



Full wwPDB X-ray Structure Validation Report ⓘ

Dec 18, 2023 – 08:51 PM EST

PDB ID : 1VY5
Title : Crystal structure of the *Thermus thermophilus* 70S ribosome in the post-catalysis state of peptide bond formation containing dipeptidyl-tRNA in the A site and deacylated tRNA in the P site.
Authors : Polikanov, Y.S.; Steitz, T.A.; Innis, C.A.
Deposited on : 2014-05-13
Resolution : 2.55 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 : 4.02b-467
Mogul : 1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix) : 1.13
EDS : 2.36
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac : 5.8.0158
CCP4 : 7.0.044 (Gargrove)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.36

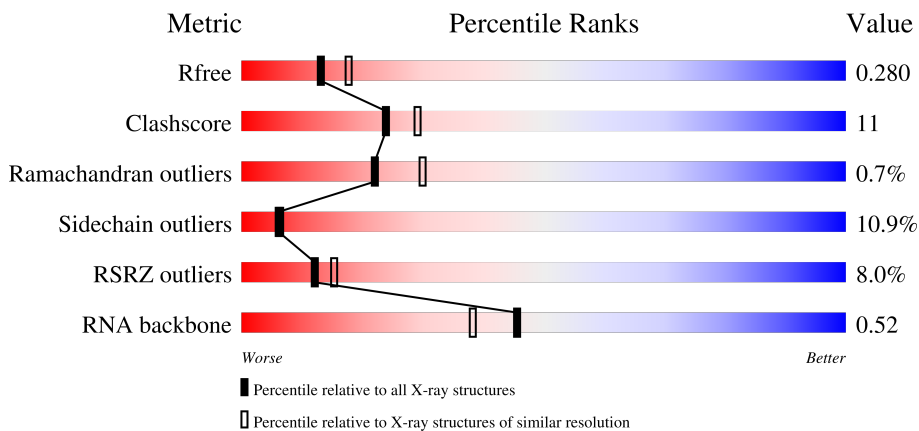
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.55 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}	130704	1284 (2.56-2.52)
Clashscore	141614	1332 (2.56-2.52)
Ramachandran outliers	138981	1315 (2.56-2.52)
Sidechain outliers	138945	1315 (2.56-2.52)
RSRZ outliers	127900	1272 (2.56-2.52)
RNA backbone	3102	1026 (2.88-2.20)

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

Mol	Chain	Length	Quality of chain
1	AA	1521	
1	CA	1521	
2	AB	256	
2	CB	256	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
3	AC	239	
3	CC	239	
4	AD	209	
4	CD	209	
5	AE	162	
5	CE	162	
6	AF	101	
6	CF	101	
7	AG	156	
7	CG	156	
8	AH	138	
8	CH	138	
9	AI	128	
9	CI	128	
10	AJ	105	
10	CJ	105	
11	AK	129	
11	CK	129	
12	AL	132	
12	CL	132	
13	AM	126	
13	CM	126	
14	AN	61	
14	CN	61	
15	AO	89	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
15	CO	89	9% 57% 35% 7%
16	AP	88	27% 68% 23% 7%
16	CP	88	8% 56% 33% 5% 7%
17	AQ	105	10% 66% 25% 6%
17	CQ	105	24% 71% 20% 6%
18	AR	88	6% 51% 24% 23%
18	CR	88	3% 52% 22% 23%
19	AS	93	3% 49% 35% 11%
19	CS	93	33% 48% 39% 11%
20	AT	106	13% 53% 32% 6% 9%
20	CT	106	14% 56% 29% 6% 9%
21	AU	27	26% 52% 26% 7% 15%
21	CU	27	56% 37% 48% 15%
22	AV	24	29% 38% 12% 46%
22	CV	24	33% 29% 12% 8% 50%
23	AW	76	33% 14% 54% 24% 5% .
23	CW	76	68% 13% 41% 33% 8% 5%
24	AX	77	% 45% 34% 18% ..
24	CX	77	5% 34% 45% 18% ..
25	AY	76	28% 13% 34% 39% 11% .
25	CY	76	42% 8% 45% 36% 8% .
26	BA	2915	% 61% 28% 7% ..
26	DA	2915	2% 52% 35% 9% ..
27	BB	121	75% 18% 6% .
27	DB	121	4% 48% 41% 10% .

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
28	BD	276	
28	DD	276	
29	BE	206	
29	DE	206	
30	BF	210	
30	DF	210	
31	BG	182	
31	DG	182	
32	BH	180	
32	DH	180	
33	BI	148	
33	DI	148	
34	BN	140	
34	DN	140	
35	BO	122	
35	DO	122	
36	BP	150	
36	DP	150	
37	BQ	141	
37	DQ	141	
38	BR	118	
38	DR	118	
39	BS	112	
39	DS	112	
40	BT	146	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
40	DT	146	3% 63% 22% 5% 10%
41	BU	118	% 77% 18% ..
41	DU	118	8% 62% 34% ..
42	BV	101	75% 23% .
42	DV	101	4% 68% 23% 6% .
43	BW	113	85% 12% ..
43	DW	113	4% 87% 11% ..
44	BX	96	74% 21% ..
44	DX	96	9% 63% 32% ...
45	BY	110	% 63% 30% 5% .
45	DY	110	16% 65% 32% ..
46	BZ	206	7% 56% 24% . 17%
46	DZ	206	22% 46% 35% . 16%
47	B0	85	7% 76% 20% ..
47	D0	85	25% 68% 24% 6% .
48	B1	98	7% 73% 22% ..
48	D1	98	13% 73% 20% 5% .
49	B2	72	65% 29% . .
49	D2	72	7% 69% 26% ..
50	B3	60	73% 20% 5% .
50	D3	60	12% 58% 38% ..
51	B4	71	7% 56% 25% 13% ..
51	D4	71	17% 48% 32% 15% ..
52	B5	60	2% 72% 22% 5% .
52	D5	60	3% 72% 23% ..

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
53	B6	54	<p>2% 56% 37% 6%</p>
53	D6	54	<p>15% 76% 19%</p>
54	B7	49	<p>6% 76% 20%</p>
54	D7	49	<p>16% 73% 24%</p>
55	B8	65	<p>3% 72% 23%</p>
55	D8	65	<p>28% 74% 25%</p>
56	B9	37	<p>5% 78% 22%</p>
56	D9	37	<p>14% 59% 38%</p>

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
25	5MU	CY	54	-	-	-	X
25	PSU	CY	55	-	-	-	X
57	MG	DA	3651	-	-	-	X
57	MG	DD	303	-	-	-	X

2 Entry composition

There are 61 unique types of molecules in this entry. The entry contains 297141 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
			Total	C	N	O	P			
1	AA	1498	Total 32205	C 14333	N 5970	O 10404	P 1498	0	0	0
1	CA	1503	Total 32312	C 14381	N 5990	O 10438	P 1503	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
2	AB	231	Total 1846	C 1179	N 331	O 331	S 5	0	0	0
2	CB	231	Total 1825	C 1167	N 326	O 327	S 5	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
3	AC	206	Total 1552	C 976	N 302	O 273	S 1	0	0	0
3	CC	206	Total 1542	C 968	N 300	O 273	S 1	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
4	AD	208	Total 1659	C 1040	N 326	O 286	S 7	0	0	0
4	CD	208	Total 1674	C 1050	N 333	O 284	S 7	0	0	0

- 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
			1129	714	213	198	4			
5	CE	148	Total	C	N	O	S	0	0	0
			1133	716	214	199	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
			806	511	143	149	3			
6	CF	100	Total	C	N	O	S	0	0	0
			816	516	146	151	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
			1231	766	243	216	6			
7	CG	155	Total	C	N	O	S	0	0	0
			1235	769	244	216	6			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	AH	137	Total	C	N	O	S	0	0	0
			1088	689	206	191	2			
8	CH	137	Total	C	N	O	S	0	0	0
			1088	689	206	191	2			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
9	AI	127	Total	C	N	O	0	0	0
			983	623	193	167			
9	CI	127	Total	C	N	O	0	0	0
			978	619	190	169			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
10	AJ	97	Total	C	N	O	0	0	0
			709	440	138	131			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
10	CJ	96	714	445	138	131	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
11	AK	114	829	516	155	155	3	0	0	0
11	CK	114	833	519	156	155	3	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
12	AL	122	930	585	185	159	1	0	0	0
12	CL	122	930	585	185	159	1	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
13	AM	123	958	592	198	166	2	0	0	0
13	CM	122	950	586	197	165	2	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
14	AN	60	492	312	104	72	4	0	0	0
14	CN	60	492	312	104	72	4	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
15	AO	88	728	456	144	126	2	0	0	0
15	CO	88	728	456	144	126	2	0	0	0

- 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
			681	433	134	113	1			
16	CP	82	Total	C	N	O	S	0	0	0
			677	430	133	113	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
			555	355	108	92			
18	CR	68	Total	C	N	O	0	0	0
			555	355	108	92			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AS	83	Total	C	N	O	S	0	0	0
			652	417	120	113	2			
19	CS	83	Total	C	N	O	S	0	0	0
			646	412	119	113	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	AT	96	Total	C	N	O	S	0	0	0
			728	446	156	124	2			
20	CT	96	Total	C	N	O	S	0	0	0
			727	446	155	124	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 RNA chain called mRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	AV	13	Total	C	N	O	P	0	0	0
			277	125	51	88	13			
22	CV	12	Total	C	N	O	P	0	0	0
			252	115	46	80	11			

- Molecule 23 is a RNA chain called A-site tRNA.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
23	AW	74	Total	C	N	O	P	S	0	0	0
			1607	727	288	516	73	3			
23	CW	72	Total	C	N	O	P	S	0	0	0
			1560	702	281	503	72	2			

- Molecule 24 is a RNA chain called P-site tRNA.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
24	AX	76	Total	C	N	O	P	S	0	0	0
			1625	725	294	529	76	1			
24	CX	76	Total	C	N	O	P	S	0	0	0
			1625	725	294	529	76	1			

- Molecule 25 is a RNA chain called E-site tRNA.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
25	AY	74	Total	C	N	O	P	S	0	0	0
			1581	707	285	515	73	1			
25	CY	73	Total	C	N	O	P	S	0	0	0
			1561	698	283	507	72	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	BA	2819	Total	C	N	O	P	0	0	0
			60729	27026	11370	19515	2818			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
26	DA	2800	60311	26840	11284	19388	2799	0	0	0

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
29	BE	204	1559	985	298	270	6	0	0	0
29	DE	204	1559	985	298	270	6	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
30	BF	203	1584	1009	298	275	2	0	0	1
30	DF	203	1580	1007	297	274	2	0	0	1

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
31	BG	181	1425	914	256	251	4	0	0	0
31	DG	181	1424	911	258	251	4	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	BH	174	Total	C	N	O	S	0	0	0
			1330	845	248	236	1			
32	DH	174	Total	C	N	O	S	0	0	0
			1330	845	248	236	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	BI	146	Total	C	N	O	S	0	0	0
			1085	693	189	202	1			
33	DI	146	Total	C	N	O	S	0	0	0
			1061	680	186	194	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	BN	140	Total	C	N	O	S	0	0	0
			1117	719	207	187	4			
34	DN	140	Total	C	N	O	S	0	0	0
			1117	719	207	187	4			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	BO	122	Total	C	N	O	S	0	0	0
			933	588	171	170	4			
35	DO	122	Total	C	N	O	S	0	0	0
			933	588	171	170	4			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	BP	149	Total	C	N	O	S	0	0	0
			1135	706	230	196	3			
36	DP	149	Total	C	N	O	S	0	0	0
			1135	706	230	196	3			

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

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

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

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

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
39	BS	110	Total	C	N	O	0	0	0
			877	553	175	149			
39	DS	110	Total	C	N	O	0	0	0
			870	549	173	148			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	BT	131	Total	C	N	O	S	0	0	0
			1091	680	225	185	1			
40	DT	131	Total	C	N	O	S	0	0	0
			1083	675	224	183	1			

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	BV	101	Total	C	N	O	S	0	0	0
			771	495	140	135	1			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
42	DV	101	771	495	140	135	1	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
43	BW	112	886	557	174	153	2	0	0	0
43	DW	112	886	557	174	153	2	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
44	BX	95	750	488	135	126	1	0	0	0
44	DX	95	750	488	135	126	1	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
45	BY	107	806	517	152	131	6	0	0	0
45	DY	107	806	517	152	131	6	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
46	BZ	171	1349	862	243	242	2	0	0	0
46	DZ	174	1360	870	243	245	2	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
47	B0	83	653	404	139	109	1	0	0	0
47	D0	83	653	404	139	109	1	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	B1	97	Total	C	N	O	S	0	0	0
			755	475	148	131	1			
48	D1	97	Total	C	N	O	S	0	0	0
			755	475	148	131	1			

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

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

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
50	B3	59	Total	C	N	O	0	0	0
			469	298	90	81			
50	D3	59	Total	C	N	O	0	0	0
			464	296	90	78			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	B4	69	Total	C	N	O	S	0	0	0
			558	352	102	99	5			
51	D4	69	Total	C	N	O	S	0	0	0
			532	339	97	91	5			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	B5	59	Total	C	N	O	S	0	0	0
			455	285	89	76	5			
52	D5	59	Total	C	N	O	S	0	0	0
			455	285	89	76	5			

- Molecule 53 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	B6	53	Total	C	N	O	S	0	0	0
			453	281	91	77	4			
53	D6	53	Total	C	N	O	S	0	0	0
			449	279	91	75	4			

- Molecule 54 is a protein called 50S ribosomal protein L34.

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

- Molecule 55 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
55	B8	64	Total	C	N	O	S	0	0	0
			511	328	99	82	2			
55	D8	64	Total	C	N	O	S	0	0	0
			517	331	102	82	2			

- Molecule 56 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
56	B9	37	Total	C	N	O	S	0	0	0
			307	188	68	47	4			
56	D9	37	Total	C	N	O	S	0	0	0
			307	188	68	47	4			

- Molecule 57 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
57	AA	214	Total	Mg	0	0
			214	214		
57	AE	3	Total	Mg	0	0
			3	3		
57	AF	1	Total	Mg	0	0
			1	1		
57	AK	1	Total	Mg	0	0
			1	1		
57	AM	1	Total	Mg	0	0
			1	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
57	AN	2	Total 2	Mg 2	0	0
57	AW	4	Total 4	Mg 4	0	0
57	AX	15	Total 15	Mg 15	0	0
57	AY	3	Total 3	Mg 3	0	0
57	BA	812	Total 812	Mg 812	0	0
57	BB	20	Total 20	Mg 20	0	0
57	BD	9	Total 9	Mg 9	0	0
57	BE	8	Total 8	Mg 8	0	0
57	BF	9	Total 9	Mg 9	0	0
57	BG	3	Total 3	Mg 3	0	0
57	BN	6	Total 6	Mg 6	0	0
57	BO	2	Total 2	Mg 2	0	0
57	BP	5	Total 5	Mg 5	0	0
57	BQ	5	Total 5	Mg 5	0	0
57	BR	2	Total 2	Mg 2	0	0
57	BU	8	Total 8	Mg 8	0	0
57	BV	5	Total 5	Mg 5	0	0
57	BW	4	Total 4	Mg 4	0	0
57	BX	3	Total 3	Mg 3	0	0
57	BY	1	Total 1	Mg 1	0	0
57	BZ	1	Total 1	Mg 1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
57	B0	3	Total 3	Mg 3	0	0
57	B1	1	Total 1	Mg 1	0	0
57	B2	1	Total 1	Mg 1	0	0
57	B3	2	Total 2	Mg 2	0	0
57	B4	1	Total 1	Mg 1	0	0
57	B5	1	Total 1	Mg 1	0	0
57	B6	2	Total 2	Mg 2	0	0
57	B7	5	Total 5	Mg 5	0	0
57	B8	1	Total 1	Mg 1	0	0
57	B9	1	Total 1	Mg 1	0	0
57	CA	170	Total 170	Mg 170	0	0
57	CD	1	Total 1	Mg 1	0	0
57	CE	1	Total 1	Mg 1	0	0
57	CF	1	Total 1	Mg 1	0	0
57	CJ	1	Total 1	Mg 1	0	0
57	CK	1	Total 1	Mg 1	0	0
57	CT	1	Total 1	Mg 1	0	0
57	CV	1	Total 1	Mg 1	0	0
57	CW	1	Total 1	Mg 1	0	0
57	CX	3	Total 3	Mg 3	0	0
57	DA	677	Total 677	Mg 677	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
57	DB	13	Total 13	Mg 13	0	0
57	DD	9	Total 9	Mg 9	0	0
57	DE	4	Total 4	Mg 4	0	0
57	DF	4	Total 4	Mg 4	0	0
57	DG	1	Total 1	Mg 1	0	0
57	DN	1	Total 1	Mg 1	0	0
57	DO	1	Total 1	Mg 1	0	0
57	DP	2	Total 2	Mg 2	0	0
57	DQ	4	Total 4	Mg 4	0	0
57	DR	1	Total 1	Mg 1	0	0
57	DU	2	Total 2	Mg 2	0	0
57	DV	3	Total 3	Mg 3	0	0
57	DW	4	Total 4	Mg 4	0	0
57	DX	1	Total 1	Mg 1	0	0
57	DY	1	Total 1	Mg 1	0	0
57	D0	1	Total 1	Mg 1	0	0
57	D3	1	Total 1	Mg 1	0	0
57	D8	1	Total 1	Mg 1	0	0

- Molecule 58 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe₄S₄).



Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	AD	1	Total	Fe S	0	0
			8	4 4		
58	CD	1	Total	Fe S	0	0
			8	4 4		

- Molecule 59 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
59	AN	1	Total	Zn	0	0
			1	1		
59	BY	1	Total	Zn	0	0
			1	1		
59	B4	1	Total	Zn	0	0
			1	1		
59	B5	1	Total	Zn	0	0
			1	1		
59	B6	1	Total	Zn	0	0
			1	1		
59	B9	1	Total	Zn	0	0
			1	1		
59	CN	1	Total	Zn	0	0
			1	1		
59	DY	1	Total	Zn	0	0
			1	1		
59	D4	1	Total	Zn	0	0
			1	1		
59	D5	1	Total	Zn	0	0
			1	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
59	D6	1	Total 1	Zn 1	0	0
59	D9	1	Total 1	Zn 1	0	0

- Molecule 60 is POTASSIUM ION (three-letter code: K) (formula: K).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
60	AX	1	Total 1	K 1	0	0
60	CX	1	Total 1	K 1	0	0

- Molecule 61 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	AA	227	Total 227	O 227	0	0
61	AE	2	Total 2	O 2	0	0
61	AJ	1	Total 1	O 1	0	0
61	AL	1	Total 1	O 1	0	0
61	AM	1	Total 1	O 1	0	0
61	AU	1	Total 1	O 1	0	0
61	AV	3	Total 3	O 3	0	0
61	AW	3	Total 3	O 3	0	0
61	AX	6	Total 6	O 6	0	0
61	AY	1	Total 1	O 1	0	0
61	BA	1383	Total 1383	O 1383	0	0
61	BB	36	Total 36	O 36	0	0
61	BD	12	Total 12	O 12	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	BE	14	Total 14	O 14	0	0
61	BF	8	Total 8	O 8	0	0
61	BG	3	Total 3	O 3	0	0
61	BI	1	Total 1	O 1	0	0
61	BO	4	Total 4	O 4	0	0
61	BP	16	Total 16	O 16	0	0
61	BQ	4	Total 4	O 4	0	0
61	BR	2	Total 2	O 2	0	0
61	BT	2	Total 2	O 2	0	0
61	BU	3	Total 3	O 3	0	0
61	BV	2	Total 2	O 2	0	0
61	BW	1	Total 1	O 1	0	0
61	BX	4	Total 4	O 4	0	0
61	BZ	1	Total 1	O 1	0	0
61	B0	3	Total 3	O 3	0	0
61	B1	1	Total 1	O 1	0	0
61	B3	2	Total 2	O 2	0	0
61	B5	2	Total 2	O 2	0	0
61	B6	1	Total 1	O 1	0	0
61	B7	2	Total 2	O 2	0	0
61	B8	8	Total 8	O 8	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	CA	185	Total 185	O 185	0	0
61	CJ	2	Total 2	O 2	0	0
61	CL	1	Total 1	O 1	0	0
61	CT	1	Total 1	O 1	0	0
61	CV	1	Total 1	O 1	0	0
61	CW	2	Total 2	O 2	0	0
61	DA	1025	Total 1025	O 1025	0	0
61	DB	9	Total 9	O 9	0	0
61	DD	19	Total 19	O 19	0	0
61	DE	11	Total 11	O 11	0	0
61	DF	3	Total 3	O 3	0	0
61	DN	2	Total 2	O 2	0	0
61	DO	1	Total 1	O 1	0	0
61	DP	16	Total 16	O 16	0	0
61	DR	1	Total 1	O 1	0	0
61	DT	3	Total 3	O 3	0	0
61	DU	2	Total 2	O 2	0	0
61	DX	3	Total 3	O 3	0	0
61	DY	2	Total 2	O 2	0	0
61	D0	3	Total 3	O 3	0	0
61	D1	1	Total 1	O 1	0	0

Continued on next page...

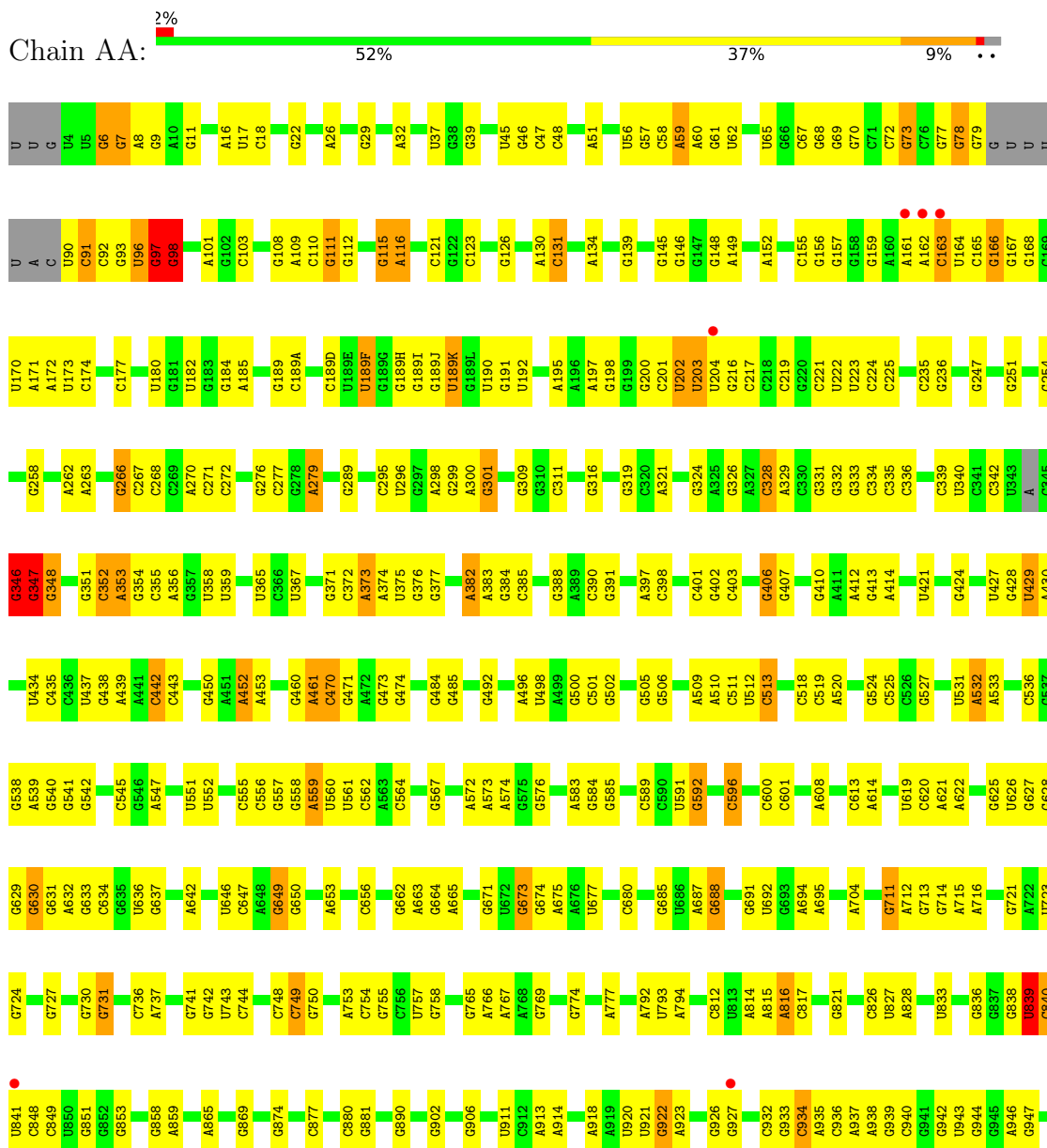
Continued from previous page...

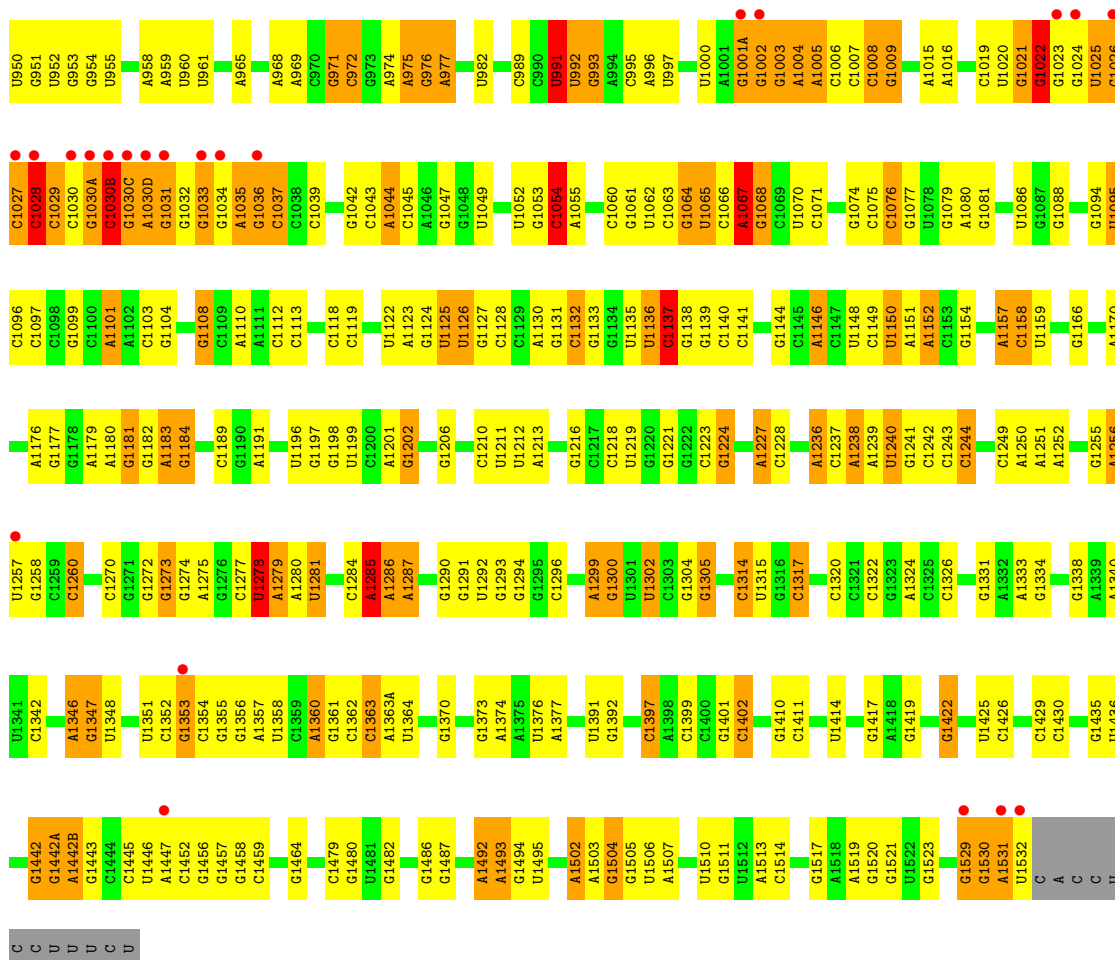
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
61	D3	1	Total O 1 1	0	0
61	D7	3	Total O 3 3	0	0
61	D8	4	Total O 4 4	0	0

3 Residue-property plots [i](#)

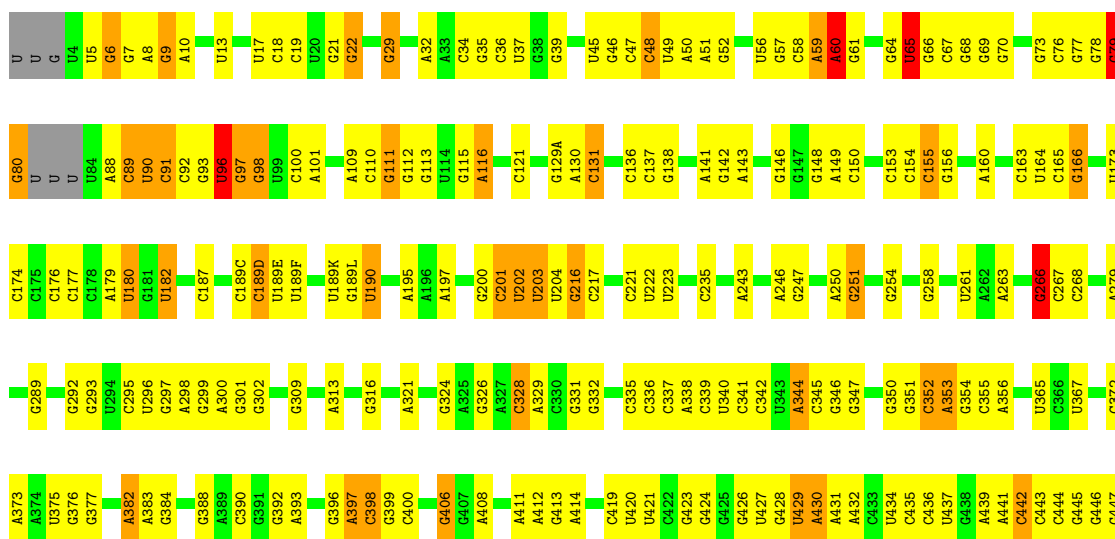
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density.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

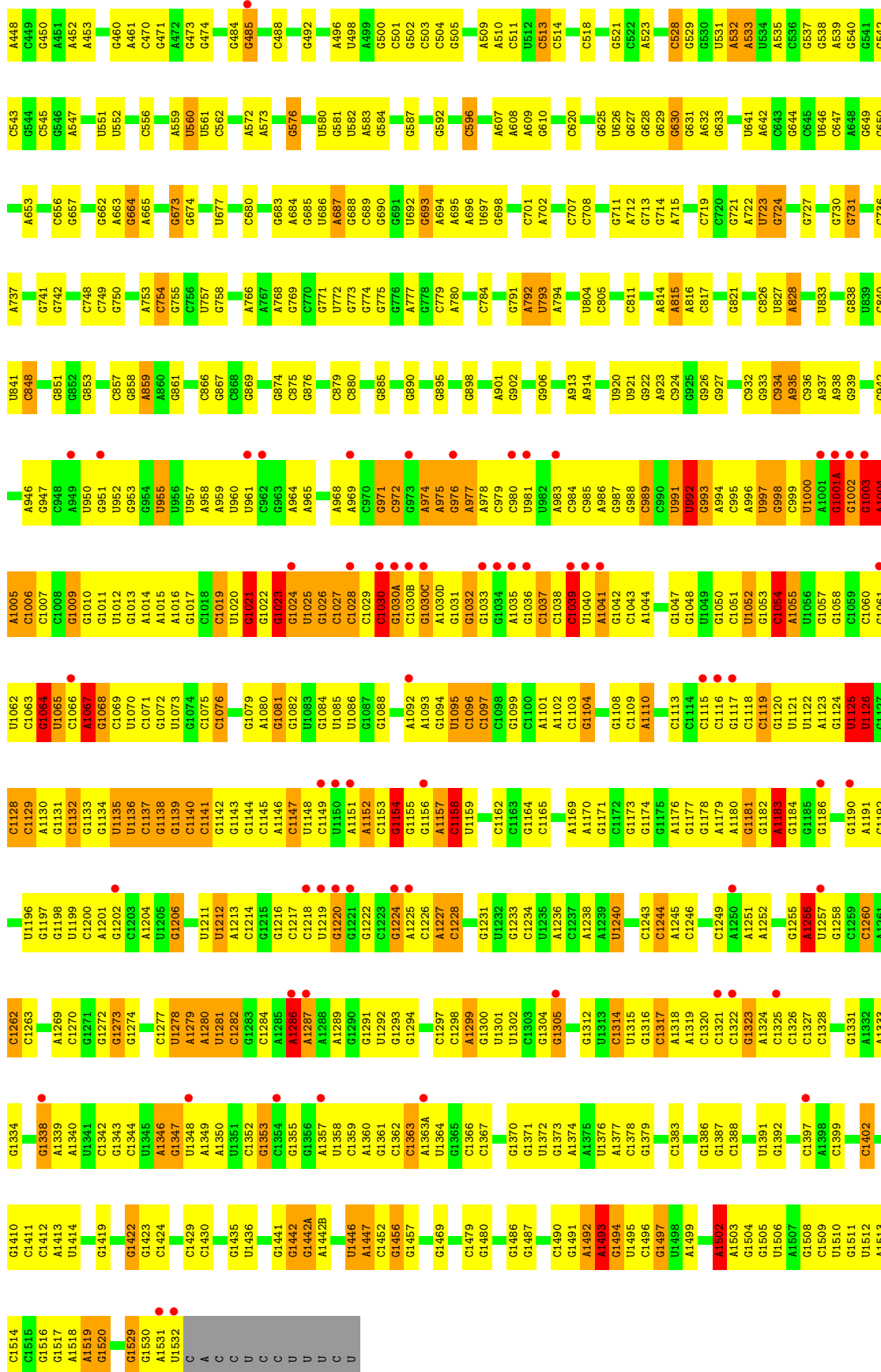
- Molecule 1: 16S Ribosomal RNA



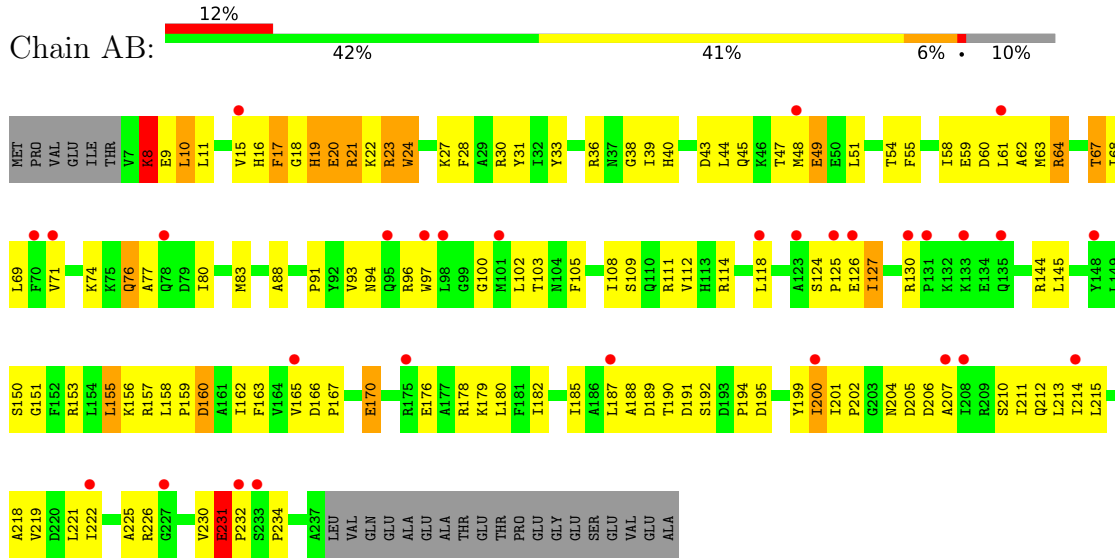


• Molecule 1: 16S Ribosomal RNA

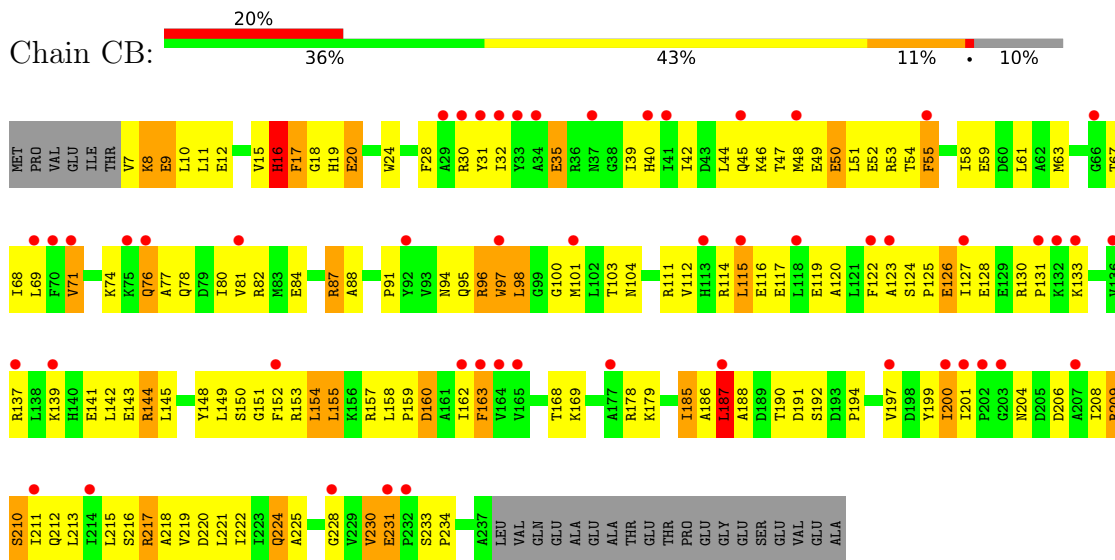




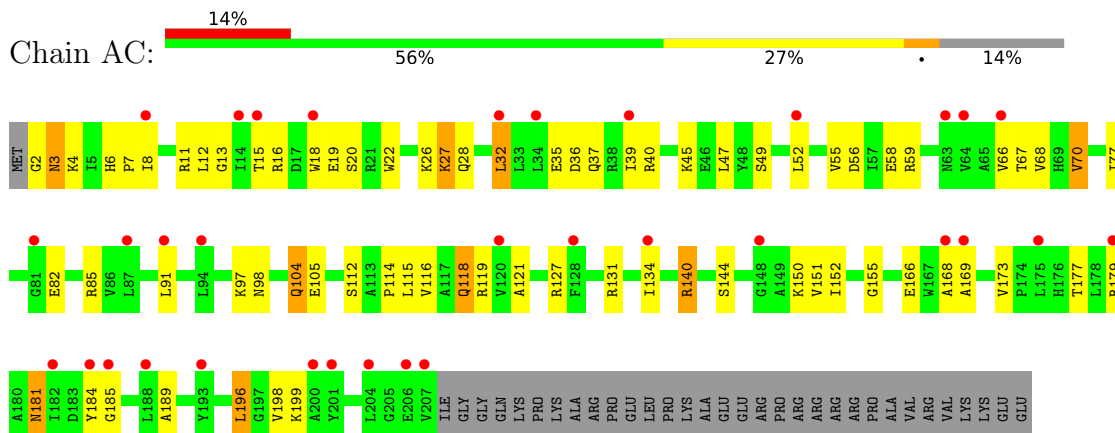
● Molecule 2: 30S ribosomal protein S2

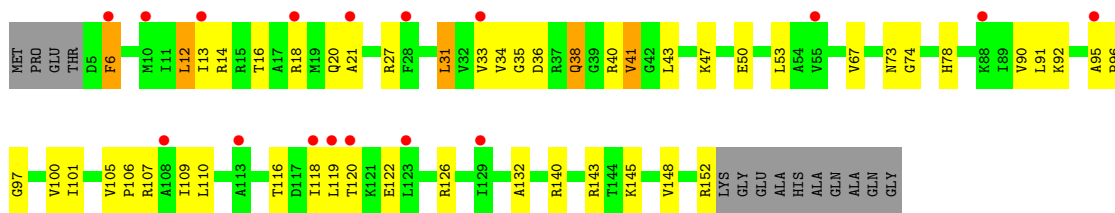


● Molecule 2: 30S ribosomal protein S2

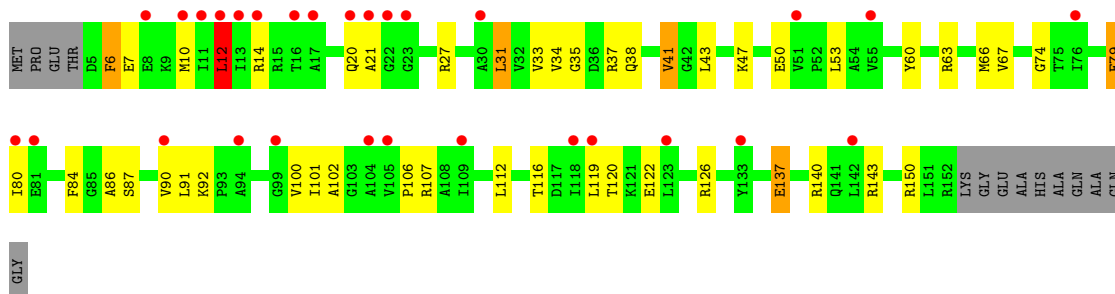


● Molecule 3: 30S ribosomal protein S3

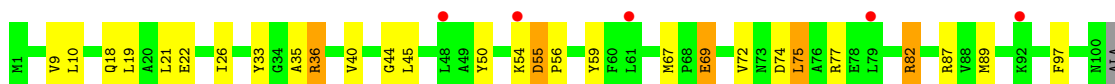
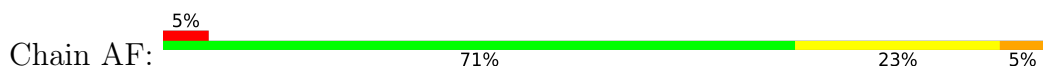




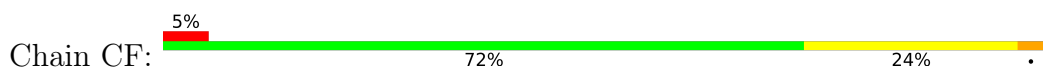
- Molecule 5: 30S ribosomal protein S5



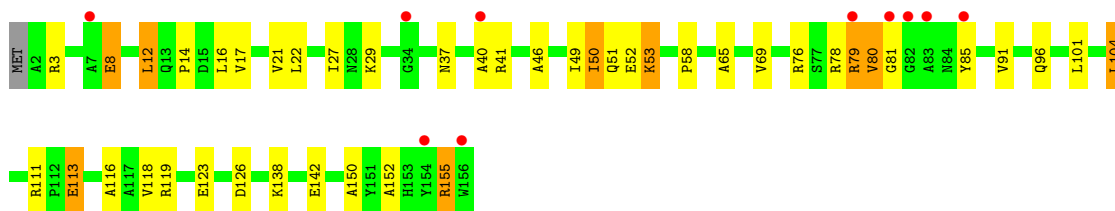
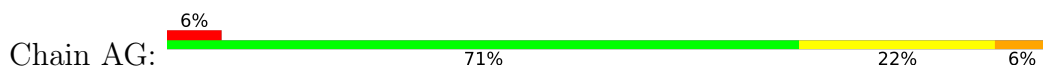
- Molecule 6: 30S ribosomal protein S6



- Molecule 6: 30S ribosomal protein S6

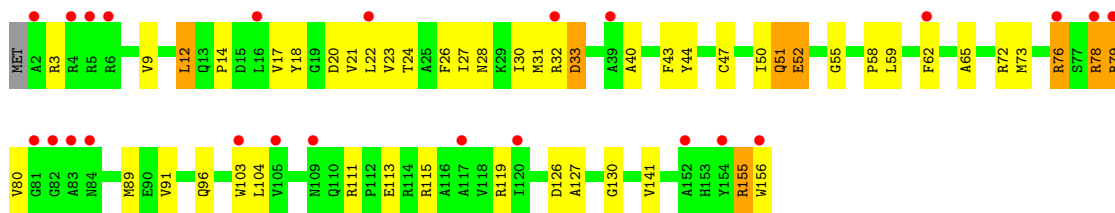


- Molecule 7: 30S ribosomal protein S7

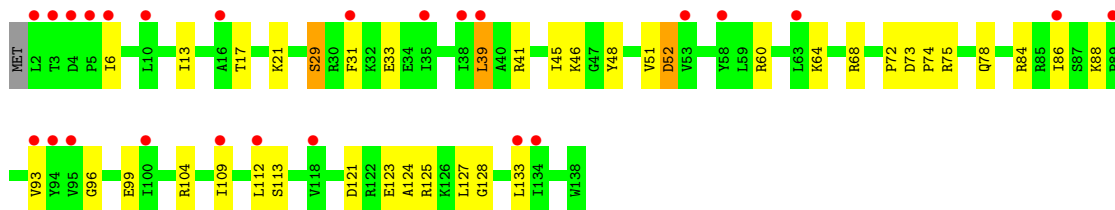
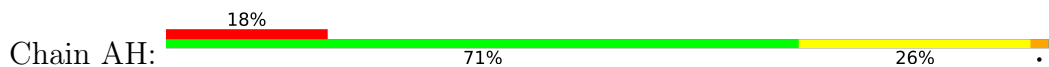


- Molecule 7: 30S ribosomal protein S7

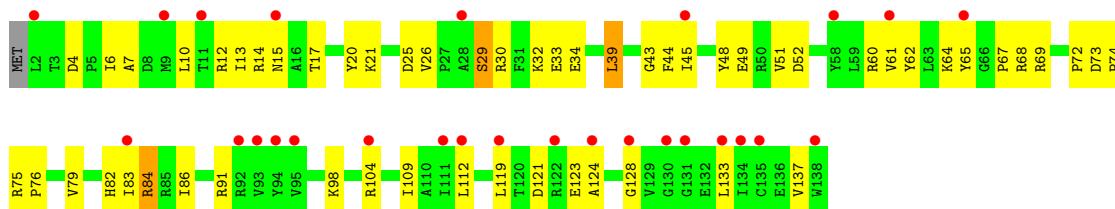




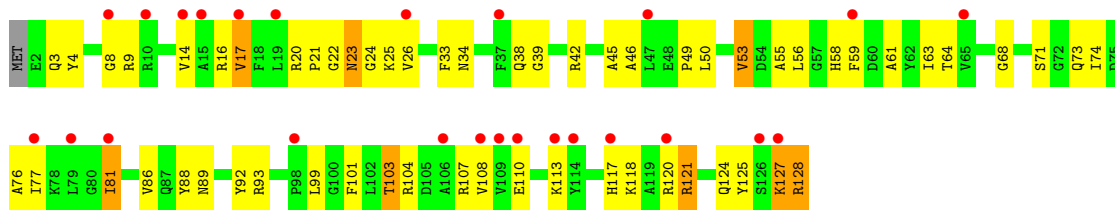
• Molecule 8: 30S ribosomal protein S8



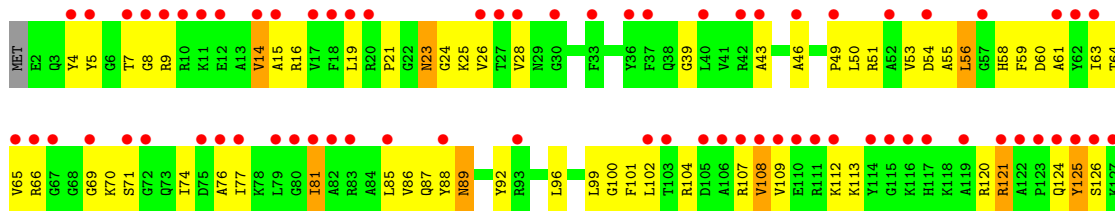
• Molecule 8: 30S ribosomal protein S8



• Molecule 9: 30S ribosomal protein S9



• Molecule 9: 30S ribosomal protein S9

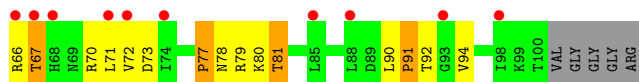


R128

• Molecule 10: 30S ribosomal protein S10



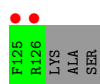
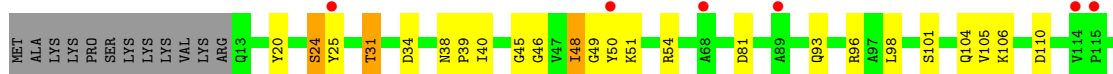
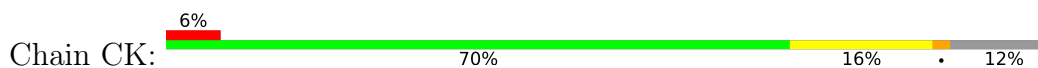
• Molecule 10: 30S ribosomal protein S10



• Molecule 11: 30S ribosomal protein S11

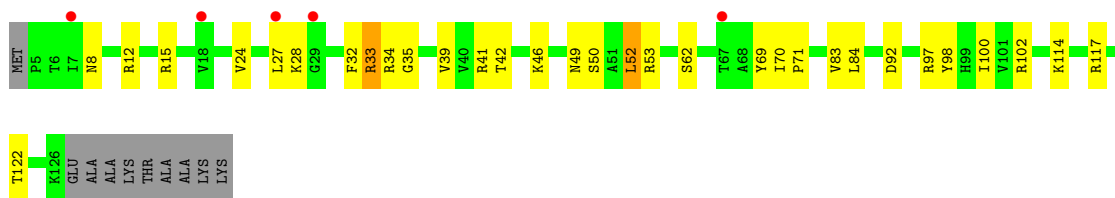


• Molecule 11: 30S ribosomal protein S11

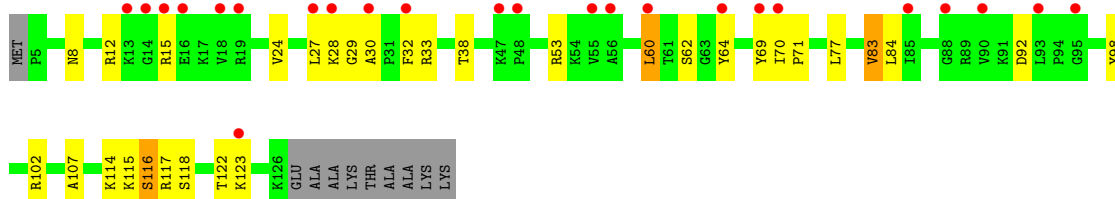


• Molecule 12: 30S ribosomal protein S12

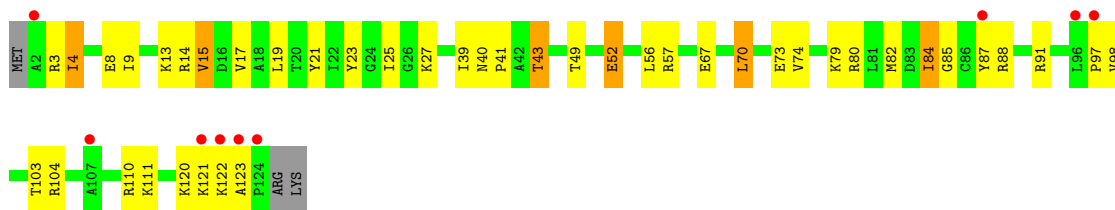




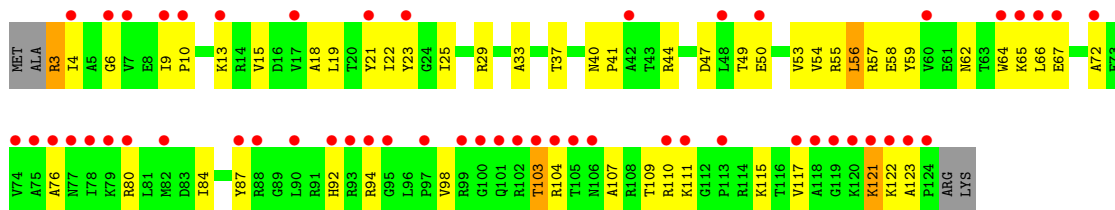
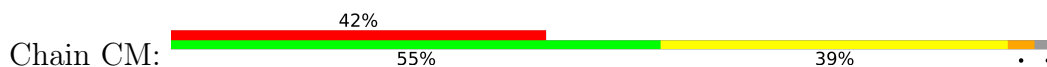
• Molecule 12: 30S ribosomal protein S12



• Molecule 13: 30S ribosomal protein S13



• Molecule 13: 30S ribosomal protein S13

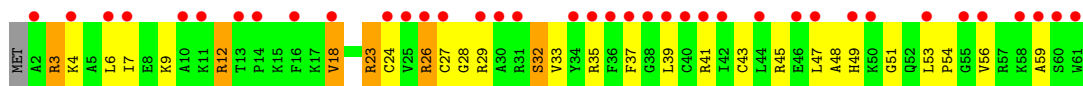


• Molecule 14: 30S ribosomal protein S14 type Z



• Molecule 14: 30S ribosomal protein S14 type Z

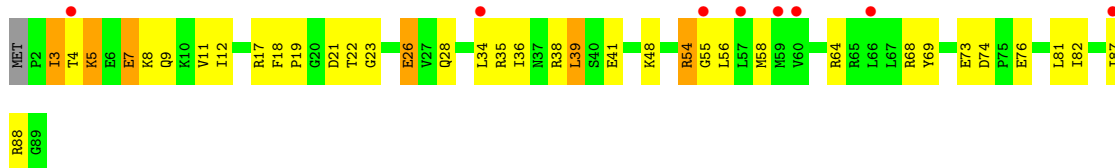




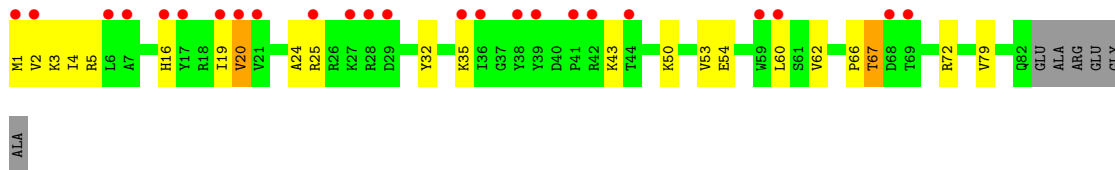
• Molecule 15: 30S ribosomal protein S15



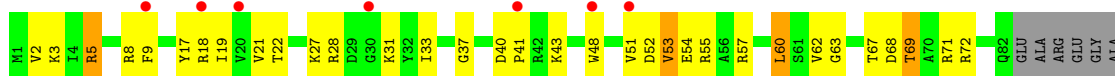
• Molecule 15: 30S ribosomal protein S15



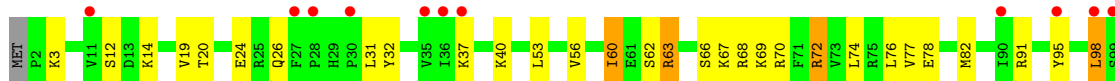
• Molecule 16: 30S ribosomal protein S16

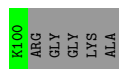


• Molecule 16: 30S ribosomal protein S16

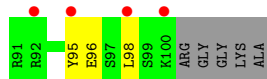
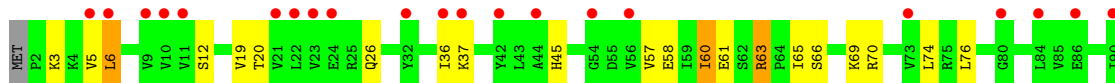
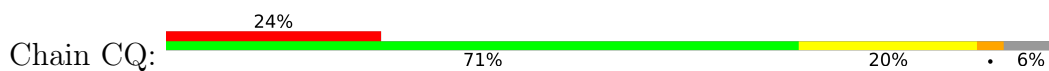


• Molecule 17: 30S ribosomal protein S17

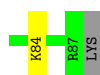
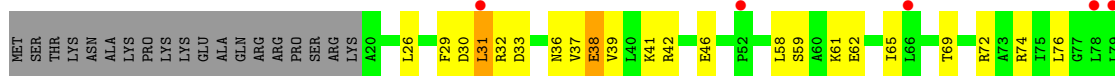




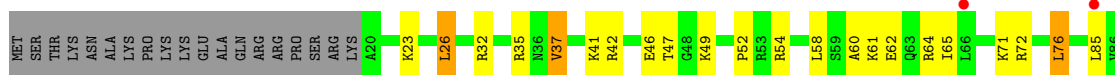
- Molecule 17: 30S ribosomal protein S17



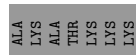
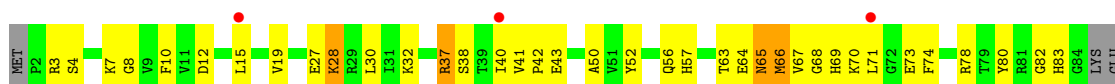
- Molecule 18: 30S ribosomal protein S18



- Molecule 18: 30S ribosomal protein S18

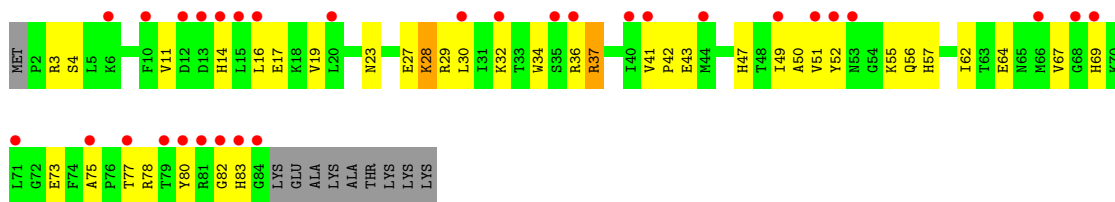


- Molecule 19: 30S ribosomal protein S19

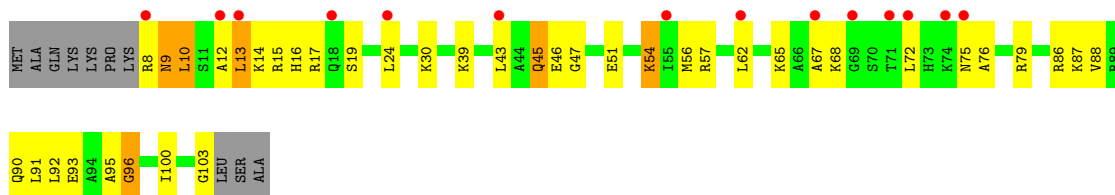


- Molecule 19: 30S ribosomal protein S19

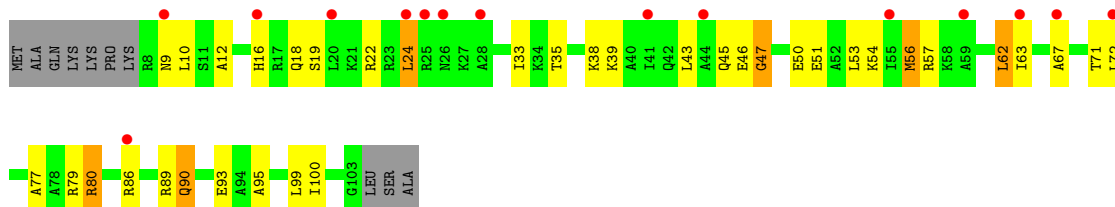




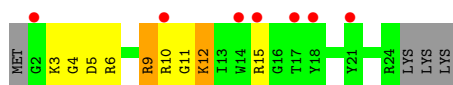
• Molecule 20: 30S ribosomal protein S20



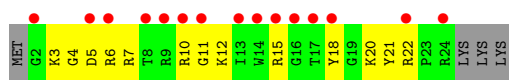
• Molecule 20: 30S ribosomal protein S20



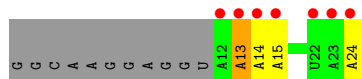
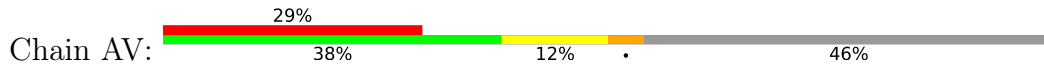
• Molecule 21: 30S ribosomal protein Thx



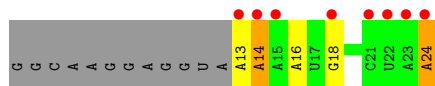
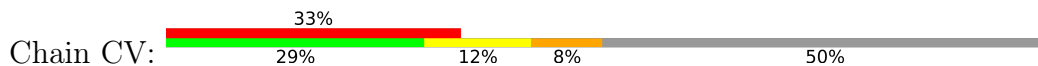
• Molecule 21: 30S ribosomal protein Thx



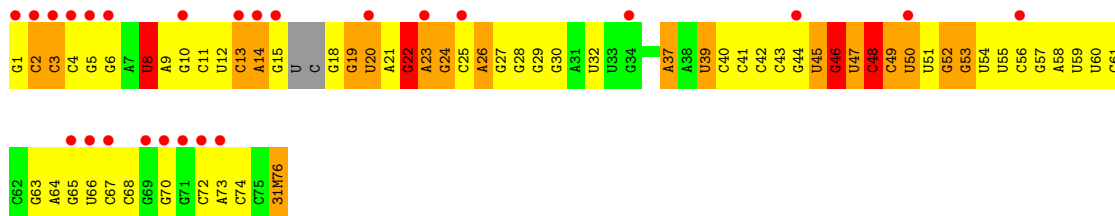
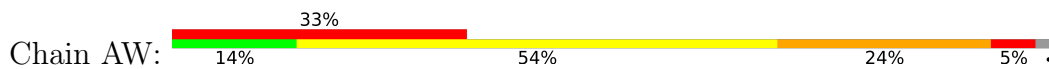
• Molecule 22: mRNA



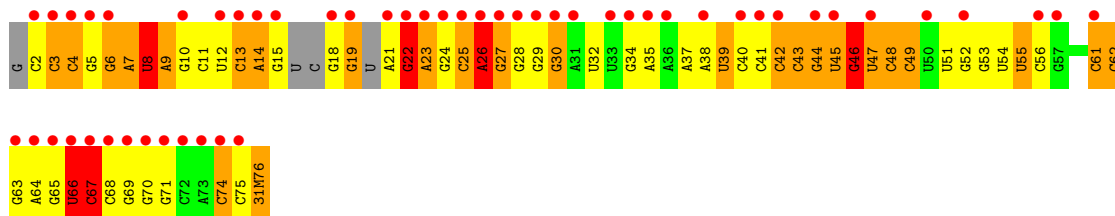
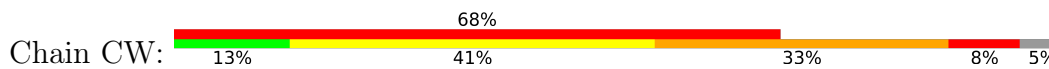
• Molecule 22: mRNA



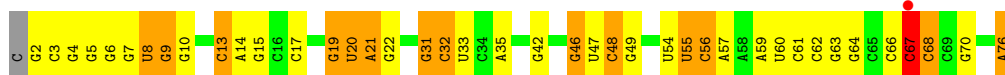
• Molecule 23: A-site tRNA



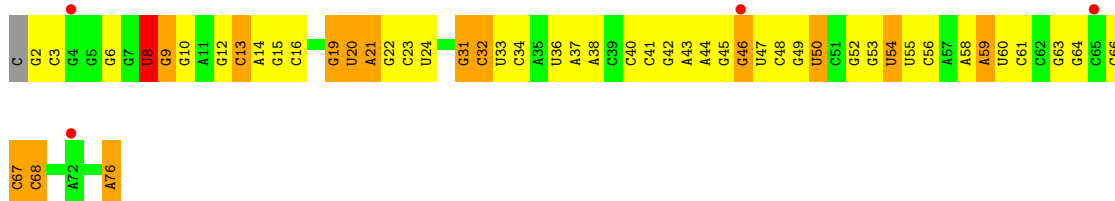
• Molecule 23: A-site tRNA



• Molecule 24: P-site tRNA

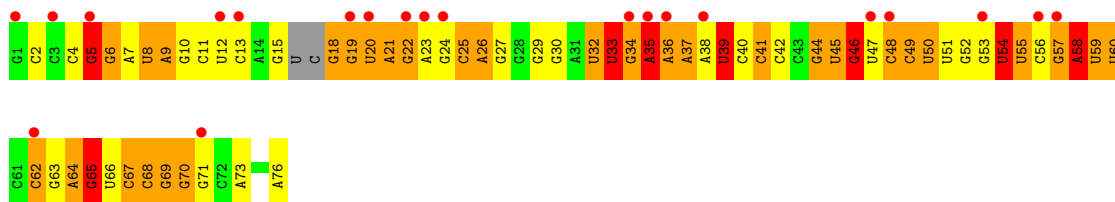


• Molecule 24: P-site tRNA

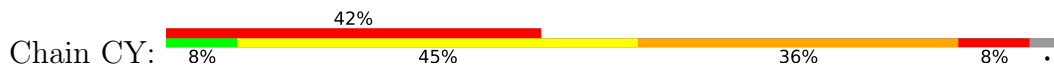


• Molecule 25: E-site tRNA

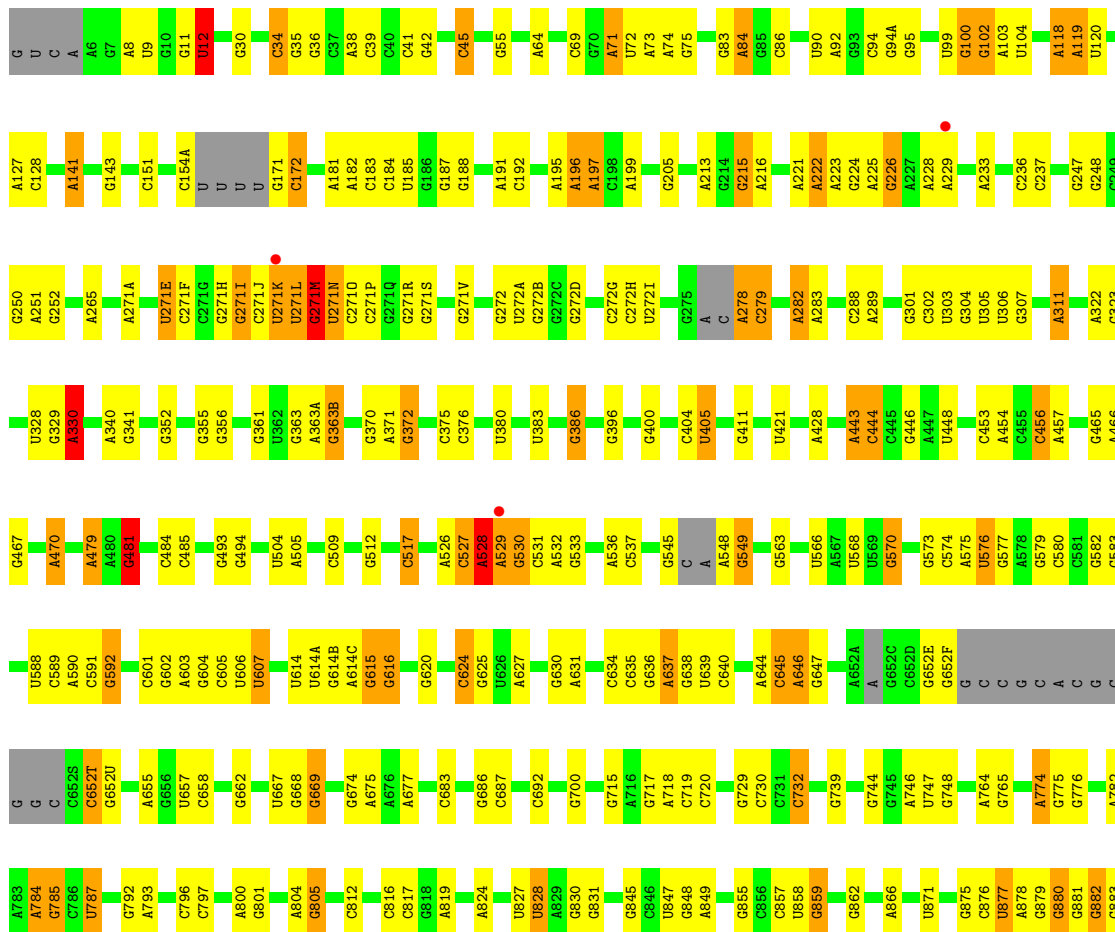


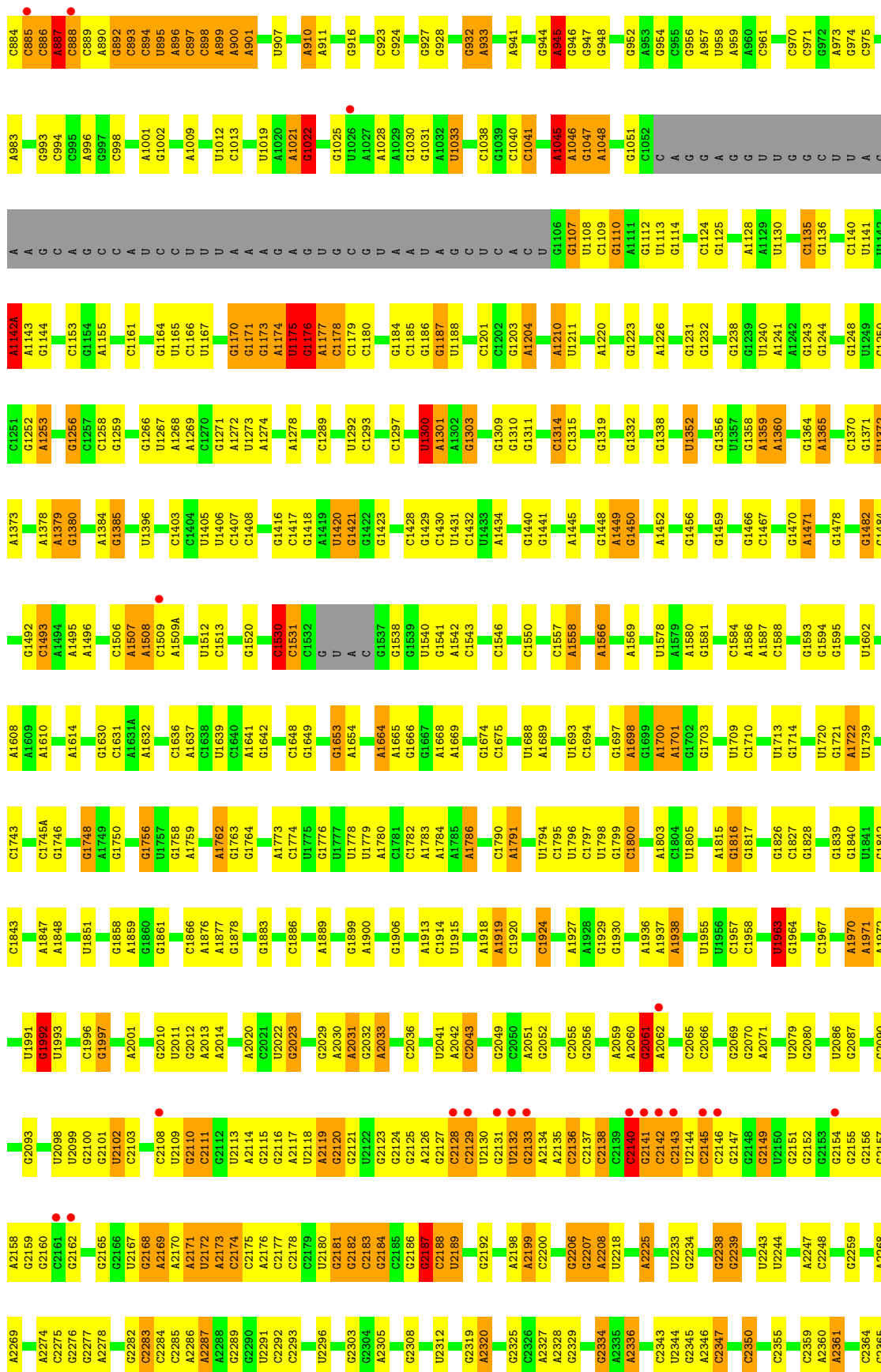


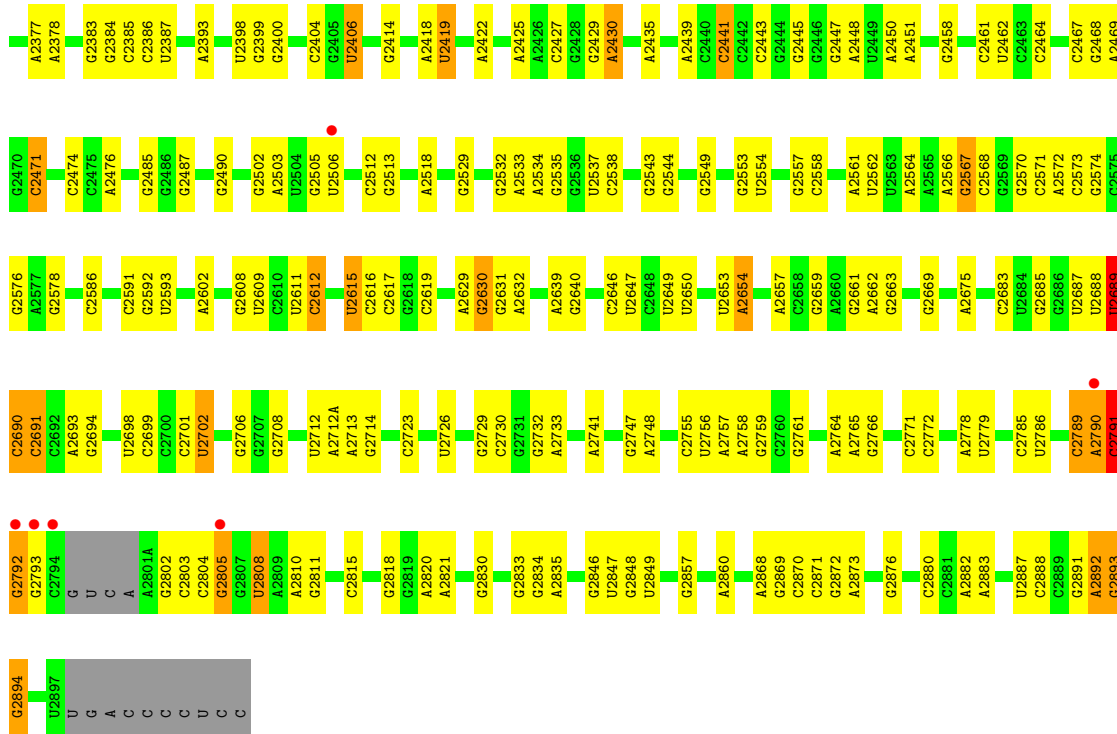
• Molecule 25: E-site tRNA



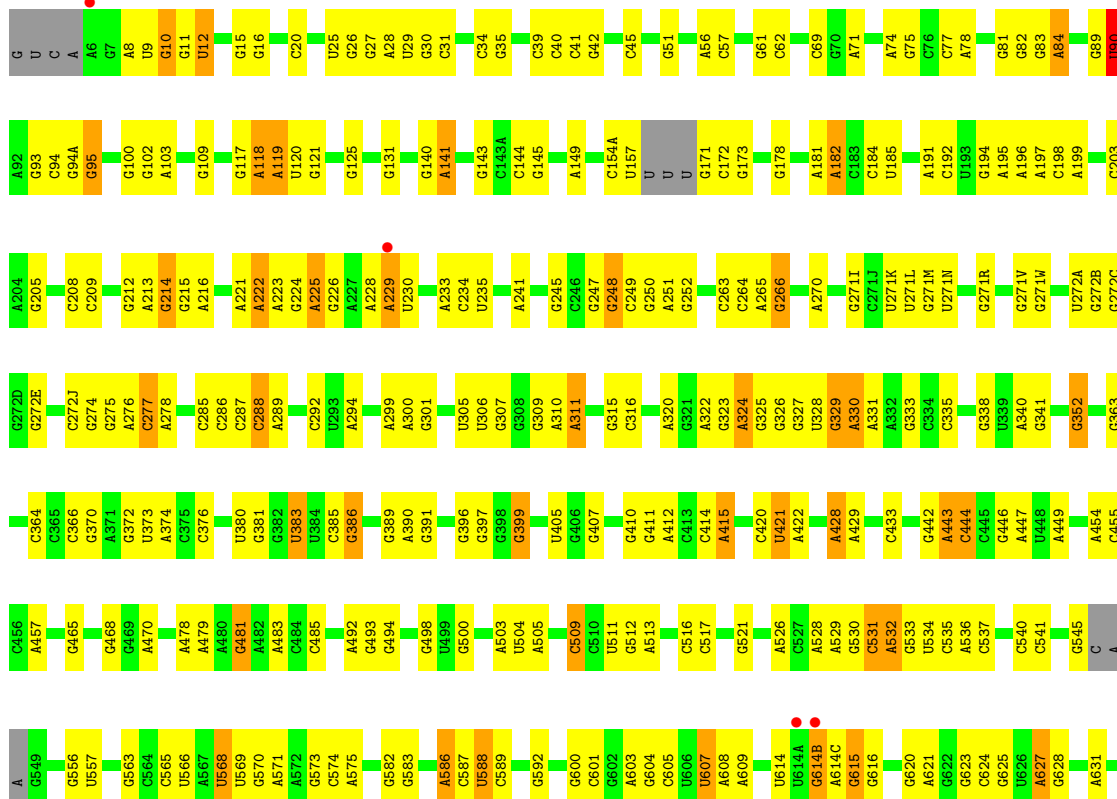
• Molecule 26: 23S Ribosomal RNA



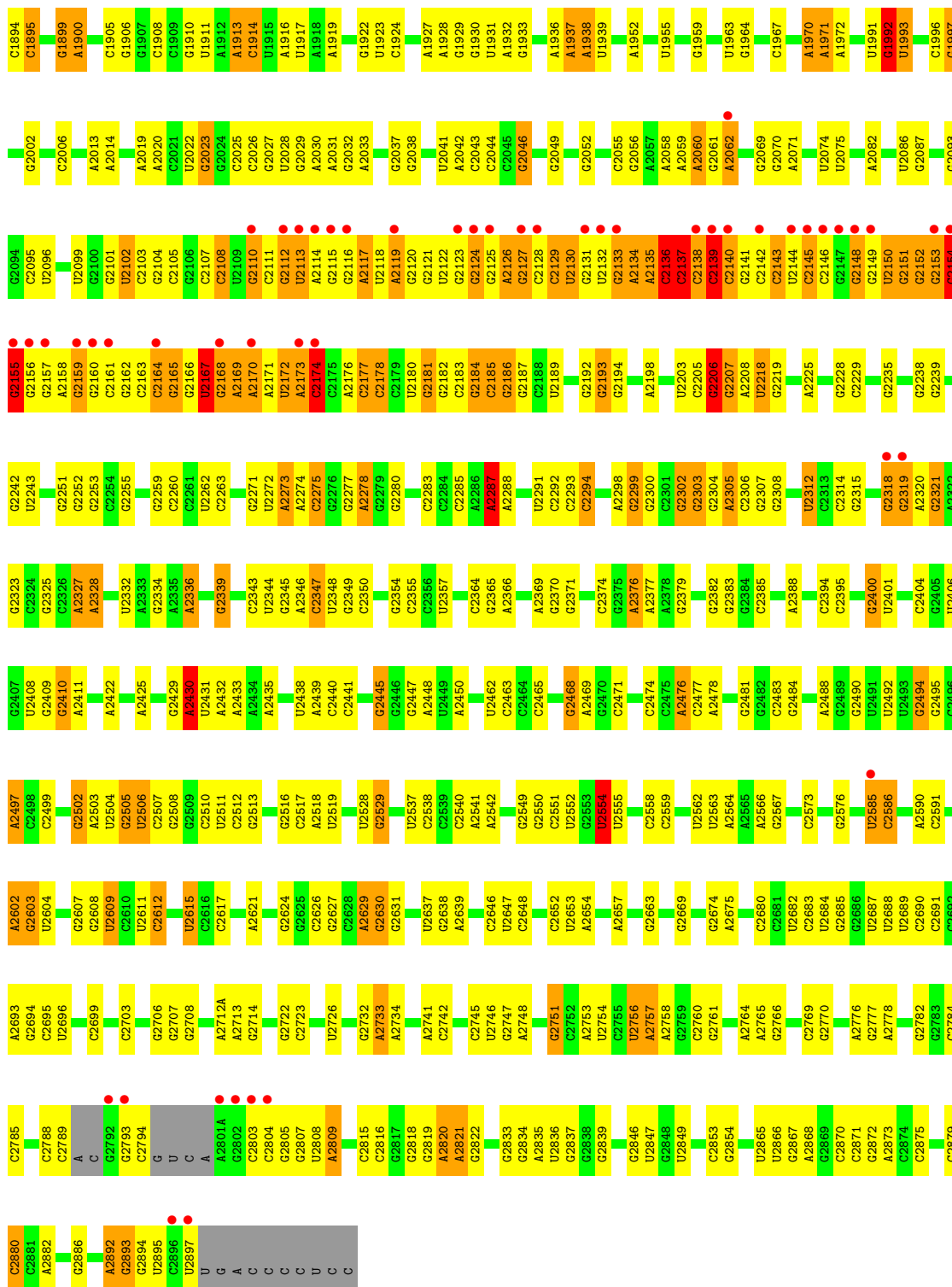




• Molecule 26: 23S Ribosomal RNA



U1794	G1653	C1543	A1471	C1370	U1283	G1179	G1042	G966	A887	G809	C721	A837
U1795	A1654	A1544	A1472	G1391	G1264	G1180	C1043	C967	C888	U810	G721	G838
U1796	C1656	C1546	G1473	G1266	A1285	G1183	G	C971	A889	U811	U724	U639
U1797	C1657	C1547	G1477	U1267	G1266	G1184	G	G974	A890	G812	G725	C640
U1798	C1658	C1547	A1478	A1268	G1267	C1185	A	C975	C893	U813	G726	G642
G1799	A1554	A1478	G1478	A1269	U1270	G1186	C	A	C894	C816	G729	A643
A1800	A1558	G1482	G1484	A1378	G1112	U1187	C	A983	U895	C817	C730	C645
A1801	G1559	G1485	G1485	A1384	U1113	U1188	A	G987	A896	C818	C731	A644
A1802	G1560	A1486	A1486	G1385	G1114	A1189	C	A989	C897	G818	G734	A646
A1803	A1561	G1487	G1487	U1394	U1115	G1196	C	G988	A899	A820	A734	G648
A1804	C1672	U1488	U1488	A1395	G1116	U1197	C	A990	A900	A821	G649	G649
U1805	G1673	U1489	U1489	C1399	G1117	U1198	G	C991	A901	U740	U740	A652B
A1809	A1668	G1491	G1491	G1283	U1118	U1199	A	C992	C902	G741	G741	A652C
A1812	A1689	U1492	U1492	A1284	G1119	U1200	C	C993	C903	U828	U828	G652D
A1815	U1693	C1493	C1493	G1285	C1118	G1201	G	G994	C904	G744	G744	C652E
A1816	U1696	U1494	U1494	A1286	G1122	U1202	C	C995	A910	G745	G745	G
G1817	G1697	A1495	A1495	A1287	U1203	G1203	U	A986	A911	U746	U746	G
G1835	A1698	U1496	U1496	U1288	G1125	U1204	G	C998	C912	G747	G747	C
A1836	G1699	U1497	U1497	U1292	A1126	U1205	C	C999	U913	U748	U748	C
A1837	A1700	C1498	C1498	U1293	A1127	G1209	C	A1000	U914	A752	A752	C
G1838	G1703	U1503	U1503	U1300	A1128	U1210	C	A1001	C840	C754	C754	A
G1839	G1703	C1504	C1504	U1130	A1129	U1211	U	G1002	A917	C755	C755	C
A1842	U1720	A1507	A1507	G1131	G1219	G1221	A	C1005	A918	G760	G760	C
C1843	G1721	A1508	A1508	A1302	A1220	U1222	C	C1006	G921	A761	A761	C
U1722	A1722	C1509	C1509	G1303	C1221	G1225	C	C1007	U922	U762	U762	G
U1739	U1739	A1509A	A1509A	C1304	G1222	U1226	C	C1008	C923	G854	G854	C
G1740	G1740	U1512	U1512	U1309	G1223	G1227	C	G1011	G927	G855	G855	C
A1741	C1598	C1513	C1513	G1310	U1224	U1228	G	G1012	G928	C856	G765	G652T
G1756	C1604	U1514	U1514	U1313	G1225	U1441	C	U1014	G932	U858	G770	G652U
G1757	A1608	G1515	G1515	C1314	U1442	A1226	C	G1015	G934	U860	A774	A655
G1758	A1609	G1519	G1519	U1315	A1142A	A1226	C	G1016	U937	A861	G775	U657
G1763	A1610	U1520	U1520	G1324	G1229	C1230	C	G1017	G938	G862	G776	C658
G1764	C1611	G1524	G1524	C1327	U1231	G1231	C	A862	G938	A863	A782	G662
U1766	C1612	G1525	G1525	G1332	G1235	U1240	U	A864	A941	C864	A783	G668
C1767	G1626	U1526	U1526	U1336	G1236	A1241	A	A866	G942	C865	A784	G669
A1773	G1630	A1528	A1528	A1336	U1239	U1241	A	C867	U943	U868	G785	G668
U1778	C1631	G1529	G1529	G1337	U1240	A1241	C	A870	G944	A870	A788	G669
A1779	G1635	C1531	C1531	U1352	U1241	A1241	G	G874	G945	A789	C791	G674
A1780	C1636	U1532	U1532	A1354	G1167	G1167	U	G875	C951	C792	G792	G686
C1781	A1637	G1533	G1533	U1359	U1168	G1168	C	A878	G952	A793	A793	C692
A1782	C1638	U	U	A1359	G1169	A1247	C	G879	A953	G794	G794	C698
A1783	U1639	A	A	A1360	G1170	G1248	U	G880	G954	C795	C795	A699
A1784	C1640	C1536	C1536	G1463	G1171	G1248	A	G881	A957	G796	G796	G700
A1785	A1641	G1537	G1537	C1364	G	A1253	U	G882	U958	G797	G797	G700
A1786	G1642	U1538	U1538	A1365	U	G1256	A	G883	A959	G798	G798	U709
A1787	G1646	C1467	C1467	A1385	G	G1261	C	C884	A960	U803	U803	G710
G1647	C1647	U1540	U1540	G1368	A	A1262	C	C886	C961	A804	A804	G715
A1847	A1848	A1542	A1542	G1369	C1178		U					

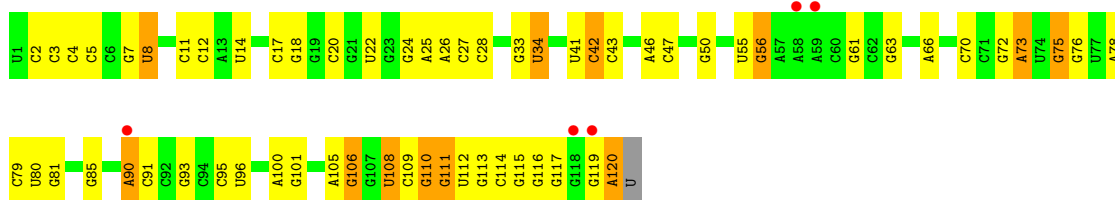


• Molecule 27: 5S Ribosomal RNA

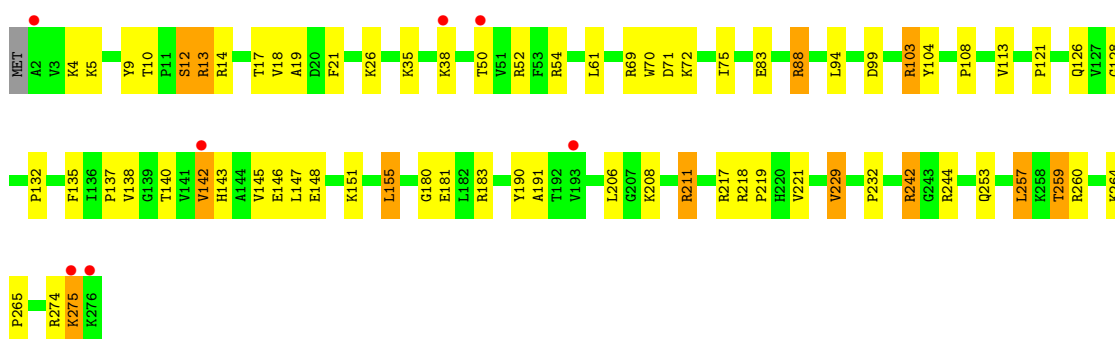
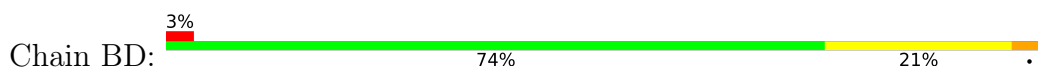
Chain BB: 75% 18% 6%



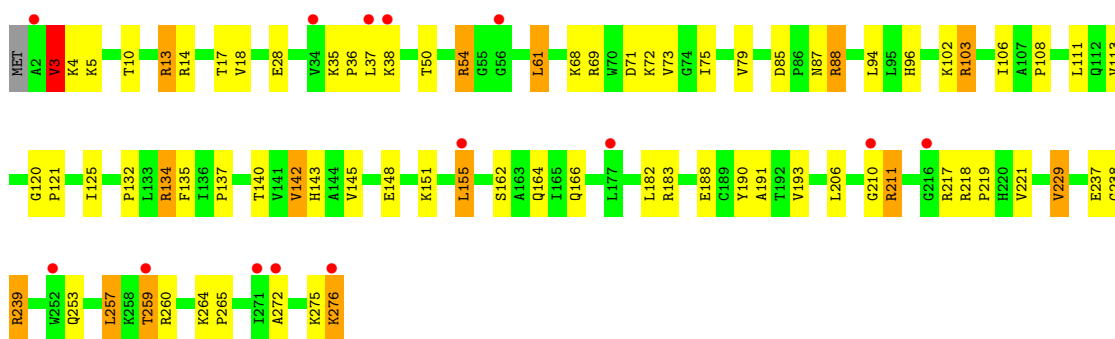
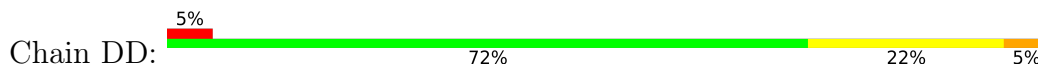
• Molecule 27: 5S Ribosomal RNA



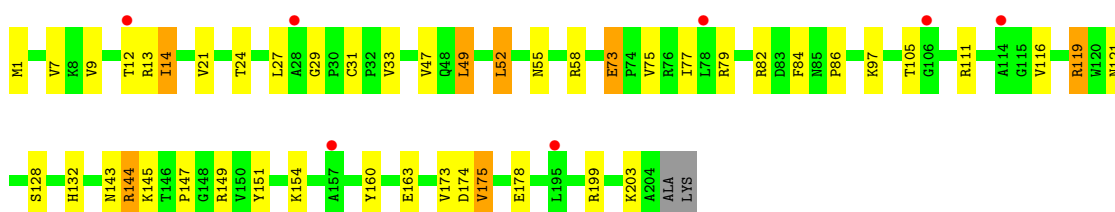
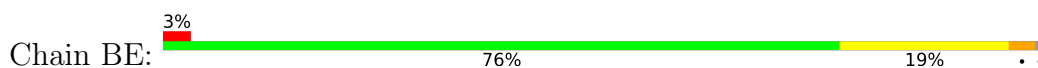
• Molecule 28: 50S ribosomal protein L2



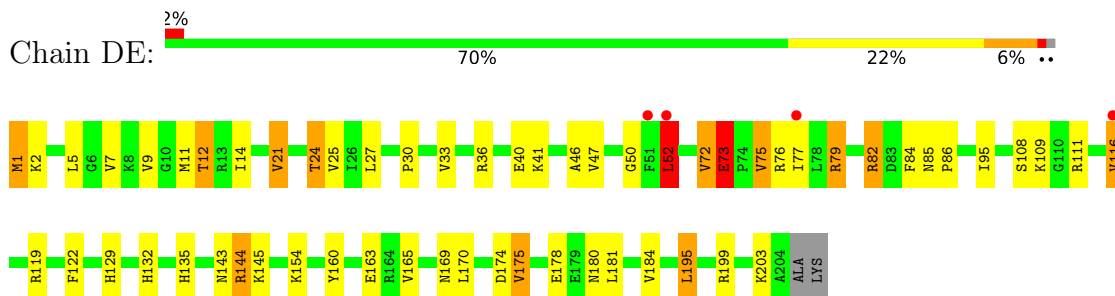
• Molecule 28: 50S ribosomal protein L2



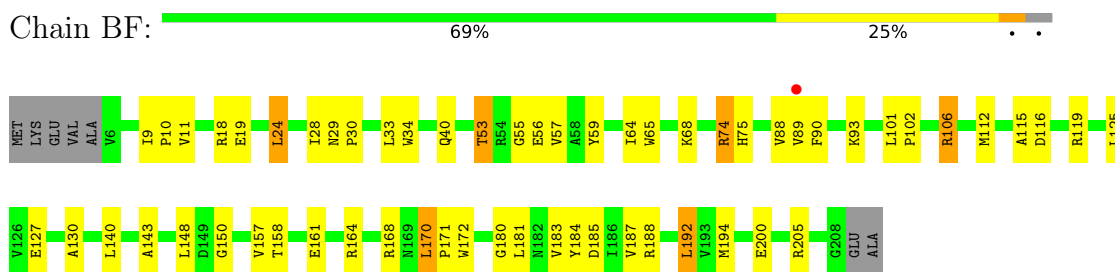
• Molecule 29: 50S ribosomal protein L3



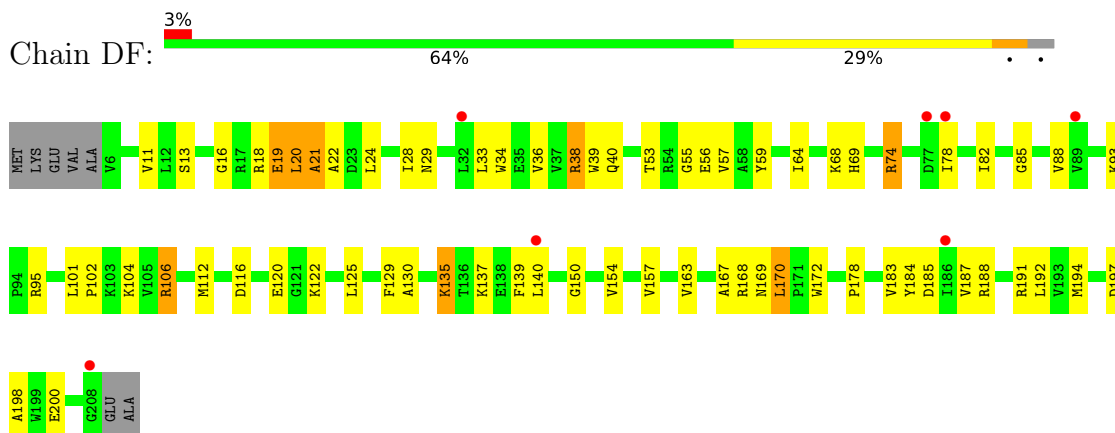
- Molecule 29: 50S ribosomal protein L3



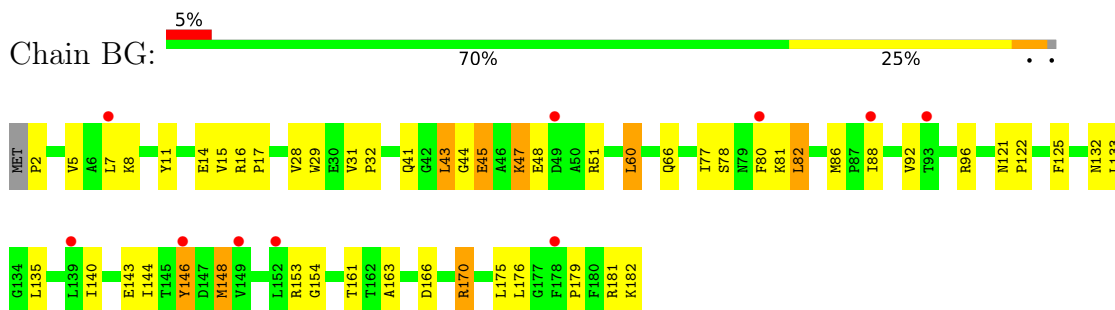
- Molecule 30: 50S ribosomal protein L4



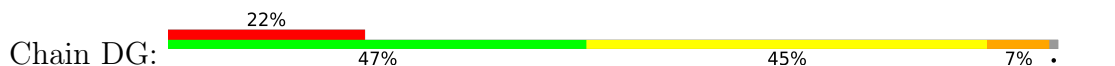
- Molecule 30: 50S ribosomal protein L4

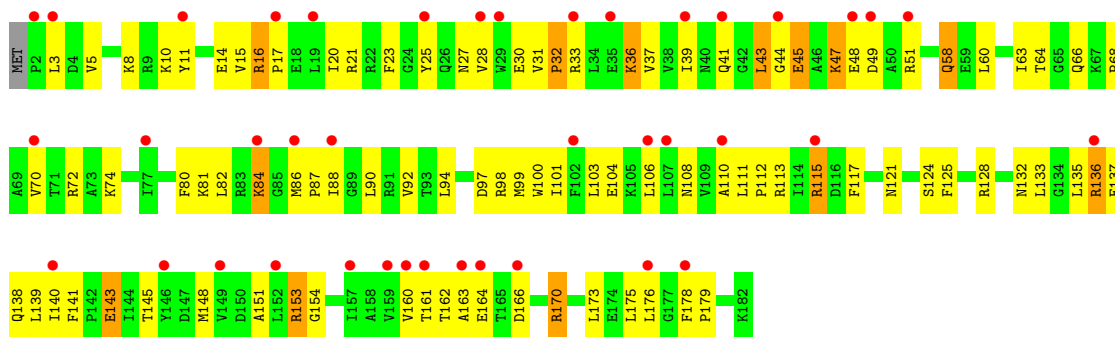


- Molecule 31: 50S ribosomal protein L5

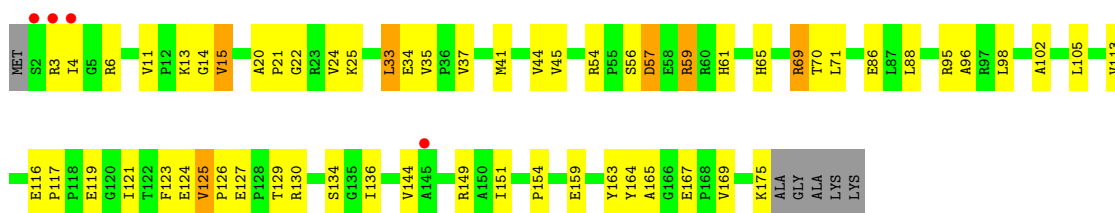


- Molecule 31: 50S ribosomal protein L5

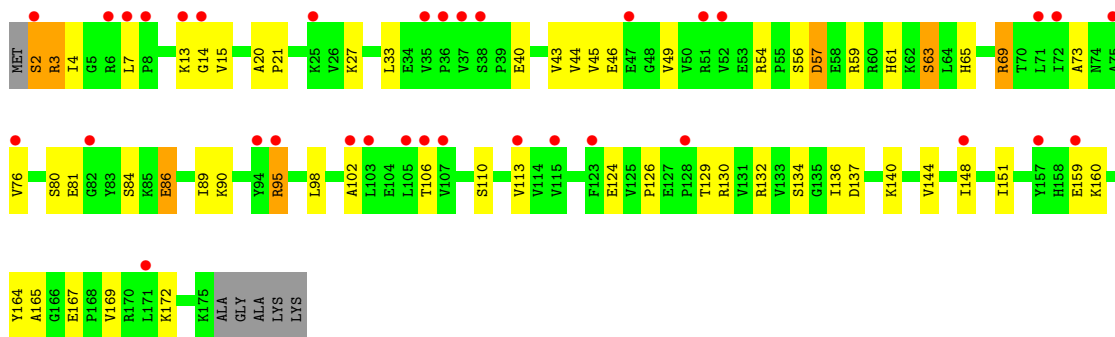




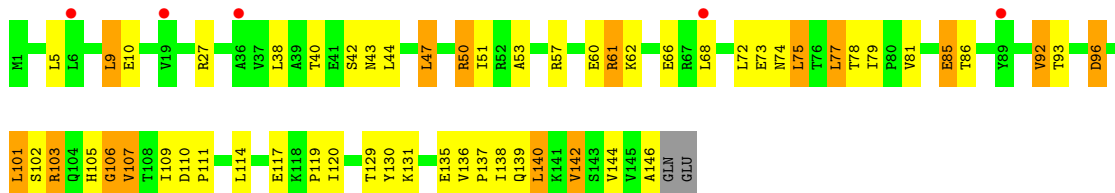
• Molecule 32: 50S ribosomal protein L6



• Molecule 32: 50S ribosomal protein L6

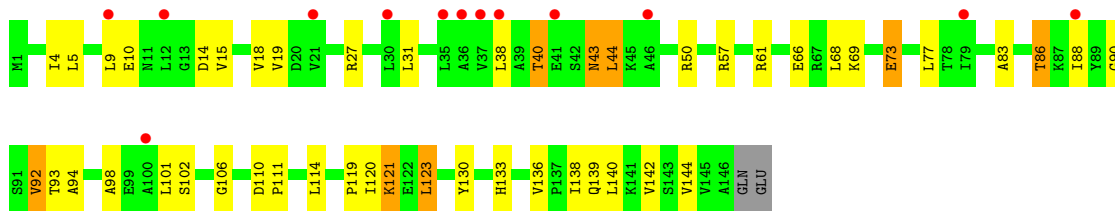


• Molecule 33: 50S ribosomal protein L9

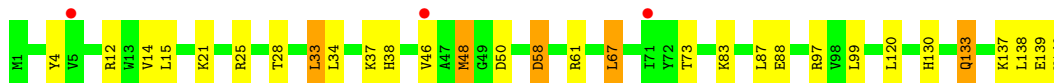
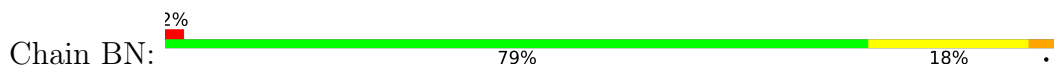


• Molecule 33: 50S ribosomal protein L9

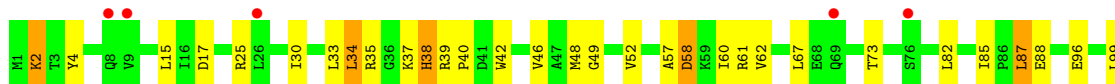
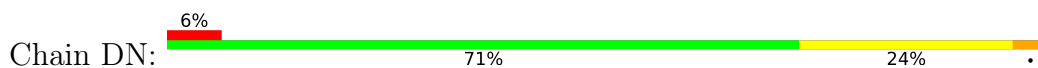




• Molecule 34: 50S ribosomal protein L13



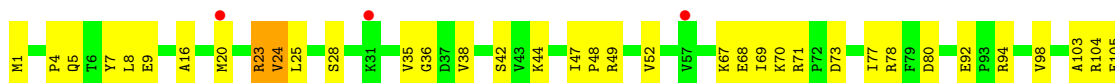
• Molecule 34: 50S ribosomal protein L13



• Molecule 35: 50S ribosomal protein L14

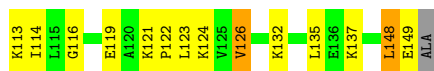


• Molecule 35: 50S ribosomal protein L14



• Molecule 36: 50S ribosomal protein L15

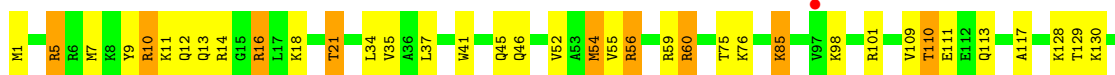
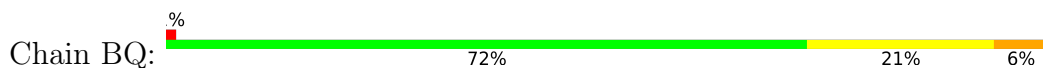




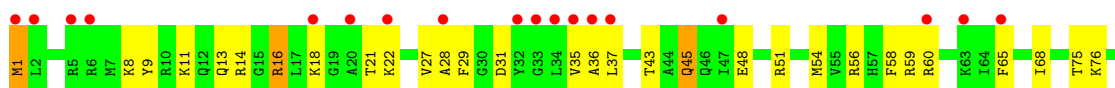
- Molecule 36: 50S ribosomal protein L15



- Molecule 37: 50S ribosomal protein L16



- Molecule 37: 50S ribosomal protein L16

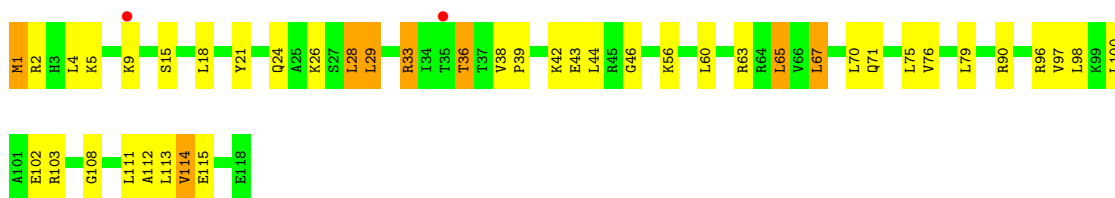


- Molecule 38: 50S ribosomal protein L17



- Molecule 38: 50S ribosomal protein L17

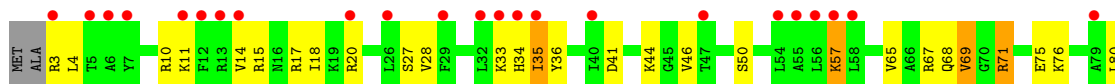




- Molecule 39: 50S ribosomal protein L18



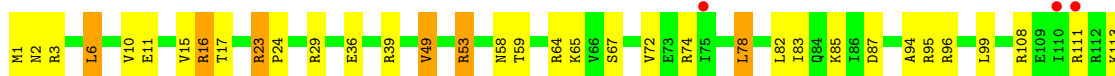
- Molecule 39: 50S ribosomal protein L18



- Molecule 40: 50S ribosomal protein L19

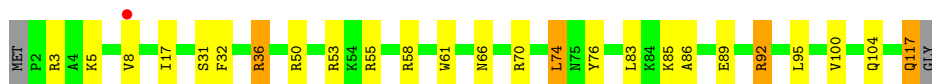


- Molecule 40: 50S ribosomal protein L19

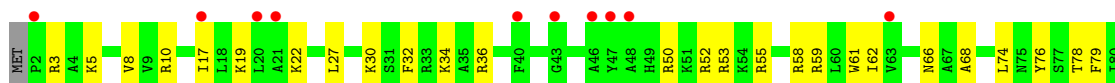


- Molecule 41: 50S ribosomal protein L20

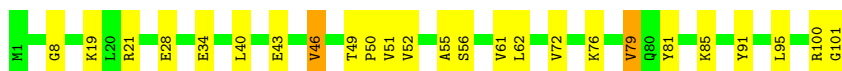
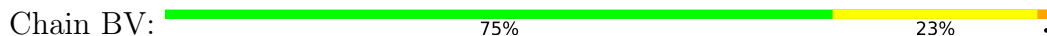




- Molecule 41: 50S ribosomal protein L20



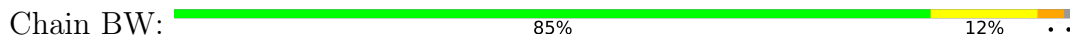
- Molecule 42: 50S ribosomal protein L21



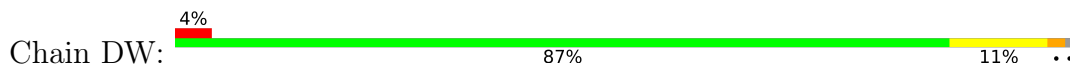
- Molecule 42: 50S ribosomal protein L21



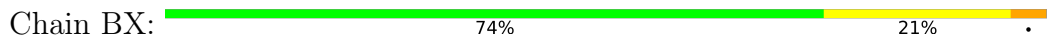
- Molecule 43: 50S ribosomal protein L22



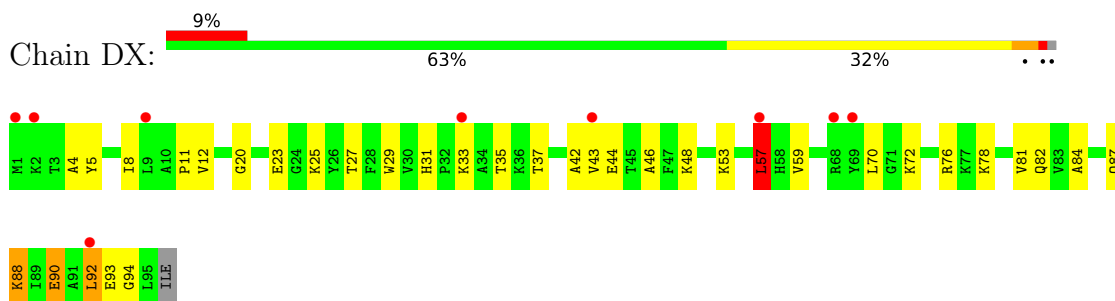
- Molecule 43: 50S ribosomal protein L22



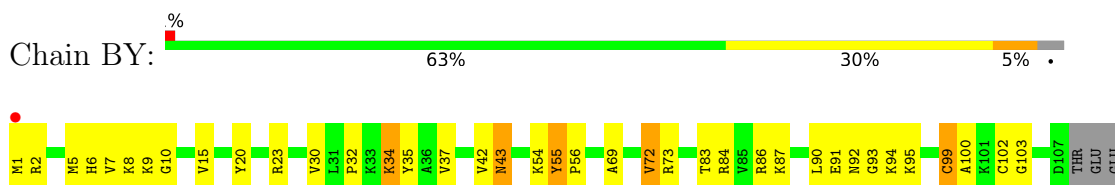
- Molecule 44: 50S ribosomal protein L23



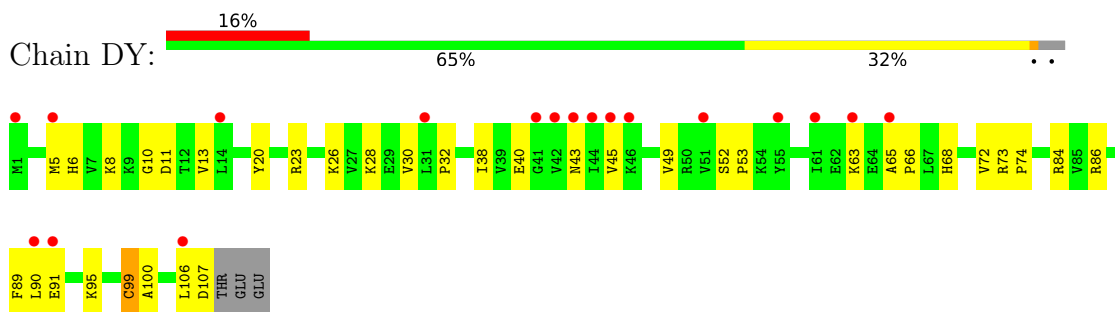
- Molecule 44: 50S ribosomal protein L23



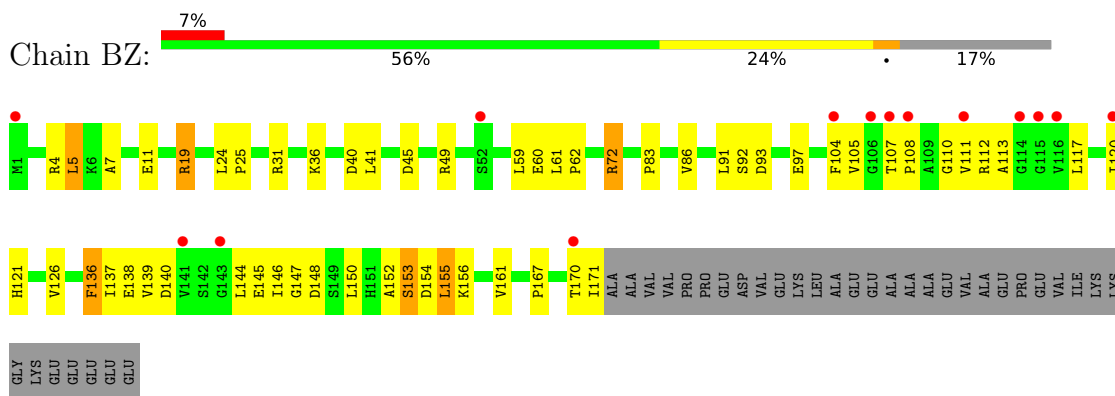
- Molecule 45: 50S ribosomal protein L24



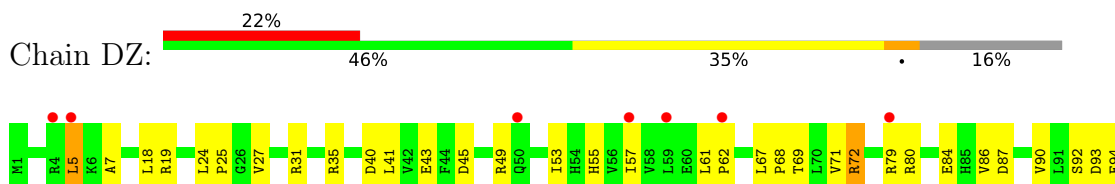
- Molecule 45: 50S ribosomal protein L24

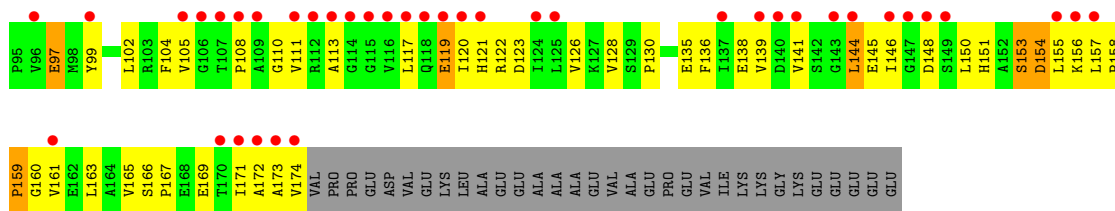


- Molecule 46: 50S ribosomal protein L25

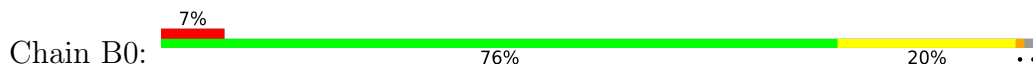


- Molecule 46: 50S ribosomal protein L25

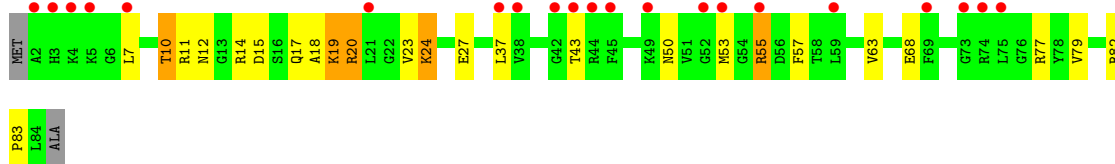




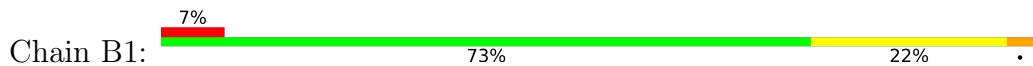
● Molecule 47: 50S ribosomal protein L27



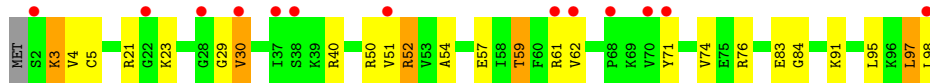
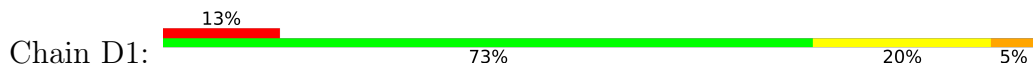
● Molecule 47: 50S ribosomal protein L27



● Molecule 48: 50S ribosomal protein L28



● Molecule 48: 50S ribosomal protein L28

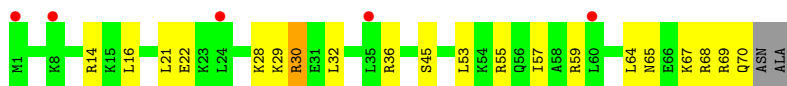


● Molecule 49: 50S ribosomal protein L29



● Molecule 49: 50S ribosomal protein L29





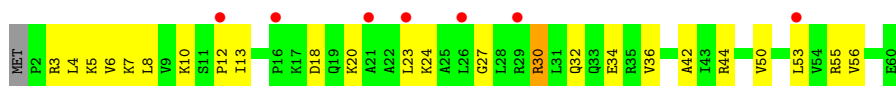
- Molecule 50: 50S ribosomal protein L30

Chain B3: 73% 20% 5%



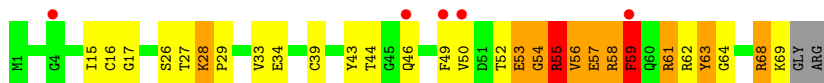
- Molecule 50: 50S ribosomal protein L30

Chain D3: 12% 58% 38%



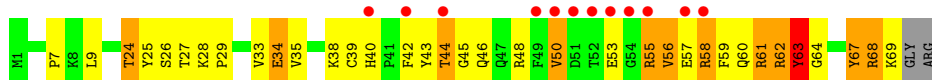
- Molecule 51: 50S ribosomal protein L31

Chain B4: 7% 56% 25% 13%



- Molecule 51: 50S ribosomal protein L31

Chain D4: 17% 48% 32% 15%



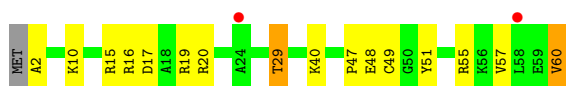
- Molecule 52: 50S ribosomal protein L32

Chain B5: 2% 72% 22% 5%



- Molecule 52: 50S ribosomal protein L32

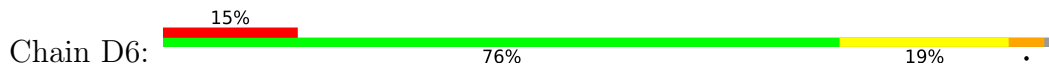
Chain D5: 3% 72% 23% 5%



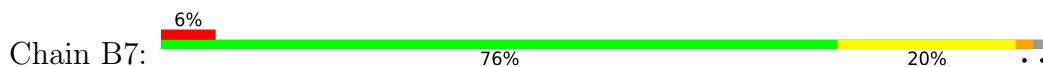
- Molecule 53: 50S ribosomal protein L33



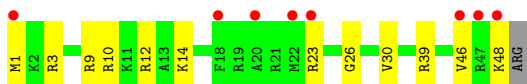
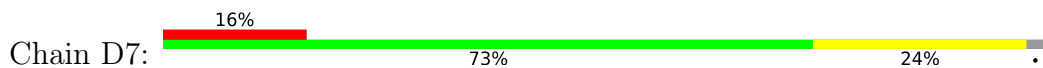
- Molecule 53: 50S ribosomal protein L33



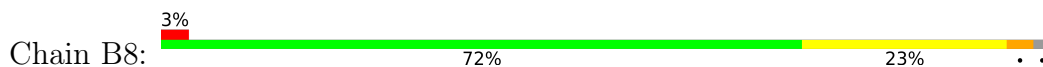
- Molecule 54: 50S ribosomal protein L34



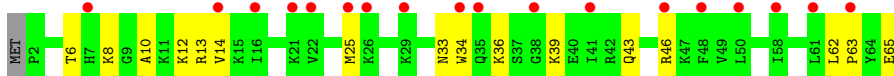
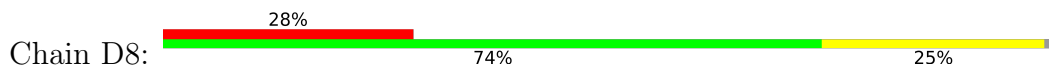
- Molecule 54: 50S ribosomal protein L34



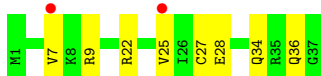
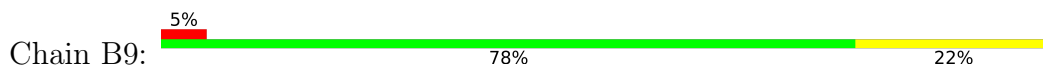
- Molecule 55: 50S ribosomal protein L35



- Molecule 55: 50S ribosomal protein L35

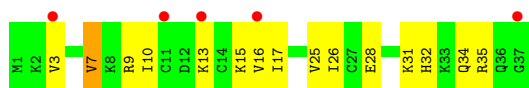


- Molecule 56: 50S ribosomal protein L36



- Molecule 56: 50S ribosomal protein L36

Chain D9:  14% 59% 38%



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	209.32Å 450.06Å 622.23Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	152.51 – 2.55 255.92 – 2.55	Depositor EDS
% Data completeness (in resolution range)	95.8 (152.51-2.55) 95.8 (255.92-2.55)	Depositor EDS
R_{merge}	0.13	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.28 (at 2.55Å)	Xtrriage
Refinement program	PHENIX 1.8.2_1309	Depositor
R, R_{free}	0.233 , 0.280 0.233 , 0.280	Depositor DCC
R_{free} test set	90444 reflections (5.02%)	wwPDB-VP
Wilson B-factor (Å ²)	50.6	Xtrriage
Anisotropy	0.115	Xtrriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.28 , 58.7	EDS
L-test for twinning ²	$\langle L \rangle = 0.39$, $\langle L^2 \rangle = 0.21$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
F_o, F_c correlation	0.90	EDS
Total number of atoms	297141	wwPDB-VP
Average B, all atoms (Å ²)	61.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.64% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

5 Model quality i

5.1 Standard geometry i

Bond lengths and bond angles in the following residue types are not validated in this section: ZN, 5MC, 5MU, SF4, 31M, K, MG, MIA, 4SU, 7MG, PSU

