
31	DJ	95	ARG
33	DL	20	GLY
41	DT	50	LEU
41	DT	57	VAL
43	DV	24	ASN
3	AC	101	ILE
8	AH	100	GLY
11	AK	124	PRO
28	BG	100	GLY
46	BY	46	VAL
47	BZ	14	ILE
6	CF	85	ILE
11	CK	120	GLY
14	CN	34	VAL
24	DC	235	GLY
27	DF	31	VAL
30	DI	52	GLY
31	DJ	64	VAL
32	DK	72	PRO
41	DT	10	VAL
45	DX	51	VAL
46	DY	11	VAL
50	D2	38	GLY
9	AI	72	ILE
13	AM	111	GLY
32	BK	120	PRO
11	CK	92	GLY
16	CP	42	ILE
17	CQ	13	VAL
20	CT	67	ILE
21	CU	27	GLY
26	DE	149	ILE
27	DF	85	ILE
28	DG	12	PRO
28	DG	17	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
30	DI	13	VAL
31	DJ	82	GLY
33	DL	46	VAL
35	DN	85	PRO
41	DT	47	VAL
2	AB	224	GLY
4	AD	139	PRO
5	AE	134	ILE
6	AF	43	GLY
7	AG	80	VAL
9	AI	24	GLY
24	BC	234	GLY
30	BI	13	VAL
4	CD	37	ALA
9	CI	104	VAL
28	DG	118	PRO
32	DK	119	ALA
39	DR	101	ILE
42	DU	47	LYS
42	DU	54	GLN
51	D3	7	VAL
2	AB	48	PRO
5	AE	105	ILE
12	AL	22	PRO
18	AR	26	ILE
30	BI	98	VAL
4	CD	167	LYS
10	CJ	42	LEU
13	CM	25	VAL
14	CN	72	GLY
19	CS	30	PRO
24	DC	228	VAL
30	DI	98	VAL
42	DU	25	VAL
48	D0	43	ILE
11	AK	91	PRO
24	BC	233	GLY
6	CF	64	VAL

5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	AB	180/180 (100%)	132 (73%)	48 (27%)	0	2
2	CB	180/180 (100%)	132 (73%)	48 (27%)	0	2
3	AC	170/170 (100%)	136 (80%)	34 (20%)	1	4
3	CC	170/170 (100%)	146 (86%)	24 (14%)	4	12
4	AD	172/172 (100%)	138 (80%)	34 (20%)	1	5
4	CD	172/172 (100%)	145 (84%)	27 (16%)	3	9
5	AE	113/113 (100%)	86 (76%)	27 (24%)	1	2
5	CE	113/113 (100%)	84 (74%)	29 (26%)	0	2
6	AF	87/87 (100%)	71 (82%)	16 (18%)	2	6
6	CF	87/87 (100%)	60 (69%)	27 (31%)	0	1
7	AG	124/124 (100%)	105 (85%)	19 (15%)	3	10
7	CG	124/124 (100%)	100 (81%)	24 (19%)	1	5
8	AH	104/104 (100%)	84 (81%)	20 (19%)	1	5
8	CH	104/104 (100%)	84 (81%)	20 (19%)	1	5
9	AI	105/105 (100%)	76 (72%)	29 (28%)	0	1
9	CI	105/105 (100%)	90 (86%)	15 (14%)	4	11
10	AJ	86/86 (100%)	69 (80%)	17 (20%)	1	5
10	CJ	86/86 (100%)	65 (76%)	21 (24%)	1	2
11	AK	90/90 (100%)	75 (83%)	15 (17%)	2	7
11	CK	90/90 (100%)	73 (81%)	17 (19%)	2	5
12	AL	103/103 (100%)	86 (84%)	17 (16%)	2	8
12	CL	103/103 (100%)	83 (81%)	20 (19%)	1	5
13	AM	92/92 (100%)	76 (83%)	16 (17%)	2	7
13	CM	92/92 (100%)	75 (82%)	17 (18%)	2	5
14	AN	79/83 (95%)	65 (82%)	14 (18%)	2	6
14	CN	79/83 (95%)	71 (90%)	8 (10%)	9	27

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
15	AO	75/76 (99%)	63 (84%)	12 (16%)	3	8
15	CO	75/76 (99%)	64 (85%)	11 (15%)	3	11
16	AP	65/65 (100%)	49 (75%)	16 (25%)	1	2
16	CP	65/65 (100%)	55 (85%)	10 (15%)	3	10
17	AQ	74/74 (100%)	50 (68%)	24 (32%)	0	0
17	CQ	74/74 (100%)	52 (70%)	22 (30%)	0	1
18	AR	48/48 (100%)	37 (77%)	11 (23%)	1	3
18	CR	48/48 (100%)	39 (81%)	9 (19%)	2	5
19	AS	70/70 (100%)	54 (77%)	16 (23%)	1	3
19	CS	70/70 (100%)	57 (81%)	13 (19%)	2	5
20	AT	65/65 (100%)	51 (78%)	14 (22%)	1	3
20	CT	65/65 (100%)	57 (88%)	8 (12%)	5	16
21	AU	44/44 (100%)	29 (66%)	15 (34%)	0	0
21	CU	44/44 (100%)	27 (61%)	17 (39%)	0	0
24	BC	216/216 (100%)	189 (88%)	27 (12%)	5	16
24	DC	216/216 (100%)	194 (90%)	22 (10%)	8	26
25	BD	164/164 (100%)	147 (90%)	17 (10%)	8	25
25	DD	164/164 (100%)	147 (90%)	17 (10%)	8	25
26	BE	165/165 (100%)	138 (84%)	27 (16%)	2	8
26	DE	165/165 (100%)	139 (84%)	26 (16%)	3	9
27	BF	148/148 (100%)	115 (78%)	33 (22%)	1	3
27	DF	148/148 (100%)	121 (82%)	27 (18%)	2	6
28	BG	137/137 (100%)	120 (88%)	17 (12%)	5	16
28	DG	137/137 (100%)	114 (83%)	23 (17%)	2	7
29	BH	114/114 (100%)	88 (77%)	26 (23%)	1	3
29	DH	114/114 (100%)	88 (77%)	26 (23%)	1	3
30	BI	109/109 (100%)	83 (76%)	26 (24%)	1	2
30	DI	109/109 (100%)	83 (76%)	26 (24%)	1	2
31	BJ	116/116 (100%)	104 (90%)	12 (10%)	8	25
31	DJ	116/116 (100%)	97 (84%)	19 (16%)	2	8
32	BK	103/103 (100%)	90 (87%)	13 (13%)	5	15

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
32	DK	103/103 (100%)	92 (89%)	11 (11%)	8	23
33	BL	102/102 (100%)	92 (90%)	10 (10%)	9	28
33	DL	102/102 (100%)	89 (87%)	13 (13%)	5	15
34	BM	109/109 (100%)	100 (92%)	9 (8%)	13	36
34	DM	109/109 (100%)	97 (89%)	12 (11%)	7	22
35	BN	100/100 (100%)	93 (93%)	7 (7%)	18	45
35	DN	100/100 (100%)	77 (77%)	23 (23%)	1	2
36	BO	86/86 (100%)	66 (77%)	20 (23%)	1	2
36	DO	86/86 (100%)	69 (80%)	17 (20%)	1	5
37	BP	99/99 (100%)	84 (85%)	15 (15%)	3	10
37	DP	99/99 (100%)	90 (91%)	9 (9%)	11	32
38	BQ	89/89 (100%)	78 (88%)	11 (12%)	5	16
38	DQ	89/89 (100%)	78 (88%)	11 (12%)	5	16
39	BR	84/84 (100%)	74 (88%)	10 (12%)	6	18
39	DR	84/84 (100%)	79 (94%)	5 (6%)	22	54
40	BS	93/93 (100%)	77 (83%)	16 (17%)	2	7
40	DS	93/93 (100%)	82 (88%)	11 (12%)	6	18
41	BT	80/80 (100%)	70 (88%)	10 (12%)	5	16
41	DT	80/80 (100%)	69 (86%)	11 (14%)	4	12
42	BU	83/83 (100%)	71 (86%)	12 (14%)	4	11
42	DU	83/83 (100%)	68 (82%)	15 (18%)	2	6
43	BV	78/78 (100%)	61 (78%)	17 (22%)	1	3
43	DV	78/78 (100%)	65 (83%)	13 (17%)	2	7
44	BW	57/58 (98%)	48 (84%)	9 (16%)	3	9
44	DW	56/58 (97%)	48 (86%)	8 (14%)	4	11
45	BX	67/67 (100%)	59 (88%)	8 (12%)	6	18
45	DX	67/67 (100%)	57 (85%)	10 (15%)	3	10
46	BY	55/55 (100%)	49 (89%)	6 (11%)	7	22
46	DY	55/55 (100%)	42 (76%)	13 (24%)	1	2
47	BZ	48/48 (100%)	43 (90%)	5 (10%)	8	25
47	DZ	48/48 (100%)	38 (79%)	10 (21%)	1	4

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
48	B0	47/47 (100%)	43 (92%)	4 (8%)	12	35
48	D0	47/47 (100%)	42 (89%)	5 (11%)	8	24
49	B1	45/45 (100%)	42 (93%)	3 (7%)	19	48
49	D1	45/45 (100%)	38 (84%)	7 (16%)	3	9
50	B2	38/38 (100%)	34 (90%)	4 (10%)	8	24
50	D2	38/38 (100%)	32 (84%)	6 (16%)	3	9
51	B3	51/51 (100%)	45 (88%)	6 (12%)	6	18
51	D3	51/51 (100%)	46 (90%)	5 (10%)	9	28
52	B4	34/34 (100%)	32 (94%)	2 (6%)	23	55
52	D4	34/34 (100%)	28 (82%)	6 (18%)	2	6
53	B5	61/180 (34%)	47 (77%)	14 (23%)	1	2
All	All	9386/9518 (99%)	7782 (83%)	1604 (17%)	2	7

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

Mol	Chain	Res	Type
2	AB	9	MET
2	AB	14	VAL
2	AB	15	HIS
2	AB	20	THR
2	AB	21	ARG
2	AB	27	MET
2	AB	30	PHE
2	AB	31	ILE
2	AB	32	PHE
2	AB	39	HIS
2	AB	41	ILE
2	AB	43	LEU
2	AB	46	THR
2	AB	50	PHE
2	AB	64	LYS
2	AB	66	LYS
2	AB	68	LEU
2	AB	85	LEU
2	AB	87	CYS
2	AB	88	ASP
2	AB	95	ARG
2	AB	100	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	AB	101	LEU
2	AB	102	THR
2	AB	107	VAL
2	AB	108	ARG
2	AB	114	LEU
2	AB	122	GLN
2	AB	123	ASP
2	AB	126	PHE
2	AB	129	LEU
2	AB	130	THR
2	AB	132	LYS
2	AB	135	LEU
2	AB	148	LEU
2	AB	153	ASP
2	AB	157	LEU
2	AB	161	LEU
2	AB	164	ILE
2	AB	170	HIS
2	AB	188	ASP
2	AB	207	ILE
2	AB	208	ARG
2	AB	210	VAL
2	AB	213	TYR
2	AB	220	THR
2	AB	225	ARG
2	AB	226	SER
3	AC	3	GLN
3	AC	14	ILE
3	AC	15	VAL
3	AC	18	TRP
3	AC	19	ASN
3	AC	21	THR
3	AC	27	LYS
3	AC	28	GLU
3	AC	29	PHE
3	AC	33	LEU
3	AC	37	PHE
3	AC	38	LYS
3	AC	43	LEU
3	AC	52	VAL
3	AC	53	SER
3	AC	55	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	AC	57	ILE
3	AC	59	ARG
3	AC	64	ILE
3	AC	69	HIS
3	AC	75	ILE
3	AC	86	LYS
3	AC	88	ARG
3	AC	107	ARG
3	AC	127	ARG
3	AC	131	ARG
3	AC	144	LEU
3	AC	167	TRP
3	AC	168	TYR
3	AC	185	ASN
3	AC	186	THR
3	AC	192	THR
3	AC	193	TYR
3	AC	196	ILE
4	AD	5	LEU
4	AD	13	ARG
4	AD	17	THR
4	AD	23	SER
4	AD	31	LYS
4	AD	32	CYS
4	AD	33	LYS
4	AD	34	ILE
4	AD	35	GLU
4	AD	44	ARG
4	AD	45	LYS
4	AD	56	ARG
4	AD	58	LYS
4	AD	63	ARG
4	AD	73	ARG
4	AD	83	LYS
4	AD	90	LEU
4	AD	93	LEU
4	AD	103	TYR
4	AD	104	ARG
4	AD	111	ARG
4	AD	121	LYS
4	AD	123	ILE
4	AD	132	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	AD	143	VAL
4	AD	153	SER
4	AD	161	LEU
4	AD	163	GLU
4	AD	173	VAL
4	AD	190	ASP
4	AD	195	ILE
4	AD	198	HIS
4	AD	205	SER
4	AD	206	LYS
5	AE	10	GLU
5	AE	14	LYS
5	AE	15	LEU
5	AE	16	ILE
5	AE	18	VAL
5	AE	21	VAL
5	AE	25	VAL
5	AE	32	SER
5	AE	36	LEU
5	AE	37	THR
5	AE	38	VAL
5	AE	60	ILE
5	AE	78	ASN
5	AE	81	LEU
5	AE	83	HIS
5	AE	85	VAL
5	AE	94	VAL
5	AE	115	LEU
5	AE	120	VAL
5	AE	124	LEU
5	AE	134	ILE
5	AE	136	VAL
5	AE	140	THR
5	AE	142	ASP
5	AE	149	SER
5	AE	153	VAL
5	AE	159	LYS
6	AF	7	VAL
6	AF	14	GLN
6	AF	15	SER
6	AF	17	GLN
6	AF	24	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	AF	50	PRO
6	AF	51	ILE
6	AF	54	LEU
6	AF	55	HIS
6	AF	68	GLN
6	AF	69	GLU
6	AF	73	GLU
6	AF	75	GLU
6	AF	84	VAL
6	AF	86	ARG
6	AF	98	GLU
7	AG	4	ARG
7	AG	7	ILE
7	AG	23	LEU
7	AG	32	VAL
7	AG	36	LYS
7	AG	38	THR
7	AG	40	GLU
7	AG	48	GLU
7	AG	50	LEU
7	AG	52	GLN
7	AG	58	GLU
7	AG	59	LEU
7	AG	63	GLU
7	AG	70	ARG
7	AG	78	ARG
7	AG	115	SER
7	AG	135	VAL
7	AG	136	LYS
7	AG	143	ARG
8	AH	2	SER
8	AH	3	MET
8	AH	22	LYS
8	AH	25	VAL
8	AH	26	THR
8	AH	36	ILE
8	AH	38	ASN
8	AH	39	VAL
8	AH	42	GLU
8	AH	47	GLU
8	AH	51	VAL
8	AH	59	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	AH	77	ARG
8	AH	83	LEU
8	AH	87	LYS
8	AH	104	VAL
8	AH	108	LYS
8	AH	117	ARG
8	AH	121	LEU
8	AH	129	VAL
9	AI	12	ARG
9	AI	18	ARG
9	AI	30	ILE
9	AI	33	ARG
9	AI	36	GLU
9	AI	43	THR
9	AI	45	ARG
9	AI	46	MET
9	AI	47	VAL
9	AI	48	VAL
9	AI	49	ARG
9	AI	55	VAL
9	AI	56	ASP
9	AI	57	MET
9	AI	60	LYS
9	AI	61	LEU
9	AI	63	LEU
9	AI	65	ILE
9	AI	68	LYS
9	AI	85	ARG
9	AI	88	MET
9	AI	89	GLU
9	AI	90	TYR
9	AI	91	ASP
9	AI	94	LEU
9	AI	100	LYS
9	AI	127	PHE
9	AI	129	LYS
9	AI	130	ARG
10	AJ	5	ARG
10	AJ	6	ILE
10	AJ	8	ILE
10	AJ	27	GLU
10	AJ	30	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	AJ	40	ILE
10	AJ	42	LEU
10	AJ	45	ARG
10	AJ	49	PHE
10	AJ	50	THR
10	AJ	52	LEU
10	AJ	59	LYS
10	AJ	66	GLU
10	AJ	73	LEU
10	AJ	84	VAL
10	AJ	87	LEU
10	AJ	91	ASP
11	AK	31	ILE
11	AK	33	THR
11	AK	34	ILE
11	AK	52	PHE
11	AK	56	ARG
11	AK	65	VAL
11	AK	81	ASN
11	AK	85	MET
11	AK	96	THR
11	AK	97	ILE
11	AK	100	LEU
11	AK	101	ASN
11	AK	107	ILE
11	AK	126	LYS
11	AK	128	ARG
12	AL	7	LEU
12	AL	10	LYS
12	AL	19	SER
12	AL	29	GLN
12	AL	30	LYS
12	AL	33	VAL
12	AL	36	ARG
12	AL	44	LYS
12	AL	58	THR
12	AL	62	GLU
12	AL	74	LEU
12	AL	89	ASP
12	AL	102	LEU
12	AL	105	SER
12	AL	110	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	AL	115	SER
12	AL	121	ARG
13	AM	4	ILE
13	AM	7	ILE
13	AM	13	LYS
13	AM	16	VAL
13	AM	25	VAL
13	AM	27	LYS
13	AM	50	GLU
13	AM	59	GLU
13	AM	71	ARG
13	AM	72	GLU
13	AM	80	LEU
13	AM	82	ASP
13	AM	87	ARG
13	AM	90	ARG
13	AM	101	ARG
13	AM	104	THR
14	AN	7	LYS
14	AN	12	LYS
14	AN	14	VAL
14	AN	26	GLU
14	AN	28	LYS
14	AN	46	LEU
14	AN	49	GLN
14	AN	50	THR
14	AN	51	LEU
14	AN	59	ARG
14	AN	84	VAL
14	AN	85	ARG
14	AN	97	LYS
14	AN	98	LYS
15	AO	8	THR
15	AO	13	SER
15	AO	17	ARG
15	AO	22	THR
15	AO	35	GLN
15	AO	39	LEU
15	AO	59	MET
15	AO	67	LEU
15	AO	83	GLU
15	AO	85	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
15	AO	87	LEU
15	AO	88	ARG
16	AP	1	MET
16	AP	2	VAL
16	AP	3	THR
16	AP	5	ARG
16	AP	8	ARG
16	AP	18	GLN
16	AP	19	VAL
16	AP	29	ASN
16	AP	33	ILE
16	AP	46	LYS
16	AP	51	ARG
16	AP	56	ARG
16	AP	66	THR
16	AP	68	SER
16	AP	76	LYS
16	AP	80	LYS
17	AQ	4	LYS
17	AQ	6	ARG
17	AQ	7	THR
17	AQ	8	LEU
17	AQ	13	VAL
17	AQ	14	SER
17	AQ	16	LYS
17	AQ	17	MET
17	AQ	21	ILE
17	AQ	29	VAL
17	AQ	30	LYS
17	AQ	33	ILE
17	AQ	38	ILE
17	AQ	48	ASP
17	AQ	52	GLU
17	AQ	55	ILE
17	AQ	61	ILE
17	AQ	69	LYS
17	AQ	74	THR
17	AQ	75	LEU
17	AQ	76	VAL
17	AQ	77	ARG
17	AQ	81	LYS
17	AQ	83	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	AR	21	ILE
18	AR	25	ASP
18	AR	29	LEU
18	AR	30	LYS
18	AR	31	ASN
18	AR	33	ILE
18	AR	34	THR
18	AR	43	ARG
18	AR	55	LEU
18	AR	57	ARG
18	AR	71	THR
19	AS	6	LYS
19	AS	7	LYS
19	AS	21	LYS
19	AS	24	GLU
19	AS	27	ASP
19	AS	29	LYS
19	AS	32	ARG
19	AS	37	ARG
19	AS	41	PHE
19	AS	43	ASN
19	AS	45	ILE
19	AS	55	ARG
19	AS	56	GLN
19	AS	58	VAL
19	AS	63	THR
19	AS	65	GLU
20	AT	3	ASN
20	AT	5	LYS
20	AT	6	SER
20	AT	10	ARG
20	AT	12	ILE
20	AT	24	ARG
20	AT	34	LYS
20	AT	36	TYR
20	AT	54	MET
20	AT	67	ILE
20	AT	69	LYS
20	AT	70	ASN
20	AT	74	ARG
20	AT	86	LEU
21	AU	5	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	AU	10	GLU
21	AU	12	PHE
21	AU	18	ARG
21	AU	20	LYS
21	AU	23	CYS
21	AU	25	LYS
21	AU	28	VAL
21	AU	34	ARG
21	AU	37	PHE
21	AU	42	THR
21	AU	46	LYS
21	AU	47	ARG
21	AU	49	LYS
21	AU	54	LYS
24	BC	13	ARG
24	BC	14	ARG
24	BC	18	LYS
24	BC	20	VAL
24	BC	24	LEU
24	BC	64	ILE
24	BC	86	ASN
24	BC	97	LYS
24	BC	105	LEU
24	BC	111	LYS
24	BC	117	GLN
24	BC	121	ASP
24	BC	156	ARG
24	BC	162	VAL
24	BC	164	ILE
24	BC	174	LEU
24	BC	177	ARG
24	BC	187	ASP
24	BC	197	ASN
24	BC	199	GLU
24	BC	213	TRP
24	BC	216	VAL
24	BC	220	VAL
24	BC	228	VAL
24	BC	245	VAL
24	BC	265	LYS
24	BC	268	VAL
25	BD	1	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BD	4	LEU
25	BD	13	ARG
25	BD	14	ILE
25	BD	18	ASP
25	BD	42	ASN
25	BD	58	ASN
25	BD	89	GLU
25	BD	95	SER
25	BD	97	SER
25	BD	121	THR
25	BD	129	THR
25	BD	133	THR
25	BD	145	SER
25	BD	165	MET
25	BD	174	SER
25	BD	186	LEU
26	BE	4	VAL
26	BE	5	LEU
26	BE	12	LEU
26	BE	16	GLU
26	BE	40	ARG
26	BE	44	ARG
26	BE	55	SER
26	BE	63	LYS
26	BE	74	LYS
26	BE	77	ILE
26	BE	79	ARG
26	BE	90	GLN
26	BE	93	SER
26	BE	107	SER
26	BE	108	ILE
26	BE	111	GLU
26	BE	116	ASP
26	BE	120	VAL
26	BE	126	VAL
26	BE	131	THR
26	BE	136	GLN
26	BE	149	ILE
26	BE	171	ASP
26	BE	178	VAL
26	BE	197	GLU
26	BE	198	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BE	200	LEU
27	BF	14	LYS
27	BF	17	MET
27	BF	18	THR
27	BF	21	ASN
27	BF	25	VAL
27	BF	34	ILE
27	BF	35	THR
27	BF	36	LEU
27	BF	37	ASN
27	BF	40	VAL
27	BF	42	GLU
27	BF	44	ILE
27	BF	48	LYS
27	BF	49	LEU
27	BF	51	ASP
27	BF	67	ILE
27	BF	83	TYR
27	BF	85	ILE
27	BF	92	ARG
27	BF	104	ILE
27	BF	108	VAL
27	BF	112	ARG
27	BF	120	LYS
27	BF	125	ARG
27	BF	132	VAL
27	BF	133	ARG
27	BF	147	ASP
27	BF	150	ARG
27	BF	152	LEU
27	BF	155	THR
27	BF	158	THR
27	BF	174	ASP
27	BF	178	ARG
28	BG	11	VAL
28	BG	33	LEU
28	BG	39	ASP
28	BG	55	ARG
28	BG	56	ASP
28	BG	67	THR
28	BG	69	ARG
28	BG	77	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	BG	84	THR
28	BG	87	LEU
28	BG	88	GLN
28	BG	99	LYS
28	BG	104	ASN
28	BG	124	GLU
28	BG	133	LEU
28	BG	139	GLN
28	BG	155	GLU
29	BH	1	MET
29	BH	3	VAL
29	BH	6	LEU
29	BH	12	LEU
29	BH	15	LEU
29	BH	27	ARG
29	BH	50	ARG
29	BH	60	GLU
29	BH	62	LEU
29	BH	66	ASN
29	BH	75	LEU
29	BH	77	THR
29	BH	79	THR
29	BH	86	ASP
29	BH	91	PHE
29	BH	112	LYS
29	BH	119	ASN
29	BH	122	LEU
29	BH	123	ARG
29	BH	125	THR
29	BH	129	GLU
29	BH	131	SER
29	BH	137	GLU
29	BH	142	VAL
29	BH	145	ASN
29	BH	146	VAL
30	BI	3	LYS
30	BI	9	VAL
30	BI	13	VAL
30	BI	17	MET
30	BI	19	ASN
30	BI	31	GLN
30	BI	34	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
30	BI	38	PHE
30	BI	45	LYS
30	BI	47	ASP
30	BI	50	GLU
30	BI	51	LYS
30	BI	58	VAL
30	BI	69	PHE
30	BI	72	LYS
30	BI	82	LYS
30	BI	86	ILE
30	BI	87	LYS
30	BI	90	SER
30	BI	94	ASN
30	BI	103	ARG
30	BI	107	GLN
30	BI	125	MET
30	BI	128	SER
30	BI	134	ARG
30	BI	136	MET
31	BJ	5	THR
31	BJ	30	THR
31	BJ	37	ARG
31	BJ	40	HIS
31	BJ	43	GLU
31	BJ	61	LYS
31	BJ	64	VAL
31	BJ	86	GLN
31	BJ	96	ARG
31	BJ	114	LEU
31	BJ	124	VAL
31	BJ	142	ILE
32	BK	1	MET
32	BK	40	LYS
32	BK	49	ARG
32	BK	58	LEU
32	BK	66	LYS
32	BK	80	ASP
32	BK	91	SER
32	BK	92	GLU
32	BK	105	ARG
32	BK	114	LYS
32	BK	116	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	BK	117	SER
32	BK	121	GLU
33	BL	19	LEU
33	BL	40	SER
33	BL	60	ARG
33	BL	82	LEU
33	BL	86	GLU
33	BL	94	THR
33	BL	100	ILE
33	BL	104	GLN
33	BL	115	GLU
33	BL	125	LEU
34	BM	20	LEU
34	BM	24	THR
34	BM	45	GLN
34	BM	55	ARG
34	BM	69	PRO
34	BM	80	VAL
34	BM	112	LEU
34	BM	115	GLU
34	BM	126	ILE
35	BN	2	ARG
35	BN	20	MET
35	BN	69	ARG
35	BN	70	THR
35	BN	95	THR
35	BN	113	ILE
35	BN	116	VAL
36	BO	2	ASP
36	BO	3	LYS
36	BO	4	LYS
36	BO	5	SER
36	BO	9	ARG
36	BO	17	LYS
36	BO	18	LEU
36	BO	24	THR
36	BO	27	VAL
36	BO	28	VAL
36	BO	31	THR
36	BO	36	TYR
36	BO	45	SER
36	BO	47	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BO	49	VAL
36	BO	55	GLU
36	BO	60	GLU
36	BO	61	GLN
36	BO	87	ILE
36	BO	89	ASP
37	BP	6	LYS
37	BP	7	GLN
37	BP	12	GLN
37	BP	26	VAL
37	BP	27	GLU
37	BP	38	LYS
37	BP	57	SER
37	BP	63	LYS
37	BP	64	ILE
37	BP	68	GLU
37	BP	88	ARG
37	BP	93	ARG
37	BP	103	ARG
37	BP	109	ARG
37	BP	110	ILE
38	BQ	18	LEU
38	BQ	30	ARG
38	BQ	51	ARG
38	BQ	52	GLN
38	BQ	58	ARG
38	BQ	78	LYS
38	BQ	85	LYS
38	BQ	87	SER
38	BQ	92	ARG
38	BQ	103	LYS
38	BQ	117	LEU
39	BR	10	LYS
39	BR	14	VAL
39	BR	16	GLU
39	BR	20	VAL
39	BR	32	THR
39	BR	38	VAL
39	BR	46	GLU
39	BR	48	LYS
39	BR	74	ILE
39	BR	85	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	BS	6	LYS
40	BS	7	HIS
40	BS	8	ARG
40	BS	19	LEU
40	BS	25	ARG
40	BS	28	LYS
40	BS	30	SER
40	BS	42	LYS
40	BS	47	VAL
40	BS	69	LEU
40	BS	81	SER
40	BS	82	MET
40	BS	90	LYS
40	BS	92	ARG
40	BS	97	LEU
40	BS	109	ASP
41	BT	1	MET
41	BT	12	ARG
41	BT	18	GLU
41	BT	27	SER
41	BT	30	ILE
41	BT	49	LYS
41	BT	70	HIS
41	BT	73	ARG
41	BT	86	THR
41	BT	93	LEU
42	BU	5	ILE
42	BU	9	ASP
42	BU	15	THR
42	BU	26	LYS
42	BU	28	VAL
42	BU	29	LEU
42	BU	52	LEU
42	BU	68	SER
42	BU	72	ILE
42	BU	77	THR
42	BU	86	ARG
42	BU	99	ASN
43	BV	1	MET
43	BV	2	PHE
43	BV	8	VAL
43	BV	10	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
43	BV	14	LYS
43	BV	17	SER
43	BV	29	ILE
43	BV	34	LYS
43	BV	41	GLU
43	BV	43	ASP
43	BV	61	LEU
43	BV	62	THR
43	BV	65	VAL
43	BV	66	ASP
43	BV	90	ASP
43	BV	92	VAL
43	BV	93	ARG
44	BW	20	ARG
44	BW	29	GLU
44	BW	38	VAL
44	BW	39	ARG
44	BW	41	ARG
44	BW	60	PHE
44	BW	64	ASP
44	BW	72	LYS
44	BW	81	SER
45	BX	5	CYS
45	BX	14	THR
45	BX	25	THR
45	BX	26	LYS
45	BX	43	GLU
45	BX	48	THR
45	BX	66	THR
45	BX	76	GLU
46	BY	5	GLU
46	BY	6	LEU
46	BY	16	THR
46	BY	22	LEU
46	BY	29	ARG
46	BY	57	LEU
47	BZ	10	THR
47	BZ	19	LYS
47	BZ	31	ARG
47	BZ	36	VAL
47	BZ	57	VAL
48	B0	20	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
48	B0	26	THR
48	B0	36	GLU
48	B0	40	ARG
49	B1	40	ASP
49	B1	47	VAL
49	B1	51	GLU
50	B2	3	ARG
50	B2	4	THR
50	B2	21	ARG
50	B2	45	SER
51	B3	5	LYS
51	B3	16	LYS
51	B3	30	ARG
51	B3	31	HIS
51	B3	47	LYS
51	B3	55	LEU
52	B4	18	LYS
52	B4	26	ILE
53	B5	21	TYR
53	B5	23	ILE
53	B5	38	PHE
53	B5	47	LYS
53	B5	48	LEU
53	B5	51	ASP
53	B5	64	SER
53	B5	73	VAL
53	B5	76	LEU
53	B5	78	ILE
53	B5	86	GLU
53	B5	93	ASP
53	B5	94	TYR
53	B5	100	ILE
2	CB	15	HIS
2	CB	16	PHE
2	CB	20	THR
2	CB	21	ARG
2	CB	23	TRP
2	CB	26	LYS
2	CB	27	MET
2	CB	32	PHE
2	CB	40	ILE
2	CB	43	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	CB	49	MET
2	CB	50	PHE
2	CB	56	GLU
2	CB	63	ARG
2	CB	66	LYS
2	CB	67	ILE
2	CB	68	LEU
2	CB	73	LYS
2	CB	74	ARG
2	CB	77	SER
2	CB	80	VAL
2	CB	85	LEU
2	CB	87	CYS
2	CB	88	ASP
2	CB	94	HIS
2	CB	95	ARG
2	CB	96	TRP
2	CB	101	LEU
2	CB	106	THR
2	CB	111	ILE
2	CB	126	PHE
2	CB	130	THR
2	CB	136	MET
2	CB	148	LEU
2	CB	163	VAL
2	CB	164	ILE
2	CB	171	ILE
2	CB	174	LYS
2	CB	175	GLU
2	CB	179	LEU
2	CB	187	VAL
2	CB	205	ASP
2	CB	207	ILE
2	CB	208	ARG
2	CB	210	VAL
2	CB	213	TYR
2	CB	222	ARG
2	CB	225	ARG
3	CC	3	GLN
3	CC	16	LYS
3	CC	27	LYS
3	CC	37	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	CC	38	LYS
3	CC	43	LEU
3	CC	70	THR
3	CC	75	ILE
3	CC	80	LYS
3	CC	103	ILE
3	CC	107	ARG
3	CC	110	GLU
3	CC	121	THR
3	CC	131	ARG
3	CC	140	ASN
3	CC	157	LEU
3	CC	167	TRP
3	CC	168	TYR
3	CC	175	LEU
3	CC	179	ARG
3	CC	185	ASN
3	CC	186	THR
3	CC	193	TYR
3	CC	200	VAL
4	CD	5	LEU
4	CD	8	LYS
4	CD	9	LEU
4	CD	10	LYS
4	CD	30	THR
4	CD	32	CYS
4	CD	33	LYS
4	CD	48	LEU
4	CD	50	ASP
4	CD	54	GLN
4	CD	55	LEU
4	CD	56	ARG
4	CD	58	LYS
4	CD	59	GLN
4	CD	81	ARG
4	CD	142	VAL
4	CD	148	LYS
4	CD	152	GLN
4	CD	155	VAL
4	CD	159	LEU
4	CD	161	LEU
4	CD	163	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	CD	174	ASP
4	CD	191	LEU
4	CD	192	SER
4	CD	200	ILE
4	CD	206	LYS
5	CE	10	GLU
5	CE	15	LEU
5	CE	24	THR
5	CE	25	VAL
5	CE	26	LYS
5	CE	32	SER
5	CE	45	ARG
5	CE	46	VAL
5	CE	52	LYS
5	CE	70	ASN
5	CE	81	LEU
5	CE	88	VAL
5	CE	93	ARG
5	CE	94	VAL
5	CE	100	SER
5	CE	101	GLU
5	CE	105	ILE
5	CE	114	VAL
5	CE	115	LEU
5	CE	126	LYS
5	CE	131	THR
5	CE	136	VAL
5	CE	140	THR
5	CE	146	ASN
5	CE	149	SER
5	CE	150	PRO
5	CE	151	GLU
5	CE	153	VAL
5	CE	156	LYS
6	CF	1	MET
6	CF	8	PHE
6	CF	16	GLU
6	CF	23	GLU
6	CF	24	ARG
6	CF	26	THR
6	CF	30	THR
6	CF	33	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	CF	35	LYS
6	CF	36	ILE
6	CF	38	ARG
6	CF	51	ILE
6	CF	53	LYS
6	CF	54	LEU
6	CF	55	HIS
6	CF	63	ASN
6	CF	64	VAL
6	CF	65	GLU
6	CF	69	GLU
6	CF	71	ILE
6	CF	74	LEU
6	CF	75	GLU
6	CF	80	PHE
6	CF	85	ILE
6	CF	87	SER
6	CF	93	LYS
6	CF	97	THR
7	CG	4	ARG
7	CG	5	ARG
7	CG	6	VAL
7	CG	7	ILE
7	CG	12	ILE
7	CG	22	LEU
7	CG	30	LEU
7	CG	43	VAL
7	CG	48	GLU
7	CG	59	LEU
7	CG	62	PHE
7	CG	64	VAL
7	CG	66	LEU
7	CG	67	GLU
7	CG	72	THR
7	CG	73	VAL
7	CG	78	ARG
7	CG	92	ARG
7	CG	94	VAL
7	CG	120	LEU
7	CG	123	GLU
7	CG	126	ASP
7	CG	140	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	CG	142	HIS
8	CH	13	ARG
8	CH	26	THR
8	CH	32	LEU
8	CH	39	VAL
8	CH	42	GLU
8	CH	45	PHE
8	CH	48	ASP
8	CH	52	GLU
8	CH	67	GLN
8	CH	73	GLU
8	CH	74	SER
8	CH	75	ILE
8	CH	77	ARG
8	CH	83	LEU
8	CH	87	LYS
8	CH	92	LEU
8	CH	99	LEU
8	CH	112	THR
8	CH	121	LEU
8	CH	125	ILE
9	CI	9	THR
9	CI	21	ILE
9	CI	28	ILE
9	CI	36	GLU
9	CI	49	ARG
9	CI	50	GLN
9	CI	55	VAL
9	CI	61	LEU
9	CI	62	ASP
9	CI	88	MET
9	CI	89	GLU
9	CI	94	LEU
9	CI	111	VAL
9	CI	127	PHE
9	CI	129	LYS
10	CJ	7	ARG
10	CJ	9	ARG
10	CJ	16	ARG
10	CJ	17	LEU
10	CJ	22	THR
10	CJ	25	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	CJ	30	LYS
10	CJ	51	VAL
10	CJ	53	ILE
10	CJ	59	LYS
10	CJ	71	LEU
10	CJ	74	VAL
10	CJ	80	THR
10	CJ	83	THR
10	CJ	87	LEU
10	CJ	88	MET
10	CJ	90	LEU
10	CJ	91	ASP
10	CJ	100	ILE
10	CJ	101	SER
10	CJ	102	LEU
11	CK	14	LYS
11	CK	15	GLN
11	CK	26	SER
11	CK	33	THR
11	CK	64	GLN
11	CK	77	TYR
11	CK	81	ASN
11	CK	82	LEU
11	CK	83	GLU
11	CK	86	VAL
11	CK	96	THR
11	CK	106	ARG
11	CK	107	ILE
11	CK	108	THR
11	CK	109	ASN
11	CK	126	LYS
11	CK	128	ARG
12	CL	3	THR
12	CL	4	VAL
12	CL	10	LYS
12	CL	18	LYS
12	CL	19	SER
12	CL	20	ASN
12	CL	29	GLN
12	CL	38	TYR
12	CL	44	LYS
12	CL	59	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	CL	63	VAL
12	CL	86	ARG
12	CL	89	ASP
12	CL	93	VAL
12	CL	94	ARG
12	CL	97	THR
12	CL	107	VAL
12	CL	110	ARG
12	CL	111	LYS
12	CL	121	ARG
13	CM	8	ASN
13	CM	13	LYS
13	CM	14	HIS
13	CM	19	LEU
13	CM	29	ARG
13	CM	31	LYS
13	CM	41	GLU
13	CM	48	LEU
13	CM	58	ASP
13	CM	59	GLU
13	CM	60	VAL
13	CM	63	PHE
13	CM	66	GLU
13	CM	90	ARG
13	CM	91	HIS
13	CM	101	ARG
13	CM	113	ARG
14	CN	10	GLU
14	CN	18	ASP
14	CN	23	LYS
14	CN	26	GLU
14	CN	28	LYS
14	CN	75	ARG
14	CN	77	PHE
14	CN	83	LYS
15	CO	6	GLU
15	CO	17	ARG
15	CO	18	ASP
15	CO	26	GLU
15	CO	35	GLN
15	CO	38	HIS
15	CO	64	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
15	CO	70	LEU
15	CO	84	ARG
15	CO	87	LEU
15	CO	88	ARG
16	CP	1	MET
16	CP	18	GLN
16	CP	20	VAL
16	CP	31	ARG
16	CP	46	LYS
16	CP	51	ARG
16	CP	55	ASP
16	CP	63	GLN
16	CP	74	LEU
16	CP	80	LYS
17	CQ	5	ILE
17	CQ	9	GLN
17	CQ	14	SER
17	CQ	17	MET
17	CQ	18	GLU
17	CQ	25	ILE
17	CQ	28	PHE
17	CQ	40	ARG
17	CQ	41	THR
17	CQ	50	ASN
17	CQ	52	GLU
17	CQ	55	ILE
17	CQ	61	ILE
17	CQ	62	ARG
17	CQ	63	GLU
17	CQ	65	ARG
17	CQ	70	THR
17	CQ	75	LEU
17	CQ	76	VAL
17	CQ	79	VAL
17	CQ	80	GLU
17	CQ	81	LYS
18	CR	21	ILE
18	CR	25	ASP
18	CR	33	ILE
18	CR	43	ARG
18	CR	45	THR
18	CR	47	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	CR	54	GLN
18	CR	57	ARG
18	CR	66	SER
19	CS	5	LEU
19	CS	6	LYS
19	CS	11	ILE
19	CS	13	LEU
19	CS	20	GLU
19	CS	21	LYS
19	CS	23	VAL
19	CS	27	ASP
19	CS	31	LEU
19	CS	36	ARG
19	CS	43	ASN
19	CS	49	ILE
19	CS	58	VAL
20	CT	6	SER
20	CT	8	LYS
20	CT	15	GLU
20	CT	30	THR
20	CT	36	TYR
20	CT	59	ASP
20	CT	64	LYS
20	CT	69	LYS
21	CU	5	LYS
21	CU	7	ARG
21	CU	12	PHE
21	CU	16	LEU
21	CU	18	ARG
21	CU	19	PHE
21	CU	21	ARG
21	CU	24	GLU
21	CU	25	LYS
21	CU	28	VAL
21	CU	34	ARG
21	CU	37	PHE
21	CU	38	TYR
21	CU	42	THR
21	CU	47	ARG
21	CU	53	VAL
21	CU	54	LYS
24	DC	6	CYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	DC	30	PHE
24	DC	63	ARG
24	DC	80	ARG
24	DC	94	VAL
24	DC	103	TYR
24	DC	111	LYS
24	DC	116	ILE
24	DC	130	LEU
24	DC	153	GLN
24	DC	156	ARG
24	DC	157	SER
24	DC	167	ARG
24	DC	175	ARG
24	DC	195	VAL
24	DC	202	LEU
24	DC	203	ARG
24	DC	229	ASP
24	DC	250	VAL
24	DC	259	SER
24	DC	262	ARG
24	DC	267	ILE
25	DD	4	LEU
25	DD	12	THR
25	DD	33	ARG
25	DD	55	LYS
25	DD	73	VAL
25	DD	77	ARG
25	DD	86	GLU
25	DD	95	SER
25	DD	103	ASP
25	DD	118	PHE
25	DD	129	THR
25	DD	138	LEU
25	DD	140	HIS
25	DD	141	ARG
25	DD	146	ILE
25	DD	170	VAL
25	DD	189	VAL
26	DE	9	GLN
26	DE	22	ASP
26	DE	40	ARG
26	DE	41	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	DE	58	LYS
26	DE	69	ARG
26	DE	77	ILE
26	DE	78	TRP
26	DE	84	THR
26	DE	91	ASP
26	DE	105	LEU
26	DE	107	SER
26	DE	108	ILE
26	DE	118	LEU
26	DE	126	VAL
26	DE	127	GLU
26	DE	131	THR
26	DE	137	LYS
26	DE	149	ILE
26	DE	150	THR
26	DE	163	ASN
26	DE	164	LEU
26	DE	170	ARG
26	DE	173	THR
26	DE	187	VAL
26	DE	188	MET
27	DF	6	ASP
27	DF	7	TYR
27	DF	8	TYR
27	DF	14	LYS
27	DF	18	THR
27	DF	26	MET
27	DF	35	THR
27	DF	36	LEU
27	DF	38	MET
27	DF	44	ILE
27	DF	48	LYS
27	DF	52	ASN
27	DF	56	ASP
27	DF	64	LYS
27	DF	74	VAL
27	DF	78	LYS
27	DF	110	ARG
27	DF	117	LEU
27	DF	125	ARG
27	DF	132	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
27	DF	140	GLU
27	DF	141	ILE
27	DF	143	TYR
27	DF	147	ASP
27	DF	150	ARG
27	DF	174	ASP
27	DF	177	PHE
28	DG	11	VAL
28	DG	24	ILE
28	DG	29	LYS
28	DG	30	ASN
28	DG	42	GLU
28	DG	45	HIS
28	DG	49	THR
28	DG	56	ASP
28	DG	62	TRP
28	DG	69	ARG
28	DG	89	LEU
28	DG	90	VAL
28	DG	92	VAL
28	DG	98	VAL
28	DG	117	LEU
28	DG	124	GLU
28	DG	127	THR
28	DG	139	GLN
28	DG	149	ARG
28	DG	151	TYR
28	DG	155	GLU
28	DG	158	LYS
28	DG	166	ASP
29	DH	7	ASP
29	DH	12	LEU
29	DH	41	LYS
29	DH	42	LYS
29	DH	48	GLU
29	DH	50	ARG
29	DH	53	GLU
29	DH	54	LEU
29	DH	57	LYS
29	DH	62	LEU
29	DH	77	THR
29	DH	78	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	DH	87	GLU
29	DH	89	LYS
29	DH	94	ILE
29	DH	109	GLU
29	DH	114	GLU
29	DH	116	ARG
29	DH	117	LEU
29	DH	119	ASN
29	DH	121	VAL
29	DH	124	THR
29	DH	125	THR
29	DH	129	GLU
29	DH	142	VAL
29	DH	149	GLU
30	DI	3	LYS
30	DI	4	LYS
30	DI	8	TYR
30	DI	10	LYS
30	DI	11	LEU
30	DI	12	GLN
30	DI	24	VAL
30	DI	38	PHE
30	DI	40	LYS
30	DI	62	TYR
30	DI	68	THR
30	DI	69	PHE
30	DI	72	LYS
30	DI	79	LEU
30	DI	86	ILE
30	DI	87	LYS
30	DI	88	SER
30	DI	97	LYS
30	DI	98	VAL
30	DI	103	ARG
30	DI	105	GLN
30	DI	106	LEU
30	DI	112	THR
30	DI	117	MET
30	DI	122	ILE
30	DI	127	ARG
31	DJ	9	GLU
31	DJ	28	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	DJ	39	LYS
31	DJ	40	HIS
31	DJ	43	GLU
31	DJ	44	TYR
31	DJ	50	THR
31	DJ	62	VAL
31	DJ	65	THR
31	DJ	72	LYS
31	DJ	76	HIS
31	DJ	81	ILE
31	DJ	84	ILE
31	DJ	85	LYS
31	DJ	96	ARG
31	DJ	103	ILE
31	DJ	109	LEU
31	DJ	129	GLU
31	DJ	138	GLN
32	DK	47	ILE
32	DK	49	ARG
32	DK	56	ASP
32	DK	66	LYS
32	DK	70	ARG
32	DK	87	LEU
32	DK	92	GLU
32	DK	95	ILE
32	DK	104	THR
32	DK	110	GLU
32	DK	114	LYS
33	DL	2	ARG
33	DL	21	ARG
33	DL	25	SER
33	DL	29	LYS
33	DL	48	ARG
33	DL	69	ARG
33	DL	78	ARG
33	DL	82	LEU
33	DL	94	THR
33	DL	100	ILE
33	DL	104	GLN
33	DL	118	THR
33	DL	126	ARG
34	DM	6	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	DM	14	LYS
34	DM	31	PHE
34	DM	47	GLU
34	DM	54	THR
34	DM	59	ARG
34	DM	60	GLN
34	DM	108	VAL
34	DM	115	GLU
34	DM	119	LEU
34	DM	124	LEU
34	DM	128	THR
35	DN	1	MET
35	DN	2	ARG
35	DN	8	ARG
35	DN	10	LEU
35	DN	12	ARG
35	DN	14	SER
35	DN	20	MET
35	DN	33	ILE
35	DN	35	LYS
35	DN	51	LEU
35	DN	53	THR
35	DN	69	ARG
35	DN	70	THR
35	DN	71	ARG
35	DN	82	GLU
35	DN	83	LEU
35	DN	90	ARG
35	DN	95	THR
35	DN	100	CYS
35	DN	114	GLU
35	DN	115	LEU
35	DN	116	VAL
35	DN	118	ARG
36	DO	5	SER
36	DO	9	ARG
36	DO	18	LEU
36	DO	26	LEU
36	DO	31	THR
36	DO	35	ILE
36	DO	36	TYR
36	DO	46	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DO	47	VAL
36	DO	48	LEU
36	DO	56	LYS
36	DO	61	GLN
36	DO	78	VAL
36	DO	88	LYS
36	DO	93	ASP
36	DO	103	VAL
36	DO	117	PHE
37	DP	4	ILE
37	DP	26	VAL
37	DP	34	GLU
37	DP	68	GLU
37	DP	73	VAL
37	DP	93	ARG
37	DP	109	ARG
37	DP	110	ILE
37	DP	112	GLU
38	DQ	6	ARG
38	DQ	9	ILE
38	DQ	11	ARG
38	DQ	25	TYR
38	DQ	41	LYS
38	DQ	51	ARG
38	DQ	52	GLN
38	DQ	60	LEU
38	DQ	97	ASP
38	DQ	104	VAL
38	DQ	117	LEU
39	DR	25	LEU
39	DR	46	GLU
39	DR	48	LYS
39	DR	58	VAL
39	DR	90	ARG
40	DS	19	LEU
40	DS	20	VAL
40	DS	22	ASP
40	DS	23	LEU
40	DS	47	VAL
40	DS	57	ASN
40	DS	67	ASP
40	DS	70	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	DS	72	THR
40	DS	96	ILE
40	DS	107	VAL
41	DT	3	ARG
41	DT	22	THR
41	DT	30	ILE
41	DT	32	LEU
41	DT	44	LYS
41	DT	49	LYS
41	DT	68	LYS
41	DT	69	ARG
41	DT	73	ARG
41	DT	74	ILE
41	DT	77	ARG
42	DU	11	VAL
42	DU	18	ASP
42	DU	24	LYS
42	DU	34	VAL
42	DU	35	ILE
42	DU	45	HIS
42	DU	46	GLN
42	DU	49	VAL
42	DU	54	GLN
42	DU	67	VAL
42	DU	70	VAL
42	DU	81	ASP
42	DU	85	PHE
42	DU	91	LYS
42	DU	99	ASN
43	DV	2	PHE
43	DV	3	THR
43	DV	26	PHE
43	DV	29	ILE
43	DV	30	ILE
43	DV	42	LEU
43	DV	43	ASP
43	DV	45	ASP
43	DV	50	MET
43	DV	51	GLN
43	DV	53	LYS
43	DV	65	VAL
43	DV	68	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
44	DW	20	ARG
44	DW	39	ARG
44	DW	41	ARG
44	DW	50	ASN
44	DW	56	ASP
44	DW	70	GLU
44	DW	72	LYS
44	DW	85	GLU
45	DX	4	VAL
45	DX	13	VAL
45	DX	23	ASN
45	DX	46	PHE
45	DX	47	VAL
45	DX	50	ARG
45	DX	58	VAL
45	DX	64	ILE
45	DX	71	LEU
45	DX	74	ARG
46	DY	11	VAL
46	DY	13	GLU
46	DY	16	THR
46	DY	25	GLN
46	DY	38	GLN
46	DY	39	GLN
46	DY	41	HIS
46	DY	45	GLN
46	DY	47	ARG
46	DY	49	ASP
46	DY	55	THR
46	DY	57	LEU
46	DY	58	ASN
47	DZ	3	LYS
47	DZ	6	LYS
47	DZ	10	THR
47	DZ	12	SER
47	DZ	17	LEU
47	DZ	25	LEU
47	DZ	31	ARG
47	DZ	36	VAL
47	DZ	52	SER
47	DZ	57	VAL
48	D0	3	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
48	D0	20	ASP
48	D0	22	LEU
48	D0	25	VAL
48	D0	28	LEU
49	D1	5	ILE
49	D1	12	VAL
49	D1	19	HIS
49	D1	26	ASN
49	D1	42	VAL
49	D1	46	HIS
49	D1	47	VAL
50	D2	4	THR
50	D2	10	LEU
50	D2	24	THR
50	D2	41	ARG
50	D2	43	THR
50	D2	44	VAL
51	D3	6	THR
51	D3	30	ARG
51	D3	31	HIS
51	D3	47	LYS
51	D3	49	MET
52	D4	2	LYS
52	D4	3	VAL
52	D4	12	ARG
52	D4	13	ASN
52	D4	26	ILE
52	D4	32	LYS

