



Full wwPDB X-ray Structure Validation Report ⓘ

Jun 16, 2014 – 10:05 PM BST

PDB ID : 4V9R
Title : Crystal structure of antibiotic DITYROMYCIN bound to 70S ribosome
Authors : Bulkley, D.P.; Brandi, L.; Polikanov, Y.S.; Fabbretti, A.; O'Connor, M.;
Gualerzi, C.O.; Steitz, T.A.
Deposited on : 2013-12-05
Resolution : 3.00 Å(reported)

This is a full wwPDB validation report for a publicly released PDB entry.
We welcome your comments at validation@mail.wwpdb.org
A user guide is available at <http://wwpdb.org/ValidationPDFNotes.html>

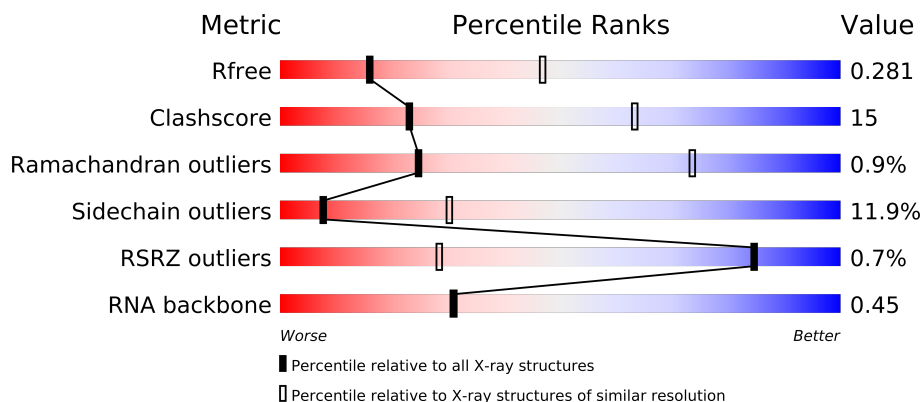
The following versions of software and data (see [references](#)) were used in the production of this report:

MolProbity : 4.02b-467
Mogul : 1.16 November 2013
Xtriage (Phenix) : dev-1323
EDS : stable23397
Percentile statistics : 21963
Refmac : 5.8.0049
CCP4 : 6.3.0 (Settle)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)
Validation Pipeline (wwPDB-VP) : stable23397

1 Overall quality at a glance

The reported resolution of this entry is 3.00 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	66092	1216 (3.00-3.00)
Clashscore	79885	1594 (3.00-3.00)
Ramachandran outliers	78287	1537 (3.00-3.00)
Sidechain outliers	78261	1540 (3.00-3.00)
RSRZ outliers	66119	1217 (3.00-3.00)
RNA backbone	1838	1070 (3.50-2.50)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density.

Mol	Chain	Length	Quality of chain
1	AA	1522	
1	CA	1522	
2	AB	256	
2	CB	256	
3	AC	239	
3	CC	239	
4	AD	209	
4	CD	209	
5	AE	162	
5	CE	162	
6	AF	101	
6	CF	101	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
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	
15	CO	89	
16	AP	88	
16	CP	88	
17	AQ	105	
17	CQ	105	
18	AR	88	
18	CR	88	
19	AS	93	
19	CS	93	
20	AT	106	
20	CT	106	
21	AU	27	
21	CU	27	
22	AV	24	
22	CV	24	
23	AX	77	
23	CX	77	
24	AW	10	
24	CW	10	
25	BA	2915	
25	DA	2915	
26	BB	122	
26	DB	122	
27	BD	276	
27	DD	276	




Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
28	BE	206	
28	DE	206	
29	BF	210	
29	DF	210	
30	BG	182	
30	DG	182	
31	BH	180	
31	DH	180	
32	BI	148	
32	DI	148	
33	BN	140	
33	DN	140	
34	BO	122	
34	DO	122	
35	BP	150	
35	DP	150	
36	BQ	141	
36	DQ	141	
37	BR	118	
37	DR	118	
38	BS	112	
38	DS	112	
39	BT	146	
39	DT	146	
40	BU	118	
40	DU	118	
41	BV	101	
41	DV	101	
42	BW	113	
42	DW	113	
43	BX	96	
43	DX	96	
44	BY	110	
44	DY	110	
45	BZ	206	
45	DZ	206	
46	B0	85	
46	D0	85	
47	B1	98	
47	D1	98	
48	B2	72	
48	D2	72	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
49	B3	60	
49	D3	60	
50	B4	71	
50	D4	71	
51	B5	60	
51	D5	60	
52	B6	54	
52	D6	54	
53	B7	49	
53	D7	49	
54	B8	65	
54	D8	65	
55	B9	37	
55	D9	37	

2 Entry composition

There are 61 unique types of molecules in this entry. The entry contains 286321 atoms, of which 0 are hydrogen and 0 are deuterium.

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	AA	1498	Total	C	N	O	P	0	0	0
			32196	14328	5966	10404	1498			
1	CA	1503	Total	C	N	O	P	0	0	0
			32312	14381	5990	10438	1503			

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

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

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

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

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

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

- 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
10	CJ	96	Total	C	N	O			
			714	445	138	131	0	0	0

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

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

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

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

- Molecule 13 is a protein called 30S Ribosomal Protein S13.

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

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

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

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
15	AO	88	Total	C	N	O	S		
			728	456	144	126	2	0	0
15	CO	88	Total	C	N	O	S		
			728	456	144	126	2	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	7	Total	C	N	O	P	0	0	1
			114	49	22	37	6			
22	CV	6	Total	C	N	O	P	0	0	0
			113	49	22	36	6			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	AX	76	Total	C	N	O	P	0	0	0
			1623	723	294	530	76			
23	CX	76	Total	C	N	O	P	0	0	0
			1623	723	294	530	76			

- Molecule 24 is a protein called Dityromycin.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
24	AW	10	Total	C	N	O	0	0	0
			93	67	10	16			
24	CW	10	Total	C	N	O	0	0	0
			93	67	10	16			

- Molecule 25 is a RNA chain called 23S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	BA	2731	Total	C	N	O	P	0	0	0
			58834	26185	11020	18899	2730			
25	DA	2714	Total	C	N	O	P	0	0	0
			58458	26018	10942	18786	2712			

- Molecule 26 is a RNA chain called 5S Ribosomal RNA.

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

Continued on next page...

Continued from previous page...

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

- Molecule 27 is a protein called 50S Ribosomal Protein L2.

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

- Molecule 28 is a protein called 50S Ribosomal Protein L3.

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

- Molecule 29 is a protein called 50S Ribosomal Protein L4.

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

- Molecule 30 is a protein called 50S Ribosomal Protein L5.

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

- Molecule 31 is a protein called 50S Ribosomal Protein L6.

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

- Molecule 32 is a protein called 50S Ribosomal Protein L9.

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

- Molecule 33 is a protein called 50S Ribosomal Protein L13.

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

- Molecule 34 is a protein called 50S Ribosomal Protein L14.

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

- Molecule 35 is a protein called 50S Ribosomal Protein L15.

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

- Molecule 36 is a protein called 50S Ribosomal Protein L16.

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

- Molecule 37 is a protein called 50S Ribosomal Protein L17.

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

- Molecule 38 is a protein called 50S Ribosomal Protein L18.

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

- Molecule 39 is a protein called 50S Ribosomal Protein L19.

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

- Molecule 40 is a protein called 50S Ribosomal Protein L20.

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

- Molecule 41 is a protein called 50S Ribosomal Protein L21.

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

- Molecule 42 is a protein called 50S Ribosomal Protein L22.

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

Continued on next page...

Continued from previous page...

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

- Molecule 43 is a protein called 50S Ribosomal Protein L23.

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

- Molecule 44 is a protein called 50S Ribosomal Protein L24.

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

- Molecule 45 is a protein called 50S Ribosomal Protein L25.

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

- Molecule 46 is a protein called 50S Ribosomal Protein L27.

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

- Molecule 47 is a protein called 50S Ribosomal Protein L28.

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

- Molecule 48 is a protein called 50S Ribosomal Protein L29.

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

- Molecule 49 is a protein called 50S Ribosomal Protein L30.

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	B4	69	Total	C	N	O	S	0	0	0
			551	348	99	99	5			
50	D4	69	Total	C	N	O	S	0	0	0
			531	338	97	91	5			

- Molecule 51 is a protein called 50S Ribosomal Protein L32.

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

- Molecule 52 is a protein called 50S Ribosomal Protein L33.

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

- Molecule 53 is a protein called 50S Ribosomal Protein L34.

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

- Molecule 54 is a protein called 50S Ribosomal Protein L35.

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

- Molecule 55 is a protein called 50S Ribosomal Protein L36.

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

- Molecule 56 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	BA	739	Total	Mg	0	0
			739	739		
56	AK	1	Total	Mg	0	0
			1	1		
56	DQ	4	Total	Mg	0	0
			4	4		
56	D3	1	Total	Mg	0	0
			1	1		
56	DF	5	Total	Mg	0	0
			5	5		
56	B8	2	Total	Mg	0	0
			2	2		
56	BE	9	Total	Mg	0	0
			9	9		
56	DU	2	Total	Mg	0	0
			2	2		
56	B1	2	Total	Mg	0	0
			2	2		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	AN	1	Total 1	Mg 1	0	0
56	BP	4	Total 4	Mg 4	0	0
56	AX	9	Total 9	Mg 9	0	0
56	CN	1	Total 1	Mg 1	0	0
56	DN	1	Total 1	Mg 1	0	0
56	AS	1	Total 1	Mg 1	0	0
56	CA	172	Total 172	Mg 172	0	0
56	B5	1	Total 1	Mg 1	0	0
56	BB	18	Total 18	Mg 18	0	0
56	D8	1	Total 1	Mg 1	0	0
56	DG	1	Total 1	Mg 1	0	0
56	CF	1	Total 1	Mg 1	0	0
56	B9	1	Total 1	Mg 1	0	0
56	BF	6	Total 6	Mg 6	0	0
56	AV	1	Total 1	Mg 1	0	0
56	BX	2	Total 2	Mg 2	0	0
56	B2	1	Total 1	Mg 1	0	0
56	AA	222	Total 222	Mg 222	0	0
56	BQ	4	Total 4	Mg 4	0	0
56	CX	3	Total 3	Mg 3	0	0
56	DV	3	Total 3	Mg 3	0	0

Continued on next page...

Continued from previous page...

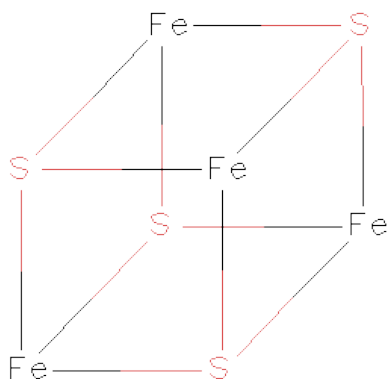
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	AM	2	Total 2	Mg 2	0	0
56	BU	9	Total 9	Mg 9	0	0
56	DR	1	Total 1	Mg 1	0	0
56	AD	1	Total 1	Mg 1	0	0
56	BN	6	Total 6	Mg 6	0	0
56	CT	1	Total 1	Mg 1	0	0
56	BG	4	Total 4	Mg 4	0	0
56	DE	6	Total 6	Mg 6	0	0
56	B3	3	Total 3	Mg 3	0	0
56	BR	3	Total 3	Mg 3	0	0
56	DA	657	Total 657	Mg 657	0	0
56	DP	2	Total 2	Mg 2	0	0
56	DW	2	Total 2	Mg 2	0	0
56	B7	4	Total 4	Mg 4	0	0
56	AL	1	Total 1	Mg 1	0	0
56	BV	3	Total 3	Mg 3	0	0
56	DO	1	Total 1	Mg 1	0	0
56	BO	1	Total 1	Mg 1	0	0
56	BZ	1	Total 1	Mg 1	0	0
56	DY	1	Total 1	Mg 1	0	0
56	D5	2	Total 2	Mg 2	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	BD	12	Total	Mg	0	0
			12	12		
56	B0	6	Total	Mg	0	0
			6	6		
56	CE	2	Total	Mg	0	0
			2	2		
56	BW	5	Total	Mg	0	0
			5	5		
56	DD	5	Total	Mg	0	0
			5	5		
56	AF	1	Total	Mg	0	0
			1	1		
56	DB	12	Total	Mg	0	0
			12	12		

- Molecule 57 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe_4S_4).

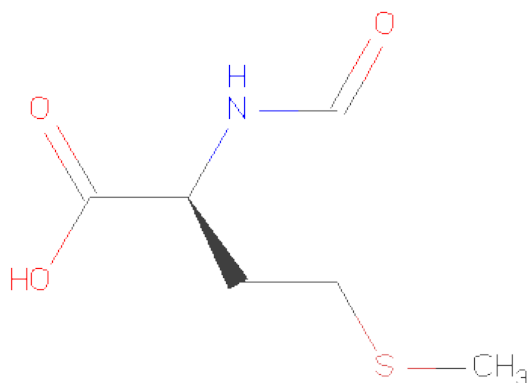


Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
57	AD	1	Total	Fe	S	0	0
			8	4	4		
57	CD	1	Total	Fe	S	0	0
			8	4	4		

- Molecule 58 is ZINC ION (three-letter code: ZN) (formula: Zn).

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

- Molecule 59 is N-FORMYLMETHIONINE (three-letter code: FME) (formula: $C_6H_{11}NO_3S$).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
59	AX	1	Total	C	N	O	S	0	0
			10	6	1	2	1		
59	CX	1	Total	C	N	O	S	0	0
			10	6	1	2	1		

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
60	BA	1	Total	K	0	0
			1	1		
60	DA	1	Total	K	0	0
			1	1		

- Molecule 61 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	AA	147	Total	O	0	0
			147	147		
61	AD	1	Total	O	0	0
			1	1		
61	AE	2	Total	O	0	0
			2	2		
61	AJ	1	Total	O	0	0
			1	1		
61	AL	2	Total	O	0	0
			2	2		
61	AO	2	Total	O	0	0
			2	2		
61	AU	1	Total	O	0	0
			1	1		
61	AV	2	Total	O	0	0
			2	2		
61	AX	1	Total	O	0	0
			1	1		
61	BA	1086	Total	O	0	0
			1086	1086		
61	BB	26	Total	O	0	0
			26	26		
61	BD	6	Total	O	0	0
			6	6		
61	BE	13	Total	O	0	0
			13	13		
61	BF	5	Total	O	0	0
			5	5		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	BG	1	Total 1	O 1	0	0
61	BN	3	Total 3	O 3	0	0
61	BO	2	Total 2	O 2	0	0
61	BP	15	Total 15	O 15	0	0
61	BQ	3	Total 3	O 3	0	0
61	BR	1	Total 1	O 1	0	0
61	BT	2	Total 2	O 2	0	0
61	BU	5	Total 5	O 5	0	0
61	BV	2	Total 2	O 2	0	0
61	BW	4	Total 4	O 4	0	0
61	BX	4	Total 4	O 4	0	0
61	B0	4	Total 4	O 4	0	0
61	B1	2	Total 2	O 2	0	0
61	B5	2	Total 2	O 2	0	0
61	B7	1	Total 1	O 1	0	0
61	B8	7	Total 7	O 7	0	0
61	CA	186	Total 186	O 186	0	0
61	CE	2	Total 2	O 2	0	0
61	CN	1	Total 1	O 1	0	0
61	CT	1	Total 1	O 1	0	0
61	CX	2	Total 2	O 2	0	0

Continued on next page...

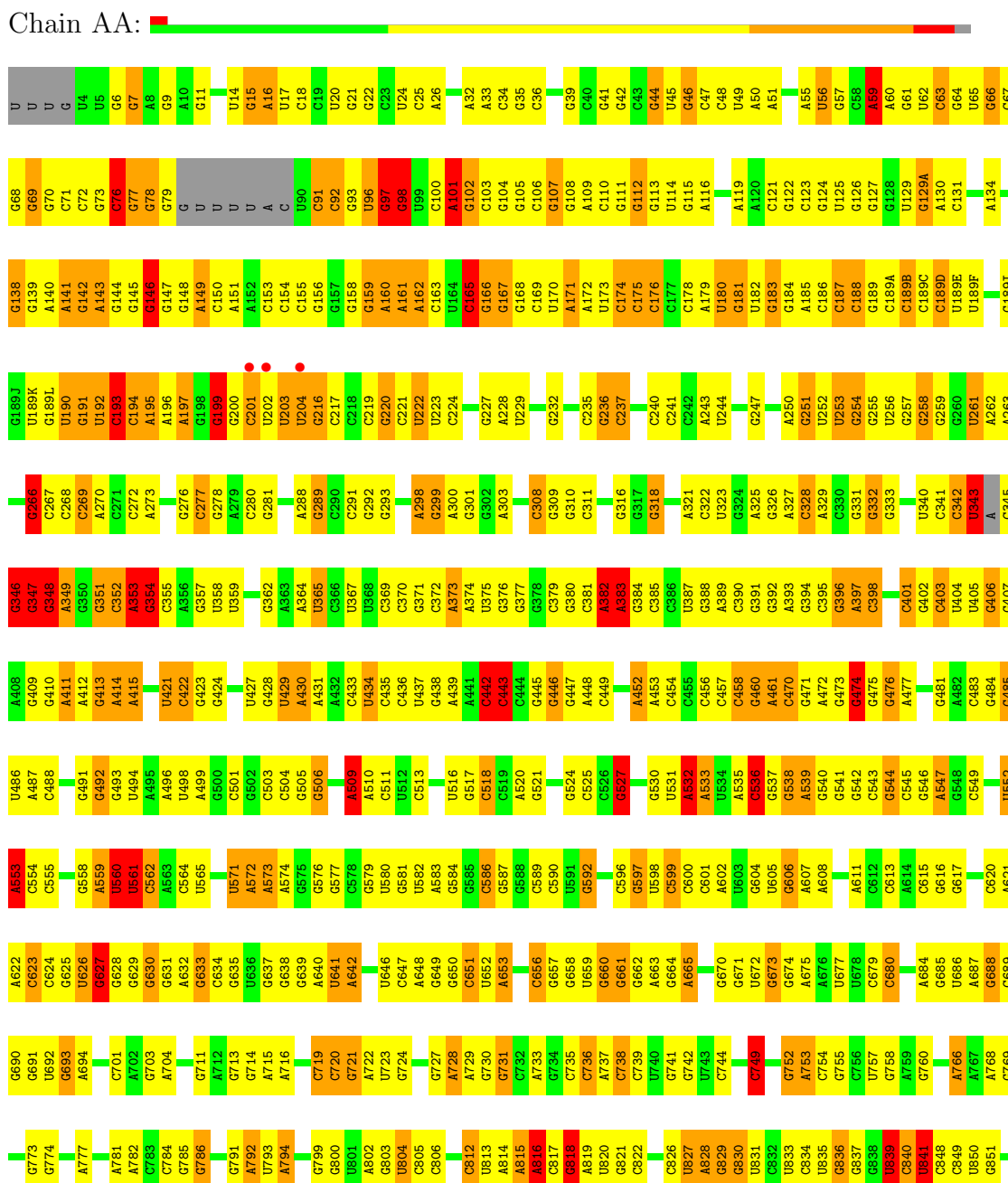
Continued from previous page...

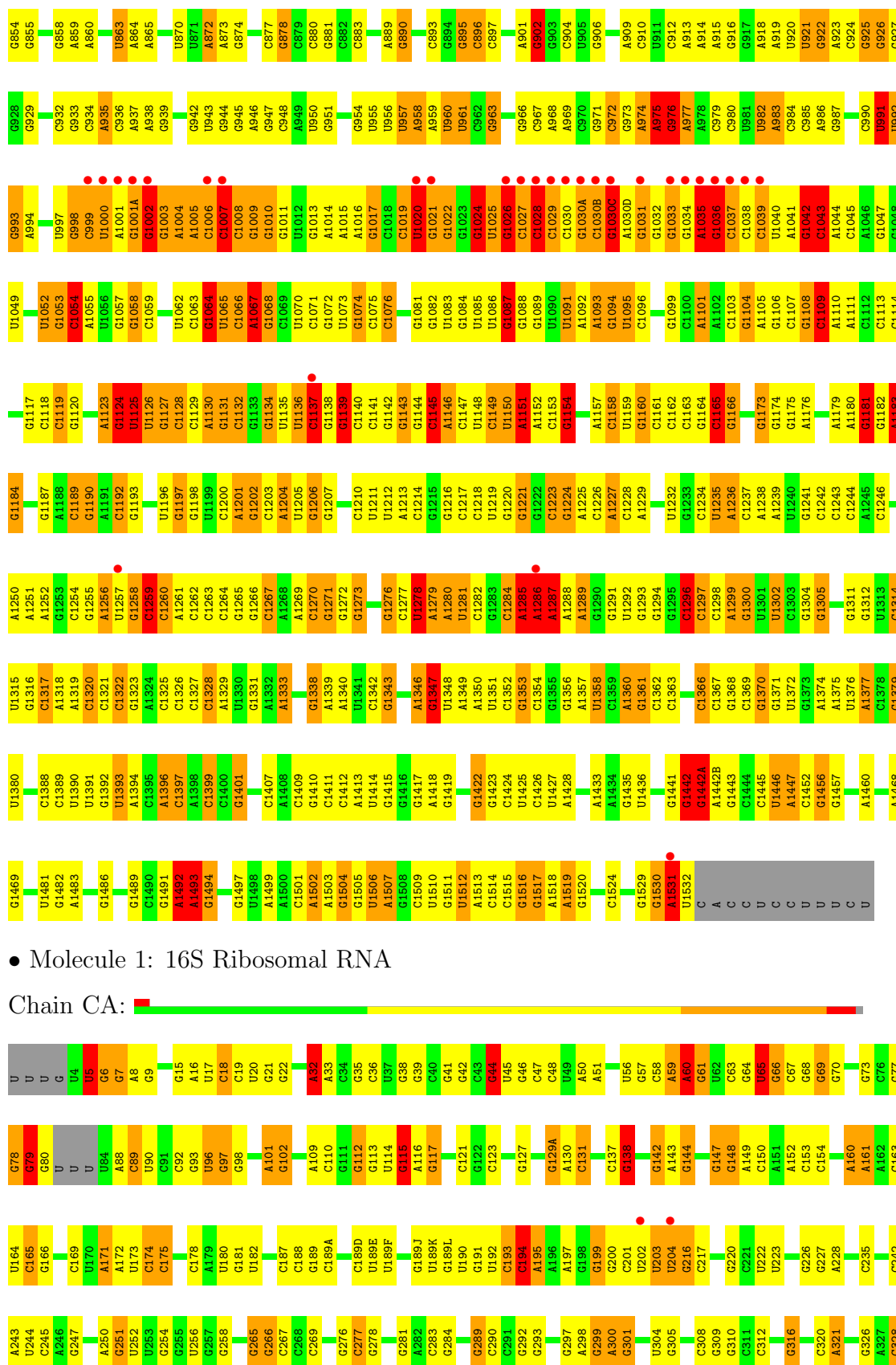
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	DA	906	Total 906	O 906	0	0
61	DB	7	Total 7	O 7	0	0
61	DD	10	Total 10	O 10	0	0
61	DE	11	Total 11	O 11	0	0
61	DF	4	Total 4	O 4	0	0
61	DO	1	Total 1	O 1	0	0
61	DP	14	Total 14	O 14	0	0
61	DQ	3	Total 3	O 3	0	0
61	DR	1	Total 1	O 1	0	0
61	DU	4	Total 4	O 4	0	0
61	DV	1	Total 1	O 1	0	0
61	DX	2	Total 2	O 2	0	0
61	DY	1	Total 1	O 1	0	0
61	D0	3	Total 3	O 3	0	0
61	D1	1	Total 1	O 1	0	0
61	D3	1	Total 1	O 1	0	0
61	D7	1	Total 1	O 1	0	0
61	D8	4	Total 4	O 4	0	0

3 Residue-property plots

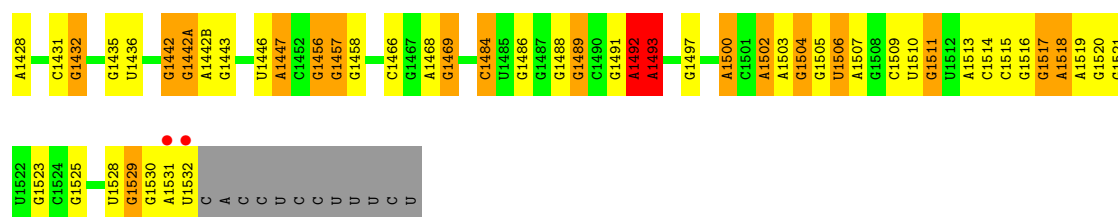
These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of errors displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according 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



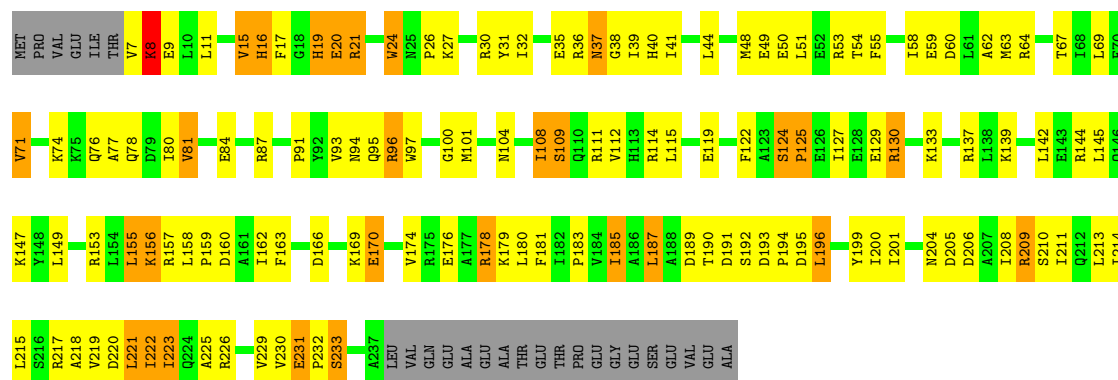


G1359	G1366	G1367	G1368	G1369	G1370	G1371	G1372	G1373	G1374	G1375	G1376	G1377	G1378	G1379	G1380	G1385	G1386	G1387	G1388	G1389	G1390	G1391	G1392	G1393	G1394	G1395	G1396	G1397	G1398	G1399	G1400	G1401	G1402	G1403	G1404	G1405	G1409	G1412	G1413	G1414	G1415	G1416	G1417	G1418	G1419	G1422	G1423	G1424	G1425	G1426	G1427	G1428	G1429	G1430	G1431	G1432	G1433	G1434	G1435	G1436	G1437	G1438	G1439	G1441	G1442	G1443	G1444	G1445	G1446	G1447	G1448	G1449	G1451	G1452	G1453	G1454	G1455	G1456	G1457	G1458	G1459	G1460	G1461	G1462	G1463	G1464	G1465	G1466	G1467	G1468	G1469	G1470	G1471	G1472	G1473	G1474	G1475	G1476	G1477	G1478	G1479	G1480	G1481	G1482	G1483	G1484	G1485	G1486	G1487	G1488	G1489	G1490	G1491	G1492	G1493	G1494	G1495	G1496	G1497	G1498	G1499	G1500	G1501	G1502	G1503	G1504	G1505	G1506	G1507	G1508	G1509	G1510	G1511	G1512	G1513	G1514	G1515	G1516	G1517	G1518	G1519	G1520	G1521	G1522	G1523	G1524	G1525	G1526	G1527	G1528	G1529	G1530	G1531	G1532	G1533	G1534	G1535	G1536	G1537	G1538	G1539	G1540	G1541	G1542	G1543	G1544	G1545	G1546	G1547	G1548	G1549	G1550	G1551	G1552	G1553	G1554	G1555	G1556	G1557	G1558	G1559	G1560	G1561	G1562	G1563	G1564	G1565	G1566	G1567	G1568	G1569	G1570	G1571	G1572	G1573	G1574	G1575	G1576	G1577	G1578	G1579	G1580	G1581	G1582	G1583	G1584	G1585	G1586	G1587	G1588	G1589	G1590	G1591	G1592	G1593	G1594	G1595	G1596	G1597	G1598	G1599	G1600	G1601	G1602	G1603	G1604	G1605	G1606	G1607	G1608	G1609	G1610	G1611	G1612	G1613	G1614	G1615	G1616	G1617	G1618	G1619	G1620	G1621	G1622	G1623	G1624	G1625	G1626	G1627	G1628	G1629	G1630	G1631	G1632	G1633	G1634	G1635	G1636	G1637	G1638	G1639	G1640	G1641	G1642	G1643	G1644	G1645	G1646	G1647	G1648	G1649	G1650	G1651	G1652	G1653	G1654	G1655	G1656	G1657	G1658	G1659	G1660	G1661	G1662	G1663	G1664	G1665	G1666	G1667	G1668	G1669	G1670	G1671	G1672	G1673	G1674	G1675	G1676	G1677	G1678	G1679	G1680	G1681	G1682	G1683	G1684	G1685	G1686	G1687	G1688	G1689	G1690	G1691	G1692	G1693	G1694	G1695	G1696	G1697	G1698	G1699	G1700	G1701	G1702	G1703	G1704	G1705	G1706	G1707	G1708	G1709	G1710	G1711	G1712	G1713	G1714	G1715	G1716	G1717	G1718	G1719	G1720	G1721	G1722	G1723	G1724	G1725	G1726	G1727	G1728	G1729	G1730	G1731	G1732	G1733	G1734	G1735	G1736	G1737	G1738	G1739	G1740	G1741	G1742	G1743	G1744	G1745	G1746	G1747	G1748	G1749	G1750	G1751	G1752	G1753	G1754	G1755	G1756	G1757	G1758	G1759	G1760	G1761	G1762	G1763	G1764	G1765	G1766	G1767	G1768	G1769	G1770	G1771	G1772	G1773	G1774	G1775	G1776	G1777	G1778	G1779	G1780	G1781	G1782	G1783	G1784	G1785	G1786	G1787	G1788	G1789	G1790	G1791	G1792	G1793	G1794	G1795	G1796	G1797	G1798	G1799	G1800	G1801	G1802	G1803	G1804	G1805	G1806	G1807	G1808	G1809	G1810	G1811	G1812	G1813	G1814	G1815	G1816	G1817	G1818	G1819	G1820	G1821	G1822	G1823	G1824	G1825	G1826	G1827	G1828	G1829	G1830	G1831	G1832	G1833	G1834	G1835	G1836	G1837	G1838	G1839	G1840	G1841	G1842	G1843	G1844	G1845	G1846	G1847	G1848	G1849	G1850	G1851	G1852	G1853	G1854	G1855	G1856	G1857	G1858	G1859	G1860	G1861	G1862	G1863	G1864	G1865	G1866	G1867	G1868	G1869	G1870	G1871	G1872	G1873	G1874	G1875	G1876	G1877	G1878	G1879	G1880	G1881	G1882	G1883	G1884	G1885	G1886	G1887	G1888	G1889	G1890	G1891	G1892	G1893	G1894	G1895	G1896	G1897	G1898	G1899	G1900	G1901	G1902	G1903	G1904	G1905	G1906	G1907	G1908	G1909	G1910	G1911	G1912	G1913	G1914	G1915	G1916	G1917	G1918	G1919	G1920	G1921	G1922	G1923	G1924	G1925	G1926	G1927	G1928	G1929	G1930	G1931	G1932	G1933	G1934	G1935	G1936	G1937	G1938	G1939	G1940	G1941	G1942	G1943	G1944	G1945	G1946	G1947	G1948	G1949	G1950	G1951	G1952	G1953	G1954	G1955	G1956	G1957	G1958	G1959	G1960	G1961	G1962	G1963	G1964	G1965	G1966	G1967	G1968	G1969	G1970	G1971	G1972	G1973	G1974	G1975	G1976	G1977	G1978	G1979	G1980	G1981	G1982	G1983	G1984	G1985	G1986	G1987	G1988	G1989	G1990	G1991	G1992	G1993	G1994	G1995	G1996	G1997	G1998	G1999	G2000	G2001	G2002	G2003	G2004	G2005	G2006	G2007	G2008	G2009	G2010	G2011	G2012	G2013	G2014	G2015	G2016	G2017	G2018	G2019	G2020	G2021	G2022	G2023	G2024	G2025	G2026	G2027	G2028	G2029	G2030	G2031	G2032	G2033	G2034	G2035	G2036	G2037	G2038	G2039	G2040	G2041	G2042	G2043	G2044	G2045	G2046	G2047	G2048	G2049	G2050	G2051	G2052	G2053	G2054	G2055	G2056	G2057	G2058	G2059	G2060	G2061	G2062	G2063	G2064	G2065	G2066	G2067	G2068	G2069	G2070	G2071	G2072	G2073	G2074	G2075	G2076	G2077	G2078	G2079	G2080	G2081	G2082	G2083	G2084	G2085	G2086	G2087	G2088	G2089	G2090	G2091	G2092	G2093	G2094	G2095	G2096	G2097	G2098	G2099	G2100	G2101	G2102	G2103	G2104	G2105	G2106	G2107	G2108	G2109	G2110	G2111	G2112	G2113	G2114	G2115	G2116	G2117	G2118	G2119	G2120	G2121	G2122	G2123	G2124	G2125	G2126	G2127	G2128	G2129	G2130	G2131	G2132	G2133	G2134	G2135	G2136	G2137	G2138	G2139	G2140	G2141	G2142	G2143	G2144	G2145	G2146	G2147	G2148	G2149	G2150	G2151	G2152	G2153	G2154	G2155	G2156	G2157	G2158	G2159	G2160	G2161	G2162	G2163	G2164	G2165	G2166	G2167	G2168	G2169	G2170	G2171	G2172	G2173	G2174	G2175	G2176	G2177	G2178	G2179	G2180	G2181	G2182	G2183	G2184	G2185	G2186	G2187	G2188	G2189	G2190	G2191	G2192	G2193	G2194	G2195	G2196	G2197	G2198	G2199	G2200	G2201	G2202	G2203	G2204	G2205	G2206	G2207	G2208	G2209	G2210	G2211	G2212	G2213	G2214	G2215	G2216	G2217	G2218	G2219	G2220	G2221	G2222	G2223	G2224	G2225	G2226	G2227	G2228	G2229	G2230	G2231	G2232	G2233	G2234	G2235	G2236	G2237	G2238	G2239	G2240	G2241	G2242	G2243	G2244	G2245	G2246	G2247	G2248	G2249	G2250	G2251	G2252	G2253	G2254	G2255	G2256	G2257	G2258	G2259	G2260	G2261	G2262	G2263	G2264	G2265	G2266	G2267	G2268	G2269	G2270	G2271	G2272	G2273	G2274	G2275	G2276	G2277	G2278	G2279	G2280	G2281	G2282	G2283	G2284	G2285	G2286	G2287	G2288	G2289	G2290	G2291	G2292	G2293	G2294	G2295	G2296	G2297	G2298	G2299	G2300	G2301	G2302	G2303	G2304	G2305	G2306	G2307	G2308	G2309	G2310	G2311	G2312	G2313	G2314	G2315	G2316	G2317	G2318	G2319	G2320	G2321	G2322	G2323	G2324	G2325	G2326	G2327	G2328	G2329	G2330	G2331	G2332	G2333	G2334	G2335	G2336	G2337	G2338	G2339	G2340	G2341	G2342	G2343	G2344	G2345	G2346	G2347	G2348	G2349	G2350	G2351	G2352	G2353	G2354	G2355	G2356	G2357	G2358	G2359	G2360	G2361	G2362	G2363	G2364	G2365	G2366	G2367	G2368	G2369	G2370	G2371	G2372	G2373	G2374	G2375	G2376	G2377	G2378	G2379	G2380	G2381	G2382	G2383	G2384	G2385	G2386	G2387	G2388	G2389	G2390	G2391	G2392	G2393	G2394	G2395	G2396	G2397	G2398	G2399	G2400
-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------



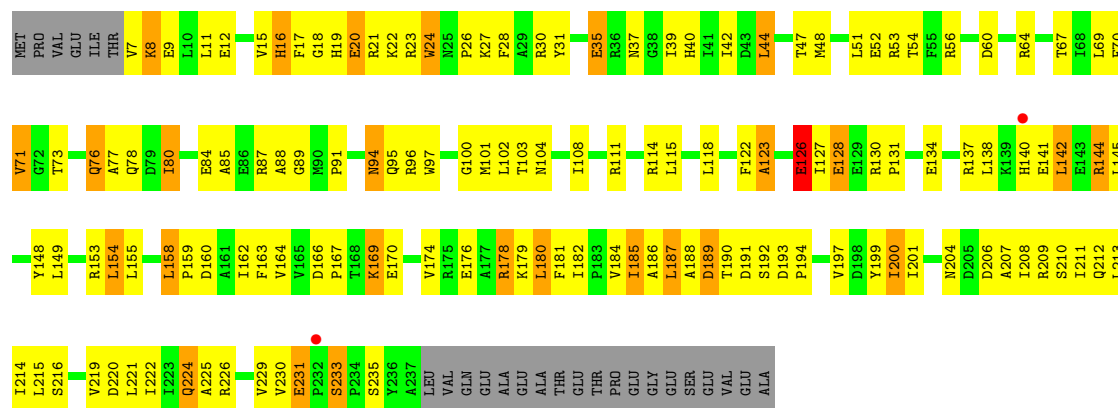
• Molecule 2: 30S Ribosomal Protein S2

Chain AB:



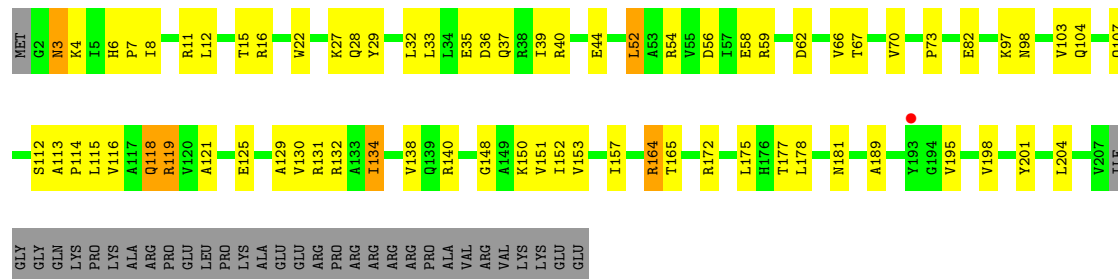
• Molecule 2: 30S Ribosomal Protein S2

Chain CB:



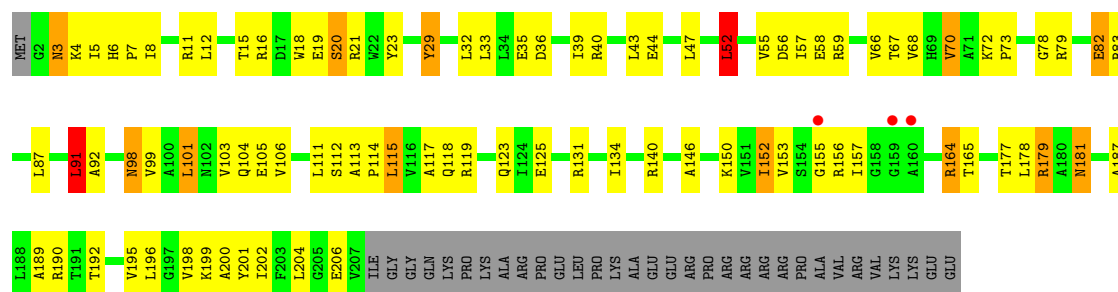
• Molecule 3: 30S Ribosomal Protein S3

Chain AC:



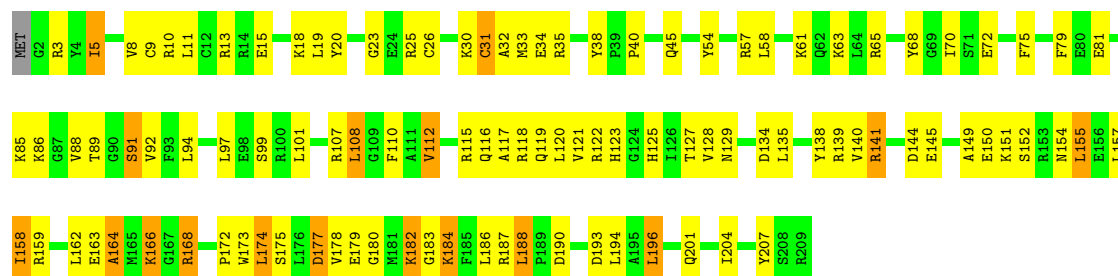
• Molecule 3: 30S Ribosomal Protein S3

Chain CC:



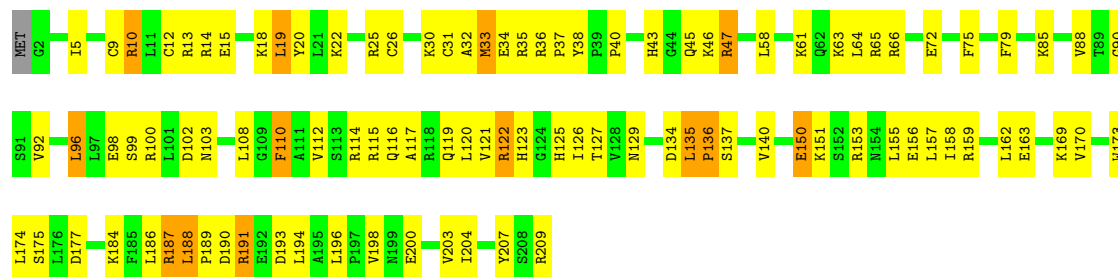
- Molecule 4: 30S Ribosomal Protein S4

Chain AD:



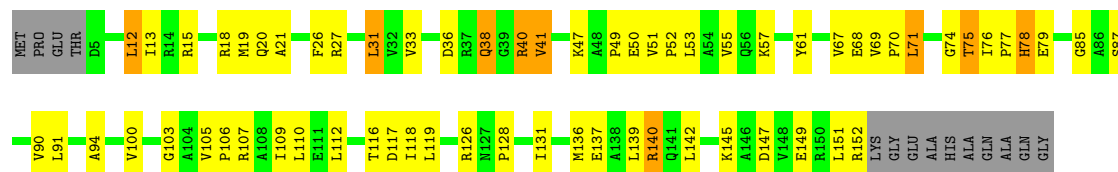
- Molecule 4: 30S Ribosomal Protein S4

Chain CD:



- Molecule 5: 30S Ribosomal Protein S5

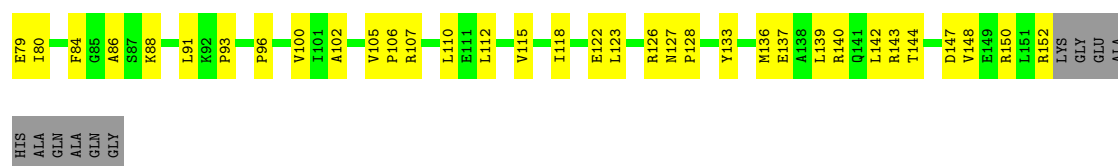
Chain AE:



- Molecule 5: 30S Ribosomal Protein S5

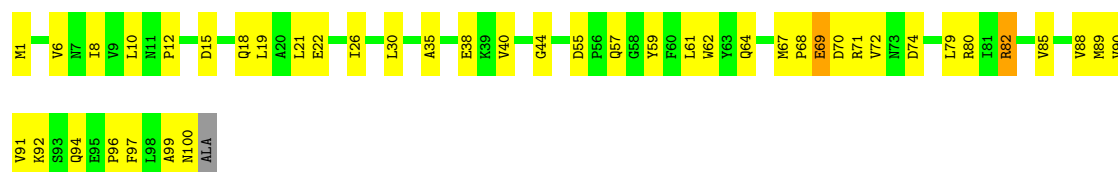
Chain CE:





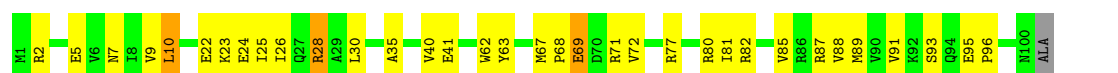
- Molecule 6: 30S Ribosomal Protein S6

Chain AF:



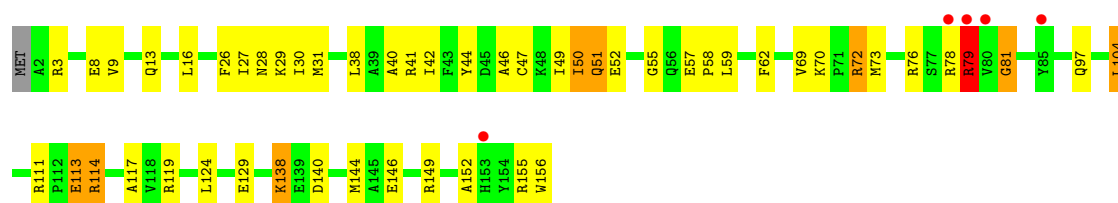
- Molecule 6: 30S Ribosomal Protein S6

Chain CF:



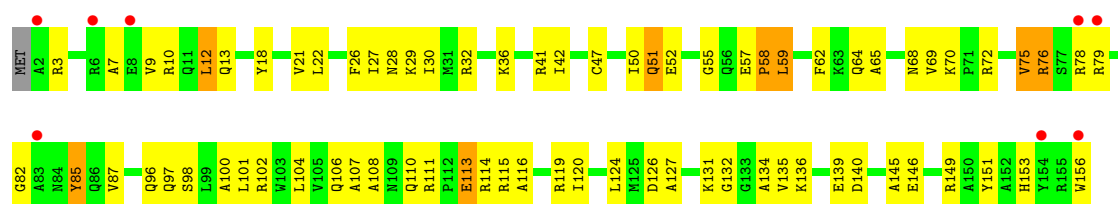
- Molecule 7: 30S Ribosomal Protein S7

Chain AG:



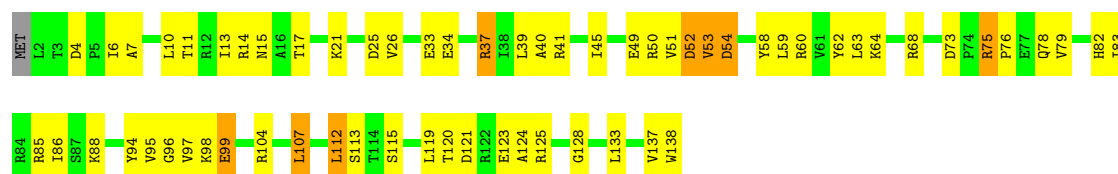
- Molecule 7: 30S Ribosomal Protein S7

Chain CG:



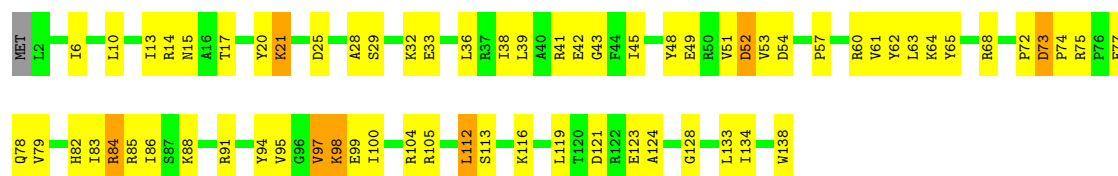
- Molecule 8: 30S Ribosomal Protein S8

Chain AH:



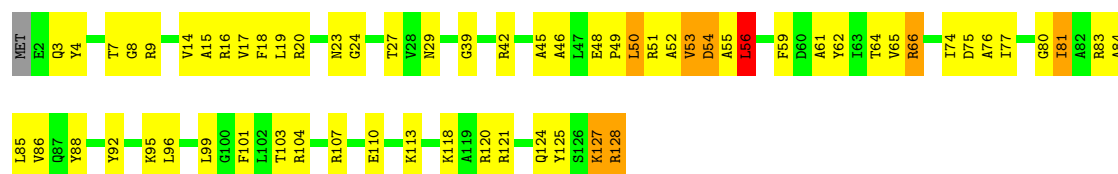
- Molecule 8: 30S Ribosomal Protein S8

Chain CH:



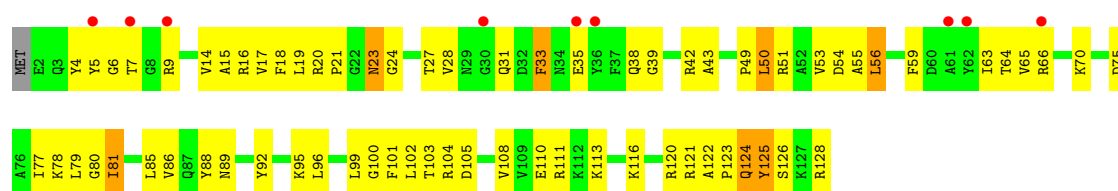
- Molecule 9: 30S Ribosomal Protein S9

Chain AI:



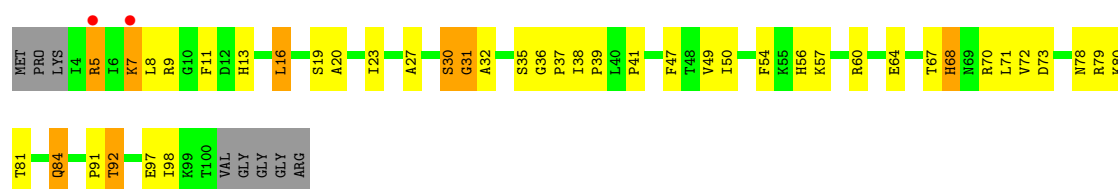
- Molecule 9: 30S Ribosomal Protein S9

Chain CI:



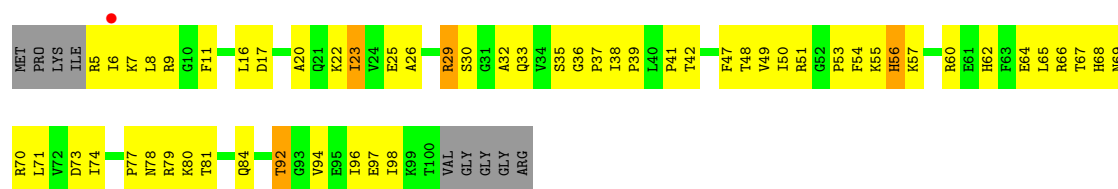
- Molecule 10: 30S Ribosomal Protein S10

Chain AJ:



- Molecule 10: 30S Ribosomal Protein S10

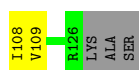
Chain CJ:



- Molecule 11: 30S Ribosomal Protein S11

Chain AK:





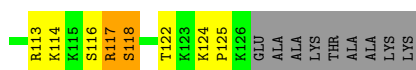
• Molecule 11: 30S Ribosomal Protein S11

Chain CK:



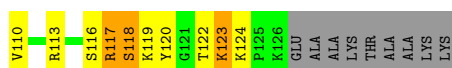
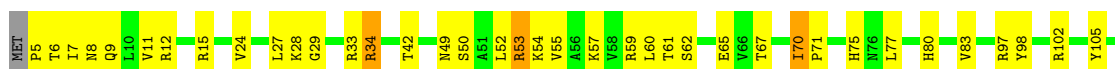
• Molecule 12: 30S Ribosomal Protein S12

Chain AL:



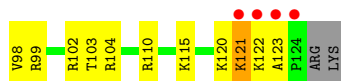
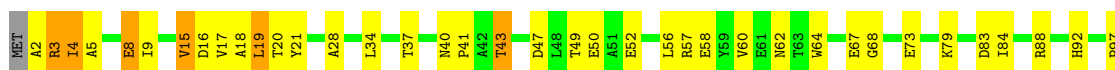
• Molecule 12: 30S Ribosomal Protein S12

Chain CL:



• Molecule 13: 30S Ribosomal Protein S13

Chain AM:



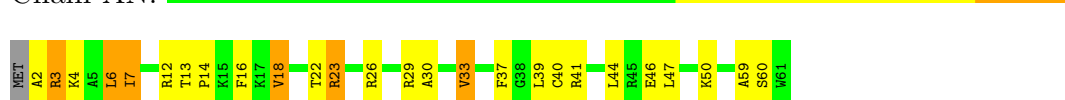
• Molecule 13: 30S Ribosomal Protein S13

Chain CM:



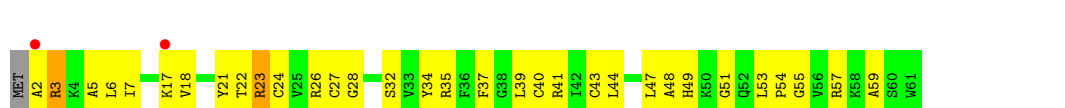
• Molecule 14: 30S Ribosomal Protein S14

Chain AN:



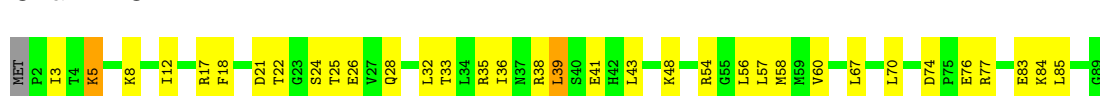
- Molecule 14: 30S Ribosomal Protein S14

Chain CN:



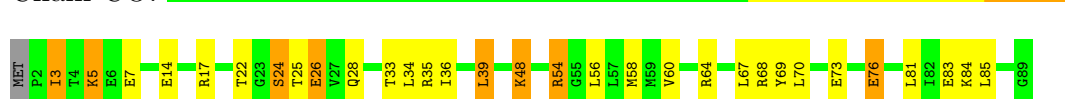
- Molecule 15: 30S Ribosomal Protein S15

Chain AO:



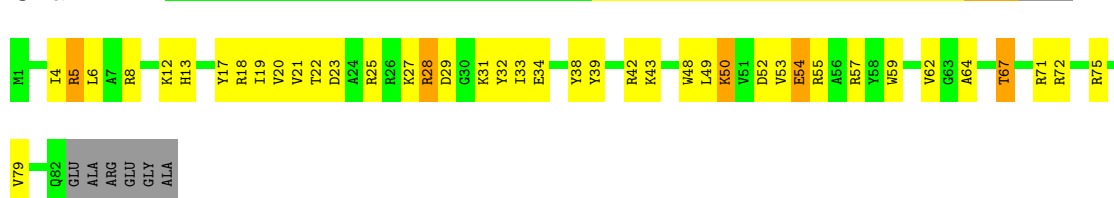
- Molecule 15: 30S Ribosomal Protein S15

Chain CO:



- Molecule 16: 30S Ribosomal Protein S16

Chain AP:



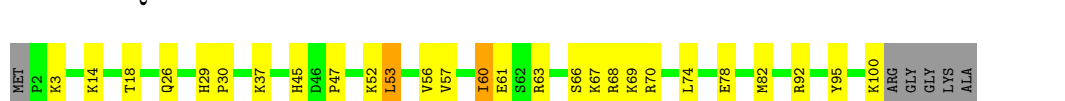
- Molecule 16: 30S Ribosomal Protein S16

Chain CP:



- Molecule 17: 30S Ribosomal Protein S17

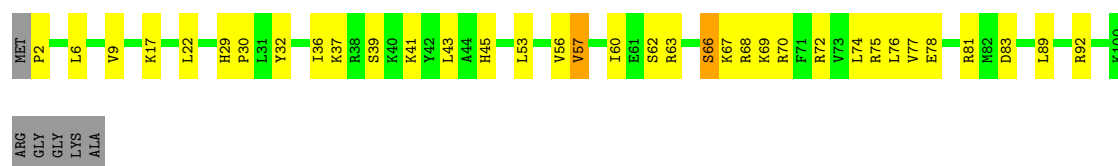
Chain AQ:



- Molecule 17: 30S Ribosomal Protein S17

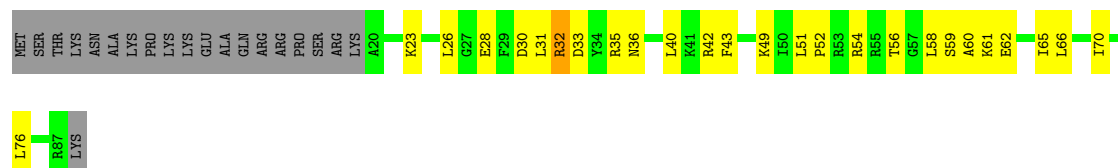
Chain CQ:





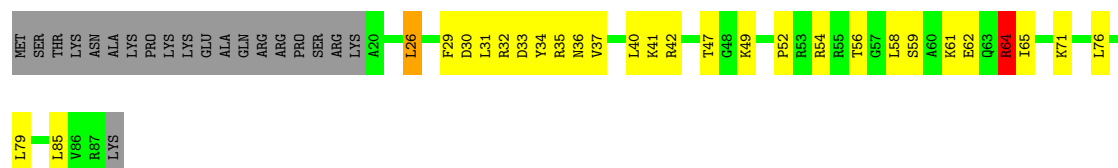
• Molecule 18: 30S Ribosomal Protein S18

Chain AR:



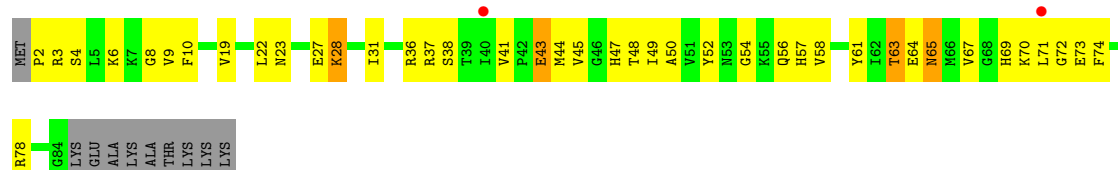
• Molecule 18: 30S Ribosomal Protein S18

Chain CR:



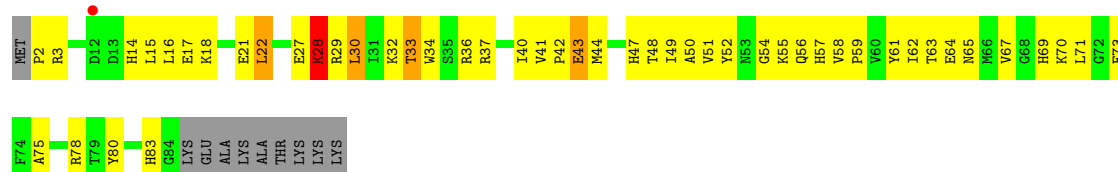
• Molecule 19: 30S Ribosomal Protein S19

Chain AS:



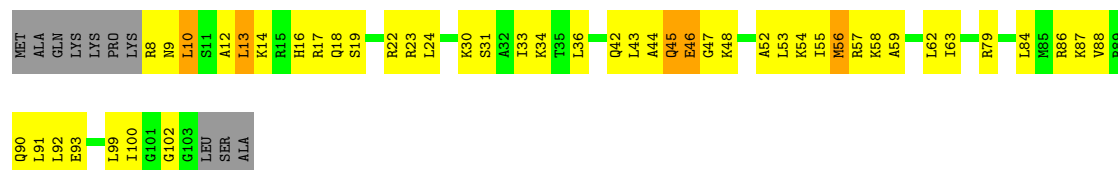
• Molecule 19: 30S Ribosomal Protein S19

Chain CS:



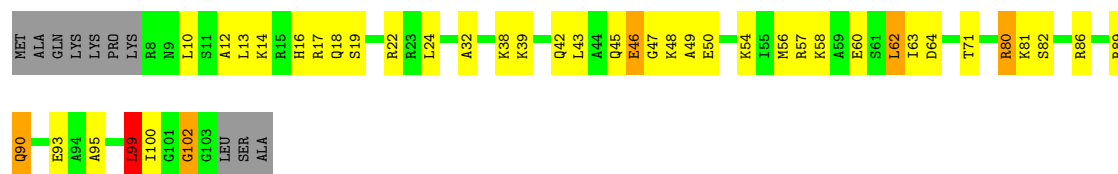
• Molecule 20: 30S Ribosomal Protein S20

Chain AT:



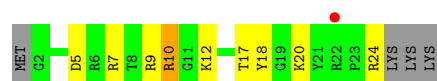
- Molecule 20: 30S Ribosomal Protein S20

Chain CT:



- Molecule 21: 30S Ribosomal Protein THX

Chain AU:



- Molecule 21: 30S Ribosomal Protein THX

Chain CU:



- Molecule 22: mRNA

Chain AV:



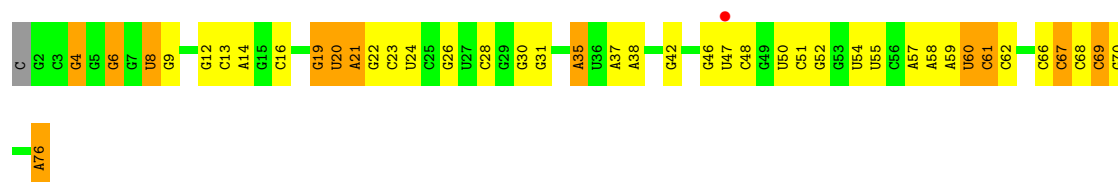
- Molecule 22: mRNA

Chain CV:



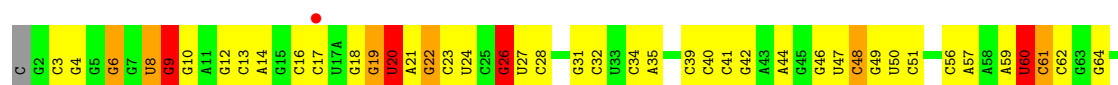
- Molecule 23: P-site tRNA

Chain AX:



- Molecule 23: P-site tRNA

Chain CX:





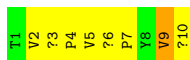
- Molecule 24: Dityromycin

Chain AW:



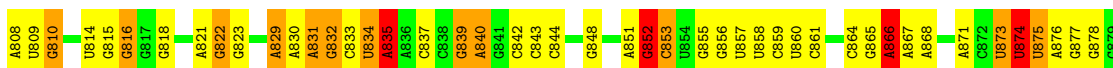
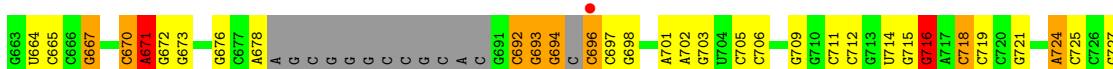
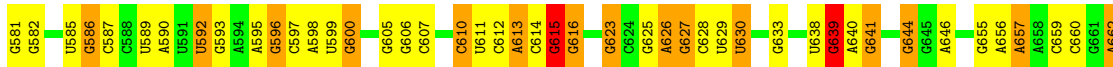
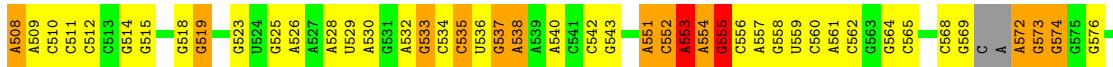
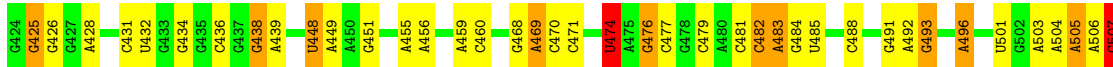
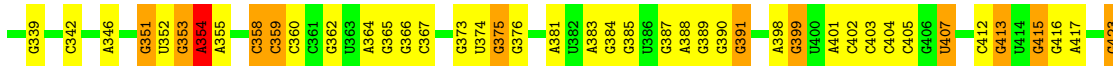
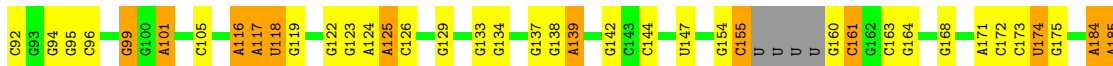
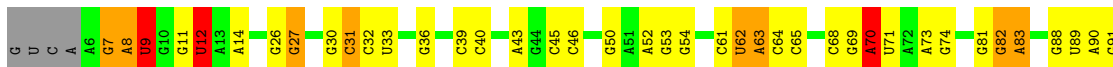
- Molecule 24: Dityromycin

Chain CW:

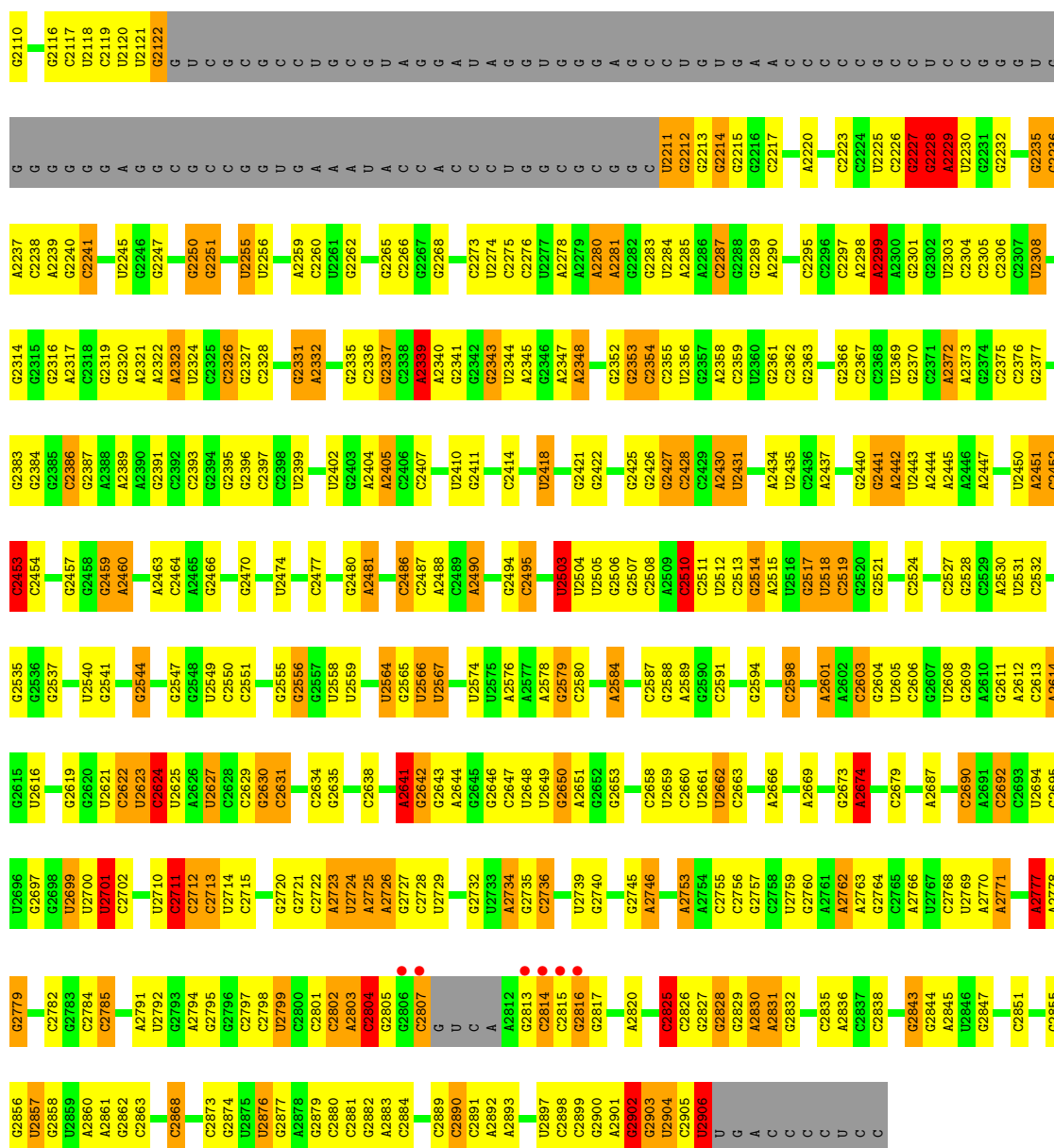


- Molecule 25: 23S Ribosomal RNA

Chain BA:

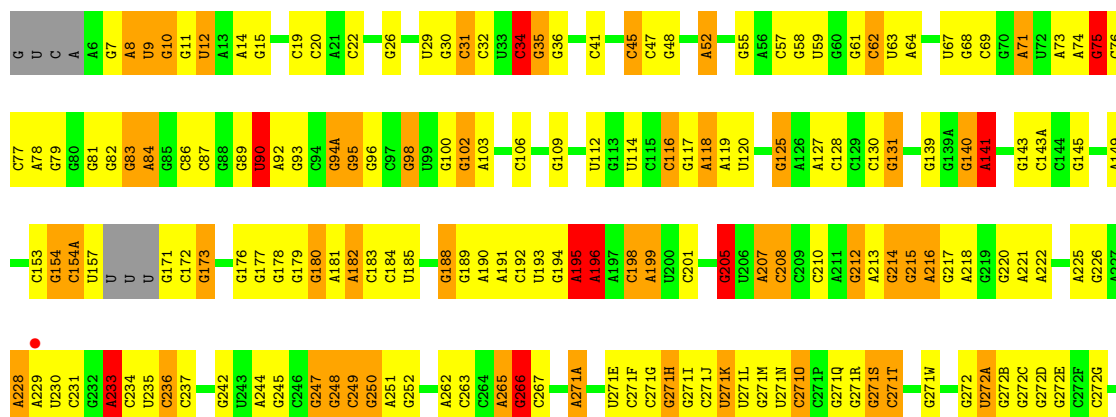


G2032	A1934	G1853	G1779	G1700	A1605	G1525	C1450	G1359	G1261	C1180	A	G1043	A955	U880
A2035	A1935	G1854	C1783	A1701	G1606	G1529	C1451	U1359	C1262	C1181	G	C1044	A956	G883
A2036	C1936	G1857	C1787	A1702	A1613	G1530	U1452	C1360	G1263	G1182	A	U1045	G962	C884
A2037	A1940	G1858	G1787	C1703	A1616	G1531	C1453	C1361	A1265	G1183	A	A1046	G965	C885
U2038	A1941	G1859	G1787	C1703	A1617	A1532	C1454	G1365	G1269	G1184	C	G1047	G965	U886
A2041	C1942	A1860	G1790	G1707	A1618	G1533	U1461	C1366	C1270	C1185	A	U1048	C987	C887
A2042	C1946	G1861	A1791	G1708	A1619	G1534	U1462	A1367	G1284	U1186	C	C1061	G973	G892
A2043	C2043	G1862	C1792	C1709	A1618	U1535	G1463	A1368	G1285	U1187	C	A1055	G974	C893
U2044	G1951	U1863	A1793	C1710	A1619	A1536	C1463	G1369	U1286	A1188	A	A1056	G977	U894
G2045	G1952	U1864	G1794	A1712	C1624	G1537	U1466	U1370	U1287	A1189	U	G1057	A978	G895
G2049	U1953	G1867	G1795	G1713	U1625	G1538	G1467	G1372	A1288	G1190	C	U1058	A986	A896
U2050	A1954	C1868	C1796	G1714	G1628	G1539	G1468	C1373	G1289	G1195	U	U1065	U882	G902
U2051	G1955	C1869	A1804	A1715	C1629	A1540	G1469	C1376	G1290	C1199	U	U1066	G983	C903
A2052	G1956	G1870	C1805	C1717	A1630	A1541	G1470	A1377	G1291	G984	U	A1067	G974	C904
A2053	G1957	G1871	U1806	U1718	C1631	G1542	G1471	G1378	G1296	U1201	A	A1068	U885	U905
G2054	A1958	G1872	G1807	C1719	A1632	C1548	G1472	U1378	G1297	A1202	A	U1069	U886	G906
A2055	A1959	U1878	U1808	U1720	A1633	U1549	G1473	A1382	C1298	G1283	A	U1070	U887	U907
C2058	C1963	A1879	U1809	G1721	C1633	C1550	C1474	A1382	A1299	C1204	G	G1071	G889	A908
U2062	C1964	U1880	U1810	G1722	C1638	C1551	G1475	G1385	G1302	G1210	A	U1072	G890	G909
A2064	G1971	U1881	C1812	A1723	G1640	C1552	U1477	U1386	G1306	U1211	G	U1073	A990	A910
C2065	G1972	C1883	G1725	G1725	G1647	A1554	U1478	G1390	C1307	U1212	U	A1074	G991	G911
G2070	U1977	G1889	C1733	C1733	C1650	A1556	A1480	C1391	G1307	U1213	C	A1075	G999	A817
G2071	U1985	A1890	U1734	U1735	C1651	A1557	C1483	C1397	G1310	G1214	G	U1076	C1000	U918
C2072	G1986	G1894	U1736	U1736	G1652	A1558	U1484	U1398	A1311	G1215	U	G1077	A1001	G922
A2073	G1987	U1895	A1737	C1653	C1657	U1560	A1485	G1401	G1312	G1216	A	A1078	U1003	C923
G2074	C1988	G1896	G1738	U1738	A1654	C1561	G1486	G1402	U1313	G1217	A	U1079	A1004	G923
G2075	A1988	A1897	U1739	U1740	A1655	G1565	G1487	G1403	A1314	G1218	U	U1080	A1005	G923
A2076	C1989	C1899	U1741	C1657	C1657	U1566	G1488	A1405	A1315	U1219	A	G1085	C1006	G826
C2077	G1990	G1900	G1742	G1742	G1657	U1567	G1489	G1406	C1316	U1220	G	C1086	G1007	G827
G2078	A1991	C1901	G1743	G1743	G1658	U1568	G1490	A1406	G1317	G1221	C	U1087	U1008	G928
A2080	C1992	G1902	G1744	G1744	G1659	U1569	A1491	U1406	U1318	A1222	U	G1088	C1009	G929
A2081	A1993	G1903	A1745	A1745	A1660	G1573	G1494	G1410	A1319	C1223	A	C1089	G1010	G930
A2082	U1999	G1904	G1746	G1746	C1663	A1574	G1495	A1411	A1321	G1224	C	G1090	G1011	C931
G2083	A2000	A1911	A1747	A1747	A1664	G1575	A1496	G1414	A1322	C1225	U	A1091	G1012	C932
A2084	C2001	G1912	G1748	G1748	G1665	A1576	G1497	G1415	G1325	C1230	G	A1092	G1013	C933
C2087	C2004	G1913	G1750	G1750	G1668	G1577	A1500	G1416	G1326	G1231	A	G1093	G1014	A934
C2088	A2008	C1914	C1755	U1755	A1679	C1579	C1506	U1418	U1334	G1232	U	C1094	G1015	C935
G2091	U2013	G1915	U1756	U1756	G1680	G	A1507	A1419	C1335	U1233	C	C1095	G1016	G936
A2093	G2014	G1916	C1757	C1757	G1683	U	A1507	G1420	C1337	A1234	A	A1096	G1017	A937
G2094	U2015	G1917	G1768	G1768	C1687	C	G1511	C1421	U1338	G1237	G	G1097	G1018	G938
U2101	G1925	A1843	A1767	A1767	U1686	G1582	G1512	G1422	C1339	G1240	A	C1098	G1019	C939
G2102	G1926	G1844	U1769	U1769	C1687	G1585	G1513	U1418	C1340	G1241	G	C	U941	U940
C2103	A1845	G1845	A1770	A1770	U1688	G1586	C1514	A1419	C1336	G1242	A	G	U942	A942
A2104	G1927	G1846	G1771	G1771	G1689	U1587	A1425	G1422	C1337	U1243	G	G	A943	C943
G2105	A2023	G1928	C1772	C1772	U1588	U1587	C1515	G1426	C1343	U1244	A	A	A944	C944
C2028	G2024	G1929	G1775	G1775	G1691	A1589	A1516	A1430	U1346	C1245	G	G	A945	A945
U2108	U2108	C1930	G1776	G1776	G1696	A1591	A1518	G1431	A1347	C1246	U	U	A946	A946
G2109	G2109	A1850	G1777	G1777	G1697	A1592	C1522	U1440	G1348	U1247	G	G	A947	A947
		U1933	G1778	G1778	G1698	A1593	U1522	U1442	G1349	C1248	U	U	A948	A948
					A1699				G1355	A1249	G	G	A949	A949
									U1256	A1255	U	U	A950	A950
													A951	U951
													A952	G952
													A953	U953
													A954	C954



• Molecule 25: 23S Ribosomal RNA

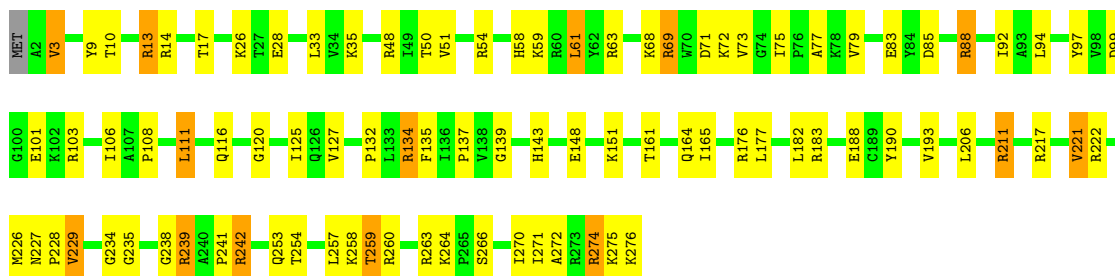
Chain DA:



C1315	A1247	A	A981	C915	G854	G775	G686	C841	A578	G506	A428	C343	G276
G1319	U1248	G	C982	G916	G855	G776	C687	G842	G579	A507	C435	G344	A276
C1320	U1249	U	A983	A917	C856	A777	U688	A643	C580	G508	C436	A345	C277
A1321	G1178	C	A984	A918	C857	A778	C692	A644	C581	C509	G437	A346	A278
C1322	C1179	G	C985	G919	U858	A782	C693	C845	G582	G512	G438	A347	C279
U1323	C1180	G	C986	G920	U859	A783	C698	A646	G583	G513	G440	G349	C280
G1324	C1181	C	G987	U922	U860	G785	C698	G647	C584	A514	G441	U350	U284
A1263	U1182	A	A990	C923	A861	G785	C698	G648	C585	G515	G442	U351	U285
U1265	G1183	C	C991	C923	G862	G785	C698	G649	C586	U519	G443	G352	U286
G1266	G1183	G	A926	A926	A863	A788	G704	A528	G587	G520	G444	U353	C287
C1329	G1186	G	G927	G927	C864	A789	A705	A529	C588	U520	G445	A357	C288
C1330	C1187	G	C985	G928	C865	C790	C708	A530	C589	G521	G446	U358	A289
A1331	U1188	G	A986	G928	C867	C791	U709	C522	C590	G522	G447	U358	G290
G1332	C1119	U	G997	G932	U868	G792	G710	C523	C591	G523	A447	G361	C291
C1333	G1120	C	C998	A933	U869	A793	G710	U524	C592	U524	U448	U362	C292
U1334	C1121	G	U999	U999	A870	C795	G710	G	C593	A526	U449	U362	C292
G1335	G1122	G	C936	C936	U871	C796	G717	G	C594	G527	G450	G363	G295
U1336	C1123	C	U937	U937	A872	C797	G717	C	C595	A528	A454	C363	C296
A1336	G1124	U	G938	G938	C873	C798	G720	C	C596	A529	C455	C363	C297
G1337	G1125	U	G939	G939	C874	G799	G720	C	C597	A530	C456	C363	C297
C1338	A1126	C	G940	G940	C875	G800	G723	C	C598	A531	C457	C364	C298
U1339	U1129	G	A941	A941	C876	G801	G724	A	C599	A532	C458	A300	A300
G1340	C1130	G	U942	U942	U877	G802	G725	C	C600	A533	C459	G370	G301
C1341	U1131	A	U943	U943	A878	A802	G726	C	C601	G533	A460	A371	C302
G1344	A1132	G	C944	G944	C879	G805	G726	C	C602	G534	C461	C371	U303
C1345	U1133	C	A945	A945	C880	C806	G730	G	C603	A536	C462	C375	G304
G1348	C1135	A	U946	U946	C881	C807	G731	G	C604	G537	C463	C376	G307
A1349	U1136	G	G947	G947	C882	C808	G732	C	C605	G538	U464	U384	G308
C1350	G1137	C	U948	U948	C883	G809	G733	C521	C606	G539	C465	C385	G309
C1351	U1138	C	C949	C949	C884	G810	A734	C522	C607	C540	A466	C386	A310
U1352	G1139	A	G950	G950	C885	C812	A735	C523	C608	C541	C467	G386	A310
C1353	C1140	U	C951	C951	C886	U913	G736	C524	C609	C542	C468	C389	A311
A1354	U1141	C	G952	G952	C887	C814	G737	A654	C610	C543	C469	A390	G312
G1358	U1142	U	A953	A953	C888	C815	G738	C	C611	C544	A470	C391	G315
A1359	C1143	U	C954	C954	C889	C816	G739	G656	C612	C545	A471	C392	C316
C1360	A1143	U	G955	G955	C890	C817	U740	G615	C613	A	A472	C392	C316
A1360	G1144	U	C956	C956	C892	G818	G741	G616	C614	G549	U475	U395	C319
C1363	A1148	A	A957	A957	C893	A819	G742	C615	C615	G551	C	G396	A320
G1364	U1149	A	U958	U958	C894	C819	G743	C616	C616	G552	U478	C397	G321
A1365	C1150	G	A959	A959	C895	C825	U747	C617	C617	G553	A479	C398	A322
U1372	G1153	A	C961	C961	C896	C826	G748	C618	C618	C	G480	C399	G323
G1368	U1154	U	U962	U962	C897	U827	G748	C619	C619	G554	G481	U403	A324
G1369	G1154	C	U963	U963	C898	U828	A752	C620	C620	U557	A482	U403	G327
C1370	U1159	C	C964	C964	C899	A829	C753	C621	C621	C	A483	U405	U328
G1371	G1160	G	G965	G965	A900	C830	C754	C622	C622	C563	C484	U405	G329
U1372	C1161	U	U966	U966	C902	G831	C755	C623	C623	U566	C485	U405	G329
U1300	G1162	U	C967	C967	C903	G832	C755	C624	C624	C	C409	C409	A330
A1301	U1163	A	U968	U968	C904	C837	G760	C625	C625	A567	G489	C410	A331
C1305	G1164	U	C970	C970	U905	C838	A761	C626	C626	U568	G491	C411	A332
G1309	U1165	C	C971	C971	C906	C839	U762	C627	C627	C	A492	C412	A333
U1310	C1166	G	G972	G972	U907	C840	G763	C628	C628	G570	A493	C413	C334
G1311	U1167	C	A973	A973	C908	C841	C764	C629	C629	A571	G494	C414	C335
C1311	C1040	U	C974	C974	A909	U847	G765	C630	C630	A572	C500	C415	G338
U1312	G1042	C	C975	C975	A910	G848	G770	C631	C631	C574	G500	C416	U339
C1386	U1043	C	G976	G976	A911	A849	G770	C632	C632	C575	A503	C416	U339
G1387	G1171	C	C976	C976	C912	A852	U773	C633	C633	U576	U504	A422	A340
C1314	G1244	U	A	A	C914	G853	A774	C634	C634	G577	A505	U427	G342

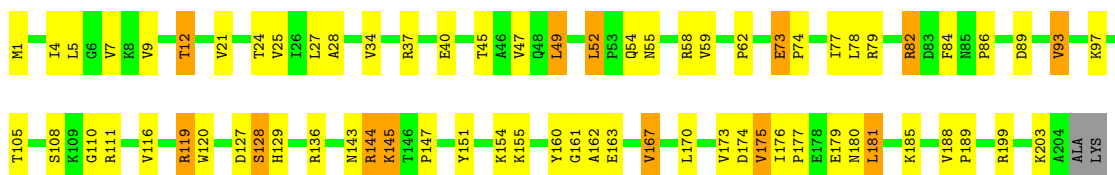






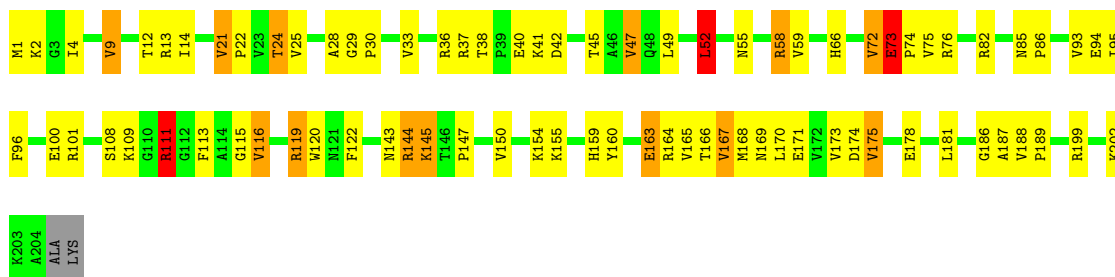
• Molecule 28: 50S Ribosomal Protein L3

Chain BE:



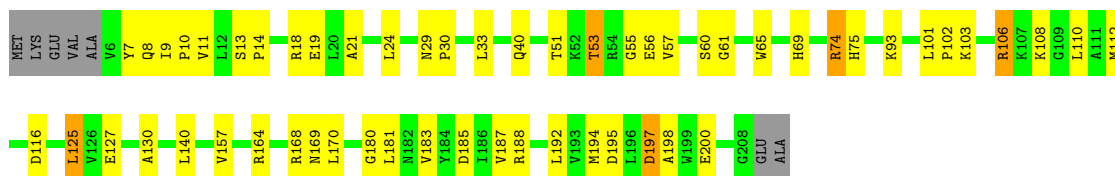
• Molecule 28: 50S Ribosomal Protein L3

Chain DE:



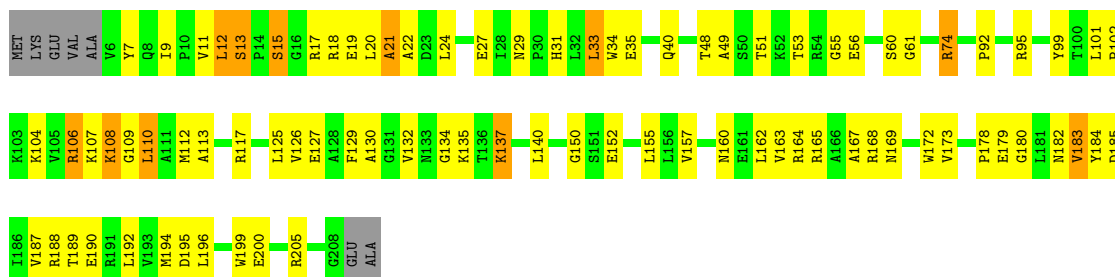
• Molecule 29: 50S Ribosomal Protein L4

Chain BF:



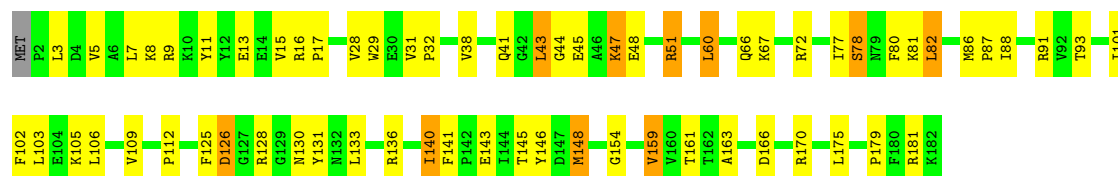
• Molecule 29: 50S Ribosomal Protein L4

Chain DF:



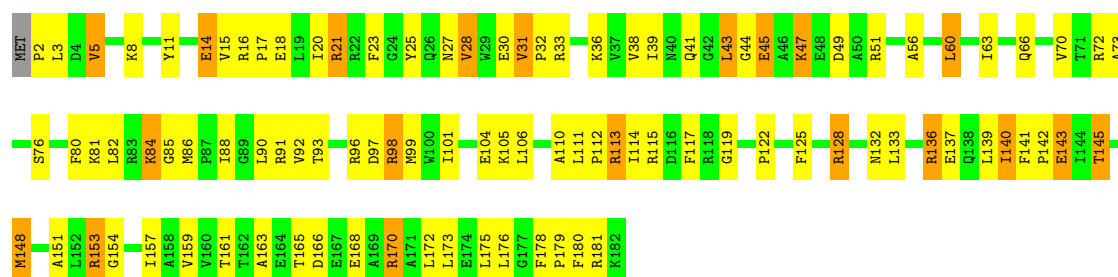
- Molecule 30: 50S Ribosomal Protein L5

Chain BG:



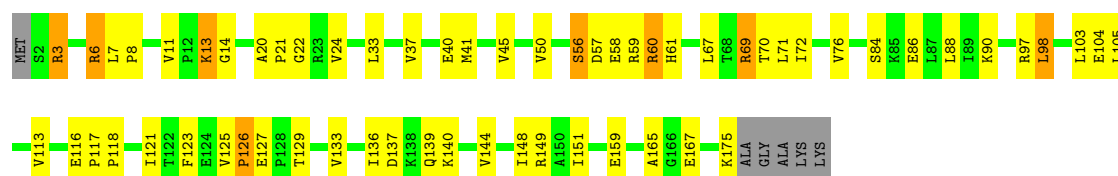
- Molecule 30: 50S Ribosomal Protein L5

Chain DG:



- Molecule 31: 50S Ribosomal Protein L6

Chain BH:



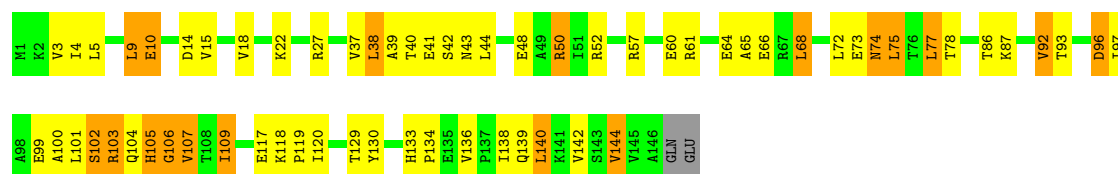
- Molecule 31: 50S Ribosomal Protein L6

Chain DH:



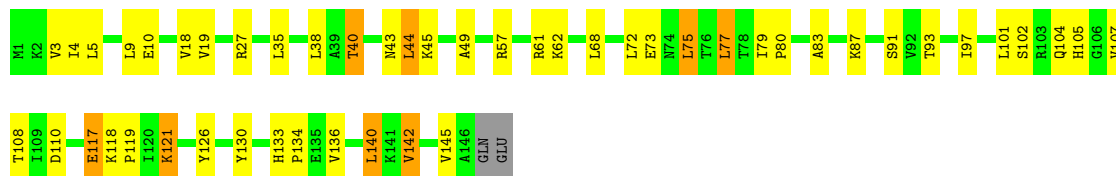
- Molecule 32: 50S Ribosomal Protein L9

Chain BI:



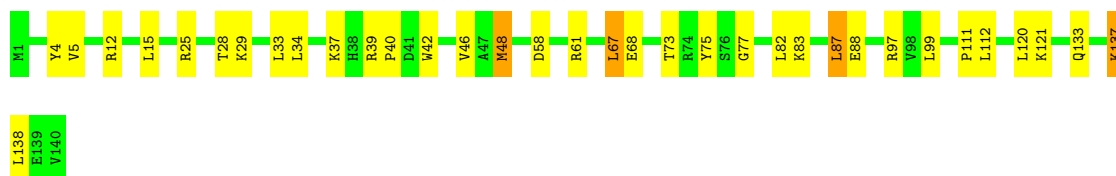
- Molecule 32: 50S Ribosomal Protein L9

Chain DI:



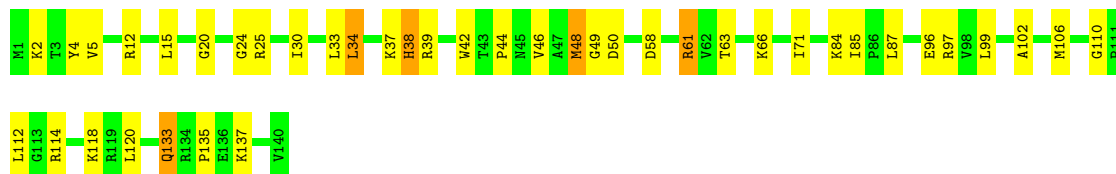
- Molecule 33: 50S Ribosomal Protein L13

Chain BN:



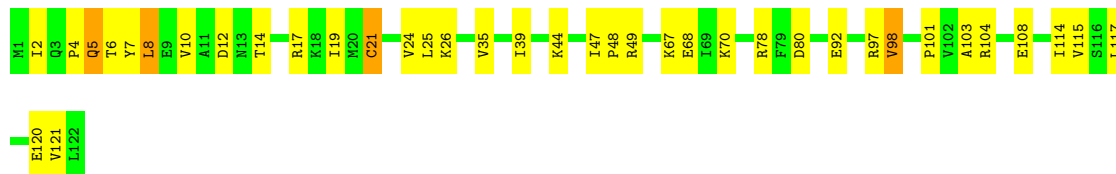
- Molecule 33: 50S Ribosomal Protein L13

Chain DN:



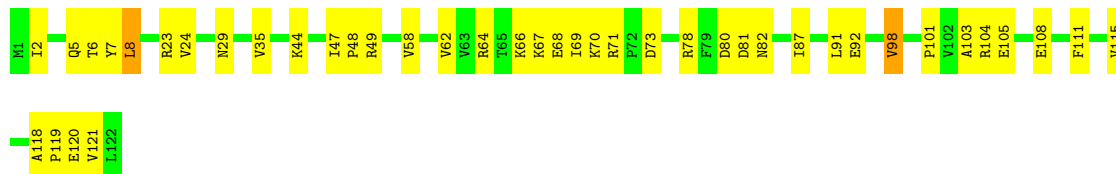
- Molecule 34: 50S Ribosomal Protein L14

Chain BO:



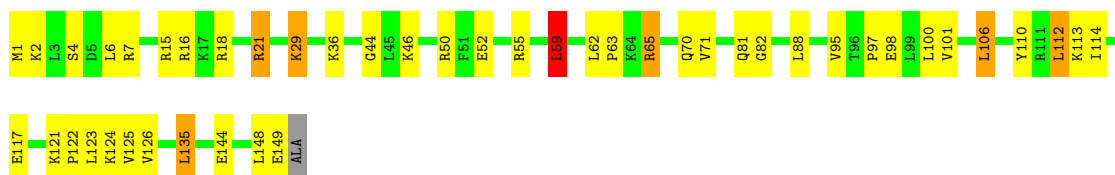
- Molecule 34: 50S Ribosomal Protein L14

Chain DO:



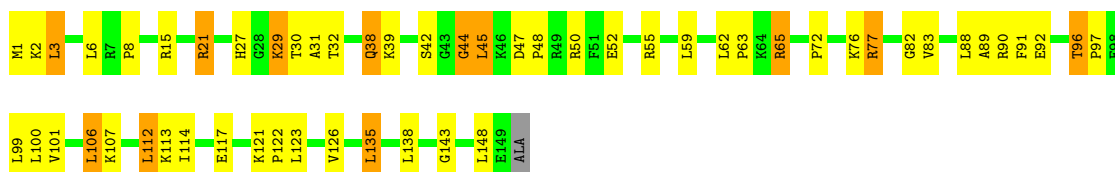
- Molecule 35: 50S Ribosomal Protein L15

Chain BP:



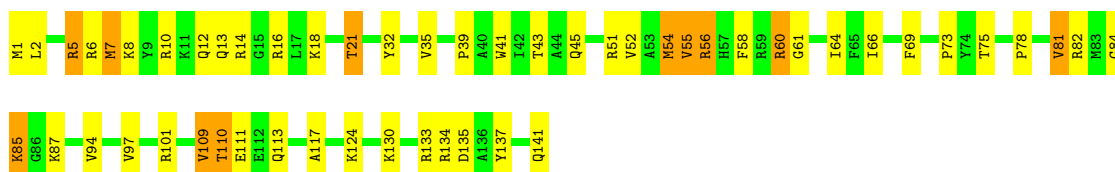
• Molecule 35: 50S Ribosomal Protein L15

Chain DP:



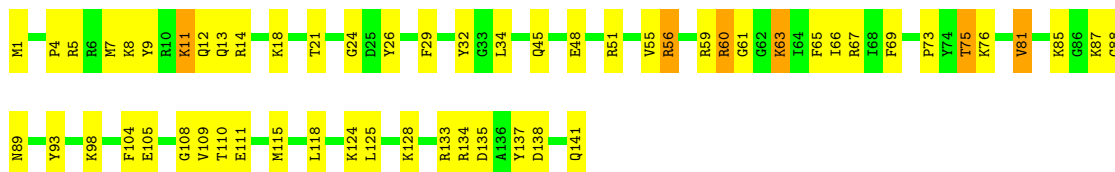
• Molecule 36: 50S Ribosomal Protein L16

Chain BQ:



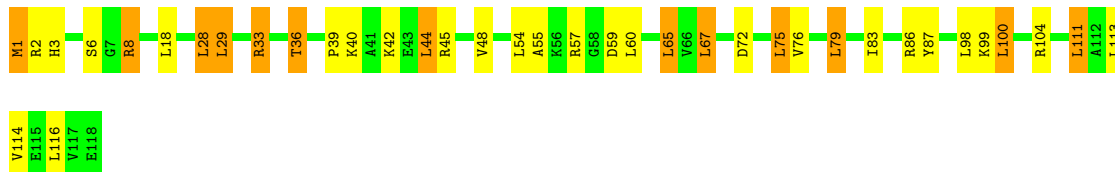
• Molecule 36: 50S Ribosomal Protein L16

Chain DQ:



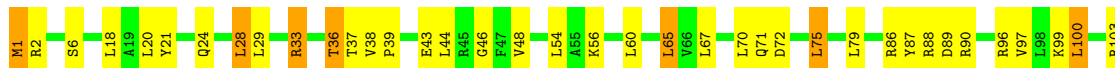
• Molecule 37: 50S Ribosomal Protein L17

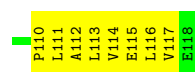
Chain BR:



• Molecule 37: 50S Ribosomal Protein L17

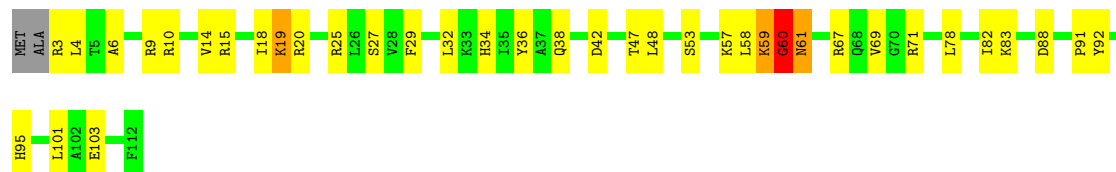
Chain DR:





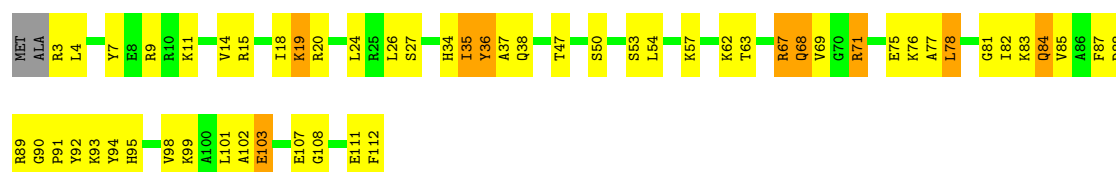
- Molecule 38: 50S Ribosomal Protein L18

Chain BS:



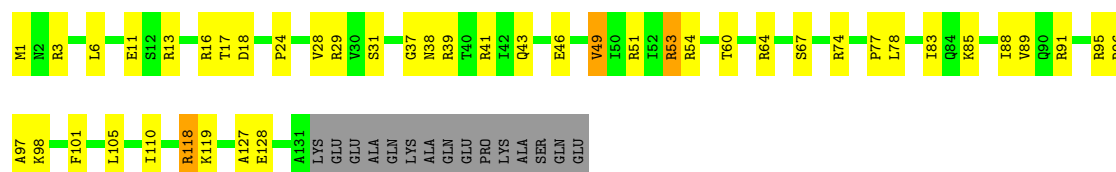
- Molecule 38: 50S Ribosomal Protein L18

Chain DS:



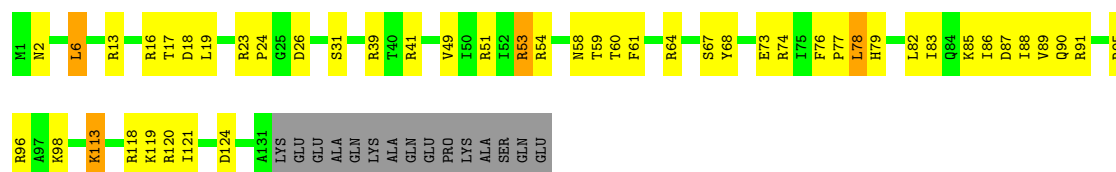
- Molecule 39: 50S Ribosomal Protein L19

Chain BT:



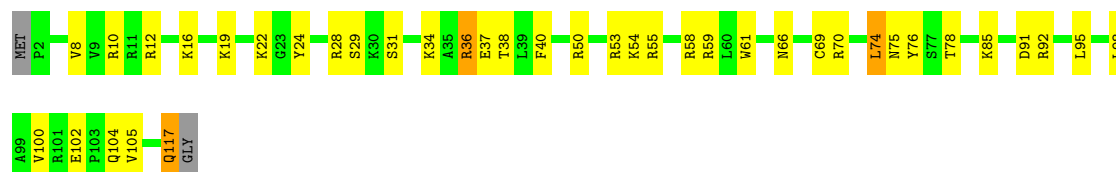
- Molecule 39: 50S Ribosomal Protein L19

Chain DT:



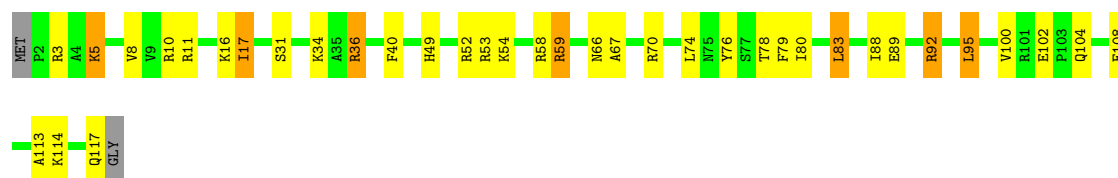
- Molecule 40: 50S Ribosomal Protein L20

Chain BU:



- Molecule 40: 50S Ribosomal Protein L20

Chain DU:



- Molecule 41: 50S Ribosomal Protein L21

Chain BV:



- Molecule 41: 50S Ribosomal Protein L21

Chain DV:



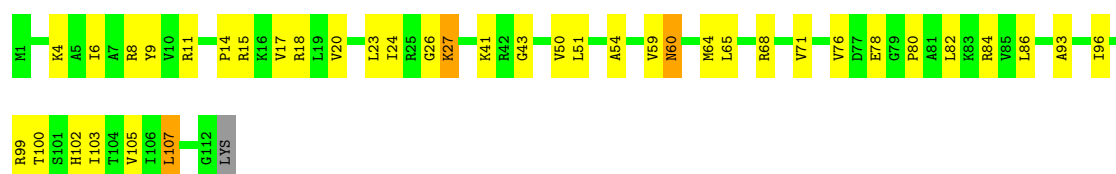
- Molecule 42: 50S Ribosomal Protein L22

Chain BW:



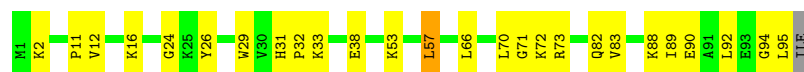
- Molecule 42: 50S Ribosomal Protein L22

Chain DW:



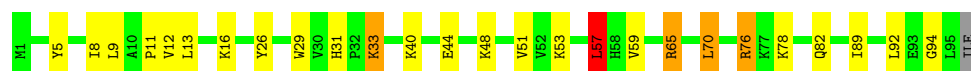
- Molecule 43: 50S Ribosomal Protein L23

Chain BX:



- Molecule 43: 50S Ribosomal Protein L23

Chain DX:



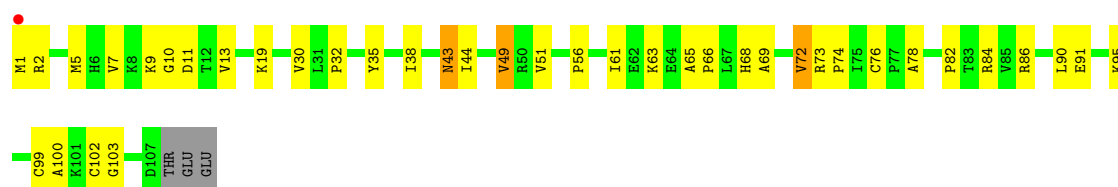
- Molecule 44: 50S Ribosomal Protein L24

Chain BY:



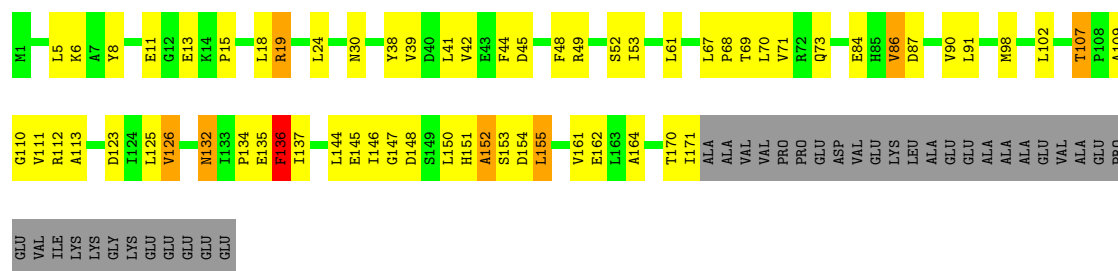
• Molecule 44: 50S Ribosomal Protein L24

Chain DY:



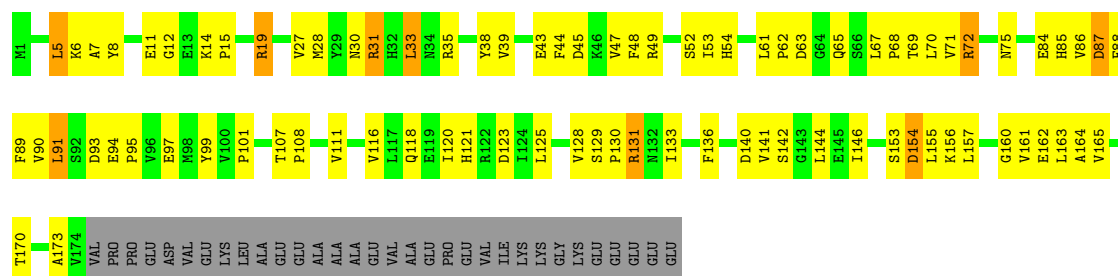
• Molecule 45: 50S Ribosomal Protein L25

Chain BZ:



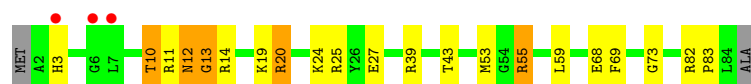
• Molecule 45: 50S Ribosomal Protein L25

Chain DZ:



• Molecule 46: 50S Ribosomal Protein L27

Chain B0:



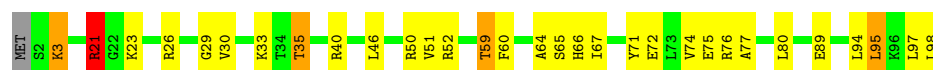
• Molecule 46: 50S Ribosomal Protein L27

Chain D0:



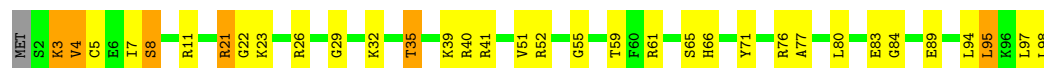
• Molecule 47: 50S Ribosomal Protein L28

Chain B1: 



- Molecule 47: 50S Ribosomal Protein L28

Chain D1: 



- Molecule 48: 50S Ribosomal Protein L29

Chain B2: 



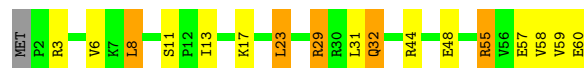
- Molecule 48: 50S Ribosomal Protein L29

Chain D2: 



- Molecule 49: 50S Ribosomal Protein L30

Chain B3: 



- Molecule 49: 50S Ribosomal Protein L30

Chain D3: 



- Molecule 50: 50S Ribosomal Protein L31

Chain B4: 



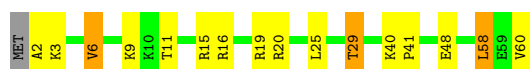
- Molecule 50: 50S Ribosomal Protein L31

Chain D4: 



- Molecule 51: 50S Ribosomal Protein L32

Chain B5: 



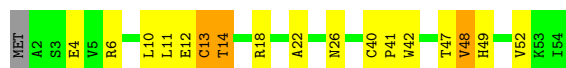
- Molecule 51: 50S Ribosomal Protein L32

Chain D5:



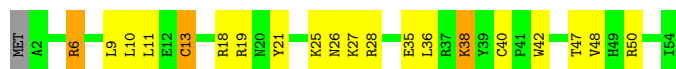
- Molecule 52: 50S Ribosomal Protein L33

Chain B6:



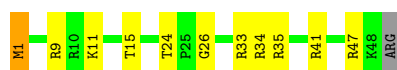
- Molecule 52: 50S Ribosomal Protein L33

Chain D6:



- Molecule 53: 50S Ribosomal Protein L34

Chain B7:



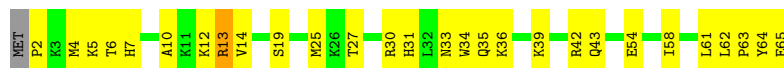
- Molecule 53: 50S Ribosomal Protein L34

Chain D7:



- Molecule 54: 50S Ribosomal Protein L35

Chain B8:



- Molecule 54: 50S Ribosomal Protein L35

Chain D8:



- Molecule 55: 50S Ribosomal Protein L36

Chain B9:



● Molecule 55: 50S Ribosomal Protein L36

Chain D9:



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	210.08Å 449.83Å 619.65Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	49.74 – 3.00 49.75 – 3.00	Depositor EDS
% Data completeness (in resolution range)	98.8 (49.74-3.00) 98.8 (49.75-3.00)	Depositor EDS
R_{merge}	0.20	Depositor
R_{sym}	0.24	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.26 (at 3.01Å)	Xtriage
Refinement program	PHENIX (phenix.refine: 1.8.2_1309)	Depositor
R, R_{free}	0.203 , 0.259 0.229 , 0.281	Depositor DCC
R_{free} test set	44205 reflections (3.87%)	DCC
Wilson B-factor (Å ²)	66.8	Xtriage
Anisotropy	0.228	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.29 , 36.8	EDS
Estimated twinning fraction	No twinning to report.	Xtriage
L-test for twinning	$\langle L \rangle = 0.46$, $\langle L^2 \rangle = 0.28$	Xtriage
Outliers	0 of 1143007 reflections	Xtriage
F_o, F_c correlation	0.93	EDS
Total number of atoms	286321	wwPDB-VP
Average B, all atoms (Å ²)	62.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.70% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: MG, K, 2QZ, ZN, 2QY, MVA, 004, FME, 2R3, SF4, 2R1

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	0.77	7/36038 (0.0%)	1.39	355/56244 (0.6%)
1	CA	0.76	13/36170 (0.0%)	1.43	365/56452 (0.6%)
2	AB	0.49	0/1881	0.77	0/2542
2	CB	0.56	0/1860	0.81	2/2518 (0.1%)
3	AC	0.48	0/1576	0.64	0/2130
3	CC	0.50	0/1566	0.72	2/2119 (0.1%)
4	AD	0.49	0/1689	0.76	1/2267 (0.0%)
4	CD	0.50	0/1704	0.71	0/2284
5	AE	0.47	0/1145	0.71	0/1543
5	CE	0.50	0/1149	0.76	0/1548
6	AF	0.48	0/819	0.69	0/1111
6	CF	0.53	0/829	0.76	0/1123
7	AG	0.48	0/1250	0.66	1/1679 (0.1%)
7	CG	0.50	0/1254	0.72	1/1683 (0.1%)
8	AH	0.46	0/1108	0.69	0/1494
8	CH	0.47	0/1108	0.71	0/1494
9	AI	0.47	0/1002	0.73	1/1346 (0.1%)
9	CI	0.56	0/997	0.75	2/1343 (0.1%)
10	AJ	0.47	0/722	0.67	0/982
10	CJ	0.53	0/727	0.69	0/988
11	AK	0.44	0/844	0.65	1/1145 (0.1%)
11	CK	0.46	0/848	0.67	0/1149
12	AL	0.50	0/946	0.73	0/1274
12	CL	0.52	0/946	0.74	0/1274
13	AM	0.48	0/969	0.68	0/1302
13	CM	0.48	0/961	0.66	0/1291
14	AN	0.48	0/501	0.71	0/664
14	CN	0.55	0/501	0.71	0/664
15	AO	0.49	0/739	0.76	0/985
15	CO	0.47	0/739	0.70	0/985
16	AP	0.47	0/697	0.73	0/939
16	CP	0.49	0/693	0.70	0/935

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	AQ	0.51	0/836	0.68	0/1117
17	CQ	0.51	0/836	0.70	0/1117
18	AR	0.48	0/560	0.73	0/746
18	CR	0.50	0/560	0.75	1/746 (0.1%)
19	AS	0.47	0/667	0.66	0/900
19	CS	0.50	0/661	0.80	1/893 (0.1%)
20	AT	0.48	0/730	0.77	0/965
20	CT	0.43	0/729	0.68	0/965
21	AU	0.47	0/203	0.62	0/266
21	CU	0.51	0/203	0.64	0/266
22	AV	0.99	0/127	1.42	2/198 (1.0%)
22	CV	0.82	0/126	1.39	1/195 (0.5%)
23	AX	0.88	8/1813 (0.4%)	1.62	47/2825 (1.7%)
23	CX	0.94	6/1813 (0.3%)	1.87	57/2825 (2.0%)
24	AW	0.46	0/20	0.84	0/23
24	CW	0.34	0/20	0.64	0/23
25	BA	1.07	33/65892 (0.1%)	1.49	877/102850 (0.9%)
25	DA	0.82	13/65466 (0.0%)	1.46	741/102184 (0.7%)
26	BB	0.83	0/2878	1.31	13/4490 (0.3%)
26	DB	0.93	2/2878 (0.1%)	1.50	45/4490 (1.0%)
27	BD	0.71	2/2186 (0.1%)	0.82	0/2944
27	DD	0.63	2/2186 (0.1%)	0.77	0/2944
28	BE	0.72	0/1592	0.77	0/2149
28	DE	0.57	0/1592	0.79	2/2149 (0.1%)
29	BF	0.73	0/1619	0.75	0/2193
29	DF	0.53	0/1615	0.80	2/2188 (0.1%)
30	BG	0.46	0/1450	0.71	0/1959
30	DG	0.54	0/1449	0.76	0/1958
31	BH	0.61	0/1356	0.72	0/1834
31	DH	0.54	0/1356	0.71	1/1834 (0.1%)
32	BI	0.51	0/1100	0.70	0/1501
32	DI	0.51	0/1076	0.74	0/1471
33	BN	0.67	0/1144	0.75	0/1543
33	DN	0.54	0/1144	0.74	0/1543
34	BO	0.66	0/943	0.78	1/1269 (0.1%)
34	DO	0.56	0/943	0.78	1/1269 (0.1%)
35	BP	0.64	0/1152	0.82	1/1533 (0.1%)
35	DP	0.55	0/1152	0.83	2/1533 (0.1%)
36	BQ	0.69	0/1143	0.81	0/1527
36	DQ	0.59	0/1143	0.77	0/1527
37	BR	0.62	0/982	0.86	0/1312
37	DR	0.51	0/982	0.70	0/1312
38	BS	0.55	0/887	0.78	1/1180 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
38	DS	0.51	0/880	0.74	0/1172
39	BT	0.59	0/1105	0.79	0/1477
39	DT	0.53	0/1097	0.74	0/1468
40	BU	0.70	0/977	0.76	0/1301
40	DU	0.52	0/977	0.71	0/1301
41	BV	0.67	0/782	0.72	0/1049
41	DV	0.57	0/782	0.75	0/1049
42	BW	0.73	0/897	0.76	0/1205
42	DW	0.59	0/897	0.74	0/1205
43	BX	0.71	0/764	0.75	1/1025 (0.1%)
43	DX	0.56	0/764	0.80	2/1025 (0.2%)
44	BY	0.70	0/819	0.78	0/1095
44	DY	0.57	0/819	0.75	0/1095
45	BZ	0.55	0/1379	0.74	0/1873
45	DZ	0.54	0/1390	0.70	0/1890
46	B0	0.63	0/662	0.81	2/881 (0.2%)
46	D0	0.55	0/662	0.78	0/881
47	B1	0.66	0/762	0.81	3/1014 (0.3%)
47	D1	0.55	0/762	0.74	0/1014
48	B2	0.61	0/590	0.81	0/781
48	D2	0.47	0/590	0.67	0/781
49	B3	0.67	0/474	0.78	0/635
49	D3	0.50	0/469	0.70	0/630
50	B4	0.57	0/564	0.81	0/759
50	D4	0.59	0/544	0.89	1/735 (0.1%)
51	B5	0.72	0/469	0.84	1/635 (0.2%)
51	D5	0.59	0/469	0.73	1/635 (0.2%)
52	B6	0.66	0/460	0.66	0/613
52	D6	0.58	0/456	0.72	0/608
53	B7	0.74	0/426	0.82	0/561
53	D7	0.60	0/426	0.78	1/561 (0.2%)
54	B8	0.68	0/519	0.72	0/684
54	D8	0.58	0/525	0.73	0/691
55	B9	0.74	0/310	0.73	0/407
55	D9	0.61	0/310	0.80	0/407
All	All	0.81	86/305966 (0.0%)	1.30	2539/457396 (0.6%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
2	AB	0	3
4	CD	0	1
7	AG	0	1
9	AI	0	1
19	CS	0	1
23	CX	1	0
24	AW	0	1
24	CW	0	1
27	DD	0	1
38	BS	0	1
44	BY	0	1
45	BZ	0	1
50	B4	0	1
50	D4	0	1
All	All	1	15

All (86) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	CA	1154	G	C6-N1	-13.21	1.30	1.39
1	CA	1119	C	N3-C4	-13.12	1.24	1.33
1	AA	343	U	C4-O4	12.79	1.33	1.23
1	CA	1154	G	N1-C2	-12.44	1.27	1.37
23	CX	76	A	N7-C5	-12.26	1.31	1.39
25	BA	1188	A	N9-C4	-11.91	1.30	1.37
23	AX	76	A	N7-C5	-11.21	1.32	1.39
25	BA	2299	A	N9-C4	-9.64	1.32	1.37
1	CA	1492	A	N9-C4	9.17	1.43	1.37
23	AX	76	A	C5-C4	-8.50	1.32	1.38
25	BA	1067	A	N9-C4	-8.41	1.32	1.37
25	DA	528	A	N9-C4	-8.20	1.32	1.37
23	AX	76	A	C5-C6	-8.08	1.33	1.41
1	CA	1154	G	C5-C4	7.97	1.44	1.38
1	CA	1154	G	N7-C5	-7.92	1.34	1.39
25	DA	2207	G	N7-C5	-7.74	1.34	1.39
25	BA	1605	A	N9-C4	-7.58	1.33	1.37
1	CA	1119	C	C2-N3	-7.45	1.29	1.35
25	BA	139	A	N9-C4	-7.24	1.33	1.37
23	CX	76	A	C5-C6	-7.03	1.34	1.41
25	DA	1021	A	N9-C4	-6.95	1.33	1.37
23	CX	76	A	C5-C4	-6.87	1.33	1.38
23	CX	14	A	N7-C5	-6.81	1.35	1.39
25	BA	1222	A	N9-C4	6.78	1.42	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BA	354	A	N9-C4	-6.73	1.33	1.37
25	BA	2389	A	N9-C4	-6.55	1.33	1.37
25	BA	990	A	C5-C6	-6.42	1.35	1.41
26	DB	66	A	N9-C4	6.41	1.41	1.37
25	BA	990	A	N9-C4	-6.26	1.34	1.37
25	DA	2320	A	N9-C4	6.25	1.41	1.37
27	DD	28	GLU	CG-CD	6.25	1.61	1.51
25	BA	1697	G	N7-C5	-6.24	1.35	1.39
25	DA	1142(A)	A	N9-C4	-6.07	1.34	1.37
27	BD	28	GLU	CG-CD	6.00	1.60	1.51
25	DA	330	A	N9-C4	-5.99	1.34	1.37
27	DD	28	GLU	CB-CG	5.98	1.63	1.52
1	AA	1124	G	N9-C4	5.94	1.42	1.38
25	BA	2771	A	N9-C4	-5.91	1.34	1.37
25	DA	1489	U	C5-C6	-5.91	1.28	1.34
25	BA	978	A	N9-C4	-5.89	1.34	1.37
25	BA	2228	G	N7-C5	-5.83	1.35	1.39
25	BA	552	C	N3-C4	-5.76	1.29	1.33
23	AX	46	G	C6-N1	5.73	1.43	1.39
25	DA	530	G	N9-C8	5.71	1.41	1.37
23	AX	22	G	N7-C5	5.71	1.42	1.39
1	AA	161	A	N9-C4	5.70	1.41	1.37
1	CA	1169	A	N7-C5	-5.67	1.35	1.39
25	DA	1890	A	N9-C4	-5.65	1.34	1.37
25	BA	1153	G	N9-C4	5.61	1.42	1.38
25	BA	2825	C	N3-C4	-5.54	1.30	1.33
25	BA	1287	A	N9-C4	-5.53	1.34	1.37
25	BA	254	A	N7-C5	-5.53	1.35	1.39
23	AX	14	A	N7-C5	-5.51	1.35	1.39
1	CA	1119	C	N1-C2	5.47	1.45	1.40
25	BA	2082	A	N9-C4	-5.46	1.34	1.37
25	BA	43	A	N9-C4	-5.46	1.34	1.37
1	CA	1003	G	N9-C4	5.41	1.42	1.38
25	BA	528	A	N3-C4	-5.40	1.31	1.34
27	BD	28	GLU	CB-CG	5.39	1.62	1.52
25	DA	945	A	N9-C4	-5.39	1.34	1.37
1	CA	1154	G	N9-C4	5.36	1.42	1.38
25	BA	798	A	N3-C4	-5.30	1.31	1.34
25	BA	2598	C	N1-C6	-5.30	1.33	1.37
25	BA	555	G	N9-C8	5.29	1.41	1.37
1	AA	1492	A	N9-C4	5.28	1.41	1.37
25	BA	590	A	N7-C5	-5.26	1.36	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	DA	945	A	N3-C4	-5.25	1.31	1.34
1	CA	1493	A	N3-C4	5.24	1.38	1.34
25	DA	2207	G	N9-C8	-5.20	1.34	1.37
25	BA	2584	A	N3-C4	-5.20	1.31	1.34
1	AA	1531	A	N9-C4	5.18	1.41	1.37
25	BA	1188	A	C5-C6	-5.13	1.36	1.41
25	BA	2740	G	N7-C5	-5.12	1.36	1.39
23	CX	22	G	C8-N7	5.12	1.34	1.30
25	BA	2803	A	N9-C4	5.12	1.41	1.37
23	AX	14	A	C8-N7	-5.09	1.27	1.31
25	BA	1605	A	N3-C4	-5.08	1.31	1.34
1	AA	1036	G	N9-C4	5.08	1.42	1.38
1	AA	1127	G	C8-N7	-5.07	1.27	1.30
23	AX	22	G	C8-N7	5.07	1.33	1.30
23	CX	46	G	C6-N1	5.04	1.43	1.39
25	BA	1067	A	N3-C4	-5.03	1.31	1.34
25	DA	1698	A	C5-C6	-5.03	1.36	1.41
25	BA	2331	G	C5-C6	-5.01	1.37	1.42
26	DB	56	G	N9-C4	5.01	1.42	1.38
1	CA	1023	G	N9-C4	5.00	1.42	1.38