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	0.37	0/36049	0.91	42/56261 (0.1%)
1	CA	0.40	6/36170 (0.0%)	1.00	88/56452 (0.2%)
2	AB	0.31	0/1881	0.60	0/2542
2	CB	0.33	0/1860	0.65	1/2518 (0.0%)
3	AC	0.28	0/1576	0.52	0/2130
3	CC	0.32	0/1566	0.61	0/2119
4	AD	0.29	0/1689	0.58	2/2267 (0.1%)
4	CD	0.30	0/1704	0.54	0/2284
5	AE	0.30	0/1145	0.55	0/1543
5	CE	0.31	0/1149	0.62	1/1548 (0.1%)
6	AF	0.28	0/819	0.49	0/1111
6	CF	0.31	0/829	0.52	0/1123
7	AG	0.27	0/1250	0.51	0/1679
7	CG	0.28	0/1254	0.53	0/1683
8	AH	0.27	0/1108	0.50	0/1494
8	CH	0.27	0/1108	0.52	0/1494
9	AI	0.30	0/1002	0.59	0/1346
9	CI	0.30	0/997	0.57	0/1343
10	AJ	0.28	0/722	0.59	0/982
10	CJ	0.31	0/727	0.59	0/988
11	AK	0.28	0/844	0.60	1/1145 (0.1%)
11	CK	0.28	0/848	0.53	0/1149
12	AL	0.30	0/946	0.52	0/1274
12	CL	0.30	0/946	0.55	0/1274
13	AM	0.28	0/969	0.61	0/1302
13	CM	0.29	0/961	0.57	0/1291
14	AN	0.30	0/501	0.50	0/664
14	CN	0.33	0/501	0.57	0/664
15	AO	0.28	0/739	0.55	0/985
15	CO	0.30	0/739	0.54	0/985
16	AP	0.28	0/697	0.52	0/939
16	CP	0.31	0/693	0.51	0/935

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	AQ	0.28	0/836	0.53	0/1117
17	CQ	0.29	0/836	0.50	0/1117
18	AR	0.27	0/560	0.56	0/746
18	CR	0.28	0/560	0.56	0/746
19	AS	0.29	0/667	0.58	0/900
19	CS	0.32	0/661	0.67	0/893
20	AT	0.28	0/730	0.58	0/965
20	CT	0.28	0/729	0.52	0/965
21	AU	0.26	0/203	0.52	0/266
21	CU	0.35	0/203	0.52	0/266
22	AV	0.41	0/310	0.94	0/480
22	CV	0.45	0/282	1.06	1/437 (0.2%)
23	AW	0.47	0/1577	1.18	6/2454 (0.2%)
23	CW	0.59	0/1531	1.46	25/2379 (1.1%)
24	AX	0.51	0/1725	1.17	14/2689 (0.5%)
24	CX	0.44	0/1725	1.12	10/2689 (0.4%)
25	AY	0.62	0/1602	1.43	22/2493 (0.9%)
25	CY	0.64	0/1579	1.46	32/2455 (1.3%)
26	BA	0.48	2/68013 (0.0%)	0.95	84/106165 (0.1%)
26	DA	0.42	1/67542 (0.0%)	0.94	72/105428 (0.1%)
27	BB	0.41	0/2878	0.88	0/4490
27	DB	0.44	0/2878	0.94	0/4490
28	BD	0.37	0/2186	0.59	0/2944
28	DD	0.33	0/2186	0.55	0/2944
29	BE	0.36	0/1592	0.57	0/2149
29	DE	0.34	0/1592	0.60	1/2149 (0.0%)
30	BF	0.35	0/1619	0.55	0/2193
30	DF	0.32	0/1615	0.58	0/2188
31	BG	0.31	0/1450	0.54	0/1959
31	DG	0.33	0/1449	0.57	0/1958
32	BH	0.33	0/1356	0.54	0/1834
32	DH	0.30	0/1356	0.52	0/1834
33	BI	0.29	0/1100	0.60	0/1501
33	DI	0.28	0/1076	0.57	0/1471
34	BN	0.32	0/1144	0.53	0/1543
34	DN	0.31	0/1144	0.54	0/1543
35	BO	0.34	0/943	0.58	1/1269 (0.1%)
35	DO	0.31	0/943	0.51	0/1269
36	BP	0.34	0/1152	0.58	0/1533
36	DP	0.31	0/1152	0.59	0/1533
37	BQ	0.34	0/1143	0.53	0/1527
37	DQ	0.31	0/1143	0.52	0/1527
38	BR	0.35	0/982	0.58	0/1312

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
38	DR	0.29	0/982	0.52	0/1312
39	BS	0.31	0/887	0.63	2/1180 (0.2%)
39	DS	0.29	0/880	0.61	0/1172
40	BT	0.33	0/1105	0.59	1/1477 (0.1%)
40	DT	0.29	0/1097	0.56	0/1468
41	BU	0.37	0/977	0.56	0/1301
41	DU	0.31	0/977	0.50	0/1301
42	BV	0.39	0/782	0.58	0/1049
42	DV	0.32	0/782	0.64	2/1049 (0.2%)
43	BW	0.38	0/897	0.57	0/1205
43	DW	0.31	0/897	0.52	0/1205
44	BX	0.39	0/764	0.59	1/1025 (0.1%)
44	DX	0.32	0/764	0.56	1/1025 (0.1%)
45	BY	0.34	0/819	0.57	0/1095
45	DY	0.31	0/819	0.55	0/1095
46	BZ	0.31	0/1379	0.61	0/1873
46	DZ	0.29	0/1390	0.57	0/1890
47	B0	0.35	0/662	0.57	0/881
47	D0	0.29	0/662	0.49	0/881
48	B1	0.34	0/762	0.56	0/1014
48	D1	0.32	0/762	0.54	0/1014
49	B2	0.32	0/590	0.56	0/781
49	D2	0.27	0/590	0.46	0/781
50	B3	0.36	0/474	0.58	0/635
50	D3	0.27	0/469	0.50	0/630
51	B4	0.35	0/571	0.71	0/768
51	D4	0.34	0/545	0.70	0/737
52	B5	0.38	0/469	0.60	0/635
52	D5	0.33	0/469	0.52	0/635
53	B6	0.36	0/460	0.51	0/613
53	D6	0.30	0/456	0.48	0/608
54	B7	0.39	0/426	0.55	0/561
54	D7	0.33	0/426	0.59	0/561
55	B8	0.36	0/519	0.58	0/684
55	D8	0.32	0/525	0.52	0/691
56	B9	0.35	0/310	0.51	0/407
56	D9	0.31	0/310	0.56	0/407
All	All	0.40	9/316594 (0.0%)	0.88	410/473970 (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	4
7	AG	0	2
7	CG	0	1
20	CT	0	1
28	BD	0	1
39	BS	0	1
51	B4	0	2
51	D4	0	1
All	All	0	13

All (9) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	CA	1154	G	N1-C2	-11.01	1.28	1.37
1	CA	1154	G	C6-N1	-10.68	1.32	1.39
1	CA	1119	C	N3-C4	-9.86	1.27	1.33
1	CA	1154	G	N7-C5	-7.17	1.34	1.39
26	BA	330	A	N9-C4	-6.79	1.33	1.37
26	BA	1021	A	N9-C4	-5.85	1.34	1.37
26	DA	2287	A	N9-C4	-5.40	1.34	1.37
1	CA	1154	G	C5-C4	5.28	1.42	1.38
1	CA	1119	C	C2-N3	-5.06	1.31	1.35

All (410) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	1119	C	N1-C2-O2	32.18	138.21	118.90
1	CA	1154	G	N3-C2-N2	24.48	137.03	119.90
1	CA	1154	G	C5-C6-O6	24.01	143.00	128.60
1	CA	1154	G	N1-C2-N2	-21.95	96.45	116.20
1	CA	1119	C	N3-C2-O2	-20.26	107.72	121.90
1	CA	1119	C	C2-N3-C4	18.04	128.92	119.90
1	CA	1119	C	C2-N1-C1'	16.83	137.32	118.80
1	CA	1154	G	C5-C6-N1	-16.70	103.15	111.50
1	CA	1154	G	C6-N1-C2	15.37	134.32	125.10
1	CA	1119	C	C5-C4-N4	13.49	129.64	120.20
1	CA	1119	C	C6-N1-C1'	-13.30	104.84	120.80
26	DA	2139	C	N1-C2-O2	11.63	125.88	118.90
1	CA	1119	C	N3-C4-N4	-11.16	110.19	118.00
1	CA	1001(A)	G	N3-C4-N9	10.62	132.37	126.00
23	CW	67	C	C5-C6-N1	10.56	126.28	121.00
1	CA	1154	G	C4-N9-C1'	10.47	140.11	126.50
25	AY	64	A	N1-C6-N6	-10.40	112.36	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	CY	23	A	N1-C6-N6	10.31	124.79	118.60
1	CA	1154	G	N1-C6-O6	-10.16	113.81	119.90
25	CY	66	U	C5-C4-O4	-10.02	119.89	125.90
25	AY	64	A	C5-C6-N6	9.87	131.59	123.70
26	BA	330	A	C2-N3-C4	-9.84	105.68	110.60
1	CA	1154	G	C2-N3-C4	-9.82	106.99	111.90
26	DA	2585	U	C5-C4-O4	-9.67	120.10	125.90
26	BA	2140	C	N1-C2-O2	9.55	124.63	118.90
1	CA	1119	C	C6-N1-C2	-9.51	116.49	120.30
26	DA	2174	C	C2-N1-C1'	9.37	129.11	118.80
1	CA	1119	C	C5-C6-N1	9.24	125.62	121.00
26	DA	2139	C	C2-N1-C1'	9.23	128.95	118.80
26	BA	1639	U	O5'-P-OP2	-9.22	97.40	105.70
1	CA	1054	C	P-O3'-C3'	9.21	130.75	119.70
26	DA	2152	G	C5-C6-O6	-9.21	123.08	128.60
1	CA	79	G	C5-C6-O6	9.02	134.01	128.60
24	AX	14	A	C4-C5-C6	8.97	121.48	117.00
1	CA	1154	G	C8-N9-C1'	-8.97	115.34	127.00
25	CY	4	C	N1-C2-O2	8.94	124.27	118.90
24	AX	46	G	C6-N1-C2	-8.94	119.74	125.10
24	CX	46	G	C6-N1-C2	-8.92	119.75	125.10
26	DA	2152	G	N1-C6-O6	8.87	125.22	119.90
26	BA	2140	C	N3-C2-O2	-8.83	115.72	121.90
1	CA	1004	A	O4'-C1'-N9	8.50	115.00	108.20
1	CA	1119	C	N1-C2-N3	-8.44	113.29	119.20
23	CW	7	A	N1-C6-N6	8.42	123.65	118.60
24	AX	14	A	C5-N7-C8	8.39	108.10	103.90
26	BA	1021	A	C2-N3-C4	-8.31	106.45	110.60
1	AA	1030(B)	C	C2-N1-C1'	8.24	127.86	118.80
26	DA	2136	C	N1-C2-O2	8.23	123.84	118.90
1	CA	1001(A)	G	N3-C4-C5	-8.21	124.49	128.60
23	CW	67	C	C2-N3-C4	8.09	123.95	119.90
1	AA	1137	C	C6-N1-C2	-8.06	117.07	120.30
26	BA	2140	C	C2-N1-C1'	8.06	127.67	118.80
25	CY	68	C	C2-N1-C1'	7.99	127.59	118.80
26	DA	2152	G	N9-C4-C5	-7.99	102.20	105.40
26	DA	2152	G	N3-C4-N9	7.99	130.79	126.00
24	CX	14	A	C4-C5-C6	7.97	120.98	117.00
39	BS	67	ARG	NE-CZ-NH1	-7.95	116.32	120.30
1	AA	1036	G	C4-N9-C1'	7.92	136.79	126.50
11	AK	18	ARG	NE-CZ-NH1	-7.89	116.36	120.30
1	CA	1001(A)	G	C4-N9-C1'	7.85	136.70	126.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	1154	G	C4-C5-C6	7.84	123.51	118.80
26	BA	2140	C	C6-N1-C2	-7.82	117.17	120.30
23	CW	22	G	N3-C2-N2	-7.75	114.47	119.90
1	AA	1030(B)	C	N1-C2-O2	7.75	123.55	118.90
26	DA	2139	C	N3-C2-O2	-7.71	116.50	121.90
26	DA	2152	G	C6-C5-N7	-7.69	125.79	130.40
1	CA	1126	U	C2-N1-C1'	7.68	126.92	117.70
26	BA	226	G	O4'-C1'-N9	7.68	114.34	108.20
26	DA	2167	U	N1-C2-O2	7.67	128.17	122.80
25	CY	66	U	N3-C4-O4	7.66	124.76	119.40
1	AA	1054	C	P-O3'-C3'	7.60	128.81	119.70
1	AA	346	G	C4-N9-C1'	7.56	136.32	126.50
25	CY	68	C	N3-C2-O2	-7.46	116.67	121.90
25	CY	56	C	C2-N1-C1'	7.45	126.99	118.80
1	CA	1001(A)	G	C8-N9-C1'	-7.43	117.34	127.00
25	CY	7	A	C6-N1-C2	-7.43	114.14	118.60
25	CY	68	C	N1-C2-O2	7.39	123.34	118.90
1	CA	1054	C	O4'-C1'-N1	7.39	114.11	108.20
26	BA	887	A	O4'-C1'-N9	7.35	114.08	108.20
26	BA	12	U	C2-N1-C1'	7.29	126.45	117.70
26	BA	1022	G	N3-C2-N2	-7.29	114.80	119.90
26	BA	1963	U	C2-N1-C1'	7.25	126.40	117.70
26	DA	2167	U	C2-N1-C1'	7.25	126.40	117.70
26	DA	2139	C	C6-N1-C1'	-7.22	112.13	120.80
26	DA	2152	G	C4-C5-N7	7.19	113.68	110.80
35	BO	8	LEU	CA-CB-CG	7.19	131.83	115.30
23	CW	45	U	C2-N1-C1'	7.17	126.31	117.70
26	DA	2174	C	C6-N1-C1'	-7.16	112.20	120.80
26	DA	2206	G	C4-N9-C1'	-7.14	117.22	126.50
24	AX	14	A	C5-C6-N1	-7.14	114.13	117.70
23	CW	44	G	C5-C6-O6	-7.13	124.32	128.60
1	AA	254	G	O5'-P-OP1	-7.09	99.32	105.70
1	AA	1036	G	C8-N9-C1'	-7.08	117.79	127.00
26	DA	2155	G	N3-C2-N2	7.07	124.85	119.90
26	BA	512	G	O4'-C1'-N9	7.04	113.83	108.20
26	DA	2167	U	N3-C2-O2	-7.03	117.28	122.20
24	AX	22	G	C5-N7-C8	-7.00	100.80	104.30
26	DA	2152	G	C8-N9-C1'	-6.95	117.96	127.00
26	DA	1372	U	C5-C4-O4	-6.92	121.75	125.90
26	DA	2137	C	C6-N1-C2	-6.90	117.54	120.30
1	AA	1137	C	C5-C6-N1	6.88	124.44	121.00
25	CY	23	A	C6-C5-N7	-6.85	127.51	132.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	CW	67	C	C2-N1-C1'	6.84	126.32	118.80
26	DA	2155	G	C6-N1-C2	6.83	129.20	125.10
23	CW	22	G	N3-C4-N9	-6.82	121.91	126.00
26	DA	893	C	C2-N1-C1'	6.82	126.30	118.80
26	DA	2585	U	C6-N1-C1'	-6.80	111.67	121.20
25	AY	5	G	N3-C4-N9	6.80	130.08	126.00
44	DX	57	LEU	CA-CB-CG	6.80	130.94	115.30
26	DA	2585	U	C2-N1-C1'	6.79	125.85	117.70
1	AA	346	G	O4'-C1'-N9	6.76	113.61	108.20
26	BA	271(M)	G	OP1-P-O3'	6.75	120.05	105.20
44	BX	57	LEU	CA-CB-CG	6.75	130.82	115.30
26	BA	624	C	O5'-P-OP1	-6.73	99.64	105.70
1	CA	1003	G	C4-N9-C1'	6.73	135.25	126.50
24	AX	22	G	C4-C5-C6	-6.69	114.79	118.80
23	CW	45	U	N1-C2-O2	6.69	127.48	122.80
1	CA	1154	G	N3-C4-N9	6.66	130.00	126.00
25	AY	4	C	N3-C2-O2	-6.61	117.27	121.90
26	BA	748	G	O4'-C1'-N9	6.61	113.49	108.20
1	CA	754	C	C2-N1-C1'	6.59	126.05	118.80
23	CW	7	A	C5-C6-N6	-6.57	118.45	123.70
26	DA	2152	G	C4-N9-C1'	6.55	135.02	126.50
25	CY	7	A	C5-C6-N1	6.53	120.96	117.70
1	CA	1001(A)	G	C6-C5-N7	-6.51	126.49	130.40
26	BA	2061	G	O5'-P-OP2	-6.50	99.84	105.70
23	CW	67	C	N1-C2-O2	6.49	122.79	118.90
25	AY	4	C	N1-C2-O2	6.48	122.79	118.90
26	BA	1142(A)	A	C2-N3-C4	-6.48	107.36	110.60
25	CY	56	C	C6-N1-C1'	-6.48	113.03	120.80
24	CX	22	G	N1-C6-O6	-6.45	116.03	119.90
25	CY	7	A	N3-C4-N9	6.45	132.56	127.40
23	CW	67	C	C6-N1-C2	-6.44	117.72	120.30
25	AY	33	U	N3-C2-O2	-6.42	117.71	122.20
26	DA	1372	U	N3-C4-O4	6.41	123.89	119.40
26	BA	330	A	N1-C2-N3	6.39	132.50	129.30
1	CA	998	G	N3-C4-N9	-6.39	122.17	126.00
26	BA	141	A	N7-C8-N9	6.38	116.99	113.80
25	AY	58	A	C4-N9-C1'	6.37	137.76	126.30
23	CW	66	U	C2-N1-C1'	6.36	125.33	117.70
26	BA	1992	G	P-O3'-C3'	6.36	127.33	119.70
24	AX	22	G	N3-C4-N9	-6.32	122.21	126.00
26	DA	2206	G	C8-N9-C1'	6.31	135.21	127.00
1	AA	1054	C	N3-C2-O2	-6.31	117.48	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	372	G	O4'-C1'-N9	6.30	113.24	108.20
23	CW	3	C	N1-C2-O2	6.29	122.67	118.90
26	BA	1256	G	N9-C4-C5	-6.28	102.89	105.40
1	AA	1397	C	C2-N1-C1'	6.28	125.70	118.80
1	AA	346	G	C8-N9-C4	-6.27	103.89	106.40
26	BA	330	A	N3-C4-C5	6.27	131.19	126.80
26	DA	1531	C	C2-N1-C1'	6.25	125.68	118.80
26	BA	1300	U	P-O3'-C3'	6.25	127.19	119.70
24	CX	46	G	C5-C6-N1	6.24	114.62	111.50
23	AW	15	G	N3-C2-N2	6.24	124.27	119.90
25	AY	69	G	N3-C4-N9	6.24	129.74	126.00
1	CA	1003	G	N7-C8-N9	6.20	116.20	113.10
23	AW	48	C	N1-C2-O2	-6.20	115.18	118.90
1	CA	1154	G	N3-C4-C5	-6.19	125.50	128.60
1	CA	96	U	O4'-C1'-N1	6.19	113.15	108.20
25	CY	23	A	C4-C5-C6	6.18	120.09	117.00
25	CY	23	A	C5-C6-N6	-6.17	118.77	123.70
25	AY	33	U	C2-N1-C1'	6.16	125.09	117.70
1	CA	1030(B)	C	C5-C6-N1	6.15	124.08	121.00
25	AY	68	C	N1-C2-O2	6.13	122.58	118.90
24	AX	14	A	C8-N9-C1'	-6.13	116.67	127.70
26	BA	1176	G	OP1-P-O3'	6.13	118.69	105.20
25	CY	4	C	N3-C2-O2	-6.13	117.61	121.90
1	AA	1054	C	C6-N1-C2	-6.12	117.85	120.30
1	CA	1052	U	N1-C2-O2	6.11	127.08	122.80
1	AA	1030(B)	C	N3-C2-O2	-6.11	117.62	121.90
1	CA	1256	A	O4'-C1'-N9	-6.11	103.31	108.20
1	CA	1119	C	C4-C5-C6	-6.11	114.35	117.40
26	BA	528	A	C2-N3-C4	-6.10	107.55	110.60
24	CX	46	G	N3-C2-N2	-6.07	115.65	119.90
1	CA	1064	G	P-O3'-C3'	6.07	126.98	119.70
25	AY	50	U	C2-N3-C4	6.05	130.63	127.00
26	BA	2036	C	O5'-P-OP1	-6.04	100.26	105.70
26	BA	330	A	N3-C4-N9	-6.04	122.57	127.40
1	CA	754	C	N1-C2-O2	6.00	122.50	118.90
26	BA	141	A	C5-N7-C8	-6.00	100.90	103.90
26	BA	787	U	O5'-P-OP1	-5.99	100.31	105.70
26	BA	271(M)	G	P-O3'-C3'	5.99	126.89	119.70
26	DA	1531	C	N1-C2-O2	5.98	122.49	118.90
26	DA	2140	C	C2-N1-C1'	5.98	125.38	118.80
25	AY	33	U	N1-C2-O2	5.97	126.98	122.80
1	CA	1030	C	C2-N1-C1'	5.96	125.36	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	2248	C	O5'-P-OP2	-5.95	100.34	105.70
1	CA	65	U	P-O3'-C3'	5.95	126.84	119.70
1	AA	1030(B)	C	C6-N1-C1'	-5.94	113.67	120.80
26	BA	1992	G	C8-N9-C4	-5.94	104.02	106.40
26	BA	1776	G	O5'-P-OP2	-5.94	100.35	105.70
23	CW	22	G	N9-C4-C5	5.94	107.78	105.40
26	BA	2615	U	O5'-P-OP1	-5.92	100.37	105.70
39	BS	67	ARG	NE-CZ-NH2	5.92	123.26	120.30
1	CA	1030(B)	C	C6-N1-C2	-5.92	117.93	120.30
26	BA	933	A	O4'-C1'-N9	5.92	112.93	108.20
25	AY	69	G	N3-C4-C5	-5.91	125.64	128.60
1	AA	347	G	P-O3'-C3'	5.91	126.79	119.70
23	AW	3	C	C2-N1-C1'	5.91	125.30	118.80
26	BA	1021	A	N1-C2-N3	5.91	132.25	129.30
25	CY	56	C	N1-C2-O2	5.89	122.43	118.90
24	AX	46	G	C5-C6-N1	5.88	114.44	111.50
26	DA	614	U	N3-C2-O2	-5.88	118.08	122.20
24	AX	22	G	C8-N9-C1'	5.86	134.62	127.00
24	AX	14	A	C4-N9-C1'	5.86	136.84	126.30
1	CA	687	A	P-O3'-C3'	5.85	126.72	119.70
23	CW	3	C	C2-N3-C4	5.84	122.82	119.90
1	CA	1023	G	N3-C4-N9	5.83	129.50	126.00
24	CX	14	A	C5-N7-C8	5.82	106.81	103.90
1	CA	1067	A	P-O3'-C3'	5.81	126.67	119.70
26	DA	2139	C	C5-C6-N1	5.81	123.91	121.00
1	CA	997	U	C5-C4-O4	5.79	129.38	125.90
26	BA	1022	G	N3-C4-N9	-5.76	122.54	126.00
1	AA	839	U	P-O3'-C3'	5.75	126.60	119.70
23	CW	66	U	P-O3'-C3'	5.74	126.59	119.70
26	BA	1828	G	C5-C6-O6	-5.73	125.16	128.60
26	BA	528	A	C5-N7-C8	-5.73	101.04	103.90
25	AY	35	A	O5'-P-OP2	-5.72	100.55	105.70
26	BA	845	G	O4'-C1'-N9	5.71	112.77	108.20
26	DA	1204	A	O4'-C1'-N9	5.70	112.76	108.20
1	CA	1039	C	N1-C2-O2	5.69	122.32	118.90
26	BA	1493	C	N1-C2-O2	5.69	122.31	118.90
1	CA	1125	U	O3'-P-O5'	5.69	114.81	104.00
26	BA	1963	U	N1-C2-O2	5.68	126.78	122.80
23	CW	45	U	C6-N1-C1'	-5.68	113.25	121.20
1	AA	1067	A	P-O3'-C3'	5.68	126.51	119.70
1	CA	1039	C	C5-C4-N4	-5.68	116.23	120.20
1	CA	1001(A)	G	N9-C4-C5	-5.67	103.13	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	DE	72	VAL	C-N-CA	5.66	135.86	121.70
1	CA	79	G	N1-C6-O6	-5.66	116.50	119.90
1	AA	1054	C	C2-N1-C1'	5.66	125.02	118.80
25	CY	5	G	N3-C4-C5	-5.64	125.78	128.60
1	AA	1125	U	P-O3'-C3'	5.64	126.47	119.70
25	CY	50	U	C5-C4-O4	5.64	129.28	125.90
1	AA	346	G	N3-C4-C5	-5.63	125.79	128.60
42	DV	100	ARG	NE-CZ-NH1	5.63	123.11	120.30
26	DA	214	G	O4'-C1'-N9	5.62	112.70	108.20
26	DA	2137	C	O4'-C1'-N1	5.61	112.69	108.20
26	DA	893	C	N1-C2-O2	5.60	122.26	118.90
23	AW	22	G	N1-C6-O6	5.60	123.26	119.90
26	BA	1372	U	N3-C4-O4	5.59	123.32	119.40
1	CA	1154	G	C5-N7-C8	5.59	107.09	104.30
26	DA	748	G	C4-N9-C1'	-5.59	119.24	126.50
1	CA	1021	G	O4'-C1'-N9	5.58	112.66	108.20
1	AA	346	G	C8-N9-C1'	-5.57	119.76	127.00
26	BA	1176	G	P-O3'-C3'	5.57	126.38	119.70
26	DA	1937	A	O4'-C1'-N9	5.56	112.65	108.20
42	DV	38	LEU	CA-CB-CG	5.56	128.09	115.30
25	AY	58	A	C8-N9-C1'	-5.56	117.69	127.70
1	AA	1022	G	N3-C2-N2	5.55	123.78	119.90
1	CA	1126	U	N1-C2-O2	5.55	126.68	122.80
1	CA	1493	A	P-O3'-C3'	5.55	126.36	119.70
26	DA	2174	C	C5-C6-N1	5.54	123.77	121.00
1	CA	1225	A	C5-C6-N6	5.53	128.13	123.70
23	CW	6	G	C4-C5-N7	5.53	113.01	110.80
23	CW	6	G	N9-C4-C5	-5.53	103.19	105.40
24	AX	22	G	N3-C4-C5	5.53	131.36	128.60
1	AA	991	U	P-O3'-C3'	5.52	126.33	119.70
25	AY	58	A	P-O3'-C3'	5.52	126.33	119.70
25	CY	69	G	N3-C4-N9	5.52	129.31	126.00
26	DA	2140	C	N1-C2-O2	5.52	122.21	118.90
26	BA	570	G	C5-C6-O6	-5.52	125.29	128.60
26	BA	1256	G	C4-C5-N7	5.52	113.01	110.80
24	CX	34	C	C2-N1-C1'	5.52	124.87	118.80
25	CY	68	C	C6-N1-C1'	-5.51	114.19	120.80
24	AX	67	C	N1-C2-O2	5.50	122.20	118.90
26	DA	2139	C	N3-C4-C5	5.49	124.10	121.90
1	AA	1028	C	O4'-C1'-N1	5.48	112.59	108.20
1	CA	1154	G	C6-C5-N7	-5.48	127.11	130.40
26	DA	383	U	O4'-C1'-N1	5.48	112.58	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	1936	A	O4'-C1'-N9	5.46	112.57	108.20
1	CA	90	U	N1-C2-N3	5.46	118.18	114.90
26	BA	1187	G	N1-C6-O6	-5.46	116.62	119.90
26	BA	383	U	C2-N1-C1'	-5.46	111.15	117.70
26	BA	2789	C	N1-C2-O2	-5.46	115.62	118.90
1	AA	1054	C	N1-C2-O2	5.46	122.17	118.90
1	CA	1286	A	C8-N9-C4	-5.45	103.62	105.80
26	BA	2689	U	N3-C2-O2	-5.45	118.39	122.20
1	AA	1285	A	P-O3'-C3'	5.44	126.23	119.70
26	BA	847	U	C2-N1-C1'	-5.44	111.17	117.70
26	BA	12	U	N1-C2-O2	5.43	126.60	122.80
26	DA	1300	U	P-O3'-C3'	5.43	126.22	119.70
24	CX	22	G	C5-N7-C8	-5.43	101.59	104.30
26	DA	2685	G	N1-C6-O6	-5.42	116.65	119.90
1	AA	347	G	OP1-P-O3'	5.41	117.09	105.20
26	DA	2585	U	O4'-C1'-N1	-5.40	103.88	108.20
26	DA	2321	G	C4-N9-C1'	5.40	133.52	126.50
1	AA	1502	A	N1-C2-N3	5.39	132.00	129.30
1	AA	97	G	N3-C4-N9	5.39	129.24	126.00
26	BA	1530	C	P-O3'-C3'	5.38	126.16	119.70
23	CW	26	A	C5-C6-N6	-5.38	119.39	123.70
26	DA	1313	U	C2-N1-C1'	5.38	124.16	117.70
23	AW	50	U	C5-C4-O4	-5.38	122.67	125.90
26	BA	1204	A	O4'-C1'-N9	5.38	112.50	108.20
25	CY	7	A	C6-C5-N7	-5.38	128.54	132.30
26	BA	945	A	C2-N3-C4	-5.38	107.91	110.60
26	BA	576	U	O5'-P-OP1	-5.37	100.86	105.70
26	BA	1698	A	O4'-C1'-N9	5.37	112.50	108.20
1	CA	1286	A	N7-C8-N9	5.37	116.48	113.80
26	BA	944	G	C4-N9-C1'	5.36	133.47	126.50
25	CY	5	G	O4'-C1'-N9	5.36	112.49	108.20
1	CA	1529	G	C4-N9-C1'	5.36	133.47	126.50
1	AA	1278	U	C5-C6-N1	5.36	125.38	122.70
26	DA	1530	C	P-O3'-C3'	5.36	126.13	119.70
25	CY	68	C	C6-N1-C2	-5.35	118.16	120.30
25	CY	5	G	C2-N3-C4	5.35	114.58	111.90
24	CX	46	G	C5-C6-O6	-5.35	125.39	128.60
26	DA	1698	A	O4'-C1'-N9	5.35	112.48	108.20
23	CW	67	C	C4-C5-C6	-5.34	114.73	117.40
1	AA	1042	G	O4'-C1'-N9	5.34	112.47	108.20
2	CB	187	LEU	CA-CB-CG	5.34	127.58	115.30
26	BA	12	U	N3-C2-O2	-5.33	118.47	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	2593	U	N3-C4-O4	-5.33	115.67	119.40
1	AA	1030(B)	C	C6-N1-C2	-5.32	118.17	120.30
25	CY	5	G	N3-C4-N9	5.32	129.19	126.00
1	CA	1126	U	C6-N1-C1'	-5.31	113.76	121.20
25	CY	24	G	N3-C4-N9	5.31	129.19	126.00
25	AY	50	U	N3-C4-C5	-5.31	111.42	114.60
1	CA	992	U	P-O3'-C3'	5.30	126.06	119.70
1	CA	1206	G	C5-C6-O6	-5.30	125.42	128.60
26	BA	1614	A	O5'-P-OP1	-5.30	100.93	105.70
26	BA	1045	A	O5'-P-OP1	5.29	117.04	110.70
1	CA	1502	A	N1-C2-N3	5.29	131.94	129.30
26	BA	1175	U	P-O3'-C3'	5.28	126.04	119.70
23	CW	66	U	C5-C6-N1	5.28	125.34	122.70
4	AD	174	LEU	CA-CB-CG	5.26	127.41	115.30
23	AW	3	C	N1-C2-O2	5.26	122.06	118.90
1	CA	79	G	C6-N1-C2	5.26	128.25	125.10
26	DA	2629	A	O4'-C1'-N9	5.25	112.40	108.20
4	AD	188	LEU	CA-CB-CG	5.24	127.36	115.30
1	CA	1323	G	N3-C4-N9	5.24	129.15	126.00
5	CE	12	LEU	CA-CB-CG	5.24	127.35	115.30
25	CY	60	U	N3-C2-O2	-5.24	118.53	122.20
24	AX	22	G	C4-N9-C1'	-5.24	119.69	126.50
26	BA	1315	C	O5'-P-OP2	-5.24	100.99	105.70
1	CA	1126	U	P-O5'-C5'	5.23	129.27	120.90
1	CA	1126	U	C5-C6-N1	5.22	125.31	122.70
1	CA	1158	C	C2-N1-C1'	5.22	124.55	118.80
25	CY	7	A	N9-C4-C5	-5.22	103.71	105.80
26	BA	2789	C	C2-N1-C1'	-5.21	113.07	118.80
26	BA	1963	U	C6-N1-C1'	-5.21	113.91	121.20
1	CA	1003	G	C8-N9-C4	-5.21	104.32	106.40
1	CA	1183	A	P-O3'-C3'	5.21	125.95	119.70
1	CA	1158	C	N1-C2-O2	5.20	122.02	118.90
26	DA	2554	U	O5'-P-OP2	-5.20	101.02	105.70
26	DA	2154	G	N9-C1'-C2'	-5.20	106.28	112.00
1	CA	1220	G	N3-C4-N9	-5.20	122.88	126.00
1	CA	998	G	N9-C4-C5	5.19	107.48	105.40
26	BA	481	G	O4'-C1'-N9	5.19	112.35	108.20
26	BA	195	A	P-O3'-C3'	5.19	125.92	119.70
26	BA	141	A	O4'-C1'-N9	5.18	112.35	108.20
26	BA	527	C	N3-C2-O2	-5.18	118.27	121.90
26	DA	945	A	O4'-C1'-N9	5.18	112.35	108.20
25	CY	7	A	C5-C6-N6	-5.18	119.56	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1150	U	C2-N3-C4	5.17	130.10	127.00
1	AA	1502	A	N7-C8-N9	5.17	116.39	113.80
1	CA	1030	C	C6-N1-C1'	-5.17	114.59	120.80
1	AA	754	C	C2-N1-C1'	5.17	124.49	118.80
26	BA	2791	C	C6-N1-C2	-5.17	118.23	120.30
25	AY	5	G	N3-C4-C5	-5.17	126.02	128.60
1	AA	97	G	N3-C4-C5	-5.16	126.02	128.60
1	CA	848	C	C5-C6-N1	5.16	123.58	121.00
26	DA	2137	C	C6-N1-C1'	5.16	126.99	120.80
26	DA	914	C	N1-C2-O2	5.15	121.99	118.90
26	DA	748	G	C8-N9-C1'	5.15	133.69	127.00
1	CA	266	G	C4-N9-C1'	5.14	133.19	126.50
26	BA	265	A	O4'-C1'-N9	5.14	112.31	108.20
26	BA	1021	A	C5-N7-C8	-5.13	101.33	103.90
26	BA	2471	C	N1-C2-O2	5.13	121.98	118.90
25	AY	6	G	N9-C4-C5	-5.12	103.35	105.40
25	AY	18	G	C4-N9-C1'	-5.12	119.84	126.50
25	AY	45	U	C5-C6-N1	5.12	125.26	122.70
1	CA	60	A	P-O3'-C3'	5.12	125.84	119.70
1	CA	1158	C	C6-N1-C2	-5.11	118.26	120.30
25	CY	69	G	N3-C4-C5	-5.11	126.05	128.60
24	CX	22	G	C4-C5-C6	-5.10	115.74	118.80
26	BA	517	C	C6-N1-C2	-5.10	118.26	120.30
26	BA	2187	G	C5-C6-O6	5.10	131.66	128.60
23	CW	66	U	C5-C4-O4	-5.10	122.84	125.90
22	CV	24	A	O4'-C1'-N9	5.09	112.28	108.20
25	CY	9	A	C4-C5-C6	-5.09	114.45	117.00
1	AA	1397	C	O4'-C1'-N1	5.09	112.27	108.20
26	DA	893	C	C6-N1-C2	-5.08	118.27	120.30
26	DA	2430	A	O4'-C1'-N9	5.08	112.26	108.20
26	DA	893	C	C5-C6-N1	5.08	123.54	121.00
26	DA	2621	A	C8-N9-C4	5.07	107.83	105.80
26	DA	214	G	C4-N9-C1'	-5.07	119.91	126.50
26	DA	1992	G	P-O3'-C3'	5.06	125.78	119.70
1	CA	1003	G	C8-N9-C1'	-5.06	120.42	127.00
1	CA	955	U	C2-N3-C4	5.06	130.04	127.00
1	AA	346	G	N7-C8-N9	5.06	115.63	113.10
1	CA	79	G	N3-C4-N9	-5.06	122.97	126.00
1	CA	90	U	O4'-C1'-N1	5.06	112.25	108.20
26	BA	2848	G	O4'-C1'-N9	5.05	112.24	108.20
26	DA	1558	A	P-O3'-C3'	5.05	125.77	119.70
23	CW	22	G	N1-C2-N2	5.05	120.75	116.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	DA	1791	A	O5'-P-OP1	-5.05	101.16	105.70
26	DA	2136	C	N3-C2-O2	-5.04	118.37	121.90
26	BA	2553	G	N3-C4-C5	-5.04	126.08	128.60
25	AY	65	G	N9-C4-C5	5.04	107.42	105.40
1	AA	98	G	N3-C4-N9	5.04	129.02	126.00
26	BA	383	U	O4'-C1'-N1	5.04	112.23	108.20
1	AA	1035	A	N1-C2-N3	5.03	131.82	129.30
40	BT	118	ARG	NE-CZ-NH1	5.02	122.81	120.30
26	DA	512	G	O4'-C1'-N9	5.02	112.22	108.20
26	DA	1131	G	O4'-C1'-N9	5.01	112.21	108.20
26	DA	1899	G	N3-C4-N9	5.01	129.01	126.00
26	BA	774	A	C8-N9-C4	-5.01	103.80	105.80
26	BA	933	A	N7-C8-N9	5.01	116.30	113.80
26	DA	90	U	C2-N1-C1'	5.00	123.70	117.70
26	DA	2140	C	C6-N1-C2	-5.00	118.30	120.30

There are no chirality outliers.

All (13) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	AB	18	GLY	Peptide
2	AB	231	GLU	Peptide
2	AB	8	LYS	Peptide
2	AB	9	GLU	Peptide
7	AG	78	ARG	Peptide
7	AG	79	ARG	Peptide
51	B4	52	THR	Peptide
51	B4	59	PHE	Peptide
28	BD	274	ARG	Peptide
39	BS	58	LEU	Peptide
7	CG	78	ARG	Peptide
20	CT	9	ASN	Peptide
51	D4	67	TYR	Peptide

5.2 Too-close contacts

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	AA	32205	0	16254	495	0
1	CA	32312	0	16307	663	0
2	AB	1846	0	1867	92	0
2	CB	1825	0	1828	102	0
3	AC	1552	0	1546	53	0
3	CC	1542	0	1517	81	0
4	AD	1659	0	1676	73	0
4	CD	1674	0	1714	61	0
5	AE	1129	0	1185	34	0
5	CE	1133	0	1191	33	0
6	AF	806	0	793	24	0
6	CF	816	0	808	18	0
7	AG	1231	0	1238	28	0
7	CG	1235	0	1249	37	0
8	AH	1088	0	1126	26	0
8	CH	1088	0	1126	42	0
9	AI	983	0	986	47	0
9	CI	978	0	966	47	0
10	AJ	709	0	650	35	0
10	CJ	714	0	672	36	0
11	AK	829	0	825	20	0
11	CK	833	0	836	14	0
12	AL	930	0	980	24	0
12	CL	930	0	980	27	0
13	AM	958	0	1002	31	0
13	CM	950	0	988	39	0
14	AN	492	0	529	16	0
14	CN	492	0	529	33	0
15	AO	728	0	760	20	0
15	CO	728	0	760	31	0
16	AP	681	0	697	12	0
16	CP	677	0	686	23	0
17	AQ	823	0	891	22	0
17	CQ	823	0	891	15	0
18	AR	555	0	618	17	0
18	CR	555	0	618	16	0
19	AS	652	0	662	31	0
19	CS	646	0	644	42	0
20	AT	728	0	798	32	0
20	CT	727	0	796	25	0
21	AU	199	0	208	8	0
21	CU	199	0	208	10	0
22	AV	277	0	140	2	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
22	CV	252	0	130	7	0
23	AW	1607	0	839	55	0
23	CW	1560	0	803	55	0
24	AX	1625	0	828	34	0
24	CX	1625	0	828	33	0
25	AY	1581	0	805	96	0
25	CY	1561	0	796	79	0
26	BA	60729	0	30621	669	0
26	DA	60311	0	30409	876	0
27	BB	2573	0	1306	19	0
27	DB	2573	0	1306	50	0
28	BD	2136	0	2218	51	0
28	DD	2136	0	2218	61	0
29	BE	1559	0	1618	30	0
29	DE	1559	0	1618	45	0
30	BF	1584	0	1625	47	0
30	DF	1580	0	1619	50	0
31	BG	1425	0	1443	38	0
31	DG	1424	0	1434	66	0
32	BH	1330	0	1407	28	0
32	DH	1330	0	1407	30	0
33	BI	1085	0	1114	41	0
33	DI	1061	0	1080	25	0
34	BN	1117	0	1183	17	0
34	DN	1117	0	1184	27	0
35	BO	933	0	996	20	0
35	DO	933	0	996	29	0
36	BP	1135	0	1212	38	0
36	DP	1135	0	1212	43	0
37	BQ	1122	0	1179	31	0
37	DQ	1122	0	1179	35	0
38	BR	968	0	1033	18	0
38	DR	968	0	1033	28	0
39	BS	877	0	938	23	0
39	DS	870	0	923	34	0
40	BT	1091	0	1151	27	0
40	DT	1083	0	1136	31	0
41	BU	959	0	1019	17	0
41	DU	959	0	1019	38	0
42	BV	771	0	830	13	0
42	DV	771	0	830	25	0
43	BW	886	0	939	12	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
43	DW	886	0	940	9	0
44	BX	750	0	814	16	0
44	DX	750	0	814	23	0
45	BY	806	0	881	23	0
45	DY	806	0	881	26	0
46	BZ	1349	0	1355	44	0
46	DZ	1360	0	1363	61	0
47	B0	653	0	674	14	0
47	D0	653	0	674	20	0
48	B1	755	0	826	18	0
48	D1	755	0	826	18	0
49	B2	588	0	643	11	0
49	D2	588	0	643	12	0
50	B3	469	0	518	9	0
50	D3	464	0	514	12	0
51	B4	558	0	544	22	0
51	D4	532	0	503	31	0
52	B5	455	0	465	11	0
52	D5	455	0	465	12	0
53	B6	453	0	473	13	0
53	D6	449	0	469	9	0
54	B7	418	0	467	9	0
54	D7	418	0	467	10	0
55	B8	511	0	571	21	0
55	D8	517	0	582	10	0
56	B9	307	0	335	7	0
56	D9	307	0	335	13	0
57	AA	214	0	0	0	0
57	AE	3	0	0	0	0
57	AF	1	0	0	0	0
57	AK	1	0	0	0	0
57	AM	1	0	0	0	0
57	AN	2	0	0	0	0
57	AW	4	0	0	0	0
57	AX	15	0	0	0	0
57	AY	3	0	0	0	0
57	B0	3	0	0	0	0
57	B1	1	0	0	0	0
57	B2	1	0	0	0	0
57	B3	2	0	0	0	0
57	B4	1	0	0	0	0
57	B5	1	0	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
57	B6	2	0	0	0	0
57	B7	5	0	0	0	0
57	B8	1	0	0	0	0
57	B9	1	0	0	0	0
57	BA	812	0	0	0	0
57	BB	20	0	0	0	0
57	BD	9	0	0	0	0
57	BE	8	0	0	0	0
57	BF	9	0	0	0	0
57	BG	3	0	0	0	0
57	BN	6	0	0	0	0
57	BO	2	0	0	0	0
57	BP	5	0	0	0	0
57	BQ	5	0	0	0	0
57	BR	2	0	0	0	0
57	BU	8	0	0	0	0
57	BV	5	0	0	0	0
57	BW	4	0	0	0	0
57	BX	3	0	0	0	0
57	BY	1	0	0	0	0
57	BZ	1	0	0	0	0
57	CA	170	0	0	0	0
57	CD	1	0	0	0	0
57	CE	1	0	0	0	0
57	CF	1	0	0	0	0
57	CJ	1	0	0	0	0
57	CK	1	0	0	0	0
57	CT	1	0	0	0	0
57	CV	1	0	0	0	0
57	CW	1	0	0	0	0
57	CX	3	0	0	1	0
57	D0	1	0	0	0	0
57	D3	1	0	0	0	0
57	D8	1	0	0	0	0
57	DA	677	0	0	0	0
57	DB	13	0	0	0	0
57	DD	9	0	0	0	0
57	DE	4	0	0	0	0
57	DF	4	0	0	0	0
57	DG	1	0	0	0	0
57	DN	1	0	0	0	0
57	DO	1	0	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
57	DP	2	0	0	0	0
57	DQ	4	0	0	0	0
57	DR	1	0	0	0	0
57	DU	2	0	0	0	0
57	DV	3	0	0	0	0
57	DW	4	0	0	0	0
57	DX	1	0	0	0	0
57	DY	1	0	0	0	0
58	AD	8	0	0	0	0
58	CD	8	0	0	0	0
59	AN	1	0	0	0	0
59	B4	1	0	0	0	0
59	B5	1	0	0	0	0
59	B6	1	0	0	0	0
59	B9	1	0	0	0	0
59	BY	1	0	0	0	0
59	CN	1	0	0	0	0
59	D4	1	0	0	0	0
59	D5	1	0	0	0	0
59	D6	1	0	0	0	0
59	D9	1	0	0	0	0
59	DY	1	0	0	0	0
60	AX	1	0	0	0	0
60	CX	1	0	0	0	0
61	AA	227	0	0	17	0
61	AE	2	0	0	0	0
61	AJ	1	0	0	0	0
61	AL	1	0	0	1	0
61	AM	1	0	0	0	0
61	AU	1	0	0	1	0
61	AV	3	0	0	0	0
61	AW	3	0	0	0	0
61	AX	6	0	0	2	0
61	AY	1	0	0	0	0
61	B0	3	0	0	0	0
61	B1	1	0	0	0	0
61	B3	2	0	0	0	0
61	B5	2	0	0	0	0
61	B6	1	0	0	0	0
61	B7	2	0	0	0	0
61	B8	8	0	0	1	0
61	BA	1383	0	0	61	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
61	BB	36	0	0	1	0
61	BD	12	0	0	1	0
61	BE	14	0	0	4	0
61	BF	8	0	0	0	0
61	BG	3	0	0	0	0
61	BI	1	0	0	0	0
61	BO	4	0	0	0	0
61	BP	16	0	0	3	0
61	BQ	4	0	0	0	0
61	BR	2	0	0	0	0
61	BT	2	0	0	0	0
61	BU	3	0	0	0	0
61	BV	2	0	0	0	0
61	BW	1	0	0	0	0
61	BX	4	0	0	0	0
61	BZ	1	0	0	0	0
61	CA	185	0	0	17	0
61	CJ	2	0	0	1	0
61	CL	1	0	0	0	0
61	CT	1	0	0	0	0
61	CV	1	0	0	0	0
61	CW	2	0	0	0	0
61	D0	3	0	0	0	0
61	D1	1	0	0	0	0
61	D3	1	0	0	1	0
61	D7	3	0	0	0	0
61	D8	4	0	0	0	0
61	DA	1025	0	0	79	0
61	DB	9	0	0	0	0
61	DD	19	0	0	4	0
61	DE	11	0	0	0	0
61	DF	3	0	0	0	0
61	DN	2	0	0	1	0
61	DO	1	0	0	0	0
61	DP	16	0	0	2	0
61	DR	1	0	0	0	0
61	DT	3	0	0	0	0
61	DU	2	0	0	0	0
61	DX	3	0	0	0	0
61	DY	2	0	0	0	0
All	All	297141	0	196251	5228	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including

hydrogen atoms). The all-atom clashscore for this structure is 11.

All (5228) 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)
25:CY:7:A:N6	25:CY:66:U:H3	1.37	1.21
25:AY:49:C:N4	25:AY:65:G:H1	1.44	1.16
26:DA:2139:C:N4	26:DA:2152:G:H1	1.42	1.16
1:CA:1000:U:H3	1:CA:1041:A:N6	1.44	1.15
1:CA:1002:G:H1	1:CA:1038:C:N4	1.48	1.12
26:BA:2136:C:N4	26:BA:2155:G:H1	1.51	1.08
26:DA:2138:C:N4	26:DA:2153:G:H1	1.54	1.03
26:DA:2121:G:H1	26:DA:2177:C:N4	1.54	1.02
23:AW:26:A:H61	23:AW:44:G:H1	1.04	1.02
2:CB:16:HIS:HB2	2:CB:204:ASN:HB3	1.36	1.01
25:CY:19:G:N2	25:CY:56:C:N3	2.08	1.01
25:CY:19:G:H1	25:CY:56:C:N4	1.58	1.01
1:CA:999:C:H42	1:CA:1042:G:H1	1.07	1.01
25:CY:50:U:H3	25:CY:64:A:N6	1.58	1.00
26:BA:1019:U:HO2'	26:BA:1021:A:H2	1.07	1.00
2:CB:16:HIS:HB3	2:CB:210:SER:HB2	1.44	1.00
1:CA:1162:C:H42	1:CA:1174:G:H1	1.01	0.99
2:AB:16:HIS:HB2	2:AB:204:ASN:HB3	1.41	0.98
25:CY:8:4SU:HN3	25:CY:14:A:H62	1.10	0.98
26:DA:2124:G:H1	26:DA:2174:C:N4	1.62	0.97
26:BA:993:G:OP1	41:BU:50:ARG:NH2	1.98	0.97
26:BA:1798:U:H5'	28:BD:259:THR:HG22	1.47	0.97
25:AY:7:A:H61	25:AY:66:U:H3	1.11	0.97
1:CA:1162:C:N4	1:CA:1174:G:H1	1.63	0.96
1:AA:1502:A:H2	1:AA:1505:G:H1	1.10	0.96
7:AG:50:ILE:HD11	7:AG:58:PRO:HA	1.48	0.95
26:BA:2123:G:H1	26:BA:2175:C:H42	1.12	0.95
23:CW:66:U:H3'	23:CW:67:C:H5''	1.49	0.95
25:CY:51:U:H3	25:CY:63:G:H1	1.13	0.95
27:DB:22:U:H3	27:DB:61:G:H1	1.11	0.94
24:AX:5:G:H1	24:AX:68:C:N4	1.65	0.94
25:AY:49:C:N3	25:AY:65:G:N2	2.14	0.94
1:CA:76:C:N4	1:CA:93:G:H1	1.66	0.93
42:DV:100:ARG:HH11	42:DV:100:ARG:HG3	1.33	0.93
23:AW:29:G:H1	23:AW:41:C:H42	1.16	0.93
25:CY:50:U:H3	25:CY:64:A:H61	0.96	0.92
1:CA:76:C:H42	1:CA:93:G:H1	0.97	0.92
46:BZ:153:SER:HB3	46:BZ:167:PRO:HB3	1.49	0.92