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (51) such sidechains are listed below:

Mol	Chain	Res	Type
5	AE	82	GLN
6	AF	3	HIS
8	AH	18	GLN
9	AI	126	GLN
11	AK	22	HIS
11	AK	40	ASN
11	AK	109	ASN
13	AM	91	HIS
15	AO	50	HIS
17	AQ	45	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
19	AS	14	HIS
27	BF	21	ASN
28	BG	111	HIS
29	BH	119	ASN
29	BH	135	HIS
31	BJ	47	HIS
31	BJ	77	HIS
36	BO	29	HIS
40	BS	9	HIS
53	B5	45	HIS
53	B5	67	HIS
2	CB	103	ASN
3	CC	176	HIS
4	CD	136	GLN
5	CE	122	ASN
7	CG	97	ASN
8	CH	67	GLN
9	CI	25	ASN
14	CN	66	GLN
15	CO	42	HIS
17	CQ	31	HIS
20	CT	21	ASN
20	CT	61	GLN
24	DC	53	HIS
24	DC	251	GLN
25	DD	140	HIS
25	DD	150	GLN
28	DG	48	ASN
28	DG	115	HIS
29	DH	28	ASN
29	DH	128	HIS
38	DQ	37	GLN
39	DR	89	HIS
41	DT	15	HIS
42	DU	74	ASN
45	DX	34	HIS
46	DY	41	HIS
48	D0	19	HIS
49	D1	19	HIS
49	D1	26	ASN
51	D3	31	HIS

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	1537/1539 (99%)	327 (21%)	10 (0%)
1	CA	1538/1539 (99%)	330 (21%)	8 (0%)
22	BA	2896/2903 (99%)	569 (19%)	27 (0%)
22	DA	2895/2903 (99%)	685 (23%)	30 (1%)
23	BB	118/119 (99%)	17 (14%)	0
23	DB	117/119 (98%)	20 (17%)	0
All	All	9101/9122 (99%)	1948 (21%)	75 (0%)

