



Full wwPDB X-ray Structure Validation Report

Jun 16, 2014 – 08:52 PM BST

PDB ID : 4V8F
Title : Crystal structure analysis of ribosomal decoding (near-cognate tRNA-ttyr complex with paromomycin).
Authors : Jenner, L.; Demeshkina, N.; Yusupov, M.; Yusupova, G.
Deposited on : 2011-12-07
Resolution : 3.30 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>

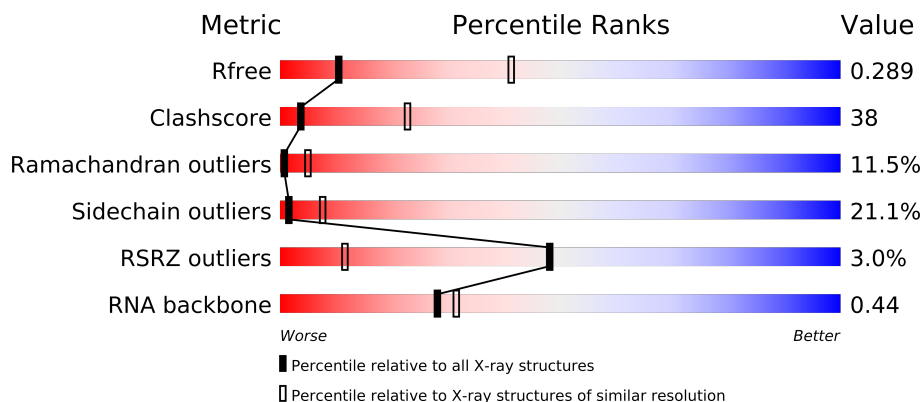
The following versions of software and data (see [references](#)) were used in the production of this report:

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 3.30 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	1341 (3.40-3.20)
Clashscore	79885	1696 (3.40-3.20)
Ramachandran outliers	78287	1664 (3.40-3.20)
Sidechain outliers	78261	1662 (3.40-3.20)
RSRZ outliers	66119	1342 (3.40-3.20)
RNA backbone	1838	1042 (3.90-2.70)

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	2912	
1	DA	2912	
2	AB	122	
2	DB	122	
3	AD	276	
3	DD	276	
4	AE	206	
4	DE	206	
5	AF	210	
5	DF	210	
6	AG	182	
6	DG	182	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
7	AH	180	
7	DH	180	
8	AK	148	
8	DK	148	
9	AM	140	
9	DM	140	
10	AN	122	
10	DN	122	
11	AO	150	
11	DO	150	
12	AP	141	
12	DP	141	
13	A0	118	
13	D0	118	
14	AQ	112	
14	DQ	112	
15	AR	146	
15	DR	146	
16	A1	118	
16	D1	118	
17	A2	101	
17	D2	101	
18	AS	113	
18	DS	113	
19	AT	96	
19	DT	96	
20	AU	110	
20	DU	110	
21	AV	206	
21	DV	206	
22	A3	85	
22	D3	85	
23	AZ	98	
23	DZ	98	
24	AW	72	
24	DW	72	
25	AX	60	
25	DX	60	
26	A4	71	
26	D4	71	
27	A5	60	
27	D5	60	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
28	A6	54	
28	D6	54	
29	A7	49	
29	D7	49	
30	A8	65	
30	D8	65	
31	BA	1506	
31	CA	1506	
32	BE	256	
32	CE	256	
33	BF	239	
33	CF	239	
34	BG	208	
34	CG	208	
35	BH	162	
35	CH	162	
36	BI	101	
36	CI	101	
37	BJ	156	
37	CJ	156	
38	BK	138	
38	CK	138	
39	BL	128	
39	CL	128	
40	BM	105	
40	CM	105	
41	BN	129	
41	CN	129	
42	BO	132	
42	CO	132	
43	BP	126	
43	CP	126	
44	BQ	61	
44	CQ	61	
45	BR	89	
45	CR	89	
46	BS	88	
46	CS	88	
47	BT	105	
47	CT	105	
48	BU	88	
48	CU	88	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
49	BV	93	
49	CV	93	
50	BW	106	
50	CW	106	
51	BX	27	
51	CX	27	
52	BB	85	
52	BD	85	
52	CB	85	
52	CD	85	
53	BC	77	
53	CC	77	
54	B1	16	
54	C1	16	

2 Entry composition

There are 58 unique types of molecules in this entry. The entry contains 304031 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 RNA (2912-MER).

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	AA	2912	Total	C	N	O	P	0	0	0
			62707	27911	11722	20163	2911			
1	DA	2907	Total	C	N	O	P	0	0	0
			62607	27866	11712	20123	2906			

There are 14 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
AA	161	U	-	INSERTION	GB AP008226.1
AA	654A	A	G	CONFLICT	GB AP008226.1
AA	654E	C	G	CONFLICT	GB AP008226.1
AA	654P	G	C	CONFLICT	GB AP008226.1
AA	654T	A	C	CONFLICT	GB AP008226.1
AA	1058	U	G	CONFLICT	GB AP008226.1
AA	1080	A	C	CONFLICT	GB AP008226.1
DA	168	U	-	insertion	GB AP008226.1
DA	654A	A	G	CONFLICT	GB AP008226.1
DA	654E	C	G	CONFLICT	GB AP008226.1
DA	654P	G	C	CONFLICT	GB AP008226.1
DA	654T	A	C	CONFLICT	GB AP008226.1
DA	1058	U	G	CONFLICT	GB AP008226.1
DA	1080	A	C	CONFLICT	GB AP008226.1

- Molecule 2 is a RNA chain called 5S RIBOSOMAL RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	AB	122	Total	C	N	O	P	0	0	0
			2617	1166	486	844	121			
2	DB	122	Total	C	N	O	P	0	0	0
			2617	1166	486	844	121			

- Molecule 3 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	AD	272	Total	C	N	O	S	0	0	0
			2115	1335	420	357	3			
3	DD	272	Total	C	N	O	S	0	0	0
			2115	1335	420	357	3			

- Molecule 4 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	AE	205	Total	C	N	O	S	0	0	0
			1568	991	300	271	6			
4	DE	205	Total	C	N	O	S	0	0	0
			1568	991	300	271	6			

- Molecule 5 is a protein called 50S ribosomal protein L4.

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

- Molecule 6 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	AG	181	Total	C	N	O	S	0	0	0
			1474	942	268	260	4			
6	DG	181	Total	C	N	O	S	0	0	0
			1474	942	268	260	4			

- Molecule 7 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	AH	170	Total	C	N	O	S	0	0	0
			1307	829	245	232	1			
7	DH	170	Total	C	N	O	S	0	0	0
			1307	829	245	232	1			

- Molecule 8 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	AK	146	Total	C	N	O	S	0	0	0
			1136	726	201	208	1			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	DK	146	Total	C	N	O	S	0	0	0
			1136	726	201	208	1			

- Molecule 9 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	AM	138	Total	C	N	O	S	0	0	0
			1104	712	206	182	4			
9	DM	138	Total	C	N	O	S	0	0	0
			1104	712	206	182	4			

- Molecule 10 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	AN	122	Total	C	N	O	S	0	0	0
			933	588	171	170	4			
10	DN	122	Total	C	N	O	S	0	0	0
			933	588	171	170	4			

- Molecule 11 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	AO	150	Total	C	N	O	S	0	0	0
			1145	712	232	198	3			
11	DO	150	Total	C	N	O	S	0	0	0
			1145	712	232	198	3			

- Molecule 12 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	AP	141	Total	C	N	O	S	0	0	0
			1122	715	212	188	7			
12	DP	141	Total	C	N	O	S	0	0	0
			1122	715	212	188	7			

- Molecule 13 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	A0	118	Total	C	N	O	S	0	0	0
			968	604	203	160	1			
13	D0	117	Total	C	N	O	S	0	0	0
			960	599	202	159				

- Molecule 14 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
14	AQ	111	Total	C	N	O	0	0	0
			882	556	176	150			
14	DQ	111	Total	C	N	O	0	0	0
			882	556	176	150			

- Molecule 15 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	AR	137	Total	C	N	O	S	0	0	0
			1141	710	234	196	1			
15	DR	137	Total	C	N	O	S	0	0	0
			1141	710	234	196	1			

- Molecule 16 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	A1	117	Total	C	N	O	S	0	0	0
			964	610	202	151	1			
16	D1	117	Total	C	N	O	S	0	0	0
			964	610	202	151	1			

- Molecule 17 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	A2	101	Total	C	N	O	S	0	0	0
			779	501	142	135	1			
17	D2	101	Total	C	N	O	S	0	0	0
			779	501	142	135	1			

- Molecule 18 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	AS	113	Total	C	N	O	S	0	0	0
			900	566	177	155	2			
18	DS	113	Total	C	N	O	S	0	0	0
			900	566	177	155	2			

- Molecule 19 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
19	AT	92	Total	C	N	O	0	0	0
			725	471	131	123			
19	DT	92	Total	C	N	O	0	0	0
			725	471	131	123			

- Molecule 20 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	AU	102	Total	C	N	O	S	0	0	0
			785	505	150	125	5			
20	DU	102	Total	C	N	O	S	0	0	0
			785	505	150	125	5			

- Molecule 21 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	AV	175	Total	C	N	O	S	0	0	0
			1397	892	251	251	3			
21	DV	179	Total	C	N	O	S	0	0	0
			1428	911	255	259	3			

- Molecule 22 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	A3	76	Total	C	N	O	S	0	0	0
			607	376	128	102	1			
22	D3	77	Total	C	N	O	S	0	0	0
			613	379	129	104	1			

- Molecule 23 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	AZ	97	Total	C	N	O	S	0	0	0
			763	481	150	131	1			
23	DZ	97	Total	C	N	O	S	0	0	0
			763	481	150	131	1			

- Molecule 24 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	AW	66	Total	C	N	O	S	0	0	0
			558	346	113	98	1			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	DW	66	Total	C	N	O	S	0	0	0
			558	346	113	98	1			

- Molecule 25 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	AX	59	Total	C	N	O		0	0	0
			469	298	90	81				
25	DX	59	Total	C	N	O		0	0	0
			469	298	90	81				

- Molecule 26 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	A4	66	Total	C	N	O	S	0	0	0
			533	335	96	97	5			
26	D4	63	Total	C	N	O	S	0	0	0
			515	326	93	91	5			

- Molecule 27 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	A5	59	Total	C	N	O	S	0	0	0
			459	288	90	76	5			
27	D5	59	Total	C	N	O	S	0	0	0
			459	288	90	76	5			

- Molecule 28 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	A6	45	Total	C	N	O	S	0	0	0
			389	241	79	65	4			
28	D6	45	Total	C	N	O	S	0	0	0
			389	241	79	65	4			

- Molecule 29 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	A7	45	Total	C	N	O	S	0	0	0
			391	240	97	52	2			
29	D7	45	Total	C	N	O	S	0	0	0
			391	240	97	52	2			

- Molecule 30 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	A8	60	Total	C	N	O	S	0	0	0
			480	306	98	74	2			
30	D8	60	Total	C	N	O	S	0	0	0
			480	306	98	74	2			

- Molecule 31 is a RNA chain called 16S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	BA	1502	Total	C	N	O	P	0	0	0
			32284	14370	5982	10431	1501			
31	CA	1502	Total	C	N	O	P	0	0	0
			32287	14370	5982	10433	1502			

- Molecule 32 is a protein called 30S RIBOSOMAL PROTEIN S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	BE	237	Total	C	N	O	S	0	0	0
			1924	1228	344	347	5			
32	CE	237	Total	C	N	O	S	0	0	0
			1924	1228	344	347	5			

- Molecule 33 is a protein called 30S RIBOSOMAL PROTEIN S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	BF	205	Total	C	N	O	S	0	0	0
			1605	1011	313	280	1			
33	CF	206	Total	C	N	O	S	0	0	0
			1612	1016	314	281	1			

- Molecule 34 is a protein called 30S RIBOSOMAL PROTEIN S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	BG	208	Total	C	N	O	S	0	0	0
			1703	1066	339	291	7			
34	CG	208	Total	C	N	O	S	0	0	0
			1703	1066	339	291	7			

- Molecule 35 is a protein called 30S RIBOSOMAL PROTEIN S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	BH	151	Total	C	N	O	S	0	0	0
			1155	729	218	204	4			
35	CH	151	Total	C	N	O	S	0	0	0
			1155	729	218	204	4			

- Molecule 36 is a protein called 30S RIBOSOMAL PROTEIN S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	BI	101	Total	C	N	O	S	0	0	0
			843	531	155	154	3			
36	CI	101	Total	C	N	O	S	0	0	0
			843	531	155	154	3			

- Molecule 37 is a protein called 30S RIBOSOMAL PROTEIN S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	BJ	155	Total	C	N	O	S	0	0	0
			1257	781	252	218	6			
37	CJ	155	Total	C	N	O	S	0	0	0
			1257	781	252	218	6			

- Molecule 38 is a protein called 30S RIBOSOMAL PROTEIN S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	BK	138	Total	C	N	O	S	0	0	0
			1116	705	215	193	3			
38	CK	138	Total	C	N	O	S	0	0	0
			1116	705	215	193	3			

- Molecule 39 is a protein called 30S RIBOSOMAL PROTEIN S9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	BL	127	Total	C	N	O		0	0	0
			1010	639	197	174				
39	CL	127	Total	C	N	O		0	0	0
			1010	639	197	174				

- Molecule 40 is a protein called 30S RIBOSOMAL PROTEIN S10.

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

Continued on next page...

Continued from previous page...

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

- Molecule 41 is a protein called 30S RIBOSOMAL PROTEIN S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	BN	119	Total	C	N	O	S	0	0	0
			885	549	168	165	3			
41	CN	119	Total	C	N	O	S	0	0	0
			885	549	168	165	3			

- Molecule 42 is a protein called 30S RIBOSOMAL PROTEIN S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	BO	125	Total	C	N	O	S	0	0	0
			975	614	196	164	1			
42	CO	125	Total	C	N	O	S	0	0	0
			975	614	196	164	1			

- Molecule 43 is a protein called 30S RIBOSOMAL PROTEIN S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	BP	116	Total	C	N	O	S	0	0	0
			928	574	191	161	2			
43	CP	117	Total	C	N	O	S	0	0	0
			933	577	192	162	2			

- Molecule 44 is a protein called 30S RIBOSOMAL PROTEIN S14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	BQ	58	Total	C	N	O	S	0	0	0
			476	303	99	70	4			
44	CQ	58	Total	C	N	O	S	0	0	0
			476	303	99	70	4			

- Molecule 45 is a protein called 30S RIBOSOMAL PROTEIN S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	BR	88	Total	C	N	O	S	0	0	0
			734	459	147	126	2			
45	CR	88	Total	C	N	O	S	0	0	0
			734	459	147	126	2			

- Molecule 46 is a protein called 30S RIBOSOMAL PROTEIN S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	BS	84	Total	C	N	O	S	0	0	0
			705	446	140	118	1			
46	CS	84	Total	C	N	O	S	0	0	0
			705	446	140	118	1			

- Molecule 47 is a protein called 30S RIBOSOMAL PROTEIN S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	BT	100	Total	C	N	O	S	0	0	0
			834	534	155	143	2			
47	CT	100	Total	C	N	O	S	0	0	0
			834	534	155	143	2			

- Molecule 48 is a protein called 30S RIBOSOMAL PROTEIN S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
48	BU	72	Total	C	N	O	0	0	0
			591	376	117	98			
48	CU	72	Total	C	N	O	0	0	0
			591	376	117	98			

- Molecule 49 is a protein called 30S RIBOSOMAL PROTEIN S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	BV	78	Total	C	N	O	S	0	0	0
			624	398	115	109	2			
49	CV	78	Total	C	N	O	S	0	0	0
			624	398	115	109	2			

- Molecule 50 is a protein called 30S RIBOSOMAL PROTEIN S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	BW	99	Total	C	N	O	S	0	0	0
			763	470	162	129	2			
50	CW	99	Total	C	N	O	S	0	0	0
			763	470	162	129	2			

- Molecule 51 is a protein called 30S RIBOSOMAL PROTEIN THX.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
51	BX	25	Total	C	N	O	0	0	0
			217	134	52	31			
51	CX	25	Total	C	N	O	0	0	0
			217	134	52	31			

- Molecule 52 is a RNA chain called TRNA-TYR.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
52	BB	85	Total	C	N	O	P	S	0	0	0
			1814	813	323	592	85	1			
52	BD	85	Total	C	N	O	P	S	0	0	0
			1814	813	323	592	85	1			
52	CB	85	Total	C	N	O	P	S	0	0	0
			1814	813	323	592	85	1			
52	CD	85	Total	C	N	O	P	S	0	0	0
			1814	813	323	592	85	1			

There are 88 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
CB	?	-	U	DELETION	GB AP012306.1
CB	?	-	A	DELETION	GB AP012306.1
CB	?	-	A	DELETION	GB AP012306.1
CB	10	C	-	insertion	GB AP012306.1
CB	11	C	-	insertion	GB AP012306.1
CB	12	C	G	CONFLICT	GB AP012306.1
CB	?	-	U	DELETION	GB AP012306.1
CB	?	-	A	DELETION	GB AP012306.1
CB	?	-	A	DELETION	GB AP012306.1
CB	17	G	C	CONFLICT	GB AP012306.1
CB	20	C	U	CONFLICT	GB AP012306.1
CB	22	A	C	CONFLICT	GB AP012306.1
CB	23	A	C	CONFLICT	GB AP012306.1
CB	24	G	U	CONFLICT	GB AP012306.1
CB	25	G	U	CONFLICT	GB AP012306.1
CB	29	C	G	CONFLICT	GB AP012306.1
CB	30	A	U	CONFLICT	GB AP012306.1
CB	32	A	-	insertion	GB AP012306.1
CB	33	C	-	insertion	GB AP012306.1
CB	34	U	-	insertion	GB AP012306.1
CB	38	MIA	-	insertion	GB AP012306.1
CB	39	A	-	insertion	GB AP012306.1
CB	40	U	-	insertion	GB AP012306.1

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
CB	41	C	G	CONFLICT	GB AP012306.1
CB	46	G	-	insertion	GB AP012306.1
CB	47	U	-	insertion	GB AP012306.1
CB	?	-	A	DELETION	GB AP012306.1
CB	?	-	A	DELETION	GB AP012306.1
CB	51	C	G	CONFLICT	GB AP012306.1
CB	53	A	G	CONFLICT	GB AP012306.1
CB	?	-	A	DELETION	GB AP012306.1
CB	59	A	-	insertion	GB AP012306.1
CB	60	A	-	insertion	GB AP012306.1
CB	66	G	A	CONFLICT	GB AP012306.1
CB	68	A	G	CONFLICT	GB AP012306.1
CB	?	-	C	DELETION	GB AP012306.1
CB	72	U	G	CONFLICT	GB AP012306.1
CB	76	C	U	CONFLICT	GB AP012306.1
CB	?	-	G	DELETION	GB AP012306.1
CB	?	-	G	DELETION	GB AP012306.1
CB	78	C	U	CONFLICT	GB AP012306.1
CB	83	C	-	insertion	GB AP012306.1
CB	84	C	-	insertion	GB AP012306.1
CB	85	A	-	insertion	GB AP012306.1
CD	?	-	U	DELETION	GB AP012306.1
CD	?	-	A	DELETION	GB AP012306.1
CD	?	-	A	DELETION	GB AP012306.1
CD	10	C	-	insertion	GB AP012306.1
CD	11	C	-	insertion	GB AP012306.1
CD	12	C	G	CONFLICT	GB AP012306.1
CD	?	-	U	DELETION	GB AP012306.1
CD	?	-	A	DELETION	GB AP012306.1
CD	?	-	A	DELETION	GB AP012306.1
CD	17	G	C	CONFLICT	GB AP012306.1
CD	20	C	U	CONFLICT	GB AP012306.1
CD	22	A	C	CONFLICT	GB AP012306.1
CD	23	A	C	CONFLICT	GB AP012306.1
CD	24	G	U	CONFLICT	GB AP012306.1
CD	25	G	U	CONFLICT	GB AP012306.1
CD	29	C	G	CONFLICT	GB AP012306.1
CD	30	A	U	CONFLICT	GB AP012306.1
CD	32	A	-	insertion	GB AP012306.1
CD	33	C	-	insertion	GB AP012306.1
CD	34	U	-	insertion	GB AP012306.1
CD	38	MIA	-	insertion	GB AP012306.1

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
CD	39	A	-	insertion	GB AP012306.1
CD	40	U	-	insertion	GB AP012306.1
CD	41	C	G	CONFLICT	GB AP012306.1
CD	46	G	-	insertion	GB AP012306.1
CD	47	U	-	insertion	GB AP012306.1
CD	?	-	A	DELETION	GB AP012306.1
CD	?	-	A	DELETION	GB AP012306.1
CD	51	C	G	CONFLICT	GB AP012306.1
CD	53	A	G	CONFLICT	GB AP012306.1
CD	?	-	A	DELETION	GB AP012306.1
CD	59	A	-	insertion	GB AP012306.1
CD	60	A	-	insertion	GB AP012306.1
CD	66	G	A	CONFLICT	GB AP012306.1
CD	68	A	G	CONFLICT	GB AP012306.1
CD	?	-	C	DELETION	GB AP012306.1
CD	72	U	G	CONFLICT	GB AP012306.1
CD	76	C	U	CONFLICT	GB AP012306.1
CD	?	-	G	DELETION	GB AP012306.1
CD	?	-	G	DELETION	GB AP012306.1
CD	78	C	U	CONFLICT	GB AP012306.1
CD	83	C	-	insertion	GB AP012306.1
CD	84	C	-	insertion	GB AP012306.1
CD	85	A	-	insertion	GB AP012306.1

- Molecule 53 is a RNA chain called TRNA-FMET.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	BC	77	Total	C	N	O	P	0	0	0
			1643	732	298	536	77			
53	CC	77	Total	C	N	O	P	0	0	0
			1643	732	298	536	77			

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
CC	18	C	U	CONFLICT	GB AP012306.1

- Molecule 54 is a RNA chain called MRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	B1	16	Total	C	N	O	P	0	0	0
			347	156	69	106	16			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	C1	16	Total	C	N	O	P	0	0	0
			347	156	69	106	16			

There are 11 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C1	10	G	-	insertion	GB AP012306.1
C1	12	A	-	insertion	GB AP012306.1
C1	13	A	-	insertion	GB AP012306.1
C1	14	A	U	CONFLICT	GB AP012306.1
C1	15	A	U	CONFLICT	GB AP012306.1
C1	20	G	U	CONFLICT	GB AP012306.1
C1	21	C	U	CONFLICT	GB AP012306.1
C1	22	A	U	CONFLICT	GB AP012306.1
C1	23	A	-	insertion	GB AP012306.1
C1	24	A	-	insertion	GB AP012306.1
C1	25	A	-	insertion	GB AP012306.1

- Molecule 55 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

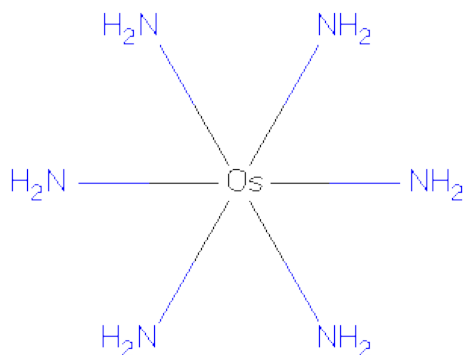
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
55	BA	114	Total	Mg	0	0
			114	114		
55	CA	121	Total	Mg	0	0
			121	121		
55	AB	6	Total	Mg	0	0
			6	6		
55	B1	1	Total	Mg	0	0
			1	1		
55	C1	2	Total	Mg	0	0
			2	2		
55	BB	13	Total	Mg	0	0
			13	13		
55	AE	3	Total	Mg	0	0
			3	3		
55	BF	1	Total	Mg	0	0
			1	1		
55	AA	332	Total	Mg	0	0
			332	332		
55	A5	1	Total	Mg	0	0
			1	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
55	D7	1	Total 1	Mg 1	0	0
55	BC	4	Total 4	Mg 4	0	0
55	A1	2	Total 2	Mg 2	0	0
55	CN	1	Total 1	Mg 1	0	0
55	D0	1	Total 1	Mg 1	0	0
55	CC	7	Total 7	Mg 7	0	0
55	DA	272	Total 272	Mg 272	0	0
55	A0	1	Total 1	Mg 1	0	0
55	DE	1	Total 1	Mg 1	0	0
55	CB	3	Total 3	Mg 3	0	0
55	BS	1	Total 1	Mg 1	0	0
55	A7	1	Total 1	Mg 1	0	0
55	D5	1	Total 1	Mg 1	0	0
55	BD	1	Total 1	Mg 1	0	0
55	AO	1	Total 1	Mg 1	0	0
55	BW	1	Total 1	Mg 1	0	0
55	A3	1	Total 1	Mg 1	0	0
55	AF	2	Total 2	Mg 2	0	0
55	DB	7	Total 7	Mg 7	0	0

- Molecule 56 is osmium (III) hexammine (three-letter code: OHX) (formula: $\text{H}_{12}\text{N}_6\text{Os}$).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AA	1	Total	N	Os	0	0
			7	6	1		
56	AB	1	Total	N	Os	0	0
			7	6	1		
56	AB	1	Total	N	Os	0	0
			7	6	1		
56	AB	1	Total	N	Os	0	0
			7	6	1		
56	AB	1	Total	N	Os	0	0
			7	6	1		
56	AB	1	Total	N	Os	0	0
			7	6	1		
56	AB	1	Total	N	Os	0	0
			7	6	1		
56	AB	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	AB	1	Total	N	Os	0	0
			7	6	1		
56	AB	1	Total	N	Os	0	0
			7	6	1		
56	AB	1	Total	N	Os	0	0
			7	6	1		
56	AB	1	Total	N	Os	0	0
			7	6	1		
56	AB	1	Total	N	Os	0	0
			7	6	1		
56	AE	1	Total	N	Os	0	0
			7	6	1		
56	AF	1	Total	N	Os	0	0
			7	6	1		
56	AO	1	Total	N	Os	0	0
			7	6	1		
56	AO	1	Total	N	Os	0	0
			7	6	1		
56	A1	1	Total	N	Os	0	0
			7	6	1		
56	A1	1	Total	N	Os	0	0
			7	6	1		
56	A3	1	Total	N	Os	0	0
			7	6	1		
56	AW	1	Total	N	Os	0	0
			7	6	1		
56	A6	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BA	1	Total	N	Os	0	0
			7	6	1		
56	BG	1	Total	N	Os	0	0
			7	6	1		
56	BL	1	Total	N	Os	0	0
			7	6	1		
56	BR	1	Total	N	Os	0	0
			7	6	1		
56	BB	1	Total	N	Os	0	0
			7	6	1		
56	BB	1	Total	N	Os	0	0
			7	6	1		
56	BC	1	Total	N	Os	0	0
			7	6	1		
56	BC	1	Total	N	Os	0	0
			7	6	1		
56	BC	1	Total	N	Os	0	0
			7	6	1		
56	BD	1	Total	N	Os	0	0
			7	6	1		
56	BD	1	Total	N	Os	0	0
			7	6	1		
56	BD	1	Total	N	Os	1	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CA	1	Total	N	Os	0	0
			7	6	1		
56	CK	1	Total	N	Os	0	0
			7	6	1		
56	CR	1	Total	N	Os	0	0
			7	6	1		
56	CV	1	Total	N	Os	0	0
			7	6	1		
56	CB	1	Total	N	Os	0	0
			7	6	1		
56	CB	1	Total	N	Os	0	0
			7	6	1		
56	CB	1	Total	N	Os	0	0
			7	6	1		
56	CC	1	Total	N	Os	0	0
			7	6	1		
56	CC	1	Total	N	Os	0	0
			7	6	1		
56	CC	1	Total	N	Os	0	0
			7	6	1		
56	CD	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

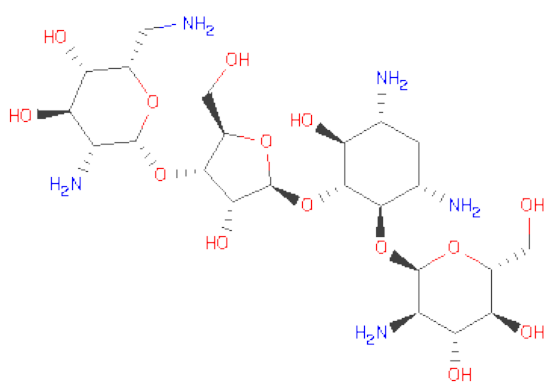
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DA	1	Total	N	Os	0	0
			7	6	1		
56	DB	1	Total	N	Os	0	0
			7	6	1		
56	DB	1	Total	N	Os	0	0
			7	6	1		
56	DB	1	Total	N	Os	0	0
			7	6	1		
56	DB	1	Total	N	Os	0	0
			7	6	1		
56	DB	1	Total	N	Os	0	0
			7	6	1		
56	DB	1	Total	N	Os	0	0
			7	6	1		
56	DB	1	Total	N	Os	0	0
			7	6	1		
56	DB	1	Total	N	Os	0	0
			7	6	1		
56	DB	1	Total	N	Os	0	0
			7	6	1		
56	DB	1	Total	N	Os	0	0
			7	6	1		
56	DB	1	Total	N	Os	0	0
			7	6	1		
56	DF	1	Total	N	Os	0	0
			7	6	1		
56	DO	1	Total	N	Os	0	0
			7	6	1		
56	D1	1	Total	N	Os	0	0
			7	6	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
56	D3	1	Total	N	Os	0	0
			7	6	1		
56	D5	1	Total	N	Os	0	0
			7	6	1		
56	D8	1	Total	N	Os	0	0
			7	6	1		

- Molecule 57 is PAROMOMYCIN (three-letter code: PAR) (formula: C₂₃H₄₅N₅O₁₄).



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

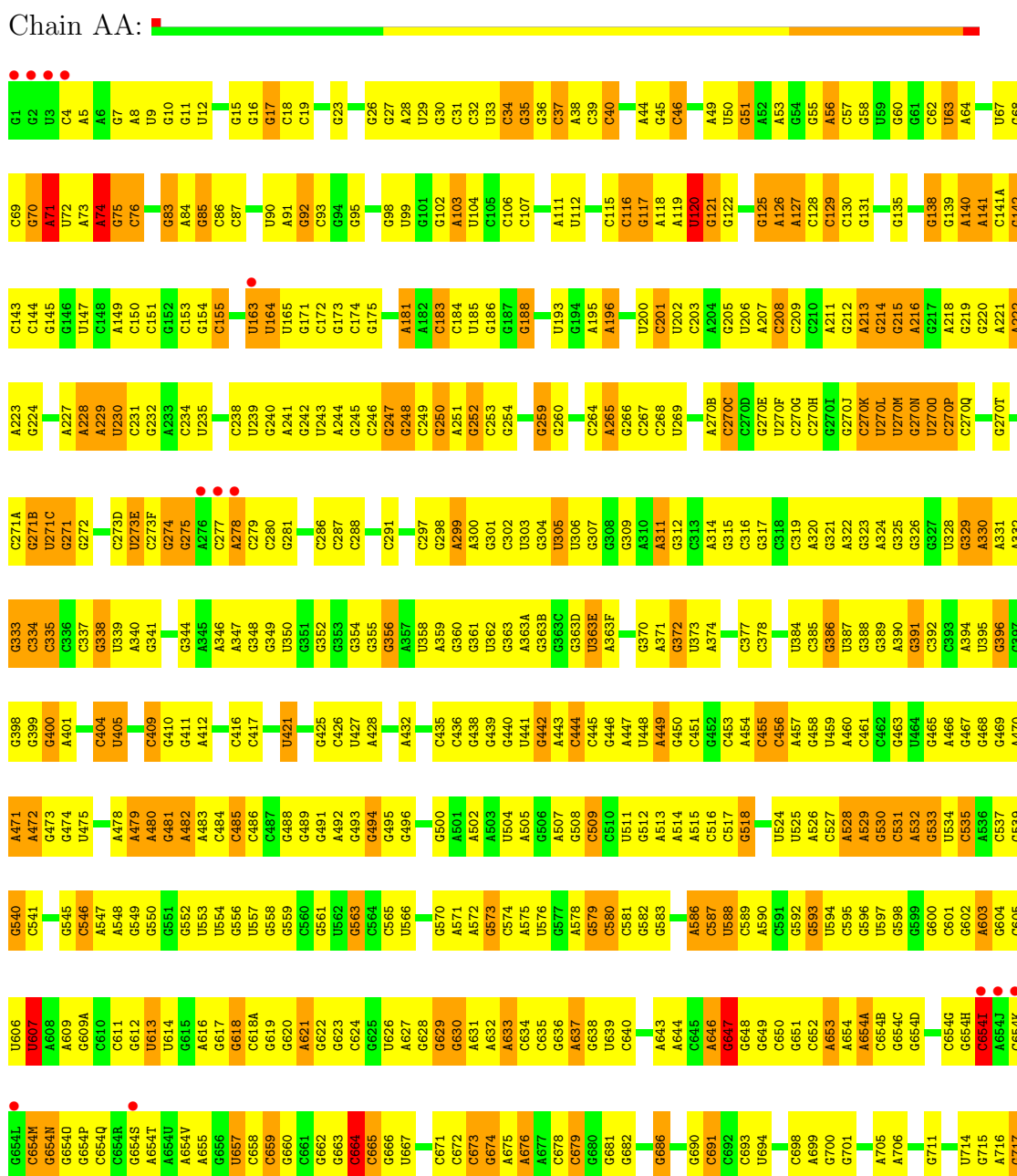
- Molecule 58 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	BG	1	Total	Zn	0	0
			1	1		
58	BQ	1	Total	Zn	0	0
			1	1		
58	CQ	1	Total	Zn	0	0
			1	1		
58	CG	1	Total	Zn	0	0
			1	1		

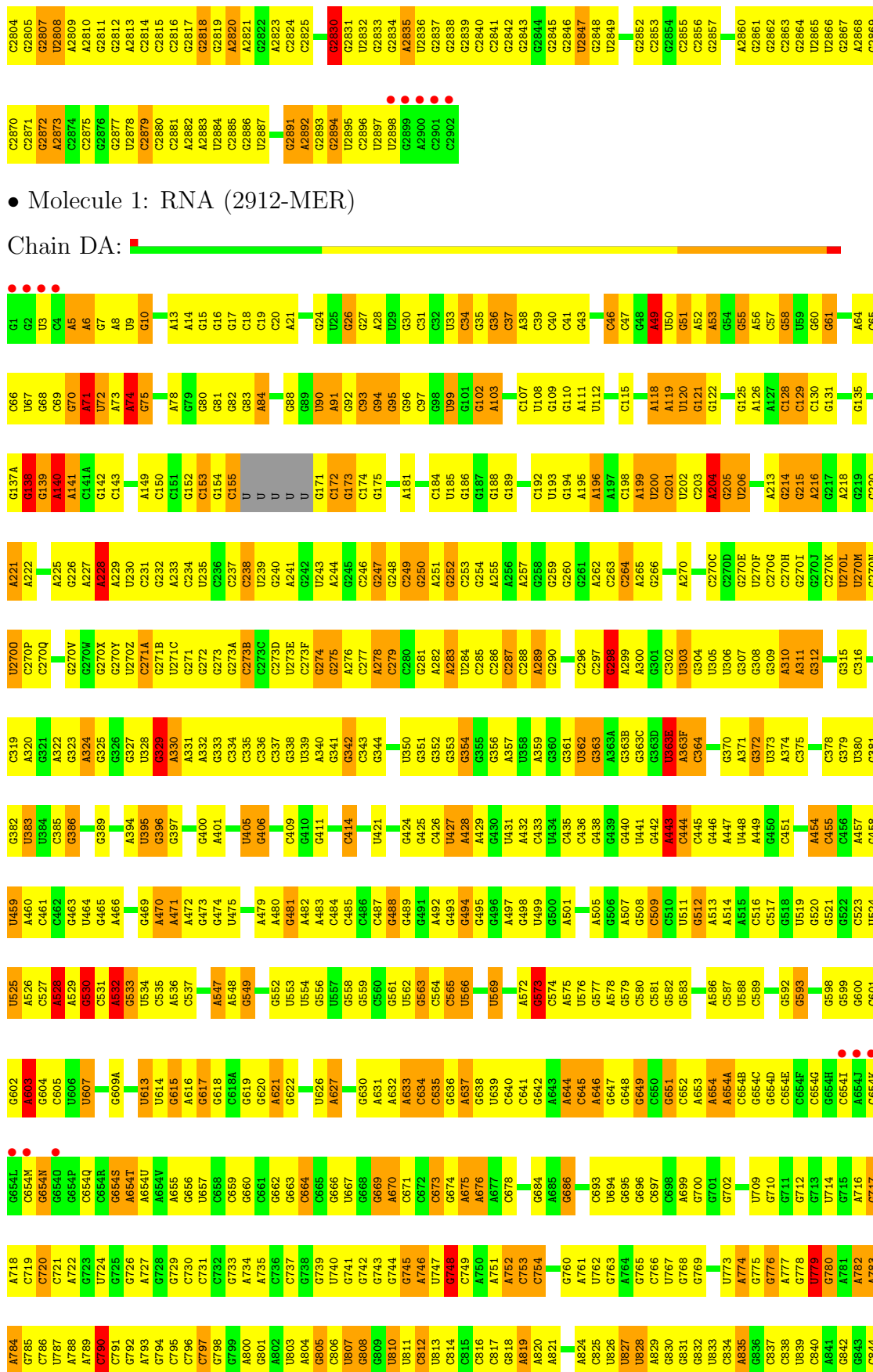
3 Residue-property plots

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: RNA (2912-MER)

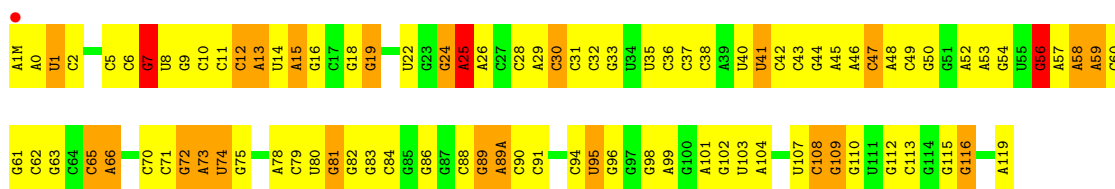


A2734	C2666	A2598	A2531	C2452	G2391	G2325	G2256	A2173	C2111	A2030	A1953	G1888	C1734
U2739	C2667	G2599	G2532	A2453	A2392	G2326	U2257	C2174	G2112	A2031	G1954	A1889	C1735
A2740	G2668	A2600	A2533	G2454	A2393	C2326	G2258		U2113	G2032	A1955	A1810	C1741
A2741	G2669	C2601	G2536	U2457	C2395	A2328	G2259	G2181	A2114	A2033	U1956	G1811	C1742
C2743	A2671	G2603	U2537	C2458	C2396	G2329	U2262	C2183	G2116	G2035	C1957	A1812	G1743
G2744	G2672	U2604	C2538		G2397	G2330	C2263	G2184	A2117	C2036	G1962	G1813	G1746
G2745		U2605	C2539	C2461	U2398	G2331	A2267	C2186	U2118	G2037	U1963	G1814	
U2746	G2673	G2606	C2540	U2462	G2399		A2268	G2187	A2119	G2038	G1964	A1815	G1750
G2747	C2678	G2607	A2541	U2463	G2400	G2334	A2269		G2120	C2039	C1965	G1816	C1751
A2748	G2680	G2608	A2542	C2467	U2401	A2335	A2269	G2190	G2121		A1966	A1819	G1752
A2749	C2681	C2610	G2544	C2468	C2402	A2336	G2270	G2191	U2122	C2043	G1967	G1819	G1753
A2750	U2682	G2611	G2545	A2469	G2403	G2337	G2271	G2192	G2123		G1968	U1820	C1754
G2751	C2683	C2612	U2546	G2470	G2404	G2338	U2272	G2193	G2124	G2048	A1969	G1824	A1755
U2752	U2684	G2613	U2547	C2471	G2405	G2339	A2273	G2194	G2125	G2049	A1970	G1824	G1756
G2753	G2685	A2614	G2548	U2472	U2406	G2340	A2274		A2126	C2050	A1971	A1825	U1757
A2754	G2686	U2615	G2549	U2473	G2407	G2341	C2275	G2195	G2127	G1906	G1972	G1826	G1758
C2755	U2687	C2616	G2550	C2474	U2408	C2342	G2276	A2198	C2128	A2054	G1973	C1827	A1759
U2756	G2688	G2617	G2551	C2475	G2409	C2343	G2277	A2199	G2129	C2055	G1907	C1908	A1760
A2757	U2689	G2618	U2554	A2476	G2410	U2344	A2278	C2206	U2130	G2056	C1909	A1829	C1761
A2758	C2690	C2619	C2556	A2477	G2413	G2345	C2281	C2207	G2131	A2057	A1981	C1830	A1762
	C2691	C2620	G2557	A2478	G2414	C2347	G2282	U2208	U2132	A2058	G1982	G1911	G1763
			G2557	G2481	G2415		C2283	G2209	G2133	A2059	G1983	A1912	G1764
			C2558	G2482	G2416	G2350	C2284	G2210	A2134	A2060	G1984	A1913	C1765
			C2559		G2417	G2351	C2285	G2211	A2135	G2061	G1985	U1834	U1766
			C2560	G2486	A2418	A2352	A2286	A2212	C2137	C2062	G1989	U1915	G1769
			G2561	G2487	U2419	G2353	A2287	G2215	C2138	C2065	U1991	C1836	
			U2562	A2488	C2420	C2355	A2288	G2216	G2139		G1992	A1918	C1771
			U2563	G2489	G2421	C2356	G2289	G2217	C2140		G1993	A1919	G1772
			A2564	G2490	A2422	U2357	U2291	G2218	G2141	U2068	U1994	C1920	A1773
			A2565		U2423	C2358	G2294	G2219	C2142	G2069	C1995	G1922	C1774
			G2566	G2494	A2424	C2359	C2294	G2224	C2143	U2070	U1996	U1923	U1775
			C2567		A2425	A2360	C2295	A2225	U2144	C2078	G1997	C1924	G1776
			C2568	C2498	A2426			C2226	C2145	U2079	C1925	U1851	U1777
				C2499	C2427	C2363			C2146	C2080	U1926	C1852	U1778
				U2500	G2428	C2364	A2298		G2147	C2081	A2001	G1852	U1779
				C2501	G2429	G2365	G2299	U2233	G2148	A2082	C2006	A1853	A1780
				G2502	A2430	A2366	G2300	G2234	G2149	G2082	C2007	A1854	C1781
				A2503	U2431	C2367	C2301	G2235	U2150	G2083	G1929	G1929	G1782
				U2504	A2432	C2368	G2302	G2236	G2151		C2008	G1858	A1783
				G2505	A2433		G2303	G2237	G2152	U2086	G2009	A1859	A1784
				U2506	A2434	G2372	G2304	G2238	G2153	G2087	U1931	G1860	A1785
				C2507	A2435	G2373	A2305	G2239	G2154		A1932	G1932	A1786
				G2508	G2502	C2374	G2306	G2240	G2155		C2012	G1863	A1787
						G2375	G2307	A2241	G2156	U2092	A2013	U1864	G1788
				U2511	U2437	C2376	G2308	G2242	G2157	G2094	A2015	G1935	C1789
				C2512	A2438	A2377	G2309	U2243	A2158	C2095	U2016	A1936	A1789
					A2439			G2244			U2017	C1870	C1790
					C2440	A2378	A2310	U2244		U2096	A1938	A1871	A1791
				A2518	C2441	C2379	A2311	U2245	G2162	C2097	G2018	A1872	
				U2519	C2442	G2380	U2246	G2246	C2163	U2098	A2019	G1878	U1796
				C2520	C2443	C2381	C2313	A2247	G2164	U2099	C1941	C1879	U1797
				G2521	G2444	G2382	C2314	C2248	G2165	G2100	C2021	C1880	U1798
				U2522	G2445	G2383	C2315	U2249	G2166	G2101	U2022	C1881	U1799
				G2523	G2446	C2384	C2316	G2250	U2167	G2023	G1945	C1882	G1800
				G2524	U2447	C2385	C2318	G2251	G2168	C2103	U1946	G1883	G1801
					A2448		C2319	G2252	A2169		C2024	A1884	A1802
				U2528	U2449	A2388	G2319	G2253	G2170	C2108	G1950	A1885	A1803
				G2529	A2450	C2389	C2320	C2254	C2171	G2109	U1951	C1886	C1804
				A2530	A2451	U2390	C2321	C2255	U2172	C2110	G1952	C1887	U1805



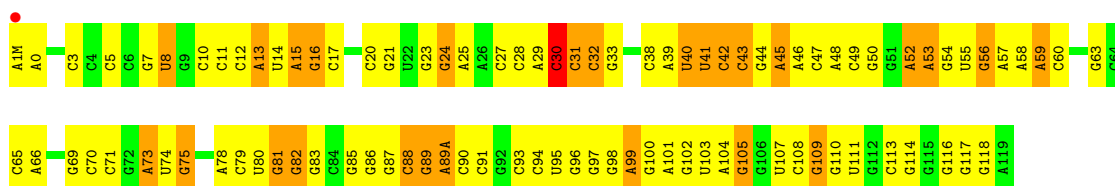
C1796	C1797	C1800	C1801	A1802	G1807	A1810	G1811	G1814	A1815	A1817	A1818	A1819	A1820	G1822	G1826	C1827	G1828	A1829	C1830	A1831	C1832	A1833	C1837	C1838	G1839	A1841	G1842	C1843	G1844	G1845	G1846	A1847	A1848	A1851	A1854	G1855	G1856	G1857	G1858	A1859	G1860	A1864	A1871	A1872	G1878															
G1717	G1718	G1726	G1727	G1728	A1729	G1730	G1731	A1732	G1733	G1734	G1735	C1741	G1742	G1743	A1749	G1750	G1753	G1754	A1755	G1756	G1757	G1758	A1759	A1760	C1761	C1762	G1763	G1764	C1765	G1766	C1770	G1771	G1772	A1773	G1774	G1775	G1776	G1777	G1778	G1779	C1781	C1782	A1783	A1784	A1785	A1786	C1787	G1788	A1789	C1790	A1791	G1792	A1794							
G1643	G1644	G1647	C1648	G1649	G1660	G1661	G1662	C1663	A1664	A1665	G1666	G1667	A1668	A1669	C1663	A1664	A1665	A1666	G1667	A1668	A1669	A1670	G1671	A1672	A1673	A1674	A1675	A1676	A1677	A1678	A1679	G1680	G1681	G1686	G1687	G1688	G1689	A1693	C1694	G1695	G1696	G1697	A1698	A1699	A1700	A1701	G1705	C1706	G1707	A1708	C1709	A1709	C1710	C1711	C1712	U1716				
G1573	C1574	C1575	U1576	C1577	U1578	A1579	A1580	G1581	C1582	A1583	C1585	A1586	A1587	C1588	C1589	C1590	G1591	C1592	A1593	A1594	G1595	C1598	C1599	G1600	U1602	G1605	G1606	A1607	A1608	A1609	A1610	C1611	C1612	G1613	U1614	C1615	A1616	C1617	A1618	G1619	G1620	C1625	G1626	G1627	A1632	G1633	A1634	G1635	C1636	U1637	C1638	U1639	C1640							
C1504	C1506	A1507	A1508	C1509	A1510	A1511	A1512	C1513	U1514	C1515	U1516	G1517	C1518	C1519	C1520	G1521	G1522	U1523	G1524	G1525	G1526	C1527	A1528	C1529	G1530	C1531	C1532	G1533	G1534	U1535	A1536	C1537	G1538	G1539	G1540	U1541	A1542	A1543	C1544	A1545	A1546	C1547	C1548	A1553	A1554	G1555	C1556	C1557	A1558	A1559	A1567	G1568	A1569	A1570						
C1437	U1438	A1439	G1440	G1441	G1442	G1443	G1444	A1444A	C1445	G1446	G1447	A1448	A1449	G1449A	C1450	C1451	A1453	C1458	G1459	A1460	G1461	C1462	C1463	C1464	G1465	G1466	C1467	C1468	A1469	G1470	A1471	C1475	A1476	A1477	G1478	G1479	G1480	U1482	G1483	G1484	G1485	A1486	G1487	U1488	U1489	A1490	G1491	G1492	C1493	A1494	A1495	A1496	U1497	C1498	A1499	G1500				
A1365	C1368	G1369	U1370	G1371	U1372	A1378	A1379	G1380	G1381	G1382	C1383	A1384	G1385	A1386	C1387	G1388	G1389	A1392	A1393	A1394	C1395	A1396	U1397	A1398	C1399	G1400	C1404	U1405	A1406	C1407	C1408	C1409	U1415	G1416	A1417	G1418	A1419	U1420	G1421	G1422	G1423	G1424	G1425	G1426	A1427	C1428	G1429	C1430	U1431	A1432	U1433	U1434	U1435	U1436						
C1297	C1298	C1299	U1300	G1301	A1302	C1305	A1308	G1309	G1310	G1311	A1312	U1313	C1314	C1315	U1316	A1317	C1318	G1319	C1320	A1321	A1322	U1323	G1324	C1325	U1326	C1327	G1328	U1329	C1330	A1331	C1332	G1337	G1338	G1339	U1340	A1341	A1342	G1343	G1344	C1345	A1349	U1352	A1353	A1354	G1355	G1358	U1359	A1360	G1361	C1362	G1363	G1364								
A1220	C1223	G1224	C1225	G1226	A1227	G1231	C1232	C1233	U1234	G1235	G1236	A1237	G1238	A1239	G1240	A1241	A1242	G1243	G1244	A1247	G1248	U1249	G1250	C1251	G1252	A1253	A1254	U1255	G1256	C1257	G1260	C1261	A1265	G1266	U1267	A1268	C1269	C1270	C1271	A1272	U1273	A1274	C1275	A1276	U1277	A1278	G1285	A1286	U1287	U1288	C1289	C1290	C1291	U1292	C1293					
C1092	G1093	A1094	U1095	C1096	G1097	A1098	G1099	U1100	U1101	C1104	G1105	G1106	G1107	U1108	C1109	G1110	A1111	G1112	U1113	G1114	G1115	C1116	G1122	G1125	C1126	A1127	U1128	A1129	U1130	G1131	A1132	U1133	G1135	G1136	G1137	G1138	C1139	U1140	U1141	U1142	A1143	C1144	C1145	U1146	C1147	A1148	G1149	C1150	G1151	C1152	A1153	C1154	G1155	A1156	G1157					
C1158	U1159	C1160	A1161	G1162	G1163	G1164	U1165	U1166	U1167	G1168	G1169	G1170	G1171	G1173	A1174	U1175	G1176	A1177	C1178	C1179	G1180	C1181	A1182	G1183	G1184	G1187	U1188	A1189	G1190	G1191	G1192	A1193	A1194	G1195	C1196	G1197	U1198	U1199	C1200	C1201	C1202	G1203	A1204	U1205	C1206	C1207	C1208	G1209	A1210	U1211	A1212	C1213	C1214	C1215	C1216	C1217	C1218	C1219		
A1029	G1030	A1031	G1032	U1033	G1034	G1035	U1036	G1039	C1040	G1041	G1042	C1043	G1044	A981	C982	A1046	A984	G1047	A1048	C1049	A1050	G1051	C1052	C1053	A1054	G1055	G1056	A1057	U1058	C1059	G1060	U1061	G1062	C1063	C1064	U1065	U1066	A1067	G1068	A1069	G1070	C1071	C1072	A1073	G1074	C1075	A1077	U1078	C1079	A1080	U1081	A1085	U1086	G1087	A1088	U1089	A1090	C1093	C1094	G1091
G968	U969	C970	C971	G972	A973	G974	G975	G976	G977	G978	G979	A980	A981	C982	A984	C985	A986	C987	A988	C989	C990	G991	C992	A993	C994	C995	A996	G997	C998	U999	A1000	A1001	G1002	U943	G944	A945	G946	G947	C986	A948	G949	G950	C951	A952	A953	G954	C955	G956	A957	U958	C959	A960	C961	G962	U963	U1025	A1027	A1028		
G845	C846	U847	C848	A849	C850	U851	G852	G853	G854	C855	C856	C857	U858	G859	U860	C861	G862	A863	G864	C865	A866	C867	U868	G869	C870	A871	C872	G873	G874	G875	C876	U877	A878	G880	G881	G882	G883	C884	C885	C886	A887	C888	C889	A890	A901	C902	C903	C904	U905											

Chain AB:



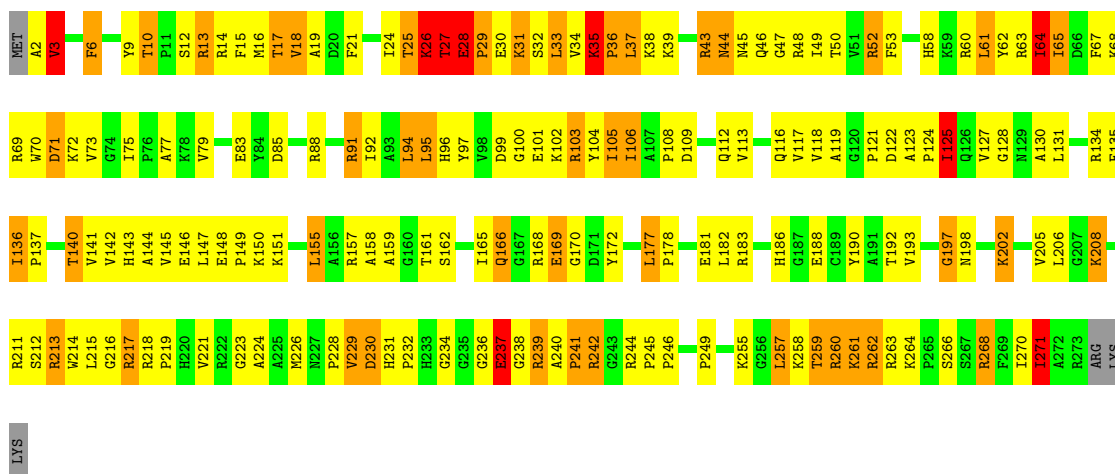
- Molecule 2: 5S RIBOSOMAL RNA

Chain DB:



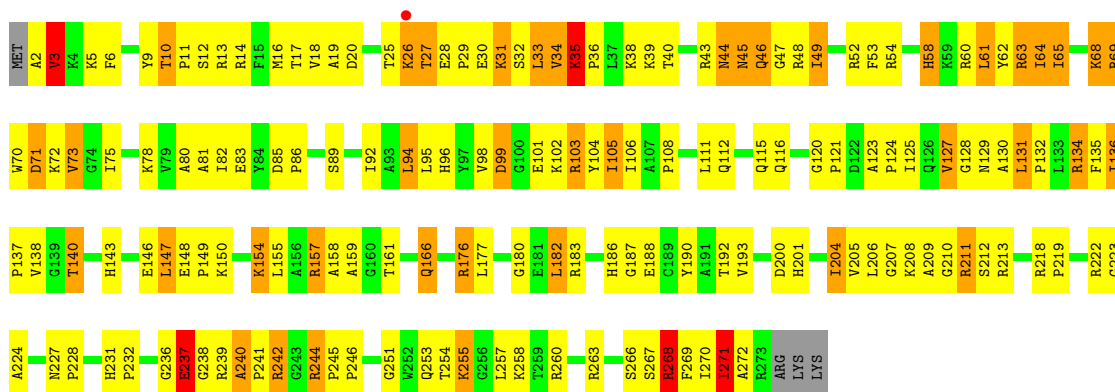
- Molecule 3: 50S ribosomal protein L2

Chain AD:



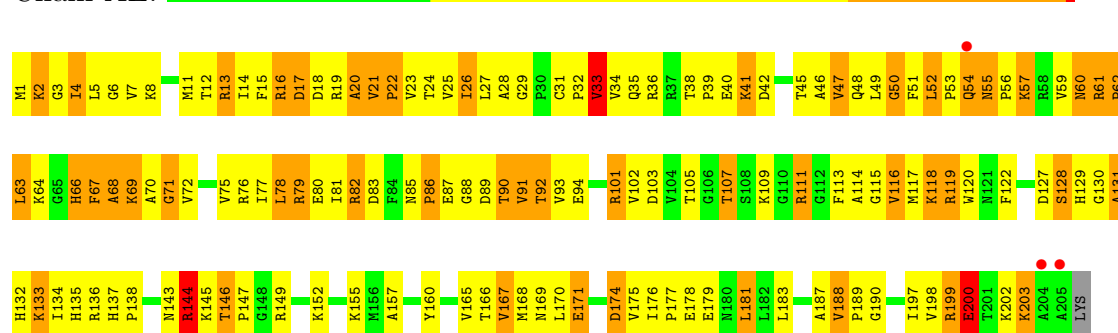
- Molecule 3: 50S ribosomal protein L2

Chain DD:



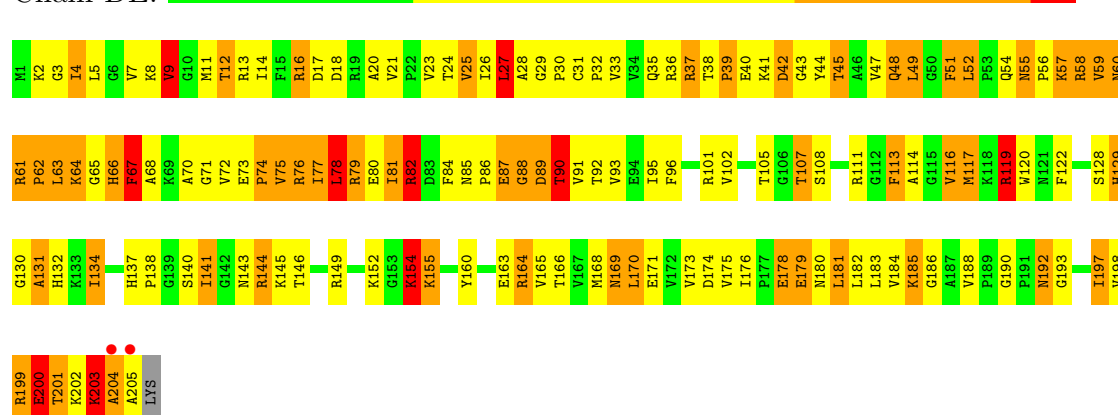
- Molecule 4: 50S ribosomal protein L3

Chain AE:



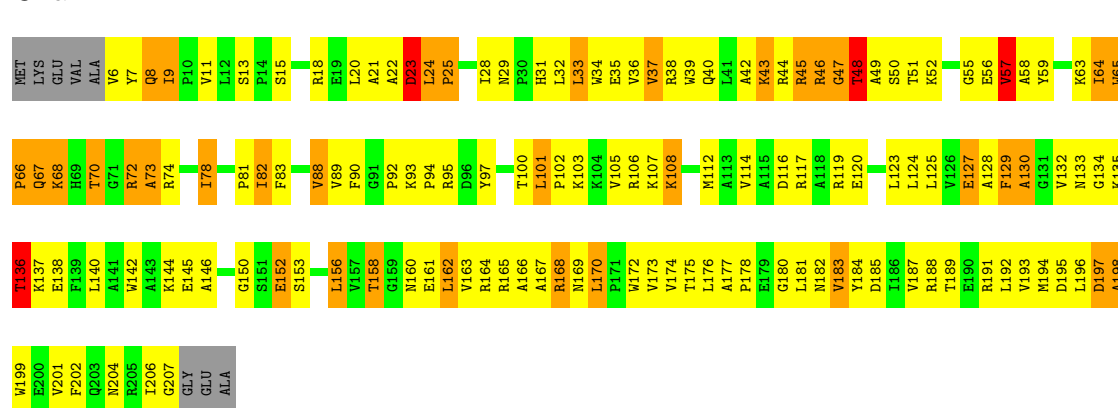
- Molecule 4: 50S ribosomal protein L3

Chain DE:



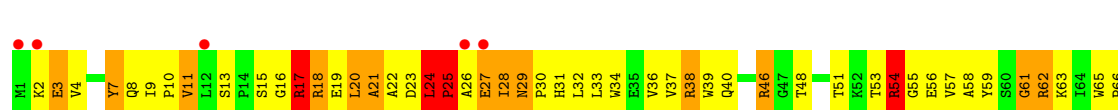
- Molecule 5: 50S ribosomal protein L4

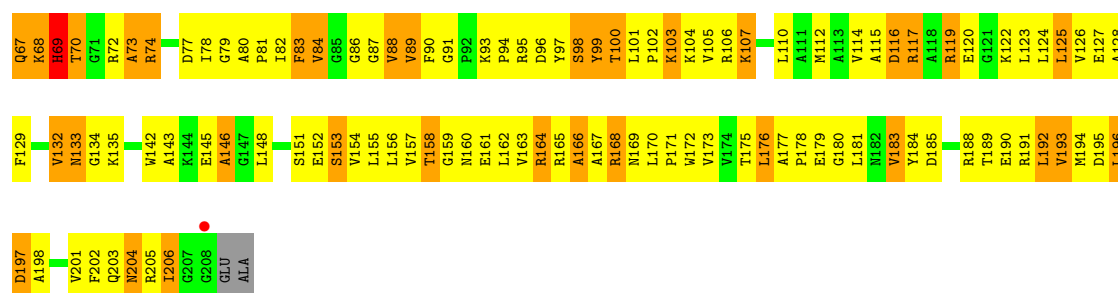
Chain AF:



- Molecule 5: 50S ribosomal protein L4

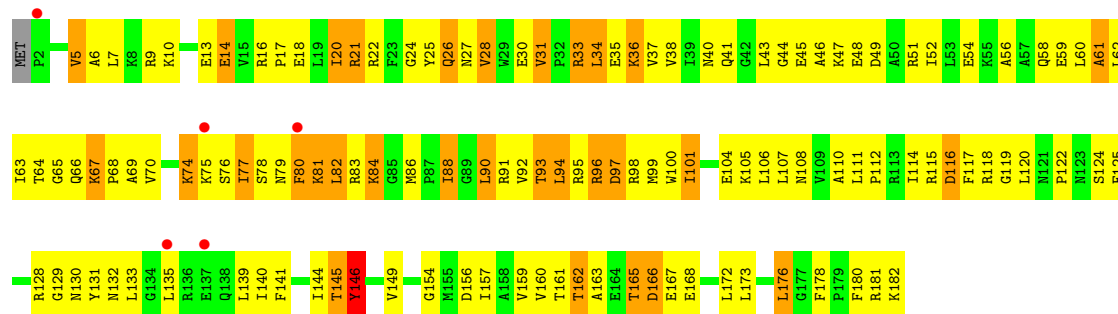
Chain DF:





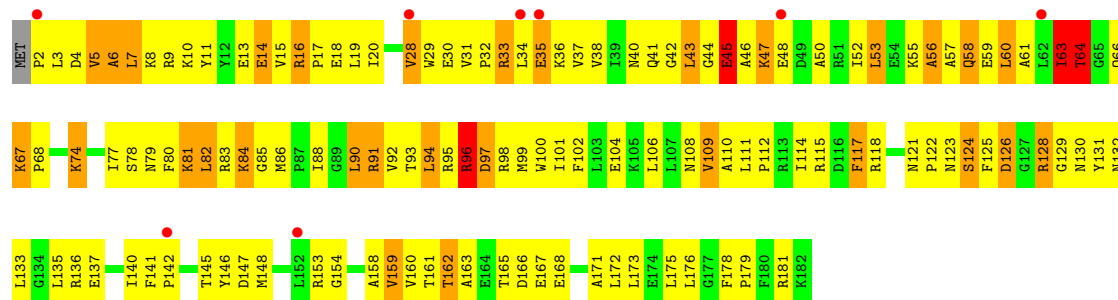
• Molecule 6: 50S ribosomal protein L5

Chain AG:



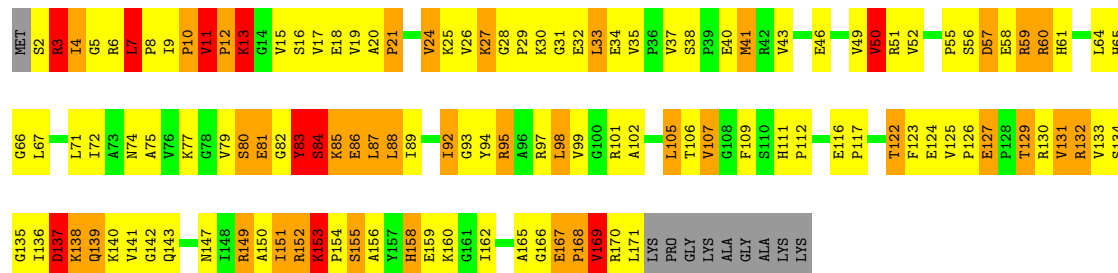
• Molecule 6: 50S ribosomal protein L5

Chain DG:



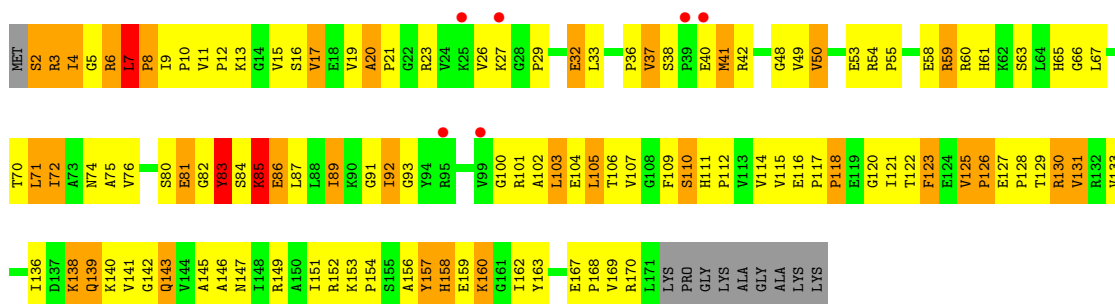
• Molecule 7: 50S ribosomal protein L6

Chain AH:



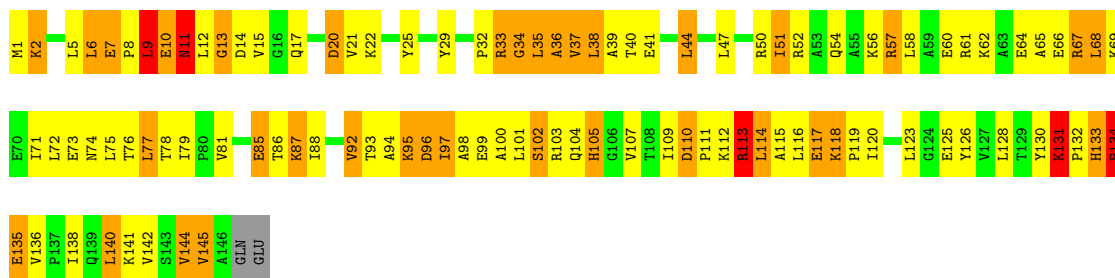
• Molecule 7: 50S ribosomal protein L6

Chain DH:



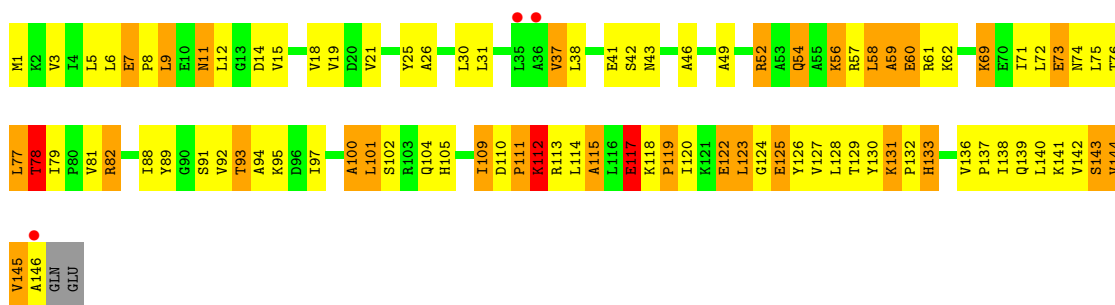
- Molecule 8: 50S ribosomal protein L9

Chain AK:



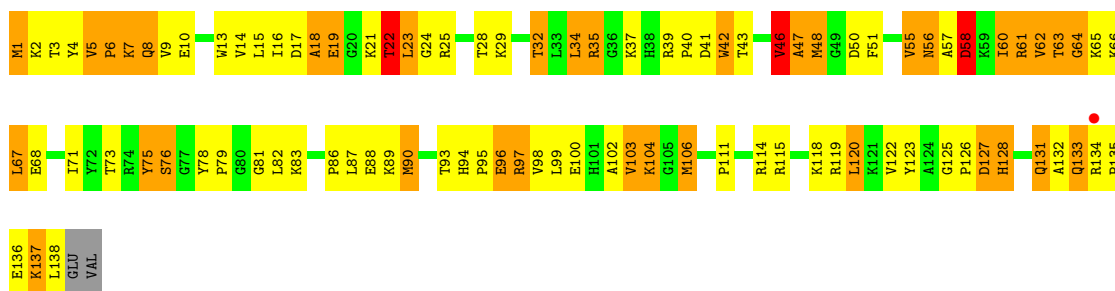
- Molecule 8: 50S ribosomal protein L9

Chain DK:



- Molecule 9: 50S ribosomal protein L13

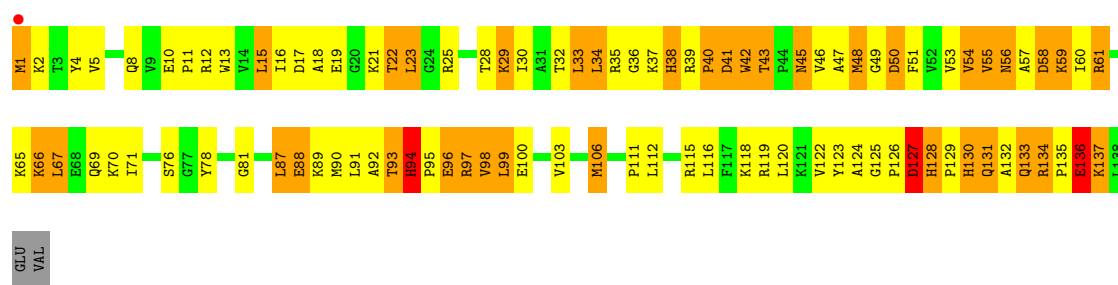
Chain AM:



- Molecule 9: 50S ribosomal protein L13

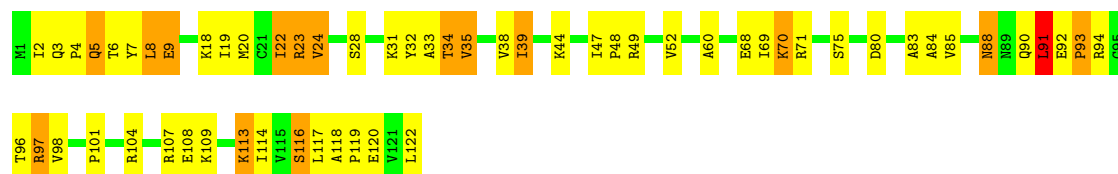
Chain DM:





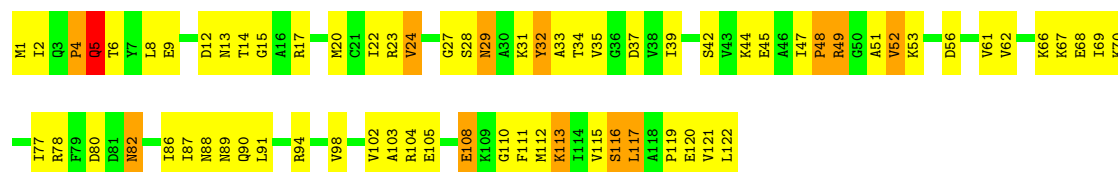
- Molecule 10: 50S ribosomal protein L14

Chain AN:



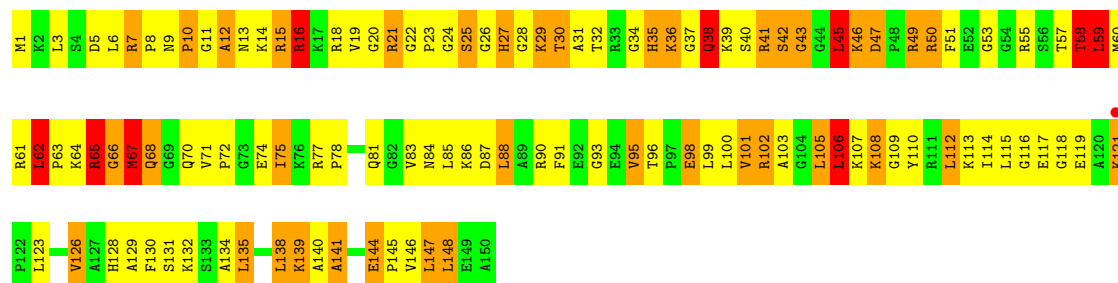
- Molecule 10: 50S ribosomal protein L14

Chain DN:



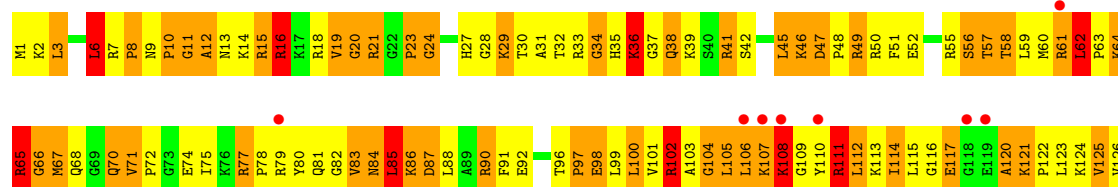
- Molecule 11: 50S ribosomal protein L15

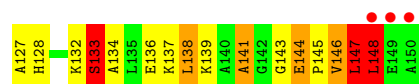
Chain AO:



- Molecule 11: 50S ribosomal protein L15

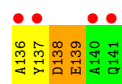
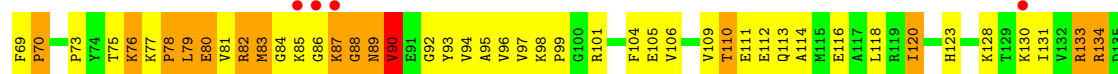
Chain DO:





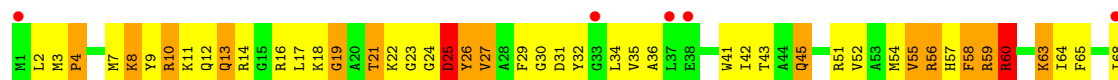
- Molecule 12: 50S ribosomal protein L16

Chain AP:



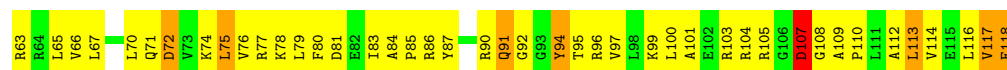
- Molecule 12: 50S ribosomal protein L16

Chain DP:



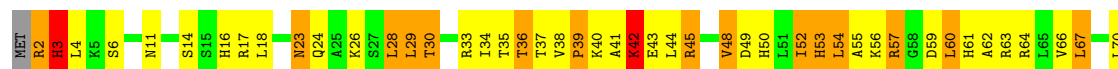
- Molecule 13: 50S ribosomal protein L17

Chain A0:



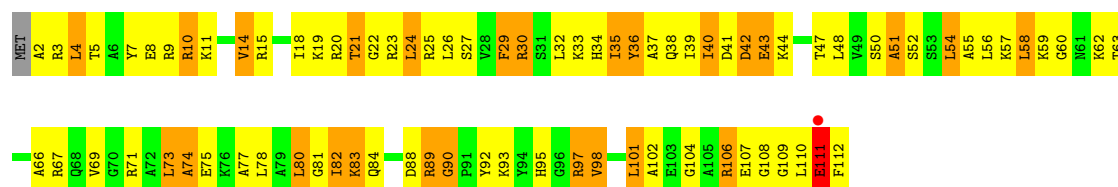
- Molecule 13: 50S ribosomal protein L17

Chain D0:



- Molecule 14: 50S ribosomal protein L18

Chain AQ:



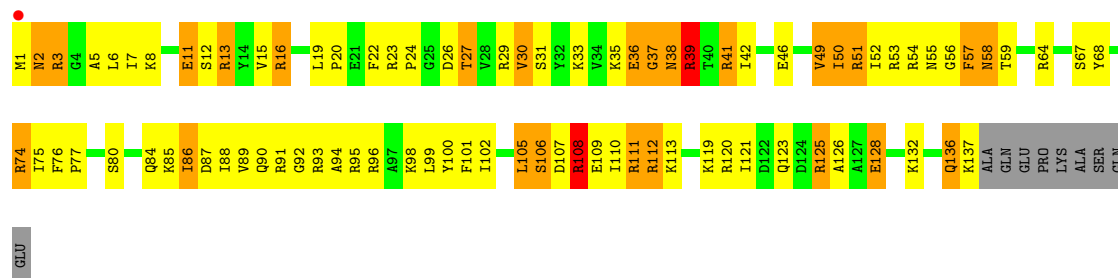
• Molecule 14: 50S ribosomal protein L18

Chain DQ:



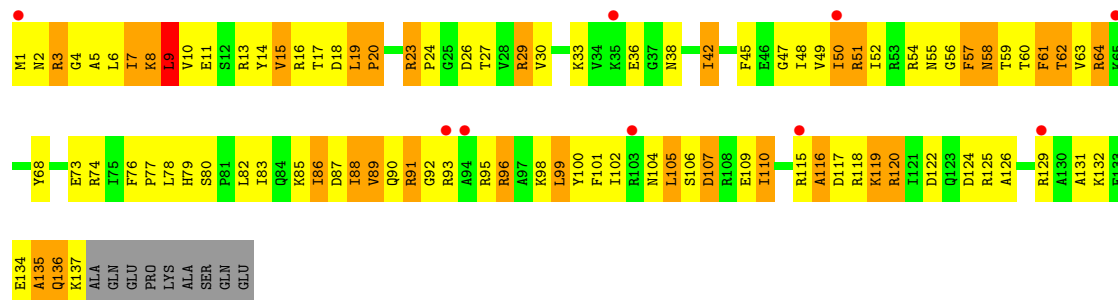
• Molecule 15: 50S ribosomal protein L19

Chain AR:



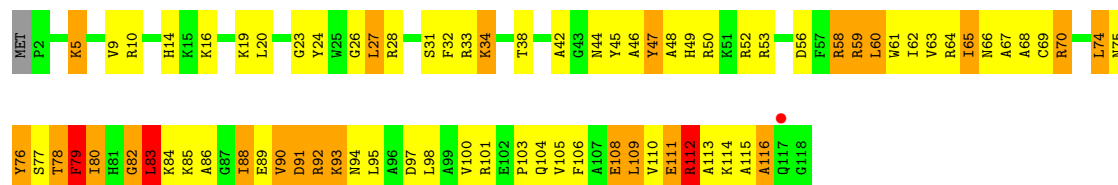
• Molecule 15: 50S ribosomal protein L19

Chain DR:



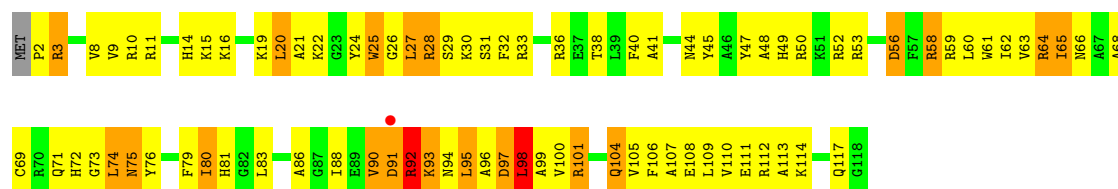
• Molecule 16: 50S ribosomal protein L20

Chain A1:



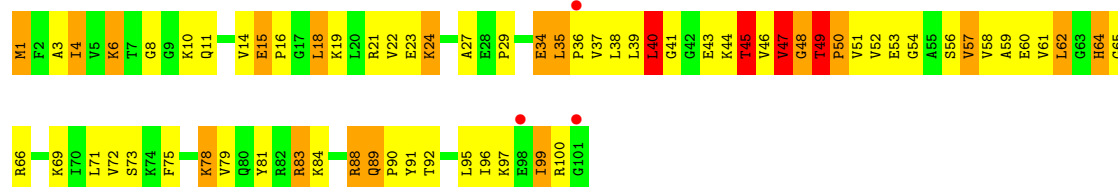
• Molecule 16: 50S ribosomal protein L20

Chain D1: 



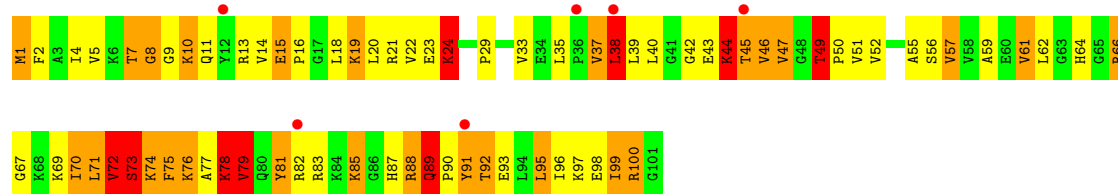
- Molecule 17: 50S ribosomal protein L21

Chain A2: 



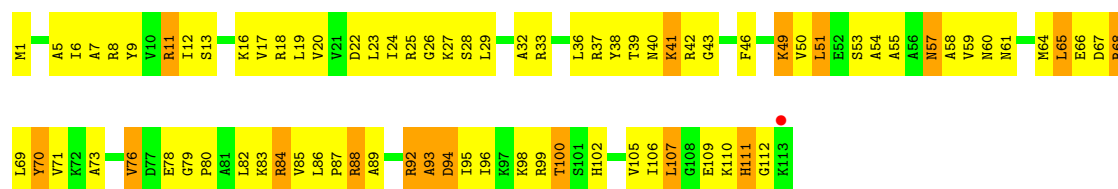
- Molecule 17: 50S ribosomal protein L21

Chain D2: 



- Molecule 18: 50S ribosomal protein L22

Chain AS: 



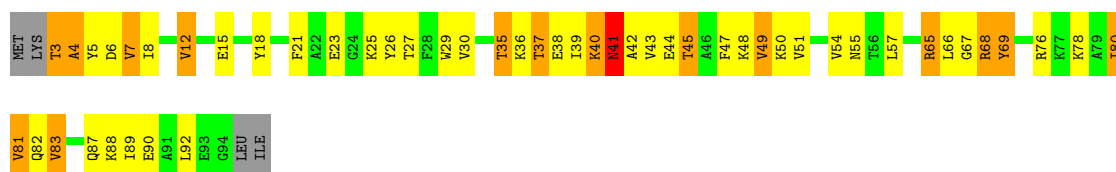
- Molecule 18: 50S ribosomal protein L22

Chain DS: 



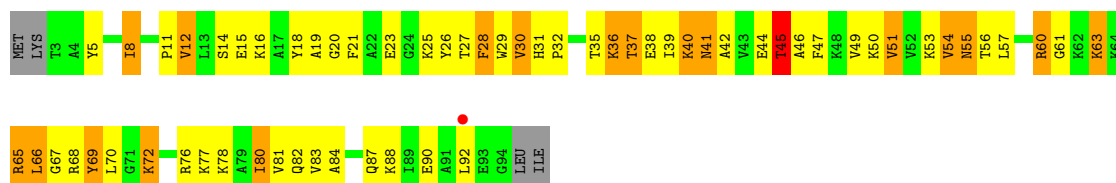
- Molecule 19: 50S ribosomal protein L23

Chain AT: 



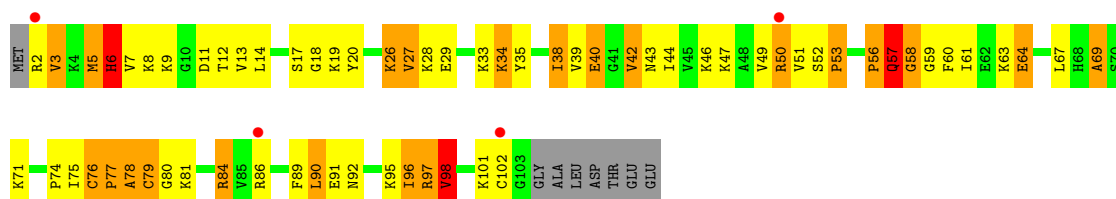
- Molecule 19: 50S ribosomal protein L23

Chain DT:



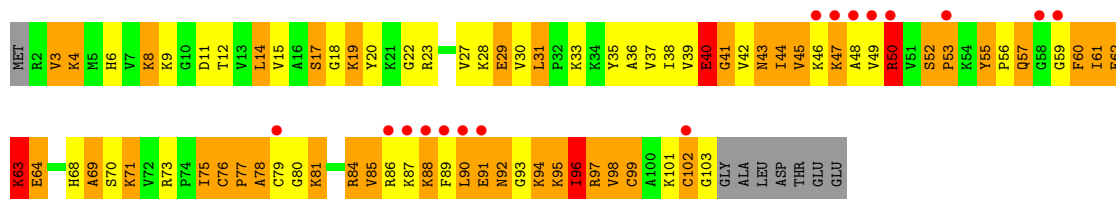
- Molecule 20: 50S ribosomal protein L24

Chain AU:



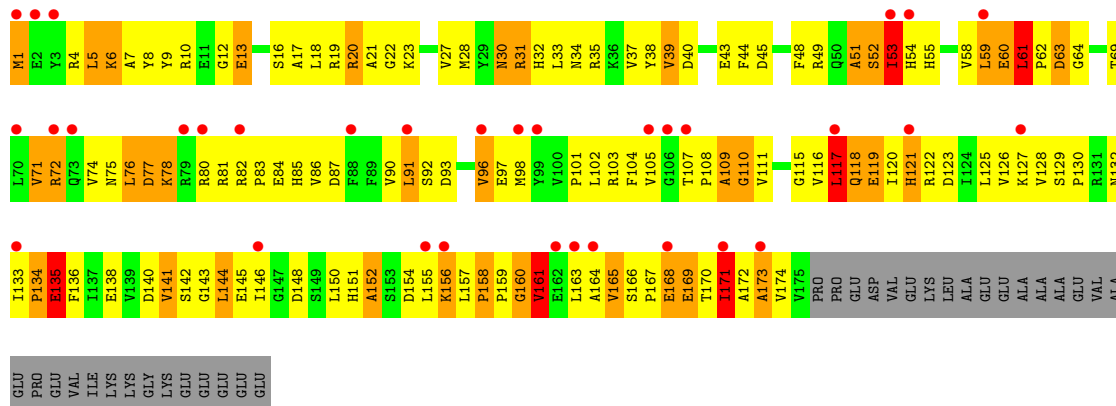
- Molecule 20: 50S ribosomal protein L24

Chain DU:

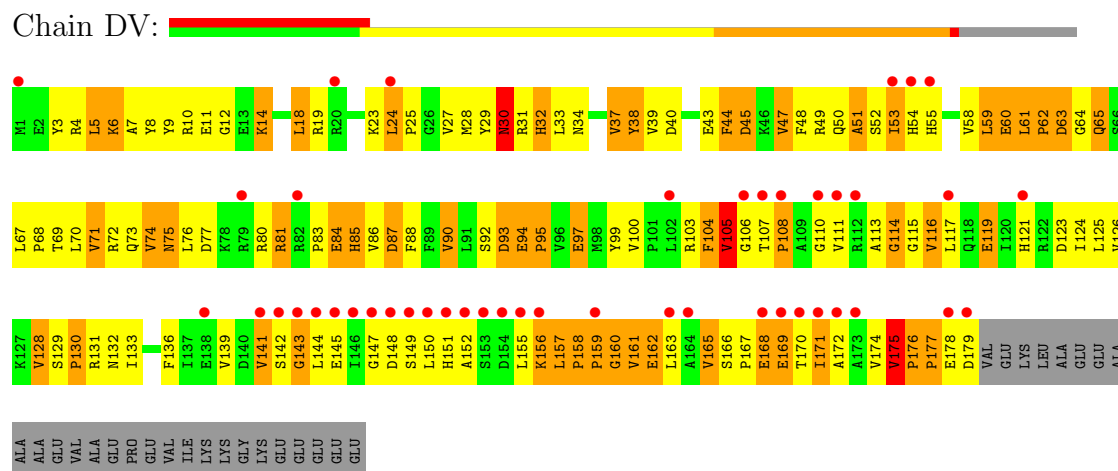


- Molecule 21: 50S ribosomal protein L25

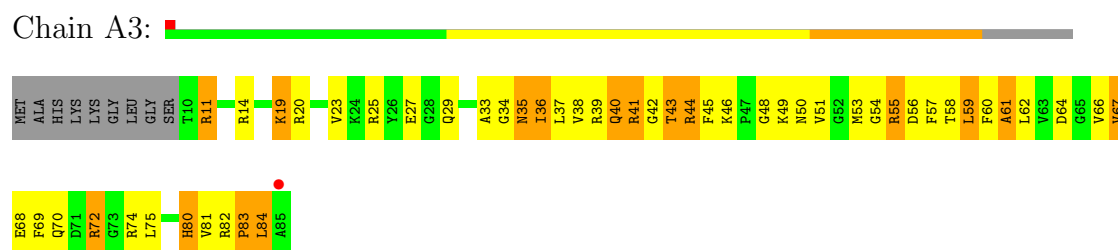
Chain AV:



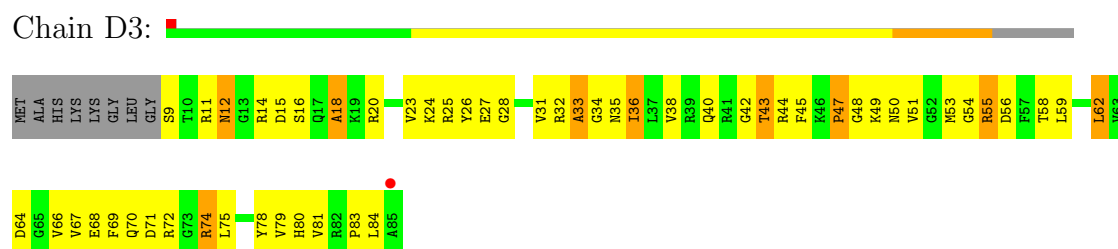
- Molecule 21: 50S ribosomal protein L25



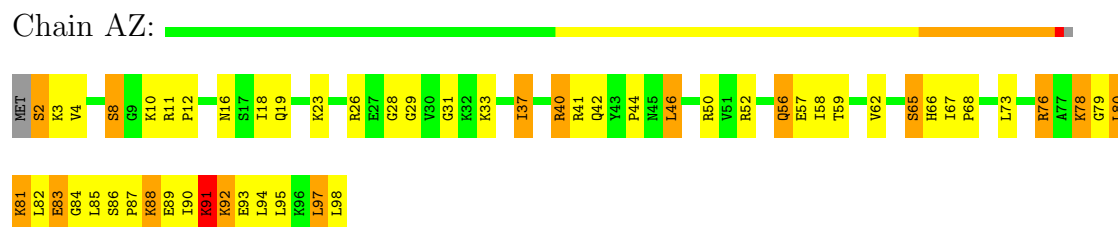
- Molecule 22: 50S ribosomal protein L27



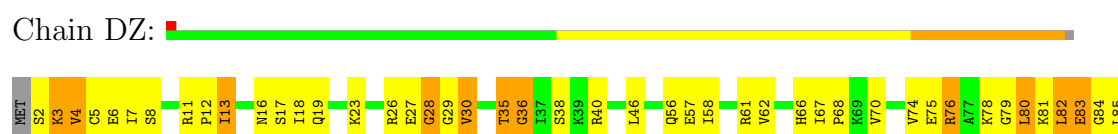
- Molecule 22: 50S ribosomal protein L27

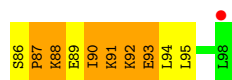


- Molecule 23: 50S ribosomal protein L28



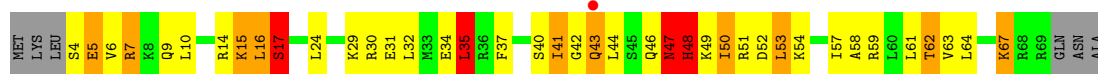
- Molecule 23: 50S ribosomal protein L28





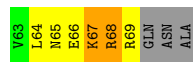
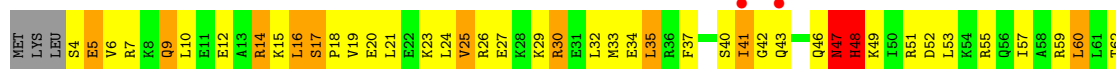
- Molecule 24: 50S ribosomal protein L29

Chain AW:



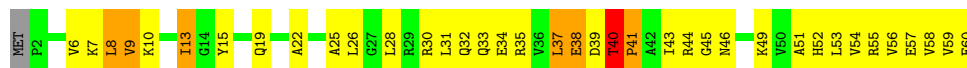
- Molecule 24: 50S ribosomal protein L29

Chain DW:



- Molecule 25: 50S ribosomal protein L30

Chain AX:



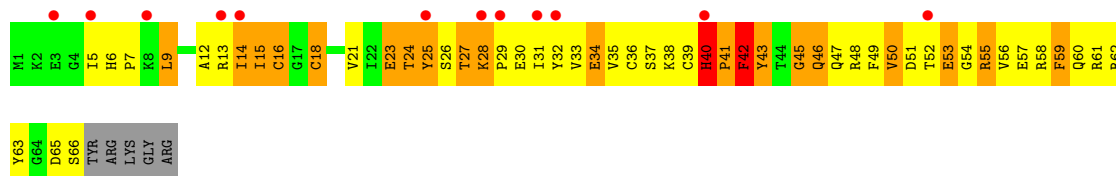
- Molecule 25: 50S ribosomal protein L30

Chain DX:



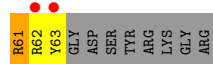
- Molecule 26: 50S ribosomal protein L31

Chain A4:



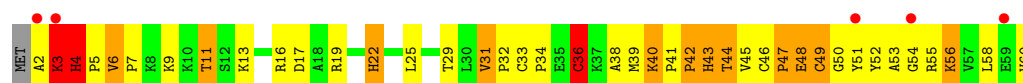
- Molecule 26: 50S ribosomal protein L31

Chain D4:



- Molecule 27: 50S ribosomal protein L32

Chain A5: 



- Molecule 27: 50S ribosomal protein L32

Chain D5: 



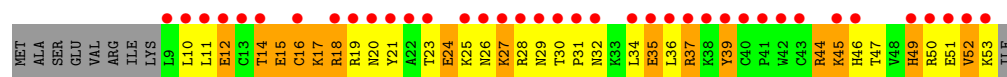
- Molecule 28: 50S ribosomal protein L33

Chain A6: 



- Molecule 28: 50S ribosomal protein L33

Chain D6: 



- Molecule 29: 50S ribosomal protein L34

Chain A7: 



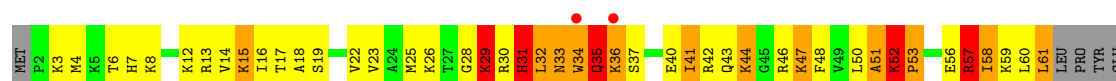
- Molecule 29: 50S ribosomal protein L34

Chain D7: 



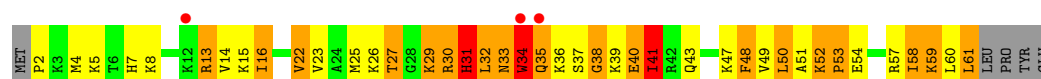
- Molecule 30: 50S ribosomal protein L35

Chain A8: 



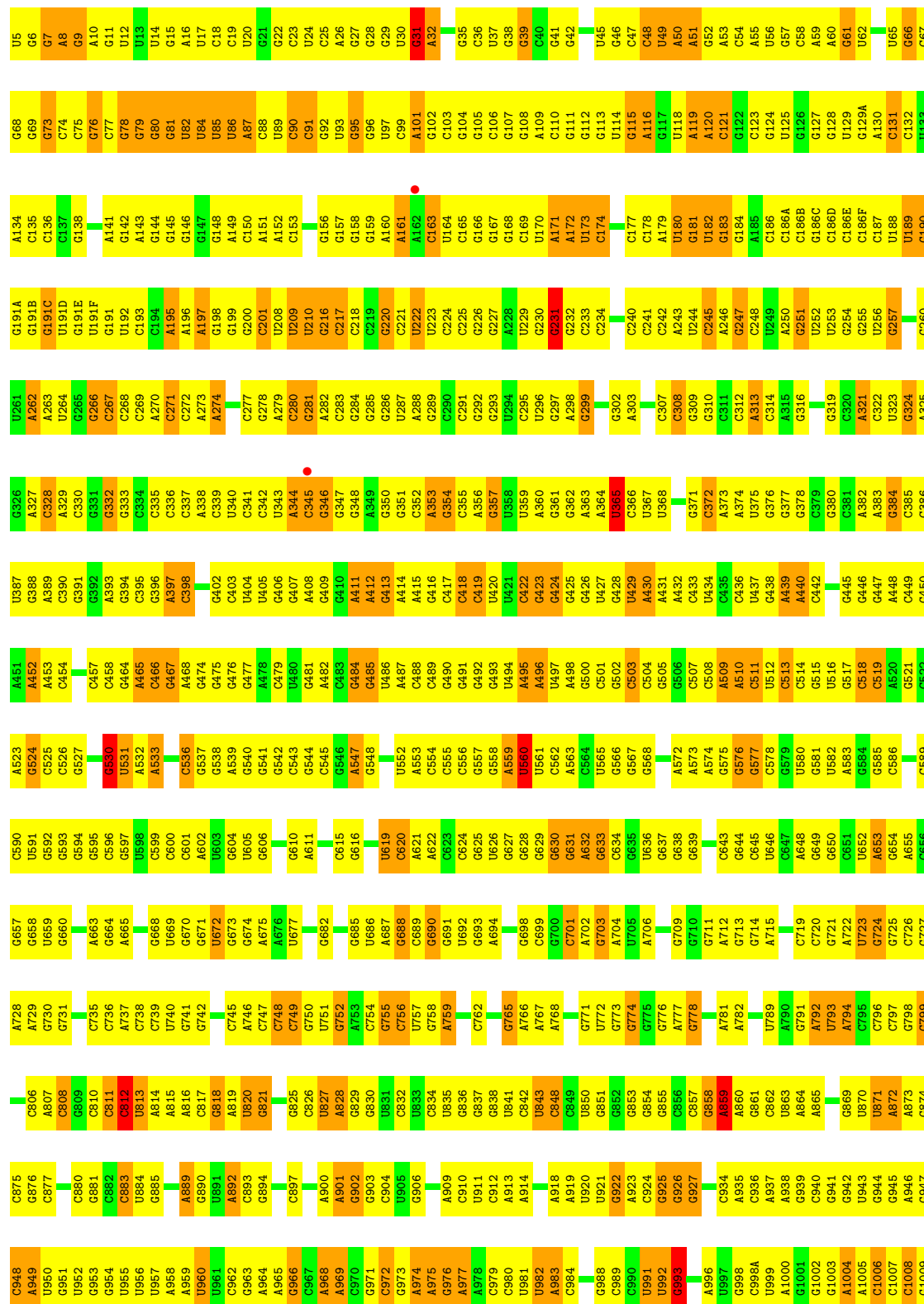
- Molecule 30: 50S ribosomal protein L35

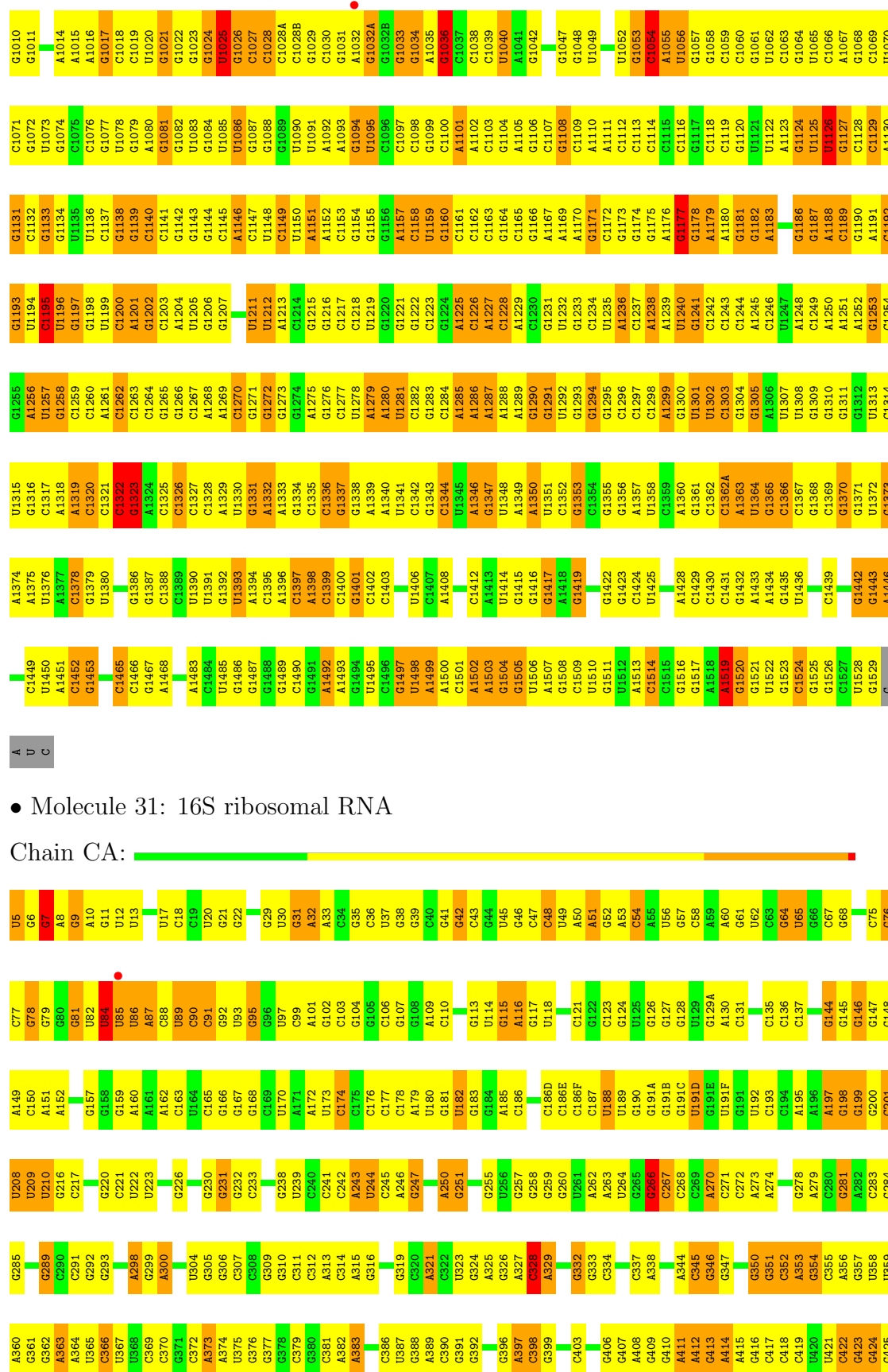
Chain D8: 



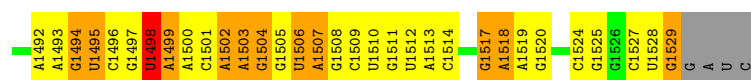
● Molecule 31: 16S ribosomal RNA

Chain BA:



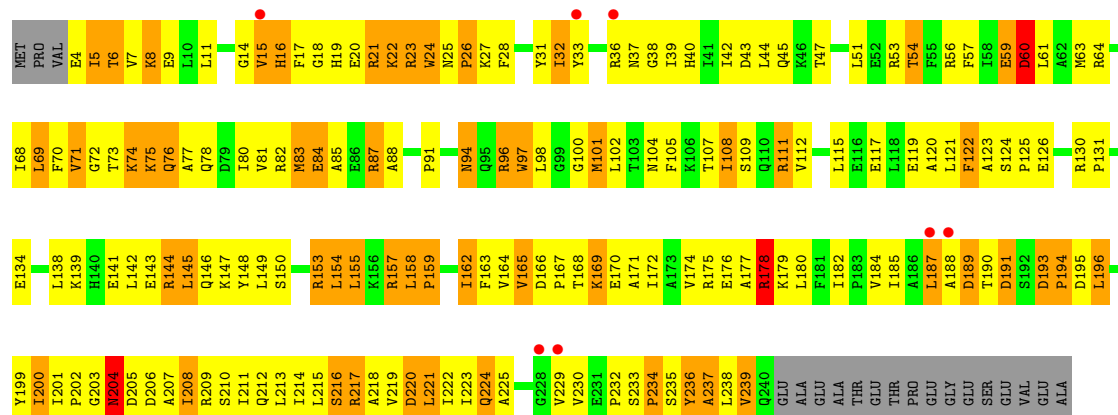


A1413	G1347	G1224	C1163	A1102	A1041	A983	G922	C956	A781	C707	G638	U571	C503	G426
U1414	A1287	A1225	G1164	C1103	G1042	C984	A923	C957	A782	C708	G639	A572	C504	U427
G1415	A1288	C1226	C1165	G1104	C1043	C985	G924	G958	C783	G711	U641	A573	G505	G428
G1416	A1289	A1227	A1105	A1044	A986	G987	G925	A859	C784	G712	G642	A574	G509	U429
G1417	G1290	C1228	A1167	C1045	G987	G988	G926	A860	G791	A712	C643	G575	A510	A430
A1418	G1291	C1229	A1168	A1046	G1047	G989	G927	G861	A792	G713	G644	G576	A511	A431
G1419	U1292	C1230	A1170	G1048	G1049	U991	G928	C962	A793	G714	C645	G577	C511	A432
C1354	G1293	G1231	G1171	A1109	U048	U992	C930	U863	A794	A715	C647	C578	U512	C433
C1355	G1294	G1232	C1172	A1110	U049	U993	C931	U864	A795	A716	U648	C579	U516	U434
C1356	G1295	G1233	G1173	A1111	C1050	G993	C932	A865	C937	C719	G649	U580	U517	C435
A1357	G1296	C1234	G1174	C1051	C1051	A994	G933	C966	C938	C720	G650	G581	G518	C436
C1358	U1297	U1235	A1175	G1052	U052	C995	C934	G867	G798	C721	C651	U582	C519	U437
C1359	A1300	A1236	A1176	G1053	U053	A996	C935	C968	G799	A722	U652	A583	A520	C438
A1360	C1237	C1237	G1177	C1054	C1054	U997	C936	G869	G800	A723	A653	G584	A521	A439
G1361	A1238	A1238	G1178	A1055	A1055	U998	A937	U870	A802	U724	G654	G585	G521	A440
A1362	A1239	A1239	G1179	U056	U056	A1000	A938	U871	A803	C725	G655	C586	C522	C442
A1363	A1240	G1241	A1180	G1057	G1057	G001	G939	A872	G803	A728	G656	G587	C526	C443
A1364	C1242	C1242	G1182	C1058	C1058	G002	C940	A873	U804	C731	G657	U591	G527	C444
C1365	C1243	C1243	A1183	C1059	C1060	G003	C941	G874	C805	C732	U658	G592	C528	C445
C1366	A1305	A1305	G1184	U1122	G1061	A1004	C942	C975	C806	C733	U659	G593	G529	C446
C1367	A1306	A1306	G1185	U1123	G1062	A1005	U943	C978	A807	C734	G660	G594	G530	C447
C1368	U1307	C1247	G1186	G1124	U062	C1006	G944	C979	C808	A735	G661	G595	U531	A448
C1369	U1308	U1247	A1187	U1125	C1063	C1007	G945	C980	C812	C736	G662	C599	U532	C449
G1370	G1309	G1248	G1188	U1126	U064	C1008	A946	C981	U813	C737	G663	A533	A532	C450
G1371	G1310	A1250	A1189	G1127	U065	G1009	G947	G882	C814	C738	G664	C534	A451	A451
G1372	G1311	A1251	C1189	C1128	C1066	G1010	C948	C983	A815	C739	G665	C535	U534	A452
C1373	G1312	G1252	G1190	U1129	A1067	G1011	C949	C984	A816	C740	G666	C536	A453	A453
U1374	U1313	A1253	A1191	U1130	U068	A1012	U950	U884	C817	C741	G667	C537	A454	C455
A1374	C1314	C1254	G1192	G1131	C1069	G1013	U951	G885	C818	C742	G674	G604	G538	C456
A1375	U1315	G1255	G1193	C1132	C1070	A1014	U952	G886	A819	C743	G675	U605	G539	C457
A1376	G1316	U1256	G1194	G1133	U072	A1015	G953	G887	U820	C744	U677	G606	G540	C458
A1377	C1317	U1257	C1195	G1134	U073	A1016	C954	G888	G821	C745	U678	A607	G541	G464
C1378	A1318	G1258	U1196	G1135	G1074	U1017	U955	A889	C824	C746	U679	C612	G542	A465
G1379	C1319	C1259	G1197	U1136	C1075	C1018	U956	G890	C825	C747	C680	C613	G543	C466
U1380	A1320	U1260	G1198	U1137	U076	C1019	U957	U891	G826	C748	C681	A614	G544	C467
U1381	C1321	A1261	U1199	G1138	G1077	U1021	A958	C893	U827	C749	C682	G615	C545	A468
C1382	G1322	C1262	G1200	G1139	U078	G1022	U959	G894	A828	C750	C683	G616	G546	C474
C1383	G1323	C1263	A1201	C1140	G1079	G1023	U960	G895	U829	C751	A694	G617	A547	C475
C1384	A1324	G1264	C1202	G1141	A1080	G1024	U961	C996	G830	C752	G685	G618	G550	A477
C1385	G1325	G1265	C1203	G1142	G1081	U1025	C962	C997	U831	C753	U686	U619	U552	A482
G1386	C1326	G1266	A1204	G1143	G1082	C1026	G963	G898	G832	C754	G687	C620	C554	C483
G1387	C1327	C1267	U1205	G1144	U083	C1027	A964	C999	C833	C755	G688	G625	C555	G484
G1388	C1328	A1268	G1206	G1145	G1084	C1028	G965	C999	U833	C756	G689	U626	G556	G485
U1389	A1329	A1269	G1207	A1146	U085	C1028	G966	A900	U834	C757	C690	U627	G557	U486
U1390	U1330	C1270	C1208	C1147	U086	C1028A	C967	A901	C834	A759	G691	A621	A553	A482
U1391	A1331	G1271	U1148	U1148	G1087	C1028B	A968	U905	U835	C760	U692	A622	C554	C483
G1392	G1332	G1272	C1210	C1149	G1088	G1029	A969	G906	G836	C761	G693	C623	C555	G484
A1394	A1333	G1273	U1211	U1150	G1089	C1030	C970	A907	G837	C762	A694	G625	C556	G485
C1397	G1334	G1274	U1212	A1151	U091	G1031	G971	A908	U841	C763	A695	U626	G558	G491
C1398	C1335	A1275	C1213	A1152	A1091	A1032	C972	A909	C842	A768	U696	G627	U559	C492
C1399	G1336	G1276	G1214	C1153	A1092	G1032A	G973	A910	U843	A769	G697	G628	U561	C493
C1400	G1337	C1277	G1215	G1154	A1093	G1032B	A974	C912	C848	U772	C699	G630	A562	U494
G1401	A1338	U1278	G1216	G1155	G1094	G1033	A975	C913	C849	C773	G700	G631	A563	A495
C1402	C1403	A1280	C1217	G1156	U095	G1034	G976	A914	U850	C774	C701	A632	C564	A496
U1403	U1281	U1281	A1157	A1157	C1096	A1035	A977	A915	G851	C775	A702	G633	U565	U497
C1404	C1342	C1282	U1159	U1159	C1096	G1037	C979	A919	G852	C776	C703	C634	G566	A498
G1405	G1343	G1283	G1160	G1160	G1099	C1038	C980	A920	G853	A777	U705	G635	G567	G500
U1406	C1284	A1285	C1162	C1162	A1101	U1040	U981	U921	U706	A780	A706	U636	C501	G502



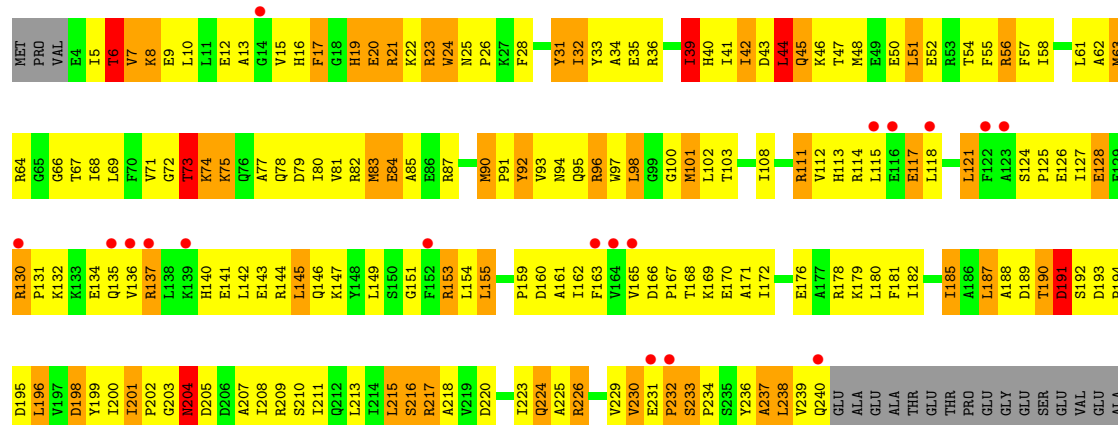
• Molecule 32: 30S RIBOSOMAL PROTEIN S2

Chain BE:



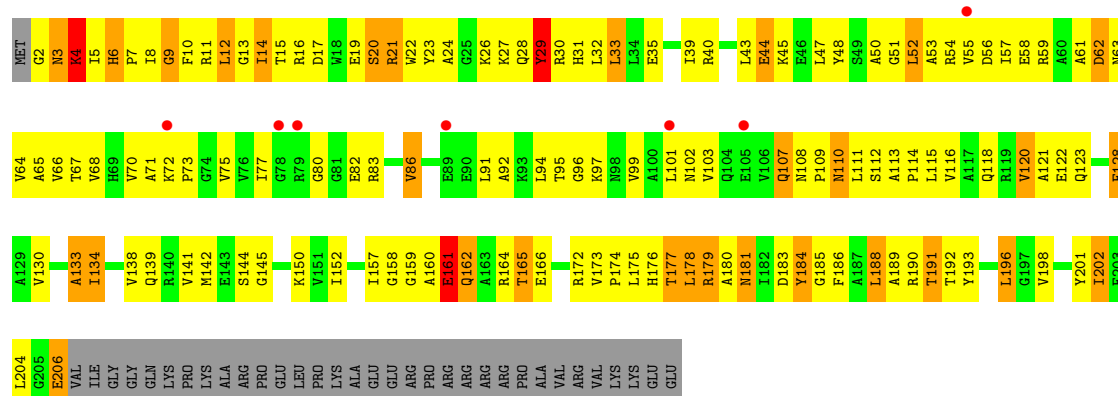
• Molecule 32: 30S RIBOSOMAL PROTEIN S2

Chain CE:



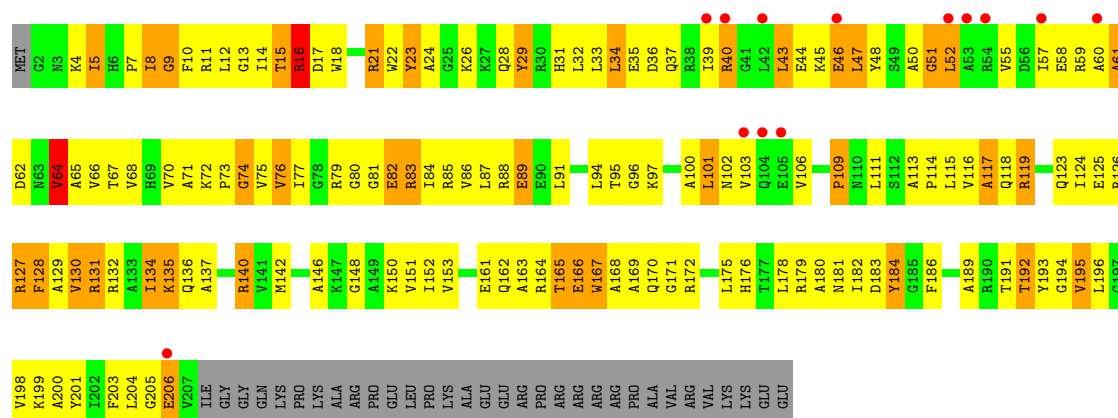
• Molecule 33: 30S RIBOSOMAL PROTEIN S3

Chain BF:



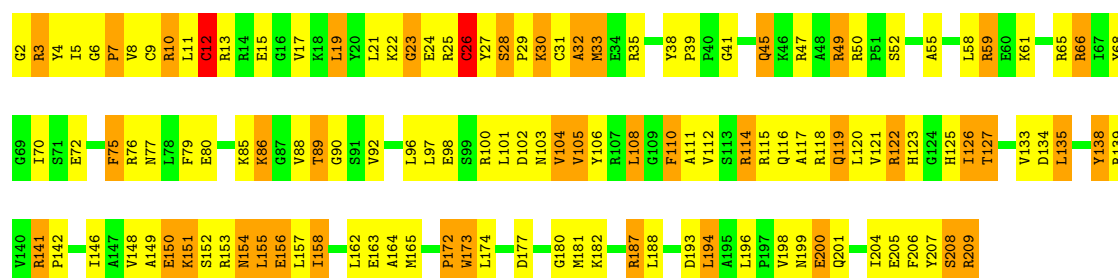
- Molecule 33: 30S RIBOSOMAL PROTEIN S3

Chain CF:



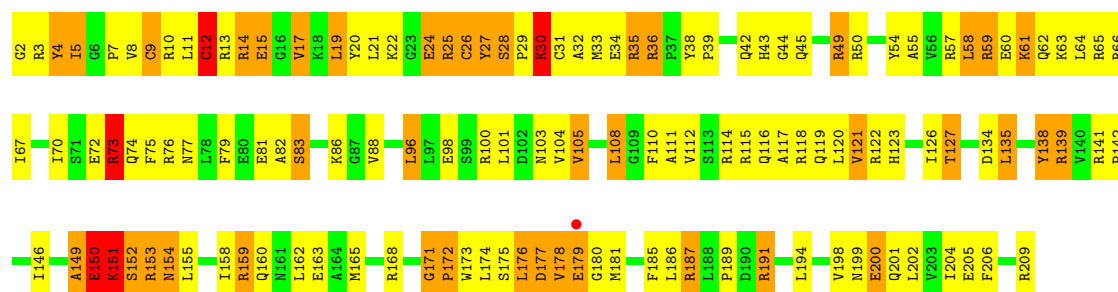
- Molecule 34: 30S RIBOSOMAL PROTEIN S4

Chain BG:



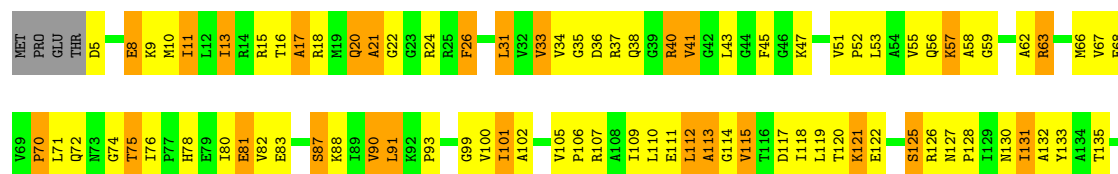
- Molecule 34: 30S RIBOSOMAL PROTEIN S4

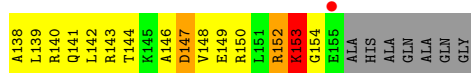
Chain CG:



- Molecule 35: 30S RIBOSOMAL PROTEIN S5

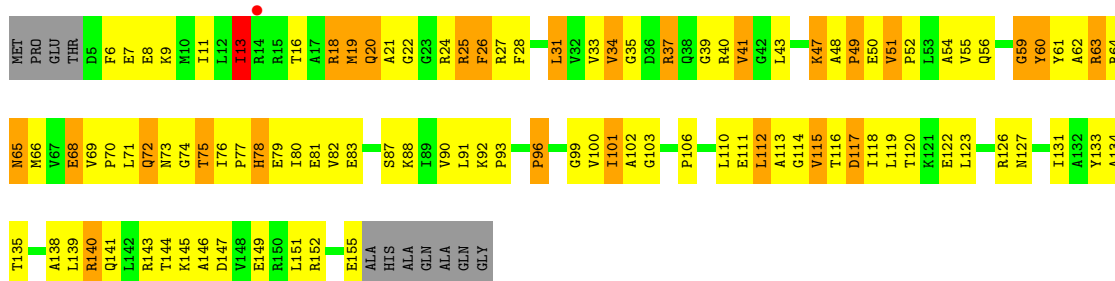
Chain BH:





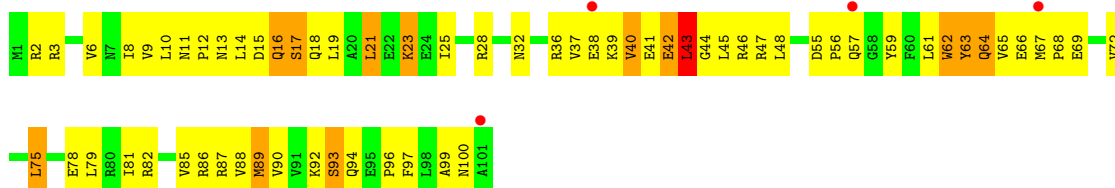
• Molecule 35: 30S RIBOSOMAL PROTEIN S5

Chain CH:



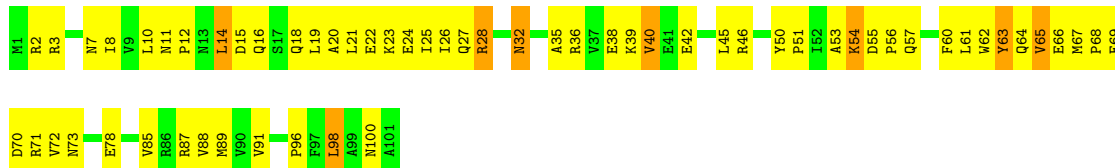
• Molecule 36: 30S RIBOSOMAL PROTEIN S6

Chain BI:



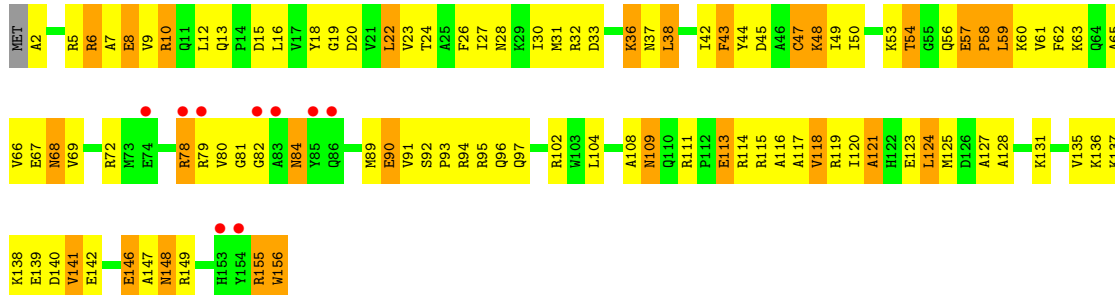
• Molecule 36: 30S RIBOSOMAL PROTEIN S6

Chain CI:



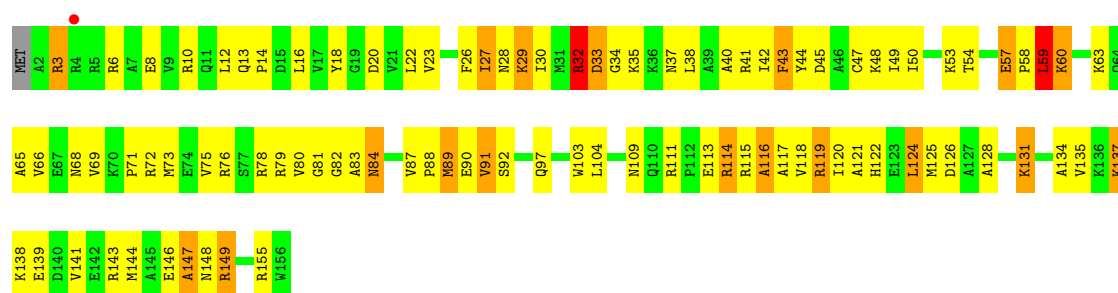
• Molecule 37: 30S RIBOSOMAL PROTEIN S7

Chain BJ:



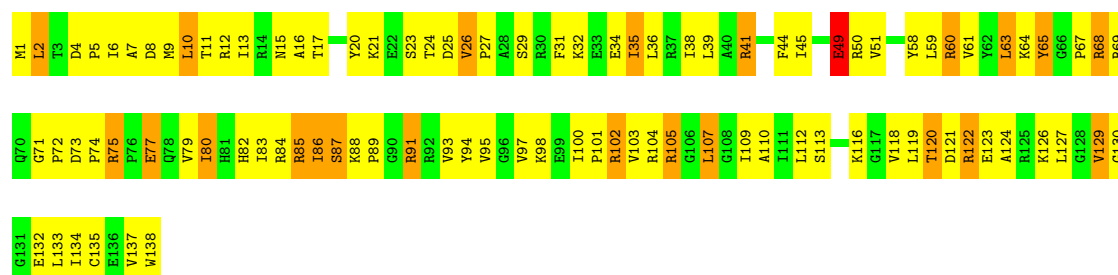
• Molecule 37: 30S RIBOSOMAL PROTEIN S7

Chain CJ:



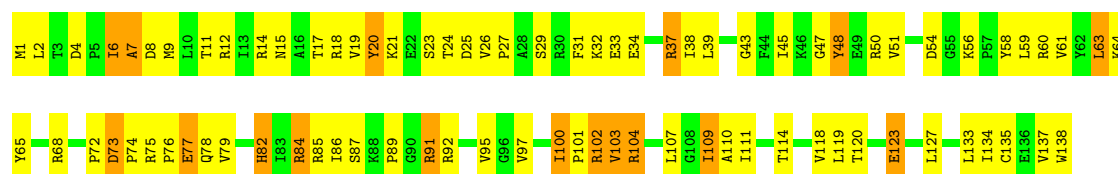
• Molecule 38: 30S RIBOSOMAL PROTEIN S8

Chain BK:



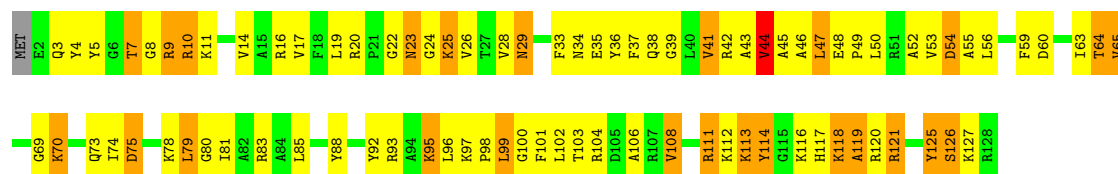
• Molecule 38: 30S RIBOSOMAL PROTEIN S8

Chain CK:



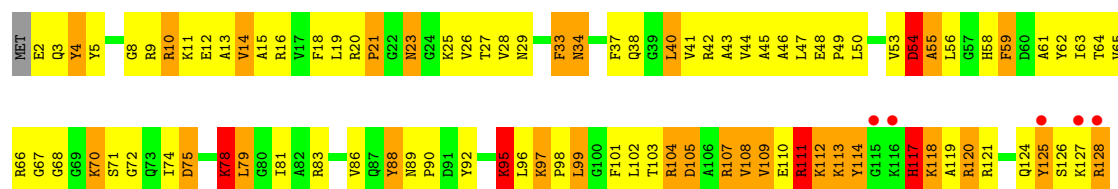
• Molecule 39: 30S RIBOSOMAL PROTEIN S9

Chain BL:



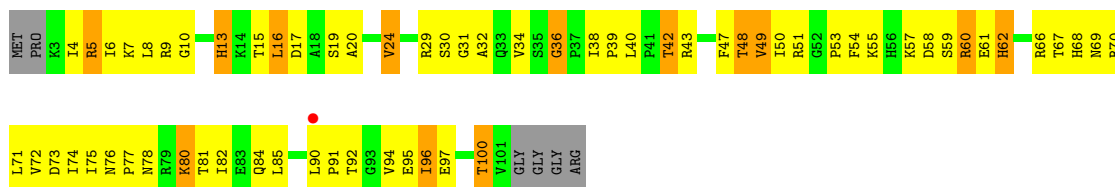
• Molecule 39: 30S RIBOSOMAL PROTEIN S9

Chain CL:



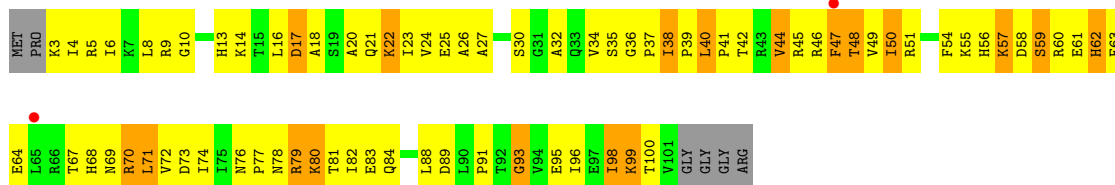
• Molecule 40: 30S RIBOSOMAL PROTEIN S10

Chain BM:



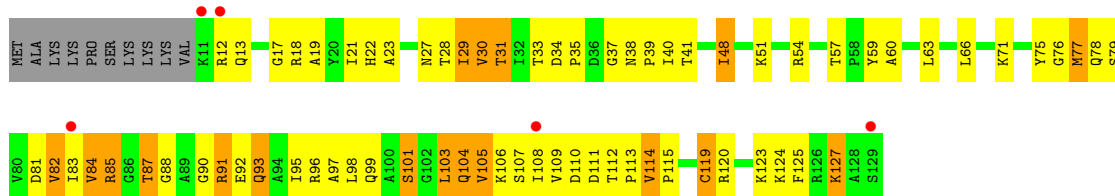
- Molecule 40: 30S RIBOSOMAL PROTEIN S10

Chain CM:



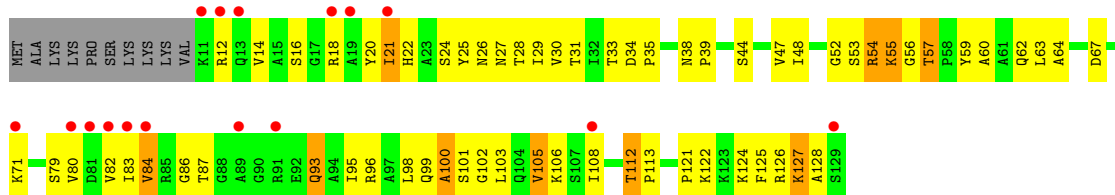
- Molecule 41: 30S RIBOSOMAL PROTEIN S11

Chain BN:



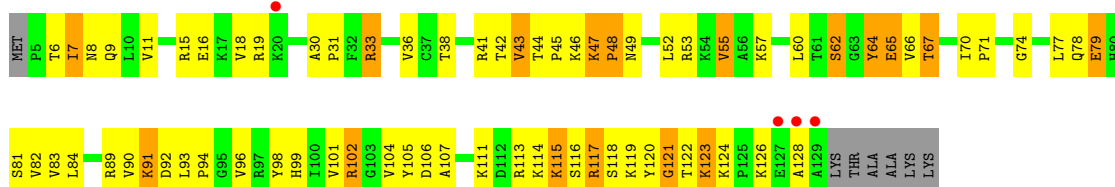
- Molecule 41: 30S RIBOSOMAL PROTEIN S11

Chain CN:



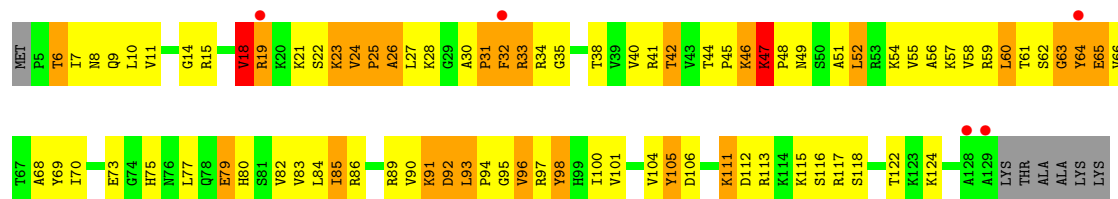
- Molecule 42: 30S RIBOSOMAL PROTEIN S12

Chain BO:



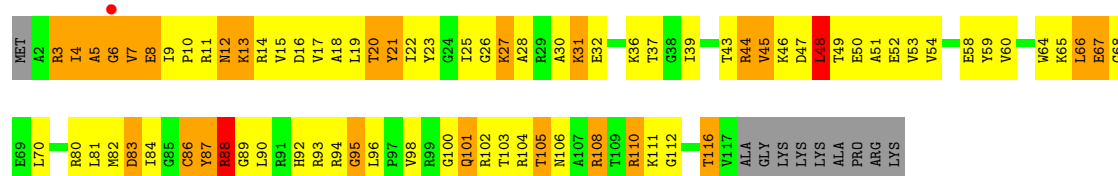
- Molecule 42: 30S RIBOSOMAL PROTEIN S12

Chain CO:



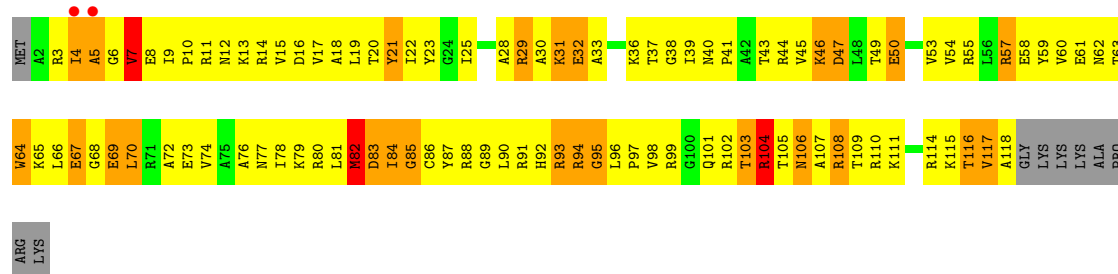
• Molecule 43: 30S RIBOSOMAL PROTEIN S13

Chain BP:



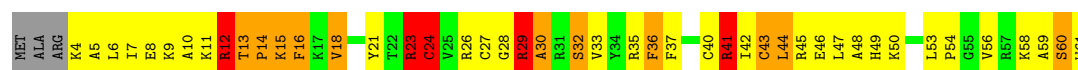
• Molecule 43: 30S RIBOSOMAL PROTEIN S13

Chain CP:



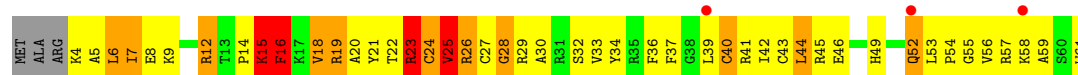
• Molecule 44: 30S RIBOSOMAL PROTEIN S14

Chain BQ:



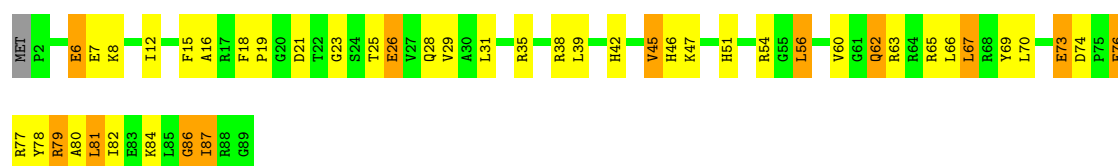
• Molecule 44: 30S RIBOSOMAL PROTEIN S14

Chain CQ:



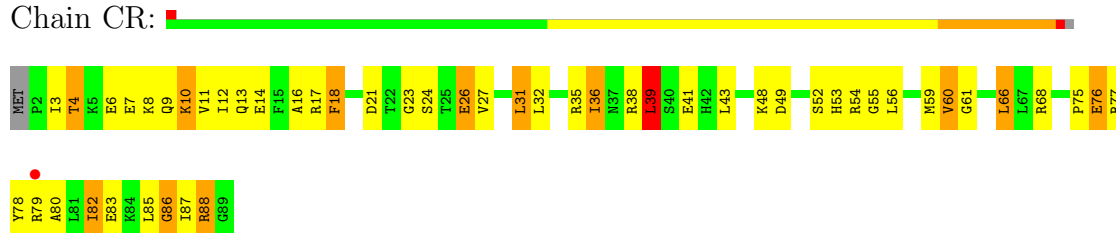
• Molecule 45: 30S RIBOSOMAL PROTEIN S15

Chain BR:



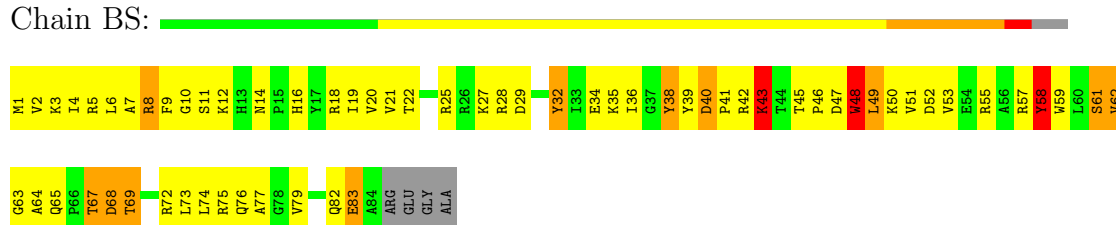
- Molecule 45: 30S RIBOSOMAL PROTEIN S15

Chain CR:



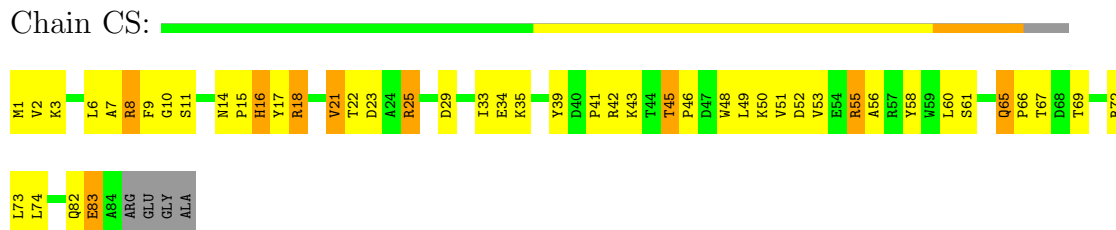
- Molecule 46: 30S RIBOSOMAL PROTEIN S16

Chain BS:



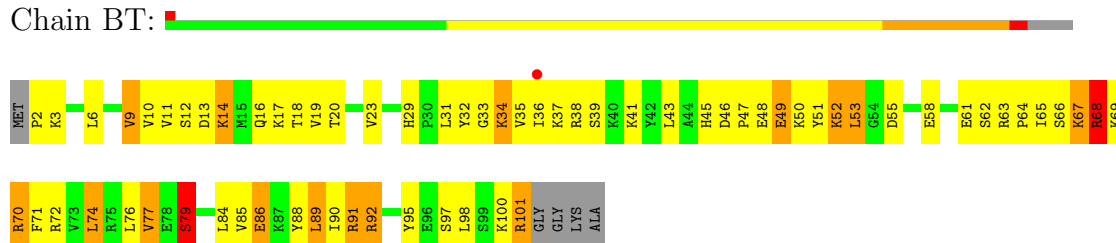
- Molecule 46: 30S RIBOSOMAL PROTEIN S16

Chain CS:



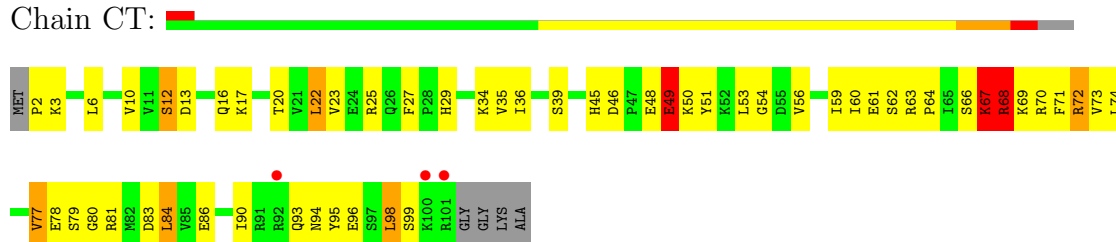
- Molecule 47: 30S RIBOSOMAL PROTEIN S17

Chain BT:



- Molecule 47: 30S RIBOSOMAL PROTEIN S17

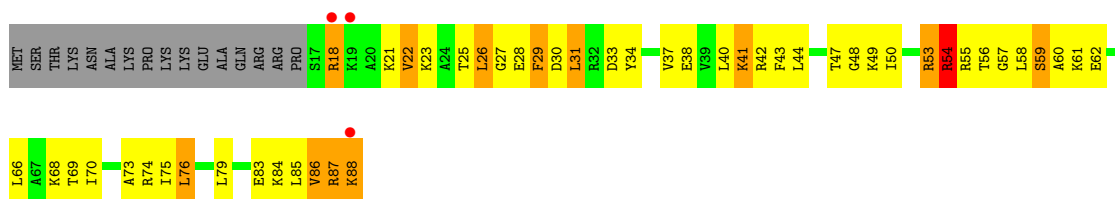
Chain CT:



- Molecule 48: 30S RIBOSOMAL PROTEIN S18

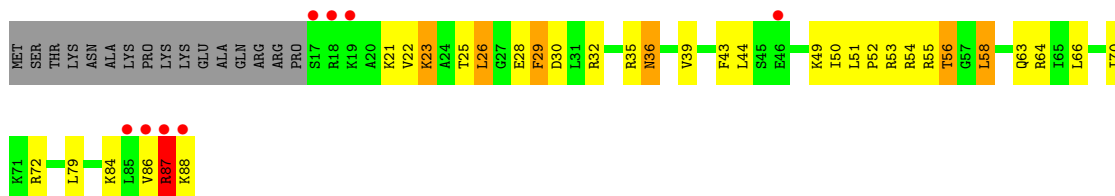
Chain BU:





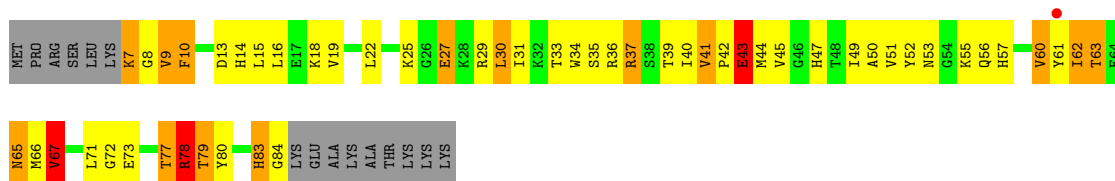
• Molecule 48: 30S RIBOSOMAL PROTEIN S18

Chain CU:



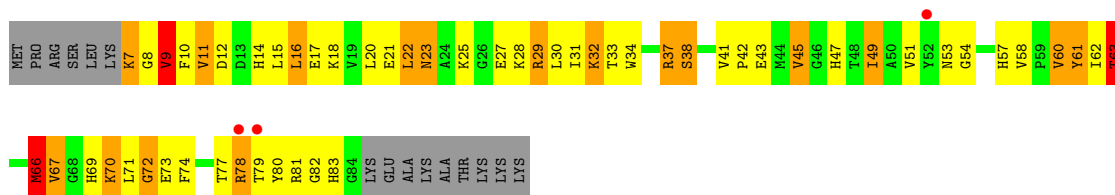
• Molecule 49: 30S RIBOSOMAL PROTEIN S19

Chain BV:



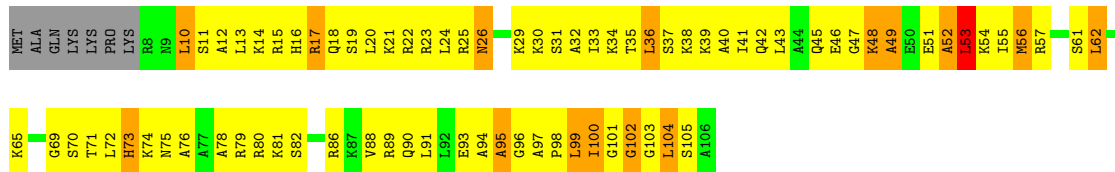
• Molecule 49: 30S RIBOSOMAL PROTEIN S19

Chain CV:



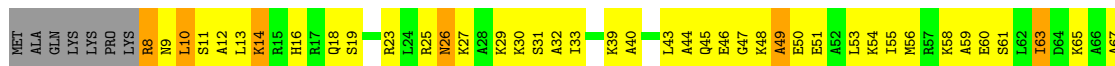
• Molecule 50: 30S RIBOSOMAL PROTEIN S20

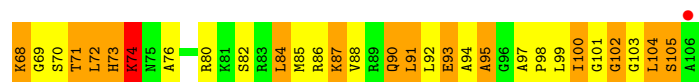
Chain BW:



• Molecule 50: 30S RIBOSOMAL PROTEIN S20

Chain CW:





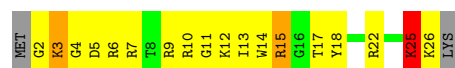
- Molecule 51: 30S RIBOSOMAL PROTEIN THX

Chain BX:



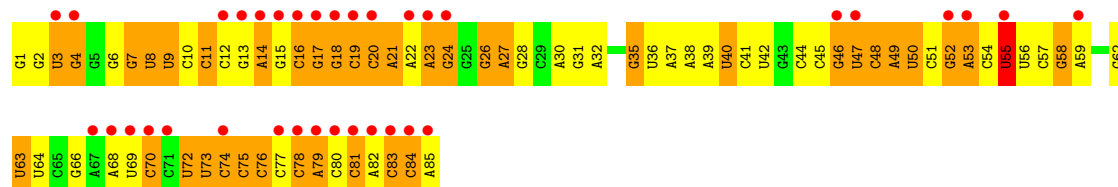
- Molecule 51: 30S RIBOSOMAL PROTEIN THX

Chain CX:



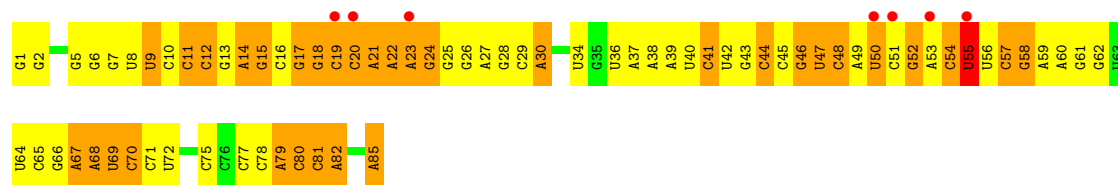
- Molecule 52: TRNA-TYR

Chain BB:



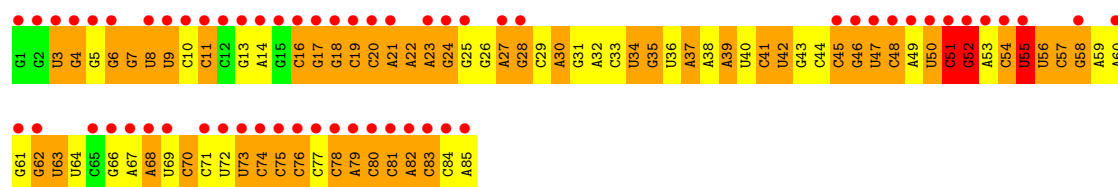
- Molecule 52: TRNA-TYR

Chain BD:



- Molecule 52: TRNA-TYR

Chain CB:



- Molecule 52: TRNA-TYR

Chain CD:





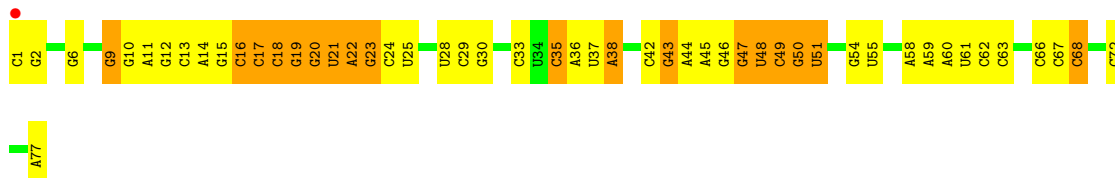
● Molecule 53: TRNA-FMET

Chain BC:



● Molecule 53: TRNA-FMET

Chain CC:



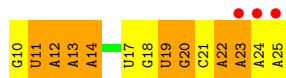
● Molecule 54: MRNA

Chain B1:



● Molecule 54: MRNA

Chain C1:



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	210.00Å 450.33Å 622.86Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	152.64 – 3.30 152.64 – 3.00	Depositor EDS
% Data completeness (in resolution range)	99.8 (152.64-3.30) 89.2 (152.64-3.00)	Depositor EDS
R_{merge}	0.41	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.44 (at 3.01Å)	Xtriage
Refinement program	PHENIX (phenix.refine: 1.7.1_743)	Depositor
R, R_{free}	0.196 , 0.247 0.255 , 0.289	Depositor DCC
R_{free} test set	692 reflections (0.07%)	DCC
Wilson B-factor (Å ²)	73.9	Xtriage
Anisotropy	0.180	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.25 , 57.8	EDS
Estimated twinning fraction	No twinning to report.	Xtriage
L-test for twinning	$\langle L \rangle = 0.42$, $\langle L^2 \rangle = 0.25$	Xtriage
Outliers	0 of 1161006 reflections	Xtriage
F_o, F_c correlation	0.94	EDS
Total number of atoms	304031	wwPDB-VP
Average B, all atoms (Å ²)	112.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.34% 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: MIA, ZN, MG, OHX, PAR

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	0.73	18/70233 (0.0%)	1.21	496/109643 (0.5%)
1	DA	0.64	9/70122 (0.0%)	1.10	332/109469 (0.3%)
2	AB	0.60	0/2928	1.24	32/4568 (0.7%)
2	DB	0.50	0/2928	1.03	7/4568 (0.2%)
3	AD	0.56	0/2165	0.81	1/2919 (0.0%)
3	DD	0.52	0/2165	0.75	0/2919
4	AE	0.47	0/1601	0.72	0/2160
4	DE	0.45	0/1601	0.67	0/2160
5	AF	0.51	0/1620	0.71	0/2194
5	DF	0.38	0/1662	0.65	0/2249
6	AG	0.36	0/1499	0.60	0/2016
6	DG	0.28	0/1499	0.52	0/2016
7	AH	0.43	0/1332	0.66	0/1802
7	DH	0.29	0/1332	0.53	0/1802
8	AK	0.36	0/1151	0.63	0/1558
8	DK	0.36	0/1151	0.63	0/1558
9	AM	0.43	0/1131	0.66	0/1525
9	DM	0.34	0/1131	0.58	0/1525
10	AN	0.46	0/943	0.65	0/1269
10	DN	0.42	0/943	0.63	1/1269 (0.1%)
11	AO	0.44	0/1162	0.81	1/1544 (0.1%)
11	DO	0.32	0/1162	0.57	1/1544 (0.1%)
12	AP	0.45	0/1143	0.63	0/1527
12	DP	0.33	0/1143	0.54	0/1527
13	A0	0.42	0/982	0.67	0/1312
13	D0	0.40	0/974	0.66	0/1302
14	AQ	0.45	0/892	0.72	0/1187
14	DQ	0.33	0/892	0.60	0/1187
15	AR	0.46	0/1155	0.66	0/1542
15	DR	0.41	0/1155	0.61	0/1542
16	A1	0.47	0/982	0.72	0/1306
16	D1	0.37	0/982	0.57	0/1306

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	A2	0.41	0/790	0.71	1/1057 (0.1%)
17	D2	0.32	0/790	0.60	1/1057 (0.1%)
18	AS	0.46	0/911	0.68	0/1220
18	DS	0.44	0/911	0.62	0/1220
19	AT	0.60	1/739 (0.1%)	0.69	0/993
19	DT	0.48	0/739	0.63	0/993
20	AU	0.50	0/798	0.69	0/1064
20	DU	0.42	0/798	0.65	0/1064
21	AV	0.37	0/1427	0.62	1/1935 (0.1%)
21	DV	0.29	0/1460	0.53	0/1982
22	A3	0.49	0/615	0.72	0/819
22	D3	0.41	0/621	0.66	0/827
23	AZ	0.46	0/770	0.70	0/1022
23	DZ	0.44	0/770	0.69	0/1022
24	AW	0.52	0/560	0.75	1/741 (0.1%)
24	DW	0.40	0/560	0.59	0/741
25	AX	0.41	0/474	0.57	0/635
25	DX	0.33	0/474	0.55	0/635
26	A4	0.39	0/545	0.61	1/733 (0.1%)
26	D4	0.34	0/527	0.62	0/709
27	A5	0.44	0/473	0.65	0/639
27	D5	0.41	0/473	0.65	0/639
28	A6	0.48	0/396	0.64	0/529
28	D6	0.45	0/396	0.67	0/529
29	A7	0.57	0/399	0.76	0/526
29	D7	0.50	0/399	0.69	0/526
30	A8	0.55	0/486	0.81	0/638
30	D8	0.42	0/486	0.65	1/638 (0.2%)
31	BA	0.54	0/36139	1.02	97/56406 (0.2%)
31	CA	0.50	0/36142	0.96	59/56410 (0.1%)
32	BE	0.30	0/1959	0.53	0/2642
32	CE	0.28	0/1959	0.52	0/2642
33	BF	0.34	0/1629	0.53	0/2195
33	CF	0.29	0/1636	0.51	0/2205
34	BG	0.44	2/1733 (0.1%)	0.60	1/2318 (0.0%)
34	CG	0.38	0/1733	0.59	1/2318 (0.0%)
35	BH	0.39	0/1171	0.60	0/1576
35	CH	0.36	0/1171	0.58	0/1576
36	BI	0.37	0/856	0.56	0/1154
36	CI	0.36	0/856	0.56	0/1154
37	BJ	0.33	0/1276	0.52	0/1709
37	CJ	0.30	0/1276	0.50	0/1709
38	BK	0.35	0/1136	0.60	0/1527

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
38	CK	0.30	0/1136	0.54	0/1527
39	BL	0.29	0/1029	0.52	0/1379
39	CL	0.30	0/1029	0.53	0/1379
40	BM	0.32	0/814	0.57	0/1095
40	CM	0.30	0/814	0.55	0/1095
41	BN	0.35	0/900	0.58	0/1213
41	CN	0.35	0/900	0.56	0/1213
42	BO	0.46	0/991	0.71	0/1327
42	CO	0.38	0/991	0.65	0/1327
43	BP	0.35	0/938	0.59	0/1258
43	CP	0.28	0/943	0.52	0/1265
44	BQ	0.44	1/485 (0.2%)	0.67	1/643 (0.2%)
44	CQ	0.31	0/485	0.55	0/643
45	BR	0.38	0/745	0.61	0/992
45	CR	0.36	0/745	0.56	1/992 (0.1%)
46	BS	0.31	0/721	0.56	0/970
46	CS	0.34	0/721	0.58	0/970
47	BT	0.38	0/847	0.57	0/1131
47	CT	0.35	0/847	0.53	0/1131
48	BU	0.36	0/596	0.63	0/790
48	CU	0.36	0/596	0.57	0/790
49	BV	0.32	0/638	0.56	0/860
49	CV	0.31	0/638	0.56	0/860
50	BW	0.30	0/765	0.57	0/1007
50	CW	0.33	0/765	0.58	0/1007
51	BX	0.32	0/221	0.52	0/288
51	CX	0.33	0/221	0.53	0/288
52	BB	0.76	0/1992	0.98	2/3099 (0.1%)
52	BD	0.65	0/1992	0.90	3/3099 (0.1%)
52	CB	0.85	0/1992	0.94	6/3099 (0.2%)
52	CD	0.67	0/1992	0.88	6/3099 (0.2%)
53	BC	0.50	0/1835	0.94	6/2859 (0.2%)
53	CC	0.46	0/1835	0.91	1/2859 (0.0%)
54	B1	0.72	0/390	0.91	1/606 (0.2%)
54	C1	0.71	0/390	0.89	0/606
All	All	0.58	31/324159 (0.0%)	0.99	1062/485455 (0.2%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
3	AD	0	3
3	DD	0	1
4	AE	0	1
5	AF	0	1
5	DF	0	1
7	AH	0	1
8	AK	0	1
8	DK	0	1
11	AO	0	1
11	DO	0	1
24	AW	0	1
30	A8	0	1
30	D8	0	1
42	BO	0	1
All	All	0	16

All (31) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	774	A	N9-C4	-9.44	1.32	1.37
1	DA	1342	A	N7-C5	-8.92	1.33	1.39
1	DA	783	A	N9-C4	-8.89	1.32	1.37
1	DA	2873	A	N7-C5	-8.61	1.34	1.39
34	BG	12	CYS	CB-SG	7.57	1.95	1.82
1	AA	1899	G	N9-C4	-7.03	1.32	1.38
1	AA	1142(A)	A	N9-C4	-7.00	1.33	1.37
1	AA	1021	A	N9-C4	-6.92	1.33	1.37
1	AA	2287	A	N9-C4	-6.83	1.33	1.37
1	DA	1899	G	N9-C4	-6.80	1.32	1.38
1	AA	783	A	N9-C4	-6.75	1.33	1.37
19	AT	3	THR	CA-CB	6.40	1.70	1.53
1	AA	783	A	C5-C6	-6.15	1.35	1.41
44	BQ	24	CYS	CB-SG	6.01	1.92	1.82
1	AA	676	A	N3-C4	-5.99	1.31	1.34
1	AA	1332	G	N9-C4	-5.93	1.33	1.38
1	DA	676	A	N9-C4	-5.91	1.34	1.37
1	DA	1142(A)	A	N9-C4	-5.77	1.34	1.37
1	AA	2401	U	N1-C2	5.72	1.43	1.38
1	AA	2346	A	N9-C4	-5.66	1.34	1.37
1	AA	807	U	C2-N3	5.61	1.41	1.37
1	AA	676	A	N9-C4	-5.40	1.34	1.37
1	DA	528	A	N3-C4	-5.39	1.31	1.34
34	BG	26	CYS	CB-SG	5.38	1.91	1.82

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1332	G	N3-C4	-5.32	1.31	1.35
1	AA	2451	A	N9-C4	-5.23	1.34	1.37
1	AA	673	C	C2-N3	5.22	1.40	1.35
1	AA	140	A	N7-C5	-5.10	1.36	1.39
1	AA	528	A	N9-C4	-5.09	1.34	1.37
1	DA	2720	U	C2-N3	5.09	1.41	1.37
1	DA	528	A	N9-C4	-5.03	1.34	1.37