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2136:C:H42	26:BA:2155:G:H1	0.96	0.92
5:CE:100:VAL:O	5:CE:107:ARG:NH2	2.02	0.92
2:CB:179:LYS:HA	8:CH:72:PRO:HG3	1.51	0.91
23:AW:50:U:H3	23:AW:64:A:H61	1.02	0.91
26:BA:517:C:OP1	52:B5:16:ARG:NH2	2.04	0.91
26:DA:2124:G:H1	26:DA:2174:C:H42	1.17	0.91
26:DA:1204:A:H2	26:DA:1241:A:H62	1.19	0.90
24:AX:5:G:H1	24:AX:68:C:H42	0.92	0.90
26:DA:2206:G:H3'	26:DA:2207:G:C8	2.07	0.89
25:CY:15:G:N1	25:CY:48:C:N3	2.19	0.89
25:AY:26:A:H61	25:AY:44:G:H1	1.14	0.88
25:CY:9:A:N6	25:CY:23:A:OP2	2.06	0.88
1:CA:922:G:H4'	5:CE:20:GLN:HA	1.56	0.88
1:CA:1000:U:H3	1:CA:1041:A:H61	0.88	0.88
1:CA:1502:A:H2	1:CA:1505:G:H1	1.22	0.87
1:AA:664:G:H22	1:AA:741:G:H1	1.19	0.87
1:CA:1002:G:N2	1:CA:1038:C:N3	2.23	0.87
47:B0:11:ARG:O	47:B0:14:ARG:NH2	2.07	0.87
23:AW:50:U:H3	23:AW:64:A:N6	1.71	0.87
26:DA:994:C:OP1	41:DU:53:ARG:NH2	2.08	0.87
23:AW:76:31M:H8	23:AW:76:31M:H5'	1.56	0.87
26:DA:1689:A:H62	26:DA:1698:A:H2	1.20	0.86
26:DA:1798:U:H5'	28:DD:259:THR:HG22	1.55	0.86
1:AA:1025:U:O2	1:AA:1036:G:O6	1.93	0.86
29:BE:47:VAL:HG21	29:BE:86:PRO:HD2	1.57	0.86
26:DA:397:G:N7	61:DA:4625:HOH:O	2.08	0.86
1:CA:664:G:H22	1:CA:741:G:H1	1.24	0.86
26:DA:827:U:OP1	61:DA:4303:HOH:O	1.91	0.85
1:CA:1360:A:OP2	14:CN:35:ARG:NH2	2.10	0.85
26:DA:1169:G:H1	26:DA:1180:C:H42	1.23	0.85
26:DA:2130:U:H4'	26:DA:2133:G:H4'	1.58	0.85
10:AJ:35:SER:HB3	10:AJ:73:ASP:HB2	1.59	0.85
30:DF:53:THR:HG22	30:DF:56:GLU:HG3	1.58	0.84
26:BA:1689:A:H62	26:BA:1698:A:H2	1.25	0.84
26:DA:2430:A:OP2	61:DA:4303:HOH:O	1.94	0.84
26:BA:631:A:OP1	36:BP:65:ARG:NH1	2.10	0.84
7:CG:79:ARG:HE	7:CG:80:VAL:HG23	1.42	0.84
26:DA:2138:C:N3	26:DA:2153:G:N2	2.24	0.84
26:BA:100:G:O2'	49:B2:7:ARG:NH2	2.10	0.84
26:BA:2287:A:H62	26:BA:2344:U:H3	1.23	0.84
9:CI:51:ARG:HG2	9:CI:56:LEU:HD21	1.60	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:36:C:OP1	12:CL:123:LYS:NZ	2.11	0.84
33:BI:92:VAL:HG13	33:BI:120:ILE:HB	1.60	0.83
1:CA:427:U:OP1	4:CD:13:ARG:NH2	2.11	0.83
23:AW:26:A:N6	23:AW:44:G:H1	1.75	0.83
30:DF:53:THR:HG23	30:DF:55:GLY:H	1.44	0.83
23:AW:6:G:H1	23:AW:67:C:N4	1.77	0.82
10:CJ:7:LYS:HG3	10:CJ:71:LEU:HD12	1.60	0.82
29:DE:11:MET:HG2	29:DE:24:THR:HB	1.61	0.82
25:AY:50:U:O4	25:AY:64:A:N1	2.13	0.82
26:BA:1176:G:H1'	26:BA:1177:A:H5'	1.59	0.82
35:DO:35:VAL:HG11	35:DO:103:ALA:HB3	1.62	0.82
3:AC:40:ARG:NH2	3:AC:55:VAL:O	2.12	0.82
3:CC:58:GLU:HB3	10:CJ:92:THR:HG21	1.59	0.82
26:BA:885:C:H3'	26:BA:886:C:H5''	1.61	0.82
25:CY:31:A:N1	25:CY:39:PSU:O2	2.13	0.82
36:DP:100:LEU:HD12	36:DP:112:LEU:HD11	1.60	0.82
26:BA:2100:G:H1	26:BA:2189:U:H3	1.27	0.82
23:CW:4:C:N4	23:CW:69:G:H1	1.77	0.82
25:CY:19:G:H1	25:CY:56:C:H42	0.85	0.82
4:AD:158:ILE:HD13	4:AD:158:ILE:H	1.45	0.81
1:CA:1029:C:N3	1:CA:1032:G:N2	2.28	0.81
19:AS:50:ALA:HB1	19:AS:57:HIS:HB3	1.62	0.81
46:BZ:117:LEU:HD11	46:BZ:144:LEU:HD22	1.61	0.81
1:CA:1029:C:N4	1:CA:1032:G:N1	2.29	0.81
26:DA:2136:C:HO2'	26:DA:2137:C:H6	1.29	0.81
26:DA:2139:C:H42	26:DA:2152:G:H1	0.83	0.81
1:CA:1153:C:H42	1:CA:1154:G:H21	1.28	0.81
26:BA:279:C:H42	26:BA:361:G:H1	1.26	0.81
26:DA:2124:G:N2	26:DA:2174:C:N3	2.28	0.81
46:DZ:126:VAL:HG11	46:DZ:161:VAL:HG23	1.61	0.81
26:BA:1530:C:O2'	26:BA:1531:C:O5'	1.99	0.81
26:DA:2114:A:N6	26:DA:2119:A:N7	2.28	0.81
26:BA:2723:C:OP1	38:BR:3:HIS:ND1	2.12	0.81
1:CA:999:C:N4	1:CA:1042:G:H1	1.77	0.81
26:DA:2121:G:N2	26:DA:2177:C:N3	2.27	0.81
1:CA:201:C:H42	1:CA:216:G:H1	1.28	0.80
32:BH:59:ARG:HB2	32:BH:59:ARG:HH11	1.43	0.80
19:CS:50:ALA:HB1	19:CS:57:HIS:HB3	1.62	0.80
26:DA:2114:A:N1	26:DA:2171:A:N6	2.29	0.80
1:AA:407:G:H5''	4:AD:115:ARG:HG2	1.62	0.80
39:BS:25:ARG:NH1	39:BS:42:ASP:OD1	2.14	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:1315:C:OP2	61:DA:4172:HOH:O	1.99	0.80
26:DA:529:A:N6	26:DA:2041:U:O2	2.14	0.80
1:CA:985:C:H42	1:CA:1220:G:H1	1.24	0.80
1:AA:742:G:OP2	15:AO:35:ARG:NH2	2.12	0.80
1:CA:1317:C:N3	19:CS:37:ARG:NH2	2.30	0.80
26:DA:2819:G:N7	61:DA:4078:HOH:O	2.15	0.80
26:BA:1466:G:HO2'	26:BA:1546:C:HO2'	1.22	0.79
25:CY:53:G:O6	25:CY:61:C:N4	2.16	0.79
26:DA:2139:C:N3	26:DA:2152:G:N2	2.26	0.79
25:AY:19:G:N2	25:AY:56:C:N3	2.30	0.79
25:CY:19:G:N1	25:CY:56:C:N4	2.23	0.79
1:CA:1133:G:H1	1:CA:1141:C:H42	1.26	0.79
25:CY:8:4SU:S4	25:CY:14:A:N7	2.56	0.79
26:DA:2682:U:OP2	61:DA:3832:HOH:O	2.00	0.79
1:CA:1000:U:O2	1:CA:1041:A:N1	2.15	0.79
26:DA:1530:C:O2'	26:DA:1531:C:O5'	2.01	0.79
26:BA:1506:C:H2'	26:BA:1507:A:H8	1.47	0.79
26:BA:2683:C:O2	35:BO:70:LYS:NZ	2.15	0.79
35:BO:35:VAL:HG11	35:BO:103:ALA:HB3	1.64	0.79
1:CA:1024:G:H2'	1:CA:1025:U:H5''	1.62	0.79
26:DA:2138:C:H42	26:DA:2153:G:H1	0.80	0.79
9:CI:71:SER:HA	9:CI:74:ILE:HD12	1.65	0.78
23:CW:29:G:H1	23:CW:41:C:H42	1.29	0.78
26:BA:2808:U:O2	26:BA:2892:A:N6	2.15	0.78
1:CA:656:C:O2'	15:CO:28:GLN:NE2	2.15	0.78
26:DA:1324:G:N7	61:DA:3887:HOH:O	2.15	0.78
1:CA:582:U:OP1	15:CO:68:ARG:NH2	2.16	0.78
26:BA:2141:G:H1	26:BA:2149:G:H22	1.31	0.78
1:CA:975:A:H4'	1:CA:976:G:H5''	1.64	0.78
1:AA:156:G:N2	1:AA:165:C:O2	2.17	0.78
1:AA:1158:C:H5	1:AA:1181:G:H1	1.32	0.78
5:CE:122:GLU:O	5:CE:126:ARG:NH1	2.16	0.78
47:D0:11:ARG:O	47:D0:14:ARG:NH2	2.17	0.78
26:BA:2123:G:H1	26:BA:2175:C:N4	1.81	0.78
25:CY:15:G:N2	25:CY:48:C:H42	1.82	0.78
26:DA:2608:G:N7	61:DA:4023:HOH:O	2.17	0.78
46:DZ:19:ARG:NH1	46:DZ:84:GLU:O	2.17	0.78
26:DA:1648:C:OP1	61:DA:4215:HOH:O	2.01	0.78
9:AI:50:LEU:HD23	9:AI:81:ILE:HD11	1.67	0.77
25:CY:62:C:H2'	25:CY:63:G:H8	1.49	0.77
1:AA:559:A:OP1	5:AE:126:ARG:NH2	2.18	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:2287:A:H62	26:DA:2344:U:H3	1.30	0.77
1:CA:985:C:N4	1:CA:1220:G:H1	1.81	0.77
1:CA:1151:A:HO2'	1:CA:1152:A:H8	1.32	0.77
13:AM:3:ARG:HD2	13:AM:9:ILE:HG12	1.65	0.77
26:BA:2136:C:N3	26:BA:2155:G:N2	2.27	0.77
1:CA:1255:G:OP1	10:CJ:45:ARG:NH2	2.17	0.77
26:BA:998:C:OP1	61:BA:4663:HOH:O	2.02	0.77
46:BZ:72:ARG:NH2	46:BZ:97:GLU:O	2.18	0.77
3:CC:129:ALA:HB3	3:CC:132:ARG:HB2	1.67	0.77
25:CY:25:C:H2'	25:CY:26:A:H8	1.47	0.77
1:AA:1260:C:O2	1:AA:1275:A:N6	2.17	0.77
33:BI:129:THR:HG22	33:BI:139:GLN:HE22	1.48	0.77
23:CW:19:G:H1	23:CW:56:C:H42	1.33	0.77
23:AW:53:G:OP1	37:BQ:60:ARG:NH2	2.17	0.77
25:AY:7:A:N6	25:AY:66:U:H3	1.82	0.77
1:AA:1422:G:H5''	35:BO:48:PRO:HB3	1.67	0.76
26:BA:927:G:N7	61:BA:4413:HOH:O	2.17	0.76
1:CA:1025:U:H3	1:CA:1036:G:H1	1.32	0.76
37:DQ:135:ASP:OD2	46:DZ:49:ARG:NH2	2.18	0.76
26:BA:400:G:N7	61:BA:5004:HOH:O	2.17	0.76
1:CA:838:G:H1	1:CA:848:C:N4	1.84	0.76
26:BA:1452:A:OP2	61:BA:4011:HOH:O	2.02	0.76
42:BV:40:LEU:HB2	42:BV:46:VAL:HG13	1.67	0.76
30:BF:18:ARG:NH2	30:BF:127:GLU:OE1	2.18	0.76
1:CA:1422:G:H5''	35:DO:48:PRO:HB3	1.67	0.76
23:CW:4:C:N3	23:CW:69:G:N2	2.34	0.76
26:DA:143:G:H4'	44:DX:35:THR:HG21	1.68	0.76
26:DA:2723:C:H5''	38:DR:1:MET:HE2	1.66	0.76
1:AA:975:A:H4'	1:AA:976:G:H5''	1.67	0.76
26:BA:2103:C:H42	26:BA:2186:G:H1	1.30	0.76
28:DD:238:GLY:O	61:DD:408:HOH:O	2.03	0.76
12:AL:71:PRO:O	12:AL:102:ARG:NH1	2.18	0.76
1:CA:1054:C:O2'	1:CA:1055:A:O5'	2.02	0.76
56:D9:25:VAL:HB	56:D9:34:GLN:HB2	1.66	0.76
3:CC:98:ASN:N	3:CC:98:ASN:OD1	2.19	0.76
26:BA:11:G:H2'	26:BA:12:U:H5''	1.68	0.76
26:DA:880:G:N1	26:DA:898:C:O2	2.18	0.76
51:D4:38:LYS:O	51:D4:40:HIS:N	2.17	0.76
13:CM:25:ILE:HD11	13:CM:66:LEU:HD13	1.68	0.75
36:BP:126:VAL:HG12	36:BP:148:LEU:HD22	1.66	0.75
2:CB:17:PHE:HB2	2:CB:44:LEU:HD11	1.66	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:792:G:O6	61:DA:4162:HOH:O	2.03	0.75
29:DE:14:ILE:HG13	29:DE:21:VAL:HG13	1.68	0.75
36:DP:29:LYS:HG3	36:DP:30:THR:N	2.01	0.75
1:AA:532:A:H2	1:AA:1206:G:H21	1.35	0.75
24:AX:6:G:H1	24:AX:67:C:H42	1.34	0.75
26:BA:1332:G:OP1	61:BA:4653:HOH:O	2.03	0.75
42:BV:76:LYS:HB2	42:BV:81:TYR:HB3	1.68	0.75
23:CW:4:C:H42	23:CW:69:G:H1	1.33	0.75
23:CW:49:C:N4	23:CW:65:G:O6	2.20	0.75
6:CF:9:VAL:HB	6:CF:87:ARG:HB2	1.68	0.75
10:AJ:17:ASP:OD1	10:AJ:70:ARG:NH1	2.20	0.75
1:CA:1013:G:N2	1:CA:1016:A:OP2	2.19	0.75
26:DA:631:A:OP1	36:DP:65:ARG:NH1	2.20	0.75
1:CA:1456:G:O6	20:CT:54:LYS:NZ	2.16	0.75
26:DA:2638:G:OP2	29:DE:82:ARG:NH2	2.19	0.75
1:AA:1183:A:H3'	1:AA:1184:G:H5''	1.69	0.75
26:BA:271(R):G:OP1	48:B1:76:ARG:NH1	2.19	0.75
26:BA:307:G:H21	26:BA:330:A:H62	1.35	0.75
1:CA:1149:C:O2'	1:CA:1280:A:N1	2.18	0.75
1:AA:78:G:N2	1:AA:91:C:N3	2.35	0.75
1:AA:574:A:OP2	61:AA:4005:HOH:O	2.05	0.75
23:AW:6:G:N2	23:AW:67:C:N3	2.34	0.75
23:AW:29:G:H1	23:AW:41:C:N4	1.84	0.75
35:BO:64:ARG:NH2	35:BO:99:PHE:O	2.20	0.75
3:CC:179:ARG:HD2	3:CC:206:GLU:HB2	1.68	0.75
15:CO:54:ARG:NH1	15:CO:58:MET:SD	2.59	0.75
1:AA:642:A:N3	8:AH:113:SER:OG	2.20	0.74
1:AA:1314:C:OP2	19:AS:4:SER:OG	2.05	0.74
26:BA:301:G:OP2	45:BY:84:ARG:NH2	2.19	0.74
1:AA:1036:G:H21	1:AA:1037:C:H1'	1.51	0.74
26:BA:2741:A:OP1	56:B9:22:ARG:NH2	2.17	0.74
19:CS:42:PRO:HG3	51:D4:61:ARG:HG2	1.69	0.74
26:DA:1189:A:OP2	61:DA:4184:HOH:O	2.04	0.74
4:CD:104:VAL:HG11	4:CD:146:ILE:HD13	1.68	0.74
27:DB:76:G:N2	27:DB:101:G:O6	2.19	0.74
20:AT:10:LEU:HB3	20:AT:12:ALA:H	1.52	0.74
28:DD:148:GLU:HB2	28:DD:151:LYS:HD2	1.68	0.74
46:DZ:72:ARG:NH2	46:DZ:97:GLU:O	2.21	0.74
26:BA:2467:C:OP2	61:BA:5096:HOH:O	2.05	0.74
1:CA:958:A:N6	19:CS:77:THR:O	2.20	0.74
4:CD:154:ASN:HA	4:CD:159:ARG:HH21	1.53	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:449:A:OP2	61:DA:4657:HOH:O	2.05	0.74
26:DA:1815:A:OP2	28:DD:54:ARG:NH2	2.19	0.74
1:CA:811:C:N4	61:CA:4023:HOH:O	2.20	0.74
25:AY:50:U:H3	25:AY:64:A:H2	1.35	0.74
23:CW:2:C:N3	23:CW:71:G:O6	2.21	0.74
23:CW:7:A:N1	23:CW:66:U:O4	2.19	0.74
26:DA:2169:A:O2'	26:DA:2170:A:O5'	2.06	0.74
27:DB:75:G:N2	46:DZ:87:ASP:OD1	2.21	0.74
26:BA:1840:G:N7	61:BA:4332:HOH:O	2.20	0.74
26:DA:884:C:N4	26:DA:892:G:O6	2.20	0.74
26:DA:2049:G:N7	61:DA:3798:HOH:O	2.19	0.74
2:AB:195:ASP:O	8:AH:68:ARG:NH2	2.21	0.74
28:BD:17:THR:O	28:BD:211:ARG:NH2	2.21	0.74
1:CA:1226:C:O2'	13:CM:111:LYS:NZ	2.20	0.74
3:CC:150:LYS:HG3	3:CC:169:ALA:HB2	1.70	0.74
26:DA:1314:C:OP1	61:DA:4172:HOH:O	2.04	0.74
4:AD:104:VAL:HG11	4:AD:146:ILE:HD13	1.69	0.74
26:BA:568:U:O4	61:BA:4141:HOH:O	2.05	0.74
36:DP:96:THR:H	36:DP:99:LEU:HD21	1.53	0.74
1:AA:911:U:OP2	12:AL:97:ARG:NH1	2.21	0.73
3:AC:15:THR:HG21	3:AC:181:ASN:HA	1.69	0.73
25:CY:62:C:H2'	25:CY:63:G:C8	2.23	0.73
49:D2:22:GLU:OE2	49:D2:68:ARG:NH2	2.21	0.73
1:AA:1505:G:O2'	22:AV:13:A:O2'	2.05	0.73
26:BA:1602:U:O4	61:BA:4228:HOH:O	2.06	0.73
26:BA:2187:G:O2'	26:BA:2188:C:OP1	2.07	0.73
1:CA:1291:G:H4'	9:CI:39:GLY:HA3	1.68	0.73
25:CY:31:A:C6	25:CY:39:PSU:O2	2.41	0.73
26:DA:2121:G:H1	26:DA:2177:C:H42	0.80	0.73
29:DE:77:ILE:HD13	29:DE:195:LEU:HD13	1.70	0.73
51:D4:40:HIS:O	51:D4:44:THR:N	2.17	0.73
51:D4:40:HIS:HB3	51:D4:43:TYR:HB2	1.71	0.73
51:B4:53:GLU:C	51:B4:55:ARG:H	1.92	0.73
5:CE:80:ILE:HG22	5:CE:91:LEU:HB2	1.71	0.73
27:DB:20:C:N4	27:DB:63:G:O6	2.19	0.73
26:DA:1959:G:N7	61:DA:4503:HOH:O	2.21	0.73
26:DA:2815:C:H5'	52:D5:29:THR:HG21	1.71	0.73
1:CA:742:G:OP2	15:CO:35:ARG:NH2	2.21	0.73
26:DA:1352:U:OP2	61:DA:3767:HOH:O	2.06	0.73
4:CD:187:ARG:NH2	4:CD:193:ASP:OD2	2.22	0.73
25:CY:18:G:N2	25:CY:55:PSU:N3	2.37	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:972:C:O2'	10:AJ:55:LYS:O	2.05	0.73
1:CA:1348:U:H4'	9:CI:120:ARG:HD2	1.71	0.73
11:CK:20:TYR:HB2	11:CK:31:THR:HG22	1.69	0.73
26:DA:11:G:N7	61:DA:4280:HOH:O	2.20	0.73
27:DB:24:G:N2	27:DB:27:C:N3	2.32	0.73
4:AD:15:GLU:HG2	4:AD:63:LYS:HB3	1.71	0.73
51:B4:59:PHE:HD1	51:B4:59:PHE:H	1.35	0.73
3:CC:43:LEU:HD21	3:CC:91:LEU:HD13	1.69	0.73
23:AW:52:G:H4'	37:BQ:56:ARG:HH22	1.54	0.72
25:AY:26:A:N6	25:AY:44:G:H1	1.85	0.72
1:CA:390:C:O3'	16:CP:28:ARG:NH2	2.22	0.72
12:CL:24:VAL:HG13	12:CL:98:TYR:HE1	1.53	0.72
25:CY:36:A:H2'	25:CY:37:MIA:O4'	1.89	0.72
26:DA:2562:U:H1'	35:DO:23:ARG:HH11	1.53	0.72
31:DG:136:ARG:HD2	31:DG:137:GLU:HG3	1.70	0.72
36:BP:94:GLU:OE2	36:BP:124:LYS:NZ	2.22	0.72
26:DA:741:G:OP2	61:DA:4224:HOH:O	2.05	0.72
1:AA:1348:U:H4'	9:AI:120:ARG:HD2	1.72	0.72
45:BY:92:ASN:HB3	45:BY:94:LYS:H	1.52	0.72
25:CY:31:A:N1	25:CY:39:PSU:C2	2.57	0.72
26:BA:1507:A:O2'	26:BA:1508:A:O4'	2.06	0.72
1:CA:976:G:H5'	1:CA:1358:U:O2'	1.89	0.72
26:DA:1449:A:O2'	26:DA:1529:G:N2	2.22	0.72
36:DP:126:VAL:HG12	36:DP:148:LEU:HD22	1.71	0.72
42:DV:6:LYS:HB2	42:DV:38:LEU:HD21	1.69	0.72
1:AA:266:G:H5''	1:AA:268:C:H41	1.53	0.72
25:AY:56:C:H2'	25:AY:57:G:O4'	1.88	0.72
25:AY:76:A:N6	26:BA:2422:A:O4'	2.22	0.72
26:BA:1019:U:H3	26:BA:1142(A):A:H62	1.35	0.72
26:BA:2810:A:N6	26:BA:2891:G:O2'	2.21	0.72
1:CA:1055:A:N7	1:CA:1200:C:N4	2.37	0.72
25:CY:26:A:N1	25:CY:44:G:O6	2.23	0.72
26:DA:2683:C:O2	35:DO:70:LYS:NZ	2.23	0.72
1:AA:347:G:O2'	1:AA:348:G:OP1	2.08	0.72
1:AA:1183:A:O2'	1:AA:1184:G:OP1	2.06	0.72
26:BA:739:G:OP1	61:BA:5196:HOH:O	2.06	0.72
1:CA:324:G:N7	61:CA:4089:HOH:O	2.23	0.72
25:CY:5:G:H1	25:CY:68:C:H42	1.36	0.72
25:AY:62:C:H2'	25:AY:63:G:H8	1.55	0.72
47:B0:10:THR:HG22	47:B0:12:ASN:H	1.54	0.72
5:CE:102:ALA:O	5:CE:107:ARG:NH1	2.22	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:2166:G:H3'	26:DA:2167:U:H5''	1.70	0.72
1:CA:977:A:N6	1:CA:1224:G:OP1	2.21	0.72
1:CA:1009:G:N2	1:CA:1021:G:H1'	2.04	0.72
2:AB:16:HIS:CD2	2:AB:17:PHE:H	2.07	0.72
9:AI:128:ARG:NH2	24:AX:33:U:OP2	2.23	0.72
26:BA:1714:G:H1	26:BA:1745(A):C:H42	1.38	0.72
9:CI:53:VAL:O	9:CI:55:ALA:N	2.22	0.72
25:CY:71:G:H4'	26:DA:1851:U:H4'	1.71	0.72
26:DA:1670:C:OP1	61:DA:3752:HOH:O	2.06	0.72
28:DD:28:GLU:OE1	61:DD:416:HOH:O	2.06	0.72
1:AA:1445:C:O2	1:AA:1457:G:N2	2.20	0.72
13:CM:58:GLU:O	13:CM:62:ASN:ND2	2.14	0.72
26:DA:1604:C:OP2	61:DA:4546:HOH:O	2.08	0.72
1:AA:1442:G:O2'	1:AA:1442(A):G:OP1	2.07	0.71
2:AB:185:ILE:HG22	2:AB:199:TYR:HB2	1.70	0.71
1:CA:1162:C:N3	1:CA:1174:G:N2	2.34	0.71
48:B1:86:SER:OG	48:B1:89:GLU:OE1	2.07	0.71
26:DA:2134:A:N3	26:DA:2159:G:O2'	2.21	0.71
1:AA:1086:U:H3	1:AA:1099:G:H22	1.37	0.71
26:BA:957:A:H5'	37:BQ:76:LYS:HG3	1.72	0.71
26:DA:1890:A:OP2	61:DA:4472:HOH:O	2.08	0.71
25:CY:15:G:N2	25:CY:48:C:N4	2.38	0.71
3:AC:6:HIS:HD2	3:AC:8:ILE:H	1.37	0.71
10:AJ:37:PRO:HA	10:AJ:72:VAL:HG12	1.73	0.71
17:AQ:3:LYS:HD2	17:AQ:60:ILE:HD11	1.71	0.71
25:AY:25:C:O2'	25:AY:26:A:O5'	2.09	0.71
1:CA:1054:C:C4	23:CW:34:G:H1'	2.25	0.71
10:CJ:5:ARG:N	61:CJ:5101:HOH:O	2.22	0.71
23:CW:29:G:H1	23:CW:41:C:N4	1.87	0.71
26:DA:370:G:N7	61:DA:3786:HOH:O	2.23	0.71
46:DZ:144:LEU:HD11	46:DZ:172:ALA:HB1	1.72	0.71
26:BA:528:A:H2'	26:BA:529:A:H5''	1.72	0.71
36:BP:116:GLY:O	36:BP:137:LYS:NZ	2.22	0.71
44:BX:53:LYS:HB3	44:BX:82:GLN:HB3	1.73	0.71
2:AB:77:ALA:HB2	2:AB:211:ILE:HD13	1.72	0.71
26:BA:2124:G:H1	26:BA:2174:C:H42	1.37	0.71
1:CA:406:G:H5'	4:CD:5:ILE:HD11	1.73	0.71
26:BA:2130:U:H4'	26:BA:2133:G:H4'	1.72	0.71
17:CQ:66:SER:O	17:CQ:70:ARG:NH1	2.24	0.71
23:CW:27:G:H1	23:CW:43:C:H42	1.37	0.71
5:AE:110:LEU:HD13	5:AE:118:ILE:HG21	1.73	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:155:LEU:HD21	2:CB:159:PRO:HG3	1.71	0.71
12:CL:24:VAL:HG13	12:CL:98:TYR:CE1	2.24	0.71
61:DA:4209:HOH:O	29:DE:135:HIS:NE2	2.24	0.71
30:DF:33:LEU:HD13	30:DF:112:MET:HE2	1.72	0.71
46:DZ:92:SER:O	46:DZ:130:PRO:HG2	1.91	0.71
9:AI:46:ALA:HB2	9:AI:74:ILE:HG23	1.72	0.70
26:BA:1022:G:H22	26:BA:1142(A):A:H2	1.39	0.70
26:BA:1815:A:OP2	28:BD:54:ARG:NH2	2.22	0.70
40:BT:95:ARG:HG2	40:BT:95:ARG:HH11	1.54	0.70
26:DA:643:A:N1	26:DA:2369:A:O2'	2.22	0.70
26:DA:731:C:OP1	61:DA:4348:HOH:O	2.08	0.70
31:DG:63:ILE:HA	31:DG:143:GLU:HG3	1.72	0.70
46:DZ:145:GLU:H	46:DZ:148:ASP:HB2	1.57	0.70
1:AA:972:C:OP1	61:AA:4173:HOH:O	2.09	0.70
26:BA:2239:G:OP2	61:BA:4335:HOH:O	2.08	0.70
30:BF:185:ASP:HA	30:BF:188:ARG:HD3	1.70	0.70
40:BT:16:ARG:NH2	40:BT:83:ILE:O	2.24	0.70
1:CA:986:A:O2'	19:CS:55:LYS:O	2.08	0.70
38:BR:67:LEU:HD13	38:BR:76:VAL:HG21	1.72	0.70
26:DA:1637:A:OP2	61:DA:4569:HOH:O	2.09	0.70
1:AA:406:G:H5'	4:AD:5:ILE:HD11	1.73	0.70
1:AA:1492:A:O2'	1:AA:1493:A:O5'	2.08	0.70
26:BA:1310:G:OP2	54:B7:9:ARG:NH1	2.25	0.70
1:CA:771:G:N7	61:CA:4042:HOH:O	2.24	0.70
46:DZ:119:GLU:O	46:DZ:122:ARG:NH1	2.24	0.70
12:AL:70:ILE:HG12	12:AL:100:ILE:HD12	1.74	0.70
23:AW:6:G:H1	23:AW:67:C:H42	1.32	0.70
1:CA:1256:A:H61	1:CA:1278:U:H1'	1.56	0.70
10:CJ:52:GLY:O	14:CN:41:ARG:NH2	2.21	0.70
1:CA:1128:C:H1'	1:CA:1147:C:H42	1.56	0.70
2:CB:87:ARG:NH2	2:CB:220:ASP:OD1	2.24	0.70
25:CY:51:U:O2	25:CY:63:G:N2	2.23	0.70
26:BA:2102:U:O2	26:BA:2187:G:N2	2.25	0.70
26:BA:2108:C:H2'	26:BA:2109:U:H6	1.57	0.70
31:BG:41:GLN:NE2	31:BG:154:GLY:O	2.24	0.70
1:AA:134:A:H61	16:AP:25:ARG:HH12	1.39	0.70
26:BA:2102:U:H3	26:BA:2187:G:H1	1.40	0.70
26:DA:2820:A:OP2	38:DR:2:ARG:NH2	2.24	0.70
1:AA:1027:C:O2	1:AA:1034:G:C2	2.45	0.70
1:AA:1076:C:H6	1:AA:1076:C:H5'	1.57	0.70
23:AW:47:U:H6	23:AW:47:U:H5'	1.57	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:729:G:OP2	28:BD:13:ARG:NH1	2.24	0.70
7:CG:113:GLU:HG2	7:CG:119:ARG:HG2	1.73	0.70
26:DA:2138:C:N4	26:DA:2153:G:N1	2.27	0.70
18:AR:26:LEU:HD21	18:AR:39:VAL:HG13	1.74	0.69
26:DA:987:G:O2'	26:DA:1000:A:N3	2.23	0.69
1:AA:96:U:HO2'	1:AA:97:G:H8	1.40	0.69
1:AA:656:C:O2'	15:AO:28:GLN:NE2	2.25	0.69
26:BA:1250:G:OP2	36:BP:21:ARG:NH1	2.26	0.69
6:CF:81:ILE:HD11	28:DD:125:ILE:HB	1.73	0.69
48:D1:59:THR:O	48:D1:91:LYS:NZ	2.24	0.69
26:BA:2285:C:OP2	53:B6:6:ARG:NH1	2.25	0.69
36:BP:59:LEU:HD21	55:B8:10:ALA:HA	1.75	0.69
26:DA:2504:U:OP2	61:DA:4169:HOH:O	2.11	0.69
44:DX:8:ILE:O	49:D2:36:ARG:NH2	2.25	0.69
44:DX:53:LYS:HB3	44:DX:82:GLN:HB3	1.74	0.69
1:AA:1414:U:H3	1:AA:1486:G:H1	1.40	0.69
28:BD:147:LEU:HD13	28:BD:155:LEU:HD21	1.73	0.69
1:CA:76:C:N3	1:CA:93:G:N2	2.34	0.69
26:DA:1011:G:OP2	41:DU:66:ASN:ND2	2.24	0.69
54:B7:24:THR:HG22	54:B7:27:GLY:H	1.57	0.69
1:CA:664:G:OP1	18:CR:64:ARG:NH2	2.26	0.69
26:DA:993:G:OP1	41:DU:50:ARG:NH2	2.25	0.69
35:DO:80:ASP:OD1	40:DT:64:ARG:NH2	2.25	0.69
28:BD:148:GLU:HB2	28:BD:151:LYS:HD2	1.75	0.69
4:AD:23:GLY:HA3	4:AD:112:VAL:HG12	1.74	0.69
1:CA:200:G:H1	1:CA:217:C:H42	1.40	0.69
3:CC:18:TRP:O	3:CC:21:ARG:NH1	2.23	0.69
26:DA:2323:G:O6	26:DA:2332:U:N3	2.18	0.69
30:DF:184:TYR:CE2	30:DF:188:ARG:HD2	2.28	0.69
1:AA:78:G:N1	1:AA:91:C:N4	2.40	0.69
2:AB:16:HIS:HB3	2:AB:210:SER:HB2	1.73	0.69
27:BB:106:G:H5'	46:BZ:31:ARG:HG2	1.75	0.69
10:CJ:49:VAL:HG23	14:CN:41:ARG:HD2	1.75	0.69
26:DA:2060:A:N3	61:DA:4112:HOH:O	2.25	0.69
26:DA:2206:G:H3'	26:DA:2207:G:H8	1.57	0.69
39:DS:93:LYS:HD2	39:DS:95:HIS:HB2	1.74	0.69
1:AA:427:U:OP1	4:AD:13:ARG:NH2	2.26	0.69
26:BA:527:C:OP1	61:BA:4682:HOH:O	2.11	0.69
37:BQ:21:THR:HG21	37:BQ:101:ARG:HD3	1.75	0.69
46:BZ:145:GLU:O	46:BZ:148:ASP:N	2.26	0.69
1:CA:1119:C:H2'	1:CA:1120:G:C8	2.28	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:20:GLU:HG2	2:AB:191:ASP:HB3	1.74	0.68
26:BA:1352:U:OP1	61:BA:4087:HOH:O	2.11	0.68
1:CA:560:U:OP2	61:CA:4161:HOH:O	2.11	0.68
26:DA:882:G:N2	26:DA:894:C:O2	2.18	0.68
26:BA:1140:C:O3'	34:BN:25:ARG:NH1	2.27	0.68
1:CA:1314:C:OP2	19:CS:4:SER:OG	2.08	0.68
31:DG:161:THR:HG22	31:DG:163:ALA:H	1.59	0.68
5:CE:20:GLN:NE2	5:CE:21:ALA:O	2.26	0.68
31:DG:41:GLN:HB3	31:DG:43:LEU:HD22	1.76	0.68
1:CA:1129:C:OP1	9:CI:16:ARG:NH1	2.26	0.68
26:DA:1223:G:N2	26:DA:1226:A:OP2	2.23	0.68
29:DE:72:VAL:HG13	29:DE:73:GLU:O	1.93	0.68
1:AA:1182:G:H4'	1:AA:1183:A:H5'	1.74	0.68
26:BA:2612:C:OP2	52:B5:2:ALA:N	2.27	0.68
1:CA:1004:A:H8	1:CA:1005:A:H4'	1.58	0.68
5:CE:7:GLU:OE1	5:CE:37:ARG:NH2	2.26	0.68
26:DA:89:G:H3'	26:DA:90:U:H5''	1.76	0.68
26:DA:880:G:H22	26:DA:898:C:H1'	1.59	0.68
1:AA:538:G:H5''	12:AL:114:LYS:HB2	1.73	0.68
26:BA:1843:C:H5'	28:BD:253:GLN:NE2	2.09	0.68
26:DA:2127:G:O6	26:DA:2161:C:N3	2.26	0.68
26:DA:2139:C:N4	26:DA:2152:G:N1	2.16	0.68
26:BA:1045:A:OP1	26:BA:1045:A:H4'	1.92	0.68
10:CJ:17:ASP:OD1	10:CJ:70:ARG:NH1	2.26	0.68
16:CP:22:THR:HA	16:CP:33:ILE:HG13	1.76	0.68
24:CX:8:4SU:O5'	24:CX:8:4SU:H6	1.93	0.68
26:DA:194:G:N7	61:DA:4296:HOH:O	2.26	0.68
33:DI:4:ILE:HG12	33:DI:18:VAL:HG22	1.76	0.68
43:DW:18:ARG:NH1	43:DW:76:VAL:O	2.27	0.68
3:AC:3:ASN:N	3:AC:3:ASN:OD1	2.26	0.68
26:BA:2110:G:O2'	26:BA:2120:G:OP2	2.12	0.68
26:DA:2165:G:H22	26:DA:2172:U:H5	1.40	0.68
1:AA:235:C:H5'	17:AQ:70:ARG:HG2	1.76	0.68
1:CA:952:U:O2'	1:CA:965:A:N6	2.27	0.68
1:CA:1442:G:O2'	1:CA:1442(A):G:OP1	2.11	0.68
15:CO:4:THR:OG1	15:CO:7:GLU:OE1	2.10	0.68
26:DA:1647:G:OP1	61:DA:4215:HOH:O	2.12	0.68
30:DF:157:VAL:HB	30:DF:194:MET:HG2	1.76	0.68
1:AA:1027:C:N3	1:AA:1034:G:C6	2.63	0.67
23:AW:66:U:H2'	23:AW:67:C:C6	2.29	0.67
26:BA:271(L):U:OP1	33:BI:50:ARG:NH1	2.26	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:446:G:H1	1:CA:488:C:H42	1.39	0.67
26:DA:857:C:OP2	47:D0:77:ARG:NH2	2.26	0.67
26:BA:2312:U:H5'	31:BG:88:ILE:HD11	1.75	0.67
51:B4:55:ARG:HB2	51:B4:56:VAL:O	1.94	0.67
1:CA:1277:C:HO2'	1:CA:1279:A:H8	1.42	0.67
15:CO:22:THR:OG1	15:CO:23:GLY:N	2.24	0.67
25:CY:25:C:H2'	25:CY:26:A:C8	2.30	0.67
1:CA:1026:G:H5'	1:CA:1027:C:O5'	1.94	0.67
1:CA:1133:G:H1	1:CA:1141:C:N4	1.92	0.67
2:AB:91:PRO:HG2	2:AB:155:LEU:HD23	1.75	0.67
30:BF:53:THR:HG23	30:BF:55:GLY:H	1.58	0.67
2:CB:88:ALA:HB2	2:CB:219:VAL:HG13	1.76	0.67
26:DA:1449:A:HO2'	26:DA:1529:G:N2	1.92	0.67
49:D2:29:LYS:HE2	49:D2:57:ILE:HG21	1.74	0.67
1:AA:324:G:N7	61:AA:4166:HOH:O	2.27	0.67
5:AE:95:ALA:HB1	5:AE:96:PRO:HD2	1.77	0.67
25:AY:66:U:H2'	25:AY:67:C:C6	2.29	0.67
26:BA:692:C:O2'	28:BD:38:LYS:NZ	2.26	0.67
1:AA:1075:C:OP1	2:AB:179:LYS:NZ	2.24	0.67
5:AE:100:VAL:O	5:AE:107:ARG:NH2	2.27	0.67
26:BA:1783:A:N7	61:BA:5061:HOH:O	2.26	0.67
46:BZ:11:GLU:O	46:BZ:36:LYS:NZ	2.23	0.67
23:CW:43:C:H2'	23:CW:44:G:C8	2.29	0.67
51:D4:24:THR:OG1	51:D4:25:TYR:N	2.24	0.67
26:BA:662:G:H5''	36:BP:16:ARG:HG2	1.75	0.67
1:AA:1103:C:OP1	2:AB:96:ARG:NH2	2.28	0.67
24:AX:5:G:N2	24:AX:68:C:N3	2.40	0.67
25:AY:22:G:H2'	25:AY:23:A:C8	2.29	0.67
26:BA:994:C:OP1	41:BU:53:ARG:NH2	2.28	0.67
1:CA:999:C:N3	1:CA:1042:G:N2	2.38	0.67
10:CJ:35:SER:HB3	10:CJ:73:ASP:HB2	1.77	0.67
26:DA:307:G:N1	26:DA:310:A:OP2	2.26	0.67
26:DA:2886:G:N7	61:DA:4141:HOH:O	2.26	0.67
28:DD:28:GLU:OE2	61:DD:417:HOH:O	2.13	0.67
31:DG:41:GLN:NE2	31:DG:154:GLY:O	2.27	0.67
1:CA:1492:A:O2'	1:CA:1493:A:O5'	2.13	0.67
13:CM:80:ARG:HH22	19:CS:69:HIS:CE1	2.12	0.67
26:BA:2759:G:N7	61:BA:4124:HOH:O	2.28	0.67
29:BE:149:ARG:O	61:BE:406:HOH:O	2.12	0.67
1:CA:316:G:OP2	1:CA:351:G:O2'	2.12	0.67
26:DA:600:G:O6	61:DA:4398:HOH:O	2.11	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:2639:A:OP2	61:DA:3839:HOH:O	2.12	0.67
30:DF:178:PRO:HB3	30:DF:198:ALA:HA	1.77	0.67
1:AA:1238:A:OP2	61:AA:4160:HOH:O	2.12	0.66
1:CA:664:G:P	18:CR:64:ARG:HH22	2.18	0.66
1:CA:1125:U:O2'	1:CA:1126:U:H2'	1.95	0.66
3:CC:34:LEU:HG	3:CC:38:ARG:HH12	1.59	0.66
9:CI:46:ALA:HB2	9:CI:74:ILE:HG23	1.77	0.66
23:CW:51:U:H3	23:CW:63:G:H1	1.41	0.66
26:DA:692:C:O2'	28:DD:38:LYS:NZ	2.28	0.66
26:DA:1993:U:OP2	61:DA:4714:HOH:O	2.13	0.66
1:AA:437:U:H5'	4:AD:155:LEU:HD21	1.75	0.66
26:BA:568:U:O2'	61:BA:5168:HOH:O	2.13	0.66
26:BA:1238:G:OP2	61:BA:5012:HOH:O	2.14	0.66
26:DA:2499:C:OP2	61:DA:4653:HOH:O	2.12	0.66
26:DA:2805:G:H2'	26:DA:2807:G:C8	2.30	0.66
13:CM:3:ARG:NH2	13:CM:9:ILE:O	2.28	0.66
26:DA:1019:U:H3	26:DA:1142(A):A:H62	1.41	0.66
1:AA:410:G:OP1	4:AD:30:LYS:NZ	2.23	0.66
25:AY:9:A:H5''	25:AY:46:7MG:HN22	1.60	0.66
26:BA:84:A:H5'	45:BY:8:LYS:HG2	1.76	0.66
37:BQ:111:GLU:OE1	37:BQ:133:ARG:NH2	2.26	0.66
3:CC:6:HIS:HD2	3:CC:8:ILE:H	1.42	0.66
26:DA:20:C:OP1	41:DU:22:LYS:NZ	2.25	0.66
26:DA:2148:G:H2'	26:DA:2149:G:H8	1.60	0.66
24:AX:8:4SU:O2	24:AX:21:A:H2	1.79	0.66
25:AY:35:A:H2'	25:AY:36:A:C8	2.30	0.66
26:BA:278:A:H2'	26:BA:279:C:C6	2.30	0.66
25:CY:2:C:H2'	25:CY:3:C:H6	1.61	0.66
26:DA:307:G:H21	26:DA:330:A:H62	1.44	0.66
26:DA:770:G:OP2	61:DA:4267:HOH:O	2.12	0.66
26:DA:2552:U:H2'	26:DA:2554:U:OP2	1.95	0.66
36:DP:39:LYS:HB2	36:DP:45:LEU:HG	1.77	0.66
26:BA:250:G:OP2	55:B8:13:ARG:NH2	2.28	0.66
30:BF:53:THR:HG22	30:BF:56:GLU:HG3	1.78	0.66
1:CA:972:C:OP1	61:CA:4167:HOH:O	2.13	0.66
13:CM:6:GLY:H	13:CM:67:GLU:HG3	1.61	0.66
32:DH:46:GLU:HB2	32:DH:49:VAL:HG12	1.76	0.66
41:DU:83:LEU:HD12	41:DU:88:ILE:HD12	1.78	0.66
1:AA:1278:U:H5'	1:AA:1279:A:O4'	1.96	0.66
9:AI:71:SER:HA	9:AI:74:ILE:HD12	1.78	0.66
10:AJ:61:GLU:OE2	14:AN:45:ARG:NE	2.29	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:125:PRO:O	2:CB:127:ILE:N	2.27	0.66
18:CR:52:PRO:HB2	18:CR:54:ARG:HG2	1.77	0.66
1:AA:165:C:H2'	1:AA:166:G:C8	2.31	0.66
1:AA:567:G:N3	61:AA:4131:HOH:O	2.28	0.66
25:AY:9:A:O2'	25:AY:10:G:N7	2.28	0.66
26:BA:624:C:O2'	26:BA:657:U:OP1	2.12	0.66
1:CA:1352:C:OP1	21:CU:3:LYS:NZ	2.19	0.66
2:CB:122:PHE:HD1	2:CB:123:ALA:H	1.43	0.66
52:D5:16:ARG:NH1	52:D5:17:ASP:OD1	2.29	0.66
5:AE:50:GLU:HB2	5:AE:53:LEU:HD13	1.77	0.66
20:AT:43:LEU:HD13	20:AT:51:GLU:HB3	1.78	0.66
40:DT:108:ARG:HG2	40:DT:111:ARG:HH12	1.60	0.66
6:AF:97:PHE:N	18:AR:30:ASP:OD1	2.29	0.66
26:DA:2171:A:N3	26:DA:2172:U:N3	2.44	0.66
27:DB:4:C:H42	27:DB:117:G:H1	1.45	0.66
2:AB:16:HIS:CD2	2:AB:17:PHE:N	2.64	0.65
7:AG:111:ARG:NH1	7:AG:113:GLU:OE2	2.27	0.65
3:CC:137:ALA:HA	3:CC:140:ARG:HH12	1.61	0.65
10:CJ:78:ASN:O	10:CJ:80:LYS:N	2.28	0.65
25:CY:28:G:N2	25:CY:43:C:H1'	2.10	0.65
26:DA:740:U:OP2	61:DA:4223:HOH:O	2.13	0.65
4:AD:140:VAL:HG11	4:AD:146:ILE:HD11	1.78	0.65
5:AE:122:GLU:O	5:AE:126:ARG:NH1	2.29	0.65
26:BA:84:A:H5''	45:BY:8:LYS:HE3	1.77	0.65
1:CA:673:G:H2'	1:CA:674:G:C8	2.31	0.65
3:CC:15:THR:HG21	3:CC:181:ASN:HA	1.78	0.65
26:DA:2336:A:H61	47:D0:43:THR:HG22	1.60	0.65
31:DG:15:VAL:HG22	31:DG:175:LEU:HB3	1.78	0.65
51:D4:62:ARG:O	51:D4:64:GLY:N	2.29	0.65
9:AI:53:VAL:HG11	9:AI:92:TYR:CZ	2.31	0.65
20:AT:9:ASN:O	20:AT:10:LEU:HB2	1.95	0.65
46:BZ:108:PRO:HB3	46:BZ:117:LEU:HD13	1.79	0.65
1:CA:460:G:O6	1:CA:470:C:H5''	1.96	0.65
2:CB:178:ARG:HH22	8:CH:68:ARG:HH22	1.43	0.65
26:DA:1140:C:O3'	34:DN:25:ARG:NH1	2.29	0.65
26:DA:2492:U:OP1	61:DA:4150:HOH:O	2.15	0.65
26:BA:744:G:OP1	61:BA:4704:HOH:O	2.14	0.65
37:BQ:110:THR:HG23	37:BQ:113:GLN:HB2	1.78	0.65
1:CA:974:A:OP2	14:CN:41:ARG:NH1	2.29	0.65
1:CA:1015:A:N3	1:CA:1218:C:O2'	2.24	0.65
26:DA:422:A:OP2	61:DA:3787:HOH:O	2.15	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:1246:A:OP1	30:DF:38:ARG:NH1	2.30	0.65
26:DA:2260:C:OP1	61:DA:4688:HOH:O	2.14	0.65
26:BA:1267:U:OP1	61:BA:5106:HOH:O	2.14	0.65
40:BT:118:ARG:HH11	40:BT:118:ARG:HG3	1.60	0.65
1:CA:396:G:O2'	1:CA:398:C:OP1	2.05	0.65
29:DE:72:VAL:HG22	29:DE:73:GLU:HG3	1.78	0.65
10:AJ:5:ARG:NE	10:AJ:73:ASP:OD1	2.30	0.65
27:BB:66:A:H61	27:BB:108:U:H2'	1.62	0.65
26:DA:2404:C:O3'	36:DP:77:ARG:NH2	2.26	0.65
31:DG:36:LYS:HG2	31:DG:160:VAL:HB	1.78	0.65
51:B4:63:TYR:N	51:B4:64:GLY:HA2	2.12	0.65
1:CA:1402:C:N4	22:CV:18:G:OP2	2.28	0.65
27:DB:5:C:H42	27:DB:116:G:H1	1.43	0.65
1:AA:1028:C:H42	1:AA:1033:G:H1	1.45	0.65
2:AB:69:LEU:HB3	2:AB:162:ILE:HG22	1.77	0.65
8:CH:29:SER:HB2	8:CH:32:LYS:HG3	1.78	0.65
30:DF:101:LEU:O	30:DF:106:ARG:NH1	2.29	0.65
30:DF:140:LEU:HD21	30:DF:170:LEU:HD11	1.79	0.65
36:DP:42:SER:O	61:DP:304:HOH:O	2.14	0.65
26:BA:1314:C:OP1	61:BA:4653:HOH:O	2.14	0.65
26:BA:2079:U:OP1	48:B1:21:ARG:NH2	2.29	0.65
29:BE:105:THR:OG1	29:BE:199:ARG:NH2	2.29	0.65
1:CA:1011:G:N2	1:CA:1019:C:H1'	2.12	0.65
1:CA:1132:C:H2'	1:CA:1133:G:H8	1.61	0.65
8:CH:45:ILE:HD13	8:CH:61:VAL:HG13	1.79	0.65
26:DA:1642:G:N7	61:DA:4099:HOH:O	2.28	0.65
26:DA:2355:C:H4'	47:D0:24:LYS:HD3	1.79	0.65
1:AA:1502:A:H2	1:AA:1505:G:N1	1.91	0.64
4:AD:64:LEU:HA	4:AD:67:ILE:HD12	1.77	0.64
1:AA:166:G:H2'	1:AA:167:G:C8	2.32	0.64
26:BA:568:U:H5'	26:BA:945:A:N1	2.12	0.64
26:BA:2287:A:N6	26:BA:2344:U:H3	1.93	0.64
2:AB:16:HIS:HE1	2:AB:214:ILE:HD11	1.63	0.64
26:BA:1113:U:H2'	26:BA:1114:G:H8	1.62	0.64
26:BA:1300:U:H4'	26:BA:1301:A:C5'	2.27	0.64
26:BA:2608:G:N7	61:BA:4411:HOH:O	2.29	0.64
33:BI:130:TYR:HB3	33:BI:138:ILE:HB	1.78	0.64
1:CA:35:G:O2'	12:CL:118:SER:O	2.15	0.64
13:CM:37:THR:O	13:CM:55:ARG:NH1	2.29	0.64
26:DA:299:A:N1	26:DA:322:A:O2'	2.25	0.64
31:DG:80:PHE:O	31:DG:82:LEU:N	2.30	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AI:3:GLN:OE1	9:AI:20:ARG:NH2	2.27	0.64
26:BA:956:G:OP2	37:BQ:14:ARG:NH2	2.25	0.64
26:BA:1434:A:H61	26:BA:1558:A:H62	1.44	0.64
26:BA:2131:G:H5''	26:BA:2132:U:H3'	1.80	0.64
47:B0:27:GLU:HG3	47:B0:68:GLU:HA	1.80	0.64
1:CA:187:C:O2'	20:CT:89:ARG:NH2	2.28	0.64
1:CA:1024:G:C2'	1:CA:1025:U:H5''	2.27	0.64
13:CM:23:TYR:HB3	13:CM:67:GLU:HA	1.79	0.64
25:AY:19:G:N1	25:AY:56:C:N4	2.45	0.64
26:BA:607:U:OP1	30:BF:102:PRO:HA	1.98	0.64
26:BA:1557:C:OP2	26:BA:1558:A:O2'	2.10	0.64
30:BF:157:VAL:HB	30:BF:194:MET:HG2	1.79	0.64
1:CA:96:U:O2'	1:CA:97:G:H5'	1.97	0.64
1:CA:377:G:OP1	16:CP:3:LYS:HD2	1.98	0.64
12:CL:117:ARG:HB3	12:CL:122:THR:HB	1.80	0.64
20:CT:16:HIS:O	20:CT:19:SER:OG	2.13	0.64
26:DA:2624:G:N7	61:DA:4478:HOH:O	2.29	0.64
41:DU:76:TYR:OH	41:DU:92:ARG:NH1	2.30	0.64
4:AD:154:ASN:HA	4:AD:159:ARG:HH21	1.63	0.64
26:BA:887:A:O2'	26:BA:888:C:OP2	2.13	0.64
13:CM:107:ALA:HB3	13:CM:111:LYS:HD2	1.79	0.64
25:CY:12:U:O4	25:CY:23:A:N1	2.31	0.64
1:CA:1118:C:C2	1:CA:1119:C:H5	2.16	0.64
1:CA:1348:U:H2'	1:CA:1349:A:H8	1.63	0.64
37:DQ:18:LYS:O	37:DQ:98:LYS:NZ	2.26	0.64
39:DS:84:GLN:H	39:DS:111:GLU:HB2	1.62	0.64
1:CA:1032:G:H2'	1:CA:1033:G:C8	2.33	0.64
22:CV:16:A:H61	24:CX:36:U:H3	1.46	0.64
31:DG:5:VAL:HG22	31:DG:8:LYS:H	1.62	0.64
2:AB:83:MET:HB3	2:AB:234:PRO:HG2	1.80	0.64
26:BA:187:G:OP2	61:BA:4468:HOH:O	2.14	0.64
26:BA:1047:G:H2'	26:BA:1110:G:H1	1.62	0.64
26:DA:2161:C:H2'	26:DA:2162:G:C8	2.33	0.64
37:DQ:85:LYS:HG2	47:D0:7:LEU:HB3	1.80	0.64
28:BD:69:ARG:NH2	28:BD:128:GLY:O	2.30	0.64
35:BO:37:ASP:OD1	35:BO:109:LYS:NZ	2.30	0.64
26:DA:568:U:H5'	26:DA:945:A:N1	2.13	0.64
40:DT:95:ARG:HG2	40:DT:95:ARG:HH11	1.62	0.64
1:AA:11:G:O2'	1:AA:506:G:N2	2.31	0.63
25:AY:26:A:N6	25:AY:44:G:N1	2.43	0.63
32:BH:149:ARG:NH1	32:BH:167:GLU:OE2	2.32	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:B6:6:ARG:NH1	53:B6:26:ASN:HB2	2.12	0.63
1:CA:1318:A:OP1	19:CS:3:ARG:NH2	2.31	0.63
26:DA:918:A:N3	27:DB:80:U:O2'	2.28	0.63
31:DG:33:ARG:NH2	31:DG:162:THR:HG21	2.13	0.63
1:AA:922:G:H4'	5:AE:20:GLN:HA	1.79	0.63
11:AK:98:LEU:O	11:AK:101:SER:OG	2.16	0.63
26:BA:526:A:OP1	61:BA:4682:HOH:O	2.15	0.63
26:BA:700:G:O2'	26:BA:1632:A:N3	2.29	0.63
26:BA:2328:A:H2'	26:BA:2329:G:C8	2.33	0.63
1:CA:148:G:H2'	1:CA:149:A:H8	1.63	0.63
1:CA:1157:A:H4'	1:CA:1158:C:O5'	1.98	0.63
26:DA:2893:G:H5'	26:DA:2893:G:H8	1.63	0.63
48:D1:51:VAL:HG11	48:D1:74:VAL:HG21	1.80	0.63
2:AB:178:ARG:HG2	8:AH:72:PRO:HA	1.78	0.63
2:AB:178:ARG:HH21	8:AH:74:PRO:HB3	1.62	0.63
11:AK:79:SER:HA	11:AK:104:GLN:HB2	1.80	0.63
26:BA:2632:A:HO2'	26:BA:2811:G:HO2'	1.43	0.63
27:BB:105:A:OP1	46:BZ:72:ARG:NH1	2.30	0.63
1:CA:683:G:O6	61:CA:4143:HOH:O	2.14	0.63
3:CC:12:LEU:HD23	3:CC:16:ARG:HB3	1.80	0.63
26:DA:248:G:OP1	61:DA:4415:HOH:O	2.16	0.63
26:DA:1022:G:H22	26:DA:1142(A):A:H2	1.42	0.63
1:AA:1157:A:H4'	1:AA:1158:C:O5'	1.98	0.63
12:AL:49:ASN:ND2	12:AL:92:ASP:OD2	2.25	0.63
26:BA:2022:U:OP1	61:BA:4666:HOH:O	2.15	0.63
55:B8:23:VAL:HG11	55:B8:47:LYS:HD3	1.80	0.63
1:CA:991:U:O2'	1:CA:992:U:O5'	2.14	0.63
26:DA:2143:C:H2'	26:DA:2144:U:O4'	1.98	0.63
1:AA:1030(D):A:H2'	1:AA:1031:G:O4'	1.99	0.63
25:AY:55:PSU:C2	25:AY:57:G:H5'	2.34	0.63
26:BA:625:G:O6	36:BP:107:LYS:NZ	2.31	0.63
1:CA:406:G:H21	4:CD:119:GLN:HE22	1.46	0.63
3:CC:152:ILE:HG23	3:CC:199:LYS:HB2	1.80	0.63
21:CU:5:ASP:O	21:CU:11:GLY:HA3	1.98	0.63
29:DE:111:ARG:HG3	29:DE:160:TYR:CD2	2.33	0.63
1:CA:266:G:H5''	1:CA:268:C:H41	1.64	0.63
12:CL:32:PHE:HB3	12:CL:84:LEU:HD11	1.81	0.63
26:DA:662:G:OP1	61:DA:4188:HOH:O	2.15	0.63
31:DG:113:ARG:NH1	31:DG:141:PHE:O	2.32	0.63
1:AA:557:G:OP1	61:AA:4076:HOH:O	2.16	0.63
55:B8:62:LEU:HB3	55:B8:65:GLU:HG3	1.80	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CC:125:GLU:HG3	3:CC:190:ARG:O	1.99	0.63
1:CA:1347:G:H5''	9:CI:107:ARG:HB3	1.81	0.63
26:DA:852:G:H2'	26:DA:853:G:H8	1.63	0.63
26:DA:2148:G:H2'	26:DA:2149:G:C8	2.34	0.63
26:DA:2537:U:H2'	26:DA:2538:C:C6	2.33	0.63
26:DA:2839:G:H5'	38:DR:46:GLY:HA2	1.79	0.63
1:AA:352:C:OP2	61:AA:4116:HOH:O	2.15	0.63
1:AA:1003:G:C2	1:AA:1004:A:H1'	2.34	0.63
2:AB:127:ILE:HD12	2:AB:130:ARG:HD3	1.80	0.63
5:AE:74:GLY:HA3	5:AE:116:THR:HG22	1.80	0.63
5:AE:92:LYS:HB3	5:AE:119:LEU:HB2	1.81	0.63
11:AK:99:GLN:HG2	11:AK:105:VAL:HG21	1.79	0.63
26:BA:1371:G:O6	61:BA:4345:HOH:O	2.12	0.63
1:CA:1256:A:N6	1:CA:1278:U:H1'	2.13	0.63
25:CY:27:G:O6	25:CY:43:C:N3	2.32	0.63
32:DH:159:GLU:HG3	32:DH:169:VAL:HG11	1.80	0.63
1:AA:346:G:C4	1:AA:347:G:H1'	2.33	0.62
1:AA:1047:G:H5''	14:AN:4:LYS:HD2	1.81	0.62
26:BA:1174:A:H4'	26:BA:1175:U:OP1	1.98	0.62
26:BA:1364:G:OP2	48:B1:3:LYS:HG3	1.99	0.62
28:BD:12:SER:HB3	28:BD:208:LYS:HB3	1.80	0.62
29:BE:121:ASN:ND2	61:BE:411:HOH:O	2.22	0.62
2:CB:18:GLY:HA2	2:CB:42:ILE:HG13	1.81	0.62
3:CC:22:TRP:CG	3:CC:59:ARG:HD2	2.34	0.62
25:CY:50:U:O2	25:CY:64:A:N1	2.32	0.62
26:DA:1803:A:O2'	28:DD:259:THR:HG21	1.98	0.62
26:DA:2183:C:H2'	26:DA:2184:G:H8	1.63	0.62
31:DG:113:ARG:NH1	31:DG:139:LEU:O	2.32	0.62
49:D2:65:ASN:OD1	49:D2:69:ARG:NH1	2.32	0.62
1:AA:157:G:H1	1:AA:164:U:H3	1.47	0.62
1:AA:1030(A):G:O2'	1:AA:1030(C):G:N7	2.27	0.62
33:BI:92:VAL:HG11	33:BI:144:VAL:HG11	1.82	0.62
46:BZ:117:LEU:HD21	46:BZ:144:LEU:HD13	1.80	0.62
1:CA:1029:C:N4	1:CA:1032:G:H1	1.96	0.62
1:CA:1076:C:H5'	1:CA:1076:C:H6	1.62	0.62
1:CA:1129:C:H2'	1:CA:1139:G:N7	2.13	0.62
13:CM:122:LYS:HD3	13:CM:123:ALA:H	1.64	0.62
26:DA:2273:A:H2'	26:DA:2274:A:C8	2.33	0.62
1:AA:1347:G:H5''	9:AI:107:ARG:HB3	1.81	0.62
26:BA:2689:U:H4'	26:BA:2690:C:H5'	1.82	0.62
38:BR:97:VAL:HG22	38:BR:114:VAL:HG13	1.82	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:473:G:H2'	1:CA:474:G:H8	1.62	0.62
2:CB:19:HIS:HB2	2:CB:204:ASN:HB2	1.80	0.62
15:CO:11:VAL:HG21	15:CO:34:LEU:HD22	1.81	0.62
23:CW:47:U:O2'	23:CW:48:C:OP1	2.16	0.62
1:AA:56:U:H2'	1:AA:57:G:C8	2.34	0.62
7:AG:37:ASN:ND2	9:AI:39:GLY:O	2.32	0.62
15:AO:22:THR:OG1	15:AO:23:GLY:N	2.31	0.62
26:BA:1143:A:OP1	34:BN:25:ARG:NH2	2.32	0.62
26:BA:2830:G:O6	61:BA:5189:HOH:O	2.13	0.62
26:DA:1842:G:O2'	28:DD:253:GLN:NE2	2.32	0.62
38:DR:97:VAL:HG22	38:DR:114:VAL:HG13	1.80	0.62
1:CA:983:A:N1	1:CA:1222:G:N2	2.47	0.62
1:CA:1054:C:N4	23:CW:34:G:H1'	2.14	0.62
1:CA:1244:C:H42	1:CA:1293:G:H1	1.47	0.62
26:DA:880:G:N2	26:DA:898:C:H1'	2.14	0.62
1:AA:202:U:O2'	1:AA:203:U:O5'	2.16	0.62
1:AA:277:C:H5''	17:AQ:68:ARG:NH2	2.15	0.62
25:AY:22:G:N7	25:AY:46:7MG:O6	2.32	0.62
3:CC:20:SER:HB2	3:CC:40:ARG:HH12	1.65	0.62
12:CL:60:LEU:N	12:CL:64:TYR:O	2.25	0.62
23:CW:19:G:N2	23:CW:56:C:N3	2.45	0.62
1:AA:406:G:OP2	61:AA:4123:HOH:O	2.15	0.62
3:AC:12:LEU:HD23	3:AC:16:ARG:HB3	1.81	0.62
26:BA:2893:G:O2'	26:BA:2894:G:OP2	2.14	0.62
4:CD:175:SER:HB3	4:CD:186:LEU:HD11	1.81	0.62
15:CO:5:LYS:H	15:CO:5:LYS:HD3	1.64	0.62
25:CY:9:A:O2'	25:CY:10:G:N7	2.32	0.62
27:DB:106:G:H5'	46:DZ:31:ARG:HG2	1.82	0.62
8:AH:121:ASP:OD1	8:AH:125:ARG:NH2	2.32	0.62
23:AW:56:C:H5	26:BA:897:C:O4'	1.83	0.62
26:BA:2572:A:N7	29:BE:144:ARG:HD2	2.15	0.62
34:BN:15:LEU:HD12	34:BN:137:LYS:HG2	1.82	0.62
1:CA:959:A:O2'	1:CA:984:C:O2'	2.17	0.62
1:CA:1067:A:N3	1:CA:1068:G:H1'	2.15	0.62
2:CB:50:GLU:HG3	2:CB:200:ILE:O	1.98	0.62
13:CM:4:ILE:HG23	13:CM:22:ILE:HD11	1.82	0.62
1:AA:92:C:H2'	1:AA:93:G:C8	2.35	0.62
1:CA:1151:A:O2'	1:CA:1152:A:H8	1.82	0.62
13:CM:121:LYS:NZ	13:CM:121:LYS:H	1.97	0.62
1:AA:1007:C:H2'	1:AA:1008:C:H5''	1.81	0.62
2:AB:231:GLU:HB3	2:AB:232:PRO:CD	2.30	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:AR:38:GLU:HA	18:AR:41:LYS:HD3	1.82	0.62
30:BF:101:LEU:O	30:BF:106:ARG:NH1	2.32	0.62
1:CA:1126:U:H3	10:CJ:40:LEU:HD11	1.65	0.62
26:DA:882:G:N1	26:DA:894:C:N3	2.46	0.62
26:DA:900:A:H2'	26:DA:901:A:H8	1.65	0.62
31:DG:179:PRO:HB2	51:D4:42:PHE:HE1	1.64	0.62
9:AI:53:VAL:HG11	9:AI:92:TYR:CE1	2.35	0.61
26:BA:732:C:OP2	61:BA:4004:HOH:O	2.16	0.61
1:CA:977:A:O2'	1:CA:981:U:N3	2.33	0.61
26:DA:509:C:OP1	61:DA:4324:HOH:O	2.16	0.61
28:DD:132:PRO:HD3	28:DD:190:TYR:CZ	2.35	0.61
1:AA:953:G:H5'	1:AA:965:A:H61	1.65	0.61
1:AA:1027:C:C2	1:AA:1034:G:N1	2.67	0.61
2:AB:17:PHE:HD2	2:AB:44:LEU:HD21	1.65	0.61
24:AX:6:G:H1	24:AX:67:C:N4	1.97	0.61
26:BA:2168:G:C6	26:BA:2171:A:H8	2.18	0.61
27:BB:45:A:OP2	31:BG:96:ARG:NH2	2.28	0.61
1:CA:345:C:OP2	40:DT:39:ARG:NH2	2.30	0.61
25:CY:8:4SU:HN3	25:CY:14:A:N6	1.91	0.61
26:DA:373:U:H2'	26:DA:374:A:H8	1.65	0.61
27:DB:24:G:N7	27:DB:56:G:H2'	2.15	0.61
27:DB:24:G:N3	27:DB:26:A:N6	2.48	0.61
28:DD:206:LEU:HD22	28:DD:211:ARG:HG2	1.81	0.61
1:AA:976:G:H5'	1:AA:1358:U:O2'	1.99	0.61
26:BA:2049:G:N7	61:BA:5165:HOH:O	2.31	0.61
26:DA:1261:C:OP2	43:DW:83:LYS:NZ	2.33	0.61
26:DA:2022:U:O2'	26:DA:2617:C:H5'	2.00	0.61
29:DE:52:LEU:O	29:DE:76:ARG:N	2.25	0.61
1:AA:677:U:H3	1:AA:713:G:H22	1.47	0.61
2:AB:74:LYS:NZ	2:AB:205:ASP:OD2	2.33	0.61
15:AO:79:ARG:O	15:AO:83:GLU:HB2	1.99	0.61
26:BA:1800:C:OP2	28:BD:183:ARG:NH2	2.32	0.61
1:CA:757:U:H2'	1:CA:758:G:O4'	1.99	0.61
25:CY:26:A:N1	25:CY:44:G:C6	2.69	0.61
36:DP:99:LEU:O	36:DP:103:ALA:N	2.32	0.61
1:AA:148:G:H2'	1:AA:149:A:H8	1.66	0.61
1:AA:1005:A:H1'	1:AA:1036:G:H22	1.65	0.61
1:AA:1070:U:H2'	1:AA:1071:C:C6	2.36	0.61
8:AH:51:VAL:HG11	8:AH:60:ARG:HH12	1.66	0.61
26:BA:1816:G:O6	28:BD:35:LYS:NZ	2.28	0.61
26:BA:2206:G:H5'	26:BA:2207:G:N7	2.14	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BE:111:ARG:HG3	29:BE:160:TYR:CD2	2.34	0.61
1:CA:1120:G:O6	1:CA:1154:G:N2	2.33	0.61
2:CB:55:PHE:HA	2:CB:58:ILE:HB	1.82	0.61
2:CB:185:ILE:HG22	2:CB:199:TYR:HB2	1.83	0.61
3:CC:52:LEU:HD21	3:CC:55:VAL:HG23	1.80	0.61
12:CL:24:VAL:HG11	12:CL:27:LEU:HD22	1.81	0.61
26:DA:2074:U:H2'	26:DA:2075:U:C6	2.36	0.61
26:DA:2431:U:OP1	61:DA:3906:HOH:O	2.16	0.61
50:D3:12:PRO:HB2	50:D3:20:LYS:HG2	1.81	0.61
1:AA:189:G:H1	1:AA:189(K):U:H3	1.48	0.61
1:AA:1027:C:H2'	1:AA:1028:C:C5	2.35	0.61
26:BA:1385:G:O2'	26:BA:1396:U:O2	2.14	0.61
1:CA:985:C:N3	1:CA:1220:G:N2	2.46	0.61
1:CA:1148:U:H1'	9:CI:66:ARG:HH12	1.66	0.61
3:CC:18:TRP:HE3	3:CC:18:TRP:H	1.47	0.61
3:CC:179:ARG:NH1	3:CC:206:GLU:OE1	2.33	0.61
44:DX:46:ALA:O	49:D2:30:ARG:NH2	2.33	0.61
46:DZ:117:LEU:HD12	46:DZ:174:VAL:HG22	1.80	0.61
50:D3:6:VAL:HG13	50:D3:56:VAL:HG22	1.81	0.61
26:BA:2350:C:OP2	61:BA:4049:HOH:O	2.16	0.61
41:BU:76:TYR:OH	41:BU:92:ARG:NH1	2.33	0.61
50:D3:5:LYS:NZ	50:D3:34:GLU:OE2	2.18	0.61
1:AA:1435:G:H2'	1:AA:1436:U:C6	2.35	0.61
3:AC:39:ILE:HG23	3:AC:91:LEU:HD11	1.83	0.61
26:BA:2714:G:OP1	61:BA:4546:HOH:O	2.16	0.61
1:CA:952:U:H2'	1:CA:953:G:C8	2.36	0.61
10:CJ:27:ALA:HA	10:CJ:81:THR:HG22	1.83	0.61
25:CY:5:G:H1	25:CY:68:C:N4	1.99	0.61
26:DA:301:G:OP2	45:DY:84:ARG:NH2	2.33	0.61
26:DA:952:G:OP1	37:DQ:16:ARG:NH2	2.33	0.61
26:DA:958:U:OP2	37:DQ:14:ARG:NH1	2.33	0.61
26:DA:1220:A:OP2	41:DU:19:LYS:NZ	2.29	0.61
38:DR:33:ARG:NH1	38:DR:115:GLU:OE2	2.29	0.61
1:AA:166:G:H2'	1:AA:167:G:H8	1.65	0.61
1:AA:562:C:H1'	12:AL:15:ARG:HB3	1.82	0.61
37:BQ:85:LYS:HG2	47:B0:7:LEU:HB3	1.83	0.61
1:CA:692:U:O2'	1:CA:694:A:N7	2.31	0.61
1:CA:920:U:H2'	1:CA:921:U:C6	2.35	0.61
1:CA:1317:C:O2	19:CS:37:ARG:NH1	2.33	0.61
11:CK:34:ASP:HB3	11:CK:40:ILE:HD11	1.83	0.61
16:CP:51:VAL:HG12	16:CP:53:VAL:H	1.64	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:526:A:OP1	61:DA:4194:HOH:O	2.16	0.61
26:DA:1939:U:OP1	26:DA:2604:U:O2'	2.19	0.61
27:DB:110:G:H2'	27:DB:111:G:C8	2.36	0.61
1:AA:1025:U:O2'	1:AA:1026:G:O4'	2.19	0.61
26:BA:528:A:C2'	26:BA:529:A:H5''	2.31	0.61
43:BW:14:PRO:HG2	43:BW:78:GLU:HG2	1.82	0.61
1:CA:957:U:H2'	1:CA:959:A:OP2	2.01	0.61
1:CA:1067:A:O2'	1:CA:1068:G:OP2	2.17	0.61
26:DA:2126:A:N3	26:DA:2127:G:H1'	2.16	0.61
40:DT:85:LYS:NZ	40:DT:87:ASP:OD2	2.28	0.61
2:AB:55:PHE:HA	2:AB:58:ILE:HB	1.83	0.60
26:BA:2791:C:H2'	26:BA:2792:G:C8	2.36	0.60
1:CA:646:U:H2'	1:CA:647:C:C6	2.36	0.60
2:CB:47:THR:O	2:CB:51:LEU:N	2.32	0.60
9:CI:16:ARG:HB2	9:CI:64:THR:HB	1.82	0.60
26:DA:1005:C:H2'	26:DA:1006:C:C6	2.36	0.60
26:DA:2046:G:H5'	52:D5:19:ARG:HA	1.83	0.60
26:DA:2708:G:H1'	38:DR:71:GLN:HE22	1.65	0.60
13:AM:80:ARG:HH22	19:AS:69:HIS:HE1	1.48	0.60
26:BA:1204:A:H2	26:BA:1241:A:H62	1.49	0.60
29:BE:9:VAL:HB	40:BT:3:ARG:HG2	1.82	0.60
30:BF:143:ALA:HB1	30:BF:148:LEU:HB2	1.82	0.60
39:BS:56:LEU:HD12	39:BS:69:VAL:HG12	1.82	0.60
1:CA:1376:U:H2'	1:CA:1377:A:C8	2.36	0.60
26:DA:1816:G:O6	28:DD:35:LYS:NZ	2.25	0.60
2:AB:80:ILE:HD11	2:AB:212:GLN:HA	1.82	0.60
19:AS:3:ARG:NH1	19:AS:8:GLY:O	2.35	0.60
27:BB:33:G:H5'	31:BG:2:PRO:HD3	1.83	0.60
48:B1:51:VAL:HG11	48:B1:74:VAL:HG21	1.84	0.60
1:CA:148:G:H2'	1:CA:149:A:C8	2.37	0.60
1:CA:1412:C:H2'	1:CA:1413:A:C8	2.36	0.60
38:DR:56:LYS:NZ	38:DR:90:ARG:O	2.33	0.60
46:DZ:7:ALA:HB3	46:DZ:61:LEU:HD12	1.81	0.60
1:AA:413:G:N2	1:AA:428:G:H1'	2.16	0.60
12:AL:24:VAL:HG12	12:AL:27:LEU:HB2	1.83	0.60
17:AQ:67:LYS:HA	17:AQ:70:ARG:HH12	1.66	0.60
29:BE:29:GLY:HA3	61:BE:408:HOH:O	2.01	0.60
31:BG:47:LYS:HG3	31:BG:48:GLU:H	1.66	0.60
45:BY:92:ASN:N	45:BY:93:GLY:HA2	2.16	0.60
51:B4:57:GLU:HB3	51:B4:58:ARG:HA	1.83	0.60
9:CI:23:ASN:ND2	9:CI:60:ASP:OD2	2.33	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:954:G:H5''	37:DQ:13:GLN:HB3	1.83	0.60
26:DA:1449:A:HO2'	26:DA:1529:G:H21	1.45	0.60
26:DA:1739:U:HO2'	26:DA:1740:G:H8	1.49	0.60
1:AA:865:A:H2	1:AA:918:A:H4'	1.67	0.60
3:AC:150:LYS:HG3	3:AC:169:ALA:HB2	1.84	0.60
25:AY:59:U:H3'	25:AY:60:U:C6	2.35	0.60
28:BD:71:ASP:HB3	28:BD:103:ARG:NH2	2.16	0.60
36:BP:26:GLY:O	61:BP:311:HOH:O	2.16	0.60
1:CA:1120:G:C6	1:CA:1154:G:N2	2.69	0.60
1:CA:1151:A:O4'	10:CJ:39:PRO:HB2	2.02	0.60
1:CA:1157:A:H5'	1:CA:1158:C:C6	2.35	0.60
11:CK:98:LEU:O	11:CK:101:SER:OG	2.19	0.60
46:DZ:159:PRO:HA	46:DZ:161:VAL:HG12	1.84	0.60
2:AB:201:ILE:HG21	2:AB:214:ILE:HG21	1.82	0.60
1:CA:9:G:H2'	1:CA:10:A:H8	1.66	0.60
26:DA:2400:G:O3'	53:D6:18:ARG:NH1	2.34	0.60
46:DZ:53:ILE:HG22	46:DZ:71:VAL:O	2.02	0.60
48:D1:23:LYS:HB3	48:D1:29:GLY:HA3	1.84	0.60
1:AA:1026:G:O6	1:AA:1034:G:N2	2.32	0.60
4:AD:108:LEU:HD13	4:AD:174:LEU:HD13	1.83	0.60
25:AY:19:G:H1	25:AY:56:C:N4	2.00	0.60
26:BA:2870:C:H2'	26:BA:2871:C:O4'	2.02	0.60
51:B4:53:GLU:O	51:B4:55:ARG:N	2.34	0.60
1:CA:1075:C:H2'	1:CA:1076:C:H5''	1.84	0.60
1:CA:1273:G:H3'	1:CA:1274:G:H8	1.67	0.60
26:DA:1007:C:OP1	34:DN:35:ARG:NH1	2.34	0.60
26:DA:1226:A:OP1	42:DV:84:LYS:HE2	2.01	0.60
1:AA:662:G:H2'	1:AA:663:A:C8	2.37	0.60
19:AS:28:LYS:HB3	19:AS:28:LYS:HZ2	1.66	0.60
26:BA:2033:A:OP1	61:BA:4308:HOH:O	2.17	0.60
26:BA:2447:G:OP2	61:BA:4563:HOH:O	2.16	0.60
1:CA:662:G:H2'	1:CA:663:A:H8	1.67	0.60
26:DA:774:A:N6	61:DA:3733:HOH:O	2.35	0.60
26:DA:1693:U:O2'	28:DD:14:ARG:NH2	2.35	0.60
26:DA:2291:U:H2'	26:DA:2292:C:C6	2.37	0.60
26:DA:2747:G:H1	26:DA:2754:U:H2'	1.66	0.60
23:AW:56:C:P	26:BA:897:C:H5'	2.42	0.60
26:BA:880:G:N2	26:BA:898:C:O2	2.35	0.60
32:BH:25:LYS:HG2	32:BH:34:GLU:HG2	1.84	0.60
1:CA:1118:C:OP1	9:CI:104:ARG:NH1	2.34	0.60
18:CR:60:ALA:O	18:CR:64:ARG:HG3	2.02	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:2808:U:C2'	26:DA:2809:A:H5'	2.32	0.60
32:DH:20:ALA:HB1	32:DH:21:PRO:HD2	1.84	0.60
36:DP:38:GLN:O	36:DP:39:LYS:HB3	2.02	0.60
26:BA:1048:A:OP2	26:BA:1109:C:N4	2.30	0.60
1:CA:542:G:OP1	4:CD:10:ARG:NH2	2.27	0.60
1:CA:1505:G:HO2'	22:CV:13:A:H2	1.49	0.60
26:DA:1247:A:OP1	30:DF:95:ARG:NH2	2.32	0.60
26:DA:2136:C:O2'	26:DA:2137:C:H6	1.85	0.60
26:DA:2499:C:N3	61:DA:3930:HOH:O	2.31	0.60
36:DP:59:LEU:HD21	55:D8:10:ALA:HA	1.82	0.60
17:AQ:66:SER:O	17:AQ:70:ARG:NH1	2.35	0.59
26:BA:1418:G:OP2	61:BA:4580:HOH:O	2.16	0.59
26:BA:2155:G:H2'	26:BA:2156:G:O4'	2.01	0.59
26:BA:2206:G:H3'	26:BA:2207:G:C8	2.37	0.59
26:BA:2871:C:N3	61:BA:4781:HOH:O	2.31	0.59
28:BD:132:PRO:HG2	28:BD:135:PHE:CD2	2.37	0.59
40:BT:118:ARG:HH22	40:BT:125:ARG:HH12	1.50	0.59
46:BZ:139:VAL:HG22	46:BZ:155:LEU:HD11	1.84	0.59
5:CE:102:ALA:HB1	5:CE:106:PRO:HG2	1.84	0.59
14:CN:6:LEU:HB3	14:CN:23:ARG:HH21	1.67	0.59
26:DA:247:G:H4'	26:DA:386:G:C5	2.36	0.59
26:DA:2638:G:P	29:DE:82:ARG:HH22	2.25	0.59
30:DF:116:ASP:OD2	36:DP:1:MET:N	2.24	0.59
1:AA:1070:U:H2'	1:AA:1071:C:H6	1.67	0.59
17:AQ:26:GLN:HG2	17:AQ:37:LYS:HG2	1.84	0.59
26:BA:898:C:H2'	26:BA:899:A:C8	2.37	0.59
26:BA:1173:G:O2'	26:BA:1174:A:O5'	2.20	0.59
31:BG:5:VAL:HG22	31:BG:8:LYS:H	1.67	0.59
32:BH:56:SER:HB3	32:BH:61:HIS:ND1	2.17	0.59
22:CV:14:A:C4	25:CY:34:G:C6	2.90	0.59
26:DA:1434:A:H61	26:DA:1558:A:H62	1.49	0.59
26:DA:2846:G:N7	61:DA:4073:HOH:O	2.32	0.59
31:DG:151:ALA:HB3	31:DG:153:ARG:HH11	1.66	0.59
42:DV:76:LYS:HB2	42:DV:81:TYR:HB3	1.83	0.59
1:AA:200:G:H1	1:AA:217:C:H42	1.51	0.59
1:AA:1292:U:P	7:AG:41:ARG:HH22	2.25	0.59
31:BG:15:VAL:HG21	31:BG:176:LEU:HD23	1.82	0.59
46:BZ:150:LEU:O	46:BZ:171:ILE:HG13	2.03	0.59
1:CA:113:G:OP1	61:CA:4148:HOH:O	2.17	0.59
1:CA:539:A:H2'	1:CA:540:G:C8	2.37	0.59
1:CA:596:C:O2	1:CA:644:G:N2	2.17	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1279:A:O2'	1:CA:1281:U:OP2	2.17	0.59
1:CA:1495:U:O2'	26:DA:1919:A:N1	2.31	0.59
3:CC:134:ILE:HD11	3:CC:153:VAL:HG21	1.83	0.59
13:CM:65:LYS:N	51:D4:50:VAL:HG21	2.18	0.59
14:CN:32:SER:O	14:CN:32:SER:OG	2.19	0.59
23:CW:14:A:H61	23:CW:21:A:H2	1.49	0.59
23:CW:61:C:O2'	23:CW:62:C:O5'	2.14	0.59
26:DA:1800:C:OP2	28:DD:183:ARG:NH2	2.35	0.59
36:DP:85:LEU:HA	36:DP:88:LEU:HD12	1.85	0.59
37:DQ:85:LYS:HB2	47:D0:7:LEU:HD12	1.83	0.59
46:DZ:105:VAL:N	46:DZ:139:VAL:O	2.35	0.59
1:AA:428:G:OP2	4:AD:10:ARG:NH1	2.35	0.59
3:AC:19:GLU:HB3	3:AC:40:ARG:HH22	1.67	0.59
25:AY:59:U:H3'	25:AY:60:U:H6	1.68	0.59
26:BA:2103:C:N4	26:BA:2186:G:H1	1.98	0.59
1:CA:254:G:OP1	17:CQ:66:SER:OG	2.17	0.59
1:CA:538:G:H5''	12:CL:114:LYS:HB2	1.82	0.59
1:CA:769:G:H4'	1:CA:1513:A:H4'	1.85	0.59
26:DA:1446:C:H42	26:DA:1465:G:H1	1.50	0.59
30:DF:185:ASP:HA	30:DF:188:ARG:HD3	1.84	0.59
34:DN:58:ASP:OD1	34:DN:58:ASP:N	2.34	0.59
46:DZ:108:PRO:HG3	46:DZ:141:VAL:HB	1.84	0.59
51:D4:33:VAL:HG12	51:D4:35:VAL:H	1.66	0.59
1:AA:189(A):C:H42	1:AA:189(J):G:H1	1.51	0.59
1:AA:736:C:H2'	1:AA:737:A:C8	2.37	0.59
3:AC:6:HIS:CD2	3:AC:8:ILE:H	2.20	0.59
3:AC:8:ILE:HD13	3:AC:184:TYR:HB3	1.84	0.59
3:AC:82:GLU:HG2	3:AC:85:ARG:NH2	2.17	0.59
26:BA:271(M):G:H4'	26:BA:271(N):U:OP1	2.01	0.59
26:DA:2023:G:H5'	26:DA:2617:C:H4'	1.83	0.59
3:AC:114:PRO:O	3:AC:118:GLN:NE2	2.35	0.59
9:AI:21:PRO:HA	9:AI:59:PHE:HA	1.85	0.59
15:AO:18:PHE:HB2	15:AO:19:PRO:HD2	1.85	0.59
23:AW:22:G:O2'	23:AW:23:A:OP1	2.18	0.59
26:BA:1025:G:C4	26:BA:1135:C:H1'	2.37	0.59
26:BA:1040:C:H2'	26:BA:1041:C:O4'	2.01	0.59
26:BA:1649:G:O2'	38:BR:107:ASP:OD2	2.17	0.59
50:B3:23:LEU:HD13	50:B3:50:VAL:HG11	1.85	0.59
26:DA:2002:G:OP2	38:DR:9:LYS:NZ	2.35	0.59
26:DA:2140:C:H1'	26:DA:2152:G:N2	2.18	0.59
1:AA:1002:G:H3'	1:AA:1003:G:C8	2.38	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AS:32:LYS:HA	19:AS:50:ALA:HB3	1.84	0.59
26:BA:652(E):G:O6	26:BA:652(T):C:N4	2.30	0.59
39:BS:15:ARG:O	39:BS:19:LYS:HG2	2.03	0.59
23:CW:11:C:H42	23:CW:24:G:H1	1.50	0.59
25:CY:18:G:N2	25:CY:55:PSU:C4	2.71	0.59
26:DA:2176:A:H2'	26:DA:2177:C:C6	2.37	0.59
37:DQ:31:ASP:OD1	37:DQ:134:ARG:NH1	2.32	0.59
50:D3:7:LYS:NZ	50:D3:32:GLN:O	2.29	0.59
25:AY:58:A:H3'	25:AY:58:A:P	2.43	0.59
26:BA:1405:U:H2'	26:BA:1406:U:C6	2.38	0.59
1:CA:1305:G:O2'	1:CA:1331:G:N2	2.36	0.59
26:DA:271(R):G:H5''	48:D1:97:LEU:HD21	1.84	0.59
26:DA:2062:A:OP1	61:DA:3829:HOH:O	2.17	0.59
31:DG:101:ILE:HD13	51:D4:25:TYR:HB2	1.84	0.59
1:AA:1239:A:H62	1:AA:1299:A:N6	2.01	0.59
23:AW:5:G:H2'	23:AW:6:G:H8	1.67	0.59
1:CA:1010:G:C2	1:CA:1011:G:C8	2.91	0.59
1:CA:1182:G:H4'	1:CA:1183:A:H3'	1.84	0.59
9:CI:9:ARG:O	9:CI:104:ARG:HG3	2.02	0.59
26:DA:2173:A:H2'	26:DA:2174:C:O4'	2.03	0.59
1:AA:1030(D):A:H62	1:AA:1031:G:H21	1.49	0.59
19:AS:30:LEU:HD11	19:AS:50:ALA:HB2	1.85	0.59
26:BA:322:A:OP1	30:BF:168:ARG:HD2	2.03	0.59
26:BA:1913:A:H4'	26:BA:1914:C:H5''	1.83	0.59
15:CO:18:PHE:HB2	15:CO:19:PRO:HD2	1.85	0.59
26:DA:249:C:O2	55:D8:12:LYS:NZ	2.29	0.59
26:DA:2112:G:C5	26:DA:2113:U:H1'	2.37	0.59
31:DG:64:THR:HB	31:DG:94:LEU:HD21	1.85	0.59
46:DZ:55:HIS:HE1	46:DZ:135:GLU:HG3	1.68	0.59
21:AU:5:ASP:OD2	61:AU:101:HOH:O	2.17	0.58
26:BA:2789:C:O2	26:BA:2894:G:N2	2.35	0.58
1:CA:1220:G:O3'	19:CS:36:ARG:HD3	2.03	0.58
1:CA:1510:U:H2'	1:CA:1511:G:C8	2.37	0.58
4:CD:15:GLU:OE2	4:CD:66:ARG:NH1	2.36	0.58
8:CH:4:ASP:OD1	8:CH:7:ALA:N	2.23	0.58
26:DA:848:G:N3	26:DA:933:A:H1'	2.18	0.58
26:DA:2151:G:H2'	26:DA:2152:G:H8	1.67	0.58
45:DY:5:MET:HE1	45:DY:32:PRO:HA	1.84	0.58
1:AA:17:U:H2'	1:AA:18:C:C6	2.38	0.58
1:AA:1202:G:O4'	14:AN:29:ARG:NH1	2.35	0.58
2:AB:162:ILE:O	2:AB:185:ILE:HG12	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AT:45:GLN:HB2	20:AT:91:LEU:HD13	1.85	0.58
26:BA:526:A:O2'	26:BA:2043:C:O2	2.20	0.58
26:BA:636:G:OP1	36:BP:132:LYS:HE2	2.02	0.58
1:CA:1338:G:H21	24:CX:41:C:H1'	1.68	0.58
4:CD:64:LEU:HB2	4:CD:198:VAL:HG11	1.84	0.58
26:DA:2849:U:OP2	40:DT:95:ARG:NH1	2.37	0.58
37:DQ:111:GLU:O	37:DQ:115:MET:HG2	2.02	0.58
25:AY:53:G:C5	25:AY:54:5MU:H72	2.38	0.58
53:B6:6:ARG:NE	53:B6:24:GLU:OE1	2.22	0.58
1:CA:1204:A:OP1	14:CN:3:ARG:NH1	2.36	0.58
17:CQ:57:VAL:HG12	17:CQ:76:LEU:HA	1.84	0.58
37:DQ:48:GLU:OE1	37:DQ:51:ARG:NH2	2.33	0.58
39:DS:14:VAL:O	39:DS:18:ILE:HG12	2.03	0.58
1:AA:46:G:O6	61:AA:4200:HOH:O	2.15	0.58
23:AW:66:U:H2'	23:AW:67:C:H6	1.66	0.58
26:BA:1021:A:H62	26:BA:1141:U:H3	1.51	0.58
1:CA:504:C:OP1	61:CA:4008:HOH:O	2.17	0.58
12:CL:70:ILE:HD13	12:CL:77:LEU:HD12	1.85	0.58
35:DO:115:VAL:HG13	35:DO:121:VAL:HG21	1.86	0.58
9:AI:99:LEU:HB3	9:AI:101:PHE:CE1	2.38	0.58
23:AW:47:U:O2'	23:AW:48:C:OP1	2.20	0.58
26:BA:2336:A:H61	47:B0:43:THR:CG2	2.16	0.58
26:BA:2485:G:OP1	37:BQ:46:GLN:NE2	2.35	0.58
2:CB:77:ALA:HA	2:CB:80:ILE:HG22	1.84	0.58
5:CE:31:LEU:HD22	5:CE:43:LEU:HD11	1.85	0.58
24:CX:50:U:H3	24:CX:64:G:H1	1.51	0.58
26:DA:2365:G:O6	55:D8:43:GLN:NE2	2.36	0.58
30:DF:21:ALA:HB3	30:DF:22:ALA:HA	1.84	0.58
1:AA:1302:U:C5	13:AM:17:VAL:HG21	2.38	0.58
26:BA:184:C:H2'	26:BA:185:U:C6	2.38	0.58
1:CA:48:C:OP2	61:CA:4100:HOH:O	2.16	0.58
1:CA:420:U:O2'	1:CA:423:G:O6	2.18	0.58
26:DA:900:A:H2'	26:DA:901:A:C8	2.39	0.58
32:DH:3:ARG:NH1	32:DH:3:ARG:HB3	2.18	0.58
32:DH:73:ALA:O	32:DH:76:VAL:HG12	2.03	0.58
1:AA:473:G:H2'	1:AA:474:G:C8	2.39	0.58
1:AA:1125:U:H1'	1:AA:1126:U:H2'	1.86	0.58
46:BZ:24:LEU:HB2	46:BZ:41:LEU:HD23	1.85	0.58
2:CB:178:ARG:HE	8:CH:74:PRO:HG3	1.68	0.58
6:CF:24:GLU:HG3	6:CF:28:ARG:NH1	2.19	0.58
26:DA:1952:A:OP1	35:DO:42:SER:OG	2.21	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:2137:C:H2'	26:DA:2138:C:C6	2.38	0.58
26:BA:871:U:OP1	37:BQ:5:ARG:HD3	2.04	0.58
26:BA:2144:U:O2'	26:BA:2145:C:H2'	2.04	0.58
26:BA:2659:G:O2'	32:BH:175:LYS:NZ	2.37	0.58
1:CA:473:G:H2'	1:CA:474:G:C8	2.39	0.58
1:CA:1010:G:N2	1:CA:1020:U:H1'	2.19	0.58
1:CA:1302:U:OP2	13:CM:21:TYR:OH	2.14	0.58
15:CO:3:ILE:HD13	15:CO:3:ILE:H	1.67	0.58
15:CO:69:TYR:O	15:CO:73:GLU:HG2	2.04	0.58
26:DA:1300:U:H4'	26:DA:1301:A:H5''	1.86	0.58
26:DA:2318:G:H21	39:DS:3:ARG:HD2	1.69	0.58
26:DA:2438:U:O2'	26:DA:2440:C:OP1	2.20	0.58
46:DZ:117:LEU:HA	46:DZ:174:VAL:HA	1.86	0.58
1:AA:473:G:H2'	1:AA:474:G:H8	1.69	0.58
2:AB:16:HIS:HB3	2:AB:210:SER:CB	2.33	0.58
4:AD:111:ALA:HB2	4:AD:120:LEU:HD12	1.86	0.58
23:AW:28:G:H2'	23:AW:29:G:H8	1.67	0.58
26:BA:801:G:O6	30:BF:53:THR:OG1	2.20	0.58
38:BR:56:LYS:NZ	38:BR:90:ARG:O	2.36	0.58
26:DA:997:G:OP1	41:DU:92:ARG:HG2	2.04	0.58
26:DA:1253:A:N6	61:DA:3721:HOH:O	2.33	0.58
26:DA:2646:C:OP2	26:DA:2732:G:O2'	2.15	0.58
1:AA:347:G:H2'	1:AA:348:G:O4'	2.03	0.58
1:AA:727:G:N2	1:AA:730:G:OP2	2.36	0.58
12:AL:24:VAL:HG11	12:AL:27:LEU:HD22	1.86	0.58
13:AM:40:ASN:O	13:AM:43:THR:OG1	2.21	0.58
20:AT:87:LYS:O	20:AT:91:LEU:HG	2.03	0.58
26:BA:303:U:O4	61:BA:4677:HOH:O	2.13	0.58
1:CA:971:G:OP2	1:CA:1231:G:N2	2.26	0.58
1:CA:1277:C:O2'	1:CA:1279:A:H8	1.86	0.58
1:CA:1422:G:O3'	35:DO:49:ARG:NH1	2.33	0.58
9:CI:5:TYR:O	9:CI:87:GLN:NE2	2.37	0.58
25:CY:40:C:C2'	25:CY:41:C:H5'	2.34	0.58
48:D1:76:ARG:HH11	48:D1:97:LEU:HD22	1.67	0.58
26:BA:566:U:H5''	36:BP:29:LYS:HE3	1.86	0.57
33:BI:129:THR:HG22	33:BI:139:GLN:NE2	2.17	0.57
46:BZ:138:GLU:H	46:BZ:156:LYS:HD3	1.69	0.57
50:B3:18:ASP:OD1	50:B3:18:ASP:N	2.37	0.57
1:CA:995:C:O2	14:CN:4:LYS:NZ	2.28	0.57
1:CA:1153:C:H42	1:CA:1154:G:N2	2.01	0.57
26:DA:465:G:OP1	54:D7:12:ARG:NH2	2.37	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AG:113:GLU:HG2	7:AG:119:ARG:HG2	1.86	0.57
9:AI:117:HIS:HB2	9:AI:121:ARG:HG3	1.85	0.57
25:AY:38:A:H2'	25:AY:39:PSU:O4'	2.04	0.57
26:BA:1166:C:H2'	26:BA:1167:U:C6	2.39	0.57
26:BA:2430:A:H2'	26:BA:2430:A:N3	2.18	0.57
27:BB:75:G:H5''	27:BB:75:G:H8	1.69	0.57
1:CA:34:C:H2'	1:CA:35:G:H8	1.69	0.57
9:CI:21:PRO:HA	9:CI:59:PHE:HA	1.85	0.57
16:CP:43:LYS:HA	16:CP:48:TRP:HB3	1.86	0.57
19:CS:64:GLU:O	19:CS:67:VAL:HG23	2.04	0.57
23:AW:5:G:H2'	23:AW:6:G:C8	2.39	0.57
33:BI:140:LEU:HD22	33:BI:142:VAL:HG13	1.86	0.57
26:DA:322:A:OP2	30:DF:169:ASN:HB2	2.04	0.57
26:DA:399:G:OP2	61:DA:4406:HOH:O	2.17	0.57
26:DA:2110:G:OP1	26:DA:2118:U:N3	2.33	0.57
38:DR:33:ARG:NH2	52:D5:57:VAL:O	2.29	0.57
1:AA:224:C:H2'	1:AA:225:C:C6	2.38	0.57
1:AA:757:U:H2'	1:AA:758:G:O4'	2.04	0.57
2:AB:16:HIS:HD2	2:AB:17:PHE:N	2.00	0.57
5:AE:78:HIS:HD1	8:AH:104:ARG:HD2	1.68	0.57
10:AJ:5:ARG:O	10:AJ:98:ILE:HA	2.05	0.57
25:AY:63:G:H2'	25:AY:64:A:O4'	2.04	0.57
26:BA:893:C:H2'	26:BA:894:C:C6	2.39	0.57
41:BU:89:GLU:HG3	42:BV:50:PRO:HB3	1.86	0.57
1:CA:975:A:N1	10:CJ:48:THR:HB	2.19	0.57
1:CA:1026:G:O6	1:CA:1036:G:N2	2.37	0.57
5:CE:137:GLU:HG2	5:CE:140:ARG:HH11	1.68	0.57
15:CO:82:ILE:HB	15:CO:87:ILE:HB	1.87	0.57
26:DA:1359:A:H61	26:DA:1372:U:H3	1.52	0.57
26:DA:1448:G:H4'	26:DA:1542:A:OP1	2.05	0.57
26:DA:2630:G:H2'	26:DA:2631:G:C8	2.39	0.57
28:DD:132:PRO:HG2	28:DD:135:PHE:CD2	2.40	0.57
1:AA:191:G:H21	20:AT:103:GLY:HA2	1.69	0.57
1:AA:1392:G:N2	1:AA:1502:A:H8	2.01	0.57
26:BA:2334:G:H5'	39:BS:9:ARG:HG2	1.85	0.57
31:BG:170:ARG:NH2	31:BG:182:LYS:O	2.37	0.57
1:CA:942:G:H21	9:CI:124:GLN:NE2	2.01	0.57
26:DA:531:C:H4'	26:DA:532:A:H5''	1.86	0.57
26:DA:903:C:H2'	26:DA:904:C:C6	2.40	0.57
26:DA:1264:G:OP1	52:D5:19:ARG:NH2	2.35	0.57
26:DA:1593:G:H2'	26:DA:1594:G:C8	2.40	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:1853:A:H2'	26:DA:1854:A:C8	2.40	0.57
27:DB:3:C:H2'	27:DB:4:C:C6	2.40	0.57
47:D0:10:THR:HG22	47:D0:12:ASN:H	1.70	0.57
27:BB:14:U:OP2	27:BB:70:C:O2'	2.20	0.57
48:B1:3:LYS:HB2	48:B1:61:ARG:HH12	1.69	0.57
49:B2:65:ASN:OD1	49:B2:69:ARG:NH1	2.35	0.57
1:CA:1099:G:OP2	2:CB:144:ARG:NH2	2.34	0.57
2:CB:63:MET:HG3	2:CB:225:ALA:HB1	1.86	0.57
10:CJ:64:GLU:OE2	10:CJ:66:ARG:NH1	2.37	0.57
26:DA:1209:G:O2'	26:DA:1237:A:N1	2.32	0.57
13:AM:3:ARG:HG3	13:AM:4:ILE:H	1.70	0.57
26:BA:30:G:OP2	41:BU:5:LYS:NZ	2.29	0.57
26:BA:878:A:H61	26:BA:899:A:H1'	1.70	0.57
26:BA:2001:A:OP1	38:BR:9:LYS:NZ	2.36	0.57
31:BG:144:ILE:HA	31:BG:148:MET:HE1	1.87	0.57
32:BH:113:VAL:HG11	32:BH:151:ILE:HD13	1.86	0.57
4:CD:173:TRP:HB3	4:CD:187:ARG:HE	1.70	0.57
15:CO:55:GLY:HA2	15:CO:58:MET:HE2	1.86	0.57
25:CY:2:C:H2'	25:CY:3:C:C6	2.39	0.57
27:DB:41:U:H5	31:DG:70:VAL:H	1.51	0.57
46:DZ:7:ALA:O	46:DZ:62:PRO:HD3	2.05	0.57
26:BA:579:G:H2'	26:BA:580:C:C6	2.40	0.57
26:BA:2207:G:O2'	26:BA:2208:A:OP1	2.21	0.57
1:CA:992:U:H3	1:CA:1044:A:H62	1.53	0.57
26:DA:658:C:H2'	26:DA:659:C:C6	2.40	0.57
26:DA:1013:C:H2'	26:DA:1014:U:H6	1.69	0.57
26:DA:1857:G:O2'	26:DA:1885:A:N6	2.35	0.57
1:AA:69:G:H2'	1:AA:70:G:C8	2.39	0.57
1:AA:993:G:H2'	1:AA:995:C:H41	1.69	0.57
1:AA:1510:U:H2'	1:AA:1511:G:C8	2.40	0.57
26:BA:576:U:H2'	26:BA:577:G:C8	2.39	0.57
30:BF:24:LEU:HD23	30:BF:115:ALA:HA	1.87	0.57
31:BG:161:THR:HG22	31:BG:163:ALA:H	1.70	0.57
45:BY:54:LYS:H	45:BY:56:PRO:HD3	1.70	0.57
1:CA:1000:U:N3	1:CA:1041:A:N6	2.22	0.57
6:CF:25:ILE:HD13	6:CF:82:ARG:HE	1.70	0.57
11:CK:48:ILE:O	11:CK:50:TYR:N	2.37	0.57
14:CN:24:CYS:O	14:CN:28:GLY:N	2.30	0.57
24:CX:67:C:H2'	24:CX:68:C:H5'	1.86	0.57
25:CY:27:G:N1	25:CY:43:C:O2	2.38	0.57
26:DA:197:A:O2'	61:DA:3732:HOH:O	2.16	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DP:44:GLY:CA	36:DP:45:LEU:HB2	2.33	0.57
38:DR:67:LEU:HD13	38:DR:76:VAL:HG21	1.86	0.57
1:AA:450:G:OP1	16:AP:43:LYS:NZ	2.37	0.57
14:AN:3:ARG:HB3	14:AN:3:ARG:HH21	1.70	0.57
25:AY:59:U:H5'	25:AY:60:U:H5	1.70	0.57
37:BQ:135:ASP:OD2	46:BZ:49:ARG:NH2	2.38	0.57
1:CA:1086:U:H3	1:CA:1099:G:H22	1.53	0.57
2:CB:178:ARG:NE	8:CH:74:PRO:HG3	2.20	0.57
26:DA:2875:C:O2'	40:DT:2:ASN:OD1	2.21	0.57
32:DH:80:SER:OG	32:DH:81:GLU:OE1	2.17	0.57
46:DZ:45:ASP:OD1	46:DZ:49:ARG:NH1	2.31	0.57
1:AA:1166:G:N2	1:AA:1170:A:OP2	2.38	0.56
26:BA:880:G:H2'	26:BA:881:G:H8	1.69	0.56
26:BA:1799:G:O2'	28:BD:181:GLU:OE2	2.22	0.56
40:BT:112:ARG:HG3	40:BT:115:ARG:HH21	1.70	0.56
44:BX:43:VAL:HG21	44:BX:81:VAL:HG11	1.86	0.56
1:CA:1321:C:H4'	13:CM:87:TYR:CE2	2.40	0.56
19:CS:28:LYS:HB2	19:CS:29:ARG:HA	1.87	0.56
26:DA:2808:U:H2'	26:DA:2809:A:H5'	1.87	0.56
44:DX:31:HIS:CD2	44:DX:33:LYS:H	2.22	0.56
1:AA:977:A:N6	1:AA:1224:G:OP1	2.29	0.56
7:AG:22:LEU:HD11	7:AG:101:LEU:HD21	1.85	0.56
46:BZ:45:ASP:OD2	46:BZ:49:ARG:NH1	2.38	0.56
1:CA:953:G:H5'	1:CA:965:A:N6	2.20	0.56
3:CC:11:ARG:HB3	3:CC:15:THR:HB	1.87	0.56
25:CY:9:A:OP2	25:CY:13:C:N4	2.38	0.56
26:DA:1864:U:OP1	26:DA:2410:G:O2'	2.17	0.56
40:DT:53:ARG:HB3	40:DT:53:ARG:HH11	1.70	0.56
46:DZ:69:THR:HG22	46:DZ:90:VAL:HA	1.88	0.56
1:AA:333:G:H4'	20:AT:16:HIS:CE1	2.41	0.56
13:AM:23:TYR:HB3	13:AM:67:GLU:HA	1.87	0.56
46:BZ:137:ILE:HA	46:BZ:156:LYS:NZ	2.20	0.56
1:CA:426:G:OP1	4:CD:36:ARG:HD2	2.05	0.56
1:CA:1154:G:N7	1:CA:1155:G:C8	2.73	0.56
1:CA:1502:A:H2	1:CA:1505:G:N1	1.99	0.56
3:CC:126:ARG:HB3	3:CC:128:PHE:CE1	2.40	0.56
8:CH:51:VAL:HG21	8:CH:60:ARG:HB2	1.87	0.56
23:CW:30:G:H1	23:CW:40:C:H42	1.51	0.56
26:DA:866:A:H2	26:DA:867:C:C4	2.23	0.56
26:DA:2167:U:H2'	26:DA:2168:G:H21	1.68	0.56
33:DI:110:ASP:N	33:DI:130:TYR:OH	2.34	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:952:U:H2'	1:AA:953:G:C8	2.41	0.56
2:AB:17:PHE:HB2	2:AB:44:LEU:HD21	1.88	0.56
4:AD:155:LEU:HD22	4:AD:157:LEU:H	1.70	0.56
24:AX:8:4SU:O5'	24:AX:8:4SU:H6	2.05	0.56
26:BA:453:C:O2	26:BA:457:A:O2'	2.22	0.56
26:BA:1252:G:OP1	41:BU:36:ARG:NH2	2.39	0.56
44:BX:5:TYR:CZ	49:B2:30:ARG:HB2	2.40	0.56
1:CA:222:U:H2'	1:CA:223:U:C6	2.39	0.56
20:CT:63:ILE:HD13	20:CT:80:ARG:HB3	1.88	0.56
26:DA:1405:U:H2'	26:DA:1406:U:C6	2.40	0.56
27:DB:110:G:H2'	27:DB:111:G:H8	1.70	0.56
46:DZ:141:VAL:HG12	46:DZ:144:LEU:HD12	1.87	0.56
1:AA:96:U:O2'	1:AA:97:G:H8	1.88	0.56
13:AM:84:ILE:HD12	19:AS:74:PHE:HE2	1.70	0.56
46:BZ:111:VAL:HG21	46:BZ:117:LEU:HB2	1.88	0.56
9:CI:49:PRO:HG2	9:CI:81:ILE:HG23	1.87	0.56
26:DA:534:U:H2'	26:DA:535:C:C6	2.41	0.56
26:DA:1579:A:H2'	26:DA:1580:A:C8	2.41	0.56
26:DA:1805:U:O2	28:DD:50:THR:HB	2.05	0.56
1:AA:58:C:O2'	1:AA:388:G:N7	2.33	0.56
5:AE:6:PHE:HB2	5:AE:34:VAL:HG22	1.88	0.56
26:BA:2708:G:H1'	38:BR:71:GLN:HE22	1.70	0.56
31:BG:16:ARG:HB2	31:BG:17:PRO:HD3	1.88	0.56
46:BZ:121:HIS:HB2	46:BZ:171:ILE:HG22	1.88	0.56
1:CA:9:G:H2'	1:CA:10:A:C8	2.41	0.56
1:CA:1392:G:N2	1:CA:1502:A:H8	2.03	0.56
8:CH:12:ARG:HD2	8:CH:26:VAL:HG12	1.88	0.56
12:CL:24:VAL:HG12	12:CL:27:LEU:HB2	1.88	0.56
26:DA:323:G:O2'	26:DA:1205:U:N3	2.35	0.56
26:DA:1507:A:O2'	26:DA:1508:A:O5'	2.20	0.56
26:DA:1639:U:H2'	26:DA:1640:C:H5''	1.88	0.56
31:DG:16:ARG:O	31:DG:20:ILE:HG13	2.05	0.56
1:AA:671:G:H5'	6:AF:77:ARG:HH22	1.70	0.56
1:AA:976:G:N2	1:AA:1363:C:OP2	2.38	0.56
26:BA:171:G:O2'	26:BA:172:C:H5'	2.06	0.56
26:BA:588:U:H2'	26:BA:589:C:C6	2.41	0.56
26:BA:668:G:H5'	26:BA:669:G:OP2	2.06	0.56
26:BA:2022:U:O2'	26:BA:2617:C:H5'	2.06	0.56
26:BA:2869:G:H2'	26:BA:2870:C:O4'	2.04	0.56
30:BF:161:GLU:HG2	30:BF:164:ARG:NH2	2.20	0.56
31:BG:41:GLN:HG3	31:BG:60:LEU:HD21	1.88	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:125:G:O2'	54:D7:48:LYS:NZ	2.36	0.56
26:DA:245:G:O6	55:D8:8:LYS:NZ	2.31	0.56
26:DA:912:C:OP1	37:DQ:8:LYS:NZ	2.25	0.56
26:DA:1787:A:N3	61:DA:3727:HOH:O	2.33	0.56
26:DA:2167:U:O2'	26:DA:2168:G:O4'	2.23	0.56
26:DA:2327:A:H2'	26:DA:2328:A:C8	2.41	0.56
45:DY:99:CYS:HB2	45:DY:106:LEU:HD21	1.88	0.56
1:AA:103:C:O2'	1:AA:172:A:N1	2.34	0.56
1:AA:1060:C:C5	3:AC:2:GLY:HA3	2.41	0.56
20:AT:9:ASN:HD22	20:AT:10:LEU:H	1.53	0.56
26:BA:71:A:OP2	26:BA:71:A:H3'	2.06	0.56
26:BA:2023:G:H5'	26:BA:2617:C:H4'	1.88	0.56
44:BX:35:THR:HG22	44:BX:38:GLU:HB2	1.87	0.56
16:CP:53:VAL:O	16:CP:57:ARG:HB2	2.06	0.56
21:CU:7:ARG:HD2	21:CU:21:TYR:HE2	1.69	0.56
28:DD:4:LYS:HB3	28:DD:18:VAL:HG23	1.88	0.56
37:DQ:1:MET:SD	37:DQ:1:MET:N	2.66	0.56
45:DY:20:TYR:CE1	45:DY:43:ASN:HA	2.41	0.56
26:BA:2124:G:H1	26:BA:2174:C:N4	2.04	0.56
26:BA:2151:G:H2'	26:BA:2152:G:C8	2.41	0.56
31:BG:77:ILE:HG22	31:BG:80:PHE:H	1.69	0.56
36:BP:89:ALA:O	36:BP:121:LYS:NZ	2.27	0.56
44:BX:31:HIS:CD2	44:BX:33:LYS:H	2.24	0.56
1:CA:1047:G:H5''	14:CN:4:LYS:HD2	1.87	0.56
2:CB:219:VAL:HA	2:CB:222:ILE:HG12	1.88	0.56
8:CH:39:LEU:HD12	8:CH:44:PHE:HB2	1.88	0.56
10:CJ:47:PHE:N	10:CJ:63:PHE:O	2.33	0.56
26:DA:2138:C:H2'	26:DA:2139:C:H5''	1.87	0.56
1:AA:139:G:N2	1:AA:224:C:O2	2.35	0.56
4:AD:173:TRP:CZ3	4:AD:174:LEU:HG	2.41	0.56
26:BA:784:A:H5'	26:BA:785:G:OP1	2.06	0.56
26:BA:2646:C:OP2	26:BA:2732:G:O2'	2.19	0.56
26:DA:1265:A:OP2	61:DA:4004:HOH:O	2.18	0.56
32:DH:113:VAL:HG11	32:DH:151:ILE:HD13	1.87	0.56
34:DN:4:TYR:HB2	41:DU:101:ARG:NH1	2.21	0.56
1:AA:736:C:H2'	1:AA:737:A:H8	1.71	0.55
10:AJ:11:PHE:HE1	10:AJ:67:THR:HG22	1.71	0.55
1:CA:1120:G:C6	1:CA:1121:U:C4	2.94	0.55
1:CA:1286:A:H2'	1:CA:1287:A:H4'	1.88	0.55
30:DF:21:ALA:CB	30:DF:22:ALA:HA	2.37	0.55
51:D4:59:PHE:HA	51:D4:60:GLN:C	2.27	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1392:G:H21	1:AA:1502:A:H8	1.54	0.55
2:AB:178:ARG:HH22	8:AH:68:ARG:HH12	1.53	0.55
4:AD:175:SER:HB3	4:AD:186:LEU:HD11	1.88	0.55
13:AM:87:TYR:O	13:AM:91:ARG:HG2	2.06	0.55
15:AO:39:LEU:HD13	15:AO:56:LEU:HB2	1.87	0.55
26:BA:592:G:O6	61:BA:4937:HOH:O	2.16	0.55
26:BA:1309:G:O6	61:BA:4912:HOH:O	2.17	0.55
33:BI:27:ARG:HD2	48:B1:71:TYR:CE1	2.41	0.55
1:CA:442:C:H42	1:CA:492:G:H1	1.53	0.55
1:CA:450:G:OP1	16:CP:43:LYS:NZ	2.38	0.55
2:CB:8:LYS:HG3	2:CB:9:GLU:HG3	1.87	0.55
24:CX:40:C:H2'	24:CX:41:C:H6	1.71	0.55
26:DA:1039:G:O6	26:DA:1116:C:N4	2.37	0.55
26:DA:1527:G:HO2'	26:DA:1544:A:H62	1.53	0.55
2:AB:231:GLU:HB3	2:AB:232:PRO:HD3	1.88	0.55
7:AG:16:LEU:HD11	9:AI:45:ALA:HB2	1.87	0.55
12:AL:24:VAL:HG13	12:AL:98:TYR:CE1	2.41	0.55
25:AY:19:G:H3'	25:AY:20:U:C6	2.41	0.55
26:BA:2238:G:H2'	26:BA:2238:G:N3	2.20	0.55
26:BA:2662:A:H2'	26:BA:2663:G:O4'	2.07	0.55
5:CE:50:GLU:HB2	5:CE:53:LEU:HD12	1.88	0.55
19:CS:28:LYS:HB2	19:CS:29:ARG:CA	2.36	0.55
24:CX:31:G:H3'	24:CX:32:5MC:HM51	1.88	0.55
26:DA:140:G:N2	26:DA:1596:A:H4'	2.21	0.55
26:DA:2135:A:H2'	26:DA:2136:C:C6	2.41	0.55
34:DN:17:ASP:HB2	34:DN:137:LYS:HZ1	1.71	0.55
1:AA:442:C:H42	1:AA:492:G:H1	1.53	0.55
11:AK:34:ASP:OD1	11:AK:38:ASN:N	2.40	0.55
20:AT:9:ASN:ND2	20:AT:10:LEU:H	2.05	0.55
26:BA:2791:C:H2'	26:BA:2792:G:H8	1.71	0.55
30:BF:158:THR:O	30:BF:164:ARG:NH1	2.38	0.55
1:CA:1065:U:OP2	1:CA:1190:G:N2	2.39	0.55
3:CC:6:HIS:CD2	3:CC:8:ILE:H	2.23	0.55
9:CI:125:TYR:HD1	9:CI:126:SER:N	2.03	0.55
9:CI:128:ARG:NH2	24:CX:33:U:OP2	2.40	0.55
13:CM:65:LYS:HA	51:D4:50:VAL:HG11	1.87	0.55
23:CW:39:PSU:H2'	23:CW:40:C:C6	2.41	0.55
26:DA:1378:A:OP1	54:D7:10:ARG:NH2	2.39	0.55
26:DA:2169:A:H2'	26:DA:2170:A:C8	2.41	0.55
33:DI:38:LEU:HB2	33:DI:40:THR:HG22	1.89	0.55
1:AA:1445:C:N3	1:AA:1457:G:N1	2.37	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AF:50:TYR:OH	18:AR:74:ARG:O	2.18	0.55
26:BA:222:A:H5''	26:BA:421:U:OP1	2.07	0.55
1:CA:1154:G:N7	1:CA:1155:G:N9	2.55	0.55
3:CC:33:LEU:HD21	14:CN:53:LEU:HD23	1.88	0.55
9:CI:9:ARG:HG2	9:CI:14:VAL:HG12	1.88	0.55
26:DA:320:A:OP2	30:DF:137:LYS:NZ	2.33	0.55
26:DA:859:G:N2	26:DA:917:A:OP2	2.39	0.55
26:DA:1239:G:H2'	26:DA:1240:U:O4'	2.06	0.55
26:DA:2400:G:H2'	26:DA:2401:U:H6	1.70	0.55
26:DA:2882:A:H5'	38:DR:96:ARG:HG3	1.87	0.55
46:DZ:111:VAL:HG21	46:DZ:117:LEU:HB2	1.88	0.55
1:AA:123:C:OP1	1:AA:311:C:O2'	2.20	0.55
26:BA:2110:G:C2	26:BA:2120:G:H1'	2.42	0.55
26:BA:2171:A:H1'	26:BA:2172:U:O4'	2.07	0.55
27:BB:91:C:H5'	37:BQ:18:LYS:HA	1.87	0.55
44:BX:2:LYS:NZ	44:BX:38:GLU:OE2	2.30	0.55
55:B8:62:LEU:HB3	55:B8:65:GLU:CG	2.36	0.55
1:CA:129(A):G:C6	1:CA:189(E):U:H4'	2.41	0.55
2:CB:48:MET:HA	2:CB:51:LEU:HB2	1.89	0.55
3:CC:22:TRP:CD2	3:CC:59:ARG:HD2	2.41	0.55
11:CK:24:SER:OG	11:CK:25:TYR:N	2.38	0.55
26:DA:84:A:H5''	45:DY:8:LYS:HE3	1.88	0.55
26:DA:833:U:O2	36:DP:55:ARG:NH2	2.37	0.55
26:DA:848:G:C2	26:DA:933:A:H1'	2.42	0.55
36:DP:121:LYS:HG2	36:DP:122:PRO:HD2	1.89	0.55
1:AA:353:A:H8	1:AA:353:A:H5'	1.72	0.55
1:AA:1305:G:N2	1:AA:1331:G:H1'	2.21	0.55
18:AR:31:LEU:HD23	18:AR:31:LEU:H	1.72	0.55
20:AT:65:LYS:HA	20:AT:68:LYS:HD3	1.88	0.55
26:BA:330:A:H2	26:BA:1210:A:HO2'	1.54	0.55
26:BA:1566:A:OP1	28:BD:211:ARG:NH1	2.40	0.55
33:BI:72:LEU:C	33:BI:74:ASN:H	2.10	0.55
33:BI:106:GLY:HA2	33:BI:107:VAL:O	2.06	0.55
1:CA:235:C:H5'	17:CQ:70:ARG:HG2	1.88	0.55
1:CA:1002:G:H1	1:CA:1038:C:H42	0.70	0.55
1:CA:1069:C:O2'	1:CA:1192:C:H1'	2.07	0.55
10:CJ:55:LYS:HG3	10:CJ:56:HIS:CD2	2.42	0.55
26:DA:330:A:H2	26:DA:1210:A:HO2'	1.54	0.55
26:DA:1530:C:HO2'	26:DA:1531:C:P	2.29	0.55
26:DA:1803:A:H4'	28:DD:259:THR:HG23	1.89	0.55
27:DB:24:G:H4'	27:DB:25:A:C8	2.41	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:D4:46:GLN:C	51:D4:48:ARG:H	2.10	0.55
3:AC:13:GLY:HA3	14:AN:57:ARG:HH21	1.72	0.55
8:AH:51:VAL:HG11	8:AH:60:ARG:NH1	2.20	0.55
24:AX:64:G:H4'	37:BQ:10:ARG:HH21	1.71	0.55
26:BA:898:C:H2'	26:BA:899:A:H8	1.70	0.55
1:CA:328:C:H4'	1:CA:329:A:H5'	1.89	0.55
1:CA:947:G:O3'	13:CM:109:THR:OG1	2.25	0.55
1:CA:1376:U:H2'	1:CA:1377:A:H8	1.70	0.55
2:CB:45:GLN:O	2:CB:49:GLU:HB2	2.06	0.55
26:DA:1796:U:H2'	26:DA:1797:C:C6	2.42	0.55
31:DG:179:PRO:HB2	51:D4:42:PHE:CE1	2.41	0.55
1:AA:1255:G:N7	10:AJ:43:ARG:NH2	2.55	0.55
1:AA:1290:G:H2'	1:AA:1291:G:H8	1.71	0.55
2:AB:16:HIS:O	2:AB:17:PHE:HD1	1.89	0.55
25:AY:50:U:N3	25:AY:64:A:C2	2.69	0.55
26:BA:2141:G:H1	26:BA:2149:G:N2	2.02	0.55
26:BA:2336:A:H61	47:B0:43:THR:HG22	1.71	0.55
36:BP:36:LYS:O	61:BP:306:HOH:O	2.18	0.55
1:CA:1023:G:C4	1:CA:1024:G:C8	2.94	0.55
1:CA:1035:A:H2'	1:CA:1036:G:H8	1.71	0.55
1:CA:1104:G:H4'	2:CB:111:ARG:NH1	2.22	0.55
4:CD:196:LEU:O	4:CD:198:VAL:N	2.36	0.55
26:DA:900:A:O2'	26:DA:901:A:OP1	2.24	0.55
30:DF:150:GLY:HA2	30:DF:172:TRP:CD2	2.41	0.55
34:DN:128:HIS:O	34:DN:131:GLN:NE2	2.40	0.55
2:AB:155:LEU:HD21	2:AB:159:PRO:HG3	1.88	0.55
6:AF:69:GLU:O	6:AF:72:VAL:HG12	2.06	0.55
35:BO:63:VAL:HG12	35:BO:106:LEU:HD11	1.88	0.55
7:CG:78:ARG:HB2	7:CG:156:TRP:HZ3	1.72	0.55
7:CG:91:VAL:HB	7:CG:96:GLN:HG2	1.88	0.55
26:DA:2349:G:OP1	61:DA:3781:HOH:O	2.18	0.55
36:DP:84:ASN:CG	36:DP:117:GLU:HB2	2.27	0.55
41:DU:85:LYS:HB2	41:DU:116:ALA:HB1	1.89	0.55
1:AA:109:A:OP1	61:AA:4215:HOH:O	2.18	0.54
9:AI:24:GLY:HA2	9:AI:59:PHE:O	2.07	0.54
13:AM:3:ARG:HG2	13:AM:8:GLU:HA	1.89	0.54
25:AY:33:U:H2'	25:AY:35:A:OP2	2.07	0.54
26:BA:1371:G:H2'	26:BA:1372:U:H5	1.70	0.54
4:CD:58:LEU:HD22	4:CD:62:GLN:HG2	1.89	0.54
25:CY:29:G:H1	25:CY:41:C:N4	2.05	0.54
26:DA:223:A:O2'	26:DA:420:C:O2	2.25	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:1467:C:C5	26:DA:1546:C:H2'	2.42	0.54
46:DZ:163:LEU:HG	46:DZ:165:VAL:HG22	1.88	0.54
1:AA:1179:A:O3'	9:AI:103:THR:HB	2.06	0.54
2:AB:109:SER:HA	2:AB:112:VAL:HG13	1.87	0.54
26:BA:1253:A:OP1	61:BA:4931:HOH:O	2.18	0.54
26:BA:1693:U:O2'	28:BD:14:ARG:NH2	2.40	0.54
26:BA:2532:G:O2'	26:BA:2657:A:N1	2.39	0.54
1:CA:419:C:OP1	1:CA:513:C:O2'	2.23	0.54
4:CD:98:GLU:HG2	4:CD:189:PRO:HG2	1.89	0.54
9:CI:28:VAL:HG22	9:CI:63:ILE:HB	1.90	0.54
15:CO:5:LYS:HD3	15:CO:5:LYS:N	2.23	0.54
16:CP:8:ARG:HG3	16:CP:17:TYR:CE1	2.42	0.54
25:CY:39:PSU:C2	25:CY:40:C:C2	2.95	0.54
26:DA:191:A:N1	61:DA:4228:HOH:O	2.34	0.54
26:DA:637:A:H2'	36:DP:117:GLU:OE2	2.08	0.54
26:DA:1014:U:H2'	26:DA:1015:G:H8	1.72	0.54
26:DA:1300:U:H4'	26:DA:1301:A:C5'	2.37	0.54
26:DA:2150:U:H2'	26:DA:2151:G:C8	2.41	0.54
26:DA:2155:G:H2'	26:DA:2156:G:H5'	1.89	0.54
30:DF:150:GLY:HA2	30:DF:172:TRP:CE3	2.42	0.54
39:DS:93:LYS:HD3	39:DS:94:TYR:N	2.22	0.54
48:D1:54:ALA:HB1	48:D1:83:GLU:HG3	1.88	0.54
1:AA:501:C:H2'	1:AA:502:G:C8	2.43	0.54
1:AA:1007:C:N3	1:AA:1022:G:O6	2.41	0.54
1:AA:1074:G:O2'	1:AA:1101:A:N1	2.31	0.54
1:AA:1149:C:H2'	1:AA:1150:U:C6	2.42	0.54
2:AB:20:GLU:HA	2:AB:21:ARG:NH2	2.22	0.54
5:AE:33:VAL:HG21	5:AE:109:ILE:HA	1.89	0.54
7:AG:152:ALA:HB1	7:AG:155:ARG:HH21	1.72	0.54
26:BA:69:C:O2	26:BA:73:A:O2'	2.23	0.54
26:BA:226:G:H21	26:BA:228:A:H62	1.54	0.54
26:BA:404:C:H4'	26:BA:405:U:H5'	1.89	0.54
26:BA:1047:G:HO2'	26:BA:1048:A:H8	1.55	0.54
26:BA:2180:U:H2'	26:BA:2181:G:O4'	2.08	0.54
39:BS:34:HIS:ND1	39:BS:53:SER:OG	2.36	0.54
43:BW:25:ARG:NH2	43:BW:74:ALA:O	2.35	0.54
46:BZ:4:ARG:NE	46:BZ:60:GLU:OE1	2.28	0.54
26:DA:276:A:H5''	26:DA:277:C:H5'	1.88	0.54
26:DA:2136:C:O2'	26:DA:2137:C:O5'	2.25	0.54
26:DA:2612:C:OP2	52:D5:2:ALA:N	2.41	0.54
31:DG:23:PHE:HB2	31:DG:25:TYR:CZ	2.42	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:AY:51:U:H3	25:AY:63:G:H1	1.55	0.54
26:BA:1113:U:H2'	26:BA:1114:G:C8	2.41	0.54
26:BA:2129:C:H2'	26:BA:2130:U:C6	2.42	0.54
26:BA:2445:G:OP1	30:BF:74:ARG:NH2	2.38	0.54
29:BE:55:ASN:HB3	29:BE:58:ARG:HG3	1.88	0.54
1:CA:859:A:OP2	1:CA:869:G:N1	2.34	0.54
1:CA:1378:C:H5	1:CA:1379:G:C4	2.25	0.54
3:CC:20:SER:OG	3:CC:22:TRP:NE1	2.40	0.54
4:CD:60:GLU:HG2	4:CD:202:LEU:HB2	1.90	0.54
26:DA:300:A:P	45:DY:86:ARG:HH22	2.30	0.54
26:DA:796:C:H2'	26:DA:797:C:C6	2.42	0.54
26:DA:2733:A:N1	29:DE:203:LYS:HA	2.23	0.54
40:DT:24:PRO:HA	40:DT:49:VAL:HG22	1.89	0.54
1:AA:848:C:H2'	1:AA:849:C:C6	2.43	0.54
1:AA:1033:G:H2'	1:AA:1034:G:H8	1.72	0.54
1:AA:1189:C:OP1	10:AJ:51:ARG:NH2	2.24	0.54
2:AB:105:PHE:CE1	2:AB:155:LEU:HD12	2.43	0.54
3:AC:104:GLN:HE21	3:AC:105:GLU:N	2.05	0.54
5:AE:91:LEU:HB3	5:AE:118:ILE:HD11	1.89	0.54
5:AE:140:ARG:O	5:AE:143:ARG:NH2	2.41	0.54
15:AO:56:LEU:O	15:AO:60:VAL:HG23	2.06	0.54
26:BA:1721:G:H3'	26:BA:1722:A:H5''	1.88	0.54
26:BA:2116:G:N1	26:BA:2162:G:OP1	2.41	0.54
26:DA:641:C:H42	26:DA:647:G:H1	1.56	0.54
32:DH:56:SER:OG	32:DH:57:ASP:N	2.41	0.54
1:AA:923:A:O2'	1:AA:1399:C:OP2	2.23	0.54
1:AA:1292:U:H5'	9:AI:38:GLN:NE2	2.22	0.54
3:AC:150:LYS:HB2	3:AC:173:VAL:HG21	1.88	0.54
5:AE:105:VAL:HB	5:AE:106:PRO:HD3	1.90	0.54
23:AW:52:G:H4'	37:BQ:56:ARG:NH2	2.22	0.54
25:AY:67:C:H2'	25:AY:68:C:O4'	2.08	0.54
26:BA:1971:A:N1	61:BA:4352:HOH:O	2.33	0.54
29:BE:174:ASP:OD1	29:BE:175:VAL:N	2.40	0.54
36:BP:100:LEU:HD12	36:BP:112:LEU:HD11	1.90	0.54
1:CA:701:C:OP1	1:CA:702:A:O2'	2.14	0.54
1:CA:1301:U:O2'	1:CA:1302:U:H5'	2.08	0.54
2:CB:61:LEU:HD23	2:CB:68:ILE:HD11	1.89	0.54
4:CD:57:ARG:HH22	5:CE:107:ARG:HD3	1.72	0.54
6:CF:46:ARG:HG3	6:CF:47:ARG:N	2.21	0.54
10:CJ:49:VAL:HG23	14:CN:41:ARG:HB2	1.88	0.54
18:CR:61:LYS:O	18:CR:65:ILE:HG12	2.07	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:1183:G:H5'	50:D3:30:ARG:HH12	1.73	0.54
33:DI:14:ASP:OD1	33:DI:15:VAL:N	2.38	0.54
1:AA:45:U:H2'	1:AA:46:G:C8	2.42	0.54
1:AA:171:A:H2'	1:AA:172:A:C8	2.42	0.54
11:AK:84:VAL:HG11	11:AK:91:ARG:HD2	1.88	0.54
19:AS:67:VAL:HG21	51:B4:59:PHE:HB3	1.88	0.54
24:AX:19:G:H4'	24:AX:20:U:OP2	2.06	0.54
26:BA:443:A:H1'	26:BA:1201:C:O4'	2.07	0.54
26:BA:2327:A:H2'	26:BA:2328:A:C8	2.42	0.54
1:CA:1003:G:N2	1:CA:1025:U:O4	2.40	0.54
3:CC:6:HIS:CG	14:CN:49:HIS:HB3	2.43	0.54
24:CX:58:A:H4'	24:CX:59:A:OP1	2.08	0.54
26:DA:252:G:P	36:DP:50:ARG:HH12	2.31	0.54
26:DA:855:G:H2'	26:DA:856:C:C6	2.43	0.54
26:DA:2206:G:H3'	26:DA:2207:G:N7	2.23	0.54
1:AA:159:G:O2'	1:AA:161:A:N7	2.30	0.54
1:AA:524:G:H2'	1:AA:525:C:C6	2.43	0.54
1:AA:539:A:H2'	1:AA:540:G:C8	2.43	0.54
1:AA:934:C:OP1	61:AA:4110:HOH:O	2.18	0.54
1:AA:1347:G:N2	1:AA:1373:G:H2'	2.23	0.54
4:AD:188:LEU:HD23	4:AD:188:LEU:H	1.73	0.54
20:AT:86:ARG:O	20:AT:90:GLN:NE2	2.40	0.54
26:BA:271(E):U:H2'	26:BA:271(F):C:C6	2.43	0.54
26:BA:784:A:C6	28:BD:229:VAL:HG11	2.43	0.54
26:BA:2243:U:OP1	61:BA:4017:HOH:O	2.17	0.54
51:B4:54:GLY:C	51:B4:56:VAL:HA	2.28	0.54
1:CA:399:G:H2'	1:CA:400:C:C6	2.43	0.54
1:CA:441:A:H3'	1:CA:442:C:C6	2.43	0.54
1:CA:723:U:HO2'	1:CA:724:G:C5'	2.21	0.54
3:CC:29:TYR:OH	14:CN:54:PRO:O	2.20	0.54
26:DA:879:G:H3'	26:DA:880:G:H8	1.72	0.54
26:DA:971:C:OP2	61:DA:4647:HOH:O	2.18	0.54
26:DA:1153:C:H2'	26:DA:1154:G:O4'	2.07	0.54
26:DA:2591:C:OP1	28:DD:239:ARG:HD2	2.08	0.54
28:DD:3:VAL:HG13	28:DD:17:THR:HB	1.89	0.54
31:DG:48:GLU:O	31:DG:51:ARG:HG3	2.07	0.54
42:DV:35:LEU:HB2	42:DV:57:VAL:HG23	1.90	0.54
1:AA:222:U:H2'	1:AA:223:U:C6	2.43	0.54
1:AA:316:G:OP2	1:AA:351:G:O2'	2.25	0.54
3:AC:11:ARG:NH2	3:AC:177:THR:O	2.41	0.54
3:AC:58:GLU:HB3	10:AJ:92:THR:HG21	1.89	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:AW:9:A:O2'	23:AW:10:G:N7	2.40	0.54
26:BA:272:G:O2'	26:BA:421:U:OP2	2.22	0.54
26:BA:887:A:H4'	26:BA:888:C:C5	2.43	0.54
26:BA:1174:A:H1'	26:BA:1175:U:H5''	1.89	0.54
26:BA:1796:U:H2'	26:BA:1797:C:C6	2.43	0.54
1:CA:428:G:OP2	4:CD:10:ARG:NH1	2.41	0.54
1:CA:1084:G:H5'	1:CA:1102:A:OP2	2.08	0.54
1:CA:1490:C:H2'	1:CA:1491:G:H8	1.72	0.54
3:CC:55:VAL:HG22	3:CC:68:VAL:HG22	1.88	0.54
3:CC:157:ILE:HD12	3:CC:164:ARG:HB3	1.90	0.54
26:DA:391:G:O2'	26:DA:410:G:OP1	2.19	0.54
26:DA:1013:C:H2'	26:DA:1014:U:C6	2.43	0.54
1:AA:26:A:N6	1:AA:558:G:O2'	2.39	0.54
1:AA:880:C:OP1	12:AL:8:ASN:ND2	2.39	0.54
1:AA:1077:G:N2	1:AA:1080:A:OP2	2.41	0.54
25:AY:6:G:O6	25:AY:7:A:N6	2.40	0.54
26:BA:271(H):G:O2'	26:BA:271(I):G:H8	1.90	0.54
26:BA:1470:G:N2	26:BA:1520:G:OP2	2.34	0.54
26:BA:2630:G:H2'	26:BA:2631:G:C8	2.43	0.54
36:BP:97:PRO:HD3	36:BP:126:VAL:O	2.08	0.54
1:CA:59:A:H5''	1:CA:60:A:H5''	1.89	0.54
1:CA:411:A:OP1	4:CD:30:LYS:NZ	2.40	0.54
2:CB:16:HIS:CB	2:CB:210:SER:HB2	2.28	0.54
13:CM:64:TRP:HB2	13:CM:66:LEU:HD21	1.89	0.54
26:DA:2102:U:H3	26:DA:2187:G:H1	1.56	0.54
26:DA:2182:G:H2'	26:DA:2183:C:C6	2.42	0.54
26:DA:2723:C:OP2	29:DE:109:LYS:NZ	2.41	0.54
1:AA:940:C:OP1	7:AG:29:LYS:NZ	2.41	0.53
1:AA:1005:A:H1'	1:AA:1036:G:N2	2.23	0.53
9:AI:17:VAL:HG11	9:AI:81:ILE:HA	1.90	0.53
25:AY:9:A:H5''	25:AY:46:7MG:N2	2.23	0.53
26:BA:2693:A:H2'	26:BA:2694:G:H8	1.72	0.53
54:B7:24:THR:CG2	54:B7:27:GLY:H	2.20	0.53
1:CA:93:G:O2'	1:CA:96:U:H5'	2.08	0.53
1:CA:299:G:H2'	1:CA:300:A:C8	2.43	0.53
1:CA:1012:U:H2'	1:CA:1013:G:C8	2.43	0.53
1:CA:1206:G:O4'	3:CC:194:GLY:HA2	2.08	0.53
2:CB:15:VAL:HG12	2:CB:16:HIS:H	1.73	0.53
4:CD:98:GLU:OE1	4:CD:103:ASN:ND2	2.31	0.53
5:CE:74:GLY:HA3	5:CE:116:THR:HG22	1.89	0.53
18:CR:58:LEU:HB3	18:CR:62:GLU:HG3	1.89	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:CS:49:ILE:HD13	19:CS:62:ILE:HD13	1.90	0.53
23:CW:66:U:C3'	23:CW:67:C:H5''	2.32	0.53
26:DA:203:C:OP2	61:DA:4309:HOH:O	2.19	0.53
26:DA:625:G:O6	36:DP:107:LYS:NZ	2.36	0.53
45:DY:28:LYS:HD2	45:DY:40:GLU:HG3	1.89	0.53
1:AA:159:G:N2	1:AA:162:A:OP2	2.37	0.53
26:BA:1406:U:H2'	26:BA:1407:C:C6	2.44	0.53
26:BA:2142:C:H2'	26:BA:2143:C:C6	2.43	0.53
37:BQ:85:LYS:HB2	47:B0:7:LEU:HD12	1.91	0.53
1:CA:986:A:H1'	19:CS:55:LYS:HA	1.90	0.53
1:CA:1011:G:C6	1:CA:1012:U:C2	2.97	0.53
1:CA:1251:A:H2'	1:CA:1252:A:C8	2.43	0.53
1:CA:1305:G:N2	1:CA:1331:G:H1'	2.23	0.53
13:CM:13:LYS:HA	13:CM:44:ARG:HH11	1.72	0.53
26:DA:500:G:N1	26:DA:503:A:OP2	2.40	0.53
29:DE:174:ASP:OD1	29:DE:175:VAL:N	2.40	0.53
33:DI:27:ARG:HD2	48:D1:71:TYR:CE1	2.43	0.53
1:AA:1191:A:H5''	3:AC:4:LYS:NZ	2.23	0.53
2:AB:204:ASN:OD1	2:AB:206:ASP:N	2.29	0.53
10:AJ:13:HIS:O	10:AJ:17:ASP:HB2	2.09	0.53
12:AL:32:PHE:HB3	12:AL:84:LEU:HD11	1.89	0.53
19:AS:65:ASN:ND2	19:AS:66:MET:HG2	2.23	0.53
38:BR:44:LEU:HD22	38:BR:48:VAL:HG23	1.90	0.53
1:CA:523:A:H61	12:CL:92:ASP:HB2	1.74	0.53
1:CA:890:G:O2'	1:CA:906:G:O6	2.20	0.53
2:CB:95:GLN:HG3	2:CB:148:TYR:HA	1.90	0.53
4:CD:61:LYS:HD2	4:CD:206:PHE:CE2	2.43	0.53
5:CE:92:LYS:HB3	5:CE:119:LEU:HB2	1.90	0.53
26:DA:957:A:H5'	37:DQ:76:LYS:HG3	1.90	0.53
26:DA:1021:A:H3'	26:DA:1021:A:H8	1.72	0.53
27:DB:90:A:C5	27:DB:91:C:H1'	2.44	0.53
36:DP:121:LYS:O	36:DP:123:LEU:N	2.40	0.53
1:AA:452:A:H4'	16:AP:72:ARG:NH1	2.24	0.53
13:AM:80:ARG:HH22	19:AS:69:HIS:CE1	2.25	0.53
17:AQ:95:TYR:HA	17:AQ:98:LEU:HD22	1.89	0.53
26:BA:910:A:H62	37:BQ:12:GLN:HA	1.73	0.53
26:BA:2115:G:H21	26:BA:2171:A:H61	1.57	0.53
28:BD:132:PRO:HD3	28:BD:190:TYR:CZ	2.44	0.53
51:B4:15:ILE:O	51:B4:33:VAL:N	2.39	0.53
1:CA:382:A:H2'	1:CA:383:A:C8	2.43	0.53
1:CA:1272:G:C2	1:CA:1273:G:H1'	2.43	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:186:ALA:O	2:CB:201:ILE:N	2.40	0.53
3:CC:125:GLU:OE2	3:CC:125:GLU:N	2.36	0.53
7:CG:26:PHE:CE1	7:CG:30:ILE:HD11	2.44	0.53
8:CH:86:ILE:HG13	8:CH:133:LEU:HD22	1.91	0.53
23:CW:8:4SU:H1'	23:CW:48:C:H1'	1.89	0.53
23:CW:27:G:H1	23:CW:43:C:N4	2.03	0.53
26:DA:1007:C:P	34:DN:37:LYS:HZ1	2.31	0.53
26:DA:1203:G:O2'	26:DA:1242:A:N6	2.39	0.53
29:DE:36:ARG:HD3	29:DE:85:ASN:HD21	1.73	0.53
51:D4:59:PHE:HA	51:D4:61:ARG:N	2.23	0.53
1:AA:198:G:O6	1:AA:219:C:N4	2.42	0.53
1:AA:346:G:OP1	40:BT:41:ARG:NH2	2.41	0.53
1:AA:715:A:H2'	1:AA:716:A:C8	2.44	0.53
26:BA:2537:U:H2'	26:BA:2538:C:C6	2.44	0.53
26:BA:2557:G:H2'	26:BA:2558:C:C6	2.44	0.53
33:BI:61:ARG:HH11	33:BI:61:ARG:HA	1.73	0.53
36:BP:42:SER:O	61:BP:305:HOH:O	2.18	0.53
1:CA:543:C:OP1	4:CD:14:ARG:NE	2.36	0.53
2:CB:230:VAL:HG22	2:CB:231:GLU:H	1.74	0.53
3:CC:155:GLY:HA3	3:CC:196:LEU:HD13	1.90	0.53
13:CM:22:ILE:HG23	13:CM:67:GLU:HG2	1.91	0.53
26:DA:1266:G:O5'	43:DW:15:ARG:NH2	2.41	0.53
26:DA:2070:G:OP2	61:DA:4495:HOH:O	2.18	0.53
27:DB:95:C:H2'	27:DB:96:U:C6	2.44	0.53
39:DS:67:ARG:HG3	39:DS:104:GLY:HA3	1.90	0.53
47:D0:27:GLU:HG3	47:D0:68:GLU:HA	1.91	0.53
1:AA:69:G:H2'	1:AA:70:G:H8	1.74	0.53
1:AA:848:C:H2'	1:AA:849:C:H6	1.74	0.53
1:AA:1112:C:O2	3:AC:179:ARG:HG3	2.09	0.53
3:AC:19:GLU:HB3	3:AC:40:ARG:NH2	2.23	0.53
3:AC:36:ASP:O	3:AC:40:ARG:HG3	2.09	0.53
23:AW:18:G:H4'	23:AW:60:U:C5	2.43	0.53
25:AY:49:C:H42	25:AY:65:G:H1	0.68	0.53
26:BA:548:A:H61	42:BV:19:LYS:H	1.56	0.53
26:BA:2693:A:H2'	26:BA:2694:G:C8	2.44	0.53
29:BE:31:CYS:HB3	29:BE:49:LEU:HG	1.90	0.53
1:CA:1347:G:N2	1:CA:1373:G:H2'	2.24	0.53
26:DA:922:U:H2'	26:DA:923:C:C6	2.43	0.53
31:DG:106:LEU:HA	31:DG:110:ALA:HB3	1.90	0.53
35:DO:16:ALA:HB2	35:DO:52:VAL:HG21	1.91	0.53
1:AA:1064:G:H4'	1:AA:1065:U:OP1	2.08	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1778:U:H2'	26:BA:1784:A:N6	2.23	0.53
26:BA:2116:G:H2'	26:BA:2117:A:C6	2.44	0.53
26:BA:2137:C:H2'	26:BA:2138:C:C6	2.43	0.53
26:BA:2690:C:OP1	38:BR:17:ARG:NH1	2.33	0.53
1:CA:895:G:N7	61:CA:4069:HOH:O	2.34	0.53
1:CA:1120:G:C6	1:CA:1154:G:C2	2.96	0.53