All (1948) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	4	U
1	AA	5	U
1	AA	8	A
1	AA	9	G
1	AA	13	U
1	AA	32	A
1	AA	39	G
1	AA	47	C
1	AA	48	C
1	AA	50	A
1	AA	51	A
1	AA	70	U
1	AA	71	A
1	AA	72	A
1	AA	73	C
1	AA	74	A
1	AA	75	G
1	AA	76	G
1	AA	80	A
1	AA	81	A
1	AA	82	G
1	AA	83	C
1	AA	85	U
1	AA	86	G
1	AA	89	U
1	AA	90	C
1	AA	91	U
1	AA	95	C
1	AA	97	G
1	AA	108	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	116	A
1	AA	120	A
1	AA	121	U
1	AA	122	G
1	AA	127	G
1	AA	130	A
1	AA	131	A
1	AA	137	U
1	AA	138	G
1	AA	140	U
1	AA	143	A
1	AA	144	G
1	AA	163	C
1	AA	168	G
1	AA	177	G
1	AA	181	A
1	AA	182	A
1	AA	183	C
1	AA	188	C
1	AA	191	G
1	AA	195	A
1	AA	197	A
1	AA	205	A
1	AA	206	C
1	AA	210	C
1	AA	211	G
1	AA	217	C
1	AA	226	G
1	AA	240	G
1	AA	245	U
1	AA	247	G
1	AA	251	G
1	AA	262	A
1	AA	263	A
1	AA	266	G
1	AA	267	C
1	AA	281	G
1	AA	289	G
1	AA	316	C
1	AA	317	U
1	AA	318	G
1	AA	320	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	321	A
1	AA	327	A
1	AA	328	C
1	AA	329	A
1	AA	330	C
1	AA	331	G
1	AA	332	G
1	AA	346	G
1	AA	347	G
1	AA	352	C
1	AA	354	G
1	AA	364	A
1	AA	367	U
1	AA	372	C
1	AA	373	A
1	AA	376	G
1	AA	384	G
1	AA	392	C
1	AA	398	U
1	AA	406	G
1	AA	411	A
1	AA	412	A
1	AA	413	G
1	AA	414	A
1	AA	421	U
1	AA	422	C
1	AA	423	G
1	AA	429	U
1	AA	430	A
1	AA	435	A
1	AA	436	C
1	AA	445	G
1	AA	454	G
1	AA	457	G
1	AA	458	U
1	AA	462	G
1	AA	466	A
1	AA	467	U
1	AA	468	A
1	AA	476	U
1	AA	479	U
1	AA	481	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	482	A
1	AA	485	U
1	AA	486	U
1	AA	495	A
1	AA	499	A
1	AA	501	C
1	AA	505	G
1	AA	511	C
1	AA	512	U
1	AA	521	G
1	AA	524	G
1	AA	527	G
1	AA	530	G
1	AA	532	A
1	AA	533	A
1	AA	541	G
1	AA	544	G
1	AA	547	A
1	AA	559	A
1	AA	562	U
1	AA	564	C
1	AA	570	G
1	AA	573	A
1	AA	576	C
1	AA	615	G
1	AA	631	C
1	AA	632	U
1	AA	650	G
1	AA	651	C
1	AA	652	U
1	AA	653	U
1	AA	661	G
1	AA	665	A
1	AA	671	G
1	AA	686	U
1	AA	687	A
1	AA	702	A
1	AA	703	G
1	AA	721	G
1	AA	723	U
1	AA	724	G
1	AA	731	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	748	G
1	AA	750	C
1	AA	753	A
1	AA	755	G
1	AA	765	G
1	AA	773	G
1	AA	777	A
1	AA	784	A
1	AA	792	A
1	AA	793	U
1	AA	794	A
1	AA	799	G
1	AA	814	A
1	AA	815	A
1	AA	817	C
1	AA	818	G
1	AA	828	U
1	AA	832	G
1	AA	841	C
1	AA	842	U
1	AA	843	U
1	AA	845	A
1	AA	846	G
1	AA	851	G
1	AA	859	G
1	AA	888	G
1	AA	892	A
1	AA	902	G
1	AA	910	C
1	AA	914	A
1	AA	926	G
1	AA	927	G
1	AA	934	C
1	AA	935	A
1	AA	958	A
1	AA	960	U
1	AA	966	G
1	AA	969	A
1	AA	971	G
1	AA	973	G
1	AA	975	A
1	AA	976	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	977	A
1	AA	983	A
1	AA	987	G
1	AA	989	U
1	AA	992	U
1	AA	993	G
1	AA	1004	A
1	AA	1009	U
1	AA	1019	A
1	AA	1021	A
1	AA	1025	U
1	AA	1026	G
1	AA	1028	C
1	AA	1029	U
1	AA	1030	U
1	AA	1031	C
1	AA	1032	G
1	AA	1033	G
1	AA	1034	G
1	AA	1036	A
1	AA	1037	C
1	AA	1043	G
1	AA	1044	A
1	AA	1050	G
1	AA	1065	U
1	AA	1066	C
1	AA	1069	C
1	AA	1070	U
1	AA	1084	G
1	AA	1086	U
1	AA	1090	U
1	AA	1092	A
1	AA	1093	A
1	AA	1094	G
1	AA	1095	U
1	AA	1098	C
1	AA	1101	A
1	AA	1103	C
1	AA	1124	G
1	AA	1125	U
1	AA	1133	G
1	AA	1135	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1136	C
1	AA	1137	C
1	AA	1138	G
1	AA	1139	G
1	AA	1140	C
1	AA	1141	C
1	AA	1142	G
1	AA	1143	G
1	AA	1145	A
1	AA	1146	A
1	AA	1152	A
1	AA	1154	G
1	AA	1159	U
1	AA	1160	G
1	AA	1161	C
1	AA	1167	A
1	AA	1168	U
1	AA	1181	G
1	AA	1183	U
1	AA	1184	G
1	AA	1196	A
1	AA	1197	A
1	AA	1202	U
1	AA	1212	U
1	AA	1213	A
1	AA	1227	A
1	AA	1228	C
1	AA	1233	G
1	AA	1236	A
1	AA	1238	A
1	AA	1239	A
1	AA	1240	U
1	AA	1241	G
1	AA	1250	A
1	AA	1256	A
1	AA	1258	G
1	AA	1280	A
1	AA	1286	U
1	AA	1287	A
1	AA	1293	C
1	AA	1299	A
1	AA	1300	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1302	C
1	AA	1304	G
1	AA	1305	G
1	AA	1312	G
1	AA	1317	C
1	AA	1319	A
1	AA	1320	C
1	AA	1321	U
1	AA	1323	G
1	AA	1325	C
1	AA	1328	C
1	AA	1329	A
1	AA	1335	U
1	AA	1336	C
1	AA	1337	G
1	AA	1338	G
1	AA	1353	G
1	AA	1363	A
1	AA	1364	U
1	AA	1378	C
1	AA	1379	G
1	AA	1396	A
1	AA	1398	A
1	AA	1400	C
1	AA	1419	G
1	AA	1429	A
1	AA	1441	A
1	AA	1442	G
1	AA	1443	C
1	AA	1446	A
1	AA	1452	C
1	AA	1453	G
1	AA	1455	G
1	AA	1486	G
1	AA	1493	A
1	AA	1497	G
1	AA	1503	A
1	AA	1505	G
1	AA	1506	U
1	AA	1507	A
1	AA	1517	G
1	AA	1529	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1530	G
1	AA	1535	C
1	AA	1538	C
22	BA	10	A
22	BA	12	U
22	BA	13	A
22	BA	15	G
22	BA	27	G
22	BA	34	U
22	BA	35	G
22	BA	46	G
22	BA	61	C
22	BA	63	A
22	BA	71	A
22	BA	74	A
22	BA	75	G
22	BA	98	G
22	BA	118	A
22	BA	119	A
22	BA	120	U
22	BA	131	A
22	BA	138	U
22	BA	139	U
22	BA	140	C
22	BA	141	G
22	BA	142	A
22	BA	143	C
22	BA	196	A
22	BA	215	G
22	BA	216	A
22	BA	221	A
22	BA	222	A
22	BA	226	A
22	BA	248	G
22	BA	255	A
22	BA	257	C
22	BA	265	A
22	BA	266	G
22	BA	271	G
22	BA	272	A
22	BA	276	U
22	BA	279	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	302	C
22	BA	311	A
22	BA	325	G
22	BA	329	G
22	BA	330	A
22	BA	343	C
22	BA	353	C
22	BA	361	G
22	BA	362	A
22	BA	371	A
22	BA	372	G
22	BA	386	G
22	BA	389	G
22	BA	404	A
22	BA	405	U
22	BA	411	G
22	BA	420	C
22	BA	424	G
22	BA	441	U
22	BA	450	G
22	BA	451	U
22	BA	457	A
22	BA	479	A
22	BA	481	G
22	BA	482	A
22	BA	483	A
22	BA	491	G
22	BA	501	A
22	BA	504	A
22	BA	505	A
22	BA	508	A
22	BA	528	A
22	BA	532	A
22	BA	533	G
22	BA	544	C
22	BA	546	U
22	BA	547	A
22	BA	548	G
22	BA	549	G
22	BA	563	A
22	BA	573	U
22	BA	575	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	585	G
22	BA	586	A
22	BA	603	A
22	BA	613	A
22	BA	615	U
22	BA	622	G
22	BA	627	A
22	BA	631	A
22	BA	637	A
22	BA	644	A
22	BA	645	C
22	BA	646	U
22	BA	647	G
22	BA	648	G
22	BA	653	U
22	BA	654	A
22	BA	655	A
22	BA	664	G
22	BA	669	G
22	BA	686	U
22	BA	702	U
22	BA	726	G
22	BA	729	G
22	BA	730	A
22	BA	738	G
22	BA	747	U
22	BA	749	A
22	BA	764	A
22	BA	775	G
22	BA	776	G
22	BA	782	A
22	BA	783	A
22	BA	784	G
22	BA	785	G
22	BA	790	U
22	BA	791	C
22	BA	792	A
22	BA	805	G
22	BA	812	C
22	BA	814	C
22	BA	819	A
22	BA	822	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	827	U
22	BA	828	U
22	BA	845	A
22	BA	846	U
22	BA	847	U
22	BA	858	G
22	BA	859	G
22	BA	866	A
22	BA	878	A
22	BA	879	G
22	BA	882	G
22	BA	885	C
22	BA	893	C
22	BA	896	A
22	BA	897	C
22	BA	910	A
22	BA	914	G
22	BA	915	C
22	BA	931	U
22	BA	932	U
22	BA	934	U
22	BA	941	A
22	BA	942	G
22	BA	946	C
22	BA	961	C
22	BA	962	G
22	BA	974	G
22	BA	978	G
22	BA	982	C
22	BA	983	A
22	BA	984	A
22	BA	985	C
22	BA	991	C
22	BA	995	C
22	BA	996	A
22	BA	999	U
22	BA	1005	C
22	BA	1006	C
22	BA	1012	U
22	BA	1013	C
22	BA	1022	G
22	BA	1026	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1033	U
22	BA	1040	A
22	BA	1046	A
22	BA	1047	G
22	BA	1057	A
22	BA	1058	U
22	BA	1061	U
22	BA	1062	G
22	BA	1063	G
22	BA	1065	U
22	BA	1066	U
22	BA	1067	A
22	BA	1068	G
22	BA	1069	A
22	BA	1070	A
22	BA	1072	C
22	BA	1073	A
22	BA	1074	G
22	BA	1075	C
22	BA	1077	A
22	BA	1079	C
22	BA	1080	A
22	BA	1081	U
22	BA	1082	U
22	BA	1087	G
22	BA	1088	A
22	BA	1089	A
22	BA	1092	C
22	BA	1093	G
22	BA	1097	U
22	BA	1098	A
22	BA	1099	G
22	BA	1100	C
22	BA	1101	U
22	BA	1103	A
22	BA	1104	C
22	BA	1106	G
22	BA	1112	G
22	BA	1128	G
22	BA	1132	U
22	BA	1133	A
22	BA	1135	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1136	G
22	BA	1138	G
22	BA	1139	G
22	BA	1141	U
22	BA	1142	A
22	BA	1168	G
22	BA	1170	C
22	BA	1171	G
22	BA	1172	C
22	BA	1174	U
22	BA	1175	A
22	BA	1176	U
22	BA	1178	C
22	BA	1179	G
22	BA	1180	U
22	BA	1186	G
22	BA	1218	G
22	BA	1230	A
22	BA	1231	U
22	BA	1238	G
22	BA	1252	G
22	BA	1253	A
22	BA	1256	G
22	BA	1266	G
22	BA	1271	G
22	BA	1272	A
22	BA	1273	U
22	BA	1275	A
22	BA	1300	G
22	BA	1301	A
22	BA	1303	G
22	BA	1305	C
22	BA	1320	C
22	BA	1325	U
22	BA	1332	G
22	BA	1348	C
22	BA	1352	U
22	BA	1355	G
22	BA	1357	C
22	BA	1359	A
22	BA	1365	A
22	BA	1374	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1377	G
22	BA	1378	A
22	BA	1379	U
22	BA	1383	A
22	BA	1386	C
22	BA	1406	U
22	BA	1407	G
22	BA	1411	U
22	BA	1415	U
22	BA	1416	G
22	BA	1419	A
22	BA	1420	A
22	BA	1427	A
22	BA	1428	C
22	BA	1435	G
22	BA	1437	C
22	BA	1452	G
22	BA	1453	A
22	BA	1458	U
22	BA	1475	G
22	BA	1482	G
22	BA	1483	G
22	BA	1493	C
22	BA	1494	A
22	BA	1495	A
22	BA	1504	A
22	BA	1508	A
22	BA	1510	G
22	BA	1515	A
22	BA	1530	G
22	BA	1532	A
22	BA	1533	C
22	BA	1534	U
22	BA	1535	A
22	BA	1536	C
22	BA	1547	C
22	BA	1548	A
22	BA	1554	U
22	BA	1555	G
22	BA	1560	G
22	BA	1569	A
22	BA	1578	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1579	A
22	BA	1583	A
22	BA	1584	U
22	BA	1585	C
22	BA	1593	A
22	BA	1597	A
22	BA	1606	C
22	BA	1607	C
22	BA	1608	A
22	BA	1609	A
22	BA	1610	A
22	BA	1616	A
22	BA	1632	A
22	BA	1647	U
22	BA	1648	U
22	BA	1649	G
22	BA	1652	A
22	BA	1659	G
22	BA	1674	G
22	BA	1685	C
22	BA	1688	U
22	BA	1697	G
22	BA	1714	U
22	BA	1715	G
22	BA	1718	G
22	BA	1729	U
22	BA	1730	C
22	BA	1736	U
22	BA	1738	G
22	BA	1739	A
22	BA	1744	A
22	BA	1764	C
22	BA	1773	A
22	BA	1776	G
22	BA	1786	A
22	BA	1795	C
22	BA	1800	C
22	BA	1801	A
22	BA	1808	A
22	BA	1813	G
22	BA	1816	C
22	BA	1819	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1828	G
22	BA	1829	A
22	BA	1830	C
22	BA	1835	G
22	BA	1839	G
22	BA	1840	G
22	BA	1841	U
22	BA	1842	G
22	BA	1849	G
22	BA	1853	A
22	BA	1870	C
22	BA	1871	A
22	BA	1872	A
22	BA	1873	G
22	BA	1876	A
22	BA	1885	A
22	BA	1886	U
22	BA	1888	G
22	BA	1890	A
22	BA	1900	A
22	BA	1902	C
22	BA	1906	G
22	BA	1909	C
22	BA	1912	A
22	BA	1913	A
22	BA	1914	C
22	BA	1915	U
22	BA	1916	A
22	BA	1917	U
22	BA	1920	C
22	BA	1923	U
22	BA	1924	C
22	BA	1925	C
22	BA	1926	U
22	BA	1929	G
22	BA	1930	G
22	BA	1931	U
22	BA	1932	A
22	BA	1938	A
22	BA	1955	U
22	BA	1964	G
22	BA	1965	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1967	C
22	BA	1970	A
22	BA	1972	G
22	BA	1986	C
22	BA	1991	U
22	BA	1992	G
22	BA	1993	U
22	BA	1995	U
22	BA	1997	C
22	BA	2018	G
22	BA	2022	U
22	BA	2023	C
22	BA	2031	A
22	BA	2033	A
22	BA	2043	C
22	BA	2051	A
22	BA	2055	C
22	BA	2056	G
22	BA	2060	A
22	BA	2061	G
22	BA	2062	A
22	BA	2064	C
22	BA	2067	G
22	BA	2069	G
22	BA	2072	C
22	BA	2092	U
22	BA	2093	G
22	BA	2097	A
22	BA	2098	U
22	BA	2099	U
22	BA	2100	G
22	BA	2102	G
22	BA	2103	C
22	BA	2106	U
22	BA	2110	G
22	BA	2111	U
22	BA	2112	G
22	BA	2113	U
22	BA	2115	G
22	BA	2116	G
22	BA	2117	A
22	BA	2118	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	2119	A
22	BA	2122	U
22	BA	2126	A
22	BA	2127	G
22	BA	2128	G
22	BA	2129	C
22	BA	2132	U
22	BA	2133	G
22	BA	2134	A
22	BA	2136	G
22	BA	2138	G
22	BA	2139	U
22	BA	2145	C
22	BA	2147	A
22	BA	2148	G
22	BA	2162	G
22	BA	2163	A
22	BA	2164	C
22	BA	2165	C
22	BA	2166	U
22	BA	2167	U
22	BA	2169	A
22	BA	2170	A
22	BA	2171	A
22	BA	2172	U
22	BA	2173	A
22	BA	2176	A
22	BA	2178	C
22	BA	2179	C
22	BA	2181	U
22	BA	2182	U
22	BA	2187	U
22	BA	2188	U
22	BA	2190	G
22	BA	2197	U
22	BA	2198	A
22	BA	2203	U
22	BA	2204	G
22	BA	2210	U
22	BA	2211	A
22	BA	2212	A
22	BA	2214	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	2220	U
22	BA	2225	A
22	BA	2238	G
22	BA	2239	G
22	BA	2248	C
22	BA	2250	G
22	BA	2258	C
22	BA	2268	A
22	BA	2278	A
22	BA	2283	C
22	BA	2286	G
22	BA	2287	A
22	BA	2296	U
22	BA	2305	U
22	BA	2308	G
22	BA	2309	A
22	BA	2311	A
22	BA	2322	A
22	BA	2325	G
22	BA	2327	A
22	BA	2331	G
22	BA	2335	A
22	BA	2346	A
22	BA	2347	C
22	BA	2350	C
22	BA	2357	G
22	BA	2361	G
22	BA	2383	G
22	BA	2385	C
22	BA	2389	G
22	BA	2394	C
22	BA	2402	U
22	BA	2403	C
22	BA	2406	A
22	BA	2420	C
22	BA	2424	C
22	BA	2425	A
22	BA	2428	G
22	BA	2429	G
22	BA	2430	A
22	BA	2431	U
22	BA	2435	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	2441	U
22	BA	2446	G
22	BA	2448	A
22	BA	2456	C
22	BA	2465	C
22	BA	2469	A
22	BA	2474	U
22	BA	2476	A
22	BA	2487	G
22	BA	2490	G
22	BA	2491	U
22	BA	2497	A
22	BA	2498	C
22	BA	2502	G
22	BA	2504	U
22	BA	2505	G
22	BA	2506	U
22	BA	2507	C
22	BA	2515	C
22	BA	2518	A
22	BA	2529	G
22	BA	2535	G
22	BA	2554	U
22	BA	2555	U
22	BA	2556	C
22	BA	2566	A
22	BA	2567	G
22	BA	2573	C
22	BA	2578	G
22	BA	2594	C
22	BA	2602	A
22	BA	2603	G
22	BA	2609	U
22	BA	2613	U
22	BA	2629	U
22	BA	2630	G
22	BA	2662	A
22	BA	2663	G
22	BA	2689	U
22	BA	2690	U
22	BA	2714	G
22	BA	2726	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	2729	G
22	BA	2733	A
22	BA	2748	A
22	BA	2757	A
22	BA	2765	A
22	BA	2778	A
22	BA	2791	G
22	BA	2792	A
22	BA	2798	U
22	BA	2799	A
22	BA	2800	A
22	BA	2811	G
22	BA	2820	A
22	BA	2821	A
22	BA	2825	G
22	BA	2826	A
22	BA	2836	U
22	BA	2867	G
22	BA	2873	A
22	BA	2879	A
22	BA	2880	C
22	BA	2883	A
22	BA	2884	U
22	BA	2887	A
22	BA	2891	U
22	BA	2903	U
23	BB	2	G
23	BB	9	G
23	BB	15	A
23	BB	16	G
23	BB	25	U
23	BB	35	C
23	BB	37	C
23	BB	42	C
23	BB	44	G
23	BB	45	A
23	BB	56	G
23	BB	66	A
23	BB	89	U
23	BB	90	C
23	BB	91	C
23	BB	109	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BB	119	A
1	CA	5	U
1	CA	6	G
1	CA	9	G
1	CA	17	U
1	CA	21	G
1	CA	32	A
1	CA	39	G
1	CA	47	C
1	CA	48	C
1	CA	51	A
1	CA	52	C
1	CA	67	C
1	CA	70	U
1	CA	71	A
1	CA	74	A
1	CA	75	G
1	CA	79	G
1	CA	80	A
1	CA	84	U
1	CA	85	U
1	CA	86	G
1	CA	87	C
1	CA	88	U
1	CA	91	U
1	CA	93	U
1	CA	94	G
1	CA	116	A
1	CA	117	G
1	CA	120	A
1	CA	121	U
1	CA	122	G
1	CA	130	A
1	CA	131	A
1	CA	135	C
1	CA	137	U
1	CA	142	G
1	CA	143	A
1	CA	144	G
1	CA	154	U
1	CA	155	A
1	CA	156	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	159	G
1	CA	169	C
1	CA	173	U
1	CA	174	A
1	CA	181	A
1	CA	182	A
1	CA	183	C
1	CA	184	G
1	CA	191	G
1	CA	197	A
1	CA	200	G
1	CA	201	G
1	CA	204	G
1	CA	207	C
1	CA	208	U
1	CA	209	U
1	CA	210	C
1	CA	211	G
1	CA	212	G
1	CA	214	C
1	CA	240	G
1	CA	244	U
1	CA	245	U
1	CA	247	G
1	CA	250	A
1	CA	251	G
1	CA	253	A
1	CA	254	G
1	CA	266	G
1	CA	267	C
1	CA	269	C
1	CA	280	C
1	CA	289	G
1	CA	294	U
1	CA	316	C
1	CA	321	A
1	CA	328	C
1	CA	329	A
1	CA	330	C
1	CA	332	G
1	CA	345	C
1	CA	347	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	352	C
1	CA	354	G
1	CA	367	U
1	CA	372	C
1	CA	376	G
1	CA	378	G
1	CA	384	G
1	CA	389	A
1	CA	390	U
1	CA	398	U
1	CA	399	G
1	CA	404	G
1	CA	406	G
1	CA	411	A
1	CA	412	A
1	CA	413	G
1	CA	421	U
1	CA	422	C
1	CA	424	G
1	CA	427	U
1	CA	429	U
1	CA	430	A
1	CA	439	U
1	CA	446	G
1	CA	457	G
1	CA	459	A
1	CA	463	U
1	CA	467	U
1	CA	468	A
1	CA	473	U
1	CA	474	G
1	CA	478	A
1	CA	479	U
1	CA	481	G
1	CA	484	G
1	CA	485	U
1	CA	486	U
1	CA	498	A
1	CA	500	G
1	CA	505	G
1	CA	509	A
1	CA	511	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	518	C
1	CA	519	C
1	CA	527	G
1	CA	531	U
1	CA	532	A
1	CA	533	A
1	CA	545	C
1	CA	547	A
1	CA	550	G
1	CA	559	A
1	CA	564	C
1	CA	568	G
1	CA	570	G
1	CA	572	A
1	CA	573	A
1	CA	576	C
1	CA	581	G
1	CA	582	C
1	CA	615	G
1	CA	619	U
1	CA	622	A
1	CA	636	U
1	CA	650	G
1	CA	653	U
1	CA	654	G
1	CA	665	A
1	CA	687	A
1	CA	695	A
1	CA	702	A
1	CA	721	G
1	CA	723	U
1	CA	724	G
1	CA	731	G
1	CA	747	A
1	CA	755	G
1	CA	758	C
1	CA	765	G
1	CA	777	A
1	CA	785	G
1	CA	787	A
1	CA	793	U
1	CA	794	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	799	G
1	CA	802	A
1	CA	812	G
1	CA	815	A
1	CA	817	C
1	CA	828	U
1	CA	832	G
1	CA	841	C
1	CA	842	U
1	CA	843	U
1	CA	844	G
1	CA	845	A
1	CA	846	G
1	CA	849	G
1	CA	874	G
1	CA	876	C
1	CA	880	C
1	CA	889	A
1	CA	906	A
1	CA	914	A
1	CA	919	A
1	CA	922	G
1	CA	926	G
1	CA	934	C
1	CA	935	A
1	CA	960	U
1	CA	964	A
1	CA	969	A
1	CA	971	G
1	CA	975	A
1	CA	976	G
1	CA	977	A
1	CA	983	A
1	CA	991	U
1	CA	992	U
1	CA	993	G
1	CA	994	A
1	CA	995	C
1	CA	996	A
1	CA	1004	A
1	CA	1008	U
1	CA	1018	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1020	G
1	CA	1025	U
1	CA	1026	G
1	CA	1027	C
1	CA	1028	C
1	CA	1030	U
1	CA	1031	C
1	CA	1032	G
1	CA	1033	G
1	CA	1034	G
1	CA	1037	C
1	CA	1039	G
1	CA	1042	A
1	CA	1043	G
1	CA	1044	A
1	CA	1047	G
1	CA	1050	G
1	CA	1052	U
1	CA	1054	C
1	CA	1055	A
1	CA	1065	U
1	CA	1069	C
1	CA	1070	U
1	CA	1072	G
1	CA	1073	U
1	CA	1086	U
1	CA	1094	G
1	CA	1095	U
1	CA	1101	A
1	CA	1104	G
1	CA	1124	G
1	CA	1125	U
1	CA	1129	C
1	CA	1133	G
1	CA	1134	G
1	CA	1136	C
1	CA	1137	C
1	CA	1139	G
1	CA	1140	C
1	CA	1141	C
1	CA	1142	G
1	CA	1145	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1154	G
1	CA	1157	A
1	CA	1159	U
1	CA	1160	G
1	CA	1161	C
1	CA	1168	U
1	CA	1181	G
1	CA	1182	G
1	CA	1184	G
1	CA	1196	A
1	CA	1198	G
1	CA	1202	U
1	CA	1212	U
1	CA	1213	A
1	CA	1222	G
1	CA	1227	A
1	CA	1228	C
1	CA	1230	C
1	CA	1236	A
1	CA	1238	A
1	CA	1239	A
1	CA	1240	U
1	CA	1253	G
1	CA	1257	A
1	CA	1259	C
1	CA	1260	G
1	CA	1275	A
1	CA	1280	A
1	CA	1285	A
1	CA	1286	U
1	CA	1287	A
1	CA	1297	G
1	CA	1299	A
1	CA	1301	U
1	CA	1305	G
1	CA	1312	G
1	CA	1317	C
1	CA	1318	A
1	CA	1320	C
1	CA	1322	C
1	CA	1323	G
1	CA	1324	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1332	A
1	CA	1336	C
1	CA	1337	G
1	CA	1338	G
1	CA	1346	A
1	CA	1353	G
1	CA	1362	A
1	CA	1363	A
1	CA	1368	A
1	CA	1379	G
1	CA	1381	U
1	CA	1382	C
1	CA	1418	A
1	CA	1441	A
1	CA	1442	G
1	CA	1446	A
1	CA	1451	U
1	CA	1452	C
1	CA	1454	G
1	CA	1475	G
1	CA	1477	U
1	CA	1491	G
1	CA	1492	A
1	CA	1497	G
1	CA	1503	A
1	CA	1505	G
1	CA	1506	U
1	CA	1507	A
1	CA	1509	C
1	CA	1517	G
1	CA	1519	A
1	CA	1529	G
1	CA	1530	G
1	CA	1533	C
1	CA	1534	A
1	CA	1535	C
1	CA	1536	C
22	DA	10	A
22	DA	15	G
22	DA	32	C
22	DA	34	U
22	DA	39	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	42	A
22	DA	43	G
22	DA	46	G
22	DA	47	C
22	DA	55	G
22	DA	57	C
22	DA	61	C
22	DA	63	A
22	DA	64	A
22	DA	66	C
22	DA	70	G
22	DA	71	A
22	DA	73	A
22	DA	74	A
22	DA	75	G
22	DA	80	G
22	DA	81	G
22	DA	82	U
22	DA	83	A
22	DA	84	A
22	DA	85	G
22	DA	87	U
22	DA	91	A
22	DA	96	C
22	DA	97	C
22	DA	98	G
22	DA	101	A
22	DA	103	A
22	DA	104	A
22	DA	111	A
22	DA	118	A
22	DA	119	A
22	DA	120	U
22	DA	121	G
22	DA	128	C
22	DA	137	U
22	DA	138	U
22	DA	139	U
22	DA	140	C
22	DA	141	G
22	DA	142	A
22	DA	143	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	145	C
22	DA	150	U
22	DA	155	A
22	DA	158	U
22	DA	159	G
22	DA	162	U
22	DA	166	U
22	DA	178	G
22	DA	180	G
22	DA	184	C
22	DA	185	G
22	DA	196	A
22	DA	199	A
22	DA	202	U
22	DA	206	U
22	DA	216	A
22	DA	221	A
22	DA	222	A
22	DA	223	A
22	DA	224	U
22	DA	225	C
22	DA	228	C
22	DA	233	A
22	DA	245	G
22	DA	248	G
22	DA	249	C
22	DA	251	A
22	DA	252	G
22	DA	258	G
22	DA	262	A
22	DA	265	A
22	DA	266	G
22	DA	271	G
22	DA	272	A
22	DA	276	U
22	DA	279	A
22	DA	281	C
22	DA	283	G
22	DA	285	G
22	DA	291	G
22	DA	294	A
22	DA	311	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	321	U
22	DA	329	G
22	DA	330	A
22	DA	335	C
22	DA	346	A
22	DA	348	A
22	DA	350	G
22	DA	361	G
22	DA	362	A
22	DA	367	G
22	DA	371	A
22	DA	372	G
22	DA	380	G
22	DA	385	C
22	DA	386	G
22	DA	387	U
22	DA	392	U
22	DA	396	G
22	DA	401	A
22	DA	405	U
22	DA	411	G
22	DA	412	A
22	DA	417	C
22	DA	420	C
22	DA	421	C
22	DA	424	G
22	DA	426	C
22	DA	430	A
22	DA	435	C
22	DA	444	C
22	DA	446	G
22	DA	448	U
22	DA	451	U
22	DA	455	C
22	DA	461	C
22	DA	462	C
22	DA	478	A
22	DA	480	A
22	DA	481	G
22	DA	490	C
22	DA	491	G
22	DA	496	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	504	A
22	DA	505	A
22	DA	508	A
22	DA	509	C
22	DA	510	C
22	DA	511	U
22	DA	528	A
22	DA	531	C
22	DA	532	A
22	DA	533	G
22	DA	543	G
22	DA	544	C
22	DA	546	U
22	DA	547	A
22	DA	548	G
22	DA	549	G
22	DA	550	C
22	DA	563	A
22	DA	564	C
22	DA	568	U
22	DA	569	U
22	DA	572	A
22	DA	573	U
22	DA	575	A
22	DA	586	A
22	DA	588	U
22	DA	603	A
22	DA	613	A
22	DA	614	A
22	DA	615	U
22	DA	617	G
22	DA	627	A
22	DA	628	G
22	DA	631	A
22	DA	637	A
22	DA	642	U
22	DA	645	C
22	DA	647	G
22	DA	648	G
22	DA	649	G
22	DA	654	A
22	DA	655	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	656	G
22	DA	657	U
22	DA	664	G
22	DA	672	C
22	DA	682	G
22	DA	684	G
22	DA	685	A
22	DA	686	U
22	DA	694	U
22	DA	695	G
22	DA	696	G
22	DA	701	G
22	DA	702	U
22	DA	704	G
22	DA	717	C
22	DA	726	G
22	DA	727	A
22	DA	728	G
22	DA	729	G
22	DA	730	A
22	DA	740	C
22	DA	747	U
22	DA	748	G
22	DA	752	A
22	DA	757	G
22	DA	758	C
22	DA	771	G
22	DA	773	U
22	DA	775	G
22	DA	776	G
22	DA	777	G
22	DA	782	A
22	DA	784	G
22	DA	785	G
22	DA	790	U
22	DA	792	A
22	DA	793	A
22	DA	798	G
22	DA	800	A
22	DA	801	G
22	DA	802	A
22	DA	805	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	812	C
22	DA	814	C
22	DA	815	C
22	DA	819	A
22	DA	826	U
22	DA	827	U
22	DA	828	U
22	DA	829	A
22	DA	830	G
22	DA	844	A
22	DA	845	A
22	DA	846	U
22	DA	847	U
22	DA	858	G
22	DA	859	G
22	DA	878	A
22	DA	881	G
22	DA	882	G
22	DA	885	C
22	DA	896	A
22	DA	897	C
22	DA	907	G
22	DA	910	A
22	DA	914	G
22	DA	915	C
22	DA	931	U
22	DA	933	A
22	DA	941	A
22	DA	946	C
22	DA	953	G
22	DA	958	U
22	DA	959	A
22	DA	961	C
22	DA	974	G
22	DA	983	A
22	DA	995	C
22	DA	996	A
22	DA	1012	U
22	DA	1013	C
22	DA	1022	G
22	DA	1023	U
22	DA	1025	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	1026	G
22	DA	1033	U
22	DA	1046	A
22	DA	1047	G
22	DA	1057	A
22	DA	1058	U
22	DA	1061	U
22	DA	1062	G
22	DA	1065	U
22	DA	1066	U
22	DA	1067	A
22	DA	1068	G
22	DA	1069	A
22	DA	1070	A
22	DA	1071	G
22	DA	1072	C
22	DA	1075	C
22	DA	1077	A
22	DA	1088	A
22	DA	1089	A
22	DA	1092	C
22	DA	1094	U
22	DA	1096	A
22	DA	1097	U
22	DA	1098	A
22	DA	1100	C
22	DA	1101	U
22	DA	1104	C
22	DA	1110	G
22	DA	1112	G
22	DA	1115	G
22	DA	1116	G
22	DA	1119	U
22	DA	1128	G
22	DA	1132	U
22	DA	1135	C
22	DA	1136	G
22	DA	1139	G
22	DA	1153	C
22	DA	1155	A
22	DA	1171	G
22	DA	1172	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	1175	A
22	DA	1176	U
22	DA	1178	C
22	DA	1179	G
22	DA	1180	U
22	DA	1183	U
22	DA	1186	G
22	DA	1199	U
22	DA	1204	A
22	DA	1205	A
22	DA	1212	G
22	DA	1227	G
22	DA	1230	A
22	DA	1231	U
22	DA	1235	G
22	DA	1236	G
22	DA	1237	A
22	DA	1238	G
22	DA	1242	U
22	DA	1243	C
22	DA	1244	A
22	DA	1247	A
22	DA	1248	G
22	DA	1250	G
22	DA	1253	A
22	DA	1256	G
22	DA	1266	G
22	DA	1268	A
22	DA	1272	A
22	DA	1273	U
22	DA	1276	A
22	DA	1282	U
22	DA	1288	G
22	DA	1289	C
22	DA	1293	C
22	DA	1294	U
22	DA	1300	G
22	DA	1301	A
22	DA	1321	A
22	DA	1330	C
22	DA	1339	G
22	DA	1344	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	1345	C
22	DA	1352	U
22	DA	1355	G
22	DA	1359	A
22	DA	1365	A
22	DA	1374	G
22	DA	1376	C
22	DA	1378	A
22	DA	1379	U
22	DA	1380	G
22	DA	1383	A
22	DA	1384	A
22	DA	1391	U
22	DA	1393	A
22	DA	1395	A
22	DA	1411	U
22	DA	1416	G
22	DA	1418	G
22	DA	1419	A
22	DA	1420	A
22	DA	1428	C
22	DA	1434	A
22	DA	1446	C
22	DA	1452	G
22	DA	1456	G
22	DA	1458	U
22	DA	1462	C
22	DA	1465	G
22	DA	1468	U
22	DA	1471	G
22	DA	1476	U
22	DA	1482	G
22	DA	1493	C
22	DA	1503	A
22	DA	1504	A
22	DA	1509	A
22	DA	1510	G
22	DA	1515	A
22	DA	1523	U
22	DA	1524	G
22	DA	1527	G
22	DA	1530	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	1531	C
22	DA	1533	C
22	DA	1534	U
22	DA	1535	A
22	DA	1536	C
22	DA	1540	G
22	DA	1546	G
22	DA	1555	G
22	DA	1560	G
22	DA	1566	A
22	DA	1569	A
22	DA	1576	U
22	DA	1578	U
22	DA	1581	G
22	DA	1582	C
22	DA	1583	A
22	DA	1584	U
22	DA	1585	C
22	DA	1587	G
22	DA	1592	C
22	DA	1602	U
22	DA	1603	A
22	DA	1606	C
22	DA	1607	C
22	DA	1608	A
22	DA	1610	A
22	DA	1613	G
22	DA	1616	A
22	DA	1626	A
22	DA	1645	G
22	DA	1646	C
22	DA	1647	U
22	DA	1648	U
22	DA	1649	G
22	DA	1651	G
22	DA	1652	A
22	DA	1653	G
22	DA	1660	G
22	DA	1663	G
22	DA	1664	A
22	DA	1674	G
22	DA	1715	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	1729	U
22	DA	1730	C
22	DA	1732	C
22	DA	1738	G
22	DA	1740	G
22	DA	1744	A
22	DA	1750	G
22	DA	1758	U
22	DA	1764	C
22	DA	1773	A
22	DA	1781	U
22	DA	1791	A
22	DA	1793	C
22	DA	1800	C
22	DA	1802	A
22	DA	1808	A
22	DA	1810	A
22	DA	1812	U
22	DA	1816	C
22	DA	1817	G
22	DA	1829	A
22	DA	1848	A
22	DA	1858	A
22	DA	1870	C
22	DA	1871	A
22	DA	1872	A
22	DA	1873	G
22	DA	1876	A
22	DA	1878	G
22	DA	1880	U
22	DA	1882	U
22	DA	1889	A
22	DA	1903	G
22	DA	1906	G
22	DA	1914	C
22	DA	1920	C
22	DA	1926	U
22	DA	1927	A
22	DA	1929	G
22	DA	1930	G
22	DA	1937	A
22	DA	1938	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	1945	G
22	DA	1955	U
22	DA	1965	C
22	DA	1967	C
22	DA	1970	A
22	DA	1971	U
22	DA	1972	G
22	DA	1975	G
22	DA	1981	A
22	DA	1991	U
22	DA	1992	G
22	DA	1993	U
22	DA	1997	C
22	DA	2004	G
22	DA	2007	U
22	DA	2018	G
22	DA	2020	A
22	DA	2021	C
22	DA	2022	U
22	DA	2023	C
22	DA	2030	A
22	DA	2031	A
22	DA	2033	A
22	DA	2043	C
22	DA	2049	G
22	DA	2051	A
22	DA	2055	C
22	DA	2056	G
22	DA	2060	A
22	DA	2061	G
22	DA	2062	A
22	DA	2064	C
22	DA	2069	G
22	DA	2075	U
22	DA	2080	A
22	DA	2087	G
22	DA	2092	U
22	DA	2093	G
22	DA	2108	A
22	DA	2110	G
22	DA	2111	U
22	DA	2112	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	2113	U
22	DA	2115	G
22	DA	2116	G
22	DA	2117	A
22	DA	2118	U
22	DA	2119	A
22	DA	2120	G
22	DA	2125	G
22	DA	2126	A
22	DA	2127	G
22	DA	2128	G
22	DA	2131	U
22	DA	2132	U
22	DA	2133	G
22	DA	2135	A
22	DA	2137	U
22	DA	2146	C
22	DA	2147	A
22	DA	2149	U
22	DA	2158	A
22	DA	2162	G
22	DA	2163	A
22	DA	2164	C
22	DA	2165	C
22	DA	2166	U
22	DA	2169	A
22	DA	2170	A
22	DA	2171	A
22	DA	2172	U
22	DA	2189	U
22	DA	2190	G
22	DA	2194	U
22	DA	2198	A
22	DA	2203	U
22	DA	2204	G
22	DA	2207	C
22	DA	2211	A
22	DA	2212	A
22	DA	2215	C
22	DA	2225	A
22	DA	2226	C
22	DA	2230	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	2238	G
22	DA	2239	G
22	DA	2242	G
22	DA	2243	U
22	DA	2245	U
22	DA	2246	G
22	DA	2250	G
22	DA	2268	A
22	DA	2273	A
22	DA	2279	G
22	DA	2280	G
22	DA	2283	C
22	DA	2285	C
22	DA	2287	A
22	DA	2305	U
22	DA	2307	G
22	DA	2308	G
22	DA	2309	A
22	DA	2310	C
22	DA	2311	A
22	DA	2313	C
22	DA	2321	U
22	DA	2322	A
22	DA	2325	G
22	DA	2327	A
22	DA	2333	A
22	DA	2345	G
22	DA	2347	C
22	DA	2350	C
22	DA	2354	C
22	DA	2356	U
22	DA	2357	G
22	DA	2361	G
22	DA	2383	G
22	DA	2385	C
22	DA	2397	G
22	DA	2402	U
22	DA	2406	A
22	DA	2407	A
22	DA	2410	G
22	DA	2412	A
22	DA	2417	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	2423	U
22	DA	2424	C
22	DA	2425	A
22	DA	2426	A
22	DA	2429	G
22	DA	2430	A
22	DA	2431	U
22	DA	2435	A
22	DA	2436	G
22	DA	2441	U
22	DA	2447	G
22	DA	2448	A
22	DA	2449	U
22	DA	2476	A
22	DA	2484	G
22	DA	2491	U
22	DA	2502	G
22	DA	2503	A
22	DA	2505	G
22	DA	2517	C
22	DA	2518	A
22	DA	2525	G
22	DA	2529	G
22	DA	2535	G
22	DA	2547	A
22	DA	2550	G
22	DA	2554	U
22	DA	2556	C
22	DA	2563	U
22	DA	2566	A
22	DA	2567	G
22	DA	2573	C
22	DA	2578	G
22	DA	2585	U
22	DA	2586	U
22	DA	2600	A
22	DA	2602	A
22	DA	2603	G
22	DA	2609	U
22	DA	2613	U
22	DA	2615	U
22	DA	2619	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	2629	U
22	DA	2630	G
22	DA	2644	G
22	DA	2646	C
22	DA	2648	G
22	DA	2656	U
22	DA	2661	G
22	DA	2663	G
22	DA	2665	A
22	DA	2682	A
22	DA	2688	G
22	DA	2689	U
22	DA	2690	U
22	DA	2691	C
22	DA	2714	G
22	DA	2716	C
22	DA	2718	G
22	DA	2726	A
22	DA	2727	A
22	DA	2729	G
22	DA	2739	U
22	DA	2748	A
22	DA	2751	G
22	DA	2757	A
22	DA	2778	A
22	DA	2791	G
22	DA	2794	C
22	DA	2799	A
22	DA	2803	G
22	DA	2809	A
22	DA	2812	G
22	DA	2820	A
22	DA	2823	A
22	DA	2825	G
22	DA	2826	A
22	DA	2833	U
22	DA	2834	G
22	DA	2835	A
22	DA	2843	G
22	DA	2850	A
22	DA	2852	G
22	DA	2861	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	2867	G
22	DA	2871	U
22	DA	2872	A
22	DA	2879	A
22	DA	2880	C
22	DA	2883	A
22	DA	2891	U
22	DA	2897	U
23	DB	13	G
23	DB	15	A
23	DB	16	G
23	DB	24	G
23	DB	35	C
23	DB	36	C
23	DB	44	G
23	DB	51	G
23	DB	54	G
23	DB	56	G
23	DB	61	G
23	DB	66	A
23	DB	87	U
23	DB	88	C
23	DB	89	U
23	DB	90	C
23	DB	99	A
23	DB	109	A
23	DB	110	C
23	DB	111	U

All (75) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	AA	209	U
1	AA	351	G
1	AA	429	U
1	AA	484	G
1	AA	722	G
1	AA	1031	C
1	AA	1049	U
1	AA	1145	A
1	AA	1201	A
1	AA	1211	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	70	G
22	BA	199	A
22	BA	271	G
22	BA	310	A
22	BA	404	A
22	BA	668	A
22	BA	764	A
22	BA	784	G
22	BA	859	G
22	BA	892	A
22	BA	960	A
22	BA	984	A
22	BA	995	C
22	BA	1378	A
22	BA	1583	A
22	BA	1606	C
22	BA	1610	A
22	BA	1738	G
22	BA	1875	G
22	BA	1925	C
22	BA	2127	G
22	BA	2211	A
22	BA	2286	G
22	BA	2326	C
22	BA	2585	U
22	BA	2756	U
22	BA	2873	A
1	CA	85	U
1	CA	115	G
1	CA	209	U
1	CA	429	U
1	CA	484	G
1	CA	1049	U
1	CA	1201	A
1	CA	1211	U
22	DA	271	G
22	DA	404	A
22	DA	479	A
22	DA	613	A
22	DA	800	A
22	DA	846	U
22	DA	877	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	1237	A
22	DA	1275	A
22	DA	1344	U
22	DA	1378	A
22	DA	1475	G
22	DA	1514	G
22	DA	1606	C
22	DA	1847	A
22	DA	1875	G
22	DA	2109	U
22	DA	2127	G
22	DA	2145	C
22	DA	2146	C
22	DA	2162	G
22	DA	2211	A
22	DA	2225	A
22	DA	2286	G
22	DA	2307	G
22	DA	2308	G
22	DA	2326	C
22	DA	2425	A
22	DA	2655	G
22	DA	2756	U

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

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

5.5 Carbohydrates [i](#)

There are no carbohydrates in this entry.

