Full wwPDB X-ray Structure Validation Report ⓘ

Mar 29, 2026 – 01:36 AM UTC

PDB ID	:	4V8G / pdb_00004v8g
Title	:	Crystal structure of RMF bound to the 70S ribosome.
Authors	:	Polikanov, Y.S.; Blaha, G.M.; Steitz, T.A.
Deposited on	:	2011-12-11
Resolution	:	3.00 Å(reported)

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

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

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

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

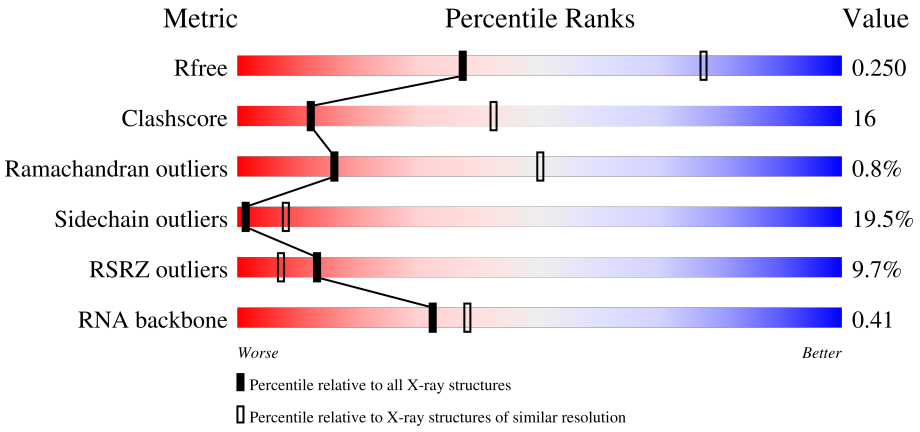
MolProbity	:	4-5-2 with Phenix2.0
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.010 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)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

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 3.00 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	180053	2672 (3.00-3.00)
Clashscore	190562	2977 (3.00-3.00)
Ramachandran outliers	187476	2877 (3.00-3.00)
Sidechain outliers	187428	2880 (3.00-3.00)
RSRZ outliers	180081	2671 (3.00-3.00)
RNA backbone	3983	1109 (3.20-2.80)

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

Mol	Chain	Length	Quality of chain
1	AA	1522	17% 31% 46% 21% ·
1	CA	1522	9% 35% 46% 17% ·
2	AB	256	16% 39% 38% 11% · 11%
2	CB	256	15% 38% 39% 11% · 11%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
3	AC	239	25% 42% 33% 11% 14%
3	CC	239	16% 38% 36% 11% 14%
4	AD	209	29% 52% 36% 11%
4	CD	209	22% 51% 37% 11%
5	AE	162	12% 38% 42% 11% 9%
5	CE	162	9% 38% 44% 10% 9%
6	AF	101	12% 54% 36% 9%
6	CF	101	5% 58% 34% 7%
7	AG	156	44% 29% 47% 22%
7	CG	156	28% 50% 39% 10%
8	AH	138	12% 50% 45% 5%
8	CH	138	12% 55% 38% 7%
9	AI	128	59% 41% 41% 14%
9	CI	128	45% 42% 43% 12%
10	AJ	105	53% 39% 38% 12% 9%
10	CJ	105	46% 53% 26% 11% 9%
11	AK	129	5% 51% 34% 12%
11	CK	129	9% 52% 33% 12%
12	AL	132	15% 45% 41% 7% 8%
12	CL	132	10% 46% 38% 8% 8%
13	AM	126	57% 37% 36% 16% 10%
13	CM	126	29% 42% 35% 13% 10%
14	AN	61	62% 21% 54% 23%
14	CN	61	48% 33% 52% 13%
15	AO	89	9% 51% 43% 6%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
15	CO	89	6% 48% 44% 7%
16	AP	88	33% 41% 40% 13% 7%
16	CP	88	22% 47% 31% 15% 7%
17	AQ	105	11% 56% 32% 6% 6%
17	CQ	105	8% 51% 37% 6% 6%
18	AR	88	6% 42% 30% 6% 23%
18	CR	88	2% 44% 27% 6% 23%
19	AS	93	46% 40% 28% 15% 13%
19	CS	93	17% 46% 33% 6% 13%
20	AT	106	28% 41% 43% 6% 8%
20	CT	106	24% 47% 36% 7% 8%
21	AU	27	78% 22% 41% 22% 15%
21	CU	27	63% 52% 26% 7% 15%
22	AV	61	8% 56% 30% 13%
22	CV	61	11% 48% 26% 11% 13%
23	BA	2915	3% 55% 31% 10%
23	DA	2915	3% 53% 34% 10%
24	BB	122	46% 43% 9%
24	DB	122	2% 45% 46% 7%
25	BD	276	2% 58% 35% 6%
25	DD	276	% 58% 34% 6%
26	BE	206	% 61% 27% 9%
26	DE	206	% 59% 28% 10%
27	BF	210	58% 30% 8%
27	DF	210	3% 51% 37% 7%

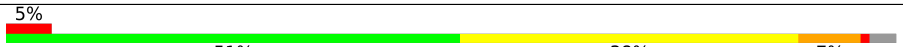
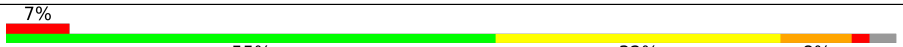
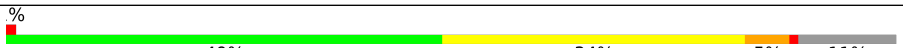
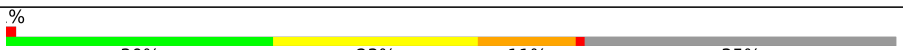
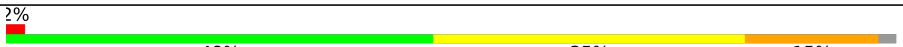
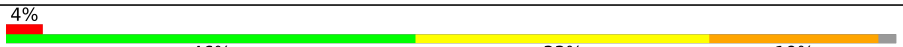
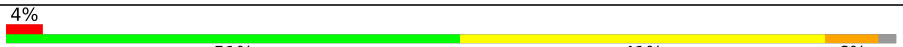
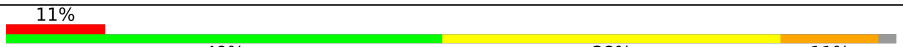
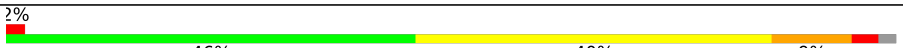
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
28	BG	182	13% 49% 41% 10%
28	DG	182	12% 48% 40% 12%
29	BH	180	6% 62% 29%
29	DH	180	4% 62% 30%
30	BI	148	3% 43% 43% 14%
30	DI	148	11% 53% 28% 17%
31	BN	140	2% 54% 36% 10%
31	DN	140	% 54% 34% 11%
32	BO	122	2% 62% 32% 6%
32	DO	122	2% 60% 34% 6%
33	BP	150	3% 59% 31% 7%
33	DP	150	% 57% 35% 6%
34	BQ	141	3% 65% 27% 6%
34	DQ	141	56% 38% 5%
35	BR	118	% 68% 27% 5%
35	DR	118	% 62% 34%
36	BS	112	% 52% 34% 12%
36	DS	112	3% 47% 39% 12%
37	BT	146	4% 47% 33% 10% 10%
37	DT	146	% 48% 34% 8% 10%
38	BU	118	3% 66% 29%
38	DU	118	65% 27% 6%
39	BV	101	2% 57% 34% 7%
39	DV	101	56% 33% 9%
40	BW	113	3% 65% 29%

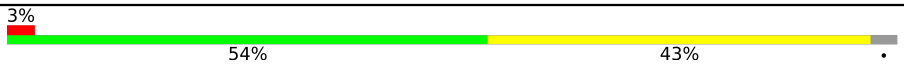
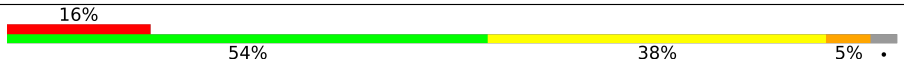
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
40	DW	113	
41	BX	96	
41	DX	96	
42	BY	110	
42	DY	110	
43	BZ	206	
43	DZ	206	
44	B0	85	
44	D0	85	
45	B1	98	
45	D1	98	
46	B2	72	
46	D2	72	
47	B3	60	
47	D3	60	
48	B4	71	
48	D4	71	
49	B5	60	
49	D5	60	
50	B6	54	
50	D6	54	
51	B7	49	
51	D7	49	
52	B8	65	
52	D8	65	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
53	B9	37	
53	D9	37	

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	1620	-	-	-	X
54	MG	AA	1632	-	-	-	X
54	MG	AA	1641	-	-	-	X
54	MG	AA	1643	-	-	-	X
54	MG	AA	1676	-	-	-	X
54	MG	AA	1677	-	-	-	X
54	MG	CA	1623	-	-	-	X
54	MG	CA	1624	-	-	-	X
54	MG	CA	1631	-	-	-	X

2 Entry composition

There are 56 unique types of molecules in this entry. The entry contains 283930 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	AA	1505	Total	C	N	O	P	0	0	0
			32353	14399	5995	10454	1505			
1	CA	1501	Total	C	N	O	P	0	0	0
			32270	14362	5983	10424	1501			

- Molecule 2 is a protein called 30S Ribosomal Protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	AB	229	Total	C	N	O	S	0	0	0
			1775	1132	318	320	5			
2	CB	229	Total	C	N	O	S	0	0	0
			1775	1132	318	320	5			

- Molecule 3 is a protein called 30S Ribosomal Protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	AC	206	Total	C	N	O	S	0	0	0
			1450	906	279	264	1			
3	CC	206	Total	C	N	O	S	0	0	0
			1450	906	279	264	1			

- Molecule 4 is a protein called 30S Ribosomal Protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	AD	208	Total	C	N	O	S	0	0	0
			1526	963	283	274	6			
4	CD	208	Total	C	N	O	S	0	0	0
			1526	963	283	274	6			

- Molecule 5 is a protein called 30S Ribosomal Protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	AE	148	Total	C	N	O	S	0	0	0
			1105	699	204	198	4			
5	CE	148	Total	C	N	O	S	0	0	0
			1105	699	204	198	4			

- 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
			777	493	137	144	3			
6	CF	100	Total	C	N	O	S	0	0	0
			777	493	137	144	3			

- Molecule 7 is a protein called 30S Ribosomal Protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	AG	155	Total	C	N	O	S	0	0	0
			1164	726	224	208	6			
7	CG	155	Total	C	N	O	S	0	0	0
			1164	726	224	208	6			

- Molecule 8 is a protein called 30S Ribosomal Protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	AH	138	Total	C	N	O	S	0	0	0
			1045	665	188	190	2			
8	CH	138	Total	C	N	O	S	0	0	0
			1045	665	188	190	2			

- Molecule 9 is a protein called 30S Ribosomal Protein S9.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
9	AI	125	Total	C	N	O	0	0	0
			852	533	163	156			
9	CI	125	Total	C	N	O	0	0	0
			852	533	163	156			

- Molecule 10 is a protein called 30S Ribosomal Protein S10.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
10	AJ	96	Total	C	N	O	0	0	0
			663	410	132	121			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
10	CJ	96	Total	C	N	O	0	0	0
			663	410	132	121			

- Molecule 11 is a protein called 30S Ribosomal Protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	AK	114	Total	C	N	O	S	0	0	0
			828	516	155	154	3			
11	CK	114	Total	C	N	O	S	0	0	0
			828	516	155	154	3			

- Molecule 12 is a protein called 30S Ribosomal Protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	AL	122	Total	C	N	O	S	0	0	0
			905	567	178	159	1			
12	CL	122	Total	C	N	O	S	0	0	0
			905	567	178	159	1			

- 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
			804	497	164	142	1			
13	CM	114	Total	C	N	O	S	0	0	0
			804	497	164	142	1			

- Molecule 14 is a protein called 30S Ribosomal Protein S14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	AN	60	Total	C	N	O	S	0	0	0
			478	303	99	72	4			
14	CN	60	Total	C	N	O	S	0	0	0
			478	303	99	72	4			

- Molecule 15 is a protein called 30S Ribosomal Protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	AO	88	Total	C	N	O	S	0	0	0
			724	453	143	126	2			
15	CO	88	Total	C	N	O	S	0	0	0
			724	453	143	126	2			

- 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
			651	416	123	111	1			
16	CP	82	Total	C	N	O	S	0	0	0
			651	416	123	111	1			

- Molecule 17 is a protein called 30S Ribosomal Protein S17.

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

- Molecule 18 is a protein called 30S Ribosomal Protein S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	AR	68	Total	C	N	O	0	0	0
			514	329	98	87			
18	CR	68	Total	C	N	O	0	0	0
			514	329	98	87			

- Molecule 19 is a protein called 30S Ribosomal Protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AS	81	Total	C	N	O	S	0	0	0
			560	351	108	99	2			
19	CS	81	Total	C	N	O	S	0	0	0
			560	351	108	99	2			

- Molecule 20 is a protein called 30S Ribosomal Protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	AT	97	Total	C	N	O	S	0	0	0
			713	438	152	121	2			
20	CT	97	Total	C	N	O	S	0	0	0
			713	438	152	121	2			

- Molecule 21 is a protein called 30S Ribosomal Protein THX.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
21	AU	23	Total	C	N	O	0	0	0
			199	122	48	29			
21	CU	23	Total	C	N	O	0	0	0
			199	122	48	29			

- Molecule 22 is a protein called Ribosome modulation factor.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	AV	53	Total	C	N	O	S	0	0	0
			333	204	66	61	2			
22	CV	53	Total	C	N	O	S	0	0	0
			353	218	67	66	2			

There are 12 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
AV	56	HIS	-	expression tag	UNP P0AFW2
AV	57	HIS	-	expression tag	UNP P0AFW2
AV	58	HIS	-	expression tag	UNP P0AFW2
AV	59	HIS	-	expression tag	UNP P0AFW2
AV	60	HIS	-	expression tag	UNP P0AFW2
AV	61	HIS	-	expression tag	UNP P0AFW2
CV	56	HIS	-	expression tag	UNP P0AFW2
CV	57	HIS	-	expression tag	UNP P0AFW2
CV	58	HIS	-	expression tag	UNP P0AFW2
CV	59	HIS	-	expression tag	UNP P0AFW2
CV	60	HIS	-	expression tag	UNP P0AFW2
CV	61	HIS	-	expression tag	UNP P0AFW2

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	BA	2809	Total	C	N	O	P	0	0	0
			60512	26930	11328	19446	2808			
23	DA	2814	Total	C	N	O	P	0	0	0
			60620	26978	11348	19481	2813			

- Molecule 24 is a RNA chain called 5S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	BB	120	Total	C	N	O	P	0	0	0
			2573	1146	476	832	119			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	DB	120	Total	C	N	O	P	0	0	0
			2573	1146	476	832	119			

- Molecule 25 is a protein called 50S Ribosomal Protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	BD	275	Total	C	N	O	S	0	0	0
			2136	1349	423	361	3			
25	DD	275	Total	C	N	O	S	0	0	0
			2136	1349	423	361	3			

- Molecule 26 is a protein called 50S Ribosomal Protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	BE	204	Total	C	N	O	S	0	0	0
			1555	982	297	270	6			
26	DE	204	Total	C	N	O	S	0	0	0
			1555	982	297	270	6			

- Molecule 27 is a protein called 50S Ribosomal Protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	BF	203	Total	C	N	O	S	0	0	1
			1580	1007	298	273	2			
27	DF	203	Total	C	N	O	S	0	0	1
			1580	1007	298	273	2			

- Molecule 28 is a protein called 50S Ribosomal Protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	BG	181	Total	C	N	O	S	0	0	0
			1368	879	242	244	3			
28	DG	181	Total	C	N	O	S	0	0	0
			1368	879	242	244	3			

- Molecule 29 is a protein called 50S Ribosomal Protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	BH	174	Total	C	N	O	S	0	0	0
			1317	837	243	236	1			
29	DH	174	Total	C	N	O	S	0	0	0
			1317	837	243	236	1			

- Molecule 30 is a protein called 50S Ribosomal Protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	BI	146	Total	C	N	O	S	0	0	0
			1040	669	180	190	1			
30	DI	146	Total	C	N	O	S	0	0	0
			1038	668	180	189	1			

- Molecule 31 is a protein called 50S Ribosomal Protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	BN	140	Total	C	N	O	S	0	0	0
			1112	717	207	184	4			
31	DN	140	Total	C	N	O	S	0	0	0
			1112	717	207	184	4			

- Molecule 32 is a protein called 50S Ribosomal Protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	BO	122	Total	C	N	O	S	0	0	0
			923	583	168	168	4			
32	DO	122	Total	C	N	O	S	0	0	0
			923	583	168	168	4			

- Molecule 33 is a protein called 50S Ribosomal Protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	BP	149	Total	C	N	O	S	0	0	0
			1131	703	229	196	3			
33	DP	149	Total	C	N	O	S	0	0	0
			1131	703	229	196	3			

- Molecule 34 is a protein called 50S Ribosomal Protein L16.

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

- Molecule 35 is a protein called 50S Ribosomal Protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	BR	118	Total	C	N	O	S	0	0	0
			968	604	203	160	1			
35	DR	118	Total	C	N	O	S	0	0	0
			968	604	203	160	1			

- Molecule 36 is a protein called 50S Ribosomal Protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
36	BS	110	Total	C	N	O	0	0	0
			865	544	172	149			
36	DS	110	Total	C	N	O	0	0	0
			865	544	172	149			

- Molecule 37 is a protein called 50S Ribosomal Protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	BT	131	Total	C	N	O	S	0	0	0
			1063	666	213	183	1			
37	DT	131	Total	C	N	O	S	0	0	0
			1063	666	213	183	1			

- Molecule 38 is a protein called 50S Ribosomal Protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	BU	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			
38	DU	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			

- Molecule 39 is a protein called 50S Ribosomal Protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	BV	100	Total	C	N	O	S	0	0	0
			760	490	136	133	1			
39	DV	101	Total	C	N	O	S	0	0	0
			771	495	140	135	1			

- Molecule 40 is a protein called 50S Ribosomal Protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	BW	112	Total	C	N	O	S	0	0	0
			881	554	172	153	2			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	DW	112	Total	C	N	O	S	0	0	0
			881	554	172	153	2			

- Molecule 41 is a protein called 50S Ribosomal Protein L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	BX	95	Total	C	N	O	S	0	0	0
			742	483	134	124	1			
41	DX	95	Total	C	N	O	S	0	0	0
			742	483	134	124	1			

- Molecule 42 is a protein called 50S Ribosomal Protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	BY	107	Total	C	N	O	S	0	0	0
			785	503	145	131	6			
42	DY	107	Total	C	N	O	S	0	0	0
			785	503	145	131	6			

- Molecule 43 is a protein called 50S Ribosomal Protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	BZ	198	Total	C	N	O	S	0	0	0
			1522	972	269	279	2			
43	DZ	198	Total	C	N	O	S	0	0	0
			1522	972	269	279	2			

- Molecule 44 is a protein called 50S Ribosomal Protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	B0	76	Total	C	N	O	S	0	0	0
			594	368	125	100	1			
44	D0	76	Total	C	N	O	S	0	0	0
			594	368	125	100	1			

- Molecule 45 is a protein called 50S Ribosomal Protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	B1	97	Total	C	N	O	S	0	0	0
			745	469	144	131	1			
45	D1	97	Total	C	N	O	S	0	0	0
			745	469	144	131	1			

- Molecule 46 is a protein called 50S Ribosomal Protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	B2	70	Total	C	N	O	S	0	0	0
			588	365	118	103	2			
46	D2	70	Total	C	N	O	S	0	0	0
			588	365	118	103	2			

- Molecule 47 is a protein called 50S Ribosomal Protein L30.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
47	B3	59	Total	C	N	O	0	0	0
			458	293	87	78			
47	D3	59	Total	C	N	O	0	0	0
			458	293	87	78			

- Molecule 48 is a protein called 50S Ribosomal Protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	B4	46	Total	C	N	O	S	0	0	0
			349	223	57	64	5			
48	D4	46	Total	C	N	O	S	0	0	0
			349	223	57	64	5			

- Molecule 49 is a protein called 50S Ribosomal Protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	B5	59	Total	C	N	O	S	0	0	0
			455	286	90	74	5			
49	D5	59	Total	C	N	O	S	0	0	0
			455	286	90	74	5			

- Molecule 50 is a protein called 50S Ribosomal Protein L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	B6	53	Total	C	N	O	S	0	0	0
			449	278	90	77	4			
50	D6	53	Total	C	N	O	S	0	0	0
			449	278	90	77	4			

- Molecule 51 is a protein called 50S Ribosomal Protein L34.

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

- Molecule 52 is a protein called 50S Ribosomal Protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	B8	64	Total	C	N	O	S	0	0	0
			509	326	99	82	2			
52	D8	64	Total	C	N	O	S	0	0	0
			509	326	99	82	2			

- Molecule 53 is a protein called 50S Ribosomal Protein L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	B9	36	Total	C	N	O	S	0	0	0
			297	182	66	46	3			
53	D9	36	Total	C	N	O	S	0	0	0
			297	182	66	46	3			

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
54	AA	106	Total	Mg	0	0
			106	106		
54	AD	1	Total	Mg	0	0
			1	1		
54	BA	618	Total	Mg	0	0
			618	618		
54	BB	17	Total	Mg	0	0
			17	17		
54	BD	3	Total	Mg	0	0
			3	3		
54	BE	6	Total	Mg	0	0
			6	6		
54	BF	2	Total	Mg	0	0
			2	2		
54	BP	1	Total	Mg	0	0
			1	1		
54	BQ	3	Total	Mg	0	0
			3	3		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	BR	2	Total Mg 2 2	0	0
54	BU	2	Total Mg 2 2	0	0
54	BV	1	Total Mg 1 1	0	0
54	BW	1	Total Mg 1 1	0	0
54	B0	2	Total Mg 2 2	0	0
54	B1	1	Total Mg 1 1	0	0
54	B2	2	Total Mg 2 2	0	0
54	B3	2	Total Mg 2 2	0	0
54	B5	2	Total Mg 2 2	0	0
54	B8	3	Total Mg 3 3	0	0
54	B9	1	Total Mg 1 1	0	0
54	CA	69	Total Mg 69 69	0	0
54	DA	430	Total Mg 430 430	0	0
54	DB	5	Total Mg 5 5	0	0
54	DD	1	Total Mg 1 1	0	0
54	DE	1	Total Mg 1 1	0	0
54	DF	2	Total Mg 2 2	0	0
54	DP	1	Total Mg 1 1	0	0
54	D6	1	Total Mg 1 1	0	0
54	D7	1	Total Mg 1 1	0	0
54	D8	1	Total Mg 1 1	0	0

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

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
55	AD	1	Total Zn 1 1	0	0
55	AN	1	Total Zn 1 1	0	0
55	BY	1	Total Zn 1 1	0	0
55	B4	1	Total Zn 1 1	0	0
55	B5	1	Total Zn 1 1	0	0
55	B6	1	Total Zn 1 1	0	0
55	B9	1	Total Zn 1 1	0	0
55	CD	1	Total Zn 1 1	0	0
55	CN	1	Total Zn 1 1	0	0
55	DY	1	Total Zn 1 1	0	0
55	D4	1	Total Zn 1 1	0	0
55	D5	1	Total Zn 1 1	0	0
55	D6	1	Total Zn 1 1	0	0
55	D9	1	Total Zn 1 1	0	0

- Molecule 56 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	AA	145	Total O 145 145	0	0
56	AF	1	Total O 1 1	0	0
56	AK	1	Total O 1 1	0	0
56	AQ	1	Total O 1 1	0	0
56	BA	1422	Total O 1422 1422	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	BB	31	Total O 31 31	0	0
56	BD	10	Total O 10 10	0	0
56	BE	8	Total O 8 8	0	0
56	BF	11	Total O 11 11	0	0
56	BH	2	Total O 2 2	0	0
56	BN	2	Total O 2 2	0	0
56	BO	3	Total O 3 3	0	0
56	BP	6	Total O 6 6	0	0
56	BQ	2	Total O 2 2	0	0
56	BR	6	Total O 6 6	0	0
56	BT	1	Total O 1 1	0	0
56	BU	2	Total O 2 2	0	0
56	BV	2	Total O 2 2	0	0
56	BW	4	Total O 4 4	0	0
56	BX	2	Total O 2 2	0	0
56	BY	1	Total O 1 1	0	0
56	B0	4	Total O 4 4	0	0
56	B3	1	Total O 1 1	0	0
56	B4	1	Total O 1 1	0	0
56	B5	3	Total O 3 3	0	0
56	B7	3	Total O 3 3	0	0

Continued on next page...

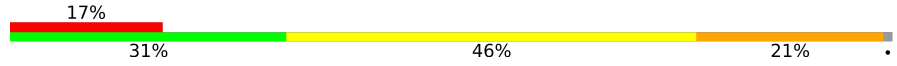
Continued from previous page...

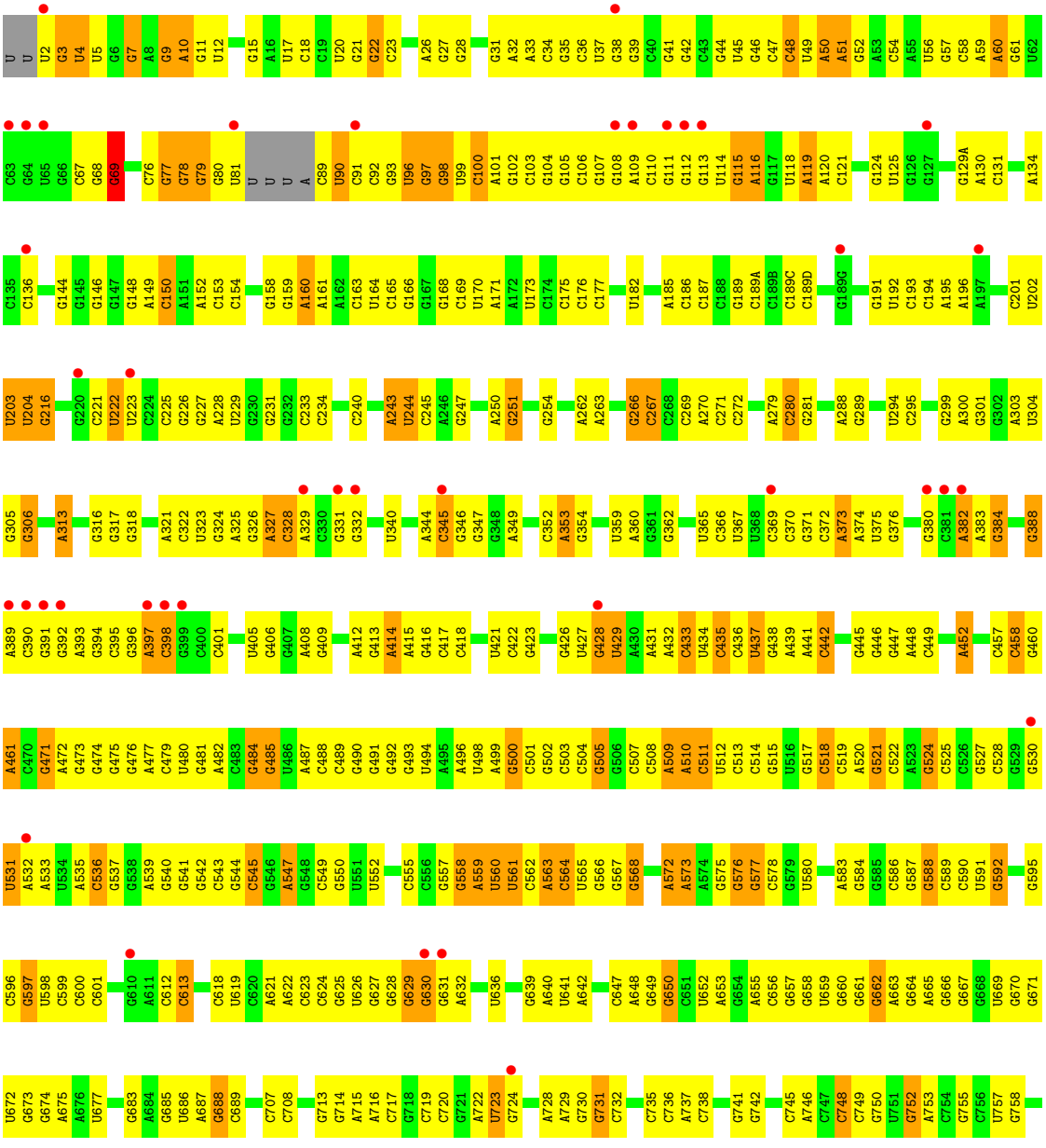
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	B8	7	Total O 7 7	0	0
56	B9	2	Total O 2 2	0	0
56	CA	119	Total O 119 119	0	0
56	CD	1	Total O 1 1	0	0
56	CK	2	Total O 2 2	0	0
56	CP	1	Total O 1 1	0	0
56	CT	2	Total O 2 2	0	0
56	DA	696	Total O 696 696	0	0
56	DB	9	Total O 9 9	0	0
56	DD	3	Total O 3 3	0	0
56	DE	2	Total O 2 2	0	0
56	DF	5	Total O 5 5	0	0
56	DP	5	Total O 5 5	0	0
56	DQ	2	Total O 2 2	0	0
56	DR	1	Total O 1 1	0	0
56	DV	1	Total O 1 1	0	0
56	DX	1	Total O 1 1	0	0
56	DY	1	Total O 1 1	0	0
56	D0	1	Total O 1 1	0	0
56	D1	2	Total O 2 2	0	0

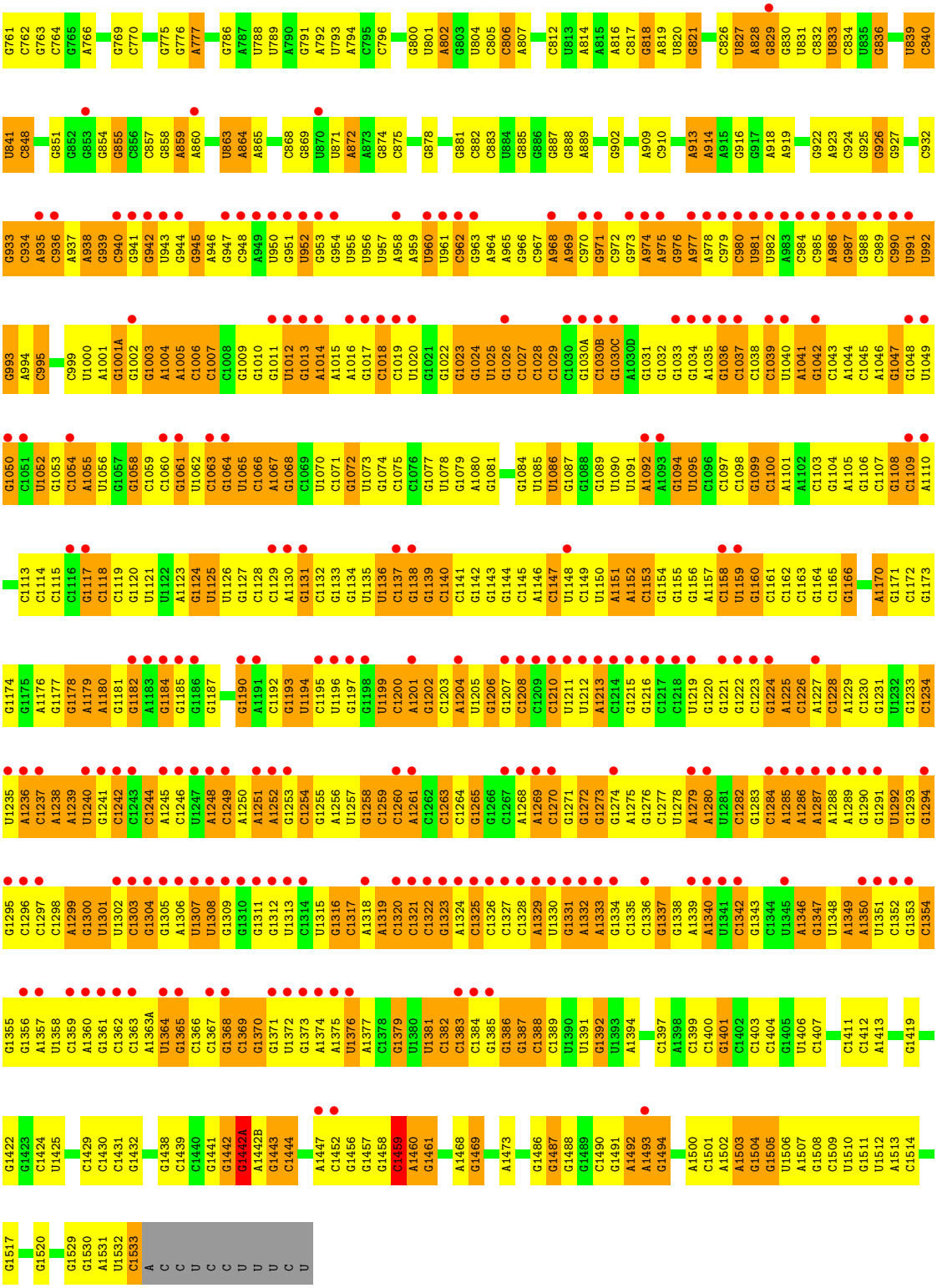
3 Residue-property plots (i)

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

- Molecule 1: 16S Ribosomal RNA

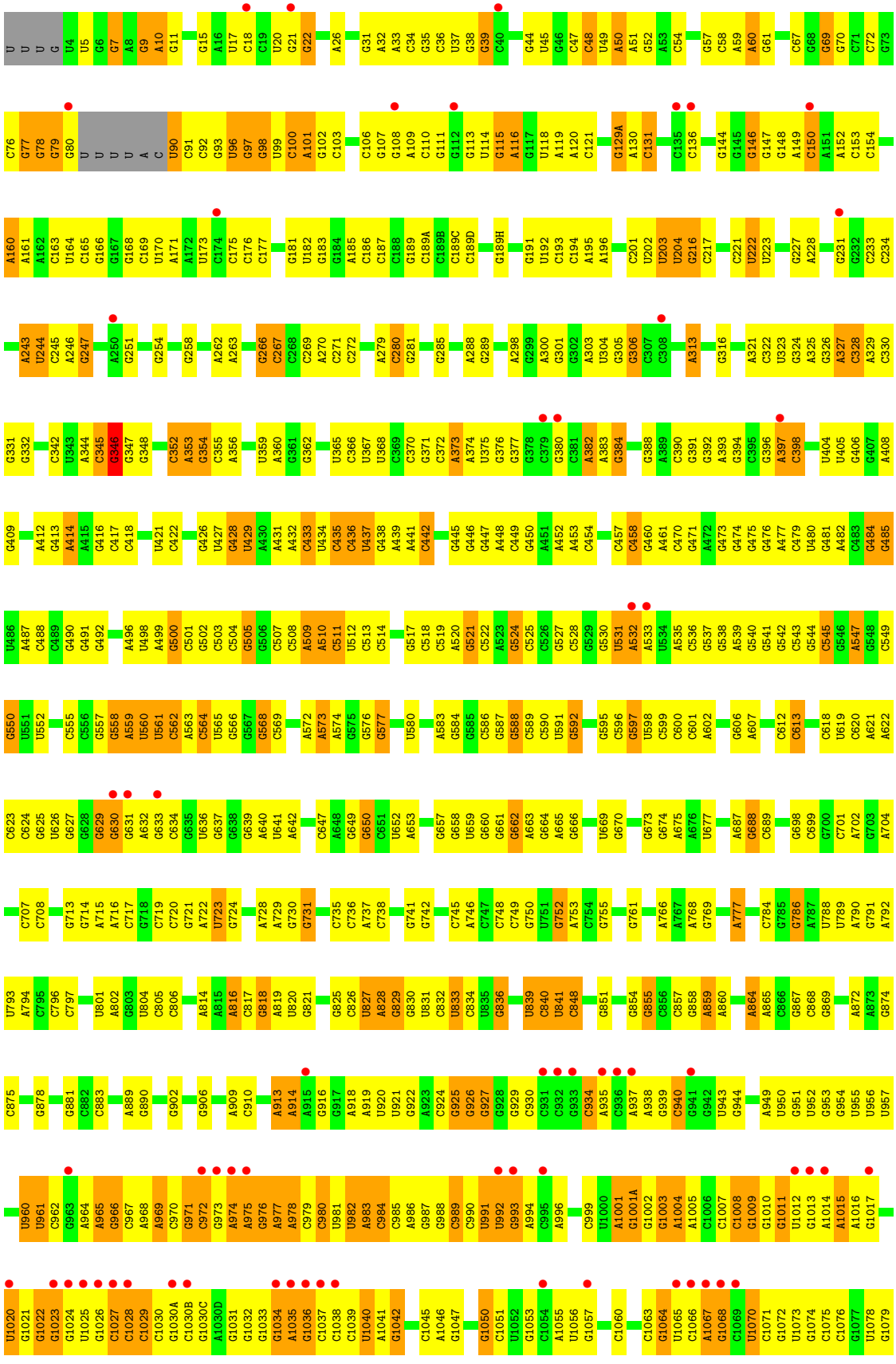
Chain AA: 

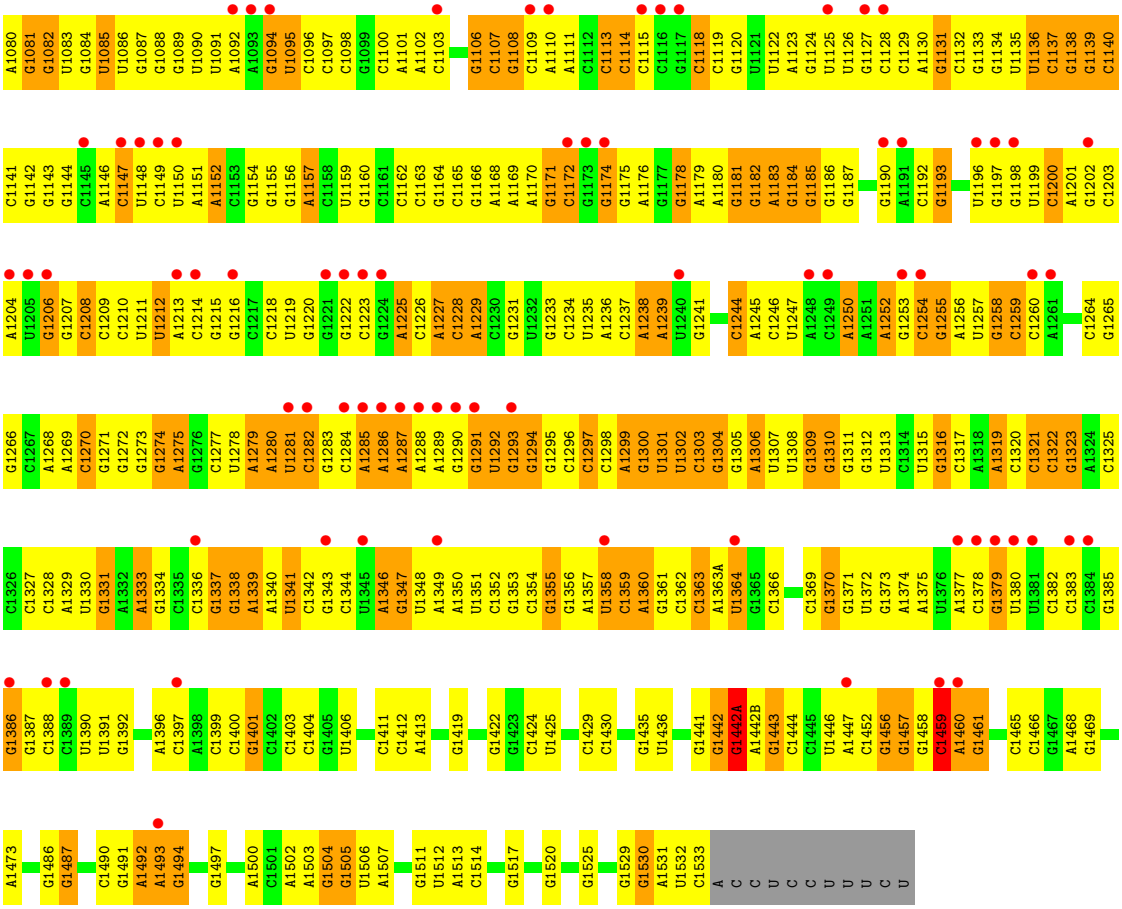




• Molecule 1: 16S Ribosomal RNA

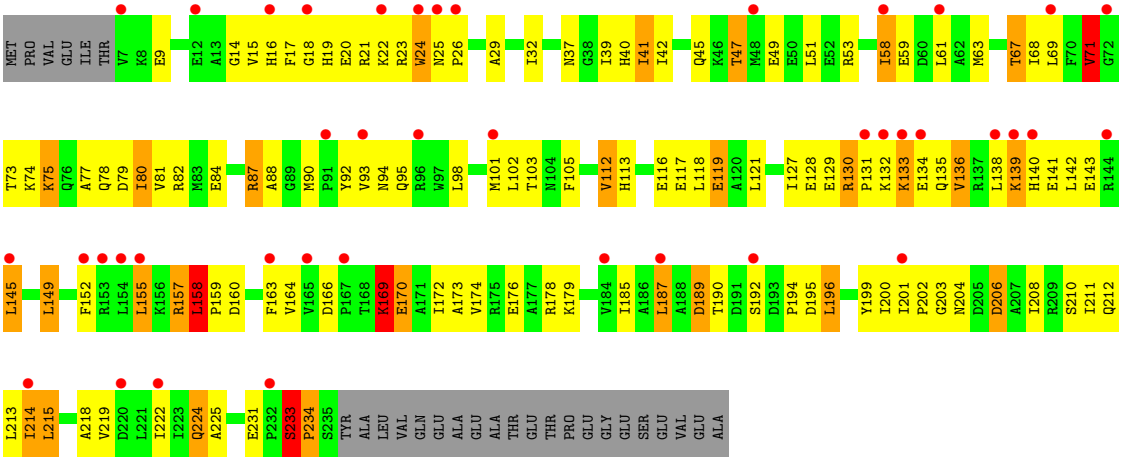
Chain CA:





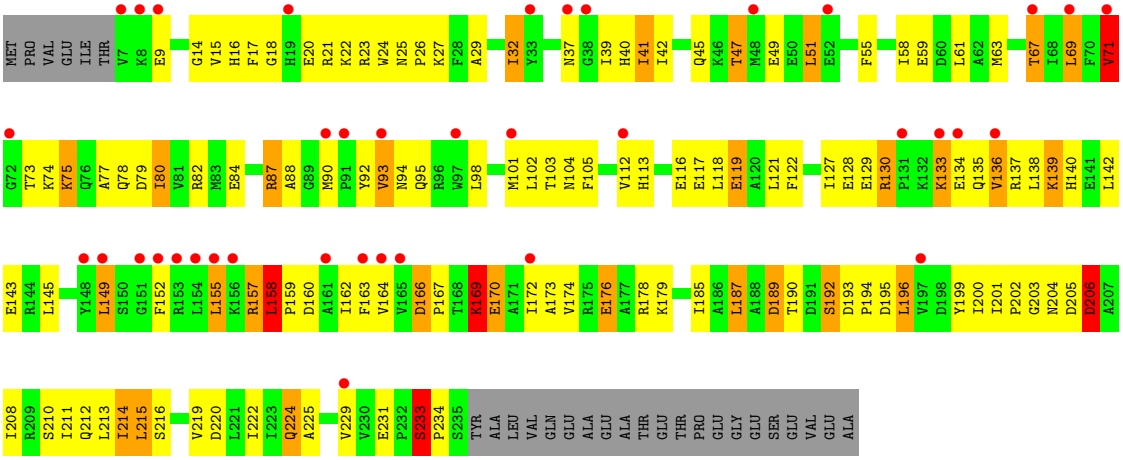
• Molecule 2: 30S Ribosomal Protein S2

Chain AB:



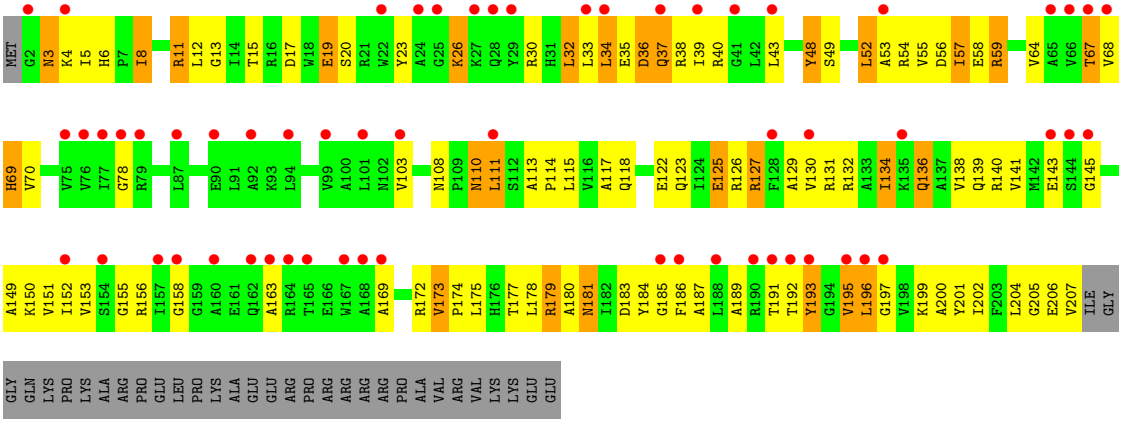
• Molecule 2: 30S Ribosomal Protein S2

Chain CB:



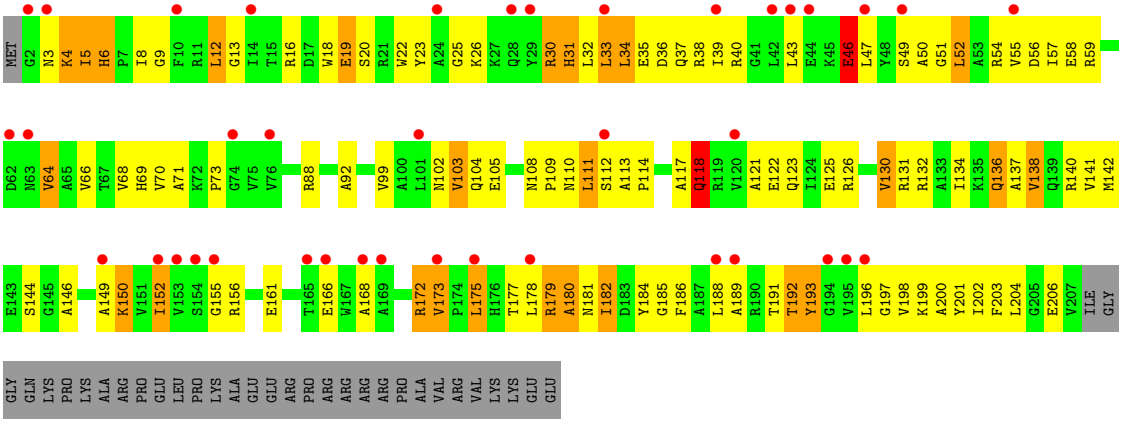
• Molecule 3: 30S Ribosomal Protein S3

Chain AC:



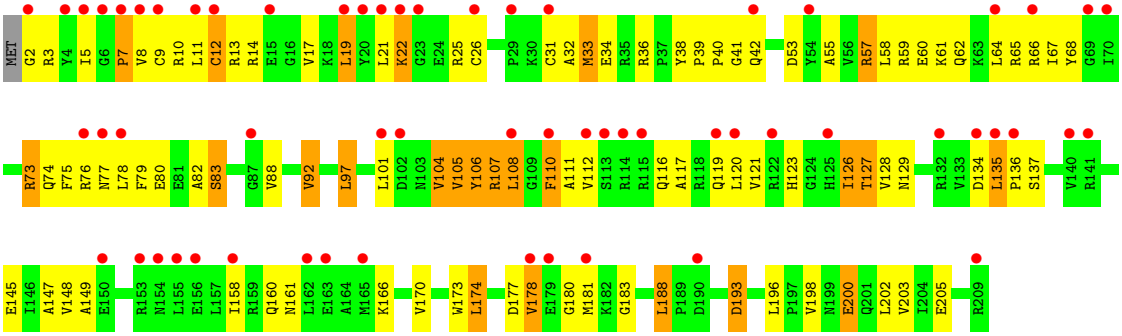
• Molecule 3: 30S Ribosomal Protein S3

Chain CC:



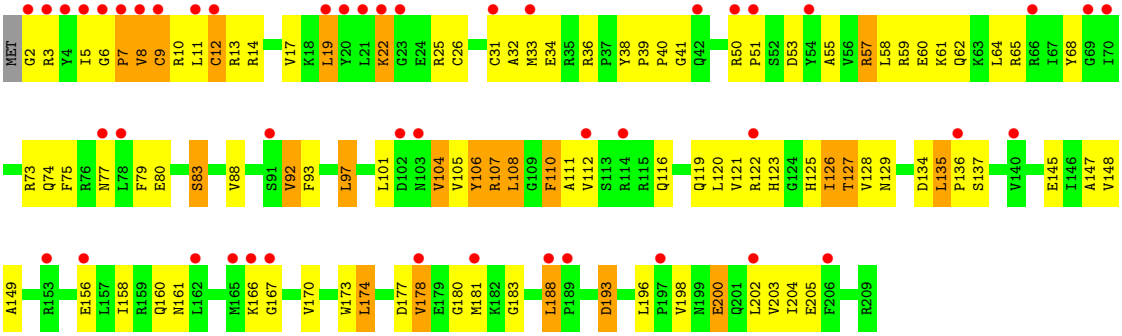
• Molecule 4: 30S Ribosomal Protein S4

Chain AD:



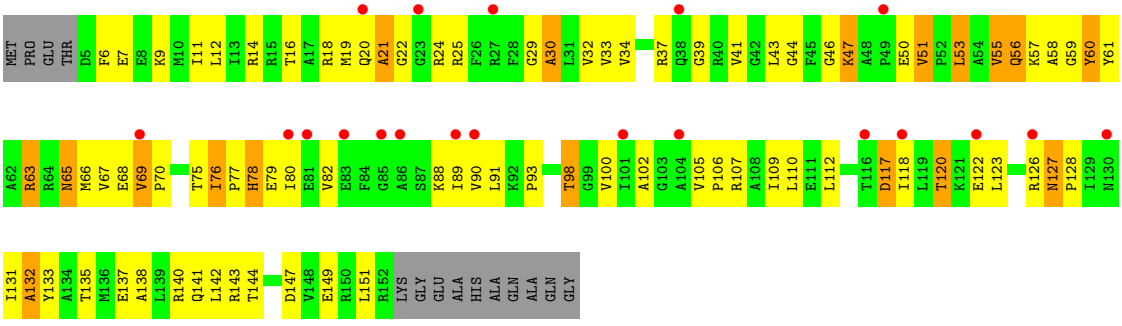
• Molecule 4: 30S Ribosomal Protein S4

Chain CD:



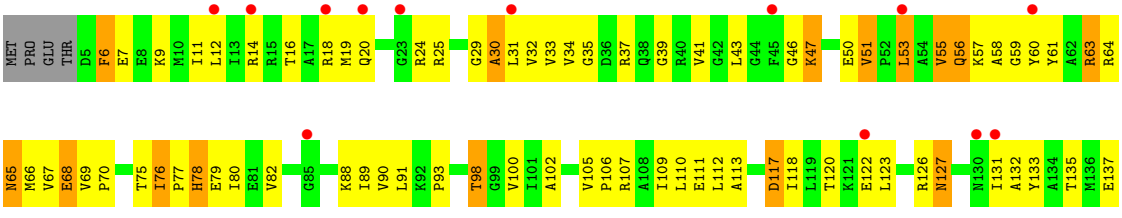
• Molecule 5: 30S Ribosomal Protein S5

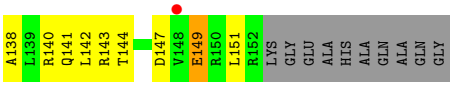
Chain AE:



• Molecule 5: 30S Ribosomal Protein S5

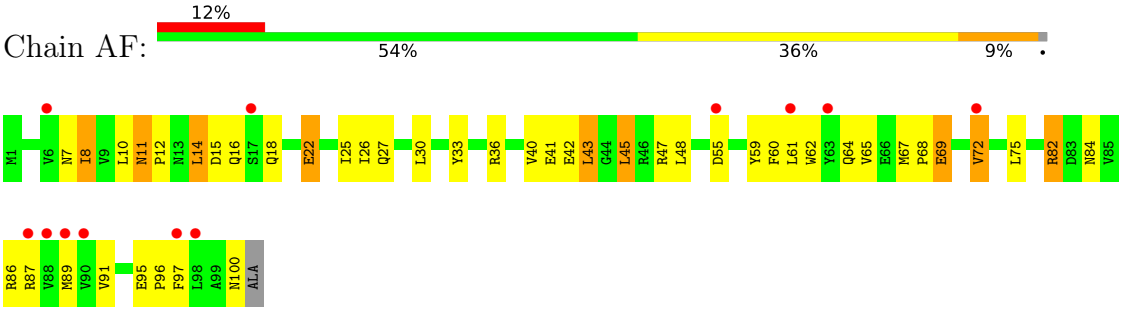
Chain CE:





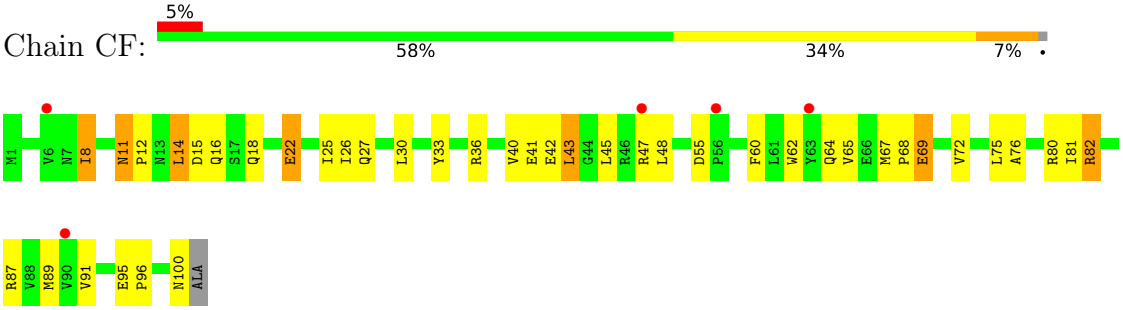
• Molecule 6: 30S Ribosomal Protein S6

Chain AF:



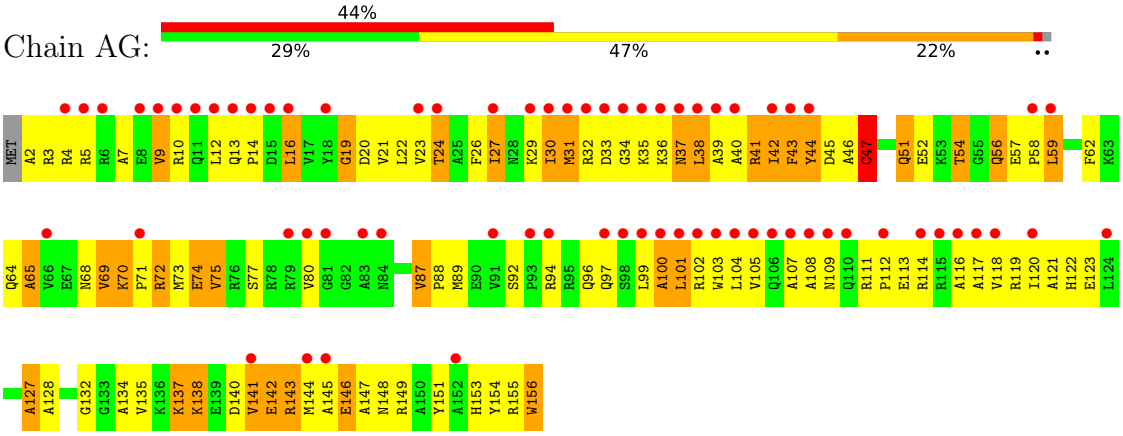
• Molecule 6: 30S Ribosomal Protein S6

Chain CF:



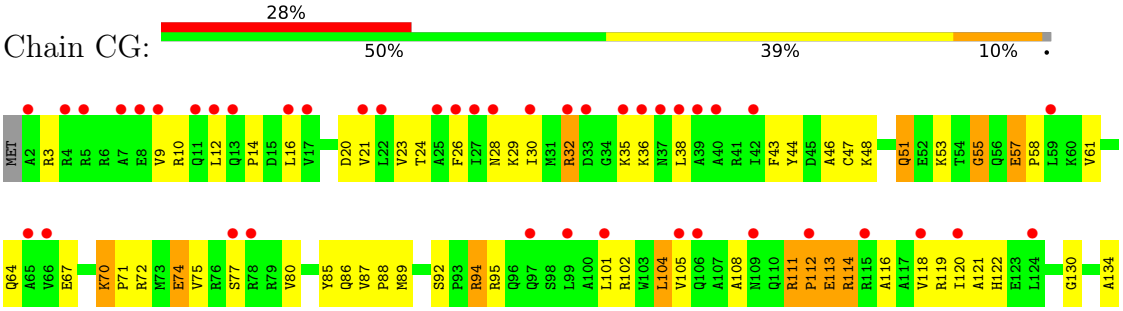
• Molecule 7: 30S Ribosomal Protein S7

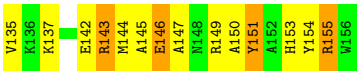
Chain AG:



• Molecule 7: 30S Ribosomal Protein S7

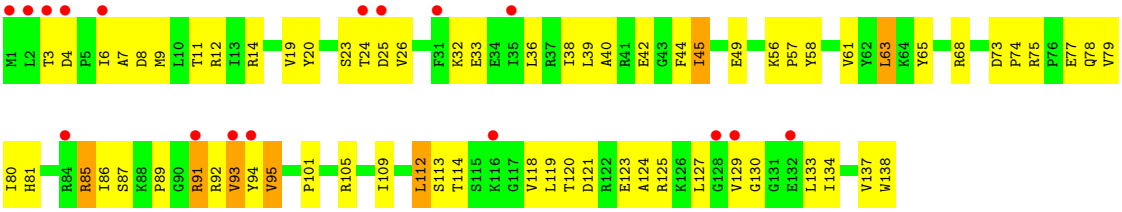
Chain CG:





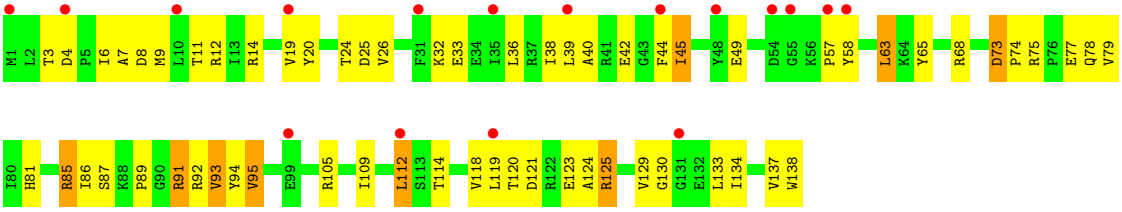
• Molecule 8: 30S Ribosomal Protein S8

Chain AH:



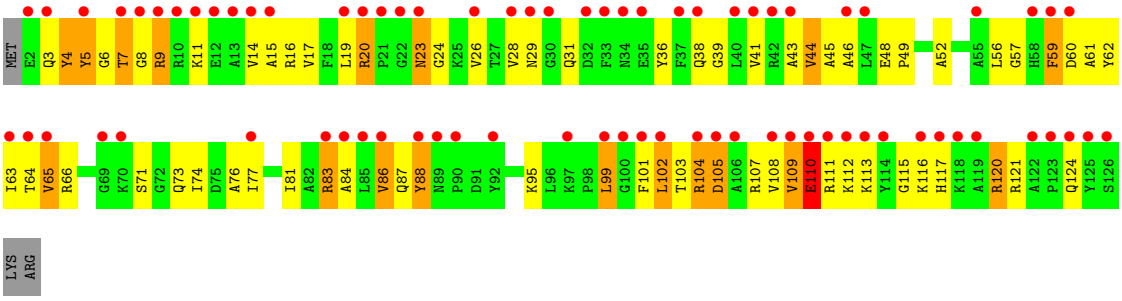
• Molecule 8: 30S Ribosomal Protein S8

Chain CH:



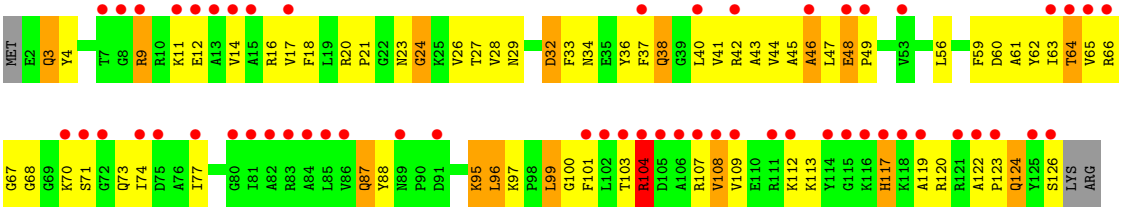
• Molecule 9: 30S Ribosomal Protein S9

Chain AI:



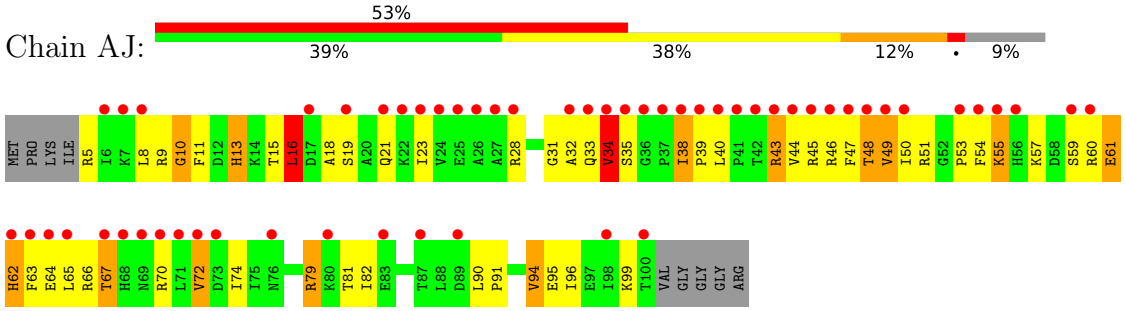
• Molecule 9: 30S Ribosomal Protein S9

Chain CI:



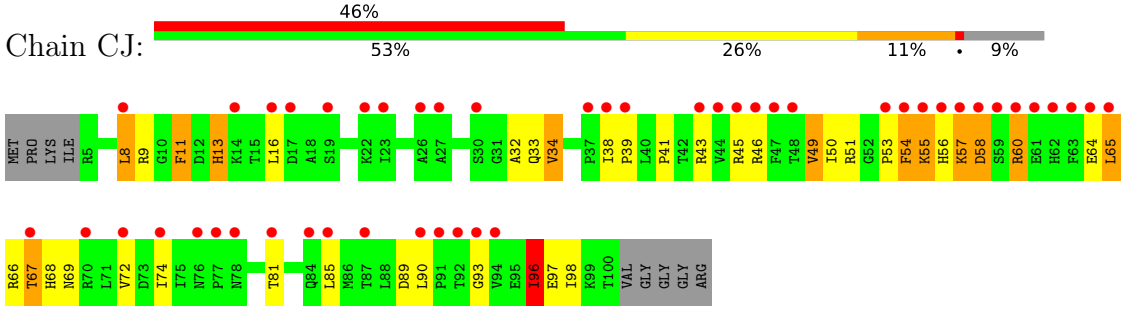
• Molecule 10: 30S Ribosomal Protein S10

Chain AJ:



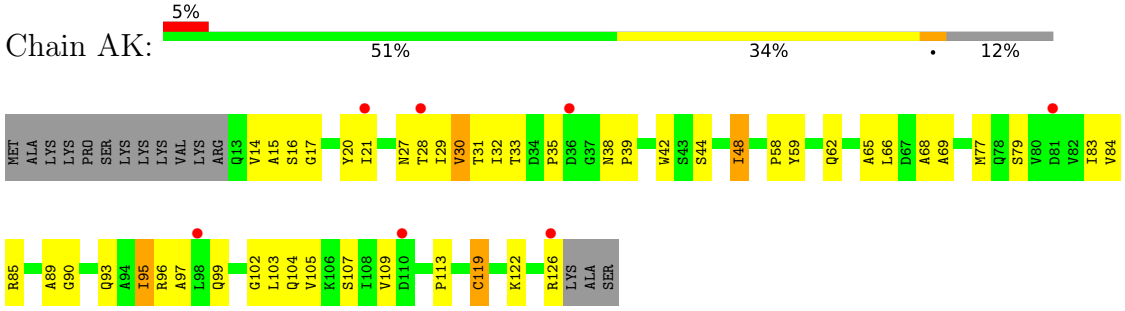
• Molecule 10: 30S Ribosomal Protein S10

Chain CJ:



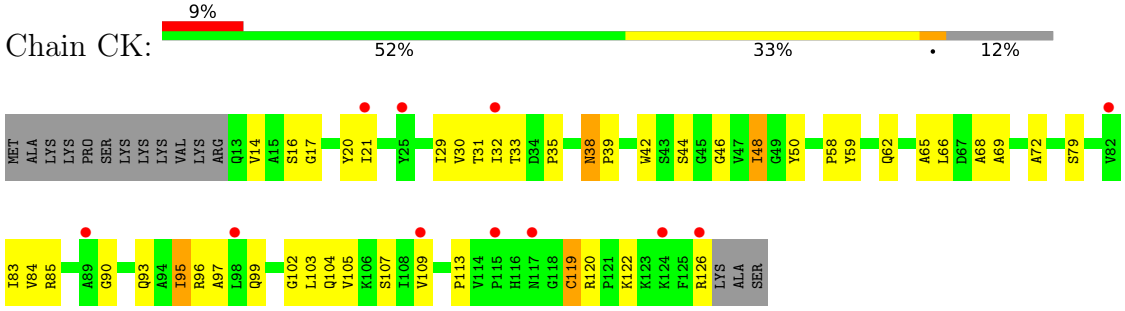
• Molecule 11: 30S Ribosomal Protein S11

Chain AK:



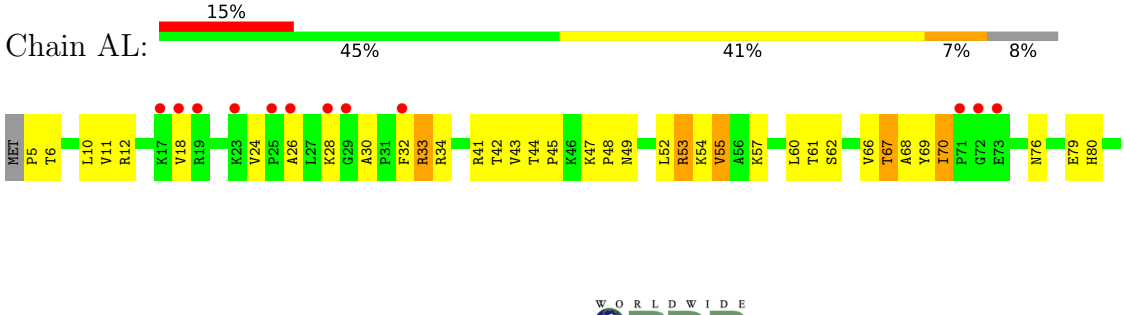
• Molecule 11: 30S Ribosomal Protein S11

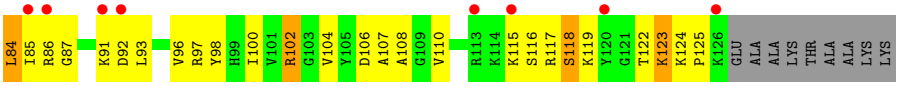
Chain CK:



• Molecule 12: 30S Ribosomal Protein S12

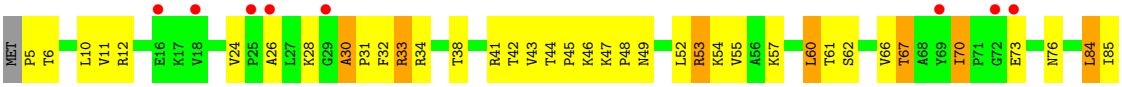
Chain AL:

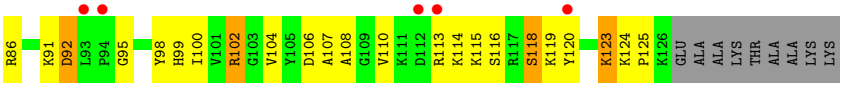




• Molecule 12: 30S Ribosomal Protein S12

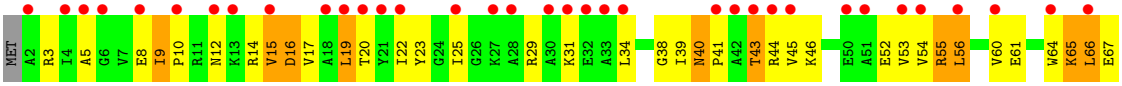
Chain CL:

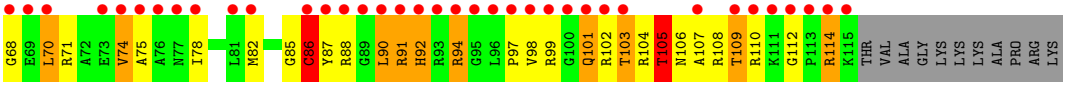




• Molecule 13: 30S Ribosomal Protein S13

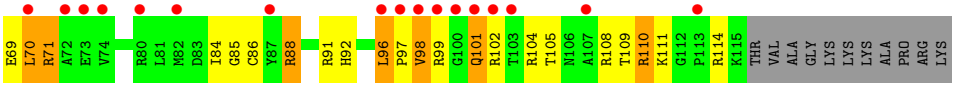
Chain AM:





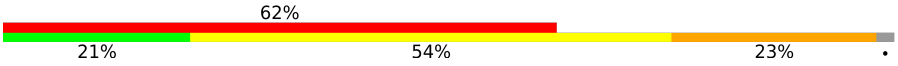
• Molecule 13: 30S Ribosomal Protein S13

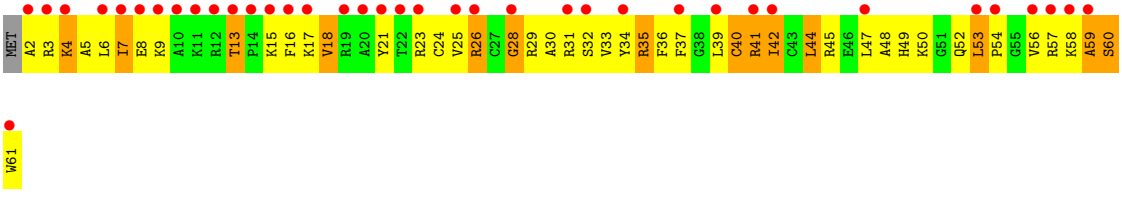
Chain CM:



• Molecule 14: 30S Ribosomal Protein S14

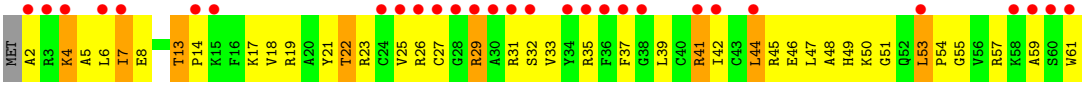
Chain AN:





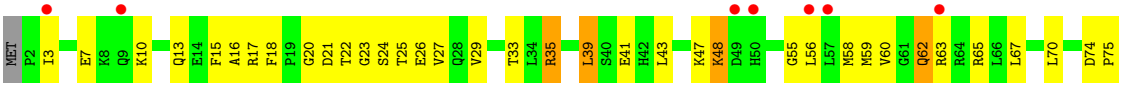
• Molecule 14: 30S Ribosomal Protein S14

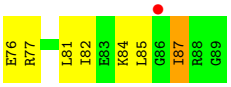
Chain CN:



• Molecule 15: 30S Ribosomal Protein S15

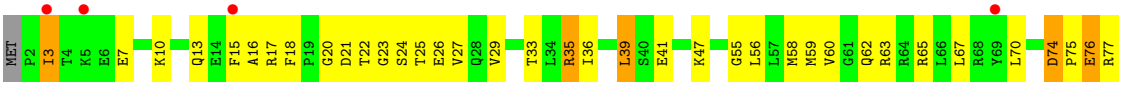
Chain AO:

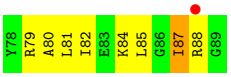




• Molecule 15: 30S Ribosomal Protein S15

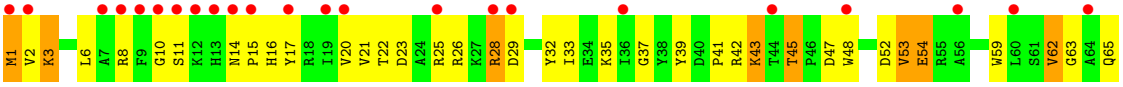
Chain CO:

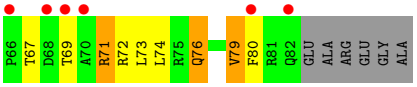




• Molecule 16: 30S Ribosomal Protein S16

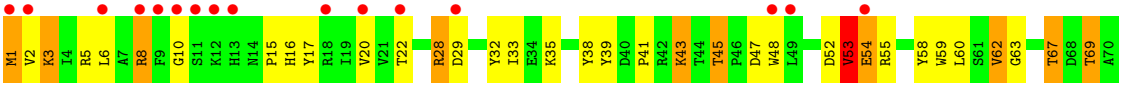
Chain AP:

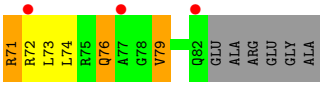




• Molecule 16: 30S Ribosomal Protein S16

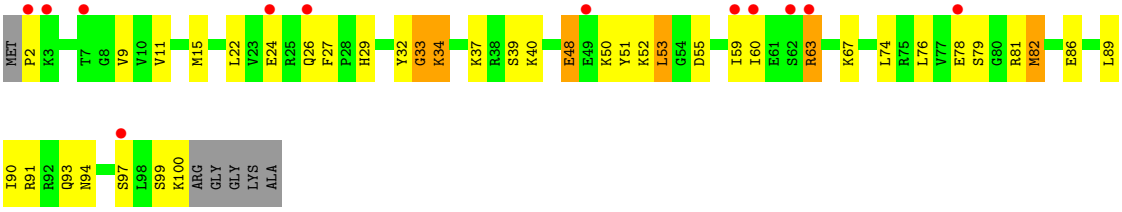
Chain CP:



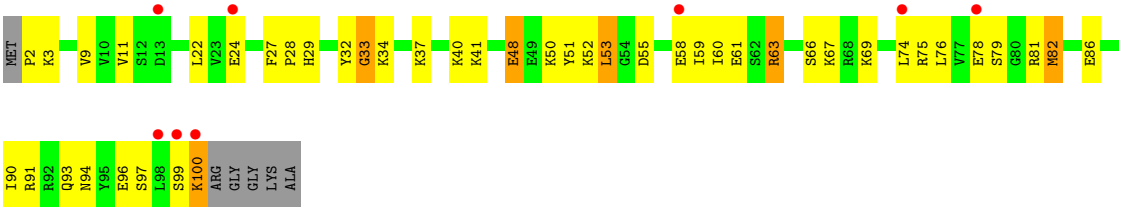


• Molecule 17: 30S Ribosomal Protein S17

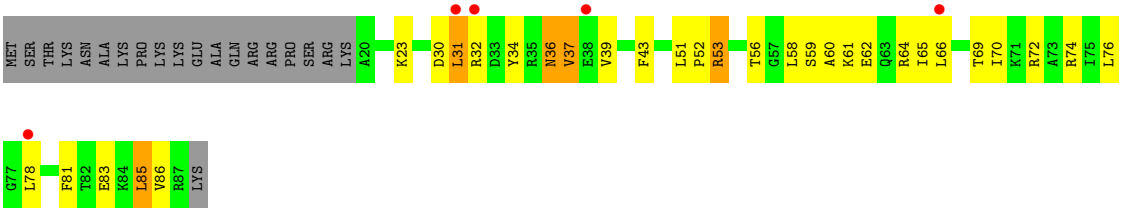
Chain AQ:



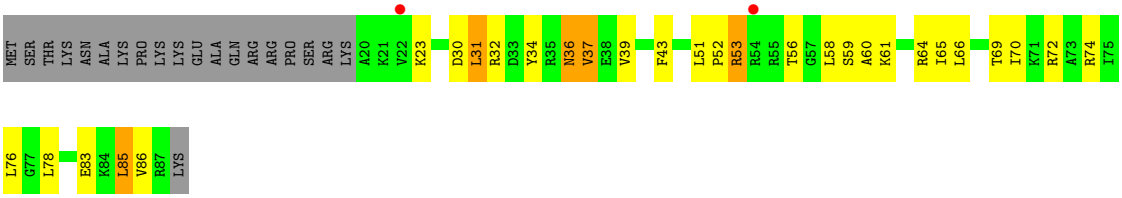
• Molecule 17: 30S Ribosomal Protein S17



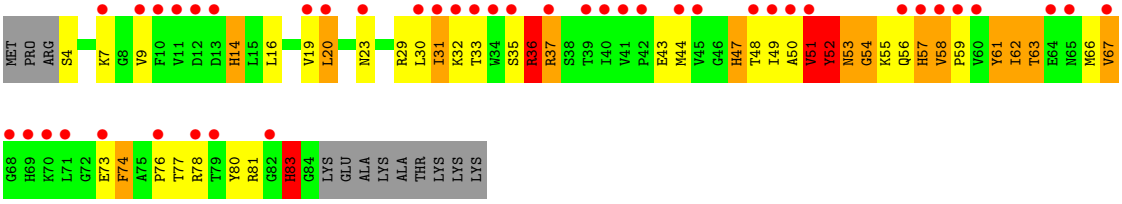
• Molecule 18: 30S Ribosomal Protein S18



• Molecule 18: 30S Ribosomal Protein S18

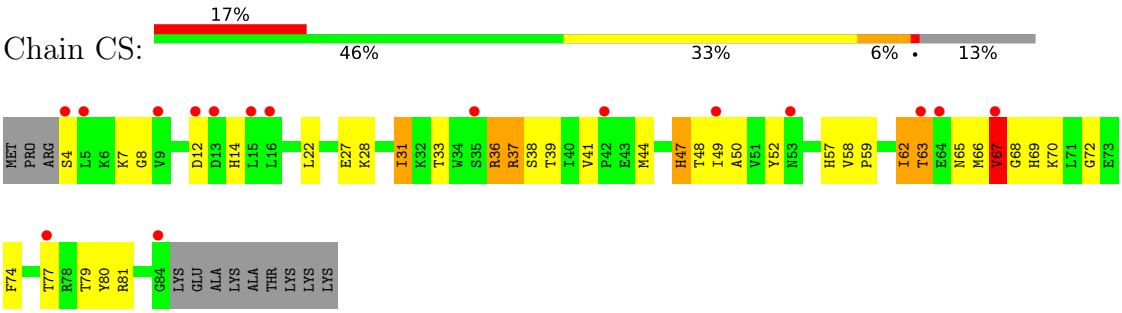


• Molecule 19: 30S Ribosomal Protein S19



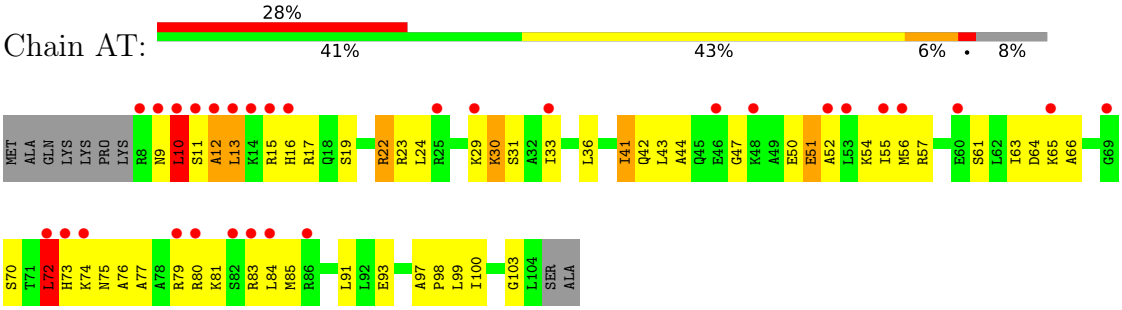
• Molecule 19: 30S Ribosomal Protein S19

Chain CS:



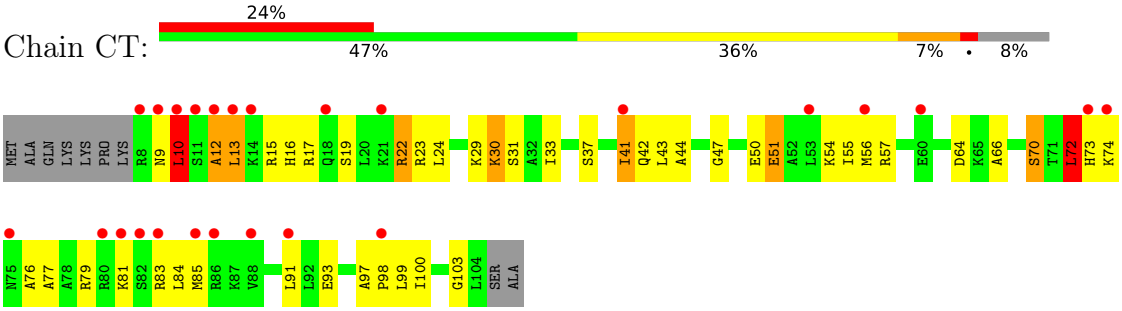
• Molecule 20: 30S Ribosomal Protein S20

Chain AT:



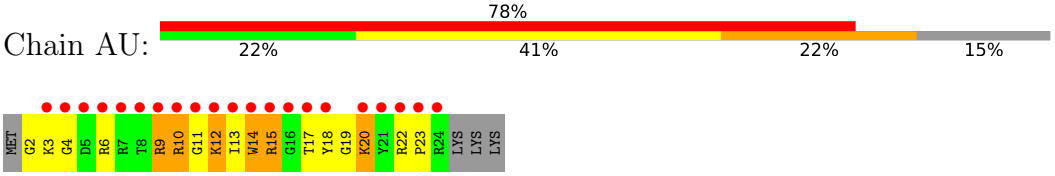
• Molecule 20: 30S Ribosomal Protein S20

Chain CT:



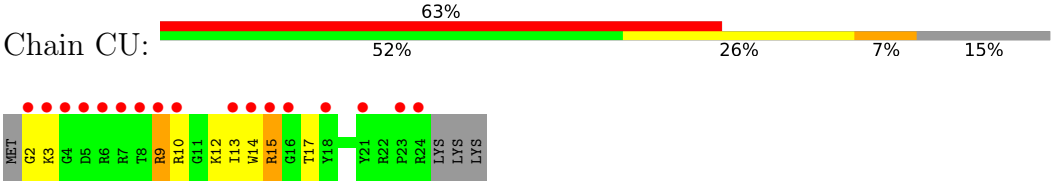
• Molecule 21: 30S Ribosomal Protein THX

Chain AU:



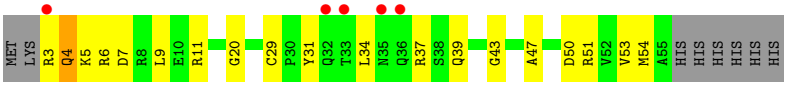
• Molecule 21: 30S Ribosomal Protein THX

Chain CU:

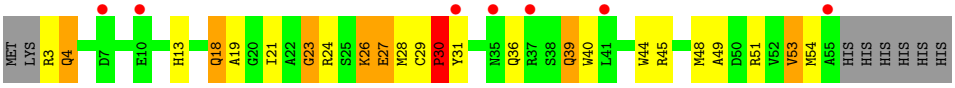


• Molecule 22: Ribosome modulation factor

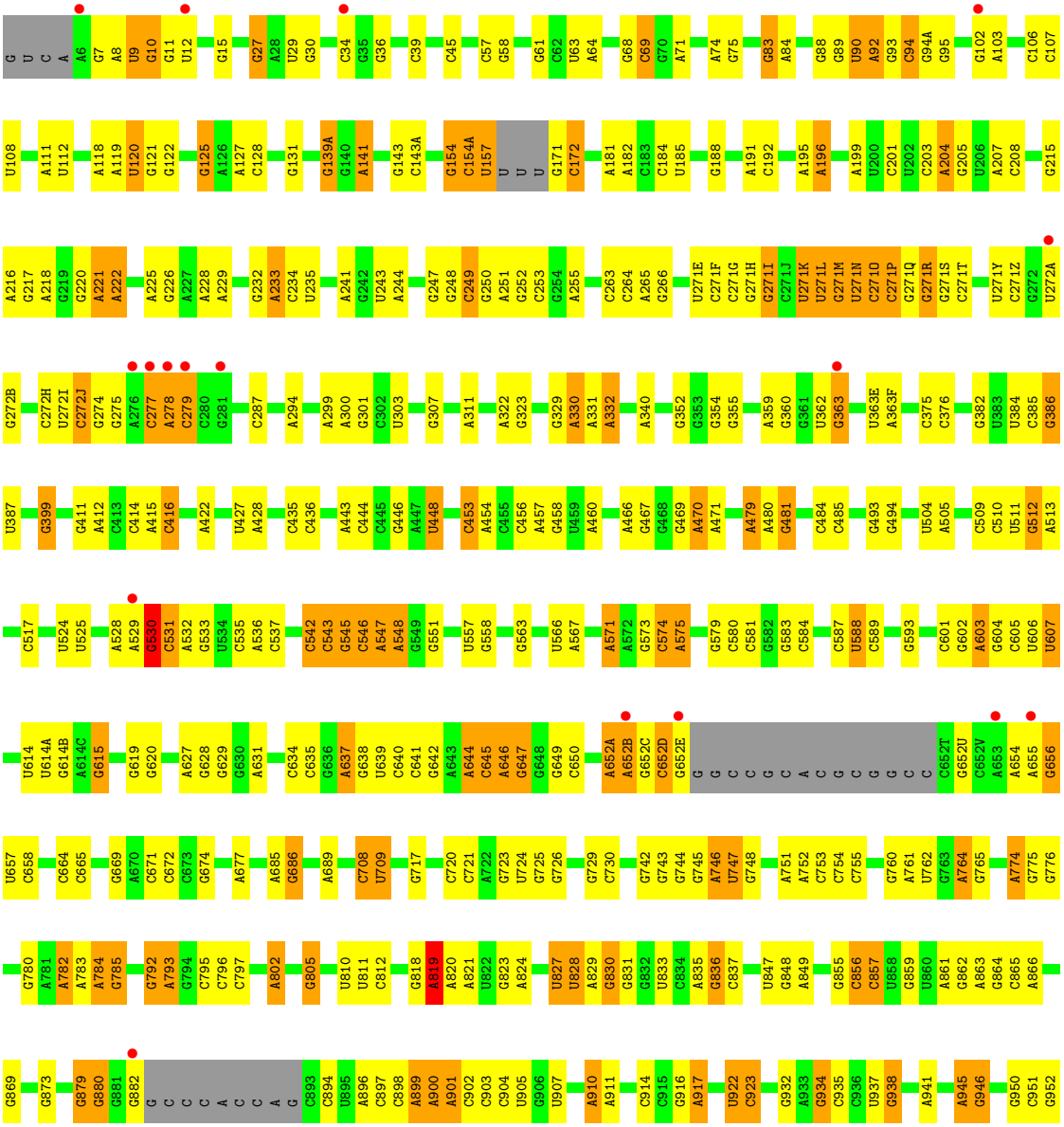
Chain AV:

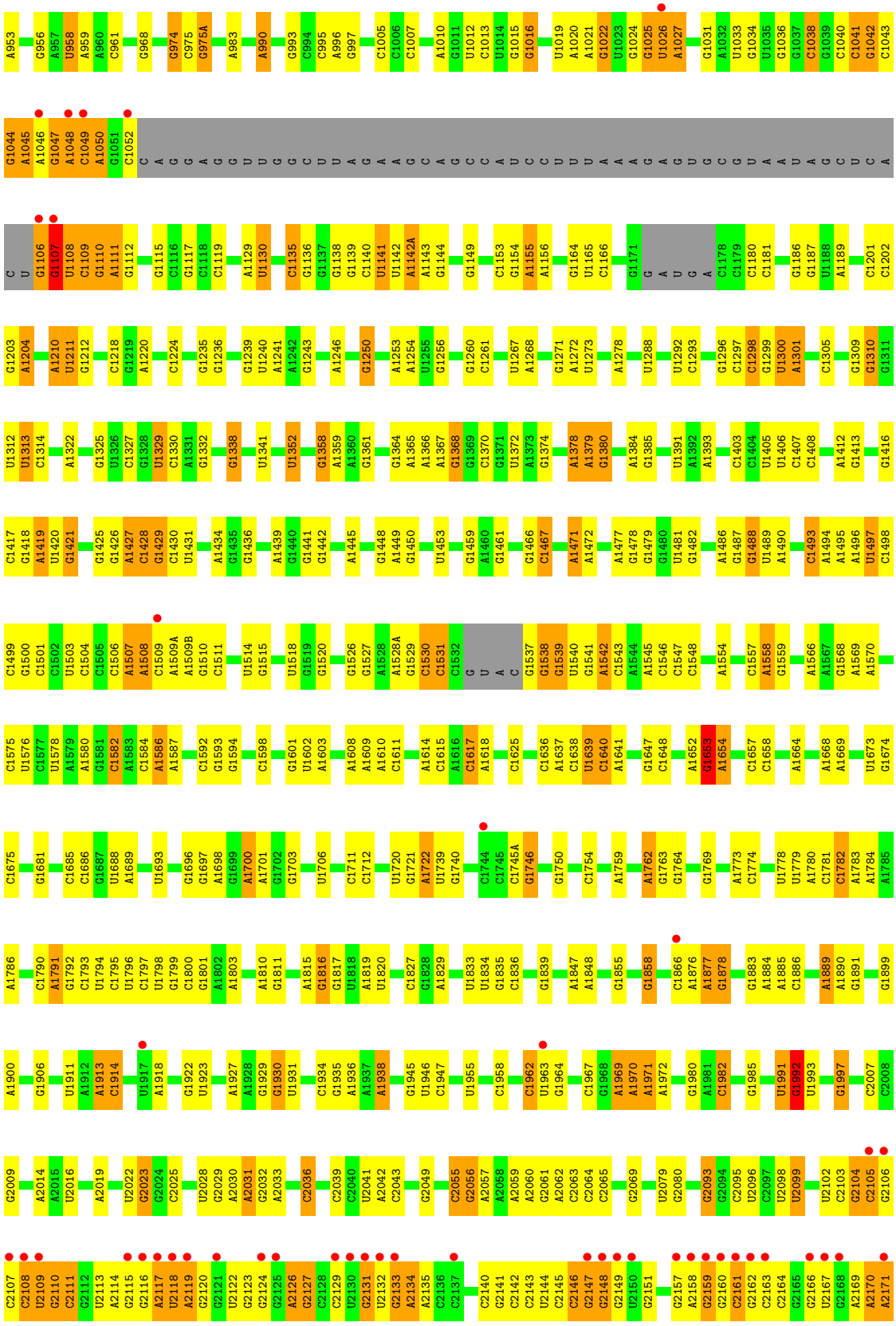


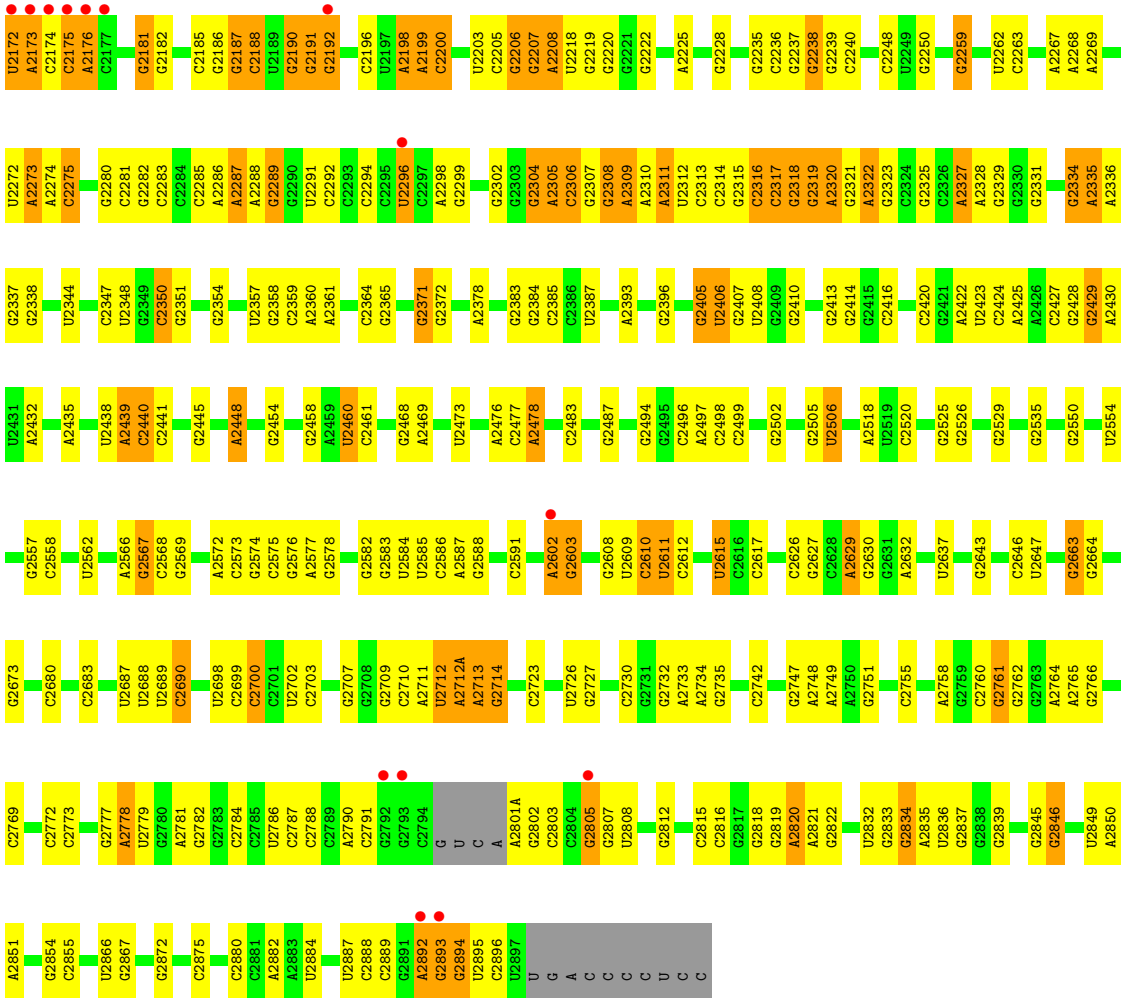
• Molecule 22: Ribosome modulation factor



• Molecule 23: 23S Ribosomal RNA

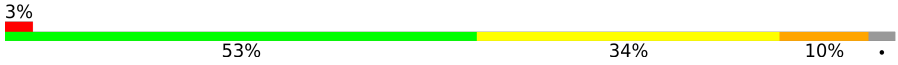


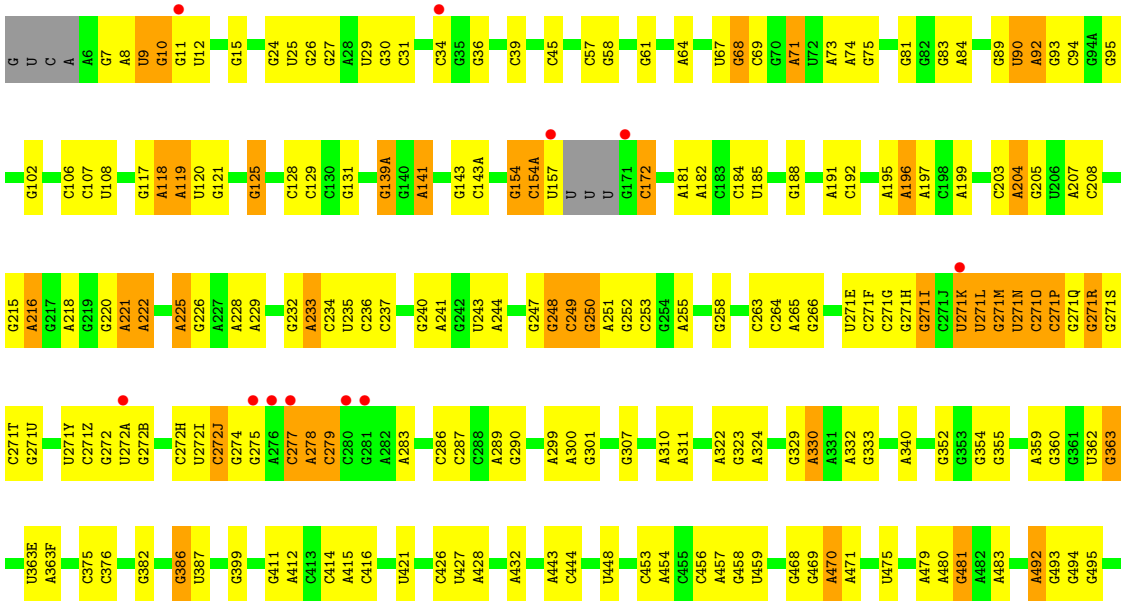

A953 G956 A957 U958 A959 A960 C961 G968 G974 C975 G975A A983 A990 G993 C994 C995 A996 G997 C1005 C1006 C1007 A1010 G1011 U1012 C1013 U1014 G1015 G1016 U1019 A1020 A1021 G1022 U1023 G1024 G1025 U1026 A1027 G1031 A1032 U1033 G1034 U1035 G1036 G1037 C1038 G1039 C1040 C1041 G1042 C1043
G1044 A1045 A1046 G1047 A1048 C1049 A1050 G1051 C1052
C U G1106 G1107 U1108 C1109 G1110 A1111 G1112 G1115 C1116 G1117 C1118 C1119 A1129 U1130 C1135 G1136 G1137 G1138 G1139 C1140 U1141 U1142 A1142A A1143 G1144 G1149 C1153 G1154 A1155 A1156 G1164 U1165 C1166 G1171 G A U G A C1178 C1179 C1180 C1181 G1186 G1187 U1188 A1189 C1201 C1202
G1203 A1204 A1210 U1211 G1212 C1218 G1219 A1220 C1224 G1235 G1236 G1239 U1240 A1241 A1242 G1243 A1246 G1250 A1253 A1254 U1255 G1256 G1260 C1261 U1267 A1268 G1271 A1272 U1273 A1278 U1288 U1292 C1293 G1296 C1297 C1298 G1299 U1300 A1301 C1305 G1309 G1310 G1311
U1312 U1313 C1314 A1322 G1325 U1326 C1327 G1328 U1329 C1330 A1331 G1332 G1338 U1341 U1352 G1358 A1359 A1360 G1361 G1364 A1365 A1366 A1367 G1368 G1369 C1370 G1371 U1372 A1373 G1374 A1378 A1379 G1380 A1384 G1385 U1391 A1392 A1393 C1403 C1404 U1405 U1406 C1407 C1408 A1412 G1413 G1416
C1417 G1418 A1419 U1420 G1421 G1425 G1426 A1427 C1428 G1429 C1430 U1431 A1434 G1435 G1436 A1439 G1440 G1441 G1442 A1445 G1448 A1449 G1450 U1453 G1459 A1460 G1461 G1466 C1467 A1471 A1472 A1477 G1478 G1479 G1480 U1481 G1482 A1486 G1487 G1488 U1489 A1490 C1493 A1494 A1495 A1496 U1497 C1498
C1499 G1500 C1501 C1502 U1503 C1504 C1505 C1506 A1507 A1508 C1509 A1509A A1509B G1510 C1511 U1514 G1515 U1518 G1519 G1520 G1526 G1527 A1528 A1528A G1529 C1530 C1531 C1532 G U A C G1537 G1538 G1539 U1540 G1541 A1542 C1543 A1544 A1545 C1546 C1547 C1548 A1554 C1557 A1558 G1559 A1566 A1567 G1568 A1569 A1570
C1575 U1576 C1577 U1578 A1579 A1580 G1581 C1582 A1583 C1584 A1586 A1587 C1592 G1593 G1594 C1598 G1601 U1602 A1603 A1608 A1609 A1610 C1611 A1614 C1615 A1616 C1617 A1618 C1625 C1636 A1637 C1638 U1639 C1640 A1641 G1647 C1648 A1652 G1653 A1654 C1657 C1658 A1664 A1668 A1669 U1673 G1674
C1675 G1681 C1685 C1686 G1687 U1688 A1689 U1693 G1696 G1697 A1698 G1699 A1700 A1701 G1702 G1703 U1706 C1711 C1712 U1720 G1721 A1722 U1739 G1740 C1744 C1745 C1745A G1746 G1750 C1754 A1759 A1762 G1763 G1764 G1769 A1773 C1774 U1778 U1779 A1780 C1781 C1782 A1783 A1784 A1785
A1786 C1790 A1791 G1792 C1793 U1794 C1795 U1796 C1797 U1798 G1799 C1800 G1801 A1802 A1803 A1810 G1811 A1815 G1816 G1817 U1818 A1819 U1820 C1827 G1828 A1829 U1833 U1834 G1835 C1836 G1839 A1847 A1848 G1855 G1858 C1866 A1876 A1877 G1878 G1883 A1884 A1885 C1886 A1889 A1890 G1891 G1899
A1900 G1906 U1911 A1912 A1913 C1914 U1917 A1918 G1922 U1923 A1927 A1928 G1929 G1930 U1931 C1934 G1935 A1936 A1937 A1938 G1945 U1946 C1947 U1955 C1958 C1962 U1963 G1964 C1967 G1968 A1969 A1970 A1971 A1972 G1980 A1981 C1982 G1985 U1991 G1992 U1993
G2009 A2014 A2015 U2016 A2019 U2022 G2023 G2024 C2025 U2028 G2029 A2030 A2031 G2032 A2033 C2036 C2039 C2040 U2041 A2042 C2043 G2049 C2055 G2056 A2057 A2058 A2059 A2060 G2061 A2062 C2063 C2064 C2065 G2069 U2079 G2080 G2093 G2094 C2095 U2096 C2097 U2098 U2099 U2102 C2103 G2104 C2105 G2106
C2107 C2108 U2109 G2110 C2111 G2112 U2113 A2114 G2115 G2116 A2117 U2118 A2119 G2120 G2121 U2122 G2123 C2124 G2125 A2126 G2127 C2128 C2129 U2130 G2131 U2132 G2133 A2134 A2135 C2136 C2137 C2140 G2141 C2142 C2143 U2144 C2145 C2146 G2147 G2148 G2149 U2150 G2151 G2157 A2158 G2159 G2160 C2161 G2162 C2163 C2164 G2165 G2166 U2167 G2168 A2169 A2170 A2171

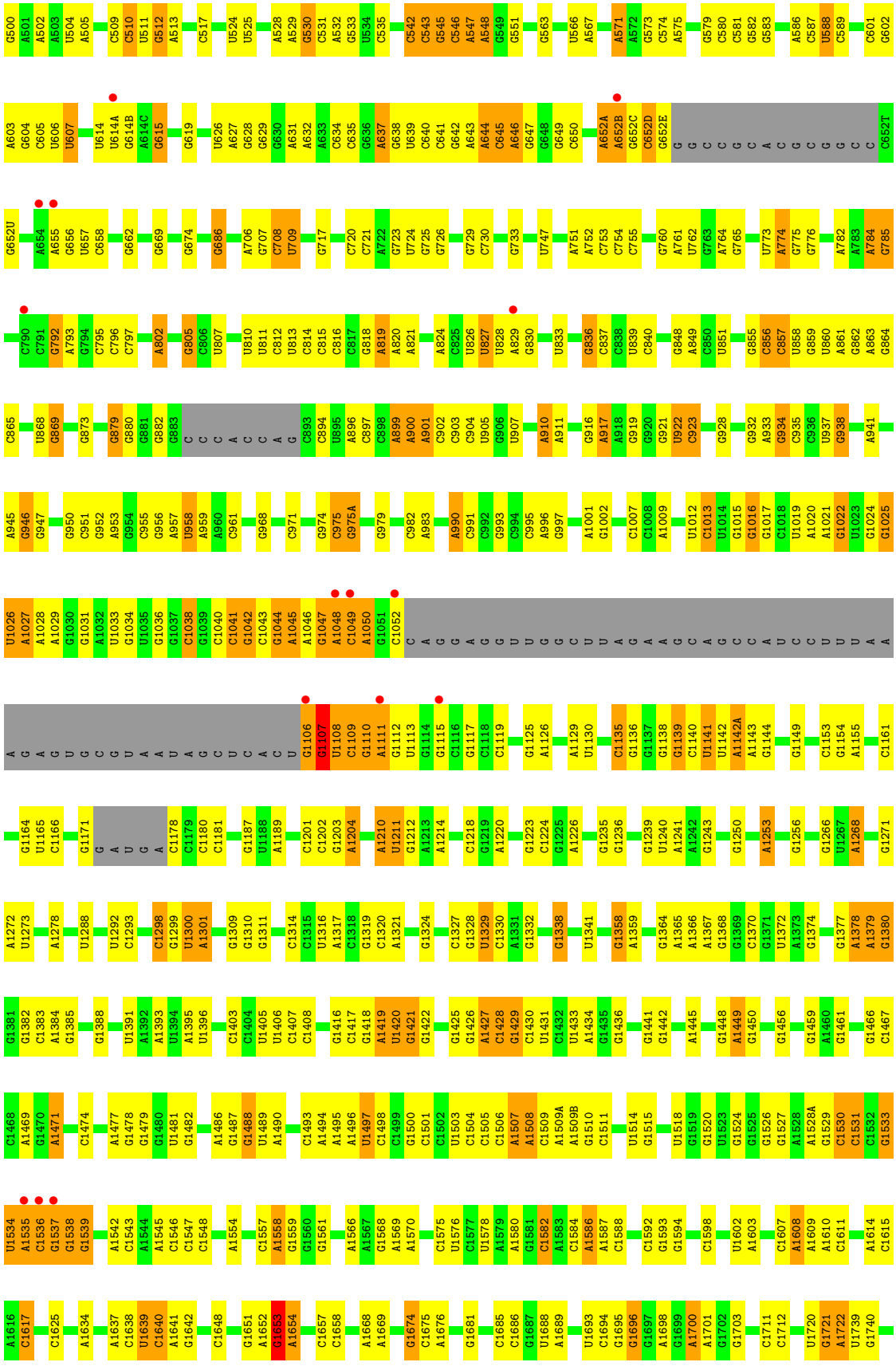


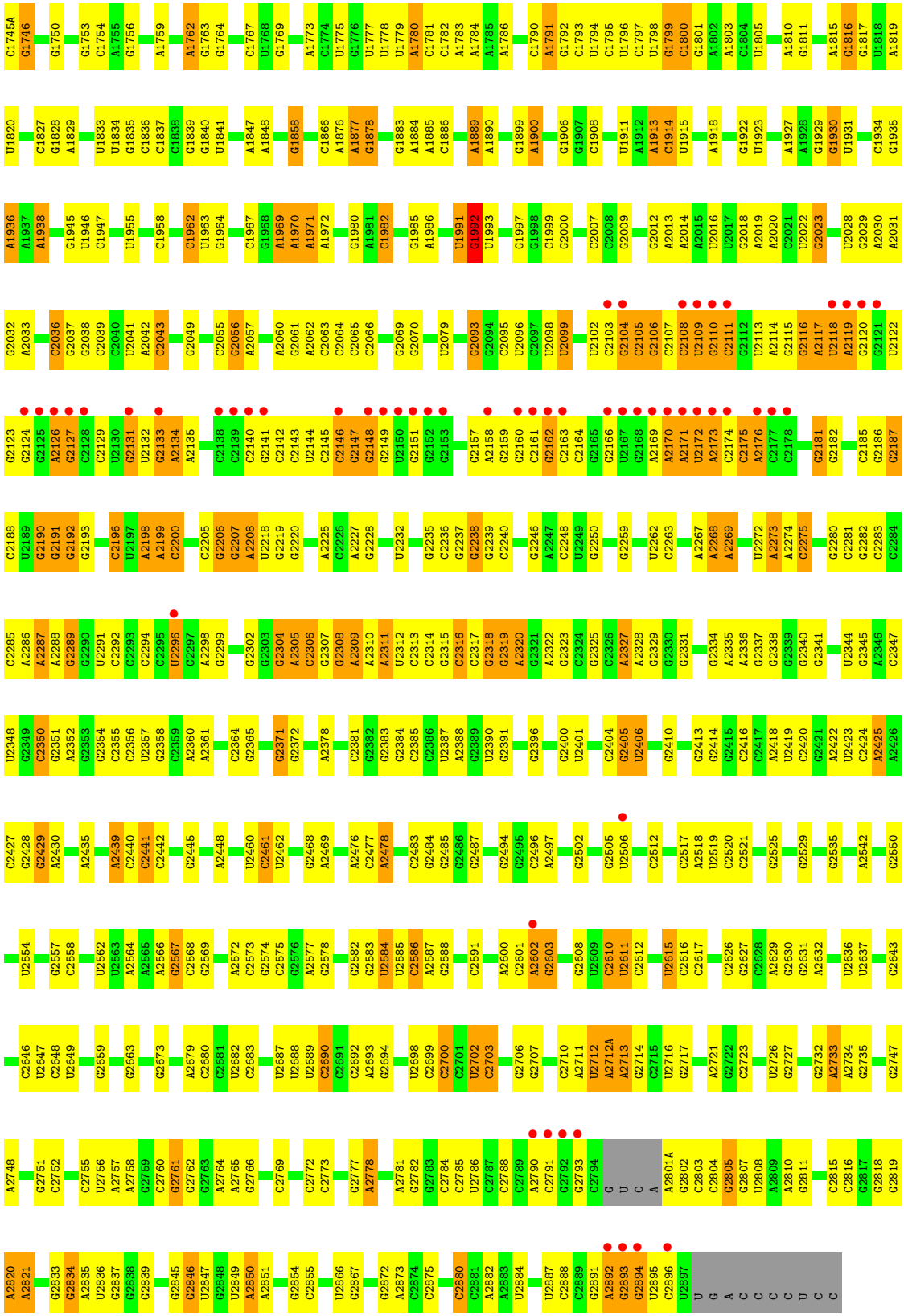
• Molecule 23: 23S Ribosomal RNA

Chain DA:



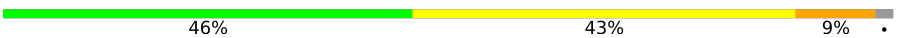


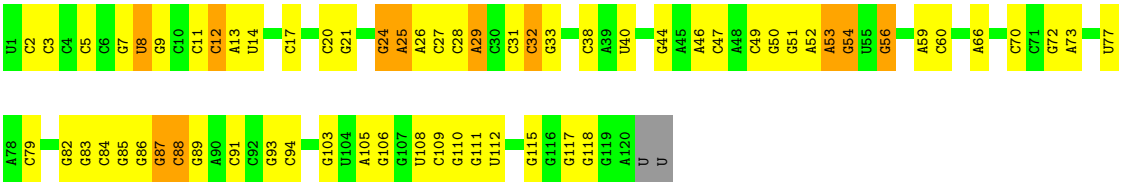




• Molecule 24: 5S Ribosomal RNA

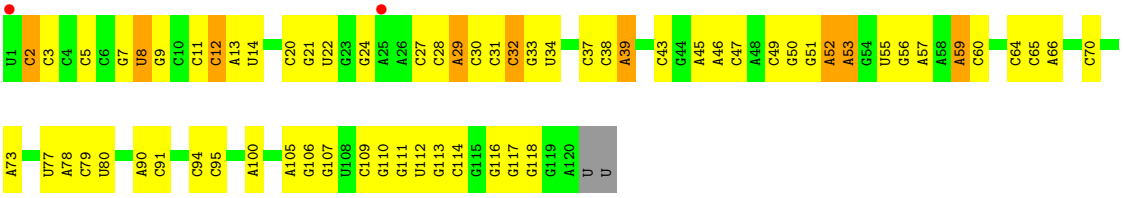
Chain BB:





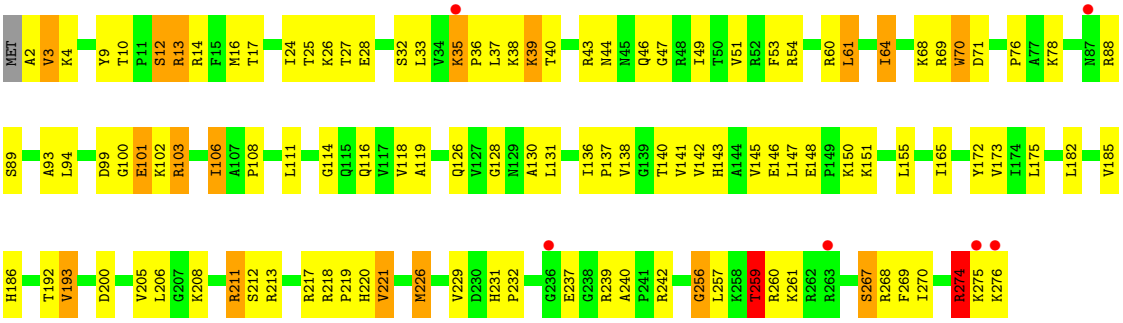
• Molecule 24: 5S Ribosomal RNA

Chain DB:



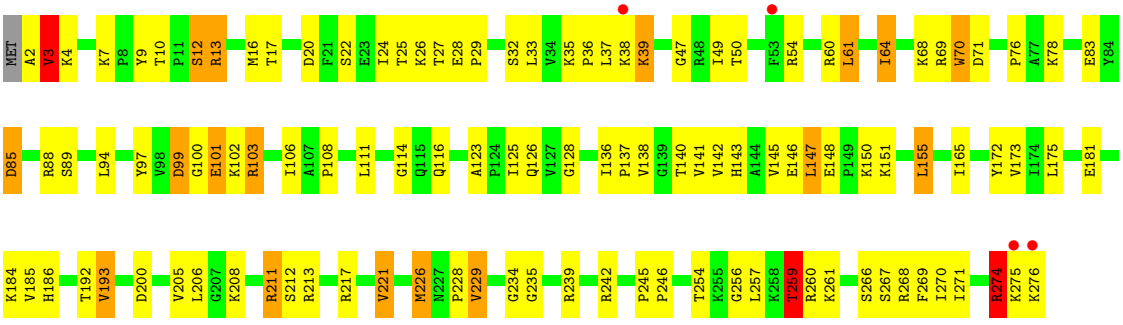
• Molecule 25: 50S Ribosomal Protein L2

Chain BD:



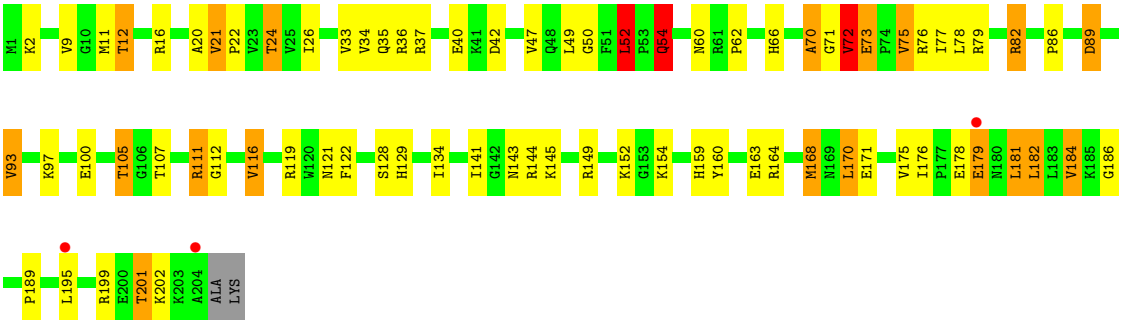
• Molecule 25: 50S Ribosomal Protein L2

Chain DD:



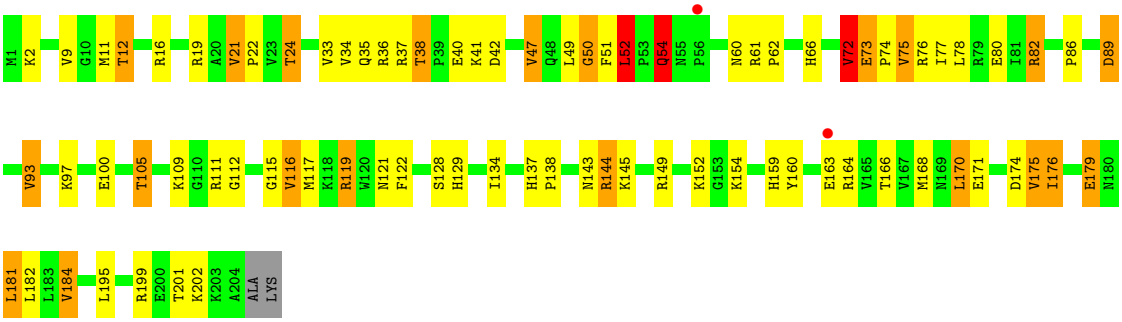
• Molecule 26: 50S Ribosomal Protein L3

Chain BE:



• Molecule 26: 50S Ribosomal Protein L3

Chain DE:

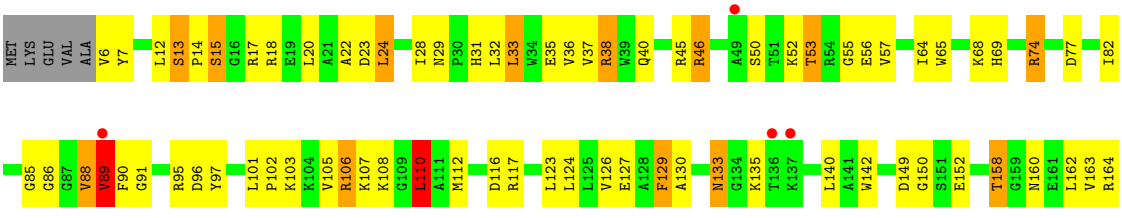


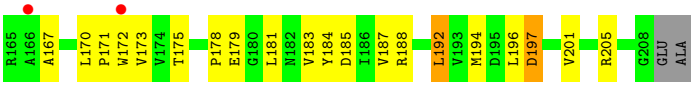
• Molecule 27: 50S Ribosomal Protein L4

Chain BF:

• Molecule 27: 50S Ribosomal Protein L4

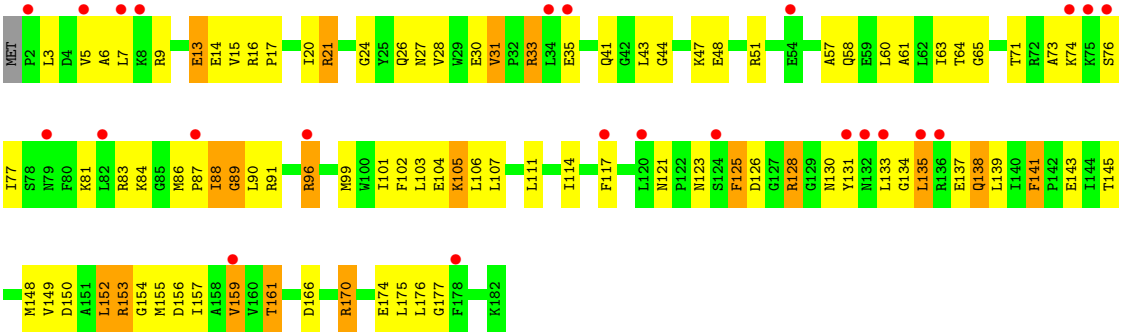
Chain DF:





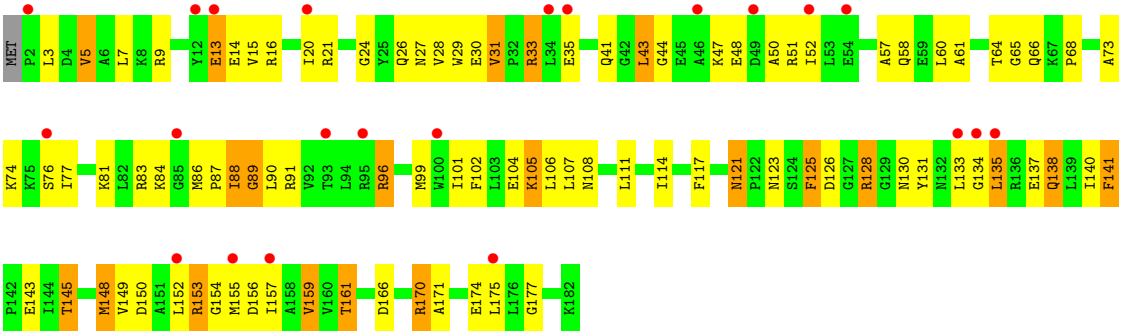
• Molecule 28: 50S Ribosomal Protein L5

Chain BG:



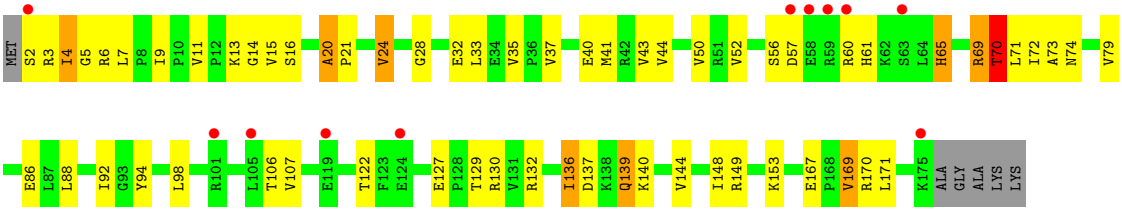
• Molecule 28: 50S Ribosomal Protein L5

Chain DG:



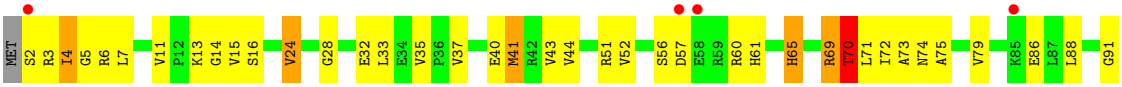
• Molecule 29: 50S Ribosomal Protein L6

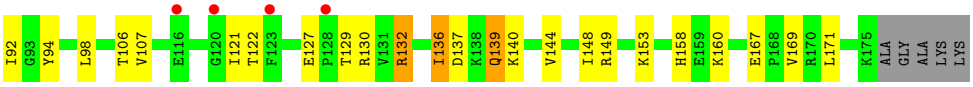
Chain BH:



• Molecule 29: 50S Ribosomal Protein L6

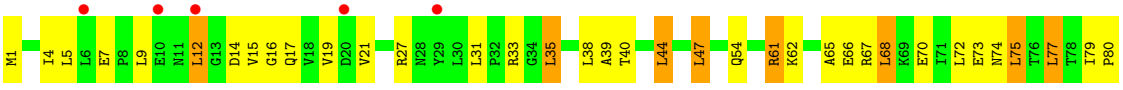
Chain DH:





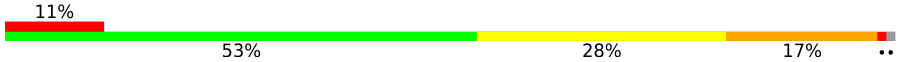
• Molecule 30: 50S Ribosomal Protein L9

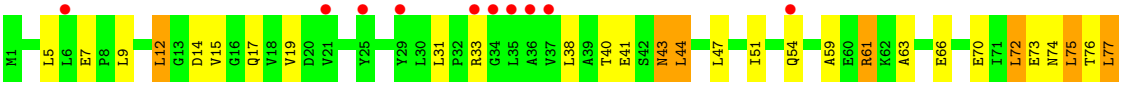
Chain BI:



• Molecule 30: 50S Ribosomal Protein L9

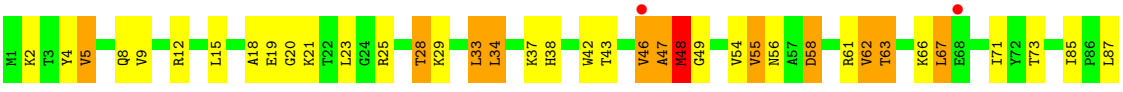
Chain DI:





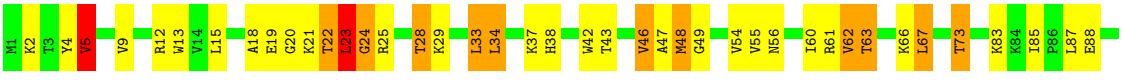
• Molecule 31: 50S Ribosomal Protein L13

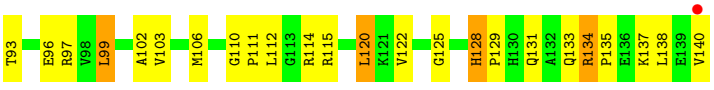
Chain BN:



• Molecule 31: 50S Ribosomal Protein L13

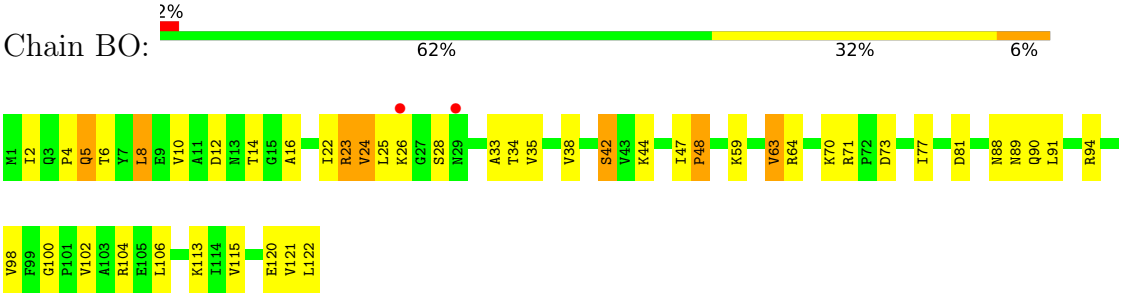
Chain DN:





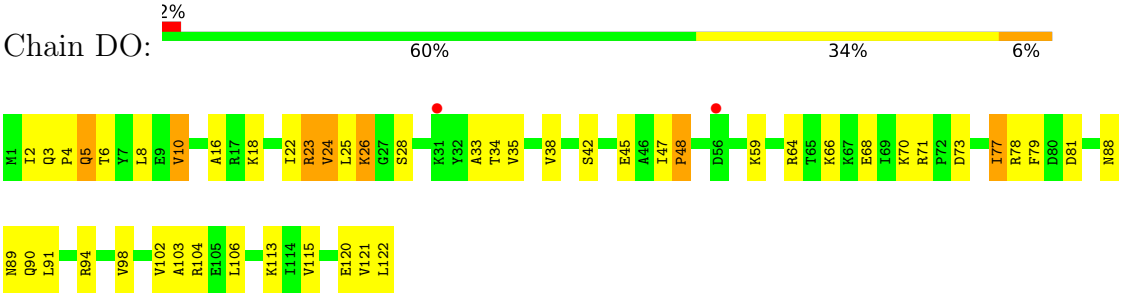
• Molecule 32: 50S Ribosomal Protein L14

Chain BO:



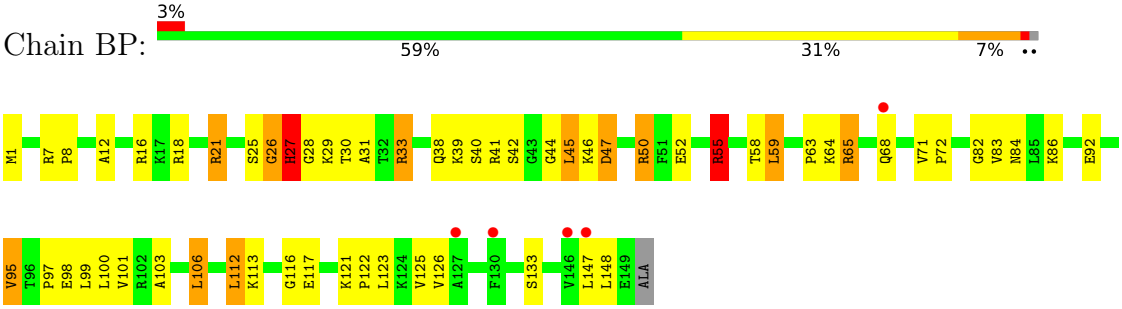
• Molecule 32: 50S Ribosomal Protein L14

Chain DO:



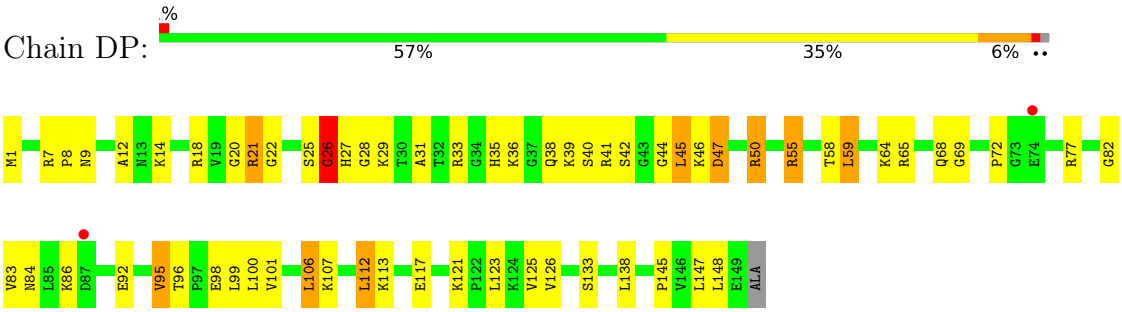
• Molecule 33: 50S Ribosomal Protein L15

Chain BP:



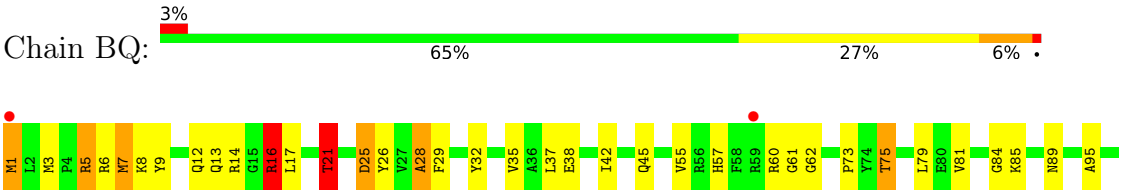
• Molecule 33: 50S Ribosomal Protein L15

Chain DP:



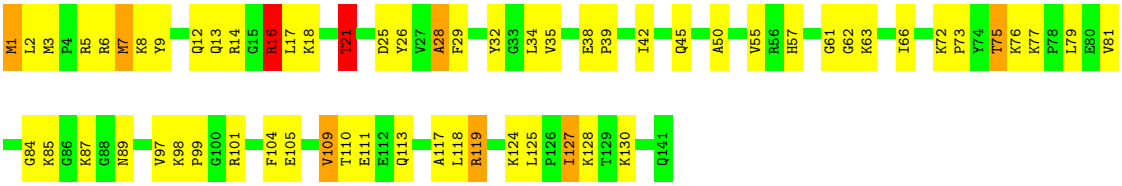
• Molecule 34: 50S Ribosomal Protein L16

Chain BQ:



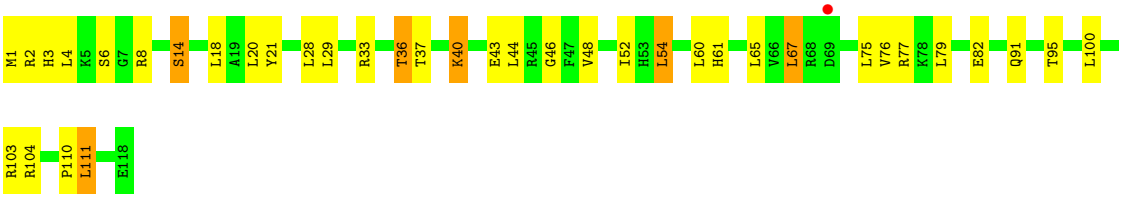
• Molecule 34: 50S Ribosomal Protein L16

Chain DQ:



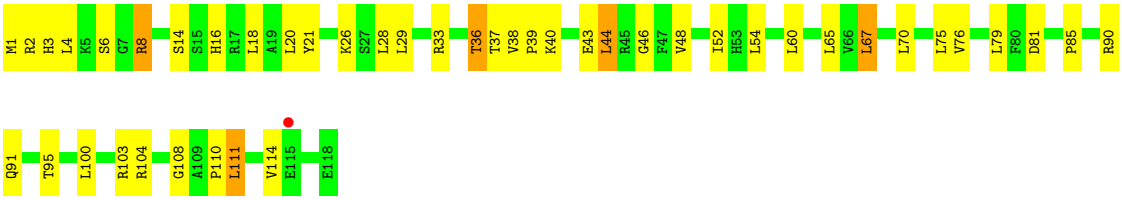
• Molecule 35: 50S Ribosomal Protein L17

Chain BR:



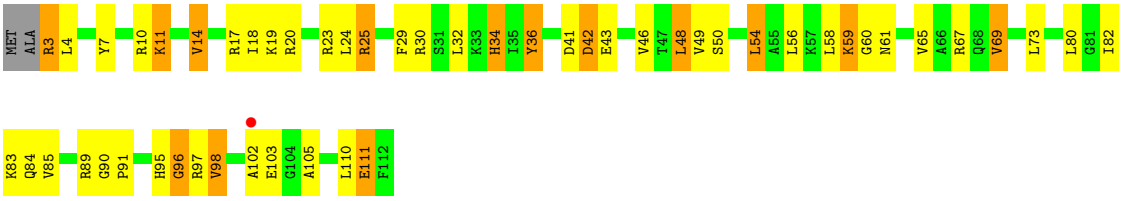
• Molecule 35: 50S Ribosomal Protein L17

Chain DR:



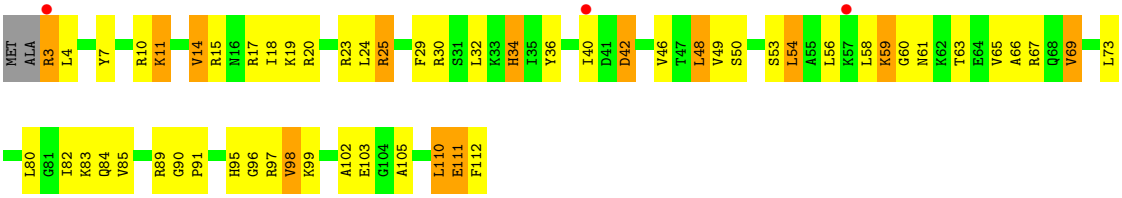
• Molecule 36: 50S Ribosomal Protein L18

Chain BS:



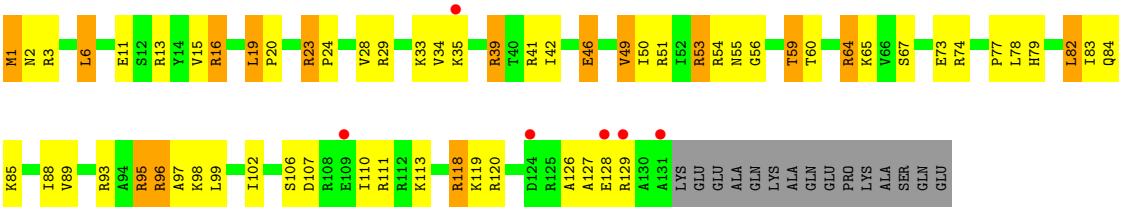
• Molecule 36: 50S Ribosomal Protein L18

Chain DS:



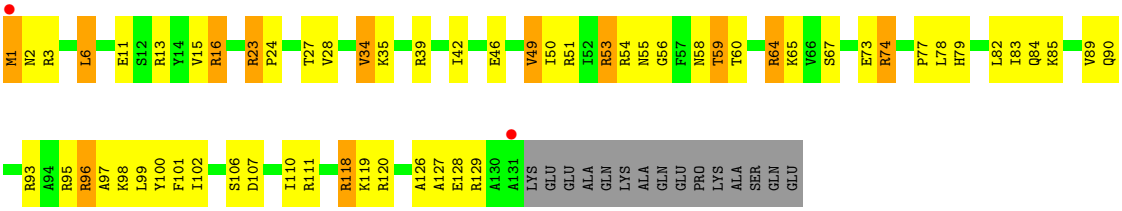
• Molecule 37: 50S Ribosomal Protein L19

Chain BT:



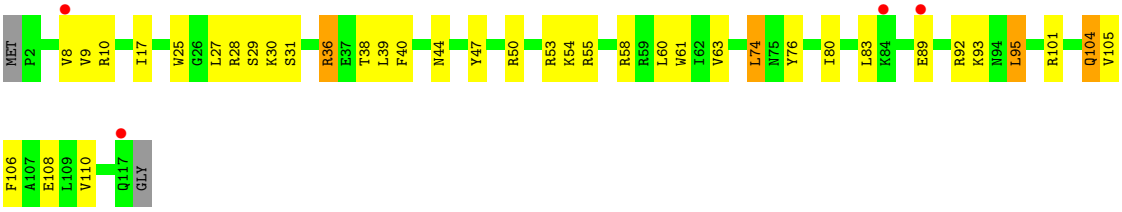
• Molecule 37: 50S Ribosomal Protein L19

Chain DT:



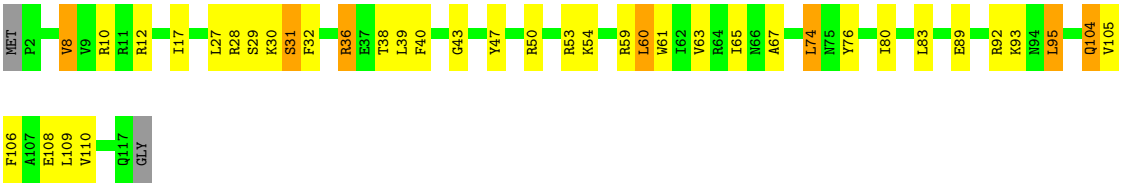
• Molecule 38: 50S Ribosomal Protein L20

Chain BU:



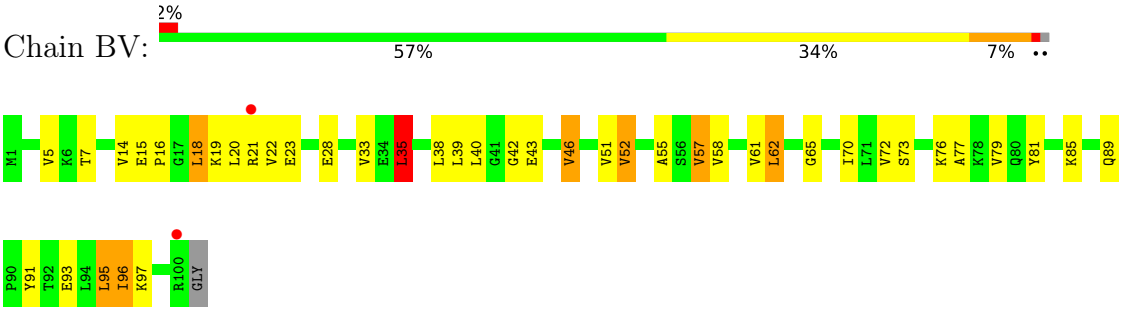
• Molecule 38: 50S Ribosomal Protein L20

Chain DU:



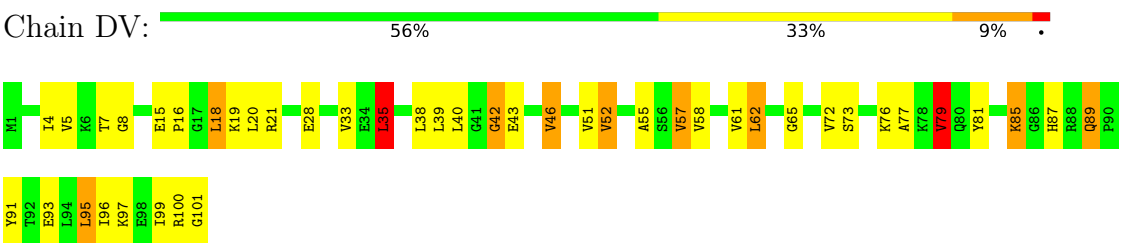
• Molecule 39: 50S Ribosomal Protein L21

Chain BV:



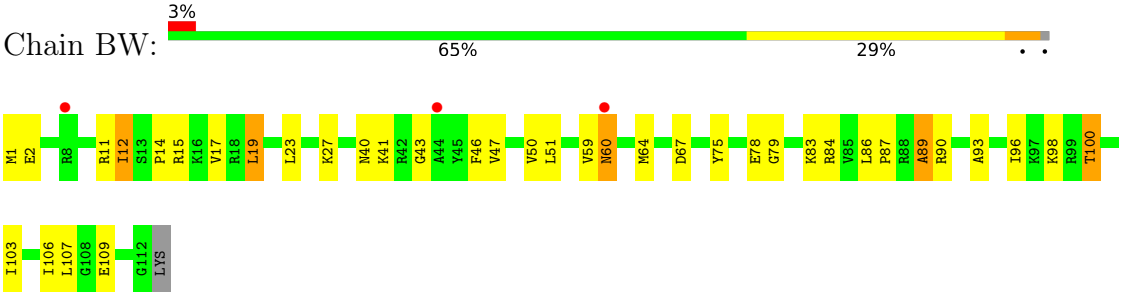
• Molecule 39: 50S Ribosomal Protein L21

Chain DV:



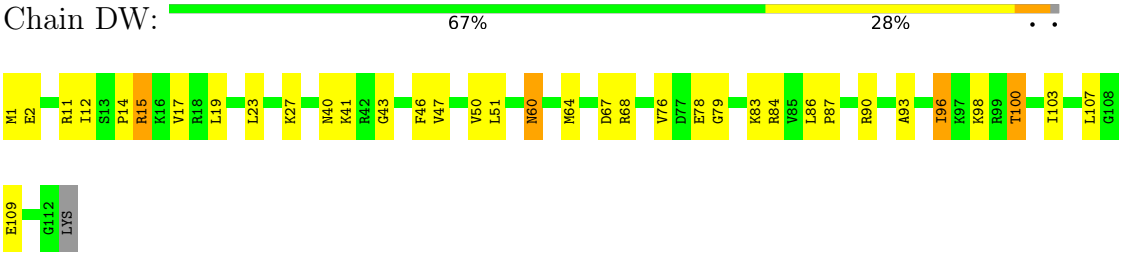
• Molecule 40: 50S Ribosomal Protein L22

Chain BW:



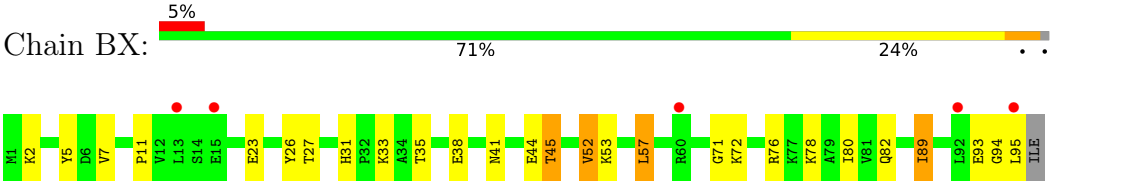
• Molecule 40: 50S Ribosomal Protein L22

Chain DW:



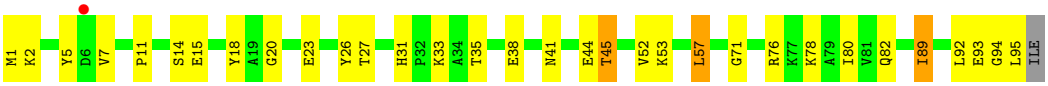
• Molecule 41: 50S Ribosomal Protein L23

Chain BX:



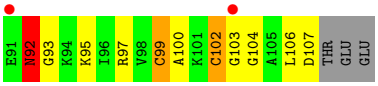
• Molecule 41: 50S Ribosomal Protein L23

Chain DX:



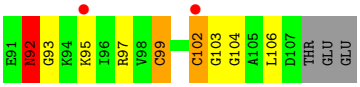
• Molecule 42: 50S Ribosomal Protein L24

Chain BY:



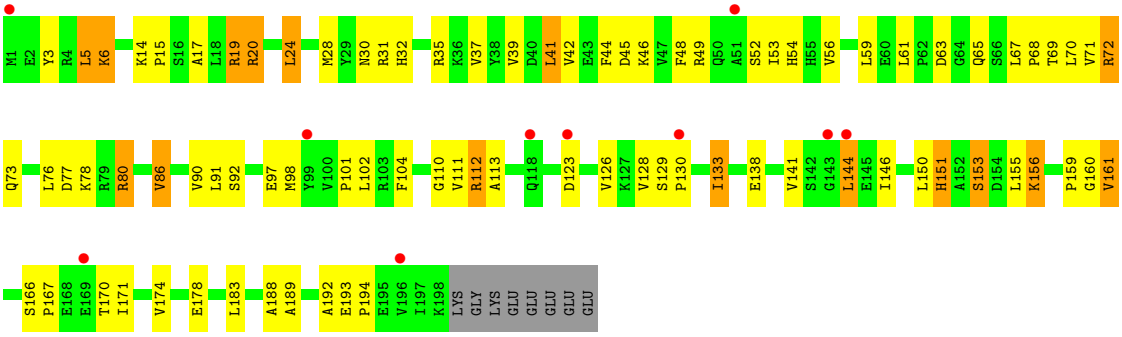
• Molecule 42: 50S Ribosomal Protein L24

Chain DY:



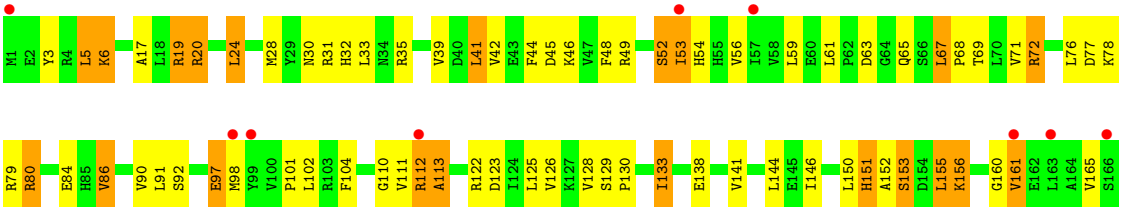
• Molecule 43: 50S Ribosomal Protein L25

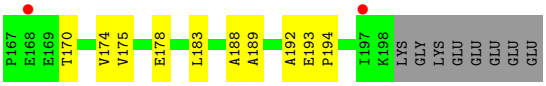
Chain BZ:



• Molecule 43: 50S Ribosomal Protein L25

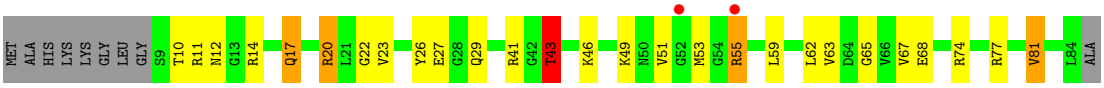
Chain DZ:





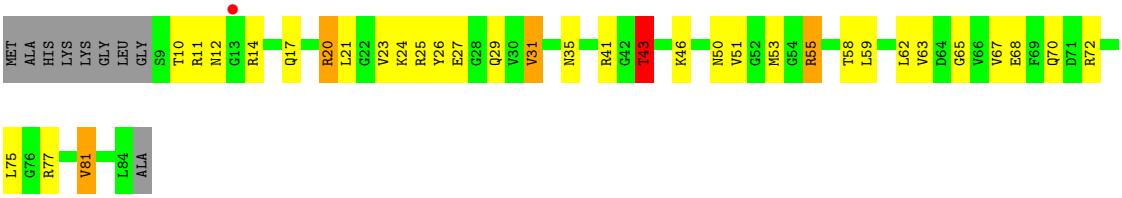
• Molecule 44: 50S Ribosomal Protein L27

Chain B0:



• Molecule 44: 50S Ribosomal Protein L27

Chain D0:

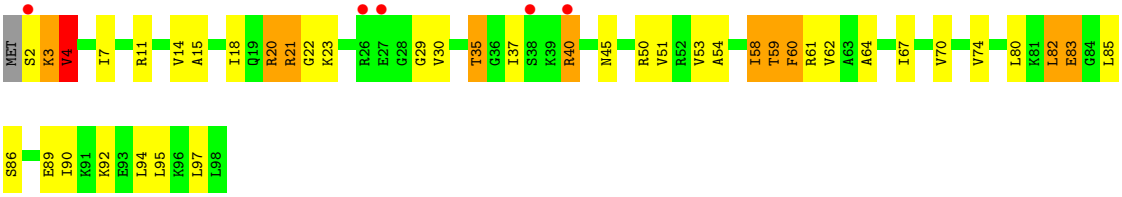


• Molecule 45: 50S Ribosomal Protein L28

Chain B1:

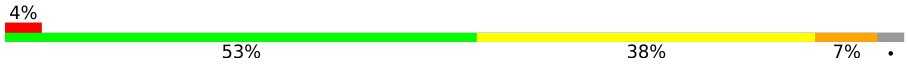
• Molecule 45: 50S Ribosomal Protein L28

Chain D1:



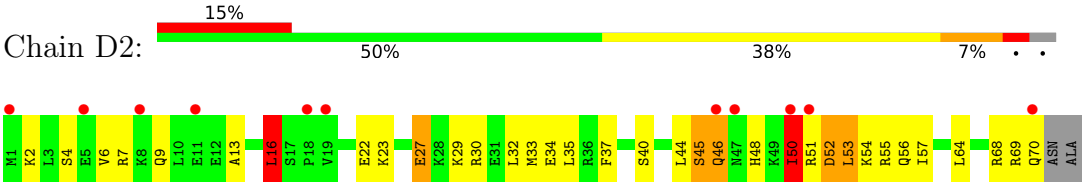
• Molecule 46: 50S Ribosomal Protein L29

Chain B2:



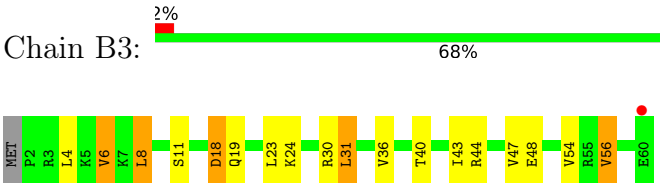
• Molecule 46: 50S Ribosomal Protein L29

Chain D2:



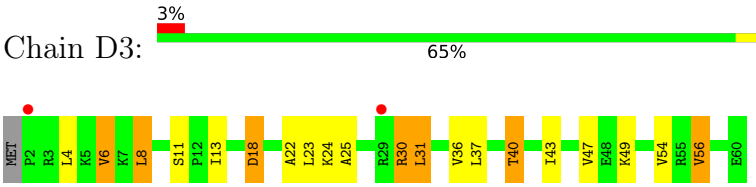
• Molecule 47: 50S Ribosomal Protein L30

Chain B3:



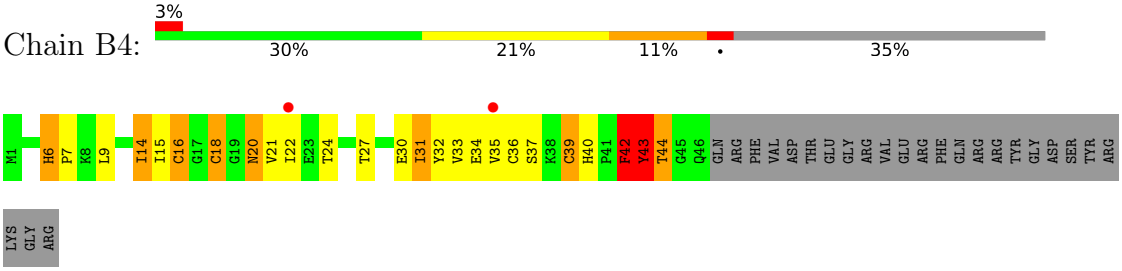
• Molecule 47: 50S Ribosomal Protein L30

Chain D3:



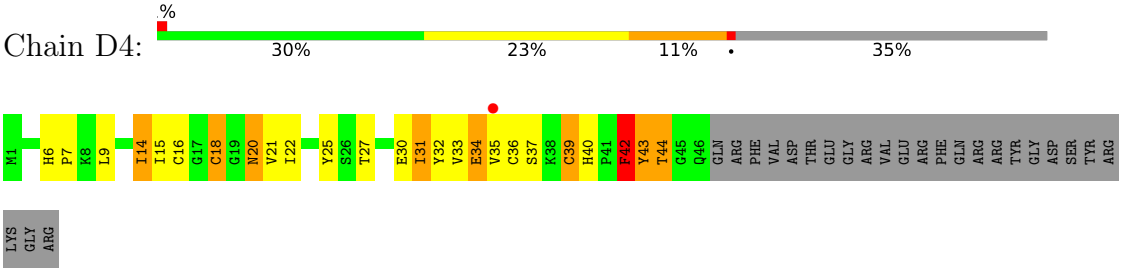
• Molecule 48: 50S Ribosomal Protein L31

Chain B4:



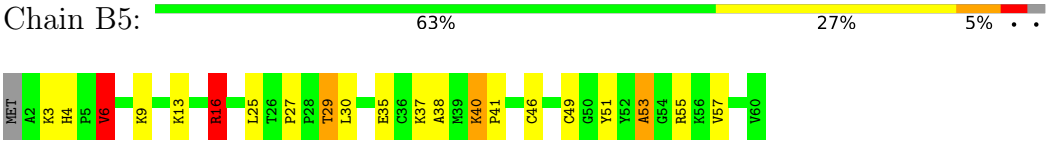
• Molecule 48: 50S Ribosomal Protein L31

Chain D4:



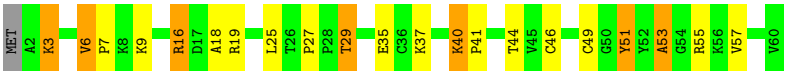
• Molecule 49: 50S Ribosomal Protein L32

Chain B5:



• Molecule 49: 50S Ribosomal Protein L32

Chain D5:

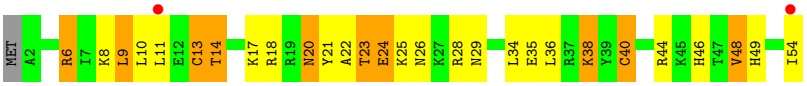


• Molecule 50: 50S Ribosomal Protein L33

Chain B6:

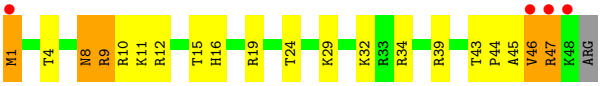
• Molecule 50: 50S Ribosomal Protein L33

Chain D6:



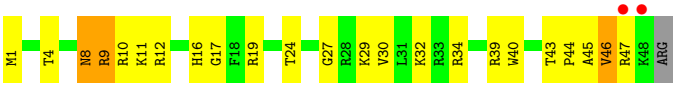
• Molecule 51: 50S Ribosomal Protein L34

Chain B7:



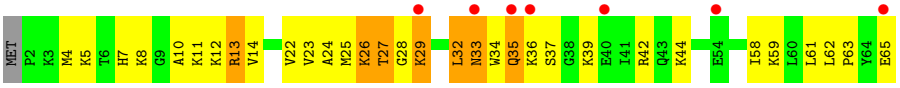
• Molecule 51: 50S Ribosomal Protein L34

Chain D7:



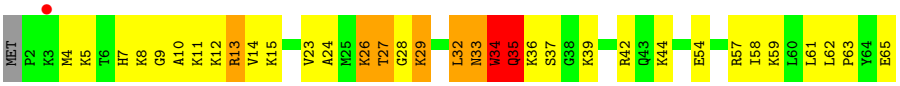
• Molecule 52: 50S Ribosomal Protein L35

Chain B8:



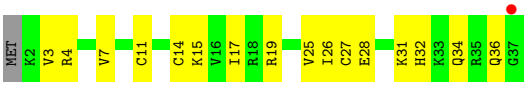
• Molecule 52: 50S Ribosomal Protein L35

Chain D8:



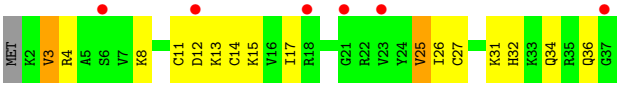
• Molecule 53: 50S Ribosomal Protein L36

Chain B9:



• Molecule 53: 50S Ribosomal Protein L36

Chain D9:



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	210.24Å 451.44Å 621.64Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	49.75 – 3.00 49.75 – 3.00	Depositor EDS
% Data completeness (in resolution range)	97.9 (49.75-3.00) 97.9 (49.75-3.00)	Depositor EDS
R_{merge}	0.27	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.34 (at 3.01Å)	Xtriage
Refinement program	PHENIX 1.7.2_869	Depositor
R, R_{free}	0.218 , 0.254 0.215 , 0.250	Depositor DCC
R_{free} test set	57194 reflections (4.91%)	wwPDB-VP
Wilson B-factor (Å^2)	68.3	Xtriage
Anisotropy	0.254	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.28 , 57.0	EDS
L-test for twinning[2]	$< \|L\| > = 0.45$, $< L^2 > = 0.27$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.92	EDS
Total number of atoms	283930	wwPDB-VP
Average B, all atoms (Å^2)	85.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.58% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

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

5 Model quality

5.1 Standard geometry

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

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	0.55	4/36215 (0.0%)	0.53	4/56522 (0.0%)
1	CA	0.51	5/36123 (0.0%)	0.51	5/56379 (0.0%)
2	AB	0.76	0/1809	1.19	13/2450 (0.5%)
2	CB	0.78	0/1809	1.18	15/2450 (0.6%)
3	AC	0.95	0/1474	1.26	6/2003 (0.3%)
3	CC	0.91	0/1474	1.25	11/2003 (0.5%)
4	AD	0.81	0/1556	1.12	5/2113 (0.2%)
4	CD	0.76	1/1556 (0.1%)	1.14	6/2113 (0.3%)
5	AE	0.71	0/1121	1.23	12/1517 (0.8%)
5	CE	0.71	0/1121	1.22	10/1517 (0.7%)
6	AF	0.71	0/790	1.16	7/1077 (0.6%)
6	CF	0.66	0/790	1.14	8/1077 (0.7%)
7	AG	1.16	0/1183	1.43	22/1599 (1.4%)
7	CG	0.92	1/1183 (0.1%)	1.19	7/1599 (0.4%)
8	AH	0.62	0/1065	1.10	4/1445 (0.3%)
8	CH	0.61	0/1065	1.09	2/1445 (0.1%)
9	AI	1.22	1/867 (0.1%)	1.37	13/1180 (1.1%)
9	CI	1.04	1/867 (0.1%)	1.30	8/1180 (0.7%)
10	AJ	1.17	1/676 (0.1%)	1.41	11/924 (1.2%)
10	CJ	1.12	1/676 (0.1%)	1.37	11/924 (1.2%)
11	AK	0.64	0/843	1.08	3/1144 (0.3%)
11	CK	0.64	0/843	1.05	2/1144 (0.2%)
12	AL	0.71	0/921	1.18	5/1247 (0.4%)
12	CL	0.69	0/921	1.18	5/1247 (0.4%)
13	AM	1.29	2/814 (0.2%)	1.47	10/1107 (0.9%)
13	CM	1.04	1/814 (0.1%)	1.33	8/1107 (0.7%)
14	AN	1.10	1/487 (0.2%)	1.40	7/649 (1.1%)
14	CN	0.83	0/487	1.22	4/649 (0.6%)
15	AO	0.62	0/735	1.08	1/981 (0.1%)
15	CO	0.61	0/735	1.07	3/981 (0.3%)
16	AP	0.69	0/667	1.23	3/905 (0.3%)
16	CP	0.70	0/667	1.23	4/905 (0.4%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
17	AQ	0.61	0/836	1.04	5/1117 (0.4%)
17	CQ	0.65	0/836	1.08	5/1117 (0.4%)
18	AR	0.66	0/519	1.05	1/699 (0.1%)
18	CR	0.67	0/519	1.05	1/699 (0.1%)
19	AS	1.37	4/574 (0.7%)	1.46	7/781 (0.9%)
19	CS	1.02	0/574	1.34	5/781 (0.6%)
20	AT	0.67	0/715	1.23	4/947 (0.4%)
20	CT	0.67	0/715	1.21	6/947 (0.6%)
21	AU	1.07	0/203	1.17	1/266 (0.4%)
21	CU	0.82	0/203	0.94	0/266
22	AV	0.88	0/339	1.25	1/464 (0.2%)
22	CV	0.87	0/360	1.24	5/492 (1.0%)
23	BA	0.88	25/67771 (0.0%)	0.61	8/105789 (0.0%)
23	DA	0.64	1/67893 (0.0%)	0.58	8/105982 (0.0%)
24	BB	0.65	1/2878 (0.0%)	0.60	0/4490
24	DB	0.54	0/2878	0.54	0/4490
25	BD	1.11	3/2186 (0.1%)	1.34	19/2944 (0.6%)
25	DD	0.95	0/2186	1.31	14/2944 (0.5%)
26	BE	1.13	2/1588 (0.1%)	1.34	15/2145 (0.7%)
26	DE	0.92	0/1588	1.32	13/2145 (0.6%)
27	BF	1.10	2/1615 (0.1%)	1.19	7/2188 (0.3%)
27	DF	0.86	0/1615	1.25	9/2188 (0.4%)
28	BG	0.66	0/1393	1.12	10/1892 (0.5%)
28	DG	0.70	0/1393	1.12	11/1892 (0.6%)
29	BH	0.91	0/1343	1.25	9/1820 (0.5%)
29	DH	0.72	0/1343	1.19	6/1820 (0.3%)
30	BI	0.82	0/1055	1.21	8/1445 (0.6%)
30	DI	0.82	0/1053	1.28	9/1442 (0.6%)
31	BN	1.12	1/1139 (0.1%)	1.39	12/1538 (0.8%)
31	DN	0.80	1/1139 (0.1%)	1.40	11/1538 (0.7%)
32	BO	1.02	0/933	1.23	5/1257 (0.4%)
32	DO	0.85	0/933	1.18	2/1257 (0.2%)
33	BP	0.96	0/1148	1.30	10/1529 (0.7%)
33	DP	0.77	0/1148	1.37	13/1529 (0.9%)
34	BQ	1.01	1/1143 (0.1%)	1.24	7/1527 (0.5%)
34	DQ	0.81	0/1143	1.20	6/1527 (0.4%)
35	BR	1.10	0/982	1.19	4/1312 (0.3%)
35	DR	0.93	0/982	1.15	2/1312 (0.2%)
36	BS	0.81	0/875	1.21	4/1168 (0.3%)
36	DS	0.75	0/875	1.16	4/1168 (0.3%)
37	BT	0.94	0/1077	1.16	4/1444 (0.3%)
37	DT	0.81	0/1077	1.11	1/1444 (0.1%)
38	BU	1.30	1/977 (0.1%)	1.18	3/1301 (0.2%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	DU	0.91	0/977	1.15	2/1301 (0.2%)
39	BV	1.12	2/771 (0.3%)	1.21	3/1037 (0.3%)
39	DV	0.83	1/782 (0.1%)	1.20	4/1049 (0.4%)
40	BW	1.32	2/891 (0.2%)	1.28	3/1197 (0.3%)
40	DW	1.09	1/891 (0.1%)	1.25	1/1197 (0.1%)
41	BX	1.08	0/756	1.15	1/1016 (0.1%)
41	DX	0.88	0/756	1.15	1/1016 (0.1%)
42	BY	1.01	0/798	1.28	5/1073 (0.5%)
42	DY	0.82	0/798	1.29	8/1073 (0.7%)
43	BZ	0.79	0/1555	1.30	13/2118 (0.6%)
43	DZ	0.76	0/1555	1.28	16/2118 (0.8%)
44	B0	1.01	0/602	1.12	2/804 (0.2%)
44	D0	0.87	0/602	1.11	1/804 (0.1%)
45	B1	1.04	3/752 (0.4%)	1.35	12/1003 (1.2%)
45	D1	0.92	0/752	1.31	9/1003 (0.9%)
46	B2	1.05	0/590	1.20	2/781 (0.3%)
46	D2	0.78	0/590	1.21	6/781 (0.8%)
47	B3	1.03	0/463	1.25	3/623 (0.5%)
47	D3	0.77	0/463	1.20	2/623 (0.3%)
48	B4	0.76	0/358	1.35	5/487 (1.0%)
48	D4	0.83	0/358	1.29	3/487 (0.6%)
49	B5	1.31	4/469 (0.9%)	1.48	10/634 (1.6%)
49	D5	0.91	1/469 (0.2%)	1.36	9/634 (1.4%)
50	B6	0.99	0/456	1.19	0/609
50	D6	0.89	1/456 (0.2%)	1.19	3/609 (0.5%)
51	B7	1.30	0/426	1.43	2/561 (0.4%)
51	D7	1.12	0/426	1.31	3/561 (0.5%)
52	B8	1.11	0/516	1.29	3/679 (0.4%)
52	D8	0.86	0/516	1.27	5/679 (0.7%)
53	B9	1.05	0/300	1.23	2/395 (0.5%)
53	D9	0.83	0/300	1.19	1/395 (0.3%)
All	All	0.76	76/304490 (0.0%)	0.80	650/455973 (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
2	AB	0	3
2	CB	0	3
3	AC	0	1

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
3	CC	0	2
5	CE	0	1
7	AG	0	4
7	CG	0	1
9	AI	0	2
9	CI	0	1
10	AJ	0	3
12	AL	0	1
12	CL	0	1
13	AM	0	3
13	CM	0	1
14	AN	0	3
17	AQ	0	1
17	CQ	0	1
19	AS	0	1
20	AT	0	2
20	CT	0	1
22	CV	0	3
25	BD	0	1
25	DD	0	1
26	BE	0	2
26	DE	0	1
27	BF	0	2
27	DF	0	3
28	BG	0	1
28	DG	0	1
30	BI	0	1
30	DI	0	1
31	BN	0	1
31	DN	0	2
32	BO	0	1
32	DO	0	1
33	BP	0	4
33	DP	0	2
36	BS	0	2
36	DS	0	1
37	BT	0	1
37	DT	0	1
41	BX	0	1
41	DX	0	1
42	BY	0	1
42	DY	0	1

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
43	BZ	0	1
45	B1	0	1
45	D1	0	1
48	B4	0	3
48	D4	0	2
52	D8	0	2
All	All	0	83

All (76) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	CA	1459	C	C1'-N1	10.61	1.64	1.48
1	AA	1459	C	C1'-N1	10.40	1.64	1.48
27	BF	89	VAL	C-O	-8.70	1.13	1.24
14	AN	13	THR	CA-CB	8.66	1.62	1.53
1	CA	1459	C	N1-C2	8.58	1.57	1.40
1	AA	1459	C	N1-C2	8.48	1.57	1.40
31	BN	85	ILE	CA-CB	-8.39	1.46	1.54
23	BA	467	G	P-OP1	-7.92	1.33	1.49
23	BA	272(A)	U	C1'-N1	7.79	1.60	1.48
23	BA	1254	A	P-OP1	-7.58	1.33	1.49
1	AA	69	G	O3'-P	6.96	1.71	1.61
23	DA	272(A)	U	C1'-N1	6.93	1.58	1.48
49	B5	6	VAL	CA-CB	-6.85	1.45	1.54
23	BA	2055	C	P-OP2	-6.80	1.35	1.49
1	CA	69	G	O3'-P	-6.76	1.51	1.61
23	BA	2055	C	P-OP1	-6.68	1.35	1.49
1	AA	1442(A)	G	N9-C4	6.45	1.50	1.38
1	CA	1442(A)	G	N9-C4	6.36	1.50	1.38
39	BV	77	ALA	CA-CB	-6.23	1.43	1.53
23	BA	1325	G	P-O5'	-6.22	1.50	1.59
45	B1	46	LEU	CA-C	-6.19	1.45	1.52
27	BF	88	VAL	CA-CB	-6.14	1.46	1.54
31	DN	85	ILE	CA-CB	-6.13	1.46	1.54
25	BD	93	ALA	CA-CB	-6.11	1.44	1.53
23	BA	467	G	P-O5'	-6.06	1.50	1.59
49	D5	18	ALA	CA-CB	-5.99	1.44	1.53
23	BA	1325	G	P-OP1	-5.96	1.37	1.49
23	BA	467	G	P-OP2	-5.92	1.37	1.49
45	B1	67	ILE	CA-CB	-5.91	1.51	1.54
25	BD	51	VAL	CA-CB	-5.90	1.46	1.54
9	AI	109	VAL	CA-CB	5.89	1.60	1.54

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
49	B5	41	PRO	C-O	-5.83	1.19	1.24
13	AM	9	ILE	CA-CB	5.82	1.61	1.54
23	BA	1325	G	P-OP2	-5.79	1.37	1.49
23	BA	530	G	C2-N3	-5.70	1.21	1.32
13	CM	9	ILE	CA-CB	5.66	1.61	1.54
23	BA	27	G	P-OP2	-5.64	1.37	1.49
40	DW	96	ILE	CA-CB	-5.60	1.47	1.54
19	AS	67	VAL	CA-CB	5.59	1.60	1.54
23	BA	466	A	P-OP2	-5.55	1.37	1.49
39	BV	14	VAL	CA-CB	-5.50	1.46	1.54
26	BE	20	ALA	CA-CB	-5.47	1.45	1.53
40	BW	106	ILE	CA-CB	-5.46	1.47	1.54
23	BA	1254	A	P-OP2	-5.45	1.38	1.49
39	DV	4	ILE	CA-CB	-5.43	1.47	1.53
23	BA	2056	G	P-OP2	-5.42	1.38	1.49
38	BU	44	ASN	C-O	-5.40	1.17	1.24
7	CG	61	VAL	CA-CB	5.39	1.60	1.54
23	BA	575	A	P-OP1	-5.37	1.38	1.49
10	CJ	72	VAL	CA-CB	5.37	1.61	1.54
49	B5	16	ARG	CA-C	-5.37	1.45	1.52
1	CA	90	U	C4-O4	5.36	1.34	1.23
24	BB	5	C	C1'-N1	-5.33	1.40	1.48
26	BE	12	THR	CA-C	-5.31	1.46	1.52
50	D6	13	CYS	CB-SG	-5.29	1.63	1.81
23	BA	2055	C	O3'-P	-5.29	1.53	1.61
34	BQ	95	ALA	CA-CB	-5.27	1.45	1.53
19	AS	63	THR	CA-CB	5.25	1.62	1.53
10	AJ	72	VAL	CA-CB	5.22	1.61	1.54
23	BA	575	A	P-OP2	-5.22	1.38	1.49
19	AS	9	VAL	CA-CB	5.18	1.60	1.54
23	BA	2578	G	P-OP2	-5.18	1.38	1.49
23	BA	453	C	P-OP1	-5.18	1.38	1.49
40	BW	89	ALA	CA-CB	-5.17	1.45	1.53
23	BA	2007	C	P-OP2	-5.16	1.38	1.49
23	BA	466	A	P-OP1	-5.16	1.38	1.49
23	BA	2335	A	C6-N6	-5.12	1.23	1.33
49	B5	38	ALA	CA-CB	-5.11	1.45	1.53
4	CD	9	CYS	CB-SG	5.10	1.98	1.81
23	BA	2296	U	C4-C5	5.09	1.53	1.43
13	AM	43	THR	CA-CB	5.08	1.61	1.53
23	BA	819	A	P-OP1	-5.07	1.38	1.49
9	CI	97	LYS	CA-C	5.04	1.58	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BD	240	ALA	CA-CB	-5.03	1.47	1.54
45	B1	45	ASN	CA-C	-5.01	1.46	1.52
19	AS	30	LEU	CA-C	5.01	1.59	1.52

All (650) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	AM	85	GLY	N-CA-C	16.16	133.71	114.48
31	BN	128	HIS	CA-C-N	13.29	132.85	119.82
31	BN	128	HIS	C-N-CA	13.29	132.85	119.82
33	DP	26	GLY	N-CA-C	-13.05	91.55	110.60
31	DN	128	HIS	CA-C-N	12.89	132.46	119.82
31	DN	128	HIS	C-N-CA	12.89	132.46	119.82
29	BH	127	GLU	CA-C-N	-11.76	105.14	119.84
29	BH	127	GLU	C-N-CA	-11.76	105.14	119.84
31	BN	46	VAL	N-CA-C	11.42	123.86	112.90
43	DZ	151	HIS	N-CA-C	11.35	127.47	113.17
29	DH	127	GLU	CA-C-N	-11.15	105.90	119.84
29	DH	127	GLU	C-N-CA	-11.15	105.90	119.84
20	CT	9	ASN	N-CA-C	11.06	122.55	107.73
31	DN	46	VAL	N-CA-C	10.66	123.13	112.90
20	AT	9	ASN	N-CA-C	10.52	122.72	107.88
4	CD	8	VAL	N-CA-C	10.44	120.44	110.42
43	BZ	151	HIS	N-CA-C	10.38	127.20	113.30
31	DN	134	ARG	CA-C-N	10.06	132.42	119.84
31	DN	134	ARG	C-N-CA	10.06	132.42	119.84
19	CS	8	GLY	N-CA-C	9.90	124.62	110.46
8	AH	73	ASP	CA-C-N	9.82	129.45	119.82
8	AH	73	ASP	C-N-CA	9.82	129.45	119.82
19	AS	36	ARG	N-CA-C	-9.73	101.41	113.28
26	DE	73	GLU	CA-C-N	9.73	129.67	120.03
26	DE	73	GLU	C-N-CA	9.73	129.67	120.03
14	AN	53	LEU	CA-C-N	9.48	130.23	119.99
14	AN	53	LEU	C-N-CA	9.48	130.23	119.99
8	CH	73	ASP	CA-C-N	9.47	129.10	119.82
8	CH	73	ASP	C-N-CA	9.47	129.10	119.82
26	BE	73	GLU	CA-C-N	9.45	130.03	119.92
26	BE	73	GLU	C-N-CA	9.45	130.03	119.92
41	DX	7	VAL	N-CA-C	-9.15	104.39	111.62
3	AC	59	ARG	N-CA-C	9.02	123.20	109.23
43	DZ	67	LEU	CA-C-N	9.00	131.09	119.84
43	DZ	67	LEU	C-N-CA	9.00	131.09	119.84

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	CL	26	ALA	N-CA-C	-8.97	102.33	113.18
31	BN	134	ARG	CA-C-N	8.93	131.00	119.84
31	BN	134	ARG	C-N-CA	8.93	131.00	119.84
49	B5	53	ALA	N-CA-C	8.93	121.35	110.91
13	CM	15	VAL	N-CA-C	8.84	119.42	110.23
33	DP	40	SER	N-CA-C	-8.83	101.33	112.90
43	BZ	67	LEU	CA-C-N	8.81	130.86	119.84
43	BZ	67	LEU	C-N-CA	8.81	130.86	119.84
43	BZ	189	ALA	N-CA-C	8.80	120.27	108.38
19	CS	41	VAL	N-CA-C	8.79	117.60	107.84
39	BV	35	LEU	CA-C-N	8.63	128.67	119.78
39	BV	35	LEU	C-N-CA	8.63	128.67	119.78
29	BH	72	ILE	N-CA-C	-8.60	102.46	111.58
3	AC	48	TYR	N-CA-C	-8.58	101.42	112.23
3	CC	110	ASN	N-CA-C	-8.51	100.72	112.12
36	DS	103	GLU	N-CA-C	-8.49	102.11	111.36
33	BP	40	SER	N-CA-C	-8.45	101.83	112.90
19	AS	83	HIS	N-CA-C	8.43	123.28	112.92
16	CP	45	THR	CA-C-N	8.40	128.13	119.56
16	CP	45	THR	C-N-CA	8.40	128.13	119.56
30	BI	131	LYS	CA-C-N	8.38	128.59	119.87
30	BI	131	LYS	C-N-CA	8.38	128.59	119.87
36	BS	103	GLU	N-CA-C	-8.35	102.26	111.36
17	CQ	32	TYR	N-CA-C	8.34	123.17	112.92
31	DN	110	GLY	CA-C-N	8.33	127.90	119.24
31	DN	110	GLY	C-N-CA	8.33	127.90	119.24
43	DZ	189	ALA	N-CA-C	8.30	119.58	107.88
33	BP	50	ARG	N-CA-C	8.24	124.44	113.72
10	CJ	89	ASP	N-CA-C	8.21	121.77	109.95
12	AL	26	ALA	N-CA-C	-8.14	103.33	113.18
30	DI	79	ILE	CA-C-N	8.14	130.02	119.84
30	DI	79	ILE	C-N-CA	8.14	130.02	119.84
17	AQ	32	TYR	N-CA-C	8.11	122.89	112.92
33	DP	47	ASP	CA-C-N	8.08	127.72	119.56
33	DP	47	ASP	C-N-CA	8.08	127.72	119.56
16	AP	45	THR	CA-C-N	8.05	127.77	119.56
16	AP	45	THR	C-N-CA	8.05	127.77	119.56
25	BD	27	THR	N-CA-C	8.03	123.29	113.17
33	DP	50	ARG	N-CA-C	8.02	124.14	113.72
38	BU	9	VAL	N-CA-C	7.99	118.79	110.72
10	AJ	40	LEU	CA-C-N	7.98	128.04	119.90
10	AJ	40	LEU	C-N-CA	7.98	128.04	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	DF	89	VAL	CA-C-N	-7.97	109.25	122.17
27	DF	89	VAL	C-N-CA	-7.97	109.25	122.17
25	BD	70	TRP	N-CA-C	-7.93	103.33	113.16
1	CA	1442(A)	G	C4-N9-C1'	7.90	150.19	126.50
4	AD	12	CYS	N-CA-C	-7.83	101.72	111.11
7	AG	5	ARG	N-CA-C	7.81	118.29	108.45
33	BP	47	ASP	CA-C-N	7.81	127.44	119.56
33	BP	47	ASP	C-N-CA	7.81	127.44	119.56
25	DD	70	TRP	N-CA-C	-7.79	103.50	113.16
2	CB	25	ASN	CA-C-N	7.77	127.44	119.82
2	CB	25	ASN	C-N-CA	7.77	127.44	119.82
33	BP	116	GLY	N-CA-C	7.77	123.56	114.16
27	DF	89	VAL	O-C-N	-7.74	112.90	122.57
20	CT	72	LEU	N-CA-C	-7.72	98.18	110.14
3	CC	30	ARG	N-CA-C	7.71	119.69	111.28
1	AA	1442(A)	G	C4-N9-C1'	7.68	149.53	126.50
2	AB	25	ASN	CA-C-N	7.67	127.33	119.82
2	AB	25	ASN	C-N-CA	7.67	127.33	119.82
27	DF	13	SER	CA-C-N	7.66	127.33	119.82
27	DF	13	SER	C-N-CA	7.66	127.33	119.82
51	B7	45	ALA	N-CA-C	7.65	119.40	111.14
14	CN	53	LEU	CA-C-N	7.59	128.02	119.83
14	CN	53	LEU	C-N-CA	7.59	128.02	119.83
20	AT	12	ALA	N-CA-C	-7.58	103.61	113.17
20	CT	12	ALA	N-CA-C	-7.58	103.15	113.30
12	CL	30	ALA	CA-C-N	7.57	126.84	118.97
12	CL	30	ALA	C-N-CA	7.57	126.84	118.97
31	DN	85	ILE	N-CA-C	7.50	116.28	107.73
12	AL	30	ALA	CA-C-N	7.49	126.76	118.97
12	AL	30	ALA	C-N-CA	7.49	126.76	118.97
29	DH	72	ILE	N-CA-C	-7.45	104.52	111.45
29	BH	70	THR	N-CA-C	-7.45	101.25	110.41
48	D4	42	PHE	CA-C-N	7.42	135.05	121.70
48	D4	42	PHE	C-N-CA	7.42	135.05	121.70
46	B2	52	ASP	N-CA-C	-7.39	102.38	111.40
7	AG	65	ALA	N-CA-C	7.37	120.76	111.69
14	AN	21	TYR	N-CA-C	7.36	121.02	107.99
52	D8	33	ASN	N-CA-C	7.33	122.41	113.17
48	B4	42	PHE	CA-C-N	7.29	134.82	121.70
48	B4	42	PHE	C-N-CA	7.29	134.82	121.70
7	AG	56	GLN	N-CA-C	7.27	118.77	108.00
52	B8	33	ASN	N-CA-C	7.27	122.33	113.17

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	AG	75	VAL	N-CA-C	7.27	117.97	110.05
25	DD	27	THR	N-CA-C	7.27	122.33	113.17
6	AF	72	VAL	N-CA-C	7.26	117.39	110.42
4	AD	8	VAL	N-CA-C	7.26	118.05	110.72
7	CG	57	GLU	CA-C-N	7.24	127.58	119.32
7	CG	57	GLU	C-N-CA	7.24	127.58	119.32
26	BE	134	ILE	N-CA-C	7.24	119.05	112.17
45	D1	35	THR	N-CA-C	-7.24	104.45	113.28
10	CJ	96	ILE	N-CA-C	7.22	119.68	107.18
26	DE	89	ASP	N-CA-C	-7.21	104.48	113.28
7	AG	70	LYS	CA-C-N	7.18	128.82	119.84
7	AG	70	LYS	C-N-CA	7.18	128.82	119.84
4	CD	12	CYS	N-CA-C	-7.16	102.52	111.11
4	AD	12	CYS	CA-CB-SG	7.14	130.81	114.40
5	CE	65	ASN	N-CA-C	-7.10	96.67	108.32
42	BY	92	ASN	N-CA-C	7.10	121.96	113.16
45	B1	22	GLY	N-CA-C	7.09	120.78	111.70
30	DI	106	GLY	N-CA-C	7.09	122.92	110.80
30	BI	126	TYR	N-CA-C	7.06	120.66	109.50
29	BH	11	VAL	CA-C-N	7.03	127.06	119.89
29	BH	11	VAL	C-N-CA	7.03	127.06	119.89
48	D4	42	PHE	N-CA-C	7.02	121.93	111.04
36	BS	90	GLY	CA-C-N	-7.02	111.06	119.84
36	BS	90	GLY	C-N-CA	-7.02	111.06	119.84
9	CI	65	VAL	N-CA-C	7.00	117.95	107.80
45	D1	4	VAL	N-CA-C	7.00	117.68	110.05
49	D5	53	ALA	N-CA-C	7.00	119.10	110.91
9	AI	121	ARG	N-CA-C	6.94	120.07	110.35
2	CB	233	SER	CA-C-N	6.94	127.35	119.93
2	CB	233	SER	C-N-CA	6.94	127.35	119.93
2	AB	158	LEU	N-CA-C	6.92	119.54	109.71
13	CM	8	GLU	N-CA-C	6.90	120.15	108.90
3	CC	105	GLU	N-CA-C	6.89	118.74	110.19
31	BN	47	ALA	N-CA-C	6.89	120.58	111.28
51	D7	45	ALA	N-CA-C	6.89	118.58	111.14
26	BE	70	ALA	N-CA-C	6.88	121.35	112.26
32	DO	22	ILE	N-CA-C	6.86	120.91	113.43
7	AG	87	VAL	CA-C-N	6.85	126.83	119.78
7	AG	87	VAL	C-N-CA	6.85	126.83	119.78
4	CD	33	MET	N-CA-C	-6.84	103.88	111.82
26	DE	117	MET	N-CA-C	-6.84	99.11	109.79
39	DV	35	LEU	CA-C-N	6.82	126.81	119.78

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	DV	35	LEU	C-N-CA	6.82	126.81	119.78
7	AG	147	ALA	N-CA-C	-6.76	104.51	112.89
2	AB	233	SER	CA-C-N	6.75	127.15	119.93
2	AB	233	SER	C-N-CA	6.75	127.15	119.93
2	CB	158	LEU	CA-C-N	6.75	126.77	119.89
2	CB	158	LEU	C-N-CA	6.75	126.77	119.89
10	CJ	98	ILE	N-CA-C	6.74	118.19	108.48
42	DY	92	ASN	N-CA-C	6.74	121.52	113.16
7	AG	52	GLU	N-CA-C	6.74	118.51	111.03
43	BZ	188	ALA	N-CA-C	-6.73	97.64	108.55
10	AJ	34	VAL	N-CA-C	6.73	123.34	109.34
7	AG	13	GLN	CA-C-N	6.71	126.73	119.89
7	AG	13	GLN	C-N-CA	6.71	126.73	119.89
33	DP	69	GLY	N-CA-C	-6.71	105.58	111.95
23	BA	1992	G	C2'-C3'-O3'	6.70	119.55	109.50
45	D1	45	ASN	CA-C-N	-6.70	112.90	122.94
45	D1	45	ASN	C-N-CA	-6.70	112.90	122.94
48	B4	42	PHE	N-CA-C	6.69	121.40	111.04
2	CB	169	LYS	N-CA-C	-6.67	96.60	110.80
2	AB	169	LYS	N-CA-C	-6.66	96.61	110.80
49	B5	40	LYS	CA-C-N	-6.66	114.87	119.66
49	B5	40	LYS	C-N-CA	-6.66	114.87	119.66
43	BZ	24	LEU	CA-C-N	-6.64	113.68	120.85
43	BZ	24	LEU	C-N-CA	-6.64	113.68	120.85
17	CQ	29	HIS	CA-C-N	6.64	126.14	119.24
17	CQ	29	HIS	C-N-CA	6.64	126.14	119.24
7	AG	19	GLY	N-CA-C	6.63	122.83	111.15
27	DF	89	VAL	CA-C-O	-6.63	112.49	120.78
45	B1	7	ILE	N-CA-C	6.63	117.25	110.82
11	AK	95	ILE	CB-CA-C	-6.62	103.49	111.97
9	CI	46	ALA	N-CA-C	-6.62	105.08	113.02
43	DZ	24	LEU	CA-C-N	-6.62	113.71	120.85
43	DZ	24	LEU	C-N-CA	-6.62	113.71	120.85
14	CN	13	THR	CA-C-N	6.61	126.06	118.85
14	CN	13	THR	C-N-CA	6.61	126.06	118.85
25	BD	136	ILE	CA-C-N	6.61	127.00	119.93
25	BD	136	ILE	C-N-CA	6.61	127.00	119.93
30	DI	120	ILE	N-CA-C	6.58	118.08	108.53
5	AE	30	ALA	N-CA-C	6.58	119.44	109.23
20	AT	72	LEU	N-CA-C	-6.58	99.94	110.14
45	B1	18	ILE	N-CA-C	6.56	116.85	106.88
44	B0	43	THR	N-CA-C	6.56	120.99	112.92

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	DZ	188	ALA	N-CA-C	-6.54	97.95	108.55
25	BD	240	ALA	CA-C-N	6.54	126.49	120.21
25	BD	240	ALA	C-N-CA	6.54	126.49	120.21
37	BT	79	HIS	N-CA-C	6.53	120.96	112.92
33	BP	55	ARG	N-CA-C	-6.53	100.81	110.48
25	DD	229	VAL	CB-CA-C	-6.53	103.33	112.14
25	DD	49	ILE	CB-CA-C	-6.52	102.59	111.33
31	DN	23	LEU	O-C-N	-6.49	113.95	122.59
43	DZ	53	ILE	N-CA-C	-6.46	106.43	112.83
2	AB	158	LEU	CA-C-N	6.46	126.43	119.78
2	AB	158	LEU	C-N-CA	6.46	126.43	119.78
10	AJ	16	LEU	N-CA-C	-6.43	104.12	112.23
35	DR	114	VAL	CB-CA-C	-6.43	101.03	110.81
9	AI	23	ASN	N-CA-C	6.43	117.98	110.97
34	DQ	61	GLY	N-CA-C	6.42	121.12	111.42
6	CF	11	ASN	CA-C-N	6.42	126.64	119.32
6	CF	11	ASN	C-N-CA	6.42	126.64	119.32
25	BD	49	ILE	CB-CA-C	-6.40	102.76	111.33
27	BF	13	SER	CA-C-N	6.39	126.08	119.82
27	BF	13	SER	C-N-CA	6.39	126.08	119.82
9	AI	110	GLU	N-CA-C	6.38	119.74	109.86
23	BA	2296	U	C2-N1-C1'	-6.37	98.60	117.70
20	CT	10	LEU	N-CA-C	6.36	124.35	110.80
5	AE	80	ILE	N-CA-C	6.35	117.45	108.17
1	AA	1442(A)	G	C8-N9-C1'	-6.35	107.96	127.00
23	DA	2296	U	C2-N1-C1'	-6.35	98.66	117.70
46	D2	52	ASP	N-CA-C	-6.35	103.66	111.40
42	BY	80	GLY	N-CA-C	-6.34	106.57	115.32
10	AJ	94	VAL	N-CA-C	6.33	117.21	109.30
26	DE	2	LYS	N-CA-C	6.33	119.16	110.24
19	CS	67	VAL	N-CA-C	6.32	122.48	109.34
23	BA	2296	U	C6-N1-C1'	6.31	140.14	121.20
1	CA	1442(A)	G	C8-N9-C1'	-6.30	108.10	127.00
1	CA	1459	C	N3-C2-O2	-6.30	103.00	121.90
10	AJ	10	GLY	N-CA-C	6.30	120.57	110.87
23	DA	2296	U	C6-N1-C1'	6.29	140.08	121.20
10	AJ	62	HIS	N-CA-C	6.29	119.15	110.35
50	D6	40	CYS	CA-C-N	6.29	125.91	119.56
50	D6	40	CYS	C-N-CA	6.29	125.91	119.56
45	B1	35	THR	N-CA-C	-6.28	105.62	113.28
50	D6	40	CYS	CA-CB-SG	6.28	128.84	114.40
1	CA	1459	C	C2-N1-C1'	6.25	137.55	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	DD	136	ILE	CA-C-N	6.23	126.60	119.93
25	DD	136	ILE	C-N-CA	6.23	126.60	119.93
32	BO	63	VAL	N-CA-C	6.22	120.87	113.22
26	BE	54	GLN	N-CA-C	6.21	118.62	109.24
10	AJ	31	GLY	N-CA-C	-6.20	103.62	112.55
34	BQ	28	ALA	N-CA-C	6.20	124.00	110.80
5	AE	65	ASN	N-CA-C	-6.19	97.72	107.93
28	BG	125	PHE	CA-C-N	6.18	128.88	120.54
28	BG	125	PHE	C-N-CA	6.18	128.88	120.54
44	D0	43	THR	N-CA-C	6.16	120.50	112.92
4	AD	33	MET	N-CA-C	-6.16	104.68	111.82
26	DE	176	ILE	CA-C-N	6.15	126.33	119.32
26	DE	176	ILE	C-N-CA	6.15	126.33	119.32
25	DD	259	THR	N-CA-C	6.15	121.71	113.72
12	AL	18	VAL	N-CA-C	6.13	116.91	110.72
26	BE	168	MET	N-CA-C	6.13	119.69	109.95
45	B1	45	ASN	CA-C-N	-6.12	113.76	122.94
45	B1	45	ASN	C-N-CA	-6.12	113.76	122.94
34	BQ	61	GLY	N-CA-C	6.12	120.66	111.42
29	DH	70	THR	N-CA-C	-6.12	102.89	110.41
23	DA	1992	G	C2'-C3'-O3'	6.11	118.66	109.50
20	AT	10	LEU	N-CA-C	6.11	123.81	110.80
35	BR	40	LYS	N-CA-C	-6.10	104.71	111.36
26	BE	50	GLY	N-CA-C	-6.08	101.59	110.90
2	CB	166	ASP	CA-C-N	6.08	125.29	118.97
2	CB	166	ASP	C-N-CA	6.08	125.29	118.97
30	DI	88	ILE	N-CA-C	6.08	118.20	109.51
26	DE	134	ILE	N-CA-C	6.07	117.94	112.17
1	AA	1459	C	N3-C2-O2	-6.04	103.77	121.90
13	AM	40	ASN	CA-C-N	6.04	125.59	119.19
13	AM	40	ASN	C-N-CA	6.04	125.59	119.19
9	AI	44	VAL	N-CA-C	6.04	117.46	108.23
3	AC	197	GLY	N-CA-C	6.02	120.37	110.97
46	B2	6	VAL	CB-CA-C	-6.02	104.27	111.97
32	BO	16	ALA	N-CA-C	-6.01	102.60	110.53
22	CV	26	LYS	N-CA-C	6.01	119.77	107.69
17	CQ	78	GLU	N-CA-C	6.01	117.94	110.91
13	CM	71	ARG	N-CA-C	-6.00	104.86	111.82
34	BQ	25	ASP	N-CA-C	6.00	120.67	113.23
38	BU	89	GLU	N-CA-C	5.99	120.29	112.92
1	AA	1459	C	C2-N1-C1'	5.99	136.77	118.80
5	CE	98	THR	N-CA-C	5.99	118.33	111.02

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	AJ	49	VAL	N-CA-C	5.98	116.24	108.35
43	DZ	52	SER	N-CA-C	5.98	116.85	108.00
10	CJ	90	LEU	C-N-CD	-5.98	107.45	120.60
28	BG	89	GLY	N-CA-C	5.97	120.18	112.18
52	D8	34	TRP	O-C-N	-5.96	114.66	122.59
45	D1	7	ILE	N-CA-C	5.96	116.60	110.82
17	AQ	29	HIS	CA-C-N	5.94	125.42	119.24
17	AQ	29	HIS	C-N-CA	5.94	125.42	119.24
26	BE	141	ILE	N-CA-C	5.94	117.88	112.29
13	AM	65	LYS	N-CA-C	5.93	118.11	108.26
49	D5	3	LYS	N-CA-C	5.93	119.48	112.72
6	AF	11	ASN	CA-C-N	5.92	126.07	119.32
6	AF	11	ASN	C-N-CA	5.92	126.07	119.32
5	CE	30	ALA	N-CA-C	5.91	118.27	108.99
34	DQ	16	ARG	N-CA-C	5.91	119.21	110.46
32	BO	22	ILE	N-CA-C	5.91	119.87	113.43
26	DE	121	ASN	CB-CA-C	-5.91	103.17	111.80
29	DH	11	VAL	CA-C-N	5.90	125.91	119.89
29	DH	11	VAL	C-N-CA	5.90	125.91	119.89
7	AG	74	GLU	N-CA-C	5.90	119.10	108.48
33	DP	22	GLY	CA-C-N	5.89	125.27	118.85
33	DP	22	GLY	C-N-CA	5.89	125.27	118.85
45	D1	18	ILE	N-CA-C	5.88	115.82	106.88
27	DF	110	LEU	N-CA-C	-5.88	104.87	111.28
40	BW	12	ILE	N-CA-C	-5.88	99.41	107.75
5	CE	127	ASN	CA-C-N	5.87	125.08	118.97
5	CE	127	ASN	C-N-CA	5.87	125.08	118.97
13	AM	8	GLU	N-CA-C	5.87	118.87	110.24
11	CK	95	ILE	CB-CA-C	-5.87	104.37	111.88
13	CM	101	GLN	N-CA-C	5.87	117.97	108.41
49	B5	27	PRO	CA-C-N	5.87	125.63	119.76
49	B5	27	PRO	C-N-CA	5.87	125.63	119.76
31	BN	71	ILE	N-CA-C	5.87	116.31	107.75
11	AK	89	ALA	N-CA-C	-5.86	105.89	113.16
5	CE	35	GLY	N-CA-C	5.86	119.64	110.91
28	DG	141	PHE	CA-C-N	5.86	125.06	118.97
28	DG	141	PHE	C-N-CA	5.86	125.06	118.97
36	DS	34	HIS	N-CA-C	5.86	118.39	109.95
34	DQ	77	LYS	CA-C-N	-5.84	114.24	120.03
34	DQ	77	LYS	C-N-CA	-5.84	114.24	120.03
36	DS	90	GLY	CA-C-N	-5.83	112.55	119.84
36	DS	90	GLY	C-N-CA	-5.83	112.55	119.84

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
38	DU	89	GLU	N-CA-C	5.83	120.09	112.92
36	BS	34	HIS	N-CA-C	5.83	119.17	109.96
10	CJ	90	LEU	CA-C-N	5.83	140.99	127.00
10	CJ	90	LEU	C-N-CA	5.83	140.99	127.00
7	AG	114	ARG	N-CA-C	5.83	119.86	112.87
30	DI	114	LEU	N-CA-C	5.82	123.20	110.80
28	BG	77	ILE	N-CA-C	5.82	115.72	106.88
9	AI	62	TYR	N-CA-C	-5.81	99.42	108.90
49	D5	27	PRO	CA-C-N	5.81	125.57	119.76
49	D5	27	PRO	C-N-CA	5.81	125.57	119.76
5	AE	98	THR	N-CA-C	5.81	118.11	111.02
7	CG	111	ARG	CA-C-N	5.81	127.10	119.84
7	CG	111	ARG	C-N-CA	5.81	127.10	119.84
22	AV	29	CYS	N-CA-C	5.80	120.35	110.02
43	DZ	122	ARG	N-CA-C	-5.80	106.20	113.28
16	CP	63	GLY	N-CA-C	5.79	124.95	114.46
42	DY	31	LEU	CA-C-N	5.79	125.00	118.97
42	DY	31	LEU	C-N-CA	5.79	125.00	118.97
9	AI	65	VAL	N-CA-C	5.79	117.03	108.45
2	AB	24	TRP	N-CA-C	5.79	118.64	109.96
34	BQ	16	ARG	N-CA-C	5.78	119.02	110.46
13	AM	109	THR	N-CA-C	5.78	118.80	111.69
33	BP	65	ARG	N-CA-C	5.77	118.87	109.06
13	CM	61	GLU	N-CA-C	5.77	117.24	111.07
42	DY	45	VAL	N-CA-C	5.76	116.58	108.17
9	CI	95	LYS	N-CA-C	-5.76	98.54	110.80
25	BD	106	ILE	N-CA-CB	5.75	117.21	110.82
28	BG	141	PHE	CA-C-N	5.75	125.43	119.05
28	BG	141	PHE	C-N-CA	5.75	125.43	119.05
5	CE	80	ILE	N-CA-C	5.75	116.96	108.45
5	AE	127	ASN	CA-C-N	5.75	124.95	118.97
5	AE	127	ASN	C-N-CA	5.75	124.95	118.97
25	BD	220	HIS	CA-C-N	-5.75	115.69	123.10
25	BD	220	HIS	C-N-CA	-5.75	115.69	123.10
43	BZ	86	VAL	N-CA-C	5.75	116.21	108.17
30	BI	89	TYR	N-CA-C	-5.74	104.93	111.07
6	CF	48	LEU	N-CA-C	5.73	118.58	109.81
27	BF	27	GLU	N-CA-C	5.72	117.84	108.52
44	B0	22	GLY	N-CA-C	5.72	119.02	111.70
26	DE	168	MET	N-CA-C	5.71	119.04	109.95
51	D7	46	VAL	N-CA-C	5.71	121.22	109.34
39	BV	70	ILE	CB-CA-C	-5.71	102.62	110.96

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	DZ	113	ALA	N-CA-C	-5.71	105.97	113.17
17	AQ	78	GLU	N-CA-C	5.71	117.59	110.91
31	BN	110	GLY	CA-C-N	5.71	125.83	119.32
31	BN	110	GLY	C-N-CA	5.71	125.83	119.32
32	DO	26	LYS	N-CA-C	-5.71	98.51	107.93
9	CI	24	GLY	N-CA-C	5.71	126.70	113.18
25	BD	267	SER	N-CA-C	-5.70	103.12	110.19
48	B4	6	HIS	CA-C-N	5.69	126.96	119.84
48	B4	6	HIS	C-N-CA	5.69	126.96	119.84
6	CF	60	PHE	N-CA-C	5.69	118.01	108.73
6	AF	47	ARG	N-CA-C	5.69	117.25	110.19
30	BI	124	GLY	N-CA-C	5.69	121.83	112.84
26	BE	2	LYS	N-CA-C	5.68	118.24	110.24
49	B5	46	CYS	CA-C-N	5.68	125.29	119.56
49	B5	46	CYS	C-N-CA	5.68	125.29	119.56
12	AL	119	LYS	N-CA-C	-5.67	102.87	110.24
6	CF	95	GLU	CA-C-N	5.66	125.67	119.89
6	CF	95	GLU	C-N-CA	5.66	125.67	119.89
9	CI	32	ASP	N-CA-C	5.66	117.46	108.79
3	AC	3	ASN	N-CA-C	5.66	120.30	113.17
42	DY	80	GLY	N-CA-C	-5.66	107.52	115.32
27	DF	86	GLY	N-CA-C	5.65	121.81	112.66
43	BZ	192	ALA	N-CA-C	5.64	116.35	108.00
47	B3	11	SER	CA-C-N	5.64	125.74	119.87
47	B3	11	SER	C-N-CA	5.64	125.74	119.87
19	CS	48	THR	N-CA-C	5.64	118.06	108.02
39	DV	79	VAL	N-CA-C	5.64	118.31	112.90
37	BT	88	ILE	CB-CA-C	-5.64	104.09	111.25
19	AS	51	VAL	N-CA-C	5.63	115.68	106.72
46	D2	16	LEU	N-CA-C	-5.63	100.17	108.79
26	DE	50	GLY	N-CA-C	-5.62	102.30	110.90
26	DE	54	GLN	N-CA-C	5.62	118.23	109.52
27	DF	17	ARG	N-CA-C	5.62	117.48	110.91
38	DU	60	LEU	N-CA-C	-5.62	104.80	111.03
26	BE	89	ASP	N-CA-C	-5.60	106.45	113.28
7	CG	147	ALA	N-CA-C	-5.60	106.45	113.28
13	CM	7	VAL	N-CA-C	5.60	119.53	113.43
18	AR	32	ARG	N-CA-C	-5.59	98.88	110.80
19	AS	58	VAL	N-CA-C	5.59	114.03	107.77
2	CB	41	ILE	N-CA-C	5.59	116.17	108.12
31	DN	5	VAL	CA-C-N	5.59	127.80	120.25
31	DN	5	VAL	C-N-CA	5.59	127.80	120.25

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	CV	51	ARG	N-CA-C	-5.59	105.96	112.89
45	B1	70	VAL	CB-CA-C	-5.58	104.71	112.02
4	CD	174	LEU	N-CA-C	5.57	118.18	108.76
23	DA	2296	U	C3'-C2'-C1'	-5.57	95.93	101.50
40	BW	59	VAL	N-CA-C	5.57	116.02	110.23
53	B9	19	ARG	N-CA-C	5.57	118.17	108.76
27	BF	86	GLY	N-CA-C	5.56	120.75	112.41
38	BU	101	ARG	N-CA-C	5.56	117.14	111.14
45	D1	70	VAL	CB-CA-C	-5.56	104.74	112.02
13	AM	65	LYS	CA-C-N	5.55	131.69	121.70
13	AM	65	LYS	C-N-CA	5.55	131.69	121.70
3	CC	64	VAL	N-CA-C	5.55	116.10	107.28
2	AB	41	ILE	N-CA-C	5.55	116.11	108.12
9	AI	5	TYR	N-CA-C	5.55	117.28	108.79
43	BZ	35	ARG	N-CA-C	5.55	118.23	108.75
30	BI	142	VAL	N-CA-C	5.54	115.97	107.77
5	CE	63	ARG	CA-C-N	-5.54	114.58	122.77
5	CE	63	ARG	C-N-CA	-5.54	114.58	122.77
19	AS	52	TYR	N-CA-C	5.53	122.59	110.80
49	D5	46	CYS	CA-C-N	5.53	125.15	119.56
49	D5	46	CYS	C-N-CA	5.53	125.15	119.56
37	BT	19	LEU	CA-C-N	5.53	125.44	119.85
37	BT	19	LEU	C-N-CA	5.53	125.44	119.85
15	AO	47	LYS	N-CA-C	-5.52	106.54	113.28
43	DZ	86	VAL	N-CA-C	5.52	115.90	108.17
27	BF	17	ARG	N-CA-C	5.52	117.36	110.91
27	BF	90	PHE	N-CA-C	5.52	122.55	110.80
26	BE	176	ILE	CA-C-N	5.51	125.87	119.47
26	BE	176	ILE	C-N-CA	5.51	125.87	119.47
4	AD	174	LEU	N-CA-C	5.51	118.08	108.76
33	DP	35	HIS	N-CA-C	5.51	117.50	108.52
26	DE	47	VAL	N-CA-C	5.49	115.80	108.11
52	B8	13	ARG	N-CA-C	5.48	120.07	113.17
30	DI	127	VAL	N-CA-C	5.47	116.43	107.24
46	D2	45	SER	N-CA-C	-5.47	101.26	109.79
23	BA	1107	G	C4-N9-C1'	5.47	142.90	126.50
31	BN	8	GLN	N-CA-C	5.47	117.95	110.24
31	BN	48	MET	N-CA-C	5.47	120.06	113.17
6	CF	14	LEU	N-CA-C	5.46	117.74	110.53
3	CC	206	GLU	N-CA-C	5.46	119.91	111.56
23	DA	1107	G	C4-N9-C1'	5.46	142.88	126.50
43	DZ	192	ALA	N-CA-C	5.46	116.08	108.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	DP	25	SER	N-CA-C	5.45	117.93	111.33
9	AI	20	ARG	CA-C-N	-5.45	114.31	119.76
9	AI	20	ARG	C-N-CA	-5.45	114.31	119.76
9	CI	124	GLN	N-CA-C	5.45	117.52	108.20
49	B5	6	VAL	N-CA-CB	-5.44	103.59	111.21
13	CM	67	GLU	N-CA-C	5.44	122.38	110.80
22	CV	23	GLY	N-CA-C	5.43	125.25	115.80
25	BD	226	MET	N-CA-C	5.43	118.47	109.94
51	B7	46	VAL	N-CA-C	5.43	120.64	109.34
43	DZ	35	ARG	N-CA-C	5.43	118.30	109.06
10	AJ	90	LEU	CA-C-N	5.43	140.03	127.00
10	AJ	90	LEU	C-N-CA	5.43	140.03	127.00
19	CS	62	ILE	N-CA-C	5.43	117.04	109.55
14	AN	35	ARG	CA-C-N	5.42	128.00	120.63
14	AN	35	ARG	C-N-CA	5.42	128.00	120.63
16	CP	53	VAL	CB-CA-C	-5.42	102.40	111.29
9	CI	96	LEU	N-CA-C	5.42	119.15	112.54
6	AF	14	LEU	N-CA-C	5.42	117.52	110.43
47	B3	19	GLN	N-CA-C	-5.41	105.38	111.28
43	BZ	171	ILE	N-CA-C	5.40	119.87	113.22
30	DI	91	SER	N-CA-C	5.40	118.21	109.40
18	CR	32	ARG	N-CA-C	-5.40	99.30	110.80
25	BD	259	THR	N-CA-C	5.40	120.74	113.72
31	BN	130	HIS	N-CA-C	5.40	119.50	113.02
28	BG	152	LEU	N-CA-C	5.39	118.05	110.23
43	DZ	153	SER	N-CA-C	-5.39	105.06	111.69
7	AG	77	SER	N-CA-C	5.39	117.09	108.41
10	CJ	54	PHE	N-CA-C	5.39	116.97	109.31
19	AS	54	GLY	N-CA-C	-5.39	107.58	114.37
23	BA	1653	G	C2'-C3'-O3'	5.39	117.58	109.50
3	CC	103	VAL	N-CA-C	5.38	115.70	108.17
45	B1	13	ILE	CA-C-N	-5.38	116.16	122.93
45	B1	13	ILE	C-N-CA	-5.38	116.16	122.93
49	D5	51	TYR	N-CA-C	5.37	117.49	108.73
29	BH	9	ILE	CB-CA-C	-5.37	104.71	111.04
25	DD	7	LYS	CA-C-N	-5.37	113.13	119.84
25	DD	7	LYS	C-N-CA	-5.37	113.13	119.84
28	DG	121	ASN	CA-C-N	5.36	124.87	119.19
28	DG	121	ASN	C-N-CA	5.36	124.87	119.19
34	DQ	28	ALA	N-CA-C	5.36	122.22	110.80
28	DG	125	PHE	CA-C-N	5.36	127.77	120.54
28	DG	125	PHE	C-N-CA	5.36	127.77	120.54

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
42	DY	2	ARG	N-CA-C	5.36	114.91	107.73
45	B1	44	PRO	CA-C-O	-5.35	114.89	121.31
7	AG	59	LEU	N-CA-C	5.35	119.74	111.56
9	AI	57	GLY	N-CA-C	-5.35	105.24	112.14
17	CQ	96	GLU	N-CA-C	-5.35	102.48	110.23
2	AB	196	LEU	N-CA-C	-5.33	106.45	113.17
23	BA	1204	A	C3'-C2'-C1'	-5.33	96.17	101.50
19	AS	62	ILE	N-CA-C	5.32	115.62	108.17
33	DP	95	VAL	N-CA-C	5.32	115.78	108.12
40	BW	75	TYR	N-CA-C	5.32	117.15	109.07
53	B9	28	GLU	N-CA-C	-5.31	105.66	111.82
32	BO	100	GLY	CA-C-N	5.31	125.29	120.03
32	BO	100	GLY	C-N-CA	5.31	125.29	120.03
39	DV	42	GLY	N-CA-C	-5.31	100.59	113.18
2	AB	192	SER	N-CA-C	5.31	115.14	108.45
28	DG	14	GLU	CA-C-N	5.31	127.33	120.70
28	DG	14	GLU	C-N-CA	5.31	127.33	120.70
9	AI	120	ARG	CA-C-N	5.30	129.21	121.31
9	AI	120	ARG	C-N-CA	5.30	129.21	121.31
3	CC	180	ALA	N-CA-C	5.30	117.75	111.33
28	DG	108	ASN	N-CA-C	5.30	116.86	111.14
2	CB	158	LEU	N-CA-C	5.29	118.84	109.58
5	AE	7	GLU	N-CA-C	5.29	116.73	111.07
5	AE	63	ARG	CA-C-N	-5.29	114.95	122.41
5	AE	63	ARG	C-N-CA	-5.29	114.95	122.41
2	CB	192	SER	N-CA-C	5.29	115.11	108.45
33	DP	20	GLY	CA-C-N	-5.28	114.71	123.37
33	DP	20	GLY	C-N-CA	-5.28	114.71	123.37
11	AK	84	VAL	N-CA-C	5.28	115.46	107.75
34	DQ	21	THR	CB-CA-C	-5.28	101.27	109.61
3	AC	78	GLY	N-CA-C	5.27	119.51	112.65
20	CT	9	ASN	CA-C-N	5.27	131.61	121.54
20	CT	9	ASN	C-N-CA	5.27	131.61	121.54
37	DT	79	HIS	N-CA-C	5.27	119.41	112.92
49	B5	4	HIS	CA-C-N	5.27	125.28	119.90
49	B5	4	HIS	C-N-CA	5.27	125.28	119.90
16	AP	37	GLY	N-CA-C	5.26	117.40	112.08
21	AU	4	GLY	N-CA-C	5.26	120.24	114.40
23	BA	2296	U	C3'-C2'-C1'	-5.26	96.24	101.50
33	BP	52	GLU	N-CA-C	5.26	120.35	113.30
33	BP	95	VAL	N-CA-C	5.26	115.69	108.12
12	CL	119	LYS	N-CA-C	-5.26	103.41	110.24

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	BP	27	HIS	N-CA-C	5.25	121.99	110.80
7	AG	127	ALA	N-CA-C	5.25	117.01	111.28
6	CF	47	ARG	N-CA-C	5.25	116.70	110.19
46	D2	6	VAL	CB-CA-C	-5.25	105.25	111.97
13	CM	49	THR	CB-CA-C	-5.25	109.55	115.79
41	BX	7	VAL	N-CA-C	-5.25	107.48	111.62
52	D8	24	ALA	N-CA-C	5.25	117.22	108.99
28	DG	89	GLY	N-CA-C	5.24	119.20	112.18
43	BZ	153	SER	N-CA-C	-5.24	105.25	111.69
9	AI	4	TYR	N-CA-C	5.24	118.18	110.59
34	BQ	60	ARG	N-CA-C	-5.23	100.08	108.55
35	BR	82	GLU	CA-C-N	-5.23	117.85	122.97
35	BR	82	GLU	C-N-CA	-5.23	117.85	122.97
17	AQ	34	LYS	N-CA-C	5.22	117.67	110.35
10	CJ	64	GLU	N-CA-C	5.22	117.62	109.52
23	DA	1107	G	C8-N9-C1'	-5.22	111.34	127.00
23	BA	1107	G	C8-N9-C1'	-5.22	111.34	127.00
28	BG	14	GLU	CA-C-N	5.22	127.22	120.70
28	BG	14	GLU	C-N-CA	5.22	127.22	120.70
30	BI	16	GLY	N-CA-C	-5.22	108.87	115.08
15	CO	47	LYS	N-CA-C	-5.22	106.92	113.28
13	AM	60	VAL	N-CA-C	5.21	115.43	110.42
3	AC	64	VAL	N-CA-C	5.21	115.78	108.17
28	BG	63	ILE	N-CA-C	5.21	115.36	110.30
15	CO	74	ASP	CA-C-N	5.21	126.36	119.84
15	CO	74	ASP	C-N-CA	5.21	126.36	119.84
23	DA	1204	A	C3'-C2'-C1'	-5.21	96.29	101.50
34	BQ	37	LEU	N-CA-C	5.21	118.79	112.23
27	BF	23	ASP	N-CA-C	5.21	117.00	110.91
42	BY	9	LYS	N-CA-C	-5.20	101.98	110.20
5	AE	69	VAL	CA-C-N	5.20	126.34	119.84
5	AE	69	VAL	C-N-CA	5.20	126.34	119.84
6	AF	60	PHE	N-CA-C	5.20	117.20	108.73
7	AG	100	ALA	N-CA-C	-5.20	106.89	113.18
14	AN	48	ALA	N-CA-C	-5.20	106.94	113.28
3	CC	161	GLU	N-CA-C	5.19	118.39	111.75
53	D9	3	VAL	N-CA-C	5.19	115.53	107.28
42	DY	84	ARG	CA-C-N	-5.19	116.76	123.19
42	DY	84	ARG	C-N-CA	-5.19	116.76	123.19
4	CD	167	GLY	N-CA-C	5.18	122.00	115.42
25	BD	35	LYS	CA-C-N	-5.18	114.65	120.14
25	BD	35	LYS	C-N-CA	-5.18	114.65	120.14

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
35	DR	16	HIS	N-CA-C	-5.18	105.32	111.69
45	D1	92	LYS	N-CA-C	-5.18	105.75	111.71
25	DD	123	ALA	N-CA-C	5.18	117.11	109.50
30	DI	83	ALA	N-CA-C	5.17	116.93	108.55
49	D5	40	LYS	CA-C-N	-5.17	115.94	119.66
49	D5	40	LYS	C-N-CA	-5.17	115.94	119.66
46	D2	50	ILE	CB-CA-C	-5.17	103.40	111.26
2	AB	234	PRO	N-CA-C	5.17	119.69	111.26
43	DZ	33	LEU	N-CA-C	5.17	117.84	108.69
11	CK	84	VAL	N-CA-C	5.17	115.30	107.75
28	DG	77	ILE	N-CA-C	5.17	115.21	107.51
43	BZ	86	VAL	CB-CA-C	-5.17	103.13	110.83
4	CD	9	CYS	N-CA-CB	5.16	118.41	110.46
12	CL	38	THR	N-CA-C	-5.16	104.58	111.24
13	AM	41	PRO	N-CA-C	5.16	120.33	113.57
1	CA	346	G	C4-N9-C1'	5.15	141.95	126.50
35	BR	61	HIS	N-CA-C	-5.15	105.32	111.03
52	B8	24	ALA	N-CA-C	5.14	116.88	109.07
7	AG	56	GLN	CB-CA-C	-5.14	109.14	116.34
2	CB	193	ASP	N-CA-C	5.13	118.02	109.09
14	AN	28	GLY	N-CA-C	5.13	125.33	113.18
7	AG	39	ALA	N-CA-C	5.12	116.67	111.14
30	BI	67	ARG	N-CA-C	-5.12	104.77	111.02
10	CJ	97	GLU	N-CA-C	5.12	118.10	110.52
23	DA	1653	G	C2'-C3'-O3'	5.12	117.18	109.50
45	B1	7	ILE	CB-CA-C	-5.12	105.33	112.04
52	D8	13	ARG	N-CA-C	5.11	119.61	113.17
22	CV	29	CYS	CA-C-N	-5.10	113.46	119.84
22	CV	29	CYS	C-N-CA	-5.10	113.46	119.84
42	BY	84	ARG	CA-C-N	-5.09	116.88	123.19
42	BY	84	ARG	C-N-CA	-5.09	116.88	123.19
25	BD	231	HIS	CA-C-N	5.09	125.12	119.32
25	BD	231	HIS	C-N-CA	5.09	125.12	119.32
34	BQ	21	THR	CB-CA-C	-5.08	101.52	109.70
46	D2	46	GLN	CB-CA-C	-5.08	104.52	111.73
45	D1	22	GLY	N-CA-C	5.07	118.19	111.70
26	BE	26	ILE	CB-CA-C	-5.07	103.58	110.42
2	CB	206	ASP	N-CA-C	5.07	118.72	111.02
25	DD	234	GLY	N-CA-C	5.07	117.76	111.93
45	B1	4	VAL	N-CA-C	5.06	116.53	109.55
25	BD	40	THR	N-CA-C	5.06	119.53	112.90
10	CJ	65	LEU	N-CA-C	5.06	116.77	108.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	CB	196	LEU	N-CA-C	-5.06	106.80	113.17
3	CC	108	ASN	CA-C-N	5.06	126.16	119.84
3	CC	108	ASN	C-N-CA	5.06	126.16	119.84
9	CI	104	ARG	N-CA-C	5.06	117.73	109.59
5	AE	21	ALA	N-CA-C	-5.05	103.92	110.19
7	CG	70	LYS	CA-C-N	5.05	125.45	119.99
7	CG	70	LYS	C-N-CA	5.05	125.45	119.99
40	DW	76	VAL	N-CA-C	5.05	115.24	108.17
52	D8	35	GLN	N-CA-C	5.05	121.55	110.80
29	BH	20	ALA	CA-C-N	-5.04	114.60	119.90
29	BH	20	ALA	C-N-CA	-5.04	114.60	119.90
51	D7	17	GLY	N-CA-C	5.03	117.72	111.93
25	BD	256	GLY	N-CA-C	5.03	121.81	115.42
7	AG	89	MET	N-CA-C	5.02	114.87	108.24
26	BE	201	THR	N-CA-C	5.02	117.64	109.86
25	DD	85	ASP	CA-C-N	5.02	125.09	119.87
25	DD	85	ASP	C-N-CA	5.02	125.09	119.87
25	DD	226	MET	N-CA-C	5.02	116.44	109.31
10	CJ	67	THR	N-CA-C	5.01	117.61	110.24
26	BE	121	ASN	CB-CA-C	-5.01	104.61	111.73
47	D3	40	THR	CA-C-N	-5.01	113.39	118.85
47	D3	40	THR	C-N-CA	-5.01	113.39	118.85
3	CC	118	GLN	N-CA-C	5.01	117.63	111.82
8	AH	75	ARG	CA-C-N	5.00	125.28	119.92
8	AH	75	ARG	C-N-CA	5.00	125.28	119.92
6	AF	48	LEU	N-CA-C	5.00	117.47	109.81
5	CE	113	ALA	N-CA-C	-5.00	106.69	112.89

There are no chirality outliers.

All (83) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	AB	128	GLU	Peptide
2	AB	14	GLY	Peptide
2	AB	71	VAL	Peptide
3	AC	186	PHE	Peptide
7	AG	19	GLY	Peptide
7	AG	44	TYR	Peptide
7	AG	47	CYS	Peptide
7	AG	54	THR	Peptide
9	AI	102	LEU	Peptide
9	AI	56	LEU	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
10	AJ	28	ARG	Peptide
10	AJ	61	GLU	Peptide
10	AJ	79	ARG	Peptide
12	AL	91	LYS	Mainchain
13	AM	105	THR	Peptide
13	AM	39	ILE	Peptide
13	AM	86	CYS	Peptide
14	AN	15	LYS	Peptide
14	AN	16	PHE	Peptide
14	AN	60	SER	Peptide
17	AQ	33	GLY	Peptide
19	AS	51	VAL	Peptide
20	AT	10	LEU	Peptide
20	AT	11	SER	Peptide
45	B1	83	GLU	Peptide
48	B4	42	PHE	Peptide
48	B4	43	TYR	Peptide
48	B4	44	THR	Peptide
25	BD	274	ARG	Peptide
26	BE	70	ALA	Peptide
26	BE	72	VAL	Peptide
27	BF	129	PHE	Peptide
27	BF	85	GLY	Peptide
28	BG	13	GLU	Peptide
30	BI	83	ALA	Peptide
31	BN	124	ALA	Peptide
32	BO	48	PRO	Peptide
33	BP	103	ALA	Peptide
33	BP	25	SER	Peptide
33	BP	26	GLY	Peptide
33	BP	44	GLY	Peptide
36	BS	82	ILE	Peptide
36	BS	96	GLY	Peptide
37	BT	126	ALA	Peptide
41	BX	93	GLU	Peptide
42	BY	102	CYS	Peptide
43	BZ	159	PRO	Peptide
2	CB	128	GLU	Peptide
2	CB	14	GLY	Peptide
2	CB	71	VAL	Peptide
3	CC	19	GLU	Peptide
3	CC	46	GLU	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
5	CE	64	ARG	Peptide
7	CG	57	GLU	Peptide
9	CI	24	GLY	Peptide
12	CL	91	LYS	Mainchain
13	CM	66	LEU	Peptide
17	CQ	33	GLY	Peptide
20	CT	10	LEU	Peptide
22	CV	26	LYS	Peptide
22	CV	28	MET	Peptide
22	CV	30	PRO	Peptide
45	D1	83	GLU	Peptide
48	D4	42	PHE	Peptide
48	D4	44	THR	Peptide
52	D8	34	TRP	Peptide,Mainchain
25	DD	274	ARG	Peptide
26	DE	72	VAL	Peptide
27	DF	129	PHE	Peptide
27	DF	85	GLY	Peptide
27	DF	89	VAL	Mainchain
28	DG	13	GLU	Peptide
30	DI	113	ARG	Peptide
31	DN	23	LEU	Peptide,Mainchain
32	DO	48	PRO	Peptide
33	DP	26	GLY	Peptide
33	DP	44	GLY	Peptide
36	DS	82	ILE	Peptide
37	DT	126	ALA	Peptide
41	DX	93	GLU	Peptide
42	DY	102	CYS	Peptide

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	AA	32353	0	16329	1269	0
1	CA	32270	0	16287	987	1
2	AB	1775	0	1743	102	0
2	CB	1775	0	1743	95	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	AC	1450	0	1314	82	0
3	CC	1450	0	1314	102	0
4	AD	1526	0	1417	80	0
4	CD	1526	0	1415	92	0
5	AE	1105	0	1130	58	0
5	CE	1105	0	1130	62	0
6	AF	777	0	737	27	0
6	CF	777	0	737	25	0
7	AG	1164	0	1106	103	0
7	CG	1164	0	1106	53	0
8	AH	1045	0	1033	53	0
8	CH	1045	0	1033	53	0
9	AI	852	0	742	69	0
9	CI	852	0	742	62	0
10	AJ	663	0	558	58	0
10	CJ	663	0	558	30	0
11	AK	828	0	822	29	0
11	CK	828	0	822	32	0
12	AL	905	0	916	44	0
12	CL	905	0	916	43	0
13	AM	804	0	752	62	0
13	CM	804	0	752	50	0
14	AN	478	0	497	53	0
14	CN	478	0	497	38	0
15	AO	724	0	749	25	0
15	CO	724	0	749	29	0
16	AP	651	0	638	34	0
16	CP	651	0	638	36	0
17	AQ	823	0	891	19	0
17	CQ	823	0	891	21	0
18	AR	514	0	530	25	0
18	CR	514	0	530	25	0
19	AS	560	0	466	41	0
19	CS	560	0	466	24	0
20	AT	713	0	766	38	0
20	CT	713	0	766	32	0
21	AU	199	0	208	26	0
21	CU	199	0	208	9	0
22	AV	333	0	235	14	0
22	CV	353	0	266	14	0
23	BA	60512	0	30492	882	0
23	DA	60620	0	30560	953	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
24	BB	2573	0	1304	45	0
24	DB	2573	0	1304	52	0
25	BD	2136	0	2218	69	0
25	DD	2136	0	2218	76	0
26	BE	1555	0	1607	40	0
26	DE	1555	0	1607	51	0
27	BF	1580	0	1621	58	0
27	DF	1580	0	1621	68	0
28	BG	1368	0	1324	53	0
28	DG	1368	0	1324	56	0
29	BH	1317	0	1376	32	0
29	DH	1317	0	1376	32	0
30	BI	1040	0	1045	57	1
30	DI	1038	0	1040	40	0
31	BN	1112	0	1180	35	0
31	DN	1112	0	1180	38	0
32	BO	923	0	981	25	0
32	DO	923	0	981	30	0
33	BP	1131	0	1201	40	0
33	DP	1131	0	1201	40	0
34	BQ	1122	0	1179	35	0
34	DQ	1122	0	1179	47	0
35	BR	968	0	1033	22	0
35	DR	968	0	1033	28	0
36	BS	865	0	905	46	0
36	DS	865	0	905	52	0
37	BT	1063	0	1103	41	0
37	DT	1063	0	1103	41	0
38	BU	959	0	1019	24	0
38	DU	959	0	1019	31	0
39	BV	760	0	816	20	0
39	DV	771	0	830	24	0
40	BW	881	0	935	19	0
40	DW	881	0	935	22	0
41	BX	742	0	799	17	0
41	DX	742	0	799	20	0
42	BY	785	0	828	33	0
42	DY	785	0	828	29	0
43	BZ	1522	0	1511	50	0
43	DZ	1522	0	1511	55	0
44	B0	594	0	604	23	0
44	D0	594	0	604	32	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
45	B1	745	0	804	30	0
45	D1	745	0	804	30	0
46	B2	588	0	643	21	0
46	D2	588	0	643	23	0
47	B3	458	0	503	9	0
47	D3	458	0	503	13	0
48	B4	349	0	336	19	0
48	D4	349	0	336	20	0
49	B5	455	0	472	14	0
49	D5	455	0	472	18	0
50	B6	449	0	462	19	0
50	D6	449	0	462	17	0
51	B7	418	0	467	12	0
51	D7	418	0	467	15	0
52	B8	509	0	565	26	0
52	D8	509	0	565	30	0
53	B9	297	0	316	8	0
53	D9	297	0	316	10	0
54	AA	106	0	0	0	0
54	AD	1	0	0	0	0
54	B0	2	0	0	0	0
54	B1	1	0	0	0	0
54	B2	2	0	0	0	0
54	B3	2	0	0	0	0
54	B5	2	0	0	0	0
54	B8	3	0	0	0	0
54	B9	1	0	0	0	0
54	BA	618	0	0	0	0
54	BB	17	0	0	0	0
54	BD	3	0	0	0	0
54	BE	6	0	0	0	0
54	BF	2	0	0	0	0
54	BP	1	0	0	0	0
54	BQ	3	0	0	0	0
54	BR	2	0	0	0	0
54	BU	2	0	0	0	0
54	BV	1	0	0	0	0
54	BW	1	0	0	0	0
54	CA	69	0	0	0	0
54	D6	1	0	0	0	0
54	D7	1	0	0	0	0
54	D8	1	0	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
54	DA	430	0	0	0	0
54	DB	5	0	0	0	0
54	DD	1	0	0	0	0
54	DE	1	0	0	0	0
54	DF	2	0	0	0	0
54	DP	1	0	0	0	0
55	AD	1	0	0	0	0
55	AN	1	0	0	0	0
55	B4	1	0	0	0	0
55	B5	1	0	0	0	0
55	B6	1	0	0	0	0
55	B9	1	0	0	0	0
55	BY	1	0	0	0	0
55	CD	1	0	0	0	0
55	CN	1	0	0	0	0
55	D4	1	0	0	0	0
55	D5	1	0	0	0	0
55	D6	1	0	0	0	0
55	D9	1	0	0	0	0
55	DY	1	0	0	0	0
56	AA	145	0	0	23	0
56	AF	1	0	0	0	0
56	AK	1	0	0	0	0
56	AQ	1	0	0	0	0
56	B0	4	0	0	0	0
56	B3	1	0	0	0	0
56	B4	1	0	0	0	0
56	B5	3	0	0	1	0
56	B7	3	0	0	0	0
56	B8	7	0	0	0	0
56	B9	2	0	0	1	0
56	BA	1422	0	0	86	0
56	BB	31	0	0	1	0
56	BD	10	0	0	4	0
56	BE	8	0	0	0	0
56	BF	11	0	0	0	0
56	BH	2	0	0	0	0
56	BN	2	0	0	0	0
56	BO	3	0	0	0	0
56	BP	6	0	0	0	0
56	BQ	2	0	0	0	0
56	BR	6	0	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	BT	1	0	0	0	0
56	BU	2	0	0	0	0
56	BV	2	0	0	0	0
56	BW	4	0	0	0	0
56	BX	2	0	0	0	0
56	BY	1	0	0	0	0
56	CA	119	0	0	13	0
56	CD	1	0	0	0	0
56	CK	2	0	0	0	0
56	CP	1	0	0	0	0
56	CT	2	0	0	0	0
56	D0	1	0	0	0	0
56	D1	2	0	0	0	0
56	DA	696	0	0	56	0
56	DB	9	0	0	0	0
56	DD	3	0	0	0	0
56	DE	2	0	0	0	0
56	DF	5	0	0	0	0
56	DP	5	0	0	0	0
56	DQ	2	0	0	0	0
56	DR	1	0	0	0	0
56	DV	1	0	0	0	0
56	DX	1	0	0	0	0
56	DY	1	0	0	0	0
All	All	283930	0	186520	7125	1

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 16.

All (7125) 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)
1:AA:1303:C:N4	1:AA:1334:G:H1	1.41	1.17
23:BA:2296:U:O4	23:BA:2335:A:N6	1.76	1.15
23:DA:2296:U:O4	23:DA:2335:A:N6	1.79	1.15
1:AA:1003:G:H1	1:AA:1037:C:N4	1.46	1.14
1:AA:559:A:H4'	1:AA:560:U:H3'	1.35	1.07
1:CA:559:A:H4'	1:CA:560:U:H3'	1.36	1.07
23:BA:2057:A:OP2	56:BA:4256:HOH:O	1.72	1.05
1:AA:952:U:H3	1:AA:1229:A:N6	1.55	1.04
1:AA:345:C:OP2	37:BT:39:ARG:NH2	1.90	1.03

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1003:G:H1	1:CA:1037:C:N4	1.56	1.02
1:AA:1313:U:H3	1:AA:1324:A:N6	1.59	1.00
23:BA:1310:G:OP2	51:B7:9:ARG:NH1	1.94	1.00
45:D1:21:ARG:HG2	45:D1:21:ARG:HH11	1.27	0.99
1:AA:1350:A:N6	1:AA:1372:U:H3	1.58	0.99
1:AA:1047:G:H1	1:AA:1210:C:H42	1.02	0.98
1:CA:1010:G:H2'	1:CA:1011:G:H8	1.28	0.98
13:CM:3:ARG:HA	48:D4:34:GLU:HG2	1.43	0.98
1:AA:933:G:H1	1:AA:1384:C:H42	1.08	0.98
23:BA:2304:G:H1	23:BA:2312:U:H3	1.11	0.97
1:AA:943:U:H3	1:AA:1340:A:H61	1.05	0.97
23:DA:2304:G:H1	23:DA:2312:U:H3	1.12	0.97
23:BA:139(A):G:N2	41:BX:44:GLU:OE1	1.97	0.97
1:CA:1010:G:H2'	1:CA:1011:G:C8	2.00	0.96
1:CA:1422:G:H5'	32:DO:48:PRO:HB3	1.44	0.96
23:DA:139(A):G:N2	41:DX:44:GLU:OE1	1.99	0.96
23:DA:1310:G:OP2	51:D7:9:ARG:NH1	1.97	0.96
23:DA:1359:A:N6	23:DA:1372:U:O4	1.99	0.96
1:AA:79:G:H1	1:AA:90:U:H3	1.05	0.96
1:CA:346:G:N2	1:CA:347:G:N3	2.15	0.95
23:BA:1784:A:OP2	56:BA:3901:HOH:O	1.84	0.95
42:DY:76:CYS:HB3	42:DY:79:CYS:HB2	1.47	0.95
23:BA:2059:A:OP2	56:BA:4447:HOH:O	1.85	0.95
33:DP:39:LYS:HB2	33:DP:45:LEU:HG	1.49	0.95
23:BA:2322:A:H61	23:BA:2335:A:N6	1.65	0.95
1:AA:1013:G:N2	1:AA:1016:A:N7	2.14	0.94
1:CA:1164:G:H1	1:CA:1172:C:H42	1.01	0.94
1:AA:1156:G:H1'	1:AA:1179:A:H61	1.32	0.94
23:DA:2322:A:H61	23:DA:2335:A:N6	1.65	0.94
1:CA:1003:G:N2	1:CA:1037:C:N3	2.17	0.93
28:DG:61:ALA:HB1	48:D4:7:PRO:HG3	1.51	0.93
23:BA:2122:U:H3	23:BA:2176:A:H61	1.12	0.93
1:AA:1347:G:H22	1:AA:1373:G:H2'	1.33	0.93
23:BA:1664:A:OP1	56:BA:4528:HOH:O	1.87	0.92
23:BA:2714:G:OP2	56:BA:4492:HOH:O	1.86	0.92
28:BG:61:ALA:HB1	48:B4:7:PRO:HG3	1.51	0.92
23:DA:1779:U:H5	23:DA:1784:A:N7	1.67	0.92
1:AA:136:C:H42	1:AA:227:G:H1	1.18	0.92
1:AA:1014:A:H5'	19:AS:14:HIS:HB2	1.52	0.92
1:CA:1164:G:H1	1:CA:1172:C:N4	1.67	0.92
23:DA:197:A:OP1	56:DA:3892:HOH:O	1.88	0.92

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1237:C:H42	1:CA:1337:G:H1	1.16	0.92
1:AA:1238:A:H62	1:AA:1299:A:H61	1.15	0.92
1:AA:1313:U:H3	1:AA:1324:A:H61	0.98	0.92
23:BA:1774:C:OP1	56:BA:4516:HOH:O	1.88	0.92
42:BY:76:CYS:HB3	42:BY:79:CYS:HB2	1.52	0.91
1:AA:1075:C:OP1	2:AB:179:LYS:NZ	2.02	0.91
1:AA:1249:C:H42	1:AA:1287:A:H8	1.15	0.91
45:B1:21:ARG:HG2	45:B1:21:ARG:HH11	1.35	0.91
23:BA:9:U:N3	23:BA:2629:A:N1	2.17	0.91
23:BA:27:G:N2	23:BA:512:G:O2'	2.02	0.91
3:AC:36:ASP:HA	3:AC:39:ILE:HB	1.52	0.91
23:DA:2122:U:H3	23:DA:2176:A:H61	1.12	0.90
1:AA:1003:G:N2	1:AA:1037:C:N3	2.17	0.90
1:AA:1233:G:H21	1:AA:1364:U:H3	1.16	0.90
1:CA:1047:G:H1	1:CA:1210:C:H42	1.13	0.90
1:AA:559:A:OP1	5:AE:126:ARG:NH2	2.04	0.90
23:DA:2287:A:H62	23:DA:2344:U:H3	1.19	0.90
52:B8:7:HIS:HD2	52:B8:10:ALA:H	1.20	0.89
1:AA:1348:U:O2	1:AA:1374:A:N6	2.04	0.89
23:BA:1154:G:N7	56:BA:4287:HOH:O	2.04	0.89
23:BA:2322:A:OP2	56:BA:4631:HOH:O	1.88	0.89
23:DA:2287:A:N6	23:DA:2344:U:H3	1.69	0.89
1:AA:346:G:N2	1:AA:347:G:N3	2.20	0.89
1:AA:1311:G:H1	1:AA:1326:C:H42	1.19	0.89
27:BF:46:ARG:HG2	27:BF:46:ARG:HH11	1.37	0.89
23:DA:2820:A:OP2	35:DR:2:ARG:NH2	2.05	0.89
23:BA:631:A:OP1	33:BP:65:ARG:NH1	2.05	0.89
52:D8:7:HIS:HD2	52:D8:10:ALA:H	1.20	0.88
23:BA:571:A:H5'	23:BA:2030:A:H62	1.38	0.88
1:AA:770:C:OP1	56:AA:1858:HOH:O	1.92	0.88
1:AA:1165:C:H42	1:AA:1171:G:H1	1.19	0.88
18:CR:69:THR:HA	18:CR:72:ARG:HD2	1.54	0.88
18:AR:69:THR:HA	18:AR:72:ARG:HD2	1.55	0.88
1:CA:1047:G:H1	1:CA:1210:C:N4	1.69	0.88
1:AA:1047:G:H1	1:AA:1210:C:N4	1.72	0.88
23:BA:1779:U:H5	23:BA:1784:A:N7	1.71	0.88
23:DA:287:C:O2	23:DA:354:G:N2	2.05	0.88
23:BA:446:G:OP2	56:BA:3961:HOH:O	1.90	0.87
23:BA:2319:G:H22	36:BS:3:ARG:HE	1.21	0.87
23:DA:27:G:N2	23:DA:512:G:O2'	2.07	0.87
33:BP:39:LYS:HB2	33:BP:45:LEU:HG	1.54	0.87