2:CB:46:LYS:O	2:CB:50:GLU:N	2.42	0.53
26:DA:644:A:H4'	26:DA:645:C:C5	2.43	0.53
26:DA:1364:G:OP2	48:D1:3:LYS:HG3	2.09	0.53
26:DA:1423:G:OP1	26:DA:1492:G:O2'	2.26	0.53
26:DA:1658:C:OP1	61:DA:4209:HOH:O	2.18	0.53
26:DA:2177:C:H2'	26:DA:2178:C:O4'	2.08	0.53
26:DA:2630:G:H2'	26:DA:2631:G:H8	1.74	0.53
42:DV:24:LYS:HG3	42:DV:64:HIS:HD2	1.73	0.53
1:AA:946:A:H2'	1:AA:947:G:C8	2.43	0.53
1:AA:1062:U:H2'	1:AA:1063:C:C6	2.44	0.53
4:AD:15:GLU:CG	4:AD:63:LYS:HB3	2.39	0.53
12:AL:39:VAL:HG11	12:AL:41:ARG:NH1	2.24	0.53
23:AW:1:G:H2'	23:AW:2:C:C6	2.44	0.53
23:AW:9:A:H1'	23:AW:45:U:O2'	2.09	0.53
26:BA:2115:G:N2	26:BA:2171:A:H61	2.06	0.53
46:BZ:126:VAL:HG11	46:BZ:161:VAL:HG23	1.89	0.53
2:CB:16:HIS:CG	2:CB:17:PHE:H	2.27	0.53
3:CC:8:ILE:HD13	3:CC:184:TYR:HB3	1.90	0.53
8:CH:30:ARG:O	8:CH:34:GLU:HG2	2.08	0.53
23:CW:75:C:H2'	23:CW:76:31M:C4	2.39	0.53
26:DA:875:G:O2'	46:DZ:151:HIS:HE1	1.92	0.53
39:DS:11:LYS:O	39:DS:15:ARG:HG3	2.08	0.53
1:AA:270:A:H2'	1:AA:271:C:C6	2.44	0.53
1:AA:520:A:N1	1:AA:536:C:H1'	2.23	0.53
6:AF:9:VAL:HB	6:AF:87:ARG:HB2	1.90	0.53
24:AX:7:G:H1	24:AX:66:C:H42	1.56	0.53
29:BE:12:THR:HG22	29:BE:13:ARG:H	1.73	0.53
26:DA:144:C:H2'	26:DA:145:G:H8	1.73	0.53
26:DA:1379:A:H4'	26:DA:1380:G:OP2	2.07	0.53
26:DA:1420:U:O2'	26:DA:1421:G:OP1	2.25	0.53
39:DS:87:PHE:CZ	39:DS:102:ALA:HB2	2.44	0.53
1:AA:97:G:O2'	1:AA:98:G:H5''	2.09	0.53
1:AA:262:A:H2'	1:AA:263:A:C8	2.44	0.53
26:BA:639:U:H2'	26:BA:640:C:C6	2.44	0.53
33:BI:40:THR:O	33:BI:44:LEU:HB2	2.09	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BZ:111:VAL:HG12	46:BZ:112:ARG:H	1.73	0.53
1:CA:1122:U:C4	1:CA:1123:A:N7	2.76	0.53
1:CA:1125:U:C3'	1:CA:1126:U:H5''	2.38	0.53
17:CQ:12:SER:HB3	17:CQ:20:THR:HB	1.89	0.53
26:DA:1532:C:N4	26:DA:1537:G:O6	2.20	0.53
26:DA:2112:G:N7	26:DA:2169:A:N6	2.57	0.53
46:DZ:53:ILE:HD13	46:DZ:99:TYR:HB2	1.91	0.53
1:AA:942:G:H21	9:AI:124:GLN:NE2	2.08	0.52
26:BA:252:G:OP1	36:BP:50:ARG:NH1	2.42	0.52
28:BD:10:THR:OG1	28:BD:13:ARG:HB2	2.08	0.52
49:B2:11:GLU:O	49:B2:15:LYS:HG3	2.09	0.52
1:CA:437:U:H5'	4:CD:155:LEU:HD21	1.91	0.52
1:CA:620:C:C2	4:CD:135:LEU:HG	2.43	0.52
1:CA:1125:U:O2	10:CJ:38:ILE:HG21	2.09	0.52
2:CB:91:PRO:HD3	2:CB:154:LEU:HD12	1.91	0.52
3:CC:54:ARG:HH11	3:CC:54:ARG:HB3	1.74	0.52
4:CD:119:GLN:HG2	4:CD:123:HIS:CD2	2.45	0.52
16:CP:52:ASP:O	16:CP:54:GLU:N	2.33	0.52
26:DA:857:C:H4'	47:D0:23:VAL:HG21	1.91	0.52
26:DA:878:A:N6	26:DA:899:A:O2'	2.43	0.52
26:DA:1415:U:O2'	26:DA:1417:C:OP1	2.25	0.52
26:DA:2646:C:H2'	26:DA:2647:U:O4'	2.09	0.52
26:DA:2684:U:O2'	35:DO:68:GLU:OE1	2.28	0.52
28:DD:85:ASP:OD2	28:DD:88:ARG:NH1	2.40	0.52
29:DE:27:LEU:HD22	40:DT:1:MET:HE1	1.90	0.52
1:AA:167:G:H2'	1:AA:168:G:H8	1.75	0.52
24:AX:56:C:O5'	24:AX:56:C:H6	1.92	0.52
25:AY:67:C:H2'	25:AY:68:C:C6	2.44	0.52
26:BA:330:A:H2	26:BA:1210:A:O2'	1.92	0.52
26:BA:1359:A:H2'	26:BA:1360:A:H5'	1.91	0.52
32:BH:159:GLU:HG3	32:BH:169:VAL:HG11	1.91	0.52
1:CA:164:U:H2'	1:CA:165:C:C6	2.44	0.52
1:CA:1119:C:N3	1:CA:1154:G:O6	2.42	0.52
1:CA:1125:U:C2	10:CJ:38:ILE:HD13	2.44	0.52
1:CA:1260:C:O5'	1:CA:1284:C:H4'	2.09	0.52
26:DA:1790:C:H5''	26:DA:1791:A:OP1	2.09	0.52
26:DA:2180:U:H2'	26:DA:2181:G:O4'	2.09	0.52
1:AA:67:C:H2'	1:AA:68:G:C8	2.44	0.52
1:AA:1027:C:N3	1:AA:1028:C:N4	2.57	0.52
3:AC:22:TRP:CZ2	14:AN:54:PRO:HG3	2.44	0.52
3:AC:152:ILE:HB	3:AC:199:LYS:HB2	1.91	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:155:LEU:HB3	4:AD:158:ILE:CD1	2.39	0.52
17:AQ:56:VAL:HB	17:AQ:78:GLU:HB3	1.91	0.52
34:BN:21:LYS:HE3	34:BN:140:VAL:OXT	2.09	0.52
50:B3:50:VAL:HB	50:B3:53:LEU:HD12	1.90	0.52
1:CA:625:G:H2'	1:CA:626:U:H6	1.74	0.52
1:CA:1278:U:H5'	1:CA:1279:A:O4'	2.08	0.52
3:CC:3:ASN:OD1	3:CC:3:ASN:N	2.42	0.52
26:DA:1188:U:H4'	42:DV:79:VAL:HG22	1.91	0.52
30:DF:120:GLU:HB2	30:DF:122:LYS:HG2	1.90	0.52
34:DN:67:LEU:O	34:DN:88:GLU:HG3	2.10	0.52
40:DT:11:GLU:O	40:DT:15:VAL:HG23	2.10	0.52
1:AA:1053:G:C3'	1:AA:1054:C:H5'	2.39	0.52
10:AJ:62:HIS:HB3	14:AN:59:ALA:HB3	1.92	0.52
12:AL:24:VAL:HG13	12:AL:98:TYR:HE1	1.73	0.52
26:BA:1429:G:H2'	26:BA:1430:C:C6	2.44	0.52
26:BA:1482:G:O6	26:BA:1507:A:N6	2.42	0.52
26:BA:1843:C:H5'	28:BD:253:GLN:HE22	1.74	0.52
27:BB:7:G:H8	27:BB:7:G:H5''	1.75	0.52
28:BD:108:PRO:HB3	28:BD:143:HIS:CE1	2.45	0.52
31:BG:179:PRO:HG3	51:B4:43:TYR:OH	2.10	0.52
32:BH:56:SER:OG	32:BH:57:ASP:N	2.42	0.52
37:BQ:54:MET:HG3	37:BQ:117:ALA:HB1	1.92	0.52
1:CA:1103:C:OP1	2:CB:96:ARG:NH2	2.42	0.52
1:CA:1158:C:O3'	2:CB:133:LYS:NZ	2.43	0.52
3:CC:111:LEU:HD22	3:CC:146:ALA:HB2	1.92	0.52
8:CH:20:TYR:HA	8:CH:65:TYR:CZ	2.44	0.52
26:DA:1021:A:H3'	26:DA:1021:A:C8	2.45	0.52
26:DA:2176:A:H2'	26:DA:2177:C:C5	2.44	0.52
26:DA:2748:A:H5'	32:DH:4:ILE:HD12	1.92	0.52
26:DA:2803:C:H2'	26:DA:2804:C:H6	1.74	0.52
28:DD:276:LYS:HD3	28:DD:276:LYS:H	1.74	0.52
33:DI:40:THR:O	33:DI:44:LEU:HB2	2.09	0.52
44:DX:11:PRO:HB3	44:DX:92:LEU:HD11	1.90	0.52
44:DX:44:GLU:O	44:DX:48:LYS:N	2.42	0.52
55:D8:6:THR:HG22	55:D8:63:PRO:HD2	1.92	0.52
6:AF:19:LEU:HD11	6:AF:59:TYR:CE2	2.45	0.52
23:AW:1:G:O6	23:AW:72:C:N3	2.42	0.52
26:BA:1187:G:H5''	42:BV:81:TYR:CE1	2.43	0.52
26:BA:2136:C:N4	26:BA:2155:G:N1	2.32	0.52
36:BP:49:ARG:NH1	55:B8:61:LEU:HD23	2.24	0.52
1:CA:1243:C:H42	1:CA:1294:G:H1	1.58	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1490:C:H2'	1:CA:1491:G:C8	2.44	0.52
3:CC:125:GLU:O	3:CC:127:ARG:NH1	2.41	0.52
26:DA:77:C:O2'	49:D2:14:ARG:NH2	2.42	0.52
26:DA:1839:G:C8	26:DA:1927:A:H1'	2.44	0.52
36:DP:95:VAL:HG13	36:DP:125:VAL:HA	1.91	0.52
50:D3:13:ILE:O	61:D3:3101:HOH:O	2.19	0.52
1:AA:685:G:N2	1:AA:704:A:OP2	2.33	0.52
1:AA:1131:G:H2'	1:AA:1132:C:H6	1.74	0.52
1:AA:1320:C:OP1	19:AS:70:LYS:HE3	2.09	0.52
1:AA:1376:U:H2'	1:AA:1377:A:C8	2.43	0.52
1:AA:1464:G:OP2	40:BT:111:ARG:NH2	2.43	0.52
1:AA:1530:G:H2'	1:AA:1531:A:O4'	2.09	0.52
4:AD:79:PHE:HE1	4:AD:204:ILE:HD13	1.75	0.52
7:AG:49:ILE:O	7:AG:53:LYS:HG3	2.10	0.52
24:AX:4:G:H2'	24:AX:5:G:C8	2.44	0.52
26:BA:141:A:H8	26:BA:1408:C:HO2'	1.54	0.52
26:BA:957:A:N1	26:BA:2458:G:H4'	2.25	0.52
1:CA:876:G:O5'	8:CH:14:ARG:NH1	2.43	0.52
1:CA:1469:G:N7	61:CA:4124:HOH:O	2.34	0.52
2:CB:141:GLU:O	2:CB:145:LEU:HG	2.09	0.52
8:CH:13:ILE:O	8:CH:17:THR:HG23	2.10	0.52
15:CO:39:LEU:HD13	15:CO:56:LEU:HB2	1.91	0.52
25:CY:61:C:H2'	25:CY:62:C:C6	2.45	0.52
26:DA:821:A:N1	61:DA:4093:HOH:O	2.34	0.52
26:DA:1899:G:O2'	26:DA:1900:A:OP2	2.24	0.52
41:DU:81:HIS:HB3	41:DU:117:GLN:HE22	1.74	0.52
1:AA:838:G:H2'	1:AA:839:U:H2'	1.92	0.52
4:AD:107:ARG:HH22	4:AD:194:LEU:HD21	1.74	0.52
6:AF:22:GLU:OE2	6:AF:82:ARG:HG2	2.10	0.52
26:BA:1803:A:O2'	28:BD:259:THR:HG21	2.09	0.52
26:BA:2243:U:H2'	26:BA:2244:U:C6	2.45	0.52
39:BS:106:ARG:O	39:BS:109:GLY:N	2.40	0.52
1:CA:189(L):G:H2'	1:CA:190:U:H6	1.74	0.52
1:CA:296:U:O2'	1:CA:556:C:O2	2.27	0.52
1:CA:1075:C:C2'	1:CA:1076:C:H5''	2.40	0.52
1:CA:1154:G:N7	1:CA:1155:G:C4	2.78	0.52
2:CB:53:ARG:HB3	2:CB:53:ARG:NH1	2.25	0.52
5:CE:6:PHE:HB2	5:CE:34:VAL:HG22	1.91	0.52
8:CH:49:GLU:HG2	8:CH:62:TYR:HE1	1.75	0.52
17:CQ:5:VAL:HG22	17:CQ:60:ILE:HG12	1.91	0.52
20:CT:43:LEU:O	20:CT:47:GLY:N	2.42	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:2171:A:C4	26:DA:2172:U:C4	2.98	0.52
31:DG:17:PRO:HA	31:DG:20:ILE:HD12	1.92	0.52
47:D0:17:GLN:O	47:D0:19:LYS:NZ	2.38	0.52
1:AA:346:G:H3'	1:AA:347:G:H4'	1.92	0.52
1:AA:649:G:H2'	1:AA:650:G:H8	1.74	0.52
2:AB:47:THR:HA	2:AB:202:PRO:HG2	1.91	0.52
4:AD:155:LEU:HB3	4:AD:158:ILE:HD11	1.92	0.52
11:AK:15:ALA:HA	11:AK:76:GLY:O	2.09	0.52
26:BA:2051:A:H5'	26:BA:2578:G:O4'	2.10	0.52
26:BA:2747:G:O6	26:BA:2755:C:H5''	2.10	0.52
1:CA:1070:U:H2'	1:CA:1071:C:H6	1.75	0.52
3:CC:126:ARG:HB3	3:CC:128:PHE:HE1	1.75	0.52
5:CE:140:ARG:O	5:CE:143:ARG:NH2	2.43	0.52
9:CI:15:ALA:HB2	9:CI:65:VAL:HG23	1.91	0.52
26:DA:657:U:H2'	26:DA:658:C:C6	2.44	0.52
26:DA:2203:U:H2'	26:DA:2205:C:C6	2.45	0.52
26:DA:2785:C:OP1	29:DE:41:LYS:NZ	2.34	0.52
31:DG:68:PRO:HB3	31:DG:92:VAL:HB	1.92	0.52
36:DP:44:GLY:HA3	36:DP:45:LEU:HB2	1.92	0.52
1:AA:428:G:H4'	1:AA:429:U:O5'	2.10	0.52
20:AT:14:LYS:HG3	20:AT:17:ARG:NH2	2.25	0.52
25:AY:5:G:H1'	25:AY:69:G:N2	2.25	0.52
26:BA:1177:A:H3'	26:BA:1178:C:C6	2.44	0.52
26:BA:2404:C:O3'	36:BP:77:ARG:NH2	2.43	0.52
40:BT:118:ARG:HG3	40:BT:118:ARG:NH1	2.22	0.52
1:CA:768:A:OP2	61:CA:4019:HOH:O	2.19	0.52
7:CG:50:ILE:HD11	7:CG:58:PRO:HA	1.92	0.52
20:CT:10:LEU:HB3	20:CT:12:ALA:H	1.74	0.52
23:CW:19:G:H1	23:CW:56:C:N4	2.04	0.52
26:DA:942:G:OP2	36:DP:39:LYS:NZ	2.42	0.52
26:DA:1033:U:OP1	56:D9:9:ARG:NH2	2.43	0.52
40:DT:16:ARG:NH2	40:DT:83:ILE:O	2.42	0.52
1:AA:1131:G:H2'	1:AA:1132:C:C6	2.45	0.52
7:AG:12:LEU:H	7:AG:12:LEU:HD12	1.74	0.52
32:BH:88:LEU:HD13	32:BH:130:ARG:HG2	1.92	0.52
39:BS:11:LYS:O	39:BS:15:ARG:HG3	2.09	0.52
39:BS:46:VAL:HG12	39:BS:48:LEU:HD12	1.91	0.52
1:CA:261:U:OP2	20:CT:79:ARG:NH2	2.43	0.52
1:CA:551:U:H2'	1:CA:552:U:C6	2.44	0.52
1:CA:1004:A:H3'	1:CA:1005:A:C5'	2.38	0.52
1:CA:1006:C:OP1	1:CA:1037:C:O2'	2.27	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:76:GLN:HB2	2:CB:208:ILE:HG12	1.92	0.52
26:DA:81:G:N7	61:DA:4166:HOH:O	2.33	0.52
26:DA:171:G:H2'	26:DA:172:C:H6	1.75	0.52
26:DA:373:U:H2'	26:DA:374:A:C8	2.44	0.52
26:DA:2590:A:OP2	28:DD:238:GLY:HA2	2.10	0.52
30:DF:20:LEU:HD12	30:DF:125:LEU:HD13	1.91	0.52
36:DP:29:LYS:HG3	36:DP:30:THR:H	1.75	0.52
43:DW:45:TYR:CZ	43:DW:49:LYS:HE3	2.45	0.52
1:AA:664:G:N2	1:AA:741:G:H1	2.00	0.51
3:AC:18:TRP:HE3	3:AC:18:TRP:H	1.56	0.51
8:AH:39:LEU:HB3	8:AH:45:ILE:HG12	1.92	0.51
8:AH:73:ASP:OD1	8:AH:75:ARG:HD3	2.10	0.51
19:AS:65:ASN:HD22	19:AS:66:MET:N	2.09	0.51
26:BA:1858:G:N2	26:BA:1883:G:H2'	2.24	0.51
29:BE:143:ASN:HD22	29:BE:147:PRO:HD3	1.76	0.51
33:BI:93:THR:HG22	33:BI:119:PRO:HB3	1.91	0.51
1:CA:1218:C:H2'	1:CA:1219:U:C6	2.45	0.51
1:CA:1304:G:C6	1:CA:1305:G:N1	2.78	0.51
9:CI:55:ALA:HA	9:CI:58:HIS:CD2	2.45	0.51
15:CO:8:LYS:O	15:CO:12:ILE:HG13	2.10	0.51
26:DA:2299:G:H2'	26:DA:2300:G:H8	1.75	0.51
29:DE:12:THR:HG22	40:DT:58:ASN:OD1	2.10	0.51
41:DU:58:ARG:HA	41:DU:61:TRP:CE3	2.45	0.51
1:AA:78:G:C2	1:AA:91:C:N3	2.78	0.51
1:AA:1036:G:H5'	1:AA:1037:C:OP2	2.09	0.51
13:AM:122:LYS:HD3	13:AM:123:ALA:H	1.74	0.51
25:AY:7:A:N1	25:AY:66:U:O2	2.42	0.51
26:BA:793:A:OP2	26:BA:2071:A:O2'	2.27	0.51
26:BA:1593:G:H2'	26:BA:1594:G:C8	2.45	0.51
26:BA:2361:A:OP1	55:B8:27:THR:OG1	2.13	0.51
29:BE:47:VAL:HG23	29:BE:84:PHE:O	2.10	0.51
49:B2:2:LYS:O	49:B2:6:VAL:HG23	2.09	0.51
1:CA:17:U:H2'	1:CA:18:C:C6	2.44	0.51
1:CA:1118:C:C2	1:CA:1119:C:C5	2.96	0.51
1:CA:1129:C:P	9:CI:16:ARG:HH12	2.33	0.51
1:CA:1327:C:H5''	21:CU:20:LYS:HB3	1.93	0.51
8:CH:67:PRO:O	8:CH:69:ARG:HG3	2.10	0.51
9:CI:53:VAL:C	9:CI:55:ALA:H	2.10	0.51
26:DA:1006:C:OP2	61:DA:4190:HOH:O	2.19	0.51
26:DA:1803:A:HO2'	28:DD:259:THR:HG21	1.76	0.51
29:DE:50:GLY:HA3	29:DE:75:VAL:HG11	1.91	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DG:39:ILE:HB	31:DG:92:VAL:HG13	1.92	0.51
32:DH:81:GLU:OE1	32:DH:81:GLU:N	2.44	0.51
1:AA:1032:G:H2'	1:AA:1033:G:C8	2.44	0.51
2:AB:100:GLY:N	2:AB:176:GLU:OE2	2.30	0.51
26:BA:8:A:H2'	26:BA:9:U:H6	1.74	0.51
26:BA:2277:G:OP2	47:B0:10:THR:HG21	2.10	0.51
1:CA:955:U:O2'	19:CS:83:HIS:HD2	1.93	0.51
1:CA:1226:C:H2'	13:CM:103:THR:HB	1.93	0.51
1:CA:1360:A:O5'	1:CA:1360:A:H8	1.93	0.51
2:CB:15:VAL:HG13	2:CB:209:ARG:HB3	1.92	0.51
2:CB:168:THR:OG1	2:CB:192:SER:HA	2.09	0.51
4:CD:38:TYR:CE1	4:CD:45:GLN:HG2	2.45	0.51
9:CI:85:LEU:HB3	9:CI:92:TYR:HD2	1.75	0.51
12:CL:28:LYS:N	12:CL:29:GLY:HA2	2.24	0.51
18:CR:47:THR:HG23	18:CR:49:LYS:HG3	1.92	0.51
26:DA:62:C:H42	26:DA:93:G:H1	1.57	0.51
26:DA:867:C:H2'	26:DA:868:U:H5'	1.92	0.51
44:DX:88:LYS:HG2	44:DX:93:GLU:HG3	1.92	0.51
1:AA:1035:A:H2	1:AA:1036:G:N7	2.09	0.51
10:AJ:38:ILE:HG13	10:AJ:71:LEU:O	2.10	0.51
26:BA:602:G:O2'	26:BA:655:A:N6	2.43	0.51
26:BA:637:A:H4'	26:BA:638:G:O5'	2.11	0.51
26:BA:1164:G:H2'	26:BA:1165:U:C6	2.46	0.51
26:BA:1420:U:O2'	26:BA:1421:G:OP1	2.22	0.51
26:BA:2687:U:H2'	26:BA:2688:U:O4'	2.10	0.51
50:B3:8:LEU:HD13	50:B3:31:LEU:HD23	1.90	0.51
1:CA:34:C:H2'	1:CA:35:G:C8	2.45	0.51
1:CA:179:A:H2'	1:CA:180:U:C6	2.46	0.51
1:CA:352:C:N3	1:CA:356:A:N6	2.58	0.51
1:CA:784:C:H4'	26:DA:1837:C:OP1	2.10	0.51
1:CA:1004:A:H62	1:CA:1037:C:H3'	1.76	0.51
1:CA:1362:C:H2'	1:CA:1363:C:H5''	1.92	0.51
3:CC:118:GLN:HA	3:CC:121:ALA:HB3	1.92	0.51
3:CC:187:ALA:O	3:CC:198:VAL:HG23	2.11	0.51
9:CI:96:LEU:O	9:CI:100:GLY:N	2.43	0.51
13:CM:3:ARG:HA	51:D4:34:GLU:HG2	1.92	0.51
17:CQ:95:TYR:HA	17:CQ:98:LEU:HD13	1.91	0.51
23:CW:74:C:N4	26:DA:2507:C:O2'	2.44	0.51
26:DA:607:U:OP1	30:DF:102:PRO:HA	2.10	0.51
26:DA:710:G:H1	26:DA:721:C:H42	1.56	0.51
26:DA:832:G:OP1	61:DA:4285:HOH:O	2.19	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:1155:A:H5''	41:DU:55:ARG:HD3	1.93	0.51
26:DA:2019:A:H4'	41:DU:34:LYS:HD2	1.92	0.51
29:DE:52:LEU:HB2	29:DE:76:ARG:HB2	1.92	0.51
42:DV:10:LYS:HZ1	42:DV:23:GLU:HG3	1.74	0.51
1:AA:997:U:H3	1:AA:1044:A:H61	1.59	0.51
26:BA:34:C:H5''	26:BA:35:G:OP2	2.09	0.51
26:BA:45:C:OP2	26:BA:215:G:H2'	2.10	0.51
30:BF:53:THR:CG2	30:BF:55:GLY:H	2.24	0.51
1:CA:448:A:P	1:CA:485:G:H22	2.33	0.51
1:CA:1050:G:H1'	1:CA:1214:C:O2	2.10	0.51
1:CA:1155:G:H2'	1:CA:1156:G:O4'	2.11	0.51
19:CS:11:VAL:HB	19:CS:16:LEU:HD12	1.93	0.51
23:CW:47:U:H3'	23:CW:48:C:H5'	1.92	0.51
26:DA:621:A:OP2	36:DP:108:LYS:NZ	2.43	0.51
26:DA:652(T):C:H2'	26:DA:652(U):G:C8	2.46	0.51
26:DA:1593:G:H2'	26:DA:1594:G:H8	1.76	0.51
30:DF:154:VAL:HG22	30:DF:191:ARG:HB2	1.92	0.51
45:DY:6:HIS:H	45:DY:6:HIS:CD2	2.28	0.51
51:D4:7:PRO:HB2	51:D4:27:THR:HG21	1.93	0.51
1:AA:1002:G:N3	1:AA:1003:G:H1'	2.26	0.51
1:AA:1025:U:C2	1:AA:1036:G:O6	2.63	0.51
1:AA:1221:G:OP1	1:AA:1320:C:N4	2.43	0.51
2:AB:67:THR:N	2:AB:160:ASP:OD1	2.44	0.51
4:AD:162:LEU:HD13	4:AD:181:MET:HG2	1.91	0.51
9:AI:77:ILE:O	9:AI:81:ILE:HG22	2.10	0.51
18:AR:33:ASP:OD2	18:AR:36:ASN:HB2	2.11	0.51
26:BA:859:G:O2'	26:BA:916:G:O6	2.21	0.51
26:BA:2123:G:N2	26:BA:2175:C:N3	2.48	0.51
33:BI:72:LEU:O	33:BI:74:ASN:N	2.44	0.51
1:CA:1057:G:H2'	1:CA:1058:G:O4'	2.11	0.51
1:CA:1227:A:OP2	13:CM:111:LYS:HE3	2.09	0.51
1:CA:1392:G:H21	1:CA:1502:A:H8	1.57	0.51
4:CD:65:ARG:HD3	4:CD:70:ILE:O	2.11	0.51
31:DG:37:VAL:HG23	31:DG:99:MET:HG3	1.92	0.51
36:DP:82:GLY:HA2	36:DP:113:LYS:O	2.10	0.51
37:DQ:36:ALA:HA	37:DQ:129:THR:HG22	1.92	0.51
1:AA:164:U:H2'	1:AA:165:C:C6	2.46	0.51
1:AA:1352:C:OP1	21:AU:3:LYS:NZ	2.40	0.51
7:AG:27:ILE:HD12	7:AG:40:ALA:HA	1.91	0.51
23:AW:28:G:H2'	23:AW:29:G:C8	2.46	0.51
26:BA:848:G:C4	26:BA:933:A:H8	2.29	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1506:C:H2'	26:BA:1507:A:C8	2.36	0.51
26:BA:1790:C:H5''	26:BA:1791:A:OP1	2.11	0.51
33:BI:75:LEU:HD22	33:BI:105:HIS:ND1	2.25	0.51
34:BN:12:ARG:NH1	34:BN:50:ASP:OD2	2.43	0.51
1:CA:662:G:H2'	1:CA:663:A:C8	2.46	0.51
15:CO:64:ARG:HD3	15:CO:68:ARG:NH2	2.25	0.51
26:DA:10:G:H2'	26:DA:11:G:H8	1.76	0.51
26:DA:1023:U:OP2	61:DA:4648:HOH:O	2.20	0.51
26:DA:1639:U:H4'	26:DA:2699:C:H4'	1.92	0.51
26:DA:1670:C:O2	29:DE:129:HIS:NE2	2.42	0.51
26:DA:2218:U:O4'	48:D1:52:ARG:NH2	2.44	0.51
1:AA:145:G:H1	1:AA:177:C:H42	1.59	0.51
1:AA:954:G:H21	1:AA:1227:A:H62	1.59	0.51
24:AX:61:C:H2'	24:AX:62:C:H6	1.75	0.51
24:AX:76:A:O3'	61:AX:3101:HOH:O	2.19	0.51
26:BA:271(K):U:C2	33:BI:50:ARG:HD3	2.46	0.51
26:BA:529:A:H62	26:BA:2041:U:H3	1.59	0.51
26:BA:2691:C:O3'	26:BA:2871:C:H4'	2.10	0.51
1:CA:375:U:O4	61:CA:4093:HOH:O	2.17	0.51
1:CA:950:U:H2'	1:CA:951:G:H8	1.76	0.51
1:CA:1004:A:C6	1:CA:1037:C:C2	2.98	0.51
1:CA:1062:U:H2'	1:CA:1063:C:C6	2.45	0.51
1:CA:1457:G:H5''	20:CT:35:THR:HG21	1.93	0.51
7:CG:78:ARG:HG2	7:CG:79:ARG:HB2	1.93	0.51
26:DA:82:G:N1	26:DA:103:A:OP2	2.37	0.51
26:DA:2364:C:OP1	47:D0:55:ARG:NH1	2.41	0.51
26:DA:2769:C:H2'	26:DA:2770:G:O4'	2.11	0.51
28:DD:134:ARG:NH1	28:DD:188:GLU:OE2	2.44	0.51
28:DD:218:ARG:HB3	28:DD:219:PRO:HD2	1.93	0.51
32:DH:90:LYS:HD3	32:DH:159:GLU:HG2	1.92	0.51
1:AA:600:C:H2'	1:AA:601:C:C6	2.45	0.51
1:AA:1004:A:N7	1:AA:1036:G:C2	2.79	0.51
25:AY:19:G:H1	25:AY:56:C:H42	1.48	0.51
26:BA:467:G:OP1	54:B7:33:ARG:NH1	2.44	0.51
26:BA:952:G:OP1	37:BQ:16:ARG:NH2	2.44	0.51
1:CA:69:G:H2'	1:CA:70:G:H8	1.76	0.51
1:CA:429:U:H3'	4:CD:9:CYS:SG	2.51	0.51
1:CA:587:G:N1	1:CA:754:C:OP2	2.41	0.51
1:CA:1120:G:N1	1:CA:1154:G:N3	2.59	0.51
1:CA:1169:A:H2'	1:CA:1170:A:C8	2.46	0.51
1:CA:1391:U:H2'	1:CA:1392:G:C8	2.45	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CC:53:ALA:HB3	3:CC:106:VAL:HG21	1.93	0.51
9:CI:8:GLY:HA3	9:CI:76:ALA:O	2.10	0.51
26:DA:1688:U:O2	26:DA:1700:A:H5'	2.11	0.51
26:DA:2121:G:O6	26:DA:2176:A:N6	2.44	0.51
26:DA:2357:U:OP1	47:D0:20:ARG:NH1	2.35	0.51
44:DX:5:TYR:CE1	49:D2:30:ARG:HB2	2.46	0.51
1:AA:460:G:O5'	1:AA:460:G:H8	1.93	0.51
8:AH:124:ALA:O	8:AH:128:GLY:N	2.43	0.51
9:AI:128:ARG:NH1	24:AX:35:A:OP2	2.44	0.51
20:AT:76:ALA:HA	20:AT:79:ARG:NH1	2.26	0.51
26:BA:1365:A:OP2	48:B1:3:LYS:HG2	2.10	0.51
26:BA:2168:G:C6	26:BA:2171:A:C8	2.99	0.51
1:CA:533:A:O2'	1:CA:535:A:OP2	2.25	0.51
1:CA:1358:U:H2'	1:CA:1359:C:O4'	2.11	0.51
1:CA:1513:A:H2'	1:CA:1514:C:C6	2.46	0.51
3:CC:130:VAL:O	3:CC:134:ILE:HD13	2.11	0.51
7:CG:22:LEU:HG	7:CG:62:PHE:HE2	1.74	0.51
26:DA:309:G:N3	26:DA:329:G:O2'	2.43	0.51
26:DA:1028:A:N6	26:DA:1125:G:H2'	2.26	0.51
26:DA:2142:C:H2'	26:DA:2143:C:C6	2.46	0.51
41:DU:52:ARG:HA	41:DU:55:ARG:HE	1.74	0.51
41:DU:104:GLN:OE1	41:DU:105:VAL:N	2.34	0.51
1:AA:749:C:H2'	1:AA:750:G:H8	1.76	0.50
1:AA:1179:A:H2'	1:AA:1180:A:O4'	2.11	0.50
4:AD:108:LEU:HD12	4:AD:176:LEU:HB2	1.93	0.50
17:AQ:12:SER:HB3	17:AQ:20:THR:HB	1.92	0.50
19:AS:3:ARG:HH21	19:AS:7:LYS:HE2	1.76	0.50
25:AY:8:4SU:H4'	25:AY:48:C:H4'	1.93	0.50
25:AY:40:C:H2'	25:AY:41:C:H6	1.76	0.50
26:BA:1817:G:OP1	28:BD:88:ARG:NH2	2.40	0.50
31:BG:43:LEU:HD11	31:BG:153:ARG:HG2	1.93	0.50
1:CA:719:C:N4	18:CR:71:LYS:HE2	2.26	0.50
1:CA:1014:A:H4'	19:CS:14:HIS:CE1	2.46	0.50
20:CT:56:MET:HG3	20:CT:57:ARG:N	2.27	0.50
25:CY:7:A:H61	25:CY:66:U:H3	0.60	0.50
26:DA:1671:U:HO2'	26:DA:1673:U:H5	1.57	0.50
26:DA:1916:A:H2'	26:DA:1917:U:O4'	2.12	0.50
31:DG:97:ASP:HA	31:DG:100:TRP:HD1	1.75	0.50
1:AA:377:G:OP1	16:AP:3:LYS:HD2	2.11	0.50
1:AA:1144:G:N2	1:AA:1146:A:H62	2.10	0.50
3:AC:35:GLU:OE2	3:AC:59:ARG:NH2	2.43	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:AX:61:C:H2'	24:AX:62:C:C6	2.46	0.50
36:BP:88:LEU:HD11	36:BP:114:ILE:HD12	1.93	0.50
45:BY:87:LYS:HB3	45:BY:95:LYS:HD3	1.93	0.50
48:B1:3:LYS:HB2	48:B1:61:ARG:NH1	2.26	0.50
56:B9:25:VAL:HB	56:B9:34:GLN:HB2	1.92	0.50
1:CA:160:A:H61	1:CA:347:G:H1'	1.76	0.50
1:CA:431:A:H2'	1:CA:432:A:C8	2.46	0.50
7:CG:28:ASN:HA	7:CG:31:MET:HE2	1.93	0.50
7:CG:111:ARG:NH1	7:CG:113:GLU:OE2	2.44	0.50
25:CY:11:C:N3	25:CY:24:G:O6	2.44	0.50
26:DA:376:C:OP1	61:DA:4418:HOH:O	2.19	0.50
26:DA:479:A:N3	26:DA:481:G:H5''	2.26	0.50
29:DE:116:VAL:HG13	29:DE:122:PHE:HB2	1.92	0.50
44:DX:43:VAL:HG21	44:DX:81:VAL:HG11	1.93	0.50
51:D4:62:ARG:H	51:D4:62:ARG:HD3	1.77	0.50
1:AA:1277:C:O2'	1:AA:1279:A:H1'	2.10	0.50
5:AE:36:ASP:OD2	5:AE:40:ARG:HB2	2.12	0.50
25:AY:62:C:H2'	25:AY:63:G:C8	2.40	0.50
26:BA:1030:G:OP2	37:BQ:128:LYS:NZ	2.44	0.50
26:BA:1274:A:N3	26:BA:1297:C:H1'	2.26	0.50
26:BA:1423:G:OP1	26:BA:1492:G:O2'	2.23	0.50
37:BQ:18:LYS:O	37:BQ:98:LYS:NZ	2.25	0.50
1:CA:1176:A:H2'	1:CA:1177:G:C8	2.47	0.50
4:CD:173:TRP:CZ3	4:CD:193:ASP:HB3	2.46	0.50
7:CG:22:LEU:HG	7:CG:62:PHE:CE2	2.46	0.50
7:CG:26:PHE:HE2	7:CG:104:LEU:HD23	1.76	0.50
27:DB:17:C:H2'	27:DB:18:G:O4'	2.11	0.50
29:DE:2:LYS:HB2	29:DE:95:ILE:HD12	1.93	0.50
29:DE:7:VAL:HG12	29:DE:27:LEU:HB3	1.92	0.50
31:DG:70:VAL:HA	31:DG:90:LEU:HD23	1.92	0.50
45:DY:38:ILE:HD11	45:DY:66:PRO:HG3	1.92	0.50
53:D6:23:THR:OG1	53:D6:24:GLU:N	2.43	0.50
1:AA:619:U:C2	4:AD:135:LEU:HD22	2.45	0.50
1:AA:1176:A:H2'	1:AA:1177:G:C8	2.46	0.50
26:BA:796:C:H2'	26:BA:797:C:C6	2.46	0.50
27:BB:2:C:H2'	27:BB:3:C:C6	2.46	0.50
33:BI:135:GLU:C	33:BI:137:PRO:HD3	2.31	0.50
45:BY:20:TYR:CE1	45:BY:43:ASN:HA	2.46	0.50
1:CA:923:A:O2'	1:CA:1399:C:OP2	2.21	0.50
1:CA:1119:C:H2'	1:CA:1120:G:H8	1.75	0.50
3:CC:8:ILE:HG23	3:CC:16:ARG:HG2	1.94	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:CP:68:ASP:O	16:CP:71:ARG:HG2	2.11	0.50
26:DA:2153:G:C2	26:DA:2154:G:C4	2.99	0.50
26:DA:2753:A:N3	56:D9:15:LYS:NZ	2.54	0.50
32:DH:56:SER:HB3	32:DH:61:HIS:ND1	2.26	0.50
38:DR:2:ARG:NH1	38:DR:5:LYS:O	2.44	0.50
1:AA:78:G:H1	1:AA:91:C:N4	2.07	0.50
1:AA:1067:A:O2'	1:AA:1068:G:OP2	2.21	0.50
1:AA:1521:G:N3	61:AA:4065:HOH:O	2.35	0.50
2:AB:60:ASP:O	2:AB:64:ARG:HB2	2.12	0.50
4:AD:147:ALA:HB2	4:AD:182:LYS:HA	1.94	0.50
9:AI:4:TYR:CD2	9:AI:88:TYR:HA	2.47	0.50
14:AN:23:ARG:NH1	14:AN:30:ALA:HB2	2.26	0.50
26:BA:2512:C:H2'	26:BA:2513:G:O4'	2.12	0.50
43:BW:79:GLY:HA3	43:BW:100:THR:HG22	1.93	0.50
1:CA:67:C:H2'	1:CA:68:G:C8	2.47	0.50
1:CA:1001(A):G:H3'	1:CA:1002:G:O4'	2.11	0.50
1:CA:1030:C:N4	1:CA:1032:G:O6	2.44	0.50
2:CB:233:SER:HB2	2:CB:234:PRO:HD2	1.93	0.50
8:CH:43:GLY:O	8:CH:64:LYS:NZ	2.42	0.50
10:CJ:55:LYS:HG3	10:CJ:56:HIS:H	1.75	0.50
26:DA:286:C:H2'	26:DA:287:C:H6	1.77	0.50
26:DA:443:A:H1'	26:DA:1201:C:O4'	2.10	0.50
26:DA:483:A:O2'	45:DY:49:VAL:O	2.25	0.50
26:DA:2318:G:N2	39:DS:3:ARG:HH11	2.09	0.50
27:DB:11:C:OP2	27:DB:12:C:N4	2.32	0.50
34:DN:4:TYR:HB2	41:DU:101:ARG:HH12	1.76	0.50
4:AD:15:GLU:HG2	4:AD:63:LYS:CB	2.41	0.50
11:AK:29:ILE:HG23	11:AK:44:SER:HB3	1.94	0.50
12:AL:28:LYS:HG3	12:AL:62:SER:HB2	1.94	0.50
18:AR:42:ARG:HH21	18:AR:42:ARG:HA	1.75	0.50
23:AW:58:A:O2'	23:AW:60:U:OP2	2.24	0.50
26:BA:456:C:H4'	61:BA:3946:HOH:O	2.11	0.50
26:BA:1045:A:H1'	26:BA:1047:G:N3	2.26	0.50
26:BA:1448:G:H4'	26:BA:1542:A:OP1	2.11	0.50
26:BA:1449:A:H5'	26:BA:1450:G:OP2	2.12	0.50
39:BS:15:ARG:HE	39:BS:88:ASP:CG	2.14	0.50
55:B8:6:THR:HG22	55:B8:63:PRO:HD2	1.93	0.50
3:CC:142:MET:HG3	3:CC:170:GLN:HB3	1.93	0.50
17:CQ:45:HIS:HA	17:CQ:69:LYS:HE3	1.94	0.50
23:CW:14:A:H2'	23:CW:15:G:O4'	2.11	0.50
25:CY:23:A:O5'	25:CY:23:A:H8	1.94	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:885:C:H2'	26:DA:886:C:H4'	1.94	0.50
26:DA:1266:G:O4'	43:DW:15:ARG:NH2	2.45	0.50
33:DI:130:TYR:HB3	33:DI:138:ILE:HB	1.94	0.50
1:AA:376:G:P	16:AP:67:THR:HG21	2.51	0.50
1:AA:1333:A:H2'	1:AA:1334:G:O4'	2.11	0.50
5:AE:78:HIS:HD1	8:AH:104:ARG:CD	2.24	0.50
10:AJ:49:VAL:HG23	14:AN:41:ARG:HB2	1.92	0.50
14:AN:33:VAL:HA	14:AN:40:CYS:HA	1.94	0.50
15:AO:8:LYS:O	15:AO:12:ILE:HG13	2.11	0.50
23:AW:37:MIA:O2'	26:BA:1913:A:N1	2.44	0.50
25:AY:69:G:C2	25:AY:70:G:H1'	2.47	0.50
26:BA:1379:A:H4'	26:BA:1380:G:OP2	2.10	0.50
26:BA:1688:U:O2	26:BA:1700:A:H5'	2.12	0.50
1:CA:677:U:H3	1:CA:713:G:H22	1.58	0.50
20:CT:67:ALA:HB2	20:CT:77:ALA:HB2	1.92	0.50
21:CU:6:ARG:O	21:CU:12:LYS:NZ	2.37	0.50
23:CW:9:A:O2'	23:CW:10:G:N7	2.43	0.50
24:CX:6:G:H1	24:CX:67:C:H42	1.58	0.50
26:DA:854:G:H2'	26:DA:855:G:H8	1.76	0.50
26:DA:2139:C:N4	26:DA:2153:G:C2	2.79	0.50
27:DB:75:G:H1'	46:DZ:27:VAL:HG11	1.94	0.50
31:DG:11:TYR:HB2	31:DG:176:LEU:HD21	1.93	0.50
36:DP:89:ALA:O	36:DP:121:LYS:NZ	2.39	0.50
39:DS:50:SER:O	39:DS:76:LYS:NZ	2.45	0.50
1:AA:714:G:H2'	1:AA:715:A:C8	2.47	0.50
1:AA:1132:C:H2'	1:AA:1133:G:H8	1.76	0.50
1:AA:1181:G:O2'	1:AA:1182:G:N7	2.45	0.50
2:AB:93:VAL:HG21	2:AB:97:TRP:CD1	2.46	0.50
6:AF:36:ARG:HB3	6:AF:36:ARG:HH11	1.77	0.50
19:AS:68:GLY:H	51:B4:58:ARG:HH11	1.59	0.50
23:AW:49:C:H42	23:AW:65:G:H1	1.60	0.50
26:BA:272(H):C:H42	26:BA:363(B):G:H1	1.58	0.50
26:BA:1866:C:H2'	26:BA:1876:A:O4'	2.11	0.50
26:BA:2319:G:H22	39:BS:3:ARG:NE	2.09	0.50
45:BY:6:HIS:H	45:BY:6:HIS:CD2	2.30	0.50
52:B5:11:THR:HG23	52:B5:15:ARG:HB3	1.93	0.50
1:CA:952:U:H2'	1:CA:953:G:H8	1.77	0.50
1:CA:1411:C:H2'	1:CA:1412:C:H6	1.76	0.50
3:CC:136:GLN:O	3:CC:140:ARG:NH1	2.45	0.50
6:CF:37:VAL:HA	6:CF:65:VAL:HG12	1.93	0.50
26:DA:11:G:H2'	26:DA:12:U:H5''	1.93	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:586:A:N1	26:DA:809:G:O2'	2.35	0.50
26:DA:1021:A:H62	26:DA:1141:U:H3	1.59	0.50
26:DA:1187:G:H5'	42:DV:81:TYR:CE1	2.47	0.50
26:DA:1399:C:OP1	44:DX:25:LYS:NZ	2.40	0.50
26:DA:1894:C:H2'	26:DA:1895:C:H6	1.77	0.50
39:DS:93:LYS:CD	39:DS:95:HIS:HB2	2.40	0.50
46:DZ:93:ASP:OD1	46:DZ:94:GLU:HG3	2.12	0.50
1:AA:279:A:C5	17:AQ:98:LEU:HD23	2.47	0.50
1:AA:673:G:H2'	1:AA:674:G:C8	2.47	0.50
1:AA:1131:G:O2'	1:AA:1132:C:H5'	2.12	0.50
1:AA:1249:C:O2'	9:AI:73:GLN:NE2	2.45	0.50
9:AI:110:GLU:OE2	9:AI:113:LYS:NZ	2.45	0.50
16:AP:4:ILE:HB	16:AP:66:PRO:HA	1.94	0.50
23:AW:11:C:H42	23:AW:24:G:H1	1.58	0.50
25:AY:33:U:C3'	25:AY:34:G:H5''	2.41	0.50
26:BA:548:A:N6	42:BV:19:LYS:H	2.09	0.50
26:BA:2441:C:OP2	26:BA:2586:C:O2'	2.26	0.50
26:BA:2712:U:H2'	26:BA:2714:G:H5''	1.93	0.50
30:BF:64:ILE:HD11	30:BF:75:HIS:HB2	1.94	0.50
40:BT:29:ARG:HG3	40:BT:46:GLU:HB2	1.93	0.50
44:BX:61:GLY:HA3	44:BX:73:ARG:O	2.11	0.50
1:CA:406:G:N2	4:CD:119:GLN:HE22	2.09	0.50
1:CA:933:G:N2	1:CA:935:A:O4'	2.45	0.50
1:CA:936:C:H2'	1:CA:937:A:O4'	2.10	0.50
1:CA:950:U:H2'	1:CA:951:G:C8	2.47	0.50
1:CA:1244:C:N4	1:CA:1293:G:H1	2.10	0.50
1:CA:1435:G:H2'	1:CA:1436:U:C6	2.46	0.50
2:CB:186:ALA:HB3	2:CB:197:VAL:HG11	1.93	0.50
4:CD:61:LYS:NZ	4:CD:72:GLU:OE2	2.42	0.50
6:CF:69:GLU:O	6:CF:72:VAL:HG12	2.12	0.50
7:CG:76:ARG:HB3	7:CG:156:TRP:CH2	2.47	0.50
12:CL:117:ARG:CZ	12:CL:117:ARG:HB2	2.41	0.50
26:DA:1300:U:O2'	26:DA:1635:G:OP1	2.27	0.50
26:DA:1996:C:H4'	26:DA:1997:G:OP1	2.11	0.50
26:DA:2302:G:C2'	26:DA:2303:G:H5'	2.41	0.50
26:DA:2657:A:O3'	32:DH:160:LYS:NZ	2.45	0.50
34:DN:73:THR:OG1	34:DN:82:LEU:HD11	2.11	0.50
1:AA:376:G:H5''	16:AP:5:ARG:HB3	1.92	0.49
1:AA:991:U:O2'	1:AA:992:U:OP2	2.23	0.49
1:AA:1030(C):G:H2'	1:AA:1030(D):A:C8	2.47	0.49
1:AA:1391:U:H2'	1:AA:1392:G:C8	2.47	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:196:LEU:O	4:AD:198:VAL:N	2.41	0.49
9:AI:49:PRO:HG2	9:AI:81:ILE:HG23	1.93	0.49
10:AJ:61:GLU:OE1	14:AN:58:LYS:NZ	2.41	0.49
26:BA:282:A:H2'	26:BA:282:A:N3	2.27	0.49
26:BA:646:A:H2'	26:BA:647:G:O4'	2.12	0.49
26:BA:747:U:O2	26:BA:2014:A:H1'	2.12	0.49
26:BA:1009:A:P	34:BN:37:LYS:HZ1	2.32	0.49
26:BA:1779:U:H2'	61:BA:5061:HOH:O	2.11	0.49
26:BA:2128:C:O2'	26:BA:2129:C:H5'	2.12	0.49
26:BA:2278:A:OP2	47:B0:12:ASN:ND2	2.45	0.49
28:BD:9:TYR:CZ	28:BD:13:ARG:HG2	2.47	0.49
38:BR:28:LEU:HD12	38:BR:48:VAL:HG21	1.94	0.49
41:BU:74:LEU:H	41:BU:74:LEU:HD12	1.77	0.49
44:BX:35:THR:HG22	44:BX:38:GLU:H	1.77	0.49
48:B1:85:LEU:HB3	48:B1:89:GLU:HG2	1.94	0.49
51:B4:61:ARG:HG3	51:B4:62:ARG:N	2.26	0.49
1:CA:1039:C:H2'	1:CA:1040:U:O4'	2.11	0.49
1:CA:1387:G:H2'	1:CA:1388:C:C6	2.47	0.49
10:CJ:67:THR:O	10:CJ:67:THR:OG1	2.30	0.49
20:CT:50:GLU:HG3	20:CT:100:ILE:HD13	1.94	0.49
26:DA:1037:G:H2'	26:DA:1038:C:O4'	2.12	0.49
26:DA:1278:A:OP1	38:DR:36:THR:HG23	2.12	0.49
26:DA:1359:A:N6	26:DA:1372:U:H3	2.08	0.49
26:DA:2128:C:H5'	26:DA:2173:A:C2	2.47	0.49
35:DO:1:MET:HG3	35:DO:67:LYS:HG2	1.93	0.49
36:DP:99:LEU:HD23	36:DP:99:LEU:H	1.77	0.49
46:DZ:117:LEU:HD11	46:DZ:144:LEU:HD13	1.93	0.49
47:D0:37:LEU:HD13	47:D0:79:VAL:HG11	1.94	0.49
1:AA:1053:G:O2'	61:AA:4100:HOH:O	2.19	0.49
1:AA:1095:U:P	1:AA:1108:G:H1	2.35	0.49
1:AA:1125:U:O2'	1:AA:1127:G:N7	2.24	0.49
1:AA:1399:C:C2	1:AA:1502:A:N6	2.80	0.49
2:AB:103:THR:HA	2:AB:180:LEU:HD11	1.93	0.49
26:BA:1774:C:O5'	26:BA:1774:C:H6	1.95	0.49
26:BA:2259:G:C8	26:BA:2427:C:C4	3.00	0.49
39:BS:14:VAL:O	39:BS:18:ILE:HG12	2.11	0.49
45:BY:92:ASN:HB3	45:BY:94:LYS:N	2.25	0.49
46:BZ:7:ALA:HB3	46:BZ:61:LEU:HD12	1.93	0.49
1:CA:137:C:H2'	1:CA:138:G:H8	1.76	0.49
1:CA:155:C:H2'	1:CA:156:G:O4'	2.11	0.49
2:CB:163:PHE:HA	2:CB:185:ILE:HG12	1.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:CN:48:ALA:HB2	14:CN:53:LEU:HD12	1.94	0.49
26:DA:996:A:C2	26:DA:997:G:C8	3.00	0.49
26:DA:1359:A:H2'	26:DA:1360:A:H5'	1.94	0.49
26:DA:1721:G:H8	26:DA:1741:A:H62	1.60	0.49
26:DA:2294:C:H5''	39:DS:10:ARG:HD2	1.94	0.49
26:DA:2483:C:H2'	26:DA:2484:G:O4'	2.11	0.49
26:DA:2849:U:P	40:DT:95:ARG:HH12	2.35	0.49
34:DN:30:ILE:HG23	34:DN:52:VAL:HG11	1.94	0.49
1:AA:1008:C:H2'	1:AA:1009:G:O4'	2.12	0.49
2:AB:20:GLU:HA	2:AB:21:ARG:HH21	1.78	0.49
26:BA:196:A:O2'	26:BA:805:G:O6	2.26	0.49
26:BA:271(K):U:H1'	33:BI:50:ARG:CZ	2.43	0.49
26:BA:1155:A:OP1	41:BU:55:ARG:HD3	2.12	0.49
26:BA:2345:G:H4'	26:BA:2346:A:H5''	1.94	0.49
28:BD:70:TRP:HB3	28:BD:190:TYR:CE1	2.46	0.49
38:BR:21:TYR:OH	38:BR:43:GLU:HG2	2.12	0.49
46:BZ:117:LEU:CD1	46:BZ:144:LEU:HD22	2.39	0.49
1:CA:110:C:H2'	1:CA:111:G:O4'	2.12	0.49
1:CA:984:C:O5'	1:CA:984:C:H6	1.94	0.49
4:CD:57:ARG:NE	4:CD:205:GLU:OE2	2.44	0.49
15:CO:3:ILE:O	15:CO:3:ILE:HG12	2.13	0.49
20:CT:18:GLN:O	20:CT:22:ARG:HG3	2.12	0.49
26:DA:286:C:H2'	26:DA:287:C:C6	2.47	0.49
26:DA:335:C:H4'	45:DY:73:ARG:CZ	2.42	0.49
26:DA:2805:G:H2'	26:DA:2807:G:H8	1.75	0.49
30:DF:129:PHE:CD2	30:DF:163:VAL:HG21	2.48	0.49
32:DH:89:ILE:O	32:DH:129:THR:HG23	2.13	0.49
34:DN:38:HIS:CE1	34:DN:39:ARG:HG3	2.46	0.49
39:DS:68:GLN:O	39:DS:71:ARG:HG3	2.13	0.49
42:DV:62:LEU:HD11	42:DV:95:LEU:HB2	1.93	0.49
44:DX:31:HIS:CD2	44:DX:33:LYS:HB2	2.47	0.49
46:DZ:104:PHE:HA	46:DZ:139:VAL:HB	1.95	0.49
1:AA:110:C:H2'	1:AA:111:G:O4'	2.12	0.49
1:AA:920:U:H2'	1:AA:921:U:C6	2.48	0.49
1:AA:1003:G:H2'	1:AA:1004:A:H4'	1.92	0.49
1:AA:1346:A:OP1	9:AI:120:ARG:NH1	2.45	0.49
23:AW:63:G:H2'	23:AW:64:A:O4'	2.13	0.49
26:BA:83:G:N2	26:BA:103:A:OP2	2.44	0.49
26:BA:831:G:O2'	36:BP:38:GLN:NE2	2.44	0.49
26:BA:2815:C:H5'	52:B5:29:THR:HG21	1.94	0.49
37:BQ:16:ARG:HG2	37:BQ:18:LYS:HE2	1.94	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:875:C:H1'	8:CH:15:ASN:HD21	1.77	0.49
10:CJ:62:HIS:HB3	14:CN:59:ALA:HB3	1.93	0.49
26:DA:10:G:H2'	26:DA:11:G:C8	2.47	0.49
26:DA:528:A:C2	26:DA:2042:A:H2'	2.47	0.49
26:DA:1264:G:H2'	26:DA:2014:A:N6	2.27	0.49
30:DF:11:VAL:HG22	30:DF:125:LEU:HB2	1.94	0.49
30:DF:13:SER:OG	30:DF:16:GLY:O	2.26	0.49
34:DN:67:LEU:HD13	34:DN:87:LEU:HD13	1.94	0.49
35:DO:73:ASP:HB2	40:DT:82:LEU:HD13	1.93	0.49
1:AA:1523:G:OP1	11:AK:123:LYS:NZ	2.30	0.49
2:AB:88:ALA:HB2	2:AB:219:VAL:HG13	1.94	0.49
4:AD:166:LYS:HB2	4:AD:168:ARG:NH1	2.26	0.49
12:AL:33:ARG:HH11	12:AL:62:SER:HB3	1.77	0.49
25:AY:50:U:N3	25:AY:64:A:H2	2.05	0.49
26:BA:8:A:H2'	26:BA:9:U:C6	2.47	0.49
26:BA:956:G:P	37:BQ:14:ARG:HH22	2.36	0.49
26:BA:2029:G:H2'	26:BA:2031:A:OP1	2.12	0.49
36:BP:50:ARG:HG2	55:B8:61:LEU:HD11	1.95	0.49
1:CA:91:C:H2'	1:CA:92:C:C6	2.48	0.49
1:CA:444:C:H2'	1:CA:445:G:H8	1.78	0.49
1:CA:528:C:H5'	1:CA:529:G:OP2	2.13	0.49
1:CA:923:A:OP1	5:CE:21:ALA:HB2	2.11	0.49
4:CD:173:TRP:CD1	4:CD:189:PRO:HG3	2.47	0.49
20:CT:53:LEU:HA	20:CT:56:MET:HG2	1.94	0.49
26:DA:1778:U:H2'	26:DA:1784:A:N6	2.28	0.49
26:DA:2408:U:H2'	26:DA:2409:G:C8	2.46	0.49
26:DA:2471:C:N4	26:DA:2476:A:O2'	2.43	0.49
26:DA:2558:C:H2'	26:DA:2559:C:O4'	2.13	0.49
27:DB:41:U:H5	31:DG:70:VAL:N	2.09	0.49
31:DG:43:LEU:HD11	31:DG:153:ARG:HG2	1.93	0.49
42:DV:100:ARG:HG3	42:DV:100:ARG:NH1	2.10	0.49
1:AA:630:G:O2'	1:AA:631:G:H5'	2.13	0.49
1:AA:674:G:OP1	6:AF:87:ARG:NH2	2.43	0.49
1:AA:1244:C:OP1	21:AU:9:ARG:HB2	2.13	0.49
1:AA:1492:A:H2'	1:AA:1493:A:C8	2.48	0.49
4:AD:166:LYS:HB2	4:AD:168:ARG:CZ	2.42	0.49
10:AJ:16:LEU:HD21	10:AJ:70:ARG:HG2	1.93	0.49
26:BA:55:G:O2'	26:BA:127:A:N1	2.39	0.49
26:BA:1292:U:H2'	26:BA:1293:C:C6	2.47	0.49
26:BA:1356:G:OP1	61:BA:5239:HOH:O	2.20	0.49
26:BA:1794:U:H2'	26:BA:1795:C:H6	1.78	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2319:G:N1	39:BS:3:ARG:HA	2.28	0.49
1:CA:45:U:H2'	1:CA:46:G:C8	2.47	0.49
1:CA:1287:A:N3	1:CA:1353:G:O2'	2.42	0.49
2:CB:77:ALA:HB2	2:CB:211:ILE:HD13	1.94	0.49
12:CL:33:ARG:HG2	12:CL:60:LEU:HD12	1.94	0.49
23:CW:76:31M:O	24:CX:76:A:O2'	2.19	0.49
26:DA:300:A:H3'	45:DY:84:ARG:HH22	1.77	0.49
26:DA:639:U:H2'	26:DA:640:C:C6	2.48	0.49
26:DA:1153:C:OP1	41:DU:92:ARG:NH1	2.42	0.49
26:DA:2058:A:N7	61:DA:3876:HOH:O	2.34	0.49
26:DA:2123:G:H2'	26:DA:2124:G:C8	2.47	0.49
28:DD:275:LYS:HG3	28:DD:276:LYS:HA	1.94	0.49
31:DG:16:ARG:HB2	31:DG:17:PRO:HD3	1.94	0.49
31:DG:103:LEU:HD22	31:DG:178:PHE:HZ	1.77	0.49
1:AA:130:A:H5'	17:AQ:63:ARG:HE	1.78	0.49
24:AX:66:C:H2'	24:AX:67:C:O4'	2.13	0.49
25:AY:51:U:H2'	25:AY:52:G:C8	2.48	0.49
26:BA:548:A:O2'	26:BA:549:G:OP1	2.27	0.49
26:BA:1278:A:OP1	38:BR:36:THR:HG23	2.12	0.49
26:BA:2291:U:H2'	26:BA:2292:C:C6	2.48	0.49
1:CA:8:A:H5'	5:CE:101:ILE:HG22	1.95	0.49
1:CA:539:A:OP2	12:CL:115:LYS:NZ	2.45	0.49
1:CA:838:G:N2	1:CA:848:C:N3	2.58	0.49
1:CA:1002:G:N3	1:CA:1003:G:H8	2.10	0.49
6:CF:11:ASN:HB3	6:CF:14:LEU:HG	1.95	0.49
26:DA:588:U:H2'	26:DA:589:C:C6	2.46	0.49
26:DA:764:A:H5'	28:DD:210:GLY:HA2	1.94	0.49
26:DA:989:G:H4'	26:DA:990:A:OP1	2.12	0.49
44:DX:12:VAL:HG22	44:DX:29:TRP:CE2	2.47	0.49
49:D2:32:LEU:HD23	49:D2:53:LEU:HB3	1.94	0.49
1:AA:625:G:H4'	16:AP:16:HIS:CD2	2.48	0.49
1:AA:865:A:C2	1:AA:918:A:H4'	2.45	0.49
1:AA:1030(D):A:N6	1:AA:1031:G:H21	2.10	0.49
3:AC:114:PRO:HA	3:AC:185:GLY:HA3	1.94	0.49
23:AW:58:A:H2	23:AW:60:U:HO2'	1.59	0.49
24:AX:21:A:N6	24:AX:46:G:H2'	2.27	0.49
25:AY:22:G:H2'	25:AY:23:A:H8	1.75	0.49
61:BA:4985:HOH:O	36:BP:39:LYS:HE3	2.12	0.49
31:BG:28:VAL:O	31:BG:31:VAL:HG12	2.13	0.49
51:B4:26:SER:OG	51:B4:27:THR:N	2.45	0.49
1:CA:539:A:H2'	1:CA:540:G:H8	1.76	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:815:A:N7	1:CA:1509:C:O2'	2.41	0.49
1:CA:1479:C:H2'	1:CA:1480:G:H8	1.77	0.49
10:CJ:38:ILE:HD11	10:CJ:71:LEU:HD22	1.94	0.49
26:DA:25:U:C4	26:DA:26:G:C6	3.00	0.49
41:DU:86:ALA:O	42:DV:49:THR:HG23	2.13	0.49
7:AG:152:ALA:O	7:AG:155:ARG:HB3	2.13	0.49
19:AS:41:VAL:O	19:AS:43:GLU:N	2.45	0.49
19:AS:63:THR:OG1	19:AS:65:ASN:ND2	2.46	0.49
26:BA:885:C:H3'	26:BA:886:C:C5'	2.40	0.49
26:BA:1899:G:H2'	26:BA:1899:G:N3	2.28	0.49
26:BA:2140:C:H1'	26:BA:2152:G:H22	1.77	0.49
36:BP:50:ARG:HH21	55:B8:7:HIS:HD2	1.59	0.49
44:BX:31:HIS:HD2	44:BX:33:LYS:H	1.59	0.49
1:CA:376:G:H5''	16:CP:5:ARG:HB2	1.94	0.49
1:CA:1029:C:N4	1:CA:1033:G:O6	2.46	0.49
1:CA:1217:C:H2'	1:CA:1218:C:O4'	2.13	0.49
1:CA:1494:G:H4'	26:DA:1913:A:N7	2.28	0.49
3:CC:48:TYR:HE1	3:CC:118:GLN:HG3	1.78	0.49
5:CE:34:VAL:HG11	5:CE:63:ARG:HG3	1.94	0.49
7:CG:126:ASP:O	7:CG:130:GLY:N	2.46	0.49
9:CI:23:ASN:ND2	9:CI:25:LYS:HG2	2.27	0.49
26:DA:812:C:H2'	26:DA:813:U:H6	1.77	0.49
26:DA:2154:G:C2	26:DA:2155:G:C8	3.01	0.49
46:DZ:5:LEU:HD21	46:DZ:43:GLU:HB3	1.94	0.49
1:AA:72:C:H2'	1:AA:73:G:O4'	2.13	0.49
1:AA:1216:G:OP1	14:AN:2:ALA:HA	2.13	0.49
4:AD:119:GLN:HG2	4:AD:123:HIS:CD2	2.47	0.49
12:AL:117:ARG:HB3	12:AL:122:THR:HB	1.95	0.49
24:AX:57:A:O4'	31:BG:78:SER:OG	2.31	0.49
26:BA:183:C:N4	26:BA:213:A:H61	2.10	0.49
26:BA:1165:U:H2'	26:BA:1166:C:C6	2.48	0.49
26:BA:2042:A:OP1	61:BA:5120:HOH:O	2.20	0.49
26:BA:2319:G:C2	39:BS:3:ARG:HA	2.48	0.49
26:BA:2347:C:O2'	53:B6:21:TYR:OH	2.30	0.49
28:BD:26:LYS:HB3	28:BD:83:GLU:HG2	1.94	0.49
30:BF:116:ASP:OD1	30:BF:119:ARG:NH2	2.46	0.49
46:BZ:41:LEU:HD21	46:BZ:83:PRO:HG2	1.94	0.49
1:CA:78:G:H2'	1:CA:79:G:H5''	1.95	0.49
1:CA:1411:C:H2'	1:CA:1412:C:C6	2.47	0.49
8:CH:83:ILE:HB	8:CH:137:VAL:HG13	1.94	0.49
24:CX:9:G:N2	24:CX:46:G:OP2	2.46	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:CY:18:G:C2	25:CY:55:PSU:C4	3.00	0.49
26:DA:1268:A:H2'	26:DA:1269:A:O4'	2.12	0.49
26:DA:1512:U:H2'	26:DA:1513:C:C6	2.48	0.49
28:DD:132:PRO:HG2	28:DD:135:PHE:HD2	1.78	0.49
35:DO:122:LEU:HD13	40:DT:72:VAL:HG11	1.94	0.49
1:AA:236:G:OP1	17:AQ:40:LYS:NZ	2.45	0.48
11:AK:48:ILE:HD12	11:AK:63:LEU:HB2	1.95	0.48
23:AW:25:C:C2'	23:AW:26:A:H5'	2.43	0.48
24:AX:47:U:H5''	24:AX:48:C:OP1	2.13	0.48
27:BB:102:A:N7	61:BB:318:HOH:O	2.35	0.48
1:CA:1118:C:H1'	1:CA:1179:A:C4	2.48	0.48
25:CY:29:G:N2	25:CY:41:C:N3	2.61	0.48
26:DA:131:G:OP1	61:DA:3791:HOH:O	2.19	0.48
26:DA:2037:G:H2'	26:DA:2038:G:C8	2.48	0.48
26:DA:2278:A:OP1	37:DQ:11:LYS:HD2	2.12	0.48
26:DA:2376:A:N3	39:DS:106:ARG:NH2	2.52	0.48
55:D8:33:ASN:HA	55:D8:36:LYS:HD2	1.94	0.48
1:AA:1049:U:OP1	14:AN:3:ARG:HB2	2.14	0.48
26:BA:1364:G:P	48:B1:3:LYS:HG3	2.53	0.48
30:BF:164:ARG:O	30:BF:168:ARG:HB2	2.12	0.48
53:B6:8:LYS:HG2	55:B8:34:TRP:CG	2.49	0.48
1:CA:50:A:H1'	1:CA:52:G:C8	2.48	0.48
1:CA:189(L):G:H2'	1:CA:190:U:C6	2.48	0.48
1:CA:392:G:H2'	1:CA:393:A:H8	1.77	0.48
1:CA:976:G:OP1	14:CN:32:SER:N	2.34	0.48
1:CA:1138:G:C6	1:CA:1140:C:H1'	2.48	0.48
2:CB:119:GLU:OE2	2:CB:153:ARG:NH2	2.41	0.48
3:CC:78:GLY:HA3	3:CC:83:ARG:H	1.76	0.48
9:CI:86:VAL:HA	9:CI:89:ASN:O	2.13	0.48
23:CW:21:A:O2'	23:CW:22:G:OP1	2.28	0.48
26:DA:222:A:H5''	26:DA:421:U:OP1	2.13	0.48
26:DA:652(B):A:N1	26:DA:655:A:H1'	2.29	0.48
26:DA:2137:C:H42	26:DA:2154:G:H1	1.59	0.48
26:DA:2206:G:H5'	26:DA:2207:G:N7	2.28	0.48
33:DI:40:THR:HG23	33:DI:43:ASN:HD21	1.77	0.48
39:DS:41:ASP:OD2	39:DS:44:LYS:HE2	2.13	0.48
43:DW:60:ASN:HD22	43:DW:60:ASN:N	2.11	0.48
56:D9:10:ILE:HD12	56:D9:32:HIS:HA	1.94	0.48
1:AA:621:A:H2'	1:AA:622:A:C8	2.48	0.48
1:AA:1284:C:OP2	1:AA:1285:A:O2'	2.29	0.48
1:AA:1302:U:OP1	13:AM:13:LYS:HE3	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:76:GLN:CD	2:AB:76:GLN:H	2.16	0.48
2:AB:163:PHE:CD2	2:AB:185:ILE:HG13	2.48	0.48
3:AC:6:HIS:CD2	3:AC:8:ILE:HB	2.48	0.48
7:AG:80:VAL:HB	7:AG:85:TYR:HE2	1.77	0.48
8:AH:13:ILE:O	8:AH:17:THR:HG23	2.13	0.48
25:AY:32:PSU:C2	25:AY:33:U:H5	2.32	0.48
26:BA:247:G:H4'	26:BA:386:G:C5	2.48	0.48
26:BA:2138:C:C2	26:BA:2154:G:C2	3.02	0.48
34:BN:4:TYR:CD2	41:BU:100:VAL:HG11	2.48	0.48
34:BN:58:ASP:OD1	34:BN:58:ASP:N	2.40	0.48
37:BQ:52:VAL:HA	37:BQ:55:VAL:HG12	1.94	0.48
51:B4:53:GLU:C	51:B4:55:ARG:N	2.65	0.48
1:CA:73:G:C6	1:CA:97:G:C6	3.01	0.48
7:CG:20:ASP:HB3	7:CG:23:VAL:HB	1.95	0.48
8:CH:20:TYR:CE1	8:CH:76:PRO:HG2	2.48	0.48
8:CH:64:LYS:HG2	8:CH:79:VAL:HG21	1.94	0.48
25:CY:7:A:N6	25:CY:66:U:N3	2.17	0.48
26:DA:1309:G:H3'	54:D7:9:ARG:HH12	1.78	0.48
26:DA:1478:G:HO2'	26:DA:1558:A:H2	1.62	0.48
26:DA:1922:G:H2'	26:DA:1923:U:O4'	2.13	0.48
32:DH:164:TYR:HB2	32:DH:167:GLU:HB2	1.95	0.48
1:AA:627:G:H2'	1:AA:628:G:H8	1.78	0.48
1:AA:1118:C:OP1	9:AI:104:ARG:NH1	2.42	0.48
1:AA:1279:A:O2'	1:AA:1281:U:OP2	2.20	0.48
1:AA:1425:U:H2'	1:AA:1426:C:C6	2.48	0.48
23:AW:26:A:N1	23:AW:44:G:N2	2.61	0.48
26:BA:630:G:OP1	55:B8:47:LYS:NZ	2.41	0.48
26:BA:800:A:H8	26:BA:800:A:OP1	1.96	0.48
26:BA:1786:A:H1'	26:BA:1938:A:N6	2.28	0.48
26:BA:2119:A:C2	26:BA:2170:A:H2'	2.48	0.48
26:BA:2640:G:OP1	34:BN:97:ARG:NH2	2.46	0.48
26:BA:2771:C:H2'	26:BA:2772:C:C6	2.48	0.48
35:BO:98:VAL:HG22	35:BO:118:ALA:HA	1.96	0.48
36:BP:63:PRO:HD3	55:B8:27:THR:HG22	1.94	0.48
39:BS:3:ARG:HE	39:BS:4:LEU:N	2.11	0.48
55:B8:23:VAL:CG1	55:B8:47:LYS:HD3	2.43	0.48
56:B9:7:VAL:HG12	56:B9:34:GLN:HB3	1.94	0.48
1:CA:339:C:H2'	1:CA:340:U:C6	2.49	0.48
1:CA:1030(A):G:N3	1:CA:1030(C):G:H8	2.11	0.48
1:CA:1035:A:H2'	1:CA:1036:G:C8	2.48	0.48
6:CF:76:ALA:O	6:CF:80:ARG:HG3	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:CO:26:GLU:HB3	15:CO:81:LEU:HD13	1.96	0.48
25:CY:35:A:H2'	25:CY:36:A:O4'	2.13	0.48
26:DA:2126:A:H4'	26:DA:2127:G:OP1	2.13	0.48
26:DA:2602:A:H4'	26:DA:2603:G:O5'	2.14	0.48
26:DA:2853:C:H2'	26:DA:2854:G:H8	1.77	0.48
28:DD:137:PRO:O	28:DD:140:THR:HG23	2.14	0.48
1:AA:130:A:H5'	17:AQ:63:ARG:NE	2.27	0.48
7:AG:150:ALA:HB2	11:AK:50:TYR:OH	2.13	0.48
26:BA:323:G:C8	30:BF:171:PRO:HG3	2.48	0.48
26:BA:1405:U:H2'	26:BA:1406:U:H6	1.78	0.48
30:BF:192:LEU:HD13	30:BF:194:MET:HE2	1.96	0.48
33:BI:85:GLU:HB3	33:BI:86:THR:H	1.52	0.48
46:BZ:111:VAL:C	46:BZ:113:ALA:H	2.17	0.48
1:CA:141:A:H1'	1:CA:182:U:O2	2.13	0.48
1:CA:1002:G:H2'	1:CA:1003:G:H8	1.78	0.48
1:CA:1006:C:H2'	1:CA:1007:C:C6	2.49	0.48
2:CB:71:VAL:HG23	2:CB:163:PHE:O	2.14	0.48
5:CE:12:LEU:HB3	5:CE:31:LEU:HB2	1.95	0.48
19:CS:17:GLU:O	19:CS:17:GLU:HG2	2.14	0.48
25:CY:69:G:C2	25:CY:70:G:H1'	2.48	0.48
26:DA:2203:U:H4'	28:DD:151:LYS:HG2	1.95	0.48
31:DG:43:LEU:HD12	31:DG:45:GLU:HG3	1.96	0.48
34:DN:38:HIS:ND1	34:DN:39:ARG:HG3	2.28	0.48
38:DR:103:ARG:NH1	38:DR:108:GLY:O	2.42	0.48
41:DU:78:THR:O	41:DU:117:GLN:NE2	2.46	0.48
13:AM:84:ILE:HG13	13:AM:85:GLY:HA2	1.94	0.48
26:BA:184:C:H2'	26:BA:185:U:H6	1.78	0.48
26:BA:893:C:H2'	26:BA:894:C:H6	1.79	0.48
26:BA:1540:U:H2'	26:BA:1541:G:O4'	2.13	0.48
26:BA:1668:A:H4'	26:BA:1669:A:O5'	2.14	0.48
26:BA:2141:G:N3	26:BA:2142:C:H1'	2.29	0.48
29:BE:178:GLU:N	29:BE:178:GLU:OE2	2.46	0.48
33:BI:47:LEU:O	33:BI:51:ILE:HG13	2.13	0.48
33:BI:61:ARG:N	33:BI:61:ARG:HD2	2.28	0.48
48:B1:72:GLU:O	48:B1:76:ARG:HG3	2.13	0.48
1:CA:189(C):C:H2'	1:CA:189(D):C:O4'	2.14	0.48
1:CA:428:G:H4'	1:CA:429:U:O5'	2.12	0.48
1:CA:1029:C:N4	1:CA:1032:G:C6	2.77	0.48
1:CA:1190:G:OP1	3:CC:5:ILE:N	2.38	0.48
1:CA:1262:C:H2'	1:CA:1263:C:H6	1.79	0.48
2:CB:178:ARG:NH2	8:CH:68:ARG:HH12	2.10	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:CI:16:ARG:HH11	9:CI:66:ARG:HH11	1.62	0.48
26:DA:184:C:H2'	26:DA:185:U:C6	2.48	0.48
26:DA:861:A:N3	27:DB:79:C:O2'	2.41	0.48
26:DA:1364:G:P	48:D1:3:LYS:HG3	2.53	0.48
30:DF:183:VAL:O	30:DF:187:VAL:HG23	2.13	0.48
40:DT:59:THR:HG23	40:DT:78:LEU:HB3	1.96	0.48
1:AA:62:U:OP1	1:AA:385:C:O2'	2.26	0.48
1:AA:1429:C:H2'	1:AA:1430:C:C6	2.48	0.48
8:AH:51:VAL:HG12	8:AH:52:ASP:N	2.28	0.48
25:AY:63:G:C2	25:AY:64:A:H1'	2.48	0.48
26:BA:288:C:H2'	26:BA:289:A:H8	1.79	0.48
26:BA:1231:G:H2'	26:BA:1232:G:C8	2.48	0.48
26:BA:1996:C:H4'	26:BA:1997:G:OP1	2.12	0.48
26:BA:2129:C:H2'	26:BA:2130:U:H6	1.77	0.48
26:BA:2140:C:C2	26:BA:2151:G:N2	2.82	0.48
26:BA:2386:C:H2'	26:BA:2387:U:C6	2.49	0.48
1:CA:408:A:H4'	4:CD:112:VAL:HG21	1.96	0.48
1:CA:742:G:P	15:CO:35:ARG:HH22	2.36	0.48
1:CA:1060:C:H2'	1:CA:1061:G:H8	1.77	0.48
1:CA:1119:C:C4	1:CA:1154:G:O6	2.66	0.48
1:CA:1135:U:H2'	1:CA:1137:C:O2	2.14	0.48
19:CS:27:GLU:HG2	19:CS:47:HIS:NE2	2.28	0.48
26:DA:952:G:H5''	26:DA:953:A:OP2	2.14	0.48
31:DG:125:PHE:HB3	31:DG:166:ASP:OD1	2.14	0.48
35:DO:4:PRO:O	35:DO:5:GLN:HB2	2.14	0.48
44:DX:20:GLY:HA2	44:DX:23:GLU:OE2	2.14	0.48
1:AA:1158:C:H5	1:AA:1181:G:N1	2.06	0.48
6:AF:69:GLU:CD	6:AF:69:GLU:H	2.16	0.48
7:AG:111:ARG:HD2	7:AG:123:GLU:HB2	1.95	0.48
10:AJ:11:PHE:CE1	10:AJ:67:THR:HG22	2.49	0.48
19:AS:64:GLU:O	19:AS:67:VAL:HG23	2.14	0.48
24:AX:55:PSU:O2'	24:AX:57:A:N7	2.33	0.48
26:BA:196:A:N3	26:BA:196:A:H2'	2.27	0.48
26:BA:1665:A:H2'	26:BA:1666:G:O4'	2.14	0.48
26:BA:2328:A:H2'	26:BA:2329:G:H8	1.75	0.48
28:BD:70:TRP:HB3	28:BD:190:TYR:CZ	2.49	0.48
31:BG:11:TYR:CZ	31:BG:16:ARG:HD3	2.48	0.48
31:BG:66:GLN:HB3	31:BG:92:VAL:HG21	1.94	0.48
39:BS:59:LYS:HE3	39:BS:60:GLY:H	1.79	0.48
1:CA:1125:U:H3'	1:CA:1126:U:H5''	1.96	0.48
1:CA:1228:C:OP1	13:CM:115:LYS:N	2.23	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:81:VAL:HB	2:CB:94:ASN:HD21	1.78	0.48
7:CG:12:LEU:H	7:CG:12:LEU:HD12	1.78	0.48
14:CN:27:CYS:SG	14:CN:29:ARG:HB2	2.53	0.48
26:DA:171:G:H2'	26:DA:172:C:C6	2.49	0.48
26:DA:851:U:O2'	50:D3:42:ALA:O	2.30	0.48
26:DA:1472:A:H2'	26:DA:1473:G:O4'	2.13	0.48
26:DA:2162:G:H4'	26:DA:2172:U:O2'	2.13	0.48
26:DA:2695:C:H2'	26:DA:2696:U:C6	2.49	0.48
29:DE:108:SER:HB3	29:DE:165:VAL:HG21	1.96	0.48
30:DF:120:GLU:CB	30:DF:122:LYS:HG2	2.44	0.48
46:DZ:110:GLY:HA3	46:DZ:145:GLU:HA	1.96	0.48
53:D6:11:LEU:HB2	53:D6:21:TYR:HB2	1.95	0.48
1:AA:328:C:H4'	1:AA:329:A:H5'	1.96	0.48
1:AA:1149:C:H2'	1:AA:1150:U:H6	1.77	0.48
4:AD:3:ARG:HD3	4:AD:118:ARG:CD	2.44	0.48
5:AE:36:ASP:OD1	5:AE:38:GLN:N	2.38	0.48
26:BA:582:G:H2'	26:BA:583:G:C8	2.49	0.48
26:BA:848:G:H2'	26:BA:849:A:C8	2.48	0.48
26:BA:2116:G:N2	26:BA:2162:G:OP1	2.46	0.48
26:BA:2183:C:H2'	26:BA:2184:G:H8	1.78	0.48
26:BA:2791:C:H6	26:BA:2791:C:OP2	1.96	0.48
39:BS:15:ARG:NE	39:BS:88:ASP:OD2	2.45	0.48
47:B0:53:MET:HG3	47:B0:59:LEU:HD23	1.96	0.48
1:CA:10:A:OP2	5:CE:126:ARG:HD2	2.14	0.48
1:CA:707:C:H2'	1:CA:708:C:C6	2.49	0.48
1:CA:1009:G:H22	1:CA:1021:G:H1'	1.78	0.48
1:CA:1133:G:N2	1:CA:1141:C:N3	2.58	0.48
2:CB:46:LYS:O	2:CB:50:GLU:HB2	2.14	0.48
3:CC:32:LEU:HD12	3:CC:59:ARG:HH22	1.79	0.48
5:CE:33:VAL:HG13	5:CE:112:LEU:HD12	1.96	0.48
5:CE:84:PHE:N	5:CE:87:SER:O	2.45	0.48
20:CT:10:LEU:HD23	20:CT:12:ALA:HB2	1.95	0.48
26:DA:77:C:H42	26:DA:109:G:H1	1.61	0.48
26:DA:390:A:H4'	26:DA:391:G:H5'	1.94	0.48
26:DA:828:U:H2'	26:DA:829:A:C8	2.49	0.48
26:DA:1363:C:O2'	26:DA:1809:A:N3	2.37	0.48
26:DA:1434:A:H61	26:DA:1558:A:N6	2.12	0.48
26:DA:2118:U:C4	26:DA:2149:G:H1'	2.48	0.48
26:DA:2293:C:H42	26:DA:2339:G:H1	1.61	0.48
26:DA:2540:C:H2'	26:DA:2541:A:O4'	2.14	0.48
28:DD:108:PRO:HB3	28:DD:143:HIS:CE1	2.49	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DG:15:VAL:HG13	31:DG:175:LEU:HD23	1.96	0.48
34:DN:34:LEU:O	34:DN:49:GLY:HA3	2.13	0.48
37:DQ:36:ALA:HB2	37:DQ:103:MET:SD	2.54	0.48
1:AA:501:C:H2'	1:AA:502:G:H8	1.78	0.48
1:AA:1118:C:H1'	1:AA:1179:A:C5	2.49	0.48
9:AI:99:LEU:HB3	9:AI:101:PHE:CD1	2.49	0.48
10:AJ:49:VAL:HG23	14:AN:41:ARG:HD2	1.96	0.48
12:AL:34:ARG:NH2	61:AL:201:HOH:O	2.25	0.48
23:AW:47:U:H5'	23:AW:47:U:C6	2.45	0.48
26:BA:493:G:O6	61:BA:4550:HOH:O	2.19	0.48
26:BA:2099:U:H2'	26:BA:2100:G:C8	2.49	0.48
26:BA:2286:A:H4'	26:BA:2287:A:O4'	2.14	0.48
26:BA:2572:A:C8	29:BE:144:ARG:HD2	2.49	0.48
32:BH:154:PRO:HB3	32:BH:163:TYR:CE2	2.49	0.48
35:BO:16:ALA:HB2	35:BO:52:VAL:HG21	1.96	0.48
1:CA:93:G:C2'	1:CA:96:U:H5'	2.44	0.48
1:CA:1030(A):G:N3	1:CA:1030(C):G:C8	2.81	0.48
1:CA:1058:G:H1	1:CA:1199:U:H3	1.62	0.48
1:CA:1063:C:H3'	1:CA:1064:G:H2'	1.96	0.48
1:CA:1179:A:H2'	1:CA:1180:A:O4'	2.13	0.48
1:CA:1333:A:H2'	1:CA:1334:G:O4'	2.14	0.48
3:CC:87:LEU:O	3:CC:91:LEU:N	2.36	0.48
6:CF:33:TYR:CD2	6:CF:75:LEU:HD23	2.49	0.48
12:CL:53:ARG:HH12	12:CL:92:ASP:HB2	1.79	0.48
26:DA:272(E):G:C2	26:DA:364:C:C2	3.02	0.48
26:DA:1889:A:H2'	26:DA:1890:A:C8	2.49	0.48
26:DA:2586:C:OP2	26:DA:2608:G:N1	2.42	0.48
26:DA:2820:A:OP1	38:DR:4:LEU:HD23	2.14	0.48
28:DD:73:VAL:HG13	28:DD:120:GLY:HA3	1.95	0.48
30:DF:29:ASN:O	30:DF:112:MET:HE1	2.13	0.48
46:DZ:138:GLU:H	46:DZ:156:LYS:HZ1	1.62	0.48
53:D6:6:ARG:NH1	53:D6:26:ASN:HB2	2.28	0.48
1:AA:1137:C:H3'	1:AA:1137:C:H6	1.77	0.47
25:AY:5:G:C2	25:AY:6:G:C4	3.02	0.47
25:AY:58:A:H4'	25:AY:59:U:OP1	2.14	0.47
26:BA:527:C:C5	26:BA:2779:U:H2'	2.49	0.47
30:BF:150:GLY:HA2	30:BF:172:TRP:CD2	2.49	0.47
31:BG:16:ARG:HE	31:BG:31:VAL:HG11	1.79	0.47
36:BP:50:ARG:HD3	55:B8:7:HIS:CD2	2.49	0.47
1:CA:89:C:H2'	1:CA:90:U:O4'	2.14	0.47
1:CA:130:A:O2'	1:CA:131:C:O5'	2.28	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:933:G:O6	7:CG:3:ARG:NH2	2.47	0.47
1:CA:1121:U:C4	1:CA:1122:U:C4	3.01	0.47
1:CA:1371:G:O3'	9:CI:69:GLY:HA3	2.14	0.47
2:CB:139:LYS:O	2:CB:143:GLU:HG3	2.14	0.47
2:CB:212:GLN:NE2	2:CB:234:PRO:O	2.46	0.47
3:CC:101:LEU:HD12	3:CC:102:ASN:N	2.29	0.47
5:CE:6:PHE:HB3	5:CE:35:GLY:C	2.34	0.47
26:DA:1365:A:OP2	48:D1:3:LYS:HG2	2.14	0.47
26:DA:2564:A:C2	26:DA:2647:U:H4'	2.49	0.47
27:DB:14:U:H5'	27:DB:70:C:O2	2.13	0.47
1:AA:950:U:H2'	1:AA:951:G:H8	1.80	0.47
5:AE:90:VAL:O	5:AE:120:THR:HA	2.14	0.47
13:AM:79:LYS:HA	13:AM:82:MET:HE2	1.96	0.47
13:AM:123:ALA:HB2	23:AW:39:PSU:H1'	1.95	0.47
19:AS:40:ILE:HD11	19:AS:74:PHE:HE1	1.78	0.47
26:BA:667:U:O2	55:B8:2:PRO:HD2	2.14	0.47
32:BH:117:PRO:HG3	32:BH:123:PHE:CD2	2.49	0.47
33:BI:130:TYR:N	33:BI:138:ILE:O	2.42	0.47
35:BO:4:PRO:O	35:BO:5:GLN:HB2	2.14	0.47
36:BP:82:GLY:HA2	36:BP:113:LYS:O	2.13	0.47
1:CA:392:G:H2'	1:CA:393:A:C8	2.48	0.47
1:CA:646:U:H2'	1:CA:647:C:H6	1.75	0.47
1:CA:657:G:H4'	15:CO:28:GLN:HG2	1.96	0.47
1:CA:1125:U:C2'	1:CA:1126:U:H5''	2.44	0.47
1:CA:1298:C:H4'	1:CA:1299:A:H5'	1.96	0.47
20:CT:24:LEU:HD13	20:CT:24:LEU:HA	1.69	0.47
23:CW:8:4SU:S4	23:CW:14:A:N7	2.88	0.47
24:CX:67:C:C2'	24:CX:68:C:H5'	2.43	0.47
26:DA:93:G:H2'	26:DA:94:C:C6	2.49	0.47
26:DA:817:C:H2'	26:DA:818:G:O4'	2.14	0.47
26:DA:1641:A:H2'	26:DA:1642:G:O4'	2.14	0.47
26:DA:2141:G:H2'	26:DA:2142:C:O4'	2.14	0.47
26:DA:2304:G:H22	26:DA:2312:U:H3	1.61	0.47
26:DA:2776:A:H4'	26:DA:2777:G:H5''	1.96	0.47
1:AA:165:C:H2'	1:AA:166:G:H8	1.79	0.47
1:AA:371:G:O2'	1:AA:373:A:N7	2.47	0.47
1:AA:596:C:OP2	61:AA:4083:HOH:O	2.20	0.47
1:AA:950:U:H2'	1:AA:951:G:C8	2.49	0.47
3:AC:118:GLN:H	3:AC:118:GLN:HG2	1.45	0.47
26:BA:446:G:OP1	41:BU:3:ARG:NH1	2.42	0.47
26:BA:900:A:H2'	26:BA:901:A:O4'	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1709:U:H2'	26:BA:1710:C:C6	2.48	0.47
33:BI:114:LEU:HD13	33:BI:130:TYR:HD1	1.78	0.47
37:BQ:34:LEU:HD11	37:BQ:129:THR:HB	1.95	0.47
55:B8:42:ARG:HD2	61:B8:205:HOH:O	2.15	0.47
1:CA:934:C:OP1	61:CA:4164:HOH:O	2.20	0.47
1:CA:1128:C:H1'	1:CA:1147:C:N4	2.25	0.47
1:CA:1320:C:O4'	19:CS:73:GLU:HG3	2.13	0.47
2:CB:80:ILE:HD11	2:CB:212:GLN:HA	1.96	0.47
10:CJ:8:LEU:HB3	10:CJ:16:LEU:HD22	1.95	0.47
21:CU:12:LYS:HD3	21:CU:22:ARG:HB3	1.96	0.47
26:DA:39:C:H2'	26:DA:40:C:C6	2.49	0.47
26:DA:322:A:OP1	30:DF:168:ARG:HD2	2.14	0.47
26:DA:615:G:OP1	30:DF:40:GLN:HG2	2.14	0.47
28:DD:71:ASP:HB3	28:DD:103:ARG:NH2	2.28	0.47
29:DE:144:ARG:HB3	29:DE:145:LYS:H	1.48	0.47
29:DE:178:GLU:OE2	29:DE:178:GLU:N	2.42	0.47
32:DH:7:LEU:O	32:DH:69:ARG:NH1	2.40	0.47
37:DQ:37:LEU:HD21	37:DQ:130:LYS:HE2	1.96	0.47
42:DV:5:VAL:HG11	42:DV:57:VAL:HG21	1.96	0.47
44:DX:4:ALA:HB1	44:DX:42:ALA:HA	1.95	0.47
1:AA:461:A:O2'	1:AA:470:C:H5'	2.13	0.47
1:AA:1495:U:O2'	26:BA:1919:A:N1	2.40	0.47
3:AC:134:ILE:HG22	3:AC:168:ALA:HB3	1.96	0.47
7:AG:111:ARG:HB3	7:AG:113:GLU:OE2	2.14	0.47
10:AJ:47:PHE:HB2	10:AJ:63:PHE:HB2	1.96	0.47
26:BA:616:G:H5'	30:BF:205:ARG:HD2	1.96	0.47
26:BA:899:A:HO2'	26:BA:900:A:H8	1.60	0.47
26:BA:1701:A:OP2	61:BA:5017:HOH:O	2.20	0.47
26:BA:2712:U:OP1	26:BA:2714:G:H4'	2.14	0.47
27:BB:66:A:N6	27:BB:108:U:H2'	2.28	0.47
41:BU:86:ALA:O	42:BV:49:THR:HG23	2.14	0.47
1:CA:736:C:H2'	1:CA:737:A:C8	2.49	0.47
1:CA:1030(A):G:N2	1:CA:1030(C):G:H3'	2.30	0.47
1:CA:1057:G:H5'	3:CC:155:GLY:HA2	1.95	0.47
1:CA:1181:G:O2'	1:CA:1182:G:N7	2.47	0.47
19:CS:32:LYS:HE3	19:CS:57:HIS:CD2	2.49	0.47
26:DA:816:C:OP1	26:DA:1185:C:O2'	2.22	0.47
35:DO:7:TYR:CZ	35:DO:44:LYS:HG3	2.50	0.47
42:DV:21:ARG:HG2	42:DV:91:TYR:CD2	2.49	0.47
1:AA:1027:C:H2'	1:AA:1028:C:C6	2.49	0.47
12:AL:97:ARG:HB2	12:AL:98:TYR:CE2	2.49	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:AW:76:31M:HNM1	26:BA:2061:G:H22	1.62	0.47
25:AY:32:PSU:C2	25:AY:33:U:C5	3.02	0.47
25:AY:50:U:H2'	25:AY:51:U:C6	2.48	0.47
26:BA:302:C:OP2	45:BY:73:ARG:NH2	2.46	0.47
26:BA:1031:G:H21	56:B9:36:GLN:HE22	1.62	0.47
32:BH:20:ALA:HB1	32:BH:21:PRO:HD2	1.97	0.47
35:BO:120:GLU:HG2	35:BO:122:LEU:HG	1.97	0.47
1:CA:727:G:P	1:CA:742:G:H21	2.38	0.47
1:CA:1328:C:O2'	13:CM:29:ARG:NH2	2.45	0.47
2:CB:120:ALA:O	2:CB:122:PHE:N	2.43	0.47
3:CC:69:HIS:CD2	3:CC:104:GLN:HB3	2.49	0.47
4:CD:173:TRP:NE1	4:CD:189:PRO:HG3	2.29	0.47
8:CH:33:GLU:HG2	8:CH:48:TYR:CE1	2.49	0.47
21:CU:15:ARG:HH11	21:CU:15:ARG:HB2	1.79	0.47
26:DA:709:U:H2'	26:DA:710:G:C8	2.50	0.47
28:DD:4:LYS:HB3	28:DD:18:VAL:CG2	2.44	0.47
29:DE:1:MET:HE1	29:DE:199:ARG:HD2	1.95	0.47
33:DI:31:LEU:HD21	33:DI:38:LEU:HG	1.96	0.47
1:AA:1179:A:H4'	9:AI:103:THR:HA	1.97	0.47
1:AA:1191:A:H5''	3:AC:4:LYS:HZ2	1.79	0.47
1:AA:1210:C:N4	1:AA:1211:U:O4	2.47	0.47
2:AB:166:ASP:O	2:AB:170:GLU:N	2.39	0.47
4:AD:175:SER:OG	4:AD:184:LYS:HB2	2.14	0.47
25:AY:18:G:H1	25:AY:55:PSU:H1'	1.80	0.47
25:AY:36:A:N6	25:AY:37:MIA:C6	2.78	0.47
26:BA:143:G:H1'	44:BX:37:THR:HG21	1.97	0.47
26:BA:1178:C:O5'	26:BA:1178:C:H6	1.96	0.47
1:CA:952:U:H4'	1:CA:964:A:N1	2.30	0.47
3:CC:42:LEU:HA	3:CC:45:LYS:HZ2	1.80	0.47
4:CD:57:ARG:NH2	5:CE:107:ARG:HD3	2.28	0.47
7:CG:89:MET:SD	7:CG:155:ARG:HB2	2.55	0.47
14:CN:26:ARG:HB3	14:CN:43:CYS:SG	2.54	0.47
24:CX:23:C:H2'	24:CX:24:U:C6	2.49	0.47
26:DA:310:A:H1'	26:DA:311:A:H2'	1.95	0.47
26:DA:1410:G:H2'	26:DA:1411:C:C6	2.49	0.47
26:DA:1528(A):A:H2'	26:DA:1529:G:O4'	2.15	0.47
26:DA:2528:U:H5''	56:D9:31:LYS:HE2	1.97	0.47
61:DA:3829:HOH:O	30:DF:68:LYS:HE2	2.14	0.47
32:DH:86:GLU:OE2	32:DH:132:ARG:NH2	2.47	0.47
1:AA:46:G:O2'	1:AA:365:U:O2	2.31	0.47
1:AA:1346:A:N1	1:AA:1374:A:H5''	2.30	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1360:A:H2'	1:AA:1361:G:O4'	2.15	0.47
2:AB:63:MET:HB3	2:AB:225:ALA:HB1	1.97	0.47
2:AB:102:LEU:HB3	2:AB:180:LEU:HD12	1.96	0.47
2:AB:188:ALA:HB1	2:AB:192:SER:OG	2.15	0.47
3:AC:32:LEU:HD13	3:AC:59:ARG:HD3	1.97	0.47
25:AY:27:G:N2	25:AY:44:G:N3	2.63	0.47
26:BA:1045:A:OP1	26:BA:1046:A:H3'	2.15	0.47
26:BA:1173:G:N2	26:BA:1177:A:OP2	2.31	0.47
26:BA:2110:G:H4'	26:BA:2111:C:OP2	2.15	0.47
26:BA:2117:A:O2'	26:BA:2118:U:H5''	2.15	0.47
26:BA:2701:C:H2'	26:BA:2702:U:H2'	1.96	0.47
31:BG:28:VAL:HG23	31:BG:29:TRP:CD1	2.50	0.47
32:BH:69:ARG:HG3	32:BH:70:THR:N	2.30	0.47
33:BI:93:THR:OG1	33:BI:96:ASP:OD1	2.24	0.47
40:BT:53:ARG:HB3	40:BT:53:ARG:NH1	2.30	0.47
41:BU:85:LYS:HE2	41:BU:117:GLN:HA	1.97	0.47
45:BY:30:VAL:HG13	45:BY:37:VAL:HG12	1.97	0.47
53:B6:16:CYS:SG	53:B6:18:ARG:HD3	2.54	0.47
1:CA:109:A:C6	1:CA:326:G:C6	3.03	0.47
1:CA:627:G:H2'	1:CA:628:G:H8	1.78	0.47
1:CA:988:G:C4'	1:CA:1014:A:H61	2.28	0.47
1:CA:1133:G:H2'	1:CA:1134:G:C8	2.49	0.47
1:CA:1186:G:O3'	9:CI:113:LYS:NZ	2.46	0.47
2:CB:54:THR:HG23	2:CB:199:TYR:HB3	1.96	0.47
2:CB:115:LEU:HD11	2:CB:153:ARG:CZ	2.44	0.47
2:CB:211:ILE:O	2:CB:215:LEU:HB2	2.14	0.47
9:CI:88:TYR:CD1	9:CI:89:ASN:HB2	2.49	0.47
10:CJ:37:PRO:HA	10:CJ:72:VAL:HG12	1.97	0.47
10:CJ:46:ARG:HG2	10:CJ:64:GLU:HB3	1.97	0.47
13:CM:10:PRO:HD2	13:CM:18:ALA:HB1	1.95	0.47
13:CM:92:HIS:CE1	13:CM:98:VAL:HG11	2.49	0.47
22:CV:14:A:H8	22:CV:14:A:OP1	1.97	0.47
26:DA:118:A:N3	26:DA:178:G:H1'	2.30	0.47
26:DA:855:G:O2'	47:D0:27:GLU:OE2	2.31	0.47
26:DA:897:C:H3'	26:DA:898:C:C6	2.50	0.47
26:DA:1196:C:H2'	26:DA:1197:G:H8	1.79	0.47
26:DA:1514:U:H2'	26:DA:1515:G:H8	1.80	0.47
26:DA:1877:A:H5'	26:DA:1878:G:OP2	2.15	0.47
26:DA:2086:U:H2'	26:DA:2087:G:C8	2.49	0.47
26:DA:2364:C:H2'	26:DA:2365:G:O4'	2.14	0.47
26:DA:2751:G:C8	32:DH:2:SER:HA	2.49	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:2788:C:H2'	26:DA:2789:C:C6	2.50	0.47
28:DD:5:LYS:HE3	28:DD:5:LYS:HB3	1.52	0.47
29:DE:5:LEU:HD11	29:DE:79:ARG:HB2	1.96	0.47
31:DG:121:ASN:HB3	31:DG:124:SER:HB2	1.97	0.47
32:DH:144:VAL:O	32:DH:148:ILE:HG12	2.15	0.47
46:DZ:108:PRO:HB2	46:DZ:111:VAL:HG23	1.96	0.47
48:D1:3:LYS:HB2	48:D1:61:ARG:NH1	2.30	0.47
48:D1:3:LYS:HB2	48:D1:61:ARG:HH12	1.80	0.47
1:AA:407:G:OP1	4:AD:115:ARG:NH2	2.48	0.47
1:AA:1293:G:H2'	1:AA:1294:G:C8	2.49	0.47
26:BA:41:C:H2'	26:BA:42:G:O4'	2.15	0.47
26:BA:1311:G:O2'	54:B7:47:ARG:NH2	2.47	0.47
46:BZ:107:THR:HA	46:BZ:108:PRO:HD3	1.77	0.47
1:CA:337:C:H2'	1:CA:338:A:H8	1.79	0.47
1:CA:1027:C:OP1	1:CA:1027:C:H4'	2.14	0.47
1:CA:1179:A:C6	1:CA:1180:A:C4	3.03	0.47
1:CA:1343:G:H2'	1:CA:1344:C:C6	2.50	0.47
3:CC:6:HIS:HB3	14:CN:49:HIS:ND1	2.30	0.47
8:CH:73:ASP:OD1	8:CH:75:ARG:HD3	2.15	0.47
24:CX:44:A:C6	24:CX:45:G:C6	3.02	0.47
26:DA:121:G:H4'	26:DA:149:A:H5'	1.97	0.47
26:DA:797:C:H2'	26:DA:798:G:O4'	2.14	0.47
26:DA:1025:G:C4	26:DA:1135:C:H1'	2.49	0.47
26:DA:1270:C:H5''	26:DA:1271:G:O5'	2.15	0.47
26:DA:2306:C:H3'	26:DA:2307:G:H2'	1.97	0.47
26:DA:2506:U:OP1	29:DE:144:ARG:NH2	2.48	0.47
26:DA:2722:G:H2'	26:DA:2723:C:C6	2.50	0.47
43:DW:14:PRO:HG2	43:DW:78:GLU:HG2	1.97	0.47
51:D4:53:GLU:HG2	51:D4:55:ARG:N	2.29	0.47
1:AA:299:G:O6	61:AA:4081:HOH:O	2.14	0.47
1:AA:1028:C:H2'	1:AA:1029:C:H4'	1.96	0.47
1:AA:1132:C:H2'	1:AA:1133:G:C8	2.50	0.47
1:AA:1227:A:P	13:AM:111:LYS:HZ2	2.37	0.47
1:AA:1443:G:N2	1:AA:1459:C:O2	2.37	0.47
2:AB:17:PHE:CD2	2:AB:44:LEU:HD21	2.48	0.47
26:BA:1243:G:O2'	36:BP:7:ARG:NH2	2.47	0.47
28:BD:72:LYS:HB3	28:BD:75:ILE:HD12	1.97	0.47
1:CA:1118:C:H1'	1:CA:1179:A:C5	2.50	0.47
1:CA:1139:G:H4'	1:CA:1140:C:OP1	2.14	0.47
1:CA:1305:G:H5'	21:CU:4:GLY:C	2.36	0.47
9:CI:16:ARG:HH11	9:CI:64:THR:HG21	1.80	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:CS:32:LYS:HA	19:CS:50:ALA:HB3	1.96	0.47
24:CX:19:G:H4'	24:CX:20:U:OP2	2.15	0.47
26:DA:77:C:OP1	49:D2:59:ARG:HD3	2.14	0.47
26:DA:315:G:H2'	26:DA:316:C:C6	2.50	0.47
26:DA:2166:G:H3'	26:DA:2167:U:C5'	2.40	0.47
26:DA:2563:U:H4'	35:DO:28:SER:HA	1.97	0.47
40:DT:29:ARG:HB3	40:DT:87:ASP:HB2	1.97	0.47
1:AA:156:G:N1	1:AA:165:C:N3	2.55	0.47
1:AA:1030(B):C:H2'	1:AA:1030(B):C:O2	2.15	0.47
2:AB:19:HIS:O	2:AB:39:ILE:HG23	2.15	0.47
15:AO:74:ASP:CG	15:AO:77:ARG:HG3	2.35	0.47
36:BP:59:LEU:HD11	55:B8:10:ALA:HB2	1.97	0.47
1:CA:136:C:O2'	16:CP:63:GLY:O	2.24	0.47
2:CB:185:ILE:HG22	2:CB:199:TYR:HD2	1.79	0.47
4:CD:140:VAL:HG11	4:CD:146:ILE:HD11	1.95	0.47
7:CG:44:TYR:O	7:CG:47:CYS:HB2	2.15	0.47
8:CH:124:ALA:O	8:CH:128:GLY:N	2.48	0.47
13:CM:54:VAL:HA	13:CM:57:ARG:HB3	1.97	0.47
23:CW:29:G:N2	23:CW:41:C:N3	2.56	0.47
26:DA:511:U:H4'	26:DA:1235:G:H4'	1.96	0.47
26:DA:571:A:N6	26:DA:2499:C:O3'	2.47	0.47
26:DA:1514:U:H2'	26:DA:1515:G:C8	2.50	0.47
26:DA:2298:A:C8	26:DA:2299:G:C8	3.03	0.47
26:DA:2319:G:N2	39:DS:3:ARG:HA	2.30	0.47
26:DA:2477:C:N4	56:D9:10:ILE:HG23	2.30	0.47
27:DB:115:G:H2'	27:DB:116:G:O4'	2.15	0.47
31:DG:143:GLU:H	31:DG:143:GLU:HG2	1.41	0.47
46:DZ:57:ILE:HD12	46:DZ:71:VAL:HG23	1.97	0.47
1:AA:161:A:H2'	1:AA:162:A:C8	2.50	0.46
1:AA:163:C:H2'	1:AA:164:U:C6	2.49	0.46
1:AA:346:G:C3'	1:AA:347:G:H4'	2.45	0.46
1:AA:625:G:H2'	1:AA:626:U:H6	1.79	0.46
1:AA:953:G:N7	13:AM:104:ARG:NH2	2.63	0.46
1:AA:1028:C:N4	1:AA:1033:G:H1	2.10	0.46
1:AA:1183:A:HO2'	1:AA:1184:G:P	2.35	0.46
1:AA:1530:G:OP1	1:AA:1530:G:H4'	2.14	0.46
2:AB:30:ARG:HG3	2:AB:31:TYR:CD1	2.50	0.46
23:AW:52:G:H4'	37:BQ:56:ARG:HH12	1.80	0.46
26:BA:303:U:H2'	26:BA:304:G:H8	1.80	0.46
26:BA:620:G:N3	26:BA:620:G:H5'	2.30	0.46
26:BA:1587:A:H2'	26:BA:1588:C:C6	2.50	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1641:A:H2'	26:BA:1642:G:O4'	2.14	0.46
38:BR:104:ARG:HG3	38:BR:111:LEU:HD21	1.97	0.46
1:CA:309:G:O2'	1:CA:607:A:N1	2.48	0.46
1:CA:1456:G:N1	20:CT:51:GLU:OE1	2.45	0.46
4:CD:25:ARG:NH1	4:CD:30:LYS:O	2.48	0.46
17:CQ:26:GLN:HG2	17:CQ:37:LYS:HG2	1.96	0.46
26:DA:854:G:H2'	26:DA:855:G:C8	2.50	0.46
26:DA:1116:C:H2'	26:DA:1117:G:H8	1.79	0.46
26:DA:1169:G:H8	26:DA:1169:G:O5'	1.98	0.46
26:DA:1430:C:H2'	26:DA:1431:U:C6	2.49	0.46
26:DA:1797:C:H4'	28:DD:257:LEU:O	2.15	0.46
26:DA:2059:A:O2'	30:DF:69:HIS:HD2	1.98	0.46
26:DA:2516:G:O6	26:DA:2517:C:N4	2.48	0.46
26:DA:2846:G:H2'	26:DA:2847:U:O4'	2.14	0.46
42:DV:40:LEU:HB2	42:DV:46:VAL:HG13	1.96	0.46
1:AA:382:A:H2'	1:AA:383:A:C8	2.49	0.46
1:AA:1002:G:H3'	1:AA:1003:G:H8	1.81	0.46
1:AA:1182:G:C4'	1:AA:1183:A:H5'	2.44	0.46
2:AB:17:PHE:HB2	2:AB:44:LEU:HD11	1.96	0.46
2:AB:21:ARG:H	2:AB:21:ARG:HD2	1.80	0.46
2:AB:102:LEU:HD23	2:AB:182:ILE:HD12	1.98	0.46
5:AE:43:LEU:HD21	5:AE:132:ALA:HB1	1.97	0.46
23:AW:6:G:N1	23:AW:67:C:N4	2.39	0.46
26:BA:744:G:OP1	29:BE:132:HIS:ND1	2.43	0.46
26:BA:1028:A:N6	26:BA:1125:G:H2'	2.30	0.46
26:BA:1179:C:H2'	26:BA:1180:C:H6	1.80	0.46
26:BA:2010:G:H5''	43:BW:42:ARG:HB2	1.98	0.46
26:BA:2887:U:H2'	26:BA:2888:C:C6	2.49	0.46
30:BF:93:LYS:HD3	30:BF:93:LYS:HA	1.68	0.46
31:BG:146:TYR:O	31:BG:146:TYR:HD1	1.98	0.46
1:CA:772:U:H2'	1:CA:773:G:O4'	2.15	0.46
2:CB:76:GLN:HG3	2:CB:206:ASP:O	2.15	0.46
7:CG:76:ARG:HB3	7:CG:156:TRP:HH2	1.80	0.46
8:CH:82:HIS:NE2	8:CH:84:ARG:HG2	2.30	0.46
10:CJ:23:ILE:HD13	10:CJ:23:ILE:HA	1.77	0.46
16:CP:40:ASP:O	16:CP:48:TRP:HB2	2.16	0.46
23:CW:76:31M:N	24:CX:76:A:O3'	2.49	0.46
25:CY:74:C:H4'	48:D1:23:LYS:HE3	1.97	0.46
26:DA:229:A:H5''	26:DA:230:U:H5'	1.96	0.46
26:DA:528:A:OP2	34:DN:114:ARG:NH1	2.48	0.46
26:DA:1630:G:H2'	26:DA:1631:C:C6	2.51	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:1786:A:H1'	26:DA:1938:A:N6	2.31	0.46
26:DA:1932:A:H2'	26:DA:1933:G:O4'	2.15	0.46
26:DA:2141:G:C8	26:DA:2151:G:N2	2.83	0.46
26:DA:2318:G:H4'	26:DA:2319:G:OP1	2.14	0.46
26:DA:2516:G:C6	26:DA:2517:C:C4	3.03	0.46
26:DA:2647:U:H2'	26:DA:2648:C:C6	2.51	0.46
26:DA:2836:U:H2'	26:DA:2837:G:C8	2.50	0.46
37:DQ:133:ARG:HG2	37:DQ:134:ARG:N	2.30	0.46
40:DT:16:ARG:HB3	40:DT:16:ARG:HH11	1.80	0.46
42:DV:60:GLU:HB3	42:DV:95:LEU:HB3	1.97	0.46
1:AA:406:G:H4'	4:AD:3:ARG:HH22	1.80	0.46
1:AA:743:U:H2'	1:AA:744:C:C6	2.51	0.46
2:AB:59:GLU:HG3	2:AB:225:ALA:HB2	1.96	0.46
4:AD:163:GLU:O	4:AD:165:MET:N	2.48	0.46
15:AO:18:PHE:CZ	15:AO:21:ASP:HB3	2.50	0.46
18:AR:58:LEU:HB3	18:AR:62:GLU:HG3	1.98	0.46
25:AY:12:U:C2	25:AY:24:G:C2	3.03	0.46
25:AY:69:G:C5	25:AY:70:G:C8	3.03	0.46
26:BA:278:A:O2'	26:BA:279:C:OP1	2.23	0.46
26:BA:527:C:C4	26:BA:2779:U:H2'	2.50	0.46
26:BA:615:G:OP1	30:BF:40:GLN:HG2	2.15	0.46
26:BA:1107:G:H2'	26:BA:1107:G:N3	2.29	0.46
26:BA:1653:G:H3'	38:BR:2:ARG:HD3	1.96	0.46
45:BY:55:TYR:CD2	45:BY:55:TYR:N	2.84	0.46
46:BZ:5:LEU:O	46:BZ:59:LEU:HA	2.15	0.46
46:BZ:137:ILE:HA	46:BZ:156:LYS:HZ1	1.80	0.46
1:CA:1492:A:H2'	1:CA:1493:A:C8	2.51	0.46
8:CH:44:PHE:CE2	8:CH:109:ILE:HG12	2.51	0.46
22:CV:16:A:N6	24:CX:36:U:H3	2.12	0.46
24:CX:13:C:O2'	26:DA:1924:C:H4'	2.15	0.46
25:CY:69:G:C6	25:CY:70:G:C8	3.04	0.46
26:DA:8:A:H2'	26:DA:9:U:H6	1.81	0.46
26:DA:724:U:H2'	26:DA:725:G:O4'	2.15	0.46
26:DA:2263:C:N4	47:D0:15:ASP:OD1	2.47	0.46
26:DA:2510:C:C4	26:DA:2511:U:C4	3.03	0.46
29:DE:50:GLY:HA2	29:DE:77:ILE:O	2.14	0.46
56:D9:13:LYS:HD3	56:D9:28:GLU:OE2	2.15	0.46
2:AB:109:SER:O	2:AB:112:VAL:HG22	2.15	0.46
2:AB:210:SER:O	2:AB:214:ILE:HG12	2.16	0.46
7:AG:113:GLU:HG3	7:AG:118:VAL:HG12	1.96	0.46
7:AG:138:LYS:NZ	7:AG:142:GLU:OE2	2.49	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:AW:8:4SU:O2'	23:AW:46:7MG:N2	2.49	0.46
23:AW:19:G:H4'	23:AW:20:U:OP1	2.16	0.46
24:AX:17:C:H5'	24:AX:61:C:OP1	2.16	0.46
26:BA:2792:G:N2	26:BA:2805:G:H1'	2.31	0.46
29:BE:149:ARG:N	61:BE:406:HOH:O	2.38	0.46
37:BQ:37:LEU:HD21	37:BQ:130:LYS:HB2	1.98	0.46
43:BW:9:TYR:HA	43:BW:100:THR:HG23	1.98	0.46
1:CA:1318:A:H5''	19:CS:3:ARG:HH22	1.80	0.46
1:CA:1499:A:H1'	1:CA:1520:G:H5'	1.96	0.46
24:CX:37:A:H2'	24:CX:38:A:O4'	2.16	0.46
25:CY:15:G:C2	25:CY:48:C:N3	2.82	0.46
26:DA:28:A:C2	26:DA:513:A:C8	3.03	0.46
26:DA:647:G:H8	26:DA:647:G:O5'	1.98	0.46
26:DA:995:C:N3	34:DN:2:LYS:HA	2.31	0.46
26:DA:1359:A:N1	26:DA:1372:U:O4	2.47	0.46
26:DA:2745:C:C4	26:DA:2746:U:C4	3.03	0.46
26:DA:2870:C:H5''	38:DR:65:LEU:HD21	1.97	0.46
1:AA:224:C:H2'	1:AA:225:C:H6	1.81	0.46
1:AA:1003:G:C2	1:AA:1004:A:N3	2.84	0.46
9:AI:8:GLY:HA3	9:AI:76:ALA:O	2.15	0.46
10:AJ:70:ARG:HA	10:AJ:70:ARG:HD3	1.83	0.46
11:AK:82:VAL:N	11:AK:107:SER:O	2.45	0.46
25:AY:36:A:H2'	25:AY:37:MIA:O4'	2.15	0.46
26:BA:236:C:H2'	26:BA:237:C:C6	2.50	0.46
26:BA:2130:U:H2'	26:BA:2131:G:N2	2.31	0.46
26:BA:2748:A:H5'	32:BH:4:ILE:HD12	1.97	0.46
30:BF:28:ILE:O	30:BF:30:PRO:HD3	2.15	0.46
49:B2:32:LEU:HD13	49:B2:36:ARG:NH1	2.30	0.46
1:CA:69:G:H2'	1:CA:70:G:C8	2.51	0.46
1:CA:90:U:O2'	1:CA:91:C:H5'	2.15	0.46
1:CA:992:U:H6	1:CA:992:U:H5''	1.80	0.46
2:CB:149:LEU:HD22	2:CB:152:PHE:HD2	1.80	0.46
19:CS:27:GLU:HG2	19:CS:47:HIS:HE2	1.80	0.46
19:CS:27:GLU:HB2	19:CS:28:LYS:NZ	2.31	0.46
26:DA:195:A:H2'	26:DA:198:C:N4	2.31	0.46
26:DA:383:U:H2'	26:DA:385:C:H5	1.81	0.46
26:DA:783:A:O2'	26:DA:785:G:OP1	2.24	0.46
26:DA:811:U:H2'	36:DP:21:ARG:HA	1.96	0.46
26:DA:2502:G:H5''	26:DA:2503:A:H5''	1.98	0.46
27:DB:55:U:O3'	31:DG:27:ASN:ND2	2.49	0.46
29:DE:1:MET:O	29:DE:84:PHE:HB2	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:DH:86:GLU:HB3	32:DH:165:ALA:HB2	1.97	0.46
48:D1:83:GLU:HA	48:D1:84:GLY:HA2	1.62	0.46
1:AA:1025:U:O2	1:AA:1036:G:C6	2.66	0.46
1:AA:1136:U:H5'	1:AA:1137:C:N3	2.30	0.46
1:AA:1351:U:O4	9:AI:118:LYS:NZ	2.49	0.46
2:AB:61:LEU:HD23	2:AB:68:ILE:HD11	1.96	0.46
4:AD:110:PHE:HE1	4:AD:176:LEU:HD13	1.80	0.46
18:AR:65:ILE:O	18:AR:69:THR:HG23	2.16	0.46
26:BA:191:A:H2'	26:BA:192:C:C6	2.51	0.46
26:BA:484:C:H2'	26:BA:485:C:C6	2.51	0.46
26:BA:1021:A:H3'	26:BA:1021:A:C8	2.50	0.46
26:BA:1176:G:H1'	26:BA:1177:A:C5'	2.38	0.46
26:BA:1495:A:H2'	26:BA:1496:A:C8	2.51	0.46
26:BA:1697:G:OP2	26:BA:1698:A:O2'	2.14	0.46
26:BA:1859:A:N6	26:BA:1883:G:O2'	2.48	0.46
26:BA:2128:C:H2'	26:BA:2129:C:C6	2.50	0.46
40:BT:51:ARG:HG3	40:BT:98:LYS:HD2	1.96	0.46
43:BW:13:SER:HA	43:BW:14:PRO:HD3	1.84	0.46
1:CA:630:G:H2'	1:CA:631:G:H8	1.81	0.46
1:CA:1002:G:N3	1:CA:1003:G:C8	2.84	0.46
1:CA:1095:U:C4	1:CA:1096:C:C4	3.03	0.46
1:CA:1134:G:H2'	1:CA:1135:U:H5'	1.98	0.46
1:CA:1291:G:C6	1:CA:1292:U:C4	3.04	0.46
14:CN:6:LEU:HB3	14:CN:23:ARG:NH2	2.30	0.46
18:CR:26:LEU:CD2	18:CR:42:ARG:HD2	2.46	0.46
25:CY:35:A:N6	25:CY:36:A:N1	2.63	0.46
26:DA:191:A:H2'	26:DA:192:C:C6	2.50	0.46
26:DA:740:U:H2'	26:DA:741:G:C8	2.51	0.46
26:DA:1310:G:OP2	54:D7:9:ARG:NH1	2.49	0.46
26:DA:1611:C:H2'	26:DA:1612:C:H5'	1.98	0.46
52:D5:16:ARG:HD2	52:D5:20:ARG:NH1	2.31	0.46
2:AB:189:ASP:OD1	2:AB:189:ASP:N	2.39	0.46
3:AC:134:ILE:HG23	3:AC:151:VAL:HB	1.98	0.46
4:AD:3:ARG:HD3	4:AD:118:ARG:HD2	1.97	0.46
26:BA:882:G:H2'	26:BA:883:G:O4'	2.15	0.46
26:BA:1204:A:N6	26:BA:1240:U:H2'	2.30	0.46
26:BA:1300:U:H4'	26:BA:1301:A:H5'	1.97	0.46
26:BA:2086:U:H2'	26:BA:2087:G:C8	2.51	0.46
26:BA:2141:G:N7	26:BA:2151:G:C2	2.84	0.46
26:BA:2199:A:OP2	26:BA:2200:C:H5	1.99	0.46
26:BA:2630:G:H2'	26:BA:2631:G:H8	1.80	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BG:47:LYS:O	31:BG:51:ARG:HG2	2.16	0.46
37:BQ:14:ARG:HG2	37:BQ:41:TRP:HH2	1.79	0.46
1:CA:937:A:H1'	1:CA:1379:G:N2	2.30	0.46
8:CH:6:ILE:O	8:CH:10:LEU:HG	2.16	0.46
10:CJ:30:SER:O	10:CJ:81:THR:HG23	2.16	0.46
25:CY:50:U:C2	25:CY:64:A:N1	2.84	0.46
26:DA:195:A:H2'	26:DA:198:C:H41	1.80	0.46
26:DA:999:U:O2'	26:DA:1000:A:H5'	2.16	0.46
26:DA:1913:A:H4'	26:DA:1914:C:O5'	2.15	0.46
26:DA:2291:U:O2'	26:DA:2374:C:H1'	2.16	0.46
26:DA:2347:C:O2'	53:D6:21:TYR:OH	2.34	0.46
26:DA:2821:A:H2'	26:DA:2822:G:C8	2.51	0.46
31:DG:10:LYS:HG3	31:DG:14:GLU:OE1	2.16	0.46
33:DI:77:LEU:HD11	33:DI:101:LEU:HB2	1.98	0.46
39:DS:27:SER:HA	39:DS:88:ASP:HB3	1.96	0.46
1:AA:93:G:O2'	1:AA:96:U:H5'	2.16	0.46
1:AA:1429:C:H2'	1:AA:1430:C:H6	1.80	0.46
3:AC:20:SER:OG	3:AC:40:ARG:NH1	2.48	0.46
11:AK:73:MET:HG2	11:AK:103:LEU:HD21	1.98	0.46
26:BA:271(V):G:O6	61:BA:4948:HOH:O	2.20	0.46
26:BA:536:A:H2'	26:BA:537:C:C6	2.50	0.46
26:BA:2533:A:H2'	26:BA:2534:A:O4'	2.16	0.46
61:BA:5273:HOH:O	47:B0:41:ARG:HA	2.15	0.46
33:BI:85:GLU:OE1	33:BI:85:GLU:HA	2.16	0.46
50:B3:26:LEU:O	50:B3:35:ARG:NE	2.49	0.46
51:B4:68:ARG:HD2	51:B4:69:LYS:H	1.81	0.46
1:CA:450:G:H4'	16:CP:41:PRO:HB2	1.98	0.46
1:CA:1220:G:H5'	19:CS:34:TRP:O	2.15	0.46
1:CA:1457:G:OP1	20:CT:39:LYS:NZ	2.37	0.46
2:CB:28:PHE:HD1	2:CB:194:PRO:HG3	1.81	0.46
2:CB:30:ARG:HG3	2:CB:31:TYR:CD1	2.50	0.46
7:CG:79:ARG:HB3	7:CG:80:VAL:H	1.37	0.46
26:DA:774:A:N3	26:DA:774:A:H2'	2.30	0.46
31:DG:25:TYR:HB3	31:DG:30:GLU:HB3	1.98	0.46
1:AA:6:G:O2'	1:AA:7:G:H5'	2.16	0.46
1:AA:262:A:C6	1:AA:263:A:C6	3.03	0.46
1:AA:1237:C:O2'	1:AA:1300:G:N2	2.43	0.46
1:AA:1302:U:OP2	13:AM:21:TYR:OH	2.24	0.46
7:AG:111:ARG:NH2	7:AG:126:ASP:OD2	2.48	0.46
26:BA:857:C:N4	26:BA:858:U:O4	2.49	0.46
26:BA:2141:G:C4	26:BA:2142:C:H1'	2.51	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BF:29:ASN:H	30:BF:112:MET:CE	2.28	0.46
38:BR:36:THR:HG22	38:BR:37:THR:H	1.81	0.46
52:B5:42:PRO:HB2	52:B5:43:HIS:ND1	2.31	0.46
1:CA:202:U:O2'	1:CA:203:U:O5'	2.31	0.46
1:CA:1004:A:N7	1:CA:1037:C:H2'	2.31	0.46
1:CA:1006:C:H2'	1:CA:1007:C:O4'	2.16	0.46
1:CA:1317:C:H5	14:CN:18:VAL:HG21	1.80	0.46
1:CA:1516:G:N2	1:CA:1519:A:OP2	2.49	0.46
2:CB:100:GLY:HA2	2:CB:103:THR:OG1	2.15	0.46
2:CB:150:SER:OG	2:CB:151:GLY:N	2.48	0.46
2:CB:218:ALA:O	2:CB:222:ILE:HG23	2.15	0.46
4:CD:92:VAL:O	4:CD:96:LEU:HD22	2.16	0.46
8:CH:121:ASP:N	8:CH:121:ASP:OD1	2.49	0.46
25:CY:76:A:O2'	26:DA:2394:C:N3	2.44	0.46
26:DA:307:G:H22	26:DA:310:A:P	2.38	0.46
26:DA:1032:A:H2	26:DA:1122:G:H22	1.61	0.46
26:DA:1484:G:C6	26:DA:1485:G:N7	2.84	0.46
26:DA:2687:U:H2'	26:DA:2688:U:O4'	2.16	0.46
31:DG:44:GLY:O	31:DG:47:LYS:HB2	2.15	0.46
44:DX:92:LEU:HD12	44:DX:92:LEU:HA	1.83	0.46
46:DZ:150:LEU:HD12	46:DZ:150:LEU:HA	1.78	0.46
1:AA:93:G:C2'	1:AA:96:U:H5'	2.46	0.46
1:AA:1273:G:H3'	1:AA:1274:G:C8	2.51	0.46
1:AA:1457:G:H2'	1:AA:1458:G:C8	2.51	0.46
5:AE:12:LEU:HB3	5:AE:31:LEU:HB2	1.98	0.46
13:AM:4:ILE:HD12	13:AM:57:ARG:HA	1.97	0.46
26:BA:2011:U:OP1	43:BW:42:ARG:HD3	2.16	0.46
26:BA:2359:C:H2'	26:BA:2360:A:O4'	2.16	0.46
26:BA:2675:A:H5'	35:BO:29:ASN:O	2.15	0.46
26:BA:2803:C:H2'	26:BA:2804:C:C6	2.51	0.46
1:CA:664:G:H5''	18:CR:64:ARG:NH2	2.31	0.46
1:CA:994:A:C5	1:CA:1216:G:H4'	2.51	0.46
2:CB:96:ARG:HD2	2:CB:98:LEU:HD22	1.97	0.46
3:CC:36:ASP:O	3:CC:40:ARG:HG3	2.16	0.46
3:CC:121:ALA:HB2	3:CC:198:VAL:HG21	1.98	0.46
26:DA:330:A:HO2'	26:DA:331:A:H8	1.61	0.46
26:DA:517:C:O2'	43:DW:18:ARG:NH2	2.49	0.46
26:DA:1477:A:H2'	26:DA:1478:G:O4'	2.14	0.46
26:DA:1539:G:H2'	26:DA:1540:U:O4'	2.16	0.46
26:DA:1857:G:C6	26:DA:1858:G:N1	2.84	0.46
26:DA:1913:A:H4'	26:DA:1914:C:C5'	2.46	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:2119:A:H2	26:DA:2171:A:H5'	1.81	0.46
27:DB:5:C:N4	27:DB:116:G:H1	2.13	0.46
27:DB:80:U:H2'	27:DB:81:G:C8	2.51	0.46
33:DI:90:GLY:O	33:DI:121:LYS:HE3	2.16	0.46
38:DR:98:LEU:HB2	38:DR:113:LEU:HD11	1.98	0.46
47:D0:82:ARG:HA	47:D0:83:PRO:HD3	1.78	0.46
1:AA:691:G:OP2	11:AK:26:ASN:ND2	2.38	0.45
1:AA:1075:C:H2'	1:AA:1076:C:H5''	1.98	0.45
2:AB:45:GLN:O	2:AB:49:GLU:HB2	2.16	0.45
26:BA:271(O):C:H2'	26:BA:271(P):C:C6	2.51	0.45
26:BA:1178:C:H2'	26:BA:1179:C:C6	2.51	0.45
33:BI:77:LEU:HB2	33:BI:142:VAL:HG12	1.97	0.45
42:BV:21:ARG:HG2	42:BV:91:TYR:CD1	2.51	0.45
50:B3:43:ILE:O	50:B3:47:VAL:HG23	2.16	0.45
1:CA:59:A:H3'	1:CA:331:G:H22	1.81	0.45
1:CA:689:C:P	11:CK:46:GLY:HA3	2.56	0.45
1:CA:920:U:H2'	1:CA:921:U:H6	1.77	0.45
1:CA:976:G:C8	1:CA:1362:C:N4	2.84	0.45
1:CA:1084:G:C5	1:CA:1085:U:C4	3.04	0.45
1:CA:1423:G:H2'	1:CA:1424:C:H6	1.80	0.45
7:CG:111:ARG:HB3	7:CG:113:GLU:OE2	2.16	0.45
12:CL:8:ASN:O	12:CL:12:ARG:HG3	2.16	0.45
15:CO:74:ASP:OD1	15:CO:76:GLU:HB2	2.16	0.45
19:CS:27:GLU:HB3	19:CS:28:LYS:HA	1.96	0.45
26:DA:385:C:O2	36:DP:71:VAL:HG21	2.16	0.45
26:DA:601:C:O2'	30:DF:104:LYS:NZ	2.44	0.45
26:DA:754:C:H2'	26:DA:755:C:C6	2.50	0.45
26:DA:1300:U:H4'	26:DA:1301:A:O5'	2.16	0.45
28:DD:72:LYS:HB3	28:DD:75:ILE:HD12	1.98	0.45
33:DI:102:SER:O	33:DI:106:GLY:N	2.37	0.45
1:AA:59:A:H3'	1:AA:331:G:H22	1.81	0.45
1:AA:1034:G:H3'	1:AA:1035:A:C8	2.51	0.45
2:AB:16:HIS:CB	2:AB:204:ASN:HB3	2.31	0.45
3:AC:155:GLY:HA3	3:AC:196:LEU:HD22	1.97	0.45
4:AD:162:LEU:CD1	4:AD:181:MET:HG2	2.46	0.45
5:AE:27:ARG:HE	5:AE:27:ARG:HB2	1.48	0.45
15:AO:61:GLY:O	15:AO:65:ARG:HG3	2.16	0.45
26:BA:911:A:H2'	37:BQ:9:TYR:OH	2.16	0.45
26:BA:1803:A:H4'	28:BD:259:THR:HG23	1.98	0.45
26:BA:1842:G:O2'	28:BD:253:GLN:NE2	2.49	0.45
26:BA:2567:G:H2'	26:BA:2568:C:C6	2.51	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2846:G:H2'	26:BA:2847:U:O4'	2.16	0.45
31:BG:16:ARG:NE	31:BG:31:VAL:HG11	2.30	0.45
53:B6:11:LEU:HB3	53:B6:49:HIS:HB3	1.98	0.45
1:CA:775:G:N2	1:CA:804:U:O4	2.48	0.45
1:CA:1323:G:H2'	1:CA:1324:A:C8	2.51	0.45
2:CB:178:ARG:NH2	8:CH:68:ARG:HH22	2.12	0.45
3:CC:164:ARG:HG2	3:CC:165:THR:H	1.81	0.45
9:CI:99:LEU:HB3	9:CI:101:PHE:CE2	2.51	0.45
13:CM:37:THR:HG21	13:CM:56:LEU:HA	1.97	0.45
17:CQ:66:SER:OG	17:CQ:69:LYS:HB2	2.16	0.45
26:DA:698:C:O2'	26:DA:734:A:N6	2.49	0.45
26:DA:752:A:P	54:D7:3:ARG:HH22	2.39	0.45
26:DA:1027:A:C6	26:DA:1126:A:C4	3.04	0.45
26:DA:1991:U:H2'	26:DA:1992:G:H5''	1.97	0.45
26:DA:2379:G:O2'	39:DS:17:ARG:NH2	2.36	0.45
28:DD:96:HIS:CD2	28:DD:102:LYS:HG2	2.52	0.45
33:DI:93:THR:HG22	33:DI:119:PRO:HB3	1.97	0.45
38:DR:29:LEU:HD12	38:DR:29:LEU:HA	1.78	0.45
47:D0:53:MET:HG2	47:D0:57:PHE:HA	1.98	0.45
1:AA:1243:C:H2'	1:AA:1244:C:C6	2.50	0.45
2:AB:16:HIS:CE1	2:AB:214:ILE:HD11	2.46	0.45
10:AJ:31:GLY:HA2	10:AJ:32:ALA:HA	1.44	0.45
26:BA:90:U:H4'	26:BA:92:A:H5'	1.99	0.45
26:BA:1301:A:C8	26:BA:1303:G:C8	3.04	0.45
26:BA:2141:G:C6	26:BA:2142:C:C2	3.04	0.45
28:BD:52:ARG:NH2	61:BD:411:HOH:O	2.22	0.45
31:BG:45:GLU:H	31:BG:45:GLU:HG2	1.36	0.45
34:BN:38:HIS:NE2	34:BN:50:ASP:OD2	2.50	0.45
1:CA:21:G:H2'	1:CA:22:G:C8	2.51	0.45
1:CA:580:U:H2'	1:CA:581:G:O4'	2.16	0.45
1:CA:1053:G:C3'	1:CA:1054:C:H5'	2.45	0.45
2:CB:97:TRP:CZ3	2:CB:101:MET:HB2	2.52	0.45
11:CK:81:ASP:OD1	11:CK:106:LYS:HB2	2.17	0.45
16:CP:19:ILE:N	16:CP:37:GLY:O	2.49	0.45
19:CS:41:VAL:HG12	19:CS:43:GLU:H	1.80	0.45
26:DA:2127:G:N1	26:DA:2161:C:O2	2.34	0.45
26:DA:2468:G:C2	26:DA:2481:G:N3	2.85	0.45
26:DA:2653:U:O2'	32:DH:110:SER:HB3	2.15	0.45
39:DS:3:ARG:HE	39:DS:4:LEU:N	2.15	0.45
1:AA:356:A:N7	61:AA:4035:HOH:O	2.36	0.45
1:AA:1251:A:H2'	1:AA:1252:A:C8	2.52	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1273:G:H3'	1:AA:1274:G:H8	1.81	0.45
4:AD:138:TYR:HE1	4:AD:140:VAL:HA	1.81	0.45
5:AE:18:ARG:HE	5:AE:27:ARG:HH21	1.64	0.45
7:AG:91:VAL:HB	7:AG:96:GLN:HG2	1.99	0.45
13:AM:15:VAL:HG22	13:AM:43:THR:O	2.17	0.45
31:BG:31:VAL:HA	31:BG:32:PRO:HD2	1.79	0.45
36:BP:121:LYS:O	36:BP:123:LEU:N	2.45	0.45
1:CA:56:U:H2'	1:CA:57:G:C8	2.52	0.45
1:CA:991:U:H3'	1:CA:1212:U:N3	2.32	0.45
3:CC:79:ARG:H	3:CC:82:GLU:HB3	1.82	0.45
5:CE:90:VAL:O	5:CE:120:THR:HA	2.17	0.45
6:CF:28:ARG:HB2	6:CF:28:ARG:HH11	1.82	0.45
11:CK:45:GLY:O	11:CK:50:TYR:HB2	2.17	0.45
26:DA:94(A):G:H2'	26:DA:95:G:O4'	2.16	0.45
26:DA:241:A:H8	26:DA:241:A:OP1	2.00	0.45
26:DA:583:G:OP2	41:DU:10:ARG:NH1	2.49	0.45
26:DA:2019:A:C4'	41:DU:34:LYS:HD2	2.47	0.45
29:DE:9:VAL:HG13	29:DE:25:VAL:O	2.16	0.45
45:DY:86:ARG:HD2	45:DY:100:ALA:HA	1.98	0.45
50:D3:4:LEU:O	50:D3:36:VAL:HA	2.17	0.45
1:AA:1305:G:H5''	21:AU:4:GLY:HA3	1.98	0.45
2:AB:22:LYS:H	2:AB:40:HIS:CE1	2.35	0.45
2:AB:150:SER:OG	2:AB:151:GLY:N	2.49	0.45
4:AD:170:VAL:HG12	4:AD:171:GLY:N	2.32	0.45
5:AE:12:LEU:HD22	5:AE:13:ILE:N	2.32	0.45
6:AF:44:GLY:HA2	6:AF:59:TYR:CE2	2.52	0.45
18:AR:31:LEU:HD11	18:AR:62:GLU:HB2	1.98	0.45
32:BH:11:VAL:HG13	32:BH:15:VAL:HG22	1.98	0.45
35:BO:7:TYR:CZ	35:BO:44:LYS:HG3	2.52	0.45
46:BZ:105:VAL:N	46:BZ:139:VAL:O	2.41	0.45
1:CA:22:G:H4'	1:CA:885:G:C8	2.52	0.45
1:CA:189(F):U:O2	17:CQ:63:ARG:NH2	2.50	0.45
1:CA:1097:C:O2'	1:CA:1169:A:N3	2.41	0.45
1:CA:1218:C:OP2	14:CN:9:LYS:NZ	2.49	0.45
6:CF:46:ARG:HH21	18:CR:37:VAL:HG11	1.81	0.45
12:CL:69:TYR:CE2	12:CL:71:PRO:HA	2.52	0.45
15:CO:17:ARG:HH11	15:CO:17:ARG:HG3	1.82	0.45
20:CT:43:LEU:HD13	20:CT:51:GLU:HB3	1.98	0.45
20:CT:53:LEU:O	20:CT:57:ARG:HG3	2.16	0.45
26:DA:25:U:H5'	43:DW:78:GLU:O	2.16	0.45
26:DA:468:G:N7	54:D7:39:ARG:NH2	2.63	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:2287:A:N1	26:DA:2346:A:N7	2.65	0.45
26:DA:2447:G:N2	26:DA:2450:A:OP2	2.46	0.45
36:DP:63:PRO:HG2	55:D8:25:MET:HB2	1.99	0.45
42:DV:5:VAL:CG1	42:DV:57:VAL:HG21	2.47	0.45
1:AA:8:A:N7	4:AD:208:SER:OG	2.48	0.45
1:AA:300:A:O2'	1:AA:564:C:N3	2.39	0.45
1:AA:836:G:OP1	18:AR:61:LYS:NZ	2.49	0.45
1:AA:1030(C):G:H2'	1:AA:1030(D):A:H8	1.81	0.45
3:AC:181:ASN:C	3:AC:181:ASN:HD22	2.20	0.45
10:AJ:55:LYS:O	10:AJ:57:LYS:N	2.50	0.45
11:AK:41:THR:OG1	11:AK:42:TRP:N	2.50	0.45
26:BA:528:A:N1	26:BA:2042:A:H2'	2.31	0.45
26:BA:1300:U:H4'	26:BA:1301:A:H5''	1.99	0.45
26:BA:2544:G:H1'	26:BA:2646:C:H4'	1.99	0.45
29:BE:7:VAL:HG12	29:BE:27:LEU:HB3	1.98	0.45
33:BI:102:SER:OG	33:BI:103:ARG:N	2.50	0.45
46:BZ:138:GLU:N	46:BZ:156:LYS:HD3	2.30	0.45
1:CA:93:G:C6	1:CA:96:U:C4	3.05	0.45
1:CA:97:G:O2'	1:CA:98:G:H5''	2.17	0.45
1:CA:1009:G:C2	1:CA:1010:G:C4	3.04	0.45
1:CA:1054:C:O2'	1:CA:1055:A:C5'	2.64	0.45
25:CY:21:A:N6	25:CY:46:7MG:H81	2.32	0.45
26:DA:93:G:H2'	26:DA:94:C:H6	1.82	0.45
26:DA:251:A:H5''	36:DP:50:ARG:HH11	1.81	0.45
26:DA:686:G:H21	26:DA:788:A:H61	1.65	0.45
26:DA:1463:C:H2'	26:DA:1464:C:H6	1.81	0.45
26:DA:1782:C:H1'	26:DA:2609:U:H5''	1.98	0.45
26:DA:2450:A:OP1	26:DA:2497:A:O2'	2.35	0.45
28:DD:17:THR:O	28:DD:211:ARG:NH2	2.45	0.45
41:DU:27:LEU:HD23	41:DU:30:LYS:HB2	1.98	0.45
42:DV:100:ARG:HH11	42:DV:100:ARG:CG	2.17	0.45
45:DY:13:VAL:HG12	45:DY:74:PRO:HA	1.99	0.45
46:DZ:113:ALA:HB3	46:DZ:146:ILE:HD11	1.97	0.45
55:D8:62:LEU:HB3	55:D8:65:GLU:HG3	1.97	0.45
1:AA:78:G:C6	1:AA:91:C:N4	2.83	0.45
1:AA:692:U:O2'	1:AA:694:A:N7	2.42	0.45
2:AB:158:LEU:HA	2:AB:159:PRO:HD3	1.83	0.45
4:AD:61:LYS:HA	4:AD:203:VAL:HG22	1.98	0.45
16:AP:5:ARG:NH1	16:AP:24:ALA:HA	2.31	0.45
25:AY:50:U:C4	25:AY:64:A:N1	2.84	0.45
26:BA:141:A:H8	26:BA:1408:C:O2'	2.00	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1794:U:H2'	26:BA:1795:C:C6	2.50	0.45
28:BD:5:LYS:HE3	28:BD:5:LYS:HB3	1.56	0.45
33:BI:136:VAL:N	33:BI:137:PRO:HD3	2.32	0.45
36:BP:135:LEU:HD23	36:BP:135:LEU:HA	1.77	0.45
37:BQ:18:LYS:HE3	37:BQ:18:LYS:HB2	1.72	0.45
53:B6:13:CYS:SG	53:B6:47:THR:HG21	2.56	0.45
1:CA:297:G:N2	1:CA:300:A:OP2	2.49	0.45
1:CA:335:C:H2'	1:CA:336:C:C6	2.51	0.45
1:CA:1000:U:C2	1:CA:1041:A:N1	2.83	0.45
2:CB:55:PHE:O	2:CB:59:GLU:N	2.33	0.45
3:CC:156:ARG:NH2	3:CC:159:GLY:O	2.27	0.45
15:CO:54:ARG:HD3	15:CO:58:MET:CE	2.47	0.45
23:CW:47:U:H3'	23:CW:48:C:C5'	2.47	0.45
25:CX:70:G:H2'	25:CX:71:G:H5'	1.99	0.45
26:DA:30:G:H2'	26:DA:31:C:C6	2.52	0.45
26:DA:864:G:C6	26:DA:865:C:N4	2.85	0.45
26:DA:2348:U:O4	26:DA:2382:G:N1	2.50	0.45
31:DG:74:LYS:O	31:DG:84:LYS:HD2	2.16	0.45
35:DO:107:ARG:CZ	40:DT:36:GLU:HG2	2.46	0.45
44:DX:92:LEU:C	44:DX:94:GLY:H	2.18	0.45
1:AA:279:A:C4	17:AQ:98:LEU:HD23	2.51	0.45
1:AA:300:A:H2'	1:AA:301:G:O4'	2.17	0.45
1:AA:1003:G:C2'	1:AA:1004:A:H4'	2.47	0.45
4:AD:98:GLU:OE1	4:AD:103:ASN:ND2	2.33	0.45
4:AD:121:VAL:O	4:AD:134:ASP:HA	2.15	0.45
26:BA:1783:A:H5'	26:BA:2608:G:H4'	1.98	0.45
1:CA:58:C:O2'	1:CA:388:G:N7	2.40	0.45
1:CA:1048:G:OP1	14:CN:3:ARG:HD2	2.17	0.45
11:CK:34:ASP:OD2	11:CK:38:ASN:HB2	2.17	0.45
24:CX:9:G:O2'	24:CX:10:G:N7	2.37	0.45
26:DA:94(A):G:C6	26:DA:95:G:C5	3.05	0.45
26:DA:270:A:N1	26:DA:366:C:H4'	2.32	0.45
26:DA:443:A:OP2	26:DA:614(B):G:N2	2.38	0.45
26:DA:848:G:C4	26:DA:933:A:H8	2.35	0.45
26:DA:1027:A:C2	26:DA:2488:A:H5'	2.52	0.45
26:DA:1740:G:H2'	26:DA:1741:A:C8	2.51	0.45
26:DA:2637:U:H1'	26:DA:2782:G:N2	2.32	0.45
30:DF:64:ILE:HG21	30:DF:78:ILE:HG23	1.99	0.45
37:DQ:118:LEU:HB3	37:DQ:131:ILE:HD12	1.97	0.45
40:DT:65:LYS:HE2	40:DT:67:SER:HB2	1.98	0.45
1:AA:189(A):C:N4	1:AA:189(J):G:H1	2.15	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:662:G:H2'	1:AA:663:A:H8	1.79	0.45
8:AH:51:VAL:HG21	8:AH:60:ARG:HB2	1.98	0.45
11:AK:38:ASN:HA	11:AK:39:PRO:HD3	1.86	0.45
23:AW:18:G:O2'	23:AW:57:G:N2	2.39	0.45
25:AY:7:A:O2'	25:AY:49:C:OP2	2.21	0.45
26:BA:729:G:C6	28:BD:208:LYS:HB2	2.52	0.45
26:BA:897:C:C4	26:BA:898:C:N4	2.85	0.45
26:BA:1957:C:H2'	26:BA:1958:C:C6	2.52	0.45
26:BA:2080:G:OP1	48:B1:35:THR:HG21	2.17	0.45
31:BG:11:TYR:O	31:BG:16:ARG:HG2	2.17	0.45
34:BN:14:VAL:HG11	34:BN:138:LEU:HD12	1.99	0.45
45:BY:34:LYS:HG3	45:BY:34:LYS:O	2.15	0.45
1:CA:1010:G:H22	1:CA:1020:U:H1'	1.82	0.45
1:CA:1374:A:O2'	7:CG:28:ASN:HB3	2.16	0.45
2:CB:15:VAL:HG21	2:CB:213:LEU:HD12	1.98	0.45