5.6 Ligand geometry [i](#)

Of 501 ligands modelled in this entry, 499 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	$\# Z > 2$
55	DOL	BA	3001	-	43,50,50	3.31	16 (37%)	54,70,70	3.12	18 (33%)
55	DOL	DA	3001	-	43,50,50	3.38	14 (32%)	54,70,70	3.15	13 (24%)

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
55	DOL	BA	3001	-	-	0/58/77/77	0/1/3/3
55	DOL	DA	3001	-	-	0/58/77/77	0/1/3/3

All (30) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	BA	3001	DOL	C1-C2	-9.35	1.43	1.55
55	DA	3001	DOL	C1-C2	-8.00	1.44	1.55
55	BA	3001	DOL	C16-C17	-3.66	1.48	1.54
55	BA	3001	DOL	O36-C32	-3.48	1.39	1.44
55	DA	3001	DOL	O18-C17	-3.28	1.37	1.43
55	DA	3001	DOL	C16-C17	-3.16	1.49	1.54
55	BA	3001	DOL	O18-C17	-2.95	1.38	1.43
55	BA	3001	DOL	O36-C37	-2.95	1.27	1.34
55	DA	3001	DOL	O36-C32	-2.80	1.40	1.44
55	DA	3001	DOL	O36-C37	-2.27	1.29	1.34
55	BA	3001	DOL	C1-N5	-2.27	1.43	1.46
55	BA	3001	DOL	C42-S39	2.00	1.81	1.78
55	BA	3001	DOL	C22-C20	2.12	1.50	1.45
55	BA	3001	DOL	C3-C4	2.37	1.57	1.52
55	DA	3001	DOL	C22-C20	2.83	1.52	1.45
55	DA	3001	DOL	C42-S39	3.05	1.83	1.78
55	BA	3001	DOL	C28-C29	3.21	1.40	1.32
55	DA	3001	DOL	C28-C29	3.48	1.41	1.32
55	BA	3001	DOL	C19-C20	4.83	1.49	1.34
55	DA	3001	DOL	C19-C20	5.17	1.51	1.34
55	BA	3001	DOL	C6-N5	5.74	1.45	1.35
55	DA	3001	DOL	C6-N5	5.82	1.45	1.35
55	DA	3001	DOL	O38-C37	6.48	1.37	1.21
55	BA	3001	DOL	O38-C37	6.54	1.37	1.21

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	BA	3001	DOL	C22-C23	7.08	1.50	1.31
55	DA	3001	DOL	C22-C23	7.84	1.52	1.31
55	BA	3001	DOL	C26-N25	8.05	1.45	1.34
55	BA	3001	DOL	O15-C14	8.72	1.37	1.21
55	DA	3001	DOL	O15-C14	8.84	1.37	1.21
55	DA	3001	DOL	C26-N25	9.71	1.47	1.34

All (31) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	DA	3001	DOL	O40-S39-O41	-19.07	100.41	117.94
55	BA	3001	DOL	O40-S39-O41	-14.12	104.96	117.94
55	BA	3001	DOL	C29-C28-C26	-7.10	104.35	122.90
55	DA	3001	DOL	C4-N5-C1	-5.56	106.19	112.33
55	BA	3001	DOL	C24-N25-C26	-4.68	114.69	122.12
55	DA	3001	DOL	C23-C22-C20	-4.13	119.65	125.89
55	BA	3001	DOL	C24-C23-C22	-4.10	114.37	125.36
55	BA	3001	DOL	O7-C6-N5	-4.04	115.41	121.54
55	DA	3001	DOL	C30-C29-C28	-3.83	114.77	126.39
55	BA	3001	DOL	O27-C26-N25	-3.75	117.75	122.41
55	DA	3001	DOL	C29-C28-C26	-3.57	113.59	122.90
55	BA	3001	DOL	C4-N5-C1	-3.27	108.72	112.33
55	BA	3001	DOL	C23-C22-C20	-2.68	121.84	125.89
55	DA	3001	DOL	C24-C23-C22	-2.66	118.22	125.36
55	DA	3001	DOL	C3-C4-N5	-2.48	100.73	103.38
55	BA	3001	DOL	C30-C29-C28	-2.36	119.25	126.39
55	BA	3001	DOL	C16-C17-C19	-2.28	107.05	111.20
55	BA	3001	DOL	O15-C14-C13	-2.14	117.59	120.76
55	DA	3001	DOL	O38-C37-C1	-2.09	120.74	124.60
55	DA	3001	DOL	C28-C26-N25	2.01	119.09	114.94
55	DA	3001	DOL	C3-C2-C1	2.34	108.79	104.31
55	BA	3001	DOL	O40-S39-C42	2.38	117.31	107.97
55	BA	3001	DOL	C21-C20-C22	2.40	121.92	118.10
55	DA	3001	DOL	C43-C42-S39	2.52	117.16	112.39
55	BA	3001	DOL	C3-C2-C1	2.56	109.19	104.31
55	BA	3001	DOL	O36-C37-C1	2.59	116.99	111.61
55	DA	3001	DOL	O36-C37-C1	3.05	117.96	111.61
55	BA	3001	DOL	C28-C26-N25	3.27	121.69	114.94
55	DA	3001	DOL	C32-O36-C37	3.55	123.81	117.85
55	BA	3001	DOL	C8-C6-N5	6.90	127.83	119.77
55	BA	3001	DOL	C43-C42-S39	7.64	126.83	112.39

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

2 monomers are involved in 38 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
55	BA	3001	DOL	11	0
55	DA	3001	DOL	27	0

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	AA	1538/1539 (99%)	-0.11	34 (2%) 62 59	11, 51, 132, 183	0
1	CA	1539/1539 (100%)	0.34	122 (7%) 13 10	24, 70, 147, 178	0
2	AB	218/218 (100%)	1.02	37 (16%) 2 1	40, 75, 101, 117	0
2	CB	218/218 (100%)	1.08	47 (21%) 1 1	60, 88, 108, 123	0
3	AC	206/206 (100%)	0.16	7 (3%) 46 39	37, 58, 80, 95	0
3	CC	206/206 (100%)	0.98	35 (16%) 2 1	55, 80, 98, 108	0
4	AD	205/205 (100%)	0.28	9 (4%) 35 30	33, 57, 80, 100	0
4	CD	205/205 (100%)	-0.08	6 (2%) 52 46	15, 36, 60, 84	0
5	AE	150/150 (100%)	0.15	3 (2%) 65 62	29, 48, 78, 94	0
5	CE	150/150 (100%)	0.27	7 (4%) 32 28	27, 53, 83, 104	0
6	AF	100/100 (100%)	0.48	10 (10%) 8 6	35, 56, 75, 79	0
6	CF	100/100 (100%)	0.54	6 (6%) 23 17	43, 73, 92, 104	0
7	AG	151/151 (100%)	0.79	17 (11%) 6 4	54, 76, 92, 100	0
7	CG	151/151 (100%)	2.73	88 (58%) 0 0	82, 106, 115, 119	0
8	AH	129/129 (100%)	0.02	2 (1%) 72 70	29, 48, 68, 79	0
8	CH	129/129 (100%)	0.26	4 (3%) 49 43	48, 64, 81, 96	0
9	AI	127/127 (100%)	1.09	24 (18%) 1 1	45, 75, 98, 107	0
9	CI	127/127 (100%)	1.74	45 (35%) 0 0	81, 97, 114, 121	0
10	AJ	98/98 (100%)	0.83	16 (16%) 2 1	41, 68, 88, 116	0
10	CJ	98/98 (100%)	2.58	53 (54%) 0 0	73, 98, 115, 124	0
11	AK	117/117 (100%)	0.45	12 (10%) 7 5	28, 62, 92, 120	0
11	CK	117/117 (100%)	0.33	4 (3%) 46 39	36, 68, 82, 90	0
12	AL	123/123 (100%)	0.05	4 (3%) 47 40	20, 35, 65, 97	0
12	CL	123/123 (100%)	0.33	7 (5%) 24 19	33, 50, 75, 96	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	AM	114/114 (100%)	1.15	24 (21%) 1 1	49, 72, 93, 104	0
13	CM	114/114 (100%)	3.75	90 (78%) 0 0	94, 115, 124, 126	0
14	AN	96/100 (96%)	0.71	11 (11%) 5 4	41, 62, 96, 105	0
14	CN	96/100 (96%)	2.36	50 (52%) 0 0	71, 97, 116, 123	0
15	AO	88/88 (100%)	0.19	2 (2%) 61 57	31, 48, 65, 90	0
15	CO	88/88 (100%)	0.37	6 (6%) 18 13	38, 65, 80, 103	0
16	AP	82/82 (100%)	0.33	4 (4%) 30 26	35, 48, 84, 109	0
16	CP	82/82 (100%)	0.63	7 (8%) 11 8	45, 62, 92, 113	0
17	AQ	80/80 (100%)	0.45	4 (5%) 30 25	28, 49, 75, 110	0
17	CQ	80/80 (100%)	1.22	19 (23%) 1 0	43, 79, 98, 100	0
18	AR	55/55 (100%)	0.67	8 (14%) 3 2	42, 55, 78, 101	0
18	CR	55/55 (100%)	0.48	7 (12%) 4 3	36, 55, 78, 109	0
19	AS	79/79 (100%)	1.31	25 (31%) 0 0	56, 72, 89, 97	0
19	CS	79/79 (100%)	3.39	57 (72%) 0 0	98, 115, 124, 129	0
20	AT	85/85 (100%)	0.45	7 (8%) 12 9	36, 48, 70, 95	0
20	CT	85/85 (100%)	1.55	25 (29%) 1 0	54, 78, 96, 101	0
21	AU	51/51 (100%)	1.44	17 (33%) 0 0	44, 76, 97, 105	0
21	CU	51/51 (100%)	0.65	4 (7%) 14 10	45, 71, 100, 103	0
22	BA	2897/2903 (99%)	0.05	140 (4%) 31 27	1, 14, 129, 195	0
22	DA	2897/2903 (99%)	0.60	227 (7%) 14 10	41, 85, 148, 181	0
23	BB	119/119 (100%)	-0.41	0 100 100	2, 23, 50, 80	0
23	DB	118/119 (99%)	0.76	14 (11%) 5 3	69, 115, 134, 143	0
24	BC	271/271 (100%)	-0.34	2 (0%) 87 86	2, 20, 37, 55	0
24	DC	271/271 (100%)	0.46	12 (4%) 35 30	47, 64, 77, 96	0
25	BD	209/209 (100%)	-0.44	0 100 100	0, 10, 36, 65	0
25	DD	209/209 (100%)	0.75	31 (14%) 3 2	53, 72, 88, 96	0
26	BE	201/201 (100%)	-0.37	0 100 100	2, 24, 55, 88	0
26	DE	201/201 (100%)	1.40	50 (24%) 1 0	53, 90, 107, 114	0
27	BF	177/177 (100%)	0.22	14 (7%) 13 10	23, 44, 76, 90	0
27	DF	177/177 (100%)	3.11	120 (67%) 0 0	97, 114, 126, 131	0
28	BG	176/176 (100%)	-0.29	1 (0%) 89 88	16, 36, 57, 72	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
28	DG	176/176 (100%)	2.17	86 (48%) 0 0	77, 96, 111, 121	0
29	BH	149/149 (100%)	2.71	74 (49%) 0 0	25, 102, 121, 129	0
29	DH	149/149 (100%)	1.27	36 (24%) 1 0	25, 92, 107, 115	0
30	BI	141/141 (100%)	3.80	96 (68%) 0 0	90, 117, 127, 134	0
30	DI	141/141 (100%)	5.64	131 (92%) 0 0	105, 126, 137, 143	0
31	BJ	142/142 (100%)	-0.37	0 100 100	1, 6, 23, 36	0
31	DJ	142/142 (100%)	0.55	9 (6%) 21 16	52, 69, 83, 91	0
32	BK	122/122 (100%)	-0.36	0 100 100	3, 12, 31, 62	0
32	DK	122/122 (100%)	0.53	8 (6%) 19 14	48, 66, 84, 96	0
33	BL	143/143 (100%)	-0.32	0 100 100	1, 19, 43, 65	0
33	DL	143/143 (100%)	1.70	53 (37%) 0 0	46, 87, 99, 115	0
34	BM	136/136 (100%)	-0.45	0 100 100	1, 10, 30, 83	0
34	DM	136/136 (100%)	0.62	15 (11%) 6 4	42, 71, 86, 100	0
35	BN	120/120 (100%)	-0.43	0 100 100	3, 8, 18, 63	0
35	DN	120/120 (100%)	0.99	20 (16%) 2 1	59, 79, 94, 112	0
36	BO	116/116 (100%)	-0.32	0 100 100	14, 26, 45, 55	0
36	DO	116/116 (100%)	2.11	59 (50%) 0 0	86, 100, 111, 118	0
37	BP	114/114 (100%)	-0.36	2 (1%) 69 66	8, 17, 41, 72	0
37	DP	114/114 (100%)	0.98	20 (17%) 2 1	61, 75, 86, 95	0
38	BQ	117/117 (100%)	-0.31	0 100 100	0, 3, 13, 34	0
38	DQ	117/117 (100%)	1.03	19 (16%) 2 1	57, 71, 80, 89	0
39	BR	103/103 (100%)	-0.39	0 100 100	1, 13, 30, 58	0
39	DR	103/103 (100%)	1.52	33 (32%) 0 0	58, 81, 94, 104	0
40	BS	110/110 (100%)	-0.42	0 100 100	2, 5, 24, 66	0
40	DS	110/110 (100%)	1.19	23 (20%) 1 1	62, 80, 95, 106	0
41	BT	93/93 (100%)	0.07	4 (4%) 36 31	9, 26, 68, 100	0
41	DT	93/93 (100%)	2.09	48 (51%) 0 0	73, 92, 106, 115	0
42	BU	102/102 (100%)	0.22	11 (10%) 6 4	12, 29, 63, 79	0
42	DU	102/102 (100%)	2.76	58 (56%) 0 0	78, 96, 110, 122	0
43	BV	94/94 (100%)	-0.38	0 100 100	5, 21, 43, 55	0
43	DV	94/94 (100%)	1.16	21 (22%) 1 0	74, 88, 99, 106	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
44	BW	76/76 (100%)	-0.35	1 (1%) 77 76	5, 12, 30, 57	0
44	DW	75/76 (98%)	1.42	22 (29%) 1 0	58, 83, 92, 105	0
45	BX	77/77 (100%)	-0.32	0 100 100	8, 22, 51, 68	0
45	DX	77/77 (100%)	1.02	16 (20%) 1 1	50, 72, 87, 92	0
46	BY	63/63 (100%)	0.21	3 (4%) 31 27	24, 41, 73, 95	0
46	DY	63/63 (100%)	2.05	34 (53%) 0 0	82, 99, 107, 110	0
47	BZ	58/58 (100%)	-0.33	0 100 100	2, 9, 29, 35	0
47	DZ	58/58 (100%)	0.80	7 (12%) 5 3	60, 74, 85, 103	0
48	B0	56/56 (100%)	-0.49	0 100 100	1, 10, 35, 60	0
48	D0	56/56 (100%)	1.41	15 (26%) 1 0	52, 83, 98, 105	0
49	B1	50/50 (100%)	-0.20	0 100 100	15, 27, 51, 58	0
49	D1	50/50 (100%)	2.06	22 (44%) 0 0	74, 90, 95, 105	0
50	B2	46/46 (100%)	-0.34	1 (2%) 62 59	5, 9, 16, 79	0
50	D2	46/46 (100%)	1.24	12 (26%) 1 0	58, 72, 87, 102	0
51	B3	64/64 (100%)	-0.40	0 100 100	4, 10, 20, 29	0
51	D3	64/64 (100%)	1.44	17 (26%) 1 0	62, 75, 84, 95	0
52	B4	38/38 (100%)	-0.08	1 (2%) 56 51	8, 19, 34, 54	0
52	D4	38/38 (100%)	2.53	20 (52%) 0 0	64, 79, 90, 100	0
53	B5	191/228 (83%)	6.29	188 (98%) 0 0	100, 122, 133, 142	0
All	All	20734/20794 (99%)	0.62	2762 (13%) 4 2	0, 64, 125, 195	0