All (2539) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	1119	C	N1-C2-O2	40.38	143.13	118.90
1	CA	1154	G	C5-C6-O6	34.47	149.28	128.60
23	CX	76	A	O4'-C1'-N9	33.86	135.29	108.20
1	CA	1154	G	N3-C2-N2	29.11	140.27	119.90
1	CA	1154	G	N1-C2-N2	-27.03	91.87	116.20
1	CA	1119	C	N3-C2-O2	-26.84	103.11	121.90
1	CA	1154	G	C5-C6-N1	-21.02	100.99	111.50
1	CA	1119	C	C2-N3-C4	20.75	130.28	119.90
1	CA	1119	C	C5-C4-N4	19.74	134.02	120.20
1	CA	1154	G	C6-N1-C2	19.14	136.58	125.10
23	CX	76	A	C2-N3-C4	18.83	120.01	110.60
23	CX	76	A	N1-C2-N3	-18.56	120.02	129.30
1	CA	1119	C	N3-C4-N4	-18.49	105.05	118.00
23	AX	76	A	N1-C2-N3	-18.09	120.25	129.30
23	AX	76	A	O4'-C1'-N9	18.05	122.64	108.20
23	AX	76	A	C2-N3-C4	17.76	119.48	110.60
1	CA	1154	G	N1-C6-O6	-17.13	109.62	119.90
23	CX	8	U	C2-N3-C4	16.84	137.10	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	1119	C	C2-N1-C1'	15.00	135.30	118.80
23	AX	8	U	C2-N3-C4	14.78	135.87	127.00
25	BA	990	A	N1-C6-N6	14.63	127.38	118.60
25	BA	1188	A	C2-N3-C4	-14.62	103.29	110.60
25	BA	1067	A	C2-N3-C4	-13.98	103.61	110.60
1	CA	1154	G	C4-N9-C1'	13.40	143.92	126.50
1	CA	1154	G	C2-N3-C4	-13.31	105.24	111.90
25	DA	528	A	C2-N3-C4	-13.08	104.06	110.60
25	BA	990	A	C2-N3-C4	-12.63	104.28	110.60
25	DA	1698	A	C2-N3-C4	-12.59	104.31	110.60
25	BA	1686	U	O5'-P-OP2	-12.55	94.40	105.70
25	DA	945	A	N1-C6-N6	12.39	126.04	118.60
25	DA	1021	A	C2-N3-C4	-12.13	104.54	110.60
1	AA	1125	U	N1-C2-O2	12.04	131.22	122.80
25	BA	139	A	C5-N7-C8	-11.81	98.00	103.90
25	BA	990	A	C5-N7-C8	-11.77	98.01	103.90
25	BA	990	A	C6-C5-N7	-11.42	124.30	132.30
1	CA	1119	C	C6-N1-C2	-11.41	115.74	120.30
25	BA	990	A	C4-C5-N7	11.33	116.36	110.70
1	CA	999	C	N1-C2-O2	11.29	125.67	118.90
1	CA	1154	G	C8-N9-C1'	-11.20	112.44	127.00
1	AA	1125	U	N1-C2-N3	-11.16	108.20	114.90
23	CX	14	A	C4-C5-C6	11.16	122.58	117.00
25	DA	1489	U	C4-C5-C6	11.12	126.37	119.70
1	AA	343	U	C5-C4-O4	-11.06	119.26	125.90
1	CA	1119	C	C6-N1-C1'	-10.92	107.70	120.80
23	CX	14	A	C5-N7-C8	10.74	109.27	103.90
25	DA	2207	G	N1-C6-O6	10.73	126.34	119.90
23	CX	46	G	N3-C2-N2	-10.65	112.44	119.90
23	AX	8	U	C5-C4-O4	10.58	132.25	125.90
25	BA	1188	A	N3-C4-C5	10.54	134.18	126.80
1	AA	1036	G	C4-N9-C1'	10.48	140.13	126.50
25	BA	139	A	N7-C8-N9	10.45	119.03	113.80
25	DA	1791	A	O5'-P-OP1	-10.22	96.50	105.70
1	CA	1004	A	O4'-C1'-N9	10.19	116.35	108.20
25	DA	2207	G	C6-C5-N7	-10.17	124.30	130.40
25	BA	2452	C	C6-N1-C2	10.12	124.35	120.30
1	CA	1492	A	C8-N9-C4	-10.00	101.80	105.80
25	DA	856	C	C6-N1-C2	-9.98	116.31	120.30
25	DA	1489	U	C2-N1-C1'	9.98	129.68	117.70
25	DA	807	U	O5'-P-OP2	9.92	122.60	110.70
1	CA	1119	C	C5-C6-N1	9.91	125.96	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	1698	A	N1-C6-N6	9.91	124.55	118.60
25	BA	354	A	C2-N3-C4	-9.82	105.69	110.60
1	AA	343	U	N3-C4-C5	9.82	120.49	114.60
23	AX	46	G	C6-N1-C2	-9.81	119.22	125.10
25	BA	978	A	C5-N7-C8	-9.78	99.01	103.90
1	AA	354	G	O5'-P-OP2	-9.77	96.91	105.70
25	BA	139	A	C2-N3-C4	-9.74	105.73	110.60
25	BA	1067	A	C5-N7-C8	-9.68	99.06	103.90
25	BA	834	U	O5'-P-OP1	-9.67	96.99	105.70
25	BA	2299	A	C2-N3-C4	-9.66	105.77	110.60
1	CA	1122	U	C2-N1-C1'	9.65	129.28	117.70
23	CX	76	A	N7-C8-N9	-9.64	108.98	113.80
23	CX	76	A	N3-C4-C5	-9.63	120.06	126.80
25	BA	1605	A	C2-N3-C4	-9.62	105.79	110.60
26	BB	91	C	C6-N1-C2	9.61	124.14	120.30
25	DA	945	A	C6-C5-N7	-9.60	125.58	132.30
23	CX	8	U	C5-C4-O4	9.59	131.65	125.90
25	BA	2624	C	O5'-P-OP1	-9.53	97.12	105.70
1	AA	1036	G	C8-N9-C1'	-9.51	114.64	127.00
23	CX	8	U	C5-C6-N1	9.49	127.44	122.70
25	DA	330	A	C2-N3-C4	-9.48	105.86	110.60
25	DA	205	G	C8-N9-C4	9.47	110.19	106.40
25	DA	446	G	C8-N9-C4	9.47	110.19	106.40
1	CA	1273	G	N3-C4-N9	9.46	131.68	126.00
25	BA	930	G	O4'-C1'-N9	9.43	115.74	108.20
25	BA	2250	G	O5'-P-OP1	-9.40	97.24	105.70
26	DB	115	G	C8-N9-C4	9.35	110.14	106.40
25	BA	1694	G	O5'-P-OP1	-9.33	97.30	105.70
25	BA	1745	A	N1-C6-N6	9.31	124.19	118.60
25	BA	1440	U	O5'-P-OP1	-9.28	97.34	105.70
25	DA	1698	A	C6-C5-N7	-9.27	125.81	132.30
23	AX	76	A	N3-C4-C5	-9.25	120.33	126.80
1	AA	343	U	C2-N3-C4	-9.23	121.46	127.00
25	DA	981	A	N1-C6-N6	-9.18	113.09	118.60
1	CA	1528	U	O5'-P-OP2	-9.17	97.45	105.70
25	DA	2804	C	C6-N1-C2	-9.16	116.64	120.30
1	CA	1003	G	N3-C4-C5	-9.15	124.03	128.60
1	AA	1030(B)	C	N1-C2-O2	9.14	124.39	118.90
23	AX	76	A	N7-C8-N9	-9.14	109.23	113.80
25	DA	1489	U	C6-N1-C1'	-9.13	108.41	121.20
25	BA	2551	C	C6-N1-C2	9.13	123.95	120.30
25	DA	2617	C	C6-N1-C2	9.10	123.94	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	2446	G	C8-N9-C4	9.07	110.03	106.40
23	AX	14	A	C5-N7-C8	9.06	108.43	103.90
25	DA	2501	C	C6-N1-C2	9.04	123.92	120.30
23	CX	8	U	N3-C4-C5	-9.03	109.18	114.60
25	BA	2331	G	C4-C5-N7	9.02	114.41	110.80
25	BA	1067	A	N7-C8-N9	8.98	118.29	113.80
1	AA	1493	A	O5'-P-OP1	8.98	121.47	110.70
25	DA	2566	A	O5'-P-OP2	-8.97	97.62	105.70
1	AA	460	G	N7-C8-N9	8.95	117.58	113.10
25	BA	2601	A	C8-N9-C4	8.95	109.38	105.80
1	CA	1012	U	N1-C2-O2	-8.94	116.55	122.80
1	CA	1260	C	C6-N1-C2	-8.91	116.73	120.30
1	CA	1119	C	C4-C5-C6	-8.91	112.94	117.40
1	AA	1030(B)	C	C2-N1-C1'	8.91	128.60	118.80
26	DB	6	C	C6-N1-C2	8.88	123.85	120.30
23	AX	22	G	N3-C4-N9	-8.87	120.68	126.00
26	DB	53	A	C8-N9-C4	-8.85	102.26	105.80
25	BA	254	A	N7-C8-N9	8.84	118.22	113.80
1	CA	1119	C	N1-C2-N3	-8.81	113.03	119.20
25	DA	63	U	C5-C4-O4	8.81	131.18	125.90
23	AX	14	A	C4-C5-C6	8.80	121.40	117.00
25	BA	2694	U	N1-C2-O2	8.79	128.96	122.80
23	CX	76	A	C5-N7-C8	8.79	108.29	103.90
23	CX	46	G	C6-N1-C2	-8.78	119.83	125.10
23	AX	22	G	C5-N7-C8	-8.76	99.92	104.30
25	BA	139	A	N1-C6-N6	8.76	123.85	118.60
23	AX	76	A	C5-N7-C8	8.75	108.27	103.90
25	BA	2298	A	N1-C2-N3	8.74	133.67	129.30
25	BA	607	C	C6-N1-C2	8.73	123.79	120.30
23	CX	22	G	C5-N7-C8	-8.73	99.94	104.30
1	CA	1017	G	C6-N1-C2	8.72	130.34	125.10
25	DA	733	G	N9-C4-C5	-8.71	101.92	105.40
25	BA	552	C	N3-C2-O2	-8.69	115.82	121.90
25	BA	733	G	O5'-P-OP1	-8.68	97.89	105.70
25	BA	2535	G	O5'-P-OP2	-8.68	97.89	105.70
25	DA	1372	U	N3-C4-O4	8.67	125.47	119.40
25	BA	537	G	O4'-C1'-N9	8.64	115.11	108.20
25	DA	933	A	C5-N7-C8	-8.64	99.58	103.90
1	CA	1484	C	C6-N1-C2	8.62	123.75	120.30
25	DA	945	A	C2-N3-C4	-8.58	106.31	110.60
25	BA	934	A	O4'-C1'-N9	8.57	115.06	108.20
25	BA	1382	A	O5'-P-OP2	-8.57	97.98	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	12	U	N3-C2-O2	-8.56	116.21	122.20
23	AX	46	G	C5-C6-N1	8.55	115.77	111.50
1	CA	1000	U	C5-C6-N1	8.54	126.97	122.70
25	BA	2876	U	C5-C6-N1	-8.54	118.43	122.70
25	BA	119	G	C5-C6-O6	-8.53	123.48	128.60
25	BA	670	C	C5-C6-N1	8.52	125.26	121.00
1	AA	76	C	C5-C6-N1	8.52	125.26	121.00
25	BA	254	A	C8-N9-C4	-8.51	102.39	105.80
1	CA	1307	U	C5-C6-N1	8.48	126.94	122.70
25	DA	528	A	N3-C4-C5	8.47	132.73	126.80
25	DA	1204	A	O4'-C1'-N9	8.46	114.97	108.20
25	BA	1067	A	C5-C6-N1	-8.45	113.47	117.70
25	BA	784	C	C6-N1-C2	8.44	123.67	120.30
1	CA	1054	C	P-O3'-C3'	8.44	129.82	119.70
1	CA	1492	A	C2-N3-C4	8.43	114.81	110.60
25	DA	446	G	N9-C4-C5	-8.43	102.03	105.40
25	DA	1677	A	N1-C6-N6	8.42	123.65	118.60
26	DB	56	G	N3-C4-C5	-8.41	124.40	128.60
25	DA	1142(A)	A	C2-N3-C4	-8.40	106.40	110.60
1	AA	1030(B)	C	C6-N1-C2	-8.39	116.94	120.30
25	BA	1188	A	N1-C6-N6	8.39	123.64	118.60
25	BA	2331	G	N1-C6-O6	8.39	124.94	119.90
1	CA	1311	G	N3-C4-N9	-8.38	120.97	126.00
25	BA	553	A	C2-N3-C4	-8.36	106.42	110.60
1	AA	167	G	N7-C8-N9	8.35	117.27	113.10
1	AA	1125	U	C2-N3-C4	8.34	132.00	127.00
25	DA	1204	A	N1-C6-N6	8.30	123.58	118.60
25	BA	2298	A	C8-N9-C4	-8.29	102.48	105.80
25	BA	837	C	O5'-P-OP2	-8.29	98.24	105.70
23	AX	76	A	N9-C4-C5	8.29	109.11	105.80
1	CA	1004	A	N1-C6-N6	-8.29	113.63	118.60
25	DA	2870	C	C6-N1-C2	-8.28	116.99	120.30
1	CA	999	C	N3-C2-O2	-8.28	116.11	121.90
1	CA	1154	G	C4-C5-C6	8.24	123.75	118.80
25	BA	2083	G	O5'-P-OP2	-8.24	98.28	105.70
25	BA	1263	C	O5'-P-OP2	-8.23	98.29	105.70
25	BA	139	A	C4-C5-N7	8.23	114.81	110.70
25	DA	514	A	C8-N9-C4	8.23	109.09	105.80
25	BA	2298	A	N7-C8-N9	8.22	117.91	113.80
25	BA	2227	G	C4-N9-C1'	-8.19	115.86	126.50
1	AA	1124	G	C8-N9-C4	-8.18	103.13	106.40
25	DA	1654	A	O5'-P-OP1	-8.18	98.34	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	43	A	C2-N3-C4	-8.14	106.53	110.60
25	DA	1204	A	C2-N3-C4	-8.13	106.53	110.60
1	AA	348	G	O5'-P-OP1	8.13	120.45	110.70
25	BA	1745	A	C2-N3-C4	-8.13	106.54	110.60
1	CA	1123	A	O4'-C1'-N9	8.13	114.70	108.20
25	DA	2567	G	N1-C6-O6	8.13	124.78	119.90
1	AA	1124	G	N3-C4-C5	-8.12	124.54	128.60
25	BA	254	A	C5-N7-C8	-8.12	99.84	103.90
25	BA	2477	C	O5'-P-OP2	-8.12	98.39	105.70
1	AA	800	G	C8-N9-C4	-8.12	103.15	106.40
1	AA	1127	G	N3-C4-N9	8.12	130.87	126.00
1	CA	848	C	C5-C6-N1	8.11	125.05	121.00
25	BA	978	A	N7-C8-N9	8.09	117.84	113.80
25	BA	139	A	C6-C5-N7	-8.08	126.65	132.30
25	BA	2510	C	C2-N3-C4	-8.05	115.88	119.90
1	AA	1125	U	C4-C5-C6	-8.04	114.87	119.70
25	BA	119	G	N1-C6-O6	8.04	124.73	119.90
25	BA	415	G	O5'-P-OP2	-8.04	98.46	105.70
25	BA	2058	C	O5'-P-OP1	-8.03	98.47	105.70
1	CA	1017	G	C5-C6-O6	8.03	133.42	128.60
25	BA	1067	A	N1-C2-N3	8.03	133.31	129.30
25	DA	2224	G	N1-C6-O6	8.02	124.71	119.90
1	CA	998	G	C6-C5-N7	8.02	135.21	130.40
25	BA	1188	A	N3-C4-N9	-8.01	120.99	127.40
25	BA	295	C	O5'-P-OP2	-8.00	98.50	105.70
25	BA	1860	A	O5'-P-OP2	-7.99	98.51	105.70
25	DA	1904	G	O5'-P-OP2	-7.99	98.50	105.70
26	DB	74	U	C5-C4-O4	7.98	130.69	125.90
25	DA	837	C	N1-C2-O2	7.97	123.68	118.90
25	DA	460	A	N1-C6-N6	7.97	123.38	118.60
25	BA	1188	A	C5-C6-N1	-7.96	113.72	117.70
1	AA	1137	C	C5-C6-N1	7.96	124.98	121.00
25	DA	2298	A	N1-C2-N3	-7.96	125.32	129.30
25	DA	529	A	N1-C6-N6	7.95	123.37	118.60
1	CA	1502	A	C5-N7-C8	-7.91	99.95	103.90
25	BA	1056	A	OP1-P-OP2	-7.91	107.74	119.60
25	BA	848	G	O5'-P-OP2	-7.90	98.59	105.70
1	CA	1122	U	C6-N1-C1'	-7.90	110.14	121.20
25	BA	2298	A	C6-C5-N7	-7.88	126.78	132.30
25	DA	530	G	C8-N9-C4	-7.88	103.25	106.40
1	CA	299	G	N1-C6-O6	7.88	124.62	119.90
25	BA	134	G	C8-N9-C4	7.87	109.55	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	855	G	O5'-P-OP2	-7.86	98.63	105.70
25	DA	945	A	C5-N7-C8	-7.86	99.97	103.90
1	AA	1007	C	C2-N1-C1'	7.86	127.44	118.80
25	BA	1067	A	N1-C6-N6	7.85	123.31	118.60
25	BA	1188	A	C5-N7-C8	-7.85	99.98	103.90
25	BA	1249	A	C5-N7-C8	-7.84	99.98	103.90
25	DA	1254	A	C8-N9-C4	-7.84	102.67	105.80
25	DA	1021	A	C5-N7-C8	-7.83	99.99	103.90
25	DA	981	A	C5-C6-N6	7.83	129.96	123.70
25	BA	2299	A	N3-C4-C5	7.82	132.28	126.80
1	AA	896	C	C6-N1-C2	7.82	123.43	120.30
1	CA	1286	A	C8-N9-C4	-7.81	102.67	105.80
25	BA	1694	G	O5'-P-OP2	7.81	120.07	110.70
1	CA	1149	C	C6-N1-C2	-7.81	117.18	120.30
23	CX	14	A	C5-C6-N1	-7.81	113.80	117.70
25	BA	1249	A	O4'-C1'-N9	7.80	114.44	108.20
25	DA	141	A	C2-N3-C4	-7.80	106.70	110.60
25	DA	1797	C	C6-N1-C2	7.80	123.42	120.30
25	DA	2679	A	O5'-P-OP2	-7.78	98.69	105.70
25	DA	2721	A	O5'-P-OP1	-7.78	98.70	105.70
25	BA	1426	G	O5'-P-OP2	-7.78	98.70	105.70
25	DA	2033	A	C2-N3-C4	7.78	114.49	110.60
25	BA	82	G	N1-C6-O6	7.77	124.56	119.90
25	BA	1985	U	C2-N1-C1'	7.77	127.02	117.70
25	BA	1093	G	N3-C4-N9	7.76	130.66	126.00
25	BA	2074	G	C8-N9-C4	-7.76	103.30	106.40
25	BA	1397	C	N3-C4-C5	7.75	125.00	121.90
25	DA	1266	G	C8-N9-C4	7.75	109.50	106.40
25	DA	1660	C	C2-N3-C4	-7.74	116.03	119.90
1	CA	1180	A	O4'-C1'-N9	7.74	114.39	108.20
25	BA	2298	A	C4-C5-C6	7.73	120.87	117.00
25	BA	2331	G	C5-N7-C8	-7.73	100.43	104.30
25	BA	2331	G	C2-N3-C4	-7.73	108.04	111.90
25	DA	2805	G	C4-C5-N7	-7.71	107.72	110.80
25	BA	1216	G	C8-N9-C4	-7.71	103.32	106.40
1	CA	1135	U	O4'-C1'-N1	7.71	114.36	108.20
25	DA	784	A	C8-N9-C4	7.71	108.88	105.80
25	BA	1093	G	N3-C4-C5	-7.71	124.75	128.60
25	DA	249	C	O5'-P-OP2	-7.70	98.77	105.70
25	DA	214	G	O4'-C1'-N9	7.68	114.34	108.20
34	DO	8	LEU	CA-CB-CG	7.68	132.96	115.30
25	DA	2463	C	C6-N1-C2	7.67	123.37	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1087	G	C8-N9-C4	-7.67	103.33	106.40
25	DA	2253	G	C6-C5-N7	-7.67	125.80	130.40
26	DB	53	A	N7-C8-N9	7.67	117.63	113.80
25	BA	1700	G	C8-N9-C4	-7.67	103.33	106.40
25	DA	210	C	C6-N1-C2	7.66	123.36	120.30
25	BA	2265	G	C8-N9-C4	7.65	109.46	106.40
25	BA	1743	G	O5'-P-OP2	-7.65	98.82	105.70
25	BA	990	A	C5-C6-N6	-7.64	117.59	123.70
25	BA	2331	G	C6-C5-N7	-7.63	125.82	130.40
1	CA	1169	A	C4-C5-C6	7.63	120.81	117.00
25	DA	188	G	C4-C5-N7	7.63	113.85	110.80
25	BA	215	G	O4'-C1'-N9	7.62	114.30	108.20
25	BA	82	G	C4-C5-N7	7.61	113.84	110.80
23	CX	8	U	N1-C2-N3	-7.61	110.34	114.90
25	DA	460	A	C5-C6-N6	-7.60	117.62	123.70
1	AA	97	G	O4'-C1'-N9	7.59	114.27	108.20
25	BA	2631	C	C6-N1-C2	7.58	123.33	120.30
25	BA	1972	G	N1-C6-O6	7.58	124.45	119.90
25	DA	1372	U	C5-C4-O4	-7.57	121.36	125.90
1	AA	1397	C	O4'-C1'-N1	7.57	114.25	108.20
25	BA	505	A	N1-C6-N6	-7.57	114.06	118.60
1	CA	1134	G	C8-N9-C4	-7.56	103.38	106.40
25	BA	2236	G	C8-N9-C4	7.55	109.42	106.40
25	BA	2093	A	C8-N9-C4	7.54	108.82	105.80
1	AA	893	C	C6-N1-C2	7.54	123.32	120.30
1	AA	897	C	O5'-P-OP2	-7.54	98.91	105.70
25	DA	2207	G	C4-C5-C6	7.54	123.33	118.80
25	DA	2206	G	C4-N9-C1'	-7.54	116.70	126.50
25	DA	1315	C	C6-N1-C2	-7.54	117.28	120.30
25	BA	2694	U	N3-C2-O2	-7.53	116.93	122.20
23	AX	22	G	C4-C5-C6	-7.53	114.28	118.80
25	DA	212	G	C8-N9-C4	-7.53	103.39	106.40
1	CA	354	G	O5'-P-OP2	-7.53	98.93	105.70
25	BA	1162	C	C6-N1-C2	7.52	123.31	120.30
25	BA	2281	A	O5'-P-OP1	-7.51	98.94	105.70
25	DA	566	U	C5-C6-N1	-7.51	118.94	122.70
25	DA	2503	A	N1-C6-N6	7.49	123.09	118.60
22	AV	17	U	C5-C4-O4	7.48	130.39	125.90
25	BA	917	A	C8-N9-C4	7.47	108.79	105.80
25	DA	2262	U	O5'-P-OP1	-7.47	98.98	105.70
25	DA	1698	A	N1-C2-N3	7.47	133.03	129.30
25	BA	1072	U	N1-C2-O2	7.46	128.03	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	1973	G	N1-C6-O6	-7.45	115.43	119.90
25	DA	1698	A	C5-C6-N1	-7.45	113.98	117.70
1	CA	1037	C	C6-N1-C2	-7.44	117.33	120.30
25	DA	461	C	N3-C2-O2	7.43	127.10	121.90
25	DA	1261	C	C6-N1-C2	7.43	123.27	120.30
1	CA	841	U	C5-C6-N1	7.42	126.41	122.70
25	BA	1249	A	C2-N3-C4	-7.41	106.90	110.60
25	DA	130	C	N1-C2-O2	7.40	123.34	118.90
25	DA	2357	U	O5'-P-OP2	-7.40	99.04	105.70
1	AA	1127	G	C8-N9-C4	7.40	109.36	106.40
25	BA	139	A	O4'-C1'-N9	7.40	114.12	108.20
25	DA	945	A	C4-C5-C6	7.40	120.70	117.00
25	DA	1791	A	C8-N9-C4	-7.38	102.85	105.80
1	AA	77	G	N9-C4-C5	-7.38	102.45	105.40
23	AX	35	A	C5-C6-N6	7.37	129.59	123.70
25	BA	2036	A	C8-N9-C4	7.36	108.74	105.80
1	AA	167	G	C4-N9-C1'	7.35	136.06	126.50
1	AA	382	A	N1-C2-N3	7.35	132.98	129.30
25	BA	2511	C	C5-C6-N1	7.35	124.67	121.00
25	DA	1644	C	N1-C2-O2	7.34	123.31	118.90
25	DA	1763	G	O5'-P-OP2	-7.34	99.09	105.70
25	DA	2503	A	C5-C6-N6	-7.33	117.83	123.70
25	DA	2218	U	N3-C2-O2	-7.32	117.08	122.20
25	DA	837	C	N3-C2-O2	-7.32	116.78	121.90
25	DA	614	U	C5-C4-O4	7.32	130.29	125.90
25	BA	1094	A	C8-N9-C4	-7.31	102.88	105.80
25	DA	2218	U	N1-C2-O2	7.31	127.92	122.80
25	BA	978	A	C4-C5-N7	7.30	114.35	110.70
1	CA	998	G	C4-C5-N7	-7.30	107.88	110.80
25	BA	2335	G	C5-C6-O6	-7.30	124.22	128.60
25	DA	1022	G	C4-C5-N7	-7.30	107.88	110.80
25	DA	504	U	N1-C2-O2	7.29	127.91	122.80
1	AA	162	A	C8-N9-C4	-7.29	102.88	105.80
25	BA	753	A	C2-N3-C4	-7.29	106.95	110.60
1	CA	1002	G	C5-C6-O6	7.29	132.97	128.60
1	AA	348	G	N3-C4-N9	-7.29	121.63	126.00
1	CA	398	C	N3-C4-N4	-7.28	112.90	118.00
25	BA	1068	G	N3-C4-N9	-7.27	121.64	126.00
25	BA	552	C	N3-C4-N4	-7.27	112.91	118.00
25	BA	122	G	O5'-P-OP2	-7.27	99.16	105.70
25	DA	945	A	N1-C2-N3	7.26	132.93	129.30
1	CA	1492	A	N3-C4-C5	-7.25	121.72	126.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1067	A	P-O3'-C3'	7.24	128.39	119.70
25	DA	2554	U	O5'-P-OP2	-7.24	99.18	105.70
25	BA	989	G	C5-C6-N1	-7.24	107.88	111.50
25	BA	1153	G	N3-C4-C5	-7.24	124.98	128.60
25	BA	1098	C	C6-N1-C2	-7.23	117.41	120.30
25	BA	1007	G	C8-N9-C4	-7.23	103.51	106.40
1	CA	1260	C	C5-C6-N1	7.23	124.61	121.00
1	AA	1502	A	C6-C5-N7	-7.22	127.25	132.30
1	AA	991	U	P-O3'-C3'	7.22	128.36	119.70
1	AA	1030(B)	C	C5-C6-N1	7.22	124.61	121.00
1	CA	1154	G	C4-C5-N7	-7.22	107.91	110.80
25	DA	116	C	C6-N1-C2	-7.22	117.41	120.30
25	BA	1605	A	N3-C4-C5	7.21	131.85	126.80
25	DA	528	A	N1-C6-N6	7.21	122.93	118.60
1	CA	927	G	C5-C6-O6	7.21	132.93	128.60
1	CA	1273	G	C8-N9-C1'	-7.21	117.63	127.00
25	DA	1021	A	N3-C4-N9	-7.21	121.63	127.40
25	DA	1142	U	N3-C2-O2	-7.21	117.16	122.20
1	CA	1286	A	N7-C8-N9	7.20	117.40	113.80
1	CA	1492	A	N7-C8-N9	7.19	117.40	113.80
1	AA	736	C	C6-N1-C2	-7.19	117.42	120.30
25	BA	990	A	N1-C2-N3	7.18	132.89	129.30
1	CA	1154	G	C8-N9-C4	-7.18	103.53	106.40
1	AA	1007	C	C5-C6-N1	7.17	124.58	121.00
25	DA	1828	G	C5-C6-N1	-7.17	107.92	111.50
1	AA	895	G	O5'-P-OP2	-7.16	99.26	105.70
25	DA	528	A	N1-C2-N3	7.16	132.88	129.30
25	BA	1222	A	C8-N9-C4	-7.15	102.94	105.80
1	CA	848	C	C6-N1-C2	-7.15	117.44	120.30
25	DA	2723	C	N1-C2-O2	-7.15	114.61	118.90
1	CA	998	G	N9-C4-C5	7.15	108.26	105.40
25	DA	552	G	N3-C4-C5	7.14	132.17	128.60
25	DA	1776	G	N3-C4-N9	7.14	130.29	126.00
1	AA	1137	C	C6-N1-C2	-7.14	117.44	120.30
23	CX	22	G	C4-C5-C6	-7.14	114.52	118.80
25	BA	789	G	O5'-P-OP1	-7.14	99.27	105.70
23	AX	8	U	N1-C2-N3	-7.14	110.62	114.90
25	DA	1531	C	C5-C6-N1	7.13	124.57	121.00
1	AA	161	A	C8-N9-C4	-7.13	102.95	105.80
1	AA	71	C	N1-C2-O2	7.12	123.17	118.90
1	CA	1023	G	N3-C4-N9	7.12	130.27	126.00
1	AA	162	A	N7-C8-N9	7.11	117.36	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2608	U	C5-C6-N1	-7.11	119.14	122.70
1	CA	320	C	C6-N1-C2	7.11	123.14	120.30
1	AA	236	G	C5-C6-N1	-7.10	107.95	111.50
1	AA	254	G	O5'-P-OP1	-7.10	99.31	105.70
25	BA	133	G	N3-C4-C5	7.10	132.15	128.60
25	BA	1067	A	C8-N9-C4	-7.10	102.96	105.80
1	CA	998	G	N3-C4-N9	-7.09	121.74	126.00
25	DA	933	A	C4-C5-N7	7.09	114.25	110.70
25	BA	552	C	C5-C4-N4	7.08	125.16	120.20
25	DA	2253	G	N1-C6-O6	7.07	124.14	119.90
1	CA	913	A	N1-C6-N6	-7.07	114.36	118.60
25	BA	2692	C	N1-C2-O2	-7.06	114.66	118.90
25	DA	1372	U	C2-N1-C1'	7.06	126.18	117.70
1	CA	1003	G	C4-N9-C1'	7.06	135.68	126.50
43	BX	57	LEU	CA-CB-CG	7.06	131.53	115.30
1	AA	1154	G	N9-C4-C5	-7.06	102.58	105.40
1	CA	998	G	N1-C6-O6	-7.06	115.67	119.90
25	DA	1229	G	C8-N9-C4	7.06	109.22	106.40
25	BA	2724	U	C5-C4-O4	-7.05	121.67	125.90
25	DA	528	A	C8-N9-C4	7.05	108.62	105.80
1	AA	470	C	N1-C2-O2	7.05	123.13	118.90
1	AA	193	C	C5-C6-N1	7.04	124.52	121.00
25	DA	2828	C	C6-N1-C2	7.04	123.12	120.30
1	CA	1038	C	C2-N3-C4	7.04	123.42	119.90
25	BA	1318	A	O5'-P-OP2	-7.03	99.38	105.70
25	DA	914	C	N1-C2-O2	7.03	123.11	118.90
1	AA	1397	C	C2-N1-C1'	7.02	126.52	118.80
25	DA	680	G	C6-C5-N7	-7.02	126.19	130.40
1	AA	1036	G	N3-C4-N9	7.01	130.21	126.00
25	BA	553	A	N1-C6-N6	7.01	122.81	118.60
25	DA	1118	C	C6-N1-C2	-7.01	117.50	120.30
25	BA	990	A	N7-C8-N9	7.01	117.31	113.80
23	CX	26	G	C6-N1-C2	7.01	129.31	125.10
1	AA	460	G	C8-N9-C4	-7.00	103.60	106.40
1	AA	1150	U	C2-N3-C4	6.98	131.19	127.00
25	DA	915	C	N3-C2-O2	-6.98	117.01	121.90
25	DA	933	A	N7-C8-N9	6.98	117.29	113.80
25	DA	1701	A	O5'-P-OP1	-6.98	99.42	105.70
25	BA	785	G	N1-C6-O6	6.97	124.08	119.90
25	DA	2286	A	N1-C6-N6	6.97	122.78	118.60
1	AA	76	C	C2-N3-C4	6.97	123.39	119.90
25	BA	639	G	O4'-C1'-N9	6.97	113.77	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2001	C	C6-N1-C2	-6.97	117.51	120.30
25	DA	2003	G	O5'-P-OP1	-6.97	99.43	105.70
1	AA	1531	A	O4'-C1'-N9	-6.96	102.63	108.20
25	BA	1386	U	N1-C2-O2	-6.96	117.93	122.80
25	DA	180	G	C6-C5-N7	-6.96	126.22	130.40
1	AA	122	G	C8-N9-C4	6.96	109.18	106.40
25	BA	82	G	N9-C4-C5	-6.96	102.62	105.40
25	DA	90	U	N3-C2-O2	-6.95	117.33	122.20
25	DA	2023	G	N3-C4-N9	6.95	130.17	126.00
23	CX	22	G	N7-C8-N9	6.95	116.58	113.10
25	DA	1975	G	O5'-P-OP2	-6.94	99.45	105.70
1	AA	63	C	C6-N1-C2	-6.94	117.52	120.30
25	BA	1822	A	N1-C6-N6	6.94	122.77	118.60
25	BA	2638	C	C6-N1-C2	6.94	123.08	120.30
25	DA	2699	C	C6-N1-C2	6.94	123.08	120.30
25	BA	1631	C	C5-C6-N1	6.93	124.47	121.00
23	AX	22	G	N3-C4-C5	6.93	132.06	128.60
25	DA	2607	G	N1-C2-N2	-6.93	109.96	116.20
25	BA	2692	C	N3-C4-N4	6.93	122.85	118.00
25	DA	1776	G	C5-C6-O6	-6.93	124.44	128.60
1	AA	460	G	C6-C5-N7	-6.92	126.25	130.40
23	AX	8	U	N3-C4-C5	-6.91	110.45	114.60
25	BA	749	G	O5'-P-OP2	-6.91	99.48	105.70
1	AA	912	C	N3-C2-O2	6.91	126.74	121.90
25	BA	254	A	C2-N3-C4	-6.91	107.14	110.60
25	DA	141	A	N7-C8-N9	6.91	117.25	113.80
26	DB	99	G	N3-C2-N2	-6.90	115.07	119.90
1	CA	979	C	C6-N1-C2	-6.90	117.54	120.30
1	CA	1273	G	C4-N9-C1'	6.90	135.47	126.50
25	BA	2630	G	N3-C4-C5	-6.90	125.15	128.60
25	BA	555	G	C5-N7-C8	-6.89	100.85	104.30
25	DA	1022	G	N3-C4-N9	-6.89	121.86	126.00
25	DA	2893	G	N9-C4-C5	-6.89	102.64	105.40
25	BA	894	U	C5-C6-N1	-6.89	119.25	122.70
25	DA	1826	G	N1-C6-O6	-6.89	115.77	119.90
25	BA	1631	C	C6-N1-C2	-6.88	117.55	120.30
1	CA	1106	G	N9-C4-C5	6.88	108.15	105.40
25	BA	1216	G	N7-C8-N9	6.88	116.54	113.10
25	BA	1414	G	N1-C6-O6	-6.88	115.77	119.90
25	BA	667	G	O5'-P-OP2	-6.88	99.51	105.70
25	BA	990	A	O4'-C1'-N9	6.88	113.70	108.20
1	CA	1391	U	C5-C4-O4	6.88	130.03	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1030(B)	C	N3-C2-O2	-6.88	117.09	121.90
1	CA	1502	A	C2-N3-C4	-6.88	107.16	110.60
1	AA	476	G	O4'-C1'-N9	6.87	113.70	108.20
1	CA	1044	A	C5-C6-N6	6.87	129.19	123.70
25	DA	945	A	N7-C8-N9	6.87	117.23	113.80
1	AA	1127	G	N7-C8-N9	-6.87	109.67	113.10
25	DA	1251	C	N1-C2-O2	-6.87	114.78	118.90
1	AA	841	U	C5-C6-N1	6.86	126.13	122.70
1	CA	1003	G	N3-C4-N9	6.86	130.12	126.00
25	DA	738	G	N1-C6-O6	-6.86	115.78	119.90
25	DA	112	U	O5'-P-OP1	-6.86	99.53	105.70
25	DA	2061	G	C5-C6-O6	-6.86	124.48	128.60
1	CA	1273	G	C5-C6-O6	-6.85	124.49	128.60
25	BA	1372	U	C5-C6-N1	-6.85	119.28	122.70
25	DA	2084	C	C6-N1-C2	6.84	123.04	120.30
25	DA	2297	C	C5-C6-N1	6.84	124.42	121.00
25	BA	1755	C	N3-C2-O2	6.84	126.69	121.90
25	DA	2827	C	C6-N1-C2	6.83	123.03	120.30
1	CA	1141	C	C2-N1-C1'	-6.83	111.28	118.80
25	BA	2339	A	N1-C6-N6	-6.83	114.50	118.60
25	BA	2454	C	C5-C6-N1	-6.83	117.59	121.00
25	DA	2313	C	C6-N1-C2	-6.83	117.57	120.30
25	BA	587	C	N1-C2-O2	-6.83	114.80	118.90
25	DA	1983	C	N1-C2-O2	-6.82	114.81	118.90
25	DA	2569	G	N3-C2-N2	-6.82	115.13	119.90
1	AA	187	C	C5-C6-N1	6.81	124.41	121.00
25	DA	2519	U	O5'-P-OP1	-6.81	99.57	105.70
25	BA	949	C	C6-N1-C2	6.80	123.02	120.30
25	DA	1607	C	N1-C2-O2	6.80	122.98	118.90
25	BA	1745	A	C6-C5-N7	-6.80	127.54	132.30
25	BA	174	U	C5-C6-N1	-6.79	119.30	122.70
25	DA	180	G	C4-C5-N7	6.79	113.52	110.80
1	CA	1043	C	N3-C4-C5	-6.79	119.18	121.90
25	DA	2330	G	N1-C6-O6	6.79	123.97	119.90
25	BA	1745	A	C4-C5-N7	6.79	114.09	110.70
1	AA	1502	A	N1-C6-N6	6.78	122.67	118.60
25	DA	945	A	O4'-C1'-N9	6.78	113.63	108.20
26	DB	70	C	N1-C2-O2	6.78	122.97	118.90
25	DA	2501	C	N3-C4-C5	6.78	124.61	121.90
25	BA	2660	C	C6-N1-C2	6.78	123.01	120.30
25	BA	1775	C	C5-C6-N1	6.78	124.39	121.00
25	BA	1744	G	C5-C6-O6	-6.77	124.53	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	CB	154	LEU	CA-CB-CG	6.77	130.88	115.30
25	BA	2229	A	O4'-C1'-N9	6.77	113.62	108.20
25	BA	978	A	N1-C6-N6	6.77	122.66	118.60
25	BA	2074	G	N9-C4-C5	6.77	108.11	105.40
25	DA	1826	G	C4-C5-N7	-6.77	108.09	110.80
1	AA	383	A	O4'-C1'-N9	6.76	113.61	108.20
1	CA	1002	G	N3-C4-N9	-6.76	121.94	126.00
25	BA	2265	G	N9-C4-C5	-6.76	102.70	105.40
25	DA	2033	A	C5-C6-N1	6.76	121.08	117.70
25	DA	1284	A	N1-C6-N6	6.76	122.65	118.60
25	BA	2299	A	N3-C4-N9	-6.75	122.00	127.40
25	BA	2558	U	C5-C6-N1	-6.75	119.33	122.70
25	BA	2298	A	C2-N3-C4	-6.75	107.23	110.60
25	DA	22	C	C6-N1-C2	6.75	123.00	120.30
1	CA	1042	G	C6-N1-C2	6.75	129.15	125.10
25	BA	840	A	N1-C6-N6	6.74	122.65	118.60
25	BA	2627	U	N3-C4-O4	-6.74	114.68	119.40
25	BA	1858	C	N3-C4-N4	-6.74	113.28	118.00
25	BA	339	G	C5-C6-N1	-6.73	108.13	111.50
1	CA	1502	A	C4-C5-N7	6.73	114.07	110.70
1	AA	1028	C	C6-N1-C2	-6.73	117.61	120.30
1	CA	1183	A	P-O3'-C3'	6.72	127.77	119.70
1	CA	1307	U	N3-C4-O4	6.72	124.11	119.40
25	DA	901	A	N7-C8-N9	6.72	117.16	113.80
25	DA	2188	C	C6-N1-C2	-6.72	117.61	120.30
25	BA	719	C	C6-N1-C2	6.72	122.99	120.30
1	AA	446	G	N1-C6-O6	6.72	123.93	119.90
25	BA	2238	C	C6-N1-C2	6.72	122.99	120.30
25	BA	105	C	C6-N1-C2	6.71	122.99	120.30
25	BA	1606	G	C4-N9-C1'	-6.71	117.77	126.50
7	CG	22	LEU	CA-CB-CG	6.71	130.74	115.30
25	BA	2807	C	C5-C6-N1	6.71	124.35	121.00
25	DA	552	G	N3-C4-N9	-6.71	121.98	126.00
25	BA	2527	C	OP1-P-OP2	-6.71	109.54	119.60
25	BA	555	G	N3-C4-N9	-6.70	121.98	126.00
1	AA	912	C	N1-C2-O2	-6.70	114.88	118.90
1	AA	1278	U	C5-C6-N1	6.70	126.05	122.70
25	DA	1021	A	N3-C4-C5	6.70	131.49	126.80
25	BA	559	U	O5'-P-OP1	-6.70	99.67	105.70
51	D5	58	LEU	CA-CB-CG	6.69	130.69	115.30
1	AA	460	G	C4-N9-C1'	6.69	135.20	126.50
25	BA	767	C	C6-N1-C2	6.69	122.98	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2544	G	N1-C6-O6	6.69	123.91	119.90
1	CA	1154	G	C5-N7-C8	6.69	107.64	104.30
19	CS	16	LEU	CA-CB-CG	6.69	130.68	115.30
25	DA	458	G	C8-N9-C4	-6.69	103.72	106.40
1	CA	768	A	C2-N3-C4	-6.68	107.26	110.60
25	BA	833	C	N3-C4-C5	6.68	124.57	121.90
25	BA	2055	A	O5'-P-OP1	-6.68	99.69	105.70
1	CA	754	C	C2-N1-C1'	6.68	126.15	118.80
25	DA	94(A)	G	C8-N9-C4	-6.68	103.73	106.40
25	BA	512	C	C6-N1-C2	6.68	122.97	120.30
25	BA	1745	A	C5-N7-C8	-6.68	100.56	103.90
1	CA	1034	G	N3-C4-N9	-6.68	121.99	126.00
25	BA	50	G	N9-C4-C5	6.68	108.07	105.40
25	DA	2519	U	C6-N1-C2	6.67	125.00	121.00
1	AA	836	G	N1-C6-O6	6.67	123.90	119.90
25	BA	2549	U	C5-C4-O4	6.67	129.90	125.90
23	CX	76	A	N9-C4-C5	6.66	108.47	105.80
22	AV	17	U	C2-N3-C4	6.66	131.00	127.00
1	CA	65	U	P-O3'-C3'	6.66	127.69	119.70
1	AA	1026	G	C4-N9-C1'	6.66	135.16	126.50
25	BA	1093	G	C4-N9-C1'	6.66	135.16	126.50
1	CA	841	U	C6-N1-C2	-6.66	117.00	121.00
25	DA	205	G	C4-N9-C1'	-6.66	117.84	126.50
25	DA	2224	G	C6-C5-N7	-6.66	126.41	130.40
25	BA	488	C	N3-C4-C5	6.65	124.56	121.90
25	BA	655	G	C8-N9-C4	6.65	109.06	106.40
25	DA	1021	A	N1-C2-N3	6.65	132.63	129.30
25	DA	2567	G	C5-C6-O6	-6.65	124.61	128.60
25	DA	114	U	N3-C4-O4	6.65	124.05	119.40
25	DA	330	A	N3-C4-C5	6.65	131.45	126.80
1	AA	728	A	O5'-P-OP2	-6.64	99.72	105.70
25	BA	477	C	N1-C2-O2	-6.64	114.91	118.90
25	DA	1489	U	C5-C6-N1	-6.64	119.38	122.70
1	AA	167	G	C6-C5-N7	-6.64	126.42	130.40
25	DA	1471	A	C8-N9-C4	-6.64	103.14	105.80
43	DX	57	LEU	CA-CB-CG	6.64	130.57	115.30
25	BA	1097	G	N1-C6-O6	6.63	123.88	119.90
1	CA	1154	G	O4'-C1'-N9	6.63	113.50	108.20
1	CA	1106	G	C8-N9-C4	-6.63	103.75	106.40
25	DA	1344	G	N1-C6-O6	6.62	123.88	119.90
1	AA	66	G	N1-C6-O6	6.62	123.87	119.90
25	DA	898	C	C5-C6-N1	6.62	124.31	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	271(A)	A	C8-N9-C4	6.61	108.45	105.80
1	CA	1126	U	C5-C6-N1	6.61	126.00	122.70
1	CA	984	C	C2-N3-C4	6.61	123.20	119.90
1	AA	1276	G	N3-C4-C5	-6.61	125.30	128.60
26	DB	9	G	N1-C6-O6	6.61	123.86	119.90
25	BA	1958	A	N1-C6-N6	6.60	122.56	118.60
25	DA	2320	A	C2-N3-C4	6.60	113.90	110.60
25	DA	2630	G	N3-C4-C5	6.60	131.90	128.60
1	AA	532	A	OP1-P-O3'	6.60	119.72	105.20
25	BA	553	A	N3-C4-C5	6.60	131.42	126.80
25	BA	2794	A	N1-C6-N6	-6.60	114.64	118.60
25	DA	530	G	N3-C4-N9	-6.59	122.04	126.00
1	CA	5	U	C2-N1-C1'	6.59	125.61	117.70
25	BA	50	G	C5-C6-O6	6.59	132.55	128.60
25	DA	2512	C	C6-N1-C2	6.59	122.94	120.30
25	BA	485	U	O5'-P-OP2	-6.58	99.78	105.70
25	DA	898	C	C6-N1-C2	-6.58	117.67	120.30
25	DA	2572	A	C8-N9-C4	6.58	108.43	105.80
25	BA	1926	G	N1-C6-O6	-6.58	115.95	119.90
1	AA	1007	C	C6-N1-C1'	-6.58	112.90	120.80
25	BA	892	G	O4'-C1'-N9	6.58	113.46	108.20
1	CA	1273	G	N3-C4-C5	-6.58	125.31	128.60
25	DA	2072	G	N1-C6-O6	6.57	123.84	119.90
23	AX	22	G	C8-N9-C1'	6.56	135.53	127.00
1	CA	1395	C	C2-N3-C4	6.56	123.18	119.90
25	DA	2333	A	C8-N9-C4	6.56	108.42	105.80
25	DA	1269	A	C2-N3-C4	-6.56	107.32	110.60
25	DA	1573	G	C8-N9-C4	6.55	109.02	106.40
1	CA	915	A	N7-C8-N9	-6.55	110.53	113.80
25	DA	576	U	O5'-P-OP1	-6.55	99.81	105.70
25	DA	2512	C	N3-C4-C5	6.55	124.52	121.90
25	DA	790	C	O5'-P-OP2	-6.55	99.81	105.70
25	DA	272(C)	G	N3-C4-C5	6.54	131.87	128.60
25	BA	2700	U	N3-C4-C5	-6.54	110.67	114.60
1	CA	992	U	P-O3'-C3'	6.54	127.55	119.70
1	CA	998	G	C5-C6-O6	6.54	132.53	128.60
25	DA	1477	A	C2-N3-C4	-6.54	107.33	110.60
25	BA	1068	G	N9-C4-C5	6.54	108.02	105.40
25	BA	1072	U	C2-N1-C1'	6.54	125.54	117.70
25	BA	254	A	O4'-C1'-N9	6.53	113.42	108.20
1	AA	611	A	C8-N9-C4	6.53	108.41	105.80
25	BA	1249	A	C4-C5-N7	6.53	113.96	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	205	G	N7-C8-N9	-6.53	109.84	113.10
25	DA	956	G	C8-N9-C4	-6.52	103.79	106.40
1	AA	1127	G	N9-C4-C5	-6.52	102.79	105.40
43	DX	65	ARG	NE-CZ-NH2	-6.52	117.04	120.30
25	BA	1723	A	N1-C6-N6	-6.52	114.69	118.60
25	BA	2651	A	N1-C6-N6	6.52	122.51	118.60
25	DA	1698	A	C5-N7-C8	-6.52	100.64	103.90
25	DA	912	C	C6-N1-C2	-6.52	117.69	120.30
1	AA	1123	A	C5-C6-N6	6.52	128.91	123.70
1	AA	1123	A	C6-N1-C2	6.51	122.51	118.60
25	DA	1142	U	N1-C2-O2	6.51	127.36	122.80
1	CA	527	G	N1-C6-O6	-6.51	115.99	119.90
25	DA	663	G	C4-C5-N7	-6.51	108.20	110.80
25	DA	1698	A	C4-C5-N7	6.51	113.96	110.70
25	DA	1698	A	O4'-C1'-N9	6.51	113.41	108.20
25	DA	514	A	N7-C8-N9	-6.51	110.55	113.80
1	CA	1101	A	C8-N9-C4	6.51	108.40	105.80
25	DA	2489	G	C8-N9-C4	6.51	109.00	106.40
25	BA	1098	C	C5-C6-N1	6.50	124.25	121.00
25	BA	398	A	N1-C6-N6	6.50	122.50	118.60
1	AA	348	G	N3-C4-C5	6.50	131.85	128.60
25	BA	2454	C	C6-N1-C2	6.50	122.90	120.30
23	CX	22	G	C8-N9-C4	-6.50	103.80	106.40
25	DA	754	C	N1-C2-O2	-6.50	115.00	118.90
25	BA	2430	A	N1-C6-N6	6.49	122.50	118.60
25	DA	1269	A	N1-C6-N6	6.49	122.50	118.60
25	BA	1700	G	P-O3'-C3'	6.49	127.48	119.70
25	DA	195	A	OP2-P-O3'	6.49	119.47	105.20
25	DA	1313	U	C2-N1-C1'	6.49	125.48	117.70
25	DA	196	A	O5'-P-OP2	-6.48	99.86	105.70
25	BA	354	A	C5-N7-C8	-6.48	100.66	103.90
1	AA	1127	G	C5-N7-C8	6.47	107.54	104.30
1	AA	1502	A	N1-C2-N3	6.47	132.54	129.30
26	DB	72	G	C6-C5-N7	-6.47	126.52	130.40
1	AA	890	G	O4'-C1'-N9	6.47	113.38	108.20
25	DA	1807	G	N1-C6-O6	6.46	123.78	119.90
25	DA	63	U	N3-C4-O4	-6.46	114.88	119.40
25	BA	254	A	C6-C5-N7	-6.46	127.78	132.30
25	DA	1698	A	C4-C5-C6	6.46	120.23	117.00
25	BA	2521	G	C8-N9-C4	6.46	108.98	106.40
25	BA	1930	C	C6-N1-C2	-6.45	117.72	120.30
25	BA	2868	C	O5'-P-OP2	-6.45	99.90	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	2446	G	N9-C4-C5	-6.45	102.82	105.40
1	AA	1519	A	C5-C6-N1	-6.45	114.48	117.70
1	CA	1518	A	N1-C2-N3	6.45	132.52	129.30
1	CA	161	A	C8-N9-C4	-6.44	103.22	105.80
1	AA	1124	G	C2-N3-C4	6.44	115.12	111.90
25	DA	1692	U	O5'-P-OP2	-6.44	99.91	105.70
25	BA	184	A	C5-N7-C8	6.44	107.12	103.90
25	DA	31	C	O5'-P-OP2	-6.43	99.91	105.70
25	BA	696	C	C5-C6-N1	6.43	124.22	121.00
25	DA	2244	U	C5-C6-N1	-6.43	119.49	122.70
25	BA	1783	C	C6-N1-C2	6.43	122.87	120.30
25	DA	2546	U	N1-C2-O2	-6.42	118.30	122.80
25	BA	1067	A	C6-C5-N7	-6.42	127.81	132.30
1	AA	738	C	C6-N1-C2	-6.42	117.73	120.30
25	DA	1210	A	P-O3'-C3'	6.42	127.40	119.70
23	CX	46	G	N9-C4-C5	6.42	107.97	105.40
25	BA	999	G	OP2-P-O3'	6.41	119.30	105.20
25	DA	907	U	C5-C6-N1	6.41	125.91	122.70
25	DA	2207	G	C5-C6-O6	-6.41	124.75	128.60
25	DA	2805	G	O4'-C1'-N9	6.41	113.33	108.20
25	BA	12	U	N1-C2-O2	6.40	127.28	122.80
1	CA	915	A	C8-N9-C4	6.40	108.36	105.80
25	DA	671	C	N1-C2-O2	-6.40	115.06	118.90
1	CA	1064	G	P-O3'-C3'	6.40	127.38	119.70
25	DA	529	A	C4-C5-N7	6.40	113.90	110.70
25	BA	538	A	N1-C6-N6	6.40	122.44	118.60
25	DA	1660	C	C5-C6-N1	-6.40	117.80	121.00
25	DA	1021	A	N7-C8-N9	6.40	117.00	113.80
25	DA	1142(A)	A	N1-C2-N3	6.40	132.50	129.30
1	AA	878	G	C8-N9-C4	6.39	108.96	106.40
25	DA	1489	U	N3-C4-O4	6.39	123.87	119.40
25	DA	522	G	C5-C6-O6	-6.38	124.77	128.60
25	DA	915	C	C6-N1-C2	-6.38	117.75	120.30
25	DA	945	A	C5-C6-N1	-6.38	114.51	117.70
25	BA	2228	G	C6-C5-N7	-6.38	126.58	130.40
1	AA	1502	A	C2-N3-C4	-6.38	107.41	110.60
25	BA	856	G	C5-C6-O6	6.37	132.42	128.60
25	BA	2331	G	C5-C6-O6	-6.37	124.78	128.60
25	DA	1677	A	C5-C6-N6	-6.37	118.61	123.70
25	BA	2427	G	C8-N9-C4	-6.37	103.85	106.40
25	DA	1653	G	C6-C5-N7	-6.36	126.58	130.40
25	BA	1631	C	C2-N1-C1'	6.36	125.79	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	906	G	N3-C4-N9	6.36	129.81	126.00
25	DA	470	A	O5'-P-OP1	-6.36	99.98	105.70
25	DA	529	A	C5-N7-C8	-6.36	100.72	103.90
25	DA	2347	C	N1-C2-O2	6.36	122.71	118.90
1	AA	1531	A	C8-N9-C4	-6.35	103.26	105.80
25	BA	2103	C	O5'-P-OP2	-6.35	99.98	105.70
25	BA	2228	G	C8-N9-C1'	-6.35	118.74	127.00
25	DA	2550	G	C6-C5-N7	-6.35	126.59	130.40
25	BA	610	C	N1-C2-O2	-6.35	115.09	118.90
1	CA	1221	G	C6-N1-C2	6.35	128.91	125.10
25	DA	2338	G	N3-C4-C5	6.35	131.78	128.60
1	AA	1276	G	C8-N9-C4	-6.35	103.86	106.40
25	BA	1659	G	C2-N3-C4	-6.34	108.73	111.90
25	BA	1850	A	C2-N3-C4	-6.34	107.43	110.60
25	BA	1710	C	C5-C4-N4	-6.34	115.76	120.20
25	DA	2826	A	N1-C6-N6	-6.34	114.80	118.60
25	BA	1170	C	C6-N1-C2	6.33	122.83	120.30
1	AA	1506	U	N3-C2-O2	6.33	126.63	122.20
25	BA	1994	A	C8-N9-C4	-6.33	103.27	105.80
25	DA	2595	G	C8-N9-C4	6.33	108.93	106.40
1	AA	146	G	C8-N9-C4	-6.33	103.87	106.40
1	CA	1262	C	C2-N1-C1'	6.33	125.76	118.80
25	DA	527	C	C6-N1-C2	-6.33	117.77	120.30
1	AA	458	C	C5-C6-N1	6.32	124.16	121.00
25	DA	2313	C	N3-C4-C5	-6.32	119.37	121.90
1	CA	1158	C	N3-C2-O2	-6.32	117.48	121.90
26	DB	56	G	N3-C4-N9	6.31	129.79	126.00
25	BA	2431	U	OP1-P-O3'	6.31	119.09	105.20
1	CA	1026	G	C2-N3-C4	6.31	115.06	111.90
25	DA	114	U	C2-N1-C1'	6.31	125.27	117.70
25	BA	1093	G	N3-C2-N2	6.31	124.31	119.90
25	DA	912	C	N3-C2-O2	-6.31	117.48	121.90
25	BA	719	C	N1-C2-O2	-6.30	115.12	118.90
1	CA	299	G	C5-C6-O6	-6.30	124.82	128.60
25	DA	461	C	N1-C2-O2	-6.30	115.12	118.90
25	DA	659	C	C6-N1-C2	6.30	122.82	120.30
25	DA	1774	C	C5-C6-N1	6.30	124.15	121.00
25	DA	2332	U	C5-C6-N1	-6.30	119.55	122.70
25	BA	2641	A	O4'-C1'-N9	6.30	113.24	108.20
25	DA	2520	C	C6-N1-C2	6.30	122.82	120.30
25	BA	507	G	O5'-P-OP2	-6.30	100.03	105.70
25	BA	1067	A	N3-C4-C5	6.30	131.21	126.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	342	C	C6-N1-C2	-6.29	117.78	120.30
1	CA	115	G	P-O3'-C3'	6.29	127.25	119.70
25	DA	465	G	C5-C6-O6	-6.29	124.82	128.60
25	DA	1647	G	O4'-C1'-N9	-6.29	103.16	108.20
1	CA	1502	A	N7-C8-N9	6.29	116.95	113.80
1	CA	1122	U	O4'-C1'-N1	-6.29	103.17	108.20
1	AA	299	G	N3-C4-C5	6.29	131.74	128.60
25	BA	46	C	N3-C4-C5	6.29	124.42	121.90
25	BA	1373	C	C6-N1-C2	-6.29	117.78	120.30
1	CA	1397	C	C2-N1-C1'	6.29	125.72	118.80
1	CA	1004	A	C5-C6-N6	6.29	128.73	123.70
1	CA	1154	G	N1-C2-N3	6.29	127.67	123.90
1	CA	365	U	C5-C6-N1	-6.29	119.56	122.70
25	DA	2346	A	N1-C6-N6	-6.29	114.83	118.60
25	BA	1322	A	C8-N9-C4	6.28	108.31	105.80
1	AA	1460	A	C8-N9-C4	6.28	108.31	105.80
25	DA	827	U	N3-C2-O2	6.28	126.60	122.20
25	DA	597	U	N3-C2-O2	6.28	126.60	122.20
25	BA	2227	G	C8-N9-C1'	6.28	135.16	127.00
1	CA	1325	C	C5-C4-N4	6.28	124.59	120.20
25	BA	1699	A	OP1-P-O3'	6.28	119.01	105.20
29	DF	12	LEU	CA-CB-CG	6.27	129.72	115.30
1	CA	1163	C	N1-C2-O2	6.27	122.66	118.90
1	CA	1271	G	C5-C6-O6	-6.27	124.84	128.60
1	AA	421	U	N3-C2-O2	-6.26	117.81	122.20
1	AA	1036	G	N3-C4-C5	-6.26	125.47	128.60
25	BA	1665	G	O5'-P-OP2	-6.26	100.06	105.70
25	DA	1963	U	C5-C6-N1	6.26	125.83	122.70
25	BA	2511	C	N3-C4-N4	6.26	122.38	118.00
25	BA	1315	A	O5'-P-OP2	-6.26	100.06	105.70
25	BA	2622	C	O5'-P-OP1	-6.26	100.07	105.70
1	CA	5	U	C6-N1-C2	-6.26	117.25	121.00
1	CA	1022	G	N3-C4-N9	-6.26	122.25	126.00
23	CX	34	C	C2-N1-C1'	6.25	125.68	118.80
25	DA	1281	G	N1-C6-O6	6.25	123.65	119.90
25	BA	354	A	N3-C4-C5	6.25	131.18	126.80
25	BA	1055	A	C8-N9-C4	-6.25	103.30	105.80
1	CA	916	G	C8-N9-C4	-6.25	103.90	106.40
25	DA	2825	C	O5'-P-OP1	-6.25	100.07	105.70
25	BA	2694	U	C2-N1-C1'	6.25	125.20	117.70
25	DA	2599	G	C8-N9-C4	6.25	108.90	106.40
25	BA	1522	G	N3-C2-N2	-6.25	115.53	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1531	A	N7-C8-N9	6.25	116.92	113.80
25	BA	555	G	C8-N9-C4	-6.25	103.90	106.40
25	DA	680	G	C5-C6-O6	-6.25	124.85	128.60
25	BA	82	G	C6-C5-N7	-6.24	126.65	130.40
25	DA	1322	A	O5'-P-OP2	-6.24	100.08	105.70
25	BA	1249	A	C6-C5-N7	-6.24	127.93	132.30
25	DA	826	U	C5-C6-N1	-6.24	119.58	122.70
1	AA	401	C	C6-N1-C2	-6.24	117.81	120.30
1	AA	1113	C	C6-N1-C2	-6.24	117.81	120.30
23	CX	26	G	N3-C2-N2	6.24	124.27	119.90
25	BA	2641	A	N1-C2-N3	6.24	132.42	129.30
25	DA	208	C	C6-N1-C2	6.24	122.80	120.30
23	CX	22	G	C8-N9-C1'	6.24	135.11	127.00
25	DA	1769	G	C5-C6-O6	-6.24	124.86	128.60
1	CA	1158	C	C6-N1-C2	-6.23	117.81	120.30
25	BA	978	A	C6-C5-N7	-6.23	127.94	132.30
25	BA	930	G	C4-N9-C1'	-6.23	118.40	126.50
25	DA	680	G	N1-C6-O6	6.22	123.64	119.90
25	DA	1746	G	C8-N9-C4	-6.22	103.91	106.40
1	AA	1285	A	P-O3'-C3'	6.22	127.17	119.70
25	BA	2265	G	N1-C6-O6	6.22	123.63	119.90
25	BA	1489	G	N1-C6-O6	6.22	123.63	119.90
25	BA	2550	C	N3-C4-C5	6.22	124.39	121.90
25	BA	1522	G	N1-C6-O6	6.22	123.63	119.90
2	CB	180	LEU	CA-CB-CG	-6.22	101.00	115.30
25	BA	1494	G	C8-N9-C4	-6.21	103.91	106.40
25	DA	1271	G	C5-C6-N1	-6.21	108.39	111.50
25	DA	680	G	C4-C5-N7	6.21	113.28	110.80
25	DA	1363	C	N3-C4-N4	-6.21	113.66	118.00
25	DA	52	A	C8-N9-C4	-6.20	103.32	105.80
25	DA	885	C	C5-C6-N1	6.20	124.10	121.00
1	CA	1033	G	N9-C4-C5	-6.20	102.92	105.40
25	BA	1696	G	O5'-P-OP2	-6.20	100.12	105.70
1	AA	998	G	N3-C4-N9	-6.20	122.28	126.00
1	CA	1169	A	N1-C6-N6	6.19	122.32	118.60
25	DA	1600	C	N1-C2-O2	-6.19	115.19	118.90
1	AA	1415	G	N1-C6-O6	6.19	123.61	119.90
25	BA	46	C	C2-N3-C4	-6.19	116.81	119.90
25	BA	139	A	C8-N9-C4	-6.19	103.33	105.80
25	BA	288	U	O4'-C1'-N1	6.19	113.15	108.20
25	BA	1606	G	N3-C4-N9	-6.19	122.29	126.00
25	DA	1653	G	C8-N9-C1'	-6.18	118.96	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	1937	A	C8-N9-C4	6.18	108.27	105.80
22	CV	17	U	C2-N3-C4	6.18	130.71	127.00
25	DA	1651	G	C8-N9-C4	6.18	108.87	106.40
25	DA	733	G	C4-C5-N7	6.18	113.27	110.80
1	CA	175	C	C6-N1-C2	-6.17	117.83	120.30
1	CA	897	C	O5'-P-OP2	-6.17	100.14	105.70
25	BA	792	G	C5-C6-O6	-6.17	124.90	128.60
1	CA	1169	A	C8-N9-C4	-6.17	103.33	105.80
25	DA	1204	A	C6-C5-N7	-6.17	127.98	132.30
1	AA	92	C	C5-C6-N1	6.17	124.08	121.00
1	AA	720	C	C6-N1-C2	-6.17	117.83	120.30
1	AA	1007	C	O4'-C1'-N1	-6.17	103.27	108.20
1	CA	1000	U	C2-N3-C4	6.17	130.70	127.00
34	BO	8	LEU	CA-CB-CG	6.17	129.48	115.30
25	BA	2734	A	C8-N9-C4	6.16	108.27	105.80
1	AA	1007	C	C2-N3-C4	6.16	122.98	119.90
1	CA	1113	C	C6-N1-C2	-6.16	117.84	120.30
25	DA	827	U	N1-C2-O2	-6.16	118.49	122.80
25	DA	1826	G	C5-N7-C8	6.16	107.38	104.30
25	DA	2804	C	C5-C6-N1	6.16	124.08	121.00
25	DA	116	C	N3-C4-C5	-6.16	119.44	121.90
25	BA	1922	A	O5'-P-OP1	-6.16	100.16	105.70
1	CA	997	U	C2-N3-C4	6.15	130.69	127.00
25	DA	1204	A	N1-C2-N3	6.15	132.38	129.30
25	DA	1660	C	C4-C5-C6	6.15	120.47	117.40
25	DA	2505	G	C5-C6-O6	-6.15	124.91	128.60
26	DB	56	G	C8-N9-C4	-6.15	103.94	106.40
25	DA	207	A	C8-N9-C4	6.14	108.26	105.80
25	BA	353	G	O5'-P-OP2	-6.14	100.17	105.70
25	BA	2519	C	O5'-P-OP2	-6.14	100.17	105.70
23	AX	4	G	C8-N9-C4	6.14	108.86	106.40
1	AA	1506	U	N1-C2-O2	-6.14	118.50	122.80
25	BA	2239	A	N9-C4-C5	6.14	108.25	105.80
25	BA	1067	A	N3-C4-N9	-6.13	122.49	127.40
25	DA	2246	G	C2-N3-C4	-6.13	108.83	111.90
25	DA	2644	G	N3-C4-N9	-6.13	122.32	126.00
25	BA	2506	G	C8-N9-C4	6.13	108.85	106.40
25	BA	903	C	C6-N1-C2	-6.13	117.85	120.30
25	BA	2627	U	C4-C5-C6	-6.13	116.02	119.70
1	CA	316	G	N1-C6-O6	6.13	123.58	119.90
25	DA	2286	A	C2-N3-C4	-6.13	107.54	110.60
25	BA	1386	U	C2-N3-C4	-6.12	123.33	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	227	G	C8-N9-C4	6.12	108.85	106.40
23	AX	76	A	C4-C5-C6	6.12	120.06	117.00
25	BA	842	C	N3-C4-N4	-6.12	113.72	118.00
1	CA	1044	A	N1-C6-N6	-6.12	114.93	118.60
1	CA	1054	C	C2-N1-C1'	6.12	125.53	118.80
25	BA	2331	G	O4'-C1'-N9	6.11	113.09	108.20
25	DA	62	C	C6-N1-C2	6.11	122.75	120.30
25	DA	2373	G	N1-C6-O6	6.11	123.57	119.90
23	CX	22	G	N1-C6-O6	-6.11	116.23	119.90
25	DA	141	A	C5-N7-C8	-6.11	100.85	103.90
25	BA	2015	U	O5'-P-OP1	-6.10	100.21	105.70
25	DA	1678	G	C8-N9-C4	-6.10	103.96	106.40
25	DA	2294	C	N1-C2-O2	6.10	122.56	118.90
25	DA	2321	G	N9-C4-C5	-6.10	102.96	105.40
1	AA	343	U	N1-C2-O2	-6.10	118.53	122.80
25	DA	748	G	C5-C6-N1	6.10	114.55	111.50
26	BB	80	U	C5-C4-O4	6.10	129.56	125.90
25	DA	2039	C	C6-N1-C2	-6.10	117.86	120.30
25	BA	989	G	C4-N9-C1'	6.10	134.43	126.50
25	BA	2287	C	O5'-P-OP1	-6.09	100.21	105.70
1	AA	1131	G	N1-C6-O6	6.09	123.56	119.90
25	BA	1829	U	N3-C4-O4	-6.09	115.14	119.40
25	DA	180	G	C5-C6-O6	-6.09	124.94	128.60
25	DA	2446	G	N7-C8-N9	-6.09	110.05	113.10
25	BA	933	C	N1-C2-O2	6.09	122.55	118.90
25	BA	2228	G	N1-C6-O6	6.09	123.55	119.90
23	CX	46	G	C8-N9-C1'	6.09	134.91	127.00
25	DA	2489	G	N9-C4-C5	-6.09	102.96	105.40
25	BA	894	U	N3-C4-O4	-6.09	115.14	119.40
25	DA	1558	A	P-O3'-C3'	6.09	127.00	119.70
1	AA	101	A	O5'-P-OP2	-6.08	100.22	105.70
25	BA	2712	C	C6-N1-C2	6.08	122.73	120.30
25	DA	2735	G	C5-C6-O6	-6.08	124.95	128.60
25	BA	1336	C	C6-N1-C2	-6.08	117.87	120.30
25	BA	2227	G	C8-N9-C4	6.08	108.83	106.40
25	DA	1797	C	C5-C6-N1	-6.08	117.96	121.00
26	DB	13	A	C8-N9-C4	6.08	108.23	105.80
25	DA	885	C	C6-N1-C2	-6.08	117.87	120.30
25	BA	477	C	C6-N1-C2	6.08	122.73	120.30
25	BA	1024	G	C5-C6-O6	6.08	132.25	128.60
25	BA	2565	G	N3-C2-N2	6.08	124.15	119.90
25	DA	522	G	N1-C6-O6	6.08	123.55	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	981	A	C6-C5-N7	6.08	136.55	132.30
25	DA	1826	G	C5-C6-O6	6.08	132.25	128.60
1	CA	1126	U	C2-N1-C1'	6.07	124.99	117.70
1	AA	841	U	C6-N1-C2	-6.07	117.36	121.00
25	BA	1919	G	N1-C6-O6	6.07	123.54	119.90
1	CA	1003	G	C4-C5-C6	6.07	122.44	118.80
1	AA	421	U	N1-C2-O2	6.07	127.05	122.80
25	DA	467	G	C8-N9-C4	6.07	108.83	106.40
25	DA	2277	G	O5'-P-OP2	-6.07	100.24	105.70
25	BA	70	A	P-O3'-C3'	6.07	126.98	119.70
1	CA	1502	A	N1-C6-N6	6.07	122.24	118.60
25	DA	504	U	N3-C2-O2	-6.07	117.95	122.20
1	CA	1511	G	N1-C6-O6	6.06	123.54	119.90
25	BA	533	G	N3-C4-N9	-6.06	122.36	126.00
1	CA	1101	A	N9-C4-C5	-6.06	103.38	105.80
23	CX	39	C	C6-N1-C2	-6.06	117.88	120.30
25	DA	1022	G	N9-C4-C5	6.06	107.82	105.40
25	DA	2388	A	O4'-C1'-N9	6.06	113.05	108.20
25	DA	2805	G	N9-C4-C5	6.06	107.82	105.40
23	AX	20	U	O4'-C1'-N1	6.06	113.05	108.20
1	CA	299	G	N9-C4-C5	-6.06	102.98	105.40
23	CX	34	C	C6-N1-C2	-6.06	117.88	120.30
1	CA	995	C	N1-C2-O2	6.05	122.53	118.90
1	AA	1131	G	C6-C5-N7	-6.05	126.77	130.40
25	DA	2206	G	C8-N9-C1'	6.05	134.87	127.00
1	AA	76	C	C4-C5-C6	-6.05	114.38	117.40
25	BA	1867	C	C6-N1-C2	-6.05	117.88	120.30
25	DA	2607	G	N3-C2-N2	6.05	124.14	119.90
25	BA	199	C	C6-N1-C2	6.05	122.72	120.30
1	CA	1369	C	C6-N1-C2	6.05	122.72	120.30
25	BA	82	G	C5-C6-O6	-6.04	124.97	128.60
25	DA	94(A)	G	N9-C4-C5	6.04	107.82	105.40
25	DA	933	A	N1-C6-N6	6.04	122.23	118.60
50	D4	68	ARG	NE-CZ-NH2	6.04	123.32	120.30
25	DA	90	U	N1-C2-O2	6.04	127.03	122.80
1	AA	848	C	C5-C6-N1	6.04	124.02	121.00
1	AA	1024	G	C8-N9-C4	-6.04	103.98	106.40
25	BA	1605	A	C5-C6-N1	-6.04	114.68	117.70
25	DA	1760	A	N1-C6-N6	-6.04	114.98	118.60
25	DA	1537	G	C5-C6-O6	-6.04	124.98	128.60
25	DA	1956	U	N1-C2-N3	6.04	118.52	114.90
25	BA	798	A	OP1-P-O3'	6.03	118.47	105.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	799	A	O5'-P-OP2	6.03	117.94	110.70
25	BA	2515	A	N1-C2-N3	-6.03	126.28	129.30
25	DA	461	C	N3-C4-N4	6.03	122.22	118.00
25	BA	1450	C	OP1-P-OP2	6.03	128.65	119.60
1	AA	325	A	C8-N9-C4	6.03	108.21	105.80
25	DA	893	C	C5-C6-N1	6.03	124.02	121.00
25	DA	945	A	C4-C5-N7	6.03	113.72	110.70
25	BA	2622	C	C5-C6-N1	-6.03	117.99	121.00
25	DA	1115	G	C4-N9-C1'	-6.03	118.67	126.50
35	DP	44	GLY	N-CA-C	-6.02	98.05	113.10
25	DA	614	U	N3-C2-O2	-6.02	117.99	122.20
1	AA	139	G	C8-N9-C4	-6.02	103.99	106.40
25	BA	1318	A	O4'-C1'-N9	6.01	113.01	108.20
25	BA	2513	C	C2-N1-C1'	-6.01	112.18	118.80
1	CA	509	A	C8-N9-C4	-6.01	103.39	105.80
1	AA	236	G	C4-C5-N7	-6.01	108.39	110.80
25	BA	1076	G	C8-N9-C4	6.01	108.81	106.40
25	DA	2298	A	C6-N1-C2	6.01	122.21	118.60
25	BA	990	A	N9-C4-C5	-6.01	103.40	105.80
25	BA	1018	A	O5'-P-OP2	6.01	117.91	110.70
25	BA	342	C	N1-C2-O2	-6.00	115.30	118.90
1	CA	1180	A	N7-C8-N9	6.00	116.80	113.80
25	BA	507	G	O4'-C1'-N9	6.00	113.00	108.20
25	DA	1708	C	O5'-P-OP2	6.00	117.90	110.70
25	DA	1775	U	O5'-P-OP2	6.00	117.90	110.70
25	BA	989	G	C5-C6-O6	6.00	132.20	128.60
1	CA	1262	C	N3-C4-C5	5.99	124.30	121.90
25	DA	1021	A	C5-C6-N1	-5.99	114.70	117.70
25	DA	2474	C	N1-C2-O2	5.99	122.49	118.90
1	CA	1154	G	N3-C4-C5	-5.99	125.61	128.60
25	DA	1721	G	N3-C4-N9	5.99	129.59	126.00
25	BA	719	C	C5-C6-N1	-5.98	118.01	121.00
1	AA	348	G	N3-C2-N2	-5.98	115.71	119.90
25	BA	2814	C	C6-N1-C2	-5.98	117.91	120.30
25	BA	1249	A	N7-C8-N9	5.98	116.79	113.80
25	BA	1870	G	C8-N9-C1'	-5.98	119.23	127.00
1	AA	1286	A	O5'-P-OP1	-5.98	100.32	105.70
1	CA	1397	C	N1-C2-O2	5.98	122.49	118.90
1	CA	265	G	O4'-C1'-N9	-5.98	103.42	108.20
1	AA	167	G	C8-N9-C4	-5.97	104.01	106.40
1	AA	107	G	C8-N9-C4	5.97	108.79	106.40
1	CA	1043	C	C6-N1-C2	-5.97	117.91	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	266	G	P-O3'-C3'	5.97	126.86	119.70
25	BA	474	U	C5-C4-O4	5.97	129.48	125.90
1	CA	1273	G	N9-C4-C5	-5.97	103.01	105.40
26	DB	56	G	C2-N3-C4	5.97	114.88	111.90
25	BA	1870	G	C4-N9-C1'	5.96	134.25	126.50
25	BA	2725	A	O5'-P-OP1	-5.96	100.33	105.70
1	CA	266	G	C2-N3-C4	-5.96	108.92	111.90
25	DA	2206	G	N3-C4-C5	5.96	131.58	128.60
1	CA	1022	G	N3-C4-C5	5.96	131.58	128.60
25	BA	883	G	N1-C6-O6	-5.96	116.33	119.90
25	BA	1072	U	N3-C2-O2	-5.96	118.03	122.20
25	DA	530	G	C5-N7-C8	-5.96	101.32	104.30
25	DA	808	G	N3-C4-C5	-5.96	125.62	128.60
25	BA	739	C	C6-N1-C2	-5.95	117.92	120.30
25	DA	2569	G	N1-C6-O6	5.95	123.47	119.90
25	BA	837	C	C2-N1-C1'	5.95	125.35	118.80
25	BA	987	G	C8-N9-C4	5.95	108.78	106.40
25	BA	2298	A	C5-N7-C8	-5.95	100.93	103.90
25	DA	2897	U	C5-C6-N1	5.95	125.67	122.70
25	BA	1152	G	O4'-C1'-N9	-5.95	103.44	108.20
1	CA	65	U	OP2-P-O3'	5.95	118.28	105.20
25	BA	1225	C	C6-N1-C2	5.94	122.68	120.30
25	BA	2574	U	C5-C6-N1	-5.94	119.73	122.70
25	DA	199	A	N1-C6-N6	5.94	122.17	118.60
25	DA	1816	G	O5'-P-OP1	-5.94	100.35	105.70
25	BA	835	A	N1-C6-N6	5.94	122.16	118.60
1	CA	1036	G	C5-C6-N1	-5.94	108.53	111.50
23	CX	22	G	N3-C4-N9	-5.94	122.44	126.00
1	AA	146	G	N7-C8-N9	5.93	116.07	113.10
25	DA	1614	A	N1-C6-N6	-5.93	115.04	118.60
25	DA	2255	G	OP2-P-O3'	5.93	118.25	105.20
26	DB	60	C	C5-C6-N1	5.93	123.97	121.00
25	BA	2094	G	C5-C6-O6	-5.93	125.04	128.60
25	BA	930	G	C8-N9-C1'	5.93	134.71	127.00
25	BA	2273	C	OP2-P-O3'	5.93	118.24	105.20
25	DA	2257	U	N3-C2-O2	5.93	126.35	122.20
25	DA	889	C	C6-N1-C2	-5.93	117.93	120.30
25	DA	2084	C	C5-C6-N1	-5.93	118.04	121.00
25	DA	1745	C	N1-C2-O2	-5.92	115.34	118.90
25	BA	2527	C	C5-C4-N4	-5.92	116.05	120.20
25	DA	2024	G	N1-C6-O6	5.92	123.45	119.90
25	BA	2674	A	C8-N9-C4	-5.92	103.43	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1606	G	C6-C5-N7	5.92	133.95	130.40
25	DA	1350	C	N1-C2-O2	-5.92	115.35	118.90
1	CA	1017	G	C5-C6-N1	-5.91	108.55	111.50
23	CX	6	G	C8-N9-C4	5.91	108.76	106.40
25	BA	793	A	O4'-C1'-N9	5.91	112.93	108.20
25	DA	2805	G	C5-C6-O6	5.91	132.14	128.60
1	CA	1311	G	N9-C4-C5	5.91	107.76	105.40
25	DA	808	G	N3-C4-N9	5.91	129.54	126.00
1	CA	768	A	C5-C6-N1	-5.90	114.75	117.70
25	DA	923	C	C5-C6-N1	5.90	123.95	121.00
25	BA	474	U	N3-C2-O2	-5.90	118.07	122.20
25	BA	1440	U	O5'-P-OP2	5.90	117.78	110.70
25	DA	530	G	N7-C8-N9	5.90	116.05	113.10
25	BA	1188	A	C4-C5-N7	5.90	113.65	110.70
25	BA	555	G	N3-C4-C5	5.90	131.55	128.60
25	DA	817	C	C6-N1-C2	5.90	122.66	120.30
25	DA	1776	G	N9-C4-C5	-5.90	103.04	105.40
25	BA	399	G	O4'-C1'-N9	5.89	112.92	108.20
1	CA	354	G	C6-C5-N7	-5.89	126.86	130.40
25	DA	1956	U	N3-C2-O2	-5.89	118.07	122.20
25	BA	1807	G	O5'-P-OP2	-5.89	100.40	105.70
1	CA	1137	C	P-O3'-C3'	5.89	126.77	119.70
1	CA	1311	G	C6-C5-N7	5.89	133.94	130.40
25	DA	1807	G	C5-C6-O6	-5.89	125.06	128.60
25	BA	727	G	N3-C4-C5	-5.89	125.65	128.60
25	BA	2298	A	N1-C6-N6	5.89	122.14	118.60
23	AX	69	C	C2-N1-C1'	5.89	125.28	118.80
25	DA	1130	U	O5'-P-OP1	-5.89	100.40	105.70
25	DA	114	U	C5-C4-O4	-5.89	122.37	125.90
25	BA	2389	A	C2-N3-C4	-5.89	107.66	110.60
25	BA	2876	U	C5-C4-O4	5.89	129.43	125.90
1	CA	1125	U	C2-N1-C1'	5.88	124.76	117.70
25	BA	303	C	C5-C6-N1	5.88	123.94	121.00
25	DA	529	A	C5-C6-N6	-5.88	119.00	123.70
25	DA	1972	A	N1-C6-N6	5.88	122.13	118.60
25	DA	565	C	C4-C5-C6	5.88	120.34	117.40
1	AA	902	G	O5'-P-OP2	-5.88	100.41	105.70
25	BA	1871	G	N1-C6-O6	-5.88	116.37	119.90
25	BA	917	A	N7-C8-N9	-5.88	110.86	113.80
25	DA	955	C	OP1-P-O3'	5.88	118.12	105.20
25	BA	671	A	C2-N3-C4	-5.87	107.66	110.60
1	CA	1312	G	N9-C4-C5	5.87	107.75	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	2059	A	N1-C6-N6	5.87	122.12	118.60
1	AA	720	C	N3-C2-O2	-5.87	117.79	121.90
25	BA	670	C	C2-N1-C1'	5.87	125.26	118.80
25	BA	1359	U	C6-N1-C2	-5.87	117.48	121.00
25	BA	1757	C	C6-N1-C2	5.87	122.65	120.30
1	AA	1150	U	N3-C4-C5	-5.87	111.08	114.60
25	BA	1249	A	N1-C6-N6	5.87	122.12	118.60
25	BA	525	G	C4-C5-N7	-5.87	108.45	110.80
1	CA	1002	G	N3-C2-N2	-5.87	115.79	119.90
25	BA	1617	A	C8-N9-C4	5.86	108.14	105.80
25	BA	1850	A	C5-C6-N1	-5.86	114.77	117.70
25	BA	2734	A	O5'-P-OP1	-5.86	100.43	105.70
25	DA	949	C	N1-C2-O2	-5.86	115.38	118.90
1	AA	1054	C	N3-C2-O2	-5.86	117.80	121.90
25	DA	1313	U	C5-C6-N1	5.86	125.63	122.70
1	AA	1054	C	P-O3'-C3'	5.86	126.73	119.70
1	CA	483	C	C6-N1-C2	5.86	122.64	120.30
1	CA	1033	G	C4-C5-N7	5.86	113.14	110.80
25	BA	1952	G	O5'-P-OP2	-5.85	100.43	105.70
25	BA	1700	G	O5'-P-OP1	-5.85	100.43	105.70
25	BA	2072	C	N1-C2-O2	-5.85	115.39	118.90
25	DA	512	G	O4'-C1'-N9	5.85	112.88	108.20
26	DB	76	G	N1-C6-O6	5.85	123.41	119.90
1	CA	999	C	C6-N1-C1'	-5.85	113.78	120.80
25	DA	856	C	O5'-P-OP1	-5.85	100.44	105.70
25	DA	2299	G	C6-N1-C2	5.85	128.61	125.10
25	BA	724	A	O5'-P-OP2	-5.85	100.44	105.70
25	DA	2501	C	C2-N1-C1'	-5.85	112.37	118.80
1	AA	1287	A	N1-C6-N6	5.85	122.11	118.60
25	BA	1298	G	N3-C4-N9	-5.84	122.49	126.00
25	DA	524	U	O5'-P-OP2	-5.84	100.44	105.70
1	AA	1407	C	C4-C5-C6	-5.84	114.48	117.40
25	BA	89	U	N3-C2-O2	-5.84	118.11	122.20
25	DA	2487	G	C8-N9-C4	5.84	108.74	106.40
25	BA	2036	A	C5-C6-N6	-5.84	119.03	123.70
1	AA	781	A	OP2-P-O3'	5.84	118.04	105.20
25	BA	2055	A	C2-N3-C4	5.84	113.52	110.60
25	DA	1030	G	N1-C6-O6	5.84	123.40	119.90
1	CA	1042	G	N1-C2-N3	-5.83	120.40	123.90
25	BA	2037	A	C8-N9-C4	5.83	108.13	105.80
25	BA	2071	G	C8-N9-C4	5.83	108.73	106.40
25	DA	194	G	N1-C6-O6	5.83	123.40	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	1189	A	O5'-P-OP1	5.83	117.70	110.70
1	CA	1002	G	N1-C6-O6	-5.83	116.40	119.90
1	CA	1359	C	N1-C2-O2	5.83	122.40	118.90
23	CX	14	A	C4-C5-N7	-5.83	107.78	110.70
25	DA	1930	G	C4-N9-C1'	-5.83	118.92	126.50
1	AA	97	G	N3-C4-N9	5.83	129.50	126.00
25	BA	52	A	N1-C6-N6	5.83	122.10	118.60
25	BA	1862	G	OP2-P-O3'	5.83	118.02	105.20
25	DA	915	C	N1-C2-O2	5.83	122.40	118.90
25	DA	1120	G	N3-C4-N9	-5.83	122.50	126.00
25	DA	2249	U	N3-C4-O4	-5.83	115.32	119.40
25	DA	747	U	N1-C2-O2	-5.83	118.72	122.80
1	AA	228	A	O5'-P-OP2	5.83	117.69	110.70
1	AA	1506	U	N3-C4-O4	5.83	123.48	119.40
25	DA	704	G	OP1-P-OP2	5.83	128.34	119.60
25	BA	1344	C	O5'-P-OP1	5.82	117.69	110.70
25	BA	2228	G	OP1-P-O3'	5.82	118.01	105.20
25	BA	1985	U	C5-C6-N1	5.82	125.61	122.70
25	DA	1471	A	N7-C8-N9	5.82	116.71	113.80
25	DA	1653	G	C4-N9-C1'	5.82	134.07	126.50
25	BA	2407	C	N3-C4-N4	5.82	122.07	118.00
25	BA	623	G	C2-N3-C4	-5.82	108.99	111.90
25	DA	1900	A	O5'-P-OP1	-5.82	100.46	105.70
25	DA	2604	U	N3-C2-O2	-5.82	118.13	122.20
1	CA	1163	C	C5-C6-N1	5.82	123.91	121.00
1	AA	365	U	N1-C2-N3	5.81	118.39	114.90
25	BA	576	G	N1-C6-O6	5.81	123.39	119.90
25	BA	1507	A	O4'-C1'-N9	5.81	112.85	108.20
25	BA	366	G	C5-C6-O6	-5.81	125.11	128.60
25	BA	2251	G	N1-C6-O6	-5.81	116.42	119.90
25	DA	944	G	N9-C4-C5	-5.81	103.08	105.40
1	AA	1029	C	C2-N1-C1'	-5.80	112.41	118.80
25	BA	1461	U	C5-C4-O4	5.80	129.38	125.90
25	DA	633	A	N1-C6-N6	5.80	122.08	118.60
25	BA	1714	G	C8-N9-C4	5.80	108.72	106.40
1	CA	353	A	OP2-P-O3'	5.80	117.97	105.20
25	DA	2517	C	O4'-C1'-N1	5.80	112.84	108.20
26	DB	104	U	C6-N1-C2	5.80	124.48	121.00
25	BA	2804	C	C6-N1-C2	-5.80	117.98	120.30
1	CA	1169	A	C6-C5-N7	-5.80	128.24	132.30
25	BA	807	G	C5-C6-N1	-5.80	108.60	111.50
25	DA	1021	A	C8-N9-C4	-5.80	103.48	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2239	A	C8-N9-C4	-5.80	103.48	105.80
1	AA	1035	A	C4-N9-C1'	5.80	136.74	126.30
25	BA	568	C	C6-N1-C2	5.80	122.62	120.30
25	BA	2836	A	C8-N9-C4	5.80	108.12	105.80
1	CA	79	G	C6-N1-C2	5.80	128.58	125.10
25	DA	1251	C	N3-C4-N4	5.80	122.06	118.00
1	AA	1201	A	P-O3'-C3'	5.79	126.65	119.70
25	BA	551	A	N1-C6-N6	-5.79	115.12	118.60
25	BA	2227	G	N3-C4-C5	5.79	131.50	128.60
25	DA	193	U	N3-C4-O4	5.79	123.45	119.40
1	AA	63	C	N3-C2-O2	-5.79	117.85	121.90
25	BA	2223	C	N3-C2-O2	-5.79	117.85	121.90
1	AA	1206	G	C5-C6-O6	-5.79	125.13	128.60
25	BA	753	A	C5-C6-N1	-5.79	114.81	117.70
25	BA	1488	G	N1-C6-O6	5.79	123.37	119.90
18	CR	64	ARG	NE-CZ-NH2	-5.79	117.41	120.30
25	DA	2560	C	C6-N1-C2	5.79	122.61	120.30
25	BA	2081	A	O4'-C1'-N9	5.79	112.83	108.20
1	CA	561	U	C5-C4-O4	-5.79	122.43	125.90
1	CA	1366	C	C2-N3-C4	5.79	122.79	119.90
25	BA	2383	G	C5-C6-O6	-5.78	125.13	128.60
1	AA	553	A	O5'-P-OP2	-5.78	100.50	105.70
1	AA	1296	C	N3-C2-O2	5.78	125.95	121.90
25	BA	1745	A	N9-C4-C5	-5.78	103.49	105.80
1	CA	300	A	N1-C6-N6	-5.78	115.13	118.60
25	DA	2207	G	C4-N9-C1'	5.78	134.02	126.50
25	DA	2893	G	C5-C6-O6	-5.78	125.13	128.60
25	BA	1821	C	N3-C4-C5	5.78	124.21	121.90
25	BA	2228	G	P-O3'-C3'	5.78	126.64	119.70
25	DA	1937	A	N7-C8-N9	-5.78	110.91	113.80
25	DA	2321	G	C5-C6-N1	-5.78	108.61	111.50
1	AA	579	G	OP2-P-O3'	5.78	117.91	105.20
25	BA	803	C	OP2-P-O3'	5.78	117.91	105.20
25	DA	198	C	O5'-P-OP1	-5.78	100.50	105.70
25	DA	528	A	N3-C4-N9	-5.78	122.78	127.40
25	BA	2407	C	C5-C4-N4	-5.78	116.16	120.20
1	CA	1044	A	C6-N1-C2	5.78	122.06	118.60
25	BA	1725	G	C8-N9-C4	-5.77	104.09	106.40
1	CA	687	A	P-O3'-C3'	5.77	126.63	119.70
25	DA	2805	G	N1-C6-O6	-5.77	116.44	119.90
1	AA	1154	G	O4'-C1'-N9	-5.77	103.58	108.20
25	BA	741	U	N3-C2-O2	-5.77	118.16	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	1067	A	P-O3'-C3'	5.77	126.62	119.70
25	BA	856	G	N1-C6-O6	-5.77	116.44	119.90
25	BA	2268	G	C2-N3-C4	-5.77	109.02	111.90
25	BA	2343	G	C2-N3-C4	-5.77	109.02	111.90
25	DA	1123	C	C6-N1-C2	5.77	122.61	120.30
1	AA	1512	U	N3-C2-O2	-5.77	118.16	122.20
25	BA	2565	G	N3-C4-N9	5.77	129.46	126.00
1	AA	280	C	C6-N1-C2	5.76	122.61	120.30
1	AA	1447	A	O4'-C1'-N9	5.76	112.81	108.20
23	CX	34	C	C5-C6-N1	5.76	123.88	121.00
1	AA	191	G	C6-C5-N7	-5.76	126.94	130.40
23	CX	60	U	O5'-P-OP2	-5.76	100.51	105.70
1	AA	921	U	C2-N3-C4	5.76	130.46	127.00
25	BA	1567	G	C8-N9-C4	-5.76	104.10	106.40
1	CA	204	U	C2-N1-C1'	5.76	124.61	117.70
25	BA	866	A	N1-C6-N6	-5.76	115.14	118.60
25	BA	1858	C	C5-C4-N4	5.75	124.23	120.20
1	AA	720	C	N1-C2-O2	5.75	122.35	118.90
1	AA	719	C	C6-N1-C2	-5.75	118.00	120.30
25	BA	12	U	C2-N1-C1'	5.75	124.60	117.70
25	BA	1551	C	C6-N1-C2	-5.75	118.00	120.30
1	AA	527	G	N3-C4-C5	5.75	131.47	128.60
1	CA	266	G	N1-C6-O6	5.75	123.35	119.90
25	DA	62	C	C5-C6-N1	-5.75	118.13	121.00
25	DA	827	U	O5'-P-OP2	-5.75	100.53	105.70
1	AA	1125	U	C6-N1-C2	5.74	124.45	121.00
25	BA	693	G	N1-C6-O6	5.74	123.34	119.90
25	DA	693	C	C6-N1-C2	5.74	122.60	120.30
25	DA	2261	C	C5-C4-N4	-5.74	116.18	120.20
25	DA	2645	G	N3-C2-N2	5.74	123.92	119.90
1	AA	1246	C	C6-N1-C2	-5.74	118.00	120.30
1	CA	117	G	N3-C4-N9	5.74	129.44	126.00
25	DA	856	C	C5-C6-N1	5.74	123.87	121.00
25	DA	1432	C	C6-N1-C2	5.74	122.59	120.30
1	AA	1516	G	C4-N9-C1'	-5.74	119.04	126.50
25	DA	1328	G	N9-C4-C5	-5.73	103.11	105.40
25	BA	592	U	C5-C6-N1	-5.73	119.83	122.70
25	DA	2595	G	N1-C6-O6	5.73	123.34	119.90
25	BA	555	G	N7-C8-N9	5.73	115.97	113.10
25	BA	2521	G	N7-C8-N9	-5.73	110.23	113.10
25	DA	2630	G	N3-C4-N9	-5.73	122.56	126.00
26	DB	51	G	C4-N9-C1'	5.73	133.95	126.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	894	U	C2-N1-C1'	-5.73	110.83	117.70
47	B1	21	ARG	NE-CZ-NH2	-5.73	117.44	120.30
1	CA	980	C	O4'-C1'-N1	5.72	112.78	108.20
1	CA	1311	G	C4-C5-N7	-5.72	108.51	110.80
23	CX	17	C	C2-N1-C1'	5.72	125.10	118.80
23	AX	4	G	N9-C4-C5	-5.72	103.11	105.40
25	DA	1746	G	O5'-P-OP1	5.72	117.57	110.70
26	DB	72	G	C5-C6-O6	-5.72	125.17	128.60
1	CA	1158	C	N1-C2-O2	5.72	122.33	118.90
25	DA	1681	G	N3-C4-C5	5.72	131.46	128.60
1	AA	199	G	C8-N9-C4	5.72	108.69	106.40
25	BA	1011	G	N1-C6-O6	-5.72	116.47	119.90
25	BA	1859	G	OP2-P-O3'	5.72	117.78	105.20
25	DA	2554	U	N3-C4-O4	5.72	123.40	119.40
25	BA	2802	C	N1-C2-O2	-5.71	115.47	118.90
25	DA	188	G	C5-C6-O6	-5.71	125.17	128.60
25	DA	389	G	C5-C6-O6	-5.71	125.17	128.60
25	BA	2567	U	N3-C2-O2	5.71	126.20	122.20
25	BA	2692	C	N3-C4-C5	-5.71	119.62	121.90
25	DA	2464	C	C6-N1-C2	5.71	122.58	120.30
25	DA	830	G	C5-C6-N1	5.71	114.35	111.50
25	DA	1721	G	N3-C2-N2	5.70	123.89	119.90
25	DA	2586	C	N3-C4-N4	5.70	121.99	118.00
25	BA	2711	C	N3-C2-O2	-5.70	117.91	121.90
25	DA	1964	G	O5'-P-OP1	-5.70	100.57	105.70
1	CA	906	G	C5-C6-O6	-5.70	125.18	128.60
1	CA	1518	A	N9-C4-C5	5.70	108.08	105.80
1	AA	990	C	C6-N1-C2	-5.70	118.02	120.30
1	AA	1026	G	C8-N9-C1'	-5.70	119.60	127.00
25	BA	1068	G	N3-C2-N2	-5.70	115.91	119.90
25	BA	1287	A	C8-N9-C4	5.70	108.08	105.80
25	BA	451	G	C5-C6-O6	-5.69	125.18	128.60
25	DA	645	C	C6-N1-C2	-5.69	118.02	120.30
25	DA	2635	C	C4-C5-C6	5.69	120.25	117.40
1	CA	893	C	N1-C2-O2	5.69	122.32	118.90
25	BA	1153	G	C2-N3-C4	5.69	114.75	111.90
25	BA	1405	A	C2-N3-C4	5.69	113.44	110.60
35	BP	59	LEU	CA-CB-CG	5.69	128.39	115.30
1	CA	1033	G	N1-C6-O6	5.69	123.31	119.90
1	CA	1258	G	O4'-C1'-N9	5.69	112.75	108.20
23	CX	46	G	C4-C5-N7	-5.69	108.52	110.80
25	BA	1605	A	N3-C4-N9	-5.69	122.85	127.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	165	C	C6-N1-C2	-5.69	118.03	120.30
1	CA	1163	C	C2-N1-C1'	5.68	125.05	118.80
26	BB	108	U	C5-C6-N1	-5.68	119.86	122.70
25	DA	807	U	OP1-P-OP2	-5.68	111.08	119.60
25	BA	670	C	C6-N1-C2	-5.68	118.03	120.30
25	BA	1859	G	C5-C6-O6	5.68	132.01	128.60
25	BA	2375	C	C6-N1-C2	5.68	122.57	120.30
25	DA	179	G	N7-C8-N9	-5.68	110.26	113.10
1	AA	1002	G	C8-N9-C4	-5.68	104.13	106.40
1	AA	1149	C	C6-N1-C2	-5.68	118.03	120.30
26	DB	29	A	C8-N9-C4	-5.68	103.53	105.80
25	BA	553	A	C6-N1-C2	5.68	122.01	118.60
25	BA	712	C	C6-N1-C2	5.68	122.57	120.30
1	AA	509	A	C8-N9-C4	-5.67	103.53	105.80
1	AA	1030(B)	C	O4'-C1'-N1	5.67	112.74	108.20
25	BA	1423	G	C5-C6-O6	5.67	132.00	128.60
25	DA	973	A	N1-C2-N3	-5.67	126.46	129.30
1	AA	536	C	O5'-P-OP2	-5.67	100.59	105.70
25	BA	600	G	C8-N9-C4	5.67	108.67	106.40
25	BA	2662	U	N3-C4-O4	-5.67	115.43	119.40
25	BA	719	C	OP2-P-O3'	5.67	117.68	105.20
25	BA	2700	U	N3-C4-O4	5.67	123.37	119.40
1	CA	1002	G	N9-C4-C5	5.67	107.67	105.40
23	CX	46	G	N1-C2-N2	5.67	121.30	116.20
1	CA	1273	G	C6-C5-N7	-5.67	127.00	130.40
25	DA	799	G	C8-N9-C4	-5.67	104.13	106.40
25	BA	94	G	O5'-P-OP2	-5.67	100.60	105.70
1	CA	1311	G	N3-C2-N2	-5.67	115.93	119.90
28	DE	72	VAL	C-N-CA	5.67	135.86	121.70
25	BA	725	C	N3-C4-C5	5.67	124.17	121.90
23	CX	8	U	N1-C2-O2	5.67	126.77	122.80
1	AA	1276	G	C4-N9-C1'	5.66	133.86	126.50
25	BA	1578	C	C5-C6-N1	5.66	123.83	121.00
1	AA	1006	C	C5-C6-N1	5.66	123.83	121.00
1	CA	527	G	C5-C6-O6	5.66	132.00	128.60
1	CA	1165	C	C5-C6-N1	5.66	123.83	121.00
25	DA	981	A	N9-C4-C5	5.66	108.06	105.80
25	DA	920	G	C8-N9-C4	-5.66	104.14	106.40
25	DA	1681	G	N1-C6-O6	5.66	123.30	119.90
1	AA	818	G	C4-C5-N7	-5.66	108.54	110.80
25	DA	1135	C	C6-N1-C2	5.66	122.56	120.30
25	DA	2769	C	C5-C4-N4	5.66	124.16	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1926	G	C5-C6-O6	5.66	131.99	128.60
25	BA	2601	A	N9-C4-C5	-5.66	103.54	105.80
1	CA	1180	A	N1-C2-N3	5.66	132.13	129.30
1	AA	422	C	O4'-C1'-N1	5.65	112.72	108.20
1	AA	749	C	C5-C6-N1	5.65	123.83	121.00
23	CX	76	A	C4-C5-C6	5.65	119.83	117.00
25	BA	2094	G	C4-C5-N7	5.65	113.06	110.80
26	BB	76	G	C8-N9-C4	5.65	108.66	106.40
1	CA	1307	U	C5-C4-O4	-5.65	122.51	125.90
25	BA	2211	U	C5-C6-N1	5.65	125.52	122.70
25	BA	459	A	N1-C6-N6	5.65	121.99	118.60
25	BA	1871	G	C5-C6-O6	5.65	131.99	128.60
25	DA	1840	G	C5-C6-N1	-5.65	108.68	111.50
25	DA	2003	G	OP1-P-OP2	5.65	128.07	119.60
25	DA	2755	C	C5-C6-N1	5.65	123.82	121.00
25	BA	2627	U	N1-C2-O2	5.64	126.75	122.80
25	DA	906	G	N3-C4-N9	-5.64	122.61	126.00
25	BA	273	G	N3-C4-N9	5.64	129.38	126.00
25	BA	2756	C	C6-N1-C2	-5.64	118.04	120.30
25	DA	797	C	C5-C4-N4	-5.64	116.25	120.20
1	AA	1131	G	N7-C8-N9	5.64	115.92	113.10
9	CI	105	ASP	CB-CG-OD1	5.64	123.38	118.30
1	AA	561	U	N1-C2-N3	-5.64	111.52	114.90
1	AA	998	G	N3-C2-N2	-5.64	115.95	119.90
25	BA	587	C	N3-C2-O2	5.64	125.85	121.90
38	BS	60	GLY	N-CA-C	5.64	127.19	113.10
1	CA	1326	C	N1-C2-O2	-5.64	115.52	118.90
25	BA	1476	C	N1-C2-O2	5.63	122.28	118.90
1	CA	1388	C	C6-N1-C2	5.63	122.55	120.30
25	BA	2238	C	C5-C6-N1	-5.63	118.18	121.00
25	BA	2466	G	N1-C6-O6	-5.63	116.52	119.90
25	DA	139	G	C8-N9-C4	-5.63	104.15	106.40
25	BA	101	A	C8-N9-C4	5.63	108.05	105.80
25	BA	822	G	C5-C6-O6	-5.63	125.22	128.60
25	BA	1220	U	P-O3'-C3'	5.63	126.45	119.70
25	DA	981	A	C4-C5-N7	-5.63	107.89	110.70
1	CA	5	U	C5-C6-N1	5.62	125.51	122.70
23	CX	46	G	C4-N9-C1'	-5.62	119.19	126.50
1	AA	187	C	C2-N1-C1'	5.62	124.98	118.80
25	BA	2518	U	O4'-C1'-N1	5.62	112.70	108.20
25	DA	9	U	C5-C6-N1	5.62	125.51	122.70
25	DA	894	C	N1-C2-O2	5.62	122.27	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1026	G	N3-C4-C5	-5.62	125.79	128.60
25	DA	1437	C	C6-N1-C2	-5.62	118.05	120.30
25	DA	63	U	C6-N1-C1'	5.62	129.06	121.20
25	DA	141	A	C8-N9-C4	-5.62	103.55	105.80
1	AA	192	U	O4'-C1'-N1	5.62	112.69	108.20
23	AX	52	G	O4'-C1'-N9	5.62	112.69	108.20
1	CA	1521	G	N3-C4-C5	-5.62	125.79	128.60
23	AX	22	G	N7-C8-N9	5.61	115.91	113.10
25	BA	2028	C	O5'-P-OP1	-5.61	100.65	105.70
25	BA	2777	A	N1-C6-N6	-5.61	115.23	118.60
25	BA	2603	C	O5'-P-OP2	5.61	117.43	110.70
25	DA	1983	C	C2-N3-C4	-5.61	117.10	119.90
1	AA	63	C	N1-C2-O2	5.61	122.27	118.90
25	BA	2093	A	N7-C8-N9	-5.61	111.00	113.80
25	BA	2513	C	C6-N1-C2	5.61	122.54	120.30
25	BA	362	G	N3-C4-C5	-5.61	125.80	128.60
25	BA	2044	U	C5-C4-O4	-5.61	122.54	125.90
1	CA	999	C	C2-N1-C1'	5.61	124.97	118.80
25	DA	1204	A	C5-N7-C8	-5.61	101.10	103.90
25	DA	1997	G	N1-C6-O6	-5.61	116.54	119.90
25	BA	423	G	N1-C6-O6	5.60	123.26	119.90
25	DA	467	G	N7-C8-N9	-5.60	110.30	113.10
25	BA	1719	C	N3-C4-N4	5.60	121.92	118.00
1	CA	1125	U	C6-N1-C2	-5.60	117.64	121.00
25	DA	2286	A	C6-C5-N7	-5.60	128.38	132.30
25	DA	2689	U	P-O3'-C3'	5.60	126.42	119.70
25	DA	1445(A)	C	C6-N1-C2	-5.60	118.06	120.30
25	BA	2376	C	C6-N1-C2	5.60	122.54	120.30
1	CA	1432	G	C5-C6-O6	5.60	131.96	128.60
25	DA	180	G	N3-C4-N9	5.60	129.36	126.00
1	CA	1415	G	O5'-P-OP2	-5.60	100.66	105.70
25	DA	2687	U	N3-C2-O2	5.60	126.12	122.20
25	BA	553	A	C4-C5-N7	5.60	113.50	110.70
25	BA	1823	G	N3-C4-N9	-5.59	122.64	126.00
25	BA	2229	A	N1-C6-N6	5.59	121.96	118.60
1	CA	79	G	N3-C4-N9	-5.59	122.64	126.00
1	CA	398	C	C5-C4-N4	5.59	124.12	120.20
1	AA	560	U	C6-N1-C2	-5.59	117.64	121.00
1	CA	1466	C	C6-N1-C2	-5.59	118.06	120.30
1	CA	1502	A	C6-C5-N7	-5.59	128.39	132.30
25	DA	956	G	N7-C8-N9	5.59	115.90	113.10
1	CA	1034	G	C5-C6-O6	5.59	131.95	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	2299	G	N3-C4-C5	5.59	131.40	128.60
1	AA	175	C	N1-C2-O2	5.59	122.25	118.90
25	BA	989	G	C8-N9-C4	-5.59	104.17	106.40
25	BA	2651	A	N9-C4-C5	-5.59	103.56	105.80
25	BA	1093	G	C6-C5-N7	-5.59	127.05	130.40
25	BA	1176	U	N3-C2-O2	-5.59	118.29	122.20
25	BA	2065	C	N1-C2-O2	-5.59	115.55	118.90
25	BA	2687	A	C8-N9-C4	5.59	108.03	105.80
25	BA	94	G	OP1-P-OP2	5.58	127.98	119.60
23	AX	46	G	C5-C6-O6	-5.58	125.25	128.60
25	BA	1476	C	C6-N1-C2	-5.58	118.07	120.30
25	BA	523	G	O5'-P-OP2	5.58	117.39	110.70
1	CA	427	U	C2-N1-C1'	5.58	124.39	117.70
1	AA	353	A	OP2-P-O3'	5.58	117.47	105.20
25	BA	1565	G	OP2-P-O3'	5.58	117.47	105.20
25	BA	1606	G	C8-N9-C1'	5.58	134.25	127.00
1	CA	1023	G	N3-C2-N2	5.58	123.80	119.90
25	DA	2827	C	C5-C6-N1	-5.58	118.21	121.00
1	CA	1502	A	N1-C2-N3	5.57	132.09	129.30
25	DA	2056	G	N3-C4-N9	5.57	129.34	126.00
1	AA	346	G	N9-C4-C5	5.57	107.63	105.40
25	BA	96	C	C6-N1-C2	-5.57	118.07	120.30
25	BA	1051	C	N1-C2-O2	5.57	122.24	118.90
1	CA	1036	G	C4-N9-C1'	5.57	133.74	126.50
23	CX	20	U	C2-N1-C1'	5.57	124.38	117.70
23	AX	14	A	C8-N9-C1'	-5.57	117.68	127.70
25	BA	538	A	C6-C5-N7	-5.57	128.40	132.30
25	BA	2250	G	OP1-P-OP2	5.57	127.95	119.60
1	AA	175	C	C6-N1-C2	-5.56	118.07	120.30
1	AA	1074	G	N1-C6-O6	5.56	123.24	119.90
25	BA	2902	G	P-O3'-C3'	5.56	126.38	119.70
1	CA	1002	G	N1-C2-N2	5.56	121.20	116.20
1	CA	1311	G	C8-N9-C1'	5.56	134.23	127.00
25	BA	1578	C	C2-N1-C1'	5.56	124.92	118.80
9	CI	50	LEU	CA-CB-CG	5.56	128.09	115.30
25	DA	1819	A	C8-N9-C4	5.56	108.02	105.80
25	DA	141	A	N1-C2-N3	5.56	132.08	129.30
25	DA	195	A	N1-C6-N6	-5.56	115.27	118.60
25	BA	552	C	O4'-C1'-N1	5.56	112.64	108.20
1	CA	354	G	C4-N9-C1'	5.56	133.72	126.50
25	DA	205	G	N3-C4-C5	5.56	131.38	128.60
25	DA	1662	C	C5-C6-N1	-5.56	118.22	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	194	G	C8-N9-C4	5.55	108.62	106.40
25	BA	1045	U	O5'-P-OP2	-5.55	100.70	105.70
25	BA	1218	G	O4'-C1'-N9	5.55	112.64	108.20
25	BA	1237	G	C8-N9-C4	5.55	108.62	106.40
1	CA	528	C	C6-N1-C2	-5.55	118.08	120.30
25	BA	2601	A	N7-C8-N9	-5.55	111.03	113.80
1	CA	754	C	N1-C2-O2	5.55	122.23	118.90
25	DA	2321	G	C8-N9-C1'	-5.55	119.78	127.00
1	AA	347	G	C4-N9-C1'	5.55	133.71	126.50
25	BA	2549	U	N3-C4-O4	-5.55	115.52	119.40
1	AA	660	G	C4-C5-N7	5.55	113.02	110.80
25	DA	1696	G	O5'-P-OP2	-5.55	100.71	105.70
25	BA	2441	G	O5'-P-OP1	5.54	117.35	110.70
1	CA	740	U	C5-C6-N1	-5.54	119.93	122.70
1	CA	1002	G	C6-C5-N7	5.54	133.73	130.40
1	AA	1502	A	C5-N7-C8	-5.54	101.13	103.90
25	DA	583	G	N1-C6-O6	5.54	123.23	119.90
25	DA	2521	C	N1-C2-O2	-5.54	115.57	118.90
1	CA	1141	C	C6-N1-C1'	5.54	127.45	120.80
25	DA	1573	G	N7-C8-N9	-5.54	110.33	113.10
26	DB	115	G	N7-C8-N9	-5.54	110.33	113.10
1	AA	188	C	C2-N1-C1'	5.54	124.89	118.80
1	AA	369	C	C6-N1-C2	-5.54	118.08	120.30
25	BA	2393	C	O5'-P-OP2	-5.54	100.71	105.70
1	CA	60	A	OP1-P-O3'	5.54	117.39	105.20
1	AA	161	A	N7-C8-N9	5.54	116.57	113.80
1	AA	460	G	C5-N7-C8	-5.54	101.53	104.30
25	BA	50	G	C4-C5-N7	-5.54	108.58	110.80
25	BA	1001	G	C5-C6-O6	5.54	131.92	128.60
25	BA	2109	G	O5'-P-OP1	5.54	117.34	110.70
25	DA	783	A	C4-C5-C6	5.54	119.77	117.00
1	AA	167	G	C5-N7-C8	-5.54	101.53	104.30
25	DA	1204	A	C5-C6-N1	-5.54	114.93	117.70
25	BA	375	G	N1-C6-O6	5.53	123.22	119.90
25	BA	818	G	C8-N9-C4	5.53	108.61	106.40
25	BA	1255	A	P-O3'-C3'	5.53	126.34	119.70
25	BA	1991	A	O5'-P-OP2	5.53	117.34	110.70
25	BA	2229	A	C5-N7-C8	-5.53	101.13	103.90
25	BA	2890	C	O5'-P-OP1	-5.53	100.72	105.70
25	DA	435	C	OP1-P-OP2	5.53	127.90	119.60
25	DA	2061	G	C4-C5-N7	5.53	113.01	110.80
1	AA	766	A	C8-N9-C4	5.53	108.01	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	AD	174	LEU	CA-CB-CG	5.53	128.02	115.30
25	DA	179	G	C8-N9-C4	5.53	108.61	106.40
25	BA	223	C	C6-N1-C2	-5.53	118.09	120.30
29	DF	17	ARG	NE-CZ-NH1	-5.53	117.54	120.30
1	AA	872	A	N1-C6-N6	5.53	121.92	118.60
25	BA	948	C	C6-N1-C2	5.53	122.51	120.30
25	BA	1314	A	OP2-P-O3'	5.53	117.36	105.20
1	AA	1087	G	N7-C8-N9	5.52	115.86	113.10
25	BA	2804	C	C5-C6-N1	5.52	123.76	121.00
1	CA	1311	G	C4-N9-C1'	-5.52	119.32	126.50
25	DA	2713	A	C8-N9-C4	-5.52	103.59	105.80
25	BA	1668	G	O5'-P-OP1	-5.52	100.73	105.70
25	BA	2876	U	C4-C5-C6	5.52	123.01	119.70
1	CA	60	A	P-O3'-C3'	5.52	126.33	119.70
1	CA	1012	U	N1-C2-N3	5.52	118.21	114.90
1	CA	1262	C	N1-C2-O2	5.52	122.21	118.90
25	BA	2323	A	N1-C6-N6	-5.52	115.29	118.60
25	DA	608	A	C8-N9-C4	-5.52	103.59	105.80
25	DA	2063	C	N1-C2-O2	-5.52	115.59	118.90
26	DB	72	G	N1-C6-O6	5.52	123.21	119.90
25	BA	616	G	C5-C6-O6	5.52	131.91	128.60
25	BA	2375	C	C5-C6-N1	-5.52	118.24	121.00
1	AA	1165	C	P-O3'-C3'	5.52	126.32	119.70
1	CA	1007	C	N1-C2-O2	5.52	122.21	118.90
25	DA	631	A	OP1-P-O3'	5.52	117.33	105.20
1	AA	266	G	C4-C5-N7	5.51	113.00	110.80
1	AA	460	G	N1-C6-O6	5.51	123.21	119.90
1	AA	627	G	N1-C6-O6	5.51	123.21	119.90
25	BA	670	C	C2-N3-C4	5.51	122.66	119.90
1	CA	1043	C	C5-C4-N4	5.51	124.06	120.20
1	CA	1500	A	N1-C6-N6	5.51	121.91	118.60
1	AA	1510	U	N1-C2-N3	-5.51	111.59	114.90
1	CA	1003	G	C8-N9-C1'	-5.51	119.84	127.00
25	DA	733	G	C6-C5-N7	-5.51	127.09	130.40
25	DA	901	A	C8-N9-C4	-5.51	103.60	105.80
25	DA	2422	A	C5-C6-N6	5.51	128.11	123.70
25	DA	553	G	C4-C5-N7	-5.51	108.60	110.80
1	AA	915	A	C8-N9-C4	5.51	108.00	105.80
25	BA	1652	G	C8-N9-C4	5.51	108.60	106.40
25	BA	2421	G	N3-C4-C5	-5.51	125.85	128.60
25	BA	2515	A	C2-N3-C4	5.51	113.35	110.60
25	BA	2713	C	N3-C2-O2	-5.50	118.05	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	248	G	C5-C6-O6	-5.50	125.30	128.60
23	AX	46	G	C2-N3-C4	5.50	114.65	111.90
1	CA	820	U	N1-C2-N3	5.50	118.20	114.90
25	DA	1330	C	N3-C2-O2	5.50	125.75	121.90
25	DA	2241	A	N1-C6-N6	-5.50	115.30	118.60
25	BA	1425	A	C8-N9-C4	5.50	108.00	105.80
25	BA	2389	A	N3-C4-C5	5.50	130.65	126.80
25	DA	1977	A	N1-C6-N6	-5.50	115.30	118.60
25	DA	2595	G	N9-C4-C5	-5.50	103.20	105.40
25	BA	1404	G	N3-C4-C5	-5.50	125.85	128.60
25	BA	2495	C	C5-C6-N1	5.50	123.75	121.00
25	BA	1824	C	N3-C4-N4	-5.49	114.16	118.00
1	AA	1154	G	C4-C5-N7	5.49	113.00	110.80
1	AA	547	A	N1-C6-N6	-5.49	115.31	118.60
1	CA	1054	C	C6-N1-C2	-5.49	118.10	120.30
1	CA	1205	U	C6-N1-C2	-5.49	117.71	121.00
25	DA	2252	G	N3-C4-N9	-5.49	122.71	126.00
25	BA	2540	U	C6-N1-C2	-5.49	117.71	121.00
25	DA	1937	A	N1-C6-N6	5.49	121.89	118.60
25	DA	215	G	N1-C6-O6	-5.49	116.61	119.90
1	AA	818	G	N1-C6-O6	-5.49	116.61	119.90
25	DA	1960	A	C8-N9-C4	5.49	107.99	105.80
1	AA	660	G	N9-C4-C5	-5.48	103.21	105.40
25	BA	50	G	N1-C6-O6	-5.48	116.61	119.90
1	AA	754	C	N3-C2-O2	-5.48	118.06	121.90
46	B0	12	ASN	N-CA-C	5.48	125.81	111.00
25	DA	236	C	C2-N3-C4	-5.48	117.16	119.90
25	DA	2352	A	O5'-P-OP1	-5.48	100.77	105.70
25	BA	2004	C	OP1-P-OP2	5.48	127.82	119.60
1	CA	894	G	C2-N3-C4	-5.48	109.16	111.90
26	DB	2	C	C6-N1-C2	-5.48	118.11	120.30
1	AA	1524	C	C5-C6-N1	-5.48	118.26	121.00
25	BA	553	A	C5-C6-N1	-5.48	114.96	117.70
1	AA	97	G	N3-C4-C5	-5.48	125.86	128.60
25	BA	1986	G	N3-C4-N9	5.48	129.29	126.00
25	BA	1269	G	N1-C6-O6	-5.47	116.62	119.90
25	BA	2421	G	N3-C4-N9	5.47	129.28	126.00
25	BA	2531	U	C5-C4-O4	-5.47	122.61	125.90
1	CA	915	A	N1-C6-N6	-5.47	115.31	118.60
25	DA	1022	G	C6-C5-N7	5.47	133.68	130.40
25	DA	2321	G	C6-N1-C2	5.47	128.38	125.10
1	AA	1143	G	C8-N9-C4	-5.47	104.21	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1769	G	N1-C6-O6	-5.47	116.62	119.90
1	CA	161	A	N9-C4-C5	5.47	107.99	105.80
1	CA	552	U	C5-C4-O4	5.47	129.18	125.90
25	DA	648	G	N1-C6-O6	5.47	123.18	119.90
25	DA	2260	C	C2-N3-C4	-5.47	117.17	119.90
1	AA	804	U	C5-C6-N1	-5.47	119.97	122.70
23	AX	46	G	N3-C2-N2	-5.47	116.07	119.90
25	BA	1588	G	N3-C4-C5	-5.47	125.87	128.60
25	BA	2445	A	O5'-P-OP2	5.47	117.26	110.70
25	BA	1573	G	C5-C6-N1	-5.47	108.77	111.50
25	BA	1665	G	N1-C6-O6	5.47	123.18	119.90
25	BA	2268	G	N3-C4-C5	5.47	131.33	128.60
25	DA	1544	A	C2-N3-C4	5.47	113.33	110.60
25	DA	1653	G	N3-C4-N9	5.47	129.28	126.00
1	AA	343	U	N1-C2-N3	5.46	118.18	114.90
1	AA	1114	C	C6-N1-C2	-5.46	118.11	120.30
25	BA	493	G	O5'-P-OP2	-5.46	100.78	105.70
25	BA	1986	G	N3-C2-N2	5.46	123.72	119.90
25	BA	2609	G	C8-N9-C4	-5.46	104.21	106.40
25	DA	1913	A	C5-C6-N1	5.46	120.43	117.70
1	AA	736	C	C2-N1-C1'	5.46	124.81	118.80
1	AA	446	G	C5-C6-O6	-5.46	125.32	128.60
1	AA	266	G	C5-N7-C8	-5.46	101.57	104.30
25	BA	613	A	N1-C6-N6	5.46	121.88	118.60
25	BA	2036	A	N7-C8-N9	-5.46	111.07	113.80
25	DA	154(A)	C	N1-C2-O2	5.46	122.18	118.90
25	DA	738	G	C5-C6-N1	5.46	114.23	111.50
25	DA	1256	G	N3-C4-N9	5.46	129.28	126.00
1	AA	146	G	C4-N9-C1'	5.46	133.60	126.50
1	AA	167	G	C8-N9-C1'	-5.46	119.90	127.00
25	BA	1404	G	C8-N9-C4	-5.46	104.22	106.40
1	CA	400	C	C6-N1-C2	5.46	122.48	120.30
25	DA	145	G	N1-C6-O6	5.46	123.17	119.90
25	BA	1390	G	N1-C6-O6	5.46	123.17	119.90
25	BA	1653	C	C5-C4-N4	-5.46	116.38	120.20
25	BA	2036	A	N9-C4-C5	-5.46	103.62	105.80
1	CA	1338	G	N3-C4-C5	-5.46	125.87	128.60
25	BA	1744	G	N1-C6-O6	5.45	123.17	119.90
1	CA	1312	G	N3-C4-N9	-5.45	122.73	126.00
1	AA	1030(B)	C	C6-N1-C1'	-5.45	114.26	120.80
25	BA	1653	C	N3-C4-N4	5.45	121.81	118.00
25	DA	2735	G	N1-C6-O6	5.45	123.17	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2101	U	N1-C2-N3	5.45	118.17	114.90
25	BA	2331	G	N3-C4-C5	5.45	131.32	128.60
25	BA	2370	G	C8-N9-C4	5.45	108.58	106.40
25	DA	2347	C	N3-C2-O2	-5.45	118.09	121.90
25	DA	2825	C	O5'-P-OP2	5.45	117.24	110.70
25	BA	1068	G	C8-N9-C1'	5.45	134.08	127.00
23	CX	46	G	C5-C6-O6	-5.45	125.33	128.60
25	DA	482	A	O5'-P-OP2	-5.45	100.80	105.70
25	DA	2406	U	O4'-C1'-N1	-5.45	103.84	108.20
25	BA	2556	G	N1-C6-O6	5.45	123.17	119.90
25	DA	1526	G	N1-C6-O6	5.45	123.17	119.90
25	DA	1261	C	N3-C4-C5	5.44	124.08	121.90
25	BA	2245	U	C5-C6-N1	-5.44	119.98	122.70
1	AA	1137	C	C2-N3-C4	5.44	122.62	119.90
25	DA	312	G	C5-C6-O6	-5.44	125.34	128.60
1	CA	32	A	C8-N9-C4	-5.44	103.62	105.80
25	DA	796	C	N3-C4-C5	5.44	124.08	121.90
25	DA	1984	G	O5'-P-OP2	-5.44	100.81	105.70
25	BA	2690	C	N3-C4-C5	-5.44	119.73	121.90
1	CA	266	G	P-O3'-C3'	5.44	126.22	119.70
1	CA	1077	G	C8-N9-C4	5.44	108.57	106.40
25	DA	2325	G	N1-C6-O6	5.44	123.16	119.90
1	AA	1502	A	O5'-P-OP2	-5.43	100.81	105.70
47	B1	21	ARG	NE-CZ-NH1	5.43	123.02	120.30
1	CA	1017	G	N3-C4-C5	5.43	131.32	128.60
25	DA	216	A	C2-N3-C4	-5.43	107.88	110.60
25	DA	2636	U	C2-N1-C1'	5.43	124.22	117.70
25	BA	2591	C	N3-C4-C5	5.43	124.07	121.90
25	BA	507	G	C8-N9-C4	-5.43	104.23	106.40
1	AA	893	C	N1-C2-O2	5.43	122.16	118.90
25	BA	1606	G	N3-C4-C5	5.43	131.31	128.60
25	DA	552	G	C8-N9-C1'	5.43	134.06	127.00
25	DA	1510	G	C6-C5-N7	-5.43	127.14	130.40
25	DA	2628	C	C6-N1-C2	5.43	122.47	120.30
25	DA	2828	C	C5-C6-N1	-5.43	118.29	121.00
1	AA	1502	A	C4-C5-N7	5.43	113.41	110.70
25	DA	2724	C	N1-C2-O2	-5.43	115.64	118.90
26	DB	119	G	O4'-C1'-N9	5.43	112.54	108.20
1	AA	1054	C	N1-C2-O2	5.42	122.16	118.90
25	BA	1243	U	N3-C2-O2	-5.42	118.40	122.20
1	CA	1028	C	C5-C6-N1	5.42	123.71	121.00
25	DA	743	G	C8-N9-C4	-5.42	104.23	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	873	U	OP2-P-O3'	5.42	117.12	105.20
25	BA	1215	G	N1-C6-O6	5.42	123.15	119.90
25	DA	2261	C	N3-C4-N4	5.42	121.80	118.00
1	AA	1389	C	N3-C2-O2	5.42	125.69	121.90
25	BA	1255	A	C8-N9-C4	-5.42	103.63	105.80
25	DA	947	G	N9-C4-C5	5.42	107.57	105.40
25	DA	2667	C	C6-N1-C2	-5.42	118.13	120.30
26	DB	82	G	C6-C5-N7	5.42	133.65	130.40
25	DA	31	C	C6-N1-C2	-5.42	118.13	120.30
25	BA	2616	U	C5-C4-O4	5.42	129.15	125.90
25	DA	312	G	N1-C6-O6	5.42	123.15	119.90
25	BA	2228	G	C4-N9-C1'	5.41	133.54	126.50
25	DA	2893	G	C4-C5-N7	5.41	112.97	110.80
1	AA	1442	G	P-O3'-C3'	5.41	126.19	119.70
23	AX	35	A	N1-C6-N6	-5.41	115.35	118.60
25	DA	215	G	C5-C6-O6	5.41	131.85	128.60
25	DA	1115	G	N3-C4-C5	5.41	131.31	128.60
25	BA	799	A	OP1-P-OP2	-5.41	111.48	119.60
25	BA	2453	C	N3-C2-O2	-5.41	118.11	121.90
1	CA	397	A	N1-C6-N6	-5.41	115.36	118.60
23	CX	22	G	C5-C6-N1	5.41	114.20	111.50
25	BA	2428	C	C4-C5-C6	-5.41	114.70	117.40
25	BA	2729	U	N3-C2-O2	-5.41	118.42	122.20
25	DA	2635	C	C5-C6-N1	-5.41	118.30	121.00
1	AA	831	U	C5-C6-N1	5.40	125.40	122.70
25	BA	12	U	C6-N1-C2	-5.40	117.76	121.00
25	BA	1153	G	N3-C4-N9	5.40	129.24	126.00
25	BA	1431	G	O4'-C1'-N9	5.40	112.52	108.20
25	BA	2851	C	N1-C2-O2	5.40	122.14	118.90
25	DA	22	C	N3-C4-C5	5.40	124.06	121.90
25	BA	81	G	C5-C6-O6	5.40	131.84	128.60
25	BA	852	G	O5'-P-OP1	-5.40	100.84	105.70
25	BA	2229	A	N7-C8-N9	5.40	116.50	113.80
1	CA	1259	C	C6-N1-C2	-5.40	118.14	120.30
25	DA	130	C	N3-C2-O2	-5.40	118.12	121.90
25	DA	1284	A	C4-C5-N7	5.40	113.40	110.70
1	AA	1442(A)	G	C5-C6-O6	-5.40	125.36	128.60
25	DA	1973	G	C5-C6-O6	5.40	131.84	128.60
25	BA	816	G	N1-C6-O6	5.40	123.14	119.90
25	DA	1644	C	N3-C2-O2	-5.40	118.12	121.90
25	BA	2777	A	C5-C6-N6	5.40	128.02	123.70
1	AA	1154	G	C8-N9-C4	5.39	108.56	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	460	A	N9-C4-C5	-5.39	103.64	105.80
25	DA	1899	G	N3-C4-N9	5.39	129.24	126.00
26	DB	25	A	O4'-C1'-N9	-5.39	103.88	108.20
1	AA	56	U	C2-N1-C1'	5.39	124.17	117.70
25	BA	1821	C	OP1-P-O3'	5.39	117.06	105.20
1	CA	1134	G	N7-C8-N9	5.39	115.80	113.10
25	BA	1755	C	N1-C2-O2	-5.39	115.67	118.90
25	BA	2699	U	N1-C2-O2	-5.39	119.03	122.80
25	BA	2405	A	C2-N3-C4	-5.39	107.91	110.60
1	AA	627	G	C4-C5-N7	5.39	112.95	110.80
25	BA	254	A	C4-C5-N7	5.39	113.39	110.70
25	BA	2826	C	C6-N1-C2	5.39	122.45	120.30
1	CA	1370	G	C8-N9-C4	-5.39	104.25	106.40
25	DA	956	G	C4-C5-C6	5.39	122.03	118.80
1	AA	346	G	N1-C6-O6	-5.38	116.67	119.90
1	AA	458	C	C2-N1-C1'	5.38	124.72	118.80
25	BA	1299	A	N1-C6-N6	-5.38	115.37	118.60
25	BA	2122	G	C2-N3-C4	5.38	114.59	111.90
25	DA	2376	A	O5'-P-OP2	-5.38	100.85	105.70
25	BA	582	G	N1-C6-O6	5.38	123.13	119.90
25	DA	90	U	C2-N1-C1'	5.38	124.16	117.70
25	DA	2253	G	N9-C4-C5	-5.38	103.25	105.40
25	BA	1163	G	N1-C6-O6	5.38	123.13	119.90
51	B5	58	LEU	CA-CB-CG	5.38	127.67	115.30
1	CA	1262	C	C6-N1-C1'	-5.38	114.35	120.80
1	CA	1285	A	C8-N9-C4	5.38	107.95	105.80
1	AA	1030(C)	G	C4-N9-C1'	5.38	133.49	126.50
25	BA	553	A	C5-N7-C8	-5.38	101.21	103.90
25	BA	974	G	N1-C6-O6	5.38	123.13	119.90
25	BA	989	G	N7-C8-N9	5.38	115.79	113.10
25	BA	2723	A	C2-N3-C4	-5.38	107.91	110.60
1	CA	893	C	C6-N1-C2	5.38	122.45	120.30
25	BA	2611	G	OP2-P-O3'	5.38	117.02	105.20
25	DA	660	G	C5-C6-N1	-5.38	108.81	111.50
1	AA	571	U	O5'-P-OP1	-5.37	100.86	105.70
25	BA	805	C	O5'-P-OP2	-5.37	100.86	105.70
26	DB	74	U	C6-N1-C1'	5.37	128.72	121.20
1	AA	976	G	N1-C6-O6	5.37	123.12	119.90
1	AA	1030(C)	G	N3-C4-N9	5.37	129.22	126.00
25	BA	2651	A	C8-N9-C4	5.37	107.95	105.80
1	AA	14	U	O5'-P-OP1	-5.37	100.87	105.70
25	BA	1055	A	OP1-P-O3'	5.37	117.01	105.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2701	U	P-O3'-C3'	5.37	126.14	119.70
1	CA	345	C	N3-C2-O2	-5.37	118.14	121.90
25	DA	1956	U	OP1-P-O3'	5.37	117.01	105.20
25	DA	2525	G	N1-C6-O6	5.37	123.12	119.90
25	BA	142	G	N3-C4-C5	5.37	131.28	128.60
25	BA	1067	A	C4-C5-N7	5.37	113.38	110.70
1	AA	1181	G	N3-C4-C5	5.37	131.28	128.60
25	BA	1934	A	N1-C6-N6	-5.37	115.38	118.60
25	BA	2078	G	C8-N9-C1'	-5.37	120.02	127.00
25	DA	2206	G	N3-C4-N9	-5.37	122.78	126.00
1	CA	1356	G	C6-N1-C2	5.36	128.32	125.10
25	DA	2023	G	N3-C4-C5	-5.36	125.92	128.60
25	DA	1031	G	N1-C6-O6	5.36	123.12	119.90
25	DA	2519	U	C5-C6-N1	-5.36	120.02	122.70
26	DB	72	G	C4-C5-N7	5.36	112.94	110.80
1	CA	1375	A	C8-N9-C4	-5.36	103.66	105.80
25	DA	52	A	N7-C8-N9	5.36	116.48	113.80
25	DA	370	G	N3-C4-C5	5.36	131.28	128.60
1	AA	1024	G	C4-N9-C1'	5.36	133.47	126.50
25	BA	69	G	N1-C6-O6	-5.36	116.69	119.90
25	BA	886	U	C5-C4-O4	5.36	129.11	125.90
25	BA	2535	G	C2-N3-C4	-5.36	109.22	111.90
25	DA	1662	C	C6-N1-C2	5.36	122.44	120.30
1	AA	800	G	N7-C8-N9	5.36	115.78	113.10
1	AA	1125	U	P-O3'-C3'	5.36	126.12	119.70
1	AA	1158	C	C4-C5-C6	5.36	120.08	117.40
25	BA	2044	U	N3-C4-O4	5.36	123.15	119.40
25	DA	1648	C	O5'-P-OP1	5.36	117.13	110.70
25	DA	2050	C	C6-N1-C2	5.36	122.44	120.30
25	BA	725	C	C5-C6-N1	-5.35	118.32	121.00
1	AA	1531	A	C4-N9-C1'	5.35	135.94	126.30
1	CA	981	U	C5-C6-N1	5.35	125.38	122.70
1	AA	1519	A	C2-N3-C4	-5.35	107.92	110.60
25	DA	2023	G	C5-C6-O6	-5.35	125.39	128.60
25	DA	2287	A	C2-N3-C4	-5.35	107.92	110.60
1	CA	429	U	C2-N1-C1'	-5.35	111.28	117.70
1	CA	1099	G	C4-C5-N7	-5.35	108.66	110.80
25	DA	976	C	N1-C2-O2	5.35	122.11	118.90
25	BA	1483	C	C6-N1-C2	-5.35	118.16	120.30
26	BB	73	A	O4'-C1'-N9	-5.35	103.92	108.20
1	CA	1173	G	N1-C6-O6	5.35	123.11	119.90
25	DA	2330	G	C5-C6-O6	-5.35	125.39	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	657	A	O5'-P-OP2	5.34	117.11	110.70
1	CA	500	G	N3-C4-C5	-5.34	125.93	128.60
25	BA	853	C	N3-C4-C5	5.34	124.04	121.90
1	AA	237	C	C6-N1-C2	5.34	122.44	120.30
25	BA	425	G	C5-C6-N1	-5.34	108.83	111.50
25	BA	933	C	C5-C6-N1	5.34	123.67	121.00
1	CA	228	A	C8-N9-C4	5.34	107.94	105.80
1	CA	503	C	C6-N1-C2	-5.34	118.16	120.30
1	CA	1028	C	N3-C2-O2	5.34	125.64	121.90
25	DA	2870	C	N3-C2-O2	-5.34	118.16	121.90
1	AA	1035	A	C8-N9-C1'	-5.34	118.09	127.70
25	BA	678	A	C8-N9-C4	-5.34	103.67	105.80
25	BA	2372	A	O5'-P-OP1	5.34	117.11	110.70
1	CA	1125	U	C5-C6-N1	5.34	125.37	122.70
25	DA	1238	G	N9-C4-C5	-5.34	103.27	105.40
25	DA	2489	G	N1-C6-O6	5.34	123.10	119.90
25	BA	331	G	O5'-P-OP1	-5.33	100.90	105.70
25	BA	519	G	C5-C6-O6	-5.33	125.40	128.60
25	BA	990	A	C5-C6-N1	-5.33	115.03	117.70
25	BA	2283	G	O5'-P-OP2	-5.33	100.90	105.70
25	BA	2372	A	O5'-P-OP2	-5.33	100.90	105.70
1	CA	194	C	C6-N1-C2	-5.33	118.17	120.30
23	AX	22	G	C6-C5-N7	5.33	133.60	130.40
25	BA	572	A	OP1-P-O3'	5.33	116.93	105.20
1	CA	691	G	C8-N9-C4	5.33	108.53	106.40
1	CA	1311	G	N3-C4-C5	5.33	131.27	128.60
25	DA	446	G	C8-N9-C1'	-5.33	120.07	127.00
1	AA	1139	G	C4-N9-C1'	-5.33	119.57	126.50
23	AX	22	G	C4-N9-C1'	-5.33	119.57	126.50
25	BA	9	U	C2-N3-C4	5.33	130.20	127.00
25	BA	2550	C	C6-N1-C2	5.33	122.43	120.30
1	AA	1030(B)	C	C2-N3-C4	5.33	122.56	119.90
25	DA	363(B)	G	N3-C4-N9	5.33	129.20	126.00
1	AA	261	U	N1-C2-O2	-5.33	119.07	122.80
25	BA	2339	A	C5-C6-N6	5.33	127.96	123.70
1	AA	1499	A	C8-N9-C4	5.32	107.93	105.80
25	BA	2753	A	O5'-P-OP2	-5.32	100.91	105.70
25	BA	2755	C	C6-N1-C2	5.32	122.43	120.30
1	CA	1034	G	C6-C5-N7	5.32	133.59	130.40
1	AA	98	G	N7-C8-N9	5.32	115.76	113.10
23	CX	70	G	C8-N9-C1'	-5.32	120.08	127.00
25	DA	1963	U	C2-N1-C1'	5.32	124.08	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	395	C	C6-N1-C2	-5.32	118.17	120.30
25	DA	614(B)	G	O4'-C1'-N9	5.32	112.45	108.20
25	DA	2827	C	C2-N3-C4	-5.32	117.24	119.90
1	AA	1024	G	N3-C4-C5	-5.31	125.94	128.60
25	BA	27	G	O5'-P-OP2	-5.31	100.92	105.70
23	CX	14	A	N1-C2-N3	5.31	131.96	129.30
25	DA	1313	U	N3-C4-O4	5.31	123.12	119.40
25	BA	932	C	C2-N3-C4	5.31	122.56	119.90
1	AA	77	G	C8-N9-C4	5.31	108.52	106.40
25	DA	1403	C	N3-C2-O2	-5.31	118.18	121.90
25	DA	1812	A	O5'-P-OP1	-5.31	100.92	105.70
25	BA	2630	G	N3-C4-N9	5.31	129.18	126.00
25	BA	2802	C	C5-C6-N1	-5.31	118.35	121.00
1	CA	661	G	N1-C6-O6	5.31	123.08	119.90
25	DA	945	A	C5-C6-N6	-5.31	119.45	123.70
25	BA	1093	G	P-O3'-C3'	5.31	126.07	119.70
25	DA	2541	A	N1-C6-N6	5.31	121.78	118.60
1	CA	851	G	N1-C6-O6	5.30	123.08	119.90
1	CA	1369	C	C5-C6-N1	-5.30	118.35	121.00
1	CA	787	A	C2-N3-C4	-5.30	107.95	110.60
25	DA	1615	C	N1-C2-O2	-5.30	115.72	118.90
1	AA	59	A	C2-N3-C4	5.30	113.25	110.60
1	CA	316	G	C6-C5-N7	-5.30	127.22	130.40
25	DA	392	C	O5'-P-OP2	5.30	117.06	110.70
25	DA	532	A	O4'-C1'-N9	5.30	112.44	108.20
1	AA	476	G	C4-N9-C1'	5.30	133.39	126.50
1	AA	1289	A	N9-C4-C5	5.30	107.92	105.80
25	BA	199	C	OP2-P-O3'	5.30	116.86	105.20
25	BA	1954	A	O5'-P-OP2	5.30	117.06	110.70
25	BA	2807	C	C6-N1-C2	-5.30	118.18	120.30
25	BA	2904	U	C5-C6-N1	5.30	125.35	122.70
25	DA	271(K)	U	C2-N1-C1'	5.30	124.06	117.70
25	DA	2643	G	O5'-P-OP1	-5.30	100.93	105.70
1	CA	266	G	C5-N7-C8	-5.30	101.65	104.30
25	DA	2744	G	OP2-P-O3'	5.30	116.86	105.20
1	AA	122	G	N3-C4-C5	5.30	131.25	128.60
25	BA	2641	A	C2-N3-C4	-5.30	107.95	110.60
26	DB	56	G	C4-N9-C1'	5.30	133.38	126.50
25	BA	30	G	N3-C4-C5	-5.29	125.95	128.60
25	BA	1992	A	O4'-C1'-N9	-5.29	103.96	108.20
1	CA	1149	C	N3-C2-O2	-5.29	118.19	121.90
23	AX	4	G	N1-C6-O6	5.29	123.08	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2559	U	N1-C2-O2	-5.29	119.09	122.80
26	BB	91	C	N3-C4-C5	5.29	124.02	121.90
26	DB	115	G	N9-C4-C5	-5.29	103.28	105.40
1	AA	236	G	C5-C6-O6	5.29	131.78	128.60
25	BA	932	C	C5-C6-N1	5.29	123.65	121.00
25	BA	1650	C	N1-C2-O2	-5.29	115.72	118.90
23	AX	35	A	C5-C6-N1	-5.29	115.06	117.70
25	DA	216	A	C8-N9-C4	5.29	107.92	105.80
25	DA	2507	C	N3-C4-C5	-5.29	119.78	121.90
25	DA	2856	C	C5-C6-N1	5.29	123.64	121.00
25	BA	1631	C	C2-N3-C4	5.29	122.54	119.90
1	AA	1481	U	OP2-P-O3'	5.29	116.83	105.20
11	AK	49	GLY	N-CA-C	5.29	126.31	113.10
25	BA	1093	G	C8-N9-C1'	-5.29	120.13	127.00
25	DA	295	G	C6-C5-N7	-5.29	127.23	130.40
25	DA	830	G	N1-C6-O6	-5.29	116.73	119.90
1	AA	1006	C	C6-N1-C2	-5.28	118.19	120.30
1	AA	1531	A	N9-C1'-C2'	5.28	120.87	114.00
25	BA	415	G	C4-N9-C1'	-5.28	119.63	126.50
25	BA	417	A	C2-N3-C4	-5.28	107.96	110.60
25	BA	758	G	N1-C6-O6	5.28	123.07	119.90
25	BA	876	A	O5'-P-OP2	-5.28	100.94	105.70
1	CA	44	G	O5'-P-OP2	-5.28	100.94	105.70
25	DA	63	U	C2-N1-C1'	-5.28	111.36	117.70
25	BA	471	C	C2-N3-C4	-5.28	117.26	119.90
1	AA	46	G	N1-C6-O6	5.28	123.07	119.90
25	BA	1972	G	C6-C5-N7	-5.28	127.23	130.40
25	BA	2663	C	C5-C4-N4	-5.28	116.50	120.20
23	CX	32	C	N1-C2-O2	5.28	122.07	118.90
1	AA	848	C	C6-N1-C2	-5.28	118.19	120.30
25	BA	739	C	OP2-P-O3'	5.28	116.81	105.20
25	BA	1221	G	OP1-P-OP2	-5.28	111.68	119.60
25	BA	1638	C	C6-N1-C2	5.28	122.41	120.30
25	BA	799	A	C2-N3-C4	-5.28	107.96	110.60
1	CA	1039	C	C5-C6-N1	5.28	123.64	121.00
25	DA	2512	C	C5-C4-N4	-5.28	116.51	120.20
25	BA	733	G	C4-C5-N7	5.27	112.91	110.80
25	BA	1348	A	O5'-P-OP2	-5.27	100.95	105.70
25	DA	2455	G	C8-N9-C1'	-5.27	120.14	127.00
1	AA	1181	G	N1-C6-O6	5.27	123.06	119.90
1	AA	1519	A	C8-N9-C4	-5.27	103.69	105.80
23	AX	8	U	C5-C6-N1	5.27	125.34	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1476	C	N3-C2-O2	-5.27	118.21	121.90
1	CA	138	G	C8-N9-C4	-5.27	104.29	106.40
25	DA	1314	C	N1-C2-O2	5.27	122.06	118.90
23	AX	35	A	C6-N1-C2	5.27	121.76	118.60
25	BA	1298	G	C4-N9-C1'	-5.27	119.65	126.50
1	AA	219	C	C6-N1-C2	-5.27	118.19	120.30
25	BA	1994	A	C5-C6-N6	-5.27	119.48	123.70
25	DA	2892	A	N1-C6-N6	-5.27	115.44	118.60
25	BA	2228	G	C4-C5-C6	5.27	121.96	118.80
25	DA	2023	G	C6-C5-N7	-5.27	127.24	130.40
26	BB	6	C	N1-C2-O2	5.27	122.06	118.90
25	BA	1850	A	OP1-P-OP2	5.26	127.50	119.60
25	DA	63	U	O4'-C1'-N1	5.26	112.41	108.20
1	AA	1058	G	N9-C4-C5	-5.26	103.30	105.40
25	BA	978	A	C8-N9-C4	-5.26	103.69	105.80
1	AA	904	C	C6-N1-C2	5.26	122.41	120.30
25	BA	816	G	C5-C6-O6	-5.26	125.44	128.60
25	BA	1794	G	N7-C8-N9	-5.26	110.47	113.10
47	B1	46	LEU	CA-CB-CG	5.26	127.40	115.30
1	CA	939	G	N3-C4-C5	-5.26	125.97	128.60
25	DA	893	C	C2-N3-C4	5.26	122.53	119.90
25	DA	1148	A	C8-N9-C4	-5.26	103.69	105.80
25	BA	351	G	O4'-C1'-N9	-5.26	103.99	108.20
25	DA	1784	A	O5'-P-OP2	5.26	117.01	110.70
25	BA	1867	C	N1-C2-O2	5.26	122.05	118.90
25	BA	2829	G	N1-C6-O6	5.26	123.05	119.90
1	CA	1012	U	C6-N1-C1'	5.26	128.56	121.20
25	BA	2527	C	C6-N1-C2	5.25	122.40	120.30
1	AA	1043	C	O4'-C1'-N1	5.25	112.40	108.20
25	BA	693	G	C5-C6-O6	-5.25	125.45	128.60
1	CA	1180	A	C8-N9-C4	-5.25	103.70	105.80
23	CX	9	G	C4-N9-C1'	-5.25	119.67	126.50
25	DA	188	G	C6-C5-N7	-5.25	127.25	130.40
25	DA	2313	C	N3-C2-O2	-5.25	118.22	121.90
1	AA	167	G	C5-C6-O6	-5.25	125.45	128.60
25	BA	353	G	C5-C6-O6	-5.25	125.45	128.60
25	DA	1377	G	N3-C4-C5	-5.25	125.97	128.60
26	DB	81	G	N7-C8-N9	5.25	115.73	113.10
25	BA	926	G	N3-C4-C5	-5.25	125.97	128.60
25	BA	1365	G	C8-N9-C4	-5.25	104.30	106.40
25	BA	1766	G	C4-C5-N7	5.25	112.90	110.80
25	BA	2241	C	N3-C2-O2	-5.25	118.22	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1710	C	N3-C4-N4	5.25	121.67	118.00
25	BA	1859	G	N1-C6-O6	-5.25	116.75	119.90
1	CA	1029	C	C5-C6-N1	5.25	123.62	121.00
1	CA	1518	A	C5-C6-N6	5.25	127.90	123.70
25	DA	1120	G	N3-C4-C5	5.25	131.22	128.60
25	DA	2435	A	C8-N9-C4	-5.25	103.70	105.80
25	BA	2857	U	C5-C6-N1	-5.25	120.08	122.70
25	DA	912	C	N1-C2-O2	5.25	122.05	118.90
26	DB	119	G	C8-N9-C1'	5.25	133.82	127.00
1	AA	587	G	O5'-P-OP1	5.24	116.99	110.70
25	BA	965	G	O5'-P-OP2	-5.24	100.98	105.70
25	BA	1222	A	N7-C8-N9	5.24	116.42	113.80
23	AX	8	U	N1-C2-O2	5.24	126.47	122.80
25	BA	139	A	C5-C6-N1	-5.24	115.08	117.70
1	CA	422	C	C6-N1-C2	-5.24	118.20	120.30
25	BA	1857	G	OP1-P-O3'	5.24	116.73	105.20
25	BA	1985	U	C6-N1-C2	-5.24	117.86	121.00
1	AA	1190	G	C8-N9-C4	-5.24	104.31	106.40
25	BA	2452	C	C5-C6-N1	-5.24	118.38	121.00
25	DA	75	G	N3-C2-N2	-5.24	116.23	119.90
25	DA	1885	A	C8-N9-C4	5.24	107.89	105.80
25	DA	2336	A	N1-C6-N6	5.24	121.74	118.60
26	DB	29	A	N7-C8-N9	5.24	116.42	113.80
25	BA	168	G	O5'-P-OP2	-5.23	100.99	105.70
25	BA	978	A	O4'-C1'-N9	5.23	112.39	108.20
25	DA	76	C	N1-C2-O2	5.23	122.04	118.90
25	DA	895	U	C2-N1-C1'	5.23	123.98	117.70
25	DA	2345	G	C5-C6-O6	5.23	131.74	128.60
25	DA	2861	G	N3-C2-N2	-5.23	116.24	119.90
25	DA	893	C	C6-N1-C2	-5.23	118.21	120.30
1	AA	140	A	C8-N9-C4	-5.23	103.71	105.80
1	AA	975	A	O4'-C1'-N9	-5.23	104.02	108.20
25	BA	89	U	C5-C4-O4	5.23	129.04	125.90
25	BA	438	G	O5'-P-OP2	-5.23	100.99	105.70
25	BA	2122	G	N1-C6-O6	-5.23	116.76	119.90
25	DA	2375	G	O5'-P-OP2	-5.23	100.99	105.70
1	AA	204	U	N1-C2-O2	5.23	126.46	122.80
25	BA	1176	U	C5-C4-O4	5.23	129.04	125.90
25	BA	2510	C	C5-C6-N1	-5.23	118.39	121.00
25	DA	1955	U	N3-C4-O4	-5.23	115.74	119.40
25	DA	2604	U	N1-C2-O2	5.23	126.46	122.80
1	AA	1510	U	C6-N1-C2	5.23	124.14	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	840	A	C5-C6-N6	-5.23	119.52	123.70
25	BA	2414	C	C6-N1-C2	5.23	122.39	120.30
25	BA	2701	U	N3-C2-O2	-5.23	118.54	122.20
25	DA	1243	G	C4-C5-N7	-5.23	108.71	110.80
25	DA	1395	A	O4'-C1'-N9	5.23	112.38	108.20
25	DA	1955	U	C5-C6-N1	-5.23	120.09	122.70
26	DB	11	C	C6-N1-C2	-5.23	118.21	120.30
1	CA	561	U	N3-C4-O4	5.23	123.06	119.40
1	AA	167	G	N1-C6-O6	5.22	123.03	119.90
25	BA	134	G	N7-C8-N9	-5.22	110.49	113.10
25	DA	228	A	N1-C6-N6	5.22	121.73	118.60
25	DA	552	G	C4-N9-C1'	-5.22	119.71	126.50
25	DA	1488	G	N3-C4-C5	-5.22	125.99	128.60
25	DA	2334	G	OP2-P-O3'	5.22	116.69	105.20
25	DA	2587	A	N1-C6-N6	5.22	121.73	118.60
1	AA	1064	G	OP1-P-O3'	5.22	116.69	105.20
25	BA	362	G	N3-C4-N9	5.22	129.13	126.00
1	CA	800	G	OP2-P-O3'	5.22	116.69	105.20
1	AA	458	C	C6-N1-C2	-5.22	118.21	120.30
23	AX	14	A	C4-N9-C1'	5.22	135.70	126.30
25	BA	512	C	N3-C2-O2	5.22	125.56	121.90
25	BA	2503	U	N3-C4-O4	-5.22	115.75	119.40
25	DA	923	C	C6-N1-C2	-5.22	118.21	120.30
25	DA	1986	A	N1-C2-N3	5.22	131.91	129.30
25	BA	1450	C	O5'-P-OP2	-5.22	101.00	105.70
25	DA	796	C	C2-N3-C4	-5.22	117.29	119.90
25	DA	1368	G	O5'-P-OP2	-5.22	101.00	105.70
25	DA	1488	G	C4-N9-C1'	5.22	133.28	126.50
1	AA	1259	C	C6-N1-C2	-5.22	118.21	120.30
25	BA	1810	U	O4'-C1'-N1	5.22	112.37	108.20
25	BA	288	U	C5-C6-N1	5.21	125.31	122.70
1	CA	605	U	O4'-C1'-N1	5.21	112.37	108.20
1	CA	997	U	C5-C4-O4	5.21	129.03	125.90
26	DB	74	U	N1-C2-N3	5.21	118.03	114.90
25	BA	1539	C	C2-N1-C1'	5.21	124.53	118.80
1	AA	1507	A	C2-N3-C4	-5.21	108.00	110.60
25	BA	1221	G	OP1-P-O3'	5.21	116.66	105.20
1	CA	1004	A	C4-C5-N7	-5.21	108.10	110.70
25	DA	908	C	N1-C2-O2	-5.21	115.78	118.90
1	AA	365	U	C5-C6-N1	-5.21	120.10	122.70
1	AA	552	U	C5-C6-N1	-5.21	120.10	122.70
25	DA	970	C	N1-C2-O2	-5.21	115.78	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2049	G	O5'-P-OP2	-5.21	101.02	105.70
1	CA	372	C	N1-C2-O2	5.21	122.02	118.90
25	DA	1488	G	C8-N9-C4	-5.21	104.32	106.40
25	DA	2591	C	C6-N1-C2	-5.21	118.22	120.30
25	BA	1172	A	N1-C6-N6	5.20	121.72	118.60
1	CA	354	G	N1-C6-O6	5.20	123.02	119.90
25	DA	665	C	N1-C2-O2	5.20	122.02	118.90
25	DA	1992	G	P-O3'-C3'	5.20	125.94	119.70
25	DA	666	G	C2-N3-C4	-5.20	109.30	111.90
25	DA	2070	G	N3-C4-C5	-5.20	126.00	128.60
25	BA	2386	C	C6-N1-C2	5.20	122.38	120.30
25	DA	2253	G	C5-C6-O6	-5.20	125.48	128.60
1	AA	220	G	C4-N9-C1'	5.20	133.26	126.50
1	AA	1042	G	O4'-C1'-N9	5.20	112.36	108.20
1	AA	1397	C	C6-N1-C2	-5.20	118.22	120.30
25	BA	2740	G	N3-C2-N2	-5.20	116.26	119.90
1	CA	528	C	C5-C6-N1	5.20	123.60	121.00
1	CA	1042	G	O4'-C1'-N9	5.20	112.36	108.20
26	DB	82	G	C4-N9-C1'	-5.20	119.74	126.50
1	AA	963	G	C5-C6-N1	5.20	114.10	111.50
1	AA	1407	C	C5-C6-N1	5.20	123.60	121.00
25	DA	233	A	OP1-P-OP2	5.20	127.39	119.60
25	BA	1093	G	N1-C2-N2	-5.19	111.53	116.20
1	AA	1150	U	C5-C4-O4	5.19	129.01	125.90
25	BA	483	A	C5-C6-N6	5.19	127.85	123.70
25	BA	1972	G	C5-C6-N1	-5.19	108.90	111.50
1	AA	1401	G	O4'-C1'-N9	-5.19	104.05	108.20
1	CA	894	G	N3-C4-C5	5.19	131.19	128.60
25	DA	645	C	C2-N1-C1'	5.19	124.51	118.80
25	BA	1472	G	N3-C2-N2	5.19	123.53	119.90
25	DA	2018	G	C5-C6-O6	-5.19	125.49	128.60
25	BA	235	C	N3-C2-O2	5.19	125.53	121.90
1	CA	299	G	C6-C5-N7	-5.19	127.29	130.40
26	DB	45	A	P-O3'-C3'	5.19	125.92	119.70
25	BA	31	C	O5'-P-OP1	-5.19	101.03	105.70
25	BA	2425	G	OP2-P-O3'	5.19	116.61	105.20
1	CA	5	U	N3-C2-O2	-5.19	118.57	122.20
25	DA	894	C	N3-C2-O2	-5.19	118.27	121.90
25	DA	1380	G	O5'-P-OP2	-5.19	101.03	105.70
23	AX	69	C	N1-C2-O2	5.18	122.01	118.90
23	AX	76	A	C4-C5-N7	-5.18	108.11	110.70
25	BA	2255	U	OP1-P-OP2	5.18	127.38	119.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2838	C	N3-C4-C5	5.18	123.97	121.90
1	CA	925	G	C5-C6-O6	-5.18	125.49	128.60
25	DA	936	C	N3-C4-N4	-5.18	114.37	118.00
25	DA	2207	G	C5-C6-N1	-5.18	108.91	111.50
1	AA	839	U	P-O3'-C3'	5.18	125.92	119.70
25	BA	1094	A	N7-C8-N9	5.18	116.39	113.80
25	BA	1824	C	N3-C2-O2	-5.18	118.27	121.90
1	CA	662	G	C6-C5-N7	-5.18	127.29	130.40
25	DA	1761	C	N1-C2-O2	-5.18	115.79	118.90
25	DA	1955	U	C5-C4-O4	5.18	129.01	125.90
25	BA	1700	G	N9-C4-C5	5.18	107.47	105.40
25	BA	2110	G	N3-C2-N2	-5.18	116.27	119.90
7	AG	81	GLY	N-CA-C	5.18	126.05	113.10
25	BA	2646	G	O5'-P-OP2	-5.18	101.04	105.70
25	BA	2906	U	C2-N1-C1'	5.18	123.92	117.70
1	CA	1456	G	C8-N9-C4	5.18	108.47	106.40
25	DA	692	C	C6-N1-C2	5.18	122.37	120.30
25	BA	1372	U	C6-N1-C2	5.18	124.11	121.00
1	CA	1303	C	N1-C2-O2	5.18	122.01	118.90
3	CC	91	LEU	CA-CB-CG	5.18	127.21	115.30
25	DA	1022	G	N3-C2-N2	-5.18	116.28	119.90
1	AA	158	G	N3-C4-N9	-5.18	122.89	126.00
25	BA	718	C	C5-C4-N4	5.18	123.82	120.20
1	CA	1065	U	P-O3'-C3'	5.17	125.91	119.70
25	DA	1142(A)	A	N1-C6-N6	5.17	121.70	118.60
25	DA	2207	G	N7-C8-N9	5.17	115.69	113.10
25	DA	2286	A	C4-C5-N7	5.17	113.29	110.70
25	BA	1755	C	C6-N1-C2	5.17	122.37	120.30
1	CA	1142	G	N3-C4-C5	-5.17	126.01	128.60
25	DA	1124	C	N3-C4-C5	5.17	123.97	121.90
1	AA	1145	C	N1-C2-O2	5.17	122.00	118.90
1	AA	749	C	C2-N3-C4	5.17	122.48	119.90
1	AA	1029	C	C6-N1-C1'	5.17	127.00	120.80
25	BA	2223	C	N1-C2-O2	5.17	122.00	118.90
26	BB	118	G	N1-C6-O6	5.17	123.00	119.90
23	CX	35	A	C6-N1-C2	5.17	121.70	118.60
25	DA	2843	G	N3-C2-N2	-5.17	116.28	119.90
1	CA	1030(B)	C	C6-N1-C2	-5.17	118.23	120.30
1	CA	1271	G	N9-C4-C5	-5.17	103.33	105.40
1	AA	1019	C	C2-N3-C4	5.17	122.48	119.90
25	DA	266	G	C5-C6-O6	-5.17	125.50	128.60
25	DA	272(C)	G	C4-N9-C1'	-5.17	119.78	126.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	1418	G	C6-C5-N7	-5.17	127.30	130.40
25	BA	118	U	O5'-P-OP1	-5.16	101.05	105.70
25	BA	1814	A	O5'-P-OP2	-5.16	101.05	105.70
1	CA	557	G	N3-C2-N2	5.16	123.51	119.90
1	CA	960	U	N1-C2-O2	5.16	126.41	122.80
1	CA	1135	U	C2-N1-C1'	-5.16	111.50	117.70
25	DA	567	A	N3-C4-C5	5.16	130.41	126.80
25	DA	1838	C	O4'-C1'-N1	5.16	112.33	108.20
1	AA	1399	C	N3-C2-O2	5.16	125.51	121.90
25	BA	2344	U	O5'-P-OP2	-5.16	101.05	105.70
1	CA	1206	G	N3-C4-N9	5.16	129.10	126.00
25	BA	50	G	O5'-P-OP2	-5.16	101.06	105.70
25	BA	1240	G	C8-N9-C4	-5.16	104.34	106.40
25	BA	1807	G	N1-C6-O6	5.16	123.00	119.90
25	BA	2697	G	O5'-P-OP2	-5.16	101.06	105.70
1	CA	242	C	N3-C4-N4	5.16	121.61	118.00
25	DA	98	G	C8-N9-C4	5.16	108.46	106.40
25	DA	1126	A	O5'-P-OP1	-5.16	101.06	105.70
25	BA	671	A	O4'-C1'-N9	5.16	112.33	108.20
1	CA	906	G	N9-C4-C5	-5.16	103.34	105.40
1	AA	24	U	O5'-P-OP1	-5.16	101.06	105.70
23	CX	35	A	C5-C6-N1	-5.16	115.12	117.70
25	DA	1229	G	N9-C4-C5	-5.16	103.34	105.40
25	DA	2018	G	C4-C5-N7	5.16	112.86	110.80
25	BA	2634	C	C6-N1-C2	5.16	122.36	120.30
25	DA	1607	C	C6-N1-C2	5.16	122.36	120.30
25	DA	1767	C	C5-C6-N1	-5.16	118.42	121.00
1	CA	1165	C	N1-C2-O2	5.15	121.99	118.90
25	DA	743	G	N9-C4-C5	5.15	107.46	105.40
28	DE	111	ARG	NE-CZ-NH2	-5.15	117.72	120.30
25	DA	1643	G	OP1-P-O3'	5.15	116.54	105.20
25	DA	2422	A	N1-C6-N6	-5.15	115.51	118.60
25	DA	2487	G	C2-N3-C4	-5.15	109.32	111.90
25	DA	2581	G	OP1-P-O3'	5.15	116.54	105.20
25	BA	852	G	C4-C5-N7	5.15	112.86	110.80
25	BA	2662	U	C5-C6-N1	-5.15	120.12	122.70
25	BA	2801	C	C2-N3-C4	-5.15	117.33	119.90
31	DH	171	LEU	CA-CB-CG	5.15	127.14	115.30
25	BA	2251	G	C8-N9-C4	5.15	108.46	106.40
25	BA	2785	C	N1-C2-O2	5.15	121.99	118.90
1	CA	897	C	C6-N1-C2	5.15	122.36	120.30
1	AA	1150	U	C6-N1-C2	-5.15	117.91	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2228	G	N9-C4-C5	-5.15	103.34	105.40
25	BA	2464	C	C5-C6-N1	5.15	123.57	121.00
26	BB	108	U	C2-N1-C1'	-5.15	111.52	117.70
1	CA	18	C	O5'-P-OP2	5.15	116.88	110.70
25	DA	1786	A	O4'-C1'-N9	5.15	112.32	108.20
1	CA	1405	G	O5'-P-OP2	-5.15	101.07	105.70
25	DA	205	G	O5'-P-OP2	-5.15	101.07	105.70
25	DA	265	A	N1-C6-N6	5.15	121.69	118.60
23	AX	76	A	C5-C6-N1	5.14	120.27	117.70
25	BA	572	A	P-O3'-C3'	5.14	125.87	119.70
25	BA	1007	G	N7-C8-N9	5.14	115.67	113.10
25	BA	2510	C	N1-C2-N3	5.14	122.80	119.20
1	CA	380	G	N3-C4-N9	-5.14	122.91	126.00
25	BA	68	C	N1-C2-O2	-5.14	115.81	118.90
25	BA	405	C	C6-N1-C2	5.14	122.36	120.30
25	BA	696	C	C2-N3-C4	5.14	122.47	119.90
1	CA	1122	U	C5-C4-O4	-5.14	122.81	125.90
25	DA	1226	A	C8-N9-C4	5.14	107.86	105.80
1	AA	156	G	C8-N9-C4	-5.14	104.34	106.40
25	BA	781	A	N1-C6-N6	5.14	121.68	118.60
1	CA	1039	C	N1-C2-O2	5.14	121.98	118.90
25	DA	2520	C	N3-C4-C5	5.14	123.96	121.90
1	AA	442	C	C5-C6-N1	5.14	123.57	121.00
25	BA	280	C	C5-C6-N1	-5.14	118.43	121.00
1	AA	781	A	N9-C4-C5	-5.14	103.75	105.80
1	AA	1143	G	N9-C4-C5	5.14	107.45	105.40
25	DA	2346	A	C4-C5-N7	-5.14	108.13	110.70
1	CA	1466	C	O5'-P-OP1	-5.13	101.08	105.70
25	DA	34	C	N1-C2-O2	5.13	121.98	118.90
25	DA	748	G	C2-N3-C4	5.13	114.47	111.90
1	AA	1058	G	C5-C6-O6	-5.13	125.52	128.60
25	BA	2266	C	C6-N1-C2	5.13	122.35	120.30
1	CA	1034	G	C8-N9-C1'	5.13	133.67	127.00
1	AA	1265	G	C6-C5-N7	-5.13	127.32	130.40
25	BA	1473	A	C6-N1-C2	-5.13	115.52	118.60
1	CA	138	G	N7-C8-N9	5.13	115.67	113.10
25	DA	422	A	O5'-P-OP2	-5.13	101.08	105.70
25	BA	660	C	C6-N1-C2	-5.13	118.25	120.30
26	BB	30	C	C6-N1-C2	-5.13	118.25	120.30
1	CA	1012	U	C2-N1-C1'	-5.13	111.54	117.70
1	CA	990	C	N1-C2-O2	5.13	121.98	118.90
25	DA	829	A	O4'-C1'-N9	5.13	112.30	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	443	C	C2-N1-C1'	5.13	124.44	118.80
23	AX	69	C	C6-N1-C1'	-5.13	114.65	120.80
25	BA	835	A	N9-C4-C5	-5.13	103.75	105.80
25	BA	1244	U	OP2-P-O3'	5.13	116.48	105.20
25	BA	2110	G	N1-C6-O6	5.13	122.98	119.90
25	BA	2236	G	N7-C8-N9	-5.13	110.54	113.10
25	DA	2540	C	N1-C2-O2	-5.13	115.82	118.90
25	BA	2110	G	N3-C4-C5	5.12	131.16	128.60
25	BA	2235	G	C5-C6-O6	-5.12	125.53	128.60
25	BA	2662	U	C6-N1-C2	5.12	124.08	121.00
1	AA	889	A	OP1-P-OP2	5.12	127.29	119.60
25	BA	2524	C	N3-C2-O2	5.12	125.49	121.90
25	BA	119	G	C6-C5-N7	-5.12	127.33	130.40
25	DA	1122	G	O5'-P-OP2	-5.12	101.09	105.70
25	DA	1399	C	OP2-P-O3'	5.12	116.47	105.20
26	DB	51	G	C8-N9-C1'	-5.12	120.34	127.00
1	CA	1506	U	N3-C2-O2	5.12	125.78	122.20
1	AA	1183	A	P-O3'-C3'	5.12	125.84	119.70
25	BA	1153	G	C8-N9-C4	-5.12	104.35	106.40
25	BA	1255	A	N9-C4-C5	5.12	107.85	105.80
25	BA	1325	G	N3-C4-C5	-5.12	126.04	128.60
25	DA	2804	C	N3-C4-C5	-5.12	119.85	121.90
1	AA	382	A	C6-N1-C2	-5.12	115.53	118.60
25	DA	2384	G	N1-C6-O6	5.12	122.97	119.90
25	BA	1935	A	C5-C6-N6	-5.12	119.61	123.70
1	CA	1034	G	N9-C4-C5	5.12	107.45	105.40
23	CX	18	G	N3-C4-C5	5.12	131.16	128.60
25	DA	2059	A	C5-C6-N6	-5.12	119.61	123.70
25	DA	2325	G	C8-N9-C4	-5.12	104.35	106.40
25	BA	1470	G	C8-N9-C4	5.11	108.44	106.40
25	BA	2094	G	N1-C6-O6	5.11	122.97	119.90
1	CA	266	G	C6-C5-N7	-5.11	127.33	130.40
1	CA	1525	G	N3-C4-N9	-5.11	122.93	126.00
25	DA	512	G	C4-N9-C1'	-5.11	119.85	126.50
25	DA	1261	C	C2-N1-C1'	-5.11	113.18	118.80
1	AA	1221	G	C6-N1-C2	5.11	128.17	125.10
1	CA	1036	G	C8-N9-C1'	-5.11	120.35	127.00
25	DA	2509	G	C5-C6-N1	-5.11	108.94	111.50
25	BA	552	C	N1-C2-N3	5.11	122.78	119.20
25	BA	2345	A	OP1-P-O3'	5.11	116.44	105.20
1	CA	1183	A	O4'-C1'-N9	-5.11	104.11	108.20
25	BA	2564	U	N1-C2-O2	-5.11	119.22	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	340	U	C6-N1-C2	5.11	124.06	121.00
25	BA	133	G	N3-C4-N9	-5.11	122.94	126.00
25	BA	1680	G	C4-C5-N7	5.11	112.84	110.80
1	CA	1023	G	N3-C4-C5	-5.11	126.05	128.60
1	CA	1206	G	C5-C6-O6	-5.11	125.53	128.60
25	DA	709	U	C5-C4-O4	5.11	128.96	125.90
25	DA	2560	C	N3-C4-C5	5.11	123.94	121.90
25	DA	2802	G	N3-C4-C5	-5.11	126.05	128.60
1	AA	1516	G	C8-N9-C1'	5.11	133.64	127.00
25	BA	1688	A	N1-C2-N3	5.11	131.85	129.30
25	BA	2070	G	N1-C6-O6	5.11	122.96	119.90
1	CA	1158	C	C2-N1-C1'	5.11	124.42	118.80
25	DA	1142	U	C2-N1-C1'	5.11	123.83	117.70
25	DA	1617	C	C4-C5-C6	5.10	119.95	117.40
26	DB	28	C	O4'-C1'-N1	5.10	112.28	108.20
1	CA	1142	G	N3-C4-N9	5.10	129.06	126.00
25	DA	533	G	O5'-P-OP1	-5.10	101.11	105.70
25	DA	2010	G	C8-N9-C4	-5.10	104.36	106.40
1	AA	1517	G	N3-C4-C5	5.10	131.15	128.60
25	BA	496	A	N1-C6-N6	-5.10	115.54	118.60
25	BA	1398	U	N3-C2-O2	-5.10	118.63	122.20
25	BA	1488	G	OP1-P-OP2	-5.10	111.95	119.60
25	BA	2506	G	C6-N1-C2	5.10	128.16	125.10
25	DA	180	G	N7-C8-N9	5.10	115.65	113.10
25	DA	2463	C	N3-C2-O2	5.10	125.47	121.90
26	DB	52	A	C8-N9-C4	-5.10	103.76	105.80
25	BA	238	C	OP1-P-O3'	5.10	116.41	105.20
25	DA	2689	U	N3-C2-O2	-5.10	118.63	122.20
23	AX	14	A	C5-C6-N1	-5.09	115.15	117.70
25	BA	816	G	C4-C5-N7	5.09	112.84	110.80
25	DA	563	G	C8-N9-C4	-5.09	104.36	106.40
25	BA	2265	G	N3-C4-C5	5.09	131.15	128.60
25	DA	1661	G	C8-N9-C4	5.09	108.44	106.40
1	AA	183	G	C8-N9-C4	-5.09	104.36	106.40
25	BA	874	U	N3-C2-O2	5.09	125.76	122.20
25	DA	568	U	C5-C4-O4	-5.09	122.84	125.90
25	DA	824	A	N7-C8-N9	-5.09	111.25	113.80
25	DA	1266	G	N7-C8-N9	-5.09	110.55	113.10
1	AA	348	G	C4-N9-C1'	-5.09	119.88	126.50
1	AA	1150	U	C5-C6-N1	5.09	125.25	122.70
25	BA	205	A	C5-C6-N6	5.09	127.77	123.70
25	BA	405	C	C5-C4-N4	-5.09	116.64	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2524	C	C6-N1-C2	5.09	122.34	120.30
3	CC	52	LEU	CA-CB-CG	5.09	127.01	115.30
25	DA	2889	C	N1-C2-O2	5.09	121.95	118.90
25	BA	1807	G	C6-C5-N7	-5.09	127.35	130.40
25	BA	1999	A	C2-N3-C4	-5.09	108.06	110.60
25	DA	799	G	N9-C4-C5	5.09	107.44	105.40
25	DA	1890	A	C4-C5-C6	-5.09	114.46	117.00
25	DA	2285	C	N3-C2-O2	-5.09	118.34	121.90
53	D7	35	ARG	NE-CZ-NH1	-5.09	117.76	120.30
1	CA	1064	G	OP2-P-O3'	5.08	116.39	105.20
25	BA	354	A	N1-C2-N3	5.08	131.84	129.30
25	DA	674	G	N1-C6-O6	-5.08	116.85	119.90
25	DA	949	C	N3-C2-O2	5.08	125.46	121.90
26	DB	63	G	C8-N9-C4	5.08	108.43	106.40
1	AA	925	G	C5-C6-O6	-5.08	125.55	128.60
25	BA	2335	G	N1-C6-O6	5.08	122.95	119.90
25	BA	2512	U	N3-C2-O2	-5.08	118.64	122.20
25	DA	1976	U	C5-C6-N1	-5.08	120.16	122.70
25	DA	2588	G	C4-C5-N7	-5.08	108.77	110.80
1	AA	753	A	OP1-P-O3'	5.08	116.38	105.20
1	CA	1136	U	C5-C6-N1	5.08	125.24	122.70
1	CA	1169	A	N9-C1'-C2'	-5.08	106.41	112.00
25	DA	1662	C	C2-N3-C4	-5.08	117.36	119.90
25	DA	2062	A	OP2-P-O3'	5.08	116.37	105.20
25	BA	807	G	C2-N3-C4	-5.08	109.36	111.90
25	BA	1870	G	N3-C4-N9	5.08	129.05	126.00
26	DB	56	G	C5-C6-N1	5.08	114.04	111.50
1	AA	474	G	C4-N9-C1'	-5.08	119.90	126.50
1	AA	627	G	C6-C5-N7	-5.08	127.36	130.40
25	BA	1658	C	C6-N1-C2	5.08	122.33	120.30
25	BA	2014	G	P-O3'-C3'	5.08	125.79	119.70
26	BB	75	G	N7-C8-N9	5.08	115.64	113.10
26	BB	98	G	O5'-P-OP2	-5.08	101.13	105.70
26	DB	66	A	C2-N3-C4	5.08	113.14	110.60
26	DB	99	G	N3-C4-N9	-5.08	122.95	126.00
25	BA	95	G	OP1-P-OP2	5.07	127.21	119.60
25	BA	1658	C	N3-C2-O2	5.07	125.45	121.90
23	CX	17	C	N1-C2-O2	5.07	121.94	118.90
25	DA	249	C	C6-N1-C2	5.07	122.33	120.30
25	DA	1826	G	N7-C8-N9	-5.07	110.56	113.10
1	AA	1415	G	C5-C6-O6	-5.07	125.56	128.60
25	DA	1776	G	C4-C5-N7	5.07	112.83	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1183	A	OP1-P-O3'	5.07	116.36	105.20
1	CA	1165	C	C2-N1-C1'	5.07	124.38	118.80
1	AA	155	C	C6-N1-C2	-5.07	118.27	120.30
25	BA	2511	C	C5-C4-N4	-5.07	116.65	120.20
1	CA	79	G	N3-C4-C5	5.07	131.13	128.60
25	DA	188	G	C5-N7-C8	-5.07	101.77	104.30
25	DA	795	C	O5'-P-OP2	-5.07	101.14	105.70
25	DA	2024	G	C8-N9-C4	5.07	108.43	106.40
1	AA	91	C	N1-C2-O2	5.07	121.94	118.90
1	AA	222	U	C2-N1-C1'	5.07	123.78	117.70
1	AA	1366	C	C2-N3-C4	5.07	122.43	119.90
25	BA	1154	U	N1-C2-O2	5.07	126.35	122.80
25	DA	674	G	C5-C6-O6	5.07	131.64	128.60
25	DA	738	G	N3-C4-C5	-5.07	126.07	128.60
25	DA	754	C	N3-C2-O2	5.07	125.45	121.90
25	DA	2520	C	C5-C6-N1	-5.07	118.47	121.00
25	DA	1790	C	P-O3'-C3'	5.06	125.78	119.70
1	CA	1082	G	C6-N1-C2	5.06	128.14	125.10
1	AA	308	C	N1-C2-O2	5.06	121.94	118.90
1	AA	1347	G	O4'-C1'-N9	5.06	112.25	108.20
25	BA	1024	G	C8-N9-C4	5.06	108.42	106.40
1	CA	998	G	C8-N9-C1'	5.06	133.58	127.00
1	AA	1109	C	N1-C2-O2	-5.06	115.86	118.90
25	BA	2762	A	C8-N9-C4	5.06	107.82	105.80
25	DA	2716	U	N1-C2-N3	5.06	117.94	114.90
1	AA	318	G	O5'-P-OP2	-5.06	101.15	105.70
25	BA	1386	U	C5-C6-N1	-5.06	120.17	122.70
25	BA	2071	G	N9-C4-C5	-5.06	103.38	105.40
1	CA	865	A	C2-N3-C4	-5.06	108.07	110.60
25	DA	1181	C	N1-C2-O2	5.06	121.93	118.90
25	DA	1758	G	N1-C6-O6	5.06	122.93	119.90
1	CA	1028	C	C2-N3-C4	5.06	122.43	119.90
25	DA	573	G	OP1-P-O3'	5.06	116.32	105.20
25	DA	795	C	C5-C6-N1	-5.06	118.47	121.00
1	AA	863	U	C5-C4-O4	5.05	128.93	125.90
25	BA	1573	G	C4-C5-N7	-5.05	108.78	110.80
25	BA	1994	A	N7-C8-N9	5.05	116.33	113.80
25	BA	2239	A	N1-C6-N6	-5.05	115.57	118.60
25	DA	297	C	C6-N1-C2	-5.05	118.28	120.30
1	AA	627	G	C5-C6-O6	-5.05	125.57	128.60
1	AA	346	G	C8-N9-C4	-5.05	104.38	106.40
25	BA	484	G	O4'-C1'-N9	5.05	112.24	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	1017	G	O5'-P-OP2	-5.05	101.15	105.70
26	BB	107	G	C2-N3-C4	-5.05	109.37	111.90
1	AA	816	A	C8-N9-C4	-5.05	103.78	105.80
1	CA	1312	G	C8-N9-C4	-5.05	104.38	106.40
1	CA	142	G	N3-C4-C5	-5.05	126.08	128.60
1	CA	977	A	C8-N9-C4	-5.05	103.78	105.80
25	DA	1600	C	N3-C2-O2	5.05	125.43	121.90
1	AA	1166	G	C4-N9-C1'	5.05	133.06	126.50
25	BA	238	C	O5'-P-OP2	-5.05	101.16	105.70
25	BA	784	C	N3-C4-C5	5.05	123.92	121.90
25	BA	2736	C	N1-C2-O2	5.05	121.93	118.90
25	BA	2771	A	C8-N9-C4	5.05	107.82	105.80
25	BA	1360	C	C2-N1-C1'	5.04	124.35	118.80
25	BA	1680	G	C5-C6-O6	-5.04	125.57	128.60
25	BA	2052	A	N1-C6-N6	5.04	121.63	118.60
25	DA	2695	C	C6-N1-C2	5.04	122.32	120.30
25	BA	990	A	N3-C4-C5	5.04	130.33	126.80
25	BA	1035	G	N9-C4-C5	-5.04	103.38	105.40
25	BA	1302	G	C8-N9-C1'	-5.04	120.44	127.00
25	BA	1310	G	P-O3'-C3'	5.04	125.75	119.70
25	BA	1359	U	C2-N1-C1'	5.04	123.75	117.70
25	BA	2535	G	OP1-P-OP2	5.04	127.17	119.60
23	CX	35	A	C5-C6-N6	5.04	127.73	123.70
25	DA	1142(A)	A	C5-C6-N1	-5.04	115.18	117.70
25	DA	1955	U	C2-N1-C1'	-5.04	111.65	117.70
35	DP	44	GLY	C-N-CA	5.04	134.31	121.70
1	AA	1502	A	N7-C8-N9	5.04	116.32	113.80
25	BA	1373	C	O5'-P-OP1	5.04	116.75	110.70
25	BA	2354	C	C6-N1-C2	-5.04	118.28	120.30
1	CA	721	G	C6-C5-N7	-5.04	127.38	130.40
25	DA	991	C	O5'-P-OP2	-5.04	101.16	105.70
25	BA	990	A	C1'-O4'-C4'	-5.04	105.87	109.90
25	BA	1170	C	N3-C4-C5	5.04	123.92	121.90
1	CA	1005	A	OP1-P-O3'	5.04	116.29	105.20
23	CX	51	C	C2-N1-C1'	5.04	124.34	118.80
1	AA	1151	A	N1-C6-N6	-5.04	115.58	118.60
23	AX	69	C	C5-C4-N4	-5.04	116.67	120.20
25	BA	449	A	OP1-P-OP2	-5.04	112.04	119.60
25	BA	615	G	N1-C6-O6	-5.04	116.88	119.90
25	BA	2268	G	C4-C5-N7	5.04	112.82	110.80
25	DA	114	U	C6-N1-C1'	-5.04	114.14	121.20
25	DA	1537	G	N1-C6-O6	5.04	122.92	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	716	G	N1-C6-O6	-5.04	116.88	119.90
25	BA	1796	C	O5'-P-OP2	-5.04	101.17	105.70
1	CA	1154	G	N3-C4-N9	5.04	129.02	126.00
25	DA	265	A	O4'-C1'-N9	5.04	112.23	108.20
25	DA	698	C	N3-C2-O2	-5.04	118.37	121.90
9	AI	50	LEU	CA-CB-CG	5.04	126.88	115.30
25	BA	334	A	N1-C6-N6	-5.04	115.58	118.60
1	CA	1282	C	C6-N1-C2	-5.04	118.29	120.30
25	DA	1615	C	N3-C2-O2	5.04	125.42	121.90
25	BA	2032	G	C5-N7-C8	-5.03	101.78	104.30
46	B0	13	GLY	N-CA-C	5.03	125.68	113.10
25	DA	659	C	C5-C6-N1	-5.03	118.48	121.00
25	DA	2045	C	N1-C2-O2	5.03	121.92	118.90
25	BA	725	C	C2-N3-C4	-5.03	117.38	119.90
25	DA	2540	C	O5'-P-OP2	-5.03	101.17	105.70
25	BA	482	C	C2-N1-C1'	5.03	124.33	118.80
25	BA	555	G	C8-N9-C1'	5.03	133.54	127.00
25	BA	1006	C	N3-C4-N4	-5.03	114.48	118.00
25	BA	2757	G	O5'-P-OP2	-5.03	101.17	105.70
1	CA	1077	G	C4-N9-C1'	-5.03	119.96	126.50
25	DA	1148	A	N9-C4-C5	5.03	107.81	105.80
25	DA	2189	U	N1-C2-O2	5.03	126.32	122.80
25	BA	2229	A	C6-C5-N7	-5.03	128.78	132.30
1	CA	972	C	C5-C6-N1	5.03	123.52	121.00
1	CA	1151	A	C5-C6-N6	-5.03	119.68	123.70
1	AA	159	G	N1-C2-N3	-5.03	120.88	123.90
1	CA	1525	G	N9-C4-C5	5.03	107.41	105.40
23	CX	49	G	C8-N9-C4	-5.03	104.39	106.40
25	DA	247	G	C8-N9-C4	5.03	108.41	106.40
1	AA	1020	U	N3-C2-O2	-5.02	118.68	122.20
1	AA	255	G	C5-C6-O6	-5.02	125.59	128.60
1	AA	382	A	N1-C6-N6	-5.02	115.59	118.60
25	BA	1738	C	N3-C4-N4	-5.02	114.48	118.00
25	DA	987	G	N9-C1'-C2'	-5.02	106.47	112.00
25	DA	1123	C	N3-C4-C5	5.02	123.91	121.90
25	DA	1313	U	C6-N1-C2	-5.02	117.99	121.00
25	BA	2638	C	N3-C4-C5	5.02	123.91	121.90
1	AA	854	G	N1-C6-O6	5.02	122.91	119.90
25	BA	762	G	C6-C5-N7	-5.02	127.39	130.40
25	DA	330	A	N3-C4-N9	-5.02	123.38	127.40
25	BA	1176	U	N1-C2-O2	5.02	126.31	122.80
25	BA	1838	G	C5-C6-O6	-5.02	125.59	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BA	2414	C	C5-C4-N4	-5.02	116.69	120.20
25	BA	2646	G	C5-C6-O6	-5.02	125.59	128.60
25	BA	2662	U	N3-C4-C5	5.02	117.61	114.60
25	BA	2697	G	N3-C4-N9	-5.02	122.99	126.00
25	DA	1309	G	C8-N9-C4	5.02	108.41	106.40
25	DA	1531	C	C2-N1-C1'	5.02	124.32	118.80
25	DA	2255	G	OP1-P-OP2	5.02	127.13	119.60
25	BA	2528	G	OP2-P-O3'	5.02	116.24	105.20
25	DA	94(A)	G	C5-C6-O6	5.02	131.61	128.60
25	DA	2545	G	N3-C4-C5	-5.02	126.09	128.60
1	AA	1088	G	N1-C6-O6	5.01	122.91	119.90
25	BA	268	G	O4'-C1'-N9	5.01	112.21	108.20
23	CX	76	A	N3-C4-N9	5.01	131.41	127.40
25	DA	193	U	C5-C4-O4	-5.01	122.89	125.90
26	DB	60	C	C2-N3-C4	5.01	122.41	119.90
25	BA	31	C	N3-C2-O2	5.01	125.41	121.90
25	BA	1425	A	OP2-P-O3'	5.01	116.23	105.20
23	CX	46	G	N3-C4-N9	-5.01	122.99	126.00
1	AA	957	U	C5-C6-N1	5.01	125.21	122.70
25	BA	933	C	C6-N1-C2	-5.01	118.30	120.30
25	BA	2608	U	C6-N1-C2	5.01	124.01	121.00
25	DA	271(S)	G	C4-C5-N7	5.01	112.81	110.80
25	DA	945	A	N9-C1'-C2'	5.01	120.52	114.00
25	BA	485	U	O5'-P-OP1	5.01	116.71	110.70
25	BA	1170	C	C5-C6-N1	-5.01	118.50	121.00
25	BA	2387	G	O5'-P-OP1	5.01	116.71	110.70
25	BA	2524	C	N1-C2-O2	-5.01	115.89	118.90
25	DA	2396	G	N1-C6-O6	5.01	122.91	119.90
1	AA	188	C	C6-N1-C2	-5.01	118.30	120.30
25	BA	476	G	N3-C4-N9	5.01	129.00	126.00
25	BA	600	G	N9-C4-C5	-5.01	103.40	105.40
25	DA	180	G	C4-N9-C1'	5.01	133.01	126.50
1	CA	972	C	C6-N1-C2	-5.00	118.30	120.30
25	DA	733	G	N3-C4-N9	5.00	129.00	126.00
25	BA	88	G	C8-N9-C4	-5.00	104.40	106.40
25	BA	423	G	C4-C5-N7	5.00	112.80	110.80
1	AA	176	C	C5-C6-N1	5.00	123.50	121.00
25	BA	585	U	OP1-P-OP2	5.00	127.10	119.60
25	BA	719	C	C2-N3-C4	-5.00	117.40	119.90
25	BA	1314	A	C2-N3-C4	-5.00	108.10	110.60
25	BA	1787	G	O5'-P-OP1	-5.00	101.20	105.70
25	DA	567	A	C4-C5-C6	-5.00	114.50	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	DA	2320	A	C5-C6-N1	5.00	120.20	117.70