2:CB:19:HIS:CG	2:CB:20:GLU:H	2.34	0.45
9:CI:4:TYR:HB2	9:CI:19:LEU:HB2	1.99	0.45
13:CM:33:ALA:HA	13:CM:59:TYR:CE2	2.51	0.45
23:CW:18:G:O6	23:CW:55:PSU:H1'	2.17	0.45
23:CW:76:31M:HA	23:CW:76:31M:HD1	1.41	0.45
26:DA:263:C:H2'	26:DA:264:C:O4'	2.17	0.45
26:DA:1116:C:H2'	26:DA:1117:G:C8	2.52	0.45
26:DA:1395:A:OP1	61:DA:4546:HOH:O	2.21	0.45
26:DA:2052:G:H4'	29:DE:143:ASN:O	2.16	0.45
26:DA:2305:A:H2'	26:DA:2306:C:O4'	2.17	0.45
27:DB:11:C:H3'	27:DB:12:C:C6	2.52	0.45
27:DB:66:A:N6	27:DB:108:U:H3'	2.32	0.45
28:DD:10:THR:OG1	28:DD:13:ARG:HG2	2.16	0.45
28:DD:96:HIS:HD2	28:DD:102:LYS:HG2	1.81	0.45
40:DT:117:ASP:OD2	40:DT:120:ARG:NE	2.41	0.45
42:DV:40:LEU:HB2	42:DV:46:VAL:HG22	1.99	0.45
1:AA:1442(B):A:N3	40:BT:118:ARG:NH2	2.65	0.45
25:AY:54:5MU:H73	25:AY:55:PSU:O2	2.17	0.45
26:BA:250:G:P	55:B8:13:ARG:HH22	2.39	0.45
26:BA:899:A:O2'	26:BA:900:A:H8	2.00	0.45
26:BA:973:A:OP2	61:BA:4141:HOH:O	2.20	0.45
26:BA:2168:G:O6	26:BA:2171:A:H8	1.99	0.45
26:BA:2576:G:H1'	61:BA:4454:HOH:O	2.17	0.45
26:BA:2893:G:HO2'	26:BA:2894:G:P	2.38	0.45
61:BA:4103:HOH:O	30:BF:68:LYS:HE2	2.17	0.45
30:BF:184:TYR:O	30:BF:188:ARG:HG3	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BH:98:LEU:HD12	32:BH:102:ALA:O	2.16	0.45
42:BV:55:ALA:HB2	42:BV:101:GLY:HA2	1.99	0.45
53:B6:40:CYS:HA	53:B6:41:PRO:HD3	1.78	0.45
1:CA:200:G:H1	1:CA:217:C:N4	2.09	0.45
1:CA:582:U:OP2	1:CA:758:G:N1	2.45	0.45
1:CA:986:A:H2'	1:CA:987:G:O4'	2.17	0.45
1:CA:1028:C:N3	1:CA:1033:G:C6	2.84	0.45
1:CA:1133:G:C4	1:CA:1134:G:C8	3.04	0.45
1:CA:1191:A:OP2	3:CC:3:ASN:ND2	2.49	0.45
1:CA:1338:G:C6	1:CA:1339:A:C6	3.05	0.45
5:CE:79:GLU:OE1	8:CH:104:ARG:HA	2.17	0.45
26:DA:492:A:H2'	26:DA:493:G:O4'	2.17	0.45
26:DA:1427:A:H4'	26:DA:1428:C:O5'	2.15	0.45
26:DA:2303:G:O2'	31:DG:132:ASN:ND2	2.44	0.45
26:DA:2607:G:O6	61:DA:4661:HOH:O	2.20	0.45
30:DF:36:VAL:HG11	30:DF:183:VAL:HG11	1.99	0.45
34:DN:37:LYS:NZ	61:DN:5101:HOH:O	2.49	0.45
39:DS:106:ARG:HG3	39:DS:112:PHE:CZ	2.51	0.45
45:DY:5:MET:HG2	45:DY:30:VAL:HG11	1.99	0.45
1:AA:6:G:H4'	1:AA:298:A:H4'	1.99	0.44
1:AA:636:U:H2'	1:AA:637:G:C8	2.52	0.44
6:AF:18:GLN:HA	6:AF:21:LEU:HD12	1.99	0.44
26:BA:271(P):C:O3'	33:BI:42:SER:OG	2.27	0.44
26:BA:1371:G:H2'	26:BA:1372:U:C5	2.50	0.44
26:BA:2615:U:H2'	26:BA:2616:C:H6	1.82	0.44
36:BP:50:ARG:NH2	55:B8:7:HIS:HD2	2.15	0.44
1:CA:353:A:H5'	1:CA:353:A:H8	1.82	0.44
1:CA:501:C:H2'	1:CA:502:G:C8	2.52	0.44
1:CA:866:C:C4	1:CA:867:G:H1'	2.52	0.44
1:CA:1070:U:H2'	1:CA:1071:C:C6	2.52	0.44
1:CA:1249:C:O4'	9:CI:70:LYS:HE2	2.17	0.44
1:CA:1326:C:H5''	21:CU:18:TYR:O	2.17	0.44
1:CA:1386:G:C2	1:CA:1387:G:C8	3.04	0.44
2:CB:187:LEU:HA	2:CB:201:ILE:HB	1.98	0.44
17:CQ:6:LEU:O	17:CQ:58:GLU:HA	2.16	0.44
20:CT:46:GLU:O	20:CT:46:GLU:HG2	2.16	0.44
25:CY:66:U:H2'	25:CY:67:C:O4'	2.17	0.44
26:DA:182:A:H2	26:DA:433:C:O2	2.00	0.44
26:DA:307:G:H21	26:DA:330:A:N6	2.10	0.44
26:DA:1794:U:H2'	26:DA:1795:C:C6	2.53	0.44
26:DA:2203:U:H2'	26:DA:2205:C:H6	1.81	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:2298:A:H2'	26:DA:2299:G:O4'	2.16	0.44
27:DB:66:A:H61	27:DB:109:C:H5'	1.82	0.44
37:DQ:58:PHE:CE2	37:DQ:109:VAL:HG21	2.52	0.44
46:DZ:157:LEU:C	46:DZ:161:VAL:HG11	2.37	0.44
1:AA:767:A:N7	61:AA:4048:HOH:O	2.36	0.44
1:AA:923:A:OP1	5:AE:21:ALA:HB2	2.17	0.44
1:AA:1149:C:P	9:AI:9:ARG:HH21	2.40	0.44
16:AP:20:VAL:HG21	16:AP:32:TYR:CD2	2.52	0.44
25:AY:41:C:H2'	25:AY:42:C:C6	2.53	0.44
26:BA:305:U:H2'	26:BA:306:U:C6	2.52	0.44
26:BA:470:A:OP1	30:BF:59:TYR:HE1	1.99	0.44
26:BA:1019:U:H3	26:BA:1142(A):A:N6	2.10	0.44
26:BA:1630:G:H2'	26:BA:1631:C:C6	2.53	0.44
26:BA:2649:U:H2'	26:BA:2650:U:C6	2.51	0.44
1:CA:153:C:H2'	1:CA:154:C:C6	2.52	0.44
2:CB:213:LEU:O	2:CB:217:ARG:HB2	2.17	0.44
8:CH:44:PHE:HE2	8:CH:109:ILE:HG12	1.82	0.44
9:CI:99:LEU:HB3	9:CI:101:PHE:CD2	2.52	0.44
15:CO:54:ARG:HD3	15:CO:58:MET:HE2	1.99	0.44
26:DA:686:G:N2	26:DA:788:A:H61	2.14	0.44
27:DB:72:G:H1'	27:DB:105:A:H61	1.82	0.44
31:DG:138:GLN:OE1	31:DG:138:GLN:N	2.43	0.44
33:DI:133:HIS:HD2	33:DI:136:VAL:HG23	1.82	0.44
39:DS:34:HIS:O	39:DS:97:ARG:NH2	2.50	0.44
45:DY:52:SER:HB2	45:DY:53:PRO:HD2	1.99	0.44
56:D9:3:VAL:HA	56:D9:35:ARG:O	2.18	0.44
1:AA:620:C:H2'	1:AA:621:A:O4'	2.16	0.44
3:AC:52:LEU:HA	3:AC:70:VAL:HG23	1.99	0.44
9:AI:99:LEU:HB3	9:AI:101:PHE:HE1	1.80	0.44
26:BA:675:A:C8	26:BA:804:A:C6	3.05	0.44
26:BA:1378:A:OP1	54:B7:10:ARG:NH2	2.51	0.44
26:BA:2661:G:H2'	26:BA:2662:A:C8	2.51	0.44
26:BA:2849:U:H4'	26:BA:2868:A:C2	2.52	0.44
29:BE:79:ARG:HD3	29:BE:79:ARG:HA	1.82	0.44
32:BH:54:ARG:HD3	32:BH:65:HIS:ND1	2.32	0.44
46:BZ:108:PRO:CG	46:BZ:117:LEU:HD22	2.47	0.44
1:CA:1273:G:H3'	1:CA:1274:G:C8	2.51	0.44
1:CA:1318:A:H5''	19:CS:3:ARG:NH2	2.32	0.44
3:CC:131:ARG:NH1	5:CE:50:GLU:HG3	2.32	0.44
4:CD:47:ARG:HH11	4:CD:49:ARG:HH21	1.65	0.44
4:CD:173:TRP:CE2	4:CD:189:PRO:HG3	2.53	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:CL:33:ARG:HD3	12:CL:62:SER:HB3	1.99	0.44
19:CS:30:LEU:CD1	19:CS:50:ALA:HB2	2.48	0.44
26:DA:2153:G:N2	26:DA:2154:G:N3	2.65	0.44
31:DG:28:VAL:O	31:DG:31:VAL:HG12	2.18	0.44
31:DG:173:LEU:HB3	31:DG:178:PHE:CG	2.53	0.44
36:DP:88:LEU:HD11	36:DP:114:ILE:HD12	1.99	0.44
46:DZ:128:VAL:HG23	46:DZ:160:GLY:O	2.17	0.44
51:D4:57:GLU:HA	51:D4:58:ARG:HA	1.71	0.44
1:AA:769:G:H4'	1:AA:1513:A:H4'	1.99	0.44
3:AC:27:LYS:HA	3:AC:27:LYS:NZ	2.32	0.44
10:AJ:38:ILE:HD11	10:AJ:71:LEU:HD23	1.98	0.44
23:AW:51:U:H2'	23:AW:52:G:H8	1.83	0.44
24:AX:31:G:N7	24:AX:32:5MC:HM52	2.32	0.44
25:AY:40:C:H2'	25:AY:41:C:C6	2.52	0.44
26:BA:141:A:C8	26:BA:1408:C:O2'	2.69	0.44
26:BA:311:A:C6	26:BA:328:U:C4	3.06	0.44
26:BA:1184:G:H5'	50:B3:29:ARG:NH1	2.32	0.44
26:BA:1268:A:C2	26:BA:2013:A:C4	3.05	0.44
26:BA:2384:G:OP2	47:B0:55:ARG:NH1	2.51	0.44
27:BB:4:C:H2'	27:BB:5:C:C6	2.52	0.44
33:BI:101:LEU:HD13	33:BI:107:VAL:O	2.16	0.44
40:BT:37:GLY:HA2	40:BT:38:ASN:HA	1.69	0.44
1:CA:142:G:H2'	1:CA:143:A:O4'	2.16	0.44
1:CA:551:U:H2'	1:CA:552:U:H6	1.81	0.44
1:CA:1054:C:HO2'	1:CA:1055:A:P	2.36	0.44
1:CA:1084:G:OP1	1:CA:1086:U:C2	2.70	0.44
1:CA:1305:G:H5'	21:CU:4:GLY:HA3	1.99	0.44
1:CA:1324:A:O4'	1:CA:1362:C:H4'	2.17	0.44
2:CB:80:ILE:HD11	2:CB:212:GLN:CA	2.48	0.44
4:CD:163:GLU:O	4:CD:166:LYS:N	2.44	0.44
10:CJ:5:ARG:HA	10:CJ:73:ASP:HA	2.00	0.44
17:CQ:66:SER:H	17:CQ:69:LYS:HB3	1.82	0.44
25:CY:7:A:N1	25:CY:66:U:O2	2.50	0.44
26:DA:1035:U:H2'	26:DA:1036:G:C8	2.52	0.44
26:DA:1219:G:H1	26:DA:1230:C:H42	1.64	0.44
26:DA:2370:G:C6	26:DA:2371:G:C6	3.06	0.44
29:DE:181:LEU:HA	29:DE:181:LEU:HD12	1.84	0.44
35:DO:71:ARG:NE	35:DO:105:GLU:OE2	2.40	0.44
44:DX:59:VAL:HB	44:DX:76:ARG:HB2	1.99	0.44
49:D2:16:LEU:O	49:D2:67:LYS:NZ	2.47	0.44
1:AA:162:A:H8	1:AA:162:A:O5'	2.01	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1028:C:H2'	1:AA:1029:C:C4'	2.47	0.44
1:AA:1241:G:H2'	1:AA:1242:C:C6	2.53	0.44
2:AB:21:ARG:H	2:AB:21:ARG:CD	2.30	0.44
2:AB:51:LEU:HD23	2:AB:201:ILE:HD12	2.00	0.44
3:AC:12:LEU:O	14:AN:57:ARG:NH2	2.50	0.44
4:AD:105:VAL:HG13	4:AD:110:PHE:HB2	1.99	0.44
4:AD:177:ASP:HB3	4:AD:182:LYS:HG2	2.00	0.44
8:AH:6:ILE:HD11	8:AH:31:PHE:HD2	1.82	0.44
8:AH:86:ILE:HG13	8:AH:133:LEU:HD22	2.00	0.44
26:BA:848:G:O6	26:BA:928:G:H2'	2.17	0.44
26:BA:1001:A:H2'	26:BA:1002:G:O4'	2.18	0.44
26:BA:2052:G:H4'	29:BE:143:ASN:O	2.17	0.44
26:BA:2849:U:OP2	40:BT:95:ARG:NH1	2.50	0.44
28:BD:232:PRO:HB3	28:BD:244:ARG:CZ	2.48	0.44
33:BI:27:ARG:HD2	48:B1:71:TYR:CZ	2.51	0.44
50:B3:31:LEU:HD23	50:B3:31:LEU:HA	1.69	0.44
1:CA:537:G:H2'	1:CA:538:G:C8	2.53	0.44
1:CA:938:A:C6	1:CA:939:G:C5	3.06	0.44
1:CA:1226:C:H4'	19:CS:80:TYR:OH	2.17	0.44
1:CA:1441:G:H8	1:CA:1441:G:O5'	2.00	0.44
2:CB:74:LYS:HB3	2:CB:169:LYS:HE2	1.98	0.44
3:CC:33:LEU:HD12	3:CC:36:ASP:HB3	1.99	0.44
7:CG:51:GLN:O	7:CG:55:GLY:HA2	2.16	0.44
26:DA:250:G:C6	26:DA:251:A:C6	3.05	0.44
26:DA:900:A:HO2'	26:DA:901:A:P	2.40	0.44
26:DA:1153:C:H5''	41:DU:62:ILE:HD13	2.00	0.44
26:DA:1463:C:H2'	26:DA:1464:C:C6	2.53	0.44
26:DA:1472:A:N6	26:DA:1519:G:H1'	2.32	0.44
26:DA:1894:C:H2'	26:DA:1895:C:C6	2.53	0.44
26:DA:2156:G:H8	26:DA:2156:G:O5'	1.99	0.44
26:DA:2892:A:N6	26:DA:2893:G:O6	2.51	0.44
28:DD:79:VAL:HG21	28:DD:111:LEU:HD11	1.99	0.44
35:DO:103:ALA:HB1	35:DO:105:GLU:OE1	2.16	0.44
37:DQ:35:VAL:HG12	37:DQ:130:LYS:O	2.18	0.44
1:AA:92:C:H2'	1:AA:93:G:H8	1.80	0.44
1:AA:636:U:H2'	1:AA:637:G:H8	1.83	0.44
1:AA:1513:A:H2'	1:AA:1514:C:C6	2.53	0.44
6:AF:33:TYR:CD2	6:AF:75:LEU:HD23	2.53	0.44
9:AI:4:TYR:CE1	9:AI:88:TYR:HD1	2.36	0.44
23:AW:56:C:OP1	26:BA:897:C:H5'	2.18	0.44
26:BA:910:A:N1	26:BA:2277:G:H1'	2.32	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1153:C:OP1	41:BU:92:ARG:NH1	2.50	0.44
26:BA:1178:C:H2'	26:BA:1179:C:H6	1.82	0.44
26:BA:2093:G:C6	26:BA:2225:A:C8	3.06	0.44
26:BA:2115:G:C2	26:BA:2117:A:N7	2.86	0.44
26:BA:2303:G:O2'	31:BG:132:ASN:ND2	2.44	0.44
45:BY:102:CYS:SG	45:BY:103:GLY:N	2.91	0.44
1:CA:37:U:O2'	1:CA:500:G:H4'	2.17	0.44
1:CA:826:C:H2'	1:CA:827:U:C6	2.53	0.44
1:CA:1493:A:H5''	1:CA:1494:G:OP2	2.18	0.44
1:CA:1508:G:H2'	1:CA:1509:C:C6	2.52	0.44
4:CD:161:ASN:HD22	4:CD:161:ASN:N	2.16	0.44
8:CH:51:VAL:HG11	8:CH:60:ARG:NH1	2.33	0.44
12:CL:24:VAL:HG12	12:CL:24:VAL:O	2.17	0.44
16:CP:9:PHE:CE1	16:CP:18:ARG:HD2	2.52	0.44
23:CW:39:PSU:H2'	23:CW:40:C:H6	1.83	0.44
26:DA:556:G:H2'	26:DA:557:U:C6	2.52	0.44
26:DA:2336:A:H61	47:D0:43:THR:CG2	2.29	0.44
26:DA:2880:C:O3'	38:DR:90:ARG:NH1	2.51	0.44
27:DB:3:C:H2'	27:DB:4:C:H6	1.83	0.44
27:DB:46:A:H2'	27:DB:47:C:C6	2.52	0.44
29:DE:77:ILE:CD1	29:DE:195:LEU:HD13	2.46	0.44
31:DG:128:ARG:HE	31:DG:128:ARG:HB2	1.67	0.44
35:DO:77:ILE:HB	40:DT:74:ARG:HD3	2.00	0.44
1:AA:346:G:N3	1:AA:347:G:H1'	2.33	0.44
1:AA:434:U:H2'	1:AA:435:C:C6	2.52	0.44
1:AA:630:G:H2'	1:AA:631:G:H8	1.83	0.44
1:AA:674:G:H2'	1:AA:675:A:H8	1.83	0.44
1:AA:952:U:H2'	1:AA:953:G:H8	1.80	0.44
1:AA:1326:C:OP1	21:AU:12:LYS:NZ	2.50	0.44
3:AC:140:ARG:HE	3:AC:140:ARG:HB2	1.51	0.44
7:AG:46:ALA:O	7:AG:50:ILE:HG23	2.18	0.44
10:AJ:38:ILE:HD11	10:AJ:71:LEU:HB3	1.99	0.44
15:AO:53:HIS:O	15:AO:56:LEU:HB3	2.18	0.44
23:AW:22:G:H2'	23:AW:23:A:C8	2.53	0.44
26:BA:251:A:C5	26:BA:252:G:H1'	2.52	0.44
26:BA:530:G:O4'	26:BA:530:G:N3	2.50	0.44
26:BA:2319:G:N2	39:BS:3:ARG:HA	2.33	0.44
32:BH:24:VAL:HG22	32:BH:35:VAL:HB	1.99	0.44
32:BH:125:VAL:HG12	32:BH:127:GLU:O	2.18	0.44
32:BH:164:TYR:HB2	32:BH:167:GLU:HB2	1.99	0.44
33:BI:79:ILE:HB	33:BI:144:VAL:HG12	2.00	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BS:58:LEU:HA	39:BS:58:LEU:HD23	1.70	0.44
46:BZ:155:LEU:HD12	46:BZ:156:LYS:H	1.81	0.44
49:B2:30:ARG:O	49:B2:34:GLU:HG3	2.17	0.44
54:B7:11:LYS:HE3	54:B7:15:THR:OG1	2.18	0.44
1:CA:79:G:N2	1:CA:80:G:C4	2.86	0.44
1:CA:576:G:O6	1:CA:880:C:O2'	2.30	0.44
1:CA:684:A:O2'	11:CK:39:PRO:O	2.34	0.44
1:CA:696:A:H8	1:CA:696:A:O5'	2.01	0.44
1:CA:1134:G:C2'	1:CA:1135:U:H5'	2.48	0.44
1:CA:1170:A:H2'	1:CA:1171:G:O4'	2.17	0.44
2:CB:74:LYS:HG3	2:CB:77:ALA:HB3	1.99	0.44
2:CB:224:GLN:HA	2:CB:228:GLY:O	2.18	0.44
6:CF:69:GLU:CD	6:CF:69:GLU:H	2.17	0.44
8:CH:68:ARG:NH1	8:CH:74:PRO:HB3	2.32	0.44
13:CM:40:ASN:ND2	13:CM:41:PRO:HD2	2.33	0.44
23:CW:14:A:N6	23:CW:21:A:H2	2.15	0.44
23:CW:38:A:H2'	23:CW:39:PSU:O4'	2.18	0.44
23:CW:76:31M:H4'	26:DA:2506:U:O2'	2.17	0.44
26:DA:582:G:H2'	26:DA:583:G:C8	2.53	0.44
26:DA:656:G:H2'	26:DA:657:U:O4'	2.18	0.44
26:DA:828:U:H4'	26:DA:831:G:N1	2.32	0.44
26:DA:1016:G:H2'	26:DA:1017:G:O4'	2.18	0.44
26:DA:2144:U:O3'	26:DA:2145:C:H2'	2.17	0.44
26:DA:2242:G:H2'	26:DA:2243:U:O4'	2.18	0.44
28:DD:108:PRO:HG2	28:DD:111:LEU:HB2	1.99	0.44
28:DD:164:GLN:NE2	28:DD:166:GLN:OE1	2.46	0.44
30:DF:39:TRP:HB3	30:DF:101:LEU:HD22	2.00	0.44
50:D3:18:ASP:OD1	50:D3:18:ASP:N	2.44	0.44
1:AA:68:G:C2	1:AA:69:G:H1'	2.53	0.44
1:AA:184:G:H2'	1:AA:185:A:H8	1.81	0.44
1:AA:299:G:H2'	1:AA:300:A:C8	2.53	0.44
1:AA:406:G:N3	4:AD:119:GLN:NE2	2.60	0.44
1:AA:731:G:H5'	1:AA:766:A:H4'	2.00	0.44
1:AA:1118:C:H1'	1:AA:1179:A:C4	2.53	0.44
1:AA:1118:C:H2'	1:AA:1119:C:H6	1.83	0.44
1:AA:1250:A:H4'	9:AI:68:GLY:N	2.33	0.44
15:AO:54:ARG:O	15:AO:58:MET:HG3	2.18	0.44
16:AP:53:VAL:HG13	16:AP:79:VAL:HG22	1.99	0.44
20:AT:72:LEU:HD23	20:AT:72:LEU:HA	1.84	0.44
21:AU:15:ARG:HB2	21:AU:15:ARG:HH11	1.82	0.44
23:AW:51:U:H2'	23:AW:52:G:C8	2.53	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:875:G:H2'	26:BA:876:C:O4'	2.17	0.44
26:BA:2030:A:H4'	26:BA:2031:A:C8	2.53	0.44
26:BA:2059:A:OP2	61:BA:4337:HOH:O	2.21	0.44
29:BE:73:GLU:H	29:BE:73:GLU:HG3	1.63	0.44
1:CA:1040:U:C4	1:CA:1041:A:C8	3.05	0.44
1:CA:1245:A:H2'	1:CA:1246:C:O4'	2.17	0.44
4:CD:47:ARG:NH1	4:CD:49:ARG:HH21	2.16	0.44
9:CI:4:TYR:CZ	9:CI:88:TYR:HD2	2.36	0.44
14:CN:26:ARG:HD2	14:CN:43:CYS:HB3	2.00	0.44
19:CS:19:VAL:O	19:CS:23:ASN:ND2	2.50	0.44
25:CY:65:G:H2'	25:CY:66:U:C6	2.53	0.44
26:DA:330:A:H2	26:DA:1210:A:H2'	1.83	0.44
26:DA:888:C:H5''	26:DA:889:C:OP2	2.18	0.44
26:DA:1288:U:C2	26:DA:1327:C:O2	2.71	0.44
26:DA:2680:C:OP2	29:DE:111:ARG:NH2	2.50	0.44
28:DD:13:ARG:HA	28:DD:13:ARG:HD2	1.71	0.44
28:DD:237:GLU:OE2	61:DD:401:HOH:O	2.21	0.44
30:DF:11:VAL:HB	30:DF:18:ARG:HB3	1.99	0.44
34:DN:15:LEU:HD12	34:DN:137:LYS:HG2	1.99	0.44
50:D3:23:LEU:O	50:D3:27:GLY:N	2.50	0.44
51:D4:40:HIS:ND1	51:D4:43:TYR:HD2	2.15	0.44
1:AA:958:A:C6	1:AA:959:A:N1	2.86	0.44
8:AH:96:GLY:N	8:AH:99:GLU:OE2	2.28	0.44
11:AK:33:THR:HA	11:AK:39:PRO:HA	2.00	0.44
16:AP:20:VAL:HG23	16:AP:35:LYS:HA	2.00	0.44
26:BA:574:C:N3	29:BE:145:LYS:NZ	2.63	0.44
26:BA:876:C:H2'	26:BA:877:U:O4'	2.18	0.44
26:BA:1636:C:H2'	26:BA:1637:A:C8	2.53	0.44
26:BA:2364:C:H2'	26:BA:2365:G:O4'	2.18	0.44
28:BD:83:GLU:OE1	28:BD:104:TYR:OH	2.28	0.44
29:BE:143:ASN:HD22	29:BE:147:PRO:CD	2.31	0.44
32:BH:3:ARG:HH12	32:BH:65:HIS:HB3	1.83	0.44
34:BN:67:LEU:O	34:BN:88:GLU:HG3	2.17	0.44
35:BO:2:ILE:HD12	35:BO:6:THR:HG21	1.99	0.44
44:BX:88:LYS:NZ	44:BX:90:GLU:OE1	2.33	0.44
1:CA:35:G:H2'	1:CA:36:C:C6	2.53	0.44
1:CA:292:G:N7	1:CA:293:G:H1'	2.33	0.44
2:CB:192:SER:O	2:CB:194:PRO:HD3	2.17	0.44
6:CF:3:ARG:HB3	6:CF:93:SER:HB2	2.00	0.44
8:CH:39:LEU:HA	8:CH:39:LEU:HD13	1.74	0.44
12:CL:69:TYR:HE2	12:CL:71:PRO:HA	1.83	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:CY:30:G:C2	25:CY:31:A:C8	3.06	0.44
26:DA:26:G:C6	26:DA:27:G:N1	2.86	0.44
26:DA:265:A:C8	26:DA:266:G:H1'	2.53	0.44
26:DA:328:U:H4'	45:DY:68:HIS:CG	2.52	0.44
26:DA:911:A:H2'	37:DQ:9:TYR:OH	2.18	0.44
26:DA:927:G:H2'	26:DA:928:G:O4'	2.17	0.44
26:DA:1032:A:H4'	56:D9:16:VAL:HG11	2.00	0.44
26:DA:1301:A:H2	26:DA:1626:G:N3	2.14	0.44
26:DA:2070:G:H2'	26:DA:2071:A:H8	1.83	0.44
26:DA:2615:U:OP1	61:DA:4004:HOH:O	2.21	0.44
31:DG:111:LEU:HB3	31:DG:117:PHE:CE2	2.53	0.44
39:DS:35:ILE:HD11	39:DS:101:LEU:HD12	1.99	0.44
1:AA:276:G:O3'	17:AQ:68:ARG:NH1	2.51	0.43
1:AA:401:C:H2'	1:AA:402:G:C8	2.53	0.43
1:AA:858:G:O6	1:AA:869:G:H3'	2.18	0.43
1:AA:1001(A):G:C6	1:AA:1002:G:C5	3.06	0.43
1:AA:1118:C:H2'	1:AA:1119:C:C6	2.53	0.43
2:AB:16:HIS:HD2	2:AB:17:PHE:H	1.56	0.43
4:AD:11:LEU:HD23	4:AD:66:ARG:HB3	1.99	0.43
9:AI:22:GLY:N	9:AI:58:HIS:O	2.39	0.43
26:BA:970:C:H2'	26:BA:971:C:C6	2.53	0.43
26:BA:1440:G:H2'	26:BA:1441:G:O4'	2.18	0.43
26:BA:1826:G:H2'	26:BA:1827:C:O4'	2.17	0.43
26:BA:2685:G:H5'	35:BO:68:GLU:OE1	2.18	0.43
30:BF:140:LEU:HD21	30:BF:170:LEU:HD11	2.00	0.43
39:BS:3:ARG:HE	39:BS:4:LEU:H	1.66	0.43
46:BZ:7:ALA:O	46:BZ:62:PRO:HD3	2.18	0.43
46:BZ:111:VAL:CG2	46:BZ:117:LEU:HB2	2.48	0.43
1:CA:1095:U:H2'	1:CA:1096:C:O4'	2.18	0.43
1:CA:1118:C:N1	1:CA:1119:C:H5	2.16	0.43
1:CA:1136:U:H5''	1:CA:1137:C:C5	2.53	0.43
1:CA:1423:G:H2'	1:CA:1424:C:C6	2.53	0.43
2:CB:7:VAL:HG12	2:CB:8:LYS:HG2	2.00	0.43
3:CC:6:HIS:HA	3:CC:7:PRO:HD3	1.71	0.43
7:CG:18:TYR:HB3	7:CG:59:LEU:HD13	2.00	0.43
9:CI:26:VAL:HG13	9:CI:61:ALA:HB3	1.99	0.43
13:CM:72:ALA:O	13:CM:76:ALA:N	2.42	0.43
25:CY:37:MIA:H3'	25:CY:38:A:H8	1.82	0.43
26:DA:668:G:H5'	26:DA:669:G:OP2	2.18	0.43
26:DA:2164:C:H5	26:DA:2165:G:N3	2.16	0.43
26:DA:2347:C:H2'	26:DA:2348:U:C6	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:2732:G:OP1	29:DE:203:LYS:NZ	2.43	0.43
26:DA:2742:C:OP1	56:D9:35:ARG:HD3	2.18	0.43
33:DI:57:ARG:O	33:DI:61:ARG:HG2	2.18	0.43
33:DI:88:ILE:HD11	33:DI:144:VAL:HG11	2.00	0.43
34:DN:4:TYR:CD2	41:DU:100:VAL:HG11	2.52	0.43
37:DQ:27:VAL:O	37:DQ:29:PHE:N	2.51	0.43
37:DQ:29:PHE:O	46:DZ:122:ARG:NH2	2.51	0.43
37:DQ:139:GLU:HG2	46:DZ:122:ARG:HG3	2.00	0.43
41:DU:76:TYR:HH	41:DU:92:ARG:HH11	1.63	0.43
45:DY:10:GLY:O	45:DY:26:LYS:HD3	2.18	0.43
1:AA:339:C:H2'	1:AA:340:U:C6	2.54	0.43
1:AA:646:U:H2'	1:AA:647:C:C6	2.53	0.43
1:AA:1305:G:H22	1:AA:1331:G:H1'	1.82	0.43
4:AD:65:ARG:HG2	4:AD:75:PHE:CD2	2.53	0.43
4:AD:112:VAL:HG23	4:AD:116:GLN:OE1	2.18	0.43
4:AD:188:LEU:HA	4:AD:189:PRO:HD3	1.80	0.43
9:AI:23:ASN:ND2	9:AI:25:LYS:HG2	2.33	0.43
25:AY:57:G:C2	25:AY:58:A:H5'	2.53	0.43
26:BA:94:C:H2'	26:BA:94(A):G:O4'	2.19	0.43
26:BA:127:A:H5''	26:BA:128:C:C6	2.53	0.43
26:BA:363(A):A:H2'	26:BA:363(B):G:C8	2.53	0.43
26:BA:1358:G:N2	26:BA:1372:U:C5	2.86	0.43
26:BA:2320:A:N3	26:BA:2320:A:H2'	2.34	0.43
26:BA:2447:G:N2	26:BA:2450:A:OP2	2.51	0.43
35:BO:78:ARG:NH2	40:BT:73:GLU:OE2	2.49	0.43
41:BU:117:GLN:H	41:BU:117:GLN:HG2	1.42	0.43
46:BZ:150:LEU:HA	46:BZ:150:LEU:HD12	1.78	0.43
1:CA:766:A:OP2	61:CA:4021:HOH:O	2.21	0.43
1:CA:1115:C:H2'	1:CA:1116:C:C6	2.53	0.43
1:CA:1152:A:C6	1:CA:1153:C:C4	3.06	0.43
2:CB:20:GLU:HG3	2:CB:191:ASP:HB3	1.99	0.43
3:CC:18:TRP:N	3:CC:18:TRP:CE3	2.85	0.43
3:CC:47:LEU:HD12	3:CC:68:VAL:HG11	2.00	0.43
7:CG:26:PHE:CD2	7:CG:62:PHE:HE1	2.36	0.43
9:CI:108:VAL:HG12	9:CI:109:VAL:H	1.84	0.43
10:CJ:16:LEU:HD23	10:CJ:94:VAL:HG22	1.99	0.43
13:CM:50:GLU:O	13:CM:54:VAL:HG22	2.18	0.43
19:CS:80:TYR:CZ	19:CS:82:GLY:HA2	2.53	0.43
26:DA:288:C:H2'	26:DA:289:A:H8	1.82	0.43
26:DA:601:C:O2	26:DA:605:C:H4'	2.18	0.43
26:DA:817:C:OP2	61:DA:4676:HOH:O	2.21	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:903:C:H2'	26:DA:904:C:H6	1.81	0.43
26:DA:910:A:N1	26:DA:2277:G:H1'	2.32	0.43
26:DA:2006:C:O5'	26:DA:2006:C:H6	2.00	0.43
26:DA:2172:U:O2'	26:DA:2173:A:OP1	2.30	0.43
26:DA:2626:C:H2'	26:DA:2627:G:O4'	2.18	0.43
37:DQ:68:ILE:HD13	37:DQ:103:MET:HG2	2.00	0.43
38:DR:21:TYR:CZ	38:DR:43:GLU:HG2	2.52	0.43
46:DZ:154:ASP:OD1	46:DZ:154:ASP:N	2.39	0.43
51:D4:26:SER:OG	51:D4:27:THR:N	2.51	0.43
1:AA:335:C:H2'	1:AA:336:C:C6	2.54	0.43
1:AA:1240:U:OP2	7:AG:116:ALA:N	2.44	0.43
3:AC:52:LEU:HD11	3:AC:55:VAL:CG2	2.48	0.43
5:AE:41:VAL:HG23	5:AE:67:VAL:HG12	2.00	0.43
9:AI:61:ALA:HB1	9:AI:63:ILE:HD11	2.01	0.43
14:AN:24:CYS:HB2	14:AN:33:VAL:HG12	2.01	0.43
20:AT:92:LEU:HD23	20:AT:92:LEU:HA	1.84	0.43
26:BA:1594:G:H2'	26:BA:1595:G:O4'	2.18	0.43
26:BA:1970:A:H4'	26:BA:1971:A:OP1	2.18	0.43
26:BA:2406:U:H2'	26:BA:2406:U:OP2	2.19	0.43
30:BF:33:LEU:HD13	30:BF:112:MET:HE2	2.00	0.43
43:BW:14:PRO:HG2	43:BW:78:GLU:CG	2.45	0.43
1:CA:757:U:O2'	1:CA:879:C:O2	2.31	0.43
1:CA:1002:G:N2	1:CA:1039:C:C4	2.86	0.43
1:CA:1016:A:H2'	1:CA:1017:G:O4'	2.18	0.43
1:CA:1080:A:H5''	1:CA:1081:G:OP2	2.19	0.43
4:CD:111:ALA:HB1	4:CD:116:GLN:HB3	2.00	0.43
6:CF:94:GLN:NE2	18:CR:72:ARG:HH12	2.16	0.43
7:CG:27:ILE:HD12	7:CG:40:ALA:HA	2.00	0.43
16:CP:3:LYS:O	16:CP:21:VAL:HA	2.18	0.43
16:CP:60:LEU:HD13	16:CP:60:LEU:HA	1.84	0.43
20:CT:90:GLN:O	20:CT:93:GLU:HB3	2.18	0.43
26:DA:324:A:H2'	26:DA:325:G:O4'	2.19	0.43
26:DA:623:G:H2'	26:DA:624:C:C6	2.54	0.43
26:DA:2674:G:H2'	26:DA:2675:A:C8	2.53	0.43
35:DO:25:LEU:HD12	35:DO:38:VAL:HG12	1.99	0.43
51:D4:56:VAL:HG13	51:D4:57:GLU:H	1.83	0.43
1:AA:374:A:C6	1:AA:375:U:C4	3.05	0.43
1:AA:814:A:H2'	1:AA:816:A:H5''	1.99	0.43
1:AA:1302:U:H5	13:AM:17:VAL:HG21	1.83	0.43
2:AB:213:LEU:HD22	2:AB:214:ILE:HD13	2.00	0.43
3:AC:6:HIS:HA	3:AC:7:PRO:HD3	1.83	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AG:65:ALA:O	7:AG:69:VAL:HG23	2.17	0.43
13:AM:70:LEU:O	13:AM:74:VAL:HG23	2.19	0.43
21:AU:5:ASP:O	21:AU:11:GLY:HA3	2.18	0.43
23:AW:76:31M:HE1	26:BA:2451:A:C6	2.53	0.43
26:BA:590:A:H2'	26:BA:591:C:O4'	2.18	0.43
26:BA:886:C:OP1	26:BA:886:C:H4'	2.17	0.43
26:BA:2168:G:H5'	26:BA:2169:A:H5''	2.00	0.43
26:BA:2377:A:H2'	26:BA:2378:A:C8	2.53	0.43
26:BA:2543:G:H2'	26:BA:2544:G:C8	2.53	0.43
30:BF:64:ILE:HD12	30:BF:65:TRP:CZ3	2.54	0.43
44:BX:50:LYS:N	44:BX:87:GLN:OE1	2.48	0.43
1:CA:1366:C:H2'	1:CA:1367:C:C6	2.53	0.43
1:CA:1399:C:C2	1:CA:1502:A:N6	2.87	0.43
3:CC:34:LEU:HG	3:CC:38:ARG:NH1	2.31	0.43
14:CN:37:PHE:HZ	14:CN:56:VAL:HG21	1.83	0.43
26:DA:540:C:H2'	26:DA:541:C:C6	2.53	0.43
26:DA:627:A:H4'	26:DA:628:G:H5'	2.00	0.43
26:DA:813:U:HO2'	26:DA:1225:G:HO2'	1.67	0.43
26:DA:1881:C:H2'	26:DA:1882:C:O4'	2.19	0.43
26:DA:2410:G:H2'	26:DA:2411:A:O4'	2.19	0.43
26:DA:2820:A:C5	38:DR:4:LEU:HD11	2.53	0.43
30:DF:33:LEU:HB3	36:DP:6:LEU:HD21	2.01	0.43
34:DN:57:ALA:HB1	34:DN:96:GLU:HA	2.01	0.43
45:DY:89:PHE:CE2	45:DY:95:LYS:HB2	2.53	0.43
51:D4:68:ARG:O	51:D4:69:LYS:HB3	2.18	0.43
1:AA:262:A:H4'	20:AT:75:ASN:HB2	2.00	0.43
1:AA:1456:G:O3'	20:AT:39:LYS:NZ	2.52	0.43
5:AE:105:VAL:O	5:AE:109:ILE:HD12	2.19	0.43
6:AF:10:LEU:HB2	6:AF:59:TYR:HB3	2.01	0.43
10:AJ:45:ARG:HG2	10:AJ:47:PHE:CZ	2.53	0.43
23:AW:56:C:H5'	26:BA:896:A:H1'	2.00	0.43
26:BA:1171:G:H3'	26:BA:1173:G:H5'	2.01	0.43
26:BA:1177:A:N3	26:BA:1177:A:H2'	2.33	0.43
26:BA:1431:U:H2'	26:BA:1432:C:C6	2.54	0.43
26:BA:1918:A:O2'	26:BA:1920:C:N4	2.51	0.43
31:BG:122:PRO:HD3	31:BG:181:ARG:HG2	2.00	0.43
32:BH:33:LEU:HD21	32:BH:136:ILE:HG13	2.00	0.43
33:BI:81:VAL:O	33:BI:146:ALA:HA	2.19	0.43
1:CA:722:A:N6	1:CA:724:G:C2	2.87	0.43
1:CA:1279:A:O2'	1:CA:1282:C:N4	2.51	0.43
2:CB:35:GLU:HB2	2:CB:40:HIS:HD2	1.82	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:CL:83:VAL:HG23	12:CL:107:ALA:HB2	2.01	0.43
16:CP:55:ARG:HD2	16:CP:55:ARG:HA	1.88	0.43
25:CY:4:C:H2'	25:CY:5:G:H5'	2.00	0.43
26:DA:1817:G:OP1	28:DD:88:ARG:NH2	2.48	0.43
26:DA:2134:A:C2	26:DA:2159:G:H4'	2.53	0.43
26:DA:2134:A:H3'	26:DA:2135:A:C8	2.53	0.43
26:DA:2516:G:C6	26:DA:2517:C:N4	2.86	0.43
27:DB:28:C:OP2	39:DS:33:LYS:NZ	2.32	0.43
28:DD:182:LEU:HB2	28:DD:272:ALA:HB3	2.01	0.43
31:DG:45:GLU:H	31:DG:45:GLU:HG2	1.43	0.43
32:DH:98:LEU:HD12	32:DH:102:ALA:O	2.18	0.43
41:DU:79:PHE:CZ	41:DU:83:LEU:HD21	2.54	0.43
45:DY:43:ASN:OD1	45:DY:65:ALA:HB3	2.19	0.43
1:AA:1061:G:H1'	10:AJ:56:HIS:CE1	2.53	0.43
13:AM:120:LYS:HE3	23:AW:40:C:O2'	2.19	0.43
19:AS:52:TYR:HA	19:AS:56:GLN:O	2.18	0.43
25:AY:33:U:H2'	25:AY:34:G:H5''	2.00	0.43
25:AY:71:G:H4'	26:BA:1851:U:H4'	2.00	0.43
26:BA:1258:C:H2'	26:BA:1259:G:O4'	2.19	0.43
26:BA:1720:U:H2'	26:BA:1721:G:O4'	2.18	0.43
26:BA:2183:C:O2'	26:BA:2184:G:OP1	2.35	0.43
26:BA:2591:C:H2'	26:BA:2592:G:C8	2.54	0.43
26:BA:2791:C:H5'	26:BA:2893:G:N2	2.34	0.43
28:BD:137:PRO:O	28:BD:140:THR:HG23	2.18	0.43
31:BG:43:LEU:HB3	31:BG:44:GLY:H	1.55	0.43
34:BN:67:LEU:HD12	34:BN:67:LEU:HA	1.80	0.43
40:BT:118:ARG:HD2	40:BT:118:ARG:HA	1.61	0.43
51:B4:59:PHE:C	51:B4:61:ARG:H	2.21	0.43
1:CA:693:G:H2'	1:CA:694:A:C8	2.53	0.43
1:CA:750:G:N2	15:CO:23:GLY:O	2.48	0.43
1:CA:1009:G:N2	1:CA:1010:G:H1'	2.33	0.43
1:CA:1030(A):G:C2	1:CA:1030(C):G:H8	2.36	0.43
9:CI:43:ALA:HB2	9:CI:74:ILE:CD1	2.49	0.43
14:CN:47:LEU:O	14:CN:51:GLY:N	2.51	0.43
23:CW:76:31M:HAM	24:CX:76:A:O3'	2.19	0.43
24:CX:15:G:H2'	24:CX:59:A:N1	2.34	0.43
26:DA:69:C:N4	61:DA:4335:HOH:O	2.52	0.43
26:DA:782:A:H5'	26:DA:783:A:N7	2.34	0.43
26:DA:2695:C:H2'	26:DA:2696:U:H6	1.84	0.43
28:DD:142:VAL:HG13	28:DD:191:ALA:HB1	2.00	0.43
46:DZ:153:SER:HB3	46:DZ:167:PRO:HA	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:90:U:O2'	1:AA:91:C:H5'	2.19	0.43
1:AA:1198:G:H2'	1:AA:1199:U:C6	2.54	0.43
2:AB:36:ARG:C	2:AB:38:GLY:H	2.21	0.43
2:AB:200:ILE:H	2:AB:200:ILE:HD13	1.84	0.43
7:AG:46:ALA:HA	7:AG:49:ILE:HD12	2.01	0.43
8:AH:41:ARG:NH2	8:AH:123:GLU:OE2	2.51	0.43
19:AS:27:GLU:HB3	19:AS:28:LYS:HB3	2.01	0.43
26:BA:1045:A:H1'	26:BA:1047:G:C2	2.53	0.43
26:BA:2292:C:H2'	26:BA:2293:C:H6	1.83	0.43
26:BA:2706:G:N7	61:BA:4733:HOH:O	2.37	0.43
33:BI:50:ARG:HA	33:BI:53:ALA:HB3	2.01	0.43
42:BV:34:GLU:HB3	42:BV:56:SER:HB2	2.00	0.43
43:BW:19:LEU:HB3	52:B5:25:LEU:HD11	2.01	0.43
48:B1:50:ARG:HG2	48:B1:59:THR:HB	2.00	0.43
53:B6:10:LEU:HG	53:B6:54:ILE:HG13	2.00	0.43
1:CA:503:C:OP2	12:CL:116:SER:HB3	2.19	0.43
1:CA:1011:G:C2	1:CA:1012:U:H1'	2.54	0.43
1:CA:1014:A:H2'	1:CA:1015:A:C8	2.54	0.43
1:CA:1110:A:OP2	61:CA:4091:HOH:O	2.21	0.43
1:CA:1442(A):G:O2'	40:DT:118:ARG:HG2	2.18	0.43
13:CM:50:GLU:HA	13:CM:53:VAL:HB	2.01	0.43
19:CS:28:LYS:HB2	19:CS:29:ARG:CB	2.48	0.43
25:CY:8:4SU:C2	25:CY:14:A:H62	2.30	0.43
26:DA:991:C:OP2	26:DA:1186:G:H5'	2.18	0.43
26:DA:1503:U:H2'	26:DA:1504:C:C6	2.54	0.43
26:DA:2805:G:C6	26:DA:2807:G:C6	3.07	0.43
26:DA:2870:C:H2'	26:DA:2871:C:O4'	2.19	0.43
30:DF:18:ARG:HG2	30:DF:19:GLU:H	1.84	0.43
32:DH:59:ARG:O	32:DH:63:SER:OG	2.36	0.43
33:DI:73:GLU:HG3	33:DI:139:GLN:O	2.18	0.43
1:AA:452:A:HO2'	1:AA:453:A:H8	1.65	0.43
1:AA:1151:A:O4'	10:AJ:39:PRO:HB2	2.19	0.43
2:AB:54:THR:HG21	2:AB:201:ILE:HD11	1.99	0.43
4:AD:64:LEU:HB2	4:AD:198:VAL:HG21	2.00	0.43
5:AE:148:VAL:O	5:AE:152:ARG:HG3	2.18	0.43
12:AL:24:VAL:HG12	12:AL:24:VAL:O	2.18	0.43
15:AO:56:LEU:HD21	26:BA:715:G:C2	2.54	0.43
17:AQ:53:LEU:HD23	17:AQ:82:MET:HE1	2.01	0.43
26:BA:11:G:C2'	26:BA:12:U:H5''	2.45	0.43
26:BA:197:A:N6	26:BA:2430:A:O2'	2.51	0.43
26:BA:848:G:N9	26:BA:933:A:H8	2.17	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2233:U:H2'	26:BA:2234:G:C8	2.54	0.43
26:BA:2790:A:N3	26:BA:2790:A:H2'	2.34	0.43
27:BB:48:A:H4'	39:BS:95:HIS:HD2	1.83	0.43
38:BR:53:HIS:O	38:BR:56:LYS:HB2	2.18	0.43
49:B2:16:LEU:HB3	49:B2:20:GLU:HB2	1.99	0.43
1:CA:165:C:H2'	1:CA:166:G:C8	2.54	0.43
1:CA:302:G:N3	1:CA:556:C:H4'	2.33	0.43
1:CA:664:G:N2	1:CA:741:G:H1	2.04	0.43
1:CA:1320:C:C1'	19:CS:73:GLU:HG3	2.49	0.43
2:CB:84:GLU:OE1	2:CB:216:SER:HA	2.18	0.43
4:CD:38:TYR:CZ	4:CD:45:GLN:HG2	2.54	0.43
7:CG:78:ARG:CZ	7:CG:79:ARG:HH12	2.32	0.43
20:CT:86:ARG:O	20:CT:90:GLN:HB2	2.19	0.43
23:CW:61:C:O2'	23:CW:62:C:H6	2.02	0.43
26:DA:265:A:H1'	26:DA:266:G:O4'	2.19	0.43
26:DA:644:A:H5''	26:DA:645:C:OP1	2.19	0.43
26:DA:974:G:C4	26:DA:989:G:C2	3.07	0.43
26:DA:1487:G:H2'	26:DA:1488:G:O4'	2.18	0.43
26:DA:1656:C:H2'	26:DA:1657:C:H6	1.84	0.43
26:DA:2494:G:C4	26:DA:2495:G:C8	3.07	0.43
26:DA:2602:A:H4'	26:DA:2603:G:C5'	2.48	0.43
31:DG:37:VAL:O	31:DG:94:LEU:N	2.50	0.43
31:DG:164:GLU:N	31:DG:164:GLU:OE2	2.51	0.43
36:DP:101:VAL:HA	36:DP:106:LEU:O	2.18	0.43
45:DY:13:VAL:HB	45:DY:72:VAL:HG13	2.00	0.43
49:D2:53:LEU:HD23	49:D2:53:LEU:HA	1.89	0.43
1:AA:402:G:C6	1:AA:403:C:C4	3.07	0.43
1:AA:1529:G:H4'	1:AA:1530:G:OP2	2.19	0.43
2:AB:88:ALA:O	2:AB:226:ARG:NH1	2.51	0.43
3:AC:6:HIS:HD2	3:AC:8:ILE:N	2.11	0.43
25:AY:49:C:N4	25:AY:65:G:N1	2.28	0.43
26:BA:288:C:H2'	26:BA:289:A:C8	2.53	0.43
26:BA:1175:U:O3'	26:BA:1176:G:H4'	2.17	0.43
26:BA:1372:U:H2'	26:BA:1373:A:O4'	2.18	0.43
26:BA:2176:A:H2'	26:BA:2177:C:C6	2.54	0.43
26:BA:2181:G:O2'	26:BA:2182:G:OP1	2.34	0.43
26:BA:2296:U:OP2	39:BS:9:ARG:NH2	2.52	0.43
26:BA:2653:U:H2'	26:BA:2654:A:C8	2.53	0.43
28:BD:71:ASP:HB3	28:BD:103:ARG:HH22	1.83	0.43
32:BH:121:ILE:HG13	32:BH:144:VAL:HG21	2.01	0.43
35:BO:104:ARG:NH1	40:BT:34:VAL:HG21	2.34	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BZ:144:LEU:HD21	46:BZ:148:ASP:O	2.19	0.43
1:CA:397:A:H3'	1:CA:397:A:N3	2.34	0.43
1:CA:607:A:C2	16:CP:31:LYS:HG3	2.54	0.43
1:CA:1133:G:H2'	1:CA:1134:G:H8	1.84	0.43
1:CA:1289:A:H2	1:CA:1372:U:O4'	2.01	0.43
15:CO:87:ILE:HG22	15:CO:88:ARG:N	2.33	0.43
24:CX:54:5MU:H6	24:CX:54:5MU:O5'	2.02	0.43
26:DA:208:C:H2'	26:DA:209:C:C6	2.54	0.43
26:DA:224:G:N7	26:DA:420:C:H4'	2.33	0.43
26:DA:380:U:H2'	26:DA:381:G:H8	1.83	0.43
26:DA:1262:A:H2	52:D5:10:LYS:HD2	1.83	0.43
26:DA:2228:G:C5	26:DA:2229:C:C4	3.07	0.43
26:DA:2400:G:H2'	26:DA:2401:U:C6	2.50	0.43
28:DD:68:LYS:O	28:DD:69:ARG:HB2	2.19	0.43
31:DG:43:LEU:C	31:DG:45:GLU:H	2.22	0.43
33:DI:14:ASP:OD1	33:DI:15:VAL:HG12	2.19	0.43
36:DP:39:LYS:CB	36:DP:45:LEU:HG	2.47	0.43
46:DZ:156:LYS:HE3	46:DZ:158:PRO:HD3	2.01	0.43
52:D5:48:GLU:O	52:D5:60:VAL:HG11	2.18	0.43
1:AA:130:A:N3	1:AA:263:A:O2'	2.38	0.43
1:AA:584:G:H2'	1:AA:585:G:C8	2.54	0.43
1:AA:943:U:H2'	1:AA:944:G:H5'	2.00	0.43
1:AA:1015:A:H2'	1:AA:1016:A:C8	2.54	0.43
1:AA:1342:C:H4'	9:AI:125:TYR:HB3	2.01	0.43
4:AD:63:LYS:HG3	4:AD:64:LEU:N	2.33	0.43
9:AI:4:TYR:CE2	9:AI:88:TYR:HA	2.54	0.43
15:AO:25:THR:HG21	15:AO:70:LEU:HB2	2.01	0.43
20:AT:90:GLN:O	20:AT:93:GLU:HB3	2.19	0.43
25:AY:6:G:H2'	25:AY:7:A:H5'	2.01	0.43
26:BA:224:G:H2'	26:BA:225:A:O4'	2.18	0.43
26:BA:340:A:H2'	26:BA:341:G:O4'	2.19	0.43
26:BA:657:U:H2'	26:BA:658:C:C6	2.53	0.43
26:BA:881:G:H2'	26:BA:881:G:N3	2.34	0.43
26:BA:882:G:N2	26:BA:895:U:O2	2.52	0.43
26:BA:892:G:C5	26:BA:893:C:C4	3.07	0.43
26:BA:1380:G:OP2	61:BA:5152:HOH:O	2.22	0.43
26:BA:1664:A:H1'	26:BA:2685:G:O2'	2.19	0.43
26:BA:1826:G:H4'	28:BD:242:ARG:CZ	2.49	0.43
26:BA:2292:C:P	39:BS:17:ARG:HH12	2.41	0.43
26:BA:2646:C:H2'	26:BA:2647:U:O4'	2.18	0.43
27:BB:110:G:H2'	27:BB:111:G:H8	1.84	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BD:206:LEU:HD22	28:BD:211:ARG:HG2	2.00	0.43
31:BG:77:ILE:HD12	31:BG:82:LEU:HD12	2.00	0.43
36:BP:96:THR:OG1	36:BP:99:LEU:HG	2.18	0.43
41:BU:66:ASN:O	41:BU:70:ARG:HG3	2.19	0.43
44:BX:66:LEU:HD23	44:BX:66:LEU:HA	1.73	0.43
52:B5:59:GLU:HG2	52:B5:60:VAL:H	1.83	0.43
1:CA:92:C:H2'	1:CA:93:G:O4'	2.19	0.43
1:CA:337:C:H2'	1:CA:338:A:C8	2.53	0.43
1:CA:1144:G:C6	1:CA:1145:C:N4	2.87	0.43
7:CG:33:ASP:OD1	7:CG:33:ASP:N	2.51	0.43
10:CJ:90:LEU:HA	10:CJ:91:PRO:HD3	1.83	0.43
25:CY:34:G:C6	25:CY:35:A:C6	3.07	0.43
26:DA:140:G:H22	26:DA:1596:A:H4'	1.83	0.43
26:DA:816:C:O2'	26:DA:932:G:O6	2.37	0.43
26:DA:855:G:C6	26:DA:856:C:N4	2.86	0.43
26:DA:1668:A:O2'	26:DA:1674:G:N7	2.43	0.43
26:DA:2028:U:H2'	26:DA:2029:G:O4'	2.19	0.43
26:DA:2529:G:O6	56:D9:31:LYS:NZ	2.52	0.43
27:DB:114:C:H4'	39:DS:46:VAL:HG22	2.01	0.43
31:DG:44:GLY:N	31:DG:88:ILE:O	2.52	0.43
35:DO:104:ARG:NH2	35:DO:121:VAL:O	2.52	0.43
42:DV:55:ALA:HA	42:DV:100:ARG:O	2.19	0.43
48:D1:50:ARG:HD2	48:D1:57:GLU:OE1	2.19	0.43
54:D7:26:GLY:O	54:D7:30:VAL:HG23	2.19	0.43
1:AA:96:U:H6	1:AA:96:U:OP2	2.02	0.42
1:AA:839:U:H3'	1:AA:840:C:C5	2.53	0.42
1:AA:1353:G:H2'	1:AA:1354:C:H6	1.84	0.42
1:AA:1504:G:OP1	1:AA:1507:A:H4'	2.19	0.42
2:AB:21:ARG:HB3	2:AB:39:ILE:HA	2.00	0.42
2:AB:28:PHE:CD1	2:AB:190:THR:HG22	2.54	0.42
3:AC:104:GLN:HE21	3:AC:105:GLU:H	1.66	0.42
6:AF:45:LEU:HD12	6:AF:59:TYR:HD2	1.84	0.42
13:AM:19:LEU:HB3	13:AM:25:ILE:HG21	2.01	0.42
17:AQ:62:SER:OG	17:AQ:72:ARG:HD2	2.19	0.42
20:AT:13:LEU:HD12	20:AT:14:LYS:N	2.33	0.42
24:AX:19:G:H3'	24:AX:20:U:H6	1.84	0.42
26:BA:614(C):A:C4	30:BF:180:GLY:HA2	2.54	0.42
26:BA:1796:U:H2'	26:BA:1797:C:H6	1.84	0.42
26:BA:2173:A:H2'	26:BA:2174:C:O4'	2.18	0.42
26:BA:2561:A:H2'	26:BA:2562:U:O4'	2.18	0.42
28:BD:145:VAL:HG12	28:BD:146:GLU:O	2.18	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BT:95:ARG:HH11	40:BT:95:ARG:CG	2.26	0.42
1:CA:130:A:N3	1:CA:263:A:O2'	2.49	0.42
1:CA:532:A:N6	3:CC:156:ARG:HH22	2.16	0.42
1:CA:580:U:H5''	15:CO:58:MET:HG2	2.00	0.42
1:CA:608:A:H2'	1:CA:609:A:O4'	2.18	0.42
1:CA:1286:A:C8	1:CA:1286:A:H3'	2.54	0.42
24:CX:8:4SU:H5''	24:CX:49:G:H5'	2.01	0.42
24:CX:21:A:N6	24:CX:46:G:H2'	2.34	0.42
26:DA:140:G:H1'	26:DA:141:A:H2	1.84	0.42
26:DA:325:G:H2'	26:DA:326:G:O4'	2.20	0.42
26:DA:414:C:O2'	26:DA:415:A:H5'	2.19	0.42
26:DA:827:U:H4'	26:DA:828:U:C6	2.53	0.42
26:DA:1161:C:H2'	26:DA:1162:G:C8	2.53	0.42
26:DA:2137:C:O2'	26:DA:2138:C:H5'	2.19	0.42
26:DA:2865:U:C4	26:DA:2866:U:C4	3.07	0.42
28:DD:36:PRO:HA	28:DD:61:LEU:HD13	2.01	0.42
28:DD:121:PRO:HB3	28:DD:135:PHE:CE2	2.53	0.42
30:DF:53:THR:HG23	30:DF:55:GLY:N	2.22	0.42
31:DG:125:PHE:CZ	31:DG:170:ARG:HA	2.54	0.42
33:DI:94:ALA:O	33:DI:98:ALA:N	2.44	0.42
37:DQ:31:ASP:HA	37:DQ:134:ARG:HH11	1.83	0.42
46:DZ:55:HIS:CE1	46:DZ:135:GLU:HG3	2.51	0.42
1:AA:126:G:H4'	1:AA:634:C:O2	2.19	0.42
1:AA:346:G:H2'	1:AA:347:G:H4'	2.01	0.42
1:AA:711:G:OP1	6:AF:54:LYS:NZ	2.35	0.42
1:AA:1457:G:OP1	20:AT:39:LYS:NZ	2.41	0.42
17:AQ:76:LEU:HD12	17:AQ:77:VAL:H	1.83	0.42
24:AX:7:G:O2'	24:AX:49:G:H5'	2.19	0.42
26:BA:38:A:H2'	26:BA:39:C:C6	2.54	0.42
26:BA:528:A:C2	26:BA:2043:C:H4'	2.53	0.42
26:BA:1713:U:H2'	26:BA:1714:G:H8	1.84	0.42
26:BA:1991:U:H2'	26:BA:1992:G:H5''	2.00	0.42
29:BE:12:THR:HG22	29:BE:13:ARG:N	2.33	0.42
35:BO:122:LEU:HD13	40:BT:72:VAL:HG11	2.01	0.42
40:BT:118:ARG:HH11	40:BT:118:ARG:CG	2.30	0.42
45:BY:35:TYR:CE2	45:BY:69:ALA:HB3	2.53	0.42
48:B1:8:SER:HB3	48:B1:66:HIS:CD2	2.55	0.42
51:B4:39:CYS:HA	51:B4:44:THR:HG21	2.01	0.42
1:CA:49:U:O4	1:CA:365:U:H5	2.01	0.42
1:CA:684:A:H1'	11:CK:39:PRO:HD2	2.01	0.42
1:CA:1051:C:N4	61:CA:4001:HOH:O	2.51	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1142:G:H2'	1:CA:1143:G:O4'	2.19	0.42
3:CC:6:HIS:HD2	3:CC:8:ILE:N	2.14	0.42
4:CD:155:LEU:HD23	4:CD:156:GLU:H	1.84	0.42
7:CG:103:TRP:CH2	7:CG:141:VAL:HG21	2.54	0.42
26:DA:212:G:H2'	26:DA:213:A:O4'	2.18	0.42
26:DA:746:A:H2'	26:DA:2612:C:H5''	2.00	0.42
26:DA:760:G:H2'	26:DA:761:A:O4'	2.18	0.42
26:DA:1235:G:C6	26:DA:1236:G:N1	2.87	0.42
26:DA:1292:U:H2'	26:DA:1293:C:C6	2.54	0.42
26:DA:1471:A:OP2	26:DA:1519:G:N1	2.42	0.42
26:DA:1587:A:H2'	26:DA:1588:C:C6	2.54	0.42
26:DA:2345:G:OP2	53:D6:38:LYS:NZ	2.42	0.42
29:DE:170:LEU:HB3	29:DE:184:VAL:CG2	2.49	0.42
35:DO:23:ARG:HG3	35:DO:24:VAL:N	2.33	0.42
51:D4:62:ARG:HB2	51:D4:63:TYR:CD1	2.54	0.42
53:D6:40:CYS:HA	53:D6:41:PRO:HD3	1.90	0.42
1:AA:8:A:H5'	5:AE:101:ILE:HG22	2.00	0.42
1:AA:16:A:O2'	5:AE:16:THR:HB	2.19	0.42
1:AA:540:G:H2'	1:AA:541:G:O4'	2.19	0.42
1:AA:1236:A:O2'	1:AA:1304:G:H4'	2.19	0.42
1:AA:1299:A:H5''	1:AA:1299:A:N3	2.35	0.42
1:AA:1317:C:N3	19:AS:37:ARG:NH2	2.63	0.42
1:AA:1410:G:H2'	1:AA:1411:C:C6	2.53	0.42
2:AB:166:ASP:HA	2:AB:167:PRO:HD3	1.81	0.42
4:AD:107:ARG:HA	4:AD:107:ARG:HD2	1.79	0.42
6:AF:89:MET:HE1	18:AR:72:ARG:HB3	2.00	0.42
8:AH:86:ILE:HG22	8:AH:93:VAL:HG21	2.01	0.42
13:AM:39:ILE:HD12	13:AM:52:GLU:HG2	2.00	0.42
20:AT:16:HIS:O	20:AT:19:SER:OG	2.25	0.42
24:AX:13:C:O2'	26:BA:1924:C:H4'	2.20	0.42
25:AY:55:PSU:N3	25:AY:57:G:H5'	2.33	0.42
26:BA:192:C:OP1	61:BA:4017:HOH:O	2.21	0.42
26:BA:226:G:N2	26:BA:228:A:H62	2.15	0.42
26:BA:644:A:H4'	26:BA:645:C:H5	1.83	0.42
26:BA:1188:U:H4'	42:BV:79:VAL:HG22	2.01	0.42
26:BA:1797:C:H4'	28:BD:257:LEU:O	2.18	0.42
30:BF:9:ILE:HA	30:BF:10:PRO:HD2	1.82	0.42
30:BF:24:LEU:HB3	30:BF:115:ALA:HB2	2.02	0.42
30:BF:89:VAL:HG12	30:BF:90:PHE:CD2	2.55	0.42
31:BG:48:GLU:HA	31:BG:51:ARG:HG3	2.00	0.42
46:BZ:136:PHE:O	46:BZ:137:ILE:HG13	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:B4:59:PHE:N	51:B4:59:PHE:CD1	2.77	0.42
1:CA:922:G:C6	1:CA:923:A:C6	3.07	0.42
1:CA:935:A:O2'	1:CA:1383:C:N3	2.44	0.42
4:CD:13:ARG:HB2	4:CD:40:PRO:HD3	2.01	0.42
12:CL:71:PRO:O	12:CL:102:ARG:HD2	2.18	0.42
19:CS:51:VAL:HB	19:CS:75:ALA:HB2	2.00	0.42
23:CW:74:C:C4	23:CW:75:C:C2	3.07	0.42
24:CX:53:G:H3'	24:CX:54:5MU:H71	2.01	0.42
25:CY:9:A:C8	25:CY:11:C:N4	2.87	0.42
26:DA:39:C:H2'	26:DA:40:C:H6	1.83	0.42
26:DA:699:A:H2'	26:DA:700:G:O4'	2.19	0.42
26:DA:1545:A:H2'	26:DA:1546:C:O4'	2.20	0.42
26:DA:1575:C:H2'	26:DA:1576:U:O4'	2.19	0.42
26:DA:1656:C:H2'	26:DA:1657:C:C6	2.54	0.42
26:DA:1970:A:H4'	26:DA:1971:A:OP1	2.19	0.42
26:DA:2168:G:O3'	26:DA:2169:A:H8	2.02	0.42
26:DA:2272:U:H5''	26:DA:2273:A:OP1	2.18	0.42
26:DA:2745:C:H2'	26:DA:2746:U:O4'	2.19	0.42
30:DF:33:LEU:HD12	30:DF:33:LEU:HA	1.75	0.42
32:DH:137:ASP:HB3	32:DH:140:LYS:HB3	1.99	0.42
35:DO:68:GLU:HB3	35:DO:78:ARG:HB2	2.01	0.42
37:DQ:43:THR:OG1	37:DQ:45:GLN:HG2	2.19	0.42
39:DS:67:ARG:HG3	39:DS:104:GLY:CA	2.49	0.42
41:DU:17:ILE:HG13	41:DU:32:PHE:HE1	1.83	0.42
46:DZ:138:GLU:H	46:DZ:156:LYS:NZ	2.16	0.42
53:D6:10:LEU:HD23	53:D6:22:ALA:HB2	2.01	0.42
1:AA:741:G:H2'	1:AA:742:G:O4'	2.19	0.42
1:AA:1479:C:H2'	1:AA:1480:G:H8	1.84	0.42
2:AB:207:ALA:O	2:AB:210:SER:HB3	2.19	0.42
20:AT:67:ALA:HA	20:AT:72:LEU:O	2.18	0.42
22:AV:15:A:O5'	22:AV:15:A:H8	2.02	0.42
24:AX:9:G:O2'	24:AX:10:G:N7	2.47	0.42
25:AY:50:U:H2'	25:AY:51:U:O4'	2.20	0.42
26:BA:466:A:N3	26:BA:683:C:H1'	2.34	0.42
26:BA:1142(A):A:C4	26:BA:1144:G:C8	3.06	0.42
26:BA:1530:C:H1'	26:BA:1531:C:OP1	2.19	0.42
26:BA:2116:G:H2'	26:BA:2117:A:C5	2.54	0.42
33:BI:93:THR:H	33:BI:96:ASP:HB2	1.84	0.42
34:BN:130:HIS:O	34:BN:133:GLN:HG2	2.19	0.42
38:BR:98:LEU:HD12	52:B5:57:VAL:HG11	2.01	0.42
46:BZ:19:ARG:HD3	46:BZ:25:PRO:CD	2.49	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:583:A:N6	1:CA:758:G:O2'	2.52	0.42
1:CA:898:G:N2	1:CA:901:A:OP2	2.50	0.42
1:CA:924:C:O2'	1:CA:1502:A:N6	2.49	0.42
1:CA:1122:U:N3	1:CA:1123:A:N7	2.67	0.42
1:CA:1410:G:H2'	1:CA:1411:C:H6	1.84	0.42
2:CB:160:ASP:N	2:CB:160:ASP:OD1	2.52	0.42
4:CD:112:VAL:HG22	4:CD:116:GLN:OE1	2.20	0.42
4:CD:121:VAL:O	4:CD:134:ASP:HA	2.20	0.42
23:CW:11:C:N4	23:CW:24:G:H1	2.14	0.42
25:CY:50:U:H2'	25:CY:51:U:C6	2.53	0.42
26:DA:729:G:O2'	26:DA:763:G:H4'	2.19	0.42
26:DA:910:A:C5	37:DQ:13:GLN:HG3	2.55	0.42
26:DA:996:A:C6	26:DA:1160:G:N1	2.87	0.42
26:DA:1847:A:H3'	26:DA:1848:A:H5'	2.00	0.42
26:DA:2110:G:C2	26:DA:2120:G:H1'	2.55	0.42
26:DA:2114:A:H2'	26:DA:2114:A:N3	2.34	0.42
26:DA:2251:G:OP1	37:DQ:82:ARG:NH1	2.52	0.42
26:DA:2376:A:H3'	26:DA:2377:A:H8	1.85	0.42
27:DB:33:G:N3	27:DB:50:G:N2	2.67	0.42
36:DP:6:LEU:HA	36:DP:6:LEU:HD23	1.78	0.42
42:DV:48:GLY:HA2	42:DV:52:VAL:HG12	2.01	0.42
51:D4:33:VAL:HG12	51:D4:34:GLU:N	2.34	0.42
1:AA:109:A:C6	1:AA:326:G:C6	3.07	0.42
1:AA:1079:G:O3'	5:AE:14:ARG:NH2	2.52	0.42
1:AA:1125:U:H4'	1:AA:1126:U:OP1	2.19	0.42
1:AA:1401:G:C2	1:AA:1402:C:H1'	2.55	0.42
5:AE:20:GLN:NE2	5:AE:21:ALA:O	2.52	0.42
8:AH:46:LYS:HG3	8:AH:64:LYS:HB2	2.02	0.42
24:AX:2:G:N3	24:AX:2:G:H2'	2.34	0.42
26:BA:375:C:H2'	26:BA:376:C:C6	2.54	0.42
26:BA:1124:C:H1'	56:B9:36:GLN:NE2	2.34	0.42
28:BD:218:ARG:HB3	28:BD:219:PRO:HD2	2.01	0.42
31:BG:121:ASN:HA	31:BG:122:PRO:HD3	1.87	0.42
32:BH:22:GLY:HA2	32:BH:37:VAL:O	2.20	0.42
53:B6:11:LEU:HD23	53:B6:11:LEU:HA	1.82	0.42
1:CA:1173:G:H2'	1:CA:1174:G:H8	1.84	0.42
1:CA:1286:A:C8	1:CA:1287:A:H4'	2.55	0.42
1:CA:1297:C:P	13:CM:44:ARG:HH22	2.42	0.42
4:CD:158:ILE:HG22	4:CD:162:LEU:HD12	2.02	0.42
6:CF:68:PRO:HB2	6:CF:71:ARG:HG3	2.01	0.42
10:CJ:32:ALA:HB1	10:CJ:33:GLN:HA	2.00	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:352:G:N2	61:DA:3734:HOH:O	2.32	0.42
26:DA:744:G:OP1	29:DE:132:HIS:ND1	2.47	0.42
26:DA:864:G:N2	26:DA:913:U:C2	2.87	0.42
26:DA:2171:A:OP1	26:DA:2171:A:H3'	2.19	0.42
30:DF:139:PHE:CD2	30:DF:167:ALA:HB2	2.55	0.42
30:DF:184:TYR:CZ	30:DF:188:ARG:HD2	2.54	0.42
39:DS:57:LYS:HB2	39:DS:57:LYS:HE3	1.80	0.42
46:DZ:144:LEU:CD1	46:DZ:172:ALA:HB1	2.47	0.42
1:AA:60:A:OP1	1:AA:111:G:N2	2.51	0.42
1:AA:299:G:H8	1:AA:299:G:O5'	2.02	0.42
1:AA:438:G:H4'	4:AD:123:HIS:CE1	2.55	0.42
2:AB:24:TRP:H	2:AB:24:TRP:HD1	1.68	0.42
4:AD:166:LYS:HA	4:AD:166:LYS:HD3	1.79	0.42
25:AY:52:G:H1	25:AY:62:C:H42	1.67	0.42
26:BA:606:U:H4'	26:BA:658:C:H4'	2.00	0.42
26:BA:1675:C:O2	29:BE:128:SER:OG	2.37	0.42
26:BA:2181:G:HO2'	26:BA:2182:G:P	2.42	0.42
27:BB:110:G:H2'	27:BB:111:G:C8	2.54	0.42
28:BD:242:ARG:N	28:BD:242:ARG:HD3	2.33	0.42
30:BF:34:TRP:CH2	36:BP:8:PRO:HB3	2.54	0.42
31:BG:77:ILE:N	31:BG:82:LEU:O	2.48	0.42
40:BT:127:ALA:O	40:BT:128:GLU:HB2	2.18	0.42
1:CA:444:C:H2'	1:CA:445:G:C8	2.55	0.42
1:CA:715:A:H5''	1:CA:805:C:H1'	2.02	0.42
1:CA:792:A:H4'	1:CA:793:U:H5''	2.01	0.42
1:CA:971:G:OP1	1:CA:971:G:H3'	2.19	0.42
1:CA:979:C:H2'	1:CA:980:C:H5'	2.01	0.42
1:CA:1057:G:C5	1:CA:1204:A:C2	3.07	0.42
1:CA:1079:G:O3'	5:CE:14:ARG:NH2	2.53	0.42
1:CA:1092:A:C6	1:CA:1093:A:C6	3.07	0.42
2:CB:133:LYS:O	2:CB:137:ARG:HG3	2.20	0.42
3:CC:43:LEU:HD11	3:CC:91:LEU:HD11	2.01	0.42
13:CM:65:LYS:CA	51:D4:50:VAL:HG11	2.49	0.42
23:CW:25:C:C2'	23:CW:26:A:H5'	2.49	0.42
25:CY:18:G:C2	25:CY:55:PSU:O4	2.72	0.42
26:DA:29:U:OP1	41:DU:5:LYS:NZ	2.52	0.42
26:DA:251:A:C5	26:DA:252:G:H1'	2.55	0.42
26:DA:608:A:C6	26:DA:609:A:C6	3.08	0.42
26:DA:896:A:N6	46:DZ:146:ILE:HD13	2.34	0.42
26:DA:1151:G:C2	26:DA:1152:C:C2	3.07	0.42
26:DA:1354:A:H5''	28:DD:38:LYS:HD3	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:1488:G:H5'	26:DA:1489:U:OP2	2.20	0.42
26:DA:2128:C:H2'	26:DA:2129:C:O4'	2.18	0.42
26:DA:2271:G:OP1	47:D0:18:ALA:HB1	2.19	0.42
26:DA:2365:G:O6	55:D8:39:LYS:HE3	2.19	0.42
27:DB:28:C:P	39:DS:36:TYR:HH	2.43	0.42
27:DB:33:G:C6	27:DB:34:U:C4	3.07	0.42
27:DB:73:A:C4	27:DB:105:A:C2	3.07	0.42
28:DD:264:LYS:HA	28:DD:265:PRO:HD3	1.88	0.42
29:DE:72:VAL:HA	29:DE:73:GLU:CB	2.50	0.42
31:DG:136:ARG:HH11	31:DG:136:ARG:H	1.68	0.42
33:DI:66:GLU:OE2	33:DI:69:LYS:HD3	2.18	0.42
35:DO:36:GLY:HA2	35:DO:106:LEU:HD23	2.01	0.42
1:AA:877:C:OP1	8:AH:88:LYS:NZ	2.33	0.42
1:AA:971:G:N1	1:AA:1363(A):A:OP2	2.45	0.42
1:AA:1356:G:H2'	1:AA:1357:A:C8	2.54	0.42
11:AK:111:ASP:HB2	18:AR:84:LYS:HD3	2.01	0.42
26:BA:118:A:H3'	26:BA:119:A:H5''	2.02	0.42
26:BA:493:G:H2'	26:BA:494:G:O4'	2.19	0.42
26:BA:1268:A:H2'	26:BA:1269:A:O4'	2.18	0.42
26:BA:1748:G:H5''	26:BA:1748:G:H8	1.85	0.42
29:BE:14:ILE:HD11	29:BE:173:VAL:HG11	2.01	0.42
40:BT:91:ARG:HD2	40:BT:120:ARG:NH1	2.35	0.42
46:BZ:110:GLY:CA	46:BZ:145:GLU:HA	2.50	0.42
46:BZ:145:GLU:H	46:BZ:148:ASP:HB2	1.84	0.42
47:B0:38:VAL:HG12	47:B0:40:GLN:HG2	2.01	0.42
1:CA:116:A:H61	1:CA:313:A:H1'	1.84	0.42
1:CA:779:C:H2'	1:CA:780:A:O4'	2.19	0.42
1:CA:1053:G:C4'	1:CA:1054:C:H5'	2.50	0.42
1:CA:1325:C:O2'	1:CA:1326:C:H5'	2.18	0.42
1:CA:1446:U:H4'	1:CA:1447:A:C5	2.54	0.42
2:CB:69:LEU:HB3	2:CB:162:ILE:HG22	2.01	0.42
19:CS:27:GLU:HB2	19:CS:28:LYS:HZ3	1.83	0.42
26:DA:698:C:H5''	26:DA:699:A:OP1	2.20	0.42
26:DA:868:U:C4	26:DA:869:G:N7	2.88	0.42
26:DA:937:U:H2'	26:DA:938:G:O4'	2.20	0.42
26:DA:1167:U:C2	26:DA:1168:G:C8	3.07	0.42
26:DA:2285:C:OP2	53:D6:6:ARG:NH1	2.52	0.42
28:DD:37:LEU:HD13	28:DD:87:ASN:ND2	2.34	0.42
30:DF:34:TRP:CE2	36:DP:8:PRO:HG3	2.55	0.42
44:DX:12:VAL:HG21	44:DX:27:THR:HG22	2.02	0.42
1:AA:938:A:C6	1:AA:939:G:C5	3.07	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1218:C:H2'	1:AA:1219:U:C6	2.55	0.42
1:AA:1287:A:H2	1:AA:1353:G:N3	2.18	0.42
4:AD:107:ARG:HH22	4:AD:194:LEU:CD2	2.33	0.42
6:AF:35:ALA:HA	6:AF:67:MET:HB3	2.02	0.42
12:AL:53:ARG:HG2	12:AL:69:TYR:HE1	1.84	0.42
13:AM:84:ILE:HD12	19:AS:74:PHE:CE2	2.51	0.42
24:AX:32:5MC:HM53	24:AX:33:U:O4	2.20	0.42
25:AY:52:G:H1	25:AY:62:C:N4	2.17	0.42
26:BA:570:G:H2'	26:BA:2030:A:C5	2.55	0.42
26:BA:717:G:H2'	26:BA:718:A:O4'	2.20	0.42
26:BA:1512:U:O2'	26:BA:1513:C:H5'	2.20	0.42
26:BA:1714:G:H1	26:BA:1745(A):C:N4	2.13	0.42
31:BG:77:ILE:HG21	31:BG:80:PHE:CD2	2.55	0.42
35:BO:73:ASP:HB2	40:BT:82:LEU:HD13	2.00	0.42
49:B2:32:LEU:HD13	49:B2:36:ARG:HH11	1.85	0.42
56:B9:27:CYS:SG	56:B9:28:GLU:N	2.93	0.42
1:CA:583:A:H2'	1:CA:584:G:O4'	2.20	0.42
1:CA:685:G:C2	1:CA:686:U:C4	3.08	0.42
1:CA:1067:A:H1'	1:CA:1068:G:O4'	2.20	0.42
1:CA:1072:G:C6	1:CA:1073:U:C4	3.08	0.42
1:CA:1233:G:H2'	1:CA:1234:C:C6	2.55	0.42
2:CB:137:ARG:O	2:CB:141:GLU:N	2.36	0.42
15:CO:5:LYS:O	15:CO:9:GLN:HG2	2.19	0.42
15:CO:36:ILE:HG23	15:CO:56:LEU:HD11	2.01	0.42
26:DA:536:A:H2'	26:DA:537:C:C6	2.55	0.42
26:DA:1198:U:H2'	26:DA:1199:U:C6	2.55	0.42
26:DA:2107:C:H2'	26:DA:2108:C:O4'	2.20	0.42
28:DD:145:VAL:HB	28:DD:155:LEU:HB2	2.02	0.42
29:DE:9:VAL:HB	40:DT:3:ARG:HG2	2.02	0.42
34:DN:40:PRO:HB3	41:DU:68:ALA:HB2	2.01	0.42
45:DY:45:VAL:N	45:DY:63:LYS:O	2.45	0.42
46:DZ:24:LEU:HA	46:DZ:25:PRO:HD3	1.90	0.42
51:D4:9:LEU:HD23	51:D4:9:LEU:HA	1.90	0.42
56:D9:7:VAL:HG12	56:D9:34:GLN:HB3	2.01	0.42
1:AA:108:G:O6	20:AT:15:ARG:HD2	2.19	0.42
1:AA:130:A:O2'	1:AA:131:C:O5'	2.32	0.42
1:AA:152:A:N6	1:AA:170:U:C2	2.88	0.42
1:AA:583:A:N6	1:AA:758:G:O2'	2.53	0.42
1:AA:1006:C:H2'	1:AA:1007:C:C6	2.55	0.42
1:AA:1029:C:N3	1:AA:1032:G:O6	2.53	0.42
1:AA:1182:G:C3'	1:AA:1183:A:H5'	2.50	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:AO:17:ARG:HH11	15:AO:17:ARG:HG3	1.84	0.42
15:AO:78:TYR:CZ	15:AO:82:ILE:HD13	2.55	0.42
17:AQ:66:SER:H	17:AQ:69:LYS:HB3	1.85	0.42
25:AY:56:C:C2	25:AY:57:G:C8	3.08	0.42
26:BA:222:A:H3'	26:BA:421:U:H5'	2.00	0.42
26:BA:1858:G:H21	26:BA:1883:G:H2'	1.84	0.42
26:BA:2090:G:O6	61:BA:4756:HOH:O	2.19	0.42
26:BA:2111:C:OP2	26:BA:2145:C:N4	2.51	0.42
26:BA:2461:C:H2'	26:BA:2462:U:C6	2.55	0.42
29:BE:14:ILE:HG12	29:BE:21:VAL:HG13	2.00	0.42
33:BI:131:LYS:HA	33:BI:137:PRO:HA	2.02	0.42
40:BT:53:ARG:HB3	40:BT:53:ARG:CZ	2.50	0.42
45:BY:54:LYS:HA	45:BY:55:TYR:HA	1.85	0.42
1:CA:6:G:H4'	1:CA:298:A:H4'	2.00	0.42
1:CA:344:A:H5''	1:CA:345:C:H5	1.84	0.42
1:CA:1269:A:H2	1:CA:1312:G:N3	2.17	0.42
1:CA:1357:A:N6	1:CA:1363(A):A:N1	2.67	0.42
3:CC:19:GLU:HB3	3:CC:55:VAL:O	2.20	0.42
3:CC:77:ILE:HG13	3:CC:78:GLY:N	2.35	0.42
11:CK:38:ASN:HA	11:CK:39:PRO:HD3	1.80	0.42
23:CW:29:G:N2	23:CW:42:C:C2	2.88	0.42
24:CX:3:C:H5'	26:DA:2255:G:O2'	2.20	0.42
26:DA:234:C:H2'	26:DA:235:U:C6	2.54	0.42
26:DA:839:U:H2'	26:DA:840:C:C6	2.55	0.42
26:DA:863:A:P	37:DQ:22:LYS:HG3	2.60	0.42
26:DA:1231:G:H2'	26:DA:1232:G:C8	2.55	0.42
26:DA:1470:G:HO2'	26:DA:1471:A:H8	1.63	0.42
26:DA:1794:U:H2'	26:DA:1795:C:H6	1.85	0.42
28:DD:73:VAL:O	28:DD:75:ILE:HG13	2.19	0.42
31:DG:72:ARG:NH1	31:DG:87:PRO:HG3	2.35	0.42
34:DN:138:LEU:HD23	34:DN:138:LEU:HA	1.73	0.42
44:DX:84:ALA:HB3	44:DX:87:GLN:NE2	2.35	0.42
46:DZ:146:ILE:H	46:DZ:146:ILE:HG13	1.62	0.42
1:AA:881:G:P	12:AL:12:ARG:HH22	2.42	0.42
1:AA:922:G:C6	1:AA:923:A:C6	3.08	0.42
1:AA:1314:C:H2'	1:AA:1315:U:C6	2.54	0.42
2:AB:62:ALA:HB3	2:AB:225:ALA:HB3	2.02	0.42
3:AC:56:ASP:HB2	3:AC:67:THR:HB	2.02	0.42
3:AC:112:SER:O	3:AC:116:VAL:HG23	2.20	0.42
3:AC:131:ARG:NE	3:AC:166:GLU:OE2	2.53	0.42
4:AD:170:VAL:HG11	4:AD:174:LEU:HB2	2.02	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AI:16:ARG:HB2	9:AI:64:THR:HB	2.01	0.42
13:AM:14:ARG:NH2	13:AM:41:PRO:O	2.53	0.42
18:AR:26:LEU:HD23	18:AR:29:PHE:CE2	2.55	0.42
25:AY:38:A:C5	25:AY:39:PSU:C6	3.08	0.42
25:AY:68:C:N3	25:AY:69:G:C8	2.88	0.42
26:BA:1762:A:H2'	61:BA:5184:HOH:O	2.19	0.42
26:BA:2101:G:H2'	26:BA:2102:U:C6	2.55	0.42
26:BA:2443:C:OP1	30:BF:68:LYS:HD3	2.20	0.42
26:BA:2619:C:H4'	29:BE:151:TYR:O	2.20	0.42
27:BB:55:U:H2'	27:BB:56:G:O4'	2.20	0.42
45:BY:9:LYS:HA	45:BY:10:GLY:HA2	1.71	0.42
50:B3:5:LYS:NZ	50:B3:34:GLU:OE2	2.40	0.42
51:B4:62:ARG:HB2	51:B4:63:TYR:CD1	2.54	0.42
1:CA:340:U:H2'	1:CA:341:C:C6	2.54	0.42
1:CA:375:U:OP1	16:CP:69:THR:HG21	2.20	0.42
1:CA:641:U:O3'	1:CA:642:A:H8	2.03	0.42
1:CA:989:C:HO2'	1:CA:1016:A:H2	1.67	0.42
1:CA:1154:G:C8	1:CA:1155:G:C8	3.07	0.42
3:CC:115:LEU:HD12	3:CC:115:LEU:HA	1.80	0.42
4:CD:57:ARG:HD3	4:CD:205:GLU:HB2	2.00	0.42
10:CJ:56:HIS:CD2	10:CJ:56:HIS:H	2.38	0.42
11:CK:110:ASP:HB3	18:CR:85:LEU:HB3	2.02	0.42
13:CM:94:ARG:CZ	19:CS:80:TYR:HD2	2.33	0.42
20:CT:33:ILE:HG13	20:CT:62:LEU:HD22	2.02	0.42
25:CY:15:G:H22	25:CY:48:C:N4	2.15	0.42
26:DA:300:A:H3'	45:DY:84:ARG:NH2	2.35	0.42
26:DA:526:A:N3	26:DA:2044:C:H1'	2.35	0.42
26:DA:1015:G:O2'	26:DA:1016:G:H5'	2.20	0.42
26:DA:1019:U:H3	26:DA:1142(A):A:N6	2.13	0.42
26:DA:2252:G:H2'	26:DA:2253:G:O4'	2.19	0.42
26:DA:2262:U:H4'	26:DA:2328:A:H2	1.84	0.42
26:DA:2307:G:H8	26:DA:2307:G:OP1	2.03	0.42
26:DA:2853:C:H2'	26:DA:2854:G:C8	2.54	0.42
39:DS:80:LEU:HD12	39:DS:80:LEU:HA	1.84	0.42
46:DZ:5:LEU:HD22	46:DZ:5:LEU:HA	1.82	0.42
1:AA:78:G:N2	1:AA:91:C:C2	2.88	0.41
1:AA:555:C:H2'	1:AA:556:C:C6	2.55	0.41
1:AA:591:U:H2'	1:AA:592:G:C8	2.54	0.41
1:AA:688:G:H5'	11:AK:46:GLY:C	2.40	0.41
1:AA:1003:G:N3	1:AA:1004:A:H1'	2.34	0.41
1:AA:1035:A:H8	1:AA:1035:A:O5'	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:71:VAL:HG13	2:AB:93:VAL:CG2	2.50	0.41
3:AC:47:LEU:CD1	3:AC:68:VAL:HG11	2.50	0.41
9:AI:93:ARG:NH1	9:AI:93:ARG:HB2	2.35	0.41
33:BI:110:ASP:HA	33:BI:111:PRO:HD2	1.78	0.41
36:BP:63:PRO:HG2	55:B8:25:MET:HB2	2.02	0.41
36:BP:121:LYS:HG2	36:BP:122:PRO:HD2	2.02	0.41
40:BT:11:GLU:OE1	40:BT:57:PHE:HB3	2.19	0.41
40:BT:73:GLU:OE1	40:BT:103:ARG:NE	2.41	0.41
45:BY:7:VAL:HG21	45:BY:72:VAL:HG12	2.02	0.41
45:BY:86:ARG:HH11	45:BY:100:ALA:HB1	1.85	0.41
51:B4:63:TYR:N	51:B4:63:TYR:CD1	2.86	0.41
1:CA:998:G:C6	1:CA:999:C:C4	3.08	0.41
1:CA:1039:C:C4	1:CA:1040:U:C4	3.07	0.41
4:CD:17:VAL:HG12	4:CD:18:LYS:N	2.35	0.41
23:CW:76:31M:N3'	26:DA:2585:U:O4	2.53	0.41
26:DA:569:U:H5''	61:DA:4096:HOH:O	2.20	0.41
26:DA:776:G:C8	26:DA:793:A:C2	3.08	0.41
26:DA:867:C:C2'	26:DA:868:U:H5'	2.50	0.41
26:DA:994:C:O2'	26:DA:996:A:OP1	2.16	0.41
26:DA:1720:U:H2'	26:DA:1721:G:O4'	2.20	0.41
26:DA:1843:C:H5'	28:DD:253:GLN:NE2	2.34	0.41
26:DA:2505:G:O6	26:DA:2576:G:H2'	2.20	0.41
26:DA:2512:C:H2'	26:DA:2513:G:O4'	2.20	0.41
26:DA:2788:C:C4	26:DA:2789:C:N4	2.88	0.41
26:DA:2815:C:H2'	26:DA:2816:C:H6	1.85	0.41
44:DX:88:LYS:NZ	44:DX:90:GLU:HG2	2.34	0.41
46:DZ:67:LEU:HA	46:DZ:68:PRO:HD3	1.93	0.41
46:DZ:166:SER:O	46:DZ:169:GLU:HB2	2.20	0.41
1:AA:309:G:H1'	1:AA:608:A:C2	2.55	0.41
1:AA:765:G:N1	1:AA:812:C:O2'	2.43	0.41
1:AA:890:G:O2'	1:AA:906:G:O6	2.24	0.41
1:AA:1128:C:H4'	1:AA:1148:U:O2	2.19	0.41
1:AA:1296:C:H4'	1:AA:1302:U:C4	2.55	0.41
1:AA:1417:G:H22	1:AA:1482:G:H2'	1.84	0.41
2:AB:27:LYS:HB2	2:AB:194:PRO:HD2	2.01	0.41
4:AD:178:VAL:C	4:AD:180:GLY:H	2.23	0.41
5:AE:6:PHE:HB3	5:AE:35:GLY:C	2.40	0.41
10:AJ:6:ILE:HA	10:AJ:97:GLU:O	2.21	0.41
11:AK:59:TYR:CZ	11:AK:63:LEU:HD11	2.55	0.41
12:AL:42:THR:OG1	12:AL:52:LEU:HD13	2.20	0.41
19:AS:3:ARG:NH1	19:AS:10:PHE:HB2	2.35	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AS:27:GLU:HB3	19:AS:28:LYS:HA	2.01	0.41
19:AS:38:SER:HB2	19:AS:71:LEU:HD12	2.01	0.41
23:AW:25:C:H2'	23:AW:26:A:H5'	2.02	0.41
25:AY:22:G:C2	25:AY:23:A:C5	3.08	0.41
25:AY:39:PSU:H6	25:AY:39:PSU:H5'	1.86	0.41
26:BA:355:G:H2'	26:BA:356:G:O4'	2.20	0.41
26:BA:479:A:N3	26:BA:481:G:H5''	2.35	0.41
26:BA:954:G:H5''	37:BQ:13:GLN:HB3	2.01	0.41
26:BA:1530:C:HO2'	26:BA:1531:C:P	2.37	0.41
26:BA:2012:G:OP1	43:BW:11:ARG:NH2	2.45	0.41
32:BH:96:ALA:HB2	32:BH:105:LEU:HD13	2.02	0.41
34:BN:33:LEU:HD12	34:BN:33:LEU:HA	1.84	0.41
39:BS:10:ARG:HG3	39:BS:13:ARG:NH2	2.35	0.41
41:BU:17:ILE:HG13	41:BU:32:PHE:HE1	1.84	0.41
46:BZ:104:PHE:CD2	46:BZ:139:VAL:HB	2.55	0.41
1:CA:434:U:H2'	1:CA:435:C:C6	2.55	0.41
1:CA:657:G:H1'	1:CA:750:G:N2	2.35	0.41
1:CA:791:G:N2	1:CA:1497:G:O3'	2.50	0.41
1:CA:814:A:N7	1:CA:816:A:C4	2.88	0.41
1:CA:971:G:H22	1:CA:1363(A):A:P	2.42	0.41
1:CA:986:A:N3	19:CS:52:TYR:OH	2.42	0.41
1:CA:1135:U:HO2'	1:CA:1136:U:H5	1.66	0.41
1:CA:1178:G:N2	1:CA:1181:G:OP2	2.49	0.41
1:CA:1346:A:N1	1:CA:1374:A:H5''	2.34	0.41
3:CC:82:GLU:O	3:CC:85:ARG:HB2	2.20	0.41
3:CC:116:VAL:HG13	3:CC:119:ARG:HD3	2.02	0.41
4:CD:112:VAL:HG13	4:CD:161:ASN:OD1	2.20	0.41
8:CH:72:PRO:O	8:CH:73:ASP:HB3	2.20	0.41
13:CM:56:LEU:HD23	13:CM:57:ARG:N	2.35	0.41
13:CM:92:HIS:CE1	13:CM:98:VAL:HG21	2.55	0.41
17:CQ:65:ILE:HB	17:CQ:69:LYS:HB3	2.03	0.41
25:CY:5:G:N2	25:CY:68:C:N3	2.63	0.41
26:DA:27:G:O2'	26:DA:28:A:OP2	2.36	0.41
26:DA:1885:A:H2'	26:DA:1886:C:O4'	2.20	0.41
26:DA:1905:C:H1'	26:DA:1928:A:H2	1.85	0.41
26:DA:2124:G:N1	26:DA:2174:C:N4	2.34	0.41
26:DA:2519:U:C4	26:DA:2542:A:C5	3.08	0.41
27:DB:108:U:H2'	27:DB:109:C:H5''	2.03	0.41
31:DG:86:MET:HA	31:DG:87:PRO:HD3	1.97	0.41
32:DH:40:GLU:OE1	32:DH:61:HIS:NE2	2.52	0.41
38:DR:26:LYS:HE2	38:DR:70:LEU:O	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DZ:158:PRO:HA	46:DZ:159:PRO:HD3	1.69	0.41
1:AA:295:C:H2'	1:AA:296:U:O4'	2.21	0.41
1:AA:589:C:H5''	8:AH:29:SER:OG	2.20	0.41
1:AA:663:A:H5'	1:AA:836:G:OP1	2.19	0.41
1:AA:977:A:H1'	1:AA:982:U:O4	2.20	0.41
1:AA:1027:C:C2	1:AA:1034:G:C6	3.07	0.41
2:AB:48:MET:HA	2:AB:51:LEU:HD12	2.03	0.41
4:AD:190:ASP:H	4:AD:193:ASP:HB2	1.86	0.41
9:AI:127:LYS:O	9:AI:128:ARG:HG2	2.20	0.41
10:AJ:47:PHE:N	10:AJ:63:PHE:O	2.47	0.41
17:AQ:31:LEU:HD23	17:AQ:32:TYR:CZ	2.56	0.41
23:AW:76:31M:HD2	26:BA:2506:U:O4'	2.20	0.41
24:AX:15:G:H21	24:AX:21:A:H1'	1.84	0.41
25:AY:19:G:C4'	25:AY:57:G:H22	2.33	0.41
26:BA:303:U:H2'	26:BA:304:G:C8	2.55	0.41
26:BA:528:A:C8	26:BA:528:A:H3'	2.54	0.41
26:BA:615:G:OP1	30:BF:40:GLN:NE2	2.53	0.41
26:BA:1963:U:H4'	26:BA:1964:G:OP1	2.20	0.41
26:BA:2698:U:H2'	26:BA:2699:C:C6	2.55	0.41
27:BB:110:G:O2'	27:BB:111:G:H5'	2.20	0.41
32:BH:88:LEU:HD23	32:BH:165:ALA:HA	2.01	0.41
38:BR:57:ARG:HH21	38:BR:62:ALA:HB2	1.85	0.41
46:BZ:105:VAL:O	46:BZ:140:ASP:HA	2.20	0.41
52:B5:35:GLU:HG3	52:B5:51:TYR:CG	2.55	0.41
1:CA:250:A:H4'	1:CA:251:G:O5'	2.18	0.41
1:CA:714:G:H2'	1:CA:715:A:C8	2.55	0.41
1:CA:741:G:H2'	1:CA:742:G:O4'	2.20	0.41
1:CA:1118:C:H2'	1:CA:1119:C:C6	2.56	0.41
1:CA:1240:U:OP2	7:CG:115:ARG:HA	2.19	0.41
5:CE:41:VAL:O	5:CE:66:MET:HA	2.20	0.41
9:CI:77:ILE:O	9:CI:81:ILE:HG22	2.21	0.41
17:CQ:3:LYS:HD3	17:CQ:61:GLU:O	2.20	0.41
26:DA:275:G:H2'	26:DA:276:A:O4'	2.20	0.41
26:DA:784:A:N6	28:DD:229:VAL:HG11	2.35	0.41
26:DA:1008:C:H4'	41:DU:59:ARG:NH2	2.35	0.41
26:DA:1248:G:C5	41:DU:3:ARG:HB2	2.55	0.41
26:DA:1372:U:O5'	26:DA:1372:U:H6	2.03	0.41
26:DA:2172:U:O2'	26:DA:2173:A:P	2.78	0.41
26:DA:2541:A:N7	61:DA:3999:HOH:O	2.37	0.41
32:DH:13:LYS:HA	32:DH:14:GLY:HA2	1.67	0.41
32:DH:86:GLU:CD	32:DH:130:ARG:HD3	2.40	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DQ:45:GLN:CD	37:DQ:45:GLN:H	2.23	0.41
39:DS:83:LYS:HE2	39:DS:83:LYS:HB3	1.90	0.41
42:DV:46:VAL:HG23	42:DV:52:VAL:HG11	2.01	0.41
46:DZ:126:VAL:HG11	46:DZ:161:VAL:CG2	2.41	0.41
1:AA:103:C:OP2	20:AT:14:LYS:NZ	2.44	0.41
1:AA:382:A:H2'	1:AA:383:A:H8	1.85	0.41
1:AA:826:C:H2'	1:AA:827:U:C6	2.56	0.41
1:AA:1122:U:H2'	1:AA:1123:A:O4'	2.21	0.41
2:AB:218:ALA:O	2:AB:222:ILE:HG13	2.20	0.41
4:AD:64:LEU:HB2	4:AD:198:VAL:HG11	2.03	0.41
4:AD:173:TRP:CE3	4:AD:174:LEU:HG	2.54	0.41
10:AJ:81:THR:HA	10:AJ:84:GLN:HB3	2.02	0.41
11:AK:62:GLN:O	11:AK:66:LEU:HG	2.21	0.41
12:AL:34:ARG:HG2	12:AL:35:GLY:N	2.34	0.41
13:AM:91:ARG:HB2	13:AM:98:VAL:HG13	2.03	0.41
19:AS:80:TYR:CZ	19:AS:82:GLY:HA2	2.56	0.41
25:AY:19:G:H4'	25:AY:20:U:OP2	2.19	0.41
25:AY:57:G:N3	25:AY:58:A:H5'	2.35	0.41
26:BA:443:A:H5''	26:BA:444:C:OP1	2.21	0.41
26:BA:601:C:O2'	26:BA:605:C:H5''	2.20	0.41
26:BA:816:C:H2'	26:BA:817:C:C6	2.55	0.41
26:BA:1266:G:O4'	43:BW:15:ARG:NH2	2.50	0.41
26:BA:1403:C:H5''	26:BA:1471:A:H1'	2.01	0.41
26:BA:1750:G:O2'	26:BA:2860:A:N1	2.38	0.41
26:BA:2119:A:C5	26:BA:2171:A:C6	3.08	0.41
26:BA:2564:A:C2	26:BA:2647:U:H4'	2.55	0.41
26:BA:2785:C:H2'	26:BA:2786:U:O4'	2.20	0.41
29:BE:119:ARG:HG2	29:BE:160:TYR:CG	2.56	0.41
33:BI:93:THR:H	33:BI:96:ASP:CG	2.23	0.41
45:BY:15:VAL:HG21	45:BY:42:VAL:HG11	2.02	0.41
49:B2:35:LEU:HB3	49:B2:50:ILE:HG12	2.01	0.41
1:CA:336:C:H2'	1:CA:337:C:C6	2.55	0.41
1:CA:501:C:H2'	1:CA:502:G:H8	1.84	0.41
1:CA:562:C:H1'	12:CL:15:ARG:HB3	2.02	0.41
1:CA:1041:A:H2'	1:CA:1042:G:O4'	2.20	0.41
2:CB:12:GLU:O	2:CB:15:VAL:N	2.50	0.41
2:CB:158:LEU:HA	2:CB:159:PRO:HD3	1.76	0.41
3:CC:28:GLN:HE21	3:CC:28:GLN:HB2	1.59	0.41
7:CG:23:VAL:HG13	7:CG:43:PHE:CE2	2.55	0.41
8:CH:51:VAL:HG12	8:CH:52:ASP:N	2.35	0.41
14:CN:45:ARG:O	14:CN:49:HIS:HD2	2.04	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:8:A:H2'	26:DA:9:U:C6	2.55	0.41
26:DA:752:A:OP1	54:D7:3:ARG:NH2	2.50	0.41
26:DA:1127:A:N7	26:DA:2488:A:O2'	2.47	0.41
26:DA:2867:G:OP2	40:DT:119:LYS:NZ	2.50	0.41
32:DH:27:LYS:HB3	32:DH:27:LYS:HE3	1.82	0.41
33:DI:110:ASP:OD1	33:DI:111:PRO:HD2	2.21	0.41
34:DN:39:ARG:HA	34:DN:40:PRO:HD3	1.80	0.41
35:DO:120:GLU:HG2	35:DO:122:LEU:HG	2.02	0.41
38:DR:21:TYR:OH	38:DR:43:GLU:HG2	2.21	0.41
41:DU:81:HIS:O	41:DU:84:LYS:HB3	2.20	0.41
42:DV:29:PRO:HA	42:DV:61:VAL:HG22	2.02	0.41
47:D0:50:ASN:HB3	47:D0:63:VAL:HG22	2.03	0.41
1:AA:103:C:OP2	20:AT:17:ARG:NH2	2.53	0.41
26:BA:465:G:H2'	26:BA:466:A:C8	2.55	0.41
26:BA:634:C:H2'	26:BA:635:C:C6	2.56	0.41
26:BA:1456:G:OP2	61:BA:4012:HOH:O	2.21	0.41
26:BA:2283:C:H2'	26:BA:2284:C:O4'	2.20	0.41
33:BI:109:ILE:HG23	33:BI:110:ASP:N	2.35	0.41
51:B4:28:LYS:HA	51:B4:29:PRO:HD3	1.84	0.41
1:CA:29:G:O2'	1:CA:295:C:H4'	2.20	0.41
1:CA:723:U:HO2'	1:CA:724:G:H5'	1.85	0.41
1:CA:730:G:C5	1:CA:731:G:H1'	2.55	0.41
1:CA:971:G:N2	1:CA:1363(A):A:OP2	2.51	0.41
1:CA:978:A:C6	1:CA:1319:A:C5	3.08	0.41
1:CA:1173:G:H2'	1:CA:1174:G:C8	2.55	0.41
6:CF:94:GLN:HE22	18:CR:72:ARG:HH12	1.69	0.41
20:CT:72:LEU:HD23	20:CT:72:LEU:HA	1.84	0.41
26:DA:324:A:N6	26:DA:338:G:O2'	2.49	0.41
26:DA:932:G:H4'	26:DA:933:A:O5'	2.19	0.41
26:DA:996:A:H4'	41:DU:91:ASP:OD2	2.19	0.41
26:DA:1024:G:C6	26:DA:1025:G:C6	3.08	0.41
26:DA:1127:A:C2'	26:DA:1128:A:H5''	2.50	0.41
26:DA:1580:A:H8	26:DA:1580:A:OP2	2.03	0.41
26:DA:1882:C:H3'	26:DA:1883:G:H8	1.85	0.41
26:DA:2169:A:C2	26:DA:2170:A:C2	3.08	0.41
26:DA:2550:G:C6	26:DA:2551:C:C4	3.08	0.41
26:DA:2683:C:OP1	40:DT:53:ARG:NH2	2.49	0.41
26:DA:2693:A:H2'	26:DA:2694:G:H8	1.85	0.41
29:DE:169:ASN:HB2	29:DE:203:LYS:HG3	2.03	0.41
30:DF:135:LYS:HE2	30:DF:135:LYS:HA	2.02	0.41
37:DQ:109:VAL:HG13	37:DQ:113:GLN:HB3	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DT:6:LEU:O	40:DT:10:VAL:HG23	2.20	0.41
1:AA:600:C:H2'	1:AA:601:C:H6	1.85	0.41
2:AB:33:TYR:HB2	2:AB:43:ASP:HB2	2.02	0.41
2:AB:77:ALA:CB	2:AB:165:VAL:HG11	2.51	0.41
3:AC:27:LYS:HA	3:AC:27:LYS:HD2	1.76	0.41
4:AD:138:TYR:CE1	4:AD:140:VAL:HA	2.56	0.41
8:AH:33:GLU:HG2	8:AH:48:TYR:CZ	2.56	0.41
10:AJ:27:ALA:HA	10:AJ:81:THR:HG21	2.03	0.41
20:AT:57:ARG:HH22	20:AT:100:ILE:HD12	1.86	0.41
21:AU:6:ARG:O	21:AU:12:LYS:HD2	2.21	0.41
26:BA:719:C:H2'	26:BA:720:C:H6	1.85	0.41
26:BA:1756:G:H4'	26:BA:1758:G:O4'	2.21	0.41
26:BA:2639:A:OP2	61:BA:4129:HOH:O	2.22	0.41
27:BB:6:C:H2'	27:BB:7:G:H5''	2.02	0.41
28:BD:142:VAL:HG13	28:BD:191:ALA:HB1	2.01	0.41
30:BF:183:VAL:O	30:BF:187:VAL:HG23	2.21	0.41
32:BH:13:LYS:HA	32:BH:14:GLY:HA2	1.68	0.41
33:BI:103:ARG:HE	33:BI:103:ARG:HB3	1.53	0.41
34:BN:48:MET:H	34:BN:48:MET:HG3	1.78	0.41
53:B6:9:LEU:HD11	53:B6:23:THR:HG23	2.03	0.41
1:CA:513:C:H2'	1:CA:514:C:O4'	2.19	0.41
1:CA:722:A:C8	1:CA:724:G:H1'	2.55	0.41
1:CA:857:C:H2'	1:CA:858:G:O4'	2.21	0.41
1:CA:942:G:C2	1:CA:1342:C:C2	3.09	0.41
1:CA:983:A:O2'	1:CA:1050:G:OP2	2.33	0.41
1:CA:998:G:H2'	1:CA:999:C:O4'	2.20	0.41
2:CB:130:ARG:HA	2:CB:131:PRO:HD3	1.88	0.41
4:CD:163:GLU:O	4:CD:166:LYS:HG2	2.21	0.41
4:CD:208:SER:OG	5:CE:101:ILE:HD12	2.20	0.41
14:CN:37:PHE:HB3	14:CN:39:LEU:HG	2.03	0.41
20:CT:86:ARG:HB3	20:CT:86:ARG:CZ	2.49	0.41
23:CW:23:A:H2'	23:CW:24:G:C8	2.56	0.41
26:DA:775:G:O3'	61:DA:4253:HOH:O	2.21	0.41
26:DA:869:G:C6	26:DA:870:A:C5	3.08	0.41
26:DA:1021:A:C8	26:DA:1021:A:C3'	3.02	0.41
26:DA:1766:U:H2'	26:DA:1767:C:H6	1.85	0.41
26:DA:2114:A:N1	26:DA:2117:A:N6	2.69	0.41
26:DA:2154:G:N1	26:DA:2155:G:N7	2.69	0.41
27:DB:8:U:H3	27:DB:113:G:H1	1.69	0.41
30:DF:184:TYR:O	30:DF:188:ARG:HG3	2.21	0.41
32:DH:54:ARG:HD3	32:DH:65:HIS:ND1	2.34	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:DI:43:ASN:HD22	33:DI:43:ASN:C	2.24	0.41
35:DO:20:MET:HE3	35:DO:44:LYS:HE3	2.02	0.41
39:DS:65:VAL:O	39:DS:69:VAL:HG12	2.20	0.41
1:AA:37:U:O2'	1:AA:500:G:H4'	2.20	0.41
1:AA:161:A:H8	1:AA:161:A:O5'	2.02	0.41
1:AA:993:G:H2'	1:AA:993:G:N3	2.36	0.41
1:AA:1286:A:H2'	1:AA:1287:A:H4'	2.01	0.41
3:AC:15:THR:CG2	3:AC:181:ASN:HA	2.44	0.41
9:AI:26:VAL:HG22	9:AI:61:ALA:HB3	2.02	0.41
20:AT:46:GLU:O	20:AT:46:GLU:HG2	2.20	0.41
23:AW:13:C:O2'	23:AW:14:A:O5'	2.37	0.41
24:AX:31:G:C8	24:AX:32:5MC:HM52	2.56	0.41
25:AY:38:A:H3'	25:AY:39:PSU:H5'	2.02	0.41
26:BA:271(A):A:N1	26:BA:272(D):G:O2'	2.47	0.41
26:BA:1338:G:N7	44:BX:62:LYS:NZ	2.65	0.41
30:BF:101:LEU:HD12	30:BF:101:LEU:HA	1.84	0.41
30:BF:157:VAL:HG21	30:BF:181:LEU:HD13	2.02	0.41
33:BI:9:LEU:HD22	33:BI:9:LEU:HA	1.79	0.41
36:BP:6:LEU:HD23	36:BP:6:LEU:HA	1.80	0.41
45:BY:5:MET:HE1	45:BY:32:PRO:HA	2.03	0.41
52:B5:16:ARG:NH1	52:B5:17:ASP:OD1	2.50	0.41
1:CA:176:C:H2'	1:CA:177:C:C6	2.55	0.41
3:CC:26:LYS:HB3	3:CC:26:LYS:HE3	1.88	0.41
15:CO:18:PHE:CE2	15:CO:21:ASP:HB2	2.56	0.41
16:CP:17:TYR:HE2	16:CP:41:PRO:HG3	1.86	0.41
23:CW:34:G:H2'	23:CW:35:A:C8	2.56	0.41
26:DA:62:C:N4	26:DA:93:G:H1	2.19	0.41
26:DA:340:A:H2'	26:DA:341:G:O4'	2.20	0.41
26:DA:1498:C:O4'	26:DA:1577:C:H4'	2.21	0.41
26:DA:2025:C:H2'	26:DA:2026:C:C6	2.56	0.41
26:DA:2026:C:H2'	26:DA:2027:G:O4'	2.21	0.41
26:DA:2152:G:C2	26:DA:2153:G:H1'	2.54	0.41
26:DA:2228:G:C6	26:DA:2229:C:C4	3.09	0.41
26:DA:2314:C:H2'	26:DA:2315:G:C8	2.56	0.41
26:DA:2432:A:C6	26:DA:2433:A:C6	3.09	0.41
26:DA:2445:G:OP1	30:DF:74:ARG:NH2	2.45	0.41
27:DB:33:G:C2	27:DB:50:G:C2	3.08	0.41
27:DB:42:C:C4	27:DB:43:C:C4	3.09	0.41
27:DB:119:G:C6	27:DB:120:A:C6	3.09	0.41
31:DG:3:LEU:HD12	31:DG:5:VAL:HG12	2.02	0.41
34:DN:42:TRP:HD1	34:DN:48:MET:HE2	1.86	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DP:55:ARG:HA	61:DP:309:HOH:O	2.21	0.41
39:DS:28:VAL:HG13	39:DS:35:ILE:HD11	2.03	0.41
39:DS:67:ARG:HG2	39:DS:71:ARG:HH11	1.85	0.41
45:DY:65:ALA:HA	45:DY:66:PRO:HD3	1.92	0.41
46:DZ:121:HIS:HB3	46:DZ:123:ASP:O	2.20	0.41
1:AA:109:A:H2'	1:AA:326:G:N2	2.35	0.41
1:AA:358:U:H2'	1:AA:359:U:C6	2.56	0.41
1:AA:519:C:OP2	12:AL:50:SER:OG	2.26	0.41
1:AA:1256:A:N6	1:AA:1278:U:O4'	2.52	0.41
1:AA:1376:U:H2'	1:AA:1377:A:H8	1.86	0.41
2:AB:103:THR:HG23	2:AB:176:GLU:OE1	2.21	0.41
6:AF:97:PHE:HB3	18:AR:32:ARG:HD3	2.01	0.41
15:AO:7:GLU:H	15:AO:7:GLU:HG3	1.65	0.41
15:AO:71:GLN:HA	15:AO:71:GLN:HE21	1.85	0.41
20:AT:54:LYS:HB2	20:AT:100:ILE:HD11	2.03	0.41
25:AY:20:U:H4'	25:AY:21:A:OP1	2.20	0.41
25:AY:59:U:H3'	25:AY:60:U:C5	2.56	0.41
25:AY:70:G:C6	25:AY:71:G:C5	3.09	0.41
26:BA:1203:G:OP2	26:BA:1204:A:O2'	2.28	0.41
26:BA:2061:G:H5''	26:BA:2503:A:C2	2.56	0.41
26:BA:2418:A:H2'	26:BA:2419:U:C6	2.55	0.41
31:BG:14:GLU:O	31:BG:17:PRO:HD2	2.21	0.41
32:BH:3:ARG:HD3	32:BH:54:ARG:HH12	1.85	0.41
36:BP:65:ARG:HD3	36:BP:66:GLY:N	2.36	0.41
48:B1:23:LYS:HB3	48:B1:29:GLY:HA3	2.02	0.41
48:B1:64:ALA:HA	48:B1:67:ILE:HG13	2.02	0.41
54:B7:24:THR:HG22	54:B7:27:GLY:N	2.30	0.41
1:CA:8:A:C6	4:CD:209:ARG:HG3	2.56	0.41
1:CA:1102:A:O3'	2:CB:96:ARG:NH1	2.47	0.41
1:CA:1315:U:H2'	1:CA:1316:G:O4'	2.21	0.41
2:CB:78:GLN:NE2	2:CB:95:GLN:OE1	2.54	0.41
2:CB:145:LEU:O	2:CB:149:LEU:HB2	2.21	0.41
10:CJ:77:PRO:O	10:CJ:81:THR:OG1	2.39	0.41
18:CR:76:LEU:HA	18:CR:76:LEU:HD12	1.81	0.41
23:CW:21:A:N6	23:CW:46:7MG:C4	2.89	0.41
25:CY:64:A:H2'	25:CY:65:G:C8	2.56	0.41
26:DA:117:G:C6	26:DA:119:A:C6	3.09	0.41
26:DA:674:G:H1'	30:DF:74:ARG:HD3	2.03	0.41
26:DA:1449:A:C2	26:DA:1529:G:H1'	2.55	0.41
26:DA:2070:G:H2'	26:DA:2071:A:C8	2.56	0.41
26:DA:2185:C:H2'	26:DA:2186:G:O4'	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:2395:C:O2'	48:D1:30:VAL:HG22	2.21	0.41
31:DG:58:GLN:HA	31:DG:58:GLN:OE1	2.21	0.41
37:DQ:58:PHE:CZ	37:DQ:109:VAL:HG21	2.55	0.41
41:DU:85:LYS:HB3	41:DU:85:LYS:HE2	1.77	0.41
51:D4:62:ARG:HB2	51:D4:63:TYR:CE1	2.55	0.41
52:D5:47:PRO:HG2	52:D5:48:GLU:OE1	2.21	0.41
1:AA:115:G:H4'	1:AA:116:A:O5'	2.20	0.41
1:AA:192:U:O3'	20:AT:57:ARG:HD2	2.20	0.41
1:AA:277:C:H5''	17:AQ:68:ARG:HH22	1.86	0.41
1:AA:551:U:H2'	1:AA:552:U:C6	2.55	0.41
1:AA:1278:U:H3'	1:AA:1278:U:H6	1.85	0.41
1:AA:1324:A:O4'	1:AA:1362:C:H4'	2.21	0.41
1:AA:1422:G:C5'	35:BO:48:PRO:HB3	2.44	0.41
4:AD:88:VAL:HG22	5:AE:97:GLY:HA2	2.01	0.41
4:AD:157:LEU:HD23	4:AD:161:ASN:HD21	1.85	0.41
6:AF:36:ARG:HB3	6:AF:36:ARG:NH1	2.36	0.41
6:AF:97:PHE:CB	18:AR:32:ARG:HD3	2.51	0.41
7:AG:104:LEU:HD13	7:AG:104:LEU:HA	1.96	0.41
9:AI:49:PRO:HG3	9:AI:101:PHE:HD2	1.86	0.41
20:AT:10:LEU:HD13	20:AT:12:ALA:HB2	2.01	0.41
24:AX:76:A:OP2	61:AX:3106:HOH:O	2.20	0.41
25:AY:21:A:H4'	25:AY:22:G:OP1	2.21	0.41
25:AY:58:A:H8	25:AY:58:A:H2'	1.72	0.41
25:AY:69:G:H2'	25:AY:70:G:O4'	2.21	0.41
26:BA:86:C:H4'	26:BA:104:U:H1'	2.03	0.41
26:BA:100:G:H3'	26:BA:102:G:C5'	2.50	0.41
26:BA:528:A:C3'	26:BA:529:A:H5''	2.51	0.41
26:BA:687:C:H42	26:BA:787:U:H4'	1.86	0.41
26:BA:947:G:H2'	26:BA:948:G:C8	2.56	0.41
26:BA:1033:U:OP1	56:B9:9:ARG:NH2	2.54	0.41
26:BA:1047:G:O2'	26:BA:1048:A:H8	2.03	0.41
26:BA:1170:G:C2	26:BA:1171:G:H1'	2.55	0.41
26:BA:1550:C:H4'	26:BA:1743:C:O2	2.21	0.41
26:BA:2065:C:H2'	26:BA:2066:C:C6	2.56	0.41
26:BA:2114:A:H2'	26:BA:2115:G:O4'	2.20	0.41
26:BA:2570:G:H2'	26:BA:2571:C:O4'	2.21	0.41
26:BA:2729:G:H2'	26:BA:2730:C:O4'	2.21	0.41
26:BA:2857:G:N2	26:BA:2860:A:OP2	2.43	0.41
28:BD:121:PRO:HB3	28:BD:135:PHE:CE2	2.56	0.41
28:BD:264:LYS:HA	28:BD:265:PRO:HD3	1.92	0.41
30:BF:11:VAL:HB	30:BF:18:ARG:HB3	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BO:86:ILE:HG22	35:BO:94:ARG:HG3	2.03	0.41
41:BU:58:ARG:HA	41:BU:61:TRP:CE3	2.56	0.41
1:CA:429:U:H1'	1:CA:430:A:H5''	2.03	0.41
1:CA:447:G:O6	1:CA:485:G:O2'	2.19	0.41
1:CA:1002:G:C2	1:CA:1003:G:C8	3.09	0.41
1:CA:1003:G:C6	1:CA:1004:A:C2	3.09	0.41
1:CA:1015:A:H2'	1:CA:1016:A:C8	2.56	0.41
1:CA:1029:C:N3	1:CA:1032:G:C2	2.89	0.41
1:CA:1133:G:H2'	1:CA:1134:G:O4'	2.20	0.41
1:CA:1198:G:H2'	1:CA:1199:U:C6	2.56	0.41
1:CA:1243:C:H2'	1:CA:1244:C:H6	1.85	0.41
1:CA:1492:A:H2'	1:CA:1493:A:C5	2.55	0.41
1:CA:1511:G:H2'	1:CA:1512:U:O4'	2.21	0.41
2:CB:48:MET:O	2:CB:52:GLU:N	2.37	0.41
2:CB:100:GLY:O	2:CB:104:ASN:N	2.49	0.41
2:CB:112:VAL:O	2:CB:116:GLU:HB2	2.21	0.41
2:CB:188:ALA:HB1	2:CB:192:SER:OG	2.21	0.41
9:CI:56:LEU:HD23	9:CI:56:LEU:HA	1.86	0.41
24:CX:31:G:C8	24:CX:32:5MC:HM52	2.56	0.41
25:CY:8:4SU:S4	25:CY:14:A:C8	3.13	0.41
26:DA:446:G:OP1	41:DU:3:ARG:NH1	2.52	0.41
26:DA:516:C:H1'	26:DA:1261:C:O2'	2.21	0.41
26:DA:571:A:H5'	26:DA:2030:A:N7	2.36	0.41
26:DA:821:A:H2'	26:DA:946:G:H5''	2.02	0.41
26:DA:921:G:C6	26:DA:922:U:C4	3.09	0.41
26:DA:1268:A:C2	26:DA:2013:A:C4	3.09	0.41
26:DA:1283:G:O2'	26:DA:1285:G:N7	2.44	0.41
26:DA:1910:G:H2'	26:DA:1911:U:H6	1.85	0.41
26:DA:2113:U:N3	26:DA:2114:A:N7	2.69	0.41
26:DA:2133:G:O2'	26:DA:2134:A:P	2.79	0.41
26:DA:2275:C:H6	26:DA:2275:C:H5'	1.86	0.41
26:DA:2761:G:H2'	26:DA:2761:G:N3	2.35	0.41
26:DA:2803:C:H2'	26:DA:2804:C:C6	2.53	0.41
27:DB:24:G:H4'	27:DB:25:A:N7	2.36	0.41
29:DE:46:ALA:HB2	29:DE:82:ARG:HA	2.02	0.41
31:DG:101:ILE:O	31:DG:104:GLU:HB3	2.20	0.41
31:DG:108:ASN:O	31:DG:112:PRO:HG2	2.21	0.41
32:DH:95:ARG:HE	32:DH:95:ARG:HB3	1.77	0.41
37:DQ:29:PHE:HB2	37:DQ:105:GLU:OE2	2.21	0.41
38:DR:28:LEU:HD23	38:DR:28:LEU:HA	1.93	0.41
39:DS:4:LEU:HA	39:DS:4:LEU:HD23	1.76	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DU:61:TRP:CH2	41:DU:93:LYS:HB2	2.56	0.41
44:DX:57:LEU:HD22	44:DX:78:LYS:HG2	2.03	0.41
46:DZ:138:GLU:H	46:DZ:156:LYS:HE2	1.85	0.41
1:AA:1003:G:N2	1:AA:1004:A:N3	2.69	0.41
1:AA:1075:C:C2'	1:AA:1076:C:H5''	2.51	0.41
6:AF:19:LEU:HD11	6:AF:59:TYR:CZ	2.56	0.41
25:AY:21:A:H8	25:AY:21:A:OP2	2.04	0.41
26:BA:719:C:H2'	26:BA:720:C:C6	2.56	0.41
26:BA:887:A:H4'	26:BA:888:C:H5	1.82	0.41
26:BA:1359:A:C2	26:BA:1372:U:O4	2.74	0.41
26:BA:2893:G:H4'	26:BA:2894:G:O5'	2.21	0.41
31:BG:125:PHE:HB3	31:BG:166:ASP:OD1	2.20	0.41
34:BN:138:LEU:HA	34:BN:138:LEU:HD23	1.81	0.41
44:BX:88:LYS:HB3	44:BX:88:LYS:HE3	1.87	0.41
1:CA:344:A:H4'	1:CA:345:C:OP2	2.21	0.41
1:CA:436:C:H2'	1:CA:437:U:H6	1.86	0.41
1:CA:609:A:C5	1:CA:610:G:C8	3.09	0.41
1:CA:946:A:H2'	1:CA:947:G:C8	2.56	0.41
1:CA:1030(A):G:N2	1:CA:1030(C):G:H8	2.19	0.41
1:CA:1030(A):G:H2'	1:CA:1030(C):G:OP2	2.20	0.41
1:CA:1053:G:H4'	1:CA:1054:C:H5'	2.03	0.41
4:CD:18:LYS:HE3	4:CD:20:TYR:CE1	2.55	0.41
4:CD:33:MET:O	4:CD:37:PRO:HB3	2.20	0.41
6:CF:100:ASN:ND2	18:CR:23:LYS:HE3	2.36	0.41
7:CG:24:THR:O	7:CG:27:ILE:HB	2.21	0.41
10:CJ:6:ILE:N	10:CJ:72:VAL:O	2.36	0.41
14:CN:37:PHE:CE2	14:CN:53:LEU:HD22	2.56	0.41
26:DA:41:C:H2'	26:DA:42:G:C8	2.56	0.41
26:DA:649:G:H4'	55:D8:46:ARG:HH22	1.86	0.41
26:DA:753:C:OP2	26:DA:753:C:H6	2.03	0.41
26:DA:966:G:H2'	26:DA:967:C:C6	2.55	0.41
26:DA:1161:C:H2'	26:DA:1162:G:H8	1.86	0.41
26:DA:2193:G:H2'	26:DA:2194:G:C8	2.56	0.41
26:DA:2706:G:H2'	26:DA:2707:G:O4'	2.21	0.41
33:DI:83:ALA:CB	33:DI:123:LEU:HD21	2.50	0.41
33:DI:86:THR:O	33:DI:123:LEU:HD23	2.21	0.41
35:DO:98:VAL:HG11	35:DO:114:ILE:HG23	2.02	0.41
36:DP:47:ASP:HA	36:DP:48:PRO:HD3	1.85	0.41
38:DR:38:VAL:HG12	38:DR:42:LYS:HE3	2.03	0.41
38:DR:38:VAL:HB	38:DR:39:PRO:HD3	2.03	0.41
44:DX:35:THR:HG22	44:DX:37:THR:N	2.36	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DZ:120:ILE:HD11	46:DZ:173:ALA:CB	2.51	0.41
56:D9:17:ILE:HD12	56:D9:17:ILE:HA	1.92	0.41
1:AA:319:G:H1	1:AA:334:C:H42	1.69	0.40
1:AA:1020:U:H2'	1:AA:1021:G:C8	2.56	0.40
1:AA:1152:A:OP1	10:AJ:68:HIS:ND1	2.52	0.40
2:AB:21:ARG:NH2	2:AB:23:ARG:HE	2.19	0.40
3:AC:52:LEU:HD11	3:AC:55:VAL:HG23	2.02	0.40
4:AD:120:LEU:HD23	4:AD:120:LEU:HA	1.82	0.40
4:AD:178:VAL:HG12	4:AD:179:GLU:H	1.86	0.40
25:AY:6:G:C6	25:AY:7:A:C5	3.08	0.40
26:BA:614:U:H5'	26:BA:614(C):A:N6	2.35	0.40
26:BA:1185:C:H5''	26:BA:1186:G:OP1	2.20	0.40
26:BA:1266:G:O5'	43:BW:15:ARG:NH2	2.54	0.40
26:BA:2113:U:C4	26:BA:2114:A:N7	2.89	0.40
26:BA:2282:G:OP1	26:BA:2283:C:H1'	2.21	0.40
26:BA:2804:C:H2'	26:BA:2805:G:O4'	2.21	0.40
31:BG:14:GLU:C	31:BG:17:PRO:HD2	2.42	0.40
46:BZ:92:SER:OG	46:BZ:93:ASP:N	2.55	0.40
46:BZ:146:ILE:HA	46:BZ:147:GLY:HA2	1.77	0.40
1:CA:19:C:H5''	5:CE:86:ALA:HB3	2.03	0.40
1:CA:64:G:H4'	1:CA:65:U:H3'	2.02	0.40
1:CA:690:G:O5'	1:CA:690:G:H8	2.04	0.40
1:CA:861:G:OP1	8:CH:75:ARG:NH2	2.54	0.40
1:CA:1134:G:H2'	1:CA:1134:G:N3	2.35	0.40
1:CA:1243:C:H2'	1:CA:1244:C:C6	2.56	0.40
1:CA:1497:G:HO2'	1:CA:1518:A:H2	1.62	0.40
5:CE:31:LEU:HD23	5:CE:31:LEU:HA	1.86	0.40
7:CG:14:PRO:HG3	7:CG:21:VAL:HG13	2.03	0.40
11:CK:93:GLN:HA	11:CK:93:GLN:HE21	1.86	0.40
23:CW:27:G:H2'	23:CW:28:G:C8	2.56	0.40
26:DA:225:A:N6	26:DA:226:G:C2	2.89	0.40
26:DA:299:A:H5''	45:DY:86:ARG:NH2	2.36	0.40
26:DA:478:A:N1	26:DA:500:G:H4'	2.35	0.40
26:DA:1309:G:H3'	54:D7:9:ARG:NH1	2.36	0.40
26:DA:1336:A:H2'	26:DA:1337:G:C8	2.56	0.40
26:DA:1853:A:N1	26:DA:2087:G:H1'	2.37	0.40
26:DA:2262:U:H4'	26:DA:2328:A:C2	2.57	0.40
26:DA:2849:U:O4	40:DT:23:ARG:NH2	2.43	0.40
26:DA:2849:U:H4'	26:DA:2868:A:C2	2.55	0.40
27:DB:78:A:C2	27:DB:100:A:C4	3.09	0.40
40:DT:108:ARG:HG2	40:DT:111:ARG:NH1	2.32	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DV:52:VAL:CG2	42:DV:55:ALA:HB3	2.51	0.40
46:DZ:161:VAL:O	46:DZ:161:VAL:HG13	2.20	0.40
1:AA:613:C:H2'	1:AA:614:A:C8	2.55	0.40
1:AA:955:U:O2'	19:AS:83:HIS:HD2	2.03	0.40
1:AA:1223:C:P	19:AS:78:ARG:HH21	2.44	0.40
2:AB:118:LEU:HD23	2:AB:118:LEU:HA	1.84	0.40
8:AH:39:LEU:HA	8:AH:39:LEU:HD12	1.86	0.40
9:AI:50:LEU:HB2	9:AI:55:ALA:HB3	2.04	0.40
15:AO:7:GLU:O	15:AO:11:VAL:HG23	2.21	0.40
18:AR:59:SER:OG	18:AR:62:GLU:HG2	2.22	0.40
20:AT:92:LEU:O	20:AT:96:GLY:HA2	2.22	0.40
25:AY:36:A:C6	25:AY:37:MIA:C5	3.03	0.40
26:BA:817:C:H4'	26:BA:932:G:C5	2.56	0.40
26:BA:828:U:C5	26:BA:2247:A:H4'	2.56	0.40
26:BA:1161:C:O2'	42:BV:8:GLY:HA2	2.21	0.40
26:BA:1223:G:N2	26:BA:1226:A:OP2	2.47	0.40
26:BA:1805:U:O2	28:BD:50:THR:HB	2.21	0.40
26:BA:2278:A:OP1	37:BQ:11:LYS:HD2	2.22	0.40
28:BD:180:GLY:HA3	28:BD:275:LYS:HB2	2.03	0.40
30:BF:150:GLY:HA2	30:BF:172:TRP:CE3	2.56	0.40
49:B2:23:LYS:O	49:B2:27:GLU:HG3	2.21	0.40
51:B4:16:CYS:SG	51:B4:17:GLY:N	2.94	0.40
53:B6:14:THR:HB	53:B6:48:VAL:O	2.22	0.40
54:B7:8:ASN:HB3	54:B7:11:LYS:HB3	2.02	0.40
1:CA:149:A:H2'	1:CA:150:C:C6	2.56	0.40
1:CA:993:G:O2'	1:CA:994:A:N7	2.51	0.40
1:CA:1277:C:O2'	1:CA:1279:A:C8	2.66	0.40
1:CA:1414:U:H3	1:CA:1486:G:H1	1.68	0.40
2:CB:219:VAL:O	2:CB:222:ILE:HG12	2.21	0.40
4:CD:22:LYS:HB2	4:CD:26:CYS:SG	2.60	0.40
7:CG:65:ALA:HB1	7:CG:127:ALA:HB3	2.02	0.40
8:CH:69:ARG:NH2	8:CH:75:ARG:O	2.53	0.40
14:CN:23:ARG:HG3	14:CN:28:GLY:O	2.21	0.40
19:CS:69:HIS:HD2	19:CS:73:GLU:OE1	2.05	0.40
22:CV:14:A:C2	25:CY:34:G:C2	3.10	0.40
23:CW:9:A:OP2	23:CW:13:C:N4	2.47	0.40
24:CX:2:G:H5'	57:CX:3002:MG:MG	1.46	0.40
24:CX:43:A:H2'	24:CX:44:A:C8	2.56	0.40
26:DA:565:C:H2'	26:DA:566:U:O4'	2.20	0.40
26:DA:820:A:N3	26:DA:943:U:H4'	2.36	0.40
26:DA:1394:U:C4	26:DA:1395:A:C5	3.10	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:DB:33:G:C6	27:DB:34:U:N3	2.89	0.40
27:DB:42:C:O2'	31:DG:66:GLN:HG2	2.21	0.40
27:DB:110:G:O2'	27:DB:111:G:H5'	2.21	0.40
29:DE:30:PRO:HD3	29:DE:180:ASN:ND2	2.35	0.40
30:DF:59:TYR:HE2	30:DF:85:GLY:O	2.04	0.40
30:DF:93:LYS:HA	30:DF:93:LYS:HD3	1.86	0.40
31:DG:125:PHE:HB3	31:DG:166:ASP:CG	2.42	0.40
35:DO:47:ILE:HB	35:DO:48:PRO:HD2	2.04	0.40
38:DR:38:VAL:HG22	38:DR:112:ALA:HB2	2.03	0.40
38:DR:63:ARG:O	38:DR:67:LEU:HB2	2.22	0.40
1:AA:189(F):U:C2	17:AQ:72:ARG:NH2	2.90	0.40
1:AA:271:C:H2'	1:AA:272:C:H6	1.87	0.40
1:AA:542:G:O3'	4:AD:14:ARG:NH2	2.53	0.40
1:AA:936:C:H2'	1:AA:937:A:O4'	2.20	0.40
1:AA:1272:G:H2'	1:AA:1273:G:O4'	2.22	0.40
3:AC:121:ALA:HB1	3:AC:189:ALA:HB2	2.04	0.40
4:AD:11:LEU:HG	4:AD:66:ARG:HD3	2.03	0.40
9:AI:33:PHE:HD1	9:AI:34:ASN:ND2	2.20	0.40
10:AJ:90:LEU:HA	10:AJ:91:PRO:HD3	1.92	0.40
20:AT:56:MET:HE3	20:AT:88:VAL:HG21	2.03	0.40
25:AY:58:A:O2'	25:AY:60:U:OP2	2.29	0.40
26:BA:570:G:H2'	26:BA:2030:A:N7	2.37	0.40
26:BA:923:C:H2'	26:BA:924:C:C6	2.56	0.40
26:BA:1174:A:H1'	26:BA:1175:U:C5'	2.50	0.40
26:BA:2274:A:C5	26:BA:2276:G:C8	3.10	0.40
26:BA:2615:U:H2'	26:BA:2616:C:C6	2.56	0.40
28:BD:4:LYS:HB3	28:BD:18:VAL:HG23	2.04	0.40
47:B0:50:ASN:HB3	47:B0:63:VAL:HG22	2.02	0.40
1:CA:453:A:H4'	16:CP:72:ARG:HG3	2.02	0.40
1:CA:630:G:O2'	1:CA:631:G:H5'	2.21	0.40
1:CA:697:U:H2'	1:CA:698:G:H5'	2.04	0.40
1:CA:828:A:OP1	1:CA:828:A:H4'	2.21	0.40
1:CA:1084:G:H1'	1:CA:1102:A:N7	2.36	0.40
1:CA:1286:A:H3'	1:CA:1286:A:H8	1.85	0.40
2:CB:28:PHE:O	2:CB:32:ILE:HG13	2.21	0.40
3:CC:29:TYR:CZ	14:CN:54:PRO:HG2	2.57	0.40
4:CD:108:LEU:HB3	4:CD:110:PHE:CE1	2.56	0.40
7:CG:26:PHE:HE1	7:CG:30:ILE:HD11	1.87	0.40
12:CL:27:LEU:HD23	12:CL:30:ALA:O	2.22	0.40
26:DA:234:C:H2'	26:DA:235:U:H6	1.87	0.40
26:DA:856:C:H2'	26:DA:857:C:C6	2.56	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DA:866:A:C6	26:DA:914:C:C5	3.10	0.40
26:DA:1014:U:H2'	26:DA:1015:G:C8	2.55	0.40
26:DA:1611:C:C2'	26:DA:1612:C:H5'	2.50	0.40
26:DA:1669:A:H5''	26:DA:2550:G:OP1	2.21	0.40
26:DA:2022:U:OP2	52:D5:15:ARG:NH2	2.54	0.40
26:DA:2155:G:C2'	26:DA:2156:G:H5'	2.52	0.40
29:DE:85:ASN:HA	29:DE:86:PRO:HD2	1.84	0.40
31:DG:115:ARG:HG2	31:DG:136:ARG:HH21	1.85	0.40
33:DI:92:VAL:HG22	33:DI:120:ILE:HB	2.03	0.40
34:DN:60:ILE:HG13	34:DN:61:ARG:N	2.36	0.40
42:DV:24:LYS:HA	42:DV:92:THR:OG1	2.21	0.40
46:DZ:79:ARG:HB2	46:DZ:80:ARG:NH1	2.36	0.40
51:D4:62:ARG:HD3	51:D4:62:ARG:N	2.35	0.40
52:D5:49:CYS:SG	52:D5:51:TYR:HB2	2.61	0.40
1:AA:148:G:H2'	1:AA:149:A:C8	2.50	0.40
1:AA:390:C:H2'	1:AA:391:G:C8	2.56	0.40
1:AA:933:G:O6	7:AG:3:ARG:NH2	2.52	0.40
1:AA:1024:G:H2'	1:AA:1025:U:H5'	2.04	0.40
2:AB:8:LYS:H	2:AB:8:LYS:HG2	1.51	0.40
2:AB:19:HIS:CG	2:AB:20:GLU:H	2.39	0.40
7:AG:14:PRO:HG3	7:AG:21:VAL:HG13	2.03	0.40
10:AJ:26:ALA:O	10:AJ:30:SER:OG	2.39	0.40
13:AM:88:ARG:HG3	13:AM:98:VAL:CG1	2.52	0.40
13:AM:97:PRO:HG2	13:AM:103:THR:HG22	2.04	0.40
19:AS:15:LEU:O	19:AS:19:VAL:HG23	2.21	0.40
19:AS:69:HIS:HD2	19:AS:73:GLU:OE1	2.05	0.40
24:AX:19:G:H5''	24:AX:60:U:O4	2.21	0.40
26:BA:589:C:H2'	26:BA:590:A:C8	2.56	0.40
26:BA:1406:U:H2'	26:BA:1407:C:H6	1.86	0.40
26:BA:2070:G:H2'	26:BA:2071:A:C8	2.57	0.40
26:BA:2355:C:H5'	61:BA:3944:HOH:O	2.22	0.40
26:BA:2398:U:H2'	26:BA:2399:G:C8	2.57	0.40
28:BD:19:ALA:HB3	28:BD:21:PHE:CE1	2.56	0.40
30:BF:64:ILE:HG13	30:BF:65:TRP:N	2.37	0.40
42:BV:49:THR:O	42:BV:49:THR:HG22	2.21	0.40
44:BX:94:GLY:N	44:BX:95:LEU:HA	2.36	0.40
45:BY:83:THR:HG21	45:BY:99:CYS:HB2	2.02	0.40
52:B5:35:GLU:HG3	52:B5:51:TYR:CD2	2.57	0.40
1:CA:57:G:H2'	1:CA:58:C:C6	2.57	0.40
1:CA:1075:C:H42	1:CA:1082:G:H1	1.68	0.40
1:CA:1164:G:O2'	1:CA:1165:C:H5'	2.22	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1226:C:H4'	19:CS:80:TYR:CZ	2.57	0.40
1:CA:1360:A:H2'	1:CA:1361:G:O4'	2.21	0.40
1:CA:1429:C:H2'	1:CA:1430:C:C6	2.57	0.40
1:CA:1479:C:H2'	1:CA:1480:G:C8	2.56	0.40
2:CB:16:HIS:ND1	2:CB:17:PHE:N	2.68	0.40
2:CB:53:ARG:HB3	2:CB:53:ARG:CZ	2.50	0.40
3:CC:109:PRO:HB3	3:CC:115:LEU:HD23	2.03	0.40
3:CC:178:LEU:HD13	3:CC:178:LEU:HA	1.93	0.40
8:CH:25:ASP:N	8:CH:25:ASP:OD1	2.55	0.40
8:CH:119:LEU:HB3	8:CH:123:GLU:CB	2.51	0.40
9:CI:23:ASN:HD22	9:CI:24:GLY:N	2.20	0.40
24:CX:12:G:H4'	26:DA:1908:C:O2	2.21	0.40
26:DA:335:C:H4'	45:DY:73:ARG:NE	2.37	0.40
26:DA:428:A:H3'	26:DA:429:A:H8	1.87	0.40
26:DA:443:A:H5''	26:DA:444:C:OP1	2.21	0.40
26:DA:570:G:H2'	26:DA:2030:A:C5	2.56	0.40
26:DA:892:G:H2'	26:DA:893:C:C4'	2.52	0.40
26:DA:996:A:O3'	41:DU:91:ASP:HB2	2.22	0.40
26:DA:1486:A:O2'	26:DA:1487:G:H5'	2.21	0.40
26:DA:2174:C:O2	26:DA:2174:C:H2'	2.21	0.40
26:DA:2462:U:H2'	26:DA:2463:C:C6	2.56	0.40
26:DA:2741:A:H2'	26:DA:2742:C:O4'	2.21	0.40
26:DA:2756:U:H1'	26:DA:2757:A:H5''	2.02	0.40
31:DG:31:VAL:HA	31:DG:32:PRO:HD2	1.72	0.40
36:DP:84:ASN:OD1	36:DP:117:GLU:HB2	2.20	0.40
40:DT:94:ALA:HB1	40:DT:99:LEU:HD21	2.02	0.40
48:D1:5:CYS:SG	48:D1:62:VAL:HG23	2.62	0.40
49:D2:64:LEU:O	49:D2:68:ARG:HG3	2.22	0.40
50:D3:23:LEU:HD13	50:D3:50:VAL:HG11	2.02	0.40
1:AA:512:U:H2'	1:AA:513:C:C6	2.56	0.40
1:AA:1002:G:C6	1:AA:1003:G:C2	3.10	0.40
1:AA:1151:A:O2'	1:AA:1152:A:H8	2.05	0.40
2:AB:215:LEU:HD23	2:AB:215:LEU:HA	1.79	0.40
3:AC:82:GLU:HA	3:AC:85:ARG:CZ	2.51	0.40
4:AD:18:LYS:HE3	4:AD:20:TYR:CZ	2.56	0.40
6:AF:22:GLU:O	6:AF:26:ILE:HG13	2.22	0.40
6:AF:55:ASP:HA	6:AF:56:PRO:HD2	1.98	0.40
13:AM:39:ILE:HG13	13:AM:56:LEU:HD12	2.03	0.40
25:AY:26:A:N1	25:AY:44:G:N2	2.54	0.40
26:BA:370:G:H4'	26:BA:371:A:OP2	2.21	0.40
26:BA:674:G:O2'	30:BF:74:ARG:HD3	2.22	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BF:106:ARG:H	30:BF:106:ARG:HG2	1.70	0.40
1:CA:243:A:C2	1:CA:246:A:C8	3.10	0.40
1:CA:1154:G:O6	1:CA:1155:G:C6	2.75	0.40
1:CA:1350:A:OP1	9:CI:121:ARG:HD3	2.21	0.40
1:CA:1367:C:O2'	10:CJ:62:HIS:HE1	2.04	0.40
1:CA:1496:C:H2'	1:CA:1497:G:O4'	2.20	0.40
2:CB:28:PHE:CD2	2:CB:190:THR:HA	2.56	0.40
7:CG:52:GLU:H	7:CG:52:GLU:HG2	1.62	0.40
14:CN:9:LYS:HG3	14:CN:12:ARG:HH11	1.86	0.40
24:CX:66:C:H2'	24:CX:67:C:O4'	2.22	0.40
25:CY:29:G:N1	25:CY:41:C:N4	2.69	0.40
26:DA:56:A:H2'	26:DA:57:C:O4'	2.22	0.40
26:DA:305:U:H2'	26:DA:306:U:C6	2.56	0.40
26:DA:832:G:H5'	36:DP:45:LEU:HD21	2.04	0.40
26:DA:933:A:H2'	26:DA:934:G:O4'	2.22	0.40
26:DA:1001:A:H2'	26:DA:1002:G:O4'	2.21	0.40
26:DA:1221(A):C:C2	26:DA:1229:G:C2	3.09	0.40
26:DA:1241:A:O2'	26:DA:1242:A:H5'	2.21	0.40
26:DA:2294:C:P	39:DS:89:ARG:HH22	2.44	0.40
26:DA:2507:C:H2'	26:DA:2508:G:O4'	2.22	0.40
34:DN:115:ARG:HA	34:DN:118:LYS:HE3	2.02	0.40
46:DZ:171:ILE:H	46:DZ:171:ILE:HG13	1.65	0.40
50:D3:10:LYS:HB3	50:D3:53:LEU:HA	2.02	0.40
51:D4:28:LYS:HA	51:D4:29:PRO:HD3	1.84	0.40