All (2762) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
53	B5	218	THR	28.0
53	B5	140	ASN	21.6
29	BH	130	VAL	18.2
30	BI	53	LEU	17.3
10	AJ	102	LEU	17.2
22	BA	2100	G	16.9
22	BA	2184	A	16.2
30	BI	54	PRO	15.4
30	DI	68	THR	15.3
53	B5	217	THR	15.1
30	BI	79	LEU	14.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
53	B5	97	GLY	14.6
30	BI	2	ALA	14.3
30	DI	2	ALA	14.2
53	B5	170	GLY	14.0
22	BA	2101	A	13.9
53	B5	162	ILE	13.9
53	B5	147	GLY	13.5
22	BA	2148	G	13.2
22	BA	2135	A	13.2
53	B5	96	GLY	13.0
1	CA	1536	C	12.8
30	DI	80	LEU	12.6
53	B5	143	ALA	12.5
30	DI	78	VAL	12.5
22	BA	2121	G	12.5
30	DI	130	GLU	12.4
30	DI	67	PHE	12.4
53	B5	107	GLY	12.4
53	B5	173	HIS	12.4
53	B5	214	TYR	12.3
30	BI	12	GLN	12.2
22	BA	2102	G	12.0
30	DI	54	PRO	12.0
53	B5	111	PHE	11.9
30	BI	4	LYS	11.8
22	BA	2103	C	11.8
22	DA	1073	A	11.8
53	B5	122	GLY	11.8
22	BA	2174	C	11.6
22	BA	2147	A	11.5
53	B5	131	ILE	11.5
30	DI	3	LYS	11.5
22	BA	2159	G	11.3
53	B5	106	ASP	11.2
22	BA	2112	G	11.1
30	DI	53	LEU	11.1
10	CJ	74	VAL	11.0
30	DI	133	ALA	11.0
22	BA	2117	A	11.0
22	BA	2145	C	11.0
30	BI	3	LYS	11.0
53	B5	76	LEU	11.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	CA	1538	C	11.0
22	BA	2177	C	10.9
7	CG	62	PHE	10.9
22	BA	2136	G	10.9
1	CA	1539	C	10.8
28	DG	33	LEU	10.8
53	B5	55	SER	10.8
22	BA	2140	G	10.8
22	BA	2183	A	10.7
30	BI	11	LEU	10.7
22	BA	2185	U	10.6
22	BA	2132	U	10.6
13	CM	45	ILE	10.6
30	DI	129	ILE	10.6
53	B5	157	ILE	10.6
20	CT	4	ILE	10.6
30	BI	69	PHE	10.5
22	BA	2160	C	10.4
22	BA	2176	A	10.4
27	DF	76	GLY	10.4
30	DI	85	GLY	10.2
53	B5	66	PRO	10.2
2	AB	157	LEU	10.2
53	B5	95	VAL	10.2
22	BA	2158	A	10.2
53	B5	141	PRO	10.0
22	BA	2161	C	10.0
29	BH	98	ASP	10.0
22	BA	2182	U	10.0
29	BH	97	ARG	10.0
30	DI	76	ALA	10.0
29	BH	102	ALA	9.9
22	BA	2178	C	9.8
53	B5	68	GLY	9.7
22	DA	1067	A	9.6
30	BI	114	ALA	9.6
29	BH	101	ASP	9.6
53	B5	223	VAL	9.5
13	CM	10	PRO	9.5
9	CI	128	SER	9.5
22	BA	2144	G	9.4
22	BA	2139	U	9.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
53	B5	134	PRO	9.4
30	DI	139	VAL	9.4
1	CA	1535	C	9.3
30	DI	69	PHE	9.3
22	BA	2120	G	9.2
22	BA	2149	U	9.2
29	DH	142	VAL	9.2
22	BA	2124	G	9.1
30	DI	52	GLY	9.1
22	BA	2169	A	9.1
30	BI	87	LYS	9.1
53	B5	142	LYS	9.1
22	BA	2123	G	9.1
29	BH	96	THR	9.0
53	B5	165	ARG	9.0
53	B5	148	PHE	8.9
27	DF	39	GLY	8.9
22	BA	2156	G	8.9
30	DI	22	PRO	8.9
22	BA	2130	U	8.9
13	CM	23	TYR	8.9
29	BH	72	ILE	8.8
30	DI	56	PRO	8.8
29	DH	136	SER	8.8
30	DI	6	GLN	8.8
53	B5	98	GLU	8.7
30	DI	98	VAL	8.7
22	BA	2104	C	8.7
30	BI	80	LEU	8.7
22	BA	2099	U	8.7
30	DI	120	ALA	8.6
30	DI	4	LYS	8.6
30	DI	110	ALA	8.6
30	DI	77	ALA	8.5
13	CM	39	ILE	8.5
28	DG	32	GLU	8.5
22	BA	2111	U	8.4
22	BA	2143	C	8.4
30	DI	121	ASP	8.4
53	B5	87	ALA	8.4
22	BA	2138	G	8.4
30	BI	133	ALA	8.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	AB	156	GLY	8.3
22	BA	2162	G	8.3
53	B5	62	THR	8.3
22	DA	2174	C	8.3
1	CA	1537	U	8.3
30	DI	58	VAL	8.3
30	DI	79	LEU	8.3
53	B5	183	PRO	8.2
19	CS	71	LEU	8.2
22	BA	2155	U	8.2
53	B5	219	MET	8.2
22	DA	1065	U	8.2
53	B5	27	ALA	8.2
14	CN	20	TYR	8.2
53	B5	109	MET	8.2
30	DI	8	TYR	8.2
13	CM	63	PHE	8.2
30	BI	13	VAL	8.2
22	BA	2113	U	8.1
36	DO	65	THR	8.1
30	DI	82	LYS	8.1
53	B5	84	ILE	8.1
53	B5	155	ARG	8.1
53	B5	207	GLY	8.1
7	CG	66	LEU	8.1
53	B5	166	ASN	8.1
7	CG	111	ARG	8.1
22	BA	2180	U	8.1
30	DI	28	LEU	8.1
30	DI	99	GLY	8.1
30	BI	67	PHE	8.0
53	B5	174	ALA	8.0
30	DI	57	VAL	8.0
42	DU	58	ILE	8.0
53	B5	45	HIS	8.0
30	DI	23	PRO	8.0
30	DI	60	THR	8.0
36	DO	64	TYR	7.9
22	BA	2118	U	7.9
22	DA	2124	G	7.9
53	B5	156	GLU	7.9
30	DI	25	GLY	7.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
53	B5	108	TRP	7.9
22	BA	2168	G	7.9
53	B5	94	TYR	7.8
22	BA	2107	G	7.8
33	DL	92	LEU	7.8
53	B5	77	ALA	7.8
27	DF	128	TYR	7.8
22	BA	2172	U	7.8
22	BA	2166	U	7.8
22	BA	2142	A	7.8
1	AA	86	G	7.8
1	CA	1020	G	7.8
22	BA	2115	G	7.8
29	BH	146	VAL	7.8
30	DI	48	SER	7.8
53	B5	67	HIS	7.8
1	AA	1536	C	7.7
30	DI	59	ILE	7.7
53	B5	48	LEU	7.7
22	DA	2309	A	7.7
53	B5	216	THR	7.7
26	DE	119	ILE	7.7
9	CI	130	ARG	7.7
22	DA	1537	G	7.7
53	B5	179	ALA	7.6
53	B5	132	LEU	7.6
22	BA	2116	G	7.6
53	B5	93	ASP	7.6
22	DA	1175	A	7.6
19	CS	67	VAL	7.6
22	BA	2152	G	7.6
29	BH	110	VAL	7.5
30	DI	66	SER	7.5
13	CM	95	LEU	7.5
30	DI	96	ASP	7.5
29	BH	136	SER	7.5
10	CJ	77	VAL	7.5
42	DU	89	ASP	7.5
22	BA	2179	C	7.4
27	DF	129	SER	7.4
27	DF	147	ASP	7.4
36	DO	66	GLY	7.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
42	DU	20	GLY	7.4
1	AA	1535	C	7.4
22	BA	2157	G	7.4
53	B5	182	PRO	7.4
27	DF	35	THR	7.3
22	BA	2153	C	7.3
29	BH	106	ALA	7.3
13	CM	84	GLY	7.3
30	BI	115	ALA	7.3
1	CA	1032	G	7.3
2	CB	32	PHE	7.2
28	DG	62	TRP	7.2
22	BA	2165	C	7.2
30	DI	90	SER	7.2
53	B5	78	ILE	7.2
53	B5	180	SER	7.2
52	D4	10	LEU	7.2
19	CS	80	TYR	7.2
53	B5	154	ILE	7.2
53	B5	20	VAL	7.2
1	AA	78	A	7.2
53	B5	81	GLY	7.1
22	BA	2163	A	7.1
4	AD	37	ALA	7.1
53	B5	59	VAL	7.1
53	B5	46	ALA	7.1
1	AA	1538	C	7.1
42	DU	52	LEU	7.1
53	B5	208	THR	7.1
19	CS	60	VAL	7.1
30	BI	5	VAL	7.1
22	DA	1093	G	7.1
1	AA	1539	C	7.0
42	DU	51	ALA	7.0
53	B5	161	ARG	7.0
53	B5	104	ILE	7.0
30	DI	95	LYS	7.0
14	CN	36	ALA	7.0
14	CN	4	GLN	7.0
22	BA	2181	U	7.0
30	BI	88	SER	7.0
53	B5	85	LYS	7.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
14	CN	51	LEU	7.0
53	B5	42	VAL	7.0
13	CM	85	CYS	6.9
53	B5	69	LEU	6.9
53	B5	100	ILE	6.9
53	B5	146	VAL	6.9
22	BA	2114	A	6.9
1	CA	1024	G	6.9
42	DU	78	GLY	6.9
1	CA	1022	A	6.9
53	B5	171	ALA	6.9
42	DU	50	PRO	6.9
7	AG	5	ARG	6.9
22	BA	2175	C	6.9
10	CJ	76	ILE	6.9
29	BH	69	ALA	6.8
38	DQ	29	SER	6.8
19	CS	74	PHE	6.8
4	CD	25	VAL	6.8
30	DI	55	ILE	6.8
28	DG	105	LEU	6.8
29	BH	68	ARG	6.8
22	BA	2122	U	6.8
2	AB	136	MET	6.7
22	BA	2127	G	6.7
27	DF	113	ASP	6.7
27	DF	79	ILE	6.7
30	DI	61	VAL	6.7
52	D4	25	VAL	6.7
7	CG	88	PRO	6.7
9	AI	43	THR	6.7
1	CA	1030	U	6.7
22	BA	2134	A	6.7
7	CG	133	THR	6.6
22	BA	2154	A	6.6
9	AI	130	ARG	6.6
13	CM	69	LEU	6.6
22	BA	2141	G	6.6
19	CS	24	GLU	6.6
13	CM	22	ILE	6.6
30	DI	5	VAL	6.6
12	AL	124	ALA	6.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	BA	2164	C	6.6
7	CG	41	SER	6.6
22	DA	1057	A	6.6
27	DF	24	SER	6.6
30	DI	73	THR	6.5
42	DU	39	ILE	6.5
7	CG	52	GLN	6.5
27	DF	112	ARG	6.5
29	BH	105	ALA	6.5
42	DU	12	ILE	6.5
30	BI	99	GLY	6.5
53	B5	213	VAL	6.5
19	CS	51	VAL	6.5
53	B5	86	GLU	6.5
13	CM	64	VAL	6.5
1	CA	1534	A	6.4
22	BA	2150	C	6.4
2	CB	135	LEU	6.4
13	CM	83	LEU	6.4
22	BA	2110	G	6.4
22	DA	1077	A	6.4
53	B5	160	GLY	6.4
29	BH	54	LEU	6.4
53	B5	37	LYS	6.4
44	DW	52	GLY	6.4
42	DU	87	PHE	6.4
30	DI	83	ALA	6.4
30	DI	34	ASN	6.4
7	CG	151	PHE	6.4
30	DI	46	THR	6.3
29	BH	85	GLY	6.3
30	DI	11	LEU	6.3
22	DA	1536	C	6.3
14	CN	52	PRO	6.3
53	B5	64	SER	6.3
9	AI	129	LYS	6.3
27	DF	78	LYS	6.3
53	B5	151	GLY	6.3
37	DP	115	ASN	6.3
27	DF	28	VAL	6.3
53	B5	70	GLY	6.3
53	B5	110	ASP	6.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
53	B5	199	ALA	6.3
19	CS	31	LEU	6.3
1	AA	1030	U	6.3
53	B5	224	ARG	6.3
53	B5	80	LYS	6.3
27	DF	21	ASN	6.3
27	DF	43	ALA	6.2
27	DF	114	PHE	6.2
30	DI	75	PRO	6.2
53	B5	72	GLN	6.2
27	DF	130	MET	6.2
45	DX	49	LEU	6.2
1	CA	1016	A	6.2
22	DA	2169	A	6.2
1	CA	1031	C	6.2
9	CI	43	THR	6.2
30	BI	22	PRO	6.1
53	B5	52	PRO	6.1
7	CG	57	SER	6.1
30	DI	47	ASP	6.1
7	CG	54	SER	6.1
19	CS	29	LYS	6.1
22	DA	2126	A	6.1
53	B5	149	ASN	6.1
1	CA	1025	U	6.1
30	DI	114	ALA	6.1
53	B5	158	LYS	6.1
13	CM	32	ALA	6.1
20	CT	38	ALA	6.1
53	B5	105	LEU	6.1
1	CA	1302	C	6.1
30	BI	101	ILE	6.1
7	CG	118	LEU	6.1
41	DT	2	ILE	6.1
30	DI	118	THR	6.1
30	DI	140	VAL	6.1
30	BI	25	GLY	6.1
30	DI	142	ASP	6.1
30	BI	97	LYS	6.0
30	BI	100	LYS	6.0
1	CA	1018	G	6.0
19	CS	30	PRO	6.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	BA	2167	U	6.0
53	B5	194	ILE	6.0
22	BA	2171	A	6.0
28	DG	166	ASP	6.0
42	DU	60	GLU	6.0
29	BH	119	ASN	6.0
19	CS	72	GLY	6.0
18	AR	20	GLU	6.0
28	DG	52	PHE	6.0
22	DA	1078	U	6.0
53	B5	26	ALA	6.0
53	B5	198	GLU	6.0
22	BA	2126	A	6.0
13	CM	109	ARG	5.9
29	BH	86	ASP	5.9
30	DI	21	SER	5.9
29	BH	121	VAL	5.9
19	CS	66	MET	5.9
30	DI	126	THR	5.9
49	D1	24	THR	5.9
10	CJ	100	ILE	5.9
42	DU	35	ILE	5.9
22	BA	2173	A	5.9
14	CN	27	LEU	5.9
19	CS	11	ILE	5.9
53	B5	90	ALA	5.9
30	DI	131	GLY	5.9
14	AN	30	ILE	5.9
53	B5	153	ILE	5.9
22	DA	931	U	5.9
13	CM	46	SER	5.9
22	BA	885	C	5.8
30	BI	8	TYR	5.8
29	BH	137	GLU	5.8
1	CA	1017	U	5.8
53	B5	181	PHE	5.8
10	CJ	86	ALA	5.8
13	CM	80	LEU	5.8
39	DR	27	ILE	5.8
9	CI	38	TYR	5.8
42	DU	21	LYS	5.8
29	BH	58	LEU	5.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
27	DF	77	PHE	5.8
27	DF	122	PHE	5.8
22	DA	2120	G	5.8
27	DF	54	ALA	5.8
27	DF	155	THR	5.8
10	CJ	82	LYS	5.8
53	B5	206	LYS	5.8
10	CJ	87	LEU	5.8
7	CG	77	SER	5.7
30	BI	135	SER	5.7
10	CJ	99	GLN	5.7
19	CS	39	THR	5.7
27	DF	23	ASN	5.7
22	DA	1066	U	5.7
21	AU	4	ILE	5.7
9	CI	64	TYR	5.7
27	DF	25	VAL	5.7
22	BA	2131	U	5.7
53	B5	152	GLU	5.7
27	DF	67	ILE	5.7
22	DA	2585	U	5.7
40	DS	84	ARG	5.7
7	CG	75	VAL	5.7
30	BI	66	SER	5.7
42	BU	49	VAL	5.7
30	BI	21	SER	5.7
19	CS	49	ILE	5.7
29	BH	144	VAL	5.7
2	AB	135	LEU	5.7
17	AQ	20	SER	5.7
30	DI	32	GLY	5.7
2	AB	9	MET	5.7
26	DE	104	ALA	5.7
29	BH	91	PHE	5.7
3	CC	193	TYR	5.7
53	B5	128	LEU	5.7
22	DA	1068	G	5.7
16	AP	80	LYS	5.6
41	DT	34	VAL	5.6
29	BH	113	SER	5.6
53	B5	172	ILE	5.6
7	CG	73	VAL	5.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
40	DS	92	ARG	5.6
13	CM	2	ALA	5.6
53	B5	82	GLU	5.6
30	DI	91	GLY	5.6
16	CP	80	LYS	5.6
22	BA	2125	G	5.6
22	DA	2168	G	5.6
8	AH	2	SER	5.6
8	CH	2	SER	5.6
19	CS	48	THR	5.6
30	DI	112	THR	5.6
30	DI	35	ILE	5.6
42	DU	77	THR	5.6
22	DA	1084	A	5.6
30	BI	68	THR	5.6
42	BU	55	PRO	5.6
53	B5	121	MET	5.6
33	DL	144	GLU	5.5
13	CM	106	ALA	5.5
30	DI	20	PRO	5.5
41	DT	15	HIS	5.5
53	B5	61	GLY	5.5
53	B5	144	GLY	5.5
13	CM	47	GLU	5.5
22	DA	1171	G	5.5
53	B5	41	THR	5.5
1	CA	209	U	5.5
30	DI	138	LEU	5.5
41	DT	70	HIS	5.5
13	CM	79	ARG	5.5
29	BH	123	ARG	5.5
7	CG	18	PHE	5.5
9	CI	125	PRO	5.5
30	DI	43	ASN	5.5
53	B5	212	SER	5.5
22	DA	2175	C	5.5
7	CG	134	ALA	5.5
22	BA	2119	A	5.5
14	CN	29	ALA	5.4
7	CG	91	VAL	5.4
10	CJ	10	LEU	5.4
2	CB	130	THR	5.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
27	DF	152	LEU	5.4
29	BH	115	VAL	5.4
51	D3	57	LEU	5.4
42	DU	48	PRO	5.4
53	B5	65	LEU	5.4
53	B5	187	ALA	5.4
53	B5	38	PHE	5.4
42	DU	36	VAL	5.4
21	AU	38	TYR	5.4
22	BA	138	U	5.4
28	DG	80	THR	5.4
13	CM	52	GLN	5.4
17	AQ	83	VAL	5.4
29	BH	112	LYS	5.4
29	DH	79	THR	5.4
13	CM	62	LYS	5.4
14	CN	54	ASP	5.4
27	DF	51	ASP	5.4
28	DG	43	VAL	5.4
12	CL	124	ALA	5.4
13	CM	19	LEU	5.4
52	D4	8	LYS	5.4
10	CJ	19	ASP	5.4
53	B5	137	LEU	5.4
30	BI	55	ILE	5.3
30	BI	14	ALA	5.3
19	CS	76	PRO	5.3
27	DF	22	TYR	5.3
22	DA	2125	G	5.3
27	DF	26	MET	5.3
7	CG	53	ARG	5.3
22	BA	1065	U	5.3
9	CI	89	GLU	5.3
46	DY	36	GLN	5.3
27	DF	29	PRO	5.3
14	CN	45	VAL	5.3
25	DD	60	VAL	5.3
53	B5	164	PHE	5.3
41	DT	76	ARG	5.3
19	CS	44	MET	5.3
1	CA	1026	G	5.3
22	BA	2133	G	5.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
19	AS	49	ILE	5.2
7	CG	79	ARG	5.2
32	DK	111	LYS	5.2
14	CN	60	GLN	5.2
10	CJ	72	ARG	5.2
10	CJ	81	GLU	5.2
13	CM	12	HIS	5.2
15	AO	89	ARG	5.2
28	DG	103	ILE	5.2
30	DI	10	LYS	5.2
30	DI	17	MET	5.2
22	BA	2186	G	5.2
30	BI	84	ALA	5.2
42	DU	71	ALA	5.2
53	B5	79	ALA	5.2
22	DA	1090	A	5.2
29	BH	132	PHE	5.2
13	CM	55	THR	5.2
19	CS	17	LYS	5.2
29	BH	83	LYS	5.2
14	CN	47	LYS	5.2
22	DA	896	A	5.2
22	BA	1094	U	5.2
27	DF	80	ARG	5.2
7	CG	59	LEU	5.1
13	CM	86	TYR	5.1
27	BF	80	ARG	5.1
53	B5	192	ALA	5.1
27	DF	156	ILE	5.1
1	CA	1021	A	5.1
22	DA	1172	C	5.1
46	DY	59	GLU	5.1
53	B5	197	LEU	5.1
30	DI	128	SER	5.1
22	DA	2797	U	5.1
30	BI	96	ASP	5.1
53	B5	83	LYS	5.1
13	CM	31	LYS	5.1
28	DG	58	TYR	5.1
36	DO	99	TYR	5.1
53	B5	89	GLU	5.1
30	DI	12	GLN	5.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
29	BH	131	SER	5.1
30	DI	15	ALA	5.1
46	BY	63	ALA	5.1
53	B5	39	ASP	5.1
53	B5	169	THR	5.1
53	B5	50	ILE	5.1
1	CA	94	G	5.1
22	DA	2172	U	5.1
7	CG	152	ALA	5.0
22	BA	2106	U	5.0
7	CG	78	ARG	5.0
7	CG	85	TYR	5.0
22	DA	1094	U	5.0
33	DL	101	ILE	5.0
19	CS	68	GLY	5.0
30	DI	92	LYS	5.0
22	DA	2173	A	5.0
30	BI	23	PRO	5.0
22	BA	2146	C	5.0
29	BH	120	GLY	5.0
28	DG	167	GLU	5.0
1	CA	1242	G	5.0
22	DA	138	U	5.0
30	DI	36	MET	5.0
22	DA	2176	A	5.0
46	DY	28	LEU	5.0
53	B5	74	ARG	5.0
30	BI	78	VAL	5.0
53	B5	176	VAL	5.0
13	CM	75	MET	5.0
30	BI	92	LYS	5.0
10	CJ	73	LEU	5.0
52	D4	12	ARG	5.0
14	CN	11	VAL	5.0
22	DA	846	U	5.0
22	DA	2180	U	5.0
9	AI	20	PHE	4.9
42	DU	80	ALA	4.9
53	B5	188	ASP	4.9
14	CN	48	LEU	4.9
19	CS	13	LEU	4.9
1	AA	1534	A	4.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	DE	144	GLU	4.9
13	CM	51	GLY	4.9
30	DI	119	GLY	4.9
53	B5	222	SER	4.9
22	BA	2105	U	4.9
53	B5	53	ARG	4.9
30	DI	87	LYS	4.9
10	CJ	71	LEU	4.9
22	DA	1048	A	4.9
19	CS	59	PRO	4.9
53	B5	126	SER	4.9
22	DA	2402	U	4.9
26	DE	164	LEU	4.9
28	DG	26	ILE	4.9
53	B5	225	ILE	4.9
22	BA	2170	A	4.9
22	BA	1063	G	4.9
19	CS	41	PHE	4.9
7	CG	69	VAL	4.9
29	BH	148	ALA	4.9
13	CM	94	GLY	4.9
14	CN	35	ASN	4.9
49	D1	36	LEU	4.9
28	DG	168	VAL	4.9
27	DF	143	TYR	4.9
30	DI	63	ALA	4.9
41	DT	43	ILE	4.9
51	D3	61	CYS	4.9
29	BH	87	GLU	4.8
27	DF	10	ASP	4.8
22	DA	1174	U	4.8
53	B5	75	VAL	4.8
28	DG	45	HIS	4.8
13	CM	38	GLY	4.8
10	CJ	80	THR	4.8
13	CM	114	LYS	4.8
48	D0	57	LYS	4.8
3	CC	91	VAL	4.8
22	DA	1085	A	4.8
7	CG	148	ASN	4.8
13	CM	58	ASP	4.8
16	AP	81	ALA	4.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	DO	117	PHE	4.8
27	DF	65	PRO	4.8
1	AA	87	C	4.8
1	AA	844	G	4.8
22	BA	1171	G	4.8
13	CM	98	ARG	4.8
41	DT	8	LEU	4.8
42	DU	3	ALA	4.8
53	B5	24	ASP	4.8
53	B5	54	ARG	4.8
30	DI	24	VAL	4.8
2	CB	83	ALA	4.8
7	CG	72	THR	4.8
22	BA	896	A	4.8
48	D0	26	THR	4.8
14	CN	26	GLU	4.8
3	CC	79	LYS	4.7
9	AI	104	VAL	4.7
33	DL	89	VAL	4.7
30	DI	18	ALA	4.7
2	CB	67	ILE	4.7
30	BI	121	ASP	4.7
9	CI	129	LYS	4.7
22	DA	1870	C	4.7
53	B5	57	GLN	4.7
22	DA	12	U	4.7
2	CB	136	MET	4.7
29	BH	62	LEU	4.7
42	DU	63	ALA	4.7
2	CB	37	LYS	4.7
53	B5	136	GLY	4.7
3	CC	192	THR	4.7
53	B5	99	GLU	4.7
20	CT	9	LYS	4.7
9	CI	58	VAL	4.7
13	CM	65	VAL	4.7
27	DF	31	VAL	4.7
48	D0	54	VAL	4.7
53	B5	210	LEU	4.7
22	DA	546	U	4.7
11	AK	14	LYS	4.7
36	DO	24	THR	4.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
30	DI	86	ILE	4.7
30	DI	122	ILE	4.7
20	CT	3	ASN	4.7
51	D3	14	PHE	4.7
13	AM	4	ILE	4.7
33	DL	142	ILE	4.7
49	D1	52	ALA	4.7
53	B5	167	ASP	4.7
53	B5	195	ARG	4.7
13	CM	43	VAL	4.6
13	CM	56	LEU	4.6
40	DS	94	ASP	4.6
22	DA	1076	C	4.6
53	B5	130	ARG	4.6
27	DF	32	GLU	4.6
9	CI	126	GLN	4.6
50	B2	46	LYS	4.6
49	D1	53	LYS	4.6
53	B5	63	VAL	4.6
53	B5	73	VAL	4.6
34	DM	99	GLY	4.6
19	CS	75	ALA	4.6
36	DO	40	ILE	4.6
1	AA	85	U	4.6
36	DO	85	LYS	4.6
29	DH	15	LEU	4.6
30	BI	117	MET	4.6
41	DT	42	GLU	4.6
7	CG	15	ASP	4.6
19	CS	42	PRO	4.6
30	DI	70	VAL	4.6
43	DV	57	TYR	4.6
28	DG	48	ASN	4.6
29	BH	55	GLU	4.6
14	CN	34	VAL	4.6
50	D2	42	LEU	4.6
53	B5	211	ARG	4.6
36	DO	46	GLU	4.6
27	BF	74	VAL	4.6
27	DF	120	LYS	4.6
30	DI	81	LYS	4.6
7	CG	45	SER	4.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	DE	201	ALA	4.6
38	DQ	74	ILE	4.6
22	DA	1075	C	4.6
30	DI	31	GLN	4.6
10	AJ	74	VAL	4.5
28	DG	57	GLY	4.6
7	CG	116	MET	4.5
20	AT	68	HIS	4.5
22	DA	1064	C	4.5
2	AB	74	ARG	4.5
2	CB	139	ARG	4.5
29	BH	61	VAL	4.5
41	DT	55	VAL	4.5
13	AM	33	ILE	4.5
1	AA	1537	U	4.5
13	CM	72	GLU	4.5
3	CC	39	VAL	4.5
29	BH	64	ALA	4.5
53	B5	135	ARG	4.5
32	DK	110	GLU	4.5
52	D4	33	HIS	4.5
53	B5	124	VAL	4.5
30	DI	127	ARG	4.5
22	DA	885	C	4.5
7	CG	49	THR	4.5
22	DA	1074	G	4.5
13	CM	48	LEU	4.5
27	DF	106	ILE	4.5
40	DS	85	ILE	4.5
40	DS	68	ASP	4.5
39	DR	29	THR	4.5
22	DA	2109	U	4.5
22	BA	2108	A	4.4
22	DA	1606	C	4.4
30	BI	6	GLN	4.4
52	D4	9	LYS	4.4
1	CA	1540	U	4.4
28	DG	111	HIS	4.4
30	BI	71	THR	4.4
53	B5	145	THR	4.4
39	DR	50	GLY	4.4
19	CS	28	LYS	4.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
19	CS	43	ASN	4.4
22	DA	1103	A	4.4
30	DI	62	TYR	4.4
53	B5	200	HIS	4.4
2	CB	9	MET	4.4
22	BA	2137	U	4.4
44	DW	38	VAL	4.4
18	AR	51	TYR	4.4
36	DO	63	LYS	4.4
7	AG	4	ARG	4.4
13	CM	71	ARG	4.4
30	BI	91	GLY	4.4
10	CJ	102	LEU	4.4
53	B5	215	VAL	4.4
1	CA	983	A	4.4
13	CM	33	ILE	4.4
22	DA	2163	A	4.4
9	CI	90	TYR	4.4
27	DF	41	GLY	4.4
27	DF	173	PHE	4.4
48	D0	27	SER	4.4
22	DA	1083	U	4.4
19	CS	50	ALA	4.4
22	DA	1046	A	4.4
27	DF	176	PRO	4.4
42	DU	49	VAL	4.4
1	CA	1235	U	4.4
22	BA	2109	U	4.4
14	CN	24	ARG	4.4
27	DF	38	MET	4.4
30	BI	81	LYS	4.4
30	DI	42	PHE	4.3
53	B5	123	ALA	4.3
28	DG	56	ASP	4.3
2	AB	131	LYS	4.3
22	DA	2167	U	4.3
32	DK	89	ASN	4.3
7	CG	109	ARG	4.3
22	BA	1172	C	4.3
4	CD	36	GLN	4.3
30	BI	34	ASN	4.3
27	DF	153	ASP	4.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	CB	129	LEU	4.3
33	DL	62	PRO	4.3
7	CG	43	VAL	4.3
22	DA	1086	A	4.3
22	DA	1535	A	4.3
53	B5	28	ARG	4.3
30	DI	101	ILE	4.3
22	DA	1087	G	4.3
30	DI	50	GLU	4.3
13	CM	29	ARG	4.3
13	CM	4	ILE	4.3
30	BI	41	ALA	4.3
27	DF	157	THR	4.3
2	CB	34	ALA	4.3
53	B5	196	ALA	4.3
7	CG	80	VAL	4.3
30	BI	48	SER	4.3
2	CB	138	THR	4.3
30	DI	7	ALA	4.3
19	CS	12	ASP	4.3
29	BH	94	ILE	4.3
53	B5	101	ILE	4.3
19	AS	39	THR	4.3
52	D4	29	ALA	4.3
19	AS	31	LEU	4.3
27	DF	60	ILE	4.3
34	DM	136	MET	4.2
2	CB	22	TYR	4.2
2	CB	35	ARG	4.2
10	CJ	89	ARG	4.2
24	DC	49	ILE	4.2
53	B5	103	LYS	4.2
22	BA	2151	U	4.2
9	CI	124	ARG	4.2
33	DL	80	SER	4.2
43	DV	32	GLY	4.2
30	DI	39	CYS	4.2
10	CJ	7	ARG	4.2
30	BI	15	ALA	4.2
1	CA	1305	G	4.2
7	CG	87	VAL	4.2
26	DE	28	VAL	4.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
39	DR	96	VAL	4.2
37	DP	111	LYS	4.2
29	BH	67	ALA	4.2
29	DH	119	ASN	4.2
22	DA	2107	G	4.2
16	AP	22	ALA	4.2
2	CB	132	LYS	4.2
17	CQ	50	ASN	4.2
53	B5	203	GLU	4.2
53	B5	204	GLY	4.2
42	DU	79	LYS	4.2
27	DF	89	VAL	4.2
49	D1	47	VAL	4.2