All (1) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
23	CX	76	A	C1'

All (15) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	AB	231	GLU	Peptide
2	AB	8	LYS	Peptide
2	AB	9	GLU	Peptide
7	AG	79	ARG	Peptide
9	AI	52	ALA	Peptide
24	AW	4	PRO	Peptide
50	B4	59	PHE	Peptide
38	BS	58	LEU	Peptide
44	BY	53	PRO	Peptide
45	BZ	136	PHE	Peptide
4	CD	45	GLN	Peptide
19	CS	28	LYS	Peptide
24	CW	9	MVA	Peptide
50	D4	67	TYR	Peptide
27	DD	274	ARG	Peptide

5.2 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 hydrogens added by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, and the number in parentheses is this value normalized per 1000 atoms of the molecule in the chain. The Symm-Clashes column gives symmetry related clashes, in the same way as for the Clashes column.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	AA	32196	0	16250	907	0
1	CA	32312	0	16307	1000	0
2	AB	1846	0	1867	106	0
2	CB	1825	0	1828	118	0
3	AC	1552	0	1546	51	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	CC	1542	0	1517	81	0
4	AD	1659	0	1676	86	0
4	CD	1674	0	1714	83	0
5	AE	1129	0	1185	44	0
5	CE	1133	0	1191	57	0
6	AF	806	0	793	34	0
6	CF	816	0	808	24	0
7	AG	1231	0	1238	33	0
7	CG	1235	0	1249	53	0
8	AH	1088	0	1126	43	0
8	CH	1088	0	1126	56	0
9	AI	983	0	986	47	0
9	CI	978	0	966	55	0
10	AJ	709	0	650	41	0
10	CJ	714	0	672	58	0
11	AK	829	0	825	17	0
11	CK	833	0	836	27	0
12	AL	930	0	980	36	0
12	CL	930	0	980	40	0
13	AM	958	0	1002	35	0
13	CM	950	0	988	50	0
14	AN	492	0	529	27	0
14	CN	492	0	529	31	0
15	AO	728	0	760	23	0
15	CO	728	0	760	26	0
16	AP	681	0	697	35	0
16	CP	677	0	686	30	0
17	AQ	823	0	891	21	0
17	CQ	823	0	891	27	0
18	AR	555	0	618	24	0
18	CR	555	0	618	19	0
19	AS	652	0	662	42	0
19	CS	646	0	644	49	0
20	AT	728	0	798	36	0
20	CT	727	0	796	26	0
21	AU	199	0	208	6	0
21	CU	199	0	208	8	0
22	AV	114	0	54	1	0
22	CV	113	0	54	1	0
23	AX	1623	0	823	23	0
23	CX	1623	0	823	22	0
24	AW	93	0	51	7	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
24	CW	93	0	51	4	0
25	BA	58834	0	29666	828	0
25	DA	58458	0	29481	1163	0
26	BB	2573	0	1306	33	0
26	DB	2573	0	1306	65	0
27	BD	2136	0	2218	62	0
27	DD	2136	0	2218	74	0
28	BE	1559	0	1618	55	0
28	DE	1559	0	1618	65	0
29	BF	1584	0	1625	38	0
29	DF	1580	0	1619	65	0
30	BG	1425	0	1443	41	0
30	DG	1424	0	1434	89	0
31	BH	1330	0	1407	37	0
31	DH	1330	0	1407	50	0
32	BI	1085	0	1114	42	0
32	DI	1061	0	1080	27	0
33	BN	1117	0	1183	18	0
33	DN	1117	0	1184	25	0
34	BO	933	0	996	26	0
34	DO	933	0	996	30	0
35	BP	1135	0	1212	42	0
35	DP	1135	0	1212	52	0
36	BQ	1122	0	1179	38	0
36	DQ	1122	0	1179	38	0
37	BR	968	0	1033	24	0
37	DR	968	0	1032	28	0
38	BS	877	0	938	30	0
38	DS	870	0	923	45	0
39	BT	1091	0	1151	36	0
39	DT	1083	0	1136	38	0
40	BU	959	0	1019	28	0
40	DU	959	0	1019	26	0
41	BV	771	0	830	15	0
41	DV	771	0	830	23	0
42	BW	886	0	940	15	0
42	DW	886	0	940	25	0
43	BX	750	0	814	19	0
43	DX	750	0	814	22	0
44	BY	806	0	881	22	0
44	DY	806	0	881	27	0
45	BZ	1349	0	1355	44	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
45	DZ	1360	0	1363	55	0
46	B0	653	0	674	19	0
46	D0	653	0	674	31	0
47	B1	755	0	826	19	0
47	D1	755	0	826	20	0
48	B2	588	0	643	13	0
48	D2	588	0	643	18	0
49	B3	469	0	518	12	0
49	D3	464	0	514	10	0
50	B4	551	0	532	38	0
50	D4	531	0	502	38	0
51	B5	455	0	465	14	0
51	D5	455	0	465	8	0
52	B6	453	0	473	10	0
52	D6	449	0	469	13	0
53	B7	418	0	467	11	0
53	D7	418	0	467	8	0
54	B8	511	0	571	31	0
54	D8	517	0	582	24	0
55	B9	307	0	335	7	0
55	D9	307	0	335	14	0
56	AA	222	0	0	0	0
56	AD	1	0	0	0	0
56	AF	1	0	0	0	0
56	AK	1	0	0	0	0
56	AL	1	0	0	0	0
56	AM	2	0	0	0	0
56	AN	1	0	0	0	0
56	AS	1	0	0	0	0
56	AV	1	0	0	0	0
56	AX	9	0	0	0	0
56	B0	6	0	0	0	0
56	B1	2	0	0	0	0
56	B2	1	0	0	0	0
56	B3	3	0	0	0	0
56	B5	1	0	0	0	0
56	B7	4	0	0	0	0
56	B8	2	0	0	0	0
56	B9	1	0	0	0	0
56	BA	739	0	0	0	0
56	BB	18	0	0	0	0
56	BD	12	0	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	BE	9	0	0	0	0
56	BF	6	0	0	0	0
56	BG	4	0	0	0	0
56	BN	6	0	0	0	0
56	BO	1	0	0	0	0
56	BP	4	0	0	0	0
56	BQ	4	0	0	0	0
56	BR	3	0	0	0	0
56	BU	9	0	0	0	0
56	BV	3	0	0	0	0
56	BW	5	0	0	0	0
56	BX	2	0	0	0	0
56	BZ	1	0	0	0	0
56	CA	172	0	0	0	0
56	CE	2	0	0	0	0
56	CF	1	0	0	0	0
56	CN	1	0	0	0	0
56	CT	1	0	0	0	0
56	CX	3	0	0	0	0
56	D3	1	0	0	0	0
56	D5	2	0	0	0	0
56	D8	1	0	0	0	0
56	DA	657	0	0	0	0
56	DB	12	0	0	0	0
56	DD	5	0	0	0	0
56	DE	6	0	0	0	0
56	DF	5	0	0	0	0
56	DG	1	0	0	0	0
56	DN	1	0	0	0	0
56	DO	1	0	0	0	0
56	DP	2	0	0	0	0
56	DQ	4	0	0	0	0
56	DR	1	0	0	0	0
56	DU	2	0	0	0	0
56	DV	3	0	0	0	0
56	DW	2	0	0	0	0
56	DY	1	0	0	0	0
57	AD	8	0	0	1	0
57	CD	8	0	0	1	0
58	AN	1	0	0	0	0
58	B4	1	0	0	0	0
58	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
58	B6	1	0	0	0	0
58	B9	1	0	0	0	0
58	BY	1	0	0	0	0
58	CN	1	0	0	0	0
58	D4	1	0	0	0	0
58	D5	1	0	0	0	0
58	D6	1	0	0	0	0
58	D9	1	0	0	0	0
58	DY	1	0	0	0	0
59	AX	10	0	10	1	0
59	CX	10	0	10	2	0
60	BA	1	0	0	0	0
60	DA	1	0	0	0	0
61	AA	147	0	0	23	0
61	AD	1	0	0	0	0
61	AE	2	0	0	0	0
61	AJ	1	0	0	0	0
61	AL	2	0	0	0	0
61	AO	2	0	0	0	0
61	AU	1	0	0	1	0
61	AV	2	0	0	0	0
61	AX	1	0	0	0	0
61	B0	4	0	0	0	0
61	B1	2	0	0	0	0
61	B5	2	0	0	0	0
61	B7	1	0	0	1	0
61	B8	7	0	0	1	0
61	BA	1086	0	0	94	0
61	BB	26	0	0	2	0
61	BD	6	0	0	0	0
61	BE	13	0	0	3	0
61	BF	5	0	0	0	0
61	BG	1	0	0	0	0
61	BN	3	0	0	0	0
61	BO	2	0	0	0	0
61	BP	15	0	0	2	0
61	BQ	3	0	0	1	0
61	BR	1	0	0	0	0
61	BT	2	0	0	0	0
61	BU	5	0	0	0	0
61	BV	2	0	0	0	0
61	BW	4	0	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
61	BX	4	0	0	1	0
61	CA	186	0	0	24	0
61	CE	2	0	0	0	0
61	CN	1	0	0	0	0
61	CT	1	0	0	0	0
61	CX	2	0	0	0	0
61	D0	3	0	0	1	0
61	D1	1	0	0	0	0
61	D3	1	0	0	0	0
61	D7	1	0	0	0	0
61	D8	4	0	0	0	0
61	DA	906	0	0	116	0
61	DB	7	0	0	0	0
61	DD	10	0	0	0	0
61	DE	11	0	0	1	0
61	DF	4	0	0	0	0
61	DO	1	0	0	0	0
61	DP	14	0	0	2	0
61	DQ	3	0	0	1	0
61	DR	1	0	0	0	0
61	DU	4	0	0	0	0
61	DV	1	0	0	0	0
61	DX	2	0	0	1	0
61	DY	1	0	0	0	0
All	All	286321	0	191058	6675	0

Clashscore is defined as the number of clashes calculated for the entry per 1000 atoms (including hydrogens) of the entry. The overall clashscore for this entry is 15.

All (6675) close contacts within the same asymmetric unit are listed below.

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1129:C:N4	1:AA:1143:G:H1	1.46	1.12
1:CA:1002:G:H1	1:CA:1038:C:N4	1.48	1.09
1:AA:348:G:H2'	1:AA:349:A:H5'	1.30	1.06
2:AB:185:ILE:HG22	2:AB:199:TYR:HB2	1.39	1.04
2:CB:16:HIS:HB2	2:CB:204:ASN:HB3	1.36	1.03
25:DA:2206:G:H3'	25:DA:2207:G:C8	1.95	1.00
39:BT:16:ARG:NH2	39:BT:83:ILE:O	1.93	1.00
1:CA:1163:C:N4	1:CA:1173:G:H1	1.60	1.00
25:DA:1019:U:HO2'	25:DA:1021:A:H2	1.03	1.00
1:AA:1125:U:N3	1:AA:1127:G:N7	2.10	0.99
1:CA:1153:C:H42	1:CA:1154:G:H21	1.06	0.98

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1318:A:H5''	19:CS:3:ARG:HH22	1.26	0.98
2:CB:185:ILE:HG22	2:CB:199:TYR:HB2	1.44	0.98
1:AA:201:C:H42	1:AA:216:G:H1	0.99	0.96
1:CA:1492:A:N3	25:DA:1913:A:N6	2.14	0.96
13:CM:122:LYS:HD3	13:CM:123:ALA:H	1.29	0.96
1:CA:1163:C:H42	1:CA:1173:G:H1	1.06	0.95
1:CA:998:G:H1	1:CA:1043:C:N4	1.64	0.94
25:DA:1488:G:C6	25:DA:1489:U:H5	1.85	0.94
25:BA:9:U:H3	25:BA:2641:A:H2	1.02	0.93
1:CA:998:G:H1	1:CA:1043:C:H42	0.95	0.93
25:BA:1036:A:OP2	61:BA:4501:HOH:O	1.87	0.93
1:AA:167:G:H2'	1:AA:168:G:H8	1.32	0.93
1:CA:999:C:N4	1:CA:1042:G:C6	2.36	0.92
25:DA:1664:A:OP1	61:DA:4386:HOH:O	1.87	0.92
1:CA:837:G:H1	1:CA:849:C:H42	1.18	0.92
25:DA:740:U:OP2	61:DA:4119:HOH:O	1.87	0.92
4:CD:122:ARG:NH1	4:CD:134:ASP:O	2.03	0.92
25:BA:139:A:H8	25:BA:1454:C:HO2'	0.94	0.92
1:CA:999:C:C4	1:CA:1042:G:N1	2.38	0.91
44:BY:92:ASN:HB3	44:BY:94:LYS:H	1.35	0.91
26:DB:22:U:H3	26:DB:61:G:H1	1.18	0.91
25:DA:1798:U:H5'	27:DD:259:THR:HG22	1.52	0.91
1:CA:677:U:H3	1:CA:713:G:H22	1.19	0.91
25:BA:1065:U:HO2'	25:BA:1067:A:H2	1.13	0.91
2:AB:16:HIS:HB2	2:AB:204:ASN:HB3	1.50	0.91
2:AB:16:HIS:CD2	2:AB:17:PHE:H	1.89	0.90
1:CA:999:C:N4	1:CA:1042:G:N1	2.18	0.90
10:CJ:8:LEU:HB2	10:CJ:70:ARG:HB2	1.53	0.90
44:BY:54:LYS:HA	44:BY:56:PRO:HD3	1.52	0.90
1:AA:1075:C:OP1	2:AB:179:LYS:NZ	2.04	0.90
25:BA:2695:C:O2	34:BO:70:LYS:NZ	2.04	0.89
1:CA:1162:C:H42	1:CA:1174:G:H1	1.21	0.89
25:BA:2227:G:H5'	25:BA:2228:G:N7	1.88	0.89
34:BO:35:VAL:HG11	34:BO:103:ALA:HB3	1.54	0.89
30:DG:11:TYR:CZ	30:DG:16:ARG:HD3	2.08	0.88
50:D4:53:GLU:HG2	50:D4:55:ARG:H	1.38	0.88
1:AA:1028:C:H42	1:AA:1033:G:H1	1.21	0.88
1:CA:1007:C:N3	1:CA:1022:G:N2	2.20	0.88
11:AK:79:SER:HA	11:AK:104:GLN:HB2	1.56	0.87
1:CA:1002:G:N2	1:CA:1038:C:N3	2.23	0.87
25:DA:1689:A:H62	25:DA:1698:A:H2	1.20	0.87
2:CB:16:HIS:HB3	2:CB:210:SER:HB3	1.57	0.87