All (1062) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	DA	1899	G	N3-C4-N9	-16.88	115.87	126.00
1	AA	1899	G	N3-C4-N9	-14.54	117.28	126.00
1	AA	774	A	C2-N3-C4	-14.31	103.44	110.60
2	AB	81	G	C6-C5-N7	-14.19	121.89	130.40
1	AA	783	A	C5-N7-C8	-13.92	96.94	103.90
1	AA	1899	G	N3-C4-C5	13.62	135.41	128.60
2	AB	81	G	C5-C6-O6	-13.43	120.54	128.60
1	DA	1899	G	C8-N9-C1'	13.03	143.94	127.00
1	DA	1899	G	N3-C4-C5	12.99	135.09	128.60
2	AB	81	G	C4-C5-N7	12.70	115.88	110.80
31	BA	690	G	C6-C5-N7	-12.68	122.79	130.40
31	BA	690	G	C4-N9-C1'	12.61	142.90	126.50
1	DA	1899	G	C4-N9-C1'	-12.57	110.16	126.50
1	DA	783	A	C5-N7-C8	-12.43	97.68	103.90
1	AA	1899	G	C2-N3-C4	-12.37	105.72	111.90
1	AA	676	A	C8-N9-C4	-12.30	100.88	105.80
1	DA	933	A	C6-C5-N7	-12.29	123.70	132.30
1	AA	676	A	N7-C8-N9	12.25	119.92	113.80
2	AB	81	G	C4-N9-C1'	12.07	142.20	126.50
31	BA	1495	U	N1-C2-O2	11.90	131.13	122.80
1	AA	676	A	C5-N7-C8	-11.79	98.00	103.90
1	AA	1332	G	C2-N3-C4	-11.60	106.10	111.90
31	BA	690	G	C8-N9-C1'	-11.47	112.09	127.00
1	DA	933	A	C4-N9-C1'	11.33	146.69	126.30
2	AB	81	G	N3-C4-N9	11.09	132.65	126.00
2	AB	81	G	C8-N9-C1'	-10.97	112.74	127.00
31	CA	898	G	C8-N9-C4	10.94	110.77	106.40
1	AA	783	A	C4-C5-N7	10.91	116.16	110.70
1	DA	2598	A	N1-C6-N6	10.86	125.11	118.60
1	AA	2401	U	N1-C2-O2	10.83	130.38	122.80
1	DA	933	A	C8-N9-C1'	-10.73	108.39	127.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	DA	1602	U	C2-N3-C4	-10.61	120.63	127.00
1	AA	1678	G	C6-C5-N7	-10.55	124.07	130.40
1	DA	1342	A	N1-C6-N6	10.55	124.93	118.60
2	AB	81	G	N1-C6-O6	10.52	126.21	119.90
1	AA	774	A	N3-C4-C5	10.49	134.15	126.80
1	DA	2720	U	C2-N3-C4	-10.47	120.72	127.00
1	AA	140	A	N7-C8-N9	10.44	119.02	113.80
1	AA	201	C	C6-N1-C2	10.42	124.47	120.30
1	AA	2447	G	C6-N1-C2	-10.40	118.86	125.10
31	CA	1529	G	C4-N9-C1'	10.23	139.79	126.50
1	AA	2401	U	N3-C2-O2	-10.19	115.07	122.20
1	AA	906	G	C5-C6-O6	10.02	134.61	128.60
1	AA	1332	G	N3-C4-C5	10.02	133.61	128.60
1	DA	1950	G	C4-N9-C1'	9.95	139.44	126.50
31	CA	1529	G	N3-C4-C5	-9.94	123.63	128.60
1	AA	2544	G	N1-C6-O6	9.84	125.81	119.90
1	AA	140	A	C8-N9-C4	-9.84	101.86	105.80
1	AA	201	C	C2-N3-C4	-9.81	114.99	119.90
1	AA	1678	G	C4-C5-N7	9.76	114.70	110.80
1	AA	633	A	N1-C6-N6	9.72	124.43	118.60
31	CA	1529	G	C8-N9-C4	-9.71	102.52	106.40
1	AA	1332	G	N3-C4-N9	-9.68	120.19	126.00
31	CA	1495	U	N1-C2-O2	9.68	129.58	122.80
1	AA	807	U	C2-N3-C4	-9.64	121.22	127.00
1	DA	933	A	C4-C5-C6	9.61	121.81	117.00
1	AA	2448	A	N1-C6-N6	9.60	124.36	118.60
52	BD	55	U	C2-N1-C1'	9.59	129.21	117.70
1	AA	774	A	N3-C4-N9	-9.56	119.75	127.40
1	AA	807	U	C5-C4-O4	-9.55	120.17	125.90
1	DA	783	A	C4-C5-N7	9.50	115.45	110.70
1	AA	783	A	N7-C8-N9	9.49	118.55	113.80
1	DA	2873	A	N1-C6-N6	9.46	124.28	118.60
1	DA	2451	A	C8-N9-C4	-9.39	102.04	105.80
1	AA	1021	A	C5-N7-C8	-9.37	99.22	103.90
1	DA	2451	A	C5-N7-C8	-9.37	99.22	103.90
1	DA	774	A	C2-N3-C4	-9.34	105.93	110.60
31	BA	1495	U	N3-C2-O2	-9.32	115.68	122.20
1	AA	676	A	C2-N3-C4	-9.28	105.96	110.60
1	DA	807	U	C2-N3-C4	-9.27	121.44	127.00
31	BA	1054	C	C2-N1-C1'	9.18	128.89	118.80
31	BA	1465	C	C2-N3-C4	-9.16	115.32	119.90
1	DA	676	A	C2-N3-C4	-9.15	106.02	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	DA	2378	A	N1-C6-N6	9.15	124.09	118.60
1	AA	673	C	C2-N3-C4	-9.11	115.34	119.90
1	AA	1786	A	N7-C8-N9	9.10	118.35	113.80
1	AA	1825	A	N1-C6-N6	-9.10	113.14	118.60
1	DA	1899	G	N9-C4-C5	9.08	109.03	105.40
1	DA	676	A	C5-N7-C8	-9.05	99.38	103.90
1	AA	2401	U	C2-N1-C1'	8.99	128.49	117.70
1	AA	783	A	C2-N3-C4	-8.97	106.11	110.60
2	AB	95	U	C5-C4-O4	8.97	131.28	125.90
1	AA	783	A	N1-C6-N6	8.93	123.96	118.60
1	DA	1332	G	C6-C5-N7	-8.91	125.05	130.40
1	AA	1312	U	C5-C4-O4	8.82	131.19	125.90
2	AB	81	G	N9-C4-C5	-8.80	101.88	105.40
1	AA	246	C	C6-N1-C2	8.78	123.81	120.30
1	DA	1312	U	C5-C4-O4	8.77	131.16	125.90
1	DA	2451	A	N7-C8-N9	8.76	118.18	113.80
1	AA	1786	A	C2-N3-C4	-8.73	106.24	110.60
1	AA	807	U	N1-C2-O2	-8.72	116.69	122.80
1	AA	1678	G	C5-N7-C8	-8.68	99.96	104.30
31	CA	898	G	N3-C4-C5	8.67	132.93	128.60
31	CA	898	G	C2-N3-C4	-8.66	107.57	111.90
1	AA	1992	G	C8-N9-C4	-8.61	102.96	106.40
1	DA	906	G	C5-C6-O6	8.57	133.74	128.60
1	AA	1786	A	C5-N7-C8	-8.56	99.62	103.90
1	DA	933	A	N3-C4-N9	8.56	134.24	127.40
1	AA	673	C	C5-C4-N4	-8.54	114.22	120.20
1	DA	630	G	C2-N3-C4	-8.55	107.63	111.90
1	DA	933	A	N9-C4-C5	-8.54	102.39	105.80
1	AA	2287	A	C2-N3-C4	-8.53	106.33	110.60
2	AB	81	G	C5-N7-C8	-8.52	100.04	104.30
1	DA	673	C	C2-N3-C4	-8.48	115.66	119.90
1	AA	247	G	C8-N9-C4	8.48	109.79	106.40
1	DA	1899	G	C2-N3-C4	-8.48	107.66	111.90
31	CA	1025	U	C5-C4-O4	-8.46	120.82	125.90
1	DA	1342	A	C6-C5-N7	-8.46	126.38	132.30
1	AA	2712	U	N3-C4-O4	-8.45	113.48	119.40
2	DB	95	U	C5-C4-O4	8.45	130.97	125.90
1	AA	1437	C	C6-N1-C2	-8.38	116.95	120.30
1	DA	1950	G	C8-N9-C1'	-8.37	116.12	127.00
1	AA	917	A	N1-C6-N6	8.34	123.60	118.60
1	AA	140	A	C6-C5-N7	-8.34	126.47	132.30
1	DA	1332	G	C2-N3-C4	-8.32	107.74	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	81	G	N7-C8-N9	8.31	117.26	113.10
31	BA	1436	U	C2-N3-C4	-8.29	122.02	127.00
1	AA	783	A	C6-C5-N7	-8.27	126.51	132.30
1	DA	786	C	C6-N1-C2	8.24	123.59	120.30
1	DA	633	A	N1-C6-N6	8.23	123.54	118.60
1	DA	1602	U	N1-C2-O2	-8.20	117.06	122.80
1	AA	530	G	N3-C4-N9	-8.18	121.09	126.00
1	AA	1962	C	N1-C2-O2	8.15	123.79	118.90
1	AA	201	C	N3-C4-C5	8.15	125.16	121.90
1	DA	906	G	N1-C6-O6	-8.15	115.01	119.90
1	AA	621	A	C2-N3-C4	-8.13	106.54	110.60
1	AA	120	U	C5-C4-O4	8.11	130.77	125.90
1	AA	140	A	C5-N7-C8	-8.11	99.85	103.90
1	AA	2447	G	C5-C6-N1	8.11	115.55	111.50
1	AA	141	A	C5-N7-C8	-8.10	99.85	103.90
1	AA	2447	G	N3-C4-C5	-8.10	124.55	128.60
1	AA	201	C	C5-C6-N1	-8.09	116.95	121.00
1	AA	664	C	C6-N1-C2	8.09	123.53	120.30
1	AA	1141	U	N1-C2-O2	-8.07	117.15	122.80
31	BA	690	G	C4-C5-N7	8.07	114.03	110.80
1	DA	1342	A	C4-C5-C6	8.06	121.03	117.00
1	AA	2712	U	C5-C4-O4	8.03	130.72	125.90
1	AA	2346	A	C2-N3-C4	-8.01	106.60	110.60
1	AA	1142(A)	A	C5-N7-C8	-8.00	99.90	103.90
1	AA	2595	G	N1-C6-O6	7.98	124.69	119.90
1	DA	1602	U	N1-C2-N3	7.97	119.68	114.90
1	DA	74	A	C2-N3-C4	-7.96	106.62	110.60
1	AA	1786	A	C6-C5-N7	-7.95	126.73	132.30
2	AB	59	A	C6-N1-C2	-7.94	113.84	118.60
31	BA	1053	G	C4-N9-C1'	-7.93	116.19	126.50
1	DA	2447	G	C6-N1-C2	-7.93	120.34	125.10
1	AA	1614	A	N1-C6-N6	7.91	123.35	118.60
1	DA	2598	A	N9-C4-C5	-7.89	102.64	105.80
1	DA	1992	G	C8-N9-C4	-7.83	103.27	106.40
1	AA	1962	C	N3-C2-O2	-7.82	116.43	121.90
1	DA	140	A	N7-C8-N9	7.79	117.69	113.80
1	AA	71	A	C5-N7-C8	-7.76	100.02	103.90
1	DA	1678	G	C6-C5-N7	-7.76	125.75	130.40
1	AA	2595	G	C5-C6-O6	-7.75	123.95	128.60
1	AA	1786	A	C8-N9-C4	-7.75	102.70	105.80
1	AA	2490	G	N3-C4-C5	7.74	132.47	128.60
31	BA	690	G	N3-C4-N9	7.74	130.65	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	CA	898	G	N9-C4-C5	-7.72	102.31	105.40
1	DA	250	G	N3-C2-N2	7.71	125.30	119.90
1	AA	1332	G	C5-N7-C8	-7.71	100.45	104.30
1	DA	1340	U	C2-N3-C4	-7.69	122.39	127.00
1	DA	2873	A	C6-C5-N7	-7.65	126.95	132.30
1	DA	1332	G	C4-C5-N7	7.64	113.86	110.80
1	AA	250	G	N3-C2-N2	7.64	125.25	119.90
1	DA	783	A	C2-N3-C4	-7.64	106.78	110.60
1	AA	1141	U	C2-N3-C4	-7.63	122.42	127.00
52	BD	55	U	C6-N1-C1'	-7.63	110.52	121.20
1	AA	2330	G	C8-N9-C4	7.62	109.45	106.40
1	DA	780	G	C5-C6-O6	-7.59	124.05	128.60
1	DA	933	A	C4-C5-N7	7.59	114.49	110.70
1	DA	2275	C	C6-N1-C2	-7.57	117.27	120.30
31	BA	1406	U	C2-N3-C4	-7.57	122.46	127.00
1	DA	906	G	N9-C4-C5	7.57	108.43	105.40
31	BA	1495	U	C2-N1-C1'	7.55	126.76	117.70
1	DA	1496	A	C8-N9-C4	-7.53	102.79	105.80
1	AA	1616	A	N1-C6-N6	7.53	123.12	118.60
1	AA	2689	U	C5-C4-O4	7.52	130.41	125.90
1	DA	1786	A	N1-C6-N6	7.51	123.11	118.60
1	AA	140	A	N1-C6-N6	7.50	123.10	118.60
1	DA	271(A)	C	C2-N1-C1'	7.50	127.05	118.80
31	BA	1465	C	N3-C4-C5	7.50	124.90	121.90
1	DA	779	U	C5-C6-N1	-7.49	118.95	122.70
1	AA	1570	A	C8-N9-C4	7.49	108.79	105.80
1	DA	676	A	N7-C8-N9	7.48	117.54	113.80
53	BC	1	C	C2-N1-C1'	7.48	127.03	118.80
1	AA	2595	G	C2-N3-C4	-7.47	108.16	111.90
1	AA	2595	G	N9-C4-C5	-7.46	102.42	105.40
31	BA	892	A	N1-C6-N6	7.46	123.08	118.60
1	AA	587	C	C6-N1-C2	-7.46	117.32	120.30
1	AA	2598	A	N1-C6-N6	7.44	123.07	118.60
1	AA	1616	A	C5-N7-C8	-7.44	100.18	103.90
1	AA	1340	U	C2-N3-C4	-7.42	122.55	127.00
1	DA	140	A	C8-N9-C4	-7.40	102.84	105.80
1	DA	383	U	N1-C2-O2	7.40	127.98	122.80
1	DA	933	A	N7-C8-N9	7.40	117.50	113.80
1	DA	2447	G	C4-C5-C6	7.40	123.24	118.80
1	AA	2451	A	C5-N7-C8	-7.38	100.21	103.90
1	AA	127	A	N1-C6-N6	7.35	123.01	118.60
1	DA	1899	G	C6-C5-N7	7.34	134.80	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	BA	690	G	C4-C5-C6	7.30	123.18	118.80
1	AA	1678	G	C2-N3-C4	-7.29	108.25	111.90
1	AA	2287	A	C5-N7-C8	-7.29	100.25	103.90
1	DA	1332	G	C5-N7-C8	-7.29	100.66	104.30
1	AA	2031	A	C5-C6-N6	-7.29	117.87	123.70
1	DA	933	A	N1-C2-N3	7.28	132.94	129.30
1	DA	1950	G	C6-C5-N7	-7.28	126.03	130.40
1	DA	1332	G	N1-C6-O6	7.28	124.27	119.90
1	AA	906	G	N1-C6-O6	-7.27	115.54	119.90
1	DA	933	A	N1-C6-N6	7.27	122.96	118.60
1	AA	783	A	C8-N9-C4	-7.27	102.89	105.80
31	BA	1036	G	N1-C6-O6	-7.27	115.54	119.90
1	DA	630	G	C8-N9-C4	7.26	109.31	106.40
1	DA	1899	G	N3-C2-N2	-7.26	114.82	119.90
1	AA	752	A	C8-N9-C4	-7.25	102.90	105.80
1	AA	535	C	C6-N1-C2	7.24	123.20	120.30
1	AA	2689	U	N3-C4-O4	-7.24	114.33	119.40
1	DA	1950	G	N7-C8-N9	7.24	116.72	113.10
1	DA	201	C	C2-N3-C4	-7.23	116.28	119.90
1	AA	2430	A	C2-N3-C4	-7.23	106.98	110.60
1	DA	1950	G	N3-C4-N9	7.22	130.33	126.00
1	DA	1786	A	C6-C5-N7	-7.21	127.25	132.30
1	DA	2595	G	C2-N3-C4	-7.21	108.30	111.90
1	AA	530	G	N3-C4-C5	7.21	132.21	128.60
1	AA	679	C	N1-C2-O2	-7.21	114.58	118.90
1	AA	828	U	N1-C2-O2	7.20	127.84	122.80
1	DA	201	C	C6-N1-C2	7.19	123.18	120.30
31	CA	1529	G	C8-N9-C1'	-7.16	117.69	127.00
1	DA	783	A	N7-C8-N9	7.15	117.38	113.80
1	AA	480	A	C8-N9-C4	-7.13	102.95	105.80
31	BA	1054	C	C5-C6-N1	7.13	124.56	121.00
1	AA	933	A	C6-N1-C2	-7.13	114.32	118.60
1	AA	1786	A	N1-C6-N6	7.11	122.86	118.60
1	AA	1653	G	N3-C4-N9	7.10	130.26	126.00
1	DA	329	G	N1-C6-O6	-7.08	115.65	119.90
1	AA	633	A	C6-C5-N7	-7.08	127.34	132.30
1	DA	1496	A	N7-C8-N9	7.07	117.34	113.80
1	DA	383	U	N3-C2-O2	-7.07	117.25	122.20
1	AA	103	A	N1-C6-N6	7.06	122.84	118.60
1	AA	774	A	C5-N7-C8	-7.06	100.37	103.90
31	CA	1529	G	N7-C8-N9	7.04	116.62	113.10
1	AA	141	A	C4-C5-N7	7.04	114.22	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	455	C	C6-N1-C2	7.04	123.11	120.30
1	AA	127	A	C2-N3-C4	-7.04	107.08	110.60
1	DA	1142(A)	A	C5-N7-C8	-7.03	100.38	103.90
1	AA	2490	G	N3-C4-N9	-7.03	121.78	126.00
1	AA	2490	G	C5-N7-C8	-7.02	100.79	104.30
31	CA	1036	G	C5-C6-O6	7.02	132.81	128.60
1	AA	456	C	C5-C6-N1	-7.01	117.49	121.00
31	BA	1036	G	C5-C6-O6	7.01	132.81	128.60
1	AA	1496	A	N7-C8-N9	6.99	117.30	113.80
1	AA	1678	G	N7-C8-N9	6.98	116.59	113.10
1	AA	780	G	C5-C6-O6	-6.98	124.41	128.60
1	AA	2392	A	N7-C8-N9	6.96	117.28	113.80
1	DA	2720	U	N1-C2-N3	6.96	119.07	114.90
1	DA	2401	U	C2-N1-C1'	6.95	126.04	117.70
31	BA	690	G	N1-C6-O6	6.92	124.05	119.90
1	AA	992	C	C6-N1-C2	-6.90	117.54	120.30
2	AB	7	G	N1-C6-O6	6.90	124.04	119.90
1	DA	83	G	C2-N3-C4	-6.90	108.45	111.90
1	DA	2375	G	N9-C4-C5	-6.90	102.64	105.40
1	DA	2378	A	N9-C4-C5	-6.90	103.04	105.80
1	AA	736	C	N3-C2-O2	6.90	126.73	121.90
1	AA	1899	G	C5-C6-N1	-6.89	108.06	111.50
1	AA	83	G	C2-N3-C4	-6.89	108.46	111.90
1	AA	1950	G	N7-C8-N9	6.89	116.54	113.10
1	AA	446	G	N1-C6-O6	6.88	124.03	119.90
1	AA	1021	A	C2-N3-C4	-6.88	107.16	110.60
1	DA	774	A	N1-C6-N6	6.88	122.72	118.60
1	DA	2873	A	C4-C5-C6	6.86	120.43	117.00
2	DB	59	A	C6-N1-C2	-6.86	114.49	118.60
1	DA	1786	A	C5-N7-C8	-6.84	100.48	103.90
31	CA	383	A	N1-C6-N6	6.83	122.70	118.60
1	AA	193	U	N1-C2-O2	-6.83	118.02	122.80
1	DA	103	A	N1-C6-N6	6.82	122.69	118.60
1	AA	906	G	N9-C4-C5	6.82	108.13	105.40
1	AA	461	C	N1-C2-O2	-6.81	114.81	118.90
1	AA	1564	C	C6-N1-C2	-6.81	117.58	120.30
31	CA	1465	C	C2-N3-C4	-6.81	116.50	119.90
1	AA	201	C	C5-C4-N4	-6.81	115.44	120.20
1	AA	676	A	C6-C5-N7	-6.81	127.54	132.30
1	DA	1786	A	N7-C8-N9	6.80	117.20	113.80
1	DA	906	G	C4-C5-N7	-6.79	108.08	110.80
1	DA	2447	G	N3-C4-C5	-6.78	125.21	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	CA	1177	G	C5-C6-O6	6.77	132.66	128.60
1	AA	673	C	N3-C4-C5	6.77	124.61	121.90
1	DA	530	G	C8-N9-C4	6.77	109.11	106.40
1	AA	633	A	C4-C5-C6	6.76	120.38	117.00
1	AA	449	A	C8-N9-C4	-6.75	103.10	105.80
11	DO	147	LEU	CA-CB-CG	6.75	130.82	115.30
1	AA	446	G	N9-C4-C5	-6.75	102.70	105.40
31	BA	756	C	C6-N1-C2	6.74	123.00	120.30
1	AA	2392	A	C8-N9-C4	-6.73	103.11	105.80
31	BA	1195	C	C6-N1-C2	-6.73	117.61	120.30
1	AA	737	C	C6-N1-C2	6.73	122.99	120.30
1	AA	1306	C	C6-N1-C2	6.71	122.98	120.30
1	DA	201	C	C5-C6-N1	-6.71	117.65	121.00
1	DA	2447	G	N1-C6-O6	6.69	123.92	119.90
2	AB	47	C	C6-N1-C2	6.66	122.96	120.30
52	CB	48	C	C6-N1-C2	-6.66	117.64	120.30
1	AA	1496	A	C8-N9-C4	-6.65	103.14	105.80
31	BA	690	G	N7-C8-N9	6.65	116.42	113.10
1	AA	1648	C	C6-N1-C2	6.64	122.96	120.30
1	AA	1142(A)	A	C2-N3-C4	-6.64	107.28	110.60
1	AA	1786	A	N1-C2-N3	6.63	132.61	129.30
1	AA	71	A	N1-C6-N6	6.62	122.57	118.60
31	BA	1053	G	C8-N9-C1'	6.61	135.60	127.00
1	AA	793	A	N1-C2-N3	6.61	132.60	129.30
1	AA	917	A	N9-C4-C5	-6.61	103.16	105.80
1	DA	783	A	N1-C6-N6	6.60	122.56	118.60
1	AA	1653	G	N3-C4-C5	-6.60	125.30	128.60
1	DA	633	A	C4-C5-C6	6.60	120.30	117.00
1	AA	1141	U	N1-C2-N3	6.59	118.86	114.90
1	AA	142	G	C4-N9-C1'	-6.59	117.94	126.50
31	BA	1465	C	C5-C4-N4	-6.59	115.59	120.20
31	BA	1417	G	N1-C6-O6	6.59	123.85	119.90
1	AA	676	A	C5-C6-N1	-6.58	114.41	117.70
1	AA	1142(A)	A	N3-C4-N9	-6.57	122.14	127.40
1	DA	2598	A	C6-C5-N7	-6.57	127.70	132.30
1	AA	1653	G	C4-N9-C1'	6.57	135.03	126.50
1	AA	2518	A	N1-C6-N6	6.56	122.53	118.60
1	AA	76	C	C6-N1-C2	6.55	122.92	120.30
1	AA	2211	G	C6-C5-N7	-6.55	126.47	130.40
1	DA	528	A	N1-C2-N3	6.55	132.58	129.30
52	BB	55	U	N1-C2-O2	6.55	127.39	122.80
1	AA	83	G	N9-C4-C5	-6.55	102.78	105.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	DA	790	C	C2-N1-C1'	6.54	126.00	118.80
1	DA	676	A	N3-C4-N9	-6.54	122.17	127.40
1	AA	2518	A	C5-N7-C8	-6.54	100.63	103.90
1	DA	676	A	N3-C4-C5	6.54	131.38	126.80
1	DA	1379	A	N1-C6-N6	6.53	122.52	118.60
1	AA	1616	A	C4-C5-N7	6.53	113.97	110.70
1	DA	1786	A	C2-N3-C4	-6.53	107.34	110.60
1	AA	1021	A	C4-C5-N7	6.52	113.96	110.70
31	CA	266	G	C4-N9-C1'	6.51	134.97	126.50
1	AA	1559	G	N1-C6-O6	6.48	123.79	119.90
1	DA	2447	G	C5-C6-O6	-6.48	124.71	128.60
2	AB	7	G	C4-C5-N7	6.46	113.39	110.80
1	DA	140	A	C5-N7-C8	-6.46	100.67	103.90
1	DA	2062	A	N1-C6-N6	6.45	122.47	118.60
1	AA	1204	A	N7-C8-N9	6.45	117.02	113.80
1	AA	141	A	N1-C6-N6	6.44	122.47	118.60
31	BA	1054	C	N1-C2-O2	6.44	122.76	118.90
1	AA	1983	C	C6-N1-C2	6.42	122.87	120.30
1	AA	659	C	C6-N1-C2	6.42	122.87	120.30
31	BA	31	G	N1-C6-O6	6.42	123.75	119.90
1	DA	2720	U	C5-C4-O4	-6.42	122.05	125.90
31	BA	1378	C	C6-N1-C2	-6.42	117.73	120.30
1	AA	1633	G	N1-C6-O6	6.41	123.74	119.90
1	DA	1340	U	C5-C4-O4	-6.40	122.06	125.90
1	AA	676	A	C4-C5-N7	6.39	113.90	110.70
1	AA	1332	G	C5-C6-N1	-6.39	108.31	111.50
1	DA	1616	A	N7-C8-N9	6.39	116.99	113.80
44	BQ	24	CYS	CA-CB-SG	6.38	125.48	114.00
1	DA	1271	G	C5-C6-N1	-6.37	108.32	111.50
1	AA	587	C	C2-N1-C1'	6.36	125.79	118.80
31	BA	1406	U	N1-C2-N3	6.36	118.71	114.90
1	DA	141	A	C5-N7-C8	-6.36	100.72	103.90
1	AA	621	A	N1-C6-N6	6.34	122.41	118.60
1	AA	1950	G	C4-N9-C1'	6.34	134.74	126.50
1	AA	2490	G	C4-C5-N7	6.34	113.34	110.80
31	BA	1126	U	N3-C2-O2	-6.33	117.77	122.20
1	AA	1204	A	C6-C5-N7	-6.33	127.87	132.30
1	DA	783	A	N3-C4-C5	6.33	131.23	126.80
1	AA	209	C	C5-C6-N1	-6.32	117.84	121.00
1	DA	807	U	N1-C2-N3	6.32	118.69	114.90
1	AA	246	C	C2-N1-C1'	-6.31	111.86	118.80
1	AA	2448	A	C6-C5-N7	-6.31	127.88	132.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	81	G	N3-C4-C5	-6.30	125.45	128.60
31	BA	1054	C	C6-N1-C2	-6.30	117.78	120.30
31	BA	1192	C	C6-N1-C2	-6.30	117.78	120.30
1	AA	141	A	N7-C8-N9	6.30	116.95	113.80
1	AA	1698	A	C2-N3-C4	-6.30	107.45	110.60
1	DA	1992	G	N3-C4-C5	-6.29	125.45	128.60
1	AA	647	G	C4-N9-C1'	6.29	134.67	126.50
1	DA	2681	C	C5-C4-N4	6.29	124.60	120.20
52	CD	49	A	C3'-C2'-C1'	-6.28	96.47	101.50
31	BA	1025	U	C5-C4-O4	-6.28	122.13	125.90
31	BA	73	G	C4-N9-C1'	6.27	134.66	126.50
1	DA	1362	C	C6-N1-C2	6.27	122.81	120.30
1	AA	2031	A	N1-C6-N6	6.27	122.36	118.60
1	AA	2712	U	C5-C6-N1	-6.27	119.57	122.70
1	DA	2776	A	C8-N9-C4	-6.26	103.29	105.80
2	AB	89(A)	A	N1-C6-N6	6.26	122.36	118.60
1	AA	2381	C	C5-C6-N1	-6.26	117.87	121.00
1	AA	630	G	C2-N3-C4	-6.25	108.77	111.90
1	DA	194	G	C8-N9-C4	6.25	108.90	106.40
1	AA	1752	C	N1-C2-O2	-6.24	115.16	118.90
1	AA	2448	A	C5-C6-N6	-6.24	118.71	123.70
52	BB	49	A	C3'-C2'-C1'	-6.24	96.51	101.50
31	CA	1436	U	C2-N3-C4	-6.23	123.26	127.00
31	BA	1054	C	C6-N1-C1'	-6.23	113.33	120.80
1	AA	1797	C	N1-C2-O2	-6.23	115.16	118.90
1	AA	1130	U	N3-C2-O2	-6.22	117.84	122.20
1	AA	2544	G	C5-C6-N1	-6.22	108.39	111.50
1	AA	2375	G	N1-C6-O6	6.22	123.63	119.90
1	DA	83	G	N9-C4-C5	-6.21	102.92	105.40
1	DA	630	G	N9-C4-C5	-6.21	102.92	105.40
1	DA	933	A	C5-N7-C8	-6.21	100.80	103.90
1	DA	2763	G	N3-C4-C5	-6.20	125.50	128.60
1	AA	784	A	N1-C6-N6	-6.19	114.89	118.60
1	AA	1781	C	C5-C6-N1	-6.19	117.91	121.00
34	BG	12	CYS	CA-CB-SG	6.19	125.13	114.00
31	CA	1322	C	N1-C2-O2	6.18	122.61	118.90
1	DA	2401	U	N1-C2-O2	6.18	127.13	122.80
1	AA	893	C	C2-N1-C1'	6.18	125.60	118.80
2	AB	7	G	C6-C5-N7	-6.18	126.69	130.40
1	AA	446	G	C6-C5-N7	-6.18	126.69	130.40
1	AA	2211	G	N1-C6-O6	6.17	123.60	119.90
1	AA	2392	A	C2-N3-C4	-6.17	107.52	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	DA	528	A	C2-N3-C4	-6.16	107.52	110.60
1	AA	906	G	C4-C5-N7	-6.16	108.34	110.80
31	BA	858	G	C4-N9-C1'	6.16	134.50	126.50
31	BA	1036	G	C4-C5-N7	-6.16	108.34	110.80
31	BA	1419	G	N3-C4-C5	6.15	131.68	128.60
1	AA	1825	A	C5-C6-N1	6.15	120.77	117.70
3	AD	28	GLU	N-CA-C	-6.14	94.43	111.00
1	AA	2375	G	N3-C4-C5	6.13	131.67	128.60
1	AA	1349	A	N1-C6-N6	6.13	122.28	118.60
1	DA	985	C	N1-C2-O2	6.13	122.58	118.90
1	AA	2392	A	C5-N7-C8	-6.13	100.84	103.90
1	AA	1614	A	C5-N7-C8	-6.12	100.84	103.90
52	CD	55	U	C2-N1-C1'	6.11	125.03	117.70
1	AA	188	G	C8-N9-C4	6.11	108.84	106.40
1	AA	1614	A	C6-C5-N7	-6.11	128.03	132.30
1	AA	1653	G	C8-N9-C1'	-6.11	119.06	127.00
1	AA	2344	U	C2-N3-C4	-6.11	123.33	127.00
1	AA	1992	G	N7-C8-N9	6.11	116.15	113.10
1	DA	1241	A	C2-N3-C4	-6.11	107.55	110.60
1	AA	2447	G	N3-C4-N9	6.10	129.66	126.00
1	AA	621	A	C5-C6-N1	-6.10	114.65	117.70
31	BA	1519	A	C8-N9-C4	-6.10	103.36	105.80
1	DA	2873	A	C5-C6-N1	-6.09	114.65	117.70
1	DA	1950	G	N3-C2-N2	6.09	124.16	119.90
53	BC	1	C	N1-C2-O2	6.09	122.55	118.90
1	AA	859	G	N1-C6-O6	6.08	123.55	119.90
1	AA	1950	G	C8-N9-C4	-6.08	103.97	106.40
1	AA	1782	C	N1-C2-O2	-6.08	115.25	118.90
1	DA	1314	C	C6-N1-C1'	-6.08	113.51	120.80
31	CA	1177	G	C4-C5-N7	-6.08	108.37	110.80
1	AA	140	A	C4-C5-N7	6.07	113.74	110.70
1	AA	1678	G	N1-C2-N2	-6.06	110.75	116.20
1	AA	630	G	N9-C4-C5	-6.06	102.98	105.40
1	DA	2490	G	C4-C5-N7	6.05	113.22	110.80
31	BA	1417	G	C6-C5-N7	-6.05	126.77	130.40
31	CA	300	A	N1-C6-N6	6.05	122.23	118.60
1	DA	2012	G	N1-C6-O6	6.03	123.52	119.90
1	AA	1427	A	N1-C6-N6	-6.03	114.98	118.60
1	AA	247	G	N7-C8-N9	-6.03	110.08	113.10
1	DA	2032	G	C6-C5-N7	-6.03	126.78	130.40
1	AA	842	G	N3-C4-C5	6.02	131.61	128.60
1	AA	1248	G	N1-C6-O6	6.02	123.51	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1962	C	C2-N1-C1'	6.02	125.42	118.80
1	DA	1026	U	C2-N1-C1'	6.02	124.92	117.70
1	DA	2500	U	C5-C6-N1	-6.02	119.69	122.70
1	DA	2430	A	C2-N3-C4	-6.01	107.59	110.60
1	AA	807	U	N3-C4-O4	6.01	123.61	119.40
1	AA	679	C	N3-C2-O2	6.00	126.10	121.90
31	CA	5	U	C2-N1-C1'	6.00	124.90	117.70
31	CA	328	C	C6-N1-C2	-6.00	117.90	120.30
31	CA	691	G	C2-N3-C4	-5.99	108.90	111.90
1	AA	733	G	C8-N9-C4	-5.99	104.00	106.40
1	AA	815	C	C6-N1-C2	5.99	122.70	120.30
1	AA	793	A	C6-N1-C2	-5.98	115.01	118.60
1	AA	1616	A	C6-C5-N7	-5.98	128.12	132.30
1	AA	2699	C	C6-N1-C2	5.97	122.69	120.30
1	DA	2447	G	N1-C2-N3	5.97	127.48	123.90
1	AA	2598	A	N9-C4-C5	-5.97	103.41	105.80
2	AB	95	U	C6-N1-C1'	5.97	129.56	121.20
1	AA	2401	U	C5-C6-N1	5.97	125.69	122.70
1	DA	1612	C	C6-N1-C2	5.97	122.69	120.30
1	AA	530	G	C8-N9-C1'	5.97	134.76	127.00
1	DA	790	C	C6-N1-C1'	-5.97	113.64	120.80
1	DA	1914	C	C6-N1-C2	-5.95	117.92	120.30
1	DA	1786	A	C4-C5-N7	5.95	113.67	110.70
1	AA	1950	G	C5-N7-C8	-5.95	101.33	104.30
52	CB	52	G	N3-C4-C5	-5.94	125.63	128.60
52	CD	55	U	N1-C2-O2	5.94	126.96	122.80
1	AA	941	A	N1-C6-N6	5.94	122.16	118.60
1	AA	121	G	C4-N9-C1'	5.93	134.21	126.50
1	AA	1614	A	C4-C5-N7	5.93	113.67	110.70
1	AA	2374	C	C6-N1-C2	5.93	122.67	120.30
1	AA	2595	G	C4-C5-N7	5.93	113.17	110.80
31	CA	1036	G	C4-C5-N7	-5.92	108.43	110.80
1	DA	780	G	C2-N3-C4	5.92	114.86	111.90
1	AA	1365	A	C4-C5-C6	5.92	119.96	117.00
1	DA	1841	U	N3-C4-C5	-5.92	111.05	114.60
1	AA	305	U	C6-N1-C2	-5.92	117.45	121.00
1	AA	2451	A	N9-C4-C5	5.92	108.17	105.80
31	BA	1412	C	C6-N1-C2	5.92	122.67	120.30
1	AA	792	G	C8-N9-C4	-5.91	104.03	106.40
1	AA	1787	A	N1-C6-N6	5.91	122.15	118.60
1	AA	2058	A	C8-N9-C4	-5.91	103.44	105.80
1	AA	183	C	C6-N1-C2	-5.90	117.94	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1379	A	C2-N3-C4	-5.90	107.65	110.60
1	AA	2473	U	C2-N1-C1'	5.90	124.78	117.70
1	DA	1950	G	N3-C4-C5	-5.90	125.65	128.60
1	AA	1665	A	N1-C6-N6	5.89	122.14	118.60
31	BA	690	G	N9-C4-C5	-5.89	103.04	105.40
30	D8	41	ILE	N-CA-C	-5.89	95.10	111.00
1	DA	633	A	C6-C5-N7	-5.88	128.18	132.30
52	CB	51	C	C5-C6-N1	5.88	123.94	121.00
1	AA	788	A	N1-C6-N6	5.88	122.13	118.60
1	AA	71	A	C4-C5-N7	5.88	113.64	110.70
1	AA	733	G	N7-C8-N9	5.88	116.04	113.10
1	AA	2378	A	N1-C6-N6	5.88	122.13	118.60
1	AA	2475	C	C2-N1-C1'	5.87	125.26	118.80
31	BA	1036	G	N9-C4-C5	5.87	107.75	105.40
1	AA	1403	C	C6-N1-C2	-5.87	117.95	120.30
31	BA	1483	A	N1-C6-N6	5.87	122.12	118.60
31	CA	1529	G	N3-C4-N9	5.87	129.52	126.00
31	CA	1406	U	C2-N3-C4	-5.86	123.48	127.00
31	CA	1495	U	C2-N1-C1'	5.86	124.73	117.70
1	AA	774	A	C8-N9-C1'	5.86	138.24	127.70
1	AA	803	U	C5-C6-N1	-5.86	119.77	122.70
1	AA	912	C	C6-N1-C2	-5.86	117.96	120.30
1	AA	74	A	C2-N3-C4	-5.86	107.67	110.60
1	AA	2601	C	C6-N1-C2	-5.85	117.96	120.30
1	AA	1123	C	N1-C2-O2	-5.85	115.39	118.90
1	DA	673	C	C5-C4-N4	-5.84	116.11	120.20
1	AA	446	G	C2-N3-C4	-5.84	108.98	111.90
53	CC	35	C	C2-N1-C1'	5.84	125.22	118.80
1	DA	2049	G	N3-C4-C5	5.84	131.52	128.60
31	CA	1036	G	N9-C4-C5	5.84	107.73	105.40
1	AA	673	C	N1-C2-O2	-5.83	115.40	118.90
1	AA	737	C	N3-C2-O2	5.83	125.98	121.90
1	DA	443	A	C8-N9-C4	-5.83	103.47	105.80
2	AB	95	U	C2-N1-C1'	-5.83	110.71	117.70
1	DA	2461	C	C6-N1-C2	-5.83	117.97	120.30
31	CA	1495	U	N3-C2-O2	-5.82	118.12	122.20
1	DA	2012	G	C5-C6-O6	-5.82	125.11	128.60
1	AA	201	C	N1-C2-O2	-5.82	115.41	118.90
1	AA	1811	G	N3-C4-N9	-5.82	122.51	126.00
31	BA	1149	C	C6-N1-C2	-5.82	117.97	120.30
1	DA	906	G	C6-C5-N7	5.81	133.89	130.40
1	DA	1888	G	C8-N9-C4	-5.81	104.08	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	2447	G	N1-C2-N3	5.81	127.39	123.90
1	DA	2587	A	N1-C6-N6	5.81	122.09	118.60
1	AA	1810	A	C4-C5-C6	5.81	119.90	117.00
1	AA	1678	G	N1-C6-O6	5.80	123.38	119.90
1	DA	2500	U	C2-N1-C1'	-5.80	110.73	117.70
1	DA	2598	A	C8-N9-C4	5.80	108.12	105.80
1	DA	1368	G	C8-N9-C4	-5.80	104.08	106.40
31	BA	73	G	C8-N9-C1'	-5.79	119.47	127.00
1	DA	1653	G	N3-C4-N9	5.79	129.48	126.00
1	DA	2490	G	C5-N7-C8	-5.79	101.40	104.30
1	AA	774	A	N1-C6-N6	5.79	122.08	118.60
1	DA	49	A	C8-N9-C4	-5.79	103.48	105.80
1	DA	271(A)	C	C6-N1-C1'	-5.79	113.86	120.80
1	AA	1633	G	C5-C6-O6	-5.78	125.13	128.60
1	AA	465	G	C5-C6-O6	5.77	132.06	128.60
1	DA	530	G	N9-C4-C5	-5.77	103.09	105.40
1	AA	847	U	C5-C4-O4	5.76	129.36	125.90
1	DA	141	A	N7-C8-N9	5.76	116.68	113.80
31	CA	186	C	C6-N1-C2	-5.76	118.00	120.30
31	CA	1036	G	N1-C6-O6	-5.76	116.44	119.90
1	AA	259	G	N1-C6-O6	5.76	123.36	119.90
1	AA	202	U	N1-C2-N3	-5.76	111.45	114.90
17	D2	49	THR	C-N-CD	5.75	140.48	128.40
1	AA	120	U	N3-C4-O4	-5.75	115.38	119.40
1	AA	1786	A	C4-C5-N7	5.75	113.57	110.70
1	AA	138	G	N7-C8-N9	5.75	115.97	113.10
1	AA	674	G	C5-C6-O6	-5.74	125.15	128.60
1	AA	2035	G	N3-C4-C5	5.74	131.47	128.60
1	AA	442	G	C8-N9-C4	-5.74	104.11	106.40
1	DA	2392	A	C5-C6-N1	-5.74	114.83	117.70
1	AA	1779	U	C5-C6-N1	-5.73	119.83	122.70
1	DA	2378	A	C8-N9-C4	5.73	108.09	105.80
1	DA	774	A	N1-C2-N3	5.73	132.16	129.30
1	DA	828	U	C5-C4-O4	5.73	129.34	125.90
1	DA	933	A	C6-N1-C2	-5.73	115.16	118.60
1	AA	2501	C	C2-N1-C1'	-5.73	112.50	118.80
2	AB	81	G	C4-C5-C6	5.73	122.24	118.80
1	DA	1314	C	C2-N1-C1'	5.72	125.09	118.80
1	AA	2277	G	C8-N9-C4	-5.72	104.11	106.40
31	BA	1322	C	C5-C6-N1	5.72	123.86	121.00
1	AA	246	C	C5-C6-N1	-5.71	118.14	121.00
1	DA	1612	C	N1-C2-O2	-5.71	115.47	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	2435	A	N7-C8-N9	5.71	116.65	113.80
1	AA	1021	A	N7-C8-N9	5.71	116.65	113.80
1	AA	2050	C	N1-C2-O2	-5.71	115.48	118.90
1	DA	204	A	C8-N9-C4	-5.71	103.52	105.80
1	AA	2236	C	N3-C4-C5	-5.70	119.62	121.90
1	AA	2451	A	N3-C4-N9	-5.70	122.84	127.40
1	DA	2763	G	C4-N9-C1'	5.70	133.91	126.50
1	DA	1950	G	C4-C5-N7	5.70	113.08	110.80
1	AA	1616	A	N7-C8-N9	5.69	116.65	113.80
1	AA	1314	C	C6-N1-C1'	-5.68	113.98	120.80
1	DA	2724	C	C2-N1-C1'	-5.68	112.55	118.80
1	DA	929	G	N1-C6-O6	5.68	123.31	119.90
1	AA	774	A	C4-N9-C1'	-5.68	116.08	126.30
1	AA	2435	A	C8-N9-C4	-5.68	103.53	105.80
1	AA	2439	A	C6-C5-N7	-5.68	128.32	132.30
1	AA	1204	A	C4-N9-C1'	5.68	136.52	126.30
1	AA	1769	G	N3-C4-C5	-5.68	125.76	128.60
31	BA	1086	U	C5-C6-N1	5.67	125.54	122.70
1	DA	71	A	C5-N7-C8	-5.67	101.06	103.90
1	AA	917	A	C2-N3-C4	-5.67	107.76	110.60
1	DA	676	A	C8-N9-C4	-5.67	103.53	105.80
1	AA	2607	G	C6-C5-N7	-5.67	127.00	130.40
1	DA	1427	A	N1-C6-N6	-5.66	115.20	118.60
1	DA	1332	G	N7-C8-N9	5.66	115.93	113.10
1	DA	1678	G	C4-C5-N7	5.65	113.06	110.80
1	DA	2032	G	C4-C5-N7	5.65	113.06	110.80
2	AB	47	C	N3-C2-O2	5.65	125.85	121.90
17	A2	40	LEU	CA-CB-CG	5.64	128.28	115.30
1	AA	2506	U	N3-C2-O2	-5.64	118.25	122.20
1	DA	754	C	C6-N1-C2	-5.64	118.04	120.30
1	DA	1653	G	C4-N9-C1'	5.64	133.83	126.50
31	CA	912	C	C6-N1-C2	5.64	122.56	120.30
31	BA	1053	G	C6-C5-N7	5.64	133.78	130.40
1	DA	271(A)	C	N1-C2-O2	5.64	122.28	118.90
1	AA	2490	G	C2-N3-C4	-5.63	109.08	111.90
1	AA	2577	A	C8-N9-C4	-5.63	103.55	105.80
1	AA	2506	U	C6-N1-C2	-5.63	117.62	121.00
1	AA	2329	G	C8-N9-C4	5.63	108.65	106.40
1	AA	1698	A	C5-N7-C8	-5.63	101.08	103.90
11	AO	59	LEU	N-CA-C	-5.63	95.80	111.00
1	AA	1633	G	N3-C4-N9	5.63	129.38	126.00
1	DA	774	A	C5-N7-C8	-5.62	101.09	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	DA	2681	C	N3-C4-N4	-5.62	114.06	118.00
31	BA	299	G	C5-C6-O6	5.62	131.97	128.60
1	AA	2401	U	C6-N1-C2	-5.62	117.63	121.00
31	CA	724	G	C5-C6-O6	-5.62	125.23	128.60
1	DA	1011	G	C4-N9-C1'	-5.62	119.20	126.50
1	DA	1992	G	N1-C6-O6	-5.61	116.53	119.90
1	AA	1678	G	C4-N9-C1'	5.61	133.79	126.50
31	CA	1177	G	N1-C6-O6	-5.61	116.54	119.90
1	DA	1653	G	N3-C4-C5	-5.61	125.80	128.60
31	BA	1436	U	N3-C4-C5	5.60	117.96	114.60
1	DA	779	U	C6-N1-C2	5.60	124.36	121.00
1	AA	140	A	C4-C5-C6	5.60	119.80	117.00
1	DA	201	C	N3-C4-C5	5.60	124.14	121.90
1	DA	1616	A	C8-N9-C4	-5.60	103.56	105.80
31	BA	1514	C	N1-C2-O2	-5.59	115.54	118.90
1	DA	2447	G	N3-C4-N9	5.59	129.36	126.00
1	AA	528	A	C2-N3-C4	-5.59	107.81	110.60
1	AA	1314	C	C2-N1-C1'	5.59	124.95	118.80
31	CA	266	G	C8-N9-C4	-5.58	104.17	106.40
1	DA	2598	A	C5-C6-N6	-5.58	119.23	123.70
1	AA	2830	G	C8-N9-C4	-5.58	104.17	106.40
1	AA	208	C	C6-N1-C2	5.58	122.53	120.30
31	BA	690	G	C5-N7-C8	-5.58	101.51	104.30
1	DA	565	C	C6-N1-C2	5.58	122.53	120.30
1	AA	780	G	N1-C2-N3	-5.58	120.55	123.90
31	BA	530	G	C4-N9-C1'	5.57	133.74	126.50
1	AA	937	U	C5-C6-N1	-5.56	119.92	122.70
1	AA	2375	G	C2-N3-C4	-5.56	109.12	111.90
1	AA	2688	U	C5-C4-O4	5.56	129.24	125.90
1	AA	1496	A	C6-C5-N7	-5.56	128.41	132.30
1	AA	140	A	C4-N9-C1'	5.55	136.30	126.30
1	DA	1142(A)	A	C2-N3-C4	-5.55	107.82	110.60
1	DA	1332	G	C4-N9-C1'	5.55	133.72	126.50
1	AA	2344	U	N1-C2-O2	-5.55	118.91	122.80
31	CA	511	C	C2-N1-C1'	-5.55	112.69	118.80
1	AA	208	C	N3-C4-C5	5.55	124.12	121.90
1	AA	265	A	N7-C8-N9	5.55	116.57	113.80
31	CA	898	G	N7-C8-N9	-5.55	110.33	113.10
1	DA	1312	U	C2-N3-C4	5.55	130.33	127.00
1	DA	1011	G	C8-N9-C1'	5.54	134.21	127.00
1	DA	1026	U	N1-C2-O2	5.54	126.68	122.80
1	AA	127	A	N9-C4-C5	-5.54	103.58	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1572	A	C8-N9-C4	5.54	108.02	105.80
31	BA	1366	C	C6-N1-C2	-5.54	118.08	120.30
1	AA	580	C	C6-N1-C2	-5.54	118.08	120.30
2	AB	30	C	C6-N1-C2	-5.54	118.08	120.30
31	BA	1495	U	C5-C6-N1	5.54	125.47	122.70
1	AA	1142(A)	A	N3-C4-C5	5.54	130.68	126.80
1	DA	1811	G	N3-C4-C5	5.53	131.37	128.60
1	DA	1842	G	C8-N9-C4	5.53	108.61	106.40
1	DA	138	G	C8-N9-C4	-5.53	104.19	106.40
1	DA	2598	A	C4-C5-C6	5.53	119.77	117.00
1	AA	2346	A	C5-C6-N1	-5.53	114.94	117.70
1	DA	780	G	N1-C2-N3	-5.52	120.59	123.90
1	DA	2430	A	C5-C6-N1	-5.52	114.94	117.70
1	AA	2685	G	N3-C4-N9	-5.52	122.69	126.00
1	AA	654(I)	C	C2-N1-C1'	5.52	124.87	118.80
31	BA	901	A	N1-C2-N3	5.52	132.06	129.30
1	DA	1611	C	N1-C2-O2	-5.52	115.59	118.90
1	AA	40	C	N1-C2-O2	-5.51	115.59	118.90
1	DA	2447	G	N3-C2-N2	-5.51	116.04	119.90
1	AA	1496	A	N1-C6-N6	5.51	121.91	118.60
1	DA	2724	C	N1-C2-O2	-5.51	115.59	118.90
1	AA	2318	G	N3-C4-N9	-5.51	122.69	126.00
1	DA	2324	C	C6-N1-C2	5.51	122.50	120.30
31	BA	1323	G	N3-C4-N9	5.51	129.31	126.00
1	DA	1898	U	C5-C4-O4	5.51	129.21	125.90
31	BA	690	G	N1-C2-N2	-5.51	111.24	116.20
31	CA	1436	U	C5-C4-O4	-5.50	122.60	125.90
31	BA	1419	G	N3-C4-N9	-5.50	122.70	126.00
1	DA	566	U	C5-C6-N1	-5.50	119.95	122.70
31	CA	84	U	C2-N1-C1'	5.50	124.30	117.70
31	CA	1370	G	C5-C6-N1	-5.50	108.75	111.50
1	AA	2580	U	C2-N1-C1'	5.50	124.29	117.70
2	AB	24	G	C4-N9-C1'	5.50	133.64	126.50
1	AA	1189	A	N1-C6-N6	5.49	121.89	118.60
1	DA	459	U	N3-C2-O2	-5.49	118.36	122.20
1	AA	141	A	C6-C5-N7	-5.49	128.46	132.30
1	AA	188	G	C5-C6-O6	-5.48	125.31	128.60
2	AB	47	C	N1-C2-O2	-5.48	115.61	118.90
31	BA	1519	A	C5-C6-N1	-5.48	114.96	117.70
31	BA	811	C	C2-N1-C1'	5.48	124.83	118.80
1	DA	103	A	N9-C4-C5	-5.48	103.61	105.80
1	AA	971	C	N1-C2-O2	-5.48	115.61	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	DA	1678	G	C4-N9-C1'	5.48	133.62	126.50
1	AA	250	G	C4-N9-C1'	5.47	133.62	126.50
1	AA	676	A	N3-C4-N9	-5.47	123.02	127.40
1	DA	2430	A	N1-C6-N6	5.47	121.89	118.60
1	DA	835	A	C8-N9-C4	5.47	107.99	105.80
1	AA	1633	G	C6-C5-N7	-5.47	127.12	130.40
1	AA	1648	C	N3-C2-O2	5.47	125.73	121.90
31	BA	560	U	C2-N1-C1'	5.47	124.26	117.70
1	AA	2475	C	C5-C6-N1	5.47	123.73	121.00
1	AA	780	G	N1-C6-O6	5.46	123.18	119.90
1	AA	941	A	N9-C4-C5	-5.46	103.62	105.80
1	AA	906	G	N3-C4-N9	-5.45	122.73	126.00
1	AA	1142(A)	A	N7-C8-N9	5.45	116.53	113.80
1	DA	140	A	C6-C5-N7	-5.45	128.49	132.30
1	AA	1021	A	N1-C6-N6	5.45	121.87	118.60
31	CA	808	C	C2-N1-C1'	-5.45	112.81	118.80
1	DA	1807	G	N9-C4-C5	-5.45	103.22	105.40
1	AA	391	G	C6-C5-N7	-5.44	127.13	130.40
1	AA	2518	A	C4-C5-N7	5.44	113.42	110.70
1	DA	1698	A	N3-C4-C5	5.44	130.61	126.80
31	BA	365	U	C2-N1-C1'	5.44	124.23	117.70
1	DA	1992	G	C2-N3-C4	5.44	114.62	111.90
31	BA	1495	U	C2-N3-C4	5.44	130.26	127.00
1	AA	2451	A	C8-N9-C4	-5.44	103.62	105.80
31	BA	31	G	C5-C6-O6	-5.44	125.34	128.60
1	AA	994	C	C6-N1-C2	-5.44	118.12	120.30
31	CA	898	G	N1-C6-O6	5.43	123.16	119.90
1	AA	2317	C	C6-N1-C2	-5.43	118.13	120.30
31	CA	270	A	C5-N7-C8	-5.43	101.18	103.90
1	DA	141	A	C4-C5-N7	5.43	113.42	110.70
1	AA	1835	G	C4-N9-C1'	5.43	133.56	126.50
2	DB	81	G	C5-C6-O6	-5.43	125.34	128.60
1	AA	391	G	C8-N9-C1'	-5.42	119.95	127.00
1	AA	630	G	C4-C5-N7	5.42	112.97	110.80
1	AA	654(I)	C	C6-N1-C2	-5.42	118.13	120.30
1	AA	2375	G	C4-C5-N7	5.42	112.97	110.80
1	DA	1612	C	N3-C2-O2	5.42	125.69	121.90
31	BA	1524	C	C6-N1-C2	5.42	122.47	120.30
52	CB	52	G	C8-N9-C4	-5.41	104.23	106.40
1	AA	1332	G	N7-C8-N9	5.41	115.81	113.10
1	AA	587	C	C5-C6-N1	5.41	123.70	121.00
45	CR	39	LEU	CA-CB-CG	5.41	127.74	115.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	DA	1797	C	C6-N1-C2	5.41	122.46	120.30
1	AA	130	C	N3-C2-O2	5.41	125.69	121.90
1	AA	1365	A	N1-C6-N6	5.41	121.84	118.60
2	AB	59	A	N1-C2-N3	5.40	132.00	129.30
1	AA	142	G	C8-N9-C1'	5.40	134.02	127.00
1	AA	1438	U	N3-C4-O4	5.40	123.18	119.40
1	AA	2329	G	C2-N3-C4	-5.40	109.20	111.90
1	DA	1647	G	N3-C4-N9	-5.40	122.76	126.00
1	DA	1663	C	C6-N1-C2	5.39	122.46	120.30
1	DA	1698	A	C5-N7-C8	-5.39	101.20	103.90
1	DA	735	A	N1-C6-N6	5.39	121.83	118.60
1	DA	675	A	N1-C6-N6	5.38	121.83	118.60
1	DA	1678	G	C5-N7-C8	-5.38	101.61	104.30
1	DA	250	G	N3-C4-N9	5.38	129.23	126.00
2	AB	25	A	N1-C6-N6	5.38	121.83	118.60
31	BA	690	G	O4'-C1'-N9	5.38	112.50	108.20
1	AA	1786	A	C4-C5-C6	5.38	119.69	117.00
1	AA	2031	A	C2-N3-C4	5.38	113.29	110.60
1	AA	1983	C	C5-C6-N1	-5.37	118.31	121.00
1	AA	2577	A	N9-C4-C5	5.37	107.95	105.80
31	BA	812	C	C2-N1-C1'	5.37	124.71	118.80
1	AA	130	C	N1-C2-O2	-5.37	115.68	118.90
31	BA	859	A	N1-C6-N6	5.37	121.82	118.60
1	AA	1204	A	C5-N7-C8	-5.37	101.22	103.90
1	DA	228	A	C6-C5-N7	-5.37	128.54	132.30
1	AA	248	G	C6-C5-N7	-5.37	127.18	130.40
31	BA	586	C	C6-N1-C2	5.37	122.45	120.30
31	CA	1267	C	C2-N1-C1'	5.37	124.70	118.80
31	CA	690	G	N7-C8-N9	5.37	115.78	113.10
1	DA	566	U	C6-N1-C2	5.36	124.22	121.00
1	DA	780	G	N1-C6-O6	5.36	123.12	119.90
1	DA	783	A	C6-C5-N7	-5.36	128.55	132.30
1	DA	1011	G	N3-C4-N9	-5.36	122.78	126.00
1	DA	912	C	C2-N1-C1'	5.36	124.70	118.80
1	AA	2031	A	N3-C4-N9	5.36	131.69	127.40
31	BA	1436	U	C5-C4-O4	-5.36	122.69	125.90
1	AA	2318	G	C5-N7-C8	-5.35	101.62	104.30
1	DA	1616	A	C6-C5-N7	-5.35	128.55	132.30
31	BA	897	C	N1-C2-O2	-5.35	115.69	118.90
1	AA	446	G	C5-C6-O6	-5.35	125.39	128.60
1	AA	456	C	C2-N1-C1'	-5.35	112.92	118.80
1	DA	1678	G	N7-C8-N9	5.35	115.77	113.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	774	A	C5-C6-N1	-5.34	115.03	117.70
31	CA	901	A	N1-C6-N6	5.34	121.81	118.60
1	DA	1187	G	C4-N9-C1'	5.34	133.45	126.50
1	AA	409	C	C6-N1-C2	5.34	122.44	120.30
1	AA	647	G	N3-C4-C5	-5.34	125.93	128.60
1	DA	530	G	C2-N3-C4	-5.34	109.23	111.90
1	AA	814	C	C6-N1-C2	5.34	122.44	120.30
1	AA	1942	C	C6-N1-C2	-5.34	118.17	120.30
1	AA	2590	A	C2-N3-C4	-5.34	107.93	110.60
1	AA	461	C	N3-C2-O2	5.33	125.63	121.90
1	DA	810	U	N3-C4-O4	5.33	123.13	119.40
1	AA	1012	U	C2-N1-C1'	-5.33	111.30	117.70
31	CA	1301	U	C2-N1-C1'	5.33	124.09	117.70
31	BA	190	G	C4-N9-C1'	5.32	133.42	126.50
1	AA	814	C	C5-C6-N1	-5.32	118.34	121.00
1	AA	1899	G	C5-N7-C8	-5.32	101.64	104.30
2	AB	24	G	C6-N1-C2	-5.32	121.91	125.10
1	AA	1963	U	N3-C2-O2	-5.32	118.48	122.20
1	DA	1681	G	N3-C4-N9	-5.32	122.81	126.00
1	AA	248	G	C5-C6-O6	-5.32	125.41	128.60
31	BA	1053	G	N3-C4-C5	5.32	131.26	128.60
1	DA	767	U	C5-C4-O4	5.32	129.09	125.90
1	DA	2763	G	N3-C4-N9	5.32	129.19	126.00
1	AA	2287	A	N3-C4-N9	-5.31	123.15	127.40
52	BD	11	C	C6-N1-C2	-5.31	118.17	120.30
1	DA	807	U	N1-C2-O2	-5.31	119.08	122.80
1	DA	1698	A	C2-N3-C4	-5.31	107.94	110.60
1	AA	807	U	N1-C2-N3	5.31	118.09	114.90
1	DA	74	A	N3-C4-C5	5.31	130.52	126.80
1	AA	783	A	N3-C4-C5	5.30	130.51	126.80
31	BA	73	G	N3-C4-N9	5.30	129.18	126.00
1	AA	1835	G	N3-C4-C5	-5.30	125.95	128.60
1	AA	2205	C	C2-N1-C1'	5.30	124.63	118.80
1	DA	633	A	C5-C6-N1	-5.30	115.05	117.70
1	DA	2378	A	C6-C5-N7	-5.30	128.59	132.30
52	CD	48	C	C5-C6-N1	5.30	123.65	121.00
1	DA	933	A	C5-C6-N6	-5.30	119.46	123.70
1	AA	1697	G	N1-C6-O6	5.30	123.08	119.90
1	DA	569	U	C5-C6-N1	-5.30	120.05	122.70
1	AA	1606	G	C6-C5-N7	-5.30	127.22	130.40
1	DA	2606	C	C5-C6-N1	-5.30	118.35	121.00
1	AA	1343	G	C4-N9-C1'	5.29	133.38	126.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1964	G	C2-N3-C4	-5.29	109.25	111.90
1	DA	603	A	C4-N9-C1'	5.29	135.82	126.30
1	AA	2544	G	N3-C2-N2	-5.29	116.20	119.90
1	DA	780	G	N1-C2-N2	5.29	120.96	116.20
1	AA	2724	C	N1-C2-O2	-5.28	115.73	118.90
1	AA	188	G	N9-C4-C5	-5.28	103.29	105.40
1	AA	1828	G	C2-N3-C4	-5.28	109.26	111.90
31	CA	266	G	N3-C4-C5	-5.28	125.96	128.60
1	AA	742	G	N3-C4-C5	5.28	131.24	128.60
1	AA	758	C	C6-N1-C2	5.28	122.41	120.30
31	BA	1516	G	C4-N9-C1'	-5.28	119.64	126.50
1	DA	1827	C	N1-C2-O2	-5.28	115.73	118.90
1	AA	530	G	C2-N3-C4	-5.28	109.26	111.90
1	AA	2544	G	C6-C5-N7	-5.28	127.23	130.40
1	DA	1274	A	N1-C6-N6	5.28	121.77	118.60
1	DA	2073	C	N1-C2-O2	-5.28	115.73	118.90
1	AA	122	G	C8-N9-C4	5.27	108.51	106.40
1	AA	1614	A	N7-C8-N9	5.27	116.44	113.80
31	BA	1053	G	N7-C8-N9	-5.27	110.46	113.10
31	BA	1322	C	C2-N1-C1'	5.27	124.60	118.80
1	AA	1197	G	C8-N9-C4	5.27	108.51	106.40
1	AA	247	G	N9-C4-C5	-5.27	103.29	105.40
1	DA	1021	A	C5-N7-C8	-5.27	101.27	103.90
1	DA	1271	G	N1-C6-O6	5.27	123.06	119.90
2	AB	7	G	C5-N7-C8	-5.27	101.67	104.30
31	BA	1053	G	N3-C4-N9	-5.27	122.84	126.00
1	AA	265	A	C8-N9-C4	-5.27	103.69	105.80
26	A4	45	GLY	N-CA-C	-5.26	99.94	113.10
1	AA	2439	A	C4-N9-C1'	5.26	135.77	126.30
31	CA	1529	G	C2-N3-C4	5.26	114.53	111.90
1	AA	1638	C	N1-C2-O2	-5.26	115.74	118.90
10	DN	8	LEU	CA-CB-CG	5.26	127.40	115.30
1	AA	2741	A	C8-N9-C4	5.26	107.90	105.80
1	AA	752	A	N7-C8-N9	5.25	116.43	113.80
1	AA	1312	U	C6-N1-C2	-5.25	117.85	121.00
1	AA	2253	G	C5-C6-O6	-5.25	125.45	128.60
1	DA	1305	C	N3-C2-O2	-5.25	118.22	121.90
1	DA	1614	A	N1-C6-N6	5.25	121.75	118.60
31	BA	858	G	C8-N9-C1'	-5.25	120.17	127.00
1	DA	678	C	C5-C6-N1	-5.25	118.38	121.00
1	DA	837	C	C6-N1-C2	-5.25	118.20	120.30
1	DA	250	G	C4-N9-C1'	5.25	133.32	126.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AB	56	G	C4-N9-C1'	5.24	133.31	126.50
1	AA	783	A	C3'-C2'-C1'	-5.24	97.31	101.50
31	BA	1516	G	C8-N9-C1'	5.24	133.81	127.00
1	DA	363(E)	U	C2-N1-C1'	5.24	123.98	117.70
1	AA	1312	U	N3-C4-C5	-5.23	111.46	114.60
53	BC	1	C	C6-N1-C1'	-5.23	114.52	120.80
1	DA	2474	C	C2-N1-C1'	5.23	124.56	118.80
2	DB	59	A	C5-C6-N1	5.23	120.32	117.70
1	AA	2401	U	C6-N1-C1'	-5.23	113.88	121.20
1	DA	532	A	C8-N9-C4	-5.23	103.71	105.80
31	BA	1177	G	N3-C4-C5	-5.23	125.98	128.60
1	DA	140	A	C4-C5-N7	5.23	113.31	110.70
1	DA	912	C	N1-C2-O2	5.23	122.04	118.90
1	AA	203	C	N1-C2-O2	-5.23	115.76	118.90
1	DA	1633	G	N1-C6-O6	5.23	123.04	119.90
1	DA	2071	A	C8-N9-C4	-5.23	103.71	105.80
1	AA	1340	U	N1-C2-O2	-5.22	119.14	122.80
31	BA	811	C	C6-N1-C1'	-5.22	114.53	120.80
1	DA	2873	A	C2-N3-C4	-5.22	107.99	110.60
1	AA	2307	G	N1-C6-O6	5.22	123.03	119.90
53	BC	16	C	C6-N1-C2	-5.22	118.21	120.30
1	AA	871	U	C5-C4-O4	-5.22	122.77	125.90
1	AA	2036	C	C6-N1-C2	-5.22	118.21	120.30
31	BA	1417	G	C4-C5-C6	5.22	121.93	118.80
1	DA	573	G	C4-N9-C1'	5.22	133.28	126.50
1	AA	248	G	N1-C6-O6	5.21	123.03	119.90
1	AA	1992	G	P-O3'-C3'	5.21	125.95	119.70
1	DA	748	G	C6-C5-N7	5.21	133.53	130.40
1	AA	676	A	N1-C2-N3	5.21	131.90	129.30
2	AB	56	G	C8-N9-C4	-5.21	104.32	106.40
31	BA	1378	C	C2-N1-C1'	5.20	124.52	118.80
1	AA	2244	U	N3-C2-O2	-5.20	118.56	122.20
1	DA	1332	G	N1-C2-N3	5.20	127.02	123.90
31	CA	7	G	C4-N9-C1'	-5.20	119.74	126.50
2	DB	59	A	N3-C4-C5	-5.20	123.16	126.80
1	DA	250	G	N1-C2-N2	-5.19	111.53	116.20
1	AA	2595	G	C8-N9-C4	5.19	108.48	106.40
1	DA	2287	A	C5-N7-C8	-5.19	101.30	103.90
1	DA	1616	A	C5-N7-C8	-5.19	101.31	103.90
1	AA	1135	C	C6-N1-C2	-5.19	118.22	120.30
1	DA	1786	A	C5-C6-N1	-5.19	115.11	117.70
1	AA	2439	A	N7-C8-N9	5.19	116.39	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	103	A	C8-N9-C1'	-5.18	118.37	127.70
1	DA	1026	U	N3-C2-O2	-5.18	118.57	122.20
1	AA	138	G	C5-N7-C8	-5.18	101.71	104.30
1	AA	250	G	C6-C5-N7	-5.18	127.29	130.40
1	AA	1306	C	C2-N1-C1'	-5.18	113.10	118.80
1	AA	1983	C	C2-N1-C1'	-5.18	113.10	118.80
1	AA	2318	G	N3-C4-C5	5.18	131.19	128.60
1	AA	630	G	C8-N9-C4	5.18	108.47	106.40
1	AA	2330	G	N3-C4-C5	5.18	131.19	128.60
1	AA	129	C	C6-N1-C2	5.18	122.37	120.30
1	DA	1614	A	N7-C8-N9	5.18	116.39	113.80
1	DA	1797	C	N1-C2-O2	-5.18	115.79	118.90
1	DA	2008	C	N1-C2-O2	-5.18	115.79	118.90
1	AA	814	C	C2-N3-C4	-5.17	117.31	119.90
34	CG	12	CYS	CA-CB-SG	5.17	123.32	114.00
1	AA	777	A	N1-C2-N3	5.17	131.89	129.30
1	DA	1681	G	N3-C4-C5	5.17	131.19	128.60
1	AA	842	G	C4-N9-C1'	-5.17	119.78	126.50
1	DA	26	G	C8-N9-C4	-5.17	104.33	106.40
1	AA	1365	A	C6-C5-N7	-5.17	128.68	132.30
1	DA	2153	G	C8-N9-C1'	5.17	133.72	127.00
1	AA	1787	A	N9-C4-C5	-5.17	103.73	105.80
1	AA	607	U	N3-C2-O2	5.16	125.81	122.20
1	AA	126	A	C8-N9-C4	-5.16	103.74	105.80
1	AA	633	A	C5-C6-N1	-5.16	115.12	117.70
1	AA	2699	C	C5-C6-N1	-5.16	118.42	121.00
31	BA	765	G	C8-N9-C1'	-5.16	120.29	127.00
1	AA	250	G	N1-C2-N2	-5.16	111.56	116.20
1	AA	1611	C	C6-N1-C2	5.16	122.36	120.30
1	DA	1992	G	C5-C6-N1	5.16	114.08	111.50
1	AA	2518	A	C6-C5-N7	-5.15	128.69	132.30
1	DA	2447	G	P-O3'-C3'	5.15	125.88	119.70
1	AA	915	C	N1-C2-O2	5.15	121.99	118.90
1	AA	1496	A	C5-N7-C8	-5.15	101.33	103.90
1	AA	657	U	C6-N1-C2	5.15	124.09	121.00
1	DA	298	G	N1-C6-O6	5.15	122.99	119.90
1	DA	2433	A	N1-C6-N6	5.15	121.69	118.60
1	AA	691	C	C6-N1-C2	5.14	122.36	120.30
52	CB	55	U	N1-C2-O2	5.14	126.40	122.80
1	AA	1899	G	C8-N9-C1'	5.14	133.69	127.00
1	AA	1528	A	N7-C8-N9	5.14	116.37	113.80
1	AA	1824	G	C8-N9-C4	5.14	108.45	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	250	G	N7-C8-N9	5.13	115.67	113.10
1	AA	906	G	C8-N9-C4	-5.13	104.35	106.40
1	AA	1769	G	C4-N9-C1'	5.13	133.17	126.50
1	DA	2873	A	C8-N9-C4	-5.12	103.75	105.80
1	AA	1811	G	N3-C4-C5	5.12	131.16	128.60
1	AA	2403	C	C6-N1-C2	-5.12	118.25	120.30
31	CA	186	C	C2-N1-C1'	5.12	124.44	118.80
53	BC	1	C	N3-C2-O2	-5.12	118.31	121.90
1	DA	71	A	N1-C6-N6	5.12	121.67	118.60
1	DA	103	A	C8-N9-C1'	-5.12	118.48	127.70
53	BC	6	G	N3-C4-C5	5.12	131.16	128.60
1	AA	647	G	C8-N9-C1'	-5.12	120.35	127.00
1	AA	2454	G	N7-C8-N9	-5.11	110.54	113.10
1	DA	247	G	C2-N3-C4	-5.11	109.34	111.90
1	AA	201	C	C2-N1-C1'	-5.11	113.19	118.80
21	AV	117	LEU	CA-CB-CG	5.11	127.04	115.30
1	AA	570	G	C8-N9-C4	-5.10	104.36	106.40
1	AA	1142(A)	A	C8-N9-C4	-5.10	103.76	105.80
24	AW	35	LEU	CA-CB-CG	5.10	127.04	115.30
31	BA	1516	G	N3-C4-N9	-5.10	122.94	126.00
31	BA	1201	A	C6-N1-C2	-5.10	115.54	118.60
1	DA	37	C	C6-N1-C1'	5.10	126.92	120.80
1	DA	2153	G	C4-N9-C1'	-5.10	119.87	126.50
1	DA	573	G	N3-C4-N9	5.10	129.06	126.00
1	DA	1342	A	C5-C6-N6	-5.10	119.62	123.70
1	AA	2018	G	C8-N9-C4	-5.10	104.36	106.40
54	B1	16	A	C8-N9-C4	5.10	107.84	105.80
1	DA	2297	C	C6-N1-C2	-5.09	118.26	120.30
1	DA	250	G	N7-C8-N9	5.09	115.65	113.10
1	DA	1614	A	C6-C5-N7	-5.09	128.74	132.30
1	DA	1653	G	C8-N9-C1'	-5.09	120.38	127.00
1	DA	1950	G	C5-N7-C8	-5.09	101.75	104.30
1	AA	465	G	C8-N9-C4	-5.09	104.36	106.40
1	DA	2087	G	C8-N9-C4	5.09	108.44	106.40
31	BA	808	C	N1-C2-O2	-5.09	115.85	118.90
1	DA	748	G	C4-N9-C1'	-5.09	119.88	126.50
1	DA	1241	A	C5-C6-N1	-5.09	115.16	117.70
31	CA	1498	U	C6-N1-C2	-5.09	117.95	121.00
1	AA	576	U	C5-C4-O4	-5.09	122.85	125.90
52	CD	55	U	C6-N1-C1'	-5.09	114.08	121.20
1	AA	1204	A	C4-C5-C6	5.08	119.54	117.00
2	DB	30	C	C6-N1-C2	-5.08	118.27	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	731	C	C6-N1-C2	-5.08	118.27	120.30
1	AA	759	G	C5-C6-O6	-5.08	125.55	128.60
1	AA	1204	A	C8-N9-C4	-5.08	103.77	105.80
1	DA	1416	G	C4-N9-C1'	-5.08	119.89	126.50
1	AA	1340	U	N1-C2-N3	5.08	117.95	114.90
1	DA	635	C	N1-C2-O2	5.08	121.95	118.90
1	AA	485	C	N1-C2-O2	-5.08	115.85	118.90
1	AA	784	A	C6-C5-N7	5.08	135.85	132.30
1	AA	1018	C	C6-N1-C2	-5.08	118.27	120.30
1	AA	2449	U	N3-C4-O4	5.08	122.95	119.40
52	CD	26	G	C8-N9-C1'	5.08	133.60	127.00
2	DB	95	U	N3-C4-O4	-5.08	115.85	119.40
1	AA	1379	A	N1-C6-N6	5.07	121.64	118.60
1	AA	1615	C	C2-N1-C1'	-5.07	113.22	118.80
31	BA	1201	A	C5-C6-N6	-5.07	119.64	123.70
1	DA	1888	G	N7-C8-N9	5.07	115.64	113.10
1	AA	798	G	N1-C6-O6	5.07	122.94	119.90
52	CB	55	U	C2-N1-C1'	5.07	123.78	117.70
1	AA	933	A	C5-C6-N6	-5.06	119.65	123.70
1	AA	2211	G	C4-N9-C1'	5.06	133.08	126.50
1	DA	83	G	C6-C5-N7	-5.06	127.36	130.40
1	DA	2289	G	C8-N9-C4	5.06	108.42	106.40
31	CA	1177	G	N9-C4-C5	5.06	107.42	105.40
1	DA	786	C	C5-C6-N1	-5.06	118.47	121.00
1	DA	2066	C	N3-C4-C5	-5.06	119.88	121.90
31	CA	768	A	N1-C2-N3	5.06	131.83	129.30
1	DA	2287	A	C2-N3-C4	-5.06	108.07	110.60
1	AA	2451	A	N7-C8-N9	5.06	116.33	113.80
1	AA	1564	C	N3-C2-O2	-5.05	118.36	121.90
1	AA	1905	C	N3-C4-N4	5.05	121.54	118.00
1	AA	2415	G	C6-N1-C2	-5.05	122.07	125.10
1	DA	737	C	C6-N1-C2	5.05	122.32	120.30
1	AA	917	A	C8-N9-C4	5.05	107.82	105.80
31	BA	231	G	C8-N9-C4	-5.05	104.38	106.40
31	CA	266	G	N7-C8-N9	5.05	115.62	113.10
1	AA	2392	A	C6-C5-N7	-5.04	128.77	132.30
31	CA	898	G	C4-N9-C1'	-5.04	119.94	126.50
1	DA	2503	A	N7-C8-N9	5.04	116.32	113.80
1	AA	103	A	N9-C4-C5	-5.04	103.78	105.80
1	DA	695	G	N1-C6-O6	5.04	122.92	119.90
1	AA	1313	U	C5-C4-O4	-5.03	122.88	125.90
1	DA	1318	C	C6-N1-C2	-5.03	118.29	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1438	U	C5-C4-O4	-5.03	122.88	125.90
31	CA	793	U	C5-C6-N1	-5.03	120.18	122.70
2	AB	89(A)	A	N9-C4-C5	-5.03	103.79	105.80
31	BA	31	G	C6-C5-N7	-5.03	127.38	130.40
31	BA	1412	C	C5-C6-N1	-5.03	118.49	121.00
1	AA	1210	A	C6-C5-N7	-5.03	128.78	132.30
31	CA	951	G	C4-N9-C1'	5.03	133.03	126.50
1	DA	1811	G	C2-N3-C4	-5.03	109.39	111.90
1	AA	1992	G	N3-C4-C5	-5.02	126.09	128.60
31	BA	993	G	C4-N9-C1'	5.02	133.03	126.50
1	DA	1379	A	C4-C5-N7	5.02	113.21	110.70
1	AA	1241	A	C2-N3-C4	-5.02	108.09	110.60
1	DA	748	G	N1-C6-O6	-5.02	116.89	119.90
1	DA	1914	C	C2-N1-C1'	5.02	124.32	118.80
1	DA	1312	U	C6-N1-C1'	5.01	128.22	121.20
1	AA	2035	G	C8-N9-C4	5.01	108.40	106.40
1	DA	2447	G	C6-C5-N7	-5.01	127.39	130.40
1	AA	798	G	N3-C4-C5	5.01	131.10	128.60
31	BA	883	C	C6-N1-C2	-5.01	118.30	120.30
1	DA	1332	G	C8-N9-C1'	-5.01	120.49	127.00
1	DA	635	C	N3-C2-O2	-5.01	118.40	121.90
1	DA	1831	G	C8-N9-C4	-5.01	104.40	106.40
31	CA	1529	G	N1-C6-O6	-5.00	116.90	119.90

There are no chirality outliers.