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:D9:11:CYS:SG	53:D9:32:HIS:HE1	1.97	0.87
1:AA:1273:G:H3'	1:AA:1274:G:H8	1.39	0.87
3:AC:181:ASN:HB3	3:AC:204:LEU:HB2	1.56	0.87
21:AU:12:LYS:HB3	21:AU:22:ARG:HD2	1.54	0.87
1:CA:839:U:H5"	1:CA:840:C:H5	1.39	0.87
26:BE:54:GLN:HG3	26:BE:76:ARG:HB3	1.56	0.87
1:CA:1273:G:H3'	1:CA:1274:G:H8	1.38	0.87
1:CA:1350:A:H61	1:CA:1372:U:H3	1.21	0.87
22:CV:4:GLN:NE2	22:CV:4:GLN:O	2.06	0.87
23:DA:2319:G:H22	36:DS:3:ARG:HE	1.23	0.86
1:CA:677:U:H3	1:CA:713:G:H22	1.22	0.86
1:AA:1092:A:H5"	7:AG:4:ARG:HH12	1.40	0.86
14:AN:47:LEU:HA	14:AN:50:LYS:HB2	1.57	0.86
1:AA:1303:C:N3	1:AA:1334:G:N2	2.24	0.86
23:BA:422:A:OP2	56:BA:3942:HOH:O	1.93	0.86
1:AA:964:A:N3	1:AA:969:A:O2'	2.06	0.86
23:BA:1359:A:N6	23:BA:1372:U:O4	2.08	0.86
23:BA:1855:G:N7	56:BA:4952:HOH:O	2.08	0.86
30:BI:104:GLN:HB3	30:BI:105:HIS:HD2	1.38	0.86
23:DA:882:G:H1	23:DA:894:C:H42	1.23	0.86
23:DA:1204:A:H2	23:DA:1241:A:H62	1.24	0.86
23:DA:1388:G:N7	56:DA:4127:HOH:O	2.08	0.86
23:DA:2134:A:O2'	23:DA:2159:G:N2	2.08	0.86
23:BA:2499:C:OP1	56:BA:4031:HOH:O	1.94	0.86
7:AG:72:ARG:NH1	7:AG:142:GLU:OE1	2.09	0.85
1:AA:1263:C:H42	1:AA:1272:G:H1	1.24	0.85
30:BI:92:VAL:HG13	30:BI:120:ILE:HB	1.55	0.85
7:AG:108:ALA:HB2	7:AG:123:GLU:HG2	1.57	0.85
23:DA:631:A:OP1	33:DP:65:ARG:NH1	2.08	0.85
23:DA:1603:A:OP1	56:DA:3880:HOH:O	1.93	0.85
1:AA:1158:C:H4'	2:AB:133:LYS:HB2	1.58	0.85
23:BA:27:G:N2	23:BA:512:G:HO2'	1.72	0.85
5:CE:122:GLU:O	5:CE:126:ARG:NH1	2.08	0.85
7:AG:64:GLN:HG3	7:AG:128:ALA:HB1	1.59	0.85
23:BA:1204:A:H2	23:BA:1241:A:H62	1.25	0.85
27:DF:46:ARG:HG2	27:DF:46:ARG:HH11	1.42	0.85
23:BA:2115:G:N2	23:BA:2119:A:OP2	2.10	0.85
19:CS:50:ALA:HA	19:CS:59:PRO:HA	1.58	0.85
1:CA:1014:A:H2'	1:CA:1015:A:C8	2.12	0.85
7:CG:74:GLU:OE1	7:CG:95:ARG:NH2	2.08	0.85
14:CN:29:ARG:HD2	14:CN:31:ARG:HB2	1.57	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:390:C:O3'	16:CP:28:ARG:NH2	2.10	0.84
1:CA:1380:U:O2	1:CA:1382:C:N4	2.09	0.84
23:DA:2777:G:H5"	23:DA:2778:A:H5'	1.58	0.84
1:AA:619:U:N3	4:AD:134:ASP:OD2	2.09	0.84
23:DA:27:G:N2	23:DA:512:G:HO2'	1.74	0.84
23:BA:1235:G:OP1	56:BA:4118:HOH:O	1.96	0.84
10:AJ:48:THR:HG22	10:AJ:60:ARG:HD2	1.59	0.84
35:DR:33:ARG:NH2	49:D5:57:VAL:O	2.11	0.84
23:DA:571:A:H5'	23:DA:2030:A:H62	1.42	0.84
2:CB:77:ALA:HB2	2:CB:211:ILE:HD13	1.60	0.84
16:AP:53:VAL:HG13	16:AP:79:VAL:HG22	1.60	0.83
23:BA:90:U:HO2'	23:BA:92:A:H8	0.88	0.83
23:DA:1689:A:H62	23:DA:1698:A:H2	1.21	0.83
23:BA:1654:A:OP1	35:BR:1:MET:N	2.09	0.83
23:BA:1970:A:OP1	56:BA:4433:HOH:O	1.96	0.83
1:AA:1205:U:H4'	3:AC:195:VAL:HB	1.60	0.83
15:CO:82:ILE:HB	15:CO:87:ILE:HG22	1.61	0.83
23:DA:2306:C:H5'	23:DA:2307:G:H2'	1.60	0.83
1:AA:1129:C:N4	1:AA:1134:G:O6	2.11	0.83
1:CA:557:G:OP1	56:CA:1761:HOH:O	1.96	0.83
23:DA:90:U:HO2'	23:DA:92:A:H8	0.85	0.83
23:DA:1109:C:H5	23:DA:1110:G:C2	1.97	0.83
37:DT:64:ARG:HB2	37:DT:73:GLU:HG2	1.61	0.83
23:BA:2108:C:H2'	23:BA:2109:U:O5'	1.79	0.82
1:AA:511:C:H42	1:AA:540:G:H1	1.28	0.82
1:AA:1422:G:H5'	32:BO:48:PRO:HB3	1.61	0.82
23:BA:1332:G:O6	56:BA:4822:HOH:O	1.97	0.82
1:CA:768:A:OP2	56:CA:1756:HOH:O	1.96	0.82
23:BA:1352:U:OP2	56:BA:3911:HOH:O	1.98	0.82
3:CC:137:ALA:HA	3:CC:140:ARG:HD3	1.61	0.82
23:BA:243:U:OP2	52:B8:8:LYS:NZ	2.11	0.82
23:DA:2115:G:N2	23:DA:2119:A:OP2	2.11	0.82
5:AE:122:GLU:O	5:AE:126:ARG:NH1	2.13	0.82
1:CA:136:C:H42	1:CA:227:G:H1	1.25	0.82
1:CA:1346:A:H61	1:CA:1374:A:H3'	1.43	0.82
1:AA:1386:G:H2'	1:AA:1387:G:H8	1.44	0.82
23:BA:2306:C:H5'	23:BA:2307:G:H2'	1.61	0.82
23:BA:2576:G:OP1	56:BA:4399:HOH:O	1.97	0.82
23:DA:1403:C:H5"	23:DA:1471:A:H1'	1.62	0.82
1:AA:1304:G:OP2	21:AU:2:GLY:N	2.11	0.82
50:B6:23:THR:OG1	50:B6:24:GLU:N	2.10	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:994:A:H61	1:AA:1047:G:H4'	1.45	0.81
1:AA:1147:C:O2	9:AI:16:ARG:NH2	2.12	0.81
23:BA:1689:A:H62	23:BA:1698:A:H2	1.26	0.81
28:BG:131:TYR:HB3	28:BG:159:VAL:HG13	1.60	0.81
1:CA:1129:C:N4	1:CA:1134:G:O6	2.13	0.81
1:AA:1124:G:N2	1:AA:1150:U:O2	2.13	0.81
5:AE:76:ILE:HG13	5:AE:77:PRO:HD2	1.61	0.81
23:BA:1109:C:H5	23:BA:1110:G:C2	1.99	0.81
1:AA:1125:U:H5'	1:AA:1126:U:H5	1.45	0.81
15:AO:82:ILE:HB	15:AO:87:ILE:HG22	1.63	0.81
23:BA:2602:A:H4'	23:BA:2603:G:OP1	1.80	0.81
26:DE:54:GLN:HG3	26:DE:76:ARG:HB3	1.61	0.81
1:AA:1157:A:H4'	1:AA:1158:C:H5'	1.62	0.81
8:AH:91:ARG:HD3	17:AQ:33:GLY:HA3	1.63	0.81
3:CC:141:VAL:HG11	3:CC:202:ILE:HD12	1.62	0.81
5:CE:76:ILE:HG13	5:CE:77:PRO:HD2	1.63	0.81
23:BA:2448:A:N1	56:BA:3932:HOH:O	2.14	0.81
1:CA:1003:G:H1	1:CA:1037:C:H42	0.82	0.81
1:CA:1131:G:O6	1:CA:1143:G:N2	2.13	0.81
1:CA:511:C:H42	1:CA:540:G:H1	1.27	0.80
30:DI:40:THR:OG1	30:DI:43:ASN:OD1	1.99	0.80
23:DA:1017:G:N7	56:DA:4001:HOH:O	2.15	0.80
23:DA:1654:A:OP1	35:DR:1:MET:N	2.14	0.80
1:AA:677:U:H3	1:AA:713:G:H22	1.29	0.80
1:CA:559:A:OP1	5:CE:126:ARG:NH2	2.13	0.80
1:CA:854:G:N7	56:CA:1775:HOH:O	2.13	0.80
1:AA:933:G:H1	1:AA:1384:C:N4	1.78	0.80
23:BA:1439:A:OP1	56:BA:4055:HOH:O	1.97	0.80
1:CA:405:U:O4	4:CD:2:GLY:N	2.14	0.80
42:DY:30:VAL:HG22	42:DY:37:VAL:HG12	1.64	0.80
1:AA:1040:U:H2'	1:AA:1041:A:H5'	1.64	0.80
1:AA:1184:G:H2'	1:AA:1185:G:H8	1.46	0.80
1:AA:1502:A:H2	1:AA:1505:G:H1	1.29	0.80
23:BA:2108:C:C2'	23:BA:2109:U:O5'	2.30	0.80
1:CA:1502:A:H2	1:CA:1505:G:H1	1.28	0.80
23:DA:1366:A:OP1	45:D1:3:LYS:NZ	2.15	0.80
1:AA:572:A:OP2	56:AA:1839:HOH:O	2.00	0.80
23:BA:271(I):G:H1	23:BA:271(O):C:H42	1.27	0.80
23:DA:27:G:H22	23:DA:512:G:HO2'	1.29	0.80
23:BA:27:G:H22	23:BA:512:G:HO2'	1.25	0.80
37:BT:64:ARG:HB2	37:BT:73:GLU:HG2	1.62	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:839:U:H5"	1:AA:840:C:H5	1.44	0.80
1:AA:943:U:H3	1:AA:1340:A:N6	1.78	0.80
1:CA:426:G:OP1	4:CD:38:TYR:OH	1.99	0.80
5:CE:43:LEU:O	5:CE:65:ASN:ND2	2.14	0.79
1:AA:800:G:N7	56:AA:1911:HOH:O	2.13	0.79
10:AJ:32:ALA:HB1	10:AJ:33:GLN:HG3	1.62	0.79
1:AA:1131:G:O6	1:AA:1143:G:N2	2.16	0.79
1:AA:1289:A:H1'	1:AA:1371:G:H21	1.45	0.79
23:BA:2615:U:OP1	56:BA:4798:HOH:O	2.01	0.79
1:CA:1029:C:H1'	1:CA:1032:G:H22	1.46	0.79
23:BA:548:A:H62	39:BV:19:LYS:HB2	1.47	0.79
23:BA:882:G:H1	23:BA:894:C:H42	1.27	0.79
23:DA:240:G:O6	56:DA:4023:HOH:O	2.00	0.79
23:DA:1449:A:OP1	56:DA:4005:HOH:O	2.01	0.79
1:AA:503:C:OP2	12:AL:116:SER:HB3	1.83	0.79
1:CA:1075:C:OP1	2:CB:179:LYS:NZ	2.16	0.79
23:DA:271(I):G:H1	23:DA:271(O):C:H42	1.29	0.79
3:AC:114:PRO:O	3:AC:118:GLN:N	2.14	0.79
1:CA:1015:A:H1'	1:CA:1219:U:H5'	1.65	0.79
23:DA:548:A:H62	39:DV:19:LYS:HB2	1.46	0.79
23:DA:1210:A:H5'	23:DA:1210:A:H8	1.46	0.79
1:AA:1309:G:N7	13:AM:99:ARG:NH2	2.31	0.79
23:DA:2322:A:N6	23:DA:2335:A:N6	2.30	0.79
5:AE:43:LEU:O	5:AE:65:ASN:ND2	2.15	0.79
1:CA:191:G:H21	20:CT:103:GLY:HA2	1.45	0.79
6:CF:11:ASN:HB3	6:CF:14:LEU:HG	1.65	0.79
2:AB:178:ARG:HH22	8:AH:68:ARG:HH22	1.30	0.78
1:CA:537:G:N7	56:CA:1768:HOH:O	2.15	0.78
4:CD:13:ARG:NH1	4:CD:38:TYR:O	2.16	0.78
30:DI:106:GLY:HA2	30:DI:107:VAL:HB	1.65	0.78
23:BA:2777:G:H5"	23:BA:2778:A:H5'	1.64	0.78
23:DA:2562:U:H1'	32:DO:23:ARG:HH11	1.49	0.78
28:DG:131:TYR:HB3	28:DG:159:VAL:HG13	1.65	0.78
23:BA:399:G:OP2	56:BA:3940:HOH:O	2.02	0.78
23:BA:2222:G:N7	56:BA:4603:HOH:O	2.15	0.78
1:CA:17:U:H2'	1:CA:18:C:C6	2.18	0.78
1:AA:992:U:H2'	1:AA:1043:C:H5	1.48	0.78
1:AA:1442(A):G:H2'	1:AA:1442(B):A:H5'	1.65	0.78
8:CH:91:ARG:HD3	17:CQ:33:GLY:HA3	1.66	0.78
30:DI:78:THR:O	30:DI:104:GLN:NE2	2.13	0.78
1:AA:1237:C:O3'	1:AA:1300:G:N2	2.16	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DT:56:GLY:O	37:DT:59:THR:HG23	1.83	0.78
23:DA:1013:C:OP2	56:DA:3999:HOH:O	2.01	0.78
37:BT:95:ARG:HG2	37:BT:95:ARG:HH11	1.48	0.78
1:CA:1442(A):G:H2'	1:CA:1442(B):A:H5'	1.65	0.77
12:CL:76:ASN:ND2	12:CL:106:ASP:O	2.17	0.77
23:DA:2134:A:H61	23:DA:2157:G:H1'	1.49	0.77
4:AD:9:CYS:HA	4:AD:12:CYS:HB2	1.65	0.77
23:BA:2322:A:N6	23:BA:2335:A:N6	2.33	0.77
4:AD:79:PHE:HD2	4:AD:80:GLU:H	1.28	0.77
16:AP:28:ARG:HG2	16:AP:28:ARG:HH11	1.46	0.77
43:DZ:45:ASP:OD2	43:DZ:49:ARG:NH1	2.17	0.77
1:AA:327:A:HO2'	1:AA:329:A:H8	1.32	0.77
1:AA:939:G:O2'	1:AA:1375:A:N3	2.15	0.77
2:AB:136:VAL:HA	2:AB:139:LYS:HG3	1.67	0.77
23:BA:301:G:OP2	42:BY:84:ARG:NH2	2.17	0.77
23:BA:1403:C:H5"	23:BA:1471:A:H1'	1.66	0.77
3:CC:35:GLU:HA	3:CC:38:ARG:HD2	1.64	0.77
16:CP:53:VAL:HG13	16:CP:79:VAL:HG22	1.64	0.77
7:AG:40:ALA:HB3	9:AI:41:VAL:HG21	1.66	0.77
4:AD:128:VAL:HG13	4:AD:129:ASN:HD22	1.48	0.77
4:CD:128:VAL:HG13	4:CD:129:ASN:HD22	1.49	0.77
1:AA:1165:C:N4	1:AA:1171:G:H1	1.83	0.77
1:AA:1376:U:H5	7:AG:9:VAL:HA	1.48	0.77
1:AA:1441:G:H4'	1:AA:1442:G:C8	2.20	0.77
23:BA:2134:A:H61	23:BA:2157:G:H1'	1.50	0.77
23:BA:2588:G:OP1	56:BA:4246:HOH:O	2.02	0.77
1:CA:1441:G:H4'	1:CA:1442:G:C8	2.19	0.77
23:DA:1243:G:O2'	33:DP:7:ARG:NH2	2.17	0.77
37:DT:60:THR:HG22	37:DT:77:PRO:HA	1.67	0.77
13:AM:90:LEU:O	13:AM:92:HIS:N	2.17	0.77
1:CA:1160:G:H1	1:CA:1176:A:H61	1.33	0.77
7:CG:89:MET:HG2	7:CG:155:ARG:HG3	1.65	0.77
1:AA:17:U:H2'	1:AA:18:C:C6	2.20	0.77
23:BA:69:C:N4	56:BA:3949:HOH:O	2.17	0.77
6:CF:62:TRP:CH2	6:CF:64:GLN:HB2	2.20	0.77
23:DA:2405:G:H4'	23:DA:2406:U:OP2	1.83	0.77
47:B3:8:LEU:HD13	47:B3:31:LEU:HD23	1.67	0.76
1:CA:1047:G:N2	1:CA:1210:C:N3	2.32	0.76
23:DA:1026:U:O2'	23:DA:1027:A:O5'	2.02	0.76
23:DA:1767:C:O2	23:DA:1985:G:N2	2.17	0.76
1:AA:952:U:H3	1:AA:1229:A:H61	0.80	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BA:120:U:OP1	56:BA:3890:HOH:O	2.01	0.76
28:BG:76:SER:HA	28:BG:83:ARG:HA	1.67	0.76
53:B9:11:CYS:SG	53:B9:32:HIS:HE1	2.08	0.76
23:BA:2104:G:N7	23:BA:2186:G:N2	2.33	0.76
23:BA:2820:A:OP2	35:BR:2:ARG:NH2	2.19	0.76
4:CD:9:CYS:HA	4:CD:12:CYS:HB2	1.66	0.76
1:AA:578:C:OP1	56:AA:1906:HOH:O	2.02	0.76
1:AA:1028:C:H42	1:AA:1034:G:H1'	1.50	0.76
23:BA:827:U:OP1	56:BA:4313:HOH:O	2.02	0.76
23:BA:2407:G:OP1	56:BA:4302:HOH:O	2.03	0.76
1:CA:1237:C:N4	1:CA:1337:G:H1	1.84	0.76
2:CB:139:LYS:HA	2:CB:142:LEU:HB3	1.68	0.76
33:DP:59:LEU:HD11	52:D8:10:ALA:HB2	1.65	0.76
1:AA:1337:G:O2'	1:AA:1338:G:N7	2.18	0.76
43:DZ:28:MET:HE1	43:DZ:61:LEU:HD21	1.68	0.76
23:BA:587:C:OP2	33:BP:21:ARG:NH2	2.18	0.76
23:BA:2134:A:N6	23:BA:2157:G:H1'	2.01	0.76
1:AA:10:A:H2'	1:AA:11:G:H8	1.50	0.76
1:CA:346:G:H21	1:CA:347:G:H1'	1.50	0.76
30:DI:92:VAL:HG23	30:DI:97:ILE:HD11	1.68	0.76
2:AB:139:LYS:HA	2:AB:142:LEU:HB3	1.68	0.76
23:BA:106:C:O4'	42:BY:1:MET:HB2	1.86	0.76
1:CA:1120:G:O6	1:CA:1152:A:N6	2.19	0.76
16:CP:28:ARG:HH11	16:CP:28:ARG:HG2	1.49	0.76
23:DA:90:U:O2'	23:DA:92:A:H8	1.64	0.76
23:DA:221:A:H4'	23:DA:222:A:O5'	1.85	0.75
29:DH:70:THR:O	29:DH:71:LEU:HB2	1.86	0.75
1:AA:1220:G:H1'	19:AS:52:TYR:CD2	2.22	0.75
2:AB:130:ARG:HA	2:AB:130:ARG:HE	1.52	0.75
7:AG:146:GLU:HA	7:AG:149:ARG:HB2	1.67	0.75
46:D2:35:LEU:HD12	46:D2:53:LEU:HD12	1.68	0.75
23:BA:1494:A:H2'	23:BA:1495:A:C8	2.21	0.75
23:BA:1980:G:O2'	23:BA:1982:C:OP2	2.05	0.75
2:CB:136:VAL:HA	2:CB:139:LYS:HG3	1.66	0.75
5:CE:9:LYS:H	5:CE:112:LEU:HD11	1.51	0.75
45:D1:54:ALA:HB1	45:D1:83:GLU:HB2	1.67	0.75
1:AA:1350:A:N1	1:AA:1372:U:O2	2.18	0.75
29:BH:70:THR:O	29:BH:71:LEU:HB2	1.85	0.75
1:CA:1118:C:H1'	1:CA:1179:A:C4	2.21	0.75
23:DA:300:A:P	42:DY:86:ARG:HH22	2.09	0.75
1:AA:598:U:H4'	8:AH:94:TYR:CD2	2.22	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:24:TRP:HZ3	2:AB:29:ALA:HB2	1.52	0.75
7:AG:73:MET:HE3	7:AG:146:GLU:HG3	1.69	0.75
25:BD:28:GLU:OE1	56:BD:402:HOH:O	2.04	0.75
1:CA:1255:G:O6	10:CJ:43:ARG:NH2	2.20	0.75
21:CU:15:ARG:HH11	21:CU:15:ARG:HB2	1.50	0.75
23:DA:2602:A:H4'	23:DA:2603:G:OP1	1.87	0.75
46:D2:51:ARG:HA	46:D2:54:LYS:HB2	1.68	0.75
50:D6:23:THR:OG1	50:D6:24:GLU:N	2.14	0.75
1:AA:299:G:O6	56:AA:1929:HOH:O	2.04	0.75
45:B1:3:LYS:HB2	45:B1:61:ARG:NH1	2.01	0.75
1:CA:426:G:OP1	4:CD:36:ARG:NH1	2.20	0.75
1:AA:1238:A:N6	1:AA:1299:A:H61	1.83	0.75
23:BA:90:U:O2	56:BA:4786:HOH:O	2.01	0.75
23:BA:2140:C:N3	23:BA:2151:G:O6	2.19	0.75
1:CA:1347:G:O2'	1:CA:1373:G:O6	2.03	0.75
2:CB:178:ARG:HH22	8:CH:68:ARG:HH22	1.35	0.75
52:D8:34:TRP:O	52:D8:36:LYS:N	2.19	0.75
1:CA:673:G:H2'	1:CA:674:G:C8	2.21	0.75
1:CA:1122:U:H2'	1:CA:1123:A:H8	1.52	0.75
9:CI:9:ARG:HG2	9:CI:14:VAL:HG22	1.69	0.75
23:DA:2291:U:O4	56:DA:4091:HOH:O	2.04	0.75
27:BF:185:ASP:OD1	27:BF:188:ARG:NH1	2.20	0.74
23:DA:1019:U:H3	23:DA:1142(A):A:H62	1.34	0.74
1:AA:1441:G:O2'	1:AA:1459:C:N3	2.17	0.74
8:CH:87:SER:HA	8:CH:93:VAL:HG23	1.69	0.74
9:CI:18:PHE:HB3	9:CI:20:ARG:HE	1.50	0.74
23:DA:2134:A:N6	23:DA:2157:G:H1'	2.02	0.74
1:AA:673:G:H2'	1:AA:674:G:C8	2.23	0.74
23:BA:90:U:O2'	23:BA:92:A:H8	1.65	0.74
23:DA:2588:G:OP1	56:DA:3979:HOH:O	2.05	0.74
1:AA:1269:A:H4'	21:AU:18:TYR:HB2	1.70	0.74
13:AM:23:TYR:HE1	13:AM:70:LEU:HB3	1.50	0.74
35:BR:33:ARG:NH2	49:B5:57:VAL:O	2.14	0.74
23:DA:2683:C:OP1	37:DT:53:ARG:NH2	2.21	0.74
3:AC:114:PRO:HA	3:AC:117:ALA:HB3	1.70	0.74
13:CM:108:ARG:HH21	13:CM:114:ARG:HH11	1.35	0.74
14:AN:23:ARG:HD3	14:AN:30:ALA:HB2	1.69	0.74
23:BA:287:C:O2	23:BA:354:G:N2	2.16	0.74
23:BA:2181:G:H2'	23:BA:2182:G:C8	2.23	0.74
23:BA:2562:U:H1'	32:BO:23:ARG:HH11	1.51	0.74
1:CA:10:A:H2'	1:CA:11:G:H8	1.52	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:2108:C:H2'	23:DA:2109:U:O5'	1.88	0.74
24:DB:105:A:OP1	43:DZ:72:ARG:NH1	2.21	0.74
7:AG:127:ALA:HB1	7:AG:135:VAL:HG23	1.70	0.74
2:CB:130:ARG:HA	2:CB:130:ARG:HE	1.52	0.74
1:AA:542:G:H5'	4:AD:41:GLY:HA3	1.68	0.74
12:AL:76:ASN:ND2	12:AL:106:ASP:O	2.19	0.74
23:BA:530:G:O4'	23:BA:530:G:N3	2.20	0.74
1:CA:1028:C:N4	1:CA:1034:G:N3	2.36	0.74
1:CA:1387:G:H2'	1:CA:1388:C:H6	1.52	0.74
23:DA:2760:C:H2'	23:DA:2761:G:H5"	1.68	0.74
28:DG:76:SER:HA	28:DG:83:ARG:HA	1.70	0.74
1:AA:1360:A:C8	14:AN:18:VAL:HG12	2.23	0.74
1:CA:1274:G:N2	1:CA:1275:A:H62	1.86	0.74
1:CA:1293:G:HO2'	1:CA:1294:G:H8	1.31	0.74
23:DA:226:G:H21	23:DA:228:A:H62	1.34	0.74
23:DA:1858:G:O2'	23:DA:1884:A:N6	2.20	0.74
27:DF:53:THR:HG23	27:DF:55:GLY:H	1.52	0.74
1:AA:3:G:H5"	1:AA:4:U:H5"	1.67	0.73
7:AG:70:LYS:O	7:AG:138:LYS:NZ	2.19	0.73
10:CJ:49:VAL:HG21	14:CN:45:ARG:HD2	1.70	0.73
1:AA:1311:G:H1	1:AA:1326:C:N4	1.86	0.73
13:AM:38:GLY:O	13:AM:55:ARG:NH1	2.21	0.73
1:CA:999:C:H42	1:CA:1042:G:H1	1.36	0.73
24:DB:117:G:H4'	36:DS:54:LEU:HD23	1.69	0.73
1:AA:947:G:O6	1:AA:1234:C:N3	2.20	0.73
10:CJ:58:ASP:OD2	10:CJ:58:ASP:N	2.21	0.73
13:AM:3:ARG:NH2	13:AM:10:PRO:O	2.21	0.73
1:CA:522:C:H5"	12:CL:120:TYR:OH	1.88	0.73
3:CC:50:ALA:HB1	3:CC:70:VAL:HG13	1.69	0.73
23:DA:921:G:O6	56:DA:3903:HOH:O	2.05	0.73
1:AA:1095:U:OP1	1:AA:1108:G:N2	2.20	0.73
23:BA:1026:U:O2'	23:BA:1027:A:O5'	2.03	0.73
1:CA:1107:C:H5"	3:CC:173:VAL:H	1.53	0.73
37:BT:60:THR:HG22	37:BT:77:PRO:HA	1.68	0.73
23:DA:747:U:O2	23:DA:2014:A:H1'	1.88	0.73
23:BA:1366:A:OP1	45:B1:3:LYS:NZ	2.21	0.73
23:BA:1669:A:OP2	56:BA:4866:HOH:O	2.05	0.73
23:BA:1798:U:H5'	25:BD:259:THR:HG22	1.70	0.73
1:CA:598:U:H4'	8:CH:94:TYR:CD2	2.24	0.73
39:DV:40:LEU:HB2	39:DV:46:VAL:HG13	1.69	0.73
3:AC:189:ALA:HB3	3:AC:196:LEU:HB2	1.69	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DQ:38:GLU:HB2	34:DQ:127:ILE:HG22	1.69	0.73
1:AA:959:A:H1'	1:AA:985:C:H1'	1.70	0.73
2:AB:208:ILE:HA	2:AB:211:ILE:HD12	1.71	0.73
8:AH:87:SER:HA	8:AH:93:VAL:HG23	1.71	0.73
48:B4:9:LEU:HD23	48:B4:27:THR:HG23	1.70	0.73
1:CA:427:U:OP1	4:CD:13:ARG:NH2	2.20	0.73
22:CV:53:VAL:HG13	22:CV:54:MET:HG3	1.70	0.73
23:DA:1038:C:H42	23:DA:1117:G:H1	1.36	0.73
48:D4:18:CYS:HB2	48:D4:39:CYS:SG	2.29	0.73
1:AA:1236:A:H4'	1:AA:1304:G:H4'	1.70	0.73
3:AC:35:GLU:O	3:AC:39:ILE:N	2.20	0.73
23:BA:1322:A:N7	56:BA:4624:HOH:O	2.21	0.73
23:BA:2036:C:H5'	23:BA:2036:C:H6	1.54	0.73
23:BA:531:C:OP2	56:BA:4363:HOH:O	2.05	0.72
23:BA:990:A:OP2	56:BA:4330:HOH:O	2.06	0.72
37:BT:56:GLY:O	37:BT:59:THR:HG23	1.88	0.72
23:DA:1141:U:OP2	31:DN:63:THR:OG1	2.06	0.72
23:DA:2721:A:OP1	56:DA:4047:HOH:O	2.05	0.72
24:DB:28:C:H2'	24:DB:29:A:H8	1.53	0.72
45:D1:3:LYS:HB2	45:D1:61:ARG:NH1	2.04	0.72
1:AA:59:A:H5'	1:AA:60:A:H5"	1.69	0.72
1:AA:346:G:H21	1:AA:347:G:H1'	1.52	0.72
1:AA:1061:G:H2'	1:AA:1062:U:C6	2.23	0.72
23:BA:226:G:H21	23:BA:228:A:H62	1.37	0.72
36:BS:102:ALA:HA	36:BS:105:ALA:HB3	1.70	0.72
42:BY:30:VAL:HG22	42:BY:37:VAL:HG12	1.71	0.72
23:DA:1494:A:H2'	23:DA:1495:A:C8	2.24	0.72
23:DA:1828:G:OP1	56:DA:3604:HOH:O	2.07	0.72
44:D0:65:GLY:HA3	44:D0:81:VAL:HG12	1.71	0.72
1:CA:542:G:OP1	4:CD:10:ARG:NH1	2.23	0.72
1:AA:1177:G:H2'	1:AA:1178:G:H5'	1.71	0.72
23:BA:2405:G:H4'	23:BA:2406:U:OP2	1.89	0.72
1:CA:991:U:C4	1:CA:1212:U:H1'	2.25	0.72
2:CB:155:LEU:HD11	2:CB:159:PRO:HD3	1.71	0.72
23:DA:639:U:H2'	23:DA:640:C:C6	2.25	0.72
33:BP:126:VAL:HG12	33:BP:148:LEU:HD22	1.70	0.72
1:CA:1321:C:H5"	1:CA:1322:C:H2'	1.71	0.72
1:CA:1442:G:O2'	1:CA:1442(A):G:OP1	2.07	0.72
13:CM:104:ARG:HG3	13:CM:105:THR:HG23	1.71	0.72
3:AC:139:GLN:O	3:AC:143:GLU:N	2.23	0.72
10:AJ:61:GLU:HB2	14:AN:58:LYS:HE3	1.70	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:542:G:P	4:CD:10:ARG:HH22	2.12	0.72
12:CL:60:LEU:HD21	12:CL:66:VAL:HG22	1.70	0.72
23:DA:615:G:OP1	27:DF:40:GLN:NE2	2.23	0.72
1:AA:1442:G:O2'	1:AA:1442(A):G:OP1	2.06	0.72
11:AK:79:SER:HA	11:AK:104:GLN:HB2	1.71	0.72
46:B2:51:ARG:HA	46:B2:54:LYS:HB2	1.72	0.72
2:CB:24:TRP:HZ3	2:CB:29:ALA:HB2	1.53	0.72
19:CS:39:THR:OG1	19:CS:70:LYS:NZ	2.22	0.72
6:AF:62:TRP:CH2	6:AF:64:GLN:HB2	2.25	0.72
23:BA:1038:C:H42	23:BA:1117:G:H1	1.38	0.72
23:BA:2786:U:O2'	26:BE:62:PRO:O	2.07	0.72
25:BD:221:VAL:HG22	25:BD:226:MET:HE2	1.70	0.72
1:CA:1129:C:H4'	1:CA:1130:A:H5'	1.71	0.72
36:DS:102:ALA:HA	36:DS:105:ALA:HB3	1.70	0.72
1:AA:1240:U:O4	7:AG:32:ARG:NH2	2.22	0.72
2:AB:77:ALA:HB2	2:AB:211:ILE:HD13	1.72	0.72
1:CA:1442:G:N7	1:CA:1442(A):G:C6	2.58	0.72
23:DA:2308:G:O2'	23:DA:2310:A:OP2	2.04	0.72
29:DH:28:GLY:HA3	29:DH:79:VAL:HB	1.70	0.72
1:AA:946:A:H2'	1:AA:947:G:C8	2.24	0.72
1:AA:1129:C:H4'	1:AA:1130:A:H5'	1.71	0.72
1:AA:1442:G:N7	1:AA:1442(A):G:C6	2.58	0.72
23:BA:639:U:H2'	23:BA:640:C:C6	2.25	0.72
1:CA:973:G:H3'	1:CA:974:A:H5"	1.72	0.72
24:DB:28:C:H2'	24:DB:29:A:C8	2.25	0.72
1:AA:812:C:N3	56:AA:1888:HOH:O	2.22	0.71
5:AE:98:THR:HB	5:AE:117:ASP:HB3	1.72	0.71
6:AF:100:ASN:ND2	18:AR:23:LYS:O	2.21	0.71
33:BP:95:VAL:HA	33:BP:99:LEU:HD12	1.72	0.71
1:AA:1066:C:H3'	1:AA:1067:A:H8	1.55	0.71
1:AA:1288:A:H1'	1:AA:1353:G:H4'	1.72	0.71
23:BA:1210:A:H5'	23:BA:1210:A:H8	1.53	0.71
48:B4:18:CYS:HB2	48:B4:39:CYS:SG	2.30	0.71
23:DA:1250:G:N7	33:DP:18:ARG:NH2	2.38	0.71
23:DA:2122:U:H3	23:DA:2176:A:N6	1.84	0.71
1:AA:940:C:H42	1:AA:1343:G:H1	1.38	0.71
23:DA:1980:G:O2'	23:DA:1982:C:OP2	2.07	0.71
23:DA:2140:C:N3	23:DA:2151:G:O6	2.24	0.71
4:AD:107:ARG:HE	4:AD:173:TRP:HZ2	1.36	0.71
23:BA:747:U:O2	23:BA:2014:A:H1'	1.90	0.71
1:CA:1073:U:H2'	1:CA:1074:G:C8	2.25	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:CI:112:LYS:HA	9:CI:119:ALA:HB2	1.71	0.71
23:DA:1022:G:H22	23:DA:1142(A):A:H2	1.38	0.71
37:DT:95:ARG:HG2	37:DT:95:ARG:HH11	1.56	0.71
1:AA:1288:A:H61	1:AA:1371:G:H1'	1.54	0.71
10:AJ:11:PHE:HE2	10:AJ:67:THR:HB	1.53	0.71
1:CA:59:A:H5'	1:CA:60:A:H5"	1.72	0.71
3:CC:155:GLY:HA3	3:CC:196:LEU:HD13	1.71	0.71
23:DA:1815:A:OP2	25:DD:54:ARG:NH2	2.23	0.71
33:DP:126:VAL:HG12	33:DP:148:LEU:HD22	1.72	0.71
1:AA:191:G:H21	20:AT:103:GLY:HA2	1.56	0.71
1:AA:1160:G:H22	1:AA:1177:G:N2	1.88	0.71
23:BA:2357:U:OP1	44:B0:20:ARG:NH1	2.23	0.71
45:B1:20:ARG:HG2	45:B1:20:ARG:HH11	1.55	0.71
1:CA:1286:A:C6	1:CA:1354:C:H5"	2.25	0.71
1:AA:1156:G:H1'	1:AA:1179:A:N6	2.05	0.71
1:AA:1261:A:O2'	1:AA:1283:G:OP1	2.08	0.71
4:CD:79:PHE:HD2	4:CD:80:GLU:H	1.35	0.71
13:CM:47:ASP:N	13:CM:47:ASP:OD1	2.22	0.71
23:DA:2104:G:N7	23:DA:2186:G:N2	2.38	0.71
5:AE:9:LYS:H	5:AE:112:LEU:HD11	1.54	0.71
7:AG:88:PRO:HD3	7:AG:148:ASN:HB3	1.73	0.71
23:BA:1817:G:OP1	25:BD:88:ARG:NH2	2.22	0.71
30:BI:102:SER:HA	30:BI:106:GLY:HA3	1.73	0.71
37:BT:16:ARG:NH2	37:BT:83:ILE:O	2.23	0.71
1:AA:325:A:N7	56:AA:1829:HOH:O	2.24	0.71
1:AA:938:A:H2'	1:AA:939:G:O4'	1.90	0.71
1:AA:1066:C:H3'	1:AA:1067:A:C8	2.24	0.71
1:CA:1015:A:N3	1:CA:1218:C:O2'	2.18	0.71
1:CA:1347:G:H8	9:CI:107:ARG:HB3	1.55	0.71
5:CE:98:THR:HB	5:CE:117:ASP:HB3	1.72	0.71
8:CH:45:ILE:HG22	8:CH:63:LEU:HA	1.72	0.71
23:DA:2296:U:C4	23:DA:2335:A:N6	2.59	0.71
1:AA:1347:G:H5"	9:AI:107:ARG:HA	1.72	0.71
1:CA:539:A:H2'	1:CA:540:G:C8	2.26	0.71
23:DA:2036:C:H6	23:DA:2036:C:H5'	1.55	0.71
1:AA:1160:G:H22	1:AA:1177:G:H21	1.38	0.70
23:BA:2158:A:H4'	23:BA:2159:G:OP1	1.90	0.70
23:DA:2181:G:H2'	23:DA:2182:G:C8	2.25	0.70
1:AA:937:A:N1	1:AA:1377:A:H1'	2.06	0.70
1:AA:1005:A:O3'	1:AA:1037:C:O2'	2.09	0.70
8:AH:45:ILE:HG22	8:AH:63:LEU:HA	1.72	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BA:1669:A:OP1	56:BA:4896:HOH:O	2.10	0.70
23:BA:2122:U:H3	23:BA:2176:A:N6	1.86	0.70
34:BQ:38:GLU:HB2	34:BQ:127:ILE:HG22	1.72	0.70
3:CC:114:PRO:O	3:CC:118:GLN:NE2	2.25	0.70
23:DA:833:U:O2	33:DP:55:ARG:NH2	2.25	0.70
37:DT:51:ARG:HG3	37:DT:98:LYS:HE3	1.74	0.70
1:AA:674:G:H2'	1:AA:675:A:H8	1.55	0.70
1:AA:1369:C:H2'	1:AA:1370:G:H8	1.54	0.70
10:AJ:48:THR:HG23	10:AJ:62:HIS:HB3	1.72	0.70
23:BA:2839:G:H5'	35:BR:46:GLY:HA2	1.74	0.70
1:CA:1304:G:H1'	1:CA:1333:A:H61	1.57	0.70
7:CG:51:GLN:HG2	7:CG:58:PRO:HD3	1.73	0.70
23:DA:243:U:OP2	52:D8:8:LYS:NZ	2.22	0.70
23:DA:1817:G:OP1	25:DD:88:ARG:NH2	2.23	0.70
1:AA:1059:C:H2'	1:AA:1060:C:C6	2.26	0.70
1:AA:1459:C:C6	1:AA:1460:A:N7	2.59	0.70
1:AA:501:C:H2'	1:AA:502:G:H8	1.55	0.70
1:AA:982:U:H3	1:AA:1222:G:H1	1.40	0.70
7:AG:24:THR:HA	7:AG:27:ILE:HG13	1.72	0.70
10:AJ:10:GLY:H	10:AJ:16:LEU:HD12	1.55	0.70
4:CD:14:ARG:HA	4:CD:39:PRO:HB3	1.74	0.70
1:AA:966:G:H5"	1:AA:969:A:N7	2.06	0.70
21:AU:3:LYS:HA	21:AU:10:ARG:HB3	1.73	0.70
23:BA:39:C:O2	27:BF:46:ARG:NH2	2.25	0.70
1:CA:1237:C:H3'	1:CA:1336:C:H41	1.55	0.70
23:DA:2786:U:O2'	26:DE:62:PRO:O	2.08	0.70
1:AA:575:G:OP1	56:AA:1856:HOH:O	2.09	0.70
1:AA:1178:G:H2'	1:AA:1179:A:H3'	1.74	0.70
5:AE:11:ILE:HG21	5:AE:105:VAL:HG22	1.74	0.70
23:BA:1858:G:O2'	23:BA:1884:A:N6	2.23	0.70
23:DA:301:G:OP2	42:DY:84:ARG:NH2	2.24	0.70
45:D1:21:ARG:HG2	45:D1:21:ARG:NH1	1.98	0.70
1:AA:524:G:H2'	1:AA:525:C:H6	1.55	0.70
23:BA:2445:G:OP1	27:BF:74:ARG:NH2	2.24	0.70
43:BZ:45:ASP:OD2	43:BZ:49:ARG:NH1	2.25	0.70
1:CA:353:A:H5'	1:CA:353:A:H8	1.56	0.70
23:DA:2357:U:OP1	44:D0:20:ARG:NH1	2.24	0.70
25:DD:221:VAL:HG22	25:DD:226:MET:HE2	1.74	0.70
37:DT:16:ARG:NH2	37:DT:83:ILE:O	2.25	0.70
1:AA:1249:C:N4	1:AA:1287:A:H8	1.87	0.69
23:BA:221:A:H4'	23:BA:222:A:O5'	1.92	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BA:1243:G:O2'	33:BP:7:ARG:NH2	2.25	0.69
23:BA:2308:G:O2'	23:BA:2310:A:OP2	2.07	0.69
48:B4:16:CYS:HA	48:B4:33:VAL:HB	1.74	0.69
1:CA:1279:A:O2'	1:CA:1281:U:OP2	2.08	0.69
23:DA:530:G:O4'	23:DA:530:G:N3	2.23	0.69
1:AA:885:G:N7	56:AA:1823:HOH:O	2.25	0.69
1:AA:994:A:N6	1:AA:1047:G:H4'	2.05	0.69
50:B6:10:LEU:HD12	50:B6:54:ILE:HA	1.73	0.69
1:CA:1178:G:N2	1:CA:1181:G:OP2	2.26	0.69
23:DA:248:G:OP1	56:DA:3741:HOH:O	2.09	0.69
1:AA:932:C:H5'	7:AG:4:ARG:HE	1.56	0.69
1:AA:1289:A:H1'	1:AA:1371:G:N2	2.05	0.69
4:CD:107:ARG:HE	4:CD:173:TRP:HZ2	1.37	0.69
14:AN:41:ARG:HA	14:AN:44:LEU:HD23	1.74	0.69
23:BA:2327:A:H2'	23:BA:2328:A:C8	2.27	0.69
27:BF:7:TYR:H	27:BF:22:ALA:HB3	1.56	0.69
45:B1:54:ALA:HB1	45:B1:83:GLU:HB2	1.73	0.69
23:DA:39:C:O2	27:DF:46:ARG:NH2	2.25	0.69
1:AA:975:A:N6	1:AA:1366:C:O2	2.25	0.69
1:AA:1009:G:O6	1:AA:1020:U:O2	2.09	0.69
1:AA:1253:G:H5'	10:AJ:44:VAL:O	1.92	0.69
21:AU:9:ARG:HD2	21:AU:13:ILE:HD11	1.74	0.69
43:BZ:28:MET:HE1	43:BZ:61:LEU:HD21	1.74	0.69
1:CA:1142:G:H3'	1:CA:1143:G:H8	1.58	0.69
23:DA:81:G:N7	56:DA:4117:HOH:O	2.24	0.69
23:DA:141:A:C8	23:DA:1408:C:O2'	2.46	0.69
1:AA:1056:U:H5'	3:AC:163:ALA:HB2	1.75	0.69
7:AG:87:VAL:HG21	7:AG:154:TYR:HB2	1.75	0.69
20:AT:12:ALA:O	20:AT:15:ARG:HB2	1.93	0.69
28:DG:16:ARG:HE	28:DG:31:VAL:HG11	1.57	0.69
1:AA:1350:A:H61	1:AA:1372:U:H3	0.81	0.69
4:AD:14:ARG:HA	4:AD:39:PRO:HB3	1.73	0.69
1:CA:1350:A:N6	1:CA:1372:U:H3	1.91	0.69
1:CA:1373:G:H5'	7:CG:36:LYS:HB2	1.75	0.69
4:CD:53:ASP:HB3	4:CD:57:ARG:HH12	1.58	0.69
23:DA:1405:U:H2'	23:DA:1406:U:C6	2.28	0.69
23:DA:2124:G:N2	23:DA:2174:C:C2	2.61	0.69
23:DA:2206:G:H5'	23:DA:2207:G:C5	2.28	0.69
40:DW:60:ASN:HD22	40:DW:60:ASN:N	1.91	0.69
1:AA:353:A:H8	1:AA:353:A:H5'	1.58	0.69
1:AA:770:C:OP1	56:AA:1860:HOH:O	2.11	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1142:G:H3'	1:AA:1143:G:H8	1.57	0.69
1:AA:1184:G:H2'	1:AA:1185:G:C8	2.28	0.69
23:BA:833:U:O2	33:BP:55:ARG:NH2	2.26	0.69
23:BA:1359:A:N6	23:BA:1372:U:C4	2.61	0.69
23:BA:2124:G:N2	23:BA:2174:C:C2	2.61	0.69
30:BI:93:THR:HG23	30:BI:96:ASP:H	1.57	0.69
7:CG:46:ALA:HB1	7:CG:121:ALA:HB2	1.75	0.69
9:CI:3:GLN:HB3	9:CI:20:ARG:HG3	1.73	0.69
11:CK:79:SER:HA	11:CK:104:GLN:HB2	1.73	0.69
15:CO:29:VAL:HG11	15:CO:81:LEU:HD21	1.74	0.69
23:DA:1278:A:OP1	35:DR:36:THR:HG23	1.91	0.69
29:DH:149:ARG:NH1	29:DH:167:GLU:OE1	2.26	0.69
42:DY:79:CYS:HB3	42:DY:81:LYS:H	1.58	0.69
44:D0:27:GLU:HG3	44:D0:68:GLU:HA	1.74	0.69
47:D3:8:LEU:HD13	47:D3:31:LEU:HD23	1.75	0.69
1:AA:1308:U:H2'	1:AA:1309:G:C8	2.27	0.69
18:AR:70:ILE:O	18:AR:74:ARG:HG3	1.93	0.69
1:CA:501:C:H2'	1:CA:502:G:H8	1.58	0.69
3:CC:150:LYS:HB2	3:CC:173:VAL:HG11	1.74	0.69
9:CI:96:LEU:HA	9:CI:100:GLY:H	1.57	0.69
1:AA:539:A:H2'	1:AA:540:G:C8	2.28	0.69
23:BA:141:A:H8	23:BA:1408:C:O2'	1.76	0.69
23:BA:141:A:H8	23:BA:1408:C:HO2'	1.41	0.69
23:BA:2296:U:C4	23:BA:2335:A:N6	2.61	0.69
23:BA:2646:C:OP2	23:BA:2732:G:O2'	2.09	0.69
52:B8:34:TRP:CG	52:B8:35:GLN:H	2.11	0.69
23:DA:1253:A:N7	56:DA:4109:HOH:O	2.26	0.69
1:AA:1065:U:H4'	1:AA:1066:C:O5'	1.92	0.68
19:AS:33:THR:HG22	19:AS:35:SER:H	1.58	0.68
29:BH:28:GLY:HA3	29:BH:79:VAL:HB	1.74	0.68
33:BP:47:ASP:OD2	33:BP:50:ARG:NH2	2.26	0.68
1:CA:1004:A:N6	1:CA:1035:A:N7	2.40	0.68
1:CA:1216:G:H5"	14:CN:5:ALA:HB2	1.73	0.68
1:CA:1264:C:H2'	1:CA:1265:G:C8	2.28	0.68
10:CJ:54:PHE:CD2	10:CJ:55:LYS:HG3	2.28	0.68
23:DA:1395:A:OP1	56:DA:3880:HOH:O	2.10	0.68
23:DA:2445:G:OP1	27:DF:74:ARG:NH2	2.25	0.68
29:DH:3:ARG:HG2	29:DH:6:ARG:HE	1.57	0.68
43:DZ:111:VAL:C	43:DZ:113:ALA:H	2.01	0.68
1:AA:1321:C:H5"	1:AA:1322:C:H2'	1.75	0.68
2:AB:135:GLN:HA	2:AB:138:LEU:HD12	1.74	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BA:2760:C:H2'	23:BA:2761:G:H5"	1.74	0.68
35:BR:67:LEU:HD13	35:BR:76:VAL:HG21	1.76	0.68
1:AA:1252:A:C2	1:AA:1355:G:H1'	2.29	0.68
15:AO:15:PHE:HE2	15:AO:84:LYS:HD2	1.59	0.68
23:BA:120:U:OP2	56:BA:3889:HOH:O	2.11	0.68
1:CA:584:G:H5'	17:CQ:91:ARG:HH22	1.58	0.68
1:CA:1274:G:H21	1:CA:1275:A:H62	1.39	0.68
46:B2:35:LEU:HD12	46:B2:53:LEU:HD12	1.75	0.68
1:CA:457:C:H2'	1:CA:458:C:C6	2.29	0.68
2:CB:185:ILE:HG22	2:CB:199:TYR:HB2	1.75	0.68
1:AA:962:C:H2'	1:AA:963:G:H8	1.57	0.68
1:AA:1062:U:H3	1:AA:1194:U:H3	1.39	0.68
30:BI:104:GLN:HB3	30:BI:105:HIS:CD2	2.25	0.68
1:CA:448:A:OP2	1:CA:485:G:N1	2.16	0.68
1:CA:574:A:OP2	56:CA:1792:HOH:O	2.11	0.68
23:DA:1798:U:H5'	25:DD:259:THR:HG22	1.74	0.68
1:AA:1502:A:H2	1:AA:1505:G:N1	1.92	0.68
23:DA:2839:G:H5'	35:DR:46:GLY:HA2	1.74	0.68
48:D4:16:CYS:HA	48:D4:33:VAL:HB	1.74	0.68
6:AF:11:ASN:HB3	6:AF:14:LEU:HG	1.74	0.68
10:AJ:57:LYS:O	10:AJ:60:ARG:NH1	2.26	0.68
1:CA:377:G:OP1	16:CP:3:LYS:NZ	2.24	0.68
3:CC:177:THR:HB	3:CC:180:ALA:HB2	1.75	0.68
5:CE:43:LEU:HD21	5:CE:132:ALA:HB1	1.76	0.68
35:DR:20:LEU:HD21	35:DR:40:LYS:HD3	1.74	0.68
1:AA:365:U:H5"	1:AA:366:C:OP1	1.94	0.68
4:AD:127:THR:HG23	4:AD:147:ALA:HB3	1.76	0.68
1:CA:1095:U:OP1	1:CA:1108:G:N2	2.24	0.68
23:DA:271(E):U:H2'	23:DA:271(F):C:C6	2.29	0.68
27:DF:7:TYR:H	27:DF:22:ALA:HB3	1.59	0.68
39:DV:76:LYS:HB2	39:DV:81:TYR:HB3	1.76	0.68
1:AA:1353:G:OP2	21:AU:3:LYS:NZ	2.24	0.68
30:BI:72:LEU:HD21	30:BI:107:VAL:HG11	1.74	0.68
3:CC:12:LEU:HD11	14:CN:51:GLY:HA3	1.75	0.68
1:AA:1003:G:H2'	1:AA:1004:A:H1'	1.76	0.68
1:AA:1285:A:H4'	1:AA:1286:A:O5'	1.94	0.68
2:AB:155:LEU:HD11	2:AB:159:PRO:HD3	1.75	0.68
23:BA:677:A:OP1	56:BA:4104:HOH:O	2.11	0.68
1:CA:49:U:H3	1:CA:362:G:H1'	1.58	0.68
1:CA:940:C:H42	1:CA:1343:G:H1	1.42	0.68
2:CB:135:GLN:HA	2:CB:138:LEU:HD12	1.76	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:127:THR:HG23	4:CD:147:ALA:HB3	1.76	0.68
23:DA:220:G:O2'	23:DA:233:A:N3	2.25	0.68
5:AE:78:HIS:HE1	5:AE:142:LEU:HA	1.59	0.67
23:BA:528:A:N1	23:BA:2042:A:H2'	2.09	0.67
28:BG:16:ARG:HE	28:BG:31:VAL:HG11	1.60	0.67
36:BS:34:HIS:CE1	36:BS:54:LEU:HD12	2.30	0.67
4:CD:193:ASP:N	4:CD:193:ASP:OD1	2.27	0.67
9:CI:43:ALA:HA	9:CI:74:ILE:HD13	1.75	0.67
27:DF:185:ASP:OD1	27:DF:188:ARG:NH1	2.27	0.67
1:AA:524:G:H2'	1:AA:525:C:C6	2.28	0.67
4:AD:14:ARG:HB2	4:AD:40:PRO:HD2	1.76	0.67
5:AE:43:LEU:HD21	5:AE:132:ALA:HB1	1.76	0.67
1:CA:1084:G:H5"	1:CA:1086:U:C4	2.27	0.67
1:CA:1285:A:H4'	1:CA:1286:A:O5'	1.93	0.67
43:DZ:69:THR:HG22	43:DZ:90:VAL:HA	1.76	0.67
1:AA:584:G:H5'	17:AQ:91:ARG:HH22	1.59	0.67
1:AA:981:U:OP1	14:AN:9:LYS:NZ	2.27	0.67
1:AA:993:G:N7	1:AA:1213:A:N6	2.42	0.67
1:AA:1216:G:H5"	14:AN:5:ALA:HB2	1.75	0.67
23:BA:2319:G:N2	36:BS:3:ARG:HE	1.93	0.67
23:DA:106:C:O4'	42:DY:1:MET:HB2	1.95	0.67
23:DA:1653:G:H3'	35:DR:2:ARG:HD3	1.76	0.67
1:AA:1382:C:H2'	1:AA:1383:C:H6	1.60	0.67
2:AB:185:ILE:HG22	2:AB:199:TYR:HB2	1.77	0.67
12:AL:33:ARG:HD3	12:AL:62:SER:HB3	1.76	0.67
23:BA:1010:A:OP2	56:BA:4351:HOH:O	2.12	0.67
1:CA:148:G:H2'	1:CA:149:A:H8	1.60	0.67
1:CA:650:G:O6	56:CA:1790:HOH:O	2.10	0.67
23:DA:2099:U:H3	23:DA:2190:G:H1	1.42	0.67
1:AA:1158:C:H2'	1:AA:1159:U:H4'	1.76	0.67
29:BH:41:MET:HE3	29:BH:65:HIS:HA	1.77	0.67
1:CA:1287:A:H2'	1:CA:1288:A:C8	2.30	0.67
9:CI:71:SER:HA	9:CI:74:ILE:HD12	1.74	0.67
23:DA:818:G:OP2	56:DA:4018:HOH:O	2.13	0.67
23:DA:2887:U:H2'	23:DA:2888:C:C6	2.30	0.67
34:DQ:62:GLY:O	43:DZ:178:GLU:HG2	1.95	0.67
36:DS:34:HIS:CE1	36:DS:54:LEU:HD12	2.29	0.67
1:AA:31:G:H5'	1:AA:306:G:N2	2.10	0.67
1:AA:1192:C:O2	5:AE:25:ARG:NH2	2.28	0.67
1:AA:1369:C:H2'	1:AA:1370:G:C8	2.30	0.67
11:AK:85:ARG:HD3	11:AK:113:PRO:HD3	1.77	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:1153:C:OP1	38:DU:92:ARG:NH1	2.26	0.67
23:DA:2682:U:OP2	56:DA:4047:HOH:O	2.12	0.67
1:AA:1319:A:N6	1:AA:1361:G:H1'	2.10	0.67
1:AA:1372:U:H2'	1:AA:1373:G:C8	2.30	0.67
23:BA:1036:G:H1	23:BA:1119:C:H42	1.43	0.67
1:CA:1441:G:O2'	1:CA:1459:C:N3	2.19	0.67
14:CN:29:ARG:HG3	14:CN:31:ARG:H	1.60	0.67
23:DA:529:A:H62	23:DA:2041:U:H3	1.42	0.67
23:DA:2361:A:N7	56:DA:3909:HOH:O	2.27	0.67
1:AA:1178:G:N2	1:AA:1181:G:O5'	2.19	0.67
1:AA:1201:A:H5'	1:AA:1203:C:OP2	1.94	0.67
4:AD:193:ASP:OD1	4:AD:193:ASP:N	2.28	0.67
1:CA:1073:U:H2'	1:CA:1074:G:H8	1.60	0.67
4:CD:80:GLU:O	4:CD:83:SER:N	2.27	0.67
15:CO:15:PHE:HE2	15:CO:84:LYS:HD2	1.60	0.67
25:DD:275:LYS:HG3	25:DD:276:LYS:HG2	1.77	0.67
1:AA:148:G:H2'	1:AA:149:A:H8	1.58	0.67
1:AA:1025:U:O2	1:AA:1036:G:O6	2.13	0.67
13:AM:108:ARG:HG3	13:AM:114:ARG:HH22	1.59	0.67
1:CA:1502:A:H2	1:CA:1505:G:N1	1.92	0.67
13:CM:108:ARG:HE	13:CM:114:ARG:HD3	1.60	0.67
28:DG:15:VAL:HG13	28:DG:175:LEU:HB3	1.77	0.67
29:DH:137:ASP:HB3	29:DH:140:LYS:HB3	1.77	0.67
2:AB:174:VAL:O	2:AB:178:ARG:HB2	1.95	0.67
13:AM:12:ASN:O	13:AM:44:ARG:HB3	1.94	0.67
13:AM:65:LYS:HA	13:AM:66:LEU:HB2	1.77	0.67
23:BA:141:A:C8	23:BA:1408:C:O2'	2.47	0.67
23:BA:1653:G:H3'	35:BR:2:ARG:HD3	1.77	0.67
24:BB:38:C:O4'	36:BS:95:HIS:NE2	2.27	0.67
45:B1:85:LEU:HB3	45:B1:89:GLU:HG3	1.77	0.67
1:CA:1014:A:H8	1:CA:1014:A:OP1	1.76	0.67
1:CA:1309:G:OP2	13:CM:99:ARG:NH2	2.24	0.67
38:DU:92:ARG:HA	38:DU:95:LEU:HB2	1.75	0.67
46:D2:50:ILE:O	46:D2:51:ARG:HB3	1.94	0.67
1:AA:955:U:H3	1:AA:1225:A:H61	1.41	0.66
23:BA:1022:G:H22	23:BA:1142(A):A:H2	1.43	0.66
1:CA:1071:C:H2'	1:CA:1072:G:H8	1.60	0.66
6:CF:91:VAL:HG11	18:CR:72:ARG:HH12	1.60	0.66
1:AA:659:U:H2'	1:AA:660:G:H8	1.58	0.66
8:AH:33:GLU:HA	8:AH:36:LEU:HD12	1.77	0.66
23:BA:1486:A:H2'	23:BA:1487:G:H8	1.58	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BA:2285:C:OP2	50:B6:6:ARG:NH1	2.28	0.66
42:BY:23:ARG:HG2	42:BY:42:VAL:HG22	1.76	0.66
44:B0:65:GLY:HA3	44:B0:81:VAL:HG12	1.77	0.66
1:CA:346:G:N2	1:CA:347:G:H1'	2.09	0.66
9:CI:9:ARG:HB2	9:CI:9:ARG:HH11	1.59	0.66
16:CP:1:MET:HE3	16:CP:3:LYS:HE3	1.76	0.66
23:DA:2108:C:C2'	23:DA:2109:U:O5'	2.42	0.66
1:AA:944:G:O6	1:AA:1337:G:H2'	1.96	0.66
9:AI:9:ARG:HH11	9:AI:9:ARG:HB2	1.61	0.66
23:BA:1019:U:H3	23:BA:1142(A):A:H62	1.42	0.66
1:CA:1530:G:OP1	56:CA:1773:HOH:O	2.12	0.66
23:DA:993:G:OP1	38:DU:50:ARG:NH2	2.29	0.66
33:DP:95:VAL:HA	33:DP:99:LEU:HD12	1.77	0.66
1:AA:1079:G:OP1	56:AA:1849:HOH:O	2.12	0.66
4:AD:65:ARG:HG2	4:AD:75:PHE:CD1	2.31	0.66
23:BA:271(E):U:H2'	23:BA:271(F):C:C6	2.31	0.66
23:BA:879:G:H22	23:BA:899:A:H1'	1.61	0.66
24:BB:27:C:H5"	36:BS:54:LEU:HD11	1.76	0.66
3:CC:152:ILE:HG13	3:CC:199:LYS:HD2	1.76	0.66
49:D5:49:CYS:SG	49:D5:51:TYR:HB2	2.36	0.66
1:AA:448:A:OP2	1:AA:485:G:N1	2.15	0.66
1:AA:994:A:C5	1:AA:1216:G:H4'	2.31	0.66
1:AA:1098:C:H2'	1:AA:1099:G:H1'	1.78	0.66
30:BI:88:ILE:HD11	30:BI:123:LEU:HB3	1.76	0.66
23:DA:574:C:OP1	56:DA:3662:HOH:O	2.14	0.66
35:DR:67:LEU:HD13	35:DR:76:VAL:HG21	1.75	0.66
1:AA:659:U:H2'	1:AA:660:G:C8	2.30	0.66
1:AA:977:A:O2'	1:AA:980:C:N4	2.29	0.66
23:BA:90:U:O2'	23:BA:92:A:O5'	2.14	0.66
23:BA:1250:G:N7	33:BP:18:ARG:NH2	2.44	0.66
30:BI:112:LYS:C	30:BI:114:LEU:H	2.03	0.66
1:CA:1028:C:N3	1:CA:1034:G:H1'	2.10	0.66
1:CA:1053:G:N7	1:CA:1200:C:H5'	2.10	0.66
1:AA:457:C:H2'	1:AA:458:C:C6	2.29	0.66
10:AJ:49:VAL:C	10:AJ:60:ARG:HG2	2.21	0.66
23:BA:1278:A:OP1	35:BR:36:THR:HG23	1.94	0.66
26:BE:11:MET:HG2	26:BE:24:THR:HB	1.77	0.66
43:BZ:111:VAL:C	43:BZ:113:ALA:H	2.03	0.66
1:CA:976:G:OP1	14:CN:32:SER:N	2.18	0.66
1:AA:952:U:O2	1:AA:1229:A:N1	2.28	0.66
4:AD:173:TRP:CD1	4:AD:174:LEU:HG	2.30	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BA:1494:A:H2'	23:BA:1495:A:H8	1.60	0.66
1:CA:436:C:H5"	4:CD:156:GLU:OE2	1.96	0.66
6:CF:100:ASN:ND2	18:CR:23:LYS:O	2.28	0.66
38:DU:36:ARG:HD2	38:DU:40:PHE:CZ	2.31	0.66
40:DW:79:GLY:HA3	40:DW:100:THR:HG22	1.77	0.66
4:AD:13:ARG:HB2	4:AD:40:PRO:HD3	1.76	0.66
1:CA:285:G:N7	56:CA:1730:HOH:O	2.29	0.66
1:CA:674:G:H2'	1:CA:675:A:H8	1.60	0.66
1:CA:1147:C:O2	9:CI:16:ARG:NH1	2.29	0.66
13:CM:65:LYS:HA	13:CM:66:LEU:HB2	1.76	0.66
1:AA:576:G:OP2	56:AA:1909:HOH:O	2.14	0.66
1:AA:1172:C:H2'	1:AA:1173:G:H8	1.61	0.66
1:AA:1277:C:O2'	1:AA:1279:A:H1'	1.96	0.66
31:BN:20:GLY:HA2	31:BN:61:ARG:HG2	1.78	0.66
1:CA:538:G:H5"	12:CL:114:LYS:HB2	1.77	0.66
4:CD:173:TRP:CD1	4:CD:174:LEU:HG	2.31	0.66
22:CV:18:GLN:HE21	22:CV:19:ALA:N	1.93	0.66
23:BA:1361:G:N7	56:BA:4717:HOH:O	2.28	0.65
1:CA:1106:G:H5'	3:CC:172:ARG:HD2	1.77	0.65
10:CJ:53:PRO:O	14:CN:41:ARG:NH2	2.30	0.65
25:DD:33:LEU:O	25:DD:64:ILE:HG13	1.97	0.65
37:DT:1:MET:HE2	37:DT:3:ARG:HG2	1.78	0.65
42:DY:23:ARG:HG2	42:DY:42:VAL:HG22	1.78	0.65
1:AA:1004:A:N6	1:AA:1035:A:OP2	2.28	0.65
1:AA:1077:G:N7	56:AA:1850:HOH:O	2.30	0.65
20:CT:16:HIS:O	20:CT:19:SER:OG	2.13	0.65
26:DE:11:MET:HG2	26:DE:24:THR:HB	1.77	0.65
1:AA:1240:U:H1'	7:AG:38:LEU:HD21	1.78	0.65
15:AO:16:ALA:HB1	15:AO:21:ASP:HB3	1.78	0.65
24:BB:31:C:O2'	24:BB:53:A:N6	2.30	0.65
31:BN:120:LEU:HD22	31:BN:122:VAL:HG23	1.78	0.65
42:BY:79:CYS:HB3	42:BY:81:LYS:H	1.61	0.65
7:CG:20:ASP:HB3	7:CG:23:VAL:HB	1.78	0.65
19:CS:31:ILE:HG12	19:CS:49:ILE:HG22	1.78	0.65
23:DA:587:C:OP2	33:DP:21:ARG:NH2	2.29	0.65
23:DA:1796:U:H2'	23:DA:1797:C:C6	2.31	0.65
1:AA:153:C:H2'	1:AA:154:C:H6	1.61	0.65
1:AA:1037:C:H2'	1:AA:1038:C:O4'	1.97	0.65
1:AA:1252:A:H2	1:AA:1355:G:H1'	1.61	0.65
20:AT:72:LEU:HD21	20:AT:77:ALA:HB2	1.79	0.65
23:BA:2140:C:O2	23:BA:2151:G:N1	2.22	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1264:C:N3	1:CA:1271:G:O6	2.29	0.65
2:CB:24:TRP:CZ3	2:CB:26:PRO:HA	2.31	0.65
2:CB:47:THR:HA	2:CB:202:PRO:HG2	1.77	0.65
1:AA:590:C:H2'	1:AA:591:U:H6	1.60	0.65
1:AA:989:C:N3	1:AA:1216:G:O6	2.29	0.65
1:AA:1442(A):G:C2'	1:AA:1442(B):A:H5'	2.26	0.65
1:CA:662:G:H2'	1:CA:663:A:C8	2.31	0.65
15:CO:62:GLN:HA	15:CO:65:ARG:HD2	1.77	0.65
45:D1:20:ARG:HG2	45:D1:20:ARG:HH11	1.61	0.65
1:AA:346:G:N2	1:AA:347:G:H1'	2.11	0.65
1:AA:1151:A:O2'	1:AA:1152:A:H8	1.80	0.65
3:AC:125:GLU:HG3	3:AC:191:THR:HG22	1.79	0.65
4:AD:13:ARG:NH1	4:AD:38:TYR:O	2.28	0.65
24:BB:60:C:N4	56:BB:326:HOH:O	2.18	0.65
1:CA:434:U:H2'	1:CA:435:C:C6	2.32	0.65
1:CA:1244:C:H2'	1:CA:1245:A:C8	2.31	0.65
25:DD:108:PRO:HB3	25:DD:143:HIS:HE1	1.60	0.65
31:DN:120:LEU:HD22	31:DN:122:VAL:HG23	1.78	0.65
1:AA:662:G:H2'	1:AA:663:A:C8	2.31	0.65
1:AA:1373:G:H4'	7:AG:36:LYS:HG3	1.78	0.65
23:BA:2099:U:H3	23:BA:2190:G:H1	1.43	0.65
31:DN:47:ALA:HB2	31:DN:112:LEU:HD11	1.78	0.65
1:AA:434:U:H2'	1:AA:435:C:C6	2.31	0.65
1:AA:1313:U:O2	1:AA:1324:A:N1	2.29	0.65
9:AI:5:TYR:HE1	9:AI:16:ARG:HG2	1.62	0.65
23:BA:1153:C:OP1	38:BU:92:ARG:NH1	2.30	0.65
1:CA:130:A:H5'	17:CQ:63:ARG:HH21	1.60	0.65
23:DA:946:G:OP2	56:DA:3960:HOH:O	2.14	0.65
1:AA:962:C:N3	1:AA:973:G:O6	2.30	0.65
1:AA:971:G:HO2'	1:AA:1365:G:HO2'	1.31	0.65
25:BD:275:LYS:HG3	25:BD:276:LYS:HG2	1.77	0.65
1:CA:537:G:H5"	12:CL:113:ARG:NH1	2.12	0.65
1:CA:620:C:H5"	56:CA:1782:HOH:O	1.97	0.65
1:CA:881:G:P	12:CL:12:ARG:HH22	2.19	0.65
23:DA:708:C:H42	23:DA:723:G:H1	1.45	0.65
1:AA:21:G:OP1	56:AA:1894:HOH:O	2.15	0.65
1:AA:1036:G:H3'	1:AA:1037:C:H6	1.62	0.65
1:AA:1249:C:H41	1:AA:1287:A:H5'	1.62	0.65
1:AA:1367:C:OP1	9:AI:115:GLY:N	2.30	0.65
3:AC:19:GLU:O	3:AC:56:ASP:HA	1.97	0.65
4:AD:53:ASP:HB3	4:AD:57:ARG:HH12	1.61	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:70:LEU:O	13:AM:74:VAL:N	2.30	0.65
23:BA:1673:U:OP1	56:BA:4565:HOH:O	2.15	0.65
23:DA:1031:G:H21	53:D9:36:GLN:HE22	1.45	0.65
42:DY:92:ASN:N	42:DY:93:GLY:HA2	2.12	0.65
23:BA:88:G:OP1	56:BA:4659:HOH:O	2.15	0.64
44:B0:27:GLU:HG3	44:B0:68:GLU:HA	1.78	0.64
3:CC:109:PRO:HA	3:CC:112:SER:HB3	1.78	0.64
23:DA:796:C:H2'	23:DA:797:C:C6	2.32	0.64
23:DA:1991:U:H2'	23:DA:1992:G:H5"	1.77	0.64
1:AA:1263:C:N4	1:AA:1272:G:H1	1.93	0.64
1:AA:1305:G:H1	1:AA:1331:G:H1'	1.63	0.64
14:AN:7:ILE:HB	14:AN:23:ARG:HG2	1.79	0.64
23:BA:220:G:O2'	23:BA:233:A:N3	2.29	0.64
23:BA:2134:A:O2'	23:BA:2159:G:N2	2.28	0.64
43:BZ:69:THR:HG22	43:BZ:90:VAL:HA	1.78	0.64
1:CA:1442(A):G:C2'	1:CA:1442(B):A:H5'	2.27	0.64
48:D4:9:LEU:HD23	48:D4:27:THR:HG23	1.77	0.64
1:AA:600:C:H2'	1:AA:601:C:C6	2.32	0.64
10:AJ:50:ILE:HG13	10:AJ:60:ARG:HH11	1.62	0.64
10:AJ:50:ILE:HB	14:AN:41:ARG:NE	2.11	0.64
23:BA:2107:C:C5	23:BA:2108:C:N4	2.65	0.64
27:BF:53:THR:HG23	27:BF:55:GLY:H	1.61	0.64
1:CA:1027:C:C2	1:CA:1034:G:N2	2.66	0.64
23:DA:2107:C:N4	23:DA:2108:C:H42	1.95	0.64
34:DQ:38:GLU:OE2	34:DQ:128:LYS:N	2.23	0.64
22:AV:4:GLN:O	22:AV:4:GLN:NE2	2.25	0.64
23:BA:686:G:H5"	51:B7:11:LYS:HE2	1.78	0.64
23:BA:784:A:H5'	23:BA:785:G:OP1	1.97	0.64
30:BI:88:ILE:HG22	30:BI:90:GLY:H	1.62	0.64
1:CA:1222:G:OP2	1:CA:1322:C:N4	2.24	0.64
6:CF:89:MET:HE1	18:CR:72:ARG:HB3	1.79	0.64
23:DA:602:G:O2'	23:DA:655:A:N6	2.31	0.64
23:DA:1430:C:H2'	23:DA:1431:U:C6	2.32	0.64
1:AA:1216:G:H5"	14:AN:5:ALA:CB	2.27	0.64
48:B4:42:PHE:HB3	48:B4:43:TYR:HB2	1.80	0.64
4:CD:14:ARG:HB2	4:CD:40:PRO:HD2	1.79	0.64
1:AA:509:A:OP2	56:AA:1864:HOH:O	2.15	0.64
1:AA:625:G:H4'	16:AP:16:HIS:CD2	2.33	0.64
2:AB:18:GLY:HA2	2:AB:42:ILE:HG13	1.79	0.64
24:BB:50:G:H5"	36:BS:61:ASN:HD21	1.63	0.64
29:BH:149:ARG:NH1	29:BH:167:GLU:OE1	2.31	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1280:A:H5'	10:CJ:41:PRO:HG2	1.78	0.64
1:CA:1459:C:C6	1:CA:1460:A:N7	2.66	0.64
3:CC:31:HIS:HA	3:CC:34:LEU:HB3	1.80	0.64
1:AA:859:A:H2'	1:AA:860:A:O4'	1.98	0.64
19:AS:48:THR:HA	19:AS:61:TYR:HA	1.80	0.64
23:BA:847:U:OP2	56:BA:4703:HOH:O	2.14	0.64
23:BA:1186:G:OP1	56:BA:4254:HOH:O	2.15	0.64
32:BO:34:THR:OG1	32:BO:35:VAL:N	2.29	0.64
52:B8:34:TRP:CG	52:B8:35:GLN:N	2.65	0.64
1:CA:524:G:H2'	1:CA:525:C:C6	2.33	0.64
5:CE:11:ILE:HG21	5:CE:105:VAL:HG22	1.80	0.64
23:DA:2123:G:H1	23:DA:2175:C:H42	1.44	0.64
1:AA:1049:U:HO2'	14:AN:2:ALA:N	1.95	0.64
23:BA:271(I):G:H1	23:BA:271(O):C:N4	1.96	0.64
33:BP:59:LEU:HD11	52:B8:10:ALA:HB2	1.78	0.64
4:CD:65:ARG:HG2	4:CD:75:PHE:CD1	2.33	0.64
5:CE:78:HIS:HE1	5:CE:142:LEU:HA	1.62	0.64
12:CL:33:ARG:HD3	12:CL:62:SER:HB3	1.78	0.64
30:DI:83:ALA:HB2	30:DI:88:ILE:HA	1.78	0.64
1:AA:1085:U:H3'	1:AA:1086:U:H5	1.63	0.64
22:AV:6:ARG:HA	22:AV:9:LEU:HD12	1.79	0.64
24:BB:24:G:N7	24:BB:56:G:H2'	2.13	0.64
23:DA:299:A:H5"	42:DY:86:ARG:HH21	1.63	0.64
23:DA:2637:U:H5"	26:DE:82:ARG:HH21	1.62	0.64
23:DA:2887:U:H2'	23:DA:2888:C:H6	1.63	0.64
30:DI:5:LEU:HD11	30:DI:19:VAL:HG22	1.79	0.64
4:AD:12:CYS:HA	4:AD:19:LEU:HB2	1.80	0.64
9:AI:26:VAL:HG22	9:AI:61:ALA:HB3	1.80	0.64
18:AR:31:LEU:HD12	18:AR:66:LEU:HD13	1.80	0.64
20:AT:56:MET:HE1	20:AT:85:MET:HA	1.80	0.64
1:CA:841:U:H5	1:CA:848:C:H1'	1.63	0.64
1:CA:1392:G:H21	1:CA:1502:A:H8	1.43	0.64
9:CI:17:VAL:HG13	9:CI:63:ILE:HG12	1.78	0.64
18:CR:31:LEU:HD12	18:CR:66:LEU:HD13	1.79	0.64
18:CR:70:ILE:O	18:CR:74:ARG:HG3	1.97	0.64
23:DA:1778:U:H2'	23:DA:1784:A:N6	2.13	0.64
23:DA:2269:A:OP1	56:DA:4013:HOH:O	2.15	0.64
30:DI:83:ALA:HB1	30:DI:86:THR:O	1.98	0.64
1:AA:1059:C:H2'	1:AA:1060:C:H6	1.63	0.63
1:AA:1126:U:H1'	1:AA:1280:A:C6	2.33	0.63
1:AA:1258:G:H2'	1:AA:1259:C:C6	2.33	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1339:A:C6	1:AA:1340:A:H1'	2.33	0.63
2:AB:24:TRP:CZ3	2:AB:26:PRO:HA	2.34	0.63
5:AE:33:VAL:HG21	5:AE:109:ILE:HA	1.80	0.63
23:BA:1045:A:N3	23:BA:1045:A:H2'	2.12	0.63
23:BA:1866:C:H2'	23:BA:1876:A:O4'	1.97	0.63
23:BA:2887:U:H2'	23:BA:2888:C:C6	2.33	0.63
24:BB:49:C:OP1	36:BS:97:ARG:HB2	1.97	0.63
27:BF:13:SER:HB3	27:BF:15:SER:HB2	1.78	0.63
1:CA:1308:U:H2'	1:CA:1309:G:C8	2.33	0.63
23:DA:546:C:H2'	23:DA:547:A:H5'	1.80	0.63
24:DB:27:C:H5"	36:DS:54:LEU:HD11	1.79	0.63
26:DE:47:VAL:HG21	26:DE:86:PRO:HD2	1.80	0.63
38:DU:29:SER:OG	38:DU:30:LYS:NZ	2.30	0.63
1:AA:841:U:H5	1:AA:848:C:H1'	1.62	0.63
10:AJ:91:PRO:HD2	10:AJ:94:VAL:HB	1.79	0.63
19:AS:33:THR:HB	19:AS:51:VAL:HG22	1.79	0.63
1:CA:600:C:H2'	1:CA:601:C:C6	2.33	0.63
23:DA:879:G:H22	23:DA:899:A:H1'	1.63	0.63
23:DA:1153:C:H2'	23:DA:1154:G:O4'	1.98	0.63
23:DA:1486:A:H2'	23:DA:1487:G:H8	1.62	0.63
23:DA:2140:C:O2	23:DA:2151:G:N1	2.23	0.63
23:DA:2567:G:H2'	23:DA:2568:C:C6	2.33	0.63
1:AA:475:G:H2'	1:AA:476:G:H8	1.62	0.63
1:AA:1203:C:H2'	1:AA:1204:A:O4'	1.99	0.63
23:BA:249:C:O2	52:B8:12:LYS:NZ	2.31	0.63
1:CA:1375:A:H4'	7:CG:29:LYS:HE2	1.80	0.63
29:DH:56:SER:HB3	29:DH:61:HIS:ND1	2.13	0.63
1:AA:130:A:H5'	17:AQ:63:ARG:HH21	1.62	0.63
1:AA:519:C:H2'	1:AA:520:A:C8	2.33	0.63
1:AA:924:C:H2'	1:AA:925:G:C8	2.34	0.63
1:CA:1372:U:H2'	1:CA:1373:G:O4'	1.97	0.63
12:CL:24:VAL:HG13	12:CL:98:TYR:HE2	1.63	0.63
13:CM:96:LEU:HD23	13:CM:97:PRO:HD2	1.80	0.63
1:AA:201:C:H42	1:AA:216:G:H1	1.46	0.63
1:AA:501:C:OP1	12:AL:117:ARG:NH2	2.28	0.63
1:AA:1287:A:H1'	1:AA:1354:C:H5'	1.79	0.63
2:AB:47:THR:HA	2:AB:202:PRO:HG2	1.79	0.63
3:AC:115:LEU:HA	3:AC:118:GLN:HG2	1.81	0.63
4:AD:108:LEU:HB3	4:AD:110:PHE:CE1	2.33	0.63
10:AJ:11:PHE:CE2	10:AJ:67:THR:HB	2.34	0.63
23:BA:2497:A:H5"	56:BA:3882:HOH:O	1.99	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:D4:42:PHE:HB3	48:D4:43:TYR:HB2	1.81	0.63
1:AA:1170:A:H2'	1:AA:1171:G:O4'	1.98	0.63
23:BA:252:G:OP2	33:BP:50:ARG:NH1	2.30	0.63
26:BE:47:VAL:HG21	26:BE:86:PRO:HD2	1.80	0.63
34:BQ:32:TYR:OH	34:BQ:111:GLU:OE1	2.15	0.63
1:CA:1302:U:OP2	13:CM:21:TYR:OH	2.05	0.63
2:CB:208:ILE:HA	2:CB:211:ILE:HD12	1.80	0.63
8:CH:7:ALA:HB2	8:CH:85:ARG:HG3	1.81	0.63
23:DA:1494:A:H2'	23:DA:1495:A:H8	1.63	0.63
23:DA:2331:G:O3'	44:D0:43:THR:HG22	1.99	0.63
1:AA:396:G:O2'	1:AA:398:C:OP1	2.11	0.63
1:AA:878:G:H5'	8:AH:89:PRO:HG2	1.80	0.63
1:AA:979:C:N3	1:AA:1318:A:N6	2.45	0.63
1:AA:999:C:H2'	1:AA:1000:U:H6	1.64	0.63
1:AA:1113:C:H2'	1:AA:1114:C:C6	2.34	0.63
1:AA:1230:C:H2'	1:AA:1231:G:H8	1.63	0.63
18:AR:53:ARG:HE	18:AR:59:SER:C	2.06	0.63
5:CE:18:ARG:HH12	5:CE:25:ARG:HD3	1.64	0.63
9:CI:108:VAL:HG12	9:CI:109:VAL:H	1.64	0.63
23:DA:2364:C:H2'	23:DA:2365:G:O4'	1.99	0.63
1:AA:935:A:O2'	1:AA:1383:C:O2	2.13	0.63
1:AA:1047:G:N2	1:AA:1210:C:N3	2.47	0.63
1:AA:1157:A:H62	1:AA:1177:G:N2	1.96	0.63
1:AA:1305:G:N1	1:AA:1331:G:H1'	2.13	0.63
1:AA:1308:U:H2'	1:AA:1309:G:H8	1.63	0.63
1:CA:201:C:H42	1:CA:216:G:H1	1.45	0.63
1:CA:258:G:O6	56:CA:1733:HOH:O	2.11	0.63
3:CC:150:LYS:HG3	3:CC:173:VAL:HG21	1.81	0.63
23:DA:1045:A:H2'	23:DA:1045:A:N3	2.14	0.63
23:DA:1866:C:H2'	23:DA:1876:A:O4'	1.99	0.63
23:DA:2646:C:OP2	23:DA:2732:G:O2'	2.13	0.63
1:AA:370:C:H2'	1:AA:371:G:C8	2.32	0.63
1:AA:1442(A):G:C8	1:AA:1442(B):A:C2	2.86	0.63
23:BA:1803:A:O2'	25:BD:259:THR:HG21	1.98	0.63
25:BD:145:VAL:HG12	25:BD:146:GLU:O	1.99	0.63
26:BE:72:VAL:HA	26:BE:73:GLU:HB3	1.80	0.63
42:BY:92:ASN:N	42:BY:93:GLY:HA2	2.13	0.63
1:CA:859:A:H2'	1:CA:860:A:O4'	1.99	0.63
4:CD:12:CYS:HA	4:CD:19:LEU:HB2	1.80	0.63
1:AA:1513:A:H2'	1:AA:1514:C:C6	2.34	0.62
20:AT:13:LEU:O	20:AT:17:ARG:HG3	1.98	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BA:2206:G:H5'	23:BA:2207:G:C5	2.34	0.62
30:BI:72:LEU:HA	30:BI:75:LEU:HD22	1.80	0.62
40:BW:86:LEU:HD22	40:BW:96:ILE:HD11	1.81	0.62
3:CC:13:GLY:HA3	14:CN:57:ARG:NH2	2.14	0.62
8:CH:33:GLU:HA	8:CH:36:LEU:HD12	1.80	0.62
20:CT:56:MET:HE1	20:CT:85:MET:HA	1.80	0.62
23:DA:271(M):G:H4'	23:DA:271(N):U:OP1	1.99	0.62
1:AA:35:G:O2'	12:AL:118:SER:O	2.17	0.62
1:AA:933:G:N2	1:AA:1384:C:N3	2.43	0.62
45:B1:3:LYS:HB2	45:B1:61:ARG:HH12	1.63	0.62
1:CA:1080:A:OP1	5:CE:14:ARG:NH2	2.31	0.62
1:CA:1308:U:H2'	1:CA:1309:G:H8	1.63	0.62
4:CD:13:ARG:HB2	4:CD:40:PRO:HD3	1.80	0.62
23:DA:277:C:H1'	23:DA:278:A:OP2	1.98	0.62
36:DS:96:GLY:HA3	36:DS:98:VAL:N	2.14	0.62
45:D1:50:ARG:HG2	45:D1:59:THR:HB	1.80	0.62
1:AA:221:C:H2'	1:AA:222:U:C6	2.33	0.62
1:AA:1170:A:H3'	1:AA:1171:G:H8	1.62	0.62
10:AJ:49:VAL:HG23	14:AN:41:ARG:HB2	1.80	0.62
14:AN:3:ARG:HH12	14:AN:28:GLY:H	1.47	0.62
33:BP:38:GLN:O	33:BP:39:LYS:HB3	1.99	0.62
5:CE:102:ALA:HB1	5:CE:106:PRO:HG2	1.82	0.62
23:DA:1143:A:OP1	31:DN:25:ARG:NH2	2.32	0.62
3:AC:19:GLU:HB3	3:AC:54:ARG:CZ	2.30	0.62
15:AO:29:VAL:HG11	15:AO:81:LEU:HD21	1.80	0.62
27:BF:53:THR:CG2	27:BF:55:GLY:H	2.12	0.62
38:BU:36:ARG:HD2	38:BU:40:PHE:CZ	2.34	0.62
1:CA:59:A:H3'	1:CA:331:G:H22	1.64	0.62
1:CA:346:G:N3	1:CA:347:G:H1'	2.13	0.62
1:CA:1027:C:H2'	1:CA:1028:C:H5	1.65	0.62
23:DA:271(R):G:H2'	23:DA:271(S):G:H8	1.64	0.62
23:DA:1495:A:H2'	23:DA:1496:A:C8	2.35	0.62
23:DA:2250:G:O2'	23:DA:2496:C:OP1	2.15	0.62
5:AE:102:ALA:HB1	5:AE:106:PRO:HG2	1.82	0.62
9:AI:4:TYR:CD2	9:AI:88:TYR:HB2	2.35	0.62
9:AI:9:ARG:HB3	9:AI:104:ARG:HH21	1.65	0.62
16:AP:1:MET:HE3	16:AP:3:LYS:HE3	1.81	0.62
1:CA:38:G:C2	1:CA:397:A:C2	2.87	0.62
1:CA:828:A:N6	1:CA:858:G:O2'	2.32	0.62
1:CA:1096:C:H2'	1:CA:1097:C:H6	1.62	0.62
25:DD:108:PRO:HB3	25:DD:143:HIS:CE1	2.35	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:17:U:O2'	1:AA:1079:G:N3	2.31	0.62
1:AA:1346:A:O2'	1:AA:1347:G:OP2	2.14	0.62
25:BD:33:LEU:O	25:BD:64:ILE:HG13	1.99	0.62
30:BI:65:ALA:HB1	30:BI:136:VAL:HG11	1.80	0.62
33:BP:121:LYS:HG2	33:BP:123:LEU:HG	1.81	0.62
1:CA:45:U:H3	1:CA:396:G:H1	1.47	0.62
1:CA:503:C:OP2	12:CL:116:SER:HB3	1.99	0.62
1:CA:524:G:H2'	1:CA:525:C:H6	1.63	0.62
2:CB:127:ILE:HA	2:CB:130:ARG:HG2	1.82	0.62
23:DA:11:G:H2'	23:DA:12:U:H5'	1.81	0.62
45:D1:80:LEU:HD23	45:D1:82:LEU:HD21	1.82	0.62
1:AA:881:G:P	12:AL:12:ARG:HH22	2.22	0.62
1:AA:1349:A:C2	1:AA:1350:A:H1'	2.35	0.62
4:AD:9:CYS:HB2	4:AD:22:LYS:NZ	2.14	0.62
23:BA:277:C:H1'	23:BA:278:A:OP2	1.99	0.62
23:BA:2602:A:H8	56:BA:3864:HOH:O	1.83	0.62
23:BA:2637:U:H5"	26:BE:82:ARG:HH21	1.65	0.62
1:CA:1115:C:N3	1:CA:1185:G:O6	2.33	0.62
1:CA:1235:U:H5"	21:CU:3:LYS:HB2	1.81	0.62
23:DA:574:C:N3	26:DE:145:LYS:NZ	2.37	0.62
23:DA:1359:A:N6	23:DA:1372:U:C4	2.59	0.62
23:DA:1507:A:O2'	23:DA:1508:A:O5'	2.17	0.62
1:AA:1001:A:H2'	1:AA:1001(A):G:O4'	2.00	0.62
1:AA:1264:C:H2'	1:AA:1265:G:C8	2.34	0.62
23:BA:1358:G:H2'	23:BA:1359:A:C2	2.35	0.62
23:BA:1488:G:H5'	23:BA:1489:U:OP2	1.99	0.62
23:BA:1754:C:OP1	37:BT:96:ARG:NH1	2.30	0.62
23:BA:2306:C:C5'	23:BA:2307:G:H2'	2.30	0.62
37:BT:65:LYS:HE2	37:BT:67:SER:HB2	1.82	0.62
2:CB:80:ILE:HD13	2:CB:212:GLN:HG2	1.81	0.62
16:CP:15:PRO:HB2	16:CP:41:PRO:HG3	1.82	0.62
23:DA:1106:G:O2'	23:DA:1107:G:OP1	2.16	0.62
30:DI:93:THR:O	30:DI:97:ILE:HD13	2.00	0.62
1:AA:164:U:H2'	1:AA:165:C:C6	2.35	0.62
1:AA:629:G:H2'	1:AA:630:G:O4'	1.99	0.62
12:AL:24:VAL:HG13	12:AL:98:TYR:HE2	1.65	0.62
25:BD:69:ARG:NH2	25:BD:128:GLY:O	2.30	0.62
39:BV:76:LYS:HB2	39:BV:81:TYR:HB3	1.82	0.62
46:B2:50:ILE:O	46:B2:51:ARG:HB3	1.97	0.62
1:CA:590:C:H2'	1:CA:591:U:H6	1.65	0.62
1:CA:1070:U:O5'	5:CE:25:ARG:NH1	2.32	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1359:C:H2'	1:CA:1361:G:OP2	2.00	0.62
1:CA:1391:U:H2'	1:CA:1392:G:C8	2.35	0.62
2:CB:174:VAL:O	2:CB:178:ARG:HB2	1.99	0.62
23:DA:1488:G:H5'	23:DA:1489:U:OP2	1.98	0.62
35:DR:104:ARG:HG3	35:DR:111:LEU:HD21	1.81	0.62
1:AA:15:G:H4'	5:AE:24:ARG:HH12	1.65	0.62
1:AA:1230:C:H42	13:AM:105:THR:HG21	1.65	0.62
3:AC:55:VAL:HA	3:AC:67:THR:O	2.00	0.62
7:AG:116:ALA:HA	7:AG:119:ARG:HB2	1.82	0.62
27:BF:28:ILE:HG12	27:BF:116:ASP:HB2	1.81	0.62
35:BR:20:LEU:HD21	35:BR:40:LYS:HD3	1.81	0.62
1:CA:1513:A:H2'	1:CA:1514:C:C6	2.35	0.62
3:CC:54:ARG:HD3	3:CC:56:ASP:HB2	1.82	0.62
23:DA:873:G:N2	23:DA:905:U:O2	2.32	0.62
23:DA:1036:G:H1	23:DA:1119:C:H42	1.47	0.62
1:AA:1459:C:N3	1:AA:1460:A:N6	2.48	0.61
23:BA:1358:G:H2'	23:BA:1359:A:H2	1.64	0.61
1:CA:365:U:H5"	1:CA:366:C:OP1	2.00	0.61
1:CA:1001:A:H2'	1:CA:1001(A):G:C8	2.34	0.61
1:CA:1459:C:N3	1:CA:1460:A:N6	2.48	0.61
2:CB:130:ARG:HB2	2:CB:135:GLN:OE1	2.00	0.61
23:DA:271(I):G:H1	23:DA:271(O):C:N4	1.98	0.61
25:DD:267:SER:O	25:DD:268:ARG:HB3	2.00	0.61
27:DF:28:ILE:HG12	27:DF:116:ASP:HB2	1.82	0.61
34:DQ:21:THR:HG21	34:DQ:101:ARG:HB2	1.82	0.61
1:AA:539:A:OP2	12:AL:115:LYS:NZ	2.33	0.61
1:AA:962:C:H1'	1:AA:1201:A:C2	2.35	0.61
1:AA:1019:C:H2'	1:AA:1020:U:O4'	2.00	0.61
1:CA:222:U:H2'	1:CA:223:U:C6	2.36	0.61
1:CA:833:U:H2'	1:CA:834:C:H6	1.64	0.61
10:CJ:50:ILE:HA	10:CJ:60:ARG:HB3	1.82	0.61
31:DN:20:GLY:HA2	31:DN:61:ARG:HG2	1.81	0.61
34:DQ:29:PHE:N	34:DQ:105:GLU:OE2	2.33	0.61
1:AA:1097:C:H2'	1:AA:1098:C:C6	2.36	0.61
2:AB:18:GLY:HA3	2:AB:41:ILE:HG23	1.82	0.61
7:AG:71:PRO:HG3	7:AG:99:LEU:HD12	1.81	0.61
23:BA:1991:U:H2'	23:BA:1992:G:H5"	1.81	0.61
1:CA:629:G:H2'	1:CA:630:G:O4'	2.00	0.61
2:CB:195:ASP:O	8:CH:74:PRO:HG3	2.01	0.61
26:DE:111:ARG:HG3	26:DE:160:TYR:CD1	2.35	0.61
1:AA:1259:C:H2'	1:AA:1283:G:O2'	2.00	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AJ:39:PRO:HA	10:AJ:70:ARG:HG2	1.82	0.61
21:AU:3:LYS:HE3	21:AU:14:TRP:CG	2.35	0.61
23:BA:300:A:P	42:BY:86:ARG:HH22	2.23	0.61
23:BA:546:C:H6	23:BA:547:A:H5'	1.64	0.61
23:BA:615:G:OP1	27:BF:40:GLN:NE2	2.33	0.61
23:BA:2867:G:OP2	37:BT:119:LYS:NZ	2.31	0.61
34:BQ:16:ARG:HH11	34:BQ:16:ARG:HG2	1.66	0.61
51:B7:8:ASN:C	51:B7:8:ASN:OD1	2.43	0.61
1:CA:565:U:OP2	1:CA:566:G:O2'	2.18	0.61
2:CB:213:LEU:HD22	2:CB:214:ILE:HD13	1.80	0.61
5:CE:33:VAL:HG21	5:CE:109:ILE:HA	1.81	0.61
15:CO:15:PHE:CE2	15:CO:84:LYS:HD2	2.35	0.61
23:DA:548:A:N6	39:DV:19:LYS:HB2	2.16	0.61
23:DA:1533:G:H21	23:DA:1536:C:H5	1.49	0.61
26:DE:72:VAL:HA	26:DE:73:GLU:HB3	1.82	0.61
29:DH:41:MET:HE3	29:DH:65:HIS:HA	1.81	0.61
50:D6:9:LEU:HD21	50:D6:25:LYS:HB3	1.81	0.61
1:AA:382:A:H2'	1:AA:383:A:H8	1.66	0.61
1:AA:458:C:H2'	1:AA:460:G:H8	1.65	0.61
1:AA:1036:G:H3'	1:AA:1037:C:C6	2.36	0.61
2:AB:121:LEU:HD21	2:AB:138:LEU:HD13	1.82	0.61
23:BA:2602:A:H1'	23:BA:2603:G:H5"	1.82	0.61
37:BT:51:ARG:HG3	37:BT:98:LYS:HE3	1.81	0.61
1:CA:1348:U:O3'	9:CI:120:ARG:HB2	2.00	0.61
3:CC:121:ALA:HB2	3:CC:198:VAL:HG11	1.81	0.61
10:CJ:8:LEU:HB3	10:CJ:96:ILE:HG22	1.83	0.61
23:DA:1798:U:C5'	25:DD:259:THR:HG22	2.30	0.61
1:AA:1028:C:N4	1:AA:1034:G:H1'	2.15	0.61
2:AB:67:THR:HA	2:AB:90:MET:HE2	1.82	0.61
3:AC:37:GLN:HG2	14:AN:26:ARG:HD2	1.81	0.61
23:BA:1430:C:H2'	23:BA:1431:U:C6	2.36	0.61
23:BA:1798:U:C5'	25:BD:259:THR:HG22	2.30	0.61
9:CI:27:THR:HA	9:CI:32:ASP:HA	1.83	0.61
18:CR:53:ARG:HE	18:CR:59:SER:C	2.08	0.61
23:DA:90:U:O2'	23:DA:92:A:O5'	2.17	0.61
2:AB:98:LEU:HB2	2:AB:101:MET:HE3	1.83	0.61
4:AD:55:ALA:O	4:AD:59:ARG:HG2	2.00	0.61
13:AM:97:PRO:HB3	13:AM:101:GLN:HE22	1.65	0.61
20:AT:43:LEU:O	20:AT:47:GLY:N	2.29	0.61
23:BA:1769:G:O2'	23:BA:1958:C:OP1	2.18	0.61
1:CA:153:C:H2'	1:CA:154:C:H6	1.64	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:878:G:H5'	8:CH:89:PRO:HG2	1.83	0.61
1:CA:1347:G:C8	9:CI:107:ARG:HB3	2.36	0.61
9:CI:32:ASP:O	9:CI:36:TYR:HB3	2.01	0.61
23:DA:207:A:H2'	23:DA:208:C:O4'	2.00	0.61
24:DB:11:C:H3'	24:DB:12:C:C6	2.36	0.61
1:AA:346:G:N3	1:AA:347:G:H1'	2.16	0.61
1:AA:964:A:H2'	1:AA:965:A:C8	2.36	0.61
2:AB:127:ILE:HA	2:AB:130:ARG:HG2	1.83	0.61
23:BA:207:A:H2'	23:BA:208:C:O4'	2.01	0.61
23:BA:2849:U:OP2	37:BT:95:ARG:NH1	2.33	0.61
24:BB:32:C:C2	24:BB:51:G:N2	2.69	0.61
30:BI:94:ALA:HA	30:BI:97:ILE:HD12	1.82	0.61
32:BO:24:VAL:HB	32:BO:33:ALA:HB2	1.83	0.61
34:BQ:62:GLY:O	43:BZ:178:GLU:HG2	2.01	0.61
47:B3:18:ASP:OD1	47:B3:18:ASP:N	2.33	0.61
1:CA:625:G:H4'	16:CP:16:HIS:CD2	2.35	0.61
1:CA:1072:G:H2'	1:CA:1073:U:C6	2.35	0.61
3:CC:118:GLN:HA	3:CC:121:ALA:HB3	1.81	0.61
5:CE:88:LYS:HB3	5:CE:123:LEU:HB2	1.83	0.61
53:D9:14:CYS:HA	53:D9:27:CYS:HB2	1.82	0.61
1:AA:952:U:H2'	1:AA:953:G:C8	2.36	0.61
1:AA:1040:U:C2'	1:AA:1041:A:H5'	2.29	0.61
23:BA:203:C:H3'	23:BA:204:A:H5"	1.82	0.61
23:BA:1434:A:H61	23:BA:1558:A:N6	1.99	0.61
28:BG:15:VAL:HG13	28:BG:175:LEU:HB3	1.81	0.61
31:BN:67:LEU:O	31:BN:88:GLU:HG3	2.00	0.61
34:BQ:21:THR:HG21	34:BQ:101:ARG:HB2	1.82	0.61
1:CA:1079:G:H2'	1:CA:1080:A:C8	2.35	0.61
23:DA:2291:U:H2'	23:DA:2292:C:C6	2.36	0.61
33:DP:47:ASP:OD2	33:DP:50:ARG:NH2	2.33	0.61
37:DT:127:ALA:HA	37:DT:128:GLU:C	2.26	0.61
52:D8:4:MET:HE3	52:D8:63:PRO:HG3	1.83	0.61
1:AA:688:G:H2'	1:AA:689:C:H6	1.65	0.61
1:AA:941:G:H1	1:AA:1342:C:H42	1.49	0.61
1:AA:1411:C:H2'	1:AA:1412:C:H6	1.65	0.61
2:AB:213:LEU:HD22	2:AB:214:ILE:HD13	1.83	0.61
23:BA:1405:U:H2'	23:BA:1406:U:C6	2.35	0.61
1:CA:445:G:H2'	1:CA:446:G:C8	2.36	0.61
1:CA:1118:C:H2'	1:CA:1119:C:C6	2.35	0.61
23:DA:607:U:OP1	27:DF:102:PRO:HA	2.01	0.61
23:BA:873:G:N2	23:BA:905:U:O2	2.33	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BA:1778:U:H2'	23:BA:1784:A:N6	2.15	0.60
1:CA:623:C:H2'	1:CA:624:C:H6	1.66	0.60
1:CA:1090:U:H2'	1:CA:1091:U:H6	1.66	0.60
7:CG:80:VAL:HG21	7:CG:85:TYR:CD1	2.36	0.60
23:DA:1107:G:N7	23:DA:1108:U:N3	2.49	0.60
23:DA:2272:U:H5"	23:DA:2273:A:OP1	2.01	0.60
28:DG:126:ASP:HB3	28:DG:130:ASN:H	1.66	0.60
33:DP:38:GLN:O	33:DP:39:LYS:HB3	2.00	0.60
1:AA:304:U:H2'	1:AA:305:G:C8	2.35	0.60
1:AA:619:U:C2	4:AD:135:LEU:HD22	2.36	0.60
1:AA:1381:U:O2'	1:AA:1382:C:H5'	2.01	0.60
7:AG:103:TRP:CH2	7:AG:141:VAL:HG11	2.35	0.60
15:AO:62:GLN:HA	15:AO:65:ARG:HD2	1.81	0.60
25:BD:108:PRO:HB3	25:BD:143:HIS:HE1	1.66	0.60
25:BD:148:GLU:HB2	25:BD:151:LYS:HD2	1.83	0.60
1:CA:1278:U:H5"	1:CA:1279:A:O4'	2.01	0.60
35:DR:36:THR:HG22	35:DR:37:THR:H	1.66	0.60
1:AA:946:A:H4'	1:AA:1333:A:O2'	2.01	0.60
23:BA:271(M):G:H4'	23:BA:271(N):U:OP1	2.00	0.60
23:BA:805:G:OP1	56:BA:4319:HOH:O	2.16	0.60
23:BA:879:G:N2	23:BA:899:A:H1'	2.16	0.60
23:BA:2022:U:O2'	23:BA:2617:C:H5'	2.00	0.60
23:BA:2123:G:H1	23:BA:2175:C:H42	1.48	0.60
46:B2:9:GLN:HE22	46:B2:56:GLN:HB3	1.66	0.60
1:CA:450:G:OP1	16:CP:43:LYS:NZ	2.33	0.60
1:CA:662:G:H2'	1:CA:663:A:H8	1.66	0.60
23:DA:2315:G:H2'	23:DA:2316:C:C6	2.36	0.60
27:DF:13:SER:HB3	27:DF:15:SER:HB2	1.83	0.60
1:AA:445:G:H2'	1:AA:446:G:C8	2.36	0.60
1:AA:539:A:H2'	1:AA:540:G:H8	1.67	0.60
1:AA:612:C:O2	1:AA:629:G:N2	2.33	0.60
1:AA:959:A:H5"	1:AA:960:U:OP2	2.02	0.60
1:AA:1013:G:H2'	1:AA:1014:A:H5"	1.84	0.60
1:AA:1287:A:H2'	1:AA:1288:A:C8	2.35	0.60
7:AG:73:MET:H	7:AG:142:GLU:HG3	1.65	0.60
8:AH:4:ASP:OD1	8:AH:85:ARG:NH1	2.35	0.60
9:AI:20:ARG:O	9:AI:60:ASP:N	2.35	0.60
12:AL:32:PHE:HE1	12:AL:86:ARG:HG3	1.66	0.60
15:AO:15:PHE:CE2	15:AO:84:LYS:HD2	2.35	0.60
20:AT:16:HIS:O	20:AT:19:SER:OG	2.12	0.60
23:BA:1495:A:H2'	23:BA:1496:A:C8	2.37	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1162:C:H2'	1:CA:1163:C:O4'	2.01	0.60
7:CG:26:PHE:HD1	7:CG:101:LEU:HB3	1.67	0.60
13:CM:88:ARG:CZ	13:CM:88:ARG:HB2	2.31	0.60
15:CO:16:ALA:HB1	15:CO:21:ASP:HB3	1.82	0.60
15:CO:33:THR:HG21	15:CO:85:LEU:HD22	1.82	0.60
23:DA:535:C:O3'	38:DU:53:ARG:NH1	2.34	0.60
23:DA:1311:G:O6	56:DA:3781:HOH:O	2.13	0.60
23:DA:2319:G:N2	36:DS:3:ARG:HE	1.96	0.60
43:DZ:17:ALA:HA	43:DZ:20:ARG:HD2	1.82	0.60
1:AA:828:A:N6	1:AA:858:G:O2'	2.34	0.60
7:AG:109:ASN:HA	7:AG:119:ARG:HD2	1.82	0.60
27:BF:102:PRO:HB2	27:BF:105:VAL:HG23	1.83	0.60
38:BU:92:ARG:HA	38:BU:95:LEU:HB2	1.82	0.60
41:BX:41:ASN:O	41:BX:45:THR:HG23	2.01	0.60
1:CA:475:G:H2'	1:CA:476:G:H8	1.66	0.60
1:CA:539:A:H2'	1:CA:540:G:H8	1.65	0.60
1:CA:1035:A:H2'	1:CA:1036:G:H8	1.66	0.60
2:CB:189:ASP:N	2:CB:189:ASP:OD1	2.35	0.60
1:AA:193:C:H2'	1:AA:194:C:C6	2.37	0.60
1:AA:390:C:O3'	16:AP:28:ARG:NH2	2.34	0.60
1:AA:1230:C:H2'	1:AA:1231:G:C8	2.36	0.60
2:AB:130:ARG:HB2	2:AB:135:GLN:OE1	2.01	0.60
4:AD:108:LEU:HD21	4:AD:183:GLY:HA3	1.82	0.60
14:AN:29:ARG:HD2	14:AN:42:ILE:HD12	1.84	0.60
23:BA:1106:G:O2'	23:BA:1107:G:OP1	2.18	0.60
23:BA:2723:C:OP1	35:BR:3:HIS:ND1	2.27	0.60
29:BH:3:ARG:HG3	29:BH:4:ILE:N	2.15	0.60
1:CA:975:A:O2'	14:CN:32:SER:HA	2.01	0.60
14:CN:22:THR:HG22	14:CN:35:ARG:HH21	1.67	0.60
20:CT:72:LEU:HD21	20:CT:77:ALA:HB2	1.83	0.60
23:DA:8:A:H2'	23:DA:9:U:C6	2.35	0.60
23:DA:185:U:H4'	23:DA:218:A:H4'	1.83	0.60
23:DA:546:C:H6	23:DA:547:A:H5'	1.65	0.60
23:DA:1298:C:H5"	23:DA:1299:G:OP2	2.02	0.60
1:AA:10:A:H2'	1:AA:11:G:C8	2.35	0.60
1:AA:1052:U:H3	1:AA:1206:G:H1	1.50	0.60
1:AA:1152:A:OP1	10:AJ:13:HIS:HB2	2.01	0.60
16:AP:59:TRP:HA	16:AP:62:VAL:HG12	1.83	0.60
23:BA:535:C:O3'	38:BU:53:ARG:NH1	2.35	0.60
23:BA:1506:C:H2'	23:BA:1507:A:H5'	1.84	0.60
38:BU:74:LEU:H	38:BU:74:LEU:HD12	1.67	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BZ:17:ALA:HA	43:BZ:20:ARG:HD2	1.83	0.60
1:CA:221:C:H2'	1:CA:222:U:C6	2.36	0.60
1:CA:1122:U:H2'	1:CA:1123:A:C8	2.36	0.60
1:CA:1208:C:H2'	1:CA:1209:C:H6	1.67	0.60
4:CD:108:LEU:HD21	4:CD:183:GLY:HA3	1.83	0.60
43:DZ:160:GLY:HA2	43:DZ:161:VAL:HB	1.83	0.60
1:AA:148:G:H2'	1:AA:149:A:C8	2.36	0.60
1:AA:511:C:N4	1:AA:540:G:H1	1.99	0.60
4:AD:80:GLU:O	4:AD:83:SER:N	2.35	0.60
23:BA:1530:C:O2'	23:BA:1531:C:O4'	2.20	0.60
1:CA:1133:G:H2'	1:CA:1134:G:H8	1.66	0.60
1:CA:1149:C:H2'	1:CA:1150:U:O4'	2.01	0.60
23:DA:141:A:H8	23:DA:1408:C:O2'	1.83	0.60
25:DD:148:GLU:HB2	25:DD:151:LYS:HD2	1.84	0.60
1:AA:153:C:H2'	1:AA:154:C:C6	2.37	0.60
1:AA:501:C:H2'	1:AA:502:G:C8	2.36	0.60
1:AA:662:G:H2'	1:AA:663:A:H8	1.66	0.60
1:AA:952:U:H4'	1:AA:964:A:H61	1.67	0.60
1:AA:1016:A:H3'	1:AA:1017:G:H8	1.65	0.60
1:AA:1029:C:O2	1:AA:1032:G:N1	2.34	0.60
1:AA:1187:G:N3	14:AN:60:SER:OG	2.35	0.60
19:AS:53:ASN:O	19:AS:77:THR:OG1	2.13	0.60
23:BA:1026:U:O2	23:BA:1026:U:H2'	1.99	0.60
43:BZ:160:GLY:HA2	43:BZ:161:VAL:HB	1.82	0.60
1:CA:429:U:C3'	4:CD:22:LYS:HZ3	2.14	0.60
3:CC:114:PRO:HA	3:CC:185:GLY:HA3	1.84	0.60
11:CK:85:ARG:HD3	11:CK:113:PRO:HD3	1.83	0.60
2:AB:21:ARG:HB3	2:AB:39:ILE:HG12	1.82	0.60
4:AD:9:CYS:HB2	4:AD:22:LYS:HZ2	1.66	0.60
23:BA:1603:A:OP1	56:BA:4692:HOH:O	2.16	0.60
36:BS:10:ARG:HH21	36:BS:91:PRO:HB2	1.67	0.60
45:B1:80:LEU:HD23	45:B1:82:LEU:HD21	1.83	0.60
2:CB:187:LEU:HD23	2:CB:201:ILE:HB	1.83	0.60
3:CC:35:GLU:O	3:CC:38:ARG:HB2	2.02	0.60
20:CT:97:ALA:HB3	20:CT:99:LEU:H	1.66	0.60
36:DS:10:ARG:HH21	36:DS:91:PRO:HB2	1.67	0.60
1:AA:221:C:H2'	1:AA:222:U:H6	1.65	0.59
1:AA:950:U:H2'	1:AA:951:G:H8	1.67	0.59
1:AA:1303:C:H42	1:AA:1334:G:H1	0.67	0.59
4:AD:60:GLU:HG2	4:AD:202:LEU:HB2	1.83	0.59
9:AI:7:THR:H	9:AI:83:ARG:HD2	1.66	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BH:56:SER:HB3	29:BH:61:HIS:ND1	2.16	0.59
37:BT:127:ALA:HA	37:BT:128:GLU:C	2.27	0.59
1:CA:625:G:H2'	1:CA:626:U:C6	2.37	0.59
1:CA:927:G:H1	1:CA:1390:U:H3	1.50	0.59
1:CA:1025:U:O2	1:CA:1036:G:O6	2.20	0.59
8:CH:36:LEU:HA	8:CH:39:LEU:HD23	1.84	0.59
23:DA:2104:G:N2	23:DA:2105:C:C2	2.70	0.59
1:AA:982:U:O2'	1:AA:984:C:N4	2.35	0.59
1:AA:1170:A:H3'	1:AA:1171:G:C8	2.37	0.59
23:BA:2104:G:N2	23:BA:2105:C:C2	2.70	0.59
23:BA:2364:C:H2'	23:BA:2365:G:O4'	2.01	0.59
27:BF:46:ARG:HH11	27:BF:46:ARG:CG	2.14	0.59
1:CA:598:U:H2'	1:CA:599:C:H6	1.68	0.59
3:CC:52:LEU:HA	3:CC:70:VAL:HA	1.83	0.59
9:CI:40:LEU:HB2	9:CI:43:ALA:HB2	1.82	0.59
23:DA:528:A:O2'	23:DA:529:A:H5'	2.02	0.59
23:DA:1803:A:O2'	25:DD:259:THR:HG21	2.02	0.59
23:DA:2118:U:OP1	23:DA:2147:G:O2'	2.21	0.59
23:DA:2306:C:C5'	23:DA:2307:G:H2'	2.30	0.59
23:DA:2327:A:H2'	23:DA:2328:A:C8	2.37	0.59
23:DA:2384:G:OP2	44:D0:55:ARG:NH1	2.35	0.59
1:AA:262:A:H2'	1:AA:263:A:C8	2.37	0.59
1:AA:741:G:H2'	1:AA:742:G:O4'	2.02	0.59
1:AA:973:G:H3'	1:AA:974:A:C5'	2.31	0.59
1:AA:1291:G:H2'	1:AA:1292:U:C6	2.37	0.59
4:AD:108:LEU:HD12	4:AD:174:LEU:HD13	1.84	0.59
23:BA:1153:C:H2'	23:BA:1154:G:O4'	2.02	0.59
1:CA:1036:G:H3'	1:CA:1037:C:H6	1.66	0.59
1:CA:1164:G:N2	1:CA:1172:C:N3	2.45	0.59
1:CA:1333:A:H2'	1:CA:1334:G:O4'	2.02	0.59
2:CB:21:ARG:HB3	2:CB:39:ILE:HG12	1.85	0.59
1:AA:959:A:H3'	1:AA:960:U:H5"	1.85	0.59
1:AA:968:A:H8	1:AA:968:A:OP1	1.85	0.59
1:AA:1028:C:N3	1:AA:1034:G:H1'	2.18	0.59
23:BA:995:C:OP2	38:BU:54:LYS:HE3	2.03	0.59
25:BD:71:ASP:OD1	25:BD:103:ARG:NH2	2.34	0.59
40:BW:60:ASN:HD22	40:BW:60:ASN:N	1.99	0.59
1:CA:346:G:C2	1:CA:347:G:H1'	2.36	0.59
1:CA:688:G:H2'	1:CA:689:C:H6	1.67	0.59
2:CB:121:LEU:HD21	2:CB:138:LEU:HD13	1.83	0.59
4:CD:60:GLU:HG2	4:CD:202:LEU:HB2	1.84	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:CK:48:ILE:H	11:CK:48:ILE:HD13	1.67	0.59
23:DA:1570:A:H5'	25:DD:36:PRO:HG3	1.84	0.59
45:D1:85:LEU:HB3	45:D1:89:GLU:HG3	1.84	0.59
1:AA:149:A:HO2'	1:AA:150:C:H6	1.49	0.59
1:AA:623:C:H2'	1:AA:624:C:H6	1.66	0.59
2:AB:80:ILE:HD13	2:AB:212:GLN:HG2	1.82	0.59
23:BA:2331:G:O3'	44:B0:43:THR:HG22	2.03	0.59
48:B4:14:ILE:HG13	48:B4:22:ILE:HB	1.82	0.59
1:CA:10:A:H2'	1:CA:11:G:C8	2.36	0.59
1:CA:934:C:O2'	1:CA:1344:C:OP2	2.12	0.59
1:CA:1057:G:H4'	3:CC:197:GLY:H	1.68	0.59
4:CD:108:LEU:HD12	4:CD:174:LEU:HD13	1.84	0.59
10:CJ:13:HIS:HB3	10:CJ:68:HIS:CE1	2.37	0.59
23:DA:12:U:O2	23:DA:12:U:H2'	2.02	0.59
23:DA:528:A:N1	23:DA:2042:A:H2'	2.17	0.59
23:DA:1769:G:O2'	23:DA:1958:C:OP1	2.18	0.59
1:AA:21:G:OP1	56:AA:1895:HOH:O	2.15	0.59
1:AA:882:C:O2'	56:AA:1815:HOH:O	2.17	0.59
1:AA:1290:G:O2'	7:AG:37:ASN:OD1	2.20	0.59
12:AL:24:VAL:HG13	12:AL:98:TYR:CE2	2.37	0.59
28:BG:137:GLU:HG2	28:BG:138:GLN:H	1.68	0.59
1:CA:1193:G:N7	3:CC:3:ASN:ND2	2.51	0.59
1:CA:1247:U:H1'	1:CA:1291:G:N2	2.17	0.59
12:CL:24:VAL:HG13	12:CL:98:TYR:CE2	2.37	0.59
23:DA:2706:G:O6	56:DA:4039:HOH:O	2.17	0.59
26:DE:170:LEU:HB3	26:DE:184:VAL:HG22	1.84	0.59
1:AA:448:A:H2'	1:AA:449:C:C6	2.38	0.59
1:AA:625:G:H2'	1:AA:626:U:C6	2.37	0.59
1:AA:936:C:H2'	1:AA:937:A:O4'	2.03	0.59
1:AA:977:A:O3'	1:AA:980:C:N4	2.35	0.59
2:AB:195:ASP:O	8:AH:74:PRO:HG3	2.01	0.59
23:BA:11:G:H2'	23:BA:12:U:H5'	1.83	0.59
23:BA:528:A:H4'	56:BA:4297:HOH:O	2.02	0.59
1:CA:148:G:H2'	1:CA:149:A:C8	2.38	0.59
1:CA:243:A:H4'	1:CA:244:U:O5'	2.01	0.59
1:CA:1090:U:H2'	1:CA:1091:U:C6	2.37	0.59
1:CA:1374:A:O2'	7:CG:28:ASN:HB3	2.02	0.59
6:CF:22:GLU:O	6:CF:26:ILE:HG13	2.03	0.59
16:CP:22:THR:HA	16:CP:33:ILE:HG13	1.84	0.59
23:DA:1962:C:O2'	23:DA:1964:G:OP2	2.20	0.59
23:DA:2834:G:H5"	23:DA:2834:G:H8	1.68	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:DP:121:LYS:HG2	33:DP:123:LEU:HG	1.83	0.59
1:AA:37:U:O2'	1:AA:547:A:N1	2.30	0.59
1:AA:401:C:OP1	4:AD:73:ARG:NE	2.35	0.59
1:AA:833:U:H2'	1:AA:834:C:H6	1.68	0.59
1:AA:957:U:H1'	1:AA:960:U:C4	2.37	0.59
1:AA:1003:G:N3	1:AA:1004:A:H1'	2.18	0.59
1:AA:1226:C:H2'	13:AM:104:ARG:HA	1.85	0.59
1:AA:1367:C:H4'	10:AJ:48:THR:HG21	1.83	0.59
6:AF:89:MET:HE1	18:AR:72:ARG:HB3	1.85	0.59
7:AG:127:ALA:HA	7:AG:132:GLY:HA3	1.83	0.59
14:AN:37:PHE:CE1	14:AN:53:LEU:HD13	2.38	0.59
23:BA:1107:G:N7	23:BA:1108:U:N3	2.50	0.59
23:BA:1593:G:H2'	23:BA:1594:G:C8	2.38	0.59
29:BH:3:ARG:HG2	29:BH:6:ARG:HE	1.67	0.59
6:CF:81:ILE:HD11	25:DD:125:ILE:HB	1.82	0.59
7:CG:108:ALA:HA	7:CG:111:ARG:HD2	1.84	0.59
23:DA:581:C:H2'	23:DA:582:G:C8	2.38	0.59
23:DA:751:A:H5'	40:DW:90:ARG:HA	1.83	0.59
23:DA:2022:U:O2'	23:DA:2617:C:H5'	2.02	0.59
28:DG:137:GLU:HG2	28:DG:138:GLN:H	1.68	0.59
1:AA:136:C:N4	1:AA:227:G:H1	1.94	0.59
1:AA:359:U:H2'	1:AA:360:A:H8	1.68	0.59
1:AA:986:A:N1	1:AA:1219:U:O4	2.36	0.59
5:AE:126:ARG:HA	5:AE:131:ILE:HD11	1.84	0.59
13:AM:65:LYS:HA	13:AM:66:LEU:CB	2.32	0.59
23:BA:548:A:N6	39:BV:19:LYS:H	2.01	0.59
23:BA:1427:A:H4'	23:BA:1428:C:O5'	2.01	0.59
23:BA:2228:G:OP1	25:BD:261:LYS:NZ	2.31	0.59
30:BI:91:SER:HB2	30:BI:119:PRO:HB2	1.84	0.59
37:BT:1:MET:HE2	37:BT:3:ARG:HG2	1.84	0.59
1:CA:542:G:H5'	4:CD:41:GLY:HA3	1.85	0.59
1:CA:1137:C:H4'	1:CA:1138:G:N2	2.18	0.59
23:DA:2602:A:H1'	23:DA:2603:G:H5"	1.85	0.59
1:AA:487:A:H2'	1:AA:488:C:O4'	2.03	0.59
1:AA:841:U:C5	1:AA:848:C:H1'	2.37	0.59
1:AA:1133:G:H2'	1:AA:1134:G:H8	1.68	0.59
1:AA:1325:C:OP1	21:AU:15:ARG:NH2	2.32	0.59
6:AF:22:GLU:O	6:AF:26:ILE:HG13	2.02	0.59
23:BA:546:C:H2'	23:BA:547:A:H5'	1.85	0.59
26:BE:105:THR:OG1	26:BE:199:ARG:NH2	2.36	0.59
28:BG:126:ASP:HB3	28:BG:130:ASN:H	1.67	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1004:A:O2'	1:CA:1037:C:O2	2.16	0.59
1:CA:1179:A:H2'	1:CA:1180:A:O4'	2.02	0.59
1:CA:1206:G:O2'	3:CC:192:THR:O	2.19	0.59
1:AA:149:A:O2'	1:AA:150:C:H6	1.86	0.58
1:AA:346:G:C2	1:AA:347:G:H1'	2.38	0.58
1:AA:626:U:H2'	1:AA:627:G:H8	1.67	0.58
3:AC:132:ARG:O	3:AC:136:GLN:HB2	2.03	0.58
23:BA:271(R):G:H2'	23:BA:271(S):G:H8	1.68	0.58
23:BA:796:C:H2'	23:BA:797:C:C6	2.38	0.58
25:BD:206:LEU:HD22	25:BD:211:ARG:HG2	1.84	0.58
39:BV:40:LEU:HB2	39:BV:46:VAL:HG13	1.84	0.58
1:CA:826:C:H4'	8:CH:12:ARG:HG3	1.85	0.58
8:CH:89:PRO:HA	8:CH:92:ARG:HE	1.68	0.58
17:CQ:24:GLU:OE2	17:CQ:37:LYS:HD3	2.03	0.58
23:DA:330:A:H2	23:DA:1210:A:H2'	1.68	0.58
27:DF:102:PRO:HB2	27:DF:105:VAL:HG23	1.84	0.58
45:D1:3:LYS:HB2	45:D1:61:ARG:HH12	1.68	0.58
1:AA:1006:C:H2'	1:AA:1007:C:C5	2.38	0.58
1:AA:1073:U:H2'	1:AA:1074:G:H8	1.66	0.58
3:AC:23:TYR:HE2	10:AJ:95:GLU:HG2	1.68	0.58
23:BA:2126:A:N1	23:BA:2162:G:O2'	2.30	0.58
23:BA:2315:G:H2'	23:BA:2316:C:C6	2.37	0.58
27:BF:181:LEU:HB3	27:BF:205:ARG:HH22	1.69	0.58
27:BF:192:LEU:HD22	27:BF:194:MET:HE2	1.85	0.58
29:BH:137:ASP:HB3	29:BH:140:LYS:HB3	1.85	0.58
37:BT:54:ARG:HA	37:BT:59:THR:HB	1.85	0.58
40:BW:79:GLY:HA3	40:BW:100:THR:HG22	1.84	0.58
5:CE:37:ARG:HG2	5:CE:37:ARG:HH11	1.68	0.58
20:CT:12:ALA:O	20:CT:15:ARG:HB2	2.04	0.58
23:DA:1530:C:O2'	23:DA:1531:C:O4'	2.20	0.58
31:DN:128:HIS:CE1	31:DN:135:PRO:HG2	2.38	0.58
12:AL:60:LEU:HD21	12:AL:66:VAL:HG22	1.85	0.58
23:BA:862:G:OP2	56:BA:4195:HOH:O	2.16	0.58
30:BI:97:ILE:O	30:BI:101:LEU:N	2.36	0.58
1:CA:511:C:N4	1:CA:540:G:H1	1.99	0.58
1:CA:1001(A):G:H2'	1:CA:1002:G:H8	1.68	0.58
1:CA:1012:U:H2'	1:CA:1013:G:O4'	2.04	0.58
1:CA:1317:C:N3	19:CS:37:ARG:NH2	2.44	0.58
1:CA:1346:A:H4'	1:CA:1347:G:H4'	1.85	0.58
23:DA:203:C:H3'	23:DA:204:A:H5"	1.85	0.58
23:DA:1038:C:N4	23:DA:1117:G:H1	2.01	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:2113:U:H2'	23:DA:2114:A:C8	2.39	0.58
43:DZ:92:SER:O	43:DZ:130:PRO:HG2	2.03	0.58
1:AA:1107:C:C4	1:AA:1108:G:C8	2.91	0.58
7:AG:155:ARG:HG2	7:AG:156:TRP:H	1.69	0.58
22:AV:39:GLN:O	22:AV:43:GLY:N	2.36	0.58
23:BA:307:G:H21	23:BA:330:A:H62	1.52	0.58
34:BQ:16:ARG:HG2	34:BQ:16:ARG:NH1	2.18	0.58
43:BZ:52:SER:OG	43:BZ:53:ILE:N	2.36	0.58
2:CB:67:THR:HA	2:CB:90:MET:HE2	1.85	0.58
11:CK:59:TYR:O	11:CK:62:GLN:HB3	2.03	0.58
13:CM:85:GLY:HA3	19:CS:74:PHE:HA	1.83	0.58
23:DA:652(D):C:H2'	23:DA:652(E):G:O4'	2.03	0.58
46:D2:13:ALA:HA	46:D2:16:LEU:HD12	1.84	0.58
1:AA:1003:G:N2	1:AA:1038:C:C2	2.71	0.58
1:AA:1016:A:H3'	1:AA:1017:G:C8	2.39	0.58
1:AA:1042:G:OP2	1:AA:1042:G:H8	1.86	0.58
3:AC:155:GLY:O	3:AC:163:ALA:HA	2.03	0.58
23:BA:184:C:H2'	23:BA:185:U:C6	2.38	0.58
1:CA:512:U:H2'	1:CA:513:C:C6	2.38	0.58
1:CA:804:U:H5"	1:CA:805:C:OP2	2.02	0.58
7:CG:85:TYR:HD1	7:CG:154:TYR:HE1	1.51	0.58
20:CT:41:ILE:HA	20:CT:44:ALA:HB3	1.86	0.58
23:DA:271(L):U:H4'	23:DA:271(M):G:OP1	2.03	0.58
23:DA:581:C:H2'	23:DA:582:G:H8	1.67	0.58
23:DA:879:G:N2	23:DA:899:A:H1'	2.17	0.58
42:DY:99:CYS:SG	42:DY:102:CYS:N	2.77	0.58
43:DZ:102:LEU:HD13	43:DZ:123:ASP:HA	1.85	0.58
1:AA:708:C:OP1	11:AK:85:ARG:NH2	2.37	0.58
1:AA:1015:A:H3'	1:AA:1016:A:C8	2.39	0.58
11:AK:33:THR:HA	11:AK:39:PRO:HA	1.85	0.58
17:AQ:24:GLU:OE2	17:AQ:37:LYS:HD3	2.03	0.58
23:BA:1108:U:O2'	23:BA:1109:C:O5'	2.21	0.58
1:CA:841:U:C5	1:CA:848:C:H1'	2.38	0.58
1:CA:1029:C:C2	1:CA:1032:G:N1	2.72	0.58
27:DF:181:LEU:HB3	27:DF:205:ARG:HH22	1.67	0.58
40:DW:43:GLY:O	40:DW:47:VAL:HG23	2.04	0.58
1:AA:826:C:H4'	8:AH:12:ARG:HG3	1.85	0.58
1:AA:1347:G:H1	1:AA:1373:G:H3'	1.69	0.58
33:BP:38:GLN:HA	33:BP:41:ARG:HG2	1.86	0.58
1:CA:1411:C:H2'	1:CA:1412:C:H6	1.69	0.58
8:CH:4:ASP:OD1	8:CH:85:ARG:NH1	2.37	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:2134:A:N3	23:DA:2159:G:H1'	2.18	0.58
36:DS:25:ARG:NH1	36:DS:42:ASP:OD2	2.37	0.58
37:DT:97:ALA:O	37:DT:98:LYS:HD2	2.03	0.58
1:AA:50:A:H1'	1:AA:52:G:C8	2.38	0.58
1:AA:639:G:H2'	1:AA:640:A:H8	1.69	0.58
1:AA:1130:A:H61	1:AA:1144:G:H1'	1.69	0.58
7:AG:42:ILE:HA	7:AG:45:ASP:HB2	1.83	0.58
16:AP:22:THR:HA	16:AP:33:ILE:HG13	1.86	0.58
23:BA:548:A:N6	39:BV:19:LYS:HB2	2.17	0.58
23:BA:1359:A:N6	23:BA:1372:U:C5	2.71	0.58
30:BI:5:LEU:HD11	30:BI:19:VAL:HG22	1.86	0.58
1:CA:149:A:O2'	1:CA:150:C:H6	1.87	0.58
10:CJ:55:LYS:O	10:CJ:57:LYS:N	2.35	0.58
19:CS:50:ALA:HB1	19:CS:57:HIS:HB3	1.84	0.58
23:DA:579:G:H2'	23:DA:580:C:C6	2.38	0.58
23:DA:1427:A:H4'	23:DA:1428:C:O5'	2.04	0.58
1:AA:501:C:H1'	1:AA:549:C:H1'	1.86	0.58
1:AA:984:C:H2'	1:AA:985:C:C6	2.38	0.58
1:AA:1062:U:H2'	1:AA:1063:C:C6	2.39	0.58
20:AT:41:ILE:HA	20:AT:44:ALA:HB3	1.85	0.58
23:BA:185:U:H4'	23:BA:218:A:H4'	1.86	0.58
37:BT:106:SER:O	37:BT:110:ILE:HG13	2.04	0.58
1:CA:428:G:H5"	4:CD:7:PRO:HB3	1.86	0.58
1:CA:436:C:H4'	4:CD:156:GLU:HB2	1.85	0.58
1:CA:438:G:OP1	4:CD:125:HIS:HE1	1.86	0.58
1:CA:501:C:H2'	1:CA:502:G:C8	2.38	0.58
1:CA:659:U:H2'	1:CA:660:G:C8	2.39	0.58
1:CA:1290:G:H3'	1:CA:1291:G:H8	1.69	0.58
23:DA:1722:A:C2	23:DA:1740:G:C8	2.92	0.58
25:DD:145:VAL:HG12	25:DD:146:GLU:O	2.04	0.58
31:DN:67:LEU:O	31:DN:88:GLU:HG3	2.04	0.58
1:AA:269:C:H2'	1:AA:270:A:C8	2.39	0.58
1:AA:511:C:N3	1:AA:540:G:N2	2.45	0.58
1:AA:1028:C:C4	1:AA:1033:G:O6	2.56	0.58
1:AA:1233:G:H2'	1:AA:1364:U:O2	2.04	0.58
1:AA:1459:C:H41	1:AA:1461:G:N2	2.02	0.58
10:AJ:54:PHE:HD2	10:AJ:55:LYS:HD3	1.69	0.58
23:BA:993:G:OP1	38:BU:50:ARG:NH2	2.37	0.58
23:BA:2308:G:H4'	23:BA:2309:A:OP2	2.02	0.58
23:BA:2690:C:OP2	35:BR:14:SER:HB3	2.04	0.58
39:BV:35:LEU:HB2	39:BV:57:VAL:HG13	1.84	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:203:U:H5”	1:CA:204:U:OP2	2.04	0.58
1:CA:1348:U:H4’	9:CI:120:ARG:HD2	1.85	0.58
2:CB:219:VAL:HA	2:CB:222:ILE:HD12	1.86	0.58
12:CL:32:PHE:HE1	12:CL:86:ARG:HG3	1.67	0.58
23:DA:154(A):C:N4	23:DA:172:C:N3	2.51	0.58
25:DD:206:LEU:HD22	25:DD:211:ARG:HG2	1.85	0.58
48:D4:15:ILE:HB	48:D4:32:TYR:CD2	2.38	0.58
1:AA:804:U:H5”	1:AA:805:C:OP2	2.03	0.57
1:AA:1073:U:H2’	1:AA:1074:G:C8	2.39	0.57
1:AA:1327:C:H2’	1:AA:1328:C:C6	2.39	0.57
7:AG:99:LEU:HB3	7:AG:103:TRP:CE2	2.39	0.57
23:BA:517:C:OP1	49:B5:16:ARG:NH2	2.36	0.57
46:B2:13:ALA:HA	46:B2:16:LEU:HD12	1.85	0.57
1:CA:487:A:H2’	1:CA:488:C:O4’	2.04	0.57
1:CA:1198:G:H2’	1:CA:1199:U:C6	2.39	0.57
6:CF:69:GLU:O	6:CF:72:VAL:HG12	2.03	0.57
23:DA:1364:G:C8	45:D1:3:LYS:HD3	2.39	0.57
23:DA:1456:G:OP2	56:DA:4008:HOH:O	2.17	0.57
32:DO:24:VAL:HB	32:DO:33:ALA:HB2	1.86	0.57
48:D4:14:ILE:HG13	48:D4:22:ILE:HB	1.85	0.57
50:D6:10:LEU:HD12	50:D6:54:ILE:HA	1.86	0.57
1:AA:564:C:O2’	8:AH:91:ARG:NH2	2.26	0.57
1:AA:945:G:C5	1:AA:1337:G:H1’	2.39	0.57
1:AA:992:U:H2’	1:AA:1043:C:C5	2.35	0.57
1:AA:1041:A:H2’	1:AA:1042:G:O4’	2.03	0.57
17:AQ:86:GLU:O	17:AQ:90:ILE:HG12	2.04	0.57
23:BA:12:U:H2’	23:BA:12:U:O2	2.04	0.57
23:BA:2309:A:N6	23:BA:2310:A:N1	2.51	0.57
30:BI:72:LEU:O	30:BI:73:GLU:HB2	2.03	0.57
2:CB:21:ARG:H	2:CB:21:ARG:HD3	1.70	0.57
23:DA:1109:C:C5	23:DA:1110:G:C2	2.88	0.57
23:DA:2849:U:OP2	37:DT:95:ARG:NH1	2.36	0.57
30:DI:5:LEU:HD21	30:DI:12:LEU:HD13	1.86	0.57
1:AA:68:G:H22	1:AA:101:A:H2	1.51	0.57
1:AA:375:U:H4’	16:AP:17:TYR:HE2	1.70	0.57
1:AA:1353:G:O6	1:AA:1369:C:N3	2.37	0.57
5:AE:93:PRO:HG2	8:AH:105:ARG:NE	2.18	0.57
16:AP:20:VAL:HG23	16:AP:35:LYS:HA	1.85	0.57
23:BA:1138:G:N3	31:BN:106:MET:HE2	2.20	0.57
23:BA:1722:A:C2	23:BA:1740:G:C8	2.92	0.57
30:BI:61:ARG:HB3	30:BI:133:HIS:HD2	1.68	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BS:58:LEU:HD12	36:BS:65:VAL:HG13	1.86	0.57
45:B1:50:ARG:HG2	45:B1:59:THR:HB	1.86	0.57
50:B6:8:LYS:HD3	52:B8:34:TRP:CD2	2.39	0.57
52:B8:39:LYS:HA	52:B8:42:ARG:NH1	2.18	0.57
1:CA:939:G:H1	1:CA:1344:C:H42	1.52	0.57
3:CC:51:GLY:HA3	3:CC:71:ALA:HB3	1.87	0.57
20:CT:13:LEU:O	20:CT:17:ARG:HG3	2.04	0.57
23:DA:2773:C:H5"	26:DE:164:ARG:HG2	1.85	0.57
34:DQ:16:ARG:HG2	34:DQ:16:ARG:HH11	1.69	0.57
42:DY:99:CYS:HB3	42:DY:104:GLY:H	1.68	0.57
8:AH:89:PRO:HA	8:AH:92:ARG:HE	1.70	0.57
23:BA:708:C:H42	23:BA:723:G:H1	1.51	0.57
27:BF:6:VAL:HA	27:BF:23:ASP:H	1.67	0.57
1:CA:325:A:OP2	20:CT:70:SER:OG	2.19	0.57
1:CA:552:U:H4'	12:CL:86:ARG:HG2	1.84	0.57
1:CA:984:C:H2'	1:CA:985:C:H6	1.68	0.57
1:CA:991:U:O2'	1:CA:992:U:O5'	2.15	0.57
4:CD:119:GLN:HG2	4:CD:123:HIS:CD2	2.39	0.57
9:CI:4:TYR:HD1	9:CI:87:GLN:HG3	1.70	0.57
23:DA:2497:A:O3'	56:DA:3888:HOH:O	2.17	0.57
1:AA:1029:C:N3	1:AA:1032:G:O6	2.37	0.57
1:AA:1035:A:H2'	1:AA:1036:G:C8	2.39	0.57
23:BA:8:A:H2'	23:BA:9:U:C6	2.39	0.57
23:BA:2611:U:C4	49:B5:3:LYS:HG2	2.40	0.57
30:BI:68:LEU:C	30:BI:70:GLU:H	2.12	0.57
45:B1:21:ARG:HG2	45:B1:21:ARG:NH1	2.07	0.57
48:B4:18:CYS:CB	48:B4:39:CYS:SG	2.90	0.57
1:CA:519:C:H2'	1:CA:520:A:C8	2.39	0.57
1:CA:708:C:OP1	11:CK:85:ARG:NH2	2.37	0.57
1:CA:736:C:H2'	1:CA:737:A:C8	2.39	0.57
3:CC:54:ARG:HB3	3:CC:69:HIS:HB2	1.86	0.57
23:DA:1971:A:OP2	25:DD:242:ARG:NH2	2.37	0.57
30:DI:134:PRO:C	30:DI:136:VAL:H	2.12	0.57
37:DT:84:GLN:HE21	37:DT:85:LYS:HG2	1.69	0.57
1:AA:1003:G:H1	1:AA:1037:C:H42	0.69	0.57
1:AA:1126:U:H5'	1:AA:1280:A:O2'	2.04	0.57
13:AM:102:ARG:HH12	13:AM:104:ARG:HD3	1.69	0.57
23:BA:1040:C:H2'	23:BA:1041:C:O4'	2.05	0.57
26:BE:16:ARG:NH1	26:BE:171:GLU:OE2	2.37	0.57
34:BQ:84:GLY:O	34:BQ:85:LYS:HB2	2.04	0.57
1:CA:15:G:H4'	5:CE:24:ARG:HH12	1.70	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:269:C:H2'	1:CA:270:A:C8	2.40	0.57
1:CA:501:C:H1'	1:CA:549:C:H1'	1.86	0.57
1:CA:980:C:H1'	14:CN:19:ARG:HA	1.87	0.57
1:CA:1163:C:C2	1:CA:1164:G:C8	2.92	0.57
38:DU:76:TYR:CZ	38:DU:80:ILE:HG13	2.40	0.57
1:AA:522:C:N4	1:AA:528:C:H42	2.03	0.57
1:AA:563:A:N6	56:AA:1896:HOH:O	2.38	0.57
1:AA:973:G:H3'	1:AA:974:A:H5"	1.85	0.57
1:AA:1065:U:H5	1:AA:1190:G:H21	1.50	0.57
10:AJ:5:ARG:HA	10:AJ:74:ILE:H	1.70	0.57
13:AM:23:TYR:H	13:AM:67:GLU:HB3	1.69	0.57
23:BA:861:A:C2	23:BA:917:A:C4	2.92	0.57
23:BA:1568:G:N7	56:BD:402:HOH:O	2.32	0.57
30:BI:31:LEU:HD21	30:BI:38:LEU:HG	1.87	0.57
1:CA:164:U:H2'	1:CA:165:C:C6	2.40	0.57
3:CC:125:GLU:HG3	3:CC:189:ALA:HB1	1.86	0.57
13:CM:108:ARG:NE	13:CM:114:ARG:HD3	2.19	0.57
23:DA:226:G:H21	23:DA:228:A:N6	2.01	0.57
23:DA:1614:A:C2	40:DW:93:ALA:HB2	2.40	0.57
36:DS:46:VAL:HG12	36:DS:48:LEU:HD12	1.87	0.57
1:AA:222:U:H2'	1:AA:223:U:C6	2.39	0.57
1:AA:777:A:H2	11:AK:119:CYS:HB3	1.69	0.57
1:AA:932:C:O3'	7:AG:4:ARG:NH2	2.37	0.57
1:AA:1054:C:C2'	1:AA:1055:A:H5"	2.34	0.57
1:AA:1179:A:H4'	1:AA:1180:A:OP1	2.05	0.57
14:AN:34:TYR:C	14:AN:36:PHE:H	2.12	0.57
23:BA:299:A:H5"	42:BY:86:ARG:HH21	1.70	0.57
23:BA:443:A:N7	27:BF:45:ARG:HG2	2.20	0.57
23:BA:652(D):C:H2'	23:BA:652(E):G:O4'	2.05	0.57
23:BA:1292:U:H2'	23:BA:1293:C:C6	2.40	0.57
23:BA:2712:U:OP1	23:BA:2714:G:H4'	2.05	0.57
25:BD:108:PRO:HB3	25:BD:143:HIS:CE1	2.40	0.57
30:BI:88:ILE:HG12	30:BI:121:LYS:O	2.04	0.57
39:BV:15:GLU:O	39:BV:18:LEU:HB2	2.05	0.57
48:B4:15:ILE:HB	48:B4:32:TYR:CD2	2.40	0.57
1:CA:136:C:N4	1:CA:227:G:H1	2.00	0.57
1:CA:382:A:H2'	1:CA:383:A:H8	1.69	0.57
1:CA:741:G:H2'	1:CA:742:G:O4'	2.04	0.57
1:CA:814:A:N7	1:CA:816:A:C4	2.73	0.57
1:CA:1076:C:H42	1:CA:1081:G:H1	1.51	0.57
4:CD:55:ALA:O	4:CD:59:ARG:HG2	2.04	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:CE:78:HIS:CE1	5:CE:142:LEU:HD23	2.40	0.57
23:DA:928:G:O6	56:DA:3789:HOH:O	2.16	0.57
23:DA:1359:A:N6	23:DA:1372:U:C5	2.73	0.57
46:D2:22:GLU:OE2	46:D2:68:ARG:NH2	2.37	0.57
1:AA:375:U:H2'	1:AA:376:G:H8	1.70	0.57
3:AC:127:ARG:HE	3:AC:193:TYR:HE2	1.53	0.57
9:AI:83:ARG:HA	9:AI:86:VAL:HG13	1.86	0.57
30:BI:102:SER:OG	30:BI:103:ARG:N	2.36	0.57
1:CA:1272:G:H2'	1:CA:1273:G:H8	1.70	0.57
1:CA:1281:U:H5"	1:CA:1282:C:OP2	2.05	0.57
1:CA:1293:G:O2'	1:CA:1294:G:H8	1.88	0.57
3:CC:54:ARG:NH1	3:CC:56:ASP:OD1	2.37	0.57
23:DA:547:A:H1'	23:DA:548:A:H4'	1.87	0.57
23:DA:686:G:H5"	51:D7:11:LYS:HE2	1.86	0.57
23:DA:1007:C:OP1	31:DN:37:LYS:NZ	2.33	0.57
27:DF:23:ASP:O	27:DF:24:LEU:HD13	2.05	0.57
40:DW:86:LEU:HD12	40:DW:87:PRO:HD2	1.85	0.57
1:AA:186:C:H2'	1:AA:187:C:C6	2.40	0.57
1:AA:565:U:OP2	1:AA:566:G:O2'	2.22	0.57
1:AA:819:A:H4'	1:AA:820:U:OP2	2.04	0.57
1:AA:1071:C:H2'	1:AA:1072:G:H8	1.69	0.57
1:AA:1391:U:H2'	1:AA:1392:G:C8	2.40	0.57
2:AB:189:ASP:N	2:AB:189:ASP:OD1	2.37	0.57
7:AG:107:ALA:O	7:AG:111:ARG:HG3	2.05	0.57
19:AS:19:VAL:O	19:AS:23:ASN:N	2.38	0.57
23:BA:1507:A:O2'	23:BA:1508:A:O5'	2.22	0.57
23:BA:1639:U:C2'	23:BA:1640:C:H5"	2.35	0.57
23:BA:2292:C:OP1	36:BS:17:ARG:NH2	2.37	0.57
23:BA:2683:C:OP1	37:BT:53:ARG:NH2	2.38	0.57
23:BA:2892:A:H2'	23:BA:2893:G:H5"	1.85	0.57
30:BI:70:GLU:O	30:BI:74:ASN:HB2	2.05	0.57
34:BQ:5:ARG:O	43:BZ:194:PRO:HD2	2.04	0.57
41:BX:31:HIS:CD2	41:BX:33:LYS:H	2.23	0.57
1:CA:7:G:O2'	5:CE:120:THR:O	2.22	0.57
1:CA:564:C:O2'	8:CH:91:ARG:NH2	2.25	0.57
1:CA:868:C:H2'	1:CA:869:G:O4'	2.05	0.57
1:CA:1072:G:H2'	1:CA:1073:U:H6	1.69	0.57
1:CA:1083:U:C5	1:CA:1084:G:C6	2.92	0.57
4:CD:108:LEU:HB3	4:CD:110:PHE:CE1	2.40	0.57
13:CM:4:ILE:O	13:CM:6:GLY:N	2.38	0.57
13:CM:92:HIS:NE2	13:CM:98:VAL:HG21	2.20	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:CN:2:ALA:HB1	14:CN:6:LEU:HD13	1.86	0.57
23:DA:588:U:H2'	23:DA:589:C:C6	2.40	0.57
23:DA:1786:A:H1'	23:DA:1938:A:N6	2.20	0.57
23:DA:1945:G:H2'	23:DA:1946:U:C6	2.40	0.57
23:DA:2790:A:H2'	23:DA:2790:A:N3	2.20	0.57
32:DO:88:ASN:HD21	32:DO:90:GLN:HB2	1.70	0.57
52:D8:34:TRP:CG	52:D8:35:GLN:N	2.71	0.57
1:AA:1137:C:H4'	1:AA:1138:G:N2	2.19	0.56
3:AC:36:ASP:OD2	3:AC:36:ASP:N	2.36	0.56
11:AK:59:TYR:O	11:AK:62:GLN:HB3	2.05	0.56
23:BA:628:G:H2'	23:BA:629:G:H8	1.70	0.56
23:BA:2291:U:H2'	23:BA:2292:C:C6	2.40	0.56
30:BI:1:MET:N	30:BI:21:VAL:O	2.35	0.56
1:CA:920:U:H2'	1:CA:921:U:C6	2.41	0.56
2:CB:103:THR:HG23	2:CB:176:GLU:HB3	1.86	0.56
5:CE:93:PRO:HG2	8:CH:105:ARG:NE	2.20	0.56
16:CP:20:VAL:HG23	16:CP:35:LYS:HA	1.87	0.56
23:DA:674:G:H1'	27:DF:74:ARG:HD3	1.87	0.56
23:DA:2591:C:OP2	25:DD:239:ARG:HB3	2.03	0.56
1:AA:203:U:H5"	1:AA:204:U:OP2	2.05	0.56
4:AD:12:CYS:SG	4:AD:31:CYS:SG	3.03	0.56
23:BA:602:G:O2'	23:BA:655:A:N6	2.38	0.56
1:CA:1255:G:O3'	1:CA:1258:G:H1'	2.05	0.56
1:CA:1330:U:H5'	1:CA:1331:G:O5'	2.06	0.56
23:DA:2126:A:H4'	23:DA:2127:G:O5'	2.05	0.56
23:DA:2308:G:H4'	23:DA:2309:A:OP2	2.04	0.56
39:DV:15:GLU:O	39:DV:18:LEU:HB2	2.04	0.56
1:AA:993:G:H2'	1:AA:995:C:N4	2.20	0.56
2:AB:21:ARG:H	2:AB:21:ARG:HD3	1.70	0.56
2:AB:219:VAL:HA	2:AB:222:ILE:HD12	1.88	0.56
6:AF:96:PRO:HB3	18:AR:30:ASP:CG	2.29	0.56
23:BA:761:A:N7	56:BA:3905:HOH:O	2.33	0.56
23:BA:1796:U:H2'	23:BA:1797:C:C6	2.39	0.56
23:BA:2131:G:N3	23:BA:2133:G:N2	2.51	0.56
24:BB:87:G:H5"	24:BB:88:C:OP2	2.06	0.56
25:BD:267:SER:O	25:BD:268:ARG:HB3	2.03	0.56
27:BF:32:LEU:HD11	27:BF:105:VAL:HG13	1.86	0.56
36:BS:83:LYS:O	36:BS:111:GLU:HG3	2.06	0.56
45:B1:64:ALA:HA	45:B1:67:ILE:HG13	1.87	0.56
1:CA:370:C:H2'	1:CA:371:G:C8	2.40	0.56
1:CA:522:C:N4	1:CA:528:C:H42	2.04	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:612:C:O2	1:CA:629:G:N2	2.38	0.56
1:CA:1442(A):G:C8	1:CA:1442(B):A:C2	2.93	0.56
8:CH:112:LEU:HA	8:CH:134:ILE:HG12	1.88	0.56
16:CP:20:VAL:HG21	16:CP:32:TYR:CG	2.40	0.56
23:DA:453:C:H5"	56:DA:3993:HOH:O	2.05	0.56
23:DA:1210:A:H5'	23:DA:1210:A:C8	2.35	0.56
23:DA:2361:A:OP1	52:D8:27:THR:HG23	2.05	0.56
25:DD:16:MET:HG3	25:DD:206:LEU:O	2.05	0.56
48:D4:18:CYS:SG	48:D4:39:CYS:HB2	2.44	0.56
52:D8:7:HIS:CD2	52:D8:10:ALA:H	2.12	0.56
1:AA:944:G:H1'	1:AA:1340:A:C2	2.40	0.56
14:AN:47:LEU:HB2	14:AN:53:LEU:HG	1.86	0.56
23:BA:795:C:H2'	23:BA:796:C:H6	1.70	0.56
23:BA:1557:C:OP2	23:BA:1558:A:O2'	2.18	0.56
39:BV:42:GLY:O	39:BV:43:GLU:HG2	2.06	0.56
1:CA:857:C:H2'	1:CA:858:G:O4'	2.05	0.56
1:CA:1181:G:H4'	1:CA:1184:G:O4'	2.05	0.56
1:CA:1218:C:H2'	1:CA:1219:U:C6	2.39	0.56
2:CB:185:ILE:HA	2:CB:199:TYR:O	2.05	0.56
23:DA:1378:A:OP1	51:D7:10:ARG:NH2	2.38	0.56
23:DA:1506:C:H2'	23:DA:1507:A:H5'	1.86	0.56
27:DF:6:VAL:HA	27:DF:23:ASP:H	1.70	0.56
32:DO:102:VAL:HB	32:DO:106:LEU:HD12	1.87	0.56
34:DQ:32:TYR:OH	34:DQ:111:GLU:OE1	2.19	0.56
48:D4:18:CYS:CB	48:D4:39:CYS:SG	2.91	0.56
1:AA:322:C:H4'	20:AT:23:ARG:HD2	1.88	0.56
4:AD:119:GLN:HG2	4:AD:123:HIS:CD2	2.41	0.56
10:AJ:47:PHE:HZ	10:AJ:65:LEU:HD22	1.70	0.56
23:BA:271(L):U:H4'	23:BA:271(M):G:OP1	2.04	0.56
23:BA:2118:U:OP1	23:BA:2147:G:O2'	2.22	0.56
23:BA:2384:G:OP2	44:B0:55:ARG:NH1	2.39	0.56
1:CA:954:G:O6	13:CM:104:ARG:NH1	2.39	0.56
1:CA:1003:G:H2'	1:CA:1004:A:H4'	1.88	0.56
3:CC:19:GLU:O	3:CC:40:ARG:NH2	2.38	0.56
4:CD:129:ASN:HD21	4:CD:145:GLU:N	2.04	0.56
28:DG:48:GLU:O	28:DG:51:ARG:N	2.39	0.56
29:DH:86:GLU:HG2	29:DH:132:ARG:HG3	1.87	0.56
43:DZ:77:ASP:OD1	43:DZ:80:ARG:HG2	2.06	0.56
1:AA:461:A:O2'	1:AA:471:G:N7	2.37	0.56
1:AA:986:A:H1'	19:AS:54:GLY:O	2.06	0.56
3:AC:20:SER:HG	3:AC:40:ARG:HH22	1.50	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AK:69:ALA:HB1	11:AK:103:LEU:HD21	1.88	0.56
21:AU:11:GLY:HA2	21:AU:14:TRP:CE3	2.41	0.56
24:BB:8:U:H6	24:BB:8:U:H5"	1.70	0.56
36:BS:25:ARG:NH1	36:BS:42:ASP:OD2	2.39	0.56
1:CA:346:G:H21	1:CA:347:G:C1'	2.18	0.56
7:CG:43:PHE:HD2	7:CG:44:TYR:CE2	2.24	0.56
11:CK:58:PRO:HA	11:CK:90:GLY:HA2	1.88	0.56
23:DA:975:C:H6	56:DA:3870:HOH:O	1.87	0.56
23:DA:2228:G:OP1	25:DD:261:LYS:NZ	2.27	0.56
27:DF:192:LEU:HD22	27:DF:194:MET:HE2	1.88	0.56
29:DH:3:ARG:HG3	29:DH:4:ILE:N	2.20	0.56
37:DT:118:ARG:HA	37:DT:118:ARG:HH11	1.71	0.56
40:DW:19:LEU:O	49:D5:25:LEU:HD12	2.06	0.56
1:AA:868:C:H2'	1:AA:869:G:O4'	2.05	0.56
1:AA:1234:C:H2'	1:AA:1235:U:O4'	2.05	0.56
1:AA:1442(B):A:C2	37:BT:118:ARG:CZ	2.89	0.56
3:AC:113:ALA:HB1	3:AC:200:ALA:HB1	1.87	0.56
8:AH:120:THR:OG1	8:AH:123:GLU:HG3	2.05	0.56
9:AI:6:GLY:N	9:AI:17:VAL:HG12	2.20	0.56
23:BA:1364:G:OP2	45:B1:3:LYS:HG2	2.05	0.56
42:BY:51:VAL:HG22	42:BY:58:GLY:H	1.70	0.56
1:CA:153:C:H2'	1:CA:154:C:C6	2.40	0.56
1:CA:598:U:H2'	1:CA:599:C:C6	2.41	0.56
1:CA:939:G:H5"	7:CG:102:ARG:CZ	2.35	0.56
1:CA:1130:A:H61	1:CA:1144:G:H1'	1.71	0.56
1:CA:1343:G:H4'	9:CI:122:ALA:HB3	1.88	0.56
1:CA:1356:G:H2'	1:CA:1357:A:C8	2.41	0.56
23:DA:566:U:H5"	33:DP:29:LYS:HE3	1.87	0.56
32:DO:115:VAL:HG13	32:DO:121:VAL:HG21	1.88	0.56
1:AA:1179:A:H2'	1:AA:1180:A:C8	2.40	0.56
1:AA:1288:A:N6	1:AA:1371:G:H1'	2.21	0.56
1:AA:1338:G:H2'	1:AA:1339:A:C8	2.40	0.56
2:AB:187:LEU:HD23	2:AB:201:ILE:HB	1.86	0.56
3:AC:32:LEU:HB3	3:AC:59:ARG:NH1	2.20	0.56
4:AD:36:ARG:HG2	4:AD:38:TYR:OH	2.05	0.56
9:AI:28:VAL:HG13	9:AI:63:ILE:HB	1.88	0.56
23:BA:63:U:OP2	56:BA:4700:HOH:O	2.18	0.56
23:BA:1593:G:H2'	23:BA:1594:G:H8	1.71	0.56
23:BA:2131:G:H5"	23:BA:2132:U:H5"	1.88	0.56
1:CA:458:C:H2'	1:CA:460:G:H8	1.69	0.56
1:CA:1095:U:H2'	1:CA:1096:C:C6	2.41	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:1779:U:C5	23:DA:1784:A:N7	2.60	0.56
23:DA:2109:U:H3'	23:DA:2109:U:H6	1.71	0.56
1:AA:243:A:H4'	1:AA:244:U:O5'	2.05	0.56
1:AA:951:G:H1'	1:AA:970:C:O2'	2.06	0.56
1:AA:1097:C:H2'	1:AA:1098:C:H6	1.71	0.56
8:AH:36:LEU:HA	8:AH:39:LEU:HD23	1.87	0.56
23:BA:528:A:O2'	23:BA:529:A:H5'	2.06	0.56
23:BA:579:G:H2'	23:BA:580:C:C6	2.41	0.56
23:BA:2107:C:C5	23:BA:2108:C:C4	2.93	0.56
36:BS:59:LYS:HB3	36:BS:60:GLY:CA	2.35	0.56
42:BY:2:ARG:HA	42:BY:2:ARG:HH11	1.70	0.56
49:B5:49:CYS:SG	49:B5:51:TYR:HB2	2.46	0.56
1:CA:639:G:H2'	1:CA:640:A:H8	1.71	0.56
1:CA:659:U:H2'	1:CA:660:G:H8	1.69	0.56
1:CA:913:A:H4'	1:CA:914:A:O5'	2.05	0.56
23:DA:1509(B):A:H2'	23:DA:1510:G:C8	2.41	0.56
23:DA:2805:G:H2'	23:DA:2807:G:H8	1.69	0.56
34:DQ:16:ARG:HG2	34:DQ:16:ARG:NH1	2.21	0.56
40:DW:60:ASN:HD22	40:DW:60:ASN:H	1.52	0.56
1:AA:598:U:H2'	1:AA:599:C:H6	1.71	0.56
1:AA:1002:G:H2'	1:AA:1003:G:O4'	2.05	0.56
1:AA:1053:G:N7	1:AA:1199:U:H2'	2.21	0.56
1:AA:1142:G:H3'	1:AA:1143:G:C8	2.40	0.56
1:AA:1220:G:H1'	19:AS:52:TYR:CE2	2.40	0.56
1:AA:1270:C:H2'	1:AA:1271:G:H8	1.71	0.56
2:AB:185:ILE:HA	2:AB:199:TYR:O	2.06	0.56
15:AO:33:THR:HG21	15:AO:85:LEU:HD22	1.88	0.56
16:AP:15:PRO:HB2	16:AP:41:PRO:HG3	1.88	0.56
17:AQ:53:LEU:HB3	17:AQ:82:MET:HE1	1.87	0.56
23:BA:107:C:H2'	23:BA:108:U:H6	1.70	0.56
23:BA:2036:C:H5'	23:BA:2036:C:C6	2.40	0.56
23:BA:2113:U:H2'	23:BA:2114:A:C8	2.40	0.56
1:CA:221:C:H2'	1:CA:222:U:H6	1.69	0.56
1:CA:1287:A:H2'	1:CA:1288:A:H8	1.71	0.56
5:CE:30:ALA:N	5:CE:46:GLY:O	2.29	0.56
9:CI:117:HIS:CE1	9:CI:123:PRO:HG3	2.41	0.56
23:DA:1466:G:O2'	23:DA:1546:C:O2'	2.23	0.56
30:DI:105:HIS:N	30:DI:105:HIS:CD2	2.74	0.56
1:AA:989:C:O2	1:AA:1216:G:N1	2.28	0.55
1:AA:1047:G:HO2'	1:AA:1215:G:HO2'	1.54	0.55
3:AC:56:ASP:HB3	3:AC:67:THR:HB	1.88	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AN:3:ARG:NH1	14:AN:28:GLY:H	2.05	0.55
20:AT:30:LYS:HA	20:AT:33:ILE:HD12	1.87	0.55
21:AU:11:GLY:HA2	21:AU:14:TRP:HE3	1.70	0.55
23:BA:1141:U:OP2	31:BN:63:THR:OG1	2.19	0.55
23:BA:1509(B):A:H2'	23:BA:1510:G:C8	2.41	0.55
23:BA:2305:A:H1'	28:BG:135:LEU:O	2.06	0.55
23:BA:2328:A:H2'	23:BA:2329:G:C8	2.41	0.55
23:BA:2424:C:O2	23:BA:2429:G:O2'	2.20	0.55
29:BH:139:GLN:HG3	29:BH:140:LYS:N	2.20	0.55
32:BO:115:VAL:HG13	32:BO:121:VAL:HG21	1.88	0.55
52:B8:7:HIS:CD2	52:B8:10:ALA:H	2.12	0.55
1:CA:950:U:H1'	1:CA:971:G:C5	2.41	0.55
27:DF:53:THR:CG2	27:DF:55:GLY:H	2.18	0.55
37:DT:42:ILE:HG12	37:DT:84:GLN:OE1	2.06	0.55
1:AA:1311:G:N2	1:AA:1326:C:N3	2.49	0.55
1:AA:1348:U:H4'	9:AI:120:ARG:NH2	2.21	0.55
5:AE:18:ARG:HH12	5:AE:25:ARG:HD3	1.70	0.55
16:AP:20:VAL:HG21	16:AP:32:TYR:CG	2.41	0.55
18:AR:56:THR:HB	18:AR:58:LEU:HD13	1.89	0.55
27:BF:107:LYS:HE3	27:BF:205:ARG:O	2.07	0.55
1:CA:160:A:H61	1:CA:346:G:N2	2.05	0.55
1:CA:1009:G:H1	1:CA:1020:U:H1'	1.72	0.55
2:CB:18:GLY:HA3	2:CB:41:ILE:HG23	1.87	0.55
23:DA:907:U:O2'	34:DQ:101:ARG:NH2	2.39	0.55
23:DA:1026:U:O2	23:DA:1026:U:H2'	2.05	0.55
23:DA:2306:C:H3'	23:DA:2307:G:C8	2.41	0.55
26:DE:16:ARG:NH1	26:DE:171:GLU:OE2	2.39	0.55
28:DG:41:GLN:NE2	28:DG:154:GLY:O	2.34	0.55
31:DN:56:ASN:H	31:DN:125:GLY:HA3	1.71	0.55
42:DY:76:CYS:CB	42:DY:79:CYS:HB2	2.29	0.55
47:D3:6:VAL:HG13	47:D3:56:VAL:HG13	1.87	0.55
47:D3:18:ASP:OD1	47:D3:18:ASP:N	2.26	0.55
1:AA:688:G:H2'	1:AA:689:C:C6	2.42	0.55
1:AA:939:G:N3	1:AA:1375:A:H2	2.04	0.55
1:AA:988:G:O2'	1:AA:1016:A:N1	2.34	0.55
5:AE:37:ARG:HG2	5:AE:37:ARG:HH11	1.72	0.55
11:AK:48:ILE:HD13	11:AK:48:ILE:H	1.70	0.55
22:AV:50:ASP:HA	22:AV:53:VAL:HG12	1.87	0.55
23:BA:271(F):C:H2'	23:BA:271(G):C:H6	1.72	0.55
23:BA:848:G:OP1	56:BA:3720:HOH:O	2.18	0.55
23:BA:1309:G:N7	56:BA:4019:HOH:O	2.33	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:88:ALA:HB2	2:CB:219:VAL:HG13	1.87	0.55
3:CC:43:LEU:O	3:CC:47:LEU:N	2.39	0.55
13:CM:69:GLU:O	13:CM:70:LEU:HB3	2.07	0.55
16:CP:59:TRP:HA	16:CP:62:VAL:HG12	1.87	0.55
23:DA:184:C:H2'	23:DA:185:U:C6	2.41	0.55
23:DA:1288:U:C2	23:DA:1327:C:O2	2.60	0.55
23:DA:1514:U:H2'	23:DA:1515:G:H8	1.71	0.55
23:DA:2023:G:H5'	23:DA:2617:C:H4'	1.88	0.55
1:AA:152:A:N6	1:AA:170:U:H3	2.03	0.55
1:AA:552:U:H4'	12:AL:86:ARG:HG2	1.87	0.55
1:AA:1009:G:H2'	1:AA:1010:G:C8	2.42	0.55
12:AL:76:ASN:HD21	12:AL:107:ALA:HA	1.72	0.55
23:BA:1109:C:C5	23:BA:1110:G:C2	2.88	0.55
23:BA:1762:A:H8	23:BA:1762:A:O5'	1.89	0.55
23:BA:2109:U:H3'	23:BA:2109:U:H6	1.72	0.55
3:CC:88:ARG:O	3:CC:92:ALA:HB3	2.06	0.55
3:CC:113:ALA:HB2	3:CC:202:ILE:HG12	1.88	0.55
13:CM:14:ARG:HD2	13:CM:42:ALA:O	2.05	0.55
23:DA:247:G:H4'	23:DA:386:G:C5	2.42	0.55
24:DB:8:U:O2'	36:DS:40:ILE:HD13	2.07	0.55
46:D2:9:GLN:HE22	46:D2:56:GLN:HB3	1.70	0.55
42:BY:8:LYS:HG2	42:BY:9:LYS:O	2.07	0.55
46:B2:53:LEU:O	46:B2:57:ILE:HG13	2.07	0.55
1:CA:35:G:C2	1:CA:550:G:C2	2.94	0.55
1:CA:346:G:N2	1:CA:347:G:C4	2.75	0.55
23:DA:272:G:N7	23:DA:421:U:H2'	2.22	0.55
23:DA:2723:C:OP1	35:DR:3:HIS:ND1	2.26	0.55
24:DB:32:C:C2	24:DB:51:G:N2	2.74	0.55
25:DD:76:PRO:HB2	25:DD:116:GLN:HE21	1.71	0.55
26:DE:97:LYS:N	26:DE:100:GLU:OE1	2.39	0.55
31:DN:28:THR:HG22	31:DN:29:LYS:N	2.22	0.55
1:AA:100:C:H2'	1:AA:101:A:C8	2.41	0.55
1:AA:327:A:O2'	1:AA:329:A:H8	1.88	0.55
1:AA:474:G:H2'	1:AA:475:G:C8	2.41	0.55
1:AA:512:U:H2'	1:AA:513:C:C6	2.41	0.55
1:AA:1504:G:H3'	1:AA:1504:G:P	2.46	0.55
3:AC:123:GLN:HA	3:AC:126:ARG:HB2	1.89	0.55
30:BI:112:LYS:O	30:BI:114:LEU:N	2.36	0.55
1:CA:1192:C:OP2	3:CC:4:LYS:NZ	2.38	0.55
1:CA:1227:A:H5'	1:CA:1227:A:H8	1.71	0.55
23:DA:83:G:OP1	42:DY:95:LYS:NZ	2.40	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:1040:C:H2'	23:DA:1041:C:O4'	2.07	0.55
23:DA:2166:G:N2	23:DA:2172:U:O4	2.40	0.55
27:DF:129:PHE:CD2	27:DF:163:VAL:HG21	2.41	0.55
33:DP:8:PRO:HB2	33:DP:12:ALA:HB3	1.87	0.55
36:DS:59:LYS:HB3	36:DS:60:GLY:CA	2.37	0.55
44:D0:29:GLN:O	44:D0:67:VAL:HG23	2.07	0.55
1:AA:1003:G:H2'	1:AA:1004:A:C1'	2.36	0.55
6:AF:91:VAL:HG11	18:AR:72:ARG:HH12	1.70	0.55
8:AH:4:ASP:HB2	8:AH:89:PRO:HG3	1.89	0.55
11:AK:58:PRO:HA	11:AK:90:GLY:HA2	1.87	0.55
23:BA:154(A):C:N4	23:BA:172:C:N3	2.54	0.55
23:BA:1007:C:OP1	31:BN:37:LYS:NZ	2.38	0.55
42:BY:68:HIS:ND1	42:BY:70:SER:HB3	2.22	0.55
1:CA:79:G:H1	1:CA:90:U:H3	1.55	0.55
1:CA:993:G:N3	1:CA:993:G:H2'	2.21	0.55
1:CA:1300:G:O2'	1:CA:1303:C:N4	2.40	0.55
1:CA:1459:C:H41	1:CA:1461:G:N2	2.05	0.55
8:CH:4:ASP:HB2	8:CH:89:PRO:HG3	1.88	0.55
8:CH:6:ILE:HB	8:CH:85:ARG:HH12	1.70	0.55
10:CJ:11:PHE:CE2	10:CJ:67:THR:HB	2.42	0.55
23:DA:2036:C:H5'	23:DA:2036:C:C6	2.40	0.55
1:AA:473:G:H2'	1:AA:474:G:C8	2.42	0.55
1:AA:499:A:H4'	1:AA:500:G:H5'	1.89	0.55
1:AA:1014:A:H2'	1:AA:1015:A:C8	2.42	0.55
1:AA:1098:C:H2'	1:AA:1099:G:C1'	2.37	0.55
1:AA:1157:A:H61	1:AA:1178:G:H1'	1.72	0.55
1:AA:1368:G:H2'	1:AA:1369:C:C6	2.42	0.55
23:BA:2306:C:H3'	23:BA:2307:G:C8	2.41	0.55
36:BS:46:VAL:HG12	36:BS:48:LEU:HD12	1.89	0.55
1:CA:819:A:H4'	1:CA:820:U:OP2	2.07	0.55
1:CA:1493:A:H4'	1:CA:1494:G:OP1	2.06	0.55
3:CC:5:ILE:HD12	3:CC:6:HIS:H	1.72	0.55
7:CG:47:CYS:O	7:CG:58:PRO:HG3	2.05	0.55
23:DA:956:G:OP2	34:DQ:14:ARG:NH2	2.40	0.55
23:DA:2328:A:H2'	23:DA:2329:G:C8	2.40	0.55
34:DQ:34:LEU:HB2	34:DQ:118:LEU:HD22	1.89	0.55
4:AD:177:ASP:OD1	4:AD:180:GLY:HA3	2.06	0.55
7:AG:102:ARG:HG2	7:AG:103:TRP:HD1	1.72	0.55
9:AI:7:THR:HA	9:AI:15:ALA:O	2.07	0.55
13:AM:12:ASN:HA	13:AM:45:VAL:HB	1.89	0.55
13:AM:14:ARG:NE	13:AM:16:ASP:OD2	2.35	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AT:56:MET:HE3	20:AT:84:LEU:HD22	1.87	0.55
23:BA:956:G:OP2	34:BQ:14:ARG:NH2	2.40	0.55
23:BA:1140:C:O3'	31:BN:25:ARG:NH1	2.39	0.55
23:BA:2126:A:H4'	23:BA:2127:G:O5'	2.07	0.55
23:BA:2287:A:N6	23:BA:2344:U:N3	2.54	0.55
33:BP:148:LEU:H	33:BP:148:LEU:HD23	1.71	0.55
38:BU:76:TYR:CZ	38:BU:80:ILE:HG13	2.42	0.55
45:B1:82:LEU:HA	45:B1:85:LEU:HD23	1.87	0.55
47:B3:6:VAL:HG12	47:B3:54:VAL:HG11	1.89	0.55
11:CK:33:THR:HA	11:CK:39:PRO:HA	1.89	0.55
23:DA:1358:G:H2'	23:DA:1359:A:C2	2.42	0.55
23:DA:1642:G:N7	56:DA:4096:HOH:O	2.33	0.55
23:DA:2557:G:H2'	23:DA:2558:C:C6	2.41	0.55
23:DA:2781:A:H5"	23:DA:2782:G:H5'	1.88	0.55
25:DD:78:LYS:HE2	25:DD:114:GLY:HA2	1.89	0.55
27:DF:31:HIS:HB2	33:DP:9:ASN:OD1	2.07	0.55
27:DF:184:TYR:CE2	27:DF:188:ARG:HD2	2.42	0.55
32:DO:34:THR:OG1	32:DO:35:VAL:N	2.39	0.55
36:DS:102:ALA:HA	36:DS:105:ALA:CB	2.37	0.55
38:DU:74:LEU:HD12	38:DU:74:LEU:H	1.72	0.55
39:DV:65:GLY:HA3	39:DV:91:TYR:CZ	2.42	0.55
1:AA:1016:A:C6	1:AA:1017:G:H1'	2.41	0.55
1:AA:1128:C:H4'	9:AI:16:ARG:HH22	1.71	0.55
5:AE:88:LYS:HB3	5:AE:123:LEU:HB2	1.88	0.55
13:AM:104:ARG:HG2	13:AM:105:THR:HG23	1.89	0.55
23:BA:330:A:HO2'	23:BA:331:A:H8	1.51	0.55
23:BA:547:A:H1'	23:BA:548:A:H4'	1.88	0.55
23:BA:2134:A:C2	23:BA:2159:G:H1'	2.42	0.55
23:BA:2321:G:OP2	56:BA:4632:HOH:O	2.18	0.55
23:BA:2610:C:H4'	23:BA:2611:U:OP2	2.05	0.55
23:BA:2790:A:N3	23:BA:2790:A:H2'	2.22	0.55
27:BF:129:PHE:CD2	27:BF:163:VAL:HG21	2.42	0.55
36:BS:84:GLN:HB3	36:BS:111:GLU:HB2	1.89	0.55
1:CA:592:G:H1	1:CA:647:C:H42	1.55	0.55
3:CC:22:TRP:HA	10:CJ:93:GLY:HA2	1.88	0.55
8:CH:81:HIS:ND1	8:CH:138:TRP:OXT	2.34	0.55
23:DA:548:A:N6	39:DV:19:LYS:H	2.05	0.55
23:DA:646:A:H2'	23:DA:647:G:O4'	2.07	0.55
23:DA:1022:G:N7	31:DN:66:LYS:HE2	2.21	0.55
23:DA:2575:C:H5'	26:DE:143:ASN:O	2.06	0.55
23:DA:2712:U:O2'	23:DA:2713:A:H5'	2.07	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:DB:2:C:H2'	24:DB:3:C:C6	2.42	0.55
24:DB:11:C:OP2	24:DB:12:C:N4	2.30	0.55
27:DF:89:VAL:HG12	27:DF:90:PHE:N	2.22	0.55
36:DS:84:GLN:HB3	36:DS:111:GLU:HB2	1.89	0.55
1:AA:426:G:H4'	4:AD:42:GLN:HA	1.88	0.54
1:AA:924:C:H2'	1:AA:925:G:H8	1.72	0.54
23:BA:443:A:H1'	23:BA:1201:C:O4'	2.06	0.54
23:BA:1364:G:OP1	45:B1:2:SER:HA	2.07	0.54
43:BZ:101:PRO:O	43:BZ:102:LEU:HD12	2.08	0.54
45:B1:15:ALA:O	45:B1:40:ARG:HG3	2.07	0.54
1:CA:186:C:H2'	1:CA:187:C:C6	2.42	0.54
1:CA:979:C:H42	14:CN:18:VAL:HG12	1.72	0.54
13:CM:59:TYR:CE1	13:CM:63:THR:HG21	2.42	0.54
23:DA:107:C:H2'	23:DA:108:U:H6	1.72	0.54
23:DA:733:G:N7	56:DA:3617:HOH:O	2.33	0.54
23:DA:1048:A:O2'	23:DA:1049:C:OP2	2.24	0.54
23:DA:2037:G:O6	56:DA:3650:HOH:O	2.17	0.54
23:DA:2820:A:OP1	35:DR:4:LEU:HD23	2.07	0.54
28:DG:125:PHE:HB3	28:DG:166:ASP:CG	2.32	0.54
29:DH:94:TYR:CE2	29:DH:107:VAL:HB	2.42	0.54
1:AA:857:C:H2'	1:AA:858:G:O4'	2.06	0.54
1:AA:1028:C:H42	1:AA:1034:G:C1'	2.18	0.54
1:AA:1158:C:N4	1:AA:1160:G:N3	2.56	0.54
1:AA:1532:U:O4	22:AV:31:TYR:HB3	2.06	0.54
3:AC:118:GLN:HA	3:AC:187:ALA:CB	2.36	0.54
23:BA:271(E):U:H2'	23:BA:271(F):C:H6	1.73	0.54
23:BA:638:G:H2'	23:BA:639:U:C6	2.42	0.54
23:BA:907:U:O2'	34:BQ:101:ARG:NH2	2.41	0.54
23:BA:1141:U:OP1	31:BN:25:ARG:NH1	2.40	0.54
23:BA:1486:A:H2'	23:BA:1487:G:C8	2.42	0.54
23:BA:2115:G:O2'	23:BA:2166:G:N2	2.39	0.54
23:BA:2144:U:H1'	23:BA:2147:G:H1	1.72	0.54
41:BX:2:LYS:HE2	41:BX:38:GLU:OE2	2.07	0.54
1:CA:955:U:H2'	1:CA:956:U:O4'	2.07	0.54
1:CA:969:A:OP1	10:CJ:55:LYS:NZ	2.31	0.54
1:CA:1063:C:H3'	1:CA:1064:G:H2'	1.89	0.54
1:CA:1095:U:P	1:CA:1108:G:H1	2.30	0.54
2:CB:204:ASN:CG	2:CB:206:ASP:H	2.15	0.54
3:CC:5:ILE:HD11	14:CN:49:HIS:CE1	2.43	0.54
3:CC:20:SER:HB3	3:CC:40:ARG:HH22	1.73	0.54
4:CD:177:ASP:OD1	4:CD:180:GLY:HA3	2.06	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:CR:56:THR:HB	18:CR:58:LEU:HD13	1.87	0.54
21:CU:3:LYS:HB3	21:CU:14:TRP:CE3	2.42	0.54
22:CV:23:GLY:N	22:CV:24:ARG:HA	2.22	0.54
23:DA:2784:C:H1'	26:DE:37:ARG:HH12	1.72	0.54
43:DZ:146:ILE:HA	43:DZ:174:VAL:HG12	1.89	0.54
1:AA:736:C:H2'	1:AA:737:A:C8	2.42	0.54
6:AF:69:GLU:O	6:AF:72:VAL:HG12	2.06	0.54
23:BA:192:C:O2'	23:BA:802:A:N3	2.38	0.54
23:BA:1570:A:H5'	25:BD:36:PRO:HG3	1.89	0.54
23:BA:1786:A:H1'	23:BA:1938:A:N6	2.22	0.54
23:BA:2822:G:C8	56:BA:4416:HOH:O	2.61	0.54
56:BA:4349:HOH:O	33:BP:16:ARG:HG2	2.07	0.54
26:BE:97:LYS:N	26:BE:100:GLU:OE1	2.39	0.54
37:BT:118:ARG:HH11	37:BT:118:ARG:HG3	1.71	0.54
51:B7:34:ARG:NH1	51:B7:39:ARG:HG3	2.21	0.54
4:CD:12:CYS:HA	4:CD:19:LEU:HD23	1.89	0.54
4:CD:59:ARG:HA	4:CD:62:GLN:HB2	1.88	0.54
8:CH:120:THR:OG1	8:CH:123:GLU:HG3	2.08	0.54
17:CQ:86:GLU:O	17:CQ:90:ILE:HG12	2.07	0.54
23:DA:720:C:H2'	23:DA:721:C:H6	1.72	0.54
23:DA:2133:G:H2'	23:DA:2157:G:H22	1.73	0.54
30:DI:31:LEU:HD21	30:DI:38:LEU:HG	1.88	0.54
31:DN:96:GLU:H	31:DN:96:GLU:CD	2.15	0.54
32:DO:88:ASN:ND2	32:DO:90:GLN:H	2.06	0.54
34:DQ:39:PRO:HD3	34:DQ:99:PRO:HG3	1.89	0.54
1:AA:814:A:N7	1:AA:816:A:C4	2.75	0.54
1:AA:950:U:H4'	1:AA:971:G:N2	2.23	0.54
1:AA:1060:C:H1'	10:AJ:53:PRO:HD2	1.88	0.54
1:AA:1376:U:C5	7:AG:9:VAL:HA	2.37	0.54
1:AA:1459:C:C4	1:AA:1460:A:N6	2.69	0.54
4:AD:3:ARG:O	4:AD:5:ILE:HG12	2.08	0.54
9:AI:45:ALA:HB3	9:AI:48:GLU:OE1	2.07	0.54
10:AJ:43:ARG:HG2	10:AJ:67:THR:HG23	1.89	0.54
23:BA:1047:G:H2'	23:BA:1110:G:N2	2.22	0.54
23:BA:1364:G:C8	45:B1:3:LYS:HD3	2.41	0.54
23:BA:1412:A:N6	56:BA:4504:HOH:O	2.40	0.54
23:BA:1657:C:H2'	23:BA:1658:C:C6	2.43	0.54
23:BA:2016:U:H1'	49:B5:6:VAL:HG13	1.89	0.54
25:BD:17:THR:O	25:BD:211:ARG:NH2	2.37	0.54
28:BG:134:GLY:HA2	28:BG:156:ASP:HA	1.89	0.54
33:BP:82:GLY:HA2	33:BP:113:LYS:O	2.07	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:262:A:H2'	1:CA:263:A:C8	2.42	0.54
1:CA:448:A:H2'	1:CA:449:C:C6	2.42	0.54
1:CA:652:U:O4	1:CA:752:G:O2'	2.20	0.54
1:CA:1239:A:H2'	1:CA:1298:C:H42	1.72	0.54
4:CD:79:PHE:HD2	4:CD:80:GLU:N	2.04	0.54
6:CF:96:PRO:HB3	18:CR:30:ASP:CG	2.32	0.54
10:CJ:55:LYS:C	10:CJ:57:LYS:H	2.15	0.54
28:DG:121:ASN:HD21	28:DG:123:ASN:HB2	1.72	0.54
30:DI:72:LEU:O	30:DI:73:GLU:HB2	2.07	0.54
37:DT:65:LYS:HE2	37:DT:67:SER:HB2	1.90	0.54
1:AA:1249:C:N4	1:AA:1287:A:H5'	2.22	0.54
5:AE:57:LYS:O	5:AE:61:TYR:HD2	1.91	0.54
20:AT:97:ALA:HB3	20:AT:99:LEU:H	1.72	0.54
23:BA:646:A:H2'	23:BA:647:G:O4'	2.06	0.54
33:BP:100:LEU:HD12	33:BP:112:LEU:HD11	1.89	0.54
1:CA:473:G:H2'	1:CA:474:G:C8	2.43	0.54
5:CE:57:LYS:O	5:CE:61:TYR:HD2	1.90	0.54
22:CV:27:GLU:H	22:CV:44:TRP:HE1	1.54	0.54
23:DA:443:A:N7	27:DF:45:ARG:HG2	2.22	0.54
23:DA:1212:G:N2	23:DA:1236:G:O2'	2.39	0.54
23:DA:1639:U:C2'	23:DA:1640:C:H5"	2.36	0.54
23:DA:2171:A:H4'	23:DA:2172:U:OP1	2.07	0.54
43:DZ:68:PRO:O	43:DZ:91:LEU:HB2	2.07	0.54
1:AA:345:C:H4'	1:AA:346:G:N7	2.22	0.54
1:AA:1022:G:H2'	1:AA:1023:G:C8	2.43	0.54
1:AA:1365:G:H5"	9:AI:117:HIS:CE1	2.42	0.54
3:AC:26:LYS:HA	14:AN:36:PHE:HE2	1.72	0.54
8:AH:7:ALA:HB2	8:AH:85:ARG:HG3	1.88	0.54
23:BA:744:G:OP1	56:BA:4402:HOH:O	2.18	0.54
23:BA:1434:A:H61	23:BA:1558:A:H62	1.56	0.54
23:BA:2477:C:O2	53:B9:4:ARG:NH2	2.37	0.54
1:CA:1147:C:H2'	1:CA:1148:U:C6	2.43	0.54
1:CA:1292:U:H2'	1:CA:1293:G:C8	2.42	0.54
3:CC:52:LEU:HD13	3:CC:68:VAL:HG13	1.89	0.54
3:CC:131:ARG:HH22	5:CE:50:GLU:CD	2.16	0.54
5:CE:126:ARG:HA	5:CE:131:ILE:HD11	1.89	0.54
23:DA:188:G:H1	23:DA:208:C:H42	1.55	0.54
23:DA:641:C:O2'	23:DA:2350:C:OP1	2.19	0.54
23:DA:1503:U:H2'	23:DA:1504:C:C6	2.43	0.54
23:DA:2577:A:H5'	49:D5:3:LYS:HD2	1.90	0.54
24:DB:107:G:OP1	43:DZ:31:ARG:NH2	2.41	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:DG:58:GLN:HA	28:DG:61:ALA:HB3	1.90	0.54
39:DV:35:LEU:HB2	39:DV:57:VAL:HG13	1.88	0.54
1:AA:1258:G:O2'	1:AA:1259:C:O4'	2.25	0.54
23:BA:645:C:O2	23:BA:645:C:H2'	2.07	0.54
23:BA:674:G:H1'	27:BF:74:ARG:HD3	1.90	0.54
23:BA:2361:A:OP1	52:B8:27:THR:HG23	2.08	0.54
23:BA:2834:G:H5"	23:BA:2834:G:H8	1.72	0.54
36:BS:59:LYS:HB3	36:BS:60:GLY:HA2	1.89	0.54
1:CA:833:U:H2'	1:CA:834:C:C6	2.43	0.54
1:CA:1046:A:H3'	1:CA:1047:G:C8	2.43	0.54
19:CS:69:HIS:HD2	19:CS:74:PHE:CE1	2.26	0.54
20:CT:66:ALA:HB3	20:CT:72:LEU:HD22	1.90	0.54
23:DA:1026:U:HO2'	23:DA:1027:A:P	2.31	0.54
23:DA:1762:A:H8	23:DA:1762:A:O5'	1.91	0.54
23:DA:2131:G:H5"	23:DA:2132:U:H5"	1.88	0.54
23:DA:2727:G:O2'	32:DO:70:LYS:HE2	2.08	0.54
29:DH:24:VAL:HG13	29:DH:37:VAL:HG21	1.89	0.54
31:DN:42:TRP:HA	31:DN:48:MET:SD	2.48	0.54
37:DT:54:ARG:HA	37:DT:59:THR:HB	1.89	0.54
41:DX:2:LYS:HE2	41:DX:38:GLU:OE2	2.07	0.54
1:AA:1054:C:H4'	1:AA:1054:C:OP2	2.07	0.54
1:AA:1150:U:H2'	10:AJ:39:PRO:HG2	1.88	0.54
1:AA:1309:G:H5'	13:AM:78:ILE:HG12	1.90	0.54
3:AC:30:ARG:HA	3:AC:33:LEU:HD23	1.90	0.54
7:AG:69:VAL:HB	7:AG:100:ALA:HA	1.90	0.54
13:AM:78:ILE:O	13:AM:82:MET:N	2.40	0.54
16:AP:15:PRO:HB3	16:AP:17:TYR:HE1	1.73	0.54
18:AR:37:VAL:HG12	18:AR:78:LEU:HB3	1.90	0.54
23:BA:330:A:H2	23:BA:1210:A:H2'	1.72	0.54
23:BA:2575:C:H5'	26:BE:143:ASN:O	2.07	0.54
1:CA:102:G:H2'	1:CA:103:C:C6	2.43	0.54
6:CF:91:VAL:HG13	18:CR:72:ARG:HH22	1.72	0.54
23:DA:784:A:H5'	23:DA:785:G:OP1	2.07	0.54
23:DA:1364:G:OP1	45:D1:2:SER:HA	2.08	0.54
23:DA:2144:U:O2'	23:DA:2145:C:H2'	2.08	0.54
1:AA:125:U:O4	56:AA:1831:HOH:O	2.17	0.54
1:AA:170:U:O2'	1:AA:171:A:H5'	2.08	0.54
1:AA:397:A:H5"	1:AA:397:A:N3	2.23	0.54
1:AA:428:G:H4'	1:AA:429:U:O5'	2.08	0.54
1:AA:1223:C:P	19:AS:78:ARG:HH21	2.31	0.54
7:AG:105:VAL:HA	7:AG:108:ALA:HB3	1.89	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AK:66:LEU:HD21	11:AK:97:ALA:HB1	1.90	0.54
23:BA:628:G:H2'	23:BA:629:G:C8	2.43	0.54
23:BA:857:C:OP2	44:B0:77:ARG:NH2	2.40	0.54
56:BA:3816:HOH:O	34:BQ:119:ARG:HD2	2.07	0.54
1:CA:396:G:O2'	1:CA:398:C:OP1	2.17	0.54
17:CQ:53:LEU:HB3	17:CQ:82:MET:HE1	1.90	0.54
20:CT:43:LEU:O	20:CT:47:GLY:N	2.33	0.54
23:DA:628:G:H2'	23:DA:629:G:H8	1.72	0.54
23:DA:861:A:C2	23:DA:917:A:C4	2.95	0.54
23:DA:2236:C:H2'	23:DA:2237:G:H5'	1.90	0.54
23:DA:2477:C:O2	53:D9:4:ARG:NH2	2.36	0.54
31:DN:102:ALA:O	31:DN:106:MET:HG3	2.07	0.54
41:DX:31:HIS:CD2	41:DX:33:LYS:H	2.26	0.54
52:D8:34:TRP:CD1	52:D8:35:GLN:H	2.26	0.54
1:AA:346:G:H21	1:AA:347:G:C1'	2.21	0.54
1:AA:382:A:H2'	1:AA:383:A:C8	2.43	0.54
1:AA:406:G:H5"	4:AD:5:ILE:HG23	1.89	0.54
1:AA:960:U:H1'	1:AA:1222:G:O2'	2.07	0.54
1:AA:1245:A:H2'	1:AA:1246:C:O4'	2.08	0.54
23:BA:2025:C:P	56:BA:4207:HOH:O	2.65	0.54
25:BD:267:SER:C	25:BD:269:PHE:H	2.16	0.54
53:B9:14:CYS:HA	53:B9:27:CYS:HB2	1.89	0.54
1:CA:673:G:O3'	6:CF:87:ARG:NH2	2.41	0.54
23:DA:1430:C:H2'	23:DA:1431:U:H6	1.73	0.54
23:DA:2000:G:N7	56:DA:4190:HOH:O	2.33	0.54
23:DA:2262:U:O2'	23:DA:2263:C:H5'	2.08	0.54
1:AA:1377:A:N3	7:AG:7:ALA:HB1	2.22	0.53
1:AA:1387:G:H2'	1:AA:1388:C:C6	2.43	0.53
2:AB:149:LEU:HB3	2:AB:152:PHE:HB3	1.90	0.53
10:AJ:19:SER:HB3	10:AJ:91:PRO:HD3	1.89	0.53
23:BA:1043:C:H2'	23:BA:1044:G:O4'	2.08	0.53
1:CA:35:G:O2'	12:CL:118:SER:O	2.25	0.53
1:CA:404:U:H5'	4:CD:122:ARG:HD3	1.89	0.53
1:CA:544:G:C6	1:CA:545:C:C4	2.96	0.53
1:CA:839:U:H5"	1:CA:840:C:C5	2.31	0.53
1:CA:1151:A:N3	10:CJ:39:PRO:HG2	2.22	0.53
2:CB:24:TRP:CE3	2:CB:26:PRO:HA	2.43	0.53
8:CH:85:ARG:NE	8:CH:87:SER:O	2.41	0.53
13:CM:13:LYS:O	13:CM:45:VAL:HG23	2.08	0.53
21:CU:15:ARG:HG2	21:CU:17:THR:HG23	1.89	0.53
23:DA:277:C:H4'	23:DA:278:A:O5'	2.08	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:DG:27:ASN:HB3	28:DG:30:GLU:HG3	1.90	0.53
1:AA:359:U:H2'	1:AA:360:A:C8	2.43	0.53
1:AA:405:U:H3'	1:AA:406:G:H5'	1.89	0.53
1:AA:950:U:H2'	1:AA:951:G:C8	2.44	0.53
1:AA:1227:A:H8	19:AS:83:HIS:CG	2.27	0.53
1:AA:1386:G:H2'	1:AA:1387:G:C8	2.33	0.53
5:AE:57:LYS:HB3	5:AE:61:TYR:HE2	1.74	0.53
23:BA:1026:U:HO2'	23:BA:1027:A:P	2.27	0.53
28:BG:156:ASP:O	28:BG:157:ILE:HG13	2.07	0.53
30:BI:14:ASP:O	30:BI:17:GLN:HB3	2.08	0.53
1:CA:304:U:H2'	1:CA:305:G:C8	2.44	0.53
1:CA:777:A:H2	11:CK:119:CYS:HB3	1.72	0.53
1:CA:1003:G:N2	1:CA:1038:C:C4	2.77	0.53
1:CA:1277:C:O2'	1:CA:1279:A:H8	1.91	0.53
1:CA:1493:A:O2'	1:CA:1494:G:O5'	2.24	0.53
2:CB:211:ILE:HG22	2:CB:215:LEU:HG	1.89	0.53
7:CG:51:GLN:O	7:CG:55:GLY:HA2	2.08	0.53
12:CL:102:ARG:HB3	12:CL:108:ALA:O	2.08	0.53
23:DA:819:A:H2'	23:DA:820:A:H5'	1.89	0.53
23:DA:2108:C:H3'	23:DA:2108:C:H6	1.72	0.53
23:DA:2815:C:H2'	23:DA:2816:C:H6	1.73	0.53
1:AA:542:G:H2'	1:AA:543:C:H6	1.74	0.53
1:AA:590:C:H2'	1:AA:591:U:C6	2.40	0.53
1:AA:669:U:H2'	1:AA:670:G:H8	1.72	0.53
1:AA:1220:G:O2'	19:AS:52:TYR:HD2	1.91	0.53
1:AA:1238:A:H62	1:AA:1299:A:N6	1.95	0.53
1:AA:1318:A:O2'	19:AS:4:SER:HB3	2.08	0.53
3:AC:52:LEU:H	3:AC:70:VAL:HG22	1.74	0.53
5:AE:68:GLU:HG2	5:AE:70:PRO:HD3	1.90	0.53
23:BA:607:U:OP1	27:BF:102:PRO:HA	2.08	0.53
23:BA:1790:C:H5"	23:BA:1791:A:OP1	2.08	0.53
23:BA:2506:U:H2'	56:BA:3804:HOH:O	2.07	0.53
34:BQ:110:THR:HG23	34:BQ:113:GLN:OE1	2.07	0.53
36:BS:102:ALA:HA	36:BS:105:ALA:CB	2.38	0.53
1:CA:100:C:H2'	1:CA:101:A:C8	2.44	0.53
1:CA:999:C:N4	1:CA:1042:G:H1	2.04	0.53
3:CC:64:VAL:O	3:CC:99:VAL:HA	2.09	0.53
6:CF:27:GLN:HA	6:CF:30:LEU:HD12	1.89	0.53
8:CH:85:ARG:HG3	8:CH:85:ARG:HH11	1.74	0.53
23:DA:154:G:H5'	23:DA:154(A):C:OP2	2.08	0.53
23:DA:1876:A:H2'	23:DA:1877:A:C8	2.44	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:2064:C:H2'	23:DA:2065:C:C6	2.44	0.53
23:DA:2129:C:N3	23:DA:2160:G:C6	2.76	0.53
23:DA:2690:C:OP2	35:DR:14:SER:HB3	2.09	0.53
35:DR:37:THR:OG1	35:DR:40:LYS:HG3	2.08	0.53
36:DS:14:VAL:O	36:DS:18:ILE:HG12	2.09	0.53
43:DZ:54:HIS:ND1	43:DZ:101:PRO:HG3	2.23	0.53
1:AA:474:G:H2'	1:AA:475:G:H8	1.73	0.53
1:AA:943:U:H2'	1:AA:944:G:C8	2.43	0.53
1:AA:977:A:H1'	1:AA:981:U:H3	1.73	0.53
1:AA:1386:G:O2'	1:AA:1387:G:H5'	2.09	0.53
1:AA:1493:A:H4'	1:AA:1494:G:OP1	2.09	0.53
27:BF:53:THR:HG22	27:BF:56:GLU:HG3	1.91	0.53
28:BG:71:THR:OG1	28:BG:88:ILE:O	2.24	0.53
28:BG:106:LEU:HG	28:BG:111:LEU:HG	1.89	0.53
36:BS:83:LYS:C	36:BS:111:GLU:HG3	2.33	0.53
42:BY:28:LYS:CG	42:BY:40:GLU:HG2	2.38	0.53
1:CA:331:G:O4'	56:CA:1724:HOH:O	2.19	0.53
1:CA:828:A:H2'	1:CA:829:G:O4'	2.08	0.53
42:DY:2:ARG:HH11	42:DY:2:ARG:HA	1.73	0.53
1:AA:196:A:N3	1:AA:222:U:H1'	2.23	0.53
1:AA:801:U:H2'	1:AA:802:A:H8	1.74	0.53
1:AA:943:U:H2'	1:AA:944:G:H8	1.72	0.53
1:AA:986:A:H2'	1:AA:987:G:C8	2.44	0.53
1:AA:994:A:N6	1:AA:1215:G:O2'	2.41	0.53
2:AB:204:ASN:CG	2:AB:206:ASP:H	2.16	0.53
3:AC:68:VAL:HG12	3:AC:70:VAL:HG23	1.89	0.53
3:AC:185:GLY:H	3:AC:200:ALA:HB3	1.71	0.53
23:BA:234:C:H2'	23:BA:235:U:O4'	2.09	0.53
23:BA:1721:G:H5'	23:BA:1722:A:OP2	2.08	0.53
23:BA:2166:G:N2	23:BA:2172:U:O4	2.40	0.53
23:BA:2319:G:C2	36:BS:3:ARG:HA	2.44	0.53
23:BA:2438:U:O2'	23:BA:2440:C:OP1	2.24	0.53
1:CA:176:C:H2'	1:CA:177:C:C6	2.44	0.53
1:CA:181:G:O2'	1:CA:183:G:N7	2.41	0.53
7:CG:43:PHE:O	7:CG:47:CYS:N	2.42	0.53
21:CU:15:ARG:HB2	21:CU:15:ARG:NH1	2.21	0.53
23:DA:2305:A:H1'	28:DG:135:LEU:O	2.09	0.53
28:DG:16:ARG:HH21	28:DG:31:VAL:HB	1.74	0.53
28:DG:156:ASP:O	28:DG:157:ILE:HG13	2.07	0.53
52:D8:28:GLY:O	52:D8:36:LYS:NZ	2.41	0.53
1:AA:160:A:H2'	1:AA:161:A:O4'	2.08	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BP:8:PRO:HB2	33:BP:12:ALA:HB3	1.91	0.53
1:CA:103:C:H1'	1:CA:171:A:N1	2.23	0.53
1:CA:560:U:H4'	1:CA:561:U:O5'	2.08	0.53
1:CA:625:G:H2'	1:CA:626:U:H6	1.73	0.53
1:CA:1130:A:N6	1:CA:1144:G:N3	2.56	0.53
1:CA:1298:C:P	7:CG:114:ARG:HH22	2.31	0.53
1:CA:1504:G:P	1:CA:1504:G:H3'	2.49	0.53
12:CL:34:ARG:O	12:CL:61:THR:HG23	2.09	0.53
23:DA:244:A:C2	23:DA:255:A:C4	2.96	0.53
23:DA:249:C:O2	52:D8:12:LYS:NZ	2.40	0.53
23:DA:2892:A:H2'	23:DA:2893:G:H5"	1.89	0.53
28:DG:111:LEU:HD22	28:DG:114:ILE:HD11	1.91	0.53
38:DU:8:VAL:O	38:DU:12:ARG:HG3	2.07	0.53
1:AA:833:U:H2'	1:AA:834:C:C6	2.43	0.53
4:AD:129:ASN:HD21	4:AD:145:GLU:N	2.07	0.53
7:AG:65:ALA:HB1	7:AG:127:ALA:HB3	1.89	0.53
23:BA:154:G:H5'	23:BA:154(A):C:OP2	2.09	0.53
23:BA:184:C:H2'	23:BA:185:U:H6	1.74	0.53
23:BA:277:C:H4'	23:BA:278:A:O5'	2.09	0.53
23:BA:2784:C:H1'	26:BE:37:ARG:HH12	1.72	0.53
25:BD:2:ALA:N	25:BD:200:ASP:OD2	2.42	0.53
28:BG:125:PHE:HB3	28:BG:166:ASP:CG	2.34	0.53
30:BI:61:ARG:HH11	30:BI:61:ARG:HA	1.72	0.53
31:BN:56:ASN:H	31:BN:125:GLY:HA3	1.73	0.53
1:CA:583:A:H2'	1:CA:584:G:O4'	2.09	0.53
1:CA:954:G:H21	1:CA:1227:A:H62	1.57	0.53
1:CA:1132:C:H2'	1:CA:1133:G:O4'	2.09	0.53
23:DA:271(F):C:H2'	23:DA:271(G):C:H6	1.73	0.53
23:DA:386:G:H4'	23:DA:387:U:OP2	2.09	0.53
23:DA:1406:U:H2'	23:DA:1407:C:C6	2.42	0.53
27:DF:150:GLY:HA2	27:DF:172:TRP:CD2	2.44	0.53
31:DN:62:VAL:HG12	31:DN:67:LEU:HD22	1.91	0.53
1:AA:79:G:O6	1:AA:90:U:O4	2.26	0.53
1:AA:913:A:H4'	1:AA:914:A:O5'	2.09	0.53
1:AA:1005:A:N6	1:AA:1024:G:H4'	2.23	0.53
1:AA:1132:C:H2'	1:AA:1133:G:O4'	2.08	0.53
1:AA:1316:G:H4'	14:AN:18:VAL:HG13	1.91	0.53
3:AC:130:VAL:O	3:AC:134:ILE:HG13	2.09	0.53
4:AD:64:LEU:HD23	4:AD:203:VAL:HG21	1.90	0.53
10:AJ:5:ARG:N	10:AJ:99:LYS:O	2.41	0.53
20:AT:41:ILE:HG22	20:AT:91:LEU:HD12	1.90	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BA:1022:G:N7	31:BN:66:LYS:HE2	2.23	0.53
23:BA:1038:C:N4	23:BA:1117:G:H1	2.03	0.53
23:BA:1531:C:H42	23:BA:1538:G:H1	1.57	0.53
23:BA:2272:U:H5"	23:BA:2273:A:OP1	2.09	0.53
28:BG:48:GLU:O	28:BG:51:ARG:N	2.42	0.53
31:BN:96:GLU:CD	31:BN:96:GLU:H	2.17	0.53
36:BS:3:ARG:HG3	36:BS:4:LEU:N	2.22	0.53
43:BZ:54:HIS:ND1	43:BZ:101:PRO:HG3	2.24	0.53
43:BZ:68:PRO:O	43:BZ:91:LEU:HB2	2.08	0.53
1:CA:1142:G:H3'	1:CA:1143:G:C8	2.41	0.53
1:CA:1192:C:N3	1:CA:1193:G:H1'	2.24	0.53
1:CA:1357:A:H3'	1:CA:1358:U:C6	2.43	0.53
23:DA:1108:U:O2'	23:DA:1109:C:O5'	2.27	0.53
23:DA:1899:G:N3	23:DA:1899:G:H2'	2.24	0.53
30:DI:98:ALA:O	30:DI:101:LEU:N	2.42	0.53
1:AA:102:G:H2'	1:AA:103:C:C6	2.44	0.53
1:AA:625:G:H2'	1:AA:626:U:H6	1.74	0.53
1:AA:982:U:O2	1:AA:1222:G:N1	2.41	0.53
10:AJ:10:GLY:N	10:AJ:16:LEU:HD12	2.23	0.53
23:BA:588:U:H2'	23:BA:589:C:C6	2.43	0.53
23:BA:2114:A:H2'	23:BA:2115:G:O4'	2.08	0.53
23:BA:2311:A:O2'	23:BA:2312:U:O4'	2.25	0.53
23:BA:2805:G:H2'	23:BA:2807:G:H8	1.74	0.53
27:BF:150:GLY:HA2	27:BF:172:TRP:CD2	2.43	0.53
1:CA:437:U:O3'	4:CD:125:HIS:NE2	2.36	0.53
1:CA:1009:G:N2	1:CA:1020:U:O2'	2.41	0.53
1:CA:1014:A:H5'	19:CS:14:HIS:ND1	2.24	0.53
3:CC:12:LEU:HD11	14:CN:51:GLY:CA	2.39	0.53
3:CC:33:LEU:HG	3:CC:34:LEU:N	2.23	0.53
23:DA:813:U:H2'	23:DA:814:C:C6	2.44	0.53
23:DA:1434:A:H61	23:DA:1558:A:N6	2.06	0.53
23:DA:2115:G:O2'	23:DA:2166:G:N2	2.42	0.53
23:DA:2144:U:H1'	23:DA:2147:G:H1	1.72	0.53
25:DD:20:ASP:OD2	25:DD:22:SER:OG	2.20	0.53
25:DD:254:THR:O	25:DD:254:THR:OG1	2.21	0.53
27:DF:107:LYS:HE3	27:DF:205:ARG:O	2.08	0.53
30:DI:14:ASP:O	30:DI:17:GLN:HB3	2.09	0.53
42:DY:23:ARG:NH1	42:DY:23:ARG:HB2	2.23	0.53
42:DY:51:VAL:HG22	42:DY:58:GLY:H	1.73	0.53
44:D0:53:MET:HG3	44:D0:59:LEU:CD2	2.38	0.53
1:AA:999:C:H2'	1:AA:1000:U:C6	2.44	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1039:C:H2'	1:AA:1040:U:C6	2.44	0.53
1:AA:1067:A:H4'	1:AA:1387:G:O2'	2.09	0.53
1:AA:1160:G:C5	1:AA:1161:C:H5	2.28	0.53
1:AA:1201:A:H4'	1:AA:1202:G:O5'	2.09	0.53
3:AC:113:ALA:HB3	3:AC:114:PRO:HD3	1.89	0.53
12:AL:5:PRO:HB2	12:AL:10:LEU:HD11	1.89	0.53
23:BA:1031:G:H21	53:B9:36:GLN:HE22	1.56	0.53
23:BA:1899:G:H2'	23:BA:1899:G:N3	2.22	0.53
25:BD:44:ASN:OD1	25:BD:46:GLN:HB2	2.09	0.53
34:BQ:12:GLN:HG2	34:BQ:73:PRO:HD2	1.91	0.53
1:CA:1131:G:H2'	1:CA:1132:C:C6	2.44	0.53
2:CB:98:LEU:HB2	2:CB:101:MET:HE3	1.90	0.53
3:CC:122:GLU:HA	3:CC:125:GLU:OE2	2.08	0.53
9:CI:4:TYR:CD1	9:CI:87:GLN:HG3	2.44	0.53
23:DA:271(E):U:H2'	23:DA:271(F):C:H6	1.72	0.53
23:DA:638:G:H2'	23:DA:639:U:C6	2.43	0.53
23:DA:1593:G:H2'	23:DA:1594:G:C8	2.44	0.53
28:DG:134:GLY:HA2	28:DG:156:ASP:HA	1.91	0.53
47:D3:4:LEU:O	47:D3:36:VAL:HA	2.08	0.53
1:AA:943:U:H1'	9:AI:124:GLN:OE1	2.08	0.52
6:AF:41:GLU:O	6:AF:43:LEU:HD12	2.10	0.52
8:AH:6:ILE:HB	8:AH:85:ARG:HH12	1.72	0.52
8:AH:112:LEU:HA	8:AH:134:ILE:HG12	1.90	0.52
13:AM:97:PRO:HB3	13:AM:101:GLN:NE2	2.23	0.52
23:BA:226:G:H21	23:BA:228:A:N6	2.05	0.52
23:BA:974:G:O6	56:BA:4102:HOH:O	2.19	0.52
23:BA:2144:U:O2'	23:BA:2145:C:H2'	2.08	0.52
23:BA:2557:G:H2'	23:BA:2558:C:C6	2.44	0.52
1:CA:428:G:H4'	1:CA:429:U:O5'	2.09	0.52
1:CA:1107:C:C4	1:CA:1108:G:C8	2.97	0.52
1:CA:1142:G:H2'	1:CA:1143:G:O4'	2.08	0.52
1:CA:1353:G:H2'	1:CA:1354:C:C6	2.44	0.52
9:CI:95:LYS:O	9:CI:99:LEU:N	2.34	0.52
13:CM:31:LYS:HA	13:CM:34:LEU:HB2	1.90	0.52
21:CU:9:ARG:O	21:CU:13:ILE:HG13	2.09	0.52
28:DG:106:LEU:HG	28:DG:111:LEU:HG	1.91	0.52
1:AA:323:U:O3'	20:AT:22:ARG:HD3	2.10	0.52
1:AA:984:C:H2'	1:AA:985:C:H6	1.74	0.52
1:AA:1016:A:H8	1:AA:1016:A:O5'	1.92	0.52
4:AD:101:LEU:HD23	4:AD:121:VAL:HG11	1.91	0.52
7:AG:12:LEU:HB2	7:AG:21:VAL:HG13	1.92	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AG:42:ILE:O	7:AG:46:ALA:N	2.39	0.52
23:BA:2712:U:O2'	23:BA:2713:A:H5'	2.09	0.52
25:BD:232:PRO:HA	56:BD:406:HOH:O	2.07	0.52
26:BE:111:ARG:HG3	26:BE:160:TYR:CD1	2.44	0.52
1:CA:1192:C:N4	1:CA:1193:G:N3	2.56	0.52
7:CG:116:ALA:HA	7:CG:119:ARG:HG3	1.90	0.52
27:DF:185:ASP:HA	27:DF:188:ARG:HD3	1.90	0.52
35:DR:81:ASP:O	35:DR:85:PRO:HG2	2.09	0.52
42:DY:28:LYS:CG	42:DY:40:GLU:HG2	2.39	0.52
1:AA:21:G:H2'	1:AA:22:G:C8	2.45	0.52
1:AA:325:A:OP2	20:AT:70:SER:OG	2.25	0.52
1:AA:1332:A:O2'	1:AA:1333:A:H5'	2.10	0.52
7:AG:41:ARG:O	7:AG:45:ASP:N	2.43	0.52
23:BA:1816:G:H1	25:BD:35:LYS:HD3	1.73	0.52
23:BA:2031:A:C6	23:BA:2498:C:H1'	2.45	0.52
23:BA:2751:G:C5	29:BH:2:SER:N	2.78	0.52
36:BS:14:VAL:O	36:BS:18:ILE:HG12	2.09	0.52
40:BW:43:GLY:O	40:BW:47:VAL:HG23	2.10	0.52
48:B4:18:CYS:SG	48:B4:39:CYS:HB2	2.49	0.52
1:CA:818:G:O2'	1:CA:819:A:H5'	2.10	0.52
2:CB:201:ILE:HG21	2:CB:214:ILE:HG21	1.90	0.52
18:CR:37:VAL:HG12	18:CR:78:LEU:HB3	1.91	0.52
23:DA:1688:U:O2	23:DA:1700:A:H5'	2.09	0.52
23:DA:1877:A:H5'	23:DA:1878:G:OP2	2.09	0.52
23:DA:2751:G:C5	29:DH:2:SER:N	2.77	0.52
36:DS:59:LYS:HB3	36:DS:60:GLY:HA2	1.90	0.52
43:DZ:52:SER:OG	43:DZ:53:ILE:N	2.42	0.52
44:D0:53:MET:HG3	44:D0:59:LEU:HD23	1.92	0.52
51:D7:8:ASN:C	51:D7:8:ASN:OD1	2.52	0.52
1:AA:3:G:O2'	1:AA:4:U:OP2	2.19	0.52
1:AA:473:G:H2'	1:AA:474:G:H8	1.75	0.52
1:AA:1085:U:H3'	1:AA:1086:U:C5	2.43	0.52
1:AA:1106:G:C5	1:AA:1107:C:C5	2.97	0.52
12:AL:34:ARG:O	12:AL:61:THR:HG23	2.09	0.52
23:BA:1779:U:H6	23:BA:1784:A:H62	1.57	0.52
23:BA:2133:G:H2'	23:BA:2157:G:H22	1.75	0.52
52:B8:28:GLY:O	52:B8:36:LYS:NZ	2.43	0.52
1:CA:1133:G:H2'	1:CA:1134:G:C8	2.44	0.52
5:CE:68:GLU:HG2	5:CE:70:PRO:HD3	1.92	0.52
9:CI:11:LYS:O	9:CI:12:GLU:HB2	2.09	0.52
9:CI:46:ALA:O	9:CI:49:PRO:HD2	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:1429:G:H2'	23:DA:1430:C:C6	2.44	0.52
23:DA:1946:U:H2'	23:DA:1947:C:C6	2.44	0.52
23:DA:2198:A:O5'	30:DI:33:ARG:NH2	2.42	0.52
23:DA:2206:G:H5'	23:DA:2207:G:N7	2.24	0.52
23:DA:2227:A:OP2	56:DA:3995:HOH:O	2.18	0.52
23:DA:2309:A:N6	23:DA:2310:A:N1	2.57	0.52
25:DD:10:THR:OG1	25:DD:13:ARG:HB2	2.10	0.52
27:DF:108:LYS:O	27:DF:112:MET:HG3	2.09	0.52
1:AA:1335:C:H4'	1:AA:1336:C:C5	2.44	0.52
3:AC:34:LEU:HA	3:AC:37:GLN:HB2	1.91	0.52
8:AH:9:MET:HG3	8:AH:26:VAL:HG11	1.92	0.52
23:BA:1815:A:OP2	25:BD:54:ARG:NH2	2.40	0.52
23:BA:2014:A:OP1	56:BA:4833:HOH:O	2.18	0.52
23:BA:2815:C:H5'	49:B5:29:THR:HG21	1.90	0.52
23:BA:2887:U:H2'	23:BA:2888:C:H6	1.74	0.52
29:BH:24:VAL:HG13	29:BH:37:VAL:HG21	1.92	0.52
1:CA:322:C:H4'	20:CT:23:ARG:HD2	1.90	0.52
7:CG:77:SER:HA	7:CG:86:GLN:HA	1.91	0.52
8:CH:124:ALA:HB1	8:CH:129:VAL:O	2.10	0.52
23:DA:542:C:H2'	23:DA:543:C:C6	2.44	0.52
23:DA:686:G:O6	51:D7:12:ARG:HD2	2.09	0.52
24:DB:52:A:O2'	24:DB:53:A:N3	2.38	0.52
36:DS:56:LEU:O	36:DS:58:LEU:HD23	2.09	0.52
44:D0:51:VAL:N	44:D0:62:LEU:HD12	2.25	0.52
52:D8:39:LYS:HA	52:D8:42:ARG:NH1	2.24	0.52
1:AA:375:U:H4'	16:AP:17:TYR:CE2	2.44	0.52
1:AA:583:A:H2'	1:AA:584:G:O4'	2.09	0.52
1:AA:940:C:N4	1:AA:1343:G:H1	2.06	0.52
1:AA:1131:G:N2	1:AA:1143:G:O2'	2.42	0.52
10:AJ:47:PHE:CE1	10:AJ:65:LEU:HB2	2.45	0.52
12:AL:102:ARG:HB3	12:AL:108:ALA:O	2.09	0.52
18:AR:59:SER:OG	18:AR:60:ALA:N	2.42	0.52
23:BA:2567:G:H2'	23:BA:2568:C:C6	2.44	0.52
26:BE:170:LEU:HB3	26:BE:184:VAL:HG22	1.90	0.52
35:BR:37:THR:OG1	35:BR:40:LYS:HG3	2.09	0.52
42:BY:23:ARG:NH1	42:BY:23:ARG:HB2	2.24	0.52
43:BZ:92:SER:O	43:BZ:130:PRO:HG2	2.10	0.52
1:CA:110:C:H2'	1:CA:111:G:O4'	2.10	0.52
1:CA:737:A:H2'	1:CA:738:C:C6	2.45	0.52
1:CA:1362:C:H2'	1:CA:1363:C:H5"	1.91	0.52
2:CB:18:GLY:HA2	2:CB:42:ILE:HG13	1.90	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:CM:91:ARG:HB2	13:CM:98:VAL:HG13	1.90	0.52
23:DA:263:C:H2'	23:DA:264:C:O4'	2.09	0.52
23:DA:1531:C:H42	23:DA:1538:G:H1	1.56	0.52
23:DA:1607:C:H4'	23:DA:1608:A:O5'	2.10	0.52
23:DA:1858:G:H2'	23:DA:1883:G:H22	1.75	0.52
23:DA:2206:G:H2'	23:DA:2207:G:C2	2.45	0.52
23:DA:2238:G:N7	56:DA:3622:HOH:O	2.34	0.52
24:DB:113:G:H2'	24:DB:114:C:C6	2.44	0.52
28:DG:135:LEU:HD13	28:DG:155:MET:HE3	1.92	0.52
29:DH:71:LEU:HA	29:DH:74:ASN:HB2	1.92	0.52
37:DT:55:ASN:N	37:DT:59:THR:HG22	2.25	0.52
1:AA:38:G:C2	1:AA:397:A:C2	2.98	0.52
1:AA:652:U:O4	1:AA:752:G:O2'	2.21	0.52
1:AA:801:U:H2'	1:AA:802:A:C8	2.44	0.52
1:AA:947:G:N2	1:AA:1235:U:H1'	2.25	0.52
1:AA:1220:G:H1'	19:AS:52:TYR:HD2	1.72	0.52
4:AD:79:PHE:HD2	4:AD:80:GLU:N	2.01	0.52
23:BA:975(A):G:H1'	23:BA:990:A:C2	2.44	0.52
1:CA:20:U:H2'	1:CA:21:G:O4'	2.10	0.52
1:CA:940:C:N4	1:CA:1343:G:H1	2.07	0.52
23:DA:1721:G:H5'	23:DA:1722:A:OP2	2.10	0.52
23:DA:2298:A:H2'	23:DA:2299:G:O4'	2.09	0.52
31:DN:99:LEU:O	31:DN:103:VAL:HG23	2.10	0.52
33:DP:148:LEU:HD23	33:DP:148:LEU:H	1.74	0.52
34:DQ:57:HIS:HD2	34:DQ:117:ALA:HB2	1.75	0.52
37:DT:99:LEU:O	37:DT:101:PHE:N	2.42	0.52
42:DY:43:ASN:OD1	42:DY:65:ALA:HB3	2.09	0.52
9:AI:95:LYS:O	9:AI:99:LEU:HG	2.10	0.52
23:BA:725:G:C6	23:BA:726:G:N1	2.78	0.52
23:BA:1503:U:H2'	23:BA:1504:C:C6	2.44	0.52
23:BA:2102:U:O2	23:BA:2187:G:O6	2.27	0.52
23:BA:2854:G:H2'	23:BA:2855:C:C6	2.45	0.52
24:BB:105:A:OP1	43:BZ:72:ARG:NH1	2.43	0.52
1:CA:160:A:H2'	1:CA:161:A:O4'	2.10	0.52
1:CA:1004:A:H2'	1:CA:1036:G:C6	2.44	0.52
1:CA:1128:C:H5	1:CA:1139:G:HO2'	1.54	0.52
4:CD:134:ASP:OD2	4:CD:135:LEU:HD13	2.10	0.52
9:CI:17:VAL:HG22	9:CI:63:ILE:HG23	1.91	0.52
23:DA:934:G:H2'	23:DA:935:C:C6	2.45	0.52
23:DA:2273:A:H2'	23:DA:2274:A:C8	2.45	0.52
1:AA:517:G:N2	1:AA:531:U:H5'	2.25	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:528:C:N4	12:AL:49:ASN:OD1	2.43	0.52
1:AA:622:A:OP2	1:AA:623:C:N4	2.39	0.52
1:AA:1034:G:H2'	1:AA:1034:G:N3	2.24	0.52
1:AA:1097:C:H1'	1:AA:1170:A:H1'	1.91	0.52
1:AA:1117:G:H3'	1:AA:1118:C:H5	1.75	0.52
5:AE:32:VAL:HB	5:AE:58:ALA:HB1	1.92	0.52
23:BA:795:C:H2'	23:BA:796:C:C6	2.45	0.52
23:BA:863:A:H2'	23:BA:864:G:H8	1.75	0.52
28:BG:111:LEU:HD22	28:BG:114:ILE:HD11	1.91	0.52
29:BH:40:GLU:OE2	29:BH:60:ARG:NH1	2.42	0.52
38:BU:74:LEU:HD11	38:BU:110:VAL:HG13	1.92	0.52
39:BV:16:PRO:HA	39:BV:96:ILE:HG22	1.91	0.52
1:CA:193:C:H2'	1:CA:194:C:C6	2.45	0.52
1:CA:538:G:OP2	12:CL:115:LYS:HB2	2.10	0.52
1:CA:673:G:H2'	1:CA:674:G:H8	1.70	0.52
1:CA:735:C:H2'	1:CA:736:C:H6	1.75	0.52
1:CA:1238:A:OP2	1:CA:1300:G:N2	2.42	0.52
1:CA:1277:C:H2'	1:CA:1278:U:H5'	1.91	0.52
3:CC:18:TRP:CD1	14:CN:54:PRO:HA	2.45	0.52
23:DA:234:C:H2'	23:DA:235:U:O4'	2.10	0.52
23:DA:1474:C:N4	56:DA:3952:HOH:O	2.42	0.52
23:DA:2820:A:C5	35:DR:4:LEU:HD11	2.45	0.52
25:DD:172:TYR:CD1	25:DD:186:HIS:HA	2.45	0.52
36:DS:58:LEU:HD12	36:DS:65:VAL:HG13	1.91	0.52
45:D1:23:LYS:HG2	45:D1:29:GLY:HA3	1.92	0.52
1:AA:152:A:N6	1:AA:170:U:N3	2.57	0.52
1:AA:993:G:C8	1:AA:1213:A:N6	2.78	0.52
1:AA:1254:C:O4'	1:AA:1356:G:H5"	2.10	0.52
8:AH:85:ARG:HG3	8:AH:85:ARG:HH11	1.75	0.52
23:BA:217:G:OP2	56:BA:3945:HOH:O	2.19	0.52
23:BA:271(K):U:O2'	23:BA:271(L):U:OP1	2.27	0.52
23:BA:1048:A:O2'	23:BA:1049:C:OP2	2.25	0.52
23:BA:2250:G:O2'	23:BA:2496:C:OP1	2.20	0.52
1:CA:473:G:H2'	1:CA:474:G:H8	1.74	0.52
1:CA:626:U:C2	1:CA:627:G:C8	2.97	0.52
1:CA:1084:G:H5"	1:CA:1086:U:C5	2.44	0.52
5:CE:57:LYS:HB3	5:CE:61:TYR:HE2	1.74	0.52
23:DA:1309:G:P	51:D7:9:ARG:HD3	2.50	0.52
23:DA:1833:U:H2'	23:DA:1834:U:H6	1.75	0.52
29:DH:139:GLN:HG3	29:DH:140:LYS:N	2.25	0.52
1:AA:947:G:N1	1:AA:1234:C:O2	2.37	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1014:A:C6	1:AA:1015:A:N6	2.78	0.51
1:AA:1130:A:N6	1:AA:1144:G:N3	2.57	0.51
1:AA:1251:A:H4'	1:AA:1370:G:H5'	1.93	0.51
1:AA:1368:G:H5"	9:AI:112:LYS:HB3	1.93	0.51
3:AC:118:GLN:HA	3:AC:187:ALA:HB3	1.92	0.51
16:AP:16:HIS:C	16:AP:17:TYR:HD1	2.18	0.51
23:BA:1005:C:O2'	31:BN:28:THR:HG21	2.10	0.51
27:BF:103:LYS:HA	27:BF:106:ARG:HG3	1.93	0.51
28:BG:16:ARG:HH21	28:BG:31:VAL:HB	1.74	0.51
31:BN:102:ALA:O	31:BN:106:MET:HG3	2.09	0.51
1:CA:191:G:N2	20:CT:103:GLY:HA2	2.20	0.51
1:CA:1234:C:H1'	1:CA:1364:U:O2	2.10	0.51
1:CA:1291:G:H4'	9:CI:38:GLN:O	2.09	0.51
9:CI:4:TYR:CE2	9:CI:88:TYR:HD1	2.27	0.51
13:CM:97:PRO:HB3	13:CM:101:GLN:CD	2.36	0.51
18:CR:66:LEU:O	18:CR:70:ILE:HG13	2.09	0.51
20:CT:73:HIS:C	20:CT:74:LYS:HG2	2.36	0.51
23:DA:323:G:C8	27:DF:171:PRO:HG3	2.45	0.51
23:DA:493:G:H2'	23:DA:494:G:O4'	2.10	0.51
23:DA:1165:U:H2'	23:DA:1166:C:C6	2.45	0.51
23:DA:1466:G:HO2'	23:DA:1546:C:HO2'	1.49	0.51
27:DF:53:THR:HG22	27:DF:56:GLU:HG3	1.92	0.51
29:DH:43:VAL:HG22	29:DH:52:VAL:HG22	1.92	0.51
32:DO:25:LEU:HD12	32:DO:38:VAL:HG12	1.92	0.51
50:D6:34:LEU:HD22	50:D6:36:LEU:HD11	1.91	0.51
1:AA:185:A:H2'	1:AA:186:C:C6	2.45	0.51
1:AA:1360:A:H2'	1:AA:1360:A:N3	2.25	0.51
1:AA:1490:C:H2'	1:AA:1491:G:O4'	2.10	0.51
6:AF:97:PHE:N	18:AR:30:ASP:OD1	2.36	0.51
7:AG:20:ASP:HB3	7:AG:23:VAL:HG23	1.91	0.51
23:BA:566:U:H5"	33:BP:29:LYS:HE3	1.92	0.51
23:BA:587:C:O2	33:BP:33:ARG:NH2	2.32	0.51
23:BA:720:C:H2'	23:BA:721:C:H6	1.75	0.51
23:BA:2163:C:OP2	23:BA:2164:C:N4	2.42	0.51
31:BN:47:ALA:HB2	31:BN:112:LEU:HD11	1.91	0.51
35:BR:36:THR:HG22	35:BR:37:THR:H	1.74	0.51
43:BZ:102:LEU:HD13	43:BZ:123:ASP:HA	1.92	0.51
46:B2:44:LEU:HG	46:B2:45:SER:O	2.10	0.51
1:CA:359:U:H2'	1:CA:360:A:H8	1.74	0.51
1:CA:626:U:H2'	1:CA:627:G:H8	1.74	0.51
1:CA:925:G:H5"	1:CA:926:G:OP1	2.09	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1182:G:H4'	1:CA:1183:A:C5'	2.41	0.51
4:CD:110:PHE:N	4:CD:110:PHE:CD1	2.77	0.51
23:DA:9:U:O2'	23:DA:10:G:OP1	2.28	0.51
23:DA:2582:G:C2	23:DA:2583:G:C8	2.98	0.51
25:DD:267:SER:C	25:DD:269:PHE:H	2.18	0.51
43:DZ:111:VAL:C	43:DZ:113:ALA:N	2.68	0.51
49:D5:41:PRO:O	49:D5:44:THR:OG1	2.28	0.51
1:AA:176:C:H2'	1:AA:177:C:C6	2.45	0.51
1:AA:266:G:H5"	1:AA:267:C:C5	2.45	0.51
1:AA:828:A:H2'	1:AA:829:G:O4'	2.10	0.51
1:AA:1133:G:H1	1:AA:1141:C:H42	1.57	0.51
1:AA:1442(B):A:O2'	1:AA:1443:G:OP2	2.26	0.51
4:AD:104:VAL:HA	4:AD:107:ARG:HB2	1.93	0.51
23:BA:2275:C:H6	23:BA:2275:C:H5'	1.75	0.51
23:BA:2305:A:H2'	23:BA:2306:C:O4'	2.10	0.51
23:BA:2727:G:O2'	32:BO:70:LYS:HE2	2.10	0.51
25:BD:142:VAL:HG23	25:BD:193:VAL:HA	1.92	0.51
28:BG:27:ASN:HB3	28:BG:30:GLU:HG3	1.93	0.51
32:BO:102:VAL:HB	32:BO:106:LEU:HD12	1.91	0.51
34:BQ:29:PHE:N	34:BQ:105:GLU:OE2	2.40	0.51
42:BY:76:CYS:CB	42:BY:79:CYS:HB2	2.35	0.51
3:CC:13:GLY:HA3	14:CN:57:ARG:HH22	1.75	0.51
4:CD:110:PHE:N	4:CD:110:PHE:HD1	2.09	0.51
20:CT:33:ILE:O	20:CT:37:SER:OG	2.20	0.51
20:CT:54:LYS:HA	20:CT:57:ARG:CZ	2.40	0.51
23:DA:1547:C:H2'	23:DA:1548:C:H6	1.75	0.51
23:DA:2079:U:OP1	45:D1:21:ARG:NH2	2.42	0.51
23:DA:2107:C:H41	23:DA:2108:C:H42	1.58	0.51
23:DA:2734:A:H2'	23:DA:2735:G:O4'	2.11	0.51
25:DD:175:LEU:HD12	25:DD:185:VAL:HG21	1.91	0.51
33:DP:26:GLY:O	33:DP:28:GLY:N	2.44	0.51
36:DS:58:LEU:HB2	36:DS:59:LYS:HB2	1.92	0.51
1:AA:737:A:H2'	1:AA:738:C:C6	2.46	0.51
1:AA:1200:C:H4'	1:AA:1201:A:H5"	1.92	0.51
1:AA:1207:G:H3'	1:AA:1208:C:H6	1.75	0.51
23:BA:2131:G:H8	23:BA:2131:G:OP2	1.94	0.51
23:BA:2162:G:H4'	23:BA:2172:U:O2'	2.10	0.51
23:BA:2317:C:H2'	23:BA:2318:G:H5'	1.93	0.51
28:BG:41:GLN:NE2	28:BG:154:GLY:O	2.39	0.51
47:B3:43:ILE:O	47:B3:47:VAL:HG23	2.11	0.51
1:CA:37:U:O2'	1:CA:500:G:H4'	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:391:G:O3'	16:CP:8:ARG:NH2	2.44	0.51
1:CA:406:G:N3	4:CD:119:GLN:NE2	2.57	0.51
1:CA:971:G:P	1:CA:1231:G:H21	2.34	0.51
1:CA:1057:G:O3'	3:CC:197:GLY:HA3	2.11	0.51
1:CA:1071:C:H2'	1:CA:1072:G:C8	2.44	0.51
1:CA:1092:A:C6	1:CA:1183:A:H2	2.28	0.51
1:CA:1133:G:H1	1:CA:1141:C:H42	1.57	0.51
9:CI:18:PHE:HB3	9:CI:20:ARG:NE	2.21	0.51
14:CN:7:ILE:HA	14:CN:23:ARG:HE	1.74	0.51
23:DA:57:C:H2'	23:DA:58:G:O4'	2.11	0.51
23:DA:903:C:H2'	23:DA:904:C:C6	2.44	0.51
23:DA:2126:A:H1'	23:DA:2127:G:OP2	2.10	0.51
23:DA:2815:C:H5'	49:D5:29:THR:HG21	1.92	0.51
34:DQ:42:ILE:HD13	34:DQ:97:VAL:HG21	1.91	0.51
43:DZ:101:PRO:O	43:DZ:102:LEU:HD12	2.10	0.51
1:AA:636:U:H5'	17:AQ:2:PRO:HG3	1.91	0.51
1:AA:1053:G:C8	1:AA:1200:C:C5	2.98	0.51
1:AA:1172:C:O5'	1:AA:1172:C:H6	1.94	0.51
1:AA:1179:A:O2'	1:AA:1180:A:O5'	2.28	0.51
2:AB:201:ILE:HG21	2:AB:214:ILE:HG21	1.92	0.51
4:AD:12:CYS:HA	4:AD:19:LEU:HD23	1.91	0.51
8:AH:57:PRO:O	8:AH:58:TYR:HD1	1.92	0.51
10:AJ:50:ILE:HB	14:AN:41:ARG:HE	1.76	0.51
23:BA:829:A:N7	23:BA:2248:C:H5'	2.25	0.51
23:BA:958:U:H5"	34:BQ:14:ARG:HD3	1.92	0.51
23:BA:1720:U:H2'	23:BA:1721:G:O4'	2.11	0.51
23:BA:1891:G:N7	56:BA:4696:HOH:O	2.32	0.51
40:BW:14:PRO:HG2	40:BW:78:GLU:HG2	1.93	0.51
42:BY:23:ARG:HB2	42:BY:23:ARG:HH11	1.76	0.51
1:CA:499:A:H4'	1:CA:500:G:H5'	1.92	0.51
1:CA:1063:C:H5"	1:CA:1064:G:H3'	1.93	0.51
1:CA:1107:C:C5'	3:CC:173:VAL:H	2.23	0.51
1:CA:1190:G:OP1	3:CC:5:ILE:HG22	2.11	0.51
6:CF:40:VAL:HG22	6:CF:42:GLU:H	1.75	0.51
9:CI:112:LYS:HA	9:CI:119:ALA:CB	2.37	0.51
13:CM:59:TYR:O	13:CM:63:THR:HB	2.11	0.51
16:CP:15:PRO:HB3	16:CP:17:TYR:HE1	1.76	0.51
20:CT:56:MET:HE3	20:CT:84:LEU:HD22	1.93	0.51
23:DA:1140:C:O3'	31:DN:25:ARG:NH1	2.43	0.51
23:DA:2163:C:OP2	23:DA:2164:C:N4	2.41	0.51
23:DA:2286:A:OP1	50:D6:29:ASN:ND2	2.44	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:2292:C:OP1	36:DS:17:ARG:NH2	2.43	0.51
30:DI:70:GLU:O	30:DI:74:ASN:ND2	2.43	0.51
39:DV:16:PRO:HA	39:DV:96:ILE:HG22	1.93	0.51
1:AA:618:C:N4	1:AA:621:A:N7	2.59	0.51
1:AA:714:G:H2'	1:AA:715:A:C8	2.46	0.51
1:AA:958:A:N6	19:AS:77:THR:O	2.43	0.51
13:AM:102:ARG:NH1	13:AM:104:ARG:HD3	2.25	0.51
23:BA:263:C:H2'	23:BA:264:C:O4'	2.11	0.51
23:BA:1364:G:P	45:B1:3:LYS:HG2	2.51	0.51
23:BA:1946:U:H2'	23:BA:1947:C:C6	2.46	0.51
23:BA:2023:G:H5'	23:BA:2617:C:H4'	1.92	0.51
23:BA:2371:G:O2'	50:B6:46:HIS:ND1	2.34	0.51
25:BD:9:TYR:CZ	25:BD:13:ARG:HG2	2.46	0.51
1:CA:382:A:H2'	1:CA:383:A:C8	2.45	0.51
1:CA:542:G:H2'	1:CA:543:C:H6	1.75	0.51
1:CA:588:G:P	56:CA:1786:HOH:O	2.69	0.51
9:CI:11:LYS:H	9:CI:104:ARG:NH2	2.09	0.51
13:CM:65:LYS:HA	13:CM:66:LEU:CB	2.41	0.51
23:DA:287:C:N3	23:DA:354:G:N1	2.46	0.51
23:DA:1779:U:H6	23:DA:1784:A:H62	1.57	0.51
23:DA:2102:U:O2	23:DA:2187:G:O6	2.29	0.51
23:DA:2114:A:H2'	23:DA:2115:G:O4'	2.11	0.51
23:DA:2572:A:N7	26:DE:145:LYS:HB2	2.25	0.51
36:DS:83:LYS:O	36:DS:111:GLU:HG3	2.11	0.51
1:AA:7:G:O2'	5:AE:120:THR:O	2.28	0.51
1:AA:101:A:H2'	1:AA:102:G:O4'	2.10	0.51
1:AA:592:G:H1	1:AA:647:C:H42	1.58	0.51
1:AA:936:C:C2	1:AA:937:A:C8	2.99	0.51
1:AA:966:G:H5"	1:AA:969:A:C5	2.45	0.51
1:AA:1357:A:H2'	1:AA:1358:U:C2	2.45	0.51
4:AD:120:LEU:HB3	4:AD:126:ILE:HD11	1.93	0.51
23:BA:529:A:H62	23:BA:2041:U:H3	1.57	0.51
23:BA:1378:A:OP1	51:B7:10:ARG:NH2	2.44	0.51
23:BA:2894:G:H2'	23:BA:2894:G:N3	2.26	0.51
31:BN:128:HIS:CE1	31:BN:135:PRO:HG2	2.45	0.51
36:BS:7:TYR:CE1	36:BS:91:PRO:HG3	2.46	0.51
37:BT:42:ILE:HG12	37:BT:84:GLN:OE1	2.10	0.51
1:CA:688:G:H2'	1:CA:689:C:C6	2.46	0.51
1:CA:1272:G:H2'	1:CA:1273:G:C8	2.45	0.51
23:DA:443:A:H1'	23:DA:1201:C:O4'	2.10	0.51
45:D1:51:VAL:HG11	45:D1:74:VAL:HG21	1.92	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:D2:29:LYS:HD3	46:D2:57:ILE:HD13	1.92	0.51
1:AA:560:U:H4'	1:AA:561:U:O5'	2.10	0.51
1:AA:599:C:H5"	8:AH:95:VAL:O	2.11	0.51
1:AA:874:G:C6	1:AA:875:C:C4	2.98	0.51
1:AA:932:C:N4	1:AA:933:G:O6	2.44	0.51
1:AA:987:G:H1'	19:AS:52:TYR:OH	2.10	0.51
1:AA:1133:G:H2'	1:AA:1134:G:C8	2.45	0.51
1:AA:1373:G:O5'	1:AA:1373:G:H8	1.93	0.51
2:AB:88:ALA:HB2	2:AB:219:VAL:HG13	1.92	0.51
2:AB:163:PHE:HD1	2:AB:164:VAL:N	2.09	0.51
12:AL:55:VAL:HG22	12:AL:68:ALA:O	2.11	0.51
13:AM:108:ARG:NE	13:AM:114:ARG:HH12	2.09	0.51
20:AT:64:ASP:CG	20:AT:81:LYS:HZ1	2.19	0.51
23:BA:188:G:H1	23:BA:208:C:H42	1.59	0.51
27:BF:89:VAL:O	27:BF:90:PHE:C	2.54	0.51
1:CA:745:C:OP1	1:CA:851:G:O2'	2.27	0.51
3:CC:68:VAL:HG12	3:CC:70:VAL:HG23	1.92	0.51
4:CD:3:ARG:O	4:CD:5:ILE:HG12	2.10	0.51
23:DA:995:C:OP2	38:DU:54:LYS:HE3	2.11	0.51
23:DA:1358:G:H2'	23:DA:1359:A:H2	1.76	0.51
25:DD:71:ASP:OD1	25:DD:103:ARG:NH2	2.35	0.51
28:DG:60:LEU:O	28:DG:64:THR:N	2.40	0.51
34:DQ:5:ARG:O	43:DZ:194:PRO:HD2	2.11	0.51
36:DS:83:LYS:C	36:DS:111:GLU:HG3	2.36	0.51
41:DX:11:PRO:HD3	46:D2:37:PHE:CE2	2.46	0.51
46:D2:48:HIS:O	46:D2:52:ASP:HB2	2.11	0.51
1:AA:192:U:H2'	1:AA:193:C:C6	2.46	0.51
1:AA:935:A:H2'	1:AA:936:C:O4'	2.11	0.51
1:AA:1125:U:H5'	1:AA:1126:U:C5	2.36	0.51
1:AA:1273:G:H3'	1:AA:1274:G:C8	2.31	0.51
1:AA:1358:U:OP2	1:AA:1359:C:N4	2.44	0.51
11:AK:32:ILE:HD11	11:AK:68:ALA:HB1	1.92	0.51
19:AS:74:PHE:C	19:AS:76:PRO:HD3	2.36	0.51
23:BA:458:G:O2'	51:B7:39:ARG:HD3	2.11	0.51
23:BA:1379:A:H4'	23:BA:1380:G:OP2	2.10	0.51
23:BA:1547:C:H2'	23:BA:1548:C:C6	2.46	0.51
23:BA:1547:C:H2'	23:BA:1548:C:H6	1.74	0.51
23:BA:1935:G:H1'	23:BA:1964:G:N2	2.26	0.51
32:BO:25:LEU:HD12	32:BO:38:VAL:HG12	1.93	0.51
42:BY:43:ASN:OD1	42:BY:65:ALA:HB3	2.11	0.51
50:B6:9:LEU:HD21	50:B6:25:LYS:HB3	1.92	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:266:G:H5”	1:CA:267:C:C5	2.46	0.51
1:CA:279:A:H4’	1:CA:280:C:H5”	1.92	0.51
1:CA:669:U:H2’	1:CA:670:G:H8	1.76	0.51
1:CA:950:U:H1’	1:CA:971:G:C4	2.46	0.51
1:CA:1486:G:H2’	1:CA:1487:G:O4’	2.11	0.51
3:CC:18:TRP:HE1	14:CN:55:GLY:N	2.09	0.51
23:DA:2311:A:O2’	23:DA:2312:U:O4’	2.22	0.51
1:AA:110:C:H2’	1:AA:111:G:O4’	2.10	0.51
1:AA:544:G:C2	1:AA:545:C:C2	2.99	0.51
1:AA:937:A:H1’	1:AA:1379:G:N2	2.26	0.51
1:AA:1000:U:O2	1:AA:1041:A:N1	2.43	0.51
1:AA:1064:G:H22	1:AA:1190:G:H2’	1.75	0.51
1:AA:1131:G:H2’	1:AA:1132:C:C6	2.46	0.51
1:AA:1300:G:O2’	1:AA:1301:U:OP2	2.26	0.51
1:AA:1307:U:O5’	1:AA:1307:U:H6	1.93	0.51
2:AB:24:TRP:CE3	2:AB:26:PRO:HA	2.45	0.51
7:AG:156:TRP:N	7:AG:156:TRP:HE3	2.08	0.51
23:BA:863:A:H2’	23:BA:864:G:C8	2.46	0.51
23:BA:1143:A:OP1	31:BN:25:ARG:NH2	2.44	0.51
23:BA:1614:A:C2	40:BW:93:ALA:HB2	2.46	0.51
23:BA:2408:U:OP2	56:BA:4306:HOH:O	2.18	0.51
23:BA:2815:C:H2’	23:BA:2816:C:H6	1.76	0.51
24:BB:77:U:OP1	43:BZ:19:ARG:NH2	2.44	0.51
1:CA:233:C:H2’	1:CA:234:C:H6	1.75	0.51
1:CA:327:A:O2’	1:CA:329:A:H8	1.94	0.51
1:CA:1003:G:H2’	1:CA:1004:A:C4’	2.41	0.51
1:CA:1441:G:H4’	1:CA:1442:G:N7	2.25	0.51
2:CB:16:HIS:HA	2:CB:210:SER:OG	2.11	0.51
3:CC:134:ILE:HG22	3:CC:168:ALA:HB3	1.92	0.51
23:DA:2420:C:OP2	52:D8:33:ASN:HB2	2.11	0.51
24:DB:43:C:H4’	28:DG:66:GLN:OE1	2.11	0.51
25:DD:12:SER:HB3	25:DD:208:LYS:HB3	1.91	0.51
45:D1:82:LEU:HA	45:D1:85:LEU:HD23	1.92	0.51
1:AA:109:A:C6	1:AA:326:G:C6	2.99	0.50
1:AA:507:C:OP2	1:AA:508:C:O2’	2.21	0.50
1:AA:649:G:H2’	1:AA:650:G:H8	1.76	0.50
1:AA:947:G:H22	1:AA:1235:U:H1’	1.76	0.50
1:AA:1323:G:O6	1:AA:1324:A:N6	2.44	0.50
2:AB:87:ARG:CZ	2:AB:233:SER:HB2	2.41	0.50
4:AD:64:LEU:HB2	4:AD:198:VAL:HG11	1.92	0.50
7:AG:69:VAL:HA	7:AG:138:LYS:HB2	1.93	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AL:45:PRO:HG3	12:AL:53:ARG:HH11	1.75	0.50
13:AM:22:ILE:HG23	13:AM:67:GLU:HG2	1.93	0.50
14:AN:59:ALA:O	14:AN:60:SER:HB3	2.10	0.50
23:BA:7:G:H2'	23:BA:8:A:O4'	2.10	0.50
23:BA:2108:C:H3'	23:BA:2108:C:H6	1.76	0.50
23:BA:2126:A:H1'	23:BA:2127:G:OP2	2.11	0.50
40:BW:1:MET:HE3	40:BW:2:GLU:H	1.75	0.50
1:CA:21:G:H2'	1:CA:22:G:C8	2.46	0.50
1:CA:50:A:H1'	1:CA:52:G:C8	2.45	0.50
1:CA:69:G:C2	1:CA:70:G:C5	2.99	0.50
1:CA:1028:C:N4	1:CA:1034:G:C2	2.78	0.50
1:CA:1115:C:O2'	14:CN:61:TRP:O	2.25	0.50
1:CA:1160:G:H1	1:CA:1176:A:N6	2.03	0.50
1:CA:1237:C:N3	1:CA:1337:G:N2	2.54	0.50
1:CA:1266:G:N2	1:CA:1268:A:H8	2.08	0.50
7:CG:9:VAL:HG13	7:CG:94:ARG:HH21	1.76	0.50
9:CI:87:GLN:HA	9:CI:87:GLN:HE21	1.76	0.50
23:DA:2131:G:OP2	23:DA:2131:G:H8	1.93	0.50
36:DS:7:TYR:CE1	36:DS:91:PRO:HG3	2.46	0.50
40:DW:19:LEU:HB3	49:D5:25:LEU:HD11	1.93	0.50
41:DX:41:ASN:O	41:DX:45:THR:HG23	2.12	0.50
43:DZ:110:GLY:HA3	43:DZ:174:VAL:HG11	1.93	0.50
47:D3:6:VAL:HG12	47:D3:54:VAL:HG11	1.93	0.50
1:AA:971:G:OP1	1:AA:972:C:C6	2.64	0.50
1:AA:1151:A:H8	1:AA:1151:A:OP2	1.94	0.50
1:AA:1441:G:H4'	1:AA:1442:G:N7	2.25	0.50
3:AC:179:ARG:NH2	3:AC:206:GLU:OE2	2.43	0.50
23:BA:784:A:H3'	56:BA:4111:HOH:O	2.11	0.50
23:BA:1296:G:OP1	23:BA:2709:G:O2'	2.24	0.50
23:BA:1499:C:O2'	23:BA:1500:G:H5'	2.11	0.50
23:BA:2124:G:H1	23:BA:2174:C:N4	2.09	0.50
23:BA:2713:A:OP1	35:BR:14:SER:OG	2.26	0.50
24:BB:53:A:H5'	24:BB:54:G:OP2	2.12	0.50
28:BG:58:GLN:HA	28:BG:61:ALA:HB3	1.93	0.50
37:BT:84:GLN:HE21	37:BT:85:LYS:HG2	1.76	0.50
1:CA:196:A:N3	1:CA:222:U:H1'	2.26	0.50
1:CA:660:G:H2'	1:CA:661:G:H8	1.76	0.50
1:CA:664:G:P	18:CR:64:ARG:HH21	2.33	0.50
1:CA:1041:A:H2'	1:CA:1042:G:O4'	2.10	0.50
1:CA:1400:C:H4'	1:CA:1401:G:OP2	2.11	0.50
9:CI:73:GLN:O	9:CI:77:ILE:HG13	2.10	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:CK:30:VAL:HG21	11:CK:65:ALA:HA	1.91	0.50
22:CV:30:PRO:HB3	22:CV:40:TRP:CD2	2.45	0.50
23:DA:1043:C:H2'	23:DA:1044:G:O4'	2.11	0.50
23:DA:1047:G:H2'	23:DA:1110:G:N2	2.26	0.50
23:DA:1593:G:H2'	23:DA:1594:G:H8	1.76	0.50
23:DA:2199:A:OP2	23:DA:2200:C:H5	1.94	0.50
23:DA:2305:A:H2'	23:DA:2306:C:O4'	2.11	0.50
23:DA:2439:A:H5'	23:DA:2439:A:C8	2.46	0.50
43:DZ:128:VAL:HG22	43:DZ:161:VAL:H	1.75	0.50
46:D2:69:ARG:O	46:D2:70:GLN:HB2	2.11	0.50
1:AA:509:A:C8	1:AA:509:A:H3'	2.46	0.50
1:AA:598:U:H2'	1:AA:599:C:C6	2.46	0.50
1:AA:658:G:C6	1:AA:659:U:C4	2.99	0.50
1:AA:669:U:H2'	1:AA:670:G:C8	2.46	0.50
1:AA:1013:G:H21	1:AA:1016:A:H62	1.59	0.50
1:AA:1182:G:H4'	1:AA:1184:G:H5"	1.94	0.50
13:AM:52:GLU:O	13:AM:56:LEU:HD12	2.11	0.50
14:AN:29:ARG:O	14:AN:40:CYS:HB3	2.12	0.50
17:AQ:55:ASP:HA	17:AQ:79:SER:HA	1.93	0.50
23:BA:493:G:H2'	23:BA:494:G:O4'	2.12	0.50
30:BI:83:ALA:HB2	30:BI:88:ILE:HA	1.92	0.50
1:CA:323:U:O3'	20:CT:22:ARG:HD3	2.11	0.50
1:CA:573:A:N3	1:CA:883:C:O2'	2.41	0.50
9:CI:48:GLU:HB3	9:CI:101:PHE:CZ	2.46	0.50
13:CM:97:PRO:HD3	13:CM:110:ARG:HB3	1.93	0.50
23:DA:639:U:H2'	23:DA:640:C:H6	1.77	0.50
23:DA:1141:U:H4'	23:DA:1142(A):A:O4'	2.11	0.50
23:DA:1377:G:O6	56:DA:3681:HOH:O	2.19	0.50
23:DA:1816:G:H1	25:DD:35:LYS:HD3	1.76	0.50
30:DI:87:LYS:HA	30:DI:121:LYS:O	2.11	0.50
31:DN:33:LEU:HD12	31:DN:38:HIS:CE1	2.47	0.50
43:DZ:24:LEU:HB2	43:DZ:41:LEU:HD23	1.94	0.50
1:AA:186:C:H2'	1:AA:187:C:H6	1.77	0.50
1:AA:447:G:H2'	1:AA:485:G:N2	2.27	0.50
1:AA:1230:C:N4	13:AM:105:THR:HG21	2.26	0.50
4:AD:110:PHE:N	4:AD:110:PHE:CD1	2.80	0.50
6:AF:40:VAL:HG22	6:AF:42:GLU:H	1.77	0.50
8:AH:85:ARG:NE	8:AH:87:SER:O	2.43	0.50
9:AI:83:ARG:O	9:AI:86:VAL:HG22	2.11	0.50
22:AV:31:TYR:CD2	22:AV:31:TYR:N	2.79	0.50
23:BA:83:G:N2	23:BA:103:A:OP2	2.36	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BA:641:C:O2'	23:BA:2350:C:OP1	2.21	0.50
39:BV:58:VAL:HG12	39:BV:97:LYS:HB2	1.92	0.50
45:B1:23:LYS:HG2	45:B1:29:GLY:HA3	1.93	0.50
1:CA:169:C:C5	1:CA:170:U:C4	2.99	0.50
1:CA:509:A:C8	1:CA:509:A:H3'	2.46	0.50
1:CA:636:U:H5'	17:CQ:2:PRO:HG3	1.92	0.50
1:CA:1442(B):A:O2'	1:CA:1443:G:OP2	2.24	0.50
2:CB:149:LEU:HB3	2:CB:152:PHE:HB3	1.92	0.50
15:CO:63:ARG:NH1	15:CO:87:ILE:HD11	2.27	0.50
22:CV:13:HIS:HB2	22:CV:39:GLN:HG3	1.94	0.50
23:DA:795:C:H2'	23:DA:796:C:H6	1.77	0.50
23:DA:1638:C:H4'	23:DA:2710:C:O2	2.11	0.50
52:D8:61:LEU:C	52:D8:63:PRO:HD3	2.36	0.50
1:AA:475:G:H2'	1:AA:476:G:C8	2.46	0.50
1:AA:980:C:C2'	1:AA:981:U:H5'	2.42	0.50
1:AA:1090:U:H2'	1:AA:1091:U:H6	1.77	0.50
1:AA:1117:G:H3'	1:AA:1118:C:C5	2.45	0.50
1:AA:1227:A:O4'	19:AS:83:HIS:HB3	2.12	0.50
1:AA:1400:C:H4'	1:AA:1401:G:OP2	2.11	0.50
5:AE:135:THR:O	5:AE:138:ALA:HB3	2.12	0.50
7:AG:146:GLU:OE2	7:AG:149:ARG:NE	2.44	0.50
13:AM:103:THR:HA	13:AM:107:ALA:HB2	1.94	0.50
23:BA:247:G:H4'	23:BA:386:G:C5	2.46	0.50
23:BA:1210:A:H5'	23:BA:1210:A:C8	2.42	0.50
23:BA:1298:C:H5"	23:BA:1299:G:OP2	2.12	0.50
23:BA:2158:A:O3'	23:BA:2159:G:H8	1.94	0.50
23:BA:2206:G:H2'	23:BA:2207:G:C2	2.47	0.50
23:BA:2286:A:H4'	23:BA:2287:A:O4'	2.12	0.50
29:BH:86:GLU:HG2	29:BH:132:ARG:HG3	1.93	0.50
1:CA:649:G:H2'	1:CA:650:G:H8	1.76	0.50
1:CA:841:U:OP2	1:CA:841:U:C2	2.64	0.50
1:CA:1007:C:H2'	1:CA:1008:C:H6	1.76	0.50
1:CA:1458:G:H2'	1:CA:1458:G:N3	2.27	0.50
4:CD:7:PRO:O	4:CD:10:ARG:HB3	2.11	0.50
23:DA:863:A:H2'	23:DA:864:G:C8	2.47	0.50
23:DA:1379:A:H4'	23:DA:1380:G:OP2	2.11	0.50
23:DA:1602:U:O4	56:DA:3688:HOH:O	2.20	0.50
35:DR:21:TYR:OH	35:DR:43:GLU:HG2	2.12	0.50
36:DS:11:LYS:HG3	36:DS:91:PRO:HD3	1.92	0.50
42:DY:23:ARG:HB2	42:DY:23:ARG:HH11	1.77	0.50
1:AA:346:G:N2	1:AA:347:G:C4	2.79	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:414:A:C5	1:AA:431:A:C2	3.00	0.50
1:AA:966:G:H4'	1:AA:969:A:H62	1.76	0.50
1:AA:1050:G:O6	1:AA:1208:C:N3	2.45	0.50
1:AA:1268:A:H4'	21:AU:23:PRO:HB3	1.93	0.50
9:AI:49:PRO:HG3	9:AI:101:PHE:CD2	2.47	0.50
23:BA:748:G:C8	40:BW:89:ALA:HB1	2.46	0.50
23:BA:1514:U:H2'	23:BA:1515:G:H8	1.77	0.50
37:BT:55:ASN:N	37:BT:59:THR:HG22	2.26	0.50
1:CA:203:U:H4'	1:CA:204:U:OP1	2.11	0.50
1:CA:474:G:H2'	1:CA:475:G:C8	2.47	0.50
1:CA:1015:A:H2	1:CA:1218:C:O2	1.94	0.50
1:CA:1073:U:O2'	2:CB:104:ASN:OD1	2.23	0.50
1:CA:1279:A:H61	3:CC:26:LYS:HZ2	1.59	0.50
16:CP:28:ARG:NH1	16:CP:29:ASP:OD2	2.44	0.50
23:DA:271(N):U:O2'	23:DA:271(O):C:H5'	2.12	0.50
23:DA:1497:U:H5"	23:DA:1498:C:H5	1.77	0.50
23:DA:1720:U:H2'	23:DA:1721:G:O4'	2.11	0.50
29:DH:69:ARG:HG3	29:DH:70:THR:N	2.26	0.50
41:DX:11:PRO:HD3	46:D2:37:PHE:CZ	2.45	0.50
41:DX:27:THR:HG23	41:DX:80:ILE:HG13	1.94	0.50
1:AA:762:C:H2'	1:AA:763:G:H8	1.76	0.50
1:AA:1006:C:N3	1:AA:1023:G:O6	2.45	0.50
1:AA:1192:C:C4	1:AA:1193:G:H1'	2.46	0.50
1:AA:1533:C:H41	22:AV:11:ARG:CG	2.25	0.50
2:AB:157:ARG:HG2	2:AB:158:LEU:N	2.26	0.50
2:AB:163:PHE:HA	2:AB:185:ILE:O	2.12	0.50
3:AC:53:ALA:HB3	3:AC:69:HIS:HB3	1.94	0.50
23:BA:122:G:N7	56:BA:3885:HOH:O	2.35	0.50
23:BA:271(P):C:H2'	23:BA:271(Q):G:H5'	1.94	0.50
23:BA:760:G:H2'	23:BA:761:A:O4'	2.12	0.50
28:BG:166:ASP:O	28:BG:170:ARG:N	2.34	0.50
30:BI:112:LYS:C	30:BI:114:LEU:N	2.70	0.50
43:BZ:110:GLY:HA3	43:BZ:174:VAL:HG11	1.92	0.50
1:CA:450:G:H4'	16:CP:41:PRO:HB2	1.93	0.50
1:CA:982:U:N3	1:CA:1223:C:N3	2.58	0.50
1:CA:1310:G:H1	1:CA:1327:C:H42	1.60	0.50
4:CD:64:LEU:HB2	4:CD:198:VAL:HG11	1.92	0.50
9:CI:18:PHE:HB2	9:CI:62:TYR:HB3	1.94	0.50
18:CR:36:ASN:HB2	18:CR:39:VAL:HG23	1.94	0.50
23:DA:1810:A:H2'	23:DA:1811:G:O4'	2.11	0.50
30:DI:77:LEU:HB3	30:DI:142:VAL:HG12	1.94	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DN:34:LEU:O	31:DN:49:GLY:HA3	2.11	0.50
1:AA:353:A:H5'	1:AA:353:A:C8	2.43	0.50
1:AA:818:G:O2'	1:AA:819:A:H5'	2.12	0.50
1:AA:1084:G:C5	1:AA:1085:U:C4	2.99	0.50
1:AA:1190:G:OP1	3:AC:5:ILE:HG22	2.11	0.50
1:AA:1268:A:O3'	21:AU:23:PRO:HB3	2.11	0.50
1:AA:1320:C:H2'	1:AA:1321:C:C6	2.47	0.50
2:AB:87:ARG:HG3	2:AB:233:SER:OG	2.12	0.50
4:AD:7:PRO:O	4:AD:10:ARG:HB3	2.11	0.50
4:AD:173:TRP:NE1	4:AD:174:LEU:HG	2.27	0.50
19:AS:35:SER:HA	19:AS:37:ARG:HG3	1.93	0.50
23:BA:2079:U:OP1	45:B1:21:ARG:NH2	2.45	0.50
23:BA:2236:C:H2'	23:BA:2237:G:H5'	1.93	0.50
23:BA:2298:A:H2'	23:BA:2299:G:O4'	2.11	0.50
25:BD:16:MET:HG3	25:BD:206:LEU:O	2.12	0.50
26:BE:24:THR:HG22	26:BE:186:GLY:O	2.12	0.50
30:BI:5:LEU:HD21	30:BI:12:LEU:HD13	1.93	0.50
30:BI:86:THR:HG23	30:BI:87:LYS:HB2	1.94	0.50
43:BZ:128:VAL:HG12	43:BZ:129:SER:N	2.27	0.50
1:CA:192:U:H2'	1:CA:193:C:C6	2.47	0.50
1:CA:1387:G:H2'	1:CA:1388:C:C6	2.39	0.50
3:CC:36:ASP:HA	3:CC:39:ILE:HD12	1.93	0.50
5:CE:51:VAL:O	5:CE:55:VAL:HG23	2.11	0.50
5:CE:135:THR:O	5:CE:138:ALA:HB3	2.11	0.50
23:DA:251:A:OP1	52:D8:7:HIS:HE1	1.95	0.50
23:DA:252:G:OP2	33:DP:50:ARG:NH1	2.40	0.50
23:DA:479:A:N3	23:DA:481:G:H5"	2.25	0.50
23:DA:873:G:N2	23:DA:905:U:C2	2.80	0.50
23:DA:910:A:C5	34:DQ:13:GLN:HG3	2.47	0.50
32:DO:64:ARG:NH1	32:DO:81:ASP:OD1	2.45	0.50
36:DS:29:PHE:CD2	36:DS:30:ARG:N	2.79	0.50
50:D6:8:LYS:HD3	52:D8:34:TRP:CD2	2.46	0.50
52:D8:32:LEU:O	52:D8:36:LYS:HE3	2.12	0.50
1:AA:20:U:H2'	1:AA:21:G:O4'	2.12	0.50
1:AA:992:U:O2'	1:AA:1043:C:N4	2.39	0.50
1:AA:1061:G:H2'	1:AA:1062:U:H6	1.76	0.50
1:AA:1206:G:H2'	1:AA:1207:G:C8	2.46	0.50
1:AA:1237:C:H5'	1:AA:1303:C:O2	2.12	0.50
1:AA:1376:U:OP1	7:AG:94:ARG:NH1	2.44	0.50
4:AD:36:ARG:HG2	4:AD:38:TYR:CZ	2.46	0.50
11:AK:15:ALA:HA	11:AK:77:MET:HA	1.94	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AL:92:ASP:OD1	12:AL:92:ASP:N	2.44	0.50
15:AO:56:LEU:O	15:AO:60:VAL:HG23	2.12	0.50
20:AT:73:HIS:C	20:AT:74:LYS:HG2	2.37	0.50
20:AT:77:ALA:O	20:AT:81:LYS:HG3	2.12	0.50
23:BA:2267:A:H2'	56:BA:4802:HOH:O	2.11	0.50
1:CA:303:A:HO2'	1:CA:555:C:HO2'	1.58	0.50
1:CA:658:G:C6	1:CA:659:U:C4	3.00	0.50
1:CA:729:A:H2'	1:CA:730:G:H8	1.75	0.50
1:CA:1068:G:N7	1:CA:1094:G:C8	2.80	0.50
1:CA:1228:C:H2'	1:CA:1229:A:H8	1.77	0.50
1:CA:1289:A:N1	1:CA:1372:U:H5'	2.27	0.50
8:CH:6:ILE:HB	8:CH:85:ARG:NH1	2.27	0.50
23:DA:1547:C:H2'	23:DA:1548:C:C6	2.47	0.50
24:DB:38:C:O4'	36:DS:95:HIS:NE2	2.44	0.50
33:DP:38:GLN:HA	33:DP:41:ARG:HG2	1.93	0.50
1:AA:60:A:P	1:AA:60:A:H8	2.35	0.49
3:AC:156:ARG:H	3:AC:196:LEU:HD12	1.77	0.49
4:AD:59:ARG:HA	4:AD:62:GLN:HB2	1.94	0.49
4:AD:128:VAL:CG1	4:AD:129:ASN:HD22	2.22	0.49
23:BA:1839:G:C8	23:BA:1927:A:H1'	2.47	0.49
27:BF:184:TYR:CE2	27:BF:188:ARG:HD2	2.46	0.49
34:BQ:1:MET:HE2	34:BQ:1:MET:N	2.27	0.49
1:CA:1014:A:H5'	19:CS:14:HIS:CG	2.46	0.49
1:CA:1338:G:H2'	1:CA:1339:A:C8	2.47	0.49
4:CD:32:ALA:O	4:CD:36:ARG:N	2.45	0.49
7:CG:88:PRO:HB3	7:CG:145:ALA:HA	1.94	0.49
8:CH:121:ASP:N	8:CH:121:ASP:OD1	2.44	0.49
13:CM:84:ILE:CB	19:CS:66:MET:HE2	2.42	0.49
23:DA:524:U:H2'	23:DA:525:U:C6	2.47	0.49
23:DA:910:A:H62	34:DQ:12:GLN:HA	1.77	0.49
23:DA:1575:C:H2'	23:DA:1576:U:C6	2.47	0.49
23:DA:1669:A:H5"	23:DA:2550:G:OP1	2.12	0.49
23:DA:1794:U:H2'	23:DA:1795:C:C6	2.47	0.49
23:DA:1945:G:H2'	23:DA:1946:U:H6	1.77	0.49
14:AN:37:PHE:HB3	14:AN:39:LEU:HD12	1.93	0.49
23:BA:1945:G:H2'	23:BA:1946:U:C6	2.47	0.49
25:BD:12:SER:HB3	25:BD:208:LYS:HB3	1.93	0.49
31:BN:62:VAL:HG12	31:BN:67:LEU:HD22	1.94	0.49
44:B0:51:VAL:N	44:B0:62:LEU:HD12	2.28	0.49
1:CA:109:A:C6	1:CA:326:G:C6	3.00	0.49
1:CA:1003:G:C4	1:CA:1004:A:H1'	2.46	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1128:C:C5'	9:CI:16:ARG:HH12	2.24	0.49
1:CA:1208:C:H2'	1:CA:1209:C:C6	2.47	0.49
7:CG:130:GLY:HA2	7:CG:135:VAL:HG21	1.94	0.49
9:CI:21:PRO:HA	9:CI:59:PHE:HD1	1.76	0.49
17:CQ:55:ASP:HA	17:CQ:79:SER:HA	1.94	0.49
27:DF:22:ALA:HB1	27:DF:24:LEU:HD22	1.93	0.49
34:DQ:6:ARG:HG2	43:DZ:194:PRO:HG2	1.93	0.49
40:DW:46:PHE:O	40:DW:50:VAL:HG23	2.13	0.49
1:AA:577:G:C8	1:AA:816:A:C6	3.00	0.49
1:AA:952:U:H4'	1:AA:964:A:N6	2.27	0.49
1:AA:1001:A:N6	1:AA:1001(A):G:C6	2.81	0.49
1:AA:1009:G:O6	1:AA:1020:U:C2	2.65	0.49
1:AA:1067:A:H1'	1:AA:1068:G:O4'	2.12	0.49
1:AA:1325:C:H4'	21:AU:17:THR:HG21	1.93	0.49
4:AD:110:PHE:N	4:AD:110:PHE:HD1	2.10	0.49
7:AG:108:ALA:HB1	7:AG:120:ILE:HD13	1.94	0.49
11:AK:16:SER:HA	11:AK:79:SER:HB3	1.94	0.49
20:AT:76:ALA:HA	20:AT:79:ARG:NH1	2.27	0.49
23:BA:253:C:OP2	52:B8:5:LYS:NZ	2.41	0.49
23:BA:386:G:H4'	23:BA:387:U:OP2	2.12	0.49
26:BE:97:LYS:O	26:BE:100:GLU:HG3	2.12	0.49
33:BP:101:VAL:HA	33:BP:106:LEU:O	2.13	0.49
36:BS:58:LEU:HB2	36:BS:59:LYS:HB2	1.94	0.49
1:CA:951:G:H4'	1:CA:972:C:H5	1.78	0.49
1:CA:977:A:H2'	1:CA:977:A:N3	2.27	0.49
2:CB:167:PRO:HD3	2:CB:187:LEU:O	2.12	0.49
3:CC:73:PRO:HB3	3:CC:103:VAL:HG11	1.94	0.49
11:CK:69:ALA:HB1	11:CK:103:LEU:HD21	1.94	0.49
23:DA:236:C:H2'	23:DA:237:C:C6	2.47	0.49
23:DA:253:C:OP2	52:D8:5:LYS:NZ	2.37	0.49
23:DA:863:A:H2'	23:DA:864:G:H8	1.76	0.49
23:DA:946:G:P	56:DA:3960:HOH:O	2.71	0.49
27:DF:149:ASP:OD2	27:DF:149:ASP:N	2.42	0.49
1:AA:375:U:H2'	1:AA:376:G:C8	2.47	0.49
1:AA:735:C:H2'	1:AA:736:C:H6	1.77	0.49
1:AA:1072:G:H2'	1:AA:1073:U:C6	2.47	0.49
1:AA:1233:G:N2	1:AA:1364:U:H3	1.96	0.49
5:AE:110:LEU:HD12	5:AE:118:ILE:HG21	1.94	0.49
7:AG:123:GLU:OE2	7:AG:134:ALA:N	2.45	0.49
7:AG:151:TYR:O	7:AG:154:TYR:HD2	1.95	0.49
18:AR:36:ASN:HB2	18:AR:39:VAL:HG23	1.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BA:271(M):G:O2'	23:BA:271(N):U:H3'	2.11	0.49
23:BA:821:A:H2'	23:BA:946:G:H5"	1.95	0.49
23:BA:1745(A):C:H5'	23:BA:1746:G:OP2	2.12	0.49
23:BA:2019:A:N7	49:B5:9:LYS:NZ	2.53	0.49
23:BA:2574:G:O2'	26:BE:143:ASN:HB3	2.12	0.49
23:BA:2818:G:O2'	23:BA:2819:G:H5'	2.12	0.49
37:BT:118:ARG:HH11	37:BT:118:ARG:HA	1.77	0.49
40:BW:40:ASN:O	40:BW:41:LYS:HG3	2.11	0.49
46:B2:29:LYS:HD3	46:B2:57:ILE:HD13	1.94	0.49
48:B4:16:CYS:HB3	48:B4:20:ASN:O	2.13	0.49
1:CA:532:A:H61	3:CC:193:TYR:HB3	1.78	0.49
1:CA:544:G:OP1	4:CD:62:GLN:NE2	2.23	0.49
1:CA:1143:G:H2'	1:CA:1144:G:C8	2.47	0.49
3:CC:138:VAL:HG22	3:CC:149:ALA:HB1	1.95	0.49
3:CC:192:THR:OG1	3:CC:193:TYR:N	2.43	0.49
5:CE:107:ARG:O	5:CE:110:LEU:N	2.45	0.49
8:CH:57:PRO:O	8:CH:58:TYR:HD1	1.95	0.49
19:CS:50:ALA:CB	19:CS:57:HIS:HB3	2.43	0.49
20:CT:77:ALA:O	20:CT:81:LYS:HG3	2.13	0.49
23:DA:856:C:O4'	44:D0:27:GLU:HB3	2.12	0.49
23:DA:902:C:H2'	23:DA:903:C:H6	1.77	0.49
23:DA:1780:A:N6	56:DA:3751:HOH:O	2.44	0.49
23:DA:1816:G:O6	25:DD:35:LYS:NZ	2.37	0.49
23:DA:2131:G:N3	23:DA:2133:G:N2	2.54	0.49
23:DA:2371:G:O2'	50:D6:46:HIS:ND1	2.34	0.49
24:DB:94:C:H2'	24:DB:95:C:H6	1.76	0.49
32:DO:71:ARG:HB3	32:DO:73:ASP:OD2	2.13	0.49
32:DO:77:ILE:HG12	37:DT:74:ARG:HD3	1.95	0.49
43:DZ:151:HIS:C	43:DZ:153:SER:H	2.20	0.49
1:AA:59:A:H3'	1:AA:331:G:H22	1.77	0.49
1:AA:1072:G:C5	1:AA:1073:U:C4	3.01	0.49
2:AB:61:LEU:HD21	2:AB:160:ASP:HB2	1.93	0.49
7:AG:14:PRO:HA	7:AG:20:ASP:C	2.37	0.49
7:AG:26:PHE:O	7:AG:30:ILE:HG13	2.12	0.49
23:BA:1108:U:O2	23:BA:1108:U:H2'	2.12	0.49
23:BA:1914:C:H6	23:BA:1914:C:OP2	1.94	0.49
23:BA:1971:A:OP2	25:BD:242:ARG:NH2	2.45	0.49
25:BD:172:TYR:CD1	25:BD:186:HIS:HA	2.47	0.49
26:BE:52:LEU:O	26:BE:75:VAL:HG22	2.12	0.49
27:BF:185:ASP:HA	27:BF:188:ARG:HD3	1.94	0.49
40:BW:86:LEU:HD12	40:BW:87:PRO:HD2	1.93	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:920:U:C2	1:CA:921:U:C5	3.01	0.49
1:CA:1115:C:O2	1:CA:1185:G:N1	2.35	0.49
3:CC:142:MET:HA	3:CC:146:ALA:HB3	1.95	0.49
6:CF:91:VAL:CG1	18:CR:72:ARG:HH12	2.26	0.49
23:DA:307:G:H21	23:DA:330:A:H62	1.60	0.49
23:DA:851:U:OP1	47:D3:49:LYS:HE2	2.13	0.49
23:DA:1266:G:O2'	23:DA:2012:G:O6	2.30	0.49
23:DA:1935:G:H1'	23:DA:1964:G:N2	2.27	0.49
23:DA:2723:C:O3'	35:DR:1:MET:HE3	2.13	0.49
24:DB:111:G:H2'	24:DB:112:U:H6	1.78	0.49
27:DF:158:THR:O	27:DF:164:ARG:NH1	2.45	0.49
28:DG:41:GLN:O	28:DG:89:GLY:HA2	2.12	0.49
29:DH:70:THR:HA	29:DH:73:ALA:HB3	1.95	0.49
34:DQ:110:THR:HG23	34:DQ:113:GLN:OE1	2.12	0.49
36:DS:10:ARG:NH2	36:DS:91:PRO:HB2	2.25	0.49
1:AA:934:C:H41	1:AA:939:G:N2	2.11	0.49
1:AA:1104:G:C6	1:AA:1105:A:C5	3.00	0.49
1:AA:1228:C:H41	13:AM:104:ARG:CG	2.25	0.49
2:AB:134:GLU:O	2:AB:138:LEU:HG	2.12	0.49
3:AC:141:VAL:O	3:AC:145:GLY:N	2.45	0.49
9:AI:16:ARG:N	9:AI:64:THR:O	2.43	0.49
10:AJ:48:THR:HA	10:AJ:62:HIS:HB3	1.94	0.49
13:AM:22:ILE:HG22	13:AM:23:TYR:N	2.28	0.49
15:AO:74:ASP:OD2	15:AO:77:ARG:HB2	2.12	0.49
23:BA:265:A:H1'	23:BA:266:G:O4'	2.12	0.49
23:BA:542:C:H2'	23:BA:543:C:C6	2.48	0.49
23:BA:783:A:O2'	23:BA:785:G:OP1	2.27	0.49
23:BA:1155:A:OP1	38:BU:55:ARG:HD3	2.12	0.49
23:BA:1858:G:H2'	23:BA:1883:G:H22	1.77	0.49
49:B5:13:LYS:HB3	56:B5:203:HOH:O	2.13	0.49
1:CA:728:A:H2'	1:CA:729:A:C8	2.47	0.49
1:CA:1135:U:O2'	1:CA:1137:C:H5'	2.12	0.49
2:CB:32:ILE:HD11	2:CB:190:THR:HG22	1.94	0.49
20:CT:41:ILE:HG22	20:CT:91:LEU:HD12	1.93	0.49
23:DA:628:G:H2'	23:DA:629:G:C8	2.46	0.49
23:DA:774:A:N3	23:DA:774:A:H2'	2.27	0.49
23:DA:1501:C:O4'	25:DD:100:GLY:HA2	2.12	0.49
23:DA:1514:U:H2'	23:DA:1515:G:C8	2.47	0.49
23:DA:2611:U:C4	49:D5:3:LYS:HG2	2.47	0.49
43:DZ:152:ALA:HA	43:DZ:155:LEU:HD13	1.94	0.49
46:D2:23:LYS:O	46:D2:27:GLU:HG2	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:982:U:P	14:AN:6:LEU:HD11	2.53	0.49
1:AA:1046:A:C6	1:AA:1047:G:H1'	2.48	0.49
3:AC:150:LYS:HB3	3:AC:201:TYR:HB2	1.95	0.49
3:AC:184:TYR:HA	3:AC:200:ALA:O	2.13	0.49
7:AG:69:VAL:O	7:AG:71:PRO:HD3	2.13	0.49
11:AK:30:VAL:HG21	11:AK:65:ALA:HA	1.94	0.49
14:AN:31:ARG:O	14:AN:40:CYS:HB2	2.13	0.49
16:AP:28:ARG:HG2	16:AP:29:ASP:OD2	2.12	0.49
17:AQ:22:LEU:HD11	17:AQ:39:SER:HB3	1.95	0.49
23:BA:271(N):U:O2'	23:BA:271(O):C:H5'	2.13	0.49
23:BA:873:G:N2	23:BA:905:U:C2	2.81	0.49
23:BA:1962:C:O2'	23:BA:1964:G:OP2	2.29	0.49
23:BA:2572:A:N7	26:BE:145:LYS:HB2	2.27	0.49
25:BD:175:LEU:HD12	25:BD:185:VAL:HG21	1.94	0.49
27:BF:178:PRO:HG2	27:BF:179:GLU:OE1	2.12	0.49
32:BO:88:ASN:HD21	32:BO:90:GLN:HB2	1.78	0.49
38:BU:104:GLN:H	38:BU:104:GLN:CD	2.21	0.49
1:CA:169:C:H5	1:CA:170:U:C4	2.31	0.49
1:CA:557:G:C6	1:CA:558:G:C6	3.01	0.49
1:CA:626:U:H5"	16:CP:38:TYR:CD2	2.48	0.49
1:CA:994:A:H2	14:CN:4:LYS:HD2	1.78	0.49
1:CA:1025:U:O2	1:CA:1036:G:C6	2.66	0.49
5:CE:53:LEU:O	5:CE:56:GLN:HB3	2.13	0.49
9:CI:40:LEU:HD11	9:CI:70:LYS:HB3	1.95	0.49
13:CM:59:TYR:CZ	13:CM:63:THR:HG21	2.47	0.49
23:DA:644:A:H4'	23:DA:645:C:C5	2.47	0.49
23:DA:792:G:H5"	23:DA:793:A:H5'	1.93	0.49
23:DA:857:C:H4'	44:D0:23:VAL:HG21	1.94	0.49
23:DA:903:C:H2'	23:DA:904:C:H6	1.77	0.49
23:DA:934:G:H2'	23:DA:935:C:H6	1.78	0.49
23:DA:1908:C:H1'	56:DA:4164:HOH:O	2.13	0.49
23:DA:2712:U:H1'	23:DA:2712(A):A:C8	2.48	0.49
27:DF:187:VAL:HG13	33:DP:1:MET:O	2.13	0.49
43:DZ:144:LEU:CD2	43:DZ:150:LEU:HG	2.43	0.49
1:AA:203:U:H4'	1:AA:204:U:OP1	2.13	0.49
1:AA:959:A:C1'	1:AA:985:C:H1'	2.41	0.49
1:AA:1296:C:H5"	13:AM:14:ARG:NE	2.27	0.49
19:AS:53:ASN:N	19:AS:56:GLN:O	2.27	0.49
23:BA:196:A:O4'	33:BP:46:LYS:HE2	2.13	0.49
23:BA:1130:U:O2	26:BE:149:ARG:NH2	2.45	0.49
23:BA:1639:U:O2'	23:BA:1640:C:H5"	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BA:2142:C:N3	23:BA:2149:G:O6	2.45	0.49
23:BA:2171:A:H4'	23:BA:2172:U:OP1	2.12	0.49
44:B0:11:ARG:O	44:B0:14:ARG:NH2	2.44	0.49
1:CA:35:G:C6	1:CA:36:C:N4	2.81	0.49
1:CA:590:C:H2'	1:CA:591:U:C6	2.45	0.49
1:CA:1003:G:N2	1:CA:1037:C:C2	2.80	0.49
1:CA:1003:G:C2	1:CA:1037:C:N3	2.81	0.49
1:CA:1360:A:N7	14:CN:18:VAL:HG13	2.27	0.49
2:CB:61:LEU:HD21	2:CB:160:ASP:HB2	1.94	0.49
23:DA:1479:G:O2'	23:DA:1558:A:H5'	2.13	0.49
23:DA:1558:A:H8	56:DA:3531:HOH:O	1.96	0.49
23:DA:2281:C:O2'	23:DA:2282:G:H5'	2.13	0.49
24:DB:66:A:H61	24:DB:109:C:H5"	1.76	0.49
25:DD:2:ALA:N	25:DD:200:ASP:OD2	2.46	0.49
30:DI:40:THR:O	30:DI:44:LEU:HB2	2.13	0.49
30:DI:130:TYR:HB3	30:DI:138:ILE:HB	1.93	0.49
1:AA:136:C:O2'	16:AP:65:GLN:OE1	2.31	0.49
1:AA:279:A:H4'	1:AA:280:C:H5"	1.94	0.49
1:AA:673:G:H2'	1:AA:674:G:H8	1.73	0.49
1:AA:1056:U:O4	1:AA:1204:A:N1	2.46	0.49
1:AA:1319:A:C6	1:AA:1323:G:H1'	2.48	0.49
2:AB:170:GLU:O	2:AB:173:ALA:N	2.46	0.49
8:AH:86:ILE:HG21	8:AH:133:LEU:HD22	1.95	0.49
13:AM:19:LEU:HD13	13:AM:22:ILE:HD12	1.94	0.49
13:AM:92:HIS:CE1	13:AM:98:VAL:HG21	2.48	0.49
20:AT:79:ARG:HD2	20:AT:83:ARG:HH21	1.77	0.49
23:BA:9:U:O2'	23:BA:10:G:OP1	2.29	0.49
23:BA:469:G:H2'	23:BA:470:A:H5"	1.95	0.49
23:BA:902:C:H2'	23:BA:903:C:H6	1.77	0.49
34:BQ:7:MET:HB2	34:BQ:7:MET:HE3	1.33	0.49
1:CA:414:A:C5	1:CA:431:A:C2	3.01	0.49
1:CA:499:A:H4'	1:CA:500:G:OP1	2.12	0.49
1:CA:918:A:H2'	1:CA:919:A:C8	2.48	0.49
1:CA:937:A:H1'	1:CA:1379:G:N2	2.28	0.49
1:CA:1269:A:C8	1:CA:1270:C:H1'	2.48	0.49
1:CA:1369:C:H2'	1:CA:1370:G:C8	2.47	0.49
2:CB:102:LEU:O	2:CB:105:PHE:HB2	2.13	0.49
3:CC:54:ARG:HG2	3:CC:56:ASP:H	1.77	0.49
4:CD:148:VAL:HG12	4:CD:149:ALA:H	1.77	0.49
10:CJ:11:PHE:HE2	10:CJ:67:THR:HB	1.77	0.49
10:CJ:81:THR:O	10:CJ:85:LEU:N	2.44	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:274:G:H2'	23:DA:275:G:C8	2.47	0.49
23:DA:1657:C:H2'	23:DA:1658:C:C6	2.47	0.49
23:DA:2123:G:H1	23:DA:2175:C:N4	2.11	0.49
23:DA:2124:G:H1	23:DA:2174:C:N4	2.10	0.49
23:DA:2313:C:H2'	23:DA:2314:C:C6	2.48	0.49
1:AA:544:G:C6	1:AA:545:C:C4	3.00	0.49
1:AA:575:G:H5"	56:AA:1815:HOH:O	2.12	0.49
1:AA:626:U:C2	1:AA:627:G:C8	3.00	0.49
1:AA:729:A:H2'	1:AA:730:G:H8	1.77	0.49
1:AA:1098:C:C4	1:AA:1099:G:C8	3.01	0.49
1:AA:1130:A:H1'	1:AA:1146:A:C2	2.48	0.49
5:AE:53:LEU:O	5:AE:56:GLN:HB3	2.12	0.49
8:AH:118:VAL:C	8:AH:119:LEU:HD23	2.38	0.49
23:BA:1721:G:N1	23:BA:1739:U:OP2	2.45	0.49
23:BA:2406:U:C4	33:BP:72:PRO:HD2	2.48	0.49
30:BI:88:ILE:HG22	30:BI:90:GLY:N	2.27	0.49
43:BZ:77:ASP:OD1	43:BZ:80:ARG:HG2	2.12	0.49
43:BZ:146:ILE:HA	43:BZ:174:VAL:HG12	1.94	0.49
43:BZ:151:HIS:C	43:BZ:153:SER:H	2.21	0.49
44:B0:53:MET:HG3	44:B0:59:LEU:CD2	2.43	0.49
52:B8:34:TRP:CE2	52:B8:35:GLN:HG3	2.47	0.49
1:CA:39:G:N7	1:CA:547:A:H8	2.10	0.49
1:CA:375:U:H2'	1:CA:376:G:H8	1.78	0.49
1:CA:1118:C:H2'	1:CA:1119:C:C5	2.47	0.49
1:CA:1490:C:H2'	1:CA:1491:G:O4'	2.13	0.49
2:CB:21:ARG:HH12	2:CB:23:ARG:HE	1.59	0.49
2:CB:224:GLN:OE1	2:CB:225:ALA:N	2.46	0.49
23:DA:125:G:H5"	51:D7:19:ARG:HD3	1.94	0.49
23:DA:821:A:H2'	23:DA:946:G:H5"	1.94	0.49
23:DA:848:G:H2'	23:DA:849:A:C8	2.47	0.49
23:DA:857:C:OP2	44:D0:77:ARG:NH2	2.46	0.49
23:DA:1794:U:H2'	23:DA:1795:C:H6	1.78	0.49
23:DA:1800:C:OP1	25:DD:266:SER:OG	2.16	0.49
23:DA:2312:U:H5'	28:DG:88:ILE:HD12	1.95	0.49
23:DA:2687:U:H2'	23:DA:2688:U:O4'	2.13	0.49
23:DA:2699:C:H2'	23:DA:2700:C:O4'	2.11	0.49
23:DA:2723:C:OP2	26:DE:109:LYS:NZ	2.46	0.49
27:DF:32:LEU:HA	27:DF:32:LEU:HD12	1.60	0.49
50:D6:11:LEU:HB3	50:D6:49:HIS:HB3	1.95	0.49
1:AA:31:G:O2'	1:AA:48:C:N4	2.45	0.48
1:AA:77:G:C6	1:AA:93:G:C6	3.01	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:103:C:H1'	1:AA:171:A:N1	2.28	0.48
1:AA:114:U:H2'	1:AA:115:G:C8	2.48	0.48
1:AA:491:G:C4	1:AA:492:G:C8	3.01	0.48
1:AA:552:U:O3'	12:AL:87:GLY:HA3	2.13	0.48
1:AA:1315:U:C4	1:AA:1316:G:C2	3.01	0.48
11:AK:21:ILE:HG12	11:AK:30:VAL:HG12	1.94	0.48
23:BA:7:G:H1	23:BA:2896:C:H42	1.61	0.48
23:BA:64:A:O3'	41:BX:71:GLY:HA3	2.13	0.48
23:BA:856:C:O4'	44:B0:27:GLU:HB3	2.12	0.48
23:BA:857:C:H4'	44:B0:23:VAL:HG21	1.94	0.48
23:BA:1359:A:O4'	23:BA:1359:A:N3	2.46	0.48
23:BA:1441:G:H2'	23:BA:1442:G:H8	1.78	0.48
23:BA:2577:A:H5'	49:B5:3:LYS:HD2	1.95	0.48
29:BH:32:GLU:O	29:BH:33:LEU:HD23	2.13	0.48
51:B7:47:ARG:HH11	51:B7:47:ARG:HG3	1.78	0.48
52:B8:4:MET:HE3	52:B8:63:PRO:HG3	1.95	0.48
1:CA:36:C:H5"	12:CL:123:LYS:HD3	1.94	0.48
1:CA:1012:U:H3'	1:CA:1013:G:C8	2.47	0.48
1:CA:1138:G:C6	1:CA:1140:C:H1'	2.48	0.48
1:CA:1168:A:C2	1:CA:1169:A:C4	3.01	0.48
1:CA:1288:A:H2'	1:CA:1289:A:O4'	2.13	0.48
1:CA:1378:C:H3'	1:CA:1379:G:H5"	1.95	0.48
1:CA:1493:A:H1'	23:DA:1913:A:N6	2.27	0.48
3:CC:152:ILE:HG22	3:CC:166:GLU:O	2.13	0.48
6:CF:41:GLU:O	6:CF:43:LEU:HD12	2.13	0.48
23:DA:517:C:OP1	49:D5:16:ARG:NH2	2.42	0.48
23:DA:855:G:H2'	23:DA:856:C:C6	2.48	0.48
23:DA:1108:U:H2'	23:DA:1108:U:O2	2.13	0.48
23:DA:1292:U:H2'	23:DA:1293:C:C6	2.48	0.48
23:DA:2208:A:H1'	23:DA:2219:G:C4	2.48	0.48
24:DB:33:G:C2	24:DB:50:G:C2	3.01	0.48
27:DF:116:ASP:CG	33:DP:1:MET:HB2	2.38	0.48
33:DP:101:VAL:HA	33:DP:106:LEU:O	2.13	0.48
43:DZ:104:PHE:HB3	43:DZ:141:VAL:HG21	1.94	0.48
46:D2:64:LEU:HD21	46:D2:68:ARG:HE	1.78	0.48
52:D8:7:HIS:HD2	52:D8:10:ALA:N	2.01	0.48
1:AA:493:G:HO2'	1:AA:494:U:H6	1.59	0.48
1:AA:971:G:N7	1:AA:1364:U:O2'	2.46	0.48
1:AA:1094:G:O2'	1:AA:1108:G:N1	2.46	0.48
1:AA:1411:C:H2'	1:AA:1412:C:C6	2.47	0.48
8:AH:25:ASP:HB3	8:AH:58:TYR:HD2	1.78	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AJ:79:ARG:HA	10:AJ:82:ILE:H	1.76	0.48
19:AS:50:ALA:HA	19:AS:59:PRO:HA	1.95	0.48
23:BA:593:G:O6	56:BA:3935:HOH:O	2.18	0.48
23:BA:903:C:H2'	23:BA:904:C:C6	2.48	0.48
23:BA:1970:A:H4'	23:BA:1971:A:OP1	2.13	0.48
25:BD:78:LYS:HE2	25:BD:114:GLY:HA2	1.94	0.48
29:BH:5:GLY:HA2	29:BH:69:ARG:HB3	1.96	0.48
31:BN:42:TRP:CE3	38:BU:63:VAL:HG11	2.48	0.48
40:BW:60:ASN:HD22	40:BW:60:ASN:H	1.58	0.48
45:B1:51:VAL:HG11	45:B1:74:VAL:HG21	1.94	0.48
1:CA:502:G:C2	1:CA:503:C:C2	3.01	0.48
1:CA:1057:G:H5'	3:CC:155:GLY:HA2	1.95	0.48
1:CA:1170:A:N6	1:CA:1171:G:C2	2.81	0.48
1:CA:1186:G:C2	1:CA:1187:G:H1'	2.47	0.48
1:CA:1360:A:H8	1:CA:1360:A:OP1	1.96	0.48
2:CB:87:ARG:HG3	2:CB:233:SER:OG	2.13	0.48
7:CG:14:PRO:HG3	7:CG:21:VAL:HG12	1.94	0.48
9:CI:26:VAL:HA	9:CI:61:ALA:HB3	1.95	0.48
12:CL:48:PRO:C	12:CL:49:ASN:HD22	2.21	0.48
23:DA:7:G:H2'	23:DA:8:A:O4'	2.12	0.48
23:DA:1745(A):C:H5'	23:DA:1746:G:OP2	2.13	0.48
23:DA:2646:C:H2'	23:DA:2647:U:O4'	2.12	0.48
23:DA:2854:G:H2'	23:DA:2855:C:C6	2.47	0.48
24:DB:5:C:O2'	24:DB:27:C:O2	2.30	0.48
33:DP:27:HIS:O	33:DP:31:ALA:HA	2.13	0.48
33:DP:82:GLY:HA2	33:DP:113:LYS:O	2.12	0.48
34:DQ:109:VAL:HG22	34:DQ:113:GLN:OE1	2.13	0.48
38:DU:74:LEU:HD11	38:DU:110:VAL:HG13	1.95	0.48
40:DW:60:ASN:N	40:DW:60:ASN:ND2	2.60	0.48
46:D2:44:LEU:HG	46:D2:45:SER:O	2.12	0.48
1:AA:967:C:H3'	1:AA:968:A:C8	2.48	0.48
1:AA:1065:U:H5"	1:AA:1066:C:C6	2.47	0.48
1:AA:1142:G:H2'	1:AA:1143:G:O4'	2.12	0.48
1:AA:1269:A:H3'	1:AA:1270:C:O4'	2.13	0.48
1:AA:1315:U:O2	1:AA:1323:G:N2	2.46	0.48
2:AB:139:LYS:O	2:AB:143:GLU:HB2	2.13	0.48
2:AB:211:ILE:HG22	2:AB:215:LEU:HG	1.95	0.48
3:AC:6:HIS:CE1	3:AC:8:ILE:HG22	2.48	0.48
3:AC:6:HIS:HE1	3:AC:8:ILE:HG22	1.78	0.48
4:AD:148:VAL:HG12	4:AD:149:ALA:H	1.78	0.48
6:AF:11:ASN:HA	6:AF:12:PRO:HD2	1.58	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AI:7:THR:HB	9:AI:83:ARG:NH1	2.28	0.48
9:AI:31:GLN:NE2	9:AI:36:TYR:HD1	2.11	0.48
18:AR:74:ARG:HH21	18:AR:81:PHE:HA	1.79	0.48
23:BA:453:C:H5"	56:BA:4383:HOH:O	2.13	0.48
23:BA:708:C:H5'	23:BA:709:U:OP2	2.13	0.48
23:BA:1506:C:C2'	23:BA:1507:A:H5'	2.42	0.48
23:BA:1876:A:H2'	23:BA:1877:A:C8	2.48	0.48
23:BA:2687:U:H2'	23:BA:2688:U:O4'	2.12	0.48
25:BD:118:VAL:HG22	25:BD:119:ALA:H	1.78	0.48
28:BG:102:PHE:CE2	28:BG:141:PHE:HE1	2.31	0.48
32:BO:59:LYS:HZ1	32:BO:89:ASN:HD21	1.61	0.48
1:CA:352:C:O2'	1:CA:354:G:OP1	2.28	0.48
1:CA:1299:A:H2'	1:CA:1301:U:C6	2.48	0.48
2:CB:82:ARG:HG3	2:CB:92:TYR:CZ	2.48	0.48
4:CD:134:ASP:O	4:CD:136:PRO:HD3	2.14	0.48
12:CL:76:ASN:HD21	12:CL:107:ALA:HA	1.79	0.48
14:CN:47:LEU:HA	14:CN:50:LYS:HB2	1.95	0.48
20:CT:42:GLN:HA	20:CT:42:GLN:NE2	2.28	0.48
23:DA:1239:G:H2'	23:DA:1240:U:O4'	2.14	0.48
23:DA:2287:A:N6	23:DA:2344:U:N3	2.50	0.48
40:DW:14:PRO:HG2	40:DW:78:GLU:HG2	1.94	0.48
43:DZ:72:ARG:NH2	43:DZ:97:GLU:O	2.46	0.48
1:AA:373:A:H2'	1:AA:374:A:H8	1.78	0.48
1:AA:750:G:H1'	15:AO:22:THR:OG1	2.13	0.48
13:AM:15:VAL:HG12	13:AM:19:LEU:HD23	1.94	0.48
22:AV:3:ARG:C	22:AV:5:LYS:H	2.22	0.48
23:BA:27:G:H1	23:BA:512:G:HO2'	1.60	0.48
23:BA:545:G:OP1	23:BA:545:G:H4'	2.12	0.48
23:BA:639:U:O2'	23:BA:640:C:H5'	2.13	0.48
23:BA:652(A):A:H4'	23:BA:652(B):A:OP1	2.14	0.48
23:BA:2115:G:C2	23:BA:2117:A:N7	2.82	0.48
23:BA:2273:A:H2'	23:BA:2274:A:C8	2.47	0.48
30:BI:61:ARG:HB3	30:BI:133:HIS:CD2	2.47	0.48
1:CA:618:C:N4	1:CA:621:A:N7	2.60	0.48
2:CB:170:GLU:O	2:CB:173:ALA:N	2.46	0.48
4:CD:14:ARG:HG3	4:CD:59:ARG:HH21	1.79	0.48
4:CD:68:TYR:CE2	4:CD:97:LEU:HD22	2.49	0.48
4:CD:127:THR:OG1	4:CD:128:VAL:N	2.46	0.48
4:CD:173:TRP:NE1	4:CD:174:LEU:HG	2.29	0.48
5:CE:67:VAL:HG21	5:CE:140:ARG:HA	1.95	0.48
17:CQ:22:LEU:HD13	17:CQ:41:LYS:HG2	1.95	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:CS:22:LEU:O	19:CS:27:GLU:HA	2.13	0.48
23:DA:511:U:C5	23:DA:512:G:C5	3.01	0.48
23:DA:848:G:N9	23:DA:933:A:H8	2.12	0.48
23:DA:911:A:H2'	34:DQ:9:TYR:OH	2.13	0.48
23:DA:1434:A:H61	23:DA:1558:A:H62	1.61	0.48
23:DA:1441:G:H2'	23:DA:1442:G:H8	1.77	0.48
23:DA:1985:G:O2'	23:DA:1986:A:H5'	2.12	0.48
24:DB:32:C:N3	24:DB:51:G:C2	2.82	0.48
24:DB:55:U:H1'	28:DG:29:TRP:HE1	1.78	0.48
31:DN:23:LEU:HG	31:DN:24:GLY:H	1.78	0.48
33:DP:84:ASN:HB3	33:DP:117:GLU:O	2.13	0.48
42:DY:38:ILE:HD11	42:DY:66:PRO:HG3	1.94	0.48
43:DZ:144:LEU:HD21	43:DZ:150:LEU:HG	1.96	0.48
1:AA:36:C:H5"	12:AL:123:LYS:HD3	1.95	0.48
1:AA:44:G:H2'	1:AA:45:U:O4'	2.13	0.48
1:AA:958:A:H61	19:AS:53:ASN:ND2	2.12	0.48
1:AA:1118:C:C2	1:AA:1179:A:C2	3.01	0.48
1:AA:1288:A:H2'	1:AA:1289:A:H5'	1.95	0.48
2:AB:224:GLN:OE1	2:AB:225:ALA:N	2.47	0.48
3:AC:150:LYS:HB2	3:AC:173:VAL:HG21	1.94	0.48
7:AG:43:PHE:O	7:AG:47:CYS:N	2.46	0.48