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1414:U:H3	1:AA:1486:G:H1	1.22	0.87
25:DA:1019:U:H3	25:DA:1142(A):A:H62	1.23	0.87
1:AA:836:G:OP2	18:AR:61:LYS:NZ	2.06	0.87
1:AA:406:G:H5'	4:AD:5:ILE:HD11	1.55	0.87
35:BP:126:VAL:HG12	35:BP:148:LEU:HD22	1.54	0.87
25:BA:1007:G:OP1	61:BA:4615:HOH:O	1.93	0.87
1:CA:1133:G:H2'	1:CA:1134:G:H8	1.39	0.87
25:DA:827:U:OP1	61:DA:4182:HOH:O	1.92	0.87
1:AA:1129:C:N3	1:AA:1143:G:N2	2.22	0.86
1:CA:1007:C:N4	1:CA:1022:G:N1	2.23	0.86
46:B0:11:ARG:O	46:B0:14:ARG:NH2	2.08	0.86
23:AX:6:G:H1	23:AX:67:C:H42	1.23	0.86
9:CI:9:ARG:HG2	9:CI:14:VAL:HG12	1.56	0.86
27:BD:71:ASP:HB3	27:BD:103:ARG:HH22	1.39	0.86
25:BA:1404:G:OP2	61:BA:4220:HOH:O	1.92	0.86
29:DF:53:THR:HG23	29:DF:55:GLY:H	1.40	0.86
25:BA:1361:C:OP2	61:BA:4469:HOH:O	1.94	0.86
1:CA:1262:C:H42	1:CA:1273:G:H1	1.21	0.86
1:AA:1025:U:O2	1:AA:1036:G:O6	1.93	0.86
25:DA:1648:C:OP1	61:DA:4113:HOH:O	1.93	0.86
1:CA:1502:A:H2	1:CA:1505:G:H1	1.23	0.86
25:BA:831:A:OP2	61:BA:4453:HOH:O	1.94	0.85
8:AH:51:VAL:HG12	8:AH:52:ASP:H	1.41	0.85
1:AA:1036:G:H5'	1:AA:1037:C:H5	1.39	0.85
1:AA:574:A:OP2	61:AA:4004:HOH:O	1.93	0.85
1:AA:166:G:H2'	1:AA:167:G:C8	2.10	0.85
30:BG:66:GLN:HG2	50:B4:1:MET:HE3	1.59	0.85
1:AA:427:U:OP1	4:AD:13:ARG:NH2	2.09	0.85
45:DZ:69:THR:HG22	45:DZ:90:VAL:HA	1.57	0.85
29:BF:185:ASP:HA	29:BF:188:ARG:HD3	1.58	0.84
1:AA:1108:G:O6	61:AA:4120:HOH:O	1.94	0.84
25:BA:1577:C:O2'	25:BA:1578:C:O5'	1.95	0.84
1:CA:1075:C:OP1	2:CB:179:LYS:NZ	2.09	0.84
25:BA:656:A:OP1	35:BP:65:ARG:NH1	2.10	0.84
25:BA:1717:C:OP1	61:BA:3894:HOH:O	1.95	0.84
25:DA:1602:U:O4	61:DA:4523:HOH:O	1.93	0.84
25:DA:2592:G:OP1	61:DA:4138:HOH:O	1.96	0.84
2:AB:21:ARG:HB3	2:AB:39:ILE:HA	1.60	0.84
25:DA:2738:A:OP2	61:DA:4117:HOH:O	1.96	0.84
1:CA:542:G:OP1	4:CD:10:ARG:NH2	2.11	0.84
1:CA:1125:U:O2'	1:CA:1126:U:H2'	1.76	0.84
1:CA:565:U:OP2	61:CA:4054:HOH:O	1.96	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BA:1683:C:OP2	61:BA:4522:HOH:O	1.95	0.84
25:BA:2459:G:OP2	61:BA:4395:HOH:O	1.96	0.84
25:DA:2452:C:OP1	61:DA:4409:HOH:O	1.95	0.83
1:AA:474:G:H2'	1:AA:475:G:H8	1.41	0.83
1:CA:582:U:OP1	15:CO:68:ARG:NH2	2.08	0.83
5:CE:40:ARG:HH21	5:CE:68:GLU:HA	1.43	0.83
25:BA:551:A:OP1	61:BA:4497:HOH:O	1.97	0.83
1:AA:1008:C:H42	1:AA:1021:G:H1	1.25	0.83
25:BA:2604:G:O2'	61:BA:4655:HOH:O	1.96	0.83
36:DQ:81:VAL:HB	46:D0:7:LEU:HD21	1.58	0.83
1:AA:443:C:N4	1:AA:491:G:O6	2.12	0.83
1:AA:1492:A:N3	25:BA:1935:A:N6	2.26	0.83
1:AA:1005:A:N7	1:AA:1024:G:N2	2.26	0.83
3:CC:73:PRO:HB3	3:CC:103:VAL:HG11	1.60	0.83
35:DP:100:LEU:HD12	35:DP:112:LEU:HD11	1.59	0.82
2:AB:69:LEU:HB3	2:AB:162:ILE:HG22	1.61	0.82
25:DA:1204:A:H2	25:DA:1241:A:H62	1.26	0.82
38:DS:93:LYS:HD3	38:DS:95:HIS:HB2	1.62	0.82
46:D0:11:ARG:O	46:D0:14:ARG:NH2	2.12	0.82
25:BA:1391:C:OP2	61:BA:3932:HOH:O	1.97	0.82
1:AA:1492:A:O2'	25:BA:1935:A:N1	2.12	0.82
25:BA:1480:A:H61	25:BA:1605:A:H62	1.25	0.82
25:DA:1310:G:OP2	53:D7:9:ARG:NH1	2.13	0.82
16:AP:53:VAL:HG13	16:AP:79:VAL:HG13	1.59	0.82
1:CA:838:G:H1	1:CA:848:C:H42	1.27	0.82
2:AB:16:HIS:CG	2:AB:17:PHE:H	1.96	0.82
4:AD:108:LEU:HD13	4:AD:174:LEU:HD13	1.60	0.82
1:CA:21:G:OP1	61:CA:4062:HOH:O	1.97	0.82
25:DA:62:C:H42	25:DA:93:G:H1	1.28	0.81
28:BE:110:GLY:O	61:BE:408:HOH:O	1.98	0.81
10:AJ:35:SER:HB3	10:AJ:73:ASP:HB2	1.61	0.81
30:BG:161:THR:HG22	30:BG:163:ALA:H	1.44	0.81
1:AA:1124:G:O2'	1:AA:1145:C:N4	2.13	0.81
1:CA:1132:C:H2'	1:CA:1133:G:H8	1.45	0.81
25:DA:1840:G:OP2	61:DA:4308:HOH:O	1.97	0.81
1:AA:656:C:O2'	15:AO:28:GLN:NE2	2.13	0.81
2:CB:201:ILE:HG21	2:CB:214:ILE:HG21	1.62	0.81
25:DA:1021:A:H62	25:DA:1141:U:H3	1.26	0.81
25:BA:1736:A:H62	25:BA:1745:A:H2	1.27	0.81
43:DX:53:LYS:HB3	43:DX:82:GLN:HB3	1.61	0.81
1:AA:97:G:O2'	1:AA:98:G:O4'	1.99	0.81
25:DA:826:U:OP1	61:DA:4259:HOH:O	1.98	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:BI:92:VAL:HG13	32:BI:120:ILE:HB	1.62	0.81
1:AA:21:G:OP1	61:AA:4080:HOH:O	1.98	0.81
45:DZ:72:ARG:NH2	45:DZ:97:GLU:O	2.14	0.81
1:AA:167:G:H2'	1:AA:168:G:C8	2.16	0.81
1:AA:1026:G:H5'	1:AA:1027:C:H5''	1.61	0.81
1:CA:975:A:H4'	1:CA:976:G:H5''	1.63	0.81
1:CA:922:G:H4'	5:CE:20:GLN:HA	1.62	0.81
35:BP:36:LYS:O	61:BP:304:HOH:O	1.98	0.81
1:CA:1245:A:H61	1:CA:1292:U:H3	1.28	0.80
25:DA:2287:A:H62	25:DA:2344:U:H3	1.26	0.80
1:CA:1005:A:H1'	1:CA:1036:G:H1	1.43	0.80
39:DT:16:ARG:NH2	39:DT:83:ILE:O	2.13	0.80
1:CA:768:A:OP2	61:CA:4023:HOH:O	2.00	0.80
27:BD:69:ARG:NH2	27:BD:128:GLY:O	2.14	0.80
1:AA:421:U:O2'	1:AA:423:G:N7	2.14	0.80
1:CA:148:G:H2'	1:CA:149:A:H8	1.44	0.80
1:AA:189(B):C:N4	1:AA:189(I):G:O6	2.11	0.80
25:BA:1093:G:H2'	25:BA:1156:G:H22	1.44	0.80
25:DA:878:A:N6	25:DA:900:A:N7	2.30	0.80
33:DN:20:GLY:HA2	33:DN:61:ARG:HE	1.45	0.80
55:D9:25:VAL:HB	55:D9:34:GLN:HB2	1.62	0.80
1:AA:289:G:OP2	61:AA:4071:HOH:O	1.99	0.80
26:DB:11:C:OP2	26:DB:12:C:N4	2.15	0.80
25:DA:271(A):A:N7	25:DA:271(W):G:N2	2.28	0.80
1:AA:559:A:OP1	5:AE:126:ARG:NH2	2.14	0.80
25:DA:2683:C:OP1	39:DT:53:ARG:NH2	2.14	0.80
51:D5:16:ARG:NH1	51:D5:17:ASP:OD1	2.14	0.80
25:DA:1816:G:O6	27:DD:35:LYS:NZ	2.11	0.80
10:CJ:49:VAL:HG23	14:CN:41:ARG:HB2	1.62	0.80
25:BA:272:U:H4'	32:BI:50:ARG:HH12	1.45	0.80
25:DA:301:G:OP2	44:DY:84:ARG:NH2	2.14	0.80
1:AA:1030(C):G:N7	1:AA:1031:G:N2	2.30	0.80
1:AA:1126:U:H5	10:AJ:71:LEU:HD22	1.45	0.79
25:DA:2371:G:O6	61:DA:3977:HOH:O	2.00	0.79
25:DA:323:G:O2'	25:DA:1205:U:N3	2.15	0.79
25:DA:981:A:OP1	61:DA:4035:HOH:O	2.01	0.79
4:AD:155:LEU:HB3	4:AD:158:ILE:HD11	1.64	0.79
4:CD:103:ASN:OD1	4:CD:114:ARG:NH2	2.15	0.79
1:CA:664:G:OP1	18:CR:64:ARG:NH2	2.15	0.79
25:BA:2734:A:N7	61:BA:4015:HOH:O	2.16	0.79
25:BA:1070:G:OP2	61:BA:4705:HOH:O	2.00	0.79
1:CA:1142:G:H3'	1:CA:1143:G:H8	1.47	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:117:G:OP2	61:CA:4053:HOH:O	2.01	0.79
47:B1:50:ARG:HG2	47:B1:59:THR:HB	1.64	0.79
2:CB:15:VAL:HG21	2:CB:213:LEU:HD12	1.63	0.79
25:DA:1971:A:OP1	61:DA:3912:HOH:O	2.01	0.79
25:DA:1250:G:OP1	61:DA:4457:HOH:O	1.99	0.79
2:CB:54:THR:HG23	2:CB:199:TYR:HB3	1.65	0.79
2:AB:16:HIS:HB3	2:AB:210:SER:HB2	1.65	0.79
25:DA:172:C:H2'	25:DA:173:G:H8	1.49	0.79
25:BA:2795:G:OP2	61:BA:4646:HOH:O	2.01	0.79
1:AA:1314:C:OP2	19:AS:4:SER:OG	2.00	0.79
26:DB:75:G:N2	45:DZ:87:ASP:OD1	2.16	0.79
25:BA:1815:A:OP2	61:BA:4517:HOH:O	1.99	0.78
8:CH:51:VAL:HG12	8:CH:52:ASP:H	1.47	0.78
1:CA:563:A:N6	61:CA:4065:HOH:O	2.16	0.78
25:BA:787:U:OP2	61:BA:4517:HOH:O	2.00	0.78
19:CS:30:LEU:HD11	19:CS:32:LYS:HG3	1.64	0.78
25:BA:354:A:H2	25:BA:1255:A:HO2'	1.30	0.78
1:CA:656:C:O2'	15:CO:28:GLN:NE2	2.17	0.78
4:CD:100:ARG:NH1	4:CD:137:SER:OG	2.16	0.78
25:DA:1040:C:N3	25:DA:1115:G:N1	2.27	0.78
19:AS:41:VAL:HG12	19:AS:43:GLU:H	1.47	0.78
25:DA:125:G:H5''	53:D7:19:ARG:HD3	1.64	0.78
25:BA:1712:A:OP2	61:BA:4248:HOH:O	2.01	0.78
25:BA:1695:C:OP1	61:BA:4514:HOH:O	2.02	0.78
1:AA:642:A:N3	8:AH:113:SER:OG	2.16	0.78
25:DA:1315:C:OP2	61:DA:4078:HOH:O	2.02	0.78
23:CX:50:U:H3	23:CX:64:G:H1	1.32	0.78
50:B4:57:GLU:HB3	50:B4:58:ARG:HA	1.66	0.78
1:CA:1047:G:H1	1:CA:1210:C:H42	1.30	0.78
25:BA:1431:G:O2'	25:BA:1442:U:O2	2.02	0.78
9:AI:50:LEU:HD13	9:AI:56:LEU:HA	1.64	0.78
25:BA:2299:A:H62	25:BA:2356:U:H3	1.26	0.78
25:BA:599:U:OP1	61:BA:4465:HOH:O	2.00	0.78
1:CA:619:U:N3	4:CD:134:ASP:OD1	2.14	0.78
1:CA:427:U:OP1	4:CD:13:ARG:NH2	2.16	0.78
3:AC:15:THR:HG21	3:AC:181:ASN:HA	1.65	0.78
25:BA:1531:G:N2	25:BA:1550:C:O2	2.15	0.78
28:BE:47:VAL:HG21	28:BE:86:PRO:HD2	1.64	0.78
1:CA:1348:U:H4'	9:CI:120:ARG:HD2	1.66	0.78
49:B3:3:ARG:NH1	49:B3:60:GLU:OE2	2.17	0.78
1:CA:1166:G:H1'	1:CA:1171:G:H22	1.49	0.78
25:BA:2227:G:H3'	25:BA:2228:G:C8	2.19	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BA:2601:A:N3	61:BA:3847:HOH:O	2.17	0.77
1:CA:1133:G:H2'	1:CA:1134:G:C8	2.18	0.77
1:AA:266:G:H5''	1:AA:268:C:H41	1.48	0.77
25:DA:1022:G:H22	25:DA:1142(A):A:H2	1.30	0.77
1:AA:1304:G:OP2	61:AA:4087:HOH:O	2.02	0.77
25:DA:323:G:HO2'	25:DA:1205:U:H3	1.28	0.77
30:DG:80:PHE:O	30:DG:82:LEU:N	2.18	0.77
1:CA:999:C:N3	1:CA:1042:G:N2	2.33	0.77
7:CG:75:VAL:HG13	7:CG:145:ALA:HA	1.66	0.77
1:CA:1193:G:O2'	5:CE:25:ARG:NH2	2.18	0.77
25:DA:602:G:O2'	25:DA:655:A:N6	2.17	0.77
2:CB:80:ILE:HD11	2:CB:212:GLN:HA	1.67	0.77
1:AA:195:A:N3	1:AA:222:U:O2'	2.15	0.77
1:AA:1124:G:HO2'	1:AA:1145:C:N4	1.81	0.77
1:AA:1054:C:OP1	61:AA:4053:HOH:O	2.01	0.77
1:AA:1129:C:H42	1:AA:1143:G:H1	0.80	0.77
1:CA:998:G:N2	1:CA:1043:C:N3	2.32	0.77
1:CA:427:U:H3'	1:CA:428:G:H2'	1.66	0.77
35:BP:50:ARG:HH21	54:B8:7:HIS:HD2	1.33	0.77
1:CA:559:A:OP1	5:CE:126:ARG:NH2	2.17	0.77
49:B3:8:LEU:HD13	49:B3:31:LEU:HD23	1.67	0.77
35:BP:59:LEU:HD21	54:B8:10:ALA:HA	1.67	0.77
1:AA:972:C:OP1	61:AA:4123:HOH:O	2.02	0.77
10:CJ:29:ARG:HB2	10:CJ:84:GLN:HE22	1.49	0.77
25:DA:195:A:N7	61:DA:4177:HOH:O	2.18	0.77
41:DV:6:LYS:HB2	41:DV:38:LEU:HD21	1.67	0.77
1:AA:742:G:OP2	15:AO:35:ARG:NH2	2.17	0.76
25:DA:2494:G:OP2	61:DA:4410:HOH:O	2.02	0.76
35:DP:126:VAL:HG12	35:DP:148:LEU:HD22	1.66	0.76
2:CB:178:ARG:HH22	8:CH:68:ARG:HH12	1.30	0.76
25:BA:2614:A:OP1	61:BA:4813:HOH:O	2.03	0.76
25:DA:2296:U:OP2	38:DS:9:ARG:NH2	2.18	0.76
1:CA:1223:C:H5''	1:CA:1224:G:H5'	1.67	0.76
25:BA:2228:G:O2'	25:BA:2229:A:OP1	2.01	0.76
25:DA:1323:U:O4	61:DA:4525:HOH:O	2.03	0.76
13:AM:17:VAL:O	13:AM:20:THR:OG1	2.04	0.76
38:BS:25:ARG:NH1	38:BS:42:ASP:OD1	2.17	0.76
25:DA:1268:A:OP1	61:DA:3942:HOH:O	2.03	0.76
10:AJ:27:ALA:HA	10:AJ:81:THR:HG21	1.66	0.76
2:AB:166:ASP:HB3	2:AB:169:LYS:HB2	1.66	0.76
2:AB:17:PHE:HB2	2:AB:44:LEU:HD21	1.66	0.76
25:BA:808:A:OP1	61:BA:4590:HOH:O	2.02	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1376:U:OP1	7:CG:98:SER:OG	2.03	0.76
10:AJ:7:LYS:HE2	10:AJ:9:ARG:HH12	1.50	0.76
20:AT:47:GLY:HA2	20:AT:48:LYS:HB2	1.67	0.76
25:BA:927:G:N2	25:BA:944:C:N3	2.34	0.76
1:AA:1162:C:H42	1:AA:1174:G:H1	1.32	0.76
10:AJ:5:ARG:HD3	10:AJ:71:LEU:HD11	1.68	0.76
25:DA:2227:A:OP2	61:DA:4568:HOH:O	2.02	0.76
19:AS:50:ALA:HB1	19:AS:57:HIS:HB3	1.65	0.76
1:AA:881:G:P	12:AL:12:ARG:HH22	2.08	0.76
1:CA:138:G:H8	1:CA:138:G:H5'	1.48	0.76
25:BA:894:U:O4	25:BA:978:A:N6	2.19	0.76
1:AA:175:C:H2'	1:AA:176:C:H6	1.51	0.76
25:BA:1248:G:O6	61:BA:4633:HOH:O	2.04	0.76
1:CA:1003:G:N2	1:CA:1025:U:O4	2.19	0.76
37:BR:67:LEU:HD13	37:BR:76:VAL:HG21	1.66	0.76
7:AG:50:ILE:HD11	7:AG:58:PRO:HA	1.68	0.76
25:DA:1010:A:OP2	61:DA:4093:HOH:O	2.04	0.75
1:AA:659:U:H2'	1:AA:660:G:C8	2.21	0.75
3:CC:35:GLU:OE2	3:CC:59:ARG:NH2	2.17	0.75
4:AD:13:ARG:NH1	4:AD:38:TYR:O	2.20	0.75
25:BA:2587:C:OP2	61:BA:4081:HOH:O	2.03	0.75
25:DA:2504:U:OP2	61:DA:4073:HOH:O	2.04	0.75
1:CA:1004:A:H8	1:CA:1005:A:H4'	1.51	0.75
10:CJ:38:ILE:HD11	10:CJ:71:LEU:HD23	1.68	0.75
26:DB:48:A:H4'	38:DS:95:HIS:HD2	1.50	0.75
1:AA:661:G:H1	1:AA:744:C:H42	1.32	0.75
1:AA:1007:C:N3	1:AA:1022:G:O6	2.19	0.75
25:DA:2705:A:OP2	61:DA:4125:HOH:O	2.04	0.75
25:DA:89:G:H3'	25:DA:90:U:H5''	1.68	0.75
25:DA:1604:C:OP2	61:DA:4394:HOH:O	2.04	0.75
7:CG:113:GLU:HG2	7:CG:119:ARG:HG2	1.66	0.75
1:CA:64:G:H4'	1:CA:65:U:H3'	1.67	0.75
1:AA:1183:A:O2'	1:AA:1184:G:OP1	2.04	0.75
1:CA:1163:C:N3	1:CA:1173:G:N2	2.35	0.75
20:CT:57:ARG:HH22	20:CT:100:ILE:HD12	1.50	0.75
1:CA:608:A:OP2	61:CA:4181:HOH:O	2.03	0.75
36:DQ:48:GLU:OE1	36:DQ:51:ARG:NH2	2.19	0.75
43:BX:31:HIS:HD2	43:BX:33:LYS:H	1.32	0.75
1:CA:1273:G:H3'	1:CA:1274:G:H8	1.51	0.75
61:BE:408:HOH:O	37:BR:3:HIS:NE2	2.19	0.75
26:DB:50:G:OP1	38:DS:63:THR:OG1	2.04	0.75
1:AA:407:G:H5''	4:AD:115:ARG:HB3	1.68	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1123:A:H4'	10:CJ:37:PRO:HD2	1.69	0.75
1:AA:1182:G:H4'	1:AA:1183:A:H5'	1.67	0.75
25:DA:773:U:OP1	61:DA:4407:HOH:O	2.05	0.75
25:DA:1324:G:N7	61:DA:3853:HOH:O	2.20	0.75
25:DA:649:G:H4'	54:D8:46:ARG:HH22	1.51	0.75
49:B3:55:ARG:NH1	49:B3:57:GLU:OE1	2.20	0.75
30:DG:18:GLU:OE2	30:DG:21:ARG:NH1	2.17	0.75
25:DA:2074:U:OP1	61:DA:3914:HOH:O	2.05	0.75
1:AA:175:C:H2'	1:AA:176:C:C6	2.22	0.74
6:AF:18:GLN:HA	6:AF:21:LEU:HD12	1.68	0.74
25:DA:1671:U:OP2	61:DA:3754:HOH:O	2.04	0.74
31:BH:98:LEU:HD22	31:BH:125:VAL:HG23	1.67	0.74
1:AA:803:G:OP1	61:AA:4050:HOH:O	2.04	0.74
25:DA:948:G:OP1	61:DA:4175:HOH:O	2.04	0.74
1:AA:1028:C:N4	1:AA:1033:G:H1	1.84	0.74
25:DA:1670:C:OP1	61:DA:3754:HOH:O	2.05	0.74
1:CA:1251:A:O2'	1:CA:1369:C:O2'	2.04	0.74
25:BA:1284:G:OP2	61:BA:4765:HOH:O	2.05	0.74
47:B1:65:SER:HG	47:B1:66:HIS:HD1	1.34	0.74
7:AG:111:ARG:NH1	7:AG:113:GLU:OE2	2.20	0.74
25:DA:1876:A:H2'	25:DA:1877:A:C8	2.22	0.74
25:DA:2006:C:OP2	61:DA:4390:HOH:O	2.06	0.74
1:AA:348:G:H2'	1:AA:349:A:C5'	2.13	0.74
25:BA:535:C:OP1	61:BA:4620:HOH:O	2.05	0.74
25:DA:31:C:OP1	61:DA:4155:HOH:O	2.05	0.74
25:BA:175:G:N2	25:BA:199:C:O2	2.19	0.74
25:DA:2552:U:H2'	25:DA:2554:U:OP2	1.86	0.74
25:DA:1153:C:OP2	61:DA:4082:HOH:O	2.05	0.74
44:DY:49:VAL:HG21	44:DY:61:ILE:HG23	1.69	0.74
25:DA:286:C:H2'	25:DA:287:C:H6	1.53	0.74
25:DA:1693:U:O2'	27:DD:14:ARG:NH2	2.20	0.74
25:DA:1332:G:OP1	61:DA:4079:HOH:O	2.05	0.74
30:DG:113:ARG:NH1	30:DG:139:LEU:O	2.20	0.74
25:DA:465:G:O6	61:DA:4428:HOH:O	2.04	0.74
39:BT:95:ARG:HG2	39:BT:95:ARG:HH11	1.53	0.74
1:CA:693:G:H1'	7:CG:82:GLY:HA3	1.68	0.74
25:DA:2206:G:H3'	25:DA:2207:G:H8	1.47	0.74
1:CA:289:G:OP2	61:CA:4053:HOH:O	2.06	0.74
4:CD:25:ARG:NH1	4:CD:30:LYS:O	2.21	0.74
46:D0:53:MET:HG3	46:D0:59:LEU:HD23	1.69	0.74
39:DT:85:LYS:NZ	39:DT:87:ASP:OD2	2.21	0.74
28:BE:143:ASN:HD22	28:BE:147:PRO:HD3	1.51	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:1803:A:O2'	27:DD:259:THR:HG21	1.86	0.73
1:AA:659:U:H2'	1:AA:660:G:H8	1.52	0.73
1:CA:1015:A:N3	1:CA:1218:C:O2'	2.20	0.73
15:AO:56:LEU:O	15:AO:60:VAL:HG23	1.88	0.73
50:D4:24:THR:OG1	50:D4:25:TYR:N	2.21	0.73
30:DG:161:THR:HG22	30:DG:163:ALA:H	1.53	0.73
1:AA:159:G:HO2'	1:AA:161:A:H62	1.36	0.73
1:AA:346:G:O6	1:AA:348:G:N2	2.17	0.73
8:AH:41:ARG:NH2	8:AH:123:GLU:OE2	2.21	0.73
25:DA:1593:G:H2'	25:DA:1594:G:H8	1.52	0.73
7:CG:111:ARG:NH2	7:CG:126:ASP:OD2	2.21	0.73
25:DA:11:G:H2'	25:DA:12:U:H5'	1.68	0.73
13:AM:34:LEU:HD13	13:AM:41:PRO:HA	1.70	0.73
25:DA:1040:C:O2	25:DA:1115:G:N2	2.18	0.73
25:BA:1359:U:OP1	61:BA:4316:HOH:O	2.05	0.73
1:CA:1189:C:O2	61:CA:4087:HOH:O	2.07	0.73
3:CC:40:ARG:NH2	3:CC:55:VAL:O	2.21	0.73
25:BA:2460:A:OP2	61:BA:4508:HOH:O	2.07	0.73
32:BI:129:THR:HG22	32:BI:139:GLN:HE22	1.54	0.73
25:BA:830:A:OP2	61:BA:4453:HOH:O	2.07	0.73
25:BA:1694:G:OP1	61:BA:4514:HOH:O	2.06	0.73
1:CA:673:G:H2'	1:CA:674:G:C8	2.23	0.73
13:CM:3:ARG:HA	50:D4:34:GLU:HG2	1.69	0.73
2:CB:84:GLU:HB3	2:CB:219:VAL:HG21	1.70	0.73
25:DA:1593:G:H2'	25:DA:1594:G:C8	2.23	0.73
1:AA:445:G:H2'	1:AA:446:G:C8	2.23	0.73
25:DA:731:C:OP1	61:DA:4226:HOH:O	2.06	0.73
25:DA:1038:C:H42	25:DA:1117:G:H1	1.34	0.73
25:BA:874:U:OP1	61:BA:4632:HOH:O	2.07	0.73
25:DA:2867:G:OP2	39:DT:119:LYS:NZ	2.20	0.73
1:AA:154:C:N4	1:AA:168:G:O6	2.22	0.73
25:DA:963:U:OP2	61:DA:4175:HOH:O	2.05	0.73
25:DA:2805:G:H2'	25:DA:2807:G:H8	1.53	0.73
25:DA:526:A:OP1	61:DA:4574:HOH:O	2.07	0.73
31:DH:98:LEU:HD22	31:DH:125:VAL:HG23	1.70	0.73
2:CB:87:ARG:NH2	2:CB:220:ASP:OD1	2.20	0.73
25:DA:1776:G:OP2	61:DA:3760:HOH:O	2.06	0.73
1:CA:1457:G:OP1	20:CT:39:LYS:NZ	2.20	0.73
25:DA:2748:A:O2'	31:DH:63:SER:O	2.06	0.73
54:D8:33:ASN:HA	54:D8:36:LYS:HD2	1.70	0.73
1:CA:1492:A:H2'	25:DA:1913:A:H62	1.54	0.72
25:BA:537:G:N7	61:BA:4620:HOH:O	2.21	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:768:A:OP2	61:AA:4023:HOH:O	2.06	0.72
1:CA:671:G:H5'	6:CF:77:ARG:HH22	1.54	0.72
25:DA:2052:G:O2'	61:DA:3731:HOH:O	2.07	0.72
1:CA:316:G:OP2	1:CA:351:G:O2'	2.06	0.72
25:BA:1405:A:H61	25:BA:1418:U:H3	1.37	0.72
4:CD:119:GLN:HG2	4:CD:123:HIS:CD2	2.24	0.72
25:DA:450:G:O6	61:DA:4448:HOH:O	2.07	0.72
2:AB:195:ASP:O	8:AH:68:ARG:NH2	2.21	0.72
1:CA:749:C:OP2	61:CA:4141:HOH:O	2.07	0.72
25:BA:2331:G:N2	38:BS:3:ARG:HA	2.04	0.72
1:AA:383:A:H2	1:AA:384:G:H1'	1.54	0.72
1:CA:299:G:O6	61:CA:4170:HOH:O	2.06	0.72
25:DA:390:A:H4'	25:DA:391:G:H5'	1.71	0.72
25:DA:2037:G:O6	61:DA:4105:HOH:O	2.06	0.72
1:AA:976:G:H5'	1:AA:1358:U:O2'	1.90	0.72
1:CA:1030(A):G:N1	1:CA:1030(D):A:OP2	2.22	0.72
3:CC:36:ASP:HA	3:CC:39:ILE:HD12	1.69	0.72
1:AA:1158:C:H5	1:AA:1181:G:H1	1.36	0.72
25:BA:1701:A:OP1	37:BR:1:MET:HA	1.90	0.72
1:CA:939:G:H1	1:CA:1344:C:H42	1.34	0.72
25:BA:1055:A:OP2	33:BN:37:LYS:NZ	2.18	0.72
25:DA:2430:A:OP2	61:DA:4182:HOH:O	2.08	0.72
1:CA:21:G:OP1	61:CA:4064:HOH:O	2.08	0.72
50:D4:44:THR:O	50:D4:46:GLN:N	2.23	0.72
31:DH:27:LYS:NZ	31:DH:32:GLU:OE2	2.22	0.72
25:DA:2849:U:OP2	39:DT:95:ARG:NH1	2.22	0.72
1:AA:1145:C:H4'	1:AA:1146:A:H5'	1.72	0.72
1:AA:1030(C):G:H2'	1:AA:1030(D):A:H8	1.55	0.72
43:BX:31:HIS:CD2	43:BX:33:LYS:H	2.08	0.72
1:AA:1369:C:H2'	1:AA:1370:G:C8	2.25	0.72
25:DA:887:A:O2'	25:DA:889:C:OP2	2.08	0.72
1:CA:954:G:H21	1:CA:1227:A:H62	1.38	0.72
1:CA:972:C:OP1	61:CA:4183:HOH:O	2.06	0.72
19:CS:37:ARG:O	19:CS:70:LYS:NZ	2.22	0.72
10:CJ:16:LEU:HD13	10:CJ:70:ARG:HG2	1.71	0.72
2:CB:179:LYS:HA	8:CH:72:PRO:HG3	1.71	0.72
1:CA:1279:A:OP2	10:CJ:9:ARG:NH1	2.22	0.72
1:AA:1198:G:OP2	61:AA:4053:HOH:O	2.06	0.72
12:AL:49:ASN:ND2	12:AL:92:ASP:OD2	2.22	0.72
25:BA:865:G:OP2	61:BA:4105:HOH:O	2.07	0.72
25:DA:2483:C:N3	36:DQ:124:LYS:NZ	2.37	0.72
40:BU:76:TYR:OH	40:BU:92:ARG:NH1	2.23	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:DU:83:LEU:HD12	40:DU:88:ILE:HD12	1.70	0.71
25:DA:2248:C:OP2	61:DA:3947:HOH:O	2.08	0.71
1:CA:1153:C:N4	1:CA:1154:G:H21	1.85	0.71
1:CA:558:G:OP1	61:CA:4170:HOH:O	2.06	0.71
10:AJ:49:VAL:HG23	14:AN:41:ARG:HB2	1.72	0.71
43:DX:11:PRO:HB3	43:DX:92:LEU:HD11	1.72	0.71
25:BA:1494:G:N2	25:BA:1511:C:O2	2.20	0.71
38:DS:50:SER:O	38:DS:76:LYS:NZ	2.22	0.71
25:BA:2014:G:OP2	61:BA:4282:HOH:O	2.08	0.71
13:AM:58:GLU:O	13:AM:62:ASN:ND2	2.16	0.71
4:AD:15:GLU:HG3	4:AD:63:LYS:HE2	1.70	0.71
35:DP:89:ALA:O	35:DP:121:LYS:NZ	2.21	0.71
25:BA:1289:G:O2'	35:BP:7:ARG:NH2	2.24	0.71
33:DN:34:LEU:O	33:DN:49:GLY:HA3	1.89	0.71
9:AI:53:VAL:O	9:AI:55:ALA:N	2.18	0.71
29:BF:13:SER:HA	29:BF:127:GLU:HG3	1.72	0.71
1:AA:1356:G:H2'	1:AA:1357:A:C8	2.26	0.71
25:DA:2427:C:OP1	61:DA:4259:HOH:O	2.08	0.71
29:BF:18:ARG:NH2	29:BF:127:GLU:OE1	2.23	0.71
38:BS:27:SER:HA	38:BS:88:ASP:HB3	1.72	0.71
18:CR:26:LEU:HD21	18:CR:42:ARG:HD3	1.72	0.71
25:DA:2785:C:OP1	28:DE:41:LYS:NZ	2.18	0.71
1:AA:922:G:H4'	5:AE:20:GLN:HA	1.71	0.71
25:DA:1036:G:H1	25:DA:1119:C:H42	1.35	0.71
26:DB:105:A:OP1	45:DZ:72:ARG:NH1	2.23	0.71
1:AA:975:A:H4'	1:AA:976:G:H5''	1.71	0.71
32:DI:72:LEU:HD21	32:DI:107:VAL:HG11	1.71	0.71
25:DA:1782:C:OP1	61:DA:4385:HOH:O	2.09	0.71
41:DV:35:LEU:HB2	41:DV:57:VAL:HG23	1.72	0.71
1:AA:56:U:H2'	1:AA:57:G:C8	2.26	0.71
1:CA:1108:G:O6	61:CA:4092:HOH:O	2.08	0.71
25:DA:1143:A:OP1	33:DN:25:ARG:NH2	2.23	0.71
25:DA:1488:G:C6	25:DA:1489:U:C5	2.75	0.71
25:DA:2805:G:H2'	25:DA:2807:G:C8	2.26	0.71
25:DA:566:U:H5''	35:DP:29:LYS:HE3	1.71	0.71
1:CA:599:C:H2'	1:CA:600:C:H5''	1.73	0.71
2:CB:91:PRO:HG2	2:CB:155:LEU:HD23	1.72	0.71
32:DI:91:SER:HB3	32:DI:121:LYS:HE3	1.72	0.71
25:BA:991:G:OP1	61:BA:4609:HOH:O	2.09	0.71
28:BE:105:THR:OG1	28:BE:199:ARG:NH2	2.24	0.71
10:CJ:77:PRO:O	10:CJ:81:THR:OG1	2.09	0.71
27:DD:108:PRO:HG2	27:DD:111:LEU:HB2	1.73	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:885:C:H2'	25:DA:886:C:H4'	1.72	0.71
17:AQ:18:THR:OG1	17:AQ:69:LYS:NZ	2.15	0.71
1:AA:186:C:H2'	1:AA:187:C:C6	2.26	0.71
1:AA:881:G:OP2	12:AL:12:ARG:NH2	2.23	0.70
25:DA:10:G:H2'	25:DA:11:G:H8	1.56	0.70
5:AE:77:PRO:HD2	5:AE:142:LEU:HD22	1.70	0.70
36:DQ:26:TYR:O	36:DQ:67:ARG:NH1	2.24	0.70
43:BX:11:PRO:HB3	43:BX:92:LEU:HD11	1.73	0.70
1:CA:1204:A:OP1	14:CN:3:ARG:NH1	2.23	0.70
5:CE:137:GLU:HG2	5:CE:140:ARG:HH11	1.54	0.70
1:AA:262:A:H2'	1:AA:263:A:C8	2.25	0.70
25:BA:2361:G:OP1	61:BA:3948:HOH:O	2.09	0.70
1:CA:1007:C:C4	1:CA:1022:G:N1	2.59	0.70
1:AA:221:C:H2'	1:AA:222:U:H6	1.55	0.70
25:BA:2331:G:H22	38:BS:3:ARG:NE	1.90	0.70
47:D1:77:ALA:HA	47:D1:80:LEU:HD13	1.73	0.70
27:DD:71:ASP:HB2	27:DD:103:ARG:HH22	1.55	0.70
25:BA:932:C:H3'	25:BA:933:C:H5''	1.73	0.70
25:BA:303:C:H42	25:BA:385:G:H1	1.39	0.70
25:DA:1140:C:O3'	33:DN:25:ARG:NH1	2.24	0.70
2:CB:88:ALA:HB2	2:CB:219:VAL:HG13	1.71	0.70
25:DA:1189:A:OP2	61:DA:4088:HOH:O	2.08	0.70
7:AG:62:PHE:HA	7:AG:124:LEU:HD22	1.72	0.70
25:BA:241:G:OP1	35:BP:50:ARG:NH1	2.23	0.70
25:DA:631:A:OP1	35:DP:65:ARG:NH1	2.24	0.70
32:DI:102:SER:HB2	32:DI:108:THR:HG22	1.73	0.70
9:AI:46:ALA:HB2	9:AI:74:ILE:HG23	1.73	0.70
1:CA:147:G:HO2'	1:CA:148:G:H8	1.38	0.70
1:AA:437:U:H5'	4:AD:155:LEU:HD11	1.74	0.70
29:DF:185:ASP:HA	29:DF:188:ARG:HD3	1.74	0.70
35:BP:63:PRO:HD3	54:B8:27:THR:HG22	1.73	0.70
25:BA:1003:U:OP2	36:BQ:14:ARG:NH1	2.23	0.70
45:DZ:53:ILE:HG22	45:DZ:71:VAL:O	1.91	0.70
27:DD:148:GLU:HB2	27:DD:151:LYS:HD2	1.72	0.70
1:CA:1162:C:N4	1:CA:1174:G:H1	1.88	0.70
30:DG:5:VAL:HG22	30:DG:8:LYS:H	1.55	0.70
1:AA:946:A:O2'	1:AA:1333:A:N3	2.24	0.70
1:AA:1346:A:OP1	9:AI:120:ARG:NH1	2.25	0.70
25:BA:2339:A:H2'	25:BA:2340:A:C8	2.25	0.70
25:BA:1039:G:OP1	40:BU:50:ARG:NH2	2.24	0.70
48:B2:29:LYS:HG2	48:B2:57:ILE:HD13	1.73	0.70
1:CA:1318:A:OP1	19:CS:3:ARG:NH1	2.24	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BQ:10:ARG:NH1	61:BQ:3102:HOH:O	2.23	0.70
8:AH:51:VAL:HG11	8:AH:60:ARG:HH12	1.57	0.70
35:BP:100:LEU:HD12	35:BP:112:LEU:HD11	1.72	0.70
25:BA:542:C:OP1	51:B5:16:ARG:NH2	2.24	0.70
1:AA:1027:C:O2'	1:AA:1034:G:N2	2.23	0.70
25:BA:1001:G:O6	61:BA:3865:HOH:O	2.07	0.70
25:BA:667:G:H21	25:BA:671:A:H2	1.40	0.70
1:AA:1074:G:O2'	1:AA:1101:A:N1	2.22	0.70
27:BD:17:THR:O	27:BD:211:ARG:NH2	2.24	0.70
1:AA:509:A:OP2	61:AA:4088:HOH:O	2.09	0.70
1:AA:1530:G:H2'	1:AA:1531:A:O4'	1.91	0.70
1:AA:1125:U:O2'	1:AA:1126:U:OP2	2.10	0.69
36:BQ:54:MET:HB3	36:BQ:64:ILE:HD11	1.73	0.69
1:AA:476:G:H2'	1:AA:477:A:O4'	1.92	0.69
2:CB:18:GLY:HA2	2:CB:42:ILE:HG13	1.73	0.69
8:AH:14:ARG:NH2	8:AH:83:ILE:O	2.25	0.69
25:DA:2005:A:OP1	61:DA:4388:HOH:O	2.10	0.69
25:DA:587:C:OP2	35:DP:21:ARG:NH2	2.25	0.69
25:DA:2327:A:H2'	25:DA:2328:A:C8	2.27	0.69
36:BQ:32:TYR:OH	36:BQ:111:GLU:OE1	2.10	0.69
42:BW:12:ILE:HD13	42:BW:17:VAL:HG13	1.74	0.69
1:CA:961:U:OP2	1:CA:1223:C:O2'	2.06	0.69
44:BY:102:CYS:SG	44:BY:103:GLY:N	2.65	0.69
25:DA:82:G:N1	25:DA:103:A:OP2	2.22	0.69
25:DA:1845:G:OP1	27:DD:258:LYS:NZ	2.24	0.69
1:AA:673:G:H2'	1:AA:674:G:C8	2.27	0.69
11:CK:98:LEU:O	11:CK:101:SER:OG	2.06	0.69
25:DA:2595:G:N7	61:DA:4196:HOH:O	2.24	0.69
30:BG:48:GLU:HA	30:BG:51:ARG:HE	1.57	0.69
2:AB:15:VAL:HB	2:AB:209:ARG:HG2	1.73	0.69
25:DA:1153:C:OP1	40:DU:92:ARG:NH1	2.25	0.69
5:AE:137:GLU:HG2	5:AE:140:ARG:HH11	1.57	0.69
3:AC:35:GLU:OE2	3:AC:59:ARG:NH2	2.24	0.69
1:CA:890:G:O2'	1:CA:906:G:O6	2.05	0.69
25:DA:2682:U:OP2	61:DA:3806:HOH:O	2.09	0.69
25:BA:2732:G:OP2	61:BA:4644:HOH:O	2.10	0.69
1:AA:166:G:H2'	1:AA:167:G:H8	1.53	0.69
1:CA:610:G:O6	61:CA:4179:HOH:O	2.10	0.69
19:CS:42:PRO:HG3	50:D4:61:ARG:HG2	1.73	0.69
43:DX:65:ARG:HB2	43:DX:70:LEU:HG	1.75	0.69
1:CA:1189:C:OP1	10:CJ:51:ARG:NH2	2.24	0.69
13:AM:49:THR:HB	13:AM:52:GLU:H	1.57	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:412:A:H8	4:CD:35:ARG:HH21	1.37	0.69
6:AF:69:GLU:O	6:AF:72:VAL:HG12	1.93	0.69
2:CB:8:LYS:HD2	2:CB:48:MET:HG2	1.75	0.69
1:CA:1153:C:H42	1:CA:1154:G:N2	1.87	0.69
1:AA:59:A:H3'	1:AA:331:G:H22	1.57	0.69
30:BG:145:THR:OG1	30:BG:148:MET:SD	2.51	0.69
25:BA:1683:C:OP2	61:BA:4523:HOH:O	2.09	0.69
25:BA:777:C:OP2	61:BA:4590:HOH:O	2.10	0.69
43:DX:8:ILE:O	48:D2:36:ARG:NH2	2.25	0.69
18:CR:47:THR:HG23	18:CR:49:LYS:HG3	1.74	0.69
1:CA:1287:A:N3	1:CA:1353:G:O2'	2.23	0.69
1:CA:46:G:O6	61:CA:4103:HOH:O	2.11	0.69
12:CL:24:VAL:HG13	12:CL:98:TYR:HE1	1.58	0.69
25:BA:989:G:O3'	61:BA:4610:HOH:O	2.09	0.69
19:AS:27:GLU:HB3	19:AS:28:LYS:HB3	1.73	0.69
1:AA:812:C:N3	61:AA:4027:HOH:O	2.24	0.69
25:DA:818:G:OP2	61:DA:3841:HOH:O	2.10	0.69
1:CA:1226:C:N4	13:CM:104:ARG:HG2	2.08	0.69
4:AD:173:TRP:CZ3	4:AD:174:LEU:HG	2.27	0.69
42:DW:14:PRO:HG2	42:DW:78:GLU:HG2	1.73	0.69
15:AO:5:LYS:HD2	15:AO:5:LYS:H	1.56	0.69
6:AF:38:GLU:HB2	6:AF:64:GLN:HG2	1.75	0.69
36:DQ:81:VAL:HG12	46:D0:5:LYS:HD3	1.73	0.69
3:AC:11:ARG:NH2	3:AC:177:THR:O	2.25	0.69
7:CG:108:ALA:HA	7:CG:111:ARG:HD2	1.74	0.69
25:DA:2748:A:H5'	31:DH:4:ILE:HD12	1.75	0.69
25:DA:2831:G:OP1	28:DE:58:ARG:NH2	2.23	0.69
32:BI:40:THR:O	32:BI:44:LEU:HB2	1.93	0.69
25:DA:1607:C:N4	25:DA:1622:G:OP2	2.26	0.69
25:DA:2291:U:H2'	25:DA:2292:C:C6	2.27	0.69
25:DA:77:C:O2'	48:D2:14:ARG:NH2	2.26	0.69
35:DP:88:LEU:HD11	35:DP:114:ILE:HD12	1.74	0.69
1:CA:353:A:H8	1:CA:353:A:H5'	1.58	0.69
25:BA:1047:A:OP2	61:BA:3918:HOH:O	2.09	0.69
1:CA:1493:A:H1'	25:DA:1913:A:H62	1.57	0.68
23:AX:6:G:H1	23:AX:67:C:N4	1.91	0.68
32:DI:4:ILE:HG12	32:DI:18:VAL:HG22	1.75	0.68
25:BA:611:U:H2'	25:BA:612:C:C6	2.28	0.68
16:AP:43:LYS:HG2	16:AP:48:TRP:CD2	2.27	0.68
10:CJ:17:ASP:OD1	10:CJ:70:ARG:NH1	2.27	0.68
30:DG:16:ARG:O	30:DG:20:ILE:HG13	1.93	0.68
1:CA:437:U:H5'	4:CD:155:LEU:HD21	1.75	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
29:BF:8:GLN:NE2	29:BF:21:ALA:HB2	2.08	0.68
1:CA:346:G:OP1	39:DT:41:ARG:NH2	2.22	0.68
1:AA:1241:G:H1	1:AA:1296:C:H42	1.38	0.68
25:DA:2570:G:O6	61:DA:4419:HOH:O	2.08	0.68
25:BA:1215:G:H2'	25:BA:1216:G:H5''	1.75	0.68
9:CI:53:VAL:O	9:CI:55:ALA:N	2.25	0.68
1:CA:693:G:H2'	1:CA:694:A:C8	2.28	0.68
1:AA:1370:G:O6	61:AA:4060:HOH:O	2.10	0.68
1:AA:974:A:OP2	14:AN:29:ARG:NH2	2.25	0.68
46:D0:27:GLU:HG3	46:D0:68:GLU:HA	1.75	0.68
1:CA:664:G:P	18:CR:64:ARG:HH22	2.16	0.68
25:BA:388:A:H2'	25:BA:389:G:C8	2.29	0.68
1:CA:382:A:H2'	1:CA:383:A:C8	2.29	0.68
25:BA:1218:G:O2'	25:BA:1219:A:O4'	2.11	0.68
32:DI:104:GLN:O	32:DI:105:HIS:ND1	2.26	0.68
1:AA:56:U:H2'	1:AA:57:G:H8	1.57	0.68
25:DA:994:C:O2'	25:DA:996:A:OP1	2.10	0.68
25:DA:1352:U:OP2	61:DA:3761:HOH:O	2.11	0.68
25:DA:2589:A:OP1	61:DA:4066:HOH:O	2.11	0.68
25:BA:808:A:N7	61:BA:3904:HOH:O	2.26	0.68
20:CT:49:ALA:HB3	20:CT:99:LEU:HD22	1.76	0.68
16:CP:52:ASP:O	16:CP:54:GLU:N	2.26	0.68
16:CP:1:MET:SD	16:CP:3:LYS:NZ	2.65	0.68
15:AO:33:THR:HG21	15:AO:85:LEU:HD22	1.76	0.68
1:CA:1025:U:N3	1:CA:1036:G:C6	2.62	0.68
1:AA:577:G:OP1	61:AA:4090:HOH:O	2.12	0.68
4:CD:187:ARG:NH2	4:CD:193:ASP:OD2	2.26	0.68
1:CA:877:C:H5''	8:CH:88:LYS:HD3	1.74	0.68
25:DA:2749:A:H1'	31:DH:63:SER:HB3	1.76	0.68
25:BA:2101:U:O3'	47:B1:35:THR:OG1	2.11	0.68
5:CE:136:MET:HA	5:CE:139:LEU:HD12	1.75	0.68
25:DA:2445:G:OP1	29:DF:74:ARG:NH2	2.27	0.68
25:DA:2592:G:N7	61:DA:3925:HOH:O	2.27	0.68
1:AA:1237:C:HO2'	1:AA:1300:G:H1	1.42	0.68
25:BA:1249:A:H2	25:BA:1287:A:H62	1.42	0.68
46:B0:27:GLU:HG3	46:B0:68:GLU:HA	1.76	0.68
25:DA:271(I):G:O6	25:DA:271(O):C:N4	2.17	0.68
25:BA:2720:G:O6	61:BA:4017:HOH:O	2.12	0.68
25:DA:131:G:OP1	61:DA:3772:HOH:O	2.12	0.68
1:AA:452:A:H4'	16:AP:72:ARG:NH1	2.08	0.67
25:BA:880:U:O2	35:BP:55:ARG:NH2	2.27	0.67
25:DA:1637:A:OP2	61:DA:4414:HOH:O	2.11	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BA:809:U:H4'	25:BA:810:G:O5'	1.93	0.67
25:BA:1356:G:OP2	53:B7:9:ARG:NH1	2.27	0.67
52:B6:13:CYS:SG	52:B6:47:THR:HG21	2.35	0.67
42:BW:14:PRO:HG2	42:BW:78:GLU:HG2	1.77	0.67
13:AM:2:ALA:N	13:AM:8:GLU:OE1	2.27	0.67
25:BA:2008:A:OP1	61:BA:4270:HOH:O	2.11	0.67
10:CJ:78:ASN:O	10:CJ:80:LYS:N	2.28	0.67
25:DA:2819:G:N7	61:DA:4008:HOH:O	2.26	0.67
19:CS:28:LYS:HB2	19:CS:29:ARG:HA	1.75	0.67
1:CA:646:U:H2'	1:CA:647:C:C6	2.29	0.67
25:BA:2324:U:H5'	30:BG:88:ILE:HD11	1.76	0.67
1:AA:503:C:OP2	12:AL:116:SER:HB3	1.93	0.67
37:DR:88:ARG:NH2	37:DR:89:ASP:OD2	2.27	0.67
25:DA:2562:U:H1'	34:DO:23:ARG:HH11	1.59	0.67
1:AA:165:C:H2'	1:AA:166:G:C8	2.30	0.67
50:D4:62:ARG:O	50:D4:64:GLY:N	2.28	0.67
25:BA:2316:G:H22	25:BA:2324:U:H3	1.42	0.67
25:BA:1476:C:H2'	25:BA:1477:U:H6	1.60	0.67
25:DA:1278:A:OP1	37:DR:36:THR:HG23	1.94	0.67
25:BA:1476:C:H2'	25:BA:1477:U:C6	2.29	0.67
26:DB:44:G:OP1	30:DG:98:ARG:NH2	2.26	0.67
20:AT:16:HIS:O	20:AT:19:SER:OG	2.12	0.67
1:CA:1502:A:H2	1:CA:1505:G:N1	1.93	0.67
30:BG:38:VAL:HG22	30:BG:93:THR:HG23	1.76	0.67
6:AF:97:PHE:N	18:AR:30:ASP:OD1	2.24	0.67
29:BF:53:THR:HG22	29:BF:55:GLY:H	1.60	0.67
11:AK:99:GLN:HG2	11:AK:105:VAL:HG21	1.76	0.67
1:CA:1262:C:N4	1:CA:1273:G:H1	1.92	0.67
25:BA:1310:G:OP1	51:B5:19:ARG:NH2	2.20	0.67
1:CA:766:A:OP2	61:CA:4024:HOH:O	2.13	0.67
25:DA:226:G:H21	25:DA:228:A:H62	1.41	0.67
20:CT:16:HIS:O	20:CT:19:SER:OG	2.09	0.67
25:DA:192:C:OP1	61:DA:4352:HOH:O	2.11	0.67
25:BA:1199:C:OP2	61:BA:4476:HOH:O	2.12	0.67
25:DA:411:G:OP1	61:DA:3860:HOH:O	2.12	0.67
31:BH:56:SER:OG	31:BH:57:ASP:N	2.26	0.67
1:AA:383:A:C2	1:AA:384:G:H1'	2.29	0.67
1:CA:585:G:OP1	17:CQ:37:LYS:NZ	2.25	0.67
32:BI:100:ALA:HA	32:BI:103:ARG:HG2	1.75	0.67
28:DE:72:VAL:HG13	28:DE:73:GLU:O	1.95	0.67
1:AA:518:C:HO2'	1:AA:530:G:N2	1.93	0.67
1:CA:376:G:H5''	16:CP:5:ARG:HD3	1.75	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BA:611:U:OP2	61:BA:4159:HOH:O	2.13	0.67
25:BA:2658:C:OP2	25:BA:2745:G:O2'	2.10	0.67
2:AB:24:TRP:CZ3	2:AB:26:PRO:HA	2.30	0.67
1:AA:454:C:P	16:AP:75:ARG:HH22	2.18	0.67
1:CA:8:A:C6	4:CD:209:ARG:HB2	2.29	0.67
25:BA:791:G:OP1	61:BA:4513:HOH:O	2.13	0.67
25:BA:426:G:OP2	61:BA:4762:HOH:O	2.12	0.67
26:DB:66:A:H61	26:DB:109:C:H5'	1.60	0.67
1:CA:144:G:H1	1:CA:178:C:H42	1.42	0.67
6:AF:15:ASP:OD1	6:AF:18:GLN:N	2.19	0.66
25:BA:1889:G:N2	25:BA:1905:G:H2'	2.10	0.66
1:AA:839:U:O2'	1:AA:840:C:OP1	2.13	0.66
10:AJ:78:ASN:O	10:AJ:80:LYS:N	2.28	0.66
2:AB:229:VAL:HG12	2:AB:230:VAL:H	1.60	0.66
4:CD:31:CYS:SG	4:CD:33:MET:N	2.69	0.66
1:CA:586:C:O2'	1:CA:878:G:H4'	1.95	0.66
1:AA:538:G:H5''	12:AL:114:LYS:HB2	1.76	0.66
30:BG:41:GLN:NE2	30:BG:154:GLY:O	2.28	0.66
1:AA:1062:U:H2'	1:AA:1063:C:C6	2.30	0.66
2:CB:77:ALA:HB2	2:CB:211:ILE:HD13	1.76	0.66
12:CL:24:VAL:HG12	12:CL:27:LEU:HB2	1.76	0.66
1:AA:1320:C:H5'	19:AS:70:LYS:HG3	1.75	0.66
28:BE:179:GLU:HB3	28:BE:181:LEU:HD22	1.76	0.66
1:AA:1042:G:O2'	1:AA:1043:C:O4'	2.12	0.66
25:BA:1044:C:OP1	61:BA:4478:HOH:O	2.12	0.66
19:CS:52:TYR:HB2	19:CS:57:HIS:CE1	2.29	0.66
9:AI:64:THR:HG23	9:AI:66:ARG:HH21	1.59	0.66
25:DA:601:C:OP1	29:DF:108:LYS:NZ	2.28	0.66
1:CA:1005:A:H1'	1:CA:1036:G:N1	2.08	0.66
25:BA:1067:A:H3'	25:BA:1067:A:C8	2.31	0.66
25:BA:778:C:OP2	61:BA:4590:HOH:O	2.13	0.66
1:CA:1237:C:H3'	1:CA:1336:C:H41	1.60	0.66
25:DA:2049:G:OP2	61:DA:3943:HOH:O	2.13	0.66
4:CD:92:VAL:O	4:CD:96:LEU:HD22	1.95	0.66
1:AA:573:A:OP2	61:AA:4004:HOH:O	2.13	0.66
25:DA:1017:G:N7	61:DA:4210:HOH:O	2.29	0.66
7:CG:68:ASN:ND2	7:CG:127:ALA:O	2.22	0.66
25:BA:479:C:OP1	61:BA:4178:HOH:O	2.12	0.66
2:AB:155:LEU:HD11	2:AB:159:PRO:HD3	1.76	0.66
25:BA:2297:C:OP2	52:B6:6:ARG:NH1	2.28	0.66
1:AA:243:A:H4'	1:AA:244:U:H5''	1.76	0.66
10:AJ:7:LYS:HB3	10:AJ:97:GLU:HB2	1.77	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
34:DO:35:VAL:HG11	34:DO:103:ALA:HB3	1.76	0.66
1:CA:837:G:H1	1:CA:849:C:N4	1.90	0.66
1:CA:256:U:OP1	17:CQ:17:LYS:NZ	2.29	0.66
1:CA:503:C:OP2	12:CL:116:SER:HB3	1.96	0.66
16:AP:43:LYS:HG2	16:AP:48:TRP:CE2	2.31	0.66
25:DA:2576:G:OP1	61:DA:4108:HOH:O	2.13	0.66
6:CF:24:GLU:HG3	6:CF:28:ARG:HH11	1.60	0.66
25:DA:2062:A:OP1	61:DA:3802:HOH:O	2.13	0.66
25:BA:2601:A:OP2	61:BA:4455:HOH:O	2.13	0.66
25:BA:1405:A:N6	25:BA:1418:U:H3	1.93	0.66
1:AA:392:G:H2'	1:AA:393:A:H8	1.61	0.66
25:BA:839:G:H5''	25:BA:840:A:H5'	1.77	0.66
25:BA:946:A:H2'	25:BA:947:A:H8	1.60	0.66
25:BA:946:A:H2'	25:BA:947:A:C8	2.31	0.66
31:DH:28:GLY:HA3	31:DH:79:VAL:HB	1.78	0.66
14:AN:3:ARG:HH21	14:AN:3:ARG:HB3	1.61	0.66
25:DA:1341:U:OP2	25:DA:1394:U:O2'	2.13	0.66
30:DG:18:GLU:HG2	30:DG:175:LEU:HD21	1.78	0.66
50:D4:38:LYS:O	50:D4:40:HIS:N	2.27	0.66
39:DT:19:LEU:HD22	39:DT:86:ILE:HG13	1.78	0.66
36:DQ:11:LYS:NZ	36:DQ:88:GLY:O	2.17	0.66
1:AA:1125:U:C2	1:AA:1127:G:N7	2.64	0.65
25:DA:2299:G:H22	25:DA:2318:G:H8	1.42	0.65
35:BP:52:GLU:OE1	35:BP:55:ARG:NH1	2.27	0.65
34:DO:2:ILE:HD12	34:DO:6:THR:HG21	1.77	0.65
1:AA:1502:A:H2	1:AA:1505:G:H1	1.43	0.65
25:DA:922:U:H2'	25:DA:923:C:C6	2.30	0.65
25:BA:1077:G:H21	55:B9:36:GLN:HE22	1.43	0.65
2:CB:163:PHE:HD1	2:CB:185:ILE:HG13	1.61	0.65
25:DA:900:A:H2'	25:DA:901:A:C8	2.31	0.65
1:AA:558:G:OP1	61:AA:4042:HOH:O	2.14	0.65
7:CG:111:ARG:NH1	7:CG:113:GLU:OE2	2.30	0.65
47:B1:21:ARG:HH11	47:B1:21:ARG:HG2	1.61	0.65
1:AA:1221:G:OP1	1:AA:1320:C:N4	2.30	0.65
25:BA:2308:U:OP2	38:BS:9:ARG:NH2	2.29	0.65
25:DA:1299:G:O6	61:DA:3930:HOH:O	2.11	0.65
25:DA:2588:G:OP2	61:DA:3902:HOH:O	2.14	0.65
25:DA:1301:A:OP1	61:DA:4413:HOH:O	2.13	0.65
1:CA:1273:G:H3'	1:CA:1274:G:C8	2.31	0.65
25:DA:2287:A:N6	25:DA:2344:U:H3	1.94	0.65
1:CA:1166:G:H1'	1:CA:1171:G:N2	2.10	0.65
25:DA:994:C:OP1	40:DU:53:ARG:NH2	2.29	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:AL:60:LEU:HD21	12:AL:66:VAL:HG22	1.78	0.65
2:AB:201:ILE:HG21	2:AB:214:ILE:HG21	1.76	0.65
1:AA:827:U:H5''	1:AA:828:A:OP2	1.97	0.65
46:D0:10:THR:O	61:D0:103:HOH:O	2.14	0.65
38:DS:35:ILE:HD11	38:DS:101:LEU:HD12	1.77	0.65
44:BY:92:ASN:HB3	44:BY:94:LYS:N	2.09	0.65
25:BA:1067:A:H62	25:BA:1186:U:H3	1.44	0.65
25:DA:1300:U:H4'	25:DA:1301:A:H5''	1.78	0.65
27:BD:132:PRO:HG2	27:BD:135:PHE:HD2	1.62	0.65
40:DU:78:THR:O	40:DU:117:GLN:NE2	2.29	0.65
1:CA:444:C:H2'	1:CA:445:G:H8	1.61	0.65
25:DA:69:C:O2	25:DA:73:A:O2'	2.14	0.65
1:AA:201:C:N4	1:AA:216:G:H1	1.84	0.65
38:BS:15:ARG:O	38:BS:19:LYS:HG2	1.96	0.65
8:AH:4:ASP:OD2	8:AH:85:ARG:NH1	2.25	0.65
30:DG:136:ARG:HH11	30:DG:137:GLU:H	1.45	0.65
6:CF:25:ILE:HD13	6:CF:82:ARG:HE	1.61	0.65
1:AA:623:C:H2'	1:AA:624:C:H6	1.59	0.65
48:B2:1:MET:N	48:B2:52:ASP:OD2	2.30	0.65
4:AD:149:ALA:HB3	4:AD:152:SER:HB2	1.79	0.65
1:AA:1125:U:N3	1:AA:1127:G:C5	2.65	0.65
25:DA:10:G:H2'	25:DA:11:G:C8	2.31	0.65
50:D4:64:GLY:C	50:D4:66:SER:H	1.99	0.65
1:AA:937:A:OP2	61:AA:4095:HOH:O	2.14	0.65
2:CB:162:ILE:HD11	2:CB:184:VAL:HG22	1.78	0.65
7:AG:152:ALA:HB1	7:AG:155:ARG:HH21	1.61	0.65
25:DA:2394:C:OP2	54:D8:30:ARG:NH1	2.30	0.65
1:CA:56:U:H2'	1:CA:57:G:C8	2.32	0.65
34:BO:8:LEU:HB2	34:BO:19:ILE:HG13	1.78	0.65
30:BG:16:ARG:NE	30:BG:31:VAL:HG11	2.12	0.65
26:DB:76:G:N2	26:DB:101:G:O6	2.27	0.65
1:AA:1025:U:O2'	1:AA:1026:G:O4'	2.15	0.65
1:AA:1027:C:C2	1:AA:1034:G:N1	2.62	0.65
15:AO:39:LEU:HD13	15:AO:56:LEU:HB2	1.78	0.65
1:CA:390:C:O3'	16:CP:28:ARG:NH2	2.29	0.65
2:AB:84:GLU:HB3	2:AB:219:VAL:HG21	1.78	0.65
1:CA:976:G:H5'	1:CA:1358:U:O2'	1.97	0.65
36:BQ:135:ASP:OD2	45:BZ:49:ARG:NH2	2.30	0.65
4:AD:182:LYS:HG2	4:AD:183:GLY:N	2.11	0.65
45:BZ:69:THR:HG22	45:BZ:90:VAL:HA	1.77	0.65
3:CC:78:GLY:HA3	3:CC:83:ARG:H	1.62	0.65
25:DA:75:G:H4'	48:D2:55:ARG:NH1	2.11	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
26:BB:48:A:H4'	38:BS:95:HIS:HD2	1.60	0.65
34:DO:115:VAL:HG13	34:DO:121:VAL:HG21	1.78	0.65
25:DA:1815:A:OP2	27:DD:54:ARG:NH2	2.28	0.65
2:CB:47:THR:O	2:CB:51:LEU:N	2.17	0.64
1:AA:1003:G:N2	1:AA:1038:C:N3	2.45	0.64
1:CA:148:G:H2'	1:CA:149:A:C8	2.30	0.64
3:AC:181:ASN:ND2	3:AC:204:LEU:HD12	2.12	0.64
25:DA:963:U:OP1	61:DA:3744:HOH:O	2.14	0.64
37:DR:36:THR:HG22	37:DR:37:THR:H	1.62	0.64
2:AB:219:VAL:HA	2:AB:222:ILE:HG13	1.78	0.64
25:BA:2579:G:H2'	25:BA:2580:C:C6	2.31	0.64
1:CA:1176:A:H2'	1:CA:1177:G:C8	2.33	0.64
1:AA:864:A:OP1	61:AA:4127:HOH:O	2.15	0.64
28:BE:4:ILE:HD13	28:BE:28:ALA:HB1	1.78	0.64
1:CA:1004:A:C6	1:CA:1037:C:C2	2.85	0.64
1:AA:1127:G:H1'	1:AA:1280:A:C6	2.32	0.64
25:DA:171:G:H2'	25:DA:172:C:C6	2.31	0.64
54:B8:42:ARG:NH1	61:B8:5103:HOH:O	2.04	0.64
19:CS:50:ALA:HB1	19:CS:57:HIS:HB3	1.79	0.64
1:CA:345:C:OP2	39:DT:39:ARG:NH2	2.29	0.64
4:AD:166:LYS:NZ	4:AD:179:GLU:OE2	2.30	0.64
25:DA:607:U:OP1	29:DF:102:PRO:HA	1.97	0.64
25:DA:2472:G:N1	25:DA:2477:C:OP1	2.24	0.64
1:CA:38:G:H22	1:CA:397:A:H5''	1.62	0.64
1:CA:60:A:H4'	1:CA:61:G:O5'	1.97	0.64
9:AI:3:GLN:HG2	9:AI:20:ARG:HE	1.63	0.64
25:BA:878:G:OP1	61:BA:4601:HOH:O	2.14	0.64
1:AA:983:A:H1'	1:AA:1049:U:O2	1.98	0.64
2:CB:16:HIS:CB	2:CB:204:ASN:HB3	2.21	0.64
4:CD:10:ARG:HB2	4:CD:40:PRO:HG3	1.78	0.64
1:AA:1009:G:O6	1:AA:1020:U:O2	2.15	0.64
50:D4:15:ILE:HB	50:D4:32:TYR:CD1	2.32	0.64
25:DA:2630:G:H2'	25:DA:2631:G:H8	1.62	0.64
35:DP:50:ARG:HH21	35:DP:50:ARG:HG3	1.62	0.64
28:DE:47:VAL:HG11	28:DE:86:PRO:HD2	1.79	0.64
32:DI:110:ASP:N	32:DI:130:TYR:OH	2.24	0.64
1:CA:1002:G:H2'	1:CA:1003:G:C8	2.33	0.64
25:BA:1091:A:OP1	25:BA:1091:A:H4'	1.96	0.64
5:CE:78:HIS:HE1	5:CE:143:ARG:H	1.45	0.64
25:BA:1890:A:N6	25:BA:1905:G:O2'	2.30	0.64
2:CB:16:HIS:CG	2:CB:17:PHE:H	2.16	0.64
1:CA:1122:U:O4	1:CA:1151:A:N1	2.30	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:DP:121:LYS:HG2	35:DP:122:PRO:HD2	1.77	0.64
25:BA:1475:G:H2'	25:BA:1476:C:C6	2.33	0.64
1:AA:833:U:H2'	1:AA:834:C:C6	2.32	0.64
43:DX:44:GLU:OE2	61:DX:102:HOH:O	2.15	0.64
25:BA:1647:G:N7	61:BA:4116:HOH:O	2.30	0.64
3:CC:12:LEU:HD23	3:CC:16:ARG:HB3	1.78	0.64
1:AA:1224:G:O2'	1:AA:1322:C:OP1	2.16	0.64
9:CI:23:ASN:HD22	9:CI:23:ASN:H	1.45	0.64
23:AX:4:G:H1	23:AX:69:C:H42	1.44	0.64
1:CA:404:U:H5'	4:CD:122:ARG:HD3	1.78	0.64
1:CA:1376:U:H2'	1:CA:1377:A:C8	2.33	0.64
25:DA:286:C:H2'	25:DA:287:C:C6	2.32	0.64
25:DA:910:A:H62	36:DQ:12:GLN:HA	1.63	0.64
5:CE:50:GLU:HB2	5:CE:53:LEU:HD13	1.79	0.64
25:DA:1784:A:OP2	61:DA:4119:HOH:O	2.15	0.64
25:DA:2839:G:H5'	37:DR:46:GLY:HA2	1.79	0.64
42:DW:60:ASN:HD22	42:DW:60:ASN:N	1.95	0.64
1:CA:1036:G:H5'	1:CA:1037:C:C6	2.32	0.64
28:BE:128:SER:OG	28:BE:129:HIS:N	2.25	0.64
1:CA:406:G:H5'	4:CD:5:ILE:HD11	1.80	0.64
10:AJ:11:PHE:HE1	10:AJ:67:THR:HG22	1.63	0.64
15:CO:14:GLU:OE2	15:CO:84:LYS:NZ	2.31	0.64
38:BS:59:LYS:HE3	38:BS:60:GLY:H	1.63	0.64
48:B2:16:LEU:O	48:B2:67:LYS:NZ	2.30	0.64
1:AA:1129:C:H5''	9:AI:16:ARG:HH12	1.63	0.64
9:CI:53:VAL:C	9:CI:55:ALA:H	2.01	0.64
25:BA:2766:A:O2'	55:B9:15:LYS:NZ	2.30	0.64
15:CO:54:ARG:NH1	15:CO:58:MET:SD	2.71	0.64
25:BA:2584:A:N7	28:BE:144:ARG:HD2	2.13	0.64
1:CA:831:U:H3	1:CA:855:G:H1	1.45	0.64
1:AA:409:G:N2	1:AA:433:C:O2	2.31	0.64
25:DA:2316:C:O2'	30:DG:128:ARG:NH1	2.30	0.64
20:AT:10:LEU:HB3	20:AT:12:ALA:H	1.63	0.64
35:BP:50:ARG:HD3	54:B8:7:HIS:CD2	2.33	0.64
1:AA:1223:C:H5''	1:AA:1224:G:H5'	1.80	0.64
25:BA:2507:G:H5''	36:BQ:82:ARG:HG2	1.79	0.64
2:AB:78:GLN:NE2	2:AB:94:ASN:O	2.30	0.64
25:BA:1185:C:O3'	33:BN:25:ARG:NH1	2.30	0.64
2:AB:7:VAL:HG11	2:AB:221:LEU:HD23	1.80	0.64
1:AA:1435:G:H2'	1:AA:1436:U:C6	2.33	0.64
14:CN:48:ALA:HB2	14:CN:53:LEU:HD12	1.79	0.64
25:BA:1067:A:H3'	25:BA:1067:A:H8	1.63	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:AP:53:VAL:HG22	16:AP:79:VAL:HG22	1.79	0.63
1:CA:1142:G:H3'	1:CA:1143:G:C8	2.31	0.63
25:DA:1041:C:H42	25:DA:1114:G:H1	1.46	0.63
1:AA:1162:C:N4	1:AA:1174:G:H1	1.95	0.63
1:CA:735:C:H2'	1:CA:736:C:C6	2.32	0.63
1:CA:1145:C:H4'	1:CA:1146:A:H5'	1.80	0.63
25:DA:1688:U:O2	25:DA:1700:A:H5'	1.98	0.63
1:CA:1245:A:N6	1:CA:1292:U:H3	1.96	0.63
25:DA:323:G:H5'	29:DF:169:ASN:HD21	1.62	0.63
1:CA:59:A:H3'	1:CA:331:G:H22	1.62	0.63
27:DD:132:PRO:HD3	27:DD:190:TYR:CZ	2.34	0.63
25:DA:903:C:H2'	25:DA:904:C:H6	1.62	0.63
25:BA:1410:G:P	47:B1:3:LYS:HG3	2.39	0.63
3:CC:52:LEU:HD23	3:CC:68:VAL:HG13	1.79	0.63
27:BD:85:ASP:OD2	27:BD:88:ARG:NH1	2.31	0.63
1:AA:154:C:N3	1:AA:168:G:N1	2.46	0.63
7:CG:76:ARG:O	7:CG:87:VAL:N	2.28	0.63
1:CA:1023:G:H3'	1:CA:1024:G:H8	1.62	0.63
4:CD:13:ARG:NH1	4:CD:38:TYR:O	2.31	0.63
1:CA:735:C:H2'	1:CA:736:C:H6	1.62	0.63
50:D4:46:GLN:HG3	50:D4:48:ARG:HH21	1.62	0.63
28:DE:72:VAL:HA	28:DE:73:GLU:HB3	1.80	0.63
25:BA:2804:C:H2'	25:BA:2805:G:C8	2.34	0.63
43:BX:53:LYS:HB3	43:BX:82:GLN:HB3	1.79	0.63
1:CA:1312:G:N7	19:CS:2:PRO:HG2	2.14	0.63
1:CA:460:G:O6	1:CA:470:C:H5''	1.98	0.63
50:B4:28:LYS:HD3	50:B4:31:ILE:HD11	1.80	0.63
1:AA:189:G:H1	1:AA:189(K):U:H3	1.45	0.63
25:BA:1219:A:H4'	25:BA:1220:U:OP1	1.97	0.63
1:CA:1119:C:H2'	1:CA:1120:G:C8	2.33	0.63
25:BA:1091:A:H1'	25:BA:1093:G:N3	2.13	0.63
25:DA:1427:A:H4'	25:DA:1428:C:O5'	1.99	0.63
50:D4:46:GLN:C	50:D4:48:ARG:H	2.02	0.63
25:BA:1000:C:OP1	36:BQ:87:LYS:HE3	1.98	0.63
25:DA:601:C:O2'	29:DF:104:LYS:NZ	2.32	0.63
30:DG:43:LEU:HD12	30:DG:45:GLU:HG3	1.81	0.63
25:BA:1829:U:H5'	27:BD:259:THR:HG22	1.79	0.63
30:DG:101:ILE:HG22	30:DG:105:LYS:HE2	1.81	0.63
27:BD:38:LYS:HE3	27:BD:39:LYS:O	1.98	0.63
29:DF:13:SER:HA	29:DF:127:GLU:HG3	1.80	0.63
33:DN:38:HIS:CE1	33:DN:39:ARG:HG3	2.34	0.63
1:AA:1008:C:N4	1:AA:1021:G:H1	1.96	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1129:C:H2'	1:CA:1139:G:N7	2.13	0.63
29:DF:150:GLY:HA2	29:DF:172:TRP:CE3	2.34	0.63
1:AA:997:U:H3	1:AA:1044:A:H61	1.47	0.63
1:CA:1042:G:O2'	1:CA:1043:C:O4'	2.17	0.63
36:DQ:85:LYS:HD3	46:D0:7:LEU:HG	1.79	0.63
25:BA:2405:A:H5'	35:BP:63:PRO:HB3	1.80	0.63
5:CE:78:HIS:CE1	5:CE:142:LEU:HA	2.33	0.63
1:AA:552:U:C2'	1:AA:553:A:H5'	2.29	0.63
1:CA:452:A:O2'	1:CA:453:A:OP2	2.15	0.63
2:AB:60:ASP:OD1	2:AB:64:ARG:NE	2.32	0.63
1:CA:222:U:H2'	1:CA:223:U:C6	2.34	0.63
3:CC:6:HIS:HB3	14:CN:49:HIS:ND1	2.14	0.63
13:CM:60:VAL:HG22	13:CM:66:LEU:HD11	1.80	0.63
50:B4:46:GLN:HG2	50:B4:48:ARG:HG2	1.79	0.63
25:BA:1897:C:H2'	25:BA:1898:A:O4'	1.98	0.63
31:DH:113:VAL:HG11	31:DH:151:ILE:HD13	1.81	0.63
1:CA:1151:A:C5'	10:CJ:41:PRO:HA	2.29	0.63
25:DA:2023:G:H5'	25:DA:2617:C:H4'	1.81	0.63
1:AA:929:G:H1	1:AA:1388:C:H42	1.47	0.63
1:CA:1236:A:O2'	1:CA:1304:G:H4'	1.99	0.63
25:DA:7:G:H2'	25:DA:8:A:C8	2.33	0.63
1:CA:192:U:H2'	1:CA:193:C:H6	1.63	0.63
25:BA:2212:G:H2'	25:BA:2213:G:O4'	1.99	0.62
45:DZ:19:ARG:NH1	45:DZ:84:GLU:O	2.32	0.62
38:DS:77:ALA:HB1	38:DS:82:ILE:HB	1.81	0.62
2:CB:210:SER:O	2:CB:214:ILE:HG12	1.99	0.62
1:AA:165:C:H2'	1:AA:166:G:H8	1.63	0.62
40:DU:92:ARG:HA	40:DU:95:LEU:HB2	1.80	0.62
13:CM:60:VAL:HG23	13:CM:64:TRP:CE3	2.34	0.62
7:AG:70:LYS:O	7:AG:138:LYS:NZ	2.30	0.62
2:CB:166:ASP:HB3	2:CB:169:LYS:HB2	1.81	0.62
25:DA:2478:A:OP2	55:D9:2:LYS:NZ	2.24	0.62
25:DA:1810:A:H2'	25:DA:1811:G:O4'	1.99	0.62
5:AE:74:GLY:HA3	5:AE:116:THR:HG22	1.82	0.62
25:DA:2070:G:OP2	61:DA:4341:HOH:O	2.16	0.62
2:CB:9:GLU:HA	2:CB:48:MET:SD	2.40	0.62
25:DA:2206:G:H3'	25:DA:2207:G:N7	2.15	0.62
25:BA:9:U:N3	25:BA:2641:A:H2	1.86	0.62
2:AB:210:SER:O	2:AB:214:ILE:HG12	1.99	0.62
25:BA:1576:G:C6	25:BA:1577:C:N4	2.67	0.62
1:AA:986:A:H1'	19:AS:54:GLY:O	1.99	0.62
1:AA:1036:G:H5'	1:AA:1037:C:C5	2.29	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:457:C:H2'	1:AA:458:C:C6	2.34	0.62
19:AS:52:TYR:HA	19:AS:56:GLN:O	2.00	0.62
59:CX:101:FME:HCN	25:DA:2451:A:H2	1.63	0.62
25:DA:2273:A:H2'	25:DA:2274:A:C8	2.34	0.62
40:BU:28:ARG:NH1	40:BU:38:THR:OG1	2.33	0.62
25:DA:2685:G:O6	61:DA:3899:HOH:O	2.14	0.62
25:DA:1005:C:H2'	25:DA:1006:C:C6	2.34	0.62
25:DA:2712(A):A:OP2	61:DA:3974:HOH:O	2.16	0.62
25:BA:1466:U:O2'	25:BA:1467:G:OP1	2.16	0.62
29:DF:21:ALA:CB	29:DF:22:ALA:HA	2.29	0.62
6:CF:80:ARG:NH1	6:CF:88:VAL:O	2.32	0.62
32:BI:72:LEU:HD21	32:BI:107:VAL:HG11	1.80	0.62
1:CA:137:C:H42	1:CA:226:G:H1	1.47	0.62
23:AX:59:A:H2'	23:AX:60:U:H5'	1.80	0.62
44:BY:15:VAL:HG21	44:BY:42:VAL:HG11	1.82	0.62
2:AB:51:LEU:HD23	2:AB:201:ILE:HD12	1.82	0.62
1:CA:147:G:O2'	1:CA:148:G:O5'	2.17	0.62
25:DA:1358:G:O2'	25:DA:1359:A:H5''	1.99	0.62
25:DA:2364:C:OP1	46:D0:55:ARG:NH1	2.32	0.62
4:AD:18:LYS:HD2	4:AD:31:CYS:SG	2.40	0.62
25:BA:239:G:OP2	54:B8:13:ARG:NH2	2.33	0.62
1:CA:999:C:C4	1:CA:1042:G:C2	2.87	0.62
1:CA:1016:A:H2'	1:CA:1017:G:O4'	2.00	0.62
2:AB:78:GLN:O	2:AB:81:VAL:HG23	2.00	0.62
3:CC:47:LEU:HD12	3:CC:68:VAL:HG11	1.82	0.62
1:CA:17:U:H2'	1:CA:18:C:C6	2.34	0.62
31:DH:30:LYS:HG3	31:DH:80:SER:O	2.00	0.62
25:DA:96:G:H4'	48:D2:48:HIS:CD2	2.35	0.62
1:CA:235:C:H5'	17:CQ:70:ARG:HG2	1.80	0.62
1:CA:424:G:H2'	1:CA:425:G:H8	1.64	0.62
29:DF:18:ARG:NH2	29:DF:127:GLU:OE1	2.33	0.62
1:CA:1305:G:N2	1:CA:1331:G:H1'	2.15	0.62
27:BD:148:GLU:HB2	27:BD:151:LYS:HD2	1.82	0.62
25:BA:1566:U:H2'	25:BA:1567:G:O4'	2.00	0.62
25:DA:2298:A:C6	25:DA:2321:G:N1	2.68	0.62
1:CA:1047:G:H1	1:CA:1210:C:N4	1.98	0.62
25:BA:2101:U:OP1	47:B1:21:ARG:NH2	2.33	0.62
1:AA:828:A:H2'	1:AA:829:G:O4'	2.00	0.62
12:AL:24:VAL:HG11	12:AL:27:LEU:HD22	1.81	0.62
1:AA:1015:A:H2'	1:AA:1016:A:C8	2.35	0.62
25:DA:754:C:H2'	25:DA:755:C:H6	1.64	0.62
25:DA:2649:U:H2'	25:DA:2650:U:C6	2.35	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:1766:U:H2'	25:DA:1767:C:H6	1.65	0.62
20:AT:87:LYS:O	20:AT:91:LEU:HG	2.00	0.62
25:DA:298:G:H5''	25:DA:299:A:OP1	2.00	0.62
1:CA:446:G:H1	1:CA:488:C:H42	1.48	0.62
1:CA:758:G:N7	61:CA:4151:HOH:O	2.31	0.62
25:DA:2079:U:O3'	47:D1:35:THR:OG1	2.17	0.62
1:AA:346:G:C6	1:AA:348:G:N2	2.66	0.61
1:AA:200:G:H5'	1:AA:201:C:OP2	2.00	0.61
1:AA:96:U:O2'	1:AA:97:G:H5'	2.00	0.61
25:DA:302:C:H42	25:DA:315:G:H1	1.46	0.61
25:DA:483:A:O2'	44:DY:49:VAL:O	2.14	0.61
35:DP:65:ARG:HG3	54:D8:25:MET:HG3	1.81	0.61
1:CA:504:C:OP1	61:CA:4009:HOH:O	2.16	0.61
1:CA:152:A:N6	1:CA:169:C:N3	2.46	0.61
35:BP:121:LYS:HG2	35:BP:122:PRO:HD2	1.82	0.61
10:CJ:42:THR:HG21	10:CJ:68:HIS:HD2	1.63	0.61
1:AA:993:G:H1	1:AA:1045:C:H42	1.47	0.61
9:CI:99:LEU:HB3	9:CI:101:PHE:HE1	1.65	0.61
25:DA:586:A:N1	25:DA:809:G:O2'	2.30	0.61
1:CA:827:U:H5''	1:CA:828:A:OP2	1.99	0.61
25:DA:1223:G:N2	25:DA:1226:A:OP2	2.31	0.61
1:CA:567:G:O2'	61:CA:4063:HOH:O	2.16	0.61
28:DE:73:GLU:HG3	28:DE:73:GLU:O	1.99	0.61
25:BA:1466:U:HO2'	25:BA:1467:G:P	2.22	0.61
25:DA:880:G:N1	25:DA:898:C:O2	2.33	0.61
31:BH:33:LEU:HD21	31:BH:136:ILE:HG13	1.82	0.61
32:BI:93:THR:H	32:BI:96:ASP:CG	2.04	0.61
48:B2:65:ASN:OD1	48:B2:69:ARG:NH1	2.31	0.61
26:DB:48:A:H2'	26:DB:49:C:C6	2.35	0.61
7:CG:113:GLU:CG	7:CG:119:ARG:HG2	2.30	0.61
3:CC:39:ILE:O	3:CC:43:LEU:HG	2.00	0.61
5:AE:76:ILE:HD12	5:AE:142:LEU:HD21	1.81	0.61
13:CM:16:ASP:HB3	13:CM:34:LEU:HD11	1.81	0.61
18:AR:42:ARG:HH21	18:AR:42:ARG:HA	1.65	0.61
3:CC:114:PRO:O	3:CC:118:GLN:HG2	2.00	0.61
1:AA:159:G:HO2'	1:AA:161:A:N6	1.98	0.61
2:CB:15:VAL:HG13	2:CB:209:ARG:HB3	1.82	0.61
1:CA:1172:C:H2'	1:CA:1173:G:C8	2.34	0.61
1:AA:487:A:H2'	1:AA:488:C:O4'	1.99	0.61
6:AF:97:PHE:HD2	18:AR:31:LEU:HD23	1.66	0.61
1:AA:961:U:OP2	1:AA:1223:C:O2'	2.09	0.61
8:AH:121:ASP:HB2	8:AH:125:ARG:NH1	2.15	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:DE:4:ILE:HD13	28:DE:28:ALA:HB1	1.81	0.61
25:DA:2312:U:C5	25:DA:2313:C:H5	2.19	0.61
1:CA:1154:G:N7	1:CA:1155:G:C4	2.68	0.61
25:BA:1378:G:OP1	61:BA:4469:HOH:O	2.16	0.61
1:AA:183:G:O2'	1:AA:224:C:O2'	2.10	0.61
20:AT:14:LYS:HG3	20:AT:17:ARG:NH2	2.16	0.61
1:CA:337:C:H2'	1:CA:338:A:C8	2.36	0.61
25:DA:2537:U:H2'	25:DA:2538:C:C6	2.35	0.61
31:DH:159:GLU:HG3	31:DH:169:VAL:HG11	1.82	0.61
7:CG:50:ILE:HD11	7:CG:58:PRO:HA	1.81	0.61
1:AA:45:U:H2'	1:AA:46:G:C8	2.36	0.61
1:AA:520:A:N1	1:AA:536:C:H1'	2.16	0.61
1:AA:1342:C:H4'	9:AI:125:TYR:HB3	1.81	0.61
1:CA:1154:G:N7	1:CA:1155:G:N9	2.49	0.61
25:DA:2299:G:N2	25:DA:2318:G:H8	1.99	0.61
5:CE:143:ARG:NH1	8:CH:77:GLU:OE1	2.33	0.61
8:AH:49:GLU:HG2	8:AH:62:TYR:HE2	1.64	0.61
36:DQ:34:LEU:HB2	36:DQ:118:LEU:HD22	1.82	0.61
25:BA:2889:C:OP2	61:BA:4426:HOH:O	2.16	0.61
25:BA:554:A:H62	25:BA:2063:U:H3	1.48	0.61
19:CS:48:THR:HG22	19:CS:61:TYR:HA	1.83	0.61
1:CA:683:G:H2'	1:CA:684:A:C8	2.35	0.61
25:BA:2348:A:H61	46:B0:43:THR:CG2	2.13	0.61
30:DG:16:ARG:HE	30:DG:31:VAL:HG11	1.66	0.61
1:AA:833:U:H2'	1:AA:834:C:H6	1.65	0.61
1:CA:192:U:H2'	1:CA:193:C:C6	2.35	0.61
33:BN:67:LEU:HD12	33:BN:87:LEU:HD13	1.83	0.61
1:CA:539:A:H2'	1:CA:540:G:C8	2.35	0.61
25:DA:1379:A:H4'	25:DA:1380:G:OP2	1.99	0.61
52:B6:14:THR:HB	52:B6:48:VAL:O	2.01	0.61
25:DA:2584:U:O4	61:DA:3961:HOH:O	2.13	0.61
25:DA:1557:C:OP2	25:DA:1558:A:O2'	2.18	0.61
25:BA:798:A:H5'	42:BW:90:ARG:HA	1.82	0.61
1:AA:628:G:H2'	1:AA:629:G:H8	1.65	0.61
1:CA:1223:C:H5''	1:CA:1224:G:C5'	2.30	0.61
25:DA:83:G:O2'	25:DA:102:G:N2	2.34	0.61
1:AA:924:C:O2'	1:AA:1502:A:N6	2.32	0.61
25:DA:903:C:H2'	25:DA:904:C:C6	2.35	0.61
25:DA:1359:A:N1	25:DA:1372:U:C4	2.69	0.61
1:CA:683:G:H2'	1:CA:684:A:H8	1.66	0.61
1:AA:601:C:O2	1:AA:637:G:N2	2.28	0.61
27:DD:73:VAL:HG13	27:DD:120:GLY:HA3	1.83	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:CK:22:HIS:HB3	11:CK:29:ILE:HB	1.82	0.61
25:BA:572:A:N6	41:BV:19:LYS:H	1.99	0.61
29:BF:51:THR:O	29:BF:93:LYS:NZ	2.29	0.61
25:BA:2830:A:OP1	37:BR:2:ARG:NH2	2.33	0.61
29:DF:53:THR:HG22	29:DF:56:GLU:HG3	1.83	0.61
19:CS:28:LYS:HB2	19:CS:29:ARG:CA	2.31	0.61
28:DE:93:VAL:O	28:DE:95:ILE:N	2.33	0.61
25:BA:2062:C:H2'	25:BA:2063:U:O4'	2.01	0.61
29:DF:183:VAL:O	29:DF:187:VAL:HG23	2.01	0.61
25:DA:1509(B):A:H2'	25:DA:1510:G:C8	2.36	0.61
45:DZ:39:VAL:HG21	45:DZ:44:PHE:HB2	1.83	0.61
28:BE:93:VAL:HG21	28:BE:180:ASN:HA	1.83	0.61
47:D1:23:LYS:HB3	47:D1:29:GLY:HA3	1.83	0.61
30:DG:41:GLN:NE2	30:DG:154:GLY:O	2.34	0.61
4:CD:79:PHE:HE1	4:CD:204:ILE:HD13	1.65	0.61
13:CM:107:ALA:HB3	13:CM:111:LYS:HE3	1.83	0.61
1:CA:1002:G:N2	1:CA:1039:C:N3	2.49	0.61
25:BA:7:G:H2'	25:BA:8:A:O4'	2.01	0.61
1:CA:1132:C:H2'	1:CA:1133:G:C8	2.33	0.61
8:CH:51:VAL:HG11	8:CH:60:ARG:HH12	1.64	0.61
1:AA:946:A:H2'	1:AA:947:G:C8	2.34	0.61
1:CA:1286:A:C8	1:CA:1287:A:H4'	2.36	0.61
1:AA:333:G:H4'	20:AT:16:HIS:CE1	2.36	0.61
1:CA:195:A:N3	1:CA:222:U:O2'	2.32	0.61
25:DA:2723:C:OP2	28:DE:109:LYS:NZ	2.32	0.61
17:AQ:56:VAL:HB	17:AQ:78:GLU:HB3	1.83	0.61
46:B0:53:MET:HG3	46:B0:59:LEU:HD23	1.82	0.61
47:D1:5:CYS:SG	47:D1:8:SER:HB3	2.41	0.61
1:AA:664:G:H22	1:AA:741:G:H1	1.47	0.60
1:CA:143:A:H5''	1:CA:144:G:H5'	1.82	0.60
3:CC:18:TRP:CD1	14:CN:54:PRO:HA	2.36	0.60
50:B4:20:ASN:ND2	50:B4:36:CYS:SG	2.74	0.60
49:D3:8:LEU:HD13	49:D3:31:LEU:HD23	1.83	0.60
1:CA:1442:G:O2'	1:CA:1442(A):G:OP1	2.15	0.60
9:AI:4:TYR:CE1	9:AI:88:TYR:HA	2.36	0.60
48:B2:32:LEU:HD12	48:B2:36:ARG:HH11	1.66	0.60
25:DA:370:G:OP1	25:DA:403:U:N3	2.32	0.60
25:BA:1093:G:H2'	25:BA:1156:G:N2	2.16	0.60
25:BA:801:C:H2'	25:BA:802:C:C6	2.37	0.60
3:AC:6:HIS:HD2	3:AC:8:ILE:H	1.50	0.60
1:CA:1263:C:H2'	1:CA:1264:C:C6	2.36	0.60
45:BZ:111:VAL:C	45:BZ:113:ALA:H	2.03	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:499:A:N3	1:AA:546:G:N2	2.46	0.60
1:AA:1228:C:OP1	13:AM:115:LYS:N	2.22	0.60
1:AA:1144:G:N2	1:AA:1146:A:H62	1.99	0.60
25:BA:1480:A:N6	25:BA:1605:A:H62	1.98	0.60
9:CI:21:PRO:HA	9:CI:59:PHE:HA	1.83	0.60
25:DA:11:G:C2'	25:DA:12:U:H5'	2.31	0.60
3:AC:58:GLU:HB3	10:AJ:92:THR:HG21	1.81	0.60
1:CA:826:C:H2'	1:CA:827:U:C6	2.35	0.60
17:CQ:22:LEU:HD13	17:CQ:41:LYS:HG3	1.83	0.60
1:CA:1095:U:H2'	1:CA:1096:C:O4'	2.01	0.60
10:CJ:32:ALA:HB1	10:CJ:33:GLN:HA	1.82	0.60
25:BA:1016:C:OP2	61:BA:4636:HOH:O	2.16	0.60
45:DZ:45:ASP:OD1	45:DZ:49:ARG:NH1	2.34	0.60
10:CJ:47:PHE:CZ	14:CN:37:PHE:HE1	2.20	0.60
30:BG:41:GLN:HG3	30:BG:60:LEU:HD11	1.81	0.60
1:AA:991:U:H1'	1:AA:993:G:C8	2.37	0.60
33:BN:15:LEU:HD12	33:BN:137:LYS:HG2	1.83	0.60
1:CA:532:A:N6	3:CC:156:ARG:HH12	1.99	0.60
25:DA:1709:U:H2'	25:DA:1710:C:C6	2.37	0.60
35:DP:96:THR:H	35:DP:99:LEU:HD21	1.66	0.60
25:DA:479:A:N3	25:DA:481:G:H5''	2.16	0.60
7:AG:27:ILE:HD12	7:AG:40:ALA:HA	1.82	0.60
25:DA:2886:G:O2'	25:DA:2887:U:H5'	2.02	0.60
20:CT:86:ARG:O	20:CT:90:GLN:HB2	2.01	0.60
25:DA:1488:G:C5	25:DA:1489:U:C5	2.89	0.60
39:DT:95:ARG:HG2	39:DT:95:ARG:HH11	1.65	0.60
34:DO:68:GLU:HB3	34:DO:78:ARG:HB2	1.84	0.60
12:AL:24:VAL:HG12	12:AL:27:LEU:HB2	1.82	0.60
1:CA:250:A:H4'	1:CA:251:G:O5'	2.02	0.60
25:BA:1542:A:N3	25:BA:1624:C:O2'	2.29	0.60
25:DA:1531:C:H42	25:DA:1538:G:H1	1.49	0.60
1:AA:123:C:OP1	1:AA:311:C:O2'	2.16	0.60
25:DA:1914:C:H2'	25:DA:1915:U:O4'	2.01	0.60
1:CA:1240:U:O2'	7:CG:32:ARG:HD3	2.02	0.60
1:AA:1025:U:H3	1:AA:1036:G:H1	1.49	0.60
1:AA:443:C:N3	1:AA:491:G:N1	2.39	0.60
25:BA:927:G:H1	25:BA:944:C:H42	1.50	0.60
25:BA:2340:A:H2'	25:BA:2341:G:C8	2.36	0.60
38:DS:35:ILE:CD1	38:DS:101:LEU:HD12	2.32	0.60
1:CA:192:U:O2'	1:CA:193:C:H5'	2.02	0.60
38:DS:14:VAL:O	38:DS:18:ILE:HG12	2.01	0.60
1:CA:1288:A:H2'	1:CA:1289:A:C8	2.36	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:890:G:O2'	1:AA:906:G:O6	2.14	0.60
25:BA:11:G:H2'	25:BA:12:U:H5'	1.82	0.60
1:AA:474:G:H2'	1:AA:475:G:C8	2.31	0.60
16:CP:43:LYS:HA	16:CP:48:TRP:HB3	1.82	0.60
34:BO:21:CYS:HB2	34:BO:39:ILE:HD12	1.83	0.60
25:BA:1846:A:OP2	27:BD:54:ARG:NH2	2.33	0.60
17:AQ:3:LYS:HD2	17:AQ:60:ILE:HD11	1.83	0.60
1:AA:701:C:O2	1:AA:703:G:N1	2.35	0.60
16:AP:50:LYS:HA	16:AP:50:LYS:HE2	1.84	0.60
1:AA:258:G:H2'	1:AA:259:G:H8	1.66	0.60
44:BY:38:ILE:HD11	44:BY:66:PRO:HG3	1.83	0.60
1:CA:1138:G:C6	1:CA:1140:C:H1'	2.37	0.60
1:AA:67:C:H2'	1:AA:68:G:C8	2.36	0.60
1:CA:1288:A:N1	1:CA:1371:G:H1'	2.17	0.60
3:CC:150:LYS:HD2	3:CC:201:TYR:HD2	1.67	0.60
3:CC:155:GLY:HA3	3:CC:196:LEU:HD13	1.84	0.60
3:AC:56:ASP:HB2	3:AC:67:THR:HB	1.82	0.60
1:CA:1104:G:H5'	2:CB:111:ARG:HD2	1.82	0.60
1:AA:364:A:H2'	1:AA:365:U:H6	1.66	0.60
1:AA:1126:U:C5	10:AJ:71:LEU:HD22	2.34	0.60
1:CA:1251:A:H2'	1:CA:1252:A:C8	2.37	0.60
12:CL:24:VAL:HG11	12:CL:27:LEU:HD22	1.83	0.60
1:CA:1237:C:HO2'	1:CA:1300:G:H1	1.47	0.60
30:DG:44:GLY:O	30:DG:47:LYS:HB2	2.00	0.60
30:DG:63:ILE:HA	30:DG:143:GLU:HG3	1.83	0.60
7:AG:78:ARG:HG2	7:AG:79:ARG:HB2	1.83	0.60
44:BY:86:ARG:HH11	44:BY:100:ALA:HB1	1.67	0.60
25:BA:1825:U:H2'	25:BA:1826:C:C6	2.36	0.60
40:BU:58:ARG:HA	40:BU:61:TRP:CE3	2.37	0.60
25:DA:1721:G:H8	25:DA:1741:A:H62	1.50	0.60
25:DA:1740:G:H2'	25:DA:1741:A:H8	1.66	0.60
15:AO:54:ARG:O	15:AO:58:MET:HG3	2.02	0.60
26:DB:43:C:H5''	50:D4:1:MET:HG2	1.83	0.60
4:AD:158:ILE:O	4:AD:162:LEU:N	2.35	0.60
1:CA:333:G:H4'	20:CT:16:HIS:CE1	2.37	0.60
31:DH:80:SER:OG	31:DH:81:GLU:N	2.32	0.60
1:CA:959:A:HO2'	1:CA:984:C:HO2'	1.47	0.60
1:AA:735:C:H2'	1:AA:736:C:H6	1.67	0.60
32:BI:3:VAL:HG12	32:BI:38:LEU:HA	1.83	0.60
1:AA:1286:A:C8	1:AA:1287:A:H4'	2.37	0.60
30:DG:122:PRO:HG3	30:DG:180:PHE:HB3	1.84	0.60
29:BF:183:VAL:O	29:BF:187:VAL:HG23	2.01	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1422:G:H5''	34:BO:48:PRO:HB3	1.84	0.60
25:BA:692:C:H2'	25:BA:693:G:O4'	2.02	0.60
1:AA:193:C:H2'	1:AA:194:C:H6	1.66	0.59
5:AE:78:HIS:CD2	5:AE:142:LEU:HD23	2.37	0.59
5:CE:78:HIS:HE1	5:CE:142:LEU:HA	1.67	0.59
1:CA:1266:G:N2	1:CA:1269:A:OP2	2.33	0.59
13:AM:15:VAL:O	13:AM:19:LEU:HD22	2.01	0.59
25:DA:1889:A:H2'	25:DA:1890:A:C8	2.36	0.59
20:AT:42:GLN:NE2	20:AT:46:GLU:OE2	2.35	0.59
25:DA:957:A:H5'	36:DQ:76:LYS:HG3	1.84	0.59
1:CA:1513:A:H2'	1:CA:1514:C:C6	2.36	0.59
1:AA:994:A:N1	1:AA:1047:G:H4'	2.17	0.59
1:AA:1351:U:O4	9:AI:118:LYS:NZ	2.34	0.59
43:DX:12:VAL:HG22	43:DX:29:TRP:CE2	2.37	0.59
1:CA:1119:C:N3	1:CA:1154:G:O6	2.35	0.59
1:AA:518:C:O2'	1:AA:530:G:N2	2.35	0.59
25:BA:1631:C:O2'	25:BA:1632:A:H5'	2.02	0.59
1:AA:1192:C:OP2	3:AC:4:LYS:NZ	2.31	0.59
5:AE:94:ALA:HB2	5:AE:119:LEU:HG	1.82	0.59
50:D4:68:ARG:HG3	50:D4:68:ARG:HH21	1.67	0.59
25:DA:184:C:H2'	25:DA:185:U:H6	1.67	0.59
28:DE:24:THR:HG22	28:DE:186:GLY:O	2.02	0.59
1:AA:192:U:HO2'	1:AA:193:C:H6	1.50	0.59
3:CC:58:GLU:HB3	10:CJ:92:THR:HG21	1.84	0.59
43:BX:31:HIS:CD2	43:BX:33:LYS:HB2	2.36	0.59
25:DA:2821:A:H2'	25:DA:2822:G:C8	2.37	0.59
25:BA:1463:C:O2'	25:BA:1633:A:N3	2.30	0.59
29:BF:30:PRO:HB3	35:BP:1:MET:HE1	1.84	0.59
18:CR:33:ASP:OD2	18:CR:36:ASN:HB2	2.01	0.59
25:BA:589:U:H5''	35:BP:29:LYS:HE3	1.84	0.59
1:AA:110:C:O2'	16:AP:25:ARG:O	2.20	0.59
41:BV:40:LEU:HB2	41:BV:46:VAL:HG13	1.83	0.59
25:DA:1470:G:H5''	25:DA:1471:A:OP1	2.02	0.59
3:AC:3:ASN:OD1	3:AC:3:ASN:N	2.35	0.59
45:DZ:140:ASP:OD1	45:DZ:142:SER:OG	2.17	0.59
25:BA:1232:G:H5''	41:BV:81:TYR:CE1	2.37	0.59
8:AH:7:ALA:HB2	8:AH:85:ARG:HD2	1.85	0.59
25:BA:2343:G:O2'	25:BA:2348:A:N1	2.28	0.59
7:CG:78:ARG:HH21	7:CG:156:TRP:HB3	1.65	0.59
25:BA:310:C:H2'	25:BA:311:C:C6	2.37	0.59
23:CX:10:G:N2	23:CX:26:G:H1'	2.18	0.59
1:AA:1442:G:O2'	1:AA:1442(A):G:OP1	2.17	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:1031:G:H5''	55:D9:8:LYS:HE3	1.84	0.59
1:AA:1025:U:C2	1:AA:1036:G:O6	2.55	0.59
25:DA:2298:A:N1	25:DA:2321:G:C6	2.70	0.59
1:AA:1271:G:H5''	1:AA:1314:C:OP1	2.03	0.59
29:BF:8:GLN:HE21	29:BF:21:ALA:HB2	1.68	0.59
1:AA:1442(A):G:C8	39:BT:118:ARG:HG2	2.38	0.59
25:BA:1827:U:H2'	25:BA:1828:C:C6	2.38	0.59
19:CS:49:ILE:HD12	19:CS:62:ILE:HD13	1.83	0.59
1:AA:17:U:H2'	1:AA:18:C:C6	2.37	0.59
1:AA:159:G:O2'	1:AA:161:A:N6	2.26	0.59
1:CA:1138:G:C5	1:CA:1140:C:H1'	2.38	0.59
1:CA:738:C:OP1	6:CF:2:ARG:NH1	2.36	0.59
19:AS:38:SER:HB2	19:AS:71:LEU:HD12	1.84	0.59
1:AA:1216:G:OP1	14:AN:2:ALA:HA	2.03	0.59
1:AA:78:G:H1	1:AA:92:C:H42	1.50	0.59
1:CA:742:G:OP2	15:CO:35:ARG:NH2	2.36	0.59
25:BA:1496:A:H5'	25:BA:1497:G:OP2	2.03	0.59
36:BQ:43:THR:HG22	36:BQ:94:VAL:HG12	1.85	0.59
25:DA:1200:C:H5'	61:DA:3774:HOH:O	2.01	0.59
1:CA:1004:A:N7	1:CA:1037:C:H2'	2.18	0.59
1:CA:1409:C:O2	1:CA:1491:G:N2	2.27	0.59
35:BP:59:LEU:HD11	54:B8:10:ALA:HB2	1.83	0.59
25:BA:945:A:O2'	25:BA:946:A:H8	1.85	0.59
27:DD:132:PRO:HG2	27:DD:135:PHE:HD2	1.67	0.59
1:AA:626:U:H2'	1:AA:627:G:H8	1.67	0.59
4:AD:154:ASN:HA	4:AD:159:ARG:HH21	1.68	0.59
45:BZ:151:HIS:O	45:BZ:153:SER:N	2.35	0.59
29:DF:126:VAL:HG21	29:DF:129:PHE:CZ	2.36	0.59
25:BA:709:G:H5''	35:BP:16:ARG:HG2	1.85	0.59
26:DB:9:G:H1	26:DB:112:U:H3	1.51	0.59
25:BA:2450:U:O2'	25:BA:2452:C:OP1	2.21	0.59
7:CG:26:PHE:O	7:CG:30:ILE:HG13	2.02	0.59
1:CA:1279:A:H5''	1:CA:1280:A:OP1	2.02	0.59
1:AA:1030(D):A:H2'	1:AA:1031:G:O4'	2.03	0.59
2:CB:76:GLN:HB2	2:CB:208:ILE:HG12	1.84	0.59
1:CA:1048:G:OP1	14:CN:3:ARG:NH2	2.35	0.59
1:CA:1288:A:H2'	1:CA:1289:A:H8	1.68	0.59
25:DA:184:C:H1'	25:DA:217:G:H1'	1.85	0.59
23:CX:4:G:H1	23:CX:69:C:H42	1.51	0.59
25:DA:1256:G:H5'	25:DA:1257:C:OP2	2.01	0.59
1:CA:1368:G:OP1	9:CI:111:ARG:NH2	2.36	0.59
38:DS:71:ARG:NH2	38:DS:107:GLU:OE1	2.36	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:BD:26:LYS:HB3	27:BD:83:GLU:HG2	1.84	0.59
25:DA:2404:C:O3'	35:DP:77:ARG:NH2	2.36	0.59
25:BA:1201:A:OP1	40:BU:55:ARG:HD3	2.03	0.59
1:CA:664:G:H22	1:CA:741:G:H1	1.51	0.59
29:BF:53:THR:CG2	29:BF:55:GLY:H	2.15	0.59
39:BT:29:ARG:HG3	39:BT:46:GLU:HB2	1.84	0.59
10:AJ:38:ILE:HD11	10:AJ:71:LEU:HD23	1.84	0.59
30:DG:16:ARG:HB2	30:DG:17:PRO:HD3	1.85	0.59
29:BF:185:ASP:OD1	29:BF:188:ARG:NH1	2.34	0.59
54:B8:6:THR:HG22	54:B8:63:PRO:HD2	1.83	0.59
3:CC:43:LEU:HD21	3:CC:91:LEU:HD13	1.84	0.59
50:D4:59:PHE:HA	50:D4:61:ARG:N	2.17	0.59
25:DA:1405:U:H2'	25:DA:1406:U:C6	2.38	0.59
41:DV:62:LEU:HD11	41:DV:95:LEU:HB2	1.85	0.59
25:BA:639:G:O2'	61:BA:3869:HOH:O	2.17	0.59
6:CF:69:GLU:O	6:CF:72:VAL:HG12	2.03	0.59
25:DA:2189:U:H2'	25:DA:2190:G:C8	2.38	0.59
1:AA:583:A:N6	1:AA:758:G:O2'	2.35	0.59
45:DZ:6:LYS:HE2	45:DZ:43:GLU:OE1	2.03	0.59
1:AA:1259:C:H42	1:AA:1276:G:H1	1.50	0.59
39:DT:59:THR:HG23	39:DT:78:LEU:HB2	1.85	0.59
59:AX:101:FME:HCN	25:BA:2463:A:H2	1.68	0.59
1:AA:1272:G:H2'	1:AA:1273:G:O4'	2.03	0.59
25:BA:1094:A:OP2	25:BA:1155:C:N4	2.29	0.58
25:DA:300:A:H1'	25:DA:319:C:H1'	1.83	0.58
4:CD:31:CYS:SG	4:CD:32:ALA:N	2.76	0.58
1:AA:552:U:H2'	1:AA:553:A:H5'	1.84	0.58
17:CQ:66:SER:O	17:CQ:70:ARG:NH1	2.36	0.58
25:DA:2363:C:O2	46:D0:39:ARG:NH2	2.31	0.58
2:AB:145:LEU:HD12	2:AB:149:LEU:HD12	1.84	0.58
38:DS:11:LYS:O	38:DS:15:ARG:HG3	2.02	0.58
28:DE:143:ASN:HD22	28:DE:147:PRO:HD3	1.67	0.58
3:AC:112:SER:O	3:AC:116:VAL:HG23	2.03	0.58
2:CB:102:LEU:HD23	2:CB:182:ILE:HD12	1.85	0.58
32:DI:77:LEU:HB3	32:DI:142:VAL:HG12	1.84	0.58
25:DA:311:A:OP2	61:DA:4575:HOH:O	2.17	0.58
26:DB:5:C:H42	26:DB:116:G:H1	1.50	0.58
1:CA:392:G:H2'	1:CA:393:A:H8	1.68	0.58
1:CA:474:G:H2'	1:CA:475:G:H8	1.68	0.58
30:DG:39:ILE:HG23	30:DG:157:ILE:HG12	1.85	0.58
27:BD:242:ARG:HG2	27:BD:246:PRO:HG3	1.84	0.58
25:DA:1614:A:OP1	61:DA:3881:HOH:O	2.17	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:713:G:H2'	1:AA:714:G:C8	2.38	0.58
1:CA:1376:U:H2'	1:CA:1377:A:H8	1.68	0.58
25:BA:1221:G:H1'	25:BA:1222:A:O5'	2.03	0.58
1:CA:1084:G:H5'	1:CA:1102:A:OP2	2.04	0.58
31:DH:169:VAL:HG12	31:DH:171:LEU:HD22	1.86	0.58
25:DA:1014:U:H2'	25:DA:1015:G:H8	1.69	0.58
9:CI:6:GLY:HA3	9:CI:80:GLY:O	2.03	0.58
1:CA:79:G:H1	1:CA:90:U:H3	1.50	0.58
25:DA:236:C:H2'	25:DA:237:C:H6	1.66	0.58
33:DN:102:ALA:O	33:DN:106:MET:HG3	2.03	0.58
20:AT:30:LYS:HA	20:AT:33:ILE:HD12	1.86	0.58
25:BA:294:C:H42	25:BA:390:G:H1	1.50	0.58
54:B8:62:LEU:HB3	54:B8:65:GLU:HG2	1.85	0.58
14:AN:23:ARG:NH1	14:AN:30:ALA:HB2	2.19	0.58
1:CA:1128:C:H1'	1:CA:1147:C:H42	1.67	0.58
26:BB:64:C:O2'	61:BB:4001:HOH:O	2.17	0.58
13:AM:122:LYS:HD3	13:AM:123:ALA:H	1.67	0.58
1:AA:501:C:H1'	1:AA:549:C:H1'	1.85	0.58
2:CB:48:MET:HA	2:CB:51:LEU:HB2	1.86	0.58
1:CA:1491:G:H3'	1:CA:1492:A:C8	2.38	0.58
25:BA:1577:C:HO2'	25:BA:1578:C:P	2.27	0.58
25:BA:2331:G:H22	38:BS:3:ARG:HE	1.50	0.58
27:BD:132:PRO:HG2	27:BD:135:PHE:CD2	2.39	0.58
1:CA:444:C:O2	1:CA:490:G:N2	2.17	0.58
1:AA:520:A:O2'	12:AL:73:GLU:OE1	2.15	0.58
2:AB:231:GLU:HB3	2:AB:232:PRO:CD	2.33	0.58
26:DB:95:C:H2'	26:DB:96:U:C6	2.38	0.58
39:DT:26:ASP:OD1	39:DT:120:ARG:NH2	2.30	0.58
20:AT:86:ARG:O	20:AT:90:GLN:NE2	2.36	0.58
25:DA:662:G:OP1	61:DA:4092:HOH:O	2.16	0.58
3:AC:130:VAL:HG21	3:AC:157:ILE:HG23	1.85	0.58
4:CD:15:GLU:OE2	4:CD:66:ARG:NH1	2.35	0.58
1:CA:1002:G:H1	1:CA:1038:C:H42	0.72	0.58
1:CA:999:C:N4	1:CA:1043:C:N3	2.51	0.58
1:CA:999:C:N3	1:CA:1042:G:C2	2.72	0.58
2:CB:16:HIS:HB2	2:CB:204:ASN:CB	2.24	0.58
35:DP:97:PRO:HD3	35:DP:126:VAL:O	2.04	0.58
1:CA:1223:C:P	19:CS:78:ARG:HH21	2.26	0.58
11:CK:99:GLN:HG2	11:CK:105:VAL:HG21	1.85	0.58
25:BA:776:G:H4'	25:BA:810:G:H5'	1.85	0.58
1:AA:396:G:O2'	1:AA:398:C:OP1	2.13	0.58
48:B2:32:LEU:HD23	48:B2:53:LEU:HB3	1.85	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:737:A:H2'	1:AA:738:C:C6	2.38	0.58
1:AA:738:C:H2'	1:AA:739:C:H6	1.69	0.58
25:BA:536:U:OP2	61:BA:4619:HOH:O	2.17	0.58
1:AA:1239:A:H62	1:AA:1299:A:N6	2.02	0.58
5:AE:12:LEU:HB3	5:AE:31:LEU:HB2	1.86	0.58
1:AA:1179:A:H2'	1:AA:1180:A:O4'	2.04	0.58
25:DA:2393:A:H5''	35:DP:63:PRO:HB3	1.85	0.58
25:DA:571:A:N6	25:DA:2499:C:O3'	2.36	0.58
25:DA:500:G:N1	25:DA:503:A:OP2	2.36	0.58
5:AE:110:LEU:HD13	5:AE:118:ILE:HG21	1.84	0.58
1:CA:664:G:H5''	18:CR:64:ARG:NH2	2.19	0.58
25:BA:2299:A:N6	25:BA:2356:U:H3	2.00	0.58
25:BA:1199:C:OP1	40:BU:92:ARG:NH1	2.37	0.58
25:DA:1359:A:N6	25:DA:1372:U:H3	2.01	0.58
25:DA:784:A:C5	27:DD:229:VAL:HG21	2.38	0.58
25:DA:2772:C:H2'	25:DA:2773:C:H6	1.68	0.58
25:BA:2514:G:OP2	61:BA:4400:HOH:O	2.17	0.58
14:CN:6:LEU:HB3	14:CN:23:ARG:NH2	2.19	0.58
45:DZ:108:PRO:HG3	45:DZ:141:VAL:HB	1.85	0.58
1:CA:1412:C:H2'	1:CA:1413:A:C8	2.39	0.58
28:DE:167:VAL:HG11	28:DE:189:PRO:HD3	1.86	0.58
25:BA:1360:C:OP1	61:BA:4469:HOH:O	2.16	0.58
1:CA:543:C:C2'	1:CA:544:G:H5'	2.33	0.58
25:BA:1003:U:O2	26:BB:90:A:O2'	2.21	0.58
20:CT:64:ASP:OD2	20:CT:81:LYS:NZ	2.35	0.58
32:DI:77:LEU:HD21	32:DI:101:LEU:HA	1.86	0.58
5:AE:145:LYS:O	5:AE:149:GLU:HG2	2.04	0.58
25:DA:2693:A:H2'	25:DA:2694:G:H8	1.68	0.58
25:DA:2343:C:HO2'	25:DA:2373:G:HO2'	1.47	0.58
18:AR:40:LEU:HD22	18:AR:70:ILE:HG12	1.86	0.58
25:BA:1779:G:H5''	25:BA:1779:G:H8	1.68	0.58
25:BA:346:A:OP1	29:BF:168:ARG:HD2	2.04	0.58
25:BA:325:G:OP2	44:BY:84:ARG:NH2	2.36	0.58
2:CB:189:ASP:HB3	2:CB:204:ASN:HA	1.85	0.58
41:DV:5:VAL:HG11	41:DV:57:VAL:HG21	1.86	0.58
27:DD:71:ASP:CB	27:DD:103:ARG:HH22	2.17	0.58
1:CA:1516:G:H2'	1:CA:1518:A:OP2	2.03	0.58
25:BA:326:C:OP2	44:BY:73:ARG:NH2	2.36	0.58
3:CC:152:ILE:HG23	3:CC:199:LYS:HB2	1.86	0.58
8:CH:49:GLU:HG2	8:CH:62:TYR:HE2	1.68	0.58
12:AL:59:ARG:HD3	24:AW:1:2QZ:OG1	2.04	0.58
25:DA:900:A:H2'	25:DA:901:A:H8	1.68	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:2630:G:H2'	25:DA:2631:G:C8	2.38	0.58
25:DA:847:U:OP2	61:DA:3962:HOH:O	2.16	0.58
25:BA:1261:G:P	40:BU:12:ARG:HH21	2.27	0.58
25:BA:231:G:C8	54:B8:5:LYS:HG2	2.39	0.58
1:AA:598:U:H4'	8:AH:94:TYR:CD2	2.38	0.58
38:BS:10:ARG:O	38:BS:14:VAL:HG13	2.04	0.58
2:AB:16:HIS:CB	2:AB:204:ASN:HB3	2.31	0.58
1:CA:147:G:O2'	1:CA:148:G:H8	1.87	0.58
31:BH:40:GLU:OE2	31:BH:60:ARG:NH1	2.37	0.58
1:CA:192:U:C2'	1:CA:193:C:H5'	2.34	0.58
40:DU:66:ASN:O	40:DU:70:ARG:HG3	2.04	0.58
25:DA:2802:G:H2'	25:DA:2803:C:O4'	2.04	0.58
25:BA:1086:C:H2'	25:BA:1087:C:O4'	2.04	0.58
1:CA:433:C:H2'	1:CA:434:U:H6	1.68	0.58
33:DN:15:LEU:HB2	33:DN:135:PRO:HB2	1.85	0.58
25:DA:839:U:H2'	25:DA:840:C:C6	2.39	0.58
25:BA:1985:U:H4'	25:BA:1986:G:OP1	2.03	0.58
1:CA:662:G:O2'	1:CA:836:G:OP1	2.21	0.57
5:CE:137:GLU:HA	5:CE:140:ARG:HB3	1.85	0.57
1:CA:953:G:H5'	1:CA:965:A:H61	1.69	0.57
1:AA:991:U:O2'	1:AA:992:U:OP2	2.21	0.57
25:DA:1796:U:H2'	25:DA:1797:C:C6	2.38	0.57
1:AA:999:C:H2'	1:AA:1000:U:O4'	2.04	0.57
10:AJ:8:LEU:HB2	10:AJ:70:ARG:HB2	1.86	0.57
23:CX:73:A:H5''	23:CX:74:C:H5'	1.86	0.57
26:BB:76:G:N2	26:BB:101:G:O6	2.30	0.57
2:CB:71:VAL:HG23	2:CB:164:VAL:HA	1.85	0.57
25:DA:854:G:H2'	25:DA:855:G:H8	1.69	0.57
25:DA:579:G:H2'	25:DA:580:C:C6	2.38	0.57
25:BA:988:U:OP2	61:BA:4599:HOH:O	2.17	0.57
32:BI:4:ILE:HG12	32:BI:18:VAL:HG22	1.85	0.57
1:AA:33:A:H2'	1:AA:34:C:C6	2.39	0.57
1:AA:1142:G:H3'	1:AA:1143:G:H8	1.68	0.57
25:BA:1525:G:O2'	25:BA:1605:A:N1	2.35	0.57
3:CC:36:ASP:O	3:CC:40:ARG:HG3	2.03	0.57
19:CS:64:GLU:HB2	50:D4:59:PHE:CE1	2.39	0.57
1:CA:45:U:H2'	1:CA:46:G:C8	2.39	0.57
48:D2:10:LEU:HD22	48:D2:14:ARG:NH1	2.19	0.57
47:B1:21:ARG:HG2	47:B1:21:ARG:NH1	2.18	0.57
1:AA:44:G:C2	1:AA:45:U:H1'	2.39	0.57
25:BA:1825:U:H2'	25:BA:1826:C:H6	1.69	0.57
1:CA:1182:G:H4'	1:CA:1183:A:H3'	1.86	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BA:2457:G:OP1	29:BF:74:ARG:NH2	2.37	0.57
33:DN:4:TYR:CD2	40:DU:100:VAL:HG11	2.39	0.57
1:CA:715:A:H2'	1:CA:716:A:C8	2.39	0.57
25:BA:1925:G:OP1	27:BD:241:PRO:HB2	2.04	0.57
38:DS:99:LYS:HE2	38:DS:103:GLU:OE2	2.03	0.57
28:DE:119:ARG:HB3	28:DE:120:TRP:CD1	2.39	0.57
8:CH:21:LYS:O	8:CH:65:TYR:OH	2.20	0.57
11:CK:34:ASP:HB3	11:CK:40:ILE:HD11	1.85	0.57
9:CI:121:ARG:NH1	9:CI:122:ALA:O	2.36	0.57
3:CC:98:ASN:N	3:CC:98:ASN:OD1	2.37	0.57
8:AH:40:ALA:HA	8:AH:45:ILE:HG13	1.87	0.57
1:AA:272:C:H2'	1:AA:273:A:H8	1.69	0.57
28:BE:111:ARG:HG3	28:BE:160:TYR:CD2	2.39	0.57
23:CX:9:G:O2'	23:CX:10:G:N7	2.33	0.57
1:CA:1427:U:H2'	1:CA:1428:A:C8	2.39	0.57
46:D0:24:LYS:HA	46:D0:24:LYS:HE2	1.87	0.57
25:DA:333:G:H5''	25:DA:334:C:OP2	2.04	0.57
1:CA:900:A:H2'	1:CA:901:A:C8	2.39	0.57
44:BY:6:HIS:H	44:BY:6:HIS:CD2	2.21	0.57
25:DA:2336:A:H61	46:D0:43:THR:CG2	2.17	0.57
25:DA:1032:A:H2	25:DA:1122:G:H22	1.51	0.57
7:CG:153:HIS:CE1	11:CK:58:PRO:HD2	2.39	0.57
19:CS:41:VAL:HB	19:CS:44:MET:HG3	1.87	0.57
1:AA:392:G:H2'	1:AA:393:A:C8	2.38	0.57
1:AA:954:G:H21	1:AA:1227:A:H62	1.53	0.57
30:BG:102:PHE:HE1	30:BG:141:PHE:HE2	1.52	0.57
25:BA:1211:U:H2'	25:BA:1212:C:C6	2.39	0.57
25:DA:2639:A:OP2	61:DA:3812:HOH:O	2.16	0.57
25:BA:1091:A:OP1	25:BA:1092:A:H3'	2.04	0.57
1:CA:487:A:H2'	1:CA:488:C:O4'	2.05	0.57
1:CA:59:A:H5''	1:CA:60:A:H5''	1.85	0.57
1:CA:1305:G:H5'	21:CU:4:GLY:HA3	1.87	0.57
25:DA:898:C:H2'	25:DA:899:A:O4'	2.05	0.57
1:CA:623:C:H2'	1:CA:624:C:H6	1.69	0.57
50:D4:68:ARG:HH21	50:D4:68:ARG:CG	2.16	0.57
9:CI:116:LYS:HA	9:CI:123:PRO:HD3	1.86	0.57
8:CH:29:SER:HB3	8:CH:32:LYS:HG3	1.86	0.57
35:DP:38:GLN:O	35:DP:39:LYS:HB3	2.05	0.57
25:BA:606:G:OP2	40:BU:10:ARG:NH1	2.37	0.57
17:AQ:53:LEU:HD23	17:AQ:82:MET:HE1	1.86	0.57
1:AA:959:A:O2'	1:AA:984:C:O2'	2.22	0.57
30:BG:131:TYR:HB3	30:BG:159:VAL:HG13	1.86	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:CE:10:MET:HG2	5:CE:13:ILE:HD11	1.86	0.57
1:AA:1412:C:H2'	1:AA:1413:A:C8	2.39	0.57
40:BU:105:VAL:HG11	41:BV:39:LEU:HD21	1.85	0.57
5:AE:50:GLU:HB2	5:AE:53:LEU:HD13	1.86	0.57
3:CC:140:ARG:NH1	3:CC:140:ARG:HB2	2.19	0.57
1:CA:1007:C:N4	1:CA:1022:G:C6	2.72	0.57
1:AA:342:C:N3	1:AA:343:U:H5	2.03	0.57
1:CA:1154:G:N7	1:CA:1155:G:C8	2.73	0.57
25:DA:1038:C:N4	25:DA:1117:G:H1	2.01	0.57
17:CQ:66:SER:OG	17:CQ:67:LYS:N	2.37	0.57
36:BQ:51:ARG:HD3	36:BQ:66:ILE:HD11	1.87	0.57
25:DA:1430:C:H2'	25:DA:1431:U:C6	2.40	0.57
27:BD:108:PRO:HG3	27:BD:143:HIS:CE1	2.39	0.57
25:BA:296:U:H2'	25:BA:297:C:C6	2.39	0.57
25:BA:586:G:OP2	61:BA:4474:HOH:O	2.16	0.57
25:DA:1292:U:H2'	25:DA:1293:C:C6	2.40	0.57
10:AJ:20:ALA:HA	10:AJ:23:ILE:HG22	1.87	0.57
25:DA:867:C:O2	25:DA:913:U:H5'	2.05	0.57
1:AA:1007:C:O2	1:AA:1022:G:N1	2.32	0.57
1:CA:1217:C:H2'	1:CA:1218:C:O4'	2.05	0.57
25:DA:601:C:O2	25:DA:605:C:H4'	2.04	0.57
1:CA:1269:A:N1	1:CA:1312:G:O2'	2.30	0.57
29:DF:129:PHE:CD2	29:DF:163:VAL:HG21	2.40	0.57
25:DA:2680:C:H1'	28:DE:187:ALA:HB1	1.86	0.57
25:BA:1261:G:OP2	40:BU:12:ARG:NH2	2.37	0.57
25:DA:855:G:H2'	25:DA:856:C:C6	2.40	0.57
1:AA:877:C:H5''	8:AH:88:LYS:HD3	1.87	0.57
25:DA:2000:G:N7	61:DA:4010:HOH:O	2.33	0.57
32:DI:40:THR:O	32:DI:44:LEU:HB2	2.04	0.57
25:BA:1660:A:OP1	25:BA:1663:C:N4	2.32	0.57
1:CA:947:G:O3'	13:CM:109:THR:OG1	2.22	0.57
50:B4:63:TYR:N	50:B4:64:GLY:HA2	2.19	0.57
25:BA:8:A:H2'	25:BA:9:U:H6	1.70	0.57
2:AB:54:THR:HG21	2:AB:201:ILE:HD11	1.86	0.57
1:AA:1270:C:C2'	1:AA:1271:G:H5'	2.35	0.57
25:DA:1314:C:OP1	61:DA:4078:HOH:O	2.18	0.57
1:AA:1241:G:H1	1:AA:1296:C:N4	2.00	0.57
43:DX:44:GLU:O	43:DX:48:LYS:N	2.38	0.57
36:DQ:135:ASP:OD2	45:DZ:49:ARG:NH2	2.38	0.57
25:BA:1778:G:H2'	25:BA:1779:G:H5''	1.86	0.57
25:DA:1291:C:H2'	25:DA:1292:U:C6	2.40	0.57
1:CA:1347:G:N2	1:CA:1373:G:H2'	2.19	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:AL:117:ARG:HB3	12:AL:122:THR:HB	1.87	0.57
7:AG:42:ILE:HG23	7:AG:117:ALA:HA	1.87	0.57
36:BQ:16:ARG:HG2	36:BQ:18:LYS:HE2	1.87	0.57
25:DA:116:C:H2'	25:DA:117:G:O4'	2.04	0.57
1:CA:426:G:OP1	4:CD:36:ARG:NH1	2.36	0.57
1:AA:102:G:H2'	1:AA:103:C:C6	2.40	0.57
25:BA:1405:A:N1	25:BA:1418:U:O4	2.38	0.57
38:BS:3:ARG:HE	38:BS:4:LEU:H	1.52	0.57
1:AA:1369:C:H2'	1:AA:1370:G:H8	1.69	0.57
29:DF:101:LEU:HD12	29:DF:102:PRO:HD2	1.86	0.57
3:CC:6:HIS:HD2	3:CC:8:ILE:H	1.51	0.57
25:BA:721:G:H1'	29:BF:74:ARG:HD3	1.87	0.57
32:BI:48:GLU:HG2	32:BI:52:ARG:HH22	1.69	0.57
4:AD:172:PRO:HB2	4:AD:187:ARG:NH2	2.20	0.57
1:AA:545:C:H5'	4:AD:72:GLU:HG2	1.87	0.57
27:BD:71:ASP:CB	27:BD:103:ARG:HH22	2.15	0.57
36:DQ:24:GLY:HA2	36:DQ:67:ARG:NH2	2.20	0.57
25:DA:754:C:H2'	25:DA:755:C:C6	2.40	0.57
13:CM:108:ARG:CZ	13:CM:114:ARG:HG2	2.34	0.57
19:AS:9:VAL:HG21	50:B4:61:ARG:HH22	1.70	0.57
25:BA:278:G:H2'	25:BA:279:G:H5''	1.87	0.57
25:DA:491:G:H2'	25:DA:492:A:C8	2.40	0.57
1:CA:1327:C:H2'	1:CA:1328:C:H6	1.70	0.57
12:CL:75:HIS:HA	12:CL:102:ARG:HH22	1.69	0.57
2:CB:137:ARG:O	2:CB:141:GLU:N	2.33	0.57
1:CA:1003:G:C6	1:CA:1004:A:C2	2.93	0.56
10:AJ:35:SER:CB	10:AJ:73:ASP:HB2	2.31	0.56
1:AA:458:C:H2'	1:AA:460:G:C8	2.40	0.56
25:DA:600:G:N3	61:DA:3736:HOH:O	2.32	0.56
1:CA:1023:G:H3'	1:CA:1024:G:C8	2.38	0.56
32:BI:72:LEU:O	32:BI:74:ASN:N	2.37	0.56
25:BA:801:C:H2'	25:BA:802:C:H6	1.69	0.56
30:DG:25:TYR:HB3	30:DG:30:GLU:HB2	1.87	0.56
32:BI:65:ALA:HB1	32:BI:136:VAL:HG11	1.87	0.56
25:DA:1364:G:OP2	47:D1:3:LYS:HG3	2.05	0.56
25:BA:1940:A:O2'	25:BA:1942:C:N4	2.38	0.56
1:CA:5:U:H5'	1:CA:6:G:C5	2.40	0.56
1:AA:1138:G:C6	1:AA:1140:C:H1'	2.39	0.56
4:AD:119:GLN:HG2	4:AD:123:HIS:CD2	2.39	0.56
4:AD:173:TRP:CE3	4:AD:174:LEU:HG	2.39	0.56
25:BA:2510:C:OP2	61:BA:4508:HOH:O	2.18	0.56
50:B4:61:ARG:HG3	50:B4:62:ARG:N	2.21	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:B0:24:LYS:O	46:B0:25:ARG:NH1	2.33	0.56
1:CA:727:G:N2	1:CA:730:G:OP2	2.36	0.56
45:DZ:130:PRO:O	45:DZ:133:ILE:HG13	2.05	0.56
25:BA:2092:G:N3	61:BA:3833:HOH:O	2.32	0.56
1:AA:161:A:H2'	1:AA:162:A:C8	2.40	0.56
9:CI:9:ARG:O	9:CI:104:ARG:HG3	2.06	0.56
10:CJ:6:ILE:O	10:CJ:71:LEU:HD12	2.04	0.56
1:CA:975:A:N1	10:CJ:48:THR:HB	2.20	0.56
1:AA:146:G:N2	1:AA:176:C:O2	2.31	0.56
25:DA:1636:C:H2'	25:DA:1637:A:C8	2.40	0.56
31:BH:56:SER:HB3	31:BH:61:HIS:ND1	2.20	0.56
25:DA:2887:U:H2'	25:DA:2888:C:C6	2.41	0.56
25:BA:2847:G:H21	37:BR:45:ARG:HH12	1.53	0.56
25:DA:1514:U:H2'	25:DA:1515:G:H8	1.70	0.56
51:D5:41:PRO:O	51:D5:44:THR:OG1	2.23	0.56
25:DA:2293:C:H42	25:DA:2339:G:H1	1.53	0.56
1:AA:1494:G:HO2'	25:BA:1934:A:HO2'	1.53	0.56
34:DO:71:ARG:NE	34:DO:105:GLU:OE2	2.36	0.56
25:DA:1271:G:OP2	61:DA:4114:HOH:O	2.18	0.56
53:B7:33:ARG:NH2	61:B7:4001:HOH:O	2.38	0.56
1:AA:605:U:H2'	1:AA:606:G:C8	2.40	0.56
25:DA:2397:G:N2	25:DA:2420:C:H1'	2.20	0.56
1:AA:1064:G:H4'	1:AA:1065:U:OP1	2.03	0.56
28:DE:52:LEU:O	28:DE:76:ARG:N	2.25	0.56
25:DA:271(E):U:H2'	25:DA:271(F):C:C6	2.40	0.56
25:BA:1830:G:O2'	27:BD:181:GLU:OE2	2.15	0.56
25:BA:2897:U:H2'	25:BA:2898:C:C6	2.40	0.56
25:BA:407:U:OP1	61:BA:4096:HOH:O	2.17	0.56
1:CA:1179:A:H4'	9:CI:103:THR:HA	1.87	0.56
1:CA:410:G:H5''	1:CA:411:A:OP1	2.05	0.56
3:AC:181:ASN:HD21	3:AC:204:LEU:HD12	1.69	0.56
19:CS:41:VAL:HG12	19:CS:43:GLU:H	1.70	0.56
25:DA:184:C:H2'	25:DA:185:U:C6	2.40	0.56
1:CA:78:G:H2'	1:CA:79:G:H5'	1.87	0.56
25:BA:2902:G:O2'	25:BA:2903:G:OP2	2.22	0.56
25:DA:819:A:OP2	25:DA:1187:G:N2	2.30	0.56
44:DY:5:MET:HE1	44:DY:32:PRO:HA	1.88	0.56
28:DE:13:ARG:HG2	39:DT:58:ASN:HD21	1.70	0.56
1:CA:920:U:H2'	1:CA:921:U:C6	2.41	0.56
10:CJ:55:LYS:HG3	10:CJ:56:HIS:CD2	2.40	0.56
25:BA:2899:C:H2'	25:BA:2900:G:O4'	2.05	0.56
25:DA:1656:C:H2'	25:DA:1657:C:H6	1.71	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
33:BN:58:ASP:OD1	33:BN:58:ASP:N	2.34	0.56
4:AD:88:VAL:O	4:AD:92:VAL:HG23	2.05	0.56
1:CA:1510:U:H2'	1:CA:1511:G:C8	2.39	0.56
2:CB:51:LEU:HD23	2:CB:201:ILE:HD12	1.87	0.56
1:CA:1179:A:C6	1:CA:1180:A:C8	2.94	0.56
1:CA:1179:A:N1	1:CA:1180:A:C8	2.74	0.56
1:CA:1493:A:H1'	25:DA:1913:A:N6	2.21	0.56
1:AA:1030:C:H3'	1:AA:1030(A):G:H4'	1.87	0.56
7:CG:107:ALA:O	7:CG:111:ARG:HG3	2.05	0.56
51:B5:16:ARG:O	51:B5:20:ARG:HG3	2.04	0.56
42:DW:78:GLU:OE1	42:DW:99:ARG:NH1	2.36	0.56
1:CA:1327:C:H2'	1:CA:1328:C:C6	2.41	0.56
45:DZ:8:TYR:HB2	45:DZ:38:TYR:CE2	2.41	0.56
25:DA:1028:A:H2'	25:DA:1029:A:C8	2.40	0.56
1:CA:509:A:C8	1:CA:509:A:H3'	2.40	0.56
25:BA:469:A:H1'	25:BA:1246:C:O4'	2.04	0.56
8:CH:51:VAL:HG12	8:CH:52:ASP:N	2.19	0.56
8:CH:51:VAL:HG21	8:CH:60:ARG:HB2	1.88	0.56
1:CA:1226:C:H4'	19:CS:80:TYR:OH	2.06	0.56
4:CD:18:LYS:NZ	4:CD:31:CYS:SG	2.77	0.56
38:DS:37:ALA:HB2	38:DS:101:LEU:HD11	1.88	0.56
1:CA:859:A:OP2	1:CA:869:G:N2	2.39	0.56
1:AA:600:C:H2'	1:AA:601:C:C6	2.41	0.56
25:DA:2336:A:H61	46:D0:43:THR:HG21	1.69	0.56
4:AD:65:ARG:HG2	4:AD:75:PHE:CD1	2.40	0.56
28:DE:163:GLU:HG2	28:DE:164:ARG:N	2.20	0.56
25:DA:539:G:H2'	25:DA:540:C:C6	2.41	0.56
43:DX:59:VAL:N	43:DX:76:ARG:O	2.34	0.56
25:DA:2590:A:OP2	27:DD:238:GLY:HA2	2.05	0.56
25:BA:2332:A:H2'	25:BA:2332:A:N3	2.20	0.56
25:BA:147:U:O4	61:BA:4548:HOH:O	2.16	0.56
1:AA:1070:U:H2'	1:AA:1071:C:H6	1.70	0.56
1:CA:1036:G:N7	1:CA:1037:C:C2	2.74	0.56
1:CA:1154:G:C8	1:CA:1155:G:C8	2.93	0.56
1:AA:1010:G:N2	1:AA:1020:U:O2'	2.39	0.56
1:AA:1197:G:OP1	61:AA:4053:HOH:O	2.17	0.56
1:AA:974:A:OP2	14:AN:41:ARG:NH1	2.39	0.56
1:AA:187:C:H2'	1:AA:188:C:H6	1.70	0.56
1:CA:826:C:H2'	1:CA:827:U:H6	1.71	0.56
25:DA:2816:C:O3'	37:DR:99:LYS:NZ	2.37	0.56
25:DA:894:C:H2'	25:DA:895:U:C6	2.41	0.56
25:DA:1755:A:OP2	39:DT:113:LYS:NZ	2.38	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BA:1296:G:N7	35:BP:18:ARG:NH2	2.54	0.56
25:DA:443:A:H5''	25:DA:444:C:OP1	2.06	0.56
25:DA:455:C:N3	25:DA:472:A:H2'	2.20	0.56
23:CX:23:C:H2'	23:CX:24:U:C6	2.40	0.56
3:CC:179:ARG:NH1	3:CC:206:GLU:OE1	2.39	0.56
25:DA:1774:C:OP1	61:DA:3938:HOH:O	2.18	0.56
25:BA:144:C:H5'	43:BX:2:LYS:HE2	1.86	0.56
25:DA:1025:G:C4	25:DA:1135:C:H1'	2.41	0.56
1:CA:1004:A:H2'	1:CA:1005:A:H5'	1.88	0.56
1:AA:1002:G:H3'	1:AA:1003:G:H8	1.71	0.56
50:D4:15:ILE:N	50:D4:31:ILE:O	2.28	0.56
1:AA:1223:C:H5''	1:AA:1224:G:C5'	2.35	0.56
52:D6:13:CYS:SG	52:D6:47:THR:HG21	2.45	0.56
30:DG:179:PRO:HB2	50:D4:42:PHE:HE1	1.70	0.56
1:CA:1422:G:H5''	34:DO:48:PRO:HB3	1.86	0.56
16:CP:6:LEU:HD23	16:CP:17:TYR:CG	2.40	0.56
25:BA:2860:A:OP2	25:BA:2876:U:H5	1.88	0.56
25:BA:843:C:H2'	25:BA:844:C:C6	2.41	0.56
25:BA:985:G:OP1	61:BA:4727:HOH:O	2.18	0.56
25:DA:330:A:HO2'	25:DA:331:A:H8	1.53	0.56
1:CA:560:U:O2'	1:CA:561:U:OP2	2.20	0.56
25:DA:887:A:H5'	25:DA:888:C:OP1	2.05	0.56
25:DA:2203:U:O4'	27:DD:151:LYS:HE2	2.06	0.56
9:CI:85:LEU:HB3	9:CI:92:TYR:CD2	2.41	0.56
1:CA:1269:A:C8	1:CA:1270:C:H1'	2.41	0.56
1:AA:134:A:H61	16:AP:25:ARG:NH1	2.04	0.56
1:AA:78:G:N2	1:AA:92:C:N3	2.54	0.56
28:DE:119:ARG:HD2	28:DE:120:TRP:CE2	2.41	0.56
25:DA:437:G:H2'	25:DA:438:G:H8	1.70	0.56
26:BB:50:G:H5''	38:BS:61:ASN:HD22	1.71	0.56
10:CJ:57:LYS:HD2	10:CJ:60:ARG:HH21	1.69	0.56
1:CA:1504:G:OP1	1:CA:1507:A:H4'	2.06	0.56
1:CA:1119:C:H2'	1:CA:1120:G:H8	1.71	0.56
1:CA:838:G:H1	1:CA:848:C:N4	2.01	0.56
25:DA:1778:U:H2'	25:DA:1784:A:N6	2.21	0.56
1:CA:1190:G:OP1	3:CC:5:ILE:N	2.37	0.56
25:DA:271(H):G:H2'	25:DA:271(I):G:H8	1.71	0.56
25:DA:443:A:H1'	25:DA:1201:C:O4'	2.06	0.56
52:B6:12:GLU:OE2	52:B6:52:VAL:HG21	2.06	0.56
1:AA:920:U:H2'	1:AA:921:U:C6	2.41	0.56
27:DD:3:VAL:HG13	27:DD:17:THR:HB	1.86	0.56
1:AA:447:G:H2'	1:AA:485:G:N2	2.21	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:AL:70:ILE:HD13	12:AL:77:LEU:HD12	1.86	0.56
25:BA:2877:G:OP2	39:BT:119:LYS:NZ	2.39	0.56
45:BZ:152:ALA:HA	45:BZ:155:LEU:HD22	1.87	0.56
25:DA:2708:G:H1'	37:DR:71:GLN:HE22	1.70	0.56
35:DP:59:LEU:O	54:D8:13:ARG:HD2	2.06	0.56
48:D2:32:LEU:HD23	48:D2:53:LEU:HB3	1.87	0.56
1:AA:269:C:H2'	1:AA:270:A:C8	2.41	0.56
25:BA:436:C:OP1	61:BA:3960:HOH:O	2.18	0.56
29:BF:101:LEU:HD12	29:BF:102:PRO:HD2	1.86	0.56
1:CA:1492:A:H2'	1:CA:1493:A:H1'	1.87	0.55
1:AA:376:G:O3'	16:AP:5:ARG:NH2	2.39	0.55
19:AS:36:ARG:HB3	19:AS:72:GLY:HA3	1.86	0.55
25:DA:2079:U:OP1	47:D1:21:ARG:NH2	2.38	0.55
3:CC:189:ALA:HB3	3:CC:196:LEU:HB2	1.88	0.55
9:CI:33:PHE:HE1	9:CI:43:ALA:HB1	1.70	0.55
20:CT:10:LEU:HD23	20:CT:12:ALA:HB2	1.87	0.55
1:CA:552:U:C2'	1:CA:553:A:H5'	2.37	0.55
55:D9:13:LYS:HD3	55:D9:28:GLU:OE2	2.06	0.55
2:CB:188:ALA:HB1	2:CB:192:SER:OG	2.05	0.55
1:AA:691:G:H2'	1:AA:692:U:C6	2.41	0.55
7:CG:146:GLU:OE2	7:CG:149:ARG:NE	2.39	0.55
25:DA:247:G:H4'	25:DA:386:G:C5	2.41	0.55
4:AD:57:ARG:NH2	5:AE:107:ARG:HD3	2.21	0.55
1:AA:342:C:C4	1:AA:343:U:H5	2.24	0.55
3:AC:36:ASP:HA	3:AC:39:ILE:HD12	1.89	0.55
23:AX:59:A:C2'	23:AX:60:U:H5'	2.36	0.55
20:AT:45:GLN:HA	20:AT:91:LEU:HB3	1.88	0.55
25:DA:1709:U:H2'	25:DA:1710:C:H6	1.71	0.55
25:DA:839:U:H2'	25:DA:840:C:H6	1.70	0.55
3:CC:140:ARG:CZ	3:CC:140:ARG:HB2	2.37	0.55
25:DA:1833:U:O2'	25:DA:1969:A:N1	2.31	0.55
37:DR:97:VAL:HG22	37:DR:114:VAL:HG22	1.87	0.55
25:BA:2879:G:H2'	25:BA:2880:C:O4'	2.07	0.55
23:CX:40:C:H2'	23:CX:41:C:H6	1.71	0.55
28:BE:59:VAL:HG21	28:BE:74:PRO:HB3	1.88	0.55
2:AB:16:HIS:HB3	2:AB:210:SER:CB	2.35	0.55
25:BA:1248:G:OP2	25:BA:1249:A:O2'	2.19	0.55
47:B1:65:SER:OG	47:B1:66:HIS:ND1	2.27	0.55
1:AA:232:G:H1'	1:AA:262:A:N1	2.22	0.55
5:CE:78:HIS:CE1	5:CE:143:ARG:H	2.23	0.55
13:AM:3:ARG:HG3	13:AM:4:ILE:H	1.71	0.55
9:AI:4:TYR:HB2	9:AI:19:LEU:HB2	1.88	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
9:AI:19:LEU:HB3	9:AI:59:PHE:HD2	1.70	0.55
7:AG:78:ARG:HH21	7:AG:156:TRP:HB3	1.70	0.55
25:BA:310:C:H2'	25:BA:311:C:H6	1.71	0.55
25:DA:1025:G:O2'	61:DA:4221:HOH:O	1.99	0.55
15:CO:39:LEU:HD13	15:CO:56:LEU:HB2	1.89	0.55
5:AE:36:ASP:OD1	5:AE:38:GLN:N	2.29	0.55
25:DA:271(Q):G:H2'	25:DA:271(R):G:H8	1.71	0.55
1:CA:937:A:H1'	1:CA:1379:G:N2	2.21	0.55
25:DA:190:A:OP2	47:D1:39:LYS:HE3	2.06	0.55
10:CJ:8:LEU:HD12	10:CJ:20:ALA:HB2	1.88	0.55
1:AA:491:G:H2'	1:AA:492:G:O4'	2.06	0.55
7:AG:113:GLU:HG2	7:AG:119:ARG:HG2	1.87	0.55
1:AA:1346:A:N1	1:AA:1374:A:H5''	2.22	0.55
6:AF:69:GLU:OE1	6:AF:69:GLU:N	2.38	0.55
33:BN:67:LEU:O	33:BN:88:GLU:HG3	2.06	0.55
25:BA:2108:U:H2'	25:BA:2109:G:C8	2.42	0.55
11:CK:18:ARG:NH2	11:CK:35:PRO:O	2.39	0.55
47:B1:51:VAL:HG11	47:B1:74:VAL:HG21	1.87	0.55
25:BA:2116:G:OP1	32:BI:22:LYS:HD2	2.06	0.55
10:CJ:30:SER:O	10:CJ:81:THR:HG23	2.07	0.55
1:AA:102:G:O2'	1:AA:151:A:N3	2.38	0.55
25:BA:868:A:O2'	25:BA:991:G:OP2	2.20	0.55
31:DH:26:VAL:HG12	31:DH:79:VAL:HG11	1.89	0.55
1:CA:457:C:H2'	1:CA:458:C:H6	1.71	0.55
25:BA:2211:U:H2'	25:BA:2212:G:H5'	1.88	0.55
1:AA:628:G:H2'	1:AA:629:G:C8	2.41	0.55
1:AA:757:U:OP1	1:AA:822:C:O2'	2.22	0.55
19:AS:9:VAL:HG21	50:B4:61:ARG:HH12	1.71	0.55
25:DA:984:A:H5''	25:DA:985:C:H5	1.70	0.55
7:CG:106:GLN:O	7:CG:110:GLN:HG3	2.05	0.55
19:CS:27:GLU:HG2	19:CS:47:HIS:NE2	2.21	0.55
25:BA:2623:U:H6	25:BA:2623:U:H5'	1.71	0.55
25:DA:956:G:H8	25:DA:956:G:H5''	1.72	0.55
1:CA:1401:G:C2	1:CA:1402:C:H1'	2.41	0.55
14:CN:26:ARG:HB3	14:CN:43:CYS:SG	2.46	0.55
1:CA:1004:A:C8	1:CA:1005:A:H4'	2.38	0.55
1:CA:1005:A:O2'	1:CA:1006:C:OP1	2.19	0.55
25:BA:1712:A:H4'	34:BO:67:LYS:HB2	1.87	0.55
38:BS:59:LYS:CE	38:BS:60:GLY:H	2.19	0.55
25:BA:1541:A:H2'	25:BA:1542:A:C8	2.42	0.55
39:DT:24:PRO:HA	39:DT:49:VAL:HG22	1.89	0.55
25:DA:1653:G:H3'	37:DR:2:ARG:HD3	1.89	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BA:1513:G:HO2'	25:BA:1593:C:HO2'	1.55	0.55
1:CA:537:G:H5''	12:CL:113:ARG:NH1	2.22	0.55
10:AJ:5:ARG:NE	10:AJ:73:ASP:OD1	2.39	0.55
1:CA:1316:G:O2'	1:CA:1318:A:N7	2.35	0.55
25:BA:139:A:C8	25:BA:1454:C:O2'	2.57	0.55
1:CA:1133:G:H1	1:CA:1141:C:N4	2.05	0.55
1:CA:418:C:H2'	1:CA:419:C:C6	2.41	0.55
1:CA:1245:A:H2'	1:CA:1246:C:O4'	2.06	0.55
25:BA:2299:A:H2	25:BA:2358:A:H62	1.53	0.55
25:BA:599:U:H2'	25:BA:600:G:C8	2.42	0.55
1:AA:1182:G:C4'	1:AA:1183:A:H5'	2.37	0.55
1:AA:382:A:C2	1:AA:383:A:N7	2.75	0.55
25:BA:1220:U:OP1	25:BA:1222:A:N6	2.40	0.55
25:BA:1223:C:H2'	25:BA:1224:C:H6	1.72	0.55
16:CP:3:LYS:HZ2	16:CP:65:GLN:HB2	1.72	0.55
16:AP:28:ARG:HG2	16:AP:29:ASP:OD1	2.07	0.55
25:BA:2348:A:H61	46:B0:43:THR:HG21	1.71	0.55
35:BP:82:GLY:HA2	35:BP:113:LYS:O	2.07	0.55
11:AK:20:TYR:CZ	11:AK:83:ILE:HD12	2.42	0.55
17:CQ:45:HIS:HA	17:CQ:69:LYS:HE3	1.87	0.55
1:AA:1110:A:OP2	61:AA:4115:HOH:O	2.18	0.55
41:DV:16:PRO:HD3	41:DV:99:ILE:HD11	1.89	0.55
25:DA:2286:A:H4'	25:DA:2287:A:O4'	2.06	0.55
25:BA:272:U:OP1	32:BI:50:ARG:NH2	2.38	0.55
1:AA:1030(B):C:H2'	1:AA:1030(C):G:H5'	1.88	0.55
1:AA:192:U:O2'	1:AA:193:C:H6	1.90	0.55
19:AS:38:SER:O	19:AS:70:LYS:HD3	2.06	0.55
25:BA:945:A:O2'	25:BA:946:A:O5'	2.17	0.55
1:CA:392:G:H2'	1:CA:393:A:C8	2.41	0.55
1:CA:1160:G:H22	1:CA:1176:A:H2	1.55	0.55
25:DA:1469:A:H2'	25:DA:1470:G:O4'	2.07	0.55
1:AA:78:G:H1	1:AA:92:C:N4	2.05	0.55
25:BA:2820:A:N6	25:BA:2900:G:O2'	2.38	0.55
5:CE:100:VAL:O	5:CE:107:ARG:NH2	2.40	0.55
6:AF:22:GLU:OE2	6:AF:82:ARG:HG2	2.07	0.55
42:DW:65:LEU:HD12	42:DW:68:ARG:HE	1.71	0.55
25:BA:676:G:OP1	54:B8:19:SER:OG	2.23	0.55
18:CR:40:LEU:HB3	18:CR:79:LEU:HD11	1.89	0.55
39:BT:16:ARG:NH1	39:BT:18:ASP:OD2	2.40	0.55
1:CA:1120:G:C6	1:CA:1121:U:C4	2.95	0.55
1:CA:1157:A:N6	1:CA:1180:A:C4	2.74	0.55
30:DG:11:TYR:O	30:DG:16:ARG:HG2	2.07	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1135:U:O2'	1:CA:1137:C:O2	2.18	0.55
1:AA:1492:A:H5''	1:AA:1493:A:OP2	2.06	0.55
46:D0:53:MET:HG3	46:D0:59:LEU:CD2	2.37	0.55
1:AA:129:U:H5'	17:AQ:3:LYS:HZ1	1.72	0.55
1:AA:1118:C:H1'	1:AA:1179:A:C4	2.41	0.55
12:AL:70:ILE:HG12	12:AL:100:ILE:HD12	1.89	0.55
25:DA:2409:G:H2'	25:DA:2410:G:O4'	2.06	0.55
25:BA:2396:G:OP2	46:B0:55:ARG:NH1	2.40	0.55
26:DB:90:A:N7	26:DB:91:C:H1'	2.21	0.55
41:BV:98:GLU:OE2	41:BV:100:ARG:NH1	2.40	0.55
25:DA:637:A:H2'	35:DP:117:GLU:OE2	2.06	0.55
1:CA:986:A:O2'	19:CS:55:LYS:O	2.24	0.55
1:CA:839:U:O2'	1:CA:840:C:OP1	2.16	0.55
25:BA:1775:C:H6	25:BA:1775:C:H5''	1.72	0.55
2:CB:52:GLU:HG2	2:CB:56:ARG:NH2	2.22	0.55
45:DZ:131:ARG:HD2	45:DZ:131:ARG:H	1.72	0.55
1:AA:66:G:O3'	1:AA:199:G:H4'	2.07	0.55
30:DG:136:ARG:HD2	30:DG:137:GLU:HG3	1.87	0.55
32:BI:37:VAL:HG12	32:BI:38:LEU:HD12	1.89	0.55
19:AS:64:GLU:HB2	50:B4:59:PHE:HE1	1.72	0.55
6:AF:22:GLU:O	6:AF:26:ILE:HG13	2.06	0.55
32:DI:117:GLU:HG3	32:DI:118:LYS:H	1.71	0.55
1:AA:932:C:H2'	1:AA:933:G:H8	1.72	0.55
25:BA:1553:A:O2'	25:BA:1554:A:O4'	2.26	0.55
25:DA:265:A:C8	25:DA:266:G:H1'	2.42	0.55
1:AA:125:U:H3	1:AA:236:G:H1	1.55	0.55
1:AA:316:G:OP2	1:AA:351:G:O2'	2.18	0.55
45:BZ:145:GLU:O	45:BZ:148:ASP:N	2.39	0.55
25:BA:1233:U:H4'	41:BV:79:VAL:HG22	1.88	0.55
4:AD:79:PHE:HE1	4:AD:204:ILE:HD13	1.71	0.55
5:AE:103:GLY:O	5:AE:106:PRO:HD2	2.06	0.55
25:DA:2600:A:C6	25:DA:2601:C:N4	2.75	0.55
25:DA:1141:U:OP2	33:DN:63:THR:OG1	2.21	0.54
1:CA:1320:C:O4'	19:CS:73:GLU:HG3	2.07	0.54
25:DA:1803:A:H4'	27:DD:259:THR:HG23	1.90	0.54
29:DF:53:THR:HG23	29:DF:55:GLY:N	2.17	0.54
1:AA:558:G:H5''	1:AA:559:A:OP2	2.07	0.54
1:AA:190:U:H2'	1:AA:191:G:H8	1.71	0.54
1:AA:1158:C:H5	1:AA:1181:G:N1	2.04	0.54
25:BA:1848:G:OP1	27:BD:88:ARG:NH2	2.40	0.54
35:BP:62:LEU:O	54:B8:13:ARG:HD3	2.07	0.54
4:AD:65:ARG:NH1	4:AD:70:ILE:O	2.40	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BA:1451:U:H2'	25:BA:1452:U:C6	2.42	0.54
31:BH:3:ARG:CG	31:BH:6:ARG:HG2	2.38	0.54
25:BA:560:C:O3'	40:BU:53:ARG:NH1	2.38	0.54
1:AA:794:A:OP2	61:AA:4035:HOH:O	2.18	0.54
25:DA:2061:G:H5''	25:DA:2503:A:C2	2.42	0.54
6:AF:68:PRO:HB2	6:AF:71:ARG:HG3	1.89	0.54
1:AA:1129:C:N4	1:AA:1143:G:N1	2.30	0.54
1:CA:1164:G:H1	1:CA:1172:C:H42	1.53	0.54
1:AA:1234:C:C2'	1:AA:1235:U:H5'	2.38	0.54
9:AI:3:GLN:OE1	9:AI:20:ARG:NH2	2.33	0.54
25:DA:1359:A:N1	25:DA:1372:U:O4	2.40	0.54
1:CA:885:G:O2'	1:CA:914:A:N1	2.39	0.54
20:AT:45:GLN:HB2	20:AT:91:LEU:HD13	1.89	0.54
25:BA:11:G:H2'	25:BA:12:U:C5'	2.38	0.54
45:BZ:151:HIS:C	45:BZ:153:SER:H	2.09	0.54
32:DI:3:VAL:HG12	32:DI:38:LEU:HA	1.88	0.54
35:DP:59:LEU:HD21	54:D8:10:ALA:HA	1.88	0.54
25:BA:287:G:N7	25:BA:448:U:H2'	2.21	0.54
25:DA:615:G:OP1	29:DF:40:GLN:NE2	2.33	0.54
44:DY:7:VAL:HG21	44:DY:72:VAL:HG12	1.89	0.54
25:BA:934:A:H4'	25:BA:935:C:C5	2.42	0.54
29:DF:11:VAL:HG22	29:DF:125:LEU:HB2	1.89	0.54
25:DA:272:G:H4'	25:DA:272(A):U:C5'	2.37	0.54
45:DZ:5:LEU:HG	45:DZ:47:VAL:HG21	1.89	0.54
4:CD:43:HIS:HA	4:CD:46:LYS:HG3	1.88	0.54
1:CA:202:U:H3'	1:CA:203:U:C6	2.42	0.54
25:DA:143:G:H2'	25:DA:143(A):C:C6	2.42	0.54
29:DF:167:ALA:HB1	29:DF:173:VAL:HG11	1.88	0.54
1:AA:1111:A:N1	3:AC:177:THR:OG1	2.34	0.54
25:DA:30:G:H2'	25:DA:31:C:C6	2.43	0.54
25:BA:2507:G:O6	61:BA:4440:HOH:O	2.19	0.54
25:DA:1766:U:H2'	25:DA:1767:C:C6	2.42	0.54
1:CA:41:G:H2'	1:CA:42:G:C8	2.42	0.54
25:BA:2314:G:N2	25:BA:2327:G:C4	2.75	0.54
6:AF:35:ALA:HA	6:AF:67:MET:HB3	1.89	0.54
6:AF:19:LEU:HD11	6:AF:59:TYR:CE2	2.42	0.54
16:AP:34:GLU:OE2	16:AP:55:ARG:NH2	2.30	0.54
27:DD:182:LEU:HB2	27:DD:272:ALA:HB3	1.89	0.54
3:AC:150:LYS:HD3	3:AC:152:ILE:HD11	1.89	0.54
41:DV:40:LEU:HB2	41:DV:46:VAL:HG13	1.89	0.54
36:DQ:125:LEU:O	61:DQ:3102:HOH:O	2.18	0.54
1:AA:1256:A:N6	1:AA:1278:U:O4'	2.37	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AC:58:GLU:O	3:AC:59:ARG:HG3	2.07	0.54
1:CA:376:G:H5''	16:CP:5:ARG:HB2	1.88	0.54
50:D4:15:ILE:HB	50:D4:32:TYR:HD1	1.69	0.54
25:DA:848:G:H2'	25:DA:849:A:C8	2.42	0.54
1:CA:616:G:N2	1:CA:624:C:O2	2.38	0.54
1:AA:601:C:H2'	1:AA:602:A:C8	2.43	0.54
1:AA:1239:A:H62	1:AA:1299:A:H62	1.53	0.54
29:BF:164:ARG:O	29:BF:168:ARG:HB2	2.07	0.54
25:DA:2803:C:H2'	25:DA:2804:C:H6	1.73	0.54
25:DA:1270:C:H5''	25:DA:1271:G:O5'	2.07	0.54
1:CA:1111:A:H2'	1:CA:1112:C:C6	2.42	0.54
45:BZ:19:ARG:NH1	45:BZ:84:GLU:O	2.40	0.54
11:CK:20:TYR:CZ	11:CK:83:ILE:HD12	2.42	0.54
26:DB:78:A:N6	26:DB:99:G:O2'	2.40	0.54
4:CD:112:VAL:HG22	4:CD:116:GLN:OE1	2.08	0.54
1:AA:1095:U:H5''	1:AA:1109:C:O2	2.07	0.54
25:DA:2074:U:H2'	25:DA:2075:U:C6	2.42	0.54
1:CA:344:A:H4'	1:CA:345:C:OP2	2.07	0.54
17:CQ:41:LYS:HZ2	17:CQ:92:ARG:HH21	1.55	0.54
1:CA:1373:G:H5''	7:CG:36:LYS:HB2	1.88	0.54
9:AI:7:THR:O	9:AI:83:ARG:NH1	2.41	0.54
27:BD:145:VAL:HG12	27:BD:146:GLU:O	2.08	0.54
16:CP:74:LEU:O	16:CP:79:VAL:HG23	2.07	0.54
41:BV:21:ARG:HG2	41:BV:91:TYR:CD1	2.43	0.54
2:AB:127:ILE:HD11	2:AB:130:ARG:HD3	1.90	0.54
25:BA:1312:G:O5'	42:BW:15:ARG:NH2	2.41	0.54
25:DA:857:C:H4'	46:D0:23:VAL:HG21	1.90	0.54
41:DV:31:ALA:O	41:DV:61:VAL:HG12	2.07	0.54
16:AP:52:ASP:OD1	16:AP:54:GLU:HG3	2.06	0.54
1:AA:527:G:O2'	1:AA:535:A:N1	2.31	0.54
9:CI:79:LEU:HD22	9:CI:104:ARG:HB2	1.90	0.54
1:CA:848:C:H2'	1:CA:849:C:O4'	2.08	0.54
39:BT:53:ARG:NH1	39:BT:60:THR:OG1	2.41	0.54
25:DA:1395:A:OP1	61:DA:4394:HOH:O	2.18	0.54
1:AA:1183:A:HO2'	1:AA:1184:G:P	2.29	0.54
25:BA:2225:U:O2'	25:BA:2226:C:H5'	2.08	0.54
32:BI:93:THR:OG1	32:BI:96:ASP:OD1	2.18	0.54
25:DA:1740:G:H2'	25:DA:1741:A:C8	2.42	0.54
25:BA:574:G:O2'	25:BA:1265:A:N3	2.34	0.54
2:CB:144:ARG:NH1	2:CB:148:TYR:OH	2.40	0.54
1:AA:358:U:H2'	1:AA:359:U:H6	1.72	0.54
7:CG:69:VAL:HG22	7:CG:135:VAL:HG22	1.90	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:660:G:H5'	29:DF:99:TYR:CE2	2.42	0.54
25:DA:250:G:H2'	25:DA:251:A:C8	2.43	0.54
9:AI:8:GLY:HA3	9:AI:76:ALA:O	2.07	0.54
1:CA:189(K):U:H2'	1:CA:189(L):G:C8	2.43	0.54
6:AF:6:VAL:HG22	6:AF:90:VAL:HG22	1.90	0.54
1:AA:1251:A:H2'	1:AA:1252:A:C8	2.42	0.54
15:CO:24:SER:OG	15:CO:25:THR:N	2.41	0.54
25:BA:1157:A:N3	25:BA:1158:G:H1'	2.23	0.54
1:CA:1025:U:H1'	1:CA:1026:G:C8	2.43	0.54
1:AA:96:U:H2'	1:AA:97:G:C8	2.42	0.54
2:CB:178:ARG:HH22	8:CH:68:ARG:NH1	2.04	0.54
25:DA:1268:A:C2	25:DA:2013:A:C4	2.95	0.54
25:DA:2037:G:O2'	25:DA:2038:G:H5'	2.07	0.54
4:CD:33:MET:HB2	57:CD:501:SF4:S3	2.48	0.54
3:CC:29:TYR:HE1	3:CC:33:LEU:HD22	1.71	0.54
32:BI:72:LEU:HA	32:BI:75:LEU:HD11	1.90	0.54
20:AT:90:GLN:O	20:AT:93:GLU:HB3	2.08	0.54
25:DA:2293:C:OP1	25:DA:2377:A:N6	2.41	0.54
25:DA:816:C:O2'	25:DA:932:G:O6	2.25	0.54
2:AB:20:GLU:O	2:AB:40:HIS:HB2	2.08	0.54
17:CQ:56:VAL:O	17:CQ:77:VAL:HB	2.08	0.54
25:DA:645:C:OP2	25:DA:645:C:H3'	2.08	0.54
1:AA:1086:U:H3	1:AA:1099:G:H22	1.56	0.54
1:CA:1362:C:H2'	1:CA:1363:C:H5''	1.88	0.54
9:AI:48:GLU:OE2	9:AI:51:ARG:HD2	2.08	0.54
1:CA:564:C:O2'	8:CH:91:ARG:NH2	2.40	0.54
1:AA:473:G:C2	1:AA:474:G:C5	2.96	0.54
26:DB:33:G:C2'	26:DB:34:U:H5'	2.37	0.54
25:DA:411:G:C5	35:DP:72:PRO:HB3	2.43	0.54
1:CA:1220:G:O3'	19:CS:36:ARG:HD3	2.08	0.54
25:DA:873:G:N2	25:DA:905:U:C2	2.76	0.54
25:DA:1359:A:C2	25:DA:1372:U:O4	2.61	0.54
1:CA:758:G:H5''	1:CA:758:G:H8	1.72	0.54
37:DR:103:ARG:NH1	37:DR:110:PRO:HD3	2.23	0.54
25:DA:585:G:H2'	25:DA:1251:C:H42	1.73	0.54
1:CA:276:G:H2'	1:CA:277:C:H5'	1.89	0.54
25:DA:2099:U:H5'	25:DA:2100:G:OP2	2.08	0.54
11:CK:48:ILE:HD11	11:CK:64:ALA:HA	1.89	0.54
25:BA:508:A:H5''	25:BA:509:A:OP1	2.08	0.54
25:BA:2080:A:OP1	61:BA:4000:HOH:O	2.18	0.54
25:DA:656:G:H2'	25:DA:657:U:O4'	2.07	0.54
29:BF:103:LYS:HA	29:BF:106:ARG:HG3	1.90	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:CB:163:PHE:HA	2:CB:185:ILE:HG12	1.89	0.54
3:AC:157:ILE:HD12	3:AC:164:ARG:HB3	1.90	0.54
25:DA:1514:U:H2'	25:DA:1515:G:C8	2.43	0.54
54:B8:33:ASN:HA	54:B8:36:LYS:HD2	1.90	0.54
25:DA:2218:U:N3	47:D1:55:GLY:O	2.41	0.54
1:CA:199:G:O2'	1:CA:200:G:H5'	2.07	0.54
43:BX:12:VAL:HG22	43:BX:29:TRP:CE2	2.43	0.54
28:DE:101:ARG:NH2	28:DE:171:GLU:HB2	2.23	0.54
1:CA:791:G:C6	1:CA:792:A:N7	2.76	0.54
2:CB:7:VAL:HG12	2:CB:8:LYS:HG2	1.90	0.54
10:AJ:5:ARG:O	10:AJ:98:ILE:HA	2.08	0.54
1:CA:1133:G:H1	1:CA:1141:C:H42	1.56	0.54
39:BT:95:ARG:HG2	39:BT:95:ARG:NH1	2.22	0.54
1:CA:939:G:H1	1:CA:1344:C:N4	2.04	0.54
1:CA:769:G:H4'	1:CA:1513:A:H4'	1.90	0.54
25:BA:493:G:OP1	53:B7:33:ARG:NH1	2.41	0.54
25:BA:715:G:H5'	25:BA:716:G:OP2	2.07	0.54
10:CJ:11:PHE:CE1	10:CJ:67:THR:HG22	2.42	0.54
13:CM:80:ARG:HH22	19:CS:69:HIS:CE1	2.26	0.54
38:BS:34:HIS:ND1	38:BS:53:SER:OG	2.37	0.54
6:CF:81:ILE:HD11	27:DD:125:ILE:HB	1.90	0.54
25:DA:1351:C:OP2	61:DA:4267:HOH:O	2.18	0.54
25:BA:555:G:O4'	25:BA:555:G:N3	2.39	0.54
37:BR:29:LEU:HD12	37:BR:116:LEU:HD11	1.89	0.54
23:AX:23:C:H2'	23:AX:24:U:C6	2.43	0.54
25:BA:821:A:H2'	25:BA:821:A:N3	2.22	0.54
1:AA:76:C:H5''	1:AA:76:C:H6	1.73	0.54
1:AA:345:C:H4'	1:AA:346:G:C4	2.43	0.53
25:DA:2299:G:N1	25:DA:2318:G:C8	2.76	0.53
1:CA:1170:A:O2'	1:CA:1171:G:O4'	2.25	0.53
1:CA:1014:A:H4'	19:CS:14:HIS:CE1	2.43	0.53
8:AH:120:THR:H	8:AH:123:GLU:HB2	1.72	0.53
11:AK:99:GLN:HG3	11:AK:105:VAL:HG11	1.90	0.53
25:BA:2075:G:OP1	28:BE:144:ARG:HG2	2.08	0.53
29:DF:21:ALA:HB3	29:DF:22:ALA:HA	1.89	0.53
1:CA:254:G:OP1	17:CQ:66:SER:OG	2.26	0.53
1:AA:598:U:H2'	1:AA:599:C:H6	1.73	0.53
38:BS:6:ALA:O	38:BS:10:ARG:HB2	2.08	0.53
1:AA:630:G:H2'	1:AA:631:G:H8	1.72	0.53
4:AD:89:THR:HG22	4:AD:204:ILE:HD12	1.90	0.53
31:DH:56:SER:OG	31:DH:57:ASP:N	2.41	0.53
1:CA:101:A:C2'	1:CA:102:G:H5'	2.37	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:1283:G:N2	25:DA:1285:G:H3'	2.24	0.53
8:AH:13:ILE:O	8:AH:17:THR:HG23	2.08	0.53
32:BI:77:LEU:HB3	32:BI:142:VAL:HG12	1.90	0.53
15:CO:26:GLU:HB3	15:CO:81:LEU:HD13	1.90	0.53
1:CA:999:C:N4	1:CA:1042:G:C2	2.76	0.53
1:AA:346:G:OP1	39:BT:41:ARG:NH1	2.41	0.53
39:BT:60:THR:HG22	39:BT:77:PRO:HA	1.90	0.53
30:DG:17:PRO:HA	30:DG:20:ILE:HD12	1.89	0.53
1:CA:922:G:N3	1:CA:1398:A:H2	2.06	0.53
5:CE:122:GLU:O	5:CE:126:ARG:NH1	2.42	0.53
38:BS:3:ARG:HE	38:BS:4:LEU:N	2.07	0.53
27:BD:206:LEU:HD22	27:BD:211:ARG:HG2	1.89	0.53
25:BA:1218:G:O2'	25:BA:1219:A:O5'	2.25	0.53
1:AA:189:G:H2'	1:AA:189(A):C:O4'	2.09	0.53
45:DZ:108:PRO:HB2	45:DZ:111:VAL:HG23	1.89	0.53
25:DA:856:C:H5''	61:DA:3739:HOH:O	2.08	0.53
25:DA:867:C:H2'	25:DA:868:U:C6	2.43	0.53
25:DA:2293:C:H5'	38:DS:89:ARG:NH2	2.23	0.53
1:CA:605:U:O2'	1:CA:606:G:H5'	2.07	0.53
1:CA:944:G:N1	1:CA:1338:G:OP2	2.39	0.53
12:CL:80:HIS:HD1	24:CW:6:2R1:CG2	2.20	0.53
25:BA:2759:U:OP2	61:BA:4008:HOH:O	2.18	0.53
31:BH:113:VAL:HG11	31:BH:151:ILE:HD13	1.90	0.53
25:DA:345:A:H1'	25:DA:346:A:N7	2.23	0.53
1:CA:500:G:N2	1:CA:546:G:H1'	2.23	0.53
3:CC:15:THR:HG21	3:CC:181:ASN:HA	1.90	0.53
36:BQ:84:GLY:O	36:BQ:85:LYS:HB2	2.07	0.53
52:B6:10:LEU:HD23	52:B6:22:ALA:HB2	1.90	0.53
25:BA:1698:G:OP1	37:BR:40:LYS:HE3	2.07	0.53
25:BA:1864:U:O2'	25:BA:1991:A:N1	2.32	0.53
5:CE:9:LYS:HB2	5:CE:112:LEU:HD11	1.89	0.53
1:CA:1120:G:O6	1:CA:1154:G:N2	2.41	0.53
25:BA:1577:C:H1'	25:BA:1578:C:OP1	2.08	0.53
1:CA:1375:A:O2'	7:CG:29:LYS:NZ	2.39	0.53
1:AA:147:G:C6	1:AA:148:G:N7	2.76	0.53
1:AA:509:A:H5'	4:AD:54:TYR:HD2	1.72	0.53
25:DA:1371:G:H2'	25:DA:1372:U:H5	1.73	0.53
25:BA:346:A:OP2	29:BF:169:ASN:HB2	2.08	0.53
26:DB:90:A:C5	26:DB:91:C:H1'	2.44	0.53
1:CA:520:A:N1	1:CA:536:C:H1'	2.23	0.53
25:DA:747:U:O2	25:DA:2014:A:H1'	2.08	0.53
25:BA:61:C:H5''	25:BA:62:U:OP2	2.08	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:191:A:N1	61:DA:4123:HOH:O	2.34	0.53
6:AF:8:ILE:HD11	6:AF:79:LEU:HD13	1.89	0.53
13:CM:14:ARG:CZ	13:CM:42:ALA:HA	2.38	0.53
3:AC:121:ALA:O	3:AC:125:GLU:HG3	2.08	0.53
36:DQ:56:ARG:HG3	36:DQ:56:ARG:HH11	1.73	0.53
3:CC:106:VAL:HG11	3:CC:115:LEU:HD21	1.90	0.53
25:DA:1495:A:H2'	25:DA:1496:A:C8	2.43	0.53
3:AC:153:VAL:HG22	3:AC:198:VAL:HG22	1.91	0.53
61:BA:3851:HOH:O	33:BN:73:THR:HG21	2.09	0.53
25:BA:1067:A:H2'	25:BA:1069:U:H5'	1.90	0.53
1:AA:1005:A:O2'	1:AA:1037:C:O2'	2.11	0.53
25:DA:1313:U:OP1	61:DA:3983:HOH:O	2.18	0.53
1:CA:1346:A:H5''	9:CI:120:ARG:HH12	1.73	0.53
25:BA:174:U:H4'	25:BA:207:A:H4'	1.91	0.53
1:CA:444:C:H2'	1:CA:445:G:C8	2.41	0.53
1:CA:445:G:H2'	1:CA:446:G:C8	2.43	0.53
1:AA:6:G:O2'	1:AA:7:G:H5'	2.08	0.53
31:BH:3:ARG:HG2	31:BH:6:ARG:HG2	1.89	0.53
27:BD:72:LYS:HB3	27:BD:75:ILE:HD12	1.90	0.53
1:CA:429:U:H1'	1:CA:430:A:H5''	1.91	0.53
1:CA:430:A:H2'	1:CA:431:A:O4'	2.08	0.53
1:CA:1435:G:H2'	1:CA:1436:U:C6	2.43	0.53
7:AG:146:GLU:O	7:AG:149:ARG:HB2	2.08	0.53
25:DA:1805:U:O2	27:DD:50:THR:HB	2.08	0.53
2:CB:24:TRP:CZ3	2:CB:26:PRO:HA	2.44	0.53
2:CB:28:PHE:CD1	2:CB:31:TYR:HB2	2.44	0.53
50:B4:15:ILE:HD12	50:B4:21:VAL:HG22	1.91	0.53
50:B4:56:VAL:HB	50:B4:60:GLN:HG3	1.90	0.53
26:BB:43:C:H5''	50:B4:1:MET:HG2	1.91	0.53
1:CA:419:C:OP1	1:CA:513:C:O2'	2.25	0.53
1:CA:542:G:P	4:CD:10:ARG:HH22	2.32	0.53
1:AA:174:C:H2'	1:AA:175:C:C6	2.44	0.53
8:AH:119:LEU:HB3	8:AH:123:GLU:HB3	1.90	0.53
1:CA:1343:G:H2'	1:CA:1344:C:C6	2.43	0.53
3:AC:8:ILE:HG23	3:AC:16:ARG:HG2	1.91	0.53
1:CA:441:A:H3'	1:CA:442:C:C6	2.44	0.53
1:AA:973:G:OP1	10:AJ:57:LYS:NZ	2.34	0.53
26:DB:41:U:H5	30:DG:70:VAL:H	1.57	0.53
25:BA:2255:U:H2'	25:BA:2256:U:C6	2.44	0.53
38:DS:84:GLN:H	38:DS:111:GLU:HB2	1.73	0.53
1:AA:448:A:H2'	1:AA:449:C:C6	2.43	0.53
47:D1:65:SER:OG	47:D1:66:HIS:ND1	2.30	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1162:C:H2'	1:CA:1163:C:H5''	1.91	0.53
1:CA:1391:U:H2'	1:CA:1392:G:C8	2.44	0.53
1:CA:543:C:O2'	1:CA:544:G:H5'	2.08	0.53
1:AA:235:C:H5'	17:AQ:70:ARG:HG2	1.90	0.53
5:AE:20:GLN:NE2	5:AE:21:ALA:O	2.42	0.53
25:DA:997:G:O2'	25:DA:998:C:H5'	2.09	0.53
1:AA:1504:G:OP1	1:AA:1507:A:H4'	2.08	0.53
38:DS:15:ARG:O	38:DS:19:LYS:HG2	2.08	0.53
25:DA:2772:C:H2'	25:DA:2773:C:C6	2.44	0.53
6:CF:9:VAL:HB	6:CF:87:ARG:HB2	1.91	0.53
34:BO:120:GLU:OE1	39:BT:67:SER:OG	2.24	0.53
28:DE:116:VAL:HG13	28:DE:122:PHE:HB2	1.91	0.53
3:CC:157:ILE:HD12	3:CC:164:ARG:HB3	1.91	0.53
25:DA:639:U:H2'	25:DA:640:C:C6	2.43	0.53
25:BA:851:A:H5''	25:BA:852:G:OP1	2.09	0.53
1:CA:129(A):G:C6	1:CA:189(E):U:H4'	2.44	0.53
31:DH:69:ARG:HG3	31:DH:70:THR:N	2.24	0.53
32:BI:130:TYR:HB3	32:BI:138:ILE:HB	1.91	0.53
25:BA:595:A:OP2	41:BV:78:LYS:NZ	2.40	0.53
25:BA:236:G:H4'	25:BA:413:G:C5	2.43	0.53
1:AA:352:C:H4'	1:AA:354:G:OP1	2.08	0.53
1:AA:1243:C:H2'	1:AA:1244:C:C6	2.43	0.53
25:DA:1247:A:OP1	29:DF:95:ARG:NH2	2.39	0.53
1:CA:1320:C:H5'	19:CS:70:LYS:HG3	1.90	0.53
1:CA:1072:G:H2'	1:CA:1073:U:C6	2.44	0.53
25:DA:154:G:O6	25:DA:172:C:N4	2.42	0.53
1:CA:138:G:H5'	1:CA:138:G:C8	2.36	0.53
4:AD:116:GLN:NE2	4:AD:157:LEU:HD21	2.23	0.53
25:BA:2053:A:C6	25:BA:2510:C:H1'	2.44	0.53
30:BG:47:LYS:HG3	30:BG:48:GLU:H	1.74	0.53
25:BA:1223:C:H2'	25:BA:1224:C:C6	2.44	0.53
11:CK:58:PRO:HG3	11:CK:89:ALA:O	2.08	0.53
17:AQ:52:LYS:HG3	17:AQ:53:LEU:N	2.22	0.53
25:DA:867:C:H2'	25:DA:868:U:H6	1.74	0.53
25:DA:266:G:N2	25:DA:427:U:H1'	2.24	0.53
25:BA:1451:U:H2'	25:BA:1452:U:H6	1.73	0.53
1:AA:1243:C:H2'	1:AA:1244:C:H6	1.74	0.53
25:DA:1237:A:OP1	61:DA:4360:HOH:O	2.19	0.53
25:BA:63:A:O3'	43:BX:71:GLY:HA3	2.09	0.53
29:DF:195:ASP:OD1	29:DF:196:LEU:N	2.42	0.53
25:DA:220:G:O2'	25:DA:233:A:N3	2.37	0.53
10:AJ:47:PHE:CZ	14:AN:37:PHE:HE1	2.26	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:AE:41:VAL:O	5:AE:67:VAL:HG12	2.08	0.53
1:AA:1376:U:H2'	1:AA:1377:A:C8	2.43	0.53
1:AA:1292:U:OP2	7:AG:41:ARG:NH2	2.34	0.53
1:CA:1151:A:H5''	10:CJ:41:PRO:HA	1.90	0.53
25:DA:1798:U:H5'	27:DD:259:THR:CG2	2.33	0.53
14:CN:24:CYS:SG	14:CN:40:CYS:N	2.76	0.53
25:DA:773:U:O2'	27:DD:48:ARG:HD3	2.09	0.53
25:BA:2442:A:OP2	61:BA:4632:HOH:O	2.19	0.53
27:BD:132:PRO:HD3	27:BD:190:TYR:CZ	2.44	0.53
30:BG:16:ARG:CZ	30:BG:31:VAL:HG11	2.39	0.53
25:BA:1628:G:H5''	25:BA:1628:G:H8	1.73	0.53
25:DA:236:C:H2'	25:DA:237:C:C6	2.43	0.53
25:BA:211:A:H5''	25:BA:448:U:OP1	2.09	0.53
25:BA:644:G:O6	29:BF:103:LYS:HE3	2.08	0.53
25:DA:2228:G:C6	25:DA:2229:C:C4	2.97	0.53
1:CA:977:A:N3	1:CA:977:A:H2'	2.22	0.53
27:DD:72:LYS:HB3	27:DD:75:ILE:HD12	1.90	0.53
25:DA:2823:A:OP1	28:DE:159:HIS:NE2	2.36	0.53
25:DA:272(D):G:O6	61:DA:4045:HOH:O	2.17	0.53
25:DA:646:A:H2'	25:DA:647:G:O4'	2.08	0.53
3:AC:62:ASP:HA	3:AC:97:LYS:HD3	1.91	0.53
9:AI:64:THR:HG23	9:AI:66:ARG:HD2	1.90	0.53
1:CA:619:U:C4	4:CD:135:LEU:HD11	2.44	0.53
26:DB:19:G:H2'	26:DB:20:C:O4'	2.09	0.53
25:DA:62:C:N3	25:DA:93:G:N2	2.45	0.53
39:DT:16:ARG:HD2	39:DT:18:ASP:OD1	2.09	0.53
1:AA:266:G:O3'	17:AQ:67:LYS:HB2	2.09	0.53
25:DA:962:G:OP1	61:DA:4175:HOH:O	2.19	0.53
45:BZ:111:VAL:HG12	45:BZ:112:ARG:H	1.74	0.53
1:CA:278:G:OP2	17:CQ:41:LYS:NZ	2.37	0.53
25:BA:1087:C:H42	25:BA:1160:G:H1	1.55	0.53
1:AA:959:A:HO2'	1:AA:984:C:HO2'	1.55	0.53
3:CC:11:ARG:HB3	3:CC:15:THR:HB	1.90	0.53
3:AC:121:ALA:HB1	3:AC:189:ALA:HB2	1.90	0.53
31:DH:24:VAL:HG13	31:DH:37:VAL:HG21	1.90	0.53
1:AA:837:G:H1	1:AA:849:C:H42	1.57	0.53
11:CK:19:ALA:HA	11:CK:32:ILE:HD13	1.91	0.53
55:D9:10:ILE:HD12	55:D9:32:HIS:HA	1.91	0.53
50:B4:24:THR:OG1	50:B4:25:TYR:N	2.42	0.53
1:CA:1205:U:O2'	3:CC:195:VAL:HG23	2.09	0.53
1:AA:159:G:N2	1:AA:161:A:H3'	2.22	0.53
25:BA:1815:A:OP1	61:BA:4185:HOH:O	2.19	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:446:G:H1	1:AA:488:C:H42	1.56	0.53
43:BX:92:LEU:C	43:BX:94:GLY:H	2.13	0.53
25:DA:297:C:H2'	25:DA:298:G:O4'	2.09	0.53
45:BZ:30:ASN:ND2	45:BZ:90:VAL:HB	2.24	0.53
35:DP:47:ASP:OD2	35:DP:50:ARG:NH2	2.41	0.53
1:AA:627:G:H2'	1:AA:628:G:C8	2.44	0.53
1:AA:364:A:H2'	1:AA:365:U:C6	2.44	0.53
1:AA:1258:G:O2'	1:AA:1259:C:H5'	2.09	0.53
25:BA:533:G:N2	42:BW:80:PRO:HG2	2.24	0.53
4:CD:150:GLU:OE2	4:CD:151:LYS:N	2.42	0.53
25:DA:588:U:H2'	25:DA:589:C:C6	2.44	0.53
35:DP:101:VAL:HA	35:DP:106:LEU:O	2.09	0.53
5:AE:33:VAL:HG21	5:AE:109:ILE:HA	1.90	0.53