All (16) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
30	A8	51	ALA	Peptide
3	AD	197	GLY	Peptide
3	AD	27	THR	Peptide
3	AD	47	GLY	Peptide
4	AE	20	ALA	Peptide
5	AF	47	GLY	Peptide
7	AH	153	LYS	Peptide
8	AK	134	PRO	Peptide
11	AO	58	THR	Peptide
24	AW	17	SER	Peptide
42	BO	47	LYS	Peptide
30	D8	53	PRO	Peptide
3	DD	237	GLU	Peptide
5	DF	25	PRO	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
8	DK	112	LYS	Peptide
11	DO	36	LYS	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	62707	0	31614	2894	0
1	DA	62607	0	31564	2901	0
2	AB	2617	0	1328	138	0
2	DB	2617	0	1328	161	0
3	AD	2115	0	2195	271	0
3	DD	2115	0	2195	239	0
4	AE	1568	0	1634	208	0
4	DE	1568	0	1634	214	0
5	AF	1585	0	1632	178	0
5	DF	1627	0	1680	236	0
6	AG	1474	0	1535	158	0
6	DG	1474	0	1535	164	0
7	AH	1307	0	1382	173	0
7	DH	1307	0	1382	136	1
8	AK	1136	0	1223	123	0
8	DK	1136	0	1223	107	0
9	AM	1104	0	1180	134	0
9	DM	1104	0	1180	145	0
10	AN	933	0	996	64	0
10	DN	933	0	996	75	0
11	AO	1145	0	1228	239	0
11	DO	1145	0	1227	311	0
12	AP	1122	0	1179	189	0
12	DP	1122	0	1179	188	0
13	A0	968	0	1033	129	0
13	D0	960	0	1021	94	0
14	AQ	882	0	943	123	0
14	DQ	882	0	943	137	0
15	AR	1141	0	1202	115	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
15	DR	1141	0	1202	128	0
16	A1	964	0	1022	120	0
16	D1	964	0	1019	158	0
17	A2	779	0	852	101	0
17	D2	779	0	852	135	0
18	AS	900	0	964	95	0
18	DS	900	0	964	72	0
19	AT	725	0	778	65	0
19	DT	725	0	778	99	0
20	AU	785	0	878	101	0
20	DU	785	0	878	133	0
21	AV	1397	0	1430	168	0
21	DV	1428	0	1454	184	0
22	A3	607	0	628	63	0
22	D3	613	0	633	68	0
23	AZ	763	0	848	71	0
23	DZ	763	0	848	53	0
24	AW	558	0	610	39	0
24	DW	558	0	610	55	0
25	AX	469	0	518	37	0
25	DX	469	0	518	39	0
26	A4	533	0	522	88	0
26	D4	515	0	510	90	0
27	A5	459	0	480	87	0
27	D5	459	0	478	52	0
28	A6	389	0	404	56	0
28	D6	389	0	404	64	0
29	A7	391	0	432	41	0
29	D7	391	0	432	37	0
30	A8	480	0	549	131	0
30	D8	480	0	549	130	0
31	BA	32284	0	16296	1832	1
31	CA	32287	0	16295	1769	0
32	BE	1924	0	1975	195	0
32	CE	1924	0	1975	225	0
33	BF	1605	0	1668	134	0
33	CF	1612	0	1677	179	0
34	BG	1703	0	1763	175	0
34	CG	1703	0	1763	186	0
35	BH	1155	0	1213	115	0
35	CH	1155	0	1213	116	0
36	BI	843	0	857	70	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
36	CI	843	0	857	53	0
37	BJ	1257	0	1296	107	0
37	CJ	1257	0	1296	106	0
38	BK	1116	0	1177	113	0
38	CK	1116	0	1177	79	0
39	BL	1010	0	1037	110	0
39	CL	1010	0	1037	156	0
40	BM	801	0	849	94	0
40	CM	801	0	849	130	0
41	BN	885	0	904	65	0
41	CN	885	0	904	71	0
42	BO	975	0	1062	65	0
42	CO	975	0	1062	123	0
43	BP	928	0	987	106	0
43	CP	933	0	992	134	0
44	BQ	476	0	511	58	0
44	CQ	476	0	512	79	0
45	BR	734	0	771	47	0
45	CR	734	0	771	51	0
46	BS	705	0	725	77	0
46	CS	705	0	725	52	0
47	BT	834	0	904	84	0
47	CT	834	0	904	58	0
48	BU	591	0	662	61	0
48	CU	591	0	662	38	0
49	BV	624	0	636	72	0
49	CV	624	0	636	83	0
50	BW	763	0	861	97	0
50	CW	763	0	861	82	0
51	BX	217	0	234	16	0
51	CX	217	0	234	22	0
52	BB	1814	0	931	140	0
52	BD	1814	0	932	148	0
52	CB	1814	0	931	149	0
52	CD	1814	0	932	156	0
53	BC	1643	0	837	55	0
53	CC	1643	0	837	79	0
54	B1	347	0	174	20	0
54	C1	347	0	174	48	0
55	A0	1	0	0	0	0
55	A1	2	0	0	0	0
55	A3	1	0	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
55	A5	1	0	0	0	0
55	A7	1	0	0	0	0
55	AA	332	0	0	0	0
55	AB	6	0	0	0	0
55	AE	3	0	0	0	0
55	AF	2	0	0	0	0
55	AO	1	0	0	0	0
55	B1	1	0	0	0	0
55	BA	114	0	0	0	0
55	BB	13	0	0	0	0
55	BC	4	0	0	0	0
55	BD	1	0	0	0	0
55	BF	1	0	0	0	0
55	BS	1	0	0	0	0
55	BW	1	0	0	0	0
55	C1	2	0	0	0	0
55	CA	121	0	0	0	0
55	CB	3	0	0	0	0
55	CC	7	0	0	0	0
55	CN	1	0	0	0	0
55	D0	1	0	0	0	0
55	D5	1	0	0	0	0
55	D7	1	0	0	0	0
55	DA	272	0	0	0	0
55	DB	7	0	0	0	0
55	DE	1	0	0	0	0
56	A1	14	0	0	0	0
56	A3	7	0	0	1	0
56	A6	7	0	0	1	0
56	AA	1659	0	0	140	0
56	AB	91	0	0	6	0
56	AE	7	0	0	0	0
56	AF	7	0	0	3	0
56	AO	14	0	0	2	0
56	AW	7	0	0	0	0
56	BA	693	0	0	66	0
56	BB	14	0	0	0	0
56	BC	21	0	0	2	0
56	BD	21	0	0	1	0
56	BG	7	0	0	2	0
56	BL	7	0	0	0	0
56	BR	7	0	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	CA	651	0	0	83	0
56	CB	21	0	0	2	0
56	CC	21	0	0	7	0
56	CD	7	0	0	1	0
56	CK	7	0	0	1	0
56	CR	7	0	0	0	0
56	CV	7	0	0	1	0
56	D1	7	0	0	0	0
56	D3	7	0	0	1	0
56	D5	7	0	0	1	0
56	D8	7	0	0	5	0
56	DA	1533	0	0	128	0
56	DB	91	0	0	6	0
56	DF	7	0	0	1	0
56	DO	7	0	0	0	0
57	BA	42	0	45	3	0
57	CA	42	0	45	1	0
58	BG	1	0	0	0	0
58	BQ	1	0	0	0	0
58	CG	1	0	0	0	0
58	CQ	1	0	0	0	0
All	All	304031	0	201063	19321	1

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 38.

All (19321) close contacts within the same asymmetric unit are listed below.

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:DO:71:VAL:CG1	11:DO:72:PRO:HD3	1.34	1.57
30:A8:34:TRP:CB	30:A8:35:GLN:HB2	1.34	1.53
20:DU:89:PHE:CE1	20:DU:90:LEU:HG	1.40	1.50
9:DM:17:ASP:HA	9:DM:55:VAL:CG2	1.36	1.49
27:D5:4:HIS:HB3	27:D5:5:PRO:CD	1.40	1.48
12:AP:24:GLY:HA3	12:AP:25:ASP:CB	1.42	1.44
27:A5:4:HIS:HB3	27:A5:5:PRO:CD	1.43	1.44
1:DA:226:G:H21	1:DA:228:A:N6	1.04	1.43
9:DM:15:LEU:CD1	9:DM:55:VAL:HG13	1.48	1.41
1:DA:226:G:N2	1:DA:228:A:H61	1.17	1.40
1:AA:2255:G:N2	12:AP:85:LYS:HE2	1.05	1.38
1:DA:882:G:H1	1:DA:894:C:N4	1.21	1.37
1:DA:2255:G:N2	12:DP:85:LYS:HE2	1.33	1.37
30:A8:34:TRP:CE3	30:A8:35:GLN:HG2	1.59	1.35

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
9:DM:15:LEU:HD11	9:DM:55:VAL:CG1	1.55	1.35
12:DP:24:GLY:HA3	12:DP:25:ASP:CB	1.42	1.35
27:A5:2:ALA:N	27:A5:3:LYS:HE2	1.42	1.34
11:AO:19:VAL:HG23	11:AO:27:HIS:CB	1.57	1.33
1:DA:811:U:H2'	11:DO:21:ARG:O	1.29	1.33
27:D5:4:HIS:CB	27:D5:5:PRO:HD2	1.50	1.32
4:DE:42:ASP:CB	4:DE:43:GLY:HA2	1.50	1.32
1:DA:847:U:C4	1:DA:933:A:N6	1.98	1.31
11:DO:47:ASP:HB3	11:DO:48:PRO:CA	1.53	1.31
11:AO:62:LEU:CD1	30:A8:30:ARG:NH1	1.93	1.30
11:AO:19:VAL:CG2	11:AO:27:HIS:HB3	1.61	1.29
1:DA:2275:C:O2'	12:DP:84:GLY:CA	1.80	1.28
4:DE:42:ASP:HB2	4:DE:43:GLY:CA	1.57	1.28
1:AA:2015:A:O2'	27:A5:3:LYS:NZ	1.65	1.27
9:DM:16:ILE:O	9:DM:55:VAL:HG22	1.27	1.26
1:AA:2255:G:N2	12:AP:85:LYS:CE	1.97	1.26
1:AA:943:U:OP2	11:AO:36:LYS:HG3	1.12	1.23
1:DA:2143:C:N4	1:DA:2148:G:H1	1.35	1.23
1:AA:2210:G:H3'	1:AA:2211:G:C8	1.73	1.23
1:DA:155:C:N4	1:DA:171:G:H1	1.36	1.23
3:AD:35:LYS:HD2	3:AD:104:TYR:CD1	1.73	1.22
27:A5:4:HIS:CB	27:A5:5:PRO:HD3	1.67	1.22
5:DF:68:LYS:O	5:DF:70:THR:HG23	1.37	1.21
1:DA:946:G:O2'	1:DA:947:G:H5'	1.37	1.21
3:DD:43:ARG:HH11	3:DD:44:ASN:ND2	1.39	1.21
1:DA:885:C:N4	1:DA:890:A:H62	1.37	1.20
11:DO:71:VAL:CG1	11:DO:72:PRO:CD	2.19	1.19
27:D5:3:LYS:CE	27:D5:3:LYS:HA	1.73	1.19
3:DD:35:LYS:HG2	3:DD:64:ILE:N	1.56	1.19
1:DA:885:C:C4	1:DA:890:A:N6	2.11	1.19
1:AA:1533:C:H3'	1:AA:1534:G:H5''	1.19	1.19
11:DO:46:LYS:HB3	11:DO:46:LYS:HZ2	1.06	1.18
12:AP:17:LEU:HD21	12:AP:96:VAL:CG1	1.72	1.18
52:CD:48:C:H3'	52:CD:49:A:C8	1.79	1.17
20:DU:89:PHE:HE1	20:DU:90:LEU:CG	1.57	1.17
31:CA:1495:U:O4	57:CA:1722:PAR:N12	1.75	1.17
9:DM:56:ASN:HA	9:DM:125:GLY:N	1.58	1.17
21:DV:11:GLU:HG3	21:DV:12:GLY:H	1.04	1.17
52:CD:48:C:H3'	52:CD:49:A:H8	1.07	1.16
12:AP:75:THR:HB	12:AP:88:GLY:HA3	1.26	1.16
1:AA:631:A:OP2	30:A8:46:ARG:NH2	1.78	1.16
1:AA:943:U:OP2	11:AO:36:LYS:CG	1.92	1.16

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:2308:G:N1	1:AA:2311:A:N1	1.92	1.16
30:A8:34:TRP:HB3	30:A8:35:GLN:CB	1.76	1.16
11:AO:58:THR:HG22	11:AO:61:ARG:HG3	1.27	1.16
5:DF:25:PRO:HB2	5:DF:27:GLU:H	1.05	1.16
11:AO:15:ARG:HG2	11:AO:15:ARG:HH11	1.10	1.16
7:AH:150:ALA:O	7:AH:152:ARG:N	1.79	1.16
6:DG:104:GLU:HG2	26:D4:23:GLU:HG2	1.28	1.16
1:AA:883:G:H1	1:AA:893:C:N4	1.43	1.16
1:DA:2020:A:OP1	16:D1:27:LEU:HD23	1.42	1.15
19:DT:12:VAL:HB	19:DT:29:TRP:NE1	1.60	1.15
1:AA:2308:G:N2	1:AA:2311:A:H2	1.45	1.15
3:DD:255:LYS:HE3	3:DD:255:LYS:H	1.05	1.15
33:CF:21:ARG:HH11	33:CF:21:ARG:HB3	1.02	1.14
20:DU:89:PHE:CE1	20:DU:90:LEU:CG	2.30	1.14
30:A8:34:TRP:CA	30:A8:35:GLN:HB2	1.74	1.14
1:DA:884:C:N4	1:DA:892:G:H1	1.46	1.14
1:AA:1359:A:N1	1:AA:1372:U:N3	1.95	1.14
1:AA:1496:A:H8	1:AA:1577:C:O2'	1.30	1.14
30:A8:34:TRP:CE3	30:A8:35:GLN:CG	2.30	1.14
1:DA:226:G:N2	1:DA:228:A:N6	1.80	1.13
1:DA:2392:A:C8	11:DO:60:MET:HB2	1.83	1.13
21:AV:72:ARG:HH11	21:AV:72:ARG:HG3	1.03	1.13
1:DA:2701:C:H3'	1:DA:2702:U:H5''	1.14	1.13
16:D1:50:ARG:HH22	17:D2:72:VAL:HG21	1.05	1.13
24:DW:17:SER:HB2	24:DW:18:PRO:HA	1.17	1.13
9:DM:17:ASP:CA	9:DM:55:VAL:CG2	2.27	1.13
31:BA:1003:G:H2'	31:BA:1004:A:H5'	1.30	1.13
1:AA:2317:C:H2'	1:AA:2318:G:H5'	1.29	1.13
1:AA:864:G:N7	12:AP:22:LYS:NZ	1.95	1.13
1:AA:1061:U:H4'	1:AA:1070:A:H1'	1.20	1.12
1:DA:252:G:OP2	11:DO:50:ARG:NH2	1.83	1.12
34:CG:22:LYS:HB2	34:CG:26:CYS:HB2	1.26	1.12
31:CA:632:A:H1'	31:CA:633:G:OP2	1.49	1.12
52:BD:19:C:H2'	52:BD:20:C:H4'	1.27	1.12
1:DA:2275:C:O2'	12:DP:84:GLY:HA3	1.40	1.12
31:BA:1175:G:H2'	31:BA:1176:A:C8	1.85	1.12
4:DE:64:LYS:HB2	4:DE:66:HIS:HD2	1.11	1.11
31:CA:1160:G:O6	31:CA:1181:G:O6	1.67	1.11
1:AA:620:G:H4'	1:AA:621:A:H5''	1.32	1.11
27:D5:3:LYS:CA	27:D5:3:LYS:HE3	1.80	1.11
17:D2:87:HIS:CE1	17:D2:89:GLN:HB2	1.85	1.11
3:AD:236:GLY:O	3:AD:237:GLU:HB2	1.45	1.11

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:A1:112:ARG:HG3	16:A1:112:ARG:HH11	1.02	1.11
1:AA:2287:A:N6	1:AA:2344:U:H3	1.49	1.11
12:AP:24:GLY:CA	12:AP:25:ASP:HB3	1.79	1.11
3:DD:35:LYS:CG	3:DD:64:ILE:H	1.63	1.11
1:DA:2795:G:H3'	1:DA:2797:U:H5''	1.31	1.11
32:CE:75:LYS:HA	32:CE:78:GLN:HB2	1.33	1.11
3:AD:28:GLU:HB3	3:AD:29:PRO:HD2	1.29	1.11
43:BP:108:ARG:HH11	43:BP:108:ARG:HG3	1.15	1.11
15:AR:105:LEU:O	15:AR:107:ASP:N	1.84	1.11
27:A5:3:LYS:HD2	27:A5:3:LYS:N	1.51	1.10
1:AA:654(D):G:H1	1:AA:654(Q):C:N4	1.49	1.10
11:DO:61:ARG:C	11:DO:62:LEU:HD22	1.70	1.10
6:AG:21:ARG:HG2	6:AG:21:ARG:HH11	1.03	1.10
11:DO:61:ARG:CB	11:DO:61:ARG:HH21	1.63	1.10
30:D8:33:ASN:HD21	30:D8:41:ILE:HD11	1.14	1.10
31:CA:686:U:O2'	31:CA:687:A:O5'	1.69	1.10
3:AD:43:ARG:NH1	3:AD:44:ASN:OD1	1.82	1.10
8:AK:131:LYS:HB3	8:AK:132:PRO:HA	1.30	1.10
1:AA:2363:C:OP1	56:AA:3551:OHX:N4	1.84	1.10
11:DO:47:ASP:OD1	11:DO:50:ARG:NH1	1.85	1.10
1:DA:885:C:N4	1:DA:890:A:N6	1.96	1.10
30:D8:33:ASN:HD21	30:D8:41:ILE:CD1	1.65	1.10
20:AU:79:CYS:SG	20:AU:80:GLY:N	2.25	1.10
21:DV:158:PRO:HB2	21:DV:159:PRO:HD2	1.34	1.09
1:DA:2306:C:H3'	1:DA:2307:G:H5''	1.27	1.09
1:DA:90:U:H2'	1:DA:91:A:H5''	1.11	1.09
11:DO:46:LYS:HB3	11:DO:46:LYS:NZ	1.63	1.09
31:BA:1028(B):C:N3	31:BA:1032(A):G:N2	2.01	1.09
31:CA:1443:G:H3'	31:CA:1446:A:H5''	1.30	1.09
9:DM:97:ARG:HH11	9:DM:97:ARG:HG2	1.13	1.09
12:AP:24:GLY:CA	12:AP:25:ASP:CB	2.30	1.09
31:CA:1176:A:H2'	31:CA:1177:G:H5'	1.24	1.09
1:AA:2591:C:OP2	3:AD:238:GLY:O	1.69	1.09
20:DU:61:ILE:HG22	20:DU:62:GLU:H	1.15	1.09
1:AA:784:A:H5'	1:AA:785:G:OP1	1.53	1.09
11:DO:47:ASP:CB	11:DO:48:PRO:HA	1.79	1.09
54:C1:19:U:H2'	54:C1:20:G:H5'	1.32	1.09
1:AA:102:G:OP1	24:AW:7:ARG:NH2	1.85	1.09
45:CR:87:ILE:HG22	45:CR:88:ARG:H	1.12	1.08
27:A5:40:LYS:HG2	27:A5:47:PRO:HD2	1.32	1.08
9:AM:97:ARG:HH11	9:AM:97:ARG:HG3	1.00	1.08
1:AA:1210:A:H8	1:AA:1210:A:H5'	1.14	1.08

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:2777:G:H5''	1:DA:2778:A:H5'	1.24	1.08
30:D8:50:LEU:HD22	30:D8:50:LEU:N	1.67	1.08
12:AP:17:LEU:CD2	12:AP:96:VAL:CG1	2.30	1.08
26:A4:39:CYS:O	26:A4:40:HIS:HB2	1.44	1.08
37:CJ:113:GLU:HB2	37:CJ:119:ARG:HG2	1.35	1.08
31:BA:1299:A:H2'	31:BA:1301:U:H1'	1.24	1.08
1:AA:1932:A:OP2	56:AA:3561:OHX:N1	1.87	1.08
53:CC:17:C:H3'	53:CC:18:C:C5'	1.83	1.08
31:BA:1053:G:H5'	31:BA:1054:C:H5'	1.28	1.08
11:DO:15:ARG:HH11	11:DO:15:ARG:CG	1.67	1.08
1:DA:2143:C:N3	1:DA:2148:G:N2	2.01	1.07
52:CD:49:A:C2	52:CD:50:U:H5''	1.89	1.07
1:DA:2392:A:H8	11:DO:60:MET:HB2	0.98	1.07
31:BA:1503:A:O2'	31:BA:1504:G:O5'	1.71	1.07
31:BA:73:G:O6	31:BA:97:U:O2	1.72	1.07
16:D1:29:SER:O	16:D1:30:LYS:HD3	1.54	1.07
31:BA:858:G:N7	56:BA:1802:OHX:N3	2.02	1.07
11:DO:47:ASP:HB3	11:DO:48:PRO:HA	1.14	1.07
11:DO:61:ARG:HH21	11:DO:61:ARG:CG	1.66	1.07
1:AA:49:A:N7	1:AA:120:U:C5	2.22	1.07
1:AA:1728:G:H3'	1:AA:1729:A:H5''	1.37	1.07
12:DP:24:GLY:CA	12:DP:25:ASP:CB	2.30	1.07
11:AO:62:LEU:HD13	30:A8:30:ARG:HH11	0.94	1.07
31:BA:791:G:H2'	31:BA:792:A:H5'	1.37	1.07
1:AA:2391:G:OP2	30:A8:32:LEU:CD1	2.01	1.07
1:AA:2131:G:H5'	1:AA:2132:U:H5''	1.31	1.07
11:DO:21:ARG:HA	11:DO:21:ARG:HE	1.15	1.07
1:DA:2392:A:H8	11:DO:60:MET:CB	1.67	1.07
31:BA:792:A:O2'	31:BA:794:A:N7	1.87	1.07
11:DO:19:VAL:HG23	11:DO:27:HIS:HB3	1.37	1.07
12:DP:11:LYS:HD3	12:DP:87:LYS:HG2	1.34	1.07
1:DA:2885:C:OP2	56:DA:3390:OHX:N1	1.87	1.07
50:BW:100:ILE:HG13	50:BW:102:GLY:H	1.19	1.07
1:AA:805:G:H5''	11:AO:38:GLN:HE22	1.13	1.07
11:DO:71:VAL:HG13	11:DO:72:PRO:CD	1.85	1.06
9:DM:17:ASP:CA	9:DM:55:VAL:HG21	1.85	1.06
1:DA:155:C:N3	1:DA:171:G:N2	2.03	1.06
26:A4:40:HIS:N	26:A4:41:PRO:HD3	1.67	1.06
1:AA:2701:C:H3'	1:AA:2702:U:H5''	1.32	1.06
11:AO:62:LEU:HD13	30:A8:30:ARG:NH1	1.58	1.06
3:DD:35:LYS:HG2	3:DD:64:ILE:H	0.95	1.06
7:AH:154:PRO:O	7:AH:156:ALA:N	1.88	1.06

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:DO:19:VAL:HG23	11:DO:27:HIS:CB	1.84	1.06
11:AO:65:ARG:HH11	11:AO:65:ARG:HG3	0.94	1.06
1:AA:2781:A:H5''	1:AA:2782:G:H5'	1.31	1.06
11:DO:79:ARG:HB3	11:DO:110:TYR:CD1	1.89	1.06
30:A8:34:TRP:CB	30:A8:35:GLN:CB	2.30	1.06
11:DO:47:ASP:HB3	11:DO:48:PRO:C	1.76	1.06
11:DO:97:PRO:CG	11:DO:112:LEU:HD12	1.84	1.06
11:DO:65:ARG:HG3	11:DO:65:ARG:HH11	0.97	1.06
16:D1:92:ARG:HD2	16:D1:95:LEU:HD12	1.34	1.06
1:DA:2610:C:H4'	1:DA:2611:U:OP2	1.51	1.06
52:BD:18:G:H1'	52:BD:19:C:OP2	1.54	1.06
11:AO:15:ARG:CG	11:AO:15:ARG:HH11	1.67	1.05
54:B1:13:A:O2'	54:B1:14:A:OP1	1.73	1.05
11:DO:97:PRO:HG3	11:DO:112:LEU:HD12	1.10	1.05
52:BB:48:C:H3'	52:BB:49:A:H8	1.13	1.05
5:DF:116:ASP:OD1	11:DO:1:MET:N	1.89	1.05
11:DO:19:VAL:CG2	11:DO:27:HIS:HB3	1.87	1.05
45:BR:26:GLU:OE2	45:BR:77:ARG:NH1	1.89	1.05
34:CG:139:ARG:HG3	34:CG:139:ARG:HH11	1.17	1.05
1:DA:1678:G:N2	1:DA:1989:G:H22	1.54	1.05
12:AP:19:GLY:HA3	12:AP:98:LYS:NZ	1.71	1.05
11:AO:114:ILE:HD11	11:AO:130:PHE:CD1	1.91	1.05
5:AF:67:GLN:HG3	5:AF:67:GLN:O	1.47	1.05
11:DO:71:VAL:HG12	11:DO:72:PRO:CD	1.82	1.05
1:AA:943:U:P	11:AO:36:LYS:HG3	1.95	1.05
49:BV:41:VAL:HB	49:BV:42:PRO:HA	1.35	1.05
1:DA:1936:A:O2'	56:DA:3103:OHX:N4	1.89	1.05
27:D5:3:LYS:HA	27:D5:3:LYS:HE3	1.33	1.05
40:BM:48:THR:HA	40:BM:62:HIS:HB3	1.36	1.05
12:AP:17:LEU:HD21	12:AP:96:VAL:HG13	1.31	1.04
30:D8:33:ASN:ND2	30:D8:41:ILE:HD11	1.71	1.04
11:DO:15:ARG:HG2	11:DO:15:ARG:HH11	1.10	1.04
52:BB:46:G:H2'	52:BB:47:U:C6	1.92	1.04
1:AA:1952:A:N1	10:AN:22:ILE:HD11	1.71	1.04
4:AE:41:LYS:HE2	4:AE:41:LYS:HA	1.38	1.04
53:CC:48:U:O2'	53:CC:49:C:OP2	1.73	1.04
12:AP:24:GLY:HA3	12:AP:25:ASP:HB2	1.36	1.04
1:AA:889:C:H3'	1:AA:890:A:H4'	1.37	1.04
31:CA:1160:G:H1	31:CA:1177:G:N2	1.53	1.04
12:DP:75:THR:HB	12:DP:88:GLY:HA3	1.30	1.04
1:AA:1102:C:H2'	1:AA:1103:A:H8	1.21	1.04
1:AA:2420:C:OP1	30:A8:33:ASN:O	1.75	1.04

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1090:U:O4	1:DA:1101:U:O2	1.76	1.04
31:CA:1256:A:OP2	33:CF:26:LYS:NZ	1.90	1.04
17:A2:15:GLU:HG3	17:A2:16:PRO:HD2	1.36	1.04
12:DP:24:GLY:HA3	12:DP:25:ASP:HB2	1.04	1.03
50:CW:82:SER:OG	50:CW:86:ARG:NH2	1.91	1.03
2:AB:7:G:H4'	14:AQ:29:PHE:HD1	1.22	1.03
31:CA:862:C:H1'	31:CA:874:G:H5''	1.40	1.03
1:DA:1022:G:O2'	1:DA:1023:U:OP2	1.73	1.03
9:DM:56:ASN:CB	9:DM:125:GLY:C	2.26	1.03
11:DO:52:GLU:HG3	11:DO:57:THR:HA	1.40	1.03
1:DA:2681:C:C5	1:DA:2725:A:N6	2.26	1.03
11:DO:71:VAL:HG13	11:DO:72:PRO:HD3	1.37	1.03
9:DM:56:ASN:HB3	9:DM:126:PRO:N	1.73	1.03
1:DA:2136:C:N4	1:DA:2155:G:N1	2.06	1.03
41:CN:54:ARG:HH11	41:CN:54:ARG:HG2	1.19	1.03
4:DE:39:PRO:HG3	4:DE:45:THR:HG23	1.40	1.03
52:BD:11:C:H3'	52:BD:12:C:H5''	1.41	1.03
30:D8:29:LYS:HG3	30:D8:29:LYS:O	1.52	1.03
30:D8:33:ASN:HA	30:D8:36:LYS:HD2	1.40	1.03
1:DA:882:G:N2	1:DA:894:C:N3	2.07	1.02
1:DA:631:A:OP2	30:D8:47:LYS:NZ	1.90	1.02
11:DO:97:PRO:HG3	11:DO:112:LEU:CD1	1.87	1.02
39:CL:112:LYS:HA	39:CL:119:ALA:HB2	1.40	1.02
8:AK:126:TYR:HB2	8:AK:140:LEU:HD21	1.37	1.02
33:BF:19:GLU:O	33:BF:40:ARG:NH2	1.92	1.02
1:AA:602:G:O2'	1:AA:604:G:O2'	1.72	1.02
16:A1:92:ARG:O	16:A1:94:ASN:N	1.93	1.02
30:A8:35:GLN:HA	30:A8:35:GLN:OE1	1.58	1.02
4:DE:37:ARG:CA	4:DE:42:ASP:OD2	2.06	1.02
1:DA:1088:A:H5'	1:DA:1089:G:H5'	1.41	1.02
1:AA:1778:U:H2'	1:AA:1784:A:N6	1.73	1.02
29:A7:12:ARG:HH11	29:A7:12:ARG:HG3	0.86	1.02
12:AP:24:GLY:HA3	12:AP:25:ASP:HB3	1.02	1.02
19:DT:65:ARG:HG3	19:DT:65:ARG:HH11	1.20	1.02
1:DA:1899:G:N2	1:DA:1902:C:H5	1.58	1.02
11:DO:9:ASN:HB3	11:DO:10:PRO:HD2	1.41	1.02
6:AG:67:LYS:HE2	26:A4:6:HIS:CE1	1.94	1.02
26:D4:22:ILE:HG12	26:D4:23:GLU:H	1.24	1.01
31:BA:1028(B):C:N4	31:BA:1032(A):G:H1	1.58	1.01
32:CE:78:GLN:O	32:CE:94:ASN:ND2	1.92	1.01
16:A1:90:VAL:O	16:A1:92:ARG:N	1.92	1.01
31:BA:1346:A:H5''	39:BL:120:ARG:HH12	1.19	1.01

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:BR:63:ARG:HH12	45:BR:87:ILE:HD12	1.21	1.01
11:AO:75:ILE:HD13	11:AO:75:ILE:H	1.23	1.01
1:AA:2467:C:H4'	12:AP:123:HIS:ND1	1.73	1.01
31:CA:1127:G:N3	31:CA:1147:C:N4	2.09	1.01
27:A5:56:LYS:HD2	27:A5:56:LYS:H	1.21	1.01
31:BA:1149:C:H2'	31:BA:1150:U:H6	1.22	1.01
1:DA:1309:G:N7	56:DA:3389:OHX:N2	2.09	1.01
12:AP:75:THR:HG22	12:AP:90:VAL:H	1.22	1.01
1:AA:270(O):U:H4'	1:AA:270(P):C:OP2	1.57	1.01
31:CA:82:U:H3	31:CA:87:A:N6	1.59	1.01
31:BA:1139:G:N2	31:BA:1143:G:O6	1.94	1.01
30:A8:34:TRP:HB3	30:A8:35:GLN:HB2	1.04	1.01
9:DM:56:ASN:HA	9:DM:125:GLY:CA	1.89	1.01
16:D1:50:ARG:HH12	17:D2:72:VAL:CG2	1.73	1.01
50:BW:31:SER:HA	50:BW:34:LYS:HE3	1.40	1.01
5:DF:46:ARG:HH11	5:DF:46:ARG:HG2	1.22	1.01
31:BA:559:A:OP2	35:BH:126:ARG:NH2	1.93	1.01
12:DP:24:GLY:HA3	12:DP:25:ASP:HB3	1.37	1.01
1:AA:1081:U:O2'	1:AA:1082:U:OP1	1.79	1.01
2:DB:14:U:O2'	2:DB:107:U:O2'	1.75	1.01
30:A8:34:TRP:HE3	30:A8:35:GLN:HG2	0.90	1.00
31:CA:503:C:OP2	42:CO:116:SER:HB3	1.60	1.00
1:AA:2689:U:H4'	1:AA:2690:C:H5'	1.41	1.00
1:DA:686:G:OP1	29:D7:11:LYS:NZ	1.93	1.00
6:AG:101:ILE:HD12	26:A4:25:TYR:HB3	1.40	1.00
1:DA:631:A:OP1	11:DO:64:LYS:HE2	1.61	1.00
1:AA:49:A:C8	1:AA:120:U:H5	1.79	1.00
34:BG:209:ARG:HE	34:BG:209:ARG:HA	1.24	1.00
1:AA:593:G:H4'	30:A8:61:LEU:HD13	1.40	1.00
1:AA:51:G:O6	56:AA:3546:OHX:N3	1.92	1.00
31:CA:975:A:H4'	31:CA:976:G:H5''	1.43	1.00
3:DD:35:LYS:HE2	3:DD:104:TYR:HB2	1.39	1.00
52:CD:18:G:H1'	52:CD:19:C:OP2	1.59	1.00
31:BA:1452:C:O2'	31:BA:1453:G:OP2	1.79	1.00
1:AA:1055:G:H1	1:AA:1104:C:N4	1.59	1.00
14:DQ:109:GLY:O	14:DQ:111:GLU:N	1.93	1.00
1:AA:1798:U:H5''	3:AD:259:THR:HG22	1.43	1.00
3:AD:166:GLN:HE21	3:AD:166:GLN:HA	1.22	1.00
31:BA:1367:C:H5'	40:BM:60:ARG:HH21	1.24	1.00
9:DM:56:ASN:HB2	9:DM:125:GLY:O	1.61	1.00
1:AA:1887:C:H2'	1:AA:1888:G:H5''	1.41	1.00
20:AU:49:VAL:O	20:AU:51:VAL:N	1.95	1.00

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DZ:92:LYS:O	23:DZ:94:LEU:N	1.93	1.00
12:AP:75:THR:CB	12:AP:88:GLY:HA3	1.92	1.00
5:DF:128:ALA:O	5:DF:142:TRP:NE1	1.94	1.00
32:BE:204:ASN:ND2	32:BE:206:ASP:O	1.94	1.00
1:DA:1043:C:N4	1:DA:1112:G:H1	1.60	1.00
11:DO:106:LEU:O	11:DO:107:LYS:HB2	1.61	0.99
1:AA:1952:A:C6	10:AN:22:ILE:HD11	1.97	0.99
3:DD:43:ARG:NH1	3:DD:44:ASN:ND2	2.10	0.99
3:DD:44:ASN:HB3	3:DD:49:ILE:HA	1.40	0.99
1:AA:676:A:H8	1:AA:2069:G:H21	1.04	0.99
1:DA:2701:C:H3'	1:DA:2702:U:C5'	1.87	0.99
31:BA:1028:C:N4	31:BA:1033:G:H1	1.60	0.99
31:CA:1352:C:H42	31:CA:1370:G:H1	1.08	0.99
31:CA:82:U:H3	31:CA:87:A:H61	1.01	0.99
5:DF:132:VAL:HG22	5:DF:133:ASN:H	1.24	0.99
29:A7:12:ARG:HH11	29:A7:12:ARG:CG	1.72	0.99
19:DT:28:PHE:HZ	19:DT:81:VAL:CG2	1.75	0.99
34:BG:22:LYS:HB2	34:BG:26:CYS:HB2	1.43	0.99
1:AA:1021:A:H62	1:AA:1141:U:H3	1.06	0.99
16:D1:50:ARG:NH2	17:D2:72:VAL:HG21	1.78	0.99
1:AA:1056:G:H21	1:AA:1103:A:N6	1.60	0.99
31:BA:1128:C:O2'	31:BA:1130:A:N7	1.92	0.99
31:BA:1129:C:H4'	31:BA:1130:A:H5'	1.42	0.99
18:DS:59:VAL:HG23	18:DS:65:LEU:H	1.24	0.99
16:A1:79:PHE:HE2	16:A1:83:LEU:HD22	1.26	0.99
31:BA:1028(B):C:N4	31:BA:1032(A):G:N1	2.11	0.99
33:BF:70:VAL:HG12	33:BF:72:LYS:H	1.27	0.99
6:DG:135:LEU:HD23	6:DG:140:ILE:HD11	1.44	0.99
31:BA:737:A:H2'	31:BA:738:C:H6	1.24	0.99
47:BT:18:THR:OG1	47:BT:69:LYS:NZ	1.94	0.99
1:DA:1171:G:H1	1:DA:1178:C:N4	1.61	0.99
14:DQ:29:PHE:HD2	14:DQ:30:ARG:N	1.61	0.99
22:D3:53:MET:HG3	22:D3:59:LEU:HD23	1.41	0.98
1:AA:882:G:N2	1:AA:894:C:N3	2.11	0.98
1:DA:2255:G:H22	12:DP:85:LYS:HE2	1.26	0.98
54:C1:19:U:C2'	54:C1:20:G:H5'	1.93	0.98
29:A7:8:ASN:HD22	29:A7:8:ASN:C	1.65	0.98
1:DA:2469:A:C8	1:DA:2482:G:C5	2.51	0.98
1:AA:1678:G:H21	1:AA:1989:G:H22	1.05	0.98
11:AO:9:ASN:HB3	11:AO:10:PRO:HD2	1.45	0.98
31:BA:1160:G:O6	31:BA:1181:G:O6	1.81	0.98
1:DA:1054:A:N6	1:DA:1105:U:H3	1.60	0.98

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:CB:47:U:H2'	52:CB:48:C:C6	1.97	0.98
4:AE:117:MET:HE1	4:AE:136:ARG:HA	1.43	0.98
31:BA:1002:G:H2'	31:BA:1003:G:H8	1.27	0.98
1:DA:1171:G:H1	1:DA:1178:C:H42	1.09	0.98
31:BA:201:C:N3	31:BA:216:G:N2	2.12	0.98
31:CA:365:U:H5'	31:CA:366:C:OP1	1.64	0.98
53:CC:17:C:C3'	53:CC:18:C:H5''	1.94	0.98
52:BB:48:C:H3'	52:BB:49:A:C8	1.98	0.98
29:A7:12:ARG:NH1	29:A7:12:ARG:HG3	1.65	0.98
36:BI:36:ARG:NH2	36:BI:38:GLU:OE2	1.95	0.98
1:AA:1900:A:H8	1:AA:1900:A:H5'	1.27	0.98
3:DD:25:THR:O	3:DD:27:THR:N	1.96	0.98
1:AA:2391:G:OP2	30:A8:32:LEU:HD11	1.63	0.98
7:AH:4:ILE:HG13	7:AH:6:ARG:CZ	1.94	0.98
1:AA:654(D):G:N2	1:AA:654(Q):C:N3	2.11	0.97
1:DA:2511:U:OP1	56:DA:3172:OHX:N2	1.96	0.97
6:AG:161:THR:HG22	6:AG:163:ALA:H	1.28	0.97
1:AA:882:G:H1	1:AA:894:C:N4	1.61	0.97
31:BA:1004:A:H5''	31:BA:1025:U:O4	1.62	0.97
31:BA:1178:G:N2	31:BA:1181:G:N7	2.12	0.97
1:DA:2404:C:H1'	11:DO:67:MET:HE3	1.46	0.97
11:AO:114:ILE:HD11	11:AO:130:PHE:HD1	1.19	0.97
12:AP:51:ARG:HH11	12:AP:51:ARG:HG2	1.29	0.97
31:BA:81:G:N2	31:BA:88:C:C2	2.32	0.97
4:AE:77:ILE:O	4:AE:79:ARG:N	1.97	0.97
1:DA:2255:G:N2	12:DP:85:LYS:CE	2.27	0.97
16:D1:100:VAL:O	16:D1:101:ARG:HG2	1.63	0.97
33:BF:95:THR:HG22	33:BF:96:GLY:H	1.29	0.97
31:CA:1145:C:H4'	31:CA:1146:A:OP1	1.63	0.97
1:AA:67:U:H3	1:AA:74:A:H2	1.12	0.97
31:CA:1286:A:C8	31:CA:1287:A:H4'	1.99	0.97
21:DV:115:GLY:HA3	21:DV:174:VAL:HG13	1.43	0.97
1:DA:811:U:C2'	11:DO:21:ARG:O	2.12	0.97
1:AA:2308:G:N2	1:AA:2311:A:C2	2.26	0.97
1:AA:1102:C:H2'	1:AA:1103:A:C8	2.00	0.97
12:DP:26:TYR:CD1	12:DP:139:GLU:HG2	2.00	0.97
1:DA:1762:A:OP1	1:DA:1762:A:H4'	1.64	0.97
1:DA:2107:C:N3	1:DA:2182:G:N2	2.11	0.97
52:CB:83:C:H2'	52:CB:84:C:H5'	1.46	0.97
1:AA:1264:G:OP1	27:A5:19:ARG:NH2	1.97	0.97
2:AB:12:C:O2'	22:A3:74:ARG:HB2	1.64	0.97
1:AA:2251:G:OP1	12:AP:82:ARG:NH1	1.96	0.97

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:324:G:N7	56:BA:1755:OHX:N3	2.11	0.97
3:DD:166:GLN:HE21	3:DD:166:GLN:HA	1.30	0.97
11:AO:65:ARG:NH1	11:AO:65:ARG:HG3	1.73	0.97
31:BA:749:C:OP1	56:BA:1801:OHX:N3	1.97	0.97
9:DM:15:LEU:CD1	9:DM:55:VAL:CG1	2.25	0.97
1:AA:993:G:OP1	16:A1:50:ARG:NH2	1.98	0.97
1:DA:2211:G:O2'	1:DA:2212:A:OP1	1.81	0.97
4:DE:64:LYS:HB2	4:DE:66:HIS:CD2	2.00	0.97
52:CB:50:U:H2'	52:CB:51:C:C6	2.00	0.97
31:BA:826:C:H2'	31:BA:827:U:O2	1.65	0.97
14:DQ:60:GLY:O	14:DQ:61:ASN:HB2	1.65	0.97
1:AA:2317:C:C2'	1:AA:2318:G:H5'	1.95	0.96
16:A1:79:PHE:CE2	16:A1:83:LEU:HD22	1.99	0.96
21:DV:115:GLY:H	21:DV:177:PRO:HG2	1.26	0.96
31:BA:625:G:H4'	46:BS:16:HIS:CD2	2.00	0.96
1:AA:881:G:O6	1:AA:895:U:O2	1.83	0.96
25:DX:19:GLN:HE22	25:DX:52:HIS:HE1	1.10	0.96
1:AA:2255:G:H21	12:AP:85:LYS:HE2	1.22	0.96
31:BA:1301:U:H3'	31:BA:1302:U:H5'	1.44	0.96
52:CB:51:C:H3'	52:CB:52:G:C8	1.98	0.96
1:DA:1341:U:H2'	1:DA:1397:U:O2	1.64	0.96
12:DP:78:PRO:O	12:DP:79:LEU:HD12	1.64	0.96
3:AD:35:LYS:HD2	3:AD:104:TYR:CE1	1.99	0.96
27:D5:3:LYS:N	27:D5:3:LYS:HE3	1.79	0.96
45:CR:82:ILE:HG12	45:CR:87:ILE:HB	1.43	0.96
29:A7:8:ASN:ND2	29:A7:11:LYS:H	1.64	0.96
31:BA:201:C:H42	31:BA:216:G:H1	0.97	0.96
31:CA:992:U:H3	31:CA:1044:A:H62	1.04	0.96
54:B1:11:U:O2'	54:B1:12:A:N3	1.98	0.96
1:AA:2136:C:N4	1:AA:2155:G:H1	1.62	0.96
1:DA:1332:G:N2	1:DA:1609:A:O2'	1.99	0.96
35:BH:68:GLU:HG2	35:BH:70:PRO:HD3	1.48	0.96
1:DA:1945:G:OP1	56:DA:3103:OHX:N6	1.99	0.96
50:CW:50:GLU:HA	50:CW:100:ILE:HG21	1.43	0.96
31:BA:382:A:H2'	31:BA:383:A:H8	1.31	0.96
1:AA:1464:C:HO2'	1:AA:1528:A:H8	1.12	0.96
1:AA:2391:G:P	30:A8:32:LEU:HD12	2.06	0.96
24:DW:17:SER:HB2	24:DW:18:PRO:CA	1.96	0.95
1:DA:259:G:H21	1:DA:621:A:H8	1.04	0.95
32:BE:42:ILE:HD11	32:BE:202:PRO:HB2	1.48	0.95
19:DT:28:PHE:CZ	19:DT:81:VAL:HG22	2.01	0.95
46:CS:8:ARG:HG2	46:CS:8:ARG:HH11	1.29	0.95

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1003:G:H1	31:CA:1037:C:N4	1.64	0.95
11:DO:62:LEU:HD22	11:DO:62:LEU:N	1.81	0.95
1:DA:1332:G:N2	1:DA:1609:A:HO2'	1.63	0.95
31:BA:8:A:H62	34:BG:208:SER:HB2	1.30	0.95
31:CA:574:A:H5''	31:CA:575:G:OP2	1.66	0.95
4:DE:37:ARG:C	4:DE:42:ASP:OD2	2.05	0.95
21:DV:11:GLU:CG	21:DV:12:GLY:H	1.79	0.95
11:DO:65:ARG:HG3	11:DO:65:ARG:NH1	1.72	0.95
1:AA:49:A:N7	1:AA:120:U:H5	1.61	0.95
14:AQ:83:LYS:O	14:AQ:109:GLY:HA2	1.66	0.95
32:CE:131:PRO:HG2	32:CE:134:GLU:HB2	1.48	0.95
52:CD:52:G:H2'	52:CD:53:A:H8	1.32	0.95
1:AA:2142:C:H42	1:AA:2149:G:H1	1.15	0.95
5:DF:53:THR:O	5:DF:55:GLY:N	2.00	0.95
1:DA:2843:G:H2'	1:DA:2844:G:H5''	1.45	0.95
1:DA:2523:G:H8	1:DA:2523:G:H5'	1.30	0.95
31:BA:1008:C:H42	31:BA:1021:G:H1	1.13	0.95
10:DN:4:PRO:O	10:DN:5:GLN:HB2	1.66	0.95
21:DV:128:VAL:HG22	21:DV:129:SER:H	1.28	0.95
28:A6:23:THR:O	56:A6:101:OHX:N6	2.00	0.95
31:BA:530:G:H4'	31:BA:531:U:OP2	1.67	0.95
31:CA:81:G:H1	31:CA:88:C:N4	1.63	0.95
2:AB:116:G:H5''	14:AQ:55:ALA:HB2	1.45	0.95
4:AE:20:ALA:HB1	4:AE:21:VAL:HG13	1.49	0.95
1:AA:1026:U:H1'	1:AA:1027:A:O5'	1.67	0.95
20:DU:89:PHE:CD1	20:DU:90:LEU:N	2.34	0.95
12:DP:79:LEU:O	12:DP:79:LEU:HD12	1.67	0.95
31:CA:279:A:OP2	47:CT:95:TYR:OH	1.82	0.95
1:AA:1069:A:H4'	1:AA:1070:A:H5''	1.47	0.95
31:BA:81:G:N2	31:BA:88:C:N3	2.14	0.95
30:A8:48:PHE:HE2	30:A8:50:LEU:HD13	1.28	0.95
26:D4:34:GLU:HG2	26:D4:35:VAL:H	1.29	0.95
24:DW:65:ASN:HD22	24:DW:69:ARG:HH21	1.00	0.94
31:BA:1125:U:OP2	31:BA:1145:C:N4	1.99	0.94
14:DQ:88:ASP:OD2	14:DQ:90:GLY:N	2.00	0.94
34:BG:22:LYS:HB2	34:BG:26:CYS:CB	1.97	0.94
1:AA:2629:A:O2'	1:AA:2630:G:H5''	1.67	0.94
52:CB:31:G:H1	52:CB:41:C:H42	0.98	0.94
1:DA:205:G:O2'	1:DA:206:U:OP2	1.85	0.94
12:AP:19:GLY:HA3	12:AP:98:LYS:HZ2	1.29	0.94
1:DA:1652:A:H62	13:D0:11:ASN:HD21	1.11	0.94
34:CG:178:VAL:HG12	34:CG:179:GLU:H	1.29	0.94

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
15:DR:91:ARG:HD2	15:DR:124:ASP:OD1	1.67	0.94
1:AA:2056:G:N2	27:A5:4:HIS:O	2.00	0.94
52:BD:22:A:N7	52:BD:57:C:N4	2.14	0.94
1:DA:1678:G:H21	1:DA:1989:G:H22	1.10	0.94
1:AA:2276:G:P	12:AP:84:GLY:HA2	2.06	0.94
11:DO:47:ASP:CB	11:DO:48:PRO:CA	2.38	0.94
1:AA:2701:C:H3'	1:AA:2702:U:C5'	1.96	0.94
50:BW:47:GLY:O	50:BW:49:ALA:N	2.01	0.94
43:BP:82:MET:O	43:BP:84:ILE:N	2.01	0.94
23:AZ:76:ARG:HG2	23:AZ:76:ARG:HH11	1.29	0.94
1:DA:1689:A:H62	1:DA:1698:A:H2	1.06	0.94
52:CD:48:C:C3'	52:CD:49:A:H8	1.80	0.94
52:CD:50:U:H2'	52:CD:51:C:C6	2.03	0.94
1:DA:2389:G:H5''	1:DA:2390:U:H5'	1.48	0.94
51:CX:2:GLY:O	51:CX:4:GLY:N	2.01	0.94
1:AA:1210:A:C8	1:AA:1210:A:H5'	2.03	0.94
11:DO:105:LEU:O	11:DO:105:LEU:HD12	1.67	0.94
4:DE:61:ARG:O	4:DE:63:LEU:N	2.00	0.94
31:CA:1056:U:H5'	33:CF:163:ALA:HB2	1.47	0.94
40:CM:49:VAL:O	40:CM:60:ARG:HB2	1.68	0.94
1:AA:1359:A:H2'	1:AA:1360:A:H5'	1.49	0.94
53:CC:17:C:H3'	53:CC:18:C:H5''	0.97	0.94
1:DA:1088:A:H4'	1:DA:1089:G:H8	1.30	0.94
1:DA:141:A:H8	1:DA:1595:G:H21	1.14	0.94
1:DA:1728:G:N7	1:DA:1731:G:N2	2.14	0.94
1:AA:2068:U:H3	1:AA:2430:A:H2	0.97	0.94
52:BD:11:C:C3'	52:BD:12:C:H5''	1.98	0.94
10:DN:2:ILE:HD12	10:DN:6:THR:HG21	1.48	0.94
10:DN:24:VAL:HA	10:DN:39:ILE:HG22	1.49	0.94
4:DE:36:ARG:NH1	4:DE:85:ASN:OD1	2.01	0.94
1:DA:1416:G:HO2'	1:DA:1417:C:H6	0.95	0.94
31:CA:519:C:O2	56:CA:1728:OHX:N4	2.01	0.94
15:DR:24:PRO:HA	15:DR:49:VAL:HG23	1.49	0.94
31:BA:1322:C:O2'	31:BA:1323:G:O5'	1.86	0.94
30:A8:34:TRP:N	30:A8:35:GLN:CB	2.30	0.93
11:AO:62:LEU:CD1	30:A8:30:ARG:HH12	1.71	0.93
52:CD:52:G:H2'	52:CD:53:A:C8	2.03	0.93
16:D1:50:ARG:HH11	17:D2:70:ILE:HG22	1.32	0.93
11:DO:79:ARG:O	11:DO:111:ARG:N	2.01	0.93
2:AB:7:G:H4'	14:AQ:29:PHE:CD1	2.04	0.93
1:DA:1310:G:OP2	29:D7:9:ARG:NH1	1.99	0.93
1:AA:1014:U:H2'	1:AA:1015:G:H5''	1.50	0.93

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:CD:61:G:H1	52:CD:71:C:H42	1.16	0.93
49:CV:11:VAL:HG22	49:CV:12:ASP:H	1.34	0.93
30:D8:50:LEU:N	30:D8:50:LEU:CD2	2.31	0.93
2:AB:43:C:OP1	6:AG:67:LYS:NZ	2.00	0.93
1:DA:389:G:H1	11:DO:71:VAL:HG12	1.32	0.93
52:BD:61:G:H1	52:BD:71:C:H42	1.11	0.93
26:A4:40:HIS:N	26:A4:41:PRO:CD	2.30	0.93
1:DA:2107:C:H42	1:DA:2182:G:H1	1.07	0.93
31:BA:382:A:H2'	31:BA:383:A:C8	2.02	0.93
42:CO:83:VAL:HG12	42:CO:84:LEU:H	1.33	0.93
11:DO:38:GLN:OE1	11:DO:45:LEU:CD1	2.16	0.93
31:BA:484:G:O2'	31:BA:485:G:OP2	1.86	0.93
24:AW:4:SER:HB2	24:AW:5:GLU:OE2	1.68	0.93
1:DA:1012:U:O4	9:DM:25:ARG:HA	1.66	0.93
14:DQ:88:ASP:O	14:DQ:89:ARG:HB3	1.66	0.93
1:DA:1043:C:N3	1:DA:1112:G:N2	2.17	0.93
1:DA:2123:G:H1	1:DA:2175:C:H42	0.99	0.93
35:CH:101:ILE:HD11	35:CH:119:LEU:HD23	1.49	0.93
3:AD:30:GLU:HG3	3:AD:63:ARG:HH21	1.31	0.93
1:DA:2378:A:H4'	14:DQ:23:ARG:HH11	1.31	0.93
1:AA:154:G:H2'	1:AA:155:C:H5''	1.51	0.93
9:DM:128:HIS:HB2	9:DM:129:PRO:HD2	1.49	0.93
11:AO:62:LEU:HG	11:AO:62:LEU:O	1.67	0.93
3:AD:35:LYS:HG2	3:AD:64:ILE:N	1.84	0.93
49:CV:20:LEU:O	49:CV:23:ASN:ND2	2.01	0.93
4:DE:179:GLU:HB3	4:DE:181:LEU:HD22	1.51	0.93
41:BN:79:SER:HB2	41:BN:106:LYS:HD2	1.50	0.93
31:BA:1007:C:H2'	31:BA:1008:C:H5''	1.49	0.93
1:AA:1056:G:N2	1:AA:1103:A:H62	1.66	0.93
31:BA:1271:G:H2'	31:BA:1272:G:H5''	1.51	0.93
4:AE:111:ARG:HG3	4:AE:160:TYR:CD1	2.04	0.93
4:AE:68:ALA:O	4:AE:70:ALA:N	2.01	0.93
1:AA:1899:G:N2	1:AA:1902:C:C5	2.37	0.93
16:D1:28:ARG:NH1	16:D1:28:ARG:HG2	1.84	0.93
31:CA:1026:G:N7	31:CA:1036:G:N2	2.17	0.93
31:CA:652:U:O2'	31:CA:653:A:H5''	1.68	0.93
8:DK:131:LYS:HB3	8:DK:132:PRO:HA	1.49	0.93
11:DO:62:LEU:CD2	11:DO:62:LEU:N	2.30	0.92
1:AA:2135:A:O2'	1:AA:2136:C:OP1	1.86	0.92
1:AA:1055:G:N2	1:AA:1104:C:N3	2.14	0.92
3:AD:35:LYS:NZ	3:AD:104:TYR:HB2	1.84	0.92
31:CA:1347:G:C8	39:CL:107:ARG:HB3	2.04	0.92

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1342:A:C6	1:DA:1397:U:C5	2.57	0.92
1:AA:1965:C:O2	56:AA:3509:OHX:N3	2.02	0.92
37:CJ:32:ARG:O	37:CJ:34:GLY:N	2.02	0.92
12:DP:19:GLY:H	12:DP:98:LYS:HZ3	1.07	0.92
1:AA:805:G:C4'	11:AO:38:GLN:NE2	2.32	0.92
29:A7:8:ASN:HD21	29:A7:11:LYS:H	0.99	0.92
1:AA:2334:G:O6	22:A3:74:ARG:NH2	2.01	0.92
30:A8:48:PHE:CE2	30:A8:50:LEU:HD13	2.04	0.92
2:DB:43:C:OP1	26:D4:6:HIS:HE1	1.51	0.92
1:AA:947:G:O6	56:AA:3547:OHX:N5	2.03	0.92
11:AO:50:ARG:HB2	11:AO:50:ARG:HH21	1.34	0.92
3:DD:69:ARG:NH2	3:DD:128:GLY:O	2.03	0.92
50:CW:8:ARG:HH11	50:CW:8:ARG:HG3	1.32	0.92
32:CE:16:HIS:HE2	32:CE:209:ARG:HG2	1.34	0.92
11:DO:62:LEU:HG	30:D8:25:MET:HB2	1.51	0.92
47:BT:6:LEU:HD23	47:BT:23:VAL:HG11	1.50	0.92
52:BB:59:A:H61	52:BB:73:U:H3	1.17	0.92
53:CC:16:C:O2'	53:CC:62:C:OP1	1.87	0.92
11:AO:15:ARG:NH1	11:AO:15:ARG:HG2	1.77	0.92
19:DT:28:PHE:HD1	19:DT:28:PHE:N	1.68	0.92
42:CO:27:LEU:HD21	42:CO:60:LEU:HG	1.52	0.92
30:A8:34:TRP:CG	30:A8:35:GLN:HB2	2.04	0.92
1:DA:2404:C:H1'	11:DO:67:MET:CE	2.00	0.92
1:AA:780:G:N2	1:AA:783:A:H62	1.67	0.92
1:AA:805:G:C5'	11:AO:38:GLN:HE22	1.82	0.92
1:AA:2068:U:N3	1:AA:2430:A:H2	1.68	0.92
6:DG:47:LYS:HD3	6:DG:81:LYS:HG3	1.52	0.92
15:DR:8:LYS:NZ	15:DR:8:LYS:HB2	1.82	0.92
2:DB:39:A:C6	26:D4:1:MET:HB3	2.03	0.92
31:CA:580:U:OP2	56:CA:1723:OHX:N5	2.02	0.92
1:AA:2210:G:H3'	1:AA:2211:G:H8	1.17	0.92
1:AA:1077:A:H3'	1:AA:1078:U:C5'	2.00	0.92
1:DA:2357:U:OP1	22:D3:20:ARG:NH1	2.03	0.92
33:CF:21:ARG:NH1	33:CF:21:ARG:HB3	1.84	0.92
1:AA:2138:C:H42	1:AA:2153:G:H1	1.08	0.92
1:DA:304:G:H2'	1:DA:305:U:H6	1.34	0.92
11:DO:15:ARG:NH1	11:DO:15:ARG:HG2	1.76	0.91
41:CN:54:ARG:HH11	41:CN:54:ARG:CG	1.82	0.91
23:DZ:87:PRO:O	23:DZ:89:GLU:N	2.03	0.91
19:DT:28:PHE:CD1	19:DT:28:PHE:N	2.30	0.91
3:AD:35:LYS:HZ1	3:AD:65:ILE:HA	1.36	0.91
17:D2:87:HIS:HE1	17:D2:89:GLN:HB2	1.30	0.91