7	CG	51	ALA	4.2
37	DP	84	ILE	4.2
22	BA	1066	U	4.2
28	DG	150	ALA	4.1
30	BI	83	ALA	4.1
42	DU	88	GLU	4.1
19	CS	25	SER	4.1
1	CA	211	G	4.1
39	DR	75	VAL	4.1
10	CJ	8	ILE	4.1
17	CQ	5	ILE	4.1
27	DF	151	GLY	4.1
3	CC	42	TYR	4.1
21	CU	38	TYR	4.1
13	CM	87	ARG	4.1
27	DF	102	ARG	4.1
19	CS	64	ASP	4.1
22	DA	1049	C	4.1
33	DL	78	ARG	4.1
1	AA	79	G	4.1
22	DA	2121	G	4.1
28	DG	10	VAL	4.1
19	AS	32	ARG	4.1
28	DG	86	LYS	4.1
44	DW	32	LEU	4.1
4	AD	36	GLN	4.1
7	CG	86	GLN	4.1
9	CI	32	GLN	4.1
22	DA	1095	A	4.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
13	CM	70	ARG	4.1
19	AS	74	PHE	4.1
7	CG	50	LEU	4.1
30	BI	26	PRO	4.1
26	DE	33	VAL	4.1
13	CM	17	ILE	4.1
22	DA	2307	G	4.1
9	AI	21	ILE	4.1
22	DA	2119	A	4.1
28	DG	59	ALA	4.1
37	DP	91	ALA	4.1
46	DY	4	LYS	4.1
30	BI	142	ASP	4.0
49	D1	48	ILE	4.0
27	DF	148	ARG	4.0
22	DA	884	U	4.0
7	CG	103	TRP	4.0
22	BA	2309	A	4.0
22	DA	2123	G	4.0
1	CA	999	C	4.0
40	DS	3	THR	4.0
50	D2	33	ARG	4.0
13	CM	61	ALA	4.0
4	AD	25	VAL	4.0
33	DL	106	GLU	4.0
53	B5	175	PRO	4.0
13	CM	16	VAL	4.0
35	DN	76	VAL	4.0
42	DU	13	VAL	4.0
46	DY	56	LEU	4.0
14	CN	2	ALA	4.0
30	DI	84	ALA	4.0
30	DI	45	LYS	4.0
30	BI	56	PRO	4.0
46	DY	37	LEU	4.0
2	AB	139	ARG	4.0
10	CJ	75	ASP	4.0
27	DF	40	VAL	4.0
27	DF	149	VAL	4.0
28	DG	151	TYR	4.0
22	DA	2165	C	4.0
22	BA	139	U	4.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
13	AM	115	PRO	4.0
52	D4	26	ILE	4.0
53	B5	193	PHE	4.0
1	CA	207	C	4.0
7	CG	84	THR	4.0
29	DH	140	ALA	4.0
7	CG	76	LYS	4.0
35	DN	29	VAL	4.0
53	B5	220	GLY	4.0
52	D4	1	MET	4.0
10	CJ	92	LEU	3.9
32	DK	112	PHE	3.9
6	AF	95	ALA	3.9
29	DH	74	ALA	3.9
22	BA	884	U	3.9
27	DF	158	THR	3.9
4	AD	28	ILE	3.9
26	DE	126	VAL	3.9
27	DF	111	ILE	3.9
30	DI	134	ARG	3.9
9	CI	20	PHE	3.9
49	D1	34	LEU	3.9
13	CM	24	GLY	3.9
33	DL	70	LYS	3.9
53	B5	133	GLY	3.9
22	DA	1407	G	3.9
33	DL	108	ALA	3.9
17	CQ	23	VAL	3.9
28	DG	9	VAL	3.9
1	AA	81	A	3.9
7	CG	137	LYS	3.9
42	DU	47	LYS	3.9
53	B5	49	GLY	3.9
9	CI	7	TYR	3.9
14	CN	12	LYS	3.9
14	CN	23	LYS	3.9
14	CN	50	THR	3.9
28	DG	27	LYS	3.9
30	BI	95	LYS	3.9
53	B5	102	GLN	3.9
46	DY	14	LEU	3.9
53	B5	184	GLU	3.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
14	CN	44	ALA	3.9
7	CG	141	VAL	3.9
28	DG	112	PRO	3.9
29	DH	54	LEU	3.9
1	AA	1492	A	3.9
30	BI	17	MET	3.9
30	DI	125	MET	3.9
3	CC	77	ILE	3.9
27	DF	27	GLN	3.9
30	DI	123	GLU	3.9
10	CJ	90	LEU	3.9
13	AM	63	PHE	3.9
33	DL	49	GLY	3.9
33	DL	82	LEU	3.9
33	DL	121	THR	3.9
10	CJ	20	GLN	3.9
26	DE	143	LEU	3.9
42	DU	19	LYS	3.9
22	DA	2127	G	3.9
22	DA	2157	G	3.9
10	CJ	45	ARG	3.9
6	AF	92	THR	3.9
28	DG	84	THR	3.9
41	DT	60	THR	3.9
14	CN	10	GLU	3.9
10	AJ	75	ASP	3.8
28	DG	77	ILE	3.8
2	AB	132	LYS	3.8
10	CJ	34	ALA	3.8
13	CM	36	ALA	3.8
26	DE	17	THR	3.8
29	BH	109	GLU	3.8
43	DV	74	ALA	3.8
22	DA	653	U	3.8
33	DL	132	ARG	3.8
42	BU	54	GLN	3.8
22	DA	277	G	3.8
10	CJ	27	GLU	3.8
19	AS	55	ARG	3.8
30	BI	120	ALA	3.8
46	DY	7	ARG	3.8
3	CC	158	GLY	3.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
29	DH	130	VAL	3.8
42	DU	14	LEU	3.8
29	BH	149	GLU	3.8
13	AM	5	ALA	3.8
30	DI	65	ARG	3.8
7	CG	8	GLY	3.8
10	CJ	35	GLN	3.8
9	CI	127	PHE	3.8
17	CQ	53	CYS	3.8
27	DF	175	PHE	3.8
12	CL	25	GLU	3.8
19	AS	3	ARG	3.8
22	DA	1173	U	3.8
29	BH	142	VAL	3.8
41	DT	74	ILE	3.8
51	D3	58	VAL	3.8
22	DA	1104	C	3.8
30	DI	102	SER	3.8
42	DU	29	LEU	3.8
48	D0	34	SER	3.8
2	CB	225	ARG	3.8
1	AA	82	G	3.8
13	AM	31	LYS	3.8
13	CM	103	LYS	3.8
2	AB	221	VAL	3.8
27	DF	174	ASP	3.8
30	DI	94	ASN	3.8
42	BU	53	ASN	3.8
52	D4	20	ASP	3.8
11	CK	126	LYS	3.8
36	DO	92	PHE	3.8
22	DA	878	A	3.8
27	DF	45	ALA	3.8
41	DT	75	GLY	3.8
21	AU	23	CYS	3.8
2	AB	88	ASP	3.8
7	CG	17	LYS	3.8
19	CS	63	THR	3.8
30	DI	30	GLN	3.8
17	AQ	5	ILE	3.8
20	CT	71	LYS	3.7
22	DA	139	U	3.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	DA	895	U	3.7
27	DF	12	VAL	3.8
46	DY	54	LYS	3.7
11	CK	43	GLY	3.7
22	DA	1106	G	3.7
9	AI	17	ALA	3.7
9	AI	32	GLN	3.7
13	AM	114	LYS	3.7
37	DP	92	VAL	3.7
50	D2	46	LYS	3.7
22	DA	2181	U	3.7
39	DR	26	ASP	3.7
30	BI	118	THR	3.7
46	DY	16	THR	3.7
7	CG	83	SER	3.7
22	DA	1063	G	3.7
14	CN	30	ILE	3.7
33	DL	79	LEU	3.7
36	DO	26	LEU	3.7
17	CQ	6	ARG	3.7
28	DG	40	ALA	3.7
22	DA	343	C	3.7
22	DA	1044	C	3.7
41	DT	47	VAL	3.7
1	CA	844	G	3.7
22	BA	2128	G	3.7
27	DF	117	LEU	3.7
27	DF	142	ASP	3.7
53	B5	43	GLU	3.7
13	CM	108	THR	3.7
19	AS	56	GLN	3.7
13	CM	115	PRO	3.7
43	DV	94	ALA	3.7
13	AM	19	LEU	3.7
37	DP	110	ILE	3.7
22	DA	1058	U	3.7
30	DI	51	LYS	3.7
28	DG	20	ASN	3.7
14	CN	57	PRO	3.7
36	DO	51	ALA	3.7
42	BU	51	ALA	3.7
53	B5	22	THR	3.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	CB	152	LYS	3.7
10	CJ	26	VAL	3.7
17	CQ	8	LEU	3.7
29	BH	122	LEU	3.7
42	BU	52	LEU	3.7
22	DA	2118	U	3.7
22	DA	2305	U	3.7
22	DA	2903	U	3.7
1	CA	79	G	3.7
1	CA	1006	G	3.7
2	CB	36	ASN	3.7
22	DA	2112	G	3.7
45	DX	50	ARG	3.7
26	DE	12	LEU	3.7
29	DH	58	LEU	3.7
27	DF	95	ARG	3.7
30	BI	39	CYS	3.7
45	DX	11	ARG	3.7
2	AB	226	SER	3.7
28	DG	102	VAL	3.7
22	DA	1211	C	3.7
29	DH	123	ARG	3.7
33	DL	87	GLY	3.6
53	B5	125	GLY	3.6
16	CP	39	PHE	3.6
16	CP	47	GLU	3.6
1	CA	1271	A	3.6
10	CJ	23	ALA	3.6
30	DI	44	ALA	3.6
27	DF	91	LEU	3.6
30	BI	10	LYS	3.6
36	DO	56	LYS	3.6
27	DF	164	GLU	3.6
46	DY	24	GLU	3.6
9	CI	39	PHE	3.6
27	DF	172	ALA	3.6
20	AT	4	ILE	3.6
22	DA	613	A	3.6
30	BI	98	VAL	3.6
7	CG	5	ARG	3.6
36	DO	22	GLY	3.6
1	CA	950	U	3.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
53	B5	205	ALA	3.6
13	CM	101	ARG	3.6
2	CB	226	SER	3.6
13	AM	3	ARG	3.6
21	AU	7	ARG	3.6
30	DI	13	VAL	3.6
22	DA	877	A	3.6
30	DI	111	GLN	3.6
22	DA	331	C	3.6
27	DF	131	GLY	3.6
35	DN	28	LEU	3.6
28	DG	104	ASN	3.6
53	B5	120	VAL	3.6
1	CA	82	G	3.6
53	B5	51	ASP	3.6
9	CI	117	GLY	3.6
13	CM	73	ILE	3.6
26	DE	103	GLY	3.6
53	B5	88	GLU	3.6
22	DA	2110	G	3.6
13	CM	44	LYS	3.6
28	DG	21	GLY	3.6
21	AU	9	ASN	3.6
1	CA	988	G	3.6
30	DI	100	LYS	3.6
49	D1	38	LYS	3.6
19	CS	47	LEU	3.6
52	D4	16	ILE	3.6
29	BH	66	ASN	3.6
30	DI	105	GLN	3.6
22	DA	1105	U	3.5
24	DC	242	LYS	3.5
2	AB	134	ALA	3.5
29	BH	84	ALA	3.5
13	CM	9	ILE	3.5
35	DN	63	ARG	3.5
42	DU	5	ILE	3.5
22	BA	1067	A	3.5
17	AQ	4	LYS	3.5
22	BA	546	U	3.5
22	DA	1043	C	3.5
26	DE	2	GLU	3.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
50	D2	1	MET	3.5
7	CG	132	GLY	3.5
44	DW	25	ARG	3.5
28	DG	17	VAL	3.5
1	CA	1004	A	3.5
22	BA	1847	A	3.5
1	CA	1007	U	3.5
22	BA	1925	C	3.5
27	BF	76	GLY	3.5
42	DU	90	GLY	3.5
13	CM	89	LEU	3.5
6	AF	36	ILE	3.5
29	BH	59	ALA	3.5
13	AM	25	VAL	3.5
29	DH	61	VAL	3.5
33	DL	81	ASP	3.5
7	CG	131	LYS	3.5
13	CM	105	ASN	3.5
1	CA	1296	C	3.5
3	CC	146	ALA	3.5
14	AN	21	PHE	3.5
27	DF	88	LYS	3.5
46	DY	49	ASP	3.5
30	BI	20	PRO	3.5
9	CI	4	ASN	3.5
27	DF	37	ASN	3.5
30	DI	19	ASN	3.5
19	CS	37	ARG	3.5
27	BF	72	LYS	3.5
28	DG	176	LYS	3.5
52	D4	15	LYS	3.5
30	DI	64	ASP	3.5
1	CA	1023	U	3.5
26	DE	129	PRO	3.5
19	CS	14	HIS	3.5
14	AN	55	SER	3.5
27	DF	144	ASP	3.5
19	AS	9	PRO	3.5
42	DU	32	GLY	3.5
7	CG	123	GLU	3.5
9	AI	90	TYR	3.5
14	CN	22	ALA	3.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
41	DT	87	LEU	3.5
25	DD	55	LYS	3.4
19	AS	33	THR	3.4
30	DI	106	LEU	3.4
30	DI	108	GLU	3.4
30	BI	104	ALA	3.4
1	AA	845	A	3.4
26	DE	64	GLY	3.4
22	BA	277	G	3.4
22	BA	1093	G	3.4
22	DA	2308	G	3.4
36	DO	21	LEU	3.4
41	DT	92	ASN	3.4
42	DU	40	ASN	3.4
44	BW	10	THR	3.4
17	CQ	21	ILE	3.4
19	CS	40	ILE	3.4
28	DG	92	VAL	3.4
30	BI	140	VAL	3.4
34	DM	80	VAL	3.4
9	CI	120	LYS	3.4
30	BI	38	PHE	3.4
33	DL	13	LYS	3.4
33	DL	66	PHE	3.4
46	DY	19	LEU	3.4
13	CM	77	ILE	3.4
36	DO	113	ALA	3.4
29	DH	139	PHE	3.4
1	CA	1320	C	3.4
28	DG	54	PRO	3.4
30	DI	117	MET	3.4
22	BA	2885	G	3.4
7	CG	70	ARG	3.4
22	DA	2300	C	3.4
30	BI	138	LEU	3.4
33	DL	61	LEU	3.4
44	DW	59	LEU	3.4
27	BF	79	ILE	3.4
29	BH	73	ASN	3.4
37	DP	20	PHE	3.4
45	DX	18	ARG	3.4
30	BI	16	GLY	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
53	B5	185	LYS	3.4
6	CF	39	LEU	3.4
3	CC	196	ILE	3.4
30	BI	49	ILE	3.4
42	DU	53	ASN	3.4
53	B5	58	ASN	3.4
27	DF	170	LEU	3.4
40	DS	19	LEU	3.4
1	CA	1028	C	3.4
22	DA	1045	C	3.4
26	DE	21	ARG	3.4
27	DF	133	ARG	3.4
46	DY	30	MET	3.4
46	DY	63	ALA	3.4
47	DZ	48	ILE	3.4
7	AG	80	VAL	3.4
42	BU	56	GLY	3.4
7	CG	122	ASN	3.4
14	CN	42	TRP	3.4
22	BA	1175	A	3.4
22	DA	1729	U	3.4
27	DF	66	LEU	3.4
1	CA	1317	C	3.4
9	CI	44	ALA	3.4
22	BA	1087	G	3.4
26	DE	128	ALA	3.4
30	DI	27	ALA	3.4
41	DT	85	VAL	3.4
43	DV	67	GLY	3.4
9	CI	33	ARG	3.3
1	AA	88	U	3.3
33	DL	3	LEU	3.3
10	CJ	41	PRO	3.3
25	DD	87	GLY	3.3
37	DP	35	GLY	3.3
1	AA	1031	C	3.3
22	DA	1107	G	3.3
43	DV	56	PHE	3.3
9	CI	37	GLN	3.3
29	DH	6	LEU	3.3
2	CB	33	GLY	3.3
49	D1	18	GLY	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
50	D2	22	MET	3.3
22	DA	1072	C	3.3
29	BH	82	SER	3.3
39	DR	66	HIS	3.3
40	DS	110	ARG	3.3
22	DA	883	G	3.3
30	DI	97	LYS	3.3
43	DV	41	GLU	3.3
29	DH	12	LEU	3.3
1	CA	1274	A	3.3
13	CM	40	ALA	3.3
22	DA	345	A	3.3
22	DA	1069	A	3.3
22	DA	1089	A	3.3
53	B5	221	PRO	3.3
7	CG	143	ARG	3.3
53	B5	191	ARG	3.3
22	DA	1170	C	3.3
29	DH	135	HIS	3.3
9	CI	5	GLN	3.3
27	DF	36	LEU	3.3
24	DC	47	GLY	3.3
30	DI	33	VAL	3.3
22	BA	892	A	3.3
22	DA	882	G	3.3
38	DQ	2	ALA	3.3
53	B5	150	ILE	3.3
44	DW	23	VAL	3.3
19	CS	38	SER	3.3
45	DX	35	SER	3.3
27	DF	69	LYS	3.3
40	DS	69	LEU	3.3
22	BA	2402	U	3.3
22	DA	1460	U	3.3
53	B5	129	GLY	3.3
3	CC	71	ALA	3.3
10	AJ	36	VAL	3.3
20	CT	41	ALA	3.3
25	DD	133	THR	3.3
29	BH	63	ALA	3.3
29	BH	139	PHE	3.3
39	DR	99	THR	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	DA	1071	G	3.3
22	DA	1179	G	3.3
36	DO	60	GLU	3.3
1	CA	1027	C	3.3
2	CB	213	TYR	3.3
36	DO	62	LEU	3.3
9	AI	79	ILE	3.3
5	CE	151	GLU	3.3
13	CM	37	ALA	3.3
39	DR	63	VAL	3.3
11	AK	111	THR	3.3
22	DA	2116	G	3.3
27	BF	78	LYS	3.3
13	CM	54	ASP	3.3
20	CT	24	ARG	3.3
14	CN	58	SER	3.3
18	CR	74	HIS	3.3
53	B5	56	ASP	3.3
12	AL	25	GLU	3.3
22	DA	2106	U	3.3
30	DI	49	ILE	3.3
53	B5	23	ILE	3.3
14	AN	36	ALA	3.3
38	DQ	118	ALA	3.3
7	CG	14	PRO	3.3
7	CG	23	LEU	3.3
28	DG	37	LEU	3.3
33	DL	19	LEU	3.3
1	CA	989	U	3.2
5	AE	31	PHE	3.2
26	DE	23	PHE	3.2
22	DA	2310	C	3.2
28	DG	136	ALA	3.2
44	DW	78	LYS	3.2
53	B5	47	LYS	3.2
28	DG	170	ARG	3.2
3	CC	144	LEU	3.2
36	DO	93	ASP	3.2
13	CM	30	SER	3.2
17	CQ	20	SER	3.2
22	DA	914	G	3.2
3	CC	92	ALA	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	DA	2170	A	3.2
13	CM	96	PRO	3.2
39	DR	32	THR	3.2
29	BH	90	LEU	3.2
53	B5	163	GLU	3.2
30	BI	94	ASN	3.2
37	BP	2	SER	3.2
9	AI	19	VAL	3.2
10	CJ	36	VAL	3.2
26	DE	32	VAL	3.2
27	DF	17	MET	3.2
51	D3	52	LYS	3.2
13	CM	11	ASP	3.2
15	CO	25	THR	3.2
27	DF	50	LEU	3.2
33	DL	139	GLY	3.2
7	CG	42	ILE	3.2
26	DE	14	VAL	3.2
27	DF	13	VAL	3.2
36	DO	103	VAL	3.2
42	DU	76	ALA	3.2
49	D1	37	LYS	3.2
1	CA	1217	C	3.2
22	DA	2150	C	3.2
30	BI	119	GLY	3.2
25	DD	59	ARG	3.2
52	D4	23	ILE	3.2
9	CI	108	ALA	3.2
42	DU	28	VAL	3.2
39	DR	43	ASN	3.2
41	DT	35	ALA	3.2
48	D0	56	ALA	3.2
1	CA	206	C	3.2
7	CG	4	ARG	3.2
53	B5	186	LEU	3.2
1	CA	1019	A	3.2
22	DA	866	A	3.2
26	DE	131	THR	3.2
4	CD	27	ALA	3.2
11	AK	129	VAL	3.2
13	CM	25	VAL	3.2
18	AR	74	HIS	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	DK	14	SER	3.2
9	AI	41	ARG	3.2
27	DF	150	ARG	3.2
52	D4	35	GLN	3.2
9	CI	118	LEU	3.2
19	CS	16	LEU	3.2
27	DF	6	ASP	3.2
36	DO	106	LEU	3.2
7	CG	61	ALA	3.2
7	CG	139	GLU	3.2
29	DH	148	ALA	3.2
30	DI	104	ALA	3.2
34	DM	79	ALA	3.2
3	CC	127	ARG	3.2
36	DO	61	GLN	3.2
41	DT	71	GLY	3.2
22	DA	2306	C	3.2
27	DF	154	ILE	3.2
26	DE	11	ALA	3.2
41	DT	41	ALA	3.2
42	BU	48	PRO	3.2
1	AA	91	U	3.1
15	CO	89	ARG	3.1
44	DW	53	CYS	3.1
53	B5	71	LYS	3.1
27	DF	82	GLY	3.1
28	DG	82	GLY	3.1
30	BI	89	GLY	3.1
23	DB	117	G	3.1
28	DG	106	SER	3.1
43	DV	42	LEU	3.1
46	DY	10	SER	3.1
46	DY	13	GLU	3.1
10	CJ	30	LYS	3.1
30	BI	7	ALA	3.1
27	DF	93	GLY	3.1
49	D1	23	THR	3.1
36	DO	5	SER	3.1
7	CG	58	GLU	3.1
41	DT	1	MET	3.1
3	CC	156	ARG	3.1
10	CJ	16	ARG	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	DA	879	G	3.1
53	B5	178	LYS	3.1
6	AF	96	VAL	3.1
4	CD	24	GLY	3.1
22	DA	2667	C	3.1
30	BI	58	VAL	3.1
41	DT	72	GLN	3.1
21	AU	21	ARG	3.1
27	DF	83	TYR	3.1
1	CA	1441	A	3.1
25	DD	154	LYS	3.1
49	D1	32	GLU	3.1
51	D3	49	MET	3.1
1	CA	202	G	3.1
1	CA	4	U	3.1
9	CI	115	LYS	3.1
26	DE	200	LEU	3.1
30	DI	38	PHE	3.1
42	BU	50	PRO	3.1
41	BT	2	ILE	3.1
14	CN	8	ALA	3.1
17	CQ	78	VAL	3.1
33	DL	83	ALA	3.1
39	DR	33	VAL	3.1
1	CA	1033	G	3.1
22	DA	2128	G	3.1
39	DR	42	ALA	3.1
3	CC	85	GLU	3.1
7	AG	59	LEU	3.1
13	CM	76	SER	3.1
20	CT	39	ILE	3.1
10	CJ	33	GLY	3.1
10	CJ	98	VAL	3.1
13	CM	35	ALA	3.1
30	BI	33	VAL	3.1
35	DN	118	ARG	3.1
18	AR	68	LEU	3.1
22	DA	356	G	3.1
26	DE	118	LEU	3.1
27	DF	7	TYR	3.1
45	DX	17	ASN	3.1
4	AD	151	LYS	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
28	DG	110	SER	3.1
37	DP	85	SER	3.1
38	DQ	22	LYS	3.1
9	CI	16	ALA	3.1
30	DI	124	ALA	3.1
22	DA	892	A	3.1
23	DB	35	C	3.1
3	AC	168	TYR	3.1
9	CI	10	GLY	3.1
9	CI	40	GLY	3.1
38	DQ	37	GLN	3.1
43	DV	55	GLU	3.1
22	DA	1176	U	3.1
27	DF	55	ALA	3.1
30	DI	14	ALA	3.1
33	DL	50	PHE	3.1
42	DU	26	LYS	3.1
16	CP	17	TYR	3.1
28	DG	19	ILE	3.1
38	DQ	25	TYR	3.1
1	AA	1032	G	3.1
47	DZ	8	THR	3.1
27	DF	146	VAL	3.0
41	DT	16	VAL	3.0
49	D1	45	GLN	3.1
27	DF	14	LYS	3.0
18	AR	23	TYR	3.0
22	BA	1072	C	3.0
22	DA	2143	C	3.0
23	DB	118	C	3.0
28	DG	53	GLY	3.0
7	CG	2	PRO	3.0
42	DU	55	PRO	3.0
53	B5	21	TYR	3.0
7	CG	38	THR	3.0
34	DM	8	LYS	3.0
36	DO	14	ALA	3.0
44	DW	61	ALA	3.0
9	CI	103	PHE	3.0
31	DJ	47	HIS	3.0
38	DQ	23	GLY	3.0
1	CA	1314	C	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	BA	1100	C	3.0
22	DA	1100	C	3.0
36	DO	4	LYS	3.0
45	DX	31	PRO	3.0
13	AM	27	LYS	3.0
42	DU	43	LYS	3.0
10	CJ	94	ALA	3.0
14	CN	17	ALA	3.0
30	BI	76	ALA	3.0
36	DO	50	ALA	3.0
35	DN	98	LEU	3.0
44	DW	60	PHE	3.0
13	CM	88	GLY	3.0
22	DA	75	G	3.0
23	DB	21	G	3.0
15	CO	17	ARG	3.0
41	BT	69	ARG	3.0
22	DA	2602	A	3.0
35	DN	25	ALA	3.0
27	DF	162	SER	3.0
28	DG	74	SER	3.0
28	DG	134	LYS	3.0
44	DW	85	GLU	3.0
2	CB	40	ILE	3.0
22	BA	1068	G	3.0
48	D0	38	HIS	3.0
30	BI	62	TYR	3.0
26	DE	127	GLU	3.0
28	DG	42	GLU	3.0
53	B5	40	GLU	3.0
1	CA	1236	A	3.0
26	DE	124	PHE	3.0
27	DF	68	THR	3.0
28	DG	148	LEU	3.0
33	DL	114	GLY	3.0
30	DI	9	VAL	3.0
42	DU	33	LYS	3.0
22	DA	881	G	3.0
1	AA	4	U	3.0
1	CA	1035	A	3.0
19	CS	79	THR	3.0
21	AU	42	THR	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	BA	1090	A	3.0
41	DT	73	ARG	3.0
14	CN	31	ILE	3.0
20	CT	8	LYS	3.0
43	DV	34	LYS	3.0
51	D3	15	LYS	3.0
29	BH	11	ASN	3.0
28	DG	44	LYS	3.0
30	DI	72	LYS	3.0
42	DU	44	LYS	3.0
18	CR	20	GLU	3.0
27	BF	42	GLU	3.0
19	AS	81	ARG	2.9
20	AT	36	TYR	2.9
21	CU	35	ARG	2.9
22	BA	2585	U	2.9
7	CG	110	LYS	2.9
13	AM	85	CYS	2.9
22	DA	1091	G	2.9
39	DR	37	GLU	2.9
22	DA	1420	A	2.9
10	CJ	51	VAL	2.9
24	DC	172	VAL	2.9
7	CG	117	ALA	2.9
2	AB	128	LYS	2.9
13	CM	3	ARG	2.9
27	DF	119	ALA	2.9
25	DD	186	LEU	2.9
28	DG	133	LEU	2.9
52	D4	32	LYS	2.9
53	B5	202	PRO	2.9
22	DA	1053	C	2.9
22	DA	2177	C	2.9
22	DA	2341	G	2.9
27	BF	71	ARG	2.9
36	DO	88	LYS	2.9
40	DS	86	MET	2.9
48	D0	3	VAL	2.9
52	D4	7	VAL	2.9
53	B5	127	LYS	2.9
7	CG	39	ALA	2.9
20	CT	68	HIS	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
13	AM	92	ARG	2.9
13	CM	113	ARG	2.9
30	BI	82	LYS	2.9
22	BA	883	G	2.9
27	DF	87	CYS	2.9
38	DQ	38	ALA	2.9
51	D3	26	HIS	2.9
22	DA	1534	U	2.9
33	DL	58	TYR	2.9
49	D1	21	TYR	2.9
9	CI	31	ASN	2.9
42	DU	54	GLN	2.9
46	DY	38	GLN	2.9
21	CU	47	ARG	2.9
9	AI	67	VAL	2.9
9	AI	128	SER	2.9
17	CQ	59	VAL	2.9
30	DI	132	THR	2.9
7	CG	65	ALA	2.9
7	CG	150	ALA	2.9
53	B5	92	ALA	2.9
1	CA	1227	A	2.9
14	CN	19	LYS	2.9
20	CT	85	LYS	2.9
28	DG	6	LYS	2.9
28	DG	165	ALA	2.9
30	DI	16	GLY	2.9
30	DI	71	THR	2.9
37	DP	112	GLU	2.9
22	BA	1061	U	2.9
26	DE	165	HIS	2.9
22	BA	1098	A	2.9
22	DA	1112	G	2.9
23	DB	18	G	2.9
28	DG	30	ASN	2.9
25	DD	26	VAL	2.9
27	DF	165	GLU	2.9
1	CA	210	C	2.9
11	CK	42	LEU	2.9
42	DU	31	SER	2.9
42	DU	98	SER	2.9
51	D3	53	GLY	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	BA	1926	U	2.9
22	DA	280	U	2.9
30	BI	122	ILE	2.9
1	CA	1015	G	2.9
10	AJ	37	ARG	2.9
19	CS	81	ARG	2.9
24	DC	48	ARG	2.9
26	DE	102	ARG	2.9
44	DW	63	ALA	2.9
1	CA	984	C	2.9
19	CS	52	HIS	2.9
22	DA	2111	U	2.9
3	CC	206	GLU	2.9
10	CJ	78	GLU	2.9
3	CC	78	GLY	2.9
41	DT	53	VAL	2.9
11	AK	42	LEU	2.9
22	DA	1056	G	2.9
28	DG	13	ALA	2.9
33	DL	68	SER	2.8
22	DA	2796	U	2.8
30	DI	107	GLN	2.8
33	DL	117	THR	2.8
30	DI	141	GLU	2.8
49	D1	5	ILE	2.8
5	CE	109	GLY	2.8
6	CF	8	PHE	2.8
12	AL	14	ARG	2.8
30	BI	103	ARG	2.8
36	DO	90	VAL	2.8
14	CN	16	LEU	2.8
19	AS	15	LEU	2.8
20	CT	86	LEU	2.8
22	DA	344	A	2.8
33	DL	57	LEU	2.8
46	DY	33	ALA	2.8
47	DZ	29	LEU	2.8
7	CG	125	SER	2.8
13	CM	78	LYS	2.8
30	BI	30	GLN	2.8
1	CA	1214	C	2.8
22	BA	140	C	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	CB	133	GLU	2.8
9	AI	89	GLU	2.8
25	DD	126	ASN	2.8
25	DD	185	ASN	2.8
29	BH	145	ASN	2.8
50	D2	18	PHE	2.8
28	DG	46	ALA	2.8
37	DP	97	LEU	2.8
14	CN	69	ARG	2.8
22	DA	2630	G	2.8
32	DK	98	ARG	2.8
7	AG	6	VAL	2.8
40	DS	46	LEU	2.8
1	CA	1286	U	2.8
9	CI	30	ILE	2.8
29	DH	77	THR	2.8
11	AK	126	LYS	2.8
13	CM	13	LYS	2.8
14	CN	7	LYS	2.8
36	DO	114	GLY	2.8
28	DG	132	VAL	2.8
2	CB	74	ARG	2.8
22	BA	1729	U	2.8
26	DE	55	SER	2.8
42	DU	30	SER	2.8
22	DA	2860	A	2.8
30	DI	137	GLY	2.8
42	DU	41	LEU	2.8
7	CG	90	GLU	2.8
13	AM	47	GLU	2.8
19	AS	24	GLU	2.8
19	CS	65	GLU	2.8
24	DC	238	ARG	2.8
25	DD	132	ALA	2.8
29	BH	116	ARG	2.8
1	CA	208	U	2.8
1	CA	1126	U	2.8
26	DE	89	PRO	2.8
53	B5	91	GLY	2.8
7	CG	26	PHE	2.8
14	AN	33	ASP	2.8
22	DA	2171	A	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
25	DD	77	ARG	2.8
27	BF	83	TYR	2.8
43	DV	6	ALA	2.8
24	DC	249	GLY	2.8
45	DX	46	PHE	2.8
3	CC	195	VAL	2.8
10	AJ	98	VAL	2.8
14	CN	53	ARG	2.8
21	AU	35	ARG	2.8
39	DR	31	GLU	2.8
26	DE	156	ASN	2.8
27	DF	44	ILE	2.8
30	BI	59	ILE	2.8
19	CS	3	ARG	2.8