25:BA:1833:A:N1	25:BA:1853:G:H1'	2.24	0.53
1:AA:138:G:H8	1:AA:138:G:H5'	1.74	0.53
25:DA:463:G:O6	61:DA:3740:HOH:O	2.14	0.53
25:BA:771:U:H2'	25:BA:772:G:O4'	2.09	0.53
25:DA:2303:G:O2'	30:DG:132:ASN:HB2	2.09	0.53
1:CA:964:A:N3	1:CA:969:A:O2'	2.30	0.53
45:BZ:150:LEU:HG	45:BZ:154:ASP:OD1	2.08	0.53
12:AL:38:THR:HG22	24:AW:3:004:HD1	1.90	0.53
1:CA:1392:G:C2'	1:CA:1393:U:H5'	2.39	0.52
43:DX:11:PRO:HG2	43:DX:13:LEU:HD21	1.90	0.52
1:CA:598:U:H2'	1:CA:599:C:C6	2.44	0.52
30:DG:117:PHE:CE1	30:DG:119:GLY:HA2	2.44	0.52
9:CI:116:LYS:HD2	9:CI:122:ALA:HA	1.91	0.52
35:DP:39:LYS:HB2	35:DP:45:LEU:HG	1.91	0.52
45:BZ:109:ALA:HB3	45:BZ:145:GLU:HG3	1.92	0.52
41:DV:30:GLY:H	41:DV:61:VAL:HG13	1.74	0.52
20:AT:44:ALA:HB2	20:AT:52:ALA:HB1	1.89	0.52
25:BA:1506:G:H5''	25:BA:1507:A:OP2	2.08	0.52
1:AA:414:A:H2'	1:AA:415:A:O4'	2.09	0.52
12:CL:57:LYS:NZ	12:CL:65:GLU:OE2	2.21	0.52
1:CA:73:G:C6	1:CA:97:G:C6	2.97	0.52
25:DA:770:G:OP2	61:DA:4150:HOH:O	2.19	0.52
1:AA:1297:C:O2'	7:AG:114:ARG:NH2	2.43	0.52
1:CA:1272:G:H2'	1:CA:1273:G:O4'	2.09	0.52
1:CA:1256:A:N6	1:CA:1278:U:H1'	2.24	0.52
1:CA:1014:A:H2'	1:CA:1015:A:C8	2.45	0.52
28:DE:55:ASN:O	28:DE:58:ARG:HG2	2.09	0.52
1:AA:985:C:H2'	1:AA:986:A:H8	1.74	0.52
30:DG:97:ASP:O	30:DG:101:ILE:HG13	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
29:DF:20:LEU:HD22	29:DF:21:ALA:H	1.74	0.52
1:CA:433:C:H2'	1:CA:434:U:C6	2.44	0.52
25:BA:2044:U:O2'	25:BA:2629:C:H5'	2.09	0.52
1:AA:1376:U:H2'	1:AA:1377:A:H8	1.74	0.52
1:CA:97:G:O2'	1:CA:98:G:H8	1.92	0.52
25:DA:958:U:OP2	36:DQ:14:ARG:NH1	2.41	0.52
1:CA:1254:C:O4'	1:CA:1356:G:H5''	2.09	0.52
29:DF:157:VAL:HB	29:DF:194:MET:HG2	1.91	0.52
34:DO:7:TYR:CZ	34:DO:44:LYS:HG3	2.45	0.52
1:AA:560:U:O2'	1:AA:561:U:OP2	2.20	0.52
25:DA:1328:G:H2'	25:DA:1330:C:C5	2.43	0.52
3:AC:33:LEU:O	3:AC:37:GLN:HG2	2.09	0.52
8:CH:112:LEU:HA	8:CH:134:ILE:HG12	1.91	0.52
25:DA:362:U:O2'	25:DA:363:G:H5'	2.09	0.52
1:AA:404:U:H2'	1:AA:405:U:C6	2.45	0.52
36:DQ:108:GLY:HA3	45:DZ:116:VAL:HG13	1.91	0.52
2:CB:100:GLY:O	2:CB:104:ASN:N	2.39	0.52
2:AB:19:HIS:HE1	2:AB:189:ASP:CB	2.22	0.52
28:BE:47:VAL:HG12	28:BE:49:LEU:HD13	1.91	0.52
25:BA:240:A:C5	25:BA:241:G:H1'	2.44	0.52
8:CH:68:ARG:NH1	8:CH:74:PRO:HB3	2.24	0.52
33:DN:30:ILE:HG22	33:DN:34:LEU:HD22	1.91	0.52
1:AA:1530:G:H4'	1:AA:1530:G:OP1	2.09	0.52
25:DA:2821:A:H2'	25:DA:2822:G:H8	1.75	0.52
1:CA:8:A:N6	4:CD:209:ARG:HB2	2.23	0.52
1:AA:650:G:C2'	1:AA:651:C:H5'	2.40	0.52
25:DA:234:C:H2'	25:DA:235:U:C6	2.44	0.52
4:CD:64:LEU:HD22	4:CD:198:VAL:HG11	1.91	0.52
25:DA:1190:G:O2'	25:DA:1191:G:H5'	2.10	0.52
12:AL:38:THR:O	12:AL:79:GLU:HG3	2.09	0.52
25:BA:265:U:H2'	25:BA:266:C:C6	2.44	0.52
30:BG:67:LYS:H	50:B4:6:HIS:CE1	2.27	0.52
37:BR:44:LEU:HD22	37:BR:48:VAL:HG23	1.90	0.52
25:BA:910:A:H2'	25:BA:911:G:H8	1.73	0.52
25:BA:2673:G:H2'	25:BA:2674:A:C8	2.43	0.52
31:BH:72:ILE:O	31:BH:76:VAL:HG23	2.09	0.52
31:DH:86:GLU:CD	31:DH:130:ARG:HD3	2.29	0.52
25:DA:918:A:H5''	26:DB:98:G:O2'	2.09	0.52
4:AD:128:VAL:HG12	4:AD:129:ASN:HD22	1.72	0.52
1:AA:1270:C:H2'	1:AA:1271:G:H5'	1.91	0.52
10:AJ:27:ALA:HA	10:AJ:81:THR:CG2	2.39	0.52
2:CB:84:GLU:OE1	2:CB:216:SER:HA	2.10	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BA:572:A:O2'	25:BA:573:G:OP1	2.20	0.52
49:D3:8:LEU:O	49:D3:32:GLN:N	2.34	0.52
2:AB:231:GLU:HB3	2:AB:232:PRO:HD3	1.91	0.52
50:B4:62:ARG:C	50:B4:64:GLY:HA2	2.30	0.52
28:DE:101:ARG:CZ	28:DE:171:GLU:HB2	2.39	0.52
1:AA:560:U:HO2'	1:AA:561:U:P	2.29	0.52
25:BA:2474:U:H1'	25:BA:2503:U:O4	2.10	0.52
35:DP:27:HIS:O	35:DP:31:ALA:HA	2.10	0.52
31:BH:11:VAL:HG21	31:BH:50:VAL:HG23	1.90	0.52
1:CA:174:C:H2'	1:CA:175:C:H6	1.75	0.52
8:AH:112:LEU:HB3	8:AH:133:LEU:HA	1.91	0.52
42:DW:86:LEU:HD22	42:DW:96:ILE:HD11	1.91	0.52
1:AA:586:C:O2'	1:AA:878:G:H4'	2.10	0.52
12:CL:7:ILE:O	12:CL:11:VAL:HG23	2.09	0.52
10:CJ:64:GLU:OE2	10:CJ:66:ARG:NH1	2.42	0.52
2:CB:73:THR:HB	2:CB:95:GLN:O	2.10	0.52
1:CA:130:A:H5'	17:CQ:63:ARG:HE	1.74	0.52
2:CB:127:ILE:O	2:CB:128:GLU:HB2	2.09	0.52
32:DI:93:THR:O	32:DI:97:ILE:HG13	2.09	0.52
1:AA:129(A):G:C6	1:AA:189(E):U:H4'	2.44	0.52
1:CA:1492:A:H3'	1:CA:1493:A:H8	1.75	0.52
26:DB:11:C:H3'	26:DB:12:C:C6	2.45	0.52
1:AA:179:A:H2'	1:AA:180:U:C6	2.44	0.52
1:AA:688:G:H2'	1:AA:689:C:H6	1.74	0.52
1:AA:613:C:H42	1:AA:627:G:H1	1.58	0.52
19:CS:22:LEU:HB3	19:CS:27:GLU:HG3	1.90	0.52
1:CA:160:A:H2'	1:CA:161:A:C8	2.44	0.52
1:CA:164:U:H2'	1:CA:165:C:C6	2.45	0.52
1:AA:310:G:OP2	16:AP:27:LYS:NZ	2.40	0.52
13:CM:92:HIS:CE1	13:CM:98:VAL:HG11	2.44	0.52
1:CA:918:A:H2'	1:CA:919:A:C8	2.44	0.52
1:AA:1164:G:H2'	1:AA:1165:C:C6	2.44	0.52
8:CH:10:LEU:HD22	8:CH:83:ILE:HD11	1.91	0.52
1:CA:1116:C:H2'	1:CA:1117:G:H5''	1.90	0.52
30:DG:28:VAL:O	30:DG:31:VAL:HG12	2.10	0.52
8:AH:51:VAL:HG12	8:AH:52:ASP:N	2.17	0.52
17:AQ:66:SER:O	17:AQ:70:ARG:NH1	2.42	0.52
1:CA:1014:A:C2	1:CA:1219:U:H1'	2.45	0.52
1:CA:1015:A:H1'	1:CA:1219:U:H5'	1.92	0.52
25:DA:2261:C:O2'	25:DA:2262:U:H5'	2.09	0.52
25:BA:2117:C:H2'	25:BA:2118:U:O4'	2.10	0.52
25:DA:873:G:H1	25:DA:904:C:H42	1.56	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
33:DN:38:HIS:ND1	33:DN:39:ARG:HG3	2.24	0.52
32:BI:72:LEU:C	32:BI:74:ASN:H	2.13	0.52
32:BI:93:THR:O	32:BI:97:ILE:HG13	2.09	0.52
41:BV:76:LYS:HB2	41:BV:81:TYR:HB3	1.92	0.52
12:CL:57:LYS:HG2	12:CL:67:THR:HG22	1.90	0.52
25:BA:1715:A:H4'	25:BA:1716:A:O5'	2.10	0.52
25:DA:1505:C:H2'	25:DA:1506:C:H6	1.75	0.52
35:DP:42:SER:O	61:DP:303:HOH:O	2.18	0.52
25:DA:1574:C:H2'	25:DA:1575:C:C6	2.43	0.52
1:AA:261:U:OP2	20:AT:79:ARG:NH2	2.42	0.52
2:CB:197:VAL:HB	2:CB:200:ILE:HG22	1.91	0.52
1:CA:67:C:H2'	1:CA:68:G:C8	2.45	0.52
9:CI:125:TYR:HD1	9:CI:126:SER:N	2.06	0.52
8:AH:34:GLU:OE2	8:AH:37:ARG:NH1	2.40	0.52
38:DS:34:HIS:HD1	38:DS:53:SER:HG	1.57	0.52
30:DG:11:TYR:CE2	30:DG:16:ARG:HD3	2.44	0.52
1:AA:1007:C:N3	1:AA:1022:G:C6	2.78	0.52
25:DA:674:G:H1'	29:DF:74:ARG:HD3	1.91	0.52
25:DA:2680:C:H5'	28:DE:189:PRO:HA	1.92	0.52
1:AA:921:U:O2	5:AE:19:MET:HB2	2.09	0.52
11:AK:20:TYR:HB2	11:AK:31:THR:HG23	1.91	0.52
3:AC:134:ILE:HD11	3:AC:153:VAL:HG23	1.91	0.52
25:DA:1219:G:H1	25:DA:1230:C:H42	1.56	0.52
1:AA:1103:C:OP1	2:AB:96:ARG:NH2	2.41	0.52
20:AT:56:MET:HE3	20:AT:88:VAL:HG11	1.91	0.52
11:CK:21:ILE:HB	11:CK:84:VAL:HG22	1.92	0.52
25:BA:930:G:O6	25:BA:939:C:C2	2.62	0.52
2:AB:109:SER:O	2:AB:112:VAL:HG22	2.10	0.52
2:CB:17:PHE:HB2	2:CB:44:LEU:HD12	1.92	0.52
1:CA:1121:U:C4	1:CA:1122:U:H5	2.28	0.52
1:CA:1169:A:N7	1:CA:1170:A:C5	2.78	0.52
19:AS:50:ALA:HA	19:AS:58:VAL:O	2.09	0.52
1:CA:1352:C:H2'	1:CA:1353:G:C8	2.44	0.52
25:BA:1222:A:H3'	25:BA:1223:C:C6	2.44	0.52
1:AA:840:C:H5''	1:AA:841:U:C5	2.44	0.52
1:AA:433:C:H2'	1:AA:434:U:H6	1.74	0.52
27:DD:132:PRO:HG2	27:DD:135:PHE:CD2	2.44	0.52
17:CQ:41:LYS:NZ	17:CQ:92:ARG:HH21	2.08	0.52
25:DA:784:A:C8	25:DA:792:G:C5	2.98	0.52
8:CH:17:THR:HG22	8:CH:63:LEU:HD12	1.92	0.52
45:DZ:93:ASP:O	45:DZ:131:ARG:NH1	2.43	0.52
30:BG:103:LEU:HD23	30:BG:106:LEU:HD23	1.90	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:DW:9:TYR:H	42:DW:102:HIS:CE1	2.27	0.52
6:CF:96:PRO:HB3	18:CR:30:ASP:CG	2.30	0.52
25:BA:1500:A:OP2	61:BA:3908:HOH:O	2.19	0.52
1:AA:229:U:O2'	16:AP:23:ASP:OD2	2.27	0.52
25:BA:1425:A:H4'	25:BA:1426:G:OP2	2.09	0.52
1:AA:532:A:O2'	1:AA:533:A:OP1	2.25	0.52
25:DA:2345:G:OP2	52:D6:38:LYS:HG3	2.10	0.52
1:AA:160:A:N1	1:AA:343:U:C2	2.78	0.52
1:AA:20:U:H4'	1:AA:572:A:C6	2.44	0.52
1:AA:193:C:H2'	1:AA:194:C:C6	2.44	0.52
43:DX:9:LEU:HA	48:D2:36:ARG:HH21	1.75	0.52
6:AF:97:PHE:CD2	18:AR:31:LEU:HD23	2.44	0.52
52:B6:6:ARG:NH1	52:B6:26:ASN:HB2	2.25	0.52
25:DA:2887:U:H2'	25:DA:2888:C:H6	1.75	0.52
1:CA:793:U:O2	1:CA:1516:G:H4'	2.10	0.52
25:DA:492:A:H2'	25:DA:493:G:O4'	2.10	0.52
1:CA:202:U:H3'	1:CA:203:U:H6	1.75	0.52
24:AW:6:2R1:C	24:AW:8:2R3:N	2.73	0.52
11:CK:62:GLN:HG3	11:CK:97:ALA:HB2	1.92	0.52
1:AA:303:A:O2'	1:AA:555:C:O2'	2.25	0.52
1:CA:708:C:H2'	1:CA:709:G:H8	1.75	0.52
8:CH:33:GLU:HG2	8:CH:48:TYR:CE2	2.45	0.52
1:CA:352:C:H4'	1:CA:354:G:OP1	2.10	0.52
1:AA:1392:G:C2'	1:AA:1393:U:H5'	2.40	0.52
1:AA:987:G:H1	1:AA:1218:C:H42	1.58	0.52
25:DA:303:U:H2'	25:DA:304:G:H8	1.75	0.52
1:CA:1036:G:H3'	1:CA:1037:C:O4'	2.09	0.52
1:CA:565:U:OP2	1:CA:566:G:O2'	2.18	0.52
2:AB:170:GLU:O	2:AB:174:VAL:HG23	2.09	0.52
1:CA:1183:A:H5'	1:CA:1183:A:H8	1.75	0.52
1:CA:833:U:H2'	1:CA:834:C:H6	1.74	0.52
25:DA:2228:G:C5	25:DA:2229:C:C4	2.98	0.52
1:CA:174:C:H2'	1:CA:175:C:C6	2.45	0.52
23:CX:48:C:C2	23:CX:59:A:H1'	2.45	0.52
1:CA:1446:U:O2'	1:CA:1447:A:O5'	2.28	0.52
25:BA:641:G:OP1	29:BF:40:GLN:NE2	2.33	0.52
37:DR:21:TYR:OH	37:DR:43:GLU:HG2	2.10	0.52
25:BA:768:C:H2'	25:BA:769:A:H8	1.75	0.52
5:AE:51:VAL:O	5:AE:55:VAL:HG23	2.09	0.52
4:CD:188:LEU:HD23	4:CD:188:LEU:H	1.75	0.52
31:DH:33:LEU:HD21	31:DH:136:ILE:HG13	1.91	0.52
25:DA:2615:U:H2'	25:DA:2616:C:H6	1.74	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:CC:125:GLU:HG3	3:CC:190:ARG:O	2.10	0.52
1:AA:1075:C:C2'	1:AA:1076:C:H5'	2.40	0.51
25:DA:1040:C:N4	25:DA:1115:G:O6	2.41	0.51
25:DA:341:G:H2'	25:DA:342:G:O4'	2.10	0.51
27:DD:206:LEU:HD22	27:DD:211:ARG:HG2	1.92	0.51
25:BA:276:C:O3'	32:BI:42:SER:OG	2.27	0.51
1:AA:562:C:H1'	12:AL:15:ARG:HB3	1.92	0.51
25:DA:1529:G:O2'	25:DA:1530:C:H5'	2.11	0.51
36:BQ:110:THR:HG23	36:BQ:113:GLN:OE1	2.10	0.51
25:BA:1653:C:H4'	25:BA:1654:A:O5'	2.10	0.51
25:BA:2799:U:O2'	28:BE:62:PRO:O	2.12	0.51
25:BA:762:G:H2'	25:BA:763:A:O4'	2.10	0.51
25:BA:2603:C:P	27:BD:239:ARG:HG3	2.50	0.51
25:DA:774:A:N3	25:DA:774:A:H2'	2.25	0.51
29:DF:165:ARG:HG2	29:DF:168:ARG:NH2	2.25	0.51
40:BU:69:CYS:HB3	40:BU:74:LEU:HD13	1.91	0.51
27:BD:9:TYR:CZ	27:BD:13:ARG:HG2	2.45	0.51
9:CI:4:TYR:CE1	9:CI:88:TYR:HA	2.44	0.51
26:DB:6:C:H2'	26:DB:7:G:H5''	1.91	0.51
1:CA:768:A:H4'	1:CA:1523:G:N2	2.25	0.51
1:AA:1183:A:H3'	1:AA:1184:G:H5''	1.92	0.51
25:BA:2013:U:H2'	25:BA:2014:G:H5''	1.93	0.51
1:CA:1311:G:H1	1:CA:1326:C:H42	1.58	0.51
25:BA:2880:C:H2'	25:BA:2881:C:O4'	2.10	0.51
9:AI:110:GLU:OE2	9:AI:113:LYS:NZ	2.43	0.51
25:DA:528:A:H2	25:DA:2043:C:H5'	1.75	0.51
38:BS:48:LEU:HD23	38:BS:82:ILE:HD11	1.91	0.51
25:BA:225:C:H2'	25:BA:226:C:C6	2.45	0.51
9:CI:51:ARG:HG2	9:CI:56:LEU:HD21	1.92	0.51
25:DA:1448:G:H1'	25:DA:1528:A:N1	2.26	0.51
25:BA:2855:G:H5''	39:BT:54:ARG:O	2.09	0.51
1:AA:1131:G:O2'	1:AA:1132:C:H5'	2.09	0.51
1:CA:931:C:H42	1:CA:1386:G:H1	1.58	0.51
25:BA:1555:C:H4'	25:BA:1555:C:OP2	2.09	0.51
2:CB:78:GLN:O	2:CB:94:ASN:ND2	2.44	0.51
25:BA:2555:G:H2'	25:BA:2556:G:C8	2.44	0.51
3:CC:119:ARG:HG2	3:CC:123:GLN:HE21	1.76	0.51
1:AA:1129:C:O2'	1:AA:1139:G:N7	2.26	0.51
1:CA:1040:U:C4	1:CA:1041:A:C8	2.98	0.51
25:BA:1067:A:C3'	25:BA:1067:A:C8	2.94	0.51
25:BA:926:G:H2'	25:BA:927:G:C1'	2.41	0.51
7:AG:50:ILE:HD11	7:AG:58:PRO:CA	2.39	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:1153:C:H2'	25:DA:1154:G:O4'	2.11	0.51
1:AA:384:G:H2'	1:AA:385:C:C6	2.46	0.51
1:CA:1220:G:H5'	19:CS:34:TRP:O	2.11	0.51
20:AT:10:LEU:HD22	20:AT:12:ALA:HB2	1.91	0.51
2:AB:77:ALA:HB2	2:AB:211:ILE:HD13	1.90	0.51
1:CA:532:A:H2	1:CA:1207:G:H4'	1.76	0.51
1:CA:1104:G:H4'	2:CB:111:ARG:NH1	2.26	0.51
1:CA:814:A:H2'	1:CA:816:A:H5''	1.90	0.51
25:BA:1071:G:C4	25:BA:1180:C:H1'	2.46	0.51
16:CP:51:VAL:HG12	16:CP:53:VAL:H	1.74	0.51
52:D6:35:GLU:HG2	52:D6:50:ARG:HD3	1.92	0.51
52:D6:18:ARG:HD2	52:D6:42:TRP:CE2	2.46	0.51
1:AA:679:C:C2'	1:AA:680:C:H5'	2.41	0.51
30:DG:56:ALA:O	30:DG:60:LEU:HB2	2.10	0.51
29:BF:157:VAL:HB	29:BF:194:MET:HG2	1.91	0.51
19:AS:19:VAL:O	19:AS:22:LEU:HB2	2.10	0.51
41:DV:37:VAL:O	41:DV:51:VAL:HG23	2.10	0.51
1:CA:1007:C:N4	1:CA:1022:G:H1	1.98	0.51
2:AB:204:ASN:OD1	2:AB:206:ASP:N	2.37	0.51
1:CA:428:G:OP2	4:CD:10:ARG:NH1	2.43	0.51
1:CA:975:A:H4'	1:CA:976:G:C5'	2.38	0.51
50:D4:16:CYS:SG	50:D4:17:GLY:N	2.83	0.51
19:AS:23:ASN:HA	19:AS:27:GLU:CD	2.31	0.51
1:AA:985:C:H2'	1:AA:986:A:C8	2.45	0.51
1:AA:929:G:H1	1:AA:1388:C:N4	2.06	0.51
25:DA:2364:C:H2'	25:DA:2365:G:O4'	2.10	0.51
25:DA:2285:C:OP2	52:D6:6:ARG:NH1	2.44	0.51
1:AA:671:G:H2'	1:AA:672:U:O4'	2.11	0.51
1:AA:1070:U:H2'	1:AA:1071:C:C6	2.44	0.51
23:CX:23:C:H2'	23:CX:24:U:H6	1.75	0.51
25:BA:930:G:H2'	25:BA:931:C:C6	2.44	0.51
30:BG:5:VAL:HG22	30:BG:8:LYS:H	1.75	0.51
1:AA:731:G:OP1	1:AA:766:A:H1'	2.08	0.51
1:CA:1307:U:H6	1:CA:1307:U:O5'	1.93	0.51
25:DA:1539:G:H2'	25:DA:1540:U:C6	2.45	0.51
26:DB:31:C:C2'	26:DB:32:C:H5'	2.40	0.51
5:AE:68:GLU:HG2	5:AE:70:PRO:HG3	1.93	0.51
28:DE:174:ASP:OD1	28:DE:175:VAL:N	2.43	0.51
23:CX:27:U:O2	23:CX:44:A:H2	1.93	0.51
1:AA:1125:U:H3'	10:AJ:5:ARG:HH22	1.75	0.51
34:BO:35:VAL:HG11	34:BO:103:ALA:CB	2.35	0.51
1:AA:661:G:H1	1:AA:744:C:N4	2.05	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:829:A:N7	25:DA:2248:C:H5'	2.25	0.51
25:DA:2785:C:O2'	28:DE:66:HIS:ND1	2.38	0.51
4:AD:31:CYS:SG	4:AD:32:ALA:N	2.83	0.51
8:AH:121:ASP:HB2	8:AH:125:ARG:HH12	1.75	0.51
26:DB:46:A:H2'	26:DB:47:C:C6	2.45	0.51
1:AA:918:A:H2'	1:AA:919:A:C8	2.45	0.51
25:BA:2661:U:H2'	25:BA:2662:U:C6	2.45	0.51
1:CA:1301:U:O2'	1:CA:1302:U:H5'	2.10	0.51
49:B3:11:SER:OG	49:B3:13:ILE:HG13	2.10	0.51
3:AC:73:PRO:HB3	3:AC:103:VAL:HG11	1.93	0.51
1:AA:537:G:H5''	12:AL:113:ARG:NH1	2.24	0.51
25:DA:1563:G:H2'	25:DA:1564:C:C6	2.45	0.51
4:AD:196:LEU:H	4:AD:196:LEU:HD12	1.76	0.51
1:AA:799:G:H5''	1:AA:799:G:H8	1.76	0.51
38:DS:87:PHE:CZ	38:DS:102:ALA:HB2	2.45	0.51
1:CA:1118:C:H1'	1:CA:1179:A:C5	2.46	0.51
1:CA:1492:A:H3'	1:CA:1493:A:C8	2.45	0.51
1:CA:1279:A:O2'	1:CA:1281:U:OP2	2.14	0.51
25:DA:92:A:H2'	25:DA:93:G:H8	1.76	0.51
25:BA:1405:A:N3	25:BA:1405:A:H5'	2.26	0.51
28:BE:119:ARG:HG2	28:BE:160:TYR:CG	2.45	0.51
30:BG:16:ARG:HB2	30:BG:17:PRO:HD3	1.92	0.51
25:DA:879:G:H3'	25:DA:880:G:H5''	1.93	0.51
1:CA:552:U:H2'	1:CA:553:A:H5'	1.93	0.51
25:DA:2823:A:OP1	28:DE:113:PHE:HB2	2.10	0.51
25:DA:704:G:H1'	25:DA:726:G:N2	2.26	0.51
12:CL:6:THR:OG1	12:CL:9:GLN:HG3	2.10	0.51
4:CD:191:ARG:O	4:CD:191:ARG:HD2	2.11	0.51
15:CO:33:THR:HG21	15:CO:85:LEU:HD22	1.93	0.51
1:CA:1004:A:H5''	1:CA:1025:U:C5	2.46	0.51
1:CA:999:C:N4	1:CA:1043:C:C4	2.79	0.51
1:CA:1150:U:O4	1:CA:1151:A:N6	2.44	0.51
1:AA:221:C:H2'	1:AA:222:U:C6	2.42	0.51
25:DA:1341:U:OP1	25:DA:1397:U:N3	2.33	0.51
1:CA:44:G:H2'	1:CA:45:U:O4'	2.10	0.51
3:CC:18:TRP:O	3:CC:21:ARG:NH1	2.43	0.51
1:AA:649:G:H2'	1:AA:650:G:H8	1.75	0.51
35:BP:121:LYS:O	35:BP:123:LEU:N	2.43	0.51
25:DA:2853:C:O2'	25:DA:2854:G:H5'	2.11	0.51
8:CH:6:ILE:O	8:CH:10:LEU:HG	2.10	0.51
47:B1:23:LYS:HB3	47:B1:29:GLY:HA3	1.93	0.51
25:DA:2745:C:C4	25:DA:2746:U:C4	2.98	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:858:U:O2	25:DA:2268:A:H2'	2.11	0.51
25:DA:375:C:H2'	25:DA:376:C:C6	2.46	0.51
25:DA:45:C:H2'	25:DA:47:C:C6	2.45	0.51
4:AD:121:VAL:O	4:AD:134:ASP:HA	2.11	0.51
14:CN:47:LEU:O	14:CN:51:GLY:N	2.43	0.51
1:CA:1120:G:C6	1:CA:1154:G:C2	2.99	0.51
25:BA:1576:G:O2'	25:BA:1577:C:H5'	2.11	0.51
35:BP:65:ARG:HG3	54:B8:25:MET:HG3	1.92	0.51
1:CA:256:U:P	17:CQ:17:LYS:HZ2	2.34	0.51
25:DA:71:A:N7	43:DX:31:HIS:HE1	2.08	0.51
30:DG:114:ILE:HD12	30:DG:117:PHE:CD2	2.46	0.51
34:DO:111:PHE:O	34:DO:115:VAL:HG23	2.10	0.51
1:AA:625:G:O2'	1:AA:626:U:H5'	2.11	0.51
1:AA:7:G:H5''	1:AA:298:A:O4'	2.11	0.51
25:DA:2773:C:OP1	28:DE:166:THR:OG1	2.26	0.51
25:DA:1291:C:H2'	25:DA:1292:U:H6	1.75	0.51
30:DG:179:PRO:HG3	50:D4:43:TYR:OH	2.11	0.51
2:CB:192:SER:O	2:CB:194:PRO:HD3	2.11	0.51
25:BA:1775:C:H5'	25:BA:1776:G:OP2	2.11	0.51
1:AA:358:U:H2'	1:AA:359:U:C6	2.46	0.51
25:DA:814:C:O2'	25:DA:815:C:H5'	2.11	0.51
1:CA:1323:G:H4'	1:CA:1363:C:C2	2.46	0.51
1:CA:429:U:H3'	4:CD:9:CYS:SG	2.50	0.51
25:DA:668:G:H5'	25:DA:669:G:OP2	2.11	0.51
25:BA:906:G:O2'	25:BA:962:G:O6	2.22	0.51
2:AB:50:GLU:OE1	2:AB:53:ARG:NH1	2.44	0.51
25:DA:2526:G:H2'	25:DA:2527:C:H6	1.75	0.51
25:DA:1472:A:H2'	25:DA:1473:G:O4'	2.11	0.51
1:CA:881:G:OP1	12:CL:12:ARG:NH2	2.42	0.51
1:AA:276:G:H2'	1:AA:277:C:H5'	1.92	0.51
1:AA:159:G:H2'	1:AA:161:A:OP2	2.10	0.51
2:CB:163:PHE:HA	2:CB:185:ILE:O	2.11	0.51
2:AB:15:VAL:HG11	2:AB:213:LEU:HD12	1.91	0.51
1:CA:426:G:H2'	1:CA:427:U:C6	2.46	0.51
1:AA:96:U:H2'	1:AA:97:G:H8	1.75	0.51
27:DD:148:GLU:CB	27:DD:151:LYS:HD2	2.41	0.51
6:CF:24:GLU:HG3	6:CF:28:ARG:NH1	2.26	0.51
25:DA:571:A:H5'	25:DA:2030:A:N7	2.26	0.51
1:AA:933:G:O6	7:AG:3:ARG:NH2	2.44	0.51
1:CA:790:A:H2'	1:CA:791:G:C8	2.46	0.51
25:BA:910:A:H2'	25:BA:911:G:C8	2.45	0.51
25:BA:289:G:H2'	25:BA:290:G:C8	2.46	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:818:G:O2'	1:CA:819:A:H5'	2.11	0.51
37:DR:28:LEU:HD12	37:DR:48:VAL:HG21	1.91	0.51
35:BP:88:LEU:HD11	35:BP:114:ILE:HD12	1.93	0.51
4:AD:190:ASP:H	4:AD:193:ASP:HB2	1.75	0.51
36:BQ:12:GLN:HG2	36:BQ:73:PRO:HD2	1.93	0.51
1:AA:1328:C:H5'	13:AM:28:ALA:CB	2.41	0.51
25:BA:592:U:C4	25:BA:593:G:C6	2.99	0.51
43:BX:95:LEU:H	43:BX:95:LEU:HD12	1.76	0.51
30:DG:145:THR:HG23	30:DG:148:MET:HE3	1.92	0.51
25:BA:238:C:O2	54:B8:12:LYS:NZ	2.37	0.51
27:DD:127:VAL:HA	27:DD:193:VAL:HG22	1.92	0.51
25:DA:1963:U:O2'	61:DA:4443:HOH:O	2.16	0.51
1:AA:1125:U:HO2'	1:AA:1126:U:P	2.34	0.51
25:DA:1337:G:H2'	25:DA:1338:G:H8	1.76	0.51
10:AJ:49:VAL:HG23	14:AN:41:ARG:HD2	1.92	0.51
19:CS:36:ARG:HD2	19:CS:52:TYR:O	2.11	0.51
1:AA:42:G:O2'	1:AA:622:A:N1	2.32	0.51
15:CO:54:ARG:HD3	15:CO:58:MET:HE2	1.93	0.51
25:DA:1710:C:H2'	25:DA:1711:C:C6	2.46	0.51
1:AA:78:G:C6	1:AA:91:C:N4	2.79	0.51
25:DA:271(Q):G:H2'	25:DA:271(R):G:C8	2.46	0.51
11:AK:31:THR:HA	11:AK:42:TRP:HA	1.93	0.51
2:CB:52:GLU:HG2	2:CB:56:ARG:HH22	1.76	0.51
4:AD:79:PHE:CE1	4:AD:204:ILE:HD13	2.46	0.51
39:BT:127:ALA:O	39:BT:128:GLU:HB3	2.09	0.51
29:DF:110:LEU:HD12	29:DF:205:ARG:HG2	1.92	0.51
1:CA:1191:A:OP2	3:CC:3:ASN:ND2	2.44	0.51
25:BA:2504:U:H2'	25:BA:2505:U:H6	1.76	0.51
37:DR:75:LEU:O	37:DR:75:LEU:HD22	2.11	0.51
29:BF:197:ASP:OD1	29:BF:197:ASP:N	2.44	0.51
1:CA:438:G:N1	1:CA:495:A:OP2	2.33	0.51
5:CE:51:VAL:O	5:CE:55:VAL:HG23	2.10	0.51
1:CA:1007:C:N3	1:CA:1022:G:C2	2.79	0.50
2:CB:16:HIS:CG	2:CB:17:PHE:N	2.79	0.50
1:AA:216:G:H2'	1:AA:217:C:C6	2.46	0.50
4:AD:3:ARG:HE	4:AD:118:ARG:CD	2.23	0.50
1:CA:1133:G:C2'	1:CA:1134:G:H8	2.19	0.50
1:CA:1256:A:H2	1:CA:1277:C:N4	2.08	0.50
25:BA:780:G:N7	61:BA:3904:HOH:O	2.35	0.50
1:AA:975:A:N6	1:AA:1367:C:O4'	2.43	0.50
36:BQ:54:MET:HG3	36:BQ:117:ALA:HB1	1.92	0.50
25:DA:2342:C:O2	25:DA:2374:C:H4'	2.12	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:AP:39:TYR:HA	16:AP:48:TRP:O	2.10	0.50
30:BG:11:TYR:CZ	30:BG:16:ARG:HD3	2.46	0.50
9:CI:78:LYS:HD3	9:CI:101:PHE:HD2	1.76	0.50
1:AA:606:G:H1'	1:AA:632:A:H61	1.76	0.50
26:BB:77:U:OP1	45:BZ:19:ARG:NH2	2.43	0.50
1:AA:404:U:H2'	1:AA:405:U:H6	1.77	0.50
8:AH:86:ILE:HG13	8:AH:133:LEU:HD22	1.93	0.50
1:AA:1164:G:H2'	1:AA:1165:C:H6	1.75	0.50
6:AF:80:ARG:NH1	6:AF:88:VAL:O	2.44	0.50
3:AC:175:LEU:HD21	3:AC:201:TYR:CE2	2.46	0.50
25:BA:2762:A:H3'	25:BA:2763:A:H2'	1.93	0.50
1:CA:1360:A:OP2	14:CN:35:ARG:NH2	2.43	0.50
34:DO:64:ARG:NH1	34:DO:81:ASP:OD1	2.44	0.50
45:DZ:7:ALA:O	45:DZ:62:PRO:HD3	2.12	0.50
25:DA:852:G:H2'	25:DA:853:G:C8	2.46	0.50
42:BW:71:VAL:HA	42:BW:107:LEU:HD12	1.94	0.50
25:DA:1022:G:C6	25:DA:1140:C:C4	3.00	0.50
1:CA:677:U:H3	1:CA:713:G:N2	1.99	0.50
1:CA:1262:C:N3	1:CA:1273:G:N2	2.56	0.50
4:CD:36:ARG:HG3	4:CD:38:TYR:CE2	2.46	0.50
10:CJ:48:THR:O	14:CN:34:TYR:OH	2.30	0.50
25:DA:302:C:N4	25:DA:315:G:H1	2.09	0.50
28:BE:47:VAL:HG21	28:BE:86:PRO:CD	2.36	0.50
1:CA:1346:A:N1	1:CA:1374:A:H5''	2.26	0.50
48:B2:32:LEU:CD1	48:B2:36:ARG:HH11	2.23	0.50
1:AA:112:G:H4'	1:AA:389:A:H4'	1.92	0.50
48:D2:29:LYS:HG2	48:D2:57:ILE:HD13	1.92	0.50
25:BA:623:G:N2	25:BA:628:C:O3'	2.44	0.50
1:CA:1061:G:H2'	1:CA:1062:U:H5'	1.93	0.50
25:DA:1239:G:H2'	25:DA:1240:U:O4'	2.11	0.50
1:AA:202:U:O2'	1:AA:203:U:O5'	2.17	0.50
4:CD:159:ARG:O	4:CD:163:GLU:N	2.42	0.50
1:AA:72:C:H2'	1:AA:73:G:O4'	2.11	0.50
40:BU:36:ARG:HD2	40:BU:40:PHE:CZ	2.46	0.50
31:DH:3:ARG:HD3	31:DH:6:ARG:HH12	1.77	0.50
36:BQ:137:TYR:O	36:BQ:141:GLN:HG2	2.10	0.50
25:DA:275:G:H2'	25:DA:276:A:C8	2.46	0.50
4:CD:22:LYS:HB2	4:CD:26:CYS:SG	2.52	0.50
1:CA:1003:G:H2'	1:CA:1004:A:H4'	1.94	0.50
1:CA:1002:G:N2	1:CA:1039:C:C4	2.80	0.50
1:AA:1279:A:H5''	1:AA:1280:A:OP1	2.12	0.50
1:CA:1122:U:C4	1:CA:1123:A:N7	2.79	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:1489:U:O2	25:DA:1489:U:H2'	2.11	0.50
25:DA:322:A:OP2	29:DF:169:ASN:HB2	2.09	0.50
25:BA:2442:A:N3	25:BA:2442:A:H2'	2.25	0.50
1:AA:370:C:H2'	1:AA:371:G:C8	2.46	0.50
9:CI:99:LEU:HB3	9:CI:101:PHE:CE1	2.46	0.50
9:AI:24:GLY:HA2	9:AI:59:PHE:O	2.12	0.50
1:CA:957:U:H2'	1:CA:959:A:OP2	2.11	0.50
1:AA:540:G:H2'	1:AA:541:G:O4'	2.11	0.50
25:DA:839:U:H1'	25:DA:1191:G:H1'	1.93	0.50
30:BG:140:ILE:HG22	30:BG:141:PHE:CD1	2.46	0.50
25:BA:296:U:H2'	25:BA:297:C:H6	1.75	0.50
25:DA:471:A:H2'	25:DA:472:A:O4'	2.11	0.50
7:CG:101:LEU:O	7:CG:104:LEU:HB2	2.11	0.50
7:CG:69:VAL:HG11	7:CG:134:ALA:HB1	1.93	0.50
2:CB:230:VAL:HG22	2:CB:231:GLU:H	1.76	0.50
55:B9:17:ILE:HG22	55:B9:24:TYR:HB2	1.93	0.50
1:CA:522:C:H41	12:CL:53:ARG:HH22	1.58	0.50
25:DA:1149:G:H2'	25:DA:1150:C:C6	2.46	0.50
1:AA:662:G:H2'	1:AA:663:A:C8	2.45	0.50
25:DA:614(C):A:C4	29:DF:180:GLY:HA2	2.46	0.50
25:BA:1002:A:N1	25:BA:2470:G:H4'	2.27	0.50
1:CA:1028:C:O2	1:CA:1034:G:H1'	2.11	0.50
1:CA:1387:G:H2'	1:CA:1388:C:C6	2.46	0.50
48:D2:16:LEU:O	48:D2:67:LYS:NZ	2.43	0.50
25:DA:1858:G:O6	61:DA:4294:HOH:O	2.16	0.50
28:DE:36:ARG:HD3	28:DE:85:ASN:HD21	1.76	0.50
16:AP:21:VAL:HG11	16:AP:59:TRP:NE1	2.27	0.50
1:CA:1164:G:H1	1:CA:1172:C:N4	2.08	0.50
1:CA:1318:A:O2'	19:CS:37:ARG:HB2	2.11	0.50
1:AA:1038:C:C2'	1:AA:1039:C:H5'	2.42	0.50
25:DA:1041:C:N4	25:DA:1114:G:H1	2.10	0.50
2:CB:87:ARG:NE	2:CB:233:SER:HB3	2.27	0.50
14:AN:29:ARG:HD3	14:AN:40:CYS:SG	2.52	0.50
25:DA:1036:G:H1	25:DA:1119:C:N4	2.06	0.50
1:AA:262:A:C6	1:AA:263:A:C6	2.99	0.50
25:BA:1219:A:H1'	25:BA:1220:U:H5''	1.93	0.50
27:DD:177:LEU:HD11	27:DD:183:ARG:HD2	1.92	0.50
1:AA:757:U:H2'	1:AA:758:G:O4'	2.10	0.50
1:CA:6:G:O2'	1:CA:7:G:H5'	2.12	0.50
6:AF:44:GLY:HA2	6:AF:59:TYR:CZ	2.46	0.50
1:CA:1323:G:H2'	1:CA:1324:A:C8	2.47	0.50
1:CA:790:A:C6	1:CA:791:G:C6	3.00	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BA:768:C:H2'	25:BA:769:A:C8	2.46	0.50
1:CA:153:C:H2'	1:CA:154:C:C6	2.47	0.50
48:D2:17:SER:N	48:D2:20:GLU:OE2	2.41	0.50
7:AG:28:ASN:HA	7:AG:31:MET:HE2	1.94	0.50
1:AA:106:C:O2'	1:AA:379:C:H5''	2.10	0.50
3:CC:134:ILE:HD11	3:CC:153:VAL:CG2	2.42	0.50
25:DA:1666:G:P	34:DO:66:LYS:HE3	2.52	0.50
27:DD:242:ARG:N	27:DD:242:ARG:HD3	2.25	0.50
1:AA:785:G:C2'	1:AA:786:G:H5'	2.42	0.50
1:AA:1142:G:H3'	1:AA:1143:G:C8	2.46	0.50
2:CB:187:LEU:HA	2:CB:201:ILE:HB	1.92	0.50
39:BT:53:ARG:HH11	39:BT:53:ARG:HB3	1.76	0.50
1:AA:1005:A:H5'	1:AA:1038:C:H1'	1.93	0.50
2:AB:21:ARG:HH21	2:AB:21:ARG:H	1.58	0.50
25:BA:1809:U:H2'	25:BA:1815:A:N6	2.27	0.50
25:BA:354:A:H2	25:BA:1255:A:O2'	1.90	0.50
25:BA:895:G:H2'	25:BA:896:A:C8	2.47	0.50
1:AA:103:C:P	20:AT:17:ARG:HH21	2.35	0.50
25:BA:70:A:H3'	25:BA:70:A:OP2	2.11	0.50
1:AA:407:G:OP1	4:AD:115:ARG:HD3	2.12	0.50
30:DG:15:VAL:HG13	30:DG:175:LEU:HB3	1.93	0.50
3:AC:22:TRP:CD1	3:AC:59:ARG:HD2	2.47	0.50
3:AC:36:ASP:O	3:AC:40:ARG:HG3	2.12	0.50
1:CA:1226:C:C4	13:CM:104:ARG:HG2	2.46	0.50
2:AB:208:ILE:HA	2:AB:211:ILE:HD12	1.94	0.50
1:CA:473:G:O2'	1:CA:474:G:H5'	2.11	0.50
1:CA:200:G:H2'	1:CA:201:C:C6	2.46	0.50
5:CE:33:VAL:HG13	5:CE:112:LEU:HD12	1.92	0.50
29:DF:31:HIS:NE2	29:DF:35:GLU:OE2	2.44	0.50
25:DA:2657:A:O3'	31:DH:160:LYS:NZ	2.43	0.50
25:DA:2447:G:OP2	61:DA:4551:HOH:O	2.20	0.50
44:BY:98:VAL:HG12	44:BY:105:ALA:HA	1.93	0.50
1:AA:1318:A:H4'	19:AS:10:PHE:CZ	2.46	0.50
1:AA:69:G:H2'	1:AA:70:G:C8	2.46	0.50
1:CA:641:U:O3'	1:CA:642:A:H8	1.94	0.50
25:BA:2784:C:H2'	25:BA:2785:C:C6	2.46	0.50
44:DY:43:ASN:CG	44:DY:65:ALA:HB3	2.31	0.50
45:BZ:136:PHE:O	45:BZ:137:ILE:HG13	2.12	0.50
54:D8:34:TRP:CG	54:D8:35:GLN:N	2.79	0.50
40:BU:102:GLU:HG3	41:BV:2:PHE:CE2	2.47	0.50
25:DA:57:C:H2'	25:DA:58:G:O4'	2.12	0.50
45:BZ:44:PHE:CZ	45:BZ:86:VAL:HG11	2.46	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:2320:A:N3	25:DA:2320:A:H2'	2.25	0.50
2:CB:19:HIS:CE1	2:CB:206:ASP:HB2	2.46	0.50
1:AA:1241:G:H2'	1:AA:1242:C:C6	2.47	0.50
25:DA:2406:U:C4	35:DP:72:PRO:HD2	2.46	0.50
25:BA:160:G:C2'	25:BA:161:C:H5'	2.42	0.50
25:DA:2272:U:H5''	25:DA:2273:A:OP1	2.11	0.50
34:DO:68:GLU:CB	34:DO:78:ARG:HB2	2.41	0.50
25:BA:1846:A:OP1	25:BA:1846:A:H8	1.95	0.50
50:B4:62:ARG:HB2	50:B4:63:TYR:CD1	2.46	0.50
7:CG:102:ARG:O	7:CG:106:GLN:HG3	2.12	0.50
1:CA:93:G:O2'	1:CA:96:U:H5'	2.11	0.50
25:BA:626:A:H4'	25:BA:627:G:H5'	1.94	0.50
1:AA:646:U:H2'	1:AA:647:C:C6	2.45	0.50
50:D4:2:LYS:HB2	50:D4:5:ILE:HD13	1.93	0.50
20:CT:13:LEU:O	20:CT:17:ARG:HG3	2.11	0.50
29:DF:60:SER:OG	29:DF:61:GLY:N	2.45	0.50
31:DH:106:THR:HG23	31:DH:112:PRO:HB3	1.94	0.50
25:BA:1385:G:H5''	43:BX:16:LYS:HD3	1.94	0.50
39:DT:51:ARG:HG3	39:DT:98:LYS:HD2	1.93	0.50
1:AA:819:A:H4'	1:AA:820:U:OP2	2.12	0.50
1:CA:999:C:C2	1:CA:1042:G:N2	2.80	0.50
25:BA:2227:G:H3'	25:BA:2228:G:N7	2.26	0.50
4:AD:3:ARG:HE	4:AD:118:ARG:HD3	1.76	0.50
25:BA:1578:C:H5''	25:BA:1579:C:OP2	2.11	0.50
25:BA:1093:G:HO2'	25:BA:1094:A:H8	1.59	0.50
25:DA:1313:U:H2'	25:DA:1610:A:C2	2.46	0.50
1:AA:947:G:H2'	1:AA:948:C:C6	2.46	0.50
1:AA:445:G:H2'	1:AA:446:G:H8	1.74	0.50
25:DA:889:C:HO2'	25:DA:890:A:H8	1.58	0.50
25:DA:118:A:N3	25:DA:178:G:H1'	2.27	0.50
1:CA:540:G:H2'	1:CA:541:G:O4'	2.12	0.50
25:BA:1629:C:H2'	25:BA:1630:A:H8	1.77	0.50
25:BA:294:C:N3	25:BA:390:G:N2	2.40	0.50
1:CA:833:U:H2'	1:CA:834:C:C6	2.47	0.50
1:CA:1509:C:H2'	1:CA:1510:U:O4'	2.12	0.50
25:DA:307:G:N1	25:DA:310:A:OP2	2.39	0.50
19:AS:3:ARG:NH1	19:AS:8:GLY:O	2.44	0.50
29:BF:65:TRP:CZ2	29:BF:75:HIS:HD2	2.29	0.50
25:DA:1188:U:H4'	41:DV:79:VAL:HG22	1.94	0.50
14:AN:14:PRO:HG2	14:AN:16:PHE:O	2.12	0.50
15:AO:18:PHE:O	15:AO:21:ASP:HB3	2.12	0.50
1:AA:1232:U:OP1	9:AI:124:GLN:HG2	2.12	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:DT:2:ASN:O	39:DT:6:LEU:HD22	2.11	0.50
31:BH:20:ALA:HB1	31:BH:21:PRO:HD2	1.94	0.50
9:CI:49:PRO:HG2	9:CI:81:ILE:HG23	1.93	0.50
39:DT:60:THR:HG22	39:DT:77:PRO:HA	1.94	0.50
25:DA:1007:C:P	33:DN:37:LYS:HZ1	2.34	0.50
1:CA:1315:U:H2'	1:CA:1316:G:O4'	2.11	0.50
1:CA:677:U:H1'	11:CK:119:CYS:SG	2.51	0.50
1:AA:1059:C:H42	1:AA:1198:G:H1	1.60	0.50
15:AO:43:LEU:HD12	15:AO:56:LEU:HD22	1.94	0.50
3:CC:56:ASP:O	3:CC:57:ILE:HD12	2.12	0.50
25:BA:672:G:H8	25:BA:672:G:O5'	1.95	0.50
19:CS:41:VAL:HG13	19:CS:42:PRO:HD2	1.92	0.50
1:CA:377:G:OP1	16:CP:3:LYS:HD2	2.12	0.50
7:CG:65:ALA:HB3	7:CG:124:LEU:HD23	1.94	0.50
3:CC:18:TRP:HB3	3:CC:20:SER:O	2.12	0.50
25:BA:2122:G:C6	25:BA:2211:U:N3	2.80	0.50
25:BA:2211:U:C2'	25:BA:2212:G:H5'	2.42	0.50
29:DF:7:TYR:O	29:DF:22:ALA:N	2.45	0.50
1:AA:626:U:H2'	1:AA:627:G:C8	2.47	0.50
45:BZ:110:GLY:O	45:BZ:113:ALA:HB3	2.12	0.50
25:DA:491:G:H2'	25:DA:492:A:H8	1.76	0.50
19:CS:22:LEU:HB3	19:CS:27:GLU:CG	2.41	0.50
25:DA:2267:A:H5''	25:DA:2268:A:H5'	1.93	0.50
1:AA:1318:A:H4'	19:AS:10:PHE:CE2	2.47	0.50
25:BA:718:C:N4	61:BA:4670:HOH:O	2.44	0.50
1:AA:1267:C:O2	21:AU:20:LYS:HD2	2.12	0.50
27:BD:166:GLN:HB2	27:BD:174:ILE:HG22	1.94	0.50
25:BA:2418:U:OP1	61:BA:4136:HOH:O	2.20	0.50
1:CA:866:C:C4	1:CA:867:G:H1'	2.46	0.50
4:AD:81:GLU:OE2	4:AD:139:ARG:NH2	2.44	0.50
3:AC:119:ARG:HH11	3:AC:140:ARG:NH2	2.10	0.50
13:CM:37:THR:HG21	13:CM:56:LEU:HA	1.94	0.50
1:CA:1038:C:O2'	1:CA:1039:C:H5'	2.12	0.50
30:DG:5:VAL:HG13	30:DG:8:LYS:HD3	1.94	0.50
1:AA:836:G:P	18:AR:61:LYS:HZ1	2.33	0.50
1:AA:406:G:N3	4:AD:119:GLN:NE2	2.58	0.50
25:DA:2319:G:C2	38:DS:3:ARG:HA	2.46	0.50
1:AA:657:G:C2	1:AA:658:G:C8	3.00	0.50
44:DY:49:VAL:CG2	44:DY:61:ILE:HG23	2.40	0.50
25:BA:1359:U:H2'	25:BA:1656:A:C2	2.46	0.50
3:CC:87:LEU:O	3:CC:91:LEU:N	2.34	0.50
9:CI:85:LEU:HB3	9:CI:92:TYR:HD2	1.76	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BA:2745:G:P	28:BE:203:LYS:HZ1	2.34	0.50
25:DA:910:A:C5	36:DQ:13:GLN:HG3	2.47	0.50
1:CA:192:U:O2'	20:CT:60:GLU:OE2	2.24	0.50
28:DE:143:ASN:HD22	28:DE:147:PRO:CD	2.25	0.50
54:D8:9:GLY:O	54:D8:13:ARG:HG2	2.11	0.50
1:CA:171:A:H2'	1:CA:172:A:C8	2.47	0.50
13:CM:19:LEU:HD11	13:CM:56:LEU:HD11	1.93	0.50
34:BO:68:GLU:OE2	34:BO:78:ARG:NH1	2.44	0.50
25:DA:2540:C:H2'	25:DA:2541:A:O4'	2.11	0.50
3:CC:111:LEU:HD22	3:CC:146:ALA:HB2	1.93	0.50
4:CD:99:SER:O	4:CD:140:VAL:HG23	2.11	0.50
1:CA:364:A:H2'	1:CA:365:U:H6	1.77	0.50
25:DA:709:U:H2'	25:DA:710:G:C8	2.47	0.50
30:BG:179:PRO:HB2	50:B4:42:PHE:HE2	1.77	0.50
25:BA:2873:C:O2'	25:BA:2874:G:H5'	2.12	0.50
25:BA:1709:C:O2'	25:BA:2699:U:OP1	2.24	0.50
37:BR:72:ASP:OD2	37:BR:75:LEU:HB2	2.11	0.50
36:BQ:21:THR:HG21	36:BQ:101:ARG:HB2	1.93	0.50
1:AA:620:C:H2'	1:AA:621:A:O4'	2.11	0.50
2:CB:44:LEU:H	2:CB:44:LEU:HD22	1.77	0.49
1:CA:1492:A:H5''	1:CA:1493:A:OP2	2.11	0.49
1:CA:1148:U:H2'	1:CA:1149:C:O4'	2.12	0.49
1:AA:67:C:O2'	1:AA:171:A:N3	2.34	0.49
2:AB:174:VAL:O	2:AB:178:ARG:HB2	2.12	0.49
25:BA:933:C:H4'	25:BA:933:C:OP1	2.11	0.49
1:AA:1348:U:H4'	9:AI:120:ARG:HD2	1.94	0.49
1:AA:452:A:O2'	1:AA:453:A:OP2	2.23	0.49
1:AA:623:C:H2'	1:AA:624:C:C6	2.44	0.49
1:CA:59:A:H5''	1:CA:60:A:C5'	2.42	0.49
1:CA:457:C:H2'	1:CA:458:C:C6	2.47	0.49
1:CA:827:U:H2'	1:CA:859:A:H61	1.77	0.49
1:CA:875:C:H1'	8:CH:15:ASN:HD21	1.77	0.49
1:CA:337:C:H2'	1:CA:338:A:H8	1.74	0.49
25:DA:892:G:H2'	25:DA:893:C:O4'	2.12	0.49
20:AT:59:ALA:O	20:AT:63:ILE:HG13	2.12	0.49
1:CA:1515:C:H2'	1:CA:1516:G:C8	2.47	0.49
30:DG:23:PHE:HB2	30:DG:25:TYR:CZ	2.47	0.49
1:CA:921:U:O2	5:CE:19:MET:HB2	2.12	0.49
25:DA:1507:A:O2'	25:DA:1508:A:O5'	2.29	0.49
2:AB:100:GLY:N	2:AB:176:GLU:OE2	2.37	0.49
36:DQ:18:LYS:O	36:DQ:98:LYS:NZ	2.24	0.49
29:DF:152:GLU:HA	29:DF:190:GLU:OE2	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BA:2402:U:P	54:B8:35:GLN:HE22	2.34	0.49
31:DH:20:ALA:HB1	31:DH:21:PRO:HD2	1.94	0.49
25:DA:2647:U:H2'	25:DA:2648:C:C6	2.47	0.49
2:AB:62:ALA:HB3	2:AB:225:ALA:HB3	1.93	0.49
16:AP:18:ARG:NH1	16:AP:32:TYR:OH	2.45	0.49
54:D8:54:GLU:O	54:D8:58:ILE:HG13	2.12	0.49
1:AA:250:A:H4'	1:AA:251:G:O5'	2.12	0.49
1:AA:460:G:O6	1:AA:470:C:H5''	2.12	0.49
4:CD:98:GLU:HG2	4:CD:189:PRO:HG2	1.93	0.49
19:AS:65:ASN:HD22	19:AS:65:ASN:N	2.08	0.49
12:CL:11:VAL:HG11	17:CQ:36:ILE:HG21	1.94	0.49
25:DA:442:G:N2	29:DF:48:THR:HB	2.27	0.49
25:DA:2369:A:H2'	25:DA:2370:G:H8	1.76	0.49
20:AT:99:LEU:HA	20:AT:100:ILE:O	2.12	0.49
8:AH:96:GLY:H	8:AH:99:GLU:CD	2.15	0.49
25:BA:2041:A:OP2	51:B5:9:LYS:NZ	2.35	0.49
31:DH:89:ILE:O	31:DH:129:THR:HG23	2.12	0.49
48:B2:44:LEU:HD23	48:B2:47:ASN:HA	1.94	0.49
1:AA:1326:C:OP1	21:AU:17:THR:OG1	2.29	0.49
30:BG:15:VAL:HG13	30:BG:175:LEU:HB3	1.94	0.49
23:AX:54:U:H2'	23:AX:55:U:O4'	2.12	0.49
17:AQ:26:GLN:HG2	17:AQ:37:LYS:HG2	1.93	0.49
23:AX:61:C:H2'	23:AX:62:C:H6	1.75	0.49
16:CP:18:ARG:O	16:CP:20:VAL:HG23	2.12	0.49
1:CA:1417:G:O6	61:CA:4047:HOH:O	2.14	0.49
2:AB:163:PHE:HA	2:AB:185:ILE:HG13	1.93	0.49
1:CA:1320:C:H2'	1:CA:1321:C:O4'	2.12	0.49
2:AB:213:LEU:HD22	2:AB:214:ILE:HD13	1.94	0.49
1:AA:20:U:H2'	1:AA:21:G:O4'	2.13	0.49
1:CA:1129:C:H1'	1:CA:1130:A:N7	2.27	0.49
25:DA:872:A:H2'	25:DA:873:G:O4'	2.11	0.49
1:AA:692:U:O2'	1:AA:694:A:N7	2.31	0.49
1:CA:605:U:H2'	1:CA:606:G:C8	2.47	0.49
25:DA:1857:G:O2'	25:DA:1885:A:N6	2.45	0.49
1:AA:1260:C:O5'	1:AA:1284:C:H4'	2.13	0.49
25:BA:32:C:O2'	25:BA:33:U:H5'	2.12	0.49
25:DA:1937:A:C8	25:DA:1939:U:H2'	2.46	0.49
1:CA:628:G:H2'	1:CA:629:G:C8	2.48	0.49
25:DA:440:G:H2'	25:DA:441:U:C6	2.47	0.49
1:AA:950:U:OP2	13:AM:102:ARG:HD3	2.13	0.49
25:BA:1153:G:H2'	25:BA:1153:G:N3	2.27	0.49
1:CA:1414:U:H3	1:CA:1486:G:H1	1.60	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:1221(A):C:C2	25:DA:1229:G:C2	3.00	0.49
1:AA:1127:G:H22	1:AA:1147:C:N4	2.10	0.49
1:CA:1157:A:N7	1:CA:1180:A:C6	2.80	0.49
25:BA:831:A:H5'	25:BA:832:G:OP1	2.12	0.49
39:DT:16:ARG:HG3	39:DT:79:HIS:HA	1.95	0.49
3:CC:56:ASP:HB2	3:CC:67:THR:HB	1.94	0.49
25:DA:450:G:OP1	25:DA:1248:G:N2	2.45	0.49
1:AA:509:A:H3'	1:AA:509:A:C8	2.48	0.49
1:CA:460:G:H1'	1:CA:472:A:H61	1.76	0.49
1:AA:991:U:H1'	1:AA:993:G:H8	1.78	0.49
41:DV:62:LEU:CD1	41:DV:95:LEU:HB2	2.42	0.49
25:BA:867:A:N3	25:BA:988:U:O2'	2.42	0.49
1:CA:441:A:H3'	1:CA:442:C:H6	1.76	0.49
25:DA:861:A:C2	25:DA:917:A:C4	3.00	0.49
1:CA:1068:G:OP2	1:CA:1068:G:H8	1.94	0.49
9:CI:77:ILE:O	9:CI:81:ILE:HG22	2.12	0.49
5:CE:76:ILE:HG12	5:CE:118:ILE:HD11	1.93	0.49
25:DA:705:A:H1'	27:DD:9:TYR:CE1	2.48	0.49
43:BX:88:LYS:NZ	43:BX:90:GLU:OE1	2.31	0.49
25:BA:564:G:H2'	25:BA:565:C:H6	1.76	0.49
25:BA:610:C:OP2	35:BP:21:ARG:NH2	2.45	0.49
25:BA:1688:A:H2'	25:BA:1689:G:O4'	2.12	0.49
26:DB:53:A:H8	26:DB:53:A:O5'	1.96	0.49
1:CA:650:G:C2'	1:CA:651:C:H5'	2.43	0.49
54:D8:3:LYS:HB2	54:D8:64:TYR:OH	2.13	0.49
39:DT:61:PHE:CE1	39:DT:76:PHE:HB2	2.48	0.49
37:DR:56:LYS:NZ	37:DR:90:ARG:O	2.45	0.49
1:CA:1117:G:N2	1:CA:1180:A:O2'	2.43	0.49
25:BA:1155:C:C5	25:BA:1156:G:C6	3.01	0.49
25:DA:1339:G:N2	25:DA:1603:A:H1'	2.28	0.49
20:AT:18:GLN:O	20:AT:22:ARG:HG3	2.12	0.49
1:CA:952:U:C4	13:CM:104:ARG:NH1	2.81	0.49
1:AA:839:U:H3'	1:AA:840:C:H6	1.77	0.49
10:AJ:11:PHE:CE1	10:AJ:67:THR:HG22	2.44	0.49
1:CA:458:C:C2	1:CA:460:G:C8	3.01	0.49
3:CC:179:ARG:O	3:CC:206:GLU:HA	2.13	0.49
29:DF:9:ILE:O	29:DF:11:VAL:HG23	2.12	0.49
1:CA:41:G:H2'	1:CA:42:G:H8	1.76	0.49
7:CG:135:VAL:O	7:CG:139:GLU:N	2.31	0.49
25:BA:1505:C:H4'	25:BA:1506:G:O5'	2.12	0.49
2:CB:200:ILE:O	2:CB:200:ILE:HG12	2.11	0.49
1:AA:517:G:N1	1:AA:533:A:OP2	2.41	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:818:G:O2'	1:AA:819:A:H5'	2.12	0.49
25:BA:507:G:H1'	25:BA:532:A:N1	2.28	0.49
18:AR:51:LEU:HD23	18:AR:52:PRO:HD2	1.94	0.49
9:CI:28:VAL:HA	9:CI:63:ILE:HB	1.93	0.49
1:CA:187:C:H2'	1:CA:188:C:H6	1.76	0.49
25:DA:1545:A:H2'	25:DA:1546:C:O4'	2.12	0.49
25:BA:581:G:OP1	33:BN:111:PRO:HD2	2.13	0.49
39:BT:105:LEU:HB2	39:BT:110:ILE:HG13	1.95	0.49
25:BA:2519:C:OP2	61:BA:4083:HOH:O	2.20	0.49
1:CA:667:G:OP1	1:CA:732:C:O2'	2.26	0.49
5:CE:12:LEU:HB3	5:CE:31:LEU:HB2	1.95	0.49
1:CA:123:C:O2'	1:CA:290:C:O2	2.30	0.49
4:CD:65:ARG:HG2	4:CD:75:PHE:CD1	2.47	0.49
25:BA:1040:C:P	40:BU:54:LYS:HZ1	2.35	0.49
1:CA:1001(A):G:N3	1:CA:1002:G:H1'	2.28	0.49
25:DA:1488:G:N1	25:DA:1489:U:H5	2.09	0.49
1:AA:1002:G:H3'	1:AA:1003:G:C8	2.48	0.49
25:DA:2227:A:OP1	27:DD:263:ARG:HD2	2.13	0.49
25:BA:895:G:N9	25:BA:978:A:H8	2.11	0.49
1:CA:1057:G:C4	1:CA:1204:A:C2	3.01	0.49
1:CA:953:G:C6	1:CA:1229:A:C6	3.01	0.49
8:CH:20:TYR:HA	8:CH:65:TYR:CZ	2.48	0.49
25:BA:934:A:O2'	25:BA:935:C:OP2	2.29	0.49
25:BA:2326:C:H2'	25:BA:2327:G:C8	2.48	0.49
1:AA:1392:G:H2'	1:AA:1393:U:H5'	1.95	0.49
1:CA:1062:U:H2'	1:CA:1063:C:C6	2.47	0.49
28:BE:120:TRP:CE3	28:BE:155:LYS:HD3	2.46	0.49
2:AB:160:ASP:O	2:AB:183:PRO:HD2	2.13	0.49
36:BQ:56:ARG:HG3	36:BQ:56:ARG:HH11	1.78	0.49
6:CF:68:PRO:HB2	6:CF:71:ARG:HG3	1.95	0.49
27:DD:164:GLN:NE2	27:DD:176:ARG:HH22	2.10	0.49
25:BA:2303:U:H2'	25:BA:2304:C:C6	2.48	0.49
1:CA:689:C:OP1	11:CK:27:ASN:ND2	2.42	0.49
44:DY:51:VAL:HG13	44:DY:56:PRO:HA	1.94	0.49
12:CL:54:LYS:O	12:CL:70:ILE:HG13	2.13	0.49
1:AA:1052:U:H5"	1:AA:1053:G:OP2	2.11	0.49
15:CO:17:ARG:HG3	15:CO:17:ARG:HH11	1.78	0.49
30:DG:110:ALA:HA	30:DG:140:ILE:O	2.12	0.49
39:BT:88:ILE:HG21	39:BT:91:ARG:NE	2.27	0.49
23:CX:19:G:H4'	23:CX:20:U:OP2	2.13	0.49
1:AA:153:C:H42	1:AA:169:C:N4	2.09	0.49
16:CP:14:ASN:OD1	16:CP:16:HIS:HE1	1.94	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:2348:U:OP2	54:D8:42:ARG:NH2	2.45	0.49
1:CA:1038:C:C2'	1:CA:1039:C:H5'	2.42	0.49
1:CA:999:C:OP1	1:CA:999:C:H4'	2.11	0.49
25:DA:740:U:H2'	25:DA:741:G:C8	2.47	0.49
1:CA:1277:C:HO2'	1:CA:1279:A:H8	1.57	0.49
35:DP:83:VAL:HG12	35:DP:112:LEU:HD21	1.94	0.49
14:CN:34:TYR:N	14:CN:39:LEU:O	2.40	0.49
1:CA:1243:C:H2'	1:CA:1244:C:H6	1.77	0.49
25:BA:927:G:C2	25:BA:928:G:C8	3.01	0.49
1:AA:102:G:H2'	1:AA:103:C:H6	1.77	0.49
7:CG:111:ARG:HB3	7:CG:113:GLU:OE2	2.12	0.49
36:DQ:66:ILE:HG12	36:DQ:104:PHE:CE2	2.48	0.49
1:CA:692:U:O2'	1:CA:694:A:N7	2.33	0.49
1:CA:598:U:H4'	8:CH:94:TYR:CD2	2.47	0.49
25:BA:1001:G:OP2	36:BQ:87:LYS:HE2	2.13	0.49
25:BA:1829:U:H5'	27:BD:259:THR:CG2	2.41	0.49
48:D2:48:HIS:O	48:D2:52:ASP:HB2	2.12	0.49
1:AA:649:G:H2'	1:AA:650:G:C8	2.48	0.49
10:CJ:42:THR:CG2	10:CJ:68:HIS:HD2	2.26	0.49
30:DG:66:GLN:HG3	50:D4:1:MET:HE3	1.95	0.49
25:DA:585:G:O2'	25:DA:1254:A:N6	2.40	0.49
30:BG:3:LEU:HD22	50:B4:25:TYR:CE1	2.48	0.49
8:AH:33:GLU:O	8:AH:37:ARG:N	2.41	0.49
25:DA:2646:C:H2'	25:DA:2647:U:O4'	2.13	0.49
25:DA:1579:A:H2'	25:DA:1580:A:C8	2.47	0.49
25:DA:468:G:N7	53:D7:39:ARG:NH2	2.47	0.49
36:DQ:111:GLU:O	36:DQ:115:MET:HG2	2.12	0.49
1:AA:977:A:O2'	1:AA:979:C:OP2	2.26	0.49
25:DA:1927:A:H2'	25:DA:1928:A:C8	2.48	0.49
25:DA:1418:G:O5'	25:DA:1418:G:H8	1.96	0.49
21:CU:10:ARG:HH11	21:CU:10:ARG:HG3	1.77	0.49
25:BA:794:U:O2	25:BA:2036:A:H1'	2.13	0.49
25:DA:568:U:H5'	25:DA:945:A:N1	2.27	0.49
25:BA:510:C:H2'	25:BA:511:C:C6	2.48	0.49
25:BA:1699:A:O2'	25:BA:1700:G:H5'	2.13	0.49
1:CA:1399:C:C2	1:CA:1502:A:N6	2.80	0.49
25:BA:831:A:C5	27:BD:229:VAL:HG21	2.48	0.49
4:CD:100:ARG:NH2	4:CD:102:ASP:OD2	2.46	0.49
1:AA:191:G:C6	1:AA:192:U:C4	3.00	0.49
25:BA:926:G:H2'	25:BA:927:G:O4'	2.12	0.49
3:CC:58:GLU:O	3:CC:59:ARG:HG3	2.12	0.49
1:CA:1012:U:H2'	1:CA:1013:G:C8	2.47	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:736:C:H2'	1:CA:737:A:C8	2.48	0.49
1:AA:384:G:H2'	1:AA:385:C:H6	1.76	0.49
25:BA:1224:C:O2'	25:BA:1225:C:H5'	2.11	0.49
25:BA:2584:A:N7	28:BE:145:LYS:HB2	2.28	0.49
25:DA:784:A:O4'	27:DD:227:ASN:ND2	2.45	0.49
19:AS:64:GLU:O	19:AS:67:VAL:HG23	2.12	0.49
1:CA:1329:A:P	13:CM:28:ALA:HB3	2.52	0.49
28:DE:52:LEU:HB2	28:DE:76:ARG:HB2	1.93	0.49
25:BA:2623:U:H2'	51:B5:2:ALA:O	2.12	0.49
38:BS:29:PHE:HD1	38:BS:92:TYR:HH	1.61	0.49
25:BA:2486:C:H5''	25:BA:2487:C:OP2	2.11	0.49
53:B7:34:ARG:NH1	53:B7:41:ARG:O	2.46	0.49
1:CA:804:U:H5''	1:CA:805:C:OP2	2.13	0.49
25:DA:708:C:H42	25:DA:723:G:H1	1.61	0.49
25:BA:64:C:H2'	25:BA:65:C:H6	1.77	0.49
2:AB:74:LYS:NZ	2:AB:205:ASP:OD2	2.46	0.49
45:BZ:161:VAL:HG13	45:BZ:161:VAL:O	2.12	0.49
3:AC:44:GLU:HG2	3:AC:52:LEU:HD22	1.94	0.49
25:DA:753:C:O5'	25:DA:753:C:H6	1.95	0.49
25:DA:1682:G:H1'	25:DA:1762:A:C6	2.47	0.49
7:AG:51:GLN:O	7:AG:55:GLY:HA2	2.12	0.49
25:DA:84:A:N1	25:DA:98:G:O2'	2.43	0.49
1:CA:1121:U:C4	1:CA:1122:U:C5	3.01	0.49
4:CD:121:VAL:O	4:CD:134:ASP:HA	2.13	0.49
1:AA:1030(C):G:H2'	1:AA:1030(D):A:C8	2.41	0.49
1:AA:1031:G:H2'	1:AA:1032:G:H8	1.78	0.49
1:CA:1170:A:O2'	1:CA:1171:G:C8	2.66	0.49
1:AA:141:A:H2	1:AA:222:U:O2	1.96	0.49
1:CA:671:G:H2'	1:CA:672:U:O4'	2.13	0.49
27:DD:108:PRO:HB3	27:DD:143:HIS:CE1	2.47	0.49
19:CS:64:GLU:O	19:CS:67:VAL:HG23	2.12	0.49
19:CS:28:LYS:CB	19:CS:29:ARG:HA	2.43	0.49
25:BA:155:C:H6	25:BA:155:C:OP2	1.96	0.49
1:AA:433:C:H2'	1:AA:434:U:C6	2.47	0.49
9:AI:4:TYR:CZ	9:AI:88:TYR:HD1	2.31	0.49
3:AC:113:ALA:HB3	3:AC:114:PRO:HD3	1.95	0.49
2:CB:53:ARG:O	2:CB:56:ARG:HG2	2.13	0.49
1:AA:863:U:H2'	1:AA:865:A:OP2	2.12	0.49
25:BA:2564:U:C2	25:BA:2566:U:H5'	2.48	0.49
33:DN:42:TRP:CH2	33:DN:44:PRO:HB3	2.48	0.49
25:DA:2716:U:O2'	25:DA:2717:G:H5'	2.13	0.49
25:DA:947:G:N2	25:DA:971:C:C2	2.81	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:2812:G:H2'	25:DA:2813:A:C8	2.48	0.49
37:DR:87:TYR:OH	37:DR:116:LEU:HB3	2.13	0.49
25:BA:1821:C:H5''	25:BA:1822:A:OP1	2.13	0.49
11:AK:82:VAL:HB	11:AK:108:ILE:HG12	1.94	0.49
18:CR:52:PRO:O	18:CR:56:THR:HG23	2.13	0.49
25:DA:2356:C:H2'	25:DA:2357:U:O4'	2.12	0.49
47:B1:72:GLU:O	47:B1:76:ARG:HG3	2.13	0.49
31:DH:83:TYR:CE2	31:DH:138:LYS:HB2	2.48	0.49
1:CA:785:G:C2'	1:CA:786:G:H5'	2.42	0.49
25:BA:1900:G:H2'	25:BA:1901:C:C6	2.47	0.49
25:DA:953:A:C2	25:DA:954:G:C8	3.00	0.49
1:CA:1318:A:H5''	19:CS:3:ARG:NH2	2.10	0.49
1:CA:1256:A:H2	1:CA:1277:C:H42	1.60	0.49
32:BI:92:VAL:HG11	32:BI:144:VAL:HG11	1.94	0.49
1:CA:1291:G:H4'	9:CI:39:GLY:HA3	1.94	0.49
1:CA:1142:G:C2	1:CA:1143:G:H1'	2.47	0.49
25:DA:1041:C:N3	25:DA:1114:G:N2	2.57	0.49
13:CM:93:ARG:NH1	25:DA:888:C:OP1	2.46	0.49
25:BA:1003:U:HO2'	25:BA:1004:A:P	2.36	0.49
30:DG:114:ILE:HD12	30:DG:117:PHE:HD2	1.78	0.49
3:CC:29:TYR:OH	14:CN:54:PRO:O	2.22	0.49
59:CX:101:FME:HCN	25:DA:2451:A:C2	2.45	0.49
1:CA:625:G:H2'	1:CA:626:U:H6	1.77	0.49
26:DB:45:A:OP2	30:DG:96:ARG:NH2	2.46	0.49
50:B4:59:PHE:HA	50:B4:61:ARG:H	1.78	0.49
1:CA:97:G:HO2'	1:CA:98:G:H8	1.61	0.49
25:BA:2843:G:H4'	25:BA:2844:G:OP2	2.13	0.49
25:BA:2713:C:H2'	25:BA:2714:U:H2'	1.95	0.49
25:DA:2659:G:N2	25:DA:2661:G:H3'	2.28	0.49
25:DA:176:G:O2'	25:DA:177:G:H5'	2.12	0.49
26:DB:24:G:H4'	26:DB:25:A:N7	2.28	0.49
28:BE:27:LEU:HD22	39:BT:1:MET:HE3	1.94	0.49
31:BH:149:ARG:NH1	31:BH:167:GLU:OE2	2.46	0.49
25:BA:359:C:H6	25:BA:359:C:O5'	1.96	0.49
15:CO:5:LYS:CD	15:CO:5:LYS:H	2.26	0.49
45:DZ:28:MET:HB3	45:DZ:88:PHE:HB2	1.95	0.49
25:BA:2904:U:O5'	25:BA:2904:U:H6	1.96	0.49
25:DA:1022:G:C5	25:DA:1140:C:C4	3.01	0.48
1:AA:145:G:H2'	1:AA:146:G:H5''	1.95	0.48
25:BA:672:G:H2'	25:BA:673:G:O4'	2.13	0.48
1:CA:586:C:HO2'	1:CA:878:G:H4'	1.78	0.48
6:CF:10:LEU:HD12	6:CF:85:VAL:HA	1.94	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:AX:4:G:H1	23:AX:69:C:N4	2.10	0.48
1:CA:540:G:H2'	1:CA:541:G:H8	1.78	0.48
1:AA:737:A:H5''	6:AF:92:LYS:HD3	1.95	0.48
1:AA:1422:G:O3'	34:BO:49:ARG:NH1	2.37	0.48
14:AN:23:ARG:HH11	14:AN:30:ALA:HB2	1.77	0.48
1:AA:1118:C:OP1	9:AI:104:ARG:NH1	2.46	0.48
5:AE:36:ASP:OD2	5:AE:40:ARG:HB2	2.13	0.48
25:BA:1506:G:C3'	25:BA:1507:A:H5''	2.43	0.48
42:DW:50:VAL:HG12	42:DW:105:VAL:HB	1.96	0.48
1:AA:1104:G:H4'	2:AB:111:ARG:NH1	2.28	0.48
44:DY:44:ILE:HA	44:DY:63:LYS:O	2.13	0.48
9:AI:17:VAL:HG21	9:AI:81:ILE:HB	1.95	0.48
1:AA:1123:A:H4'	10:AJ:37:PRO:HD2	1.95	0.48
25:BA:1952:G:O2'	25:BA:1990:G:O6	2.18	0.48
1:AA:410:G:H5''	1:AA:411:A:OP1	2.13	0.48
34:DO:29:ASN:OD1	34:DO:29:ASN:N	2.46	0.48
3:CC:113:ALA:HB2	3:CC:202:ILE:HG13	1.95	0.48
30:DG:16:ARG:NE	30:DG:31:VAL:HG11	2.26	0.48
1:CA:424:G:H2'	1:CA:425:G:C8	2.47	0.48
1:AA:457:C:H2'	1:AA:458:C:C5	2.48	0.48
20:CT:50:GLU:HG3	20:CT:100:ILE:HD13	1.93	0.48
25:DA:997:G:OP2	40:DU:58:ARG:NH1	2.40	0.48
43:DX:31:HIS:CD2	43:DX:33:LYS:H	2.32	0.48
25:BA:1834:A:O2'	27:BD:259:THR:HG21	2.13	0.48
33:DN:38:HIS:NE2	33:DN:50:ASP:OD2	2.25	0.48
1:CA:625:G:H2'	1:CA:626:U:C6	2.48	0.48
28:DE:120:TRP:CE3	28:DE:155:LYS:HD3	2.48	0.48
25:BA:1941:A:H5''	25:BA:1942:C:OP2	2.13	0.48
1:CA:202:U:O2'	1:CA:203:U:O5'	2.17	0.48
1:CA:96:U:O2'	1:CA:97:G:H5'	2.13	0.48
1:CA:745:C:OP1	1:CA:851:G:O2'	2.20	0.48
1:AA:202:U:H3'	1:AA:203:U:H6	1.78	0.48
25:BA:2481:A:C2	25:BA:2494:G:C8	3.01	0.48
25:DA:952:G:C6	25:DA:966:G:C6	3.01	0.48
25:DA:1786:A:H1'	25:DA:1938:A:N6	2.28	0.48
8:AH:73:ASP:OD2	8:AH:75:ARG:NH1	2.46	0.48
28:DE:108:SER:HB3	28:DE:165:VAL:HG21	1.94	0.48
25:BA:374:U:H2'	25:BA:375:G:O4'	2.12	0.48
49:D3:10:LYS:NZ	49:D3:15:TYR:OH	2.41	0.48
11:AK:48:ILE:O	11:AK:50:TYR:N	2.45	0.48
25:DA:1819:A:H5''	27:DD:161:THR:HG21	1.93	0.48
17:CQ:62:SER:OG	17:CQ:72:ARG:HD3	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1058:G:N2	10:CJ:53:PRO:HG3	2.28	0.48
11:CK:110:ASP:HB3	18:CR:85:LEU:HB3	1.93	0.48
25:BA:1790:A:H5''	25:BA:2728:C:H1'	1.95	0.48
31:DH:95:ARG:HB2	31:DH:128:PRO:CB	2.44	0.48
25:DA:2257:U:O2'	25:DA:2258:C:H5'	2.12	0.48
1:CA:1118:C:H2'	1:CA:1119:C:H6	1.77	0.48
35:BP:148:LEU:H	35:BP:148:LEU:HD23	1.79	0.48
3:AC:15:THR:CG2	3:AC:181:ASN:HA	2.40	0.48
49:B3:3:ARG:HD3	49:B3:60:GLU:CD	2.34	0.48
1:CA:557:G:C6	1:CA:558:G:C6	3.01	0.48
25:DA:83:G:OP2	44:DY:95:LYS:NZ	2.31	0.48
6:CF:82:ARG:HB2	6:CF:85:VAL:HG23	1.95	0.48
13:CM:16:ASP:N	13:CM:16:ASP:OD1	2.46	0.48
25:BA:2343:G:O2'	46:B0:43:THR:HG22	2.13	0.48
4:CD:200:GLU:O	4:CD:204:ILE:HG12	2.13	0.48
1:CA:1264:C:H2'	1:CA:1265:G:H8	1.78	0.48
1:CA:1104:G:H4'	2:CB:111:ARG:HH11	1.77	0.48
14:CN:6:LEU:HB3	14:CN:23:ARG:HH21	1.77	0.48
26:DB:78:A:H2'	26:DB:79:C:O4'	2.13	0.48
25:DA:815:C:H2'	25:DA:816:C:C6	2.48	0.48
25:BA:1899:A:H5'	25:BA:1900:G:OP2	2.13	0.48
25:BA:1533:G:H1	25:BA:1548:C:H42	1.61	0.48
2:AB:27:LYS:NZ	2:AB:193:ASP:OD2	2.45	0.48
4:AD:20:TYR:HA	4:AD:26:CYS:SG	2.53	0.48
5:CE:80:ILE:HG22	5:CE:91:LEU:HB2	1.94	0.48
1:CA:991:U:H3'	1:CA:1212:U:H3	1.78	0.48
19:AS:61:TYR:CE2	19:AS:63:THR:HG23	2.48	0.48
25:BA:53:G:O2'	53:B7:35:ARG:HD3	2.13	0.48
14:AN:26:ARG:NH2	14:AN:47:LEU:HD21	2.28	0.48
2:AB:220:ASP:O	2:AB:223:ILE:HG12	2.13	0.48
25:DA:291:C:H2'	25:DA:292:C:H5'	1.95	0.48
36:BQ:7:MET:HB2	36:BQ:7:MET:HE3	1.82	0.48
39:BT:31:SER:OG	39:BT:85:LYS:HE3	2.13	0.48
25:DA:1027:A:C6	25:DA:1126:A:C4	3.01	0.48
31:DH:102:ALA:HA	31:DH:117:PRO:HD3	1.95	0.48
14:CN:32:SER:O	14:CN:40:CYS:HA	2.13	0.48
1:AA:1030(A):G:H2'	1:AA:1030(C):G:OP2	2.13	0.48
25:BA:173:C:H2'	25:BA:174:U:C6	2.48	0.48
40:DU:79:PHE:CZ	40:DU:83:LEU:HD21	2.48	0.48
32:DI:72:LEU:HA	32:DI:75:LEU:HD22	1.96	0.48
1:CA:460:G:C6	1:CA:470:C:H5''	2.47	0.48
26:DB:42:C:O2'	30:DG:66:GLN:HG2	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BA:922:G:H1	25:BA:948:C:H42	1.62	0.48
25:BA:279:G:H5''	25:BA:279:G:H8	1.78	0.48
47:D1:3:LYS:HB2	47:D1:61:ARG:HH11	1.77	0.48
25:DA:272:G:H4'	25:DA:272(A):U:H5''	1.94	0.48
25:DA:2740:A:C6	25:DA:2741:A:C6	3.01	0.48
41:DV:60:GLU:OE2	41:DV:97:LYS:NZ	2.30	0.48
34:BO:80:ASP:OD1	39:BT:64:ARG:NH2	2.46	0.48
1:AA:1106:G:C6	1:AA:1107:C:C4	3.00	0.48
5:CE:88:LYS:HB3	5:CE:123:LEU:HB2	1.96	0.48
1:CA:1093:A:H5''	1:CA:1094:G:OP2	2.13	0.48
31:BH:67:LEU:O	31:BH:71:LEU:HB2	2.14	0.48
1:AA:113:G:H2'	1:AA:114:U:C6	2.48	0.48
27:DD:134:ARG:NH1	27:DD:188:GLU:OE2	2.45	0.48
23:AX:19:G:C5	23:AX:57:A:C2	3.02	0.48
13:AM:37:THR:HG21	13:AM:56:LEU:HA	1.95	0.48
25:DA:1197:G:H2'	25:DA:1198:U:C6	2.48	0.48
4:AD:25:ARG:HG2	4:AD:25:ARG:O	2.12	0.48
26:DB:55:U:O3'	30:DG:27:ASN:ND2	2.46	0.48
25:BA:1346:U:H4'	25:BA:1347:A:H5'	1.94	0.48
1:CA:1004:A:H62	1:CA:1037:C:H2'	1.79	0.48
1:CA:1041:A:N6	1:CA:1042:G:C6	2.81	0.48
1:CA:1075:C:C2'	1:CA:1076:C:H5'	2.43	0.48
25:DA:172:C:H2'	25:DA:173:G:C8	2.38	0.48
28:BE:47:VAL:HG23	28:BE:84:PHE:O	2.12	0.48
1:CA:1169:A:H8	1:CA:1169:A:H3'	1.78	0.48
1:CA:397:A:H3'	1:CA:397:A:N3	2.27	0.48
25:DA:2271:G:H2'	25:DA:2272:U:C6	2.48	0.48
25:DA:2722:G:H2'	25:DA:2723:C:C6	2.49	0.48
45:BZ:107:THR:HG21	45:BZ:112:ARG:HH21	1.78	0.48
26:DB:42:C:C4	26:DB:43:C:C4	3.01	0.48
39:DT:23:ARG:HG3	39:DT:120:ARG:NH1	2.29	0.48
25:DA:489:G:H2'	25:DA:491:G:O4'	2.14	0.48
27:BD:133:LEU:HG	27:BD:189:CYS:O	2.13	0.48
25:DA:2742:C:OP1	55:D9:35:ARG:HD3	2.14	0.48
23:AX:19:G:H4'	23:AX:20:U:OP2	2.12	0.48
25:BA:2104:A:H2'	25:BA:2105:G:O4'	2.13	0.48
1:CA:617:G:H4'	16:CP:44:THR:O	2.12	0.48
25:DA:2632:A:O2'	25:DA:2811:G:O2'	2.20	0.48
25:DA:244:A:H2'	25:DA:245:G:O4'	2.13	0.48
25:BA:1913:G:H2'	25:BA:1914:C:C6	2.49	0.48
1:CA:189:G:C5	1:CA:189(A):C:C4	3.00	0.48
61:BA:3803:HOH:O	51:B5:15:ARG:HG2	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:960:U:O2	1:CA:960:U:H2'	2.12	0.48
1:AA:1134:G:N3	1:AA:1134:G:H2'	2.29	0.48
11:AK:92:GLU:O	11:AK:95:ILE:HG13	2.13	0.48
12:CL:110:VAL:CG2	12:CL:120:TYR:HB3	2.43	0.48
25:DA:94(A):G:N2	48:D2:47:ASN:OD1	2.45	0.48
25:BA:1702:A:H3'	25:BA:1703:C:C6	2.48	0.48
1:AA:391:G:C6	1:AA:392:G:C5	3.01	0.48
1:CA:504:C:H1'	1:CA:510:A:C4	2.49	0.48
25:DA:370:G:OP2	61:DA:3768:HOH:O	2.20	0.48
30:DG:38:VAL:HG22	30:DG:93:THR:HG23	1.95	0.48
39:DT:88:ILE:HG13	39:DT:91:ARG:NH2	2.28	0.48
25:DA:1125:G:H5'	55:D9:37:GLY:HA2	1.96	0.48
2:AB:32:ILE:HD13	2:AB:40:HIS:CD2	2.48	0.48
1:CA:977:A:O2'	1:CA:979:C:OP2	2.20	0.48
25:DA:528:A:C2	25:DA:2042:A:H2'	2.48	0.48
2:AB:180:LEU:O	2:AB:181:PHE:HB2	2.14	0.48
2:AB:192:SER:O	2:AB:194:PRO:HD3	2.14	0.48
31:BH:69:ARG:HG3	31:BH:70:THR:N	2.28	0.48
32:BI:104:GLN:O	32:BI:106:GLY:N	2.35	0.48
1:AA:300:A:O2'	1:AA:564:C:N3	2.38	0.48
1:CA:1458:G:H5'	20:CT:32:ALA:HB2	1.96	0.48
16:AP:13:HIS:O	16:AP:42:ARG:NH2	2.47	0.48
28:BE:174:ASP:OD1	28:BE:175:VAL:N	2.46	0.48
25:BA:2605:U:H2'	25:BA:2606:C:C6	2.49	0.48
28:BE:173:VAL:CG2	28:BE:185:LYS:HB2	2.44	0.48
25:DA:384:U:H2'	25:DA:385:C:H6	1.78	0.48
25:DA:67:U:H2'	25:DA:68:G:O4'	2.13	0.48
25:DA:1023:U:H4'	25:DA:1123:C:OP1	2.13	0.48
2:AB:95:GLN:HG3	2:AB:147:LYS:HD3	1.94	0.48
25:BA:403:C:H2'	25:BA:404:C:C6	2.47	0.48
5:AE:105:VAL:HG21	5:AE:128:PRO:HB3	1.96	0.48
25:DA:1142(A):A:C8	25:DA:1144:G:N7	2.81	0.48
25:BA:8:A:H2'	25:BA:9:U:C6	2.48	0.48
26:DB:12:C:H6	26:DB:12:C:O5'	1.96	0.48
25:DA:2299:G:H2'	25:DA:2300:G:H8	1.79	0.48
49:B3:59:VAL:O	49:B3:60:GLU:HG2	2.13	0.48
1:AA:1236:A:H2'	1:AA:1237:C:C6	2.49	0.48
12:CL:24:VAL:HG12	12:CL:24:VAL:O	2.14	0.48
7:CG:62:PHE:HA	7:CG:124:LEU:HD22	1.96	0.48
28:DE:28:ALA:HB3	28:DE:93:VAL:HG12	1.95	0.48
1:AA:728:A:H2'	1:AA:729:A:C8	2.49	0.48
1:AA:738:C:H2'	1:AA:739:C:C6	2.47	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:454:A:H4'	25:DA:455:C:OP2	2.12	0.48
1:AA:1086:U:C2'	1:AA:1087:G:H5'	2.43	0.48
45:BZ:150:LEU:HB3	45:BZ:171:ILE:HD11	1.96	0.48
25:DA:361:G:O2'	25:DA:362:U:H5'	2.13	0.48
25:DA:1839:G:C8	25:DA:1927:A:H1'	2.48	0.48
15:CO:5:LYS:HD2	15:CO:5:LYS:H	1.78	0.48
10:AJ:37:PRO:HA	10:AJ:72:VAL:HG12	1.96	0.48
13:AM:56:LEU:O	13:AM:60:VAL:HG23	2.13	0.48
49:D3:46:ASN:O	49:D3:50:VAL:HG22	2.14	0.48
35:BP:81:GLN:HB2	35:BP:110:TYR:CD2	2.49	0.48
55:B9:13:LYS:HD2	55:B9:28:GLU:OE2	2.14	0.48
1:AA:438:G:O2'	1:AA:494:U:O4	2.19	0.48
32:BI:117:GLU:HG3	32:BI:118:LYS:H	1.77	0.48
41:DV:65:GLY:HA3	41:DV:91:TYR:CZ	2.48	0.48
1:AA:308:C:H2'	1:AA:309:G:H8	1.78	0.48
9:CI:96:LEU:O	9:CI:100:GLY:N	2.47	0.48
1:AA:35:G:O2'	12:AL:118:SER:O	2.23	0.48
25:DA:1289:C:H2'	25:DA:1290:C:C6	2.47	0.48
36:DQ:133:ARG:HG2	36:DQ:134:ARG:N	2.27	0.48
1:CA:1239:A:H62	1:CA:1299:A:H62	1.60	0.48
1:AA:901:A:C5	1:AA:902:G:H1'	2.48	0.48
1:AA:346:G:N1	1:AA:347:G:H1'	2.28	0.48
1:CA:1121:U:H2'	1:CA:1122:U:O4'	2.13	0.48
1:AA:1020:U:H2'	1:AA:1021:G:C8	2.49	0.48
1:AA:1030(C):G:N7	1:AA:1031:G:C2	2.82	0.48
19:AS:65:ASN:HD22	19:AS:65:ASN:H	1.61	0.48
25:BA:927:G:C2'	25:BA:928:G:H5'	2.44	0.48
25:BA:160:G:O2'	25:BA:161:C:H5'	2.14	0.48
8:CH:61:VAL:HG12	8:CH:63:LEU:HD22	1.95	0.48
1:CA:839:U:H5''	1:CA:840:C:C5	2.48	0.48
1:CA:840:C:H4'	1:CA:841:U:OP1	2.13	0.48
2:AB:20:GLU:HG2	2:AB:191:ASP:HB3	1.94	0.48
32:BI:77:LEU:CB	32:BI:142:VAL:HG12	2.44	0.48
25:BA:2857:U:OP1	39:BT:98:LYS:NZ	2.41	0.48
48:D2:29:LYS:HE2	48:D2:57:ILE:HG21	1.96	0.48
1:CA:1028:C:C2	1:CA:1033:G:N1	2.80	0.48
3:CC:134:ILE:HD11	3:CC:153:VAL:HG23	1.94	0.48
1:CA:364:A:H2'	1:CA:365:U:C6	2.49	0.48
51:B5:11:THR:HG23	51:B5:15:ARG:HB3	1.95	0.48
49:D3:23:LEU:HD13	49:D3:50:VAL:HG11	1.96	0.48
25:DA:1932:A:H2'	25:DA:1933:G:O4'	2.13	0.48
8:AH:124:ALA:O	8:AH:128:GLY:N	2.47	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:2735:G:H2'	25:DA:2736:G:H8	1.79	0.48
25:BA:2038:U:H1'	51:B5:6:VAL:HG13	1.96	0.48
8:AH:104:ARG:HG3	8:AH:138:TRP:CD2	2.48	0.48
2:CB:170:GLU:O	2:CB:174:VAL:HG23	2.13	0.48
25:DA:574:C:OP1	61:DA:3792:HOH:O	2.20	0.48
37:DR:38:VAL:HB	37:DR:39:PRO:HD3	1.96	0.48
44:DY:102:CYS:SG	44:DY:103:GLY:N	2.87	0.48
25:BA:2352:G:H2'	25:BA:2353:G:H8	1.78	0.48
25:DA:1452:A:OP2	61:DA:4348:HOH:O	2.20	0.48
25:BA:553:A:N1	25:BA:2064:A:H2'	2.28	0.48
25:BA:125:A:H5'	25:BA:126:C:O4'	2.14	0.48
51:B5:48:GLU:HA	51:B5:48:GLU:OE1	2.13	0.48
28:DE:38:THR:O	28:DE:42:ASP:N	2.39	0.48
45:DZ:153:SER:OG	45:DZ:154:ASP:OD1	2.23	0.48
1:CA:1026:G:N3	1:CA:1026:G:H3'	2.29	0.48
1:CA:1119:C:C2	1:CA:1154:G:O6	2.66	0.48
1:AA:836:G:H1	1:AA:850:U:H3	1.60	0.48
1:AA:1004:A:N7	1:AA:1036:G:N2	2.62	0.48
1:CA:297:G:N2	1:CA:300:A:OP2	2.45	0.48
13:CM:3:ARG:HE	13:CM:4:ILE:HG22	1.79	0.48
54:B8:39:LYS:O	54:B8:43:GLN:HG3	2.14	0.48
1:AA:991:U:O2'	1:AA:992:U:P	2.72	0.48
1:CA:625:G:O2'	1:CA:626:U:H5'	2.14	0.48
25:DA:1614:A:C2	42:DW:93:ALA:HB2	2.49	0.48
12:AL:79:GLU:HB3	12:AL:80:HIS:HD2	1.78	0.48
31:DH:86:GLU:OE1	31:DH:130:ARG:HD3	2.13	0.48
25:BA:2798:C:H2'	25:BA:2799:U:O4'	2.14	0.48
1:CA:1027:C:C2	1:CA:1034:G:N2	2.68	0.48
25:BA:2650:G:P	28:BE:82:ARG:HH22	2.37	0.48
5:AE:152:ARG:HA	8:AH:64:LYS:NZ	2.29	0.48
25:BA:1537:G:O2'	27:BD:101:GLU:HB2	2.13	0.48
25:BA:747:G:H2'	25:BA:748:G:O4'	2.14	0.48
38:DS:88:ASP:OD1	38:DS:90:GLY:N	2.42	0.48
21:CU:22:ARG:HA	21:CU:23:PRO:HD3	1.69	0.48
13:CM:10:PRO:HB2	13:CM:13:LYS:HB2	1.94	0.48
26:BB:66:A:H61	26:BB:109:C:H5'	1.79	0.48
13:AM:97:PRO:HG2	13:AM:103:THR:HG22	1.96	0.48
16:AP:22:THR:HA	16:AP:33:ILE:HG12	1.94	0.48
29:DF:51:THR:HG23	29:DF:92:PRO:HG2	1.96	0.48
10:CJ:65:LEU:HD12	14:CN:55:GLY:O	2.14	0.48
15:AO:48:LYS:HD2	15:AO:48:LYS:HA	1.75	0.48
26:BB:75:G:H5''	26:BB:75:G:H8	1.79	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:1488:G:C5	25:DA:1489:U:H5	2.22	0.48
4:CD:117:ALA:O	4:CD:121:VAL:HG23	2.13	0.48
1:CA:1125:U:C2	10:CJ:38:ILE:HD13	2.49	0.48
26:DB:73:A:C4	26:DB:105:A:C2	3.01	0.48
10:AJ:30:SER:O	10:AJ:81:THR:HG23	2.14	0.48
2:AB:71:VAL:HG13	2:AB:93:VAL:HG21	1.95	0.48
2:AB:24:TRP:CE3	2:AB:26:PRO:HA	2.48	0.48
1:CA:1304:G:C6	1:CA:1305:G:N1	2.81	0.48
25:DA:937:U:H2'	25:DA:938:G:O4'	2.14	0.48
25:BA:1462:G:O2'	25:BA:1463:C:OP2	2.32	0.48
4:CD:15:GLU:HG2	4:CD:63:LYS:HB3	1.96	0.48
1:AA:598:U:H2'	1:AA:599:C:C6	2.48	0.48
1:CA:714:G:H2'	1:CA:715:A:C8	2.49	0.48
4:AD:188:LEU:H	4:AD:188:LEU:HD23	1.79	0.48
7:CG:100:ALA:O	7:CG:104:LEU:HD13	2.13	0.48
25:DA:644:A:H4'	25:DA:645:C:N4	2.29	0.48
1:CA:1067:A:N3	1:CA:1068:G:H1'	2.29	0.48
25:DA:2647:U:H2'	25:DA:2648:C:H6	1.79	0.48
29:BF:60:SER:OG	29:BF:61:GLY:N	2.47	0.48
25:DA:1412:A:H2'	25:DA:1413:G:C8	2.49	0.48
12:AL:34:ARG:HG2	12:AL:35:GLY:N	2.29	0.48
25:DA:2461:C:H2'	25:DA:2462:U:C6	2.49	0.48
25:DA:1348:G:O6	25:DA:1349:A:N6	2.47	0.48
33:DN:71:ILE:HG21	33:DN:84:LYS:HB3	1.95	0.48
45:DZ:54:HIS:NE2	45:DZ:123:ASP:HB3	2.28	0.48
25:BA:202:A:H2'	25:BA:203:G:O4'	2.14	0.48
35:DP:92:GLU:HA	35:DP:123:LEU:HD21	1.96	0.48
11:AK:70:LYS:HB2	11:AK:70:LYS:NZ	2.28	0.48
1:AA:15:G:H5'	1:AA:1396:A:O2'	2.13	0.48
45:BZ:8:TYR:HB2	45:BZ:38:TYR:CE2	2.49	0.48
1:CA:1256:A:H61	1:CA:1278:U:C1'	2.27	0.47
1:AA:472:A:N6	1:AA:473:G:C2	2.82	0.47
2:CB:19:HIS:CG	2:CB:20:GLU:H	2.31	0.47
1:CA:1223:C:OP2	19:CS:78:ARG:NH2	2.41	0.47
36:DQ:51:ARG:HD3	36:DQ:66:ILE:HD11	1.95	0.47
25:BA:2363:G:O6	54:B8:39:LYS:HG3	2.14	0.47
1:CA:1326:C:H5''	21:CU:18:TYR:O	2.14	0.47
12:AL:25:PRO:HD2	12:AL:98:TYR:OH	2.14	0.47
26:DB:45:A:H2'	26:DB:46:A:H8	1.78	0.47
5:AE:12:LEU:HD22	5:AE:13:ILE:N	2.29	0.47
25:DA:784:A:OP2	61:DA:4065:HOH:O	2.20	0.47
25:DA:2331:G:O2'	46:D0:43:THR:HG22	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:1658:C:H2'	25:DA:1659:U:C6	2.49	0.47
27:DD:17:THR:O	27:DD:211:ARG:NH2	2.47	0.47
35:DP:62:LEU:O	54:D8:13:ARG:HD3	2.14	0.47
1:AA:1292:U:C2'	1:AA:1293:G:H5'	2.44	0.47
31:DH:94:TYR:CE2	31:DH:160:LYS:HG2	2.49	0.47
25:DA:2359:C:H2'	25:DA:2360:A:O4'	2.13	0.47
25:DA:2556:C:H2'	25:DA:2557:G:O4'	2.14	0.47
25:DA:272(G):C:H42	25:DA:363(C):G:H1	1.62	0.47
1:CA:1106:G:H2'	1:CA:1107:C:C6	2.49	0.47
1:AA:880:C:OP1	12:AL:8:ASN:ND2	2.45	0.47
28:DE:9:VAL:HG22	28:DE:25:VAL:HB	1.96	0.47
25:BA:615:G:O2'	54:B8:4:MET:HG3	2.14	0.47
1:AA:1125:U:O2'	1:AA:1126:U:P	2.72	0.47
1:CA:1118:C:OP1	9:CI:104:ARG:NH1	2.46	0.47
1:CA:663:A:C2'	1:CA:664:G:H5'	2.44	0.47
25:BA:1249:A:H61	25:BA:1286:U:H2'	1.78	0.47
25:BA:70:A:N7	43:BX:31:HIS:HE1	2.12	0.47
25:DA:30:G:H2'	25:DA:31:C:H6	1.78	0.47
1:CA:1218:C:H2'	1:CA:1219:U:C6	2.49	0.47
1:AA:1366:C:H2'	1:AA:1367:C:C6	2.50	0.47
50:D4:59:PHE:HA	50:D4:60:GLN:C	2.35	0.47
1:CA:719:C:O2'	18:CR:49:LYS:HB3	2.13	0.47
25:DA:994:C:OP2	40:DU:54:LYS:NZ	2.38	0.47
2:AB:60:ASP:O	2:AB:64:ARG:HB2	2.14	0.47
1:CA:1207:G:H2'	1:CA:1208:C:H6	1.79	0.47
25:DA:1710:C:H2'	25:DA:1711:C:H6	1.78	0.47
1:AA:36:C:O2'	1:AA:501:C:OP1	2.32	0.47
25:BA:1957:G:H1'	25:BA:1986:G:N2	2.29	0.47
41:DV:76:LYS:HD2	41:DV:81:TYR:CD2	2.49	0.47
12:AL:80:HIS:HD1	24:AW:6:2R1:CG2	2.26	0.47
19:AS:3:ARG:NH1	19:AS:10:PHE:HB2	2.29	0.47
1:CA:589:C:O2'	1:CA:590:C:H5'	2.14	0.47
14:AN:26:ARG:CZ	14:AN:47:LEU:HD21	2.43	0.47
31:BH:7:LEU:HD12	31:BH:8:PRO:HD2	1.96	0.47
1:CA:1216:G:H5''	14:CN:5:ALA:CB	2.44	0.47
25:BA:2490:A:H5'	55:B9:31:LYS:HE2	1.96	0.47
1:AA:1226:C:C5	13:AM:104:ARG:HA	2.49	0.47
18:CR:61:LYS:O	18:CR:65:ILE:HG12	2.14	0.47
45:BZ:70:LEU:HA	45:BZ:70:LEU:HD23	1.67	0.47
1:AA:430:A:OP1	4:AD:9:CYS:HB2	2.14	0.47
26:BB:40:U:H2'	50:B4:2:LYS:HE3	1.95	0.47
34:BO:7:TYR:CZ	34:BO:44:LYS:HG3	2.49	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:AK:15:ALA:HB1	11:AK:78:GLN:HB2	1.95	0.47
30:DG:125:PHE:HB3	30:DG:166:ASP:OD1	2.14	0.47
23:AX:66:C:H2'	23:AX:67:C:O4'	2.14	0.47
1:CA:300:A:O2'	1:CA:564:C:N3	2.36	0.47
1:AA:1315:U:O2'	1:AA:1360:A:N3	2.39	0.47
1:CA:1169:A:N7	1:CA:1170:A:N7	2.62	0.47
45:DZ:53:ILE:CD1	45:DZ:99:TYR:HB2	2.44	0.47
1:CA:1286:A:H2	21:CU:18:TYR:HH	1.61	0.47
25:BA:1047:A:H2'	25:BA:1048:G:O4'	2.15	0.47
46:D0:27:GLU:HB2	46:D0:69:PHE:HD1	1.78	0.47
25:DA:1639:U:H2'	25:DA:1640:C:H5''	1.95	0.47
26:BB:48:A:H2'	26:BB:49:C:C6	2.49	0.47
1:CA:1270:C:H2'	1:CA:1271:G:H5'	1.96	0.47
25:DA:592:G:O2'	54:D8:4:MET:HG3	2.14	0.47
1:CA:1442:G:H2'	1:CA:1442(A):G:H5'	1.95	0.47
1:CA:650:G:H2'	1:CA:651:C:H5'	1.96	0.47
25:BA:2481:A:O2'	36:BQ:56:ARG:HD2	2.14	0.47
25:DA:568:U:H5'	25:DA:945:A:C2	2.50	0.47
52:B6:18:ARG:HD2	52:B6:42:TRP:CG	2.49	0.47
25:BA:1171:G:H5'	55:B9:37:GLY:HA2	1.97	0.47
18:CR:35:ARG:O	18:CR:37:VAL:N	2.46	0.47
15:AO:8:LYS:O	15:AO:12:ILE:HG13	2.14	0.47
45:BZ:132:ASN:O	45:BZ:134:PRO:HD3	2.14	0.47
9:CI:110:GLU:OE2	9:CI:113:LYS:HE2	2.14	0.47
25:DA:652(D):C:H42	25:DA:652(U):G:H1	1.62	0.47
53:B7:1:MET:H3	53:B7:1:MET:HE3	1.80	0.47
1:AA:782:A:O3'	1:AA:1515:C:H4'	2.14	0.47
1:AA:189(C):C:H2'	1:AA:189(D):C:O4'	2.14	0.47
1:CA:1002:G:C2	1:CA:1003:G:N7	2.83	0.47
1:CA:1025:U:O2'	1:CA:1026:G:H5''	2.15	0.47
1:CA:1151:A:O2'	1:CA:1152:A:H8	1.96	0.47
2:AB:16:HIS:CG	2:AB:17:PHE:N	2.71	0.47
1:CA:20:U:H2'	1:CA:21:G:O4'	2.14	0.47
1:AA:1316:G:H4'	14:AN:18:VAL:HG13	1.97	0.47
19:AS:41:VAL:HG12	19:AS:43:GLU:N	2.23	0.47
1:AA:1162:C:C2	1:AA:1175:G:C2	3.02	0.47
43:DX:92:LEU:C	43:DX:94:GLY:H	2.17	0.47
1:CA:1237:C:O2'	1:CA:1300:G:N1	2.37	0.47
25:DA:530:G:C5	25:DA:2022:U:H5''	2.50	0.47
1:CA:540:G:H2'	1:CA:541:G:C8	2.48	0.47
48:B2:32:LEU:HD21	48:B2:54:LYS:HG3	1.97	0.47
13:AM:15:VAL:HG13	13:AM:43:THR:O	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:865:A:C2	1:AA:918:A:H4'	2.49	0.47
25:DA:242:G:H5''	54:D8:64:TYR:CE2	2.50	0.47
25:DA:954:G:C2	25:DA:964:C:O2	2.67	0.47
25:BA:1074:A:N6	25:BA:1171:G:H2'	2.29	0.47
27:DD:58:HIS:ND1	27:DD:59:LYS:N	2.62	0.47
25:DA:1525:G:H2'	25:DA:1526:G:C8	2.50	0.47
1:AA:1187:G:N3	14:AN:60:SER:OG	2.48	0.47
4:AD:30:LYS:HA	4:AD:35:ARG:HH11	1.79	0.47
25:BA:1495:G:O2'	25:BA:1575:A:N1	2.38	0.47
11:AK:69:ALA:O	11:AK:73:MET:HG3	2.14	0.47
1:AA:860:A:OP2	61:AA:4055:HOH:O	2.20	0.47
42:DW:82:LEU:HD22	42:DW:84:ARG:NH2	2.29	0.47
1:CA:1009:G:N2	1:CA:1021:G:H1'	2.29	0.47
13:AM:120:LYS:HA	13:AM:121:LYS:HE3	1.95	0.47
44:BY:19:LYS:HE2	44:BY:20:TYR:CE1	2.49	0.47
25:DA:2439:A:C8	25:DA:2439:A:H5'	2.50	0.47
33:BN:138:LEU:HD23	33:BN:138:LEU:HA	1.52	0.47
1:AA:1125:U:H1'	1:AA:1126:U:O5'	2.14	0.47
2:CB:163:PHE:CD1	2:CB:185:ILE:HG13	2.47	0.47
1:CA:1492:A:H2'	1:CA:1493:A:C1'	2.43	0.47
25:DA:1803:A:HO2'	27:DD:259:THR:HG21	1.79	0.47
1:CA:1134:G:H1	1:CA:1140:C:H42	1.62	0.47
25:DA:287:C:H2'	25:DA:288:C:H6	1.79	0.47
29:DF:184:TYR:CE2	29:DF:188:ARG:HD2	2.50	0.47
25:BA:1001:G:OP2	36:BQ:14:ARG:NH2	2.47	0.47
25:BA:839:G:O2'	61:BA:4651:HOH:O	2.20	0.47
15:CO:54:ARG:HD3	15:CO:58:MET:CE	2.43	0.47
1:CA:1070:U:H2'	1:CA:1071:C:C6	2.50	0.47
27:BD:108:PRO:HD2	27:BD:111:LEU:HG	1.96	0.47
25:DA:307:G:H2'	25:DA:309:G:OP2	2.14	0.47
25:DA:1494:A:C6	25:DA:1495:A:C6	3.03	0.47
1:CA:160:A:H61	1:CA:347:G:H1'	1.80	0.47
25:DA:2741:A:H2'	25:DA:2742:C:O4'	2.13	0.47
25:BA:2504:U:H2'	25:BA:2505:U:C6	2.49	0.47
25:BA:705:C:H2'	25:BA:706:C:C6	2.49	0.47
1:CA:1077:G:N1	1:CA:1081:G:C6	2.83	0.47
37:BR:57:ARG:HB3	37:BR:59:ASP:OD1	2.13	0.47
19:AS:69:HIS:HD2	19:AS:73:GLU:OE1	1.97	0.47
25:DA:2297:C:C6	25:DA:2297:C:H3'	2.49	0.47
45:DZ:31:ARG:HD2	45:DZ:94:GLU:OE2	2.15	0.47
3:CC:117:ALA:HB2	3:CC:200:ALA:HB2	1.97	0.47
29:DF:178:PRO:HG2	29:DF:179:GLU:OE1	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:DZ:33:LEU:HD21	45:DZ:90:VAL:HG21	1.96	0.47
25:BA:207:A:C2	25:BA:224:U:H4'	2.50	0.47
1:CA:954:G:H2'	1:CA:955:U:C6	2.49	0.47
31:BH:40:GLU:OE1	31:BH:61:HIS:NE2	2.44	0.47
2:CB:69:LEU:HD12	2:CB:70:PHE:H	1.80	0.47
10:CJ:42:THR:HG23	10:CJ:68:HIS:HA	1.97	0.47
25:DA:2771:C:H5''	28:DE:202:LYS:HD3	1.95	0.47
25:DA:2332:U:H5'	25:DA:2336:A:N6	2.30	0.47
25:DA:1429:G:H2'	25:DA:1430:C:C6	2.49	0.47
1:CA:979:C:H2'	1:CA:980:C:H5'	1.96	0.47
38:DS:53:SER:OG	38:DS:54:LEU:N	2.47	0.47
25:DA:1826:G:H4'	27:DD:242:ARG:CZ	2.45	0.47
25:DA:2356:C:O3'	46:D0:20:ARG:HD2	2.14	0.47
25:DA:574:C:H1'	25:DA:2055:C:C6	2.50	0.47
20:CT:47:GLY:HA2	20:CT:48:LYS:CB	2.44	0.47
25:DA:1463:C:H2'	25:DA:1464:C:H6	1.79	0.47
27:DD:139:GLY:N	27:DD:165:ILE:O	2.47	0.47
25:DA:1668:A:O2'	25:DA:1674:G:N7	2.34	0.47
25:BA:248:G:O2'	25:BA:646:A:O2'	2.25	0.47
25:DA:1773:A:H5''	61:DA:4250:HOH:O	2.13	0.47
31:BH:22:GLY:HA2	31:BH:37:VAL:O	2.14	0.47
44:DY:13:VAL:HG12	44:DY:74:PRO:HA	1.96	0.47
2:CB:189:ASP:OD1	2:CB:189:ASP:N	2.46	0.47
1:AA:1125:U:H1'	1:AA:1126:U:H2'	1.97	0.47
1:CA:1122:U:H5'	1:CA:1123:A:OP2	2.14	0.47
10:CJ:8:LEU:HB3	10:CJ:16:LEU:HD22	1.96	0.47
1:CA:1134:G:H2'	1:CA:1135:U:H5'	1.97	0.47
1:CA:1277:C:O2'	1:CA:1279:A:H8	1.98	0.47
1:CA:1291:G:H2'	1:CA:1292:U:C6	2.50	0.47
1:CA:149:A:H2'	1:CA:150:C:C6	2.50	0.47
1:CA:1130:A:H5'	9:CI:18:PHE:CE2	2.50	0.47
25:DA:652(B):A:N1	25:DA:655:A:H1'	2.30	0.47
1:AA:196:A:H8	1:AA:196:A:O5'	1.98	0.47
1:AA:68:G:H22	1:AA:101:A:H2	1.63	0.47
7:AG:46:ALA:HA	7:AG:49:ILE:HD12	1.97	0.47
1:AA:407:G:O2'	4:AD:116:GLN:HG3	2.15	0.47
25:DA:30:G:OP2	40:DU:5:LYS:HE2	2.15	0.47
19:CS:14:HIS:O	19:CS:18:LYS:HG3	2.14	0.47
29:BF:14:PRO:HD2	29:BF:127:GLU:OE2	2.15	0.47
35:BP:63:PRO:HB2	54:B8:30:ARG:NH2	2.29	0.47
26:BB:31:C:H4'	30:BG:29:TRP:CH2	2.50	0.47
25:DA:2291:U:H2'	25:DA:2292:C:H6	1.76	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:502:G:C6	1:CA:503:C:N3	2.83	0.47
4:AD:166:LYS:HB2	4:AD:168:ARG:NH2	2.30	0.47
4:AD:31:CYS:SG	4:AD:33:MET:N	2.83	0.47
1:CA:875:C:O2'	8:CH:14:ARG:HD2	2.15	0.47
25:DA:1707:G:H2'	25:DA:1708:C:C6	2.49	0.47
32:DI:77:LEU:HD13	32:DI:79:ILE:HD11	1.96	0.47
25:DA:854:G:H2'	25:DA:855:G:C8	2.49	0.47
27:BD:106:ILE:O	27:BD:108:PRO:HD3	2.15	0.47
12:CL:71:PRO:O	12:CL:102:ARG:HD2	2.15	0.47
1:AA:631:G:H2'	1:AA:632:A:C8	2.50	0.47
25:DA:34:C:O2'	25:DA:35:G:OP1	2.26	0.47
1:CA:1111:A:N1	3:CC:177:THR:OG1	2.37	0.47
4:CD:150:GLU:HA	4:CD:153:ARG:HE	1.79	0.47
1:AA:532:A:O2'	1:AA:533:A:P	2.73	0.47
25:DA:303:U:H2'	25:DA:304:G:C8	2.50	0.47
1:CA:1238:A:C2	1:CA:1303:C:H4'	2.50	0.47
25:BA:956:A:N1	25:BA:2289:G:H1'	2.30	0.47
1:CA:773:G:H1	1:CA:806:C:H42	1.61	0.47
28:DE:37:ARG:O	28:DE:45:THR:HA	2.14	0.47
34:DO:120:GLU:HB2	39:DT:68:TYR:HE2	1.79	0.47
3:AC:138:VAL:HG23	3:AC:151:VAL:HG23	1.96	0.47
42:BW:28:SER:O	42:BW:31:GLU:N	2.47	0.47
36:DQ:63:LYS:HE2	36:DQ:65:PHE:CE2	2.49	0.47
1:CA:576:G:N2	1:CA:760:G:OP2	2.48	0.47
34:DO:91:LEU:N	34:DO:91:LEU:HD23	2.30	0.47
25:DA:2687:U:H2'	25:DA:2688:U:O4'	2.15	0.47
1:CA:1051:C:H2'	1:CA:1052:U:H6	1.78	0.47
5:AE:57:LYS:HD3	5:AE:61:TYR:HE2	1.80	0.47
11:AK:84:VAL:HG11	11:AK:91:ARG:HD2	1.95	0.47
25:DA:1030:G:OP2	36:DQ:128:LYS:NZ	2.44	0.47
1:AA:49:U:H3	1:AA:362:G:H1'	1.78	0.47
8:CH:28:ALA:HB3	8:CH:57:PRO:HB2	1.96	0.47
1:AA:323:U:H5'	20:AT:23:ARG:HB2	1.96	0.47
1:AA:1068:G:N7	1:AA:1094:G:H2'	2.30	0.47
27:DD:63:ARG:HD3	27:DD:92:ILE:HD11	1.96	0.47
24:AW:9:MVA:O	24:AW:10:2QY:CD2	2.63	0.47
25:DA:1167:U:O2	25:DA:1183:G:N2	2.48	0.47
9:AI:86:VAL:HG13	9:AI:96:LEU:HD12	1.97	0.47
25:BA:82:G:N2	25:BA:101:A:OP2	2.47	0.47
31:DH:11:VAL:HG21	31:DH:50:VAL:HG23	1.97	0.47
1:CA:658:G:C6	1:CA:659:U:C4	3.02	0.47
31:DH:104:GLU:HG3	31:DH:114:VAL:HG22	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BA:2891:C:H2'	25:BA:2892:A:O4'	2.14	0.47
49:D3:18:ASP:N	49:D3:18:ASP:OD1	2.48	0.47
15:AO:17:ARG:HG3	15:AO:17:ARG:HH11	1.79	0.47
25:BA:2724:U:O2'	25:BA:2726:A:H5'	2.15	0.47
25:BA:2828:G:OP2	37:BR:42:LYS:NZ	2.42	0.47
38:DS:7:TYR:CZ	38:DS:91:PRO:HG3	2.49	0.47
1:CA:1179:A:N6	1:CA:1180:A:N7	2.62	0.47
1:AA:1005:A:H1'	1:AA:1036:G:H22	1.79	0.47
1:CA:923:A:OP1	5:CE:21:ALA:HB2	2.15	0.47
9:CI:38:GLN:HG2	9:CI:39:GLY:N	2.29	0.47
25:BA:354:A:HO2'	25:BA:355:A:H8	1.57	0.47
54:B8:61:LEU:O	54:B8:63:PRO:HD3	2.14	0.47
25:BA:895:G:O6	25:BA:974:G:H2'	2.15	0.47
1:AA:145:G:H2'	1:AA:146:G:C5'	2.45	0.47
1:AA:170:U:O2'	1:AA:171:A:H5'	2.15	0.47
28:DE:72:VAL:HA	28:DE:73:GLU:CB	2.44	0.47
6:CF:10:LEU:HD11	6:CF:85:VAL:HG22	1.95	0.47
25:DA:185:U:H4'	25:DA:218:A:H4'	1.97	0.47
1:AA:1118:C:H1'	1:AA:1179:A:C5	2.50	0.47
1:CA:839:U:HO2'	1:CA:840:C:P	2.35	0.47
1:CA:590:C:H2'	1:CA:591:U:C6	2.49	0.47
37:DR:38:VAL:HG22	37:DR:112:ALA:HB2	1.97	0.47
25:BA:2649:U:O3'	28:BE:82:ARG:NH2	2.48	0.47
1:AA:652:U:O2'	1:AA:653:A:OP2	2.29	0.47
39:BT:24:PRO:HA	39:BT:49:VAL:HG22	1.96	0.47
26:BB:1:U:H2'	26:BB:2:C:C6	2.50	0.47
1:CA:58:C:O2'	1:CA:388:G:N7	2.45	0.47
28:BE:73:GLU:H	28:BE:73:GLU:HG3	1.54	0.47
1:AA:397:A:N3	1:AA:397:A:H3'	2.30	0.47
33:BN:4:TYR:CD2	40:BU:100:VAL:HG11	2.50	0.47
1:AA:543:C:C2'	1:AA:544:G:H5'	2.45	0.47
2:AB:54:THR:O	2:AB:58:ILE:HG13	2.15	0.47
1:AA:1314:C:H5	19:AS:4:SER:HB2	1.80	0.47
1:AA:1236:A:O2'	1:AA:1304:G:H4'	2.15	0.47
1:AA:180:U:O2'	1:AA:181:G:H5'	2.15	0.47
1:AA:149:A:H2'	1:AA:150:C:C6	2.50	0.47
1:AA:1346:A:H5''	9:AI:120:ARG:NH1	2.29	0.47
50:D4:59:PHE:O	50:D4:62:ARG:NH2	2.48	0.47
25:DA:923:C:H1'	46:D0:29:GLN:HG2	1.97	0.47
25:BA:312:C:H2'	25:BA:313:A:H8	1.79	0.47
11:CK:48:ILE:O	11:CK:50:TYR:N	2.47	0.47
1:AA:403:C:H2'	1:AA:404:U:H6	1.80	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
50:B4:6:HIS:HA	50:B4:7:PRO:HD3	1.77	0.47
25:DA:2369:A:H2'	25:DA:2370:G:C8	2.50	0.47
25:BA:1699:A:OP1	37:BR:8:ARG:NH1	2.48	0.47
35:BP:2:LYS:NZ	35:BP:4:SER:HB3	2.29	0.47
1:AA:909:A:H2'	1:AA:910:C:O4'	2.14	0.47
25:BA:1810:U:H2'	61:BA:4798:HOH:O	2.15	0.47
3:CC:92:ALA:HB2	3:CC:99:VAL:CB	2.45	0.47
23:CX:61:C:H2'	23:CX:62:C:H6	1.79	0.47
7:CG:18:TYR:HB3	7:CG:59:LEU:HD13	1.97	0.47
1:CA:304:U:H2'	1:CA:305:G:C8	2.49	0.47
25:BA:1650:C:H5''	61:BA:4275:HOH:O	2.15	0.47
1:CA:771:G:N7	61:CA:4038:HOH:O	2.36	0.47
25:BA:2692:C:H5'	28:BE:189:PRO:HA	1.96	0.47
1:AA:1189:C:H5''	1:AA:1190:G:OP2	2.15	0.47
1:CA:1005:A:H1'	1:CA:1036:G:C6	2.49	0.47
1:CA:1003:G:H1	1:CA:1035:A:N6	2.12	0.47
1:AA:1149:C:H2'	1:AA:1150:U:H6	1.79	0.47
30:DG:32:PRO:HB2	30:DG:172:LEU:HD22	1.97	0.47
1:CA:425:G:C2	1:CA:426:G:C8	3.02	0.47
3:CC:73:PRO:HB3	3:CC:103:VAL:CG1	2.40	0.47
1:AA:1030(B):C:C2'	1:AA:1030(C):G:H5'	2.45	0.47
25:DA:195:A:H5''	25:DA:196:A:O5'	2.15	0.47
1:AA:664:G:N2	1:AA:741:G:H1	2.12	0.47
1:CA:1376:U:C2	1:CA:1377:A:N7	2.83	0.47
7:CG:113:GLU:O	7:CG:119:ARG:HD3	2.15	0.47
1:AA:486:U:H2'	1:AA:487:A:H8	1.80	0.47
1:CA:953:G:N7	13:CM:104:ARG:NH1	2.63	0.47
25:DA:71:A:H5''	25:DA:73:A:C8	2.50	0.47
25:DA:848:G:N3	25:DA:933:A:H1'	2.30	0.47
25:BA:1517:G:C6	25:BA:1567:G:N7	2.83	0.47
12:AL:24:VAL:HG13	12:AL:98:TYR:CE2	2.50	0.47
36:DQ:135:ASP:HB2	36:DQ:138:ASP:OD2	2.15	0.47
1:CA:532:A:H62	3:CC:156:ARG:HH12	1.61	0.47
29:BF:116:ASP:OD2	35:BP:1:MET:HB2	2.15	0.47
9:CI:6:GLY:O	9:CI:17:VAL:HG12	2.15	0.47
1:CA:947:G:H2'	1:CA:948:C:O4'	2.15	0.47
50:B4:63:TYR:CD1	50:B4:63:TYR:N	2.83	0.47
25:DA:1364:G:P	47:D1:3:LYS:HG3	2.54	0.47
43:DX:59:VAL:HG21	43:DX:78:LYS:HE3	1.96	0.47
25:BA:934:A:H4'	25:BA:935:C:H5	1.80	0.47
25:DA:143:G:H2'	25:DA:143(A):C:H6	1.76	0.47
1:CA:1191:A:OP1	3:CC:4:LYS:HG3	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1032:G:H2'	1:CA:1033:G:C8	2.50	0.47
50:D4:5:ILE:HG12	50:D4:6:HIS:CD2	2.50	0.47
54:D8:3:LYS:HB2	54:D8:64:TYR:HH	1.80	0.47
25:BA:1790:A:H1'	25:BA:2723:A:C2	2.50	0.47
1:AA:308:C:H2'	1:AA:309:G:C8	2.50	0.47
33:BN:75:TYR:CE2	33:BN:77:GLY:HA2	2.50	0.47
1:CA:583:A:H2'	1:CA:584:G:O4'	2.15	0.47
49:D3:3:ARG:HH11	49:D3:60:GLU:CB	2.28	0.47
11:AK:34:ASP:HB2	11:AK:35:PRO:HD2	1.97	0.47
20:AT:31:SER:HA	20:AT:34:LYS:HE2	1.97	0.47
6:AF:99:ALA:O	18:AR:28:GLU:HG3	2.14	0.47
25:BA:2858:G:C8	39:BT:97:ALA:HB2	2.50	0.47
25:DA:536:A:H2'	25:DA:537:C:C6	2.50	0.47
25:DA:26:G:OP1	42:DW:80:PRO:HB3	2.14	0.47
29:DF:137:LYS:HA	29:DF:140:LEU:HD23	1.97	0.47
25:DA:1142:U:H2'	25:DA:1142:U:O2	2.14	0.47
25:BA:1921:G:H2'	25:BA:1921:G:N3	2.29	0.47
54:D8:62:LEU:HB3	54:D8:65:GLU:HG2	1.97	0.47
45:BZ:24:LEU:HB2	45:BZ:41:LEU:HD23	1.96	0.47
44:BY:54:LYS:HA	44:BY:56:PRO:CD	2.36	0.46
1:CA:1292:U:OP2	7:CG:41:ARG:NH2	2.49	0.46
19:AS:52:TYR:HB2	19:AS:57:HIS:CE1	2.50	0.46
25:DA:1352:U:OP1	61:DA:3789:HOH:O	2.20	0.46
1:CA:1220:G:N2	1:CA:1221:G:H1'	2.30	0.46
1:AA:834:C:H2'	1:AA:835:U:C6	2.50	0.46
3:CC:12:LEU:HA	3:CC:16:ARG:HB3	1.98	0.46
1:AA:997:U:H3	1:AA:1044:A:N6	2.13	0.46
35:DP:99:LEU:HD23	35:DP:99:LEU:H	1.80	0.46
26:DB:95:C:H2'	26:DB:96:U:H6	1.78	0.46
25:DA:1028:A:N6	25:DA:1125:G:H2'	2.30	0.46
25:DA:984:A:H5''	25:DA:985:C:C5	2.49	0.46
6:AF:1:MET:HA	6:AF:67:MET:O	2.14	0.46
16:CP:57:ARG:HH21	16:CP:79:VAL:HA	1.80	0.46
1:AA:1217:C:H2'	1:AA:1218:C:O4'	2.15	0.46
39:DT:121:ILE:O	39:DT:124:ASP:HB2	2.14	0.46
15:CO:3:ILE:HG21	15:CO:34:LEU:HD21	1.97	0.46
52:D6:25:LYS:HE3	52:D6:27:LYS:HA	1.96	0.46
25:BA:1372:U:H2'	25:BA:1373:C:C6	2.50	0.46
32:BI:9:LEU:HD13	32:BI:10:GLU:HG2	1.97	0.46
13:AM:16:ASP:N	13:AM:16:ASP:OD1	2.48	0.46
25:DA:1899:G:N3	25:DA:1899:G:H2'	2.30	0.46
31:DH:137:ASP:HB3	31:DH:140:LYS:HB3	1.97	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:BE:34:VAL:HG21	28:BE:78:LEU:HD11	1.97	0.46
1:CA:427:U:H2'	1:CA:428:G:C8	2.50	0.46
1:AA:437:U:O3'	4:AD:125:HIS:HE1	1.98	0.46
1:AA:1305:G:N2	1:AA:1331:G:H1'	2.30	0.46
25:DA:1397:U:OP2	25:DA:1398:C:N4	2.42	0.46
26:DB:33:G:C6	26:DB:34:U:C4	3.03	0.46
25:DA:2807:G:N2	25:DA:2893:G:O6	2.48	0.46
46:D0:56:ASP:OD1	46:D0:58:THR:OG1	2.31	0.46
1:CA:1015:A:H2'	1:CA:1016:A:C8	2.50	0.46
1:AA:380:G:N1	1:AA:384:G:C6	2.83	0.46
25:DA:2291:U:O2'	25:DA:2374:C:O2	2.30	0.46
25:DA:994:C:H1'	41:DV:10:LYS:HE3	1.98	0.46
1:AA:839:U:H5''	1:AA:840:C:H5	1.81	0.46
13:CM:60:VAL:HG23	13:CM:64:TRP:HE3	1.78	0.46
1:CA:1070:U:H2'	1:CA:1071:C:H6	1.80	0.46
1:AA:616:G:C2	1:AA:617:G:C8	3.03	0.46
1:AA:627:G:H2'	1:AA:628:G:H8	1.79	0.46
3:AC:12:LEU:HA	3:AC:16:ARG:HB3	1.97	0.46
1:CA:1207:G:H2'	1:CA:1208:C:C6	2.49	0.46
25:DA:475:U:C4	25:DA:481:G:O6	2.69	0.46
25:BA:1629:C:C2	25:BA:1630:A:C8	3.03	0.46
1:CA:78:G:C2'	1:CA:79:G:H5'	2.45	0.46
4:CD:64:LEU:HB2	4:CD:198:VAL:HG21	1.97	0.46
1:AA:272:C:H2'	1:AA:273:A:C8	2.49	0.46
25:DA:2591:C:OP1	27:DD:239:ARG:HD2	2.15	0.46
27:DD:206:LEU:HD23	27:DD:206:LEU:HA	1.49	0.46
25:BA:1592:A:H2'	25:BA:1593:C:O4'	2.16	0.46
38:BS:34:HIS:HD1	38:BS:53:SER:HG	1.62	0.46
13:CM:92:HIS:CE1	13:CM:98:VAL:HG21	2.50	0.46
52:D6:36:LEU:HB3	52:D6:38:LYS:HZ1	1.79	0.46
1:CA:629:G:H2'	1:CA:630:G:O4'	2.14	0.46
1:AA:300:A:H1'	1:AA:565:U:O2	2.15	0.46
25:BA:662:A:H8	35:BP:117:GLU:HG3	1.81	0.46
2:AB:115:LEU:O	2:AB:119:GLU:HG2	2.15	0.46
1:CA:380:G:C2	1:CA:384:G:C6	3.04	0.46
1:AA:1057:G:H2'	1:AA:1058:G:O4'	2.16	0.46
1:AA:791:G:C2'	1:AA:792:A:H5'	2.46	0.46
8:CH:86:ILE:HG13	8:CH:133:LEU:HD22	1.97	0.46
42:BW:33:ARG:NE	42:BW:52:GLU:OE1	2.48	0.46
33:DN:58:ASP:N	33:DN:58:ASP:OD1	2.39	0.46
25:DA:1945:G:H2'	25:DA:1946:U:C6	2.50	0.46
53:B7:11:LYS:HE3	53:B7:15:THR:OG1	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BA:2735:G:H2'	25:BA:2736:C:C6	2.50	0.46
50:B4:68:ARG:O	50:B4:69:LYS:HB3	2.15	0.46
1:CA:1041:A:C6	1:CA:1042:G:C6	3.04	0.46
1:CA:1151:A:O4'	10:CJ:39:PRO:HB2	2.15	0.46
1:AA:1025:U:O2	1:AA:1036:G:C6	2.67	0.46
25:DA:300:A:H3'	44:DY:84:ARG:NH2	2.31	0.46
1:CA:662:G:H2'	1:CA:663:A:C8	2.51	0.46
3:AC:11:ARG:HD3	3:AC:15:THR:HB	1.97	0.46
1:AA:1305:G:H22	1:AA:1331:G:H1'	1.80	0.46
20:AT:14:LYS:O	20:AT:18:GLN:HG3	2.15	0.46
31:BH:126:PRO:HB2	31:BH:127:GLU:H	1.41	0.46
2:AB:178:ARG:HH22	8:AH:68:ARG:HH12	1.63	0.46
25:DA:2262:U:H4'	25:DA:2328:A:C2	2.49	0.46
45:BZ:69:THR:HG22	45:BZ:90:VAL:HG22	1.98	0.46
25:DA:1531:C:N4	25:DA:1538:G:H1	2.12	0.46
1:CA:942:G:C2	1:CA:1342:C:C2	3.03	0.46
36:DQ:18:LYS:HE3	36:DQ:18:LYS:HB2	1.71	0.46
25:DA:2880:C:O3'	37:DR:90:ARG:NH1	2.48	0.46
25:BA:1041:C:OP2	40:BU:54:LYS:NZ	2.45	0.46
30:DG:106:LEU:HA	30:DG:110:ALA:HB3	1.96	0.46
25:DA:2563:U:O2	25:DA:2565:A:H8	1.98	0.46
42:DW:59:VAL:HA	42:DW:64:MET:O	2.16	0.46
20:CT:58:LYS:HE3	20:CT:62:LEU:HD12	1.97	0.46
25:DA:627:A:H4'	25:DA:628:G:H5'	1.97	0.46
25:DA:1311:G:N7	53:D7:47:ARG:HD2	2.31	0.46
7:CG:132:GLY:O	7:CG:136:LYS:HG2	2.15	0.46
35:DP:138:LEU:HD11	35:DP:143:GLY:HA3	1.97	0.46
25:DA:581:C:H2'	25:DA:582:G:C8	2.50	0.46
25:DA:583:G:OP2	40:DU:10:ARG:NH1	2.47	0.46
25:BA:1521:C:H2'	25:BA:1522:G:C8	2.49	0.46
53:B7:24:THR:HG22	53:B7:26:GLY:H	1.80	0.46
53:B7:24:THR:HG22	53:B7:26:GLY:N	2.29	0.46
1:CA:1003:G:C6	1:CA:1004:A:H2	2.32	0.46
45:DZ:30:ASN:ND2	45:DZ:90:VAL:HB	2.31	0.46
4:AD:173:TRP:HZ3	4:AD:174:LEU:HG	1.74	0.46
1:AA:741:G:H2'	1:AA:742:G:O4'	2.15	0.46
1:AA:146:G:C4	1:AA:147:G:C8	3.03	0.46
25:DA:2704:C:H2'	25:DA:2705:A:O4'	2.15	0.46
25:DA:649:G:C5	25:DA:650:C:C4	3.03	0.46
1:CA:955:U:H2'	1:CA:956:U:O4'	2.15	0.46
40:DU:79:PHE:O	40:DU:83:LEU:HD22	2.15	0.46
28:DE:72:VAL:HG22	28:DE:73:GLU:HG2	1.98	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:622:A:C8	1:AA:623:C:C5	3.03	0.46
25:DA:1800:C:OP2	27:DD:183:ARG:NH2	2.47	0.46
35:DP:52:GLU:OE2	54:D8:57:ARG:NH1	2.44	0.46
25:DA:370:G:H4'	25:DA:371:A:OP2	2.16	0.46
8:CH:20:TYR:CE2	8:CH:75:ARG:HG2	2.51	0.46
1:AA:958:A:C6	1:AA:959:A:N1	2.83	0.46
1:AA:1433:A:C6	1:AA:1468:A:C4	3.03	0.46
1:AA:1291:G:H4'	9:AI:39:GLY:HA3	1.97	0.46
1:CA:1356:G:H2'	1:CA:1357:A:C8	2.51	0.46
1:CA:67:C:H2'	1:CA:68:G:H8	1.80	0.46
1:AA:16:A:N1	1:AA:919:A:H2	2.13	0.46
25:DA:1651:G:H5'	37:DR:39:PRO:HG2	1.97	0.46
25:BA:319:G:H1	25:BA:367:C:H42	1.63	0.46
5:CE:71:LEU:HD11	5:CE:115:VAL:HG22	1.96	0.46
25:BA:196:A:H2'	25:BA:197:C:O4'	2.14	0.46
1:AA:1302:U:OP2	13:AM:21:TYR:OH	2.26	0.46
25:BA:664:U:H2'	25:BA:665:C:C6	2.51	0.46
2:CB:180:LEU:O	2:CB:181:PHE:HB2	2.15	0.46
32:BI:27:ARG:HD2	47:B1:71:TYR:CE1	2.51	0.46
38:DS:38:GLN:HB2	38:DS:47:THR:HG23	1.98	0.46
25:BA:2262:G:C8	25:BA:2508:C:H5''	2.50	0.46
8:CH:98:LYS:HE3	8:CH:98:LYS:HB2	1.73	0.46
1:CA:971:G:OP1	1:CA:971:G:H3'	2.16	0.46
52:D6:19:ARG:N	52:D6:19:ARG:HD2	2.31	0.46
12:CL:34:ARG:HG3	12:CL:105:TYR:CE2	2.50	0.46
25:BA:1421:C:H2'	25:BA:1422:C:H6	1.79	0.46
1:AA:804:U:H5''	1:AA:805:C:OP2	2.15	0.46
25:DA:687:C:H2'	25:DA:688:U:O4'	2.15	0.46
1:CA:1127:G:H5'	1:CA:1280:A:O2'	2.15	0.46
10:CJ:9:ARG:HG2	10:CJ:69:ASN:OD1	2.14	0.46
30:DG:82:LEU:HA	30:DG:86:MET:SD	2.55	0.46
2:CB:20:GLU:HG3	2:CB:191:ASP:HB3	1.97	0.46
1:AA:55:A:C5	1:AA:56:U:C5	3.04	0.46
45:DZ:52:SER:OG	45:DZ:53:ILE:N	2.48	0.46
1:AA:376:G:P	16:AP:67:THR:HG21	2.56	0.46
25:DA:530:G:O4'	25:DA:530:G:N3	2.49	0.46
25:DA:848:G:C4	25:DA:933:A:H8	2.34	0.46
1:CA:757:U:O2'	1:CA:879:C:O2	2.21	0.46
25:DA:1319:G:C6	25:DA:1320:C:N4	2.84	0.46
1:AA:583:A:H2'	1:AA:584:G:O4'	2.16	0.46
8:CH:49:GLU:HG2	8:CH:62:TYR:CE2	2.48	0.46
38:BS:14:VAL:O	38:BS:18:ILE:HG12	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:DE:163:GLU:HG2	28:DE:164:ARG:H	1.80	0.46
25:BA:211:A:H3'	25:BA:448:U:H5'	1.97	0.46
1:CA:1061:G:C2'	1:CA:1062:U:H5'	2.46	0.46
20:CT:14:LYS:O	20:CT:18:GLN:HG3	2.15	0.46
25:DA:625:G:N7	35:DP:107:LYS:NZ	2.59	0.46
1:CA:1124:G:C5'	10:CJ:36:GLY:H	2.29	0.46
25:DA:1274:A:N1	25:DA:1644:C:O2'	2.40	0.46
1:AA:1136:U:H5''	1:AA:1137:C:N3	2.31	0.46
1:CA:688:G:H5'	11:CK:46:GLY:C	2.36	0.46
25:BA:2517:G:O6	25:BA:2588:G:H2'	2.15	0.46
7:AG:26:PHE:O	7:AG:30:ILE:HG13	2.15	0.46
1:AA:1418:A:C2	1:AA:1483:A:C2	3.03	0.46
1:CA:799:G:H8	1:CA:799:G:H5''	1.80	0.46
2:CB:22:LYS:HB3	2:CB:22:LYS:HE2	1.60	0.46
38:DS:78:LEU:HD11	38:DS:108:GLY:O	2.15	0.46
4:AD:138:TYR:HE1	4:AD:140:VAL:HA	1.80	0.46
1:CA:1036:G:N7	1:CA:1037:C:O2	2.48	0.46
2:CB:207:ALA:O	2:CB:210:SER:OG	2.20	0.46
10:AJ:38:ILE:HD11	10:AJ:71:LEU:HB3	1.97	0.46
10:CJ:62:HIS:HB3	14:CN:59:ALA:HB3	1.96	0.46
25:DA:300:A:H1'	25:DA:319:C:C1'	2.45	0.46
25:DA:315:G:H2'	25:DA:316:C:C6	2.51	0.46
1:CA:1131:G:OP1	9:CI:20:ARG:NH2	2.48	0.46
20:CT:54:LYS:HA	20:CT:57:ARG:CZ	2.46	0.46
1:AA:826:C:H2'	1:AA:827:U:C6	2.51	0.46
43:DX:44:GLU:HG3	43:DX:51:VAL:HG23	1.97	0.46
1:CA:1305:G:H22	1:CA:1331:G:H1'	1.80	0.46
32:BI:93:THR:HG22	32:BI:119:PRO:HB3	1.98	0.46
5:AE:100:VAL:O	5:AE:107:ARG:NH2	2.49	0.46
1:AA:932:C:H2'	1:AA:933:G:C8	2.51	0.46
25:DA:1264:G:H2'	25:DA:2014:A:N6	2.30	0.46
29:DF:164:ARG:O	29:DF:168:ARG:HB2	2.15	0.46
1:CA:1308:U:OP2	13:CM:99:ARG:HD3	2.15	0.46
25:BA:1042:A:H4'	40:BU:91:ASP:OD2	2.16	0.46
25:BA:403:C:H2'	25:BA:404:C:H6	1.79	0.46
30:DG:173:LEU:HD22	30:DG:178:PHE:CE1	2.50	0.46
45:BZ:53:ILE:HG22	45:BZ:71:VAL:O	2.16	0.46
45:BZ:67:LEU:HA	45:BZ:68:PRO:HD3	1.86	0.46
25:BA:1836:U:H5''	27:BD:250:TRP:CE2	2.50	0.46
32:DI:27:ARG:HD2	47:D1:71:TYR:CE1	2.51	0.46
25:BA:1471:G:H2'	25:BA:1472:G:C8	2.51	0.46
18:CR:59:SER:H	18:CR:62:GLU:CG	2.29	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:1824:G:N3	27:DD:254:THR:OG1	2.48	0.46
27:DD:10:THR:OG1	27:DD:13:ARG:HG2	2.15	0.46
32:DI:134:PRO:C	32:DI:136:VAL:H	2.19	0.46
26:DB:118:G:H2'	26:DB:119:G:O4'	2.16	0.46
25:DA:2747:G:N2	25:DA:2757:A:H62	2.13	0.46
2:AB:229:VAL:HG12	2:AB:230:VAL:N	2.30	0.46
4:AD:163:GLU:O	4:AD:166:LYS:HG2	2.16	0.46
1:CA:458:C:H2'	1:CA:460:G:H8	1.81	0.46
30:BG:102:PHE:CE1	30:BG:141:PHE:HE2	2.32	0.46
1:CA:814:A:N7	1:CA:816:A:C4	2.84	0.46
7:CG:69:VAL:HG21	7:CG:104:LEU:HD11	1.97	0.46
32:BI:77:LEU:HA	32:BI:77:LEU:HD23	1.75	0.46
25:BA:1709:C:H1'	25:BA:2699:U:H5''	1.97	0.46
2:AB:115:LEU:O	2:AB:119:GLU:N	2.47	0.46
25:DA:2545:G:N3	25:DA:2565:A:H2	2.13	0.46
20:CT:18:GLN:O	20:CT:22:ARG:HG3	2.15	0.46
25:BA:640:A:C4	29:BF:180:GLY:HA2	2.51	0.46
16:CP:55:ARG:O	16:CP:58:TYR:HB3	2.15	0.46
27:DD:221:VAL:HG22	27:DD:226:MET:CE	2.46	0.46
2:AB:124:SER:HB3	2:AB:125:PRO:HA	1.98	0.46
4:CD:175:SER:HB3	4:CD:186:LEU:HD11	1.98	0.46
35:BP:135:LEU:HD23	35:BP:135:LEU:HA	1.81	0.46
25:BA:330:U:H2'	25:BA:331:G:O4'	2.15	0.46
25:DA:212:G:H2'	25:DA:213:A:O4'	2.16	0.46
1:CA:1484:C:O2'	25:DA:1960:A:O2'	2.30	0.46
1:CA:109:A:H2'	1:CA:326:G:N2	2.29	0.46
2:CB:17:PHE:HB2	2:CB:44:LEU:CD1	2.46	0.46
1:CA:1120:G:N1	1:CA:1154:G:N3	2.64	0.46
1:CA:411:A:H1'	1:CA:413:G:O4'	2.16	0.46
25:DA:2318:G:N2	38:DS:3:ARG:HH11	2.13	0.46
4:CD:98:GLU:OE1	4:CD:103:ASN:ND2	2.44	0.46
1:CA:664:G:N2	1:CA:741:G:H1	2.12	0.46
1:AA:184:G:N2	1:AA:194:C:C2	2.84	0.46
1:AA:62:U:OP1	1:AA:385:C:O2'	2.29	0.46
1:AA:452:A:OP1	16:AP:43:LYS:NZ	2.39	0.46
1:AA:376:G:H2'	1:AA:377:G:H8	1.81	0.46
6:CF:10:LEU:HD12	6:CF:10:LEU:HA	1.78	0.46
1:CA:458:C:H2'	1:CA:460:G:C8	2.51	0.46
1:AA:189(K):U:H2'	1:AA:189(L):G:C8	2.51	0.46
30:DG:141:PHE:HD1	30:DG:142:PRO:HD2	1.80	0.46
25:DA:2040:C:H2'	25:DA:2041:U:O4'	2.16	0.46
1:AA:688:G:H2'	1:AA:689:C:C6	2.51	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:735:C:H2'	1:AA:736:C:C6	2.48	0.46
25:DA:2693:A:H2'	25:DA:2694:G:C8	2.49	0.46
1:CA:1515:C:H2'	1:CA:1516:G:H8	1.80	0.46
8:AH:39:LEU:HB3	8:AH:45:ILE:HD11	1.97	0.46
30:DG:25:TYR:CD2	30:DG:30:GLU:HB3	2.51	0.46
1:AA:630:G:H2'	1:AA:631:G:C8	2.50	0.46
25:DA:437:G:H2'	25:DA:438:G:C8	2.49	0.46
15:CO:56:LEU:O	15:CO:60:VAL:HG23	2.15	0.46
1:AA:1338:G:H2'	1:AA:1339:A:C8	2.50	0.46
25:BA:2326:C:H2'	25:BA:2327:G:H8	1.80	0.46
25:DA:251:A:C5	25:DA:252:G:H1'	2.51	0.46
9:CI:4:TYR:HB2	9:CI:19:LEU:HB2	1.98	0.46
25:DA:2266:A:H4'	25:DA:2267:A:N3	2.31	0.46
1:AA:276:G:C2'	1:AA:277:C:H5'	2.45	0.46
1:CA:568:G:N7	12:CL:5:PRO:HD3	2.31	0.46
25:DA:1197:G:H2'	25:DA:1198:U:H6	1.81	0.46
52:B6:18:ARG:HD2	52:B6:42:TRP:CD1	2.51	0.46
2:CB:180:LEU:HD23	2:CB:180:LEU:HA	1.67	0.46
2:CB:145:LEU:O	2:CB:149:LEU:HB2	2.15	0.46
1:AA:1511:G:H2'	1:AA:1512:U:O4'	2.16	0.46
10:CJ:23:ILE:HD13	10:CJ:26:ALA:HB3	1.96	0.46
25:BA:1739:U:H2'	25:BA:1741:C:C5	2.50	0.46
55:D9:15:LYS:HE2	55:D9:17:ILE:HD13	1.98	0.46
2:CB:40:HIS:HB3	2:CB:190:THR:HG21	1.97	0.46
14:AN:46:GLU:O	14:AN:50:LYS:HG3	2.16	0.46
25:DA:1748:G:O2'	25:DA:1749:A:H5'	2.16	0.46
37:BR:65:LEU:HD13	37:BR:65:LEU:HA	1.72	0.46
12:CL:117:ARG:HB3	12:CL:122:THR:HB	1.98	0.46
31:DH:149:ARG:NH1	31:DH:167:GLU:OE2	2.49	0.46
25:BA:2825:C:H5'	51:B5:29:THR:HG21	1.98	0.46
25:BA:904:C:N4	25:BA:905:U:O4	2.49	0.46
25:DA:409:C:O2'	25:DA:410:G:H5'	2.15	0.46
45:DZ:157:LEU:HB3	45:DZ:161:VAL:HG13	1.98	0.46
39:BT:16:ARG:HD2	39:BT:18:ASP:OD1	2.16	0.46
25:DA:1019:U:OP1	25:DA:1035:U:O2'	2.23	0.46
30:DG:14:GLU:O	30:DG:17:PRO:HD2	2.15	0.46
1:AA:1027:C:C4	1:AA:1034:G:O6	2.67	0.46
1:AA:1035:A:H2	1:AA:1036:G:N7	2.14	0.46
14:CN:24:CYS:O	14:CN:28:GLY:N	2.43	0.46
45:DZ:27:VAL:HG12	45:DZ:85:HIS:HE1	1.81	0.46
25:BA:2299:A:C4	25:BA:2301:G:C8	3.04	0.46
25:DA:1427:A:H8	25:DA:1427:A:O5'	1.99	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:CD:25:ARG:HG2	4:CD:25:ARG:O	2.16	0.46
3:CC:43:LEU:HD23	3:CC:43:LEU:N	2.31	0.46
1:CA:671:G:N2	1:CA:735:C:O2	2.49	0.46
38:BS:15:ARG:NE	38:BS:88:ASP:OD2	2.41	0.46
25:DA:1782:C:O2'	25:DA:2609:U:H5''	2.15	0.46
1:AA:604:G:C6	1:AA:605:U:C4	3.04	0.46
25:DA:415:A:H2'	25:DA:416:C:O4'	2.16	0.46
1:CA:1030:C:N4	1:CA:1032:G:O6	2.49	0.46
1:CA:991:U:H3'	1:CA:1212:U:N3	2.31	0.46
25:BA:696:C:P	25:BA:696:C:H6	2.39	0.46
28:BE:167:VAL:HG11	28:BE:189:PRO:HD3	1.96	0.46
7:CG:51:GLN:O	7:CG:55:GLY:HA2	2.16	0.46
42:DW:54:ALA:HB1	42:DW:107:LEU:HD22	1.97	0.46
54:D8:19:SER:OG	54:D8:21:LYS:HE3	2.16	0.46
2:AB:101:MET:HA	2:AB:108:ILE:HD12	1.97	0.46
25:BA:1859:G:OP1	61:BA:4531:HOH:O	2.20	0.46
1:CA:685:G:C2	1:CA:686:U:C4	3.04	0.46
28:BE:54:GLN:OE1	28:BE:55:ASN:N	2.46	0.46
25:DA:1851:U:H2'	25:DA:1852:C:O4'	2.16	0.46
25:BA:2630:G:C6	25:BA:2631:C:C4	3.03	0.46
1:CA:1163:C:N4	1:CA:1173:G:N1	2.35	0.46
26:DB:5:C:OP1	26:DB:61:G:O2'	2.29	0.46
1:CA:1277:C:O2'	1:CA:1279:A:C8	2.66	0.46
1:AA:473:G:O2'	1:AA:474:G:H5'	2.16	0.46
25:DA:62:C:N4	25:DA:93:G:H1	2.04	0.46
25:DA:812:C:H1'	25:DA:1250:G:C2	2.51	0.46
1:CA:1097:C:H4'	1:CA:1170:A:H5'	1.97	0.46
35:DP:21:ARG:HA	35:DP:21:ARG:HD3	1.78	0.46
25:DA:996:A:C2	25:DA:997:G:C8	3.03	0.46
16:CP:21:VAL:HG22	16:CP:33:ILE:HD12	1.97	0.46
3:CC:70:VAL:HG22	3:CC:72:LYS:H	1.80	0.46
23:AX:48:C:C2	23:AX:59:A:H1'	2.51	0.46
1:AA:637:G:C2	1:AA:638:G:C4	3.04	0.46
25:DA:1999:C:OP1	25:DA:2723:C:O2'	2.28	0.46
25:BA:1854:G:OP1	27:BD:54:ARG:NH1	2.49	0.46
26:DB:42:C:O2	30:DG:93:THR:N	2.37	0.46
25:BA:1496:A:H5''	25:BA:1496:A:H8	1.80	0.46
1:AA:693:G:H2'	1:AA:694:A:C8	2.51	0.46
3:CC:23:TYR:HA	10:CJ:11:PHE:CE2	2.50	0.46
25:DA:1528(A):A:C8	25:DA:1529:G:C8	3.03	0.46
1:AA:1068:G:OP2	1:AA:1068:G:H8	1.99	0.46
52:D6:11:LEU:HA	52:D6:11:LEU:HD23	1.64	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:DZ:128:VAL:HG23	45:DZ:160:GLY:O	2.15	0.46
25:BA:1369:U:H2'	25:BA:1370:G:H5'	1.97	0.46
42:BW:19:LEU:HB3	51:B5:25:LEU:HD11	1.97	0.46
25:DA:1259:G:H2'	25:DA:1260:G:C8	2.51	0.46
41:DV:64:HIS:CD2	41:DV:92:THR:HG1	2.33	0.46
42:BW:18:ARG:NH1	42:BW:76:VAL:O	2.48	0.46
25:BA:886:U:H2'	25:BA:887:C:C6	2.51	0.46
1:AA:1352:C:H2'	1:AA:1353:G:C8	2.50	0.46
36:DQ:137:TYR:O	36:DQ:141:GLN:HG2	2.16	0.46
1:CA:1002:G:H5''	1:CA:1003:G:OP2	2.16	0.45
1:CA:1041:A:N6	1:CA:1042:G:O6	2.48	0.45
1:AA:166:G:H2'	1:AA:167:G:N7	2.30	0.45
25:BA:1188:A:C4	25:BA:1190:G:C8	3.04	0.45
1:AA:1361:G:H2'	1:AA:1362:C:O4'	2.15	0.45
1:AA:1237:C:O2'	1:AA:1300:G:N1	2.38	0.45
28:BE:143:ASN:HD22	28:BE:147:PRO:CD	2.24	0.45
1:CA:1013:G:N2	1:CA:1016:A:OP2	2.35	0.45
1:AA:975:A:H8	1:AA:975:A:H5'	1.82	0.45
9:AI:85:LEU:HB3	9:AI:92:TYR:HD2	1.80	0.45
1:CA:600:C:C2	1:CA:639:G:C2	3.04	0.45
25:DA:2342:C:O2'	25:DA:2374:C:OP1	2.31	0.45
4:CD:33:MET:SD	4:CD:37:PRO:HA	2.56	0.45
1:CA:540:G:C4	1:CA:541:G:C8	3.04	0.45
45:BZ:111:VAL:C	45:BZ:113:ALA:N	2.69	0.45
25:DA:1739:U:O2'	25:DA:1740:G:H8	1.98	0.45
25:DA:1014:U:H2'	25:DA:1015:G:C8	2.49	0.45
25:DA:1614:A:H8	25:DA:1614:A:P	2.39	0.45
4:CD:15:GLU:CG	4:CD:63:LYS:HB3	2.46	0.45
27:BD:127:VAL:HA	27:BD:193:VAL:HG22	1.98	0.45
25:DA:230:U:H2'	25:DA:231:C:H6	1.81	0.45
26:BB:13:A:N1	26:BB:69:G:O2'	2.41	0.45
1:AA:1325:C:O2'	1:AA:1326:C:H5'	2.16	0.45
4:AD:30:LYS:HA	4:AD:35:ARG:NH1	2.30	0.45
12:CL:34:ARG:HB3	12:CL:34:ARG:HE	1.40	0.45
18:AR:32:ARG:HH11	18:AR:65:ILE:HD12	1.82	0.45
25:BA:1919:G:H2'	25:BA:1920:U:O4'	2.16	0.45
30:BG:72:ARG:NH1	30:BG:87:PRO:HG3	2.30	0.45
3:AC:129:ALA:HB3	3:AC:132:ARG:HB2	1.97	0.45
42:DW:18:ARG:NH1	42:DW:76:VAL:O	2.50	0.45
25:DA:446:G:H8	61:DA:3775:HOH:O	1.98	0.45
5:CE:152:ARG:HG2	8:CH:42:GLU:O	2.16	0.45
5:CE:36:ASP:O	5:CE:38:GLN:N	2.47	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1091:U:H2'	1:AA:1093:A:OP2	2.16	0.45
35:BP:97:PRO:HD3	35:BP:126:VAL:O	2.17	0.45
1:AA:1005:A:H1'	1:AA:1036:G:N2	2.31	0.45
1:AA:1039:C:N4	1:AA:1040:U:O4	2.49	0.45
1:CA:1256:A:H61	1:CA:1278:U:H1'	1.81	0.45
51:D5:16:ARG:O	51:D5:20:ARG:HG3	2.16	0.45
8:CH:51:VAL:CG1	8:CH:52:ASP:H	2.24	0.45
25:DA:1339:G:H21	25:DA:1603:A:H1'	1.80	0.45
1:AA:222:U:H2'	1:AA:223:U:C6	2.51	0.45
2:CB:178:ARG:CZ	8:CH:74:PRO:HG3	2.47	0.45
25:DA:1593:G:C2	25:DA:1594:G:C4	3.04	0.45
1:CA:1189:C:H5''	1:CA:1190:G:OP2	2.16	0.45
3:AC:35:GLU:CD	3:AC:59:ARG:HH22	2.19	0.45
1:AA:375:U:C4	1:AA:376:G:N7	2.84	0.45
25:DA:2070:G:C2	25:DA:2442:C:C2	3.04	0.45
1:AA:501:C:O2'	1:AA:549:C:O2	2.34	0.45
25:DA:817:C:O2'	25:DA:839:U:H5''	2.16	0.45
12:AL:77:LEU:HD21	12:AL:107:ALA:HA	1.98	0.45
25:DA:265:A:H1'	25:DA:266:G:O4'	2.16	0.45
35:DP:27:HIS:HB2	61:DP:313:HOH:O	2.16	0.45
18:AR:43:PHE:O	18:AR:51:LEU:HD12	2.17	0.45
25:DA:468:G:H2'	25:DA:469:G:O4'	2.15	0.45
1:CA:991:U:N3	1:CA:1212:U:O2	2.49	0.45
31:BH:71:LEU:HA	31:BH:71:LEU:HD12	1.79	0.45
34:DO:87:ILE:HD12	34:DO:91:LEU:HA	1.98	0.45
29:DF:34:TRP:CZ3	35:DP:8:PRO:HB3	2.51	0.45
25:DA:2689:U:P	25:DA:2719:G:H22	2.39	0.45
18:CR:29:PHE:HE1	18:CR:31:LEU:HD13	1.81	0.45
25:BA:2760:G:O6	25:BA:2768:C:H5''	2.17	0.45
9:CI:31:GLN:HB2	9:CI:35:GLU:OE2	2.16	0.45
1:CA:817:C:H42	1:CA:1529:G:H1	1.63	0.45
45:BZ:98:MET:O	45:BZ:125:LEU:HD12	2.16	0.45
17:CQ:43:LEU:HG	17:CQ:68:ARG:HG2	1.97	0.45
25:DA:2578:G:H1'	61:DE:404:HOH:O	2.15	0.45
26:BB:6:C:H2'	26:BB:7:G:H5''	1.98	0.45
30:DG:76:SER:CB	30:DG:84:LYS:H	2.29	0.45
1:CA:113:G:H2'	1:CA:114:U:H6	1.82	0.45
25:DA:1386:C:H2'	25:DA:1387:C:C6	2.51	0.45
5:AE:27:ARG:HE	5:AE:27:ARG:HB2	1.46	0.45
2:CB:122:PHE:HD1	2:CB:123:ALA:H	1.63	0.45
2:CB:85:ALA:O	2:CB:89:GLY:N	2.49	0.45
24:CW:4:PRO:HA	24:CW:5:MVA:HN1	1.30	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:160:A:H2'	1:AA:161:A:C8	2.52	0.45
14:CN:37:PHE:HB3	14:CN:39:LEU:HD12	1.99	0.45
1:AA:193:C:C2	1:AA:194:C:C5	3.04	0.45
35:DP:29:LYS:HG3	35:DP:30:THR:HG23	1.98	0.45
43:BX:92:LEU:HA	43:BX:92:LEU:HD12	1.79	0.45
25:BA:1613:A:OP1	27:BD:211:ARG:NH1	2.50	0.45
1:CA:353:A:C8	1:CA:353:A:H5'	2.45	0.45
16:AP:71:ARG:O	16:AP:75:ARG:N	2.45	0.45
5:CE:53:LEU:HD12	5:CE:53:LEU:H	1.80	0.45
2:AB:77:ALA:O	2:AB:81:VAL:HG22	2.16	0.45
1:CA:1145:C:H4'	1:CA:1146:A:C5'	2.44	0.45
1:CA:461:A:C5	1:CA:471:G:C6	3.04	0.45
1:CA:251:G:H4'	1:CA:252:U:O5'	2.16	0.45
1:AA:994:A:N7	1:AA:1216:G:H4'	2.32	0.45
14:CN:21:TYR:HE1	14:CN:23:ARG:NE	2.14	0.45
5:AE:52:PRO:HG2	5:AE:53:LEU:HD12	1.98	0.45
1:CA:1422:G:O3'	34:DO:49:ARG:NH1	2.48	0.45
1:AA:690:G:C6	1:AA:691:G:C6	3.04	0.45
1:AA:1298:C:H2'	7:AG:114:ARG:NH1	2.32	0.45
26:DB:31:C:O2'	26:DB:32:C:H5'	2.16	0.45
25:BA:581:G:P	33:BN:111:PRO:HD2	2.56	0.45
25:BA:2304:C:H2'	25:BA:2305:C:C6	2.51	0.45
1:CA:243:A:H4'	1:CA:244:U:H5''	1.97	0.45
1:CA:1309:G:H5'	13:CM:78:ILE:HD11	1.98	0.45
1:AA:938:A:C6	1:AA:939:G:C5	3.05	0.45
25:DA:1252:G:C2	25:DA:1253:A:C2	3.03	0.45
25:DA:623:G:C6	25:DA:624:C:C4	3.05	0.45
5:AE:15:ARG:HD2	5:AE:26:PHE:CD2	2.51	0.45
1:CA:292:G:N2	1:CA:309:G:C4	2.85	0.45
1:CA:555:C:H2'	1:CA:556:C:C6	2.51	0.45
8:AH:11:THR:HG22	8:AH:15:ASN:ND2	2.31	0.45
25:BA:596:G:O2'	25:BA:597:C:H3'	2.17	0.45
27:DD:33:LEU:HD23	27:DD:33:LEU:HA	1.74	0.45
40:BU:16:LYS:HE2	40:BU:16:LYS:HB3	1.71	0.45
2:AB:8:LYS:HG2	2:AB:8:LYS:H	1.59	0.45
2:CB:118:LEU:HB3	2:CB:142:LEU:HD12	1.97	0.45
2:CB:47:THR:HG22	2:CB:51:LEU:HG	1.99	0.45
1:AA:1125:U:O4	1:AA:1128:C:C5	2.70	0.45
45:DZ:30:ASN:HA	45:DZ:89:PHE:HE1	1.80	0.45
2:CB:211:ILE:O	2:CB:215:LEU:HB2	2.16	0.45
25:BA:1285:G:H2'	25:BA:1286:U:O4'	2.16	0.45
1:AA:658:G:H2'	1:AA:659:U:H6	1.81	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:888:C:H2'	25:DA:889:C:N3	2.31	0.45
12:CL:24:VAL:CG1	12:CL:27:LEU:HD22	2.46	0.45
1:CA:731:G:H5'	1:CA:766:A:H4'	1.97	0.45
7:CG:65:ALA:HB1	7:CG:127:ALA:HB3	1.99	0.45
35:DP:47:ASP:HA	35:DP:48:PRO:HD3	1.82	0.45
1:AA:1118:C:H2'	1:AA:1119:C:C6	2.51	0.45
8:CH:17:THR:HA	8:CH:65:TYR:HE2	1.81	0.45
1:CA:605:U:C2'	1:CA:606:G:H5'	2.46	0.45
2:CB:127:ILE:HG12	2:CB:128:GLU:H	1.81	0.45
25:DA:528:A:H2	25:DA:2043:C:C5'	2.30	0.45
25:DA:1527:G:H2'	25:DA:1542:A:N1	2.31	0.45
1:AA:251:G:N2	1:AA:253:U:C5	2.84	0.45
17:AQ:26:GLN:HE21	17:AQ:37:LYS:HG2	1.81	0.45
18:AR:52:PRO:O	18:AR:56:THR:HG23	2.16	0.45
25:BA:2354:C:O2'	25:BA:2386:C:H5''	2.17	0.45
25:DA:966:G:H2'	25:DA:967:C:C6	2.52	0.45
1:AA:299:G:H2'	1:AA:300:A:C8	2.51	0.45
27:DD:61:LEU:O	27:DD:63:ARG:NH1	2.50	0.45
4:AD:23:GLY:HA3	4:AD:112:VAL:HB	1.98	0.45
1:AA:1206:G:C6	1:AA:1207:G:C5	3.04	0.45
25:BA:860:U:H2'	25:BA:861:C:C6	2.52	0.45
20:CT:46:GLU:O	20:CT:46:GLU:HG2	2.14	0.45
25:BA:306:A:N3	25:BA:306:A:H2'	2.31	0.45
6:AF:100:ASN:H	18:AR:23:LYS:HZ1	1.63	0.45
25:DA:2400:G:H2'	25:DA:2401:U:H6	1.81	0.45
1:AA:1254:C:H2'	1:AA:1255:G:C8	2.52	0.45
25:DA:2219:G:H2'	25:DA:2220:G:H8	1.81	0.45
1:AA:278:G:OP2	17:AQ:92:ARG:NH2	2.50	0.45
4:CD:122:ARG:HH11	4:CD:122:ARG:HA	1.82	0.45
2:AB:55:PHE:HE1	2:AB:218:ALA:HA	1.82	0.45
1:CA:413:G:N2	1:CA:428:G:H1'	2.32	0.45
1:AA:1316:G:N1	1:AA:1319:A:OP2	2.48	0.45
10:CJ:22:LYS:HA	10:CJ:25:GLU:HB2	1.98	0.45
25:BA:2614:A:C8	46:B0:3:HIS:HE1	2.34	0.45
1:AA:658:G:H2'	1:AA:659:U:C6	2.51	0.45
25:DA:2497:A:H5''	61:DA:3744:HOH:O	2.16	0.45
1:CA:737:A:H2'	1:CA:738:C:C6	2.52	0.45
25:BA:1056:A:N3	25:BA:1199:C:H1'	2.32	0.45
9:CI:53:VAL:HG23	9:CI:55:ALA:HB3	1.98	0.45
25:DA:1223:G:N1	25:DA:1227:G:C6	2.85	0.45
1:AA:627:G:O2'	1:AA:628:G:H5'	2.17	0.45
45:BZ:107:THR:HG21	45:BZ:112:ARG:NH2	2.30	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:DI:126:TYR:HB2	32:DI:142:VAL:HG23	1.98	0.45
1:CA:1328:C:H2'	1:CA:1329:A:O4'	2.16	0.45
25:DA:644:A:H4'	25:DA:645:C:C4	2.50	0.45
25:BA:2289:G:OP2	46:B0:10:THR:HG21	2.16	0.45
25:DA:276:A:H5''	25:DA:277:C:H5'	1.99	0.45
1:AA:977:A:H1'	1:AA:982:U:O4	2.16	0.45
1:CA:780:A:H1'	1:CA:803:G:N2	2.32	0.45
44:BY:20:TYR:CE1	44:BY:43:ASN:HA	2.51	0.45
44:DY:74:PRO:O	44:DY:82:PRO:HA	2.17	0.45
29:DF:137:LYS:HE3	29:DF:137:LYS:HB3	1.57	0.45
1:CA:380:G:N2	1:CA:384:G:C5	2.85	0.45
1:AA:1202:G:N2	14:AN:46:GLU:OE1	2.48	0.45
25:DA:1138:G:H2'	25:DA:1139:G:O4'	2.16	0.45
45:BZ:48:PHE:CE1	45:BZ:52:SER:HA	2.51	0.45
45:DZ:125:LEU:HG	45:DZ:164:ALA:HB3	1.99	0.45
25:DA:2879:C:OP2	61:DA:4047:HOH:O	2.21	0.45
4:AD:8:VAL:O	4:AD:11:LEU:HB2	2.17	0.45
25:DA:2728:U:H2'	25:DA:2729:G:C8	2.52	0.45
25:DA:2097:C:H2'	25:DA:2098:U:H6	1.81	0.45
15:CO:69:TYR:O	15:CO:73:GLU:HG2	2.17	0.45
43:BX:38:GLU:HA	61:BX:201:HOH:O	2.16	0.45
25:DA:2751:G:H3'	25:DA:2752:C:C6	2.51	0.45
9:AI:99:LEU:HB3	9:AI:101:PHE:HE1	1.81	0.45
35:DP:82:GLY:HA2	35:DP:113:LYS:O	2.17	0.45
1:AA:1410:G:H2'	1:AA:1411:C:C6	2.51	0.45
25:BA:1230:C:H5''	25:BA:1231:G:OP1	2.17	0.45
41:BV:62:LEU:HD12	41:BV:62:LEU:HA	1.83	0.45
35:BP:46:LYS:HB3	35:BP:46:LYS:HE3	1.74	0.45
25:BA:1839:U:H6	25:BA:1839:U:O5'	1.99	0.45
25:DA:761:A:N7	61:DA:3757:HOH:O	2.36	0.45
42:DW:20:VAL:HG21	42:DW:43:GLY:HA3	1.99	0.45
40:DU:49:HIS:HA	40:DU:52:ARG:HB3	1.98	0.45
1:AA:1127:G:H21	1:AA:1128:C:H1'	1.80	0.45
25:DA:1664:A:N7	61:DA:3965:HOH:O	2.36	0.45
25:DA:1647:G:H3'	61:DA:4113:HOH:O	2.17	0.45
1:CA:1074:G:C2	1:CA:1075:C:C2	3.05	0.45
1:CA:1149:C:O2'	1:CA:1280:A:N1	2.44	0.45
1:CA:1346:A:H5''	9:CI:120:ARG:NH1	2.31	0.45
25:DA:196:A:H2'	25:DA:196:A:N3	2.32	0.45
25:DA:1789:A:H2'	25:DA:1790:C:C6	2.52	0.45
25:DA:1248:G:O2'	40:DU:3:ARG:HA	2.17	0.45
1:CA:557:G:N1	1:CA:558:G:C2	2.84	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:2290:G:C6	25:DA:2291:U:C4	3.05	0.45
1:AA:589:C:O2'	1:AA:590:C:H5'	2.17	0.45
25:DA:1227:G:H2'	25:DA:1228:G:O4'	2.16	0.45
9:AI:19:LEU:HB3	9:AI:59:PHE:CD2	2.50	0.45
29:DF:132:VAL:HG21	29:DF:163:VAL:HG22	1.99	0.45
1:CA:1423:G:H2'	1:CA:1424:C:C6	2.51	0.45
19:CS:22:LEU:HD23	19:CS:27:GLU:HA	1.99	0.45
1:AA:236:G:H2'	1:AA:237:C:C6	2.51	0.45
4:AD:129:ASN:N	4:AD:145:GLU:O	2.43	0.45
16:AP:4:ILE:HG13	16:AP:64:ALA:HB1	1.99	0.45
9:AI:77:ILE:O	9:AI:81:ILE:HG22	2.17	0.45
19:AS:45:VAL:HG13	19:AS:63:THR:HA	1.98	0.45
25:BA:629:U:H4'	25:BA:705:C:H4'	1.99	0.45
12:CL:34:ARG:O	12:CL:61:THR:HG23	2.17	0.45
1:CA:109:A:C6	1:CA:326:G:C6	3.05	0.45
10:CJ:23:ILE:HD13	10:CJ:23:ILE:HA	1.72	0.45
1:AA:1353:G:OP1	21:AU:10:ARG:NH1	2.46	0.45
25:DA:870:A:C2'	25:DA:871:U:H5'	2.46	0.45
1:AA:719:C:O2'	18:AR:49:LYS:HB3	2.15	0.45
25:DA:2872:G:C2	25:DA:2873:A:N6	2.85	0.45
29:DF:29:ASN:H	29:DF:112:MET:CE	2.30	0.45
30:BG:101:ILE:HG22	30:BG:105:LYS:HE2	1.98	0.45
44:BY:106:LEU:O	44:BY:107:ASP:HB2	2.17	0.45
42:DW:4:LYS:HD3	42:DW:6:ILE:HD11	1.98	0.45
34:BO:115:VAL:HG13	34:BO:121:VAL:HG21	1.98	0.45
25:DA:610:G:N2	25:DA:619:G:H1'	2.32	0.45
25:BA:1204:C:H4'	49:B3:32:GLN:HB2	1.97	0.45
1:AA:1327:C:OP2	21:AU:12:LYS:NZ	2.37	0.45
25:BA:2323:A:H3'	25:BA:2323:A:OP1	2.17	0.45
5:AE:87:SER:HB3	5:AE:131:ILE:HD13	1.97	0.45
1:CA:1005:A:H5''	1:CA:1006:C:C5	2.52	0.45
1:CA:690:G:H2'	1:CA:691:G:O4'	2.16	0.45
1:AA:1504:G:H4'	1:AA:1505:G:C4	2.52	0.45
42:DW:60:ASN:ND2	42:DW:60:ASN:N	2.65	0.45
30:DG:143:GLU:H	30:DG:143:GLU:HG2	1.35	0.45
1:AA:684:A:H2'	1:AA:685:G:C8	2.52	0.45
25:DA:479:A:HO2'	25:DA:481:G:H8	1.62	0.45
1:AA:736:C:H2'	1:AA:737:A:C8	2.51	0.45
25:DA:1032:A:O3'	55:D9:16:VAL:HG11	2.16	0.45
25:BA:605:G:H2'	25:BA:606:G:C8	2.52	0.45
25:DA:493:G:H2'	25:DA:494:G:O4'	2.16	0.45
25:DA:1165:U:H2'	25:DA:1166:C:C6	2.52	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
30:DG:70:VAL:HA	30:DG:90:LEU:HD23	1.98	0.45
1:AA:389:A:C6	1:AA:390:C:H1'	2.51	0.45
25:DA:528:A:OP2	33:DN:114:ARG:NH1	2.44	0.45
25:BA:2661:U:H2'	25:BA:2662:U:H6	1.82	0.45
1:AA:580:U:H2'	1:AA:581:G:C8	2.51	0.45
1:AA:430:A:H2'	1:AA:431:A:O4'	2.17	0.45
25:DA:1525:G:H2'	25:DA:1526:G:H8	1.80	0.45
1:CA:1249:C:O4'	9:CI:70:LYS:HE2	2.17	0.45
9:CI:15:ALA:HB2	9:CI:65:VAL:HG23	1.98	0.45
25:DA:2046:G:H2'	25:DA:2047:U:C6	2.52	0.45
1:AA:124:G:H4'	1:AA:291:C:O2'	2.16	0.45
36:DQ:29:PHE:HB2	36:DQ:105:GLU:OE2	2.17	0.45
25:DA:1159:U:O2'	25:DA:1160:G:H5'	2.17	0.45
7:CG:42:ILE:HD13	7:CG:116:ALA:HB3	1.98	0.45
19:CS:40:ILE:HD12	19:CS:71:LEU:HD12	1.99	0.45
25:DA:2019:A:OP2	51:D5:9:LYS:NZ	2.27	0.45
31:BH:13:LYS:HA	31:BH:14:GLY:HA2	1.77	0.45
25:BA:2612:A:H2'	25:BA:2613:C:C6	2.52	0.45
4:CD:110:PHE:N	4:CD:110:PHE:CD1	2.84	0.45
1:AA:524:G:H2'	1:AA:525:C:C6	2.52	0.45
1:AA:1073:U:O2'	2:AB:104:ASN:OD1	2.30	0.45
25:DA:1212:G:H1'	25:DA:1236:G:N2	2.31	0.45
18:AR:33:ASP:OD2	18:AR:36:ASN:HB2	2.16	0.45
1:AA:721:G:H4'	1:AA:722:A:O4'	2.16	0.45
2:CB:12:GLU:HA	2:CB:15:VAL:HG23	1.98	0.45
39:BT:53:ARG:NH1	39:BT:53:ARG:HB3	2.32	0.45
1:AA:1027:C:N3	1:AA:1034:G:O6	2.50	0.45
1:AA:1095:U:OP1	1:AA:1108:G:N2	2.45	0.45
1:AA:148:G:O2'	1:AA:149:A:H8	2.00	0.45
46:D0:53:MET:HA	46:D0:58:THR:O	2.16	0.45
50:D4:61:ARG:O	50:D4:61:ARG:NH1	2.49	0.45
12:CL:27:LEU:HD13	12:CL:98:TYR:CE1	2.52	0.45
25:BA:2658:C:H2'	25:BA:2659:U:O4'	2.17	0.45
1:CA:443:C:C2	1:CA:444:C:C5	3.05	0.45
1:AA:1223:C:P	19:AS:78:ARG:HH21	2.39	0.45
1:CA:580:U:H5''	15:CO:58:MET:HG2	1.99	0.45
25:DA:7:G:O4'	33:DN:133:GLN:NE2	2.49	0.45
25:DA:848:G:O6	25:DA:928:G:H2'	2.16	0.45
25:BA:1541:A:O2'	25:BA:1542:A:H5'	2.17	0.45
4:CD:196:LEU:O	4:CD:198:VAL:N	2.41	0.45
1:AA:1299:A:H5''	1:AA:1299:A:N3	2.32	0.45
25:DA:940:G:H21	25:DA:1191:G:C4'	2.30	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:127:G:OP1	1:AA:635:G:H1'	2.17	0.45
45:BZ:15:PRO:O	45:BZ:19:ARG:HB2	2.17	0.45
2:AB:19:HIS:HE1	2:AB:189:ASP:HB3	1.80	0.45
13:CM:81:LEU:HD22	13:CM:88:ARG:HB3	1.98	0.45
1:CA:1342:C:H4'	9:CI:125:TYR:HB3	1.98	0.45
39:BT:51:ARG:HG3	39:BT:98:LYS:HD2	1.99	0.45
1:AA:865:A:H2	1:AA:918:A:H4'	1.81	0.45
1:CA:1027:C:O2'	1:CA:1034:G:N2	2.49	0.45
45:DZ:121:HIS:HB3	45:DZ:123:ASP:O	2.17	0.45
1:CA:1009:G:H2'	1:CA:1010:G:O4'	2.16	0.45
25:DA:2297:C:H6	25:DA:2297:C:H3'	1.81	0.45
1:AA:665:A:H1'	1:AA:733:A:O4'	2.17	0.45
1:AA:1417:G:N2	1:AA:1482:G:H2'	2.32	0.45
28:DE:111:ARG:HG3	28:DE:160:TYR:CD2	2.52	0.45
1:CA:728:A:H2'	1:CA:729:A:C8	2.52	0.45
1:CA:1366:C:H2'	1:CA:1367:C:C6	2.51	0.45
40:BU:24:TYR:HB2	40:BU:29:SER:HB3	1.99	0.45
25:BA:476:G:O6	61:BA:4177:HOH:O	2.21	0.45
25:DA:81:G:C2	25:DA:106:C:N3	2.85	0.45
37:BR:104:ARG:HG3	37:BR:111:LEU:HD21	1.99	0.45
25:DA:1486:A:O2'	25:DA:1487:G:H5'	2.17	0.45
25:DA:271(S):G:C2'	25:DA:271(T):C:H5'	2.46	0.45
25:BA:83:A:H5'	44:BY:8:LYS:HG2	1.98	0.45
25:BA:2619:G:O3'	61:BA:4187:HOH:O	2.21	0.45
25:BA:2451:A:H5'	25:BA:2451:A:C8	2.52	0.45
25:DA:2882:A:OP1	37:DR:96:ARG:NE	2.49	0.45
2:CB:130:ARG:HA	2:CB:131:PRO:HD3	1.82	0.45
1:CA:420:U:H1'	1:CA:424:G:N2	2.32	0.45
25:DA:1790:C:H2'	25:DA:1791:A:C5	2.52	0.45
11:CK:99:GLN:C	11:CK:101:SER:H	2.20	0.45
1:CA:437:U:O2'	4:CD:125:HIS:HE1	2.00	0.45
25:DA:1637:A:H4'	25:DA:2711:A:O2'	2.17	0.45
1:AA:1041:A:C2'	1:AA:1042:G:H5'	2.46	0.45
4:CD:88:VAL:O	4:CD:92:VAL:HG23	2.16	0.45
25:DA:921:G:C6	25:DA:922:U:C4	3.05	0.45
43:DX:40:LYS:HG3	43:DX:51:VAL:HB	1.99	0.45
13:CM:22:ILE:HB	13:CM:25:ILE:HD13	1.99	0.45
1:AA:1015:A:H8	1:AA:1015:A:O5'	2.00	0.45
25:DA:1796:U:H2'	25:DA:1797:C:H6	1.81	0.45
25:DA:2408:U:H2'	25:DA:2409:G:C8	2.52	0.45
25:BA:2399:U:OP1	46:B0:55:ARG:NH2	2.50	0.45
24:AW:6:2R1:O	24:AW:8:2R3:N	2.50	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1391:U:H2'	1:AA:1392:G:C8	2.52	0.45
2:AB:63:MET:HB3	2:AB:225:ALA:O	2.16	0.45
44:BY:43:ASN:HD22	44:BY:43:ASN:HA	1.50	0.45
25:DA:445:C:O2'	25:DA:446:G:H5'	2.17	0.45
34:BO:97:ARG:HA	34:BO:117:LEU:HD22	1.99	0.45
25:DA:2698:U:H2'	25:DA:2699:C:C6	2.52	0.45
35:BP:124:LYS:HG3	35:BP:144:GLU:HG2	1.99	0.45
25:DA:524:U:H2'	25:DA:525:U:C6	2.52	0.45
1:AA:1205:U:O2'	3:AC:195:VAL:HG23	2.17	0.45
25:DA:1903:G:OP1	27:DD:241:PRO:HB2	2.17	0.45
36:BQ:133:ARG:HG2	36:BQ:134:ARG:N	2.31	0.45
11:CK:44:SER:OG	11:CK:47:VAL:HG23	2.17	0.45
25:DA:1266:G:O5'	42:DW:15:ARG:NH2	2.50	0.45
1:AA:1424:C:H2'	1:AA:1425:U:O4'	2.16	0.45
30:DG:151:ALA:O	30:DG:153:ARG:HD3	2.16	0.45
25:DA:2335:A:C8	25:DA:2337:G:C5	3.05	0.45
25:BA:613:A:H2'	25:BA:614:C:O4'	2.17	0.45
47:B1:94:LEU:O	47:B1:97:LEU:HB2	2.17	0.45
5:CE:6:PHE:HD2	5:CE:63:ARG:HD3	1.82	0.45
1:CA:1007:C:O2	1:CA:1007:C:H2'	2.16	0.45
1:AA:1127:G:H21	1:AA:1148:U:H3	1.64	0.45
25:BA:2695:C:OP1	39:BT:53:ARG:NH2	2.50	0.45
50:B4:57:GLU:HB3	50:B4:58:ARG:CA	2.44	0.45
25:BA:927:G:OP2	25:BA:927:G:H8	2.01	0.45
1:AA:66:G:N2	1:AA:172:A:N3	2.65	0.45
7:AG:46:ALA:O	7:AG:50:ILE:HG23	2.17	0.45
7:AG:50:ILE:CD1	7:AG:58:PRO:HA	2.41	0.45
13:CM:57:ARG:NH1	50:D4:17:GLY:HA3	2.32	0.45
1:AA:486:U:H2'	1:AA:487:A:C8	2.52	0.45
1:AA:384:G:C2	1:AA:385:C:C4	3.05	0.45
40:BU:76:TYR:HH	40:BU:92:ARG:HH11	1.59	0.45
1:AA:674:G:O2'	1:AA:675:A:H5'	2.17	0.45
25:BA:154:G:C6	25:BA:155:C:N4	2.85	0.45
25:DA:2315:G:H2'	25:DA:2316:C:C6	2.52	0.45
8:AH:121:ASP:OD1	8:AH:121:ASP:N	2.49	0.45
25:BA:1828:C:H4'	27:BD:257:LEU:O	2.17	0.45
29:DF:160:ASN:HB3	29:DF:163:VAL:HB	1.98	0.45
28:DE:119:ARG:HD2	28:DE:120:TRP:NE1	2.32	0.45
10:CJ:55:LYS:HE3	10:CJ:56:HIS:NE2	2.32	0.45
3:CC:179:ARG:HD2	3:CC:206:GLU:HB2	1.98	0.45
27:BD:146:GLU:HB2	27:BD:189:CYS:HB3	1.98	0.45