23:BA:271(Y):U:O3'	23:BA:271(Z):C:H6	1.96	0.48
23:BA:1015:G:C2'	23:BA:1016:G:H5'	2.43	0.48
23:BA:1025:G:C4	23:BA:1135:C:H1'	2.49	0.48
23:BA:2028:U:H2'	23:BA:2029:G:O4'	2.13	0.48
23:BA:2393:A:O2'	52:B8:13:ARG:NH1	2.43	0.48
23:BA:2483:C:N3	34:BQ:124:LYS:NZ	2.58	0.48
23:BA:2646:C:H2'	23:BA:2647:U:O4'	2.14	0.48
26:BE:37:ARG:HA	26:BE:42:ASP:OD2	2.13	0.48
26:BE:179:GLU:HB3	26:BE:181:LEU:HD22	1.95	0.48
40:BW:83:LYS:O	40:BW:84:ARG:HD3	2.12	0.48
46:B2:22:GLU:OE2	46:B2:68:ARG:NH2	2.46	0.48
1:CA:102:G:H2'	1:CA:103:C:H6	1.79	0.48
1:CA:170:U:O2'	1:CA:171:A:H5'	2.14	0.48
1:CA:669:U:H2'	1:CA:670:G:C8	2.48	0.48
1:CA:983:A:H2	1:CA:984:C:C6	2.32	0.48
1:CA:1095:U:H2'	1:CA:1096:C:N1	2.28	0.48
11:CK:21:ILE:HG12	11:CK:30:VAL:HG12	1.95	0.48
12:CL:42:THR:OG1	12:CL:52:LEU:HD12	2.14	0.48
15:CO:55:GLY:HA2	15:CO:58:MET:HG3	1.96	0.48
23:DA:2098:U:H2'	23:DA:2099:U:O4'	2.14	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:2698:U:O4	56:DA:4098:HOH:O	2.19	0.48
29:DH:24:VAL:HG22	29:DH:35:VAL:HB	1.94	0.48
44:D0:11:ARG:O	44:D0:14:ARG:NH2	2.46	0.48
1:AA:169:C:C5	1:AA:170:U:C4	3.01	0.48
1:AA:233:C:H2'	1:AA:234:C:H6	1.78	0.48
1:AA:1028:C:C4	1:AA:1034:G:H1'	2.49	0.48
1:AA:1090:U:H2'	1:AA:1091:U:C6	2.49	0.48
1:AA:1385:G:H2'	1:AA:1386:G:O4'	2.13	0.48
4:AD:9:CYS:SG	4:AD:26:CYS:SG	3.11	0.48
4:AD:88:VAL:O	4:AD:92:VAL:HG23	2.13	0.48
7:AG:47:CYS:SG	7:AG:62:PHE:HB2	2.53	0.48
10:AJ:46:ARG:HA	10:AJ:64:GLU:HA	1.95	0.48
16:AP:17:TYR:HD1	16:AP:17:TYR:N	2.12	0.48
23:BA:997:G:OP1	38:BU:92:ARG:HG2	2.14	0.48
23:BA:2064:C:H2'	23:BA:2065:C:C6	2.48	0.48
29:BH:69:ARG:HG3	29:BH:70:THR:N	2.27	0.48
31:BN:33:LEU:HD12	31:BN:38:HIS:CE1	2.49	0.48
37:BT:29:ARG:HB2	37:BT:46:GLU:HB2	1.94	0.48
42:BY:28:LYS:HG2	42:BY:40:GLU:HG2	1.96	0.48
44:B0:53:MET:HG3	44:B0:59:LEU:HD23	1.96	0.48
1:CA:154:C:C2	1:CA:168:G:C2	3.02	0.48
1:CA:745:C:H2'	1:CA:746:A:C8	2.49	0.48
1:CA:1192:C:N4	1:CA:1193:G:C4	2.81	0.48
1:CA:1442:G:C8	1:CA:1442(A):G:C5	3.02	0.48
13:CM:102:ARG:HE	13:CM:104:ARG:HB3	1.79	0.48
23:DA:251:A:C5	23:DA:252:G:H1'	2.49	0.48
23:DA:258:G:N7	56:DA:4027:HOH:O	2.35	0.48
25:DD:17:THR:O	25:DD:211:ARG:NH2	2.40	0.48
42:DY:28:LYS:HG2	42:DY:40:GLU:HG2	1.96	0.48
44:D0:26:TYR:O	44:D0:29:GLN:HB2	2.14	0.48
1:AA:27:G:H2'	1:AA:28:G:C8	2.48	0.48
1:AA:580:U:H3	1:AA:761:G:H1	1.62	0.48
1:AA:1086:U:H2'	1:AA:1087:G:O4'	2.14	0.48
1:AA:1458:G:H2'	1:AA:1458:G:N3	2.28	0.48
3:AC:129:ALA:HB3	3:AC:132:ARG:HB2	1.96	0.48
4:AD:14:ARG:HG3	4:AD:59:ARG:HH21	1.79	0.48
5:AE:30:ALA:N	5:AE:46:GLY:O	2.29	0.48
8:AH:38:ILE:HD12	8:AH:118:VAL:HG12	1.95	0.48
21:AU:12:LYS:HG3	21:AU:17:THR:O	2.14	0.48
23:BA:154:G:H5"	23:BA:154:G:H8	1.79	0.48
23:BA:2299:G:N7	56:BA:4728:HOH:O	2.35	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BQ:38:GLU:OE2	34:BQ:128:LYS:N	2.33	0.48
42:BY:99:CYS:HB3	42:BY:104:GLY:H	1.79	0.48
43:BZ:5:LEU:HD22	43:BZ:6:LYS:N	2.29	0.48
52:B8:32:LEU:O	52:B8:36:LYS:HE3	2.13	0.48
1:CA:359:U:H2'	1:CA:360:A:C8	2.48	0.48
1:CA:1022:G:H2'	1:CA:1023:G:C8	2.49	0.48
1:CA:1308:U:OP1	13:CM:98:VAL:HG23	2.13	0.48
1:CA:1346:A:N1	1:CA:1374:A:H5"	2.28	0.48
1:CA:1370:G:C8	9:CI:109:VAL:HG21	2.49	0.48
18:CR:43:PHE:C	18:CR:51:LEU:HD12	2.38	0.48
23:DA:495:G:N7	56:DA:4056:HOH:O	2.35	0.48
23:DA:916:G:O2'	23:DA:917:A:O4'	2.31	0.48
23:DA:1253:A:N6	56:DA:3585:HOH:O	2.45	0.48
23:DA:1790:C:H5"	23:DA:1791:A:OP1	2.13	0.48
23:DA:1914:C:OP2	23:DA:1914:C:H6	1.96	0.48
23:DA:2690:C:N4	23:DA:2713:A:H1'	2.28	0.48
24:DB:90:A:C5	24:DB:91:C:H1'	2.49	0.48
26:DE:35:GLN:OE1	26:DE:66:HIS:HE1	1.95	0.48
26:DE:112:GLY:O	26:DE:159:HIS:HA	2.13	0.48
28:DG:73:ALA:HB2	28:DG:88:ILE:HD11	1.95	0.48
35:DR:103:ARG:HH12	35:DR:110:PRO:HD3	1.78	0.48
38:DU:76:TYR:OH	38:DU:92:ARG:NH1	2.47	0.48
43:DZ:111:VAL:O	43:DZ:113:ALA:N	2.46	0.48
45:D1:94:LEU:O	45:D1:97:LEU:HB2	2.13	0.48
1:AA:266:G:H5"	1:AA:267:C:H5	1.79	0.48
1:AA:869:G:H4'	1:AA:872:A:O4'	2.14	0.48
1:AA:1394:A:C5	1:AA:1501:C:H4'	2.49	0.48
2:AB:40:HIS:HB3	2:AB:190:THR:HG21	1.96	0.48
3:AC:11:ARG:NH1	3:AC:11:ARG:HB2	2.28	0.48
4:AD:134:ASP:O	4:AD:136:PRO:HD3	2.14	0.48
7:AG:32:ARG:O	7:AG:33:ASP:HB2	2.13	0.48
7:AG:70:LYS:O	7:AG:72:ARG:HD3	2.14	0.48
23:BA:2098:U:H2'	23:BA:2099:U:O4'	2.12	0.48
23:BA:2273:A:O2'	23:BA:2274:A:H5'	2.13	0.48
28:BG:174:GLU:O	28:BG:177:GLY:N	2.45	0.48
33:BP:38:GLN:O	33:BP:39:LYS:CB	2.62	0.48
40:BW:46:PHE:O	40:BW:50:VAL:HG23	2.13	0.48
43:BZ:111:VAL:O	43:BZ:113:ALA:N	2.47	0.48
43:BZ:144:LEU:HD21	43:BZ:150:LEU:HG	1.95	0.48
1:CA:447:G:H2'	1:CA:485:G:N2	2.29	0.48
1:CA:801:U:H2'	1:CA:802:A:C8	2.49	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1286:A:H61	1:CA:1355:G:P	2.37	0.48
1:CA:1321:C:H5'	1:CA:1322:C:H5"	1.96	0.48
1:CA:1329:A:H4'	13:CM:24:GLY:HA2	1.96	0.48
1:CA:1349:A:C2	1:CA:1350:A:H1'	2.49	0.48
3:CC:181:ASN:OD1	3:CC:204:LEU:HB2	2.13	0.48
7:CG:85:TYR:CD1	7:CG:154:TYR:HE1	2.32	0.48
16:CP:72:ARG:HG2	16:CP:73:LEU:HD23	1.96	0.48
23:DA:154:G:H5"	23:DA:154:G:H8	1.79	0.48
23:DA:958:U:H5"	34:DQ:14:ARG:HD3	1.95	0.48
23:DA:2162:G:H4'	23:DA:2172:U:O2'	2.14	0.48
23:DA:2331:G:H4'	44:D0:43:THR:H	1.79	0.48
53:D9:32:HIS:O	53:D9:34:GLN:HG3	2.13	0.48
1:AA:175:C:H2'	1:AA:176:C:H6	1.79	0.48
1:AA:622:A:C8	1:AA:623:C:C6	3.02	0.48
1:AA:715:A:H2'	1:AA:716:A:C8	2.49	0.48
1:AA:762:C:H2'	1:AA:763:G:C8	2.49	0.48
1:AA:1159:U:H3	1:AA:1182:G:H1	1.61	0.48
1:AA:1349:A:H5'	9:AI:120:ARG:HG2	1.96	0.48
3:AC:125:GLU:HA	3:AC:191:THR:HG22	1.95	0.48
5:AE:59:GLY:O	5:AE:63:ARG:N	2.43	0.48
9:AI:31:GLN:HG3	9:AI:36:TYR:HB2	1.94	0.48
15:AO:35:ARG:NH2	15:AO:59:MET:HE2	2.28	0.48
17:AQ:51:TYR:HE2	17:AQ:76:LEU:HB2	1.79	0.48
23:BA:251:A:OP1	52:B8:7:HIS:HE1	1.95	0.48
23:BA:274:G:H2'	23:BA:275:G:C8	2.48	0.48
23:BA:2304:G:H21	28:BG:156:ASP:CG	2.22	0.48
23:BA:2748:A:OP1	29:BH:70:THR:HG21	2.13	0.48
50:B6:11:LEU:HB3	50:B6:49:HIS:HB3	1.95	0.48
1:CA:176:C:H2'	1:CA:177:C:H6	1.79	0.48
1:CA:433:C:H2'	1:CA:434:U:H6	1.78	0.48
1:CA:441:A:H3'	1:CA:442:C:C6	2.49	0.48
1:CA:1203:C:H2'	1:CA:1204:A:C8	2.49	0.48
4:CD:101:LEU:HD23	4:CD:121:VAL:HG11	1.94	0.48
5:CE:32:VAL:HB	5:CE:58:ALA:HB1	1.95	0.48
23:DA:1506:C:C2'	23:DA:1507:A:H5'	2.44	0.48
23:DA:1538:G:O2'	23:DA:1539:G:OP1	2.27	0.48
23:DA:1575:C:H2'	23:DA:1576:U:H6	1.78	0.48
23:DA:2134:A:C2	23:DA:2159:G:H1'	2.49	0.48
23:DA:2378:A:H4'	36:DS:23:ARG:NH1	2.29	0.48
23:DA:2834:G:H5"	23:DA:2834:G:C8	2.49	0.48
36:DS:96:GLY:N	36:DS:99:LYS:H	2.12	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:DU:104:GLN:CD	38:DU:104:GLN:H	2.22	0.48
47:D3:8:LEU:HD13	47:D3:31:LEU:HA	1.96	0.48
1:AA:1001(A):G:H2'	1:AA:1002:G:H8	1.79	0.48
1:AA:1202:G:H1'	14:AN:42:ILE:HG21	1.95	0.48
1:AA:1362:C:H2'	1:AA:1363:C:H5"	1.96	0.48
3:AC:34:LEU:O	3:AC:38:ARG:N	2.34	0.48
9:AI:43:ALA:O	9:AI:46:ALA:N	2.46	0.48
23:BA:271(L):U:C4'	23:BA:271(M):G:OP1	2.61	0.48
23:BA:934:G:H2'	23:BA:935:C:C6	2.48	0.48
23:BA:2699:C:H2'	23:BA:2700:C:O4'	2.13	0.48
24:BB:2:C:H2'	24:BB:3:C:C6	2.48	0.48
24:BB:14:U:OP2	24:BB:70:C:O2'	2.30	0.48
24:BB:91:C:OP1	34:BQ:16:ARG:HG2	2.14	0.48
33:BP:39:LYS:CB	33:BP:45:LEU:HG	2.37	0.48
45:B1:3:LYS:HE3	45:B1:3:LYS:HB3	1.51	0.48
1:CA:77:G:C6	1:CA:93:G:C6	3.02	0.48
1:CA:148:G:O2'	1:CA:149:A:H5'	2.13	0.48
1:CA:980:C:H3'	1:CA:981:U:C6	2.49	0.48
1:CA:1325:C:H5"	21:CU:17:THR:HG21	1.96	0.48
1:CA:1403:C:H1'	1:CA:1500:A:N1	2.29	0.48
3:CC:175:LEU:H	3:CC:175:LEU:HG	1.54	0.48
20:CT:76:ALA:HA	20:CT:79:ARG:NH1	2.29	0.48
23:DA:30:G:H2'	23:DA:31:C:C6	2.48	0.48
33:DP:100:LEU:HD12	33:DP:112:LEU:HD11	1.95	0.48
48:D4:16:CYS:SG	48:D4:20:ASN:N	2.87	0.48
1:AA:31:G:H5'	1:AA:306:G:H21	1.77	0.47
1:AA:97:G:HO2'	1:AA:98:G:H8	1.61	0.47
1:AA:192:U:H2'	1:AA:193:C:H6	1.79	0.47
1:AA:1048:G:H5'	1:AA:1215:G:H4'	1.96	0.47
1:AA:1115:C:H1'	14:AN:61:TRP:O	2.13	0.47
1:AA:1313:U:N3	1:AA:1324:A:N6	2.33	0.47
1:AA:1350:A:C2	7:AG:34:GLY:HA3	2.49	0.47
1:AA:1382:C:O2'	1:AA:1383:C:H5'	2.13	0.47
1:AA:1533:C:H41	22:AV:11:ARG:HG3	1.79	0.47
2:AB:71:VAL:N	2:AB:163:PHE:O	2.46	0.47
5:AE:67:VAL:HG21	5:AE:140:ARG:HA	1.96	0.47
7:AG:140:ASP:HA	7:AG:143:ARG:NH2	2.29	0.47
10:AJ:79:ARG:C	10:AJ:81:THR:N	2.70	0.47
23:BA:57:C:H2'	23:BA:58:G:O4'	2.14	0.47
23:BA:855:G:H2'	23:BA:856:C:C6	2.49	0.47
23:BA:1049:C:H2'	23:BA:1050:A:C8	2.48	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BA:2784:C:H1'	26:BE:37:ARG:NH1	2.28	0.47
24:BB:8:U:O3'	36:BS:25:ARG:NH2	2.47	0.47
24:BB:28:C:OP1	36:BS:36:TYR:OH	2.30	0.47
26:BE:116:VAL:HG13	26:BE:122:PHE:CG	2.47	0.47
31:BN:18:ALA:O	31:BN:21:LYS:HB2	2.14	0.47
40:BW:19:LEU:O	49:B5:25:LEU:HD12	2.14	0.47
1:CA:202:U:H3'	1:CA:203:U:C5	2.49	0.47
1:CA:589:C:H2'	1:CA:590:C:C6	2.49	0.47
1:CA:949:A:H2	1:CA:971:G:N7	2.12	0.47
1:CA:1126:U:OP2	1:CA:1281:U:H1'	2.14	0.47
1:CA:1131:G:N2	1:CA:1143:G:O2'	2.46	0.47
7:CG:92:SER:HB3	7:CG:95:ARG:HB3	1.95	0.47
10:CJ:8:LEU:HD22	10:CJ:96:ILE:HG22	1.95	0.47
19:CS:37:ARG:O	19:CS:70:LYS:HE3	2.14	0.47
23:DA:7:G:H1	23:DA:2896:C:H42	1.62	0.47
23:DA:795:C:H2'	23:DA:796:C:C6	2.49	0.47
23:DA:1025:G:C4	23:DA:1135:C:H1'	2.49	0.47
23:DA:2610:C:H4'	23:DA:2611:U:OP2	2.14	0.47
24:DB:29:A:H5"	24:DB:30:C:OP2	2.14	0.47
30:DI:14:ASP:N	30:DI:17:GLN:OE1	2.34	0.47
39:DV:62:LEU:HD21	39:DV:95:LEU:HB2	1.95	0.47
52:D8:34:TRP:CE2	52:D8:35:GLN:HG3	2.49	0.47
1:AA:2:U:H2'	1:AA:3:G:O4'	2.14	0.47
1:AA:1068:G:OP2	1:AA:1068:G:H8	1.97	0.47
1:AA:1119:C:N3	1:AA:1154:G:O6	2.47	0.47
10:AJ:15:THR:HA	10:AJ:18:ALA:H	1.79	0.47
23:BA:524:U:H2'	23:BA:525:U:C6	2.49	0.47
23:BA:751:A:H5'	40:BW:90:ARG:HA	1.97	0.47
23:BA:1568:G:H5"	25:BD:61:LEU:HD22	1.96	0.47
23:BA:1833:U:O2'	23:BA:1969:A:N1	2.45	0.47
23:BA:2129:C:N3	23:BA:2160:G:C6	2.83	0.47
23:BA:2304:G:O6	23:BA:2312:U:O4	2.32	0.47
23:BA:2781:A:H5"	23:BA:2782:G:H5'	1.96	0.47
28:BG:47:LYS:HD3	28:BG:81:LYS:CB	2.44	0.47
30:BI:79:ILE:O	30:BI:144:VAL:HA	2.14	0.47
1:CA:1081:G:H2'	1:CA:1082:G:O4'	2.14	0.47
3:CC:46:GLU:H	3:CC:46:GLU:CD	2.21	0.47
5:CE:127:ASN:O	5:CE:131:ILE:HG12	2.14	0.47
7:CG:143:ARG:CZ	7:CG:143:ARG:HB2	2.44	0.47
23:DA:271(P):C:H2'	23:DA:271(Q):G:H5'	1.95	0.47
23:DA:649:G:H2'	23:DA:650:C:O4'	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:957:A:H5'	34:DQ:76:LYS:HG3	1.96	0.47
37:DT:23:ARG:HG3	37:DT:120:ARG:NH1	2.29	0.47
40:DW:83:LYS:O	40:DW:84:ARG:HD3	2.15	0.47
52:D8:62:LEU:HB3	52:D8:65:GLU:HG2	1.96	0.47
1:AA:169:C:H5	1:AA:170:U:C4	2.32	0.47
1:AA:938:A:N3	1:AA:1377:A:C8	2.82	0.47
1:AA:952:U:H2'	1:AA:953:G:H8	1.77	0.47
1:AA:991:U:O2	1:AA:993:G:C8	2.67	0.47
1:AA:1149:C:O2'	1:AA:1280:A:N6	2.47	0.47
1:AA:1332:A:H8	1:AA:1332:A:O5'	1.98	0.47
4:AD:5:ILE:HG22	4:AD:5:ILE:O	2.14	0.47
8:AH:121:ASP:N	8:AH:121:ASP:OD1	2.48	0.47
9:AI:11:LYS:HA	9:AI:108:VAL:HG12	1.96	0.47
23:BA:1211:U:H4'	23:BA:1212:G:OP2	2.14	0.47
23:BA:2690:C:N4	23:BA:2713:A:H1'	2.28	0.47
39:BV:62:LEU:HD21	39:BV:95:LEU:HB2	1.96	0.47
43:BZ:111:VAL:HG12	43:BZ:112:ARG:H	1.78	0.47
52:B8:61:LEU:C	52:B8:63:PRO:HD3	2.40	0.47
1:CA:722:A:O2'	1:CA:723:U:H5"	2.14	0.47
1:CA:1055:A:N1	1:CA:1056:U:H1'	2.29	0.47
1:CA:1244:C:H2'	1:CA:1245:A:H8	1.75	0.47
1:CA:1459:C:C2	1:CA:1460:A:N6	2.83	0.47
7:CG:104:LEU:HD22	7:CG:134:ALA:HB1	1.97	0.47
7:CG:116:ALA:HA	7:CG:119:ARG:CG	2.44	0.47
15:CO:35:ARG:NH2	15:CO:59:MET:HE2	2.29	0.47
20:CT:64:ASP:OD1	20:CT:81:LYS:NZ	2.47	0.47
23:DA:271(L):U:C4'	23:DA:271(M):G:OP1	2.61	0.47
23:DA:359:A:H2'	23:DA:360:G:O4'	2.14	0.47
23:DA:1405:U:H2'	23:DA:1406:U:H6	1.78	0.47
39:DV:58:VAL:HG12	39:DV:97:LYS:HB2	1.96	0.47
1:AA:189:G:C6	1:AA:189(A):C:C4	3.02	0.47
1:AA:959:A:H3'	1:AA:960:U:C5'	2.44	0.47
1:AA:1126:U:H1'	1:AA:1280:A:C5	2.50	0.47
1:AA:1276:G:N3	1:AA:1282:C:O2'	2.47	0.47
2:AB:87:ARG:NH2	2:AB:233:SER:HB2	2.28	0.47
5:AE:107:ARG:O	5:AE:110:LEU:N	2.47	0.47
11:AK:29:ILE:HG23	11:AK:44:SER:HB3	1.95	0.47
12:AL:84:LEU:HD22	12:AL:85:ILE:H	1.79	0.47
23:BA:754:C:H2'	23:BA:755:C:H6	1.78	0.47
23:BA:1688:U:O2	23:BA:1700:A:H5'	2.14	0.47
23:BA:2286:A:OP1	50:B6:29:ASN:ND2	2.48	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BA:2850:A:OP2	23:BA:2866:U:H5	1.97	0.47
26:BE:21:VAL:HA	26:BE:22:PRO:HD2	1.69	0.47
1:CA:203:U:H3'	1:CA:203:U:OP2	2.14	0.47
1:CA:577:G:C8	1:CA:816:A:C6	3.03	0.47
1:CA:715:A:H2'	1:CA:716:A:C8	2.48	0.47
1:CA:1128:C:OP1	9:CI:66:ARG:NH2	2.48	0.47
1:CA:1138:G:H3'	1:CA:1138:G:N3	2.30	0.47
1:CA:1273:G:H2'	1:CA:1273:G:N3	2.28	0.47
1:CA:1286:A:H2'	1:CA:1287:A:H4'	1.96	0.47
1:CA:1411:C:H2'	1:CA:1412:C:C6	2.49	0.47
3:CC:131:ARG:NH2	5:CE:50:GLU:OE1	2.45	0.47
8:CH:118:VAL:C	8:CH:119:LEU:HD23	2.39	0.47
13:CM:92:HIS:CD2	13:CM:98:VAL:HG21	2.50	0.47
20:CT:30:LYS:HA	20:CT:33:ILE:HD12	1.95	0.47
23:DA:1041:C:H5'	23:DA:1042:G:OP2	2.15	0.47
23:DA:1106:G:H4'	23:DA:1107:G:OP2	2.14	0.47
23:DA:1364:G:P	45:D1:3:LYS:HG2	2.54	0.47
23:DA:1486:A:H2'	23:DA:1487:G:C8	2.46	0.47
23:DA:1839:G:C8	23:DA:1927:A:H1'	2.49	0.47
23:DA:2836:U:H2'	23:DA:2837:G:C8	2.49	0.47
26:DE:105:THR:OG1	26:DE:199:ARG:NH2	2.46	0.47
27:DF:32:LEU:HD11	27:DF:105:VAL:HG13	1.96	0.47
43:DZ:5:LEU:HD22	43:DZ:6:LYS:H	1.80	0.47
1:AA:393:A:C2	1:AA:394:G:C8	3.03	0.47
1:AA:600:C:H2'	1:AA:601:C:H6	1.79	0.47
1:AA:722:A:O2'	1:AA:723:U:H5"	2.15	0.47
1:AA:1080:A:H5'	5:AE:14:ARG:NH2	2.29	0.47
1:AA:1493:A:H1'	23:BA:1913:A:N1	2.30	0.47
2:AB:102:LEU:O	2:AB:105:PHE:HB2	2.14	0.47
13:AM:87:TYR:O	13:AM:91:ARG:HG2	2.14	0.47
16:AP:17:TYR:N	16:AP:17:TYR:CD1	2.81	0.47
19:AS:35:SER:C	19:AS:51:VAL:HG11	2.38	0.47
23:BA:529:A:OP2	31:BN:114:ARG:NH2	2.47	0.47
23:BA:1413:G:O6	56:BA:4504:HOH:O	2.19	0.47
23:BA:1418:G:H8	23:BA:1418:G:O5'	1.97	0.47
48:B4:16:CYS:HB2	48:B4:36:CYS:SG	2.55	0.47
1:CA:547:A:OP2	4:CD:2:GLY:HA2	2.13	0.47
1:CA:920:U:H2'	1:CA:921:U:H6	1.79	0.47
1:CA:1127:G:H4'	9:CI:66:ARG:HH12	1.79	0.47
3:CC:191:THR:OG1	3:CC:192:THR:N	2.46	0.47
5:CE:76:ILE:HG22	5:CE:93:PRO:HB3	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:CE:93:PRO:HG2	8:CH:105:ARG:CZ	2.45	0.47
7:CG:26:PHE:CD1	7:CG:101:LEU:HB3	2.47	0.47
7:CG:26:PHE:HE1	7:CG:101:LEU:O	1.97	0.47
9:CI:113:LYS:HB2	9:CI:119:ALA:HA	1.96	0.47
17:CQ:51:TYR:HE2	17:CQ:76:LEU:HB2	1.80	0.47
23:DA:92:A:C2'	23:DA:93:G:H5'	2.45	0.47
23:DA:1223:G:N2	23:DA:1226:A:OP2	2.40	0.47
23:DA:2478:A:H5'	53:D9:31:LYS:HE2	1.96	0.47
24:DB:111:G:H2'	24:DB:112:U:C6	2.49	0.47
1:AA:1356:G:H2'	1:AA:1357:A:C8	2.49	0.47
1:AA:1442:G:C8	1:AA:1442(A):G:C5	3.02	0.47
2:AB:16:HIS:HA	2:AB:210:SER:OG	2.13	0.47
3:AC:36:ASP:HB3	3:AC:57:ILE:HD12	1.96	0.47
4:AD:107:ARG:O	4:AD:170:VAL:HG11	2.15	0.47
7:AG:105:VAL:HG23	7:AG:120:ILE:HD11	1.96	0.47
11:AK:27:ASN:OD1	11:AK:28:THR:N	2.46	0.47
16:AP:3:LYS:O	16:AP:21:VAL:HA	2.15	0.47
23:BA:1992:G:C2	23:BA:1997:G:C5	3.03	0.47
24:BB:20:C:H2'	24:BB:21:G:O4'	2.14	0.47
1:CA:580:U:H3	1:CA:761:G:H1	1.62	0.47
1:CA:1128:C:O2'	1:CA:1130:A:C8	2.65	0.47
1:CA:1290:G:C6	1:CA:1291:G:C6	3.03	0.47
1:CA:1306:A:H2'	1:CA:1307:U:C6	2.49	0.47
1:CA:1396:A:H2	5:CE:19:MET:HG3	1.79	0.47
4:CD:88:VAL:O	4:CD:92:VAL:HG23	2.14	0.47
23:DA:362:U:O2'	23:DA:363:G:H5"	2.15	0.47
23:DA:542:C:H2'	23:DA:543:C:H6	1.79	0.47
23:DA:857:C:H1'	44:D0:26:TYR:CE2	2.49	0.47
23:DA:864:G:C6	23:DA:865:C:N4	2.83	0.47
23:DA:1652:A:OP1	35:DR:8:ARG:HD3	2.14	0.47
23:DA:2693:A:H2'	23:DA:2694:G:H8	1.78	0.47
28:DG:96:ARG:N	28:DG:99:MET:HE2	2.29	0.47
29:DH:33:LEU:HD21	29:DH:136:ILE:HG13	1.96	0.47
32:DO:2:ILE:HD12	32:DO:6:THR:HG21	1.96	0.47
34:DQ:84:GLY:O	34:DQ:85:LYS:HB2	2.14	0.47
41:DX:53:LYS:HB3	41:DX:82:GLN:HB3	1.96	0.47
1:AA:345:C:C4'	1:AA:346:G:N7	2.78	0.47
1:AA:405:U:O4	4:AD:2:GLY:N	2.48	0.47
1:AA:522:C:OP2	12:AL:69:TYR:OH	2.25	0.47
1:AA:864:A:H2'	1:AA:865:A:C8	2.49	0.47
1:AA:865:A:C2	1:AA:918:A:H4'	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:976:G:H2'	1:AA:1359:C:H5'	1.96	0.47
1:AA:978:A:N7	1:AA:1360:A:N6	2.63	0.47
1:AA:999:C:N4	1:AA:1042:G:H1	2.13	0.47
1:AA:1039:C:N3	1:AA:1040:U:C4	2.83	0.47
1:AA:1109:C:H2'	1:AA:1110:A:O4'	2.14	0.47
1:AA:1227:A:H3'	1:AA:1228:C:H5"	1.97	0.47
1:AA:1245:A:N6	1:AA:1293:G:N1	2.62	0.47
1:AA:1291:G:H4'	9:AI:39:GLY:HA3	1.95	0.47
1:AA:1349:A:H1'	1:AA:1374:A:N6	2.29	0.47
1:AA:1438:G:H2'	1:AA:1439:C:C6	2.49	0.47
7:AG:46:ALA:HB1	7:AG:121:ALA:HB2	1.96	0.47
7:AG:73:MET:O	7:AG:142:GLU:HA	2.15	0.47
8:AH:81:HIS:ND1	8:AH:138:TRP:OXT	2.35	0.47
10:AJ:48:THR:HA	10:AJ:62:HIS:CB	2.44	0.47
13:AM:5:ALA:HB1	13:AM:66:LEU:HD13	1.96	0.47
13:AM:108:ARG:HD2	13:AM:112:GLY:O	2.15	0.47
14:AN:4:LYS:O	14:AN:4:LYS:HD3	2.15	0.47
15:AO:63:ARG:HG2	15:AO:67:LEU:HD12	1.95	0.47
20:AT:29:LYS:O	20:AT:33:ILE:HG13	2.15	0.47
23:BA:90:U:O2'	23:BA:92:A:P	2.71	0.47
23:BA:244:A:C2	23:BA:255:A:C4	3.03	0.47
23:BA:362:U:O2'	23:BA:363:G:H5"	2.15	0.47
23:BA:902:C:H2'	23:BA:903:C:C6	2.50	0.47
23:BA:1036:G:H1	23:BA:1119:C:N4	2.10	0.47
23:BA:1041:C:H5'	23:BA:1042:G:OP2	2.14	0.47
23:BA:1479:G:O2'	23:BA:1558:A:H5'	2.14	0.47
23:BA:1796:U:H4'	25:BD:256:GLY:N	2.30	0.47
23:BA:2206:G:H5'	23:BA:2207:G:N7	2.29	0.47
23:BA:2334:G:O6	44:B0:74:ARG:NH1	2.40	0.47
23:BA:2439:A:H5'	23:BA:2439:A:C8	2.50	0.47
23:BA:2845:G:O2'	23:BA:2846:G:H5'	2.15	0.47
24:BB:108:U:H2'	24:BB:109:C:H5"	1.97	0.47
27:BF:108:LYS:O	27:BF:112:MET:HG3	2.14	0.47
30:BI:68:LEU:C	30:BI:70:GLU:N	2.73	0.47
32:BO:88:ASN:ND2	32:BO:90:GLN:H	2.12	0.47
33:BP:63:PRO:HG2	52:B8:25:MET:HB2	1.96	0.47
36:BS:10:ARG:NH2	36:BS:91:PRO:HB2	2.28	0.47
36:BS:10:ARG:O	36:BS:14:VAL:HG13	2.14	0.47
37:BT:97:ALA:O	37:BT:98:LYS:HD2	2.14	0.47
41:BX:27:THR:HG23	41:BX:80:ILE:HG13	1.97	0.47
50:B6:16:CYS:SG	50:B6:18:ARG:HG3	2.55	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:59:A:H5'	1:CA:60:A:C5'	2.44	0.47
1:CA:266:G:H5"	1:CA:267:C:H5	1.79	0.47
1:CA:397:A:N3	1:CA:397:A:H5"	2.29	0.47
1:CA:426:G:P	4:CD:36:ARG:NH1	2.87	0.47
1:CA:438:G:OP1	4:CD:125:HIS:CE1	2.66	0.47
1:CA:622:A:OP2	1:CA:623:C:N4	2.47	0.47
1:CA:939:G:H1	1:CA:1344:C:N4	2.12	0.47
1:CA:1035:A:H2'	1:CA:1036:G:C8	2.48	0.47
1:CA:1096:C:H2'	1:CA:1097:C:C6	2.47	0.47
1:CA:1373:G:C5'	7:CG:36:LYS:HB2	2.42	0.47
3:CC:117:ALA:HB2	3:CC:200:ALA:HB2	1.97	0.47
12:CL:5:PRO:HB2	12:CL:10:LEU:HD11	1.96	0.47
12:CL:57:LYS:HE2	12:CL:67:THR:HG23	1.97	0.47
15:CO:24:SER:O	15:CO:27:VAL:N	2.47	0.47
23:DA:29:U:H2'	23:DA:30:G:C8	2.50	0.47
23:DA:458:G:O2'	51:D7:39:ARG:HD3	2.14	0.47
23:DA:819:A:C2'	23:DA:820:A:H5'	2.45	0.47
23:DA:824:A:H1'	23:DA:2358:G:N7	2.29	0.47
23:DA:975(A):G:H1'	23:DA:990:A:C2	2.49	0.47
23:DA:2016:U:H1'	49:D5:6:VAL:HG13	1.96	0.47
23:DA:2317:C:H2'	23:DA:2318:G:H5'	1.96	0.47
23:DA:2497:A:H5"	56:DA:3635:HOH:O	2.13	0.47
23:DA:2659:G:P	29:DH:158:HIS:HE2	2.36	0.47
23:DA:2884:U:O2	49:D5:53:ALA:HB2	2.15	0.47
28:DG:126:ASP:CG	28:DG:130:ASN:HD22	2.23	0.47
31:DN:34:LEU:HD12	31:DN:34:LEU:HA	1.73	0.47
45:D1:82:LEU:HD22	45:D1:90:ILE:HG23	1.97	0.47
51:D7:16:HIS:HB2	51:D7:44:PRO:HG2	1.97	0.47
52:D8:62:LEU:HB3	52:D8:65:GLU:CG	2.45	0.47
1:AA:458:C:H2'	1:AA:460:G:C8	2.47	0.47
1:AA:841:U:OP2	1:AA:841:U:C2	2.68	0.47
1:AA:941:G:OP1	7:AG:32:ARG:HD2	2.15	0.47
1:AA:1065:U:H5"	1:AA:1066:C:H6	1.79	0.47
1:AA:1138:G:H3'	1:AA:1138:G:N3	2.29	0.47
2:AB:103:THR:HG23	2:AB:176:GLU:HB3	1.97	0.47
2:AB:204:ASN:OD1	2:AB:206:ASP:N	2.47	0.47
3:AC:172:ARG:HH21	3:AC:174:PRO:HG3	1.79	0.47
4:AD:166:LYS:HA	4:AD:178:VAL:HG11	1.97	0.47
5:AE:57:LYS:HB3	5:AE:61:TYR:CE2	2.50	0.47
5:AE:93:PRO:O	8:AH:105:ARG:NH2	2.47	0.47
15:AO:55:GLY:HA2	15:AO:58:MET:HG3	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AT:42:GLN:HA	20:AT:42:GLN:NE2	2.29	0.47
23:BA:278:A:H4'	23:BA:279:C:OP1	2.14	0.47
23:BA:1300:U:H4'	23:BA:1301:A:H5"	1.97	0.47
23:BA:1706:U:OP1	56:BA:4153:HOH:O	2.20	0.47
23:BA:2626:C:H2'	23:BA:2627:G:O4'	2.15	0.47
23:BA:2772:C:H2'	23:BA:2773:C:C6	2.50	0.47
28:BG:16:ARG:NH2	28:BG:28:VAL:O	2.48	0.47
1:CA:44:G:H2'	1:CA:45:U:O4'	2.15	0.47
1:CA:78:G:N2	1:CA:92:C:O2	2.48	0.47
1:CA:408:A:H61	1:CA:434:U:H3	1.62	0.47
1:CA:1171:G:H2'	1:CA:1172:C:C6	2.50	0.47
1:CA:1236:A:O3'	1:CA:1304:G:H5'	2.13	0.47
2:CB:71:VAL:HG13	2:CB:93:VAL:HG23	1.95	0.47
3:CC:9:GLY:HA3	14:CN:49:HIS:ND1	2.30	0.47
4:CD:64:LEU:HD23	4:CD:203:VAL:HG21	1.96	0.47
5:CE:60:TYR:CD1	5:CE:60:TYR:C	2.93	0.47
6:CF:15:ASP:HB2	6:CF:18:GLN:H	1.79	0.47
15:CO:56:LEU:O	15:CO:60:VAL:HG23	2.15	0.47
19:CS:52:TYR:HD1	19:CS:57:HIS:CD2	2.32	0.47
20:CT:55:ILE:HD13	20:CT:55:ILE:HA	1.77	0.47
23:DA:1329:U:H5"	23:DA:1330:C:H5	1.80	0.47
23:DA:1533:G:H8	23:DA:1533:G:O5'	1.98	0.47
23:DA:1557:C:OP2	23:DA:1558:A:O2'	2.25	0.47
23:DA:2894:G:H2'	23:DA:2894:G:N3	2.30	0.47
29:DH:144:VAL:O	29:DH:148:ILE:HG12	2.14	0.47
1:AA:27:G:H2'	1:AA:28:G:H8	1.79	0.47
1:AA:36:C:O2'	12:AL:117:ARG:NH2	2.48	0.47
1:AA:408:A:H61	1:AA:434:U:H3	1.63	0.47
1:AA:1224:G:OP1	13:AM:104:ARG:NH1	2.47	0.47
1:AA:1285:A:H1'	1:AA:1286:A:OP2	2.14	0.47
1:AA:1459:C:H2'	1:AA:1460:A:C8	2.50	0.47
2:AB:194:PRO:O	2:AB:196:LEU:N	2.48	0.47
9:AI:65:VAL:HG22	9:AI:73:GLN:HG2	1.96	0.47
18:AR:43:PHE:C	18:AR:51:LEU:HD12	2.40	0.47
23:BA:1021:A:N6	23:BA:1142(A):A:H61	2.12	0.47
23:BA:1239:G:H2'	23:BA:1240:U:O4'	2.14	0.47
23:BA:1510:G:H2'	23:BA:1511:C:C6	2.50	0.47
23:BA:1514:U:H2'	23:BA:1515:G:C8	2.50	0.47
23:BA:1582:C:O2'	23:BA:1586:A:N3	2.47	0.47
23:BA:1815:A:C5	23:BA:1817:G:C6	3.03	0.47
39:BV:21:ARG:HG3	39:BV:93:GLU:HG3	1.96	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BX:52:VAL:HG12	41:BX:82:GLN:HG2	1.97	0.47
44:B0:29:GLN:O	44:B0:67:VAL:HG23	2.15	0.47
45:B1:86:SER:OG	45:B1:89:GLU:HG2	2.15	0.47
47:B3:8:LEU:HD13	47:B3:31:LEU:HA	1.96	0.47
1:CA:484:G:O2'	1:CA:485:G:OP2	2.32	0.47
1:CA:1319:A:H2'	19:CS:4:SER:HB2	1.97	0.47
1:CA:1356:G:H2'	1:CA:1357:A:O4'	2.15	0.47
1:CA:1493:A:H1'	23:DA:1913:A:C6	2.49	0.47
23:DA:143:G:H2'	23:DA:143(A):C:C6	2.50	0.47
23:DA:720:C:H2'	23:DA:721:C:C6	2.48	0.47
23:DA:2315:G:C6	23:DA:2316:C:N4	2.83	0.47
23:DA:2337:G:C2	23:DA:2338:G:C8	3.03	0.47
25:DD:26:LYS:HE2	25:DD:28:GLU:O	2.14	0.47
29:DH:40:GLU:OE2	29:DH:60:ARG:NH1	2.48	0.47
36:DS:3:ARG:HG3	36:DS:4:LEU:N	2.24	0.47
38:DU:65:ILE:HD11	38:DU:95:LEU:HB3	1.97	0.47
40:DW:40:ASN:O	40:DW:41:LYS:HG3	2.14	0.47
43:DZ:141:VAL:O	43:DZ:144:LEU:HB2	2.14	0.47
53:D9:8:LYS:O	53:D9:34:GLN:NE2	2.45	0.47
1:AA:106:C:H2'	1:AA:107:G:H8	1.80	0.47
1:AA:1152:A:H5'	10:AJ:13:HIS:CD2	2.50	0.47
6:AF:91:VAL:HG13	18:AR:72:ARG:HH22	1.80	0.47
9:AI:46:ALA:HB1	9:AI:74:ILE:HG23	1.96	0.47
16:AP:28:ARG:NH1	16:AP:29:ASP:OD2	2.47	0.47
21:AU:12:LYS:CB	21:AU:22:ARG:HD2	2.36	0.47
23:BA:1493:C:C4	23:BA:2206:G:H1'	2.50	0.47
23:BA:1652:A:C2'	23:BA:1653:G:H5'	2.45	0.47
23:BA:2734:A:H2'	23:BA:2735:G:O4'	2.15	0.47
27:BF:158:THR:O	27:BF:164:ARG:NH1	2.48	0.47
31:BN:34:LEU:HD12	31:BN:34:LEU:HA	1.72	0.47
1:CA:509:A:H5"	4:CD:55:ALA:HB2	1.95	0.47
1:CA:1015:A:H2'	1:CA:1016:A:O4'	2.15	0.47
1:CA:1347:G:N2	1:CA:1373:G:H2'	2.30	0.47
2:CB:21:ARG:HD3	2:CB:21:ARG:N	2.29	0.47
5:CE:59:GLY:O	5:CE:63:ARG:N	2.42	0.47
13:CM:91:ARG:HG3	13:CM:98:VAL:HA	1.97	0.47
15:CO:25:THR:HG21	15:CO:70:LEU:HB2	1.97	0.47
23:DA:760:G:H2'	23:DA:761:A:O4'	2.14	0.47
23:DA:811:U:H2'	33:DP:21:ARG:HA	1.96	0.47
23:DA:860:U:C2	23:DA:2268:A:C8	3.03	0.47
23:DA:2287:A:O2'	23:DA:2288:A:H3'	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:DB:49:C:OP1	36:DS:97:ARG:HB2	2.15	0.47
27:DF:64:ILE:HD12	27:DF:65:TRP:CZ3	2.50	0.47
27:DF:89:VAL:O	27:DF:91:GLY:N	2.48	0.47
49:D5:35:GLU:HG3	49:D5:51:TYR:CB	2.45	0.47
1:AA:105:G:H2'	1:AA:106:C:C6	2.50	0.46
1:AA:872:A:C5	1:AA:874:G:C8	3.03	0.46
1:AA:1227:A:H8	19:AS:83:HIS:ND1	2.12	0.46
1:AA:1308:U:OP1	13:AM:97:PRO:HA	2.16	0.46
1:AA:1360:A:H3'	1:AA:1361:G:C8	2.50	0.46
1:AA:1442(B):A:C2	37:BT:118:ARG:NE	2.83	0.46
1:AA:1486:G:H2'	1:AA:1487:G:O4'	2.14	0.46
7:AG:16:LEU:HD13	9:AI:44:VAL:O	2.15	0.46
12:AL:70:ILE:HG23	12:AL:100:ILE:HD12	1.97	0.46
13:AM:52:GLU:HG2	13:AM:55:ARG:NH2	2.30	0.46
21:AU:15:ARG:HD3	21:AU:17:THR:HG22	1.97	0.46
23:BA:529:A:H4'	56:BA:4296:HOH:O	2.14	0.46
23:BA:792:G:H5"	23:BA:793:A:H5'	1.96	0.46
23:BA:1210:A:H4'	23:BA:1211:U:O5'	2.14	0.46
30:BI:140:LEU:HD23	30:BI:140:LEU:HA	1.53	0.46
32:BO:47:ILE:HB	32:BO:48:PRO:HD2	1.97	0.46
1:CA:978:A:H5"	1:CA:979:C:OP2	2.14	0.46
1:CA:1236:A:OP1	21:CU:2:GLY:HA3	2.15	0.46
4:CD:36:ARG:HG2	4:CD:38:TYR:CZ	2.51	0.46
4:CD:36:ARG:HG2	4:CD:38:TYR:OH	2.15	0.46
4:CD:119:GLN:O	4:CD:123:HIS:CD2	2.69	0.46
4:CD:120:LEU:HB3	4:CD:126:ILE:HD11	1.95	0.46
23:DA:64:A:O3'	41:DX:71:GLY:HA3	2.15	0.46
23:DA:307:G:N7	56:DA:3950:HOH:O	2.35	0.46
23:DA:657:U:H2'	23:DA:658:C:C6	2.50	0.46
23:DA:1889:A:H2'	23:DA:1890:A:C8	2.50	0.46
23:DA:1970:A:H4'	23:DA:1971:A:OP1	2.15	0.46
23:DA:2483:C:N3	34:DQ:124:LYS:NZ	2.63	0.46
25:DD:142:VAL:HG23	25:DD:193:VAL:HA	1.97	0.46
25:DD:147:LEU:HD13	25:DD:155:LEU:HD21	1.97	0.46
26:DE:97:LYS:O	26:DE:100:GLU:HG3	2.15	0.46
27:DF:103:LYS:HA	27:DF:106:ARG:HG3	1.97	0.46
37:DT:23:ARG:HG3	37:DT:120:ARG:CZ	2.45	0.46
37:DT:84:GLN:NE2	37:DT:85:LYS:HG2	2.30	0.46
41:DX:26:TYR:CE1	41:DX:89:ILE:HG13	2.50	0.46
43:DZ:30:ASN:HD22	43:DZ:90:VAL:HB	1.79	0.46
1:AA:933:G:C8	7:AG:3:ARG:HD2	2.50	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1099:G:H5'	1:AA:1100:C:OP2	2.15	0.46
1:AA:1493:A:O2'	1:AA:1494:G:O5'	2.28	0.46
2:AB:21:ARG:HD3	2:AB:21:ARG:N	2.30	0.46
2:AB:84:GLU:HA	2:AB:87:ARG:HB3	1.97	0.46
2:AB:112:VAL:HG12	2:AB:113:HIS:ND1	2.29	0.46
2:AB:149:LEU:HD22	2:AB:152:PHE:CD1	2.50	0.46
13:AM:86:CYS:O	19:AS:73:GLU:HB3	2.15	0.46
19:AS:57:HIS:ND1	19:AS:57:HIS:N	2.64	0.46
21:AU:12:LYS:HZ2	21:AU:17:THR:C	2.22	0.46
22:AV:51:ARG:HB3	22:AV:51:ARG:HH11	1.80	0.46
23:BA:251:A:C5	23:BA:252:G:H1'	2.49	0.46
23:BA:911:A:H2'	34:BQ:9:TYR:OH	2.15	0.46
23:BA:2208:A:H1'	23:BA:2219:G:C4	2.50	0.46
25:BD:76:PRO:HB2	25:BD:116:GLN:HE21	1.80	0.46
28:BG:73:ALA:HB2	28:BG:88:ILE:HD11	1.96	0.46
42:BY:32:PRO:O	42:BY:35:TYR:N	2.44	0.46
43:BZ:53:ILE:HG22	43:BZ:71:VAL:O	2.15	0.46
1:CA:31:G:O2'	1:CA:48:C:N4	2.48	0.46
1:CA:152:A:N6	1:CA:170:U:H3	2.12	0.46
1:CA:622:A:C8	1:CA:623:C:C6	3.03	0.46
1:CA:1233:G:H2'	1:CA:1234:C:C6	2.50	0.46
1:CA:1252:A:H2'	1:CA:1253:G:O4'	2.16	0.46
2:CB:134:GLU:O	2:CB:138:LEU:HG	2.14	0.46
3:CC:184:TYR:CE2	3:CC:186:PHE:HB2	2.50	0.46
23:DA:278:A:H4'	23:DA:279:C:OP1	2.15	0.46
23:DA:1180:C:H2'	23:DA:1181:C:H6	1.79	0.46
23:DA:1582:C:O2'	23:DA:1586:A:N3	2.47	0.46
26:DE:36:ARG:HG2	26:DE:47:VAL:HG22	1.96	0.46
36:DS:49:VAL:HG12	36:DS:73:LEU:HD12	1.96	0.46
48:D4:14:ILE:HA	48:D4:31:ILE:O	2.16	0.46
50:D6:11:LEU:HB2	50:D6:21:TYR:HB2	1.97	0.46
1:AA:59:A:H5'	1:AA:60:A:C5'	2.41	0.46
1:AA:193:C:H2'	1:AA:194:C:H6	1.78	0.46
1:AA:503:C:H2'	1:AA:504:C:H6	1.79	0.46
1:AA:745:C:H2'	1:AA:746:A:C8	2.49	0.46
1:AA:1237:C:O2'	1:AA:1335:C:H5'	2.15	0.46
3:AC:130:VAL:HG21	3:AC:158:GLY:N	2.30	0.46
7:AG:37:ASN:ND2	9:AI:39:GLY:O	2.46	0.46
9:AI:23:ASN:N	9:AI:60:ASP:OD1	2.48	0.46
10:AJ:49:VAL:HG23	14:AN:41:ARG:HD2	1.97	0.46
12:AL:124:LYS:HA	12:AL:125:PRO:HD3	1.78	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AN:6:LEU:HG	14:AN:23:ARG:HH22	1.78	0.46
15:AO:24:SER:O	15:AO:27:VAL:N	2.46	0.46
23:BA:83:G:OP1	42:BY:95:LYS:NZ	2.48	0.46
23:BA:530:G:N1	56:BA:4292:HOH:O	2.25	0.46
23:BA:1816:G:N1	25:BD:35:LYS:HD3	2.30	0.46
23:BA:2146:C:H4'	23:BA:2147:G:C8	2.50	0.46
25:BD:242:ARG:HD3	25:BD:242:ARG:N	2.30	0.46
33:BP:84:ASN:HB3	33:BP:117:GLU:O	2.16	0.46
43:BZ:144:LEU:CD2	43:BZ:150:LEU:HG	2.45	0.46
1:CA:509:A:H3'	1:CA:509:A:H8	1.80	0.46
1:CA:662:G:O2'	1:CA:836:G:OP1	2.32	0.46
1:CA:937:A:H1'	1:CA:1379:G:H22	1.81	0.46
1:CA:1459:C:C4	1:CA:1460:A:N6	2.73	0.46
2:CB:113:HIS:O	2:CB:117:GLU:HG3	2.16	0.46
6:CF:8:ILE:HD12	6:CF:26:ILE:HD13	1.97	0.46
23:DA:955:C:OP1	34:DQ:87:LYS:HE2	2.14	0.46
23:DA:1494:A:C6	23:DA:1495:A:C6	3.04	0.46
23:DA:1568:G:H5"	25:DD:61:LEU:HD22	1.96	0.46
23:DA:2106:G:N1	23:DA:2107:C:O2	2.48	0.46
25:DD:101:GLU:OE1	25:DD:103:ARG:HD3	2.15	0.46
28:DG:145:THR:HG23	28:DG:148:MET:SD	2.55	0.46
31:DN:111:PRO:HA	31:DN:114:ARG:NH1	2.30	0.46
39:DV:99:ILE:HG22	39:DV:101:GLY:H	1.80	0.46
40:DW:86:LEU:HD22	40:DW:96:ILE:HD11	1.96	0.46
44:D0:72:ARG:HB2	44:D0:75:LEU:HB2	1.98	0.46
50:D6:21:TYR:CE2	50:D6:38:LYS:HG2	2.51	0.46
1:AA:76:C:H3'	1:AA:77:G:H5"	1.98	0.46
1:AA:946:A:O2'	1:AA:1333:A:H1'	2.15	0.46
1:AA:951:G:O6	1:AA:1230:C:N3	2.49	0.46
1:AA:1099:G:H2'	1:AA:1099:G:N3	2.31	0.46
1:AA:1503:A:C8	1:AA:1531:A:H1'	2.51	0.46
3:AC:58:GLU:O	3:AC:59:ARG:HG3	2.15	0.46
3:AC:134:ILE:HG12	3:AC:153:VAL:HG21	1.98	0.46
3:AC:156:ARG:HD3	3:AC:193:TYR:HD1	1.81	0.46
5:AE:60:TYR:C	5:AE:60:TYR:CD1	2.94	0.46
10:AJ:32:ALA:HA	10:AJ:33:GLN:HA	1.67	0.46
18:AR:66:LEU:O	18:AR:70:ILE:HG13	2.15	0.46
23:BA:1810:A:H2'	23:BA:1811:G:O4'	2.14	0.46
23:BA:2772:C:H2'	23:BA:2773:C:H6	1.80	0.46
25:BD:172:TYR:HD1	25:BD:185:VAL:C	2.23	0.46
26:BE:71:GLY:HA2	26:BE:72:VAL:O	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BS:80:LEU:HD12	36:BS:80:LEU:HA	1.72	0.46
36:BS:96:GLY:HA3	36:BS:98:VAL:N	2.31	0.46
42:BY:35:TYR:CE2	42:BY:69:ALA:HB3	2.50	0.46
1:CA:376:G:P	16:CP:67:THR:HG21	2.55	0.46
1:CA:865:A:H5'	1:CA:1078:U:O4	2.15	0.46
1:CA:1085:U:H3'	1:CA:1086:U:H5	1.80	0.46
1:CA:1459:C:H2'	1:CA:1460:A:C8	2.50	0.46
5:CE:137:GLU:O	5:CE:141:GLN:HG3	2.15	0.46
23:DA:415:A:H2'	23:DA:416:C:C6	2.50	0.46
23:DA:492:A:H2'	23:DA:493:G:O4'	2.15	0.46
23:DA:1021:A:N6	23:DA:1142(A):A:H61	2.13	0.46
23:DA:2238:G:H2'	23:DA:2238:G:N3	2.30	0.46
23:DA:2275:C:H6	23:DA:2275:C:H5'	1.80	0.46
24:DB:8:U:OP1	36:DS:11:LYS:NZ	2.41	0.46
25:DD:68:LYS:O	25:DD:70:TRP:CD1	2.69	0.46
32:DO:47:ILE:HB	32:DO:48:PRO:HD2	1.97	0.46
1:AA:36:C:H4'	12:AL:122:THR:O	2.16	0.46
1:AA:60:A:H8	1:AA:60:A:OP1	1.98	0.46
1:AA:530:G:H3'	1:AA:530:G:OP1	2.15	0.46
1:AA:662:G:O2'	1:AA:836:G:OP1	2.33	0.46
1:AA:791:G:C6	1:AA:792:A:N7	2.84	0.46
1:AA:986:A:C6	1:AA:1220:G:N1	2.84	0.46
1:AA:1237:C:OP1	1:AA:1303:C:O2'	2.33	0.46
1:AA:1238:A:H3'	1:AA:1239:A:H8	1.80	0.46
1:AA:1306:A:H1'	1:AA:1332:A:C2	2.50	0.46
1:AA:1313:U:C2	1:AA:1324:A:N1	2.83	0.46
1:AA:1349:A:C8	1:AA:1373:G:N2	2.77	0.46
3:AC:35:GLU:OE2	3:AC:59:ARG:NH2	2.48	0.46
3:AC:134:ILE:HG13	3:AC:134:ILE:H	1.42	0.46
4:AD:200:GLU:N	4:AD:200:GLU:OE2	2.49	0.46
6:AF:8:ILE:HD12	6:AF:26:ILE:HD13	1.96	0.46
6:AF:67:MET:HB2	6:AF:68:PRO:HD2	1.98	0.46
7:AG:68:ASN:C	7:AG:135:VAL:HG22	2.40	0.46
12:AL:42:THR:OG1	12:AL:52:LEU:HD12	2.14	0.46
23:BA:2427:C:H5"	23:BA:2428:G:OP1	2.15	0.46
23:BA:2820:A:OP1	35:BR:4:LEU:HD23	2.15	0.46
23:BA:2833:G:H3'	23:BA:2834:G:H5"	1.97	0.46
28:BG:60:LEU:O	28:BG:64:THR:N	2.38	0.46
29:BH:43:VAL:HG22	29:BH:52:VAL:HG22	1.98	0.46
1:CA:79:G:H2'	1:CA:80:G:C8	2.50	0.46
1:CA:115:G:H4'	1:CA:116:A:O5'	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:186:C:H2'	1:CA:187:C:H6	1.79	0.46
1:CA:517:G:N2	1:CA:531:U:H5'	2.31	0.46
1:CA:719:C:H5	1:CA:720:C:C4	2.33	0.46
1:CA:1369:C:OP2	9:CI:112:LYS:N	2.37	0.46
2:CB:75:LYS:HE3	2:CB:78:GLN:OE1	2.16	0.46
8:CH:120:THR:H	8:CH:123:GLU:HB2	1.80	0.46
12:CL:102:ARG:HB3	12:CL:102:ARG:HE	1.44	0.46
13:CM:23:TYR:HE1	13:CM:70:LEU:HD21	1.79	0.46
16:CP:28:ARG:HG2	16:CP:29:ASP:OD2	2.16	0.46
20:CT:79:ARG:HD2	20:CT:83:ARG:HH21	1.80	0.46
23:DA:272(J):C:H2'	23:DA:274:G:O4'	2.15	0.46
23:DA:322:A:H5'	23:DA:340:A:H1'	1.96	0.46
23:DA:919:G:N2	23:DA:2269:A:OP2	2.45	0.46
23:DA:1171:G:H1	23:DA:1178:C:H42	1.63	0.46
23:DA:2286:A:H4'	23:DA:2287:A:O4'	2.15	0.46
24:DB:65:C:N4	24:DB:109:C:C2	2.83	0.46
26:DE:115:GLY:O	26:DE:119:ARG:HB2	2.15	0.46
30:DI:61:ARG:HH11	30:DI:61:ARG:HA	1.81	0.46
36:DS:96:GLY:H	36:DS:99:LYS:H	1.63	0.46
45:D1:3:LYS:HE3	45:D1:3:LYS:HB3	1.52	0.46
1:AA:502:G:P	12:AL:116:SER:HA	2.56	0.46
1:AA:945:G:H2'	1:AA:945:G:N3	2.31	0.46
1:AA:986:A:H1'	19:AS:55:LYS:HA	1.96	0.46
1:AA:1027:C:H5	1:AA:1029:C:N3	2.13	0.46
1:AA:1143:G:H2'	1:AA:1144:G:C8	2.50	0.46
1:AA:1238:A:C2	1:AA:1303:C:H4'	2.51	0.46
13:AM:88:ARG:O	13:AM:91:ARG:HB2	2.16	0.46
16:AP:59:TRP:O	16:AP:63:GLY:N	2.49	0.46
17:AQ:81:ARG:HD2	17:AQ:81:ARG:HA	1.63	0.46
23:BA:1425:G:H2'	23:BA:1426:G:O4'	2.16	0.46
23:BA:2262:U:O2'	23:BA:2263:C:H5'	2.15	0.46
23:BA:2302:G:C6	23:BA:2315:G:C6	3.04	0.46
29:BH:33:LEU:HD21	29:BH:136:ILE:HG13	1.98	0.46
36:BS:11:LYS:HG3	36:BS:91:PRO:HD3	1.96	0.46
42:BY:99:CYS:SG	42:BY:102:CYS:N	2.88	0.46
44:B0:26:TYR:O	44:B0:29:GLN:HB2	2.15	0.46
50:B6:34:LEU:HD22	50:B6:36:LEU:HD11	1.98	0.46
1:CA:93:G:H1'	1:CA:96:U:H5'	1.97	0.46
1:CA:544:G:C2	1:CA:545:C:C2	3.04	0.46
1:CA:745:C:H2'	1:CA:746:A:H8	1.80	0.46
1:CA:1184:G:H2'	1:CA:1184:G:N3	2.30	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1246:C:H2'	1:CA:1247:U:O4'	2.15	0.46
1:CA:1273:G:H5'	1:CA:1274:G:OP2	2.16	0.46
1:CA:1512:U:H2'	1:CA:1513:A:C8	2.50	0.46
2:CB:149:LEU:HD22	2:CB:152:PHE:CD1	2.50	0.46
7:CG:87:VAL:HG11	7:CG:155:ARG:HB2	1.96	0.46
9:CI:49:PRO:HG3	9:CI:101:PHE:CG	2.51	0.46
10:CJ:34:VAL:HG12	10:CJ:74:ILE:HA	1.97	0.46
11:CK:122:LYS:HB3	11:CK:122:LYS:HE2	1.68	0.46
15:CO:63:ARG:HG2	15:CO:67:LEU:HD12	1.97	0.46
23:DA:469:G:H2'	23:DA:470:A:H5"	1.96	0.46
23:DA:1202:C:N4	23:DA:1203:G:C6	2.83	0.46
23:DA:1536:C:O2'	23:DA:1537:G:O5'	2.28	0.46
23:DA:1833:U:O2'	23:DA:1969:A:N1	2.41	0.46
23:DA:2615:U:C2	49:D5:7:PRO:HA	2.51	0.46
26:DE:52:LEU:O	26:DE:75:VAL:HG22	2.16	0.46
27:DF:127:GLU:HA	27:DF:196:LEU:HD12	1.97	0.46
28:DG:16:ARG:NH2	28:DG:28:VAL:O	2.48	0.46
41:DX:57:LEU:HD21	41:DX:78:LYS:HE2	1.97	0.46
44:D0:24:LYS:O	44:D0:25:ARG:HD3	2.16	0.46
1:AA:17:U:H2'	1:AA:18:C:H6	1.77	0.46
1:AA:203:U:H3'	1:AA:203:U:OP2	2.15	0.46
1:AA:1154:G:C2	1:AA:1155:G:C4	3.04	0.46
1:AA:1250:A:C6	1:AA:1251:A:C6	3.04	0.46
2:AB:75:LYS:HA	2:AB:78:GLN:HB2	1.97	0.46
5:AE:93:PRO:HG2	8:AH:105:ARG:CZ	2.44	0.46
9:AI:9:ARG:HB3	9:AI:104:ARG:NH2	2.29	0.46
20:AT:63:ILE:HD13	20:AT:80:ARG:HB3	1.98	0.46
20:AT:66:ALA:HB3	20:AT:72:LEU:HD22	1.98	0.46
23:BA:125:G:C6	51:B7:10:ARG:HG3	2.51	0.46
23:BA:322:A:H5'	23:BA:340:A:H1'	1.97	0.46
23:BA:479:A:N3	23:BA:481:G:H5"	2.30	0.46
23:BA:723:G:H2'	23:BA:724:U:O4'	2.16	0.46
23:BA:910:A:C5	34:BQ:13:GLN:HG3	2.51	0.46
23:BA:950:G:C6	23:BA:951:C:C4	3.04	0.46
23:BA:2191:G:H3'	23:BA:2192:G:H8	1.81	0.46
23:BA:2832:U:OP2	56:BA:4214:HOH:O	2.20	0.46
26:BE:201:THR:OG1	26:BE:202:LYS:N	2.49	0.46
31:BN:128:HIS:HA	31:BN:129:PRO:HD2	1.62	0.46
43:BZ:5:LEU:O	43:BZ:59:LEU:HA	2.16	0.46
46:B2:69:ARG:O	46:B2:70:GLN:HB2	2.15	0.46
1:CA:373:A:N3	1:CA:481:G:N2	2.51	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:658:G:H2'	1:CA:659:U:H6	1.81	0.46
1:CA:1060:C:OP1	10:CJ:51:ARG:NH1	2.48	0.46
1:CA:1122:U:O4	1:CA:1123:A:N6	2.47	0.46
2:CB:194:PRO:C	2:CB:196:LEU:H	2.24	0.46
4:CD:104:VAL:HA	4:CD:107:ARG:HB2	1.97	0.46
9:CI:33:PHE:O	9:CI:37:PHE:HB2	2.16	0.46
23:DA:1418:G:H8	23:DA:1418:G:O5'	1.99	0.46
23:DA:2636:U:H4'	26:DE:80:GLU:OE2	2.16	0.46
25:DD:69:ARG:NH2	25:DD:128:GLY:O	2.38	0.46
25:DD:71:ASP:CG	25:DD:103:ARG:HH22	2.23	0.46
27:DF:178:PRO:HG2	27:DF:179:GLU:OE1	2.15	0.46
32:DO:68:GLU:HB3	32:DO:78:ARG:HD3	1.98	0.46
37:DT:118:ARG:HH11	37:DT:118:ARG:HG3	1.80	0.46
1:AA:303:A:O2'	1:AA:555:C:O2'	2.31	0.46
1:AA:719:C:H5	1:AA:720:C:C4	2.34	0.46
1:AA:730:G:C5	1:AA:731:G:H1'	2.50	0.46
1:AA:945:G:N7	1:AA:1337:G:H1'	2.30	0.46
1:AA:1042:G:OP2	1:AA:1042:G:C8	2.67	0.46
1:AA:1305:G:O2'	1:AA:1306:A:OP2	2.28	0.46
1:AA:1458:G:H5'	20:AT:31:SER:CB	2.46	0.46
3:AC:152:ILE:HG13	3:AC:201:TYR:HE1	1.81	0.46
12:AL:41:ARG:HH12	12:AL:57:LYS:HE3	1.81	0.46
15:AO:74:ASP:HA	15:AO:75:PRO:HD2	1.79	0.46
18:AR:52:PRO:O	18:AR:56:THR:HG23	2.16	0.46
23:BA:92:A:C2'	23:BA:93:G:H5'	2.45	0.46
23:BA:323:G:C8	27:BF:171:PRO:HG3	2.51	0.46
23:BA:1338:G:O2'	23:BA:1393:A:N1	2.44	0.46
23:BA:1529:G:C6	23:BA:1530:C:C4	3.03	0.46
23:BA:1827:C:H5'	23:BA:1971:A:H4'	1.98	0.46
23:BA:2123:G:H1	23:BA:2175:C:N4	2.14	0.46
23:BA:2141:G:C6	23:BA:2151:G:C6	3.03	0.46
25:BD:118:VAL:HG22	25:BD:119:ALA:N	2.31	0.46
30:BI:123:LEU:HD23	30:BI:123:LEU:H	1.80	0.46
34:BQ:57:HIS:HD2	34:BQ:117:ALA:HB2	1.80	0.46
1:CA:344:A:H3'	1:CA:346:G:O6	2.16	0.46
1:CA:353:A:H5'	1:CA:353:A:C8	2.42	0.46
1:CA:479:C:H2'	1:CA:480:U:H6	1.80	0.46
1:CA:658:G:C4	1:CA:659:U:C5	3.04	0.46
1:CA:1236:A:H2'	1:CA:1237:C:C6	2.51	0.46
1:CA:1360:A:C8	14:CN:18:VAL:HG22	2.50	0.46
23:DA:234:C:H2'	23:DA:235:U:H6	1.81	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:2285:C:OP2	50:D6:6:ARG:NH1	2.47	0.46
23:DA:2692:C:HO2'	23:DA:2847:U:HO2'	1.59	0.46
23:DA:2748:A:OP1	29:DH:70:THR:HG21	2.16	0.46
23:DA:2818:G:O2'	23:DA:2819:G:H5'	2.16	0.46
23:DA:2850:A:OP2	23:DA:2866:U:H5	1.98	0.46
25:DD:38:LYS:HD2	25:DD:39:LYS:N	2.30	0.46
27:DF:133:ASN:HA	27:DF:162:LEU:HD23	1.98	0.46
27:DF:192:LEU:CD2	27:DF:194:MET:HE2	2.46	0.46
34:DQ:16:ARG:O	34:DQ:17:LEU:HD23	2.15	0.46
39:DV:77:ALA:C	39:DV:79:VAL:H	2.24	0.46
1:AA:116:A:H61	1:AA:313:A:H1'	1.81	0.46
1:AA:509:A:H3'	1:AA:509:A:H8	1.80	0.46
1:AA:558:G:H5"	1:AA:559:A:P	2.55	0.46
1:AA:623:C:H2'	1:AA:624:C:C6	2.48	0.46
1:AA:745:C:H2'	1:AA:746:A:H8	1.80	0.46
1:AA:955:U:H3	1:AA:1225:A:N6	2.09	0.46
1:AA:1127:G:H1'	1:AA:1148:U:N3	2.31	0.46
1:AA:1165:C:N4	1:AA:1166:G:C6	2.84	0.46
1:AA:1459:C:C2	1:AA:1460:A:N6	2.84	0.46
4:AD:59:ARG:HH22	4:AD:66:ARG:NH1	2.13	0.46
6:AF:25:ILE:CD1	6:AF:82:ARG:HE	2.28	0.46
8:AH:40:ALA:HA	8:AH:45:ILE:HG13	1.96	0.46
9:AI:71:SER:O	9:AI:74:ILE:HB	2.16	0.46
23:BA:196:A:N3	23:BA:196:A:H2'	2.31	0.46
23:BA:241:A:O4'	23:BA:243:U:C6	2.69	0.46
23:BA:686:G:O6	51:B7:12:ARG:HD2	2.16	0.46
23:BA:1779:U:C5	23:BA:1784:A:N7	2.64	0.46
29:BH:56:SER:OG	29:BH:57:ASP:N	2.49	0.46
29:BH:94:TYR:CE2	29:BH:107:VAL:HB	2.50	0.46
36:BS:24:LEU:HD23	36:BS:24:LEU:HA	1.77	0.46
43:BZ:5:LEU:HD22	43:BZ:6:LYS:H	1.81	0.46
52:B8:29:LYS:HD3	52:B8:44:LYS:C	2.40	0.46
1:CA:626:U:H5"	16:CP:38:TYR:CG	2.51	0.46
1:CA:980:C:H3'	1:CA:981:U:H6	1.81	0.46
1:CA:1007:C:H2'	1:CA:1008:C:C6	2.51	0.46
4:CD:111:ALA:HB1	4:CD:116:GLN:HG2	1.98	0.46
7:CG:36:LYS:HA	7:CG:36:LYS:HD3	1.80	0.46
16:CP:16:HIS:C	16:CP:17:TYR:HD1	2.24	0.46
18:CR:31:LEU:CD2	18:CR:31:LEU:H	2.29	0.46
19:CS:36:ARG:HB3	19:CS:72:GLY:HA3	1.98	0.46
22:CV:27:GLU:H	22:CV:44:TRP:NE1	2.14	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:128:C:H2'	23:DA:129:C:H6	1.80	0.46
23:DA:271(R):G:H2'	23:DA:271(S):G:C8	2.49	0.46
23:DA:708:C:H5'	23:DA:709:U:OP2	2.16	0.46
23:DA:901:A:H2'	23:DA:902:C:C6	2.51	0.46
23:DA:923:C:C4'	44:D0:29:GLN:HE21	2.28	0.46
23:DA:1721:G:N1	23:DA:1739:U:OP2	2.49	0.46
23:DA:2142:C:N3	23:DA:2149:G:O6	2.49	0.46
23:DA:2747:G:O6	23:DA:2755:C:H5"	2.16	0.46
23:DA:2867:G:OP2	37:DT:119:LYS:NZ	2.41	0.46
30:DI:97:ILE:O	30:DI:100:ALA:HB3	2.16	0.46
30:DI:124:GLY:N	30:DI:144:VAL:HG13	2.31	0.46
37:DT:11:GLU:O	37:DT:15:VAL:HG23	2.16	0.46
47:D3:4:LEU:N	47:D3:37:LEU:O	2.45	0.46
1:AA:11:G:C5	1:AA:12:U:C5	3.03	0.46
1:AA:165:C:H2'	1:AA:166:G:H8	1.81	0.46
1:AA:673:G:O3'	6:AF:87:ARG:NH2	2.49	0.46
1:AA:937:A:H2'	1:AA:938:A:H5'	1.98	0.46
1:AA:992:U:O2'	1:AA:993:G:OP2	2.32	0.46
1:AA:1027:C:C2	1:AA:1034:G:N2	2.84	0.46
1:AA:1179:A:HO2'	1:AA:1180:A:C5'	2.28	0.46
1:AA:1291:G:H5"	7:AG:41:ARG:NH2	2.31	0.46
2:AB:42:ILE:HD13	2:AB:203:GLY:HA2	1.98	0.46
2:AB:73:THR:HG21	2:AB:95:GLN:O	2.16	0.46
6:AF:27:GLN:HA	6:AF:30:LEU:HD12	1.98	0.46
24:BB:117:G:H2'	24:BB:118:G:O4'	2.16	0.46
40:BW:41:LYS:HE3	49:B5:25:LEU:HD21	1.96	0.46
43:BZ:45:ASP:O	43:BZ:49:ARG:HG3	2.16	0.46
1:CA:589:C:H2'	1:CA:590:C:H6	1.81	0.46
1:CA:599:C:H5"	8:CH:95:VAL:O	2.15	0.46
1:CA:1250:A:H4'	9:CI:67:GLY:HA2	1.96	0.46
1:CA:1531:A:H2'	1:CA:1532:U:O4'	2.16	0.46
2:CB:73:THR:HG21	2:CB:95:GLN:O	2.16	0.46
4:CD:26:CYS:HA	4:CD:31:CYS:HB2	1.98	0.46
23:DA:646:A:H5'	23:DA:646:A:N3	2.31	0.46
23:DA:655:A:H8	23:DA:656:G:O4'	1.98	0.46
23:DA:1815:A:C5	23:DA:1817:G:C6	3.04	0.46
23:DA:2345:G:N3	23:DA:2381:C:H2'	2.31	0.46
23:DA:2784:C:H1'	26:DE:37:ARG:NH1	2.30	0.46
24:DB:14:U:OP2	24:DB:70:C:O2'	2.31	0.46
26:DE:60:ASN:OD1	26:DE:62:PRO:HD2	2.15	0.46
29:DH:5:GLY:HA2	29:DH:69:ARG:HB3	1.97	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DQ:35:VAL:HG13	34:DQ:130:LYS:HB3	1.98	0.46
1:AA:394:G:H2'	1:AA:395:C:H6	1.81	0.45
1:AA:433:C:H2'	1:AA:434:U:H6	1.81	0.45
1:AA:655:A:C2	1:AA:656:C:C2	3.05	0.45
1:AA:932:C:H5'	7:AG:4:ARG:NE	2.28	0.45
1:AA:948:C:OP2	13:AM:106:ASN:HB3	2.16	0.45
1:AA:1240:U:C4	7:AG:32:ARG:NH2	2.84	0.45
1:AA:1346:A:N6	1:AA:1374:A:C8	2.84	0.45
1:AA:1351:U:H4'	7:AG:33:ASP:CG	2.41	0.45
1:AA:1377:A:H2'	7:AG:7:ALA:CB	2.46	0.45
3:AC:150:LYS:HA	3:AC:169:ALA:HB2	1.98	0.45
7:AG:137:LYS:O	7:AG:141:VAL:HB	2.16	0.45
9:AI:5:TYR:CE1	9:AI:16:ARG:HG2	2.45	0.45
9:AI:7:THR:HG23	9:AI:14:VAL:HG13	1.97	0.45
15:AO:39:LEU:HD13	15:AO:56:LEU:HB2	1.97	0.45
23:BA:271(S):G:C6	23:BA:271(T):C:C4	3.05	0.45
23:BA:588:U:H1'	27:BF:90:PHE:HB3	1.97	0.45
23:BA:1045:A:O2'	23:BA:1047:G:C5	2.68	0.45
23:BA:1429:G:H2'	23:BA:1430:C:C6	2.50	0.45
23:BA:2294:C:OP1	36:BS:89:ARG:NH1	2.41	0.45
23:BA:2313:C:H5"	28:BG:91:ARG:HG3	1.98	0.45
27:BF:7:TYR:N	27:BF:22:ALA:HB3	2.29	0.45
29:BH:20:ALA:HB1	29:BH:21:PRO:HD2	1.97	0.45
51:B7:16:HIS:HB2	51:B7:44:PRO:HG2	1.98	0.45
52:B8:62:LEU:HB3	52:B8:65:GLU:HG2	1.97	0.45
1:CA:511:C:N3	1:CA:540:G:N2	2.54	0.45
1:CA:791:G:C6	1:CA:792:A:N7	2.83	0.45
1:CA:1227:A:OP2	13:CM:111:LYS:HG2	2.16	0.45
2:CB:47:THR:O	2:CB:51:LEU:HB2	2.16	0.45
4:CD:25:ARG:O	4:CD:25:ARG:HG2	2.16	0.45
5:CE:133:TYR:O	5:CE:137:GLU:HB2	2.15	0.45
5:CE:151:LEU:HB3	8:CH:79:VAL:HG22	1.98	0.45
8:CH:86:ILE:HG21	8:CH:133:LEU:HD22	1.98	0.45
12:CL:60:LEU:HD22	12:CL:60:LEU:H	1.80	0.45
23:DA:1026:U:O2'	23:DA:1027:A:H8	2.00	0.45
23:DA:1027:A:N6	23:DA:1126:A:C4	2.84	0.45
23:DA:1204:A:H61	23:DA:1240:U:H2'	1.81	0.45
23:DA:1364:G:OP2	45:D1:3:LYS:HG2	2.16	0.45
23:DA:1922:G:H2'	23:DA:1923:U:O4'	2.16	0.45
23:DA:2250:G:N2	34:DQ:84:GLY:HA3	2.31	0.45
23:DA:2406:U:C4	33:DP:72:PRO:HD2	2.51	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:2512:C:H4'	26:DE:122:PHE:CE2	2.51	0.45
23:DA:2626:C:H2'	23:DA:2627:G:O4'	2.15	0.45
23:DA:2716:U:O2'	23:DA:2717:G:H5'	2.16	0.45
23:DA:2760:C:C2'	23:DA:2761:G:H5"	2.44	0.45
24:DB:50:G:H5"	36:DS:61:ASN:HD21	1.81	0.45
28:DG:102:PHE:CE2	28:DG:141:PHE:HE1	2.33	0.45
39:DV:52:VAL:HG22	39:DV:55:ALA:HB3	1.97	0.45
45:D1:60:PHE:N	45:D1:60:PHE:CD2	2.84	0.45
52:D8:9:GLY:O	52:D8:13:ARG:HG3	2.16	0.45
1:AA:441:A:H3'	1:AA:442:C:C6	2.51	0.45
1:AA:499:A:H4'	1:AA:500:G:OP1	2.15	0.45
1:AA:573:A:N3	1:AA:883:C:O2'	2.44	0.45
1:AA:956:U:C2	1:AA:1225:A:C2	3.04	0.45
1:AA:1300:G:H4'	1:AA:1301:U:O5'	2.16	0.45
1:AA:1306:A:H2'	1:AA:1307:U:C6	2.51	0.45
4:AD:205:GLU:OE1	5:AE:100:VAL:HB	2.16	0.45
5:AE:78:HIS:CE1	5:AE:142:LEU:HD23	2.51	0.45
7:AG:69:VAL:HG21	7:AG:134:ALA:HB1	1.98	0.45
9:AI:71:SER:HA	9:AI:74:ILE:HB	1.99	0.45
19:AS:29:ARG:HA	19:AS:47:HIS:HB3	1.98	0.45
23:BA:1141:U:H4'	23:BA:1142(A):A:O4'	2.16	0.45
23:BA:2312:U:H5'	28:BG:88:ILE:HD12	1.97	0.45
26:BE:116:VAL:HG13	26:BE:122:PHE:HB2	1.98	0.45
28:BG:137:GLU:HG3	28:BG:152:LEU:HD21	1.98	0.45
30:BI:133:HIS:ND1	30:BI:134:PRO:O	2.43	0.45
31:BN:99:LEU:O	31:BN:103:VAL:HG23	2.16	0.45
31:BN:112:LEU:O	31:BN:115:ARG:N	2.46	0.45
43:BZ:24:LEU:HB2	43:BZ:41:LEU:HD23	1.98	0.45
43:BZ:128:VAL:HG22	43:BZ:161:VAL:H	1.81	0.45
52:B8:29:LYS:HG2	52:B8:44:LYS:HB3	1.98	0.45
1:CA:475:G:H2'	1:CA:476:G:C8	2.49	0.45
1:CA:623:C:H2'	1:CA:624:C:C6	2.48	0.45
1:CA:674:G:H2'	1:CA:675:A:C8	2.47	0.45
1:CA:874:G:C6	1:CA:875:C:C4	3.04	0.45
1:CA:1347:G:H8	9:CI:107:ARG:CB	2.26	0.45
2:CB:187:LEU:HA	2:CB:201:ILE:HB	1.98	0.45
3:CC:23:TYR:OH	3:CC:25:GLY:HA3	2.17	0.45
3:CC:150:LYS:NZ	3:CC:150:LYS:HB3	2.31	0.45
4:CD:59:ARG:HA	4:CD:59:ARG:HH11	1.81	0.45
6:CF:33:TYR:HB2	6:CF:75:LEU:HD12	1.97	0.45
7:CG:112:PRO:O	7:CG:119:ARG:HD3	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:195:A:H4'	23:DA:251:A:O2'	2.17	0.45
23:DA:241:A:O4'	23:DA:243:U:C6	2.70	0.45
23:DA:861:A:N3	24:DB:79:C:O2'	2.47	0.45
23:DA:2304:G:H21	28:DG:156:ASP:CG	2.25	0.45
34:DQ:12:GLN:HG2	34:DQ:73:PRO:HD2	1.97	0.45
36:DS:65:VAL:O	36:DS:69:VAL:HG12	2.16	0.45
37:DT:99:LEU:O	37:DT:100:TYR:C	2.59	0.45
1:AA:519:C:H2'	1:AA:520:A:H8	1.80	0.45
1:AA:1297:C:OP2	13:AM:14:ARG:HD3	2.16	0.45
1:AA:1317:C:OP1	14:AN:17:LYS:HG3	2.16	0.45
1:AA:1369:C:OP1	14:AN:61:TRP:NE1	2.49	0.45
1:AA:1412:C:H2'	1:AA:1413:A:C8	2.51	0.45
2:AB:58:ILE:H	2:AB:58:ILE:HG13	1.43	0.45
3:AC:56:ASP:O	3:AC:67:THR:N	2.39	0.45
5:AE:127:ASN:HA	5:AE:128:PRO:HD3	1.77	0.45
8:AH:6:ILE:HB	8:AH:85:ARG:NH1	2.30	0.45
11:AK:21:ILE:HA	11:AK:30:VAL:HG12	1.97	0.45
11:AK:48:ILE:HG12	11:AK:48:ILE:O	2.16	0.45
23:BA:836:G:H5"	23:BA:837:C:OP2	2.17	0.45
23:BA:916:G:O2'	23:BA:917:A:O4'	2.33	0.45
23:BA:1877:A:H5'	23:BA:1878:G:OP2	2.17	0.45
23:BA:2170:A:OP2	23:BA:2170:A:H8	1.99	0.45
34:BQ:26:TYR:CD1	34:BQ:28:ALA:HB2	2.51	0.45
42:BY:102:CYS:O	42:BY:104:GLY:N	2.48	0.45
43:BZ:80:ARG:HG2	43:BZ:80:ARG:H	1.62	0.45
47:B3:4:LEU:O	47:B3:36:VAL:HA	2.15	0.45
1:CA:441:A:H3'	1:CA:442:C:H6	1.81	0.45
1:CA:491:G:C4	1:CA:492:G:C8	3.04	0.45
1:CA:988:G:H2'	1:CA:989:C:O4'	2.16	0.45
2:CB:59:GLU:O	2:CB:63:MET:HG2	2.16	0.45
2:CB:194:PRO:O	2:CB:196:LEU:N	2.48	0.45
2:CB:219:VAL:O	2:CB:222:ILE:HB	2.16	0.45
11:CK:16:SER:HA	11:CK:79:SER:HB3	1.98	0.45
23:DA:1364:G:N7	45:D1:3:LYS:HD3	2.30	0.45
23:DA:2191:G:H3'	23:DA:2192:G:H8	1.81	0.45
23:DA:2390:U:O2'	23:DA:2391:G:H5'	2.16	0.45
28:DG:174:GLU:O	28:DG:177:GLY:N	2.45	0.45
34:DQ:119:ARG:HE	34:DQ:119:ARG:HB3	1.62	0.45
39:DV:21:ARG:HG3	39:DV:93:GLU:HG3	1.98	0.45
44:D0:53:MET:HA	44:D0:58:THR:O	2.16	0.45
45:D1:64:ALA:HA	45:D1:67:ILE:HG13	1.97	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:57:G:N2	1:AA:388:G:C6	2.81	0.45
1:AA:1006:C:O2	1:AA:1023:G:N1	2.49	0.45
1:AA:1027:C:N3	1:AA:1034:G:C2	2.85	0.45
1:AA:1261:A:O4'	1:AA:1283:G:H5"	2.16	0.45
3:AC:32:LEU:HD22	3:AC:59:ARG:HH12	1.80	0.45
5:AE:137:GLU:O	5:AE:141:GLN:HG3	2.17	0.45
5:AE:151:LEU:HB3	8:AH:79:VAL:HG22	1.97	0.45
6:AF:84:ASN:O	6:AF:86:ARG:HG3	2.17	0.45
9:AI:5:TYR:O	9:AI:84:ALA:HA	2.17	0.45
9:AI:49:PRO:HG3	9:AI:101:PHE:CG	2.49	0.45
13:AM:23:TYR:HB3	13:AM:67:GLU:HA	1.97	0.45
16:AP:43:LYS:HG2	16:AP:48:TRP:CE3	2.52	0.45
22:AV:51:ARG:HB3	22:AV:51:ARG:NH1	2.31	0.45
23:BA:271(H):G:O2'	23:BA:271(I):G:OP2	2.28	0.45
23:BA:415:A:H2'	23:BA:416:C:C6	2.52	0.45
23:BA:446:G:P	56:BA:3961:HOH:O	2.67	0.45
23:BA:848:G:H2'	23:BA:849:A:C8	2.52	0.45
23:BA:1721:G:C2	23:BA:1739:U:OP2	2.70	0.45
24:BB:25:A:H2'	24:BB:26:A:O4'	2.16	0.45
24:BB:49:C:OP1	36:BS:96:GLY:HA2	2.17	0.45
31:BN:55:VAL:HG22	31:BN:126:PRO:HA	1.99	0.45
1:CA:130:A:O2'	1:CA:131:C:O5'	2.33	0.45
1:CA:1002:G:C2	1:CA:1003:G:H1'	2.51	0.45
1:CA:1155:G:H2'	1:CA:1156:G:C8	2.51	0.45
1:CA:1233:G:H2'	1:CA:1234:C:H6	1.81	0.45
1:CA:1302:U:C5	13:CM:17:VAL:HG21	2.51	0.45
2:CB:136:VAL:HA	2:CB:139:LYS:CG	2.43	0.45
5:CE:57:LYS:HB3	5:CE:61:TYR:CE2	2.50	0.45
7:CG:87:VAL:HG13	7:CG:151:TYR:HB2	1.99	0.45
11:CK:29:ILE:HG23	11:CK:44:SER:HB3	1.99	0.45
23:DA:26:G:C6	23:DA:27:G:N1	2.85	0.45
23:DA:196:A:H2'	23:DA:196:A:N3	2.31	0.45
23:DA:1478:G:H2'	23:DA:1479:G:H8	1.82	0.45
23:DA:1510:G:H2'	23:DA:1511:C:C6	2.51	0.45
23:DA:1592:C:H2'	23:DA:1593:G:H8	1.82	0.45
23:DA:2107:C:N4	23:DA:2108:C:N4	2.64	0.45
23:DA:2109:U:O2	23:DA:2181:G:N1	2.49	0.45
23:DA:2115:G:C2	23:DA:2117:A:N7	2.84	0.45
23:DA:2146:C:H4'	23:DA:2147:G:C8	2.51	0.45
23:DA:2302:G:C6	23:DA:2315:G:C6	3.04	0.45
23:DA:2773:C:OP1	26:DE:166:THR:OG1	2.34	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:2793:G:N2	23:DA:2804:C:H1'	2.32	0.45
27:DF:197:ASP:OD2	27:DF:197:ASP:N	2.49	0.45
41:DX:18:TYR:O	41:DX:20:GLY:N	2.50	0.45
43:DZ:144:LEU:HD12	43:DZ:144:LEU:HA	1.78	0.45
46:D2:51:ARG:O	46:D2:51:ARG:HG2	2.16	0.45
52:D8:29:LYS:HD3	52:D8:44:LYS:C	2.41	0.45
1:AA:971:G:C8	1:AA:1365:G:H1'	2.51	0.45
1:AA:1011:G:C6	1:AA:1012:U:N3	2.84	0.45
1:AA:1238:A:H2'	1:AA:1239:A:C8	2.51	0.45
1:AA:1441:G:H21	1:AA:1459:C:H6	1.64	0.45
1:AA:1531:A:H2'	1:AA:1532:U:O4'	2.16	0.45
3:AC:23:TYR:CE2	10:AJ:95:GLU:HG2	2.50	0.45
3:AC:122:GLU:HA	3:AC:125:GLU:OE2	2.17	0.45
7:AG:127:ALA:HA	7:AG:132:GLY:CA	2.44	0.45
13:AM:5:ALA:HA	13:AM:61:GLU:HG2	1.99	0.45
23:BA:375:C:H2'	23:BA:376:C:C6	2.51	0.45
23:BA:1419:A:C8	23:BA:1421:G:C6	3.05	0.45
23:BA:2131:G:OP2	23:BA:2131:G:H3'	2.17	0.45
23:BA:2134:A:N3	23:BA:2159:G:H1'	2.31	0.45
33:BP:26:GLY:O	33:BP:28:GLY:N	2.38	0.45
43:BZ:30:ASN:HD22	43:BZ:90:VAL:HB	1.82	0.45
1:CA:35:G:N2	1:CA:550:G:N3	2.65	0.45
1:CA:426:G:H2'	1:CA:427:U:C6	2.52	0.45
1:CA:801:U:H2'	1:CA:802:A:H8	1.82	0.45
1:CA:1179:A:OP1	1:CA:1179:A:H8	1.99	0.45
4:CD:59:ARG:HA	4:CD:59:ARG:NH1	2.31	0.45
8:CH:9:MET:O	8:CH:12:ARG:N	2.49	0.45
23:DA:643:A:C2	23:DA:644:A:C4	3.04	0.45
23:DA:645:C:O2	23:DA:645:C:H2'	2.15	0.45
23:DA:1319:G:C6	23:DA:1320:C:N4	2.85	0.45
23:DA:1651:G:H2'	23:DA:1652:A:O4'	2.17	0.45
23:DA:2126:A:N1	23:DA:2162:G:O2'	2.40	0.45
23:DA:2304:G:O6	23:DA:2312:U:O4	2.34	0.45
23:DA:2591:C:OP1	25:DD:239:ARG:HG2	2.17	0.45
25:DD:213:ARG:HA	25:DD:213:ARG:HD2	1.61	0.45
41:DX:18:TYR:C	41:DX:20:GLY:N	2.75	0.45
43:DZ:53:ILE:HG22	43:DZ:71:VAL:O	2.17	0.45
1:AA:962:C:O2	1:AA:973:G:N1	2.33	0.45
1:AA:1054:C:H2'	1:AA:1055:A:H5"	1.99	0.45
1:AA:1160:G:C6	1:AA:1161:C:N4	2.85	0.45
1:AA:1163:C:H2'	1:AA:1164:G:O4'	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1375:A:H4'	7:AG:29:LYS:NZ	2.32	0.45
2:AB:219:VAL:O	2:AB:222:ILE:HB	2.16	0.45
4:AD:68:TYR:CE2	4:AD:97:LEU:HD22	2.52	0.45
4:AD:188:LEU:H	4:AD:188:LEU:HG	1.33	0.45
5:AE:50:GLU:HB2	5:AE:53:LEU:HD13	1.99	0.45
8:AH:120:THR:H	8:AH:123:GLU:HB2	1.81	0.45
9:AI:24:GLY:H	9:AI:60:ASP:CG	2.25	0.45
10:AJ:15:THR:HA	10:AJ:18:ALA:HB3	1.99	0.45
10:AJ:23:ILE:O	10:AJ:34:VAL:HG11	2.17	0.45
20:AT:54:LYS:HA	20:AT:57:ARG:CZ	2.46	0.45
23:BA:828:U:H4'	23:BA:831:G:N1	2.32	0.45
23:BA:1180:C:H2'	23:BA:1181:C:H6	1.80	0.45
23:BA:1529:G:H8	23:BA:1529:G:O5'	1.99	0.45
23:BA:1575:C:H2'	23:BA:1576:U:C6	2.51	0.45
23:BA:1697:G:OP2	23:BA:1698:A:O2'	2.22	0.45
23:BA:2203:U:H4'	25:BD:151:LYS:HG2	1.98	0.45
25:BD:71:ASP:HB3	25:BD:103:ARG:NH2	2.32	0.45
25:BD:137:PRO:HB2	25:BD:140:THR:HG23	1.99	0.45
26:BE:112:GLY:O	26:BE:159:HIS:HA	2.17	0.45
29:BH:70:THR:HA	29:BH:73:ALA:HB3	1.99	0.45
30:BI:40:THR:O	30:BI:44:LEU:HB2	2.17	0.45
45:B1:94:LEU:O	45:B1:97:LEU:HB2	2.16	0.45
46:B2:1:MET:HG3	46:B2:52:ASP:OD2	2.16	0.45
48:B4:40:HIS:HB3	48:B4:43:TYR:HB3	1.97	0.45
1:CA:116:A:H61	1:CA:313:A:H1'	1.82	0.45
1:CA:298:A:H8	1:CA:298:A:OP1	2.00	0.45
1:CA:714:G:H2'	1:CA:715:A:C8	2.51	0.45
1:CA:952:U:H4'	1:CA:964:A:N1	2.32	0.45
1:CA:1002:G:N2	1:CA:1003:G:H1'	2.31	0.45
1:CA:1137:C:H4'	1:CA:1138:G:C2	2.52	0.45
1:CA:1250:A:O3'	9:CI:67:GLY:HA2	2.16	0.45
1:CA:1399:C:C2	1:CA:1502:A:N6	2.85	0.45
1:CA:1441:G:H21	1:CA:1459:C:H6	1.64	0.45
1:CA:1491:G:H5"	1:CA:1492:A:OP2	2.16	0.45
4:CD:61:LYS:O	4:CD:65:ARG:HB2	2.17	0.45
15:CO:7:GLU:O	15:CO:10:LYS:HB3	2.16	0.45
16:CP:43:LYS:HG2	16:CP:48:TRP:CE3	2.52	0.45
20:CT:29:LYS:O	20:CT:33:ILE:HG13	2.17	0.45
23:DA:902:C:H2'	23:DA:903:C:C6	2.51	0.45
23:DA:997:G:OP1	38:DU:92:ARG:HG2	2.16	0.45
23:DA:1106:G:N3	23:DA:1106:G:H2'	2.31	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:1235:G:C6	23:DA:1236:G:N1	2.84	0.45
24:DB:46:A:C5	24:DB:47:C:C4	3.04	0.45
39:DV:20:LEU:HD12	39:DV:20:LEU:HA	1.79	0.45
47:D3:43:ILE:O	47:D3:47:VAL:HG23	2.16	0.45
1:AA:158:G:H2'	1:AA:159:G:H8	1.82	0.45
1:AA:589:C:H2'	1:AA:590:C:C6	2.52	0.45
1:AA:959:A:N1	1:AA:1221:G:O2'	2.50	0.45
1:AA:1001(A):G:H2'	1:AA:1002:G:C8	2.52	0.45
1:AA:1275:A:H2'	1:AA:1276:G:O4'	2.17	0.45
1:AA:1358:U:H5	1:AA:1359:C:C4	2.35	0.45
2:AB:16:HIS:CD2	2:AB:210:SER:HA	2.51	0.45
2:AB:42:ILE:HG21	2:AB:202:PRO:O	2.17	0.45
2:AB:113:HIS:O	2:AB:117:GLU:HG3	2.16	0.45
4:AD:134:ASP:OD2	4:AD:135:LEU:HD13	2.16	0.45
7:AG:33:ASP:HB2	7:AG:35:LYS:HB3	1.99	0.45
23:BA:252:G:P	33:BP:50:ARG:HH11	2.38	0.45
23:BA:359:A:H2'	23:BA:360:G:O4'	2.17	0.45
23:BA:620:G:N3	23:BA:620:G:H5'	2.32	0.45
23:BA:644:A:H4'	23:BA:645:C:C5	2.51	0.45
23:BA:774:A:H2'	23:BA:774:A:N3	2.31	0.45
23:BA:937:U:H2'	23:BA:938:G:O4'	2.16	0.45
23:BA:1453:U:OP1	35:BR:77:ARG:NH1	2.45	0.45
23:BA:1796:U:H4'	25:BD:256:GLY:H	1.82	0.45
31:BN:54:VAL:HG11	31:BN:99:LEU:HD12	1.97	0.45
37:BT:23:ARG:HG3	37:BT:120:ARG:CZ	2.46	0.45
1:CA:328:C:H4'	1:CA:329:A:H5'	1.98	0.45
7:CG:146:GLU:HA	7:CG:149:ARG:HB2	1.98	0.45
9:CI:16:ARG:HB2	9:CI:64:THR:HG23	1.98	0.45
23:DA:583:G:OP2	38:DU:10:ARG:HD2	2.17	0.45
23:DA:815:C:H2'	23:DA:816:C:H6	1.81	0.45
23:DA:1108:U:O2'	23:DA:1109:C:O4'	2.34	0.45
23:DA:1436:G:H1'	23:DA:1477:A:HO2'	1.82	0.45
23:DA:1634:A:OP2	56:DA:3694:HOH:O	2.21	0.45
23:DA:2427:C:H5"	23:DA:2428:G:OP1	2.16	0.45
23:DA:2785:C:OP1	26:DE:41:LYS:NZ	2.40	0.45
27:DF:68:LYS:HB2	27:DF:69:HIS:CD2	2.52	0.45
31:DN:22:THR:O	31:DN:23:LEU:O	2.34	0.45
40:DW:64:MET:HE3	40:DW:109:GLU:HG3	1.99	0.45
43:DZ:5:LEU:O	43:DZ:59:LEU:HA	2.16	0.45
48:D4:40:HIS:HB3	48:D4:43:TYR:HB3	1.98	0.45
1:AA:750:G:N3	15:AO:23:GLY:HA3	2.32	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1155:G:H3'	1:AA:1156:G:C8	2.52	0.45
1:AA:1300:G:O2'	1:AA:1301:U:P	2.74	0.45
1:AA:1443:G:H5'	1:AA:1444:C:OP2	2.17	0.45
1:AA:1459:C:H2'	1:AA:1460:A:N7	2.32	0.45
2:AB:194:PRO:C	2:AB:196:LEU:H	2.24	0.45
6:AF:45:LEU:HD12	6:AF:59:TYR:CD1	2.52	0.45
9:AI:112:LYS:HG3	9:AI:116:LYS:O	2.17	0.45
12:AL:48:PRO:C	12:AL:49:ASN:HD22	2.24	0.45
21:AU:20:LYS:HE3	21:AU:20:LYS:HB3	1.72	0.45
23:BA:195:A:H4'	23:BA:251:A:O2'	2.16	0.45
23:BA:923:C:C4'	44:B0:29:GLN:HE21	2.29	0.45
23:BA:1047:G:H21	23:BA:1111:A:N6	2.14	0.45
23:BA:2199:A:OP2	23:BA:2200:C:H5	1.99	0.45
25:BD:237:GLU:OE1	56:BD:404:HOH:O	2.21	0.45
30:BI:44:LEU:HD12	30:BI:44:LEU:HA	1.76	0.45
31:BN:48:MET:HB2	31:BN:48:MET:HE3	1.59	0.45
37:BT:127:ALA:HA	37:BT:129:ARG:N	2.32	0.45
1:CA:57:G:H2'	1:CA:58:C:C6	2.52	0.45
1:CA:426:G:P	4:CD:36:ARG:HH12	2.40	0.45
1:CA:530:G:OP1	1:CA:530:G:H3'	2.17	0.45
12:CL:67:THR:OG1	12:CL:95:GLY:O	2.31	0.45
23:DA:1316:U:H2'	23:DA:1317:A:C8	2.51	0.45
23:DA:1545:A:H2'	23:DA:1546:C:O4'	2.17	0.45
23:DA:2131:G:OP2	23:DA:2131:G:H3'	2.16	0.45
23:DA:2173:A:C6	23:DA:2174:C:C2	3.05	0.45
23:DA:2360:A:H2'	23:DA:2361:A:O4'	2.17	0.45
24:DB:29:A:OP2	36:DS:32:LEU:HD12	2.17	0.45
25:DD:17:THR:HG23	25:DD:205:VAL:HB	1.98	0.45
29:DH:75:ALA:O	29:DH:79:VAL:HG22	2.17	0.45
48:D4:15:ILE:HG13	48:D4:21:VAL:HG22	1.97	0.45
53:D9:25:VAL:HB	53:D9:34:GLN:HB2	1.98	0.45
1:AA:392:G:H2'	1:AA:393:A:H8	1.81	0.45
1:AA:613:C:N4	1:AA:627:G:H1	2.14	0.45
1:AA:922:G:C6	1:AA:923:A:C6	3.04	0.45
1:AA:947:G:H2'	1:AA:948:C:O4'	2.16	0.45
1:AA:1002:G:C2	1:AA:1003:G:H1'	2.52	0.45
1:AA:1151:A:O2'	1:AA:1152:A:C8	2.65	0.45
1:AA:1269:A:C8	1:AA:1269:A:OP2	2.70	0.45
1:AA:1293:G:C2	1:AA:1294:G:C8	3.04	0.45
3:AC:141:VAL:HG11	3:AC:202:ILE:HD12	1.99	0.45
5:AE:29:GLY:HA2	5:AE:47:LYS:HA	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AG:103:TRP:CZ3	7:AG:141:VAL:HG11	2.52	0.45
18:AR:31:LEU:H	18:AR:31:LEU:CD2	2.30	0.45
19:AS:63:THR:H	19:AS:66:MET:HG3	1.81	0.45
23:BA:1493:C:N4	23:BA:2206:G:H1'	2.32	0.45
23:BA:2205:C:O2	23:BA:2220:G:C2	2.70	0.45
23:BA:2313:C:H2'	23:BA:2314:C:C6	2.51	0.45
23:BA:2331:G:H4'	44:B0:43:THR:H	1.82	0.45
24:BB:59:A:H2'	24:BB:60:C:C6	2.52	0.45
33:BP:97:PRO:HG3	33:BP:112:LEU:HD12	1.99	0.45
43:BZ:104:PHE:HB3	43:BZ:141:VAL:HG21	1.99	0.45
46:B2:64:LEU:O	46:B2:68:ARG:HG2	2.17	0.45
46:B2:64:LEU:HD21	46:B2:68:ARG:HE	1.81	0.45
1:CA:77:G:C6	1:CA:78:G:C6	3.04	0.45
1:CA:154:C:C4	1:CA:168:G:N1	2.84	0.45
1:CA:405:U:H3'	1:CA:406:G:H5'	1.97	0.45
1:CA:505:G:C6	1:CA:535:A:C2	3.05	0.45
1:CA:956:U:H1'	1:CA:1225:A:H2	1.81	0.45
2:CB:87:ARG:CZ	2:CB:233:SER:HB2	2.46	0.45
11:CK:66:LEU:HD21	11:CK:97:ALA:HB1	1.98	0.45
12:CL:47:LYS:HA	12:CL:49:ASN:H	1.82	0.45
23:DA:271(K):U:O2'	23:DA:271(L):U:OP1	2.29	0.45
23:DA:271(M):G:O2'	23:DA:271(N):U:H3'	2.17	0.45
23:DA:725:G:C6	23:DA:726:G:N1	2.85	0.45
23:DA:1332:G:N3	23:DA:1332:G:H5'	2.32	0.45
23:DA:2387:U:O2'	44:D0:41:ARG:NH2	2.42	0.45
25:DD:71:ASP:HB3	25:DD:103:ARG:NH2	2.31	0.45
25:DD:102:LYS:C	25:DD:103:ARG:HG2	2.42	0.45
34:DQ:26:TYR:CD1	34:DQ:28:ALA:HB2	2.51	0.45
1:AA:77:G:C6	1:AA:78:G:C6	3.05	0.45
1:AA:99:U:H2'	1:AA:100:C:H6	1.82	0.45
1:AA:106:C:H2'	1:AA:107:G:C8	2.52	0.45
1:AA:392:G:H2'	1:AA:393:A:C8	2.52	0.45
1:AA:479:C:H2'	1:AA:480:U:H6	1.82	0.45
1:AA:657:G:C2	1:AA:750:G:C5	3.05	0.45
1:AA:1028:C:C5	1:AA:1033:G:O6	2.70	0.45
1:AA:1047:G:O2'	1:AA:1215:G:O2'	2.30	0.45
1:AA:1157:A:H8	1:AA:1158:C:N3	2.14	0.45
1:AA:1205:U:H2'	1:AA:1206:G:C8	2.52	0.45
1:AA:1376:U:O5'	7:AG:94:ARG:NH2	2.50	0.45
1:AA:1424:C:H2'	1:AA:1425:U:O4'	2.17	0.45
2:AB:118:LEU:HD13	2:AB:142:LEU:HB2	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AI:15:ALA:HB3	9:AI:76:ALA:O	2.17	0.45
9:AI:28:VAL:HA	9:AI:63:ILE:O	2.16	0.45
9:AI:105:ASP:OD1	9:AI:105:ASP:N	2.50	0.45
12:AL:85:ILE:HA	12:AL:85:ILE:HD13	1.66	0.45
14:AN:47:LEU:HD22	14:AN:50:LYS:HD3	1.98	0.45
15:AO:75:PRO:O	15:AO:77:ARG:N	2.50	0.45
17:AQ:48:GLU:HG3	17:AQ:50:LYS:HE3	1.99	0.45
23:BA:671:C:H2'	23:BA:672:C:C6	2.52	0.45
23:BA:2458:G:O2'	23:BA:2460:U:O4	2.33	0.45
23:BA:2591:C:OP1	25:BD:239:ARG:HG2	2.17	0.45
27:BF:65:TRP:HH2	27:BF:72:ARG:HH21	1.64	0.45
29:BH:71:LEU:HA	29:BH:74:ASN:HB2	1.98	0.45
34:BQ:16:ARG:O	34:BQ:17:LEU:HD23	2.15	0.45
41:BX:5:TYR:HD1	46:B2:33:MET:HE2	1.82	0.45
1:CA:600:C:H2'	1:CA:601:C:H6	1.81	0.45
1:CA:688:G:O2'	1:CA:704:A:N1	2.43	0.45
1:CA:717:C:H6	1:CA:717:C:H5"	1.81	0.45
1:CA:994:A:N3	1:CA:994:A:H2'	2.31	0.45
1:CA:1342:C:H1'	9:CI:124:GLN:NE2	2.32	0.45
3:CC:18:TRP:NE1	14:CN:55:GLY:H	2.15	0.45
3:CC:34:LEU:O	3:CC:38:ARG:HG3	2.17	0.45
3:CC:156:ARG:HD3	3:CC:193:TYR:HB2	1.99	0.45
4:CD:106:TYR:C	4:CD:106:TYR:CD2	2.95	0.45
6:CF:11:ASN:HA	6:CF:12:PRO:HD2	1.63	0.45
8:CH:9:MET:SD	8:CH:32:LYS:HG2	2.57	0.45
18:CR:61:LYS:O	18:CR:65:ILE:HG12	2.17	0.45
23:DA:637:A:H8	33:DP:117:GLU:HG3	1.82	0.45
23:DA:1009:A:O4'	38:DU:59:ARG:HG2	2.16	0.45
23:DA:1341:U:O2	41:DX:80:ILE:HD13	2.17	0.45
23:DA:2322:A:H2'	23:DA:2323:G:O4'	2.17	0.45
28:DG:47:LYS:HD3	28:DG:81:LYS:CB	2.47	0.45
34:DQ:75:THR:HA	34:DQ:89:ASN:O	2.17	0.45
41:DX:5:TYR:HD1	46:D2:33:MET:CE	2.30	0.45
44:D0:51:VAL:HG23	44:D0:81:VAL:HG23	1.97	0.45
1:AA:202:U:H3'	1:AA:203:U:C5	2.52	0.44
1:AA:925:G:H5"	1:AA:926:G:OP1	2.17	0.44
1:AA:1040:U:C4	1:AA:1041:A:N7	2.85	0.44
1:AA:1041:A:N6	1:AA:1042:G:C2	2.85	0.44
1:AA:1054:C:H2'	1:AA:1054:C:H6	1.57	0.44
1:AA:1060:C:C1'	10:AJ:53:PRO:HD2	2.47	0.44
1:AA:1127:G:C4	1:AA:1147:C:N4	2.85	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1227:A:H3'	1:AA:1228:C:C5'	2.47	0.44
1:AA:1366:C:O3'	10:AJ:60:ARG:NH2	2.48	0.44
23:BA:764:A:N3	25:BD:213:ARG:NH1	2.65	0.44
23:BA:1108:U:O2'	23:BA:1109:C:O4'	2.35	0.44
23:BA:1792:G:H2'	23:BA:1793:C:H6	1.82	0.44
28:BG:121:ASN:HD21	28:BG:123:ASN:HB2	1.82	0.44
39:BV:52:VAL:HG22	39:BV:55:ALA:HB3	1.99	0.44
43:BZ:30:ASN:OD1	43:BZ:32:HIS:N	2.47	0.44
45:B1:20:ARG:HH11	45:B1:20:ARG:CG	2.27	0.44
52:B8:34:TRP:O	52:B8:36:LYS:N	2.50	0.44
1:CA:728:A:H2'	1:CA:729:A:H8	1.81	0.44
1:CA:1002:G:C2	1:CA:1039:C:C2	3.05	0.44
1:CA:1156:G:H2'	1:CA:1157:A:H5"	1.99	0.44
1:CA:1327:C:H2'	1:CA:1328:C:C6	2.52	0.44
2:CB:204:ASN:OD1	2:CB:206:ASP:N	2.46	0.44
5:CE:50:GLU:HB2	5:CE:53:LEU:HD13	1.99	0.44
8:CH:9:MET:HG3	8:CH:26:VAL:HG11	1.99	0.44
23:DA:90:U:O2'	23:DA:92:A:P	2.74	0.44
23:DA:510:C:H2'	23:DA:511:U:O4'	2.17	0.44
23:DA:1027:A:C6	23:DA:1126:A:C4	3.04	0.44
23:DA:2018:G:H2'	23:DA:2019:A:O4'	2.17	0.44
23:DA:2420:C:O5'	23:DA:2420:C:H6	2.01	0.44
25:DD:274:ARG:H	25:DD:274:ARG:HG3	1.47	0.44
27:DF:29:ASN:H	27:DF:112:MET:CE	2.30	0.44
28:DG:5:VAL:HG23	28:DG:104:GLU:OE1	2.17	0.44
30:DI:77:LEU:HD22	30:DI:104:GLN:OE1	2.17	0.44
32:DO:2:ILE:HB	32:DO:33:ALA:HB3	1.99	0.44
34:DQ:7:MET:HB2	34:DQ:7:MET:HE3	1.33	0.44
40:DW:1:MET:HE3	40:DW:2:GLU:H	1.82	0.44
52:D8:34:TRP:C	52:D8:36:LYS:H	2.22	0.44
1:AA:49:U:H3	1:AA:362:G:H1'	1.83	0.44
1:AA:69:G:C2	1:AA:101:A:N1	2.85	0.44
1:AA:115:G:H4'	1:AA:116:A:O5'	2.17	0.44
1:AA:1006:C:P	1:AA:1037:C:O2'	2.75	0.44
1:AA:1030(B):C:C2'	1:AA:1030(C):G:H5'	2.47	0.44
1:AA:1225:A:H2'	1:AA:1225:A:N3	2.31	0.44
1:AA:1364:U:H3'	1:AA:1365:G:C8	2.52	0.44
1:AA:1368:G:O2'	1:AA:1369:C:H5'	2.17	0.44
4:AD:112:VAL:HG13	4:AD:161:ASN:ND2	2.33	0.44
5:AE:51:VAL:O	5:AE:55:VAL:HG23	2.17	0.44
8:AH:56:LYS:HA	8:AH:57:PRO:HD2	1.86	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AL:57:LYS:HE2	12:AL:67:THR:HG23	2.00	0.44
13:AM:31:LYS:HA	13:AM:34:LEU:HD12	1.98	0.44
23:BA:272(J):C:H2'	23:BA:274:G:O4'	2.17	0.44
23:BA:754:C:H2'	23:BA:755:C:C6	2.52	0.44
23:BA:1794:U:H2'	23:BA:1795:C:C6	2.52	0.44
23:BA:1794:U:H2'	23:BA:1795:C:H6	1.83	0.44
23:BA:2833:G:O2'	23:BA:2834:G:P	2.76	0.44
27:BF:88:VAL:HG23	27:BF:89:VAL:O	2.16	0.44
32:BO:2:ILE:HG13	32:BO:8:LEU:HD11	1.99	0.44
35:BR:21:TYR:OH	35:BR:43:GLU:HG2	2.16	0.44
48:B4:30:GLU:O	48:B4:31:ILE:HG13	2.17	0.44
50:B6:44:ARG:HB3	50:B6:44:ARG:HH11	1.83	0.44
1:CA:1030:C:N4	1:CA:1032:G:C4	2.85	0.44
1:CA:1034:G:N2	1:CA:1035:A:N6	2.65	0.44
1:CA:1186:G:H21	14:CN:61:TRP:C	2.26	0.44
5:CE:7:GLU:HG2	5:CE:112:LEU:HD22	1.98	0.44
22:CV:30:PRO:HB3	22:CV:40:TRP:CE2	2.51	0.44
23:DA:247:G:H4'	23:DA:386:G:C6	2.52	0.44
23:DA:500:G:N2	23:DA:502:A:H3'	2.33	0.44
23:DA:723:G:H2'	23:DA:724:U:O4'	2.17	0.44
23:DA:947:G:N2	23:DA:971:C:C2	2.85	0.44
23:DA:1359:A:C6	23:DA:1372:U:O4	2.68	0.44
23:DA:2133:G:O2'	23:DA:2158:A:N1	2.43	0.44
23:DA:2236:C:C2'	23:DA:2237:G:H5'	2.47	0.44
23:DA:2320:A:H2'	23:DA:2320:A:N3	2.31	0.44
23:DA:2461:C:H2'	23:DA:2462:U:C6	2.52	0.44
23:DA:2574:G:N3	26:DE:143:ASN:ND2	2.66	0.44
45:D1:86:SER:OG	45:D1:89:GLU:HG2	2.16	0.44
1:AA:271:C:H2'	1:AA:272:C:H6	1.81	0.44
1:AA:344:A:H3'	1:AA:346:G:O6	2.16	0.44
1:AA:441:A:H5'	1:AA:442:C:OP2	2.17	0.44
1:AA:484:G:O2'	1:AA:485:G:OP2	2.30	0.44
1:AA:942:G:N2	1:AA:1342:C:H1'	2.32	0.44
1:AA:1027:C:N4	1:AA:1034:G:C6	2.85	0.44
1:AA:1512:U:H2'	1:AA:1513:A:C8	2.53	0.44
2:AB:187:LEU:HA	2:AB:201:ILE:HB	1.99	0.44
5:AE:78:HIS:CE1	5:AE:142:LEU:HA	2.48	0.44
9:AI:44:VAL:HA	9:AI:45:ALA:HA	1.35	0.44
10:AJ:50:ILE:HG13	10:AJ:60:ARG:HG3	2.00	0.44
19:AS:16:LEU:O	19:AS:20:LEU:HD23	2.17	0.44
19:AS:63:THR:OG1	19:AS:66:MET:HG2	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:AU:12:LYS:HE3	21:AU:19:GLY:N	2.32	0.44
23:BA:542:C:H2'	23:BA:543:C:H6	1.83	0.44
23:BA:1575:C:H2'	23:BA:1576:U:H6	1.81	0.44
23:BA:2454:G:H1'	56:BA:4395:HOH:O	2.17	0.44
23:BA:2787:C:H2'	23:BA:2788:C:H6	1.82	0.44
25:BD:38:LYS:HD2	25:BD:39:LYS:N	2.32	0.44
25:BD:130:ALA:C	25:BD:131:LEU:HD12	2.42	0.44
27:BF:107:LYS:HE2	27:BF:208:GLY:N	2.32	0.44
28:BG:27:ASN:OD1	28:BG:28:VAL:N	2.50	0.44
30:BI:4:ILE:HG21	30:BI:47:LEU:HD23	1.99	0.44
31:BN:58:ASP:OD1	31:BN:58:ASP:N	2.46	0.44
34:BQ:1:MET:HE2	34:BQ:1:MET:H3	1.83	0.44
44:B0:51:VAL:HG23	44:B0:81:VAL:HG23	1.97	0.44
1:CA:192:U:H2'	1:CA:193:C:H6	1.82	0.44
1:CA:474:G:H2'	1:CA:475:G:H8	1.81	0.44
1:CA:503:C:H2'	1:CA:504:C:H6	1.83	0.44
1:CA:784:C:H4'	23:DA:1837:C:OP1	2.17	0.44
1:CA:790:A:C6	1:CA:791:G:C6	3.05	0.44
1:CA:943:U:H2'	1:CA:944:G:H8	1.83	0.44
1:CA:1097:C:H2'	1:CA:1098:C:O4'	2.17	0.44
1:CA:1151:A:C2	10:CJ:39:PRO:HG2	2.52	0.44
1:CA:1371:G:H5"	9:CI:68:GLY:HA2	2.00	0.44
1:CA:1424:C:H2'	1:CA:1425:U:O4'	2.17	0.44
1:CA:1531:A:H5'	56:CA:1772:HOH:O	2.16	0.44
7:CG:80:VAL:O	7:CG:80:VAL:HG12	2.18	0.44
8:CH:73:ASP:HA	8:CH:74:PRO:HD2	1.75	0.44
10:CJ:49:VAL:HG21	14:CN:45:ARG:CD	2.44	0.44
10:CJ:54:PHE:CE2	10:CJ:55:LYS:HG3	2.52	0.44
17:CQ:48:GLU:HG3	17:CQ:50:LYS:HE3	2.00	0.44
23:DA:652(A):A:H4'	23:DA:652(B):A:OP1	2.17	0.44
23:DA:1036:G:H1	23:DA:1119:C:N4	2.13	0.44
23:DA:1526:G:C6	23:DA:1527:G:C2	3.06	0.44
23:DA:1537:G:H2'	23:DA:1538:G:H8	1.82	0.44
23:DA:1575:C:O2'	23:DA:1576:U:H5'	2.16	0.44
23:DA:2009:G:OP1	40:DW:41:LYS:HE2	2.17	0.44
23:DA:2028:U:H2'	23:DA:2029:G:O4'	2.17	0.44
23:DA:2586:C:H1'	56:DA:3976:HOH:O	2.16	0.44
25:DD:76:PRO:HB2	25:DD:116:GLN:NE2	2.32	0.44
1:AA:51:A:C6	1:AA:353:A:C2	3.06	0.44
1:AA:380:G:C2	1:AA:384:G:C6	3.04	0.44
1:AA:514:C:H2'	1:AA:515:G:H8	1.83	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:932:C:H5”	7:AG:3:ARG:HH11	1.83	0.44
2:AB:20:GLU:O	2:AB:40:HIS:HB2	2.18	0.44
3:AC:8:ILE:O	3:AC:12:LEU:HG	2.17	0.44
13:AM:71:ARG:O	13:AM:75:ALA:HB3	2.18	0.44
19:AS:52:TYR:H	19:AS:57:HIS:HA	1.81	0.44
23:BA:271(Q):G:O2’	23:BA:271(R):G:P	2.75	0.44
23:BA:830:G:H4’	23:BA:831:G:OP2	2.18	0.44
23:BA:934:G:H2’	23:BA:935:C:H6	1.81	0.44
23:BA:1537:G:H2’	23:BA:1538:G:C8	2.52	0.44
23:BA:1537:G:H2’	23:BA:1538:G:H8	1.82	0.44
23:BA:1592:C:H2’	23:BA:1593:G:C8	2.53	0.44
23:BA:2140:C:H2’	23:BA:2141:G:C8	2.53	0.44
23:BA:2416:C:O5’	23:BA:2416:C:H6	2.00	0.44
25:BD:17:THR:HG23	25:BD:205:VAL:HB	1.98	0.44
28:BG:41:GLN:O	28:BG:89:GLY:HA2	2.18	0.44
37:BT:2:ASN:O	37:BT:6:LEU:HD22	2.18	0.44
41:BX:26:TYR:CE1	41:BX:89:ILE:HG13	2.52	0.44
1:CA:165:C:H2’	1:CA:166:G:H8	1.83	0.44
1:CA:189:G:C6	1:CA:189(A):C:C4	3.05	0.44
1:CA:633:G:C5	1:CA:634:C:C4	3.06	0.44
1:CA:657:G:C2	1:CA:750:G:C5	3.04	0.44
1:CA:750:G:N3	15:CO:23:GLY:HA3	2.32	0.44
1:CA:1492:A:OP1	1:CA:1492:A:H4’	2.18	0.44
3:CC:118:GLN:HE21	3:CC:118:GLN:HB3	1.63	0.44
3:CC:182:ILE:HG23	3:CC:203:PHE:HB2	1.99	0.44
4:CD:166:LYS:HA	4:CD:178:VAL:HG11	1.99	0.44
8:CH:112:LEU:HB3	8:CH:133:LEU:HA	1.99	0.44
9:CI:44:VAL:HA	9:CI:45:ALA:HA	1.68	0.44
13:CM:23:TYR:O	13:CM:66:LEU:HA	2.17	0.44
23:DA:192:C:O2’	23:DA:802:A:N3	2.40	0.44
23:DA:1533:G:H2’	23:DA:1534:U:O4’	2.17	0.44
23:DA:1930:G:O2’	23:DA:1931:U:P	2.76	0.44
23:DA:2186:G:N1	23:DA:2187:G:C5	2.85	0.44
23:DA:2319:G:C2	36:DS:3:ARG:HA	2.53	0.44
25:DD:97:TYR:HB2	25:DD:101:GLU:O	2.17	0.44
25:DD:184:LYS:HG3	25:DD:271:ILE:HD11	1.99	0.44
28:DG:74:LYS:O	28:DG:84:LYS:HG2	2.17	0.44
34:DQ:21:THR:HA	34:DQ:98:LYS:HB2	1.98	0.44
42:DY:68:HIS:ND1	42:DY:70:SER:HB3	2.32	0.44
43:DZ:5:LEU:HD22	43:DZ:6:LYS:N	2.32	0.44
1:AA:148:G:O2’	1:AA:149:A:H5’	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:622:A:C8	1:AA:623:C:C5	3.06	0.44
1:AA:717:C:H5"	1:AA:717:C:H6	1.83	0.44
1:AA:888:G:H4'	1:AA:1488:G:O2'	2.18	0.44
1:AA:1030(C):G:H8	1:AA:1030(C):G:H3'	1.83	0.44
1:AA:1128:C:O2'	1:AA:1130:A:C8	2.70	0.44
1:AA:1140:C:H2'	1:AA:1141:C:H6	1.81	0.44
1:AA:1165:C:N3	1:AA:1171:G:N2	2.60	0.44
1:AA:1320:C:C2	19:AS:36:ARG:HG3	2.52	0.44
2:AB:218:ALA:O	2:AB:222:ILE:HG13	2.17	0.44
4:AD:111:ALA:HB2	4:AD:120:LEU:HD12	1.99	0.44
8:AH:124:ALA:HB1	8:AH:129:VAL:O	2.16	0.44
13:AM:23:TYR:CE1	13:AM:70:LEU:HB3	2.40	0.44
20:AT:36:LEU:HD13	20:AT:36:LEU:HA	1.86	0.44
23:BA:574:C:OP1	56:BA:4003:HOH:O	2.20	0.44
23:BA:1310:G:H1'	23:BA:1611:C:H5'	1.99	0.44
23:BA:1478:G:H2'	23:BA:1479:G:H8	1.83	0.44
23:BA:2834:G:N2	23:BA:2882:A:N6	2.66	0.44
24:BB:32:C:N3	24:BB:51:G:C2	2.85	0.44
27:BF:127:GLU:HA	27:BF:196:LEU:HD12	1.98	0.44
43:BZ:98:MET:SD	43:BZ:133:ILE:HD13	2.57	0.44
50:B6:21:TYR:CE2	50:B6:38:LYS:HG2	2.52	0.44
1:CA:540:G:H2'	1:CA:541:G:O4'	2.18	0.44
1:CA:586:C:O2'	1:CA:878:G:H4'	2.17	0.44
1:CA:827:U:H5"	1:CA:828:A:OP2	2.17	0.44
1:CA:921:U:H2'	1:CA:922:G:O4'	2.17	0.44
1:CA:1459:C:H2'	1:CA:1460:A:N7	2.33	0.44
12:CL:41:ARG:HH12	12:CL:57:LYS:HE3	1.82	0.44
12:CL:124:LYS:HA	12:CL:125:PRO:HD3	1.76	0.44
18:CR:59:SER:OG	18:CR:60:ALA:N	2.50	0.44
23:DA:125:G:C6	51:D7:10:ARG:HG3	2.52	0.44
23:DA:1141:U:OP1	31:DN:25:ARG:NH1	2.51	0.44
25:DD:245:PRO:HA	25:DD:246:PRO:HD3	1.84	0.44
26:DE:116:VAL:HG13	26:DE:122:PHE:CG	2.52	0.44
27:DF:88:VAL:HG23	27:DF:89:VAL:O	2.18	0.44
30:DI:75:LEU:HD12	30:DI:105:HIS:ND1	2.33	0.44
30:DI:88:ILE:HD11	30:DI:122:GLU:C	2.43	0.44
31:DN:23:LEU:O	31:DN:25:ARG:N	2.50	0.44
35:DR:103:ARG:NH1	35:DR:108:GLY:O	2.51	0.44
42:DY:77:PRO:HD3	42:DY:106:LEU:HD23	1.98	0.44
46:D2:53:LEU:O	46:D2:57:ILE:HG13	2.17	0.44
47:D3:4:LEU:HD23	47:D3:4:LEU:HA	1.81	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:D4:15:ILE:HB	48:D4:32:TYR:CE2	2.53	0.44
50:D6:13:CYS:HB2	50:D6:20:ASN:HD21	1.82	0.44
1:AA:176:C:H2'	1:AA:177:C:H6	1.80	0.44
1:AA:327:A:C4	1:AA:329:A:C8	3.06	0.44
1:AA:426:G:H2'	1:AA:427:U:C6	2.53	0.44
1:AA:452:A:H62	1:AA:480:U:H3	1.66	0.44
1:AA:660:G:H2'	1:AA:661:G:H8	1.80	0.44
1:AA:1203:C:O2'	1:AA:1204:A:H5'	2.18	0.44
7:AG:88:PRO:HB3	7:AG:145:ALA:HB1	1.99	0.44
20:AT:43:LEU:HB2	20:AT:52:ALA:HB2	1.99	0.44
23:BA:92:A:O2'	23:BA:93:G:H5'	2.17	0.44
23:BA:469:G:C2'	23:BA:470:A:H5"	2.47	0.44
23:BA:1448:G:O2'	23:BA:1528(A):A:N1	2.43	0.44
23:BA:2287:A:C4	23:BA:2289:G:C8	3.04	0.44
23:BA:2287:A:N3	23:BA:2289:G:C8	2.86	0.44
23:BA:2822:G:N7	56:BA:4416:HOH:O	2.36	0.44
25:BD:43:ARG:HG2	25:BD:47:GLY:O	2.18	0.44
38:BU:76:TYR:OH	38:BU:92:ARG:NH1	2.50	0.44
42:BY:67:LEU:HD23	42:BY:67:LEU:HA	1.61	0.44
43:BZ:70:LEU:HD23	43:BZ:70:LEU:HA	1.83	0.44
1:CA:69:G:N1	1:CA:70:G:C5	2.86	0.44
1:CA:324:G:N2	1:CA:327:A:C8	2.86	0.44
1:CA:869:G:H4'	1:CA:872:A:O4'	2.17	0.44
1:CA:1003:G:N2	1:CA:1038:C:N3	2.65	0.44
1:CA:1102:A:C5	1:CA:1103:C:C5	3.05	0.44
1:CA:1190:G:P	3:CC:5:ILE:HG22	2.57	0.44
1:CA:1288:A:C6	1:CA:1289:A:C5	3.05	0.44
4:CD:200:GLU:O	4:CD:204:ILE:HG12	2.17	0.44
6:CF:25:ILE:CD1	6:CF:82:ARG:HE	2.31	0.44
7:CG:48:LYS:HA	7:CG:51:GLN:HB2	1.99	0.44
7:CG:64:GLN:HE22	7:CG:67:GLU:HB3	1.81	0.44
8:CH:40:ALA:HA	8:CH:45:ILE:HG13	1.99	0.44
16:CP:71:ARG:HA	16:CP:74:LEU:HB2	2.00	0.44
19:CS:63:THR:HB	19:CS:65:ASN:H	1.82	0.44
23:DA:2110:G:O2'	23:DA:2120:G:H5'	2.17	0.44
23:DA:2313:C:H5"	28:DG:91:ARG:HG3	1.98	0.44
23:DA:2820:A:C6	35:DR:4:LEU:HD11	2.53	0.44
30:DI:78:THR:N	30:DI:104:GLN:OE1	2.43	0.44
30:DI:123:LEU:H	30:DI:123:LEU:HG	1.58	0.44
34:DQ:72:LYS:HA	34:DQ:73:PRO:HD3	1.88	0.44
36:DS:110:LEU:HD12	36:DS:110:LEU:HA	1.81	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DT:50:ILE:HG22	37:DT:102:ILE:HD11	2.00	0.44
43:DZ:19:ARG:NH1	43:DZ:84:GLU:O	2.51	0.44
43:DZ:63:ASP:OD1	43:DZ:65:GLN:HB3	2.17	0.44
50:D6:14:THR:HG21	50:D6:48:VAL:HG13	2.00	0.44
1:AA:15:G:H4'	5:AE:24:ARG:NH1	2.31	0.44
1:AA:134:A:H61	16:AP:25:ARG:NH1	2.14	0.44
1:AA:160:A:H1'	1:AA:344:A:C5	2.53	0.44
1:AA:345:C:H4'	1:AA:346:G:C8	2.52	0.44
1:AA:474:G:C2	1:AA:475:G:C5	3.05	0.44
1:AA:745:C:OP1	1:AA:851:G:O2'	2.32	0.44
1:AA:1149:C:H2'	1:AA:1150:U:C2	2.53	0.44
1:AA:1260:C:N3	1:AA:1274:G:N2	2.65	0.44
3:AC:177:THR:O	3:AC:180:ALA:HB2	2.18	0.44
4:AD:105:VAL:HG12	4:AD:117:ALA:HB1	1.98	0.44
5:AE:76:ILE:HG22	5:AE:93:PRO:HB3	2.00	0.44
13:AM:103:THR:HA	13:AM:107:ALA:CB	2.48	0.44
16:AP:76:GLN:O	16:AP:76:GLN:HG3	2.17	0.44
23:BA:639:U:H2'	23:BA:640:C:H6	1.76	0.44
23:BA:1922:G:H2'	23:BA:1923:U:O4'	2.18	0.44
23:BA:2114:A:O2'	23:BA:2167:U:H4'	2.17	0.44
23:BA:2169:A:O2'	23:BA:2170:A:H5'	2.18	0.44
23:BA:2315:G:C6	23:BA:2316:C:N4	2.86	0.44
26:BE:178:GLU:H	26:BE:178:GLU:CD	2.26	0.44
37:BT:118:ARG:HH11	37:BT:118:ARG:CG	2.31	0.44
1:CA:185:A:H2'	1:CA:186:C:C6	2.53	0.44
1:CA:521:G:OP1	12:CL:73:GLU:HA	2.17	0.44
1:CA:890:G:O2'	1:CA:906:G:O6	2.34	0.44
1:CA:969:A:H2'	1:CA:970:C:O4'	2.17	0.44
1:CA:1206:G:C6	1:CA:1207:G:C5	3.06	0.44
1:CA:1373:G:H5"	7:CG:36:LYS:HE2	1.99	0.44
4:CD:128:VAL:CG1	4:CD:129:ASN:HD22	2.22	0.44
9:CI:28:VAL:HG22	9:CI:63:ILE:HD12	2.00	0.44
17:CQ:81:ARG:HA	17:CQ:81:ARG:HD2	1.63	0.44
23:DA:71:A:H5"	23:DA:73:A:C8	2.52	0.44
23:DA:271(Y):U:O3'	23:DA:271(Z):C:H6	2.00	0.44
23:DA:829:A:N7	23:DA:2248:C:H5'	2.33	0.44
23:DA:2038:G:O6	56:DA:3654:HOH:O	2.20	0.44
32:DO:18:LYS:HD2	32:DO:45:GLU:CD	2.42	0.44
35:DR:44:LEU:HD23	35:DR:44:LEU:HA	1.86	0.44
52:D8:4:MET:HE3	52:D8:63:PRO:CG	2.47	0.44
1:AA:3:G:H4'	1:AA:4:U:OP2	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:119:A:C5	1:AA:240:C:C4	3.06	0.44
1:AA:477:A:H2'	1:AA:479:C:H6	1.82	0.44
1:AA:521:G:H2'	1:AA:522:C:H6	1.83	0.44
1:AA:1015:A:C6	1:AA:1016:A:C6	3.06	0.44
1:AA:1135:U:O2'	1:AA:1137:C:H5'	2.18	0.44
1:AA:1202:G:C8	14:AN:42:ILE:HD13	2.52	0.44
1:AA:1268:A:O2'	21:AU:19:GLY:O	2.35	0.44
1:AA:1273:G:C2	1:AA:1274:G:H1'	2.53	0.44
1:AA:1332:A:H1'	13:AM:109:THR:HG23	1.99	0.44
3:AC:30:ARG:O	3:AC:33:LEU:HB3	2.18	0.44
7:AG:33:ASP:HB2	7:AG:35:LYS:HE3	1.98	0.44
7:AG:59:LEU:O	7:AG:62:PHE:HB3	2.18	0.44
16:AP:72:ARG:HG2	16:AP:73:LEU:HD23	2.00	0.44
23:BA:952:G:C6	23:BA:953:A:N7	2.86	0.44
23:BA:1406:U:H2'	23:BA:1407:C:C6	2.52	0.44
23:BA:1529:G:O2'	23:BA:1530:C:H5'	2.17	0.44
23:BA:1889:A:H2'	23:BA:1890:A:C8	2.53	0.44
23:BA:2602:A:H1'	23:BA:2603:G:C5'	2.48	0.44
25:BD:68:LYS:O	25:BD:70:TRP:CD1	2.71	0.44
27:BF:22:ALA:HB1	27:BF:24:LEU:HD22	1.99	0.44
27:BF:181:LEU:HD12	27:BF:181:LEU:HA	1.84	0.44
37:BT:35:LYS:HB3	37:BT:35:LYS:HE2	1.74	0.44
41:BX:11:PRO:HD3	46:B2:37:PHE:CE2	2.52	0.44
41:BX:11:PRO:HD3	46:B2:37:PHE:CZ	2.52	0.44
43:BZ:183:LEU:HD23	43:BZ:183:LEU:HA	1.84	0.44
53:B9:7:VAL:HA	53:B9:34:GLN:OE1	2.18	0.44
1:CA:270:A:H2'	1:CA:271:C:C6	2.53	0.44
1:CA:858:G:O6	1:CA:869:G:H3'	2.18	0.44
1:CA:881:G:P	12:CL:12:ARG:NH2	2.89	0.44
1:CA:1492:A:N3	1:CA:1492:A:H2'	2.32	0.44
2:CB:27:LYS:HB3	2:CB:194:PRO:HD2	2.00	0.44
2:CB:75:LYS:HA	2:CB:78:GLN:HB2	2.00	0.44
5:CE:29:GLY:HA2	5:CE:47:LYS:HA	1.99	0.44
5:CE:110:LEU:HD12	5:CE:118:ILE:HG21	1.99	0.44
16:CP:76:GLN:O	16:CP:76:GLN:HG3	2.18	0.44
23:DA:1015:G:C2'	23:DA:1016:G:H5'	2.48	0.44
23:DA:1615:C:C5	23:DA:1617:C:C4	3.06	0.44
23:DA:2418:A:H2'	23:DA:2419:U:C6	2.53	0.44
23:DA:2615:U:H2'	23:DA:2616:C:H6	1.82	0.44
36:DS:63:THR:O	36:DS:66:ALA:HB3	2.18	0.44
38:DU:27:LEU:HA	38:DU:30:LYS:HB2	2.00	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:445:G:C6	1:AA:490:G:C6	3.06	0.44
1:AA:1137:C:H5'	1:AA:1138:G:N1	2.33	0.44
1:AA:1399:C:C2	1:AA:1502:A:N6	2.86	0.44
1:AA:1403:C:H1'	1:AA:1500:A:N1	2.33	0.44
1:AA:1492:A:H2'	1:AA:1492:A:N3	2.32	0.44
2:AB:82:ARG:HG3	2:AB:92:TYR:CZ	2.52	0.44
16:AP:14:ASN:OD1	16:AP:16:HIS:ND1	2.50	0.44
23:BA:1494:A:C6	23:BA:1495:A:C6	3.06	0.44
23:BA:1592:C:H2'	23:BA:1593:G:H8	1.82	0.44
23:BA:1652:A:H2'	23:BA:1653:G:H5'	2.00	0.44
25:BD:101:GLU:OE1	25:BD:103:ARG:HD3	2.17	0.44
27:BF:192:LEU:CD2	27:BF:194:MET:HE2	2.48	0.44
28:BG:107:LEU:HD23	28:BG:111:LEU:HD12	1.98	0.44
29:BH:144:VAL:O	29:BH:148:ILE:HG12	2.18	0.44
42:BY:86:ARG:NH1	42:BY:100:ALA:HB1	2.33	0.44
1:CA:99:U:H2'	1:CA:100:C:H6	1.82	0.44
1:CA:355:C:C4	1:CA:356:A:N7	2.86	0.44
1:CA:433:C:H2'	1:CA:434:U:C6	2.53	0.44
1:CA:1127:G:C4	1:CA:1147:C:N4	2.86	0.44
1:CA:1150:U:H1'	1:CA:1280:A:C6	2.52	0.44
1:CA:1340:A:C2'	1:CA:1341:U:H5'	2.48	0.44
3:CC:123:GLN:HA	3:CC:126:ARG:HH11	1.81	0.44
4:CD:50:ARG:HA	4:CD:51:PRO:HD3	1.86	0.44
23:DA:1436:G:H1'	23:DA:1477:A:O2'	2.18	0.44
23:DA:1592:C:H2'	23:DA:1593:G:C8	2.53	0.44
23:DA:1792:G:H2'	23:DA:1793:C:H6	1.81	0.44
23:DA:1833:U:H2'	23:DA:1834:U:C6	2.51	0.44
23:DA:2186:G:N2	23:DA:2187:G:C4	2.86	0.44
23:DA:2316:C:H1'	28:DG:128:ARG:NH2	2.32	0.44
23:DA:2562:U:C1'	32:DO:23:ARG:HH11	2.25	0.44
24:DB:31:C:O2'	24:DB:53:A:N6	2.51	0.44
24:DB:32:C:N3	24:DB:51:G:N2	2.65	0.44
27:DF:46:ARG:HH11	27:DF:46:ARG:CG	2.21	0.44
27:DF:150:GLY:HA2	27:DF:172:TRP:CE3	2.53	0.44
31:DN:42:TRP:CE3	38:DU:63:VAL:HG11	2.52	0.44
38:DU:106:PHE:O	38:DU:110:VAL:HG23	2.18	0.44
41:DX:18:TYR:C	41:DX:20:GLY:H	2.26	0.44
42:DY:102:CYS:O	42:DY:104:GLY:N	2.51	0.44
1:AA:22:G:H2'	1:AA:23:C:C6	2.53	0.43
1:AA:99:U:H2'	1:AA:100:C:C6	2.53	0.43
1:AA:933:G:N7	7:AG:3:ARG:HD2	2.32	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1048:G:OP1	14:AN:4:LYS:HB2	2.17	0.43
1:AA:1303:C:H2'	1:AA:1304:G:H5'	2.01	0.43
1:AA:1305:G:C2	1:AA:1331:G:H1'	2.53	0.43
1:AA:1458:G:H5'	20:AT:31:SER:HB2	2.00	0.43
3:AC:193:TYR:CD2	3:AC:193:TYR:N	2.86	0.43
7:AG:156:TRP:N	7:AG:156:TRP:CE3	2.85	0.43
23:BA:125:G:H5"	51:B7:19:ARG:HD3	1.99	0.43
23:BA:511:U:C5	23:BA:512:G:C5	3.06	0.43
23:BA:639:U:H2'	23:BA:640:C:C5	2.53	0.43
23:BA:1106:G:H2'	23:BA:1106:G:N3	2.33	0.43
23:BA:1202:C:N4	23:BA:1203:G:C6	2.86	0.43
23:BA:1329:U:H5"	23:BA:1330:C:H5	1.83	0.43
23:BA:1858:G:H2'	23:BA:1883:G:N2	2.33	0.43
23:BA:2698:U:H2'	23:BA:2699:C:C6	2.52	0.43
26:BE:77:ILE:HD12	26:BE:195:LEU:HD13	2.00	0.43
27:BF:116:ASP:CG	33:BP:1:MET:HB2	2.43	0.43
30:BI:130:TYR:HB3	30:BI:138:ILE:HB	2.00	0.43
43:BZ:166:SER:HA	43:BZ:167:PRO:HD3	1.83	0.43
46:B2:23:LYS:O	46:B2:27:GLU:HG2	2.18	0.43
1:CA:152:A:N6	1:CA:170:U:N3	2.66	0.43
1:CA:458:C:H2'	1:CA:460:G:C8	2.50	0.43
1:CA:872:A:C5	1:CA:874:G:C8	3.06	0.43
1:CA:966:G:H2'	1:CA:967:C:O4'	2.18	0.43
1:CA:1001(A):G:H2'	1:CA:1002:G:C8	2.50	0.43
1:CA:1014:A:C2	1:CA:1219:U:H1'	2.53	0.43
1:CA:1468:A:H2'	1:CA:1469:G:O4'	2.18	0.43
7:CG:92:SER:H	7:CG:95:ARG:HD3	1.83	0.43
8:CH:92:ARG:HD3	8:CH:92:ARG:HA	1.74	0.43
13:CM:43:THR:OG1	13:CM:47:ASP:O	2.36	0.43
19:CS:58:VAL:HA	19:CS:59:PRO:HD3	1.81	0.43
23:DA:271(Q):G:O2'	23:DA:271(R):G:OP2	2.36	0.43
23:DA:1049:C:O2'	23:DA:1050:A:P	2.76	0.43
23:DA:1187:G:H5"	39:DV:81:TYR:CE2	2.53	0.43
23:DA:1310:G:H1'	23:DA:1611:C:H5'	2.00	0.43
23:DA:2356:C:O3'	44:D0:20:ARG:HD3	2.18	0.43
23:DA:2772:C:H2'	23:DA:2773:C:C6	2.53	0.43
23:DA:2833:G:H3'	23:DA:2834:G:H5"	2.00	0.43
34:DQ:66:ILE:HG12	34:DQ:104:PHE:CE2	2.53	0.43
36:DS:110:LEU:HB3	36:DS:112:PHE:HE2	1.83	0.43
43:DZ:48:PHE:CE2	43:DZ:52:SER:HA	2.53	0.43
44:D0:17:GLN:OE1	44:D0:17:GLN:HA	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:514:C:H2'	1:AA:515:G:C8	2.53	0.43
1:AA:667:G:OP1	1:AA:732:C:O2'	2.27	0.43
1:AA:832:C:N4	1:AA:855:G:C6	2.86	0.43
1:AA:918:A:C6	1:AA:919:A:C6	3.06	0.43
1:AA:1202:G:H2'	1:AA:1203:C:O4'	2.17	0.43
2:AB:21:ARG:HH12	2:AB:23:ARG:HE	1.64	0.43
6:AF:15:ASP:HB2	6:AF:18:GLN:H	1.82	0.43
14:AN:24:CYS:HB2	14:AN:33:VAL:HG12	1.98	0.43
14:AN:53:LEU:HA	14:AN:54:PRO:HD3	1.53	0.43
20:AT:80:ARG:O	20:AT:84:LEU:HB2	2.17	0.43
23:BA:9:U:OP1	31:BN:115:ARG:NH2	2.51	0.43
23:BA:654:A:H2	23:BA:655:A:C2	2.36	0.43
23:BA:1288:U:C2	23:BA:1327:C:O2	2.71	0.43
36:BS:49:VAL:HG12	36:BS:73:LEU:HD12	2.00	0.43
43:BZ:14:LYS:HA	43:BZ:15:PRO:HD3	1.91	0.43
1:CA:114:U:H2'	1:CA:115:G:C8	2.53	0.43
1:CA:507:C:OP2	1:CA:508:C:O2'	2.28	0.43
1:CA:568:G:C6	1:CA:569:C:N4	2.86	0.43
1:CA:832:C:N4	1:CA:855:G:C6	2.85	0.43
1:CA:990:C:H2'	1:CA:991:U:C6	2.53	0.43
1:CA:1013:G:H1'	1:CA:1017:G:H1	1.82	0.43
1:CA:1310:G:H1	1:CA:1327:C:N4	2.16	0.43
2:CB:40:HIS:HB3	2:CB:190:THR:HG21	1.98	0.43
7:CG:146:GLU:HG2	7:CG:149:ARG:HG3	2.00	0.43
8:CH:20:TYR:HA	8:CH:65:TYR:CE2	2.53	0.43
12:CL:54:LYS:HB3	12:CL:70:ILE:HD12	1.99	0.43
16:CP:39:TYR:CD1	16:CP:73:LEU:HD13	2.53	0.43
23:DA:1914:C:H2'	23:DA:1915:U:C6	2.53	0.43
23:DA:2093:G:H1	23:DA:2196:C:H42	1.66	0.43
23:DA:2141:G:C6	23:DA:2151:G:C6	3.06	0.43
23:DA:2146:C:H4'	23:DA:2147:G:O4'	2.19	0.43
23:DA:2404:C:O3'	33:DP:77:ARG:NH2	2.51	0.43
27:DF:123:LEU:HD12	27:DF:124:LEU:N	2.33	0.43
30:DI:97:ILE:O	30:DI:101:LEU:N	2.51	0.43
31:DN:128:HIS:HA	31:DN:129:PRO:HD2	1.64	0.43
48:D4:30:GLU:O	48:D4:31:ILE:HG13	2.18	0.43
1:AA:93:G:H1'	1:AA:96:U:H5'	1.99	0.43
1:AA:118:U:C5	1:AA:288:A:C6	3.06	0.43
1:AA:189:G:H2'	1:AA:189(A):C:C6	2.53	0.43
1:AA:658:G:H2'	1:AA:659:U:H6	1.82	0.43
1:AA:757:U:H2'	1:AA:758:G:O4'	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1098:C:C2	1:AA:1099:G:H1'	2.54	0.43
1:AA:1138:G:C6	1:AA:1140:C:H1'	2.53	0.43
1:AA:1206:G:H4'	3:AC:193:TYR:C	2.42	0.43
1:AA:1293:G:N3	1:AA:1294:G:C8	2.86	0.43
2:AB:138:LEU:O	2:AB:142:LEU:N	2.39	0.43
3:AC:131:ARG:HA	3:AC:134:ILE:HD12	1.99	0.43
23:BA:1545:A:H2'	23:BA:1546:C:O4'	2.17	0.43
23:BA:1711:C:H2'	23:BA:1712:C:H6	1.83	0.43
23:BA:1782:C:C4	23:BA:2587:A:C2	3.06	0.43
23:BA:1885:A:H2'	23:BA:1886:C:O4'	2.19	0.43
23:BA:2146:C:H4'	23:BA:2147:G:O4'	2.18	0.43
23:BA:2387:U:H4'	44:B0:41:ARG:NH2	2.34	0.43
23:BA:2432:A:C6	45:B1:33:LYS:HB3	2.54	0.43
32:BO:4:PRO:O	32:BO:5:GLN:HB2	2.17	0.43
32:BO:71:ARG:HB3	32:BO:73:ASP:OD2	2.18	0.43
48:B4:15:ILE:HB	48:B4:32:TYR:CE2	2.53	0.43
50:B6:14:THR:HG21	50:B6:48:VAL:HG13	2.00	0.43
1:CA:345:C:H4'	1:CA:346:G:N7	2.32	0.43
1:CA:750:G:H1'	15:CO:22:THR:OG1	2.19	0.43
1:CA:832:C:O2'	1:CA:833:U:P	2.76	0.43
1:CA:865:A:C2	1:CA:918:A:H4'	2.53	0.43
1:CA:1234:C:H2'	1:CA:1235:U:C6	2.54	0.43
1:CA:1308:U:O2'	1:CA:1309:G:H5'	2.19	0.43
2:CB:71:VAL:N	2:CB:163:PHE:O	2.46	0.43
2:CB:139:LYS:O	2:CB:143:GLU:HB2	2.18	0.43
3:CC:177:THR:HG22	3:CC:179:ARG:H	1.82	0.43
4:CD:107:ARG:O	4:CD:170:VAL:HG11	2.18	0.43
7:CG:150:ALA:HB2	11:CK:50:TYR:OH	2.18	0.43
11:CK:38:ASN:HA	11:CK:39:PRO:HD3	1.89	0.43
14:CN:13:THR:HA	14:CN:14:PRO:HD2	1.88	0.43
16:CP:54:GLU:H	16:CP:54:GLU:HG2	1.45	0.43
16:CP:55:ARG:O	16:CP:58:TYR:N	2.51	0.43
23:DA:191:A:H2'	23:DA:192:C:C6	2.53	0.43
23:DA:271(F):C:C2	23:DA:271(G):C:C6	3.06	0.43
23:DA:868:U:C4	23:DA:869:G:N7	2.86	0.43
23:DA:1047:G:H21	23:DA:1111:A:N6	2.17	0.43
23:DA:1049:C:H2'	23:DA:1050:A:C8	2.53	0.43
23:DA:1142(A):A:C4	23:DA:1144:G:C8	3.06	0.43
23:DA:2562:U:O2'	32:DO:23:ARG:HD3	2.18	0.43
25:DD:108:PRO:HG2	25:DD:111:LEU:HG	1.99	0.43
28:DG:125:PHE:HB3	28:DG:166:ASP:OD2	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DN:38:HIS:O	38:DU:67:ALA:HB1	2.18	0.43
33:DP:138:LEU:HD23	33:DP:145:PRO:HG3	1.99	0.43
36:DS:11:LYS:O	36:DS:15:ARG:HB2	2.18	0.43
37:DT:127:ALA:HA	37:DT:129:ARG:N	2.33	0.43
41:DX:57:LEU:HD13	41:DX:78:LYS:HG2	1.99	0.43
44:D0:31:VAL:HB	44:D0:35:ASN:ND2	2.33	0.43
1:AA:107:G:H2'	1:AA:108:G:O4'	2.18	0.43
1:AA:437:U:H2'	1:AA:438:G:C8	2.54	0.43
1:AA:832:C:O2'	1:AA:833:U:P	2.77	0.43
1:AA:874:G:C5	1:AA:875:C:C5	3.07	0.43
1:AA:1053:G:H4'	1:AA:1055:A:OP1	2.18	0.43
1:AA:1255:G:O6	1:AA:1279:A:H2'	2.18	0.43
1:AA:1319:A:H4'	19:AS:4:SER:HA	2.00	0.43
1:AA:1332:A:C2'	1:AA:1333:A:H5'	2.49	0.43
1:AA:1438:G:H2'	1:AA:1439:C:H6	1.83	0.43
1:AA:1492:A:H4'	1:AA:1492:A:OP1	2.18	0.43
2:AB:61:LEU:HD23	2:AB:68:ILE:HD11	2.00	0.43
4:AD:111:ALA:HB1	4:AD:116:GLN:HG2	1.99	0.43
6:AF:33:TYR:HB2	6:AF:75:LEU:HD12	2.01	0.43
9:AI:71:SER:HA	9:AI:74:ILE:HD12	1.99	0.43
10:AJ:50:ILE:HA	10:AJ:59:SER:O	2.18	0.43
12:AL:93:LEU:HD23	12:AL:93:LEU:HA	1.79	0.43
20:AT:51:GLU:O	20:AT:55:ILE:HG12	2.18	0.43
23:BA:354:G:H2'	23:BA:355:G:C8	2.53	0.43
23:BA:448:U:O4	23:BA:583:G:H1'	2.18	0.43
23:BA:603:A:C8	23:BA:655:A:C6	3.06	0.43
23:BA:1501:C:O4'	25:BD:100:GLY:HA2	2.17	0.43
23:BA:2723:C:O3'	35:BR:1:MET:HE3	2.18	0.43
28:BG:44:GLY:O	28:BG:47:LYS:HG3	2.18	0.43
28:BG:96:ARG:N	28:BG:99:MET:HE2	2.33	0.43
37:BT:24:PRO:HA	37:BT:49:VAL:O	2.17	0.43
39:BV:22:VAL:HG23	39:BV:23:GLU:O	2.18	0.43
39:BV:35:LEU:HB2	39:BV:57:VAL:CG1	2.48	0.43
46:B2:50:ILE:C	46:B2:52:ASP:H	2.26	0.43
47:B3:6:VAL:HG13	47:B3:56:VAL:HG13	1.99	0.43
1:CA:513:C:H2'	1:CA:514:C:C6	2.53	0.43
1:CA:1147:C:H2'	1:CA:1148:U:H6	1.82	0.43
1:CA:1315:U:H2'	1:CA:1316:G:O4'	2.18	0.43
11:CK:48:ILE:O	11:CK:48:ILE:HG12	2.19	0.43
14:CN:44:LEU:HD12	14:CN:48:ALA:HB2	2.00	0.43
23:DA:836:G:H5"	23:DA:837:C:OP2	2.17	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:1639:U:O2'	23:DA:1640:C:H5"	2.18	0.43
23:DA:1676:A:N7	56:DA:4078:HOH:O	2.36	0.43
23:DA:2273:A:O2'	23:DA:2274:A:H5'	2.19	0.43
28:DG:64:THR:OG1	28:DG:65:GLY:N	2.51	0.43
28:DG:166:ASP:O	28:DG:170:ARG:N	2.37	0.43
36:DS:24:LEU:HD23	36:DS:24:LEU:HA	1.84	0.43
38:DU:17:ILE:HD13	38:DU:17:ILE:HA	1.86	0.43
1:AA:263:A:OP1	20:AT:79:ARG:NH1	2.52	0.43
1:AA:324:G:N2	1:AA:327:A:C8	2.86	0.43
1:AA:433:C:H2'	1:AA:434:U:C6	2.54	0.43
1:AA:658:G:C4	1:AA:659:U:C5	3.07	0.43
1:AA:777:A:C2	11:AK:119:CYS:HB3	2.53	0.43
1:AA:1052:U:H3'	1:AA:1053:G:H5"	2.00	0.43
1:AA:1319:A:H62	1:AA:1361:G:H1'	1.82	0.43
1:AA:1368:G:H2'	1:AA:1369:C:H6	1.82	0.43
1:AA:1443:G:H1	1:AA:1459:C:C2'	2.30	0.43
1:AA:1491:G:H5"	1:AA:1492:A:OP2	2.18	0.43
2:AB:163:PHE:HD1	2:AB:164:VAL:H	1.66	0.43
5:AE:39:GLY:O	5:AE:69:VAL:HG12	2.19	0.43
11:AK:17:GLY:HA2	11:AK:35:PRO:HD3	2.00	0.43
11:AK:20:TYR:CE2	11:AK:83:ILE:HD12	2.54	0.43
12:AL:79:GLU:HG2	12:AL:80:HIS:ND1	2.34	0.43
15:AO:63:ARG:NH1	15:AO:87:ILE:HD11	2.33	0.43
21:AU:22:ARG:N	21:AU:23:PRO:HD3	2.34	0.43
23:BA:583:G:OP2	38:BU:10:ARG:HD2	2.18	0.43
23:BA:922:U:H2'	23:BA:923:C:C6	2.54	0.43
23:BA:1142(A):A:C4	23:BA:1144:G:C8	3.07	0.43
23:BA:1486:A:C4	23:BA:1487:G:C8	3.06	0.43
24:BB:29:A:OP2	36:BS:32:LEU:HD12	2.18	0.43
29:BH:169:VAL:HG12	29:BH:170:ARG:N	2.33	0.43
30:BI:84:GLY:C	30:BI:86:THR:H	2.26	0.43
36:BS:29:PHE:CD2	36:BS:30:ARG:N	2.87	0.43
38:BU:25:TRP:O	38:BU:28:ARG:HB2	2.18	0.43
1:CA:203:U:H3'	1:CA:203:U:P	2.59	0.43
1:CA:254:G:OP1	17:CQ:67:LYS:O	2.36	0.43
1:CA:769:G:H4'	1:CA:1513:A:H4'	2.01	0.43
1:CA:830:G:H2'	1:CA:831:U:O4'	2.19	0.43
1:CA:922:G:H1'	5:CE:19:MET:HB2	2.00	0.43
1:CA:996:A:H2	1:CA:1045:C:H2'	1.84	0.43
1:CA:1076:C:N4	1:CA:1081:G:H1	2.15	0.43
1:CA:1089:G:C5	1:CA:1090:U:C4	3.06	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1127:G:H1'	1:CA:1148:U:N3	2.34	0.43
1:CA:1279:A:H61	3:CC:26:LYS:NZ	2.16	0.43
1:CA:1355:G:H2'	1:CA:1356:G:C8	2.53	0.43
2:CB:233:SER:OG	2:CB:234:PRO:HD2	2.18	0.43
3:CC:52:LEU:O	3:CC:52:LEU:HG	2.18	0.43
4:CD:112:VAL:HG13	4:CD:161:ASN:ND2	2.33	0.43
5:CE:143:ARG:NH1	8:CH:77:GLU:OE2	2.52	0.43
6:CF:91:VAL:HG21	18:CR:72:ARG:HH12	1.84	0.43
15:CO:39:LEU:HD13	15:CO:56:LEU:HB2	2.01	0.43
23:DA:375:C:H2'	23:DA:376:C:C6	2.54	0.43
23:DA:1210:A:H4'	23:DA:1211:U:O5'	2.18	0.43
23:DA:1396:U:H5"	56:DA:4129:HOH:O	2.17	0.43
23:DA:1537:G:H2'	23:DA:1538:G:C8	2.53	0.43
23:DA:2262:U:H4'	23:DA:2328:A:C2	2.54	0.43
23:DA:2572:A:C8	26:DE:144:ARG:HD2	2.54	0.43
24:DB:113:G:H2'	24:DB:114:C:H6	1.82	0.43
31:DN:112:LEU:O	31:DN:115:ARG:N	2.48	0.43
44:D0:72:ARG:CB	44:D0:75:LEU:HB2	2.48	0.43
1:AA:373:A:N3	1:AA:481:G:N2	2.50	0.43
1:AA:887:G:H1	1:AA:910:C:H42	1.67	0.43
1:AA:964:A:H2'	1:AA:965:A:H8	1.81	0.43
1:AA:973:G:H4'	10:AJ:54:PHE:O	2.18	0.43
1:AA:1027:C:C4	1:AA:1034:G:N1	2.86	0.43
1:AA:1150:U:H3'	1:AA:1151:A:C8	2.53	0.43
1:AA:1333:A:H2'	1:AA:1334:G:O4'	2.19	0.43
1:AA:1349:A:H61	7:AG:34:GLY:HA2	1.84	0.43
2:AB:215:LEU:HD22	2:AB:215:LEU:HA	1.74	0.43
3:AC:183:ASP:HB3	3:AC:202:ILE:HB	1.99	0.43
5:AE:55:VAL:O	5:AE:58:ALA:HB3	2.17	0.43
8:AH:9:MET:SD	8:AH:32:LYS:HG2	2.58	0.43
8:AH:44:PHE:HB3	8:AH:80:ILE:HD11	2.00	0.43
12:AL:32:PHE:CE1	12:AL:86:ARG:HG3	2.50	0.43
14:AN:29:ARG:HH11	14:AN:42:ILE:CD1	2.31	0.43
23:BA:139(A):G:N2	56:BA:3825:HOH:O	2.50	0.43
23:BA:143:G:H2'	23:BA:143(A):C:C6	2.54	0.43
23:BA:720:C:H2'	23:BA:721:C:C6	2.54	0.43
23:BA:819:A:H2'	23:BA:820:A:H5'	2.01	0.43
23:BA:901:A:H2'	23:BA:902:C:C6	2.54	0.43
23:BA:2562:U:O2'	32:BO:23:ARG:HD3	2.18	0.43
23:BA:2834:G:H5"	23:BA:2834:G:C8	2.52	0.43
30:BI:77:LEU:HD21	30:BI:101:LEU:HA	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BR:103:ARG:HH12	35:BR:110:PRO:HD3	1.84	0.43
37:BT:118:ARG:HG3	37:BT:118:ARG:NH1	2.30	0.43
43:BZ:138:GLU:HB3	43:BZ:156:LYS:HZ2	1.84	0.43
46:B2:14:ARG:O	46:B2:67:LYS:NZ	2.52	0.43
1:CA:60:A:P	1:CA:60:A:H8	2.41	0.43
1:CA:380:G:C2	1:CA:384:G:C6	3.06	0.43
1:CA:663:A:O3'	18:CR:64:ARG:NH2	2.41	0.43
1:CA:919:A:H8	1:CA:919:A:O5'	2.02	0.43
1:CA:929:G:C6	1:CA:930:C:C4	3.06	0.43
1:CA:1316:G:N2	1:CA:1319:A:O5'	2.52	0.43
1:CA:1442:G:N7	1:CA:1442(A):G:C5	2.87	0.43
12:CL:70:ILE:HG23	12:CL:100:ILE:HD12	2.00	0.43
13:CM:56:LEU:O	13:CM:59:TYR:HB3	2.18	0.43
23:DA:265:A:H1'	23:DA:266:G:O4'	2.19	0.43
23:DA:459:U:H5"	51:D7:40:TRP:CD2	2.53	0.43
23:DA:567:A:OP2	33:DP:29:LYS:NZ	2.38	0.43
23:DA:839:U:H2'	23:DA:840:C:C6	2.53	0.43
23:DA:904:C:H2'	23:DA:905:U:C6	2.54	0.43
23:DA:1885:A:H2'	23:DA:1886:C:O4'	2.18	0.43
23:DA:2109:U:C6	23:DA:2109:U:C3'	3.01	0.43
23:DA:2564:A:C2	23:DA:2647:U:H4'	2.54	0.43
25:DD:33:LEU:HA	25:DD:33:LEU:HD23	1.39	0.43
27:DF:101:LEU:HA	27:DF:101:LEU:HD12	1.79	0.43
38:DU:43:GLY:HA3	39:DV:73:SER:OG	2.19	0.43
44:D0:65:GLY:CA	44:D0:81:VAL:HG12	2.46	0.43
1:AA:203:U:H3'	1:AA:203:U:P	2.59	0.43
1:AA:328:C:H4'	1:AA:329:A:H5'	1.99	0.43
1:AA:827:U:H5"	1:AA:828:A:OP2	2.18	0.43
1:AA:1152:A:H2'	1:AA:1153:C:O4'	2.17	0.43
1:AA:1261:A:H5'	1:AA:1284:C:OP1	2.18	0.43
1:AA:1403:C:H6	1:AA:1403:C:O5'	2.01	0.43
9:AI:8:GLY:HA3	9:AI:76:ALA:O	2.18	0.43
10:AJ:79:ARG:C	10:AJ:81:THR:H	2.27	0.43
13:AM:91:ARG:NE	13:AM:97:PRO:O	2.40	0.43
16:AP:54:GLU:H	16:AP:54:GLU:HG2	1.50	0.43
23:BA:1639:U:H2'	23:BA:1640:C:H5"	2.01	0.43
23:BA:1783:A:C2	23:BA:2587:A:C5	3.06	0.43
23:BA:2104:G:O6	23:BA:2186:G:C4	2.72	0.43
23:BA:2109:U:C3'	23:BA:2109:U:C6	3.01	0.43
24:BB:33:G:C2	24:BB:50:G:C2	3.06	0.43
28:BG:176:LEU:HD23	28:BG:176:LEU:HA	1.90	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BI:61:ARG:N	30:BI:61:ARG:HD2	2.34	0.43
30:BI:72:LEU:C	30:BI:74:ASN:H	2.26	0.43
33:BP:29:LYS:HB3	33:BP:30:THR:H	1.60	0.43
36:BS:56:LEU:HD23	36:BS:56:LEU:HA	1.81	0.43
43:BZ:141:VAL:O	43:BZ:144:LEU:HB2	2.19	0.43
48:B4:15:ILE:O	48:B4:33:VAL:N	2.49	0.43
50:B6:11:LEU:HB2	50:B6:21:TYR:HB2	1.99	0.43
1:CA:91:C:H2'	1:CA:92:C:C6	2.54	0.43
1:CA:429:U:O3'	4:CD:22:LYS:NZ	2.47	0.43
1:CA:826:C:H2'	1:CA:827:U:H6	1.84	0.43
1:CA:953:G:H2'	1:CA:954:G:O4'	2.18	0.43
1:CA:1247:U:H1'	1:CA:1291:G:H22	1.84	0.43
2:CB:118:LEU:HA	2:CB:121:LEU:HB3	2.00	0.43
2:CB:216:SER:O	2:CB:220:ASP:N	2.40	0.43
3:CC:20:SER:HB2	3:CC:22:TRP:NE1	2.33	0.43
3:CC:111:LEU:HA	3:CC:202:ILE:HG21	1.99	0.43
5:CE:55:VAL:O	5:CE:58:ALA:HB3	2.19	0.43
23:DA:24:G:H2'	23:DA:25:U:O4'	2.19	0.43
23:DA:1668:A:C8	23:DA:1674:G:C6	3.07	0.43
23:DA:1754:C:OP1	37:DT:96:ARG:NH1	2.45	0.43
23:DA:2350:C:H2'	23:DA:2351:G:O4'	2.18	0.43
23:DA:2815:C:H2'	23:DA:2816:C:C6	2.53	0.43
26:DE:116:VAL:HG13	26:DE:122:PHE:HB2	2.01	0.43
27:DF:181:LEU:HB3	27:DF:205:ARG:NH2	2.33	0.43
34:DQ:1:MET:HG2	34:DQ:2:LEU:H	1.83	0.43
37:DT:35:LYS:HB3	37:DT:35:LYS:HE2	1.76	0.43
43:DZ:128:VAL:HG12	43:DZ:129:SER:N	2.33	0.43
1:AA:557:G:C6	1:AA:558:G:C6	3.06	0.43
1:AA:1033:G:H2'	1:AA:1033:G:N3	2.33	0.43
1:AA:1119:C:OP1	9:AI:83:ARG:NH2	2.52	0.43
1:AA:1157:A:H4'	1:AA:1158:C:C5'	2.42	0.43
1:AA:1244:C:OP1	21:AU:9:ARG:HB2	2.19	0.43
1:AA:1277:C:H1'	1:AA:1282:C:O2	2.18	0.43
1:AA:1360:A:H3'	1:AA:1361:G:H8	1.84	0.43
5:AE:60:TYR:O	5:AE:63:ARG:HB2	2.19	0.43
7:AG:97:GLN:HA	7:AG:100:ALA:HB3	2.00	0.43
7:AG:104:LEU:HD12	7:AG:123:GLU:HG3	2.00	0.43
13:AM:94:ARG:NH2	19:AS:80:TYR:HB3	2.32	0.43
23:BA:1165:U:H2'	23:BA:1166:C:C6	2.54	0.43
23:BA:1779:U:C2	23:BA:1783:A:N7	2.87	0.43
23:BA:2009:G:OP1	40:BW:41:LYS:HE2	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BA:2281:C:O2'	23:BA:2282:G:H5'	2.18	0.43
23:BA:2420:C:OP2	52:B8:33:ASN:HB2	2.18	0.43
23:BA:2478:A:H5'	53:B9:31:LYS:HE2	2.00	0.43
28:BG:7:LEU:HD11	28:BG:107:LEU:HD12	1.99	0.43
32:BO:120:GLU:HG2	32:BO:122:LEU:HG	2.00	0.43
36:BS:65:VAL:O	36:BS:69:VAL:HG12	2.19	0.43
45:B1:40:ARG:HE	45:B1:40:ARG:HB2	1.57	0.43
50:B6:45:LYS:HG3	50:B6:46:HIS:O	2.19	0.43
1:CA:325:A:H2'	1:CA:326:G:O4'	2.18	0.43
1:CA:445:G:C6	1:CA:490:G:C6	3.07	0.43
1:CA:538:G:OP1	12:CL:114:LYS:N	2.44	0.43
1:CA:542:G:H2'	1:CA:543:C:C6	2.53	0.43
1:CA:954:G:C2	1:CA:955:U:C2	3.07	0.43
1:CA:1090:U:O5'	1:CA:1090:U:H6	2.01	0.43
1:CA:1130:A:H1'	1:CA:1146:A:C2	2.53	0.43
1:CA:1135:U:H4'	1:CA:1136:U:C4	2.53	0.43
1:CA:1207:G:H2'	1:CA:1208:C:O4'	2.18	0.43
1:CA:1239:A:H61	1:CA:1296:C:H2'	1.84	0.43
1:CA:1493:A:O2'	1:CA:1494:G:H8	2.02	0.43
2:CB:157:ARG:HG2	2:CB:158:LEU:N	2.33	0.43
6:CF:67:MET:HB2	6:CF:68:PRO:HD2	1.99	0.43
7:CG:101:LEU:O	7:CG:105:VAL:HG23	2.18	0.43
23:DA:662:G:H5'	33:DP:14:LYS:O	2.19	0.43
23:DA:953:A:OP2	34:DQ:16:ARG:NE	2.47	0.43
23:DA:1029:A:H8	23:DA:1029:A:O5'	2.01	0.43
23:DA:1383:C:H6	23:DA:1383:C:O5'	2.01	0.43
23:DA:1500:G:N2	25:DD:99:ASP:O	2.48	0.43
23:DA:1535:A:OP1	23:DA:1535:A:H3'	2.19	0.43
23:DA:1681:G:H1'	23:DA:1762:A:H2'	2.00	0.43
23:DA:2056:G:C2	23:DA:2057:A:C8	3.06	0.43
23:DA:2186:G:C2	23:DA:2187:G:C5	3.07	0.43
23:DA:2880:C:O3'	35:DR:90:ARG:NH1	2.51	0.43
25:DD:71:ASP:HB3	25:DD:103:ARG:HH22	1.83	0.43
28:DG:107:LEU:HD23	28:DG:111:LEU:HD12	2.01	0.43
30:DI:134:PRO:O	30:DI:136:VAL:N	2.51	0.43
34:DQ:1:MET:N	34:DQ:1:MET:HE2	2.33	0.43
37:DT:2:ASN:O	37:DT:6:LEU:HD22	2.19	0.43
37:DT:27:THR:HB	37:DT:90:GLN:HB3	2.00	0.43
43:DZ:98:MET:SD	43:DZ:133:ILE:HD13	2.59	0.43
47:D3:11:SER:OG	47:D3:13:ILE:HG13	2.19	0.43
51:D7:27:GLY:O	51:D7:30:VAL:HB	2.17	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:44:G:C6	1:AA:45:U:C2	3.07	0.43
1:AA:49:U:O4	1:AA:365:U:H5	2.02	0.43
1:AA:78:G:N2	1:AA:92:C:O2	2.52	0.43
1:AA:113:G:H2'	1:AA:114:U:C6	2.54	0.43
1:AA:175:C:H2'	1:AA:176:C:C6	2.54	0.43
1:AA:472:A:H4'	16:AP:80:PHE:O	2.19	0.43
1:AA:540:G:H2'	1:AA:541:G:O4'	2.18	0.43
1:AA:1006:C:C2	1:AA:1023:G:N1	2.76	0.43
1:AA:1137:C:H4'	1:AA:1138:G:C2	2.53	0.43
1:AA:1237:C:H5"	1:AA:1238:A:O4'	2.19	0.43
1:AA:1363:C:H5'	1:AA:1363(A):A:O5'	2.19	0.43
2:AB:22:LYS:H	2:AB:40:HIS:HD2	1.67	0.43
2:AB:79:ASP:O	2:AB:82:ARG:N	2.51	0.43
5:AE:19:MET:HE3	5:AE:19:MET:HB3	1.66	0.43
5:AE:66:MET:O	5:AE:67:VAL:HB	2.19	0.43
11:AK:31:THR:HG22	11:AK:42:TRP:CB	2.49	0.43
15:AO:17:ARG:HH11	15:AO:17:ARG:HG3	1.84	0.43
15:AO:48:LYS:HD2	15:AO:48:LYS:HA	1.88	0.43
16:AP:71:ARG:HA	16:AP:74:LEU:HB2	2.00	0.43
20:AT:73:HIS:O	20:AT:76:ALA:HB3	2.19	0.43
23:BA:94:C:H5"	23:BA:94(A):G:OP2	2.19	0.43
23:BA:107:C:H2'	23:BA:108:U:C6	2.53	0.43
23:BA:861:A:H2'	23:BA:862:G:O4'	2.18	0.43
23:BA:1681:G:H1'	23:BA:1762:A:H2'	2.01	0.43
23:BA:1783:A:OP1	56:BA:3901:HOH:O	2.21	0.43
23:BA:2747:G:O6	23:BA:2755:C:H5"	2.17	0.43
26:BE:181:LEU:HD12	26:BE:181:LEU:HA	1.72	0.43
30:BI:62:LYS:O	30:BI:66:GLU:HG2	2.19	0.43
1:CA:613:C:N4	1:CA:627:G:H1	2.16	0.43
1:CA:1036:G:H5"	1:CA:1037:C:H5	1.84	0.43
1:CA:1106:G:H2'	1:CA:1107:C:H6	1.84	0.43
1:CA:1291:G:C6	1:CA:1292:U:C4	3.07	0.43
1:CA:1412:C:H2'	1:CA:1413:A:C8	2.53	0.43
2:CB:149:LEU:HB3	2:CB:152:PHE:CB	2.49	0.43
5:CE:6:PHE:HD2	5:CE:6:PHE:HA	1.74	0.43
7:CG:32:ARG:O	7:CG:35:LYS:HG3	2.19	0.43
23:DA:601:C:O2	23:DA:605:C:H4'	2.19	0.43
23:DA:1211:U:H4'	23:DA:1212:G:OP2	2.18	0.43
23:DA:1324:G:C5	23:DA:1328:G:O6	2.72	0.43
23:DA:1486:A:C4	23:DA:1487:G:C8	3.06	0.43
23:DA:2424:C:O2	23:DA:2429:G:O2'	2.28	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:2483:C:H2'	23:DA:2484:G:O4'	2.19	0.43
24:DB:38:C:H2'	24:DB:39:A:O4'	2.19	0.43
26:DE:51:PHE:CE2	26:DE:52:LEU:HD13	2.54	0.43
27:DF:110:LEU:HD21	27:DF:181:LEU:HG	2.00	0.43
34:DQ:38:GLU:O	34:DQ:127:ILE:HG21	2.19	0.43
36:DS:80:LEU:HD12	36:DS:80:LEU:HA	1.76	0.43
43:DZ:79:ARG:HD2	43:DZ:80:ARG:HH21	1.83	0.43
51:D7:34:ARG:NH1	51:D7:39:ARG:HG3	2.34	0.43
1:AA:1060:C:C5'	10:AJ:51:ARG:HB3	2.49	0.43
1:AA:1120:G:H2'	1:AA:1120:G:N3	2.33	0.43
2:AB:132:LYS:HA	2:AB:135:GLN:NE2	2.34	0.43
7:AG:51:GLN:CG	7:AG:58:PRO:HD3	2.49	0.43
7:AG:71:PRO:HD2	7:AG:96:GLN:HA	2.00	0.43
7:AG:121:ALA:HB3	7:AG:122:HIS:CD2	2.54	0.43
10:AJ:44:VAL:HG13	10:AJ:64:GLU:HG3	2.01	0.43
13:AM:23:TYR:O	13:AM:25:ILE:HD12	2.18	0.43
17:AQ:99:SER:C	17:AQ:100:LYS:HG2	2.43	0.43
23:BA:2157:G:H2'	23:BA:2158:A:C8	2.54	0.43
23:BA:2191:G:H5'	23:BA:2192:G:OP2	2.19	0.43
24:BB:66:A:H61	24:BB:108:U:H2'	1.83	0.43
27:BF:106:ARG:H	27:BF:106:ARG:HG2	1.50	0.43
28:BG:153:ARG:HE	28:BG:153:ARG:HB2	1.51	0.43
49:B5:35:GLU:HG3	49:B5:51:TYR:CB	2.49	0.43
50:B6:44:ARG:HB3	50:B6:44:ARG:NH1	2.34	0.43
1:CA:31:G:H5'	1:CA:306:G:N2	2.34	0.43
1:CA:586:C:C2'	1:CA:587:G:H5'	2.49	0.43
1:CA:1259:C:H2'	1:CA:1283:G:O2'	2.19	0.43
1:CA:1266:G:N2	1:CA:1268:A:C8	2.85	0.43
4:CD:205:GLU:OE1	5:CE:100:VAL:HB	2.19	0.43
7:CG:70:LYS:HA	7:CG:71:PRO:HD3	1.76	0.43
10:CJ:50:ILE:HG23	10:CJ:57:LYS:HA	2.00	0.43
16:CP:60:LEU:HD23	16:CP:60:LEU:HA	1.91	0.43
20:CT:41:ILE:H	20:CT:41:ILE:HG13	1.26	0.43
23:DA:89:G:OP2	23:DA:90:U:H3'	2.19	0.43
23:DA:107:C:C2	23:DA:108:U:C5	3.07	0.43
23:DA:1300:U:H4'	23:DA:1301:A:H5"	2.01	0.43
23:DA:1638:C:H5"	23:DA:2710:C:O2'	2.19	0.43
23:DA:1858:G:H2'	23:DA:1883:G:N2	2.34	0.43
23:DA:2169:A:O2'	23:DA:2170:A:H5'	2.18	0.43
25:DD:172:TYR:HD1	25:DD:185:VAL:C	2.27	0.43
26:DE:174:ASP:OD2	26:DE:175:VAL:N	2.52	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:DF:32:LEU:O	27:DF:35:GLU:N	2.52	0.43
27:DF:74:ARG:H	27:DF:74:ARG:HG3	1.27	0.43
28:DG:137:GLU:HG3	28:DG:152:LEU:HD21	1.99	0.43
46:D2:50:ILE:O	46:D2:51:ARG:CB	2.63	0.43
1:AA:254:G:OP1	17:AQ:67:LYS:O	2.36	0.42
1:AA:669:U:C2	1:AA:670:G:C8	3.07	0.42
1:AA:731:G:OP1	1:AA:766:A:H1'	2.18	0.42
1:AA:865:A:H8	1:AA:865:A:O5'	2.02	0.42
1:AA:918:A:H2'	1:AA:919:A:C8	2.54	0.42
1:AA:1001:A:C6	1:AA:1041:A:C5	3.07	0.42
2:AB:59:GLU:O	2:AB:63:MET:HG2	2.19	0.42
10:AJ:45:ARG:O	10:AJ:65:LEU:N	2.42	0.42
14:AN:7:ILE:HD13	14:AN:8:GLU:HG3	2.01	0.42
17:AQ:26:GLN:O	17:AQ:27:PHE:HB3	2.19	0.42
21:AU:9:ARG:CZ	21:AU:10:ARG:HH22	2.32	0.42
23:BA:89:G:OP2	23:BA:90:U:H3'	2.19	0.42
23:BA:634:C:H2'	23:BA:635:C:C6	2.54	0.42
23:BA:729:G:C6	25:BD:208:LYS:HB2	2.53	0.42
23:BA:1669:A:H5"	23:BA:2550:G:OP1	2.20	0.42
23:BA:1685:C:H2'	23:BA:1686:C:C6	2.54	0.42
23:BA:2275:C:H5'	23:BA:2275:C:C6	2.53	0.42
23:BA:2287:A:O2'	23:BA:2288:A:H3'	2.19	0.42
23:BA:2317:C:H2'	23:BA:2318:G:C5'	2.49	0.42
23:BA:2378:A:H4'	36:BS:23:ARG:NH1	2.33	0.42
24:BB:50:G:H5"	36:BS:61:ASN:ND2	2.33	0.42
25:BD:26:LYS:HE2	25:BD:28:GLU:O	2.19	0.42
27:BF:149:ASP:OD2	27:BF:149:ASP:N	2.40	0.42
28:BG:135:LEU:HD13	28:BG:155:MET:HE3	2.01	0.42
30:BI:35:LEU:N	30:BI:35:LEU:HD23	2.34	0.42
31:BN:42:TRP:HA	31:BN:48:MET:SD	2.59	0.42
38:BU:61:TRP:CH2	38:BU:93:LYS:HB2	2.53	0.42
1:CA:227:G:H2'	1:CA:228:A:C8	2.54	0.42
1:CA:602:A:C6	1:CA:637:G:C6	3.07	0.42
1:CA:1356:G:C6	1:CA:1357:A:C6	3.07	0.42
2:CB:84:GLU:HA	2:CB:87:ARG:HB3	2.00	0.42
12:CL:85:ILE:HD13	12:CL:85:ILE:HA	1.70	0.42
18:CR:52:PRO:O	18:CR:56:THR:HG23	2.19	0.42
23:DA:10:G:H1'	23:DA:2801(A):A:C2	2.54	0.42
23:DA:551:G:O2'	23:DA:1220:A:N3	2.46	0.42
23:DA:639:U:O2'	23:DA:640:C:H5'	2.19	0.42
23:DA:952:G:C6	23:DA:953:A:N7	2.87	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:1268:A:C2	23:DA:2013:A:C4	3.07	0.42
23:DA:1711:C:H2'	23:DA:1712:C:C6	2.54	0.42
23:DA:1721:G:C2	23:DA:1739:U:OP2	2.72	0.42
25:DD:242:ARG:N	25:DD:242:ARG:HD3	2.33	0.42
32:DO:106:LEU:HD23	32:DO:106:LEU:HA	1.78	0.42
41:DX:1:MET:HE2	41:DX:1:MET:HB3	1.95	0.42
41:DX:14:SER:O	41:DX:15:GLU:C	2.61	0.42
1:AA:124:G:C5	1:AA:125:U:C4	3.07	0.42
1:AA:1014:A:H4'	19:AS:14:HIS:ND1	2.35	0.42
1:AA:1106:G:C6	1:AA:1107:C:C4	3.07	0.42
1:AA:1306:A:H1'	1:AA:1332:A:N3	2.34	0.42
1:AA:1382:C:C2'	1:AA:1383:C:H5'	2.49	0.42
1:AA:1429:C:H2'	1:AA:1430:C:C6	2.54	0.42
4:AD:61:LYS:O	4:AD:65:ARG:HB2	2.19	0.42
4:AD:106:TYR:CD2	4:AD:106:TYR:C	2.97	0.42
4:AD:121:VAL:O	4:AD:134:ASP:HA	2.19	0.42
5:AE:133:TYR:O	5:AE:137:GLU:HB2	2.19	0.42
7:AG:31:MET:O	7:AG:32:ARG:HD3	2.18	0.42
9:AI:19:LEU:HD23	9:AI:19:LEU:HA	1.70	0.42
10:AJ:38:ILE:HA	10:AJ:39:PRO:HD3	1.75	0.42
11:AK:99:GLN:HA	11:AK:105:VAL:HG11	2.01	0.42
13:AM:14:ARG:N	13:AM:44:ARG:HD3	2.34	0.42
23:BA:657:U:H2'	23:BA:658:C:C6	2.54	0.42
23:BA:780:G:C2	23:BA:782:A:C2	3.07	0.42
23:BA:945:A:C2	23:BA:2448:A:C4	3.08	0.42
23:BA:1297:C:OP1	23:BA:2710:C:H4'	2.19	0.42
23:BA:2111:C:C4	23:BA:2145:C:C2	3.07	0.42
23:BA:2712:U:H1'	23:BA:2712(A):A:C8	2.55	0.42
24:BB:88:C:H2'	24:BB:89:G:O4'	2.20	0.42
27:BF:32:LEU:HD12	27:BF:32:LEU:HA	1.68	0.42
30:BI:145:VAL:HG12	30:BI:146:ALA:N	2.34	0.42
42:BY:5:MET:HE3	42:BY:5:MET:HB2	1.75	0.42
1:CA:375:U:H2'	1:CA:376:G:C8	2.54	0.42
1:CA:512:U:H2'	1:CA:513:C:H6	1.83	0.42
1:CA:658:G:C5	1:CA:659:U:C5	3.07	0.42
1:CA:960:U:H4'	1:CA:961:U:C5'	2.49	0.42
1:CA:1089:G:C6	1:CA:1090:U:N3	2.87	0.42
1:CA:1442:G:H2'	1:CA:1442(A):G:C8	2.54	0.42
3:CC:46:GLU:CD	3:CC:46:GLU:N	2.77	0.42
17:CQ:99:SER:C	17:CQ:100:LYS:HG2	2.44	0.42
23:DA:236:C:H2'	23:DA:237:C:H6	1.84	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:415:A:H2'	23:DA:416:C:H6	1.83	0.42
23:DA:642:G:H21	23:DA:646:A:H2	1.66	0.42
23:DA:805:G:H4'	33:DP:38:GLN:HB3	2.00	0.42
23:DA:1419:A:C8	23:DA:1421:G:C6	3.08	0.42
23:DA:1448:G:O2'	23:DA:1528(A):A:N1	2.45	0.42
23:DA:1529:G:H8	23:DA:1529:G:O5'	2.02	0.42
23:DA:1796:U:H4'	25:DD:256:GLY:N	2.33	0.42
23:DA:1805:U:O2	25:DD:50:THR:HB	2.19	0.42
23:DA:1900:A:N1	23:DA:1970:A:C6	2.88	0.42
23:DA:2108:C:C3'	23:DA:2108:C:C6	3.02	0.42
23:DA:2294:C:OP1	36:DS:89:ARG:NH1	2.43	0.42
23:DA:2557:G:H2'	23:DA:2558:C:H6	1.84	0.42
24:DB:57:A:H1'	28:DG:29:TRP:HB2	2.01	0.42
26:DE:21:VAL:HA	26:DE:22:PRO:HD2	1.74	0.42
26:DE:93:VAL:H	26:DE:93:VAL:HG22	1.55	0.42
28:DG:24:GLY:O	28:DG:26:GLN:NE2	2.53	0.42
28:DG:43:LEU:HB3	28:DG:44:GLY:H	1.58	0.42
28:DG:89:GLY:O	28:DG:90:LEU:HD23	2.19	0.42
32:DO:3:GLN:HB2	32:DO:4:PRO:HD2	2.00	0.42
43:DZ:30:ASN:OD1	43:DZ:32:HIS:N	2.46	0.42
45:D1:15:ALA:O	45:D1:40:ARG:HG3	2.19	0.42
1:AA:21:G:P	56:AA:1895:HOH:O	2.75	0.42
1:AA:294:U:H2'	1:AA:295:C:C6	2.54	0.42
1:AA:791:G:H8	1:AA:791:G:O5'	2.03	0.42
1:AA:938:A:C2	1:AA:939:G:H1'	2.54	0.42
1:AA:1001:A:C6	1:AA:1041:A:C6	3.07	0.42
1:AA:1001:A:C6	1:AA:1001(A):G:C5	3.07	0.42
1:AA:1381:U:C2	1:AA:1382:C:H5	2.38	0.42
1:AA:1511:G:H2'	1:AA:1512:U:O4'	2.19	0.42
4:AD:21:LEU:HD21	4:AD:67:ILE:HA	2.01	0.42
9:AI:9:ARG:HD2	9:AI:104:ARG:HE	1.85	0.42
14:AN:3:ARG:HA	14:AN:6:LEU:HB2	2.00	0.42
14:AN:40:CYS:SG	14:AN:42:ILE:HB	2.59	0.42
23:BA:548:A:H61	39:BV:19:LYS:H	1.66	0.42
23:BA:601:C:O2	23:BA:605:C:H4'	2.20	0.42
23:BA:1187:G:H5"	39:BV:81:TYR:CE2	2.55	0.42
23:BA:2287:A:C4	23:BA:2289:G:N7	2.87	0.42
23:BA:2292:C:P	36:BS:17:ARG:HH22	2.41	0.42
23:BA:2359:C:H2'	23:BA:2360:A:O4'	2.19	0.42
23:BA:2812:G:N2	23:BA:2889:C:C2	2.86	0.42
24:BB:11:C:H3'	24:BB:12:C:C6	2.54	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:BB:32:C:N3	24:BB:51:G:N2	2.67	0.42
30:BI:27:ARG:HD2	45:B1:71:TYR:CE1	2.55	0.42
30:BI:98:ALA:O	30:BI:101:LEU:N	2.52	0.42
34:BQ:21:THR:O	43:BZ:78:LYS:HD3	2.20	0.42
37:BT:50:ILE:HG22	37:BT:102:ILE:HD11	2.01	0.42
39:BV:20:LEU:HD12	39:BV:20:LEU:HA	1.79	0.42
40:BW:60:ASN:N	40:BW:60:ASN:ND2	2.67	0.42
41:BX:5:TYR:HD1	46:B2:33:MET:CE	2.32	0.42
41:BX:53:LYS:HB3	41:BX:82:GLN:HB3	2.01	0.42
44:B0:17:GLN:OE1	44:B0:17:GLN:HA	2.18	0.42
1:CA:327:A:HO2'	1:CA:329:A:H8	1.68	0.42
1:CA:1022:G:H2'	1:CA:1023:G:H8	1.84	0.42
1:CA:1128:C:H5'	9:CI:16:ARG:HH12	1.84	0.42
1:CA:1140:C:H2'	1:CA:1141:C:H6	1.84	0.42
1:CA:1226:C:H4'	19:CS:80:TYR:OH	2.19	0.42
1:CA:1268:A:N6	1:CA:1269:A:N6	2.67	0.42
2:CB:20:GLU:O	2:CB:40:HIS:HB2	2.20	0.42
2:CB:42:ILE:HG21	2:CB:202:PRO:O	2.19	0.42
3:CC:114:PRO:CA	3:CC:185:GLY:HA3	2.49	0.42
3:CC:137:ALA:O	3:CC:140:ARG:HB2	2.19	0.42
8:CH:39:LEU:H	8:CH:39:LEU:HD22	1.85	0.42
23:DA:1161:C:H1'	39:DV:8:GLY:O	2.19	0.42
23:DA:1827:C:H5'	23:DA:1971:A:H4'	2.01	0.42
23:DA:2065:C:H2'	23:DA:2066:C:H6	1.84	0.42
23:DA:2140:C:H2'	23:DA:2141:G:C8	2.54	0.42
27:DF:130:ALA:HB2	27:DF:142:TRP:HD1	1.84	0.42
32:DO:10:VAL:HG21	32:DO:16:ALA:HB3	1.99	0.42
50:D6:10:LEU:HD23	50:D6:22:ALA:HB2	2.01	0.42
1:AA:542:G:H2'	1:AA:543:C:C6	2.53	0.42
1:AA:788:U:H2'	1:AA:789:U:O4'	2.19	0.42
1:AA:858:G:O6	1:AA:869:G:H3'	2.19	0.42
1:AA:993:G:H2'	1:AA:995:C:H42	1.82	0.42
1:AA:1060:C:H5"	10:AJ:51:ARG:HB3	2.02	0.42
1:AA:1251:A:O4'	1:AA:1370:G:H4'	2.20	0.42
1:AA:1284:C:P	1:AA:1285:A:H2'	2.60	0.42
1:AA:1351:U:H4'	7:AG:33:ASP:OD1	2.19	0.42
3:AC:127:ARG:NE	3:AC:193:TYR:OH	2.52	0.42
23:BA:649:G:H2'	23:BA:650:C:O4'	2.18	0.42
23:BA:1367:A:N7	23:BA:1368:G:H1'	2.35	0.42
23:BA:1798:U:OP2	25:BD:274:ARG:NH2	2.52	0.42
23:BA:2095:C:H2'	23:BA:2096:U:O4'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BA:2198:A:O5'	30:BI:33:ARG:NH2	2.51	0.42
27:BF:117:ARG:HD3	27:BF:117:ARG:HA	1.87	0.42
27:BF:181:LEU:HB3	27:BF:205:ARG:NH2	2.33	0.42
30:BI:5:LEU:N	30:BI:5:LEU:HD12	2.34	0.42
36:BS:34:HIS:NE2	36:BS:54:LEU:HD12	2.33	0.42
1:CA:1174:G:H2'	1:CA:1175:G:H8	1.84	0.42
23:DA:30:G:O2'	23:DA:1214:A:N3	2.46	0.42
23:DA:387:U:H5"	56:DA:3740:HOH:O	2.19	0.42
23:DA:1138:G:H5"	23:DA:1139:G:OP2	2.18	0.42
23:DA:1338:G:O2'	23:DA:1393:A:N1	2.45	0.42
23:DA:1425:G:H2'	23:DA:1426:G:O4'	2.19	0.42
23:DA:1639:U:H2'	23:DA:1640:C:H5"	2.00	0.42
23:DA:2111:C:C4	23:DA:2145:C:C2	3.08	0.42
23:DA:2287:A:N3	23:DA:2289:G:C8	2.88	0.42
23:DA:2575:C:H2'	23:DA:2578:G:O6	2.19	0.42
24:DB:7:G:H4'	36:DS:29:PHE:CD1	2.54	0.42
28:DG:33:ARG:O	28:DG:161:THR:HG22	2.19	0.42
34:DQ:21:THR:O	43:DZ:78:LYS:HD3	2.19	0.42
36:DS:34:HIS:CG	36:DS:53:SER:HG	2.31	0.42
43:DZ:67:LEU:HA	43:DZ:68:PRO:HD3	1.74	0.42
46:D2:27:GLU:HG2	46:D2:27:GLU:H	1.68	0.42
1:AA:373:A:C8	1:AA:482:A:C8	3.07	0.42
1:AA:536:C:H5"	1:AA:537:G:OP2	2.18	0.42
1:AA:839:U:H5"	1:AA:840:C:C5	2.36	0.42
1:AA:987:G:N2	1:AA:1015:A:H2	2.18	0.42
1:AA:1058:G:H1	1:AA:1199:U:H3	1.67	0.42
1:AA:1160:G:C5	1:AA:1161:C:C5	3.05	0.42
1:AA:1236:A:H2'	1:AA:1237:C:O4'	2.18	0.42
1:AA:1301:U:O2'	1:AA:1303:C:H6	2.02	0.42
13:AM:22:ILE:HG22	13:AM:23:TYR:H	1.84	0.42
18:AR:61:LYS:O	18:AR:65:ILE:HG12	2.20	0.42
23:BA:742:G:H2'	23:BA:743:G:C8	2.55	0.42
23:BA:1529:G:C5	23:BA:1530:C:C4	3.08	0.42
23:BA:2147:G:H2'	23:BA:2148:G:O4'	2.20	0.42
24:BB:82:G:C2'	24:BB:83:G:H5'	2.49	0.42
34:BQ:6:ARG:HG2	43:BZ:194:PRO:HG2	2.01	0.42
37:BT:19:LEU:HA	37:BT:20:PRO:HD3	1.91	0.42
38:BU:106:PHE:O	38:BU:110:VAL:HG23	2.20	0.42
1:CA:99:U:H2'	1:CA:100:C:C6	2.54	0.42
1:CA:453:A:C5	1:CA:454:C:C4	3.07	0.42
1:CA:1067:A:N3	1:CA:1068:G:H1'	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1084:G:C5	1:CA:1085:U:C5	3.07	0.42
1:CA:1457:G:N2	1:CA:1458:G:H1'	2.34	0.42
1:CA:1458:G:H5'	20:CT:31:SER:CB	2.50	0.42
2:CB:27:LYS:CB	2:CB:194:PRO:HD2	2.49	0.42
11:CK:32:ILE:HD11	11:CK:68:ALA:HB1	2.00	0.42
12:CL:45:PRO:HG3	12:CL:53:ARG:HH11	1.82	0.42
23:DA:354:G:H2'	23:DA:355:G:C8	2.55	0.42
23:DA:542:C:H3'	23:DA:542:C:C6	2.53	0.42
23:DA:937:U:H2'	23:DA:938:G:O4'	2.19	0.42
23:DA:1311:G:O6	51:D7:9:ARG:NH2	2.53	0.42
23:DA:1816:G:N1	25:DD:35:LYS:HD3	2.33	0.42
23:DA:2772:C:H2'	23:DA:2773:C:H6	1.84	0.42
25:DD:13:ARG:HD2	25:DD:13:ARG:HA	1.83	0.42
28:DG:7:LEU:HD11	28:DG:107:LEU:HD12	2.01	0.42
28:DG:86:MET:HA	28:DG:87:PRO:HD3	1.84	0.42
34:DQ:50:ALA:HB2	34:DQ:125:LEU:HD21	2.02	0.42
35:DR:67:LEU:HD13	35:DR:67:LEU:HA	1.75	0.42
37:DT:99:LEU:C	37:DT:101:PHE:N	2.76	0.42
37:DT:106:SER:O	37:DT:110:ILE:HG13	2.20	0.42
48:D4:15:ILE:O	48:D4:33:VAL:N	2.49	0.42
48:D4:25:TYR:N	48:D4:25:TYR:CD1	2.88	0.42
49:D5:19:ARG:HH11	49:D5:19:ARG:HD2	1.65	0.42
1:AA:191:G:C6	1:AA:192:U:N3	2.88	0.42
1:AA:708:C:P	11:AK:85:ARG:HH22	2.42	0.42
1:AA:748:C:H6	1:AA:748:C:H2'	1.61	0.42
1:AA:854:G:H3'	1:AA:871:U:O4	2.20	0.42
1:AA:909:A:H2'	1:AA:910:C:O4'	2.20	0.42
1:AA:935:A:H2'	1:AA:936:C:C6	2.55	0.42
1:AA:970:C:H5'	1:AA:972:C:C2	2.54	0.42
1:AA:1026:G:N3	1:AA:1026:G:H2'	2.35	0.42
1:AA:1223:C:OP1	1:AA:1225:A:H8	2.02	0.42
1:AA:1326:C:H5"	21:AU:18:TYR:O	2.19	0.42
7:AG:69:VAL:HA	7:AG:138:LYS:CB	2.48	0.42
8:AH:11:THR:HA	8:AH:14:ARG:NH1	2.35	0.42
9:AI:28:VAL:HG12	9:AI:65:VAL:HG12	2.01	0.42
13:AM:94:ARG:CZ	19:AS:80:TYR:HB3	2.50	0.42
23:BA:29:U:H2'	23:BA:30:G:C8	2.54	0.42
23:BA:542:C:H3'	23:BA:542:C:C6	2.55	0.42
23:BA:866:A:C6	23:BA:914:C:C5	3.08	0.42
23:BA:1312:U:H4'	23:BA:1313:U:O5'	2.19	0.42
23:BA:1601:G:O2'	23:BA:1602:U:H5'	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BA:1930:G:O2'	23:BA:1931:U:P	2.78	0.42
23:BA:2140:C:N3	23:BA:2151:G:C6	2.88	0.42
24:BB:11:C:OP2	24:BB:12:C:N4	2.36	0.42
28:BG:96:ARG:O	28:BG:99:MET:HB3	2.18	0.42
28:BG:126:ASP:CG	28:BG:130:ASN:HD22	2.27	0.42
35:BR:67:LEU:HD13	35:BR:67:LEU:HA	1.78	0.42
43:BZ:48:PHE:CE2	43:BZ:52:SER:HA	2.54	0.42
45:B1:82:LEU:HD22	45:B1:90:ILE:HG23	2.02	0.42
47:B3:4:LEU:HA	47:B3:4:LEU:HD23	1.71	0.42
51:B7:1:MET:HE3	51:B7:1:MET:HB2	1.52	0.42
1:CA:76:C:H3'	1:CA:77:G:H5"	2.00	0.42
1:CA:431:A:H2'	1:CA:432:A:O4'	2.19	0.42
1:CA:664:G:H22	1:CA:741:G:H1	1.68	0.42
1:CA:909:A:H2'	1:CA:910:C:O4'	2.20	0.42
1:CA:1435:G:H2'	1:CA:1436:U:C6	2.55	0.42
2:CB:163:PHE:HD1	2:CB:164:VAL:N	2.17	0.42
3:CC:23:TYR:CZ	3:CC:25:GLY:HA3	2.55	0.42
3:CC:43:LEU:HA	3:CC:43:LEU:HD23	1.61	0.42
4:CD:200:GLU:OE2	4:CD:200:GLU:N	2.52	0.42
11:CK:21:ILE:HA	11:CK:30:VAL:HG12	2.01	0.42
15:CO:75:PRO:O	15:CO:77:ARG:N	2.52	0.42
23:DA:67:U:C2'	23:DA:68:G:H5'	2.50	0.42
23:DA:990:A:OP2	23:DA:991:C:OP2	2.38	0.42
23:DA:1001:A:H2'	23:DA:1002:G:O4'	2.19	0.42
23:DA:2095:C:H2'	23:DA:2096:U:O4'	2.20	0.42
23:DA:2600:A:C6	23:DA:2601:C:N4	2.88	0.42
24:DB:77:U:OP1	43:DZ:19:ARG:NH2	2.52	0.42
26:DE:176:ILE:HG22	26:DE:179:GLU:HB2	2.01	0.42
29:DH:91:GLY:HA3	29:DH:160:LYS:HG3	2.02	0.42
30:DI:5:LEU:N	30:DI:5:LEU:HD12	2.35	0.42
31:DN:73:THR:HA	31:DN:83:LYS:O	2.19	0.42
1:AA:79:G:H2'	1:AA:80:G:C8	2.54	0.42
1:AA:441:A:H3'	1:AA:442:C:H6	1.85	0.42
1:AA:664:G:H22	1:AA:741:G:H1	1.68	0.42
1:AA:1001(A):G:C6	1:AA:1002:G:C6	3.08	0.42
1:AA:1128:C:H5	1:AA:1139:G:HO2'	1.61	0.42
1:AA:1135:U:H4'	1:AA:1136:U:C4	2.55	0.42
1:AA:1190:G:H5"	3:AC:4:LYS:HB3	2.00	0.42
1:AA:1224:G:H1	1:AA:1363:C:H42	1.65	0.42
1:AA:1358:U:H5	1:AA:1359:C:N3	2.18	0.42
1:AA:1365:G:O3'	9:AI:117:HIS:HE1	2.03	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1510:U:H2'	1:AA:1511:G:C8	2.54	0.42
2:AB:132:LYS:HA	2:AB:135:GLN:CD	2.44	0.42
2:AB:141:GLU:O	2:AB:145:LEU:HB2	2.19	0.42
7:AG:127:ALA:HB2	7:AG:134:ALA:HB3	2.01	0.42
8:AH:112:LEU:HB3	8:AH:133:LEU:HA	2.01	0.42
9:AI:99:LEU:HD12	9:AI:101:PHE:CE1	2.54	0.42
10:AJ:46:ARG:HB3	10:AJ:63:PHE:O	2.20	0.42
20:AT:55:ILE:HD13	20:AT:55:ILE:HA	1.75	0.42
23:BA:255:A:H1'	23:BA:384:U:C6	2.55	0.42
23:BA:664:C:H2'	23:BA:665:C:H6	1.83	0.42
23:BA:2238:G:H2'	23:BA:2238:G:N3	2.35	0.42
23:BA:2350:C:H2'	23:BA:2351:G:O4'	2.20	0.42
23:BA:2845:G:H5"	37:BT:54:ARG:O	2.19	0.42
24:BB:52:A:O2'	24:BB:53:A:N3	2.52	0.42
25:BD:182:LEU:HD23	25:BD:182:LEU:HA	1.73	0.42
27:BF:32:LEU:O	27:BF:33:LEU:C	2.61	0.42
28:BG:33:ARG:O	28:BG:161:THR:HG22	2.19	0.42
28:BG:57:ALA:HB2	28:BG:90:LEU:HD13	2.02	0.42
1:CA:520:A:O2'	12:CL:73:GLU:HG2	2.19	0.42
1:CA:730:G:C5	1:CA:731:G:H1'	2.54	0.42
1:CA:960:U:H4'	1:CA:961:U:H5"	2.01	0.42
1:CA:1311:G:C2	1:CA:1327:C:C2	3.08	0.42
1:CA:1329:A:C2	1:CA:1330:U:H1'	2.54	0.42
1:CA:1350:A:H2'	1:CA:1351:U:O4'	2.19	0.42
1:CA:1443:G:H1	1:CA:1459:C:C2'	2.31	0.42
8:CH:25:ASP:HB3	8:CH:58:TYR:HD2	1.85	0.42
14:CN:48:ALA:HB2	14:CN:53:LEU:HD12	2.00	0.42
16:CP:17:TYR:HD1	16:CP:17:TYR:N	2.18	0.42
17:CQ:58:GLU:OE1	17:CQ:75:ARG:NH1	2.53	0.42
23:DA:252:G:P	33:DP:50:ARG:HH11	2.43	0.42
23:DA:475:U:C4	23:DA:481:G:O6	2.73	0.42
23:DA:479:A:H4'	23:DA:480:A:OP1	2.19	0.42
23:DA:545:G:OP1	23:DA:545:G:H4'	2.19	0.42
23:DA:1130:U:O2	26:DE:149:ARG:NH2	2.50	0.42
23:DA:1637:A:H4'	23:DA:2711:A:O2'	2.20	0.42
23:DA:1685:C:H2'	23:DA:1686:C:C6	2.55	0.42
23:DA:2070:G:C2	23:DA:2442:C:C2	3.07	0.42
26:DE:181:LEU:HD12	26:DE:181:LEU:HA	1.71	0.42
26:DE:201:THR:OG1	26:DE:202:LYS:N	2.53	0.42
27:DF:160:ASN:ND2	27:DF:163:VAL:HG23	2.35	0.42
29:DH:3:ARG:HG2	29:DH:6:ARG:NE	2.31	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:DH:121:ILE:HD11	29:DH:140:LYS:HG2	2.01	0.42
32:DO:66:LYS:HA	32:DO:79:PHE:O	2.20	0.42
34:DQ:35:VAL:CG1	34:DQ:130:LYS:HB3	2.49	0.42
43:DZ:125:LEU:HB3	43:DZ:165:VAL:CG1	2.49	0.42
1:AA:154:C:C2	1:AA:168:G:C2	3.07	0.42
1:AA:168:G:C2	1:AA:169:C:N3	2.88	0.42
1:AA:250:A:H4'	1:AA:251:G:O5'	2.20	0.42
1:AA:294:U:H2'	1:AA:295:C:H6	1.85	0.42
1:AA:414:A:H2'	1:AA:415:A:C8	2.55	0.42
1:AA:416:G:H2'	1:AA:417:C:O4'	2.20	0.42
1:AA:589:C:H2'	1:AA:590:C:H6	1.85	0.42
1:AA:707:C:H4'	11:AK:20:TYR:CD1	2.54	0.42
1:AA:1016:A:N6	1:AA:1017:G:N3	2.68	0.42
1:AA:1064:G:C5	1:AA:1066:C:C4	3.08	0.42
2:AB:53:ARG:HH12	2:AB:199:TYR:HD2	1.67	0.42
5:AE:60:TYR:C	5:AE:60:TYR:HD1	2.28	0.42
12:AL:54:LYS:HB3	12:AL:70:ILE:HD12	2.02	0.42
13:AM:114:ARG:NH1	13:AM:114:ARG:HB3	2.35	0.42
16:AP:39:TYR:CD1	16:AP:73:LEU:HD13	2.55	0.42
23:BA:567:A:OP2	33:BP:29:LYS:NZ	2.39	0.42
23:BA:824:A:H1'	23:BA:2358:G:N7	2.34	0.42
23:BA:1048:A:O2'	23:BA:1049:C:P	2.77	0.42
23:BA:1647:G:H3'	23:BA:1647:G:OP2	2.20	0.42
23:BA:1911:U:C2	23:BA:1918:A:C2	3.07	0.42
23:BA:2322:A:H2'	23:BA:2323:G:O4'	2.19	0.42
23:BA:2749:A:H5"	29:BH:3:ARG:HH21	1.85	0.42
23:BA:2773:C:H5"	26:BE:164:ARG:HG2	2.01	0.42
23:BA:2820:A:C5	35:BR:4:LEU:HD11	2.55	0.42
28:BG:86:MET:HA	28:BG:87:PRO:HD3	1.84	0.42
44:B0:10:THR:HG22	44:B0:12:ASN:H	1.84	0.42
50:B6:10:LEU:CD1	50:B6:54:ILE:HA	2.46	0.42
1:CA:97:G:HO2'	1:CA:98:G:H8	1.63	0.42
1:CA:113:G:H2'	1:CA:114:U:C6	2.54	0.42
1:CA:432:A:H3'	1:CA:433:C:C6	2.55	0.42
1:CA:701:C:OP1	1:CA:702:A:O2'	2.31	0.42
1:CA:961:U:H2'	1:CA:962:C:O4'	2.19	0.42
1:CA:965:A:H5'	1:CA:969:A:H5"	2.01	0.42
1:CA:1030(B):C:H3'	1:CA:1030(C):G:C8	2.54	0.42
1:CA:1297:C:O3'	7:CG:114:ARG:NH2	2.53	0.42
1:CA:1300:G:O2'	1:CA:1301:U:P	2.77	0.42
1:CA:1307:U:H5"	13:CM:101:GLN:NE2	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1385:G:C6	1:CA:1386:G:N7	2.87	0.42
1:CA:1493:A:H1'	23:DA:1913:A:N1	2.35	0.42
2:CB:98:LEU:O	2:CB:101:MET:HB2	2.20	0.42
2:CB:167:PRO:O	2:CB:174:VAL:HG21	2.19	0.42
3:CC:122:GLU:HA	3:CC:125:GLU:CD	2.45	0.42
4:CD:121:VAL:O	4:CD:134:ASP:HA	2.20	0.42
8:CH:11:THR:HA	8:CH:14:ARG:NH1	2.35	0.42
13:CM:68:GLY:HA2	13:CM:71:ARG:HB2	2.01	0.42
15:CO:74:ASP:OD2	15:CO:77:ARG:HB2	2.19	0.42
23:DA:580:C:H2'	23:DA:581:C:C6	2.55	0.42
23:DA:819:A:C4	23:DA:1189:A:C2	3.08	0.42
23:DA:1015:G:O2'	23:DA:1016:G:H5'	2.20	0.42
23:DA:2232:U:P	45:D1:40:ARG:HH12	2.43	0.42
23:DA:2805:G:H2'	23:DA:2807:G:C8	2.52	0.42
26:DE:38:THR:O	26:DE:42:ASP:N	2.47	0.42
27:DF:37:VAL:O	27:DF:38:ARG:C	2.62	0.42
27:DF:106:ARG:H	27:DF:106:ARG:HG2	1.51	0.42
38:DU:28:ARG:NH1	38:DU:38:THR:OG1	2.48	0.42
46:D2:64:LEU:O	46:D2:68:ARG:HG2	2.19	0.42
1:AA:33:A:H2'	1:AA:34:C:C6	2.55	0.42
1:AA:57:G:H2'	1:AA:58:C:C6	2.54	0.42
1:AA:1002:G:N3	1:AA:1003:G:H1'	2.35	0.42
1:AA:1235:U:H5"	21:AU:3:LYS:HD3	2.02	0.42
1:AA:1335:C:H4'	1:AA:1336:C:C6	2.55	0.42
1:AA:1442(A):G:C5	1:AA:1442(B):A:C6	3.07	0.42
3:AC:110:ASN:OD1	3:AC:110:ASN:N	2.52	0.42
15:AO:18:PHE:HD1	15:AO:20:GLY:H	1.67	0.42
23:BA:157:U:H4'	23:BA:171:G:H21	1.85	0.42
23:BA:271(F):C:C2	23:BA:271(G):C:C6	3.08	0.42
23:BA:271(Q):G:O2'	23:BA:271(R):G:C8	2.73	0.42
23:BA:271(Q):G:O2'	23:BA:271(R):G:OP2	2.28	0.42
23:BA:861:A:N3	24:BB:79:C:O2'	2.49	0.42
23:BA:903:C:H2'	23:BA:904:C:H6	1.84	0.42
23:BA:2093:G:H1	23:BA:2196:C:H42	1.68	0.42
23:BA:2173:A:C6	23:BA:2174:C:C2	3.07	0.42
23:BA:2680:C:H5'	26:BE:189:PRO:HA	2.02	0.42
24:BB:46:A:C5	24:BB:47:C:C4	3.08	0.42
24:BB:52:A:O2'	24:BB:53:A:H5"	2.20	0.42
24:BB:89:G:OP2	24:BB:89:G:H8	2.02	0.42
26:BE:93:VAL:HG12	26:BE:182:LEU:HD12	2.01	0.42
29:BH:33:LEU:HD11	29:BH:136:ILE:O	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BI:39:ALA:O	30:BI:44:LEU:HD22	2.19	0.42
38:BU:29:SER:OG	38:BU:30:LYS:NZ	2.48	0.42
38:BU:58:ARG:HA	38:BU:61:TRP:CE3	2.55	0.42
50:B6:47:THR:HG22	50:B6:48:VAL:N	2.35	0.42
1:CA:60:A:H8	1:CA:60:A:OP1	2.02	0.42
1:CA:72:C:C2	1:CA:98:G:N2	2.88	0.42
1:CA:624:C:H4'	16:CP:10:GLY:HA2	2.01	0.42
1:CA:864:A:H2'	1:CA:865:A:C8	2.55	0.42
1:CA:867:G:H5'	22:CV:3:ARG:CB	2.49	0.42
1:CA:1111:A:N6	3:CC:177:THR:HA	2.35	0.42
2:CB:69:LEU:HB2	2:CB:162:ILE:HG22	2.02	0.42
3:CC:150:LYS:O	3:CC:201:TYR:HB2	2.20	0.42
10:CJ:32:ALA:HB1	10:CJ:33:GLN:HB3	2.02	0.42
10:CJ:46:ARG:HD3	14:CN:61:TRP:CZ3	2.55	0.42
11:CK:102:GLY:C	11:CK:103:LEU:HD22	2.44	0.42
14:CN:47:LEU:HD23	14:CN:50:LYS:HD2	2.01	0.42
23:DA:848:G:N3	23:DA:933:A:H1'	2.35	0.42
23:DA:1711:C:H2'	23:DA:1712:C:H6	1.85	0.42
23:DA:1828:G:H5"	56:DA:3602:HOH:O	2.20	0.42
23:DA:1911:U:C2	23:DA:1918:A:C2	3.08	0.42
23:DA:2133:G:H2'	23:DA:2157:G:N2	2.35	0.42
23:DA:2287:A:C4	23:DA:2289:G:C8	3.07	0.42
23:DA:2391:G:O6	23:DA:2425:A:H8	2.03	0.42
37:DT:3:ARG:CB	37:DT:3:ARG:HH21	2.32	0.42
38:DU:17:ILE:HG23	38:DU:39:LEU:HD12	2.01	0.42
39:DV:87:HIS:NE2	39:DV:89:GLN:HG2	2.35	0.42
1:AA:340:U:H3	1:AA:349:A:H61	1.66	0.42
1:AA:567:G:H2'	1:AA:568:G:O4'	2.20	0.42
1:AA:1016:A:C8	1:AA:1016:A:O5'	2.73	0.42
1:AA:1139:G:N2	1:AA:1142:G:O6	2.37	0.42
1:AA:1162:C:H2'	1:AA:1163:C:C6	2.55	0.42
1:AA:1508:G:H2'	1:AA:1509:C:C6	2.55	0.42
2:AB:77:ALA:O	2:AB:81:VAL:HG23	2.20	0.42
4:AD:25:ARG:O	4:AD:25:ARG:HG2	2.19	0.42
7:AG:68:ASN:C	7:AG:138:LYS:HE2	2.45	0.42
12:AL:97:ARG:HB2	12:AL:98:TYR:CE1	2.55	0.42
17:AQ:89:LEU:HD23	17:AQ:89:LEU:HA	1.75	0.42
19:AS:7:LYS:H	19:AS:7:LYS:HG2	1.58	0.42
22:AV:39:GLN:H	22:AV:39:GLN:HG2	1.67	0.42
23:BA:615:G:OP2	27:BF:43:LYS:NZ	2.41	0.42
23:BA:646:A:N3	23:BA:646:A:H5'	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BA:857:C:H1'	44:B0:26:TYR:CE2	2.55	0.42
23:BA:1049:C:O2'	23:BA:1050:A:OP1	2.37	0.42
23:BA:1467:C:C2	23:BA:1526:G:N2	2.88	0.42
23:BA:2123:G:H2'	23:BA:2124:G:C8	2.55	0.42
23:BA:2236:C:C2'	23:BA:2237:G:H5'	2.50	0.42
24:BB:2:C:H2'	24:BB:3:C:H6	1.85	0.42
28:BG:64:THR:OG1	28:BG:65:GLY:N	2.51	0.42
1:CA:118:U:C5	1:CA:288:A:C6	3.08	0.42
1:CA:185:A:C6	1:CA:186:C:C4	3.08	0.42
1:CA:375:U:P	16:CP:69:THR:HG21	2.60	0.42
1:CA:437:U:H2'	1:CA:438:G:C8	2.55	0.42
1:CA:539:A:OP2	12:CL:115:LYS:NZ	2.53	0.42
1:CA:606:G:H5"	1:CA:607:A:H5'	2.02	0.42
1:CA:626:U:H4'	16:CP:38:TYR:CZ	2.54	0.42
1:CA:967:C:H6	1:CA:967:C:O5'	2.02	0.42
1:CA:1064:G:H8	1:CA:1064:G:O5'	2.02	0.42
1:CA:1106:G:H2'	1:CA:1107:C:C6	2.55	0.42
1:CA:1165:C:H2'	1:CA:1166:G:H8	1.84	0.42
1:CA:1363(A):A:H4'	1:CA:1364:U:O5'	2.20	0.42
1:CA:1441:G:O2'	1:CA:1459:C:C4	2.64	0.42
1:CA:1525:G:OP1	11:CK:120:ARG:NH2	2.52	0.42
4:CD:79:PHE:CD2	4:CD:80:GLU:N	2.82	0.42
5:CE:78:HIS:CE1	5:CE:142:LEU:HA	2.50	0.42
12:CL:84:LEU:HD22	12:CL:85:ILE:H	1.85	0.42
13:CM:9:ILE:N	13:CM:10:PRO:HD3	2.35	0.42
16:CP:28:ARG:HH11	16:CP:28:ARG:CG	2.26	0.42
23:DA:128:C:H2'	23:DA:129:C:C6	2.55	0.42
23:DA:656:G:H2'	23:DA:657:U:O4'	2.19	0.42
23:DA:1777:U:O2'	23:DA:1778:U:H5'	2.19	0.42
23:DA:1936:A:H5'	56:DA:3541:HOH:O	2.19	0.42
23:DA:2521:C:O2'	23:DA:2564:A:N3	2.46	0.42
24:DB:59:A:H2'	24:DB:60:C:C6	2.55	0.42
25:DD:228:PRO:HD3	25:DD:235:GLY:HA3	2.02	0.42
26:DE:12:THR:HG22	37:DT:58:ASN:OD1	2.20	0.42
26:DE:73:GLU:HA	26:DE:74:PRO:HD3	1.78	0.42
27:DF:46:ARG:HG2	27:DF:46:ARG:NH1	2.22	0.42
32:DO:104:ARG:NH1	37:DT:34:VAL:HG21	2.35	0.42
39:DV:42:GLY:O	39:DV:43:GLU:HG2	2.20	0.42
43:DZ:183:LEU:HD23	43:DZ:183:LEU:HA	1.81	0.42
47:D3:30:ARG:H	47:D3:30:ARG:HG3	1.66	0.42
1:AA:586:C:O2'	1:AA:878:G:H4'	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:657:G:C2	1:AA:658:G:C8	3.07	0.41
1:AA:775:G:O2'	1:AA:776:G:H5'	2.20	0.41
1:AA:1027:C:C5	1:AA:1029:C:C4	3.08	0.41
1:AA:1071:C:H2'	1:AA:1072:G:C8	2.53	0.41
1:AA:1245:A:C6	1:AA:1293:G:C2	3.08	0.41
1:AA:1443:G:O6	1:AA:1459:C:C2	2.73	0.41
2:AB:18:GLY:HA2	2:AB:42:ILE:CG1	2.47	0.41
2:AB:233:SER:OG	2:AB:234:PRO:HD2	2.19	0.41
3:AC:108:ASN:O	3:AC:111:LEU:HB3	2.20	0.41
4:AD:32:ALA:O	4:AD:36:ARG:N	2.51	0.41
4:AD:76:ARG:O	4:AD:80:GLU:HG2	2.20	0.41
4:AD:121:VAL:HA	4:AD:126:ILE:HG12	2.02	0.41
13:AM:3:ARG:HB2	13:AM:9:ILE:HG22	2.01	0.41
14:AN:54:PRO:C	14:AN:56:VAL:H	2.26	0.41
18:AR:85:LEU:HD22	18:AR:86:VAL:N	2.35	0.41
21:AU:10:ARG:HH11	21:AU:10:ARG:HG3	1.85	0.41
23:BA:536:A:H2'	23:BA:537:C:C6	2.55	0.41
23:BA:656:G:H2'	23:BA:657:U:O4'	2.20	0.41
23:BA:725:G:C5	23:BA:726:G:C6	3.08	0.41
23:BA:864:G:C6	23:BA:865:C:N4	2.87	0.41
23:BA:880:G:N2	23:BA:898:C:H1'	2.34	0.41
23:BA:1466:G:O2'	23:BA:1546:C:O2'	2.27	0.41
23:BA:2109:U:H3'	23:BA:2109:U:C6	2.54	0.41
23:BA:2582:G:C2	23:BA:2583:G:C8	3.08	0.41
23:BA:2836:U:H2'	23:BA:2837:G:C8	2.55	0.41
24:BB:7:G:C2	24:BB:115:G:C2	3.08	0.41
25:BD:213:ARG:HA	25:BD:213:ARG:HD2	1.65	0.41
27:BF:123:LEU:HD12	27:BF:124:LEU:N	2.35	0.41
27:BF:133:ASN:HA	27:BF:162:LEU:HD23	2.01	0.41
29:BH:13:LYS:HA	29:BH:14:GLY:HA2	1.56	0.41
33:BP:71:VAL:HG22	33:BP:72:PRO:HA	2.02	0.41
36:BS:41:ASP:OD1	36:BS:43:GLU:HB2	2.20	0.41
37:BT:11:GLU:O	37:BT:15:VAL:HG23	2.19	0.41
38:BU:17:ILE:HG23	38:BU:39:LEU:HD12	2.00	0.41
41:BX:57:LEU:HD13	41:BX:78:LYS:HG2	2.01	0.41
50:B6:6:ARG:NH1	50:B6:26:ASN:HB2	2.35	0.41
1:CA:160:A:N6	1:CA:346:G:N2	2.68	0.41
1:CA:510:A:H5"	1:CA:511:C:OP2	2.19	0.41
1:CA:586:C:H2'	1:CA:587:G:H5'	2.02	0.41
1:CA:597:G:N2	8:CH:94:TYR:OH	2.53	0.41
1:CA:649:G:H2'	1:CA:650:G:C8	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:924:C:H2'	1:CA:925:G:H8	1.84	0.41
1:CA:1033:G:H2'	1:CA:1034:G:O4'	2.20	0.41
1:CA:1333:A:C6	1:CA:1334:G:C4	3.08	0.41
1:CA:1353:G:H5"	21:CU:13:ILE:CG2	2.49	0.41
7:CG:16:LEU:HD12	9:CI:42:ARG:HA	2.02	0.41
8:CH:121:ASP:O	8:CH:125:ARG:HG2	2.20	0.41
12:CL:46:LYS:HG3	12:CL:92:ASP:HA	2.01	0.41
19:CS:28:LYS:O	19:CS:47:HIS:HD2	2.03	0.41
23:DA:225:A:H2'	23:DA:226:G:H5'	2.03	0.41
23:DA:1568:G:H5'	25:DD:60:ARG:HA	2.02	0.41
23:DA:2019:A:N7	49:D5:9:LYS:NZ	2.59	0.41
23:DA:2317:C:H2'	23:DA:2318:G:C5'	2.50	0.41
23:DA:2517:C:C6	23:DA:2542:A:N7	2.88	0.41
25:DD:29:PRO:HA	25:DD:83:GLU:OE1	2.20	0.41
27:DF:22:ALA:HB1	27:DF:24:LEU:CD2	2.50	0.41
27:DF:32:LEU:O	27:DF:33:LEU:C	2.62	0.41
28:DG:96:ARG:O	28:DG:99:MET:HB3	2.19	0.41
32:DO:4:PRO:O	32:DO:5:GLN:HB2	2.19	0.41
42:DY:67:LEU:HD23	42:DY:67:LEU:HA	1.69	0.41
45:D1:4:VAL:HG11	45:D1:11:ARG:NH1	2.35	0.41
46:D2:45:SER:O	46:D2:46:GLN:HB2	2.20	0.41
1:AA:96:U:O2'	1:AA:97:G:H8	2.02	0.41
1:AA:303:A:C5	1:AA:304:U:C5	3.08	0.41
1:AA:613:C:H42	1:AA:627:G:H1	1.68	0.41
1:AA:728:A:H2'	1:AA:729:A:C8	2.54	0.41
1:AA:967:C:N3	1:AA:968:A:N6	2.68	0.41
1:AA:1172:C:H2'	1:AA:1173:G:C8	2.49	0.41
1:AA:1201:A:H1'	1:AA:1202:G:OP2	2.20	0.41
1:AA:1207:G:H3'	1:AA:1208:C:C6	2.55	0.41
1:AA:1227:A:H5'	19:AS:83:HIS:HB2	2.02	0.41
1:AA:1251:A:H61	1:AA:1285:A:H61	1.69	0.41
1:AA:1306:A:N6	1:AA:1331:G:O4'	2.53	0.41
1:AA:1493:A:O2'	1:AA:1494:G:H8	2.03	0.41
4:AD:53:ASP:HB3	4:AD:57:ARG:NH1	2.33	0.41
7:AG:2:ALA:N	7:AG:7:ALA:HB2	2.35	0.41
7:AG:99:LEU:HB3	7:AG:103:TRP:CZ2	2.55	0.41
7:AG:104:LEU:HA	7:AG:134:ALA:HB2	2.02	0.41
19:AS:31:ILE:HD13	19:AS:32:LYS:N	2.35	0.41
20:AT:73:HIS:HB3	20:AT:74:LYS:HE3	2.02	0.41
22:AV:20:GLY:HA3	22:AV:47:ALA:HB3	2.01	0.41
23:BA:823:G:C6	23:BA:835:A:N1	2.88	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BA:1045:A:N3	23:BA:1045:A:C2'	2.82	0.41
23:BA:1341:U:O2	41:BX:80:ILE:HD13	2.20	0.41
23:BA:1985:G:OP2	56:BA:3743:HOH:O	2.20	0.41
23:BA:2591:C:OP2	25:BD:239:ARG:HB3	2.20	0.41
24:BB:93:G:H2'	24:BB:94:C:H6	1.85	0.41
32:BO:64:ARG:NH1	32:BO:81:ASP:OD1	2.53	0.41
34:BQ:75:THR:HA	34:BQ:89:ASN:O	2.20	0.41
43:BZ:44:PHE:CD1	43:BZ:44:PHE:C	2.99	0.41
43:BZ:138:GLU:HB3	43:BZ:156:LYS:NZ	2.35	0.41
1:CA:106:C:H2'	1:CA:107:G:H8	1.84	0.41
1:CA:146:G:H5"	1:CA:147:G:OP2	2.20	0.41
1:CA:477:A:H2'	1:CA:479:C:H6	1.84	0.41
1:CA:532:A:N6	3:CC:193:TYR:HB3	2.35	0.41
1:CA:951:G:O6	13:CM:105:THR:HG21	2.20	0.41
1:CA:1050:G:H2'	1:CA:1051:C:C6	2.55	0.41
1:CA:1092:A:C6	1:CA:1183:A:C2	3.08	0.41
1:CA:1360:A:OP2	14:CN:35:ARG:NH2	2.40	0.41
2:CB:42:ILE:HD13	2:CB:203:GLY:HA2	2.03	0.41
7:CG:74:GLU:O	7:CG:88:PRO:HA	2.20	0.41
7:CG:113:GLU:O	7:CG:113:GLU:HG2	2.20	0.41
13:CM:65:LYS:HE3	13:CM:65:LYS:O	2.20	0.41
15:CO:74:ASP:HA	15:CO:75:PRO:HD2	1.76	0.41
16:CP:17:TYR:N	16:CP:17:TYR:CD1	2.87	0.41
23:DA:546:C:H2'	23:DA:546:C:H6	1.63	0.41
23:DA:861:A:H2'	23:DA:862:G:O4'	2.20	0.41
23:DA:1224:C:O2'	39:DV:85:LYS:HA	2.20	0.41
23:DA:1693:U:H4'	23:DA:1694:C:OP2	2.19	0.41
23:DA:2065:C:H2'	23:DA:2066:C:C6	2.54	0.41
36:DS:34:HIS:ND1	36:DS:53:SER:OG	2.31	0.41
42:DY:2:ARG:HA	42:DY:2:ARG:HD3	1.78	0.41
44:D0:21:LEU:HD23	44:D0:21:LEU:HA	1.82	0.41
44:D0:70:GLN:HG2	44:D0:72:ARG:HG2	2.02	0.41
52:D8:33:ASN:O	52:D8:34:TRP:O	2.38	0.41
53:D9:4:ARG:O	53:D9:36:GLN:HA	2.19	0.41
53:D9:12:ASP:OD1	53:D9:13:LYS:HG3	2.19	0.41
1:AA:35:G:C6	1:AA:36:C:N4	2.88	0.41
1:AA:346:G:OP1	37:BT:41:ARG:NH2	2.51	0.41
1:AA:391:G:C6	1:AA:392:G:C5	3.07	0.41
1:AA:513:C:H2'	1:AA:514:C:C6	2.55	0.41
1:AA:942:G:C2	1:AA:943:U:C2	3.08	0.41
1:AA:1024:G:H8	1:AA:1024:G:O5'	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1058:G:OP1	3:AC:199:LYS:NZ	2.39	0.41
1:AA:1157:A:N6	1:AA:1177:G:N1	2.68	0.41
1:AA:1288:A:H8	1:AA:1288:A:O5'	2.03	0.41
1:AA:1328:C:C4	1:AA:1329:A:N7	2.88	0.41
1:AA:1388:C:H2'	1:AA:1389:C:C6	2.55	0.41
5:AE:43:LEU:HD12	5:AE:44:GLY:N	2.36	0.41
6:AF:95:GLU:HA	6:AF:96:PRO:HD3	1.88	0.41
7:AG:46:ALA:HB2	7:AG:117:ALA:O	2.20	0.41
8:AH:119:LEU:HB3	8:AH:123:GLU:HB2	2.00	0.41
9:AI:111:ARG:O	9:AI:113:LYS:HE3	2.20	0.41
10:AJ:54:PHE:CD2	10:AJ:55:LYS:HD3	2.53	0.41
13:AM:12:ASN:HA	13:AM:46:LYS:H	1.85	0.41
23:BA:637:A:H8	33:BP:117:GLU:HG3	1.86	0.41
23:BA:1141:U:P	31:BN:25:ARG:NH1	2.93	0.41
23:BA:1693:U:O2'	25:BD:14:ARG:NH2	2.53	0.41
23:BA:2108:C:C3'	23:BA:2108:C:C6	3.04	0.41
23:BA:2320:A:N3	23:BA:2320:A:H2'	2.35	0.41
26:BE:36:ARG:HG2	26:BE:47:VAL:HG22	2.01	0.41
32:BO:59:LYS:NZ	32:BO:89:ASN:HD21	2.17	0.41
34:BQ:35:VAL:CG1	34:BQ:130:LYS:HB3	2.50	0.41
41:BX:72:LYS:HE3	41:BX:72:LYS:HB3	1.85	0.41
42:BY:90:LEU:C	42:BY:92:ASN:H	2.27	0.41
1:CA:390:C:H2'	1:CA:391:G:C8	2.55	0.41
1:CA:708:C:P	11:CK:85:ARG:HH22	2.44	0.41
1:CA:777:A:C2	11:CK:119:CYS:HB3	2.55	0.41
1:CA:826:C:H2'	1:CA:827:U:C6	2.55	0.41
1:CA:1080:A:H5"	1:CA:1081:G:OP2	2.21	0.41
1:CA:1352:C:H2'	1:CA:1353:G:C8	2.54	0.41
1:CA:1429:C:H2'	1:CA:1430:C:C6	2.54	0.41
2:CB:16:HIS:CD2	2:CB:210:SER:HA	2.55	0.41
2:CB:74:LYS:HD3	2:CB:205:ASP:O	2.21	0.41
2:CB:163:PHE:HA	2:CB:185:ILE:O	2.20	0.41
8:CH:119:LEU:HB3	8:CH:123:GLU:HB2	2.02	0.41
17:CQ:27:PHE:HD1	17:CQ:28:PRO:O	2.03	0.41
19:CS:67:VAL:HB	19:CS:68:GLY:H	1.68	0.41
23:DA:271(Q):G:O2'	23:DA:271(R):G:P	2.78	0.41
23:DA:528:A:C2	23:DA:2043:C:H4'	2.56	0.41
23:DA:634:C:H2'	23:DA:635:C:C6	2.55	0.41
23:DA:708:C:N4	23:DA:723:G:H1	2.16	0.41
23:DA:1529:G:C6	23:DA:1530:C:C4	3.07	0.41
23:DA:1668:A:H4'	23:DA:1669:A:O5'	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:1759:A:H1'	23:DA:2711:A:C2	2.55	0.41
23:DA:1783:A:C2	23:DA:2587:A:C5	3.09	0.41
23:DA:1792:G:H2'	23:DA:1793:C:C6	2.55	0.41
23:DA:2157:G:H2'	23:DA:2158:A:C8	2.55	0.41
23:DA:2205:C:O2	23:DA:2220:G:C2	2.73	0.41
23:DA:2519:U:C6	23:DA:2542:A:N6	2.88	0.41
24:DB:49:C:OP1	36:DS:96:GLY:HA2	2.21	0.41
26:DE:50:GLY:HA2	26:DE:77:ILE:O	2.21	0.41
27:DF:52:LYS:HA	27:DF:56:GLU:OE2	2.21	0.41
31:DN:18:ALA:O	31:DN:21:LYS:HB2	2.20	0.41
31:DN:48:MET:HE3	31:DN:48:MET:HB2	1.71	0.41
34:DQ:63:LYS:HD2	43:DZ:175:VAL:HG21	2.01	0.41
43:DZ:111:VAL:HG12	43:DZ:112:ARG:H	1.86	0.41
46:D2:4:SER:HA	46:D2:7:ARG:NH1	2.35	0.41
50:D6:6:ARG:NH1	50:D6:26:ASN:HB2	2.36	0.41
1:AA:91:C:H2'	1:AA:92:C:C6	2.56	0.41
1:AA:102:G:H2'	1:AA:103:C:H6	1.83	0.41
1:AA:103:C:C2	1:AA:104:G:C8	3.09	0.41
1:AA:228:A:H2'	1:AA:229:U:O4'	2.20	0.41
1:AA:963:G:H1'	10:AJ:54:PHE:HZ	1.84	0.41
1:AA:976:G:H5'	1:AA:1358:U:O2'	2.21	0.41
1:AA:1036:G:H5"	1:AA:1037:C:C5	2.56	0.41
1:AA:1089:G:C6	1:AA:1090:U:C4	3.08	0.41
1:AA:1158:C:H5"	2:AB:131:PRO:O	2.20	0.41
1:AA:1294:G:H2'	1:AA:1295:G:O4'	2.19	0.41
2:AB:149:LEU:HB3	2:AB:152:PHE:CB	2.49	0.41
6:AF:7:ASN:HD21	18:AR:34:TYR:HE1	1.68	0.41
7:AG:97:GLN:O	7:AG:101:LEU:HG	2.20	0.41
23:BA:303:U:O4	56:BA:4356:HOH:O	2.21	0.41
23:BA:435:C:C5	23:BA:436:C:C5	3.08	0.41
23:BA:907:U:H4'	34:BQ:101:ARG:HH22	1.84	0.41
23:BA:1107:G:H8	23:BA:1107:G:H2'	1.42	0.41
23:BA:2259:G:H1'	23:BA:2427:C:H2'	2.02	0.41
23:BA:2730:C:H4'	26:BE:168:MET:O	2.21	0.41
24:BB:103:G:O2'	43:BZ:73:GLN:NE2	2.54	0.41
25:BD:267:SER:C	25:BD:269:PHE:N	2.79	0.41
27:BF:101:LEU:HA	27:BF:101:LEU:HD12	1.68	0.41
27:BF:158:THR:C	27:BF:178:PRO:HD3	2.44	0.41
31:BN:28:THR:HG22	31:BN:29:LYS:N	2.34	0.41
32:BO:23:ARG:HG3	32:BO:24:VAL:N	2.35	0.41
35:BR:104:ARG:HG3	35:BR:111:LEU:HD21	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BU:28:ARG:NH1	38:BU:38:THR:OG1	2.45	0.41
53:B9:4:ARG:NH1	56:B9:202:HOH:O	2.53	0.41
1:CA:373:A:H61	1:CA:391:G:H1'	1.85	0.41
1:CA:393:A:C2	1:CA:394:G:C8	3.08	0.41
1:CA:721:G:H4'	1:CA:722:A:O4'	2.20	0.41
1:CA:788:U:H2'	1:CA:789:U:O4'	2.21	0.41
1:CA:1113:C:H2'	1:CA:1114:C:C6	2.54	0.41
1:CA:1291:G:O2'	1:CA:1292:U:H5'	2.20	0.41
1:CA:1443:G:O6	1:CA:1459:C:C2	2.73	0.41
5:CE:39:GLY:O	5:CE:69:VAL:HG12	2.20	0.41
9:CI:112:LYS:CG	9:CI:119:ALA:HB2	2.51	0.41
10:CJ:50:ILE:HD11	10:CJ:60:ARG:NH1	2.35	0.41
12:CL:30:ALA:HA	12:CL:31:PRO:HD3	1.79	0.41
12:CL:32:PHE:CE1	12:CL:86:ARG:HG3	2.52	0.41
14:CN:53:LEU:HA	14:CN:54:PRO:HD3	1.73	0.41
15:CO:76:GLU:O	15:CO:79:ARG:N	2.53	0.41
15:CO:81:LEU:O	15:CO:85:LEU:N	2.51	0.41
15:CO:87:ILE:HG23	15:CO:88:ARG:N	2.35	0.41
20:CT:51:GLU:H	20:CT:51:GLU:CD	2.28	0.41
23:DA:196:A:O4'	33:DP:46:LYS:HE2	2.20	0.41
23:DA:289:A:H2'	23:DA:290:G:O4'	2.20	0.41
23:DA:529:A:OP2	31:DN:114:ARG:NH2	2.54	0.41
23:DA:807:U:OP2	33:DP:36:LYS:HD3	2.20	0.41
23:DA:2845:G:O2'	23:DA:2846:G:H5'	2.20	0.41
24:DB:11:C:H3'	24:DB:12:C:H6	1.82	0.41
27:DF:95:ARG:HG3	27:DF:97:TYR:CE2	2.55	0.41
33:DP:96:THR:OG1	33:DP:99:LEU:HG	2.20	0.41
38:DU:47:TYR:HA	38:DU:50:ARG:NH2	2.35	0.41
42:DY:1:MET:C	42:DY:1:MET:HE3	2.45	0.41
1:AA:432:A:H3'	1:AA:433:C:C6	2.56	0.41
1:AA:652:U:C4	1:AA:752:G:N3	2.88	0.41
1:AA:806:C:O2'	1:AA:807:A:H5'	2.21	0.41
1:AA:865:A:H2	1:AA:918:A:H4'	1.84	0.41
1:AA:919:A:O5'	1:AA:919:A:H8	2.04	0.41
1:AA:1000:U:C2	1:AA:1041:A:N1	2.89	0.41
1:AA:1113:C:H2'	1:AA:1114:C:H6	1.80	0.41
1:AA:1145:C:H1'	1:AA:1146:A:H8	1.86	0.41
1:AA:1239:A:H61	1:AA:1299:A:N6	2.19	0.41
1:AA:1270:C:H2'	1:AA:1271:G:C8	2.54	0.41
1:AA:1394:A:N6	1:AA:1501:C:H5'	2.36	0.41
2:AB:74:LYS:HB2	2:AB:74:LYS:HE3	1.91	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:136:VAL:HA	2:AB:139:LYS:CG	2.45	0.41
3:AC:13:GLY:C	14:AN:57:ARG:HH21	2.28	0.41
4:AD:78:LEU:O	4:AD:82:ALA:HB2	2.21	0.41
16:AP:42:ARG:C	16:AP:43:LYS:HD2	2.45	0.41
20:AT:74:LYS:HB3	20:AT:74:LYS:HE2	1.89	0.41
23:BA:638:G:H2'	23:BA:639:U:H6	1.85	0.41
23:BA:685:A:C2	23:BA:689:A:C6	3.09	0.41
23:BA:866:A:C6	23:BA:914:C:C6	3.08	0.41
23:BA:900:A:C4	23:BA:901:A:C8	3.09	0.41
23:BA:1497:U:H5"	23:BA:1498:C:H5	1.85	0.41
23:BA:2110:G:O2'	23:BA:2120:G:H5'	2.21	0.41
23:BA:2316:C:H1'	28:BG:128:ARG:NH2	2.35	0.41
23:BA:2778:A:H4'	23:BA:2779:U:OP2	2.21	0.41
24:BB:111:G:H2'	24:BB:112:U:H6	1.86	0.41
25:BD:108:PRO:HG2	25:BD:111:LEU:HG	2.02	0.41
26:BE:60:ASN:OD1	26:BE:62:PRO:HD2	2.20	0.41
33:BP:27:HIS:O	33:BP:31:ALA:HA	2.21	0.41
33:BP:121:LYS:HG3	33:BP:122:PRO:HD2	2.01	0.41
36:BS:56:LEU:O	36:BS:58:LEU:HD23	2.21	0.41
46:B2:3:LEU:HD23	46:B2:3:LEU:HA	1.82	0.41
48:B4:15:ILE:HG13	48:B4:21:VAL:HG22	2.01	0.41
1:CA:271:C:H2'	1:CA:272:C:H6	1.85	0.41
1:CA:300:A:H1'	1:CA:565:U:O2	2.21	0.41
1:CA:619:U:C2	4:CD:135:LEU:HD22	2.56	0.41
1:CA:957:U:H4'	19:CS:79:THR:OG1	2.20	0.41
1:CA:1179:A:OP1	1:CA:1179:A:C8	2.74	0.41
1:CA:1286:A:N6	1:CA:1354:C:O3'	2.53	0.41
1:CA:1446:U:O2	1:CA:1456:G:N2	2.53	0.41
3:CC:69:HIS:CD2	3:CC:104:GLN:HB2	2.55	0.41
5:CE:19:MET:HE3	5:CE:19:MET:HB3	1.69	0.41
5:CE:60:TYR:C	5:CE:60:TYR:HD1	2.28	0.41
9:CI:45:ALA:CB	9:CI:47:LEU:H	2.33	0.41
12:CL:47:LYS:HB2	12:CL:47:LYS:HE2	1.83	0.41
14:CN:25:VAL:HB	14:CN:39:LEU:HD21	2.01	0.41
15:CO:3:ILE:HD13	15:CO:3:ILE:H	1.84	0.41
17:CQ:22:LEU:HD12	17:CQ:40:LYS:O	2.20	0.41
23:DA:216:A:C4	23:DA:432:A:C2	3.08	0.41
23:DA:250:G:H2'	23:DA:251:A:C8	2.56	0.41
23:DA:271(H):G:O2'	23:DA:271(I):G:P	2.79	0.41
23:DA:271(P):C:C2'	23:DA:271(Q):G:H5'	2.51	0.41
23:DA:2811:G:N2	23:DA:2891:G:H1'	2.35	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:DB:20:C:H2'	24:DB:21:G:O4'	2.19	0.41
24:DB:79:C:H2'	24:DB:80:U:O4'	2.20	0.41
25:DD:137:PRO:HB2	25:DD:140:THR:HG23	2.03	0.41
26:DE:128:SER:OG	26:DE:129:HIS:N	2.53	0.41
27:DF:117:ARG:HA	27:DF:117:ARG:HD3	1.87	0.41
43:DZ:138:GLU:HB3	43:DZ:156:LYS:NZ	2.35	0.41
52:D8:54:GLU:OE1	52:D8:57:ARG:NH1	2.50	0.41
1:AA:9:G:OP1	5:AE:122:GLU:HB2	2.20	0.41
1:AA:46:G:N7	56:AA:1902:HOH:O	2.37	0.41
1:AA:325:A:H2'	1:AA:326:G:O4'	2.21	0.41
1:AA:543:C:C2	1:AA:544:G:C8	3.09	0.41
1:AA:685:G:O2'	1:AA:686:U:H5'	2.21	0.41
1:AA:954:G:H2'	1:AA:955:U:O4'	2.21	0.41
1:AA:994:A:C6	1:AA:1047:G:H4'	2.55	0.41
1:AA:1043:C:H2'	1:AA:1044:A:H8	1.85	0.41
1:AA:1070:U:H1'	1:AA:1106:G:N2	2.35	0.41
1:AA:1296:C:C4	1:AA:1297:C:C2	3.08	0.41
1:AA:1350:A:N1	1:AA:1372:U:C2	2.88	0.41
2:AB:19:HIS:ND1	2:AB:189:ASP:OD2	2.39	0.41
3:AC:205:GLY:O	3:AC:207:VAL:HG23	2.20	0.41
8:AH:121:ASP:O	8:AH:125:ARG:HG2	2.20	0.41
10:AJ:51:ARG:HA	14:AN:45:ARG:NE	2.35	0.41
12:AL:5:PRO:HB2	12:AL:10:LEU:CD1	2.50	0.41
19:AS:58:VAL:HA	19:AS:59:PRO:HD3	1.77	0.41
23:BA:191:A:H2'	23:BA:192:C:C6	2.55	0.41
23:BA:332:A:H2'	56:BA:4744:HOH:O	2.20	0.41
23:BA:642:G:H21	23:BA:646:A:H2	1.68	0.41
23:BA:805:G:H4'	33:BP:38:GLN:HB3	2.01	0.41
26:BE:128:SER:OG	26:BE:129:HIS:N	2.52	0.41
30:BI:130:TYR:HD1	30:BI:130:TYR:HA	1.70	0.41
42:BY:77:PRO:HD3	42:BY:106:LEU:HD23	2.02	0.41
52:B8:26:LYS:HZ2	52:B8:26:LYS:HG2	1.70	0.41
53:B9:32:HIS:O	53:B9:34:GLN:HG3	2.20	0.41
1:CA:33:A:H2'	1:CA:34:C:C6	2.55	0.41
1:CA:263:A:OP1	20:CT:79:ARG:NH1	2.54	0.41
1:CA:373:A:H2'	1:CA:374:A:H8	1.84	0.41
1:CA:376:G:H5"	16:CP:5:ARG:CB	2.51	0.41
1:CA:971:G:H1	1:CA:1363(A):A:H5'	1.85	0.41
1:CA:980:C:H5'	1:CA:981:U:OP2	2.20	0.41
1:CA:1163:C:H2'	1:CA:1164:G:H8	1.85	0.41
1:CA:1245:A:N1	1:CA:1293:G:C6	2.89	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1349:A:H2'	1:CA:1350:A:O4'	2.21	0.41
4:CD:188:LEU:H	4:CD:188:LEU:HG	1.24	0.41
5:CE:37:ARG:HG2	5:CE:37:ARG:NH1	2.35	0.41
17:CQ:66:SER:OG	17:CQ:69:LYS:HB2	2.20	0.41
19:CS:33:THR:O	19:CS:52:TYR:HB2	2.20	0.41
22:CV:45:ARG:O	22:CV:49:ALA:HB2	2.21	0.41
23:DA:92:A:O2'	23:DA:93:G:H5'	2.20	0.41
23:DA:900:A:O2'	23:DA:901:A:OP1	2.36	0.41
23:DA:1469:A:C2	23:DA:1524:G:C2	3.09	0.41
23:DA:2104:G:O6	23:DA:2186:G:C4	2.74	0.41
23:DA:2170:A:OP2	23:DA:2170:A:H8	2.04	0.41
24:DB:37:C:C5	24:DB:38:C:C5	3.09	0.41
24:DB:117:G:H2'	24:DB:118:G:O4'	2.21	0.41
27:DF:13:SER:HA	27:DF:14:PRO:HD2	1.82	0.41
30:DI:133:HIS:CE1	30:DI:134:PRO:O	2.73	0.41
32:DO:120:GLU:HG2	32:DO:122:LEU:HG	2.03	0.41
1:AA:502:G:C2	1:AA:503:C:C2	3.08	0.41
1:AA:671:G:C2	1:AA:672:U:C2	3.09	0.41
1:AA:1016:A:H8	1:AA:1016:A:P	2.44	0.41
1:AA:1145:C:H1'	1:AA:1146:A:C8	2.56	0.41
3:AC:181:ASN:CB	3:AC:204:LEU:HB2	2.39	0.41
12:AL:102:ARG:HB3	12:AL:102:ARG:HE	1.46	0.41
13:AM:25:ILE:HG23	13:AM:29:ARG:CB	2.51	0.41
14:AN:47:LEU:C	14:AN:53:LEU:HG	2.46	0.41
15:AO:25:THR:HG21	15:AO:70:LEU:HB2	2.01	0.41
23:BA:580:C:H2'	23:BA:581:C:C6	2.55	0.41
23:BA:1526:G:C6	23:BA:1527:G:C2	3.09	0.41
30:BI:130:TYR:HD2	30:BI:138:ILE:HD12	1.86	0.41
1:CA:34:C:H42	1:CA:550:G:H1	1.69	0.41
1:CA:129(A):G:C6	1:CA:189(H):G:H1'	2.55	0.41
1:CA:825:G:H2'	1:CA:826:C:C6	2.55	0.41
2:CB:133:LYS:O	2:CB:137:ARG:N	2.31	0.41
2:CB:167:PRO:HG2	2:CB:192:SER:CB	2.50	0.41
3:CC:111:LEU:HD11	3:CC:144:SER:HB3	2.03	0.41
8:CH:85:ARG:HD3	8:CH:86:ILE:N	2.35	0.41
11:CK:69:ALA:O	11:CK:72:ALA:N	2.48	0.41
17:CQ:91:ARG:O	17:CQ:94:ASN:HB2	2.20	0.41
22:CV:30:PRO:HG3	22:CV:40:TRP:CZ3	2.56	0.41
23:DA:468:G:N7	51:D7:39:ARG:NH2	2.61	0.41
23:DA:582:G:H2'	23:DA:583:G:C8	2.56	0.41
23:DA:1028:A:N6	23:DA:1125:G:H2'	2.35	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:1161:C:O2'	39:DV:8:GLY:HA2	2.21	0.41
23:DA:1425:G:H2'	23:DA:1426:G:C8	2.55	0.41
23:DA:1999:C:H2'	23:DA:2000:G:O4'	2.19	0.41
23:DA:2147:G:H2'	23:DA:2148:G:O4'	2.21	0.41
23:DA:2352:A:N6	23:DA:2365:G:O2'	2.54	0.41
23:DA:2441:C:OP2	23:DA:2586:C:O2'	2.36	0.41
23:DA:2572:A:N7	26:DE:144:ARG:HD2	2.35	0.41
24:DB:2:C:H2'	24:DB:3:C:H6	1.84	0.41
25:DD:3:VAL:HG12	25:DD:17:THR:HB	2.03	0.41
26:DE:105:THR:HG23	26:DE:166:THR:OG1	2.20	0.41
27:DF:7:TYR:N	27:DF:22:ALA:HB3	2.31	0.41
28:DG:57:ALA:HB1	28:DG:68:PRO:HD2	2.03	0.41
28:DG:126:ASP:HB2	28:DG:130:ASN:O	2.20	0.41
31:DN:54:VAL:HG11	31:DN:99:LEU:HD12	2.01	0.41
37:DT:24:PRO:HA	37:DT:49:VAL:HG22	2.02	0.41
38:DU:61:TRP:CD2	38:DU:93:LYS:HA	2.55	0.41
47:D3:22:ALA:O	47:D3:25:ALA:HB3	2.21	0.41
1:AA:457:C:H2'	1:AA:458:C:H6	1.82	0.41
1:AA:518:C:C4	1:AA:530:G:C5	3.08	0.41
1:AA:522:C:H41	12:AL:53:ARG:HH22	1.69	0.41
1:AA:624:C:O2'	16:AP:10:GLY:HA2	2.19	0.41
1:AA:872:A:C4	1:AA:874:G:C8	3.08	0.41
1:AA:1158:C:H4'	2:AB:133:LYS:CB	2.41	0.41
1:AA:1348:U:H2'	1:AA:1349:A:O4'	2.21	0.41
1:AA:1358:U:H5	1:AA:1359:C:C2	2.38	0.41
1:AA:1384:C:N4	1:AA:1385:G:O6	2.54	0.41
4:AD:31:CYS:C	4:AD:33:MET:H	2.29	0.41
6:AF:45:LEU:HD12	6:AF:59:TYR:HD1	1.85	0.41
6:AF:91:VAL:HG21	18:AR:72:ARG:HH12	1.86	0.41
7:AG:68:ASN:O	7:AG:135:VAL:HG13	2.21	0.41
9:AI:49:PRO:HB2	9:AI:81:ILE:O	2.21	0.41
23:BA:384:U:H2'	23:BA:385:C:H6	1.86	0.41
23:BA:1759:A:H1'	23:BA:2711:A:C2	2.56	0.41
23:BA:2287:A:C5	23:BA:2289:G:C5	3.09	0.41
23:BA:2337:G:C2	23:BA:2338:G:C8	3.09	0.41
23:BA:2526:G:H5'	23:BA:2742:C:O2'	2.21	0.41
24:BB:85:G:H2'	24:BB:86:G:H5'	2.03	0.41
25:BD:53:PHE:HB3	25:BD:218:ARG:O	2.21	0.41
35:BR:54:LEU:HD12	35:BR:54:LEU:HA	1.90	0.41
38:BU:105:VAL:HG11	39:BV:39:LEU:HD21	2.01	0.41
42:BY:76:CYS:HA	42:BY:77:PRO:HD3	1.88	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:15:G:H4'	5:CE:24:ARG:NH1	2.34	0.41
1:CA:175:C:H2'	1:CA:176:C:C6	2.56	0.41
1:CA:374:A:H2'	1:CA:374:A:N3	2.36	0.41
1:CA:416:G:H2'	1:CA:417:C:O4'	2.20	0.41
1:CA:938:A:N6	1:CA:939:G:C6	2.89	0.41
1:CA:954:G:C6	13:CM:104:ARG:NH1	2.88	0.41
1:CA:1155:G:C6	1:CA:1156:G:C6	3.09	0.41
1:CA:1163:C:C4	1:CA:1164:G:N7	2.89	0.41
1:CA:1273:G:H3'	1:CA:1274:G:C8	2.31	0.41
1:CA:1329:A:H5"	13:CM:25:ILE:C	2.46	0.41
1:CA:1443:G:O6	1:CA:1459:C:O2	2.38	0.41
2:CB:79:ASP:O	2:CB:82:ARG:N	2.54	0.41
4:CD:93:PHE:O	4:CD:97:LEU:HB2	2.20	0.41
8:CH:20:TYR:HA	8:CH:65:TYR:CZ	2.56	0.41
9:CI:9:ARG:HB2	9:CI:9:ARG:NH1	2.31	0.41
10:CJ:54:PHE:CG	10:CJ:55:LYS:N	2.88	0.41
15:CO:17:ARG:HH11	15:CO:17:ARG:HG3	1.86	0.41
23:DA:7:G:H4'	31:DN:13:TRP:CZ2	2.56	0.41
23:DA:483:A:O4'	42:DY:48:ALA:HB1	2.20	0.41
23:DA:580:C:H2'	23:DA:581:C:H6	1.85	0.41
23:DA:1048:A:O2'	23:DA:1049:C:P	2.78	0.41
23:DA:1504:C:O2'	23:DA:1505:C:H5'	2.20	0.41
23:DA:1695:G:H2'	23:DA:1696:G:O4'	2.21	0.41
23:DA:1840:G:C6	23:DA:1841:U:C4	3.09	0.41
23:DA:2340:G:O2'	23:DA:2341:G:H5'	2.20	0.41
23:DA:2484:G:C2	23:DA:2485:G:C8	3.08	0.41
23:DA:2577:A:O4'	49:D5:3:LYS:HB2	2.21	0.41
23:DA:2679:A:H2'	23:DA:2680:C:O4'	2.20	0.41
25:DD:85:ASP:C	25:DD:85:ASP:OD1	2.64	0.41
30:DI:5:LEU:HD11	30:DI:19:VAL:CG2	2.48	0.41
34:DQ:3:MET:HE2	34:DQ:3:MET:HB3	1.89	0.41
38:DU:105:VAL:HG11	39:DV:39:LEU:HD21	2.02	0.41
46:D2:35:LEU:HD23	46:D2:35:LEU:HA	1.92	0.41
1:AA:41:G:H2'	1:AA:42:G:C8	2.56	0.41
1:AA:189(C):C:H2'	1:AA:189(D):C:O4'	2.21	0.41
1:AA:227:G:H2'	1:AA:228:A:C8	2.56	0.41
1:AA:299:G:H2'	1:AA:300:A:C8	2.56	0.41
1:AA:510:A:H5"	1:AA:511:C:OP2	2.21	0.41
1:AA:586:C:C2'	1:AA:587:G:H5'	2.51	0.41
1:AA:641:U:O3'	1:AA:642:A:H8	2.02	0.41
1:AA:830:G:H2'	1:AA:831:U:O4'	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:939:G:H2'	1:AA:940:C:C6	2.56	0.41
1:AA:975:A:H4'	1:AA:976:G:H5"	2.03	0.41
1:AA:1001(A):G:C6	1:AA:1002:G:C5	3.08	0.41
1:AA:1003:G:C2	1:AA:1004:A:C8	3.09	0.41
1:AA:1203:C:C2	1:AA:1204:A:C8	3.09	0.41
1:AA:1242:C:H5"	1:AA:1304:G:OP1	2.20	0.41
1:AA:1305:G:N2	1:AA:1331:G:H1'	2.36	0.41
1:AA:1346:A:C8	1:AA:1348:U:C2	3.09	0.41
1:AA:1360:A:N7	14:AN:18:VAL:HG12	2.35	0.41
1:AA:1442:G:N7	1:AA:1442(A):G:C5	2.88	0.41
2:AB:98:LEU:O	2:AB:101:MET:HB2	2.20	0.41
2:AB:157:ARG:HB3	2:AB:157:ARG:HH11	1.85	0.41
2:AB:166:ASP:HB3	2:AB:169:LYS:HB2	2.02	0.41
2:AB:178:ARG:HH21	8:AH:74:PRO:HB3	1.86	0.41
4:AD:119:GLN:O	4:AD:123:HIS:CD2	2.74	0.41
4:AD:127:THR:OG1	4:AD:128:VAL:N	2.53	0.41
7:AG:47:CYS:O	7:AG:58:PRO:HB3	2.20	0.41
7:AG:68:ASN:O	7:AG:138:LYS:HE2	2.21	0.41
7:AG:127:ALA:CB	7:AG:134:ALA:HB3	2.51	0.41
9:AI:59:PHE:HD1	9:AI:59:PHE:HA	1.66	0.41
11:AK:122:LYS:HE2	11:AK:122:LYS:HB3	1.72	0.41
12:AL:47:LYS:HA	12:AL:49:ASN:H	1.86	0.41
17:AQ:91:ARG:O	17:AQ:94:ASN:HB2	2.21	0.41
20:AT:61:SER:O	20:AT:65:LYS:HG3	2.21	0.41
20:AT:74:LYS:HG3	20:AT:75:ASN:OD1	2.21	0.41
23:BA:10:G:H1'	23:BA:2801(A):A:C2	2.56	0.41
23:BA:107:C:C2	23:BA:108:U:C5	3.09	0.41
23:BA:557:U:H2'	23:BA:558:G:H8	1.86	0.41
23:BA:819:A:C4	23:BA:1189:A:C2	3.08	0.41
23:BA:1541:G:H5"	23:BA:1542:A:OP2	2.21	0.41
23:BA:1668:A:H4'	23:BA:1669:A:O5'	2.21	0.41
23:BA:2080:G:P	45:B1:35:THR:OG1	2.78	0.41
23:BA:2108:C:H2'	23:BA:2109:U:C5'	2.50	0.41
23:BA:2161:C:O2'	23:BA:2162:G:H5'	2.20	0.41
23:BA:2884:U:O2	49:B5:53:ALA:HB2	2.20	0.41
26:BE:35:GLN:OE1	26:BE:66:HIS:HE1	2.04	0.41
26:BE:116:VAL:HG13	26:BE:122:PHE:CD2	2.56	0.41
27:BF:168:ARG:HG2	27:BF:175:THR:HG21	2.02	0.41
28:BG:74:LYS:O	28:BG:84:LYS:HG2	2.21	0.41
29:BH:60:ARG:HE	29:BH:60:ARG:HB3	1.74	0.41
29:BH:149:ARG:HH12	29:BH:167:GLU:CD	2.29	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BI:72:LEU:HA	30:BI:75:LEU:CD2	2.51	0.41
30:BI:79:ILE:HA	30:BI:80:PRO:HD2	1.87	0.41
31:BN:34:LEU:O	31:BN:49:GLY:HA3	2.20	0.41
34:BQ:32:TYR:CE2	34:BQ:133:ARG:HG3	2.56	0.41
40:BW:64:MET:HE3	40:BW:109:GLU:HG3	2.03	0.41
47:B3:44:ARG:O	47:B3:48:GLU:HG3	2.21	0.41
48:B4:6:HIS:HA	48:B4:7:PRO:HD2	1.76	0.41
52:B8:62:LEU:HB3	52:B8:65:GLU:CG	2.51	0.41
1:CA:111:G:O6	1:CA:330:C:N4	2.52	0.41
1:CA:189(C):C:H2'	1:CA:189(D):C:O4'	2.20	0.41
1:CA:342:C:C2	1:CA:348:G:N2	2.89	0.41
1:CA:521:G:H2'	1:CA:522:C:H6	1.86	0.41
1:CA:641:U:O3'	1:CA:642:A:H8	2.03	0.41
1:CA:970:C:H41	9:CI:126:SER:CB	2.34	0.41
1:CA:976:G:OP1	14:CN:31:ARG:HD3	2.21	0.41
1:CA:986:A:H2'	1:CA:987:G:O4'	2.20	0.41
1:CA:1047:G:H1'	1:CA:1215:G:O2'	2.20	0.41
1:CA:1084:G:C6	1:CA:1085:U:C4	3.08	0.41
1:CA:1107:C:N4	1:CA:1108:G:N7	2.69	0.41
1:CA:1109:C:H2'	1:CA:1110:A:O4'	2.21	0.41
1:CA:1182:G:H4'	1:CA:1183:A:H5'	2.02	0.41
1:CA:1253:G:H2'	1:CA:1254:C:C6	2.56	0.41
1:CA:1291:G:C2'	1:CA:1292:U:H5'	2.50	0.41
1:CA:1319:A:N1	1:CA:1323:G:H1'	2.35	0.41
1:CA:1392:G:N2	1:CA:1502:A:H8	2.13	0.41
1:CA:1465:C:H2'	1:CA:1466:C:O4'	2.21	0.41
2:CB:22:LYS:H	2:CB:40:HIS:HD2	1.68	0.41
2:CB:116:GLU:HA	2:CB:119:GLU:HB2	2.03	0.41
3:CC:6:HIS:HE1	3:CC:184:TYR:CD2	2.39	0.41
3:CC:16:ARG:HD2	3:CC:54:ARG:NH2	2.36	0.41
3:CC:132:ARG:O	3:CC:136:GLN:HB2	2.20	0.41
4:CD:174:LEU:HD23	4:CD:174:LEU:HA	1.82	0.41
5:CE:66:MET:O	5:CE:67:VAL:HB	2.20	0.41
6:CF:76:ALA:O	6:CF:80:ARG:HG3	2.21	0.41
7:CG:116:ALA:HA	7:CG:119:ARG:HB2	2.03	0.41
8:CH:38:ILE:HD12	8:CH:118:VAL:HG12	2.01	0.41
8:CH:44:PHE:HA	8:CH:79:VAL:CG1	2.51	0.41
8:CH:73:ASP:OD2	8:CH:75:ARG:HD3	2.21	0.41
9:CI:12:GLU:O	9:CI:67:GLY:HA3	2.20	0.41
9:CI:100:GLY:O	9:CI:103:THR:HG22	2.20	0.41
11:CK:20:TYR:CE2	11:CK:83:ILE:HD12	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:CK:99:GLN:HA	11:CK:105:VAL:HG11	2.03	0.41
13:CM:3:ARG:HE	13:CM:4:ILE:HG22	1.86	0.41
13:CM:20:THR:HG23	13:CM:26:GLY:HA2	2.03	0.41
15:CO:18:PHE:HD1	15:CO:20:GLY:H	1.69	0.41
17:CQ:82:MET:HE2	17:CQ:82:MET:HB3	1.92	0.41
18:CR:85:LEU:HD22	18:CR:86:VAL:N	2.35	0.41
19:CS:69:HIS:HD2	19:CS:74:PHE:HE1	1.69	0.41
23:DA:117:G:C6	23:DA:119:A:C6	3.09	0.41
23:DA:118:A:C8	23:DA:119:A:C8	3.09	0.41
23:DA:773:U:H5'	25:DD:47:GLY:HA3	2.02	0.41
23:DA:922:U:H2'	23:DA:923:C:C6	2.55	0.41
23:DA:1049:C:H1'	23:DA:1113:U:H4'	2.02	0.41
23:DA:1382:G:H2'	23:DA:1383:C:C6	2.56	0.41
23:DA:1433:U:O2	23:DA:1561:G:C2	2.74	0.41
23:DA:1587:A:H2'	23:DA:1588:C:C6	2.55	0.41
23:DA:1651:G:N2	23:DA:2007:C:C2	2.89	0.41
23:DA:2335:A:C8	23:DA:2337:G:N7	2.89	0.41
23:DA:2833:G:O2'	23:DA:2834:G:P	2.78	0.41
24:DB:28:C:C2	24:DB:29:A:C8	3.09	0.41
24:DB:78:A:C2	24:DB:100:A:C4	3.09	0.41
25:DD:267:SER:C	25:DD:269:PHE:N	2.79	0.41
27:DF:167:ALA:HB1	27:DF:173:VAL:HG11	2.01	0.41
29:DH:32:GLU:O	29:DH:33:LEU:HD23	2.21	0.41
29:DH:33:LEU:HD11	29:DH:136:ILE:O	2.21	0.41
30:DI:59:ALA:O	30:DI:63:ALA:N	2.54	0.41
35:DR:26:LYS:HE2	35:DR:70:LEU:O	2.21	0.41
40:DW:68:ARG:O	40:DW:109:GLU:HA	2.21	0.41
42:DY:90:LEU:C	42:DY:92:ASN:H	2.29	0.41
43:DZ:45:ASP:CG	43:DZ:49:ARG:HH11	2.28	0.41
44:D0:41:ARG:HD2	44:D0:41:ARG:HA	1.80	0.41
45:D1:40:ARG:HE	45:D1:40:ARG:HB2	1.67	0.41
49:D5:49:CYS:SG	49:D5:51:TYR:HD1	2.44	0.41
1:AA:41:G:H2'	1:AA:42:G:H8	1.85	0.41
1:AA:597:G:N2	8:AH:94:TYR:OH	2.53	0.41
1:AA:769:G:H4'	1:AA:1513:A:H4'	2.03	0.41
1:AA:976:G:H8	1:AA:1358:U:H2'	1.85	0.41
1:AA:977:A:H2'	1:AA:978:A:H5"	2.02	0.41
1:AA:1055:A:N6	1:AA:1056:U:C4	2.89	0.41
1:AA:1253:G:OP1	10:AJ:44:VAL:HG23	2.21	0.41
1:AA:1271:G:N3	1:AA:1272:G:H1'	2.36	0.41
1:AA:1352:C:H2'	1:AA:1353: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:1355:G:C6	1:AA:1368:G:C6	3.09	0.41
2:AB:75:LYS:HE3	2:AB:78:GLN:OE1	2.21	0.41
3:AC:32:LEU:HB3	3:AC:59:ARG:CZ	2.51	0.41
5:AE:21:ALA:O	5:AE:22:GLY:C	2.63	0.41
8:AH:101:PRO:HG3	8:AH:133:LEU:HD11	2.03	0.41
9:AI:9:ARG:HB2	9:AI:9:ARG:NH1	2.32	0.41
13:AM:91:ARG:HD2	13:AM:91:ARG:HA	1.93	0.41
15:AO:7:GLU:O	15:AO:10:LYS:HB3	2.20	0.41
17:AQ:15:MET:HE3	17:AQ:15:MET:HB2	1.97	0.41
23:BA:9:U:O4	23:BA:2629:A:C2	2.73	0.41
23:BA:127:A:H5"	23:BA:128:C:O4'	2.20	0.41
23:BA:322:A:C5	23:BA:340:A:C2	3.09	0.41
23:BA:1711:C:H2'	23:BA:1712:C:C6	2.55	0.41
23:BA:2127:G:HO2'	23:BA:2173:A:H2	1.64	0.41
25:BD:218:ARG:HB3	25:BD:219:PRO:HD2	2.03	0.41
27:BF:140:LEU:HA	27:BF:140:LEU:HD13	1.90	0.41
27:BF:179:GLU:H	27:BF:179:GLU:CD	2.29	0.41
28:BG:24:GLY:O	28:BG:26:GLN:NE2	2.54	0.41
32:BO:104:ARG:NH1	37:BT:34:VAL:HG21	2.36	0.41
48:B4:14:ILE:HA	48:B4:31:ILE:O	2.19	0.41
1:CA:57:G:H2'	1:CA:58:C:O4'	2.21	0.41
1:CA:107:G:H2'	1:CA:108:G:O4'	2.21	0.41
1:CA:373:A:C8	1:CA:482:A:C8	3.09	0.41
1:CA:391:G:C6	1:CA:392:G:C5	3.09	0.41
1:CA:509:A:O2'	1:CA:510:A:OP1	2.29	0.41
1:CA:707:C:OP1	11:CK:85:ARG:NH1	2.54	0.41
1:CA:828:A:H5"	1:CA:859:A:C2	2.56	0.41
1:CA:925:G:C2	1:CA:927:G:C8	3.09	0.41
1:CA:1072:G:O2'	1:CA:1073:U:H5'	2.20	0.41
1:CA:1203:C:H2'	1:CA:1204:A:O4'	2.20	0.41
1:CA:1236:A:O2'	1:CA:1304:G:H4'	2.21	0.41
2:CB:224:GLN:HB2	2:CB:229:VAL:HG22	2.02	0.41
3:CC:130:VAL:O	3:CC:134:ILE:HG13	2.21	0.41
4:CD:6:GLY:O	4:CD:8:VAL:N	2.53	0.41
13:CM:63:THR:HG23	13:CM:64:TRP:CD1	2.56	0.41
15:CO:76:GLU:O	15:CO:80:ALA:N	2.53	0.41
23:DA:107:C:H2'	23:DA:108:U:C6	2.54	0.41
23:DA:729:G:H2'	23:DA:1775:U:H1'	2.04	0.41
23:DA:1138:G:N3	31:DN:106:MET:HE2	2.36	0.41
23:DA:2115:G:H5"	23:DA:2116:G:OP2	2.21	0.41
23:DA:2400:G:C5	23:DA:2401:U:C5	3.09	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:2702:U:H4'	23:DA:2703:C:OP1	2.20	0.41
23:DA:2752:C:O5'	23:DA:2752:C:H6	2.04	0.41
24:DB:59:A:H2'	24:DB:60:C:H6	1.85	0.41
25:DD:221:VAL:HG22	25:DD:226:MET:CE	2.47	0.41
26:DE:137:HIS:HB3	26:DE:138:PRO:HD2	2.02	0.41
28:DG:50:ALA:C	28:DG:52:ILE:H	2.29	0.41
30:DI:78:THR:HA	30:DI:143:SER:O	2.21	0.41
38:DU:76:TYR:CD2	38:DU:76:TYR:C	2.98	0.41
41:DX:94:GLY:HA3	41:DX:95:LEU:HA	1.66	0.41
50:D6:14:THR:O	50:D6:17:LYS:NZ	2.30	0.41
52:D8:26:LYS:HZ2	52:D8:26:LYS:HG2	1.72	0.41
1:AA:2:U:O5'	1:AA:2:U:H6	2.05	0.40
1:AA:44:G:OP1	16:AP:11:SER:HB2	2.21	0.40
1:AA:89:C:H2'	1:AA:90:U:C5	2.56	0.40
1:AA:225:C:C4	1:AA:226:G:N7	2.89	0.40
1:AA:317:G:C6	1:AA:318:G:N7	2.89	0.40
1:AA:505:G:C6	1:AA:535:A:C2	3.09	0.40
1:AA:626:U:H2'	1:AA:627:G:C8	2.51	0.40
1:AA:627:G:O2'	1:AA:628:G:H5'	2.20	0.40
1:AA:683:G:N2	1:AA:708:C:C2	2.89	0.40
1:AA:1027:C:H2'	1:AA:1028:C:C4	2.55	0.40
1:AA:1065:U:O2	1:AA:1109:C:H5'	2.21	0.40
1:AA:1157:A:C4'	1:AA:1158:C:H5'	2.40	0.40
1:AA:1160:G:C4	1:AA:1161:C:C5	3.09	0.40
1:AA:1248:A:C2	1:AA:1289:A:N6	2.88	0.40
5:AE:137:GLU:HG2	5:AE:140:ARG:HH11	1.87	0.40
9:AI:24:GLY:O	9:AI:26:VAL:HG23	2.21	0.40
14:AN:45:ARG:HG2	14:AN:49:HIS:CD2	2.56	0.40
23:BA:1106:G:H4'	23:BA:1107:G:OP2	2.20	0.40
23:BA:1364:G:N7	45:B1:3:LYS:HD3	2.36	0.40
23:BA:1538:G:O2'	23:BA:1539:G:OP1	2.28	0.40
23:BA:2420:C:H6	23:BA:2420:C:O5'	2.04	0.40
27:BF:150:GLY:HA2	27:BF:172:TRP:CE3	2.57	0.40
28:BG:103:LEU:HA	28:BG:103:LEU:HD23	1.82	0.40
32:BO:81:ASP:OD2	32:BO:81:ASP:N	2.52	0.40
37:BT:33:LYS:O	37:BT:82:LEU:HD23	2.21	0.40
38:BU:47:TYR:HA	38:BU:50:ARG:NH2	2.36	0.40
39:BV:65:GLY:HA3	39:BV:91:TYR:CZ	2.56	0.40
41:BX:94:GLY:HA3	41:BX:95:LEU:HA	1.63	0.40
1:CA:175:C:H2'	1:CA:176:C:H6	1.85	0.40
1:CA:246:A:N3	1:CA:247:G:H1'	2.36	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:390:C:H2'	1:CA:391:G:H8	1.86	0.40
1:CA:689:C:P	11:CK:46:GLY:HA3	2.61	0.40
1:CA:731:G:OP1	1:CA:766:A:H1'	2.20	0.40
1:CA:790:A:N1	1:CA:1497:G:H5"	2.36	0.40
1:CA:865:A:O5'	1:CA:865:A:H8	2.04	0.40
1:CA:994:A:H61	1:CA:1047:G:C4'	2.34	0.40
1:CA:1168:A:C6	1:CA:1169:A:C6	3.09	0.40
3:CC:47:LEU:HD23	3:CC:47:LEU:HA	1.89	0.40
11:CK:31:THR:HG22	11:CK:42:TRP:CB	2.51	0.40
23:DA:188:G:H1	23:DA:208:C:N4	2.18	0.40
23:DA:271(H):G:O2'	23:DA:271(I):G:OP2	2.28	0.40
23:DA:271(S):G:C6	23:DA:271(T):C:C4	3.08	0.40
23:DA:626:U:O4	33:DP:107:LYS:HE2	2.21	0.40
23:DA:858:U:O2	23:DA:2268:A:H2'	2.20	0.40
23:DA:1138:G:C4	23:DA:1139:G:H1'	2.56	0.40
23:DA:1420:U:H6	23:DA:1420:U:H2'	1.61	0.40
23:DA:2127:G:HO2'	23:DA:2173:A:H2	1.63	0.40
23:DA:2834:G:N2	23:DA:2882:A:N6	2.69	0.40
25:DD:9:TYR:CZ	25:DD:13:ARG:HG2	2.56	0.40
27:DF:126:VAL:HG21	27:DF:129:PHE:CE1	2.55	0.40
32:DO:35:VAL:HG21	32:DO:103:ALA:HB3	2.03	0.40
35:DR:38:VAL:HB	35:DR:39:PRO:HD3	2.02	0.40
37:DT:3:ARG:HB2	37:DT:3:ARG:NH2	2.36	0.40
52:D8:34:TRP:CD2	52:D8:35:GLN:HB2	2.56	0.40
1:AA:112:G:H2'	1:AA:112:G:N3	2.37	0.40
1:AA:394:G:H2'	1:AA:395:C:C6	2.57	0.40
1:AA:588:G:OP2	56:AA:1873:HOH:O	2.22	0.40
1:AA:674:G:H2'	1:AA:675:A:C8	2.44	0.40
1:AA:707:C:OP1	11:AK:85:ARG:NH1	2.54	0.40
1:AA:863:U:H2'	1:AA:865:A:OP2	2.22	0.40
1:AA:941:G:H1	1:AA:1342:C:N4	2.14	0.40
1:AA:990:C:H5'	1:AA:1018:C:OP2	2.21	0.40
1:AA:1271:G:C6	1:AA:1272:G:C4	3.09	0.40
1:AA:1316:G:H2'	1:AA:1318:A:OP2	2.20	0.40
1:AA:1346:A:O3'	1:AA:1347:G:H4'	2.21	0.40
1:AA:1348:U:C4	1:AA:1374:A:N7	2.90	0.40
1:AA:1431:C:H2'	1:AA:1432:G:O4'	2.21	0.40
2:AB:166:ASP:CG	2:AB:169:LYS:HB2	2.47	0.40
3:AC:138:VAL:HG13	3:AC:149:ALA:HB3	2.03	0.40
7:AG:20:ASP:O	7:AG:21:VAL:C	2.64	0.40
8:AH:23:SER:HA	8:AH:61:VAL:O	2.22	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:AO:43:LEU:HD23	15:AO:43:LEU:HA	1.77	0.40
16:AP:23:ASP:HB3	16:AP:26:ARG:HG2	2.03	0.40
23:BA:271(H):G:C6	23:BA:271(Q):G:C6	3.09	0.40
23:BA:1047:G:H2'	23:BA:1110:G:H22	1.84	0.40
23:BA:1540:U:H2'	23:BA:1541:G:O4'	2.21	0.40
23:BA:1568:G:H5'	25:BD:60:ARG:HA	2.03	0.40
23:BA:1636:C:H2'	23:BA:1637:A:C8	2.56	0.40
23:BA:2473:U:O2	23:BA:2473:U:H2'	2.20	0.40
25:BD:102:LYS:C	25:BD:103:ARG:HG2	2.46	0.40
27:BF:32:LEU:O	27:BF:35:GLU:N	2.55	0.40
31:BN:20:GLY:HA2	31:BN:61:ARG:CG	2.49	0.40
34:BQ:3:MET:HB3	34:BQ:3:MET:HE2	1.82	0.40
48:B4:42:PHE:CB	48:B4:43:TYR:HB2	2.50	0.40
1:CA:189:G:H2'	1:CA:189(A):C:C6	2.56	0.40
1:CA:622:A:C8	1:CA:623:C:C5	3.09	0.40
1:CA:673:G:H5"	6:CF:87:ARG:CZ	2.51	0.40
1:CA:1015:A:C2	1:CA:1218:C:O2	2.72	0.40
1:CA:1151:A:O4'	10:CJ:39:PRO:HB2	2.20	0.40
1:CA:1274:G:H21	1:CA:1275:A:N6	2.14	0.40
1:CA:1370:G:O2'	1:CA:1371:G:H5'	2.21	0.40
1:CA:1511:G:H2'	1:CA:1512:U:O4'	2.21	0.40
2:CB:55:PHE:HD2	2:CB:55:PHE:HA	1.77	0.40
2:CB:166:ASP:CG	2:CB:169:LYS:HB2	2.46	0.40
3:CC:57:ILE:HG12	3:CC:66:VAL:HA	2.03	0.40
5:CE:107:ARG:O	5:CE:111:GLU:N	2.53	0.40
6:CF:91:VAL:HG11	18:CR:72:ARG:NH1	2.32	0.40
13:CM:96:LEU:HA	13:CM:97:PRO:HD3	1.88	0.40
23:DA:226:G:N2	23:DA:228:A:N6	2.68	0.40
23:DA:243:U:O2'	23:DA:244:A:H5'	2.22	0.40
23:DA:706:A:H2'	23:DA:707:G:O4'	2.21	0.40
23:DA:950:G:C6	23:DA:951:C:C4	3.10	0.40
23:DA:1421:G:C2	23:DA:1422:G:N7	2.89	0.40
23:DA:1586:A:H2'	23:DA:1587:A:H5'	2.03	0.40
23:DA:2583:G:H2'	23:DA:2584:U:H6	1.86	0.40
23:DA:2648:C:H2'	23:DA:2649:U:C6	2.56	0.40
23:DA:2788:C:OP1	26:DE:61:ARG:NH2	2.53	0.40
24:DB:117:G:C4'	36:DS:54:LEU:HD23	2.47	0.40
34:DQ:18:LYS:O	34:DQ:98:LYS:HD3	2.21	0.40
40:DW:79:GLY:CA	40:DW:100:THR:HG22	2.49	0.40
45:D1:58:ILE:HG21	45:D1:58:ILE:HD13	1.76	0.40
1:AA:152:A:C8	1:AA:153:C:C5	3.09	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:304:U:C2	1:AA:305:G:N7	2.90	0.40
1:AA:592:G:C6	1:AA:648:A:C6	3.10	0.40
1:AA:599:C:H4'	8:AH:130:GLY:C	2.47	0.40
1:AA:664:G:P	18:AR:64:ARG:HH21	2.43	0.40
1:AA:826:C:H2'	1:AA:827:U:H6	1.86	0.40
1:AA:1060:C:H4'	10:AJ:51:ARG:C	2.46	0.40
1:AA:1192:C:OP1	3:AC:4:LYS:NZ	2.55	0.40
1:AA:1205:U:H2'	1:AA:1206:G:H8	1.86	0.40
1:AA:1347:G:H8	9:AI:107:ARG:CB	2.34	0.40
1:AA:1363(A):A:P	1:AA:1363(A):A:C8	3.14	0.40
9:AI:52:ALA:HB2	9:AI:101:PHE:CE1	2.56	0.40
9:AI:110:GLU:HG2	9:AI:111:ARG:H	1.86	0.40
14:AN:47:LEU:HB2	14:AN:53:LEU:CG	2.49	0.40
22:AV:34:LEU:O	22:AV:37:ARG:N	2.53	0.40
23:BA:154(A):C:H5"	23:BA:154(A):C:O2	2.22	0.40
23:BA:479:A:H4'	23:BA:480:A:OP1	2.21	0.40
23:BA:551:G:O2'	23:BA:1220:A:N3	2.45	0.40
23:BA:1038:C:H6	23:BA:1038:C:H5"	1.86	0.40
23:BA:1246:A:OP1	56:BA:4348:HOH:O	2.22	0.40
23:BA:1260:G:C6	23:BA:1261:C:C4	3.09	0.40
23:BA:1638:C:H4'	23:BA:2710:C:O2	2.21	0.40
27:BF:197:ASP:OD2	27:BF:197:ASP:N	2.54	0.40
37:BT:84:GLN:NE2	37:BT:85:LYS:HG2	2.35	0.40
44:B0:55:ARG:NH1	44:B0:55:ARG:HB2	2.36	0.40
1:CA:658:G:H2'	1:CA:659:U:C6	2.56	0.40
1:CA:791:G:O5'	1:CA:791:G:H8	2.04	0.40
1:CA:881:G:OP2	12:CL:12:ARG:NH2	2.54	0.40
1:CA:981:U:H4'	14:CN:21:TYR:CZ	2.56	0.40
1:CA:1039:C:H2'	1:CA:1040:U:O4'	2.21	0.40
1:CA:1152:A:H5'	10:CJ:13:HIS:CD2	2.57	0.40
1:CA:1264:C:H2'	1:CA:1265:G:H8	1.82	0.40
1:CA:1269:A:C4	1:CA:1313:U:H1'	2.56	0.40
1:CA:1342:C:H2'	1:CA:1343:G:C8	2.57	0.40
4:CD:6:GLY:O	4:CD:8:VAL:HG23	2.21	0.40
5:CE:149:GLU:H	5:CE:149:GLU:HG2	1.53	0.40
13:CM:33:ALA:HB2	13:CM:64:TRP:CZ3	2.56	0.40
15:CO:36:ILE:O	15:CO:39:LEU:N	2.55	0.40
20:CT:74:LYS:HB3	20:CT:74:LYS:HE2	1.88	0.40
23:DA:330:A:C2	23:DA:1210:A:H2'	2.52	0.40
23:DA:827:U:O2	23:DA:2246:G:H4'	2.22	0.40
23:DA:1753:G:OP1	37:DT:95:ARG:HD3	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DA:1799:G:C8	25:DD:181:GLU:OE2	2.74	0.40
23:DA:2119:A:C6	23:DA:2171:A:C5	3.10	0.40
29:DH:56:SER:OG	29:DH:57:ASP:N	2.55	0.40
30:DI:75:LEU:CD2	30:DI:140:LEU:HD21	2.52	0.40
31:DN:18:ALA:HB3	31:DN:56:ASN:O	2.21	0.40
32:DO:59:LYS:NZ	32:DO:89:ASN:HD21	2.19	0.40
32:DO:68:GLU:O	32:DO:68:GLU:HG2	2.21	0.40
36:DS:58:LEU:HB2	36:DS:59:LYS:CB	2.50	0.40
37:DT:118:ARG:HG3	37:DT:118:ARG:NH1	2.37	0.40
38:DU:31:SER:O	38:DU:32:PHE:C	2.64	0.40
38:DU:109:LEU:HD23	38:DU:109:LEU:HA	1.83	0.40
44:D0:10:THR:HG22	44:D0:12:ASN:H	1.86	0.40
1:AA:56:U:C2	1:AA:57:G:C8	3.09	0.40
1:AA:373:A:H61	1:AA:391:G:H1'	1.87	0.40
1:AA:392:G:C4	1:AA:393:A:C8	3.09	0.40
1:AA:489:C:H6	1:AA:489:C:O5'	2.04	0.40
1:AA:563:A:N7	1:AA:567:G:H1'	2.36	0.40
1:AA:820:U:H4'	1:AA:821:G:OP2	2.21	0.40
1:AA:934:C:O2	1:AA:934:C:O4'	2.39	0.40
1:AA:1030(C):G:H3'	1:AA:1030(C):G:C8	2.57	0.40
1:AA:1147:C:H2'	1:AA:1148:U:C6	2.56	0.40
1:AA:1442:G:H2'	1:AA:1442(A):G:C8	2.56	0.40
1:AA:1503:A:N6	1:AA:1532:U:O2'	2.55	0.40
2:AB:116:GLU:HA	2:AB:119:GLU:HB2	2.03	0.40
2:AB:155:LEU:HD22	2:AB:155:LEU:HA	1.91	0.40
6:AF:10:LEU:HD13	6:AF:61:LEU:HD13	2.04	0.40
7:AG:102:ARG:HE	7:AG:102:ARG:HB2	1.46	0.40
8:AH:127:LEU:HD13	8:AH:127:LEU:HA	1.94	0.40
9:AI:111:ARG:CB	14:AN:61:TRP:HE1	2.34	0.40
13:AM:68:GLY:H	13:AM:71:ARG:HH21	1.69	0.40
14:AN:32:SER:HB3	14:AN:41:ARG:HB3	2.03	0.40
17:AQ:39:SER:O	17:AQ:40:LYS:HB2	2.22	0.40
23:BA:111:A:C2	23:BA:112:U:C2	3.09	0.40
23:BA:811:U:H2'	33:BP:21:ARG:HA	2.03	0.40
23:BA:862:G:P	56:BA:4195:HOH:O	2.79	0.40
23:BA:1212:G:N2	23:BA:1236:G:O2'	2.52	0.40
23:BA:1436:G:H1'	23:BA:1477:A:O2'	2.22	0.40
23:BA:1615:C:C5	23:BA:1617:C:C4	3.10	0.40
23:BA:2174:C:H6	23:BA:2174:C:O5'	2.04	0.40
23:BA:2187:G:C6	23:BA:2188:C:C2	3.09	0.40
23:BA:2319:G:C8	23:BA:2320:A:C2	3.10	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BA:2854:G:H2'	23:BA:2855:C:H6	1.85	0.40
28:BG:6:ALA:HB3	28:BG:104:GLU:OE1	2.22	0.40
28:BG:17:PRO:O	28:BG:21:ARG:HB2	2.20	0.40
32:BO:2:ILE:HD12	32:BO:6:THR:HG21	2.02	0.40
1:CA:519:C:H2'	1:CA:520:A:H8	1.85	0.40
1:CA:786:G:C2	1:CA:797:C:C2	3.09	0.40
1:CA:1057:G:C5	1:CA:1204:A:C2	3.10	0.40
1:CA:1079:G:C6	1:CA:1080:A:N6	2.90	0.40
2:CB:118:LEU:O	2:CB:122:PHE:N	2.55	0.40
17:CQ:3:LYS:HD3	17:CQ:61:GLU:O	2.21	0.40
22:CV:30:PRO:HB2	22:CV:31:TYR:HB2	2.04	0.40
23:DA:631:A:H2'	23:DA:632:A:O4'	2.21	0.40
23:DA:754:C:H2'	23:DA:755:C:H6	1.86	0.40
23:DA:826:U:OP1	23:DA:2428:G:H3'	2.21	0.40
23:DA:979:G:C6	23:DA:982:C:C5	3.09	0.40
23:DA:1266:G:O5'	40:DW:15:ARG:NH2	2.54	0.40
23:DA:1504:C:H2'	23:DA:1505:C:H6	1.86	0.40
23:DA:1529:G:O2'	23:DA:1530:C:H5'	2.21	0.40
23:DA:2192:G:C2	23:DA:2193:G:C8	3.09	0.40
23:DA:2416:C:O5'	23:DA:2416:C:H6	2.04	0.40
26:DE:24:THR:HG23	26:DE:184:VAL:HG12	2.04	0.40
28:DG:105:LYS:HE2	28:DG:105:LYS:HB2	1.91	0.40
30:DI:44:LEU:HA	30:DI:44:LEU:HD12	1.39	0.40
35:DR:70:LEU:HA	35:DR:70:LEU:HD23	1.84	0.40
40:DW:41:LYS:HE3	49:D5:25:LEU:HD21	2.04	0.40
43:DZ:110:GLY:C	43:DZ:111:VAL:O	2.62	0.40
44:D0:50:ASN:C	44:D0:62:LEU:HD12	2.45	0.40
48:D4:6:HIS:HA	48:D4:7:PRO:HD2	1.83	0.40
1:AA:11:G:C6	1:AA:12:U:C4	3.09	0.40
1:AA:38:G:H22	1:AA:397:A:P	2.44	0.40
1:AA:78:G:H1	1:AA:91:C:H42	1.69	0.40
1:AA:112:G:H4'	1:AA:389:A:H4'	2.04	0.40
1:AA:627:G:H2'	1:AA:628:G:H8	1.87	0.40
1:AA:642:A:N3	8:AH:113:SER:OG	2.51	0.40
1:AA:649:G:H2'	1:AA:650:G:C8	2.56	0.40
1:AA:763:G:H2'	1:AA:764:C:H6	1.87	0.40
1:AA:970:C:C5'	1:AA:972:C:C2	3.04	0.40
1:AA:1010:G:C5	1:AA:1011:G:C8	3.09	0.40
1:AA:1157:A:O4'	1:AA:1158:C:C2	2.75	0.40
1:AA:1392:G:N2	1:AA:1502:A:C8	2.90	0.40
1:AA:1468:A:H2'	1:AA:1469:G:O4'	2.22	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:143:ARG:NH1	8:AH:77:GLU:OE2	2.53	0.40
8:AH:20:TYR:HA	8:AH:65:TYR:CZ	2.57	0.40
9:AI:4:TYR:CD1	9:AI:87:GLN:HG2	2.56	0.40
9:AI:66:ARG:HA	9:AI:73:GLN:NE2	2.37	0.40
11:AK:102:GLY:C	11:AK:103:LEU:HD22	2.46	0.40
12:AL:47:LYS:HB2	12:AL:47:LYS:HE2	1.83	0.40
18:AR:59:SER:HB3	18:AR:62:GLU:HG3	2.04	0.40
23:BA:460:A:C2	23:BA:470:A:C4	3.10	0.40
23:BA:484:C:H2'	23:BA:485:C:C6	2.57	0.40
23:BA:745:G:C2'	23:BA:746:A:H5'	2.51	0.40
23:BA:1528(A):A:N7	23:BA:1529:G:C5	2.89	0.40
23:BA:1586:A:H2'	23:BA:1587:A:H5'	2.03	0.40
23:BA:2292:C:P	36:BS:17:ARG:NH2	2.95	0.40
23:BA:2315:G:H2'	23:BA:2316:C:H6	1.86	0.40
23:BA:2663:G:C5	23:BA:2664:G:C5	3.09	0.40
25:BD:10:THR:OG1	25:BD:13:ARG:HB2	2.22	0.40
28:BG:105:LYS:HE2	28:BG:105:LYS:HB2	1.90	0.40
29:BH:24:VAL:HG22	29:BH:35:VAL:HB	2.03	0.40
32:BO:12:ASP:CG	32:BO:14:THR:HG23	2.47	0.40
32:BO:42:SER:HB3	32:BO:44:LYS:HE2	2.02	0.40
34:BQ:35:VAL:HG13	34:BQ:130:LYS:HB3	2.04	0.40
34:BQ:119:ARG:HE	34:BQ:119:ARG:HB3	1.65	0.40
37:BT:99:LEU:O	37:BT:102:ILE:HG12	2.21	0.40
42:BY:65:ALA:HA	42:BY:66:PRO:HD3	1.91	0.40
42:BY:106:LEU:O	42:BY:107:ASP:HB2	2.21	0.40
43:BZ:63:ASP:OD1	43:BZ:65:GLN:HB3	2.21	0.40
49:B5:29:THR:O	49:B5:30:LEU:HD23	2.22	0.40
1:CA:9:G:OP1	5:CE:122:GLU:HB2	2.22	0.40
1:CA:217:C:O2'	1:CA:470:C:N4	2.55	0.40
1:CA:474:G:C2	1:CA:475:G:C5	3.09	0.40
1:CA:509:A:C6	1:CA:510:A:N1	2.89	0.40
1:CA:561:U:O2'	1:CA:562:C:OP1	2.35	0.40
1:CA:597:G:H5"	1:CA:598:U:OP2	2.21	0.40
1:CA:599:C:H4'	8:CH:130:GLY:C	2.47	0.40
1:CA:698:G:C6	1:CA:699:C:C4	3.10	0.40
1:CA:924:C:H2'	1:CA:925:G:C8	2.56	0.40
1:CA:1107:C:H5"	3:CC:173:VAL:N	2.29	0.40
1:CA:1109:C:O2'	1:CA:1110:A:H5'	2.22	0.40
1:CA:1307:U:O5'	1:CA:1307:U:H6	2.04	0.40
1:CA:1380:U:C4	7:CG:3:ARG:HG2	2.56	0.40
1:CA:1403:C:H6	1:CA:1403:C:O5'	2.04	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1512:U:H2'	1:CA:1513:A:H8	1.86	0.40
11:CK:17:GLY:HA2	11:CK:35:PRO:HD3	2.03	0.40
11:CK:29:ILE:HG12	11:CK:44:SER:HB2	2.03	0.40
18:CR:34:TYR:CD2	18:CR:34:TYR:N	2.89	0.40
22:CV:13:HIS:O	22:CV:13:HIS:ND1	2.46	0.40
23:DA:271(T):C:H2'	23:DA:271(U):G:H8	1.86	0.40
23:DA:469:G:C2'	23:DA:470:A:H5"	2.51	0.40
23:DA:754:C:H2'	23:DA:755:C:C6	2.57	0.40
23:DA:811:U:O2'	33:DP:21:ARG:HG3	2.22	0.40
23:DA:916:G:C2'	23:DA:917:A:H5"	2.52	0.40
23:DA:1721:G:H5"	23:DA:1721:G:N3	2.37	0.40
23:DA:2109:U:H3'	23:DA:2109:U:C6	2.53	0.40
23:DA:2631:G:O2'	23:DA:2810:A:N1	2.47	0.40
23:DA:2732:G:H3'	23:DA:2733:A:O4'	2.20	0.40
23:DA:2820:A:O2'	23:DA:2821:A:OP1	2.30	0.40
28:DG:153:ARG:HE	28:DG:153:ARG:HB2	1.55	0.40
29:DH:13:LYS:HA	29:DH:14:GLY:HA2	1.54	0.40
30:DI:72:LEU:C	30:DI:74:ASN:H	2.30	0.40
31:DN:134:ARG:HA	31:DN:135:PRO:HD3	1.61	0.40
36:DS:102:ALA:HA	36:DS:105:ALA:H	1.85	0.40
43:DZ:44:PHE:CD1	43:DZ:44:PHE:C	2.99	0.40
48:D4:16:CYS:HB2	48:D4:36:CYS:SG	2.62	0.40
50:D6:10:LEU:CD1	50:D6:54:ILE:HA	2.51	0.40