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AD:17:THR:HG22	3:AD:205:VAL:H	1.33	0.91
1:AA:851:U:OP1	25:AX:49:LYS:NZ	2.02	0.91
1:AA:2015:A:HO2'	27:A5:3:LYS:NZ	1.57	0.91
5:DF:69:HIS:H	5:DF:69:HIS:CD2	1.87	0.91
19:DT:28:PHE:CZ	19:DT:81:VAL:CG2	2.53	0.91
47:CT:63:ARG:HG2	47:CT:64:PRO:HD2	1.52	0.91
33:BF:58:GLU:HB2	33:BF:65:ALA:HB3	1.52	0.91
1:DA:155:C:N4	1:DA:171:G:N1	2.03	0.91
1:DA:2425:A:H5'	1:DA:2427:C:O4'	1.71	0.91
1:DA:2468:G:O6	1:DA:2481:G:C6	2.24	0.91
10:DN:68:GLU:HB3	10:DN:78:ARG:NH1	1.84	0.91
48:CU:22:VAL:O	48:CU:23:LYS:HB3	1.70	0.91
20:DU:4:LYS:HE3	20:DU:4:LYS:HA	1.51	0.91
11:AO:101:VAL:HG23	11:AO:106:LEU:HB3	1.51	0.91
1:AA:1533:C:H3'	1:AA:1534:G:C5'	2.01	0.91
1:AA:780:G:H21	1:AA:783:A:N6	1.67	0.91
29:D7:8:ASN:HD22	29:D7:11:LYS:H	1.15	0.91
1:DA:2645:G:H3'	1:DA:2646:C:H5'	1.53	0.91
1:DA:1606:G:H5''	1:DA:1607:C:OP1	1.70	0.91
33:CF:113:ALA:HB3	33:CF:114:PRO:HD3	1.52	0.91
31:BA:1065:U:O2'	31:BA:1066:C:OP2	1.88	0.91
10:DN:35:VAL:HG11	10:DN:103:ALA:HB3	1.53	0.91
30:A8:34:TRP:CE3	30:A8:35:GLN:CD	2.44	0.91
31:CA:1106:G:H5''	33:CF:172:ARG:HG2	1.50	0.91
1:AA:2270:G:OP2	56:AA:3374:OHX:N4	2.04	0.91
34:CG:22:LYS:HD2	34:CG:26:CYS:SG	2.11	0.91
1:DA:1627:G:OP2	56:DA:3384:OHX:N5	2.04	0.91
1:AA:1689:A:H62	1:AA:1698:A:H2	1.12	0.91
1:AA:76:C:O2'	24:AW:62:THR:HG21	1.70	0.91
1:DA:593:G:H1'	30:D8:4:MET:HE1	1.50	0.91
6:AG:21:ARG:HG2	6:AG:21:ARG:NH1	1.78	0.91
31:BA:1348:U:H3	31:BA:1374:A:H2	1.19	0.91
5:DF:83:PHE:O	5:DF:84:VAL:HB	1.69	0.91
1:AA:2391:G:P	30:A8:32:LEU:CD1	2.59	0.91
5:AF:65:TRP:CZ3	5:AF:72:ARG:HB3	2.06	0.91
1:DA:2136:C:N3	1:DA:2155:G:N2	2.19	0.91
1:DA:1899:G:N2	1:DA:1902:C:C5	2.34	0.91
12:DP:56:ARG:HB2	12:DP:56:ARG:HH11	1.31	0.91
31:BA:1226:C:O2'	43:BP:111:LYS:NZ	2.03	0.91
3:DD:176:ARG:HH11	3:DD:176:ARG:HG2	1.34	0.91
1:DA:67:U:H3	1:DA:74:A:H2	1.19	0.91
3:DD:255:LYS:N	3:DD:255:LYS:HE3	1.85	0.90

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:90:U:C2'	1:DA:91:A:H5''	1.98	0.90
44:BQ:59:ALA:O	44:BQ:60:SER:HB2	1.68	0.90
5:AF:101:LEU:HD13	5:AF:102:PRO:HD2	1.53	0.90
14:AQ:30:ARG:HG2	14:AQ:30:ARG:HH11	1.35	0.90
29:D7:8:ASN:ND2	29:D7:11:LYS:H	1.69	0.90
11:DO:38:GLN:OE1	11:DO:45:LEU:HD12	1.71	0.90
11:AO:105:LEU:O	11:AO:106:LEU:HB2	1.68	0.90
52:BB:62:G:H2'	52:BB:63:U:H5'	1.53	0.90
53:BC:1:C:N4	53:BC:74:A:H2	1.69	0.90
3:AD:30:GLU:HG3	3:AD:63:ARG:NH2	1.86	0.90
30:D8:34:TRP:CG	30:D8:35:GLN:N	2.32	0.90
9:DM:33:LEU:HD12	9:DM:38:HIS:HD2	1.35	0.90
40:BM:61:GLU:OE2	44:BQ:45:ARG:NH1	2.04	0.90
34:BG:172:PRO:O	34:BG:174:LEU:N	2.04	0.90
3:DD:26:LYS:H	3:DD:26:LYS:HD2	1.33	0.90
1:DA:676:A:H8	1:DA:2069:G:H21	0.91	0.90
1:DA:848:G:H2'	1:DA:849:A:C8	2.05	0.90
52:BD:17:G:H1'	52:BD:18:G:OP1	1.71	0.90
1:AA:1364:G:N7	23:AZ:2:SER:HB3	1.87	0.90
10:DN:47:ILE:HG13	10:DN:48:PRO:HD2	1.52	0.90
40:BM:9:ARG:HH21	40:BM:97:GLU:HG3	1.36	0.90
40:CM:9:ARG:HH21	40:CM:95:GLU:HG2	1.32	0.90
21:AV:27:VAL:HG12	21:AV:87:ASP:HB3	1.50	0.90
30:A8:34:TRP:CA	30:A8:35:GLN:CB	2.46	0.90
31:CA:1321:C:H3'	31:CA:1322:C:H5''	1.51	0.90
16:D1:50:ARG:HH12	17:D2:72:VAL:CB	1.82	0.90
16:D1:98:LEU:C	16:D1:100:VAL:H	1.74	0.90
35:BH:144:THR:OG1	35:BH:147:ASP:OD2	1.88	0.90
17:D2:62:LEU:HD22	17:D2:95:LEU:HB2	1.54	0.90
1:DA:1153:C:H2'	1:DA:1154:G:O4'	1.70	0.90
31:CA:909:A:OP1	42:CO:21:LYS:HD3	1.70	0.90
9:DM:17:ASP:HA	9:DM:55:VAL:HG21	0.91	0.90
3:DD:35:LYS:NZ	3:DD:64:ILE:O	2.04	0.90
16:D1:50:ARG:HH22	17:D2:72:VAL:CG2	1.83	0.90
1:AA:968:G:O6	56:AA:3547:OHX:N1	2.04	0.90
42:CO:47:LYS:HB3	42:CO:48:PRO:HD2	1.53	0.90
35:BH:11:ILE:HD11	35:BH:31:LEU:HD13	1.51	0.90
20:DU:81:LYS:HG2	20:DU:97:ARG:CZ	2.01	0.90
9:DM:10:GLU:HG3	9:DM:11:PRO:HD2	1.54	0.90
31:BA:1256:A:HO2'	31:BA:1257:U:P	1.93	0.90
27:D5:3:LYS:HA	27:D5:3:LYS:HE2	1.50	0.90
1:AA:2308:G:N1	1:AA:2311:A:C2	2.37	0.90

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:AE:61:ARG:HB2	4:AE:62:PRO:HD3	1.51	0.90
8:AK:67:ARG:HH21	8:AK:68:LEU:HB2	1.34	0.90
1:DA:34:C:O2'	1:DA:35:G:OP2	1.90	0.90
1:DA:2150:U:H2'	1:DA:2151:G:C8	2.06	0.90
11:DO:61:ARG:CB	11:DO:61:ARG:NH2	2.34	0.90
1:AA:140:A:H8	1:AA:1408:C:O2'	1.54	0.90
20:DU:50:ARG:HB3	20:DU:53:PRO:HG3	1.53	0.90
4:DE:101:ARG:HD2	4:DE:169:ASN:ND2	1.87	0.90
1:DA:2748:A:N7	1:DA:2754:U:O4	2.05	0.90
39:CL:53:VAL:O	39:CL:55:ALA:N	2.05	0.90
31:CA:468:A:H2'	31:CA:474:G:H5'	1.51	0.90
31:BA:419:C:H42	31:BA:424:G:H1	1.19	0.90
1:DA:885:C:C4	1:DA:890:A:C6	2.58	0.90
21:AV:72:ARG:NH2	21:AV:97:GLU:O	2.04	0.90
40:CM:40:LEU:HG	40:CM:41:PRO:HD2	1.53	0.90
14:AQ:66:ALA:HA	14:AQ:69:VAL:HG12	1.54	0.90
1:AA:494:G:H21	18:AS:57:ASN:HD21	1.18	0.90
1:AA:873:G:H1	1:AA:904:C:N4	1.68	0.90
31:CA:412:A:O2'	31:CA:413:G:OP2	1.88	0.90
9:DM:17:ASP:HA	9:DM:55:VAL:HG22	1.53	0.89
31:CA:1352:C:N4	31:CA:1370:G:H1	1.70	0.89
1:AA:1022:G:H22	1:AA:1142(A):A:H2	1.20	0.89
1:DA:2468:G:H3'	1:DA:2476:A:N1	1.85	0.89
1:AA:2304:G:H22	1:AA:2312:U:H3	1.20	0.89
1:AA:507:A:H5''	1:AA:508:G:H5'	1.54	0.89
9:DM:15:LEU:HD11	9:DM:55:VAL:HG13	1.04	0.89
31:BA:78:G:H1	31:BA:91:C:H42	1.16	0.89
1:DA:140:A:H8	1:DA:1408:C:HO2'	0.90	0.89
42:CO:59:ARG:HH11	42:CO:63:GLY:HA2	1.33	0.89
31:CA:1298:C:H5	37:CJ:114:ARG:HD2	1.36	0.89
11:AO:62:LEU:HD12	30:A8:30:ARG:NH1	1.88	0.89
1:DA:2469:A:O2'	12:DP:56:ARG:HG2	1.72	0.89
12:DP:27:VAL:HG13	12:DP:105:GLU:OE2	1.72	0.89
1:AA:1945:G:OP1	56:AA:3555:OHX:N2	2.06	0.89
1:AA:1582:C:O2'	1:AA:1586:A:H8	1.54	0.89
4:DE:66:HIS:C	4:DE:68:ALA:H	1.76	0.89
1:AA:2420:C:P	30:A8:33:ASN:O	2.31	0.89
16:D1:92:ARG:HD3	16:D1:94:ASN:HB3	1.52	0.89
15:AR:77:PRO:HG2	15:AR:80:SER:HB2	1.54	0.89
52:BD:47:U:H2'	52:BD:48:C:C6	2.07	0.89
40:CM:54:PHE:CD2	40:CM:55:LYS:HD3	2.08	0.89
52:CD:47:U:H2'	52:CD:48:C:C6	2.08	0.89

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:DW:46:GLN:H	24:DW:49:LYS:HZ2	1.14	0.89
14:DQ:17:ARG:HH11	14:DQ:17:ARG:CG	1.86	0.89
1:AA:2438:U:O3'	1:AA:2439:A:H3'	1.72	0.89
31:CA:1374:A:H2'	31:CA:1375:A:H5'	1.55	0.89
31:CA:182:U:H5	31:CA:183:G:H1'	1.36	0.89
1:DA:9:U:N3	1:DA:2629:A:N6	2.21	0.89
12:AP:75:THR:HB	12:AP:88:GLY:CA	2.02	0.89
14:DQ:10:ARG:HH21	14:DQ:91:PRO:HB2	1.36	0.89
1:AA:1364:G:OP2	23:AZ:2:SER:OG	1.89	0.89
52:BB:23:A:H2'	52:BB:24:G:H5''	1.53	0.89
1:AA:2875:C:H4'	15:AR:5:ALA:HB2	1.51	0.89
32:CE:79:ASP:O	32:CE:82:ARG:N	2.05	0.89
24:AW:42:GLY:O	24:AW:44:LEU:N	2.05	0.89
48:CU:56:THR:HB	48:CU:58:LEU:HD11	1.51	0.89
11:DO:61:ARG:HH21	11:DO:61:ARG:HG2	1.37	0.89
31:CA:1129:C:N4	31:CA:1142:G:O6	2.06	0.89
31:CA:987:G:H1	31:CA:1218:C:H42	1.21	0.89
8:AK:7:GLU:HA	8:AK:15:VAL:HG22	1.54	0.89
19:AT:67:GLY:O	19:AT:69:TYR:N	2.05	0.89
32:CE:50:GLU:O	32:CE:54:THR:OG1	1.88	0.89
4:AE:26:ILE:HD11	4:AE:198:VAL:HG21	1.54	0.89
15:AR:50:ILE:HD11	15:AR:102:ILE:HD11	1.54	0.89
31:BA:789:U:C5	31:BA:792:A:OP2	2.26	0.89
31:BA:87:A:H2'	31:BA:88:C:H6	1.38	0.89
1:DA:517:C:OP1	27:D5:16:ARG:NH2	2.06	0.89
1:AA:860:U:C5	1:AA:917:A:H2	1.91	0.89
1:DA:2392:A:H2	1:DA:2424:C:H42	1.20	0.88
52:BD:11:C:H3'	52:BD:12:C:C5'	2.03	0.88
31:BA:142:G:H1	31:BA:221:C:H42	1.20	0.88
46:CS:8:ARG:CG	46:CS:8:ARG:HH11	1.86	0.88
45:CR:16:ALA:HB1	45:CR:21:ASP:HB3	1.55	0.88
15:DR:64:ARG:HB2	15:DR:73:GLU:HG2	1.53	0.88
3:AD:125:ILE:HD11	3:AD:131:LEU:HD21	1.53	0.88
30:A8:52:LYS:O	30:A8:52:LYS:HG3	1.73	0.88
3:DD:43:ARG:NH1	3:DD:44:ASN:HD21	1.68	0.88
5:DF:24:LEU:HB3	5:DF:25:PRO:CD	2.03	0.88
31:BA:411:A:N7	31:BA:413:G:N3	2.21	0.88
20:AU:52:SER:HB2	20:AU:53:PRO:HD3	1.54	0.88
6:DG:128:ARG:HG3	6:DG:128:ARG:HH21	1.38	0.88
1:DA:2275:C:O2'	12:DP:84:GLY:HA2	1.70	0.88
31:CA:1157:A:O2'	31:CA:1158:C:O5'	1.90	0.88
12:AP:79:LEU:O	12:AP:80:GLU:HB2	1.70	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1325:C:H4'	51:CX:17:THR:HG21	1.54	0.88
49:CV:28:LYS:HD3	49:CV:29:ARG:H	1.34	0.88
1:DA:1088:A:H4'	1:DA:1089:G:C8	2.09	0.88
19:DT:8:ILE:H	19:DT:8:ILE:HD12	1.36	0.88
3:AD:35:LYS:CD	3:AD:104:TYR:CD1	2.56	0.88
52:BB:48:C:H42	52:BB:52:G:H1	1.20	0.88
42:CO:70:ILE:HD13	42:CO:77:LEU:HD12	1.53	0.88
31:CA:382:A:H2'	31:CA:383:A:C8	2.07	0.88
31:CA:979:C:C5	31:CA:980:C:C6	2.62	0.88
1:DA:884:C:H42	1:DA:892:G:H1	0.94	0.88
17:D2:73:SER:HB2	17:D2:83:ARG:O	1.73	0.88
31:BA:1023:G:H3'	31:BA:1024:G:H5''	1.55	0.88
30:D8:49:VAL:C	30:D8:50:LEU:HD22	1.94	0.88
40:BM:48:THR:HG23	40:BM:62:HIS:ND1	1.88	0.88
20:AU:56:PRO:O	20:AU:58:GLY:N	2.07	0.88
1:AA:507:A:C5'	1:AA:508:G:H5'	2.04	0.88
21:DV:11:GLU:HG3	21:DV:12:GLY:N	1.88	0.88
1:AA:1359:A:N6	1:AA:1372:U:O2	2.07	0.88
21:AV:72:ARG:NH1	21:AV:72:ARG:HG3	1.82	0.88
40:BM:34:VAL:HG22	40:BM:74:ILE:HG22	1.56	0.88
1:AA:1900:A:C8	1:AA:1900:A:H5'	2.08	0.88
32:BE:88:ALA:HB2	32:BE:219:VAL:HG13	1.52	0.88
31:CA:359:U:H2'	31:CA:360:A:C8	2.08	0.88
52:CB:6:G:O2'	52:CB:7:G:OP1	1.91	0.88
6:AG:37:VAL:O	6:AG:94:LEU:HD23	1.74	0.88
16:D1:92:ARG:HG2	17:D2:11:GLN:NE2	1.89	0.88
31:BA:1128:C:H2'	31:BA:1139:G:O6	1.73	0.88
19:DT:26:TYR:O	19:DT:28:PHE:CE1	2.27	0.88
12:AP:51:ARG:HH12	12:AP:55:VAL:HG11	1.38	0.88
1:AA:547:A:H2'	1:AA:548:A:C8	2.07	0.88
36:BI:28:ARG:O	36:BI:32:ASN:ND2	2.06	0.88
6:DG:129:GLY:O	6:DG:130:ASN:ND2	2.07	0.88
3:AD:35:LYS:HD3	3:AD:63:ARG:CB	2.04	0.88
1:AA:2444:G:OP2	5:AF:68:LYS:HE2	1.74	0.88
15:DR:51:ARG:HG2	15:DR:98:LYS:HD2	1.53	0.88
42:CO:83:VAL:HG11	42:CO:100:ILE:HD12	1.56	0.88
1:DA:1470:G:OP2	56:DA:3343:OHX:N5	2.07	0.88
31:CA:1392:G:H21	31:CA:1502:A:H8	1.17	0.88
1:AA:315:G:H2'	1:AA:316:C:H6	1.37	0.88
16:D1:25:TRP:C	16:D1:25:TRP:CD1	2.47	0.88
9:DM:56:ASN:HA	9:DM:125:GLY:H	1.36	0.88
1:AA:2394:C:OP1	11:AO:63:PRO:HD2	1.73	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1190:G:O6	56:CA:1762:OHX:N3	2.07	0.88
34:CG:8:VAL:O	34:CG:10:ARG:N	2.06	0.88
17:A2:39:LEU:O	17:A2:40:LEU:HD23	1.74	0.88
14:DQ:11:LYS:HG3	14:DQ:91:PRO:HD3	1.53	0.88
2:DB:7:G:H4'	14:DQ:29:PHE:CD1	2.09	0.88
25:DX:19:GLN:NE2	25:DX:52:HIS:HE1	1.72	0.88
3:DD:206:LEU:HD22	3:DD:211:ARG:HG2	1.55	0.88
1:DA:1478:G:N7	56:DA:3415:OHX:N3	2.22	0.88
21:DV:27:VAL:HG12	21:DV:87:ASP:HB3	1.53	0.88
5:AF:46:ARG:HG2	5:AF:46:ARG:HH11	1.38	0.88
1:AA:2404:C:O3'	11:AO:77:ARG:NH2	2.07	0.88
5:DF:132:VAL:O	5:DF:134:GLY:N	2.06	0.87
4:DE:5:LEU:HD11	4:DE:79:ARG:HB2	1.56	0.87
35:BH:41:VAL:HG22	35:BH:113:ALA:HB2	1.55	0.87
34:BG:153:ARG:NH2	34:BG:180:GLY:O	2.06	0.87
7:AH:10:PRO:O	7:AH:11:VAL:HG13	1.74	0.87
1:DA:774:A:H2	1:DA:787:U:HO2'	1.22	0.87
1:AA:607:U:H3	1:AA:621:A:H2	1.20	0.87
16:A1:112:ARG:HG3	16:A1:112:ARG:NH1	1.78	0.87
11:DO:19:VAL:HG22	11:DO:20:GLY:H	1.37	0.87
31:CA:81:G:N2	31:CA:88:C:N3	2.21	0.87
23:DZ:86:SER:N	23:DZ:87:PRO:HD2	1.87	0.87
1:DA:2468:G:H3'	1:DA:2476:A:C2	2.10	0.87
4:AE:20:ALA:O	4:AE:21:VAL:HG22	1.75	0.87
1:DA:2762:G:H3'	1:DA:2763:G:H5''	1.56	0.87
29:D7:34:ARG:NH1	29:D7:39:ARG:HG3	1.88	0.87
32:BE:100:GLY:N	32:BE:176:GLU:OE2	2.07	0.87
32:CE:72:GLY:O	32:CE:74:LYS:N	2.05	0.87
11:DO:64:LYS:HB2	30:D8:25:MET:CE	1.94	0.87
14:AQ:29:PHE:HD2	14:AQ:30:ARG:N	1.72	0.87
1:DA:1995:U:OP1	56:DA:3172:OHX:N3	2.06	0.87
32:BE:194:PRO:O	32:BE:196:LEU:N	2.08	0.87
1:DA:1364:G:OP2	23:DZ:2:SER:N	2.07	0.87
35:CH:122:GLU:HB3	35:CH:126:ARG:HG2	1.55	0.87
35:BH:78:HIS:HE1	35:BH:143:ARG:H	1.22	0.87
1:AA:1509:C:H3'	1:AA:1510:A:H5''	1.54	0.87
2:AB:15:A:H5'	2:AB:16:G:C8	2.08	0.87
52:BD:18:G:OP1	52:BD:66:G:N2	2.08	0.87
43:BP:4:ILE:HG22	43:BP:5:ALA:H	1.39	0.87
31:BA:210:U:HO2'	31:BA:216:G:H8	1.17	0.87
53:BC:1:C:H42	53:BC:74:A:H2	0.90	0.87
27:D5:57:VAL:HG12	27:D5:58:LEU:H	1.39	0.87

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
33:BF:16:ARG:NH2	33:BF:183:ASP:OD2	2.07	0.87
1:DA:2607:G:O6	56:DA:3214:OHX:N1	2.06	0.87
31:BA:1299:A:C2'	31:BA:1301:U:H1'	2.04	0.87
1:DA:1019:U:H2'	1:DA:1020:A:H8	1.40	0.87
18:DS:64:MET:O	18:DS:65:LEU:HB2	1.75	0.87
1:AA:873:G:H1	1:AA:904:C:H42	0.93	0.87
21:DV:30:ASN:O	21:DV:32:HIS:N	2.06	0.87
38:BK:87:SER:HB2	38:BK:93:VAL:HB	1.54	0.87
24:DW:16:LEU:O	24:DW:16:LEU:HD12	1.74	0.87
9:DM:33:LEU:HD12	9:DM:38:HIS:CD2	2.10	0.87
31:BA:1256:A:O2'	31:BA:1257:U:O5'	1.91	0.87
1:DA:2287:A:H62	1:DA:2344:U:H3	1.18	0.87
19:DT:36:LYS:HG2	19:DT:54:VAL:HB	1.55	0.87
31:CA:1176:A:C2'	31:CA:1177:G:H5'	2.05	0.87
31:CA:362:G:H4'	42:CO:33:ARG:HH21	1.40	0.87
1:DA:2655:G:N2	1:DA:2665:A:OP2	2.08	0.87
31:CA:1027:C:O2	31:CA:1035:A:N6	2.07	0.87
39:CL:3:GLN:HE21	39:CL:20:ARG:NH1	1.71	0.87
34:BG:155:LEU:HD12	34:BG:158:ILE:HD11	1.55	0.87
31:CA:64:G:H4'	31:CA:65:U:O5'	1.74	0.87
4:DE:119:ARG:HG2	4:DE:160:TYR:HB2	1.56	0.87
4:DE:37:ARG:HA	4:DE:42:ASP:OD2	1.73	0.87
40:CM:56:HIS:O	40:CM:58:ASP:N	2.06	0.87
12:AP:17:LEU:HD21	12:AP:96:VAL:HG11	1.53	0.87
16:D1:50:ARG:HH12	17:D2:72:VAL:HB	1.39	0.87
31:BA:737:A:H2'	31:BA:738:C:C6	2.09	0.87
1:DA:1416:G:O2'	1:DA:1417:C:O5'	1.92	0.87
13:D0:78:LYS:O	13:D0:83:ILE:HG13	1.74	0.87
34:BG:85:LYS:HG2	34:BG:86:LYS:H	1.40	0.87
42:CO:90:VAL:O	42:CO:92:ASP:N	2.08	0.87
32:BE:111:ARG:HH11	32:BE:111:ARG:HG2	1.36	0.87
1:DA:586:A:H5'	5:DF:89:VAL:HG21	1.56	0.87
21:DV:33:LEU:HD23	21:DV:90:VAL:HG21	1.55	0.87
5:AF:123:LEU:HD12	5:AF:124:LEU:H	1.37	0.87
23:AZ:65:SER:HB2	23:AZ:66:HIS:HD2	1.40	0.87
1:AA:1197:G:N7	56:AA:3538:OHX:N2	2.22	0.87
5:AF:51:THR:HB	5:AF:88:VAL:HG21	1.55	0.87
34:BG:126:ILE:HD13	34:BG:127:THR:H	1.39	0.87
33:BF:162:GLN:HG2	54:B1:24:A:H1'	1.54	0.87
31:BA:652:U:O4	31:BA:752:G:O2'	1.91	0.87
31:BA:991:U:O2'	31:BA:992:U:H5'	1.75	0.87
31:CA:1321:C:N4	31:CA:1322:C:H41	1.72	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1352:C:OP1	51:CX:3:LYS:NZ	2.06	0.86
28:D6:25:LYS:HB3	30:D8:34:TRP:CH2	2.10	0.86
5:DF:31:HIS:HB2	11:DO:9:ASN:ND2	1.90	0.86
31:BA:1149:C:H2'	31:BA:1150:U:C6	2.09	0.86
44:BQ:6:LEU:HB3	44:BQ:23:ARG:NH2	1.89	0.86
31:BA:411:A:C5	31:BA:413:G:H1'	2.09	0.86
9:AM:40:PRO:O	16:A1:64:ARG:HG2	1.75	0.86
1:AA:540:G:H8	1:AA:540:G:H5'	1.40	0.86
38:CK:64:LYS:HG2	38:CK:79:VAL:HG21	1.57	0.86
1:DA:946:G:H2'	1:DA:947:G:H8	1.40	0.86
11:DO:9:ASN:HB3	11:DO:10:PRO:CD	2.04	0.86
52:CB:58:G:H1	52:CB:74:C:H42	1.22	0.86
14:AQ:32:LEU:O	14:AQ:62:LYS:NZ	2.08	0.86
50:CW:10:LEU:HD13	50:CW:12:ALA:H	1.38	0.86
32:BE:60:ASP:OD1	32:BE:64:ARG:NH2	2.07	0.86
30:D8:34:TRP:CD1	30:D8:35:GLN:N	2.41	0.86
31:CA:1349:A:OP2	39:CL:118:LYS:NZ	2.07	0.86
31:CA:81:G:H1	31:CA:88:C:H42	0.88	0.86
2:DB:7:G:H4'	14:DQ:29:PHE:HD1	1.39	0.86
42:CO:47:LYS:HB3	42:CO:48:PRO:CD	2.05	0.86
31:BA:426:G:O6	56:BA:1785:OHX:N4	2.08	0.86
30:A8:34:TRP:N	30:A8:35:GLN:HB3	1.90	0.86
1:AA:1055:G:H1	1:AA:1104:C:H42	0.87	0.86
1:AA:1678:G:N2	1:AA:1989:G:H22	1.72	0.86
1:DA:67:U:N3	1:DA:74:A:C2	2.43	0.86
42:CO:75:HIS:HD2	42:CO:77:LEU:H	1.24	0.86
31:BA:280:C:H3'	31:BA:281:G:H5'	1.55	0.86
7:AH:25:LYS:HG2	7:AH:34:GLU:HG2	1.56	0.86
1:AA:1060:U:H3	1:AA:1088:A:H8	1.22	0.86
31:BA:1346:A:H5''	39:BL:120:ARG:NH1	1.90	0.86
30:A8:59:LYS:HB2	30:A8:59:LYS:NZ	1.89	0.86
35:BH:110:LEU:HD13	35:BH:118:ILE:HD13	1.57	0.86
30:D8:52:LYS:H	30:D8:52:LYS:HD2	1.40	0.86
49:CV:7:LYS:HG2	49:CV:8:GLY:H	1.39	0.86
1:DA:9:U:N3	1:DA:2629:A:C6	2.43	0.86
1:AA:2275:C:O2'	12:AP:84:GLY:HA3	1.76	0.86
12:AP:17:LEU:CD2	12:AP:96:VAL:HG13	2.00	0.86
1:DA:2391:G:OP2	30:D8:32:LEU:CD1	2.23	0.86
1:DA:2138:C:H42	1:DA:2153:G:H1	1.21	0.86
31:BA:1145:C:H4'	31:BA:1146:A:C8	2.10	0.86
1:DA:2378:A:O2'	14:DQ:21:THR:HG21	1.75	0.86
1:DA:2468:G:H8	1:DA:2476:A:N1	1.73	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:CH:91:LEU:HD12	35:CH:120:THR:HG22	1.57	0.86
6:DG:161:THR:HG22	6:DG:163:ALA:H	1.40	0.86
1:AA:2136:C:H42	1:AA:2155:G:H1	0.90	0.86
21:DV:174:VAL:O	21:DV:175:VAL:HB	1.73	0.86
31:BA:991:U:O4	31:BA:1212:U:O2'	1.94	0.86
31:CA:736:C:H2'	31:CA:737:A:H8	1.40	0.86
4:AE:28:ALA:HB3	4:AE:93:VAL:HG23	1.58	0.86
1:AA:163:U:H2'	1:AA:164:U:H5'	1.55	0.86
3:AD:35:LYS:HD3	3:AD:63:ARG:HB3	1.57	0.86
5:DF:25:PRO:HB2	5:DF:27:GLU:N	1.89	0.86
1:DA:1250:G:N7	11:DO:18:ARG:NH2	2.24	0.86
1:DA:859:G:O2'	1:DA:916:G:O6	1.93	0.86
1:AA:900:A:H3'	1:AA:901:A:H8	1.40	0.86
42:CO:24:VAL:O	42:CO:26:ALA:N	2.06	0.86
39:CL:26:VAL:HG13	39:CL:61:ALA:HB3	1.56	0.86
41:BN:99:GLN:HG2	41:BN:105:VAL:HG21	1.55	0.86
28:A6:15:GLU:HA	28:A6:49:HIS:HA	1.58	0.86
7:AH:20:ALA:HB1	7:AH:21:PRO:HD2	1.58	0.86
51:BX:2:GLY:O	51:BX:4:GLY:N	2.09	0.86
19:DT:28:PHE:CE1	19:DT:81:VAL:HG22	2.11	0.86
21:DV:115:GLY:N	21:DV:177:PRO:HG2	1.89	0.86
32:BE:165:VAL:HG23	32:BE:166:ASP:H	1.38	0.86
31:CA:345:C:O2'	31:CA:346:G:O5'	1.93	0.86
52:CD:22:A:N7	52:CD:57:C:N4	2.24	0.85
34:CG:29:PRO:HD2	34:CG:30:LYS:HE2	1.56	0.85
31:CA:1160:G:N1	31:CA:1177:G:N2	2.24	0.85
1:AA:1899:G:H22	1:AA:1902:C:N4	1.74	0.85
1:DA:2123:G:H1	1:DA:2175:C:N4	1.73	0.85
39:CL:97:LYS:HB2	39:CL:102:LEU:HD12	1.58	0.85
1:DA:530:G:O2'	1:DA:532:A:C8	2.27	0.85
1:AA:2645:G:H3'	1:AA:2646:C:H5'	1.58	0.85
12:DP:56:ARG:HB2	12:DP:56:ARG:NH1	1.91	0.85
1:AA:2749:A:OP1	7:AH:4:ILE:HG22	1.76	0.85
53:BC:48:U:O2'	53:BC:49:C:OP2	1.92	0.85
27:A5:4:HIS:CB	27:A5:5:PRO:CD	2.33	0.85
31:CA:1322:C:H2'	31:CA:1322:C:O2	1.75	0.85
1:DA:1899:G:H22	1:DA:1902:C:N4	1.74	0.85
2:DB:15:A:H5''	2:DB:16:G:H8	1.41	0.85
32:CE:83:MET:O	32:CE:85:ALA:N	2.10	0.85
1:DA:38:A:H2'	1:DA:39:C:C6	2.10	0.85
38:BK:34:GLU:HB3	38:BK:118:VAL:HG21	1.57	0.85
3:AD:34:VAL:HG21	3:AD:103:ARG:HA	1.59	0.85

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:CE:77:ALA:HB2	32:CE:211:ILE:HD13	1.59	0.85
11:DO:79:ARG:HB3	11:DO:110:TYR:HD1	1.38	0.85
31:BA:611:A:H61	31:BA:629:G:H1	1.21	0.85
42:BO:71:PRO:O	42:BO:102:ARG:HD3	1.75	0.85
4:DE:8:LYS:HB3	4:DE:193:GLY:H	1.40	0.85
31:BA:1240:U:OP2	37:BJ:116:ALA:N	2.09	0.85
12:DP:24:GLY:CA	12:DP:25:ASP:HB2	1.97	0.85
34:CG:31:CYS:HB3	34:CG:33:MET:HB2	1.59	0.85
43:BP:26:GLY:O	43:BP:28:ALA:N	2.09	0.85
26:A4:63:TYR:HE2	49:BV:42:PRO:HD3	1.40	0.85
31:BA:542:G:OP1	34:BG:10:ARG:NH2	2.10	0.85
1:AA:1416:G:HO2'	1:AA:1417:C:H6	0.85	0.85
1:AA:2439:A:C8	1:AA:2439:A:H5'	2.11	0.85
35:BH:75:THR:OG1	35:BH:76:ILE:N	2.05	0.85
13:D0:24:GLN:HB3	13:D0:44:LEU:HD11	1.57	0.85
31:CA:328:C:O2'	31:CA:329:A:OP2	1.92	0.85
1:DA:2275:C:HO2'	12:DP:84:GLY:CA	1.84	0.85
30:A8:16:ILE:HD11	30:A8:57:ARG:HG2	1.57	0.85
1:AA:370:G:H4'	1:AA:371:A:OP2	1.76	0.85
1:DA:2872:G:C5	1:DA:2873:A:N1	2.44	0.85
31:CA:539:A:OP2	42:CO:115:LYS:NZ	2.09	0.85
9:DM:56:ASN:HB3	9:DM:125:GLY:C	1.95	0.85
11:DO:65:ARG:CG	11:DO:65:ARG:HH11	1.86	0.85
26:A4:36:CYS:O	26:A4:41:PRO:HG2	1.76	0.85
1:DA:1171:G:N2	1:DA:1178:C:N3	2.24	0.85
1:DA:2212:A:H1'	1:DA:2215:G:C5	2.12	0.85
19:DT:63:LYS:H	19:DT:63:LYS:NZ	1.74	0.85
49:CV:78:ARG:HD3	49:CV:78:ARG:H	1.42	0.85
11:DO:71:VAL:HG12	11:DO:72:PRO:HD3	0.86	0.85
31:CA:1318:A:O2'	49:CV:37:ARG:HB3	1.76	0.85
1:AA:2307:G:C8	1:AA:2311:A:C2	2.64	0.85
1:AA:2701:C:C3'	1:AA:2702:U:H5''	2.06	0.85
1:AA:1022:G:O6	9:AM:66:LYS:NZ	2.08	0.85
33:BF:50:ALA:HB1	33:BF:70:VAL:HG11	1.56	0.85
1:AA:1587:A:H2'	1:AA:1588:C:H6	1.42	0.85
1:AA:315:G:H2'	1:AA:316:C:C6	2.12	0.85
19:AT:36:LYS:HA	19:AT:39:ILE:HD12	1.58	0.85
21:AV:53:ILE:HG22	21:AV:71:VAL:HG22	1.56	0.85
31:CA:1321:C:N4	31:CA:1322:C:N4	2.23	0.85
1:AA:890:A:H8	1:AA:892:G:C8	1.94	0.85
2:AB:72:G:H5''	2:AB:73:A:OP1	1.77	0.85
6:AG:21:ARG:HH11	6:AG:21:ARG:CG	1.87	0.85