10:CJ:11:PHE:CD1	10:CJ:67:THR:HG22	2.52	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:649:G:H2'	1:CA:650:G:O4'	2.16	0.45
1:AA:309:G:H1'	1:AA:608:A:C2	2.51	0.45
28:DE:144:ARG:HB3	28:DE:145:LYS:H	1.52	0.45
1:CA:1216:G:OP1	14:CN:2:ALA:HA	2.17	0.45
25:DA:2461:C:H2'	25:DA:2462:U:H6	1.82	0.45
28:BE:55:ASN:HB3	28:BE:58:ARG:HG3	1.97	0.45
25:DA:271(S):G:C6	25:DA:271(T):C:C4	3.05	0.45
25:BA:804:U:H2'	25:BA:805:C:O4'	2.17	0.45
25:BA:2328:C:H1'	30:BG:128:ARG:HH21	1.81	0.45
17:CQ:76:LEU:HD11	17:CQ:78:GLU:O	2.16	0.45
1:AA:1203:C:H2'	1:AA:1204:A:C8	2.52	0.45
25:BA:2444:A:C8	47:B1:33:LYS:HD2	2.52	0.45
27:DD:99:ASP:HB3	27:DD:101:GLU:H	1.82	0.45
2:CB:37:ASN:O	2:CB:39:ILE:HG12	2.17	0.45
25:DA:335:C:H4'	44:DY:73:ARG:CD	2.47	0.45
25:BA:1971:G:C6	25:BA:1972:G:C6	3.05	0.45
2:AB:196:LEU:HA	2:AB:196:LEU:HD12	1.78	0.45
38:DS:85:VAL:O	38:DS:112:PHE:HB3	2.16	0.45
25:BA:335:A:C6	25:BA:352:U:C4	3.05	0.45
1:CA:1026:G:N7	1:CA:1036:G:N2	2.66	0.44
10:CJ:81:THR:HA	10:CJ:84:GLN:HB2	1.99	0.44
1:AA:146:G:C6	1:AA:147:G:N7	2.84	0.44
1:CA:599:C:H5''	8:CH:95:VAL:O	2.17	0.44
25:BA:1217:G:C5	25:BA:1218:G:C8	3.05	0.44
26:DB:66:A:N6	26:DB:109:C:H5'	2.28	0.44
9:AI:3:GLN:CG	9:AI:20:ARG:HE	2.28	0.44
3:CC:68:VAL:HG12	3:CC:70:VAL:HG12	1.99	0.44
1:CA:401:C:H1'	1:CA:622:A:H1'	1.98	0.44
4:CD:90:GLY:HA2	4:CD:204:ILE:HD11	1.97	0.44
25:DA:1710:C:H5'	25:DA:2859:G:H1'	1.99	0.44
30:DG:96:ARG:O	30:DG:99:MET:HB3	2.17	0.44
1:AA:542:G:OP1	4:AD:10:ARG:NH1	2.49	0.44
25:DA:2293:C:H6	25:DA:2293:C:H5''	1.82	0.44
25:DA:1187:G:H5''	41:DV:81:TYR:CE1	2.51	0.44
16:CP:6:LEU:HD23	16:CP:17:TYR:CD1	2.50	0.44
6:AF:44:GLY:HA2	6:AF:59:TYR:CE2	2.52	0.44
25:DA:484:C:H2'	25:DA:485:C:H6	1.82	0.44
1:CA:977:A:H2'	1:CA:978:A:H5''	1.98	0.44
25:DA:668:G:H5''	25:DA:668:G:H8	1.82	0.44
25:DA:2740:A:C6	25:DA:2764:A:C8	3.06	0.44
25:DA:852:G:N2	25:DA:926:A:H1'	2.32	0.44
16:CP:42:ARG:CB	16:CP:44:THR:HG23	2.48	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:DS:27:SER:HA	38:DS:88:ASP:HB3	1.99	0.44
1:CA:1106:G:H2'	1:CA:1107:C:H6	1.82	0.44
13:AM:121:LYS:HE3	13:AM:121:LYS:H	1.82	0.44
34:DO:119:PRO:HB2	39:DT:68:TYR:CE2	2.52	0.44
25:BA:1314:A:H2'	25:BA:1315:A:O4'	2.17	0.44
26:DB:119:G:C6	26:DB:120:A:C6	3.05	0.44
55:D9:17:ILE:HG21	55:D9:26:ILE:HD11	1.99	0.44
28:DE:96:PHE:HA	28:DE:100:GLU:OE1	2.17	0.44
25:DA:1847:A:H4'	25:DA:1848:A:OP2	2.15	0.44
25:BA:1557:A:H2'	25:BA:1558:G:C8	2.52	0.44
25:BA:834:U:H5''	25:BA:835:A:H5'	1.98	0.44
23:AX:12:G:H4'	25:BA:1930:C:O2	2.17	0.44
40:BU:34:LYS:NZ	40:BU:37:GLU:OE2	2.41	0.44
44:DY:35:TYR:CE2	44:DY:69:ALA:HB3	2.52	0.44
38:BS:67:ARG:HG2	38:BS:71:ARG:CZ	2.47	0.44
38:BS:67:ARG:HG2	38:BS:71:ARG:NH1	2.32	0.44
37:BR:98:LEU:HB2	37:BR:113:LEU:HD11	1.98	0.44
37:DR:65:LEU:HA	37:DR:65:LEU:HD12	1.81	0.44
40:BU:98:LEU:HA	40:BU:98:LEU:HD23	1.75	0.44
25:BA:2087:C:H2'	25:BA:2088:C:C6	2.52	0.44
25:DA:2508:G:C2	25:DA:2582:G:C6	3.05	0.44
4:CD:134:ASP:O	4:CD:136:PRO:HD3	2.18	0.44
8:AH:51:VAL:HG11	8:AH:60:ARG:NH1	2.28	0.44
1:CA:1126:U:H4'	1:CA:1281:U:H1'	1.98	0.44
14:CN:24:CYS:SG	14:CN:39:LEU:HA	2.58	0.44
2:CB:208:ILE:HA	2:CB:211:ILE:HD12	2.00	0.44
35:BP:50:ARG:HG2	54:B8:61:LEU:HD11	1.99	0.44
26:DB:33:G:O2'	26:DB:34:U:H5'	2.17	0.44
25:DA:52:A:C5	25:DA:118:A:C2	3.05	0.44
1:CA:1225:A:H2'	1:CA:1226:C:C5	2.52	0.44
1:CA:321:A:C2	1:CA:333:G:C2	3.06	0.44
13:CM:25:ILE:HD11	13:CM:66:LEU:HD13	1.98	0.44
1:CA:1206:G:C6	1:CA:1207:G:C5	3.05	0.44
13:AM:40:ASN:O	13:AM:43:THR:OG1	2.30	0.44
1:AA:1216:G:P	14:AN:2:ALA:HA	2.57	0.44
25:DA:1506:C:H2'	25:DA:1507:A:H5'	1.99	0.44
25:DA:94(A):G:H2'	25:DA:95:G:O4'	2.16	0.44
2:AB:30:ARG:HH21	2:AB:194:PRO:HB2	1.82	0.44
28:BE:175:VAL:HG22	28:BE:177:PRO:HD3	1.99	0.44
1:AA:1066:C:O2'	1:AA:1067:A:H5'	2.16	0.44
25:BA:1334:U:C4	25:BA:1373:C:H1'	2.52	0.44
18:CR:58:LEU:HD12	18:CR:62:GLU:HG3	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:DZ:125:LEU:HB3	45:DZ:165:VAL:CG1	2.47	0.44
1:CA:422:C:H4'	1:CA:423:G:C4	2.51	0.44
19:AS:31:ILE:HB	19:AS:49:ILE:HG12	1.99	0.44
25:BA:1095:C:C4	25:BA:1096:A:N7	2.85	0.44
8:CH:41:ARG:HH22	8:CH:123:GLU:CD	2.20	0.44
25:DA:1802:A:N1	25:DA:1822:G:H1'	2.33	0.44
7:CG:70:LYS:HG2	7:CG:96:GLN:O	2.18	0.44
26:BB:4:C:H42	26:BB:117:G:H1	1.65	0.44
5:CE:27:ARG:HE	5:CE:27:ARG:HB2	1.62	0.44
25:DA:1681:G:O5'	25:DA:1681:G:H8	2.01	0.44
25:BA:401:A:C2	25:BA:428:A:C4	3.06	0.44
32:BI:14:ASP:OD1	32:BI:15:VAL:N	2.51	0.44
25:DA:797:C:H2'	25:DA:798:G:C8	2.53	0.44
25:BA:1073:A:C6	25:BA:1172:A:C4	3.06	0.44
1:AA:1124:G:P	10:AJ:36:GLY:H	2.40	0.44
25:DA:900:A:C2'	25:DA:901:A:H8	2.30	0.44
2:CB:77:ALA:HA	2:CB:80:ILE:HG22	1.99	0.44
2:CB:178:ARG:NH2	8:CH:68:ARG:HH12	2.06	0.44
30:DG:15:VAL:HG13	30:DG:175:LEU:HD23	1.99	0.44
2:AB:71:VAL:HG12	2:AB:170:GLU:HG2	2.00	0.44
25:DA:997:G:H2'	25:DA:998:C:H6	1.83	0.44
46:B0:27:GLU:HB2	46:B0:69:PHE:HD1	1.82	0.44
25:BA:1904:C:H2'	25:BA:1905:G:O4'	2.18	0.44
1:AA:373:A:C2	1:AA:374:A:C8	3.06	0.44
4:CD:88:VAL:HG22	5:CE:96:PRO:HB2	1.99	0.44
25:DA:910:A:C6	25:DA:911:A:C6	3.05	0.44
1:AA:435:C:H2'	1:AA:436:C:H6	1.83	0.44
1:CA:1144:G:N2	1:CA:1146:A:H62	2.16	0.44
25:DA:2022:U:O2'	25:DA:2617:C:H5'	2.17	0.44
26:DB:46:A:H2'	26:DB:47:C:H6	1.83	0.44
25:BA:323:A:N1	25:BA:346:A:O2'	2.44	0.44
1:AA:1291:G:H2'	1:AA:1292:U:C6	2.52	0.44
25:DA:1654:A:OP1	37:DR:1:MET:HA	2.18	0.44
36:BQ:109:VAL:HG22	36:BQ:113:GLN:OE1	2.17	0.44
25:BA:2856:G:H2'	25:BA:2857:U:O4'	2.17	0.44
1:CA:932:C:H2'	1:CA:933:G:C8	2.52	0.44
4:AD:101:LEU:HD23	4:AD:121:VAL:HG11	1.98	0.44
9:AI:49:PRO:HG2	9:AI:81:ILE:HG23	1.99	0.44
23:AX:57:A:O4'	30:BG:78:SER:OG	2.31	0.44
25:BA:254:A:C8	25:BA:255:G:H1'	2.51	0.44
25:DA:1266:G:O2'	25:DA:2012:G:O6	2.21	0.44
3:CC:79:ARG:O	3:CC:82:GLU:HB2	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:1475:G:C2	25:DA:1517:G:C2	3.05	0.44
25:BA:917:A:C2	25:BA:954:C:C2	3.05	0.44
1:CA:35:G:H2'	1:CA:36:C:C6	2.53	0.44
25:BA:1014:U:OP1	49:B3:17:LYS:N	2.50	0.44
15:AO:25:THR:HG21	15:AO:70:LEU:HB2	2.00	0.44
25:DA:828:U:H4'	25:DA:831:G:N1	2.31	0.44
45:DZ:63:ASP:OD1	45:DZ:65:GLN:HG3	2.17	0.44
15:CO:48:LYS:N	15:CO:48:LYS:HD2	2.32	0.44
41:BV:20:LEU:HA	41:BV:20:LEU:HD12	1.75	0.44
29:BF:195:ASP:HB3	29:BF:198:ALA:H	1.82	0.44
1:AA:1129:C:H1'	1:AA:1130:A:N7	2.33	0.44
25:DA:1493:C:N4	25:DA:2206:G:O2'	2.47	0.44
1:CA:1179:A:C6	1:CA:1180:A:N7	2.85	0.44
1:AA:457:C:H2'	1:AA:458:C:H6	1.82	0.44
1:CA:974:A:OP2	14:CN:41:ARG:NH1	2.50	0.44
1:CA:1030(C):G:H2'	1:CA:1030(D):A:C8	2.53	0.44
19:CS:15:LEU:HD11	19:CS:33:THR:HB	1.99	0.44
3:CC:19:GLU:HB3	3:CC:40:ARG:NH2	2.33	0.44
1:CA:671:G:H5'	6:CF:77:ARG:NH2	2.27	0.44
9:AI:53:VAL:HG11	9:AI:92:TYR:CE1	2.53	0.44
6:AF:62:TRP:CD1	18:AR:35:ARG:HD2	2.53	0.44
25:DA:2819:G:H2'	25:DA:2821:A:N7	2.32	0.44
1:CA:38:G:N2	1:CA:397:A:H5''	2.31	0.44
13:CM:20:THR:HG21	13:CM:27:LYS:HE2	1.99	0.44
32:DI:79:ILE:HA	32:DI:80:PRO:HD2	1.73	0.44
25:BA:1993:A:OP2	27:BD:242:ARG:NH2	2.51	0.44
25:DA:854:G:C2	25:DA:855:G:C5	3.06	0.44
1:AA:257:G:N2	1:AA:269:C:O2	2.20	0.44
29:DF:40:GLN:NE2	29:DF:182:ASN:HB2	2.32	0.44
45:BZ:150:LEU:HA	45:BZ:150:LEU:HD12	1.59	0.44
1:CA:1028:C:N3	1:CA:1033:G:O6	2.50	0.44
1:AA:784:C:H4'	25:BA:1868:C:OP1	2.18	0.44
37:BR:8:ARG:NH1	37:BR:39:PRO:HB3	2.32	0.44
1:CA:805:C:C2'	1:CA:806:C:H5'	2.48	0.44
31:DH:95:ARG:HB2	31:DH:128:PRO:HB2	1.99	0.44
31:DH:117:PRO:HG3	31:DH:123:PHE:CD2	2.52	0.44
29:DF:49:ALA:O	29:DF:92:PRO:HB2	2.17	0.44
53:B7:1:MET:N	53:B7:1:MET:HE3	2.32	0.44
27:DD:61:LEU:HA	27:DD:61:LEU:HD12	1.57	0.44
4:AD:138:TYR:CE1	4:AD:140:VAL:HA	2.52	0.44
28:BE:127:ASP:OD2	61:BE:410:HOH:O	2.21	0.44
46:D0:82:ARG:HA	46:D0:83:PRO:HD3	1.73	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:BX:72:LYS:HG2	43:BX:73:ARG:O	2.18	0.44
2:AB:36:ARG:C	2:AB:38:GLY:H	2.20	0.44
25:BA:412:C:O2	35:BP:71:VAL:HG21	2.17	0.44
6:CF:7:ASN:ND2	18:CR:34:TYR:OH	2.46	0.44
25:DA:2780:G:OP2	33:DN:118:LYS:HD3	2.18	0.44
1:AA:64:G:H4'	1:AA:65:U:H3'	1.98	0.44
32:BI:68:LEU:HD11	32:BI:109:ILE:HD11	2.00	0.44
25:DA:2653:U:O2'	31:DH:110:SER:HB3	2.17	0.44
8:CH:116:LYS:O	8:CH:119:LEU:HD21	2.17	0.44
2:CB:126:GLU:HG3	2:CB:126:GLU:H	1.63	0.44
27:BD:33:LEU:HA	27:BD:33:LEU:HD23	1.75	0.44
31:DH:90:LYS:HD2	31:DH:163:TYR:CD1	2.52	0.44
1:CA:110:C:O2'	16:CP:25:ARG:O	2.33	0.44
1:CA:1007:C:C2	1:CA:1022:G:N2	2.75	0.44
1:AA:159:G:O2'	1:AA:161:A:N7	2.47	0.44
1:CA:1118:C:H2'	1:CA:1119:C:C6	2.52	0.44
1:AA:1034:G:H5''	1:AA:1035:A:OP2	2.17	0.44
1:AA:184:G:H2'	1:AA:185:A:H8	1.82	0.44
25:DA:764:A:N1	25:DA:1789:A:O2'	2.49	0.44
41:DV:35:LEU:HB2	41:DV:57:VAL:CG2	2.46	0.44
5:AE:75:THR:HG23	5:AE:76:ILE:O	2.18	0.44
25:DA:2261:C:C5	46:D0:16:SER:HB3	2.53	0.44
9:CI:53:VAL:HG21	9:CI:92:TYR:OH	2.18	0.44
19:CS:50:ALA:HA	19:CS:58:VAL:O	2.17	0.44
25:DA:1359:A:N6	25:DA:1372:U:N3	2.61	0.44
32:DI:80:PRO:HA	32:DI:145:VAL:HG23	1.99	0.44
50:B4:61:ARG:HG3	50:B4:62:ARG:H	1.82	0.44
4:AD:187:ARG:HG2	4:AD:188:LEU:H	1.82	0.44
1:CA:937:A:H1'	1:CA:1379:G:H22	1.83	0.44
1:CA:276:G:C2'	1:CA:277:C:H5'	2.48	0.44
25:DA:1574:C:H2'	25:DA:1575:C:H6	1.83	0.44
42:DW:8:ARG:HA	42:DW:102:HIS:ND1	2.31	0.44
2:AB:59:GLU:O	2:AB:63:MET:HG2	2.18	0.44
2:AB:95:GLN:HG3	2:AB:147:LYS:O	2.17	0.44
13:CM:13:LYS:HA	13:CM:44:ARG:HH11	1.81	0.44
27:DD:221:VAL:HG22	27:DD:226:MET:HE3	1.98	0.44
1:CA:35:G:O2'	12:CL:118:SER:O	2.36	0.44
25:BA:2635:G:H4'	25:BA:2835:C:O2	2.16	0.44
5:CE:102:ALA:HB1	5:CE:106:PRO:HG2	2.00	0.44
52:B6:11:LEU:HB3	52:B6:49:HIS:HB3	1.99	0.44
26:BB:24:G:N3	26:BB:27:C:N4	2.58	0.44
1:CA:679:C:O2'	1:CA:680:C:H5'	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:CM:97:PRO:HB3	13:CM:101:GLN:OE1	2.17	0.44
25:DA:2197:U:O3'	25:DA:2198:A:H8	2.01	0.44
25:DA:719:C:H2'	25:DA:720:C:H6	1.82	0.44
30:DG:111:LEU:HB2	30:DG:112:PRO:HD3	1.99	0.44
50:B4:16:CYS:SG	50:B4:17:GLY:N	2.90	0.44
25:BA:2827:G:OP1	37:BR:99:LYS:HE2	2.17	0.44
22:AV:15:A:O5'	22:AV:15:A:H8	2.00	0.44
25:BA:982:U:H2'	25:BA:983:G:O4'	2.18	0.44
1:AA:1082:G:H2'	1:AA:1083:U:O4'	2.18	0.44
1:AA:1084:G:C5	1:AA:1085:U:C4	3.06	0.44
7:AG:16:LEU:HD11	9:AI:45:ALA:HB2	1.99	0.44
26:DB:62:C:H2'	26:DB:63:G:C8	2.53	0.44
1:CA:564:C:H5'	17:CQ:32:TYR:CE1	2.52	0.44
2:AB:69:LEU:HD13	2:AB:91:PRO:HB2	2.00	0.44
4:AD:174:LEU:HA	4:AD:184:LYS:O	2.18	0.44
25:DA:2319:G:H4'	25:DA:2320:A:OP1	2.17	0.44
9:CI:24:GLY:HA2	9:CI:59:PHE:O	2.18	0.44
25:DA:154:G:C6	25:DA:173:G:C6	3.05	0.44
1:AA:184:G:O4'	1:AA:224:C:H4'	2.18	0.44
35:BP:59:LEU:HG	54:B8:58:ILE:HD13	2.00	0.44
1:CA:939:G:H2'	1:CA:940:C:C6	2.53	0.44
25:DA:2262:U:OP2	46:D0:19:LYS:HD3	2.16	0.44
1:AA:1399:C:C2	1:AA:1401:G:C5	3.06	0.44
15:CO:54:ARG:O	15:CO:58:MET:HG3	2.17	0.44
1:AA:688:G:O2'	1:AA:704:A:N1	2.47	0.44
38:DS:67:ARG:O	38:DS:71:ARG:HG2	2.17	0.44
10:AJ:57:LYS:HD2	10:AJ:60:ARG:HH21	1.81	0.44
34:DO:7:TYR:CE1	34:DO:44:LYS:HG3	2.53	0.44
38:DS:36:TYR:OH	38:DS:54:LEU:HD22	2.17	0.44
38:DS:26:LEU:HD22	38:DS:87:PHE:CE1	2.52	0.44
1:AA:581:G:N2	1:AA:582:U:C4	2.85	0.44
25:DA:652(D):C:H2'	25:DA:652(E):G:O4'	2.17	0.44
25:DA:652(E):G:H8	25:DA:652(E):G:OP2	2.00	0.44
1:CA:292:G:N7	1:CA:293:G:H1'	2.32	0.44
52:B6:40:CYS:HA	52:B6:41:PRO:HD3	1.80	0.44
1:CA:1431:C:H2'	1:CA:1432:G:O4'	2.18	0.44
31:BH:117:PRO:HG3	31:BH:123:PHE:CD2	2.52	0.44
25:DA:1169:G:H1	25:DA:1180:C:H42	1.65	0.44
27:DD:85:ASP:OD2	27:DD:88:ARG:HD2	2.18	0.44
25:DA:572:A:OP2	41:DV:78:LYS:NZ	2.50	0.44
27:BD:2:ALA:N	27:BD:20:ASP:OD2	2.50	0.44
25:DA:1392:A:C6	25:DA:1393:A:C6	3.06	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:1365:A:O4'	47:D1:41:ARG:NH2	2.51	0.44
25:DA:542:C:C2	25:DA:552:G:N2	2.86	0.44
8:CH:82:HIS:NE2	8:CH:84:ARG:HG2	2.32	0.44
1:AA:715:A:H2'	1:AA:716:A:C8	2.52	0.44
46:D0:34:GLY:N	46:D0:61:ALA:O	2.46	0.44
25:DA:78:A:H2'	25:DA:79:G:C8	2.53	0.44
2:AB:51:LEU:O	2:AB:55:PHE:HD2	2.01	0.44
17:AQ:67:LYS:HA	17:AQ:70:ARG:HH12	1.82	0.44
2:CB:76:GLN:NE2	2:CB:206:ASP:O	2.50	0.44
1:AA:1173:G:H2'	1:AA:1174:G:H8	1.83	0.44
25:BA:1359:U:H2'	25:BA:1656:A:N1	2.33	0.44
25:DA:1788:C:C2	25:DA:1789:A:C8	3.05	0.44
1:CA:502:G:OP2	12:CL:116:SER:HA	2.17	0.44
25:DA:71:A:N7	43:DX:31:HIS:CE1	2.86	0.44
3:CC:33:LEU:HD21	14:CN:53:LEU:CD2	2.47	0.44
50:B4:14:ILE:HG12	50:B4:31:ILE:HB	2.00	0.44
1:CA:453:A:H4'	16:CP:72:ARG:HG3	2.00	0.44
20:CT:60:GLU:HG3	20:CT:81:LYS:HD2	2.00	0.44
25:DA:2536:G:C5	25:DA:2537:U:C5	3.05	0.44
33:BN:67:LEU:HD12	33:BN:67:LEU:HA	1.71	0.44
38:DS:15:ARG:HB3	38:DS:19:LYS:NZ	2.32	0.44
25:DA:595:C:H2'	25:DA:596:G:O4'	2.17	0.44
25:DA:1514:U:O2'	25:DA:1515:G:H5'	2.18	0.44
25:BA:2623:U:C4	51:B5:3:LYS:HG2	2.53	0.44
28:DE:101:ARG:HD2	28:DE:169:ASN:OD1	2.18	0.44
25:BA:555:G:C5	25:BA:2044:U:H5''	2.52	0.44
25:DA:344:G:N2	25:DA:345:A:H62	2.15	0.44
38:DS:34:HIS:ND1	38:DS:53:SER:OG	2.36	0.44
3:AC:175:LEU:HD21	3:AC:201:TYR:HE2	1.82	0.44
25:DA:954:G:C5	25:DA:955:C:C5	3.05	0.44
25:BA:1702:A:H3'	25:BA:1703:C:H6	1.82	0.44
28:BE:188:VAL:HA	28:BE:189:PRO:HD3	1.80	0.44
28:BE:78:LEU:O	28:BE:79:ARG:HG2	2.18	0.44
5:CE:152:ARG:HG3	8:CH:43:GLY:O	2.17	0.44
5:CE:36:ASP:C	5:CE:38:GLN:H	2.20	0.44
25:BA:171:A:H2'	25:BA:172:C:O4'	2.18	0.44
25:DA:2080:G:O2'	25:DA:2081:C:H5'	2.18	0.44
1:CA:1349:A:H2'	1:CA:1350:A:H8	1.82	0.44
25:DA:2817:G:C5	25:DA:2830:G:C2	3.05	0.44
40:DU:76:TYR:CZ	40:DU:80:ILE:HG13	2.53	0.44
25:DA:447:A:H4'	25:DA:449:A:C8	2.51	0.44
6:CF:89:MET:HG2	6:CF:91:VAL:HG23	2.00	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BA:1588:G:H5''	25:BA:1589:A:OP2	2.17	0.44
29:BF:9:ILE:HA	29:BF:10:PRO:HD2	1.76	0.44
25:DA:395:U:H1'	25:DA:396:G:N7	2.32	0.44
43:BX:24:GLY:O	43:BX:83:VAL:HG22	2.18	0.44
1:AA:1285:A:O5'	1:AA:1285:A:H8	2.01	0.44
8:CH:36:LEU:HA	8:CH:36:LEU:HD23	1.80	0.44
1:CA:399:G:H2'	1:CA:400:C:C6	2.53	0.44
6:AF:10:LEU:HD23	6:AF:61:LEU:HD13	2.00	0.44
1:CA:1154:G:H2'	1:CA:1154:G:H8	1.36	0.44
1:CA:1151:A:H5'	10:CJ:41:PRO:HA	1.97	0.44
25:DA:2298:A:N6	25:DA:2321:G:H1	2.15	0.44
19:AS:65:ASN:C	50:B4:58:ARG:HG3	2.38	0.44
19:CS:15:LEU:HD12	19:CS:18:LYS:HD2	1.99	0.44
1:CA:738:C:H2'	1:CA:739:C:H6	1.83	0.44
54:B8:30:ARG:HD3	54:B8:30:ARG:HA	1.45	0.44
25:DA:2261:C:H1'	25:DA:2388:A:N3	2.33	0.44
1:AA:59:A:H5''	1:AA:60:A:H5''	2.00	0.44
12:CL:24:VAL:HG13	12:CL:98:TYR:CE1	2.46	0.44
29:BF:53:THR:HB	29:BF:56:GLU:OE2	2.18	0.44
1:AA:1220:G:O3'	19:AS:36:ARG:HD3	2.18	0.44
40:DU:113:ALA:O	40:DU:117:GLN:HG2	2.18	0.44
2:CB:69:LEU:HB3	2:CB:162:ILE:HG22	2.00	0.44
30:BG:16:ARG:HE	30:BG:31:VAL:HG21	1.82	0.44
1:CA:472:A:H2'	1:CA:473:G:O4'	2.18	0.44
25:DA:2078:C:H2'	25:DA:2079:U:O4'	2.17	0.44
25:DA:1656:C:H2'	25:DA:1657:C:C6	2.53	0.44
2:CB:100:GLY:HA2	2:CB:103:THR:OG1	2.18	0.44
1:AA:1218:C:H2'	1:AA:1219:U:C6	2.52	0.44
25:DA:616:G:H5'	29:DF:205:ARG:HD2	2.00	0.44
1:CA:189:G:H2'	1:CA:189(A):C:C6	2.53	0.44
25:BA:248:G:HO2'	25:BA:646:A:HO2'	1.54	0.44
25:DA:623:G:C2	25:DA:624:C:C2	3.06	0.44
4:CD:110:PHE:N	4:CD:110:PHE:HD1	2.16	0.44
1:AA:1375:A:H4'	7:AG:29:LYS:HD3	2.00	0.44
12:AL:88:GLY:O	12:AL:99:HIS:HD2	2.01	0.44
25:BA:1722:C:H2'	25:BA:1723:A:O4'	2.18	0.44
37:DR:33:ARG:NH1	37:DR:115:GLU:OE2	2.49	0.44
25:DA:519:U:H2'	25:DA:520:G:H8	1.83	0.44
31:BH:84:SER:HA	31:BH:133:VAL:O	2.18	0.44
45:BZ:146:ILE:HA	45:BZ:147:GLY:HA2	1.67	0.44
25:BA:1766:G:H8	25:BA:1770:A:H62	1.66	0.44
15:AO:67:LEU:HA	15:AO:67:LEU:HD23	1.74	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
44:BY:55:TYR:CD2	44:BY:55:TYR:N	2.85	0.44
10:AJ:84:GLN:O	10:AJ:84:GLN:HG2	2.18	0.44
47:B1:77:ALA:HA	47:B1:80:LEU:HD13	1.99	0.44
25:BA:2369:U:OP1	46:B0:20:ARG:NH1	2.51	0.44
1:AA:437:U:O3'	4:AD:125:HIS:CE1	2.71	0.44
25:BA:2734:A:O2'	25:BA:2884:C:H5'	2.17	0.44
19:CS:30:LEU:CD1	19:CS:32:LYS:HG3	2.40	0.44
1:CA:1168:A:N3	1:CA:1168:A:H3'	2.33	0.44
1:AA:660:G:H2'	1:AA:661:G:H8	1.81	0.44
1:AA:658:G:C2	1:AA:749:C:N3	2.86	0.44
1:CA:1227:A:H8	1:CA:1227:A:H3'	1.83	0.44
4:AD:164:ALA:O	4:AD:168:ARG:NH1	2.48	0.44
13:CM:20:THR:C	13:CM:22:ILE:H	2.21	0.44
25:DA:1131:G:O6	25:DA:2040:C:H1'	2.18	0.44
25:DA:478:A:N1	25:DA:500:G:H4'	2.33	0.44
25:DA:330:A:H2	25:DA:1210:A:H2'	1.82	0.44
11:CK:20:TYR:CE1	11:CK:83:ILE:HD12	2.52	0.44
2:AB:35:GLU:HB2	2:AB:40:HIS:HA	2.00	0.44
27:BD:77:ALA:HB2	27:BD:97:TYR:CG	2.52	0.44
1:CA:1342:C:H1'	9:CI:124:GLN:NE2	2.32	0.44
25:BA:956:A:C5	36:BQ:13:GLN:HG3	2.53	0.44
25:DA:1857:G:C6	25:DA:1858:G:N1	2.86	0.44
20:AT:57:ARG:HH22	20:AT:100:ILE:HD12	1.83	0.44
25:BA:2303:U:O2'	25:BA:2386:C:O2	2.30	0.44
45:BZ:126:VAL:CG1	45:BZ:161:VAL:HG23	2.47	0.44
25:DA:2750:A:H4'	25:DA:2751:G:OP2	2.13	0.44
48:D2:22:GLU:OE2	48:D2:68:ARG:NH2	2.51	0.44
47:D1:7:ILE:HG23	47:D1:98:LEU:HD11	1.99	0.44
25:DA:2387:U:H1'	46:D0:41:ARG:NE	2.32	0.44
1:AA:592:G:C2	1:AA:648:A:C2	3.06	0.44
1:CA:1380:U:C4	7:CG:3:ARG:HG2	2.52	0.44
31:DH:5:GLY:HA3	31:DH:65:HIS:CG	2.52	0.44
2:AB:133:LYS:O	2:AB:137:ARG:HG3	2.18	0.44
38:DS:57:LYS:HE2	38:DS:57:LYS:HB2	1.61	0.44
23:CX:8:U:O5'	23:CX:8:U:H6	2.01	0.44
3:AC:148:GLY:HA3	3:AC:172:ARG:O	2.17	0.44
1:CA:1049:U:C5	1:CA:1201:A:H5'	2.52	0.44
34:DO:80:ASP:OD1	39:DT:64:ARG:NH2	2.49	0.44
30:BG:43:LEU:HB3	30:BG:44:GLY:H	1.53	0.44
8:AH:53:VAL:HG12	8:AH:54:ASP:OD1	2.17	0.44
1:CA:1003:G:H22	1:CA:1035:A:H61	1.66	0.43
2:AB:163:PHE:HA	2:AB:185:ILE:O	2.17	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:CB:213:LEU:HD22	2:CB:214:ILE:HD13	1.99	0.43
1:CA:1178:G:H2'	1:CA:1180:A:OP2	2.17	0.43
28:BE:110:GLY:HA2	28:BE:161:GLY:HA3	2.00	0.43
25:DA:876:C:H2'	25:DA:877:U:O4'	2.17	0.43
1:AA:181:G:N1	1:AA:195:A:C8	2.85	0.43
25:BA:927:G:H2'	25:BA:928:G:H5'	2.00	0.43
1:CA:1203:C:H2'	1:CA:1204:A:C8	2.53	0.43
25:BA:671:A:H2'	25:BA:672:G:O4'	2.18	0.43
13:AM:49:THR:OG1	13:AM:52:GLU:OE1	2.24	0.43
13:AM:3:ARG:HG2	13:AM:8:GLU:HA	2.00	0.43
25:DA:1297:C:OP1	25:DA:2710:C:H4'	2.18	0.43
2:CB:162:ILE:HG13	2:CB:162:ILE:O	2.17	0.43
16:CP:72:ARG:NH2	16:CP:73:LEU:HD21	2.33	0.43
13:CM:29:ARG:HH11	13:CM:64:TRP:HB3	1.83	0.43
17:AQ:60:ILE:HG12	17:AQ:61:GLU:N	2.33	0.43
44:BY:86:ARG:NH1	44:BY:100:ALA:HB1	2.31	0.43
25:DA:333:G:H2'	25:DA:333:G:N3	2.33	0.43
25:BA:2092:G:H2'	25:BA:2093:A:O4'	2.17	0.43
1:AA:630:G:O2'	1:AA:631:G:H5'	2.19	0.43
3:CC:112:SER:HB3	3:CC:115:LEU:HD23	2.00	0.43
31:DH:86:GLU:OE2	31:DH:132:ARG:NH2	2.38	0.43
1:CA:67:C:O2'	1:CA:171:A:H1'	2.18	0.43
25:DA:321:G:H4'	29:DF:165:ARG:O	2.18	0.43
29:BF:125:LEU:HD12	29:BF:194:MET:HB2	2.00	0.43
25:BA:31:C:C4	25:BA:32:C:C5	3.06	0.43
33:DN:42:TRP:HA	33:DN:48:MET:HE1	2.00	0.43
17:AQ:92:ARG:O	17:AQ:95:TYR:HB2	2.18	0.43
25:DA:1160:G:C6	25:DA:1161:C:C4	3.06	0.43
1:CA:1425:U:H2'	1:CA:1426:C:C6	2.53	0.43
18:AR:59:SER:H	18:AR:62:GLU:CG	2.31	0.43
9:AI:15:ALA:HB2	9:AI:65:VAL:HG23	2.00	0.43
25:BA:2710:U:H2'	25:BA:2711:C:C6	2.53	0.43
25:DA:1957:C:O2'	25:DA:1985:G:H1'	2.18	0.43
25:BA:2023:A:H2'	25:BA:2024:G:C8	2.52	0.43
40:BU:75:ASN:OD1	40:BU:78:THR:OG1	2.19	0.43
27:BD:175:LEU:HD12	27:BD:185:VAL:HG21	2.00	0.43
25:BA:26:G:C6	25:BA:27:G:C6	3.06	0.43
25:BA:233:A:C2	25:BA:244:A:C4	3.06	0.43
25:DA:775:G:C4	25:DA:794:G:C8	3.06	0.43
1:CA:69:G:H2'	1:CA:70:G:H8	1.82	0.43
1:CA:1002:G:H2'	1:CA:1003:G:H8	1.83	0.43
1:AA:1277:C:H1'	1:AA:1282:C:C2	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1157:A:N6	1:CA:1178:G:H21	2.15	0.43
9:CI:14:VAL:HG22	9:CI:66:ARG:O	2.18	0.43
25:DA:1489:U:O2'	25:DA:1490:A:H5''	2.18	0.43
1:CA:1072:G:C6	1:CA:1073:U:C4	3.07	0.43
1:AA:472:A:H2'	1:AA:473:G:O4'	2.17	0.43
25:DA:89:G:C3'	25:DA:90:U:H5''	2.44	0.43
1:CA:1243:C:H2'	1:CA:1244:C:C6	2.53	0.43
1:AA:1030:C:N4	1:AA:1030(A):G:N3	2.66	0.43
25:DA:2298:A:C8	25:DA:2299:G:C8	3.07	0.43
19:AS:41:VAL:HB	19:AS:44:MET:HG3	1.99	0.43
1:AA:1304:G:C6	1:AA:1305:G:N1	2.86	0.43
30:DG:3:LEU:HD22	50:D4:25:TYR:CE2	2.53	0.43
28:BE:119:ARG:CG	28:BE:160:TYR:HB2	2.48	0.43
25:DA:2849:U:H4'	25:DA:2868:A:C2	2.52	0.43
6:AF:38:GLU:OE1	6:AF:64:GLN:NE2	2.35	0.43
1:AA:454:C:OP1	16:AP:75:ARG:NH2	2.49	0.43
4:AD:177:ASP:OD2	4:AD:180:GLY:HA3	2.18	0.43
25:DA:936:C:H2'	25:DA:937:U:C6	2.52	0.43
7:AG:78:ARG:NH2	7:AG:156:TRP:HB3	2.33	0.43
30:DG:170:ARG:HD3	30:DG:170:ARG:C	2.39	0.43
1:AA:1047:G:O3'	14:AN:4:LYS:HB2	2.17	0.43
28:DE:166:THR:HG21	28:DE:199:ARG:HH22	1.83	0.43
1:CA:1427:U:H2'	1:CA:1428:A:H8	1.80	0.43
25:DA:2820:A:OP1	37:DR:2:ARG:NH2	2.51	0.43
6:AF:30:LEU:O	6:AF:35:ALA:N	2.51	0.43
1:CA:1323:G:H4'	1:CA:1363:C:N3	2.32	0.43
2:CB:24:TRP:CH2	2:CB:26:PRO:HA	2.53	0.43
25:DA:590:A:OP1	29:DF:95:ARG:NH1	2.51	0.43
1:CA:640:A:C2'	1:CA:641:U:H5'	2.48	0.43
45:BZ:39:VAL:HG21	45:BZ:44:PHE:HB2	1.99	0.43
1:CA:123:C:OP1	1:CA:312:C:H5'	2.18	0.43
23:AX:20:U:H5''	23:AX:21:A:OP2	2.17	0.43
25:BA:220:C:H2'	25:BA:221:G:O4'	2.18	0.43
37:BR:36:THR:O	37:BR:111:LEU:HD12	2.18	0.43
9:AI:29:ASN:ND2	9:AI:65:VAL:O	2.51	0.43
9:AI:18:PHE:HD2	9:AI:62:TYR:HD2	1.66	0.43
5:CE:105:VAL:HG21	5:CE:128:PRO:HB3	2.00	0.43
27:DD:77:ALA:HA	27:DD:97:TYR:HA	2.00	0.43
47:D1:76:ARG:HH11	47:D1:97:LEU:HD22	1.83	0.43
53:D7:22:MET:HA	53:D7:28:ARG:HG2	2.00	0.43
25:DA:262:A:H2'	25:DA:263:C:O4'	2.19	0.43
12:AL:71:PRO:O	12:AL:102:ARG:HD2	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:926:G:H22	22:CV:16:A:P	2.41	0.43
27:BD:275:LYS:HB3	27:BD:276:LYS:H	1.40	0.43
44:DY:76:CYS:SG	44:DY:78:ALA:HB3	2.59	0.43
26:BB:12:C:H2'	46:B0:73:GLY:HA3	1.99	0.43
20:AT:92:LEU:HA	20:AT:92:LEU:HD23	1.72	0.43
38:BS:32:LEU:HD23	38:BS:32:LEU:HA	1.81	0.43
25:BA:518:G:H2'	25:BA:519:G:O4'	2.18	0.43
40:BU:66:ASN:O	40:BU:70:ARG:HG3	2.17	0.43
16:AP:6:LEU:HB3	16:AP:17:TYR:CD2	2.53	0.43
43:DX:26:TYR:CE2	43:DX:89:ILE:HG13	2.53	0.43
41:BV:55:ALA:HB2	41:BV:101:GLY:HA2	1.99	0.43
30:DG:16:ARG:HA	30:DG:16:ARG:HD2	1.65	0.43
1:CA:1137:C:H5''	1:CA:1138:G:OP1	2.18	0.43
10:CJ:38:ILE:HG13	10:CJ:38:ILE:O	2.18	0.43
16:AP:57:ARG:NH2	16:AP:79:VAL:O	2.42	0.43
1:CA:1169:A:C8	1:CA:1169:A:H3'	2.53	0.43
1:AA:195:A:H3'	1:AA:196:A:C8	2.52	0.43
30:BG:11:TYR:CE2	30:BG:16:ARG:HD3	2.53	0.43
16:CP:72:ARG:HH21	16:CP:73:LEU:HD21	1.82	0.43
25:DA:2312:U:H5'	30:DG:88:ILE:HD11	2.01	0.43
48:B2:32:LEU:HD12	48:B2:36:ARG:NH1	2.33	0.43
1:CA:1240:U:C2	7:CG:32:ARG:HD2	2.53	0.43
38:DS:19:LYS:H	38:DS:19:LYS:HG2	1.56	0.43
38:DS:94:TYR:CE1	38:DS:99:LYS:HG3	2.53	0.43
1:CA:509:A:C8	1:CA:509:A:C3'	3.01	0.43
10:CJ:57:LYS:HD2	10:CJ:60:ARG:NH2	2.33	0.43
2:AB:127:ILE:CD1	2:AB:130:ARG:HD3	2.49	0.43
25:DA:2852:G:H2'	25:DA:2853:C:C6	2.53	0.43
25:DA:917:A:H5'	25:DA:918:A:OP2	2.17	0.43
1:CA:160:A:H2'	1:CA:161:A:H8	1.83	0.43
23:CX:59:A:H2'	23:CX:60:U:H5'	2.00	0.43
14:AN:13:THR:HA	14:AN:14:PRO:HD3	1.85	0.43
25:BA:2352:G:H2'	25:BA:2353:G:C8	2.53	0.43
25:DA:1996:C:H4'	25:DA:1997:G:OP1	2.18	0.43
25:BA:905:U:O2	25:BA:2280:A:H2'	2.18	0.43
25:BA:1535:U:O2'	25:BA:1536:A:H8	2.01	0.43
30:BG:125:PHE:HB3	30:BG:166:ASP:OD1	2.19	0.43
4:AD:107:ARG:NH2	4:AD:194:LEU:HD22	2.33	0.43
1:AA:966:G:H21	9:AI:127:LYS:NZ	2.17	0.43
25:DA:1916:A:H2'	25:DA:1917:U:O4'	2.18	0.43
30:DG:73:ALA:HB3	30:DG:85:GLY:H	1.83	0.43
25:DA:2031:A:C6	25:DA:2498:C:H1'	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:327:A:C4	1:AA:329:A:C8	3.06	0.43
1:AA:328:C:H4'	1:AA:329:A:H5'	2.00	0.43
25:DA:289:A:H2'	25:DA:290:G:O4'	2.19	0.43
35:BP:6:LEU:HD23	35:BP:6:LEU:HA	1.74	0.43
17:CQ:81:ARG:HD2	17:CQ:81:ARG:HA	1.76	0.43
26:DB:3:C:H2'	26:DB:4:C:C6	2.53	0.43
25:DA:2236:C:H2'	25:DA:2237:G:O4'	2.19	0.43
25:BA:2453:C:OP2	25:BA:2598:C:O2'	2.35	0.43
25:BA:1894:G:H2'	25:BA:1895:U:C6	2.53	0.43
1:AA:1262:C:H2'	1:AA:1263:C:C6	2.53	0.43
15:AO:74:ASP:CG	15:AO:77:ARG:HG3	2.38	0.43
1:CA:1035:A:C2	1:CA:1036:G:C8	3.06	0.43
1:AA:1095:U:H2'	1:AA:1096:C:O4'	2.17	0.43
20:AT:13:LEU:HD12	20:AT:14:LYS:N	2.33	0.43
2:AB:71:VAL:HA	2:AB:93:VAL:HG23	2.01	0.43
54:B8:39:LYS:HA	54:B8:42:ARG:NH1	2.33	0.43
1:AA:673:G:N2	1:AA:674:G:C2	2.86	0.43
25:DA:2831:G:P	28:DE:58:ARG:NH2	2.91	0.43
5:CE:110:LEU:HD21	5:CE:139:LEU:HD21	2.00	0.43
1:CA:646:U:H2'	1:CA:647:C:H6	1.77	0.43
25:DA:2243:U:OP1	61:DA:4352:HOH:O	2.21	0.43
1:CA:1270:C:C2'	1:CA:1271:G:H5'	2.47	0.43
13:CM:29:ARG:HD3	13:CM:64:TRP:CD2	2.53	0.43
13:CM:29:ARG:NH1	13:CM:64:TRP:HB3	2.34	0.43
1:CA:1263:C:H2'	1:CA:1264:C:C5	2.54	0.43
26:DB:45:A:H2'	26:DB:46:A:C8	2.53	0.43
1:AA:33:A:H2'	1:AA:34:C:H6	1.82	0.43
9:CI:116:LYS:NZ	9:CI:122:ALA:HB2	2.33	0.43
1:CA:832:C:N4	1:CA:833:U:C4	2.87	0.43
1:CA:708:C:H2'	1:CA:709:G:C8	2.54	0.43
15:CO:33:THR:O	15:CO:36:ILE:HB	2.19	0.43
4:AD:117:ALA:O	4:AD:121:VAL:HG23	2.18	0.43
1:AA:784:C:H2'	1:AA:785:G:O4'	2.18	0.43
1:CA:642:A:C6	1:CA:643:C:C4	3.06	0.43
25:DA:1939:U:OP1	25:DA:2604:U:O2'	2.36	0.43
25:BA:564:G:H2'	25:BA:565:C:C6	2.52	0.43
37:DR:87:TYR:OH	37:DR:117:VAL:O	2.24	0.43
25:DA:966:G:C6	25:DA:967:C:N4	2.86	0.43
1:AA:413:G:N2	1:AA:428:G:H1'	2.34	0.43
27:DD:139:GLY:H	27:DD:165:ILE:HB	1.83	0.43
7:AG:26:PHE:CE2	7:AG:30:ILE:HD11	2.53	0.43
25:DA:2751:G:OP2	31:DH:2:SER:HB3	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:BU:78:THR:HG22	40:BU:117:GLN:HE22	1.84	0.43
25:BA:711:C:H4'	25:BA:986:A:OP1	2.18	0.43
4:CD:72:GLU:OE1	4:CD:207:TYR:OH	2.37	0.43
25:DA:140:G:N2	25:DA:1596:A:H4'	2.33	0.43
25:BA:814:U:O2'	25:BA:815:G:H5'	2.17	0.43
36:BQ:2:LEU:HD23	36:BQ:69:PHE:CD2	2.53	0.43
25:DA:608:A:H2'	25:DA:609:A:C8	2.53	0.43
8:CH:39:LEU:HB3	8:CH:45:ILE:HG12	2.00	0.43
1:AA:1394:A:C6	1:AA:1501:C:H4'	2.53	0.43
25:BA:1008:U:H2'	25:BA:1009:C:C6	2.54	0.43
34:DO:73:ASP:HB2	39:DT:82:LEU:HD13	2.00	0.43
1:CA:1517:G:H1'	25:DA:1919:A:O3'	2.18	0.43
25:BA:2336:C:H5''	25:BA:2337:G:H5'	2.00	0.43
25:BA:977:G:OP2	49:B3:29:ARG:NH2	2.50	0.43
31:DH:25:LYS:HG2	31:DH:25:LYS:HZ3	1.75	0.43
25:BA:2367:C:H1'	46:B0:39:ARG:HH21	1.82	0.43
36:BQ:35:VAL:HG13	36:BQ:130:LYS:HB3	1.99	0.43
26:DB:6:C:C2	26:DB:116:G:N2	2.87	0.43
25:BA:1987:C:H3'	25:BA:1988:A:H2'	1.99	0.43
25:DA:2259:G:H1'	25:DA:2427:C:C2	2.53	0.43
39:DT:16:ARG:NH1	39:DT:18:ASP:OD2	2.51	0.43
1:AA:1266:G:N2	1:AA:1270:C:C2	2.86	0.43
25:DA:1341:U:H3'	25:DA:1397:U:O2	2.18	0.43
1:CA:1017:G:H2'	1:CA:1018:C:O4'	2.18	0.43
31:DH:98:LEU:CD2	31:DH:125:VAL:HG23	2.46	0.43
25:DA:450:G:P	25:DA:1248:G:H22	2.41	0.43
25:BA:302:A:H2'	25:BA:303:C:C6	2.54	0.43
25:BA:1003:U:H5''	36:BQ:14:ARG:HD3	2.01	0.43
8:AH:10:LEU:HD22	8:AH:83:ILE:HD11	2.00	0.43
25:DA:2380:C:O5'	25:DA:2380:C:H6	2.01	0.43
16:CP:21:VAL:HG11	16:CP:59:TRP:NE1	2.33	0.43
43:DX:31:HIS:HD2	43:DX:33:LYS:H	1.67	0.43
3:CC:12:LEU:HD23	3:CC:12:LEU:HA	1.88	0.43
5:CE:52:PRO:HG2	5:CE:53:LEU:HD12	2.00	0.43
1:CA:1271:G:H5''	1:CA:1314:C:OP1	2.18	0.43
25:BA:2122:G:N3	25:BA:2122:G:H2'	2.33	0.43
45:BZ:111:VAL:HG12	45:BZ:112:ARG:N	2.33	0.43
26:DB:42:C:O2	30:DG:92:VAL:HA	2.18	0.43
25:DA:1032:A:O2'	25:DA:1034:G:OP2	2.21	0.43
25:BA:2108:U:H2'	25:BA:2109:G:H8	1.83	0.43
1:AA:1379:G:C5	1:AA:1380:U:C5	3.06	0.43
1:AA:276:G:O3'	17:AQ:68:ARG:NH1	2.52	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:275:G:C6	25:DA:276:A:C6	3.07	0.43
54:B8:34:TRP:CE2	54:B8:35:GLN:HB3	2.54	0.43
1:CA:554:C:H2'	1:CA:555:C:C6	2.53	0.43
31:BH:117:PRO:HA	31:BH:118:PRO:HD2	1.83	0.43
1:AA:727:G:N2	1:AA:730:G:OP2	2.45	0.43
1:AA:1288:A:C6	1:AA:1289:A:C5	3.06	0.43
45:DZ:11:GLU:HB3	45:DZ:12:GLY:H	1.70	0.43
2:CB:101:MET:HA	2:CB:108:ILE:HD13	2.01	0.43
45:DZ:14:LYS:HA	45:DZ:15:PRO:HD3	1.87	0.43
21:AU:18:TYR:CE2	21:AU:24:ARG:HD3	2.53	0.43
37:DR:20:LEU:O	37:DR:24:GLN:HG3	2.19	0.43
9:AI:128:ARG:NH1	23:AX:35:A:OP2	2.51	0.43
45:BZ:102:LEU:HD13	45:BZ:123:ASP:HA	2.00	0.43
25:BA:2042:A:O2'	25:BA:2043:C:H5'	2.19	0.43
25:DA:2845:G:H5''	39:DT:54:ARG:O	2.18	0.43
25:DA:2573:C:H3'	61:DA:4461:HOH:O	2.18	0.43
31:BH:88:LEU:HD23	31:BH:165:ALA:HA	2.01	0.43
2:AB:156:LYS:HB3	2:AB:156:LYS:HE2	1.64	0.43
13:AM:84:ILE:HD12	19:AS:74:PHE:HZ	1.83	0.43
25:BA:1618:A:H2'	25:BA:1619:A:C8	2.53	0.43
25:DA:2870:C:H2'	25:DA:2871:C:O4'	2.17	0.43
1:AA:1145:C:H4'	1:AA:1146:A:C5'	2.47	0.43
1:CA:1120:G:N2	1:CA:1154:G:H1'	2.34	0.43
1:CA:1178:G:N3	1:CA:1180:A:H2	2.16	0.43
1:AA:1075:C:H2'	1:AA:1076:C:H5'	2.01	0.43
1:AA:1030(A):G:N2	1:AA:1032:G:O6	2.51	0.43
8:CH:51:VAL:HG11	8:CH:60:ARG:NH1	2.30	0.43
1:CA:1374:A:O2'	7:CG:28:ASN:HB3	2.19	0.43
5:CE:110:LEU:HD23	5:CE:110:LEU:HA	1.68	0.43
16:CP:22:THR:HA	16:CP:33:ILE:HG13	2.01	0.43
25:BA:154:G:O6	25:BA:155:C:N4	2.52	0.43
30:BG:11:TYR:OH	30:BG:32:PRO:O	2.31	0.43
1:CA:1269:A:H2	1:CA:1312:G:N3	2.16	0.43
27:BD:38:LYS:HD2	27:BD:38:LYS:HA	1.59	0.43
1:AA:684:A:O2'	11:AK:39:PRO:O	2.37	0.43
4:AD:18:LYS:HG2	57:AD:501:SF4:S1	2.57	0.43
1:AA:626:U:C2	1:AA:627:G:C8	3.06	0.43
26:DB:43:C:C5	26:DB:45:A:N6	2.87	0.43
35:DP:45:LEU:HD23	35:DP:45:LEU:HA	1.43	0.43
20:CT:10:LEU:HD12	20:CT:10:LEU:HA	1.61	0.43
1:CA:577:G:C8	1:CA:816:A:C6	3.07	0.43
34:BO:101:PRO:HG3	39:BT:67:SER:OG	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:933:G:C6	1:CA:1385:G:C6	3.07	0.43
30:DG:145:THR:H	30:DG:148:MET:HE3	1.84	0.43
25:DA:1761:C:H3'	25:DA:1762:A:H5''	1.99	0.43
20:AT:34:LYS:HE2	20:AT:34:LYS:HB2	1.85	0.43
25:BA:1836:U:H5''	27:BD:250:TRP:CD2	2.54	0.43
18:AR:59:SER:H	18:AR:62:GLU:HG3	1.84	0.43
25:BA:864:C:H4'	25:BA:977:G:C5	2.54	0.43
25:DA:2845:G:H2'	25:DA:2846:G:C8	2.54	0.43
25:DA:1827:C:OP2	27:DD:222:ARG:NH1	2.52	0.43
44:DY:86:ARG:HH11	44:DY:100:ALA:HA	1.84	0.43
10:CJ:5:ARG:O	10:CJ:98:ILE:HA	2.18	0.43
1:AA:353:A:H5'	1:AA:353:A:H8	1.84	0.43
29:DF:106:ARG:H	29:DF:106:ARG:HG2	1.48	0.43
25:DA:2607:G:H2'	25:DA:2608:G:O4'	2.19	0.43
1:AA:1003:G:C2'	1:AA:1004:A:H4'	2.49	0.43
1:AA:442:C:H5'	1:AA:443:C:OP2	2.19	0.43
1:AA:178:C:H2'	1:AA:179:A:O4'	2.19	0.43
1:AA:194:C:H5''	1:AA:195:A:OP2	2.18	0.43
43:BX:31:HIS:HA	43:BX:32:PRO:HD3	1.86	0.43
25:DA:649:G:C4'	54:D8:46:ARG:HH22	2.28	0.43
1:AA:381:C:C5	1:AA:382:A:C5	3.06	0.43
1:AA:1367:C:N3	1:AA:1368:G:C8	2.87	0.43
6:AF:62:TRP:CH2	6:AF:64:GLN:HB2	2.53	0.43
1:CA:391:G:C6	1:CA:392:G:C5	3.06	0.43
27:DD:183:ARG:HG3	27:DD:270:ILE:HG12	2.01	0.43
1:CA:38:G:C2	1:CA:397:A:C2	3.07	0.43
26:DB:28:C:H2'	26:DB:29:A:O4'	2.19	0.43
25:DA:2712:U:H1'	25:DA:2712(A):A:C8	2.53	0.43
25:BA:2348:A:H61	46:B0:43:THR:HG22	1.81	0.43
45:DZ:45:ASP:OD2	45:DZ:49:ARG:HD2	2.19	0.43
1:CA:811:C:O2'	1:CA:901:A:N1	2.46	0.43
35:DP:38:GLN:O	35:DP:39:LYS:CB	2.66	0.43
1:AA:957:U:H2'	1:AA:959:A:OP2	2.19	0.43
4:AD:57:ARG:HH22	5:AE:107:ARG:HD3	1.82	0.43
25:DA:1654:A:O2'	28:DE:113:PHE:O	2.34	0.43
1:CA:93:G:H2'	1:CA:96:U:O4'	2.19	0.43
25:DA:362:U:H6	25:DA:362:U:H2'	1.68	0.43
1:AA:646:U:H2'	1:AA:647:C:H6	1.84	0.43
25:DA:2646:C:OP2	25:DA:2732:G:O2'	2.27	0.43
31:BH:7:LEU:O	31:BH:69:ARG:HD3	2.19	0.43
27:DD:13:ARG:HA	27:DD:13:ARG:HD2	1.67	0.43
17:CQ:57:VAL:HG12	17:CQ:75:ARG:O	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1203:C:H2'	1:AA:1204:A:H8	1.84	0.43
1:CA:909:A:H2'	1:CA:910:C:O4'	2.19	0.43
1:AA:1263:C:H2'	1:AA:1264:C:C6	2.54	0.43
25:DA:1503:U:O2'	25:DA:1504:C:H5'	2.18	0.43
30:BG:77:ILE:HD12	30:BG:82:LEU:HD12	2.01	0.43
25:DA:348:G:H2'	25:DA:349:G:H8	1.82	0.43
25:BA:1473:A:H4'	25:BA:1474:C:O4'	2.19	0.43
36:BQ:78:PRO:O	36:BQ:81:VAL:HG13	2.18	0.43
4:CD:158:ILE:HG22	4:CD:162:LEU:HD12	2.01	0.43
5:AE:69:VAL:HG22	5:AE:71:LEU:HD23	2.00	0.43
25:BA:99:G:O3'	48:B2:7:ARG:NH2	2.52	0.43
25:DA:635:C:H2'	25:DA:636:G:O4'	2.19	0.43
25:DA:2776:A:H4'	25:DA:2777:G:H5''	2.00	0.43
2:AB:122:PHE:CD2	2:AB:139:LYS:HE2	2.53	0.43
25:BA:2679:C:H6	25:BA:2679:C:O5'	2.02	0.43
15:CO:76:GLU:HA	15:CO:76:GLU:OE1	2.19	0.43
27:BD:123:ALA:HB3	27:BD:131:LEU:HG	1.99	0.43
1:AA:1127:G:N2	1:AA:1147:C:N4	2.67	0.43
1:AA:97:G:O2'	1:AA:98:G:H8	2.02	0.43
25:DA:301:G:C4	25:DA:302:C:C5	3.07	0.43
25:DA:1338:G:O2'	25:DA:1339:G:H5'	2.19	0.43
1:CA:738:C:H2'	1:CA:739:C:C6	2.53	0.43
36:BQ:54:MET:HB3	36:BQ:64:ILE:CD1	2.46	0.43
50:D4:60:GLN:N	50:D4:62:ARG:HE	2.17	0.43
1:CA:1226:C:H4'	19:CS:80:TYR:CZ	2.53	0.43
1:CA:382:A:H2'	1:CA:383:A:H8	1.77	0.43
25:DA:2821:A:C2	25:DA:2822:G:C4	3.06	0.43
10:AJ:78:ASN:C	10:AJ:80:LYS:H	2.22	0.43
25:DA:2048:G:C6	25:DA:2049:G:C5	3.07	0.43
3:AC:12:LEU:HD23	3:AC:16:ARG:HB3	2.01	0.43
1:AA:728:A:C6	15:AO:54:ARG:HD2	2.54	0.43
25:BA:311:C:H2'	25:BA:312:C:O4'	2.18	0.43
1:AA:1442:G:H2'	1:AA:1442(A):G:H5'	1.99	0.43
25:BA:242:C:OP2	54:B8:5:LYS:NZ	2.43	0.43
50:B4:59:PHE:CA	50:B4:61:ARG:H	2.31	0.43
2:CB:138:LEU:HA	2:CB:141:GLU:HB3	2.01	0.43
25:DA:35:G:H1'	25:DA:454:A:C4	2.53	0.43
25:DA:1164:G:H2'	25:DA:1165:U:C6	2.54	0.43
1:CA:414:A:H2'	1:CA:415:A:O4'	2.18	0.43
16:AP:27:LYS:HB2	16:AP:27:LYS:HE3	1.73	0.43
1:CA:1307:U:H2'	1:CA:1308:U:C6	2.54	0.43
25:DA:2526:G:H2'	25:DA:2527:C:C6	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:642:A:N3	8:CH:113:SER:OG	2.40	0.43
25:BA:64:C:H2'	25:BA:65:C:C6	2.54	0.43
19:AS:48:THR:HG22	19:AS:61:TYR:HA	2.01	0.43
5:AE:152:ARG:NH2	8:AH:107:LEU:O	2.52	0.43
1:AA:1067:A:N3	1:AA:1068:G:H1'	2.34	0.43
32:DI:62:LYS:HG2	32:DI:133:HIS:NE2	2.34	0.43
28:DE:59:VAL:HG21	28:DE:74:PRO:HB3	2.00	0.43
25:DA:2469:A:H5''	25:DA:2470:G:OP2	2.19	0.43
4:AD:61:LYS:HD2	4:AD:207:TYR:CZ	2.54	0.43
25:BA:1345:G:O5'	25:BA:1345:G:H8	2.01	0.43
1:AA:773:G:H5''	1:AA:773:G:H8	1.84	0.43
30:DG:165:THR:OG1	30:DG:168:GLU:HG3	2.19	0.43
5:AE:136:MET:O	5:AE:139:LEU:N	2.52	0.43
9:CI:9:ARG:H	9:CI:79:LEU:HD23	1.84	0.43
1:CA:620:C:C2	4:CD:135:LEU:HG	2.52	0.43
30:DG:14:GLU:C	30:DG:17:PRO:HD2	2.39	0.43
25:DA:2298:A:N1	25:DA:2321:G:C2	2.86	0.43
1:AA:1315:U:H2'	1:AA:1316:G:O4'	2.19	0.43
1:AA:742:G:P	15:AO:35:ARG:HH22	2.40	0.43
29:BF:7:TYR:O	29:BF:21:ALA:HA	2.18	0.43
1:AA:1220:G:N2	19:AS:54:GLY:O	2.45	0.43
34:DO:35:VAL:HA	34:DO:62:VAL:HG12	2.01	0.43
1:AA:41:G:O2'	1:AA:42:G:H5'	2.19	0.43
35:DP:50:ARG:O	35:DP:52:GLU:HG3	2.19	0.43
25:DA:2617:C:H2'	25:DA:2618:G:O4'	2.19	0.43
25:DA:1380:G:N2	25:DA:1570:A:N1	2.59	0.43
1:AA:625:G:C2'	1:AA:626:U:H5'	2.49	0.43
1:AA:600:C:H2'	1:AA:601:C:H6	1.83	0.43
25:DA:218:A:N1	25:DA:235:U:O2'	2.48	0.43
1:AA:1259:C:N4	1:AA:1276:G:H1	2.16	0.43
8:AH:39:LEU:HD12	8:AH:39:LEU:HA	1.80	0.43
25:DA:868:U:C4	25:DA:869:G:N7	2.87	0.43
10:CJ:50:ILE:HD11	10:CJ:57:LYS:HD3	2.01	0.43
1:AA:256:U:H2'	1:AA:257:G:C8	2.54	0.43
25:DA:1494:A:H2'	25:DA:1495:A:C8	2.53	0.43
25:BA:939:C:O2'	25:BA:940:C:H5'	2.19	0.43
1:AA:516:U:C4	1:AA:517:G:C6	3.06	0.43
19:AS:22:LEU:HD13	19:AS:47:HIS:CD2	2.54	0.43
1:AA:203:U:OP2	1:AA:203:U:H2'	2.19	0.43
16:AP:59:TRP:HA	16:AP:62:VAL:HG12	2.01	0.43
18:AR:56:THR:HB	18:AR:58:LEU:HD23	1.99	0.43
5:CE:11:ILE:HB	5:CE:31:LEU:HB3	2.01	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
26:BB:75:G:C5'	26:BB:75:G:H8	2.32	0.43
1:AA:429:U:H4'	1:AA:430:A:O5'	2.19	0.43
1:CA:1052:U:H5''	1:CA:1053:G:OP2	2.19	0.43
5:CE:148:VAL:HG13	5:CE:152:ARG:CZ	2.49	0.43
1:CA:817:C:N4	1:CA:1529:G:H1	2.16	0.43
25:BA:83:A:C5'	44:BY:8:LYS:HG2	2.49	0.43
11:CK:43:SER:HA	11:CK:47:VAL:HG21	1.99	0.43
40:DU:36:ARG:HD2	40:DU:40:PHE:CZ	2.54	0.43
25:BA:2624:C:H2'	25:BA:2625:U:H5'	2.00	0.43
1:CA:32:A:C2	1:CA:33:A:C4	3.07	0.43
25:BA:383:A:H2'	25:BA:384:G:O4'	2.19	0.43
1:CA:860:A:H2'	1:CA:861:G:O4'	2.19	0.43
25:DA:2489:G:C6	25:DA:2490:G:C6	3.07	0.43
31:BH:103:LEU:HD23	31:BH:148:ILE:HD13	1.99	0.43
26:DB:37:C:C5	26:DB:38:C:C5	3.07	0.43
47:B1:64:ALA:HA	47:B1:67:ILE:HG13	2.00	0.43
25:BA:1805:C:O5'	25:BA:1805:C:H6	2.02	0.43
10:AJ:68:HIS:H	10:AJ:68:HIS:CD2	2.35	0.43
11:AK:98:LEU:O	11:AK:101:SER:OG	2.21	0.43
25:DA:1009:A:O5'	25:DA:1009:A:H8	2.02	0.43
25:BA:252:C:H2'	25:BA:253:C:O4'	2.19	0.43
1:AA:1150:U:O4	1:AA:1151:A:N6	2.52	0.43
1:AA:1151:A:C5'	10:AJ:41:PRO:HA	2.49	0.43
1:AA:1003:G:H2'	1:AA:1004:A:H4'	2.01	0.43
54:B8:6:THR:HG23	54:B8:64:TYR:HD2	1.84	0.43
1:AA:148:G:N3	1:AA:149:A:C8	2.87	0.43
1:CA:1065:U:H6	1:CA:1190:G:H21	1.65	0.43
2:CB:219:VAL:HA	2:CB:222:ILE:CD1	2.48	0.43
1:CA:600:C:OP1	8:CH:97:VAL:N	2.38	0.43
25:BA:302:A:H8	25:BA:302:A:P	2.42	0.43
19:CS:42:PRO:CG	50:D4:61:ARG:HG2	2.44	0.43
13:AM:3:ARG:CG	13:AM:4:ILE:H	2.32	0.43
25:BA:1889:G:H22	25:BA:1905:G:H2'	1.83	0.43
1:AA:374:A:C6	1:AA:375:U:C4	3.07	0.43
28:BE:176:ILE:HB	28:BE:181:LEU:HB2	2.00	0.43
1:CA:1220:G:H2'	1:CA:1221:G:O4'	2.18	0.43
1:CA:1305:G:O2'	1:CA:1331:G:N2	2.52	0.43
1:CA:226:G:C2	1:CA:227:G:C8	3.07	0.43
25:DA:754:C:H4'	25:DA:1272:A:N6	2.34	0.43
1:AA:1423:G:OP1	34:BO:49:ARG:NH2	2.47	0.43
45:BZ:155:LEU:HA	45:BZ:155:LEU:HD12	1.73	0.43
25:DA:1448:G:H4'	25:DA:1542:A:OP1	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BA:956:A:H62	36:BQ:12:GLN:HA	1.83	0.43
1:CA:1063:C:H5'	1:CA:1064:G:H2'	2.01	0.43
27:DD:164:GLN:HE22	27:DD:176:ARG:HH22	1.65	0.43
25:DA:945:A:C4	25:DA:2448:A:C2	3.07	0.43
1:AA:322:C:O2'	20:AT:23:ARG:HD2	2.19	0.43
45:DZ:161:VAL:O	45:DZ:161:VAL:HG13	2.19	0.43
1:CA:113:G:H2'	1:CA:114:U:C6	2.53	0.43
1:AA:1409:C:H2'	1:AA:1410:G:H8	1.84	0.43
12:AL:102:ARG:HB3	12:AL:102:ARG:HE	1.58	0.43
31:BH:103:LEU:CD2	31:BH:148:ILE:HD13	2.48	0.43
48:D2:28:LYS:HD3	48:D2:60:LEU:HD11	2.00	0.43
25:BA:273:G:H2'	25:BA:273:G:H8	1.64	0.43
33:BN:42:TRP:HA	33:BN:48:MET:SD	2.58	0.43
1:AA:292:G:N7	1:AA:293:G:H1'	2.34	0.43
38:BS:38:GLN:OE1	38:BS:47:THR:HG21	2.19	0.43
1:CA:654:G:H2'	1:CA:655:A:O4'	2.19	0.43
25:BA:1586:G:H2'	25:BA:1587:U:O4'	2.19	0.43
45:DZ:91:LEU:HD12	45:DZ:91:LEU:HA	1.77	0.43
49:B3:23:LEU:HD12	49:B3:23:LEU:HA	1.85	0.43
25:BA:1337:C:H2'	25:BA:1338:U:C6	2.54	0.43
1:AA:1456:G:O6	20:AT:54:LYS:NZ	2.34	0.43
1:CA:1003:G:C2'	1:CA:1004:A:H4'	2.49	0.42
1:AA:341:C:C2'	1:AA:342:C:H5'	2.49	0.42
1:CA:1119:C:C4	1:CA:1154:G:O6	2.71	0.42
25:BA:2331:G:N2	38:BS:3:ARG:NE	2.64	0.42
25:BA:2377:G:O6	54:B8:39:LYS:HE3	2.19	0.42
25:DA:1297:C:H2'	25:DA:1298:C:H6	1.84	0.42
1:AA:684:A:C6	1:AA:685:G:C6	3.07	0.42
1:AA:589:C:C2'	1:AA:590:C:H5'	2.48	0.42
25:DA:880:G:N2	25:DA:898:C:H1'	2.33	0.42
1:CA:624:C:H2'	1:CA:625:G:H8	1.84	0.42
1:AA:615:C:H2'	1:AA:616:G:O4'	2.19	0.42
1:CA:1206:G:H4'	3:CC:192:THR:O	2.19	0.42
6:AF:92:LYS:HB2	6:AF:92:LYS:HE2	1.85	0.42
7:CG:26:PHE:CE2	7:CG:30:ILE:HD11	2.54	0.42
1:CA:89:C:C4	1:CA:90:U:C5	3.07	0.42
1:CA:1159:U:C6	1:CA:1182:G:C4	3.07	0.42
25:DA:1657:C:H2'	25:DA:1658:C:C6	2.54	0.42
1:CA:936:C:H2'	1:CA:937:A:O4'	2.18	0.42
25:BA:1552:C:O2'	25:BA:1553:A:H5'	2.19	0.42
15:CO:25:THR:HG21	15:CO:70:LEU:HB2	2.01	0.42
52:D6:36:LEU:HB3	52:D6:38:LYS:NZ	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DQ:32:TYR:OH	36:DQ:111:GLU:OE1	2.28	0.42
28:DE:9:VAL:HG22	28:DE:25:VAL:O	2.19	0.42
12:CL:117:ARG:NH2	12:CL:124:LYS:HB2	2.34	0.42
25:DA:881:G:H2'	25:DA:882:G:C8	2.54	0.42
13:AM:9:ILE:HB	13:AM:18:ALA:HB1	2.01	0.42
25:DA:2695:C:H2'	25:DA:2696:U:C6	2.54	0.42
25:DA:999:U:O2'	25:DA:1000:A:H5'	2.19	0.42
25:BA:1478:C:H2'	25:BA:1479:U:O4'	2.19	0.42
25:DA:357:A:H2'	25:DA:358:U:C6	2.54	0.42
25:BA:2792:U:OP1	61:BA:4641:HOH:O	2.22	0.42
25:DA:653:A:H2'	25:DA:654:A:O4'	2.19	0.42
25:BA:185:A:H2'	25:BA:185:A:N3	2.33	0.42
45:DZ:35:ARG:HD2	45:DZ:35:ARG:HA	1.82	0.42
35:DP:6:LEU:HA	35:DP:6:LEU:HD23	1.79	0.42
14:AN:6:LEU:HA	14:AN:6:LEU:HD12	1.87	0.42
27:BD:65:ILE:HB	27:BD:67:PHE:CE2	2.54	0.42
25:BA:2274:U:OP2	46:B0:19:LYS:NZ	2.50	0.42
1:AA:1312:G:N7	19:AS:2:PRO:HG3	2.33	0.42
50:B4:53:GLU:HG2	50:B4:55:ARG:H	1.84	0.42
10:CJ:7:LYS:HB2	10:CJ:97:GLU:HB2	2.00	0.42
13:AM:88:ARG:HG3	13:AM:98:VAL:HG12	2.01	0.42
35:BP:44:GLY:N	61:BP:302:HOH:O	2.52	0.42
51:D5:11:THR:HG22	51:D5:12:SER:O	2.19	0.42
1:CA:1001(A):G:C4	1:CA:1002:G:H1'	2.53	0.42
1:CA:1115:C:H2'	1:CA:1116:C:C6	2.54	0.42
1:CA:1134:G:N1	1:CA:1135:U:H1'	2.34	0.42
1:CA:300:A:H1'	1:CA:565:U:O2	2.20	0.42
25:BA:1605:A:O4'	25:BA:1605:A:N3	2.51	0.42
1:CA:1292:U:C2	1:CA:1293:G:C8	3.07	0.42
25:DA:2287:A:O2'	25:DA:2288:A:H3'	2.19	0.42
1:AA:1314:C:N4	1:AA:1315:U:O4	2.52	0.42
1:AA:147:G:C6	1:AA:148:G:C5	3.07	0.42
26:DB:50:G:OP2	38:DS:62:LYS:HD3	2.18	0.42
1:CA:1030(A):G:HO2'	1:CA:1030(B):C:H5	1.62	0.42
19:CS:64:GLU:HB2	50:D4:59:PHE:HE1	1.82	0.42
4:CD:190:ASP:O	4:CD:193:ASP:HB2	2.19	0.42
1:AA:392:G:C4	1:AA:393:A:C8	3.06	0.42
1:CA:491:G:H2'	1:CA:492:G:O4'	2.18	0.42
2:AB:219:VAL:HA	2:AB:222:ILE:CG1	2.47	0.42
25:BA:2584:A:C8	28:BE:144:ARG:HD2	2.55	0.42
25:DA:2313:C:O2	25:DA:2313:C:H2'	2.19	0.42
25:DA:1510:G:H2'	25:DA:1511:C:O4'	2.18	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
17:CQ:22:LEU:HD11	17:CQ:39:SER:HB2	2.01	0.42
39:BT:118:ARG:HH11	39:BT:118:ARG:HG3	1.84	0.42
28:DE:199:ARG:NH1	28:DE:202:LYS:HZ1	2.17	0.42
1:CA:1347:G:O2'	1:CA:1373:G:O6	2.24	0.42
1:AA:604:G:C2	1:AA:635:G:C5	3.08	0.42
25:DA:143:G:H5''	25:DA:1598:C:O2'	2.19	0.42
25:DA:815:C:C2	25:DA:1193:G:C2	3.06	0.42
33:DN:110:GLY:O	33:DN:114:ARG:HG3	2.18	0.42
3:CC:119:ARG:HG2	3:CC:123:GLN:NE2	2.34	0.42
23:CX:19:G:H1	23:CX:56:C:H42	1.67	0.42
25:DA:1289:C:H2'	25:DA:1290:C:H6	1.84	0.42
8:CH:84:ARG:NH1	8:CH:85:ARG:O	2.52	0.42
2:AB:122:PHE:HD2	2:AB:139:LYS:HE2	1.84	0.42
35:BP:101:VAL:HG22	35:BP:106:LEU:O	2.18	0.42
2:CB:60:ASP:O	2:CB:64:ARG:HG2	2.19	0.42
25:BA:829:A:O2'	25:BA:1819:C:H4'	2.20	0.42
9:AI:80:GLY:O	9:AI:84:ALA:N	2.50	0.42
1:AA:1210:C:C2'	1:AA:1211:U:H5'	2.49	0.42
25:BA:1485:A:H2'	25:BA:1486:G:O4'	2.19	0.42
12:CL:28:LYS:NZ	12:CL:62:SER:HB2	2.34	0.42
28:DE:178:GLU:OE2	28:DE:178:GLU:N	2.44	0.42
25:BA:124:A:H5''	25:BA:124:A:H8	1.83	0.42
17:CQ:89:LEU:HA	17:CQ:89:LEU:HD23	1.63	0.42
25:DA:763:G:H1'	25:DA:765:G:O4'	2.19	0.42
25:BA:137:G:O2'	25:BA:138:G:H5'	2.19	0.42
25:DA:1590:U:H2'	25:DA:1591:G:C8	2.54	0.42
25:BA:2284:U:H5''	25:BA:2285:A:OP1	2.19	0.42
9:AI:16:ARG:HD3	9:AI:64:THR:HG21	2.01	0.42
1:CA:999:C:H3'	1:CA:1000:U:H5	1.84	0.42
25:DA:1005:C:C2	25:DA:1143:A:C5	3.08	0.42
2:AB:214:ILE:O	2:AB:218:ALA:HB2	2.19	0.42
1:CA:419:C:N3	1:CA:425:G:C2	2.87	0.42
4:AD:173:TRP:HA	4:AD:186:LEU:HB2	2.00	0.42
25:BA:1093:G:H2'	25:BA:1156:G:H1	1.84	0.42
25:BA:1091:A:C8	25:BA:1093:G:N2	2.88	0.42
25:DA:2298:A:N7	25:DA:2299:G:C4	2.88	0.42
38:DS:3:ARG:O	38:DS:4:LEU:HD23	2.20	0.42
25:DA:2755:C:HO2'	25:DA:2756:U:H6	1.65	0.42
25:DA:195:A:H2'	25:DA:198:C:N4	2.34	0.42
3:CC:32:LEU:HD12	3:CC:59:ARG:HH12	1.84	0.42
25:BA:174:U:H2'	25:BA:175:G:H8	1.85	0.42
35:DP:29:LYS:HG3	35:DP:30:THR:N	2.35	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1220:G:N3	19:AS:54:GLY:HA2	2.34	0.42
25:DA:911:A:H2'	36:DQ:9:TYR:CZ	2.54	0.42
25:DA:1227:G:C2	25:DA:1228:G:C4	3.08	0.42
1:AA:44:G:H2'	1:AA:45:U:O4'	2.18	0.42
39:BT:118:ARG:HG3	39:BT:118:ARG:NH1	2.35	0.42
2:AB:145:LEU:O	2:AB:149:LEU:HB2	2.20	0.42
2:CB:71:VAL:CG2	2:CB:164:VAL:HG22	2.49	0.42
1:AA:126:G:OP1	1:AA:605:U:O2'	2.28	0.42
2:AB:127:ILE:HG13	2:AB:130:ARG:HG2	2.02	0.42
12:AL:79:GLU:C	12:AL:80:HIS:CD2	2.93	0.42
1:CA:130:A:O2'	1:CA:131:C:O5'	2.36	0.42
13:CM:88:ARG:HG3	13:CM:98:VAL:HG12	2.00	0.42
9:CI:50:LEU:CD1	9:CI:56:LEU:HD23	2.50	0.42
25:DA:2876:G:H4'	39:DT:2:ASN:ND2	2.34	0.42
25:DA:1221(A):C:C2	25:DA:1229:G:N2	2.87	0.42
1:AA:1053:G:N2	61:AA:4013:HOH:O	2.46	0.42
25:DA:1580:A:OP2	25:DA:1580:A:H8	2.03	0.42
1:AA:652:U:C4	1:AA:752:G:N3	2.87	0.42
25:DA:2019:A:H4'	40:DU:34:LYS:HD2	2.01	0.42
31:BH:144:VAL:O	31:BH:148:ILE:HG13	2.19	0.42
4:CD:120:LEU:HB3	4:CD:126:ILE:HD11	2.00	0.42
25:BA:1639:G:H2'	25:BA:1640:G:C8	2.53	0.42
25:BA:1376:C:O2'	25:BA:1377:A:H5'	2.19	0.42
27:DD:26:LYS:HB3	27:DD:83:GLU:HG2	2.01	0.42
1:AA:1343:G:O2'	9:AI:121:ARG:HD2	2.19	0.42
25:DA:2009:G:OP1	42:DW:41:LYS:HE2	2.19	0.42
21:AU:5:ASP:OD2	61:AU:101:HOH:O	2.20	0.42
25:BA:503:A:C6	25:BA:504:A:C6	3.07	0.42
1:AA:872:A:C8	1:AA:874:G:C8	3.07	0.42
11:CK:81:ASP:OD1	11:CK:106:LYS:HB2	2.20	0.42
25:BA:2779:G:H2'	25:BA:2779:G:N3	2.34	0.42
11:CK:85:ARG:HA	11:CK:112:THR:OG1	2.20	0.42
25:DA:949:C:H2'	25:DA:950:G:C8	2.55	0.42
1:CA:328:C:H4'	1:CA:329:A:H5'	2.01	0.42
1:CA:1003:G:H2'	1:CA:1004:A:C4'	2.48	0.42
1:CA:542:G:C2	1:CA:543:C:C4	3.07	0.42
1:CA:1126:U:H6	1:CA:1281:U:O2	2.02	0.42
25:DA:878:A:C6	25:DA:900:A:N7	2.86	0.42
1:CA:1129:C:H4'	9:CI:16:ARG:HH22	1.84	0.42
1:AA:445:G:C2	1:AA:446:G:C4	3.07	0.42
27:DD:79:VAL:HG21	27:DD:111:LEU:HD11	2.02	0.42
5:CE:78:HIS:CE1	5:CE:142:LEU:HD23	2.54	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:332:G:C2	1:CA:333:G:C8	3.07	0.42
1:AA:839:U:H3'	1:AA:840:C:C6	2.53	0.42
1:AA:923:A:O2'	1:AA:1399:C:OP2	2.30	0.42
30:DG:105:LYS:HB3	30:DG:142:PRO:HG3	2.01	0.42
25:DA:2365:G:O6	54:D8:39:LYS:HE3	2.19	0.42
48:B2:28:LYS:HG3	48:B2:53:LEU:HD21	2.01	0.42
25:DA:1403:C:O5'	25:DA:1471:A:H1'	2.19	0.42
23:CX:22:G:H2'	23:CX:23:C:C6	2.54	0.42
25:DA:1425:G:N2	25:DA:1573:G:N7	2.67	0.42
3:CC:181:ASN:ND2	3:CC:204:LEU:HD12	2.34	0.42
37:BR:28:LEU:HD12	37:BR:48:VAL:HG21	2.01	0.42
1:CA:130:A:H5'	17:CQ:63:ARG:NE	2.34	0.42
1:CA:1310:G:H5'	13:CM:77:ASN:ND2	2.34	0.42
31:DH:105:LEU:HD11	31:DH:148:ILE:HG23	2.01	0.42
25:DA:2051:A:H5'	25:DA:2578:G:O4'	2.20	0.42
25:BA:476:G:OP2	61:BA:4507:HOH:O	2.22	0.42
25:DA:797:C:H2'	25:DA:798:G:H8	1.83	0.42
25:BA:917:A:OP1	36:BQ:6:ARG:NE	2.50	0.42
25:DA:1288:U:C2	25:DA:1327:C:O2	2.72	0.42
25:BA:2753:A:C6	25:BA:2777:A:C8	3.07	0.42
25:BA:2627:U:OP1	61:BA:4253:HOH:O	2.21	0.42
25:DA:1665:A:H4'	34:DO:67:LYS:HB2	2.01	0.42
48:B2:22:GLU:OE2	48:B2:68:ARG:NH2	2.51	0.42
25:DA:19:C:H2'	25:DA:20:C:H6	1.84	0.42
25:DA:543:C:H2'	25:DA:545:G:O4'	2.19	0.42
25:BA:1051:C:O2'	33:BN:28:THR:HG21	2.20	0.42
15:AO:32:LEU:O	15:AO:36:ILE:HG13	2.20	0.42
25:BA:950:C:H2'	25:BA:951:U:C6	2.54	0.42
26:BB:113:G:H2'	26:BB:114:C:C6	2.54	0.42
1:AA:11:G:O2'	1:AA:506:G:N2	2.52	0.42
25:DA:1208:C:C4	25:DA:1209:G:N7	2.87	0.42
10:AJ:13:HIS:HA	10:AJ:16:LEU:HB3	2.02	0.42
1:CA:505:G:H2'	1:CA:506:G:H8	1.84	0.42
47:B1:95:LEU:O	47:B1:98:LEU:HB2	2.20	0.42
40:DU:102:GLU:CG	41:DV:13:ARG:HH12	2.33	0.42
25:BA:163:C:H2'	25:BA:164:G:O4'	2.19	0.42
1:AA:342:C:C2'	1:AA:343:U:H5'	2.49	0.42
25:DA:1022:G:N7	33:DN:66:LYS:HE2	2.33	0.42
25:BA:1717:C:O2	28:BE:129:HIS:NE2	2.43	0.42
1:CA:922:G:C6	1:CA:923:A:C6	3.08	0.42
39:DT:16:ARG:HB2	39:DT:79:HIS:ND1	2.35	0.42
25:DA:2319:G:N2	38:DS:3:ARG:HA	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:2747:G:H21	25:DA:2757:A:H62	1.67	0.42
1:AA:1007:C:C4	1:AA:1022:G:O6	2.72	0.42
25:DA:1876:A:H2'	25:DA:1877:A:H8	1.81	0.42
1:CA:691:G:H2'	1:CA:692:U:C6	2.54	0.42
3:CC:19:GLU:O	3:CC:56:ASP:HA	2.19	0.42
38:BS:4:LEU:HA	38:BS:4:LEU:HD23	1.64	0.42
25:DA:2262:U:H4'	25:DA:2328:A:H2	1.85	0.42
50:D4:61:ARG:HA	50:D4:61:ARG:HH11	1.84	0.42
1:AA:1399:C:C2	1:AA:1502:A:N6	2.87	0.42
1:AA:926:G:C6	1:AA:1505:G:C6	3.08	0.42
1:CA:445:G:C6	1:CA:490:G:C6	3.08	0.42
25:BA:2804:C:H2'	25:BA:2805:G:H8	1.81	0.42
1:AA:1016:A:H2'	1:AA:1017:G:O4'	2.20	0.42
3:CC:118:GLN:HE21	3:CC:118:GLN:HB3	1.68	0.42
1:AA:1442:G:HO2'	1:AA:1442(A):G:P	2.37	0.42
9:CL:17:VAL:HG11	9:CL:80:GLY:C	2.39	0.42
18:AR:66:LEU:O	18:AR:70:ILE:HG13	2.20	0.42
25:DA:2355:C:H4'	46:D0:24:LYS:HG3	2.01	0.42
27:DD:238:GLY:O	27:DD:239:ARG:O	2.37	0.42
26:BB:33:G:C2	26:BB:50:G:C2	3.07	0.42
25:DA:577:G:O2'	25:DA:1254:A:OP1	2.35	0.42
15:CO:26:GLU:H	15:CO:26:GLU:HG2	1.53	0.42
36:DQ:56:ARG:CG	36:DQ:56:ARG:HH11	2.31	0.42
1:CA:414:A:C5	1:CA:431:A:C2	3.07	0.42
25:DA:363:G:H2'	25:DA:363(A):A:H8	1.83	0.42
25:DA:861:A:H2'	25:DA:862:G:O4'	2.19	0.42
25:DA:1540:U:C2'	25:DA:1541:G:H5'	2.49	0.42
3:CC:3:ASN:N	3:CC:3:ASN:OD1	2.53	0.42
39:BT:101:PHE:HD2	39:BT:105:LEU:HD11	1.83	0.42
25:BA:2304:C:H2'	25:BA:2305:C:H6	1.83	0.42
25:DA:48:G:N2	25:DA:177:G:H21	2.18	0.42
25:BA:1954:A:H2'	25:BA:1955:G:O4'	2.20	0.42
25:BA:694:G:N1	25:BA:696:C:O2	2.52	0.42
25:DA:1287:A:H5''	25:DA:1288:U:OP2	2.20	0.42
26:DB:83:G:H4'	49:D3:52:HIS:CG	2.55	0.42
25:DA:1794:U:H2'	25:DA:1795:C:C6	2.54	0.42
6:CF:35:ALA:HA	6:CF:67:MET:HB3	2.00	0.42
25:DA:1991:U:H2'	25:DA:1992:G:H5''	2.01	0.42
34:BO:10:VAL:HG13	34:BO:17:ARG:C	2.40	0.42
25:BA:2372:A:H8	25:BA:2372:A:O5'	2.02	0.42
12:CL:77:LEU:HA	12:CL:77:LEU:HD23	1.84	0.42
33:DN:96:GLU:H	33:DN:96:GLU:CD	2.22	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:CC:66:VAL:O	3:CC:101:LEU:HA	2.19	0.42
50:D4:19:GLY:O	50:D4:21:VAL:HG23	2.19	0.42
36:BQ:39:PRO:HA	36:BQ:97:VAL:O	2.19	0.42
25:DA:86:C:O2'	25:DA:87:C:H5'	2.20	0.42
25:DA:1132:A:H2'	25:DA:1133:U:C6	2.55	0.42
1:CA:1006:C:C4	1:CA:1007:C:C5	3.08	0.42
1:CA:1358:U:H2'	1:CA:1359:C:O4'	2.20	0.42
19:AS:65:ASN:HA	50:B4:58:ARG:HG3	2.00	0.42
1:AA:67:C:H4'	1:AA:172:A:O4'	2.20	0.42
31:BH:98:LEU:HA	31:BH:98:LEU:HD12	1.80	0.42
13:CM:57:ARG:NH1	50:D4:34:GLU:HA	2.35	0.42
1:AA:445:G:C6	1:AA:446:G:C6	3.08	0.42
1:AA:975:A:H4'	1:AA:976:G:C5'	2.44	0.42
50:D4:46:GLN:HB3	50:D4:48:ARG:HG2	2.01	0.42
1:CA:1227:A:H3'	1:CA:1227:A:C8	2.55	0.42
1:AA:538:G:O2'	1:AA:539:A:H5'	2.20	0.42
1:AA:434:U:H2'	1:AA:435:C:C6	2.54	0.42
25:DA:848:G:N9	25:DA:933:A:H8	2.18	0.42
28:DE:93:VAL:C	28:DE:95:ILE:H	2.23	0.42
1:CA:532:A:H62	3:CC:156:ARG:NH1	2.17	0.42
44:BY:86:ARG:HD2	44:BY:100:ALA:HA	2.02	0.42
32:BI:38:LEU:HD12	32:BI:38:LEU:H	1.84	0.42
30:DG:122:PRO:HB3	30:DG:170:ARG:NH2	2.34	0.42
1:AA:541:G:O2'	1:AA:542:G:H5'	2.20	0.42
32:DI:140:LEU:HD13	32:DI:142:VAL:HG13	2.01	0.42
25:BA:2802:C:O2	25:BA:2903:G:N1	2.49	0.42
32:DI:38:LEU:C	32:DI:40:THR:H	2.22	0.42
1:CA:1402:C:O2	1:CA:1500:A:N1	2.53	0.42
14:CN:27:CYS:HB3	14:CN:43:CYS:SG	2.59	0.42
1:CA:841:U:H6	1:CA:841:U:OP1	2.01	0.42
25:DA:484:C:H2'	25:DA:485:C:C6	2.54	0.42
20:AT:56:MET:HG3	20:AT:84:LEU:HD22	2.01	0.42
1:AA:300:A:H2'	1:AA:301:G:O4'	2.19	0.42
25:DA:2360:A:H2'	25:DA:2361:A:O4'	2.20	0.42
1:AA:1137:C:H6	1:AA:1137:C:H3'	1.84	0.42
1:CA:688:G:C6	1:CA:700:G:C2	3.07	0.42
38:DS:24:LEU:O	38:DS:85:VAL:HG23	2.19	0.42
15:AO:24:SER:OG	15:AO:25:THR:N	2.53	0.42
25:DA:2081:C:H2'	25:DA:2082:A:H8	1.85	0.42
25:BA:1337:C:H2'	25:BA:1338:U:H6	1.85	0.42
1:CA:1241:G:H2'	1:CA:1242:C:C6	2.54	0.42
7:AG:72:ARG:O	7:AG:73:MET:HE2	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
19:CS:17:GLU:O	19:CS:21:GLU:N	2.43	0.42
30:BG:109:VAL:C	30:BG:112:PRO:HD2	2.40	0.42
25:DA:1378:A:OP1	53:D7:10:ARG:NH2	2.52	0.42
39:BT:37:GLY:HA2	39:BT:38:ASN:HA	1.50	0.42
37:BR:33:ARG:HA	37:BR:114:VAL:O	2.19	0.42
4:CD:12:CYS:SG	4:CD:19:LEU:HB2	2.59	0.42
1:AA:769:G:H4'	1:AA:1513:A:H4'	2.01	0.42
25:DA:1462:C:H4'	25:DA:2703:C:H5'	2.01	0.42
1:AA:1229:A:O2'	23:AX:30:G:OP1	2.35	0.42
13:CM:40:ASN:HB3	13:CM:43:THR:HG23	2.01	0.42
31:BH:90:LYS:HD3	31:BH:159:GLU:HG2	2.01	0.42
1:CA:191:G:N2	20:CT:102:GLY:O	2.40	0.42
44:DY:19:LYS:HB3	44:DY:19:LYS:HE2	1.91	0.42
7:CG:64:GLN:HA	7:CG:64:GLN:OE1	2.19	0.42
25:DA:189:G:H2'	25:DA:205:G:N2	2.35	0.42
1:CA:1234:C:C2'	1:CA:1235:U:H5'	2.50	0.42
1:CA:880:C:OP1	12:CL:8:ASN:ND2	2.49	0.42
11:CK:80:VAL:HG22	11:CK:103:LEU:HB3	2.02	0.42
2:CB:16:HIS:ND1	2:CB:17:PHE:N	2.66	0.42
25:DA:1140:C:H5'	33:DN:24:GLY:HA3	2.01	0.42
10:CJ:48:THR:HG1	10:CJ:62:HIS:CE1	2.37	0.42
25:DA:652(B):A:C2	25:DA:655:A:H1'	2.55	0.42
13:CM:82:MET:O	13:CM:93:ARG:NH2	2.52	0.42
25:DA:2203:U:O2'	25:DA:2205:C:H5'	2.20	0.42
3:AC:32:LEU:HD13	3:AC:59:ARG:HD3	2.01	0.42
1:CA:1325:C:O2'	1:CA:1326:C:H5'	2.20	0.42
42:DW:14:PRO:HG2	42:DW:78:GLU:CG	2.45	0.42
25:DA:2291:U:H5''	25:DA:2380:C:H1'	2.01	0.42
13:AM:4:ILE:HB	13:AM:57:ARG:HG3	2.02	0.42
16:AP:71:ARG:O	16:AP:75:ARG:HB2	2.19	0.42
1:AA:924:C:H2'	1:AA:925:G:H8	1.85	0.42
25:DA:1299:G:C5	25:DA:1639:U:C5	3.07	0.42
12:AL:33:ARG:HG2	12:AL:60:LEU:HD12	2.02	0.42
1:AA:829:G:O2'	1:AA:830:G:H5'	2.19	0.42
30:DG:128:ARG:HE	30:DG:128:ARG:HB2	1.51	0.42
1:AA:993:G:N3	1:AA:993:G:H2'	2.34	0.42
28:DE:2:LYS:NZ	28:DE:95:ILE:O	2.44	0.42
25:DA:784:A:P	61:DA:4065:HOH:O	2.78	0.42
1:AA:597:G:H5''	1:AA:598:U:OP2	2.19	0.42
8:CH:13:ILE:O	8:CH:17:THR:HG23	2.20	0.42
25:BA:1212:C:H2'	25:BA:1213:U:H6	1.84	0.42
25:DA:539:G:H2'	25:DA:540:C:H6	1.81	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:407:G:H5''	4:CD:115:ARG:HB3	2.02	0.42
5:AE:33:VAL:HG13	5:AE:112:LEU:HD12	2.02	0.42
23:CX:27:U:O2	23:CX:44:A:C2	2.72	0.42
25:DA:2265:U:C4	25:DA:2266:A:C5	3.08	0.42
4:CD:156:GLU:O	4:CD:159:ARG:HB2	2.19	0.42
26:BB:16:G:C6	26:BB:69:G:C2	3.07	0.42
25:DA:442:G:N2	29:DF:48:THR:O	2.52	0.42
1:AA:1104:G:C4	1:AA:1105:A:C8	3.08	0.42
25:DA:448:U:O4	25:DA:583:G:H1'	2.19	0.42
25:BA:1740:U:H4'	25:BA:1741:C:OP2	2.19	0.42
29:DF:29:ASN:O	29:DF:33:LEU:HD22	2.19	0.42
25:BA:540:A:H2	25:BA:1306:G:N3	2.18	0.42
1:AA:1261:A:H3'	1:AA:1262:C:C6	2.55	0.42
25:BA:1338:U:H2'	25:BA:1339:C:C6	2.55	0.42
27:DD:264:LYS:HD3	27:DD:266:SER:OG	2.20	0.42
25:BA:1183:G:H2'	25:BA:1184:G:O4'	2.20	0.42
25:DA:2519:U:C6	25:DA:2542:A:N6	2.88	0.42
25:DA:2788:C:H2'	25:DA:2789:C:C6	2.55	0.42
1:CA:1086:U:C2'	1:CA:1087:G:H5'	2.49	0.42
25:DA:284:U:H2'	25:DA:285:C:H6	1.83	0.42
46:D0:31:VAL:HG11	46:D0:37:LEU:HD21	2.01	0.42
25:BA:415:G:O2'	25:BA:416:G:N7	2.48	0.42
25:BA:2081:A:O2'	29:BF:69:HIS:HD2	2.03	0.42
6:CF:30:LEU:H	6:CF:30:LEU:HG	1.57	0.42
28:BE:9:VAL:HB	39:BT:3:ARG:HG2	2.02	0.42
25:BA:2275:C:H2'	25:BA:2276:C:O4'	2.20	0.42
25:DA:1214:A:H61	25:DA:1235:G:H1'	1.85	0.42
4:CD:61:LYS:HA	4:CD:203:VAL:HG22	2.02	0.42
25:BA:2831:A:H2'	25:BA:2832:G:C8	2.55	0.42
25:DA:1020:A:N1	25:DA:1141:U:O2'	2.35	0.42
1:AA:1034:G:H3'	1:AA:1035:A:H8	1.85	0.42
25:DA:2259:G:C2	25:DA:2282:G:C6	3.08	0.42
1:CA:1244:C:H42	1:CA:1293:G:H1	1.67	0.42
1:CA:147:G:N2	1:CA:148:G:C4	2.88	0.42
4:AD:155:LEU:HB3	4:AD:158:ILE:CD1	2.42	0.42
25:DA:1394:U:C4	25:DA:1395:A:C5	3.07	0.42
31:BH:125:VAL:HG12	31:BH:127:GLU:O	2.20	0.42
25:DA:1593:G:C4	25:DA:1594:G:C8	3.07	0.42
2:AB:93:VAL:HG21	2:AB:97:TRP:CD1	2.54	0.42
1:AA:1356:G:O2'	1:AA:1357:A:H5'	2.20	0.42
31:BH:56:SER:OG	31:BH:58:GLU:HG2	2.20	0.42
30:DG:114:ILE:HG23	30:DG:136:ARG:NH2	2.35	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:BZ:45:ASP:OD2	45:BZ:49:ARG:NH1	2.52	0.42
1:CA:453:A:C5	1:CA:454:C:C4	3.08	0.42
1:CA:622:A:H3'	1:CA:623:C:C6	2.54	0.42
25:BA:1541:A:C6	25:BA:1542:A:C6	3.08	0.42
26:DB:46:A:C5	26:DB:47:C:C4	3.08	0.42
39:DT:90:GLN:HG3	39:DT:91:ARG:N	2.35	0.42
38:BS:10:ARG:HH21	38:BS:91:PRO:HB2	1.84	0.42
8:AH:40:ALA:CA	8:AH:45:ILE:HG13	2.49	0.42
43:DX:57:LEU:HD13	43:DX:78:LYS:HG3	2.02	0.42
25:DA:307:G:H21	25:DA:330:A:H62	1.68	0.42
26:BB:33:G:N2	26:BB:50:G:C4	2.88	0.42
1:CA:407:G:O2'	4:CD:116:GLN:HG3	2.20	0.42
3:CC:23:TYR:HA	10:CJ:11:PHE:CD2	2.55	0.42
25:DA:344:G:N2	25:DA:345:A:N6	2.68	0.42
10:AJ:50:ILE:HD11	10:AJ:57:LYS:HE3	2.02	0.42
25:BA:1506:G:H3'	25:BA:1507:A:H5''	2.02	0.42
25:DA:2526:G:H5'	25:DA:2742:C:O2'	2.18	0.42
25:DA:852:G:H2'	25:DA:853:G:H8	1.83	0.42
25:DA:1857:G:C6	25:DA:1858:G:C6	3.08	0.42
25:DA:1885:A:H2'	25:DA:1886:C:O4'	2.20	0.42
25:DA:2847:U:OP1	39:DT:98:LYS:NZ	2.40	0.42
25:BA:2904:U:H2'	25:BA:2905:C:O4'	2.20	0.42
42:DW:50:VAL:HG21	42:DW:103:ILE:HB	2.01	0.42
1:CA:991:U:O4	1:CA:1212:U:H1'	2.20	0.42
31:DH:123:PHE:CZ	31:DH:148:ILE:HD11	2.54	0.42
23:AX:8:U:H6	23:AX:8:U:O5'	2.03	0.42
1:CA:1053:G:N7	1:CA:1200:C:H5''	2.34	0.42
25:DA:2097:C:H2'	25:DA:2098:U:C6	2.55	0.42
40:DU:59:ARG:HH11	40:DU:59:ARG:HB3	1.85	0.42
25:DA:506:G:O3'	25:DA:507:A:H8	2.03	0.42
31:DH:12:PRO:O	31:DH:15:VAL:HG13	2.20	0.42
27:BD:223:GLY:HA3	27:BD:231:HIS:CE1	2.55	0.42
25:BA:1737:A:H3'	25:BA:1738:C:H6	1.84	0.42
36:BQ:58:PHE:HB3	36:BQ:61:GLY:O	2.20	0.42
20:CT:63:ILE:HD13	20:CT:80:ARG:HB3	2.01	0.42
26:BB:82:G:C2'	26:BB:83:G:H5'	2.49	0.42
8:CH:124:ALA:O	8:CH:128:GLY:N	2.52	0.42
25:DA:2768:C:H2'	25:DA:2769:C:O4'	2.19	0.42
25:DA:29:U:H4'	40:DU:11:ARG:HH22	1.84	0.42
45:DZ:67:LEU:HA	45:DZ:68:PRO:HD3	1.66	0.42
25:BA:324:A:H2'	25:BA:358:C:H1'	2.01	0.42
15:AO:57:LEU:HA	15:AO:57:LEU:HD23	1.92	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BA:1098:C:O5'	25:BA:1098:C:H6	2.03	0.42
25:BA:943:C:H6	25:BA:943:C:O5'	2.03	0.42
32:BI:87:LYS:HE3	32:BI:87:LYS:HB2	1.77	0.42
1:AA:1426:C:H2'	1:AA:1427:U:C6	2.55	0.42
32:DI:83:ALA:HB1	32:DI:87:LYS:O	2.19	0.42
25:DA:1698:A:C8	25:DA:1700:A:H5''	2.55	0.42
1:AA:1002:G:C6	1:AA:1003:G:C2	3.08	0.42
25:DA:153:C:H2'	25:DA:154:G:O4'	2.19	0.42
25:BA:927:G:H1	25:BA:944:C:N4	2.16	0.42
25:DA:2500:U:H2'	25:DA:2504:U:C5	2.55	0.42
25:BA:932:C:H3'	25:BA:933:C:C5'	2.46	0.42
25:DA:2280:G:O2'	25:DA:2388:A:N1	2.46	0.42
25:DA:226:G:H21	25:DA:228:A:N6	2.13	0.42
19:CS:58:VAL:HA	19:CS:59:PRO:HD2	1.82	0.42
25:DA:600:G:N2	25:DA:605:C:O3'	2.52	0.42
25:DA:1638:C:H4'	25:DA:2710:C:O2	2.19	0.42
1:CA:874:G:O2'	1:CA:875:C:H5'	2.20	0.42
1:CA:1128:C:H1'	1:CA:1147:C:N4	2.34	0.42
50:B4:63:TYR:H	50:B4:63:TYR:HD1	1.67	0.42
1:CA:834:C:H2'	1:CA:835:U:C6	2.55	0.42
1:CA:979:C:C2'	1:CA:980:C:H5'	2.50	0.42
1:CA:1066:C:H2'	1:CA:1067:A:C8	2.55	0.42
1:AA:105:G:H2'	1:AA:106:C:C6	2.55	0.42
39:DT:61:PHE:CZ	39:DT:76:PHE:HB2	2.55	0.42
23:CX:19:G:C4	23:CX:57:A:C2	3.08	0.42
1:AA:438:G:O2'	1:AA:493:G:C2	2.73	0.42
25:DA:628:G:H2'	25:DA:629:G:C8	2.55	0.42
2:CB:114:ARG:NH1	2:CB:118:LEU:HD21	2.35	0.42
47:B1:60:PHE:HE2	47:B1:95:LEU:HD11	1.85	0.42
25:BA:918:U:OP1	36:BQ:5:ARG:HD3	2.20	0.42
25:DA:521:G:O2'	25:DA:522:G:H5'	2.20	0.42
26:DB:15:A:OP2	26:DB:69:G:N2	2.52	0.42
25:DA:2391:G:O6	25:DA:2425:A:H8	2.02	0.42
28:DE:14:ILE:HG13	28:DE:21:VAL:HG13	2.01	0.42
26:BB:103:G:O2'	45:BZ:73:GLN:NE2	2.52	0.42
12:AL:124:LYS:HA	12:AL:125:PRO:HD3	1.82	0.42
36:DQ:75:THR:HA	36:DQ:89:ASN:O	2.19	0.42
31:BH:121:ILE:HD13	31:BH:121:ILE:HA	1.93	0.42
1:AA:1516:G:H2'	1:AA:1518:A:OP2	2.19	0.42
25:DA:2836:U:C4	25:DA:2883:A:N6	2.88	0.42
10:AJ:19:SER:OG	10:AJ:91:PRO:HD2	2.19	0.42
47:D1:4:VAL:HG11	47:D1:11:ARG:NH1	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:AD:91:SER:O	4:AD:94:LEU:HB2	2.20	0.42
25:DA:776:G:H4'	25:DA:777:A:O5'	2.20	0.42
7:CG:85:TYR:HB3	7:CG:151:TYR:CE2	2.54	0.42
1:CA:976:G:P	14:CN:32:SER:H	2.42	0.42
26:DB:75:G:N3	45:DZ:85:HIS:CE1	2.88	0.42
16:CP:5:ARG:CZ	16:CP:22:THR:HG21	2.50	0.42
1:CA:502:G:P	12:CL:116:SER:HA	2.60	0.42
25:DA:1639:U:C2'	25:DA:1640:C:H5''	2.50	0.42
30:DG:114:ILE:HB	30:DG:117:PHE:HB2	2.01	0.42
4:AD:178:VAL:C	4:AD:180:GLY:H	2.24	0.42
25:BA:2804:C:O2	25:BA:2816:G:N1	2.46	0.42
3:CC:6:HIS:HA	3:CC:7:PRO:HD3	1.86	0.42
31:DH:29:PRO:HG2	31:DH:80:SER:HA	2.02	0.42
1:AA:670:G:C2	1:AA:671:G:C4	3.07	0.42
1:AA:110:C:H2'	1:AA:111:G:O4'	2.20	0.42
3:AC:112:SER:HB3	3:AC:115:LEU:HD22	2.01	0.42
1:AA:677:U:H3	1:AA:713:G:H22	1.68	0.42
1:AA:1117:G:H5''	9:AI:104:ARG:NH2	2.35	0.42
1:CA:434:U:H2'	1:CA:435:C:C6	2.55	0.42
25:DA:1190:G:H5''	35:DP:32:THR:HA	2.01	0.42
1:CA:948:C:OP2	13:CM:108:ARG:HB2	2.20	0.42
7:AG:38:LEU:O	7:AG:42:ILE:HG13	2.19	0.42
1:CA:1423:G:P	34:DO:49:ARG:HH12	2.43	0.42
25:DA:642:G:N2	25:DA:645:C:OP1	2.52	0.42
1:AA:1292:U:O2'	1:AA:1293:G:H5'	2.20	0.42
25:DA:2615:U:OP1	61:DA:3945:HOH:O	2.20	0.42
45:BZ:126:VAL:HG13	45:BZ:161:VAL:HG23	2.02	0.42
25:DA:1447:G:N2	25:DA:1464:C:O2	2.30	0.42
28:BE:167:VAL:CG1	28:BE:189:PRO:HD3	2.50	0.42
2:CB:35:GLU:HA	2:CB:39:ILE:O	2.20	0.42
30:BG:43:LEU:HD12	30:BG:43:LEU:HA	1.89	0.42
25:BA:1306:G:C6	25:BA:1307:C:C4	3.08	0.42
25:BA:26:G:C6	25:BA:27:G:N1	2.88	0.42
25:BA:815:G:C6	25:BA:816:G:C5	3.08	0.42
25:BA:552:C:C5	25:BA:2792:U:H2'	2.55	0.42
1:CA:283:C:H2'	1:CA:284:G:O4'	2.20	0.42
25:DA:2283:C:C2	25:DA:2389:G:C2	3.08	0.42
25:DA:2761:G:N3	25:DA:2761:G:H2'	2.34	0.42
6:CF:5:GLU:HG3	6:CF:93:SER:OG	2.20	0.42
1:CA:562:C:H1'	12:CL:15:ARG:HB3	2.02	0.42
25:DA:735:A:C6	25:DA:736:C:C2	3.08	0.42
32:BI:133:HIS:ND1	32:BI:134:PRO:O	2.52	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
15:CO:67:LEU:HD23	15:CO:67:LEU:HA	1.75	0.42
4:CD:169:LYS:HB3	4:CD:169:LYS:NZ	2.35	0.42
1:CA:402:G:C2'	1:CA:403:C:H5'	2.49	0.42
25:BA:2647:C:H2'	25:BA:2648:U:O4'	2.20	0.42
1:AA:1277:C:O2'	1:AA:1279:A:H1'	2.19	0.41
25:BA:1066:A:H4'	25:BA:1067:A:O5'	2.20	0.41
1:AA:25:C:H2'	1:AA:26:A:C8	2.56	0.41
26:DB:33:G:N3	26:DB:50:G:C2	2.88	0.41
25:DA:2850:A:H5'	25:DA:2868:A:C2	2.55	0.41
25:DA:118:A:H1'	25:DA:178:G:O4'	2.19	0.41
1:CA:1286:A:H2'	1:CA:1287:A:H4'	2.01	0.41
25:DA:2292:C:H4'	25:DA:2375:G:H4'	2.01	0.41
25:DA:271(H):G:H2'	25:DA:271(I):G:C8	2.53	0.41
1:AA:393:A:OP2	16:AP:12:LYS:HD2	2.20	0.41
25:DA:1298:C:H5"	25:DA:1299:G:OP2	2.20	0.41
1:AA:41:G:C6	1:AA:402:G:C6	3.08	0.41
25:DA:875:G:N2	25:DA:903:C:C2	2.88	0.41
33:DN:38:HIS:O	40:DU:67:ALA:HB1	2.20	0.41
3:CC:8:ILE:HG22	14:CN:49:HIS:O	2.20	0.41
25:DA:665:C:H2'	25:DA:666:G:H8	1.84	0.41
25:DA:2685:G:H5'	34:DO:68:GLU:OE1	2.19	0.41
1:CA:872:A:C2	1:CA:874:G:C6	3.08	0.41
31:DH:169:VAL:HG12	31:DH:171:LEU:CD2	2.50	0.41
25:DA:1708:C:O2'	25:DA:1709:U:H5'	2.20	0.41
3:AC:114:PRO:O	3:AC:118:GLN:NE2	2.53	0.41
11:CK:33:THR:HA	11:CK:39:PRO:HA	2.02	0.41
46:D0:24:LYS:O	46:D0:25:ARG:HD3	2.20	0.41
25:DA:942:G:OP2	35:DP:39:LYS:NZ	2.49	0.41
2:CB:134:GLU:O	2:CB:138:LEU:HG	2.20	0.41
25:BA:2860:A:C2	25:BA:2861:A:C4	3.08	0.41
25:BA:1513:G:O2'	25:BA:1593:C:O2'	2.27	0.41
14:AN:37:PHE:HB3	14:AN:39:LEU:HD12	2.02	0.41
25:BA:316:C:C2	25:BA:373:G:C2	3.07	0.41
1:CA:66:G:C2	1:CA:67:C:C6	3.08	0.41
25:DA:704:G:N3	25:DA:726:G:C2	2.87	0.41
25:DA:1188:U:C4'	41:DV:79:VAL:HG22	2.50	0.41
20:AT:53:LEU:HD13	20:AT:100:ILE:O	2.20	0.41
5:CE:31:LEU:HA	5:CE:31:LEU:HD23	1.73	0.41
25:DA:966:G:H2'	25:DA:967:C:H6	1.85	0.41
55:B9:28:GLU:O	55:B9:30:PRO:HD3	2.18	0.41
1:AA:428:G:O4'	1:AA:430:A:C8	2.74	0.41
42:DW:82:LEU:HD22	42:DW:84:ARG:HH22	1.84	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BA:491:G:H2'	25:BA:492:A:C8	2.55	0.41
25:DA:1266:G:C8	42:DW:15:ARG:NH2	2.87	0.41
25:DA:2335:A:C8	25:DA:2337:G:N7	2.88	0.41
15:AO:74:ASP:OD2	15:AO:77:ARG:HG3	2.20	0.41
25:BA:504:A:C6	25:BA:506:A:C6	3.08	0.41
1:AA:640:A:C2'	1:AA:641:U:H5'	2.49	0.41
25:DA:328:U:H4'	44:DY:68:HIS:CD2	2.55	0.41
1:AA:895:G:H2'	1:AA:896:C:C6	2.55	0.41
6:CF:62:TRP:C	6:CF:63:TYR:HD1	2.23	0.41
1:AA:935:A:C2	1:AA:936:C:C2	3.08	0.41
25:DA:1434:A:H2'	25:DA:1435:G:O4'	2.20	0.41
5:CE:93:PRO:HG2	8:CH:105:ARG:NE	2.34	0.41
25:BA:714:U:O2	54:B8:2:PRO:HD2	2.20	0.41
25:DA:724:U:H2'	25:DA:725:G:O4'	2.20	0.41
25:BA:2235:G:OP1	27:BD:172:TYR:OH	2.36	0.41
36:DQ:59:ARG:O	36:DQ:61:GLY:N	2.39	0.41
32:DI:45:LYS:O	32:DI:49:ALA:N	2.50	0.41
25:DA:2671:A:H2'	25:DA:2672:G:O4'	2.20	0.41
1:CA:1330:U:O3'	13:CM:23:TYR:HE1	2.03	0.41
12:CL:123:LYS:H	12:CL:123:LYS:HG2	1.52	0.41
25:BA:234:G:H2'	25:BA:235:C:H6	1.84	0.41
43:DX:5:TYR:CE1	48:D2:30:ARG:HB2	2.55	0.41
1:CA:310:G:C5'	16:CP:31:LYS:HB2	2.50	0.41
27:BD:218:ARG:HB3	27:BD:219:PRO:HD2	2.02	0.41
49:B3:44:ARG:O	49:B3:48:GLU:HG3	2.20	0.41
1:AA:814:A:H2'	1:AA:816:A:H5''	2.02	0.41
1:CA:1005:A:H8	1:CA:1005:A:O5'	2.03	0.41
1:CA:999:C:H3'	1:CA:1000:U:C5	2.55	0.41
1:AA:1125:U:N3	1:AA:1127:G:C6	2.89	0.41
1:CA:1118:C:C2	1:CA:1119:C:C5	3.09	0.41
2:AB:187:LEU:HD23	2:AB:201:ILE:HB	2.02	0.41
25:BA:1577:C:O2'	25:BA:1578:C:P	2.76	0.41
25:DA:322:A:P	29:DF:169:ASN:HB2	2.60	0.41
49:B3:3:ARG:HD3	49:B3:60:GLU:OE2	2.20	0.41
54:B8:54:GLU:O	54:B8:58:ILE:HG13	2.20	0.41
1:CA:1252:A:H61	1:CA:1285:A:H61	1.67	0.41
29:BF:11:VAL:HB	29:BF:18:ARG:HB3	2.01	0.41
25:DA:1815:A:C6	25:DA:1817:G:C6	3.08	0.41
15:CO:54:ARG:HH11	15:CO:58:MET:CE	2.33	0.41
1:CA:454:C:N4	1:CA:479:C:N3	2.68	0.41
1:CA:194:C:H5''	1:CA:195:A:OP2	2.20	0.41
25:DA:2271:G:OP1	46:D0:18:ALA:HB1	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:857:C:H2'	1:CA:858:G:O4'	2.20	0.41
1:CA:872:A:C4	1:CA:874:G:N7	2.88	0.41
1:CA:1228:C:OP2	13:CM:111:LYS:HD3	2.20	0.41
1:CA:983:A:H3'	1:CA:983:A:N3	2.36	0.41
1:AA:677:U:H6	1:AA:677:U:O5'	2.03	0.41
25:BA:1159:U:H2'	25:BA:1160:G:C8	2.55	0.41
25:DA:1774:C:H5''	25:DA:1775:U:OP2	2.20	0.41
25:DA:576:U:H2'	25:DA:577:G:C8	2.54	0.41
25:DA:1163:G:C2	25:DA:1164:G:C8	3.08	0.41
27:BD:72:LYS:HD3	27:BD:97:TYR:CE2	2.55	0.41
1:AA:1131:G:O5'	1:AA:1131:G:H8	2.03	0.41
1:CA:1063:C:H3'	1:CA:1064:G:H2'	2.02	0.41
2:CB:229:VAL:HG12	2:CB:230:VAL:N	2.35	0.41
1:CA:991:U:H3'	1:CA:1212:U:C4	2.55	0.41
32:BI:104:GLN:HG3	32:BI:105:HIS:CD2	2.55	0.41
1:CA:1051:C:H2'	1:CA:1052:U:C6	2.54	0.41
4:AD:99:SER:O	4:AD:140:VAL:HG23	2.20	0.41
32:DI:62:LYS:HG2	32:DI:133:HIS:CE1	2.54	0.41
45:BZ:125:LEU:HG	45:BZ:164:ALA:HB3	2.01	0.41
8:CH:82:HIS:HB3	8:CH:138:TRP:NE1	2.35	0.41
47:D1:95:LEU:O	47:D1:98:LEU:HB2	2.20	0.41
1:CA:348:G:C2	1:CA:349:A:C5	3.08	0.41
25:DA:328:U:H4'	44:DY:68:HIS:CG	2.55	0.41
25:DA:2801(A):A:N3	25:DA:2895:U:H1'	2.35	0.41
41:DV:58:VAL:HG21	41:DV:100:ARG:NH1	2.35	0.41
36:BQ:52:VAL:HA	36:BQ:55:VAL:HG13	2.02	0.41
20:AT:43:LEU:HD12	20:AT:55:ILE:HG13	2.01	0.41
6:AF:12:PRO:HG3	6:AF:57:GLN:O	2.20	0.41
25:DA:556:G:C6	25:DA:557:U:C4	3.08	0.41
25:BA:875:U:C5	25:BA:2259:A:H4'	2.55	0.41
1:CA:1054:C:H6	1:CA:1054:C:H2'	1.49	0.41
30:DG:181:ARG:CZ	30:DG:181:ARG:HB3	2.49	0.41
4:AD:110:PHE:CD1	4:AD:110:PHE:N	2.88	0.41
5:CE:28:PHE:O	5:CE:47:LYS:HA	2.20	0.41
25:DA:864:G:C6	25:DA:865:C:N4	2.88	0.41
28:BE:52:LEU:HD12	28:BE:77:ILE:HD13	2.01	0.41
1:AA:1148:U:H2'	1:AA:1149:C:O4'	2.21	0.41
1:AA:1279:A:O2'	1:AA:1281:U:OP2	2.35	0.41
26:DB:21:G:H2'	26:DB:22:U:O4'	2.20	0.41
10:CJ:8:LEU:HD23	10:CJ:96:ILE:HG23	2.03	0.41
30:DG:31:VAL:HA	30:DG:32:PRO:HD2	1.87	0.41
46:B0:12:ASN:O	46:B0:14:ARG:N	2.52	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:AD:13:ARG:HB2	4:AD:40:PRO:HD3	2.02	0.41
4:AD:13:ARG:NH2	4:AD:40:PRO:HA	2.35	0.41
10:CJ:49:VAL:HG23	14:CN:41:ARG:HD2	2.01	0.41
3:AC:11:ARG:HD3	3:AC:15:THR:CB	2.51	0.41
2:CB:215:LEU:HA	2:CB:215:LEU:HD23	1.67	0.41
26:DB:33:G:H1'	26:DB:50:G:H22	1.85	0.41
1:CA:1188:A:H2'	1:CA:1189:C:O4'	2.21	0.41
3:AC:32:LEU:HD13	3:AC:59:ARG:NH1	2.35	0.41
1:CA:1311:G:H1	1:CA:1326:C:N4	2.18	0.41
2:AB:24:TRP:HD1	2:AB:24:TRP:H	1.68	0.41
1:AA:840:C:H4'	1:AA:841:U:OP1	2.20	0.41
1:CA:503:C:H2'	1:CA:504:C:H6	1.85	0.41
1:CA:489:C:H2'	1:CA:490:G:H8	1.85	0.41
2:AB:211:ILE:H	2:AB:211:ILE:HG13	1.68	0.41
25:DA:2274:A:C5	25:DA:2276:G:C8	3.08	0.41
7:CG:47:CYS:O	7:CG:50:ILE:HG12	2.20	0.41
25:DA:2285:C:C2	25:DA:2384:G:N2	2.88	0.41
7:CG:78:ARG:HG2	7:CG:79:ARG:HB2	2.03	0.41
25:BA:922:G:H1	25:BA:948:C:N4	2.18	0.41
25:DA:662:G:H2'	25:DA:663:G:H8	1.85	0.41
4:CD:63:LYS:HG3	4:CD:198:VAL:CG2	2.50	0.41
25:BA:2901:A:N6	25:BA:2902:G:N1	2.67	0.41
25:BA:2902:G:H4'	25:BA:2903:G:O5'	2.21	0.41
50:B4:59:PHE:C	50:B4:61:ARG:H	2.16	0.41
50:B4:62:ARG:HB2	50:B4:63:TYR:HD1	1.82	0.41
1:AA:1071:C:H5''	5:AE:49:PRO:HG2	2.02	0.41
25:BA:2589:A:O4'	51:B5:3:LYS:HB2	2.20	0.41
31:BH:6:ARG:HE	31:BH:6:ARG:HB3	1.57	0.41
25:BA:2045:G:H5'	25:BA:2629:C:H4'	2.03	0.41
25:BA:266:C:H2'	25:BA:267:C:O4'	2.21	0.41
3:AC:52:LEU:HA	3:AC:70:VAL:HG22	2.01	0.41
12:CL:119:LYS:O	12:CL:120:TYR:HB2	2.20	0.41
25:DA:2055:C:H5'	25:DA:2056:G:O5'	2.20	0.41
25:BA:1836:U:O2	27:BD:50:THR:HB	2.20	0.41
25:BA:1470:G:H2'	25:BA:1471:G:O4'	2.20	0.41
25:BA:1096:A:N3	25:BA:1096:A:H2'	2.35	0.41
8:CH:104:ARG:HG3	8:CH:138:TRP:CD2	2.55	0.41
25:BA:2711:C:H2'	25:BA:2712:C:O4'	2.20	0.41
25:DA:950:G:C6	25:DA:951:C:C4	3.08	0.41
1:CA:340:U:H2'	1:CA:341:C:C6	2.55	0.41
25:DA:2744:G:C2	25:DA:2761:G:C4	3.08	0.41
25:DA:799:G:H3'	25:DA:800:A:H2'	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:D1:83:GLU:HA	47:D1:84:GLY:HA2	1.58	0.41
1:AA:481:G:H1'	1:AA:483:C:N4	2.36	0.41
24:CW:9:MVA:O	24:CW:10:2QY:CD2	2.68	0.41
1:AA:142:G:H2'	1:AA:143:A:H8	1.85	0.41
30:BG:9:ARG:O	30:BG:13:GLU:HG2	2.20	0.41
45:DZ:146:ILE:H	45:DZ:146:ILE:HG13	1.58	0.41
37:DR:100:LEU:HA	37:DR:100:LEU:HD12	1.90	0.41
27:BD:68:LYS:HD2	27:BD:70:TRP:CH2	2.55	0.41
42:BW:38:TYR:CE1	51:B5:41:PRO:HD3	2.56	0.41
25:DA:686:G:N2	25:DA:788:A:H61	2.18	0.41
8:AH:58:TYR:O	8:AH:59:LEU:HD23	2.20	0.41
1:AA:347:G:H21	1:AA:348:G:H3'	1.85	0.41
1:CA:1157:A:N6	1:CA:1180:A:N3	2.67	0.41
25:DA:1664:A:OP1	61:DA:4387:HOH:O	2.21	0.41
27:BD:71:ASP:HB3	27:BD:103:ARG:NH2	2.21	0.41
1:AA:1491:G:H5''	1:AA:1492:A:OP2	2.20	0.41
1:CA:147:G:O2'	1:CA:148:G:P	2.79	0.41
2:CB:80:ILE:HD13	2:CB:80:ILE:O	2.20	0.41
25:DA:2850:A:H5'	25:DA:2868:A:H2	1.85	0.41
46:D0:19:LYS:HE2	46:D0:19:LYS:HB2	1.46	0.41
9:CI:89:ASN:O	9:CI:92:TYR:HB2	2.19	0.41
1:AA:376:G:H2'	1:AA:377:G:C8	2.56	0.41
1:AA:401:C:H2'	1:AA:402:G:H8	1.86	0.41
34:DO:104:ARG:NH2	34:DO:121:VAL:O	2.54	0.41
28:BE:4:ILE:HG12	28:BE:5:LEU:N	2.35	0.41
25:DA:1371:G:HO2'	25:DA:1372:U:H5	1.63	0.41
45:DZ:75:ASN:O	45:DZ:84:GLU:N	2.35	0.41
9:CI:95:LYS:HA	9:CI:99:LEU:HD13	2.02	0.41
29:DF:117:ARG:NH2	29:DF:187:VAL:HA	2.35	0.41
25:DA:1721:G:H5'	25:DA:1722:A:OP2	2.20	0.41
1:CA:983:A:H2	1:CA:984:C:C6	2.38	0.41
25:DA:1478:G:C2	25:DA:1479:G:C8	3.09	0.41
8:CH:73:ASP:OD1	8:CH:75:ARG:HD3	2.20	0.41
50:B4:61:ARG:O	50:B4:62:ARG:C	2.58	0.41
25:BA:289:G:H2'	25:BA:290:G:H8	1.83	0.41
23:AX:61:C:H2'	23:AX:62:C:C6	2.54	0.41
8:AH:75:ARG:HA	8:AH:76:PRO:HD2	1.84	0.41
1:AA:113:G:H2'	1:AA:114:U:H6	1.84	0.41
48:D2:44:LEU:HD23	48:D2:47:ASN:HA	2.02	0.41
25:BA:553:A:C2	25:BA:2065:C:H4'	2.55	0.41
1:CA:780:A:N3	1:CA:803:G:N1	2.67	0.41
5:AE:57:LYS:HD3	5:AE:61:TYR:CE2	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BA:1314:A:C2	25:BA:2035:A:C4	3.08	0.41
25:BA:210:A:N1	25:BA:254:A:O2'	2.48	0.41
25:BA:213:G:H2'	25:BA:214:A:O4'	2.20	0.41
25:DA:1959:G:C6	25:DA:1960:A:C5	3.08	0.41
24:CW:3:004:HA	24:CW:4:PRO:HD3	1.73	0.41
39:DT:64:ARG:HB2	39:DT:73:GLU:HG2	2.02	0.41
1:AA:1513:A:H2'	1:AA:1514:C:C6	2.55	0.41
25:BA:873:U:H2'	25:BA:875:U:O4'	2.20	0.41
5:CE:67:VAL:HG13	5:CE:69:VAL:HG12	2.03	0.41
31:DH:87:LEU:HD23	31:DH:164:TYR:HA	2.02	0.41
1:AA:109:A:H2'	1:AA:326:G:H21	1.86	0.41
37:BR:55:ALA:HB2	37:BR:79:LEU:HD13	2.02	0.41
30:BG:126:ASP:HB3	30:BG:130:ASN:H	1.85	0.41
25:DA:460:A:C2	25:DA:470:A:C4	3.09	0.41
23:AX:50:U:H2'	23:AX:51:C:C6	2.55	0.41
25:DA:569:U:C4	25:DA:570:G:C6	3.08	0.41
26:BB:85:G:H8	26:BB:85:G:H5''	1.85	0.41
7:AG:104:LEU:HA	7:AG:104:LEU:HD13	1.84	0.41
7:AG:69:VAL:O	7:AG:69:VAL:HG12	2.19	0.41
37:BR:100:LEU:HD12	37:BR:100:LEU:HA	1.93	0.41
27:BD:253:GLN:HE21	27:BD:253:GLN:HB3	1.56	0.41
40:DU:17:ILE:HG23	40:DU:17:ILE:HD12	1.73	0.41
25:BA:1882:U:C4	25:BA:1883:C:C4	3.09	0.41
25:DA:207:A:H2'	25:DA:208:C:O4'	2.21	0.41
25:DA:1587:A:H2'	25:DA:1588:C:C6	2.55	0.41
50:B4:49:PHE:HB3	50:B4:50:VAL:H	1.37	0.41
1:AA:119:A:C5	1:AA:240:C:C4	3.08	0.41
25:BA:1343:C:OP1	25:BA:2722:C:H4'	2.20	0.41
1:CA:1155:G:C6	1:CA:1156:G:C2	3.09	0.41
30:DG:176:LEU:HA	30:DG:176:LEU:HD23	1.77	0.41
1:CA:1133:G:N2	1:CA:1141:C:N3	2.69	0.41
1:CA:1392:G:N2	1:CA:1502:A:H8	2.19	0.41
1:CA:544:G:C2	1:CA:545:C:C2	3.08	0.41
25:DA:2756:U:H5''	55:D9:19:ARG:HB3	2.02	0.41
4:CD:173:TRP:CE2	4:CD:189:PRO:HG3	2.56	0.41
1:AA:254:G:OP1	17:AQ:67:LYS:O	2.38	0.41
1:AA:946:A:C6	1:AA:947:G:C6	3.09	0.41
25:DA:2807:G:C2	25:DA:2893:G:O6	2.73	0.41
1:CA:406:G:N2	4:CD:119:GLN:HE22	2.18	0.41
28:BE:111:ARG:HA	37:BR:1:MET:SD	2.61	0.41
25:BA:865:G:H4'	25:BA:885:C:O3'	2.20	0.41
38:BS:19:LYS:H	38:BS:19:LYS:HG2	1.76	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:CH:97:VAL:HA	8:CH:100:ILE:HD11	2.01	0.41
25:BA:672:G:O2'	25:BA:2363:G:H4'	2.21	0.41
25:DA:1380:G:N3	25:DA:1380:G:H2'	2.36	0.41
1:CA:1240:U:OP2	7:CG:115:ARG:HA	2.20	0.41
6:AF:91:VAL:HG12	6:AF:92:LYS:O	2.20	0.41
25:BA:922:G:H2'	25:BA:923:C:O4'	2.20	0.41
36:BQ:18:LYS:HB2	36:BQ:18:LYS:HE3	1.67	0.41
25:BA:1933:U:H2'	25:BA:1940:A:N1	2.35	0.41
44:DY:5:MET:HG2	44:DY:30:VAL:HG11	2.03	0.41
27:BD:72:LYS:HB3	27:BD:72:LYS:HE3	1.85	0.41
2:CB:30:ARG:HG3	2:CB:31:TYR:CD1	2.55	0.41
10:AJ:57:LYS:HD2	10:AJ:60:ARG:NH2	2.36	0.41
1:AA:112:G:H21	1:AA:354:G:C4'	2.34	0.41
1:AA:310:G:H5''	16:AP:31:LYS:HB2	2.03	0.41
25:DA:527:C:H4'	25:DA:528:A:O5'	2.20	0.41
12:CL:42:THR:HA	12:CL:53:ARG:O	2.21	0.41
25:BA:501:U:C4	25:BA:507:G:O6	2.74	0.41
23:AX:8:U:O2	23:AX:21:A:H2	2.03	0.41
2:AB:30:ARG:HG3	2:AB:31:TYR:CD1	2.55	0.41
25:DA:575:A:OP2	25:DA:2055:C:N4	2.36	0.41
25:DA:678:C:H2'	25:DA:679:C:C6	2.55	0.41
25:DA:1009:A:O4'	40:DU:59:ARG:HG2	2.20	0.41
12:CL:28:LYS:N	12:CL:29:GLY:HA2	2.35	0.41
25:BA:2814:C:H2'	25:BA:2815:C:O4'	2.20	0.41
1:CA:402:G:H2'	1:CA:403:C:H5'	2.01	0.41
20:CT:89:ARG:O	20:CT:93:GLU:HB2	2.19	0.41
27:DD:68:LYS:O	27:DD:69:ARG:HB2	2.20	0.41
25:DA:2558:C:H2'	25:DA:2559:C:O4'	2.20	0.41
25:DA:1344:G:O2'	25:DA:1385:G:H2'	2.20	0.41
34:BO:98:VAL:HG11	34:BO:114:ILE:HG23	2.03	0.41
25:BA:1298:G:C2	25:BA:1299:A:C2	3.08	0.41
1:AA:955:U:H2'	1:AA:956:U:O4'	2.20	0.41
25:DA:1814:G:H4'	27:DD:51:VAL:HG21	2.02	0.41
25:DA:398:G:H2'	25:DA:399:G:O4'	2.20	0.41
34:DO:98:VAL:HG22	34:DO:118:ALA:HA	2.02	0.41
25:BA:2906:U:O2	25:BA:2906:U:H2'	2.21	0.41
45:DZ:163:LEU:HD12	45:DZ:163:LEU:HA	1.77	0.41
7:CG:12:LEU:O	7:CG:21:VAL:HG12	2.21	0.41
4:AD:141:ARG:HG3	4:AD:144:ASP:OD2	2.20	0.41
1:AA:1153:C:H2'	1:AA:1154:G:H5''	2.03	0.41
4:CD:13:ARG:HB2	4:CD:40:PRO:HD3	2.02	0.41
1:CA:300:A:H2'	1:CA:301:G:O4'	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:CE:40:ARG:NH2	5:CE:68:GLU:HA	2.23	0.41
25:BA:1988:A:H1'	61:BA:4655:HOH:O	2.21	0.41
4:AD:108:LEU:HD12	4:AD:108:LEU:HA	1.90	0.41
4:AD:175:SER:OG	4:AD:184:LYS:HB2	2.20	0.41
25:DA:2298:A:H8	25:DA:2299:G:C8	2.37	0.41
25:DA:322:A:C5	25:DA:340:A:C2	3.09	0.41
9:CI:5:TYR:OH	9:CI:16:ARG:HG2	2.20	0.41
25:DA:1337:G:H2'	25:DA:1338:G:C8	2.53	0.41
1:CA:1168:A:N1	1:CA:1169:A:C6	2.89	0.41
1:AA:145:G:C6	1:AA:146:G:N7	2.88	0.41
8:AH:6:ILE:O	8:AH:10:LEU:HG	2.21	0.41
13:AM:3:ARG:CG	13:AM:8:GLU:HA	2.51	0.41
1:AA:401:C:H2'	1:AA:402:G:C8	2.56	0.41
25:DA:872:A:P	36:DQ:5:ARG:HH12	2.44	0.41
1:CA:471:G:H2'	1:CA:471:G:N3	2.36	0.41
1:AA:553:A:H2'	1:AA:554:C:C6	2.55	0.41
25:BA:2226:C:O2	25:BA:2232:G:C2	2.74	0.41
1:CA:1084:G:C5	1:CA:1085:U:C4	3.09	0.41
1:CA:539:A:C6	1:CA:540:G:C6	3.08	0.41
32:BI:37:VAL:CG1	32:BI:38:LEU:HD12	2.51	0.41
1:AA:92:C:H2'	1:AA:93:G:O4'	2.21	0.41
38:DS:68:GLN:O	38:DS:71:ARG:HG3	2.20	0.41
25:DA:942:G:O2'	25:DA:943:U:H5'	2.21	0.41
35:DP:44:GLY:CA	35:DP:45:LEU:HB2	2.51	0.41
25:DA:1430:C:H2'	25:DA:1431:U:H6	1.81	0.41
25:DA:471:A:H8	25:DA:471:A:O5'	2.02	0.41
55:D9:27:CYS:SG	55:D9:28:GLU:N	2.94	0.41
1:CA:97:G:O2'	1:CA:98:G:O4'	2.37	0.41
13:CM:77:ASN:O	13:CM:81:LEU:HD12	2.21	0.41
1:CA:1385:G:C4	1:CA:1386:G:C8	3.09	0.41
15:AO:18:PHE:CZ	15:AO:21:ASP:HB2	2.56	0.41
1:CA:784:C:H2'	1:CA:785:G:O4'	2.21	0.41
25:BA:402:C:H2'	25:BA:403:C:C6	2.56	0.41
25:DA:574:C:N3	28:DE:145:LYS:HE3	2.36	0.41
25:BA:1074:A:H61	25:BA:1171:G:H2'	1.84	0.41
6:AF:100:ASN:H	18:AR:23:LYS:NZ	2.17	0.41
9:AI:18:PHE:O	9:AI:61:ALA:HA	2.20	0.41
1:CA:245:C:O2	1:CA:283:C:N3	2.53	0.41
5:CE:41:VAL:O	5:CE:67:VAL:HG12	2.20	0.41
25:DA:1785:A:C8	25:DA:1787:A:C5	3.08	0.41
12:AL:7:ILE:O	12:AL:11:VAL:HG23	2.20	0.41
29:BF:29:ASN:H	29:BF:112:MET:CE	2.34	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BA:2544:G:O2'	25:BA:2669:A:N1	2.48	0.41
8:CH:64:LYS:HD2	8:CH:79:VAL:HG21	2.02	0.41
27:DD:228:PRO:HD3	27:DD:235:GLY:CA	2.51	0.41
25:BA:2321:A:H2'	25:BA:2322:A:C8	2.56	0.41
25:BA:2050:U:H2'	25:BA:2051:G:O4'	2.21	0.41
29:DF:155:LEU:HB2	29:DF:189:THR:HG21	2.03	0.41
25:BA:2240:G:C5	25:BA:2241:C:C4	3.08	0.41
28:DE:29:GLY:HA2	28:DE:30:PRO:HA	1.84	0.41
17:AQ:45:HIS:NE2	17:AQ:47:PRO:HG3	2.35	0.41
34:BO:4:PRO:O	34:BO:5:GLN:HB2	2.20	0.41
44:DY:9:LYS:HA	44:DY:10:GLY:HA2	1.51	0.41
23:CX:3:C:H5'	25:DA:2255:G:O2'	2.20	0.41
1:CA:1039:C:N4	1:CA:1040:U:O4	2.54	0.41
30:DG:11:TYR:OH	30:DG:16:ARG:HD3	2.21	0.41
4:AD:3:ARG:HH12	4:AD:5:ILE:HG13	1.85	0.41
4:CD:14:ARG:HB2	4:CD:40:PRO:HD2	2.02	0.41
25:BA:1093:G:O2'	25:BA:1094:A:H8	2.03	0.41
1:AA:197:A:N6	1:AA:221:C:H5'	2.35	0.41
25:DA:2850:A:OP2	25:DA:2866:U:H5	2.03	0.41
30:BG:48:GLU:HA	30:BG:51:ARG:NE	2.31	0.41
25:BA:2701:U:OP2	25:BA:2732:G:N2	2.43	0.41
25:DA:411:G:C4	35:DP:72:PRO:HB3	2.56	0.41
1:AA:332:G:OP2	20:AT:10:LEU:HD13	2.20	0.41
29:DF:13:SER:HB2	29:DF:15:SER:H	1.84	0.41
12:AL:24:VAL:O	12:AL:24:VAL:HG12	2.20	0.41
13:CM:16:ASP:HB3	13:CM:34:LEU:CD1	2.50	0.41
1:CA:540:G:H8	1:CA:540:G:O5'	2.04	0.41
39:DT:26:ASP:OD1	39:DT:91:ARG:HA	2.21	0.41
27:DD:227:ASN:C	27:DD:234:GLY:HA3	2.41	0.41
25:BA:364:A:H2'	25:BA:365:G:O4'	2.21	0.41
1:AA:631:G:H2'	1:AA:632:A:H8	1.85	0.41
1:AA:1380:U:C4	7:AG:3:ARG:HG2	2.56	0.41
25:BA:1018:A:H5'	25:BA:1233:U:H1'	2.03	0.41
25:DA:647:G:H8	25:DA:647:G:O5'	2.04	0.41
12:AL:79:GLU:HB3	12:AL:80:HIS:CD2	2.56	0.41
1:AA:951:G:N7	13:AM:102:ARG:NH2	2.68	0.41
1:AA:1106:G:C5	1:AA:1107:C:C5	3.09	0.41
1:CA:1009:G:N2	1:CA:1010:G:H1'	2.36	0.41
11:AK:18:ARG:NH2	11:AK:35:PRO:O	2.41	0.41
55:D9:17:ILE:HD12	55:D9:17:ILE:HA	1.70	0.41
25:BA:2631:C:H4'	28:BE:151:TYR:O	2.21	0.41
52:D6:11:LEU:HB2	52:D6:21:TYR:HB2	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:DQ:4:PRO:HG3	36:DQ:69:PHE:HE2	1.86	0.41
1:AA:1289:A:H2	1:AA:1372:U:O4'	2.04	0.41
31:BH:86:GLU:HB3	31:BH:165:ALA:HB2	2.02	0.41
45:DZ:118:GLN:N	45:DZ:173:ALA:O	2.54	0.41
25:BA:1733:C:H2'	25:BA:1734:G:O4'	2.21	0.41
1:CA:19:C:H5''	5:CE:86:ALA:HB3	2.02	0.41
10:AJ:64:GLU:HG2	14:AN:59:ALA:HB2	2.02	0.41
25:DA:2730:C:H4'	28:DE:168:MET:O	2.20	0.41
25:DA:2398:U:H2'	25:DA:2399:G:C8	2.56	0.41
1:CA:652:U:O2'	1:CA:653:A:OP2	2.27	0.41
25:BA:116:A:H3'	25:BA:117:A:C5'	2.49	0.41
42:BW:20:VAL:O	42:BW:23:LEU:HB2	2.20	0.41
34:BO:12:ASP:CG	34:BO:14:THR:HG23	2.41	0.41
47:D1:22:GLY:O	47:D1:32:LYS:HE3	2.21	0.41
13:AM:67:GLU:HB3	13:AM:68:GLY:H	1.65	0.41
1:CA:853:G:C4	1:CA:854:G:C8	3.09	0.41
45:DZ:120:ILE:HD12	45:DZ:120:ILE:N	2.36	0.41
37:DR:113:LEU:HD12	37:DR:113:LEU:O	2.20	0.41
45:BZ:13:GLU:HB3	45:BZ:18:LEU:HD21	2.02	0.41
42:BW:9:TYR:H	42:BW:102:HIS:CE1	2.38	0.41
45:DZ:95:PRO:HA	45:DZ:129:SER:HA	2.02	0.41
25:DA:127:A:H5''	25:DA:128:C:C6	2.55	0.41
25:BA:702:A:H8	25:BA:703:G:O4'	2.04	0.41
34:BO:104:ARG:NH2	39:BT:43:GLN:OE1	2.54	0.41
1:AA:633:G:H2'	1:AA:634:C:C6	2.56	0.41
1:CA:1258:G:H21	1:CA:1279:A:H62	1.69	0.41
1:AA:456:C:H2'	1:AA:457:C:C6	2.55	0.41
2:AB:162:ILE:O	2:AB:162:ILE:HG13	2.20	0.41
25:DA:1339:G:H5''	43:DX:16:LYS:HD3	2.03	0.41
8:CH:68:ARG:HH11	8:CH:68:ARG:HG3	1.86	0.41
1:AA:1162:C:H2'	1:AA:1163:C:C6	2.56	0.41
25:DA:465:G:C6	25:DA:466:A:N6	2.89	0.41
1:CA:954:G:C5	1:CA:955:U:C4	3.09	0.41
29:DF:184:TYR:CE1	35:DP:3:LEU:HD21	2.56	0.41
1:AA:1349:A:C2	1:AA:1374:A:C4	3.09	0.41
25:DA:83:G:N2	25:DA:103:A:OP2	2.53	0.41
5:CE:139:LEU:HA	5:CE:142:LEU:HD12	2.02	0.41
21:CU:2:GLY:O	21:CU:4:GLY:N	2.54	0.41
25:BA:2119:C:H2'	25:BA:2120:U:O4'	2.21	0.41
20:AT:33:ILE:HG23	20:AT:63:ILE:HG12	2.03	0.41
25:BA:346:A:C5	25:BA:364:A:C2	3.09	0.41
25:BA:1212:C:H2'	25:BA:1213:U:C6	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:BD:111:LEU:HD23	27:BD:127:VAL:HG12	2.03	0.41
1:AA:605:U:O2'	1:AA:606:G:H5'	2.21	0.41
10:CJ:54:PHE:CD2	10:CJ:55:LYS:HG2	2.55	0.41
25:DA:1425:G:H2'	25:DA:1426:G:O4'	2.21	0.41
25:BA:1553:A:O2'	25:BA:1554:A:O5'	2.31	0.41
27:DD:125:ILE:HG13	27:DD:137:PRO:HD3	2.01	0.41
25:DA:280:C:C2	25:DA:361:G:C2	3.08	0.41
11:CK:27:ASN:OD1	11:CK:28:THR:N	2.49	0.41
8:CH:39:LEU:HA	8:CH:39:LEU:HD13	1.93	0.41
33:BN:28:THR:HG22	33:BN:29:LYS:N	2.33	0.41
38:DS:92:TYR:HB3	38:DS:98:VAL:HG21	2.02	0.41
25:DA:141:A:C8	25:DA:1408:C:O2'	2.72	0.41
49:D3:6:VAL:HG12	49:D3:54:VAL:HG13	2.02	0.41
44:DY:38:ILE:HD13	44:DY:66:PRO:HA	2.03	0.41
26:BB:29:A:C2	26:BB:30:C:C2	3.08	0.41
40:BU:19:LYS:O	40:BU:22:LYS:HG3	2.21	0.41
25:BA:1560:U:H2'	25:BA:1561:C:C6	2.56	0.41
2:CB:27:LYS:HE3	2:CB:193:ASP:OD1	2.20	0.41
1:CA:1468:A:H2'	1:CA:1469:G:O4'	2.20	0.41
28:BE:108:SER:O	28:BE:162:ALA:HA	2.21	0.41
26:DB:13:A:O2'	26:DB:14:U:H3'	2.20	0.41
1:CA:1198:G:H2'	1:CA:1199:U:C6	2.54	0.41
31:BH:137:ASP:HB3	31:BH:140:LYS:HB3	2.02	0.41
29:DF:134:GLY:HA2	29:DF:162:LEU:O	2.21	0.41
34:BO:25:LEU:O	34:BO:26:LYS:HG3	2.21	0.41
25:BA:908:A:N3	26:BB:79:C:O2'	2.44	0.41
29:BF:181:LEU:HD12	29:BF:181:LEU:HA	1.83	0.41
25:BA:1771:G:H8	25:BA:1771:G:O5'	2.04	0.41
1:CA:1121:U:N3	1:CA:1122:U:C5	2.88	0.41
1:CA:1316:G:H2'	1:CA:1318:A:OP2	2.21	0.41
25:BA:1403:U:H2'	25:BA:1404:G:O4'	2.21	0.41
1:CA:1390:U:H2'	1:CA:1391:U:C6	2.56	0.41
1:CA:1075:C:H2'	1:CA:1076:C:H5'	2.02	0.41
25:DA:90:U:O3'	25:DA:92:A:H8	2.04	0.41
25:DA:2683:C:O2	34:DO:70:LYS:HE3	2.20	0.41
1:CA:1139:G:N2	1:CA:1143:G:C6	2.88	0.41
9:CI:20:ARG:HA	9:CI:21:PRO:HD3	1.90	0.41
25:BA:1712:A:C4'	34:BO:67:LYS:HB2	2.51	0.41
1:AA:1235:U:H2'	1:AA:1236:A:O4'	2.20	0.41
1:AA:1304:G:C5	1:AA:1305:G:C6	3.09	0.41
30:DG:72:ARG:HA	30:DG:86:MET:O	2.21	0.41
5:CE:18:ARG:HE	5:CE:25:ARG:HB2	1.86	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:CG:75:VAL:O	7:CG:76:ARG:HG3	2.21	0.41
10:CJ:25:GLU:O	10:CJ:29:ARG:HD3	2.21	0.41
1:AA:100:C:H2'	1:AA:101:A:C8	2.56	0.41
46:D0:36:ILE:HD12	46:D0:58:THR:CG2	2.51	0.41
54:D8:31:HIS:O	54:D8:36:LYS:NZ	2.53	0.41
1:CA:734:G:H2'	1:CA:735:C:C6	2.55	0.41
1:CA:735:C:H5'	18:CR:71:LYS:HD3	2.02	0.41
1:AA:382:A:H2	1:AA:383:A:N7	2.19	0.41
25:DA:1782:C:O4'	25:DA:2609:U:C2	2.74	0.41
25:DA:631:A:H2'	25:DA:632:A:O4'	2.19	0.41
3:AC:35:GLU:HG2	3:AC:39:ILE:HD11	2.03	0.41
1:CA:1353:G:C2	1:CA:1370:G:C2	3.09	0.41
25:BA:989:G:H5'	25:BA:990:A:H5'	2.02	0.41
25:DA:77:C:H42	25:DA:109:G:H1	1.68	0.41
25:BA:1355:G:P	53:B7:9:ARG:HD3	2.61	0.41
42:BW:14:PRO:HG2	42:BW:78:GLU:CG	2.45	0.41
1:AA:1220:G:H2'	1:AA:1221:G:O4'	2.20	0.41
1:AA:375:U:C2	1:AA:376:G:C8	3.09	0.41
34:DO:2:ILE:HD11	34:DO:82:ASN:HB3	2.03	0.41
2:AB:211:ILE:O	2:AB:215:LEU:HB2	2.21	0.41
1:CA:451:A:N1	1:CA:480:U:H2'	2.36	0.41
3:CC:6:HIS:NE2	3:CC:8:ILE:HB	2.36	0.41
1:CA:1305:G:H5'	21:CU:4:GLY:CA	2.51	0.41
1:CA:757:U:H2'	1:CA:758:G:O4'	2.21	0.41
1:CA:868:C:H2'	1:CA:869:G:O4'	2.20	0.41
3:AC:6:HIS:HA	3:AC:7:PRO:HD3	1.96	0.41
34:BO:47:ILE:HB	34:BO:48:PRO:HD2	2.03	0.41
1:AA:6:G:C4	5:AE:119:LEU:HD11	2.56	0.41
25:BA:922:G:H4'	45:BZ:151:HIS:HE1	1.86	0.41
7:CG:26:PHE:CD2	7:CG:30:ILE:HD11	2.56	0.41
1:AA:599:C:H5''	8:AH:95:VAL:O	2.20	0.41
1:AA:998:G:H2'	1:AA:999:C:C6	2.56	0.41
41:DV:40:LEU:CB	41:DV:46:VAL:HG13	2.51	0.41
2:AB:127:ILE:HB	2:AB:129:GLU:H	1.85	0.41
1:AA:357:G:C2	1:AA:358:U:C5	3.08	0.41
25:DA:2302:G:C6	25:DA:2303:G:N7	2.89	0.41
20:AT:56:MET:O	20:AT:56:MET:HG2	2.21	0.41
1:CA:112:G:H21	1:CA:354:G:C4'	2.33	0.41
23:CX:59:A:C2'	23:CX:60:U:H5'	2.51	0.41
25:BA:2856:G:OP2	39:BT:54:ARG:HB2	2.21	0.41
1:CA:932:C:H2'	1:CA:933:G:H8	1.86	0.41
25:DA:1539:G:H2'	25:DA:1540:U:H6	1.84	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1329:A:OP1	13:AM:28:ALA:HB3	2.21	0.41
4:CD:20:TYR:CD1	4:CD:26:CYS:HB3	2.56	0.41
1:CA:649:G:C5	1:CA:650:G:C8	3.09	0.41
1:CA:1093:A:N3	1:CA:1109:C:O2'	2.46	0.41
13:AM:60:VAL:HG13	13:AM:64:TRP:CE3	2.55	0.41
32:BI:102:SER:HA	32:BI:106:GLY:HA3	2.03	0.41
1:CA:780:A:C2	1:CA:803:G:C6	3.09	0.41
12:AL:36:VAL:HG23	24:AW:10:2QY:CE1	2.50	0.41
1:CA:114:U:H2'	1:CA:115:G:C8	2.56	0.41
29:DF:34:TRP:CH2	35:DP:8:PRO:HB3	2.56	0.41
1:CA:308:C:H2'	1:CA:309:G:H8	1.86	0.41
25:DA:760:G:H2'	25:DA:761:A:O4'	2.19	0.41
17:CQ:57:VAL:HG12	17:CQ:76:LEU:HA	2.03	0.41
25:DA:335:C:H4'	44:DY:73:ARG:NE	2.36	0.41
38:DS:24:LEU:HD23	38:DS:24:LEU:HA	1.89	0.41
25:BA:1013:G:H2'	25:BA:1014:U:C6	2.56	0.41
31:DH:154:PRO:HB3	31:DH:163:TYR:CZ	2.56	0.41
47:D1:94:LEU:O	47:D1:97:LEU:HB2	2.20	0.41
53:D7:24:THR:O	53:D7:28:ARG:HG3	2.21	0.41
25:BA:273:G:O2'	25:BA:274:U:H5''	2.20	0.41
1:CA:341:C:C2'	1:CA:342:C:H5'	2.50	0.41
25:DA:1461:G:H2'	25:DA:1462:C:H6	1.85	0.41
28:DE:14:ILE:HD11	28:DE:173:VAL:HG11	2.03	0.41
1:CA:853:G:C2	1:CA:854:G:C8	3.08	0.41
26:BB:78:A:H2'	26:BB:79:C:O4'	2.20	0.41
17:CQ:29:HIS:HA	17:CQ:30:PRO:HD2	1.88	0.41
2:AB:87:ARG:NH1	2:AB:233:SER:HB3	2.36	0.41
25:DA:1655:A:H4'	28:DE:115:GLY:N	2.36	0.41
1:AA:394:G:H2'	1:AA:395:C:H6	1.86	0.41
25:BA:1845:G:H4'	27:BD:51:VAL:HG21	2.03	0.41
25:DA:2758:A:H2'	25:DA:2759:G:O4'	2.20	0.41
25:DA:272(E):G:C2	25:DA:364:C:C2	3.09	0.41
25:BA:1679:A:OP2	61:BA:4621:HOH:O	2.22	0.41
25:DA:2028:U:H2'	25:DA:2029:G:O4'	2.21	0.41
1:CA:447:G:H2'	1:CA:485:G:N2	2.36	0.41
1:AA:461:A:O5'	1:AA:461:A:H8	2.04	0.41
33:BN:82:LEU:HD12	33:BN:82:LEU:HA	1.76	0.41
42:BW:88:ARG:HD2	42:BW:88:ARG:HA	1.94	0.41
13:AM:79:LYS:NZ	13:AM:83:ASP:OD2	2.45	0.41
1:AA:1445:C:C4	1:AA:1446:U:C4	3.09	0.41
25:DA:1263:U:H1'	51:D5:10:LYS:HG3	2.03	0.41
5:AE:90:VAL:O	5:AE:91:LEU:HD13	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:CE:60:TYR:CZ	5:CE:64:ARG:HD3	2.56	0.41
2:CB:158:LEU:HA	2:CB:159:PRO:HD3	1.74	0.41
31:BH:97:ARG:NE	31:BH:104:GLU:OE1	2.53	0.41
1:CA:358:U:H2'	1:CA:359:U:H6	1.86	0.41
25:BA:2495:C:N3	36:BQ:124:LYS:NZ	2.67	0.41
25:DA:802:A:OP1	61:DA:4454:HOH:O	2.21	0.41
25:DA:1353:A:H2'	25:DA:1354:A:C8	2.55	0.41
25:BA:2797:C:H1'	28:BE:37:ARG:NH1	2.36	0.41
23:AX:37:A:H2'	23:AX:38:A:O4'	2.20	0.41
25:BA:866:A:C4	25:BA:1234:A:C2	3.08	0.41
25:DA:1717:G:C2	25:DA:1745(A):C:O2	2.74	0.41
13:CM:47:ASP:N	13:CM:47:ASP:OD1	2.54	0.41
40:BU:85:LYS:HE2	40:BU:85:LYS:HB3	1.88	0.41
25:DA:2250:G:N3	25:DA:2250:G:H5''	2.36	0.41
3:AC:178:LEU:HA	3:AC:178:LEU:HD13	1.80	0.41
20:AT:36:LEU:HA	20:AT:36:LEU:HD23	1.82	0.41
25:DA:352:G:H8	25:DA:352:G:OP1	2.04	0.41
12:AL:54:LYS:HD3	12:AL:54:LYS:N	2.36	0.41
31:DH:71:LEU:HA	31:DH:71:LEU:HD12	1.86	0.41
25:DA:1581:G:H2'	25:DA:1582:C:O4'	2.21	0.41
1:AA:815:A:N7	1:AA:1509:C:O2'	2.43	0.41
1:CA:1153:C:H2'	1:CA:1154:G:H5''	2.02	0.41
30:DG:11:TYR:HA	30:DG:176:LEU:HD21	2.03	0.41
30:DG:8:LYS:O	30:DG:11:TYR:HB3	2.21	0.41
1:CA:1272:G:C2	1:CA:1273:G:H1'	2.56	0.41
1:AA:460:G:C6	1:AA:470:C:H5''	2.56	0.41
25:DA:2318:G:H21	38:DS:3:ARG:CD	2.34	0.41
25:DA:2371:G:C2	25:DA:2372:G:C8	3.09	0.41
25:DA:2755:C:C4	55:D9:19:ARG:NH1	2.89	0.41
25:DA:2494:G:C4	25:DA:2495:G:C8	3.08	0.41
1:AA:146:G:N1	1:AA:147:G:C5	2.89	0.41
1:AA:147:G:O2'	1:AA:148:G:H5'	2.20	0.41
1:AA:172:A:N7	1:AA:174:C:C4	2.89	0.41
25:BA:2074:G:H4'	28:BE:143:ASN:O	2.21	0.41
2:AB:71:VAL:HG13	2:AB:93:VAL:CG2	2.50	0.41
13:CM:90:LEU:HD23	13:CM:93:ARG:NE	2.36	0.41
1:CA:1227:A:C2	19:CS:83:HIS:HB3	2.56	0.41
45:DZ:48:PHE:CE1	45:DZ:52:SER:HA	2.56	0.41
47:B1:21:ARG:CG	47:B1:21:ARG:HH11	2.29	0.41
25:DA:271(G):C:H2'	25:DA:271(H):G:H8	1.86	0.41
32:BI:99:GLU:O	32:BI:103:ARG:NH1	2.54	0.41
25:BA:2745:G:H3'	25:BA:2746:A:O4'	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:AD:178:VAL:HG12	4:AD:179:GLU:N	2.36	0.41
25:BA:2214:G:H5'	25:BA:2215:G:OP2	2.21	0.41
30:DG:43:LEU:HB3	30:DG:44:GLY:H	1.51	0.41
30:DG:142:PRO:HG2	30:DG:143:GLU:OE1	2.21	0.41
3:CC:6:HIS:CD2	3:CC:8:ILE:H	2.36	0.41
1:AA:685:G:C2	1:AA:686:U:C4	3.08	0.41
44:BY:38:ILE:HD13	44:BY:66:PRO:HA	2.03	0.41
25:BA:1629:C:H2'	25:BA:1630:A:C8	2.56	0.41
1:AA:91:C:H2'	1:AA:92:C:C6	2.56	0.41
1:CA:78:G:N2	1:CA:92:C:C2	2.88	0.41
25:BA:474:U:C4	25:BA:606:G:H1'	2.56	0.41
6:AF:82:ARG:HB3	6:AF:85:VAL:HG23	2.03	0.41
1:AA:125:U:O2	1:AA:236:G:N2	2.46	0.41
25:DA:658:C:H2'	25:DA:659:C:C6	2.55	0.41
25:BA:275:C:H2'	25:BA:276:C:C6	2.56	0.41
25:DA:2745:C:H4'	31:DH:142:GLY:O	2.21	0.41
18:AR:58:LEU:HA	18:AR:58:LEU:HD13	1.79	0.41
25:DA:2348:U:O4	25:DA:2382:G:N1	2.54	0.41
1:CA:783:C:N4	1:CA:784:C:H41	2.19	0.41
35:BP:81:GLN:HB2	35:BP:110:TYR:HD2	1.86	0.41
25:DA:652(T):C:H2'	25:DA:652(U):G:C8	2.56	0.41
1:AA:1206:G:O6	1:AA:1207:G:C6	2.74	0.41
25:DA:106:C:O4'	44:DY:1:MET:HG3	2.21	0.41
26:BB:4:C:H2'	26:BB:5:C:O4'	2.22	0.41
1:CA:1049:U:C6	1:CA:1201:A:H5'	2.56	0.41
25:BA:26:G:O3'	25:BA:1306:G:H4'	2.20	0.41
5:CE:127:ASN:HA	5:CE:128:PRO:HD3	1.83	0.41
30:BG:77:ILE:HG22	30:BG:80:PHE:H	1.86	0.41
5:CE:41:VAL:HG23	5:CE:67:VAL:CG1	2.51	0.41
1:AA:108:G:H5''	1:AA:109:A:H5''	2.03	0.41
26:DB:14:U:O3'	26:DB:108:U:O2'	2.38	0.41
1:CA:358:U:H2'	1:CA:359:U:C6	2.56	0.41
9:AI:9:ARG:HG2	9:AI:14:VAL:HG13	2.02	0.41
4:AD:150:GLU:HG3	4:AD:151:LYS:N	2.36	0.41
54:D8:22:VAL:CG2	54:D8:59:LYS:HG3	2.51	0.41
32:DI:9:LEU:HD11	32:DI:35:LEU:HD13	2.03	0.41
25:BA:751:G:O2'	25:BA:773:G:N2	2.40	0.41
1:CA:216:G:H2'	1:CA:217:C:C6	2.56	0.41
1:CA:456:C:N3	1:CA:476:G:C2	2.89	0.41
20:CT:42:GLN:O	20:CT:45:GLN:HB3	2.20	0.41
1:CA:484:G:C8	1:CA:486:U:C2	3.09	0.41
23:CX:12:G:H1'	25:DA:1923:U:O2'	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BA:2430:A:H2'	25:BA:2431:U:C6	2.56	0.41
35:DP:135:LEU:HD23	35:DP:135:LEU:HA	1.93	0.41
8:CH:121:ASP:OD1	8:CH:121:ASP:N	2.53	0.41
40:DU:16:LYS:HB3	40:DU:16:LYS:HE2	1.80	0.41
45:DZ:70:LEU:HA	45:DZ:70:LEU:HD23	1.79	0.41
6:CF:22:GLU:O	6:CF:26:ILE:HG13	2.21	0.41
1:CA:1005:A:H3'	1:CA:1006:C:O4'	2.20	0.40
1:CA:1134:G:C2'	1:CA:1135:U:H5'	2.50	0.40
1:CA:1073:U:C4	1:CA:1074:G:N7	2.90	0.40
25:DA:2298:A:C6	25:DA:2321:G:C2	3.09	0.40
4:CD:173:TRP:CD1	4:CD:174:LEU:HG	2.56	0.40
25:DA:1114:G:H2'	25:DA:1115:G:C8	2.55	0.40
1:CA:559:A:H4'	1:CA:560:U:H5''	2.03	0.40
25:BA:895:G:C4	25:BA:978:A:H8	2.39	0.40
7:AG:111:ARG:HB3	7:AG:113:GLU:OE2	2.21	0.40
1:CA:674:G:H2'	1:CA:675:A:H8	1.84	0.40
25:BA:2701:U:O2	25:BA:2701:U:H5'	2.21	0.40
35:DP:88:LEU:O	35:DP:91:PHE:HD1	2.02	0.40
30:DG:136:ARG:NH1	30:DG:137:GLU:H	2.16	0.40
28:BE:144:ARG:HB3	28:BE:145:LYS:H	1.45	0.40
13:CM:29:ARG:HB3	13:CM:64:TRP:CZ3	2.55	0.40
25:DA:848:G:C2	25:DA:933:A:H1'	2.57	0.40
5:AE:116:THR:HG23	5:AE:117:ASP:OD2	2.21	0.40
16:CP:43:LYS:HG2	16:CP:48:TRP:CD2	2.56	0.40
7:CG:27:ILE:HA	7:CG:30:ILE:HD12	2.03	0.40
25:BA:390:G:H2'	25:BA:391:G:O4'	2.21	0.40
1:CA:1128:C:H1'	1:CA:1147:C:N3	2.35	0.40
4:CD:64:LEU:O	4:CD:64:LEU:HD12	2.21	0.40
2:CB:164:VAL:HB	2:CB:186:ALA:HB2	2.03	0.40
29:BF:74:ARG:H	29:BF:74:ARG:HG3	1.63	0.40
30:DG:179:PRO:HG3	50:D4:43:TYR:CZ	2.56	0.40
29:DF:125:LEU:HD21	29:DF:199:TRP:CD2	2.56	0.40
41:BV:65:GLY:HA3	41:BV:91:TYR:CZ	2.55	0.40
3:CC:112:SER:O	3:CC:115:LEU:HB2	2.22	0.40
6:CF:95:GLU:HA	6:CF:96:PRO:HD3	1.90	0.40
1:CA:881:G:P	12:CL:12:ARG:NH2	2.94	0.40
14:AN:12:ARG:HG2	14:AN:13:THR:N	2.36	0.40
1:AA:251:G:H4'	1:AA:252:U:O5'	2.21	0.40
25:BA:1347:A:C8	25:BA:1349:G:C8	3.09	0.40
8:AH:64:LYS:HG2	8:AH:79:VAL:HG21	2.02	0.40
38:DS:78:LEU:HG	38:DS:78:LEU:H	1.29	0.40
4:AD:107:ARG:HD2	4:AD:107:ARG:HA	1.71	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DA:2044:C:C2	25:DA:2625:G:C2	3.08	0.40
1:AA:1269:A:H2	1:AA:1312:G:N3	2.19	0.40
1:AA:1210:C:H2'	1:AA:1211:U:H5'	2.03	0.40
26:DB:83:G:H5''	49:D3:52:HIS:CE1	2.55	0.40
1:CA:341:C:H6	1:CA:341:C:O5'	2.04	0.40
28:BE:9:VAL:HG22	28:BE:25:VAL:HB	2.03	0.40
25:DA:1334:G:H2'	25:DA:1335:U:C6	2.57	0.40
25:BA:1735:U:O2	25:BA:1747:A:H5'	2.21	0.40
25:DA:1309:G:O2'	25:DA:1611:C:O2'	2.26	0.40
5:CE:84:PHE:CE2	5:CE:133:TYR:HD2	2.39	0.40
1:CA:127:G:O2'	17:CQ:2:PRO:O	2.40	0.40
45:DZ:144:LEU:HD23	45:DZ:144:LEU:HA	1.85	0.40
4:CD:108:LEU:HD12	4:CD:108:LEU:HA	1.67	0.40
1:AA:720:C:H6	1:AA:720:C:O5'	2.04	0.40
37:DR:70:LEU:O	37:DR:72:ASP:N	2.54	0.40
21:CU:15:ARG:HB2	21:CU:15:ARG:HH11	1.86	0.40
4:AD:45:GLN:HB3	4:AD:45:GLN:HE21	1.66	0.40
16:AP:38:TYR:O	16:AP:49:LEU:HD12	2.21	0.40
25:DA:1583:A:H5'	25:DA:1584:C:O5'	2.20	0.40
36:DQ:73:PRO:HA	36:DQ:93:TYR:CD1	2.55	0.40
42:DW:24:ILE:HA	42:DW:27:LYS:HG3	2.02	0.40
4:AD:68:TYR:CE2	4:AD:97:LEU:HB3	2.56	0.40
10:AJ:38:ILE:HA	10:AJ:39:PRO:HD3	1.90	0.40
25:BA:1091:A:O2'	25:BA:1093:G:C4	2.68	0.40
1:CA:973:G:H3'	1:CA:974:A:H5''	2.03	0.40
25:DA:2756:U:H4'	25:DA:2757:A:OP1	2.21	0.40
25:DA:1338:G:C4	25:DA:1339:G:C8	3.10	0.40
1:CA:1222:G:C6	1:CA:1223:C:C4	3.10	0.40
25:DA:30:G:C5	25:DA:31:C:C4	3.10	0.40
15:AO:39:LEU:HB3	15:AO:56:LEU:HD13	2.03	0.40
25:DA:14:A:C6	25:DA:526:A:C2	3.09	0.40
14:AN:33:VAL:HA	14:AN:40:CYS:HA	2.03	0.40
27:BD:206:LEU:HD23	27:BD:206:LEU:HA	1.79	0.40
25:BA:1220:U:H1'	25:BA:1221:G:OP1	2.21	0.40
1:AA:391:G:OP1	16:AP:28:ARG:NH1	2.41	0.40
30:DG:101:ILE:O	30:DG:104:GLU:HB3	2.21	0.40
1:AA:129:U:H5'	17:AQ:3:LYS:NZ	2.35	0.40
25:BA:1629:C:O2'	25:BA:1632:A:N3	2.53	0.40
11:CK:33:THR:OG1	11:CK:34:ASP:O	2.29	0.40
26:BB:33:G:C2'	26:BB:34:U:H5'	2.50	0.40
25:BA:630:U:OP1	29:BF:102:PRO:HA	2.21	0.40
1:CA:986:A:H1'	19:CS:54:GLY:O	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
50:B4:5:ILE:HG12	50:B4:6:HIS:CD2	2.56	0.40
1:CA:1385:G:C6	1:CA:1386:G:C5	3.09	0.40
25:DA:919:G:C6	25:DA:920:G:C5	3.09	0.40
25:BA:1703:C:H5''	28:BE:136:ARG:HB2	2.02	0.40
25:DA:2360:A:C2	25:DA:2361:A:H1'	2.57	0.40
1:CA:1021:G:N3	1:CA:1021:G:H2'	2.35	0.40
25:DA:1667:G:H1'	25:DA:1991:U:O4	2.21	0.40
25:DA:521:G:H2'	25:DA:522:G:H8	1.86	0.40
28:DE:21:VAL:HA	28:DE:22:PRO:HD3	1.74	0.40
34:BO:104:ARG:HH22	39:BT:43:GLN:NE2	2.19	0.40
10:AJ:31:GLY:HA2	10:AJ:32:ALA:HA	1.49	0.40
1:AA:130:A:N7	17:AQ:63:ARG:HB2	2.35	0.40
10:CJ:35:SER:N	10:CJ:73:ASP:O	2.34	0.40
48:D2:62:THR:O	48:D2:65:ASN:HB3	2.21	0.40
1:AA:963:G:N3	10:AJ:54:PHE:HZ	2.19	0.40
43:BX:26:TYR:CE2	43:BX:89:ILE:HG13	2.55	0.40
42:DW:26:GLY:HA2	42:DW:71:VAL:O	2.20	0.40
5:CE:144:THR:H	5:CE:147:ASP:HB2	1.86	0.40
25:DA:2016:U:H2'	25:DA:2017:U:C6	2.56	0.40
25:BA:2410:U:H2'	25:BA:2411:G:C8	2.56	0.40
25:DA:182:A:C6	25:DA:183:C:C4	3.09	0.40
27:BD:109:ASP:HB2	27:BD:197:GLY:HA2	2.01	0.40
25:BA:218:A:H3'	25:BA:218:A:C8	2.57	0.40
27:DD:253:GLN:HB3	27:DD:253:GLN:HE21	1.53	0.40
1:CA:687:A:C2	1:CA:704:A:C5	3.09	0.40
7:AG:44:TYR:O	7:AG:47:CYS:HB2	2.21	0.40
1:AA:1347:G:H5''	9:AI:107:ARG:HB3	2.02	0.40
5:CE:34:VAL:N	5:CE:42:GLY:O	2.51	0.40
1:AA:347:G:O2'	1:AA:348:G:N2	2.54	0.40
1:AA:342:C:N3	1:AA:348:G:O6	2.55	0.40
1:AA:1144:G:H21	1:AA:1146:A:H62	1.67	0.40
1:AA:1145:C:H5''	1:AA:1146:A:OP1	2.21	0.40
1:CA:1118:C:H1'	1:CA:1179:A:C4	2.56	0.40
1:AA:1001(A):G:C5	1:AA:1002:G:C8	3.08	0.40
45:DZ:30:ASN:OD1	45:DZ:33:LEU:HD23	2.22	0.40
25:DA:2287:A:C5	25:DA:2289:G:C5	3.10	0.40
32:BI:50:ARG:H	32:BI:50:ARG:HG2	1.59	0.40
1:AA:437:U:C5'	4:AD:155:LEU:HD11	2.47	0.40
25:DA:1336:A:H2'	25:DA:1337:G:C8	2.56	0.40
1:CA:1169:A:C8	1:CA:1169:A:C3'	3.04	0.40
25:DA:466:A:H1'	25:DA:683:C:O4'	2.21	0.40
39:DT:31:SER:OG	39:DT:85:LYS:HE3	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1370:G:C2	1:AA:1371:G:C8	3.09	0.40
36:BQ:14:ARG:HG2	36:BQ:41:TRP:HH2	1.87	0.40
1:AA:1220:G:H21	19:AS:54:GLY:C	2.23	0.40
7:CG:120:ILE:CG2	7:CG:124:LEU:HD12	2.52	0.40
25:DA:921:G:C5	25:DA:922:U:C4	3.09	0.40
25:DA:1406:U:H2'	25:DA:1407:C:C6	2.56	0.40
38:DS:77:ALA:O	38:DS:81:GLY:N	2.54	0.40
1:CA:828:A:N6	1:CA:858:G:O2'	2.50	0.40
52:D6:6:ARG:NH1	52:D6:26:ASN:HB2	2.36	0.40
25:DA:414:C:C2'	25:DA:415:A:H5'	2.51	0.40
1:CA:840:C:H5''	1:CA:841:U:H5	1.86	0.40
4:CD:43:HIS:CA	4:CD:46:LYS:HG3	2.51	0.40
27:DD:182:LEU:O	27:DD:271:ILE:N	2.45	0.40
25:BA:2642:G:H2'	25:BA:2643:G:O4'	2.21	0.40
1:CA:943:U:H2'	1:CA:944:G:H5'	2.02	0.40
25:DA:1813:G:H1'	27:DD:50:THR:OG1	2.22	0.40
16:AP:59:TRP:HB3	16:AP:64:ALA:HB2	2.03	0.40
25:DA:2564:A:OP1	25:DA:2648:C:H4'	2.20	0.40
25:DA:442:G:H21	29:DF:48:THR:HB	1.84	0.40
25:DA:952:G:C6	25:DA:953:A:N7	2.90	0.40
25:BA:403:C:H42	25:BA:425:G:H1	1.68	0.40
20:CT:43:LEU:O	20:CT:47:GLY:N	2.54	0.40
25:DA:628:G:H2'	25:DA:629:G:H8	1.85	0.40
25:BA:2087:C:H2'	25:BA:2088:C:H6	1.86	0.40
1:AA:1427:U:H2'	1:AA:1428:A:C8	2.56	0.40
25:BA:1026:A:C4	25:BA:1181:G:O4'	2.74	0.40
25:BA:39:C:H2'	25:BA:40:C:C6	2.56	0.40
25:BA:561:A:H2'	25:BA:562:C:C6	2.56	0.40
38:BS:69:VAL:HG23	38:BS:101:LEU:HG	2.04	0.40
26:BB:100:A:O5'	61:BB:4021:HOH:O	2.22	0.40
1:AA:960:U:C2	1:AA:1225:A:N7	2.89	0.40
25:BA:227:C:H2'	25:BA:228:U:O4'	2.21	0.40
17:AQ:29:HIS:HA	17:AQ:30:PRO:HD2	1.88	0.40
25:BA:1423:G:H2'	61:BA:3831:HOH:O	2.20	0.40
1:CA:601:C:H2'	1:CA:602:A:C8	2.55	0.40
1:CA:1155:G:H2'	1:CA:1156:G:O4'	2.22	0.40
2:AB:48:MET:HA	2:AB:51:LEU:HD12	2.03	0.40
1:AA:573:A:N3	1:AA:883:C:O2'	2.43	0.40
1:AA:1492:A:H1'	25:BA:1935:A:H61	1.86	0.40
1:AA:1317:C:OP1	14:AN:18:VAL:HG22	2.22	0.40
1:AA:945:G:C2	1:AA:946:A:C8	3.10	0.40
25:BA:807:G:H2'	25:BA:808:A:O4'	2.22	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:103:C:C4	1:AA:104:G:N7	2.89	0.40
26:DB:33:G:H5'	30:DG:2:PRO:HD3	2.03	0.40
25:DA:2805:G:C6	25:DA:2807:G:C6	3.09	0.40
2:CB:219:VAL:HA	2:CB:222:ILE:HD11	2.02	0.40
1:AA:974:A:OP1	1:AA:974:A:H8	2.04	0.40
25:BA:868:A:H2'	25:BA:991:G:H5''	2.04	0.40
25:DA:2831:G:P	28:DE:58:ARG:HH22	2.38	0.40
35:DP:90:ARG:HG2	35:DP:91:PHE:CD1	2.56	0.40
25:BA:2576:A:C2	25:BA:2659:U:H4'	2.56	0.40
7:CG:65:ALA:CB	7:CG:124:LEU:HD23	2.50	0.40
1:CA:491:G:C2	1:CA:492:G:C4	3.10	0.40
1:CA:391:G:P	16:CP:28:ARG:HH22	2.44	0.40
1:AA:1321:C:H5''	1:AA:1322:C:H2'	2.03	0.40
25:DA:875:G:C2	25:DA:903:C:C2	3.10	0.40
20:CT:82:SER:O	20:CT:86:ARG:HG3	2.22	0.40
25:BA:12:U:O2	25:BA:12:U:H2'	2.21	0.40
14:AN:4:LYS:HD3	14:AN:7:ILE:CG2	2.51	0.40
23:CX:4:G:H1	23:CX:69:C:N4	2.17	0.40
3:AC:115:LEU:HD12	3:AC:118:GLN:OE1	2.21	0.40
25:DA:663:G:C6	25:DA:664:C:C4	3.10	0.40
28:DE:188:VAL:HA	28:DE:189:PRO:HD3	1.98	0.40
1:CA:811:C:N4	61:CA:4026:HOH:O	2.52	0.40
25:DA:1292:U:H2'	25:DA:1293:C:H6	1.86	0.40
25:DA:912:C:C2	25:DA:913:U:C5	3.10	0.40
32:BI:65:ALA:CB	32:BI:136:VAL:HG11	2.50	0.40
25:DA:895:U:O2'	25:DA:896:A:H2'	2.22	0.40
37:BR:87:TYR:OH	37:BR:116:LEU:HB3	2.21	0.40
2:CB:230:VAL:HG13	2:CB:231:GLU:O	2.22	0.40
25:BA:1040:C:O2'	25:BA:1042:A:OP1	2.34	0.40
25:DA:955:C:OP1	36:DQ:87:LYS:HE3	2.22	0.40
31:DH:103:LEU:HB3	31:DH:123:PHE:CD2	2.57	0.40
45:DZ:54:HIS:CG	45:DZ:101:PRO:HG3	2.56	0.40
1:CA:1106:G:N2	1:CA:1107:C:C2	2.89	0.40
25:BA:254:A:H1'	25:BA:255:G:O4'	2.21	0.40
52:D6:10:LEU:O	52:D6:11:LEU:HD23	2.21	0.40
26:BB:11:C:OP2	26:BB:12:C:H5	2.05	0.40
13:AM:92:HIS:CE1	13:AM:98:VAL:HG11	2.56	0.40
1:AA:240:C:H2'	1:AA:241:C:C6	2.56	0.40
50:D4:49:PHE:HB3	50:D4:50:VAL:HG12	2.04	0.40
5:AE:147:ASP:O	5:AE:151:LEU:HG	2.21	0.40
25:DA:2352:A:C4	25:DA:2366:A:C2	3.10	0.40
34:DO:101:PRO:HG3	39:DT:67:SER:OG	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:AF:89:MET:SD	18:AR:76:LEU:HD21	2.61	0.40
1:AA:943:U:H2'	1:AA:944:G:H5'	2.04	0.40
51:D5:48:GLU:O	51:D5:60:VAL:HG11	2.22	0.40
25:DA:990:A:C6	25:DA:1186:G:H1'	2.57	0.40
25:BA:1929:G:C2	25:BA:1946:C:C2	3.10	0.40
19:CS:51:VAL:HB	19:CS:75:ALA:HB2	2.03	0.40
53:D7:5:TRP:CD1	53:D7:7:PRO:HD3	2.56	0.40
1:CA:1488:G:C2'	1:CA:1489:G:H5'	2.52	0.40
1:CA:528:C:H41	12:CL:49:ASN:ND2	2.19	0.40
32:BI:140:LEU:HA	32:BI:140:LEU:HD23	1.87	0.40
2:CB:224:GLN:HG2	2:CB:225:ALA:N	2.36	0.40
1:AA:341:C:O2'	1:AA:342:C:H5'	2.21	0.40
2:CB:167:PRO:HD3	2:CB:187:LEU:O	2.21	0.40
1:CA:1122:U:C4	1:CA:1151:A:N1	2.89	0.40
10:CJ:16:LEU:HD23	10:CJ:94:VAL:HG22	2.04	0.40
1:CA:1126:U:C4	10:CJ:71:LEU:HD22	2.56	0.40
1:CA:922:G:H2'	1:CA:923:A:C8	2.56	0.40
1:AA:288:A:H2'	1:AA:289:G:H4'	2.04	0.40
1:CA:567:G:N2	61:CA:4065:HOH:O	2.48	0.40
28:BE:49:LEU:HA	28:BE:49:LEU:HD12	1.85	0.40
2:CB:211:ILE:HG13	2:CB:211:ILE:H	1.71	0.40
25:DA:1268:A:H2'	25:DA:1269:A:O4'	2.22	0.40
25:BA:207:A:N1	25:BA:224:U:H4'	2.36	0.40
1:CA:954:G:C6	1:CA:955:U:C4	3.10	0.40
5:AE:76:ILE:HB	5:AE:77:PRO:HD2	2.04	0.40
25:DA:1630:G:H2'	25:DA:1631:C:C6	2.56	0.40
6:AF:96:PRO:HB3	18:AR:30:ASP:CG	2.41	0.40
54:D8:30:ARG:HD3	54:D8:30:ARG:HA	1.57	0.40
25:BA:2225:U:O4'	27:BD:151:LYS:HE2	2.21	0.40
1:AA:701:C:H1'	1:AA:703:G:C6	2.56	0.40
25:BA:390:G:H8	25:BA:390:G:O5'	2.04	0.40
4:AD:65:ARG:HG2	4:AD:75:PHE:CG	2.56	0.40
1:AA:920:U:H2'	1:AA:921:U:H6	1.84	0.40
25:DA:657:U:H2'	25:DA:658:C:C6	2.56	0.40
1:CA:101:A:H2'	1:CA:102:G:H5'	2.03	0.40
25:DA:858:U:H1'	25:DA:2268:A:H2'	2.04	0.40
25:DA:1472:A:C2	25:DA:1473:G:H1'	2.56	0.40
25:BA:1521:C:H2'	25:BA:1522:G:H8	1.87	0.40
25:BA:1471:G:H2'	25:BA:1472:G:O4'	2.21	0.40
18:CR:59:SER:H	18:CR:62:GLU:HG3	1.86	0.40
32:DI:133:HIS:CD2	32:DI:134:PRO:O	2.75	0.40
25:DA:871:U:H5''	36:DQ:69:PHE:CE2	2.56	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1072:G:C5	1:AA:1073:U:C4	3.10	0.40
25:BA:2328:C:H1'	30:BG:128:ARG:NH2	2.36	0.40
25:DA:679:C:H2'	25:DA:680:G:H8	1.86	0.40
1:AA:1261:A:H3'	1:AA:1262:C:H6	1.86	0.40
44:DY:86:ARG:HD2	44:DY:100:ALA:HA	2.04	0.40
25:DA:949:C:H2'	25:DA:950:G:H8	1.86	0.40
1:CA:310:G:H5''	16:CP:31:LYS:HB2	2.03	0.40
1:AA:107:G:H2'	1:AA:108:G:O4'	2.22	0.40
33:BN:39:ARG:HA	33:BN:40:PRO:HD3	1.96	0.40
27:BD:92:ILE:HD12	27:BD:104:TYR:CE1	2.57	0.40
2:AB:37:ASN:HB2	2:AB:41:ILE:HD11	2.03	0.40
8:AH:82:HIS:O	8:AH:137:VAL:HA	2.21	0.40
29:DF:109:GLY:O	29:DF:113:ALA:N	2.43	0.40
25:BA:2862:G:H2'	25:BA:2863:C:O4'	2.22	0.40
54:D8:15:LYS:HG2	54:D8:16:ILE:N	2.35	0.40
46:B0:82:ARG:HA	46:B0:83:PRO:HD3	1.94	0.40
41:BV:8:GLY:O	41:BV:10:LYS:HE2	2.22	0.40
25:DA:2611:U:C4	51:D5:3:LYS:HG2	2.57	0.40
2:CB:97:TRP:HZ3	2:CB:176:GLU:OE2	2.04	0.40
25:DA:1498:C:O4'	25:DA:1577:C:H4'	2.22	0.40
25:BA:796:C:C5	25:BA:1664:A:C6	3.10	0.40
28:BE:12:THR:HG21	39:BT:11:GLU:HG2	2.03	0.40
3:CC:187:ALA:HB3	3:CC:198:VAL:HB	2.04	0.40
25:BA:2427:G:C5	25:BA:2428:C:C4	3.10	0.40
28:DE:150:VAL:HG13	28:DE:154:LYS:HG3	2.03	0.40
1:AA:1160:G:H8	1:AA:1160:G:H5'	1.87	0.40
3:CC:178:LEU:HD13	3:CC:178:LEU:HA	1.82	0.40
34:BO:2:ILE:HD12	34:BO:6:THR:HG21	2.02	0.40