All (1) 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)
30:BI:91:SER:OG	1:CA:368:U:OP1[3_654]	2.19	0.01

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
2	AB	227/256 (89%)	188 (83%)	37 (16%)	2 (1%)	14 48
2	CB	227/256 (89%)	192 (85%)	33 (14%)	2 (1%)	14 48
3	AC	204/239 (85%)	179 (88%)	25 (12%)	0	100 100
3	CC	204/239 (85%)	177 (87%)	27 (13%)	0	100 100
4	AD	206/209 (99%)	179 (87%)	25 (12%)	2 (1%)	12 45
4	CD	206/209 (99%)	180 (87%)	24 (12%)	2 (1%)	12 45
5	AE	146/162 (90%)	125 (86%)	20 (14%)	1 (1%)	18 53
5	CE	146/162 (90%)	126 (86%)	20 (14%)	0	100 100
6	AF	98/101 (97%)	88 (90%)	10 (10%)	0	100 100
6	CF	98/101 (97%)	88 (90%)	10 (10%)	0	100 100
7	AG	153/156 (98%)	132 (86%)	19 (12%)	2 (1%)	9 38
7	CG	153/156 (98%)	128 (84%)	23 (15%)	2 (1%)	9 38
8	AH	136/138 (99%)	122 (90%)	14 (10%)	0	100 100
8	CH	136/138 (99%)	125 (92%)	11 (8%)	0	100 100
9	AI	123/128 (96%)	106 (86%)	15 (12%)	2 (2%)	7 34
9	CI	123/128 (96%)	109 (89%)	12 (10%)	2 (2%)	7 34
10	AJ	94/105 (90%)	78 (83%)	14 (15%)	2 (2%)	5 27
10	CJ	94/105 (90%)	74 (79%)	18 (19%)	2 (2%)	5 27
11	AK	112/129 (87%)	100 (89%)	12 (11%)	0	100 100
11	CK	112/129 (87%)	100 (89%)	12 (11%)	0	100 100
12	AL	120/132 (91%)	109 (91%)	10 (8%)	1 (1%)	16 50
12	CL	120/132 (91%)	107 (89%)	11 (9%)	2 (2%)	7 32
13	AM	112/126 (89%)	82 (73%)	27 (24%)	3 (3%)	4 22
13	CM	112/126 (89%)	84 (75%)	27 (24%)	1 (1%)	14 48
14	AN	58/61 (95%)	48 (83%)	7 (12%)	3 (5%)	1 9
14	CN	58/61 (95%)	51 (88%)	6 (10%)	1 (2%)	7 32
15	AO	86/89 (97%)	71 (83%)	15 (17%)	0	100 100
15	CO	86/89 (97%)	72 (84%)	14 (16%)	0	100 100
16	AP	80/88 (91%)	69 (86%)	9 (11%)	2 (2%)	4 23
16	CP	80/88 (91%)	71 (89%)	7 (9%)	2 (2%)	4 23
17	AQ	97/105 (92%)	87 (90%)	10 (10%)	0	100 100
17	CQ	97/105 (92%)	86 (89%)	11 (11%)	0	100 100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
18	AR	66/88 (75%)	60 (91%)	6 (9%)	0	100	100
18	CR	66/88 (75%)	60 (91%)	6 (9%)	0	100	100
19	AS	79/93 (85%)	62 (78%)	16 (20%)	1 (1%)	9	38
19	CS	79/93 (85%)	60 (76%)	16 (20%)	3 (4%)	2	15
20	AT	95/106 (90%)	82 (86%)	10 (10%)	3 (3%)	3	18
20	CT	95/106 (90%)	81 (85%)	11 (12%)	3 (3%)	3	18
21	AU	21/27 (78%)	19 (90%)	2 (10%)	0	100	100
21	CU	21/27 (78%)	19 (90%)	2 (10%)	0	100	100
22	AV	51/61 (84%)	42 (82%)	9 (18%)	0	100	100
22	CV	51/61 (84%)	34 (67%)	14 (28%)	3 (6%)	1	7
25	BD	273/276 (99%)	258 (94%)	14 (5%)	1 (0%)	30	65
25	DD	273/276 (99%)	258 (94%)	14 (5%)	1 (0%)	30	65
26	BE	202/206 (98%)	188 (93%)	12 (6%)	2 (1%)	12	45
26	DE	202/206 (98%)	189 (94%)	11 (5%)	2 (1%)	12	45
27	BF	201/210 (96%)	187 (93%)	13 (6%)	1 (0%)	24	60
27	DF	201/210 (96%)	188 (94%)	12 (6%)	1 (0%)	24	60
28	BG	179/182 (98%)	151 (84%)	28 (16%)	0	100	100
28	DG	179/182 (98%)	151 (84%)	27 (15%)	1 (1%)	21	56
29	BH	172/180 (96%)	156 (91%)	14 (8%)	2 (1%)	10	40
29	DH	172/180 (96%)	158 (92%)	12 (7%)	2 (1%)	10	40
30	BI	144/148 (97%)	114 (79%)	27 (19%)	3 (2%)	5	27
30	DI	144/148 (97%)	113 (78%)	29 (20%)	2 (1%)	9	36
31	BN	138/140 (99%)	128 (93%)	6 (4%)	4 (3%)	3	20
31	DN	138/140 (99%)	126 (91%)	7 (5%)	5 (4%)	2	16
32	BO	120/122 (98%)	113 (94%)	7 (6%)	0	100	100
32	DO	120/122 (98%)	112 (93%)	8 (7%)	0	100	100
33	BP	147/150 (98%)	134 (91%)	12 (8%)	1 (1%)	18	53
33	DP	147/150 (98%)	134 (91%)	13 (9%)	0	100	100
34	BQ	139/141 (99%)	127 (91%)	12 (9%)	0	100	100
34	DQ	139/141 (99%)	125 (90%)	14 (10%)	0	100	100
35	BR	116/118 (98%)	110 (95%)	6 (5%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
35	DR	116/118 (98%)	112 (97%)	4 (3%)	0	100	100
36	BS	108/112 (96%)	96 (89%)	11 (10%)	1 (1%)	14	48
36	DS	108/112 (96%)	97 (90%)	10 (9%)	1 (1%)	14	48
37	BT	129/146 (88%)	125 (97%)	4 (3%)	0	100	100
37	DT	129/146 (88%)	126 (98%)	3 (2%)	0	100	100
38	BU	114/118 (97%)	113 (99%)	1 (1%)	0	100	100
38	DU	114/118 (97%)	113 (99%)	1 (1%)	0	100	100
39	BV	98/101 (97%)	93 (95%)	5 (5%)	0	100	100
39	DV	99/101 (98%)	94 (95%)	5 (5%)	0	100	100
40	BW	110/113 (97%)	106 (96%)	4 (4%)	0	100	100
40	DW	110/113 (97%)	106 (96%)	4 (4%)	0	100	100
41	BX	93/96 (97%)	88 (95%)	5 (5%)	0	100	100
41	DX	93/96 (97%)	88 (95%)	5 (5%)	0	100	100
42	BY	105/110 (96%)	94 (90%)	9 (9%)	2 (2%)	6	30
42	DY	105/110 (96%)	95 (90%)	8 (8%)	2 (2%)	6	30
43	BZ	196/206 (95%)	178 (91%)	15 (8%)	3 (2%)	8	35
43	DZ	196/206 (95%)	177 (90%)	16 (8%)	3 (2%)	8	35
44	B0	74/85 (87%)	71 (96%)	3 (4%)	0	100	100
44	D0	74/85 (87%)	71 (96%)	3 (4%)	0	100	100
45	B1	95/98 (97%)	93 (98%)	2 (2%)	0	100	100
45	D1	95/98 (97%)	93 (98%)	1 (1%)	1 (1%)	11	43
46	B2	68/72 (94%)	65 (96%)	3 (4%)	0	100	100
46	D2	68/72 (94%)	65 (96%)	3 (4%)	0	100	100
47	B3	57/60 (95%)	53 (93%)	4 (7%)	0	100	100
47	D3	57/60 (95%)	53 (93%)	4 (7%)	0	100	100
48	B4	44/71 (62%)	37 (84%)	7 (16%)	0	100	100
48	D4	44/71 (62%)	38 (86%)	6 (14%)	0	100	100
49	B5	57/60 (95%)	52 (91%)	5 (9%)	0	100	100
49	D5	57/60 (95%)	52 (91%)	5 (9%)	0	100	100
50	B6	51/54 (94%)	49 (96%)	2 (4%)	0	100	100
50	D6	51/54 (94%)	49 (96%)	2 (4%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
51	B7	46/49 (94%)	44 (96%)	1 (2%)	1 (2%)	5 26
51	D7	46/49 (94%)	45 (98%)	0	1 (2%)	5 26
52	B8	62/65 (95%)	59 (95%)	2 (3%)	1 (2%)	7 34
52	D8	62/65 (95%)	59 (95%)	1 (2%)	2 (3%)	3 18
53	B9	34/37 (92%)	34 (100%)	0	0	100 100
53	D9	34/37 (92%)	34 (100%)	0	0	100 100
All	All	11473/12250 (94%)	10289 (90%)	1089 (10%)	95 (1%)	16 50