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
30:D8:33:ASN:O	30:D8:34:TRP:CD1	2.30	0.85
5:AF:67:GLN:CG	5:AF:67:GLN:O	2.25	0.85
1:AA:1055:G:N1	1:AA:1104:C:N4	2.23	0.85
31:CA:667:G:OP2	56:CA:1757:OHX:N6	2.10	0.85
50:BW:43:LEU:HD13	50:BW:51:GLU:HB3	1.58	0.85
1:AA:1510:A:H2'	1:AA:1510:A:N3	1.91	0.85
49:BV:36:ARG:NH1	49:BV:52:TYR:O	2.09	0.85
23:DZ:23:LYS:HD3	23:DZ:28:GLY:HA3	1.57	0.85
1:AA:1109:C:HO2'	1:AA:1110:G:C4'	1.88	0.85
5:DF:178:PRO:HG2	5:DF:179:GLU:OE1	1.75	0.85
1:DA:2786:U:H4'	4:DE:65:GLY:N	1.92	0.84
31:BA:1006:C:H42	31:BA:1023:G:H1	1.21	0.84
31:CA:1443:G:O2'	15:DR:122:ASP:OD2	1.95	0.84
45:CR:87:ILE:HG22	45:CR:88:ARG:N	1.92	0.84
11:AO:50:ARG:CB	11:AO:50:ARG:HH21	1.90	0.84
24:DW:4:SER:OG	24:DW:5:GLU:OE2	1.94	0.84
31:CA:243:A:H4'	31:CA:244:U:O5'	1.77	0.84
1:AA:2343:C:O2'	1:AA:2373:G:O2'	1.92	0.84
1:AA:1606:G:H5''	1:AA:1607:C:OP1	1.76	0.84
49:BV:65:ASN:HD22	49:BV:65:ASN:H	1.25	0.84
1:DA:598:G:C1'	11:DO:12:ALA:HB2	2.06	0.84
7:DH:125:VAL:HG23	7:DH:126:PRO:HB3	1.59	0.84
12:AP:75:THR:HG22	12:AP:90:VAL:N	1.91	0.84
16:D1:44:ASN:OD1	17:D2:74:LYS:HA	1.77	0.84
52:BD:17:G:O2'	52:BD:66:G:N2	2.09	0.84
34:BG:207:TYR:C	34:BG:209:ARG:H	1.79	0.84
1:AA:1021:A:OP2	9:AM:65:LYS:NZ	2.10	0.84
31:BA:254:G:O3'	47:BT:69:LYS:NZ	2.09	0.84
1:DA:2469:A:N7	1:DA:2482:G:C4	2.43	0.84
32:CE:7:VAL:HG22	32:CE:8:LYS:H	1.39	0.84
3:AD:148:GLU:HB2	3:AD:151:LYS:HD2	1.58	0.84
1:DA:5:A:H61	1:DA:2898:U:H3	1.24	0.84
12:AP:7:MET:HE1	12:AP:73:PRO:HG3	1.57	0.84
12:AP:92:GLY:O	12:AP:93:TYR:CD1	2.30	0.84
31:BA:1271:G:C2'	31:BA:1272:G:H5''	2.07	0.84
17:A2:89:GLN:HE21	17:A2:89:GLN:HA	1.40	0.84
20:DU:88:LYS:O	20:DU:89:PHE:CD2	2.30	0.84
52:CD:21:A:N6	52:CD:55:U:O4	2.09	0.84
31:BA:1028:C:H42	31:BA:1033:G:H1	0.88	0.84
1:DA:2168:G:N2	1:DA:2170:A:OP2	2.10	0.84
28:D6:29:ASN:HA	28:D6:32:ASN:HD22	1.41	0.84
3:DD:60:ARG:HD3	3:DD:86:PRO:HB2	1.58	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
21:AV:134:PRO:O	21:AV:136:PHE:N	2.11	0.84
31:BA:168:G:N7	56:BA:1812:OHX:N3	2.25	0.84
31:CA:1443:G:H3'	31:CA:1446:A:C5'	2.08	0.84
1:DA:1899:G:H22	1:DA:1902:C:H41	1.24	0.84
31:BA:201:C:N4	31:BA:216:G:H1	1.75	0.84
31:BA:422:C:O2'	31:BA:423:G:N3	2.10	0.84
1:DA:2131:G:H5'	1:DA:2132:U:OP1	1.78	0.84
34:BG:114:ARG:HG3	34:BG:114:ARG:HH11	1.43	0.84
33:CF:95:THR:O	33:CF:97:LYS:N	2.09	0.84
9:DM:35:ARG:HB2	9:DM:42:TRP:HH2	1.42	0.84
50:BW:89:ARG:HH21	50:BW:104:LEU:HD11	1.42	0.84
31:CA:631:G:H3'	31:CA:632:A:C8	2.13	0.84
1:DA:598:G:O4'	11:DO:12:ALA:HB2	1.76	0.84
33:CF:14:ILE:HG12	33:CF:15:THR:H	1.42	0.84
1:DA:524:U:H2'	1:DA:525:U:H6	1.41	0.84
52:BB:83:C:H2'	52:BB:84:C:H5'	1.60	0.84
5:AF:55:GLY:O	56:AF:303:OHX:N1	2.09	0.84
27:A5:3:LYS:CD	27:A5:3:LYS:N	2.35	0.84
1:AA:780:G:H21	1:AA:783:A:H62	0.88	0.84
32:BE:204:ASN:ND2	32:BE:206:ASP:H	1.75	0.84
34:CG:178:VAL:O	34:CG:180:GLY:N	2.09	0.84
18:AS:9:TYR:H	18:AS:102:HIS:HD2	1.26	0.84
14:AQ:108:GLY:H	14:AQ:110:LEU:HD21	1.41	0.84
1:AA:2340:G:O2'	1:AA:2341:G:H5'	1.78	0.84
27:A5:2:ALA:N	27:A5:3:LYS:CE	2.37	0.84
31:BA:1002:G:H2'	31:BA:1003:G:C8	2.12	0.84
31:CA:1157:A:H1'	31:CA:1158:C:N3	1.91	0.84
1:DA:2795:G:H3'	1:DA:2797:U:C5'	2.07	0.84
28:D6:10:LEU:HD23	30:D8:34:TRP:CZ2	2.13	0.84
11:AO:38:GLN:HE21	11:AO:38:GLN:HA	1.42	0.84
52:CB:42:U:H2'	52:CB:43:G:C8	2.12	0.84
1:AA:2346:A:H4'	1:AA:2347:C:OP2	1.76	0.84
43:CP:92:HIS:CE1	43:CP:98:VAL:HG11	2.13	0.84
12:AP:17:LEU:CD2	12:AP:96:VAL:HG11	2.04	0.84
31:BA:1159:U:O4'	31:BA:1182:G:N2	2.10	0.84
17:A2:44:LYS:O	17:A2:46:VAL:N	2.11	0.84
11:DO:81:GLN:OE1	11:DO:106:LEU:O	1.94	0.84
1:AA:1026:U:H4'	1:AA:1027:A:OP1	1.76	0.84
1:DA:71:A:OP2	1:DA:71:A:H3'	1.77	0.84
3:AD:72:LYS:HE2	3:AD:101:GLU:OE2	1.77	0.84
31:CA:1255:G:OP1	40:CM:45:ARG:NH1	2.11	0.84
30:A8:34:TRP:HE3	30:A8:35:GLN:CG	1.79	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:DU:88:LYS:O	20:DU:89:PHE:CG	2.30	0.84
31:BA:1028:C:N3	31:BA:1033:G:N2	2.25	0.84
34:CG:4:TYR:HD1	34:CG:5:ILE:N	1.75	0.84
1:DA:2681:C:H2'	1:DA:2681:C:O2	1.77	0.84
31:BA:1147:C:O2	39:BL:16:ARG:NH1	2.11	0.84
1:AA:2790:A:C2	1:AA:2894:G:H5'	2.12	0.84
42:CO:60:LEU:O	42:CO:62:SER:N	2.11	0.84
23:AZ:80:LEU:C	23:AZ:81:LYS:HE2	1.98	0.84
21:DV:147:GLY:O	21:DV:149:SER:N	2.11	0.84
1:DA:2255:G:C2	12:DP:85:LYS:HE2	2.13	0.83
17:D2:78:LYS:O	17:D2:79:VAL:HG12	1.78	0.83
52:BD:62:G:N2	52:BD:70:C:N3	2.26	0.83
1:DA:90:U:H2'	1:DA:91:A:C5'	2.03	0.83
1:DA:2469:A:C8	1:DA:2482:G:C4	2.66	0.83
34:BG:11:LEU:O	34:BG:13:ARG:N	2.10	0.83
31:CA:179:A:H2'	31:CA:180:U:H6	1.42	0.83
31:BA:396:G:O2'	31:BA:398:C:OP1	1.94	0.83
15:AR:51:ARG:HB2	15:AR:98:LYS:HD3	1.60	0.83
34:BG:150:GLU:O	34:BG:152:SER:N	2.10	0.83
8:DK:101:LEU:H	8:DK:101:LEU:HD23	1.39	0.83
23:AZ:56:GLN:HA	23:AZ:56:GLN:HE21	1.43	0.83
12:AP:138:ASP:N	12:AP:138:ASP:OD1	2.11	0.83
1:DA:153:C:H42	1:DA:173:G:H1	1.25	0.83
31:CA:1049:U:H4'	31:CA:1050:G:C5'	2.08	0.83
12:DP:110:THR:HG23	12:DP:113:GLN:HG3	1.58	0.83
32:BE:59:GLU:O	32:BE:61:LEU:N	2.11	0.83
31:BA:1004:A:H5''	31:BA:1025:U:C4	2.12	0.83
1:AA:2319:G:H4'	1:AA:2320:A:OP1	1.78	0.83
1:DA:2427:C:H5''	1:DA:2428:G:OP1	1.78	0.83
26:A4:39:CYS:SG	26:A4:41:PRO:CG	2.66	0.83
6:AG:67:LYS:O	6:AG:67:LYS:HD2	1.76	0.83
35:BH:91:LEU:HD12	35:BH:120:THR:HG22	1.58	0.83
12:AP:66:ILE:HG13	12:AP:67:ARG:H	1.42	0.83
31:BA:1003:G:C2'	31:BA:1004:A:H5'	2.07	0.83
31:CA:870:U:H4'	31:CA:871:U:H5'	1.61	0.83
25:DX:19:GLN:HE22	25:DX:52:HIS:CE1	1.96	0.83
52:CB:44:C:H2'	52:CB:45:C:O4'	1.78	0.83
1:AA:646:A:H2'	1:AA:647:G:O4'	1.79	0.83
1:DA:1992:G:O2'	1:DA:1993:U:OP2	1.96	0.83
21:AV:39:VAL:HG21	21:AV:44:PHE:HB2	1.60	0.83
1:AA:958:U:OP2	12:AP:14:ARG:NH1	2.10	0.83
33:CF:184:TYR:HD1	33:CF:201:TYR:HE2	1.27	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
9:DM:15:LEU:HD11	9:DM:55:VAL:HG12	1.59	0.83
1:AA:2688:U:H5	1:AA:2720:U:OP2	1.62	0.83
32:BE:235:SER:O	32:BE:237:ALA:N	2.11	0.83
31:BA:453:A:H4'	46:BS:72:ARG:HB2	1.59	0.83
1:DA:483:A:H4'	20:DU:49:VAL:HA	1.60	0.83
17:D2:49:THR:HB	17:D2:50:PRO:CD	2.09	0.83
1:AA:2347:C:H4'	28:A6:39:TYR:HE2	1.43	0.83
1:AA:1278:A:O3'	13:A0:34:ILE:HD11	1.78	0.83
1:AA:1332:G:N2	1:AA:1609:A:O2'	2.11	0.83
26:D4:22:ILE:HG12	26:D4:23:GLU:N	1.93	0.83
31:BA:1004:A:H2'	31:BA:1005:A:O4'	1.77	0.83
43:CP:33:ALA:O	43:CP:37:THR:OG1	1.96	0.83
35:CH:60:TYR:HB2	35:CH:64:ARG:HH21	1.43	0.83
34:BG:31:CYS:C	34:BG:33:MET:H	1.80	0.83
1:AA:2287:A:H62	1:AA:2344:U:H3	0.85	0.83
1:AA:1535:U:N3	1:AA:1536:A:H3'	1.92	0.83
1:AA:620:G:H4'	1:AA:621:A:C5'	2.08	0.83
26:A4:18:CYS:CB	26:A4:39:CYS:HB2	1.87	0.83
31:BA:1145:C:H5''	31:BA:1146:A:OP1	1.77	0.83
17:D2:62:LEU:HB3	17:D2:93:GLU:O	1.79	0.83
32:CE:92:TYR:CD2	32:CE:151:GLY:HA3	2.13	0.83
22:D3:43:THR:O	22:D3:45:PHE:N	2.11	0.83
1:DA:2125:G:H22	1:DA:2172:U:P	2.02	0.83
31:BA:1318:A:H5''	49:BV:10:PHE:CD2	2.14	0.83
40:CM:54:PHE:CG	40:CM:55:LYS:HD3	2.13	0.83
1:AA:1077:A:H3'	1:AA:1078:U:H5''	1.60	0.83
31:BA:77:C:H2'	31:BA:78:G:H5''	1.58	0.83
31:BA:93:U:H2'	31:BA:95:G:O4'	1.78	0.83
4:AE:48:GLN:HE22	4:AE:77:ILE:HD12	1.43	0.83
2:AB:15:A:OP1	2:AB:15:A:H4'	1.79	0.83
31:BA:35:G:O2'	42:BO:118:SER:O	1.96	0.83
38:CK:77:GLU:HG3	38:CK:78:GLN:N	1.91	0.83
34:CG:14:ARG:HG3	34:CG:14:ARG:HH11	1.44	0.83
43:BP:94:ARG:O	43:BP:96:LEU:N	2.12	0.83
18:DS:51:LEU:O	18:DS:51:LEU:HD22	1.79	0.83
4:AE:132:HIS:O	4:AE:133:LYS:HB2	1.78	0.83
1:AA:1535:U:H3'	1:AA:1536:A:H5''	1.60	0.83
17:A2:59:ALA:HB2	17:A2:96:ILE:HD13	1.60	0.83
14:DQ:17:ARG:HH11	14:DQ:17:ARG:HG3	1.44	0.83
8:DK:124:GLY:H	8:DK:142:VAL:HG12	1.42	0.83
7:AH:124:GLU:HB2	7:AH:132:ARG:HG3	1.60	0.83
21:DV:141:VAL:HG21	21:DV:150:LEU:HD13	1.60	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
33:CF:23:TYR:HD2	33:CF:24:ALA:N	1.77	0.83
28:A6:25:LYS:HE3	30:A8:34:TRP:HZ2	1.44	0.83
1:DA:847:U:C5	1:DA:933:A:N6	2.47	0.83
8:DK:109:ILE:HB	8:DK:130:TYR:OH	1.77	0.83
31:CA:418:C:H42	31:CA:425:G:H1	1.23	0.83
48:CU:58:LEU:H	48:CU:58:LEU:HD12	1.41	0.83
29:A7:43:THR:HG23	29:A7:44:PRO:HD2	1.59	0.83
1:DA:986:C:C2'	1:DA:987:G:H5'	2.09	0.83
34:CG:8:VAL:O	34:CG:11:LEU:N	2.10	0.82
52:BD:21:A:N1	52:BD:55:U:O4	2.12	0.82
31:BA:73:G:O6	31:BA:97:U:C2	2.31	0.82
16:D1:90:VAL:O	16:D1:92:ARG:N	2.12	0.82
1:DA:1043:C:H42	1:DA:1112:G:H1	0.88	0.82
1:DA:1054:A:H61	1:DA:1105:U:H3	0.83	0.82
31:CA:991:U:O2'	31:CA:992:U:O5'	1.95	0.82
31:CA:1086:U:H3	31:CA:1099:G:H22	1.25	0.82
1:AA:654(B):C:H42	1:AA:654(S):G:H1	1.27	0.82
53:BC:18:C:O2	56:BC:105:OHX:N4	2.12	0.82
1:AA:559:G:H22	16:A1:49:HIS:CD2	1.97	0.82
1:DA:877:U:O4	1:DA:899:A:N6	2.12	0.82
7:AH:153:LYS:HG2	7:AH:162:ILE:HB	1.61	0.82
1:DA:1048:A:H2	1:DA:1112:G:H21	1.24	0.82
1:DA:1342:A:N1	1:DA:1397:U:C4	2.47	0.82
31:CA:1023:G:H3'	31:CA:1024:G:H5''	1.61	0.82
42:CO:75:HIS:CD2	42:CO:77:LEU:H	1.97	0.82
33:CF:181:ASN:HD21	33:CF:204:LEU:HB2	1.44	0.82
1:DA:1781:C:O2'	56:DA:3337:OHX:N6	2.12	0.82
7:DH:19:VAL:HG12	7:DH:20:ALA:H	1.44	0.82
1:AA:524:U:H2'	1:AA:525:U:H6	1.43	0.82
32:CE:7:VAL:HG13	32:CE:8:LYS:HD3	1.60	0.82
15:AR:56:GLY:O	15:AR:59:THR:HG23	1.80	0.82
1:AA:1652:A:OP1	13:A0:8:ARG:NH1	2.12	0.82
1:DA:1382:G:OP1	56:DA:3437:OHX:N2	2.12	0.82
32:BE:94:ASN:H	32:BE:94:ASN:HD22	1.28	0.82
3:AD:35:LYS:NZ	3:AD:65:ILE:HA	1.94	0.82
43:CP:94:ARG:O	43:CP:96:LEU:N	2.12	0.82
3:DD:35:LYS:HE2	3:DD:104:TYR:CD1	2.14	0.82
1:DA:2415:G:H4'	11:DO:67:MET:H	1.41	0.82
17:A2:35:LEU:HB2	17:A2:37:VAL:HG22	1.60	0.82
31:BA:38:G:C2	31:BA:397:A:C2	2.67	0.82
31:CA:526:C:OP2	42:CO:91:LYS:NZ	2.13	0.82
32:CE:233:SER:HB2	32:CE:234:PRO:HD2	1.58	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:155:C:N3	1:DA:171:G:C2	2.47	0.82
30:D8:33:ASN:HD21	30:D8:41:ILE:CG1	1.91	0.82
1:AA:2138:C:N4	1:AA:2153:G:H1	1.77	0.82
1:DA:2313:C:H5''	6:DG:40:ASN:ND2	1.93	0.82
13:A0:100:LEU:HD13	13:A0:112:ALA:HA	1.59	0.82
1:DA:330:A:H2	1:DA:1210:A:HO2'	0.88	0.82
27:A5:6:VAL:HG22	27:A5:7:PRO:CD	2.09	0.82
43:CP:92:HIS:HE1	43:CP:98:VAL:HG11	1.44	0.82
30:A8:61:LEU:HD12	30:A8:61:LEU:O	1.79	0.82
1:DA:1169:G:H2'	1:DA:1170:G:O4'	1.79	0.82
52:CB:16:C:H2'	52:CB:18:G:OP1	1.80	0.82
3:DD:69:ARG:HD3	3:DD:105:ILE:HD11	1.59	0.82
15:DR:3:ARG:HG2	15:DR:6:LEU:HB2	1.60	0.82
31:BA:438:G:OP1	34:BG:125:HIS:HE1	1.63	0.82
9:AM:103:VAL:O	9:AM:106:MET:N	2.12	0.82
1:DA:2508:G:O6	56:DA:3159:OHX:N1	2.13	0.82
11:DO:11:GLY:O	11:DO:13:ASN:N	2.12	0.82
1:DA:67:U:N3	1:DA:74:A:H2	1.78	0.82
42:BO:7:ILE:HD11	47:BT:32:TYR:HB3	1.62	0.82
1:AA:667:U:OP2	56:AO:203:OHX:N4	2.11	0.82
6:DG:63:ILE:HG13	6:DG:63:ILE:O	1.78	0.82
22:A3:36:ILE:O	22:A3:36:ILE:HD13	1.80	0.82
1:DA:2467:C:H2'	1:DA:2468:G:O4'	1.80	0.82
12:AP:133:ARG:O	12:AP:134:ARG:HB3	1.79	0.82
20:AU:97:ARG:HH21	20:AU:98:VAL:HB	1.44	0.82
1:AA:2400:G:H2'	1:AA:2401:U:H6	1.45	0.82
1:AA:881:G:H5'	1:AA:882:G:OP2	1.78	0.82
52:CB:61:G:N2	52:CB:72:U:O2	2.11	0.82
31:BA:422:C:O2'	31:BA:423:G:C2	2.33	0.82
38:BK:86:ILE:HG22	38:BK:87:SER:H	1.44	0.82
31:BA:1315:U:H2'	31:BA:1316:G:O4'	1.79	0.82
5:DF:188:ARG:HA	11:DO:3:LEU:HD11	1.59	0.82
32:BE:158:LEU:HD22	32:BE:182:ILE:HD11	1.60	0.82
11:AO:61:ARG:O	11:AO:62:LEU:HD23	1.78	0.82
54:C1:21:C:H2'	54:C1:22:A:C8	2.14	0.82
31:CA:1160:G:O6	31:CA:1181:G:C6	2.33	0.82
3:AD:28:GLU:HB3	3:AD:29:PRO:CD	2.08	0.82
1:AA:330:A:H2	1:AA:1210:A:H2'	1.45	0.82
31:CA:1277:C:HO2'	31:CA:1279:A:H8	0.83	0.82
31:CA:1003:G:N2	31:CA:1037:C:N3	2.28	0.82
52:CB:31:G:H1	52:CB:41:C:N4	1.78	0.82
41:BN:87:THR:HG22	41:BN:88:GLY:H	1.45	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1800:C:OP1	3:AD:264:LYS:NZ	2.13	0.82
31:CA:388:G:OP1	56:CA:1725:OHX:N5	2.12	0.82
4:DE:80:GLU:O	4:DE:82:ARG:N	2.13	0.81
7:AH:152:ARG:HG3	7:AH:153:LYS:H	1.45	0.81
16:D1:91:ASP:OD2	16:D1:96:ALA:HB2	1.79	0.81
2:AB:6:C:H2'	2:AB:7:G:H5''	1.62	0.81
2:DB:7:G:O5'	14:DQ:29:PHE:HE1	1.63	0.81
31:BA:748:C:H4'	31:BA:749:C:O5'	1.80	0.81
37:BJ:111:ARG:HD2	37:BJ:123:GLU:HB2	1.62	0.81
31:CA:312:C:OP1	56:CA:1746:OHX:N4	2.13	0.81
31:CA:1125:U:O4	40:CM:5:ARG:NH1	2.13	0.81
53:CC:1:C:O2	53:CC:1:C:H2'	1.78	0.81
21:DV:28:MET:HG3	21:DV:37:VAL:HG11	1.62	0.81
42:BO:6:THR:H	42:BO:9:GLN:HE21	1.28	0.81
12:DP:24:GLY:CA	12:DP:25:ASP:HB3	2.05	0.81
1:AA:1062:G:H2'	1:AA:1063:G:C8	2.15	0.81
43:BP:108:ARG:NH1	43:BP:108:ARG:HG3	1.92	0.81
34:BG:85:LYS:HG2	34:BG:86:LYS:HD2	1.62	0.81
31:CA:736:C:H2'	31:CA:737:A:C8	2.14	0.81
5:AF:40:GLN:OE1	5:AF:184:TYR:HB2	1.79	0.81
1:DA:226:G:H21	1:DA:228:A:H62	1.27	0.81
3:DD:35:LYS:HG2	3:DD:64:ILE:HG23	1.61	0.81
3:DD:35:LYS:CD	3:DD:104:TYR:HD1	1.92	0.81
1:AA:882:G:H2'	1:AA:883:G:C8	2.15	0.81
24:DW:47:ASN:O	24:DW:49:LYS:N	2.13	0.81
1:AA:805:G:H5''	11:AO:38:GLN:NE2	1.95	0.81
39:CL:28:VAL:HG22	39:CL:63:ILE:HB	1.60	0.81
1:DA:2467:C:H4'	12:DP:123:HIS:CD2	2.15	0.81
31:BA:87:A:H2'	31:BA:88:C:C6	2.15	0.81
1:DA:2107:C:N4	1:DA:2182:G:H1	1.77	0.81
4:AE:13:ARG:HH11	4:AE:21:VAL:HG11	1.45	0.81
31:BA:820:U:H4'	31:BA:821:G:OP2	1.80	0.81
1:DA:1174:A:N6	1:DA:1176:G:O2'	2.13	0.81
7:AH:9:ILE:HB	7:AH:49:VAL:HB	1.62	0.81
21:DV:158:PRO:HB2	21:DV:159:PRO:CD	2.11	0.81
31:BA:173:U:H5''	31:BA:197:A:O4'	1.78	0.81
31:BA:1374:A:H2'	31:BA:1375:A:H5'	1.62	0.81
31:BA:390:C:O3'	46:BS:28:ARG:NH2	2.14	0.81
4:AE:13:ARG:HB2	4:AE:21:VAL:HG12	1.62	0.81
1:DA:324:A:OP1	56:DA:3348:OHX:N2	2.13	0.81
43:CP:60:VAL:HG13	43:CP:64:TRP:HE1	1.43	0.81
31:CA:273:A:H1'	47:CT:16:GLN:HE21	1.46	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:2318:G:H22	14:DQ:2:ALA:HA	1.43	0.81
3:AD:2:ALA:O	3:AD:3:VAL:HB	1.77	0.81
1:DA:2308:G:O2'	1:DA:2309:A:P	2.38	0.81
1:AA:142:G:H1'	19:AT:37:THR:HG21	1.60	0.81
42:CO:34:ARG:HG3	42:CO:35:GLY:N	1.95	0.81
1:AA:1533:C:C3'	1:AA:1534:G:H5''	2.06	0.81
1:DA:1019:U:H3	1:DA:1142(A):A:H62	1.24	0.81
10:DN:105:GLU:HA	10:DN:108:GLU:HG3	1.60	0.81
1:DA:1921:G:N7	56:DA:3064:OHX:N2	2.28	0.81
27:D5:3:LYS:CE	27:D5:3:LYS:CA	2.41	0.81
11:AO:64:LYS:HD2	30:A8:25:MET:SD	2.20	0.81
31:CA:1310:G:H5'	43:CP:77:ASN:HD21	1.43	0.81
12:AP:51:ARG:NH1	12:AP:55:VAL:HG11	1.96	0.81
31:BA:448:A:OP2	31:BA:485:G:N2	2.13	0.81
38:BK:91:ARG:HH11	38:BK:91:ARG:CG	1.94	0.81
1:AA:273(F):C:H3'	1:AA:274:G:H5''	1.62	0.81
1:DA:528:A:H2	1:DA:2043:C:H4'	1.44	0.81
36:CI:61:LEU:HD23	36:CI:63:TYR:OH	1.81	0.81
8:AK:110:ASP:N	8:AK:110:ASP:OD1	2.10	0.81
46:CS:1:MET:HE1	46:CS:65:GLN:HB2	1.60	0.81
12:DP:135:ASP:O	12:DP:137:TYR:N	2.13	0.81
1:AA:907:U:O2'	12:AP:101:ARG:NH2	2.14	0.81
30:D8:33:ASN:O	30:D8:34:TRP:HD1	1.63	0.81
1:AA:1728:G:C2	1:AA:1730:U:OP2	2.34	0.81
1:DA:2468:G:C8	1:DA:2476:A:N1	2.48	0.81
52:BB:62:G:C2'	52:BB:63:U:H5'	2.10	0.81
1:AA:860:U:H5	1:AA:917:A:C2	1.97	0.81
1:DA:483:A:H5'	20:DU:49:VAL:HG22	1.60	0.81
32:BE:80:ILE:HD11	32:BE:208:ILE:HG23	1.61	0.81
34:BG:88:VAL:O	34:BG:90:GLY:N	2.14	0.81
21:AV:77:ASP:OD2	21:AV:80:ARG:HG2	1.79	0.81
9:DM:13:TRP:O	9:DM:135:PRO:HD2	1.81	0.81
31:CA:750:G:OP2	56:CA:1803:OHX:N5	2.14	0.81
15:DR:5:ALA:O	15:DR:8:LYS:HB3	1.81	0.81
1:DA:2439:A:H5'	1:DA:2439:A:C8	2.15	0.81
1:AA:819:A:OP2	1:AA:1187:G:N2	2.14	0.81
1:DA:1427:A:H4'	1:DA:1428:C:O5'	1.80	0.81
1:AA:287:C:H2'	1:AA:288:C:H6	1.45	0.81
31:CA:993:G:H2'	31:CA:995:C:H41	1.44	0.81
4:AE:13:ARG:HB2	4:AE:21:VAL:CG1	2.11	0.81
1:DA:1689:A:N6	1:DA:1698:A:H2	1.79	0.81
21:AV:160:GLY:O	21:AV:161:VAL:HG13	1.81	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:243:U:OP2	30:A8:8:LYS:NZ	2.13	0.81
32:BE:63:MET:HB3	32:BE:225:ALA:HB1	1.63	0.81
7:AH:83:TYR:HB2	7:AH:134:SER:HA	1.63	0.81
20:AU:40:GLU:HA	20:AU:40:GLU:OE1	1.78	0.81
4:AE:101:ARG:CZ	4:AE:171:GLU:HB3	2.11	0.81
4:AE:3:GLY:HA3	4:AE:81:ILE:HG21	1.63	0.81
8:DK:14:ASP:OD1	8:DK:15:VAL:N	2.13	0.81
1:AA:2599:G:N7	3:AD:236:GLY:O	2.14	0.81
52:BB:52:G:H2'	52:BB:53:A:C8	2.15	0.81
31:BA:81:G:N1	31:BA:88:C:N4	2.29	0.81
15:DR:91:ARG:NH1	15:DR:124:ASP:OD1	2.13	0.81
35:BH:78:HIS:CE1	35:BH:143:ARG:H	1.99	0.81
32:CE:224:GLN:HG3	32:CE:225:ALA:N	1.94	0.81
23:AZ:18:ILE:HG12	23:AZ:37:ILE:HG23	1.63	0.81
1:DA:1543:A:H4'	1:DA:1543:A:OP1	1.79	0.81
1:AA:86:C:H4'	1:AA:104:U:H1'	1.63	0.81
39:BL:48:GLU:H	39:BL:49:PRO:HD2	1.46	0.81
10:AN:47:ILE:HG13	10:AN:48:PRO:HD2	1.61	0.81
34:CG:173:TRP:HB3	34:CG:187:ARG:HH11	1.46	0.81
1:DA:2611:U:O2'	27:D5:3:LYS:HG2	1.81	0.80
40:CM:47:PHE:CZ	44:CQ:37:PHE:HE2	1.98	0.80
5:DF:122:LYS:HD2	5:DF:191:ARG:HG2	1.63	0.80
8:AK:131:LYS:HB3	8:AK:132:PRO:CA	2.06	0.80
11:DO:147:LEU:HD22	11:DO:148:LEU:H	1.45	0.80
8:AK:140:LEU:HD23	8:AK:140:LEU:H	1.43	0.80
24:AW:10:LEU:HD11	24:AW:59:ARG:HD2	1.63	0.80
5:DF:161:GLU:HA	5:DF:164:ARG:NH1	1.96	0.80
54:C1:13:A:O2'	54:C1:14:A:OP1	1.98	0.80
22:A3:53:MET:HG3	22:A3:59:LEU:HD23	1.61	0.80
32:BE:73:THR:OG1	32:BE:170:GLU:OE2	1.97	0.80
1:DA:885:C:C5	1:DA:890:A:N6	2.49	0.80
31:BA:1304:G:N1	31:BA:1332:A:OP2	2.13	0.80
1:AA:1689:A:N6	1:AA:1698:A:H2	1.78	0.80
31:BA:1316:G:N2	31:BA:1318:A:H3'	1.97	0.80
52:CD:80:C:H2'	52:CD:81:C:H6	1.45	0.80
1:AA:2583:G:H21	52:BB:85:A:H8	1.27	0.80
19:DT:40:LYS:O	19:DT:42:ALA:N	2.14	0.80
1:AA:2327:A:H2'	1:AA:2328:A:C8	2.15	0.80
3:AD:262:ARG:HH11	3:AD:262:ARG:HG3	1.45	0.80
20:DU:39:VAL:O	20:DU:40:GLU:HB2	1.77	0.80
50:BW:56:MET:HG3	50:BW:88:VAL:HG21	1.63	0.80
52:CD:48:C:C3'	52:CD:49:A:C8	2.58	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1546:C:O2'	1:AA:1547:C:OP2	1.98	0.80
41:BN:107:SER:HA	48:BU:87:ARG:HD2	1.62	0.80
1:AA:2400:G:H2'	1:AA:2401:U:C6	2.15	0.80
31:BA:1504:G:OP1	31:BA:1507:A:H4'	1.81	0.80
12:DP:79:LEU:C	12:DP:79:LEU:HD12	2.02	0.80
1:DA:2310:A:H5'	1:DA:2311:A:OP2	1.81	0.80
1:AA:1515:C:H2'	1:AA:1516:U:C6	2.16	0.80
33:CF:7:PRO:O	33:CF:11:ARG:NH1	2.15	0.80
1:AA:1006:C:H1'	9:AM:106:MET:HG2	1.62	0.80
17:D2:64:HIS:CD2	17:D2:92:THR:HG23	2.17	0.80
36:BI:75:LEU:HD22	36:BI:79:LEU:HG	1.63	0.80
52:CD:43:G:H2'	52:CD:44:C:C6	2.16	0.80
1:AA:92:G:O6	56:AA:3523:OHX:N5	2.13	0.80
1:AA:2055:C:H5'	1:AA:2056:G:OP1	1.82	0.80
11:DO:61:ARG:NH2	11:DO:61:ARG:CG	2.39	0.80
19:DT:65:ARG:NH1	19:DT:65:ARG:HG3	1.97	0.80
1:AA:1887:C:C2'	1:AA:1888:G:H5''	2.10	0.80
42:CO:26:ALA:O	42:CO:27:LEU:HD22	1.80	0.80
15:DR:3:ARG:HE	15:DR:6:LEU:HD13	1.47	0.80
31:BA:1226:C:H4'	49:BV:80:TYR:OH	1.82	0.80
26:D4:36:CYS:HB3	26:D4:41:PRO:HG3	1.63	0.80
1:AA:2032:G:H21	4:AE:146:THR:HG23	1.45	0.80
1:AA:566:U:OP1	11:AO:29:LYS:HE3	1.82	0.80
11:DO:121:LYS:HA	11:DO:121:LYS:HE3	1.63	0.80
20:AU:63:LYS:HD2	20:AU:64:GLU:H	1.47	0.80
6:DG:104:GLU:HG2	26:D4:23:GLU:CG	2.09	0.80
1:AA:2151:G:H2'	1:AA:2152:G:C8	2.16	0.80
11:DO:19:VAL:HG23	11:DO:27:HIS:CG	2.16	0.80
1:AA:1071:G:O6	1:AA:1091:G:O6	2.00	0.80
31:CA:1250:A:H4'	39:CL:68:GLY:H	1.46	0.80
32:BE:18:GLY:N	32:BE:42:ILE:HG22	1.97	0.80
1:AA:1480:G:C2	1:AA:1482:U:O2	2.35	0.80
34:BG:126:ILE:HD13	34:BG:127:THR:N	1.96	0.80
31:BA:1240:U:C5	37:BJ:32:ARG:HD2	2.16	0.80
1:DA:2438:U:O3'	1:DA:2439:A:H3'	1.82	0.80
4:DE:116:VAL:O	4:DE:117:MET:HB2	1.80	0.80
33:CF:131:ARG:NH1	35:CH:50:GLU:HG3	1.97	0.80
1:AA:320:A:H2'	5:AF:136:THR:HG21	1.62	0.80
9:DM:16:ILE:C	9:DM:55:VAL:HG22	2.01	0.80
11:DO:104:GLY:O	11:DO:105:LEU:CG	2.30	0.80
1:DA:1071:G:H5''	1:DA:1072:C:OP2	1.82	0.80
31:CA:1502:A:H2	31:CA:1505:G:H1	1.29	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1515:C:H2'	1:AA:1516:U:H6	1.46	0.80
9:DM:35:ARG:HB2	9:DM:42:TRP:CH2	2.15	0.80
20:AU:97:ARG:C	20:AU:97:ARG:HE	1.85	0.80
1:AA:527:C:OP2	1:AA:2779:U:H5	1.62	0.80
12:AP:59:ARG:O	12:AP:61:GLY:N	2.13	0.80
43:CP:28:ALA:O	43:CP:30:ALA:N	2.14	0.80
1:AA:2277:G:H5''	12:AP:87:LYS:HB3	1.63	0.80
54:C1:21:C:N4	54:C1:22:A:N6	2.30	0.80
31:CA:631:G:O2'	31:CA:632:A:OP1	1.98	0.80
28:D6:10:LEU:HD23	30:D8:34:TRP:CH2	2.15	0.80
31:CA:1392:G:N2	31:CA:1502:A:H8	1.80	0.80
5:AF:197:ASP:O	5:AF:199:TRP:N	2.15	0.80
35:CH:62:ALA:O	35:CH:65:ASN:N	2.15	0.80
50:CW:67:ALA:HA	50:CW:73:HIS:HA	1.63	0.80
1:AA:2167:U:O2'	1:AA:2168:G:OP1	2.00	0.80
31:CA:260:G:O6	56:CA:1779:OHX:N3	2.14	0.80
14:AQ:92:TYR:HB2	14:AQ:98:VAL:HG11	1.64	0.80
47:CT:67:LYS:O	47:CT:68:ARG:HB2	1.81	0.80
4:AE:167:VAL:HG11	4:AE:187:ALA:O	1.81	0.80
13:A0:41:ALA:O	13:A0:44:LEU:N	2.15	0.80
30:A8:35:GLN:O	30:A8:36:LYS:HB2	1.80	0.80
11:DO:48:PRO:O	11:DO:51:PHE:N	2.13	0.80
1:AA:880:G:H1	1:AA:897:C:N4	1.80	0.80
52:BD:23:A:H2'	52:BD:24:G:O4'	1.80	0.80
45:CR:87:ILE:CG2	45:CR:88:ARG:H	1.94	0.80
1:AA:1728:G:N1	1:AA:1730:U:OP2	2.15	0.80
52:CB:20:C:O2'	52:CB:68:A:N7	2.14	0.80
42:CO:100:ILE:HG22	42:CO:101:VAL:H	1.47	0.80
1:AA:1480:G:C6	1:AA:1482:U:N3	2.48	0.80
31:BA:677:U:OP1	56:BA:1780:OHX:N3	2.15	0.80
19:AT:41:ASN:O	19:AT:45:THR:HG23	1.82	0.80
1:AA:2506:U:H2'	1:AA:2506:U:O2	1.82	0.80
1:AA:997:G:OP1	16:A1:93:LYS:HG3	1.81	0.80
35:BH:153:LYS:NZ	35:BH:154:GLY:O	2.12	0.80
4:AE:29:GLY:H	4:AE:51:PHE:HE2	1.26	0.80
33:CF:21:ARG:HH11	33:CF:21:ARG:CB	1.91	0.80
1:DA:1171:G:H2'	1:DA:1171:G:OP2	1.82	0.80
26:D4:34:GLU:CG	26:D4:35:VAL:H	1.95	0.80
11:DO:39:LYS:HA	11:DO:45:LEU:HD22	1.64	0.80
1:AA:2505:G:O2'	1:AA:2506:U:H5'	1.81	0.80
22:D3:49:LYS:O	22:D3:50:ASN:HB2	1.82	0.80
1:DA:1534:G:H5'	1:DA:1535:U:OP2	1.82	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:DD:34:VAL:HG13	3:DD:35:LYS:HD2	1.64	0.79
5:DF:192:LEU:O	5:DF:193:VAL:HG23	1.82	0.79
1:AA:883:G:N2	1:AA:893:C:N3	2.29	0.79
31:BA:1503:A:HO2'	31:BA:1504:G:P	2.04	0.79
52:BB:52:G:H2'	52:BB:53:A:H8	1.47	0.79
1:DA:1069:A:H4'	1:DA:1070:A:H5''	1.64	0.79
11:AO:112:LEU:H	11:AO:128:HIS:CD2	2.00	0.79
20:DU:97:ARG:HH11	20:DU:97:ARG:HG2	1.47	0.79
6:DG:130:ASN:OD1	6:DG:160:VAL:HA	1.81	0.79
33:CF:131:ARG:HH12	35:CH:50:GLU:HG3	1.46	0.79
41:BN:78:GLN:O	41:BN:103:LEU:HA	1.82	0.79
5:AF:167:ALA:O	5:AF:169:ASN:N	2.14	0.79
1:DA:17:G:H2'	1:DA:18:C:H6	1.47	0.79
9:AM:56:ASN:N	9:AM:125:GLY:O	2.15	0.79
23:DZ:82:LEU:HD23	23:DZ:82:LEU:H	1.47	0.79
22:D3:36:ILE:O	22:D3:36:ILE:HD13	1.82	0.79
1:DA:943:U:OP2	11:DO:36:LYS:HG3	1.82	0.79
12:AP:21:THR:CG2	12:AP:21:THR:O	2.30	0.79
1:AA:885:C:N3	1:AA:890:A:N7	2.29	0.79
3:DD:255:LYS:CE	3:DD:255:LYS:H	1.92	0.79
3:AD:27:THR:HG23	3:AD:28:GLU:H	1.46	0.79
52:CB:67:A:N6	52:CB:70:C:H1'	1.97	0.79
1:DA:2843:G:C2'	1:DA:2844:G:H5''	2.12	0.79
52:CB:28:G:H22	52:CB:45:C:H1'	1.47	0.79
1:AA:456:C:C5	19:AT:69:TYR:CE1	2.69	0.79
37:CJ:50:ILE:HB	37:CJ:58:PRO:HG3	1.64	0.79
1:AA:1921:G:N7	56:AA:3391:OHX:N2	2.30	0.79
4:DE:39:PRO:CG	4:DE:45:THR:HG23	2.11	0.79
5:DF:24:LEU:HB3	5:DF:25:PRO:HD2	1.62	0.79
31:CA:1162:C:H42	31:CA:1174:G:H1	1.27	0.79
1:AA:67:U:N3	1:AA:74:A:C2	2.47	0.79
1:AA:1607:C:O2	56:AA:3433:OHX:N5	2.16	0.79
11:DO:11:GLY:C	11:DO:13:ASN:H	1.85	0.79
19:DT:40:LYS:HA	19:DT:51:VAL:HG11	1.64	0.79
48:BU:21:LYS:O	48:BU:22:VAL:HB	1.81	0.79
34:CG:31:CYS:C	34:CG:33:MET:H	1.84	0.79
34:BG:22:LYS:HB2	34:BG:26:CYS:SG	2.22	0.79
1:AA:1678:G:H21	1:AA:1989:G:N2	1.80	0.79
12:DP:21:THR:CG2	12:DP:21:THR:O	2.30	0.79
5:DF:78:ILE:HA	5:DF:83:PHE:CD1	2.17	0.79
1:DA:330:A:C2	1:DA:1210:A:O2'	2.35	0.79
37:BJ:23:VAL:O	37:BJ:27:ILE:HG13	1.83	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:D6:28:ARG:HD2	28:D6:31:PRO:HD2	1.64	0.79
41:BN:12:ARG:HG2	41:BN:13:GLN:H	1.45	0.79
9:DM:56:ASN:HB2	9:DM:125:GLY:C	2.00	0.79
1:AA:631:A:P	30:A8:46:ARG:HH21	2.06	0.79
9:AM:133:GLN:HE21	9:AM:133:GLN:H	1.27	0.79
1:AA:2391:G:OP1	30:A8:32:LEU:HD12	1.82	0.79
52:BB:19:C:H4'	52:BB:20:C:OP1	1.81	0.79
4:AE:68:ALA:C	4:AE:70:ALA:H	1.84	0.79
15:DR:8:LYS:O	15:DR:10:VAL:N	2.14	0.79
7:AH:10:PRO:HD2	7:AH:50:VAL:H	1.46	0.79
31:CA:345:C:H1'	31:CA:346:G:C2	2.18	0.79
3:DD:2:ALA:O	3:DD:3:VAL:HB	1.83	0.79
41:BN:85:ARG:HG2	41:BN:113:PRO:HD3	1.65	0.79
31:BA:671:G:N2	31:BA:672:U:H1'	1.97	0.79
1:AA:880:G:O2'	1:AA:881:G:OP1	2.00	0.79
1:DA:1071:G:H1'	1:DA:1089:G:H3'	1.63	0.79
1:DA:1135:C:O2	56:DA:3468:OHX:N6	2.15	0.79
1:DA:906:G:OP1	12:DP:26:TYR:OH	2.00	0.79
31:CA:413:G:O2'	31:CA:428:G:N2	2.16	0.79
31:CA:328:C:H2'	31:CA:328:C:O2	1.82	0.79
38:BK:91:ARG:HH11	38:BK:91:ARG:HG3	1.47	0.79
41:BN:124:LYS:HD2	41:BN:125:PHE:CE2	2.17	0.79
1:DA:2537:U:H2'	1:DA:2538:C:C6	2.17	0.79
31:BA:1086:U:H3	31:BA:1099:G:H22	1.31	0.79
1:AA:1250:G:N7	11:AO:18:ARG:NH2	2.31	0.79
1:AA:18:C:O3'	16:A1:23:GLY:HA2	1.83	0.79
1:AA:2276:G:OP2	12:AP:84:GLY:HA2	1.83	0.79
11:DO:46:LYS:O	11:DO:48:PRO:CA	2.30	0.79
5:AF:101:LEU:HD13	5:AF:102:PRO:CD	2.12	0.79
1:DA:2726:U:H6	10:DN:67:LYS:HZ3	1.30	0.79
27:A5:50:GLY:H	27:A5:56:LYS:HG3	1.48	0.79
12:DP:78:PRO:O	12:DP:79:LEU:CD1	2.31	0.79
28:A6:12:GLU:HA	28:A6:23:THR:HB	1.64	0.79
1:AA:1871:A:H2'	1:AA:1872:A:C8	2.18	0.79
2:DB:52:A:O2'	2:DB:53:A:N7	2.15	0.79
31:BA:965:A:H4'	31:BA:966:G:OP1	1.80	0.79
31:CA:1442:G:C6	31:CA:1446:A:N6	2.51	0.79
2:DB:15:A:H3'	2:DB:16:G:H5'	1.65	0.79
23:AZ:76:ARG:CG	23:AZ:76:ARG:HH11	1.96	0.79
15:AR:26:ASP:HB3	15:AR:92:GLY:H	1.47	0.79
1:AA:1088:A:H5'	1:AA:1089:G:H5'	1.63	0.79
18:DS:65:LEU:HD13	18:DS:68:ARG:HD2	1.64	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:2474:C:O2	1:DA:2474:C:H2'	1.81	0.79
1:DA:2469:A:N7	1:DA:2482:G:C5	2.50	0.79
21:DV:128:VAL:HG22	21:DV:129:SER:N	1.98	0.79
1:AA:1417:C:H42	1:AA:1581:G:H1	1.31	0.79
31:CA:1503:A:H1'	31:CA:1504:G:OP1	1.83	0.79
1:DA:2656:U:H3	1:DA:2665:A:H2	1.29	0.79
1:DA:2872:G:C4	1:DA:2873:A:N1	2.51	0.79
13:A0:100:LEU:HD11	13:A0:113:LEU:HD13	1.65	0.79
31:CA:421:U:O2	31:CA:421:U:H2'	1.82	0.79
47:BT:64:PRO:HB3	47:BT:70:ARG:NH1	1.98	0.79
7:AH:126:PRO:O	7:AH:127:GLU:HB2	1.81	0.79
31:CA:973:G:H1'	40:CM:55:LYS:CE	2.12	0.79
43:BP:87:TYR:O	43:BP:89:GLY:N	2.15	0.79
16:D1:50:ARG:NH1	17:D2:72:VAL:CG2	2.46	0.79
31:BA:1004:A:C5'	31:BA:1025:U:H3	1.96	0.79
30:D8:33:ASN:HA	30:D8:36:LYS:CD	2.11	0.79
31:CA:82:U:O2	31:CA:87:A:N1	2.16	0.79
5:DF:46:ARG:HH11	5:DF:46:ARG:CG	1.96	0.79
3:AD:166:GLN:NE2	3:AD:166:GLN:HA	1.98	0.79
31:BA:736:C:H2'	31:BA:737:A:C8	2.18	0.79
1:AA:1899:G:N2	1:AA:1902:C:H5	1.78	0.79
12:DP:26:TYR:HD1	12:DP:139:GLU:HG2	1.43	0.79
1:AA:1607:C:H4'	1:AA:1608:A:O5'	1.83	0.79
1:AA:1551:C:H2'	1:AA:1552:G:H5'	1.62	0.79
1:AA:222:A:H3'	1:AA:421:U:H5'	1.63	0.79
1:DA:1204:A:O2'	1:DA:1205:U:OP2	1.99	0.79
1:DA:768:G:O2'	1:DA:1379:A:N6	2.15	0.79
4:DE:37:ARG:HD3	4:DE:44:TYR:OH	1.83	0.78
3:AD:32:SER:O	3:AD:33:LEU:HB2	1.83	0.78
3:DD:35:LYS:HE2	3:DD:104:TYR:HD1	1.48	0.78
52:BD:62:G:H1	52:BD:70:C:H42	1.31	0.78
1:DA:2797:U:H2'	1:DA:2798:C:H5'	1.65	0.78
1:DA:2394:C:OP1	11:DO:63:PRO:HD2	1.82	0.78
20:DU:61:ILE:HG22	20:DU:62:GLU:N	1.96	0.78
1:DA:1089:G:H4'	1:DA:1090:U:OP1	1.83	0.78
16:A1:90:VAL:HG22	17:A2:39:LEU:HB3	1.65	0.78
1:AA:1416:G:O2'	1:AA:1417:C:H6	1.65	0.78
46:BS:75:ARG:O	46:BS:77:ALA:N	2.15	0.78
1:AA:2795:G:H3'	1:AA:2797:U:C5'	2.13	0.78
1:AA:588:U:H2'	1:AA:589:C:C6	2.17	0.78
31:BA:1113:C:H2'	31:BA:1114:C:H6	1.48	0.78
1:DA:1916:A:OP2	56:DA:3162:OHX:N3	2.15	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:DP:90:VAL:CG1	12:DP:90:VAL:O	2.31	0.78
31:CA:324:G:N7	56:CA:1766:OHX:N4	2.30	0.78
31:CA:979:C:H5	31:CA:980:C:C6	1.98	0.78
31:BA:1176:A:N6	31:BA:1177:G:C5	2.51	0.78
32:CE:16:HIS:NE2	32:CE:209:ARG:HG2	1.97	0.78
31:BA:736:C:H2'	31:BA:737:A:H8	1.48	0.78
16:D1:28:ARG:CG	16:D1:28:ARG:NH1	2.46	0.78
31:CA:363:A:O2'	31:CA:364:A:H5'	1.83	0.78
33:CF:162:GLN:HG2	54:C1:24:A:H1'	1.64	0.78
1:AA:2392:A:H8	11:AO:60:MET:HB2	1.46	0.78
1:AA:2393:A:H5'	11:AO:62:LEU:HB3	1.65	0.78
40:CM:48:THR:HA	40:CM:62:HIS:HB3	1.63	0.78
11:DO:64:LYS:HG3	11:DO:65:ARG:N	1.95	0.78
4:AE:78:LEU:O	4:AE:79:ARG:HB2	1.83	0.78
32:BE:18:GLY:H	32:BE:42:ILE:HG22	1.46	0.78
31:CA:1004:A:H5''	31:CA:1025:U:O4	1.83	0.78
12:AP:32:TYR:HE1	12:AP:133:ARG:HG3	1.47	0.78
1:AA:1925:C:C2'	1:AA:1926:U:H5'	2.14	0.78
31:CA:353:A:H5'	31:CA:353:A:H8	1.46	0.78
26:A4:14:ILE:HG13	26:A4:31:ILE:HB	1.65	0.78
31:CA:485:G:H1'	31:CA:486:U:H5	1.46	0.78
1:AA:2475:C:O2	1:AA:2475:C:H2'	1.83	0.78
31:BA:532:A:OP1	56:BA:1788:OHX:N6	2.15	0.78
1:AA:1535:U:H3'	1:AA:1536:A:C5'	2.13	0.78
6:DG:96:ARG:O	6:DG:98:ARG:N	2.15	0.78
1:DA:2310:A:H5''	1:DA:2310:A:N3	1.98	0.78
15:DR:77:PRO:HG2	15:DR:80:SER:HB2	1.63	0.78
1:AA:654(N):G:H2'	1:AA:654(O):G:C8	2.19	0.78
1:DA:2789:C:C3'	1:DA:2790:A:H5''	2.13	0.78
1:AA:2308:G:C2	1:AA:2311:A:C2	2.71	0.78
31:CA:1141:C:O2'	31:CA:1142:G:H5'	1.82	0.78
31:CA:1128:C:H4'	39:CL:16:ARG:HH12	1.45	0.78
31:CA:1022:G:H2'	31:CA:1023:G:O4'	1.84	0.78
31:CA:1039:C:H3'	31:CA:1040:U:H5''	1.65	0.78
11:DO:37:GLY:O	11:DO:39:LYS:N	2.17	0.78
31:CA:1298:C:C5	37:CJ:114:ARG:HD2	2.19	0.78
32:CE:185:ILE:HG22	32:CE:199:TYR:HB2	1.64	0.78
1:DA:945:A:C6	1:DA:2448:A:C5	2.72	0.78
5:DF:119:ARG:HH11	5:DF:119:ARG:CG	1.97	0.78
1:AA:2210:G:H5'	1:AA:2211:G:N7	1.99	0.78
3:AD:35:LYS:HB3	3:AD:63:ARG:HA	1.66	0.78
1:DA:1188:U:H5'	17:D2:79:VAL:HB	1.65	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1057:A:N1	1:DA:1081:U:O4	2.16	0.78
31:BA:1133:G:H1	31:BA:1141:C:H42	1.30	0.78
31:CA:1003:G:H1	31:CA:1037:C:H42	1.32	0.78
13:A0:2:ARG:HG3	13:A0:5:LYS:NZ	1.98	0.78
1:DA:2303:G:C2'	1:DA:2304:G:H5'	2.13	0.78
1:AA:2340:G:C2'	1:AA:2341:G:H5'	2.13	0.78
1:AA:2127:G:O2'	1:AA:2173:A:N1	2.15	0.78
43:CP:40:ASN:HB3	43:CP:43:THR:HG23	1.64	0.78
4:AE:130:GLY:O	4:AE:131:ALA:O	2.00	0.78
8:AK:93:THR:HG22	8:AK:119:PRO:HB3	1.63	0.78
3:DD:35:LYS:CG	3:DD:64:ILE:HG23	2.12	0.78
31:BA:1178:G:N2	31:BA:1181:G:C8	2.52	0.78
9:AM:97:ARG:NH1	9:AM:97:ARG:HG3	1.79	0.78
31:BA:1053:G:C5'	31:BA:1054:C:H5'	2.13	0.78
1:DA:304:G:H2'	1:DA:305:U:C6	2.19	0.78
32:BE:74:LYS:HD2	32:BE:74:LYS:H	1.47	0.78
38:BK:13:ILE:O	38:BK:17:THR:HG23	1.84	0.78
3:DD:64:ILE:O	3:DD:64:ILE:HG13	1.84	0.78
31:BA:1005:A:H5"	31:BA:1006:C:C6	2.19	0.78
3:AD:27:THR:CG2	3:AD:28:GLU:H	1.97	0.78
30:D8:29:LYS:O	30:D8:29:LYS:CG	2.31	0.78
44:BQ:6:LEU:HB3	44:BQ:23:ARG:HH21	1.49	0.78
1:AA:2751:G:O2'	1:AA:2752:C:OP1	2.02	0.78
31:BA:86:U:O2'	31:BA:87:A:O4'	2.00	0.78
2:DB:39:A:N1	26:D4:1:MET:HB3	1.99	0.78
8:DK:76:THR:HG23	8:DK:77:LEU:H	1.49	0.78
42:BO:126:LYS:HG2	42:BO:128:ALA:H	1.49	0.78
12:DP:30:GLY:HA2	12:DP:107:ALA:HB2	1.65	0.78
15:DR:92:GLY:HA2	15:DR:116:ALA:HA	1.66	0.78
2:DB:74:U:H2'	2:DB:75:G:H5"	1.66	0.78
22:A3:51:VAL:N	22:A3:62:LEU:HD12	1.99	0.78
11:AO:26:GLY:O	11:AO:28:GLY:N	2.17	0.78
31:CA:950:U:H3'	43:CP:102:ARG:HH22	1.47	0.78
32:CE:74:LYS:O	32:CE:75:LYS:HB2	1.84	0.78
19:DT:27:THR:C	19:DT:28:PHE:CD1	2.57	0.78
31:CA:1025:U:O2'	31:CA:1026:G:O5'	2.02	0.78
48:CU:55:ARG:HH11	48:CU:55:ARG:HG3	1.49	0.78
10:DN:117:LEU:N	10:DN:117:LEU:HD12	1.99	0.78
1:DA:2773:C:OP1	4:DE:166:THR:OG1	2.00	0.78
1:DA:851:U:O2	1:DA:928:G:C2	2.37	0.78
11:AO:61:ARG:CZ	11:AO:61:ARG:HB3	2.13	0.78
31:BA:171:A:H2'	31:BA:172:A:C8	2.19	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:791:G:C2'	31:BA:792:A:H5'	2.14	0.78
26:A4:23:GLU:OE1	26:A4:24:THR:N	2.16	0.78
31:BA:1271:G:H2'	31:BA:1272:G:C5'	2.12	0.78
21:AV:10:ARG:HD3	21:AV:38:TYR:HB3	1.66	0.78
1:AA:138:G:N2	19:AT:44:GLU:OE2	2.16	0.78
34:BG:5:ILE:HG23	34:BG:6:GLY:N	1.99	0.78
1:AA:1416:G:O2'	1:AA:1417:C:O5'	2.01	0.78
1:DA:38:A:H2'	1:DA:39:C:H6	1.45	0.78
32:CE:233:SER:HB2	32:CE:234:PRO:CD	2.14	0.78
31:BA:677:U:H3	31:BA:713:G:H22	1.32	0.78
31:BA:131:C:O2	31:BA:131:C:H2'	1.83	0.78
27:D5:41:PRO:O	27:D5:44:THR:OG1	2.00	0.78
1:AA:2712:U:H5'	1:AA:2712:U:O2	1.83	0.78
31:BA:1251:A:H2'	31:BA:1252:A:C8	2.19	0.78
9:DM:15:LEU:HD13	9:DM:55:VAL:HG13	1.60	0.77
1:DA:2275:C:O2	12:DP:85:LYS:CG	2.32	0.77
44:CQ:22:THR:HB	44:CQ:33:VAL:HG11	1.66	0.77
28:D6:12:GLU:HB3	28:D6:23:THR:HG22	1.66	0.77
31:BA:789:U:H5	31:BA:792:A:OP2	1.66	0.77
1:AA:2131:G:H5'	1:AA:2132:U:C5'	2.11	0.77
50:BW:98:PRO:O	50:BW:100:ILE:N	2.14	0.77
16:D1:91:ASP:O	16:D1:92:ARG:HG3	1.85	0.77
39:CL:111:ARG:HB3	39:CL:113:LYS:HE2	1.64	0.77
17:D2:49:THR:HB	17:D2:50:PRO:HD3	1.66	0.77
21:DV:52:SER:O	21:DV:54:HIS:N	2.17	0.77
1:AA:598:G:H1'	11:AO:12:ALA:HB2	1.65	0.77
3:DD:108:PRO:HB3	3:DD:143:HIS:CE1	2.19	0.77
1:AA:2623:G:N2	27:A5:22:HIS:HE1	1.82	0.77
4:DE:178:GLU:OE2	4:DE:178:GLU:N	2.13	0.77
31:BA:977:A:C8	31:BA:1223:C:C4	2.72	0.77
9:AM:137:LYS:HE3	9:AM:138:LEU:H	1.49	0.77
32:BE:236:TYR:HA	32:BE:239:VAL:HG21	1.65	0.77
18:AS:40:ASN:O	18:AS:41:LYS:HG2	1.84	0.77
32:CE:102:LEU:H	32:CE:102:LEU:HD12	1.48	0.77
10:AN:34:THR:HG23	10:AN:35:VAL:N	1.97	0.77
3:AD:10:THR:HG23	3:AD:13:ARG:HB2	1.66	0.77
1:AA:1340:U:H4'	1:AA:1341:U:OP2	1.83	0.77
1:DA:946:G:H2'	1:DA:947:G:C8	2.18	0.77
39:CL:11:LYS:H	39:CL:104:ARG:NH2	1.82	0.77
28:D6:25:LYS:HA	30:D8:34:TRP:CZ3	2.18	0.77
31:CA:690:G:H22	41:CN:55:LYS:HE2	1.49	0.77
31:BA:1053:G:O6	31:BA:1199:U:H2'	1.83	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
22:D3:53:MET:HG3	22:D3:59:LEU:CD2	2.12	0.77
50:CW:100:ILE:HD12	50:CW:100:ILE:H	1.47	0.77
52:BD:48:C:C6	52:BD:48:C:OP2	2.37	0.77
8:AK:33:ARG:O	8:AK:35:LEU:N	2.18	0.77
1:AA:910:A:C5	12:AP:13:GLN:HG3	2.19	0.77
1:DA:1379:A:H4'	1:DA:1380:G:OP2	1.84	0.77
50:CW:40:ALA:HB2	50:CW:55:ILE:HG22	1.67	0.77
31:BA:135:C:H2'	31:BA:136:C:H5'	1.64	0.77
1:DA:2406:U:O4	11:DO:70:GLN:HB2	1.84	0.77
1:DA:827:U:O2'	1:DA:2068:U:C2	2.37	0.77
1:AA:2656:U:H3	1:AA:2665:A:H2	1.32	0.77
2:AB:73:A:C2'	2:AB:74:U:H5'	2.15	0.77
31:BA:1182:G:H4'	31:BA:1183:A:H5''	1.67	0.77
31:BA:624:C:O3'	46:BS:10:GLY:HA2	1.84	0.77
1:DA:1790:C:H5''	1:DA:1791:A:OP1	1.83	0.77
1:AA:2257:U:O2'	1:AA:2258:C:H5'	1.84	0.77
52:BD:20:C:H5'	52:BD:68:A:N6	1.99	0.77
31:BA:78:G:N1	31:BA:91:C:N4	2.30	0.77
53:CC:48:U:H1'	53:CC:49:C:O5'	1.84	0.77
2:DB:15:A:H5''	2:DB:16:G:C8	2.19	0.77
7:DH:6:ARG:HH21	7:DH:54:ARG:HH22	1.31	0.77
52:CB:75:C:O2'	52:CB:76:C:OP1	2.02	0.77
12:AP:51:ARG:NH1	12:AP:51:ARG:HG2	1.94	0.77
2:DB:39:A:H2'	26:D4:1:MET:CE	2.14	0.77
31:BA:510:A:OP2	34:BG:49:ARG:NH2	2.17	0.77
4:AE:51:PHE:CD1	4:AE:52:LEU:HG	2.19	0.77
34:CG:153:ARG:O	34:CG:155:LEU:N	2.15	0.77
20:DU:9:LYS:O	20:DU:27:VAL:HG23	1.83	0.77
27:A5:40:LYS:HZ3	27:A5:46:CYS:HB3	1.50	0.77
11:DO:16:ARG:HH11	11:DO:16:ARG:HG3	1.49	0.77
31:CA:1347:G:H8	39:CL:107:ARG:HB3	1.48	0.77
1:AA:140:A:C8	1:AA:1408:C:O2'	2.32	0.77
1:DA:2756:U:H4'	1:DA:2757:A:OP1	1.82	0.77
12:AP:27:VAL:HG13	12:AP:105:GLU:OE2	1.83	0.77
15:DR:60:THR:HG22	15:DR:77:PRO:HA	1.65	0.77
1:AA:674:G:O2'	5:AF:74:ARG:HD3	1.85	0.77
31:CA:377:G:OP1	46:CS:3:LYS:HD2	1.83	0.77
13:D0:41:ALA:O	13:D0:43:GLU:N	2.16	0.77
4:DE:58:ARG:O	4:DE:60:ASN:N	2.18	0.77
52:CD:20:C:H3'	52:CD:68:A:N6	1.99	0.77
1:AA:2318:G:H22	14:AQ:2:ALA:HA	1.50	0.77
27:A5:41:PRO:O	27:A5:44:THR:OG1	2.02	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:DO:19:VAL:CG2	11:DO:27:HIS:CB	2.55	0.77
11:AO:75:ILE:CD1	11:AO:75:ILE:H	1.97	0.77
27:A5:50:GLY:N	27:A5:56:LYS:HG3	2.00	0.77
29:A7:8:ASN:ND2	29:A7:8:ASN:O	2.13	0.77
31:CA:409:G:OP1	34:CG:24:GLU:HG2	1.84	0.77
2:AB:30:C:H2'	2:AB:31:C:H5'	1.65	0.77
39:BL:111:ARG:HG3	39:BL:112:LYS:H	1.48	0.77
31:BA:524:G:H2'	31:BA:525:C:C6	2.20	0.77
4:DE:70:ALA:O	4:DE:72:VAL:N	2.17	0.77
1:AA:2210:G:C3'	1:AA:2211:G:C8	2.62	0.77
31:CA:1321:C:H41	31:CA:1322:C:N4	1.81	0.77
31:CA:974:A:OP2	44:CQ:41:ARG:NH1	2.17	0.77
15:AR:50:ILE:HD11	15:AR:102:ILE:CD1	2.15	0.77
11:DO:79:ARG:HD3	11:DO:110:TYR:CE1	2.19	0.77
41:CN:54:ARG:NH1	41:CN:54:ARG:HG2	1.95	0.77
1:DA:1049:C:N3	7:DH:2:SER:N	2.33	0.77
1:AA:2811:G:O6	56:AA:3432:OHX:N6	2.17	0.77
1:AA:140:A:H8	1:AA:1408:C:HO2'	0.80	0.77
31:CA:1502:A:H5''	31:CA:1504:G:N7	2.00	0.77
26:D4:37:SER:OG	26:D4:38:LYS:N	2.15	0.77
31:CA:485:G:H1'	31:CA:486:U:C5	2.20	0.77
1:DA:107:C:H2'	1:DA:108:U:H6	1.49	0.77
18:DS:9:TYR:H	18:DS:102:HIS:CD2	2.01	0.77
15:DR:88:ILE:HD12	15:DR:89:VAL:N	1.99	0.77
1:DA:2015:A:H1'	27:D5:2:ALA:HA	1.67	0.77
5:AF:45:ARG:HH11	5:AF:45:ARG:HG2	1.49	0.77
1:DA:2811:G:OP1	4:DE:61:ARG:HB2	1.83	0.77
26:A4:39:CYS:SG	26:A4:41:PRO:CD	2.73	0.77
1:AA:1586:A:H4'	1:AA:1586:A:OP1	1.84	0.77
43:CP:28:ALA:C	43:CP:30:ALA:H	1.87	0.77
31:BA:135:C:O2'	56:BA:1773:OHX:N1	2.18	0.77
31:CA:942:G:H21	39:CL:124:GLN:NE2	1.83	0.77
31:BA:1510:U:H2'	31:BA:1511:G:C8	2.20	0.77
19:AT:15:GLU:CD	19:AT:15:GLU:H	1.88	0.77
31:CA:498:A:H4'	31:CA:500:G:OP1	1.84	0.77
1:DA:389:G:N1	11:DO:71:VAL:HG12	2.00	0.77
6:DG:104:GLU:CG	26:D4:23:GLU:HG2	2.12	0.77
1:DA:1024:G:H3'	1:DA:1025:G:H5''	1.67	0.77
52:CB:30:A:H2'	52:CB:31:G:C8	2.19	0.77
15:DR:8:LYS:HZ2	15:DR:8:LYS:HB2	1.47	0.77
1:DA:2129:C:C2'	1:DA:2130:U:H5'	2.14	0.77
1:DA:602:G:O2'	1:DA:604:G:O2'	2.01	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1510:A:H8	1:DA:1510:A:OP2	1.67	0.77
1:DA:1903:G:OP1	3:DD:241:PRO:HB2	1.85	0.77
31:BA:313:A:H2'	31:BA:314:C:H6	1.48	0.77
1:DA:443:A:H5''	1:DA:444:C:OP1	1.84	0.77
1:DA:2433:A:H5''	1:DA:2434:A:OP1	1.85	0.77
31:BA:1305:G:OP2	31:BA:1305:G:H8	1.68	0.76
26:A4:18:CYS:CB	26:A4:39:CYS:CB	2.55	0.76
6:AG:115:ARG:NH1	43:BP:7:VAL:HB	2.00	0.76
41:CN:48:ILE:HD11	41:CN:64:ALA:HA	1.67	0.76
27:A5:56:LYS:CD	27:A5:56:LYS:H	1.98	0.76
52:BB:17:G:O2'	52:BB:66:G:N2	2.16	0.76
2:AB:30:C:OP2	14:AQ:32:LEU:HD11	1.85	0.76
7:AH:83:TYR:H	7:AH:83:TYR:HD2	1.30	0.76
31:CA:421:U:H5''	31:CA:422:C:OP2	1.85	0.76
50:CW:40:ALA:HB2	50:CW:55:ILE:CG2	2.15	0.76
31:CA:1152:A:H5'	40:CM:13:HIS:CD2	2.20	0.76
1:AA:2857:G:N2	1:AA:2860:A:OP2	2.17	0.76
34:CG:3:ARG:HE	34:CG:118:ARG:HD3	1.50	0.76
37:CJ:76:ARG:HG2	37:CJ:76:ARG:HH11	1.50	0.76
31:CA:1119:C:OP2	39:CL:9:ARG:NH2	2.18	0.76
7:AH:150:ALA:C	7:AH:152:ARG:H	1.86	0.76
31:CA:1288:A:H2'	31:CA:1289:A:C8	2.20	0.76
9:AM:97:ARG:HH11	9:AM:97:ARG:CG	1.92	0.76
1:AA:805:G:C5'	11:AO:38:GLN:NE2	2.48	0.76
11:DO:80:TYR:CE1	11:DO:111:ARG:HG2	2.19	0.76
3:DD:176:ARG:CG	3:DD:176:ARG:HH11	1.98	0.76
1:AA:456:C:H5	19:AT:69:TYR:CE1	2.03	0.76
54:C1:12:A:O2'	54:C1:13:A:OP1	2.04	0.76
7:AH:97:ARG:O	7:AH:98:LEU:HB2	1.84	0.76
22:A3:68:GLU:HG3	22:A3:80:HIS:HD2	1.49	0.76
36:BI:69:GLU:O	36:BI:72:VAL:HG12	1.85	0.76
1:DA:228:A:H3'	1:DA:228:A:H8	1.50	0.76
52:CD:14:A:H3'	52:CD:15:G:H5''	1.65	0.76
1:AA:900:A:H5'	1:AA:901:A:OP2	1.85	0.76
11:DO:64:LYS:CG	11:DO:65:ARG:N	2.47	0.76
3:AD:166:GLN:CA	3:AD:166:GLN:HE21	1.96	0.76
14:DQ:30:ARG:HG3	14:DQ:35:ILE:HD13	1.67	0.76
31:CA:991:U:HO2'	31:CA:992:U:P	2.08	0.76
31:CA:995:C:H1'	44:CQ:4:LYS:HE3	1.65	0.76
32:CE:132:LYS:HA	32:CE:135:GLN:HB2	1.67	0.76
14:AQ:37:ALA:HB2	14:AQ:101:LEU:HD21	1.68	0.76
1:DA:2875:C:O2'	15:DR:3:ARG:HG3	1.84	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:BD:52:G:H2'	52:BD:53:A:C8	2.19	0.76
1:AA:860:U:C5	1:AA:917:A:C2	2.72	0.76
34:BG:86:LYS:H	34:BG:86:LYS:HD2	1.51	0.76
16:A1:59:ARG:O	16:A1:63:VAL:HG23	1.84	0.76
1:AA:165:U:O2	1:AA:165:U:H3'	1.85	0.76