There are no symmetry-related clashes.

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	229/256 (90%)	208 (91%)	14 (6%)	7 (3%)	4 3

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	CB	229/256 (90%)	206 (90%)	16 (7%)	7 (3%)	4	3
3	AC	204/239 (85%)	195 (96%)	8 (4%)	1 (0%)	29	40
3	CC	204/239 (85%)	189 (93%)	15 (7%)	0	100	100
4	AD	206/209 (99%)	197 (96%)	7 (3%)	2 (1%)	15	22
4	CD	206/209 (99%)	196 (95%)	9 (4%)	1 (0%)	29	40
5	AE	146/162 (90%)	142 (97%)	4 (3%)	0	100	100
5	CE	146/162 (90%)	140 (96%)	6 (4%)	0	100	100
6	AF	98/101 (97%)	97 (99%)	1 (1%)	0	100	100
6	CF	98/101 (97%)	97 (99%)	1 (1%)	0	100	100
7	AG	153/156 (98%)	144 (94%)	5 (3%)	4 (3%)	5	5
7	CG	153/156 (98%)	144 (94%)	8 (5%)	1 (1%)	22	30
8	AH	135/138 (98%)	134 (99%)	1 (1%)	0	100	100
8	CH	135/138 (98%)	132 (98%)	3 (2%)	0	100	100
9	AI	125/128 (98%)	117 (94%)	8 (6%)	0	100	100
9	CI	125/128 (98%)	119 (95%)	5 (4%)	1 (1%)	19	27
10	AJ	95/105 (90%)	85 (90%)	6 (6%)	4 (4%)	3	1
10	CJ	94/105 (90%)	85 (90%)	4 (4%)	5 (5%)	2	0
11	AK	112/129 (87%)	104 (93%)	6 (5%)	2 (2%)	8	10
11	CK	112/129 (87%)	103 (92%)	7 (6%)	2 (2%)	8	10
12	AL	120/132 (91%)	117 (98%)	3 (2%)	0	100	100
12	CL	120/132 (91%)	118 (98%)	2 (2%)	0	100	100
13	AM	121/126 (96%)	116 (96%)	5 (4%)	0	100	100
13	CM	120/126 (95%)	113 (94%)	7 (6%)	0	100	100
14	AN	58/61 (95%)	56 (97%)	2 (3%)	0	100	100
14	CN	58/61 (95%)	56 (97%)	2 (3%)	0	100	100
15	AO	86/89 (97%)	82 (95%)	4 (5%)	0	100	100
15	CO	86/89 (97%)	83 (96%)	3 (4%)	0	100	100
16	AP	80/88 (91%)	79 (99%)	1 (1%)	0	100	100
16	CP	80/88 (91%)	78 (98%)	1 (1%)	1 (1%)	12	16
17	AQ	97/105 (92%)	93 (96%)	4 (4%)	0	100	100
17	CQ	97/105 (92%)	93 (96%)	4 (4%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
18	AR	66/88 (75%)	65 (98%)	1 (2%)	0	100	100
18	CR	66/88 (75%)	65 (98%)	1 (2%)	0	100	100
19	AS	81/93 (87%)	73 (90%)	7 (9%)	1 (1%)	13	17
19	CS	81/93 (87%)	72 (89%)	9 (11%)	0	100	100
20	AT	94/106 (89%)	87 (93%)	3 (3%)	4 (4%)	2	1
20	CT	94/106 (89%)	88 (94%)	3 (3%)	3 (3%)	4	3
21	AU	21/27 (78%)	20 (95%)	1 (5%)	0	100	100
21	CU	21/27 (78%)	20 (95%)	1 (5%)	0	100	100
28	BD	273/276 (99%)	264 (97%)	8 (3%)	1 (0%)	34	46
28	DD	273/276 (99%)	263 (96%)	8 (3%)	2 (1%)	22	30
29	BE	202/206 (98%)	196 (97%)	5 (2%)	1 (0%)	29	40
29	DE	202/206 (98%)	196 (97%)	4 (2%)	2 (1%)	15	22
30	BF	201/210 (96%)	200 (100%)	0	1 (0%)	29	40
30	DF	201/210 (96%)	199 (99%)	0	2 (1%)	15	22
31	BG	179/182 (98%)	170 (95%)	8 (4%)	1 (1%)	25	34
31	DG	179/182 (98%)	171 (96%)	5 (3%)	3 (2%)	9	11
32	BH	172/180 (96%)	168 (98%)	3 (2%)	1 (1%)	25	34
32	DH	172/180 (96%)	166 (96%)	5 (3%)	1 (1%)	25	34
33	BI	144/148 (97%)	130 (90%)	11 (8%)	3 (2%)	7	7
33	DI	144/148 (97%)	133 (92%)	10 (7%)	1 (1%)	22	30
34	BN	138/140 (99%)	136 (99%)	2 (1%)	0	100	100
34	DN	138/140 (99%)	135 (98%)	2 (1%)	1 (1%)	22	30
35	BO	120/122 (98%)	114 (95%)	6 (5%)	0	100	100
35	DO	120/122 (98%)	116 (97%)	4 (3%)	0	100	100
36	BP	147/150 (98%)	140 (95%)	6 (4%)	1 (1%)	22	30
36	DP	147/150 (98%)	138 (94%)	7 (5%)	2 (1%)	11	15
37	BQ	139/141 (99%)	135 (97%)	4 (3%)	0	100	100
37	DQ	139/141 (99%)	134 (96%)	4 (3%)	1 (1%)	22	30
38	BR	116/118 (98%)	111 (96%)	5 (4%)	0	100	100
38	DR	116/118 (98%)	111 (96%)	5 (4%)	0	100	100
39	BS	108/112 (96%)	104 (96%)	3 (3%)	1 (1%)	17	24

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
39	DS	108/112 (96%)	105 (97%)	2 (2%)	1 (1%)	17	24
40	BT	129/146 (88%)	122 (95%)	7 (5%)	0	100	100
40	DT	129/146 (88%)	127 (98%)	2 (2%)	0	100	100
41	BU	114/118 (97%)	114 (100%)	0	0	100	100
41	DU	114/118 (97%)	114 (100%)	0	0	100	100
42	BV	99/101 (98%)	93 (94%)	6 (6%)	0	100	100
42	DV	99/101 (98%)	95 (96%)	3 (3%)	1 (1%)	15	22
43	BW	110/113 (97%)	110 (100%)	0	0	100	100
43	DW	110/113 (97%)	110 (100%)	0	0	100	100
44	BX	93/96 (97%)	89 (96%)	4 (4%)	0	100	100
44	DX	93/96 (97%)	89 (96%)	4 (4%)	0	100	100
45	BY	105/110 (96%)	98 (93%)	7 (7%)	0	100	100
45	DY	105/110 (96%)	101 (96%)	4 (4%)	0	100	100
46	BZ	169/206 (82%)	153 (90%)	15 (9%)	1 (1%)	25	34
46	DZ	172/206 (84%)	161 (94%)	11 (6%)	0	100	100
47	B0	81/85 (95%)	81 (100%)	0	0	100	100
47	D0	81/85 (95%)	79 (98%)	2 (2%)	0	100	100
48	B1	95/98 (97%)	94 (99%)	0	1 (1%)	14	19
48	D1	95/98 (97%)	93 (98%)	1 (1%)	1 (1%)	14	19
49	B2	68/72 (94%)	68 (100%)	0	0	100	100
49	D2	68/72 (94%)	68 (100%)	0	0	100	100
50	B3	57/60 (95%)	56 (98%)	1 (2%)	0	100	100
50	D3	57/60 (95%)	55 (96%)	2 (4%)	0	100	100
51	B4	67/71 (94%)	53 (79%)	11 (16%)	3 (4%)	2	1
51	D4	67/71 (94%)	53 (79%)	9 (13%)	5 (8%)	1	0
52	B5	57/60 (95%)	53 (93%)	4 (7%)	0	100	100
52	D5	57/60 (95%)	53 (93%)	4 (7%)	0	100	100
53	B6	51/54 (94%)	49 (96%)	2 (4%)	0	100	100
53	D6	51/54 (94%)	49 (96%)	2 (4%)	0	100	100
54	B7	46/49 (94%)	46 (100%)	0	0	100	100
54	D7	46/49 (94%)	45 (98%)	0	1 (2%)	6	7

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
55	B8	62/65 (95%)	62 (100%)	0	0	100	100
55	D8	62/65 (95%)	62 (100%)	0	0	100	100
56	B9	35/37 (95%)	35 (100%)	0	0	100	100
56	D9	35/37 (95%)	35 (100%)	0	0	100	100
All	All	11409/12128 (94%)	10908 (96%)	416 (4%)	85 (1%)	22	30

All (85) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	AB	126	GLU
7	AG	80	VAL
20	AT	10	LEU
20	AT	96	GLY
28	BD	275	LYS
29	BE	52	LEU
30	BF	130	ALA
33	BI	107	VAL
51	B4	55	ARG
2	CB	16	HIS
2	CB	20	GLU
2	CB	126	GLU
4	CD	46	LYS
9	CI	54	ASP
10	CJ	79	ARG
20	CT	99	LEU
30	DF	21	ALA
30	DF	130	ALA
33	DI	10	GLU
36	DP	29	LYS
51	D4	39	CYS
51	D4	63	TYR
54	D7	46	VAL
2	AB	10	LEU
2	AB	19	HIS
4	AD	166	LYS
7	AG	8	GLU
7	AG	81	GLY
10	AJ	31	GLY
10	AJ	56	HIS
11	AK	49	GLY
20	AT	47	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	BI	106	GLY
48	B1	3	LYS
51	B4	54	GLY
51	B4	57	GLU
2	CB	8	LYS
2	CB	9	GLU
10	CJ	56	HIS
10	CJ	77	PRO
11	CK	49	GLY
20	CT	47	GLY
20	CT	95	ALA
29	DE	52	LEU
31	DG	81	LYS
32	DH	126	PRO
37	DQ	28	ALA
51	D4	45	GLY
2	AB	20	GLU
4	AD	164	ALA
10	AJ	79	ARG
19	AS	42	PRO
20	AT	95	ALA
31	BG	47	LYS
32	BH	126	PRO
39	BS	60	GLY
46	BZ	152	ALA
11	CK	105	VAL
28	DD	239	ARG
34	DN	2	LYS
39	DS	84	GLN
33	BI	73	GLU
36	BP	29	LYS
2	CB	10	LEU
10	CJ	55	LYS
28	DD	3	VAL
31	DG	32	PRO
31	DG	47	LYS
36	DP	45	LEU
48	D1	3	LYS
51	D4	55	ARG
10	AJ	91	PRO
29	DE	73	GLU
51	D4	62	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	AB	231	GLU
3	AC	66	VAL
2	CB	231	GLU
7	CG	17	VAL
16	CP	53	VAL
11	AK	105	VAL
2	AB	124	SER
10	CJ	91	PRO
42	DV	79	VAL
7	AG	17	VAL
2	AB	125	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	192/220 (87%)	163 (85%)	29 (15%)	3	2
2	CB	187/220 (85%)	149 (80%)	38 (20%)	1	1
3	AC	143/188 (76%)	121 (85%)	22 (15%)	2	2
3	CC	140/188 (74%)	124 (89%)	16 (11%)	5	5
4	AD	170/181 (94%)	152 (89%)	18 (11%)	6	7
4	CD	173/181 (96%)	152 (88%)	21 (12%)	5	4
5	AE	113/123 (92%)	105 (93%)	8 (7%)	14	19
5	CE	114/123 (93%)	101 (89%)	13 (11%)	5	5
6	AF	83/90 (92%)	76 (92%)	7 (8%)	11	13
6	CF	85/90 (94%)	80 (94%)	5 (6%)	19	25
7	AG	119/127 (94%)	108 (91%)	11 (9%)	9	11
7	CG	120/127 (94%)	109 (91%)	11 (9%)	9	11
8	AH	114/119 (96%)	105 (92%)	9 (8%)	12	15
8	CH	114/119 (96%)	107 (94%)	7 (6%)	18	24
9	AI	90/99 (91%)	76 (84%)	14 (16%)	2	2

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
9	CI	89/99 (90%)	76 (85%)	13 (15%)	3	2
10	AJ	66/92 (72%)	58 (88%)	8 (12%)	5	4
10	CJ	69/92 (75%)	63 (91%)	6 (9%)	10	12
11	AK	82/99 (83%)	77 (94%)	5 (6%)	18	24
11	CK	83/99 (84%)	76 (92%)	7 (8%)	11	13
12	AL	97/109 (89%)	93 (96%)	4 (4%)	30	41
12	CL	97/109 (89%)	93 (96%)	4 (4%)	30	41
13	AM	93/101 (92%)	82 (88%)	11 (12%)	5	5
13	CM	92/101 (91%)	80 (87%)	12 (13%)	4	3
14	AN	49/50 (98%)	42 (86%)	7 (14%)	3	3
14	CN	49/50 (98%)	41 (84%)	8 (16%)	2	2
15	AO	78/80 (98%)	64 (82%)	14 (18%)	2	1
15	CO	78/80 (98%)	69 (88%)	9 (12%)	5	5
16	AP	69/74 (93%)	60 (87%)	9 (13%)	4	3
16	CP	68/74 (92%)	61 (90%)	7 (10%)	7	7
17	AQ	94/97 (97%)	85 (90%)	9 (10%)	8	9
17	CQ	94/97 (97%)	87 (93%)	7 (7%)	13	18
18	AR	59/77 (77%)	54 (92%)	5 (8%)	10	13
18	CR	59/77 (77%)	52 (88%)	7 (12%)	5	5
19	AS	69/80 (86%)	64 (93%)	5 (7%)	14	18
19	CS	67/80 (84%)	63 (94%)	4 (6%)	19	25
20	AT	70/82 (85%)	62 (89%)	8 (11%)	5	5
20	CT	70/82 (85%)	62 (89%)	8 (11%)	5	5
21	AU	18/22 (82%)	15 (83%)	3 (17%)	2	2
21	CU	18/22 (82%)	17 (94%)	1 (6%)	21	28
28	BD	215/218 (99%)	195 (91%)	20 (9%)	9	10
28	DD	215/218 (99%)	193 (90%)	22 (10%)	7	8
29	BE	164/166 (99%)	146 (89%)	18 (11%)	6	6
29	DE	164/166 (99%)	145 (88%)	19 (12%)	5	5
30	BF	160/166 (96%)	149 (93%)	11 (7%)	15	20
30	DF	159/166 (96%)	144 (91%)	15 (9%)	8	10

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
31	BG	143/156 (92%)	128 (90%)	15 (10%)	7	7
31	DG	142/156 (91%)	122 (86%)	20 (14%)	3	3
32	BH	144/148 (97%)	126 (88%)	18 (12%)	4	4
32	DH	144/148 (97%)	126 (88%)	18 (12%)	4	4
33	BI	110/124 (89%)	86 (78%)	24 (22%)	1	1
33	DI	104/124 (84%)	88 (85%)	16 (15%)	2	2
34	BN	118/119 (99%)	103 (87%)	15 (13%)	4	4
34	DN	118/119 (99%)	106 (90%)	12 (10%)	7	8
35	BO	100/100 (100%)	93 (93%)	7 (7%)	15	19
35	DO	100/100 (100%)	93 (93%)	7 (7%)	15	19
36	BP	115/116 (99%)	98 (85%)	17 (15%)	3	2
36	DP	115/116 (99%)	100 (87%)	15 (13%)	4	3
37	BQ	111/111 (100%)	95 (86%)	16 (14%)	3	3
37	DQ	111/111 (100%)	99 (89%)	12 (11%)	6	6
38	BR	101/101 (100%)	82 (81%)	19 (19%)	1	1
38	DR	101/101 (100%)	83 (82%)	18 (18%)	2	1
39	BS	87/88 (99%)	81 (93%)	6 (7%)	15	20
39	DS	85/88 (97%)	75 (88%)	10 (12%)	5	5
40	BT	115/127 (91%)	106 (92%)	9 (8%)	12	16
40	DT	113/127 (89%)	103 (91%)	10 (9%)	10	12
41	BU	93/94 (99%)	84 (90%)	9 (10%)	8	9
41	DU	93/94 (99%)	85 (91%)	8 (9%)	10	13
42	BV	80/82 (98%)	68 (85%)	12 (15%)	3	2
42	DV	80/82 (98%)	67 (84%)	13 (16%)	2	2
43	BW	90/92 (98%)	83 (92%)	7 (8%)	12	16
43	DW	90/92 (98%)	83 (92%)	7 (8%)	12	16
44	BX	77/78 (99%)	71 (92%)	6 (8%)	12	16
44	DX	77/78 (99%)	71 (92%)	6 (8%)	12	16
45	BY	85/91 (93%)	75 (88%)	10 (12%)	5	5
45	DY	85/91 (93%)	79 (93%)	6 (7%)	14	19
46	BZ	145/179 (81%)	133 (92%)	12 (8%)	11	14

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
46	DZ	145/179 (81%)	129 (89%)	16 (11%)	6	6
47	B0	65/67 (97%)	62 (95%)	3 (5%)	27	36
47	D0	65/67 (97%)	60 (92%)	5 (8%)	13	16
48	B1	80/83 (96%)	73 (91%)	7 (9%)	10	12
48	D1	80/83 (96%)	71 (89%)	9 (11%)	6	5
49	B2	65/67 (97%)	57 (88%)	8 (12%)	4	4
49	D2	65/67 (97%)	59 (91%)	6 (9%)	9	11
50	B3	51/52 (98%)	46 (90%)	5 (10%)	8	9
50	D3	50/52 (96%)	44 (88%)	6 (12%)	5	5
51	B4	60/63 (95%)	47 (78%)	13 (22%)	1	1
51	D4	53/63 (84%)	43 (81%)	10 (19%)	1	1
52	B5	50/52 (96%)	45 (90%)	5 (10%)	7	8
52	D5	50/52 (96%)	46 (92%)	4 (8%)	12	15
53	B6	51/52 (98%)	44 (86%)	7 (14%)	3	3
53	D6	50/52 (96%)	48 (96%)	2 (4%)	31	43
54	B7	41/42 (98%)	38 (93%)	3 (7%)	14	18
54	D7	41/42 (98%)	38 (93%)	3 (7%)	14	18
55	B8	53/55 (96%)	49 (92%)	4 (8%)	13	17
55	D8	54/55 (98%)	51 (94%)	3 (6%)	21	28
56	B9	34/34 (100%)	34 (100%)	0	100	100
56	D9	34/34 (100%)	32 (94%)	2 (6%)	19	25
All	All	9320/10066 (93%)	8304 (89%)	1016 (11%)	6	6

All (1016) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	AB	8	LYS
2	AB	10	LEU
2	AB	11	LEU
2	AB	15	VAL
2	AB	17	PHE
2	AB	21	ARG
2	AB	23	ARG
2	AB	24	TRP
2	AB	49	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	AB	64	ARG
2	AB	67	THR
2	AB	76	GLN
2	AB	94	ASN
2	AB	108	ILE
2	AB	111	ARG
2	AB	114	ARG
2	AB	127	ILE
2	AB	144	ARG
2	AB	145	LEU
2	AB	153	ARG
2	AB	155	LEU
2	AB	156	LYS
2	AB	157	ARG
2	AB	160	ASP
2	AB	170	GLU
2	AB	187	LEU
2	AB	200	ILE
2	AB	221	LEU
2	AB	230	VAL
3	AC	3	ASN
3	AC	26	LYS
3	AC	27	LYS
3	AC	28	GLN
3	AC	32	LEU
3	AC	37	GLN
3	AC	45	LYS
3	AC	49	SER
3	AC	70	VAL
3	AC	77	ILE
3	AC	97	LYS
3	AC	98	ASN
3	AC	104	GLN
3	AC	115	LEU
3	AC	118	GLN
3	AC	119	ARG
3	AC	127	ARG
3	AC	140	ARG
3	AC	144	SER
3	AC	181	ASN
3	AC	196	LEU
3	AC	198	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	AD	5	ILE
4	AD	31	CYS
4	AD	49	ARG
4	AD	52	SER
4	AD	53	ASP
4	AD	58	LEU
4	AD	63	LYS
4	AD	86	LYS
4	AD	108	LEU
4	AD	122	ARG
4	AD	127	THR
4	AD	135	LEU
4	AD	139	ARG
4	AD	141	ARG
4	AD	144	ASP
4	AD	158	ILE
4	AD	168	ARG
4	AD	188	LEU
5	AE	6	PHE
5	AE	12	LEU
5	AE	31	LEU
5	AE	38	GLN
5	AE	41	VAL
5	AE	47	LYS
5	AE	73	ASN
5	AE	145	LYS
6	AF	36	ARG
6	AF	40	VAL
6	AF	55	ASP
6	AF	69	GLU
6	AF	74	ASP
6	AF	75	LEU
6	AF	82	ARG
7	AG	8	GLU
7	AG	12	LEU
7	AG	50	ILE
7	AG	51	GLN
7	AG	52	GLU
7	AG	53	LYS
7	AG	76	ARG
7	AG	79	ARG
7	AG	104	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	AG	113	GLU
7	AG	155	ARG
8	AH	21	LYS
8	AH	29	SER
8	AH	39	LEU
8	AH	52	ASP
8	AH	78	GLN
8	AH	84	ARG
8	AH	109	ILE
8	AH	112	LEU
8	AH	127	LEU
9	AI	14	VAL
9	AI	17	VAL
9	AI	23	ASN
9	AI	42	ARG
9	AI	53	VAL
9	AI	56	LEU
9	AI	81	ILE
9	AI	86	VAL
9	AI	89	ASN
9	AI	103	THR
9	AI	108	VAL
9	AI	121	ARG
9	AI	127	LYS
9	AI	128	ARG
10	AJ	16	LEU
10	AJ	17	ASP
10	AJ	43	ARG
10	AJ	66	ARG
10	AJ	81	THR
10	AJ	84	GLN
10	AJ	94	VAL
10	AJ	100	THR
11	AK	14	VAL
11	AK	16	SER
11	AK	31	THR
11	AK	48	ILE
11	AK	96	ARG
12	AL	33	ARG
12	AL	46	LYS
12	AL	52	LEU
12	AL	83	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	AM	4	ILE
13	AM	15	VAL
13	AM	27	LYS
13	AM	43	THR
13	AM	49	THR
13	AM	52	GLU
13	AM	70	LEU
13	AM	73	GLU
13	AM	84	ILE
13	AM	110	ARG
13	AM	121	LYS
14	AN	3	ARG
14	AN	7	ILE
14	AN	18	VAL
14	AN	23	ARG
14	AN	26	ARG
14	AN	32	SER
14	AN	50	LYS
15	AO	3	ILE
15	AO	5	LYS
15	AO	21	ASP
15	AO	22	THR
15	AO	26	GLU
15	AO	39	LEU
15	AO	41	GLU
15	AO	47	LYS
15	AO	64	ARG
15	AO	66	LEU
15	AO	71	GLN
15	AO	76	GLU
15	AO	83	GLU
15	AO	84	LYS
16	AP	1	MET
16	AP	2	VAL
16	AP	19	ILE
16	AP	20	VAL
16	AP	50	LYS
16	AP	54	GLU
16	AP	60	LEU
16	AP	62	VAL
16	AP	67	THR
17	AQ	14	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	AQ	19	VAL
17	AQ	24	GLU
17	AQ	60	ILE
17	AQ	63	ARG
17	AQ	72	ARG
17	AQ	74	LEU
17	AQ	91	ARG
17	AQ	98	LEU
18	AR	31	LEU
18	AR	37	VAL
18	AR	38	GLU
18	AR	46	GLU
18	AR	76	LEU
19	AS	12	ASP
19	AS	28	LYS
19	AS	37	ARG
19	AS	65	ASN
19	AS	66	MET
20	AT	8	ARG
20	AT	9	ASN
20	AT	13	LEU
20	AT	24	LEU
20	AT	30	LYS
20	AT	45	GLN
20	AT	54	LYS
20	AT	62	LEU
21	AU	9	ARG
21	AU	10	ARG
21	AU	12	LYS
28	BD	12	SER
28	BD	13	ARG
28	BD	61	LEU
28	BD	88	ARG
28	BD	94	LEU
28	BD	99	ASP
28	BD	103	ARG
28	BD	113	VAL
28	BD	126	GLN
28	BD	138	VAL
28	BD	142	VAL
28	BD	155	LEU
28	BD	211	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	BD	217	ARG
28	BD	221	VAL
28	BD	229	VAL
28	BD	242	ARG
28	BD	257	LEU
28	BD	259	THR
28	BD	260	ARG
29	BE	1	MET
29	BE	14	ILE
29	BE	24	THR
29	BE	33	VAL
29	BE	49	LEU
29	BE	52	LEU
29	BE	73	GLU
29	BE	75	VAL
29	BE	77	ILE
29	BE	82	ARG
29	BE	97	LYS
29	BE	116	VAL
29	BE	119	ARG
29	BE	144	ARG
29	BE	154	LYS
29	BE	163	GLU
29	BE	175	VAL
29	BE	203	LYS
30	BF	19	GLU
30	BF	24	LEU
30	BF	53	THR
30	BF	57	VAL
30	BF	74	ARG
30	BF	88	VAL
30	BF	106	ARG
30	BF	125	LEU
30	BF	170	LEU
30	BF	192	LEU
30	BF	200	GLU
31	BG	7	LEU
31	BG	43	LEU
31	BG	45	GLU
31	BG	60	LEU
31	BG	81	LYS
31	BG	82	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	BG	86	MET
31	BG	133	LEU
31	BG	135	LEU
31	BG	140	ILE
31	BG	143	GLU
31	BG	146	TYR
31	BG	148	MET
31	BG	170	ARG
31	BG	175	LEU
32	BH	6	ARG
32	BH	15	VAL
32	BH	33	LEU
32	BH	41	MET
32	BH	44	VAL
32	BH	45	VAL
32	BH	57	ASP
32	BH	59	ARG
32	BH	69	ARG
32	BH	71	LEU
32	BH	86	GLU
32	BH	95	ARG
32	BH	116	GLU
32	BH	119	GLU
32	BH	124	GLU
32	BH	125	VAL
32	BH	129	THR
32	BH	134	SER
33	BI	5	LEU
33	BI	9	LEU
33	BI	10	GLU
33	BI	38	LEU
33	BI	43	ASN
33	BI	47	LEU
33	BI	50	ARG
33	BI	57	ARG
33	BI	60	GLU
33	BI	61	ARG
33	BI	62	LYS
33	BI	66	GLU
33	BI	68	LEU
33	BI	75	LEU
33	BI	77	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	BI	78	THR
33	BI	85	GLU
33	BI	92	VAL
33	BI	96	ASP
33	BI	101	LEU
33	BI	103	ARG
33	BI	117	GLU
33	BI	140	LEU
33	BI	142	VAL
34	BN	28	THR
34	BN	33	LEU
34	BN	34	LEU
34	BN	46	VAL
34	BN	48	MET
34	BN	58	ASP
34	BN	61	ARG
34	BN	67	LEU
34	BN	73	THR
34	BN	83	LYS
34	BN	87	LEU
34	BN	99	LEU
34	BN	120	LEU
34	BN	133	GLN
34	BN	139	GLU
35	BO	8	LEU
35	BO	23	ARG
35	BO	24	VAL
35	BO	69	ILE
35	BO	92	GLU
35	BO	94	ARG
35	BO	108	GLU
36	BP	1	MET
36	BP	2	LYS
36	BP	55	ARG
36	BP	59	LEU
36	BP	65	ARG
36	BP	70	GLN
36	BP	76	LYS
36	BP	77	ARG
36	BP	83	VAL
36	BP	95	VAL
36	BP	98	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BP	106	LEU
36	BP	112	LEU
36	BP	119	GLU
36	BP	126	VAL
36	BP	148	LEU
36	BP	149	GLU
37	BQ	1	MET
37	BQ	5	ARG
37	BQ	7	MET
37	BQ	10	ARG
37	BQ	16	ARG
37	BQ	21	THR
37	BQ	35	VAL
37	BQ	45	GLN
37	BQ	54	MET
37	BQ	56	ARG
37	BQ	59	ARG
37	BQ	60	ARG
37	BQ	75	THR
37	BQ	85	LYS
37	BQ	109	VAL
37	BQ	110	THR
38	BR	1	MET
38	BR	6	SER
38	BR	15	SER
38	BR	18	LEU
38	BR	24	GLN
38	BR	28	LEU
38	BR	29	LEU
38	BR	33	ARG
38	BR	36	THR
38	BR	44	LEU
38	BR	60	LEU
38	BR	65	LEU
38	BR	67	LEU
38	BR	75	LEU
38	BR	79	LEU
38	BR	100	LEU
38	BR	102	GLU
38	BR	111	LEU
38	BR	114	VAL
39	BS	20	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	BS	57	LYS
39	BS	59	LYS
39	BS	67	ARG
39	BS	83	LYS
39	BS	110	LEU
40	BT	17	THR
40	BT	28	VAL
40	BT	34	VAL
40	BT	49	VAL
40	BT	53	ARG
40	BT	78	LEU
40	BT	96	ARG
40	BT	108	ARG
40	BT	118	ARG
41	BU	8	VAL
41	BU	31	SER
41	BU	36	ARG
41	BU	74	LEU
41	BU	83	LEU
41	BU	92	ARG
41	BU	95	LEU
41	BU	104	GLN
41	BU	117	GLN
42	BV	28	GLU
42	BV	43	GLU
42	BV	46	VAL
42	BV	51	VAL
42	BV	52	VAL
42	BV	61	VAL
42	BV	62	LEU
42	BV	72	VAL
42	BV	79	VAL
42	BV	85	LYS
42	BV	95	LEU
42	BV	100	ARG
43	BW	4	LYS
43	BW	11	ARG
43	BW	15	ARG
43	BW	17	VAL
43	BW	51	LEU
43	BW	67	ASP
43	BW	100	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
44	BX	35	THR
44	BX	45	THR
44	BX	57	LEU
44	BX	66	LEU
44	BX	72	LYS
44	BX	88	LYS
45	BY	1	MET
45	BY	2	ARG
45	BY	23	ARG
45	BY	34	LYS
45	BY	43	ASN
45	BY	55	TYR
45	BY	72	VAL
45	BY	90	LEU
45	BY	91	GLU
45	BY	99	CYS
46	BZ	5	LEU
46	BZ	19	ARG
46	BZ	40	ASP
46	BZ	72	ARG
46	BZ	86	VAL
46	BZ	91	LEU
46	BZ	120	ILE
46	BZ	136	PHE
46	BZ	153	SER
46	BZ	154	ASP
46	BZ	155	LEU
46	BZ	170	THR
47	B0	20	ARG
47	B0	55	ARG
47	B0	82	ARG
48	B1	21	ARG
48	B1	40	ARG
48	B1	52	ARG
48	B1	59	THR
48	B1	78	LYS
48	B1	95	LEU
48	B1	98	LEU
49	B2	3	LEU
49	B2	28	LYS
49	B2	30	ARG
49	B2	32	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
49	B2	45	SER
49	B2	55	ARG
49	B2	64	LEU
49	B2	70	GLN
50	B3	8	LEU
50	B3	23	LEU
50	B3	29	ARG
50	B3	32	GLN
50	B3	55	ARG
51	B4	28	LYS
51	B4	34	GLU
51	B4	46	GLN
51	B4	49	PHE
51	B4	50	VAL
51	B4	53	GLU
51	B4	55	ARG
51	B4	56	VAL
51	B4	58	ARG
51	B4	59	PHE
51	B4	61	ARG
51	B4	63	TYR
51	B4	68	ARG
52	B5	16	ARG
52	B5	29	THR
52	B5	40	LYS
52	B5	55	ARG
52	B5	60	VAL
53	B6	4	GLU
53	B6	6	ARG
53	B6	14	THR
53	B6	28	ARG
53	B6	38	LYS
53	B6	48	VAL
53	B6	52	VAL
54	B7	1	MET
54	B7	24	THR
54	B7	43	THR
55	B8	13	ARG
55	B8	14	VAL
55	B8	31	HIS
55	B8	34	TRP
2	CB	11	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	CB	16	HIS
2	CB	17	PHE
2	CB	24	TRP
2	CB	35	GLU
2	CB	39	ILE
2	CB	50	GLU
2	CB	55	PHE
2	CB	67	THR
2	CB	71	VAL
2	CB	76	GLN
2	CB	82	ARG
2	CB	87	ARG
2	CB	96	ARG
2	CB	97	TRP
2	CB	98	LEU
2	CB	114	ARG
2	CB	115	LEU
2	CB	117	GLU
2	CB	124	SER
2	CB	126	GLU
2	CB	128	GLU
2	CB	142	LEU
2	CB	144	ARG
2	CB	154	LEU
2	CB	155	LEU
2	CB	157	ARG
2	CB	160	ASP
2	CB	163	PHE
2	CB	185	ILE
2	CB	187	LEU
2	CB	200	ILE
2	CB	209	ARG
2	CB	210	SER
2	CB	217	ARG
2	CB	221	LEU
2	CB	224	GLN
2	CB	230	VAL
3	CC	3	ASN
3	CC	21	ARG
3	CC	35	GLU
3	CC	49	SER
3	CC	70	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	CC	91	LEU
3	CC	98	ASN
3	CC	101	LEU
3	CC	104	GLN
3	CC	105	GLU
3	CC	118	GLN
3	CC	140	ARG
3	CC	152	ILE
3	CC	179	ARG
3	CC	196	LEU
3	CC	198	VAL
4	CD	10	ARG
4	CD	15	GLU
4	CD	31	CYS
4	CD	34	GLU
4	CD	47	ARG
4	CD	58	LEU
4	CD	61	LYS
4	CD	86	LYS
4	CD	96	LEU
4	CD	108	LEU
4	CD	115	ARG
4	CD	127	THR
4	CD	135	LEU
4	CD	155	LEU
4	CD	157	LEU
4	CD	168	ARG
4	CD	170	VAL
4	CD	181	MET
4	CD	187	ARG
4	CD	188	LEU
4	CD	194	LEU
5	CE	6	PHE
5	CE	10	MET
5	CE	12	LEU
5	CE	27	ARG
5	CE	31	LEU
5	CE	38	GLN
5	CE	41	VAL
5	CE	47	LYS
5	CE	60	TYR
5	CE	67	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	CE	79	GLU
5	CE	137	GLU
5	CE	150	ARG
6	CF	28	ARG
6	CF	40	VAL
6	CF	41	GLU
6	CF	46	ARG
6	CF	75	LEU
7	CG	9	VAL
7	CG	12	LEU
7	CG	32	ARG
7	CG	33	ASP
7	CG	51	GLN
7	CG	52	GLU
7	CG	72	ARG
7	CG	73	MET
7	CG	76	ARG
7	CG	79	ARG
7	CG	155	ARG
8	CH	21	LYS
8	CH	29	SER
8	CH	39	LEU
8	CH	84	ARG
8	CH	91	ARG
8	CH	98	LYS
8	CH	112	LEU
9	CI	7	THR
9	CI	14	VAL
9	CI	23	ASN
9	CI	50	LEU
9	CI	56	LEU
9	CI	81	ILE
9	CI	89	ASN
9	CI	102	LEU
9	CI	108	VAL
9	CI	112	LYS
9	CI	121	ARG
9	CI	125	TYR
9	CI	128	ARG
10	CJ	7	LYS
10	CJ	19	SER
10	CJ	29	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	CJ	59	SER
10	CJ	67	THR
10	CJ	81	THR
11	CK	24	SER
11	CK	31	THR
11	CK	48	ILE
11	CK	51	LYS
11	CK	54	ARG
11	CK	96	ARG
11	CK	104	GLN
12	CL	38	THR
12	CL	60	LEU
12	CL	83	VAL
12	CL	116	SER
13	CM	3	ARG
13	CM	15	VAL
13	CM	19	LEU
13	CM	47	ASP
13	CM	49	THR
13	CM	56	LEU
13	CM	84	ILE
13	CM	103	THR
13	CM	104	ARG
13	CM	110	ARG
13	CM	117	VAL
13	CM	121	LYS
14	CN	3	ARG
14	CN	7	ILE
14	CN	12	ARG
14	CN	18	VAL
14	CN	23	ARG
14	CN	26	ARG
14	CN	32	SER
14	CN	33	VAL
15	CO	3	ILE
15	CO	5	LYS
15	CO	7	GLU
15	CO	26	GLU
15	CO	38	ARG
15	CO	39	LEU
15	CO	41	GLU
15	CO	48	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
15	CO	54	ARG
16	CP	2	VAL
16	CP	5	ARG
16	CP	27	LYS
16	CP	60	LEU
16	CP	62	VAL
16	CP	67	THR
16	CP	69	THR
17	CQ	6	LEU
17	CQ	19	VAL
17	CQ	36	ILE
17	CQ	60	ILE
17	CQ	63	ARG
17	CQ	74	LEU
17	CQ	96	GLU
18	CR	26	LEU
18	CR	32	ARG
18	CR	35	ARG
18	CR	37	VAL
18	CR	41	LYS
18	CR	46	GLU
18	CR	76	LEU
19	CS	28	LYS
19	CS	37	ARG
19	CS	56	GLN
19	CS	78	ARG
20	CT	24	LEU
20	CT	38	LYS
20	CT	45	GLN
20	CT	56	MET
20	CT	62	LEU
20	CT	71	THR
20	CT	80	ARG
20	CT	90	GLN
21	CU	10	ARG
28	DD	3	VAL
28	DD	13	ARG
28	DD	54	ARG
28	DD	61	LEU
28	DD	88	ARG
28	DD	94	LEU
28	DD	103	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	DD	106	ILE
28	DD	113	VAL
28	DD	134	ARG
28	DD	142	VAL
28	DD	155	LEU
28	DD	162	SER
28	DD	193	VAL
28	DD	211	ARG
28	DD	217	ARG
28	DD	221	VAL
28	DD	229	VAL
28	DD	257	LEU
28	DD	259	THR
28	DD	260	ARG
28	DD	276	LYS
29	DE	1	MET
29	DE	12	THR
29	DE	21	VAL
29	DE	24	THR
29	DE	33	VAL
29	DE	40	GLU
29	DE	47	VAL
29	DE	52	LEU
29	DE	73	GLU
29	DE	75	VAL
29	DE	79	ARG
29	DE	82	ARG
29	DE	116	VAL
29	DE	119	ARG
29	DE	144	ARG
29	DE	154	LYS
29	DE	163	GLU
29	DE	175	VAL
29	DE	195	LEU
30	DF	19	GLU
30	DF	20	LEU
30	DF	24	LEU
30	DF	28	ILE
30	DF	38	ARG
30	DF	57	VAL
30	DF	74	ARG
30	DF	82	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
30	DF	88	VAL
30	DF	106	ARG
30	DF	135	LYS
30	DF	170	LEU
30	DF	192	LEU
30	DF	197	ASP
30	DF	200	GLU
31	DG	16	ARG
31	DG	21	ARG
31	DG	36	LYS
31	DG	43	LEU
31	DG	45	GLU
31	DG	49	ASP
31	DG	58	GLN
31	DG	60	LEU
31	DG	84	LYS
31	DG	98	ARG
31	DG	115	ARG
31	DG	133	LEU
31	DG	135	LEU
31	DG	136	ARG
31	DG	140	ILE
31	DG	143	GLU
31	DG	145	THR
31	DG	148	MET
31	DG	153	ARG
31	DG	170	ARG
32	DH	2	SER
32	DH	3	ARG
32	DH	15	VAL
32	DH	33	LEU
32	DH	43	VAL
32	DH	44	VAL
32	DH	45	VAL
32	DH	57	ASP
32	DH	63	SER
32	DH	69	ARG
32	DH	84	SER
32	DH	86	GLU
32	DH	95	ARG
32	DH	106	THR
32	DH	124	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	DH	134	SER
32	DH	136	ILE
32	DH	172	LYS
33	DI	5	LEU
33	DI	9	LEU
33	DI	19	VAL
33	DI	40	THR
33	DI	43	ASN
33	DI	44	LEU
33	DI	50	ARG
33	DI	68	LEU
33	DI	73	GLU
33	DI	86	THR
33	DI	92	VAL
33	DI	114	LEU
33	DI	121	LYS
33	DI	123	LEU
33	DI	140	LEU
33	DI	142	VAL
34	DN	33	LEU
34	DN	34	LEU
34	DN	38	HIS
34	DN	46	VAL
34	DN	58	ASP
34	DN	62	VAL
34	DN	85	ILE
34	DN	87	LEU
34	DN	99	LEU
34	DN	120	LEU
34	DN	137	LYS
34	DN	139	GLU
35	DO	8	LEU
35	DO	9	GLU
35	DO	23	ARG
35	DO	24	VAL
35	DO	69	ILE
35	DO	92	GLU
35	DO	94	ARG
36	DP	1	MET
36	DP	29	LYS
36	DP	45	LEU
36	DP	50	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DP	55	ARG
36	DP	65	ARG
36	DP	70	GLN
36	DP	95	VAL
36	DP	96	THR
36	DP	99	LEU
36	DP	106	LEU
36	DP	112	LEU
36	DP	119	GLU
36	DP	131	SER
36	DP	148	LEU
37	DQ	1	MET
37	DQ	16	ARG
37	DQ	21	THR
37	DQ	45	GLN
37	DQ	54	MET
37	DQ	56	ARG
37	DQ	59	ARG
37	DQ	60	ARG
37	DQ	65	PHE
37	DQ	75	THR
37	DQ	85	LYS
37	DQ	110	THR
38	DR	1	MET
38	DR	15	SER
38	DR	18	LEU
38	DR	24	GLN
38	DR	28	LEU
38	DR	29	LEU
38	DR	33	ARG
38	DR	36	THR
38	DR	44	LEU
38	DR	60	LEU
38	DR	65	LEU
38	DR	67	LEU
38	DR	75	LEU
38	DR	79	LEU
38	DR	100	LEU
38	DR	102	GLU
38	DR	111	LEU
38	DR	114	VAL
39	DS	20	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	DS	35	ILE
39	DS	57	LYS
39	DS	69	VAL
39	DS	71	ARG
39	DS	75	GLU
39	DS	93	LYS
39	DS	101	LEU
39	DS	103	GLU
39	DS	110	LEU
40	DT	6	LEU
40	DT	16	ARG
40	DT	17	THR
40	DT	23	ARG
40	DT	49	VAL
40	DT	53	ARG
40	DT	78	LEU
40	DT	96	ARG
40	DT	113	LYS
40	DT	118	ARG
41	DU	8	VAL
41	DU	36	ARG
41	DU	74	LEU
41	DU	83	LEU
41	DU	89	GLU
41	DU	92	ARG
41	DU	104	GLN
41	DU	108	GLU
42	DV	6	LYS
42	DV	15	GLU
42	DV	18	LEU
42	DV	38	LEU
42	DV	46	VAL
42	DV	51	VAL
42	DV	57	VAL
42	DV	61	VAL
42	DV	62	LEU
42	DV	72	VAL
42	DV	79	VAL
42	DV	95	LEU
42	DV	100	ARG
43	DW	11	ARG
43	DW	15	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
43	DW	17	VAL
43	DW	51	LEU
43	DW	52	GLU
43	DW	60	ASN
43	DW	100	THR
44	DX	57	LEU
44	DX	70	LEU
44	DX	72	LYS
44	DX	88	LYS
44	DX	90	GLU
44	DX	92	LEU
45	DY	11	ASP
45	DY	23	ARG
45	DY	90	LEU
45	DY	91	GLU
45	DY	99	CYS
45	DY	107	ASP
46	DZ	5	LEU
46	DZ	18	LEU
46	DZ	35	ARG
46	DZ	40	ASP
46	DZ	41	LEU
46	DZ	72	ARG
46	DZ	86	VAL
46	DZ	97	GLU
46	DZ	102	LEU
46	DZ	119	GLU
46	DZ	136	PHE
46	DZ	144	LEU
46	DZ	153	SER
46	DZ	154	ASP
46	DZ	155	LEU
46	DZ	159	PRO
47	D0	10	THR
47	D0	19	LYS
47	D0	20	ARG
47	D0	24	LYS
47	D0	55	ARG
48	D1	4	VAL
48	D1	21	ARG
48	D1	30	VAL
48	D1	40	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
48	D1	52	ARG
48	D1	59	THR
48	D1	95	LEU
48	D1	97	LEU
48	D1	98	LEU
49	D2	21	LEU
49	D2	28	LYS
49	D2	30	ARG
49	D2	45	SER
49	D2	55	ARG
49	D2	70	GLN
50	D3	3	ARG
50	D3	8	LEU
50	D3	24	LYS
50	D3	30	ARG
50	D3	44	ARG
50	D3	55	ARG
51	D4	24	THR
51	D4	34	GLU
51	D4	44	THR
51	D4	50	VAL
51	D4	56	VAL
51	D4	58	ARG
51	D4	61	ARG
51	D4	63	TYR
51	D4	67	TYR
51	D4	68	ARG
52	D5	29	THR
52	D5	40	LYS
52	D5	55	ARG
52	D5	60	VAL
53	D6	6	ARG
53	D6	38	LYS
54	D7	1	MET
54	D7	14	LYS
54	D7	23	ARG
55	D8	13	ARG
55	D8	14	VAL
55	D8	34	TRP
56	D9	7	VAL
56	D9	26	ILE

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (130)

such sidechains are listed below:

Mol	Chain	Res	Type
2	AB	16	HIS
2	AB	94	ASN
3	AC	6	HIS
3	AC	28	GLN
3	AC	104	GLN
3	AC	123	GLN
3	AC	136	GLN
3	AC	162	GLN
3	AC	181	ASN
4	AD	45	GLN
4	AD	77	ASN
4	AD	123	HIS
4	AD	125	HIS
4	AD	161	ASN
5	AE	20	GLN
5	AE	38	GLN
6	AF	94	GLN
6	AF	100	ASN
7	AG	13	GLN
7	AG	28	ASN
9	AI	23	ASN
9	AI	31	GLN
9	AI	34	ASN
9	AI	73	GLN
9	AI	89	ASN
9	AI	124	GLN
10	AJ	56	HIS
11	AK	93	GLN
11	AK	104	GLN
12	AL	78	GLN
12	AL	99	HIS
13	AM	92	HIS
15	AO	9	GLN
15	AO	28	GLN
15	AO	46	HIS
15	AO	71	GLN
16	AP	76	GLN
19	AS	65	ASN
19	AS	69	HIS
19	AS	83	HIS
20	AT	9	ASN
20	AT	90	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	BD	87	ASN
28	BD	164	GLN
28	BD	166	GLN
28	BD	253	GLN
30	BF	69	HIS
30	BF	169	ASN
30	BF	203	GLN
31	BG	26	GLN
31	BG	40	ASN
33	BI	43	ASN
33	BI	54	GLN
35	BO	5	GLN
36	BP	38	GLN
38	BR	71	GLN
40	BT	43	GLN
40	BT	58	ASN
40	BT	123	GLN
41	BU	94	ASN
44	BX	31	HIS
44	BX	82	GLN
45	BY	6	HIS
45	BY	43	ASN
49	B2	9	GLN
49	B2	70	GLN
51	B4	46	GLN
56	B9	36	GLN
2	CB	40	HIS
2	CB	94	ASN
2	CB	224	GLN
3	CC	6	HIS
3	CC	28	GLN
3	CC	69	HIS
3	CC	104	GLN
3	CC	118	GLN
3	CC	123	GLN
3	CC	136	GLN
4	CD	77	ASN
4	CD	119	GLN
4	CD	123	HIS
4	CD	125	HIS
4	CD	161	ASN
5	CE	20	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	CE	141	GLN
6	CF	94	GLN
7	CG	28	ASN
7	CG	51	GLN
9	CI	23	ASN
9	CI	31	GLN
9	CI	58	HIS
9	CI	89	ASN
9	CI	124	GLN
10	CJ	62	HIS
11	CK	93	GLN
12	CL	78	GLN
12	CL	99	HIS
13	CM	77	ASN
13	CM	92	HIS
15	CO	28	GLN
15	CO	62	GLN
19	CS	56	GLN
19	CS	57	HIS
19	CS	65	ASN
19	CS	69	HIS
19	CS	83	HIS
28	DD	96	HIS
28	DD	164	GLN
28	DD	166	GLN
28	DD	253	GLN
29	DE	85	ASN
30	DF	69	HIS
30	DF	169	ASN
30	DF	203	GLN
31	DG	26	GLN
31	DG	40	ASN
33	DI	43	ASN
38	DR	71	GLN
39	DS	68	GLN
40	DT	58	ASN
40	DT	123	GLN
41	DU	117	GLN
42	DV	64	HIS
44	DX	31	HIS
44	DX	82	GLN
45	DY	43	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	DZ	55	HIS
46	DZ	151	HIS
56	D9	20	HIS
56	D9	36	GLN

5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	1495/1521 (98%)	304 (20%)	25 (1%)
1	CA	1501/1521 (98%)	316 (21%)	28 (1%)
22	AV	12/24 (50%)	3 (25%)	0
22	CV	11/24 (45%)	2 (18%)	0
23	AW	70/76 (92%)	30 (42%)	2 (2%)
23	CW	67/76 (88%)	32 (47%)	2 (2%)
24	AX	75/77 (97%)	16 (21%)	0
24	CX	75/77 (97%)	21 (28%)	0
25	AY	71/76 (93%)	35 (49%)	4 (5%)
25	CY	69/76 (90%)	32 (46%)	1 (1%)
26	BA	2811/2915 (96%)	450 (16%)	34 (1%)
26	DA	2791/2915 (95%)	552 (19%)	30 (1%)
27	BB	119/121 (98%)	14 (11%)	0
27	DB	119/121 (98%)	17 (14%)	0
All	All	9286/9620 (96%)	1824 (19%)	126 (1%)

All (1824) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	6	G
1	AA	7	G
1	AA	9	G
1	AA	22	G
1	AA	29	G
1	AA	32	A
1	AA	39	G
1	AA	47	C
1	AA	48	C
1	AA	51	A
1	AA	59	A
1	AA	61	G
1	AA	65	U
1	AA	73	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	77	G
1	AA	78	G
1	AA	79	G
1	AA	91	C
1	AA	96	U
1	AA	97	G
1	AA	98	G
1	AA	101	A
1	AA	111	G
1	AA	112	G
1	AA	116	A
1	AA	121	C
1	AA	131	C
1	AA	146	G
1	AA	155	C
1	AA	163	C
1	AA	166	G
1	AA	173	U
1	AA	174	C
1	AA	180	U
1	AA	182	U
1	AA	189(D)	C
1	AA	189(F)	U
1	AA	189(H)	G
1	AA	189(I)	G
1	AA	189(K)	U
1	AA	190	U
1	AA	195	A
1	AA	197	A
1	AA	201	C
1	AA	202	U
1	AA	203	U
1	AA	204	U
1	AA	216	G
1	AA	221	C
1	AA	247	G
1	AA	251	G
1	AA	258	G
1	AA	266	G
1	AA	267	C
1	AA	279	A
1	AA	289	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	301	G
1	AA	321	A
1	AA	328	C
1	AA	332	G
1	AA	342	C
1	AA	346	G
1	AA	347	G
1	AA	348	G
1	AA	352	C
1	AA	353	A
1	AA	354	G
1	AA	355	C
1	AA	367	U
1	AA	372	C
1	AA	373	A
1	AA	382	A
1	AA	384	G
1	AA	397	A
1	AA	398	C
1	AA	406	G
1	AA	412	A
1	AA	414	A
1	AA	421	U
1	AA	424	G
1	AA	429	U
1	AA	430	A
1	AA	439	A
1	AA	442	C
1	AA	443	C
1	AA	452	A
1	AA	461	A
1	AA	470	C
1	AA	471	G
1	AA	484	G
1	AA	485	G
1	AA	496	A
1	AA	498	U
1	AA	505	G
1	AA	509	A
1	AA	510	A
1	AA	511	C
1	AA	513	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	518	C
1	AA	527	G
1	AA	531	U
1	AA	532	A
1	AA	533	A
1	AA	545	C
1	AA	547	A
1	AA	559	A
1	AA	560	U
1	AA	561	U
1	AA	572	A
1	AA	573	A
1	AA	576	G
1	AA	592	G
1	AA	596	C
1	AA	629	G
1	AA	630	G
1	AA	632	A
1	AA	633	G
1	AA	649	G
1	AA	653	A
1	AA	665	A
1	AA	673	G
1	AA	680	C
1	AA	687	A
1	AA	688	G
1	AA	695	A
1	AA	711	G
1	AA	712	A
1	AA	721	G
1	AA	723	U
1	AA	724	G
1	AA	731	G
1	AA	749	C
1	AA	753	A
1	AA	755	G
1	AA	774	G
1	AA	777	A
1	AA	792	A
1	AA	793	U
1	AA	794	A
1	AA	815	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	816	A
1	AA	817	C
1	AA	821	G
1	AA	828	A
1	AA	833	U
1	AA	840	C
1	AA	841	U
1	AA	851	G
1	AA	853	G
1	AA	859	A
1	AA	874	G
1	AA	902	G
1	AA	914	A
1	AA	922	G
1	AA	926	G
1	AA	927	G
1	AA	932	C
1	AA	934	C
1	AA	935	A
1	AA	960	U
1	AA	961	U
1	AA	968	A
1	AA	969	A
1	AA	971	G
1	AA	972	C
1	AA	974	A
1	AA	975	A
1	AA	976	G
1	AA	977	A
1	AA	989	C
1	AA	992	U
1	AA	993	G
1	AA	996	A
1	AA	1000	U
1	AA	1001(A)	G
1	AA	1002	G
1	AA	1003	G
1	AA	1004	A
1	AA	1005	A
1	AA	1008	C
1	AA	1009	G
1	AA	1019	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1021	G
1	AA	1022	G
1	AA	1023	G
1	AA	1025	U
1	AA	1026	G
1	AA	1027	C
1	AA	1028	C
1	AA	1029	C
1	AA	1030	C
1	AA	1030(A)	G
1	AA	1030(B)	C
1	AA	1030(C)	G
1	AA	1030(D)	A
1	AA	1031	G
1	AA	1033	G
1	AA	1037	C
1	AA	1039	C
1	AA	1043	C
1	AA	1044	A
1	AA	1045	C
1	AA	1052	U
1	AA	1054	C
1	AA	1055	A
1	AA	1065	U
1	AA	1066	C
1	AA	1068	G
1	AA	1076	C
1	AA	1081	G
1	AA	1088	G
1	AA	1094	G
1	AA	1095	U
1	AA	1096	C
1	AA	1097	C
1	AA	1101	A
1	AA	1104	G
1	AA	1108	G
1	AA	1110	A
1	AA	1113	C
1	AA	1124	G
1	AA	1126	U
1	AA	1130	A
1	AA	1132	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1135	U
1	AA	1136	U
1	AA	1137	C
1	AA	1138	G
1	AA	1139	G
1	AA	1140	C
1	AA	1141	C
1	AA	1146	A
1	AA	1152	A
1	AA	1154	G
1	AA	1157	A
1	AA	1158	C
1	AA	1159	U
1	AA	1183	A
1	AA	1184	G
1	AA	1196	U
1	AA	1197	G
1	AA	1202	G
1	AA	1212	U
1	AA	1213	A
1	AA	1224	G
1	AA	1227	A
1	AA	1228	C
1	AA	1236	A
1	AA	1238	A
1	AA	1240	U
1	AA	1244	C
1	AA	1256	A
1	AA	1257	U
1	AA	1258	G
1	AA	1260	C
1	AA	1270	C
1	AA	1273	G
1	AA	1278	U
1	AA	1279	A
1	AA	1280	A
1	AA	1281	U
1	AA	1286	A
1	AA	1287	A
1	AA	1299	A
1	AA	1300	G
1	AA	1302	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1305	G
1	AA	1314	C
1	AA	1317	C
1	AA	1322	C
1	AA	1338	G
1	AA	1340	A
1	AA	1346	A
1	AA	1347	G
1	AA	1353	G
1	AA	1355	G
1	AA	1360	A
1	AA	1363	C
1	AA	1364	U
1	AA	1370	G
1	AA	1397	C
1	AA	1402	C
1	AA	1419	G
1	AA	1422	G
1	AA	1442	G
1	AA	1442(A)	G
1	AA	1442(B)	A
1	AA	1446	U
1	AA	1447	A
1	AA	1452	C
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	1506	U
1	AA	1517	G
1	AA	1519	A
1	AA	1520	G
1	AA	1529	G
1	AA	1530	G
1	AA	1531	A
1	AA	1532	U
22	AV	13	A
22	AV	14	A
22	AV	24	A
23	AW	2	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	AW	3	C
23	AW	4	C
23	AW	8	4SU
23	AW	12	U
23	AW	14	A
23	AW	19	G
23	AW	20	U
23	AW	21	A
23	AW	22	G
23	AW	23	A
23	AW	24	G
23	AW	26	A
23	AW	27	G
23	AW	30	G
23	AW	42	C
23	AW	43	C
23	AW	45	U
23	AW	46	7MG
23	AW	47	U
23	AW	48	C
23	AW	49	C
23	AW	52	G
23	AW	53	G
23	AW	59	U
23	AW	61	C
23	AW	68	C
23	AW	70	G
23	AW	73	A
23	AW	74	C
24	AX	3	C
24	AX	9	G
24	AX	13	C
24	AX	19	G
24	AX	20	U
24	AX	21	A
24	AX	31	G
24	AX	42	G
24	AX	48	C
24	AX	56	C
24	AX	59	A
24	AX	63	G
24	AX	67	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	AX	68	C
24	AX	70	G
24	AX	76	A
25	AY	2	C
25	AY	5	G
25	AY	9	A
25	AY	11	C
25	AY	13	C
25	AY	15	G
25	AY	19	G
25	AY	20	U
25	AY	21	A
25	AY	22	G
25	AY	26	A
25	AY	29	G
25	AY	30	G
25	AY	33	U
25	AY	34	G
25	AY	35	A
25	AY	36	A
25	AY	39	PSU
25	AY	41	C
25	AY	44	G
25	AY	45	U
25	AY	46	7MG
25	AY	47	U
25	AY	48	C
25	AY	49	C
25	AY	54	5MU
25	AY	57	G
25	AY	58	A
25	AY	59	U
25	AY	60	U
25	AY	62	C
25	AY	65	G
25	AY	67	C
25	AY	70	G
25	AY	73	A
26	BA	12	U
26	BA	34	C
26	BA	36	G
26	BA	45	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BA	64	A
26	BA	71	A
26	BA	72	U
26	BA	74	A
26	BA	75	G
26	BA	84	A
26	BA	95	G
26	BA	99	U
26	BA	100	G
26	BA	102	G
26	BA	118	A
26	BA	119	A
26	BA	120	U
26	BA	151	C
26	BA	154(A)	C
26	BA	172	C
26	BA	181	A
26	BA	182	A
26	BA	188	G
26	BA	196	A
26	BA	197	A
26	BA	199	A
26	BA	205	G
26	BA	215	G
26	BA	216	A
26	BA	221	A
26	BA	222	A
26	BA	223	A
26	BA	229	A
26	BA	233	A
26	BA	248	G
26	BA	271(E)	U
26	BA	271(I)	G
26	BA	271(K)	U
26	BA	271(L)	U
26	BA	271(M)	G
26	BA	271(N)	U
26	BA	271(S)	G
26	BA	272(A)	U
26	BA	272(B)	G
26	BA	272(G)	C
26	BA	272(I)	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BA	279	C
26	BA	282	A
26	BA	283	A
26	BA	311	A
26	BA	329	G
26	BA	330	A
26	BA	352	G
26	BA	363	G
26	BA	363(B)	G
26	BA	372	G
26	BA	380	U
26	BA	386	G
26	BA	396	G
26	BA	405	U
26	BA	411	G
26	BA	428	A
26	BA	443	A
26	BA	444	C
26	BA	448	U
26	BA	454	A
26	BA	456	C
26	BA	470	A
26	BA	479	A
26	BA	481	G
26	BA	504	U
26	BA	505	A
26	BA	509	C
26	BA	528	A
26	BA	529	A
26	BA	530	G
26	BA	531	C
26	BA	532	A
26	BA	533	G
26	BA	545	G
26	BA	549	G
26	BA	563	G
26	BA	573	G
26	BA	575	A
26	BA	592	G
26	BA	603	A
26	BA	604	G
26	BA	607	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BA	614(A)	U
26	BA	614(B)	G
26	BA	615	G
26	BA	616	G
26	BA	627	A
26	BA	637	A
26	BA	645	C
26	BA	646	A
26	BA	652(F)	G
26	BA	652(T)	C
26	BA	652(U)	G
26	BA	669	G
26	BA	677	A
26	BA	686	G
26	BA	730	C
26	BA	732	C
26	BA	764	A
26	BA	765	G
26	BA	775	G
26	BA	776	G
26	BA	782	A
26	BA	784	A
26	BA	785	G
26	BA	792	G
26	BA	805	G
26	BA	812	C
26	BA	819	A
26	BA	824	A
26	BA	827	U
26	BA	828	U
26	BA	830	G
26	BA	855	G
26	BA	859	G
26	BA	862	G
26	BA	866	A
26	BA	877	U
26	BA	879	G
26	BA	880	G
26	BA	882	G
26	BA	884	C
26	BA	885	C
26	BA	886	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BA	887	A
26	BA	888	C
26	BA	889	C
26	BA	890	A
26	BA	892	G
26	BA	893	C
26	BA	894	C
26	BA	895	U
26	BA	896	A
26	BA	897	C
26	BA	898	C
26	BA	899	A
26	BA	900	A
26	BA	901	A
26	BA	907	U
26	BA	910	A
26	BA	932	G
26	BA	941	A
26	BA	945	A
26	BA	946	G
26	BA	958	U
26	BA	959	A
26	BA	961	C
26	BA	974	G
26	BA	975	C
26	BA	983	A
26	BA	996	A
26	BA	1012	U
26	BA	1013	C
26	BA	1022	G
26	BA	1033	U
26	BA	1038	C
26	BA	1041	C
26	BA	1045	A
26	BA	1046	A
26	BA	1047	G
26	BA	1048	A
26	BA	1051	G
26	BA	1107	G
26	BA	1108	U
26	BA	1110	G
26	BA	1112	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BA	1128	A
26	BA	1130	U
26	BA	1135	C
26	BA	1136	G
26	BA	1170	G
26	BA	1171	G
26	BA	1173	G
26	BA	1174	A
26	BA	1175	U
26	BA	1176	G
26	BA	1177	A
26	BA	1178	C
26	BA	1210	A
26	BA	1211	U
26	BA	1220	A
26	BA	1244	G
26	BA	1248	G
26	BA	1253	A
26	BA	1256	G
26	BA	1271	G
26	BA	1272	A
26	BA	1273	U
26	BA	1289	C
26	BA	1300	U
26	BA	1301	A
26	BA	1303	G
26	BA	1314	C
26	BA	1319	G
26	BA	1352	U
26	BA	1359	A
26	BA	1360	A
26	BA	1365	A
26	BA	1370	C
26	BA	1380	G
26	BA	1384	A
26	BA	1385	G
26	BA	1416	G
26	BA	1417	C
26	BA	1420	U
26	BA	1421	G
26	BA	1428	C
26	BA	1445	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BA	1449	A
26	BA	1450	G
26	BA	1459	G
26	BA	1467	C
26	BA	1471	A
26	BA	1478	G
26	BA	1482	G
26	BA	1484	G
26	BA	1493	C
26	BA	1507	A
26	BA	1508	A
26	BA	1509	C
26	BA	1509(A)	A
26	BA	1531	C
26	BA	1538	G
26	BA	1543	C
26	BA	1558	A
26	BA	1566	A
26	BA	1569	A
26	BA	1578	U
26	BA	1580	A
26	BA	1581	G
26	BA	1584	C
26	BA	1586	A
26	BA	1608	A
26	BA	1610	A
26	BA	1648	C
26	BA	1654	A
26	BA	1664	A
26	BA	1674	G
26	BA	1694	C
26	BA	1700	A
26	BA	1701	A
26	BA	1703	G
26	BA	1722	A
26	BA	1739	U
26	BA	1746	G
26	BA	1748	G
26	BA	1756	G
26	BA	1759	A
26	BA	1762	A
26	BA	1763	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BA	1764	G
26	BA	1773	A
26	BA	1780	A
26	BA	1782	C
26	BA	1786	A
26	BA	1791	A
26	BA	1800	C
26	BA	1816	G
26	BA	1839	G
26	BA	1847	A
26	BA	1848	A
26	BA	1861	G
26	BA	1877	A
26	BA	1878	G
26	BA	1886	C
26	BA	1889	A
26	BA	1900	A
26	BA	1906	G
26	BA	1915	U
26	BA	1919	A
26	BA	1924	C
26	BA	1927	A
26	BA	1929	G
26	BA	1930	G
26	BA	1937	A
26	BA	1938	A
26	BA	1955	U
26	BA	1963	U
26	BA	1967	C
26	BA	1970	A
26	BA	1971	A
26	BA	1972	A
26	BA	1992	G
26	BA	1993	U
26	BA	1997	G
26	BA	2020	A
26	BA	2023	G
26	BA	2031	A
26	BA	2032	G
26	BA	2033	A
26	BA	2043	C
26	BA	2055	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BA	2056	G
26	BA	2060	A
26	BA	2061	G
26	BA	2062	A
26	BA	2069	G
26	BA	2098	U
26	BA	2102	U
26	BA	2110	G
26	BA	2111	C
26	BA	2119	A
26	BA	2120	G
26	BA	2121	G
26	BA	2125	G
26	BA	2126	A
26	BA	2127	G
26	BA	2128	C
26	BA	2129	C
26	BA	2132	U
26	BA	2133	G
26	BA	2134	A
26	BA	2135	A
26	BA	2136	C
26	BA	2138	C
26	BA	2140	C
26	BA	2141	G
26	BA	2142	C
26	BA	2143	C
26	BA	2145	C
26	BA	2146	C
26	BA	2147	G
26	BA	2149	G
26	BA	2157	G
26	BA	2158	A
26	BA	2159	G
26	BA	2160	G
26	BA	2165	G
26	BA	2167	U
26	BA	2168	G
26	BA	2169	A
26	BA	2171	A
26	BA	2172	U
26	BA	2173	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BA	2174	C
26	BA	2178	C
26	BA	2181	G
26	BA	2182	G
26	BA	2184	G
26	BA	2188	C
26	BA	2189	U
26	BA	2192	G
26	BA	2198	A
26	BA	2199	A
26	BA	2206	G
26	BA	2207	G
26	BA	2208	A
26	BA	2218	U
26	BA	2225	A
26	BA	2238	G
26	BA	2239	G
26	BA	2268	A
26	BA	2269	A
26	BA	2275	C
26	BA	2283	C
26	BA	2287	A
26	BA	2289	G
26	BA	2305	A
26	BA	2308	G
26	BA	2320	A
26	BA	2325	G
26	BA	2334	G
26	BA	2336	A
26	BA	2343	C
26	BA	2347	C
26	BA	2350	C
26	BA	2361	A
26	BA	2383	G
26	BA	2385	C
26	BA	2393	A
26	BA	2400	G
26	BA	2406	U
26	BA	2414	G
26	BA	2419	U
26	BA	2425	A
26	BA	2429	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BA	2430	A
26	BA	2435	A
26	BA	2439	A
26	BA	2441	C
26	BA	2448	A
26	BA	2464	C
26	BA	2468	G
26	BA	2469	A
26	BA	2471	C
26	BA	2474	C
26	BA	2476	A
26	BA	2487	G
26	BA	2490	G
26	BA	2502	G
26	BA	2505	G
26	BA	2518	A
26	BA	2529	G
26	BA	2535	G
26	BA	2549	G
26	BA	2554	U
26	BA	2566	A
26	BA	2567	G
26	BA	2573	C
26	BA	2574	G
26	BA	2602	A
26	BA	2609	U
26	BA	2611	U
26	BA	2612	C
26	BA	2629	A
26	BA	2630	G
26	BA	2654	A
26	BA	2669	G
26	BA	2689	U
26	BA	2690	C
26	BA	2691	C
26	BA	2702	U
26	BA	2712(A)	A
26	BA	2713	A
26	BA	2726	U
26	BA	2733	A
26	BA	2757	A
26	BA	2758	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BA	2761	G
26	BA	2764	A
26	BA	2765	A
26	BA	2766	G
26	BA	2778	A
26	BA	2790	A
26	BA	2791	C
26	BA	2792	G
26	BA	2793	G
26	BA	2802	G
26	BA	2805	G
26	BA	2808	U
26	BA	2818	G
26	BA	2820	A
26	BA	2821	A
26	BA	2833	G
26	BA	2834	G
26	BA	2835	A
26	BA	2872	G
26	BA	2873	A
26	BA	2876	G
26	BA	2880	C
26	BA	2882	A
26	BA	2883	A
26	BA	2892	A
26	BA	2894	G
27	BB	2	C
27	BB	7	G
27	BB	34	U
27	BB	42	C
27	BB	56	G
27	BB	73	A
27	BB	75	G
27	BB	85	G
27	BB	93	G
27	BB	106	G
27	BB	110	G
27	BB	111	G
27	BB	112	U
27	BB	120	A
1	CA	5	U
1	CA	6	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	7	G
1	CA	9	G
1	CA	13	U
1	CA	22	G
1	CA	29	G
1	CA	32	A
1	CA	39	G
1	CA	47	C
1	CA	48	C
1	CA	51	A
1	CA	59	A
1	CA	61	G
1	CA	65	U
1	CA	66	G
1	CA	77	G
1	CA	79	G
1	CA	80	G
1	CA	88	A
1	CA	89	C
1	CA	91	C
1	CA	96	U
1	CA	97	G
1	CA	98	G
1	CA	100	C
1	CA	101	A
1	CA	111	G
1	CA	112	G
1	CA	116	A
1	CA	121	C
1	CA	131	C
1	CA	146	G
1	CA	155	C
1	CA	163	C
1	CA	166	G
1	CA	173	U
1	CA	174	C
1	CA	180	U
1	CA	182	U
1	CA	189(D)	C
1	CA	189(K)	U
1	CA	190	U
1	CA	195	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	197	A
1	CA	201	C
1	CA	202	U
1	CA	203	U
1	CA	204	U
1	CA	216	G
1	CA	221	C
1	CA	247	G
1	CA	251	G
1	CA	258	G
1	CA	266	G
1	CA	267	C
1	CA	279	A
1	CA	289	G
1	CA	301	G
1	CA	321	A
1	CA	328	C
1	CA	332	G
1	CA	342	C
1	CA	344	A
1	CA	346	G
1	CA	350	G
1	CA	352	C
1	CA	353	A
1	CA	354	G
1	CA	355	C
1	CA	367	U
1	CA	372	C
1	CA	373	A
1	CA	382	A
1	CA	384	G
1	CA	397	A
1	CA	398	C
1	CA	406	G
1	CA	412	A
1	CA	413	G
1	CA	414	A
1	CA	421	U
1	CA	424	G
1	CA	429	U
1	CA	430	A
1	CA	439	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	442	C
1	CA	443	C
1	CA	452	A
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	505	G
1	CA	509	A
1	CA	510	A
1	CA	511	C
1	CA	513	C
1	CA	518	C
1	CA	521	G
1	CA	528	C
1	CA	531	U
1	CA	532	A
1	CA	533	A
1	CA	545	C
1	CA	547	A
1	CA	559	A
1	CA	561	U
1	CA	572	A
1	CA	573	A
1	CA	576	G
1	CA	592	G
1	CA	596	C
1	CA	629	G
1	CA	630	G
1	CA	632	A
1	CA	633	G
1	CA	649	G
1	CA	650	G
1	CA	653	A
1	CA	664	G
1	CA	665	A
1	CA	673	G
1	CA	680	C
1	CA	687	A
1	CA	688	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	693	G
1	CA	695	A
1	CA	711	G
1	CA	712	A
1	CA	721	G
1	CA	723	U
1	CA	724	G
1	CA	731	G
1	CA	749	C
1	CA	753	A
1	CA	755	G
1	CA	774	G
1	CA	777	A
1	CA	792	A
1	CA	793	U
1	CA	794	A
1	CA	815	A
1	CA	817	C
1	CA	821	G
1	CA	828	A
1	CA	833	U
1	CA	840	C
1	CA	841	U
1	CA	851	G
1	CA	853	G
1	CA	859	A
1	CA	874	G
1	CA	902	G
1	CA	914	A
1	CA	926	G
1	CA	927	G
1	CA	932	C
1	CA	934	C
1	CA	935	A
1	CA	960	U
1	CA	961	U
1	CA	968	A
1	CA	969	A
1	CA	971	G
1	CA	972	C
1	CA	974	A
1	CA	975	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	976	G
1	CA	977	A
1	CA	989	C
1	CA	992	U
1	CA	993	G
1	CA	996	A
1	CA	997	U
1	CA	1000	U
1	CA	1001(A)	G
1	CA	1002	G
1	CA	1003	G
1	CA	1004	A
1	CA	1005	A
1	CA	1006	C
1	CA	1009	G
1	CA	1019	C
1	CA	1021	G
1	CA	1022	G
1	CA	1023	G
1	CA	1024	G
1	CA	1025	U
1	CA	1026	G
1	CA	1027	C
1	CA	1028	C
1	CA	1030	C
1	CA	1030(A)	G
1	CA	1030(C)	G
1	CA	1030(D)	A
1	CA	1031	G
1	CA	1032	G
1	CA	1037	C
1	CA	1039	C
1	CA	1041	A
1	CA	1043	C
1	CA	1052	U
1	CA	1054	C
1	CA	1055	A
1	CA	1065	U
1	CA	1066	C
1	CA	1068	G
1	CA	1076	C
1	CA	1081	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1088	G
1	CA	1094	G
1	CA	1095	U
1	CA	1096	C
1	CA	1097	C
1	CA	1101	A
1	CA	1104	G
1	CA	1108	G
1	CA	1109	C
1	CA	1110	A
1	CA	1113	C
1	CA	1117	G
1	CA	1124	G
1	CA	1125	U
1	CA	1126	U
1	CA	1129	C
1	CA	1130	A
1	CA	1131	G
1	CA	1132	C
1	CA	1135	U
1	CA	1136	U
1	CA	1137	C
1	CA	1138	G
1	CA	1139	G
1	CA	1140	C
1	CA	1141	C
1	CA	1146	A
1	CA	1147	C
1	CA	1152	A
1	CA	1154	G
1	CA	1157	A
1	CA	1158	C
1	CA	1159	U
1	CA	1183	A
1	CA	1184	G
1	CA	1196	U
1	CA	1197	G
1	CA	1202	G
1	CA	1211	U
1	CA	1212	U
1	CA	1213	A
1	CA	1224	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1227	A
1	CA	1228	C
1	CA	1236	A
1	CA	1238	A
1	CA	1240	U
1	CA	1244	C
1	CA	1256	A
1	CA	1257	U
1	CA	1258	G
1	CA	1260	C
1	CA	1262	C
1	CA	1270	C
1	CA	1273	G
1	CA	1278	U
1	CA	1279	A
1	CA	1280	A
1	CA	1281	U
1	CA	1282	C
1	CA	1286	A
1	CA	1287	A
1	CA	1299	A
1	CA	1300	G
1	CA	1305	G
1	CA	1314	C
1	CA	1317	C
1	CA	1322	C
1	CA	1338	G
1	CA	1340	A
1	CA	1346	A
1	CA	1347	G
1	CA	1353	G
1	CA	1355	G
1	CA	1363	C
1	CA	1364	U
1	CA	1370	G
1	CA	1397	C
1	CA	1402	C
1	CA	1419	G
1	CA	1422	G
1	CA	1442	G
1	CA	1442(A)	G
1	CA	1442(B)	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1446	U
1	CA	1447	A
1	CA	1452	C
1	CA	1456	G
1	CA	1487	G
1	CA	1492	A
1	CA	1493	A
1	CA	1494	G
1	CA	1497	G
1	CA	1502	A
1	CA	1503	A
1	CA	1504	G
1	CA	1506	U
1	CA	1517	G
1	CA	1519	A
1	CA	1520	G
1	CA	1529	G
1	CA	1530	G
1	CA	1531	A
1	CA	1532	U
22	CV	14	A
22	CV	24	A
23	CW	3	C
23	CW	4	C
23	CW	5	G
23	CW	6	G
23	CW	8	4SU
23	CW	9	A
23	CW	12	U
23	CW	14	A
23	CW	19	G
23	CW	22	G
23	CW	23	A
23	CW	25	C
23	CW	26	A
23	CW	27	G
23	CW	30	G
23	CW	42	C
23	CW	43	C
23	CW	45	U
23	CW	46	7MG
23	CW	47	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	CW	48	C
23	CW	49	C
23	CW	52	G
23	CW	53	G
23	CW	61	C
23	CW	62	C
23	CW	64	A
23	CW	66	U
23	CW	67	C
23	CW	68	C
23	CW	70	G
23	CW	74	C
24	CX	8	4SU
24	CX	9	G
24	CX	13	C
24	CX	16	C
24	CX	19	G
24	CX	20	U
24	CX	21	A
24	CX	31	G
24	CX	42	G
24	CX	47	U
24	CX	48	C
24	CX	50	U
24	CX	52	G
24	CX	56	C
24	CX	59	A
24	CX	60	U
24	CX	61	C
24	CX	63	G
24	CX	67	C
24	CX	68	C
24	CX	76	A
25	CY	2	C
25	CY	8	4SU
25	CY	9	A
25	CY	11	C
25	CY	13	C
25	CY	15	G
25	CY	19	G
25	CY	23	A
25	CY	27	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	CY	29	G
25	CY	30	G
25	CY	33	U
25	CY	34	G
25	CY	35	A
25	CY	36	A
25	CY	39	PSU
25	CY	41	C
25	CY	45	U
25	CY	46	7MG
25	CY	47	U
25	CY	49	C
25	CY	52	G
25	CY	54	5MU
25	CY	56	C
25	CY	57	G
25	CY	58	A
25	CY	59	U
25	CY	62	C
25	CY	65	G
25	CY	67	C
25	CY	70	G
25	CY	73	A
26	DA	10	G
26	DA	12	U
26	DA	15	G
26	DA	16	G
26	DA	34	C
26	DA	35	G
26	DA	45	C
26	DA	51	G
26	DA	61	G
26	DA	71	A
26	DA	74	A
26	DA	75	G
26	DA	78	A
26	DA	83	G
26	DA	84	A
26	DA	90	U
26	DA	95	G
26	DA	100	G
26	DA	102	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	DA	118	A
26	DA	119	A
26	DA	120	U
26	DA	141	A
26	DA	154(A)	C
26	DA	157	U
26	DA	173	G
26	DA	181	A
26	DA	182	A
26	DA	196	A
26	DA	199	A
26	DA	205	G
26	DA	214	G
26	DA	215	G
26	DA	216	A
26	DA	221	A
26	DA	222	A
26	DA	225	A
26	DA	228	A
26	DA	229	A
26	DA	233	A
26	DA	248	G
26	DA	266	G
26	DA	271(I)	G
26	DA	271(K)	U
26	DA	271(L)	U
26	DA	271(M)	G
26	DA	271(N)	U
26	DA	271(V)	G
26	DA	271(W)	G
26	DA	272(A)	U
26	DA	272(B)	G
26	DA	272(C)	G
26	DA	272(J)	C
26	DA	274	G
26	DA	277	C
26	DA	278	A
26	DA	285	C
26	DA	288	C
26	DA	292	C
26	DA	294	A
26	DA	311	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	DA	324	A
26	DA	327	G
26	DA	329	G
26	DA	330	A
26	DA	333	G
26	DA	352	G
26	DA	363	G
26	DA	372	G
26	DA	386	G
26	DA	389	G
26	DA	396	G
26	DA	399	G
26	DA	405	U
26	DA	407	G
26	DA	411	G
26	DA	412	A
26	DA	415	A
26	DA	421	U
26	DA	428	A
26	DA	442	G
26	DA	443	A
26	DA	444	C
26	DA	447	A
26	DA	454	A
26	DA	455	C
26	DA	457	A
26	DA	470	A
26	DA	481	G
26	DA	485	C
26	DA	494	G
26	DA	498	G
26	DA	504	U
26	DA	505	A
26	DA	509	C
26	DA	521	G
26	DA	530	G
26	DA	531	C
26	DA	532	A
26	DA	533	G
26	DA	545	G
26	DA	563	G
26	DA	568	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	DA	573	G
26	DA	574	C
26	DA	575	A
26	DA	586	A
26	DA	587	C
26	DA	588	U
26	DA	592	G
26	DA	603	A
26	DA	604	G
26	DA	607	U
26	DA	614(B)	G
26	DA	614(C)	A
26	DA	615	G
26	DA	616	G
26	DA	620	G
26	DA	627	A
26	DA	637	A
26	DA	645	C
26	DA	646	A
26	DA	652(B)	A
26	DA	652(C)	G
26	DA	652(D)	C
26	DA	652(U)	G
26	DA	656	G
26	DA	668	G
26	DA	669	G
26	DA	686	G
26	DA	698	C
26	DA	699	A
26	DA	715	G
26	DA	726	G
26	DA	730	C
26	DA	752	A
26	DA	753	C
26	DA	765	G
26	DA	775	G
26	DA	776	G
26	DA	782	A
26	DA	783	A
26	DA	784	A
26	DA	785	G
26	DA	790	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	DA	792	G
26	DA	794	G
26	DA	803	U
26	DA	805	G
26	DA	812	C
26	DA	819	A
26	DA	827	U
26	DA	851	U
26	DA	852	G
26	DA	854	G
26	DA	857	C
26	DA	859	G
26	DA	866	A
26	DA	868	U
26	DA	874	G
26	DA	879	G
26	DA	880	G
26	DA	882	G
26	DA	884	C
26	DA	886	C
26	DA	887	A
26	DA	888	C
26	DA	889	C
26	DA	890	A
26	DA	893	C
26	DA	896	A
26	DA	897	C
26	DA	898	C
26	DA	900	A
26	DA	901	A
26	DA	903	C
26	DA	910	A
26	DA	917	A
26	DA	932	G
26	DA	938	G
26	DA	941	A
26	DA	945	A
26	DA	946	G
26	DA	950	G
26	DA	952	G
26	DA	953	A
26	DA	958	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	DA	959	A
26	DA	961	C
26	DA	974	G
26	DA	975	C
26	DA	983	A
26	DA	996	A
26	DA	1005	C
26	DA	1006	C
26	DA	1012	U
26	DA	1013	C
26	DA	1017	G
26	DA	1022	G
26	DA	1025	G
26	DA	1026	U
26	DA	1033	U
26	DA	1034	G
26	DA	1038	C
26	DA	1039	G
26	DA	1042	G
26	DA	1043	C
26	DA	1114	G
26	DA	1118	C
26	DA	1126	A
26	DA	1128	A
26	DA	1130	U
26	DA	1135	C
26	DA	1136	G
26	DA	1139	G
26	DA	1142(A)	A
26	DA	1144	G
26	DA	1171	G
26	DA	1180	C
26	DA	1196	C
26	DA	1205	U
26	DA	1210	A
26	DA	1211	U
26	DA	1220	A
26	DA	1221	C
26	DA	1229	G
26	DA	1242	A
26	DA	1247	A
26	DA	1253	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	DA	1256	G
26	DA	1271	G
26	DA	1272	A
26	DA	1273	U
26	DA	1287	A
26	DA	1300	U
26	DA	1301	A
26	DA	1303	G
26	DA	1305	C
26	DA	1314	C
26	DA	1332	G
26	DA	1352	U
26	DA	1359	A
26	DA	1360	A
26	DA	1365	A
26	DA	1368	G
26	DA	1370	C
26	DA	1380	G
26	DA	1384	A
26	DA	1385	G
26	DA	1412	A
26	DA	1416	G
26	DA	1417	C
26	DA	1419	A
26	DA	1420	U
26	DA	1421	G
26	DA	1428	C
26	DA	1437	C
26	DA	1445	A
26	DA	1445(A)	C
26	DA	1449	A
26	DA	1450	G
26	DA	1459	G
26	DA	1467	C
26	DA	1471	A
26	DA	1482	G
26	DA	1490	A
26	DA	1493	C
26	DA	1494	A
26	DA	1495	A
26	DA	1496	A
26	DA	1497	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	DA	1508	A
26	DA	1509	C
26	DA	1509(A)	A
26	DA	1523	U
26	DA	1525	G
26	DA	1531	C
26	DA	1541	G
26	DA	1542	A
26	DA	1543	C
26	DA	1547	C
26	DA	1554	A
26	DA	1558	A
26	DA	1559	G
26	DA	1566	A
26	DA	1569	A
26	DA	1578	U
26	DA	1580	A
26	DA	1583	A
26	DA	1584	C
26	DA	1586	A
26	DA	1595	G
26	DA	1598	C
26	DA	1608	A
26	DA	1609	A
26	DA	1610	A
26	DA	1612	C
26	DA	1639	U
26	DA	1640	C
26	DA	1647	G
26	DA	1648	C
26	DA	1654	A
26	DA	1674	G
26	DA	1696	G
26	DA	1700	A
26	DA	1703	G
26	DA	1721	G
26	DA	1722	A
26	DA	1740	G
26	DA	1756	G
26	DA	1758	G
26	DA	1763	G
26	DA	1764	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	DA	1773	A
26	DA	1780	A
26	DA	1782	C
26	DA	1791	A
26	DA	1800	C
26	DA	1801	G
26	DA	1812	A
26	DA	1816	G
26	DA	1835	G
26	DA	1836	C
26	DA	1847	A
26	DA	1848	A
26	DA	1866	C
26	DA	1877	A
26	DA	1887	C
26	DA	1889	A
26	DA	1895	C
26	DA	1900	A
26	DA	1906	G
26	DA	1914	C
26	DA	1929	G
26	DA	1930	G
26	DA	1931	U
26	DA	1936	A
26	DA	1937	A
26	DA	1938	A
26	DA	1955	U
26	DA	1963	U
26	DA	1964	G
26	DA	1967	C
26	DA	1970	A
26	DA	1971	A
26	DA	1972	A
26	DA	1993	U
26	DA	1997	G
26	DA	2020	A
26	DA	2023	G
26	DA	2031	A
26	DA	2032	G
26	DA	2033	A
26	DA	2043	C
26	DA	2046	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	DA	2055	C
26	DA	2056	G
26	DA	2060	A
26	DA	2061	G
26	DA	2062	A
26	DA	2069	G
26	DA	2082	A
26	DA	2093	G
26	DA	2095	C
26	DA	2096	U
26	DA	2099	U
26	DA	2101	G
26	DA	2102	U
26	DA	2103	C
26	DA	2104	G
26	DA	2105	C
26	DA	2108	C
26	DA	2111	C
26	DA	2112	G
26	DA	2113	U
26	DA	2115	G
26	DA	2116	G
26	DA	2117	A
26	DA	2119	A
26	DA	2122	U
26	DA	2124	G
26	DA	2125	G
26	DA	2126	A
26	DA	2127	G
26	DA	2129	C
26	DA	2130	U
26	DA	2131	G
26	DA	2132	U
26	DA	2133	G
26	DA	2134	A
26	DA	2135	A
26	DA	2136	C
26	DA	2137	C
26	DA	2138	C
26	DA	2139	C
26	DA	2143	C
26	DA	2145	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	DA	2146	C
26	DA	2148	G
26	DA	2150	U
26	DA	2151	G
26	DA	2153	G
26	DA	2154	G
26	DA	2155	G
26	DA	2157	G
26	DA	2158	A
26	DA	2159	G
26	DA	2160	G
26	DA	2163	C
26	DA	2164	C
26	DA	2165	G
26	DA	2167	U
26	DA	2168	G
26	DA	2169	A
26	DA	2170	A
26	DA	2172	U
26	DA	2173	A
26	DA	2174	C
26	DA	2177	C
26	DA	2178	C
26	DA	2181	G
26	DA	2184	G
26	DA	2185	C
26	DA	2186	G
26	DA	2189	U
26	DA	2192	G
26	DA	2193	G
26	DA	2198	A
26	DA	2206	G
26	DA	2207	G
26	DA	2208	A
26	DA	2218	U
26	DA	2219	G
26	DA	2225	A
26	DA	2235	G
26	DA	2238	G
26	DA	2239	G
26	DA	2259	G
26	DA	2273	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	DA	2275	C
26	DA	2278	A
26	DA	2280	G
26	DA	2283	C
26	DA	2287	A
26	DA	2288	A
26	DA	2294	C
26	DA	2299	G
26	DA	2302	G
26	DA	2303	G
26	DA	2305	A
26	DA	2308	G
26	DA	2312	U
26	DA	2318	G
26	DA	2319	G
26	DA	2320	A
26	DA	2321	G
26	DA	2325	G
26	DA	2327	A
26	DA	2328	A
26	DA	2334	G
26	DA	2336	A
26	DA	2339	G
26	DA	2343	C
26	DA	2347	C
26	DA	2350	C
26	DA	2354	G
26	DA	2366	A
26	DA	2376	A
26	DA	2383	G
26	DA	2385	C
26	DA	2388	A
26	DA	2400	G
26	DA	2406	U
26	DA	2410	G
26	DA	2422	A
26	DA	2425	A
26	DA	2429	G
26	DA	2430	A
26	DA	2435	A
26	DA	2439	A
26	DA	2441	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	DA	2445	G
26	DA	2448	A
26	DA	2465	C
26	DA	2468	G
26	DA	2469	A
26	DA	2474	C
26	DA	2476	A
26	DA	2478	A
26	DA	2490	G
26	DA	2494	G
26	DA	2497	A
26	DA	2502	G
26	DA	2505	G
26	DA	2506	U
26	DA	2518	A
26	DA	2529	G
26	DA	2549	G
26	DA	2554	U
26	DA	2555	U
26	DA	2566	A
26	DA	2567	G
26	DA	2573	C
26	DA	2586	C
26	DA	2602	A
26	DA	2603	G
26	DA	2609	U
26	DA	2611	U
26	DA	2612	C
26	DA	2615	U
26	DA	2629	A
26	DA	2630	G
26	DA	2652	C
26	DA	2654	A
26	DA	2663	G
26	DA	2669	G
26	DA	2689	U
26	DA	2690	C
26	DA	2691	C
26	DA	2703	C
26	DA	2712(A)	A
26	DA	2713	A
26	DA	2714	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	DA	2726	U
26	DA	2733	A
26	DA	2734	A
26	DA	2751	G
26	DA	2757	A
26	DA	2758	A
26	DA	2760	C
26	DA	2764	A
26	DA	2765	A
26	DA	2766	G
26	DA	2778	A
26	DA	2784	C
26	DA	2793	G
26	DA	2794	C
26	DA	2809	A
26	DA	2818	G
26	DA	2820	A
26	DA	2821	A
26	DA	2833	G
26	DA	2834	G
26	DA	2835	A
26	DA	2872	G
26	DA	2873	A
26	DA	2879	C
26	DA	2880	C
26	DA	2892	A
26	DA	2894	G
26	DA	2895	U
26	DA	2897	U
27	DB	2	C
27	DB	7	G
27	DB	8	U
27	DB	34	U
27	DB	42	C
27	DB	56	G
27	DB	73	A
27	DB	75	G
27	DB	85	G
27	DB	90	A
27	DB	93	G
27	DB	106	G
27	DB	108	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
27	DB	110	G
27	DB	111	G
27	DB	112	U
27	DB	120	A

All (126) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	AA	96	U
1	AA	115	G
1	AA	266	G
1	AA	347	G
1	AA	429	U
1	AA	509	A
1	AA	532	A
1	AA	560	U
1	AA	687	A
1	AA	748	C
1	AA	793	U
1	AA	839	U
1	AA	913	A
1	AA	991	U
1	AA	1026	G
1	AA	1054	C
1	AA	1064	G
1	AA	1065	U
1	AA	1067	A
1	AA	1181	G
1	AA	1201	A
1	AA	1256	A
1	AA	1285	A
1	AA	1442	G
1	AA	1492	A
23	AW	13	C
23	AW	22	G
25	AY	19	G
25	AY	21	A
25	AY	25	C
25	AY	58	A
26	BA	71	A
26	BA	196	A
26	BA	271(J)	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BA	271(K)	U
26	BA	271(M)	G
26	BA	278	A
26	BA	746	A
26	BA	764	A
26	BA	774	A
26	BA	899	A
26	BA	974	G
26	BA	1047	G
26	BA	1142(A)	A
26	BA	1174	A
26	BA	1175	U
26	BA	1176	G
26	BA	1210	A
26	BA	1300	U
26	BA	1301	A
26	BA	1379	A
26	BA	1420	U
26	BA	1530	C
26	BA	1653	G
26	BA	1992	G
26	BA	2110	G
26	BA	2126	A
26	BA	2181	G
26	BA	2183	C
26	BA	2187	G
26	BA	2406	U
26	BA	2430	A
26	BA	2689	U
26	BA	2756	U
26	BA	2893	G
1	CA	60	A
1	CA	65	U
1	CA	115	G
1	CA	266	G
1	CA	429	U
1	CA	509	A
1	CA	532	A
1	CA	560	U
1	CA	687	A
1	CA	748	C
1	CA	840	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	913	A
1	CA	991	U
1	CA	992	U
1	CA	1027	C
1	CA	1054	C
1	CA	1064	G
1	CA	1065	U
1	CA	1067	A
1	CA	1128	C
1	CA	1181	G
1	CA	1183	A
1	CA	1201	A
1	CA	1212	U
1	CA	1256	A
1	CA	1299	A
1	CA	1442	G
1	CA	1492	A
23	CW	4	C
23	CW	13	C
25	CY	46	7MG
26	DA	271(K)	U
26	DA	271(M)	G
26	DA	277	C
26	DA	587	C
26	DA	752	A
26	DA	764	A
26	DA	774	A
26	DA	827	U
26	DA	856	C
26	DA	900	A
26	DA	1210	A
26	DA	1300	U
26	DA	1379	A
26	DA	1420	U
26	DA	1427	A
26	DA	1493	C
26	DA	1530	C
26	DA	1558	A
26	DA	1653	G
26	DA	1913	A
26	DA	1992	G
26	DA	2110	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	DA	2126	A
26	DA	2136	C
26	DA	2169	A
26	DA	2177	C
26	DA	2318	G
26	DA	2689	U
26	DA	2756	U
26	DA	2893	G

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

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

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
23	PSU	CW	39	23	18,21,22	1.33	2 (11%)	22,30,33	1.73	3 (13%)
24	5MC	AX	32	24	18,22,23	0.98	2 (11%)	26,32,35	1.29	3 (11%)
23	7MG	CW	46	23	22,26,27	1.43	4 (18%)	29,39,42	2.41	6 (20%)
25	PSU	CY	39	25	18,21,22	1.41	2 (11%)	22,30,33	2.15	3 (13%)
23	PSU	CW	32	23	18,21,22	1.31	2 (11%)	22,30,33	1.84	3 (13%)
23	PSU	AW	55	23	18,21,22	1.36	2 (11%)	22,30,33	1.80	3 (13%)
23	PSU	AW	32	23	18,21,22	1.33	2 (11%)	22,30,33	1.86	3 (13%)
25	PSU	CY	32	25	18,21,22	1.35	2 (11%)	22,30,33	1.84	4 (18%)
23	MIA	AW	37	23	24,31,32	2.19	4 (16%)	26,44,47	2.60	10 (38%)
24	5MU	AX	54	57,24	19,22,23	1.43	5 (26%)	28,32,35	1.93	5 (17%)
25	PSU	AY	55	25	18,21,22	1.34	3 (16%)	22,30,33	2.16	5 (22%)
23	4SU	AW	8	23	18,21,22	1.71	4 (22%)	26,30,33	2.08	5 (19%)
25	4SU	CY	8	25	18,21,22	1.62	4 (22%)	26,30,33	2.95	6 (23%)
25	5MU	AY	54	25	19,22,23	1.49	5 (26%)	28,32,35	2.13	7 (25%)
23	31M	CW	76	23	38,44,45	1.41	5 (13%)	38,61,64	1.23	3 (7%)
25	5MU	CY	54	25	19,22,23	1.34	4 (21%)	28,32,35	2.18	6 (21%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
23	PSU	CW	55	23	18,21,22	1.35	2 (11%)	22,30,33	1.95	3 (13%)
25	PSU	CY	55	25	18,21,22	1.43	4 (22%)	22,30,33	2.30	5 (22%)
24	PSU	CX	55	24	18,21,22	1.32	2 (11%)	22,30,33	1.85	4 (18%)
25	PSU	AY	39	25	18,21,22	1.54	4 (22%)	22,30,33	1.82	5 (22%)
24	4SU	CX	8	24	18,21,22	1.95	6 (33%)	26,30,33	1.35	4 (15%)
24	5MU	CX	54	24	19,22,23	1.39	4 (21%)	28,32,35	2.26	6 (21%)
25	7MG	CY	46	25	22,26,27	1.44	5 (22%)	29,39,42	2.56	8 (27%)
25	7MG	AY	46	25	22,26,27	1.29	3 (13%)	29,39,42	2.81	7 (24%)
24	5MC	CX	32	24	18,22,23	0.96	2 (11%)	26,32,35	1.17	3 (11%)
23	5MU	AW	54	23	19,22,23	1.40	5 (26%)	28,32,35	1.90	6 (21%)
23	MIA	CW	37	23	18,24,32	1.12	2 (11%)	18,35,47	1.19	2 (11%)
23	7MG	AW	46	23	22,26,27	1.36	4 (18%)	29,39,42	2.52	6 (20%)
25	4SU	AY	8	25	18,21,22	1.78	5 (27%)	26,30,33	2.00	5 (19%)
25	PSU	AY	32	25	18,21,22	1.36	2 (11%)	22,30,33	1.87	4 (18%)
25	MIA	CY	37	25	18,24,32	1.16	2 (11%)	18,35,47	1.25	3 (16%)
25	MIA	AY	37	25	18,24,32	1.14	2 (11%)	18,35,47	1.22	2 (11%)
23	4SU	CW	8	23	18,21,22	1.58	4 (22%)	26,30,33	2.33	5 (19%)
23	5MU	CW	54	23	19,22,23	1.34	4 (21%)	28,32,35	1.97	7 (25%)
23	31M	AW	76	23	38,44,45	1.40	5 (13%)	38,61,64	1.39	4 (10%)
24	4SU	AX	8	24	18,21,22	2.17	5 (27%)	26,30,33	1.70	6 (23%)
24	PSU	AX	55	57,24	18,21,22	1.31	2 (11%)	22,30,33	1.90	4 (18%)
23	PSU	AW	39	23	18,21,22	1.38	2 (11%)	22,30,33	1.70	3 (13%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
23	PSU	CW	39	23	-	0/7/25/26	0/2/2/2
24	5MC	AX	32	24	-	0/7/25/26	0/2/2/2
23	7MG	CW	46	23	-	3/7/37/38	0/3/3/3
25	PSU	CY	39	25	-	2/7/25/26	0/2/2/2
23	PSU	CW	32	23	-	0/7/25/26	0/2/2/2
23	PSU	AW	55	23	-	0/7/25/26	0/2/2/2
23	PSU	AW	32	23	-	0/7/25/26	0/2/2/2
25	PSU	CY	32	25	-	1/7/25/26	0/2/2/2

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
23	MIA	AW	37	23	-	1/11/33/34	0/3/3/3
24	5MU	AX	54	57,24	-	0/7/25/26	0/2/2/2
25	PSU	AY	55	25	-	2/7/25/26	0/2/2/2
23	4SU	AW	8	23	-	0/7/25/26	0/2/2/2
25	4SU	CY	8	25	-	2/7/25/26	0/2/2/2
25	5MU	AY	54	25	-	2/7/25/26	0/2/2/2
23	31M	CW	76	23	-	11/27/49/50	0/4/4/4
25	5MU	CY	54	25	-	2/7/25/26	0/2/2/2
23	PSU	CW	55	23	-	0/7/25/26	0/2/2/2
25	PSU	CY	55	25	-	4/7/25/26	0/2/2/2
24	PSU	CX	55	24	-	1/7/25/26	0/2/2/2
25	PSU	AY	39	25	-	2/7/25/26	0/2/2/2
24	4SU	CX	8	24	-	0/7/25/26	0/2/2/2
24	5MU	CX	54	24	-	0/7/25/26	0/2/2/2
25	7MG	CY	46	25	-	4/7/37/38	0/3/3/3
25	7MG	AY	46	25	-	2/7/37/38	0/3/3/3
24	5MC	CX	32	24	-	0/7/25/26	0/2/2/2
23	5MU	AW	54	23	-	0/7/25/26	0/2/2/2
23	MIA	CW	37	23	-	0/3/25/34	0/3/3/3
23	7MG	AW	46	23	-	3/7/37/38	0/3/3/3
25	4SU	AY	8	25	-	2/7/25/26	0/2/2/2
25	PSU	AY	32	25	-	1/7/25/26	0/2/2/2
25	MIA	CY	37	25	-	3/3/25/34	0/3/3/3
25	MIA	AY	37	25	-	3/3/25/34	0/3/3/3
23	4SU	CW	8	23	-	0/7/25/26	0/2/2/2
23	5MU	CW	54	23	-	0/7/25/26	0/2/2/2
23	31M	AW	76	23	-	9/27/49/50	0/4/4/4
24	4SU	AX	8	24	-	0/7/25/26	0/2/2/2
24	PSU	AX	55	57,24	-	0/7/25/26	0/2/2/2
23	PSU	AW	39	23	-	0/7/25/26	0/2/2/2

All (128) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	AW	37	MIA	C13-C14	7.24	1.53	1.32
23	AW	37	MIA	C2-S10	-6.30	1.70	1.75
24	AX	8	4SU	C4-N3	-5.19	1.32	1.37
23	AW	76	31M	CB-CG	-5.03	1.39	1.51
23	CW	76	31M	CB-CG	-4.85	1.39	1.51

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	CY	8	4SU	C4-S4	-4.65	1.59	1.68
25	AY	8	4SU	C4-S4	-4.39	1.60	1.68
24	CX	8	4SU	C4-N3	-4.37	1.32	1.37
23	AW	8	4SU	C4-S4	-4.34	1.60	1.68
24	AX	8	4SU	C4-S4	-4.32	1.60	1.68
23	CW	8	4SU	C4-S4	-4.25	1.60	1.68
24	CX	8	4SU	C4-S4	-4.23	1.60	1.68
25	AY	39	PSU	C6-C5	4.16	1.40	1.35
24	AX	8	4SU	C2-N3	-3.94	1.30	1.38
23	CW	55	PSU	C6-C5	3.78	1.39	1.35
25	CY	32	PSU	C6-C5	3.65	1.39	1.35
23	AW	55	PSU	C6-C5	3.60	1.39	1.35
25	CY	46	7MG	C4-N9	-3.60	1.33	1.37
25	AY	32	PSU	C6-C5	3.53	1.39	1.35
24	CX	55	PSU	C6-C5	3.42	1.39	1.35
24	AX	8	4SU	C5-C4	-3.40	1.38	1.42
23	CW	76	31M	O4'-C1'	3.40	1.45	1.41
23	CW	39	PSU	C6-C5	3.39	1.39	1.35
25	AY	8	4SU	C4-N3	-3.39	1.34	1.37
23	CW	32	PSU	C6-C5	3.39	1.39	1.35
23	CW	46	7MG	C4-N9	-3.34	1.33	1.37
23	AW	76	31M	O4'-C1'	3.28	1.45	1.41
23	AW	39	PSU	C6-C5	3.25	1.39	1.35
25	CY	39	PSU	C6-C5	3.23	1.39	1.35
23	AW	32	PSU	C6-C5	3.16	1.39	1.35
25	CY	55	PSU	C6-C5	3.14	1.39	1.35
25	AY	55	PSU	C6-C5	3.11	1.38	1.35
24	CX	8	4SU	C5-C4	-3.08	1.38	1.42
23	AW	76	31M	C5-C4	-3.07	1.32	1.40
23	AW	46	7MG	C5-C4	3.06	1.48	1.38
23	CW	76	31M	C5-C4	-3.03	1.32	1.40
23	CW	46	7MG	C5-C4	3.02	1.48	1.38
25	AY	46	7MG	C5-C4	3.01	1.47	1.38
24	CX	54	5MU	C6-C5	2.99	1.39	1.34
25	AY	54	5MU	C2-N1	2.97	1.43	1.38
23	AW	54	5MU	C6-C5	2.96	1.39	1.34
25	CY	46	7MG	C5-C4	2.96	1.47	1.38
23	AW	8	4SU	C4-N3	-2.92	1.34	1.37
25	CY	46	7MG	C8-N9	2.90	1.47	1.46
25	CY	37	MIA	C5-C4	2.89	1.48	1.40
23	AW	46	7MG	C4-N9	-2.88	1.34	1.37
24	AX	54	5MU	C6-C5	2.87	1.39	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	CY	55	PSU	C4-N3	-2.87	1.33	1.38
24	AX	55	PSU	C6-C5	2.87	1.38	1.35
23	AW	39	PSU	C4-N3	-2.84	1.33	1.38
24	AX	54	5MU	C4-N3	-2.78	1.33	1.38
23	CW	37	MIA	C2-N3	2.75	1.36	1.32
23	CW	46	7MG	C8-N9	2.74	1.47	1.46
25	AY	37	MIA	C5-C4	2.73	1.48	1.40
23	AW	76	31M	C6-C5	-2.73	1.33	1.43
24	CX	32	5MC	C6-C5	2.72	1.39	1.34
24	AX	32	5MC	C6-N1	-2.71	1.33	1.38
25	CY	54	5MU	C4-N3	-2.71	1.33	1.38
25	AY	54	5MU	C6-C5	2.71	1.39	1.34
25	AY	54	5MU	C4-C5	2.71	1.49	1.44
23	CW	37	MIA	C5-C4	2.69	1.48	1.40
24	CX	54	5MU	C4-N3	-2.68	1.33	1.38
25	CY	8	4SU	C5-C4	-2.68	1.39	1.42
25	AY	37	MIA	C2-N3	2.66	1.36	1.32
23	CW	54	5MU	C6-C5	2.64	1.38	1.34
25	CY	37	MIA	C2-N3	2.63	1.36	1.32
23	AW	32	PSU	C4-N3	-2.61	1.34	1.38
23	CW	8	4SU	C4-N3	-2.60	1.34	1.37
25	AY	55	PSU	C4-N3	-2.59	1.34	1.38
25	AY	32	PSU	C4-N3	-2.58	1.34	1.38
25	AY	46	7MG	C8-N9	2.57	1.47	1.46
23	AW	55	PSU	C4-N3	-2.57	1.34	1.38
25	AY	8	4SU	C5-C4	-2.56	1.39	1.42
23	CW	76	31M	C6-C5	-2.55	1.33	1.43
23	AW	8	4SU	C5-C4	-2.54	1.39	1.42
23	AW	54	5MU	C4-N3	-2.52	1.34	1.38
23	AW	37	MIA	C5-C4	2.51	1.47	1.40
24	AX	55	PSU	C4-N3	-2.50	1.34	1.38
24	CX	8	4SU	O2-C2	2.47	1.27	1.23
23	CW	54	5MU	C4-C5	2.45	1.48	1.44
23	CW	39	PSU	C4-N3	-2.43	1.34	1.38
25	CY	54	5MU	C2-N3	-2.41	1.33	1.38
24	CX	54	5MU	C4-C5	2.41	1.48	1.44
25	CY	54	5MU	C6-C5	2.40	1.38	1.34
23	AW	8	4SU	C2-N1	2.39	1.42	1.38
25	AY	55	PSU	O4'-C1'	-2.39	1.40	1.43
24	CX	55	PSU	C4-N3	-2.37	1.34	1.38
23	CW	55	PSU	C4-N3	-2.37	1.34	1.38
24	AX	32	5MC	C6-C5	2.37	1.38	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	AW	46	7MG	C6-N1	-2.36	1.34	1.38
23	AW	76	31M	C2-N1	2.36	1.38	1.33
25	AY	8	4SU	C2-N1	2.34	1.42	1.38
25	AY	46	7MG	C6-N1	-2.33	1.34	1.38
23	CW	54	5MU	C2-N1	2.33	1.42	1.38
25	CY	46	7MG	C6-N1	-2.33	1.34	1.38
25	AY	39	PSU	C4-N3	-2.32	1.34	1.38
23	CW	32	PSU	C4-N3	-2.32	1.34	1.38
25	CY	39	PSU	C4-N3	-2.31	1.34	1.38
25	CY	55	PSU	C2-N3	-2.31	1.33	1.37
24	CX	32	5MC	C6-N1	-2.30	1.34	1.38
25	AY	39	PSU	O4'-C1'	-2.30	1.40	1.43
24	AX	54	5MU	C4-C5	2.26	1.48	1.44
24	AX	54	5MU	C2-N1	2.25	1.42	1.38
23	CW	8	4SU	C2-N1	2.24	1.42	1.38
25	CY	54	5MU	C6-N1	-2.23	1.34	1.38
25	AY	8	4SU	C2-N3	-2.22	1.34	1.38
25	CY	8	4SU	C2-N1	2.22	1.42	1.38
25	CY	55	PSU	C4-C5	2.21	1.50	1.44
24	AX	8	4SU	O2-C2	2.21	1.27	1.23
24	CX	8	4SU	C2-N3	-2.19	1.34	1.38
23	AW	54	5MU	C2-N1	2.17	1.41	1.38
25	AY	54	5MU	C6-N1	-2.17	1.34	1.38
23	CW	46	7MG	C6-N1	-2.16	1.34	1.38
23	AW	54	5MU	C4-C5	2.15	1.48	1.44
23	CW	76	31M	C5-N7	-2.14	1.32	1.39
24	CX	54	5MU	C6-N1	-2.13	1.34	1.38
25	AY	54	5MU	C4-N3	-2.13	1.34	1.38
25	AY	39	PSU	C2-N1	-2.12	1.33	1.36
23	AW	46	7MG	C8-N9	2.12	1.47	1.46
23	CW	54	5MU	C4-N3	-2.12	1.34	1.38
25	CY	32	PSU	C4-N3	-2.12	1.34	1.38
23	AW	37	MIA	C6-N1	2.10	1.35	1.32
24	CX	8	4SU	C2-N1	2.10	1.41	1.38
24	AX	54	5MU	C2-N3	-2.08	1.34	1.38
25	CY	46	7MG	C5-C6	2.08	1.48	1.43
25	CY	8	4SU	C4-N3	-2.05	1.35	1.37
23	CW	8	4SU	C5-C4	-2.04	1.39	1.42
23	AW	54	5MU	C2-N3	-2.02	1.34	1.38

All (177) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	AY	46	7MG	N9-C4-N3	10.08	140.54	125.47
23	AW	46	7MG	N9-C4-N3	8.92	138.81	125.47
25	CY	8	4SU	C4-N3-C2	-8.84	118.75	127.34
23	AW	37	MIA	C12-C13-C14	-8.47	110.65	127.14
23	CW	46	7MG	N9-C4-N3	8.10	137.58	125.47
25	CY	46	7MG	N9-C4-N3	7.92	137.32	125.47
23	CW	8	4SU	C4-N3-C2	-7.37	120.18	127.34
25	CY	8	4SU	C5-C4-N3	7.06	121.24	114.69
25	CY	39	PSU	N1-C2-N3	6.75	122.77	115.13
25	AY	55	PSU	N1-C2-N3	6.59	122.59	115.13
25	CY	55	PSU	N1-C2-N3	6.35	122.33	115.13
25	CY	8	4SU	C5-C4-S4	-6.26	116.40	124.47
25	AY	46	7MG	C5-C4-N3	-6.15	116.40	128.13
23	AW	8	4SU	C4-N3-C2	-6.08	121.43	127.34
24	CX	54	5MU	N3-C2-N1	6.03	122.89	114.89
23	CW	55	PSU	N1-C2-N3	5.92	121.84	115.13
24	CX	55	PSU	N1-C2-N3	5.88	121.79	115.13
23	AW	8	4SU	C5-C4-N3	5.87	120.13	114.69
25	CY	46	7MG	N9-C8-N7	-5.86	94.99	103.38
23	CW	32	PSU	N1-C2-N3	5.79	121.69	115.13
24	AX	55	PSU	N1-C2-N3	5.76	121.65	115.13
23	AW	32	PSU	N1-C2-N3	5.74	121.64	115.13
25	AY	32	PSU	N1-C2-N3	5.71	121.60	115.13
24	CX	54	5MU	C4-N3-C2	-5.68	120.00	127.35
23	CW	8	4SU	C5-C4-N3	5.67	119.95	114.69
23	AW	55	PSU	N1-C2-N3	5.66	121.55	115.13
25	CY	32	PSU	N1-C2-N3	5.65	121.53	115.13
25	AY	8	4SU	C5-C4-N3	5.57	119.85	114.69
25	AY	8	4SU	C4-N3-C2	-5.57	121.93	127.34
23	AW	39	PSU	N1-C2-N3	5.53	121.40	115.13
23	AW	76	31M	N3-C2-N1	-5.49	120.09	128.68
23	AW	46	7MG	N9-C8-N7	-5.42	95.63	103.38
23	CW	39	PSU	N1-C2-N3	5.38	121.22	115.13
25	CY	54	5MU	C5-C4-N3	5.34	119.87	115.31
23	CW	76	31M	N3-C2-N1	-5.31	120.38	128.68
25	AY	39	PSU	N1-C2-N3	5.30	121.13	115.13
25	CY	54	5MU	C4-N3-C2	-5.23	120.58	127.35
25	AY	54	5MU	C4-N3-C2	-5.20	120.61	127.35
23	CW	46	7MG	C5-C4-N3	-5.17	118.28	128.13
23	CW	46	7MG	N9-C8-N7	-5.07	96.12	103.38
25	CY	54	5MU	O4-C4-C5	-5.01	119.10	124.90
25	CY	55	PSU	C4-N3-C2	-5.00	119.14	126.34
23	AW	46	7MG	C5-C4-N3	-4.96	118.68	128.13

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	AY	46	7MG	N9-C8-N7	-4.87	96.42	103.38
25	AY	46	7MG	C2-N3-C4	4.82	120.88	112.30
25	CY	46	7MG	C5-C4-N3	-4.81	118.96	128.13
25	AY	54	5MU	C5-C4-N3	4.80	119.41	115.31
25	CY	39	PSU	O2-C2-N1	-4.77	117.54	122.79
24	AX	54	5MU	N3-C2-N1	4.73	121.17	114.89
24	AX	54	5MU	C4-N3-C2	-4.72	121.23	127.35
23	CW	54	5MU	C4-N3-C2	-4.69	121.27	127.35
23	CW	8	4SU	N3-C2-N1	4.59	120.99	114.89
23	AW	54	5MU	C4-N3-C2	-4.57	121.44	127.35
23	AW	54	5MU	N3-C2-N1	4.55	120.93	114.89
25	CY	8	4SU	N3-C2-N1	4.50	120.86	114.89
25	AY	54	5MU	N3-C2-N1	4.48	120.84	114.89
24	AX	54	5MU	C5-C4-N3	4.48	119.14	115.31
25	CY	39	PSU	C4-N3-C2	-4.48	119.89	126.34
24	AX	8	4SU	C6-C5-C4	-4.45	116.10	119.95
23	CW	54	5MU	N3-C2-N1	4.41	120.74	114.89
25	CY	54	5MU	N3-C2-N1	4.38	120.71	114.89
25	AY	55	PSU	C4-N3-C2	-4.37	120.05	126.34
25	CY	8	4SU	O2-C2-N1	-4.34	117.02	122.79
23	AW	37	MIA	C2-N3-C4	4.33	121.29	115.32
25	CY	46	7MG	C2-N3-C4	4.31	119.98	112.30
24	AX	32	5MC	C5-C6-N1	-4.27	118.94	123.34
25	AY	54	5MU	O4-C4-C5	-4.27	119.95	124.90
24	CX	54	5MU	C5-C4-N3	4.27	118.96	115.31
23	CW	46	7MG	C2-N3-C4	4.21	119.79	112.30
23	AW	54	5MU	C5-C4-N3	4.18	118.88	115.31
23	CW	54	5MU	O4-C4-C5	-4.17	120.07	124.90
23	CW	54	5MU	C5-C4-N3	4.15	118.86	115.31
23	AW	46	7MG	C2-N3-C4	4.13	119.66	112.30
25	AY	32	PSU	C4-N3-C2	-4.11	120.41	126.34
23	AW	54	5MU	O4-C4-C5	-4.11	120.14	124.90
25	CY	55	PSU	O2-C2-N1	-4.07	118.31	122.79
25	CY	54	5MU	C5-C6-N1	-4.03	119.20	123.34
24	AX	55	PSU	C4-N3-C2	-4.02	120.55	126.34
23	AW	37	MIA	C16-C14-C13	-4.00	111.09	122.65
24	CX	54	5MU	O2-C2-N1	-3.98	117.50	122.79
23	CW	55	PSU	C4-N3-C2	-3.98	120.61	126.34
24	CX	55	PSU	C4-N3-C2	-3.97	120.62	126.34
24	CX	54	5MU	O4-C4-C5	-3.92	120.36	124.90
23	AW	32	PSU	C4-N3-C2	-3.90	120.71	126.34
25	AY	55	PSU	O2-C2-N1	-3.86	118.55	122.79

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	CW	32	PSU	C4-N3-C2	-3.84	120.81	126.34
23	AW	37	MIA	C15-C14-C13	-3.83	111.57	122.65
24	AX	8	4SU	C5-C4-N3	3.83	118.24	114.69
24	CX	8	4SU	C5-C4-N3	3.81	118.22	114.69
24	AX	8	4SU	O2-C2-N1	3.79	127.82	122.79
23	AW	8	4SU	N3-C2-N1	3.71	119.81	114.89
23	CW	8	4SU	C5-C4-S4	-3.71	119.69	124.47
25	AY	39	PSU	O2-C2-N1	-3.71	118.71	122.79
23	CW	55	PSU	O2-C2-N1	-3.63	118.80	122.79
23	AW	37	MIA	C5-C6-N1	-3.62	117.80	120.81
24	AX	54	5MU	O4-C4-C5	-3.61	120.71	124.90
23	AW	8	4SU	C5-C4-S4	-3.58	119.86	124.47
24	CX	32	5MC	C5-C6-N1	-3.56	119.68	123.34
25	CY	32	PSU	O2-C2-N1	-3.55	118.88	122.79
24	CX	54	5MU	C5-C6-N1	-3.54	119.69	123.34
25	CY	32	PSU	C4-N3-C2	-3.54	121.23	126.34
23	CW	39	PSU	C4-N3-C2	-3.54	121.24	126.34
23	AW	55	PSU	C4-N3-C2	-3.53	121.25	126.34
25	AY	8	4SU	N3-C2-N1	3.47	119.50	114.89
25	CY	55	PSU	C6-C5-C4	-3.44	115.79	118.20
24	AX	55	PSU	O2-C2-N1	-3.38	119.07	122.79
25	AY	54	5MU	C5-C6-N1	-3.36	119.88	123.34
23	AW	54	5MU	C5-C6-N1	-3.33	119.91	123.34
23	CW	32	PSU	O2-C2-N1	-3.32	119.14	122.79
23	AW	39	PSU	C4-N3-C2	-3.31	121.58	126.34
23	AW	32	PSU	O2-C2-N1	-3.26	119.20	122.79
24	AX	54	5MU	C5-C6-N1	-3.26	119.99	123.34
25	AY	46	7MG	C5-C6-N1	3.23	116.69	110.99
25	AY	37	MIA	N3-C2-N1	-3.22	123.64	128.68
23	CW	37	MIA	N3-C2-N1	-3.15	123.75	128.68
23	AW	76	31M	CAM-CTM-N	3.15	120.52	116.15
23	AW	76	31M	OTM-CTM-CAM	-3.13	113.55	120.18
25	CY	37	MIA	N3-C2-N1	-3.12	123.80	128.68
24	CX	8	4SU	C1'-N1-C2	3.04	123.08	117.57
23	AW	55	PSU	O2-C2-N1	-3.03	119.45	122.79
23	CW	76	31M	OTM-CTM-CAM	-3.02	113.79	120.18
23	CW	8	4SU	O2-C2-N1	-3.00	118.80	122.79
23	AW	46	7MG	C5-C4-N9	-2.95	102.51	106.35
24	CX	55	PSU	O2-C2-N1	-2.92	119.57	122.79
23	AW	37	MIA	C2-N1-C6	2.90	122.38	117.19
25	AY	46	7MG	O6-C6-C5	-2.90	120.44	127.54
25	AY	8	4SU	C1'-N1-C2	2.89	122.79	117.57

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	AY	39	PSU	C6-C5-C4	-2.88	116.18	118.20
23	CW	54	5MU	C5-C6-N1	-2.83	120.43	123.34
24	CX	8	4SU	C6-C5-C4	-2.82	117.51	119.95
25	AY	8	4SU	C5-C4-S4	-2.81	120.85	124.47
23	AW	37	MIA	C4-C5-N7	-2.73	106.56	109.40
25	AY	37	MIA	C4-C5-N7	-2.72	106.56	109.40
25	CY	46	7MG	O4'-C1'-N9	-2.71	105.60	109.30
25	CY	46	7MG	C5-C6-N1	2.70	115.75	110.99
24	AX	8	4SU	S4-C4-N3	-2.68	117.56	120.21
23	CW	37	MIA	C4-C5-N7	-2.68	106.61	109.40
23	AW	76	31M	O4'-C4'-C3'	2.68	107.90	104.06
23	CW	46	7MG	C5-C6-N1	2.64	115.65	110.99
23	CW	39	PSU	O2-C2-N1	-2.64	119.89	122.79
24	AX	32	5MC	C5-C4-N3	-2.64	118.83	121.67
23	CW	76	31M	CAM-CTM-N	2.61	119.77	116.15
25	AY	54	5MU	C5M-C5-C4	2.60	121.63	118.77
25	AY	32	PSU	O2-C2-N1	-2.58	119.95	122.79
23	AW	37	MIA	N3-C2-N1	-2.57	122.26	126.98
25	AY	46	7MG	C5-C4-N9	-2.54	103.05	106.35
25	AY	39	PSU	C6-N1-C2	-2.54	120.08	122.68
24	CX	32	5MC	C5-C4-N3	-2.52	118.95	121.67
23	AW	39	PSU	O2-C2-N1	-2.51	120.03	122.79
23	CW	54	5MU	C5M-C5-C4	2.46	121.47	118.77
23	AW	46	7MG	C5-C6-N1	2.45	115.31	110.99
24	AX	8	4SU	C1'-N1-C2	2.45	122.00	117.57
23	AW	37	MIA	C12-N6-C6	-2.42	118.97	122.55
25	AY	55	PSU	O4'-C1'-C2'	2.41	108.55	105.14
23	AW	37	MIA	C11-S10-C2	-2.38	100.49	102.27
24	AX	32	5MC	CM5-C5-C6	-2.26	119.83	122.85
23	CW	54	5MU	O2-C2-N1	-2.22	119.83	122.79
24	AX	8	4SU	O2-C2-N3	-2.21	117.38	121.50
23	AW	8	4SU	C1'-N1-C2	2.20	121.56	117.57
25	CY	8	4SU	S4-C4-N3	2.18	122.36	120.21
25	CY	54	5MU	O2-C2-N1	-2.17	119.90	122.79
24	AX	55	PSU	C5-C6-N1	-2.16	118.87	122.11
25	AY	55	PSU	C5-C6-N1	-2.15	118.88	122.11
25	AY	39	PSU	C4-N3-C2	-2.11	123.29	126.34
23	AW	54	5MU	O2-C2-N1	-2.11	119.99	122.79
25	AY	32	PSU	C5-C6-N1	-2.10	118.95	122.11
25	CY	32	PSU	O4'-C1'-C2'	2.09	108.09	105.14
25	AY	54	5MU	C5M-C5-C6	-2.07	120.08	122.85
24	CX	55	PSU	C5-C6-N1	-2.07	119.00	122.11

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	CY	55	PSU	C5-C6-N1	-2.06	119.03	122.11
25	CY	46	7MG	C5-C4-N9	-2.05	103.69	106.35
24	CX	32	5MC	O2-C2-N3	-2.04	119.01	122.33
24	CX	8	4SU	C6-N1-C2	-2.04	118.39	120.99
25	CY	46	7MG	C6-C5-N7	2.04	135.12	131.91
23	CW	46	7MG	O6-C6-C5	-2.03	122.57	127.54
25	CY	37	MIA	C4-C5-N7	-2.01	107.30	109.40
25	CY	37	MIA	N6-C6-N1	2.01	122.74	118.57

There are no chirality outliers.