There are no symmetry-related clashes.

5.3 Torsion angles

5.3.1 Protein backbone ⓘ

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	AB	229/256 (90%)	201 (88%)	23 (10%)	5 (2%)	10	45
2	CB	229/256 (90%)	201 (88%)	21 (9%)	7 (3%)	7	34
3	AC	204/239 (85%)	182 (89%)	20 (10%)	2 (1%)	22	70
3	CC	204/239 (85%)	181 (89%)	21 (10%)	2 (1%)	22	70
4	AD	206/209 (99%)	184 (89%)	20 (10%)	2 (1%)	22	70
4	CD	206/209 (99%)	185 (90%)	18 (9%)	3 (2%)	15	58
5	AE	146/162 (90%)	136 (93%)	8 (6%)	2 (1%)	16	60
5	CE	146/162 (90%)	134 (92%)	12 (8%)	0	100	100
6	AF	98/101 (97%)	94 (96%)	4 (4%)	0	100	100
6	CF	98/101 (97%)	94 (96%)	4 (4%)	0	100	100
7	AG	153/156 (98%)	137 (90%)	15 (10%)	1 (1%)	30	78
7	CG	153/156 (98%)	139 (91%)	13 (8%)	1 (1%)	30	78
8	AH	135/138 (98%)	131 (97%)	4 (3%)	0	100	100
8	CH	135/138 (98%)	131 (97%)	3 (2%)	1 (1%)	30	78
9	AI	125/128 (98%)	112 (90%)	10 (8%)	3 (2%)	9	42
9	CI	125/128 (98%)	115 (92%)	8 (6%)	2 (2%)	14	56
10	AJ	95/105 (90%)	84 (88%)	8 (8%)	3 (3%)	6	33
10	CJ	94/105 (90%)	84 (89%)	8 (8%)	2 (2%)	11	47
11	AK	112/129 (87%)	101 (90%)	10 (9%)	1 (1%)	25	73
11	CK	112/129 (87%)	101 (90%)	10 (9%)	1 (1%)	25	73
12	AL	120/132 (91%)	117 (98%)	3 (2%)	0	100	100
12	CL	120/132 (91%)	113 (94%)	7 (6%)	0	100	100
13	AM	121/126 (96%)	113 (93%)	7 (6%)	1 (1%)	27	76
13	CM	120/126 (95%)	113 (94%)	6 (5%)	1 (1%)	27	76
14	AN	58/61 (95%)	55 (95%)	3 (5%)	0	100	100
14	CN	58/61 (95%)	55 (95%)	3 (5%)	0	100	100
15	AO	86/89 (97%)	80 (93%)	6 (7%)	0	100	100
15	CO	86/89 (97%)	81 (94%)	5 (6%)	0	100	100
16	AP	80/88 (91%)	74 (92%)	6 (8%)	0	100	100
16	CP	80/88 (91%)	73 (91%)	6 (8%)	1 (1%)	18	62
17	AQ	97/105 (92%)	92 (95%)	5 (5%)	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%)	60 (91%)	5 (8%)	1 (2%)	15	58
18	CR	66/88 (75%)	61 (92%)	5 (8%)	0	100	100
19	AS	81/93 (87%)	76 (94%)	5 (6%)	0	100	100
19	CS	81/93 (87%)	74 (91%)	7 (9%)	0	100	100
20	AT	94/106 (89%)	84 (89%)	9 (10%)	1 (1%)	21	67
20	CT	94/106 (89%)	86 (92%)	5 (5%)	3 (3%)	6	33
21	AU	21/27 (78%)	17 (81%)	4 (19%)	0	100	100
21	CU	21/27 (78%)	18 (86%)	3 (14%)	0	100	100
24	AW	3/10 (30%)	0	2 (67%)	1 (33%)	0	0
24	CW	3/10 (30%)	1 (33%)	1 (33%)	1 (33%)	0	0
27	BD	273/276 (99%)	260 (95%)	12 (4%)	1 (0%)	43	87
27	DD	273/276 (99%)	258 (94%)	13 (5%)	2 (1%)	30	78
28	BE	202/206 (98%)	194 (96%)	7 (4%)	1 (0%)	38	84
28	DE	202/206 (98%)	195 (96%)	4 (2%)	3 (2%)	15	58
29	BF	201/210 (96%)	195 (97%)	5 (2%)	1 (0%)	38	84
29	DF	201/210 (96%)	195 (97%)	4 (2%)	2 (1%)	22	70
30	BG	179/182 (98%)	167 (93%)	9 (5%)	3 (2%)	14	54
30	DG	179/182 (98%)	161 (90%)	14 (8%)	4 (2%)	10	45
31	BH	172/180 (96%)	165 (96%)	6 (4%)	1 (1%)	33	81
31	DH	172/180 (96%)	164 (95%)	7 (4%)	1 (1%)	33	81
32	BI	144/148 (97%)	124 (86%)	14 (10%)	6 (4%)	4	24
32	DI	144/148 (97%)	124 (86%)	17 (12%)	3 (2%)	11	47
33	BN	138/140 (99%)	133 (96%)	5 (4%)	0	100	100
33	DN	138/140 (99%)	132 (96%)	5 (4%)	1 (1%)	30	78
34	BO	120/122 (98%)	116 (97%)	3 (2%)	1 (1%)	27	76
34	DO	120/122 (98%)	117 (98%)	2 (2%)	1 (1%)	27	76
35	BP	147/150 (98%)	138 (94%)	8 (5%)	1 (1%)	30	78
35	DP	147/150 (98%)	135 (92%)	9 (6%)	3 (2%)	11	48
36	BQ	139/141 (99%)	131 (94%)	7 (5%)	1 (1%)	30	78
36	DQ	139/141 (99%)	129 (93%)	9 (6%)	1 (1%)	30	78
37	BR	116/118 (98%)	110 (95%)	5 (4%)	1 (1%)	25	73

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
37	DR	116/118 (98%)	111 (96%)	5 (4%)	0	100	100
38	BS	108/112 (96%)	103 (95%)	4 (4%)	1 (1%)	25	73
38	DS	108/112 (96%)	102 (94%)	5 (5%)	1 (1%)	25	73
39	BT	129/146 (88%)	123 (95%)	6 (5%)	0	100	100
39	DT	129/146 (88%)	127 (98%)	2 (2%)	0	100	100
40	BU	114/118 (97%)	113 (99%)	1 (1%)	0	100	100
40	DU	114/118 (97%)	113 (99%)	1 (1%)	0	100	100
41	BV	99/101 (98%)	93 (94%)	5 (5%)	1 (1%)	22	70
41	DV	99/101 (98%)	94 (95%)	4 (4%)	1 (1%)	22	70
42	BW	110/113 (97%)	108 (98%)	2 (2%)	0	100	100
42	DW	110/113 (97%)	108 (98%)	2 (2%)	0	100	100
43	BX	93/96 (97%)	91 (98%)	2 (2%)	0	100	100
43	DX	93/96 (97%)	89 (96%)	4 (4%)	0	100	100
44	BY	105/110 (96%)	98 (93%)	7 (7%)	0	100	100
44	DY	105/110 (96%)	97 (92%)	8 (8%)	0	100	100
45	BZ	169/206 (82%)	150 (89%)	18 (11%)	1 (1%)	33	81
45	DZ	172/206 (84%)	162 (94%)	10 (6%)	0	100	100
46	B0	81/85 (95%)	76 (94%)	4 (5%)	1 (1%)	19	64
46	D0	81/85 (95%)	76 (94%)	4 (5%)	1 (1%)	19	64
47	B1	95/98 (97%)	93 (98%)	1 (1%)	1 (1%)	21	67
47	D1	95/98 (97%)	92 (97%)	2 (2%)	1 (1%)	21	67
48	B2	68/72 (94%)	68 (100%)	0	0	100	100
48	D2	68/72 (94%)	67 (98%)	1 (2%)	0	100	100
49	B3	57/60 (95%)	56 (98%)	1 (2%)	0	100	100
49	D3	57/60 (95%)	57 (100%)	0	0	100	100
50	B4	67/71 (94%)	53 (79%)	9 (13%)	5 (8%)	2	8
50	D4	67/71 (94%)	52 (78%)	8 (12%)	7 (10%)	1	4
51	B5	57/60 (95%)	53 (93%)	4 (7%)	0	100	100
51	D5	57/60 (95%)	54 (95%)	3 (5%)	0	100	100
52	B6	51/54 (94%)	48 (94%)	3 (6%)	0	100	100
52	D6	51/54 (94%)	47 (92%)	4 (8%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
53	B7	46/49 (94%)	46 (100%)	0	0	100	100
53	D7	46/49 (94%)	44 (96%)	1 (2%)	1 (2%)	10	45
54	B8	62/65 (95%)	60 (97%)	2 (3%)	0	100	100
54	D8	62/65 (95%)	61 (98%)	1 (2%)	0	100	100
55	B9	35/37 (95%)	34 (97%)	1 (3%)	0	100	100
55	D9	35/37 (95%)	34 (97%)	1 (3%)	0	100	100
All	All	11415/12148 (94%)	10659 (93%)	648 (6%)	108 (1%)	25	73

All (108) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	AB	125	PRO
3	AC	107	GLN
4	AD	166	LYS
9	AI	54	ASP
10	AJ	31	GLY
10	AJ	79	ARG
11	AK	49	GLY
18	AR	60	ALA
27	BD	275	LYS
29	BF	130	ALA
31	BH	126	PRO
36	BQ	60	ARG
50	B4	55	ARG
50	B4	68	ARG
2	CB	16	HIS
2	CB	20	GLU
2	CB	21	ARG
2	CB	126	GLU
7	CG	7	ALA
9	CI	54	ASP
10	CJ	79	ARG
20	CT	95	ALA
20	CT	99	LEU
29	DF	21	ALA
29	DF	130	ALA
30	DG	14	GLU
30	DG	47	LYS
30	DG	81	LYS
31	DH	126	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	DI	10	GLU
36	DQ	60	ARG
47	D1	3	LYS
50	D4	38	LYS
50	D4	39	CYS
50	D4	45	GLY
50	D4	55	ARG
50	D4	60	GLN
50	D4	63	TYR
53	D7	46	VAL
2	AB	16	HIS
2	AB	19	HIS
5	AE	85	GLY
5	AE	140	ARG
7	AG	81	GLY
9	AI	56	LEU
9	AI	95	LYS
10	AJ	56	HIS
24	AW	7	PRO
32	BI	73	GLU
34	BO	5	GLN
35	BP	29	LYS
38	BS	60	GLY
45	BZ	152	ALA
46	B0	13	GLY
47	B1	3	LYS
50	B4	47	GLN
50	B4	56	VAL
50	B4	57	GLU
2	CB	8	LYS
13	CM	106	ASN
27	DD	239	ARG
28	DE	73	GLU
28	DE	94	GLU
32	DI	117	GLU
33	DN	2	LYS
34	DO	5	GLN
30	BG	47	LYS
30	BG	51	ARG
2	CB	231	GLU
3	CC	181	ASN
11	CK	49	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	CT	102	GLY
28	DE	52	LEU
30	DG	51	ARG
38	DS	84	GLN
41	DV	79	VAL
4	AD	164	ALA
13	AM	5	ALA
28	BE	52	LEU
32	BI	39	ALA
2	CB	123	ALA
4	CD	47	ARG
4	CD	129	ASN
10	CJ	56	HIS
32	DI	119	PRO
35	DP	38	GLN
50	D4	46	GLN
2	AB	37	ASN
30	BG	126	ASP
32	BI	105	HIS
32	BI	107	VAL
41	BV	79	VAL
3	CC	91	LEU
9	CI	56	LEU
27	DD	3	VAL
35	DP	29	LYS
35	DP	45	LEU
46	D0	4	LYS
3	AC	66	VAL
20	AT	102	GLY
32	BI	10	GLU
37	BR	83	ILE
8	CH	73	ASP
32	BI	106	GLY
16	CP	53	VAL
24	CW	7	PRO
2	AB	124	SER
4	CD	136	PRO

5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	AB	192/220 (87%)	154 (80%)	38 (20%)	2	11
2	CB	187/220 (85%)	155 (83%)	32 (17%)	3	15
3	AC	143/188 (76%)	128 (90%)	15 (10%)	10	37
3	CC	140/188 (74%)	123 (88%)	17 (12%)	7	29
4	AD	170/181 (94%)	146 (86%)	24 (14%)	5	23
4	CD	173/181 (96%)	152 (88%)	21 (12%)	7	29
5	AE	113/123 (92%)	102 (90%)	11 (10%)	12	42
5	CE	114/123 (93%)	104 (91%)	10 (9%)	14	48
6	AF	83/90 (92%)	76 (92%)	7 (8%)	16	51
6	CF	85/90 (94%)	79 (93%)	6 (7%)	21	61
7	AG	119/127 (94%)	100 (84%)	19 (16%)	3	17
7	CG	120/127 (94%)	102 (85%)	18 (15%)	4	20
8	AH	114/119 (96%)	97 (85%)	17 (15%)	4	20
8	CH	114/119 (96%)	102 (90%)	12 (10%)	10	37
9	AI	90/99 (91%)	78 (87%)	12 (13%)	6	25
9	CI	89/99 (90%)	75 (84%)	14 (16%)	4	18
10	AJ	66/92 (72%)	59 (89%)	7 (11%)	10	36
10	CJ	69/92 (75%)	65 (94%)	4 (6%)	28	71
11	AK	82/99 (83%)	75 (92%)	7 (8%)	15	51
11	CK	83/99 (84%)	77 (93%)	6 (7%)	21	59
12	AL	97/109 (89%)	87 (90%)	10 (10%)	10	38
12	CL	97/109 (89%)	83 (86%)	14 (14%)	5	22
13	AM	93/101 (92%)	81 (87%)	12 (13%)	6	26
13	CM	92/101 (91%)	78 (85%)	14 (15%)	4	20
14	AN	49/50 (98%)	41 (84%)	8 (16%)	3	17
14	CN	49/50 (98%)	41 (84%)	8 (16%)	3	17
15	AO	78/80 (98%)	68 (87%)	10 (13%)	6	27
15	CO	78/80 (98%)	66 (85%)	12 (15%)	4	19
16	AP	69/74 (93%)	61 (88%)	8 (12%)	8	31
16	CP	68/74 (92%)	64 (94%)	4 (6%)	28	70

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
17	AQ	94/97 (97%)	88 (94%)	6 (6%)	25	66
17	CQ	94/97 (97%)	86 (92%)	8 (8%)	15	51
18	AR	59/77 (77%)	56 (95%)	3 (5%)	33	76
18	CR	59/77 (77%)	53 (90%)	6 (10%)	11	38
19	AS	69/80 (86%)	63 (91%)	6 (9%)	15	49
19	CS	67/80 (84%)	59 (88%)	8 (12%)	8	30
20	AT	70/82 (85%)	60 (86%)	10 (14%)	5	22
20	CT	70/82 (85%)	61 (87%)	9 (13%)	6	26
21	AU	18/22 (82%)	15 (83%)	3 (17%)	3	16
21	CU	18/22 (82%)	16 (89%)	2 (11%)	9	34
24	AW	3/3 (100%)	2 (67%)	1 (33%)	0	2
24	CW	3/3 (100%)	2 (67%)	1 (33%)	0	2
27	BD	215/218 (99%)	193 (90%)	22 (10%)	11	38
27	DD	215/218 (99%)	195 (91%)	20 (9%)	13	45
28	BE	164/166 (99%)	140 (85%)	24 (15%)	5	21
28	DE	164/166 (99%)	140 (85%)	24 (15%)	5	21
29	BF	160/166 (96%)	145 (91%)	15 (9%)	13	44
29	DF	159/166 (96%)	142 (89%)	17 (11%)	10	35
30	BG	143/156 (92%)	124 (87%)	19 (13%)	6	25
30	DG	142/156 (91%)	117 (82%)	25 (18%)	3	14
31	BH	144/148 (97%)	128 (89%)	16 (11%)	9	34
31	DH	144/148 (97%)	131 (91%)	13 (9%)	14	47
32	BI	110/124 (89%)	85 (77%)	25 (23%)	1	6
32	DI	104/124 (84%)	90 (86%)	14 (14%)	6	24
33	BN	118/119 (99%)	100 (85%)	18 (15%)	4	19
33	DN	118/119 (99%)	102 (86%)	16 (14%)	5	24
34	BO	100/100 (100%)	95 (95%)	5 (5%)	34	77
34	DO	100/100 (100%)	92 (92%)	8 (8%)	17	53
35	BP	115/116 (99%)	103 (90%)	12 (10%)	10	37
35	DP	115/116 (99%)	102 (89%)	13 (11%)	9	33
36	BQ	111/111 (100%)	96 (86%)	15 (14%)	6	24

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
36	DQ	111/111 (100%)	97 (87%)	14 (13%)	7	27
37	BR	101/101 (100%)	83 (82%)	18 (18%)	2	14
37	DR	101/101 (100%)	84 (83%)	17 (17%)	3	15
38	BS	87/88 (99%)	78 (90%)	9 (10%)	10	38
38	DS	85/88 (97%)	73 (86%)	12 (14%)	5	23
39	BT	115/127 (91%)	103 (90%)	12 (10%)	10	37
39	DT	113/127 (89%)	103 (91%)	10 (9%)	14	48
40	BU	93/94 (99%)	85 (91%)	8 (9%)	15	50
40	DU	93/94 (99%)	79 (85%)	14 (15%)	4	20
41	BV	80/82 (98%)	68 (85%)	12 (15%)	4	20
41	DV	80/82 (98%)	70 (88%)	10 (12%)	7	28
42	BW	90/92 (98%)	83 (92%)	7 (8%)	18	55
42	DW	90/92 (98%)	82 (91%)	8 (9%)	14	48
43	BX	77/78 (99%)	74 (96%)	3 (4%)	43	85
43	DX	77/78 (99%)	73 (95%)	4 (5%)	32	75
44	BY	85/91 (93%)	76 (89%)	9 (11%)	10	36
44	DY	85/91 (93%)	77 (91%)	8 (9%)	13	44
45	BZ	145/179 (81%)	127 (88%)	18 (12%)	7	28
45	DZ	145/179 (81%)	128 (88%)	17 (12%)	8	31
46	B0	65/67 (97%)	62 (95%)	3 (5%)	37	80
46	D0	65/67 (97%)	60 (92%)	5 (8%)	18	56
47	B1	80/83 (96%)	70 (88%)	10 (12%)	7	28
47	D1	80/83 (96%)	69 (86%)	11 (14%)	5	24
48	B2	65/67 (97%)	56 (86%)	9 (14%)	5	24
48	D2	65/67 (97%)	57 (88%)	8 (12%)	7	28
49	B3	51/52 (98%)	44 (86%)	7 (14%)	5	24
49	D3	50/52 (96%)	42 (84%)	8 (16%)	3	17
50	B4	59/63 (94%)	47 (80%)	12 (20%)	2	9
50	D4	53/63 (84%)	44 (83%)	9 (17%)	3	15
51	B5	50/52 (96%)	45 (90%)	5 (10%)	11	39
51	D5	50/52 (96%)	45 (90%)	5 (10%)	11	39

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
52	B6	51/52 (98%)	47 (92%)	4 (8%)	18	55
52	D6	50/52 (96%)	43 (86%)	7 (14%)	5	23
53	B7	41/42 (98%)	39 (95%)	2 (5%)	35	78
53	D7	41/42 (98%)	38 (93%)	3 (7%)	20	59
54	B8	53/55 (96%)	50 (94%)	3 (6%)	29	71
54	D8	54/55 (98%)	52 (96%)	2 (4%)	45	86
55	B9	34/34 (100%)	33 (97%)	1 (3%)	55	90
55	D9	34/34 (100%)	31 (91%)	3 (9%)	14	48
All	All	9325/10072 (93%)	8217 (88%)	1108 (12%)	8	30

All (1108) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	AB	8	LYS
2	AB	11	LEU
2	AB	15	VAL
2	AB	20	GLU
2	AB	21	ARG
2	AB	24	TRP
2	AB	49	GLU
2	AB	67	THR
2	AB	71	VAL
2	AB	76	GLN
2	AB	80	ILE
2	AB	81	VAL
2	AB	96	ARG
2	AB	108	ILE
2	AB	109	SER
2	AB	114	ARG
2	AB	130	ARG
2	AB	142	LEU
2	AB	144	ARG
2	AB	153	ARG
2	AB	155	LEU
2	AB	156	LYS
2	AB	157	ARG
2	AB	158	LEU
2	AB	170	GLU
2	AB	178	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	AB	185	ILE
2	AB	187	LEU
2	AB	190	THR
2	AB	196	LEU
2	AB	200	ILE
2	AB	209	ARG
2	AB	217	ARG
2	AB	221	LEU
2	AB	222	ILE
2	AB	223	ILE
2	AB	226	ARG
2	AB	233	SER
3	AC	3	ASN
3	AC	27	LYS
3	AC	28	GLN
3	AC	29	TYR
3	AC	52	LEU
3	AC	54	ARG
3	AC	82	GLU
3	AC	98	ASN
3	AC	104	GLN
3	AC	118	GLN
3	AC	119	ARG
3	AC	131	ARG
3	AC	134	ILE
3	AC	164	ARG
3	AC	165	THR
4	AD	5	ILE
4	AD	19	LEU
4	AD	31	CYS
4	AD	34	GLU
4	AD	58	LEU
4	AD	85	LYS
4	AD	86	LYS
4	AD	91	SER
4	AD	108	LEU
4	AD	112	VAL
4	AD	120	LEU
4	AD	122	ARG
4	AD	127	THR
4	AD	135	LEU
4	AD	141	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	AD	155	LEU
4	AD	158	ILE
4	AD	168	ARG
4	AD	177	ASP
4	AD	182	LYS
4	AD	184	LYS
4	AD	188	LEU
4	AD	196	LEU
4	AD	201	GLN
5	AE	12	LEU
5	AE	18	ARG
5	AE	31	LEU
5	AE	38	GLN
5	AE	40	ARG
5	AE	41	VAL
5	AE	47	LYS
5	AE	71	LEU
5	AE	75	THR
5	AE	78	HIS
5	AE	79	GLU
6	AF	40	VAL
6	AF	55	ASP
6	AF	69	GLU
6	AF	70	ASP
6	AF	74	ASP
6	AF	82	ARG
6	AF	94	GLN
7	AG	8	GLU
7	AG	9	VAL
7	AG	13	GLN
7	AG	50	ILE
7	AG	51	GLN
7	AG	52	GLU
7	AG	57	GLU
7	AG	59	LEU
7	AG	72	ARG
7	AG	76	ARG
7	AG	79	ARG
7	AG	97	GLN
7	AG	104	LEU
7	AG	113	GLU
7	AG	114	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	AG	129	GLU
7	AG	138	LYS
7	AG	140	ASP
7	AG	144	MET
8	AH	21	LYS
8	AH	25	ASP
8	AH	26	VAL
8	AH	37	ARG
8	AH	50	ARG
8	AH	52	ASP
8	AH	53	VAL
8	AH	54	ASP
8	AH	63	LEU
8	AH	75	ARG
8	AH	78	GLN
8	AH	97	VAL
8	AH	98	LYS
8	AH	99	GLU
8	AH	107	LEU
8	AH	112	LEU
8	AH	115	SER
9	AI	23	ASN
9	AI	27	THR
9	AI	42	ARG
9	AI	53	VAL
9	AI	54	ASP
9	AI	56	LEU
9	AI	66	ARG
9	AI	75	ASP
9	AI	81	ILE
9	AI	103	THR
9	AI	127	LYS
9	AI	128	ARG
10	AJ	5	ARG
10	AJ	7	LYS
10	AJ	16	LEU
10	AJ	30	SER
10	AJ	68	HIS
10	AJ	84	GLN
10	AJ	92	THR
11	AK	16	SER
11	AK	31	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	AK	48	ILE
11	AK	70	LYS
11	AK	95	ILE
11	AK	96	ARG
11	AK	109	VAL
12	AL	6	THR
12	AL	33	ARG
12	AL	53	ARG
12	AL	55	VAL
12	AL	57	LYS
12	AL	67	THR
12	AL	70	ILE
12	AL	83	VAL
12	AL	117	ARG
12	AL	118	SER
13	AM	3	ARG
13	AM	4	ILE
13	AM	8	GLU
13	AM	15	VAL
13	AM	19	LEU
13	AM	43	THR
13	AM	47	ASP
13	AM	50	GLU
13	AM	73	GLU
13	AM	99	ARG
13	AM	110	ARG
13	AM	121	LYS
14	AN	3	ARG
14	AN	6	LEU
14	AN	7	ILE
14	AN	18	VAL
14	AN	22	THR
14	AN	23	ARG
14	AN	33	VAL
14	AN	44	LEU
15	AO	3	ILE
15	AO	5	LYS
15	AO	22	THR
15	AO	26	GLU
15	AO	38	ARG
15	AO	39	LEU
15	AO	41	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
15	AO	76	GLU
15	AO	83	GLU
15	AO	84	LYS
16	AP	5	ARG
16	AP	8	ARG
16	AP	19	ILE
16	AP	20	VAL
16	AP	28	ARG
16	AP	50	LYS
16	AP	54	GLU
16	AP	67	THR
17	AQ	14	LYS
17	AQ	53	LEU
17	AQ	57	VAL
17	AQ	60	ILE
17	AQ	74	LEU
17	AQ	100	LYS
18	AR	26	LEU
18	AR	32	ARG
18	AR	54	ARG
19	AS	6	LYS
19	AS	28	LYS
19	AS	37	ARG
19	AS	43	GLU
19	AS	63	THR
19	AS	65	ASN
20	AT	8	ARG
20	AT	9	ASN
20	AT	10	LEU
20	AT	13	LEU
20	AT	24	LEU
20	AT	45	GLN
20	AT	46	GLU
20	AT	56	MET
20	AT	58	LYS
20	AT	62	LEU
21	AU	7	ARG
21	AU	9	ARG
21	AU	10	ARG
24	AW	2	VAL
27	BD	3	VAL
27	BD	12	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
27	BD	13	ARG
27	BD	69	ARG
27	BD	88	ARG
27	BD	94	LEU
27	BD	99	ASP
27	BD	103	ARG
27	BD	106	ILE
27	BD	111	LEU
27	BD	116	GLN
27	BD	138	VAL
27	BD	142	VAL
27	BD	162	SER
27	BD	200	ASP
27	BD	211	ARG
27	BD	221	VAL
27	BD	229	VAL
27	BD	242	ARG
27	BD	257	LEU
27	BD	260	ARG
27	BD	274	ARG
28	BE	1	MET
28	BE	7	VAL
28	BE	12	THR
28	BE	21	VAL
28	BE	24	THR
28	BE	40	GLU
28	BE	45	THR
28	BE	49	LEU
28	BE	73	GLU
28	BE	82	ARG
28	BE	89	ASP
28	BE	93	VAL
28	BE	97	LYS
28	BE	116	VAL
28	BE	119	ARG
28	BE	128	SER
28	BE	144	ARG
28	BE	145	LYS
28	BE	154	LYS
28	BE	163	GLU
28	BE	167	VAL
28	BE	170	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	BE	175	VAL
28	BE	181	LEU
29	BF	19	GLU
29	BF	24	LEU
29	BF	33	LEU
29	BF	53	THR
29	BF	57	VAL
29	BF	74	ARG
29	BF	106	ARG
29	BF	108	LYS
29	BF	110	LEU
29	BF	125	LEU
29	BF	140	LEU
29	BF	170	LEU
29	BF	192	LEU
29	BF	197	ASP
29	BF	200	GLU
30	BG	7	LEU
30	BG	28	VAL
30	BG	43	LEU
30	BG	45	GLU
30	BG	60	LEU
30	BG	78	SER
30	BG	81	LYS
30	BG	82	LEU
30	BG	86	MET
30	BG	91	ARG
30	BG	133	LEU
30	BG	136	ARG
30	BG	140	ILE
30	BG	143	GLU
30	BG	146	TYR
30	BG	148	MET
30	BG	159	VAL
30	BG	170	ARG
30	BG	181	ARG
31	BH	3	ARG
31	BH	6	ARG
31	BH	13	LYS
31	BH	24	VAL
31	BH	41	MET
31	BH	45	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	BH	56	SER
31	BH	59	ARG
31	BH	60	ARG
31	BH	69	ARG
31	BH	98	LEU
31	BH	105	LEU
31	BH	116	GLU
31	BH	129	THR
31	BH	139	GLN
31	BH	175	LYS
32	BI	5	LEU
32	BI	9	LEU
32	BI	38	LEU
32	BI	41	GLU
32	BI	43	ASN
32	BI	50	ARG
32	BI	57	ARG
32	BI	60	GLU
32	BI	61	ARG
32	BI	64	GLU
32	BI	66	GLU
32	BI	68	LEU
32	BI	74	ASN
32	BI	75	LEU
32	BI	77	LEU
32	BI	78	THR
32	BI	86	THR
32	BI	92	VAL
32	BI	96	ASP
32	BI	101	LEU
32	BI	102	SER
32	BI	103	ARG
32	BI	109	ILE
32	BI	140	LEU
32	BI	144	VAL
33	BN	5	VAL
33	BN	12	ARG
33	BN	33	LEU
33	BN	34	LEU
33	BN	46	VAL
33	BN	48	MET
33	BN	61	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	BN	67	LEU
33	BN	68	GLU
33	BN	83	LYS
33	BN	87	LEU
33	BN	97	ARG
33	BN	99	LEU
33	BN	112	LEU
33	BN	120	LEU
33	BN	121	LYS
33	BN	133	GLN
33	BN	137	LYS
34	BO	21	CYS
34	BO	24	VAL
34	BO	92	GLU
34	BO	98	VAL
34	BO	108	GLU
35	BP	15	ARG
35	BP	21	ARG
35	BP	59	LEU
35	BP	65	ARG
35	BP	70	GLN
35	BP	95	VAL
35	BP	98	GLU
35	BP	106	LEU
35	BP	112	LEU
35	BP	125	VAL
35	BP	135	LEU
35	BP	149	GLU
36	BQ	1	MET
36	BQ	5	ARG
36	BQ	7	MET
36	BQ	8	LYS
36	BQ	21	THR
36	BQ	45	GLN
36	BQ	54	MET
36	BQ	55	VAL
36	BQ	56	ARG
36	BQ	60	ARG
36	BQ	75	THR
36	BQ	81	VAL
36	BQ	85	LYS
36	BQ	109	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BQ	110	THR
37	BR	1	MET
37	BR	6	SER
37	BR	8	ARG
37	BR	18	LEU
37	BR	28	LEU
37	BR	29	LEU
37	BR	33	ARG
37	BR	36	THR
37	BR	44	LEU
37	BR	54	LEU
37	BR	60	LEU
37	BR	65	LEU
37	BR	67	LEU
37	BR	75	LEU
37	BR	79	LEU
37	BR	86	ARG
37	BR	100	LEU
37	BR	111	LEU
38	BS	19	LYS
38	BS	20	ARG
38	BS	36	TYR
38	BS	57	LYS
38	BS	59	LYS
38	BS	61	ASN
38	BS	78	LEU
38	BS	83	LYS
38	BS	103	GLU
39	BT	6	LEU
39	BT	13	ARG
39	BT	17	THR
39	BT	28	VAL
39	BT	39	ARG
39	BT	49	VAL
39	BT	53	ARG
39	BT	74	ARG
39	BT	78	LEU
39	BT	89	VAL
39	BT	96	ARG
39	BT	118	ARG
40	BU	8	VAL
40	BU	31	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	BU	36	ARG
40	BU	59	ARG
40	BU	74	LEU
40	BU	95	LEU
40	BU	104	GLN
40	BU	117	GLN
41	BV	10	LYS
41	BV	18	LEU
41	BV	21	ARG
41	BV	39	LEU
41	BV	43	GLU
41	BV	46	VAL
41	BV	51	VAL
41	BV	61	VAL
41	BV	62	LEU
41	BV	72	VAL
41	BV	73	SER
41	BV	79	VAL
42	BW	11	ARG
42	BW	15	ARG
42	BW	17	VAL
42	BW	23	LEU
42	BW	51	LEU
42	BW	67	ASP
42	BW	107	LEU
43	BX	57	LEU
43	BX	66	LEU
43	BX	70	LEU
44	BY	2	ARG
44	BY	7	VAL
44	BY	43	ASN
44	BY	72	VAL
44	BY	73	ARG
44	BY	90	LEU
44	BY	91	GLU
44	BY	102	CYS
44	BY	107	ASP
45	BZ	5	LEU
45	BZ	6	LYS
45	BZ	11	GLU
45	BZ	19	ARG
45	BZ	42	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
45	BZ	61	LEU
45	BZ	86	VAL
45	BZ	87	ASP
45	BZ	91	LEU
45	BZ	107	THR
45	BZ	126	VAL
45	BZ	132	ASN
45	BZ	135	GLU
45	BZ	136	PHE
45	BZ	144	LEU
45	BZ	155	LEU
45	BZ	162	GLU
45	BZ	170	THR
46	B0	10	THR
46	B0	20	ARG
46	B0	55	ARG
47	B1	21	ARG
47	B1	26	ARG
47	B1	30	VAL
47	B1	35	THR
47	B1	40	ARG
47	B1	52	ARG
47	B1	59	THR
47	B1	75	GLU
47	B1	89	GLU
47	B1	95	LEU
48	B2	28	LYS
48	B2	30	ARG
48	B2	41	ILE
48	B2	52	ASP
48	B2	53	LEU
48	B2	55	ARG
48	B2	64	LEU
48	B2	68	ARG
48	B2	70	GLN
49	B3	6	VAL
49	B3	8	LEU
49	B3	23	LEU
49	B3	29	ARG
49	B3	32	GLN
49	B3	55	ARG
49	B3	58	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	B4	5	ILE
50	B4	33	VAL
50	B4	34	GLU
50	B4	44	THR
50	B4	46	GLN
50	B4	48	ARG
50	B4	49	PHE
50	B4	56	VAL
50	B4	58	ARG
50	B4	61	ARG
50	B4	63	TYR
50	B4	69	LYS
51	B5	6	VAL
51	B5	29	THR
51	B5	40	LYS
51	B5	58	LEU
51	B5	60	VAL
52	B6	4	GLU
52	B6	13	CYS
52	B6	14	THR
52	B6	48	VAL
53	B7	1	MET
53	B7	47	ARG
54	B8	13	ARG
54	B8	14	VAL
54	B8	31	HIS
55	B9	17	ILE
2	CB	11	LEU
2	CB	23	ARG
2	CB	24	TRP
2	CB	35	GLU
2	CB	44	LEU
2	CB	67	THR
2	CB	71	VAL
2	CB	76	GLN
2	CB	80	ILE
2	CB	94	ASN
2	CB	96	ARG
2	CB	115	LEU
2	CB	126	GLU
2	CB	128	GLU
2	CB	140	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	CB	142	LEU
2	CB	144	ARG
2	CB	153	ARG
2	CB	154	LEU
2	CB	158	LEU
2	CB	160	ASP
2	CB	169	LYS
2	CB	178	ARG
2	CB	185	ILE
2	CB	187	LEU
2	CB	189	ASP
2	CB	200	ILE
2	CB	221	LEU
2	CB	224	GLN
2	CB	226	ARG
2	CB	233	SER
2	CB	235	SER
3	CC	3	ASN
3	CC	20	SER
3	CC	29	TYR
3	CC	44	GLU
3	CC	52	LEU
3	CC	70	VAL
3	CC	82	GLU
3	CC	98	ASN
3	CC	101	LEU
3	CC	104	GLN
3	CC	105	GLU
3	CC	115	LEU
3	CC	131	ARG
3	CC	152	ILE
3	CC	164	ARG
3	CC	165	THR
3	CC	179	ARG
4	CD	10	ARG
4	CD	19	LEU
4	CD	33	MET
4	CD	34	GLU
4	CD	47	ARG
4	CD	58	LEU
4	CD	85	LYS
4	CD	96	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	CD	110	PHE
4	CD	122	ARG
4	CD	127	THR
4	CD	135	LEU
4	CD	150	GLU
4	CD	157	LEU
4	CD	170	VAL
4	CD	177	ASP
4	CD	184	LYS
4	CD	187	ARG
4	CD	188	LEU
4	CD	191	ARG
4	CD	194	LEU
5	CE	12	LEU
5	CE	18	ARG
5	CE	31	LEU
5	CE	40	ARG
5	CE	41	VAL
5	CE	47	LYS
5	CE	71	LEU
5	CE	75	THR
5	CE	79	GLU
5	CE	150	ARG
6	CF	10	LEU
6	CF	23	LYS
6	CF	28	ARG
6	CF	40	VAL
6	CF	41	GLU
6	CF	69	GLU
7	CG	9	VAL
7	CG	10	ARG
7	CG	12	LEU
7	CG	13	GLN
7	CG	51	GLN
7	CG	52	GLU
7	CG	57	GLU
7	CG	58	PRO
7	CG	59	LEU
7	CG	72	ARG
7	CG	75	VAL
7	CG	76	ARG
7	CG	85	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	CG	97	GLN
7	CG	113	GLU
7	CG	114	ARG
7	CG	131	LYS
7	CG	140	ASP
8	CH	21	LYS
8	CH	25	ASP
8	CH	38	ILE
8	CH	52	ASP
8	CH	53	VAL
8	CH	54	ASP
8	CH	78	GLN
8	CH	84	ARG
8	CH	97	VAL
8	CH	98	LYS
8	CH	99	GLU
8	CH	112	LEU
9	CI	7	THR
9	CI	23	ASN
9	CI	27	THR
9	CI	33	PHE
9	CI	42	ARG
9	CI	64	THR
9	CI	75	ASP
9	CI	81	ILE
9	CI	86	VAL
9	CI	102	LEU
9	CI	108	VAL
9	CI	124	GLN
9	CI	125	TYR
9	CI	128	ARG
10	CJ	23	ILE
10	CJ	29	ARG
10	CJ	74	ILE
10	CJ	92	THR
11	CK	33	THR
11	CK	54	ARG
11	CK	79	SER
11	CK	95	ILE
11	CK	96	ARG
11	CK	126	ARG
12	CL	33	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	CL	34	ARG
12	CL	50	SER
12	CL	52	LEU
12	CL	53	ARG
12	CL	55	VAL
12	CL	59	ARG
12	CL	60	LEU
12	CL	70	ILE
12	CL	83	VAL
12	CL	97	ARG
12	CL	117	ARG
12	CL	118	SER
12	CL	123	LYS
13	CM	3	ARG
13	CM	4	ILE
13	CM	19	LEU
13	CM	27	LYS
13	CM	47	ASP
13	CM	49	THR
13	CM	50	GLU
13	CM	56	LEU
13	CM	70	LEU
13	CM	99	ARG
13	CM	104	ARG
13	CM	106	ASN
13	CM	110	ARG
13	CM	121	LYS
14	CN	3	ARG
14	CN	7	ILE
14	CN	17	LYS
14	CN	18	VAL
14	CN	22	THR
14	CN	23	ARG
14	CN	44	LEU
14	CN	57	ARG
15	CO	3	ILE
15	CO	5	LYS
15	CO	7	GLU
15	CO	22	THR
15	CO	24	SER
15	CO	26	GLU
15	CO	39	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
15	CO	48	LYS
15	CO	54	ARG
15	CO	64	ARG
15	CO	76	GLU
15	CO	83	GLU
16	CP	5	ARG
16	CP	8	ARG
16	CP	67	THR
16	CP	69	THR
17	CQ	6	LEU
17	CQ	9	VAL
17	CQ	53	LEU
17	CQ	57	VAL
17	CQ	60	ILE
17	CQ	66	SER
17	CQ	74	LEU
17	CQ	83	ASP
18	CR	26	LEU
18	CR	32	ARG
18	CR	41	LYS
18	CR	54	ARG
18	CR	64	ARG
18	CR	76	LEU
19	CS	22	LEU
19	CS	28	LYS
19	CS	30	LEU
19	CS	33	THR
19	CS	43	GLU
19	CS	56	GLN
19	CS	63	THR
19	CS	65	ASN
20	CT	24	LEU
20	CT	38	LYS
20	CT	46	GLU
20	CT	56	MET
20	CT	62	LEU
20	CT	71	THR
20	CT	80	ARG
20	CT	90	GLN
20	CT	99	LEU
21	CU	10	ARG
21	CU	12	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	CW	2	VAL
27	DD	13	ARG
27	DD	61	LEU
27	DD	69	ARG
27	DD	88	ARG
27	DD	94	LEU
27	DD	106	ILE
27	DD	111	LEU
27	DD	116	GLN
27	DD	134	ARG
27	DD	211	ARG
27	DD	217	ARG
27	DD	221	VAL
27	DD	229	VAL
27	DD	242	ARG
27	DD	257	LEU
27	DD	259	THR
27	DD	260	ARG
27	DD	274	ARG
27	DD	275	LYS
27	DD	276	LYS
28	DE	1	MET
28	DE	9	VAL
28	DE	12	THR
28	DE	21	VAL
28	DE	24	THR
28	DE	33	VAL
28	DE	40	GLU
28	DE	47	VAL
28	DE	49	LEU
28	DE	52	LEU
28	DE	58	ARG
28	DE	73	GLU
28	DE	75	VAL
28	DE	82	ARG
28	DE	111	ARG
28	DE	116	VAL
28	DE	119	ARG
28	DE	144	ARG
28	DE	145	LYS
28	DE	163	GLU
28	DE	167	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	DE	170	LEU
28	DE	175	VAL
28	DE	181	LEU
29	DF	12	LEU
29	DF	13	SER
29	DF	15	SER
29	DF	19	GLU
29	DF	24	LEU
29	DF	27	GLU
29	DF	33	LEU
29	DF	74	ARG
29	DF	106	ARG
29	DF	107	LYS
29	DF	108	LYS
29	DF	110	LEU
29	DF	135	LYS
29	DF	137	LYS
29	DF	183	VAL
29	DF	192	LEU
29	DF	200	GLU
30	DG	5	VAL
30	DG	21	ARG
30	DG	28	VAL
30	DG	31	VAL
30	DG	33	ARG
30	DG	36	LYS
30	DG	43	LEU
30	DG	45	GLU
30	DG	49	ASP
30	DG	60	LEU
30	DG	84	LYS
30	DG	91	ARG
30	DG	98	ARG
30	DG	113	ARG
30	DG	115	ARG
30	DG	128	ARG
30	DG	133	LEU
30	DG	136	ARG
30	DG	140	ILE
30	DG	143	GLU
30	DG	145	THR
30	DG	148	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
30	DG	153	ARG
30	DG	159	VAL
30	DG	170	ARG
31	DH	15	VAL
31	DH	25	LYS
31	DH	42	ARG
31	DH	69	ARG
31	DH	76	VAL
31	DH	81	GLU
31	DH	95	ARG
31	DH	98	LEU
31	DH	105	LEU
31	DH	106	THR
31	DH	134	SER
31	DH	139	GLN
31	DH	171	LEU
32	DI	5	LEU
32	DI	19	VAL
32	DI	40	THR
32	DI	43	ASN
32	DI	44	LEU
32	DI	57	ARG
32	DI	61	ARG
32	DI	68	LEU
32	DI	73	GLU
32	DI	75	LEU
32	DI	77	LEU
32	DI	121	LYS
32	DI	140	LEU
32	DI	142	VAL
33	DN	5	VAL
33	DN	12	ARG
33	DN	33	LEU
33	DN	34	LEU
33	DN	38	HIS
33	DN	46	VAL
33	DN	48	MET
33	DN	61	ARG
33	DN	85	ILE
33	DN	87	LEU
33	DN	97	ARG
33	DN	99	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	DN	112	LEU
33	DN	120	LEU
33	DN	133	GLN
33	DN	137	LYS
34	DO	8	LEU
34	DO	24	VAL
34	DO	47	ILE
34	DO	58	VAL
34	DO	69	ILE
34	DO	92	GLU
34	DO	98	VAL
34	DO	108	GLU
35	DP	1	MET
35	DP	2	LYS
35	DP	3	LEU
35	DP	15	ARG
35	DP	21	ARG
35	DP	55	ARG
35	DP	65	ARG
35	DP	76	LYS
35	DP	77	ARG
35	DP	96	THR
35	DP	106	LEU
35	DP	112	LEU
35	DP	135	LEU
36	DQ	1	MET
36	DQ	7	MET
36	DQ	8	LYS
36	DQ	11	LYS
36	DQ	21	THR
36	DQ	45	GLN
36	DQ	55	VAL
36	DQ	56	ARG
36	DQ	60	ARG
36	DQ	63	LYS
36	DQ	75	THR
36	DQ	81	VAL
36	DQ	109	VAL
36	DQ	110	THR
37	DR	1	MET
37	DR	6	SER
37	DR	18	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
37	DR	28	LEU
37	DR	29	LEU
37	DR	33	ARG
37	DR	36	THR
37	DR	44	LEU
37	DR	54	LEU
37	DR	60	LEU
37	DR	65	LEU
37	DR	67	LEU
37	DR	75	LEU
37	DR	79	LEU
37	DR	86	ARG
37	DR	100	LEU
37	DR	111	LEU
38	DS	19	LYS
38	DS	20	ARG
38	DS	35	ILE
38	DS	36	TYR
38	DS	67	ARG
38	DS	68	GLN
38	DS	69	VAL
38	DS	71	ARG
38	DS	75	GLU
38	DS	78	LEU
38	DS	83	LYS
38	DS	103	GLU
39	DT	6	LEU
39	DT	13	ARG
39	DT	17	THR
39	DT	53	ARG
39	DT	74	ARG
39	DT	78	LEU
39	DT	89	VAL
39	DT	96	ARG
39	DT	113	LYS
39	DT	118	ARG
40	DU	5	LYS
40	DU	8	VAL
40	DU	17	ILE
40	DU	31	SER
40	DU	36	ARG
40	DU	59	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	DU	74	LEU
40	DU	83	LEU
40	DU	89	GLU
40	DU	92	ARG
40	DU	95	LEU
40	DU	104	GLN
40	DU	108	GLU
40	DU	114	LYS
41	DV	15	GLU
41	DV	18	LEU
41	DV	39	LEU
41	DV	46	VAL
41	DV	57	VAL
41	DV	61	VAL
41	DV	62	LEU
41	DV	72	VAL
41	DV	73	SER
41	DV	79	VAL
42	DW	11	ARG
42	DW	17	VAL
42	DW	23	LEU
42	DW	27	LYS
42	DW	51	LEU
42	DW	60	ASN
42	DW	100	THR
42	DW	107	LEU
43	DX	33	LYS
43	DX	57	LEU
43	DX	70	LEU
43	DX	76	ARG
44	DY	2	ARG
44	DY	11	ASP
44	DY	43	ASN
44	DY	49	VAL
44	DY	72	VAL
44	DY	90	LEU
44	DY	91	GLU
44	DY	99	CYS
45	DZ	5	LEU
45	DZ	19	ARG
45	DZ	31	ARG
45	DZ	33	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
45	DZ	61	LEU
45	DZ	72	ARG
45	DZ	86	VAL
45	DZ	87	ASP
45	DZ	91	LEU
45	DZ	107	THR
45	DZ	131	ARG
45	DZ	136	PHE
45	DZ	154	ASP
45	DZ	155	LEU
45	DZ	156	LYS
45	DZ	162	GLU
45	DZ	170	THR
46	D0	7	LEU
46	D0	10	THR
46	D0	19	LYS
46	D0	20	ARG
46	D0	55	ARG
47	D1	4	VAL
47	D1	8	SER
47	D1	21	ARG
47	D1	26	ARG
47	D1	35	THR
47	D1	40	ARG
47	D1	51	VAL
47	D1	52	ARG
47	D1	59	THR
47	D1	89	GLU
47	D1	95	LEU
48	D2	28	LYS
48	D2	30	ARG
48	D2	40	SER
48	D2	41	ILE
48	D2	52	ASP
48	D2	53	LEU
48	D2	55	ARG
48	D2	70	GLN
49	D3	6	VAL
49	D3	8	LEU
49	D3	23	LEU
49	D3	24	LYS
49	D3	30	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
49	D3	31	LEU
49	D3	32	GLN
49	D3	44	ARG
50	D4	3	GLU
50	D4	5	ILE
50	D4	33	VAL
50	D4	44	THR
50	D4	50	VAL
50	D4	56	VAL
50	D4	61	ARG
50	D4	63	TYR
50	D4	68	ARG
51	D5	29	THR
51	D5	33	CYS
51	D5	40	LYS
51	D5	48	GLU
51	D5	58	LEU
52	D6	6	ARG
52	D6	9	LEU
52	D6	13	CYS
52	D6	28	ARG
52	D6	38	LYS
52	D6	40	CYS
52	D6	48	VAL
53	D7	1	MET
53	D7	41	ARG
53	D7	48	LYS
54	D8	14	VAL
54	D8	31	HIS
55	D9	7	VAL
55	D9	17	ILE
55	D9	26	ILE

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (115) such sidechains are listed below:

Mol	Chain	Res	Type
3	AC	6	HIS
3	AC	28	GLN
3	AC	37	GLN
3	AC	181	ASN
4	AD	45	GLN
4	AD	123	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	AE	20	GLN
5	AE	141	GLN
6	AF	94	GLN
6	AF	100	ASN
7	AG	28	ASN
9	AI	23	ASN
9	AI	31	GLN
9	AI	34	ASN
9	AI	58	HIS
9	AI	73	GLN
9	AI	89	ASN
10	AJ	56	HIS
10	AJ	84	GLN
11	AK	93	GLN
11	AK	104	GLN
12	AL	78	GLN
12	AL	99	HIS
15	AO	28	GLN
15	AO	62	GLN
17	AQ	26	GLN
19	AS	23	ASN
19	AS	47	HIS
19	AS	65	ASN
19	AS	69	HIS
20	AT	9	ASN
20	AT	16	HIS
20	AT	45	GLN
27	BD	87	ASN
27	BD	164	GLN
27	BD	253	GLN
28	BE	85	ASN
29	BF	8	GLN
29	BF	69	HIS
29	BF	169	ASN
29	BF	203	GLN
30	BG	26	GLN
30	BG	40	ASN
32	BI	43	ASN
32	BI	139	GLN
35	BP	38	GLN
39	BT	123	GLN
40	BU	117	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
43	BX	31	HIS
43	BX	55	ASN
44	BY	6	HIS
44	BY	43	ASN
45	BZ	32	HIS
45	BZ	151	HIS
46	B0	3	HIS
48	B2	70	GLN
54	B8	35	GLN
55	B9	36	GLN
2	CB	224	GLN
3	CC	6	HIS
3	CC	28	GLN
3	CC	37	GLN
3	CC	104	GLN
3	CC	118	GLN
3	CC	123	GLN
3	CC	136	GLN
3	CC	181	ASN
4	CD	77	ASN
4	CD	125	HIS
5	CE	20	GLN
5	CE	78	HIS
5	CE	141	GLN
7	CG	51	GLN
7	CG	148	ASN
8	CH	15	ASN
8	CH	78	GLN
9	CI	23	ASN
9	CI	58	HIS
9	CI	89	ASN
9	CI	124	GLN
10	CJ	68	HIS
11	CK	22	HIS
11	CK	93	GLN
12	CL	78	GLN
13	CM	77	ASN
15	CO	28	GLN
15	CO	62	GLN
19	CS	56	GLN
19	CS	65	ASN
19	CS	69	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	CT	16	HIS
27	DD	164	GLN
27	DD	253	GLN
28	DE	85	ASN
28	DE	143	ASN
29	DF	69	HIS
29	DF	169	ASN
29	DF	203	GLN
32	DI	43	ASN
32	DI	133	HIS
34	DO	3	GLN
35	DP	38	GLN
36	DQ	45	GLN
37	DR	13	HIS
37	DR	71	GLN
38	DS	68	GLN
39	DT	58	ASN
39	DT	123	GLN
42	DW	60	ASN
43	DX	31	HIS
44	DY	43	ASN
45	DZ	55	HIS
46	D0	3	HIS
48	D2	38	GLN
55	D9	36	GLN

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	1495/1522 (98%)	421 (28%)	24 (1%)
1	CA	1501/1522 (98%)	421 (28%)	30 (1%)
22	AV	4/24 (16%)	1 (25%)	0
22	CV	4/24 (16%)	1 (25%)	0
23	AX	75/77 (97%)	18 (24%)	0
23	CX	75/77 (97%)	19 (25%)	0
25	BA	2722/2915 (93%)	527 (19%)	41 (1%)
25	DA	2704/2915 (92%)	526 (19%)	35 (1%)
26	BB	119/122 (97%)	21 (17%)	0
26	DB	119/122 (97%)	23 (19%)	1 (0%)
All	All	8818/9320 (94%)	1978 (22%)	131 (1%)

All (1978) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	7	G
1	AA	9	G
1	AA	15	G
1	AA	16	A
1	AA	22	G
1	AA	32	A
1	AA	39	G
1	AA	44	G
1	AA	47	C
1	AA	48	C
1	AA	50	A
1	AA	51	A
1	AA	59	A
1	AA	61	G
1	AA	63	C
1	AA	69	G
1	AA	76	C
1	AA	77	G
1	AA	78	G
1	AA	79	G
1	AA	96	U
1	AA	97	G
1	AA	98	G
1	AA	101	A
1	AA	102	G
1	AA	112	G
1	AA	115	G
1	AA	116	A
1	AA	121	C
1	AA	129(A)	G
1	AA	131	C
1	AA	138	G
1	AA	141	A
1	AA	142	G
1	AA	143	A
1	AA	144	G
1	AA	146	G
1	AA	149	A
1	AA	160	A
1	AA	163	C
1	AA	165	C
1	AA	166	G
1	AA	171	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	173	U
1	AA	174	C
1	AA	180	U
1	AA	181	G
1	AA	182	U
1	AA	189(B)	C
1	AA	189(D)	C
1	AA	189(F)	U
1	AA	190	U
1	AA	193	C
1	AA	194	C
1	AA	195	A
1	AA	197	A
1	AA	199	G
1	AA	201	C
1	AA	203	U
1	AA	204	U
1	AA	216	G
1	AA	220	G
1	AA	247	G
1	AA	251	G
1	AA	253	U
1	AA	258	G
1	AA	266	G
1	AA	267	C
1	AA	269	C
1	AA	277	C
1	AA	281	G
1	AA	289	G
1	AA	298	A
1	AA	318	G
1	AA	321	A
1	AA	328	C
1	AA	332	G
1	AA	342	C
1	AA	343	U
1	AA	346	G
1	AA	347	G
1	AA	348	G
1	AA	349	A
1	AA	351	G
1	AA	352	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
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	383	A
1	AA	387	U
1	AA	388	G
1	AA	396	G
1	AA	397	A
1	AA	398	C
1	AA	403	C
1	AA	406	G
1	AA	411	A
1	AA	412	A
1	AA	413	G
1	AA	414	A
1	AA	415	A
1	AA	422	C
1	AA	424	G
1	AA	429	U
1	AA	430	A
1	AA	434	U
1	AA	439	A
1	AA	442	C
1	AA	443	C
1	AA	452	A
1	AA	461	A
1	AA	471	G
1	AA	474	G
1	AA	484	G
1	AA	485	G
1	AA	492	G
1	AA	496	A
1	AA	498	U
1	AA	504	C
1	AA	505	G
1	AA	506	G
1	AA	509	A
1	AA	510	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	511	C
1	AA	513	C
1	AA	518	C
1	AA	521	G
1	AA	527	G
1	AA	531	U
1	AA	532	A
1	AA	533	A
1	AA	536	C
1	AA	538	G
1	AA	539	A
1	AA	544	G
1	AA	547	A
1	AA	553	A
1	AA	559	A
1	AA	560	U
1	AA	561	U
1	AA	562	C
1	AA	571	U
1	AA	572	A
1	AA	573	A
1	AA	576	G
1	AA	586	C
1	AA	592	G
1	AA	596	C
1	AA	597	G
1	AA	599	C
1	AA	606	G
1	AA	607	A
1	AA	623	C
1	AA	626	U
1	AA	627	G
1	AA	630	G
1	AA	633	G
1	AA	639	G
1	AA	641	U
1	AA	642	A
1	AA	651	C
1	AA	653	A
1	AA	656	C
1	AA	661	G
1	AA	665	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	673	G
1	AA	680	C
1	AA	687	A
1	AA	688	G
1	AA	693	G
1	AA	711	G
1	AA	721	G
1	AA	723	U
1	AA	724	G
1	AA	731	G
1	AA	749	C
1	AA	752	G
1	AA	753	A
1	AA	755	G
1	AA	760	G
1	AA	774	G
1	AA	777	A
1	AA	786	G
1	AA	792	A
1	AA	793	U
1	AA	794	A
1	AA	802	A
1	AA	806	C
1	AA	812	C
1	AA	813	U
1	AA	815	A
1	AA	816	A
1	AA	817	C
1	AA	818	G
1	AA	821	G
1	AA	827	U
1	AA	828	A
1	AA	829	G
1	AA	830	G
1	AA	839	U
1	AA	840	C
1	AA	841	U
1	AA	851	G
1	AA	855	G
1	AA	858	G
1	AA	859	A
1	AA	870	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	873	A
1	AA	902	G
1	AA	914	A
1	AA	916	G
1	AA	922	G
1	AA	926	G
1	AA	927	G
1	AA	934	C
1	AA	935	A
1	AA	942	G
1	AA	958	A
1	AA	960	U
1	AA	961	U
1	AA	967	C
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	980	C
1	AA	982	U
1	AA	983	A
1	AA	991	U
1	AA	992	U
1	AA	993	G
1	AA	999	C
1	AA	1000	U
1	AA	1001	A
1	AA	1001(A)	G
1	AA	1002	G
1	AA	1003	G
1	AA	1004	A
1	AA	1005	A
1	AA	1006	C
1	AA	1007	C
1	AA	1008	C
1	AA	1009	G
1	AA	1010	G
1	AA	1011	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1013	G
1	AA	1014	A
1	AA	1017	G
1	AA	1019	C
1	AA	1020	U
1	AA	1021	G
1	AA	1022	G
1	AA	1024	G
1	AA	1025	U
1	AA	1026	G
1	AA	1027	C
1	AA	1028	C
1	AA	1029	C
1	AA	1030(A)	G
1	AA	1030(C)	G
1	AA	1031	G
1	AA	1033	G
1	AA	1035	A
1	AA	1036	G
1	AA	1037	C
1	AA	1039	C
1	AA	1042	G
1	AA	1043	C
1	AA	1052	U
1	AA	1053	G
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	1087	G
1	AA	1089	G
1	AA	1091	U
1	AA	1092	A
1	AA	1093	A
1	AA	1094	G
1	AA	1095	U
1	AA	1101	A
1	AA	1104	G
1	AA	1108	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1109	C
1	AA	1119	C
1	AA	1120	G
1	AA	1124	G
1	AA	1125	U
1	AA	1126	U
1	AA	1128	C
1	AA	1130	A
1	AA	1132	C
1	AA	1134	G
1	AA	1135	U
1	AA	1136	U
1	AA	1137	C
1	AA	1139	G
1	AA	1141	C
1	AA	1145	C
1	AA	1146	A
1	AA	1151	A
1	AA	1152	A
1	AA	1154	G
1	AA	1157	A
1	AA	1159	U
1	AA	1160	G
1	AA	1161	C
1	AA	1166	G
1	AA	1173	G
1	AA	1176	A
1	AA	1181	G
1	AA	1183	A
1	AA	1184	G
1	AA	1189	C
1	AA	1192	C
1	AA	1193	G
1	AA	1196	U
1	AA	1197	G
1	AA	1200	C
1	AA	1202	G
1	AA	1204	A
1	AA	1212	U
1	AA	1213	A
1	AA	1214	C
1	AA	1223	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1224	G
1	AA	1227	A
1	AA	1235	U
1	AA	1236	A
1	AA	1238	A
1	AA	1250	A
1	AA	1256	A
1	AA	1257	U
1	AA	1258	G
1	AA	1259	C
1	AA	1260	C
1	AA	1267	C
1	AA	1270	C
1	AA	1271	G
1	AA	1273	G
1	AA	1278	U
1	AA	1279	A
1	AA	1280	A
1	AA	1281	U
1	AA	1284	C
1	AA	1286	A
1	AA	1287	A
1	AA	1294	G
1	AA	1296	C
1	AA	1297	C
1	AA	1299	A
1	AA	1300	G
1	AA	1302	U
1	AA	1305	G
1	AA	1311	G
1	AA	1314	C
1	AA	1317	C
1	AA	1320	C
1	AA	1322	C
1	AA	1323	G
1	AA	1328	C
1	AA	1333	A
1	AA	1338	G
1	AA	1340	A
1	AA	1343	G
1	AA	1346	A
1	AA	1347	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1350	A
1	AA	1353	G
1	AA	1354	C
1	AA	1358	U
1	AA	1360	A
1	AA	1361	G
1	AA	1363	C
1	AA	1370	G
1	AA	1377	A
1	AA	1379	G
1	AA	1390	U
1	AA	1393	U
1	AA	1396	A
1	AA	1397	C
1	AA	1419	G
1	AA	1422	G
1	AA	1441	G
1	AA	1442	G
1	AA	1442(A)	G
1	AA	1442(B)	A
1	AA	1443	G
1	AA	1446	U
1	AA	1447	A
1	AA	1452	C
1	AA	1456	G
1	AA	1457	G
1	AA	1469	G
1	AA	1489	G
1	AA	1492	A
1	AA	1493	A
1	AA	1494	G
1	AA	1497	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

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	AV	15	A
23	AX	6	G
23	AX	9	G
23	AX	13	C
23	AX	16	C
23	AX	19	G
23	AX	21	A
23	AX	26	G
23	AX	28	C
23	AX	31	G
23	AX	42	G
23	AX	47	U
23	AX	58	A
23	AX	60	U
23	AX	61	C
23	AX	67	C
23	AX	68	C
23	AX	70	G
23	AX	76	A
25	BA	7	G
25	BA	8	A
25	BA	9	U
25	BA	12	U
25	BA	14	A
25	BA	36	G
25	BA	45	C
25	BA	54	G
25	BA	62	U
25	BA	63	A
25	BA	70	A
25	BA	71	U
25	BA	73	A
25	BA	74	G
25	BA	83	A
25	BA	90	A
25	BA	91	G
25	BA	92	C
25	BA	99	G
25	BA	116	A
25	BA	117	A
25	BA	118	U
25	BA	123	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BA	125	A
25	BA	129	G
25	BA	155	C
25	BA	161	C
25	BA	185	A
25	BA	187	C
25	BA	189	U
25	BA	190	C
25	BA	194	G
25	BA	203	G
25	BA	204	G
25	BA	205	A
25	BA	210	A
25	BA	211	A
25	BA	213	G
25	BA	217	A
25	BA	218	A
25	BA	221	G
25	BA	222	A
25	BA	237	G
25	BA	239	G
25	BA	250	G
25	BA	265	U
25	BA	269	G
25	BA	271	U
25	BA	272	U
25	BA	273	G
25	BA	274	U
25	BA	275	C
25	BA	276	C
25	BA	279	G
25	BA	281	G
25	BA	287	G
25	BA	288	U
25	BA	289	G
25	BA	294	C
25	BA	299	G
25	BA	303	C
25	BA	306	A
25	BA	307	A
25	BA	335	A
25	BA	351	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BA	353	G
25	BA	354	A
25	BA	358	C
25	BA	359	C
25	BA	360	C
25	BA	376	G
25	BA	381	A
25	BA	387	G
25	BA	391	G
25	BA	399	G
25	BA	407	U
25	BA	413	G
25	BA	423	G
25	BA	431	C
25	BA	432	U
25	BA	434	G
25	BA	438	G
25	BA	439	A
25	BA	448	U
25	BA	455	A
25	BA	456	A
25	BA	460	C
25	BA	469	A
25	BA	470	C
25	BA	474	U
25	BA	481	C
25	BA	482	C
25	BA	483	A
25	BA	496	A
25	BA	505	A
25	BA	507	G
25	BA	508	A
25	BA	514	G
25	BA	515	G
25	BA	526	A
25	BA	529	U
25	BA	530	A
25	BA	534	C
25	BA	535	C
25	BA	538	A
25	BA	543	G
25	BA	554	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BA	555	G
25	BA	556	C
25	BA	557	A
25	BA	558	G
25	BA	569	G
25	BA	573	G
25	BA	574	G
25	BA	586	G
25	BA	596	G
25	BA	598	A
25	BA	615	G
25	BA	616	G
25	BA	625	G
25	BA	626	A
25	BA	627	G
25	BA	630	U
25	BA	633	G
25	BA	638	U
25	BA	639	G
25	BA	641	G
25	BA	644	G
25	BA	657	A
25	BA	659	C
25	BA	662	A
25	BA	670	C
25	BA	671	A
25	BA	692	C
25	BA	694	G
25	BA	697	C
25	BA	698	G
25	BA	701	A
25	BA	716	G
25	BA	724	A
25	BA	733	G
25	BA	749	G
25	BA	763	A
25	BA	764	G
25	BA	777	C
25	BA	810	G
25	BA	822	G
25	BA	823	G
25	BA	829	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BA	831	A
25	BA	832	G
25	BA	835	A
25	BA	839	G
25	BA	852	G
25	BA	853	C
25	BA	857	U
25	BA	858	U
25	BA	859	C
25	BA	866	A
25	BA	871	A
25	BA	874	U
25	BA	875	U
25	BA	877	G
25	BA	902	G
25	BA	906	G
25	BA	926	G
25	BA	927	G
25	BA	928	G
25	BA	929	G
25	BA	930	G
25	BA	931	C
25	BA	932	C
25	BA	933	C
25	BA	934	A
25	BA	935	C
25	BA	937	A
25	BA	940	C
25	BA	942	A
25	BA	944	C
25	BA	945	A
25	BA	946	A
25	BA	953	U
25	BA	956	A
25	BA	965	G
25	BA	973	G
25	BA	977	G
25	BA	986	A
25	BA	989	G
25	BA	990	A
25	BA	991	G
25	BA	1003	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BA	1004	A
25	BA	1006	C
25	BA	1019	G
25	BA	1020	C
25	BA	1026	A
25	BA	1029	A
25	BA	1036	A
25	BA	1042	A
25	BA	1051	C
25	BA	1058	U
25	BA	1059	C
25	BA	1066	A
25	BA	1068	G
25	BA	1072	U
25	BA	1076	G
25	BA	1079	U
25	BA	1080	G
25	BA	1085	G
25	BA	1087	C
25	BA	1088	G
25	BA	1089	C
25	BA	1091	A
25	BA	1092	A
25	BA	1093	G
25	BA	1094	A
25	BA	1096	A
25	BA	1153	G
25	BA	1154	U
25	BA	1156	G
25	BA	1158	G
25	BA	1168	G
25	BA	1175	A
25	BA	1176	U
25	BA	1180	C
25	BA	1181	G
25	BA	1184	G
25	BA	1186	U
25	BA	1187	U
25	BA	1195	G
25	BA	1202	A
25	BA	1210	G
25	BA	1216	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BA	1217	G
25	BA	1218	G
25	BA	1219	A
25	BA	1220	U
25	BA	1221	G
25	BA	1222	A
25	BA	1223	C
25	BA	1225	C
25	BA	1255	A
25	BA	1256	U
25	BA	1270	C
25	BA	1290	G
25	BA	1296	G
25	BA	1299	A
25	BA	1302	G
25	BA	1311	A
25	BA	1317	G
25	BA	1318	A
25	BA	1319	U
25	BA	1321	A
25	BA	1322	A
25	BA	1338	U
25	BA	1346	U
25	BA	1347	A
25	BA	1360	C
25	BA	1367	A
25	BA	1398	U
25	BA	1401	G
25	BA	1405	A
25	BA	1406	A
25	BA	1411	A
25	BA	1416	C
25	BA	1419	A
25	BA	1430	A
25	BA	1431	G
25	BA	1462	G
25	BA	1463	C
25	BA	1466	U
25	BA	1467	G
25	BA	1468	G
25	BA	1474	C
25	BA	1491	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BA	1496	A
25	BA	1497	G
25	BA	1507	A
25	BA	1514	C
25	BA	1516	A
25	BA	1518	A
25	BA	1525	G
25	BA	1529	G
25	BA	1536	A
25	BA	1539	C
25	BA	1541	A
25	BA	1554	A
25	BA	1555	C
25	BA	1556	A
25	BA	1569	U
25	BA	1578	C
25	BA	1579	C
25	BA	1589	A
25	BA	1590	C
25	BA	1592	A
25	BA	1605	A
25	BA	1613	A
25	BA	1616	A
25	BA	1625	U
25	BA	1628	G
25	BA	1631	C
25	BA	1632	A
25	BA	1633	A
25	BA	1654	A
25	BA	1655	A
25	BA	1656	A
25	BA	1660	A
25	BA	1694	G
25	BA	1695	C
25	BA	1696	G
25	BA	1699	A
25	BA	1701	A
25	BA	1707	C
25	BA	1711	A
25	BA	1721	G
25	BA	1743	G
25	BA	1747	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BA	1748	A
25	BA	1750	G
25	BA	1766	G
25	BA	1767	A
25	BA	1768	U
25	BA	1769	G
25	BA	1772	C
25	BA	1776	G
25	BA	1777	G
25	BA	1779	G
25	BA	1787	G
25	BA	1790	A
25	BA	1791	A
25	BA	1793	A
25	BA	1794	G
25	BA	1795	G
25	BA	1804	A
25	BA	1805	C
25	BA	1811	A
25	BA	1813	C
25	BA	1817	A
25	BA	1822	A
25	BA	1829	U
25	BA	1831	C
25	BA	1832	G
25	BA	1843	A
25	BA	1847	G
25	BA	1860	A
25	BA	1867	C
25	BA	1870	G
25	BA	1878	A
25	BA	1879	A
25	BA	1881	G
25	BA	1889	G
25	BA	1899	A
25	BA	1900	G
25	BA	1901	C
25	BA	1911	A
25	BA	1916	C
25	BA	1922	A
25	BA	1928	G
25	BA	1935	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BA	1936	C
25	BA	1941	A
25	BA	1951	G
25	BA	1952	G
25	BA	1953	U
25	BA	1954	A
25	BA	1959	A
25	BA	1960	A
25	BA	1963	C
25	BA	1964	C
25	BA	1977	U
25	BA	1985	U
25	BA	1986	G
25	BA	1987	C
25	BA	1989	C
25	BA	1992	A
25	BA	1993	A
25	BA	1994	A
25	BA	1999	A
25	BA	2014	G
25	BA	2015	U
25	BA	2018	C
25	BA	2019	G
25	BA	2042	A
25	BA	2045	G
25	BA	2052	A
25	BA	2053	A
25	BA	2054	G
25	BA	2055	A
25	BA	2065	C
25	BA	2074	G
25	BA	2077	C
25	BA	2078	G
25	BA	2082	A
25	BA	2083	G
25	BA	2084	A
25	BA	2091	G
25	BA	2102	G
25	BA	2121	U
25	BA	2212	G
25	BA	2214	G
25	BA	2217	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BA	2220	A
25	BA	2227	G
25	BA	2228	G
25	BA	2229	A
25	BA	2230	U
25	BA	2236	G
25	BA	2237	A
25	BA	2247	G
25	BA	2250	G
25	BA	2251	G
25	BA	2260	C
25	BA	2278	A
25	BA	2280	A
25	BA	2281	A
25	BA	2287	C
25	BA	2290	A
25	BA	2295	C
25	BA	2299	A
25	BA	2306	C
25	BA	2308	U
25	BA	2317	A
25	BA	2319	G
25	BA	2320	G
25	BA	2326	C
25	BA	2332	A
25	BA	2337	G
25	BA	2339	A
25	BA	2347	A
25	BA	2348	A
25	BA	2353	G
25	BA	2355	C
25	BA	2359	C
25	BA	2362	C
25	BA	2366	G
25	BA	2373	A
25	BA	2384	G
25	BA	2391	G
25	BA	2395	G
25	BA	2397	C
25	BA	2404	A
25	BA	2418	U
25	BA	2422	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BA	2426	G
25	BA	2434	A
25	BA	2435	U
25	BA	2437	A
25	BA	2440	G
25	BA	2441	G
25	BA	2442	A
25	BA	2443	U
25	BA	2447	A
25	BA	2451	A
25	BA	2453	C
25	BA	2459	G
25	BA	2460	A
25	BA	2480	G
25	BA	2481	A
25	BA	2486	C
25	BA	2488	A
25	BA	2490	A
25	BA	2503	U
25	BA	2510	C
25	BA	2514	G
25	BA	2517	G
25	BA	2518	U
25	BA	2530	A
25	BA	2532	C
25	BA	2537	G
25	BA	2541	G
25	BA	2547	G
25	BA	2566	U
25	BA	2567	U
25	BA	2578	A
25	BA	2579	G
25	BA	2594	G
25	BA	2614	A
25	BA	2621	U
25	BA	2622	C
25	BA	2623	U
25	BA	2624	C
25	BA	2641	A
25	BA	2642	G
25	BA	2644	A
25	BA	2650	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BA	2653	G
25	BA	2666	A
25	BA	2674	A
25	BA	2690	C
25	BA	2701	U
25	BA	2702	C
25	BA	2711	C
25	BA	2715	C
25	BA	2721	G
25	BA	2725	A
25	BA	2726	A
25	BA	2727	G
25	BA	2739	U
25	BA	2746	A
25	BA	2764	G
25	BA	2770	A
25	BA	2771	A
25	BA	2777	A
25	BA	2778	A
25	BA	2779	G
25	BA	2782	C
25	BA	2791	A
25	BA	2799	U
25	BA	2803	A
25	BA	2804	C
25	BA	2807	C
25	BA	2813	G
25	BA	2816	G
25	BA	2817	G
25	BA	2825	C
25	BA	2828	G
25	BA	2830	A
25	BA	2831	A
25	BA	2843	G
25	BA	2845	A
25	BA	2868	C
25	BA	2882	G
25	BA	2883	A
25	BA	2890	C
25	BA	2893	A
25	BA	2903	G
25	BA	2906	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BB	2	C
26	BB	7	G
26	BB	12	C
26	BB	13	A
26	BB	31	C
26	BB	34	U
26	BB	42	C
26	BB	56	G
26	BB	59	A
26	BB	72	G
26	BB	73	A
26	BB	75	G
26	BB	85	G
26	BB	88	C
26	BB	89	G
26	BB	90	A
26	BB	93	G
26	BB	95	C
26	BB	106	G
26	BB	110	G
26	BB	119	G
1	CA	6	G
1	CA	7	G
1	CA	9	G
1	CA	15	G
1	CA	16	A
1	CA	22	G
1	CA	32	A
1	CA	39	G
1	CA	44	G
1	CA	47	C
1	CA	48	C
1	CA	50	A
1	CA	51	A
1	CA	59	A
1	CA	61	G
1	CA	63	C
1	CA	65	U
1	CA	66	G
1	CA	69	G
1	CA	77	G
1	CA	78	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	79	G
1	CA	80	G
1	CA	88	A
1	CA	89	C
1	CA	96	U
1	CA	97	G
1	CA	101	A
1	CA	102	G
1	CA	112	G
1	CA	115	G
1	CA	116	A
1	CA	121	C
1	CA	129(A)	G
1	CA	131	C
1	CA	138	G
1	CA	142	G
1	CA	144	G
1	CA	148	G
1	CA	160	A
1	CA	163	C
1	CA	165	C
1	CA	166	G
1	CA	171	A
1	CA	173	U
1	CA	174	C
1	CA	180	U
1	CA	181	G
1	CA	182	U
1	CA	189(D)	C
1	CA	189(F)	U
1	CA	189(J)	G
1	CA	190	U
1	CA	193	C
1	CA	194	C
1	CA	195	A
1	CA	197	A
1	CA	199	G
1	CA	203	U
1	CA	204	U
1	CA	216	G
1	CA	220	G
1	CA	247	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	251	G
1	CA	258	G
1	CA	265	G
1	CA	266	G
1	CA	267	C
1	CA	269	C
1	CA	277	C
1	CA	281	G
1	CA	289	G
1	CA	298	A
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	351	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	383	A
1	CA	387	U
1	CA	388	G
1	CA	396	G
1	CA	397	A
1	CA	398	C
1	CA	403	C
1	CA	406	G
1	CA	411	A
1	CA	412	A
1	CA	413	G
1	CA	414	A
1	CA	415	A
1	CA	422	C
1	CA	424	G
1	CA	427	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	429	U
1	CA	430	A
1	CA	434	U
1	CA	439	A
1	CA	442	C
1	CA	449	C
1	CA	452	A
1	CA	461	A
1	CA	471	G
1	CA	474	G
1	CA	484	G
1	CA	485	G
1	CA	492	G
1	CA	496	A
1	CA	498	U
1	CA	504	C
1	CA	505	G
1	CA	506	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	527	G
1	CA	531	U
1	CA	532	A
1	CA	533	A
1	CA	536	C
1	CA	538	G
1	CA	544	G
1	CA	547	A
1	CA	553	A
1	CA	559	A
1	CA	560	U
1	CA	561	U
1	CA	562	C
1	CA	571	U
1	CA	572	A
1	CA	573	A
1	CA	576	G
1	CA	586	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	592	G
1	CA	596	C
1	CA	597	G
1	CA	600	C
1	CA	606	G
1	CA	607	A
1	CA	623	C
1	CA	626	U
1	CA	627	G
1	CA	630	G
1	CA	633	G
1	CA	639	G
1	CA	641	U
1	CA	642	A
1	CA	650	G
1	CA	651	C
1	CA	653	A
1	CA	656	C
1	CA	661	G
1	CA	665	A
1	CA	673	G
1	CA	680	C
1	CA	687	A
1	CA	688	G
1	CA	693	G
1	CA	711	G
1	CA	721	G
1	CA	723	U
1	CA	724	G
1	CA	731	G
1	CA	752	G
1	CA	753	A
1	CA	755	G
1	CA	758	G
1	CA	760	G
1	CA	774	G
1	CA	777	A
1	CA	786	G
1	CA	792	A
1	CA	793	U
1	CA	794	A
1	CA	802	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	806	C
1	CA	812	C
1	CA	813	U
1	CA	815	A
1	CA	816	A
1	CA	817	C
1	CA	818	G
1	CA	821	G
1	CA	827	U
1	CA	828	A
1	CA	829	G
1	CA	830	G
1	CA	836	G
1	CA	839	U
1	CA	840	C
1	CA	841	U
1	CA	851	G
1	CA	855	G
1	CA	858	G
1	CA	859	A
1	CA	870	U
1	CA	873	A
1	CA	902	G
1	CA	914	A
1	CA	916	G
1	CA	922	G
1	CA	926	G
1	CA	927	G
1	CA	934	C
1	CA	935	A
1	CA	942	G
1	CA	958	A
1	CA	960	U
1	CA	961	U
1	CA	967	C
1	CA	968	A
1	CA	969	A
1	CA	971	G
1	CA	972	C
1	CA	974	A
1	CA	975	A
1	CA	976	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	977	A
1	CA	980	C
1	CA	982	U
1	CA	983	A
1	CA	991	U
1	CA	992	U
1	CA	993	G
1	CA	995	C
1	CA	999	C
1	CA	1001	A
1	CA	1001(A)	G
1	CA	1002	G
1	CA	1004	A
1	CA	1005	A
1	CA	1006	C
1	CA	1007	C
1	CA	1010	G
1	CA	1011	G
1	CA	1013	G
1	CA	1014	A
1	CA	1019	C
1	CA	1020	U
1	CA	1022	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	1031	G
1	CA	1033	G
1	CA	1034	G
1	CA	1035	A
1	CA	1036	G
1	CA	1037	C
1	CA	1039	C
1	CA	1041	A
1	CA	1042	G
1	CA	1043	C
1	CA	1052	U
1	CA	1053	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1054	C
1	CA	1055	A
1	CA	1063	C
1	CA	1065	U
1	CA	1066	C
1	CA	1068	G
1	CA	1070	U
1	CA	1076	C
1	CA	1081	G
1	CA	1087	G
1	CA	1089	G
1	CA	1091	U
1	CA	1092	A
1	CA	1093	A
1	CA	1094	G
1	CA	1095	U
1	CA	1101	A
1	CA	1104	G
1	CA	1108	G
1	CA	1109	C
1	CA	1117	G
1	CA	1119	C
1	CA	1120	G
1	CA	1122	U
1	CA	1124	G
1	CA	1125	U
1	CA	1128	C
1	CA	1129	C
1	CA	1130	A
1	CA	1132	C
1	CA	1134	G
1	CA	1135	U
1	CA	1136	U
1	CA	1137	C
1	CA	1138	G
1	CA	1139	G
1	CA	1141	C
1	CA	1145	C
1	CA	1146	A
1	CA	1147	C
1	CA	1151	A
1	CA	1152	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1154	G
1	CA	1157	A
1	CA	1159	U
1	CA	1160	G
1	CA	1161	C
1	CA	1163	C
1	CA	1165	C
1	CA	1169	A
1	CA	1171	G
1	CA	1173	G
1	CA	1174	G
1	CA	1176	A
1	CA	1181	G
1	CA	1183	A
1	CA	1184	G
1	CA	1187	G
1	CA	1189	C
1	CA	1192	C
1	CA	1193	G
1	CA	1196	U
1	CA	1197	G
1	CA	1200	C
1	CA	1202	G
1	CA	1204	A
1	CA	1211	U
1	CA	1212	U
1	CA	1213	A
1	CA	1223	C
1	CA	1224	G
1	CA	1227	A
1	CA	1235	U
1	CA	1236	A
1	CA	1238	A
1	CA	1240	U
1	CA	1250	A
1	CA	1256	A
1	CA	1257	U
1	CA	1258	G
1	CA	1259	C
1	CA	1260	C
1	CA	1267	C
1	CA	1270	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1271	G
1	CA	1273	G
1	CA	1279	A
1	CA	1280	A
1	CA	1281	U
1	CA	1282	C
1	CA	1283	G
1	CA	1284	C
1	CA	1287	A
1	CA	1297	C
1	CA	1299	A
1	CA	1300	G
1	CA	1305	G
1	CA	1311	G
1	CA	1314	C
1	CA	1317	C
1	CA	1320	C
1	CA	1322	C
1	CA	1323	G
1	CA	1332	A
1	CA	1333	A
1	CA	1338	G
1	CA	1340	A
1	CA	1343	G
1	CA	1346	A
1	CA	1347	G
1	CA	1353	G
1	CA	1354	C
1	CA	1358	U
1	CA	1360	A
1	CA	1361	G
1	CA	1363	C
1	CA	1370	G
1	CA	1377	A
1	CA	1379	G
1	CA	1390	U
1	CA	1393	U
1	CA	1396	A
1	CA	1397	C
1	CA	1398	A
1	CA	1419	G
1	CA	1422	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1442	G
1	CA	1442(A)	G
1	CA	1442(B)	A
1	CA	1443	G
1	CA	1447	A
1	CA	1456	G
1	CA	1457	G
1	CA	1469	G
1	CA	1489	G
1	CA	1492	A
1	CA	1493	A
1	CA	1497	G
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	15	A
23	CX	6	G
23	CX	9	G
23	CX	13	C
23	CX	16	C
23	CX	19	G
23	CX	20	U
23	CX	21	A
23	CX	26	G
23	CX	28	C
23	CX	31	G
23	CX	42	G
23	CX	47	U
23	CX	48	C
23	CX	60	U
23	CX	61	C
23	CX	67	C
23	CX	68	C
23	CX	70	G
23	CX	76	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	DA	8	A
25	DA	9	U
25	DA	10	G
25	DA	12	U
25	DA	15	G
25	DA	32	C
25	DA	34	C
25	DA	35	G
25	DA	36	G
25	DA	41	C
25	DA	45	C
25	DA	55	G
25	DA	59	U
25	DA	61	G
25	DA	64	A
25	DA	71	A
25	DA	74	A
25	DA	75	G
25	DA	83	G
25	DA	84	A
25	DA	90	U
25	DA	95	G
25	DA	100	G
25	DA	102	G
25	DA	118	A
25	DA	119	A
25	DA	120	U
25	DA	125	G
25	DA	131	G
25	DA	140	G
25	DA	141	A
25	DA	149	A
25	DA	154	G
25	DA	154(A)	C
25	DA	157	U
25	DA	173	G
25	DA	180	G
25	DA	181	A
25	DA	182	A
25	DA	188	G
25	DA	196	A
25	DA	199	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	DA	201	C
25	DA	205	G
25	DA	214	G
25	DA	215	G
25	DA	216	A
25	DA	221	A
25	DA	222	A
25	DA	225	A
25	DA	229	A
25	DA	233	A
25	DA	248	G
25	DA	250	G
25	DA	266	G
25	DA	267	C
25	DA	271(H)	G
25	DA	271(J)	C
25	DA	271(K)	U
25	DA	271(L)	U
25	DA	271(M)	G
25	DA	271(N)	U
25	DA	271(O)	C
25	DA	271(T)	C
25	DA	272(A)	U
25	DA	272(B)	G
25	DA	275	G
25	DA	277	C
25	DA	278	A
25	DA	292	C
25	DA	311	A
25	DA	312	G
25	DA	324	A
25	DA	327	G
25	DA	329	G
25	DA	330	A
25	DA	333	G
25	DA	338	G
25	DA	339	U
25	DA	342	G
25	DA	348	G
25	DA	351	G
25	DA	352	G
25	DA	363	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	DA	384	U
25	DA	385	C
25	DA	386	G
25	DA	399	G
25	DA	405	U
25	DA	411	G
25	DA	412	A
25	DA	415	A
25	DA	428	A
25	DA	437	G
25	DA	438	G
25	DA	443	A
25	DA	444	C
25	DA	455	C
25	DA	456	C
25	DA	457	A
25	DA	470	A
25	DA	481	G
25	DA	504	U
25	DA	505	A
25	DA	509	C
25	DA	524	U
25	DA	527	C
25	DA	528	A
25	DA	529	A
25	DA	530	G
25	DA	531	C
25	DA	532	A
25	DA	533	G
25	DA	545	G
25	DA	563	G
25	DA	568	U
25	DA	573	G
25	DA	575	A
25	DA	586	A
25	DA	592	G
25	DA	603	A
25	DA	604	G
25	DA	606	U
25	DA	607	U
25	DA	610	G
25	DA	614(B)	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	DA	614(C)	A
25	DA	615	G
25	DA	616	G
25	DA	620	G
25	DA	631	A
25	DA	634	C
25	DA	637	A
25	DA	645	C
25	DA	646	A
25	DA	652(B)	A
25	DA	652(C)	G
25	DA	652(E)	G
25	DA	652(U)	G
25	DA	654	A
25	DA	669	G
25	DA	670	A
25	DA	686	G
25	DA	710	G
25	DA	717	G
25	DA	726	G
25	DA	730	C
25	DA	747	U
25	DA	752	A
25	DA	753	C
25	DA	765	G
25	DA	775	G
25	DA	776	G
25	DA	782	A
25	DA	784	A
25	DA	785	G
25	DA	792	G
25	DA	805	G
25	DA	812	C
25	DA	819	A
25	DA	827	U
25	DA	829	A
25	DA	857	C
25	DA	859	G
25	DA	866	A
25	DA	867	C
25	DA	871	U
25	DA	874	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	DA	878	A
25	DA	879	G
25	DA	880	G
25	DA	884	C
25	DA	886	C
25	DA	887	A
25	DA	888	C
25	DA	889	C
25	DA	890	A
25	DA	895	U
25	DA	896	A
25	DA	897	C
25	DA	898	C
25	DA	899	A
25	DA	900	A
25	DA	901	A
25	DA	903	C
25	DA	910	A
25	DA	911	A
25	DA	913	U
25	DA	917	A
25	DA	923	C
25	DA	932	G
25	DA	938	G
25	DA	941	A
25	DA	945	A
25	DA	946	G
25	DA	953	A
25	DA	956	G
25	DA	957	A
25	DA	958	U
25	DA	959	A
25	DA	961	C
25	DA	968	G
25	DA	974	G
25	DA	975	C
25	DA	983	A
25	DA	996	A
25	DA	1012	U
25	DA	1013	C
25	DA	1020	A
25	DA	1022	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	DA	1023	U
25	DA	1025	G
25	DA	1027	A
25	DA	1033	U
25	DA	1034	G
25	DA	1038	C
25	DA	1039	G
25	DA	1040	C
25	DA	1041	C
25	DA	1043	C
25	DA	1114	G
25	DA	1115	G
25	DA	1116	C
25	DA	1118	C
25	DA	1119	C
25	DA	1129	A
25	DA	1130	U
25	DA	1135	C
25	DA	1136	G
25	DA	1139	G
25	DA	1142(A)	A
25	DA	1170	G
25	DA	1171	G
25	DA	1198	U
25	DA	1204	A
25	DA	1205	U
25	DA	1210	A
25	DA	1211	U
25	DA	1213	A
25	DA	1220	A
25	DA	1230	C
25	DA	1244	G
25	DA	1249	U
25	DA	1253	A
25	DA	1256	G
25	DA	1271	G
25	DA	1272	A
25	DA	1273	U
25	DA	1284	A
25	DA	1287	A
25	DA	1298	C
25	DA	1300	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	DA	1301	A
25	DA	1305	C
25	DA	1314	C
25	DA	1315	C
25	DA	1345	C
25	DA	1359	A
25	DA	1360	A
25	DA	1365	A
25	DA	1368	G
25	DA	1370	C
25	DA	1379	A
25	DA	1380	G
25	DA	1384	A
25	DA	1385	G
25	DA	1386	C
25	DA	1403	C
25	DA	1410	G
25	DA	1411	C
25	DA	1412	A
25	DA	1416	G
25	DA	1417	C
25	DA	1419	A
25	DA	1420	U
25	DA	1421	G
25	DA	1428	C
25	DA	1435	G
25	DA	1437	C
25	DA	1445	A
25	DA	1445(A)	C
25	DA	1449	A
25	DA	1450	G
25	DA	1459	G
25	DA	1466	G
25	DA	1467	C
25	DA	1471	A
25	DA	1482	G
25	DA	1490	A
25	DA	1493	C
25	DA	1494	A
25	DA	1495	A
25	DA	1496	A
25	DA	1497	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	DA	1504	C
25	DA	1508	A
25	DA	1509	C
25	DA	1509(A)	A
25	DA	1525	G
25	DA	1531	C
25	DA	1539	G
25	DA	1541	G
25	DA	1542	A
25	DA	1543	C
25	DA	1545	A
25	DA	1554	A
25	DA	1558	A
25	DA	1559	G
25	DA	1566	A
25	DA	1569	A
25	DA	1578	U
25	DA	1580	A
25	DA	1586	A
25	DA	1595	G
25	DA	1608	A
25	DA	1609	A
25	DA	1631(A)	A
25	DA	1632	A
25	DA	1634	A
25	DA	1639	U
25	DA	1640	C
25	DA	1645	G
25	DA	1648	C
25	DA	1654	A
25	DA	1674	G
25	DA	1682	G
25	DA	1696	G
25	DA	1700	A
25	DA	1701	A
25	DA	1703	G
25	DA	1718	G
25	DA	1721	G
25	DA	1722	A
25	DA	1746	G
25	DA	1756	G
25	DA	1762	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	DA	1763	G
25	DA	1764	G
25	DA	1773	A
25	DA	1780	A
25	DA	1782	C
25	DA	1791	A
25	DA	1800	C
25	DA	1801	G
25	DA	1812	A
25	DA	1816	G
25	DA	1823	G
25	DA	1828	G
25	DA	1829	A
25	DA	1835	G
25	DA	1839	G
25	DA	1847	A
25	DA	1848	A
25	DA	1857	G
25	DA	1859	A
25	DA	1861	G
25	DA	1877	A
25	DA	1878	G
25	DA	1895	C
25	DA	1900	A
25	DA	1906	G
25	DA	1913	A
25	DA	1914	C
25	DA	1926	U
25	DA	1929	G
25	DA	1930	G
25	DA	1931	U
25	DA	1936	A
25	DA	1937	A
25	DA	1938	A
25	DA	1955	U
25	DA	1960	A
25	DA	1963	U
25	DA	1966	A
25	DA	1967	C
25	DA	1970	A
25	DA	1971	A
25	DA	1972	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	DA	1984	G
25	DA	1993	U
25	DA	1997	G
25	DA	2005	A
25	DA	2020	A
25	DA	2021	C
25	DA	2023	G
25	DA	2031	A
25	DA	2032	G
25	DA	2033	A
25	DA	2034	U
25	DA	2039	C
25	DA	2043	C
25	DA	2055	C
25	DA	2056	G
25	DA	2060	A
25	DA	2061	G
25	DA	2062	A
25	DA	2063	C
25	DA	2069	G
25	DA	2076	U
25	DA	2082	A
25	DA	2086	U
25	DA	2096	U
25	DA	2097	C
25	DA	2099	U
25	DA	2101	G
25	DA	2189	U
25	DA	2192	G
25	DA	2193	G
25	DA	2198	A
25	DA	2206	G
25	DA	2207	G
25	DA	2208	A
25	DA	2218	U
25	DA	2219	G
25	DA	2225	A
25	DA	2235	G
25	DA	2238	G
25	DA	2239	G
25	DA	2267	A
25	DA	2275	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	DA	2283	C
25	DA	2287	A
25	DA	2289	G
25	DA	2291	U
25	DA	2297	C
25	DA	2302	G
25	DA	2303	G
25	DA	2305	A
25	DA	2308	G
25	DA	2312	U
25	DA	2313	C
25	DA	2315	G
25	DA	2318	G
25	DA	2319	G
25	DA	2320	A
25	DA	2321	G
25	DA	2325	G
25	DA	2334	G
25	DA	2335	A
25	DA	2336	A
25	DA	2337	G
25	DA	2343	C
25	DA	2347	C
25	DA	2366	A
25	DA	2375	G
25	DA	2376	A
25	DA	2383	G
25	DA	2385	C
25	DA	2401	U
25	DA	2402	C
25	DA	2406	U
25	DA	2410	G
25	DA	2413	G
25	DA	2414	G
25	DA	2422	A
25	DA	2425	A
25	DA	2429	G
25	DA	2430	A
25	DA	2434	A
25	DA	2435	A
25	DA	2439	A
25	DA	2441	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	DA	2448	A
25	DA	2468	G
25	DA	2469	A
25	DA	2474	C
25	DA	2476	A
25	DA	2487	G
25	DA	2502	G
25	DA	2505	G
25	DA	2517	C
25	DA	2518	A
25	DA	2520	C
25	DA	2529	G
25	DA	2549	G
25	DA	2554	U
25	DA	2566	A
25	DA	2567	G
25	DA	2573	C
25	DA	2574	G
25	DA	2578	G
25	DA	2586	C
25	DA	2602	A
25	DA	2611	U
25	DA	2612	C
25	DA	2615	U
25	DA	2630	G
25	DA	2632	A
25	DA	2654	A
25	DA	2662	A
25	DA	2663	G
25	DA	2666	C
25	DA	2689	U
25	DA	2690	C
25	DA	2691	C
25	DA	2712(A)	A
25	DA	2713	A
25	DA	2714	G
25	DA	2726	U
25	DA	2733	A
25	DA	2751	G
25	DA	2752	C
25	DA	2757	A
25	DA	2763	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	DA	2764	A
25	DA	2765	A
25	DA	2766	G
25	DA	2778	A
25	DA	2789	C
25	DA	2793	G
25	DA	2794	C
25	DA	2802	G
25	DA	2804	C
25	DA	2818	G
25	DA	2820	A
25	DA	2821	A
25	DA	2833	G
25	DA	2835	A
25	DA	2849	U
25	DA	2872	G
25	DA	2879	C
25	DA	2880	C
25	DA	2887	U
25	DA	2892	A
25	DA	2893	G
25	DA	2894	G
26	DB	2	C
26	DB	7	G
26	DB	8	U
26	DB	12	C
26	DB	13	A
26	DB	31	C
26	DB	34	U
26	DB	42	C
26	DB	45	A
26	DB	46	A
26	DB	56	G
26	DB	59	A
26	DB	72	G
26	DB	73	A
26	DB	75	G
26	DB	85	G
26	DB	88	C
26	DB	89	G
26	DB	90	A
26	DB	93	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	DB	106	G
26	DB	110	G
26	DB	119	G

All (131) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	AA	97	G
1	AA	115	G
1	AA	173	U
1	AA	266	G
1	AA	429	U
1	AA	509	A
1	AA	532	A
1	AA	560	U
1	AA	687	A
1	AA	793	U
1	AA	913	A
1	AA	991	U
1	AA	1027	C
1	AA	1042	G
1	AA	1054	C
1	AA	1064	G
1	AA	1065	U
1	AA	1067	A
1	AA	1125	U
1	AA	1165	C
1	AA	1201	A
1	AA	1256	A
1	AA	1285	A
1	AA	1442	G
25	BA	70	A
25	BA	99	G
25	BA	184	A
25	BA	185	A
25	BA	188	A
25	BA	271	U
25	BA	273	G
25	BA	302	A
25	BA	468	G
25	BA	553	A
25	BA	716	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BA	793	A
25	BA	823	G
25	BA	874	U
25	BA	945	A
25	BA	990	A
25	BA	1003	U
25	BA	1019	G
25	BA	1093	G
25	BA	1219	A
25	BA	1220	U
25	BA	1221	G
25	BA	1255	A
25	BA	1321	A
25	BA	1466	U
25	BA	1577	C
25	BA	1654	A
25	BA	1700	G
25	BA	1793	A
25	BA	2014	G
25	BA	2228	G
25	BA	2347	A
25	BA	2418	U
25	BA	2434	A
25	BA	2442	A
25	BA	2459	G
25	BA	2623	U
25	BA	2701	U
25	BA	2769	U
25	BA	2883	A
25	BA	2902	G
1	CA	5	U
1	CA	60	A
1	CA	65	U
1	CA	97	G
1	CA	115	G
1	CA	147	G
1	CA	204	U
1	CA	266	G
1	CA	429	U
1	CA	509	A
1	CA	532	A
1	CA	560	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	687	A
1	CA	793	U
1	CA	913	A
1	CA	991	U
1	CA	992	U
1	CA	1005	A
1	CA	1054	C
1	CA	1064	G
1	CA	1065	U
1	CA	1067	A
1	CA	1128	C
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	1531	A
25	DA	195	A
25	DA	196	A
25	DA	249	C
25	DA	271(M)	G
25	DA	277	C
25	DA	310	A
25	DA	528	A
25	DA	620	G
25	DA	669	G
25	DA	752	A
25	DA	774	A
25	DA	827	U
25	DA	856	C
25	DA	859	G
25	DA	900	A
25	DA	1026	U
25	DA	1210	A
25	DA	1378	A
25	DA	1379	A
25	DA	1420	U
25	DA	1427	A
25	DA	1543	C
25	DA	1558	A
25	DA	1559	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	DA	1608	A
25	DA	1653	G
25	DA	1992	G
25	DA	2288	A
25	DA	2318	G
25	DA	2335	A
25	DA	2406	U
25	DA	2439	A
25	DA	2689	U
25	DA	2750	A
25	DA	2756	U
26	DB	45	A

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

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

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# $ Z > 2$	Counts	RMSZ	# $ Z > 2$
24	2QZ	AW	1	24	8,8,9	6.11	2 (25%)	7,10,12	2.52	1 (14%)
24	2QY	AW	10	24	12,13,14	1.43	3 (25%)	13,16,18	2.58	5 (38%)
24	004	AW	3	24	10,10,11	6.47	3 (30%)	10,12,14	5.74	1 (10%)
24	MVA	AW	5	24	7,7,8	6.71	2 (28%)	5,8,10	2.10	1 (20%)
24	2R1	AW	6	24	9,10,11	2.55	5 (55%)	10,13,15	54.55	3 (30%)
24	2R3	AW	8	24	14,14,15	5.87	1 (7%)	16,18,20	2.48	9 (56%)
24	MVA	AW	9	24	7,7,8	5.79	2 (28%)	5,8,10	1.05	1 (20%)
24	2QZ	CW	1	24	8,8,9	6.33	3 (37%)	7,10,12	3.80	2 (28%)
24	2QY	CW	10	24	12,13,14	1.41	3 (25%)	13,16,18	2.30	2 (15%)
24	004	CW	3	24	10,10,11	6.07	3 (30%)	10,12,14	9.22	1 (10%)
24	MVA	CW	5	24	7,7,8	6.99	3 (42%)	5,8,10	1.00	0
24	2R1	CW	6	24	9,10,11	2.31	3 (33%)	10,13,15	13.39	2 (20%)
24	2R3	CW	8	24	14,14,15	5.39	1 (7%)	16,18,20	2.75	7 (43%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
24	MVA	CW	9	24	7,7,8	6.86	3 (42%)	5,8,10	1.53	1 (20%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	2QZ	AW	1	24	-	1/8/10/12	0/0/0/0
24	2QY	AW	10	24	-	1/5/8/10	0/1/1/1
24	004	AW	3	24	-	0/4/6/8	0/1/1/1
24	MVA	AW	5	24	-	1/6/8/10	0/0/0/0
24	2R1	AW	6	24	-	0/4/14/16	0/0/1/1
24	2R3	AW	8	24	-	0/10/12/14	0/1/1/1
24	MVA	AW	9	24	-	0/6/8/10	0/0/0/0
24	2QZ	CW	1	24	-	1/8/10/12	0/0/0/0
24	2QY	CW	10	24	-	0/5/8/10	0/1/1/1
24	004	CW	3	24	-	0/4/6/8	0/1/1/1
24	MVA	CW	5	24	-	0/6/8/10	0/0/0/0
24	2R1	CW	6	24	-	0/4/14/16	0/0/1/1
24	2R3	CW	8	24	-	0/10/12/14	0/1/1/1
24	MVA	CW	9	24	-	0/6/8/10	0/0/0/0

All (37) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	AW	8	2R3	O-C	21.83	1.26	1.11
24	CW	8	2R3	O-C	20.03	1.25	1.11
24	AW	3	004	O-C	19.40	1.24	1.11
24	CW	5	MVA	O-C	18.00	1.23	1.11
24	CW	3	004	O-C	17.75	1.23	1.11
24	AW	5	MVA	O-C	17.48	1.23	1.11
24	CW	1	2QZ	O-C	17.46	1.23	1.11
24	CW	9	MVA	O-C	17.34	1.23	1.11
24	AW	1	2QZ	O-C	17.07	1.23	1.11
24	AW	9	MVA	O-C	15.16	1.21	1.11
24	CW	3	004	CB-CA	-5.97	1.49	1.52
24	AW	6	2R1	CA-N	5.39	1.46	1.35
24	CW	6	2R1	CA-N	5.02	1.45	1.35
24	AW	3	004	CB-CA	-4.83	1.49	1.52
24	CW	9	MVA	CB-CA	4.49	1.57	1.54
24	AW	3	004	CA-C	4.36	1.54	1.48

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	CW	3	004	CA-C	4.20	1.54	1.48
24	CW	6	2R1	CG2-CB	-3.67	1.48	1.51
24	AW	6	2R1	CG2-CB	-3.02	1.48	1.51
24	CW	10	2QY	O-C	2.97	1.26	1.18
24	AW	10	2QY	O-C	2.91	1.26	1.18
24	AW	10	2QY	CA-N	2.89	1.48	1.37
24	CW	9	MVA	CA-C	2.88	1.55	1.49
24	AW	6	2R1	O-C	2.85	1.25	1.18
24	CW	5	MVA	CB-CA	2.77	1.56	1.54
24	CW	1	2QZ	CA-N	2.77	1.49	1.46
24	CW	10	2QY	CA-N	2.71	1.47	1.37
24	CW	6	2R1	O-C	2.64	1.25	1.18
24	CW	10	2QY	CG-CB	2.61	1.52	1.46
24	CW	5	MVA	CA-C	2.58	1.54	1.49
24	AW	6	2R1	CB-CA	2.49	1.36	1.34
24	CW	1	2QZ	CA-C	2.43	1.54	1.49
24	AW	5	MVA	CA-C	2.39	1.54	1.49
24	AW	1	2QZ	CA-C	2.36	1.54	1.49
24	AW	10	2QY	CG-CB	2.24	1.51	1.46
24	AW	9	MVA	CA-C	2.24	1.53	1.49
24	AW	6	2R1	OD1-CG1	2.04	1.56	1.42

All (36) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	AW	6	2R1	CG1-CB-CA	171.85	126.77	119.61
24	CW	6	2R1	CG1-CB-CA	40.48	121.30	119.61
24	CW	3	004	C-CA-N	-29.06	109.98	113.27
24	AW	3	004	C-CA-N	-17.91	111.24	113.27
24	AW	6	2R1	OD2-CG2-CB	-14.50	92.15	112.43
24	CW	6	2R1	OD2-CG2-CB	-12.18	95.40	112.43
24	CW	1	2QZ	OG1-CB-CG2	9.39	137.20	109.72
24	AW	10	2QY	CB-CA-N	6.66	132.58	121.57
24	CW	8	2R3	CB-CA-N	6.16	121.22	109.41
24	AW	1	2QZ	OG1-CB-CG2	6.12	127.64	109.72
24	CW	10	2QY	CB-CA-N	5.82	131.19	121.57
24	CW	8	2R3	OB-CB-CA	5.68	118.56	107.48
24	AW	8	2R3	CB-CA-N	4.86	118.73	109.41
24	CW	10	2QY	CN-N-CA	-4.81	109.17	124.32
24	AW	10	2QY	CN-N-CA	-4.76	109.33	124.32
24	AW	8	2R3	OB-CB-CA	4.51	116.28	107.48
24	AW	5	MVA	CN-N-CA	4.22	126.51	114.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	CW	8	2R3	C-CA-N	-3.25	106.65	111.94
24	AW	8	2R3	C-CA-N	-3.22	106.70	111.94
24	CW	8	2R3	CO-OH-CZ	-3.07	110.40	117.54
24	AW	8	2R3	CE2-CD2-CG	2.99	124.29	121.20
24	AW	8	2R3	CO-OH-CZ	-2.89	110.83	117.54
24	CW	8	2R3	CE1-CD1-CG	-2.67	118.45	121.20
24	CW	9	MVA	CN-N-CA	2.67	122.05	114.39
24	CW	8	2R3	CD2-CG-CB	-2.56	117.08	120.75
24	AW	6	2R1	CG2-CB-CA	-2.46	119.98	123.55
24	CW	1	2QZ	CN1-N-CN2	-2.43	102.89	110.43
24	AW	8	2R3	CE1-CD1-CG	-2.37	118.75	121.20
24	AW	8	2R3	CD1-CG-CB	2.30	124.04	120.75
24	AW	10	2QY	CG-CB-CA	-2.26	126.71	130.63
24	AW	10	2QY	CD2-CG-CD1	2.14	120.93	117.66
24	AW	10	2QY	CE1-CD1-CG	-2.14	118.61	121.29
24	AW	9	MVA	CN-N-CA	2.12	120.49	114.39
24	CW	8	2R3	CE2-CD2-CG	2.11	123.38	121.20
24	AW	8	2R3	CD1-CE1-CZ	2.08	122.42	119.75
24	AW	8	2R3	CD2-CG-CB	-2.02	117.85	120.75

There are no chirality outliers.

All (4) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
24	AW	1	2QZ	C-CA-N-CN1
24	CW	1	2QZ	C-CA-N-CN1
24	AW	5	MVA	CB-CA-N-CN
24	AW	10	2QY	CB-CA-N-CN

There are no ring outliers.

5.5 Carbohydrates

There are no carbohydrates in this entry.

5.6 Ligand geometry

Of 1991 ligands modelled in this entry, 1987 are monoatomic - leaving 4 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and

the number of bonds (or angles) that are defined in the chemical component dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
57	SF4	AD	501	4	12,12,12	22.61	12 (100%)	0,24,24	0.00	-
59	FME	AX	101	23	9,9,10	6.14	3 (33%)	6,9,11	1.39	1 (16%)
57	SF4	CD	501	4	12,12,12	21.29	12 (100%)	0,24,24	0.00	-
59	FME	CX	101	23	9,9,10	6.72	3 (33%)	6,9,11	1.21	1 (16%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
57	SF4	AD	501	4	-	0/0/48/48	0/6/5/5
59	FME	AX	101	23	-	1/7/9/11	0/0/0/0
57	SF4	CD	501	4	-	0/0/48/48	0/6/5/5
59	FME	CX	101	23	-	1/7/9/11	0/0/0/0

All (30) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	AD	501	SF4	S1-FE2	-23.92	2.17	2.33
57	AD	501	SF4	S2-FE1	-23.56	2.17	2.33
57	AD	501	SF4	S4-FE1	-23.55	2.17	2.33
57	AD	501	SF4	S4-FE3	-23.55	2.17	2.33
57	CD	501	SF4	S3-FE1	-23.54	2.17	2.33
57	AD	501	SF4	S3-FE4	-23.44	2.17	2.33
57	AD	501	SF4	S2-FE3	-23.07	2.17	2.33
57	AD	501	SF4	S3-FE2	-23.03	2.17	2.33
57	CD	501	SF4	S4-FE3	-22.50	2.18	2.33
57	AD	501	SF4	S1-FE4	-22.47	2.18	2.33
57	CD	501	SF4	S3-FE4	-22.29	2.18	2.33
57	CD	501	SF4	S1-FE3	-21.46	2.18	2.33
57	AD	501	SF4	S4-FE2	-21.42	2.18	2.33
57	CD	501	SF4	S2-FE1	-21.39	2.18	2.33
57	CD	501	SF4	S4-FE1	-21.39	2.18	2.33
57	CD	501	SF4	S1-FE4	-21.20	2.19	2.33
57	AD	501	SF4	S1-FE3	-21.19	2.19	2.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	AD	501	SF4	S3-FE1	-21.18	2.19	2.33
57	CD	501	SF4	S2-FE3	-20.82	2.19	2.33
57	CD	501	SF4	S3-FE2	-20.67	2.19	2.33
57	AD	501	SF4	S2-FE4	-20.64	2.19	2.33
57	CD	501	SF4	S4-FE2	-20.08	2.19	2.33
57	CD	501	SF4	S1-FE2	-20.02	2.19	2.33
59	CX	101	FME	O-C	19.88	1.25	1.11
57	CD	501	SF4	S2-FE4	-19.80	2.19	2.33
59	AX	101	FME	O-C	17.98	1.23	1.11
59	AX	101	FME	CA-N	2.61	1.49	1.46
59	AX	101	FME	CA-C	2.56	1.54	1.49
59	CX	101	FME	CA-C	2.41	1.54	1.49
59	CX	101	FME	CA-N	2.06	1.48	1.46

All (2) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	AX	101	FME	CA-N-CN	-2.47	119.03	122.82
59	CX	101	FME	CA-N-CN	-2.33	119.25	122.82

There are no chirality outliers.

All (2) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
59	AX	101	FME	O1-CN-N-CA
59	CX	101	FME	O1-CN-N-CA

There are no ring outliers.

5.7 Other polymers ⓘ

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

In the following table, the column labelled ‘#RSRZ> 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 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	1498/1522 (98%)	-0.20	32 (2%)	60	12	39, 80, 103, 118	0
1	CA	1503/1522 (98%)	-0.23	28 (1%)	64	13	41, 80, 103, 119	0
2	AB	231/256 (90%)	-0.08	0	100	100	69, 86, 97, 105	0
2	CB	231/256 (90%)	0.09	2 (0%)	81	24	70, 88, 98, 107	0
3	AC	206/239 (86%)	0.08	1 (0%)	88	36	73, 87, 95, 104	0
3	CC	206/239 (86%)	0.22	3 (1%)	70	16	72, 89, 97, 104	0
4	AD	208/209 (99%)	-0.07	0	100	100	61, 80, 90, 97	0
4	CD	208/209 (99%)	-0.17	0	100	100	61, 79, 89, 97	0
5	AE	148/162 (91%)	-0.30	0	100	100	51, 73, 82, 93	0
5	CE	148/162 (91%)	-0.24	0	100	100	53, 75, 84, 96	0
6	AF	100/101 (99%)	-0.22	0	100	100	63, 77, 87, 94	0
6	CF	100/101 (99%)	-0.25	0	100	100	62, 78, 87, 95	0
7	AG	155/156 (99%)	0.24	5 (3%)	45	9	74, 86, 99, 106	0
7	CG	155/156 (99%)	0.25	8 (5%)	26	6	75, 86, 99, 105	0
8	AH	137/138 (99%)	-0.09	0	100	100	60, 74, 82, 89	0
8	CH	137/138 (99%)	-0.10	0	100	100	62, 75, 83, 89	0
9	AI	127/128 (99%)	0.26	0	100	100	73, 91, 99, 101	0
9	CI	127/128 (99%)	0.78	9 (7%)	16	4	72, 93, 100, 102	0
10	AJ	97/105 (92%)	0.40	2 (2%)	60	12	73, 91, 100, 105	0
10	CJ	96/105 (91%)	0.55	1 (1%)	79	22	77, 93, 100, 104	0
11	AK	114/129 (88%)	-0.24	0	100	100	53, 74, 87, 91	0
11	CK	114/129 (88%)	-0.09	0	100	100	55, 76, 87, 92	0
12	AL	122/132 (92%)	-0.21	0	100	100	53, 68, 80, 87	0
12	CL	122/132 (92%)	-0.16	0	100	100	53, 69, 80, 87	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%)	0.25	4 (3%)	44	8	67, 85, 95, 105	0
13	CM	122/126 (96%)	0.36	6 (4%)	28	6	77, 92, 100, 109	0
14	AN	60/61 (98%)	0.06	0	100	100	75, 87, 94, 103	0
14	CN	60/61 (98%)	0.52	2 (3%)	44	8	77, 89, 94, 100	0
15	AO	88/89 (98%)	-0.13	0	100	100	55, 72, 85, 90	0
15	CO	88/89 (98%)	-0.14	0	100	100	55, 72, 85, 91	0
16	AP	82/88 (93%)	0.26	0	100	100	67, 78, 89, 94	0
16	CP	82/88 (93%)	0.02	0	100	100	66, 76, 88, 94	0
17	AQ	99/105 (94%)	-0.15	0	100	100	59, 72, 83, 90	0
17	CQ	99/105 (94%)	-0.12	0	100	100	58, 72, 83, 89	0
18	AR	68/88 (77%)	0.16	0	100	100	65, 73, 87, 91	0
18	CR	68/88 (77%)	0.15	0	100	100	64, 75, 87, 91	0
19	AS	83/93 (89%)	0.50	2 (2%)	56	11	77, 92, 99, 106	0
19	CS	83/93 (89%)	0.54	1 (1%)	75	20	79, 92, 101, 106	0
20	AT	96/106 (90%)	0.11	0	100	100	62, 76, 86, 90	0
20	CT	96/106 (90%)	0.07	0	100	100	62, 74, 86, 92	0
21	AU	23/27 (85%)	0.95	1 (4%)	34	7	73, 88, 93, 94	0
21	CU	23/27 (85%)	0.91	0	100	100	73, 89, 92, 94	0
22	AV	7/24 (29%)	0.58	0	100	100	65, 77, 102, 104	0
22	CV	6/24 (25%)	0.84	1 (16%)	2	1	67, 78, 103, 103	0
23	AX	76/77 (98%)	0.24	1 (1%)	74	19	52, 80, 97, 105	0
23	CX	76/77 (98%)	0.20	1 (1%)	74	19	52, 82, 100, 106	0
24	AW	6/10 (60%)	-0.23	1 (16%)	2	1	67, 81, 87, 98	0
24	CW	6/10 (60%)	-0.06	0	100	100	67, 78, 82, 87	0
25	BA	2731/2915 (93%)	-0.36	11 (0%)	90	41	23, 44, 85, 111	0
25	DA	2714/2915 (93%)	-0.54	11 (0%)	90	41	26, 47, 85, 118	0
26	BB	120/122 (98%)	-0.46	0	100	100	42, 68, 80, 95	0
26	DB	120/122 (98%)	-0.37	0	100	100	48, 74, 84, 97	0
27	BD	275/276 (99%)	-0.34	0	100	100	22, 42, 58, 77	0
27	DD	275/276 (99%)	-0.36	0	100	100	23, 44, 60, 79	0
28	BE	204/206 (99%)	-0.29	0	100	100	23, 45, 67, 88	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
28	DE	204/206 (99%)	-0.31	0 100 100	24, 47, 70, 88	0
29	BF	203/210 (96%)	-0.26	0 100 100	20, 51, 77, 94	0
29	DF	203/210 (96%)	-0.32	0 100 100	22, 54, 78, 93	0
30	BG	181/182 (99%)	-0.26	0 100 100	59, 77, 90, 103	0
30	DG	181/182 (99%)	0.01	0 100 100	63, 80, 92, 102	0
31	BH	174/180 (96%)	-0.25	0 100 100	50, 66, 78, 84	0
31	DH	174/180 (96%)	0.15	0 100 100	54, 71, 82, 87	0
32	BI	146/148 (98%)	-0.25	0 100 100	45, 75, 87, 92	0
32	DI	146/148 (98%)	0.01	0 100 100	48, 76, 86, 91	0
33	BN	140/140 (100%)	-0.33	0 100 100	32, 49, 68, 80	0
33	DN	140/140 (100%)	-0.35	0 100 100	34, 53, 72, 81	0
34	BO	122/122 (100%)	-0.34	0 100 100	25, 39, 60, 78	0
34	DO	122/122 (100%)	-0.32	0 100 100	34, 52, 68, 79	0
35	BP	149/150 (99%)	-0.27	0 100 100	26, 54, 76, 84	0
35	DP	149/150 (99%)	-0.13	0 100 100	30, 57, 79, 86	0
36	BQ	141/141 (100%)	-0.26	0 100 100	33, 51, 65, 79	0
36	DQ	141/141 (100%)	-0.31	0 100 100	35, 54, 70, 80	0
37	BR	118/118 (100%)	-0.38	0 100 100	22, 35, 51, 64	0
37	DR	118/118 (100%)	-0.30	0 100 100	36, 50, 64, 81	0
38	BS	110/112 (98%)	-0.23	0 100 100	38, 55, 69, 81	0
38	DS	110/112 (98%)	0.13	0 100 100	66, 78, 90, 100	0
39	BT	131/146 (89%)	-0.33	0 100 100	33, 45, 75, 91	0
39	DT	131/146 (89%)	-0.36	0 100 100	44, 56, 80, 86	0
40	BU	116/118 (98%)	-0.45	0 100 100	19, 30, 50, 63	0
40	DU	116/118 (98%)	-0.29	0 100 100	39, 61, 79, 88	0
41	BV	101/101 (100%)	-0.31	0 100 100	29, 52, 70, 77	0
41	DV	101/101 (100%)	-0.19	0 100 100	32, 58, 74, 79	0
42	BW	112/113 (99%)	-0.36	0 100 100	27, 37, 61, 94	0
42	DW	112/113 (99%)	-0.28	0 100 100	31, 40, 63, 94	0
43	BX	95/96 (98%)	-0.31	0 100 100	32, 46, 69, 82	0
43	DX	95/96 (98%)	-0.22	0 100 100	38, 50, 72, 83	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
44	BY	107/110 (97%)	-0.18	1 (0%) 81 24	44, 59, 77, 82	0
44	DY	107/110 (97%)	0.17	1 (0%) 81 24	46, 63, 80, 85	0
45	BZ	171/206 (83%)	-0.30	0 100 100	52, 71, 85, 93	0
45	DZ	174/206 (84%)	-0.14	0 100 100	56, 74, 87, 95	0
46	B0	83/85 (97%)	-0.11	3 (3%) 41 8	22, 40, 75, 104	0
46	D0	83/85 (97%)	0.10	2 (2%) 56 11	45, 66, 87, 98	0
47	B1	97/98 (98%)	-0.21	0 100 100	25, 42, 71, 77	0
47	D1	97/98 (98%)	-0.21	0 100 100	35, 56, 79, 85	0
48	B2	70/72 (97%)	-0.33	0 100 100	31, 48, 64, 77	0
48	D2	70/72 (97%)	-0.24	0 100 100	56, 73, 84, 86	0
49	B3	59/60 (98%)	-0.21	0 100 100	26, 38, 63, 86	0
49	D3	59/60 (98%)	0.07	1 (1%) 67 15	49, 62, 80, 93	0
50	B4	69/71 (97%)	-0.03	0 100 100	64, 87, 101, 104	0
50	D4	69/71 (97%)	0.19	2 (2%) 49 9	85, 95, 104, 107	0
51	B5	59/60 (98%)	-0.43	0 100 100	14, 35, 55, 71	0
51	D5	59/60 (98%)	-0.39	0 100 100	29, 51, 70, 77	0
52	B6	53/54 (98%)	-0.32	0 100 100	40, 54, 68, 74	0
52	D6	53/54 (98%)	-0.28	0 100 100	42, 58, 68, 74	0
53	B7	48/49 (97%)	-0.20	0 100 100	26, 32, 67, 78	0
53	D7	48/49 (97%)	-0.18	1 (2%) 60 12	27, 34, 66, 79	0
54	B8	64/65 (98%)	-0.26	0 100 100	33, 43, 51, 57	0
54	D8	64/65 (98%)	-0.21	0 100 100	34, 46, 56, 60	0
55	B9	37/37 (100%)	0.07	0 100 100	43, 52, 68, 77	0
55	D9	37/37 (100%)	0.65	3 (8%) 12 3	48, 57, 72, 78	0
All	All	20468/21468 (95%)	-0.21	147 (0%) 84 28	14, 65, 95, 119	0

All (147) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
13	CM	124	PRO	8.9
13	CM	123	ALA	6.8
13	AM	123	ALA	5.8
7	CG	78	ARG	5.5
1	CA	1030(B)	C	5.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AA	1036	G	5.3
13	AM	124	PRO	4.8
1	AA	1000	U	4.7
1	CA	1001(A)	G	4.6
13	AM	122	LYS	4.6
1	AA	1028	C	4.4
1	AA	1037	C	4.4
1	AA	1030(B)	C	4.3
1	CA	1257	U	4.2
1	CA	1001	A	4.2
1	CA	1532	U	4.1
13	CM	122	LYS	4.1
1	CA	1036	G	4.1
1	AA	1030(C)	G	4.0
7	AG	78	ARG	4.0
1	AA	1030	C	4.0
1	CA	1002	G	3.9
1	AA	1001(A)	G	3.9
1	CA	1030(C)	G	3.8
13	AM	121	LYS	3.7
1	AA	1002	G	3.7
7	CG	79	ARG	3.6
25	BA	1555	C	3.6
7	AG	80	VAL	3.5
25	BA	935	C	3.5
1	AA	202	U	3.5
1	AA	1038	C	3.4
1	CA	1030(A)	G	3.4
46	B0	3	HIS	3.4
55	D9	13	LYS	3.4
1	CA	1035	A	3.4
46	B0	7	LEU	3.4
9	CI	36	TYR	3.4
25	DA	2802	G	3.3
1	AA	1001	A	3.3
7	AG	79	ARG	3.3
1	AA	204	U	3.3
1	AA	999	C	3.3
25	DA	652(B)	A	3.2
1	AA	1029	C	3.2
1	AA	1026	G	3.2
25	DA	1509	C	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	CA	1026	G	3.1
25	DA	229	A	3.1
1	CA	1286	A	3.1
1	AA	1034	G	3.1
25	BA	2814	C	3.0
1	AA	1030(A)	G	3.0
3	CC	160	ALA	3.0
1	AA	1257	U	3.0
1	CA	1040	U	3.0
3	CC	155	GLY	2.9
1	CA	1037	C	2.9
25	BA	2807	C	2.9
13	CM	121	LYS	2.9
14	CN	17	LYS	2.9
25	BA	1221	G	2.8
9	CI	30	GLY	2.8
25	DA	2803	C	2.8
25	DA	2793	G	2.8
46	B0	6	GLY	2.8
25	BA	2815	C	2.7
1	AA	1027	C	2.7
25	DA	2801(A)	A	2.7
9	CI	9	ARG	2.7
49	D3	60	GLU	2.7
13	CM	120	LYS	2.6
1	AA	1031	G	2.6
9	CI	62	TYR	2.6
1	AA	1137	C	2.6
53	D7	48	LYS	2.6
7	CG	154	TYR	2.6
46	D0	6	GLY	2.6
46	D0	7	LEU	2.5
1	AA	1021	G	2.5
10	CJ	6	ILE	2.5
9	CI	7	THR	2.5
25	DA	2896	C	2.5
1	AA	1035	A	2.5
1	AA	1531	A	2.5
1	CA	1531	A	2.5
1	CA	1034	G	2.4
9	CI	61	ALA	2.4
1	AA	1039	C	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	CB	140	HIS	2.4
19	CS	12	ASP	2.4
1	AA	1006	C	2.4
1	AA	1286	A	2.4
7	CG	156	TRP	2.4
21	AU	22	ARG	2.4
1	CA	1027	C	2.3
25	BA	2806	G	2.3
10	AJ	5	ARG	2.3
3	CC	159	GLY	2.3
10	AJ	7	LYS	2.3
1	CA	1000	U	2.3
25	BA	2813	G	2.3
1	CA	1021	G	2.3
13	CM	119	GLY	2.3
19	AS	40	ILE	2.3
25	DA	2805	G	2.3
24	AW	9	MVA	2.2
25	DA	888	C	2.2
3	AC	193	TYR	2.2
1	CA	1041	A	2.2
55	D9	12	ASP	2.2
9	CI	5	TYR	2.2
1	CA	1029	C	2.2
44	DY	1	MET	2.2
1	AA	1020	U	2.2
1	CA	1030(D)	A	2.2
7	CG	83	ALA	2.2
9	CI	66	ARG	2.2
23	CX	17	C	2.1
1	AA	1033	G	2.1
50	D4	68	ARG	2.1
7	CG	8	GLU	2.1
1	CA	1020	U	2.1
14	CN	2	ALA	2.1
22	CV	14	A	2.1
25	BA	218	A	2.1
1	AA	201	C	2.1
1	AA	1007	C	2.1
9	CI	35	GLU	2.1
44	BY	1	MET	2.1
23	AX	47	U	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	CA	1006	C	2.1
1	CA	202	U	2.1
50	D4	69	LYS	2.1
1	CA	1042	G	2.1
2	CB	232	PRO	2.1
25	BA	696	C	2.1
7	CG	6	ARG	2.1
19	AS	71	LEU	2.1
7	CG	2	ALA	2.0
55	D9	16	VAL	2.0
1	CA	204	U	2.0
1	CA	1039	C	2.0
25	DA	2794	C	2.0
7	AG	85	TYR	2.0
25	BA	2816	G	2.0
7	AG	153	HIS	2.0

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

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. LLDF column lists the quality of electron density of the group with respect to its neighbouring residues in protein, DNA or RNA chains. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
24	2QZ	AW	1	9/10	0.26	-	50,71,82,83	0
24	MVA	AW	5	8/9	0.20	-	69,82,86,91	0
24	2R3	AW	8	14/15	0.22	-	70,78,86,87	0
24	2R3	CW	8	14/15	0.13	-	62,69,77,78	0
24	2QY	CW	10	13/14	0.15	-	60,72,80,86	0
24	MVA	CW	5	8/9	0.23	-	76,88,91,99	0
24	2QZ	CW	1	9/10	0.27	-	63,71,80,101	0
24	2R1	CW	6	10/11	0.13	-	68,82,90,91	0
24	MVA	CW	9	8/9	0.23	-	70,73,84,91	0
24	004	CW	3	10/11	0.15	-	69,78,82,83	0
24	2QY	AW	10	13/14	0.13	-	49,70,87,100	0
24	2R1	AW	6	10/11	0.14	-	66,72,84,91	0
24	004	AW	3	10/11	0.12	-	67,87,95,97	0
24	MVA	AW	9	8/9	0.27	-	63,74,87,88	0

6.3 Carbohydrates

There are no carbohydrates in this entry.