26	DE	88	ARG	2.8
34	DM	6	ARG	2.8
46	DY	5	GLU	2.8
19	AS	71	LEU	2.8
28	DG	50	LEU	2.8
35	DN	116	VAL	2.8
14	AN	20	TYR	2.8
51	D3	64	TYR	2.8
1	CA	845	A	2.7
1	CA	1321	U	2.7
1	AA	1026	G	2.7
1	CA	1003	G	2.7
45	DX	22	LEU	2.7
28	DG	25	THR	2.7
42	DU	2	ALA	2.7
43	DV	23	ALA	2.7
2	AB	27	MET	2.7
22	DA	544	C	2.7
9	AI	4	ASN	2.7
17	CQ	63	GLU	2.7
22	DA	405	U	2.7
7	AG	18	PHE	2.7
2	AB	57	LEU	2.7
29	DH	75	LEU	2.7
32	DK	35	VAL	2.7
42	DU	93	VAL	2.7
1	CA	1002	G	2.7
22	BA	141	G	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	BA	879	G	2.7
22	DA	880	G	2.7
39	DR	28	ALA	2.7
47	DZ	2	ALA	2.7
51	D3	27	ALA	2.7
5	AE	159	LYS	2.7
48	D0	23	THR	2.7
22	DA	2313	C	2.7
41	BT	92	ASN	2.7
46	DY	35	GLY	2.7
33	DL	115	GLU	2.7
22	DA	2147	A	2.7
27	DF	100	PHE	2.7
4	CD	46	PRO	2.7
21	AU	11	PRO	2.7
27	DF	169	LEU	2.7
9	CI	11	ARG	2.7
27	DF	107	ALA	2.7
36	DO	107	ALA	2.7
1	CA	1331	G	2.7
36	DO	80	GLU	2.7
2	AB	30	PHE	2.7
11	AK	113	VAL	2.7
14	CN	33	ASP	2.7
19	CS	21	LYS	2.7
26	DE	178	VAL	2.7
39	DR	20	VAL	2.7
41	DT	40	LYS	2.7
42	DU	81	ASP	2.7
53	B5	44	VAL	2.7
19	CS	32	ARG	2.7
16	AP	82	ALA	2.7
26	DE	190	ALA	2.7
7	CG	112	GLY	2.7
39	DR	19	THR	2.7
1	AA	1001	C	2.7
3	CC	14	ILE	2.7
9	CI	83	ILE	2.7
33	DL	73	ILE	2.7
41	DT	30	ILE	2.7
19	CS	58	VAL	2.7
42	DU	25	VAL	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	AB	65	GLY	2.7
7	CG	82	GLY	2.7
13	CM	5	ALA	2.7
39	DR	88	GLY	2.7
18	CR	51	TYR	2.7
1	CA	1008	U	2.7
22	DA	102	U	2.7
26	DE	150	THR	2.7
35	DN	97	ILE	2.7
27	DF	109	PRO	2.7
29	DH	144	VAL	2.7
1	CA	81	A	2.7
22	DA	1321	A	2.7
27	DF	75	ALA	2.7
27	DF	118	SER	2.7
22	DA	893	C	2.7
46	DY	45	GLN	2.7
6	CF	35	LYS	2.7
11	AK	43	GLY	2.7
36	DO	41	ALA	2.7
26	DE	10	SER	2.7
28	DG	164	TYR	2.7
29	BH	25	TYR	2.7
31	DJ	118	MET	2.7
22	BA	2192	U	2.7
16	CP	54	LEU	2.7
26	DE	24	ASN	2.7
53	B5	189	ASN	2.7
8	CH	90	ASP	2.7
44	DW	64	ASP	2.7
29	BH	89	LYS	2.7
49	D1	43	VAL	2.7
2	CB	149	GLY	2.7
37	DP	95	ALA	2.7
51	D3	65	ALA	2.7
33	DL	7	SER	2.6
1	AA	412	A	2.6
3	CC	157	LEU	2.6
28	DG	117	LEU	2.6
30	BI	24	VAL	2.6
52	D4	13	ASN	2.6
27	BF	41	GLY	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
53	B5	177	GLY	2.6
52	B4	12	ARG	2.6
2	CB	15	HIS	2.6
27	BF	77	PHE	2.6
7	CG	60	GLU	2.6
7	CG	74	GLU	2.6
22	DA	1059	G	2.6
34	DM	62	LYS	2.6
39	DR	49	ILE	2.6
9	AI	63	LEU	2.6
38	DQ	44	GLN	2.6
7	AG	69	VAL	2.6
30	BI	73	THR	2.6
35	DN	73	ASN	2.6
7	AG	88	PRO	2.6
1	CA	1001	C	2.6
30	BI	27	ALA	2.6
14	CN	21	PHE	2.6
9	AI	83	ILE	2.6
13	AM	17	ILE	2.6
27	DF	85	ILE	2.6
28	DG	24	ILE	2.6
28	DG	131	ILE	2.6
30	BI	86	ILE	2.6
22	BA	2193	G	2.6
22	DA	88	G	2.6
14	AN	18	ASP	2.6
30	DI	103	ARG	2.6
22	BA	2129	C	2.6
29	BH	99	ILE	2.6
40	DS	4	ILE	2.6
2	AB	117	LEU	2.6
39	DR	22	LEU	2.6
10	AJ	38	GLY	2.6
7	CG	71	PRO	2.6
41	DT	45	ALA	2.6
2	CB	30	PHE	2.6
19	AS	61	PHE	2.6
29	DH	91	PHE	2.6
1	CA	1132	C	2.6
10	CJ	15	HIS	2.6
1	CA	85	U	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	AB	35	ARG	2.6
10	AJ	71	LEU	2.6
22	DA	1468	U	2.6
29	DH	122	LEU	2.6
41	DT	50	LEU	2.6
2	AB	123	ASP	2.6
18	CR	40	VAL	2.6
30	DI	116	ASP	2.6
41	DT	80	TRP	2.6
25	DD	41	ALA	2.6
30	BI	63	ALA	2.6
40	DS	93	ALA	2.6
1	AA	1042	A	2.6
1	CA	1036	A	2.6
22	DA	141	G	2.6
26	DE	13	THR	2.6
7	CG	144	MET	2.6
22	DA	1092	C	2.6
25	DD	96	ILE	2.6
28	DG	35	ARG	2.6
29	DH	143	ILE	2.6
40	DS	103	ILE	2.6
12	CL	123	LYS	2.6
53	B5	19	LYS	2.6
2	CB	217	VAL	2.6
17	CQ	83	VAL	2.6
19	CS	62	VAL	2.6
30	BI	9	VAL	2.6
39	DR	34	GLU	2.6
41	DT	56	GLU	2.6
2	CB	91	PHE	2.6
13	CM	18	ALA	2.6
13	CM	112	PRO	2.6
1	CA	1275	A	2.6
22	DA	1408	G	2.6
46	DY	60	LYS	2.6
1	CA	1237	C	2.6
2	AB	187	VAL	2.6
37	DP	19	SER	2.6
41	DT	89	GLU	2.6
10	CJ	37	ARG	2.6
29	DH	10	ALA	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
29	DH	84	ALA	2.6
37	DP	109	ARG	2.6
46	BY	2	LYS	2.6
46	DY	48	ARG	2.6
44	DW	43	THR	2.6
52	D4	38	GLY	2.6
22	DA	291	G	2.6
10	CJ	91	ASP	2.6
29	BH	81	ALA	2.6
29	DH	47	PHE	2.6
36	DO	57	ALA	2.6
2	AB	29	PRO	2.6
2	AB	129	LEU	2.5
8	CH	3	MET	2.5
9	CI	57	MET	2.5
22	DA	1101	U	2.5
26	DE	199	MET	2.5
29	DH	137	GLU	2.5
1	CA	978	A	2.5
22	DA	2158	A	2.5
30	BI	139	VAL	2.5
51	D3	24	HIS	2.5
3	CC	107	ARG	2.5
36	DO	30	ARG	2.5
20	CT	45	ALA	2.5
20	CT	47	ALA	2.5
2	AB	67	ILE	2.5
27	DF	42	GLU	2.5
46	DY	62	GLY	2.5
13	CM	28	THR	2.5
29	BH	5	LEU	2.5
33	DL	85	VAL	2.5
1	CA	1209	C	2.5
42	DU	75	ALA	2.5
38	DQ	82	GLY	2.5
17	CQ	44	LEU	2.5
13	CM	110	LYS	2.5
20	CT	13	GLN	2.5
27	DF	81	GLN	2.5
40	DS	6	LYS	2.5
10	CJ	40	ILE	2.5
13	CM	93	ARG	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
35	DN	26	GLY	2.5
36	DO	9	ARG	2.5
41	DT	77	ARG	2.5
43	DV	89	ILE	2.5
51	D3	59	ILE	2.5
52	D4	36	ARG	2.5
1	AA	842	U	2.5
22	DA	646	U	2.5
29	BH	138	VAL	2.5
7	AG	151	PHE	2.5
12	CL	44	LYS	2.5
13	AM	35	ALA	2.5
27	DF	47	LYS	2.5
39	DR	103	ALA	2.5
41	DT	49	LYS	2.5
11	AK	19	GLY	2.5
36	DO	81	ARG	2.5
46	DY	47	ARG	2.5
10	CJ	6	ILE	2.5
14	CN	43	ASN	2.5
25	DD	27	ILE	2.5
35	DN	107	ASN	2.5
43	DV	49	ASN	2.5
46	BY	6	LEU	2.5
23	DB	20	G	2.5
43	DV	1	MET	2.5
6	CF	80	PHE	2.5
9	CI	91	ASP	2.5
27	DF	9	LYS	2.5
33	DL	107	PHE	2.5
2	CB	137	ARG	2.5
27	DF	171	ALA	2.5
28	DG	174	ALA	2.5
18	AR	32	TYR	2.5
38	DQ	30	ARG	2.5
1	CA	1218	C	2.5
25	DD	76	GLY	2.5
39	DR	101	ILE	2.5
30	BI	106	LEU	2.5
2	CB	107	VAL	2.5
9	AI	48	VAL	2.5
46	DY	1	MET	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	CA	1270	G	2.5
20	CT	43	ASP	2.5
22	BA	880	G	2.5
22	DA	548	G	2.5
29	BH	76	GLU	2.5
19	CS	77	THR	2.5
14	CN	99	ALA	2.5
21	AU	50	ALA	2.5
2	CB	182	PRO	2.5
5	AE	115	LEU	2.5
6	AF	54	LEU	2.5
17	CQ	61	ILE	2.5
17	CQ	75	LEU	2.5
22	DA	1533	C	2.5
24	DC	205	LEU	2.5
14	CN	6	MET	2.5
25	DD	209	ALA	2.5
42	DU	15	THR	2.5
46	DY	3	ALA	2.5
49	D1	46	HIS	2.5
34	DM	29	GLY	2.5
2	CB	128	LYS	2.5
10	AJ	25	ILE	2.5
20	AT	64	LYS	2.5
25	DD	56	LYS	2.5
29	DH	57	LYS	2.5
39	DR	24	LYS	2.5
42	DU	91	LYS	2.5
1	CA	995	C	2.5
14	CN	55	SER	2.5
22	DA	33	C	2.5
26	DE	179	SER	2.5
13	AM	105	ASN	2.5
14	CN	63	ARG	2.5
1	CA	80	A	2.5
46	DY	26	PHE	2.5
7	CG	81	GLY	2.5
24	DC	5	LYS	2.5
29	BH	126	GLY	2.5
48	D0	2	ALA	2.5
1	CA	987	G	2.5
1	CA	1455	G	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	CB	161	LEU	2.5
3	CC	162	ILE	2.5
9	AI	6	TYR	2.5
20	CT	36	TYR	2.5
22	DA	2801	G	2.5
6	CF	91	ARG	2.4
10	CJ	31	ARG	2.4
15	CO	26	GLU	2.4
22	DA	2129	C	2.4
41	DT	54	GLU	2.4
46	DY	40	SER	2.4
52	D4	30	GLU	2.4
1	CA	1492	A	2.4
24	DC	26	LYS	2.4
36	DO	3	LYS	2.4
43	DV	43	ASP	2.4
36	DO	38	GLN	2.4
41	DT	86	THR	2.4
7	CG	44	TYR	2.4
1	CA	841	C	2.4
22	DA	436	C	2.4
23	DB	19	C	2.4
30	BI	43	ASN	2.4
2	AB	18	HIS	2.4
22	DA	508	A	2.4
22	DA	1205	A	2.4
17	CQ	77	ARG	2.4
14	CN	46	LEU	2.4
29	DH	72	ILE	2.4
30	DI	37	GLU	2.4
40	DS	100	THR	2.4
46	DY	9	LYS	2.4
34	DM	27	SER	2.4
41	DT	10	VAL	2.4
23	DB	64	G	2.4
39	DR	1	MET	2.4
26	DE	9	GLN	2.4
27	BF	81	GLN	2.4
8	CH	130	ALA	2.4
27	DF	71	ARG	2.4
36	DO	105	ALA	2.4
4	AD	177	LYS	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	DA	1214	A	2.4
22	DA	1509	A	2.4
22	DA	2211	A	2.4
2	AB	213	TYR	2.4
10	CJ	32	THR	2.4
28	DG	171	THR	2.4
30	DI	26	PRO	2.4
31	DJ	74	TYR	2.4
27	DF	132	VAL	2.4
29	BH	20	ASN	2.4
35	DN	62	ASN	2.4
35	DN	93	GLY	2.4
22	DA	316	C	2.4
22	DA	897	C	2.4
38	DQ	59	GLN	2.4
2	AB	15	HIS	2.4
29	BH	4	ILE	2.4
6	AF	89	VAL	2.4
27	DF	74	VAL	2.4
3	CC	102	ASN	2.4
36	DO	19	GLN	2.4
40	DS	40	ASN	2.4
42	BU	46	GLN	2.4
33	DL	15	ALA	2.4
45	DX	30	LEU	2.4
3	AC	193	TYR	2.4
3	CC	37	PHE	2.4
6	CF	79	ARG	2.4
11	AK	13	ARG	2.4
27	DF	30	ARG	2.4
34	DM	64	TRP	2.4
42	BU	57	GLY	2.4
21	AU	24	GLU	2.4
53	B5	168	LYS	2.4
37	DP	13	MET	2.4
51	D3	28	ASN	2.4
13	CM	15	ALA	2.4
29	BH	111	ALA	2.4
3	CC	87	LEU	2.4
10	AJ	90	LEU	2.4
26	DE	180	LEU	2.4
3	CC	126	ARG	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
7	AG	56	LYS	2.4
24	DC	245	VAL	2.4
27	DF	99	PHE	2.4
30	BI	93	PRO	2.4
30	DI	113	LYS	2.4
33	DL	122	VAL	2.4
42	DU	83	VAL	2.4
33	DL	118	THR	2.4
26	DE	1	MET	2.4
3	CC	141	ALA	2.4
53	B5	159	ALA	2.4
7	CG	6	VAL	2.4
28	DG	4	VAL	2.4
28	DG	169	VAL	2.4
38	DQ	45	TYR	2.4
1	CA	467	U	2.4
1	CA	1224	U	2.4
1	CA	1307	U	2.4
22	DA	1734	G	2.4
30	BI	112	THR	2.4
1	CA	460	A	2.4
1	CA	1362	A	2.4
7	CG	115	SER	2.4
10	AJ	34	ALA	2.4
22	BA	1089	A	2.4
22	DA	1169	A	2.4
28	DG	38	ASN	2.4
36	DO	23	ALA	2.4
48	D0	39	LEU	2.4
22	BA	893	C	2.4
22	DA	228	C	2.4
25	DD	6	GLY	2.3
22	DA	2149	U	2.3
45	DX	78	TYR	2.3
28	DG	137	ASP	2.3
43	DV	45	ASP	2.3
21	AU	52	ALA	2.3
35	DN	30	ARG	2.3
37	BP	115	ASN	2.3
41	DT	69	ARG	2.3
49	D1	44	ARG	2.3
14	AN	26	GLU	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
19	AS	41	PHE	2.3
22	DA	2164	C	2.3
41	DT	31	VAL	2.3
50	D2	30	VAL	2.3
2	CB	88	ASP	2.3
13	CM	57	ARG	2.3
27	DF	115	ARG	2.3
30	BI	47	ASP	2.3
30	BI	65	ARG	2.3
27	DF	168	ALA	2.3
27	DF	57	LEU	2.3
22	DA	583	G	2.3
22	DA	1212	G	2.3
36	DO	87	ILE	2.3
1	CA	1493	A	2.3
22	DA	1111	A	2.3
22	DA	2108	A	2.3
27	DF	138	PHE	2.3
44	DW	73	GLY	2.3
14	CN	3	LYS	2.3
26	DE	90	GLN	2.3
26	DE	96	VAL	2.3
32	DK	53	LYS	2.3
1	CA	1212	U	2.3
20	CT	87	ALA	2.3
29	BH	65	ALA	2.3
4	AD	82	LEU	2.3
37	DP	114	LEU	2.3
14	CN	68	GLY	2.3
24	BC	237	GLY	2.3
33	DL	124	GLY	2.3
53	B5	209	PHE	2.3
1	CA	1241	G	2.3
22	BA	1062	G	2.3
22	DA	549	G	2.3
22	DA	619	G	2.3
15	CO	75	VAL	2.3
22	DA	1052	C	2.3
45	DX	20	HIS	2.3
1	CA	842	U	2.3
22	DA	2105	U	2.3
7	CG	129	GLU	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
41	DT	46	ALA	2.3
28	DG	36	THR	2.3
33	DL	5	THR	2.3
2	AB	32	PHE	2.3
7	CG	20	SER	2.3
28	DG	28	GLY	2.3
28	DG	31	GLY	2.3
39	DR	35	PHE	2.3
7	AG	78	ARG	2.3
2	CB	210	VAL	2.3
25	DD	125	TRP	2.3
39	DR	51	VAL	2.3
22	DA	603	A	2.3
22	DA	1042	G	2.3
13	CM	82	ASP	2.3
29	DH	149	GLU	2.3
49	D1	35	GLU	2.3
28	BG	177	LYS	2.3
34	DM	56	ALA	2.3
46	DY	32	ALA	2.3
9	AI	28	ILE	2.3
18	AR	21	ILE	2.3
20	CT	67	ILE	2.3
33	DL	77	ILE	2.3
33	DL	26	GLY	2.3
33	DL	102	GLY	2.3
21	AU	51	SER	2.3
1	CA	1287	A	2.3
10	CJ	11	LYS	2.3
10	CJ	66	GLU	2.3
22	DA	1730	C	2.3
22	DA	2178	C	2.3
36	DO	108	ASP	2.3
29	BH	26	ALA	2.3
30	BI	36	MET	2.3
3	CC	159	GLY	2.3
9	AI	39	PHE	2.3
13	AM	99	GLY	2.3
36	DO	25	ARG	2.3
31	DJ	119	PHE	2.3
51	D3	6	THR	2.3
13	AM	43	VAL	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
43	DV	58	SER	2.3
53	B5	201	LYS	2.3
14	CN	18	ASP	2.3
22	DA	2182	U	2.3
22	DA	2798	U	2.3
28	DG	12	PRO	2.3
29	DH	86	ASP	2.3
1	AA	1027	C	2.3
1	CA	101	A	2.3
22	DA	279	A	2.3
22	DA	2412	A	2.3
31	DJ	142	ILE	2.3
35	DN	113	ILE	2.3
35	DN	82	GLU	2.3
42	DU	37	GLU	2.3
3	CC	179	ARG	2.3
10	AJ	89	ARG	2.3
13	AM	109	ARG	2.3
22	DA	1542	U	2.3
20	CT	79	LEU	2.3
27	DF	116	GLY	2.3
38	DQ	73	GLY	2.3
43	DV	33	GLY	2.3
48	D0	49	TYR	2.3
19	CS	10	PHE	2.3
28	DG	88	GLN	2.3
28	DG	127	THR	2.2
30	BI	102	SER	2.2
14	CN	41	ARG	2.2
46	DY	29	ARG	2.2
2	CB	39	HIS	2.2
22	DA	1217	U	2.2
25	DD	84	LEU	2.2
31	DJ	97	PRO	2.2
15	CO	15	PHE	2.2
20	CT	12	ILE	2.2
41	DT	36	LYS	2.2
1	CA	1325	C	2.2
29	DH	132	PHE	2.2
10	CJ	24	GLU	2.2
13	CM	41	GLU	2.2
19	CS	73	GLU	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
25	DD	49	GLN	2.2
33	DL	86	GLU	2.2
22	BA	1088	A	2.2
28	DG	149	ARG	2.2
1	CA	1050	G	2.2
2	AB	20	THR	2.2
22	DA	1538	G	2.2
23	DB	2	G	2.2
2	AB	127	ASP	2.2
41	DT	32	LEU	2.2
44	DW	57	HIS	2.2
48	D0	53	LYS	2.2
19	AS	13	LEU	2.2
25	DD	47	ALA	2.2
25	DD	115	GLY	2.2
13	CM	81	MET	2.2
28	DG	141	ILE	2.2
7	AG	58	GLU	2.2
36	DO	84	GLU	2.2
43	DV	91	PHE	2.2
9	CI	67	VAL	2.2
19	AS	60	VAL	2.2
3	AC	86	LYS	2.2
20	CT	70	ASN	2.2
22	DA	1872	A	2.2
2	CB	159	ASP	2.2
36	DO	53	THR	2.2
7	CG	30	LEU	2.2
22	DA	1060	U	2.2
23	DB	16	G	2.2
26	DE	183	PHE	2.2
34	DM	105	MET	2.2
10	AJ	7	ARG	2.2
28	DG	157	TYR	2.2
39	DR	92	TRP	2.2
29	DH	110	VAL	2.2
29	DH	13	GLY	2.2
33	DL	130	GLY	2.2
20	CT	72	ALA	2.2
21	AU	10	GLU	2.2
40	DS	5	ALA	2.2
7	AG	79	ARG	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
42	DU	22	ARG	2.2
50	D2	14	ARG	2.2
2	AB	66	LYS	2.2
35	DN	94	TYR	2.2
29	DH	78	VAL	2.2
36	DO	54	VAL	2.2
2	CB	116	ASP	2.2
10	CJ	38	GLY	2.2
1	CA	1363	A	2.2
5	CE	149	SER	2.2
25	DD	201	LEU	2.2
27	DF	20	PHE	2.2
27	DF	121	SER	2.2
47	DZ	24	LEU	2.2
3	AC	64	ILE	2.2
7	CG	107	ALA	2.2
7	CG	121	ALA	2.2
18	CR	73	ARG	2.2
33	DL	103	ILE	2.2
36	DO	37	ALA	2.2
22	DA	1475	G	2.2
27	DF	97	TRP	2.2
29	BH	147	VAL	2.2
19	CS	46	GLY	2.2
22	DA	1167	C	2.2
44	DW	83	GLU	2.2
4	CD	47	ARG	2.2
6	AF	61	LEU	2.2
26	DE	157	LEU	2.2
36	DO	7	ARG	2.2
41	DT	59	ASN	2.2
14	AN	12	LYS	2.2
2	CB	164	ILE	2.2
38	DQ	101	PHE	2.2
10	CJ	44	THR	2.2
28	DG	129	THR	2.2
34	DM	24	THR	2.2
22	BA	654	A	2.2
47	DZ	9	GLN	2.2
19	AS	20	GLU	2.2
11	CK	13	ARG	2.2
13	CM	99	GLY	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	BA	882	G	2.2
22	DA	2162	G	2.2
16	CP	76	LYS	2.2
22	DA	11	C	2.2
22	DA	2146	C	2.2
2	AB	42	ASN	2.2
19	CS	5	LEU	2.2
19	CS	15	LEU	2.2
22	DA	1061	U	2.2
29	BH	75	LEU	2.2
7	CG	7	ILE	2.2
41	DT	83	ALA	2.2
53	B5	190	ILE	2.2
2	CB	154	MET	2.2
22	DA	2799	A	2.2
3	CC	80	LYS	2.2
4	AD	147	GLU	2.2
9	CI	112	GLU	2.2
41	DT	67	VAL	2.2
13	AM	107	ARG	2.2
11	AK	18	ASP	2.2
13	CM	42	ASP	2.2
2	CB	134	ALA	2.2
14	CN	73	PHE	2.2
41	DT	79	ASP	2.2
6	AF	6	ILE	2.2
11	AK	110	ILE	2.2
28	DG	73	ASN	2.2
36	DO	98	GLN	2.2
46	DY	25	GLN	2.2
48	D0	55	ILE	2.2
29	BH	125	THR	2.2
1	CA	1219	A	2.2
7	CG	89	VAL	2.2
18	AR	73	ARG	2.2
28	DG	29	LYS	2.2
36	DO	13	ARG	2.2
22	BA	613	A	2.2
22	BA	2191	A	2.2
22	DA	2800	A	2.2
40	DS	36	LEU	2.1
3	CC	160	ALA	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
13	AM	40	ALA	2.1
28	DG	22	GLN	2.1
9	CI	68	LYS	2.1
33	DL	141	LYS	2.1
6	AF	91	ARG	2.1
9	AI	97	GLU	2.1
18	CR	48	ARG	2.1
31	DJ	35	ARG	2.1
44	DW	71	VAL	2.1
45	DX	13	VAL	2.1
22	DA	101	A	2.1
22	DA	1347	A	2.1
23	DB	119	A	2.1
18	CR	21	ILE	2.1
27	DF	104	ILE	2.1
19	CS	20	GLU	2.1
24	BC	238	ARG	2.1
25	DD	46	ARG	2.1
20	AT	20	HIS	2.1
23	DB	54	G	2.1
13	CM	97	VAL	2.1
28	DG	90	VAL	2.1
41	DT	90	GLY	2.1
48	D0	35	GLY	2.1
5	CE	124	LEU	2.1
12	AL	15	LYS	2.1
25	DD	8	LYS	2.1
27	DF	161	LYS	2.1
45	DX	33	LEU	2.1
1	CA	1239	A	2.1
1	CA	1240	U	2.1
7	AG	7	ILE	2.1
20	AT	12	ILE	2.1
22	DA	2132	U	2.1
24	DC	2	ALA	2.1
50	D2	32	ALA	2.1
1	AA	841	C	2.1
1	CA	990	C	2.1
1	CA	1228	C	2.1
22	DA	275	C	2.1
31	DJ	92	MET	2.1
3	AC	66	VAL	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
13	AM	30	SER	2.1
29	BH	95	GLY	2.1
1	CA	1260	G	2.1
1	CA	1453	G	2.1
22	BA	1071	G	2.1
22	DA	329	G	2.1
22	DA	2668	G	2.1
44	DW	44	LYS	2.1
44	DW	58	THR	2.1
50	D2	2	LYS	2.1
12	CL	38	TYR	2.1
19	AS	5	LEU	2.1
15	AO	17	ARG	2.1
31	DJ	13	ARG	2.1
36	DO	20	GLU	2.1
53	B5	60	ARG	2.1
2	CB	151	ILE	2.1
23	DB	53	A	2.1
30	BI	77	ALA	2.1
1	AA	83	C	2.1
1	CA	1210	C	2.1
3	CC	81	GLY	2.1
7	AG	8	GLY	2.1
42	DU	70	VAL	2.1
45	DX	47	VAL	2.1
51	D3	21	GLY	2.1
13	CM	104	THR	2.1
2	AB	114	LEU	2.1
13	AM	80	LEU	2.1
14	AN	16	LEU	2.1
3	AC	101	ILE	2.1
20	CT	81	ALA	2.1
22	DA	1224	U	2.1
30	DI	109	ILE	2.1
33	DL	65	GLY	2.1
33	DL	88	GLY	2.1
34	DM	17	ASN	2.1
16	CP	2	VAL	2.1
9	AI	33	ARG	2.1
17	CQ	11	ARG	2.1
40	DS	101	SER	2.1
2	AB	130	THR	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
19	AS	77	THR	2.1
10	AJ	35	GLN	2.1
3	CC	207	ILE	2.1
26	DE	175	ILE	2.1
2	CB	131	LYS	2.1
22	BA	1179	G	2.1
22	DA	1311	G	2.1
22	DA	1731	G	2.1
25	DD	38	LYS	2.1
30	BI	72	LYS	2.1
34	DM	87	GLY	2.1
5	CE	152	MET	2.1
25	DD	1	MET	2.1
10	CJ	9	ARG	2.1
33	DL	8	PRO	2.1
39	DR	47	VAL	2.1
2	CB	23	TRP	2.1
2	CB	104	TRP	2.1
10	CJ	101	SER	2.1
49	D1	7	GLU	2.1
14	AN	51	LEU	2.1
19	AS	10	PHE	2.1
33	DL	125	LEU	2.1
4	AD	148	LYS	2.1
39	DR	18	GLN	2.1
41	DT	88	LYS	2.1
1	AA	5	U	2.1
1	AA	84	U	2.1
23	DB	22	U	2.1
36	DO	11	ALA	2.1
49	D1	9	ILE	2.1
3	AC	39	VAL	2.1
17	CQ	29	VAL	2.1
33	DL	119	PRO	2.1
38	DQ	34	VAL	2.1
42	DU	59	VAL	2.1
1	CA	87	C	2.1
1	CA	1145	A	2.1
9	CI	94	LEU	2.1
10	CJ	59	LYS	2.1
19	AS	16	LEU	2.1
19	AS	21	LYS	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
29	BH	93	SER	2.1
27	BF	113	ASP	2.1
1	AA	1017	U	2.1
5	CE	75	ALA	2.1
20	AT	87	ALA	2.1
22	DA	2833	U	2.1
21	AU	47	ARG	2.1
27	BF	116	GLY	2.1
35	DN	101	GLY	2.1
37	DP	9	GLU	2.1
1	CA	1276	G	2.1
25	DD	140	HIS	2.0
10	AJ	14	ASP	2.0
10	AJ	101	SER	2.0
22	BA	1069	A	2.0
26	DE	41	GLN	2.0
50	D2	31	LEU	2.0
13	CM	68	ASP	2.0
39	DR	102	SER	2.0
40	DS	109	ASP	2.0
2	CB	125	THR	2.0
22	DA	1082	U	2.0
25	DD	128	ARG	2.0
35	DN	111	ALA	2.0
44	DW	41	ARG	2.0
29	BH	71	LYS	2.0
36	DO	55	GLU	2.0
7	AG	141	VAL	2.0
21	AU	28	VAL	2.0
36	DO	97	PHE	2.0
38	DQ	71	GLN	2.0
1	AA	1002	G	2.0
1	CA	90	C	2.0
8	AH	54	ASP	2.0
22	DA	117	G	2.0
22	DA	180	G	2.0
22	DA	446	G	2.0
26	DE	191	ASP	2.0
30	BI	64	ASP	2.0
1	CA	461	A	2.0
1	CA	89	U	2.0
1	CA	1029	U	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	CC	89	LYS	2.0
7	CG	56	LYS	2.0
12	CL	62	GLU	2.0
22	BA	1060	U	2.0
45	DX	21	ALA	2.0
29	BH	124	THR	2.0
30	BI	45	LYS	2.0
36	DO	31	THR	2.0
44	DW	72	LYS	2.0
7	AG	64	VAL	2.0
9	CI	111	VAL	2.0
19	CS	9	PRO	2.0
40	DS	82	MET	2.0
9	CI	63	LEU	2.0
19	CS	36	ARG	2.0
21	AU	17	ARG	2.0
49	D1	6	ARG	2.0
50	D2	35	ARG	2.0
2	AB	167	ASP	2.0
27	DF	56	ASP	2.0
28	DG	114	ASP	2.0
29	DH	83	LYS	2.0
36	DO	2	ASP	2.0
1	CA	121	U	2.0
1	CA	979	C	2.0
1	CA	1301	U	2.0
36	DO	109	ALA	2.0
14	CN	101	TRP	2.0
22	DA	70	G	2.0
22	DA	2410	G	2.0
47	DZ	10	THR	2.0
38	DQ	39	VAL	2.0
6	AF	80	PHE	2.0
2	AB	141	LEU	2.0
9	CI	41	ARG	2.0
9	CI	119	ARG	2.0
21	CU	37	PHE	2.0
11	AK	82	LEU	2.0
39	DR	87	GLN	2.0
42	DU	27	ASN	2.0
12	CL	15	LYS	2.0
7	CG	140	ASP	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
17	CQ	38	ILE	2.0
27	DF	19	GLU	2.0
40	DS	9	HIS	2.0
41	BT	70	HIS	2.0
37	DP	42	ALA	2.0
1	CA	1121	U	2.0
1	CA	1220	G	2.0
1	CA	1300	G	2.0
19	AS	48	THR	2.0
22	BA	881	G	2.0
37	DP	31	TRP	2.0
22	DA	391	A	2.0
22	DA	505	A	2.0
22	DA	626	A	2.0
5	CE	147	MET	2.0
19	CS	61	PHE	2.0
20	CT	25	ARG	2.0
28	DG	49	THR	2.0
43	DV	92	VAL	2.0
37	DP	12	GLN	2.0
41	DT	68	LYS	2.0