All (60) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
23	AW	37	MIA	C12-C13-C14-C16
23	AW	76	31M	NM-CAM-CTM-N
23	AW	76	31M	CBM-CAM-CTM-N
23	AW	76	31M	CBM-CAM-CTM-OTM
25	AY	39	PSU	C3'-C4'-C5'-O5'
25	AY	46	7MG	C4'-C5'-O5'-P
25	AY	54	5MU	C3'-C4'-C5'-O5'
25	AY	54	5MU	O4'-C4'-C5'-O5'
23	CW	46	7MG	C2'-C1'-N9-C8
23	CW	76	31M	C3'-C4'-C5'-O5'
23	CW	76	31M	O4'-C4'-C5'-O5'
23	CW	76	31M	NM-CAM-CTM-N
25	CY	37	MIA	C3'-C4'-C5'-O5'
25	CY	46	7MG	O4'-C4'-C5'-O5'
25	CY	54	5MU	C3'-C4'-C5'-O5'
25	CY	54	5MU	O4'-C4'-C5'-O5'
25	CY	55	PSU	C2'-C1'-C5-C4
25	CY	55	PSU	C2'-C1'-C5-C6
23	CW	76	31M	C-CA-CB-CG
23	CW	76	31M	N-CA-CB-CG
25	AY	39	PSU	O4'-C4'-C5'-O5'
25	CY	39	PSU	C3'-C4'-C5'-O5'
25	CY	39	PSU	O4'-C4'-C5'-O5'
25	CY	46	7MG	C3'-C4'-C5'-O5'
25	CY	8	4SU	C3'-C4'-C5'-O5'
25	CY	8	4SU	O4'-C4'-C5'-O5'
25	CY	37	MIA	O4'-C4'-C5'-O5'
23	CW	76	31M	CA-CB-CG-CD1
23	CW	76	31M	CA-CB-CG-CD2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
23	AW	76	31M	NM-CAM-CTM-OTM
23	CW	76	31M	NM-CAM-CTM-OTM
23	CW	76	31M	CBM-CAM-CTM-OTM
23	AW	76	31M	CTM-CAM-CBM-CGM
25	CY	46	7MG	C2'-C1'-N9-C8
23	AW	76	31M	CBM-CGM-SDM-CEM
23	AW	76	31M	NM-CAM-CBM-CGM
23	AW	46	7MG	C4'-C5'-O5'-P
23	CW	76	31M	CBM-CGM-SDM-CEM
25	AY	37	MIA	C4'-C5'-O5'-P
23	AW	46	7MG	C3'-C4'-C5'-O5'
25	AY	37	MIA	C3'-C4'-C5'-O5'
25	CY	37	MIA	C4'-C5'-O5'-P
25	AY	32	PSU	O4'-C4'-C5'-O5'
25	AY	46	7MG	C3'-C4'-C5'-O5'
23	CW	46	7MG	C4'-C5'-O5'-P
23	AW	76	31M	C2'-C3'-N3'-C
23	AW	46	7MG	O4'-C4'-C5'-O5'
25	AY	55	PSU	O4'-C1'-C5-C4
25	AY	8	4SU	C2'-C1'-N1-C6
25	CY	32	PSU	O4'-C4'-C5'-O5'
25	CY	46	7MG	O4'-C1'-N9-C8
23	CW	46	7MG	C2'-C1'-N9-C4
23	CW	76	31M	CBM-CAM-CTM-N
25	AY	55	PSU	O4'-C1'-C5-C6
25	CY	55	PSU	O4'-C1'-C5-C6
25	AY	8	4SU	C2'-C1'-N1-C2
24	CX	55	PSU	O4'-C4'-C5'-O5'
25	CY	55	PSU	C3'-C4'-C5'-O5'
23	AW	76	31M	C4'-C5'-O5'-P
25	AY	37	MIA	O4'-C4'-C5'-O5'

There are no ring outliers.

28 monomers are involved in 67 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
23	CW	39	PSU	3	0
24	AX	32	5MC	3	0
23	CW	46	7MG	1	0
25	CY	39	PSU	4	0
23	AW	37	MIA	1	0
25	AY	55	PSU	4	0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Clashes	Symm-Clashes
23	AW	8	4SU	1	0
25	CY	8	4SU	5	0
25	AY	54	5MU	2	0
23	CW	76	31M	7	0
23	CW	55	PSU	1	0
25	CY	55	PSU	4	0
25	AY	39	PSU	4	0
24	CX	8	4SU	2	0
24	CX	54	5MU	2	0
25	CY	46	7MG	1	0
25	AY	46	7MG	3	0
24	CX	32	5MC	2	0
23	AW	46	7MG	1	0
25	AY	8	4SU	1	0
25	AY	32	PSU	2	0
25	CY	37	MIA	2	0
25	AY	37	MIA	3	0
23	CW	8	4SU	2	0
23	AW	76	31M	4	0
24	AX	8	4SU	2	0
24	AX	55	PSU	1	0
23	AW	39	PSU	1	0

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 2093 ligands modelled in this entry, 2091 are monoatomic - leaving 2 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
58	SF4	CD	302	4	0,12,12	-	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
58	SF4	AD	501	4	0,12,12	-	-	-		

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
58	SF4	CD	302	4	-	-	0/6/5/5
58	SF4	AD	501	4	-	-	0/6/5/5

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 [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Fit of model and data i

6.1 Protein, DNA and RNA chains i

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ > 2	OWAB(Å ²)	Q < 0.9
1	AA	1498/1521 (98%)	0.35	28 (1%) 66 73	42, 72, 93, 108	0
1	CA	1503/1521 (98%)	0.38	63 (4%) 36 42	44, 74, 94, 109	0
2	AB	231/256 (90%)	0.77	30 (12%) 3 4	72, 82, 90, 94	0
2	CB	231/256 (90%)	1.43	52 (22%) 0 0	73, 84, 90, 95	0
3	AC	206/239 (86%)	0.96	33 (16%) 1 2	68, 79, 87, 94	0
3	CC	206/239 (86%)	1.84	76 (36%) 0 0	71, 81, 89, 94	0
4	AD	208/209 (99%)	0.97	27 (12%) 3 4	57, 72, 81, 90	0
4	CD	208/209 (99%)	0.80	16 (7%) 13 17	58, 71, 80, 91	0
5	AE	148/162 (91%)	1.01	17 (11%) 4 6	58, 71, 80, 85	0
5	CE	148/162 (91%)	1.21	29 (19%) 1 1	60, 73, 81, 86	0
6	AF	100/101 (99%)	0.56	5 (5%) 28 34	56, 69, 78, 82	0
6	CF	100/101 (99%)	0.43	5 (5%) 28 34	57, 70, 78, 82	0
7	AG	155/156 (99%)	0.84	10 (6%) 18 22	65, 75, 83, 91	0
7	CG	155/156 (99%)	1.13	24 (15%) 2 2	66, 76, 84, 92	0
8	AH	137/138 (99%)	0.96	25 (18%) 1 1	62, 72, 79, 87	0
8	CH	137/138 (99%)	1.09	27 (19%) 1 1	64, 74, 80, 87	0
9	AI	127/128 (99%)	1.11	25 (19%) 1 1	65, 80, 86, 89	0
9	CI	127/128 (99%)	2.49	72 (56%) 0 0	68, 82, 88, 91	0
10	AJ	97/105 (92%)	1.18	19 (19%) 1 1	64, 82, 90, 93	0
10	CJ	96/105 (91%)	1.72	35 (36%) 0 0	67, 84, 91, 93	0
11	AK	114/129 (88%)	0.83	8 (7%) 16 19	48, 70, 79, 84	0
11	CK	114/129 (88%)	0.76	8 (7%) 16 19	51, 71, 79, 84	0
12	AL	122/132 (92%)	0.77	5 (4%) 37 44	50, 65, 73, 78	0
12	CL	122/132 (92%)	1.17	24 (19%) 1 1	53, 67, 75, 80	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	AM	123/126 (97%)	0.70	9 (7%) 15 18	55, 70, 81, 89	0
13	CM	122/126 (96%)	2.06	53 (43%) 0 0	70, 84, 91, 99	0
14	AN	60/61 (98%)	1.20	9 (15%) 2 2	67, 74, 83, 84	0
14	CN	60/61 (98%)	3.00	38 (63%) 0 0	69, 77, 84, 88	0
15	AO	88/89 (98%)	0.67	6 (6%) 17 20	56, 67, 80, 81	0
15	CO	88/89 (98%)	0.92	8 (9%) 9 11	59, 69, 80, 83	0
16	AP	82/88 (93%)	1.57	24 (29%) 0 0	57, 71, 80, 84	0
16	CP	82/88 (93%)	0.97	7 (8%) 10 12	58, 70, 80, 84	0
17	AQ	99/105 (94%)	0.81	11 (11%) 5 7	59, 71, 80, 84	0
17	CQ	99/105 (94%)	1.29	25 (25%) 0 0	61, 71, 81, 85	0
18	AR	68/88 (77%)	0.75	5 (7%) 14 18	59, 68, 81, 83	0
18	CR	68/88 (77%)	0.60	3 (4%) 34 41	61, 70, 80, 84	0
19	AS	83/93 (89%)	0.60	3 (3%) 42 49	71, 80, 86, 95	0
19	CS	83/93 (89%)	1.93	31 (37%) 0 0	74, 82, 89, 96	0
20	AT	96/106 (90%)	0.94	14 (14%) 2 3	57, 71, 81, 85	0
20	CT	96/106 (90%)	1.15	15 (15%) 2 2	58, 70, 82, 85	0
21	AU	23/27 (85%)	1.65	7 (30%) 0 0	67, 74, 77, 81	0
21	CU	23/27 (85%)	2.78	15 (65%) 0 0	70, 75, 80, 84	0
22	AV	13/24 (54%)	2.86	7 (53%) 0 0	58, 81, 96, 99	0
22	CV	12/24 (50%)	3.67	8 (66%) 0 0	63, 84, 93, 94	0
23	AW	66/76 (86%)	1.96	25 (37%) 0 0	68, 96, 103, 105	0
23	CW	64/76 (84%)	3.61	52 (81%) 0 0	73, 97, 103, 106	0
24	AX	72/77 (93%)	0.44	1 (1%) 75 81	39, 68, 87, 91	0
24	CX	72/77 (93%)	0.73	4 (5%) 24 29	53, 82, 93, 97	0
25	AY	67/76 (88%)	1.42	21 (31%) 0 0	44, 97, 102, 105	0
25	CY	66/76 (86%)	2.35	32 (48%) 0 0	47, 97, 102, 105	0
26	BA	2819/2915 (96%)	0.67	29 (1%) 82 86	26, 45, 89, 104	0
26	DA	2800/2915 (96%)	0.18	65 (2%) 60 67	30, 49, 90, 108	0
27	BB	120/121 (99%)	0.55	0 100 100	40, 64, 73, 86	0
27	DB	120/121 (99%)	0.20	5 (4%) 36 42	46, 69, 76, 90	0
28	BD	275/276 (99%)	0.81	7 (2%) 57 63	27, 43, 58, 82	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
28	DD	275/276 (99%)	0.69	14 (5%) 28 33	29, 45, 61, 81	0
29	BE	204/206 (99%)	0.79	7 (3%) 45 52	25, 48, 66, 80	0
29	DE	204/206 (99%)	0.57	4 (1%) 65 72	29, 52, 67, 81	0
30	BF	203/210 (96%)	0.75	1 (0%) 91 94	26, 53, 76, 87	0
30	DF	203/210 (96%)	0.57	7 (3%) 45 52	30, 58, 77, 87	0
31	BG	181/182 (99%)	0.81	10 (5%) 25 30	51, 69, 81, 88	0
31	DG	181/182 (99%)	1.26	40 (22%) 0 0	56, 73, 82, 90	0
32	BH	174/180 (96%)	0.75	4 (2%) 60 67	51, 65, 75, 88	0
32	DH	174/180 (96%)	1.09	34 (19%) 1 1	55, 70, 78, 88	0
33	BI	146/148 (98%)	0.56	5 (3%) 45 52	50, 74, 82, 87	0
33	DI	146/148 (98%)	0.60	13 (8%) 9 11	52, 75, 82, 86	0
34	BN	140/140 (100%)	0.90	3 (2%) 63 70	32, 50, 67, 76	0
34	DN	140/140 (100%)	0.68	8 (5%) 23 28	36, 55, 70, 77	0
35	BO	122/122 (100%)	0.58	0 100 100	30, 43, 59, 70	0
35	DO	122/122 (100%)	0.75	3 (2%) 57 63	45, 59, 73, 78	0
36	BP	149/150 (99%)	0.82	3 (2%) 65 72	26, 55, 75, 83	0
36	DP	149/150 (99%)	0.95	22 (14%) 2 2	30, 59, 77, 85	0
37	BQ	141/141 (100%)	0.83	1 (0%) 87 90	36, 52, 67, 80	0
37	DQ	141/141 (100%)	1.25	26 (18%) 1 1	41, 57, 70, 82	0
38	BR	118/118 (100%)	0.68	0 100 100	25, 36, 54, 59	0
38	DR	118/118 (100%)	0.64	2 (1%) 70 76	40, 54, 65, 72	0
39	BS	110/112 (98%)	0.50	1 (0%) 84 88	38, 51, 65, 72	0
39	DS	110/112 (98%)	1.22	25 (22%) 0 0	63, 77, 84, 92	0
40	BT	131/146 (89%)	0.51	0 100 100	32, 47, 69, 82	0
40	DT	131/146 (89%)	0.66	4 (3%) 49 56	48, 63, 79, 85	0
41	BU	116/118 (98%)	0.80	1 (0%) 84 88	18, 33, 49, 59	0
41	DU	116/118 (98%)	0.82	10 (8%) 10 12	42, 61, 78, 84	0
42	BV	101/101 (100%)	0.55	0 100 100	21, 41, 58, 67	0
42	DV	101/101 (100%)	0.63	4 (3%) 38 45	41, 71, 83, 91	0
43	BW	112/113 (99%)	0.73	0 100 100	23, 34, 54, 79	0
43	DW	112/113 (99%)	0.69	5 (4%) 33 40	39, 50, 67, 83	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
44	BX	95/96 (98%)	0.56	0 100 100	23, 38, 61, 84	0
44	DX	95/96 (98%)	0.97	9 (9%) 8 10	43, 60, 76, 79	0
45	BY	107/110 (97%)	0.51	1 (0%) 84 88	32, 50, 69, 83	0
45	DY	107/110 (97%)	1.19	18 (16%) 1 1	57, 71, 81, 88	0
46	BZ	171/206 (83%)	0.70	14 (8%) 11 14	39, 64, 91, 95	0
46	DZ	174/206 (84%)	1.53	46 (26%) 0 0	66, 84, 94, 101	0
47	B0	83/85 (97%)	0.88	6 (7%) 15 18	27, 39, 61, 73	0
47	D0	83/85 (97%)	1.49	21 (25%) 0 0	46, 66, 75, 82	0
48	B1	97/98 (98%)	0.80	7 (7%) 15 18	30, 48, 70, 76	0
48	D1	97/98 (98%)	0.95	13 (13%) 3 4	38, 58, 74, 83	0
49	B2	70/72 (97%)	0.57	0 100 100	34, 50, 64, 79	0
49	D2	70/72 (97%)	0.66	5 (7%) 16 19	56, 70, 80, 86	0
50	B3	59/60 (98%)	0.63	0 100 100	24, 37, 63, 71	0
50	D3	59/60 (98%)	0.96	7 (11%) 4 5	49, 64, 79, 85	0
51	B4	69/71 (97%)	0.48	5 (7%) 15 18	54, 73, 87, 92	0
51	D4	69/71 (97%)	1.13	12 (17%) 1 1	74, 88, 94, 99	0
52	B5	59/60 (98%)	0.63	1 (1%) 70 76	20, 33, 54, 67	0
52	D5	59/60 (98%)	0.55	2 (3%) 45 52	36, 51, 67, 73	0
53	B6	53/54 (98%)	0.60	1 (1%) 66 73	31, 44, 61, 68	0
53	D6	53/54 (98%)	1.10	8 (15%) 2 2	52, 63, 76, 79	0
54	B7	48/49 (97%)	1.03	3 (6%) 20 23	21, 30, 62, 76	0
54	D7	48/49 (97%)	1.31	8 (16%) 1 1	33, 42, 61, 70	0
55	B8	64/65 (98%)	0.74	2 (3%) 49 56	25, 36, 45, 60	0
55	D8	64/65 (98%)	1.51	18 (28%) 0 0	46, 58, 66, 72	0
56	B9	37/37 (100%)	1.07	2 (5%) 25 30	31, 49, 73, 74	0
56	D9	37/37 (100%)	1.27	5 (13%) 3 4	46, 57, 73, 76	0
All	All	20897/21748 (96%)	0.73	1673 (8%) 12 15	18, 64, 89, 109	0

All (1673) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
13	CM	124	PRO	12.7
2	CB	165	VAL	12.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
13	AM	124	PRO	11.3
23	CW	71	G	10.9
7	CG	83	ALA	10.6
13	CM	123	ALA	9.8
3	CC	155	GLY	9.1
7	CG	82	GLY	9.0
23	CW	70	G	8.9
23	CW	73	A	8.4
14	CN	25	VAL	8.4
23	AW	71	G	8.2
23	CW	72	C	8.2
9	CI	7	THR	8.1
3	CC	198	VAL	8.0
51	D4	49	PHE	8.0
23	CW	2	C	8.0
23	AW	70	G	8.0
46	DZ	114	GLY	8.0
13	AM	123	ALA	8.0
13	CM	90	LEU	7.8
13	CM	78	ILE	7.8
7	AG	82	GLY	7.8
9	CI	76	ALA	7.8
9	CI	109	VAL	7.8
23	CW	4	C	7.7
3	CC	8	ILE	7.6
22	CV	23	A	7.6
10	CJ	47	PHE	7.6
14	CN	34	TYR	7.4
13	CM	4	ILE	7.3
21	CU	14	TRP	7.2
14	CN	39	LEU	7.2
3	CC	189	ALA	7.1
19	CS	80	TYR	7.1
23	CW	3	C	7.1
46	DZ	155	LEU	7.1
9	CI	36	TYR	7.0
10	CJ	85	LEU	7.0
13	CM	122	LYS	7.0
22	CV	13	A	7.0
5	CE	12	LEU	7.0
25	CY	1	G	7.0
31	DG	28	VAL	6.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
46	DZ	120	ILE	6.8
13	CM	94	ARG	6.8
14	CN	61	TRP	6.7
45	DY	1	MET	6.7
26	DA	2155	G	6.7
19	CS	82	GLY	6.7
19	CS	79	THR	6.6
25	CY	36	A	6.6
1	CA	1030(B)	C	6.6
25	CY	34	G	6.5
23	CW	31	A	6.5
25	CY	18	G	6.5
2	CB	187	LEU	6.5
9	CI	61	ALA	6.4
22	AV	13	A	6.4
13	CM	120	LYS	6.4
13	CM	121	LYS	6.4
3	CC	124	ILE	6.4
3	CC	157	ILE	6.4
10	CJ	55	LYS	6.4
26	DA	229	A	6.3
9	CI	115	GLY	6.3
13	CM	102	ARG	6.3
39	DS	32	LEU	6.2
7	AG	83	ALA	6.2
9	CI	66	ARG	6.2
54	B7	46	VAL	6.2
31	DG	29	TRP	6.2
14	CN	37	PHE	6.1
26	DA	2132	U	6.1
13	CM	119	GLY	6.1
14	CN	29	ARG	6.0
44	DX	92	LEU	6.0
51	D4	57	GLU	6.0
2	CB	122	PHE	6.0
46	DZ	113	ALA	6.0
46	DZ	107	THR	5.9
3	CC	71	ALA	5.9
5	CE	22	GLY	5.9
14	AN	2	ALA	5.9
9	CI	14	VAL	5.9
9	CI	9	ARG	5.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	DA	2125	G	5.8
51	D4	52	THR	5.8
14	CN	44	LEU	5.7
26	DA	2112	G	5.7
3	CC	153	VAL	5.7
3	CC	190	ARG	5.7
21	CU	6	ARG	5.7
23	CW	69	G	5.6
14	CN	53	LEU	5.6
25	CY	35	A	5.6
26	DA	2154	G	5.6
2	CB	164	VAL	5.6
47	D0	45	PHE	5.6
2	CB	123	ALA	5.6
54	D7	46	VAL	5.6
3	CC	53	ALA	5.5
22	CV	24	A	5.5
13	CM	6	GLY	5.5
45	DY	106	LEU	5.5
2	CB	92	TYR	5.4
22	AV	24	A	5.4
42	DV	72	VAL	5.4
48	B1	98	LEU	5.4
1	CA	1030(A)	G	5.4
8	AH	3	THR	5.4
25	CY	56	C	5.4
25	CY	53	G	5.4
48	D1	2	SER	5.3
9	CI	123	PRO	5.3
21	CU	16	GLY	5.3
46	DZ	116	VAL	5.2
46	BZ	114	GLY	5.2
28	BD	276	LYS	5.2
5	CE	90	VAL	5.2
19	CS	41	VAL	5.2
7	CG	81	GLY	5.2
46	DZ	96	VAL	5.1
17	AQ	27	PHE	5.1
23	CW	38	A	5.1
3	CC	167	TRP	5.1
22	CV	22	U	5.1
23	CW	13	C	5.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
12	CL	64	TYR	5.0
1	CA	1532	U	5.0
25	AY	36	A	5.0
13	CM	87	TYR	5.0
25	CY	64	A	5.0
10	CJ	63	PHE	5.0
5	CE	94	ALA	5.0
45	DY	5	MET	5.0
1	AA	1532	U	5.0
7	AG	79	ARG	5.0
9	CI	15	ALA	4.9
2	CB	132	LYS	4.9
46	DZ	108	PRO	4.9
22	CV	21	C	4.9
2	CB	32	ILE	4.9
23	CW	75	C	4.8
13	AM	122	LYS	4.8
23	AW	4	C	4.8
3	CC	197	GLY	4.8
9	CI	67	GLY	4.8
47	D0	3	HIS	4.8
14	CN	2	ALA	4.8
1	CA	1035	A	4.7
17	CQ	54	GLY	4.7
7	CG	156	TRP	4.7
46	DZ	111	VAL	4.7
26	DA	2173	A	4.7
32	DH	105	LEU	4.7
2	CB	97	TRP	4.7
22	AV	14	A	4.7
26	DA	2133	G	4.7
46	DZ	156	LYS	4.7
2	AB	101	MET	4.7
31	DG	48	GLU	4.7
37	DQ	33	GLY	4.7
56	D9	37	GLY	4.7
2	CB	207	ALA	4.6
47	B0	7	LEU	4.6
16	AP	2	VAL	4.6
23	CW	5	G	4.6
46	DZ	171	ILE	4.6
13	CM	60	VAL	4.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
19	CS	52	TYR	4.6
23	CW	56	C	4.6
1	AA	1036	G	4.6
26	DA	2145	C	4.6
1	AA	1031	G	4.6
2	CB	201	ILE	4.6
25	AY	34	G	4.6
56	D9	16	VAL	4.6
19	CS	84	GLY	4.6
9	CI	110	GLU	4.6
26	BA	2140	C	4.5
1	AA	1257	U	4.5
9	AI	15	ALA	4.5
1	CA	1036	G	4.5
23	CW	24	G	4.5
21	AU	17	THR	4.5
23	AW	3	C	4.5
10	CJ	46	ARG	4.5
19	CS	71	LEU	4.5
19	CS	75	ALA	4.5
1	AA	1028	C	4.5
9	CI	125	TYR	4.5
46	DZ	143	GLY	4.5
9	AI	113	LYS	4.5
45	DY	45	VAL	4.5
9	CI	18	PHE	4.5
54	D7	48	LYS	4.5
9	CI	106	ALA	4.4
3	AC	204	LEU	4.4
3	CC	194	GLY	4.4
23	CW	40	C	4.4
31	DG	140	ILE	4.4
9	CI	49	PRO	4.4
9	CI	122	ALA	4.4
51	D4	54	GLY	4.4
14	CN	36	PHE	4.4
22	AV	12	A	4.4
10	CJ	74	ILE	4.4
26	DA	2802	G	4.4
3	CC	101	LEU	4.4
10	CJ	71	LEU	4.4
12	CL	18	VAL	4.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
5	CE	13	ILE	4.4
26	DA	896	A	4.4
23	CW	28	G	4.4
14	CN	4	LYS	4.3
1	CA	1030	C	4.3
9	AI	81	ILE	4.3
17	CQ	36	ILE	4.3
31	DG	19	LEU	4.3
10	CJ	44	VAL	4.3
4	AD	2	GLY	4.3
46	DZ	147	GLY	4.3
5	CE	109	ILE	4.3
9	AI	106	ALA	4.3
14	CN	10	ALA	4.3
3	CC	120	VAL	4.3
9	CI	124	GLN	4.3
20	CT	9	ASN	4.3
23	CW	14	A	4.3
23	AW	20	U	4.3
9	CI	79	LEU	4.3
23	CW	15	G	4.3
12	CL	32	PHE	4.3
8	CH	130	GLY	4.3
9	AI	19	LEU	4.3
19	CS	30	LEU	4.3
3	CC	129	ALA	4.3
25	CY	5	G	4.3
10	CJ	62	HIS	4.2
25	CY	2	C	4.2
21	CU	13	ILE	4.2
23	CW	10	G	4.2
14	CN	42	ILE	4.2
19	CS	49	ILE	4.2
5	CE	133	TYR	4.2
9	CI	10	ARG	4.2
3	AC	39	ILE	4.2
9	CI	85	LEU	4.2
44	DX	69	TYR	4.2
54	B7	47	ARG	4.2
15	CO	57	LEU	4.1
8	CH	93	VAL	4.1
26	DA	888	C	4.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
7	CG	154	TYR	4.1
9	CI	75	ASP	4.1
14	CN	38	GLY	4.1
9	CI	112	LYS	4.1
14	CN	50	LYS	4.1
10	CJ	54	PHE	4.1
22	AV	23	A	4.1
3	CC	4	LYS	4.1
26	BA	2132	U	4.1
3	CC	126	ARG	4.1
37	DQ	5	ARG	4.1
9	CI	116	LYS	4.1
26	DA	2156	G	4.1
16	AP	19	ILE	4.1
32	DH	6	ARG	4.1
1	CA	1220	G	4.0
25	CY	57	G	4.0
13	CM	101	GLN	4.0
9	CI	114	TYR	4.0
16	AP	38	TYR	4.0
23	CW	6	G	4.0
16	CP	51	VAL	4.0
10	AJ	98	ILE	4.0
53	D6	54	ILE	4.0
13	CM	88	ARG	4.0
46	DZ	149	SER	4.0
32	DH	107	VAL	4.0
54	D7	47	ARG	4.0
46	DZ	172	ALA	4.0
12	CL	90	VAL	4.0
23	CW	30	G	4.0
25	CY	6	G	4.0
2	CB	70	PHE	4.0
2	CB	71	VAL	4.0
10	CJ	49	VAL	4.0
10	CJ	72	VAL	4.0
53	D6	52	VAL	4.0
25	CY	61	C	4.0
20	CT	72	LEU	4.0
21	CU	2	GLY	4.0
23	AW	73	A	4.0
9	CI	4	TYR	4.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	CC	185	GLY	4.0
25	CY	62	C	3.9
26	BA	2145	C	3.9
7	CG	4	ARG	3.9
9	CI	127	LYS	3.9
3	CC	60	ALA	3.9
1	AA	1027	C	3.9
1	CA	1531	A	3.9
45	DY	55	TYR	3.9
46	BZ	106	GLY	3.9
53	D6	11	LEU	3.9
32	DH	72	ILE	3.9
28	BD	2	ALA	3.9
46	DZ	139	VAL	3.9
7	CG	22	LEU	3.9
23	AW	5	G	3.9
9	CI	69	GLY	3.9
14	CN	58	LYS	3.9
1	CA	1001	A	3.9
2	CB	101	MET	3.9
3	CC	145	GLY	3.9
14	CN	59	ALA	3.9
25	AY	24	G	3.9
23	CW	41	C	3.9
3	CC	184	TYR	3.9
46	DZ	125	LEU	3.9
14	CN	49	HIS	3.8
3	CC	160	ALA	3.8
2	CB	131	PRO	3.8
13	CM	97	PRO	3.8
41	DU	2	PRO	3.8
23	AW	69	G	3.8
26	DA	2153	G	3.8
47	D0	44	ARG	3.8
32	DH	113	VAL	3.8
23	CW	36	A	3.8
7	CG	79	ARG	3.8
54	B7	48	LYS	3.8
39	DS	56	LEU	3.8
45	DY	44	ILE	3.8
48	B1	2	SER	3.8
9	AI	109	VAL	3.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	CA	1034	G	3.8
3	AC	87	LEU	3.8
37	DQ	22	LYS	3.8
46	BZ	108	PRO	3.8
32	DH	106	THR	3.8
37	DQ	104	PHE	3.8
25	CY	19	G	3.8
21	CU	11	GLY	3.8
9	CI	19	LEU	3.8
46	BZ	141	VAL	3.8
4	CD	134	ASP	3.8
11	AK	25	TYR	3.8
16	AP	39	TYR	3.8
19	CS	66	MET	3.8
33	DI	38	LEU	3.8
51	D4	50	VAL	3.8
2	CB	228	GLY	3.7
23	CW	74	C	3.7
4	CD	47	ARG	3.7
21	CU	8	THR	3.7
37	DQ	65	PHE	3.7
2	AB	126	GLU	3.7
3	CC	57	ILE	3.7
31	DG	159	VAL	3.7
21	AU	2	GLY	3.7
26	DA	2170	A	3.7
46	DZ	115	GLY	3.7
19	CS	53	ASN	3.7
39	DS	11	LYS	3.7
3	CC	206	GLU	3.7
28	DD	37	LEU	3.7
3	AC	81	GLY	3.7
2	CB	152	PHE	3.7
3	CC	134	ILE	3.7
9	AI	47	LEU	3.7
23	CW	25	C	3.7
46	DZ	141	VAL	3.7
55	D8	26	LYS	3.7
10	CJ	48	THR	3.7
39	DS	3	ARG	3.7
9	CI	17	VAL	3.7
21	CU	17	THR	3.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	BA	1509	C	3.7
26	BA	2794	C	3.7
47	D0	69	PHE	3.7
22	AV	22	U	3.7
14	CN	55	GLY	3.7
8	CH	2	LEU	3.7
13	CM	82	MET	3.7
26	DA	1509	C	3.7
2	AB	133	LYS	3.6
26	DA	2793	G	3.6
10	AJ	18	ALA	3.6
10	CJ	50	ILE	3.6
46	BZ	120	ILE	3.6
51	D4	40	HIS	3.6
26	BA	2793	G	3.6
4	CD	146	ILE	3.6
12	CL	28	LYS	3.6
5	CE	81	GLU	3.6
17	CQ	84	LEU	3.6
47	D0	21	LEU	3.6
48	B1	97	LEU	3.6
46	DZ	170	THR	3.6
9	CI	80	GLY	3.6
1	CA	1202	G	3.6
14	CN	41	ARG	3.6
2	CB	29	ALA	3.6
8	CH	95	VAL	3.6
2	CB	163	PHE	3.6
9	CI	81	ILE	3.6
21	AU	15	ARG	3.6
26	BA	885	C	3.6
2	CB	33	TYR	3.6
20	CT	28	ALA	3.6
25	AY	47	U	3.6
26	DA	2113	U	3.6
9	CI	108	VAL	3.6
54	D7	1	MET	3.6
31	DG	41	GLN	3.6
21	CU	10	ARG	3.5
3	CC	6	HIS	3.5
39	DS	40	ILE	3.5
39	DS	54	LEU	3.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
39	DS	12	PHE	3.5
16	AP	68	ASP	3.5
22	CV	14	A	3.5
26	DA	2119	A	3.5
20	AT	67	ALA	3.5
1	AA	1034	G	3.5
1	CA	1002	G	3.5
1	CA	1224	G	3.5
7	AG	156	TRP	3.5
44	DX	68	ARG	3.5
3	CC	187	ALA	3.5
46	DZ	137	ILE	3.5
51	D4	51	ASP	3.5
7	CG	78	ARG	3.5
1	AA	1030(A)	G	3.5
23	CW	65	G	3.5
30	DF	208	GLY	3.5
26	BA	2146	C	3.5
26	DA	2146	C	3.5
31	DG	25	TYR	3.5
26	DA	2160	G	3.5
23	AW	14	A	3.4
3	CC	128	PHE	3.4
16	AP	60	LEU	3.4
19	CS	14	HIS	3.4
3	AC	206	GLU	3.4
2	CB	31	TYR	3.4
26	DA	2144	U	3.4
20	AT	74	LYS	3.4
23	AW	72	C	3.4
13	CM	105	THR	3.4
3	CC	154	SER	3.4
9	CI	30	GLY	3.4
17	AQ	35	VAL	3.4
21	CU	15	ARG	3.4
3	AC	8	ILE	3.4
3	AC	184	TYR	3.4
25	AY	1	G	3.4
25	CY	63	G	3.4
26	DA	2116	G	3.4
31	DG	11	TYR	3.4
9	CI	27	THR	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
19	CS	35	SER	3.4
41	DU	21	ALA	3.4
46	DZ	173	ALA	3.4
17	CQ	23	VAL	3.4
32	DH	123	PHE	3.4
36	DP	59	LEU	3.4
39	DS	7	TYR	3.4
37	DQ	28	ALA	3.4
39	DS	5	THR	3.4
13	CM	104	ARG	3.4
31	DG	149	VAL	3.4
8	CH	94	TYR	3.4
49	D2	60	LEU	3.4
2	CB	177	ALA	3.4
13	CM	118	ALA	3.4
44	DX	2	LYS	3.4
25	AY	35	A	3.4
1	CA	1001(A)	G	3.4
13	CM	7	VAL	3.4
31	DG	136	ARG	3.4
3	CC	204	LEU	3.4
9	CI	28	VAL	3.4
26	DA	2149	G	3.4
19	CS	81	ARG	3.4
4	AD	155	LEU	3.3
40	DT	75	ILE	3.3
51	B4	59	PHE	3.3
8	CH	124	ALA	3.3
9	CI	62	TYR	3.3
32	DH	102	ALA	3.3
1	AA	1030(B)	C	3.3
2	CB	37	ASN	3.3
25	CY	13	C	3.3
9	AI	126	SER	3.3
47	D0	37	LEU	3.3
1	CA	1150	U	3.3
9	CI	105	ASP	3.3
10	AJ	73	ASP	3.3
17	AQ	36	ILE	3.3
25	CY	47	U	3.3
28	DD	38	LYS	3.3
18	AR	78	LEU	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
20	AT	55	ILE	3.3
31	DG	35	GLU	3.3
31	DG	39	ILE	3.3
21	CU	5	ASP	3.3
23	AW	13	C	3.3
10	CJ	93	GLY	3.3
6	CF	55	ASP	3.3
1	AA	1030(C)	G	3.3
16	AP	59	TRP	3.3
26	BA	2131	G	3.3
2	AB	232	PRO	3.3
9	CI	102	LEU	3.3
47	D0	59	LEU	3.3
39	DS	35	ILE	3.3
26	DA	886	C	3.3
12	CL	13	LYS	3.3
44	DX	33	LYS	3.3
55	D8	35	GLN	3.3
26	DA	2123	G	3.2
9	AI	117	HIS	3.2
12	AL	29	GLY	3.2
23	CW	47	U	3.2
1	AA	1531	A	3.2
24	AX	67	C	3.2
25	AY	56	C	3.2
5	CE	105	VAL	3.2
12	CL	55	VAL	3.2
3	CC	171	GLY	3.2
4	CD	188	LEU	3.2
4	AD	5	ILE	3.2
5	AE	28	PHE	3.2
28	DD	2	ALA	3.2
20	CT	41	ILE	3.2
23	AW	6	G	3.2
25	AY	5	G	3.2
47	D0	4	LYS	3.2
46	DZ	118	GLN	3.2
32	DH	36	PRO	3.2
12	CL	27	LEU	3.2
1	AA	1002	G	3.2
9	CI	126	SER	3.2
9	AI	98	PRO	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
25	AY	13	C	3.2
2	CB	200	ILE	3.2
2	CB	48	MET	3.2
51	D4	55	ARG	3.2
17	AQ	28	PRO	3.2
26	DA	2138	C	3.2
31	DG	152	LEU	3.2
10	AJ	63	PHE	3.2
11	CK	126	ARG	3.2
42	DV	73	SER	3.2
36	DP	118	GLY	3.2
8	CH	112	LEU	3.2
16	AP	17	TYR	3.2
26	DA	2319	G	3.2
26	BA	2062	A	3.2
5	AE	118	ILE	3.2
46	DZ	146	ILE	3.2
14	CN	31	ARG	3.2
2	CB	115	LEU	3.2
3	CC	12	LEU	3.2
23	CW	27	G	3.1
26	DA	2131	G	3.1
2	CB	214	ILE	3.1
14	CN	7	ILE	3.1
19	CS	40	ILE	3.1
25	CY	21	A	3.1
9	CI	128	ARG	3.1
3	CC	87	LEU	3.1
10	CJ	65	LEU	3.1
36	DP	45	LEU	3.1
52	D5	58	LEU	3.1
3	CC	147	LYS	3.1
5	CE	11	ILE	3.1
10	CJ	13	HIS	3.1
23	AW	65	G	3.1
23	CW	23	A	3.1
25	AY	38	A	3.1
17	CQ	92	ARG	3.1
13	CM	64	TRP	3.1
16	CP	48	TRP	3.1
46	DZ	99	TYR	3.1
7	CG	84	ASN	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
23	AW	25	C	3.1
26	BA	2161	C	3.1
26	DA	2128	C	3.1
31	DG	2	PRO	3.1
26	DA	2115	G	3.1
31	DG	49	ASP	3.1
2	CB	34	ALA	3.1
3	CC	47	LEU	3.1
10	CJ	26	ALA	3.1
21	CU	24	ARG	3.1
3	CC	23	TYR	3.1
7	AG	154	TYR	3.1
3	AC	14	ILE	3.1
1	AA	1030(D)	A	3.1
25	CY	65	G	3.1
13	CM	99	ARG	3.1
2	CB	203	GLY	3.1
15	CO	60	VAL	3.1
31	DG	163	ALA	3.1
3	CC	65	ALA	3.1
22	CV	15	A	3.1
36	DP	32	THR	3.1
2	AB	165	VAL	3.1
14	CN	24	CYS	3.1
1	CA	1219	U	3.1
19	CS	32	LYS	3.1
20	CT	26	ASN	3.1
26	DA	2140	C	3.1
3	CC	121	ALA	3.1
3	CC	146	ALA	3.1
4	AD	135	LEU	3.1
13	AM	2	ALA	3.1
14	CN	47	LEU	3.1
17	CQ	73	VAL	3.1
25	CY	26	A	3.0
26	DA	652(B)	A	3.0
23	CW	34	G	3.0
26	DA	883	G	3.0
44	DX	1	MET	3.0
21	AU	18	TYR	3.0
3	CC	199	LYS	3.0
1	AA	163	C	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
7	CG	16	LEU	3.0
32	DH	52	VAL	3.0
23	CW	64	A	3.0
5	CE	30	ALA	3.0
13	CM	75	ALA	3.0
36	DP	57	THR	3.0
13	CM	74	VAL	3.0
32	DH	25	LYS	3.0
9	CI	12	GLU	3.0
27	DB	119	G	3.0
10	CJ	6	ILE	3.0
36	DP	75	ILE	3.0
47	D0	42	GLY	3.0
1	AA	1447	A	3.0
1	CA	1363(A)	A	3.0
23	CW	26	A	3.0
31	BG	146	TYR	3.0
40	DT	111	ARG	3.0
2	CB	118	LEU	3.0
5	CE	16	THR	3.0
10	AJ	40	LEU	3.0
51	D4	44	THR	3.0
1	AA	1026	G	3.0
26	DA	2164	C	3.0
5	AE	6	PHE	3.0
11	AK	29	ILE	3.0
25	CY	12	U	3.0
26	BA	271(K)	U	3.0
47	D0	74	ARG	3.0
12	CL	69	TYR	3.0
27	DB	59	A	3.0
19	CS	20	LEU	3.0
29	BE	195	LEU	3.0
32	DH	128	PRO	3.0
2	CB	197	VAL	3.0
13	CM	95	GLY	3.0
8	CH	9	MET	3.0
14	CN	27	CYS	3.0
26	BA	2143	C	3.0
26	DA	1026	U	3.0
7	AG	40	ALA	3.0
37	DQ	6	ARG	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
17	CQ	90	ILE	2.9
23	CW	19	G	2.9
25	AY	19	G	2.9
25	CY	22	G	2.9
4	CD	141	ARG	2.9
9	CI	103	THR	2.9
13	AM	97	PRO	2.9
32	BH	145	ALA	2.9
46	DZ	117	LEU	2.9
46	BZ	111	VAL	2.9
47	B0	3	HIS	2.9
9	CI	63	ILE	2.9
31	DG	88	ILE	2.9
14	CN	60	SER	2.9
32	DH	2	SER	2.9
9	AI	120	ARG	2.9
31	DG	51	ARG	2.9
25	CY	25	C	2.9
26	DA	2803	C	2.9
5	CE	123	LEU	2.9
46	DZ	5	LEU	2.9
14	CN	35	ARG	2.9
2	CB	211	ILE	2.9
25	CY	33	U	2.9
3	AC	168	ALA	2.9
23	AW	2	C	2.9
32	DH	103	LEU	2.9
39	DS	58	LEU	2.9
55	D8	61	LEU	2.9
9	CI	5	TYR	2.9
11	CK	25	TYR	2.9
9	AI	65	VAL	2.9
18	CR	87	ARG	2.9
44	DX	43	VAL	2.9
2	AB	200	ILE	2.9
36	DP	51	PHE	2.9
8	CH	131	GLY	2.9
17	CQ	98	LEU	2.9
39	BS	37	ALA	2.9
7	CG	32	ARG	2.9
31	DG	146	TYR	2.9
17	CQ	9	VAL	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
17	CQ	56	VAL	2.9
32	DH	115	VAL	2.9
27	DB	118	G	2.9
45	DY	63	LYS	2.9
14	CN	16	PHE	2.9
9	CI	42	ARG	2.9
20	AT	12	ALA	2.9
1	CA	1116	C	2.9
9	CI	65	VAL	2.9
9	CI	33	PHE	2.9
33	DI	35	LEU	2.9
39	DS	33	LYS	2.9
32	DH	157	TYR	2.9
26	DA	2174	C	2.8
2	AB	130	ARG	2.8
8	CH	92	ARG	2.8
19	CS	36	ARG	2.8
3	CC	5	ILE	2.8
47	D0	5	LYS	2.8
1	AA	1001(A)	G	2.8
45	DY	90	LEU	2.8
13	CM	77	ASN	2.8
4	AD	138	TYR	2.8
9	CI	107	ARG	2.8
36	DP	50	ARG	2.8
56	D9	3	VAL	2.8
26	DA	645	C	2.8
26	DA	885	C	2.8
26	DA	2139	C	2.8
41	DU	17	ILE	2.8
13	CM	72	ALA	2.8
14	CN	6	LEU	2.8
19	AS	71	LEU	2.8
47	D0	7	LEU	2.8
1	AA	162	A	2.8
3	CC	159	GLY	2.8
23	CW	29	G	2.8
25	AY	57	G	2.8
32	BH	2	SER	2.8
10	AJ	21	GLN	2.8
8	CH	134	ILE	2.8
24	CX	65	C	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
31	DG	157	ILE	2.8
45	DY	61	ILE	2.8
5	CE	21	ALA	2.8
13	CM	76	ALA	2.8
2	CB	133	LYS	2.8
4	AD	11	LEU	2.8
8	CH	119	LEU	2.8
10	AJ	90	LEU	2.8
4	AD	3	ARG	2.8
9	CI	83	ARG	2.8
39	DS	20	ARG	2.8
1	AA	1023	G	2.8
17	CQ	10	VAL	2.8
51	B4	50	VAL	2.8
8	AH	5	PRO	2.8
17	AQ	30	PRO	2.8
25	AY	12	U	2.8
46	DZ	121	HIS	2.8
2	AB	175	ARG	2.8
26	DA	2142	C	2.8
43	DW	82	LEU	2.8
1	AA	161	A	2.8
5	AE	55	VAL	2.8
39	DS	14	VAL	2.8
8	CH	65	TYR	2.8
1	CA	1030(C)	G	2.8
26	DA	2897	U	2.8
5	AE	108	ALA	2.8
2	AB	227	GLY	2.8
37	DQ	2	LEU	2.8
13	CM	117	VAL	2.8
25	AY	23	A	2.8
11	AK	75	TYR	2.8
14	CN	30	ALA	2.8
23	AW	15	G	2.8
17	AQ	99	SER	2.8
55	D8	25	MET	2.8
4	AD	180	GLY	2.7
4	CD	9	CYS	2.7
9	CI	88	TYR	2.7
9	CI	52	ALA	2.7
31	BG	93	THR	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	BH	4	ILE	2.7
8	CH	133	LEU	2.7
12	CL	60	LEU	2.7
34	DN	116	LEU	2.7
45	DY	31	LEU	2.7
1	CA	1115	C	2.7
49	D2	1	MET	2.7
2	CB	139	LYS	2.7
16	AP	21	VAL	2.7
37	DQ	18	LYS	2.7
45	DY	42	VAL	2.7
2	CB	162	ILE	2.7
3	CC	152	ILE	2.7
7	CG	152	ALA	2.7
13	AM	107	ALA	2.7
14	CN	40	CYS	2.7
20	CT	63	ILE	2.7
46	BZ	107	THR	2.7
48	D1	37	ILE	2.7
1	CA	983	A	2.7
23	CW	21	A	2.7
32	DH	71	LEU	2.7
5	CE	8	GLU	2.7
46	DZ	50	GLN	2.7
39	DS	57	LYS	2.7
1	CA	1033	G	2.7
23	CW	67	C	2.7
11	CK	114	VAL	2.7
2	CB	137	ARG	2.7
54	D7	23	ARG	2.7
7	CG	39	ALA	2.7
14	CN	46	GLU	2.7
8	CH	58	TYR	2.7
8	CH	111	ILE	2.7
13	CM	21	TYR	2.7
32	DH	7	LEU	2.7
32	DH	94	TYR	2.7
37	DQ	32	TYR	2.7
37	DQ	47	ILE	2.7
28	BD	38	LYS	2.7
19	CS	68	GLY	2.7
46	BZ	115	GLY	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
46	BZ	143	GLY	2.7
14	CN	26	ARG	2.7
46	DZ	119	GLU	2.7
26	DA	2124	G	2.7
19	CS	12	ASP	2.7
3	AC	193	TYR	2.7
3	CC	91	LEU	2.7
20	AT	43	LEU	2.7
34	DN	26	LEU	2.7
46	BZ	104	PHE	2.7
50	D3	53	LEU	2.7
23	CW	35	A	2.7
26	DA	2801(A)	A	2.7
28	DD	216	GLY	2.7
1	CA	1149	C	2.7
2	CB	136	VAL	2.7
10	CJ	58	ASP	2.7
26	DA	2896	C	2.7
12	CL	30	ALA	2.7
3	AC	94	LEU	2.7
4	CD	206	PHE	2.7
23	CW	52	G	2.7
46	DZ	57	ILE	2.7
46	DZ	144	LEU	2.7
19	CS	69	HIS	2.7
3	CC	158	GLY	2.7
7	AG	81	GLY	2.7
9	CI	72	GLY	2.7
16	AP	1	MET	2.7
1	CA	1286	A	2.7
1	CA	1354	C	2.7
10	CJ	59	SER	2.7
15	CO	4	THR	2.7
2	AB	214	ILE	2.7
4	AD	174	LEU	2.7
6	AF	79	LEU	2.7
18	AR	31	LEU	2.7
30	DF	32	LEU	2.7
31	BG	88	ILE	2.7
33	DI	30	LEU	2.7
55	D8	29	LYS	2.7
23	CW	57	G	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	DA	2147	G	2.7
37	DQ	1	MET	2.7
8	CH	135	CYS	2.6
30	BF	89	VAL	2.6
9	CI	93	ARG	2.6
2	CB	40	HIS	2.6
1	CA	1066	C	2.6
4	AD	110	PHE	2.6
5	CE	80	ILE	2.6
26	DA	2161	C	2.6
33	DI	12	LEU	2.6
9	AI	37	PHE	2.6
34	BN	71	ILE	2.6
1	CA	973	G	2.6
23	AW	44	G	2.6
8	CH	122	ARG	2.6
16	AP	28	ARG	2.6
28	BD	275	LYS	2.6
3	CC	173	VAL	2.6
32	DH	37	VAL	2.6
56	B9	7	VAL	2.6
56	B9	25	VAL	2.6
16	AP	7	ALA	2.6
5	AE	123	LEU	2.6
5	CE	99	GLY	2.6
19	CS	16	LEU	2.6
23	CW	66	U	2.6
45	DY	14	LEU	2.6
3	CC	186	PHE	2.6
17	CQ	100	LYS	2.6
31	DG	115	ARG	2.6
32	DH	38	SER	2.6
2	AB	97	TRP	2.6
33	BI	19	VAL	2.6
37	DQ	114	ALA	2.6
47	D0	2	ALA	2.6
48	D1	62	VAL	2.6
10	CJ	67	THR	2.6
19	CS	77	THR	2.6
47	D0	52	GLY	2.6
12	CL	70	ILE	2.6
4	CD	49	ARG	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	CA	1322	C	2.6
7	AG	85	TYR	2.6
32	DH	47	GLU	2.6
55	D8	38	GLY	2.6
14	CN	13	THR	2.6
48	B1	35	THR	2.6
1	AA	204	U	2.6
4	AD	50	ARG	2.6
10	CJ	41	PRO	2.6
36	DP	79	ARG	2.6
1	CA	1092	A	2.6
55	B8	65	GLU	2.6
2	CB	76	GLN	2.6
48	D1	38	SER	2.6
13	CM	65	LYS	2.6
3	AC	120	VAL	2.6
4	CD	122	ARG	2.6
5	CE	55	VAL	2.6
8	AH	93	VAL	2.6
20	CT	59	ALA	2.6
50	D3	21	ALA	2.6
53	D6	5	VAL	2.6
53	D6	14	THR	2.6
16	AP	6	LEU	2.6
23	CW	12	U	2.6
5	AE	129	ILE	2.6
48	B1	7	ILE	2.6
1	CA	1190	G	2.6
25	CY	15	G	2.6
1	CA	1357	A	2.6
22	AV	15	A	2.6
10	AJ	68	HIS	2.6
26	BA	2108	C	2.6
26	BA	2128	C	2.6
41	DU	47	TYR	2.6
5	CE	14	ARG	2.6
8	AH	4	ASP	2.6
9	AI	10	ARG	2.6
2	AB	123	ALA	2.6
5	AE	120	THR	2.6
33	DI	36	ALA	2.6
17	CQ	5	VAL	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
31	DG	70	VAL	2.6
18	AR	79	LEU	2.6
11	AK	42	TRP	2.6
55	D8	34	TRP	2.6
3	CC	81	GLY	2.6
9	CI	8	GLY	2.6
46	DZ	106	GLY	2.6
3	CC	122	GLU	2.6
5	CE	17	ALA	2.5
45	DY	91	GLU	2.6
8	CH	11	THR	2.5
41	DU	63	VAL	2.5
46	DZ	174	VAL	2.5
48	B1	70	VAL	2.5
28	DD	177	LEU	2.5
2	AB	135	GLN	2.5
2	AB	70	PHE	2.5
12	AL	7	ILE	2.5
12	CL	85	ILE	2.5
20	CT	55	ILE	2.5
31	DG	102	PHE	2.5
55	D8	41	ILE	2.5
5	AE	18	ARG	2.5
10	CJ	68	HIS	2.5
16	AP	29	ASP	2.5
19	CS	83	HIS	2.5
31	DG	86	MET	2.5
39	DS	34	HIS	2.5
3	AC	200	ALA	2.5
14	CN	11	LYS	2.5
25	AY	71	G	2.5
49	D2	8	LYS	2.5
23	AW	56	C	2.5
5	AE	119	LEU	2.5
18	CR	85	LEU	2.5
23	AW	50	U	2.5
32	DH	95	ARG	2.5
9	AI	77	ILE	2.5
11	CK	125	PHE	2.5
12	CL	88	GLY	2.5
32	DH	82	GLY	2.5
37	DQ	91	GLU	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	CC	200	ALA	2.5
9	CI	46	ALA	2.5
26	DA	2062	A	2.5
39	DS	92	TYR	2.5
5	CE	142	LEU	2.5
9	CI	26	VAL	2.5
31	DG	160	VAL	2.5
2	CB	66	GLY	2.5
3	CC	181	ASN	2.5
23	CW	45	U	2.5
3	CC	205	GLY	2.5
3	AC	128	PHE	2.5
8	AH	35	ILE	2.5
13	CM	92	HIS	2.5
28	DD	271	ILE	2.5
36	DP	76	LYS	2.5
2	CB	45	GLN	2.5
9	CI	121	ARG	2.5
14	AN	14	PRO	2.5
1	CA	1250	A	2.5
3	AC	32	LEU	2.5
3	CC	207	VAL	2.5
14	AN	15	LYS	2.5
17	CQ	22	LEU	2.5
26	DA	2114	A	2.5
34	DN	9	VAL	2.5
46	DZ	59	LEU	2.5
1	CA	1040	U	2.5
25	CY	66	U	2.5
4	AD	204	ILE	2.5
23	CW	22	G	2.5
37	DQ	60	ARG	2.5
12	CL	56	ALA	2.5
13	CM	10	PRO	2.5
21	AU	14	TRP	2.5
3	AC	207	VAL	2.5
3	CC	188	LEU	2.5
8	AH	2	LEU	2.5
9	CI	57	GLY	2.5
10	AJ	71	LEU	2.5
20	CT	20	LEU	2.5
32	DH	76	VAL	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	BP	37	GLY	2.5
36	DP	101	VAL	2.5
36	DP	125	VAL	2.5
48	D1	70	VAL	2.5
1	CA	969	A	2.5
1	CA	1041	A	2.5
27	DB	58	A	2.5
10	AJ	4	ILE	2.5
9	CI	20	ARG	2.5
10	CJ	51	ARG	2.5
25	AY	48	C	2.5
1	CA	1061	G	2.5
23	CW	18	G	2.5
3	AC	15	THR	2.5
5	AE	95	ALA	2.5
11	CK	68	ALA	2.5
20	AT	72	LEU	2.5
46	DZ	105	VAL	2.5
20	AT	18	GLN	2.5
26	BA	1026	U	2.5
4	AD	158	ILE	2.5
10	AJ	47	PHE	2.5
1	CA	962	C	2.5
1	CA	1039	C	2.5
11	CK	89	ALA	2.5
16	AP	41	PRO	2.5
3	CC	2	GLY	2.5
20	AT	75	ASN	2.5
3	AC	175	LEU	2.4
8	CH	104	ARG	2.4
13	CM	66	LEU	2.4
15	AO	34	LEU	2.4
2	CB	81	VAL	2.4
9	AI	127	LYS	2.4
37	DQ	97	VAL	2.4
53	D6	42	TRP	2.4
29	DE	77	ILE	2.4
54	D7	18	PHE	2.4
12	CL	48	PRO	2.4
23	CW	42	C	2.4
26	BA	888	C	2.4
7	CG	117	ALA	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
9	CI	43	ALA	2.4
14	AN	20	ALA	2.4
55	D8	7	HIS	2.4
1	CA	976	G	2.4
1	CA	1338	G	2.4
33	DI	9	LEU	2.4
3	CC	130	VAL	2.4
37	DQ	96	VAL	2.4
1	CA	961	U	2.4
3	AC	18	TRP	2.4
9	CI	77	ILE	2.4
5	AE	10	MET	2.4
1	CA	949	A	2.4
10	CJ	60	ARG	2.4
31	DG	17	PRO	2.4
50	D3	16	PRO	2.4
25	AY	3	C	2.4
54	D7	20	ALA	2.4
6	CF	21	LEU	2.4
10	AJ	49	VAL	2.4
16	AP	20	VAL	2.4
31	BG	149	VAL	2.4
33	DI	41	GLU	2.4
1	AA	1024	G	2.4
9	AI	114	TYR	2.4
25	AY	53	G	2.4
3	CC	22	TRP	2.4
47	D0	55	ARG	2.4
53	D6	20	ASN	2.4
3	CC	117	ALA	2.4
9	CI	117	HIS	2.4
11	AK	89	ALA	2.4
47	D0	43	THR	2.4
31	DG	164	GLU	2.4
6	AF	48	LEU	2.4
10	CJ	88	LEU	2.4
33	BI	6	LEU	2.4
3	AC	66	VAL	2.4
13	CM	79	LYS	2.4
15	AO	60	VAL	2.4
32	DH	35	VAL	2.4
37	DQ	63	LYS	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
6	CF	46	ARG	2.4
16	AP	25	ARG	2.4
32	DH	148	ILE	2.4
36	DP	91	PHE	2.4
39	DS	90	GLY	2.4
23	AW	34	G	2.4
55	D8	63	PRO	2.4
3	CC	69	HIS	2.4
5	CE	104	ALA	2.4
33	DI	46	ALA	2.4
36	DP	58	THR	2.4
1	CA	1225	A	2.4
37	DQ	37	LEU	2.4
10	CJ	66	ARG	2.4
21	AU	10	ARG	2.4
4	AD	170	VAL	2.4
16	CP	30	GLY	2.4
8	CH	83	ILE	2.4
15	CO	59	MET	2.4
39	DS	29	PHE	2.4
41	DU	40	PHE	2.4
48	D1	71	TYR	2.4
20	CT	44	ALA	2.4
39	DS	6	ALA	2.4
13	CM	103	THR	2.4
9	CI	71	SER	2.4
50	D3	26	LEU	2.4
8	CH	61	VAL	2.4
10	CJ	64	GLU	2.4
26	BA	2129	C	2.4
27	DB	90	A	2.4
28	DD	56	GLY	2.4
48	D1	30	VAL	2.4
23	CW	50	U	2.4
14	CN	14	PRO	2.4
16	AP	36	ILE	2.4
15	AO	69	TYR	2.4
35	DO	20	MET	2.4
36	DP	110	TYR	2.4
13	CM	42	ALA	2.4
36	DP	15	ARG	2.4
31	DG	161	THR	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	CC	111	LEU	2.4
8	AH	112	LEU	2.4
20	AT	24	LEU	2.4
29	DE	52	LEU	2.4
6	AF	92	LYS	2.3
4	AD	148	VAL	2.3
7	CG	105	VAL	2.3
17	AQ	11	VAL	2.3
34	BN	5	VAL	2.3
45	DY	51	VAL	2.3
23	AW	67	C	2.3
2	CB	41	ILE	2.3
5	AE	13	ILE	2.3
10	AJ	23	ILE	2.3
40	DT	110	ILE	2.3
3	AC	201	TYR	2.3
9	AI	59	PHE	2.3
50	D3	29	ARG	2.3
5	CE	20	GLN	2.3
37	DQ	121	ALA	2.3
47	B0	2	ALA	2.3
16	AP	44	THR	2.3
28	DD	259	THR	2.3
20	CT	24	LEU	2.3
8	AH	118	VAL	2.3
9	AI	108	VAL	2.3
33	DI	21	VAL	2.3
2	CB	232	PRO	2.3
20	AT	8	ARG	2.3
21	CU	22	ARG	2.3
23	AW	66	U	2.3
1	CA	1397	C	2.3
2	AB	208	ILE	2.3
8	AH	6	ILE	2.3
17	CQ	86	GLU	2.3
10	AJ	11	PHE	2.3
2	AB	148	TYR	2.3
8	AH	94	TYR	2.3
17	CQ	37	LYS	2.3
21	AU	21	TYR	2.3
31	DG	84	LYS	2.3
37	DQ	20	ALA	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
37	DQ	93	TYR	2.3
41	DU	48	ALA	2.3
12	AL	67	THR	2.3
41	DU	43	GLY	2.3
6	AF	61	LEU	2.3
8	AH	133	LEU	2.3
36	BP	105	LEU	2.3
16	AP	16	HIS	2.3
2	AB	71	VAL	2.3
2	AB	95	GLN	2.3
34	BN	46	VAL	2.3
1	CA	1257	U	2.3
46	DZ	62	PRO	2.3
28	DD	276	LYS	2.3
1	AA	1529	G	2.3
5	CE	118	ILE	2.3
14	AN	7	ILE	2.3
15	AO	87	ILE	2.3
26	DA	614(B)	G	2.3
17	CQ	44	ALA	2.3
37	DQ	36	ALA	2.3
8	CH	128	GLY	2.3
3	AC	188	LEU	2.3
7	CG	6	ARG	2.3
9	CI	111	ARG	2.3
13	CM	67	GLU	2.3
20	AT	13	LEU	2.3
32	DH	159	GLU	2.3
34	DN	69	GLN	2.3
46	DZ	140	ASP	2.3
46	DZ	148	ASP	2.3
4	AD	140	VAL	2.3
14	CN	18	VAL	2.3
28	DD	34	VAL	2.3
3	CC	142	MET	2.3
54	D7	22	MET	2.3
2	CB	127	ILE	2.3
19	AS	40	ILE	2.3
8	AH	31	PHE	2.3
9	CI	37	PHE	2.3
4	AD	167	GLY	2.3
4	AD	209	ARG	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
17	CQ	80	GLY	2.3
33	DI	100	ALA	2.3
13	CM	23	TYR	2.3
23	AW	10	G	2.3
26	BA	2805	G	2.3
39	DS	47	THR	2.3
2	AB	61	LEU	2.3
2	AB	187	LEU	2.3
9	CI	11	LYS	2.3
13	CM	13	LYS	2.3
3	CC	174	PRO	2.3
28	BD	142	VAL	2.3
37	BQ	97	VAL	2.3
2	CB	231	GLU	2.3
28	DD	252	TRP	2.3
3	AC	148	GLY	2.3
7	CG	5	ARG	2.3
17	AQ	90	ILE	2.3
39	DS	13	ARG	2.3
4	AD	147	ALA	2.3
36	DP	47	ASP	2.3
36	DP	87	ASP	2.3
26	DA	887	A	2.3
33	BI	68	LEU	2.3
1	CA	1305	G	2.3
26	DA	2127	G	2.3
48	D1	68	PRO	2.3
10	AJ	28	ARG	2.3
16	AP	42	ARG	2.3
47	D0	38	VAL	2.3
55	D8	14	VAL	2.3
35	DO	31	LYS	2.3
3	CC	80	GLY	2.3
3	CC	14	ILE	2.3
55	D8	58	ILE	2.3
2	CB	55	PHE	2.3
3	CC	196	LEU	2.3
43	DW	9	TYR	2.3
26	BA	2142	C	2.3
50	D3	23	LEU	2.3
55	D8	50	LEU	2.3
1	AA	927	G	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	CA	1156	G	2.2
3	AC	63	ASN	2.2
3	AC	64	VAL	2.2
4	AD	154	ASN	2.2
25	AY	22	G	2.2
26	BA	2792	G	2.2
2	AB	48	MET	2.2
2	AB	78	GLN	2.2
25	AY	20	U	2.2
2	AB	233	SER	2.2
9	CI	119	ALA	2.2
10	CJ	98	ILE	2.2
41	DU	46	ALA	2.2
55	D8	16	ILE	2.2
3	AC	91	LEU	2.2
4	CD	157	LEU	2.2
10	CJ	8	LEU	2.2
31	BG	152	LEU	2.2
31	DG	106	LEU	2.2
17	CQ	32	TYR	2.2
1	CA	1321	C	2.2
15	CO	55	GLY	2.2
47	D0	73	GLY	2.2
8	AH	95	VAL	2.2
12	AL	18	VAL	2.2
17	CQ	11	VAL	2.2
33	DI	37	VAL	2.2
45	BY	1	MET	2.2
24	CX	46	G	2.2
25	CY	29	G	2.2
25	CY	70	G	2.2
26	BA	2141	G	2.2
26	DA	2110	G	2.2
26	DA	2318	G	2.2
8	AH	134	ILE	2.2
20	CT	16	HIS	2.2
4	CD	135	LEU	2.2
8	AH	10	LEU	2.2
15	CO	34	LEU	2.2
48	D1	98	LEU	2.2
4	CD	207	TYR	2.2
8	CH	15	ASN	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	DP	68	GLN	2.2
1	CA	980	C	2.2
3	CC	183	ASP	2.2
48	D1	28	GLY	2.2
9	AI	110	GLU	2.2
23	CW	68	C	2.2
26	DA	2804	C	2.2
36	DP	95	VAL	2.2
1	CA	1348	U	2.2
23	AW	23	A	2.2
4	AD	122	ARG	2.2
8	AH	38	ILE	2.2
16	AP	69	THR	2.2
1	CA	1117	G	2.2
1	CA	1221	G	2.2
26	DA	2168	G	2.2
12	AL	27	LEU	2.2
31	BG	7	LEU	2.2
32	DH	171	LEU	2.2
19	CS	13	ASP	2.2
2	CB	75	LYS	2.2
33	BI	89	TYR	2.2
1	AA	1030	C	2.2
10	CJ	43	ARG	2.2
13	CM	17	VAL	2.2
46	BZ	116	VAL	2.2
46	DZ	161	VAL	2.2
48	D1	61	ARG	2.2
26	DA	614(A)	U	2.2
1	CA	1151	A	2.2
1	CA	1287	A	2.2
7	AG	7	ALA	2.2
4	AD	97	LEU	2.2
13	CM	106	ASN	2.2
13	CM	113	PRO	2.2
20	AT	69	GLY	2.2
32	DH	8	PRO	2.2
49	D2	24	LEU	2.2
55	D8	21	LYS	2.2
1	AA	1353	G	2.2
20	CT	86	ARG	2.2
46	DZ	4	ARG	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
4	CD	203	VAL	2.2
2	AB	207	ALA	2.2
12	CL	16	GLU	2.2
29	BE	28	ALA	2.2
39	DS	55	ALA	2.2
30	DF	186	ILE	2.2
31	DG	178	PHE	2.2
3	AC	185	GLY	2.2
7	AG	34	GLY	2.2
10	CJ	39	PRO	2.2
28	DD	155	LEU	2.2
32	DH	14	GLY	2.2
39	DS	26	LEU	2.2
44	DX	57	LEU	2.2
2	CB	30	ARG	2.2
14	AN	23	ARG	2.2
8	AH	58	TYR	2.2
13	CM	50	GLU	2.2
23	AW	1	G	2.2
26	DA	2792	G	2.2
4	AD	133	VAL	2.2
5	CE	10	MET	2.2
14	AN	18	VAL	2.2
14	CN	56	VAL	2.2
19	CS	44	MET	2.2
35	DO	57	VAL	2.2
37	DQ	35	VAL	2.2
52	D5	24	ALA	2.2
2	AB	222	ILE	2.2
3	AC	182	ILE	2.2
23	CW	61	C	2.2
25	CY	4	C	2.2
30	DF	77	ASP	2.2
3	CC	179	ARG	2.2
13	CM	100	GLY	2.2
14	AN	3	ARG	2.2
28	DD	210	GLY	2.2
31	BG	80	PHE	2.2
48	D1	22	GLY	2.2
51	B4	49	PHE	2.2
50	D3	12	PRO	2.2
55	D8	46	ARG	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
18	AR	66	LEU	2.2
31	DG	176	LEU	2.2
46	DZ	157	LEU	2.2
17	CQ	24	GLU	2.2
32	DH	13	LYS	2.1
1	AA	841	U	2.1
23	CW	44	G	2.1
23	CW	63	G	2.1
26	DA	2159	G	2.1
43	DW	85	VAL	2.1
3	AC	169	ALA	2.1
8	AH	16	ALA	2.1
3	CC	13	GLY	2.1
4	AD	132	ARG	2.1
45	DY	43	ASN	2.1
31	DG	44	GLY	2.1
51	D4	58	ARG	2.1
33	DI	88	ILE	2.1
1	CA	1325	C	2.1
7	CG	62	PHE	2.1
25	AY	62	C	2.1
43	DW	14	PRO	2.1
6	CF	45	LEU	2.1
9	AI	79	LEU	2.1
19	AS	15	LEU	2.1
29	BE	78	LEU	2.1
31	DG	107	LEU	2.1
49	D2	35	LEU	2.1
56	D9	11	CYS	2.1
17	CQ	42	TYR	2.1
17	CQ	95	TYR	2.1
47	D0	53	MET	2.1
1	CA	981	U	2.1
5	AE	21	ALA	2.1
5	AE	33	VAL	2.1
9	AI	14	VAL	2.1
10	AJ	44	VAL	2.1
34	DN	140	VAL	2.1
46	DZ	109	ALA	2.1
48	D1	51	VAL	2.1
11	AK	87	THR	2.1
3	AC	134	ILE	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	CC	72	LYS	2.1
12	CL	47	LYS	2.1
13	CM	111	LYS	2.1
17	AQ	37	LYS	2.1
19	CS	10	PHE	2.1
26	DA	652(U)	G	2.1
26	DA	2157	G	2.1
33	DI	79	ILE	2.1
2	AB	98	LEU	2.1
3	CC	43	LEU	2.1
8	AH	39	LEU	2.1
15	CO	66	LEU	2.1
47	B0	75	LEU	2.1
55	B8	60	LEU	2.1
46	BZ	52	SER	2.1
13	CM	80	ARG	2.1
24	CX	72	A	2.1
7	CG	109	ASN	2.1
3	CC	48	TYR	2.1
5	AE	113	ALA	2.1
5	CE	51	VAL	2.1
12	CL	123	LYS	2.1
13	AM	87	TYR	2.1
51	B4	4	GLY	2.1
19	CS	51	VAL	2.1
45	DY	65	ALA	2.1
11	CK	115	PRO	2.1
18	AR	52	PRO	2.1
36	DP	38	GLN	2.1
46	DZ	124	ILE	2.1
51	D4	42	PHE	2.1
8	AH	63	LEU	2.1
18	CR	66	LEU	2.1
34	DN	112	LEU	2.1
37	DQ	34	LEU	2.1
1	AA	1033	G	2.1
13	CM	110	ARG	2.1
43	DW	13	SER	2.1
3	CC	3	ASN	2.1
11	AK	117	ASN	2.1
38	DR	9	LYS	2.1
47	B0	5	LYS	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	BA	529	A	2.1
26	BA	2790	A	2.1
3	CC	193	TYR	2.1
10	AJ	20	ALA	2.1
20	CT	67	ALA	2.1
28	BD	193	VAL	2.1
29	BE	157	ALA	2.1
30	DF	89	VAL	2.1
39	DS	79	ALA	2.1
47	B0	51	VAL	2.1
53	D6	22	ALA	2.1
53	B6	23	THR	2.1
8	AH	100	ILE	2.1
10	AJ	96	ILE	2.1
2	CB	69	LEU	2.1
3	CC	33	LEU	2.1
16	CP	9	PHE	2.1
11	AK	81	ASP	2.1
17	AQ	98	LEU	2.1
17	CQ	6	LEU	2.1
31	BG	49	ASP	2.1
44	DX	9	LEU	2.1
47	D0	75	LEU	2.1
6	AF	54	LYS	2.1
13	AM	121	LYS	2.1
16	AP	27	LYS	2.1
34	DN	76	SER	2.1
45	DY	46	LYS	2.1
15	AO	55	GLY	2.1
25	CY	72	C	2.1
8	AH	53	VAL	2.1
9	CI	82	ALA	2.1
36	BP	12	ALA	2.1
26	DA	6	A	2.1
41	BU	8	VAL	2.1
51	D4	53	GLU	2.1
55	D8	22	VAL	2.1
4	AD	115	ARG	2.1
7	CG	76	ARG	2.1
13	CM	93	ARG	2.1
14	AN	21	TYR	2.1
20	CT	25	ARG	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	DH	51	ARG	2.1
46	DZ	79	ARG	2.1
8	AH	86	ILE	2.1
19	CS	6	LYS	2.1
4	AD	101	LEU	2.1
5	CE	119	LEU	2.1
15	AO	57	LEU	2.1
36	DP	3	LEU	2.1
45	DY	41	GLY	2.1
1	CA	1028	C	2.1
1	CA	951	G	2.1
1	CA	1186	G	2.1
2	AB	125	PRO	2.1
5	AE	88	LYS	2.1
8	CH	28	ALA	2.1
24	CX	4	G	2.1
29	BE	114	ALA	2.1
33	BI	36	ALA	2.1
47	D0	49	LYS	2.1
9	AI	17	VAL	2.1
16	CP	20	VAL	2.1
17	CQ	21	VAL	2.1
29	BE	12	THR	2.1
9	CI	54	ASP	2.1
21	CU	18	TYR	2.1
2	CB	113	HIS	2.1
5	CE	76	ILE	2.1
30	DF	78	ILE	2.1
3	AC	34	LEU	2.1
3	AC	52	LEU	2.1
13	AM	96	LEU	2.1
29	DE	51	PHE	2.1
41	DU	20	LEU	2.1
9	AI	8	GLY	2.1
10	CJ	61	GLU	2.1
12	CL	95	GLY	2.1
42	DV	101	GLY	2.1
7	CG	103	TRP	2.1
12	CL	15	ARG	2.1
16	CP	18	ARG	2.1
31	DG	33	ARG	2.1
37	DQ	103	MET	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
46	BZ	1	MET	2.0
7	CG	2	ALA	2.0
8	AH	89	PRO	2.0
31	DG	166	ASP	2.0
2	AB	15	VAL	2.0
26	BA	2506	U	2.0
29	DE	116	VAL	2.0
52	B5	60	VAL	2.0
1	CA	485	G	2.0
1	CA	1003	G	2.0
7	CG	120	ILE	2.0
11	CK	50	TYR	2.0
25	CY	52	G	2.0
26	BA	2154	G	2.0
31	DG	77	ILE	2.0
2	AB	118	LEU	2.0
19	CS	15	LEU	2.0
20	AT	62	LEU	2.0
31	BG	178	PHE	2.0
40	DT	114	LEU	2.0
10	CJ	10	GLY	2.0
55	D8	48	PHE	2.0
10	AJ	57	LYS	2.0
4	CD	115	ARG	2.0
4	CD	209	ARG	2.0
46	DZ	112	ARG	2.0
2	CB	202	PRO	2.0
28	DD	272	ALA	2.0
38	DR	35	THR	2.0
46	BZ	170	THR	2.0
1	CA	1218	C	2.0
3	CC	51	GLY	2.0
8	CH	45	ILE	2.0
15	CO	87	ILE	2.0
12	CL	19	ARG	2.0
12	CL	93	LEU	2.0
13	CM	9	ILE	2.0
56	D9	13	LYS	2.0
3	AC	179	ARG	2.0
4	AD	191	ARG	2.0
30	DF	140	LEU	2.0
31	BG	139	LEU	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	BH	3	ARG	2.0
1	CA	1024	G	2.0
26	BA	2133	G	2.0
26	BA	2162	G	2.0
26	DA	2148	G	2.0
26	BA	229	A	2.0
8	CH	138	TRP	2.0
16	AP	35	LYS	2.0
31	DG	110	ALA	2.0
32	DH	75	ALA	2.0
20	AT	71	THR	2.0
28	BD	50	THR	2.0
34	DN	8	GLN	2.0
51	B4	46	GLN	2.0
9	AI	26	VAL	2.0
23	CW	33	U	2.0
26	DA	2585	U	2.0
42	DV	79	VAL	2.0
5	CE	23	GLY	2.0
12	CL	14	GLY	2.0
21	CU	9	ARG	2.0
29	BE	106	GLY	2.0
6	CF	52	ILE	2.0
8	AH	109	ILE	2.0
9	CI	40	LEU	2.0
13	CM	48	LEU	2.0
31	DG	3	LEU	2.0
4	CD	93	PHE	2.0
17	AQ	95	TYR	2.0
22	CV	18	G	2.0
48	B1	69	LYS	2.0
2	AB	131	PRO	2.0
16	CP	41	PRO	2.0

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

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
25	7MG	CY	46	24/25	0.48	0.37	86,105,111,137	0
25	MIA	CY	37	22/30	0.61	0.38	72,95,113,138	0
25	5MU	CY	54	21/22	0.63	0.53	78,94,109,140	0
23	7MG	CW	46	24/25	0.66	0.27	79,96,109,133	0
25	PSU	CY	55	20/21	0.67	0.49	94,102,110,124	0
25	4SU	CY	8	20/21	0.68	0.22	93,103,113,128	0
23	4SU	CW	8	20/21	0.69	0.30	81,98,120,127	0
25	PSU	AY	55	20/21	0.70	0.29	93,101,108,122	0
23	7MG	AW	46	24/25	0.72	0.23	84,99,117,133	0
25	5MU	AY	54	21/22	0.73	0.26	80,96,105,131	0
25	7MG	AY	46	24/25	0.76	0.27	75,101,111,123	0
25	PSU	AY	39	20/21	0.76	0.30	78,90,117,123	0
25	PSU	CY	39	20/21	0.77	0.30	79,90,116,130	0
25	4SU	AY	8	20/21	0.78	0.16	82,96,103,118	0
25	PSU	CY	32	20/21	0.79	0.21	80,92,101,107	0
23	PSU	CW	55	20/21	0.79	0.30	79,89,99,104	0
25	MIA	AY	37	22/30	0.80	0.22	77,90,111,119	0
23	4SU	AW	8	20/21	0.81	0.20	86,95,112,128	0
25	PSU	AY	32	20/21	0.83	0.24	78,93,100,106	0
23	5MU	CW	54	21/22	0.84	0.24	74,88,99,101	0
23	MIA	CW	37	22/30	0.84	0.32	75,85,92,100	0
23	PSU	AW	55	20/21	0.84	0.27	77,90,98,104	0
23	PSU	CW	39	20/21	0.87	0.42	78,84,97,98	0
23	PSU	AW	32	20/21	0.88	0.25	77,83,92,98	0
23	PSU	CW	32	20/21	0.88	0.45	81,87,94,103	0
24	PSU	CX	55	20/21	0.89	0.15	70,80,91,96	0
23	31M	CW	76	41/42	0.89	0.41	50,63,73,88	20
23	5MU	AW	54	21/22	0.91	0.20	65,82,91,93	0
24	4SU	CX	8	20/21	0.91	0.17	77,87,95,97	0
24	5MU	CX	54	21/22	0.92	0.22	70,81,89,99	0
23	PSU	AW	39	20/21	0.93	0.23	73,82,95,97	0
23	31M	AW	76	41/42	0.94	0.33	37,54,66,83	9
24	4SU	AX	8	20/21	0.94	0.18	54,66,82,89	0
23	MIA	AW	37	29/30	0.94	0.26	59,71,81,86	0
24	5MU	AX	54	21/22	0.95	0.20	49,68,79,84	0
24	PSU	AX	55	20/21	0.95	0.21	50,63,73,83	0
24	5MC	AX	32	21/22	0.95	0.21	43,53,62,78	0
24	5MC	CX	32	21/22	0.96	0.21	63,76,86,88	0

6.3 Carbohydrates i

There are no monosaccharides in this entry.