All (95) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
13	AM	91	ARG
33	BP	27	HIS
12	CL	92	ASP
31	DN	23	LEU
31	DN	24	GLY
52	D8	34	TRP
52	D8	35	GLN
2	AB	129	GLU
9	AI	102	LEU
20	AT	100	ILE
27	BF	90	PHE
30	BI	113	ARG
31	BN	23	LEU
42	BY	103	GLY
52	B8	35	GLN
2	CB	129	GLU
16	CP	53	VAL
19	CS	47	HIS
20	CT	100	ILE
22	CV	27	GLU
27	DF	89	VAL
30	DI	117	GLU
16	AP	53	VAL
16	AP	79	VAL
31	BN	5	VAL
10	CJ	56	HIS
13	CM	5	ALA
42	DY	103	GLY
2	AB	9	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	AM	90	LEU
14	AN	35	ARG
19	AS	52	TYR
29	BH	65	HIS
30	BI	85	GLU
31	BN	4	TYR
31	BN	19	GLU
2	CB	9	GLU
16	CP	79	VAL
20	CT	10	LEU
22	CV	30	PRO
29	DH	65	HIS
29	DH	92	ILE
31	DN	4	TYR
31	DN	5	VAL
31	DN	19	GLU
7	AG	54	THR
12	AL	28	LYS
14	AN	26	ARG
14	AN	59	ALA
20	AT	10	LEU
29	BH	92	ILE
51	B7	46	VAL
9	CI	23	ASN
9	CI	56	LEU
10	CJ	57	LYS
12	CL	28	LYS
14	CN	59	ALA
19	CS	12	ASP
19	CS	67	VAL
45	D1	3	LYS
51	D7	46	VAL
5	AE	132	ALA
7	AG	112	PRO
9	AI	103	THR
10	AJ	35	SER
26	BE	52	LEU
43	BZ	193	GLU
4	CD	7	PRO
7	CG	112	PRO
26	DE	52	LEU
28	DG	171	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	AJ	34	VAL
26	BE	72	VAL
25	DD	3	VAL
26	DE	72	VAL
30	DI	107	VAL
4	AD	7	PRO
4	AD	178	VAL
25	BD	3	VAL
36	BS	85	VAL
4	CD	178	VAL
22	CV	53	VAL
43	BZ	161	VAL
43	DZ	161	VAL
43	DZ	193	GLU
13	AM	40	ASN
42	BY	3	VAL
43	BZ	39	VAL
7	CG	55	GLY
36	DS	85	VAL
42	DY	3	VAL
30	BI	107	VAL
43	DZ	39	VAL
20	AT	98	PRO
20	CT	98	PRO

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
2	AB	177/220 (80%)	136 (77%)	41 (23%)	1 4
2	CB	177/220 (80%)	135 (76%)	42 (24%)	1 4
3	AC	114/188 (61%)	78 (68%)	36 (32%)	0 1
3	CC	114/188 (61%)	80 (70%)	34 (30%)	0 2
4	AD	141/181 (78%)	111 (79%)	30 (21%)	1 6

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
4	CD	141/181 (78%)	111 (79%)	30 (21%)	1 6
5	AE	108/123 (88%)	83 (77%)	25 (23%)	1 5
5	CE	108/123 (88%)	83 (77%)	25 (23%)	1 5
6	AF	76/90 (84%)	66 (87%)	10 (13%)	4 18
6	CF	76/90 (84%)	66 (87%)	10 (13%)	4 18
7	AG	103/127 (81%)	67 (65%)	36 (35%)	0 1
7	CG	103/127 (81%)	77 (75%)	26 (25%)	0 3
8	AH	103/119 (87%)	86 (84%)	17 (16%)	2 12
8	CH	103/119 (87%)	85 (82%)	18 (18%)	2 10
9	AI	62/99 (63%)	47 (76%)	15 (24%)	1 4
9	CI	62/99 (63%)	48 (77%)	14 (23%)	1 5
10	AJ	53/92 (58%)	39 (74%)	14 (26%)	0 3
10	CJ	53/92 (58%)	37 (70%)	16 (30%)	0 1
11	AK	81/99 (82%)	70 (86%)	11 (14%)	3 17
11	CK	81/99 (82%)	71 (88%)	10 (12%)	4 21
12	AL	91/109 (84%)	75 (82%)	16 (18%)	2 10
12	CL	91/109 (84%)	74 (81%)	17 (19%)	1 9
13	AM	64/101 (63%)	42 (66%)	22 (34%)	0 1
13	CM	64/101 (63%)	44 (69%)	20 (31%)	0 1
14	AN	46/50 (92%)	36 (78%)	10 (22%)	1 6
14	CN	46/50 (92%)	32 (70%)	14 (30%)	0 1
15	AO	77/80 (96%)	67 (87%)	10 (13%)	4 19
15	CO	77/80 (96%)	69 (90%)	8 (10%)	7 28
16	AP	63/74 (85%)	47 (75%)	16 (25%)	0 3
16	CP	63/74 (85%)	47 (75%)	16 (25%)	0 3
17	AQ	94/97 (97%)	81 (86%)	13 (14%)	3 17
17	CQ	94/97 (97%)	80 (85%)	14 (15%)	3 15
18	AR	49/77 (64%)	42 (86%)	7 (14%)	3 16
18	CR	49/77 (64%)	42 (86%)	7 (14%)	3 16
19	AS	43/80 (54%)	25 (58%)	18 (42%)	0 0
19	CS	43/80 (54%)	32 (74%)	11 (26%)	0 3

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
20	AT	65/82 (79%)	55 (85%)	10 (15%)	2 13
20	CT	65/82 (79%)	54 (83%)	11 (17%)	2 11
21	AU	18/22 (82%)	11 (61%)	7 (39%)	0 1
21	CU	18/22 (82%)	14 (78%)	4 (22%)	1 5
22	AV	16/50 (32%)	13 (81%)	3 (19%)	1 9
22	CV	21/50 (42%)	15 (71%)	6 (29%)	0 2
25	BD	215/218 (99%)	178 (83%)	37 (17%)	2 11
25	DD	215/218 (99%)	178 (83%)	37 (17%)	2 11
26	BE	163/166 (98%)	132 (81%)	31 (19%)	1 8
26	DE	163/166 (98%)	132 (81%)	31 (19%)	1 8
27	BF	159/166 (96%)	129 (81%)	30 (19%)	1 9
27	DF	159/166 (96%)	129 (81%)	30 (19%)	1 9
28	BG	128/156 (82%)	99 (77%)	29 (23%)	1 5
28	DG	128/156 (82%)	99 (77%)	29 (23%)	1 5
29	BH	141/148 (95%)	121 (86%)	20 (14%)	3 16
29	DH	141/148 (95%)	119 (84%)	22 (16%)	2 13
30	BI	99/124 (80%)	72 (73%)	27 (27%)	0 2
30	DI	98/124 (79%)	63 (64%)	35 (36%)	0 1
31	BN	117/119 (98%)	90 (77%)	27 (23%)	1 5
31	DN	117/119 (98%)	89 (76%)	28 (24%)	1 4
32	BO	98/100 (98%)	84 (86%)	14 (14%)	3 16
32	DO	98/100 (98%)	85 (87%)	13 (13%)	4 18
33	BP	114/116 (98%)	96 (84%)	18 (16%)	2 13
33	DP	114/116 (98%)	96 (84%)	18 (16%)	2 13
34	BQ	111/111 (100%)	94 (85%)	17 (15%)	3 14
34	DQ	111/111 (100%)	97 (87%)	14 (13%)	4 20
35	BR	101/101 (100%)	81 (80%)	20 (20%)	1 8
35	DR	101/101 (100%)	82 (81%)	19 (19%)	1 9
36	BS	84/88 (96%)	67 (80%)	17 (20%)	1 7
36	DS	84/88 (96%)	67 (80%)	17 (20%)	1 7
37	BT	110/127 (87%)	87 (79%)	23 (21%)	1 7