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

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

6.3 Carbohydrates ⓘ

There are no carbohydrates in this entry.

6.4 Ligands ⓘ

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. LLDF column lists the quality of electron density of the group with respect to its neighbouring residues in protein, DNA or RNA chains. 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	LLDF	B-factors(Å ²)	Q<0.9
54	MG	AA	1668	1/1	0.72	0.90	26.43	54,54,54,54	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
54	MG	BA	3139	1/1	0.98	0.36	21.89	0,0,0,0	0
54	MG	BA	3178	1/1	0.91	0.47	21.31	27,27,27,27	0
54	MG	BA	3195	1/1	0.91	0.57	20.73	31,31,31,31	0
54	MG	BA	3042	1/1	0.89	0.34	19.16	2,2,2,2	0
54	MG	AA	1634	1/1	0.94	0.43	17.52	73,73,73,73	0
54	MG	DA	3028	1/1	0.60	1.16	14.08	104,104,104,104	0
54	MG	DA	3161	1/1	0.86	0.30	13.23	46,46,46,46	0
54	MG	AA	1669	1/1	0.71	0.29	12.48	45,45,45,45	0
54	MG	BA	3085	1/1	0.81	0.22	10.82	29,29,29,29	0
54	MG	DA	3113	1/1	0.68	0.57	10.81	72,72,72,72	0
54	MG	DA	3137	1/1	0.61	0.48	9.79	52,52,52,52	0
54	MG	DA	3003	1/1	0.48	0.63	9.60	101,101,101,101	0
54	MG	AA	1661	1/1	0.75	0.37	8.87	55,55,55,55	0
54	MG	BA	3137	1/1	0.88	0.36	8.82	46,46,46,46	0
54	MG	AA	1629	1/1	0.94	0.27	8.07	79,79,79,79	0
54	MG	DA	3116	1/1	0.84	0.32	7.48	72,72,72,72	0
54	MG	AA	1653	1/1	0.94	0.24	6.75	47,47,47,47	0
54	MG	BA	3075	1/1	0.89	0.22	6.48	35,35,35,35	0
54	MG	CA	1612	1/1	0.95	0.20	5.98	46,46,46,46	0
54	MG	DA	3027	1/1	0.76	0.33	5.93	97,97,97,97	0
54	MG	BA	3169	1/1	0.93	0.16	5.77	29,29,29,29	0
54	MG	BA	3049	1/1	0.72	0.17	5.70	50,50,50,50	0
54	MG	BA	3177	1/1	0.98	0.18	5.21	12,12,12,12	0
54	MG	DA	3072	1/1	0.79	0.29	5.12	86,86,86,86	0
54	MG	CA	1626	1/1	0.84	0.20	4.88	54,54,54,54	0
54	MG	DA	3093	1/1	0.68	0.36	4.83	94,94,94,94	0
54	MG	BA	3158	1/1	0.97	0.25	4.83	22,22,22,22	0
54	MG	AA	1621	1/1	0.98	0.17	4.62	19,19,19,19	0
54	MG	DA	3071	1/1	0.67	0.22	4.28	87,87,87,87	0
55	DOL	DA	3001	48/48	0.88	0.32	3.93	28,49,62,81	0
55	DOL	BA	3001	48/48	0.96	0.20	3.76	1,7,30,58	0
54	MG	DA	3110	1/1	0.92	0.24	3.14	39,39,39,39	0
54	MG	BA	3131	1/1	0.98	0.24	2.76	1,1,1,1	0
54	MG	BA	3107	1/1	0.97	0.19	2.74	0,0,0,0	0
54	MG	CA	1617	1/1	0.79	0.19	2.72	57,57,57,57	0
54	MG	BA	3013	1/1	0.96	0.22	2.57	0,0,0,0	0
54	MG	BA	3110	1/1	0.97	0.20	2.56	4,4,4,4	0
54	MG	BA	3146	1/1	0.87	0.18	2.50	32,32,32,32	0
54	MG	AA	1622	1/1	0.86	0.18	2.50	50,50,50,50	0
54	MG	DA	3097	1/1	0.95	0.21	1.98	87,87,87,87	0
54	MG	BA	3055	1/1	0.97	0.18	1.94	0,0,0,0	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
54	MG	BA	3106	1/1	0.97	0.18	1.91	5,5,5,5	0
54	MG	DA	3094	1/1	0.89	0.30	1.77	87,87,87,87	0
54	MG	DA	3150	1/1	0.88	0.27	1.74	50,50,50,50	0
54	MG	BA	3065	1/1	0.99	0.17	1.72	1,1,1,1	0
54	MG	BA	3152	1/1	0.94	0.18	1.67	12,12,12,12	0
54	MG	AA	1628	1/1	0.92	0.24	1.64	59,59,59,59	0
54	MG	DA	3025	1/1	0.88	0.23	1.59	68,68,68,68	0
54	MG	DA	3032	1/1	0.84	0.23	1.56	71,71,71,71	0
54	MG	CA	1635	1/1	0.73	0.35	1.53	122,122,122,122	0
54	MG	BA	3183	1/1	0.95	0.16	1.46	19,19,19,19	0
54	MG	DA	3132	1/1	0.80	0.25	1.28	64,64,64,64	0
54	MG	BA	3151	1/1	0.93	0.20	1.28	12,12,12,12	0
54	MG	BA	3136	1/1	0.93	0.17	1.09	24,24,24,24	0
54	MG	CA	1646	1/1	0.87	0.40	0.87	97,97,97,97	0
54	MG	DA	3105	1/1	0.92	0.21	0.83	81,81,81,81	0
54	MG	DA	3019	1/1	0.44	0.32	0.80	109,109,109,109	0
54	MG	BA	3018	1/1	0.97	0.19	0.76	0,0,0,0	0
54	MG	DA	3115	1/1	0.91	0.33	0.76	113,113,113,113	0
54	MG	CA	1615	1/1	0.56	0.18	0.76	52,52,52,52	0
54	MG	BA	3186	1/1	0.97	0.20	0.73	14,14,14,14	0
54	MG	BA	3187	1/1	0.97	0.14	0.64	30,30,30,30	0
54	MG	CA	1622	1/1	0.94	0.16	0.50	46,46,46,46	0
54	MG	BA	3109	1/1	0.99	0.16	0.44	6,6,6,6	0
54	MG	DA	3130	1/1	0.86	0.24	0.34	80,80,80,80	0
54	MG	DA	3156	1/1	0.90	0.19	0.33	57,57,57,57	0
54	MG	CA	1630	1/1	0.66	0.35	0.07	120,120,120,120	0
54	MG	BA	3113	1/1	0.94	0.15	0.07	39,39,39,39	0
54	MG	BA	3025	1/1	0.98	0.17	0.07	2,2,2,2	0
54	MG	BA	3038	1/1	0.95	0.16	0.07	31,31,31,31	0
54	MG	CA	1632	1/1	0.75	0.16	0.07	79,79,79,79	0
54	MG	BA	3057	1/1	0.84	0.20	-0.04	68,68,68,68	0
54	MG	AA	1631	1/1	0.89	0.14	-0.05	52,52,52,52	0
54	MG	DA	3009	1/1	0.68	0.20	-0.05	91,91,91,91	0
54	MG	DA	3078	1/1	0.65	0.21	-0.19	110,110,110,110	0
54	MG	BA	3132	1/1	0.97	0.17	-0.19	27,27,27,27	0
54	MG	DA	3120	1/1	0.85	0.18	-0.20	81,81,81,81	0
54	MG	DA	3106	1/1	0.73	0.19	-0.23	49,49,49,49	0
54	MG	DA	3124	1/1	0.83	0.18	-0.25	87,87,87,87	0
54	MG	DA	3024	1/1	0.90	0.19	-0.29	46,46,46,46	0
54	MG	DA	3098	1/1	0.81	0.19	-0.33	60,60,60,60	0
54	MG	DA	3108	1/1	0.92	0.19	-0.37	61,61,61,61	0
54	MG	BA	3133	1/1	0.96	0.20	-0.39	39,39,39,39	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
54	MG	DA	3036	1/1	0.94	0.17	-0.42	62,62,62,62	0
54	MG	DA	3069	1/1	0.93	0.17	-0.44	80,80,80,80	0
54	MG	CA	1614	1/1	0.78	0.12	-0.47	49,49,49,49	0
54	MG	DA	3063	1/1	0.94	0.17	-0.50	50,50,50,50	0
54	MG	AN	201	1/1	0.94	0.19	-0.50	62,62,62,62	0
54	MG	DA	3136	1/1	0.68	0.18	-0.67	94,94,94,94	0
54	MG	BA	3174	1/1	0.95	0.12	-0.76	14,14,14,14	0
54	MG	BA	3150	1/1	0.94	0.14	-0.88	29,29,29,29	0
54	MG	CA	1640	1/1	0.95	0.13	-0.98	27,27,27,27	0
54	MG	BA	3111	1/1	0.99	0.15	-1.07	4,4,4,4	0
54	MG	BA	3103	1/1	0.93	0.16	-1.09	0,0,0,0	0
54	MG	DA	3080	1/1	0.82	0.19	-1.12	96,96,96,96	0
54	MG	BA	3185	1/1	0.98	0.11	-1.17	13,13,13,13	0
54	MG	BA	3117	1/1	0.99	0.16	-1.22	2,2,2,2	0
54	MG	AA	1607	1/1	0.90	0.05	-1.24	54,54,54,54	0
54	MG	BA	3154	1/1	0.97	0.13	-1.25	12,12,12,12	0
54	MG	DA	3042	1/1	0.79	0.13	-1.34	87,87,87,87	0
54	MG	DA	3049	1/1	0.77	0.18	-1.36	87,87,87,87	0
54	MG	DA	3109	1/1	0.90	0.14	-1.43	47,47,47,47	0
54	MG	DB	202	1/1	0.93	0.10	-1.44	64,64,64,64	0
54	MG	DA	3023	1/1	0.76	0.13	-1.52	76,76,76,76	0
56	ZN	D4	101	1/1	0.98	0.06	-1.53	91,91,91,91	0
54	MG	DA	3129	1/1	0.90	0.15	-1.54	50,50,50,50	0
54	MG	DA	3102	1/1	0.95	0.14	-1.57	61,61,61,61	0
54	MG	AA	1624	1/1	0.78	0.12	-1.64	46,46,46,46	0
54	MG	BA	3115	1/1	0.95	0.14	-1.66	17,17,17,17	0
54	MG	DA	3018	1/1	0.91	0.17	-1.76	55,55,55,55	0
54	MG	DA	3059	1/1	0.94	0.11	-1.81	39,39,39,39	0
54	MG	AA	1638	1/1	0.82	0.09	-1.89	64,64,64,64	0
54	MG	DA	3013	1/1	0.94	0.18	-1.91	45,45,45,45	0
54	MG	BA	3070	1/1	0.97	0.14	-1.97	0,0,0,0	0
54	MG	CA	1610	1/1	0.83	0.09	-2.10	65,65,65,65	0
54	MG	DA	3096	1/1	0.88	0.11	-2.13	61,61,61,61	0
54	MG	AA	1613	1/1	0.92	0.11	-2.22	33,33,33,33	0
54	MG	DA	3128	1/1	0.94	0.12	-2.24	79,79,79,79	0
54	MG	DA	3134	1/1	0.82	0.14	-2.34	54,54,54,54	0
54	MG	BA	3064	1/1	0.96	0.14	-2.37	1,1,1,1	0
54	MG	DB	201	1/1	0.72	0.13	-2.37	113,113,113,113	0
54	MG	AA	1639	1/1	0.82	0.14	-2.38	45,45,45,45	0
54	MG	BA	3009	1/1	0.95	0.13	-2.44	4,4,4,4	0
54	MG	DA	3064	1/1	0.94	0.17	-2.46	53,53,53,53	0
54	MG	BA	3164	1/1	0.93	0.12	-2.46	4,4,4,4	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
54	MG	DA	3066	1/1	0.88	0.14	-2.48	58,58,58,58	0
54	MG	AA	1640	1/1	0.96	0.10	-2.52	21,21,21,21	0
54	MG	BA	3029	1/1	0.98	0.13	-2.65	23,23,23,23	0
54	MG	DA	3047	1/1	0.85	0.11	-2.66	74,74,74,74	0
54	MG	BA	3135	1/1	0.92	0.12	-2.68	3,3,3,3	0
54	MG	AA	1612	1/1	0.86	0.11	-2.71	48,48,48,48	0
54	MG	CA	1603	1/1	0.78	0.08	-2.77	37,37,37,37	0
54	MG	BA	3066	1/1	0.96	0.14	-2.79	0,0,0,0	0
54	MG	DA	3152	1/1	0.91	0.10	-2.81	45,45,45,45	0
54	MG	BA	3006	1/1	0.99	0.10	-2.82	43,43,43,43	0
56	ZN	B4	101	1/1	1.00	0.06	-2.84	36,36,36,36	0
54	MG	AA	1616	1/1	0.94	0.08	-2.86	57,57,57,57	0
54	MG	AA	1609	1/1	0.90	0.12	-2.86	35,35,35,35	0
54	MG	AA	1604	1/1	0.93	0.11	-2.99	56,56,56,56	0
54	MG	DA	3079	1/1	0.89	0.12	-3.14	98,98,98,98	0
54	MG	DA	3074	1/1	0.91	0.09	-3.27	72,72,72,72	0
54	MG	BA	3019	1/1	0.99	0.07	-3.28	14,14,14,14	0
54	MG	BB	201	1/1	0.95	0.08	-3.33	31,31,31,31	0
54	MG	BA	3051	1/1	0.98	0.12	-3.56	1,1,1,1	0
54	MG	BB	202	1/1	0.95	0.08	-3.61	6,6,6,6	0
54	MG	BA	3030	1/1	0.96	0.14	-3.68	6,6,6,6	0
54	MG	CA	1601	1/1	0.93	0.11	-3.95	38,38,38,38	0
54	MG	BA	3081	1/1	0.92	0.11	-3.97	18,18,18,18	0
54	MG	BA	3067	1/1	0.99	0.11	-3.98	1,1,1,1	0
54	MG	DA	3035	1/1	0.89	0.10	-4.00	79,79,79,79	0
54	MG	BA	3162	1/1	0.94	0.11	-4.18	21,21,21,21	0
54	MG	DA	3051	1/1	0.98	0.10	-4.21	32,32,32,32	0
54	MG	BA	3034	1/1	0.97	0.13	-4.43	2,2,2,2	0
54	MG	AA	1606	1/1	0.90	0.08	-4.49	44,44,44,44	0
54	MG	BA	3014	1/1	0.94	0.14	-4.52	0,0,0,0	0
54	MG	AA	1641	1/1	0.99	0.07	-4.70	24,24,24,24	0
54	MG	BA	3099	1/1	0.98	0.04	-4.84	5,5,5,5	0
54	MG	BA	3130	1/1	0.98	0.14	-4.87	0,0,0,0	0
54	MG	BA	3015	1/1	0.91	0.09	-4.88	4,4,4,4	0
54	MG	CA	1616	1/1	0.95	0.09	-5.00	38,38,38,38	0
54	MG	BA	3079	1/1	0.90	0.08	-5.05	22,22,22,22	0
54	MG	BA	3160	1/1	0.97	0.10	-5.06	3,3,3,3	0
54	MG	BA	3073	1/1	0.91	0.08	-5.20	12,12,12,12	0
54	MG	DA	3006	1/1	0.84	0.06	-5.24	95,95,95,95	0
54	MG	AA	1617	1/1	0.95	0.06	-5.25	42,42,42,42	0
54	MG	BA	3003	1/1	0.97	0.08	-5.29	18,18,18,18	0
54	MG	DA	3022	1/1	0.86	0.07	-5.40	55,55,55,55	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
54	MG	CA	1607	1/1	0.90	0.09	-5.46	53,53,53,53	0
54	MG	BA	3052	1/1	0.93	0.08	-5.52	7,7,7,7	0
54	MG	BA	3024	1/1	0.99	0.12	-5.61	0,0,0,0	0
54	MG	BA	3010	1/1	0.99	0.09	-5.62	0,0,0,0	0
54	MG	AA	1611	1/1	0.96	0.07	-5.75	20,20,20,20	0
54	MG	DA	3043	1/1	0.91	0.09	-5.96	68,68,68,68	0
54	MG	BA	3121	1/1	0.93	0.09	-6.49	2,2,2,2	0
54	MG	BA	3098	1/1	0.96	0.08	-6.60	3,3,3,3	0
54	MG	BA	3026	1/1	0.97	0.11	-7.00	3,3,3,3	0
54	MG	BA	3023	1/1	0.97	0.08	-7.68	1,1,1,1	0
54	MG	AA	1632	1/1	0.93	0.06	-8.33	37,37,37,37	0
54	MG	DA	3054	1/1	0.94	0.11	-8.52	48,48,48,48	0
54	MG	BA	3060	1/1	0.95	0.07	-10.12	14,14,14,14	0
54	MG	BA	3119	1/1	0.90	0.09	-10.31	21,21,21,21	0
54	MG	BA	3112	1/1	0.95	0.06	-10.39	29,29,29,29	0
54	MG	DA	3050	1/1	0.98	0.11	-11.40	48,48,48,48	0
54	MG	CA	1619	1/1	0.96	0.09	-12.44	34,34,34,34	0
54	MG	BA	3072	1/1	0.98	0.08	-12.50	7,7,7,7	0
54	MG	DA	3135	1/1	0.33	0.65	-	101,101,101,101	0
54	MG	AA	1627	1/1	0.87	0.06	-	48,48,48,48	0
54	MG	AA	1644	1/1	0.90	0.38	-	45,45,45,45	0
54	MG	BA	3037	1/1	1.00	0.16	-	0,0,0,0	0
54	MG	BA	3069	1/1	0.93	0.16	-	1,1,1,1	0
54	MG	AA	1610	1/1	0.93	0.29	-	65,65,65,65	0
54	MG	BA	3002	1/1	0.93	0.06	-	19,19,19,19	0
54	MG	DA	3147	1/1	0.68	0.26	-	67,67,67,67	0
54	MG	CA	1623	1/1	0.95	0.19	-	50,50,50,50	0
54	MG	DA	3040	1/1	0.86	0.12	-	80,80,80,80	0
54	MG	CA	1604	1/1	0.42	0.16	-	95,95,95,95	0
54	MG	DA	3029	1/1	0.45	0.24	-	77,77,77,77	0
54	MG	DA	3033	1/1	0.93	0.16	-	63,63,63,63	0
54	MG	AA	1623	1/1	0.95	0.10	-	41,41,41,41	0
54	MG	CA	1624	1/1	0.93	0.07	-	39,39,39,39	0
54	MG	DA	3163	1/1	0.86	0.26	-	64,64,64,64	0
54	MG	DB	203	1/1	0.66	0.09	-	85,85,85,85	0
54	MG	DA	3090	1/1	0.94	0.07	-	84,84,84,84	0
54	MG	AA	1614	1/1	0.86	0.23	-	74,74,74,74	0
54	MG	BA	3086	1/1	0.94	0.15	-	24,24,24,24	0
54	MG	DA	3004	1/1	0.87	0.08	-	78,78,78,78	0
54	MG	DA	3012	1/1	0.66	0.22	-	78,78,78,78	0
54	MG	BA	3104	1/1	0.88	0.12	-	8,8,8,8	0
54	MG	BA	3163	1/1	0.96	0.39	-	12,12,12,12	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
54	MG	DA	3099	1/1	0.52	0.39	-	91,91,91,91	0
54	MG	DA	3041	1/1	0.61	0.45	-	72,72,72,72	0
54	MG	AA	1654	1/1	0.94	0.14	-	34,34,34,34	0
54	MG	DA	3086	1/1	0.98	0.10	-	74,74,74,74	0
54	MG	CA	1638	1/1	0.84	0.06	-	65,65,65,65	0
54	MG	AA	1670	1/1	0.95	0.39	-	58,58,58,58	0
54	MG	BA	3170	1/1	0.92	0.15	-	36,36,36,36	0
54	MG	CA	1606	1/1	0.81	0.22	-	90,90,90,90	0
54	MG	BA	3063	1/1	0.94	0.53	-	52,52,52,52	0
54	MG	BA	3093	1/1	0.95	0.15	-	57,57,57,57	0
54	MG	BA	3191	1/1	0.92	0.29	-	12,12,12,12	0
54	MG	DA	3154	1/1	0.97	0.45	-	57,57,57,57	0
54	MG	BA	3167	1/1	0.88	0.25	-	32,32,32,32	0
54	MG	AA	1636	1/1	0.98	0.09	-	17,17,17,17	0
54	MG	DA	3117	1/1	0.91	0.07	-	72,72,72,72	0
54	MG	CA	1609	1/1	0.88	0.07	-	87,87,87,87	0
54	MG	DA	3056	1/1	0.77	0.29	-	91,91,91,91	0
54	MG	AA	1605	1/1	0.96	0.17	-	26,26,26,26	0
54	MG	DA	3084	1/1	0.76	0.25	-	104,104,104,104	0
54	MG	AA	1646	1/1	0.98	0.07	-	54,54,54,54	0
54	MG	CA	1654	1/1	0.96	0.19	-	55,55,55,55	0
54	MG	BA	3166	1/1	0.96	0.12	-	23,23,23,23	0
54	MG	BA	3140	1/1	0.93	0.33	-	0,0,0,0	0
54	MG	AA	1615	1/1	0.97	0.10	-	62,62,62,62	0
54	MG	CA	1618	1/1	0.98	0.16	-	35,35,35,35	0
54	MG	BA	3059	1/1	0.86	0.35	-	36,36,36,36	0
54	MG	DA	3037	1/1	0.88	0.12	-	92,92,92,92	0
54	MG	DA	3146	1/1	0.90	0.40	-	48,48,48,48	0
54	MG	DA	3007	1/1	0.87	0.33	-	119,119,119,119	0
54	MG	AA	1665	1/1	0.88	0.26	-	47,47,47,47	0
54	MG	BA	3118	1/1	0.98	0.12	-	4,4,4,4	0
54	MG	BA	3053	1/1	0.98	0.10	-	6,6,6,6	0
54	MG	DA	3011	1/1	0.84	0.15	-	73,73,73,73	0
54	MG	DA	3020	1/1	0.92	0.22	-	49,49,49,49	0
54	MG	DA	3100	1/1	0.30	0.43	-	86,86,86,86	0
54	MG	DA	3073	1/1	0.93	0.31	-	61,61,61,61	0
54	MG	DA	3142	1/1	0.93	0.13	-	34,34,34,34	0
54	MG	DA	3162	1/1	0.73	0.69	-	63,63,63,63	0
54	MG	AM	201	1/1	0.89	0.85	-	59,59,59,59	0
54	MG	BA	3147	1/1	0.90	0.46	-	23,23,23,23	0
54	MG	BA	3142	1/1	0.98	0.37	-	0,0,0,0	0
54	MG	AA	1652	1/1	0.97	0.18	-	18,18,18,18	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
54	MG	BA	3068	1/1	0.99	0.14	-	1,1,1,1	0
54	MG	CA	1636	1/1	0.14	0.24	-	127,127,127,127	0
54	MG	DA	3159	1/1	0.77	0.33	-	47,47,47,47	0
54	MG	CA	1621	1/1	0.79	0.14	-	72,72,72,72	0
54	MG	DA	3151	1/1	0.78	0.58	-	56,56,56,56	0
54	MG	BA	3031	1/1	0.93	0.10	-	20,20,20,20	0
54	MG	AA	1647	1/1	0.91	0.17	-	48,48,48,48	0
54	MG	CA	1650	1/1	0.97	0.09	-	42,42,42,42	0
54	MG	BA	3082	1/1	0.75	0.12	-	16,16,16,16	0
54	MG	CA	1648	1/1	0.94	0.25	-	19,19,19,19	0
54	MG	BA	3062	1/1	0.94	0.32	-	46,46,46,46	0
54	MG	CA	1633	1/1	0.89	0.53	-	76,76,76,76	0
54	MG	DA	3044	1/1	0.71	0.45	-	113,113,113,113	0
54	MG	DA	3153	1/1	0.91	0.12	-	45,45,45,45	0
54	MG	DA	3164	1/1	0.88	0.26	-	40,40,40,40	0
54	MG	BB	204	1/1	0.95	0.41	-	12,12,12,12	0
54	MG	DA	3082	1/1	0.94	0.10	-	59,59,59,59	0
54	MG	DA	3048	1/1	0.70	0.31	-	123,123,123,123	0
54	MG	DA	3143	1/1	0.81	0.10	-	73,73,73,73	0
54	MG	BA	3153	1/1	0.97	0.10	-	26,26,26,26	0
54	MG	BA	3011	1/1	0.97	0.08	-	0,0,0,0	0
54	MG	DA	3061	1/1	0.64	2.99	-	102,102,102,102	0
54	MG	CA	1644	1/1	0.89	0.24	-	43,43,43,43	0
54	MG	BA	3020	1/1	0.95	0.07	-	24,24,24,24	0
54	MG	AA	1642	1/1	0.88	0.19	-	32,32,32,32	0
54	MG	BA	3097	1/1	0.96	0.06	-	8,8,8,8	0
54	MG	BA	3041	1/1	0.99	0.14	-	2,2,2,2	0
54	MG	BA	3128	1/1	0.98	0.07	-	0,0,0,0	0
54	MG	BA	3032	1/1	0.94	0.18	-	5,5,5,5	0
54	MG	DA	3046	1/1	0.60	0.13	-	68,68,68,68	0
54	MG	BA	3096	1/1	0.92	0.09	-	19,19,19,19	0
54	MG	DA	3038	1/1	0.83	0.12	-	64,64,64,64	0
54	MG	BA	3061	1/1	0.95	0.27	-	40,40,40,40	0
54	MG	BA	3044	1/1	0.95	0.11	-	3,3,3,3	0
54	MG	BA	3058	1/1	0.77	0.16	-	9,9,9,9	0
54	MG	DA	3060	1/1	0.82	0.35	-	81,81,81,81	0
54	MG	BA	3108	1/1	1.00	0.20	-	1,1,1,1	0
54	MG	CA	1649	1/1	0.79	0.29	-	61,61,61,61	0
54	MG	DA	3085	1/1	0.83	0.17	-	76,76,76,76	0
54	MG	CA	1645	1/1	0.96	0.14	-	28,28,28,28	0
54	MG	DA	3149	1/1	0.89	0.41	-	55,55,55,55	0
54	MG	BA	3083	1/1	0.99	0.14	-	2,2,2,2	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
54	MG	DA	3103	1/1	0.67	0.15	-	67,67,67,67	0
54	MG	BA	3120	1/1	0.76	0.18	-	47,47,47,47	0
54	MG	BA	3159	1/1	0.91	0.20	-	8,8,8,8	0
54	MG	AA	1635	1/1	0.96	0.05	-	23,23,23,23	0
54	MG	CA	1602	1/1	0.63	0.12	-	87,87,87,87	0
54	MG	CA	1625	1/1	0.96	0.13	-	17,17,17,17	0
54	MG	BA	3048	1/1	0.98	0.16	-	9,9,9,9	0
54	MG	BA	3144	1/1	0.99	0.28	-	6,6,6,6	0
54	MG	BA	3181	1/1	0.95	0.14	-	16,16,16,16	0
54	MG	CA	1652	1/1	0.93	0.15	-	86,86,86,86	0
54	MG	DA	3058	1/1	0.83	0.91	-	107,107,107,107	0
54	MG	DA	3068	1/1	0.89	0.14	-	64,64,64,64	0
54	MG	DA	3112	1/1	0.89	0.42	-	92,92,92,92	0
54	MG	BA	3182	1/1	0.97	0.16	-	16,16,16,16	0
54	MG	DA	3122	1/1	0.91	0.10	-	36,36,36,36	0
54	MG	DA	3126	1/1	0.82	0.20	-	77,77,77,77	0
54	MG	BA	3033	1/1	0.95	0.10	-	9,9,9,9	0
54	MG	BA	3054	1/1	0.93	0.09	-	6,6,6,6	0
54	MG	BA	3171	1/1	0.95	0.15	-	28,28,28,28	0
54	MG	DA	3158	1/1	0.86	0.23	-	52,52,52,52	0
54	MG	D2	101	1/1	0.85	0.17	-	76,76,76,76	0
54	MG	DA	3055	1/1	0.88	0.12	-	59,59,59,59	0
54	MG	BA	3143	1/1	0.95	0.31	-	22,22,22,22	0
54	MG	DA	3138	1/1	0.94	0.22	-	38,38,38,38	0
54	MG	BA	3124	1/1	0.96	0.10	-	20,20,20,20	0
54	MG	AA	1656	1/1	0.71	0.94	-	66,66,66,66	0
54	MG	DA	3160	1/1	0.94	0.26	-	64,64,64,64	0
54	MG	DA	3121	1/1	0.90	0.06	-	48,48,48,48	0
54	MG	AA	1660	1/1	0.93	0.34	-	45,45,45,45	0
54	MG	BA	3092	1/1	0.96	0.09	-	21,21,21,21	0
54	MG	AA	1630	1/1	0.92	0.07	-	35,35,35,35	0
54	MG	BA	3035	1/1	0.95	0.15	-	3,3,3,3	0
54	MG	AA	1649	1/1	0.97	0.14	-	32,32,32,32	0
54	MG	BA	3129	1/1	0.96	0.15	-	3,3,3,3	0
54	MG	AA	1618	1/1	0.68	0.28	-	75,75,75,75	0
54	MG	DA	3089	1/1	0.86	0.31	-	87,87,87,87	0
54	MG	AA	1608	1/1	0.89	0.13	-	27,27,27,27	0
54	MG	BA	3141	1/1	0.94	0.14	-	17,17,17,17	0
54	MG	BA	3123	1/1	0.98	0.17	-	0,0,0,0	0
54	MG	DA	3133	1/1	-0.13	1.03	-	105,105,105,105	0
54	MG	BA	3155	1/1	0.97	0.10	-	18,18,18,18	0
54	MG	DA	3140	1/1	0.81	0.36	-	42,42,42,42	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
54	MG	BA	3077	1/1	0.97	0.13	-	12,12,12,12	0
54	MG	DA	3119	1/1	0.49	0.81	-	112,112,112,112	0
54	MG	AA	1657	1/1	0.84	0.29	-	60,60,60,60	0
54	MG	DA	3010	1/1	0.74	0.06	-	80,80,80,80	0
54	MG	BA	3156	1/1	0.93	0.35	-	26,26,26,26	0
54	MG	DA	3002	1/1	0.62	0.14	-	78,78,78,78	0
54	MG	BA	3105	1/1	0.93	0.10	-	10,10,10,10	0
54	MG	DA	3139	1/1	0.93	0.26	-	31,31,31,31	0
54	MG	BA	3089	1/1	0.88	0.13	-	24,24,24,24	0
54	MG	CA	1613	1/1	0.89	0.11	-	20,20,20,20	0
54	MG	CA	1605	1/1	0.83	0.17	-	86,86,86,86	0
54	MG	BA	3193	1/1	0.97	0.21	-	32,32,32,32	0
54	MG	AA	1601	1/1	0.92	0.10	-	53,53,53,53	0
54	MG	BA	3116	1/1	0.90	0.20	-	32,32,32,32	0
54	MG	BA	3165	1/1	0.87	0.22	-	38,38,38,38	0
54	MG	BA	3043	1/1	0.96	0.12	-	5,5,5,5	0
54	MG	CA	1634	1/1	0.91	0.12	-	51,51,51,51	0
54	MG	CA	1608	1/1	0.81	0.17	-	80,80,80,80	0
54	MG	DA	3165	1/1	0.80	0.15	-	100,100,100,100	0
54	MG	AA	1666	1/1	0.21	0.37	-	61,61,61,61	0
54	MG	DA	3131	1/1	0.90	0.61	-	94,94,94,94	0
54	MG	DA	3045	1/1	0.80	0.14	-	87,87,87,87	0
54	MG	AA	1645	1/1	0.79	0.26	-	54,54,54,54	0
54	MG	BA	3004	1/1	0.96	0.07	-	22,22,22,22	0
54	MG	DA	3015	1/1	0.90	0.13	-	63,63,63,63	0
54	MG	DA	3076	1/1	0.97	0.07	-	66,66,66,66	0
54	MG	BA	3076	1/1	0.85	0.17	-	33,33,33,33	0
54	MG	DA	3016	1/1	0.78	0.37	-	73,73,73,73	0
54	MG	DA	3017	1/1	0.82	0.54	-	100,100,100,100	0
54	MG	BA	3046	1/1	0.97	0.15	-	6,6,6,6	0
54	MG	DA	3062	1/1	0.46	0.61	-	89,89,89,89	0
54	MG	DA	3123	1/1	0.91	0.14	-	62,62,62,62	0
54	MG	CA	1651	1/1	0.94	0.16	-	42,42,42,42	0
54	MG	BA	3179	1/1	0.95	0.34	-	30,30,30,30	0
54	MG	BA	3122	1/1	0.93	0.11	-	25,25,25,25	0
54	MG	BA	3022	1/1	0.96	0.08	-	16,16,16,16	0
54	MG	BA	3168	1/1	0.79	0.26	-	41,41,41,41	0
54	MG	BA	3190	1/1	0.92	0.14	-	39,39,39,39	0
54	MG	CA	1629	1/1	0.50	0.10	-	89,89,89,89	0
54	MG	DA	3148	1/1	0.91	0.19	-	41,41,41,41	0
54	MG	DA	3087	1/1	0.87	0.15	-	64,64,64,64	0
54	MG	CA	1653	1/1	0.84	0.17	-	47,47,47,47	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
54	MG	BA	3100	1/1	0.86	0.29	-	51,51,51,51	0
54	MG	CA	1655	1/1	0.88	0.11	-	45,45,45,45	0
54	MG	BA	3036	1/1	0.93	0.14	-	10,10,10,10	0
54	MG	BA	3084	1/1	0.98	0.08	-	16,16,16,16	0
54	MG	BA	3194	1/1	0.82	0.86	-	41,41,41,41	0
54	MG	BA	3149	1/1	0.92	0.23	-	44,44,44,44	0
54	MG	AA	1648	1/1	0.97	0.16	-	33,33,33,33	0
54	MG	AA	1650	1/1	0.65	0.34	-	61,61,61,61	0
54	MG	DA	3077	1/1	0.14	0.37	-	115,115,115,115	0
54	MG	BA	3138	1/1	0.96	0.38	-	1,1,1,1	0
54	MG	DA	3157	1/1	0.86	0.67	-	76,76,76,76	0
54	MG	BA	3078	1/1	0.88	0.49	-	87,87,87,87	0
54	MG	CA	1628	1/1	0.70	0.30	-	99,99,99,99	0
54	MG	BA	3173	1/1	0.96	0.15	-	38,38,38,38	0
54	MG	DA	3057	1/1	0.82	0.20	-	92,92,92,92	0
54	MG	DA	3053	1/1	0.88	0.12	-	44,44,44,44	0
54	MG	DA	3005	1/1	0.60	0.53	-	103,103,103,103	0
54	MG	BA	3176	1/1	0.96	0.08	-	28,28,28,28	0
54	MG	BA	3126	1/1	0.98	0.17	-	4,4,4,4	0
54	MG	DA	3067	1/1	0.87	0.12	-	53,53,53,53	0
54	MG	DA	3145	1/1	0.74	0.19	-	56,56,56,56	0
54	MG	DA	3081	1/1	0.88	0.22	-	66,66,66,66	0
54	MG	AA	1603	1/1	0.93	0.14	-	44,44,44,44	0
54	MG	BA	3021	1/1	0.96	0.27	-	0,0,0,0	0
54	MG	AA	1619	1/1	0.84	0.08	-	71,71,71,71	0
54	MG	BA	3188	1/1	0.97	0.14	-	6,6,6,6	0
54	MG	BA	3027	1/1	0.71	0.30	-	44,44,44,44	0
54	MG	DA	3141	1/1	0.96	0.21	-	39,39,39,39	0
54	MG	DA	3111	1/1	0.63	0.20	-	103,103,103,103	0
54	MG	AA	1658	1/1	0.67	0.67	-	52,52,52,52	0
54	MG	DA	3118	1/1	0.89	0.09	-	55,55,55,55	0
54	MG	BA	3114	1/1	0.92	0.12	-	0,0,0,0	0
54	MG	DA	3091	1/1	0.71	0.17	-	82,82,82,82	0
54	MG	BA	3094	1/1	0.89	0.10	-	42,42,42,42	0
54	MG	BA	3157	1/1	0.96	0.07	-	18,18,18,18	0
54	MG	CA	1639	1/1	0.93	0.08	-	49,49,49,49	0
54	MG	BA	3192	1/1	0.96	0.18	-	23,23,23,23	0
54	MG	BA	3090	1/1	0.84	0.16	-	34,34,34,34	0
54	MG	AA	1625	1/1	0.91	0.13	-	14,14,14,14	0
54	MG	BA	3017	1/1	0.91	0.14	-	13,13,13,13	0
54	MG	CA	1620	1/1	0.97	0.04	-	61,61,61,61	0
54	MG	BA	3056	1/1	0.95	0.10	-	2,2,2,2	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
54	MG	AA	1633	1/1	0.88	0.12	-	51,51,51,51	0
54	MG	CA	1642	1/1	0.92	0.22	-	25,25,25,25	0
54	MG	BA	3180	1/1	0.93	0.14	-	29,29,29,29	0
54	MG	DA	3034	1/1	0.75	0.17	-	69,69,69,69	0
54	MG	BA	3095	1/1	0.93	0.07	-	17,17,17,17	0
54	MG	BA	3008	1/1	0.96	0.14	-	33,33,33,33	0
54	MG	CA	1611	1/1	0.85	0.25	-	87,87,87,87	0
54	MG	AA	1664	1/1	0.54	0.72	-	49,49,49,49	0
54	MG	DA	3075	1/1	0.90	0.19	-	83,83,83,83	0
54	MG	DA	3021	1/1	0.87	0.16	-	53,53,53,53	0
54	MG	DA	3088	1/1	0.80	0.12	-	75,75,75,75	0
54	MG	BA	3172	1/1	0.92	0.09	-	27,27,27,27	0
54	MG	AA	1662	1/1	0.70	0.46	-	58,58,58,58	0
54	MG	BA	3039	1/1	1.00	0.23	-	0,0,0,0	0
54	MG	DA	3052	1/1	0.95	0.10	-	60,60,60,60	0
54	MG	BA	3184	1/1	0.99	0.16	-	3,3,3,3	0
54	MG	BA	3016	1/1	0.92	0.34	-	51,51,51,51	0
54	MG	BA	3145	1/1	0.96	0.27	-	17,17,17,17	0
54	MG	BA	3091	1/1	0.96	0.09	-	4,4,4,4	0
54	MG	DA	3065	1/1	0.93	0.10	-	34,34,34,34	0
54	MG	AA	1651	1/1	0.84	0.20	-	51,51,51,51	0
54	MG	DQ	201	1/1	0.95	0.27	-	37,37,37,37	0
54	MG	CA	1641	1/1	0.94	0.26	-	66,66,66,66	0
54	MG	DA	3144	1/1	0.80	0.29	-	72,72,72,72	0
54	MG	DA	3101	1/1	0.88	0.13	-	63,63,63,63	0
54	MG	BA	3045	1/1	0.97	0.06	-	27,27,27,27	0
54	MG	BA	3080	1/1	0.95	0.07	-	42,42,42,42	0
54	MG	BA	3005	1/1	0.82	0.14	-	45,45,45,45	0
54	MG	BA	3125	1/1	0.86	0.29	-	39,39,39,39	0
54	MG	BA	3074	1/1	0.97	0.12	-	1,1,1,1	0
54	MG	AA	1667	1/1	0.90	0.16	-	30,30,30,30	0
54	MG	BA	3012	1/1	0.93	0.08	-	19,19,19,19	0
54	MG	CA	1637	1/1	0.82	0.23	-	64,64,64,64	0
54	MG	AA	1643	1/1	0.91	0.16	-	42,42,42,42	0
54	MG	AA	1637	1/1	0.69	0.14	-	81,81,81,81	0
54	MG	DA	3107	1/1	0.85	0.12	-	70,70,70,70	0
54	MG	DA	3127	1/1	0.73	0.20	-	74,74,74,74	0
54	MG	DA	3083	1/1	0.86	0.22	-	74,74,74,74	0
54	MG	AA	1620	1/1	0.97	0.06	-	30,30,30,30	0
54	MG	DL	201	1/1	0.60	0.52	-	68,68,68,68	0
54	MG	DA	3008	1/1	0.83	0.30	-	102,102,102,102	0
54	MG	DA	3095	1/1	0.74	0.28	-	91,91,91,91	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
54	MG	DA	3031	1/1	0.85	0.14	-	65,65,65,65	0
54	MG	AA	1655	1/1	0.98	0.12	-	44,44,44,44	0
54	MG	CA	1643	1/1	0.86	0.30	-	44,44,44,44	0
54	MG	DA	3125	1/1	0.81	0.17	-	59,59,59,59	0
54	MG	BA	3088	1/1	0.99	0.21	-	2,2,2,2	0
54	MG	CA	1631	1/1	0.59	0.23	-	101,101,101,101	0
54	MG	BA	3127	1/1	0.96	0.12	-	5,5,5,5	0
54	MG	BA	3134	1/1	0.81	0.42	-	54,54,54,54	0
54	MG	BA	3102	1/1	0.97	0.08	-	9,9,9,9	0
54	MG	BA	3101	1/1	0.90	0.10	-	1,1,1,1	0
54	MG	BA	3071	1/1	0.95	0.19	-	66,66,66,66	0
54	MG	CA	1627	1/1	0.90	0.28	-	87,87,87,87	0
54	MG	BA	3040	1/1	0.93	0.13	-	2,2,2,2	0
54	MG	BA	3189	1/1	0.69	0.21	-	48,48,48,48	0
54	MG	DA	3039	1/1	0.96	0.07	-	57,57,57,57	0
54	MG	DA	3014	1/1	0.80	0.20	-	78,78,78,78	0
54	MG	CA	1647	1/1	0.96	0.09	-	36,36,36,36	0
54	MG	DA	3026	1/1	0.34	0.49	-	100,100,100,100	0
54	MG	BB	203	1/1	0.95	0.04	-	8,8,8,8	0
54	MG	BA	3161	1/1	0.94	0.16	-	33,33,33,33	0
54	MG	BA	3148	1/1	0.97	0.17	-	28,28,28,28	0
54	MG	DA	3092	1/1	0.71	0.78	-	117,117,117,117	0
54	MG	BA	3087	1/1	0.91	0.12	-	2,2,2,2	0
54	MG	BA	3047	1/1	0.92	0.17	-	4,4,4,4	0
54	MG	BA	3028	1/1	0.99	0.04	-	6,6,6,6	0
54	MG	DA	3155	1/1	0.96	0.32	-	42,42,42,42	0
54	MG	DA	3030	1/1	0.89	0.22	-	70,70,70,70	0
54	MG	AA	1663	1/1	0.91	0.11	-	45,45,45,45	0
54	MG	AA	1659	1/1	0.81	0.18	-	62,62,62,62	0
54	MG	DA	3114	1/1	0.92	0.14	-	66,66,66,66	0
54	MG	BA	3175	1/1	0.96	0.14	-	34,34,34,34	0
54	MG	CA	1656	1/1	0.90	0.26	-	50,50,50,50	0
54	MG	BA	3050	1/1	0.94	0.07	-	18,18,18,18	0
54	MG	AA	1626	1/1	0.79	0.27	-	53,53,53,53	0
54	MG	DA	3104	1/1	0.74	0.08	-	80,80,80,80	0
54	MG	BQ	201	1/1	0.98	0.14	-	7,7,7,7	0
54	MG	AA	1602	1/1	0.94	0.42	-	55,55,55,55	0
54	MG	BA	3007	1/1	0.95	0.10	-	24,24,24,24	0
54	MG	DA	3070	1/1	0.62	0.18	-	108,108,108,108	0

6.5 Other polymers ⓘ

There are no such residues in this entry.