6.4 Ligands i

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
57	MG	BA	3730	1/1	0.31	0.19	71,71,71,71	0
57	MG	BA	3427	1/1	0.41	0.20	61,61,61,61	0
57	MG	BA	3670	1/1	0.43	0.26	61,61,61,61	0
57	MG	DA	3448	1/1	0.43	0.20	70,70,70,70	0
57	MG	DA	3403	1/1	0.45	0.14	57,57,57,57	0
57	MG	BA	3721	1/1	0.46	0.32	82,82,82,82	0
57	MG	DA	3651	1/1	0.48	0.53	75,75,75,75	0
57	MG	DA	3530	1/1	0.51	0.13	74,74,74,74	0
57	MG	DA	3329	1/1	0.54	0.13	54,54,54,54	0
57	MG	DA	3563	1/1	0.57	0.15	74,74,74,74	0
57	MG	AW	3004	1/1	0.57	0.14	49,49,49,49	0
57	MG	BA	3636	1/1	0.58	0.14	64,64,64,64	0
57	MG	CT	3001	1/1	0.58	0.12	56,56,56,56	0
57	MG	DA	3259	1/1	0.58	0.21	43,43,43,43	0
57	MG	DR	5001	1/1	0.58	0.24	70,70,70,70	0
57	MG	BB	215	1/1	0.59	0.18	73,73,73,73	0
57	MG	DA	3673	1/1	0.60	0.14	69,69,69,69	0
57	MG	CA	3070	1/1	0.61	0.15	63,63,63,63	0
57	MG	DA	3320	1/1	0.61	0.15	55,55,55,55	0
57	MG	CA	3088	1/1	0.62	0.14	74,74,74,74	0
57	MG	BA	3616	1/1	0.62	0.21	65,65,65,65	0
57	MG	BA	3568	1/1	0.63	0.10	59,59,59,59	0
57	MG	AA	3004	1/1	0.63	0.15	67,67,67,67	0
57	MG	DA	3566	1/1	0.64	0.12	69,69,69,69	0
57	MG	DA	3213	1/1	0.64	0.32	63,63,63,63	0
57	MG	BA	3470	1/1	0.65	0.13	62,62,62,62	0
57	MG	D8	5001	1/1	0.65	0.23	66,66,66,66	0
57	MG	AA	3153	1/1	0.66	0.18	74,74,74,74	0
57	MG	DA	3518	1/1	0.66	0.24	54,54,54,54	0
57	MG	CA	3051	1/1	0.66	0.19	81,81,81,81	0
57	MG	DA	3532	1/1	0.66	0.24	69,69,69,69	0
57	MG	DA	3413	1/1	0.66	0.23	48,48,48,48	0
57	MG	CX	3002	1/1	0.67	0.14	70,70,70,70	0
57	MG	AX	3014	1/1	0.67	0.19	72,72,72,72	0
57	MG	DA	3256	1/1	0.67	0.19	62,62,62,62	0
57	MG	DB	3011	1/1	0.69	0.14	72,72,72,72	0
57	MG	DA	3076	1/1	0.69	0.14	58,58,58,58	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3244	1/1	0.69	0.11	71,71,71,71	0
57	MG	BA	3678	1/1	0.70	0.08	65,65,65,65	0
57	MG	DA	3633	1/1	0.71	0.12	58,58,58,58	0
57	MG	DA	3125	1/1	0.71	0.26	70,70,70,70	0
57	MG	BA	3053	1/1	0.72	0.21	54,54,54,54	0
57	MG	BA	3070	1/1	0.72	0.37	59,59,59,59	0
57	MG	BA	3003	1/1	0.72	0.19	60,60,60,60	0
57	MG	DA	3316	1/1	0.72	0.11	45,45,45,45	0
57	MG	CA	3018	1/1	0.72	0.16	69,69,69,69	0
57	MG	BA	3540	1/1	0.73	0.23	37,37,37,37	0
57	MG	AA	3103	1/1	0.73	0.24	73,73,73,73	0
57	MG	BA	3257	1/1	0.73	0.23	53,53,53,53	0
57	MG	DA	3546	1/1	0.73	0.11	71,71,71,71	0
57	MG	DA	3060	1/1	0.74	0.15	64,64,64,64	0
57	MG	BA	3300	1/1	0.74	0.25	57,57,57,57	0
57	MG	AA	3169	1/1	0.74	0.13	62,62,62,62	0
57	MG	DD	303	1/1	0.74	0.62	87,87,87,87	0
57	MG	DA	3616	1/1	0.74	0.11	71,71,71,71	0
57	MG	AA	3206	1/1	0.74	0.19	64,64,64,64	0
57	MG	BA	3641	1/1	0.75	0.21	68,68,68,68	0
57	MG	BB	209	1/1	0.75	0.32	65,65,65,65	0
57	MG	BA	3503	1/1	0.75	0.12	49,49,49,49	0
57	MG	B4	502	1/1	0.75	0.14	71,71,71,71	0
57	MG	BA	3538	1/1	0.75	0.15	40,40,40,40	0
57	MG	DA	3608	1/1	0.75	0.13	68,68,68,68	0
57	MG	BA	3401	1/1	0.75	0.16	35,35,35,35	0
57	MG	BA	3602	1/1	0.76	0.16	53,53,53,53	0
57	MG	BA	3095	1/1	0.76	0.24	51,51,51,51	0
57	MG	CJ	5001	1/1	0.76	0.08	73,73,73,73	0
57	MG	BA	3353	1/1	0.76	0.12	50,50,50,50	0
57	MG	BA	3362	1/1	0.76	0.20	41,41,41,41	0
57	MG	DA	3620	1/1	0.76	0.12	68,68,68,68	0
57	MG	BF	304	1/1	0.76	0.18	45,45,45,45	0
57	MG	DA	3635	1/1	0.76	0.11	38,38,38,38	0
57	MG	DA	3642	1/1	0.76	0.28	54,54,54,54	0
57	MG	BF	308	1/1	0.76	0.20	46,46,46,46	0
57	MG	BA	3225	1/1	0.76	0.16	61,61,61,61	0
57	MG	DB	3008	1/1	0.76	0.20	67,67,67,67	0
57	MG	AA	3013	1/1	0.76	0.17	69,69,69,69	0
57	MG	BA	3704	1/1	0.76	0.14	77,77,77,77	0
57	MG	DA	3531	1/1	0.76	0.18	61,61,61,61	0
57	MG	DA	3252	1/1	0.76	0.08	37,37,37,37	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3383	1/1	0.77	0.21	54,54,54,54	0
57	MG	BA	3615	1/1	0.77	0.21	68,68,68,68	0
57	MG	BA	3733	1/1	0.77	0.11	58,58,58,58	0
57	MG	DA	3205	1/1	0.77	0.10	56,56,56,56	0
57	MG	DA	3262	1/1	0.77	0.10	65,65,65,65	0
57	MG	BA	3560	1/1	0.77	0.14	56,56,56,56	0
57	MG	DA	3234	1/1	0.77	0.21	63,63,63,63	0
57	MG	BB	214	1/1	0.77	0.18	49,49,49,49	0
57	MG	DA	3554	1/1	0.78	0.10	62,62,62,62	0
57	MG	BA	3421	1/1	0.78	0.17	32,32,32,32	0
57	MG	AA	3084	1/1	0.78	0.24	51,51,51,51	0
57	MG	DA	3585	1/1	0.78	0.12	43,43,43,43	0
57	MG	CA	3017	1/1	0.78	0.19	53,53,53,53	0
57	MG	DA	3610	1/1	0.78	0.22	64,64,64,64	0
57	MG	BA	3716	1/1	0.78	0.12	65,65,65,65	0
57	MG	BA	3771	1/1	0.78	0.29	50,50,50,50	0
57	MG	DA	3218	1/1	0.78	0.13	59,59,59,59	0
57	MG	CA	3013	1/1	0.79	0.13	69,69,69,69	0
57	MG	BA	3114	1/1	0.79	0.18	53,53,53,53	0
57	MG	DA	3212	1/1	0.79	0.15	45,45,45,45	0
57	MG	DA	3417	1/1	0.79	0.11	52,52,52,52	0
57	MG	BA	3638	1/1	0.79	0.14	63,63,63,63	0
57	MG	DA	3607	1/1	0.79	0.14	65,65,65,65	0
57	MG	CA	3024	1/1	0.79	0.10	74,74,74,74	0
57	MG	BA	3724	1/1	0.79	0.18	62,62,62,62	0
57	MG	DP	201	1/1	0.79	0.29	70,70,70,70	0
57	MG	AE	202	1/1	0.79	0.12	80,80,80,80	0
57	MG	DA	3335	1/1	0.79	0.16	47,47,47,47	0
59	ZN	D4	501	1/1	0.79	0.07	144,144,144,144	0
57	MG	AA	3069	1/1	0.80	0.19	68,68,68,68	0
57	MG	CA	3152	1/1	0.80	0.20	76,76,76,76	0
57	MG	DA	3222	1/1	0.80	0.14	57,57,57,57	0
57	MG	CA	3166	1/1	0.80	0.14	66,66,66,66	0
57	MG	BA	3757	1/1	0.80	0.20	76,76,76,76	0
57	MG	AA	3160	1/1	0.80	0.21	59,59,59,59	0
57	MG	BA	3781	1/1	0.80	0.20	41,41,41,41	0
57	MG	DA	3025	1/1	0.80	0.16	54,54,54,54	0
57	MG	BA	3020	1/1	0.80	0.22	53,53,53,53	0
57	MG	BA	3052	1/1	0.80	0.16	56,56,56,56	0
57	MG	DA	3078	1/1	0.80	0.19	57,57,57,57	0
57	MG	BA	3728	1/1	0.80	0.33	48,48,48,48	0
57	MG	CA	3064	1/1	0.80	0.17	60,60,60,60	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3340	1/1	0.80	0.18	58,58,58,58	0
57	MG	AX	3011	1/1	0.80	0.20	78,78,78,78	0
57	MG	AA	3091	1/1	0.81	0.14	60,60,60,60	0
57	MG	BA	3693	1/1	0.81	0.19	56,56,56,56	0
57	MG	DA	3321	1/1	0.81	0.08	48,48,48,48	0
57	MG	DA	3589	1/1	0.81	0.07	68,68,68,68	0
57	MG	DA	3082	1/1	0.81	0.14	47,47,47,47	0
57	MG	DA	3118	1/1	0.81	0.15	77,77,77,77	0
57	MG	AW	3001	1/1	0.81	0.11	60,60,60,60	0
57	MG	BA	3715	1/1	0.81	0.14	63,63,63,63	0
57	MG	DA	3402	1/1	0.81	0.10	66,66,66,66	0
57	MG	BA	3172	1/1	0.81	0.19	46,46,46,46	0
57	MG	DA	3408	1/1	0.81	0.08	58,58,58,58	0
57	MG	CA	3146	1/1	0.81	0.19	66,66,66,66	0
57	MG	BB	218	1/1	0.81	0.22	77,77,77,77	0
57	MG	DA	3669	1/1	0.81	0.25	55,55,55,55	0
57	MG	AA	3170	1/1	0.81	0.13	75,75,75,75	0
57	MG	DA	3451	1/1	0.81	0.16	55,55,55,55	0
57	MG	BA	3463	1/1	0.81	0.20	48,48,48,48	0
57	MG	AA	3183	1/1	0.81	0.15	65,65,65,65	0
57	MG	DG	3001	1/1	0.81	0.09	55,55,55,55	0
57	MG	BA	3066	1/1	0.81	0.19	49,49,49,49	0
57	MG	CX	3003	1/1	0.81	0.22	54,54,54,54	0
57	MG	BA	3316	1/1	0.81	0.12	66,66,66,66	0
57	MG	AA	3138	1/1	0.81	0.18	71,71,71,71	0
57	MG	CA	3107	1/1	0.82	0.20	80,80,80,80	0
57	MG	CA	3109	1/1	0.82	0.13	67,67,67,67	0
57	MG	DA	3333	1/1	0.82	0.13	41,41,41,41	0
57	MG	DA	3582	1/1	0.82	0.07	56,56,56,56	0
57	MG	BA	3242	1/1	0.82	0.21	55,55,55,55	0
57	MG	CA	3149	1/1	0.82	0.14	52,52,52,52	0
57	MG	DA	3342	1/1	0.82	0.11	42,42,42,42	0
57	MG	BA	3273	1/1	0.82	0.22	54,54,54,54	0
57	MG	DA	3394	1/1	0.82	0.18	65,65,65,65	0
57	MG	BA	3473	1/1	0.82	0.19	56,56,56,56	0
57	MG	BA	3695	1/1	0.82	0.18	67,67,67,67	0
57	MG	DA	3628	1/1	0.82	0.24	76,76,76,76	0
57	MG	DA	3630	1/1	0.82	0.19	61,61,61,61	0
57	MG	DA	3406	1/1	0.82	0.11	51,51,51,51	0
57	MG	BA	3317	1/1	0.82	0.18	53,53,53,53	0
57	MG	BA	3760	1/1	0.82	0.19	44,44,44,44	0
57	MG	BA	3761	1/1	0.82	0.16	59,59,59,59	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	BA	3707	1/1	0.82	0.24	44,44,44,44	0
57	MG	BA	3709	1/1	0.82	0.20	62,62,62,62	0
57	MG	DA	3487	1/1	0.82	0.21	62,62,62,62	0
57	MG	DA	3513	1/1	0.82	0.16	52,52,52,52	0
57	MG	BA	3418	1/1	0.82	0.17	30,30,30,30	0
57	MG	DA	3276	1/1	0.82	0.12	49,49,49,49	0
57	MG	DA	3308	1/1	0.82	0.15	61,61,61,61	0
57	MG	BA	3335	1/1	0.82	0.23	52,52,52,52	0
57	MG	BA	3342	1/1	0.82	0.10	46,46,46,46	0
57	MG	DA	3553	1/1	0.82	0.10	49,49,49,49	0
57	MG	BA	3587	1/1	0.83	0.17	36,36,36,36	0
57	MG	BA	3594	1/1	0.83	0.12	40,40,40,40	0
57	MG	AA	3002	1/1	0.83	0.15	71,71,71,71	0
57	MG	AA	3017	1/1	0.83	0.18	71,71,71,71	0
57	MG	BA	3434	1/1	0.83	0.13	55,55,55,55	0
57	MG	B5	101	1/1	0.83	0.24	51,51,51,51	0
57	MG	DA	3075	1/1	0.83	0.29	59,59,59,59	0
57	MG	CA	3009	1/1	0.83	0.11	64,64,64,64	0
57	MG	BA	3446	1/1	0.83	0.17	40,40,40,40	0
57	MG	AA	3020	1/1	0.83	0.13	76,76,76,76	0
57	MG	DA	3385	1/1	0.83	0.11	52,52,52,52	0
57	MG	BA	3154	1/1	0.83	0.23	47,47,47,47	0
57	MG	BA	3669	1/1	0.83	0.09	62,62,62,62	0
57	MG	BA	3759	1/1	0.83	0.18	33,33,33,33	0
57	MG	CA	3058	1/1	0.83	0.13	68,68,68,68	0
57	MG	AA	3127	1/1	0.83	0.16	65,65,65,65	0
57	MG	AA	3189	1/1	0.83	0.12	65,65,65,65	0
57	MG	CA	3087	1/1	0.83	0.19	67,67,67,67	0
57	MG	DA	3422	1/1	0.83	0.08	46,46,46,46	0
57	MG	DA	3446	1/1	0.83	0.11	45,45,45,45	0
57	MG	BA	3769	1/1	0.83	0.18	52,52,52,52	0
57	MG	AA	3023	1/1	0.83	0.13	74,74,74,74	0
57	MG	BA	3372	1/1	0.83	0.16	28,28,28,28	0
57	MG	BA	3788	1/1	0.83	0.15	51,51,51,51	0
57	MG	BA	3802	1/1	0.83	0.47	54,54,54,54	0
57	MG	AA	3139	1/1	0.83	0.14	59,59,59,59	0
57	MG	DA	3268	1/1	0.83	0.17	51,51,51,51	0
57	MG	AA	3008	1/1	0.83	0.27	73,73,73,73	0
57	MG	DA	3544	1/1	0.83	0.12	65,65,65,65	0
57	MG	CA	3066	1/1	0.84	0.14	66,66,66,66	0
57	MG	DA	3071	1/1	0.84	0.13	59,59,59,59	0
57	MG	BA	3129	1/1	0.84	0.28	58,58,58,58	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	BA	3404	1/1	0.84	0.13	59,59,59,59	0
57	MG	BA	3480	1/1	0.84	0.20	35,35,35,35	0
57	MG	CA	3098	1/1	0.84	0.09	65,65,65,65	0
57	MG	DA	3088	1/1	0.84	0.18	47,47,47,47	0
57	MG	BA	3764	1/1	0.84	0.17	51,51,51,51	0
57	MG	DA	3122	1/1	0.84	0.11	49,49,49,49	0
57	MG	BA	3253	1/1	0.84	0.23	55,55,55,55	0
57	MG	DA	3147	1/1	0.84	0.15	56,56,56,56	0
57	MG	CA	3116	1/1	0.84	0.22	68,68,68,68	0
57	MG	CA	3140	1/1	0.84	0.15	67,67,67,67	0
57	MG	BA	3512	1/1	0.84	0.18	52,52,52,52	0
57	MG	AA	3025	1/1	0.84	0.24	62,62,62,62	0
57	MG	BA	3018	1/1	0.84	0.20	56,56,56,56	0
57	MG	BA	3794	1/1	0.84	0.26	51,51,51,51	0
57	MG	DA	3414	1/1	0.84	0.13	43,43,43,43	0
57	MG	CA	3021	1/1	0.84	0.14	61,61,61,61	0
57	MG	DA	3421	1/1	0.84	0.13	50,50,50,50	0
57	MG	DA	3247	1/1	0.84	0.09	45,45,45,45	0
57	MG	DA	3430	1/1	0.84	0.11	37,37,37,37	0
57	MG	DA	3646	1/1	0.84	0.14	59,59,59,59	0
57	MG	DA	3431	1/1	0.84	0.23	50,50,50,50	0
57	MG	BA	3179	1/1	0.84	0.17	50,50,50,50	0
57	MG	CV	101	1/1	0.84	0.13	72,72,72,72	0
57	MG	DA	3450	1/1	0.84	0.10	40,40,40,40	0
57	MG	BA	3438	1/1	0.84	0.14	60,60,60,60	0
57	MG	DA	3468	1/1	0.84	0.27	66,66,66,66	0
57	MG	DA	3476	1/1	0.84	0.14	62,62,62,62	0
57	MG	AA	3005	1/1	0.84	0.14	62,62,62,62	0
57	MG	DA	3497	1/1	0.84	0.11	55,55,55,55	0
57	MG	BA	3391	1/1	0.84	0.24	63,63,63,63	0
57	MG	DA	3044	1/1	0.84	0.10	62,62,62,62	0
57	MG	CA	3141	1/1	0.85	0.04	92,92,92,92	0
57	MG	BA	3231	1/1	0.85	0.32	63,63,63,63	0
57	MG	BA	3506	1/1	0.85	0.10	58,58,58,58	0
57	MG	DA	3498	1/1	0.85	0.08	51,51,51,51	0
57	MG	AA	3073	1/1	0.85	0.10	56,56,56,56	0
57	MG	CA	3158	1/1	0.85	0.13	67,67,67,67	0
57	MG	BB	220	1/1	0.85	0.13	57,57,57,57	0
57	MG	AA	3079	1/1	0.85	0.13	68,68,68,68	0
57	MG	AA	3033	1/1	0.85	0.14	59,59,59,59	0
57	MG	B2	3001	1/1	0.85	0.21	56,56,56,56	0
57	MG	BA	3718	1/1	0.85	0.11	71,71,71,71	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	BA	3546	1/1	0.85	0.19	40,40,40,40	0
57	MG	AA	3166	1/1	0.85	0.14	69,69,69,69	0
57	MG	BA	3293	1/1	0.85	0.26	50,50,50,50	0
57	MG	CA	3016	1/1	0.85	0.11	57,57,57,57	0
57	MG	DA	3571	1/1	0.85	0.12	56,56,56,56	0
57	MG	DA	3069	1/1	0.85	0.23	57,57,57,57	0
57	MG	BA	3296	1/1	0.85	0.18	53,53,53,53	0
57	MG	DA	3362	1/1	0.85	0.21	44,44,44,44	0
57	MG	AA	3034	1/1	0.85	0.11	47,47,47,47	0
57	MG	BA	3754	1/1	0.85	0.18	48,48,48,48	0
57	MG	BA	3755	1/1	0.85	0.15	55,55,55,55	0
57	MG	BA	3432	1/1	0.85	0.14	58,58,58,58	0
57	MG	CA	3052	1/1	0.85	0.21	72,72,72,72	0
57	MG	BA	3301	1/1	0.85	0.13	60,60,60,60	0
57	MG	BA	3305	1/1	0.85	0.09	62,62,62,62	0
57	MG	DA	3410	1/1	0.85	0.13	53,53,53,53	0
57	MG	BA	3443	1/1	0.85	0.23	37,37,37,37	0
57	MG	DA	3139	1/1	0.85	0.17	53,53,53,53	0
57	MG	DA	3415	1/1	0.85	0.11	68,68,68,68	0
57	MG	AA	3041	1/1	0.85	0.21	46,46,46,46	0
57	MG	DA	3657	1/1	0.85	0.10	63,63,63,63	0
57	MG	DA	3661	1/1	0.85	0.16	62,62,62,62	0
57	MG	DA	3178	1/1	0.85	0.22	50,50,50,50	0
57	MG	DA	3180	1/1	0.85	0.20	42,42,42,42	0
57	MG	DA	3425	1/1	0.85	0.12	61,61,61,61	0
57	MG	BA	3453	1/1	0.85	0.32	45,45,45,45	0
57	MG	BA	3456	1/1	0.85	0.18	49,49,49,49	0
57	MG	DE	303	1/1	0.85	0.12	54,54,54,54	0
57	MG	AA	3047	1/1	0.85	0.17	63,63,63,63	0
57	MG	AA	3184	1/1	0.85	0.12	60,60,60,60	0
57	MG	BA	3681	1/1	0.85	0.08	66,66,66,66	0
57	MG	DU	3002	1/1	0.85	0.40	55,55,55,55	0
57	MG	D0	101	1/1	0.85	0.08	71,71,71,71	0
57	MG	AA	3001	1/1	0.85	0.14	61,61,61,61	0
57	MG	AA	3196	1/1	0.85	0.21	74,74,74,74	0
57	MG	DA	3360	1/1	0.86	0.16	46,46,46,46	0
57	MG	DA	3138	1/1	0.86	0.13	55,55,55,55	0
57	MG	BA	3213	1/1	0.86	0.26	40,40,40,40	0
57	MG	BA	3447	1/1	0.86	0.10	72,72,72,72	0
57	MG	AA	3065	1/1	0.86	0.20	63,63,63,63	0
57	MG	AA	3214	1/1	0.86	0.17	73,73,73,73	0
57	MG	DA	3185	1/1	0.86	0.11	68,68,68,68	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	AA	3177	1/1	0.86	0.08	66,66,66,66	0
57	MG	DA	3577	1/1	0.86	0.14	58,58,58,58	0
57	MG	BA	3598	1/1	0.86	0.14	63,63,63,63	0
57	MG	CE	3001	1/1	0.86	0.10	79,79,79,79	0
57	MG	BA	3601	1/1	0.86	0.12	55,55,55,55	0
57	MG	DA	3592	1/1	0.86	0.07	51,51,51,51	0
57	MG	CA	3033	1/1	0.86	0.19	71,71,71,71	0
57	MG	BA	3308	1/1	0.86	0.19	43,43,43,43	0
57	MG	BB	202	1/1	0.86	0.28	59,59,59,59	0
57	MG	BA	3165	1/1	0.86	0.17	45,45,45,45	0
57	MG	BA	3426	1/1	0.86	0.20	37,37,37,37	0
57	MG	DA	3035	1/1	0.86	0.20	52,52,52,52	0
57	MG	BA	3486	1/1	0.86	0.13	57,57,57,57	0
57	MG	AA	3192	1/1	0.86	0.14	71,71,71,71	0
57	MG	DA	3440	1/1	0.86	0.09	61,61,61,61	0
57	MG	DA	3641	1/1	0.86	0.20	69,69,69,69	0
57	MG	DA	3062	1/1	0.86	0.20	63,63,63,63	0
57	MG	CA	3073	1/1	0.86	0.14	57,57,57,57	0
57	MG	AA	3054	1/1	0.86	0.13	53,53,53,53	0
57	MG	DA	3654	1/1	0.86	0.12	56,56,56,56	0
57	MG	DA	3309	1/1	0.86	0.09	51,51,51,51	0
57	MG	DA	3658	1/1	0.86	0.12	62,62,62,62	0
57	MG	DA	3462	1/1	0.86	0.20	42,42,42,42	0
57	MG	DA	3667	1/1	0.86	0.12	50,50,50,50	0
57	MG	DA	3312	1/1	0.86	0.10	54,54,54,54	0
57	MG	BE	305	1/1	0.86	0.17	43,43,43,43	0
57	MG	DA	3484	1/1	0.86	0.12	62,62,62,62	0
57	MG	CA	3097	1/1	0.86	0.15	69,69,69,69	0
57	MG	DB	3012	1/1	0.86	0.33	61,61,61,61	0
57	MG	DA	3495	1/1	0.86	0.11	47,47,47,47	0
57	MG	BA	3274	1/1	0.86	0.14	49,49,49,49	0
57	MG	BA	3530	1/1	0.86	0.22	49,49,49,49	0
57	MG	BA	3284	1/1	0.86	0.27	43,43,43,43	0
57	MG	CA	3115	1/1	0.86	0.09	63,63,63,63	0
57	MG	DA	3523	1/1	0.86	0.10	59,59,59,59	0
57	MG	DA	3528	1/1	0.86	0.15	62,62,62,62	0
57	MG	BA	3680	1/1	0.86	0.11	68,68,68,68	0
57	MG	BA	3180	1/1	0.86	0.17	47,47,47,47	0
57	MG	AA	3038	1/1	0.87	0.33	68,68,68,68	0
57	MG	BX	3002	1/1	0.87	0.19	46,46,46,46	0
57	MG	CA	3168	1/1	0.87	0.11	56,56,56,56	0
57	MG	AA	3197	1/1	0.87	0.26	70,70,70,70	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3521	1/1	0.87	0.13	58,58,58,58	0
57	MG	BA	3583	1/1	0.87	0.21	45,45,45,45	0
57	MG	BA	3584	1/1	0.87	0.20	63,63,63,63	0
57	MG	DA	3283	1/1	0.87	0.11	51,51,51,51	0
57	MG	AA	3121	1/1	0.87	0.12	70,70,70,70	0
57	MG	BA	3206	1/1	0.87	0.23	49,49,49,49	0
57	MG	BA	3732	1/1	0.87	0.26	51,51,51,51	0
57	MG	DA	3002	1/1	0.87	0.10	48,48,48,48	0
57	MG	DA	3007	1/1	0.87	0.14	50,50,50,50	0
57	MG	AA	3124	1/1	0.87	0.09	47,47,47,47	0
57	MG	DA	3558	1/1	0.87	0.17	61,61,61,61	0
57	MG	BA	3742	1/1	0.87	0.24	65,65,65,65	0
57	MG	BA	3318	1/1	0.87	0.12	41,41,41,41	0
57	MG	AA	3049	1/1	0.87	0.21	64,64,64,64	0
57	MG	DA	3575	1/1	0.87	0.14	64,64,64,64	0
57	MG	DA	3339	1/1	0.87	0.15	61,61,61,61	0
57	MG	DA	3061	1/1	0.87	0.13	48,48,48,48	0
57	MG	CA	3027	1/1	0.87	0.20	64,64,64,64	0
57	MG	DA	3356	1/1	0.87	0.10	36,36,36,36	0
57	MG	AA	3051	1/1	0.87	0.23	73,73,73,73	0
57	MG	DA	3361	1/1	0.87	0.12	44,44,44,44	0
57	MG	BA	3071	1/1	0.87	0.35	59,59,59,59	0
57	MG	BA	3074	1/1	0.87	0.21	46,46,46,46	0
57	MG	BA	3637	1/1	0.87	0.11	39,39,39,39	0
57	MG	AA	3031	1/1	0.87	0.23	70,70,70,70	0
57	MG	DA	3400	1/1	0.87	0.12	54,54,54,54	0
57	MG	BA	3386	1/1	0.87	0.16	53,53,53,53	0
57	MG	DA	3632	1/1	0.87	0.15	36,36,36,36	0
57	MG	BA	3658	1/1	0.87	0.26	61,61,61,61	0
57	MG	DA	3110	1/1	0.87	0.31	58,58,58,58	0
57	MG	BA	3780	1/1	0.87	0.11	62,62,62,62	0
57	MG	BA	3258	1/1	0.87	0.13	44,44,44,44	0
57	MG	AA	3089	1/1	0.87	0.15	60,60,60,60	0
57	MG	CA	3090	1/1	0.87	0.10	67,67,67,67	0
57	MG	BA	3128	1/1	0.87	0.14	69,69,69,69	0
57	MG	DA	3140	1/1	0.87	0.15	58,58,58,58	0
57	MG	AA	3190	1/1	0.87	0.10	58,58,58,58	0
57	MG	DA	3659	1/1	0.87	0.14	48,48,48,48	0
57	MG	DA	3148	1/1	0.87	0.12	54,54,54,54	0
57	MG	BA	3513	1/1	0.87	0.15	59,59,59,59	0
57	MG	BA	3684	1/1	0.87	0.12	68,68,68,68	0
57	MG	BB	211	1/1	0.87	0.10	51,51,51,51	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3676	1/1	0.87	0.33	67,67,67,67	0
57	MG	DA	3437	1/1	0.87	0.16	52,52,52,52	0
57	MG	BA	3419	1/1	0.87	0.23	37,37,37,37	0
57	MG	CA	3124	1/1	0.87	0.12	59,59,59,59	0
57	MG	CA	3138	1/1	0.87	0.19	80,80,80,80	0
57	MG	DA	3217	1/1	0.87	0.14	38,38,38,38	0
57	MG	DF	3001	1/1	0.87	0.20	44,44,44,44	0
57	MG	BA	3147	1/1	0.87	0.16	45,45,45,45	0
57	MG	BA	3001	1/1	0.87	0.14	53,53,53,53	0
57	MG	DQ	3004	1/1	0.87	0.28	54,54,54,54	0
57	MG	BA	3545	1/1	0.87	0.14	65,65,65,65	0
57	MG	DA	3240	1/1	0.87	0.09	48,48,48,48	0
57	MG	DA	3242	1/1	0.87	0.11	52,52,52,52	0
57	MG	AA	3045	1/1	0.87	0.12	58,58,58,58	0
57	MG	BA	3548	1/1	0.87	0.17	40,40,40,40	0
57	MG	AA	3200	1/1	0.88	0.08	73,73,73,73	0
57	MG	BA	3297	1/1	0.88	0.14	43,43,43,43	0
57	MG	CA	3157	1/1	0.88	0.11	58,58,58,58	0
57	MG	BA	3006	1/1	0.88	0.19	48,48,48,48	0
57	MG	CA	3163	1/1	0.88	0.09	63,63,63,63	0
57	MG	AA	3094	1/1	0.88	0.17	59,59,59,59	0
57	MG	BA	3162	1/1	0.88	0.15	38,38,38,38	0
57	MG	DA	3526	1/1	0.88	0.11	48,48,48,48	0
57	MG	DA	3527	1/1	0.88	0.12	60,60,60,60	0
57	MG	DA	3274	1/1	0.88	0.15	58,58,58,58	0
57	MG	AA	3026	1/1	0.88	0.13	70,70,70,70	0
57	MG	BA	3030	1/1	0.88	0.18	46,46,46,46	0
57	MG	DA	3288	1/1	0.88	0.14	52,52,52,52	0
57	MG	BA	3673	1/1	0.88	0.17	55,55,55,55	0
57	MG	BA	3471	1/1	0.88	0.27	53,53,53,53	0
57	MG	BA	3679	1/1	0.88	0.12	62,62,62,62	0
57	MG	BA	3033	1/1	0.88	0.29	53,53,53,53	0
57	MG	AA	3145	1/1	0.88	0.12	66,66,66,66	0
57	MG	BA	3333	1/1	0.88	0.20	38,38,38,38	0
57	MG	DA	3323	1/1	0.88	0.11	50,50,50,50	0
57	MG	DA	3567	1/1	0.88	0.27	62,62,62,62	0
57	MG	BA	3502	1/1	0.88	0.12	56,56,56,56	0
57	MG	DA	3572	1/1	0.88	0.06	62,62,62,62	0
57	MG	B7	105	1/1	0.88	0.16	56,56,56,56	0
57	MG	DA	3334	1/1	0.88	0.15	52,52,52,52	0
57	MG	CA	3003	1/1	0.88	0.12	57,57,57,57	0
57	MG	DA	3056	1/1	0.88	0.09	51,51,51,51	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	BA	3185	1/1	0.88	0.19	57,57,57,57	0
57	MG	DA	3590	1/1	0.88	0.10	51,51,51,51	0
57	MG	DA	3591	1/1	0.88	0.17	55,55,55,55	0
57	MG	BA	3337	1/1	0.88	0.17	58,58,58,58	0
57	MG	DA	3603	1/1	0.88	0.06	41,41,41,41	0
57	MG	DA	3606	1/1	0.88	0.10	71,71,71,71	0
57	MG	AA	3107	1/1	0.88	0.18	64,64,64,64	0
57	MG	BA	3212	1/1	0.88	0.24	54,54,54,54	0
57	MG	DA	3609	1/1	0.88	0.10	46,46,46,46	0
57	MG	BA	3710	1/1	0.88	0.17	57,57,57,57	0
57	MG	DA	3614	1/1	0.88	0.07	65,65,65,65	0
57	MG	BA	3514	1/1	0.88	0.23	48,48,48,48	0
57	MG	DA	3618	1/1	0.88	0.12	53,53,53,53	0
57	MG	DA	3367	1/1	0.88	0.14	61,61,61,61	0
57	MG	DA	3380	1/1	0.88	0.07	55,55,55,55	0
57	MG	BA	3526	1/1	0.88	0.17	44,44,44,44	0
57	MG	BA	3057	1/1	0.88	0.20	34,34,34,34	0
57	MG	DA	3388	1/1	0.88	0.15	53,53,53,53	0
57	MG	BA	3532	1/1	0.88	0.15	52,52,52,52	0
57	MG	DA	3636	1/1	0.88	0.32	63,63,63,63	0
57	MG	CA	3039	1/1	0.88	0.11	68,68,68,68	0
57	MG	DA	3092	1/1	0.88	0.18	45,45,45,45	0
57	MG	DA	3093	1/1	0.88	0.09	62,62,62,62	0
57	MG	AA	3046	1/1	0.88	0.22	55,55,55,55	0
57	MG	AX	3002	1/1	0.88	0.17	58,58,58,58	0
57	MG	AX	3010	1/1	0.88	0.21	59,59,59,59	0
57	MG	BA	3072	1/1	0.88	0.14	47,47,47,47	0
57	MG	AA	3072	1/1	0.88	0.12	66,66,66,66	0
57	MG	BA	3740	1/1	0.88	0.16	28,28,28,28	0
57	MG	BA	3409	1/1	0.88	0.16	30,30,30,30	0
57	MG	BA	3566	1/1	0.88	0.21	67,67,67,67	0
57	MG	AA	3019	1/1	0.88	0.11	66,66,66,66	0
57	MG	BA	3578	1/1	0.88	0.09	46,46,46,46	0
57	MG	DB	3002	1/1	0.88	0.17	65,65,65,65	0
57	MG	DB	3003	1/1	0.88	0.12	57,57,57,57	0
57	MG	BA	3266	1/1	0.88	0.19	39,39,39,39	0
57	MG	BA	3267	1/1	0.88	0.19	65,65,65,65	0
57	MG	AA	3128	1/1	0.88	0.08	57,57,57,57	0
57	MG	DA	3208	1/1	0.88	0.36	58,58,58,58	0
57	MG	BA	3117	1/1	0.88	0.20	59,59,59,59	0
57	MG	BA	3430	1/1	0.88	0.16	37,37,37,37	0
57	MG	DA	3216	1/1	0.88	0.22	56,56,56,56	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	BA	3275	1/1	0.88	0.17	58,58,58,58	0
57	MG	BA	3122	1/1	0.88	0.15	41,41,41,41	0
57	MG	BA	3002	1/1	0.88	0.10	50,50,50,50	0
57	MG	DA	3469	1/1	0.88	0.28	44,44,44,44	0
57	MG	BA	3442	1/1	0.88	0.17	44,44,44,44	0
57	MG	BA	3619	1/1	0.88	0.20	58,58,58,58	0
57	MG	BA	3624	1/1	0.88	0.10	68,68,68,68	0
57	MG	BA	3397	1/1	0.89	0.15	30,30,30,30	0
57	MG	BA	3499	1/1	0.89	0.10	58,58,58,58	0
57	MG	DA	3470	1/1	0.89	0.19	45,45,45,45	0
57	MG	CA	3076	1/1	0.89	0.14	57,57,57,57	0
57	MG	DA	3481	1/1	0.89	0.41	55,55,55,55	0
57	MG	DA	3206	1/1	0.89	0.13	50,50,50,50	0
57	MG	CA	3081	1/1	0.89	0.09	46,46,46,46	0
57	MG	DA	3492	1/1	0.89	0.12	55,55,55,55	0
57	MG	BA	3399	1/1	0.89	0.20	45,45,45,45	0
57	MG	AA	3108	1/1	0.89	0.28	67,67,67,67	0
57	MG	BA	3640	1/1	0.89	0.17	53,53,53,53	0
57	MG	BA	3402	1/1	0.89	0.14	40,40,40,40	0
57	MG	BA	3092	1/1	0.89	0.16	37,37,37,37	0
57	MG	BA	3298	1/1	0.89	0.16	51,51,51,51	0
57	MG	DA	3223	1/1	0.89	0.15	50,50,50,50	0
57	MG	BA	3790	1/1	0.89	0.18	34,34,34,34	0
57	MG	BA	3793	1/1	0.89	0.13	40,40,40,40	0
57	MG	BA	3023	1/1	0.89	0.22	36,36,36,36	0
57	MG	BA	3106	1/1	0.89	0.22	42,42,42,42	0
57	MG	CA	3128	1/1	0.89	0.15	65,65,65,65	0
57	MG	DA	3248	1/1	0.89	0.12	56,56,56,56	0
57	MG	BA	3810	1/1	0.89	0.18	41,41,41,41	0
57	MG	BA	3109	1/1	0.89	0.18	51,51,51,51	0
57	MG	AA	3042	1/1	0.89	0.09	57,57,57,57	0
57	MG	BA	3314	1/1	0.89	0.13	58,58,58,58	0
57	MG	BA	3315	1/1	0.89	0.19	31,31,31,31	0
57	MG	BA	3431	1/1	0.89	0.17	59,59,59,59	0
57	MG	DA	3564	1/1	0.89	0.16	61,61,61,61	0
57	MG	DA	3275	1/1	0.89	0.17	42,42,42,42	0
57	MG	CA	3156	1/1	0.89	0.10	73,73,73,73	0
57	MG	BA	3032	1/1	0.89	0.20	47,47,47,47	0
57	MG	AA	3209	1/1	0.89	0.08	59,59,59,59	0
57	MG	CA	3159	1/1	0.89	0.18	70,70,70,70	0
57	MG	BE	301	1/1	0.89	0.14	35,35,35,35	0
57	MG	DA	3311	1/1	0.89	0.17	54,54,54,54	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	BA	3697	1/1	0.89	0.17	61,61,61,61	0
57	MG	DA	3313	1/1	0.89	0.16	47,47,47,47	0
57	MG	BA	3703	1/1	0.89	0.10	64,64,64,64	0
57	MG	BA	3125	1/1	0.89	0.17	47,47,47,47	0
57	MG	BQ	3005	1/1	0.89	0.13	49,49,49,49	0
57	MG	DA	3593	1/1	0.89	0.11	40,40,40,40	0
57	MG	BU	201	1/1	0.89	0.15	43,43,43,43	0
57	MG	DA	3605	1/1	0.89	0.12	58,58,58,58	0
57	MG	BV	203	1/1	0.89	0.19	38,38,38,38	0
57	MG	DA	3332	1/1	0.89	0.11	53,53,53,53	0
57	MG	BA	3324	1/1	0.89	0.17	45,45,45,45	0
57	MG	BZ	3001	1/1	0.89	0.29	55,55,55,55	0
57	MG	AA	3210	1/1	0.89	0.27	59,59,59,59	0
57	MG	BA	3573	1/1	0.89	0.16	51,51,51,51	0
57	MG	BA	3444	1/1	0.89	0.21	29,29,29,29	0
57	MG	BA	3445	1/1	0.89	0.30	63,63,63,63	0
57	MG	DA	3355	1/1	0.89	0.12	58,58,58,58	0
57	MG	DA	3621	1/1	0.89	0.08	44,44,44,44	0
57	MG	DA	3626	1/1	0.89	0.07	67,67,67,67	0
57	MG	AA	3102	1/1	0.89	0.25	59,59,59,59	0
57	MG	CA	3004	1/1	0.89	0.25	66,66,66,66	0
57	MG	BA	3131	1/1	0.89	0.11	58,58,58,58	0
57	MG	BA	3590	1/1	0.89	0.16	50,50,50,50	0
57	MG	AA	3176	1/1	0.89	0.10	67,67,67,67	0
57	MG	DA	3371	1/1	0.89	0.13	58,58,58,58	0
57	MG	DA	3638	1/1	0.89	0.10	51,51,51,51	0
57	MG	DA	3066	1/1	0.89	0.10	42,42,42,42	0
57	MG	BA	3596	1/1	0.89	0.10	64,64,64,64	0
57	MG	BA	3058	1/1	0.89	0.15	49,49,49,49	0
57	MG	CA	3020	1/1	0.89	0.11	56,56,56,56	0
57	MG	BA	3361	1/1	0.89	0.13	49,49,49,49	0
57	MG	DA	3077	1/1	0.89	0.23	61,61,61,61	0
57	MG	CA	3022	1/1	0.89	0.20	78,78,78,78	0
57	MG	AM	201	1/1	0.89	0.16	51,51,51,51	0
57	MG	BA	3741	1/1	0.89	0.74	64,64,64,64	0
57	MG	DA	3090	1/1	0.89	0.10	52,52,52,52	0
57	MG	AA	3064	1/1	0.89	0.24	60,60,60,60	0
57	MG	CA	3036	1/1	0.89	0.14	66,66,66,66	0
57	MG	DA	3095	1/1	0.89	0.15	58,58,58,58	0
57	MG	DA	3098	1/1	0.89	0.17	53,53,53,53	0
57	MG	DA	3106	1/1	0.89	0.13	52,52,52,52	0
57	MG	DA	3420	1/1	0.89	0.24	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
57	MG	BA	3745	1/1	0.89	0.08	75,75,75,75	0
57	MG	CA	3041	1/1	0.89	0.13	59,59,59,59	0
57	MG	CA	3044	1/1	0.89	0.23	62,62,62,62	0
57	MG	DA	3124	1/1	0.89	0.15	57,57,57,57	0
57	MG	BA	3749	1/1	0.89	0.12	56,56,56,56	0
57	MG	BA	3008	1/1	0.89	0.17	47,47,47,47	0
57	MG	BA	3618	1/1	0.89	0.14	65,65,65,65	0
57	MG	DP	202	1/1	0.89	0.11	53,53,53,53	0
57	MG	DA	3444	1/1	0.89	0.06	44,44,44,44	0
57	MG	CA	3061	1/1	0.89	0.28	66,66,66,66	0
57	MG	CA	3062	1/1	0.89	0.17	64,64,64,64	0
57	MG	DX	101	1/1	0.89	0.12	51,51,51,51	0
57	MG	AA	3093	1/1	0.89	0.12	66,66,66,66	0
57	MG	DA	3151	1/1	0.89	0.09	55,55,55,55	0
57	MG	BA	3622	1/1	0.89	0.19	48,48,48,48	0
57	MG	CA	3002	1/1	0.90	0.12	63,63,63,63	0
57	MG	BA	3599	1/1	0.90	0.21	43,43,43,43	0
57	MG	AA	3143	1/1	0.90	0.08	60,60,60,60	0
57	MG	DA	3245	1/1	0.90	0.12	54,54,54,54	0
57	MG	CA	3006	1/1	0.90	0.14	64,64,64,64	0
57	MG	AA	3211	1/1	0.90	0.12	47,47,47,47	0
57	MG	DA	3499	1/1	0.90	0.10	53,53,53,53	0
57	MG	DA	3502	1/1	0.90	0.10	55,55,55,55	0
57	MG	BA	3612	1/1	0.90	0.14	21,21,21,21	0
57	MG	BA	3485	1/1	0.90	0.09	42,42,42,42	0
57	MG	BA	3192	1/1	0.90	0.28	46,46,46,46	0
57	MG	BA	3195	1/1	0.90	0.11	46,46,46,46	0
57	MG	DA	3524	1/1	0.90	0.17	61,61,61,61	0
57	MG	BA	3501	1/1	0.90	0.23	71,71,71,71	0
57	MG	DA	3270	1/1	0.90	0.10	46,46,46,46	0
57	MG	DA	3271	1/1	0.90	0.15	48,48,48,48	0
57	MG	DA	3018	1/1	0.90	0.20	62,62,62,62	0
57	MG	BA	3199	1/1	0.90	0.15	46,46,46,46	0
57	MG	DA	3033	1/1	0.90	0.10	42,42,42,42	0
57	MG	DA	3280	1/1	0.90	0.16	33,33,33,33	0
57	MG	BA	3623	1/1	0.90	0.26	55,55,55,55	0
57	MG	DA	3547	1/1	0.90	0.14	54,54,54,54	0
57	MG	BA	3411	1/1	0.90	0.19	33,33,33,33	0
57	MG	DA	3301	1/1	0.90	0.19	52,52,52,52	0
57	MG	DA	3556	1/1	0.90	0.11	67,67,67,67	0
57	MG	DA	3051	1/1	0.90	0.11	48,48,48,48	0
57	MG	CA	3026	1/1	0.90	0.20	63,63,63,63	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	BA	3634	1/1	0.90	0.14	62,62,62,62	0
57	MG	BA	3104	1/1	0.90	0.13	42,42,42,42	0
57	MG	BA	3312	1/1	0.90	0.18	32,32,32,32	0
57	MG	DA	3314	1/1	0.90	0.12	43,43,43,43	0
57	MG	CA	3038	1/1	0.90	0.14	58,58,58,58	0
57	MG	AA	3100	1/1	0.90	0.12	65,65,65,65	0
57	MG	DA	3070	1/1	0.90	0.13	58,58,58,58	0
57	MG	AA	3185	1/1	0.90	0.12	82,82,82,82	0
57	MG	DA	3328	1/1	0.90	0.08	47,47,47,47	0
57	MG	AA	3187	1/1	0.90	0.13	62,62,62,62	0
57	MG	BA	3648	1/1	0.90	0.11	65,65,65,65	0
57	MG	BA	3429	1/1	0.90	0.10	65,65,65,65	0
57	MG	CA	3054	1/1	0.90	0.30	69,69,69,69	0
57	MG	CA	3057	1/1	0.90	0.18	76,76,76,76	0
57	MG	DA	3337	1/1	0.90	0.13	41,41,41,41	0
57	MG	BA	3659	1/1	0.90	0.19	61,61,61,61	0
57	MG	BA	3664	1/1	0.90	0.16	55,55,55,55	0
57	MG	BA	3666	1/1	0.90	0.19	50,50,50,50	0
57	MG	AA	3146	1/1	0.90	0.13	66,66,66,66	0
57	MG	AA	3059	1/1	0.90	0.12	78,78,78,78	0
57	MG	BA	3047	1/1	0.90	0.22	60,60,60,60	0
57	MG	DA	3103	1/1	0.90	0.10	58,58,58,58	0
57	MG	DA	3615	1/1	0.90	0.09	65,65,65,65	0
57	MG	BA	3541	1/1	0.90	0.16	38,38,38,38	0
57	MG	BA	3811	1/1	0.90	0.14	65,65,65,65	0
57	MG	AA	3036	1/1	0.90	0.17	61,61,61,61	0
57	MG	DA	3378	1/1	0.90	0.13	57,57,57,57	0
57	MG	DA	3119	1/1	0.90	0.22	39,39,39,39	0
57	MG	AA	3194	1/1	0.90	0.11	56,56,56,56	0
57	MG	BB	210	1/1	0.90	0.07	61,61,61,61	0
57	MG	AA	3057	1/1	0.90	0.22	64,64,64,64	0
57	MG	DA	3126	1/1	0.90	0.08	55,55,55,55	0
57	MG	DA	3129	1/1	0.90	0.12	46,46,46,46	0
57	MG	DA	3401	1/1	0.90	0.10	38,38,38,38	0
57	MG	DA	3132	1/1	0.90	0.23	52,52,52,52	0
57	MG	DA	3133	1/1	0.90	0.22	50,50,50,50	0
57	MG	BA	3550	1/1	0.90	0.19	36,36,36,36	0
57	MG	BA	3686	1/1	0.90	0.25	60,60,60,60	0
57	MG	AA	3135	1/1	0.90	0.24	65,65,65,65	0
57	MG	DA	3141	1/1	0.90	0.27	61,61,61,61	0
57	MG	DA	3146	1/1	0.90	0.10	55,55,55,55	0
57	MG	BA	3351	1/1	0.90	0.17	30,30,30,30	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	BD	309	1/1	0.90	0.32	57,57,57,57	0
57	MG	AX	3016	1/1	0.90	0.10	56,56,56,56	0
57	MG	DA	3666	1/1	0.90	0.14	35,35,35,35	0
57	MG	BA	3700	1/1	0.90	0.16	61,61,61,61	0
57	MG	BA	3702	1/1	0.90	0.27	51,51,51,51	0
57	MG	DA	3424	1/1	0.90	0.09	61,61,61,61	0
57	MG	CA	3130	1/1	0.90	0.09	57,57,57,57	0
57	MG	DA	3677	1/1	0.90	0.47	52,52,52,52	0
57	MG	DB	3001	1/1	0.90	0.17	64,64,64,64	0
57	MG	AA	3058	1/1	0.90	0.28	59,59,59,59	0
57	MG	BN	3004	1/1	0.90	0.12	60,60,60,60	0
57	MG	DB	3004	1/1	0.90	0.15	55,55,55,55	0
57	MG	AA	3204	1/1	0.90	0.13	53,53,53,53	0
57	MG	DA	3209	1/1	0.90	0.24	53,53,53,53	0
57	MG	BA	3581	1/1	0.90	0.19	30,30,30,30	0
57	MG	BA	3276	1/1	0.90	0.31	54,54,54,54	0
57	MG	DA	3214	1/1	0.90	0.24	59,59,59,59	0
57	MG	DA	3215	1/1	0.90	0.13	59,59,59,59	0
57	MG	AA	3117	1/1	0.90	0.12	79,79,79,79	0
57	MG	DA	3452	1/1	0.90	0.16	51,51,51,51	0
57	MG	BA	3461	1/1	0.90	0.10	62,62,62,62	0
57	MG	DA	3463	1/1	0.90	0.14	55,55,55,55	0
57	MG	DA	3465	1/1	0.90	0.12	46,46,46,46	0
57	MG	BA	3177	1/1	0.90	0.19	46,46,46,46	0
57	MG	DA	3221	1/1	0.90	0.27	52,52,52,52	0
57	MG	BA	3465	1/1	0.90	0.18	43,43,43,43	0
57	MG	BA	3394	1/1	0.90	0.18	40,40,40,40	0
59	ZN	DY	501	1/1	0.90	0.15	96,96,96,96	0
57	MG	AA	3142	1/1	0.90	0.11	41,41,41,41	0
57	MG	DA	3170	1/1	0.91	0.12	53,53,53,53	0
57	MG	AX	3003	1/1	0.91	0.13	71,71,71,71	0
57	MG	CA	3091	1/1	0.91	0.12	55,55,55,55	0
57	MG	BA	3366	1/1	0.91	0.12	57,57,57,57	0
57	MG	BA	3495	1/1	0.91	0.13	37,37,37,37	0
57	MG	CA	3100	1/1	0.91	0.09	52,52,52,52	0
57	MG	BA	3255	1/1	0.91	0.15	47,47,47,47	0
57	MG	BB	206	1/1	0.91	0.30	47,47,47,47	0
57	MG	CA	3111	1/1	0.91	0.16	64,64,64,64	0
57	MG	BA	3650	1/1	0.91	0.12	52,52,52,52	0
57	MG	BA	3654	1/1	0.91	0.20	57,57,57,57	0
57	MG	DA	3494	1/1	0.91	0.12	47,47,47,47	0
57	MG	CA	3118	1/1	0.91	0.19	68,68,68,68	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	AX	3007	1/1	0.91	0.10	67,67,67,67	0
57	MG	BA	3126	1/1	0.91	0.16	54,54,54,54	0
57	MG	CA	3129	1/1	0.91	0.09	43,43,43,43	0
57	MG	AA	3080	1/1	0.91	0.21	58,58,58,58	0
57	MG	BA	3396	1/1	0.91	0.15	50,50,50,50	0
57	MG	BA	3668	1/1	0.91	0.17	53,53,53,53	0
57	MG	BD	302	1/1	0.91	0.27	50,50,50,50	0
57	MG	DA	3236	1/1	0.91	0.26	47,47,47,47	0
57	MG	DA	3239	1/1	0.91	0.24	56,56,56,56	0
57	MG	CA	3144	1/1	0.91	0.19	71,71,71,71	0
57	MG	BA	3507	1/1	0.91	0.20	49,49,49,49	0
57	MG	DA	3243	1/1	0.91	0.12	55,55,55,55	0
57	MG	BA	3508	1/1	0.91	0.20	51,51,51,51	0
57	MG	CA	3150	1/1	0.91	0.21	56,56,56,56	0
57	MG	AA	3003	1/1	0.91	0.30	72,72,72,72	0
57	MG	DA	3538	1/1	0.91	0.11	58,58,58,58	0
57	MG	CA	3153	1/1	0.91	0.16	70,70,70,70	0
57	MG	BA	3269	1/1	0.91	0.16	53,53,53,53	0
57	MG	BA	3400	1/1	0.91	0.21	33,33,33,33	0
57	MG	DA	3550	1/1	0.91	0.13	57,57,57,57	0
57	MG	BN	3002	1/1	0.91	0.16	39,39,39,39	0
57	MG	AA	3131	1/1	0.91	0.15	71,71,71,71	0
57	MG	CA	3160	1/1	0.91	0.17	62,62,62,62	0
57	MG	BO	201	1/1	0.91	0.19	50,50,50,50	0
57	MG	BO	202	1/1	0.91	0.09	65,65,65,65	0
57	MG	BA	3143	1/1	0.91	0.26	45,45,45,45	0
57	MG	BA	3683	1/1	0.91	0.15	73,73,73,73	0
57	MG	AA	3133	1/1	0.91	0.16	56,56,56,56	0
57	MG	DA	3279	1/1	0.91	0.12	56,56,56,56	0
57	MG	BA	3405	1/1	0.91	0.19	63,63,63,63	0
57	MG	BA	3150	1/1	0.91	0.17	55,55,55,55	0
57	MG	CW	3001	1/1	0.91	0.22	67,67,67,67	0
57	MG	B1	101	1/1	0.91	0.50	51,51,51,51	0
57	MG	AA	3188	1/1	0.91	0.08	69,69,69,69	0
57	MG	DA	3588	1/1	0.91	0.30	65,65,65,65	0
57	MG	BA	3413	1/1	0.91	0.13	47,47,47,47	0
57	MG	DA	3004	1/1	0.91	0.17	40,40,40,40	0
57	MG	BA	3285	1/1	0.91	0.27	50,50,50,50	0
57	MG	DA	3011	1/1	0.91	0.08	48,48,48,48	0
57	MG	B7	104	1/1	0.91	0.27	48,48,48,48	0
57	MG	BA	3061	1/1	0.91	0.23	29,29,29,29	0
57	MG	DA	3604	1/1	0.91	0.18	59,59,59,59	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3317	1/1	0.91	0.12	44,44,44,44	0
57	MG	BA	3164	1/1	0.91	0.21	48,48,48,48	0
57	MG	BA	3423	1/1	0.91	0.18	44,44,44,44	0
57	MG	DA	3038	1/1	0.91	0.16	47,47,47,47	0
57	MG	BA	3561	1/1	0.91	0.12	45,45,45,45	0
57	MG	DA	3049	1/1	0.91	0.27	52,52,52,52	0
57	MG	BA	3562	1/1	0.91	0.14	37,37,37,37	0
57	MG	CA	3007	1/1	0.91	0.13	57,57,57,57	0
57	MG	AA	3162	1/1	0.91	0.07	66,66,66,66	0
57	MG	CA	3011	1/1	0.91	0.23	61,61,61,61	0
57	MG	CA	3012	1/1	0.91	0.21	60,60,60,60	0
57	MG	AA	3066	1/1	0.91	0.31	60,60,60,60	0
57	MG	DA	3622	1/1	0.91	0.21	61,61,61,61	0
57	MG	BA	3005	1/1	0.91	0.16	30,30,30,30	0
57	MG	BA	3575	1/1	0.91	0.12	48,48,48,48	0
57	MG	AA	3028	1/1	0.91	0.22	76,76,76,76	0
57	MG	BA	3303	1/1	0.91	0.17	36,36,36,36	0
57	MG	BA	3304	1/1	0.91	0.15	67,67,67,67	0
57	MG	BA	3433	1/1	0.91	0.20	32,32,32,32	0
57	MG	BA	3073	1/1	0.91	0.22	61,61,61,61	0
57	MG	BA	3007	1/1	0.91	0.19	55,55,55,55	0
57	MG	DA	3085	1/1	0.91	0.08	53,53,53,53	0
57	MG	AA	3030	1/1	0.91	0.18	60,60,60,60	0
57	MG	DA	3643	1/1	0.91	0.13	61,61,61,61	0
57	MG	CA	3028	1/1	0.91	0.13	41,41,41,41	0
57	MG	AN	502	1/1	0.91	0.29	63,63,63,63	0
57	MG	DA	3653	1/1	0.91	0.14	52,52,52,52	0
57	MG	BA	3019	1/1	0.91	0.15	42,42,42,42	0
57	MG	AA	3063	1/1	0.91	0.10	35,35,35,35	0
57	MG	DA	3097	1/1	0.91	0.21	33,33,33,33	0
57	MG	BA	3746	1/1	0.91	0.11	51,51,51,51	0
57	MG	BA	3210	1/1	0.91	0.33	49,49,49,49	0
57	MG	BA	3750	1/1	0.91	0.17	27,27,27,27	0
57	MG	CA	3046	1/1	0.91	0.09	69,69,69,69	0
57	MG	DA	3405	1/1	0.91	0.16	46,46,46,46	0
57	MG	DA	3116	1/1	0.91	0.48	52,52,52,52	0
57	MG	DA	3407	1/1	0.91	0.04	66,66,66,66	0
57	MG	AA	3021	1/1	0.91	0.14	63,63,63,63	0
57	MG	BA	3606	1/1	0.91	0.14	61,61,61,61	0
57	MG	DA	3120	1/1	0.91	0.13	49,49,49,49	0
57	MG	BA	3321	1/1	0.91	0.24	55,55,55,55	0
57	MG	CA	3055	1/1	0.91	0.09	69,69,69,69	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	BA	3024	1/1	0.91	0.19	49,49,49,49	0
57	MG	AA	3198	1/1	0.91	0.13	61,61,61,61	0
57	MG	BA	3226	1/1	0.91	0.27	47,47,47,47	0
57	MG	DA	3130	1/1	0.91	0.18	52,52,52,52	0
57	MG	DD	309	1/1	0.91	0.20	59,59,59,59	0
57	MG	BA	3227	1/1	0.91	0.24	57,57,57,57	0
57	MG	BA	3621	1/1	0.91	0.17	53,53,53,53	0
57	MG	DA	3429	1/1	0.91	0.14	41,41,41,41	0
57	MG	DA	3134	1/1	0.91	0.21	41,41,41,41	0
57	MG	BA	3466	1/1	0.91	0.17	49,49,49,49	0
57	MG	BA	3229	1/1	0.91	0.22	54,54,54,54	0
57	MG	BA	3120	1/1	0.91	0.21	55,55,55,55	0
57	MG	CA	3075	1/1	0.91	0.18	59,59,59,59	0
57	MG	BA	3631	1/1	0.91	0.18	42,42,42,42	0
57	MG	BA	3121	1/1	0.91	0.21	64,64,64,64	0
57	MG	BA	3478	1/1	0.91	0.19	58,58,58,58	0
57	MG	BA	3252	1/1	0.91	0.41	60,60,60,60	0
57	MG	DA	3165	1/1	0.91	0.24	57,57,57,57	0
57	MG	DA	3423	1/1	0.92	0.12	49,49,49,49	0
57	MG	AA	3115	1/1	0.92	0.09	79,79,79,79	0
57	MG	BA	3779	1/1	0.92	0.29	66,66,66,66	0
57	MG	BA	3051	1/1	0.92	0.19	43,43,43,43	0
57	MG	CA	3074	1/1	0.92	0.23	64,64,64,64	0
57	MG	BA	3239	1/1	0.92	0.34	48,48,48,48	0
57	MG	DA	3135	1/1	0.92	0.12	38,38,38,38	0
57	MG	DA	3137	1/1	0.92	0.23	54,54,54,54	0
57	MG	BA	3346	1/1	0.92	0.10	27,27,27,27	0
57	MG	BA	3628	1/1	0.92	0.25	49,49,49,49	0
57	MG	BA	3347	1/1	0.92	0.15	44,44,44,44	0
57	MG	BA	3240	1/1	0.92	0.40	47,47,47,47	0
57	MG	BA	3797	1/1	0.92	0.17	53,53,53,53	0
57	MG	BA	3799	1/1	0.92	0.06	49,49,49,49	0
57	MG	DA	3456	1/1	0.92	0.07	50,50,50,50	0
57	MG	CA	3095	1/1	0.92	0.14	64,64,64,64	0
57	MG	BA	3127	1/1	0.92	0.29	57,57,57,57	0
57	MG	DA	3153	1/1	0.92	0.19	47,47,47,47	0
57	MG	DA	3162	1/1	0.92	0.36	50,50,50,50	0
57	MG	DA	3164	1/1	0.92	0.12	51,51,51,51	0
57	MG	BA	3477	1/1	0.92	0.18	61,61,61,61	0
57	MG	DA	3473	1/1	0.92	0.12	50,50,50,50	0
57	MG	BA	3357	1/1	0.92	0.23	25,25,25,25	0
57	MG	DA	3478	1/1	0.92	0.12	59,59,59,59	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3173	1/1	0.92	0.12	53,53,53,53	0
57	MG	BA	3812	1/1	0.92	0.28	47,47,47,47	0
57	MG	AA	3161	1/1	0.92	0.23	65,65,65,65	0
57	MG	AY	3003	1/1	0.92	0.30	53,53,53,53	0
57	MG	DA	3194	1/1	0.92	0.10	56,56,56,56	0
57	MG	CA	3112	1/1	0.92	0.15	69,69,69,69	0
57	MG	AA	3022	1/1	0.92	0.10	71,71,71,71	0
57	MG	BA	3493	1/1	0.92	0.16	58,58,58,58	0
57	MG	BA	3651	1/1	0.92	0.19	45,45,45,45	0
57	MG	CA	3120	1/1	0.92	0.18	64,64,64,64	0
57	MG	DA	3503	1/1	0.92	0.14	52,52,52,52	0
57	MG	DA	3505	1/1	0.92	0.08	56,56,56,56	0
57	MG	BA	3652	1/1	0.92	0.15	67,67,67,67	0
57	MG	BA	3369	1/1	0.92	0.15	44,44,44,44	0
57	MG	BA	3134	1/1	0.92	0.17	48,48,48,48	0
57	MG	BB	219	1/1	0.92	0.11	67,67,67,67	0
57	MG	CA	3135	1/1	0.92	0.15	63,63,63,63	0
57	MG	BA	3385	1/1	0.92	0.16	59,59,59,59	0
57	MG	DA	3219	1/1	0.92	0.17	53,53,53,53	0
57	MG	BA	3662	1/1	0.92	0.10	61,61,61,61	0
57	MG	BA	3136	1/1	0.92	0.14	30,30,30,30	0
57	MG	BA	3387	1/1	0.92	0.15	54,54,54,54	0
57	MG	BA	3388	1/1	0.92	0.19	48,48,48,48	0
57	MG	BE	307	1/1	0.92	0.15	62,62,62,62	0
57	MG	DA	3543	1/1	0.92	0.08	53,53,53,53	0
57	MG	BF	302	1/1	0.92	0.18	46,46,46,46	0
57	MG	BA	3138	1/1	0.92	0.34	42,42,42,42	0
57	MG	AA	3163	1/1	0.92	0.18	56,56,56,56	0
57	MG	BG	202	1/1	0.92	0.21	41,41,41,41	0
57	MG	BA	3671	1/1	0.92	0.16	63,63,63,63	0
57	MG	BA	3145	1/1	0.92	0.10	44,44,44,44	0
57	MG	BA	3675	1/1	0.92	0.19	67,67,67,67	0
57	MG	BA	3271	1/1	0.92	0.17	58,58,58,58	0
57	MG	DA	3250	1/1	0.92	0.18	69,69,69,69	0
57	MG	DA	3251	1/1	0.92	0.17	62,62,62,62	0
57	MG	AA	3119	1/1	0.92	0.12	51,51,51,51	0
57	MG	BA	3515	1/1	0.92	0.12	53,53,53,53	0
57	MG	AA	3191	1/1	0.92	0.21	47,47,47,47	0
57	MG	BX	3001	1/1	0.92	0.82	48,48,48,48	0
57	MG	DA	3263	1/1	0.92	0.13	41,41,41,41	0
57	MG	DA	3576	1/1	0.92	0.09	53,53,53,53	0
57	MG	DA	3267	1/1	0.92	0.16	49,49,49,49	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	BA	3151	1/1	0.92	0.26	52,52,52,52	0
57	MG	BX	3003	1/1	0.92	0.17	35,35,35,35	0
57	MG	DA	3586	1/1	0.92	0.16	60,60,60,60	0
57	MG	BY	502	1/1	0.92	0.25	40,40,40,40	0
57	MG	DA	3273	1/1	0.92	0.11	47,47,47,47	0
57	MG	AA	3037	1/1	0.92	0.22	55,55,55,55	0
57	MG	B0	102	1/1	0.92	0.22	48,48,48,48	0
57	MG	BA	3535	1/1	0.92	0.19	31,31,31,31	0
57	MG	DA	3001	1/1	0.92	0.17	60,60,60,60	0
57	MG	DA	3595	1/1	0.92	0.17	59,59,59,59	0
57	MG	BA	3403	1/1	0.92	0.08	54,54,54,54	0
57	MG	AA	3122	1/1	0.92	0.11	56,56,56,56	0
57	MG	AA	3171	1/1	0.92	0.10	51,51,51,51	0
57	MG	B6	102	1/1	0.92	0.11	68,68,68,68	0
57	MG	BA	3542	1/1	0.92	0.18	45,45,45,45	0
57	MG	BA	3407	1/1	0.92	0.15	47,47,47,47	0
57	MG	BA	3290	1/1	0.92	0.28	40,40,40,40	0
57	MG	BA	3292	1/1	0.92	0.15	48,48,48,48	0
57	MG	BA	3412	1/1	0.92	0.23	40,40,40,40	0
57	MG	BA	3708	1/1	0.92	0.21	50,50,50,50	0
57	MG	DA	3047	1/1	0.92	0.15	49,49,49,49	0
57	MG	DA	3048	1/1	0.92	0.06	53,53,53,53	0
57	MG	BA	3554	1/1	0.92	0.13	51,51,51,51	0
57	MG	DA	3050	1/1	0.92	0.17	59,59,59,59	0
57	MG	CA	3008	1/1	0.92	0.27	51,51,51,51	0
57	MG	DA	3325	1/1	0.92	0.12	35,35,35,35	0
57	MG	DA	3327	1/1	0.92	0.12	57,57,57,57	0
57	MG	BA	3016	1/1	0.92	0.13	38,38,38,38	0
57	MG	BA	3714	1/1	0.92	0.11	57,57,57,57	0
57	MG	BA	3017	1/1	0.92	0.25	48,48,48,48	0
57	MG	AA	3070	1/1	0.92	0.18	52,52,52,52	0
57	MG	DA	3063	1/1	0.92	0.22	54,54,54,54	0
57	MG	DA	3637	1/1	0.92	0.59	58,58,58,58	0
57	MG	CA	3014	1/1	0.92	0.21	58,58,58,58	0
57	MG	BA	3717	1/1	0.92	0.16	50,50,50,50	0
57	MG	AA	3061	1/1	0.92	0.34	55,55,55,55	0
57	MG	BA	3098	1/1	0.92	0.23	40,40,40,40	0
57	MG	BA	3722	1/1	0.92	0.19	47,47,47,47	0
57	MG	DA	3354	1/1	0.92	0.19	44,44,44,44	0
57	MG	BA	3424	1/1	0.92	0.25	39,39,39,39	0
57	MG	BA	3182	1/1	0.92	0.14	55,55,55,55	0
57	MG	BA	3099	1/1	0.92	0.22	41,41,41,41	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3079	1/1	0.92	0.17	55,55,55,55	0
57	MG	BA	3100	1/1	0.92	0.17	39,39,39,39	0
57	MG	DA	3083	1/1	0.92	0.18	40,40,40,40	0
57	MG	BA	3101	1/1	0.92	0.19	53,53,53,53	0
57	MG	BA	3734	1/1	0.92	0.16	52,52,52,52	0
57	MG	DA	3668	1/1	0.92	0.39	60,60,60,60	0
57	MG	BA	3307	1/1	0.92	0.17	29,29,29,29	0
57	MG	DA	3382	1/1	0.92	0.07	48,48,48,48	0
57	MG	DA	3091	1/1	0.92	0.10	48,48,48,48	0
57	MG	AA	3097	1/1	0.92	0.34	56,56,56,56	0
57	MG	BA	3310	1/1	0.92	0.24	58,58,58,58	0
57	MG	DA	3391	1/1	0.92	0.09	45,45,45,45	0
57	MG	DA	3392	1/1	0.92	0.19	70,70,70,70	0
57	MG	BA	3203	1/1	0.92	0.24	40,40,40,40	0
57	MG	DA	3398	1/1	0.92	0.14	45,45,45,45	0
57	MG	BA	3022	1/1	0.92	0.19	60,60,60,60	0
57	MG	BA	3207	1/1	0.92	0.24	54,54,54,54	0
57	MG	DA	3100	1/1	0.92	0.16	43,43,43,43	0
57	MG	DD	304	1/1	0.92	0.38	52,52,52,52	0
57	MG	AA	3201	1/1	0.92	0.13	52,52,52,52	0
57	MG	AX	3008	1/1	0.92	0.19	70,70,70,70	0
57	MG	AX	3009	1/1	0.92	0.18	64,64,64,64	0
57	MG	DA	3112	1/1	0.92	0.16	59,59,59,59	0
57	MG	AA	3202	1/1	0.92	0.14	57,57,57,57	0
57	MG	DA	3409	1/1	0.92	0.15	57,57,57,57	0
57	MG	BA	3322	1/1	0.92	0.17	52,52,52,52	0
57	MG	AA	3109	1/1	0.92	0.14	62,62,62,62	0
57	MG	BA	3455	1/1	0.92	0.16	64,64,64,64	0
57	MG	DV	3003	1/1	0.92	0.10	65,65,65,65	0
57	MG	CA	3059	1/1	0.92	0.25	72,72,72,72	0
57	MG	BA	3043	1/1	0.92	0.15	48,48,48,48	0
57	MG	D3	3001	1/1	0.92	0.20	57,57,57,57	0
57	MG	BA	3767	1/1	0.92	0.12	73,73,73,73	0
57	MG	BA	3459	1/1	0.92	0.19	48,48,48,48	0
57	MG	DA	3128	1/1	0.92	0.15	58,58,58,58	0
57	MG	CA	3078	1/1	0.93	0.14	44,44,44,44	0
57	MG	BA	3341	1/1	0.93	0.12	51,51,51,51	0
57	MG	DA	3131	1/1	0.93	0.21	46,46,46,46	0
57	MG	CA	3082	1/1	0.93	0.15	79,79,79,79	0
57	MG	DA	3426	1/1	0.93	0.22	49,49,49,49	0
57	MG	CA	3086	1/1	0.93	0.13	64,64,64,64	0
57	MG	BA	3119	1/1	0.93	0.13	45,45,45,45	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	BA	3800	1/1	0.93	0.23	38,38,38,38	0
57	MG	DA	3432	1/1	0.93	0.12	37,37,37,37	0
57	MG	BA	3228	1/1	0.93	0.25	59,59,59,59	0
57	MG	DA	3438	1/1	0.93	0.20	47,47,47,47	0
57	MG	BA	3807	1/1	0.93	0.17	47,47,47,47	0
57	MG	AA	3101	1/1	0.93	0.16	43,43,43,43	0
57	MG	BA	3639	1/1	0.93	0.46	48,48,48,48	0
57	MG	DA	3447	1/1	0.93	0.15	58,58,58,58	0
57	MG	AE	203	1/1	0.93	0.18	63,63,63,63	0
57	MG	BB	201	1/1	0.93	0.17	55,55,55,55	0
57	MG	CA	3102	1/1	0.93	0.08	68,68,68,68	0
57	MG	AA	3178	1/1	0.93	0.15	59,59,59,59	0
57	MG	DA	3149	1/1	0.93	0.06	56,56,56,56	0
57	MG	BA	3642	1/1	0.93	0.12	48,48,48,48	0
57	MG	DA	3152	1/1	0.93	0.20	51,51,51,51	0
57	MG	BA	3646	1/1	0.93	0.17	42,42,42,42	0
57	MG	BA	3355	1/1	0.93	0.17	61,61,61,61	0
57	MG	DA	3163	1/1	0.93	0.15	49,49,49,49	0
57	MG	CA	3114	1/1	0.93	0.04	57,57,57,57	0
57	MG	AA	3181	1/1	0.93	0.16	51,51,51,51	0
57	MG	AN	503	1/1	0.93	0.15	54,54,54,54	0
57	MG	CA	3117	1/1	0.93	0.10	71,71,71,71	0
57	MG	BA	3250	1/1	0.93	0.68	42,42,42,42	0
57	MG	DA	3482	1/1	0.93	0.10	50,50,50,50	0
57	MG	AA	3136	1/1	0.93	0.10	70,70,70,70	0
57	MG	BA	3656	1/1	0.93	0.27	53,53,53,53	0
57	MG	BA	3035	1/1	0.93	0.26	39,39,39,39	0
57	MG	DA	3201	1/1	0.93	0.14	61,61,61,61	0
57	MG	AA	3076	1/1	0.93	0.26	77,77,77,77	0
57	MG	AA	3078	1/1	0.93	0.27	66,66,66,66	0
57	MG	BA	3505	1/1	0.93	0.12	55,55,55,55	0
57	MG	AA	3140	1/1	0.93	0.15	53,53,53,53	0
57	MG	DA	3211	1/1	0.93	0.14	48,48,48,48	0
57	MG	BA	3261	1/1	0.93	0.11	61,61,61,61	0
57	MG	BE	308	1/1	0.93	0.17	40,40,40,40	0
57	MG	CA	3142	1/1	0.93	0.13	69,69,69,69	0
57	MG	DA	3514	1/1	0.93	0.13	42,42,42,42	0
57	MG	DA	3517	1/1	0.93	0.05	51,51,51,51	0
57	MG	BA	3265	1/1	0.93	0.21	54,54,54,54	0
57	MG	AA	3141	1/1	0.93	0.23	61,61,61,61	0
57	MG	AA	3056	1/1	0.93	0.13	61,61,61,61	0
57	MG	BA	3055	1/1	0.93	0.21	45,45,45,45	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	AA	3029	1/1	0.93	0.22	53,53,53,53	0
57	MG	BA	3519	1/1	0.93	0.08	55,55,55,55	0
57	MG	BN	3006	1/1	0.93	0.20	49,49,49,49	0
57	MG	BA	3524	1/1	0.93	0.13	42,42,42,42	0
57	MG	DA	3227	1/1	0.93	0.28	41,41,41,41	0
57	MG	AA	3007	1/1	0.93	0.13	57,57,57,57	0
57	MG	DA	3536	1/1	0.93	0.11	48,48,48,48	0
57	MG	BP	202	1/1	0.93	0.21	36,36,36,36	0
57	MG	DA	3540	1/1	0.93	0.17	42,42,42,42	0
57	MG	DA	3237	1/1	0.93	0.14	56,56,56,56	0
57	MG	BA	3149	1/1	0.93	0.18	40,40,40,40	0
57	MG	DA	3545	1/1	0.93	0.13	35,35,35,35	0
57	MG	BA	3531	1/1	0.93	0.21	26,26,26,26	0
57	MG	CA	3164	1/1	0.93	0.16	60,60,60,60	0
57	MG	DA	3549	1/1	0.93	0.10	57,57,57,57	0
57	MG	CA	3165	1/1	0.93	0.11	45,45,45,45	0
57	MG	DA	3551	1/1	0.93	0.08	55,55,55,55	0
57	MG	BU	202	1/1	0.93	0.29	40,40,40,40	0
57	MG	AA	3085	1/1	0.93	0.18	48,48,48,48	0
57	MG	DA	3246	1/1	0.93	0.14	43,43,43,43	0
57	MG	DA	3557	1/1	0.93	0.15	51,51,51,51	0
57	MG	CA	3170	1/1	0.93	0.18	58,58,58,58	0
57	MG	BV	204	1/1	0.93	0.21	49,49,49,49	0
57	MG	BA	3533	1/1	0.93	0.10	59,59,59,59	0
57	MG	BA	3688	1/1	0.93	0.16	46,46,46,46	0
57	MG	BA	3690	1/1	0.93	0.18	58,58,58,58	0
57	MG	DA	3255	1/1	0.93	0.09	51,51,51,51	0
57	MG	AA	3193	1/1	0.93	0.08	72,72,72,72	0
57	MG	BA	3537	1/1	0.93	0.16	45,45,45,45	0
57	MG	BA	3277	1/1	0.93	0.65	47,47,47,47	0
57	MG	BA	3282	1/1	0.93	0.16	39,39,39,39	0
57	MG	DA	3578	1/1	0.93	0.18	59,59,59,59	0
57	MG	AA	3149	1/1	0.93	0.10	46,46,46,46	0
57	MG	BA	3406	1/1	0.93	0.10	50,50,50,50	0
57	MG	DA	3006	1/1	0.93	0.10	38,38,38,38	0
57	MG	BA	3161	1/1	0.93	0.17	52,52,52,52	0
57	MG	DA	3009	1/1	0.93	0.15	48,48,48,48	0
57	MG	BA	3706	1/1	0.93	0.11	53,53,53,53	0
57	MG	DA	3013	1/1	0.93	0.09	40,40,40,40	0
57	MG	DA	3017	1/1	0.93	0.06	55,55,55,55	0
57	MG	B7	102	1/1	0.93	0.16	47,47,47,47	0
57	MG	AA	3152	1/1	0.93	0.10	62,62,62,62	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3029	1/1	0.93	0.35	49,49,49,49	0
57	MG	DA	3284	1/1	0.93	0.12	47,47,47,47	0
57	MG	DA	3032	1/1	0.93	0.15	48,48,48,48	0
57	MG	DA	3291	1/1	0.93	0.20	44,44,44,44	0
57	MG	BA	3291	1/1	0.93	0.21	33,33,33,33	0
57	MG	B9	502	1/1	0.93	0.19	48,48,48,48	0
57	MG	DA	3036	1/1	0.93	0.14	48,48,48,48	0
57	MG	AA	3088	1/1	0.93	0.27	65,65,65,65	0
57	MG	DA	3041	1/1	0.93	0.09	38,38,38,38	0
57	MG	AA	3155	1/1	0.93	0.24	48,48,48,48	0
57	MG	DA	3045	1/1	0.93	0.29	51,51,51,51	0
57	MG	DA	3617	1/1	0.93	0.07	56,56,56,56	0
57	MG	BA	3713	1/1	0.93	0.18	33,33,33,33	0
57	MG	BA	3555	1/1	0.93	0.14	29,29,29,29	0
57	MG	BA	3295	1/1	0.93	0.19	38,38,38,38	0
57	MG	AA	3067	1/1	0.93	0.26	57,57,57,57	0
57	MG	DA	3625	1/1	0.93	0.07	69,69,69,69	0
57	MG	BA	3173	1/1	0.93	0.15	48,48,48,48	0
57	MG	DA	3627	1/1	0.93	0.17	63,63,63,63	0
57	MG	BA	3075	1/1	0.93	0.24	45,45,45,45	0
57	MG	BA	3077	1/1	0.93	0.17	49,49,49,49	0
57	MG	DA	3631	1/1	0.93	0.12	57,57,57,57	0
57	MG	BA	3078	1/1	0.93	0.24	51,51,51,51	0
57	MG	BA	3302	1/1	0.93	0.12	69,69,69,69	0
57	MG	BA	3576	1/1	0.93	0.07	57,57,57,57	0
57	MG	DA	3064	1/1	0.93	0.20	49,49,49,49	0
57	MG	DA	3065	1/1	0.93	0.18	43,43,43,43	0
57	MG	BA	3079	1/1	0.93	0.19	39,39,39,39	0
57	MG	BA	3580	1/1	0.93	0.13	55,55,55,55	0
57	MG	AA	3027	1/1	0.93	0.15	50,50,50,50	0
57	MG	BA	3186	1/1	0.93	0.45	45,45,45,45	0
57	MG	DA	3074	1/1	0.93	0.13	37,37,37,37	0
57	MG	DA	3650	1/1	0.93	0.12	67,67,67,67	0
57	MG	DA	3351	1/1	0.93	0.12	48,48,48,48	0
57	MG	DA	3652	1/1	0.93	0.39	67,67,67,67	0
57	MG	BA	3190	1/1	0.93	0.20	52,52,52,52	0
57	MG	BA	3585	1/1	0.93	0.09	46,46,46,46	0
57	MG	AA	3060	1/1	0.93	0.27	46,46,46,46	0
57	MG	DA	3358	1/1	0.93	0.14	45,45,45,45	0
57	MG	AA	3071	1/1	0.93	0.22	53,53,53,53	0
57	MG	AA	3095	1/1	0.93	0.29	60,60,60,60	0
57	MG	BA	3595	1/1	0.93	0.09	51,51,51,51	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	BA	3439	1/1	0.93	0.13	33,33,33,33	0
57	MG	BA	3200	1/1	0.93	0.15	67,67,67,67	0
57	MG	BA	3201	1/1	0.93	0.20	62,62,62,62	0
57	MG	DA	3670	1/1	0.93	0.42	60,60,60,60	0
57	MG	DA	3672	1/1	0.93	0.16	71,71,71,71	0
57	MG	CA	3040	1/1	0.93	0.11	51,51,51,51	0
57	MG	DA	3675	1/1	0.93	0.13	52,52,52,52	0
57	MG	DA	3381	1/1	0.93	0.17	56,56,56,56	0
57	MG	BA	3014	1/1	0.93	0.29	42,42,42,42	0
57	MG	BA	3758	1/1	0.93	0.11	45,45,45,45	0
57	MG	AA	3096	1/1	0.93	0.22	63,63,63,63	0
57	MG	BA	3604	1/1	0.93	0.15	36,36,36,36	0
57	MG	AA	3130	1/1	0.93	0.08	56,56,56,56	0
57	MG	DB	3005	1/1	0.93	0.08	59,59,59,59	0
57	MG	BA	3319	1/1	0.93	0.19	46,46,46,46	0
57	MG	BA	3765	1/1	0.93	0.22	48,48,48,48	0
57	MG	DA	3396	1/1	0.93	0.10	40,40,40,40	0
57	MG	DA	3397	1/1	0.93	0.09	57,57,57,57	0
57	MG	BA	3320	1/1	0.93	0.22	48,48,48,48	0
57	MG	BA	3768	1/1	0.93	0.12	47,47,47,47	0
57	MG	DA	3107	1/1	0.93	0.13	51,51,51,51	0
57	MG	DA	3108	1/1	0.93	0.07	52,52,52,52	0
57	MG	AA	3012	1/1	0.93	0.16	46,46,46,46	0
57	MG	CA	3060	1/1	0.93	0.08	65,65,65,65	0
57	MG	AA	3055	1/1	0.93	0.21	57,57,57,57	0
57	MG	BA	3773	1/1	0.93	0.25	52,52,52,52	0
57	MG	BA	3457	1/1	0.93	0.19	32,32,32,32	0
57	MG	AE	201	1/1	0.93	0.15	59,59,59,59	0
57	MG	DV	3001	1/1	0.93	0.23	70,70,70,70	0
57	MG	DA	3121	1/1	0.93	0.07	44,44,44,44	0
57	MG	DW	3003	1/1	0.93	0.09	72,72,72,72	0
57	MG	BA	3328	1/1	0.93	0.27	40,40,40,40	0
57	MG	BA	3223	1/1	0.93	0.13	41,41,41,41	0
57	MG	BA	3464	1/1	0.93	0.14	45,45,45,45	0
57	MG	BA	3021	1/1	0.93	0.19	49,49,49,49	0
57	MG	DA	3127	1/1	0.93	0.15	35,35,35,35	0
57	MG	BA	3118	1/1	0.93	0.17	48,48,48,48	0
57	MG	DA	3434	1/1	0.94	0.11	39,39,39,39	0
57	MG	BQ	3003	1/1	0.94	0.27	49,49,49,49	0
57	MG	BA	3063	1/1	0.94	0.15	59,59,59,59	0
57	MG	BR	201	1/1	0.94	0.26	57,57,57,57	0
57	MG	BA	3340	1/1	0.94	0.14	39,39,39,39	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3172	1/1	0.94	0.09	62,62,62,62	0
57	MG	CA	3145	1/1	0.94	0.14	66,66,66,66	0
57	MG	BA	3183	1/1	0.94	0.18	42,42,42,42	0
57	MG	DA	3179	1/1	0.94	0.12	52,52,52,52	0
57	MG	BU	205	1/1	0.94	0.24	47,47,47,47	0
57	MG	BU	208	1/1	0.94	0.21	40,40,40,40	0
57	MG	DA	3188	1/1	0.94	0.19	48,48,48,48	0
57	MG	DA	3458	1/1	0.94	0.05	52,52,52,52	0
57	MG	BA	3268	1/1	0.94	0.22	55,55,55,55	0
57	MG	DA	3195	1/1	0.94	0.09	43,43,43,43	0
57	MG	DA	3200	1/1	0.94	0.09	66,66,66,66	0
57	MG	BA	3344	1/1	0.94	0.12	66,66,66,66	0
57	MG	DA	3202	1/1	0.94	0.11	57,57,57,57	0
57	MG	DA	3203	1/1	0.94	0.57	50,50,50,50	0
57	MG	DA	3472	1/1	0.94	0.16	44,44,44,44	0
57	MG	BA	3064	1/1	0.94	0.13	43,43,43,43	0
57	MG	BA	3448	1/1	0.94	0.24	32,32,32,32	0
57	MG	BA	3452	1/1	0.94	0.16	55,55,55,55	0
57	MG	DA	3479	1/1	0.94	0.17	43,43,43,43	0
57	MG	BA	3065	1/1	0.94	0.19	60,60,60,60	0
57	MG	DA	3210	1/1	0.94	0.17	53,53,53,53	0
57	MG	BA	3350	1/1	0.94	0.20	28,28,28,28	0
57	MG	CA	3161	1/1	0.94	0.09	56,56,56,56	0
57	MG	DA	3490	1/1	0.94	0.13	47,47,47,47	0
57	MG	BA	3189	1/1	0.94	0.19	39,39,39,39	0
57	MG	BA	3352	1/1	0.94	0.22	53,53,53,53	0
57	MG	AA	3083	1/1	0.94	0.31	57,57,57,57	0
57	MG	AA	3199	1/1	0.94	0.15	73,73,73,73	0
57	MG	AA	3016	1/1	0.94	0.09	63,63,63,63	0
57	MG	BA	3196	1/1	0.94	0.25	38,38,38,38	0
57	MG	BA	3279	1/1	0.94	0.24	43,43,43,43	0
57	MG	CF	3001	1/1	0.94	0.12	46,46,46,46	0
57	MG	BA	3365	1/1	0.94	0.13	62,62,62,62	0
57	MG	DA	3511	1/1	0.94	0.16	49,49,49,49	0
57	MG	AX	3004	1/1	0.94	0.15	64,64,64,64	0
57	MG	BA	3738	1/1	0.94	0.15	43,43,43,43	0
57	MG	DA	3516	1/1	0.94	0.07	67,67,67,67	0
57	MG	DA	3229	1/1	0.94	0.22	50,50,50,50	0
57	MG	DA	3230	1/1	0.94	0.22	73,73,73,73	0
57	MG	DA	3232	1/1	0.94	0.13	62,62,62,62	0
57	MG	BA	3739	1/1	0.94	0.22	40,40,40,40	0
57	MG	DA	3235	1/1	0.94	0.20	45,45,45,45	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	AA	3132	1/1	0.94	0.19	55,55,55,55	0
57	MG	AA	3111	1/1	0.94	0.09	79,79,79,79	0
57	MG	DA	3238	1/1	0.94	0.27	44,44,44,44	0
57	MG	BA	3610	1/1	0.94	0.09	61,61,61,61	0
57	MG	BA	3743	1/1	0.94	0.17	44,44,44,44	0
57	MG	BA	3376	1/1	0.94	0.16	48,48,48,48	0
57	MG	DA	3533	1/1	0.94	0.11	43,43,43,43	0
57	MG	BA	3377	1/1	0.94	0.14	44,44,44,44	0
57	MG	CA	3010	1/1	0.94	0.17	56,56,56,56	0
57	MG	BA	3747	1/1	0.94	0.20	52,52,52,52	0
57	MG	BA	3748	1/1	0.94	0.15	29,29,29,29	0
57	MG	BA	3289	1/1	0.94	0.21	56,56,56,56	0
57	MG	AA	3009	1/1	0.94	0.18	57,57,57,57	0
57	MG	DA	3249	1/1	0.94	0.14	45,45,45,45	0
57	MG	BA	3204	1/1	0.94	0.23	36,36,36,36	0
57	MG	DA	3024	1/1	0.94	0.21	59,59,59,59	0
57	MG	AA	3159	1/1	0.94	0.12	66,66,66,66	0
57	MG	DA	3254	1/1	0.94	0.07	52,52,52,52	0
57	MG	BA	3389	1/1	0.94	0.13	55,55,55,55	0
57	MG	AA	3098	1/1	0.94	0.18	55,55,55,55	0
57	MG	BA	3294	1/1	0.94	0.23	61,61,61,61	0
57	MG	DA	3260	1/1	0.94	0.09	55,55,55,55	0
57	MG	AA	3075	1/1	0.94	0.11	49,49,49,49	0
57	MG	BA	3084	1/1	0.94	0.22	38,38,38,38	0
57	MG	DA	3264	1/1	0.94	0.13	40,40,40,40	0
57	MG	DA	3037	1/1	0.94	0.16	43,43,43,43	0
57	MG	CA	3025	1/1	0.94	0.14	51,51,51,51	0
57	MG	DA	3039	1/1	0.94	0.10	43,43,43,43	0
57	MG	BA	3633	1/1	0.94	0.12	49,49,49,49	0
57	MG	DA	3573	1/1	0.94	0.12	43,43,43,43	0
57	MG	DA	3043	1/1	0.94	0.15	38,38,38,38	0
57	MG	BA	3504	1/1	0.94	0.13	56,56,56,56	0
57	MG	AA	3068	1/1	0.94	0.14	69,69,69,69	0
57	MG	CA	3030	1/1	0.94	0.22	57,57,57,57	0
57	MG	BA	3217	1/1	0.94	0.16	37,37,37,37	0
57	MG	DA	3584	1/1	0.94	0.18	53,53,53,53	0
57	MG	CA	3035	1/1	0.94	0.09	59,59,59,59	0
57	MG	BA	3219	1/1	0.94	0.17	36,36,36,36	0
57	MG	DA	3587	1/1	0.94	0.12	56,56,56,56	0
57	MG	CA	3037	1/1	0.94	0.14	73,73,73,73	0
57	MG	DA	3053	1/1	0.94	0.10	47,47,47,47	0
57	MG	DA	3054	1/1	0.94	0.23	48,48,48,48	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3300	1/1	0.94	0.20	45,45,45,45	0
57	MG	BA	3770	1/1	0.94	0.16	45,45,45,45	0
57	MG	DA	3302	1/1	0.94	0.28	70,70,70,70	0
57	MG	DA	3594	1/1	0.94	0.31	54,54,54,54	0
57	MG	BA	3220	1/1	0.94	0.22	29,29,29,29	0
57	MG	BA	3509	1/1	0.94	0.21	31,31,31,31	0
57	MG	BA	3777	1/1	0.94	0.17	40,40,40,40	0
57	MG	BA	3511	1/1	0.94	0.14	30,30,30,30	0
57	MG	AY	3002	1/1	0.94	0.24	56,56,56,56	0
57	MG	BA	3096	1/1	0.94	0.23	54,54,54,54	0
57	MG	BA	3785	1/1	0.94	0.23	59,59,59,59	0
57	MG	DA	3067	1/1	0.94	0.26	57,57,57,57	0
57	MG	CA	3053	1/1	0.94	0.15	41,41,41,41	0
57	MG	DA	3612	1/1	0.94	0.09	62,62,62,62	0
57	MG	AA	3032	1/1	0.94	0.19	67,67,67,67	0
57	MG	BA	3649	1/1	0.94	0.11	40,40,40,40	0
57	MG	DA	3324	1/1	0.94	0.11	33,33,33,33	0
57	MG	AA	3123	1/1	0.94	0.26	51,51,51,51	0
57	MG	BA	3516	1/1	0.94	0.19	52,52,52,52	0
57	MG	BA	3306	1/1	0.94	0.17	37,37,37,37	0
57	MG	BA	3520	1/1	0.94	0.16	61,61,61,61	0
57	MG	DA	3331	1/1	0.94	0.17	37,37,37,37	0
57	MG	DA	3623	1/1	0.94	0.09	66,66,66,66	0
57	MG	DA	3624	1/1	0.94	0.19	56,56,56,56	0
57	MG	BA	3655	1/1	0.94	0.14	50,50,50,50	0
57	MG	BA	3801	1/1	0.94	0.31	50,50,50,50	0
57	MG	BA	3522	1/1	0.94	0.09	52,52,52,52	0
57	MG	BA	3803	1/1	0.94	0.23	44,44,44,44	0
57	MG	DA	3336	1/1	0.94	0.19	40,40,40,40	0
57	MG	CA	3068	1/1	0.94	0.15	48,48,48,48	0
57	MG	BA	3805	1/1	0.94	0.12	44,44,44,44	0
57	MG	BA	3523	1/1	0.94	0.11	48,48,48,48	0
57	MG	DA	3634	1/1	0.94	0.14	60,60,60,60	0
57	MG	BA	3809	1/1	0.94	0.13	63,63,63,63	0
57	MG	BA	3155	1/1	0.94	0.27	44,44,44,44	0
57	MG	BA	3157	1/1	0.94	0.24	45,45,45,45	0
57	MG	CA	3077	1/1	0.94	0.08	66,66,66,66	0
57	MG	BA	3663	1/1	0.94	0.19	41,41,41,41	0
57	MG	CA	3079	1/1	0.94	0.21	66,66,66,66	0
57	MG	AA	3052	1/1	0.94	0.29	65,65,65,65	0
57	MG	DA	3102	1/1	0.94	0.19	40,40,40,40	0
57	MG	BA	3236	1/1	0.94	0.20	49,49,49,49	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3104	1/1	0.94	0.29	53,53,53,53	0
57	MG	DA	3368	1/1	0.94	0.24	50,50,50,50	0
57	MG	CA	3083	1/1	0.94	0.10	79,79,79,79	0
57	MG	BA	3415	1/1	0.94	0.16	28,28,28,28	0
57	MG	DA	3655	1/1	0.94	0.11	64,64,64,64	0
57	MG	DA	3656	1/1	0.94	0.13	58,58,58,58	0
57	MG	DA	3379	1/1	0.94	0.14	63,63,63,63	0
57	MG	BA	3417	1/1	0.94	0.24	38,38,38,38	0
57	MG	BA	3237	1/1	0.94	0.15	45,45,45,45	0
57	MG	DA	3660	1/1	0.94	0.09	61,61,61,61	0
57	MG	BA	3536	1/1	0.94	0.27	49,49,49,49	0
57	MG	DA	3662	1/1	0.94	0.13	62,62,62,62	0
57	MG	DA	3114	1/1	0.94	0.15	55,55,55,55	0
57	MG	BA	3672	1/1	0.94	0.20	43,43,43,43	0
57	MG	CA	3094	1/1	0.94	0.11	70,70,70,70	0
57	MG	AA	3104	1/1	0.94	0.28	59,59,59,59	0
57	MG	CA	3096	1/1	0.94	0.10	44,44,44,44	0
57	MG	AA	3014	1/1	0.94	0.21	32,32,32,32	0
57	MG	AA	3172	1/1	0.94	0.10	72,72,72,72	0
57	MG	BA	3243	1/1	0.94	0.17	53,53,53,53	0
57	MG	BA	3166	1/1	0.94	0.14	38,38,38,38	0
57	MG	BA	3543	1/1	0.94	0.23	37,37,37,37	0
57	MG	CA	3108	1/1	0.94	0.31	68,68,68,68	0
57	MG	BA	3682	1/1	0.94	0.19	53,53,53,53	0
57	MG	CA	3110	1/1	0.94	0.09	65,65,65,65	0
57	MG	BE	303	1/1	0.94	0.20	51,51,51,51	0
57	MG	BA	3170	1/1	0.94	0.16	38,38,38,38	0
57	MG	BA	3054	1/1	0.94	0.28	36,36,36,36	0
57	MG	DB	3009	1/1	0.94	0.18	59,59,59,59	0
57	MG	BA	3685	1/1	0.94	0.19	53,53,53,53	0
57	MG	AA	3174	1/1	0.94	0.10	50,50,50,50	0
57	MG	DB	3013	1/1	0.94	0.17	64,64,64,64	0
57	MG	DD	302	1/1	0.94	0.15	42,42,42,42	0
57	MG	BA	3323	1/1	0.94	0.20	30,30,30,30	0
57	MG	DA	3411	1/1	0.94	0.22	53,53,53,53	0
57	MG	DD	306	1/1	0.94	0.28	39,39,39,39	0
57	MG	BA	3176	1/1	0.94	0.17	45,45,45,45	0
57	MG	CA	3119	1/1	0.94	0.16	64,64,64,64	0
57	MG	AA	3175	1/1	0.94	0.18	63,63,63,63	0
57	MG	CA	3122	1/1	0.94	0.21	64,64,64,64	0
57	MG	DA	3419	1/1	0.94	0.11	32,32,32,32	0
57	MG	BA	3559	1/1	0.94	0.08	47,47,47,47	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DQ	3003	1/1	0.94	0.15	51,51,51,51	0
57	MG	CA	3125	1/1	0.94	0.08	63,63,63,63	0
57	MG	CA	3126	1/1	0.94	0.11	67,67,67,67	0
57	MG	BA	3329	1/1	0.94	0.19	60,60,60,60	0
57	MG	BA	3436	1/1	0.94	0.14	40,40,40,40	0
57	MG	BA	3009	1/1	0.94	0.17	28,28,28,28	0
57	MG	BA	3564	1/1	0.94	0.16	44,44,44,44	0
57	MG	DA	3427	1/1	0.94	0.14	45,45,45,45	0
57	MG	DA	3428	1/1	0.94	0.18	37,37,37,37	0
57	MG	AW	3003	1/1	0.94	0.13	72,72,72,72	0
57	MG	DA	3154	1/1	0.94	0.17	48,48,48,48	0
57	MG	DA	3158	1/1	0.94	0.16	60,60,60,60	0
57	MG	CA	3139	1/1	0.94	0.14	62,62,62,62	0
60	K	AX	3001	1/1	0.94	0.12	65,65,65,65	0
57	MG	BA	3383	1/1	0.95	0.12	53,53,53,53	0
57	MG	AA	3010	1/1	0.95	0.17	52,52,52,52	0
57	MG	B3	3001	1/1	0.95	0.12	34,34,34,34	0
57	MG	BA	3205	1/1	0.95	0.27	50,50,50,50	0
57	MG	BA	3482	1/1	0.95	0.15	51,51,51,51	0
57	MG	BA	3600	1/1	0.95	0.31	44,44,44,44	0
57	MG	DA	3207	1/1	0.95	0.30	63,63,63,63	0
57	MG	BA	3484	1/1	0.95	0.13	54,54,54,54	0
57	MG	BA	3133	1/1	0.95	0.19	45,45,45,45	0
57	MG	AA	3156	1/1	0.95	0.26	63,63,63,63	0
57	MG	DA	3467	1/1	0.95	0.25	40,40,40,40	0
57	MG	BA	3209	1/1	0.95	0.24	54,54,54,54	0
57	MG	CA	3169	1/1	0.95	0.24	51,51,51,51	0
57	MG	CA	3001	1/1	0.95	0.10	75,75,75,75	0
57	MG	CD	301	1/1	0.95	0.19	56,56,56,56	0
57	MG	BA	3608	1/1	0.95	0.31	62,62,62,62	0
57	MG	DA	3474	1/1	0.95	0.14	51,51,51,51	0
57	MG	DA	3475	1/1	0.95	0.16	51,51,51,51	0
57	MG	AA	3157	1/1	0.95	0.17	45,45,45,45	0
57	MG	DA	3477	1/1	0.95	0.09	43,43,43,43	0
57	MG	BA	3496	1/1	0.95	0.17	41,41,41,41	0
57	MG	CK	3001	1/1	0.95	0.17	45,45,45,45	0
57	MG	AA	3179	1/1	0.95	0.13	69,69,69,69	0
57	MG	BA	3500	1/1	0.95	0.14	56,56,56,56	0
57	MG	DA	3483	1/1	0.95	0.32	55,55,55,55	0
57	MG	BA	3617	1/1	0.95	0.16	51,51,51,51	0
57	MG	DA	3485	1/1	0.95	0.12	52,52,52,52	0
57	MG	DA	3486	1/1	0.95	0.09	47,47,47,47	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	BA	3395	1/1	0.95	0.17	38,38,38,38	0
57	MG	DA	3488	1/1	0.95	0.07	41,41,41,41	0
57	MG	DA	3224	1/1	0.95	0.17	49,49,49,49	0
57	MG	DA	3225	1/1	0.95	0.07	49,49,49,49	0
57	MG	DA	3226	1/1	0.95	0.38	45,45,45,45	0
57	MG	AA	3050	1/1	0.95	0.15	33,33,33,33	0
57	MG	DA	3496	1/1	0.95	0.07	53,53,53,53	0
57	MG	CX	3004	1/1	0.95	0.18	63,63,63,63	0
57	MG	BA	3751	1/1	0.95	0.17	26,26,26,26	0
57	MG	BA	3620	1/1	0.95	0.15	40,40,40,40	0
57	MG	DA	3501	1/1	0.95	0.15	37,37,37,37	0
57	MG	BA	3215	1/1	0.95	0.27	36,36,36,36	0
57	MG	BA	3398	1/1	0.95	0.21	32,32,32,32	0
57	MG	CA	3015	1/1	0.95	0.22	56,56,56,56	0
57	MG	DA	3507	1/1	0.95	0.14	43,43,43,43	0
57	MG	DA	3510	1/1	0.95	0.25	49,49,49,49	0
57	MG	AA	3116	1/1	0.95	0.11	55,55,55,55	0
57	MG	BA	3218	1/1	0.95	0.20	47,47,47,47	0
57	MG	BA	3626	1/1	0.95	0.25	44,44,44,44	0
57	MG	DA	3015	1/1	0.95	0.20	52,52,52,52	0
57	MG	CA	3019	1/1	0.95	0.10	65,65,65,65	0
57	MG	BA	3146	1/1	0.95	0.17	40,40,40,40	0
57	MG	DA	3519	1/1	0.95	0.18	63,63,63,63	0
57	MG	DA	3023	1/1	0.95	0.30	40,40,40,40	0
57	MG	DA	3522	1/1	0.95	0.12	71,71,71,71	0
57	MG	AA	3205	1/1	0.95	0.22	51,51,51,51	0
57	MG	BA	3632	1/1	0.95	0.07	50,50,50,50	0
57	MG	AA	3129	1/1	0.95	0.11	47,47,47,47	0
57	MG	DA	3030	1/1	0.95	0.14	39,39,39,39	0
57	MG	BA	3510	1/1	0.95	0.17	46,46,46,46	0
57	MG	BA	3635	1/1	0.95	0.13	58,58,58,58	0
57	MG	BA	3026	1/1	0.95	0.15	41,41,41,41	0
57	MG	BA	3081	1/1	0.95	0.21	46,46,46,46	0
57	MG	CA	3029	1/1	0.95	0.17	63,63,63,63	0
57	MG	BA	3027	1/1	0.95	0.11	26,26,26,26	0
57	MG	CA	3031	1/1	0.95	0.10	68,68,68,68	0
57	MG	DA	3539	1/1	0.95	0.12	53,53,53,53	0
57	MG	CA	3032	1/1	0.95	0.24	62,62,62,62	0
57	MG	DA	3541	1/1	0.95	0.14	44,44,44,44	0
57	MG	BA	3775	1/1	0.95	0.16	33,33,33,33	0
57	MG	BA	3087	1/1	0.95	0.24	42,42,42,42	0
57	MG	BA	3156	1/1	0.95	0.29	41,41,41,41	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	BA	3090	1/1	0.95	0.31	53,53,53,53	0
57	MG	AA	3035	1/1	0.95	0.21	56,56,56,56	0
57	MG	DA	3548	1/1	0.95	0.06	60,60,60,60	0
57	MG	BA	3782	1/1	0.95	0.16	65,65,65,65	0
57	MG	BA	3783	1/1	0.95	0.12	56,56,56,56	0
57	MG	BA	3031	1/1	0.95	0.19	52,52,52,52	0
57	MG	DA	3272	1/1	0.95	0.10	41,41,41,41	0
57	MG	CA	3042	1/1	0.95	0.11	59,59,59,59	0
57	MG	BA	3647	1/1	0.95	0.09	56,56,56,56	0
57	MG	BA	3163	1/1	0.95	0.14	55,55,55,55	0
57	MG	AA	3118	1/1	0.95	0.17	47,47,47,47	0
57	MG	DA	3562	1/1	0.95	0.12	64,64,64,64	0
57	MG	DA	3277	1/1	0.95	0.11	55,55,55,55	0
57	MG	AX	3015	1/1	0.95	0.21	42,42,42,42	0
57	MG	DA	3565	1/1	0.95	0.08	59,59,59,59	0
57	MG	BA	3795	1/1	0.95	0.15	35,35,35,35	0
57	MG	BA	3796	1/1	0.95	0.25	45,45,45,45	0
57	MG	DA	3568	1/1	0.95	0.08	52,52,52,52	0
57	MG	DA	3570	1/1	0.95	0.13	31,31,31,31	0
57	MG	AA	3165	1/1	0.95	0.20	54,54,54,54	0
57	MG	DA	3286	1/1	0.95	0.14	42,42,42,42	0
57	MG	DA	3287	1/1	0.95	0.10	41,41,41,41	0
57	MG	BA	3798	1/1	0.95	0.20	28,28,28,28	0
57	MG	DA	3290	1/1	0.95	0.15	59,59,59,59	0
57	MG	BA	3527	1/1	0.95	0.16	54,54,54,54	0
57	MG	DA	3295	1/1	0.95	0.21	44,44,44,44	0
57	MG	DA	3581	1/1	0.95	0.22	57,57,57,57	0
57	MG	BA	3246	1/1	0.95	0.35	39,39,39,39	0
57	MG	DA	3583	1/1	0.95	0.15	51,51,51,51	0
57	MG	BA	3249	1/1	0.95	0.13	49,49,49,49	0
57	MG	AY	3001	1/1	0.95	0.39	65,65,65,65	0
57	MG	DA	3303	1/1	0.95	0.09	48,48,48,48	0
57	MG	DA	3304	1/1	0.95	0.06	48,48,48,48	0
57	MG	BA	3171	1/1	0.95	0.25	31,31,31,31	0
57	MG	DA	3073	1/1	0.95	0.09	42,42,42,42	0
57	MG	CA	3063	1/1	0.95	0.23	58,58,58,58	0
57	MG	BA	3325	1/1	0.95	0.15	48,48,48,48	0
57	MG	BA	3661	1/1	0.95	0.09	44,44,44,44	0
57	MG	BA	3808	1/1	0.95	0.16	42,42,42,42	0
57	MG	AA	3213	1/1	0.95	0.23	54,54,54,54	0
57	MG	AA	3144	1/1	0.95	0.14	46,46,46,46	0
57	MG	DA	3598	1/1	0.95	0.08	61,61,61,61	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3600	1/1	0.95	0.35	70,70,70,70	0
57	MG	DA	3602	1/1	0.95	0.10	65,65,65,65	0
57	MG	DA	3318	1/1	0.95	0.14	40,40,40,40	0
57	MG	DA	3080	1/1	0.95	0.10	55,55,55,55	0
57	MG	BA	3175	1/1	0.95	0.20	20,20,20,20	0
57	MG	BA	3539	1/1	0.95	0.20	52,52,52,52	0
57	MG	BA	3667	1/1	0.95	0.15	61,61,61,61	0
57	MG	DA	3087	1/1	0.95	0.18	58,58,58,58	0
57	MG	AA	3167	1/1	0.95	0.10	57,57,57,57	0
57	MG	AA	3106	1/1	0.95	0.10	57,57,57,57	0
57	MG	DA	3611	1/1	0.95	0.14	48,48,48,48	0
57	MG	BA	3262	1/1	0.95	0.14	41,41,41,41	0
57	MG	CA	3080	1/1	0.95	0.09	49,49,49,49	0
57	MG	BA	3178	1/1	0.95	0.13	46,46,46,46	0
57	MG	BA	3110	1/1	0.95	0.17	41,41,41,41	0
57	MG	AA	3081	1/1	0.95	0.11	48,48,48,48	0
57	MG	BA	3440	1/1	0.95	0.12	42,42,42,42	0
57	MG	AF	3001	1/1	0.95	0.26	44,44,44,44	0
57	MG	BA	3551	1/1	0.95	0.19	36,36,36,36	0
57	MG	BA	3552	1/1	0.95	0.26	29,29,29,29	0
57	MG	BD	301	1/1	0.95	0.23	40,40,40,40	0
57	MG	CA	3092	1/1	0.95	0.10	50,50,50,50	0
57	MG	DA	3343	1/1	0.95	0.16	50,50,50,50	0
57	MG	DA	3348	1/1	0.95	0.10	34,34,34,34	0
57	MG	BA	3056	1/1	0.95	0.21	40,40,40,40	0
57	MG	BD	304	1/1	0.95	0.22	32,32,32,32	0
57	MG	DA	3629	1/1	0.95	0.27	62,62,62,62	0
57	MG	BA	3348	1/1	0.95	0.18	36,36,36,36	0
57	MG	BA	3557	1/1	0.95	0.16	33,33,33,33	0
57	MG	DA	3113	1/1	0.95	0.19	60,60,60,60	0
57	MG	DA	3359	1/1	0.95	0.13	47,47,47,47	0
57	MG	AA	3134	1/1	0.95	0.14	66,66,66,66	0
57	MG	AA	3150	1/1	0.95	0.20	57,57,57,57	0
57	MG	DA	3117	1/1	0.95	0.20	52,52,52,52	0
57	MG	DA	3364	1/1	0.95	0.07	40,40,40,40	0
57	MG	CA	3101	1/1	0.95	0.11	49,49,49,49	0
57	MG	DA	3640	1/1	0.95	0.19	43,43,43,43	0
57	MG	BE	306	1/1	0.95	0.20	26,26,26,26	0
57	MG	CA	3104	1/1	0.95	0.12	68,68,68,68	0
57	MG	DA	3372	1/1	0.95	0.08	56,56,56,56	0
57	MG	DA	3645	1/1	0.95	0.07	45,45,45,45	0
57	MG	DA	3375	1/1	0.95	0.16	39,39,39,39	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3649	1/1	0.95	0.05	58,58,58,58	0
57	MG	DA	3376	1/1	0.95	0.16	61,61,61,61	0
57	MG	DA	3377	1/1	0.95	0.10	38,38,38,38	0
57	MG	CA	3106	1/1	0.95	0.07	56,56,56,56	0
57	MG	AA	3195	1/1	0.95	0.12	57,57,57,57	0
57	MG	BA	3687	1/1	0.95	0.21	22,22,22,22	0
57	MG	BA	3062	1/1	0.95	0.27	42,42,42,42	0
57	MG	BA	3451	1/1	0.95	0.16	31,31,31,31	0
57	MG	BA	3354	1/1	0.95	0.10	48,48,48,48	0
57	MG	BA	3567	1/1	0.95	0.15	34,34,34,34	0
57	MG	DA	3386	1/1	0.95	0.11	35,35,35,35	0
57	MG	CA	3113	1/1	0.95	0.11	67,67,67,67	0
57	MG	DA	3389	1/1	0.95	0.14	46,46,46,46	0
57	MG	BA	3123	1/1	0.95	0.22	32,32,32,32	0
57	MG	BA	3570	1/1	0.95	0.16	42,42,42,42	0
57	MG	BA	3571	1/1	0.95	0.18	58,58,58,58	0
57	MG	BA	3194	1/1	0.95	0.18	47,47,47,47	0
57	MG	BA	3359	1/1	0.95	0.30	62,62,62,62	0
57	MG	BP	201	1/1	0.95	0.28	41,41,41,41	0
57	MG	DA	3136	1/1	0.95	0.14	52,52,52,52	0
57	MG	AA	3039	1/1	0.95	0.15	56,56,56,56	0
57	MG	DA	3674	1/1	0.95	0.15	37,37,37,37	0
57	MG	CA	3121	1/1	0.95	0.14	63,63,63,63	0
57	MG	BP	205	1/1	0.95	0.18	65,65,65,65	0
57	MG	BQ	3001	1/1	0.95	0.22	45,45,45,45	0
57	MG	BA	3577	1/1	0.95	0.19	51,51,51,51	0
57	MG	BQ	3004	1/1	0.95	0.27	42,42,42,42	0
57	MG	CA	3127	1/1	0.95	0.18	62,62,62,62	0
57	MG	AW	3002	1/1	0.95	0.22	53,53,53,53	0
57	MG	BA	3579	1/1	0.95	0.17	49,49,49,49	0
57	MG	DB	3006	1/1	0.95	0.14	57,57,57,57	0
57	MG	BA	3283	1/1	0.95	0.20	35,35,35,35	0
57	MG	CA	3132	1/1	0.95	0.13	66,66,66,66	0
57	MG	BA	3712	1/1	0.95	0.18	53,53,53,53	0
57	MG	CA	3136	1/1	0.95	0.14	72,72,72,72	0
57	MG	BU	204	1/1	0.95	0.16	35,35,35,35	0
57	MG	DA	3418	1/1	0.95	0.11	52,52,52,52	0
57	MG	BA	3015	1/1	0.95	0.16	32,32,32,32	0
57	MG	BU	207	1/1	0.95	0.17	38,38,38,38	0
57	MG	AA	3015	1/1	0.95	0.15	65,65,65,65	0
57	MG	BA	3288	1/1	0.95	0.20	56,56,56,56	0
57	MG	DA	3167	1/1	0.95	0.13	41,41,41,41	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DE	304	1/1	0.95	0.15	43,43,43,43	0
57	MG	BA	3373	1/1	0.95	0.17	48,48,48,48	0
57	MG	BW	201	1/1	0.95	0.31	44,44,44,44	0
57	MG	DO	5001	1/1	0.95	0.13	59,59,59,59	0
57	MG	BA	3068	1/1	0.95	0.18	43,43,43,43	0
57	MG	DA	3174	1/1	0.95	0.13	44,44,44,44	0
57	MG	DQ	3002	1/1	0.95	0.10	51,51,51,51	0
57	MG	BA	3130	1/1	0.95	0.08	44,44,44,44	0
57	MG	BA	3592	1/1	0.95	0.20	28,28,28,28	0
57	MG	CA	3151	1/1	0.95	0.27	59,59,59,59	0
57	MG	DA	3181	1/1	0.95	0.13	50,50,50,50	0
57	MG	DA	3183	1/1	0.95	0.15	38,38,38,38	0
57	MG	DA	3433	1/1	0.95	0.18	46,46,46,46	0
57	MG	BA	3593	1/1	0.95	0.22	38,38,38,38	0
57	MG	DA	3186	1/1	0.95	0.15	54,54,54,54	0
57	MG	DY	502	1/1	0.95	0.13	50,50,50,50	0
57	MG	BA	3723	1/1	0.95	0.07	47,47,47,47	0
57	MG	DA	3439	1/1	0.95	0.23	42,42,42,42	0
57	MG	CA	3154	1/1	0.95	0.17	56,56,56,56	0
59	ZN	B4	501	1/1	0.95	0.15	89,89,89,89	0
57	MG	DA	3441	1/1	0.95	0.11	45,45,45,45	0
57	MG	BA	3381	1/1	0.95	0.16	46,46,46,46	0
57	MG	DA	3196	1/1	0.95	0.22	49,49,49,49	0
57	MG	DA	3068	1/1	0.96	0.10	58,58,58,58	0
57	MG	BE	304	1/1	0.96	0.19	42,42,42,42	0
57	MG	BA	3224	1/1	0.96	0.22	65,65,65,65	0
57	MG	BA	3088	1/1	0.96	0.35	48,48,48,48	0
57	MG	AA	3044	1/1	0.96	0.25	60,60,60,60	0
57	MG	DA	3269	1/1	0.96	0.06	49,49,49,49	0
57	MG	BA	3603	1/1	0.96	0.13	53,53,53,53	0
57	MG	BA	3091	1/1	0.96	0.40	56,56,56,56	0
57	MG	BF	303	1/1	0.96	0.54	49,49,49,49	0
57	MG	DA	3504	1/1	0.96	0.07	47,47,47,47	0
57	MG	BA	3711	1/1	0.96	0.19	54,54,54,54	0
57	MG	BA	3356	1/1	0.96	0.16	37,37,37,37	0
57	MG	DA	3509	1/1	0.96	0.12	59,59,59,59	0
57	MG	BA	3059	1/1	0.96	0.21	26,26,26,26	0
57	MG	BG	203	1/1	0.96	0.16	42,42,42,42	0
57	MG	DA	3081	1/1	0.96	0.28	55,55,55,55	0
57	MG	BN	3001	1/1	0.96	0.31	53,53,53,53	0
57	MG	DA	3515	1/1	0.96	0.15	45,45,45,45	0
57	MG	CA	3093	1/1	0.96	0.10	55,55,55,55	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3282	1/1	0.96	0.06	52,52,52,52	0
57	MG	DA	3084	1/1	0.96	0.08	39,39,39,39	0
57	MG	BA	3517	1/1	0.96	0.14	45,45,45,45	0
57	MG	DA	3520	1/1	0.96	0.11	57,57,57,57	0
57	MG	BA	3132	1/1	0.96	0.14	40,40,40,40	0
57	MG	BA	3613	1/1	0.96	0.41	42,42,42,42	0
57	MG	BA	3614	1/1	0.96	0.11	63,63,63,63	0
57	MG	BA	3094	1/1	0.96	0.21	36,36,36,36	0
57	MG	BA	3720	1/1	0.96	0.14	65,65,65,65	0
57	MG	DA	3293	1/1	0.96	0.14	54,54,54,54	0
57	MG	BA	3437	1/1	0.96	0.14	36,36,36,36	0
57	MG	DA	3296	1/1	0.96	0.12	28,28,28,28	0
57	MG	DA	3298	1/1	0.96	0.16	59,59,59,59	0
57	MG	DA	3299	1/1	0.96	0.20	55,55,55,55	0
57	MG	BP	204	1/1	0.96	0.06	46,46,46,46	0
57	MG	AA	3180	1/1	0.96	0.10	73,73,73,73	0
57	MG	DA	3537	1/1	0.96	0.08	44,44,44,44	0
57	MG	AA	3212	1/1	0.96	0.13	42,42,42,42	0
57	MG	BQ	3002	1/1	0.96	0.23	43,43,43,43	0
57	MG	DA	3101	1/1	0.96	0.16	49,49,49,49	0
57	MG	DA	3306	1/1	0.96	0.13	55,55,55,55	0
57	MG	BA	3525	1/1	0.96	0.17	34,34,34,34	0
57	MG	BA	3727	1/1	0.96	0.13	51,51,51,51	0
57	MG	BA	3238	1/1	0.96	0.24	62,62,62,62	0
57	MG	BA	3729	1/1	0.96	0.19	47,47,47,47	0
57	MG	BA	3441	1/1	0.96	0.13	35,35,35,35	0
57	MG	BA	3528	1/1	0.96	0.18	56,56,56,56	0
57	MG	DA	3109	1/1	0.96	0.15	40,40,40,40	0
57	MG	BA	3529	1/1	0.96	0.20	56,56,56,56	0
57	MG	DA	3111	1/1	0.96	0.19	61,61,61,61	0
57	MG	DA	3319	1/1	0.96	0.12	41,41,41,41	0
57	MG	BA	3184	1/1	0.96	0.32	43,43,43,43	0
57	MG	BA	3370	1/1	0.96	0.20	39,39,39,39	0
57	MG	BA	3627	1/1	0.96	0.17	56,56,56,56	0
57	MG	BV	202	1/1	0.96	0.17	50,50,50,50	0
57	MG	DA	3559	1/1	0.96	0.12	43,43,43,43	0
57	MG	AA	3087	1/1	0.96	0.11	41,41,41,41	0
57	MG	BA	3629	1/1	0.96	0.16	43,43,43,43	0
57	MG	BV	205	1/1	0.96	0.09	38,38,38,38	0
57	MG	BA	3140	1/1	0.96	0.14	47,47,47,47	0
57	MG	BW	202	1/1	0.96	0.22	54,54,54,54	0
57	MG	BW	203	1/1	0.96	0.20	44,44,44,44	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3123	1/1	0.96	0.20	56,56,56,56	0
57	MG	DA	3569	1/1	0.96	0.23	49,49,49,49	0
57	MG	BW	204	1/1	0.96	0.22	42,42,42,42	0
57	MG	BA	3375	1/1	0.96	0.13	68,68,68,68	0
57	MG	AA	3006	1/1	0.96	0.12	52,52,52,52	0
57	MG	BA	3244	1/1	0.96	0.22	53,53,53,53	0
57	MG	DA	3574	1/1	0.96	0.11	53,53,53,53	0
57	MG	AA	3011	1/1	0.96	0.34	57,57,57,57	0
57	MG	BA	3382	1/1	0.96	0.09	63,63,63,63	0
57	MG	DA	3341	1/1	0.96	0.13	51,51,51,51	0
57	MG	BA	3248	1/1	0.96	0.30	42,42,42,42	0
57	MG	DA	3580	1/1	0.96	0.16	36,36,36,36	0
57	MG	B0	103	1/1	0.96	0.08	53,53,53,53	0
57	MG	DA	3346	1/1	0.96	0.12	48,48,48,48	0
57	MG	BA	3191	1/1	0.96	0.18	43,43,43,43	0
57	MG	DA	3350	1/1	0.96	0.12	51,51,51,51	0
57	MG	AA	3074	1/1	0.96	0.09	50,50,50,50	0
57	MG	DA	3353	1/1	0.96	0.16	42,42,42,42	0
57	MG	BA	3753	1/1	0.96	0.15	33,33,33,33	0
57	MG	B3	3002	1/1	0.96	0.12	66,66,66,66	0
57	MG	BA	3251	1/1	0.96	0.19	44,44,44,44	0
57	MG	CA	3143	1/1	0.96	0.10	64,64,64,64	0
57	MG	AA	3043	1/1	0.96	0.23	51,51,51,51	0
57	MG	BA	3460	1/1	0.96	0.10	62,62,62,62	0
57	MG	BA	3644	1/1	0.96	0.14	35,35,35,35	0
57	MG	BA	3645	1/1	0.96	0.20	33,33,33,33	0
57	MG	DA	3145	1/1	0.96	0.17	43,43,43,43	0
57	MG	DA	3596	1/1	0.96	0.10	56,56,56,56	0
57	MG	DA	3597	1/1	0.96	0.06	51,51,51,51	0
57	MG	DA	3365	1/1	0.96	0.08	36,36,36,36	0
57	MG	DA	3366	1/1	0.96	0.14	42,42,42,42	0
57	MG	BA	3547	1/1	0.96	0.23	39,39,39,39	0
57	MG	BA	3034	1/1	0.96	0.25	56,56,56,56	0
57	MG	BA	3763	1/1	0.96	0.19	24,24,24,24	0
57	MG	BA	3462	1/1	0.96	0.19	36,36,36,36	0
57	MG	DA	3374	1/1	0.96	0.16	56,56,56,56	0
57	MG	DA	3150	1/1	0.96	0.08	56,56,56,56	0
57	MG	BA	3107	1/1	0.96	0.16	53,53,53,53	0
57	MG	BA	3256	1/1	0.96	0.15	40,40,40,40	0
57	MG	CA	3005	1/1	0.96	0.15	62,62,62,62	0
57	MG	BA	3197	1/1	0.96	0.30	41,41,41,41	0
57	MG	DA	3156	1/1	0.96	0.09	51,51,51,51	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	BA	3108	1/1	0.96	0.32	44,44,44,44	0
57	MG	DA	3159	1/1	0.96	0.15	58,58,58,58	0
57	MG	DA	3160	1/1	0.96	0.10	56,56,56,56	0
57	MG	BA	3468	1/1	0.96	0.17	62,62,62,62	0
57	MG	BA	3469	1/1	0.96	0.15	49,49,49,49	0
57	MG	DA	3619	1/1	0.96	0.11	69,69,69,69	0
57	MG	DA	3387	1/1	0.96	0.10	42,42,42,42	0
57	MG	CA	3162	1/1	0.96	0.10	66,66,66,66	0
57	MG	BA	3153	1/1	0.96	0.31	47,47,47,47	0
57	MG	BA	3657	1/1	0.96	0.26	47,47,47,47	0
57	MG	DA	3169	1/1	0.96	0.24	47,47,47,47	0
57	MG	BA	3012	1/1	0.96	0.20	39,39,39,39	0
57	MG	DA	3395	1/1	0.96	0.12	47,47,47,47	0
57	MG	BA	3778	1/1	0.96	0.16	48,48,48,48	0
57	MG	BA	3264	1/1	0.96	0.22	58,58,58,58	0
57	MG	BA	3660	1/1	0.96	0.11	61,61,61,61	0
57	MG	DA	3176	1/1	0.96	0.19	41,41,41,41	0
57	MG	BA	3041	1/1	0.96	0.24	40,40,40,40	0
57	MG	BA	3112	1/1	0.96	0.23	30,30,30,30	0
57	MG	AA	3173	1/1	0.96	0.15	54,54,54,54	0
57	MG	BA	3160	1/1	0.96	0.32	55,55,55,55	0
57	MG	BA	3665	1/1	0.96	0.16	49,49,49,49	0
57	MG	AX	3012	1/1	0.96	0.17	59,59,59,59	0
57	MG	BA	3208	1/1	0.96	0.16	44,44,44,44	0
57	MG	CA	3023	1/1	0.96	0.14	44,44,44,44	0
57	MG	DA	3639	1/1	0.96	0.48	59,59,59,59	0
57	MG	DA	3193	1/1	0.96	0.13	57,57,57,57	0
57	MG	BA	3572	1/1	0.96	0.16	61,61,61,61	0
57	MG	BA	3272	1/1	0.96	0.61	48,48,48,48	0
57	MG	BA	3574	1/1	0.96	0.19	66,66,66,66	0
57	MG	DA	3199	1/1	0.96	0.11	47,47,47,47	0
57	MG	DA	3416	1/1	0.96	0.12	50,50,50,50	0
57	MG	DA	3648	1/1	0.96	0.14	57,57,57,57	0
57	MG	BA	3488	1/1	0.96	0.19	60,60,60,60	0
57	MG	BA	3491	1/1	0.96	0.15	45,45,45,45	0
57	MG	BA	3492	1/1	0.96	0.13	46,46,46,46	0
57	MG	AX	3013	1/1	0.96	0.13	58,58,58,58	0
57	MG	DA	3204	1/1	0.96	0.31	46,46,46,46	0
57	MG	BA	3676	1/1	0.96	0.21	33,33,33,33	0
57	MG	BA	3494	1/1	0.96	0.09	49,49,49,49	0
57	MG	BA	3408	1/1	0.96	0.20	36,36,36,36	0
57	MG	BA	3804	1/1	0.96	0.42	53,53,53,53	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3012	1/1	0.96	0.12	33,33,33,33	0
57	MG	BA	3336	1/1	0.96	0.15	64,64,64,64	0
57	MG	DA	3014	1/1	0.96	0.21	46,46,46,46	0
57	MG	BA	3806	1/1	0.96	0.16	30,30,30,30	0
57	MG	BA	3582	1/1	0.96	0.16	74,74,74,74	0
57	MG	DA	3663	1/1	0.96	0.13	60,60,60,60	0
57	MG	BA	3076	1/1	0.96	0.17	43,43,43,43	0
57	MG	DA	3022	1/1	0.96	0.27	51,51,51,51	0
57	MG	BA	3211	1/1	0.96	0.15	55,55,55,55	0
57	MG	AA	3110	1/1	0.96	0.13	48,48,48,48	0
57	MG	BA	3586	1/1	0.96	0.09	53,53,53,53	0
57	MG	BA	3414	1/1	0.96	0.18	41,41,41,41	0
57	MG	DA	3220	1/1	0.96	0.16	46,46,46,46	0
57	MG	CA	3045	1/1	0.96	0.24	54,54,54,54	0
57	MG	BA	3589	1/1	0.96	0.21	27,27,27,27	0
57	MG	DA	3443	1/1	0.96	0.10	54,54,54,54	0
57	MG	CA	3048	1/1	0.96	0.12	67,67,67,67	0
57	MG	DA	3445	1/1	0.96	0.10	32,32,32,32	0
57	MG	CA	3049	1/1	0.96	0.20	63,63,63,63	0
57	MG	AA	3203	1/1	0.96	0.13	59,59,59,59	0
57	MG	BB	205	1/1	0.96	0.20	60,60,60,60	0
57	MG	BA	3689	1/1	0.96	0.17	42,42,42,42	0
57	MG	BB	207	1/1	0.96	0.22	54,54,54,54	0
57	MG	DB	3007	1/1	0.96	0.20	58,58,58,58	0
57	MG	DA	3040	1/1	0.96	0.12	31,31,31,31	0
57	MG	DA	3454	1/1	0.96	0.16	56,56,56,56	0
57	MG	BA	3591	1/1	0.96	0.17	35,35,35,35	0
57	MG	DA	3457	1/1	0.96	0.07	54,54,54,54	0
57	MG	DA	3233	1/1	0.96	0.19	53,53,53,53	0
57	MG	DD	301	1/1	0.96	0.15	47,47,47,47	0
57	MG	DA	3461	1/1	0.96	0.11	62,62,62,62	0
57	MG	CA	3056	1/1	0.96	0.10	64,64,64,64	0
57	MG	BA	3691	1/1	0.96	0.16	55,55,55,55	0
57	MG	DA	3464	1/1	0.96	0.10	46,46,46,46	0
57	MG	BA	3692	1/1	0.96	0.15	40,40,40,40	0
57	MG	DE	302	1/1	0.96	0.17	33,33,33,33	0
57	MG	BB	213	1/1	0.96	0.19	60,60,60,60	0
57	MG	AA	3048	1/1	0.96	0.22	57,57,57,57	0
57	MG	BA	3694	1/1	0.96	0.10	51,51,51,51	0
57	MG	BB	216	1/1	0.96	0.23	51,51,51,51	0
57	MG	DA	3241	1/1	0.96	0.13	45,45,45,45	0
57	MG	BA	3169	1/1	0.96	0.17	45,45,45,45	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3052	1/1	0.96	0.13	61,61,61,61	0
57	MG	BA	3696	1/1	0.96	0.14	33,33,33,33	0
57	MG	AA	3113	1/1	0.96	0.12	58,58,58,58	0
57	MG	DA	3055	1/1	0.96	0.17	49,49,49,49	0
57	MG	CA	3067	1/1	0.96	0.31	61,61,61,61	0
57	MG	DA	3057	1/1	0.96	0.20	42,42,42,42	0
57	MG	DA	3059	1/1	0.96	0.26	43,43,43,43	0
57	MG	BA	3699	1/1	0.96	0.23	35,35,35,35	0
57	MG	DW	3002	1/1	0.96	0.15	45,45,45,45	0
57	MG	CA	3069	1/1	0.96	0.12	60,60,60,60	0
57	MG	BA	3083	1/1	0.96	0.15	56,56,56,56	0
57	MG	DA	3253	1/1	0.96	0.13	45,45,45,45	0
57	MG	BA	3701	1/1	0.96	0.15	43,43,43,43	0
57	MG	BD	308	1/1	0.96	0.23	46,46,46,46	0
57	MG	BA	3349	1/1	0.96	0.09	56,56,56,56	0
57	MG	DA	3489	1/1	0.96	0.13	51,51,51,51	0
57	MG	AA	3114	1/1	0.96	0.17	59,59,59,59	0
57	MG	AA	3151	1/1	0.96	0.14	45,45,45,45	0
57	MG	DA	3493	1/1	0.96	0.30	66,66,66,66	0
57	MG	DA	3086	1/1	0.97	0.09	43,43,43,43	0
57	MG	BA	3611	1/1	0.97	0.17	46,46,46,46	0
57	MG	DA	3278	1/1	0.97	0.06	43,43,43,43	0
57	MG	BN	3005	1/1	0.97	0.17	36,36,36,36	0
57	MG	DA	3089	1/1	0.97	0.39	52,52,52,52	0
57	MG	BA	3111	1/1	0.97	0.13	54,54,54,54	0
57	MG	DA	3506	1/1	0.97	0.09	42,42,42,42	0
57	MG	BA	3393	1/1	0.97	0.18	51,51,51,51	0
57	MG	AA	3207	1/1	0.97	0.09	65,65,65,65	0
57	MG	BA	3725	1/1	0.97	0.14	44,44,44,44	0
57	MG	BA	3113	1/1	0.97	0.25	53,53,53,53	0
57	MG	DA	3096	1/1	0.97	0.23	42,42,42,42	0
57	MG	BA	3168	1/1	0.97	0.17	47,47,47,47	0
57	MG	BA	3004	1/1	0.97	0.19	33,33,33,33	0
57	MG	DA	3099	1/1	0.97	0.17	32,32,32,32	0
57	MG	BA	3115	1/1	0.97	0.24	59,59,59,59	0
57	MG	BA	3731	1/1	0.97	0.30	37,37,37,37	0
57	MG	BA	3232	1/1	0.97	0.20	52,52,52,52	0
57	MG	BA	3116	1/1	0.97	0.28	50,50,50,50	0
57	MG	AA	3208	1/1	0.97	0.17	60,60,60,60	0
57	MG	DA	3105	1/1	0.97	0.19	48,48,48,48	0
57	MG	BA	3309	1/1	0.97	0.18	41,41,41,41	0
57	MG	AA	3147	1/1	0.97	0.10	70,70,70,70	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
57	MG	BA	3311	1/1	0.97	0.27	48,48,48,48	0
57	MG	DA	3305	1/1	0.97	0.20	50,50,50,50	0
57	MG	AA	3148	1/1	0.97	0.22	57,57,57,57	0
57	MG	DA	3529	1/1	0.97	0.08	38,38,38,38	0
57	MG	DA	3307	1/1	0.97	0.09	42,42,42,42	0
57	MG	BA	3036	1/1	0.97	0.17	40,40,40,40	0
57	MG	AX	3005	1/1	0.97	0.14	47,47,47,47	0
57	MG	DA	3310	1/1	0.97	0.13	38,38,38,38	0
57	MG	BA	3042	1/1	0.97	0.20	43,43,43,43	0
57	MG	BA	3630	1/1	0.97	0.14	58,58,58,58	0
57	MG	AX	3006	1/1	0.97	0.10	65,65,65,65	0
57	MG	CA	3123	1/1	0.97	0.14	58,58,58,58	0
57	MG	BA	3410	1/1	0.97	0.16	27,27,27,27	0
57	MG	BA	3518	1/1	0.97	0.20	44,44,44,44	0
57	MG	DA	3542	1/1	0.97	0.17	24,24,24,24	0
57	MG	BA	3245	1/1	0.97	0.23	34,34,34,34	0
57	MG	BA	3046	1/1	0.97	0.28	41,41,41,41	0
57	MG	BA	3752	1/1	0.97	0.19	32,32,32,32	0
57	MG	BA	3181	1/1	0.97	0.25	43,43,43,43	0
57	MG	DA	3322	1/1	0.97	0.19	51,51,51,51	0
57	MG	BA	3082	1/1	0.97	0.22	39,39,39,39	0
57	MG	CA	3131	1/1	0.97	0.07	55,55,55,55	0
57	MG	BA	3011	1/1	0.97	0.19	35,35,35,35	0
57	MG	DA	3326	1/1	0.97	0.16	43,43,43,43	0
57	MG	DA	3552	1/1	0.97	0.12	54,54,54,54	0
57	MG	CA	3134	1/1	0.97	0.16	69,69,69,69	0
57	MG	BA	3756	1/1	0.97	0.20	48,48,48,48	0
57	MG	BA	3048	1/1	0.97	0.13	47,47,47,47	0
57	MG	CA	3137	1/1	0.97	0.16	56,56,56,56	0
57	MG	BA	3086	1/1	0.97	0.21	22,22,22,22	0
57	MG	AA	3120	1/1	0.97	0.19	45,45,45,45	0
57	MG	DA	3561	1/1	0.97	0.04	57,57,57,57	0
57	MG	BA	3420	1/1	0.97	0.16	40,40,40,40	0
57	MG	BA	3643	1/1	0.97	0.13	46,46,46,46	0
57	MG	BA	3326	1/1	0.97	0.19	20,20,20,20	0
57	MG	BA	3254	1/1	0.97	0.22	25,25,25,25	0
57	MG	DA	3338	1/1	0.97	0.15	61,61,61,61	0
57	MG	BA	3188	1/1	0.97	0.30	49,49,49,49	0
57	MG	BA	3766	1/1	0.97	0.15	28,28,28,28	0
57	MG	BA	3425	1/1	0.97	0.15	40,40,40,40	0
57	MG	CA	3147	1/1	0.97	0.12	64,64,64,64	0
57	MG	BA	3330	1/1	0.97	0.23	37,37,37,37	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3345	1/1	0.97	0.09	44,44,44,44	0
57	MG	B7	101	1/1	0.97	0.24	39,39,39,39	0
57	MG	DA	3142	1/1	0.97	0.13	47,47,47,47	0
57	MG	DA	3349	1/1	0.97	0.07	52,52,52,52	0
57	MG	DA	3143	1/1	0.97	0.18	38,38,38,38	0
57	MG	BA	3331	1/1	0.97	0.17	49,49,49,49	0
57	MG	DA	3352	1/1	0.97	0.19	63,63,63,63	0
57	MG	DA	3579	1/1	0.97	0.10	48,48,48,48	0
57	MG	B7	103	1/1	0.97	0.16	42,42,42,42	0
57	MG	BA	3428	1/1	0.97	0.19	46,46,46,46	0
57	MG	AA	3099	1/1	0.97	0.20	51,51,51,51	0
57	MG	CA	3155	1/1	0.97	0.12	53,53,53,53	0
57	MG	B8	101	1/1	0.97	0.21	44,44,44,44	0
57	MG	BA	3334	1/1	0.97	0.14	37,37,37,37	0
57	MG	BA	3774	1/1	0.97	0.07	46,46,46,46	0
57	MG	BA	3653	1/1	0.97	0.21	39,39,39,39	0
57	MG	BA	3776	1/1	0.97	0.20	43,43,43,43	0
57	MG	DA	3155	1/1	0.97	0.25	48,48,48,48	0
57	MG	BA	3089	1/1	0.97	0.17	19,19,19,19	0
57	MG	AA	3164	1/1	0.97	0.10	61,61,61,61	0
57	MG	BA	3260	1/1	0.97	0.30	39,39,39,39	0
57	MG	BA	3338	1/1	0.97	0.13	40,40,40,40	0
57	MG	DA	3369	1/1	0.97	0.15	28,28,28,28	0
57	MG	DA	3370	1/1	0.97	0.14	51,51,51,51	0
57	MG	BA	3435	1/1	0.97	0.27	45,45,45,45	0
57	MG	AA	3018	1/1	0.97	0.24	56,56,56,56	0
57	MG	DA	3373	1/1	0.97	0.15	44,44,44,44	0
57	MG	DA	3599	1/1	0.97	0.20	36,36,36,36	0
57	MG	CA	3167	1/1	0.97	0.17	60,60,60,60	0
57	MG	DA	3601	1/1	0.97	0.10	44,44,44,44	0
57	MG	BA	3193	1/1	0.97	0.20	48,48,48,48	0
57	MG	DA	3166	1/1	0.97	0.11	55,55,55,55	0
57	MG	BA	3784	1/1	0.97	0.21	33,33,33,33	0
57	MG	DA	3168	1/1	0.97	0.29	45,45,45,45	0
57	MG	BA	3263	1/1	0.97	0.34	49,49,49,49	0
57	MG	BA	3786	1/1	0.97	0.13	35,35,35,35	0
57	MG	DA	3171	1/1	0.97	0.12	31,31,31,31	0
57	MG	BA	3787	1/1	0.97	0.23	45,45,45,45	0
57	MG	BA	3343	1/1	0.97	0.15	53,53,53,53	0
57	MG	DA	3384	1/1	0.97	0.10	49,49,49,49	0
57	MG	BA	3789	1/1	0.97	0.18	12,12,12,12	0
57	MG	DA	3613	1/1	0.97	0.15	54,54,54,54	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	DA	3175	1/1	0.97	0.12	41,41,41,41	0
57	MG	BA	3549	1/1	0.97	0.29	39,39,39,39	0
57	MG	AA	3105	1/1	0.97	0.32	69,69,69,69	0
57	MG	BA	3345	1/1	0.97	0.14	38,38,38,38	0
57	MG	DA	3390	1/1	0.97	0.11	43,43,43,43	0
57	MG	BA	3137	1/1	0.97	0.24	39,39,39,39	0
57	MG	BA	3553	1/1	0.97	0.10	59,59,59,59	0
57	MG	DA	3182	1/1	0.97	0.24	51,51,51,51	0
57	MG	BA	3093	1/1	0.97	0.26	56,56,56,56	0
57	MG	DA	3184	1/1	0.97	0.16	47,47,47,47	0
57	MG	BA	3139	1/1	0.97	0.33	40,40,40,40	0
57	MG	AA	3182	1/1	0.97	0.14	49,49,49,49	0
57	MG	DA	3187	1/1	0.97	0.11	42,42,42,42	0
57	MG	AA	3024	1/1	0.97	0.12	54,54,54,54	0
57	MG	DA	3189	1/1	0.97	0.20	41,41,41,41	0
57	MG	DA	3191	1/1	0.97	0.17	37,37,37,37	0
57	MG	DA	3192	1/1	0.97	0.10	60,60,60,60	0
57	MG	BA	3270	1/1	0.97	0.17	48,48,48,48	0
57	MG	BA	3144	1/1	0.97	0.19	41,41,41,41	0
57	MG	BA	3674	1/1	0.97	0.15	63,63,63,63	0
57	MG	BA	3202	1/1	0.97	0.19	60,60,60,60	0
57	MG	AA	3154	1/1	0.97	0.11	69,69,69,69	0
57	MG	BA	3677	1/1	0.97	0.17	60,60,60,60	0
57	MG	BA	3565	1/1	0.97	0.17	40,40,40,40	0
57	MG	BA	3097	1/1	0.97	0.14	44,44,44,44	0
57	MG	CA	3034	1/1	0.97	0.14	59,59,59,59	0
57	MG	DA	3016	1/1	0.97	0.34	50,50,50,50	0
57	MG	AK	3001	1/1	0.97	0.18	44,44,44,44	0
57	MG	AA	3125	1/1	0.97	0.24	37,37,37,37	0
57	MG	DA	3019	1/1	0.97	0.29	37,37,37,37	0
57	MG	DA	3644	1/1	0.97	0.08	55,55,55,55	0
57	MG	DA	3020	1/1	0.97	0.16	55,55,55,55	0
57	MG	BA	3358	1/1	0.97	0.21	49,49,49,49	0
57	MG	DA	3647	1/1	0.97	0.11	54,54,54,54	0
57	MG	AA	3186	1/1	0.97	0.12	42,42,42,42	0
57	MG	BA	3360	1/1	0.97	0.16	41,41,41,41	0
57	MG	AA	3112	1/1	0.97	0.17	63,63,63,63	0
57	MG	DA	3028	1/1	0.97	0.36	52,52,52,52	0
57	MG	BB	203	1/1	0.97	0.24	43,43,43,43	0
57	MG	BB	204	1/1	0.97	0.18	41,41,41,41	0
57	MG	BA	3280	1/1	0.97	0.14	37,37,37,37	0
57	MG	BA	3363	1/1	0.97	0.15	22,22,22,22	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	BA	3152	1/1	0.97	0.30	43,43,43,43	0
57	MG	BB	208	1/1	0.97	0.14	45,45,45,45	0
57	MG	BA	3102	1/1	0.97	0.19	44,44,44,44	0
57	MG	CA	3050	1/1	0.97	0.20	61,61,61,61	0
57	MG	BA	3368	1/1	0.97	0.20	40,40,40,40	0
57	MG	DA	3435	1/1	0.97	0.15	50,50,50,50	0
57	MG	DA	3436	1/1	0.97	0.12	54,54,54,54	0
57	MG	BA	3103	1/1	0.97	0.17	38,38,38,38	0
57	MG	DA	3664	1/1	0.97	0.39	48,48,48,48	0
57	MG	BB	212	1/1	0.97	0.13	55,55,55,55	0
57	MG	DA	3042	1/1	0.97	0.17	38,38,38,38	0
57	MG	AA	3092	1/1	0.97	0.14	63,63,63,63	0
57	MG	BA	3371	1/1	0.97	0.14	35,35,35,35	0
57	MG	DA	3228	1/1	0.97	0.30	38,38,38,38	0
57	MG	BA	3286	1/1	0.97	0.21	34,34,34,34	0
57	MG	DA	3046	1/1	0.97	0.16	47,47,47,47	0
57	MG	DA	3231	1/1	0.97	0.09	62,62,62,62	0
57	MG	BA	3105	1/1	0.97	0.18	37,37,37,37	0
57	MG	BA	3474	1/1	0.97	0.18	55,55,55,55	0
57	MG	DA	3449	1/1	0.97	0.10	54,54,54,54	0
57	MG	BA	3475	1/1	0.97	0.13	42,42,42,42	0
57	MG	BA	3698	1/1	0.97	0.22	31,31,31,31	0
57	MG	BA	3476	1/1	0.97	0.15	55,55,55,55	0
57	MG	BA	3214	1/1	0.97	0.17	41,41,41,41	0
57	MG	DA	3455	1/1	0.97	0.10	47,47,47,47	0
57	MG	BD	303	1/1	0.97	0.14	39,39,39,39	0
57	MG	AA	3158	1/1	0.97	0.14	45,45,45,45	0
57	MG	BD	305	1/1	0.97	0.16	35,35,35,35	0
57	MG	DA	3460	1/1	0.97	0.13	41,41,41,41	0
57	MG	DB	3010	1/1	0.97	0.17	57,57,57,57	0
57	MG	BD	306	1/1	0.97	0.25	38,38,38,38	0
57	MG	BA	3479	1/1	0.97	0.07	50,50,50,50	0
57	MG	DA	3058	1/1	0.97	0.14	29,29,29,29	0
57	MG	BA	3158	1/1	0.97	0.20	41,41,41,41	0
57	MG	BA	3481	1/1	0.97	0.18	41,41,41,41	0
57	MG	DA	3466	1/1	0.97	0.11	41,41,41,41	0
57	MG	CA	3071	1/1	0.97	0.15	68,68,68,68	0
57	MG	CA	3072	1/1	0.97	0.17	54,54,54,54	0
57	MG	DD	307	1/1	0.97	0.32	43,43,43,43	0
57	MG	BE	302	1/1	0.97	0.23	39,39,39,39	0
57	MG	BA	3379	1/1	0.97	0.18	31,31,31,31	0
57	MG	BA	3483	1/1	0.97	0.15	28,28,28,28	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
57	MG	BA	3380	1/1	0.97	0.10	48,48,48,48	0
57	MG	BA	3159	1/1	0.97	0.25	50,50,50,50	0
57	MG	DF	3003	1/1	0.97	0.40	43,43,43,43	0
57	MG	BA	3028	1/1	0.97	0.22	51,51,51,51	0
57	MG	BA	3067	1/1	0.97	0.15	41,41,41,41	0
57	MG	BF	301	1/1	0.97	0.16	35,35,35,35	0
57	MG	BA	3489	1/1	0.97	0.07	59,59,59,59	0
57	MG	DA	3257	1/1	0.97	0.18	50,50,50,50	0
57	MG	DA	3072	1/1	0.97	0.14	47,47,47,47	0
57	MG	BA	3490	1/1	0.97	0.10	54,54,54,54	0
57	MG	DA	3261	1/1	0.97	0.12	49,49,49,49	0
57	MG	BA	3221	1/1	0.97	0.17	37,37,37,37	0
57	MG	CA	3084	1/1	0.97	0.13	60,60,60,60	0
57	MG	DV	3002	1/1	0.97	0.30	49,49,49,49	0
57	MG	BF	306	1/1	0.97	0.28	31,31,31,31	0
57	MG	DW	3001	1/1	0.97	0.40	54,54,54,54	0
57	MG	DA	3265	1/1	0.97	0.12	30,30,30,30	0
57	MG	DA	3266	1/1	0.97	0.09	57,57,57,57	0
57	MG	DW	3004	1/1	0.97	0.22	52,52,52,52	0
57	MG	BF	307	1/1	0.97	0.24	37,37,37,37	0
57	MG	BA	3222	1/1	0.97	0.18	37,37,37,37	0
57	MG	BF	309	1/1	0.97	0.15	53,53,53,53	0
57	MG	BG	201	1/1	0.97	0.20	58,58,58,58	0
57	MG	BA	3029	1/1	0.97	0.48	37,37,37,37	0
57	MG	AA	3137	1/1	0.97	0.15	51,51,51,51	0
57	MG	BA	3299	1/1	0.97	0.16	25,25,25,25	0
57	MG	BA	3390	1/1	0.97	0.26	38,38,38,38	0
59	ZN	D9	501	1/1	0.97	0.12	68,68,68,68	0
57	MG	BN	3003	1/1	0.97	0.19	48,48,48,48	0
60	K	CX	3001	1/1	0.97	0.19	82,82,82,82	0
57	MG	BA	3332	1/1	0.98	0.18	38,38,38,38	0
57	MG	BA	3040	1/1	0.98	0.36	35,35,35,35	0
57	MG	DA	3471	1/1	0.98	0.23	50,50,50,50	0
57	MG	BA	3588	1/1	0.98	0.23	31,31,31,31	0
57	MG	AA	3040	1/1	0.98	0.11	60,60,60,60	0
57	MG	DA	3034	1/1	0.98	0.18	38,38,38,38	0
57	MG	BA	3141	1/1	0.98	0.28	42,42,42,42	0
57	MG	BA	3791	1/1	0.98	0.18	28,28,28,28	0
57	MG	BA	3792	1/1	0.98	0.14	54,54,54,54	0
57	MG	DA	3357	1/1	0.98	0.07	50,50,50,50	0
57	MG	BA	3719	1/1	0.98	0.18	53,53,53,53	0
57	MG	BA	3259	1/1	0.98	0.21	25,25,25,25	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	BA	3167	1/1	0.98	0.12	41,41,41,41	0
57	MG	BP	203	1/1	0.98	0.15	33,33,33,33	0
57	MG	BA	3142	1/1	0.98	0.17	49,49,49,49	0
57	MG	DA	3363	1/1	0.98	0.16	29,29,29,29	0
57	MG	BA	3534	1/1	0.98	0.21	44,44,44,44	0
57	MG	BA	3339	1/1	0.98	0.21	23,23,23,23	0
57	MG	BA	3060	1/1	0.98	0.20	30,30,30,30	0
57	MG	DA	3144	1/1	0.98	0.11	38,38,38,38	0
57	MG	BA	3080	1/1	0.98	0.17	60,60,60,60	0
57	MG	DA	3491	1/1	0.98	0.16	51,51,51,51	0
57	MG	AA	3168	1/1	0.98	0.11	59,59,59,59	0
57	MG	BA	3230	1/1	0.98	0.20	53,53,53,53	0
57	MG	AA	3053	1/1	0.98	0.20	61,61,61,61	0
57	MG	BR	202	1/1	0.98	0.14	31,31,31,31	0
57	MG	CA	3043	1/1	0.98	0.11	47,47,47,47	0
57	MG	CA	3133	1/1	0.98	0.21	59,59,59,59	0
57	MG	BA	3487	1/1	0.98	0.14	50,50,50,50	0
57	MG	DA	3258	1/1	0.98	0.14	48,48,48,48	0
57	MG	DA	3500	1/1	0.98	0.10	49,49,49,49	0
57	MG	BA	3044	1/1	0.98	0.22	20,20,20,20	0
57	MG	BU	203	1/1	0.98	0.21	47,47,47,47	0
57	MG	CA	3047	1/1	0.98	0.14	53,53,53,53	0
57	MG	BA	3234	1/1	0.98	0.15	38,38,38,38	0
57	MG	DA	3157	1/1	0.98	0.11	47,47,47,47	0
57	MG	BA	3605	1/1	0.98	0.17	43,43,43,43	0
57	MG	BA	3735	1/1	0.98	0.43	57,57,57,57	0
57	MG	DA	3508	1/1	0.98	0.10	44,44,44,44	0
57	MG	BA	3736	1/1	0.98	0.16	42,42,42,42	0
57	MG	DA	3161	1/1	0.98	0.19	38,38,38,38	0
57	MG	BV	201	1/1	0.98	0.31	33,33,33,33	0
57	MG	DA	3512	1/1	0.98	0.09	47,47,47,47	0
57	MG	BA	3737	1/1	0.98	0.29	43,43,43,43	0
57	MG	BA	3544	1/1	0.98	0.22	44,44,44,44	0
57	MG	BA	3607	1/1	0.98	0.24	38,38,38,38	0
57	MG	BA	3235	1/1	0.98	0.16	42,42,42,42	0
57	MG	BA	3609	1/1	0.98	0.11	39,39,39,39	0
57	MG	CA	3148	1/1	0.98	0.11	70,70,70,70	0
57	MG	DA	3393	1/1	0.98	0.10	50,50,50,50	0
57	MG	BA	3174	1/1	0.98	0.18	37,37,37,37	0
57	MG	BA	3148	1/1	0.98	0.33	44,44,44,44	0
57	MG	BA	3744	1/1	0.98	0.14	39,39,39,39	0
57	MG	BA	3124	1/1	0.98	0.21	19,19,19,19	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	AA	3086	1/1	0.98	0.07	57,57,57,57	0
57	MG	DA	3525	1/1	0.98	0.13	59,59,59,59	0
57	MG	DA	3399	1/1	0.98	0.13	59,59,59,59	0
57	MG	BA	3085	1/1	0.98	0.27	35,35,35,35	0
57	MG	DA	3281	1/1	0.98	0.16	53,53,53,53	0
57	MG	BA	3241	1/1	0.98	0.19	36,36,36,36	0
57	MG	CA	3065	1/1	0.98	0.17	49,49,49,49	0
57	MG	DA	3404	1/1	0.98	0.12	48,48,48,48	0
57	MG	DA	3177	1/1	0.98	0.15	42,42,42,42	0
57	MG	BA	3497	1/1	0.98	0.14	28,28,28,28	0
57	MG	DA	3534	1/1	0.98	0.15	55,55,55,55	0
57	MG	DA	3665	1/1	0.98	0.14	42,42,42,42	0
57	MG	B0	101	1/1	0.98	0.17	36,36,36,36	0
57	MG	BA	3498	1/1	0.98	0.18	36,36,36,36	0
57	MG	DA	3289	1/1	0.98	0.10	53,53,53,53	0
57	MG	BA	3313	1/1	0.98	0.07	53,53,53,53	0
57	MG	AA	3077	1/1	0.98	0.25	56,56,56,56	0
57	MG	DA	3412	1/1	0.98	0.20	50,50,50,50	0
57	MG	DA	3292	1/1	0.98	0.17	30,30,30,30	0
57	MG	BA	3556	1/1	0.98	0.21	36,36,36,36	0
57	MG	DA	3294	1/1	0.98	0.16	43,43,43,43	0
57	MG	AA	3082	1/1	0.98	0.13	46,46,46,46	0
57	MG	BA	3558	1/1	0.98	0.14	32,32,32,32	0
57	MG	BB	217	1/1	0.98	0.18	29,29,29,29	0
57	MG	BA	3449	1/1	0.98	0.21	35,35,35,35	0
57	MG	B6	101	1/1	0.98	0.17	48,48,48,48	0
57	MG	BA	3450	1/1	0.98	0.13	48,48,48,48	0
57	MG	DA	3190	1/1	0.98	0.20	54,54,54,54	0
57	MG	BA	3625	1/1	0.98	0.18	39,39,39,39	0
57	MG	BA	3278	1/1	0.98	0.18	34,34,34,34	0
57	MG	BA	3049	1/1	0.98	0.21	36,36,36,36	0
57	MG	DA	3555	1/1	0.98	0.29	53,53,53,53	0
57	MG	BA	3563	1/1	0.98	0.17	36,36,36,36	0
57	MG	BA	3762	1/1	0.98	0.20	46,46,46,46	0
57	MG	BA	3050	1/1	0.98	0.20	38,38,38,38	0
57	MG	DA	3197	1/1	0.98	0.14	55,55,55,55	0
57	MG	DA	3198	1/1	0.98	0.13	40,40,40,40	0
57	MG	DA	3094	1/1	0.98	0.22	50,50,50,50	0
57	MG	BA	3454	1/1	0.98	0.23	27,27,27,27	0
57	MG	CA	3085	1/1	0.98	0.13	54,54,54,54	0
57	MG	DD	305	1/1	0.98	0.12	36,36,36,36	0
57	MG	BA	3281	1/1	0.98	0.28	60,60,60,60	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	BA	3010	1/1	0.98	0.16	39,39,39,39	0
57	MG	DD	308	1/1	0.98	0.29	48,48,48,48	0
57	MG	BA	3247	1/1	0.98	0.16	25,25,25,25	0
57	MG	DE	301	1/1	0.98	0.40	46,46,46,46	0
57	MG	CA	3089	1/1	0.98	0.12	47,47,47,47	0
57	MG	AA	3062	1/1	0.98	0.28	51,51,51,51	0
57	MG	BA	3364	1/1	0.98	0.27	60,60,60,60	0
57	MG	AA	3090	1/1	0.98	0.21	66,66,66,66	0
57	MG	DF	3002	1/1	0.98	0.18	48,48,48,48	0
57	MG	DA	3003	1/1	0.98	0.15	27,27,27,27	0
57	MG	DA	3442	1/1	0.98	0.12	39,39,39,39	0
57	MG	DN	5001	1/1	0.98	0.11	66,66,66,66	0
57	MG	AA	3126	1/1	0.98	0.09	49,49,49,49	0
57	MG	BA	3772	1/1	0.98	0.19	33,33,33,33	0
57	MG	BA	3367	1/1	0.98	0.25	29,29,29,29	0
57	MG	DQ	3001	1/1	0.98	0.13	47,47,47,47	0
57	MG	DA	3008	1/1	0.98	0.09	36,36,36,36	0
57	MG	BA	3287	1/1	0.98	0.14	42,42,42,42	0
57	MG	DA	3010	1/1	0.98	0.17	47,47,47,47	0
57	MG	BA	3416	1/1	0.98	0.21	21,21,21,21	0
57	MG	DU	3001	1/1	0.98	0.32	55,55,55,55	0
57	MG	DA	3330	1/1	0.98	0.11	45,45,45,45	0
57	MG	BA	3187	1/1	0.98	0.25	29,29,29,29	0
57	MG	CA	3099	1/1	0.98	0.15	44,44,44,44	0
57	MG	DA	3453	1/1	0.98	0.22	60,60,60,60	0
57	MG	BA	3705	1/1	0.98	0.11	62,62,62,62	0
57	MG	DA	3115	1/1	0.98	0.24	40,40,40,40	0
57	MG	BA	3467	1/1	0.98	0.23	50,50,50,50	0
57	MG	BF	305	1/1	0.98	0.09	49,49,49,49	0
57	MG	CA	3103	1/1	0.98	0.13	46,46,46,46	0
57	MG	DA	3459	1/1	0.98	0.19	47,47,47,47	0
57	MG	BA	3327	1/1	0.98	0.18	38,38,38,38	0
57	MG	CA	3105	1/1	0.98	0.18	52,52,52,52	0
57	MG	BA	3521	1/1	0.98	0.20	39,39,39,39	0
58	SF4	AD	501	8/8	0.98	0.16	62,68,73,86	0
58	SF4	CD	302	8/8	0.98	0.16	60,68,83,86	0
59	ZN	AN	501	1/1	0.98	0.19	69,69,69,69	0
59	ZN	BY	501	1/1	0.98	0.15	58,58,58,58	0
57	MG	DA	3021	1/1	0.98	0.09	31,31,31,31	0
59	ZN	B6	103	1/1	0.98	0.24	49,49,49,49	0
59	ZN	CN	501	1/1	0.98	0.08	93,93,93,93	0
57	MG	BA	3135	1/1	0.98	0.20	43,43,43,43	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
57	MG	BA	3025	1/1	0.98	0.16	27,27,27,27	0
57	MG	BA	3038	1/1	0.98	0.25	35,35,35,35	0
57	MG	BA	3472	1/1	0.98	0.16	20,20,20,20	0
57	MG	BA	3039	1/1	0.98	0.20	32,32,32,32	0
57	MG	BU	206	1/1	0.99	0.40	35,35,35,35	0
57	MG	DA	3026	1/1	0.99	0.56	59,59,59,59	0
57	MG	DA	3027	1/1	0.99	0.57	51,51,51,51	0
57	MG	BD	307	1/1	0.99	0.21	40,40,40,40	0
57	MG	BA	3384	1/1	0.99	0.19	41,41,41,41	0
57	MG	BA	3216	1/1	0.99	0.23	37,37,37,37	0
57	MG	DA	3031	1/1	0.99	0.43	43,43,43,43	0
57	MG	BA	3569	1/1	0.99	0.19	49,49,49,49	0
57	MG	DA	3285	1/1	0.99	0.13	32,32,32,32	0
57	MG	BA	3045	1/1	0.99	0.21	36,36,36,36	0
57	MG	BA	3597	1/1	0.99	0.21	25,25,25,25	0
57	MG	BA	3378	1/1	0.99	0.12	28,28,28,28	0
57	MG	BA	3233	1/1	0.99	0.30	56,56,56,56	0
57	MG	BA	3726	1/1	0.99	0.19	63,63,63,63	0
57	MG	BA	3013	1/1	0.99	0.14	32,32,32,32	0
57	MG	DA	3315	1/1	0.99	0.08	42,42,42,42	0
57	MG	BA	3198	1/1	0.99	0.24	37,37,37,37	0
57	MG	BA	3374	1/1	0.99	0.17	40,40,40,40	0
57	MG	BA	3422	1/1	0.99	0.24	33,33,33,33	0
57	MG	DA	3671	1/1	0.99	0.13	74,74,74,74	0
57	MG	BA	3392	1/1	0.99	0.17	53,53,53,53	0
57	MG	DA	3344	1/1	0.99	0.16	31,31,31,31	0
57	MG	BA	3069	1/1	0.99	0.27	22,22,22,22	0
57	MG	DA	3297	1/1	0.99	0.11	39,39,39,39	0
59	ZN	B5	102	1/1	0.99	0.22	48,48,48,48	0
57	MG	DA	3347	1/1	0.99	0.20	27,27,27,27	0
59	ZN	B9	501	1/1	0.99	0.18	38,38,38,38	0
57	MG	DF	3004	1/1	0.99	0.38	44,44,44,44	0
57	MG	DA	3560	1/1	0.99	0.07	40,40,40,40	0
57	MG	DA	3005	1/1	0.99	0.22	57,57,57,57	0
59	ZN	D5	501	1/1	0.99	0.20	58,58,58,58	0
59	ZN	D6	501	1/1	0.99	0.17	71,71,71,71	0
57	MG	BA	3458	1/1	0.99	0.18	18,18,18,18	0
57	MG	DA	3480	1/1	0.99	0.10	40,40,40,40	0
57	MG	DA	3535	1/1	0.99	0.18	56,56,56,56	0
57	MG	BA	3037	1/1	1.00	0.24	34,34,34,34	0

6.5 Other polymers [i](#)

There are no such residues in this entry.