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
37	DT	110/127 (87%)	88 (80%)	22 (20%)	1 7
38	BU	93/94 (99%)	83 (89%)	10 (11%)	6 26
38	DU	93/94 (99%)	84 (90%)	9 (10%)	8 30
39	BV	79/82 (96%)	59 (75%)	20 (25%)	0 3
39	DV	80/82 (98%)	61 (76%)	19 (24%)	1 4
40	BW	89/92 (97%)	75 (84%)	14 (16%)	2 13
40	DW	89/92 (97%)	76 (85%)	13 (15%)	3 15
41	BX	75/78 (96%)	68 (91%)	7 (9%)	8 32
41	DX	75/78 (96%)	67 (89%)	8 (11%)	6 26
42	BY	80/91 (88%)	64 (80%)	16 (20%)	1 7
42	DY	80/91 (88%)	62 (78%)	18 (22%)	1 5
43	BZ	159/179 (89%)	136 (86%)	23 (14%)	3 15
43	DZ	159/179 (89%)	139 (87%)	20 (13%)	4 20
44	B0	59/67 (88%)	51 (86%)	8 (14%)	3 17
44	D0	59/67 (88%)	52 (88%)	7 (12%)	5 22
45	B1	78/83 (94%)	64 (82%)	14 (18%)	2 10
45	D1	78/83 (94%)	63 (81%)	15 (19%)	1 8
46	B2	65/67 (97%)	57 (88%)	8 (12%)	4 21
46	D2	65/67 (97%)	55 (85%)	10 (15%)	2 13
47	B3	49/52 (94%)	40 (82%)	9 (18%)	1 9
47	D3	49/52 (94%)	40 (82%)	9 (18%)	1 9
48	B4	39/63 (62%)	27 (69%)	12 (31%)	0 1
48	D4	39/63 (62%)	29 (74%)	10 (26%)	0 3
49	B5	50/52 (96%)	44 (88%)	6 (12%)	5 22
49	D5	50/52 (96%)	44 (88%)	6 (12%)	5 22
50	B6	50/52 (96%)	39 (78%)	11 (22%)	1 5
50	D6	50/52 (96%)	37 (74%)	13 (26%)	0 3
51	B7	41/42 (98%)	31 (76%)	10 (24%)	1 4
51	D7	41/42 (98%)	32 (78%)	9 (22%)	1 5
52	B8	52/55 (94%)	41 (79%)	11 (21%)	1 6
52	D8	52/55 (94%)	41 (79%)	11 (21%)	1 6

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
53	B9	32/34 (94%)	27 (84%)	5 (16%)	2 13
53	D9	32/34 (94%)	27 (84%)	5 (16%)	2 13
All	All	8753/10166 (86%)	7042 (80%)	1711 (20%)	1 8

All (1711) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	AB	15	VAL
2	AB	17	PHE
2	AB	32	ILE
2	AB	37	ASN
2	AB	45	GLN
2	AB	47	THR
2	AB	49	GLU
2	AB	51	LEU
2	AB	58	ILE
2	AB	67	THR
2	AB	69	LEU
2	AB	71	VAL
2	AB	75	LYS
2	AB	80	ILE
2	AB	87	ARG
2	AB	93	VAL
2	AB	94	ASN
2	AB	112	VAL
2	AB	119	GLU
2	AB	130	ARG
2	AB	133	LYS
2	AB	136	VAL
2	AB	139	LYS
2	AB	140	HIS
2	AB	145	LEU
2	AB	149	LEU
2	AB	155	LEU
2	AB	157	ARG
2	AB	158	LEU
2	AB	169	LYS
2	AB	170	GLU
2	AB	172	ILE
2	AB	187	LEU
2	AB	189	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	AB	200	ILE
2	AB	206	ASP
2	AB	214	ILE
2	AB	215	LEU
2	AB	224	GLN
2	AB	231	GLU
2	AB	233	SER
3	AC	3	ASN
3	AC	8	ILE
3	AC	11	ARG
3	AC	15	THR
3	AC	17	ASP
3	AC	19	GLU
3	AC	26	LYS
3	AC	32	LEU
3	AC	34	LEU
3	AC	36	ASP
3	AC	37	GLN
3	AC	43	LEU
3	AC	48	TYR
3	AC	49	SER
3	AC	52	LEU
3	AC	57	ILE
3	AC	67	THR
3	AC	69	HIS
3	AC	103	VAL
3	AC	110	ASN
3	AC	111	LEU
3	AC	125	GLU
3	AC	127	ARG
3	AC	134	ILE
3	AC	136	GLN
3	AC	140	ARG
3	AC	151	VAL
3	AC	173	VAL
3	AC	175	LEU
3	AC	178	LEU
3	AC	179	ARG
3	AC	181	ASN
3	AC	192	THR
3	AC	193	TYR
3	AC	195	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	AC	196	LEU
4	AD	11	LEU
4	AD	17	VAL
4	AD	19	LEU
4	AD	22	LYS
4	AD	34	GLU
4	AD	57	ARG
4	AD	58	LEU
4	AD	73	ARG
4	AD	74	GLN
4	AD	77	ASN
4	AD	83	SER
4	AD	92	VAL
4	AD	97	LEU
4	AD	104	VAL
4	AD	105	VAL
4	AD	106	TYR
4	AD	107	ARG
4	AD	108	LEU
4	AD	110	PHE
4	AD	126	ILE
4	AD	127	THR
4	AD	135	LEU
4	AD	137	SER
4	AD	158	ILE
4	AD	160	GLN
4	AD	181	MET
4	AD	188	LEU
4	AD	193	ASP
4	AD	196	LEU
4	AD	200	GLU
5	AE	6	PHE
5	AE	12	LEU
5	AE	16	THR
5	AE	20	GLN
5	AE	34	VAL
5	AE	41	VAL
5	AE	47	LYS
5	AE	51	VAL
5	AE	53	LEU
5	AE	55	VAL
5	AE	56	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	AE	60	TYR
5	AE	75	THR
5	AE	76	ILE
5	AE	78	HIS
5	AE	79	GLU
5	AE	82	VAL
5	AE	89	ILE
5	AE	90	VAL
5	AE	91	LEU
5	AE	117	ASP
5	AE	120	THR
5	AE	144	THR
5	AE	147	ASP
5	AE	149	GLU
6	AF	8	ILE
6	AF	16	GLN
6	AF	22	GLU
6	AF	36	ARG
6	AF	43	LEU
6	AF	45	LEU
6	AF	55	ASP
6	AF	65	VAL
6	AF	69	GLU
6	AF	82	ARG
7	AG	9	VAL
7	AG	10	ARG
7	AG	16	LEU
7	AG	22	LEU
7	AG	24	THR
7	AG	27	ILE
7	AG	30	ILE
7	AG	31	MET
7	AG	37	ASN
7	AG	38	LEU
7	AG	41	ARG
7	AG	42	ILE
7	AG	43	PHE
7	AG	44	TYR
7	AG	47	CYS
7	AG	51	GLN
7	AG	56	GLN
7	AG	57	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	AG	69	VAL
7	AG	72	ARG
7	AG	74	GLU
7	AG	75	VAL
7	AG	80	VAL
7	AG	92	SER
7	AG	101	LEU
7	AG	113	GLU
7	AG	118	VAL
7	AG	137	LYS
7	AG	138	LYS
7	AG	141	VAL
7	AG	142	GLU
7	AG	143	ARG
7	AG	144	MET
7	AG	146	GLU
7	AG	153	HIS
7	AG	156	TRP
8	AH	3	THR
8	AH	8	ASP
8	AH	19	VAL
8	AH	24	THR
8	AH	42	GLU
8	AH	45	ILE
8	AH	49	GLU
8	AH	63	LEU
8	AH	78	GLN
8	AH	85	ARG
8	AH	91	ARG
8	AH	93	VAL
8	AH	95	VAL
8	AH	109	ILE
8	AH	112	LEU
8	AH	114	THR
8	AH	137	VAL
9	AI	3	GLN
9	AI	7	THR
9	AI	9	ARG
9	AI	29	ASN
9	AI	38	GLN
9	AI	59	PHE
9	AI	77	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	AI	83	ARG
9	AI	86	VAL
9	AI	88	TYR
9	AI	99	LEU
9	AI	104	ARG
9	AI	105	ASP
9	AI	109	VAL
9	AI	110	GLU
10	AJ	8	LEU
10	AJ	9	ARG
10	AJ	13	HIS
10	AJ	16	LEU
10	AJ	21	GLN
10	AJ	34	VAL
10	AJ	38	ILE
10	AJ	43	ARG
10	AJ	48	THR
10	AJ	55	LYS
10	AJ	66	ARG
10	AJ	67	THR
10	AJ	72	VAL
10	AJ	96	ILE
11	AK	14	VAL
11	AK	30	VAL
11	AK	38	ASN
11	AK	48	ILE
11	AK	93	GLN
11	AK	95	ILE
11	AK	96	ARG
11	AK	107	SER
11	AK	109	VAL
11	AK	119	CYS
11	AK	126	ARG
12	AL	6	THR
12	AL	11	VAL
12	AL	33	ARG
12	AL	43	VAL
12	AL	44	THR
12	AL	53	ARG
12	AL	55	VAL
12	AL	67	THR
12	AL	70	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	AL	84	LEU
12	AL	96	VAL
12	AL	102	ARG
12	AL	104	VAL
12	AL	110	VAL
12	AL	118	SER
12	AL	123	LYS
13	AM	15	VAL
13	AM	16	ASP
13	AM	17	VAL
13	AM	19	LEU
13	AM	20	THR
13	AM	43	THR
13	AM	53	VAL
13	AM	54	VAL
13	AM	55	ARG
13	AM	56	LEU
13	AM	64	TRP
13	AM	66	LEU
13	AM	70	LEU
13	AM	74	VAL
13	AM	86	CYS
13	AM	92	HIS
13	AM	94	ARG
13	AM	101	GLN
13	AM	103	THR
13	AM	105	THR
13	AM	110	ARG
13	AM	114	ARG
14	AN	4	LYS
14	AN	7	ILE
14	AN	13	THR
14	AN	18	VAL
14	AN	25	VAL
14	AN	40	CYS
14	AN	41	ARG
14	AN	42	ILE
14	AN	44	LEU
14	AN	52	GLN
15	AO	3	ILE
15	AO	13	GLN
15	AO	26	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
15	AO	35	ARG
15	AO	39	LEU
15	AO	41	GLU
15	AO	48	LYS
15	AO	62	GLN
15	AO	76	GLU
15	AO	87	ILE
16	AP	1	MET
16	AP	2	VAL
16	AP	3	LYS
16	AP	6	LEU
16	AP	8	ARG
16	AP	28	ARG
16	AP	43	LYS
16	AP	45	THR
16	AP	47	ASP
16	AP	52	ASP
16	AP	54	GLU
16	AP	62	VAL
16	AP	67	THR
16	AP	69	THR
16	AP	71	ARG
16	AP	76	GLN
17	AQ	9	VAL
17	AQ	11	VAL
17	AQ	34	LYS
17	AQ	48	GLU
17	AQ	52	LYS
17	AQ	53	LEU
17	AQ	59	ILE
17	AQ	60	ILE
17	AQ	63	ARG
17	AQ	74	LEU
17	AQ	82	MET
17	AQ	93	GLN
17	AQ	97	SER
18	AR	31	LEU
18	AR	36	ASN
18	AR	37	VAL
18	AR	53	ARG
18	AR	76	LEU
18	AR	83	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	AR	85	LEU
19	AS	14	HIS
19	AS	20	LEU
19	AS	31	ILE
19	AS	36	ARG
19	AS	37	ARG
19	AS	43	GLU
19	AS	44	MET
19	AS	47	HIS
19	AS	49	ILE
19	AS	52	TYR
19	AS	53	ASN
19	AS	57	HIS
19	AS	61	TYR
19	AS	62	ILE
19	AS	67	VAL
19	AS	74	PHE
19	AS	81	ARG
19	AS	83	HIS
20	AT	10	LEU
20	AT	13	LEU
20	AT	22	ARG
20	AT	24	LEU
20	AT	30	LYS
20	AT	41	ILE
20	AT	50	GLU
20	AT	51	GLU
20	AT	72	LEU
20	AT	93	GLU
21	AU	6	ARG
21	AU	9	ARG
21	AU	10	ARG
21	AU	12	LYS
21	AU	14	TRP
21	AU	15	ARG
21	AU	20	LYS
22	AV	4	GLN
22	AV	7	ASP
22	AV	54	MET
25	BD	3	VAL
25	BD	4	LYS
25	BD	12	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BD	13	ARG
25	BD	24	ILE
25	BD	25	THR
25	BD	32	SER
25	BD	37	LEU
25	BD	39	LYS
25	BD	61	LEU
25	BD	64	ILE
25	BD	89	SER
25	BD	94	LEU
25	BD	99	ASP
25	BD	101	GLU
25	BD	103	ARG
25	BD	106	ILE
25	BD	126	GLN
25	BD	138	VAL
25	BD	141	VAL
25	BD	147	LEU
25	BD	150	LYS
25	BD	155	LEU
25	BD	165	ILE
25	BD	173	VAL
25	BD	192	THR
25	BD	193	VAL
25	BD	211	ARG
25	BD	212	SER
25	BD	217	ARG
25	BD	221	VAL
25	BD	229	VAL
25	BD	257	LEU
25	BD	259	THR
25	BD	260	ARG
25	BD	270	ILE
25	BD	274	ARG
26	BE	9	VAL
26	BE	12	THR
26	BE	21	VAL
26	BE	24	THR
26	BE	33	VAL
26	BE	34	VAL
26	BE	40	GLU
26	BE	49	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BE	52	LEU
26	BE	54	GLN
26	BE	75	VAL
26	BE	78	LEU
26	BE	79	ARG
26	BE	82	ARG
26	BE	89	ASP
26	BE	93	VAL
26	BE	105	THR
26	BE	107	THR
26	BE	111	ARG
26	BE	116	VAL
26	BE	119	ARG
26	BE	144	ARG
26	BE	152	LYS
26	BE	154	LYS
26	BE	163	GLU
26	BE	170	LEU
26	BE	175	VAL
26	BE	179	GLU
26	BE	181	LEU
26	BE	182	LEU
26	BE	184	VAL
27	BF	12	LEU
27	BF	15	SER
27	BF	18	ARG
27	BF	20	LEU
27	BF	24	LEU
27	BF	33	LEU
27	BF	36	VAL
27	BF	38	ARG
27	BF	46	ARG
27	BF	50	SER
27	BF	53	THR
27	BF	57	VAL
27	BF	60	SER
27	BF	74	ARG
27	BF	77	ASP
27	BF	82	ILE
27	BF	88	VAL
27	BF	106	ARG
27	BF	110	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
27	BF	133	ASN
27	BF	135	LYS
27	BF	140	LEU
27	BF	152	GLU
27	BF	158	THR
27	BF	170	LEU
27	BF	175	THR
27	BF	183	VAL
27	BF	192	LEU
27	BF	197	ASP
27	BF	201	VAL
28	BG	3	LEU
28	BG	5	VAL
28	BG	9	ARG
28	BG	13	GLU
28	BG	20	ILE
28	BG	21	ARG
28	BG	31	VAL
28	BG	33	ARG
28	BG	35	GLU
28	BG	43	LEU
28	BG	88	ILE
28	BG	96	ARG
28	BG	101	ILE
28	BG	105	LYS
28	BG	117	PHE
28	BG	128	ARG
28	BG	133	LEU
28	BG	135	LEU
28	BG	138	GLN
28	BG	139	LEU
28	BG	143	GLU
28	BG	145	THR
28	BG	148	MET
28	BG	149	VAL
28	BG	150	ASP
28	BG	153	ARG
28	BG	159	VAL
28	BG	161	THR
28	BG	170	ARG
29	BH	4	ILE
29	BH	7	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	BH	15	VAL
29	BH	16	SER
29	BH	24	VAL
29	BH	44	VAL
29	BH	50	VAL
29	BH	69	ARG
29	BH	70	THR
29	BH	88	LEU
29	BH	98	LEU
29	BH	106	THR
29	BH	122	THR
29	BH	129	THR
29	BH	130	ARG
29	BH	136	ILE
29	BH	139	GLN
29	BH	153	LYS
29	BH	169	VAL
29	BH	171	LEU
30	BI	7	GLU
30	BI	9	LEU
30	BI	12	LEU
30	BI	15	VAL
30	BI	35	LEU
30	BI	44	LEU
30	BI	47	LEU
30	BI	54	GLN
30	BI	61	ARG
30	BI	68	LEU
30	BI	75	LEU
30	BI	77	LEU
30	BI	85	GLU
30	BI	87	LYS
30	BI	88	ILE
30	BI	92	VAL
30	BI	93	THR
30	BI	102	SER
30	BI	108	THR
30	BI	116	LEU
30	BI	117	GLU
30	BI	121	LYS
30	BI	127	VAL
30	BI	129	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
30	BI	130	TYR
30	BI	140	LEU
30	BI	142	VAL
31	BN	2	LYS
31	BN	5	VAL
31	BN	9	VAL
31	BN	12	ARG
31	BN	15	LEU
31	BN	28	THR
31	BN	33	LEU
31	BN	34	LEU
31	BN	43	THR
31	BN	46	VAL
31	BN	48	MET
31	BN	55	VAL
31	BN	58	ASP
31	BN	62	VAL
31	BN	63	THR
31	BN	67	LEU
31	BN	73	THR
31	BN	87	LEU
31	BN	93	THR
31	BN	97	ARG
31	BN	99	LEU
31	BN	120	LEU
31	BN	131	GLN
31	BN	133	GLN
31	BN	137	LYS
31	BN	138	LEU
31	BN	140	VAL
32	BO	5	GLN
32	BO	8	LEU
32	BO	10	VAL
32	BO	23	ARG
32	BO	24	VAL
32	BO	26	LYS
32	BO	28	SER
32	BO	42	SER
32	BO	63	VAL
32	BO	77	ILE
32	BO	91	LEU
32	BO	94	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	BO	98	VAL
32	BO	113	LYS
33	BP	21	ARG
33	BP	33	ARG
33	BP	42	SER
33	BP	45	LEU
33	BP	55	ARG
33	BP	58	THR
33	BP	59	LEU
33	BP	64	LYS
33	BP	68	GLN
33	BP	83	VAL
33	BP	86	LYS
33	BP	92	GLU
33	BP	98	GLU
33	BP	106	LEU
33	BP	112	LEU
33	BP	125	VAL
33	BP	133	SER
33	BP	147	LEU
34	BQ	1	MET
34	BQ	5	ARG
34	BQ	7	MET
34	BQ	8	LYS
34	BQ	16	ARG
34	BQ	21	THR
34	BQ	25	ASP
34	BQ	42	ILE
34	BQ	45	GLN
34	BQ	55	VAL
34	BQ	75	THR
34	BQ	79	LEU
34	BQ	81	VAL
34	BQ	109	VAL
34	BQ	110	THR
34	BQ	119	ARG
34	BQ	127	ILE
35	BR	6	SER
35	BR	8	ARG
35	BR	14	SER
35	BR	18	LEU
35	BR	28	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	BR	29	LEU
35	BR	36	THR
35	BR	44	LEU
35	BR	48	VAL
35	BR	52	ILE
35	BR	54	LEU
35	BR	60	LEU
35	BR	65	LEU
35	BR	67	LEU
35	BR	75	LEU
35	BR	79	LEU
35	BR	91	GLN
35	BR	95	THR
35	BR	100	LEU
35	BR	111	LEU
36	BS	3	ARG
36	BS	11	LYS
36	BS	14	VAL
36	BS	19	LYS
36	BS	20	ARG
36	BS	25	ARG
36	BS	36	TYR
36	BS	42	ASP
36	BS	48	LEU
36	BS	50	SER
36	BS	54	LEU
36	BS	59	LYS
36	BS	67	ARG
36	BS	69	VAL
36	BS	98	VAL
36	BS	110	LEU
36	BS	111	GLU
37	BT	1	MET
37	BT	6	LEU
37	BT	13	ARG
37	BT	16	ARG
37	BT	23	ARG
37	BT	28	VAL
37	BT	39	ARG
37	BT	46	GLU
37	BT	49	VAL
37	BT	53	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
37	BT	59	THR
37	BT	64	ARG
37	BT	74	ARG
37	BT	78	LEU
37	BT	82	LEU
37	BT	89	VAL
37	BT	93	ARG
37	BT	95	ARG
37	BT	96	ARG
37	BT	107	ASP
37	BT	111	ARG
37	BT	113	LYS
37	BT	118	ARG
38	BU	8	VAL
38	BU	27	LEU
38	BU	31	SER
38	BU	36	ARG
38	BU	60	LEU
38	BU	74	LEU
38	BU	83	LEU
38	BU	95	LEU
38	BU	104	GLN
38	BU	108	GLU
39	BV	5	VAL
39	BV	7	THR
39	BV	18	LEU
39	BV	28	GLU
39	BV	33	VAL
39	BV	35	LEU
39	BV	38	LEU
39	BV	46	VAL
39	BV	51	VAL
39	BV	52	VAL
39	BV	57	VAL
39	BV	61	VAL
39	BV	62	LEU
39	BV	72	VAL
39	BV	73	SER
39	BV	79	VAL
39	BV	85	LYS
39	BV	89	GLN
39	BV	95	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	BV	96	ILE
40	BW	11	ARG
40	BW	12	ILE
40	BW	15	ARG
40	BW	17	VAL
40	BW	19	LEU
40	BW	23	LEU
40	BW	27	LYS
40	BW	51	LEU
40	BW	60	ASN
40	BW	67	ASP
40	BW	98	LYS
40	BW	100	THR
40	BW	103	ILE
40	BW	107	LEU
41	BX	23	GLU
41	BX	35	THR
41	BX	45	THR
41	BX	52	VAL
41	BX	57	LEU
41	BX	76	ARG
41	BX	89	ILE
42	BY	2	ARG
42	BY	5	MET
42	BY	7	VAL
42	BY	19	LYS
42	BY	23	ARG
42	BY	31	LEU
42	BY	34	LYS
42	BY	44	ILE
42	BY	55	TYR
42	BY	61	ILE
42	BY	72	VAL
42	BY	85	VAL
42	BY	90	LEU
42	BY	92	ASN
42	BY	97	ARG
42	BY	99	CYS
43	BZ	3	TYR
43	BZ	5	LEU
43	BZ	6	LYS
43	BZ	19	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
43	BZ	20	ARG
43	BZ	31	ARG
43	BZ	37	VAL
43	BZ	41	LEU
43	BZ	42	VAL
43	BZ	46	LYS
43	BZ	56	VAL
43	BZ	72	ARG
43	BZ	76	LEU
43	BZ	80	ARG
43	BZ	86	VAL
43	BZ	97	GLU
43	BZ	112	ARG
43	BZ	126	VAL
43	BZ	133	ILE
43	BZ	144	LEU
43	BZ	155	LEU
43	BZ	156	LYS
43	BZ	170	THR
44	B0	17	GLN
44	B0	20	ARG
44	B0	43	THR
44	B0	46	LYS
44	B0	49	LYS
44	B0	55	ARG
44	B0	63	VAL
44	B0	81	VAL
45	B1	4	VAL
45	B1	14	VAL
45	B1	20	ARG
45	B1	21	ARG
45	B1	30	VAL
45	B1	35	THR
45	B1	37	ILE
45	B1	40	ARG
45	B1	53	VAL
45	B1	58	ILE
45	B1	59	THR
45	B1	62	VAL
45	B1	82	LEU
45	B1	95	LEU
46	B2	16	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	B2	27	GLU
46	B2	30	ARG
46	B2	32	LEU
46	B2	40	SER
46	B2	50	ILE
46	B2	53	LEU
46	B2	55	ARG
47	B3	6	VAL
47	B3	8	LEU
47	B3	18	ASP
47	B3	23	LEU
47	B3	24	LYS
47	B3	30	ARG
47	B3	31	LEU
47	B3	40	THR
47	B3	56	VAL
48	B4	14	ILE
48	B4	16	CYS
48	B4	18	CYS
48	B4	20	ASN
48	B4	24	THR
48	B4	31	ILE
48	B4	34	GLU
48	B4	35	VAL
48	B4	37	SER
48	B4	39	CYS
48	B4	43	TYR
48	B4	44	THR
49	B5	6	VAL
49	B5	16	ARG
49	B5	29	THR
49	B5	37	LYS
49	B5	40	LYS
49	B5	55	ARG
50	B6	6	ARG
50	B6	9	LEU
50	B6	14	THR
50	B6	18	ARG
50	B6	23	THR
50	B6	28	ARG
50	B6	35	GLU
50	B6	38	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	B6	40	CYS
50	B6	44	ARG
50	B6	48	VAL
51	B7	1	MET
51	B7	4	THR
51	B7	8	ASN
51	B7	9	ARG
51	B7	15	THR
51	B7	24	THR
51	B7	29	LYS
51	B7	32	LYS
51	B7	43	THR
51	B7	47	ARG
52	B8	11	LYS
52	B8	14	VAL
52	B8	22	VAL
52	B8	23	VAL
52	B8	26	LYS
52	B8	27	THR
52	B8	29	LYS
52	B8	32	LEU
52	B8	37	SER
52	B8	58	ILE
52	B8	59	LYS
53	B9	3	VAL
53	B9	15	LYS
53	B9	17	ILE
53	B9	25	VAL
53	B9	26	ILE
2	CB	15	VAL
2	CB	17	PHE
2	CB	32	ILE
2	CB	37	ASN
2	CB	45	GLN
2	CB	47	THR
2	CB	49	GLU
2	CB	51	LEU
2	CB	58	ILE
2	CB	67	THR
2	CB	69	LEU
2	CB	71	VAL
2	CB	75	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	CB	80	ILE
2	CB	87	ARG
2	CB	93	VAL
2	CB	94	ASN
2	CB	112	VAL
2	CB	119	GLU
2	CB	130	ARG
2	CB	133	LYS
2	CB	136	VAL
2	CB	139	LYS
2	CB	140	HIS
2	CB	145	LEU
2	CB	149	LEU
2	CB	155	LEU
2	CB	157	ARG
2	CB	158	LEU
2	CB	169	LYS
2	CB	170	GLU
2	CB	172	ILE
2	CB	176	GLU
2	CB	187	LEU
2	CB	189	ASP
2	CB	200	ILE
2	CB	206	ASP
2	CB	214	ILE
2	CB	215	LEU
2	CB	224	GLN
2	CB	231	GLU
2	CB	233	SER
3	CC	4	LYS
3	CC	5	ILE
3	CC	6	HIS
3	CC	8	ILE
3	CC	12	LEU
3	CC	30	ARG
3	CC	31	HIS
3	CC	32	LEU
3	CC	33	LEU
3	CC	34	LEU
3	CC	37	GLN
3	CC	46	GLU
3	CC	49	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	CC	52	LEU
3	CC	55	VAL
3	CC	58	GLU
3	CC	59	ARG
3	CC	102	ASN
3	CC	111	LEU
3	CC	118	GLN
3	CC	130	VAL
3	CC	136	GLN
3	CC	138	VAL
3	CC	150	LYS
3	CC	152	ILE
3	CC	172	ARG
3	CC	173	VAL
3	CC	175	LEU
3	CC	178	LEU
3	CC	179	ARG
3	CC	182	ILE
3	CC	188	LEU
3	CC	192	THR
3	CC	193	TYR
4	CD	11	LEU
4	CD	17	VAL
4	CD	19	LEU
4	CD	22	LYS
4	CD	34	GLU
4	CD	57	ARG
4	CD	58	LEU
4	CD	73	ARG
4	CD	74	GLN
4	CD	77	ASN
4	CD	83	SER
4	CD	92	VAL
4	CD	97	LEU
4	CD	104	VAL
4	CD	105	VAL
4	CD	106	TYR
4	CD	107	ARG
4	CD	108	LEU
4	CD	110	PHE
4	CD	126	ILE
4	CD	127	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	CD	135	LEU
4	CD	137	SER
4	CD	158	ILE
4	CD	160	GLN
4	CD	181	MET
4	CD	188	LEU
4	CD	193	ASP
4	CD	196	LEU
4	CD	200	GLU
5	CE	6	PHE
5	CE	12	LEU
5	CE	16	THR
5	CE	20	GLN
5	CE	31	LEU
5	CE	34	VAL
5	CE	41	VAL
5	CE	47	LYS
5	CE	51	VAL
5	CE	53	LEU
5	CE	55	VAL
5	CE	56	GLN
5	CE	68	GLU
5	CE	75	THR
5	CE	76	ILE
5	CE	78	HIS
5	CE	79	GLU
5	CE	82	VAL
5	CE	89	ILE
5	CE	90	VAL
5	CE	91	LEU
5	CE	117	ASP
5	CE	144	THR
5	CE	147	ASP
5	CE	149	GLU
6	CF	8	ILE
6	CF	16	GLN
6	CF	22	GLU
6	CF	36	ARG
6	CF	43	LEU
6	CF	45	LEU
6	CF	55	ASP
6	CF	65	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	CF	69	GLU
6	CF	82	ARG
7	CG	10	ARG
7	CG	12	LEU
7	CG	24	THR
7	CG	30	ILE
7	CG	32	ARG
7	CG	38	LEU
7	CG	51	GLN
7	CG	53	LYS
7	CG	72	ARG
7	CG	74	GLU
7	CG	75	VAL
7	CG	94	ARG
7	CG	104	LEU
7	CG	113	GLU
7	CG	114	ARG
7	CG	118	VAL
7	CG	120	ILE
7	CG	122	HIS
7	CG	137	LYS
7	CG	142	GLU
7	CG	143	ARG
7	CG	144	MET
7	CG	146	GLU
7	CG	151	TYR
7	CG	153	HIS
7	CG	155	ARG
8	CH	3	THR
8	CH	8	ASP
8	CH	19	VAL
8	CH	24	THR
8	CH	42	GLU
8	CH	45	ILE
8	CH	49	GLU
8	CH	63	LEU
8	CH	78	GLN
8	CH	85	ARG
8	CH	91	ARG
8	CH	93	VAL
8	CH	95	VAL
8	CH	109	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	CH	112	LEU
8	CH	114	THR
8	CH	125	ARG
8	CH	137	VAL
9	CI	3	GLN
9	CI	9	ARG
9	CI	29	ASN
9	CI	34	ASN
9	CI	38	GLN
9	CI	41	VAL
9	CI	48	GLU
9	CI	60	ASP
9	CI	64	THR
9	CI	87	GLN
9	CI	99	LEU
9	CI	104	ARG
9	CI	108	VAL
9	CI	117	HIS
10	CJ	8	LEU
10	CJ	9	ARG
10	CJ	11	PHE
10	CJ	13	HIS
10	CJ	16	LEU
10	CJ	34	VAL
10	CJ	38	ILE
10	CJ	45	ARG
10	CJ	49	VAL
10	CJ	55	LYS
10	CJ	58	ASP
10	CJ	60	ARG
10	CJ	65	LEU
10	CJ	66	ARG
10	CJ	69	ASN
10	CJ	96	ILE
11	CK	14	VAL
11	CK	38	ASN
11	CK	48	ILE
11	CK	93	GLN
11	CK	95	ILE
11	CK	96	ARG
11	CK	107	SER
11	CK	109	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	CK	119	CYS
11	CK	126	ARG
12	CL	6	THR
12	CL	11	VAL
12	CL	33	ARG
12	CL	43	VAL
12	CL	44	THR
12	CL	53	ARG
12	CL	55	VAL
12	CL	60	LEU
12	CL	67	THR
12	CL	70	ILE
12	CL	84	LEU
12	CL	99	HIS
12	CL	102	ARG
12	CL	104	VAL
12	CL	110	VAL
12	CL	118	SER
12	CL	123	LYS
13	CM	3	ARG
13	CM	4	ILE
13	CM	9	ILE
13	CM	15	VAL
13	CM	16	ASP
13	CM	17	VAL
13	CM	27	LYS
13	CM	47	ASP
13	CM	54	VAL
13	CM	60	VAL
13	CM	63	THR
13	CM	65	LYS
13	CM	67	GLU
13	CM	70	LEU
13	CM	86	CYS
13	CM	88	ARG
13	CM	96	LEU
13	CM	98	VAL
13	CM	109	THR
13	CM	110	ARG
14	CN	4	LYS
14	CN	7	ILE
14	CN	8	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
14	CN	17	LYS
14	CN	22	THR
14	CN	26	ARG
14	CN	27	CYS
14	CN	29	ARG
14	CN	33	VAL
14	CN	37	PHE
14	CN	41	ARG
14	CN	42	ILE
14	CN	44	LEU
14	CN	46	GLU
15	CO	3	ILE
15	CO	13	GLN
15	CO	26	GLU
15	CO	35	ARG
15	CO	39	LEU
15	CO	41	GLU
15	CO	76	GLU
15	CO	87	ILE
16	CP	1	MET
16	CP	2	VAL
16	CP	3	LYS
16	CP	6	LEU
16	CP	8	ARG
16	CP	28	ARG
16	CP	43	LYS
16	CP	45	THR
16	CP	47	ASP
16	CP	52	ASP
16	CP	54	GLU
16	CP	62	VAL
16	CP	67	THR
16	CP	69	THR
16	CP	71	ARG
16	CP	76	GLN
17	CQ	9	VAL
17	CQ	11	VAL
17	CQ	34	LYS
17	CQ	48	GLU
17	CQ	52	LYS
17	CQ	53	LEU
17	CQ	59	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	CQ	60	ILE
17	CQ	63	ARG
17	CQ	74	LEU
17	CQ	82	MET
17	CQ	93	GLN
17	CQ	97	SER
17	CQ	100	LYS
18	CR	31	LEU
18	CR	36	ASN
18	CR	37	VAL
18	CR	53	ARG
18	CR	76	LEU
18	CR	83	GLU
18	CR	85	LEU
19	CS	7	LYS
19	CS	31	ILE
19	CS	36	ARG
19	CS	37	ARG
19	CS	38	SER
19	CS	44	MET
19	CS	62	ILE
19	CS	63	THR
19	CS	67	VAL
19	CS	77	THR
19	CS	81	ARG
20	CT	10	LEU
20	CT	13	LEU
20	CT	22	ARG
20	CT	24	LEU
20	CT	30	LYS
20	CT	41	ILE
20	CT	50	GLU
20	CT	51	GLU
20	CT	70	SER
20	CT	72	LEU
20	CT	93	GLU
21	CU	9	ARG
21	CU	10	ARG
21	CU	12	LYS
21	CU	15	ARG
22	CV	4	GLN
22	CV	18	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	CV	21	ILE
22	CV	36	GLN
22	CV	39	GLN
22	CV	48	MET
25	DD	3	VAL
25	DD	4	LYS
25	DD	12	SER
25	DD	13	ARG
25	DD	24	ILE
25	DD	25	THR
25	DD	32	SER
25	DD	37	LEU
25	DD	39	LYS
25	DD	61	LEU
25	DD	64	ILE
25	DD	89	SER
25	DD	94	LEU
25	DD	99	ASP
25	DD	101	GLU
25	DD	103	ARG
25	DD	106	ILE
25	DD	126	GLN
25	DD	138	VAL
25	DD	141	VAL
25	DD	147	LEU
25	DD	150	LYS
25	DD	155	LEU
25	DD	165	ILE
25	DD	173	VAL
25	DD	192	THR
25	DD	193	VAL
25	DD	211	ARG
25	DD	212	SER
25	DD	217	ARG
25	DD	221	VAL
25	DD	229	VAL
25	DD	257	LEU
25	DD	259	THR
25	DD	260	ARG
25	DD	270	ILE
25	DD	274	ARG
26	DE	9	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	DE	12	THR
26	DE	19	ARG
26	DE	21	VAL
26	DE	24	THR
26	DE	33	VAL
26	DE	34	VAL
26	DE	38	THR
26	DE	40	GLU
26	DE	49	LEU
26	DE	52	LEU
26	DE	54	GLN
26	DE	75	VAL
26	DE	78	LEU
26	DE	82	ARG
26	DE	89	ASP
26	DE	93	VAL
26	DE	105	THR
26	DE	116	VAL
26	DE	119	ARG
26	DE	144	ARG
26	DE	152	LYS
26	DE	154	LYS
26	DE	163	GLU
26	DE	170	LEU
26	DE	175	VAL
26	DE	179	GLU
26	DE	181	LEU
26	DE	182	LEU
26	DE	184	VAL
26	DE	195	LEU
27	DF	12	LEU
27	DF	15	SER
27	DF	18	ARG
27	DF	20	LEU
27	DF	24	LEU
27	DF	33	LEU
27	DF	36	VAL
27	DF	38	ARG
27	DF	46	ARG
27	DF	50	SER
27	DF	53	THR
27	DF	57	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
27	DF	74	ARG
27	DF	77	ASP
27	DF	82	ILE
27	DF	88	VAL
27	DF	96	ASP
27	DF	106	ARG
27	DF	110	LEU
27	DF	133	ASN
27	DF	135	LYS
27	DF	140	LEU
27	DF	152	GLU
27	DF	158	THR
27	DF	170	LEU
27	DF	175	THR
27	DF	183	VAL
27	DF	192	LEU
27	DF	197	ASP
27	DF	201	VAL
28	DG	3	LEU
28	DG	5	VAL
28	DG	9	ARG
28	DG	13	GLU
28	DG	20	ILE
28	DG	21	ARG
28	DG	31	VAL
28	DG	33	ARG
28	DG	35	GLU
28	DG	43	LEU
28	DG	88	ILE
28	DG	96	ARG
28	DG	101	ILE
28	DG	105	LYS
28	DG	117	PHE
28	DG	128	ARG
28	DG	133	LEU
28	DG	135	LEU
28	DG	138	GLN
28	DG	140	ILE
28	DG	143	GLU
28	DG	145	THR
28	DG	148	MET
28	DG	149	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	DG	150	ASP
28	DG	153	ARG
28	DG	159	VAL
28	DG	161	THR
28	DG	170	ARG
29	DH	4	ILE
29	DH	7	LEU
29	DH	15	VAL
29	DH	16	SER
29	DH	24	VAL
29	DH	41	MET
29	DH	44	VAL
29	DH	51	ARG
29	DH	69	ARG
29	DH	70	THR
29	DH	88	LEU
29	DH	98	LEU
29	DH	106	THR
29	DH	122	THR
29	DH	129	THR
29	DH	130	ARG
29	DH	132	ARG
29	DH	136	ILE
29	DH	139	GLN
29	DH	153	LYS
29	DH	169	VAL
29	DH	171	LEU
30	DI	7	GLU
30	DI	9	LEU
30	DI	12	LEU
30	DI	15	VAL
30	DI	41	GLU
30	DI	43	ASN
30	DI	44	LEU
30	DI	47	LEU
30	DI	51	ILE
30	DI	54	GLN
30	DI	61	ARG
30	DI	66	GLU
30	DI	72	LEU
30	DI	75	LEU
30	DI	76	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
30	DI	77	LEU
30	DI	78	THR
30	DI	79	ILE
30	DI	85	GLU
30	DI	87	LYS
30	DI	88	ILE
30	DI	92	VAL
30	DI	93	THR
30	DI	97	ILE
30	DI	101	LEU
30	DI	105	HIS
30	DI	116	LEU
30	DI	117	GLU
30	DI	120	ILE
30	DI	123	LEU
30	DI	133	HIS
30	DI	140	LEU
30	DI	142	VAL
30	DI	144	VAL
30	DI	145	VAL
31	DN	2	LYS
31	DN	5	VAL
31	DN	9	VAL
31	DN	12	ARG
31	DN	15	LEU
31	DN	22	THR
31	DN	28	THR
31	DN	33	LEU
31	DN	34	LEU
31	DN	43	THR
31	DN	46	VAL
31	DN	48	MET
31	DN	55	VAL
31	DN	60	ILE
31	DN	62	VAL
31	DN	63	THR
31	DN	67	LEU
31	DN	73	THR
31	DN	87	LEU
31	DN	93	THR
31	DN	97	ARG
31	DN	99	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	DN	120	LEU
31	DN	131	GLN
31	DN	133	GLN
31	DN	137	LYS
31	DN	138	LEU
31	DN	140	VAL
32	DO	5	GLN
32	DO	8	LEU
32	DO	10	VAL
32	DO	23	ARG
32	DO	24	VAL
32	DO	26	LYS
32	DO	28	SER
32	DO	42	SER
32	DO	77	ILE
32	DO	91	LEU
32	DO	94	ARG
32	DO	98	VAL
32	DO	113	LYS
33	DP	21	ARG
33	DP	33	ARG
33	DP	42	SER
33	DP	45	LEU
33	DP	55	ARG
33	DP	58	THR
33	DP	59	LEU
33	DP	64	LYS
33	DP	68	GLN
33	DP	83	VAL
33	DP	86	LYS
33	DP	92	GLU
33	DP	98	GLU
33	DP	106	LEU
33	DP	112	LEU
33	DP	125	VAL
33	DP	133	SER
33	DP	147	LEU
34	DQ	1	MET
34	DQ	7	MET
34	DQ	8	LYS
34	DQ	16	ARG
34	DQ	21	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	DQ	25	ASP
34	DQ	45	GLN
34	DQ	55	VAL
34	DQ	75	THR
34	DQ	79	LEU
34	DQ	81	VAL
34	DQ	109	VAL
34	DQ	119	ARG
34	DQ	127	ILE
35	DR	6	SER
35	DR	8	ARG
35	DR	18	LEU
35	DR	28	LEU
35	DR	29	LEU
35	DR	36	THR
35	DR	44	LEU
35	DR	48	VAL
35	DR	52	ILE
35	DR	54	LEU
35	DR	60	LEU
35	DR	65	LEU
35	DR	67	LEU
35	DR	75	LEU
35	DR	79	LEU
35	DR	91	GLN
35	DR	95	THR
35	DR	100	LEU
35	DR	111	LEU
36	DS	3	ARG
36	DS	11	LYS
36	DS	14	VAL
36	DS	19	LYS
36	DS	20	ARG
36	DS	25	ARG
36	DS	36	TYR
36	DS	42	ASP
36	DS	48	LEU
36	DS	50	SER
36	DS	54	LEU
36	DS	59	LYS
36	DS	67	ARG
36	DS	69	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DS	98	VAL
36	DS	110	LEU
36	DS	111	GLU
37	DT	1	MET
37	DT	6	LEU
37	DT	13	ARG
37	DT	16	ARG
37	DT	23	ARG
37	DT	28	VAL
37	DT	34	VAL
37	DT	39	ARG
37	DT	46	GLU
37	DT	49	VAL
37	DT	53	ARG
37	DT	59	THR
37	DT	64	ARG
37	DT	74	ARG
37	DT	78	LEU
37	DT	82	LEU
37	DT	89	VAL
37	DT	93	ARG
37	DT	96	ARG
37	DT	107	ASP
37	DT	111	ARG
37	DT	118	ARG
38	DU	8	VAL
38	DU	31	SER
38	DU	36	ARG
38	DU	60	LEU
38	DU	74	LEU
38	DU	83	LEU
38	DU	95	LEU
38	DU	104	GLN
38	DU	108	GLU
39	DV	5	VAL
39	DV	7	THR
39	DV	18	LEU
39	DV	28	GLU
39	DV	33	VAL
39	DV	35	LEU
39	DV	38	LEU
39	DV	46	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	DV	51	VAL
39	DV	52	VAL
39	DV	57	VAL
39	DV	61	VAL
39	DV	62	LEU
39	DV	72	VAL
39	DV	79	VAL
39	DV	85	LYS
39	DV	89	GLN
39	DV	95	LEU
39	DV	100	ARG
40	DW	11	ARG
40	DW	12	ILE
40	DW	15	ARG
40	DW	17	VAL
40	DW	23	LEU
40	DW	27	LYS
40	DW	51	LEU
40	DW	60	ASN
40	DW	67	ASP
40	DW	98	LYS
40	DW	100	THR
40	DW	103	ILE
40	DW	107	LEU
41	DX	23	GLU
41	DX	35	THR
41	DX	45	THR
41	DX	52	VAL
41	DX	57	LEU
41	DX	76	ARG
41	DX	89	ILE
41	DX	92	LEU
42	DY	1	MET
42	DY	2	ARG
42	DY	5	MET
42	DY	7	VAL
42	DY	23	ARG
42	DY	31	LEU
42	DY	34	LYS
42	DY	44	ILE
42	DY	55	TYR
42	DY	61	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	DY	67	LEU
42	DY	72	VAL
42	DY	79	CYS
42	DY	85	VAL
42	DY	90	LEU
42	DY	92	ASN
42	DY	97	ARG
42	DY	99	CYS
43	DZ	3	TYR
43	DZ	5	LEU
43	DZ	6	LYS
43	DZ	19	ARG
43	DZ	20	ARG
43	DZ	41	LEU
43	DZ	42	VAL
43	DZ	46	LYS
43	DZ	56	VAL
43	DZ	72	ARG
43	DZ	76	LEU
43	DZ	80	ARG
43	DZ	86	VAL
43	DZ	97	GLU
43	DZ	112	ARG
43	DZ	126	VAL
43	DZ	133	ILE
43	DZ	155	LEU
43	DZ	156	LYS
43	DZ	170	THR
44	D0	20	ARG
44	D0	31	VAL
44	D0	43	THR
44	D0	46	LYS
44	D0	55	ARG
44	D0	63	VAL
44	D0	81	VAL
45	D1	4	VAL
45	D1	14	VAL
45	D1	20	ARG
45	D1	21	ARG
45	D1	30	VAL
45	D1	35	THR
45	D1	37	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
45	D1	40	ARG
45	D1	53	VAL
45	D1	58	ILE
45	D1	59	THR
45	D1	60	PHE
45	D1	62	VAL
45	D1	82	LEU
45	D1	95	LEU
46	D2	2	LYS
46	D2	16	LEU
46	D2	27	GLU
46	D2	30	ARG
46	D2	32	LEU
46	D2	34	GLU
46	D2	40	SER
46	D2	50	ILE
46	D2	53	LEU
46	D2	55	ARG
47	D3	6	VAL
47	D3	8	LEU
47	D3	18	ASP
47	D3	23	LEU
47	D3	24	LYS
47	D3	30	ARG
47	D3	31	LEU
47	D3	40	THR
47	D3	56	VAL
48	D4	14	ILE
48	D4	18	CYS
48	D4	20	ASN
48	D4	31	ILE
48	D4	34	GLU
48	D4	35	VAL
48	D4	37	SER
48	D4	39	CYS
48	D4	43	TYR
48	D4	44	THR
49	D5	6	VAL
49	D5	16	ARG
49	D5	29	THR
49	D5	37	LYS
49	D5	40	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
49	D5	55	ARG
50	D6	6	ARG
50	D6	9	LEU
50	D6	14	THR
50	D6	18	ARG
50	D6	20	ASN
50	D6	23	THR
50	D6	24	GLU
50	D6	28	ARG
50	D6	35	GLU
50	D6	38	LYS
50	D6	40	CYS
50	D6	44	ARG
50	D6	48	VAL
51	D7	1	MET
51	D7	4	THR
51	D7	8	ASN
51	D7	9	ARG
51	D7	24	THR
51	D7	29	LYS
51	D7	32	LYS
51	D7	43	THR
51	D7	47	ARG
52	D8	11	LYS
52	D8	14	VAL
52	D8	15	LYS
52	D8	23	VAL
52	D8	26	LYS
52	D8	27	THR
52	D8	29	LYS
52	D8	32	LEU
52	D8	37	SER
52	D8	58	ILE
52	D8	59	LYS
53	D9	3	VAL
53	D9	15	LYS
53	D9	17	ILE
53	D9	25	VAL
53	D9	26	ILE

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (119) such sidechains are listed below:

Mol	Chain	Res	Type
2	AB	37	ASN
2	AB	40	HIS
4	AD	123	HIS
4	AD	129	ASN
4	AD	160	GLN
4	AD	161	ASN
5	AE	78	HIS
8	AH	78	GLN
9	AI	3	GLN
9	AI	117	HIS
10	AJ	21	GLN
13	AM	77	ASN
15	AO	37	ASN
16	AP	76	GLN
17	AQ	94	ASN
20	AT	42	GLN
22	AV	13	HIS
25	BD	87	ASN
25	BD	164	GLN
26	BE	143	ASN
27	BF	69	HIS
28	BG	40	ASN
28	BG	123	ASN
28	BG	138	GLN
30	BI	105	HIS
31	BN	38	HIS
31	BN	133	GLN
32	BO	88	ASN
32	BO	89	ASN
32	BO	90	GLN
33	BP	27	HIS
34	BQ	12	GLN
34	BQ	45	GLN
34	BQ	89	ASN
37	BT	84	GLN
38	BU	72	HIS
38	BU	81	HIS
40	BW	60	ASN
41	BX	31	HIS
43	BZ	50	GLN
43	BZ	151	HIS
44	B0	35	ASN
44	B0	50	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	B2	46	GLN
46	B2	70	GLN
52	B8	7	HIS
53	B9	20	HIS
53	B9	36	GLN
2	CB	94	ASN
3	CC	6	HIS
3	CC	104	GLN
3	CC	110	ASN
3	CC	118	GLN
4	CD	123	HIS
4	CD	129	ASN
4	CD	160	GLN
4	CD	161	ASN
5	CE	73	ASN
5	CE	78	HIS
6	CF	100	ASN
7	CG	37	ASN
7	CG	56	GLN
7	CG	64	GLN
7	CG	106	GLN
7	CG	148	ASN
9	CI	3	GLN
9	CI	38	GLN
9	CI	73	GLN
9	CI	87	GLN
9	CI	117	HIS
10	CJ	33	GLN
12	CL	49	ASN
14	CN	52	GLN
15	CO	37	ASN
16	CP	76	GLN
17	CQ	45	HIS
17	CQ	94	ASN
19	CS	47	HIS
19	CS	69	HIS
19	CS	83	HIS
20	CT	42	GLN
22	CV	4	GLN
22	CV	18	GLN
22	CV	36	GLN
22	CV	39	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	DD	87	ASN
25	DD	96	HIS
26	DE	143	ASN
27	DF	8	GLN
27	DF	69	HIS
28	DG	40	ASN
28	DG	138	GLN
29	DH	147	ASN
30	DI	74	ASN
30	DI	105	HIS
30	DI	139	GLN
31	DN	38	HIS
31	DN	133	GLN
32	DO	88	ASN
32	DO	89	ASN
32	DO	90	GLN
33	DP	27	HIS
34	DQ	45	GLN
34	DQ	89	ASN
35	DR	50	HIS
37	DT	84	GLN
38	DU	72	HIS
40	DW	60	ASN
41	DX	31	HIS
42	DY	6	HIS
43	DZ	151	HIS
44	D0	35	ASN
44	D0	50	ASN
46	D2	70	GLN
50	D6	20	ASN
51	D7	6	GLN
52	D8	7	HIS
53	D9	20	HIS
53	D9	36	GLN

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	1503/1522 (98%)	427 (28%)	31 (2%)
1	CA	1499/1522 (98%)	384 (25%)	29 (1%)
23	BA	2802/2915 (96%)	562 (20%)	62 (2%)

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
23	DA	2808/2915 (96%)	557 (19%)	63 (2%)
24	BB	119/122 (97%)	21 (17%)	0
24	DB	119/122 (97%)	21 (17%)	0
All	All	8850/9118 (97%)	1972 (22%)	185 (2%)

All (1972) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	4	U
1	AA	5	U
1	AA	9	G
1	AA	10	A
1	AA	22	G
1	AA	26	A
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	54	C
1	AA	60	A
1	AA	61	G
1	AA	67	C
1	AA	77	G
1	AA	78	G
1	AA	79	G
1	AA	81	U
1	AA	90	U
1	AA	96	U
1	AA	97	G
1	AA	98	G
1	AA	100	C
1	AA	115	G
1	AA	116	A
1	AA	119	A
1	AA	120	A
1	AA	121	C
1	AA	129(A)	G
1	AA	131	C
1	AA	144	G
1	AA	146	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	150	C
1	AA	160	A
1	AA	163	C
1	AA	173	U
1	AA	182	U
1	AA	195	A
1	AA	203	U
1	AA	204	U
1	AA	216	G
1	AA	222	U
1	AA	231	G
1	AA	243	A
1	AA	244	U
1	AA	245	C
1	AA	247	G
1	AA	251	G
1	AA	266	G
1	AA	267	C
1	AA	280	C
1	AA	281	G
1	AA	289	G
1	AA	301	G
1	AA	306	G
1	AA	313	A
1	AA	316	G
1	AA	321	A
1	AA	327	A
1	AA	328	C
1	AA	332	G
1	AA	345	C
1	AA	352	C
1	AA	353	A
1	AA	354	G
1	AA	367	U
1	AA	369	C
1	AA	372	C
1	AA	373	A
1	AA	382	A
1	AA	384	G
1	AA	388	G
1	AA	397	A
1	AA	398	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	409	G
1	AA	412	A
1	AA	413	G
1	AA	414	A
1	AA	418	C
1	AA	421	U
1	AA	422	C
1	AA	423	G
1	AA	428	G
1	AA	429	U
1	AA	433	C
1	AA	435	C
1	AA	436	C
1	AA	437	U
1	AA	439	A
1	AA	442	C
1	AA	452	A
1	AA	458	C
1	AA	461	A
1	AA	471	G
1	AA	484	G
1	AA	485	G
1	AA	496	A
1	AA	498	U
1	AA	500	G
1	AA	505	G
1	AA	509	A
1	AA	510	A
1	AA	511	C
1	AA	518	C
1	AA	521	G
1	AA	524	G
1	AA	527	G
1	AA	531	U
1	AA	532	A
1	AA	533	A
1	AA	536	C
1	AA	545	C
1	AA	547	A
1	AA	550	G
1	AA	558	G
1	AA	559	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	560	U
1	AA	561	U
1	AA	562	C
1	AA	563	A
1	AA	564	C
1	AA	568	G
1	AA	572	A
1	AA	573	A
1	AA	576	G
1	AA	577	G
1	AA	588	G
1	AA	592	G
1	AA	595	G
1	AA	596	C
1	AA	597	G
1	AA	613	C
1	AA	629	G
1	AA	630	G
1	AA	631	G
1	AA	632	A
1	AA	650	G
1	AA	653	A
1	AA	662	G
1	AA	665	A
1	AA	666	G
1	AA	687	A
1	AA	688	G
1	AA	723	U
1	AA	724	G
1	AA	731	G
1	AA	749	C
1	AA	752	G
1	AA	753	A
1	AA	755	G
1	AA	777	A
1	AA	786	G
1	AA	793	U
1	AA	794	A
1	AA	796	C
1	AA	802	A
1	AA	806	C
1	AA	817	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	818	G
1	AA	821	G
1	AA	827	U
1	AA	828	A
1	AA	829	G
1	AA	833	U
1	AA	836	G
1	AA	839	U
1	AA	840	C
1	AA	841	U
1	AA	848	C
1	AA	855	G
1	AA	859	A
1	AA	863	U
1	AA	864	A
1	AA	872	A
1	AA	889	A
1	AA	902	G
1	AA	913	A
1	AA	914	A
1	AA	916	G
1	AA	926	G
1	AA	927	G
1	AA	933	G
1	AA	934	C
1	AA	935	A
1	AA	936	C
1	AA	938	A
1	AA	939	G
1	AA	940	C
1	AA	942	G
1	AA	945	G
1	AA	952	U
1	AA	960	U
1	AA	961	U
1	AA	962	C
1	AA	968	A
1	AA	969	A
1	AA	971	G
1	AA	974	A
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	980	C
1	AA	981	U
1	AA	986	A
1	AA	987	G
1	AA	990	C
1	AA	991	U
1	AA	992	U
1	AA	993	G
1	AA	995	C
1	AA	1001(A)	G
1	AA	1003	G
1	AA	1004	A
1	AA	1005	A
1	AA	1006	C
1	AA	1007	C
1	AA	1012	U
1	AA	1013	G
1	AA	1014	A
1	AA	1018	C
1	AA	1023	G
1	AA	1024	G
1	AA	1025	U
1	AA	1026	G
1	AA	1027	C
1	AA	1028	C
1	AA	1029	C
1	AA	1030(A)	G
1	AA	1030(B)	C
1	AA	1030(C)	G
1	AA	1031	G
1	AA	1036	G
1	AA	1037	C
1	AA	1039	C
1	AA	1041	A
1	AA	1042	G
1	AA	1045	C
1	AA	1047	G
1	AA	1050	G
1	AA	1052	U
1	AA	1054	C
1	AA	1055	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1058	G
1	AA	1061	G
1	AA	1063	C
1	AA	1065	U
1	AA	1066	C
1	AA	1067	A
1	AA	1068	G
1	AA	1072	G
1	AA	1078	U
1	AA	1081	G
1	AA	1086	U
1	AA	1092	A
1	AA	1094	G
1	AA	1095	U
1	AA	1099	G
1	AA	1100	C
1	AA	1101	A
1	AA	1103	C
1	AA	1108	G
1	AA	1109	C
1	AA	1117	G
1	AA	1118	C
1	AA	1121	U
1	AA	1123	A
1	AA	1124	G
1	AA	1125	U
1	AA	1131	G
1	AA	1136	U
1	AA	1137	C
1	AA	1138	G
1	AA	1139	G
1	AA	1140	C
1	AA	1147	C
1	AA	1151	A
1	AA	1152	A
1	AA	1153	C
1	AA	1158	C
1	AA	1159	U
1	AA	1160	G
1	AA	1166	G
1	AA	1170	A
1	AA	1174	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1176	A
1	AA	1178	G
1	AA	1179	A
1	AA	1180	A
1	AA	1182	G
1	AA	1184	G
1	AA	1190	G
1	AA	1193	G
1	AA	1194	U
1	AA	1195	C
1	AA	1196	U
1	AA	1197	G
1	AA	1199	U
1	AA	1200	C
1	AA	1201	A
1	AA	1202	G
1	AA	1204	A
1	AA	1206	G
1	AA	1208	C
1	AA	1210	C
1	AA	1211	U
1	AA	1212	U
1	AA	1213	A
1	AA	1224	G
1	AA	1225	A
1	AA	1226	C
1	AA	1228	C
1	AA	1234	C
1	AA	1236	A
1	AA	1237	C
1	AA	1238	A
1	AA	1239	A
1	AA	1240	U
1	AA	1241	G
1	AA	1242	C
1	AA	1244	C
1	AA	1248	A
1	AA	1249	C
1	AA	1251	A
1	AA	1252	A
1	AA	1254	C
1	AA	1256	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1257	U
1	AA	1258	G
1	AA	1259	C
1	AA	1260	C
1	AA	1261	A
1	AA	1263	C
1	AA	1265	G
1	AA	1269	A
1	AA	1270	C
1	AA	1272	G
1	AA	1273	G
1	AA	1278	U
1	AA	1279	A
1	AA	1280	A
1	AA	1282	C
1	AA	1284	C
1	AA	1285	A
1	AA	1286	A
1	AA	1287	A
1	AA	1292	U
1	AA	1294	G
1	AA	1298	C
1	AA	1299	A
1	AA	1300	G
1	AA	1301	U
1	AA	1302	U
1	AA	1303	C
1	AA	1304	G
1	AA	1307	U
1	AA	1308	U
1	AA	1312	G
1	AA	1316	G
1	AA	1317	C
1	AA	1319	A
1	AA	1320	C
1	AA	1321	C
1	AA	1322	C
1	AA	1323	G
1	AA	1325	C
1	AA	1329	A
1	AA	1330	U
1	AA	1331	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1332	A
1	AA	1333	A
1	AA	1337	G
1	AA	1340	A
1	AA	1342	C
1	AA	1346	A
1	AA	1347	G
1	AA	1349	A
1	AA	1350	A
1	AA	1354	C
1	AA	1364	U
1	AA	1365	G
1	AA	1368	G
1	AA	1369	C
1	AA	1370	G
1	AA	1376	U
1	AA	1379	G
1	AA	1381	U
1	AA	1382	C
1	AA	1383	C
1	AA	1386	G
1	AA	1387	G
1	AA	1388	C
1	AA	1392	G
1	AA	1397	C
1	AA	1401	G
1	AA	1404	C
1	AA	1406	U
1	AA	1407	C
1	AA	1419	G
1	AA	1442	G
1	AA	1442(A)	G
1	AA	1443	G
1	AA	1444	C
1	AA	1447	A
1	AA	1452	C
1	AA	1456	G
1	AA	1457	G
1	AA	1459	C
1	AA	1460	A
1	AA	1461	G
1	AA	1469	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1473	A
1	AA	1487	G
1	AA	1492	A
1	AA	1493	A
1	AA	1494	G
1	AA	1503	A
1	AA	1504	G
1	AA	1505	G
1	AA	1506	U
1	AA	1507	A
1	AA	1517	G
1	AA	1520	G
1	AA	1529	G
1	AA	1530	G
1	AA	1533	C
23	BA	10	G
23	BA	15	G
23	BA	34	C
23	BA	36	G
23	BA	45	C
23	BA	61	G
23	BA	68	G
23	BA	69	C
23	BA	71	A
23	BA	74	A
23	BA	75	G
23	BA	83	G
23	BA	84	A
23	BA	90	U
23	BA	92	A
23	BA	94	C
23	BA	95	G
23	BA	102	G
23	BA	118	A
23	BA	119	A
23	BA	120	U
23	BA	121	G
23	BA	125	G
23	BA	131	G
23	BA	139(A)	G
23	BA	141	A
23	BA	154	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BA	154(A)	C
23	BA	157	U
23	BA	172	C
23	BA	181	A
23	BA	182	A
23	BA	196	A
23	BA	199	A
23	BA	201	C
23	BA	204	A
23	BA	205	G
23	BA	215	G
23	BA	216	A
23	BA	221	A
23	BA	222	A
23	BA	225	A
23	BA	229	A
23	BA	232	G
23	BA	233	A
23	BA	248	G
23	BA	250	G
23	BA	271(I)	G
23	BA	271(K)	U
23	BA	271(L)	U
23	BA	271(M)	G
23	BA	271(N)	U
23	BA	271(O)	C
23	BA	271(P)	C
23	BA	271(R)	G
23	BA	272(B)	G
23	BA	272(H)	C
23	BA	272(I)	U
23	BA	272(J)	C
23	BA	277	C
23	BA	278	A
23	BA	279	C
23	BA	294	A
23	BA	311	A
23	BA	329	G
23	BA	330	A
23	BA	332	A
23	BA	352	G
23	BA	363	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BA	363(F)	A
23	BA	382	G
23	BA	386	G
23	BA	399	G
23	BA	411	G
23	BA	412	A
23	BA	414	C
23	BA	416	C
23	BA	427	U
23	BA	428	A
23	BA	444	C
23	BA	448	U
23	BA	454	A
23	BA	456	C
23	BA	457	A
23	BA	470	A
23	BA	471	A
23	BA	481	G
23	BA	504	U
23	BA	505	A
23	BA	509	C
23	BA	510	C
23	BA	512	G
23	BA	513	A
23	BA	530	G
23	BA	531	C
23	BA	532	A
23	BA	533	G
23	BA	543	C
23	BA	545	G
23	BA	546	C
23	BA	547	A
23	BA	548	A
23	BA	563	G
23	BA	571	A
23	BA	573	G
23	BA	574	C
23	BA	575	A
23	BA	584	C
23	BA	588	U
23	BA	603	A
23	BA	604	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BA	606	U
23	BA	607	U
23	BA	614	U
23	BA	614(A)	U
23	BA	614(B)	G
23	BA	615	G
23	BA	619	G
23	BA	627	A
23	BA	637	A
23	BA	644	A
23	BA	645	C
23	BA	646	A
23	BA	647	G
23	BA	652(B)	A
23	BA	652(C)	G
23	BA	652(D)	C
23	BA	652(U)	G
23	BA	656	G
23	BA	669	G
23	BA	686	G
23	BA	708	C
23	BA	709	U
23	BA	717	G
23	BA	730	C
23	BA	746	A
23	BA	747	U
23	BA	752	A
23	BA	753	C
23	BA	762	U
23	BA	764	A
23	BA	765	G
23	BA	775	G
23	BA	776	G
23	BA	782	A
23	BA	784	A
23	BA	785	G
23	BA	792	G
23	BA	793	A
23	BA	802	A
23	BA	805	G
23	BA	810	U
23	BA	812	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BA	818	G
23	BA	819	A
23	BA	827	U
23	BA	828	U
23	BA	830	G
23	BA	836	G
23	BA	857	C
23	BA	859	G
23	BA	869	G
23	BA	879	G
23	BA	880	G
23	BA	896	A
23	BA	897	C
23	BA	899	A
23	BA	900	A
23	BA	901	A
23	BA	910	A
23	BA	917	A
23	BA	922	U
23	BA	923	C
23	BA	932	G
23	BA	934	G
23	BA	938	G
23	BA	941	A
23	BA	945	A
23	BA	946	G
23	BA	958	U
23	BA	959	A
23	BA	961	C
23	BA	968	G
23	BA	974	G
23	BA	975	C
23	BA	975(A)	G
23	BA	983	A
23	BA	990	A
23	BA	996	A
23	BA	1012	U
23	BA	1013	C
23	BA	1016	G
23	BA	1020	A
23	BA	1022	G
23	BA	1024	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BA	1025	G
23	BA	1026	U
23	BA	1027	A
23	BA	1033	U
23	BA	1034	G
23	BA	1038	C
23	BA	1041	C
23	BA	1042	G
23	BA	1044	G
23	BA	1045	A
23	BA	1046	A
23	BA	1047	G
23	BA	1048	A
23	BA	1049	C
23	BA	1050	A
23	BA	1052	C
23	BA	1107	G
23	BA	1108	U
23	BA	1109	C
23	BA	1110	G
23	BA	1111	A
23	BA	1112	G
23	BA	1115	G
23	BA	1129	A
23	BA	1130	U
23	BA	1135	C
23	BA	1136	G
23	BA	1139	G
23	BA	1141	U
23	BA	1142	U
23	BA	1142(A)	A
23	BA	1149	G
23	BA	1155	A
23	BA	1156	A
23	BA	1164	G
23	BA	1210	A
23	BA	1211	U
23	BA	1218	C
23	BA	1224	C
23	BA	1250	G
23	BA	1253	A
23	BA	1256	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BA	1267	U
23	BA	1268	A
23	BA	1271	G
23	BA	1272	A
23	BA	1273	U
23	BA	1298	C
23	BA	1300	U
23	BA	1301	A
23	BA	1305	C
23	BA	1310	G
23	BA	1313	U
23	BA	1314	C
23	BA	1329	U
23	BA	1338	G
23	BA	1352	U
23	BA	1358	G
23	BA	1365	A
23	BA	1368	G
23	BA	1370	C
23	BA	1374	G
23	BA	1379	A
23	BA	1380	G
23	BA	1384	A
23	BA	1385	G
23	BA	1391	U
23	BA	1416	G
23	BA	1417	C
23	BA	1419	A
23	BA	1420	U
23	BA	1421	G
23	BA	1427	A
23	BA	1428	C
23	BA	1429	G
23	BA	1445	A
23	BA	1449	A
23	BA	1450	G
23	BA	1459	G
23	BA	1461	G
23	BA	1467	C
23	BA	1471	A
23	BA	1472	A
23	BA	1481	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BA	1482	G
23	BA	1488	G
23	BA	1490	A
23	BA	1493	C
23	BA	1497	U
23	BA	1507	A
23	BA	1508	A
23	BA	1509	C
23	BA	1509(A)	A
23	BA	1518	U
23	BA	1520	G
23	BA	1530	C
23	BA	1531	C
23	BA	1539	G
23	BA	1542	A
23	BA	1543	C
23	BA	1554	A
23	BA	1558	A
23	BA	1559	G
23	BA	1566	A
23	BA	1569	A
23	BA	1578	U
23	BA	1580	A
23	BA	1582	C
23	BA	1584	C
23	BA	1586	A
23	BA	1598	C
23	BA	1608	A
23	BA	1609	A
23	BA	1610	A
23	BA	1617	C
23	BA	1618	A
23	BA	1625	C
23	BA	1639	U
23	BA	1640	C
23	BA	1641	A
23	BA	1648	C
23	BA	1653	G
23	BA	1654	A
23	BA	1674	G
23	BA	1675	C
23	BA	1696	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BA	1700	A
23	BA	1701	A
23	BA	1703	G
23	BA	1722	A
23	BA	1746	G
23	BA	1750	G
23	BA	1762	A
23	BA	1763	G
23	BA	1764	G
23	BA	1773	A
23	BA	1780	A
23	BA	1781	C
23	BA	1782	C
23	BA	1791	A
23	BA	1799	G
23	BA	1800	C
23	BA	1801	G
23	BA	1816	G
23	BA	1819	A
23	BA	1820	U
23	BA	1829	A
23	BA	1834	U
23	BA	1835	G
23	BA	1836	C
23	BA	1847	A
23	BA	1848	A
23	BA	1858	G
23	BA	1877	A
23	BA	1878	G
23	BA	1889	A
23	BA	1900	A
23	BA	1906	G
23	BA	1913	A
23	BA	1914	C
23	BA	1929	G
23	BA	1930	G
23	BA	1934	C
23	BA	1936	A
23	BA	1938	A
23	BA	1955	U
23	BA	1962	C
23	BA	1963	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BA	1967	C
23	BA	1969	A
23	BA	1970	A
23	BA	1971	A
23	BA	1972	A
23	BA	1982	C
23	BA	1991	U
23	BA	1992	G
23	BA	1993	U
23	BA	1997	G
23	BA	2023	G
23	BA	2031	A
23	BA	2032	G
23	BA	2033	A
23	BA	2036	C
23	BA	2039	C
23	BA	2043	C
23	BA	2049	G
23	BA	2055	C
23	BA	2056	G
23	BA	2060	A
23	BA	2061	G
23	BA	2062	A
23	BA	2063	C
23	BA	2069	G
23	BA	2093	G
23	BA	2099	U
23	BA	2103	C
23	BA	2104	G
23	BA	2105	C
23	BA	2106	G
23	BA	2108	C
23	BA	2109	U
23	BA	2110	G
23	BA	2111	C
23	BA	2116	G
23	BA	2117	A
23	BA	2118	U
23	BA	2119	A
23	BA	2126	A
23	BA	2127	G
23	BA	2131	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BA	2133	G
23	BA	2134	A
23	BA	2135	A
23	BA	2143	C
23	BA	2146	C
23	BA	2147	G
23	BA	2148	G
23	BA	2159	G
23	BA	2161	C
23	BA	2170	A
23	BA	2172	U
23	BA	2173	A
23	BA	2175	C
23	BA	2176	A
23	BA	2181	G
23	BA	2185	C
23	BA	2187	G
23	BA	2188	C
23	BA	2190	G
23	BA	2191	G
23	BA	2192	G
23	BA	2198	A
23	BA	2199	A
23	BA	2200	C
23	BA	2206	G
23	BA	2207	G
23	BA	2208	A
23	BA	2218	U
23	BA	2225	A
23	BA	2235	G
23	BA	2238	G
23	BA	2239	G
23	BA	2240	C
23	BA	2259	G
23	BA	2268	A
23	BA	2269	A
23	BA	2273	A
23	BA	2275	C
23	BA	2280	G
23	BA	2283	C
23	BA	2287	A
23	BA	2289	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BA	2304	G
23	BA	2305	A
23	BA	2306	C
23	BA	2308	G
23	BA	2309	A
23	BA	2311	A
23	BA	2316	C
23	BA	2317	C
23	BA	2318	G
23	BA	2319	G
23	BA	2320	A
23	BA	2322	A
23	BA	2325	G
23	BA	2327	A
23	BA	2334	G
23	BA	2336	A
23	BA	2347	C
23	BA	2348	U
23	BA	2350	C
23	BA	2354	G
23	BA	2371	G
23	BA	2372	G
23	BA	2383	G
23	BA	2385	C
23	BA	2396	G
23	BA	2405	G
23	BA	2406	U
23	BA	2410	G
23	BA	2413	G
23	BA	2414	G
23	BA	2422	A
23	BA	2423	U
23	BA	2425	A
23	BA	2429	G
23	BA	2430	A
23	BA	2435	A
23	BA	2439	A
23	BA	2440	C
23	BA	2441	C
23	BA	2448	A
23	BA	2460	U
23	BA	2461	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BA	2468	G
23	BA	2469	A
23	BA	2476	A
23	BA	2478	A
23	BA	2487	G
23	BA	2494	G
23	BA	2502	G
23	BA	2505	G
23	BA	2506	U
23	BA	2518	A
23	BA	2520	C
23	BA	2525	G
23	BA	2529	G
23	BA	2535	G
23	BA	2554	U
23	BA	2566	A
23	BA	2567	G
23	BA	2569	G
23	BA	2573	C
23	BA	2584	U
23	BA	2585	U
23	BA	2586	C
23	BA	2602	A
23	BA	2603	G
23	BA	2608	G
23	BA	2609	U
23	BA	2610	C
23	BA	2611	U
23	BA	2612	C
23	BA	2615	U
23	BA	2629	A
23	BA	2630	G
23	BA	2632	A
23	BA	2643	G
23	BA	2663	G
23	BA	2673	G
23	BA	2690	C
23	BA	2700	C
23	BA	2702	U
23	BA	2703	C
23	BA	2707	G
23	BA	2712	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BA	2712(A)	A
23	BA	2713	A
23	BA	2714	G
23	BA	2726	U
23	BA	2733	A
23	BA	2758	A
23	BA	2761	G
23	BA	2762	G
23	BA	2764	A
23	BA	2765	A
23	BA	2766	G
23	BA	2769	C
23	BA	2778	A
23	BA	2791	C
23	BA	2802	G
23	BA	2803	C
23	BA	2805	G
23	BA	2808	U
23	BA	2820	A
23	BA	2821	A
23	BA	2834	G
23	BA	2835	A
23	BA	2846	G
23	BA	2851	A
23	BA	2872	G
23	BA	2875	C
23	BA	2880	C
23	BA	2892	A
23	BA	2893	G
23	BA	2894	G
23	BA	2895	U
24	BB	8	U
24	BB	9	G
24	BB	12	C
24	BB	13	A
24	BB	17	C
24	BB	24	G
24	BB	25	A
24	BB	29	A
24	BB	32	C
24	BB	40	U
24	BB	44	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	BB	53	A
24	BB	54	G
24	BB	56	G
24	BB	72	G
24	BB	73	A
24	BB	84	C
24	BB	87	G
24	BB	88	C
24	BB	106	G
24	BB	110	G
1	CA	5	U
1	CA	9	G
1	CA	10	A
1	CA	22	G
1	CA	26	A
1	CA	32	A
1	CA	39	G
1	CA	47	C
1	CA	48	C
1	CA	50	A
1	CA	51	A
1	CA	54	C
1	CA	60	A
1	CA	61	G
1	CA	67	C
1	CA	77	G
1	CA	78	G
1	CA	79	G
1	CA	96	U
1	CA	97	G
1	CA	98	G
1	CA	100	C
1	CA	101	A
1	CA	115	G
1	CA	116	A
1	CA	119	A
1	CA	120	A
1	CA	121	C
1	CA	129(A)	G
1	CA	131	C
1	CA	144	G
1	CA	146	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	150	C
1	CA	160	A
1	CA	163	C
1	CA	173	U
1	CA	182	U
1	CA	195	A
1	CA	203	U
1	CA	204	U
1	CA	216	G
1	CA	222	U
1	CA	231	G
1	CA	243	A
1	CA	244	U
1	CA	245	C
1	CA	247	G
1	CA	251	G
1	CA	266	G
1	CA	267	C
1	CA	280	C
1	CA	281	G
1	CA	289	G
1	CA	301	G
1	CA	306	G
1	CA	313	A
1	CA	316	G
1	CA	321	A
1	CA	327	A
1	CA	328	C
1	CA	332	G
1	CA	345	C
1	CA	346	G
1	CA	352	C
1	CA	353	A
1	CA	354	G
1	CA	367	U
1	CA	372	C
1	CA	373	A
1	CA	382	A
1	CA	384	G
1	CA	388	G
1	CA	397	A
1	CA	398	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	409	G
1	CA	412	A
1	CA	413	G
1	CA	414	A
1	CA	418	C
1	CA	421	U
1	CA	422	C
1	CA	428	G
1	CA	429	U
1	CA	433	C
1	CA	435	C
1	CA	436	C
1	CA	437	U
1	CA	439	A
1	CA	442	C
1	CA	452	A
1	CA	458	C
1	CA	461	A
1	CA	471	G
1	CA	484	G
1	CA	485	G
1	CA	496	A
1	CA	498	U
1	CA	500	G
1	CA	505	G
1	CA	509	A
1	CA	510	A
1	CA	511	C
1	CA	518	C
1	CA	521	G
1	CA	524	G
1	CA	527	G
1	CA	531	U
1	CA	532	A
1	CA	533	A
1	CA	536	C
1	CA	545	C
1	CA	547	A
1	CA	550	G
1	CA	558	G
1	CA	559	A
1	CA	560	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	561	U
1	CA	562	C
1	CA	563	A
1	CA	564	C
1	CA	568	G
1	CA	572	A
1	CA	573	A
1	CA	576	G
1	CA	577	G
1	CA	588	G
1	CA	592	G
1	CA	595	G
1	CA	596	C
1	CA	597	G
1	CA	613	C
1	CA	629	G
1	CA	630	G
1	CA	631	G
1	CA	632	A
1	CA	650	G
1	CA	653	A
1	CA	662	G
1	CA	665	A
1	CA	666	G
1	CA	687	A
1	CA	688	G
1	CA	723	U
1	CA	724	G
1	CA	731	G
1	CA	749	C
1	CA	752	G
1	CA	753	A
1	CA	755	G
1	CA	777	A
1	CA	786	G
1	CA	793	U
1	CA	794	A
1	CA	796	C
1	CA	806	C
1	CA	816	A
1	CA	817	C
1	CA	818	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	821	G
1	CA	827	U
1	CA	828	A
1	CA	829	G
1	CA	833	U
1	CA	836	G
1	CA	839	U
1	CA	840	C
1	CA	841	U
1	CA	848	C
1	CA	855	G
1	CA	859	A
1	CA	864	A
1	CA	889	A
1	CA	902	G
1	CA	913	A
1	CA	914	A
1	CA	916	G
1	CA	925	G
1	CA	926	G
1	CA	927	G
1	CA	934	C
1	CA	935	A
1	CA	940	C
1	CA	960	U
1	CA	961	U
1	CA	965	A
1	CA	966	G
1	CA	968	A
1	CA	969	A
1	CA	971	G
1	CA	972	C
1	CA	974	A
1	CA	975	A
1	CA	976	G
1	CA	977	A
1	CA	978	A
1	CA	980	C
1	CA	982	U
1	CA	983	A
1	CA	984	C
1	CA	989	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	992	U
1	CA	993	G
1	CA	1001	A
1	CA	1001(A)	G
1	CA	1003	G
1	CA	1004	A
1	CA	1005	A
1	CA	1008	C
1	CA	1009	G
1	CA	1011	G
1	CA	1015	A
1	CA	1020	U
1	CA	1021	G
1	CA	1022	G
1	CA	1023	G
1	CA	1024	G
1	CA	1026	G
1	CA	1027	C
1	CA	1028	C
1	CA	1029	C
1	CA	1030(A)	G
1	CA	1031	G
1	CA	1034	G
1	CA	1035	A
1	CA	1036	G
1	CA	1040	U
1	CA	1042	G
1	CA	1050	G
1	CA	1064	G
1	CA	1065	U
1	CA	1066	C
1	CA	1068	G
1	CA	1070	U
1	CA	1081	G
1	CA	1082	G
1	CA	1085	U
1	CA	1087	G
1	CA	1088	G
1	CA	1094	G
1	CA	1095	U
1	CA	1100	C
1	CA	1101	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1106	G
1	CA	1107	C
1	CA	1108	G
1	CA	1113	C
1	CA	1114	C
1	CA	1118	C
1	CA	1124	G
1	CA	1125	U
1	CA	1131	G
1	CA	1136	U
1	CA	1137	C
1	CA	1138	G
1	CA	1139	G
1	CA	1140	C
1	CA	1147	C
1	CA	1152	A
1	CA	1154	G
1	CA	1157	A
1	CA	1159	U
1	CA	1171	G
1	CA	1172	C
1	CA	1174	G
1	CA	1178	G
1	CA	1181	G
1	CA	1182	G
1	CA	1183	A
1	CA	1184	G
1	CA	1185	G
1	CA	1193	G
1	CA	1196	U
1	CA	1197	G
1	CA	1200	C
1	CA	1202	G
1	CA	1206	G
1	CA	1208	C
1	CA	1211	U
1	CA	1212	U
1	CA	1213	A
1	CA	1214	C
1	CA	1220	G
1	CA	1225	A
1	CA	1227	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1228	C
1	CA	1229	A
1	CA	1238	A
1	CA	1239	A
1	CA	1241	G
1	CA	1244	C
1	CA	1250	A
1	CA	1252	A
1	CA	1254	C
1	CA	1255	G
1	CA	1256	A
1	CA	1257	U
1	CA	1258	G
1	CA	1259	C
1	CA	1260	C
1	CA	1270	C
1	CA	1274	G
1	CA	1275	A
1	CA	1279	A
1	CA	1280	A
1	CA	1281	U
1	CA	1282	C
1	CA	1284	C
1	CA	1285	A
1	CA	1286	A
1	CA	1287	A
1	CA	1291	G
1	CA	1292	U
1	CA	1293	G
1	CA	1294	G
1	CA	1295	G
1	CA	1297	C
1	CA	1299	A
1	CA	1300	G
1	CA	1301	U
1	CA	1302	U
1	CA	1303	C
1	CA	1304	G
1	CA	1305	G
1	CA	1306	A
1	CA	1309	G
1	CA	1310	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1312	G
1	CA	1316	G
1	CA	1319	A
1	CA	1320	C
1	CA	1321	C
1	CA	1322	C
1	CA	1323	G
1	CA	1331	G
1	CA	1333	A
1	CA	1337	G
1	CA	1338	G
1	CA	1339	A
1	CA	1341	U
1	CA	1346	A
1	CA	1347	G
1	CA	1355	G
1	CA	1358	U
1	CA	1359	C
1	CA	1360	A
1	CA	1363	C
1	CA	1364	U
1	CA	1366	C
1	CA	1370	G
1	CA	1377	A
1	CA	1379	G
1	CA	1383	C
1	CA	1386	G
1	CA	1397	C
1	CA	1401	G
1	CA	1404	C
1	CA	1406	U
1	CA	1419	G
1	CA	1442	G
1	CA	1442(A)	G
1	CA	1443	G
1	CA	1444	C
1	CA	1447	A
1	CA	1452	C
1	CA	1456	G
1	CA	1457	G
1	CA	1459	C
1	CA	1460	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1461	G
1	CA	1473	A
1	CA	1487	G
1	CA	1492	A
1	CA	1493	A
1	CA	1494	G
1	CA	1503	A
1	CA	1504	G
1	CA	1505	G
1	CA	1506	U
1	CA	1507	A
1	CA	1517	G
1	CA	1520	G
1	CA	1529	G
1	CA	1530	G
1	CA	1533	C
23	DA	10	G
23	DA	15	G
23	DA	34	C
23	DA	36	G
23	DA	45	C
23	DA	61	G
23	DA	68	G
23	DA	69	C
23	DA	71	A
23	DA	74	A
23	DA	75	G
23	DA	84	A
23	DA	90	U
23	DA	92	A
23	DA	94	C
23	DA	95	G
23	DA	102	G
23	DA	118	A
23	DA	119	A
23	DA	120	U
23	DA	121	G
23	DA	125	G
23	DA	131	G
23	DA	139(A)	G
23	DA	141	A
23	DA	154	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DA	154(A)	C
23	DA	157	U
23	DA	172	C
23	DA	181	A
23	DA	182	A
23	DA	196	A
23	DA	199	A
23	DA	204	A
23	DA	205	G
23	DA	215	G
23	DA	216	A
23	DA	221	A
23	DA	222	A
23	DA	225	A
23	DA	229	A
23	DA	232	G
23	DA	233	A
23	DA	248	G
23	DA	250	G
23	DA	271(I)	G
23	DA	271(K)	U
23	DA	271(L)	U
23	DA	271(M)	G
23	DA	271(N)	U
23	DA	271(O)	C
23	DA	271(P)	C
23	DA	271(R)	G
23	DA	272(B)	G
23	DA	272(H)	C
23	DA	272(I)	U
23	DA	272(J)	C
23	DA	277	C
23	DA	278	A
23	DA	279	C
23	DA	283	A
23	DA	286	C
23	DA	311	A
23	DA	324	A
23	DA	329	G
23	DA	330	A
23	DA	332	A
23	DA	333	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DA	352	G
23	DA	363	G
23	DA	363(F)	A
23	DA	382	G
23	DA	386	G
23	DA	399	G
23	DA	411	G
23	DA	412	A
23	DA	414	C
23	DA	426	C
23	DA	427	U
23	DA	428	A
23	DA	444	C
23	DA	448	U
23	DA	454	A
23	DA	456	C
23	DA	457	A
23	DA	470	A
23	DA	471	A
23	DA	481	G
23	DA	492	A
23	DA	504	U
23	DA	505	A
23	DA	509	C
23	DA	510	C
23	DA	512	G
23	DA	513	A
23	DA	530	G
23	DA	531	C
23	DA	532	A
23	DA	533	G
23	DA	543	C
23	DA	545	G
23	DA	546	C
23	DA	547	A
23	DA	548	A
23	DA	563	G
23	DA	571	A
23	DA	573	G
23	DA	575	A
23	DA	586	A
23	DA	588	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DA	603	A
23	DA	604	G
23	DA	606	U
23	DA	607	U
23	DA	614	U
23	DA	614(A)	U
23	DA	614(B)	G
23	DA	615	G
23	DA	619	G
23	DA	627	A
23	DA	637	A
23	DA	644	A
23	DA	645	C
23	DA	646	A
23	DA	652(B)	A
23	DA	652(C)	G
23	DA	652(D)	C
23	DA	652(U)	G
23	DA	669	G
23	DA	686	G
23	DA	708	C
23	DA	709	U
23	DA	717	G
23	DA	730	C
23	DA	752	A
23	DA	753	C
23	DA	762	U
23	DA	765	G
23	DA	775	G
23	DA	776	G
23	DA	782	A
23	DA	784	A
23	DA	785	G
23	DA	792	G
23	DA	802	A
23	DA	805	G
23	DA	810	U
23	DA	812	C
23	DA	819	A
23	DA	827	U
23	DA	828	U
23	DA	830	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DA	836	G
23	DA	857	C
23	DA	859	G
23	DA	869	G
23	DA	879	G
23	DA	880	G
23	DA	896	A
23	DA	897	C
23	DA	899	A
23	DA	900	A
23	DA	901	A
23	DA	910	A
23	DA	917	A
23	DA	922	U
23	DA	923	C
23	DA	932	G
23	DA	934	G
23	DA	938	G
23	DA	941	A
23	DA	945	A
23	DA	946	G
23	DA	958	U
23	DA	959	A
23	DA	961	C
23	DA	968	G
23	DA	974	G
23	DA	975	C
23	DA	975(A)	G
23	DA	983	A
23	DA	990	A
23	DA	996	A
23	DA	1012	U
23	DA	1013	C
23	DA	1016	G
23	DA	1020	A
23	DA	1022	G
23	DA	1024	G
23	DA	1025	G
23	DA	1026	U
23	DA	1027	A
23	DA	1033	U
23	DA	1034	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DA	1038	C
23	DA	1041	C
23	DA	1042	G
23	DA	1044	G
23	DA	1045	A
23	DA	1046	A
23	DA	1047	G
23	DA	1048	A
23	DA	1049	C
23	DA	1050	A
23	DA	1052	C
23	DA	1107	G
23	DA	1108	U
23	DA	1109	C
23	DA	1110	G
23	DA	1111	A
23	DA	1112	G
23	DA	1115	G
23	DA	1129	A
23	DA	1135	C
23	DA	1136	G
23	DA	1139	G
23	DA	1141	U
23	DA	1142	U
23	DA	1142(A)	A
23	DA	1149	G
23	DA	1155	A
23	DA	1164	G
23	DA	1211	U
23	DA	1218	C
23	DA	1253	A
23	DA	1256	G
23	DA	1268	A
23	DA	1271	G
23	DA	1272	A
23	DA	1273	U
23	DA	1298	C
23	DA	1300	U
23	DA	1301	A
23	DA	1314	C
23	DA	1321	A
23	DA	1329	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DA	1338	G
23	DA	1358	G
23	DA	1365	A
23	DA	1367	A
23	DA	1368	G
23	DA	1370	C
23	DA	1374	G
23	DA	1379	A
23	DA	1380	G
23	DA	1384	A
23	DA	1385	G
23	DA	1391	U
23	DA	1416	G
23	DA	1417	C
23	DA	1419	A
23	DA	1420	U
23	DA	1421	G
23	DA	1427	A
23	DA	1428	C
23	DA	1429	G
23	DA	1445	A
23	DA	1449	A
23	DA	1450	G
23	DA	1459	G
23	DA	1461	G
23	DA	1467	C
23	DA	1471	A
23	DA	1481	U
23	DA	1482	G
23	DA	1488	G
23	DA	1490	A
23	DA	1493	C
23	DA	1497	U
23	DA	1507	A
23	DA	1508	A
23	DA	1509	C
23	DA	1509(A)	A
23	DA	1518	U
23	DA	1520	G
23	DA	1530	C
23	DA	1531	C
23	DA	1533	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DA	1534	U
23	DA	1535	A
23	DA	1536	C
23	DA	1537	G
23	DA	1539	G
23	DA	1542	A
23	DA	1543	C
23	DA	1554	A
23	DA	1558	A
23	DA	1559	G
23	DA	1566	A
23	DA	1569	A
23	DA	1578	U
23	DA	1580	A
23	DA	1582	C
23	DA	1584	C
23	DA	1586	A
23	DA	1598	C
23	DA	1608	A
23	DA	1609	A
23	DA	1610	A
23	DA	1617	C
23	DA	1625	C
23	DA	1639	U
23	DA	1640	C
23	DA	1641	A
23	DA	1648	C
23	DA	1653	G
23	DA	1654	A
23	DA	1674	G
23	DA	1675	C
23	DA	1696	G
23	DA	1700	A
23	DA	1701	A
23	DA	1703	G
23	DA	1721	G
23	DA	1722	A
23	DA	1746	G
23	DA	1750	G
23	DA	1756	G
23	DA	1762	A
23	DA	1763	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DA	1764	G
23	DA	1773	A
23	DA	1780	A
23	DA	1781	C
23	DA	1782	C
23	DA	1791	A
23	DA	1799	G
23	DA	1800	C
23	DA	1801	G
23	DA	1816	G
23	DA	1819	A
23	DA	1820	U
23	DA	1829	A
23	DA	1835	G
23	DA	1836	C
23	DA	1847	A
23	DA	1848	A
23	DA	1858	G
23	DA	1877	A
23	DA	1878	G
23	DA	1889	A
23	DA	1900	A
23	DA	1906	G
23	DA	1913	A
23	DA	1914	C
23	DA	1929	G
23	DA	1930	G
23	DA	1934	C
23	DA	1936	A
23	DA	1938	A
23	DA	1955	U
23	DA	1962	C
23	DA	1963	U
23	DA	1967	C
23	DA	1969	A
23	DA	1970	A
23	DA	1971	A
23	DA	1972	A
23	DA	1982	C
23	DA	1991	U
23	DA	1992	G
23	DA	1993	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DA	1997	G
23	DA	2020	A
23	DA	2023	G
23	DA	2031	A
23	DA	2032	G
23	DA	2033	A
23	DA	2036	C
23	DA	2039	C
23	DA	2043	C
23	DA	2049	G
23	DA	2055	C
23	DA	2056	G
23	DA	2060	A
23	DA	2061	G
23	DA	2062	A
23	DA	2063	C
23	DA	2069	G
23	DA	2093	G
23	DA	2099	U
23	DA	2103	C
23	DA	2104	G
23	DA	2105	C
23	DA	2106	G
23	DA	2108	C
23	DA	2109	U
23	DA	2110	G
23	DA	2111	C
23	DA	2116	G
23	DA	2117	A
23	DA	2118	U
23	DA	2119	A
23	DA	2126	A
23	DA	2127	G
23	DA	2131	G
23	DA	2133	G
23	DA	2134	A
23	DA	2135	A
23	DA	2143	C
23	DA	2146	C
23	DA	2147	G
23	DA	2148	G
23	DA	2161	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DA	2162	G
23	DA	2170	A
23	DA	2172	U
23	DA	2173	A
23	DA	2175	C
23	DA	2176	A
23	DA	2181	G
23	DA	2185	C
23	DA	2187	G
23	DA	2188	C
23	DA	2190	G
23	DA	2191	G
23	DA	2192	G
23	DA	2196	C
23	DA	2198	A
23	DA	2199	A
23	DA	2200	C
23	DA	2206	G
23	DA	2207	G
23	DA	2208	A
23	DA	2218	U
23	DA	2225	A
23	DA	2235	G
23	DA	2238	G
23	DA	2239	G
23	DA	2240	C
23	DA	2259	G
23	DA	2267	A
23	DA	2268	A
23	DA	2269	A
23	DA	2273	A
23	DA	2275	C
23	DA	2280	G
23	DA	2283	C
23	DA	2287	A
23	DA	2289	G
23	DA	2304	G
23	DA	2305	A
23	DA	2306	C
23	DA	2308	G
23	DA	2309	A
23	DA	2311	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DA	2316	C
23	DA	2318	G
23	DA	2319	G
23	DA	2320	A
23	DA	2325	G
23	DA	2327	A
23	DA	2334	G
23	DA	2336	A
23	DA	2347	C
23	DA	2348	U
23	DA	2350	C
23	DA	2354	G
23	DA	2355	C
23	DA	2371	G
23	DA	2372	G
23	DA	2383	G
23	DA	2385	C
23	DA	2388	A
23	DA	2396	G
23	DA	2405	G
23	DA	2406	U
23	DA	2410	G
23	DA	2413	G
23	DA	2414	G
23	DA	2422	A
23	DA	2423	U
23	DA	2425	A
23	DA	2429	G
23	DA	2430	A
23	DA	2435	A
23	DA	2439	A
23	DA	2440	C
23	DA	2441	C
23	DA	2448	A
23	DA	2460	U
23	DA	2461	C
23	DA	2468	G
23	DA	2469	A
23	DA	2476	A
23	DA	2478	A
23	DA	2487	G
23	DA	2494	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DA	2502	G
23	DA	2505	G
23	DA	2506	U
23	DA	2518	A
23	DA	2520	C
23	DA	2525	G
23	DA	2529	G
23	DA	2535	G
23	DA	2554	U
23	DA	2566	A
23	DA	2567	G
23	DA	2569	G
23	DA	2573	C
23	DA	2584	U
23	DA	2585	U
23	DA	2586	C
23	DA	2602	A
23	DA	2603	G
23	DA	2608	G
23	DA	2610	C
23	DA	2611	U
23	DA	2612	C
23	DA	2615	U
23	DA	2629	A
23	DA	2630	G
23	DA	2632	A
23	DA	2643	G
23	DA	2663	G
23	DA	2673	G
23	DA	2689	U
23	DA	2690	C
23	DA	2700	C
23	DA	2702	U
23	DA	2703	C
23	DA	2707	G
23	DA	2712	U
23	DA	2712(A)	A
23	DA	2713	A
23	DA	2714	G
23	DA	2726	U
23	DA	2733	A
23	DA	2757	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DA	2758	A
23	DA	2761	G
23	DA	2762	G
23	DA	2764	A
23	DA	2765	A
23	DA	2766	G
23	DA	2769	C
23	DA	2778	A
23	DA	2791	C
23	DA	2802	G
23	DA	2803	C
23	DA	2805	G
23	DA	2808	U
23	DA	2820	A
23	DA	2821	A
23	DA	2834	G
23	DA	2835	A
23	DA	2846	G
23	DA	2850	A
23	DA	2851	A
23	DA	2872	G
23	DA	2875	C
23	DA	2880	C
23	DA	2892	A
23	DA	2893	G
23	DA	2894	G
23	DA	2895	U
24	DB	2	C
24	DB	8	U
24	DB	9	G
24	DB	12	C
24	DB	13	A
24	DB	22	U
24	DB	24	G
24	DB	29	A
24	DB	32	C
24	DB	34	U
24	DB	39	A
24	DB	45	A
24	DB	52	A
24	DB	53	A
24	DB	56	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	DB	59	A
24	DB	64	C
24	DB	73	A
24	DB	106	G
24	DB	110	G
24	DB	116	G

All (185) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	AA	3	G
1	AA	7	G
1	AA	60	A
1	AA	69	G
1	AA	115	G
1	AA	119	A
1	AA	203	U
1	AA	243	A
1	AA	266	G
1	AA	327	A
1	AA	428	G
1	AA	484	G
1	AA	509	A
1	AA	560	U
1	AA	687	A
1	AA	748	C
1	AA	840	C
1	AA	913	A
1	AA	992	U
1	AA	1064	G
1	AA	1065	U
1	AA	1067	A
1	AA	1179	A
1	AA	1201	A
1	AA	1279	A
1	AA	1285	A
1	AA	1300	G
1	AA	1364	U
1	AA	1442	G
1	AA	1493	A
1	AA	1504	G
23	BA	9	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BA	90	U
23	BA	196	A
23	BA	221	A
23	BA	249	C
23	BA	271(K)	U
23	BA	271(L)	U
23	BA	271(M)	G
23	BA	277	C
23	BA	278	A
23	BA	363(E)	U
23	BA	479	A
23	BA	512	G
23	BA	542	C
23	BA	547	A
23	BA	652(A)	A
23	BA	669	G
23	BA	746	A
23	BA	752	A
23	BA	764	A
23	BA	774	A
23	BA	776	G
23	BA	827	U
23	BA	856	C
23	BA	896	A
23	BA	900	A
23	BA	974	G
23	BA	1026	U
23	BA	1033	U
23	BA	1047	G
23	BA	1048	A
23	BA	1049	C
23	BA	1106	G
23	BA	1108	U
23	BA	1210	A
23	BA	1378	A
23	BA	1379	A
23	BA	1427	A
23	BA	1507	A
23	BA	1530	C
23	BA	1538	G
23	BA	1558	A
23	BA	1608	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BA	1609	A
23	BA	1617	C
23	BA	1653	G
23	BA	1799	G
23	BA	1819	A
23	BA	1992	G
23	BA	2126	A
23	BA	2171	A
23	BA	2172	U
23	BA	2308	G
23	BA	2318	G
23	BA	2405	G
23	BA	2439	A
23	BA	2602	A
23	BA	2610	C
23	BA	2689	U
23	BA	2712	U
23	BA	2778	A
23	BA	2802	G
1	CA	7	G
1	CA	60	A
1	CA	115	G
1	CA	119	A
1	CA	203	U
1	CA	243	A
1	CA	266	G
1	CA	327	A
1	CA	345	C
1	CA	428	G
1	CA	484	G
1	CA	509	A
1	CA	560	U
1	CA	687	A
1	CA	748	C
1	CA	840	C
1	CA	913	A
1	CA	991	U
1	CA	992	U
1	CA	1064	G
1	CA	1065	U
1	CA	1067	A
1	CA	1201	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1211	U
1	CA	1285	A
1	CA	1300	G
1	CA	1442	G
1	CA	1493	A
1	CA	1504	G
23	DA	9	U
23	DA	90	U
23	DA	196	A
23	DA	221	A
23	DA	249	C
23	DA	271(K)	U
23	DA	271(L)	U
23	DA	271(M)	G
23	DA	277	C
23	DA	278	A
23	DA	310	A
23	DA	363(E)	U
23	DA	512	G
23	DA	542	C
23	DA	547	A
23	DA	652(A)	A
23	DA	752	A
23	DA	764	A
23	DA	774	A
23	DA	776	G
23	DA	827	U
23	DA	856	C
23	DA	859	G
23	DA	896	A
23	DA	900	A
23	DA	974	G
23	DA	1026	U
23	DA	1033	U
23	DA	1047	G
23	DA	1048	A
23	DA	1049	C
23	DA	1106	G
23	DA	1108	U
23	DA	1210	A
23	DA	1378	A
23	DA	1379	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DA	1427	A
23	DA	1507	A
23	DA	1530	C
23	DA	1536	C
23	DA	1538	G
23	DA	1558	A
23	DA	1608	A
23	DA	1617	C
23	DA	1653	G
23	DA	1799	G
23	DA	1819	A
23	DA	1992	G
23	DA	2126	A
23	DA	2171	A
23	DA	2172	U
23	DA	2308	G
23	DA	2318	G
23	DA	2405	G
23	DA	2439	A
23	DA	2602	A
23	DA	2610	C
23	DA	2689	U
23	DA	2712	U
23	DA	2756	U
23	DA	2778	A
23	DA	2802	G
23	DA	2873	A

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

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

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

Of 1302 ligands modelled in this entry, 1302 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å^2)	Q<0.9
1	AA	1505/1522 (98%)	1.04	260 (17%)	4	3	52, 116, 177, 188	0
1	CA	1501/1522 (98%)	0.71	137 (9%)	15	8	53, 112, 168, 181	0
2	AB	229/256 (89%)	1.23	41 (17%)	3	2	114, 135, 150, 160	0
2	CB	229/256 (89%)	1.12	38 (16%)	4	3	113, 135, 150, 160	0
3	AC	206/239 (86%)	1.53	60 (29%)	1	1	122, 148, 164, 172	0
3	CC	206/239 (86%)	1.16	39 (18%)	3	2	119, 140, 153, 162	0
4	AD	208/209 (99%)	1.56	60 (28%)	1	1	100, 116, 133, 143	0
4	CD	208/209 (99%)	1.37	47 (22%)	2	1	95, 111, 129, 142	0
5	AE	148/162 (91%)	1.10	20 (13%)	7	4	85, 109, 124, 129	0
5	CE	148/162 (91%)	0.84	14 (9%)	14	7	87, 108, 124, 132	0
6	AF	100/101 (99%)	0.99	12 (12%)	9	5	88, 102, 122, 136	0
6	CF	100/101 (99%)	0.71	5 (5%)	34	18	93, 107, 123, 135	0
7	AG	155/156 (99%)	2.21	69 (44%)	0	1	134, 156, 166, 168	0
7	CG	155/156 (99%)	1.40	43 (27%)	1	1	118, 144, 151, 158	0
8	AH	138/138 (100%)	0.94	17 (12%)	8	5	93, 111, 121, 131	0
8	CH	138/138 (100%)	0.95	17 (12%)	8	5	89, 110, 120, 133	0
9	AI	125/128 (97%)	2.60	75 (60%)	0	0	131, 157, 170, 176	0
9	CI	125/128 (97%)	2.25	57 (45%)	0	0	129, 151, 161, 173	0
10	AJ	96/105 (91%)	2.53	56 (58%)	0	0	137, 155, 170, 176	0
10	CJ	96/105 (91%)	2.14	48 (50%)	0	0	130, 149, 161, 169	0
11	AK	114/129 (88%)	0.81	7 (6%)	27	14	74, 109, 123, 127	0
11	CK	114/129 (88%)	0.91	11 (9%)	13	7	79, 109, 122, 124	0
12	AL	122/132 (92%)	1.10	20 (16%)	4	3	72, 95, 111, 120	0
12	CL	122/132 (92%)	0.97	13 (10%)	11	6	72, 92, 106, 116	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	AM	114/126 (90%)	2.81	72 (63%) 0 0	147, 160, 171, 177	0
13	CM	114/126 (90%)	1.79	37 (32%) 1 1	124, 145, 155, 158	0
14	AN	60/61 (98%)	2.86	38 (63%) 0 0	134, 160, 169, 174	0
14	CN	60/61 (98%)	2.13	29 (48%) 0 0	136, 146, 152, 155	0
15	AO	88/89 (98%)	0.92	8 (9%) 15 8	78, 103, 120, 131	0
15	CO	88/89 (98%)	0.72	5 (5%) 29 15	79, 102, 122, 129	0
16	AP	82/88 (93%)	1.88	29 (35%) 1 1	98, 112, 132, 138	0
16	CP	82/88 (93%)	1.51	19 (23%) 2 1	89, 105, 122, 132	0
17	AQ	99/105 (94%)	1.10	12 (12%) 8 5	86, 99, 113, 118	0
17	CQ	99/105 (94%)	0.79	8 (8%) 18 9	84, 98, 113, 117	0
18	AR	68/88 (77%)	0.94	5 (7%) 20 10	93, 104, 138, 141	0
18	CR	68/88 (77%)	0.83	2 (2%) 53 31	95, 107, 138, 143	0
19	AS	81/93 (87%)	2.23	43 (53%) 0 0	131, 164, 174, 179	0
19	CS	81/93 (87%)	1.39	16 (19%) 3 2	125, 146, 153, 155	0
20	AT	97/106 (91%)	1.63	30 (30%) 1 1	90, 106, 127, 131	0
20	CT	97/106 (91%)	1.44	25 (25%) 1 1	84, 103, 125, 132	0
21	AU	23/27 (85%)	4.91	21 (91%) 0 0	147, 161, 169, 174	0
21	CU	23/27 (85%)	3.07	17 (73%) 0 0	130, 145, 153, 154	0
22	AV	53/61 (86%)	0.71	5 (9%) 14 7	93, 105, 121, 143	0
22	CV	53/61 (86%)	0.74	7 (13%) 7 4	90, 115, 141, 151	0
23	BA	2809/2915 (96%)	-0.21	77 (2%) 56 33	31, 50, 134, 186	0
23	DA	2814/2915 (96%)	-0.19	82 (2%) 53 31	34, 56, 138, 189	0
24	BB	120/122 (98%)	-0.12	0 100 100	46, 72, 94, 119	0
24	DB	120/122 (98%)	0.30	2 (1%) 69 45	63, 90, 111, 129	0
25	BD	275/276 (99%)	0.17	6 (2%) 62 39	34, 52, 69, 117	0
25	DD	275/276 (99%)	-0.07	4 (1%) 72 49	36, 55, 72, 119	0
26	BE	204/206 (99%)	0.12	3 (1%) 72 49	32, 55, 78, 95	0
26	DE	204/206 (99%)	0.05	2 (0%) 79 59	35, 61, 84, 101	0
27	BF	203/210 (96%)	0.06	0 100 100	30, 60, 92, 136	0
27	DF	203/210 (96%)	0.22	6 (2%) 52 30	34, 67, 96, 136	0
28	BG	181/182 (99%)	1.12	24 (13%) 7 4	80, 120, 143, 152	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
28	DG	181/182 (99%)	1.18	22 (12%) 8 5	92, 126, 146, 156	0
29	BH	174/180 (96%)	0.66	11 (6%) 26 13	58, 79, 97, 110	0
29	DH	174/180 (96%)	0.77	8 (4%) 37 20	70, 92, 107, 122	0
30	BI	146/148 (98%)	0.36	5 (3%) 48 27	57, 90, 108, 120	0
30	DI	146/148 (98%)	0.88	17 (11%) 9 5	60, 108, 127, 131	0
31	BN	140/140 (100%)	0.15	3 (2%) 63 40	39, 55, 83, 98	0
31	DN	140/140 (100%)	0.08	1 (0%) 84 66	45, 63, 89, 101	0
32	BO	122/122 (100%)	0.11	2 (1%) 70 47	43, 58, 79, 85	0
32	DO	122/122 (100%)	-0.07	2 (1%) 70 47	46, 62, 82, 86	0
33	BP	149/150 (99%)	0.30	5 (3%) 48 27	34, 63, 98, 109	0
33	DP	149/150 (99%)	0.25	2 (1%) 75 53	38, 70, 102, 111	0
34	BQ	141/141 (100%)	0.21	4 (2%) 55 32	43, 61, 77, 91	0
34	DQ	141/141 (100%)	0.25	0 100 100	47, 67, 85, 94	0
35	BR	118/118 (100%)	0.03	1 (0%) 82 64	38, 50, 70, 78	0
35	DR	118/118 (100%)	0.07	1 (0%) 82 64	42, 55, 73, 82	0
36	BS	110/112 (98%)	0.32	1 (0%) 81 61	58, 75, 93, 101	0
36	DS	110/112 (98%)	0.60	3 (2%) 56 33	64, 82, 99, 110	0
37	BT	131/146 (89%)	0.20	6 (4%) 37 20	51, 63, 98, 117	0
37	DT	131/146 (89%)	0.19	2 (1%) 72 49	55, 67, 101, 118	0
38	BU	116/118 (98%)	0.04	4 (3%) 48 27	35, 48, 69, 81	0
38	DU	116/118 (98%)	-0.02	0 100 100	40, 56, 76, 86	0
39	BV	100/101 (99%)	0.14	2 (2%) 65 41	34, 62, 81, 91	0
39	DV	101/101 (100%)	0.17	0 100 100	40, 72, 90, 98	0
40	BW	112/113 (99%)	-0.11	3 (2%) 56 33	36, 43, 64, 102	0
40	DW	112/113 (99%)	-0.04	0 100 100	40, 48, 69, 95	0
41	BX	95/96 (98%)	0.18	5 (5%) 32 16	41, 51, 74, 98	0
41	DX	95/96 (98%)	0.25	1 (1%) 78 57	47, 56, 80, 102	0
42	BY	107/110 (97%)	0.68	6 (5%) 30 15	52, 64, 89, 107	0
42	DY	107/110 (97%)	0.87	8 (7%) 20 10	59, 72, 96, 116	0
43	BZ	198/206 (96%)	0.59	10 (5%) 33 17	65, 85, 111, 126	0
43	DZ	198/206 (96%)	0.58	11 (5%) 30 15	73, 92, 115, 132	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
44	B0	76/85 (89%)	0.08	2 (2%) 57 34	48, 55, 71, 87	0
44	D0	76/85 (89%)	0.22	1 (1%) 75 53	53, 61, 76, 90	0
45	B1	97/98 (98%)	0.12	3 (3%) 51 30	37, 57, 89, 103	0
45	D1	97/98 (98%)	0.33	5 (5%) 33 17	41, 61, 91, 108	0
46	B2	70/72 (97%)	0.40	3 (4%) 40 21	50, 66, 84, 103	0
46	D2	70/72 (97%)	0.84	11 (15%) 5 3	55, 71, 88, 112	0
47	B3	59/60 (98%)	0.40	1 (1%) 69 45	43, 57, 85, 101	0
47	D3	59/60 (98%)	0.42	2 (3%) 48 27	49, 64, 92, 112	0
48	B4	46/71 (64%)	0.50	2 (4%) 40 21	106, 140, 151, 154	0
48	D4	46/71 (64%)	0.72	1 (2%) 62 39	113, 141, 152, 163	0
49	B5	59/60 (98%)	-0.11	0 100 100	33, 51, 68, 89	0
49	D5	59/60 (98%)	-0.07	0 100 100	37, 55, 73, 95	0
50	B6	53/54 (98%)	0.02	1 (1%) 66 43	53, 61, 75, 78	0
50	D6	53/54 (98%)	0.11	2 (3%) 44 24	56, 65, 79, 82	0
51	B7	48/49 (97%)	0.01	4 (8%) 17 9	32, 37, 61, 78	0
51	D7	48/49 (97%)	-0.00	2 (4%) 40 22	36, 40, 64, 83	0
52	B8	64/65 (98%)	0.54	7 (10%) 10 6	42, 49, 58, 70	0
52	D8	64/65 (98%)	0.16	1 (1%) 70 47	46, 53, 62, 72	0
53	B9	36/37 (97%)	0.34	1 (2%) 55 32	49, 59, 72, 83	0
53	D9	36/37 (97%)	1.01	6 (16%) 4 3	58, 68, 81, 91	0
All	All	20542/21368 (96%)	0.51	2001 (9%) 13 7	30, 80, 160, 189	0