6.4 Ligands

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. LLDF column lists the quality of electron density of the group with respect to its neighbouring residues in protein, DNA or RNA chains. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
56	MG	BA	3054	1/1	0.18	-	39,39,39,39	0
56	MG	AA	3126	1/1	0.18	-	54,54,54,54	0
56	MG	DA	3292	1/1	0.17	-	34,34,34,34	0
56	MG	BA	3004	1/1	0.21	-	45,45,45,45	0
56	MG	BA	3337	1/1	0.10	-	48,48,48,48	0
56	MG	DA	3385	1/1	0.34	-	58,58,58,58	0
56	MG	BA	3087	1/1	0.42	-	48,48,48,48	0
56	MG	BA	3456	1/1	0.21	-	24,24,24,24	0
56	MG	CA	3057	1/1	0.21	-	40,40,40,40	0
56	MG	DA	3532	1/1	0.10	-	60,60,60,60	0
56	MG	BA	3493	1/1	0.12	-	51,51,51,51	0
56	MG	DA	3369	1/1	0.05	-	53,53,53,53	0
56	MG	DA	3032	1/1	0.13	-	36,36,36,36	0
56	MG	DA	3613	1/1	0.30	-	64,64,64,64	0
56	MG	DA	3603	1/1	0.21	-	66,66,66,66	0
56	MG	AA	3016	1/1	0.11	-	70,70,70,70	0
56	MG	BA	3383	1/1	0.15	-	51,51,51,51	0
56	MG	DA	3263	1/1	0.15	-	48,48,48,48	0
56	MG	DA	3220	1/1	0.35	-	61,61,61,61	0
56	MG	DA	3615	1/1	0.09	-	57,57,57,57	0
56	MG	BA	3375	1/1	0.18	-	44,44,44,44	0
56	MG	DA	3268	1/1	0.15	-	42,42,42,42	0
56	MG	DA	3314	1/1	0.17	-	56,56,56,56	0
56	MG	BA	3263	1/1	0.58	-	35,35,35,35	0
56	MG	DA	3566	1/1	0.13	-	55,55,55,55	0
56	MG	BA	3393	1/1	0.18	-	27,27,27,27	0
56	MG	DA	3136	1/1	0.07	-	39,39,39,39	0
58	ZN	B6	501	1/1	0.12	-	51,51,51,51	0
56	MG	DA	3394	1/1	0.07	-	46,46,46,46	0
56	MG	DA	3393	1/1	0.24	-	35,35,35,35	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BA	3155	1/1	0.46	-	56,56,56,56	0
56	MG	DA	3299	1/1	0.12	-	35,35,35,35	0
56	MG	DA	3165	1/1	0.28	-	48,48,48,48	0
56	MG	DA	3347	1/1	0.20	-	39,39,39,39	0
56	MG	BA	3301	1/1	0.56	-	44,44,44,44	0
56	MG	BA	3062	1/1	0.40	-	46,46,46,46	0
56	MG	BA	3532	1/1	0.22	-	42,42,42,42	0
56	MG	BA	3606	1/1	0.09	-	44,44,44,44	0
56	MG	BA	3575	1/1	0.14	-	26,26,26,26	0
56	MG	BA	3648	1/1	0.18	-	54,54,54,54	0
56	MG	DA	3162	1/1	0.11	-	69,69,69,69	0
56	MG	CA	3025	1/1	0.13	-	102,102,102,102	0
56	MG	AA	3007	1/1	0.14	-	68,68,68,68	0
56	MG	BF	306	1/1	0.42	-	52,52,52,52	0
56	MG	AA	3019	1/1	0.48	-	64,64,64,64	0
56	MG	CA	3156	1/1	0.26	-	80,80,80,80	0
56	MG	CA	3027	1/1	0.34	-	64,64,64,64	0
56	MG	DA	3158	1/1	0.43	-	47,47,47,47	0
56	MG	B3	3402	1/1	0.09	-	49,49,49,49	0
56	MG	CA	3009	1/1	0.12	-	55,55,55,55	0
56	MG	BA	3472	1/1	0.12	-	53,53,53,53	0
56	MG	BA	3505	1/1	0.27	-	45,45,45,45	0
56	MG	BA	3705	1/1	0.22	-	64,64,64,64	0
56	MG	BA	3354	1/1	0.27	-	45,45,45,45	0
56	MG	BA	3469	1/1	0.13	-	60,60,60,60	0
56	MG	BA	3594	1/1	0.35	-	55,55,55,55	0
56	MG	DA	3618	1/1	0.26	-	61,61,61,61	0
56	MG	DA	3517	1/1	0.27	-	47,47,47,47	0
56	MG	CA	3163	1/1	0.24	-	60,60,60,60	0
56	MG	BD	301	1/1	0.38	-	35,35,35,35	0
56	MG	BA	3218	1/1	0.11	-	58,58,58,58	0
56	MG	BA	3068	1/1	0.44	-	43,43,43,43	0
56	MG	DA	3021	1/1	0.10	-	43,43,43,43	0
56	MG	DA	3377	1/1	0.19	-	32,32,32,32	0
56	MG	BA	3576	1/1	0.10	-	45,45,45,45	0
56	MG	BA	3082	1/1	0.17	-	54,54,54,54	0
56	MG	BA	3293	1/1	0.30	-	69,69,69,69	0
56	MG	BA	3515	1/1	0.23	-	46,46,46,46	0
56	MG	BA	3715	1/1	0.29	-	44,44,44,44	0
56	MG	BA	3453	1/1	0.29	-	54,54,54,54	0
56	MG	BA	3553	1/1	0.17	-	46,46,46,46	0
56	MG	DA	3275	1/1	0.25	-	34,34,34,34	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	AA	3057	1/1	0.15	-	45,45,45,45	0
56	MG	AA	3071	1/1	0.30	-	60,60,60,60	0
56	MG	AM	3001	1/1	0.08	-	76,76,76,76	0
56	MG	DA	3647	1/1	0.56	-	45,45,45,45	0
56	MG	CA	3037	1/1	0.24	-	45,45,45,45	0
56	MG	DA	3041	1/1	0.37	-	54,54,54,54	0
56	MG	BA	3036	1/1	0.17	-	25,25,25,25	0
56	MG	BA	3332	1/1	0.12	-	52,52,52,52	0
56	MG	BA	3443	1/1	0.31	-	34,34,34,34	0
56	MG	BA	3708	1/1	0.28	-	38,38,38,38	0
56	MG	DA	3248	1/1	0.20	-	30,30,30,30	0
56	MG	DA	3321	1/1	0.11	-	31,31,31,31	0
56	MG	DA	3214	1/1	0.09	-	48,48,48,48	0
56	MG	DA	3280	1/1	0.22	-	46,46,46,46	0
56	MG	BA	3307	1/1	0.16	-	35,35,35,35	0
56	MG	BA	3459	1/1	0.12	-	51,51,51,51	0
56	MG	AA	3183	1/1	0.10	-	56,56,56,56	0
56	MG	AA	3123	1/1	0.37	-	38,38,38,38	0
56	MG	DA	3398	1/1	0.14	-	50,50,50,50	0
56	MG	DA	3022	1/1	0.17	-	41,41,41,41	0
56	MG	AA	3206	1/1	0.15	-	79,79,79,79	0
56	MG	DD	305	1/1	0.16	-	73,73,73,73	0
56	MG	CA	3061	1/1	0.49	-	68,68,68,68	0
56	MG	CA	3099	1/1	0.39	-	64,64,64,64	0
56	MG	AA	3027	1/1	0.30	-	67,67,67,67	0
56	MG	DA	3195	1/1	0.21	-	51,51,51,51	0
56	MG	DA	3522	1/1	0.22	-	46,46,46,46	0
56	MG	BA	3310	1/1	0.12	-	59,59,59,59	0
56	MG	BA	3410	1/1	0.17	-	21,21,21,21	0
58	ZN	DY	501	1/1	0.04	-	90,90,90,90	0
56	MG	DF	303	1/1	0.25	-	42,42,42,42	0
56	MG	DA	3403	1/1	0.21	-	42,42,42,42	0
56	MG	AA	3054	1/1	0.21	-	46,46,46,46	0
56	MG	CA	3011	1/1	0.26	-	27,27,27,27	0
56	MG	DA	3563	1/1	0.13	-	49,49,49,49	0
56	MG	BA	3152	1/1	0.07	-	52,52,52,52	0
56	MG	BA	3298	1/1	0.37	-	45,45,45,45	0
56	MG	DF	305	1/1	0.51	-	55,55,55,55	0
56	MG	DA	3642	1/1	0.19	-	67,67,67,67	0
56	MG	AA	3219	1/1	0.17	-	54,54,54,54	0
56	MG	BA	3222	1/1	0.50	-	56,56,56,56	0
56	MG	DA	3232	1/1	0.13	-	39,39,39,39	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BA	3356	1/1	0.13	-	33,33,33,33	0
56	MG	BA	3500	1/1	0.12	-	43,43,43,43	0
56	MG	BA	3671	1/1	0.14	-	44,44,44,44	0
56	MG	BA	3401	1/1	0.16	-	49,49,49,49	0
56	MG	BA	3193	1/1	0.46	-	53,53,53,53	0
56	MG	DA	3243	1/1	0.40	-	49,49,49,49	0
56	MG	DA	3600	1/1	0.14	-	73,73,73,73	0
56	MG	BA	3335	1/1	0.14	-	51,51,51,51	0
56	MG	BA	3581	1/1	0.33	-	54,54,54,54	0
56	MG	CA	3001	1/1	0.18	-	48,48,48,48	0
56	MG	BR	202	1/1	0.25	-	25,25,25,25	0
56	MG	DA	3361	1/1	0.15	-	58,58,58,58	0
56	MG	DA	3400	1/1	0.20	-	42,42,42,42	0
56	MG	AA	3049	1/1	0.36	-	46,46,46,46	0
56	MG	BA	3259	1/1	0.21	-	59,59,59,59	0
56	MG	BA	3199	1/1	0.33	-	31,31,31,31	0
56	MG	DA	3301	1/1	0.28	-	30,30,30,30	0
60	K	DA	3234	1/1	0.24	-	102,102,102,102	0
56	MG	AF	3001	1/1	0.16	-	62,62,62,62	0
56	MG	AA	3061	1/1	0.14	-	57,57,57,57	0
56	MG	BA	3518	1/1	0.09	-	52,52,52,52	0
56	MG	BA	3630	1/1	0.13	-	48,48,48,48	0
56	MG	DA	3555	1/1	0.14	-	43,43,43,43	0
56	MG	BA	3286	1/1	0.25	-	42,42,42,42	0
56	MG	AA	3134	1/1	0.29	-	70,70,70,70	0
56	MG	BA	3270	1/1	0.29	-	29,29,29,29	0
56	MG	BA	3642	1/1	0.14	-	52,52,52,52	0
56	MG	DB	3009	1/1	0.37	-	41,41,41,41	0
56	MG	BA	3092	1/1	0.24	-	28,28,28,28	0
56	MG	BA	3071	1/1	0.24	-	55,55,55,55	0
56	MG	BA	3067	1/1	0.42	-	55,55,55,55	0
56	MG	AA	3042	1/1	0.26	-	50,50,50,50	0
56	MG	DA	3656	1/1	0.11	-	62,62,62,62	0
56	MG	DA	3186	1/1	0.33	-	38,38,38,38	0
56	MG	CA	3040	1/1	0.38	-	47,47,47,47	0
56	MG	BA	3445	1/1	0.16	-	16,16,16,16	0
56	MG	BB	3007	1/1	0.12	-	49,49,49,49	0
56	MG	AA	3191	1/1	0.12	-	56,56,56,56	0
56	MG	BA	3623	1/1	0.16	-	43,43,43,43	0
56	MG	BV	3002	1/1	0.63	-	42,42,42,42	0
56	MG	BA	3462	1/1	0.22	-	30,30,30,30	0
56	MG	BA	3190	1/1	0.33	-	42,42,42,42	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	DA	3439	1/1	0.22	-	45,45,45,45	0
56	MG	BA	3265	1/1	0.24	-	39,39,39,39	0
56	MG	DA	3096	1/1	0.33	-	68,68,68,68	0
56	MG	CA	3142	1/1	0.23	-	80,80,80,80	0
56	MG	DA	3097	1/1	0.18	-	58,58,58,58	0
56	MG	BA	3387	1/1	0.28	-	49,49,49,49	0
56	MG	BA	3334	1/1	0.14	-	41,41,41,41	0
56	MG	CA	3032	1/1	0.21	-	44,44,44,44	0
56	MG	BA	3548	1/1	0.29	-	40,40,40,40	0
56	MG	DA	3611	1/1	0.15	-	51,51,51,51	0
56	MG	BA	3446	1/1	0.20	-	25,25,25,25	0
56	MG	BA	3069	1/1	0.11	-	33,33,33,33	0
56	MG	DA	3178	1/1	0.18	-	43,43,43,43	0
56	MG	AA	3159	1/1	0.28	-	57,57,57,57	0
56	MG	CA	3114	1/1	0.21	-	67,67,67,67	0
56	MG	BB	3014	1/1	0.09	-	68,68,68,68	0
56	MG	BA	3524	1/1	0.13	-	50,50,50,50	0
56	MG	BA	3045	1/1	0.15	-	27,27,27,27	0
56	MG	AA	3034	1/1	0.23	-	46,46,46,46	0
56	MG	BA	3225	1/1	0.39	-	42,42,42,42	0
56	MG	BA	3271	1/1	0.32	-	40,40,40,40	0
56	MG	DA	3052	1/1	0.12	-	20,20,20,20	0
56	MG	BA	3070	1/1	0.26	-	46,46,46,46	0
56	MG	BD	306	1/1	0.59	-	47,47,47,47	0
56	MG	BA	3289	1/1	0.12	-	53,53,53,53	0
56	MG	BA	3291	1/1	0.16	-	44,44,44,44	0
56	MG	AA	3109	1/1	0.22	-	59,59,59,59	0
56	MG	DA	3255	1/1	0.16	-	46,46,46,46	0
56	MG	DA	3520	1/1	0.10	-	38,38,38,38	0
56	MG	DA	3040	1/1	0.21	-	45,45,45,45	0
56	MG	AA	3119	1/1	0.32	-	42,42,42,42	0
56	MG	BA	3699	1/1	0.15	-	23,23,23,23	0
56	MG	BA	3415	1/1	0.14	-	28,28,28,28	0
56	MG	BA	3230	1/1	1.00	-	70,70,70,70	0
56	MG	DA	3371	1/1	0.24	-	37,37,37,37	0
56	MG	BA	3129	1/1	0.63	-	44,44,44,44	0
56	MG	BA	3114	1/1	0.28	-	46,46,46,46	0
56	MG	BA	3562	1/1	0.14	-	42,42,42,42	0
56	MG	CA	3140	1/1	0.15	-	75,75,75,75	0
56	MG	D8	5001	1/1	0.22	-	53,53,53,53	0
56	MG	DA	3326	1/1	0.10	-	61,61,61,61	0
56	MG	BA	3640	1/1	0.20	-	31,31,31,31	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	DA	3558	1/1	0.20	-	77,77,77,77	0
56	MG	CA	3047	1/1	0.17	-	56,56,56,56	0
56	MG	BA	3073	1/1	0.17	-	43,43,43,43	0
56	MG	BA	3083	1/1	0.13	-	33,33,33,33	0
56	MG	BG	3004	1/1	0.06	-	53,53,53,53	0
56	MG	DA	3420	1/1	0.05	-	43,43,43,43	0
56	MG	DA	3429	1/1	0.08	-	30,30,30,30	0
56	MG	DA	3583	1/1	0.24	-	35,35,35,35	0
56	MG	DA	3472	1/1	0.19	-	38,38,38,38	0
56	MG	BA	3386	1/1	0.13	-	29,29,29,29	0
56	MG	BA	3584	1/1	0.09	-	43,43,43,43	0
56	MG	BA	3228	1/1	0.32	-	23,23,23,23	0
56	MG	AA	3211	1/1	0.12	-	58,58,58,58	0
56	MG	BA	3013	1/1	0.43	-	36,36,36,36	0
56	MG	DA	3387	1/1	0.14	-	50,50,50,50	0
56	MG	DA	3375	1/1	0.09	-	40,40,40,40	0
56	MG	DA	3307	1/1	0.11	-	40,40,40,40	0
56	MG	DA	3193	1/1	0.19	-	42,42,42,42	0
56	MG	DA	3481	1/1	0.09	-	59,59,59,59	0
56	MG	CA	3100	1/1	0.17	-	72,72,72,72	0
56	MG	CA	3004	1/1	0.32	-	88,88,88,88	0
56	MG	DA	3210	1/1	0.33	-	46,46,46,46	0
56	MG	DV	202	1/1	0.69	-	45,45,45,45	0
56	MG	CA	3155	1/1	0.15	-	71,71,71,71	0
56	MG	AA	3079	1/1	0.86	-	65,65,65,65	0
56	MG	BA	3707	1/1	0.16	-	57,57,57,57	0
56	MG	DA	3281	1/1	0.14	-	33,33,33,33	0
56	MG	DA	3372	1/1	0.10	-	37,37,37,37	0
56	MG	BA	3512	1/1	0.18	-	42,42,42,42	0
56	MG	AA	3155	1/1	0.18	-	54,54,54,54	0
56	MG	CA	3086	1/1	0.14	-	70,70,70,70	0
58	ZN	D9	501	1/1	0.05	-	63,63,63,63	0
56	MG	CA	3118	1/1	0.07	-	39,39,39,39	0
56	MG	BE	308	1/1	0.26	-	27,27,27,27	0
56	MG	BA	3637	1/1	0.79	-	52,52,52,52	0
56	MG	DA	3039	1/1	0.55	-	46,46,46,46	0
56	MG	CA	3083	1/1	0.10	-	30,30,30,30	0
56	MG	AA	3194	1/1	0.16	-	50,50,50,50	0
56	MG	AA	3069	1/1	0.07	-	77,77,77,77	0
56	MG	DA	3649	1/1	0.10	-	39,39,39,39	0
56	MG	BA	3219	1/1	0.39	-	36,36,36,36	0
56	MG	BA	3046	1/1	0.41	-	52,52,52,52	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	AA	3102	1/1	0.05	-	68,68,68,68	0
56	MG	DA	3033	1/1	0.21	-	41,41,41,41	0
56	MG	CA	3126	1/1	0.24	-	56,56,56,56	0
56	MG	BW	3005	1/1	0.42	-	38,38,38,38	0
56	MG	DA	3592	1/1	0.14	-	49,49,49,49	0
56	MG	BA	3368	1/1	0.16	-	22,22,22,22	0
56	MG	AA	3199	1/1	0.12	-	62,62,62,62	0
56	MG	BA	3312	1/1	0.10	-	43,43,43,43	0
56	MG	DA	3457	1/1	0.14	-	44,44,44,44	0
56	MG	DA	3153	1/1	0.31	-	51,51,51,51	0
56	MG	AA	3204	1/1	0.15	-	70,70,70,70	0
56	MG	BU	203	1/1	0.28	-	26,26,26,26	0
56	MG	AX	109	1/1	0.10	-	56,56,56,56	0
56	MG	BA	3714	1/1	0.14	-	72,72,72,72	0
56	MG	DA	3168	1/1	0.62	-	46,46,46,46	0
56	MG	AA	3133	1/1	0.76	-	71,71,71,71	0
56	MG	B7	103	1/1	0.45	-	46,46,46,46	0
56	MG	AA	3036	1/1	0.19	-	69,69,69,69	0
56	MG	BA	3084	1/1	0.52	-	47,47,47,47	0
56	MG	BA	3608	1/1	0.15	-	51,51,51,51	0
56	MG	AA	3022	1/1	0.24	-	56,56,56,56	0
56	MG	BA	3327	1/1	0.16	-	21,21,21,21	0
56	MG	BA	3571	1/1	0.22	-	48,48,48,48	0
56	MG	BA	3616	1/1	0.28	-	73,73,73,73	0
56	MG	DA	3144	1/1	0.34	-	37,37,37,37	0
56	MG	CA	3165	1/1	0.18	-	47,47,47,47	0
56	MG	DA	3297	1/1	0.15	-	36,36,36,36	0
56	MG	DA	3422	1/1	0.21	-	45,45,45,45	0
56	MG	CA	3088	1/1	0.20	-	49,49,49,49	0
56	MG	DA	3217	1/1	0.27	-	33,33,33,33	0
56	MG	BA	3052	1/1	0.25	-	29,29,29,29	0
56	MG	DA	3318	1/1	0.19	-	47,47,47,47	0
56	MG	DA	3114	1/1	0.16	-	47,47,47,47	0
56	MG	DA	3629	1/1	0.13	-	30,30,30,30	0
56	MG	BD	312	1/1	0.94	-	72,72,72,72	0
56	MG	DA	3290	1/1	0.19	-	59,59,59,59	0
56	MG	BA	3049	1/1	0.18	-	17,17,17,17	0
56	MG	DA	3070	1/1	0.31	-	51,51,51,51	0
56	MG	AA	3009	1/1	0.25	-	71,71,71,71	0
56	MG	BA	3680	1/1	0.24	-	62,62,62,62	0
56	MG	D5	102	1/1	0.54	-	44,44,44,44	0
56	MG	BA	3314	1/1	0.13	-	22,22,22,22	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	DB	3011	1/1	0.34	-	49,49,49,49	0
56	MG	CA	3129	1/1	0.23	-	54,54,54,54	0
56	MG	BA	3123	1/1	0.22	-	47,47,47,47	0
56	MG	BA	3380	1/1	0.07	-	32,32,32,32	0
56	MG	BA	3017	1/1	0.33	-	38,38,38,38	0
56	MG	BA	3421	1/1	0.14	-	28,28,28,28	0
56	MG	DA	3173	1/1	0.26	-	50,50,50,50	0
56	MG	DA	3282	1/1	0.30	-	58,58,58,58	0
56	MG	CF	3001	1/1	0.19	-	56,56,56,56	0
56	MG	AA	3212	1/1	0.16	-	36,36,36,36	0
56	MG	DA	3304	1/1	0.19	-	44,44,44,44	0
56	MG	DA	3386	1/1	0.18	-	18,18,18,18	0
56	MG	CA	3162	1/1	0.26	-	60,60,60,60	0
56	MG	BA	3540	1/1	0.33	-	29,29,29,29	0
56	MG	DA	3395	1/1	0.14	-	40,40,40,40	0
56	MG	BA	3423	1/1	0.36	-	45,45,45,45	0
56	MG	BA	3205	1/1	0.31	-	38,38,38,38	0
56	MG	BA	3668	1/1	0.21	-	42,42,42,42	0
56	MG	CA	3031	1/1	0.32	-	55,55,55,55	0
56	MG	CA	3003	1/1	0.14	-	69,69,69,69	0
56	MG	BA	3130	1/1	0.38	-	51,51,51,51	0
56	MG	BA	3085	1/1	0.36	-	35,35,35,35	0
56	MG	DA	3445	1/1	0.47	-	60,60,60,60	0
56	MG	BA	3626	1/1	0.13	-	50,50,50,50	0
56	MG	AA	3218	1/1	0.24	-	73,73,73,73	0
56	MG	AA	3106	1/1	0.26	-	68,68,68,68	0
56	MG	CA	3141	1/1	0.32	-	85,85,85,85	0
56	MG	AX	106	1/1	0.09	-	64,64,64,64	0
56	MG	BA	3266	1/1	0.22	-	47,47,47,47	0
58	ZN	B4	501	1/1	0.08	-	152,152,152,152	0
56	MG	DA	3174	1/1	0.42	-	26,26,26,26	0
56	MG	BA	3055	1/1	0.26	-	44,44,44,44	0
56	MG	DA	3121	1/1	0.27	-	46,46,46,46	0
56	MG	CA	3026	1/1	0.13	-	52,52,52,52	0
56	MG	DA	3519	1/1	0.13	-	39,39,39,39	0
56	MG	BA	3537	1/1	0.17	-	45,45,45,45	0
56	MG	DA	3123	1/1	0.17	-	61,61,61,61	0
56	MG	BA	3722	1/1	0.27	-	49,49,49,49	0
56	MG	BA	3636	1/1	0.11	-	54,54,54,54	0
56	MG	BA	3095	1/1	0.73	-	55,55,55,55	0
56	MG	DA	3654	1/1	0.29	-	50,50,50,50	0
56	MG	BA	3371	1/1	0.19	-	38,38,38,38	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	B7	104	1/1	0.19	-	55,55,55,55	0
56	MG	DA	3417	1/1	0.21	-	54,54,54,54	0
56	MG	BA	3713	1/1	0.22	-	49,49,49,49	0
56	MG	DA	3228	1/1	0.18	-	49,49,49,49	0
56	MG	DA	3362	1/1	0.33	-	42,42,42,42	0
56	MG	BA	3248	1/1	0.39	-	68,68,68,68	0
56	MG	DA	3590	1/1	0.18	-	39,39,39,39	0
56	MG	DA	3657	1/1	0.39	-	55,55,55,55	0
56	MG	DA	3501	1/1	0.09	-	67,67,67,67	0
56	MG	DA	3570	1/1	0.12	-	67,67,67,67	0
56	MG	B0	101	1/1	0.21	-	57,57,57,57	0
56	MG	BA	3351	1/1	0.24	-	21,21,21,21	0
56	MG	DD	301	1/1	0.24	-	23,23,23,23	0
56	MG	AA	3201	1/1	0.12	-	76,76,76,76	0
56	MG	DA	3313	1/1	0.18	-	30,30,30,30	0
56	MG	BA	3437	1/1	0.14	-	37,37,37,37	0
56	MG	BA	3104	1/1	0.37	-	34,34,34,34	0
56	MG	BW	3004	1/1	0.66	-	46,46,46,46	0
56	MG	BA	3234	1/1	0.36	-	48,48,48,48	0
56	MG	BA	3549	1/1	0.30	-	49,49,49,49	0
56	MG	CA	3132	1/1	0.08	-	66,66,66,66	0
56	MG	BA	3316	1/1	0.13	-	51,51,51,51	0
56	MG	BA	3001	1/1	0.29	-	52,52,52,52	0
56	MG	BA	3223	1/1	0.44	-	49,49,49,49	0
56	MG	DA	3020	1/1	0.27	-	45,45,45,45	0
56	MG	BA	3331	1/1	0.17	-	61,61,61,61	0
56	MG	AA	3070	1/1	0.23	-	68,68,68,68	0
56	MG	BA	3110	1/1	0.26	-	43,43,43,43	0
56	MG	DA	3390	1/1	0.18	-	58,58,58,58	0
56	MG	BA	3012	1/1	0.10	-	34,34,34,34	0
56	MG	BA	3064	1/1	0.37	-	49,49,49,49	0
56	MG	DA	3315	1/1	0.11	-	39,39,39,39	0
56	MG	DA	3064	1/1	0.38	-	55,55,55,55	0
56	MG	BA	3333	1/1	0.15	-	27,27,27,27	0
56	MG	DA	3454	1/1	0.12	-	52,52,52,52	0
56	MG	BA	3239	1/1	0.21	-	33,33,33,33	0
56	MG	BA	3044	1/1	0.36	-	32,32,32,32	0
56	MG	AA	3128	1/1	0.16	-	64,64,64,64	0
56	MG	BA	3481	1/1	0.19	-	41,41,41,41	0
56	MG	AA	3125	1/1	0.14	-	56,56,56,56	0
56	MG	BB	3002	1/1	0.20	-	49,49,49,49	0
56	MG	DA	3215	1/1	0.32	-	43,43,43,43	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	DA	3421	1/1	0.17	-	43,43,43,43	0
56	MG	BA	3252	1/1	0.55	-	65,65,65,65	0
56	MG	BA	3256	1/1	0.12	-	60,60,60,60	0
56	MG	DA	3616	1/1	0.17	-	41,41,41,41	0
56	MG	DA	3221	1/1	0.29	-	56,56,56,56	0
56	MG	BA	3593	1/1	0.12	-	51,51,51,51	0
56	MG	BA	3210	1/1	0.29	-	39,39,39,39	0
56	MG	BA	3660	1/1	0.14	-	58,58,58,58	0
56	MG	BA	3476	1/1	0.08	-	47,47,47,47	0
56	MG	DA	3117	1/1	0.16	-	46,46,46,46	0
56	MG	BA	3079	1/1	0.26	-	50,50,50,50	0
56	MG	BA	3094	1/1	0.40	-	62,62,62,62	0
56	MG	DA	3111	1/1	0.20	-	67,67,67,67	0
56	MG	BA	3681	1/1	0.17	-	54,54,54,54	0
56	MG	CA	3072	1/1	0.24	-	57,57,57,57	0
56	MG	BA	3409	1/1	0.17	-	40,40,40,40	0
56	MG	B1	3002	1/1	0.13	-	29,29,29,29	0
56	MG	BN	3004	1/1	0.46	-	69,69,69,69	0
56	MG	CA	3043	1/1	0.34	-	62,62,62,62	0
56	MG	BA	3377	1/1	0.14	-	27,27,27,27	0
56	MG	DA	3402	1/1	0.17	-	33,33,33,33	0
56	MG	BA	3484	1/1	0.16	-	40,40,40,40	0
56	MG	BA	3319	1/1	0.13	-	34,34,34,34	0
56	MG	DA	3559	1/1	0.11	-	47,47,47,47	0
56	MG	AA	3130	1/1	0.17	-	55,55,55,55	0
56	MG	BA	3565	1/1	0.15	-	75,75,75,75	0
56	MG	BA	3602	1/1	0.15	-	44,44,44,44	0
56	MG	BA	3187	1/1	0.22	-	53,53,53,53	0
56	MG	DA	3166	1/1	0.10	-	37,37,37,37	0
56	MG	CA	3052	1/1	0.16	-	47,47,47,47	0
56	MG	B2	101	1/1	0.28	-	34,34,34,34	0
56	MG	BA	3157	1/1	0.34	-	52,52,52,52	0
56	MG	BA	3672	1/1	0.28	-	63,63,63,63	0
56	MG	DA	3303	1/1	0.15	-	37,37,37,37	0
56	MG	DA	3451	1/1	0.08	-	68,68,68,68	0
56	MG	DA	3638	1/1	0.10	-	53,53,53,53	0
56	MG	CA	3048	1/1	0.23	-	70,70,70,70	0
56	MG	AA	3077	1/1	0.39	-	67,67,67,67	0
56	MG	DA	3099	1/1	0.36	-	39,39,39,39	0
56	MG	AA	3104	1/1	0.19	-	35,35,35,35	0
56	MG	BA	3450	1/1	0.14	-	40,40,40,40	0
56	MG	BA	3113	1/1	0.22	-	48,48,48,48	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BA	3605	1/1	0.10	-	35,35,35,35	0
56	MG	BA	3349	1/1	0.18	-	31,31,31,31	0
56	MG	DF	304	1/1	0.59	-	39,39,39,39	0
56	MG	BA	3374	1/1	0.29	-	26,26,26,26	0
56	MG	AA	3058	1/1	0.36	-	59,59,59,59	0
56	MG	DA	3079	1/1	0.25	-	44,44,44,44	0
56	MG	BA	3192	1/1	0.38	-	48,48,48,48	0
56	MG	AA	3135	1/1	0.31	-	49,49,49,49	0
56	MG	BA	3734	1/1	0.36	-	42,42,42,42	0
56	MG	DA	3448	1/1	0.38	-	67,67,67,67	0
56	MG	DA	3049	1/1	0.21	-	56,56,56,56	0
56	MG	AA	3051	1/1	0.17	-	56,56,56,56	0
56	MG	CN	502	1/1	0.30	-	70,70,70,70	0
56	MG	BA	3076	1/1	0.23	-	40,40,40,40	0
56	MG	BA	3008	1/1	0.14	-	30,30,30,30	0
56	MG	DA	3047	1/1	0.12	-	36,36,36,36	0
56	MG	DA	3007	1/1	0.27	-	43,43,43,43	0
56	MG	CA	3135	1/1	0.39	-	61,61,61,61	0
56	MG	DA	3539	1/1	0.22	-	35,35,35,35	0
56	MG	AA	3146	1/1	0.24	-	55,55,55,55	0
56	MG	DE	306	1/1	0.12	-	44,44,44,44	0
56	MG	DA	3370	1/1	0.22	-	40,40,40,40	0
56	MG	DA	3349	1/1	0.09	-	27,27,27,27	0
56	MG	DA	3235	1/1	0.38	-	46,46,46,46	0
56	MG	DA	3645	1/1	0.35	-	57,57,57,57	0
56	MG	BA	3323	1/1	0.16	-	25,25,25,25	0
56	MG	BA	3247	1/1	0.22	-	58,58,58,58	0
56	MG	DA	3355	1/1	0.40	-	39,39,39,39	0
56	MG	DA	3116	1/1	0.40	-	43,43,43,43	0
56	MG	DA	3364	1/1	0.17	-	40,40,40,40	0
56	MG	B7	101	1/1	0.18	-	45,45,45,45	0
56	MG	DA	3591	1/1	0.14	-	67,67,67,67	0
56	MG	AA	3015	1/1	0.25	-	74,74,74,74	0
56	MG	AA	3008	1/1	0.23	-	61,61,61,61	0
56	MG	CA	3137	1/1	0.14	-	59,59,59,59	0
56	MG	BB	3017	1/1	0.23	-	80,80,80,80	0
56	MG	CX	102	1/1	0.07	-	60,60,60,60	0
56	MG	BA	3429	1/1	0.16	-	55,55,55,55	0
56	MG	BA	3434	1/1	0.30	-	22,22,22,22	0
56	MG	CA	3090	1/1	0.17	-	63,63,63,63	0
56	MG	CA	3158	1/1	0.11	-	64,64,64,64	0
56	MG	DA	3098	1/1	1.07	-	45,45,45,45	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	AA	3023	1/1	0.12	-	56,56,56,56	0
56	MG	CA	3019	1/1	0.15	-	62,62,62,62	0
56	MG	BA	3300	1/1	0.25	-	48,48,48,48	0
56	MG	DA	3484	1/1	0.06	-	47,47,47,47	0
56	MG	DB	3002	1/1	0.23	-	72,72,72,72	0
56	MG	DA	3594	1/1	0.21	-	63,63,63,63	0
56	MG	DA	3447	1/1	0.17	-	56,56,56,56	0
56	MG	BA	3666	1/1	0.37	-	54,54,54,54	0
56	MG	BA	3102	1/1	0.07	-	45,45,45,45	0
56	MG	AA	3171	1/1	0.33	-	77,77,77,77	0
56	MG	BA	3737	1/1	0.26	-	39,39,39,39	0
56	MG	DA	3489	1/1	0.08	-	36,36,36,36	0
56	MG	BA	3470	1/1	0.05	-	44,44,44,44	0
56	MG	BA	3521	1/1	0.14	-	38,38,38,38	0
56	MG	BA	3555	1/1	0.23	-	31,31,31,31	0
56	MG	DA	3383	1/1	0.18	-	27,27,27,27	0
56	MG	BB	3004	1/1	0.29	-	57,57,57,57	0
56	MG	BA	3569	1/1	0.07	-	55,55,55,55	0
56	MG	DA	3198	1/1	0.33	-	34,34,34,34	0
56	MG	AA	3116	1/1	0.47	-	62,62,62,62	0
56	MG	DA	3026	1/1	0.20	-	36,36,36,36	0
56	MG	BA	3704	1/1	0.38	-	58,58,58,58	0
56	MG	BA	3552	1/1	0.25	-	30,30,30,30	0
56	MG	AA	3010	1/1	0.13	-	71,71,71,71	0
56	MG	DA	3019	1/1	0.21	-	32,32,32,32	0
56	MG	CA	3069	1/1	0.22	-	63,63,63,63	0
56	MG	BA	3509	1/1	0.20	-	29,29,29,29	0
56	MG	BA	3709	1/1	0.16	-	77,77,77,77	0
56	MG	BA	3254	1/1	0.28	-	40,40,40,40	0
56	MG	DA	3567	1/1	0.10	-	68,68,68,68	0
56	MG	CA	3046	1/1	0.17	-	52,52,52,52	0
56	MG	BA	3433	1/1	0.28	-	46,46,46,46	0
56	MG	BA	3649	1/1	0.27	-	43,43,43,43	0
56	MG	DA	3273	1/1	0.24	-	32,32,32,32	0
56	MG	BA	3582	1/1	0.21	-	52,52,52,52	0
56	MG	BA	3184	1/1	0.65	-	51,51,51,51	0
56	MG	DA	3167	1/1	0.26	-	46,46,46,46	0
56	MG	BA	3041	1/1	0.35	-	45,45,45,45	0
56	MG	BA	3274	1/1	0.19	-	54,54,54,54	0
56	MG	DA	3182	1/1	0.20	-	29,29,29,29	0
56	MG	DA	3427	1/1	0.16	-	29,29,29,29	0
56	MG	DA	3302	1/1	0.25	-	42,42,42,42	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BB	3003	1/1	0.24	-	40,40,40,40	0
56	MG	CA	3171	1/1	0.16	-	61,61,61,61	0
56	MG	DA	3261	1/1	0.24	-	44,44,44,44	0
56	MG	CA	3084	1/1	0.18	-	80,80,80,80	0
56	MG	DA	3461	1/1	0.08	-	40,40,40,40	0
56	MG	DA	3336	1/1	0.14	-	36,36,36,36	0
56	MG	AX	107	1/1	0.41	-	82,82,82,82	0
56	MG	DA	3078	1/1	0.17	-	49,49,49,49	0
56	MG	BA	3343	1/1	0.19	-	37,37,37,37	0
56	MG	BA	3246	1/1	0.32	-	38,38,38,38	0
56	MG	DA	3627	1/1	0.23	-	52,52,52,52	0
56	MG	BA	3647	1/1	0.25	-	40,40,40,40	0
56	MG	BA	3489	1/1	0.11	-	50,50,50,50	0
56	MG	DA	3258	1/1	0.25	-	39,39,39,39	0
56	MG	BA	3449	1/1	0.10	-	59,59,59,59	0
56	MG	AA	3012	1/1	0.15	-	58,58,58,58	0
56	MG	BA	3023	1/1	0.42	-	34,34,34,34	0
56	MG	DA	3602	1/1	0.17	-	63,63,63,63	0
56	MG	CA	3095	1/1	0.17	-	35,35,35,35	0
56	MG	CA	3148	1/1	0.19	-	65,65,65,65	0
56	MG	DA	3503	1/1	0.06	-	41,41,41,41	0
56	MG	DA	3084	1/1	0.18	-	55,55,55,55	0
56	MG	AA	3004	1/1	0.14	-	50,50,50,50	0
56	MG	BA	3224	1/1	0.35	-	48,48,48,48	0
56	MG	AA	3168	1/1	0.31	-	80,80,80,80	0
56	MG	BA	3435	1/1	0.24	-	59,59,59,59	0
56	MG	BA	3132	1/1	0.20	-	28,28,28,28	0
56	MG	AX	110	1/1	0.16	-	45,45,45,45	0
56	MG	DA	3154	1/1	0.48	-	45,45,45,45	0
56	MG	BA	3198	1/1	0.34	-	29,29,29,29	0
56	MG	DA	3526	1/1	0.14	-	49,49,49,49	0
56	MG	BB	3010	1/1	0.20	-	44,44,44,44	0
56	MG	AX	108	1/1	0.13	-	66,66,66,66	0
56	MG	D5	101	1/1	0.59	-	44,44,44,44	0
56	MG	DA	3027	1/1	0.61	-	49,49,49,49	0
56	MG	DA	3379	1/1	0.14	-	63,63,63,63	0
56	MG	DA	3595	1/1	0.19	-	53,53,53,53	0
56	MG	DA	3156	1/1	0.60	-	38,38,38,38	0
56	MG	DA	3105	1/1	0.15	-	56,56,56,56	0
56	MG	DA	3246	1/1	0.17	-	55,55,55,55	0
56	MG	DA	3065	1/1	0.18	-	40,40,40,40	0
56	MG	DA	3511	1/1	0.10	-	47,47,47,47	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BA	3613	1/1	0.18	-	47,47,47,47	0
56	MG	BA	3665	1/1	0.21	-	39,39,39,39	0
56	MG	DA	3463	1/1	0.07	-	32,32,32,32	0
56	MG	AA	3040	1/1	0.07	-	46,46,46,46	0
56	MG	CA	3117	1/1	0.17	-	58,58,58,58	0
56	MG	DA	3259	1/1	0.23	-	45,45,45,45	0
56	MG	BA	3458	1/1	0.23	-	46,46,46,46	0
56	MG	DA	3170	1/1	0.27	-	45,45,45,45	0
56	MG	BA	3522	1/1	0.16	-	42,42,42,42	0
56	MG	CA	3038	1/1	0.27	-	54,54,54,54	0
56	MG	CA	3082	1/1	0.10	-	46,46,46,46	0
56	MG	DA	3163	1/1	0.20	-	52,52,52,52	0
56	MG	DA	3339	1/1	0.27	-	35,35,35,35	0
56	MG	BA	3634	1/1	0.09	-	77,77,77,77	0
56	MG	DA	3253	1/1	0.13	-	35,35,35,35	0
56	MG	BA	3188	1/1	0.29	-	49,49,49,49	0
56	MG	BA	3065	1/1	0.27	-	31,31,31,31	0
56	MG	DA	3523	1/1	0.12	-	47,47,47,47	0
56	MG	B1	3001	1/1	0.77	-	63,63,63,63	0
56	MG	DA	3091	1/1	0.48	-	50,50,50,50	0
56	MG	DA	3432	1/1	0.23	-	37,37,37,37	0
56	MG	AA	3148	1/1	0.21	-	72,72,72,72	0
56	MG	DA	3358	1/1	0.15	-	38,38,38,38	0
56	MG	AA	3082	1/1	0.24	-	52,52,52,52	0
56	MG	BU	209	1/1	1.04	-	36,36,36,36	0
56	MG	AA	3029	1/1	1.03	-	60,60,60,60	0
56	MG	DA	3346	1/1	0.21	-	64,64,64,64	0
56	MG	BO	201	1/1	0.11	-	63,63,63,63	0
56	MG	BA	3619	1/1	0.17	-	42,42,42,42	0
56	MG	BA	3100	1/1	0.18	-	42,42,42,42	0
56	MG	DA	3634	1/1	0.18	-	33,33,33,33	0
56	MG	CA	3017	1/1	0.20	-	54,54,54,54	0
56	MG	DA	3515	1/1	0.07	-	57,57,57,57	0
56	MG	DA	3632	1/1	0.16	-	60,60,60,60	0
56	MG	CA	3144	1/1	0.78	-	84,84,84,84	0
56	MG	DA	3584	1/1	0.14	-	47,47,47,47	0
56	MG	BA	3621	1/1	0.22	-	57,57,57,57	0
56	MG	AA	3043	1/1	0.38	-	63,63,63,63	0
56	MG	BA	3479	1/1	0.16	-	44,44,44,44	0
56	MG	DA	3149	1/1	0.07	-	47,47,47,47	0
56	MG	DA	3115	1/1	0.09	-	64,64,64,64	0
56	MG	AA	3144	1/1	0.12	-	56,56,56,56	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	DA	3628	1/1	0.14	-	38,38,38,38	0
56	MG	BA	3679	1/1	0.12	-	39,39,39,39	0
56	MG	CA	3079	1/1	0.09	-	37,37,37,37	0
56	MG	B0	106	1/1	0.09	-	43,43,43,43	0
56	MG	BA	3005	1/1	0.14	-	43,43,43,43	0
56	MG	BA	3413	1/1	0.07	-	19,19,19,19	0
56	MG	DA	3230	1/1	0.17	-	61,61,61,61	0
56	MG	DA	3104	1/1	0.15	-	46,46,46,46	0
56	MG	DA	3564	1/1	0.11	-	29,29,29,29	0
56	MG	AA	3099	1/1	0.51	-	49,49,49,49	0
56	MG	BA	3050	1/1	0.17	-	33,33,33,33	0
59	FME	AX	101	10/11	0.47	-	55,74,92,107	0
56	MG	DA	3112	1/1	0.31	-	49,49,49,49	0
56	MG	DA	3146	1/1	0.18	-	34,34,34,34	0
56	MG	BA	3112	1/1	0.12	-	46,46,46,46	0
56	MG	DA	3287	1/1	0.06	-	53,53,53,53	0
56	MG	BA	3010	1/1	0.08	-	35,35,35,35	0
56	MG	DA	3572	1/1	0.10	-	39,39,39,39	0
56	MG	BA	3056	1/1	0.26	-	39,39,39,39	0
56	MG	BX	102	1/1	0.22	-	60,60,60,60	0
56	MG	DA	3605	1/1	0.07	-	58,58,58,58	0
56	MG	AA	3002	1/1	0.20	-	74,74,74,74	0
56	MG	AA	3037	1/1	0.29	-	53,53,53,53	0
56	MG	DA	3536	1/1	0.14	-	57,57,57,57	0
56	MG	CA	3041	1/1	0.38	-	71,71,71,71	0
56	MG	DA	3037	1/1	0.37	-	37,37,37,37	0
56	MG	AA	3167	1/1	0.15	-	78,78,78,78	0
56	MG	BA	3019	1/1	0.10	-	42,42,42,42	0
56	MG	DA	3179	1/1	0.41	-	36,36,36,36	0
56	MG	BA	3167	1/1	0.39	-	50,50,50,50	0
56	MG	BA	3607	1/1	0.18	-	74,74,74,74	0
56	MG	DA	3376	1/1	0.18	-	42,42,42,42	0
56	MG	DA	3322	1/1	0.07	-	41,41,41,41	0
56	MG	DA	3407	1/1	0.14	-	35,35,35,35	0
56	MG	BA	3461	1/1	0.13	-	33,33,33,33	0
56	MG	CA	3087	1/1	0.14	-	40,40,40,40	0
56	MG	BA	3120	1/1	0.30	-	56,56,56,56	0
56	MG	BU	207	1/1	0.37	-	38,38,38,38	0
56	MG	BA	3720	1/1	0.19	-	51,51,51,51	0
56	MG	DA	3381	1/1	0.27	-	68,68,68,68	0
56	MG	DA	3207	1/1	0.12	-	41,41,41,41	0
56	MG	AA	3122	1/1	0.40	-	40,40,40,40	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BA	3384	1/1	0.29	-	47,47,47,47	0
56	MG	BA	3620	1/1	0.24	-	57,57,57,57	0
56	MG	BA	3373	1/1	0.10	-	48,48,48,48	0
56	MG	DA	3211	1/1	0.19	-	46,46,46,46	0
56	MG	BA	3145	1/1	0.33	-	40,40,40,40	0
56	MG	BA	3138	1/1	0.14	-	54,54,54,54	0
56	MG	DA	3426	1/1	0.13	-	41,41,41,41	0
56	MG	BA	3612	1/1	0.16	-	41,41,41,41	0
56	MG	DA	3194	1/1	0.60	-	65,65,65,65	0
56	MG	DA	3466	1/1	0.09	-	43,43,43,43	0
56	MG	BA	3529	1/1	0.21	-	22,22,22,22	0
56	MG	AA	3032	1/1	0.33	-	65,65,65,65	0
56	MG	CA	3138	1/1	0.12	-	59,59,59,59	0
56	MG	DA	3086	1/1	0.28	-	43,43,43,43	0
56	MG	B9	502	1/1	0.26	-	49,49,49,49	0
56	MG	BA	3402	1/1	0.21	-	23,23,23,23	0
56	MG	DA	3640	1/1	0.19	-	53,53,53,53	0
56	MG	AA	3114	1/1	0.21	-	73,73,73,73	0
56	MG	AA	3139	1/1	0.20	-	58,58,58,58	0
56	MG	CA	3136	1/1	0.29	-	70,70,70,70	0
56	MG	BA	3204	1/1	0.19	-	48,48,48,48	0
56	MG	BA	3740	1/1	1.11	-	57,57,57,57	0
56	MG	DA	3224	1/1	0.11	-	53,53,53,53	0
56	MG	BA	3731	1/1	0.27	-	52,52,52,52	0
56	MG	AA	3164	1/1	0.22	-	61,61,61,61	0
56	MG	DA	3267	1/1	0.28	-	40,40,40,40	0
56	MG	DO	5001	1/1	0.09	-	33,33,33,33	0
56	MG	BA	3279	1/1	0.17	-	60,60,60,60	0
56	MG	BA	3025	1/1	0.19	-	48,48,48,48	0
56	MG	BA	3573	1/1	0.16	-	53,53,53,53	0
56	MG	DA	3015	1/1	0.31	-	54,54,54,54	0
56	MG	DQ	3003	1/1	0.23	-	58,58,58,58	0
56	MG	CA	3023	1/1	0.21	-	37,37,37,37	0
56	MG	B8	5002	1/1	0.22	-	48,48,48,48	0
56	MG	BA	3572	1/1	0.19	-	23,23,23,23	0
56	MG	DA	3341	1/1	0.06	-	40,40,40,40	0
56	MG	DE	302	1/1	0.29	-	46,46,46,46	0
56	MG	BA	3028	1/1	0.31	-	59,59,59,59	0
56	MG	DE	305	1/1	0.63	-	68,68,68,68	0
56	MG	DA	3658	1/1	0.30	-	50,50,50,50	0
56	MG	BD	305	1/1	0.27	-	41,41,41,41	0
56	MG	AA	3013	1/1	0.22	-	75,75,75,75	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	DA	3343	1/1	0.12	-	37,37,37,37	0
56	MG	BA	3457	1/1	0.10	-	25,25,25,25	0
56	MG	DA	3072	1/1	0.15	-	40,40,40,40	0
56	MG	BA	3227	1/1	0.18	-	67,67,67,67	0
56	MG	BA	3658	1/1	0.21	-	62,62,62,62	0
56	MG	BA	3622	1/1	0.24	-	32,32,32,32	0
56	MG	BA	3262	1/1	0.33	-	44,44,44,44	0
56	MG	BA	3215	1/1	0.09	-	32,32,32,32	0
56	MG	DB	3010	1/1	0.21	-	66,66,66,66	0
56	MG	DA	3271	1/1	0.08	-	45,45,45,45	0
56	MG	CA	3166	1/1	0.07	-	71,71,71,71	0
56	MG	AA	3052	1/1	0.23	-	58,58,58,58	0
56	MG	BA	3040	1/1	0.24	-	40,40,40,40	0
56	MG	DA	3551	1/1	0.08	-	43,43,43,43	0
56	MG	DA	3418	1/1	0.27	-	57,57,57,57	0
56	MG	BA	3035	1/1	0.14	-	32,32,32,32	0
56	MG	DA	3502	1/1	0.17	-	48,48,48,48	0
56	MG	BA	3321	1/1	0.20	-	47,47,47,47	0
56	MG	DA	3442	1/1	0.28	-	58,58,58,58	0
56	MG	BA	3533	1/1	0.29	-	30,30,30,30	0
56	MG	BA	3598	1/1	0.23	-	32,32,32,32	0
56	MG	DA	3480	1/1	0.17	-	42,42,42,42	0
56	MG	DQ	3004	1/1	0.22	-	52,52,52,52	0
56	MG	BA	3089	1/1	0.23	-	50,50,50,50	0
56	MG	BA	3213	1/1	0.19	-	63,63,63,63	0
56	MG	DA	3317	1/1	0.20	-	34,34,34,34	0
56	MG	BA	3528	1/1	0.20	-	44,44,44,44	0
56	MG	DA	3017	1/1	0.22	-	51,51,51,51	0
56	MG	BA	3717	1/1	0.13	-	51,51,51,51	0
56	MG	BA	3440	1/1	0.11	-	40,40,40,40	0
56	MG	BB	3011	1/1	0.17	-	45,45,45,45	0
56	MG	BA	3272	1/1	0.07	-	49,49,49,49	0
56	MG	DA	3187	1/1	0.59	-	52,52,52,52	0
56	MG	BA	3287	1/1	0.15	-	11,11,11,11	0
56	MG	BA	3676	1/1	0.14	-	63,63,63,63	0
56	MG	BA	3191	1/1	0.21	-	56,56,56,56	0
56	MG	BA	3243	1/1	0.09	-	43,43,43,43	0
56	MG	DA	3067	1/1	0.28	-	35,35,35,35	0
56	MG	BA	3693	1/1	0.26	-	57,57,57,57	0
56	MG	DA	3325	1/1	0.23	-	31,31,31,31	0
56	MG	DA	3610	1/1	0.13	-	49,49,49,49	0
56	MG	BA	3488	1/1	0.29	-	43,43,43,43	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	CT	3001	1/1	0.20	-	57,57,57,57	0
56	MG	BE	305	1/1	0.66	-	44,44,44,44	0
56	MG	CA	3169	1/1	0.18	-	52,52,52,52	0
56	MG	AA	3124	1/1	0.20	-	61,61,61,61	0
56	MG	DA	3554	1/1	0.26	-	62,62,62,62	0
56	MG	DA	3373	1/1	0.25	-	52,52,52,52	0
56	MG	CA	3028	1/1	0.48	-	62,62,62,62	0
56	MG	BA	3128	1/1	0.14	-	28,28,28,28	0
56	MG	DA	3059	1/1	0.05	-	42,42,42,42	0
56	MG	DA	3471	1/1	0.13	-	32,32,32,32	0
56	MG	DA	3024	1/1	0.61	-	59,59,59,59	0
56	MG	BA	3180	1/1	0.33	-	48,48,48,48	0
56	MG	DA	3342	1/1	0.15	-	31,31,31,31	0
56	MG	AA	3152	1/1	0.12	-	29,29,29,29	0
56	MG	DA	3574	1/1	0.20	-	22,22,22,22	0
56	MG	DA	3311	1/1	0.35	-	33,33,33,33	0
56	MG	DA	3409	1/1	0.10	-	54,54,54,54	0
56	MG	BA	3499	1/1	0.20	-	50,50,50,50	0
56	MG	BA	3137	1/1	0.22	-	59,59,59,59	0
56	MG	DA	3464	1/1	0.20	-	51,51,51,51	0
56	MG	AA	3196	1/1	0.28	-	78,78,78,78	0
56	MG	BA	3395	1/1	0.38	-	56,56,56,56	0
56	MG	DA	3637	1/1	0.22	-	59,59,59,59	0
56	MG	DA	3051	1/1	0.14	-	39,39,39,39	0
56	MG	BA	3305	1/1	0.12	-	48,48,48,48	0
56	MG	AA	3193	1/1	0.17	-	65,65,65,65	0
56	MG	AA	3062	1/1	0.15	-	30,30,30,30	0
56	MG	BA	3341	1/1	0.17	-	31,31,31,31	0
56	MG	BA	3651	1/1	0.35	-	52,52,52,52	0
56	MG	BA	3452	1/1	0.12	-	16,16,16,16	0
56	MG	CA	3012	1/1	0.12	-	50,50,50,50	0
56	MG	BA	3567	1/1	0.09	-	54,54,54,54	0
56	MG	DA	3219	1/1	0.35	-	49,49,49,49	0
56	MG	DA	3227	1/1	0.15	-	40,40,40,40	0
56	MG	BA	3216	1/1	0.27	-	46,46,46,46	0
56	MG	DA	3295	1/1	0.22	-	31,31,31,31	0
56	MG	AA	3097	1/1	0.42	-	53,53,53,53	0
56	MG	DV	203	1/1	0.33	-	41,41,41,41	0
56	MG	BA	3175	1/1	0.46	-	40,40,40,40	0
56	MG	DA	3134	1/1	0.19	-	37,37,37,37	0
56	MG	CA	3062	1/1	0.34	-	67,67,67,67	0
56	MG	BA	3257	1/1	0.25	-	56,56,56,56	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BA	3006	1/1	0.26	-	46,46,46,46	0
56	MG	BA	3585	1/1	0.21	-	25,25,25,25	0
56	MG	BA	3352	1/1	0.16	-	58,58,58,58	0
56	MG	DA	3060	1/1	0.38	-	51,51,51,51	0
56	MG	DA	3510	1/1	0.10	-	67,67,67,67	0
58	ZN	BY	501	1/1	0.08	-	67,67,67,67	0
56	MG	DA	3338	1/1	0.18	-	58,58,58,58	0
56	MG	DA	3512	1/1	0.09	-	37,37,37,37	0
56	MG	BA	3471	1/1	0.09	-	28,28,28,28	0
56	MG	BA	3183	1/1	0.24	-	40,40,40,40	0
56	MG	BA	3447	1/1	0.09	-	76,76,76,76	0
56	MG	DA	3565	1/1	0.20	-	48,48,48,48	0
56	MG	B0	103	1/1	0.18	-	46,46,46,46	0
56	MG	BA	3244	1/1	0.17	-	46,46,46,46	0
56	MG	BP	202	1/1	0.39	-	47,47,47,47	0
56	MG	DA	3038	1/1	0.26	-	37,37,37,37	0
56	MG	BA	3465	1/1	0.08	-	51,51,51,51	0
56	MG	BA	3153	1/1	0.37	-	47,47,47,47	0
56	MG	DA	3063	1/1	0.14	-	55,55,55,55	0
56	MG	CA	3146	1/1	0.16	-	61,61,61,61	0
56	MG	AA	3149	1/1	0.10	-	49,49,49,49	0
56	MG	AA	3085	1/1	0.42	-	57,57,57,57	0
56	MG	DA	3399	1/1	0.21	-	39,39,39,39	0
56	MG	BA	3736	1/1	0.13	-	40,40,40,40	0
56	MG	BA	3267	1/1	0.20	-	56,56,56,56	0
56	MG	AN	101	1/1	0.14	-	64,64,64,64	0
56	MG	BA	3588	1/1	0.20	-	41,41,41,41	0
56	MG	BA	3601	1/1	0.18	-	61,61,61,61	0
56	MG	BA	3116	1/1	0.28	-	30,30,30,30	0
56	MG	DA	3081	1/1	0.21	-	56,56,56,56	0
56	MG	DA	3568	1/1	0.40	-	58,58,58,58	0
56	MG	DA	3538	1/1	0.16	-	37,37,37,37	0
56	MG	AA	3198	1/1	0.17	-	73,73,73,73	0
56	MG	BA	3236	1/1	0.28	-	37,37,37,37	0
56	MG	BR	203	1/1	0.59	-	48,48,48,48	0
56	MG	BA	3427	1/1	0.19	-	20,20,20,20	0
56	MG	BA	3284	1/1	0.74	-	76,76,76,76	0
56	MG	AA	3118	1/1	0.44	-	39,39,39,39	0
56	MG	BA	3196	1/1	0.20	-	45,45,45,45	0
56	MG	DA	3337	1/1	0.14	-	50,50,50,50	0
56	MG	DA	3575	1/1	0.12	-	51,51,51,51	0
56	MG	BA	3703	1/1	0.12	-	44,44,44,44	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BA	3194	1/1	0.51	-	43,43,43,43	0
56	MG	DA	3113	1/1	1.15	-	61,61,61,61	0
56	MG	DA	3056	1/1	0.34	-	37,37,37,37	0
56	MG	BE	301	1/1	0.21	-	28,28,28,28	0
56	MG	CA	3077	1/1	0.29	-	51,51,51,51	0
56	MG	D3	101	1/1	0.51	-	54,54,54,54	0
56	MG	DA	3547	1/1	0.13	-	47,47,47,47	0
56	MG	DA	3460	1/1	0.11	-	47,47,47,47	0
56	MG	AA	3127	1/1	0.21	-	50,50,50,50	0
56	MG	BA	3507	1/1	0.22	-	37,37,37,37	0
56	MG	CA	3149	1/1	0.17	-	81,81,81,81	0
56	MG	BA	3694	1/1	0.26	-	48,48,48,48	0
56	MG	DA	3374	1/1	0.15	-	40,40,40,40	0
56	MG	BA	3396	1/1	0.20	-	41,41,41,41	0
56	MG	BA	3258	1/1	0.15	-	35,35,35,35	0
56	MG	BA	3159	1/1	0.27	-	47,47,47,47	0
56	MG	DP	201	1/1	0.37	-	52,52,52,52	0
56	MG	AA	3138	1/1	0.37	-	38,38,38,38	0
56	MG	DA	3291	1/1	0.20	-	42,42,42,42	0
56	MG	BB	3018	1/1	0.27	-	54,54,54,54	0
56	MG	DA	3016	1/1	0.21	-	33,33,33,33	0
56	MG	BA	3697	1/1	0.20	-	63,63,63,63	0
56	MG	DA	3562	1/1	0.19	-	41,41,41,41	0
56	MG	DA	3470	1/1	0.15	-	45,45,45,45	0
56	MG	DA	3521	1/1	0.18	-	46,46,46,46	0
56	MG	DA	3209	1/1	0.10	-	44,44,44,44	0
56	MG	DA	3157	1/1	0.50	-	56,56,56,56	0
56	MG	DA	3542	1/1	0.17	-	44,44,44,44	0
56	MG	BA	3043	1/1	0.36	-	33,33,33,33	0
56	MG	AA	3221	1/1	0.10	-	52,52,52,52	0
56	MG	BA	3212	1/1	0.17	-	47,47,47,47	0
56	MG	BA	3568	1/1	0.20	-	68,68,68,68	0
56	MG	BA	3400	1/1	0.18	-	29,29,29,29	0
56	MG	AL	3001	1/1	0.15	-	50,50,50,50	0
56	MG	DA	3434	1/1	0.19	-	51,51,51,51	0
56	MG	AA	3101	1/1	0.14	-	61,61,61,61	0
56	MG	BA	3566	1/1	0.23	-	43,43,43,43	0
56	MG	DA	3203	1/1	0.13	-	48,48,48,48	0
56	MG	BA	3002	1/1	0.17	-	38,38,38,38	0
56	MG	AA	3080	1/1	0.26	-	58,58,58,58	0
56	MG	B3	3401	1/1	0.19	-	24,24,24,24	0
56	MG	AA	3086	1/1	0.64	-	65,65,65,65	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BA	3732	1/1	0.41	-	56,56,56,56	0
56	MG	BN	3005	1/1	0.94	-	63,63,63,63	0
56	MG	DA	3058	1/1	0.21	-	56,56,56,56	0
56	MG	BA	3564	1/1	0.15	-	26,26,26,26	0
56	MG	BA	3022	1/1	0.17	-	66,66,66,66	0
56	MG	BA	3583	1/1	0.20	-	57,57,57,57	0
56	MG	DA	3424	1/1	0.18	-	58,58,58,58	0
56	MG	BA	3164	1/1	0.47	-	57,57,57,57	0
56	MG	DA	3508	1/1	0.04	-	30,30,30,30	0
56	MG	BA	3275	1/1	0.20	-	28,28,28,28	0
56	MG	DA	3419	1/1	0.09	-	53,53,53,53	0
56	MG	BA	3504	1/1	0.17	-	54,54,54,54	0
56	MG	CA	3106	1/1	0.34	-	72,72,72,72	0
56	MG	CA	3127	1/1	0.20	-	72,72,72,72	0
56	MG	BA	3325	1/1	0.18	-	39,39,39,39	0
56	MG	BQ	3002	1/1	0.26	-	51,51,51,51	0
56	MG	BA	3195	1/1	0.11	-	37,37,37,37	0
56	MG	BA	3358	1/1	0.17	-	78,78,78,78	0
56	MG	BA	3467	1/1	0.15	-	44,44,44,44	0
56	MG	CA	3104	1/1	0.12	-	60,60,60,60	0
56	MG	DA	3331	1/1	0.18	-	27,27,27,27	0
56	MG	BA	3691	1/1	0.10	-	40,40,40,40	0
56	MG	DA	3270	1/1	0.24	-	55,55,55,55	0
56	MG	BN	3006	1/1	0.07	-	33,33,33,33	0
56	MG	DA	3120	1/1	0.63	-	50,50,50,50	0
56	MG	BA	3260	1/1	0.12	-	47,47,47,47	0
56	MG	AA	3041	1/1	0.12	-	41,41,41,41	0
56	MG	DA	3277	1/1	0.09	-	46,46,46,46	0
56	MG	BA	3189	1/1	0.21	-	39,39,39,39	0
56	MG	DA	3540	1/1	0.13	-	76,76,76,76	0
56	MG	BE	304	1/1	0.58	-	45,45,45,45	0
56	MG	AA	3214	1/1	0.31	-	42,42,42,42	0
56	MG	DA	3240	1/1	0.22	-	58,58,58,58	0
56	MG	DA	3102	1/1	0.28	-	49,49,49,49	0
56	MG	BN	3002	1/1	0.26	-	52,52,52,52	0
56	MG	CA	3035	1/1	0.26	-	49,49,49,49	0
56	MG	DA	3249	1/1	0.21	-	25,25,25,25	0
56	MG	BA	3407	1/1	0.22	-	35,35,35,35	0
56	MG	DA	3444	1/1	0.26	-	43,43,43,43	0
56	MG	DA	3598	1/1	0.18	-	45,45,45,45	0
56	MG	DA	3414	1/1	0.23	-	59,59,59,59	0
56	MG	BA	3719	1/1	0.08	-	63,63,63,63	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BA	3131	1/1	0.12	-	31,31,31,31	0
56	MG	BA	3600	1/1	0.33	-	54,54,54,54	0
56	MG	DA	3651	1/1	0.12	-	48,48,48,48	0
56	MG	DA	3332	1/1	0.12	-	29,29,29,29	0
56	MG	DA	3633	1/1	0.23	-	25,25,25,25	0
56	MG	CA	3111	1/1	0.10	-	69,69,69,69	0
56	MG	CA	3120	1/1	0.18	-	59,59,59,59	0
56	MG	DA	3128	1/1	0.35	-	54,54,54,54	0
56	MG	CA	3122	1/1	0.22	-	70,70,70,70	0
56	MG	BA	3296	1/1	0.64	-	69,69,69,69	0
56	MG	BA	3093	1/1	0.45	-	52,52,52,52	0
56	MG	CA	3063	1/1	0.10	-	57,57,57,57	0
56	MG	BA	3105	1/1	0.19	-	54,54,54,54	0
56	MG	CA	3154	1/1	0.18	-	54,54,54,54	0
56	MG	BA	3176	1/1	0.21	-	50,50,50,50	0
56	MG	BA	3527	1/1	0.22	-	45,45,45,45	0
56	MG	BA	3245	1/1	0.23	-	45,45,45,45	0
56	MG	DA	3363	1/1	0.17	-	56,56,56,56	0
56	MG	DA	3046	1/1	0.09	-	48,48,48,48	0
56	MG	DA	3478	1/1	0.09	-	58,58,58,58	0
56	MG	DN	5001	1/1	0.13	-	71,71,71,71	0
56	MG	CA	3139	1/1	0.26	-	76,76,76,76	0
56	MG	DA	3411	1/1	0.21	-	33,33,33,33	0
56	MG	AA	3129	1/1	0.23	-	77,77,77,77	0
56	MG	BA	3253	1/1	0.27	-	63,63,63,63	0
56	MG	BU	208	1/1	0.21	-	42,42,42,42	0
56	MG	AA	3177	1/1	0.14	-	58,58,58,58	0
56	MG	BE	309	1/1	0.18	-	37,37,37,37	0
56	MG	DA	3101	1/1	0.30	-	59,59,59,59	0
56	MG	CA	3024	1/1	0.36	-	57,57,57,57	0
56	MG	DA	3639	1/1	0.14	-	55,55,55,55	0
56	MG	DA	3092	1/1	0.28	-	48,48,48,48	0
56	MG	DA	3622	1/1	0.15	-	40,40,40,40	0
56	MG	BA	3021	1/1	0.36	-	62,62,62,62	0
56	MG	DA	3507	1/1	0.22	-	53,53,53,53	0
56	MG	BA	3148	1/1	0.63	-	49,49,49,49	0
56	MG	AA	3120	1/1	0.46	-	53,53,53,53	0
56	MG	DA	3054	1/1	0.10	-	34,34,34,34	0
56	MG	BA	3020	1/1	0.28	-	43,43,43,43	0
56	MG	DA	3293	1/1	0.10	-	34,34,34,34	0
56	MG	DA	3175	1/1	0.31	-	52,52,52,52	0
56	MG	BD	309	1/1	0.18	-	43,43,43,43	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	DA	3469	1/1	0.18	-	52,52,52,52	0
56	MG	BA	3057	1/1	0.40	-	36,36,36,36	0
56	MG	BA	3168	1/1	0.44	-	52,52,52,52	0
56	MG	DA	3431	1/1	0.36	-	56,56,56,56	0
56	MG	BA	3115	1/1	0.16	-	28,28,28,28	0
56	MG	AA	3111	1/1	0.15	-	70,70,70,70	0
56	MG	AA	3166	1/1	0.22	-	55,55,55,55	0
56	MG	CA	3113	1/1	0.28	-	84,84,84,84	0
56	MG	AA	3068	1/1	0.11	-	67,67,67,67	0
58	ZN	AN	102	1/1	0.11	-	88,88,88,88	0
56	MG	BA	3360	1/1	0.20	-	39,39,39,39	0
56	MG	CA	3010	1/1	0.16	-	34,34,34,34	0
56	MG	DA	3491	1/1	0.27	-	55,55,55,55	0
56	MG	DA	3127	1/1	0.11	-	44,44,44,44	0
56	MG	DA	3076	1/1	0.44	-	38,38,38,38	0
56	MG	BA	3127	1/1	0.34	-	42,42,42,42	0
56	MG	CA	3147	1/1	0.36	-	77,77,77,77	0
56	MG	BA	3088	1/1	0.18	-	55,55,55,55	0
56	MG	BA	3061	1/1	0.35	-	44,44,44,44	0
56	MG	CA	3050	1/1	0.20	-	54,54,54,54	0
56	MG	DA	3527	1/1	0.12	-	58,58,58,58	0
56	MG	AA	3005	1/1	0.27	-	66,66,66,66	0
56	MG	BA	3363	1/1	0.17	-	29,29,29,29	0
56	MG	CA	3044	1/1	0.12	-	52,52,52,52	0
56	MG	BA	3554	1/1	0.20	-	25,25,25,25	0
56	MG	BA	3226	1/1	0.33	-	31,31,31,31	0
56	MG	BA	3739	1/1	0.31	-	50,50,50,50	0
56	MG	AA	3035	1/1	0.29	-	59,59,59,59	0
56	MG	BA	3177	1/1	0.48	-	35,35,35,35	0
56	MG	DA	3505	1/1	0.16	-	24,24,24,24	0
56	MG	AX	104	1/1	0.23	-	62,62,62,62	0
56	MG	BA	3485	1/1	0.20	-	67,67,67,67	0
56	MG	BA	3197	1/1	0.44	-	39,39,39,39	0
56	MG	AA	3209	1/1	0.25	-	66,66,66,66	0
56	MG	DA	3125	1/1	0.41	-	55,55,55,55	0
56	MG	BA	3171	1/1	0.38	-	42,42,42,42	0
58	ZN	B9	501	1/1	0.10	-	49,49,49,49	0
56	MG	CA	3030	1/1	0.35	-	74,74,74,74	0
56	MG	DA	3449	1/1	0.29	-	46,46,46,46	0
56	MG	BA	3615	1/1	0.20	-	55,55,55,55	0
56	MG	BA	3034	1/1	0.15	-	37,37,37,37	0
56	MG	DD	303	1/1	0.60	-	48,48,48,48	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	DA	3002	1/1	0.24	-	47,47,47,47	0
56	MG	BW	3002	1/1	0.20	-	34,34,34,34	0
56	MG	DA	3535	1/1	0.18	-	58,58,58,58	0
56	MG	BW	3001	1/1	0.29	-	55,55,55,55	0
56	MG	BA	3673	1/1	0.17	-	60,60,60,60	0
56	MG	DA	3029	1/1	0.13	-	62,62,62,62	0
56	MG	BA	3058	1/1	0.38	-	41,41,41,41	0
56	MG	BA	3726	1/1	0.30	-	29,29,29,29	0
56	MG	DA	3042	1/1	0.34	-	38,38,38,38	0
56	MG	DA	3533	1/1	0.12	-	59,59,59,59	0
56	MG	BA	3632	1/1	0.18	-	55,55,55,55	0
56	MG	BA	3099	1/1	0.30	-	55,55,55,55	0
56	MG	BA	3238	1/1	0.18	-	48,48,48,48	0
56	MG	BP	201	1/1	0.61	-	37,37,37,37	0
56	MG	DA	3441	1/1	0.18	-	46,46,46,46	0
56	MG	BA	3103	1/1	0.34	-	58,58,58,58	0
56	MG	BA	3233	1/1	0.19	-	49,49,49,49	0
56	MG	BU	206	1/1	0.23	-	41,41,41,41	0
56	MG	DA	3284	1/1	0.20	-	45,45,45,45	0
56	MG	DA	3576	1/1	0.17	-	57,57,57,57	0
56	MG	DA	3348	1/1	0.10	-	39,39,39,39	0
56	MG	DA	3430	1/1	0.18	-	75,75,75,75	0
56	MG	AA	3205	1/1	0.19	-	66,66,66,66	0
56	MG	BA	3670	1/1	0.11	-	55,55,55,55	0
56	MG	BA	3597	1/1	0.30	-	46,46,46,46	0
56	MG	AA	3047	1/1	0.45	-	59,59,59,59	0
56	MG	BA	3669	1/1	0.21	-	61,61,61,61	0
56	MG	CE	3002	1/1	0.06	-	69,69,69,69	0
56	MG	BA	3702	1/1	0.24	-	56,56,56,56	0
56	MG	BA	3290	1/1	0.16	-	35,35,35,35	0
56	MG	AA	3083	1/1	0.09	-	56,56,56,56	0
56	MG	BA	3560	1/1	0.27	-	24,24,24,24	0
56	MG	DD	304	1/1	0.55	-	40,40,40,40	0
56	MG	BA	3133	1/1	0.48	-	53,53,53,53	0
56	MG	BA	3039	1/1	0.31	-	44,44,44,44	0
56	MG	CA	3033	1/1	0.20	-	64,64,64,64	0
56	MG	BA	3695	1/1	0.25	-	34,34,34,34	0
56	MG	AA	3174	1/1	0.21	-	49,49,49,49	0
56	MG	BA	3419	1/1	0.30	-	36,36,36,36	0
56	MG	AA	3025	1/1	0.13	-	78,78,78,78	0
56	MG	BA	3610	1/1	1.07	-	49,49,49,49	0
56	MG	BA	3125	1/1	0.28	-	26,26,26,26	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	CA	3008	1/1	1.06	-	59,59,59,59	0
56	MG	CA	3018	1/1	0.30	-	55,55,55,55	0
56	MG	AA	3121	1/1	0.48	-	52,52,52,52	0
56	MG	BA	3718	1/1	0.17	-	52,52,52,52	0
56	MG	CA	3076	1/1	0.25	-	48,48,48,48	0
56	MG	DA	3351	1/1	0.22	-	58,58,58,58	0
56	MG	AA	3145	1/1	0.24	-	63,63,63,63	0
56	MG	CA	3130	1/1	0.10	-	59,59,59,59	0
56	MG	BA	3491	1/1	0.21	-	38,38,38,38	0
56	MG	CA	3074	1/1	0.24	-	56,56,56,56	0
56	MG	DA	3549	1/1	0.35	-	73,73,73,73	0
56	MG	AA	3110	1/1	0.13	-	41,41,41,41	0
56	MG	BV	3001	1/1	0.32	-	42,42,42,42	0
56	MG	DW	202	1/1	0.38	-	53,53,53,53	0
56	MG	CA	3097	1/1	0.13	-	60,60,60,60	0
56	MG	BA	3033	1/1	0.47	-	54,54,54,54	0
56	MG	AX	103	1/1	0.07	-	57,57,57,57	0
56	MG	BA	3411	1/1	0.19	-	21,21,21,21	0
56	MG	BA	3018	1/1	0.33	-	54,54,54,54	0
56	MG	DA	3531	1/1	0.11	-	44,44,44,44	0
56	MG	B3	3403	1/1	0.34	-	37,37,37,37	0
56	MG	DA	3018	1/1	0.32	-	41,41,41,41	0
56	MG	DB	3003	1/1	0.20	-	70,70,70,70	0
56	MG	DA	3500	1/1	0.24	-	66,66,66,66	0
56	MG	DB	3012	1/1	0.21	-	50,50,50,50	0
56	MG	DA	3176	1/1	0.10	-	52,52,52,52	0
56	MG	BA	3232	1/1	0.20	-	32,32,32,32	0
56	MG	CA	3015	1/1	0.29	-	53,53,53,53	0
56	MG	DA	3233	1/1	0.29	-	58,58,58,58	0
56	MG	DD	302	1/1	0.73	-	48,48,48,48	0
56	MG	DA	3488	1/1	0.16	-	48,48,48,48	0
56	MG	BA	3108	1/1	0.16	-	32,32,32,32	0
56	MG	BA	3480	1/1	0.11	-	22,22,22,22	0
56	MG	BA	3172	1/1	0.12	-	54,54,54,54	0
56	MG	DA	3009	1/1	0.10	-	33,33,33,33	0
56	MG	BA	3416	1/1	0.17	-	25,25,25,25	0
56	MG	BA	3231	1/1	0.20	-	50,50,50,50	0
56	MG	DA	3476	1/1	0.11	-	35,35,35,35	0
56	MG	AA	3046	1/1	0.16	-	60,60,60,60	0
56	MG	BA	3081	1/1	0.29	-	44,44,44,44	0
58	ZN	B5	501	1/1	0.10	-	49,49,49,49	0
59	FME	CX	101	10/11	0.46	-	59,80,100,106	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BA	3735	1/1	0.26	-	47,47,47,47	0
56	MG	BF	304	1/1	0.57	-	30,30,30,30	0
56	MG	AA	3208	1/1	0.32	-	38,38,38,38	0
56	MG	BA	3251	1/1	0.28	-	45,45,45,45	0
56	MG	AA	3215	1/1	0.91	-	77,77,77,77	0
56	MG	BA	3086	1/1	0.34	-	50,50,50,50	0
56	MG	BA	3412	1/1	0.26	-	29,29,29,29	0
56	MG	BA	3506	1/1	0.26	-	33,33,33,33	0
56	MG	AA	3074	1/1	0.23	-	40,40,40,40	0
56	MG	DA	3530	1/1	0.16	-	57,57,57,57	0
56	MG	BA	3015	1/1	0.27	-	30,30,30,30	0
56	MG	BA	3098	1/1	0.28	-	42,42,42,42	0
56	MG	BA	3309	1/1	0.14	-	43,43,43,43	0
56	MG	BA	3689	1/1	0.16	-	25,25,25,25	0
56	MG	DA	3309	1/1	0.16	-	25,25,25,25	0
56	MG	BA	3186	1/1	0.16	-	50,50,50,50	0
56	MG	DA	3446	1/1	0.14	-	46,46,46,46	0
56	MG	DA	3388	1/1	0.13	-	25,25,25,25	0
56	MG	DA	3298	1/1	0.26	-	45,45,45,45	0
56	MG	BA	3202	1/1	0.46	-	29,29,29,29	0
56	MG	DA	3208	1/1	0.24	-	46,46,46,46	0
56	MG	AA	3192	1/1	0.07	-	73,73,73,73	0
56	MG	DA	3231	1/1	0.10	-	45,45,45,45	0
56	MG	DA	3504	1/1	0.16	-	46,46,46,46	0
56	MG	DE	304	1/1	0.17	-	30,30,30,30	0
56	MG	BA	3589	1/1	0.22	-	34,34,34,34	0
56	MG	BU	205	1/1	0.38	-	39,39,39,39	0
56	MG	DA	3265	1/1	0.30	-	44,44,44,44	0
56	MG	BA	3534	1/1	0.23	-	36,36,36,36	0
56	MG	AA	3178	1/1	0.18	-	63,63,63,63	0
56	MG	BA	3420	1/1	0.17	-	13,13,13,13	0
56	MG	BA	3174	1/1	0.20	-	52,52,52,52	0
56	MG	AA	3095	1/1	0.20	-	54,54,54,54	0
56	MG	AA	3113	1/1	0.15	-	56,56,56,56	0
56	MG	DA	3614	1/1	0.11	-	46,46,46,46	0
56	MG	BA	3237	1/1	0.19	-	43,43,43,43	0
56	MG	BA	3574	1/1	0.09	-	52,52,52,52	0
56	MG	DA	3612	1/1	0.33	-	46,46,46,46	0
56	MG	DA	3561	1/1	0.14	-	40,40,40,40	0
56	MG	DA	3048	1/1	0.38	-	29,29,29,29	0
56	MG	DA	3200	1/1	0.67	-	48,48,48,48	0
56	MG	DA	3164	1/1	0.18	-	40,40,40,40	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BA	3038	1/1	0.14	-	51,51,51,51	0
56	MG	DY	502	1/1	0.07	-	66,66,66,66	0
56	MG	DA	3529	1/1	0.40	-	72,72,72,72	0
56	MG	AA	3011	1/1	0.60	-	44,44,44,44	0
56	MG	DA	3140	1/1	0.34	-	55,55,55,55	0
56	MG	DA	3080	1/1	0.10	-	43,43,43,43	0
56	MG	DA	3225	1/1	0.10	-	64,64,64,64	0
56	MG	AV	101	1/1	0.26	-	51,51,51,51	0
56	MG	BA	3510	1/1	0.16	-	66,66,66,66	0
56	MG	DA	3013	1/1	0.11	-	38,38,38,38	0
56	MG	DA	3095	1/1	0.25	-	53,53,53,53	0
56	MG	AA	3053	1/1	0.38	-	56,56,56,56	0
56	MG	BA	3141	1/1	0.53	-	43,43,43,43	0
56	MG	BA	3344	1/1	0.16	-	65,65,65,65	0
56	MG	DA	3354	1/1	0.18	-	39,39,39,39	0
56	MG	BA	3439	1/1	0.08	-	35,35,35,35	0
56	MG	BA	3143	1/1	0.76	-	41,41,41,41	0
56	MG	DA	3368	1/1	0.17	-	34,34,34,34	0
56	MG	AA	3108	1/1	0.26	-	72,72,72,72	0
56	MG	BA	3016	1/1	0.50	-	50,50,50,50	0
56	MG	DA	3599	1/1	0.27	-	69,69,69,69	0
56	MG	DA	3486	1/1	0.07	-	52,52,52,52	0
56	MG	BF	305	1/1	0.32	-	38,38,38,38	0
56	MG	BA	3391	1/1	0.18	-	39,39,39,39	0
56	MG	BA	3614	1/1	0.18	-	48,48,48,48	0
56	MG	BD	308	1/1	0.34	-	21,21,21,21	0
56	MG	DA	3252	1/1	0.22	-	36,36,36,36	0
56	MG	DA	3171	1/1	0.87	-	58,58,58,58	0
56	MG	BE	306	1/1	0.44	-	38,38,38,38	0
56	MG	AA	3014	1/1	0.13	-	24,24,24,24	0
56	MG	BA	3097	1/1	0.17	-	30,30,30,30	0
56	MG	BA	3403	1/1	0.21	-	28,28,28,28	0
56	MG	CA	3016	1/1	0.39	-	72,72,72,72	0
56	MG	CA	3134	1/1	0.19	-	92,92,92,92	0
56	MG	DA	3543	1/1	0.19	-	52,52,52,52	0
56	MG	AA	3073	1/1	0.11	-	63,63,63,63	0
56	MG	BA	3536	1/1	0.16	-	37,37,37,37	0
56	MG	DA	3356	1/1	0.42	-	57,57,57,57	0
56	MG	BA	3729	1/1	0.14	-	54,54,54,54	0
56	MG	BA	3543	1/1	0.22	-	24,24,24,24	0
56	MG	BA	3667	1/1	0.18	-	72,72,72,72	0
56	MG	BA	3361	1/1	0.11	-	39,39,39,39	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BW	3003	1/1	0.23	-	39,39,39,39	0
56	MG	BA	3653	1/1	0.15	-	46,46,46,46	0
56	MG	BA	3182	1/1	0.37	-	43,43,43,43	0
56	MG	CA	3159	1/1	0.61	-	76,76,76,76	0
56	MG	BA	3556	1/1	0.18	-	25,25,25,25	0
56	MG	DA	3236	1/1	0.15	-	38,38,38,38	0
56	MG	AA	3087	1/1	0.25	-	87,87,87,87	0
56	MG	BA	3158	1/1	0.45	-	43,43,43,43	0
56	MG	BA	3586	1/1	0.24	-	26,26,26,26	0
56	MG	BA	3531	1/1	0.21	-	28,28,28,28	0
56	MG	BA	3451	1/1	0.09	-	31,31,31,31	0
56	MG	CA	3105	1/1	0.07	-	59,59,59,59	0
56	MG	BA	3503	1/1	0.20	-	56,56,56,56	0
56	MG	CA	3080	1/1	0.13	-	51,51,51,51	0
56	MG	AA	3039	1/1	0.19	-	62,62,62,62	0
56	MG	BA	3178	1/1	0.50	-	51,51,51,51	0
56	MG	BA	3032	1/1	0.31	-	36,36,36,36	0
56	MG	DA	3514	1/1	0.20	-	60,60,60,60	0
56	MG	CA	3152	1/1	0.33	-	45,45,45,45	0
56	MG	AA	3150	1/1	0.29	-	67,67,67,67	0
56	MG	DA	3188	1/1	0.54	-	52,52,52,52	0
56	MG	DA	3330	1/1	0.13	-	30,30,30,30	0
56	MG	BA	3595	1/1	0.15	-	37,37,37,37	0
56	MG	DA	3124	1/1	0.14	-	66,66,66,66	0
56	MG	BA	3538	1/1	0.20	-	29,29,29,29	0
56	MG	BA	3121	1/1	0.24	-	50,50,50,50	0
56	MG	BA	3303	1/1	0.21	-	11,11,11,11	0
56	MG	BA	3438	1/1	0.20	-	30,30,30,30	0
56	MG	AA	3103	1/1	0.13	-	43,43,43,43	0
56	MG	BA	3422	1/1	0.12	-	23,23,23,23	0
56	MG	BA	3101	1/1	0.40	-	47,47,47,47	0
56	MG	DP	202	1/1	0.20	-	54,54,54,54	0
56	MG	CA	3091	1/1	0.16	-	95,95,95,95	0
56	MG	BA	3080	1/1	0.10	-	12,12,12,12	0
56	MG	BA	3706	1/1	0.13	-	38,38,38,38	0
56	MG	DA	3152	1/1	0.26	-	43,43,43,43	0
56	MG	DA	3544	1/1	0.37	-	42,42,42,42	0
56	MG	BA	3221	1/1	0.64	-	55,55,55,55	0
56	MG	CA	3058	1/1	0.19	-	36,36,36,36	0
56	MG	CA	3143	1/1	0.08	-	91,91,91,91	0
56	MG	CA	3123	1/1	0.11	-	75,75,75,75	0
56	MG	AX	102	1/1	0.15	-	66,66,66,66	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	CA	3049	1/1	0.17	-	51,51,51,51	0
56	MG	DA	3206	1/1	0.43	-	36,36,36,36	0
56	MG	DF	302	1/1	0.27	-	47,47,47,47	0
56	MG	DA	3103	1/1	0.42	-	52,52,52,52	0
56	MG	BA	3269	1/1	0.12	-	32,32,32,32	0
56	MG	AA	3136	1/1	0.11	-	68,68,68,68	0
56	MG	DA	3085	1/1	0.10	-	35,35,35,35	0
56	MG	DA	3262	1/1	0.25	-	60,60,60,60	0
56	MG	DA	3359	1/1	0.21	-	21,21,21,21	0
56	MG	BA	3179	1/1	0.32	-	53,53,53,53	0
56	MG	BA	3483	1/1	0.21	-	18,18,18,18	0
56	MG	BA	3404	1/1	0.10	-	42,42,42,42	0
56	MG	BA	3520	1/1	0.11	-	69,69,69,69	0
56	MG	BA	3628	1/1	0.09	-	39,39,39,39	0
56	MG	BA	3418	1/1	0.27	-	20,20,20,20	0
56	MG	BA	3448	1/1	0.21	-	23,23,23,23	0
56	MG	DA	3289	1/1	0.18	-	64,64,64,64	0
56	MG	BA	3119	1/1	0.12	-	56,56,56,56	0
56	MG	BA	3692	1/1	0.19	-	36,36,36,36	0
56	MG	DA	3329	1/1	0.14	-	40,40,40,40	0
56	MG	BA	3696	1/1	0.26	-	36,36,36,36	0
56	MG	BA	3513	1/1	0.29	-	51,51,51,51	0
56	MG	BA	3701	1/1	0.10	-	69,69,69,69	0
56	MG	BA	3140	1/1	0.32	-	50,50,50,50	0
56	MG	AA	3142	1/1	0.41	-	60,60,60,60	0
56	MG	DA	3626	1/1	0.18	-	63,63,63,63	0
56	MG	AA	3066	1/1	0.19	-	41,41,41,41	0
56	MG	CA	3068	1/1	0.13	-	47,47,47,47	0
56	MG	DA	3617	1/1	0.08	-	51,51,51,51	0
56	MG	BA	3656	1/1	0.23	-	70,70,70,70	0
56	MG	BA	3611	1/1	0.10	-	61,61,61,61	0
56	MG	DA	3118	1/1	0.08	-	44,44,44,44	0
56	MG	DA	3257	1/1	0.19	-	25,25,25,25	0
56	MG	BA	3639	1/1	0.10	-	35,35,35,35	0
56	MG	BA	3357	1/1	0.19	-	45,45,45,45	0
56	MG	AA	3157	1/1	0.05	-	26,26,26,26	0
56	MG	AA	3165	1/1	0.14	-	24,24,24,24	0
56	MG	DA	3525	1/1	0.09	-	56,56,56,56	0
56	MG	DA	3139	1/1	0.22	-	47,47,47,47	0
56	MG	AA	3217	1/1	0.41	-	64,64,64,64	0
56	MG	DA	3423	1/1	0.18	-	29,29,29,29	0
56	MG	DA	3185	1/1	0.34	-	42,42,42,42	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	DA	3278	1/1	0.08	-	39,39,39,39	0
56	MG	BA	3541	1/1	0.13	-	37,37,37,37	0
56	MG	BA	3398	1/1	0.14	-	36,36,36,36	0
56	MG	BA	3106	1/1	0.29	-	52,52,52,52	0
56	MG	AA	3084	1/1	0.31	-	71,71,71,71	0
56	MG	DA	3222	1/1	0.21	-	45,45,45,45	0
56	MG	BA	3635	1/1	0.16	-	52,52,52,52	0
56	MG	DA	3159	1/1	0.14	-	50,50,50,50	0
56	MG	AA	3045	1/1	0.28	-	71,71,71,71	0
56	MG	AA	3170	1/1	0.21	-	83,83,83,83	0
56	MG	BA	3659	1/1	0.11	-	42,42,42,42	0
56	MG	BD	311	1/1	0.90	-	53,53,53,53	0
60	K	BA	3304	1/1	0.39	-	93,93,93,93	0
56	MG	DA	3580	1/1	0.16	-	35,35,35,35	0
56	MG	DA	3528	1/1	0.15	-	33,33,33,33	0
56	MG	BA	3091	1/1	0.32	-	55,55,55,55	0
56	MG	CA	3125	1/1	0.21	-	64,64,64,64	0
56	MG	CA	3045	1/1	0.08	-	60,60,60,60	0
56	MG	DA	3646	1/1	0.20	-	42,42,42,42	0
56	MG	BB	3009	1/1	0.11	-	49,49,49,49	0
56	MG	BA	3009	1/1	0.23	-	36,36,36,36	0
56	MG	DA	3438	1/1	0.27	-	50,50,50,50	0
56	MG	BA	3738	1/1	0.20	-	58,58,58,58	0
56	MG	CA	3102	1/1	0.05	-	55,55,55,55	0
56	MG	BA	3624	1/1	0.15	-	73,73,73,73	0
56	MG	BA	3135	1/1	0.23	-	57,57,57,57	0
56	MG	DA	3436	1/1	0.25	-	61,61,61,61	0
56	MG	BA	3487	1/1	0.19	-	47,47,47,47	0
56	MG	DA	3212	1/1	0.08	-	48,48,48,48	0
56	MG	DA	3145	1/1	0.32	-	52,52,52,52	0
56	MG	DA	3148	1/1	0.15	-	41,41,41,41	0
56	MG	CA	3121	1/1	0.44	-	59,59,59,59	0
56	MG	BA	3678	1/1	0.09	-	47,47,47,47	0
56	MG	DA	3477	1/1	0.43	-	35,35,35,35	0
56	MG	AA	3185	1/1	0.27	-	47,47,47,47	0
56	MG	BA	3250	1/1	0.32	-	61,61,61,61	0
56	MG	AA	3210	1/1	0.06	-	48,48,48,48	0
56	MG	DA	3623	1/1	0.13	-	63,63,63,63	0
56	MG	DA	3245	1/1	0.26	-	43,43,43,43	0
56	MG	BA	3725	1/1	0.11	-	29,29,29,29	0
56	MG	DA	3397	1/1	0.19	-	40,40,40,40	0
56	MG	DA	3499	1/1	0.20	-	44,44,44,44	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BA	3207	1/1	0.39	-	44,44,44,44	0
56	MG	BA	3641	1/1	0.12	-	33,33,33,33	0
56	MG	CA	3020	1/1	0.23	-	45,45,45,45	0
56	MG	AA	3173	1/1	0.11	-	37,37,37,37	0
56	MG	BA	3431	1/1	0.27	-	54,54,54,54	0
56	MG	DA	3003	1/1	0.17	-	43,43,43,43	0
56	MG	BA	3723	1/1	0.17	-	25,25,25,25	0
56	MG	DA	3189	1/1	0.27	-	55,55,55,55	0
56	MG	BA	3151	1/1	0.23	-	40,40,40,40	0
56	MG	DA	3083	1/1	0.14	-	44,44,44,44	0
56	MG	BA	3136	1/1	0.18	-	47,47,47,47	0
56	MG	BA	3478	1/1	0.21	-	36,36,36,36	0
56	MG	DA	3462	1/1	0.23	-	71,71,71,71	0
56	MG	AA	3213	1/1	0.10	-	74,74,74,74	0
56	MG	DA	3011	1/1	0.36	-	42,42,42,42	0
56	MG	DA	3465	1/1	0.20	-	41,41,41,41	0
56	MG	CA	3167	1/1	0.08	-	68,68,68,68	0
56	MG	CA	3145	1/1	0.10	-	67,67,67,67	0
56	MG	BA	3339	1/1	0.15	-	47,47,47,47	0
56	MG	DA	3435	1/1	0.17	-	56,56,56,56	0
56	MG	BA	3379	1/1	0.09	-	43,43,43,43	0
56	MG	BA	3007	1/1	0.25	-	55,55,55,55	0
56	MG	BA	3359	1/1	0.15	-	63,63,63,63	0
56	MG	BA	3060	1/1	0.57	-	64,64,64,64	0
56	MG	BA	3027	1/1	0.23	-	53,53,53,53	0
56	MG	DA	3323	1/1	0.18	-	60,60,60,60	0
56	MG	BA	3320	1/1	0.22	-	41,41,41,41	0
56	MG	DA	3109	1/1	0.23	-	55,55,55,55	0
56	MG	BA	3599	1/1	0.11	-	56,56,56,56	0
56	MG	AA	3162	1/1	0.14	-	79,79,79,79	0
56	MG	BA	3490	1/1	0.10	-	40,40,40,40	0
56	MG	BA	3090	1/1	0.20	-	42,42,42,42	0
56	MG	AA	3089	1/1	0.34	-	80,80,80,80	0
56	MG	DA	3641	1/1	0.22	-	47,47,47,47	0
56	MG	AA	3160	1/1	0.28	-	52,52,52,52	0
56	MG	BA	3618	1/1	0.21	-	37,37,37,37	0
56	MG	DA	3031	1/1	0.17	-	60,60,60,60	0
56	MG	BA	3029	1/1	0.66	-	53,53,53,53	0
56	MG	DA	3366	1/1	0.09	-	43,43,43,43	0
56	MG	BA	3324	1/1	0.26	-	54,54,54,54	0
56	MG	BA	3014	1/1	0.37	-	48,48,48,48	0
56	MG	DA	3345	1/1	0.12	-	16,16,16,16	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	CA	3071	1/1	0.15	-	64,64,64,64	0
56	MG	BA	3229	1/1	0.36	-	50,50,50,50	0
56	MG	BA	3638	1/1	0.09	-	73,73,73,73	0
56	MG	CA	3168	1/1	0.46	-	79,79,79,79	0
56	MG	DA	3573	1/1	0.16	-	32,32,32,32	0
56	MG	BA	3024	1/1	0.14	-	31,31,31,31	0
56	MG	DA	3652	1/1	0.25	-	26,26,26,26	0
56	MG	BA	3161	1/1	0.13	-	50,50,50,50	0
56	MG	BA	3362	1/1	0.16	-	23,23,23,23	0
56	MG	AA	3056	1/1	0.20	-	61,61,61,61	0
56	MG	BA	3294	1/1	0.15	-	59,59,59,59	0
56	MG	DA	3621	1/1	0.16	-	46,46,46,46	0
56	MG	BA	3643	1/1	0.18	-	59,59,59,59	0
56	MG	CA	3092	1/1	0.07	-	56,56,56,56	0
56	MG	CA	3014	1/1	0.21	-	56,56,56,56	0
56	MG	BA	3066	1/1	0.23	-	49,49,49,49	0
56	MG	DA	3450	1/1	0.18	-	47,47,47,47	0
56	MG	DB	3004	1/1	0.14	-	56,56,56,56	0
56	MG	DA	3075	1/1	0.20	-	45,45,45,45	0
56	MG	B7	102	1/1	0.26	-	29,29,29,29	0
56	MG	BA	3109	1/1	0.25	-	62,62,62,62	0
56	MG	CA	3103	1/1	0.44	-	101,101,101,101	0
56	MG	BA	3026	1/1	0.14	-	36,36,36,36	0
56	MG	BA	3686	1/1	0.30	-	65,65,65,65	0
56	MG	DA	3340	1/1	0.12	-	29,29,29,29	0
56	MG	BU	201	1/1	0.69	-	33,33,33,33	0
56	MG	CA	3108	1/1	0.14	-	45,45,45,45	0
56	MG	BA	3724	1/1	0.21	-	22,22,22,22	0
56	MG	DA	3636	1/1	0.11	-	64,64,64,64	0
56	MG	DA	3296	1/1	0.56	-	65,65,65,65	0
56	MG	BA	3684	1/1	0.16	-	44,44,44,44	0
56	MG	AA	3117	1/1	0.14	-	64,64,64,64	0
56	MG	DA	3191	1/1	0.17	-	31,31,31,31	0
56	MG	BA	3498	1/1	0.32	-	81,81,81,81	0
56	MG	DA	3541	1/1	0.13	-	55,55,55,55	0
56	MG	DA	3276	1/1	0.11	-	26,26,26,26	0
56	MG	BA	3185	1/1	0.22	-	40,40,40,40	0
56	MG	BA	3561	1/1	0.25	-	39,39,39,39	0
56	MG	BZ	3001	1/1	0.21	-	47,47,47,47	0
56	MG	AA	3176	1/1	0.14	-	60,60,60,60	0
56	MG	AD	502	1/1	0.58	-	56,56,56,56	0
56	MG	BA	3367	1/1	0.18	-	29,29,29,29	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BA	3285	1/1	0.18	-	44,44,44,44	0
56	MG	BA	3674	1/1	0.30	-	67,67,67,67	0
56	MG	DA	3479	1/1	0.17	-	35,35,35,35	0
56	MG	DA	3328	1/1	0.28	-	33,33,33,33	0
58	ZN	CN	501	1/1	0.10	-	104,104,104,104	0
56	MG	BA	3539	1/1	0.19	-	23,23,23,23	0
56	MG	DA	3456	1/1	0.20	-	58,58,58,58	0
56	MG	DA	3006	1/1	0.08	-	41,41,41,41	0
56	MG	DA	3650	1/1	0.04	-	35,35,35,35	0
56	MG	DA	3135	1/1	0.27	-	58,58,58,58	0
56	MG	AA	3161	1/1	0.10	-	61,61,61,61	0
56	MG	BA	3326	1/1	0.25	-	15,15,15,15	0
56	MG	BA	3496	1/1	0.45	-	21,21,21,21	0
56	MG	AM	3002	1/1	0.50	-	60,60,60,60	0
56	MG	BA	3220	1/1	0.28	-	27,27,27,27	0
56	MG	BA	3502	1/1	0.23	-	59,59,59,59	0
56	MG	BA	3716	1/1	0.24	-	77,77,77,77	0
56	MG	DA	3389	1/1	0.20	-	32,32,32,32	0
56	MG	AA	3179	1/1	0.24	-	34,34,34,34	0
56	MG	BA	3399	1/1	0.23	-	22,22,22,22	0
56	MG	AA	3203	1/1	0.15	-	76,76,76,76	0
56	MG	DA	3581	1/1	0.23	-	41,41,41,41	0
56	MG	BA	3609	1/1	0.25	-	29,29,29,29	0
56	MG	BF	303	1/1	0.10	-	42,42,42,42	0
56	MG	BA	3464	1/1	0.18	-	40,40,40,40	0
56	MG	BA	3118	1/1	0.25	-	53,53,53,53	0
56	MG	DA	3596	1/1	0.15	-	68,68,68,68	0
56	MG	DA	3196	1/1	0.11	-	54,54,54,54	0
56	MG	BA	3698	1/1	0.35	-	58,58,58,58	0
56	MG	DB	3001	1/1	0.19	-	80,80,80,80	0
56	MG	DA	3516	1/1	0.19	-	54,54,54,54	0
56	MG	BA	3444	1/1	0.26	-	29,29,29,29	0
56	MG	DA	3335	1/1	0.21	-	36,36,36,36	0
56	MG	BA	3559	1/1	0.40	-	29,29,29,29	0
56	MG	DW	201	1/1	0.33	-	45,45,45,45	0
56	MG	BA	3495	1/1	0.28	-	27,27,27,27	0
56	MG	DA	3548	1/1	0.17	-	60,60,60,60	0
57	SF4	AD	501	8/8	0.12	-	62,75,82,88	0
56	MG	BA	3441	1/1	0.25	-	29,29,29,29	0
56	MG	DA	3132	1/1	0.65	-	47,47,47,47	0
56	MG	BA	3063	1/1	0.12	-	34,34,34,34	0
56	MG	BA	3273	1/1	0.59	-	35,35,35,35	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BA	3170	1/1	0.43	-	34,34,34,34	0
56	MG	BA	3011	1/1	0.17	-	39,39,39,39	0
56	MG	BA	3146	1/1	0.36	-	56,56,56,56	0
56	MG	DA	3130	1/1	0.09	-	34,34,34,34	0
56	MG	DA	3025	1/1	0.46	-	38,38,38,38	0
56	MG	AA	3186	1/1	0.13	-	51,51,51,51	0
56	MG	DA	3310	1/1	0.27	-	30,30,30,30	0
56	MG	DA	3004	1/1	0.16	-	24,24,24,24	0
56	MG	AA	3153	1/1	0.14	-	46,46,46,46	0
56	MG	DA	3556	1/1	0.10	-	35,35,35,35	0
56	MG	DA	3497	1/1	0.06	-	37,37,37,37	0
56	MG	BA	3297	1/1	0.33	-	43,43,43,43	0
56	MG	DA	3283	1/1	0.17	-	47,47,47,47	0
56	MG	CA	3112	1/1	0.27	-	69,69,69,69	0
56	MG	DA	3256	1/1	0.13	-	41,41,41,41	0
56	MG	BA	3688	1/1	0.06	-	58,58,58,58	0
56	MG	AK	3001	1/1	0.19	-	48,48,48,48	0
56	MG	BA	3394	1/1	0.24	-	45,45,45,45	0
56	MG	DA	3155	1/1	0.27	-	50,50,50,50	0
56	MG	BA	3201	1/1	0.28	-	36,36,36,36	0
56	MG	BA	3675	1/1	0.25	-	68,68,68,68	0
56	MG	BA	3577	1/1	0.11	-	63,63,63,63	0
56	MG	DA	3655	1/1	0.12	-	62,62,62,62	0
56	MG	DA	3518	1/1	0.10	-	40,40,40,40	0
56	MG	DA	3260	1/1	0.07	-	32,32,32,32	0
56	MG	AA	3158	1/1	0.23	-	47,47,47,47	0
56	MG	AA	3063	1/1	0.12	-	57,57,57,57	0
56	MG	BA	3166	1/1	0.21	-	41,41,41,41	0
56	MG	BA	3519	1/1	0.06	-	57,57,57,57	0
56	MG	BA	3727	1/1	0.18	-	27,27,27,27	0
56	MG	CA	3056	1/1	0.17	-	63,63,63,63	0
56	MG	BN	3001	1/1	0.38	-	65,65,65,65	0
56	MG	BA	3299	1/1	0.33	-	56,56,56,56	0
56	MG	BA	3473	1/1	0.13	-	55,55,55,55	0
56	MG	CA	3098	1/1	0.20	-	37,37,37,37	0
56	MG	BA	3590	1/1	0.17	-	23,23,23,23	0
56	MG	BA	3072	1/1	0.68	-	45,45,45,45	0
56	MG	AA	3093	1/1	0.34	-	90,90,90,90	0
56	MG	DA	3218	1/1	0.10	-	31,31,31,31	0
56	MG	BA	3117	1/1	0.26	-	37,37,37,37	0
56	MG	BA	3147	1/1	0.61	-	42,42,42,42	0
56	MG	CA	3021	1/1	0.28	-	54,54,54,54	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	DA	3147	1/1	0.19	-	46,46,46,46	0
56	MG	DA	3320	1/1	0.21	-	50,50,50,50	0
56	MG	BA	3547	1/1	0.20	-	30,30,30,30	0
56	MG	BA	3336	1/1	0.16	-	46,46,46,46	0
56	MG	DA	3205	1/1	0.25	-	41,41,41,41	0
56	MG	BA	3163	1/1	0.35	-	50,50,50,50	0
56	MG	DA	3066	1/1	0.33	-	59,59,59,59	0
56	MG	CA	3119	1/1	0.42	-	73,73,73,73	0
56	MG	BA	3047	1/1	0.34	-	30,30,30,30	0
56	MG	BA	3242	1/1	0.20	-	45,45,45,45	0
56	MG	DA	3010	1/1	0.32	-	42,42,42,42	0
56	MG	BA	3417	1/1	0.19	-	21,21,21,21	0
56	MG	DA	3601	1/1	0.21	-	50,50,50,50	0
56	MG	BA	3604	1/1	0.37	-	64,64,64,64	0
56	MG	DU	3002	1/1	0.62	-	52,52,52,52	0
56	MG	BG	3002	1/1	0.10	-	51,51,51,51	0
56	MG	BA	3364	1/1	0.21	-	30,30,30,30	0
56	MG	DA	3443	1/1	0.21	-	30,30,30,30	0
56	MG	BA	3162	1/1	0.24	-	43,43,43,43	0
56	MG	BA	3721	1/1	0.31	-	56,56,56,56	0
56	MG	AA	3187	1/1	0.06	-	72,72,72,72	0
56	MG	DA	3410	1/1	0.08	-	40,40,40,40	0
56	MG	AA	3163	1/1	0.24	-	23,23,23,23	0
56	MG	BA	3134	1/1	0.13	-	34,34,34,34	0
56	MG	B8	5001	1/1	0.17	-	62,62,62,62	0
56	MG	AA	3181	1/1	0.18	-	46,46,46,46	0
56	MG	DA	3100	1/1	0.59	-	55,55,55,55	0
56	MG	DA	3378	1/1	0.10	-	38,38,38,38	0
56	MG	BA	3603	1/1	0.29	-	40,40,40,40	0
56	MG	DA	3088	1/1	0.18	-	47,47,47,47	0
56	MG	CE	3001	1/1	0.21	-	66,66,66,66	0
56	MG	CA	3065	1/1	0.36	-	81,81,81,81	0
56	MG	BA	3264	1/1	0.18	-	29,29,29,29	0
56	MG	CA	3066	1/1	0.09	-	47,47,47,47	0
56	MG	BA	3149	1/1	0.04	-	58,58,58,58	0
56	MG	AA	3048	1/1	0.09	-	52,52,52,52	0
56	MG	DA	3119	1/1	0.16	-	44,44,44,44	0
56	MG	BA	3486	1/1	0.27	-	55,55,55,55	0
56	MG	DA	3624	1/1	0.12	-	54,54,54,54	0
56	MG	DA	3475	1/1	0.12	-	35,35,35,35	0
56	MG	AA	3078	1/1	0.31	-	55,55,55,55	0
56	MG	DA	3129	1/1	0.34	-	45,45,45,45	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BA	3315	1/1	0.35	-	43,43,43,43	0
56	MG	AA	3140	1/1	0.11	-	65,65,65,65	0
56	MG	BA	3579	1/1	0.31	-	21,21,21,21	0
56	MG	DA	3172	1/1	0.33	-	46,46,46,46	0
56	MG	BA	3288	1/1	0.11	-	45,45,45,45	0
56	MG	AA	3024	1/1	0.09	-	49,49,49,49	0
56	MG	DA	3333	1/1	0.11	-	61,61,61,61	0
56	MG	BN	3003	1/1	0.38	-	67,67,67,67	0
56	MG	CA	3051	1/1	0.13	-	77,77,77,77	0
56	MG	BA	3240	1/1	0.28	-	54,54,54,54	0
56	MG	DA	3055	1/1	0.23	-	55,55,55,55	0
56	MG	DA	3440	1/1	0.07	-	48,48,48,48	0
56	MG	BA	3365	1/1	0.05	-	63,63,63,63	0
56	MG	BQ	3003	1/1	0.18	-	15,15,15,15	0
56	MG	BA	3425	1/1	0.22	-	42,42,42,42	0
56	MG	AA	3088	1/1	0.33	-	53,53,53,53	0
56	MG	DA	3392	1/1	0.14	-	60,60,60,60	0
56	MG	CA	3053	1/1	1.84	-	87,87,87,87	0
56	MG	BA	3466	1/1	0.13	-	53,53,53,53	0
56	MG	BA	3463	1/1	0.11	-	32,32,32,32	0
56	MG	BA	3475	1/1	0.07	-	42,42,42,42	0
56	MG	CA	3115	1/1	0.07	-	81,81,81,81	0
56	MG	DA	3324	1/1	0.18	-	24,24,24,24	0
56	MG	BA	3523	1/1	0.16	-	32,32,32,32	0
56	MG	AA	3156	1/1	0.13	-	31,31,31,31	0
56	MG	DA	3305	1/1	0.19	-	33,33,33,33	0
56	MG	AA	3105	1/1	0.31	-	54,54,54,54	0
56	MG	AA	3050	1/1	0.28	-	50,50,50,50	0
56	MG	BA	3292	1/1	0.25	-	59,59,59,59	0
56	MG	BA	3682	1/1	0.35	-	50,50,50,50	0
56	MG	DA	3453	1/1	0.12	-	44,44,44,44	0
56	MG	AA	3090	1/1	0.19	-	64,64,64,64	0
56	MG	DA	3490	1/1	0.15	-	46,46,46,46	0
56	MG	DA	3244	1/1	0.21	-	23,23,23,23	0
56	MG	BA	3328	1/1	0.19	-	41,41,41,41	0
56	MG	DA	3044	1/1	0.23	-	45,45,45,45	0
56	MG	DA	3588	1/1	0.10	-	47,47,47,47	0
56	MG	BA	3283	1/1	0.18	-	61,61,61,61	0
56	MG	BA	3122	1/1	0.64	-	68,68,68,68	0
56	MG	BA	3687	1/1	0.15	-	59,59,59,59	0
56	MG	DA	3334	1/1	0.17	-	37,37,37,37	0
56	MG	CA	3078	1/1	0.28	-	51,51,51,51	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	DA	3367	1/1	0.05	-	55,55,55,55	0
56	MG	BA	3217	1/1	0.32	-	59,59,59,59	0
56	MG	DA	3122	1/1	0.13	-	60,60,60,60	0
56	MG	BA	3308	1/1	0.19	-	33,33,33,33	0
56	MG	BB	3001	1/1	0.15	-	56,56,56,56	0
56	MG	DA	3050	1/1	0.46	-	30,30,30,30	0
56	MG	DA	3365	1/1	0.07	-	52,52,52,52	0
56	MG	B5	502	1/1	0.10	-	56,56,56,56	0
56	MG	BA	3591	1/1	0.23	-	38,38,38,38	0
56	MG	DA	3557	1/1	0.25	-	74,74,74,74	0
56	MG	AA	3098	1/1	0.46	-	76,76,76,76	0
56	MG	CA	3124	1/1	0.15	-	64,64,64,64	0
56	MG	CA	3036	1/1	0.25	-	56,56,56,56	0
56	MG	BA	3261	1/1	0.30	-	45,45,45,45	0
56	MG	DA	3272	1/1	0.12	-	36,36,36,36	0
56	MG	DA	3631	1/1	0.18	-	49,49,49,49	0
56	MG	BA	3677	1/1	0.19	-	47,47,47,47	0
56	MG	CA	3067	1/1	0.28	-	66,66,66,66	0
56	MG	DA	3142	1/1	0.21	-	33,33,33,33	0
56	MG	AA	3003	1/1	0.28	-	70,70,70,70	0
56	MG	DA	3036	1/1	0.30	-	35,35,35,35	0
56	MG	BA	3306	1/1	0.15	-	19,19,19,19	0
56	MG	BA	3587	1/1	0.22	-	23,23,23,23	0
56	MG	DA	3030	1/1	0.28	-	49,49,49,49	0
56	MG	DA	3455	1/1	0.20	-	53,53,53,53	0
56	MG	AA	3143	1/1	0.20	-	67,67,67,67	0
56	MG	DA	3090	1/1	0.27	-	59,59,59,59	0
56	MG	DA	3415	1/1	0.08	-	22,22,22,22	0
56	MG	AA	3182	1/1	0.13	-	48,48,48,48	0
57	SF4	CD	501	8/8	0.11	-	63,76,87,96	0
56	MG	DA	3483	1/1	0.16	-	55,55,55,55	0
56	MG	DA	3237	1/1	0.33	-	37,37,37,37	0
56	MG	DA	3107	1/1	0.13	-	50,50,50,50	0
56	MG	CA	3029	1/1	0.23	-	54,54,54,54	0
56	MG	BB	3012	1/1	0.17	-	42,42,42,42	0
56	MG	BA	3317	1/1	0.23	-	40,40,40,40	0
56	MG	BA	3211	1/1	0.08	-	43,43,43,43	0
56	MG	DA	3458	1/1	0.23	-	47,47,47,47	0
56	MG	DA	3487	1/1	0.06	-	44,44,44,44	0
56	MG	DA	3437	1/1	0.18	-	46,46,46,46	0
56	MG	BA	3311	1/1	0.28	-	52,52,52,52	0
56	MG	AA	3115	1/1	0.19	-	67,67,67,67	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BA	3650	1/1	0.15	-	44,44,44,44	0
56	MG	DA	3396	1/1	0.14	-	37,37,37,37	0
56	MG	BE	303	1/1	0.08	-	39,39,39,39	0
56	MG	DA	3474	1/1	0.10	-	49,49,49,49	0
56	MG	BA	3545	1/1	0.18	-	20,20,20,20	0
56	MG	CA	3150	1/1	0.22	-	63,63,63,63	0
56	MG	BA	3428	1/1	0.41	-	36,36,36,36	0
56	MG	CX	104	1/1	0.11	-	52,52,52,52	0
56	MG	BA	3460	1/1	0.18	-	66,66,66,66	0
56	MG	DA	3404	1/1	0.19	-	57,57,57,57	0
56	MG	BA	3655	1/1	0.11	-	44,44,44,44	0
56	MG	AA	3141	1/1	0.22	-	51,51,51,51	0
56	MG	DA	3093	1/1	0.13	-	51,51,51,51	0
56	MG	DA	3184	1/1	0.18	-	54,54,54,54	0
56	MG	DA	3181	1/1	0.27	-	55,55,55,55	0
56	MG	AS	3001	1/1	0.15	-	79,79,79,79	0
56	MG	BA	3511	1/1	0.15	-	40,40,40,40	0
56	MG	DA	3008	1/1	0.25	-	56,56,56,56	0
56	MG	AA	3001	1/1	0.24	-	74,74,74,74	0
56	MG	DA	3593	1/1	0.22	-	62,62,62,62	0
56	MG	DA	3382	1/1	0.06	-	44,44,44,44	0
56	MG	BA	3154	1/1	0.41	-	55,55,55,55	0
56	MG	BA	3348	1/1	0.09	-	29,29,29,29	0
56	MG	DB	3008	1/1	0.12	-	36,36,36,36	0
56	MG	DA	3077	1/1	0.32	-	48,48,48,48	0
56	MG	CA	3101	1/1	0.11	-	58,58,58,58	0
56	MG	AA	3184	1/1	0.13	-	81,81,81,81	0
56	MG	BA	3592	1/1	0.16	-	43,43,43,43	0
56	MG	DA	3251	1/1	0.27	-	50,50,50,50	0
56	MG	DA	3495	1/1	0.09	-	53,53,53,53	0
56	MG	DA	3053	1/1	0.20	-	47,47,47,47	0
56	MG	BR	201	1/1	0.41	-	44,44,44,44	0
56	MG	BA	3208	1/1	0.13	-	50,50,50,50	0
56	MG	AA	3064	1/1	0.14	-	65,65,65,65	0
56	MG	BD	307	1/1	0.26	-	36,36,36,36	0
56	MG	BA	3042	1/1	0.14	-	50,50,50,50	0
56	MG	AA	3072	1/1	0.25	-	69,69,69,69	0
56	MG	DA	3226	1/1	0.19	-	47,47,47,47	0
56	MG	BA	3627	1/1	0.29	-	50,50,50,50	0
56	MG	DA	3546	1/1	0.22	-	38,38,38,38	0
56	MG	BA	3378	1/1	0.18	-	24,24,24,24	0
56	MG	CA	3034	1/1	0.28	-	66,66,66,66	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BA	3173	1/1	0.23	-	41,41,41,41	0
56	MG	DA	3300	1/1	0.15	-	47,47,47,47	0
56	MG	BA	3278	1/1	0.16	-	53,53,53,53	0
56	MG	CA	3153	1/1	0.10	-	85,85,85,85	0
56	MG	BA	3570	1/1	0.21	-	33,33,33,33	0
56	MG	BA	3432	1/1	0.14	-	27,27,27,27	0
56	MG	AA	3055	1/1	0.28	-	56,56,56,56	0
56	MG	DA	3550	1/1	0.09	-	54,54,54,54	0
56	MG	AA	3031	1/1	0.25	-	41,41,41,41	0
56	MG	BA	3345	1/1	0.04	-	37,37,37,37	0
56	MG	DA	3391	1/1	0.14	-	54,54,54,54	0
56	MG	BQ	3004	1/1	0.32	-	41,41,41,41	0
56	MG	CA	3170	1/1	0.37	-	44,44,44,44	0
56	MG	BA	3644	1/1	0.11	-	38,38,38,38	0
56	MG	DA	3425	1/1	0.19	-	51,51,51,51	0
56	MG	BB	3013	1/1	0.17	-	31,31,31,31	0
56	MG	AX	105	1/1	0.41	-	72,72,72,72	0
56	MG	BA	3111	1/1	0.19	-	43,43,43,43	0
56	MG	DA	3138	1/1	0.40	-	53,53,53,53	0
56	MG	BV	3003	1/1	0.24	-	27,27,27,27	0
56	MG	DA	3141	1/1	0.18	-	63,63,63,63	0
56	MG	DA	3126	1/1	0.17	-	61,61,61,61	0
56	MG	DA	3069	1/1	0.16	-	49,49,49,49	0
58	ZN	D6	501	1/1	0.11	-	65,65,65,65	0
56	MG	AA	3169	1/1	0.20	-	62,62,62,62	0
56	MG	DB	3006	1/1	0.20	-	54,54,54,54	0
56	MG	AA	3151	1/1	0.07	-	49,49,49,49	0
56	MG	BA	3392	1/1	0.13	-	53,53,53,53	0
56	MG	CA	3172	1/1	0.21	-	65,65,65,65	0
56	MG	BA	3107	1/1	0.17	-	60,60,60,60	0
56	MG	DA	3492	1/1	0.08	-	44,44,44,44	0
56	MG	AA	3092	1/1	0.47	-	59,59,59,59	0
56	MG	BG	3003	1/1	0.22	-	53,53,53,53	0
56	MG	DA	3607	1/1	0.19	-	68,68,68,68	0
56	MG	CA	3070	1/1	0.39	-	59,59,59,59	0
56	MG	BA	3376	1/1	0.32	-	35,35,35,35	0
56	MG	CA	3064	1/1	0.15	-	74,74,74,74	0
56	MG	BA	3124	1/1	0.22	-	46,46,46,46	0
56	MG	DA	3043	1/1	0.49	-	56,56,56,56	0
56	MG	AA	3172	1/1	0.08	-	36,36,36,36	0
56	MG	DA	3028	1/1	0.07	-	34,34,34,34	0
56	MG	AA	3220	1/1	0.10	-	42,42,42,42	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	AA	3006	1/1	0.09	-	84,84,84,84	0
56	MG	DR	5001	1/1	0.16	-	39,39,39,39	0
56	MG	CA	3160	1/1	0.14	-	49,49,49,49	0
56	MG	DA	3087	1/1	0.26	-	43,43,43,43	0
56	MG	AA	3190	1/1	0.30	-	61,61,61,61	0
56	MG	DA	3644	1/1	0.68	-	50,50,50,50	0
56	MG	DA	3509	1/1	0.08	-	57,57,57,57	0
56	MG	DA	3577	1/1	0.23	-	44,44,44,44	0
56	MG	BA	3280	1/1	0.31	-	44,44,44,44	0
56	MG	AA	3188	1/1	0.26	-	52,52,52,52	0
56	MG	DA	3023	1/1	0.41	-	64,64,64,64	0
56	MG	CA	3128	1/1	0.25	-	55,55,55,55	0
56	MG	BA	3497	1/1	0.44	-	28,28,28,28	0
56	MG	CA	3081	1/1	0.08	-	72,72,72,72	0
56	MG	DA	3327	1/1	0.12	-	45,45,45,45	0
56	MG	BA	3645	1/1	0.20	-	63,63,63,63	0
56	MG	DA	3485	1/1	0.20	-	44,44,44,44	0
56	MG	DA	3294	1/1	0.20	-	30,30,30,30	0
56	MG	DA	3405	1/1	0.33	-	53,53,53,53	0
56	MG	DA	3585	1/1	0.22	-	62,62,62,62	0
56	MG	DE	303	1/1	0.14	-	36,36,36,36	0
56	MG	DA	3582	1/1	0.37	-	44,44,44,44	0
56	MG	BA	3662	1/1	0.13	-	46,46,46,46	0
56	MG	DA	3620	1/1	0.19	-	66,66,66,66	0
56	MG	DA	3553	1/1	0.15	-	58,58,58,58	0
56	MG	DA	3161	1/1	0.17	-	51,51,51,51	0
56	MG	DA	3493	1/1	0.25	-	38,38,38,38	0
56	MG	DA	3014	1/1	0.29	-	38,38,38,38	0
56	MG	DA	3131	1/1	0.21	-	60,60,60,60	0
56	MG	BA	3381	1/1	0.07	-	25,25,25,25	0
56	MG	DA	3201	1/1	0.21	-	43,43,43,43	0
56	MG	DA	3312	1/1	0.23	-	24,24,24,24	0
56	MG	BA	3051	1/1	0.30	-	34,34,34,34	0
56	MG	DA	3635	1/1	0.12	-	39,39,39,39	0
56	MG	DA	3286	1/1	0.18	-	26,26,26,26	0
56	MG	BF	302	1/1	0.25	-	49,49,49,49	0
56	MG	BA	3617	1/1	0.34	-	30,30,30,30	0
56	MG	CA	3096	1/1	0.12	-	54,54,54,54	0
56	MG	BA	3517	1/1	0.12	-	52,52,52,52	0
56	MG	DA	3183	1/1	0.13	-	42,42,42,42	0
56	MG	AA	3189	1/1	0.14	-	74,74,74,74	0
56	MG	DA	3416	1/1	0.39	-	34,34,34,34	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BA	3329	1/1	0.06	-	49,49,49,49	0
56	MG	B0	104	1/1	0.38	-	55,55,55,55	0
56	MG	DA	3534	1/1	0.14	-	62,62,62,62	0
56	MG	DA	3035	1/1	0.52	-	58,58,58,58	0
56	MG	AA	3091	1/1	0.25	-	75,75,75,75	0
56	MG	BD	303	1/1	0.29	-	35,35,35,35	0
56	MG	BA	3255	1/1	0.20	-	53,53,53,53	0
56	MG	DA	3606	1/1	0.19	-	58,58,58,58	0
56	MG	BA	3048	1/1	0.33	-	33,33,33,33	0
56	MG	BA	3728	1/1	0.25	-	56,56,56,56	0
56	MG	AA	3021	1/1	0.16	-	76,76,76,76	0
56	MG	DA	3180	1/1	0.21	-	47,47,47,47	0
56	MG	DA	3071	1/1	0.52	-	46,46,46,46	0
56	MG	BA	3514	1/1	0.21	-	49,49,49,49	0
56	MG	BA	3030	1/1	0.34	-	26,26,26,26	0
56	MG	AA	3200	1/1	0.28	-	79,79,79,79	0
56	MG	CA	3006	1/1	0.09	-	72,72,72,72	0
56	MG	DA	3216	1/1	0.17	-	47,47,47,47	0
56	MG	DA	3513	1/1	0.11	-	58,58,58,58	0
56	MG	BA	3281	1/1	0.21	-	45,45,45,45	0
56	MG	DA	3357	1/1	0.12	-	50,50,50,50	0
56	MG	DE	301	1/1	0.83	-	51,51,51,51	0
56	MG	DA	3545	1/1	0.26	-	35,35,35,35	0
56	MG	DA	3106	1/1	0.54	-	45,45,45,45	0
56	MG	DA	3057	1/1	0.27	-	57,57,57,57	0
56	MG	BA	3685	1/1	0.21	-	58,58,58,58	0
56	MG	BA	3442	1/1	0.18	-	33,33,33,33	0
56	MG	DA	3452	1/1	0.20	-	64,64,64,64	0
56	MG	BA	3563	1/1	0.38	-	66,66,66,66	0
56	MG	BA	3346	1/1	0.17	-	33,33,33,33	0
56	MG	DA	3643	1/1	0.28	-	18,18,18,18	0
56	MG	BA	3156	1/1	0.42	-	61,61,61,61	0
56	MG	BA	3200	1/1	0.28	-	32,32,32,32	0
56	MG	DA	3061	1/1	0.27	-	47,47,47,47	0
56	MG	DA	3625	1/1	0.16	-	48,48,48,48	0
56	MG	CA	3039	1/1	0.56	-	82,82,82,82	0
56	MG	CA	3002	1/1	0.07	-	74,74,74,74	0
56	MG	BA	3414	1/1	0.22	-	51,51,51,51	0
56	MG	DA	3192	1/1	0.54	-	48,48,48,48	0
56	MG	BX	101	1/1	0.08	-	38,38,38,38	0
56	MG	BA	3382	1/1	0.23	-	21,21,21,21	0
56	MG	AA	3060	1/1	0.41	-	52,52,52,52	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BA	3430	1/1	0.10	-	47,47,47,47	0
56	MG	BA	3077	1/1	0.18	-	20,20,20,20	0
56	MG	BA	3338	1/1	0.20	-	62,62,62,62	0
56	MG	DA	3352	1/1	0.27	-	24,24,24,24	0
56	MG	DA	3578	1/1	0.14	-	68,68,68,68	0
56	MG	DA	3401	1/1	0.14	-	41,41,41,41	0
56	MG	BA	3477	1/1	0.16	-	52,52,52,52	0
56	MG	BA	3235	1/1	0.33	-	44,44,44,44	0
56	MG	BA	3268	1/1	0.20	-	29,29,29,29	0
56	MG	CA	3042	1/1	0.29	-	69,69,69,69	0
56	MG	BA	3037	1/1	0.52	-	39,39,39,39	0
56	MG	DQ	3002	1/1	0.31	-	51,51,51,51	0
56	MG	DA	3350	1/1	0.23	-	21,21,21,21	0
56	MG	DA	3137	1/1	0.32	-	62,62,62,62	0
56	MG	CA	3005	1/1	0.37	-	37,37,37,37	0
56	MG	DA	3308	1/1	0.10	-	32,32,32,32	0
56	MG	BA	3318	1/1	0.14	-	30,30,30,30	0
56	MG	BA	3712	1/1	0.25	-	47,47,47,47	0
56	MG	BA	3424	1/1	0.17	-	44,44,44,44	0
56	MG	BA	3390	1/1	0.09	-	40,40,40,40	0
56	MG	BA	3126	1/1	0.33	-	47,47,47,47	0
56	MG	DA	3412	1/1	0.16	-	34,34,34,34	0
56	MG	BA	3075	1/1	0.23	-	36,36,36,36	0
56	MG	BA	3664	1/1	0.18	-	63,63,63,63	0
56	MG	DA	3160	1/1	0.23	-	47,47,47,47	0
56	MG	BA	3160	1/1	0.16	-	24,24,24,24	0
56	MG	DA	3133	1/1	0.13	-	31,31,31,31	0
56	MG	BA	3405	1/1	0.23	-	57,57,57,57	0
56	MG	BA	3214	1/1	0.28	-	37,37,37,37	0
56	MG	BA	3142	1/1	0.30	-	57,57,57,57	0
56	MG	DA	3597	1/1	0.14	-	66,66,66,66	0
56	MG	BA	3558	1/1	0.19	-	47,47,47,47	0
56	MG	CA	3089	1/1	0.16	-	54,54,54,54	0
56	MG	DA	3279	1/1	0.27	-	32,32,32,32	0
56	MG	BA	3059	1/1	0.37	-	35,35,35,35	0
56	MG	BA	3663	1/1	0.32	-	73,73,73,73	0
56	MG	DA	3406	1/1	0.06	-	48,48,48,48	0
56	MG	CA	3022	1/1	0.05	-	67,67,67,67	0
56	MG	DA	3459	1/1	0.13	-	43,43,43,43	0
56	MG	DA	3250	1/1	0.09	-	42,42,42,42	0
56	MG	BD	304	1/1	0.39	-	41,41,41,41	0
56	MG	AA	3018	1/1	0.25	-	51,51,51,51	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BA	3578	1/1	0.18	-	47,47,47,47	0
56	MG	DA	3151	1/1	0.34	-	48,48,48,48	0
56	MG	AA	3222	1/1	0.14	-	64,64,64,64	0
56	MG	BA	3551	1/1	0.16	-	31,31,31,31	0
56	MG	BA	3031	1/1	0.58	-	44,44,44,44	0
56	MG	BA	3733	1/1	0.38	-	40,40,40,40	0
56	MG	BA	3206	1/1	0.26	-	32,32,32,32	0
56	MG	BA	3710	1/1	0.06	-	57,57,57,57	0
56	MG	BA	3683	1/1	0.28	-	37,37,37,37	0
56	MG	DA	3094	1/1	0.27	-	26,26,26,26	0
56	MG	CA	3013	1/1	0.09	-	46,46,46,46	0
56	MG	DA	3012	1/1	0.40	-	52,52,52,52	0
56	MG	CA	3093	1/1	0.10	-	65,65,65,65	0
56	MG	DA	3587	1/1	0.16	-	57,57,57,57	0
56	MG	AA	3100	1/1	0.58	-	43,43,43,43	0
56	MG	DA	3274	1/1	0.39	-	49,49,49,49	0
56	MG	BA	3347	1/1	0.15	-	44,44,44,44	0
56	MG	DA	3241	1/1	0.10	-	74,74,74,74	0
56	MG	BA	3530	1/1	0.22	-	72,72,72,72	0
56	MG	AA	3067	1/1	0.36	-	76,76,76,76	0
56	MG	DF	301	1/1	0.36	-	40,40,40,40	0
56	MG	DA	3247	1/1	0.34	-	34,34,34,34	0
56	MG	DA	3199	1/1	0.16	-	46,46,46,46	0
56	MG	BG	3001	1/1	0.10	-	65,65,65,65	0
56	MG	AA	3107	1/1	0.29	-	44,44,44,44	0
56	MG	DA	3266	1/1	0.19	-	32,32,32,32	0
56	MG	DA	3239	1/1	0.14	-	54,54,54,54	0
56	MG	DA	3384	1/1	0.12	-	24,24,24,24	0
56	MG	DA	3264	1/1	0.19	-	38,38,38,38	0
58	ZN	D4	501	1/1	0.07	-	155,155,155,155	0
56	MG	DA	3537	1/1	0.18	-	74,74,74,74	0
56	MG	DA	3285	1/1	0.10	-	41,41,41,41	0
56	MG	BE	302	1/1	0.17	-	29,29,29,29	0
56	MG	DA	3062	1/1	0.40	-	58,58,58,58	0
56	MG	DA	3360	1/1	0.12	-	36,36,36,36	0
56	MG	BA	3468	1/1	0.17	-	45,45,45,45	0
56	MG	BU	202	1/1	0.75	-	41,41,41,41	0
56	MG	AA	3038	1/1	0.45	-	64,64,64,64	0
56	MG	DA	3202	1/1	0.21	-	39,39,39,39	0
56	MG	BA	3096	1/1	0.23	-	35,35,35,35	0
56	MG	DA	3001	1/1	0.28	-	76,76,76,76	0
56	MG	DA	3604	1/1	0.08	-	50,50,50,50	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BA	3557	1/1	0.26	-	35,35,35,35	0
56	MG	DA	3068	1/1	0.18	-	52,52,52,52	0
56	MG	BA	3652	1/1	0.22	-	54,54,54,54	0
56	MG	BP	203	1/1	0.75	-	39,39,39,39	0
56	MG	AA	3195	1/1	0.18	-	58,58,58,58	0
56	MG	BA	3366	1/1	0.13	-	30,30,30,30	0
56	MG	BA	3074	1/1	0.16	-	38,38,38,38	0
56	MG	BA	3139	1/1	0.78	-	50,50,50,50	0
56	MG	CA	3054	1/1	0.42	-	74,74,74,74	0
56	MG	AA	3017	1/1	0.28	-	57,57,57,57	0
56	MG	DA	3579	1/1	0.17	-	38,38,38,38	0
56	MG	B0	102	1/1	0.15	-	50,50,50,50	0
56	MG	BA	3690	1/1	0.22	-	55,55,55,55	0
56	MG	DA	3143	1/1	0.21	-	53,53,53,53	0
56	MG	DA	3288	1/1	0.21	-	68,68,68,68	0
56	MG	DA	3552	1/1	0.13	-	42,42,42,42	0
56	MG	CA	3133	1/1	0.14	-	45,45,45,45	0
56	MG	BA	3455	1/1	0.39	-	47,47,47,47	0
56	MG	BA	3408	1/1	0.12	-	28,28,28,28	0
56	MG	BA	3282	1/1	0.15	-	34,34,34,34	0
56	MG	CA	3131	1/1	0.12	-	48,48,48,48	0
56	MG	CA	3059	1/1	0.17	-	51,51,51,51	0
56	MG	BA	3241	1/1	0.42	-	41,41,41,41	0
56	MG	DA	3089	1/1	0.27	-	51,51,51,51	0
56	MG	BA	3302	1/1	0.25	-	48,48,48,48	0
56	MG	BA	3482	1/1	0.11	-	59,59,59,59	0
56	MG	DB	3005	1/1	0.25	-	41,41,41,41	0
56	MG	DA	3619	1/1	0.17	-	67,67,67,67	0
56	MG	BA	3596	1/1	0.25	-	79,79,79,79	0
56	MG	BA	3169	1/1	0.21	-	39,39,39,39	0
56	MG	BA	3546	1/1	0.27	-	46,46,46,46	0
56	MG	AA	3094	1/1	0.24	-	78,78,78,78	0
56	MG	BB	3008	1/1	0.19	-	49,49,49,49	0
56	MG	AA	3175	1/1	0.15	-	70,70,70,70	0
56	MG	CA	3073	1/1	0.45	-	74,74,74,74	0
56	MG	CA	3116	1/1	0.20	-	76,76,76,76	0
56	MG	AA	3075	1/1	0.11	-	50,50,50,50	0
56	MG	BA	3661	1/1	0.25	-	69,69,69,69	0
56	MG	CA	3110	1/1	0.13	-	93,93,93,93	0
56	MG	AA	3020	1/1	0.20	-	80,80,80,80	0
56	MG	DA	3353	1/1	0.17	-	54,54,54,54	0
56	MG	BA	3340	1/1	0.20	-	57,57,57,57	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	BA	3277	1/1	0.46	-	45,45,45,45	0
56	MG	BA	3436	1/1	0.27	-	35,35,35,35	0
56	MG	DA	3110	1/1	0.15	-	46,46,46,46	0
56	MG	DA	3467	1/1	0.30	-	48,48,48,48	0
56	MG	DA	3589	1/1	0.11	-	65,65,65,65	0
56	MG	DV	201	1/1	0.25	-	56,56,56,56	0
56	MG	BA	3633	1/1	0.34	-	54,54,54,54	0
56	MG	CA	3060	1/1	0.41	-	59,59,59,59	0
56	MG	DA	3074	1/1	0.27	-	60,60,60,60	0
56	MG	BA	3053	1/1	0.18	-	52,52,52,52	0
56	MG	BA	3508	1/1	0.17	-	46,46,46,46	0
56	MG	BA	3631	1/1	0.14	-	41,41,41,41	0
56	MG	BB	3006	1/1	0.30	-	34,34,34,34	0
56	MG	DA	3269	1/1	0.16	-	47,47,47,47	0
56	MG	BD	310	1/1	0.41	-	48,48,48,48	0
56	MG	CA	3094	1/1	0.21	-	37,37,37,37	0
56	MG	CA	3151	1/1	0.14	-	80,80,80,80	0
56	MG	DA	3496	1/1	0.34	-	76,76,76,76	0
56	MG	AA	3131	1/1	0.37	-	65,65,65,65	0
56	MG	DA	3254	1/1	0.14	-	52,52,52,52	0
56	MG	CA	3161	1/1	0.18	-	71,71,71,71	0
56	MG	DA	3229	1/1	0.15	-	44,44,44,44	0
56	MG	DA	3494	1/1	0.12	-	50,50,50,50	0
56	MG	DA	3569	1/1	0.08	-	54,54,54,54	0
56	MG	BB	3015	1/1	0.08	-	35,35,35,35	0
56	MG	DA	3560	1/1	0.07	-	57,57,57,57	0
56	MG	BD	302	1/1	0.56	-	44,44,44,44	0
56	MG	DA	3034	1/1	0.20	-	40,40,40,40	0
56	MG	DA	3408	1/1	0.18	-	35,35,35,35	0
56	MG	BA	3700	1/1	0.24	-	26,26,26,26	0
56	MG	DA	3306	1/1	0.17	-	51,51,51,51	0
56	MG	BA	3492	1/1	0.19	-	48,48,48,48	0
56	MG	AA	3065	1/1	0.28	-	50,50,50,50	0
56	MG	BA	3397	1/1	0.10	-	44,44,44,44	0
56	MG	BA	3516	1/1	0.18	-	64,64,64,64	0
56	MG	DA	3608	1/1	0.28	-	63,63,63,63	0
56	MG	BA	3654	1/1	0.13	-	49,49,49,49	0
56	MG	BB	3005	1/1	0.18	-	62,62,62,62	0
56	MG	DA	3473	1/1	0.19	-	50,50,50,50	0
56	MG	AA	3112	1/1	0.12	-	53,53,53,53	0
56	MG	AA	3059	1/1	0.62	-	49,49,49,49	0
56	MG	DA	3108	1/1	0.54	-	50,50,50,50	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	B0	105	1/1	0.27	-	44,44,44,44	0
56	MG	DA	3648	1/1	0.22	-	43,43,43,43	0
56	MG	DA	3319	1/1	0.12	-	31,31,31,31	0
56	MG	BA	3550	1/1	0.19	-	32,32,32,32	0
56	MG	AA	3180	1/1	0.45	-	75,75,75,75	0
56	MG	BE	307	1/1	0.28	-	51,51,51,51	0
56	MG	AA	3044	1/1	0.14	-	60,60,60,60	0
56	MG	BA	3535	1/1	0.19	-	42,42,42,42	0
56	MG	DA	3204	1/1	0.28	-	44,44,44,44	0
56	MG	DA	3571	1/1	0.10	-	57,57,57,57	0
56	MG	AA	3147	1/1	0.44	-	51,51,51,51	0
56	MG	BA	3203	1/1	0.20	-	45,45,45,45	0
56	MG	BA	3330	1/1	0.10	-	35,35,35,35	0
56	MG	AA	3137	1/1	0.16	-	40,40,40,40	0
56	MG	BA	3350	1/1	0.26	-	36,36,36,36	0
56	MG	CA	3085	1/1	0.28	-	58,58,58,58	0
56	MG	CA	3055	1/1	0.27	-	61,61,61,61	0
56	MG	BB	3016	1/1	0.14	-	24,24,24,24	0
56	MG	DA	3190	1/1	0.11	-	54,54,54,54	0
56	MG	BA	3388	1/1	0.23	-	30,30,30,30	0
56	MG	DA	3468	1/1	0.29	-	47,47,47,47	0
56	MG	DA	3213	1/1	0.07	-	48,48,48,48	0
56	MG	BA	3389	1/1	0.14	-	52,52,52,52	0
56	MG	BA	3165	1/1	0.42	-	44,44,44,44	0
56	MG	BQ	3001	1/1	0.33	-	38,38,38,38	0
56	MG	BA	3406	1/1	0.21	-	54,54,54,54	0
56	MG	DA	3177	1/1	0.23	-	30,30,30,30	0
56	MG	DA	3433	1/1	0.24	-	39,39,39,39	0
56	MG	DA	3506	1/1	0.09	-	61,61,61,61	0
56	MG	BA	3003	1/1	0.09	-	24,24,24,24	0
56	MG	BA	3544	1/1	0.21	-	35,35,35,35	0
56	MG	AA	3030	1/1	0.65	-	66,66,66,66	0
56	MG	BA	3711	1/1	0.45	-	64,64,64,64	0
56	MG	BA	3369	1/1	0.13	-	49,49,49,49	0
56	MG	DA	3524	1/1	0.23	-	51,51,51,51	0
56	MG	CA	3109	1/1	0.13	-	79,79,79,79	0
56	MG	BA	3625	1/1	0.47	-	80,80,80,80	0
56	MG	AA	3081	1/1	0.41	-	46,46,46,46	0
56	MG	DA	3428	1/1	0.29	-	30,30,30,30	0
56	MG	BA	3580	1/1	0.17	-	58,58,58,58	0
56	MG	BA	3150	1/1	0.35	-	42,42,42,42	0
56	MG	DA	3316	1/1	0.27	-	47,47,47,47	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	DA	3150	1/1	0.10	-	57,57,57,57	0
56	MG	BA	3526	1/1	0.12	-	49,49,49,49	0
56	MG	CX	103	1/1	0.21	-	57,57,57,57	0
56	MG	AA	3028	1/1	0.56	-	72,72,72,72	0
56	MG	AA	3096	1/1	0.28	-	52,52,52,52	0
56	MG	BP	204	1/1	0.08	-	53,53,53,53	0
56	MG	AA	3197	1/1	0.12	-	64,64,64,64	0
56	MG	AA	3216	1/1	0.22	-	60,60,60,60	0
56	MG	BA	3313	1/1	0.12	-	56,56,56,56	0
56	MG	AA	3026	1/1	0.18	-	52,52,52,52	0
56	MG	DA	3242	1/1	0.24	-	31,31,31,31	0
56	MG	DA	3082	1/1	0.07	-	7,7,7,7	0
56	MG	BA	3542	1/1	0.18	-	37,37,37,37	0
56	MG	DA	3482	1/1	0.17	-	45,45,45,45	0
56	MG	CA	3007	1/1	0.33	-	63,63,63,63	0
56	MG	DA	3498	1/1	0.13	-	75,75,75,75	0
56	MG	AA	3154	1/1	0.09	-	60,60,60,60	0
56	MG	BA	3276	1/1	0.27	-	9,9,9,9	0
56	MG	DG	3001	1/1	0.10	-	68,68,68,68	0
56	MG	CA	3075	1/1	0.36	-	76,76,76,76	0
56	MG	BA	3646	1/1	0.20	-	39,39,39,39	0
56	MG	AA	3202	1/1	0.21	-	72,72,72,72	0
56	MG	AA	3076	1/1	0.35	-	74,74,74,74	0
56	MG	BA	3454	1/1	0.23	-	20,20,20,20	0
56	MG	BA	3372	1/1	0.15	-	42,42,42,42	0
56	MG	DA	3238	1/1	0.12	-	37,37,37,37	0
56	MG	BA	3144	1/1	0.12	-	52,52,52,52	0
56	MG	BA	3209	1/1	0.42	-	39,39,39,39	0
56	MG	BA	3078	1/1	0.32	-	44,44,44,44	0
56	MG	DA	3586	1/1	0.10	-	57,57,57,57	0
56	MG	BF	301	1/1	0.60	-	46,46,46,46	0
56	MG	CA	3164	1/1	0.36	-	43,43,43,43	0
56	MG	BA	3370	1/1	0.06	-	39,39,39,39	0
56	MG	BA	3525	1/1	0.16	-	31,31,31,31	0
56	MG	DA	3073	1/1	0.17	-	50,50,50,50	0
56	MG	BA	3657	1/1	0.18	-	29,29,29,29	0
56	MG	DA	3169	1/1	0.27	-	58,58,58,58	0
56	MG	BA	3355	1/1	0.07	-	39,39,39,39	0
56	MG	DB	3007	1/1	0.29	-	45,45,45,45	0
56	MG	DA	3380	1/1	0.09	-	40,40,40,40	0
56	MG	BA	3353	1/1	0.26	-	31,31,31,31	0
56	MG	BA	3474	1/1	0.25	-	43,43,43,43	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	MG	DA	3413	1/1	0.16	-	44,44,44,44	0
58	ZN	D5	103	1/1	0.07	-	61,61,61,61	0
56	MG	BA	3501	1/1	0.17	-	35,35,35,35	0
56	MG	CA	3107	1/1	0.09	-	71,71,71,71	0
56	MG	BA	3730	1/1	0.16	-	43,43,43,43	0
56	MG	DA	3197	1/1	0.31	-	43,43,43,43	0
56	MG	BU	204	1/1	0.39	-	49,49,49,49	0
56	MG	DA	3630	1/1	0.09	-	67,67,67,67	0
56	MG	BA	3181	1/1	0.11	-	37,37,37,37	0
56	MG	BA	3322	1/1	0.13	-	46,46,46,46	0
56	MG	AA	3132	1/1	0.20	-	59,59,59,59	0
56	MG	DA	3653	1/1	0.12	-	52,52,52,52	0
56	MG	BA	3342	1/1	0.22	-	46,46,46,46	0
56	MG	DA	3045	1/1	0.25	-	49,49,49,49	0
56	MG	AA	3207	1/1	0.17	-	51,51,51,51	0
56	MG	DA	3609	1/1	0.20	-	49,49,49,49	0
56	MG	BA	3494	1/1	0.25	-	28,28,28,28	0
56	MG	DA	3223	1/1	0.13	-	41,41,41,41	0
56	MG	BA	3385	1/1	0.06	-	56,56,56,56	0
56	MG	CA	3157	1/1	0.19	-	56,56,56,56	0
56	MG	DQ	3001	1/1	0.26	-	40,40,40,40	0
56	MG	AA	3033	1/1	0.48	-	68,68,68,68	0
56	MG	BA	3426	1/1	0.08	-	34,34,34,34	0
56	MG	BA	3629	1/1	0.14	-	51,51,51,51	0
56	MG	DU	3001	1/1	1.07	-	61,61,61,61	0
56	MG	BA	3249	1/1	0.37	-	46,46,46,46	0
56	MG	DA	3005	1/1	0.40	-	50,50,50,50	0
56	MG	DA	3344	1/1	0.12	-	48,48,48,48	0
56	MG	BA	3295	1/1	0.13	-	30,30,30,30	0

6.5 Other polymers ⓘ

There are no such residues in this entry.