All (2001) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
21	AU	16	GLY	10.9
42	BY	1	MET	10.4
7	CG	2	ALA	10.3
21	AU	4	GLY	9.8
10	AJ	72	VAL	9.4
21	AU	3	LYS	9.2
14	AN	12	ARG	9.1
13	AM	43	THR	9.0
42	DY	80	GLY	8.9
9	AI	12	GLU	8.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
29	BH	2	SER	8.7
1	AA	974	A	8.7
28	DG	35	GLU	8.4
13	CM	100	GLY	8.4
13	CM	7	VAL	8.3
21	AU	11	GLY	8.3
13	AM	97	PRO	8.1
14	AN	13	THR	8.0
1	AA	1363	C	8.0
13	AM	87	TYR	8.0
2	AB	131	PRO	7.9
3	AC	2	GLY	7.9
7	AG	38	LEU	7.4
1	AA	982	U	7.4
4	CD	69	GLY	7.3
1	AA	1290	G	7.2
14	AN	14	PRO	7.1
7	CG	38	LEU	7.1
10	AJ	47	PHE	6.9
21	AU	17	THR	6.8
13	AM	103	THR	6.8
19	AS	49	ILE	6.7
13	AM	111	LYS	6.7
10	CJ	54	PHE	6.7
9	AI	123	PRO	6.6
21	AU	21	TYR	6.6
14	CN	2	ALA	6.6
1	CA	1148	U	6.6
23	BA	2130	U	6.6
9	AI	109	VAL	6.5
10	AJ	8	LEU	6.5
23	BA	2117	A	6.5
13	AM	96	LEU	6.4
1	CA	1149	C	6.4
13	AM	88	ARG	6.4
1	AA	1286	A	6.4
9	AI	125	TYR	6.4
7	AG	97	GLN	6.3
10	CJ	53	PRO	6.2
13	AM	107	ALA	6.2
5	AE	130	ASN	6.2
7	AG	36	LYS	6.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AA	949	A	6.1
21	AU	14	TRP	6.1
13	AM	60	VAL	6.0
2	AB	133	LYS	6.0
1	CA	933	G	6.0
7	AG	35	LYS	6.0
9	CI	7	THR	6.0
21	CU	5	ASP	6.0
7	AG	42	ILE	6.0
14	AN	39	LEU	6.0
13	AM	100	GLY	5.9
7	CG	5	ARG	5.9
7	AG	39	ALA	5.9
1	AA	1306	A	5.9
1	CA	1379	G	5.9
14	CN	29	ARG	5.9
1	AA	1030(B)	C	5.8
3	AC	144	SER	5.8
13	AM	99	ARG	5.8
17	AQ	78	GLU	5.8
9	CI	118	LYS	5.7
1	AA	1352	C	5.7
3	AC	192	THR	5.7
21	AU	18	TYR	5.6
1	AA	1341	U	5.6
13	AM	101	GLN	5.6
13	AM	90	LEU	5.6
9	AI	89	ASN	5.6
21	CU	23	PRO	5.6
9	CI	77	ILE	5.6
1	CA	1026	G	5.5
3	CC	153	VAL	5.5
7	AG	104	LEU	5.5
20	CT	10	LEU	5.5
9	AI	13	ALA	5.5
1	AA	1030(C)	G	5.5
10	AJ	24	VAL	5.5
9	AI	7	THR	5.5
9	CI	123	PRO	5.5
1	AA	950	U	5.5
1	AA	1331	G	5.5
13	CM	66	LEU	5.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	CB	161	ALA	5.4
7	AG	117	ALA	5.4
9	CI	106	ALA	5.4
1	AA	1235	U	5.4
20	AT	10	LEU	5.4
3	CC	76	VAL	5.4
1	CA	1027	C	5.4
21	AU	15	ARG	5.4
3	AC	196	LEU	5.3
1	AA	986	A	5.3
1	CA	974	A	5.3
6	AF	88	VAL	5.3
9	AI	14	VAL	5.3
9	CI	108	VAL	5.3
1	AA	1351	U	5.3
45	D1	2	SER	5.3
23	BA	2129	C	5.3
2	CB	93	VAL	5.3
4	CD	21	LEU	5.2
13	AM	113	PRO	5.2
42	DY	2	ARG	5.2
23	DA	2110	G	5.2
21	CU	14	TRP	5.2
5	AE	81	GLU	5.2
16	AP	28	ARG	5.2
9	CI	119	ALA	5.2
9	CI	101	PHE	5.2
21	AU	6	ARG	5.2
7	AG	66	VAL	5.2
1	AA	951	G	5.1
1	AA	1291	G	5.1
12	CL	73	GLU	5.1
20	AT	82	SER	5.1
9	AI	113	LYS	5.1
7	AG	59	LEU	5.1
23	BA	1106	G	5.1
13	AM	98	VAL	5.1
21	CU	6	ARG	5.1
16	CP	82	GLN	5.1
28	DG	155	MET	5.1
10	CJ	43	ARG	5.1
9	AI	119	ALA	5.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
14	AN	37	PHE	5.1
3	CC	155	GLY	5.1
13	AM	91	ARG	5.0
9	CI	117	HIS	5.0
10	AJ	38	ILE	5.0
20	AT	12	ALA	5.0
13	AM	27	LYS	5.0
1	AA	1224	G	5.0
1	AA	1309	G	5.0
9	AI	10	ARG	5.0
21	AU	8	THR	5.0
19	AS	40	ILE	5.0
16	CP	12	LYS	5.0
12	CL	112	ASP	4.9
1	AA	1223	C	4.9
23	BA	2173	A	4.9
19	AS	9	VAL	4.9
3	AC	39	ILE	4.9
1	AA	980	C	4.9
15	AO	3	ILE	4.9
2	CB	152	PHE	4.9
23	BA	277	C	4.9
18	AR	31	LEU	4.9
28	BG	35	GLU	4.8
7	AG	116	ALA	4.8
9	AI	102	LEU	4.8
1	AA	1217	C	4.8
1	AA	1242	C	4.8
14	AN	2	ALA	4.8
1	AA	989	C	4.8
10	CJ	23	ILE	4.8
13	AM	20	THR	4.8
10	AJ	34	VAL	4.8
1	AA	973	G	4.8
16	AP	29	ASP	4.8
19	CS	4	SER	4.8
20	CT	11	SER	4.8
42	BY	2	ARG	4.8
14	CN	34	TYR	4.7
4	AD	6	GLY	4.7
1	AA	1236	A	4.7
1	AA	1240	U	4.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	CA	1285	A	4.7
4	AD	21	LEU	4.7
28	BG	133	LEU	4.7
7	AG	5	ARG	4.7
19	AS	50	ALA	4.7
9	AI	3	GLN	4.7
30	DI	121	LYS	4.7
1	AA	952	U	4.7
1	AA	1340	A	4.7
10	AJ	62	HIS	4.7
10	AJ	71	LEU	4.7
14	AN	7	ILE	4.7
3	CC	43	LEU	4.7
9	AI	126	SER	4.7
10	CJ	72	VAL	4.7
14	CN	25	VAL	4.7
1	AA	948	C	4.7
1	AA	1218	C	4.7
28	DG	2	PRO	4.6
1	AA	983	A	4.6
13	CM	5	ALA	4.6
9	AI	11	LYS	4.6
9	AI	111	ARG	4.6
23	DA	2173	A	4.6
1	CA	936	C	4.6
8	CH	1	MET	4.6
13	AM	109	THR	4.6
7	AG	93	PRO	4.6
19	AS	41	VAL	4.6
16	AP	13	HIS	4.6
9	CI	125	TYR	4.5
10	CJ	64	GLU	4.5
1	AA	987	G	4.5
9	CI	84	ALA	4.5
8	AH	1	MET	4.5
14	CN	31	ARG	4.5
14	AN	11	LYS	4.5
16	AP	12	LYS	4.5
9	AI	106	ALA	4.5
13	AM	5	ALA	4.5
1	CA	1222	G	4.5
14	AN	10	ALA	4.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
23	DA	2168	G	4.5
13	AM	19	LEU	4.5
13	AM	41	PRO	4.5
25	BD	275	LYS	4.5
10	CJ	48	THR	4.4
13	CM	103	THR	4.4
3	AC	87	LEU	4.4
9	CI	121	ARG	4.4
7	CG	124	LEU	4.4
13	CM	60	VAL	4.4
21	CU	2	GLY	4.4
7	CG	120	ILE	4.4
7	AG	33	ASP	4.4
9	CI	105	ASP	4.4
9	CI	126	SER	4.4
28	BG	131	TYR	4.4
10	AJ	65	LEU	4.4
13	AM	4	ILE	4.4
19	AS	69	HIS	4.4
1	AA	1216	G	4.4
7	AG	118	VAL	4.4
4	CD	202	LEU	4.4
7	AG	31	MET	4.3
9	AI	84	ALA	4.3
7	CG	8	GLU	4.3
1	AA	941	G	4.3
1	CA	1023	G	4.3
1	CA	1092	A	4.3
1	AA	981	U	4.3
16	AP	1	MET	4.3
28	DG	134	GLY	4.3
1	CA	1036	G	4.3
1	AA	1332	A	4.3
9	CI	40	LEU	4.3
14	AN	34	TYR	4.3
7	AG	8	GLU	4.3
1	AA	1330	U	4.3
23	DA	272(A)	U	4.3
10	CJ	56	HIS	4.3
7	AG	15	ASP	4.3
5	CE	20	GLN	4.3
7	AG	9	VAL	4.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
14	AN	61	TRP	4.2
1	CA	1286	A	4.2
12	CL	26	ALA	4.2
13	CM	27	LYS	4.2
20	AT	13	LEU	4.2
1	AA	947	G	4.2
1	AA	1342	C	4.2
1	CA	1128	C	4.2
23	BA	2125	G	4.2
10	AJ	64	GLU	4.2
52	B8	35	GLN	4.2
13	CM	102	ARG	4.2
2	AB	134	GLU	4.2
29	DH	2	SER	4.2
4	AD	31	CYS	4.2
7	CG	106	GLN	4.2
5	AE	90	VAL	4.2
13	CM	67	GLU	4.2
2	CB	149	LEU	4.2
9	CI	12	GLU	4.1
20	CT	73	HIS	4.1
53	D9	37	GLY	4.1
14	AN	23	ARG	4.1
2	AB	184	VAL	4.1
10	AJ	54	PHE	4.1
2	CB	72	GLY	4.1
25	BD	276	LYS	4.1
1	AA	1214	C	4.1
8	AH	84	ARG	4.1
14	AN	32	SER	4.1
45	D1	26	ARG	4.1
7	AG	34	GLY	4.1
14	CN	37	PHE	4.1
30	DI	34	GLY	4.1
1	AA	985	C	4.1
1	AA	1237	C	4.1
4	CD	31	CYS	4.1
25	DD	276	LYS	4.1
9	AI	2	GLU	4.1
4	CD	42	GLN	4.1
9	AI	112	LYS	4.0
9	AI	33	PHE	4.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
20	AT	86	ARG	4.0
10	CJ	84	GLN	4.0
9	CI	49	PRO	4.0
1	CA	1205	U	4.0
1	CA	1293	G	4.0
14	AN	9	LYS	4.0
21	AU	12	LYS	4.0
23	BA	2131	G	4.0
6	CF	63	TYR	4.0
9	CI	81	ILE	4.0
11	CK	89	ALA	4.0
23	DA	276	A	4.0
16	AP	2	VAL	4.0
19	CS	13	ASP	4.0
9	CI	15	ALA	4.0
29	BH	58	GLU	4.0
1	AA	1030(A)	G	4.0
1	AA	1353	G	4.0
4	CD	9	CYS	4.0
3	AC	76	VAL	4.0
1	CA	1116	C	4.0
14	AN	16	PHE	4.0
9	AI	118	LYS	4.0
10	AJ	40	LEU	4.0
9	AI	108	VAL	4.0
1	AA	1312	G	4.0
1	CA	1202	G	4.0
21	AU	24	ARG	4.0
4	AD	5	ILE	4.0
14	AN	22	THR	4.0
23	DA	2128	C	4.0
41	DX	6	ASP	4.0
9	AI	70	LYS	4.0
25	DD	275	LYS	4.0
6	AF	6	VAL	3.9
1	AA	961	U	3.9
20	AT	73	HIS	3.9
51	D7	48	LYS	3.9
17	AQ	7	THR	3.9
4	CD	112	VAL	3.9
3	CC	2	GLY	3.9
7	CG	39	ALA	3.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	CC	154	SER	3.9
41	BX	60	ARG	3.9
28	BG	87	PRO	3.9
1	AA	988	G	3.9
1	AA	1197	G	3.9
1	AA	1287	A	3.9
23	BA	2159	G	3.9
10	CJ	55	LYS	3.9
19	AS	70	LYS	3.9
1	AA	1212	U	3.9
9	AI	88	TYR	3.9
16	CP	10	GLY	3.9
22	AV	36	GLN	3.9
10	AJ	63	PHE	3.9
20	CT	12	ALA	3.9
1	CA	1223	C	3.9
14	AN	21	TYR	3.9
10	AJ	48	THR	3.9
23	BA	2167	U	3.9
52	B8	33	ASN	3.9
9	CI	63	ILE	3.9
10	AJ	55	LYS	3.9
16	AP	11	SER	3.9
7	AG	110	GLN	3.9
13	CM	101	GLN	3.9
19	AS	10	PHE	3.9
7	CG	16	LEU	3.9
20	CT	86	ARG	3.8
20	CT	85	MET	3.8
22	AV	33	THR	3.8
2	AB	132	LYS	3.8
9	AI	30	GLY	3.8
10	AJ	53	PRO	3.8
1	AA	1018	C	3.8
23	BA	2172	U	3.8
23	BA	2792	G	3.8
23	DA	2792	G	3.8
5	CE	12	LEU	3.8
20	AT	53	LEU	3.8
7	CG	7	ALA	3.8
7	CG	32	ARG	3.8
9	CI	82	ALA	3.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
21	CU	7	ARG	3.8
17	CQ	24	GLU	3.8
17	CQ	78	GLU	3.8
20	AT	56	MET	3.8
10	CJ	47	PHE	3.8
1	AA	977	A	3.8
1	AA	1339	A	3.8
17	AQ	97	SER	3.8
26	BE	204	ALA	3.8
23	BA	2163	C	3.8
7	AG	80	VAL	3.8
1	CA	1198	G	3.8
4	CD	11	LEU	3.8
14	AN	6	LEU	3.8
8	CH	99	GLU	3.8
10	AJ	83	GLU	3.8
4	AD	120	LEU	3.8
19	AS	48	THR	3.8
19	AS	71	LEU	3.8
41	BX	92	LEU	3.8
4	AD	113	SER	3.8
7	AG	105	VAL	3.8
11	CK	82	VAL	3.8
21	AU	20	LYS	3.8
7	AG	144	MET	3.8
9	CI	107	ARG	3.8
1	AA	935	A	3.8
1	CA	1093	A	3.8
1	AA	1209	C	3.7
9	CI	53	VAL	3.7
11	CK	117	ASN	3.7
23	BA	2116	G	3.7
23	DA	2152	G	3.7
10	CJ	65	LEU	3.7
23	BA	2119	A	3.7
23	DA	2171	A	3.7
4	AD	125	HIS	3.7
1	AA	984	C	3.7
23	BA	1509	C	3.7
23	BA	2108	C	3.7
10	CJ	59	SER	3.7
13	AM	15	VAL	3.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	AB	48	MET	3.7
7	AG	114	ARG	3.7
1	AA	1289	A	3.7
23	BA	2174	C	3.7
12	AL	19	ARG	3.7
9	AI	117	HIS	3.7
7	AG	16	LEU	3.7
11	CK	98	LEU	3.7
23	DA	2148	G	3.7
23	DA	2893	G	3.7
53	D9	21	GLY	3.7
4	CD	156	GLU	3.7
9	AI	105	ASP	3.7
10	AJ	25	GLU	3.7
23	BA	6	A	3.7
23	DA	2174	C	3.7
13	CM	9	ILE	3.7
13	CM	70	LEU	3.7
28	BG	120	LEU	3.7
4	AD	22	LYS	3.7
1	AA	1050	G	3.6
5	AE	86	ALA	3.6
5	AE	122	GLU	3.6
7	AG	40	ALA	3.6
9	AI	60	ASP	3.6
9	AI	110	GLU	3.6
45	B1	2	SER	3.6
9	CI	122	ALA	3.6
23	DA	2790	A	3.6
1	AA	1384	C	3.6
3	AC	154	SER	3.6
7	CG	115	ARG	3.6
12	CL	113	ARG	3.6
13	AM	33	ALA	3.6
18	CR	54	ARG	3.6
4	AD	165	MET	3.6
7	CG	22	LEU	3.6
1	CA	1065	U	3.6
14	AN	15	LYS	3.6
19	AS	68	GLY	3.6
21	CU	16	GLY	3.6
1	AA	1213	A	3.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AA	1329	A	3.6
1	CA	975	A	3.6
7	CG	109	ASN	3.6
10	CJ	37	PRO	3.6
10	CJ	46	ARG	3.6
29	BH	59	ARG	3.6
1	AA	1327	C	3.6
12	AL	120	TYR	3.6
10	AJ	56	HIS	3.6
16	AP	10	GLY	3.6
3	AC	190	ARG	3.6
10	AJ	37	PRO	3.6
8	AH	93	VAL	3.6
4	AD	26	CYS	3.6
1	CA	1068	G	3.6
1	CA	1173	G	3.6
1	CA	1291	G	3.6
19	AS	73	GLU	3.6
18	AR	66	LEU	3.6
9	AI	46	ALA	3.6
9	AI	23	ASN	3.6
9	AI	114	TYR	3.6
9	CI	71	SER	3.6
8	CH	54	ASP	3.6
1	AA	1138	G	3.5
1	AA	1215	G	3.5
1	CA	1013	G	3.5
10	AJ	45	ARG	3.5
23	BA	2171	A	3.5
23	DA	171	G	3.5
23	DA	2892	A	3.5
9	CI	17	VAL	3.5
9	AI	29	ASN	3.5
6	AF	17	SER	3.5
9	AI	9	ARG	3.5
30	DI	54	GLN	3.5
7	CG	25	ALA	3.5
7	CG	35	LYS	3.5
19	AS	67	VAL	3.5
23	BA	2158	A	3.5
1	AA	1048	G	3.5
3	AC	90	GLU	3.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
4	AD	156	GLU	3.5
4	CD	5	ILE	3.5
9	CI	48	GLU	3.5
9	AI	37	PHE	3.5
1	AA	65	U	3.5
3	CC	49	SER	3.5
7	AG	11	GLN	3.5
16	AP	68	ASP	3.5
9	CI	85	LEU	3.5
7	AG	115	ARG	3.5
23	BA	2176	A	3.5
23	DA	2170	A	3.5
23	DA	2162	G	3.5
13	AM	92	HIS	3.5
9	AI	122	ALA	3.5
1	AA	1247	U	3.5
1	AA	1307	U	3.5
20	CT	56	MET	3.5
7	AG	10	ARG	3.5
2	CB	52	GLU	3.5
16	AP	17	TYR	3.5
14	CN	36	PHE	3.5
1	AA	1350	A	3.5
4	AD	112	VAL	3.5
10	AJ	44	VAL	3.5
12	AL	18	VAL	3.5
11	AK	98	LEU	3.5
7	AG	30	ILE	3.5
1	AA	1304	G	3.5
31	BN	68	GLU	3.4
2	CB	7	VAL	3.4
30	DI	92	VAL	3.4
4	CD	23	GLY	3.4
30	BI	6	LEU	3.4
13	AM	22	ILE	3.4
15	CO	3	ILE	3.4
20	AT	80	ARG	3.4
28	DG	157	ILE	3.4
9	CI	11	LYS	3.4
1	AA	1295	G	3.4
1	AA	1364	U	3.4
23	BA	2168	G	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
23	DA	2127	G	3.4
10	AJ	76	ASN	3.4
22	AV	35	ASN	3.4
27	DF	136	THR	3.4
32	BO	29	ASN	3.4
3	CC	28	GLN	3.4
10	CJ	45	ARG	3.4
13	CM	99	ARG	3.4
21	CU	15	ARG	3.4
42	DY	1	MET	3.4
13	AM	10	PRO	3.4
10	AJ	59	SER	3.4
19	AS	60	VAL	3.4
19	CS	9	VAL	3.4
9	CI	80	GLY	3.4
13	AM	42	ALA	3.4
13	AM	102	ARG	3.4
43	BZ	143	GLY	3.4
3	AC	163	ALA	3.4
1	AA	960	U	3.4
21	CU	8	THR	3.4
12	AL	23	LYS	3.4
1	CA	1253	G	3.4
23	BA	2148	G	3.4
2	AB	214	ILE	3.4
7	AG	120	ILE	3.4
10	AJ	23	ILE	3.4
13	AM	25	ILE	3.4
30	DI	120	ILE	3.4
10	AJ	80	LYS	3.4
13	CM	65	LYS	3.4
13	CM	113	PRO	3.4
22	CV	35	ASN	3.4
1	AA	1296	C	3.4
3	AC	66	VAL	3.4
6	AF	90	VAL	3.4
6	CF	6	VAL	3.4
7	AG	12	LEU	3.4
7	CG	4	ARG	3.4
28	BG	159	VAL	3.4
5	AE	85	GLY	3.4
8	CH	131	GLY	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AA	1268	A	3.3
1	CA	935	A	3.3
23	DA	1535	A	3.3
1	AA	1019	C	3.3
1	AA	1326	C	3.3
1	CA	1254	C	3.3
3	AC	188	LEU	3.3
19	AS	20	LEU	3.3
43	DZ	112	ARG	3.3
13	AM	69	GLU	3.3
19	AS	13	ASP	3.3
4	AD	4	TYR	3.3
14	CN	30	ALA	3.3
4	AD	158	ILE	3.3
1	AA	1310	G	3.3
1	CA	1190	G	3.3
23	DA	2149	G	3.3
23	DA	2153	G	3.3
23	DA	2894	G	3.3
14	AN	3	ARG	3.3
13	AM	50	GLU	3.3
20	AT	60	GLU	3.3
9	CI	70	LYS	3.3
9	CI	116	LYS	3.3
4	CD	102	ASP	3.3
7	CG	27	ILE	3.3
9	AI	43	ALA	3.3
30	DI	29	TYR	3.3
3	AC	37	GLN	3.3
19	AS	76	PRO	3.3
5	CE	130	ASN	3.3
1	AA	108	G	3.3
1	AA	1222	G	3.3
7	AG	83	ALA	3.3
13	CM	72	ALA	3.3
23	BA	2149	G	3.3
23	DA	1106	G	3.3
20	AT	11	SER	3.3
15	CO	69	TYR	3.3
1	CA	1287	A	3.3
23	DA	655	A	3.3
7	CG	11	GLN	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
21	AU	22	ARG	3.3
21	CU	10	ARG	3.3
23	BA	2296	U	3.3
1	CA	18	C	3.3
4	AD	78	LEU	3.3
19	AS	31	ILE	3.3
21	CU	21	TYR	3.3
1	CA	1024	G	3.3
3	AC	165	THR	3.3
23	BA	2147	G	3.3
28	BG	82	LEU	3.3
8	AH	116	LYS	3.3
14	CN	58	LYS	3.3
20	AT	14	LYS	3.3
1	AA	1016	A	3.3
19	AS	65	ASN	3.3
20	AT	9	ASN	3.3
1	CA	1147	C	3.3
3	AC	160	ALA	3.3
10	AJ	32	ALA	3.3
10	CJ	26	ALA	3.3
12	AL	26	ALA	3.3
9	CI	66	ARG	3.2
9	CI	114	TYR	3.2
13	AM	44	ARG	3.2
30	DI	33	ARG	3.2
4	AD	9	CYS	3.2
4	AD	19	LEU	3.2
9	AI	58	HIS	3.2
16	AP	69	THR	3.2
5	AE	118	ILE	3.2
42	BY	5	MET	3.2
1	AA	942	G	3.2
1	CA	993	G	3.2
1	CA	1380	U	3.2
7	AG	94	ARG	3.2
30	DI	25	TYR	3.2
1	AA	1260	C	3.2
1	AA	1325	C	3.2
4	AD	108	LEU	3.2
7	CG	77	SER	3.2
28	DG	34	LEU	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	CB	19	HIS	3.2
9	CI	75	ASP	3.2
33	DP	87	ASP	3.2
38	BU	117	GLN	3.2
3	CC	194	GLY	3.2
7	AG	32	ARG	3.2
9	CI	42	ARG	3.2
10	CJ	76	ASN	3.2
12	AL	29	GLY	3.2
13	CM	8	GLU	3.2
14	AN	28	GLY	3.2
8	CH	119	LEU	3.2
1	AA	1130	A	3.2
1	AA	1285	A	3.2
1	AA	1294	G	3.2
2	AB	165	VAL	3.2
3	AC	130	VAL	3.2
2	AB	140	HIS	3.2
19	AS	39	THR	3.2
23	BA	1049	C	3.2
7	CG	30	ILE	3.2
19	AS	44	MET	3.2
21	CU	24	ARG	3.2
25	BD	263	ARG	3.2
46	B2	11	GLU	3.2
28	BG	74	LYS	3.2
52	D8	3	LYS	3.2
4	AD	54	TYR	3.2
23	DA	2109	U	3.2
10	CJ	81	THR	3.2
8	AH	25	ASP	3.2
23	DA	2176	A	3.2
1	AA	390	C	3.2
8	AH	132	GLU	3.2
9	AI	21	PRO	3.2
13	AM	74	VAL	3.2
10	AJ	46	ARG	3.2
14	CN	41	ARG	3.2
16	AP	56	ALA	3.2
23	BA	272(A)	U	3.1
23	BA	2118	U	3.1
13	AM	70	LEU	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
20	CT	60	GLU	3.1
7	CG	118	VAL	3.1
28	BG	178	PHE	3.1
7	AG	14	PRO	3.1
10	CJ	77	PRO	3.1
16	AP	15	PRO	3.1
1	AA	990	C	3.1
23	BA	2124	G	3.1
23	BA	2893	G	3.1
10	AJ	70	ARG	3.1
13	CM	4	ILE	3.1
13	CM	2	ALA	3.1
28	BG	76	SER	3.1
9	CI	102	LEU	3.1
10	AJ	73	ASP	3.1
12	CL	72	GLY	3.1
16	CP	29	ASP	3.1
14	CN	27	CYS	3.1
16	AP	20	VAL	3.1
6	AF	63	TYR	3.1
7	CG	112	PRO	3.1
1	AA	1252	A	3.1
3	CC	152	ILE	3.1
7	CG	42	ILE	3.1
16	CP	13	HIS	3.1
3	AC	162	GLN	3.1
13	CM	107	ALA	3.1
1	AA	381	C	3.1
1	AA	962	C	3.1
8	AH	3	THR	3.1
23	BA	2161	C	3.1
23	DA	1049	C	3.1
16	CP	11	SER	3.1
1	CA	1094	G	3.1
1	CA	1197	G	3.1
6	AF	97	PHE	3.1
9	CI	111	ARG	3.1
21	AU	23	PRO	3.1
4	CD	19	LEU	3.1
13	CM	96	LEU	3.1
1	CA	1248	A	3.1
44	D0	13	GLY	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AA	1328	C	3.1
4	AD	15	GLU	3.1
19	AS	64	GLU	3.1
20	CT	88	VAL	3.1
23	DA	2178	C	3.1
4	AD	7	PRO	3.1
7	AG	71	PRO	3.1
51	B7	48	LYS	3.1
1	AA	971	G	3.1
23	DA	1115	G	3.1
23	BA	2150	U	3.1
28	DG	152	LEU	3.1
9	CI	103	THR	3.1
7	CG	78	ARG	3.1
13	AM	115	LYS	3.1
23	DA	2169	A	3.1
1	AA	979	C	3.0
23	BA	1744	C	3.0
23	DA	2177	C	3.0
9	CI	46	ALA	3.0
10	AJ	26	ALA	3.0
1	AA	1002	G	3.0
1	AA	1311	G	3.0
23	BA	2162	G	3.0
7	CG	9	VAL	3.0
23	BA	2109	U	3.0
8	AH	31	PHE	3.0
18	AR	38	GLU	3.0
4	CD	165	MET	3.0
12	AL	25	PRO	3.0
14	CN	42	ILE	3.0
21	AU	13	ILE	3.0
46	D2	18	PRO	3.0
50	D6	54	ILE	3.0
13	AM	18	ALA	3.0
33	BP	147	LEU	3.0
1	AA	532	A	3.0
1	AA	1183	A	3.0
23	BA	276	A	3.0
23	DA	2602	A	3.0
4	CD	50	ARG	3.0
1	CA	1260	C	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
12	AL	17	LYS	3.0
14	AN	58	LYS	3.0
43	BZ	196	VAL	3.0
4	AD	163	GLU	3.0
13	AM	64	TRP	3.0
5	AE	101	ILE	3.0
1	CA	1150	U	3.0
23	BA	2132	U	3.0
1	AA	953	G	3.0
23	BA	2121	G	3.0
3	CC	33	LEU	3.0
28	BG	34	LEU	3.0
10	CJ	27	ALA	3.0
14	AN	31	ARG	3.0
10	CJ	62	HIS	3.0
4	CD	167	GLY	3.0
25	DD	38	LYS	3.0
2	AB	7	VAL	3.0
3	CC	165	THR	3.0
1	AA	1208	C	3.0
1	AA	1284	C	3.0
1	AA	1322	C	3.0
3	AC	167	TRP	3.0
2	AB	155	LEU	3.0
7	AG	99	LEU	3.0
14	CN	6	LEU	3.0
19	CS	35	SER	3.0
28	DG	133	LEU	3.0
2	CB	148	TYR	3.0
4	AD	141	ARG	3.0
1	AA	1308	U	3.0
9	AI	32	ASP	3.0
10	CJ	58	ASP	3.0
9	CI	112	LYS	3.0
1	AA	1017	G	3.0
17	AQ	26	GLN	3.0
23	BA	2133	G	3.0
23	DA	275	G	3.0
23	DA	2125	G	3.0
46	D2	46	GLN	3.0
50	B6	54	ILE	3.0
1	AA	1110	A	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	CB	154	LEU	3.0
12	AL	73	GLU	3.0
4	AD	115	ARG	3.0
40	BW	8	ARG	3.0
1	CA	1383	C	3.0
5	CE	60	TYR	3.0
23	DA	2139	C	3.0
23	DA	2146	C	3.0
3	AC	99	VAL	3.0
7	CG	105	VAL	3.0
9	CI	86	VAL	3.0
10	AJ	36	GLY	3.0
16	CP	2	VAL	3.0
2	CB	69	LEU	2.9
8	AH	2	LEU	2.9
17	AQ	63	ARG	2.9
20	AT	83	ARG	2.9
28	DG	13	GLU	2.9
1	CA	380	G	2.9
9	AI	116	LYS	2.9
1	AA	1288	A	2.9
4	CD	2	GLY	2.9
9	CI	8	GLY	2.9
13	AM	54	VAL	2.9
19	AS	11	VAL	2.9
29	BH	57	ASP	2.9
10	CJ	63	PHE	2.9
1	AA	1158	C	2.9
3	AC	33	LEU	2.9
10	CJ	78	ASN	2.9
10	AJ	42	THR	2.9
15	AO	57	LEU	2.9
19	AS	37	ARG	2.9
20	AT	25	ARG	2.9
13	AM	13	LYS	2.9
13	CM	61	GLU	2.9
14	CN	15	LYS	2.9
13	AM	51	ALA	2.9
3	AC	68	VAL	2.9
7	AG	91	VAL	2.9
9	AI	28	VAL	2.9
9	CI	65	VAL	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
19	AS	19	VAL	2.9
28	BG	124	SER	2.9
5	CE	23	GLY	2.9
1	AA	1207	G	2.9
12	AL	32	PHE	2.9
3	AC	28	GLN	2.9
3	AC	34	LEU	2.9
9	AI	40	LEU	2.9
13	AM	114	ARG	2.9
10	AJ	69	ASN	2.9
28	BG	8	LYS	2.9
38	BU	84	LYS	2.9
1	AA	1060	C	2.9
1	CA	1028	C	2.9
1	CA	1054	C	2.9
9	AI	90	PRO	2.9
7	AG	103	TRP	2.9
4	CD	20	TYR	2.9
2	AB	152	PHE	2.9
25	DD	53	PHE	2.9
3	CC	47	LEU	2.9
7	AG	106	GLN	2.9
14	AN	47	LEU	2.9
10	CJ	57	LYS	2.9
13	CM	37	THR	2.9
28	DG	93	THR	2.9
3	CC	166	GLU	2.9
13	CM	97	PRO	2.9
23	BA	653	A	2.9
2	CB	197	VAL	2.9
1	AA	1210	C	2.9
1	AA	1320	C	2.9
2	AB	96	ARG	2.9
3	CC	10	PHE	2.9
14	CN	28	GLY	2.9
11	CK	126	ARG	2.9
2	CB	172	ILE	2.9
3	AC	157	ILE	2.9
4	AD	70	ILE	2.9
10	AJ	35	SER	2.9
14	AN	4	LYS	2.9
14	CN	44	LEU	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
28	BG	7	LEU	2.9
28	DG	135	LEU	2.9
5	AE	20	GLN	2.9
7	CG	33	ASP	2.9
10	AJ	89	ASP	2.9
2	CB	91	PRO	2.9
47	D3	2	PRO	2.9
5	AE	83	GLU	2.9
19	AS	23	ASN	2.9
20	AT	46	GLU	2.9
9	CI	14	VAL	2.9
13	AM	86	CYS	2.9
3	AC	41	GLY	2.9
9	AI	83	ARG	2.9
20	AT	8	ARG	2.9
1	AA	954	G	2.9
1	AA	1011	G	2.9
1	AA	1269	A	2.9
9	AI	63	ILE	2.9
10	CJ	22	LYS	2.9
23	BA	2793	G	2.9
23	DA	281	G	2.9
1	AA	1313	U	2.8
7	AG	107	ALA	2.8
9	AI	55	ALA	2.8
10	AJ	39	PRO	2.8
14	CN	59	ALA	2.8
37	DT	131	ALA	2.8
4	CD	3	ARG	2.8
16	CP	18	ARG	2.8
3	AC	145	GLY	2.8
2	AB	201	ILE	2.8
11	CK	21	ILE	2.8
13	CM	87	TYR	2.8
7	AG	100	ALA	2.8
13	AM	30	ALA	2.8
1	AA	630	G	2.8
1	AA	963	G	2.8
1	CA	1012	U	2.8
10	CJ	91	PRO	2.8
17	CQ	13	ASP	2.8
19	AS	79	THR	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AA	1243	C	2.8
1	CA	1384	C	2.8
2	AB	93	VAL	2.8
3	AC	103	VAL	2.8
4	CD	122	ARG	2.8
9	AI	26	VAL	2.8
43	BZ	169	GLU	2.8
3	AC	25	GLY	2.8
7	AG	124	LEU	2.8
2	AB	232	PRO	2.8
4	AD	114	ARG	2.8
14	AN	26	ARG	2.8
19	AS	42	PRO	2.8
10	AJ	49	VAL	2.8
10	AJ	22	LYS	2.8
19	AS	33	THR	2.8
31	DN	140	VAL	2.8
1	AA	1245	A	2.8
3	AC	43	LEU	2.8
9	AI	99	LEU	2.8
2	AB	58	ILE	2.8
5	AE	89	ILE	2.8
11	CK	32	ILE	2.8
23	BA	1917	U	2.8
23	BA	2157	G	2.8
7	AG	108	ALA	2.8
34	BQ	141	GLN	2.8
9	AI	104	ARG	2.8
28	BG	136	ARG	2.8
13	CM	53	VAL	2.8
45	D1	38	SER	2.8
10	CJ	67	THR	2.8
46	D2	5	GLU	2.8
10	CJ	17	ASP	2.8
2	CB	90	MET	2.8
2	CB	151	GLY	2.8
5	AE	23	GLY	2.8
1	AA	1375	A	2.8
3	AC	193	TYR	2.8
4	CD	4	TYR	2.8
23	DA	2119	A	2.8
7	AG	6	ARG	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
23	DA	2111	C	2.8
1	AA	220	G	2.8
1	AA	331	G	2.8
7	AG	141	VAL	2.8
23	BA	2115	G	2.8
13	AM	56	LEU	2.8
50	D6	11	LEU	2.8
2	CB	67	THR	2.8
10	AJ	6	ILE	2.8
46	D2	1	MET	2.7
15	AO	49	ASP	2.7
3	CC	29	TYR	2.7
4	AD	20	TYR	2.7
17	CQ	100	LYS	2.7
28	DG	46	ALA	2.7
1	AA	1012	U	2.7
1	CA	1014	A	2.7
4	AD	178	VAL	2.7
4	CD	140	VAL	2.7
9	AI	124	GLN	2.7
18	CR	22	VAL	2.7
30	DI	119	PRO	2.7
4	AD	162	LEU	2.7
7	AG	101	LEU	2.7
10	CJ	85	LEU	2.7
19	CS	49	ILE	2.7
8	AH	24	THR	2.7
23	DA	280	C	2.7
43	DZ	98	MET	2.7
9	AI	100	GLY	2.7
4	AD	134	ASP	2.7
23	DA	11	G	2.7
23	DA	2124	G	2.7
13	AM	93	ARG	2.7
4	CD	103	ASN	2.7
13	AM	21	TYR	2.7
17	AQ	3	LYS	2.7
25	BD	35	LYS	2.7
3	CC	196	LEU	2.7
4	CD	7	PRO	2.7
19	CS	15	LEU	2.7
45	B1	72	GLU	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AA	1324	A	2.7
13	AM	95	GLY	2.7
15	AO	63	ARG	2.7
20	AT	65	LYS	2.7
1	AA	940	C	2.7
1	AA	970	C	2.7
1	AA	1246	C	2.7
1	AA	1362	C	2.7
1	CA	1284	C	2.7
10	AJ	17	ASP	2.7
11	AK	81	ASP	2.7
23	DA	2103	C	2.7
10	AJ	68	HIS	2.7
14	AN	25	VAL	2.7
16	CP	49	LEU	2.7
1	AA	113	G	2.7
1	AA	332	G	2.7
1	AA	391	G	2.7
1	AA	1274	G	2.7
7	AG	13	GLN	2.7
23	BA	2160	G	2.7
23	BA	2166	G	2.7
42	DY	102	CYS	2.7
52	B8	65	GLU	2.7
9	CI	83	ARG	2.7
10	CJ	60	ARG	2.7
1	AA	1376	U	2.7
23	DA	2118	U	2.7
8	AH	4	ASP	2.7
4	AD	8	VAL	2.7
4	AD	11	LEU	2.7
5	CE	31	LEU	2.7
16	CP	20	VAL	2.7
1	AA	136	C	2.7
1	AA	1039	C	2.7
5	AE	49	PRO	2.7
13	AM	78	ILE	2.7
19	AS	59	PRO	2.7
23	BA	2107	C	2.7
23	DA	2163	C	2.7
9	AI	8	GLY	2.7
12	AL	126	LYS	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
13	AM	32	GLU	2.7
13	CM	6	GLY	2.7
22	CV	10	GLU	2.7
1	AA	380	G	2.7
43	DZ	166	SER	2.7
22	CV	55	ALA	2.7
34	BQ	140	ALA	2.7
1	AA	1196	U	2.7
2	CB	33	TYR	2.7
7	CG	17	VAL	2.7
13	AM	53	VAL	2.7
13	AM	81	LEU	2.7
28	BG	135	LEU	2.7
30	DI	35	LEU	2.7
6	AF	55	ASP	2.7
2	CB	37	ASN	2.7
1	AA	975	A	2.6
1	CA	1035	A	2.6
1	CA	1261	A	2.6
1	CA	1288	A	2.6
4	AD	42	GLN	2.6
7	AG	27	ILE	2.6
8	CH	31	PHE	2.6
9	AI	101	PHE	2.6
3	AC	135	LYS	2.6
21	CU	4	GLY	2.6
1	AA	1030	C	2.6
1	CA	1066	C	2.6
19	CS	77	THR	2.6
7	AG	98	SER	2.6
7	CG	21	VAL	2.6
19	AS	58	VAL	2.6
33	BP	127	ALA	2.6
1	CA	1030(A)	G	2.6
23	DA	2141	G	2.6
28	DG	49	ASP	2.6
3	CC	3	ASN	2.6
10	AJ	41	PRO	2.6
11	AK	126	ARG	2.6
28	BG	132	ASN	2.6
34	BQ	1	MET	2.6
1	AA	1201	A	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AA	1360	A	2.6
1	CA	1447	A	2.6
3	CC	188	LEU	2.6
9	AI	15	ALA	2.6
13	CM	54	VAL	2.6
1	CA	932	C	2.6
9	CI	9	ARG	2.6
42	DY	95	LYS	2.6
52	B8	36	LYS	2.6
6	CF	56	PRO	2.6
7	AG	43	PHE	2.6
4	AD	190	ASP	2.6
7	CG	97	GLN	2.6
37	BT	124	ASP	2.6
3	AC	78	GLY	2.6
3	AC	197	GLY	2.6
8	CH	55	GLY	2.6
1	AA	1020	U	2.6
1	AA	1198	G	2.6
1	AA	1253	G	2.6
1	CA	1386	G	2.6
4	AD	155	LEU	2.6
9	AI	86	VAL	2.6
1	AA	860	A	2.6
1	AA	1374	A	2.6
28	BG	75	LYS	2.6
17	CQ	99	SER	2.6
22	CV	31	TYR	2.6
7	CG	26	PHE	2.6
8	CH	57	PRO	2.6
14	CN	14	PRO	2.6
23	DA	277	C	2.6
7	CG	37	ASN	2.6
20	AT	69	GLY	2.6
26	BE	195	LEU	2.6
8	CH	19	VAL	2.6
13	CM	98	VAL	2.6
14	AN	20	ALA	2.6
1	AA	943	U	2.6
1	AA	1049	U	2.6
13	CM	64	TRP	2.6
16	AP	25	ARG	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
16	CP	22	THR	2.6
21	AU	10	ARG	2.6
27	DF	172	TRP	2.6
9	CI	74	ILE	2.6
6	AF	89	MET	2.6
1	AA	944	G	2.6
1	AA	1061	G	2.6
1	AA	1323	G	2.6
1	CA	1034	G	2.6
1	AA	109	A	2.6
1	AA	968	A	2.6
1	CA	1349	A	2.6
7	CG	13	GLN	2.6
3	CC	62	ASP	2.6
9	AI	22	GLY	2.6
11	AK	110	ASP	2.6
29	DH	120	GLY	2.6
7	AG	84	ASN	2.6
30	DI	6	LEU	2.6
1	AA	1051	C	2.6
1	AA	1336	C	2.6
19	CS	64	GLU	2.6
30	BI	10	GLU	2.6
4	AD	140	VAL	2.6
38	BU	8	VAL	2.6
51	B7	47	ARG	2.6
2	AB	24	TRP	2.5
4	AD	119	GLN	2.5
17	CQ	98	LEU	2.5
1	AA	1221	G	2.5
1	AA	1305	G	2.5
3	AC	79	ARG	2.5
21	AU	5	ASP	2.5
23	DA	2121	G	2.5
3	CC	169	ALA	2.5
20	AT	52	ALA	2.5
9	AI	64	THR	2.5
10	AJ	67	THR	2.5
16	AP	19	ILE	2.5
2	AB	101	MET	2.5
1	CA	174	C	2.5
21	CU	18	TYR	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
42	DY	79	CYS	2.5
1	AA	991	U	2.5
2	CB	155	LEU	2.5
3	AC	158	GLY	2.5
3	CC	175	LEU	2.5
4	CD	91	SER	2.5
10	AJ	21	GLN	2.5
19	CS	16	LEU	2.5
19	CS	84	GLY	2.5
23	DA	2296	U	2.5
41	BX	13	LEU	2.5
3	AC	164	ARG	2.5
12	AL	86	ARG	2.5
13	AM	94	ARG	2.5
20	CT	83	ARG	2.5
21	AU	7	ARG	2.5
21	CU	3	LYS	2.5
52	B8	29	LYS	2.5
2	CB	112	VAL	2.5
14	AN	56	VAL	2.5
3	CC	189	ALA	2.5
43	DZ	197	ILE	2.5
11	AK	28	THR	2.5
1	CA	1204	A	2.5
1	CA	1017	G	2.5
7	AG	18	TYR	2.5
14	AN	54	PRO	2.5
4	CD	78	LEU	2.5
1	CA	1030(B)	C	2.5
5	CE	14	ARG	2.5
9	CI	104	ARG	2.5
10	CJ	14	LYS	2.5
16	CP	72	ARG	2.5
19	CS	5	LEU	2.5
4	AD	12	CYS	2.5
5	CE	85	GLY	2.5
37	BT	35	LYS	2.5
10	CJ	30	SER	2.5
20	CT	82	SER	2.5
5	AE	69	VAL	2.5
8	AH	129	VAL	2.5
19	AS	51	VAL	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
13	AM	2	ALA	2.5
9	CI	89	ASN	2.5
22	CV	7	ASP	2.5
20	CT	13	LEU	2.5
53	D9	18	ARG	2.5
1	AA	1227	A	2.5
1	CA	1213	A	2.5
1	CA	1460	A	2.5
23	BA	2602	A	2.5
6	CF	90	VAL	2.5
10	CJ	44	VAL	2.5
16	AP	82	GLN	2.5
28	BG	5	VAL	2.5
1	AA	111	G	2.5
1	AA	1365	G	2.5
1	AA	1371	G	2.5
14	CN	60	SER	2.5
23	BA	1107	G	2.5
23	DA	2131	G	2.5
20	CT	41	ILE	2.5
1	AA	345	C	2.5
1	CA	931	C	2.5
1	CA	1249	C	2.5
23	DA	2108	C	2.5
29	DH	58	GLU	2.5
37	DT	1	MET	2.5
2	AB	163	PHE	2.5
4	CD	77	ASN	2.5
9	CI	91	ASP	2.5
29	DH	123	PHE	2.5
1	CA	1125	U	2.5
10	CJ	92	THR	2.5
16	AP	44	THR	2.5
2	CB	131	PRO	2.5
4	AD	135	LEU	2.5
15	CO	88	ARG	2.5
53	B9	37	GLY	2.5
16	CP	77	ALA	2.4
29	BH	63	SER	2.4
1	AA	958	A	2.4
1	AA	1261	A	2.4
1	CA	532	A	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
29	BH	124	GLU	2.4
29	DH	116	GLU	2.4
4	AD	209	ARG	2.4
5	CE	18	ARG	2.4
7	AG	37	ASN	2.4
9	AI	97	LYS	2.4
13	AM	12	ASN	2.4
20	AT	48	LYS	2.4
20	CT	74	LYS	2.4
39	BV	100	ARG	2.4
53	D9	12	ASP	2.4
1	AA	369	C	2.4
1	AA	631	G	2.4
1	AA	1297	C	2.4
1	AA	1385	G	2.4
1	CA	112	G	2.4
1	CA	1221	G	2.4
1	CA	1224	G	2.4
1	CA	1459	C	2.4
7	CG	101	LEU	2.4
23	DA	2151	G	2.4
1	AA	1159	U	2.4
7	AG	44	TYR	2.4
19	AS	57	HIS	2.4
2	CB	136	VAL	2.4
6	AF	72	VAL	2.4
9	CI	115	GLY	2.4
3	AC	92	ALA	2.4
3	AC	143	GLU	2.4
10	CJ	61	GLU	2.4
13	AM	8	GLU	2.4
2	CB	163	PHE	2.4
4	AD	76	ARG	2.4
10	CJ	70	ARG	2.4
12	AL	113	ARG	2.4
14	CN	3	ARG	2.4
18	AR	32	ARG	2.4
20	AT	79	ARG	2.4
13	AM	34	LEU	2.4
1	AA	1191	A	2.4
1	AA	1279	A	2.4
11	AK	36	ASP	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
24	DB	25	A	2.4
12	CL	69	TYR	2.4
1	CA	1038	C	2.4
1	CA	1172	C	2.4
3	AC	24	ALA	2.4
7	CG	40	ALA	2.4
1	AA	81	U	2.4
1	AA	1064	G	2.4
1	AA	1241	G	2.4
1	AA	1345	U	2.4
1	AA	1361	G	2.4
8	AH	35	ILE	2.4
23	DA	1536	C	2.4
23	BA	2106	G	2.4
16	CP	1	MET	2.4
4	AD	66	ARG	2.4
11	CK	124	LYS	2.4
28	BG	96	ARG	2.4
46	D2	11	GLU	2.4
4	CD	12	CYS	2.4
6	AF	61	LEU	2.4
16	CP	6	LEU	2.4
2	AB	26	PRO	2.4
4	CD	51	PRO	2.4
9	CI	64	THR	2.4
42	DY	82	PRO	2.4
12	AL	92	ASP	2.4
19	CS	67	VAL	2.4
31	BN	46	VAL	2.4
4	AD	87	GLY	2.4
28	DG	12	TYR	2.4
10	AJ	98	ILE	2.4
37	BT	131	ALA	2.4
1	AA	329	A	2.4
1	AA	389	A	2.4
1	AA	1092	A	2.4
2	CB	101	MET	2.4
3	AC	4	LYS	2.4
14	AN	19	ARG	2.4
27	DF	137	LYS	2.4
32	DO	31	LYS	2.4
1	AA	1211	U	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AA	1267	C	2.4
1	CA	1364	U	2.4
2	CB	134	GLU	2.4
9	AI	85	LEU	2.4
13	CM	73	GLU	2.4
23	DA	2167	U	2.4
28	BG	54	GLU	2.4
19	AS	35	SER	2.4
1	AA	1186	G	2.4
1	AA	1368	G	2.4
11	CK	115	PRO	2.4
19	CS	42	PRO	2.4
48	D4	35	VAL	2.4
2	AB	72	GLY	2.4
25	BD	236	GLY	2.4
43	BZ	123	ASP	2.4
5	CE	131	ILE	2.4
28	DG	20	ILE	2.4
43	DZ	57	ILE	2.4
2	AB	139	LYS	2.4
4	AD	122	ARG	2.4
4	AD	181	MET	2.4
8	CH	44	PHE	2.4
3	AC	101	LEU	2.4
3	CC	42	LEU	2.4
29	BH	105	LEU	2.4
1	AA	397	A	2.4
1	AA	1493	A	2.4
4	AD	179	GLU	2.4
28	DG	54	GLU	2.4
31	BN	140	VAL	2.4
43	BZ	130	PRO	2.4
53	D9	23	VAL	2.4
1	AA	1314	C	2.3
4	AD	69	GLY	2.3
3	AC	77	ILE	2.3
16	AP	14	ASN	2.3
20	AT	55	ILE	2.3
20	CT	81	LYS	2.3
6	CF	47	ARG	2.3
22	CV	37	ARG	2.3
1	AA	1184	G	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	CA	231	G	2.3
1	CA	1117	G	2.3
23	BA	281	G	2.3
23	DA	2120	G	2.3
4	AD	101	LEU	2.3
16	CP	9	PHE	2.3
3	CC	44	GLU	2.3
33	DP	74	GLU	2.3
3	AC	195	VAL	2.3
4	CD	178	VAL	2.3
4	AD	29	PRO	2.3
30	DI	111	PRO	2.3
1	AA	1204	A	2.3
1	AA	1251	A	2.3
1	CA	1110	A	2.3
2	CB	133	LYS	2.3
4	CD	6	GLY	2.3
7	CG	36	LYS	2.3
6	AF	87	ARG	2.3
8	AH	91	ARG	2.3
13	AM	6	GLY	2.3
11	AK	21	ILE	2.3
19	CS	63	THR	2.3
20	CT	80	ARG	2.3
28	DG	85	GLY	2.3
36	DS	3	ARG	2.3
13	AM	76	ALA	2.3
1	AA	1219	U	2.3
1	CA	992	U	2.3
4	AD	77	ASN	2.3
13	AM	82	MET	2.3
1	AA	1383	C	2.3
1	CA	308	C	2.3
1	CA	379	C	2.3
13	CM	19	LEU	2.3
20	AT	84	LEU	2.3
5	AE	38	GLN	2.3
20	CT	18	GLN	2.3
13	AM	73	GLU	2.3
41	BX	15	GLU	2.3
1	AA	64	G	2.3
1	AA	1013	G	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AA	1036	G	2.3
1	AA	1131	G	2.3
1	CA	631	G	2.3
1	CA	1174	G	2.3
3	CC	55	VAL	2.3
3	CC	120	VAL	2.3
23	DA	2104	G	2.3
46	D2	19	VAL	2.3
29	DH	85	LYS	2.3
7	AG	79	ARG	2.3
14	AN	41	ARG	2.3
14	CN	26	ARG	2.3
3	CC	14	ILE	2.3
14	AN	42	ILE	2.3
3	AC	29	TYR	2.3
8	CH	48	TYR	2.3
3	AC	94	LEU	2.3
9	AI	47	LEU	2.3
10	CJ	8	LEU	2.3
13	CM	12	ASN	2.3
1	CA	397	A	2.3
1	CA	937	A	2.3
4	CD	206	PHE	2.3
8	CH	4	ASP	2.3
19	CS	12	ASP	2.3
35	BR	69	ASP	2.3
1	AA	1040	U	2.3
1	CA	1196	U	2.3
10	AJ	33	GLN	2.3
19	AS	56	GLN	2.3
26	DE	163	GLU	2.3
47	B3	60	GLU	2.3
1	AA	1359	C	2.3
1	CA	1378	C	2.3
2	CB	229	VAL	2.3
10	AJ	7	LYS	2.3
13	AM	31	LYS	2.3
23	BA	1866	C	2.3
23	DA	790	C	2.3
29	BH	175	LYS	2.3
4	CD	66	ARG	2.3
29	BH	101	ARG	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
39	BV	21	ARG	2.3
46	B2	69	ARG	2.3
2	AB	91	PRO	2.3
10	AJ	50	ILE	2.3
28	BG	2	PRO	2.3
3	AC	22	TRP	2.3
13	AM	112	GLY	2.3
15	AO	86	GLY	2.3
3	AC	168	ALA	2.3
16	AP	48	TRP	2.3
20	AT	16	HIS	2.3
43	BZ	144	LEU	2.3
1	AA	127	G	2.3
1	AA	1026	G	2.3
1	CA	1057	G	2.3
1	CA	1127	G	2.3
1	CA	1216	G	2.3
28	BG	117	PHE	2.3
20	CT	9	ASN	2.3
20	CT	75	ASN	2.3
33	BP	68	GLN	2.3
32	BO	26	LYS	2.3
42	BY	34	LYS	2.3
1	AA	1280	A	2.3
1	CA	1067	A	2.3
2	AB	144	ARG	2.3
5	CE	122	GLU	2.3
5	CE	148	VAL	2.3
10	AJ	43	ARG	2.3
16	CP	54	GLU	2.3
23	BA	278	A	2.3
23	DA	829	A	2.3
23	DA	2126	A	2.3
29	BH	119	GLU	2.3
45	B1	83	GLU	2.3
52	B8	54	GLU	2.3
1	CA	1025	U	2.3
8	CH	35	ILE	2.3
9	AI	77	ILE	2.3
14	CN	7	ILE	2.3
36	DS	40	ILE	2.3
8	AH	128	GLY	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
13	AM	75	ALA	2.3
27	DF	49	ALA	2.3
1	AA	1129	C	2.3
1	AA	1270	C	2.3
1	CA	1397	C	2.3
23	BA	34	C	2.3
51	B7	1	MET	2.3
10	CJ	87	THR	2.3
18	AR	78	LEU	2.3
14	CN	32	SER	2.3
28	DG	76	SER	2.3
4	CD	54	TYR	2.3
43	BZ	99	TYR	2.3
2	CB	156	LYS	2.3
7	AG	29	LYS	2.3
7	CG	28	ASN	2.3
20	AT	74	LYS	2.3
25	BD	87	ASN	2.3
46	D2	47	ASN	2.3
9	AI	20	ARG	2.3
9	AI	38	GLN	2.3
20	CT	8	ARG	2.3
22	AV	32	GLN	2.3
2	CB	71	VAL	2.3
9	AI	65	VAL	2.3
1	CA	108	G	2.2
23	BA	363	G	2.2
23	BA	2805	G	2.2
23	DA	2160	G	2.2
2	AB	222	ILE	2.2
4	CD	189	PRO	2.2
7	AG	145	ALA	2.2
13	AM	89	GLY	2.2
1	AA	1302	U	2.2
1	CA	915	A	2.2
1	CA	1191	A	2.2
1	CA	1240	U	2.2
1	CA	1377	A	2.2
12	CL	93	LEU	2.2
14	CN	53	LEU	2.2
23	BA	1046	A	2.2
30	BI	12	LEU	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
9	CI	37	PHE	2.2
10	AJ	100	THR	2.2
1	AA	1054	C	2.2
1	CA	1109	C	2.2
7	AG	4	ARG	2.2
14	CN	35	ARG	2.2
23	BA	279	C	2.2
51	D7	47	ARG	2.2
2	CB	165	VAL	2.2
7	AG	23	VAL	2.2
46	D2	70	GLN	2.2
2	AB	12	GLU	2.2
17	AQ	24	GLU	2.2
37	BT	128	GLU	2.2
43	DZ	53	ILE	2.2
4	CD	197	PRO	2.2
7	CG	65	ALA	2.2
8	CH	10	LEU	2.2
9	CI	72	GLY	2.2
26	DE	56	PRO	2.2
20	CT	53	LEU	2.2
42	BY	103	GLY	2.2
43	BZ	1	MET	2.2
19	AS	34	TRP	2.2
1	AA	1034	G	2.2
1	AA	1185	G	2.2
1	AA	1356	G	2.2
1	CA	941	G	2.2
23	BA	882	G	2.2
36	DS	57	LYS	2.2
7	AG	102	ARG	2.2
14	AN	57	ARG	2.2
20	AT	15	ARG	2.2
21	CU	9	ARG	2.2
47	D3	29	ARG	2.2
1	AA	1093	A	2.2
23	BA	652(B)	A	2.2
23	DA	652(B)	A	2.2
3	AC	152	ILE	2.2
9	AI	35	GLU	2.2
17	CQ	58	GLU	2.2
38	BU	89	GLU	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AA	63	C	2.2
1	AA	1303	C	2.2
1	CA	1069	C	2.2
2	AB	69	LEU	2.2
4	AD	102	ASP	2.2
4	CD	162	LEU	2.2
10	CJ	90	LEU	2.2
14	AN	53	LEU	2.2
30	DI	110	ASP	2.2
17	AQ	2	PRO	2.2
42	DY	32	PRO	2.2
4	CD	166	LYS	2.2
15	CO	5	LYS	2.2
10	AJ	60	ARG	2.2
21	AU	9	ARG	2.2
7	AG	24	THR	2.2
15	AO	50	HIS	2.2
8	CH	58	TYR	2.2
11	CK	109	VAL	2.2
12	CL	18	VAL	2.2
19	AS	45	VAL	2.2
30	DI	37	VAL	2.2
2	AB	192	SER	2.2
1	CA	1381	U	2.2
23	BA	1026	U	2.2
10	CJ	38	ILE	2.2
12	AL	85	ILE	2.2
1	AA	38	G	2.2
1	AA	530	G	2.2
1	AA	1334	G	2.2
1	AA	1357	A	2.2
1	CA	21	G	2.2
1	CA	633	G	2.2
23	BA	2892	A	2.2
23	DA	2793	G	2.2
40	BW	60	ASN	2.2
1	CA	1289	A	2.2
2	AB	154	LEU	2.2
15	AO	56	LEU	2.2
4	AD	2	GLY	2.2
7	AG	152	ALA	2.2
12	CL	94	PRO	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
14	AN	59	ALA	2.2
14	CN	24	CYS	2.2
19	AS	82	GLY	2.2
2	AB	220	ASP	2.2
2	CB	8	LYS	2.2
12	AL	115	LYS	2.2
20	CT	14	LYS	2.2
1	AA	91	C	2.2
1	CA	135	C	2.2
1	CA	136	C	2.2
1	CA	150	C	2.2
1	CA	1115	C	2.2
23	BA	1052	C	2.2
23	DA	2138	C	2.2
13	CM	74	VAL	2.2
17	AQ	60	ILE	2.2
2	AB	61	LEU	2.2
26	BE	179	GLU	2.2
35	DR	115	GLU	2.2
43	DZ	1	MET	2.2
3	AC	53	ALA	2.2
3	AC	65	ALA	2.2
13	AM	28	ALA	2.2
36	BS	102	ALA	2.2
43	DZ	168	GLU	2.2
45	D1	27	GLU	2.2
4	CD	22	LYS	2.2
20	AT	29	LYS	2.2
1	AA	1148	U	2.2
23	DA	614(A)	U	2.2
23	DA	2506	U	2.2
24	DB	1	U	2.2
5	AE	27	ARG	2.2
45	D1	40	ARG	2.2
1	AA	1248	A	2.2
1	AA	1447	A	2.2
23	DA	2158	A	2.2
1	AA	112	G	2.2
1	AA	853	G	2.2
1	AA	1373	G	2.2
1	CA	973	G	2.2
1	CA	1343	G	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
23	BA	102	G	2.2
23	DA	2166	G	2.2
7	CG	66	VAL	2.1
51	B7	46	VAL	2.1
12	CL	120	TYR	2.1
1	AA	1037	C	2.1
1	AA	1116	C	2.1
1	CA	1145	C	2.1
4	CD	70	ILE	2.1
17	AQ	59	ILE	2.1
23	BA	2137	C	2.1
23	BA	2175	C	2.1
23	BA	2177	C	2.1
23	DA	2791	C	2.1
3	CC	101	LEU	2.1
5	CE	53	LEU	2.1
7	CG	12	LEU	2.1
3	CC	112	SER	2.1
10	CJ	19	SER	2.1
12	AL	28	LYS	2.1
16	AP	64	ALA	2.1
3	AC	185	GLY	2.1
9	AI	42	ARG	2.1
9	AI	34	ASN	2.1
12	CL	25	PRO	2.1
1	AA	2	U	2.1
23	DA	2172	U	2.1
30	BI	20	ASP	2.1
3	AC	75	VAL	2.1
4	CD	8	VAL	2.1
1	CA	250	A	2.1
8	AH	94	TYR	2.1
16	AP	36	ILE	2.1
23	BA	1048	A	2.1
23	DA	1111	A	2.1
7	CG	99	LEU	2.1
8	CH	112	LEU	2.1
12	AL	91	LYS	2.1
14	CN	4	LYS	2.1
17	CQ	74	LEU	2.1
46	D2	8	LYS	2.1
1	AA	392	G	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AA	724	G	2.1
1	AA	829	G	2.1
1	AA	1117	G	2.1
1	CA	80	G	2.1
2	CB	48	MET	2.1
3	AC	169	ALA	2.1
4	CD	114	ARG	2.1
23	BA	652(E)	G	2.1
27	DF	166	ALA	2.1
30	DI	36	ALA	2.1
1	AA	936	C	2.1
1	CA	1336	C	2.1
4	AD	136	PRO	2.1
7	AG	58	PRO	2.1
10	CJ	39	PRO	2.1
12	CL	16	GLU	2.1
17	AQ	49	GLU	2.1
17	AQ	62	SER	2.1
42	BY	91	GLU	2.1
52	B8	40	GLU	2.1
2	AB	25	ASN	2.1
4	AD	154	ASN	2.1
16	AP	9	PHE	2.1
9	AI	41	VAL	2.1
16	CP	48	TRP	2.1
28	DG	100	TRP	2.1
1	AA	223	U	2.1
1	CA	1345	U	2.1
3	AC	191	THR	2.1
11	CK	25	TYR	2.1
14	AN	17	LYS	2.1
23	DA	2150	U	2.1
28	DG	52	ILE	2.1
4	AD	153	ARG	2.1
4	CD	33	MET	2.1
13	CM	82	MET	2.1
44	B0	55	ARG	2.1
46	D2	51	ARG	2.1
40	BW	44	ALA	2.1
43	BZ	51	ALA	2.1
16	AP	66	PRO	2.1
10	AJ	19	SER	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
16	AP	80	PHE	2.1
53	D9	6	SER	2.1
19	CS	53	ASN	2.1
1	AA	189(G)	G	2.1
1	AA	610	G	2.1
1	AA	1182	G	2.1
1	AA	1190	G	2.1
1	CA	630	G	2.1
10	CJ	94	VAL	2.1
23	BA	2192	G	2.1
23	DA	2133	G	2.1
27	DF	89	VAL	2.1
33	BP	146	VAL	2.1
1	AA	1109	C	2.1
1	AA	1137	C	2.1
1	CA	995	C	2.1
1	CA	1037	C	2.1
23	DA	34	C	2.1
23	DA	2140	C	2.1
14	CN	61	TRP	2.1
20	CT	21	LYS	2.1
3	CC	178	LEU	2.1
10	CJ	74	ILE	2.1
19	AS	30	LEU	2.1
22	CV	41	LEU	2.1
32	DO	56	ASP	2.1
48	B4	22	ILE	2.1
3	CC	149	ALA	2.1
1	AA	870	U	2.1
23	BA	12	U	2.1
23	BA	1963	U	2.1
23	DA	157	U	2.1
23	DA	271(K)	U	2.1
9	AI	69	GLY	2.1
2	AB	167	PRO	2.1
3	AC	128	PHE	2.1
4	AD	110	PHE	2.1
13	CM	58	GLU	2.1
29	DH	128	PRO	2.1
37	BT	109	GLU	2.1
9	CI	109	VAL	2.1
13	AM	45	VAL	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AA	197	A	2.1
1	AA	978	A	2.1
1	AA	1035	A	2.1
1	AA	1318	A	2.1
3	AC	27	LYS	2.1
3	CC	63	ASN	2.1
13	AM	77	ASN	2.1
23	BA	655	A	2.1
23	DA	1048	A	2.1
2	AB	138	LEU	2.1
2	AB	145	LEU	2.1
2	AB	16	HIS	2.1
2	AB	153	ARG	2.1
2	CB	97	TRP	2.1
2	CB	153	ARG	2.1
4	CD	153	ARG	2.1
5	AE	126	ARG	2.1
10	CJ	16	LEU	2.1
16	AP	8	ARG	2.1
16	CP	8	ARG	2.1
21	CU	13	ILE	2.1
28	DG	95	ARG	2.1
34	BQ	59	ARG	2.1
41	BX	95	LEU	2.1
43	DZ	163	LEU	2.1
46	D2	50	ILE	2.1
3	AC	67	THR	2.1
4	CD	181	MET	2.1
9	AI	5	TYR	2.1
1	AA	398	C	2.1
1	AA	1063	C	2.1
1	AA	1367	C	2.1
1	CA	1389	C	2.1
1	AA	428	G	2.1
1	CA	963	G	2.1
1	CA	1206	G	2.1
1	CA	1290	G	2.1
10	AJ	27	ALA	2.1
12	AL	72	GLY	2.1
12	CL	29	GLY	2.1
13	AM	68	GLY	2.1
15	AO	9	GLN	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
43	BZ	118	GLN	2.1
5	CE	45	PHE	2.1
7	AG	112	PRO	2.1
9	AI	59	PHE	2.1
12	AL	71	PRO	2.1
15	CO	15	PHE	2.1
1	CA	1281	U	2.0
19	AS	32	LYS	2.0
30	DI	21	VAL	2.0
43	DZ	161	VAL	2.0
48	B4	35	VAL	2.0
4	AD	132	ARG	2.0
4	CD	188	LEU	2.0
8	AH	6	ILE	2.0
10	AJ	28	ARG	2.0
20	AT	33	ILE	2.0
20	CT	91	LEU	2.0
28	BG	79	ASN	2.0
28	DG	175	LEU	2.0
1	AA	1014	A	2.0
1	AA	1333	A	2.0
1	CA	533	A	2.0
1	CA	1493	A	2.0
3	CC	24	ALA	2.0
3	CC	168	ALA	2.0
10	AJ	87	THR	2.0
16	AP	7	ALA	2.0
16	AP	70	ALA	2.0
30	BI	29	TYR	2.0
43	DZ	99	TYR	2.0
2	AB	18	GLY	2.0
3	AC	186	PHE	2.0
14	CN	38	GLY	2.0
33	BP	130	PHE	2.0
44	B0	52	GLY	2.0
4	CD	136	PRO	2.0
20	CT	98	PRO	2.0
1	AA	1195	C	2.0
1	AA	1249	C	2.0
1	CA	40	C	2.0
1	CA	1103	C	2.0
2	CB	164	VAL	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	CC	195	VAL	2.0
23	DA	2896	C	2.0
1	AA	399	G	2.0
1	AA	1033	G	2.0
1	AA	1042	G	2.0
4	AD	64	LEU	2.0
6	AF	98	LEU	2.0
7	CG	59	LEU	2.0
8	CH	39	LEU	2.0
13	AM	66	LEU	2.0
13	CM	80	ARG	2.0
20	AT	72	LEU	2.0
23	DA	1537	G	2.0
29	BH	60	ARG	2.0
37	BT	129	ARG	2.0
1	AA	1372	U	2.0
1	CA	1020	U	2.0
1	CA	1358	U	2.0
7	AG	109	ASN	2.0
5	AE	104	ALA	2.0
5	AE	116	THR	2.0
9	CI	13	ALA	2.0
9	AI	92	TYR	2.0
30	DI	93	THR	2.0
19	AS	12	ASP	2.0
29	DH	57	ASP	2.0
2	CB	38	GLY	2.0
3	CC	74	GLY	2.0
4	AD	23	GLY	2.0
7	AG	81	GLY	2.0
10	CJ	93	GLY	2.0
2	AB	22	LYS	2.0
19	AS	7	LYS	2.0
46	B2	70	GLN	2.0
1	AA	382	A	2.0
2	CB	9	GLU	2.0
3	CC	173	VAL	2.0
4	AD	150	GLU	2.0
14	AN	8	GLU	2.0
23	BA	529	A	2.0
23	DA	654	A	2.0
13	AM	110	ARG	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
19	AS	78	ARG	2.0
22	AV	3	ARG	2.0
2	AB	187	LEU	2.0
3	AC	111	LEU	2.0
9	AI	19	LEU	2.0
16	AP	60	LEU	2.0
3	CC	39	ILE	2.0
5	AE	80	ILE	2.0
1	AA	1321	C	2.0
1	AA	1452	C	2.0
1	CA	972	C	2.0
1	CA	1214	C	2.0
1	CA	1282	C	2.0
1	CA	1388	C	2.0
23	BA	2105	C	2.0
23	DA	1052	C	2.0
23	DA	2161	C	2.0

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

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

6.3 Carbohydrates (i)

There are no oligosaccharides in this entry.

6.4 Ligands (i)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	AA	1641	1/1	0.43	0.48	93,93,93,93	0
54	MG	BA	3243	1/1	0.55	0.19	117,117,117,117	0
54	MG	BA	3280	1/1	0.55	0.25	89,89,89,89	0
54	MG	BA	3363	1/1	0.55	0.20	74,74,74,74	0
54	MG	CA	1604	1/1	0.56	0.25	110,110,110,110	0
54	MG	AA	1670	1/1	0.57	0.25	115,115,115,115	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	DA	3297	1/1	0.59	0.18	66,66,66,66	0
54	MG	AA	1643	1/1	0.61	0.59	96,96,96,96	0
54	MG	CA	1631	1/1	0.62	0.52	88,88,88,88	0
54	MG	AA	1682	1/1	0.62	0.17	111,111,111,111	0
54	MG	DA	3346	1/1	0.62	0.12	89,89,89,89	0
54	MG	BA	3614	1/1	0.64	0.17	94,94,94,94	0
54	MG	AA	1665	1/1	0.65	0.17	86,86,86,86	0
54	MG	DA	3030	1/1	0.65	0.21	52,52,52,52	0
54	MG	DA	3378	1/1	0.65	0.24	98,98,98,98	0
54	MG	DA	3379	1/1	0.65	0.17	94,94,94,94	0
54	MG	AD	302	1/1	0.66	0.22	120,120,120,120	0
54	MG	AA	1625	1/1	0.67	0.33	102,102,102,102	0
54	MG	DA	3151	1/1	0.67	0.31	58,58,58,58	0
54	MG	DA	3133	1/1	0.68	0.15	78,78,78,78	0
54	MG	BA	3569	1/1	0.68	0.25	68,68,68,68	0
54	MG	CA	1624	1/1	0.68	0.41	82,82,82,82	0
54	MG	AA	1608	1/1	0.69	0.28	90,90,90,90	0
54	MG	BB	208	1/1	0.69	0.21	70,70,70,70	0
54	MG	DA	3200	1/1	0.70	0.22	67,67,67,67	0
54	MG	BA	3351	1/1	0.70	0.14	57,57,57,57	0
54	MG	BA	3308	1/1	0.70	0.25	51,51,51,51	0
54	MG	CA	1634	1/1	0.70	0.35	101,101,101,101	0
54	MG	DA	3172	1/1	0.70	0.20	50,50,50,50	0
54	MG	DA	3214	1/1	0.71	0.22	74,74,74,74	0
54	MG	AA	1676	1/1	0.71	0.47	84,84,84,84	0
54	MG	DA	3180	1/1	0.71	0.33	78,78,78,78	0
54	MG	DA	3194	1/1	0.71	0.35	77,77,77,77	0
54	MG	AA	1606	1/1	0.71	0.38	74,74,74,74	0
54	MG	BA	3093	1/1	0.72	0.31	81,81,81,81	0
54	MG	AA	1632	1/1	0.72	0.50	93,93,93,93	0
54	MG	BA	3013	1/1	0.72	0.10	103,103,103,103	0
54	MG	BA	3365	1/1	0.72	0.14	84,84,84,84	0
54	MG	CA	1623	1/1	0.72	0.45	73,73,73,73	0
54	MG	DA	3391	1/1	0.72	0.17	67,67,67,67	0
54	MG	BA	3102	1/1	0.73	0.14	59,59,59,59	0
54	MG	DA	3219	1/1	0.73	0.27	38,38,38,38	0
54	MG	BA	3203	1/1	0.73	0.25	69,69,69,69	0
54	MG	B0	101	1/1	0.73	0.22	75,75,75,75	0
54	MG	AA	1694	1/1	0.73	0.23	110,110,110,110	0
54	MG	CA	1610	1/1	0.73	0.40	80,80,80,80	0
54	MG	DA	3050	1/1	0.73	0.28	90,90,90,90	0
54	MG	BA	3195	1/1	0.74	0.24	84,84,84,84	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	AA	1639	1/1	0.74	0.21	74,74,74,74	0
54	MG	AA	1646	1/1	0.74	0.33	73,73,73,73	0
54	MG	AA	1654	1/1	0.74	0.16	87,87,87,87	0
54	MG	BA	3520	1/1	0.74	0.27	67,67,67,67	0
54	MG	DB	201	1/1	0.74	0.35	75,75,75,75	0
55	ZN	CN	101	1/1	0.74	0.23	188,188,188,188	0
54	MG	BA	3514	1/1	0.75	0.11	97,97,97,97	0
54	MG	BA	3519	1/1	0.75	0.25	90,90,90,90	0
54	MG	B8	102	1/1	0.75	0.27	61,61,61,61	0
54	MG	AA	1653	1/1	0.75	0.39	80,80,80,80	0
54	MG	BA	3157	1/1	0.75	0.14	46,46,46,46	0
54	MG	DA	3129	1/1	0.75	0.15	78,78,78,78	0
54	MG	BA	3487	1/1	0.75	0.16	94,94,94,94	0
54	MG	DA	3108	1/1	0.76	0.31	80,80,80,80	0
54	MG	BA	3176	1/1	0.76	0.24	69,69,69,69	0
54	MG	BA	3274	1/1	0.76	0.26	81,81,81,81	0
54	MG	BA	3148	1/1	0.76	0.26	54,54,54,54	0
54	MG	CA	1657	1/1	0.76	0.29	86,86,86,86	0
54	MG	DA	3175	1/1	0.76	0.17	69,69,69,69	0
54	MG	BA	3034	1/1	0.76	0.12	46,46,46,46	0
54	MG	BA	3340	1/1	0.76	0.16	65,65,65,65	0
54	MG	DA	3091	1/1	0.76	0.26	70,70,70,70	0
54	MG	AA	1671	1/1	0.77	0.21	89,89,89,89	0
54	MG	DA	3128	1/1	0.77	0.33	72,72,72,72	0
54	MG	AA	1620	1/1	0.77	0.43	77,77,77,77	0
54	MG	AA	1662	1/1	0.77	0.26	83,83,83,83	0
54	MG	BA	3558	1/1	0.77	0.17	61,61,61,61	0
54	MG	BA	3145	1/1	0.77	0.20	78,78,78,78	0
54	MG	CA	1615	1/1	0.77	0.35	76,76,76,76	0
54	MG	DA	3078	1/1	0.77	0.34	53,53,53,53	0
54	MG	DA	3189	1/1	0.77	0.34	66,66,66,66	0
54	MG	BA	3197	1/1	0.77	0.25	62,62,62,62	0
54	MG	AA	1609	1/1	0.78	0.25	91,91,91,91	0
54	MG	DA	3054	1/1	0.78	0.36	75,75,75,75	0
54	MG	BA	3063	1/1	0.78	0.30	84,84,84,84	0
54	MG	DA	3209	1/1	0.78	0.30	79,79,79,79	0
54	MG	CA	1609	1/1	0.78	0.35	70,70,70,70	0
54	MG	BA	3159	1/1	0.78	0.10	66,66,66,66	0
54	MG	DA	3225	1/1	0.78	0.33	64,64,64,64	0
54	MG	BA	3068	1/1	0.78	0.25	70,70,70,70	0
54	MG	DA	3316	1/1	0.78	0.15	75,75,75,75	0
54	MG	DA	3327	1/1	0.78	0.15	94,94,94,94	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	BA	3549	1/1	0.78	0.14	68,68,68,68	0
54	MG	AA	1698	1/1	0.78	0.33	68,68,68,68	0
54	MG	AA	1656	1/1	0.78	0.19	74,74,74,74	0
54	MG	BA	3201	1/1	0.78	0.23	79,79,79,79	0
54	MG	DA	3410	1/1	0.78	0.14	72,72,72,72	0
54	MG	AA	1683	1/1	0.78	0.12	139,139,139,139	0
54	MG	BA	3375	1/1	0.78	0.22	46,46,46,46	0
54	MG	CA	1612	1/1	0.79	0.30	84,84,84,84	0
54	MG	BA	3136	1/1	0.79	0.30	73,73,73,73	0
54	MG	BA	3139	1/1	0.79	0.23	53,53,53,53	0
54	MG	AA	1630	1/1	0.79	0.27	76,76,76,76	0
54	MG	DA	3075	1/1	0.79	0.20	71,71,71,71	0
54	MG	BA	3079	1/1	0.79	0.29	68,68,68,68	0
54	MG	DA	3223	1/1	0.79	0.21	104,104,104,104	0
54	MG	DA	3084	1/1	0.79	0.21	62,62,62,62	0
54	MG	BA	3152	1/1	0.79	0.23	73,73,73,73	0
54	MG	AA	1655	1/1	0.80	0.33	90,90,90,90	0
54	MG	DA	3107	1/1	0.80	0.18	47,47,47,47	0
54	MG	BA	3124	1/1	0.80	0.27	68,68,68,68	0
54	MG	BA	3499	1/1	0.80	0.10	107,107,107,107	0
54	MG	DA	3278	1/1	0.80	0.13	46,46,46,46	0
54	MG	CA	1638	1/1	0.80	0.29	71,71,71,71	0
54	MG	DA	3298	1/1	0.80	0.13	71,71,71,71	0
54	MG	DA	3299	1/1	0.80	0.09	54,54,54,54	0
54	MG	CA	1648	1/1	0.80	0.13	100,100,100,100	0
54	MG	BA	3061	1/1	0.80	0.31	64,64,64,64	0
54	MG	AA	1677	1/1	0.80	0.45	81,81,81,81	0
54	MG	DA	3033	1/1	0.80	0.26	68,68,68,68	0
54	MG	AA	1700	1/1	0.80	0.12	114,114,114,114	0
54	MG	DA	3390	1/1	0.80	0.11	69,69,69,69	0
54	MG	AA	1602	1/1	0.80	0.28	111,111,111,111	0
54	MG	BA	3553	1/1	0.80	0.18	70,70,70,70	0
54	MG	AA	1628	1/1	0.80	0.22	84,84,84,84	0
55	ZN	AN	101	1/1	0.80	0.14	213,213,213,213	0
54	MG	BA	3226	1/1	0.80	0.29	62,62,62,62	0
54	MG	AA	1627	1/1	0.81	0.22	70,70,70,70	0
54	MG	AA	1672	1/1	0.81	0.44	82,82,82,82	0
54	MG	BA	3240	1/1	0.81	0.28	64,64,64,64	0
54	MG	AA	1616	1/1	0.81	0.28	79,79,79,79	0
54	MG	CA	1622	1/1	0.81	0.39	74,74,74,74	0
54	MG	DA	3345	1/1	0.81	0.10	100,100,100,100	0
54	MG	BA	3256	1/1	0.81	0.47	69,69,69,69	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	BA	3439	1/1	0.81	0.15	53,53,53,53	0
54	MG	DA	3089	1/1	0.81	0.39	82,82,82,82	0
54	MG	BA	3086	1/1	0.81	0.18	57,57,57,57	0
54	MG	DA	3103	1/1	0.81	0.23	71,71,71,71	0
54	MG	DA	3399	1/1	0.81	0.28	60,60,60,60	0
54	MG	BB	215	1/1	0.81	0.13	77,77,77,77	0
54	MG	AA	1697	1/1	0.81	0.14	75,75,75,75	0
54	MG	DF	301	1/1	0.81	0.27	58,58,58,58	0
54	MG	AA	1661	1/1	0.81	0.46	77,77,77,77	0
54	MG	BA	3320	1/1	0.81	0.16	57,57,57,57	0
54	MG	BA	3041	1/1	0.82	0.31	56,56,56,56	0
54	MG	BA	3249	1/1	0.82	0.21	70,70,70,70	0
54	MG	BB	204	1/1	0.82	0.26	67,67,67,67	0
54	MG	DA	3102	1/1	0.82	0.28	79,79,79,79	0
54	MG	CA	1626	1/1	0.82	0.25	86,86,86,86	0
54	MG	BA	3051	1/1	0.82	0.14	52,52,52,52	0
54	MG	BB	209	1/1	0.82	0.20	79,79,79,79	0
54	MG	DA	3310	1/1	0.82	0.15	56,56,56,56	0
54	MG	BA	3257	1/1	0.82	0.26	64,64,64,64	0
54	MG	BA	3055	1/1	0.82	0.17	58,58,58,58	0
54	MG	DA	3341	1/1	0.82	0.21	39,39,39,39	0
54	MG	AA	1658	1/1	0.82	0.18	60,60,60,60	0
54	MG	DA	3025	1/1	0.82	0.32	57,57,57,57	0
54	MG	BA	3062	1/1	0.82	0.20	69,69,69,69	0
54	MG	BA	3029	1/1	0.82	0.12	83,83,83,83	0
54	MG	DA	3037	1/1	0.82	0.23	49,49,49,49	0
54	MG	AA	1619	1/1	0.82	0.31	68,68,68,68	0
54	MG	BA	3076	1/1	0.82	0.21	70,70,70,70	0
54	MG	DA	3069	1/1	0.82	0.31	61,61,61,61	0
54	MG	DA	3205	1/1	0.82	0.34	82,82,82,82	0
54	MG	DA	3206	1/1	0.82	0.40	75,75,75,75	0
54	MG	BA	3039	1/1	0.82	0.14	44,44,44,44	0
54	MG	CA	1621	1/1	0.82	0.29	64,64,64,64	0
54	MG	AA	1668	1/1	0.83	0.22	83,83,83,83	0
54	MG	DA	3199	1/1	0.83	0.26	74,74,74,74	0
54	MG	BA	3160	1/1	0.83	0.21	46,46,46,46	0
54	MG	BA	3459	1/1	0.83	0.09	130,130,130,130	0
54	MG	DA	3043	1/1	0.83	0.18	63,63,63,63	0
54	MG	DA	3047	1/1	0.83	0.24	65,65,65,65	0
54	MG	DA	3210	1/1	0.83	0.28	60,60,60,60	0
54	MG	DA	3049	1/1	0.83	0.28	58,58,58,58	0
54	MG	DA	3217	1/1	0.83	0.38	69,69,69,69	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	BA	3485	1/1	0.83	0.09	60,60,60,60	0
54	MG	BA	3166	1/1	0.83	0.22	58,58,58,58	0
54	MG	DA	3063	1/1	0.83	0.17	54,54,54,54	0
54	MG	BA	3497	1/1	0.83	0.19	55,55,55,55	0
54	MG	BA	3170	1/1	0.83	0.30	52,52,52,52	0
54	MG	AA	1623	1/1	0.83	0.34	74,74,74,74	0
54	MG	BA	3184	1/1	0.83	0.24	66,66,66,66	0
54	MG	AA	1607	1/1	0.83	0.35	69,69,69,69	0
54	MG	BA	3535	1/1	0.83	0.12	70,70,70,70	0
54	MG	BA	3545	1/1	0.83	0.11	79,79,79,79	0
54	MG	BA	3196	1/1	0.83	0.27	80,80,80,80	0
54	MG	BA	3091	1/1	0.83	0.20	47,47,47,47	0
54	MG	AA	1638	1/1	0.83	0.24	78,78,78,78	0
54	MG	DA	3360	1/1	0.83	0.12	63,63,63,63	0
54	MG	DA	3126	1/1	0.83	0.21	80,80,80,80	0
54	MG	CA	1629	1/1	0.83	0.34	72,72,72,72	0
54	MG	BA	3565	1/1	0.83	0.13	90,90,90,90	0
54	MG	DA	3130	1/1	0.83	0.14	59,59,59,59	0
54	MG	BA	3100	1/1	0.83	0.28	72,72,72,72	0
54	MG	AA	1675	1/1	0.83	0.39	73,73,73,73	0
54	MG	BA	3618	1/1	0.83	0.09	85,85,85,85	0
54	MG	BA	3233	1/1	0.83	0.17	59,59,59,59	0
54	MG	CA	1659	1/1	0.83	0.22	60,60,60,60	0
54	MG	BB	207	1/1	0.83	0.19	69,69,69,69	0
54	MG	BU	202	1/1	0.84	0.26	62,62,62,62	0
54	MG	AA	1645	1/1	0.84	0.43	77,77,77,77	0
54	MG	BA	3178	1/1	0.84	0.20	58,58,58,58	0
54	MG	DA	3008	1/1	0.84	0.16	48,48,48,48	0
54	MG	DA	3111	1/1	0.84	0.31	60,60,60,60	0
54	MG	AA	1622	1/1	0.84	0.30	67,67,67,67	0
54	MG	DA	3127	1/1	0.84	0.15	63,63,63,63	0
54	MG	BA	3194	1/1	0.84	0.26	79,79,79,79	0
54	MG	BA	3001	1/1	0.84	0.12	56,56,56,56	0
54	MG	BA	3254	1/1	0.84	0.19	67,67,67,67	0
54	MG	BA	3077	1/1	0.84	0.23	43,43,43,43	0
54	MG	DA	3313	1/1	0.84	0.15	64,64,64,64	0
54	MG	DA	3139	1/1	0.84	0.34	65,65,65,65	0
54	MG	DA	3141	1/1	0.84	0.28	74,74,74,74	0
54	MG	DA	3147	1/1	0.84	0.41	78,78,78,78	0
54	MG	CA	1619	1/1	0.84	0.25	69,69,69,69	0
54	MG	DA	3163	1/1	0.84	0.14	56,56,56,56	0
54	MG	AA	1696	1/1	0.84	0.08	74,74,74,74	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	BA	3481	1/1	0.84	0.14	76,76,76,76	0
54	MG	BA	3267	1/1	0.84	0.32	53,53,53,53	0
54	MG	AA	1634	1/1	0.84	0.34	95,95,95,95	0
54	MG	DA	3192	1/1	0.84	0.30	66,66,66,66	0
54	MG	AA	1657	1/1	0.84	0.29	81,81,81,81	0
54	MG	DA	3400	1/1	0.84	0.17	95,95,95,95	0
54	MG	BA	3283	1/1	0.84	0.22	56,56,56,56	0
54	MG	BA	3287	1/1	0.84	0.38	65,65,65,65	0
54	MG	CA	1633	1/1	0.84	0.29	71,71,71,71	0
54	MG	BA	3205	1/1	0.84	0.21	61,61,61,61	0
54	MG	BD	303	1/1	0.84	0.15	58,58,58,58	0
54	MG	AA	1618	1/1	0.85	0.21	69,69,69,69	0
54	MG	CA	1602	1/1	0.85	0.36	82,82,82,82	0
54	MG	AA	1605	1/1	0.85	0.36	74,74,74,74	0
54	MG	BA	3014	1/1	0.85	0.16	57,57,57,57	0
54	MG	BA	3098	1/1	0.85	0.41	54,54,54,54	0
54	MG	DA	3203	1/1	0.85	0.23	48,48,48,48	0
54	MG	DA	3059	1/1	0.85	0.22	55,55,55,55	0
54	MG	AA	1640	1/1	0.85	0.51	80,80,80,80	0
54	MG	CA	1614	1/1	0.85	0.39	69,69,69,69	0
54	MG	AA	1604	1/1	0.85	0.18	81,81,81,81	0
54	MG	BA	3073	1/1	0.85	0.14	67,67,67,67	0
54	MG	BA	3210	1/1	0.85	0.16	57,57,57,57	0
54	MG	BA	3339	1/1	0.85	0.10	91,91,91,91	0
54	MG	BA	3217	1/1	0.85	0.12	51,51,51,51	0
54	MG	DA	3097	1/1	0.85	0.30	64,64,64,64	0
54	MG	DA	3232	1/1	0.85	0.25	46,46,46,46	0
54	MG	BA	3218	1/1	0.85	0.26	54,54,54,54	0
54	MG	CA	1625	1/1	0.85	0.57	88,88,88,88	0
54	MG	BA	3360	1/1	0.85	0.12	53,53,53,53	0
54	MG	AA	1621	1/1	0.85	0.47	80,80,80,80	0
54	MG	AA	1644	1/1	0.85	0.31	74,74,74,74	0
54	MG	DA	3123	1/1	0.85	0.14	56,56,56,56	0
54	MG	BA	3179	1/1	0.85	0.25	48,48,48,48	0
54	MG	BA	3396	1/1	0.85	0.25	23,23,23,23	0
54	MG	BA	3420	1/1	0.85	0.15	41,41,41,41	0
54	MG	CA	1639	1/1	0.85	0.43	61,61,61,61	0
54	MG	BA	3428	1/1	0.85	0.18	35,35,35,35	0
54	MG	BA	3180	1/1	0.85	0.17	51,51,51,51	0
54	MG	DA	3138	1/1	0.85	0.51	60,60,60,60	0
54	MG	BA	3183	1/1	0.85	0.20	76,76,76,76	0
54	MG	DA	3383	1/1	0.85	0.15	63,63,63,63	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	BA	3480	1/1	0.85	0.10	70,70,70,70	0
54	MG	DA	3143	1/1	0.85	0.29	62,62,62,62	0
54	MG	DA	3012	1/1	0.85	0.22	60,60,60,60	0
54	MG	BP	201	1/1	0.85	0.26	43,43,43,43	0
54	MG	DA	3155	1/1	0.85	0.19	57,57,57,57	0
54	MG	AA	1669	1/1	0.85	0.08	96,96,96,96	0
54	MG	BA	3188	1/1	0.85	0.12	43,43,43,43	0
54	MG	DA	3034	1/1	0.85	0.23	74,74,74,74	0
54	MG	B5	101	1/1	0.85	0.12	51,51,51,51	0
54	MG	DA	3036	1/1	0.86	0.14	65,65,65,65	0
54	MG	DA	3216	1/1	0.86	0.16	53,53,53,53	0
54	MG	BA	3111	1/1	0.86	0.26	57,57,57,57	0
54	MG	AA	1652	1/1	0.86	0.32	82,82,82,82	0
54	MG	DA	3221	1/1	0.86	0.15	69,69,69,69	0
54	MG	AA	1673	1/1	0.86	0.26	67,67,67,67	0
54	MG	BB	213	1/1	0.86	0.10	69,69,69,69	0
54	MG	BA	3517	1/1	0.86	0.14	51,51,51,51	0
54	MG	DA	3240	1/1	0.86	0.33	67,67,67,67	0
54	MG	DA	3259	1/1	0.86	0.21	64,64,64,64	0
54	MG	BA	3386	1/1	0.86	0.10	77,77,77,77	0
54	MG	BA	3174	1/1	0.86	0.14	71,71,71,71	0
54	MG	BR	201	1/1	0.86	0.28	58,58,58,58	0
54	MG	BA	3534	1/1	0.86	0.17	76,76,76,76	0
54	MG	BA	3032	1/1	0.86	0.22	67,67,67,67	0
54	MG	B2	101	1/1	0.86	0.25	75,75,75,75	0
54	MG	BA	3425	1/1	0.86	0.15	37,37,37,37	0
54	MG	CA	1640	1/1	0.86	0.32	62,62,62,62	0
54	MG	DA	3336	1/1	0.86	0.11	87,87,87,87	0
54	MG	DA	3173	1/1	0.86	0.17	49,49,49,49	0
54	MG	DA	3342	1/1	0.86	0.16	41,41,41,41	0
54	MG	BA	3314	1/1	0.86	0.11	71,71,71,71	0
54	MG	AA	1674	1/1	0.86	0.15	73,73,73,73	0
54	MG	DA	3185	1/1	0.86	0.32	47,47,47,47	0
54	MG	DA	3099	1/1	0.86	0.13	40,40,40,40	0
54	MG	DA	3190	1/1	0.86	0.17	57,57,57,57	0
54	MG	BA	3329	1/1	0.86	0.11	45,45,45,45	0
54	MG	BA	3563	1/1	0.86	0.10	67,67,67,67	0
54	MG	DA	3196	1/1	0.86	0.34	63,63,63,63	0
54	MG	BA	3465	1/1	0.86	0.12	38,38,38,38	0
54	MG	AA	1692	1/1	0.86	0.17	113,113,113,113	0
54	MG	DA	3109	1/1	0.86	0.27	70,70,70,70	0
54	MG	BA	3070	1/1	0.86	0.19	61,61,61,61	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	DA	3118	1/1	0.86	0.27	44,44,44,44	0
54	MG	AA	1660	1/1	0.86	0.45	91,91,91,91	0
54	MG	AA	1637	1/1	0.86	0.33	82,82,82,82	0
54	MG	BA	3147	1/1	0.87	0.24	57,57,57,57	0
54	MG	BA	3097	1/1	0.87	0.24	58,58,58,58	0
54	MG	BA	3242	1/1	0.87	0.22	66,66,66,66	0
54	MG	B3	102	1/1	0.87	0.18	54,54,54,54	0
54	MG	BA	3023	1/1	0.87	0.21	52,52,52,52	0
54	MG	BA	3154	1/1	0.87	0.15	49,49,49,49	0
54	MG	DA	3125	1/1	0.87	0.36	66,66,66,66	0
54	MG	BA	3251	1/1	0.87	0.22	63,63,63,63	0
54	MG	BA	3024	1/1	0.87	0.11	48,48,48,48	0
54	MG	DA	3224	1/1	0.87	0.35	80,80,80,80	0
54	MG	BA	3067	1/1	0.87	0.17	35,35,35,35	0
54	MG	BA	3108	1/1	0.87	0.24	56,56,56,56	0
54	MG	DA	3235	1/1	0.87	0.25	36,36,36,36	0
54	MG	BA	3082	1/1	0.87	0.17	71,71,71,71	0
54	MG	DA	3249	1/1	0.87	0.23	67,67,67,67	0
54	MG	DA	3250	1/1	0.87	0.26	41,41,41,41	0
54	MG	BA	3562	1/1	0.87	0.20	43,43,43,43	0
54	MG	BA	3118	1/1	0.87	0.27	57,57,57,57	0
54	MG	BA	3276	1/1	0.87	0.30	56,56,56,56	0
54	MG	BA	3279	1/1	0.87	0.11	54,54,54,54	0
54	MG	DA	3053	1/1	0.87	0.30	54,54,54,54	0
54	MG	AA	1612	1/1	0.87	0.28	76,76,76,76	0
54	MG	DA	3057	1/1	0.87	0.18	67,67,67,67	0
54	MG	DA	3152	1/1	0.87	0.27	58,58,58,58	0
54	MG	BA	3464	1/1	0.87	0.12	41,41,41,41	0
54	MG	DA	3159	1/1	0.87	0.33	59,59,59,59	0
54	MG	DA	3062	1/1	0.87	0.15	65,65,65,65	0
54	MG	DA	3170	1/1	0.87	0.24	52,52,52,52	0
54	MG	BA	3207	1/1	0.87	0.13	59,59,59,59	0
54	MG	AA	1636	1/1	0.87	0.19	86,86,86,86	0
54	MG	DA	3071	1/1	0.87	0.22	60,60,60,60	0
54	MG	DA	3367	1/1	0.87	0.25	68,68,68,68	0
54	MG	DA	3074	1/1	0.87	0.29	38,38,38,38	0
54	MG	DA	3183	1/1	0.87	0.19	50,50,50,50	0
54	MG	BA	3213	1/1	0.87	0.29	64,64,64,64	0
54	MG	DA	3076	1/1	0.87	0.27	70,70,70,70	0
54	MG	AA	1678	1/1	0.87	0.28	75,75,75,75	0
54	MG	CA	1630	1/1	0.87	0.23	72,72,72,72	0
54	MG	BA	3140	1/1	0.87	0.15	59,59,59,59	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	BA	3096	1/1	0.87	0.21	63,63,63,63	0
54	MG	BA	3335	1/1	0.87	0.10	55,55,55,55	0
54	MG	BA	3505	1/1	0.87	0.10	76,76,76,76	0
54	MG	BQ	201	1/1	0.87	0.13	49,49,49,49	0
54	MG	BA	3507	1/1	0.87	0.12	53,53,53,53	0
54	MG	BA	3080	1/1	0.88	0.33	42,42,42,42	0
54	MG	AA	1642	1/1	0.88	0.12	64,64,64,64	0
54	MG	AA	1688	1/1	0.88	0.11	111,111,111,111	0
54	MG	AA	1649	1/1	0.88	0.18	66,66,66,66	0
54	MG	BA	3116	1/1	0.88	0.22	56,56,56,56	0
54	MG	AA	1702	1/1	0.88	0.11	97,97,97,97	0
54	MG	AA	1706	1/1	0.88	0.08	100,100,100,100	0
54	MG	BA	3490	1/1	0.88	0.14	53,53,53,53	0
54	MG	BA	3491	1/1	0.88	0.17	65,65,65,65	0
54	MG	BA	3356	1/1	0.88	0.25	59,59,59,59	0
54	MG	DA	3247	1/1	0.88	0.31	52,52,52,52	0
54	MG	BA	3358	1/1	0.88	0.09	64,64,64,64	0
54	MG	BA	3216	1/1	0.88	0.16	52,52,52,52	0
54	MG	DA	3252	1/1	0.88	0.21	41,41,41,41	0
54	MG	BA	3269	1/1	0.88	0.22	54,54,54,54	0
54	MG	DA	3261	1/1	0.88	0.21	56,56,56,56	0
54	MG	DA	3064	1/1	0.88	0.20	53,53,53,53	0
54	MG	BA	3135	1/1	0.88	0.23	54,54,54,54	0
54	MG	DA	3160	1/1	0.88	0.28	48,48,48,48	0
54	MG	DA	3162	1/1	0.88	0.17	55,55,55,55	0
54	MG	DA	3070	1/1	0.88	0.12	53,53,53,53	0
54	MG	CA	1632	1/1	0.88	0.29	65,65,65,65	0
54	MG	DA	3314	1/1	0.88	0.15	54,54,54,54	0
54	MG	BA	3374	1/1	0.88	0.09	75,75,75,75	0
54	MG	AA	1601	1/1	0.88	0.36	68,68,68,68	0
54	MG	BR	202	1/1	0.88	0.17	49,49,49,49	0
54	MG	AA	1659	1/1	0.88	0.28	62,62,62,62	0
54	MG	BA	3167	1/1	0.88	0.30	68,68,68,68	0
54	MG	BA	3415	1/1	0.88	0.08	49,49,49,49	0
54	MG	CA	1650	1/1	0.88	0.20	100,100,100,100	0
54	MG	DA	3347	1/1	0.88	0.08	76,76,76,76	0
54	MG	DA	3092	1/1	0.88	0.29	63,63,63,63	0
54	MG	BA	3542	1/1	0.88	0.16	60,60,60,60	0
54	MG	BA	3239	1/1	0.88	0.19	38,38,38,38	0
54	MG	CA	1663	1/1	0.88	0.09	91,91,91,91	0
54	MG	DA	3197	1/1	0.88	0.29	66,66,66,66	0
54	MG	DA	3388	1/1	0.88	0.09	72,72,72,72	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	CA	1669	1/1	0.88	0.13	117,117,117,117	0
54	MG	DA	3001	1/1	0.88	0.17	62,62,62,62	0
54	MG	BA	3546	1/1	0.88	0.09	57,57,57,57	0
54	MG	B9	102	1/1	0.88	0.17	45,45,45,45	0
54	MG	DA	3023	1/1	0.88	0.32	61,61,61,61	0
54	MG	DA	3207	1/1	0.88	0.31	53,53,53,53	0
54	MG	DB	202	1/1	0.88	0.51	86,86,86,86	0
54	MG	BA	3169	1/1	0.88	0.19	60,60,60,60	0
54	MG	D6	102	1/1	0.88	0.32	64,64,64,64	0
54	MG	BA	3301	1/1	0.88	0.07	62,62,62,62	0
54	MG	BA	3241	1/1	0.88	0.35	62,62,62,62	0
54	MG	BA	3125	1/1	0.89	0.18	50,50,50,50	0
54	MG	BA	3092	1/1	0.89	0.33	55,55,55,55	0
54	MG	DA	3122	1/1	0.89	0.28	47,47,47,47	0
54	MG	BA	3555	1/1	0.89	0.12	49,49,49,49	0
54	MG	DA	3220	1/1	0.89	0.20	48,48,48,48	0
54	MG	BA	3053	1/1	0.89	0.23	53,53,53,53	0
54	MG	BA	3075	1/1	0.89	0.27	53,53,53,53	0
54	MG	CA	1613	1/1	0.89	0.33	71,71,71,71	0
54	MG	DA	3035	1/1	0.89	0.30	68,68,68,68	0
54	MG	BA	3473	1/1	0.89	0.20	59,59,59,59	0
54	MG	AA	1687	1/1	0.89	0.12	70,70,70,70	0
54	MG	CA	1618	1/1	0.89	0.34	75,75,75,75	0
54	MG	DA	3134	1/1	0.89	0.21	64,64,64,64	0
54	MG	DA	3135	1/1	0.89	0.17	44,44,44,44	0
54	MG	DA	3045	1/1	0.89	0.35	72,72,72,72	0
54	MG	BA	3332	1/1	0.89	0.18	60,60,60,60	0
54	MG	DA	3254	1/1	0.89	0.25	43,43,43,43	0
54	MG	BA	3581	1/1	0.89	0.10	47,47,47,47	0
54	MG	BA	3250	1/1	0.89	0.13	47,47,47,47	0
54	MG	DA	3262	1/1	0.89	0.08	46,46,46,46	0
54	MG	DA	3052	1/1	0.89	0.32	71,71,71,71	0
54	MG	AA	1666	1/1	0.89	0.20	62,62,62,62	0
54	MG	BB	203	1/1	0.89	0.19	80,80,80,80	0
54	MG	BA	3489	1/1	0.89	0.18	38,38,38,38	0
54	MG	BA	3209	1/1	0.89	0.30	67,67,67,67	0
54	MG	AA	1611	1/1	0.89	0.13	69,69,69,69	0
54	MG	BA	3005	1/1	0.89	0.13	42,42,42,42	0
54	MG	BA	3261	1/1	0.89	0.20	59,59,59,59	0
54	MG	DA	3326	1/1	0.89	0.10	95,95,95,95	0
54	MG	DA	3169	1/1	0.89	0.17	39,39,39,39	0
54	MG	DA	3335	1/1	0.89	0.22	72,72,72,72	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	BA	3265	1/1	0.89	0.16	30,30,30,30	0
54	MG	BA	3506	1/1	0.89	0.17	61,61,61,61	0
54	MG	BA	3150	1/1	0.89	0.14	61,61,61,61	0
54	MG	DA	3343	1/1	0.89	0.13	35,35,35,35	0
54	MG	DA	3072	1/1	0.89	0.26	50,50,50,50	0
54	MG	DA	3073	1/1	0.89	0.22	54,54,54,54	0
54	MG	CA	1636	1/1	0.89	0.31	77,77,77,77	0
54	MG	DA	3349	1/1	0.89	0.22	54,54,54,54	0
54	MG	DA	3359	1/1	0.89	0.17	49,49,49,49	0
54	MG	CA	1637	1/1	0.89	0.31	67,67,67,67	0
54	MG	DA	3363	1/1	0.89	0.12	72,72,72,72	0
54	MG	BA	3081	1/1	0.89	0.32	66,66,66,66	0
54	MG	BA	3270	1/1	0.89	0.34	74,74,74,74	0
54	MG	BA	3049	1/1	0.89	0.17	54,54,54,54	0
54	MG	DA	3193	1/1	0.89	0.34	63,63,63,63	0
54	MG	BA	3220	1/1	0.89	0.12	79,79,79,79	0
54	MG	BA	3529	1/1	0.89	0.13	86,86,86,86	0
54	MG	CA	1654	1/1	0.89	0.16	95,95,95,95	0
54	MG	DA	3396	1/1	0.89	0.13	37,37,37,37	0
54	MG	DA	3198	1/1	0.89	0.24	55,55,55,55	0
54	MG	BA	3225	1/1	0.89	0.14	61,61,61,61	0
54	MG	DA	3402	1/1	0.89	0.17	59,59,59,59	0
54	MG	BA	3007	1/1	0.89	0.15	36,36,36,36	0
54	MG	DA	3411	1/1	0.89	0.11	90,90,90,90	0
54	MG	BA	3089	1/1	0.89	0.25	46,46,46,46	0
54	MG	BA	3285	1/1	0.89	0.29	59,59,59,59	0
54	MG	DA	3106	1/1	0.89	0.18	56,56,56,56	0
54	MG	BA	3052	1/1	0.89	0.32	61,61,61,61	0
54	MG	DA	3004	1/1	0.89	0.23	59,59,59,59	0
54	MG	CA	1601	1/1	0.89	0.29	50,50,50,50	0
54	MG	BA	3272	1/1	0.90	0.23	65,65,65,65	0
54	MG	CA	1605	1/1	0.90	0.28	74,74,74,74	0
54	MG	BA	3043	1/1	0.90	0.17	54,54,54,54	0
54	MG	BA	3388	1/1	0.90	0.12	54,54,54,54	0
54	MG	DA	3233	1/1	0.90	0.23	43,43,43,43	0
54	MG	DA	3234	1/1	0.90	0.33	56,56,56,56	0
54	MG	AA	1631	1/1	0.90	0.35	64,64,64,64	0
54	MG	DA	3238	1/1	0.90	0.43	52,52,52,52	0
54	MG	BA	3230	1/1	0.90	0.26	50,50,50,50	0
54	MG	DA	3241	1/1	0.90	0.19	63,63,63,63	0
54	MG	DA	3243	1/1	0.90	0.32	53,53,53,53	0
54	MG	DA	3244	1/1	0.90	0.33	35,35,35,35	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	DA	3245	1/1	0.90	0.13	47,47,47,47	0
54	MG	BA	3417	1/1	0.90	0.13	37,37,37,37	0
54	MG	BA	3015	1/1	0.90	0.21	42,42,42,42	0
54	MG	DA	3136	1/1	0.90	0.28	42,42,42,42	0
54	MG	BA	3193	1/1	0.90	0.14	50,50,50,50	0
54	MG	DA	3253	1/1	0.90	0.24	42,42,42,42	0
54	MG	BA	3022	1/1	0.90	0.11	57,57,57,57	0
54	MG	DA	3255	1/1	0.90	0.36	63,63,63,63	0
54	MG	DA	3256	1/1	0.90	0.35	59,59,59,59	0
54	MG	BA	3286	1/1	0.90	0.13	52,52,52,52	0
54	MG	BA	3456	1/1	0.90	0.09	89,89,89,89	0
54	MG	BA	3155	1/1	0.90	0.33	64,64,64,64	0
54	MG	BA	3289	1/1	0.90	0.27	50,50,50,50	0
54	MG	AA	1681	1/1	0.90	0.12	65,65,65,65	0
54	MG	BA	3469	1/1	0.90	0.21	77,77,77,77	0
54	MG	CA	1627	1/1	0.90	0.09	79,79,79,79	0
54	MG	DA	3309	1/1	0.90	0.34	48,48,48,48	0
54	MG	BA	3054	1/1	0.90	0.17	52,52,52,52	0
54	MG	BA	3244	1/1	0.90	0.26	45,45,45,45	0
54	MG	DA	3066	1/1	0.90	0.14	56,56,56,56	0
54	MG	DA	3165	1/1	0.90	0.20	58,58,58,58	0
54	MG	DA	3320	1/1	0.90	0.12	57,57,57,57	0
54	MG	BA	3315	1/1	0.90	0.11	84,84,84,84	0
54	MG	AA	1603	1/1	0.90	0.20	68,68,68,68	0
54	MG	BA	3026	1/1	0.90	0.12	68,68,68,68	0
54	MG	AA	1617	1/1	0.90	0.23	82,82,82,82	0
54	MG	BA	3252	1/1	0.90	0.16	44,44,44,44	0
54	MG	BA	3130	1/1	0.90	0.26	32,32,32,32	0
54	MG	BB	214	1/1	0.90	0.12	67,67,67,67	0
54	MG	BA	3494	1/1	0.90	0.24	44,44,44,44	0
54	MG	DA	3188	1/1	0.90	0.21	54,54,54,54	0
54	MG	BA	3495	1/1	0.90	0.10	70,70,70,70	0
54	MG	DA	3080	1/1	0.90	0.39	73,73,73,73	0
54	MG	DA	3191	1/1	0.90	0.16	50,50,50,50	0
54	MG	DA	3082	1/1	0.90	0.12	51,51,51,51	0
54	MG	BA	3090	1/1	0.90	0.10	45,45,45,45	0
54	MG	BA	3031	1/1	0.90	0.15	41,41,41,41	0
54	MG	DA	3370	1/1	0.90	0.12	51,51,51,51	0
54	MG	CA	1651	1/1	0.90	0.19	61,61,61,61	0
54	MG	BA	3500	1/1	0.90	0.17	33,33,33,33	0
54	MG	BA	3004	1/1	0.90	0.16	41,41,41,41	0
54	MG	AA	1615	1/1	0.90	0.30	56,56,56,56	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	DA	3101	1/1	0.90	0.40	62,62,62,62	0
54	MG	CA	1661	1/1	0.90	0.14	100,100,100,100	0
54	MG	DA	3393	1/1	0.90	0.08	81,81,81,81	0
54	MG	AA	1699	1/1	0.90	0.11	69,69,69,69	0
54	MG	BA	3512	1/1	0.90	0.25	45,45,45,45	0
54	MG	BA	3513	1/1	0.90	0.08	66,66,66,66	0
54	MG	AA	1667	1/1	0.90	0.24	63,63,63,63	0
54	MG	DA	3407	1/1	0.90	0.19	59,59,59,59	0
54	MG	BA	3182	1/1	0.90	0.18	69,69,69,69	0
54	MG	DA	3011	1/1	0.90	0.31	46,46,46,46	0
54	MG	DA	3215	1/1	0.90	0.15	58,58,58,58	0
54	MG	BA	3518	1/1	0.90	0.25	59,59,59,59	0
54	MG	DA	3119	1/1	0.90	0.32	57,57,57,57	0
54	MG	BA	3369	1/1	0.90	0.10	74,74,74,74	0
54	MG	BA	3271	1/1	0.90	0.16	60,60,60,60	0
54	MG	DA	3029	1/1	0.90	0.26	72,72,72,72	0
54	MG	AA	1648	1/1	0.91	0.17	62,62,62,62	0
54	MG	DA	3239	1/1	0.91	0.21	39,39,39,39	0
54	MG	BA	3453	1/1	0.91	0.12	74,74,74,74	0
54	MG	BA	3290	1/1	0.91	0.20	47,47,47,47	0
54	MG	CA	1616	1/1	0.91	0.30	72,72,72,72	0
54	MG	CA	1617	1/1	0.91	0.41	70,70,70,70	0
54	MG	BA	3458	1/1	0.91	0.09	45,45,45,45	0
54	MG	DA	3246	1/1	0.91	0.28	41,41,41,41	0
54	MG	BA	3294	1/1	0.91	0.09	37,37,37,37	0
54	MG	BA	3078	1/1	0.91	0.20	38,38,38,38	0
54	MG	BA	3106	1/1	0.91	0.22	48,48,48,48	0
54	MG	DA	3251	1/1	0.91	0.33	39,39,39,39	0
54	MG	DA	3055	1/1	0.91	0.25	43,43,43,43	0
54	MG	BA	3247	1/1	0.91	0.21	53,53,53,53	0
54	MG	DA	3153	1/1	0.91	0.22	38,38,38,38	0
54	MG	BA	3003	1/1	0.91	0.21	29,29,29,29	0
54	MG	DA	3158	1/1	0.91	0.22	72,72,72,72	0
54	MG	BA	3316	1/1	0.91	0.20	34,34,34,34	0
54	MG	BA	3612	1/1	0.91	0.09	100,100,100,100	0
54	MG	BA	3613	1/1	0.91	0.09	109,109,109,109	0
54	MG	BA	3200	1/1	0.91	0.15	51,51,51,51	0
54	MG	DA	3284	1/1	0.91	0.13	61,61,61,61	0
54	MG	DA	3294	1/1	0.91	0.13	52,52,52,52	0
54	MG	DA	3068	1/1	0.91	0.18	48,48,48,48	0
54	MG	DA	3168	1/1	0.91	0.20	42,42,42,42	0
54	MG	BA	3020	1/1	0.91	0.10	34,34,34,34	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	BA	3331	1/1	0.91	0.11	51,51,51,51	0
54	MG	BA	3112	1/1	0.91	0.32	47,47,47,47	0
54	MG	BA	3057	1/1	0.91	0.12	46,46,46,46	0
54	MG	BA	3021	1/1	0.91	0.12	33,33,33,33	0
54	MG	CA	1635	1/1	0.91	0.17	68,68,68,68	0
54	MG	BA	3120	1/1	0.91	0.18	42,42,42,42	0
54	MG	AA	1663	1/1	0.91	0.33	70,70,70,70	0
54	MG	BA	3264	1/1	0.91	0.32	38,38,38,38	0
54	MG	BA	3498	1/1	0.91	0.09	69,69,69,69	0
54	MG	DA	3081	1/1	0.91	0.23	52,52,52,52	0
54	MG	DA	3340	1/1	0.91	0.20	44,44,44,44	0
54	MG	BB	216	1/1	0.91	0.27	46,46,46,46	0
54	MG	DA	3083	1/1	0.91	0.24	55,55,55,55	0
54	MG	CA	1646	1/1	0.91	0.17	92,92,92,92	0
54	MG	BA	3087	1/1	0.91	0.24	56,56,56,56	0
54	MG	BA	3042	1/1	0.91	0.25	47,47,47,47	0
54	MG	BA	3131	1/1	0.91	0.13	44,44,44,44	0
54	MG	DA	3095	1/1	0.91	0.40	71,71,71,71	0
54	MG	DA	3355	1/1	0.91	0.06	37,37,37,37	0
54	MG	CA	1653	1/1	0.91	0.15	83,83,83,83	0
54	MG	AA	1635	1/1	0.91	0.20	71,71,71,71	0
54	MG	BA	3045	1/1	0.91	0.24	62,62,62,62	0
54	MG	BA	3046	1/1	0.91	0.23	49,49,49,49	0
54	MG	DA	3368	1/1	0.91	0.11	78,78,78,78	0
54	MG	BV	201	1/1	0.91	0.21	74,74,74,74	0
54	MG	BA	3072	1/1	0.91	0.19	59,59,59,59	0
54	MG	BA	3379	1/1	0.91	0.09	56,56,56,56	0
54	MG	BA	3275	1/1	0.91	0.07	41,41,41,41	0
54	MG	DA	3387	1/1	0.91	0.06	71,71,71,71	0
54	MG	BA	3229	1/1	0.91	0.25	51,51,51,51	0
54	MG	BA	3392	1/1	0.91	0.11	55,55,55,55	0
54	MG	DA	3116	1/1	0.91	0.30	46,46,46,46	0
54	MG	DA	3117	1/1	0.91	0.25	34,34,34,34	0
54	MG	BA	3141	1/1	0.91	0.30	65,65,65,65	0
54	MG	BA	3521	1/1	0.91	0.12	41,41,41,41	0
54	MG	AA	1626	1/1	0.91	0.28	67,67,67,67	0
54	MG	CA	1603	1/1	0.91	0.27	73,73,73,73	0
54	MG	BA	3234	1/1	0.91	0.25	34,34,34,34	0
54	MG	DA	3408	1/1	0.91	0.09	65,65,65,65	0
54	MG	BA	3011	1/1	0.91	0.19	50,50,50,50	0
54	MG	DA	3228	1/1	0.91	0.36	51,51,51,51	0
54	MG	DA	3229	1/1	0.91	0.22	55,55,55,55	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	DA	3231	1/1	0.91	0.30	54,54,54,54	0
54	MG	DB	203	1/1	0.91	0.39	61,61,61,61	0
54	MG	CA	1608	1/1	0.91	0.36	67,67,67,67	0
54	MG	BA	3191	1/1	0.91	0.17	45,45,45,45	0
54	MG	BA	3543	1/1	0.91	0.14	59,59,59,59	0
55	ZN	B4	101	1/1	0.91	0.08	200,200,200,200	0
54	MG	AA	1679	1/1	0.91	0.28	64,64,64,64	0
55	ZN	DY	201	1/1	0.91	0.09	128,128,128,128	0
54	MG	BA	3361	1/1	0.92	0.15	53,53,53,53	0
54	MG	BA	3016	1/1	0.92	0.14	57,57,57,57	0
54	MG	CA	1606	1/1	0.92	0.40	81,81,81,81	0
54	MG	DA	3166	1/1	0.92	0.20	55,55,55,55	0
54	MG	BA	3211	1/1	0.92	0.21	53,53,53,53	0
54	MG	BA	3189	1/1	0.92	0.21	46,46,46,46	0
54	MG	DA	3006	1/1	0.92	0.16	44,44,44,44	0
54	MG	DA	3171	1/1	0.92	0.35	53,53,53,53	0
54	MG	DA	3086	1/1	0.92	0.32	54,54,54,54	0
54	MG	BA	3492	1/1	0.92	0.09	78,78,78,78	0
54	MG	BA	3214	1/1	0.92	0.28	34,34,34,34	0
54	MG	DA	3177	1/1	0.92	0.33	59,59,59,59	0
54	MG	DA	3178	1/1	0.92	0.31	58,58,58,58	0
54	MG	DA	3292	1/1	0.92	0.10	39,39,39,39	0
54	MG	DA	3293	1/1	0.92	0.13	50,50,50,50	0
54	MG	BA	3577	1/1	0.92	0.18	58,58,58,58	0
54	MG	DA	3181	1/1	0.92	0.27	51,51,51,51	0
54	MG	DA	3093	1/1	0.92	0.43	66,66,66,66	0
54	MG	DA	3184	1/1	0.92	0.29	39,39,39,39	0
54	MG	DA	3017	1/1	0.92	0.21	61,61,61,61	0
54	MG	DA	3020	1/1	0.92	0.18	39,39,39,39	0
54	MG	DA	3098	1/1	0.92	0.22	62,62,62,62	0
54	MG	BA	3069	1/1	0.92	0.28	53,53,53,53	0
54	MG	BA	3109	1/1	0.92	0.11	57,57,57,57	0
54	MG	DA	3317	1/1	0.92	0.06	94,94,94,94	0
54	MG	DA	3318	1/1	0.92	0.07	66,66,66,66	0
54	MG	DA	3028	1/1	0.92	0.16	53,53,53,53	0
54	MG	BA	3173	1/1	0.92	0.37	65,65,65,65	0
54	MG	AA	1614	1/1	0.92	0.20	62,62,62,62	0
54	MG	DA	3195	1/1	0.92	0.29	75,75,75,75	0
54	MG	BA	3224	1/1	0.92	0.18	61,61,61,61	0
54	MG	BA	3175	1/1	0.92	0.34	70,70,70,70	0
54	MG	BA	3088	1/1	0.92	0.22	46,46,46,46	0
54	MG	BA	3311	1/1	0.92	0.23	60,60,60,60	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	DA	3113	1/1	0.92	0.23	42,42,42,42	0
54	MG	BA	3227	1/1	0.92	0.09	42,42,42,42	0
54	MG	DA	3204	1/1	0.92	0.18	37,37,37,37	0
54	MG	DA	3041	1/1	0.92	0.24	49,49,49,49	0
54	MG	BA	3228	1/1	0.92	0.20	26,26,26,26	0
54	MG	DA	3351	1/1	0.92	0.12	78,78,78,78	0
54	MG	BA	3262	1/1	0.92	0.31	32,32,32,32	0
54	MG	DA	3121	1/1	0.92	0.35	53,53,53,53	0
54	MG	BA	3113	1/1	0.92	0.18	35,35,35,35	0
54	MG	BA	3450	1/1	0.92	0.11	71,71,71,71	0
54	MG	BA	3156	1/1	0.92	0.18	57,57,57,57	0
54	MG	BA	3232	1/1	0.92	0.13	54,54,54,54	0
54	MG	AA	1610	1/1	0.92	0.33	75,75,75,75	0
54	MG	BA	3522	1/1	0.92	0.15	68,68,68,68	0
54	MG	BA	3525	1/1	0.92	0.06	112,112,112,112	0
54	MG	BA	3064	1/1	0.92	0.14	45,45,45,45	0
54	MG	DA	3058	1/1	0.92	0.10	51,51,51,51	0
54	MG	BA	3532	1/1	0.92	0.07	35,35,35,35	0
54	MG	BA	3235	1/1	0.92	0.18	45,45,45,45	0
54	MG	DA	3227	1/1	0.92	0.20	65,65,65,65	0
54	MG	BW	201	1/1	0.92	0.14	51,51,51,51	0
54	MG	DA	3394	1/1	0.92	0.18	56,56,56,56	0
54	MG	DA	3137	1/1	0.92	0.29	64,64,64,64	0
54	MG	BA	3236	1/1	0.92	0.26	50,50,50,50	0
54	MG	B1	101	1/1	0.92	0.10	50,50,50,50	0
54	MG	BA	3541	1/1	0.92	0.19	54,54,54,54	0
54	MG	B3	101	1/1	0.92	0.12	60,60,60,60	0
54	MG	DA	3146	1/1	0.92	0.27	35,35,35,35	0
54	MG	BA	3341	1/1	0.92	0.10	69,69,69,69	0
54	MG	BA	3237	1/1	0.92	0.26	56,56,56,56	0
54	MG	DA	3420	1/1	0.92	0.10	97,97,97,97	0
54	MG	DA	3423	1/1	0.92	0.07	79,79,79,79	0
54	MG	BA	3476	1/1	0.92	0.12	44,44,44,44	0
54	MG	AA	1664	1/1	0.92	0.14	85,85,85,85	0
54	MG	DA	3242	1/1	0.92	0.28	38,38,38,38	0
54	MG	BA	3547	1/1	0.92	0.15	31,31,31,31	0
54	MG	DA	3157	1/1	0.92	0.20	69,69,69,69	0
54	MG	BA	3121	1/1	0.92	0.06	38,38,38,38	0
54	MG	BA	3277	1/1	0.92	0.19	66,66,66,66	0
54	MG	DA	3077	1/1	0.92	0.17	66,66,66,66	0
54	MG	DA	3248	1/1	0.92	0.39	44,44,44,44	0
54	MG	DA	3032	1/1	0.93	0.25	43,43,43,43	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	DA	3131	1/1	0.93	0.20	39,39,39,39	0
54	MG	BA	3436	1/1	0.93	0.14	38,38,38,38	0
54	MG	BA	3219	1/1	0.93	0.28	62,62,62,62	0
54	MG	BA	3441	1/1	0.93	0.12	35,35,35,35	0
54	MG	BA	3313	1/1	0.93	0.13	42,42,42,42	0
54	MG	AA	1633	1/1	0.93	0.36	72,72,72,72	0
54	MG	CA	1611	1/1	0.93	0.14	64,64,64,64	0
54	MG	BA	3222	1/1	0.93	0.07	51,51,51,51	0
54	MG	BA	3047	1/1	0.93	0.18	50,50,50,50	0
54	MG	DA	3142	1/1	0.93	0.11	46,46,46,46	0
54	MG	DA	3046	1/1	0.93	0.43	43,43,43,43	0
54	MG	BA	3028	1/1	0.93	0.18	46,46,46,46	0
54	MG	BA	3554	1/1	0.93	0.15	58,58,58,58	0
54	MG	DA	3149	1/1	0.93	0.23	36,36,36,36	0
54	MG	BA	3094	1/1	0.93	0.11	41,41,41,41	0
54	MG	BA	3192	1/1	0.93	0.14	43,43,43,43	0
54	MG	BA	3559	1/1	0.93	0.13	39,39,39,39	0
54	MG	BA	3161	1/1	0.93	0.23	54,54,54,54	0
54	MG	BA	3162	1/1	0.93	0.33	62,62,62,62	0
54	MG	BA	3165	1/1	0.93	0.19	56,56,56,56	0
54	MG	BA	3566	1/1	0.93	0.15	40,40,40,40	0
54	MG	DA	3263	1/1	0.93	0.08	70,70,70,70	0
54	MG	AA	1680	1/1	0.93	0.14	83,83,83,83	0
54	MG	BA	3115	1/1	0.93	0.29	43,43,43,43	0
54	MG	BA	3580	1/1	0.93	0.08	61,61,61,61	0
54	MG	BA	3344	1/1	0.93	0.08	52,52,52,52	0
54	MG	DA	3065	1/1	0.93	0.18	58,58,58,58	0
54	MG	CA	1628	1/1	0.93	0.22	55,55,55,55	0
54	MG	BA	3590	1/1	0.93	0.09	82,82,82,82	0
54	MG	BA	3345	1/1	0.93	0.16	45,45,45,45	0
54	MG	BA	3273	1/1	0.93	0.08	66,66,66,66	0
54	MG	BA	3355	1/1	0.93	0.14	54,54,54,54	0
54	MG	BA	3168	1/1	0.93	0.20	52,52,52,52	0
54	MG	DA	3174	1/1	0.93	0.36	60,60,60,60	0
54	MG	BA	3357	1/1	0.93	0.08	47,47,47,47	0
54	MG	BA	3030	1/1	0.93	0.14	37,37,37,37	0
54	MG	BA	3142	1/1	0.93	0.34	53,53,53,53	0
54	MG	DA	3179	1/1	0.93	0.34	62,62,62,62	0
54	MG	DA	3324	1/1	0.93	0.14	64,64,64,64	0
54	MG	BA	3496	1/1	0.93	0.08	79,79,79,79	0
54	MG	BA	3171	1/1	0.93	0.27	67,67,67,67	0
54	MG	BA	3278	1/1	0.93	0.09	43,43,43,43	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	DA	3079	1/1	0.93	0.21	60,60,60,60	0
54	MG	DA	3338	1/1	0.93	0.12	50,50,50,50	0
54	MG	BA	3206	1/1	0.93	0.15	68,68,68,68	0
54	MG	DA	3186	1/1	0.93	0.17	42,42,42,42	0
54	MG	DA	3187	1/1	0.93	0.35	47,47,47,47	0
54	MG	CA	1642	1/1	0.93	0.11	87,87,87,87	0
54	MG	CA	1644	1/1	0.93	0.12	74,74,74,74	0
54	MG	CA	1645	1/1	0.93	0.18	63,63,63,63	0
54	MG	BA	3018	1/1	0.93	0.16	72,72,72,72	0
54	MG	DA	3085	1/1	0.93	0.27	51,51,51,51	0
54	MG	DA	3350	1/1	0.93	0.14	50,50,50,50	0
54	MG	BA	3501	1/1	0.93	0.07	61,61,61,61	0
54	MG	DA	3354	1/1	0.93	0.12	41,41,41,41	0
54	MG	BA	3503	1/1	0.93	0.12	68,68,68,68	0
54	MG	BF	301	1/1	0.93	0.22	56,56,56,56	0
54	MG	BA	3282	1/1	0.93	0.16	43,43,43,43	0
54	MG	BA	3065	1/1	0.93	0.13	47,47,47,47	0
54	MG	DA	3364	1/1	0.93	0.10	67,67,67,67	0
54	MG	DA	3366	1/1	0.93	0.07	35,35,35,35	0
54	MG	CA	1656	1/1	0.93	0.09	97,97,97,97	0
54	MG	BQ	202	1/1	0.93	0.28	53,53,53,53	0
54	MG	BA	3377	1/1	0.93	0.10	69,69,69,69	0
54	MG	BA	3066	1/1	0.93	0.12	43,43,43,43	0
54	MG	BA	3383	1/1	0.93	0.11	71,71,71,71	0
54	MG	DA	3380	1/1	0.93	0.07	91,91,91,91	0
54	MG	CA	1664	1/1	0.93	0.06	94,94,94,94	0
54	MG	DA	3386	1/1	0.93	0.07	63,63,63,63	0
54	MG	BA	3384	1/1	0.93	0.07	62,62,62,62	0
54	MG	DA	3105	1/1	0.93	0.31	33,33,33,33	0
54	MG	BA	3122	1/1	0.93	0.22	56,56,56,56	0
54	MG	BA	3151	1/1	0.93	0.25	62,62,62,62	0
54	MG	BA	3391	1/1	0.93	0.15	38,38,38,38	0
54	MG	DA	3007	1/1	0.93	0.08	36,36,36,36	0
54	MG	BA	3103	1/1	0.93	0.35	67,67,67,67	0
54	MG	DA	3112	1/1	0.93	0.29	60,60,60,60	0
54	MG	BA	3215	1/1	0.93	0.23	61,61,61,61	0
54	MG	BA	3292	1/1	0.93	0.11	44,44,44,44	0
54	MG	DA	3405	1/1	0.93	0.14	70,70,70,70	0
54	MG	DA	3015	1/1	0.93	0.26	71,71,71,71	0
54	MG	DA	3016	1/1	0.93	0.14	41,41,41,41	0
54	MG	BA	3153	1/1	0.93	0.23	53,53,53,53	0
54	MG	DA	3120	1/1	0.93	0.25	52,52,52,52	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	DA	3226	1/1	0.93	0.21	53,53,53,53	0
54	MG	BA	3528	1/1	0.93	0.11	43,43,43,43	0
54	MG	DA	3021	1/1	0.93	0.25	53,53,53,53	0
54	MG	BA	3297	1/1	0.93	0.11	35,35,35,35	0
54	MG	DA	3230	1/1	0.93	0.27	67,67,67,67	0
54	MG	BA	3008	1/1	0.93	0.15	32,32,32,32	0
54	MG	DF	302	1/1	0.93	0.11	64,64,64,64	0
54	MG	DP	201	1/1	0.93	0.39	58,58,58,58	0
54	MG	DA	3026	1/1	0.93	0.07	49,49,49,49	0
55	ZN	AD	301	1/1	0.93	0.17	107,107,107,107	0
54	MG	BA	3128	1/1	0.93	0.17	53,53,53,53	0
54	MG	BA	3435	1/1	0.93	0.14	36,36,36,36	0
54	MG	BA	3540	1/1	0.93	0.09	61,61,61,61	0
54	MG	DA	3237	1/1	0.93	0.28	39,39,39,39	0
54	MG	BA	3327	1/1	0.94	0.07	34,34,34,34	0
54	MG	DA	3257	1/1	0.94	0.29	59,59,59,59	0
54	MG	DA	3258	1/1	0.94	0.10	56,56,56,56	0
54	MG	BA	3266	1/1	0.94	0.48	48,48,48,48	0
54	MG	DA	3260	1/1	0.94	0.21	44,44,44,44	0
54	MG	BA	3434	1/1	0.94	0.19	36,36,36,36	0
54	MG	BA	3127	1/1	0.94	0.30	51,51,51,51	0
54	MG	BA	3099	1/1	0.94	0.24	52,52,52,52	0
54	MG	DA	3265	1/1	0.94	0.09	39,39,39,39	0
54	MG	DA	3267	1/1	0.94	0.12	59,59,59,59	0
54	MG	AA	1651	1/1	0.94	0.39	69,69,69,69	0
54	MG	BF	302	1/1	0.94	0.16	62,62,62,62	0
54	MG	DA	3286	1/1	0.94	0.11	50,50,50,50	0
54	MG	BA	3337	1/1	0.94	0.10	33,33,33,33	0
54	MG	BA	3448	1/1	0.94	0.18	33,33,33,33	0
54	MG	BA	3449	1/1	0.94	0.09	49,49,49,49	0
54	MG	BA	3526	1/1	0.94	0.13	28,28,28,28	0
54	MG	BA	3338	1/1	0.94	0.10	30,30,30,30	0
54	MG	BA	3101	1/1	0.94	0.28	51,51,51,51	0
54	MG	DA	3301	1/1	0.94	0.07	55,55,55,55	0
54	MG	BA	3530	1/1	0.94	0.10	84,84,84,84	0
54	MG	BA	3231	1/1	0.94	0.20	45,45,45,45	0
54	MG	DA	3182	1/1	0.94	0.20	59,59,59,59	0
54	MG	DA	3087	1/1	0.94	0.20	58,58,58,58	0
54	MG	DA	3088	1/1	0.94	0.28	65,65,65,65	0
54	MG	BA	3533	1/1	0.94	0.13	48,48,48,48	0
54	MG	AA	1613	1/1	0.94	0.23	74,74,74,74	0
54	MG	BA	3199	1/1	0.94	0.08	31,31,31,31	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	BA	3538	1/1	0.94	0.07	70,70,70,70	0
54	MG	BA	3463	1/1	0.94	0.09	36,36,36,36	0
54	MG	DA	3096	1/1	0.94	0.23	46,46,46,46	0
54	MG	DA	3330	1/1	0.94	0.11	44,44,44,44	0
54	MG	DA	3331	1/1	0.94	0.17	69,69,69,69	0
54	MG	BA	3048	1/1	0.94	0.20	42,42,42,42	0
54	MG	DA	3009	1/1	0.94	0.18	54,54,54,54	0
54	MG	B8	101	1/1	0.94	0.15	64,64,64,64	0
54	MG	BA	3105	1/1	0.94	0.08	40,40,40,40	0
54	MG	BA	3467	1/1	0.94	0.09	73,73,73,73	0
54	MG	BA	3544	1/1	0.94	0.06	91,91,91,91	0
54	MG	DA	3104	1/1	0.94	0.11	57,57,57,57	0
54	MG	BA	3468	1/1	0.94	0.08	38,38,38,38	0
54	MG	DA	3018	1/1	0.94	0.14	42,42,42,42	0
54	MG	BA	3084	1/1	0.94	0.28	56,56,56,56	0
54	MG	DA	3201	1/1	0.94	0.31	69,69,69,69	0
54	MG	BA	3204	1/1	0.94	0.06	47,47,47,47	0
54	MG	BA	3475	1/1	0.94	0.17	53,53,53,53	0
54	MG	DA	3352	1/1	0.94	0.10	61,61,61,61	0
54	MG	DA	3024	1/1	0.94	0.12	49,49,49,49	0
54	MG	BA	3551	1/1	0.94	0.20	40,40,40,40	0
54	MG	DA	3357	1/1	0.94	0.08	53,53,53,53	0
54	MG	BA	3085	1/1	0.94	0.40	63,63,63,63	0
54	MG	DA	3115	1/1	0.94	0.20	39,39,39,39	0
54	MG	BA	3009	1/1	0.94	0.17	59,59,59,59	0
54	MG	BA	3110	1/1	0.94	0.27	23,23,23,23	0
54	MG	BA	3557	1/1	0.94	0.31	42,42,42,42	0
54	MG	BA	3050	1/1	0.94	0.08	46,46,46,46	0
54	MG	BA	3284	1/1	0.94	0.07	40,40,40,40	0
54	MG	AA	1690	1/1	0.94	0.07	59,59,59,59	0
54	MG	DA	3372	1/1	0.94	0.20	40,40,40,40	0
54	MG	DA	3375	1/1	0.94	0.09	50,50,50,50	0
54	MG	AA	1650	1/1	0.94	0.31	70,70,70,70	0
54	MG	BA	3114	1/1	0.94	0.15	43,43,43,43	0
54	MG	BA	3071	1/1	0.94	0.11	49,49,49,49	0
54	MG	DA	3038	1/1	0.94	0.24	39,39,39,39	0
54	MG	DA	3039	1/1	0.94	0.14	41,41,41,41	0
54	MG	DA	3040	1/1	0.94	0.21	50,50,50,50	0
54	MG	BA	3567	1/1	0.94	0.07	62,62,62,62	0
54	MG	BA	3036	1/1	0.94	0.22	49,49,49,49	0
54	MG	DA	3044	1/1	0.94	0.27	51,51,51,51	0
54	MG	CA	1620	1/1	0.94	0.26	57,57,57,57	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	BA	3571	1/1	0.94	0.07	76,76,76,76	0
54	MG	BA	3572	1/1	0.94	0.14	49,49,49,49	0
54	MG	DA	3048	1/1	0.94	0.10	53,53,53,53	0
54	MG	BA	3038	1/1	0.94	0.06	36,36,36,36	0
54	MG	BA	3579	1/1	0.94	0.11	53,53,53,53	0
54	MG	DA	3403	1/1	0.94	0.10	49,49,49,49	0
54	MG	AA	1686	1/1	0.94	0.08	115,115,115,115	0
54	MG	BA	3185	1/1	0.94	0.12	44,44,44,44	0
54	MG	BA	3584	1/1	0.94	0.09	68,68,68,68	0
54	MG	DA	3409	1/1	0.94	0.06	79,79,79,79	0
54	MG	BA	3587	1/1	0.94	0.12	66,66,66,66	0
54	MG	DA	3144	1/1	0.94	0.25	42,42,42,42	0
54	MG	DA	3414	1/1	0.94	0.08	68,68,68,68	0
54	MG	DA	3415	1/1	0.94	0.13	89,89,89,89	0
54	MG	BA	3186	1/1	0.94	0.24	64,64,64,64	0
54	MG	BA	3594	1/1	0.94	0.07	70,70,70,70	0
54	MG	DA	3148	1/1	0.94	0.36	70,70,70,70	0
54	MG	BA	3187	1/1	0.94	0.23	30,30,30,30	0
54	MG	DA	3061	1/1	0.94	0.19	52,52,52,52	0
54	MG	BA	3258	1/1	0.94	0.27	56,56,56,56	0
54	MG	BA	3025	1/1	0.94	0.09	52,52,52,52	0
54	MG	AA	1695	1/1	0.94	0.07	93,93,93,93	0
54	MG	BB	202	1/1	0.94	0.12	46,46,46,46	0
54	MG	D8	101	1/1	0.94	0.31	49,49,49,49	0
54	MG	BA	3399	1/1	0.94	0.10	41,41,41,41	0
54	MG	BA	3263	1/1	0.94	0.31	41,41,41,41	0
54	MG	BA	3027	1/1	0.94	0.11	56,56,56,56	0
54	MG	BA	3510	1/1	0.94	0.08	33,33,33,33	0
54	MG	BA	3006	1/1	0.94	0.11	44,44,44,44	0
54	MG	DA	3005	1/1	0.95	0.21	64,64,64,64	0
54	MG	BA	3132	1/1	0.95	0.20	31,31,31,31	0
54	MG	DA	3321	1/1	0.95	0.10	53,53,53,53	0
54	MG	DA	3211	1/1	0.95	0.23	53,53,53,53	0
54	MG	BA	3255	1/1	0.95	0.28	65,65,65,65	0
54	MG	BA	3291	1/1	0.95	0.20	59,59,59,59	0
54	MG	BB	205	1/1	0.95	0.32	57,57,57,57	0
54	MG	AA	1647	1/1	0.95	0.26	61,61,61,61	0
54	MG	AA	1685	1/1	0.95	0.08	77,77,77,77	0
54	MG	DA	3014	1/1	0.95	0.13	52,52,52,52	0
54	MG	BA	3502	1/1	0.95	0.09	41,41,41,41	0
54	MG	DA	3222	1/1	0.95	0.18	47,47,47,47	0
54	MG	BB	210	1/1	0.95	0.09	67,67,67,67	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	BA	3548	1/1	0.95	0.09	41,41,41,41	0
54	MG	BA	3172	1/1	0.95	0.11	71,71,71,71	0
54	MG	BA	3198	1/1	0.95	0.21	29,29,29,29	0
54	MG	BA	3460	1/1	0.95	0.08	58,58,58,58	0
54	MG	DA	3154	1/1	0.95	0.41	62,62,62,62	0
54	MG	DA	3022	1/1	0.95	0.28	52,52,52,52	0
54	MG	DA	3156	1/1	0.95	0.21	52,52,52,52	0
54	MG	BA	3302	1/1	0.95	0.14	45,45,45,45	0
54	MG	BE	302	1/1	0.95	0.10	52,52,52,52	0
54	MG	DA	3353	1/1	0.95	0.07	40,40,40,40	0
54	MG	BE	303	1/1	0.95	0.07	54,54,54,54	0
54	MG	BE	306	1/1	0.95	0.11	56,56,56,56	0
54	MG	DA	3161	1/1	0.95	0.33	55,55,55,55	0
54	MG	DA	3358	1/1	0.95	0.07	68,68,68,68	0
54	MG	DA	3027	1/1	0.95	0.32	51,51,51,51	0
54	MG	BA	3012	1/1	0.95	0.07	34,34,34,34	0
54	MG	DA	3361	1/1	0.95	0.05	67,67,67,67	0
54	MG	DA	3362	1/1	0.95	0.06	63,63,63,63	0
54	MG	DA	3164	1/1	0.95	0.14	46,46,46,46	0
54	MG	BA	3556	1/1	0.95	0.10	58,58,58,58	0
54	MG	BA	3310	1/1	0.95	0.11	44,44,44,44	0
54	MG	DA	3167	1/1	0.95	0.17	59,59,59,59	0
54	MG	BA	3347	1/1	0.95	0.15	55,55,55,55	0
54	MG	BA	3397	1/1	0.95	0.07	31,31,31,31	0
54	MG	DA	3371	1/1	0.95	0.06	50,50,50,50	0
54	MG	BA	3561	1/1	0.95	0.14	49,49,49,49	0
54	MG	BA	3117	1/1	0.95	0.10	31,31,31,31	0
54	MG	BU	201	1/1	0.95	0.20	51,51,51,51	0
54	MG	BA	3472	1/1	0.95	0.12	29,29,29,29	0
54	MG	BA	3405	1/1	0.95	0.10	38,38,38,38	0
54	MG	BA	3474	1/1	0.95	0.13	66,66,66,66	0
54	MG	BA	3408	1/1	0.95	0.16	34,34,34,34	0
54	MG	BA	3164	1/1	0.95	0.11	39,39,39,39	0
54	MG	CA	1641	1/1	0.95	0.17	74,74,74,74	0
54	MG	DA	3389	1/1	0.95	0.07	58,58,58,58	0
54	MG	AA	1629	1/1	0.95	0.24	63,63,63,63	0
54	MG	CA	1643	1/1	0.95	0.08	109,109,109,109	0
54	MG	DA	3110	1/1	0.95	0.09	46,46,46,46	0
54	MG	AA	1624	1/1	0.95	0.43	66,66,66,66	0
54	MG	DA	3395	1/1	0.95	0.10	37,37,37,37	0
54	MG	BA	3573	1/1	0.95	0.07	55,55,55,55	0
54	MG	BA	3059	1/1	0.95	0.18	49,49,49,49	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	DA	3114	1/1	0.95	0.12	51,51,51,51	0
54	MG	BA	3318	1/1	0.95	0.09	73,73,73,73	0
54	MG	CA	1649	1/1	0.95	0.08	92,92,92,92	0
54	MG	BA	3146	1/1	0.95	0.36	52,52,52,52	0
54	MG	DA	3406	1/1	0.95	0.07	35,35,35,35	0
54	MG	BA	3362	1/1	0.95	0.05	73,73,73,73	0
54	MG	BA	3221	1/1	0.95	0.20	51,51,51,51	0
54	MG	BA	3253	1/1	0.95	0.18	38,38,38,38	0
54	MG	DA	3279	1/1	0.95	0.17	40,40,40,40	0
54	MG	BA	3588	1/1	0.95	0.13	86,86,86,86	0
54	MG	BA	3493	1/1	0.95	0.11	52,52,52,52	0
54	MG	BA	3593	1/1	0.95	0.09	70,70,70,70	0
54	MG	DA	3417	1/1	0.95	0.14	81,81,81,81	0
54	MG	DA	3060	1/1	0.95	0.12	60,60,60,60	0
54	MG	DA	3421	1/1	0.95	0.07	69,69,69,69	0
54	MG	BA	3536	1/1	0.95	0.06	82,82,82,82	0
54	MG	CA	1607	1/1	0.95	0.21	72,72,72,72	0
54	MG	BA	3537	1/1	0.95	0.11	38,38,38,38	0
54	MG	CA	1666	1/1	0.95	0.08	131,131,131,131	0
54	MG	BA	3330	1/1	0.95	0.11	36,36,36,36	0
54	MG	DA	3308	1/1	0.95	0.14	49,49,49,49	0
54	MG	DA	3202	1/1	0.95	0.13	37,37,37,37	0
54	MG	BA	3442	1/1	0.95	0.10	31,31,31,31	0
54	MG	D7	101	1/1	0.95	0.21	52,52,52,52	0
54	MG	DA	3312	1/1	0.95	0.07	67,67,67,67	0
54	MG	DA	3067	1/1	0.95	0.21	32,32,32,32	0
54	MG	DA	3002	1/1	0.95	0.29	67,67,67,67	0
54	MG	DA	3315	1/1	0.95	0.06	59,59,59,59	0
54	MG	DA	3003	1/1	0.95	0.19	35,35,35,35	0
54	MG	BA	3445	1/1	0.95	0.06	56,56,56,56	0
54	MG	BA	3104	1/1	0.96	0.09	48,48,48,48	0
54	MG	BA	3364	1/1	0.96	0.04	46,46,46,46	0
54	MG	DA	3124	1/1	0.96	0.26	35,35,35,35	0
54	MG	BB	212	1/1	0.96	0.06	68,68,68,68	0
54	MG	BA	3306	1/1	0.96	0.08	51,51,51,51	0
54	MG	DA	3322	1/1	0.96	0.10	35,35,35,35	0
54	MG	BA	3368	1/1	0.96	0.23	34,34,34,34	0
54	MG	DA	3325	1/1	0.96	0.13	36,36,36,36	0
54	MG	AA	1684	1/1	0.96	0.06	76,76,76,76	0
54	MG	BA	3181	1/1	0.96	0.15	48,48,48,48	0
54	MG	BA	3137	1/1	0.96	0.05	38,38,38,38	0
54	MG	BE	301	1/1	0.96	0.18	43,43,43,43	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	DA	3332	1/1	0.96	0.06	62,62,62,62	0
54	MG	DA	3334	1/1	0.96	0.07	56,56,56,56	0
54	MG	DA	3212	1/1	0.96	0.12	38,38,38,38	0
54	MG	DA	3132	1/1	0.96	0.21	49,49,49,49	0
54	MG	BA	3208	1/1	0.96	0.24	54,54,54,54	0
54	MG	BA	3138	1/1	0.96	0.10	54,54,54,54	0
54	MG	BE	304	1/1	0.96	0.10	32,32,32,32	0
54	MG	DA	3218	1/1	0.96	0.38	53,53,53,53	0
54	MG	AA	1703	1/1	0.96	0.09	89,89,89,89	0
54	MG	BA	3238	1/1	0.96	0.06	32,32,32,32	0
54	MG	BA	3095	1/1	0.96	0.24	45,45,45,45	0
54	MG	BA	3479	1/1	0.96	0.08	35,35,35,35	0
54	MG	DA	3140	1/1	0.96	0.22	70,70,70,70	0
54	MG	BA	3163	1/1	0.96	0.31	42,42,42,42	0
54	MG	BA	3389	1/1	0.96	0.11	33,33,33,33	0
54	MG	BA	3483	1/1	0.96	0.12	57,57,57,57	0
54	MG	CA	1655	1/1	0.96	0.17	74,74,74,74	0
54	MG	DA	3145	1/1	0.96	0.26	47,47,47,47	0
54	MG	BA	3326	1/1	0.96	0.06	30,30,30,30	0
54	MG	BA	3074	1/1	0.96	0.21	55,55,55,55	0
54	MG	BA	3123	1/1	0.96	0.11	43,43,43,43	0
54	MG	BA	3143	1/1	0.96	0.32	45,45,45,45	0
54	MG	BA	3190	1/1	0.96	0.18	46,46,46,46	0
54	MG	BA	3144	1/1	0.96	0.20	54,54,54,54	0
54	MG	CA	1665	1/1	0.96	0.11	76,76,76,76	0
54	MG	B0	102	1/1	0.96	0.12	56,56,56,56	0
54	MG	CA	1667	1/1	0.96	0.12	64,64,64,64	0
54	MG	CA	1668	1/1	0.96	0.12	105,105,105,105	0
54	MG	BA	3333	1/1	0.96	0.15	36,36,36,36	0
54	MG	BA	3410	1/1	0.96	0.07	34,34,34,34	0
54	MG	DA	3369	1/1	0.96	0.12	57,57,57,57	0
54	MG	BA	3411	1/1	0.96	0.15	43,43,43,43	0
54	MG	BA	3412	1/1	0.96	0.09	41,41,41,41	0
54	MG	BA	3413	1/1	0.96	0.12	31,31,31,31	0
54	MG	BA	3414	1/1	0.96	0.13	26,26,26,26	0
54	MG	BA	3334	1/1	0.96	0.06	43,43,43,43	0
54	MG	BA	3416	1/1	0.96	0.06	46,46,46,46	0
54	MG	BA	3248	1/1	0.96	0.26	50,50,50,50	0
54	MG	DA	3381	1/1	0.96	0.09	79,79,79,79	0
54	MG	DA	3382	1/1	0.96	0.09	53,53,53,53	0
54	MG	BA	3568	1/1	0.96	0.08	60,60,60,60	0
54	MG	BA	3419	1/1	0.96	0.09	35,35,35,35	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	BA	3570	1/1	0.96	0.11	36,36,36,36	0
54	MG	DA	3090	1/1	0.96	0.16	53,53,53,53	0
54	MG	BA	3040	1/1	0.96	0.07	33,33,33,33	0
54	MG	BA	3056	1/1	0.96	0.11	48,48,48,48	0
54	MG	BA	3019	1/1	0.96	0.07	39,39,39,39	0
54	MG	BA	3432	1/1	0.96	0.10	31,31,31,31	0
54	MG	BA	3508	1/1	0.96	0.11	40,40,40,40	0
54	MG	BA	3509	1/1	0.96	0.07	85,85,85,85	0
54	MG	DA	3176	1/1	0.96	0.20	61,61,61,61	0
54	MG	DA	3397	1/1	0.96	0.06	65,65,65,65	0
54	MG	BA	3058	1/1	0.96	0.13	56,56,56,56	0
54	MG	BA	3511	1/1	0.96	0.07	33,33,33,33	0
54	MG	DA	3100	1/1	0.96	0.45	61,61,61,61	0
54	MG	BA	3585	1/1	0.96	0.09	54,54,54,54	0
54	MG	BA	3223	1/1	0.96	0.23	57,57,57,57	0
54	MG	DA	3266	1/1	0.96	0.07	58,58,58,58	0
54	MG	BA	3129	1/1	0.96	0.15	49,49,49,49	0
54	MG	DA	3268	1/1	0.96	0.12	43,43,43,43	0
54	MG	BA	3002	1/1	0.96	0.10	98,98,98,98	0
54	MG	AA	1704	1/1	0.96	0.06	90,90,90,90	0
54	MG	DA	3280	1/1	0.96	0.11	40,40,40,40	0
54	MG	DA	3412	1/1	0.96	0.06	45,45,45,45	0
54	MG	DA	3413	1/1	0.96	0.08	37,37,37,37	0
54	MG	AA	1691	1/1	0.96	0.07	58,58,58,58	0
54	MG	DA	3285	1/1	0.96	0.08	52,52,52,52	0
54	MG	BA	3595	1/1	0.96	0.05	82,82,82,82	0
54	MG	DA	3289	1/1	0.96	0.06	52,52,52,52	0
54	MG	BA	3608	1/1	0.96	0.07	87,87,87,87	0
54	MG	BA	3611	1/1	0.96	0.06	70,70,70,70	0
54	MG	DA	3424	1/1	0.96	0.04	130,130,130,130	0
54	MG	DA	3427	1/1	0.96	0.09	40,40,40,40	0
54	MG	BA	3133	1/1	0.96	0.17	31,31,31,31	0
54	MG	DA	3296	1/1	0.96	0.07	50,50,50,50	0
54	MG	BA	3259	1/1	0.96	0.15	51,51,51,51	0
54	MG	DB	204	1/1	0.96	0.10	74,74,74,74	0
54	MG	DE	301	1/1	0.96	0.35	37,37,37,37	0
54	MG	BA	3260	1/1	0.96	0.24	50,50,50,50	0
54	MG	BA	3177	1/1	0.96	0.09	45,45,45,45	0
54	MG	BB	201	1/1	0.96	0.09	61,61,61,61	0
54	MG	DA	3306	1/1	0.96	0.07	88,88,88,88	0
54	MG	BA	3524	1/1	0.96	0.09	77,77,77,77	0
54	MG	BA	3359	1/1	0.96	0.06	49,49,49,49	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	BA	3455	1/1	0.96	0.21	42,42,42,42	0
54	MG	BA	3298	1/1	0.96	0.07	53,53,53,53	0
54	MG	BB	206	1/1	0.96	0.23	62,62,62,62	0
54	MG	BA	3299	1/1	0.96	0.10	38,38,38,38	0
54	MG	BA	3134	1/1	0.96	0.27	44,44,44,44	0
54	MG	DA	3042	1/1	0.97	0.25	46,46,46,46	0
54	MG	BA	3035	1/1	0.97	0.17	45,45,45,45	0
54	MG	CA	1647	1/1	0.97	0.12	78,78,78,78	0
54	MG	DA	3348	1/1	0.97	0.04	85,85,85,85	0
54	MG	BA	3578	1/1	0.97	0.10	60,60,60,60	0
54	MG	BA	3010	1/1	0.97	0.08	48,48,48,48	0
54	MG	BA	3523	1/1	0.97	0.04	79,79,79,79	0
54	MG	B2	102	1/1	0.97	0.08	60,60,60,60	0
54	MG	BA	3037	1/1	0.97	0.12	52,52,52,52	0
54	MG	BA	3119	1/1	0.97	0.07	39,39,39,39	0
54	MG	DA	3051	1/1	0.97	0.13	43,43,43,43	0
54	MG	BA	3478	1/1	0.97	0.08	92,92,92,92	0
54	MG	BA	3527	1/1	0.97	0.08	51,51,51,51	0
54	MG	BA	3367	1/1	0.97	0.17	33,33,33,33	0
54	MG	CA	1658	1/1	0.97	0.13	83,83,83,83	0
54	MG	BA	3245	1/1	0.97	0.10	36,36,36,36	0
54	MG	CA	1660	1/1	0.97	0.10	106,106,106,106	0
54	MG	BA	3422	1/1	0.97	0.09	27,27,27,27	0
54	MG	BA	3531	1/1	0.97	0.07	49,49,49,49	0
54	MG	DA	3365	1/1	0.97	0.06	50,50,50,50	0
54	MG	BA	3482	1/1	0.97	0.12	58,58,58,58	0
54	MG	BA	3606	1/1	0.97	0.06	29,29,29,29	0
54	MG	BA	3336	1/1	0.97	0.05	46,46,46,46	0
54	MG	BA	3484	1/1	0.97	0.14	40,40,40,40	0
54	MG	BA	3370	1/1	0.97	0.09	66,66,66,66	0
54	MG	BA	3486	1/1	0.97	0.06	48,48,48,48	0
54	MG	BA	3430	1/1	0.97	0.13	30,30,30,30	0
54	MG	DA	3374	1/1	0.97	0.12	44,44,44,44	0
54	MG	DA	3272	1/1	0.97	0.09	47,47,47,47	0
54	MG	DA	3376	1/1	0.97	0.06	43,43,43,43	0
54	MG	DA	3377	1/1	0.97	0.06	61,61,61,61	0
54	MG	DA	3277	1/1	0.97	0.06	42,42,42,42	0
54	MG	BA	3617	1/1	0.97	0.08	93,93,93,93	0
54	MG	BA	3288	1/1	0.97	0.33	33,33,33,33	0
54	MG	BA	3539	1/1	0.97	0.06	61,61,61,61	0
54	MG	DA	3282	1/1	0.97	0.06	42,42,42,42	0
54	MG	DA	3283	1/1	0.97	0.06	48,48,48,48	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	DA	3385	1/1	0.97	0.18	49,49,49,49	0
54	MG	BA	3312	1/1	0.97	0.06	50,50,50,50	0
54	MG	BA	3044	1/1	0.97	0.18	49,49,49,49	0
54	MG	BA	3083	1/1	0.97	0.32	56,56,56,56	0
54	MG	BA	3017	1/1	0.97	0.14	47,47,47,47	0
54	MG	DA	3291	1/1	0.97	0.15	43,43,43,43	0
54	MG	BA	3440	1/1	0.97	0.05	63,63,63,63	0
54	MG	BA	3342	1/1	0.97	0.09	57,57,57,57	0
54	MG	DA	3208	1/1	0.97	0.41	52,52,52,52	0
54	MG	DA	3295	1/1	0.97	0.07	42,42,42,42	0
54	MG	BA	3060	1/1	0.97	0.16	45,45,45,45	0
54	MG	DA	3013	1/1	0.97	0.07	41,41,41,41	0
54	MG	BA	3317	1/1	0.97	0.07	51,51,51,51	0
54	MG	BA	3447	1/1	0.97	0.17	37,37,37,37	0
54	MG	DA	3300	1/1	0.97	0.14	62,62,62,62	0
54	MG	DA	3213	1/1	0.97	0.38	64,64,64,64	0
54	MG	DA	3303	1/1	0.97	0.10	37,37,37,37	0
54	MG	DA	3305	1/1	0.97	0.05	55,55,55,55	0
54	MG	BA	3346	1/1	0.97	0.05	45,45,45,45	0
54	MG	BA	3550	1/1	0.97	0.08	37,37,37,37	0
54	MG	BA	3033	1/1	0.97	0.18	40,40,40,40	0
54	MG	DA	3019	1/1	0.97	0.10	41,41,41,41	0
54	MG	DA	3150	1/1	0.97	0.25	41,41,41,41	0
54	MG	BA	3350	1/1	0.97	0.09	60,60,60,60	0
54	MG	BA	3452	1/1	0.97	0.09	62,62,62,62	0
54	MG	BD	301	1/1	0.97	0.07	41,41,41,41	0
54	MG	BA	3394	1/1	0.97	0.05	29,29,29,29	0
54	MG	DA	3416	1/1	0.97	0.06	32,32,32,32	0
54	MG	BA	3504	1/1	0.97	0.22	28,28,28,28	0
54	MG	BA	3454	1/1	0.97	0.09	34,34,34,34	0
54	MG	BA	3295	1/1	0.97	0.06	44,44,44,44	0
54	MG	BA	3352	1/1	0.97	0.11	53,53,53,53	0
54	MG	BA	3457	1/1	0.97	0.07	91,91,91,91	0
54	MG	DA	3425	1/1	0.97	0.07	60,60,60,60	0
54	MG	DA	3094	1/1	0.97	0.15	39,39,39,39	0
54	MG	DA	3428	1/1	0.97	0.04	81,81,81,81	0
54	MG	BA	3322	1/1	0.97	0.05	45,45,45,45	0
54	MG	BA	3400	1/1	0.97	0.08	34,34,34,34	0
54	MG	DA	3031	1/1	0.97	0.26	43,43,43,43	0
54	MG	DA	3329	1/1	0.97	0.06	47,47,47,47	0
54	MG	BA	3401	1/1	0.97	0.07	45,45,45,45	0
54	MG	BA	3324	1/1	0.97	0.11	82,82,82,82	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	BA	3406	1/1	0.97	0.11	40,40,40,40	0
54	MG	DA	3333	1/1	0.97	0.05	53,53,53,53	0
54	MG	BQ	203	1/1	0.97	0.09	44,44,44,44	0
54	MG	DA	3236	1/1	0.97	0.37	44,44,44,44	0
54	MG	BA	3325	1/1	0.97	0.06	47,47,47,47	0
54	MG	BA	3516	1/1	0.97	0.06	39,39,39,39	0
54	MG	AA	1701	1/1	0.97	0.04	96,96,96,96	0
54	MG	BA	3202	1/1	0.97	0.20	65,65,65,65	0
54	MG	BA	3158	1/1	0.97	0.28	51,51,51,51	0
54	MG	BA	3300	1/1	0.97	0.07	37,37,37,37	0
55	ZN	D4	101	1/1	0.97	0.09	176,176,176,176	0
55	ZN	D6	101	1/1	0.97	0.05	86,86,86,86	0
54	MG	DA	3010	1/1	0.98	0.08	43,43,43,43	0
54	MG	BA	3349	1/1	0.98	0.05	39,39,39,39	0
54	MG	BA	3488	1/1	0.98	0.06	34,34,34,34	0
54	MG	BA	3407	1/1	0.98	0.08	35,35,35,35	0
54	MG	BA	3373	1/1	0.98	0.05	55,55,55,55	0
54	MG	BA	3576	1/1	0.98	0.05	41,41,41,41	0
54	MG	BA	3212	1/1	0.98	0.20	47,47,47,47	0
54	MG	BA	3451	1/1	0.98	0.14	34,34,34,34	0
54	MG	DA	3307	1/1	0.98	0.10	39,39,39,39	0
54	MG	AA	1693	1/1	0.98	0.05	78,78,78,78	0
54	MG	BA	3281	1/1	0.98	0.05	56,56,56,56	0
54	MG	BA	3354	1/1	0.98	0.09	49,49,49,49	0
54	MG	DA	3311	1/1	0.98	0.06	65,65,65,65	0
54	MG	AA	1705	1/1	0.98	0.06	68,68,68,68	0
54	MG	DA	3384	1/1	0.98	0.09	57,57,57,57	0
54	MG	BA	3319	1/1	0.98	0.06	68,68,68,68	0
54	MG	BA	3385	1/1	0.98	0.07	73,73,73,73	0
54	MG	BA	3304	1/1	0.98	0.07	27,27,27,27	0
54	MG	BA	3589	1/1	0.98	0.04	70,70,70,70	0
54	MG	BA	3418	1/1	0.98	0.06	54,54,54,54	0
54	MG	BA	3592	1/1	0.98	0.04	51,51,51,51	0
54	MG	DA	3319	1/1	0.98	0.06	59,59,59,59	0
54	MG	DA	3392	1/1	0.98	0.04	56,56,56,56	0
54	MG	BA	3387	1/1	0.98	0.10	33,33,33,33	0
54	MG	BA	3461	1/1	0.98	0.07	38,38,38,38	0
54	MG	BA	3321	1/1	0.98	0.06	65,65,65,65	0
54	MG	BA	3149	1/1	0.98	0.18	49,49,49,49	0
54	MG	BA	3607	1/1	0.98	0.09	38,38,38,38	0
54	MG	DA	3398	1/1	0.98	0.04	52,52,52,52	0
54	MG	BA	3390	1/1	0.98	0.12	29,29,29,29	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	BA	3609	1/1	0.98	0.12	51,51,51,51	0
54	MG	DA	3328	1/1	0.98	0.05	34,34,34,34	0
54	MG	BA	3427	1/1	0.98	0.12	32,32,32,32	0
54	MG	BA	3293	1/1	0.98	0.09	29,29,29,29	0
54	MG	B8	103	1/1	0.98	0.11	51,51,51,51	0
54	MG	CA	1652	1/1	0.98	0.10	65,65,65,65	0
54	MG	BA	3309	1/1	0.98	0.14	38,38,38,38	0
54	MG	BA	3470	1/1	0.98	0.09	35,35,35,35	0
54	MG	BA	3471	1/1	0.98	0.11	38,38,38,38	0
54	MG	BA	3431	1/1	0.98	0.19	34,34,34,34	0
54	MG	DA	3337	1/1	0.98	0.06	42,42,42,42	0
54	MG	BA	3552	1/1	0.98	0.07	38,38,38,38	0
54	MG	DA	3339	1/1	0.98	0.05	48,48,48,48	0
54	MG	DA	3264	1/1	0.98	0.11	46,46,46,46	0
54	MG	BA	3393	1/1	0.98	0.13	38,38,38,38	0
54	MG	BA	3433	1/1	0.98	0.06	35,35,35,35	0
54	MG	BA	3246	1/1	0.98	0.16	49,49,49,49	0
54	MG	BA	3515	1/1	0.98	0.12	46,46,46,46	0
54	MG	DA	3271	1/1	0.98	0.07	57,57,57,57	0
54	MG	BA	3343	1/1	0.98	0.04	91,91,91,91	0
54	MG	DA	3275	1/1	0.98	0.04	48,48,48,48	0
54	MG	DA	3276	1/1	0.98	0.12	51,51,51,51	0
54	MG	BA	3477	1/1	0.98	0.04	45,45,45,45	0
54	MG	DA	3429	1/1	0.98	0.05	44,44,44,44	0
54	MG	BA	3268	1/1	0.98	0.08	44,44,44,44	0
54	MG	BA	3560	1/1	0.98	0.05	29,29,29,29	0
54	MG	BA	3438	1/1	0.98	0.08	38,38,38,38	0
54	MG	BB	211	1/1	0.98	0.04	51,51,51,51	0
54	MG	BA	3296	1/1	0.98	0.05	48,48,48,48	0
54	MG	DA	3356	1/1	0.98	0.12	42,42,42,42	0
54	MG	BA	3107	1/1	0.98	0.15	49,49,49,49	0
54	MG	DA	3056	1/1	0.98	0.28	61,61,61,61	0
54	MG	BA	3564	1/1	0.98	0.12	36,36,36,36	0
54	MG	DA	3287	1/1	0.98	0.04	46,46,46,46	0
54	MG	BA	3126	1/1	0.98	0.29	57,57,57,57	0
54	MG	DA	3290	1/1	0.98	0.10	42,42,42,42	0
54	MG	BA	3402	1/1	0.98	0.07	47,47,47,47	0
55	ZN	BY	201	1/1	0.98	0.03	74,74,74,74	0
54	MG	BB	217	1/1	0.98	0.16	42,42,42,42	0
55	ZN	B9	101	1/1	0.98	0.05	69,69,69,69	0
55	ZN	CD	301	1/1	0.98	0.22	96,96,96,96	0
54	MG	BA	3444	1/1	0.98	0.04	61,61,61,61	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	BD	302	1/1	0.98	0.18	38,38,38,38	0
54	MG	BA	3348	1/1	0.98	0.10	37,37,37,37	0
54	MG	BA	3446	1/1	0.98	0.04	40,40,40,40	0
54	MG	BA	3395	1/1	0.99	0.06	32,32,32,32	0
54	MG	BA	3582	1/1	0.99	0.12	54,54,54,54	0
54	MG	BA	3583	1/1	0.99	0.03	50,50,50,50	0
54	MG	DA	3344	1/1	0.99	0.03	51,51,51,51	0
54	MG	BA	3380	1/1	0.99	0.05	50,50,50,50	0
54	MG	BA	3382	1/1	0.99	0.07	58,58,58,58	0
54	MG	BA	3586	1/1	0.99	0.05	58,58,58,58	0
54	MG	BA	3398	1/1	0.99	0.04	36,36,36,36	0
54	MG	DA	3401	1/1	0.99	0.03	85,85,85,85	0
54	MG	BA	3443	1/1	0.99	0.07	41,41,41,41	0
54	MG	BA	3353	1/1	0.99	0.03	28,28,28,28	0
54	MG	DA	3404	1/1	0.99	0.07	53,53,53,53	0
54	MG	BA	3323	1/1	0.99	0.03	40,40,40,40	0
54	MG	BA	3591	1/1	0.99	0.06	56,56,56,56	0
54	MG	DA	3302	1/1	0.99	0.13	36,36,36,36	0
54	MG	BA	3307	1/1	0.99	0.06	29,29,29,29	0
54	MG	DA	3304	1/1	0.99	0.05	38,38,38,38	0
54	MG	BA	3421	1/1	0.99	0.04	36,36,36,36	0
54	MG	BA	3371	1/1	0.99	0.06	67,67,67,67	0
54	MG	BA	3423	1/1	0.99	0.08	30,30,30,30	0
54	MG	BA	3596	1/1	0.99	0.04	46,46,46,46	0
54	MG	CA	1662	1/1	0.99	0.08	95,95,95,95	0
54	MG	BA	3599	1/1	0.99	0.04	50,50,50,50	0
54	MG	BA	3600	1/1	0.99	0.09	31,31,31,31	0
54	MG	BA	3602	1/1	0.99	0.03	24,24,24,24	0
54	MG	DA	3419	1/1	0.99	0.03	50,50,50,50	0
54	MG	BA	3603	1/1	0.99	0.04	30,30,30,30	0
54	MG	BA	3424	1/1	0.99	0.12	32,32,32,32	0
54	MG	DA	3422	1/1	0.99	0.03	75,75,75,75	0
54	MG	BA	3403	1/1	0.99	0.06	44,44,44,44	0
54	MG	BA	3426	1/1	0.99	0.11	28,28,28,28	0
54	MG	BA	3404	1/1	0.99	0.05	46,46,46,46	0
54	MG	DA	3426	1/1	0.99	0.04	94,94,94,94	0
54	MG	BA	3610	1/1	0.99	0.04	56,56,56,56	0
54	MG	BA	3372	1/1	0.99	0.10	50,50,50,50	0
54	MG	BA	3429	1/1	0.99	0.11	29,29,29,29	0
54	MG	DA	3430	1/1	0.99	0.03	72,72,72,72	0
54	MG	DA	3269	1/1	0.99	0.04	54,54,54,54	0
54	MG	DA	3373	1/1	0.99	0.10	38,38,38,38	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
54	MG	AA	1689	1/1	0.99	0.04	55,55,55,55	0
54	MG	DA	3323	1/1	0.99	0.15	36,36,36,36	0
54	MG	DB	205	1/1	0.99	0.10	70,70,70,70	0
54	MG	DD	301	1/1	0.99	0.08	40,40,40,40	0
54	MG	BA	3305	1/1	0.99	0.03	37,37,37,37	0
54	MG	DA	3273	1/1	0.99	0.04	37,37,37,37	0
54	MG	DA	3274	1/1	0.99	0.03	35,35,35,35	0
54	MG	BA	3615	1/1	0.99	0.04	91,91,91,91	0
54	MG	BA	3616	1/1	0.99	0.06	82,82,82,82	0
54	MG	BA	3303	1/1	0.99	0.11	36,36,36,36	0
54	MG	BA	3409	1/1	0.99	0.07	26,26,26,26	0
54	MG	BA	3376	1/1	0.99	0.04	55,55,55,55	0
54	MG	BA	3366	1/1	0.99	0.03	50,50,50,50	0
54	MG	BA	3574	1/1	0.99	0.03	41,41,41,41	0
54	MG	B5	102	1/1	0.99	0.04	42,42,42,42	0
55	ZN	B6	101	1/1	0.99	0.03	54,54,54,54	0
54	MG	BA	3575	1/1	0.99	0.05	54,54,54,54	0
54	MG	BA	3462	1/1	0.99	0.05	25,25,25,25	0
54	MG	BA	3378	1/1	0.99	0.12	38,38,38,38	0
54	MG	BA	3437	1/1	0.99	0.07	28,28,28,28	0
54	MG	BA	3328	1/1	0.99	0.06	27,27,27,27	0
54	MG	BA	3466	1/1	0.99	0.03	67,67,67,67	0
55	ZN	D9	101	1/1	0.99	0.05	87,87,87,87	0
54	MG	BA	3381	1/1	1.00	0.04	49,49,49,49	0
54	MG	BA	3604	1/1	1.00	0.02	36,36,36,36	0
54	MG	BA	3605	1/1	1.00	0.03	30,30,30,30	0
55	ZN	B5	103	1/1	1.00	0.02	58,58,58,58	0
54	MG	BA	3597	1/1	1.00	0.02	26,26,26,26	0
54	MG	BE	305	1/1	1.00	0.09	32,32,32,32	0
54	MG	DA	3270	1/1	1.00	0.04	34,34,34,34	0
54	MG	DA	3418	1/1	1.00	0.02	39,39,39,39	0
54	MG	DA	3288	1/1	1.00	0.05	37,37,37,37	0
54	MG	BA	3601	1/1	1.00	0.02	33,33,33,33	0
55	ZN	D5	101	1/1	1.00	0.02	65,65,65,65	0
54	MG	BA	3598	1/1	1.00	0.02	39,39,39,39	0
54	MG	DA	3281	1/1	1.00	0.03	36,36,36,36	0

6.5 Other polymers (i)

There are no such residues in this entry.