52:CD:79:A:C2'	52:CD:80:C:H5'	2.16	0.76
1:AA:654(M):C:H3'	1:AA:654(N):G:C8	2.20	0.76
1:DA:1800:C:OP2	3:DD:266:SER:OG	2.03	0.76
31:BA:46:G:H2'	31:BA:366:C:H5	1.50	0.76
1:AA:2747:G:O6	1:AA:2755:C:H5''	1.85	0.76
31:CA:1194:U:H2'	31:CA:1195:C:H6	1.50	0.76
1:DA:2726:U:HO2'	1:DA:2727:G:H8	1.30	0.76
31:CA:991:U:O2	31:CA:993:G:H8	1.68	0.76
31:CA:1025:U:HO2'	31:CA:1026:G:P	2.07	0.76
10:DN:98:VAL:HG12	10:DN:117:LEU:HB2	1.67	0.76
46:BS:43:LYS:HG3	46:BS:48:TRP:HE3	1.49	0.76
16:D1:72:HIS:HE1	16:D1:107:ALA:HA	1.49	0.76
11:AO:62:LEU:HD12	30:A8:30:ARG:HH12	1.46	0.76
31:CA:1329:A:C2'	31:CA:1330:U:H5'	2.14	0.76
27:A5:40:LYS:NZ	27:A5:46:CYS:HB3	2.01	0.76
1:DA:1899:G:O2'	1:DA:1900:A:OP2	2.03	0.76
1:DA:1171:G:H1'	1:DA:1173:G:O4'	1.85	0.76
30:A8:56:GLU:O	30:A8:58:ILE:N	2.17	0.76
35:CH:63:ARG:O	35:CH:66:MET:HE2	1.86	0.76
7:AH:58:GLU:O	7:AH:60:ARG:N	2.18	0.76
3:AD:96:HIS:ND1	3:AD:102:LYS:HD3	2.00	0.76
37:BJ:120:ILE:O	37:BJ:124:LEU:HB2	1.85	0.76
1:DA:2531:A:H4'	7:DH:157:TYR:CE2	2.20	0.76
1:DA:889:C:C5	1:DA:890:A:H1'	2.21	0.76
28:D6:23:THR:O	56:D8:101:OHX:N4	2.19	0.76
26:A4:39:CYS:SG	26:A4:41:PRO:HG3	2.26	0.76
31:CA:1278:U:O2	31:CA:1278:U:H2'	1.86	0.76
52:CB:57:C:C2	52:CB:68:A:H1'	2.21	0.76
1:AA:2751:G:C2	7:AH:3:ARG:HB3	2.20	0.76
4:AE:15:PHE:H	4:AE:21:VAL:H	1.33	0.76
10:DN:47:ILE:CG1	10:DN:48:PRO:HD2	2.15	0.76
31:BA:975:A:H4'	31:BA:976:G:H5''	1.67	0.76
1:DA:2405:G:O2'	1:DA:2406:U:OP1	2.04	0.76
1:AA:1985:G:OP2	56:AA:3467:OHX:N2	2.18	0.76
1:DA:2516:G:C6	1:DA:2517:C:N4	2.54	0.76
1:AA:2287:A:N6	1:AA:2344:U:N3	2.18	0.76
31:CA:976:G:H5'	31:CA:1358:U:O2'	1.86	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
26:A4:59:PHE:O	26:A4:63:TYR:HB3	1.85	0.76
1:DA:1142:U:O2	1:DA:1142:U:H2'	1.85	0.76
1:AA:1049:C:H2'	1:AA:1050:A:C5'	2.16	0.76
31:BA:659:U:H2'	31:BA:660:G:H8	1.48	0.76
46:CS:8:ARG:HG2	46:CS:8:ARG:NH1	2.00	0.76
31:CA:1003:G:N2	31:CA:1037:C:C2	2.53	0.76
1:AA:154:G:C2'	1:AA:155:C:H5''	2.15	0.76
31:CA:362:G:N7	56:CA:1798:OHX:N5	2.33	0.76
29:D7:34:ARG:HH11	29:D7:39:ARG:HG3	1.48	0.76
1:AA:1045:A:O2'	1:AA:1047:G:C4	2.38	0.76
15:DR:61:PHE:HD2	15:DR:61:PHE:H	1.33	0.76
9:DM:137:LYS:HA	9:DM:137:LYS:NZ	2.00	0.76
3:DD:246:PRO:O	3:DD:254:THR:HG22	1.85	0.76
22:D3:32:ARG:HG2	22:D3:33:ALA:H	1.51	0.76
31:CA:1190:G:C6	56:CA:1762:OHX:N6	2.53	0.76
39:CL:114:TYR:HD1	40:CM:60:ARG:HG2	1.51	0.76
16:D1:50:ARG:HH12	17:D2:72:VAL:HG23	1.51	0.76
17:D2:73:SER:CB	17:D2:83:ARG:O	2.33	0.76
1:DA:2391:G:OP2	30:D8:32:LEU:HD13	1.83	0.76
31:BA:79:G:O2'	31:BA:80:G:O5'	2.03	0.76
14:AQ:30:ARG:HG2	14:AQ:30:ARG:NH1	1.95	0.76
31:CA:1135:U:H2'	31:CA:1137:C:O2	1.86	0.76
12:DP:79:LEU:CD1	12:DP:79:LEU:C	2.54	0.76
43:CP:3:ARG:HG2	43:CP:9:ILE:CG1	2.16	0.76
31:CA:468:A:C2'	31:CA:474:G:H5'	2.16	0.76
14:AQ:67:ARG:NH1	14:AQ:67:ARG:HB2	2.01	0.76
18:AS:9:TYR:H	18:AS:102:HIS:CD2	2.04	0.76
34:CG:175:SER:HB3	34:CG:186:LEU:HD11	1.68	0.76
14:AQ:89:ARG:O	14:AQ:89:ARG:HG2	1.83	0.76
32:BE:91:PRO:HG3	32:BE:154:LEU:HB3	1.67	0.76
47:CT:6:LEU:HD22	47:CT:23:VAL:HG11	1.68	0.76
1:DA:1358:G:O2'	1:DA:1359:A:H5''	1.84	0.76
34:BG:199:ASN:O	34:BG:201:GLN:N	2.17	0.76
1:DA:2893:G:H4'	1:DA:2894:G:O5'	1.86	0.76
1:DA:1188:U:O2'	1:DA:1189:A:H5'	1.84	0.76
1:AA:1532:C:H2'	1:AA:1533:C:H6	1.51	0.76
31:BA:963:G:N3	40:BM:55:LYS:NZ	2.32	0.76
17:D2:15:GLU:O	17:D2:96:ILE:HG21	1.86	0.76
1:AA:2689:U:C4'	1:AA:2690:C:H5'	2.14	0.76
31:BA:1367:C:H5'	40:BM:60:ARG:NH2	1.98	0.76
42:CO:100:ILE:HG22	42:CO:101:VAL:N	2.01	0.76
5:DF:161:GLU:HG2	5:DF:164:ARG:HH12	1.51	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:BJ:111:ARG:NH1	37:BJ:113:GLU:OE2	2.18	0.76
1:DA:528:A:C2	1:DA:2043:C:H4'	2.20	0.76
50:BW:26:ASN:H	50:BW:26:ASN:HD22	1.33	0.76
37:CJ:16:LEU:HD12	39:CL:42:ARG:HA	1.67	0.76
31:BA:1007:C:C2'	31:BA:1008:C:H5''	2.15	0.76
15:AR:108:ARG:HA	15:AR:111:ARG:HE	1.50	0.76
24:DW:47:ASN:C	24:DW:49:LYS:H	1.90	0.76
27:A5:33:CYS:HB2	27:A5:40:LYS:HD3	1.66	0.76
31:BA:142:G:H2'	31:BA:143:A:H8	1.51	0.76
26:A4:63:TYR:CE2	49:BV:42:PRO:HD3	2.21	0.76
52:CB:48:C:H3'	52:CB:49:A:H8	1.51	0.76
1:AA:2807:G:H2'	1:AA:2808:U:H5''	1.66	0.76
34:CG:14:ARG:HG3	34:CG:14:ARG:NH1	2.00	0.76
8:DK:123:LEU:HA	8:DK:142:VAL:HG11	1.67	0.76
21:DV:44:PHE:HE1	21:DV:48:PHE:CD2	2.03	0.76
34:CG:189:PRO:HB2	34:CG:194:LEU:HD21	1.67	0.76
1:AA:1430:C:H2'	1:AA:1431:U:C6	2.20	0.76
1:DA:1495:A:C2'	1:DA:1496:A:H5'	2.16	0.76
31:CA:1372:U:OP1	39:CL:72:GLY:N	2.18	0.76
3:DD:35:LYS:CD	3:DD:104:TYR:CD1	2.69	0.75
31:BA:1390:U:O4	56:BA:1811:OHX:N2	2.20	0.75
33:BF:40:ARG:O	33:BF:44:GLU:HG2	1.86	0.75
34:BG:209:ARG:NE	34:BG:209:ARG:HA	2.01	0.75
52:CB:19:C:H4'	52:CB:20:C:OP1	1.87	0.75
52:CB:73:U:H2'	52:CB:74:C:H5'	1.68	0.75
1:AA:67:U:N3	1:AA:74:A:H2	1.83	0.75
1:AA:910:A:N7	12:AP:13:GLN:HG3	2.02	0.75
1:AA:274:G:H2'	1:AA:275:G:O4'	1.87	0.75
34:CG:118:ARG:HA	34:CG:121:VAL:HG23	1.68	0.75
18:AS:58:ALA:HB1	18:AS:64:MET:HE2	1.65	0.75
1:DA:847:U:C4	1:DA:933:A:C6	2.72	0.75
31:CA:1189:C:P	40:CM:51:ARG:HH22	2.09	0.75
3:DD:64:ILE:O	3:DD:64:ILE:CG1	2.34	0.75
1:AA:2317:C:H2'	1:AA:2318:G:C5'	2.15	0.75
52:BD:57:C:O2'	52:BD:68:A:H4'	1.85	0.75
31:BA:1503:A:HO2'	31:BA:1504:G:C5'	1.99	0.75
6:AG:67:LYS:HE2	26:A4:6:HIS:HE1	1.46	0.75
14:DQ:110:LEU:HD22	14:DQ:111:GLU:N	2.02	0.75
31:BA:81:G:H1	31:BA:88:C:N4	1.84	0.75
52:CB:84:C:H2'	52:CB:85:A:C4	2.21	0.75
52:CD:61:G:H1	52:CD:71:C:N4	1.84	0.75
31:CA:1297:C:H1'	31:CA:1298:C:OP2	1.86	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:CP:13:LYS:NZ	43:CP:21:TYR:OH	2.19	0.75
1:AA:1557:C:OP2	1:AA:1558:A:O2'	2.02	0.75
34:BG:85:LYS:O	56:BG:302:OHX:N5	2.19	0.75
28:A6:16:CYS:O	28:A6:17:LYS:HB2	1.86	0.75
32:BE:69:LEU:HB2	32:BE:159:PRO:HG3	1.67	0.75
1:AA:1288:U:C2	1:AA:1327:C:O2	2.39	0.75
37:CJ:27:ILE:HG12	37:CJ:43:PHE:HD2	1.51	0.75
1:AA:2364:C:O2'	1:AA:2365:G:H5'	1.85	0.75
1:AA:2402:C:O2'	1:AA:2403:C:OP1	2.03	0.75
1:AA:880:G:N2	1:AA:897:C:N3	2.33	0.75
31:BA:1026:G:N7	31:BA:1036:G:N2	2.34	0.75
15:AR:111:ARG:HD3	15:AR:111:ARG:H	1.51	0.75
28:D6:25:LYS:CB	30:D8:34:TRP:CH2	2.69	0.75
1:AA:1056:G:H21	1:AA:1103:A:H62	0.84	0.75
1:DA:1141:U:O2'	1:DA:1142:U:OP2	2.04	0.75
53:CC:62:C:H2'	53:CC:63:C:H6	1.51	0.75
31:CA:359:U:H2'	31:CA:360:A:H8	1.51	0.75
31:CA:1503:A:HO2'	31:CA:1504:G:P	2.09	0.75
50:CW:25:ARG:HG3	50:CW:25:ARG:HH11	1.50	0.75
1:AA:945:A:N7	1:AA:2448:A:N3	2.35	0.75
34:BG:92:VAL:O	34:BG:96:LEU:HD23	1.86	0.75
1:AA:796:C:H2'	1:AA:797:C:C6	2.22	0.75
31:CA:1316:G:N2	31:CA:1318:A:H3'	2.01	0.75
43:CP:86:CYS:O	43:CP:89:GLY:N	2.18	0.75
1:AA:889:C:H3'	1:AA:890:A:C4'	2.13	0.75
1:DA:2400:G:H2'	1:DA:2401:U:H6	1.50	0.75
1:DA:2780:G:H4'	1:DA:2781:A:OP2	1.87	0.75
1:AA:2141:G:O6	1:AA:2150:U:O2	2.05	0.75
1:DA:1171:G:H4'	1:DA:1173:G:OP1	1.87	0.75
52:CB:61:G:C2	52:CB:72:U:O2	2.40	0.75
1:DA:2468:G:C8	1:DA:2476:A:C6	2.74	0.75
11:AO:100:LEU:HB3	11:AO:106:LEU:HD12	1.69	0.75
1:AA:2163:C:H2'	1:AA:2164:C:H5'	1.67	0.75
39:CL:42:ARG:NH2	39:CL:75:ASP:OD2	2.16	0.75
42:CO:18:VAL:O	42:CO:19:ARG:HB2	1.86	0.75
31:CA:293:G:N7	56:CA:1810:OHX:N6	2.33	0.75
46:CS:58:TYR:O	46:CS:61:SER:OG	1.99	0.75
1:DA:646:A:H2'	1:DA:647:G:O4'	1.86	0.75
5:AF:108:LYS:O	5:AF:112:MET:HG3	1.87	0.75
12:AP:75:THR:CG2	12:AP:89:ASN:H	1.99	0.75
11:AO:16:ARG:HG3	11:AO:16:ARG:HH11	1.49	0.75
11:DO:62:LEU:HD11	30:D8:25:MET:C	2.07	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1057:A:H2'	1:AA:1058:U:C6	2.21	0.75
31:BA:1132:C:O2'	31:BA:1133:G:H5'	1.85	0.75
30:A8:59:LYS:HB2	30:A8:59:LYS:HZ3	1.49	0.75
31:CA:182:U:C5	31:CA:183:G:H1'	2.22	0.75
7:DH:92:ILE:HG22	7:DH:93:GLY:N	2.01	0.75
5:AF:29:ASN:H	5:AF:112:MET:HE2	1.52	0.75
12:DP:17:LEU:HD21	12:DP:41:TRP:HE1	1.50	0.75
46:BS:50:LYS:HD3	46:BS:51:VAL:N	2.00	0.75
32:CE:142:LEU:HD23	32:CE:142:LEU:O	1.86	0.75
15:DR:56:GLY:O	15:DR:59:THR:HG23	1.86	0.75
31:BA:112:G:OP1	46:BS:27:LYS:HD2	1.87	0.75
31:CA:84:U:O2	31:CA:84:U:H2'	1.86	0.75
41:BN:127:LYS:HE2	41:BN:127:LYS:HA	1.68	0.75
31:CA:1322:C:O2'	31:CA:1323:G:H5'	1.85	0.75
44:CQ:21:TYR:HE2	44:CQ:23:ARG:HH21	1.34	0.75
1:DA:1110:G:O2'	1:DA:1111:A:O4'	2.03	0.75
14:AQ:36:TYR:HD1	14:AQ:36:TYR:N	1.85	0.75
52:CB:28:G:N2	52:CB:45:C:H1'	2.02	0.75
2:DB:43:C:H5'	2:DB:44:G:OP2	1.86	0.75
1:AA:252:G:OP2	11:AO:50:ARG:NH1	2.18	0.75
7:AH:141:VAL:HG12	7:AH:142:GLY:N	2.00	0.75
18:AS:64:MET:O	18:AS:65:LEU:HB2	1.87	0.75
31:BA:1090:U:O2'	31:BA:1091:U:H5'	1.87	0.75
3:DD:267:SER:HA	3:DD:270:ILE:HD12	1.68	0.75
3:AD:186:HIS:CD2	3:AD:188:GLU:H	2.03	0.75
4:AE:181:LEU:HD21	15:AR:7:ILE:HG23	1.69	0.75
1:DA:153:C:N4	1:DA:173:G:H1	1.85	0.75
11:DO:84:ASN:O	11:DO:86:LYS:N	2.19	0.75
14:DQ:107:GLU:H	14:DQ:110:LEU:HD11	1.51	0.75
18:DS:59:VAL:HG23	18:DS:65:LEU:N	2.02	0.75
21:AV:27:VAL:HG12	21:AV:87:ASP:CB	2.15	0.75
1:DA:2748:A:H2'	1:DA:2749:A:H8	1.52	0.75
32:BE:69:LEU:HB3	32:BE:162:ILE:HG22	1.68	0.75
43:CP:37:THR:O	43:CP:55:ARG:NH2	2.15	0.75
1:DA:2297:C:H2'	1:DA:2297:C:O2	1.83	0.75
1:AA:654(M):C:H5'	1:AA:654(N):G:N7	2.02	0.75
31:BA:313:A:H2'	31:BA:314:C:C6	2.22	0.75
31:CA:547:A:OP2	34:CG:2:GLY:N	2.19	0.75
1:DA:2789:C:C2'	1:DA:2790:A:H5''	2.17	0.75
43:CP:78:ILE:HG23	43:CP:92:HIS:HD2	1.49	0.75
1:DA:885:C:H41	1:DA:890:A:H62	1.33	0.75
1:AA:49:A:N7	1:AA:120:U:C4	2.55	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:49:A:C8	1:AA:120:U:C5	2.65	0.75
16:D1:69:CYS:HB3	16:D1:106:PHE:CZ	2.21	0.75
31:CA:1277:C:O2'	31:CA:1279:A:H8	1.66	0.75
1:DA:2136:C:N4	1:DA:2155:G:C6	2.55	0.75
31:BA:1120:G:N7	56:BA:1728:OHX:N1	2.34	0.75
1:AA:270(O):U:C4'	1:AA:270(P):C:OP2	2.34	0.75
31:BA:1124:G:H3'	31:BA:1145:C:H41	1.51	0.75
19:DT:18:TYR:HA	19:DT:21:PHE:CD2	2.21	0.75
1:AA:546:C:H3'	1:AA:547:A:C8	2.22	0.75
1:AA:1109:C:O2'	1:AA:1110:G:O4'	2.02	0.75
8:DK:104:GLN:HG2	8:DK:105:HIS:HD2	1.50	0.75
32:CE:42:ILE:HG21	32:CE:203:GLY:HA2	1.69	0.75
10:AN:71:ARG:NH1	15:AR:74:ARG:HH21	1.85	0.75
33:BF:30:ARG:HB2	44:BQ:36:PHE:O	1.86	0.75
29:A7:35:ARG:HG3	29:A7:42:LEU:HD11	1.69	0.75
1:DA:900:A:H3'	1:DA:901:A:H8	1.52	0.75
4:DE:31:CYS:HB3	4:DE:49:LEU:HB3	1.67	0.75
4:DE:3:GLY:HA3	4:DE:81:ILE:HD12	1.68	0.75
4:DE:52:LEU:HB3	4:DE:75:VAL:HG23	1.68	0.75
9:AM:95:PRO:O	9:AM:96:GLU:CD	2.25	0.75
45:BR:63:ARG:NH1	45:BR:87:ILE:HD12	1.98	0.75
1:AA:2635:C:H5''	4:AE:78:LEU:HA	1.69	0.75
1:DA:2304:G:H22	1:DA:2312:U:H3	1.33	0.75
20:DU:97:ARG:NH1	20:DU:97:ARG:HG2	2.02	0.75
8:DK:77:LEU:HD13	8:DK:141:LYS:HD2	1.69	0.75
7:AH:43:VAL:HG12	7:AH:52:VAL:HG22	1.68	0.75
31:BA:1280:A:H3'	31:BA:1281:U:H5''	1.68	0.75
31:BA:486:U:H2'	31:BA:487:A:C8	2.21	0.75
1:DA:2667:C:N3	7:DH:110:SER:OG	2.17	0.75
37:BJ:68:ASN:ND2	37:BJ:127:ALA:O	2.20	0.75
4:AE:87:GLU:O	4:AE:89:ASP:N	2.20	0.75
1:DA:2275:C:HO2'	12:DP:84:GLY:HA2	1.43	0.74
31:CA:1319:A:OP1	49:CV:10:PHE:HB3	1.87	0.74
3:DD:63:ARG:N	3:DD:63:ARG:HD3	2.02	0.74
1:AA:882:G:N1	1:AA:894:C:N4	2.24	0.74
32:CE:236:TYR:HB2	32:CE:239:VAL:HB	1.68	0.74
35:BH:100:VAL:HG22	35:BH:118:ILE:HG22	1.69	0.74
8:DK:101:LEU:H	8:DK:101:LEU:CD2	1.98	0.74
31:BA:575:G:OP1	56:BA:1746:OHX:N3	2.19	0.74
3:DD:231:HIS:ND1	3:DD:232:PRO:HD2	2.01	0.74
6:AG:13:GLU:O	6:AG:14:GLU:HB2	1.85	0.74
11:AO:6:LEU:O	11:AO:7:ARG:O	2.05	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:2298:A:H62	1:AA:2318:G:H8	1.36	0.74
1:DA:1019:U:H2'	1:DA:1020:A:C8	2.22	0.74
33:CF:180:ALA:O	33:CF:181:ASN:HB3	1.86	0.74
20:AU:81:LYS:HB3	20:AU:97:ARG:HD3	1.68	0.74
31:CA:266:G:H1	31:CA:270:A:H62	1.35	0.74
46:BS:43:LYS:CG	46:BS:48:TRP:CE3	2.70	0.74
18:AS:111:HIS:CD2	18:AS:112:GLY:H	2.04	0.74
31:CA:200:G:H1	31:CA:217:C:H42	1.35	0.74
39:BL:53:VAL:HG21	39:BL:92:TYR:CG	2.22	0.74
1:AA:2544:G:OP1	56:AA:3504:OHX:N2	2.20	0.74
28:A6:33:LYS:HG3	28:A6:34:LEU:HD22	1.68	0.74
31:BA:723:U:H2'	31:BA:723:U:O2	1.87	0.74
13:A0:91:GLN:H	13:A0:91:GLN:NE2	1.85	0.74
16:D1:50:ARG:NH1	17:D2:72:VAL:HB	2.02	0.74
1:AA:2142:C:N4	1:AA:2149:G:H1	1.84	0.74
34:BG:209:ARG:HE	34:BG:209:ARG:CA	1.96	0.74
34:BG:173:TRP:CZ3	34:BG:193:ASP:HB3	2.21	0.74
31:CA:1503:A:N6	54:C1:12:A:C4	2.55	0.74
1:DA:2720:U:N3	1:DA:2873:A:C2	2.55	0.74
1:DA:1210:A:H5'	1:DA:1212:G:O4'	1.87	0.74
1:AA:2164:C:H2'	1:AA:2165:G:O4'	1.87	0.74
5:DF:119:ARG:HH11	5:DF:119:ARG:HG2	1.52	0.74
1:AA:1427:A:H4'	1:AA:1428:C:O5'	1.86	0.74
1:DA:296:C:O2'	1:DA:297:C:H5'	1.86	0.74
17:D2:39:LEU:O	17:D2:40:LEU:HD12	1.87	0.74
3:DD:25:THR:C	3:DD:27:THR:H	1.89	0.74
4:AE:20:ALA:CB	4:AE:21:VAL:HG13	2.17	0.74
32:BE:8:LYS:HE3	32:BE:11:LEU:HD13	1.68	0.74
1:AA:527:C:OP2	1:AA:2779:U:C5	2.39	0.74
12:DP:90:VAL:HG12	12:DP:90:VAL:O	1.85	0.74
1:DA:945:A:C5	1:DA:2448:A:C2	2.76	0.74
8:DK:104:GLN:HG2	8:DK:105:HIS:CD2	2.21	0.74
1:DA:2531:A:H4'	7:DH:157:TYR:HE2	1.52	0.74
1:AA:847:U:C4	1:AA:933:A:N1	2.56	0.74
6:AG:16:ARG:HH11	6:AG:16:ARG:HG3	1.50	0.74
3:AD:35:LYS:HD3	3:AD:63:ARG:CA	2.18	0.74
54:C1:21:C:C4	54:C1:22:A:C6	2.76	0.74
31:CA:1056:U:O4	31:CA:1200:C:C6	2.40	0.74
3:DD:35:LYS:HE3	3:DD:64:ILE:C	2.08	0.74
44:BQ:40:CYS:O	44:BQ:42:ILE:N	2.19	0.74
7:AH:4:ILE:HB	7:AH:6:ARG:CD	2.16	0.74
6:DG:126:ASP:OD2	6:DG:130:ASN:HB2	1.87	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BH:106:PRO:O	35:BH:110:LEU:HG	1.87	0.74
35:BH:139:LEU:O	35:BH:142:LEU:N	2.19	0.74
1:AA:286:C:H2'	1:AA:287:C:C6	2.21	0.74
3:DD:201:HIS:O	3:DD:204:ILE:HG12	1.87	0.74
52:CB:13:G:N2	52:CB:23:A:N1	2.35	0.74
33:CF:164:ARG:HG2	33:CF:165:THR:H	1.52	0.74
1:AA:2015:A:O2'	27:A5:3:LYS:HG3	1.86	0.74
3:DD:35:LYS:CD	3:DD:64:ILE:H	1.99	0.74
3:DD:35:LYS:HE2	3:DD:104:TYR:CB	2.16	0.74
7:AH:153:LYS:N	7:AH:153:LYS:HD2	2.01	0.74
1:DA:1464:C:HO2'	1:DA:1528:A:H8	1.33	0.74
52:CB:47:U:O2'	52:CB:48:C:O4'	2.01	0.74
34:CG:150:GLU:O	34:CG:152:SER:N	2.19	0.74
32:BE:81:VAL:O	32:BE:85:ALA:HB2	1.88	0.74
45:CR:39:LEU:O	45:CR:39:LEU:HD22	1.88	0.74
21:AV:169:GLU:OE1	21:AV:170:THR:OG1	2.06	0.74
7:AH:40:GLU:O	7:AH:41:MET:HB2	1.86	0.74
31:CA:1288:A:H2'	31:CA:1289:A:H8	1.52	0.74
15:AR:102:ILE:HA	15:AR:105:LEU:CD2	2.18	0.74
28:D6:24:GLU:OE2	56:D8:101:OHX:N2	2.20	0.74
11:DO:15:ARG:CB	11:DO:15:ARG:HH11	2.01	0.74
46:BS:8:ARG:HB3	46:BS:28:ARG:NH1	2.01	0.74
6:DG:64:THR:HG23	6:DG:66:GLN:H	1.53	0.74
1:AA:62:C:H42	1:AA:92:G:H1	1.35	0.74
3:AD:186:HIS:HD2	3:AD:188:GLU:H	1.35	0.74
4:AE:67:PHE:O	4:AE:69:LYS:N	2.20	0.74
15:AR:84:GLN:HG2	15:AR:85:LYS:HG2	1.69	0.74
31:CA:748:C:H1'	31:CA:749:C:OP2	1.87	0.74
16:D1:11:ARG:HG3	16:D1:11:ARG:HH11	1.53	0.74
1:DA:2275:C:O2	12:DP:85:LYS:HG2	1.88	0.74
31:CA:1331:G:OP1	31:CA:1331:G:H4'	1.86	0.74
31:CA:975:A:C4'	31:CA:976:G:H5''	2.18	0.74
1:DA:631:A:OP1	11:DO:64:LYS:CE	2.35	0.74
1:DA:2523:G:H5'	1:DA:2523:G:C8	2.20	0.74
20:DU:97:ARG:NH2	20:DU:98:VAL:HB	2.03	0.74
32:BE:185:ILE:HG22	32:BE:199:TYR:HB2	1.68	0.74
32:BE:220:ASP:O	32:BE:223:ILE:N	2.20	0.74
45:BR:7:GLU:OE1	45:BR:38:ARG:NH2	2.19	0.74
1:AA:1858:G:O2'	1:AA:1884:A:N6	2.20	0.74
1:DA:1442:G:H2'	1:DA:1443:G:H5''	1.70	0.74
1:DA:30:G:H2'	1:DA:31:C:C6	2.23	0.74
31:BA:673:G:H2'	31:BA:674:G:C8	2.21	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:BT:86:GLU:O	47:BT:90:ILE:HG12	1.87	0.74
31:CA:1199:U:H4'	40:CM:54:PHE:CE1	2.22	0.74
1:DA:2702:U:H2'	1:DA:2703:C:C5	2.21	0.74
1:DA:2391:G:OP2	30:D8:32:LEU:HD12	1.88	0.74
7:AH:6:ARG:HG3	7:AH:7:LEU:HG	1.70	0.74
24:AW:58:ALA:O	24:AW:62:THR:HG22	1.86	0.74
1:DA:451:C:N4	1:DA:454:A:H5'	2.02	0.74
1:AA:2173:A:H5'	1:AA:2174:C:OP2	1.87	0.74
22:A3:49:LYS:N	22:A3:80:HIS:HB3	2.03	0.74
1:DA:2712:U:H1'	1:DA:2712(A):A:C8	2.22	0.74
1:DA:2816:C:O3'	13:D0:99:LYS:NZ	2.20	0.74
31:BA:468:A:H2'	31:BA:474:G:H5'	1.68	0.74
1:DA:1701:A:OP2	56:DA:3099:OHX:N4	2.21	0.74
37:BJ:15:ASP:O	37:BJ:19:GLY:N	2.19	0.74
31:CA:890:G:O6	56:CA:1756:OHX:N5	2.20	0.74
9:DM:134:ARG:HG2	9:DM:134:ARG:O	1.87	0.74
1:AA:943:U:OP2	11:AO:36:LYS:CD	2.35	0.74
3:AD:35:LYS:CG	3:AD:64:ILE:N	2.51	0.74
52:CD:19:C:H2'	52:CD:20:C:H4'	1.70	0.74
5:DF:25:PRO:HB3	5:DF:28:ILE:HG23	1.69	0.74
33:BF:92:ALA:HB2	33:BF:99:VAL:HG22	1.70	0.74
34:BG:4:TYR:HE2	34:BG:11:LEU:HD11	1.50	0.74
1:AA:860:U:H5	1:AA:917:A:H2	1.32	0.74
21:AV:52:SER:OG	21:AV:52:SER:O	2.05	0.74
15:AR:53:ARG:HB3	15:AR:53:ARG:CZ	2.16	0.74
47:CT:67:LYS:HA	47:CT:70:ARG:HH12	1.53	0.74
14:AQ:25:ARG:NH1	14:AQ:42:ASP:OD2	2.21	0.74
15:DR:88:ILE:HD11	15:DR:125:ARG:HH22	1.53	0.74
46:BS:39:TYR:O	46:BS:40:ASP:HB2	1.86	0.74
9:DM:47:ALA:O	9:DM:119:ARG:NH2	2.20	0.74
52:BB:1:G:H2'	52:BB:2:G:H8	1.52	0.74
1:DA:1183:G:N7	56:DA:3427:OHX:N4	2.36	0.74
13:A0:75:LEU:O	13:A0:75:LEU:HD22	1.88	0.74
9:DM:45:ASN:HD22	9:DM:45:ASN:H	1.33	0.74
32:CE:178:ARG:NH2	38:CK:68:ARG:HH22	1.86	0.74
1:AA:1028:A:N3	1:AA:2486:G:O2'	2.20	0.74
3:AD:35:LYS:NZ	3:AD:64:ILE:O	2.18	0.73
3:DD:218:ARG:HB3	3:DD:219:PRO:HD2	1.70	0.73
31:CA:1054:C:O2'	31:CA:1055:A:O5'	2.03	0.73
3:DD:35:LYS:CE	3:DD:104:TYR:HD1	2.01	0.73
39:CL:10:ARG:NH1	39:CL:105:ASP:OD1	2.21	0.73
1:DA:627:A:N7	11:DO:84:ASN:ND2	2.33	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1129:C:H4'	31:CA:1130:A:C5'	2.18	0.73
15:DR:51:ARG:CG	15:DR:98:LYS:HD2	2.17	0.73
1:DA:2303:G:O2'	1:DA:2304:G:H5'	1.88	0.73
1:AA:598:G:C1'	11:AO:12:ALA:HB2	2.18	0.73
1:AA:2584:U:H2'	1:AA:2585:U:H2'	1.70	0.73
34:BG:65:ARG:NH1	34:BG:70:ILE:O	2.20	0.73
11:AO:138:LEU:HD12	11:AO:144:GLU:HG3	1.70	0.73
13:A0:85:PRO:O	13:A0:87:TYR:N	2.21	0.73
43:BP:13:LYS:O	43:BP:44:ARG:HD2	1.88	0.73
1:DA:2786:U:H4'	4:DE:65:GLY:H	1.51	0.73
1:AA:2212:A:H1'	1:AA:2215:G:C5	2.22	0.73
3:DD:32:SER:O	3:DD:33:LEU:HB2	1.88	0.73
52:BD:12:C:O2	52:BD:24:G:N2	2.19	0.73
16:D1:98:LEU:C	16:D1:100:VAL:N	2.41	0.73
52:BB:48:C:N4	52:BB:52:G:H1	1.86	0.73
31:BA:210:U:O2'	31:BA:216:G:H8	1.70	0.73
1:DA:676:A:H8	1:DA:2069:G:N2	1.77	0.73
49:BV:63:THR:HG23	49:BV:65:ASN:HD21	1.54	0.73
32:CE:8:LYS:HB2	32:CE:217:ARG:HE	1.52	0.73
1:DA:1379:A:H1'	1:DA:1380:G:OP1	1.88	0.73
31:BA:46:G:H2'	31:BA:366:C:C5	2.23	0.73
13:A0:10:LEU:O	13:A0:12:ARG:HG3	1.87	0.73
1:AA:2216:G:O6	56:AA:3329:OHX:N3	2.20	0.73
6:DG:121:ASN:HD22	6:DG:181:ARG:NH2	1.86	0.73
10:DN:115:VAL:HG13	10:DN:121:VAL:HG21	1.69	0.73
10:AN:104:ARG:HD3	15:AR:36:GLU:OE2	1.87	0.73
31:CA:1157:A:H1'	31:CA:1158:C:C2	2.24	0.73
21:DV:158:PRO:CB	21:DV:159:PRO:HD2	2.15	0.73
31:CA:1277:C:O2'	31:CA:1279:A:C8	2.40	0.73
41:CN:57:THR:HG22	41:CN:59:TYR:H	1.54	0.73
29:A7:8:ASN:ND2	29:A7:8:ASN:C	2.33	0.73
35:BH:147:ASP:HA	35:BH:150:ARG:NH1	2.04	0.73
1:AA:948:G:O6	56:AA:3547:OHX:N1	2.20	0.73
16:A1:66:ASN:OD1	16:A1:76:TYR:HB3	1.87	0.73
30:D8:54:GLU:OE1	30:D8:57:ARG:NH2	2.22	0.73
1:DA:1538:G:O2'	1:DA:1539:G:H5'	1.87	0.73
11:AO:85:LEU:HA	11:AO:88:LEU:HD22	1.71	0.73
35:CH:8:GLU:HB3	35:CH:34:VAL:HG23	1.70	0.73
42:CO:117:ARG:HB3	42:CO:122:THR:HB	1.69	0.73
22:A3:35:ASN:H	22:A3:35:ASN:HD22	1.35	0.73
21:DV:155:LEU:HD21	21:DV:171:ILE:HG21	1.70	0.73
1:DA:534:U:O2'	16:D1:49:HIS:HD2	1.72	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:BU:53:ARG:HH21	48:BU:59:SER:C	1.91	0.73
3:AD:34:VAL:C	3:AD:35:LYS:HG3	2.07	0.73
3:AD:35:LYS:HZ1	3:AD:104:TYR:HB2	1.50	0.73
1:DA:946:G:C2'	1:DA:947:G:H5'	2.19	0.73
1:AA:805:G:H4'	11:AO:38:GLN:HE21	1.52	0.73
34:CG:139:ARG:CG	34:CG:139:ARG:HH11	1.99	0.73
1:DA:2294:C:P	14:DQ:89:ARG:HH22	2.10	0.73
7:AH:4:ILE:O	7:AH:6:ARG:HG2	1.88	0.73
1:AA:1026:U:O2	1:AA:1027:A:H5''	1.88	0.73
31:CA:418:C:N4	31:CA:425:G:H1	1.84	0.73
2:AB:15:A:H5'	2:AB:16:G:H8	1.50	0.73
31:BA:992:U:H1'	31:BA:993:G:OP2	1.88	0.73
46:BS:43:LYS:HG3	46:BS:48:TRP:CE3	2.24	0.73
3:AD:96:HIS:CE1	3:AD:102:LYS:HD3	2.22	0.73
37:BJ:120:ILE:HG22	37:BJ:124:LEU:HD12	1.70	0.73
6:DG:43:LEU:HD12	6:DG:45:GLU:HG3	1.69	0.73
1:DA:2615:U:C2	27:D5:7:PRO:HA	2.22	0.73
1:DA:2789:C:H2'	1:DA:2790:A:H5''	1.68	0.73
9:DM:133:GLN:O	9:DM:134:ARG:HD3	1.88	0.73
1:DA:2275:C:H5'	1:DA:2275:C:H6	1.53	0.73
31:CA:1209:C:H2'	31:CA:1209:C:O2	1.87	0.73
11:AO:15:ARG:CB	11:AO:15:ARG:HH11	2.01	0.73
2:AB:75:G:H21	21:AV:85:HIS:CE1	2.06	0.73
1:AA:1728:G:H3'	1:AA:1729:A:C5'	2.16	0.73
5:AF:67:GLN:O	5:AF:68:LYS:HB2	1.86	0.73
39:CL:63:ILE:HD11	39:CL:81:ILE:HD11	1.71	0.73
34:BG:22:LYS:CB	34:BG:26:CYS:HB2	2.17	0.73
1:DA:2469:A:C8	1:DA:2482:G:C6	2.76	0.73
1:AA:2751:G:O2'	1:AA:2752:C:P	2.45	0.73
1:AA:1545(A):A:H2'	1:AA:1546:C:H5'	1.69	0.73
50:BW:89:ARG:HD2	50:BW:104:LEU:HD21	1.71	0.73
31:BA:395:C:O2	31:BA:395:C:H2'	1.88	0.73
31:BA:452:A:O2'	31:BA:453:A:O5'	2.06	0.73
1:DA:1496:A:H8	1:DA:1577:C:O2'	1.70	0.73
1:DA:27:G:N2	1:DA:512:G:HO2'	1.86	0.73
10:DN:119:PRO:HB2	15:DR:68:TYR:CE2	2.24	0.73
8:DK:59:ALA:HA	8:DK:62:LYS:HB3	1.69	0.73
22:A3:83:PRO:O	22:A3:84:LEU:HB2	1.88	0.73
49:BV:41:VAL:HA	49:BV:44:MET:HB2	1.69	0.73
49:BV:41:VAL:CB	49:BV:42:PRO:HA	2.17	0.73
35:BH:126:ARG:HG3	35:BH:126:ARG:HH11	1.54	0.73
13:A0:2:ARG:HG3	13:A0:5:LYS:HZ1	1.53	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:AF:40:GLN:OE1	5:AF:184:TYR:CB	2.36	0.73
7:AH:84:SER:OG	7:AH:85:LYS:N	2.19	0.73
14:AQ:3:ARG:HG2	14:AQ:4:LEU:N	2.03	0.73
1:DA:1639:U:C2'	1:DA:1640:C:H5'	2.19	0.73
38:CK:12:ARG:NH1	38:CK:27:PRO:HD3	2.02	0.73
4:AE:23:VAL:HG21	4:AE:183:LEU:HD23	1.69	0.73
5:AF:164:ARG:HG3	5:AF:175:THR:OG1	1.88	0.73
1:AA:2532:G:O2'	1:AA:2657:A:N1	2.21	0.73
27:A5:6:VAL:HG22	27:A5:7:PRO:HD2	1.70	0.73
1:AA:2255:G:H22	12:AP:85:LYS:HE2	0.92	0.73
5:DF:152:GLU:OE2	5:DF:191:ARG:HD2	1.89	0.73
1:AA:900:A:H3'	1:AA:901:A:C8	2.23	0.73
31:BA:1331:G:O2'	31:BA:1332:A:O5'	2.06	0.73
52:BB:10:C:H42	52:BB:26:G:H1	1.36	0.73
32:BE:204:ASN:HD22	32:BE:206:ASP:H	1.36	0.73
15:DR:11:GLU:OE1	15:DR:11:GLU:N	2.22	0.73
1:DA:2544:G:OP1	56:DA:3471:OHX:N4	2.22	0.73
39:CL:3:GLN:HG2	39:CL:20:ARG:HD2	1.70	0.73
44:CQ:45:ARG:O	44:CQ:49:HIS:CD2	2.42	0.73
1:DA:2557:G:H2'	1:DA:2558:C:H6	1.54	0.73
13:A0:92:GLY:H	13:A0:94:TYR:HE2	1.33	0.73
1:AA:68:G:H2'	1:AA:69:C:H6	1.52	0.73
10:DN:120:GLU:OE1	10:DN:122:LEU:HD21	1.87	0.73
48:BU:26:LEU:HB3	48:BU:42:ARG:HH22	1.53	0.73
1:DA:1582:C:HO2'	1:DA:1586:A:H8	1.36	0.73
27:A5:4:HIS:HB3	27:A5:5:PRO:HD3	0.75	0.73
11:AO:58:THR:CG2	11:AO:61:ARG:HG3	2.14	0.73
43:CP:76:ALA:HA	43:CP:79:LYS:CB	2.17	0.73
9:DM:97:ARG:NH1	9:DM:97:ARG:HG2	1.88	0.73
34:BG:12:CYS:HA	34:BG:19:LEU:CD2	2.19	0.73
1:DA:2130:U:H2'	1:DA:2158:A:C2	2.24	0.73
31:BA:394:G:C5	31:BA:395:C:C5	2.77	0.73
38:BK:64:LYS:C	38:BK:65:TYR:HD1	1.91	0.73
1:DA:2490:G:N2	56:DA:3344:OHX:N1	2.37	0.73
1:DA:2561:A:H2	10:DN:23:ARG:HH12	1.37	0.73
17:D2:77:ALA:O	17:D2:78:LYS:CG	2.37	0.73
27:A5:40:LYS:HB2	27:A5:46:CYS:SG	2.29	0.73
20:AU:76:CYS:SG	20:AU:77:PRO:HD2	2.28	0.73
13:A0:92:GLY:N	13:A0:94:TYR:HE2	1.86	0.73
1:AA:361:G:O2'	1:AA:362:U:H5'	1.89	0.73
1:AA:1296:G:O2'	1:AA:1297:C:H5'	1.88	0.73
53:BC:20:G:C2	53:BC:58:A:N3	2.57	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:1194:U:H2'	31:BA:1195:C:H6	1.53	0.73
12:DP:4:PRO:HD3	12:DP:70:PRO:O	1.87	0.73
39:CL:49:PRO:HB3	39:CL:96:LEU:HD11	1.70	0.73
7:AH:80:SER:O	7:AH:81:GLU:HG3	1.88	0.73
1:AA:330:A:O2'	1:AA:331:A:H8	1.70	0.73
39:CL:14:VAL:O	39:CL:65:VAL:HG23	1.89	0.73
50:BW:25:ARG:HH11	50:BW:25:ARG:HG3	1.54	0.73
31:BA:859:A:H2'	31:BA:860:A:H8	1.54	0.73
35:BH:147:ASP:HA	35:BH:150:ARG:HH12	1.54	0.73
1:AA:141:A:H8	1:AA:1595:G:H21	1.36	0.73
2:AB:50:G:OP1	14:AQ:63:THR:HG23	1.88	0.73
32:BE:77:ALA:HB2	32:BE:211:ILE:HD13	1.71	0.73
1:DA:2157:G:H2'	1:DA:2158:A:C8	2.24	0.73
28:A6:34:LEU:HB2	28:A6:36:LEU:HD22	1.69	0.73
21:AV:30:ASN:O	21:AV:32:HIS:N	2.22	0.73
28:D6:52:VAL:HG22	28:D6:53:LYS:H	1.53	0.73
31:CA:458:C:H2'	31:CA:464:G:O4'	1.89	0.73
17:A2:47:VAL:HG22	17:A2:48:GLY:N	2.04	0.73
36:BI:82:ARG:HB2	36:BI:85:VAL:HG23	1.71	0.73
5:DF:38:ARG:HH11	5:DF:38:ARG:HG3	1.54	0.73
1:DA:669:G:O2'	1:DA:670:A:OP1	2.05	0.72
31:BA:1301:U:O4	31:BA:1303:C:H1'	1.88	0.72
26:A4:40:HIS:H	26:A4:41:PRO:CD	2.00	0.72
31:BA:1000:A:H4'	1:DA:2137:C:OP1	1.89	0.72
1:DA:259:G:O2'	1:DA:621:A:O2'	2.07	0.72
3:AD:17:THR:HG22	3:AD:205:VAL:N	2.03	0.72
1:DA:1607:C:H4'	1:DA:1608:A:O5'	1.87	0.72
1:AA:588:U:H2'	1:AA:589:C:H6	1.53	0.72
1:AA:2474:C:H2'	1:AA:2475:C:O4'	1.89	0.72
31:CA:1226:C:N4	43:CP:104:ARG:HD2	2.03	0.72
29:A7:29:LYS:HD3	29:A7:32:LYS:HD2	1.71	0.72
3:DD:182:LEU:H	3:DD:272:ALA:HB3	1.54	0.72
1:DA:666:G:OP1	11:DO:47:ASP:O	2.07	0.72
11:AO:64:LYS:O	11:AO:66:GLY:N	2.22	0.72
11:DO:61:ARG:HH21	11:DO:61:ARG:HB3	1.54	0.72
1:AA:1729:A:H8	1:AA:1730:U:C5	2.07	0.72
16:A1:92:ARG:HD3	16:A1:94:ASN:HB3	1.69	0.72
31:CA:1129:C:H4'	31:CA:1130:A:H5'	1.69	0.72
31:BA:829:G:O2'	31:BA:830:G:H5'	1.89	0.72
1:AA:1107:G:H2'	1:AA:1108:U:H6	1.54	0.72
1:DA:2119:A:N6	1:DA:2170:A:H62	1.86	0.72
1:DA:1138:G:H5''	1:DA:1139:G:OP2	1.88	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:CH:9:LYS:HB2	35:CH:112:LEU:HD11	1.69	0.72
6:AG:35:GLU:OE1	6:AG:36:LYS:N	2.21	0.72
43:BP:15:VAL:HG23	43:BP:43:THR:O	1.88	0.72
31:BA:343:U:H1'	31:BA:347:G:N2	2.04	0.72
31:CA:1056:U:O2	31:CA:1056:U:H2'	1.87	0.72
31:CA:1194:U:H2'	31:CA:1195:C:C6	2.24	0.72
3:DD:35:LYS:CE	3:DD:104:TYR:HB2	2.18	0.72
1:AA:2318:G:H22	14:AQ:2:ALA:CA	2.02	0.72
1:DA:1899:G:N2	1:DA:1902:C:H41	1.87	0.72
16:A1:58:ARG:HA	16:A1:61:TRP:CE3	2.24	0.72
22:D3:49:LYS:NZ	22:D3:68:GLU:OE2	2.14	0.72
4:AE:179:GLU:HB3	4:AE:181:LEU:HD22	1.71	0.72
52:CB:23:A:H2'	52:CB:24:G:H5'	1.70	0.72
37:BJ:9:VAL:HG13	37:BJ:94:ARG:HE	1.54	0.72
1:AA:1043:C:H2'	1:AA:1044:G:H5'	1.72	0.72
21:AV:9:TYR:HE1	21:AV:35:ARG:HD3	1.55	0.72
1:DA:492:A:C2'	1:DA:493:G:H5'	2.19	0.72
44:CQ:18:VAL:O	44:CQ:20:ALA:N	2.21	0.72
31:CA:976:G:OP1	44:CQ:32:SER:N	2.22	0.72
14:DQ:10:ARG:O	14:DQ:14:VAL:HG12	1.89	0.72
21:AV:27:VAL:HG22	21:AV:28:MET:H	1.52	0.72
18:AS:68:ARG:HE	18:AS:112:GLY:HA3	1.54	0.72
7:DH:15:VAL:HG12	7:DH:29:PRO:HD2	1.71	0.72
7:DH:58:GLU:O	7:DH:60:ARG:N	2.22	0.72
1:DA:1384:A:N3	1:DA:1405:U:H1'	2.04	0.72
48:BU:70:ILE:HG23	48:BU:79:LEU:HD13	1.70	0.72
13:D0:97:VAL:HA	13:D0:113:LEU:O	1.89	0.72
6:DG:4:ASP:O	6:DG:5:VAL:HB	1.89	0.72
31:BA:1055:A:O2'	33:BF:161:GLU:OE1	2.07	0.72
1:DA:1068:G:O2'	1:DA:1096:A:O2'	2.05	0.72
31:CA:1346:A:H1'	31:CA:1347:G:OP2	1.90	0.72
33:BF:20:SER:HB2	33:BF:40:ARG:HH22	1.53	0.72
27:A5:50:GLY:H	27:A5:56:LYS:CG	2.01	0.72
31:BA:209:U:H5'	31:BA:210:U:OP2	1.88	0.72
52:BB:17:G:HO2'	52:BB:66:G:N2	1.88	0.72
31:BA:81:G:N1	31:BA:88:C:C4	2.57	0.72
4:DE:176:ILE:HB	4:DE:181:LEU:HB2	1.71	0.72
1:DA:2645:G:C3'	1:DA:2646:C:H5'	2.20	0.72
31:CA:436:C:H2'	31:CA:437:U:H6	1.55	0.72
31:CA:410:G:OP2	34:CG:25:ARG:HG2	1.89	0.72
31:CA:1303:C:O2	31:CA:1303:C:H2'	1.89	0.72
32:BE:59:GLU:C	32:BE:61:LEU:H	1.91	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1138:G:H21	9:AM:106:MET:CE	2.01	0.72
3:AD:18:VAL:HG12	3:AD:19:ALA:H	1.55	0.72
1:DA:2619:C:OP1	4:DE:152:LYS:HE2	1.89	0.72
24:AW:47:ASN:O	24:AW:49:LYS:N	2.22	0.72
12:AP:21:THR:O	12:AP:21:THR:HG22	1.89	0.72
1:DA:946:G:N2	1:DA:971:C:O2	2.20	0.72
31:CA:1060:C:O2'	31:CA:1061:G:H5'	1.90	0.72
52:CD:57:C:H4'	52:CD:58:G:O5'	1.89	0.72
32:CE:167:PRO:O	32:CE:171:ALA:N	2.23	0.72
28:D6:24:GLU:HG3	28:D6:25:LYS:H	1.54	0.72
1:AA:1049:C:H2'	1:AA:1050:A:H5'	1.71	0.72
20:DU:97:ARG:H	20:DU:97:ARG:HD3	1.53	0.72
31:BA:438:G:H4'	34:BG:123:HIS:ND1	2.04	0.72
38:CK:17:THR:O	38:CK:78:GLN:NE2	2.20	0.72
9:AM:22:THR:HG21	9:AM:25:ARG:HD2	1.70	0.72
20:AU:97:ARG:NE	20:AU:97:ARG:O	2.23	0.72
1:AA:142:G:C1'	19:AT:37:THR:HG21	2.18	0.72
1:AA:2543:G:H5''	1:AA:2543:G:H8	1.54	0.72
1:DA:2561:A:H2	10:DN:23:ARG:NH1	1.87	0.72
42:BO:66:VAL:HG21	42:BO:98:TYR:CE1	2.24	0.72
32:BE:124:SER:HB2	32:BE:125:PRO:HD2	1.70	0.72
43:BP:105:THR:OG1	43:BP:106:ASN:N	2.23	0.72
31:CA:78:G:H2'	31:CA:79:G:O4'	1.90	0.72
26:D4:48:ARG:HG2	26:D4:49:PHE:H	1.54	0.72
6:DG:55:LYS:HD2	6:DG:58:GLN:NE2	2.04	0.72
38:BK:41:ARG:NH2	38:BK:123:GLU:OE1	2.23	0.72
11:DO:21:ARG:NE	11:DO:21:ARG:HA	1.98	0.72
1:AA:2400:G:O2'	1:AA:2401:U:H5'	1.89	0.72
1:DA:1161:C:H1'	17:D2:8:GLY:O	1.89	0.72
52:BB:10:C:H2'	52:BB:11:C:C6	2.24	0.72
52:BB:46:G:H2'	52:BB:47:U:C5	2.25	0.72
31:CA:1129:C:C4	31:CA:1139:G:N1	2.57	0.72
36:BI:3:ARG:NH1	36:BI:38:GLU:OE1	2.23	0.72
1:DA:1762:A:C4'	1:DA:1762:A:OP1	2.37	0.72
4:AE:14:ILE:H	4:AE:21:VAL:HA	1.55	0.72
31:CA:1503:A:O2'	31:CA:1504:G:O5'	2.08	0.72
1:AA:1558:A:H1'	1:AA:1559:G:OP2	1.90	0.72
12:AP:1:MET:O	12:AP:2:LEU:HB2	1.89	0.72
12:AP:104:PHE:O	12:AP:105:GLU:HB2	1.89	0.72
4:AE:101:ARG:HG2	4:AE:169:ASN:OD1	1.89	0.72
31:BA:670:G:OP2	56:BA:1760:OHX:N5	2.23	0.72
32:CE:118:LEU:HB2	32:CE:142:LEU:HD12	1.70	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:495:G:H21	18:DS:61:ASN:HD21	1.37	0.72
1:AA:2579:C:H2'	1:AA:2580:U:O4'	1.90	0.72
6:AG:38:VAL:HG22	6:AG:93:THR:HG23	1.71	0.72
26:A4:54:GLY:HA2	26:A4:57:GLU:HB3	1.71	0.72
49:CV:49:ILE:HG13	49:CV:62:ILE:HD11	1.71	0.72
34:BG:163:GLU:O	34:BG:165:MET:N	2.23	0.72
1:AA:2567:G:H2'	1:AA:2568:C:C6	2.25	0.72
27:A5:3:LYS:O	27:A5:4:HIS:HB2	1.89	0.72
31:CA:979:C:C5	31:CA:980:C:H6	2.08	0.72
26:D4:22:ILE:CG1	26:D4:23:GLU:H	1.99	0.72
4:AE:116:VAL:O	4:AE:117:MET:HB3	1.89	0.72
31:CA:1034:G:N2	31:CA:1035:A:H62	1.88	0.72
21:DV:168:GLU:HG3	21:DV:169:GLU:N	2.03	0.72
4:DE:116:VAL:O	4:DE:117:MET:CB	2.38	0.72
13:A0:41:ALA:O	13:A0:43:GLU:N	2.23	0.72
6:DG:28:VAL:O	6:DG:31:VAL:HG12	1.89	0.72
1:AA:1864:U:H2'	1:AA:1869:G:H5''	1.72	0.72
2:DB:28:C:OP1	14:DQ:36:TYR:OH	2.05	0.72
31:CA:664:G:H22	31:CA:741:G:H1	1.36	0.72
27:A5:36:CYS:SG	27:A5:48:GLU:O	2.47	0.72
1:AA:1142:U:H2'	1:AA:1142:U:O2	1.90	0.72
1:AA:15:G:C2'	1:AA:16:G:H5'	2.20	0.72
1:AA:2347:C:H4'	28:A6:39:TYR:CE2	2.24	0.72
4:DE:66:HIS:C	4:DE:68:ALA:N	2.43	0.72
1:AA:2402:C:H5	1:AA:2415:G:H22	1.37	0.72
3:AD:35:LYS:HD2	3:AD:104:TYR:HD1	1.46	0.72
31:CA:1189:C:OP1	40:CM:51:ARG:NH2	2.17	0.72
1:AA:881:G:H3'	1:AA:882:G:O4'	1.89	0.72
31:CA:687:A:H1'	31:CA:688:G:OP2	1.90	0.72
53:CC:48:U:HO2'	53:CC:49:C:P	2.11	0.72
9:AM:1:MET:HE1	16:A1:95:LEU:HD21	1.72	0.72
1:AA:1803:A:O2'	3:AD:259:THR:HG21	1.90	0.72
31:BA:280:C:O2'	56:BA:1793:OHX:N4	2.22	0.72
56:BA:1793:OHX:N6	47:BT:39:SER:O	2.22	0.72
11:DO:92:GLU:OE2	11:DO:121:LYS:HG2	1.90	0.72
3:DD:108:PRO:HB3	3:DD:143:HIS:HE1	1.55	0.72
31:BA:468:A:C8	31:BA:474:G:C8	2.78	0.72
5:AF:132:VAL:HG23	5:AF:133:ASN:N	2.05	0.72
41:CN:20:TYR:CE2	41:CN:83:ILE:HD12	2.25	0.72
1:DA:481:G:OP2	20:DU:47:LYS:HB2	1.88	0.72
1:AA:1266:G:O6	18:AS:13:SER:OG	2.06	0.72
15:DR:20:PRO:HD2	15:DR:86:ILE:HG23	1.72	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:DO:46:LYS:O	11:DO:48:PRO:HB3	1.89	0.72
12:AP:92:GLY:O	12:AP:93:TYR:CG	2.42	0.72
10:DN:117:LEU:HD12	10:DN:117:LEU:H	1.54	0.72
31:BA:310:G:OP2	46:BS:27:LYS:NZ	2.23	0.72
31:CA:954:G:H2'	31:CA:955:U:C6	2.25	0.72
18:AS:12:ILE:HG13	18:AS:42:ARG:HH12	1.54	0.72
33:CF:182:ILE:HG22	33:CF:203:PHE:HA	1.71	0.72
1:DA:674:G:OP1	5:DF:54:ARG:NH2	2.22	0.72
41:CN:93:GLN:HA	41:CN:93:GLN:HE21	1.54	0.72
31:CA:1329:A:H2'	31:CA:1330:U:H5'	1.71	0.71
31:BA:1301:U:O2	31:BA:1301:U:H2'	1.88	0.71
1:AA:330:A:O2'	1:AA:331:A:C8	2.43	0.71
1:DA:626:U:H5'	1:DA:627:A:H5'	1.70	0.71
11:DO:104:GLY:O	11:DO:105:LEU:CB	2.38	0.71
16:A1:79:PHE:HE2	16:A1:83:LEU:CD2	2.03	0.71
52:BB:17:G:N2	52:BB:66:G:H2'	2.04	0.71
3:DD:166:GLN:HE21	3:DD:166:GLN:CA	2.02	0.71
32:BE:17:PHE:HB3	32:BE:44:LEU:HD11	1.70	0.71
1:AA:969:U:O4	56:AA:3547:OHX:N1	2.23	0.71
1:DA:1771:C:O2'	1:DA:1786:A:H8	1.73	0.71
21:DV:170:THR:O	21:DV:172:ALA:N	2.22	0.71
42:BO:7:ILE:CD1	47:BT:32:TYR:HB3	2.19	0.71
31:BA:22:G:H2'	31:BA:23:C:C6	2.25	0.71
1:AA:1030:G:OP2	12:AP:128:LYS:NZ	2.19	0.71
43:BP:47:ASP:O	43:BP:48:LEU:HB3	1.87	0.71
2:AB:73:A:H2'	2:AB:74:U:H5'	1.72	0.71
34:CG:11:LEU:HD22	34:CG:66:ARG:HD3	1.71	0.71
31:CA:1181:G:N3	31:CA:1181:G:H2'	2.06	0.71
3:AD:28:GLU:O	3:AD:29:PRO:C	2.24	0.71
31:BA:1053:G:N7	31:BA:1199:U:H3'	2.05	0.71
1:AA:593:G:O3'	30:A8:61:LEU:HD22	1.89	0.71
31:BA:266:G:OP1	56:BA:1724:OHX:N2	2.23	0.71
14:DQ:29:PHE:CD2	14:DQ:30:ARG:N	2.53	0.71
2:AB:12:C:O2	22:A3:74:ARG:NH1	2.23	0.71
31:CA:411:A:N7	31:CA:413:G:N3	2.38	0.71
54:C1:12:A:O2'	54:C1:13:A:P	2.48	0.71
31:CA:1033:G:H2'	31:CA:1034:G:O4'	1.90	0.71
31:CA:1100:C:HO2'	31:CA:1102:A:P	2.13	0.71
20:DU:43:ASN:N	20:DU:43:ASN:HD22	1.88	0.71
9:AM:22:THR:HG22	9:AM:23:LEU:N	2.05	0.71
7:AH:101:ARG:NH1	7:AH:122:THR:OG1	2.22	0.71
1:DA:2352:A:C2	22:D3:33:ALA:O	2.43	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:A0:12:ARG:HD3	13:A0:16:HIS:CD2	2.25	0.71
18:DS:17:VAL:O	18:DS:19:LEU:N	2.23	0.71
1:DA:2599:G:OP2	3:DD:236:GLY:N	2.23	0.71
4:AE:1:MET:HB3	4:AE:200:GLU:OE1	1.89	0.71
10:AN:2:ILE:HD13	10:AN:2:ILE:N	2.05	0.71
1:DA:2326:C:OP1	56:DA:3223:OHX:N5	2.23	0.71
5:DF:69:HIS:H	5:DF:69:HIS:HD2	1.35	0.71
31:BA:1008:C:N4	31:BA:1021:G:H1	1.85	0.71
1:AA:1065:U:H1'	1:AA:1074:G:H22	1.55	0.71
32:CE:169:LYS:O	32:CE:169:LYS:HD3	1.90	0.71
1:DA:2400:G:C4	1:DA:2401:U:C5	2.78	0.71
31:BA:1065:U:HO2'	31:BA:1066:C:P	2.13	0.71
1:DA:2320:A:H1'	1:DA:2321:G:C6	2.25	0.71
1:AA:4:C:H2'	1:AA:5:A:C8	2.26	0.71
41:CN:124:LYS:HE3	41:CN:125:PHE:CE2	2.25	0.71
31:CA:1203:C:H2'	31:CA:1204:A:O4'	1.90	0.71
31:CA:1206:G:O2'	33:CF:193:TYR:HA	1.90	0.71
11:DO:61:ARG:NH2	11:DO:61:ARG:HG2	2.02	0.71
11:DO:15:ARG:NH1	11:DO:15:ARG:CG	2.39	0.71
17:A2:35:LEU:HD22	17:A2:35:LEU:H	1.55	0.71
31:CA:1129:C:H41	31:CA:1141:C:N4	1.87	0.71
2:DB:7:G:O5'	14:DQ:29:PHE:CE1	2.43	0.71
2:AB:116:G:C5'	14:AQ:55:ALA:HB2	2.19	0.71
15:DR:106:SER:HA	15:DR:110:ILE:HG13	1.72	0.71
1:DA:999:U:H3'	1:DA:1154:G:O6	1.89	0.71
33:BF:12:LEU:O	33:BF:14:ILE:N	2.23	0.71
1:DA:2872:G:O2'	1:DA:2873:A:H5'	1.90	0.71
11:AO:121:LYS:HZ3	11:AO:123:LEU:HD11	1.54	0.71
1:DA:1316:U:O2'	1:DA:1317:A:H5'	1.90	0.71
32:BE:146:GLN:OE1	32:BE:153:ARG:NH2	2.24	0.71
14:AQ:48:LEU:HD23	14:AQ:82:ILE:HD11	1.72	0.71
31:BA:353:A:H8	31:BA:353:A:H5'	1.55	0.71
1:AA:989:G:N7	25:AX:13:ILE:HD11	2.05	0.71
15:AR:136:GLN:HG3	15:AR:137:LYS:H	1.54	0.71
16:A1:92:ARG:HB3	17:A2:11:GLN:NE2	2.05	0.71
31:CA:652:U:H1'	31:CA:653:A:H2	1.54	0.71
31:BA:950:U:H2'	31:BA:951:G:H8	1.55	0.71
30:D8:52:LYS:H	30:D8:52:LYS:CD	2.04	0.71
8:DK:123:LEU:HA	8:DK:142:VAL:CG1	2.20	0.71
1:DA:30:G:H2'	1:DA:31:C:H6	1.53	0.71
31:CA:930:C:H2'	31:CA:931:C:H5'	1.72	0.71
12:DP:83:MET:SD	12:DP:83:MET:N	2.63	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:CT:59:ILE:HG22	47:CT:71:PHE:HD1	1.55	0.71
2:DB:59:A:H2'	2:DB:60:C:O4'	1.90	0.71
32:BE:54:THR:HG21	32:BE:201:ILE:HD11	1.72	0.71
31:CA:791:G:C6	31:CA:792:A:N7	2.58	0.71
3:DD:34:VAL:HG21	3:DD:103:ARG:HA	1.73	0.71
31:CA:632:A:C1'	31:CA:633:G:OP2	2.33	0.71
1:DA:997:G:O2'	1:DA:998:C:H5'	1.91	0.71
9:DM:33:LEU:CD1	9:DM:38:HIS:HD2	2.03	0.71
14:DQ:102:ALA:O	14:DQ:105:ALA:N	2.23	0.71
7:AH:4:ILE:HB	7:AH:6:ARG:HD3	1.73	0.71
15:DR:3:ARG:HG2	15:DR:6:LEU:H	1.53	0.71
31:BA:394:G:C5	31:BA:395:C:H5	2.08	0.71
20:AU:84:ARG:HH12	20:AU:97:ARG:HB2	1.55	0.71
24:AW:47:ASN:C	24:AW:49:LYS:H	1.94	0.71
5:DF:37:VAL:HG13	5:DF:184:TYR:HD1	1.55	0.71
21:AV:125:LEU:HG	21:AV:164:ALA:HB3	1.72	0.71
31:BA:630:G:H2'	31:BA:631:G:O4'	1.91	0.71
24:DW:21:LEU:O	24:DW:25:VAL:HG22	1.90	0.71
1:DA:773:U:H4'	3:DD:47:GLY:HA3	1.73	0.71
1:DA:389:G:H1	11:DO:71:VAL:CG1	2.02	0.71
9:DM:128:HIS:HB2	9:DM:129:PRO:CD	2.20	0.71
4:DE:61:ARG:C	4:DE:63:LEU:H	1.94	0.71
11:AO:64:LYS:C	11:AO:66:GLY:H	1.93	0.71
1:AA:882:G:H3'	1:AA:883:G:H5''	1.71	0.71
16:D1:50:ARG:HH11	17:D2:70:ILE:CG2	2.00	0.71
1:DA:2415:G:H4'	11:DO:66:GLY:HA3	1.72	0.71
28:D6:24:GLU:HG3	28:D6:25:LYS:N	2.06	0.71
37:CJ:113:GLU:HB2	37:CJ:119:ARG:CG	2.19	0.71
1:AA:1833:U:H2'	1:AA:1834:U:H6	1.56	0.71
31:BA:1053:G:O3'	31:BA:1054:C:H4'	1.89	0.71
11:DO:106:LEU:HD11	11:DO:111:ARG:O	1.90	0.71
2:DB:66:A:C2	2:DB:108:C:C4	2.79	0.71
38:BK:86:ILE:HG22	38:BK:87:SER:N	2.05	0.71
33:CF:184:TYR:HD1	33:CF:201:TYR:CE2	2.09	0.71
1:AA:1858:G:O6	56:AA:3569:OHX:N6	2.24	0.71
1:AA:70:G:H4'	1:AA:71:A:OP1	1.91	0.71
1:AA:2572:A:N7	4:AE:144:ARG:HD2	2.05	0.71
27:A5:3:LYS:H	27:A5:3:LYS:HD2	1.53	0.71
31:CA:965:A:OP1	31:CA:1198:G:H5''	1.91	0.71
52:BB:46:G:O2'	52:BB:47:U:H5'	1.91	0.71
1:AA:1071:G:N1	1:AA:1091:G:N7	2.38	0.71
31:BA:1347:G:N2	31:BA:1373:G:H2'	2.04	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:BL:17:VAL:HG21	39:BL:80:GLY:HA3	1.73	0.71
1:DA:1652:A:N6	13:D0:11:ASN:HD21	1.88	0.71
1:AA:917:A:H2'	1:AA:918:A:C5'	2.20	0.71
7:AH:86:GLU:HG3	7:AH:165:ALA:HB3	1.72	0.71
1:AA:86:C:H5''	20:AU:2:ARG:HH12	1.54	0.71
13:A0:94:TYR:N	13:A0:94:TYR:CD2	2.56	0.71
31:BA:631:G:O2'	31:BA:632:A:O4'	2.07	0.71
14:AQ:59:LYS:HG2	14:AQ:60:GLY:H	1.54	0.71
6:AG:119:GLY:HA3	6:AG:181:ARG:HB2	1.73	0.71
16:D1:112:ARG:HH11	17:D2:47:VAL:HG13	1.56	0.71
33:BF:110:ASN:O	33:BF:111:LEU:HD23	1.90	0.71
12:AP:83:MET:SD	12:AP:83:MET:N	2.63	0.71
37:CJ:65:ALA:HB2	37:CJ:128:ALA:HB2	1.72	0.71
20:DU:31:LEU:O	20:DU:31:LEU:HD12	1.90	0.71
27:D5:3:LYS:O	27:D5:4:HIS:O	2.09	0.71
12:DP:23:GLY:HA2	12:DP:25:ASP:HB2	1.73	0.71
8:AK:64:GLU:C	8:AK:66:GLU:H	1.93	0.71
35:BH:78:HIS:HE1	35:BH:143:ARG:N	1.88	0.71
39:BL:43:ALA:O	39:BL:45:ALA:N	2.24	0.71
1:DA:492:A:H2'	1:DA:493:G:H5'	1.72	0.71
44:CQ:18:VAL:C	44:CQ:20:ALA:H	1.94	0.71
1:DA:910:A:H62	12:DP:12:GLN:HA	1.56	0.71
12:DP:29:PHE:HB3	12:DP:65:PHE:CZ	2.25	0.71
24:AW:32:LEU:HA	24:AW:35:LEU:HD23	1.72	0.71
48:CU:36:ASN:HB2	48:CU:39:VAL:HG23	1.73	0.71
9:AM:34:LEU:HD11	9:AM:119:ARG:O	1.91	0.71
1:AA:2191:G:H2'	1:AA:2192:G:H5''	1.73	0.71
52:CD:12:C:O2	52:CD:24:G:N2	2.24	0.71
5:DF:32:LEU:HD23	5:DF:32:LEU:O	1.91	0.71
26:A4:37:SER:HB3	26:A4:42:PHE:CD1	2.26	0.71
43:BP:3:ARG:HG2	43:BP:9:ILE:HD11	1.73	0.71
31:BA:142:G:H1	31:BA:221:C:N4	1.89	0.71
1:DA:259:G:N2	1:DA:621:A:H8	1.86	0.71
34:CG:178:VAL:HG12	34:CG:179:GLU:N	2.04	0.71
12:DP:19:GLY:H	12:DP:98:LYS:NZ	1.87	0.71
52:BD:49:A:H1'	52:BD:52:G:H22	1.56	0.71
1:DA:1519:G:C2'	1:DA:1520:U:H5'	2.20	0.71
1:DA:2872:G:C8	1:DA:2873:A:C2	2.79	0.71
19:AT:4:ALA:HA	19:AT:7:VAL:HG23	1.73	0.71
21:DV:6:LYS:HG3	21:DV:7:ALA:H	1.56	0.71
17:A2:29:PRO:HA	17:A2:61:VAL:HG23	1.72	0.71
5:DF:4:VAL:HG11	5:DF:17:ARG:HE	1.55	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:818:G:O2'	31:CA:819:A:H5'	1.90	0.71
6:AG:165:THR:HG23	6:AG:168:GLU:OE1	1.91	0.71
7:DH:104:GLU:HB2	7:DH:114:VAL:HG22	1.73	0.71
1:AA:2281:C:O2'	1:AA:2282:G:H5'	1.91	0.71
30:A8:31:HIS:CG	30:A8:31:HIS:O	2.43	0.70
31:CA:1200:C:H5'	31:CA:1201:A:H5'	1.73	0.70
1:AA:880:G:OP1	1:AA:880:G:H4'	1.91	0.70
1:DA:884:C:N3	1:DA:892:G:N2	2.36	0.70
31:BA:1242:C:H42	31:BA:1295:G:H1	1.39	0.70
31:BA:1305:G:H22	31:BA:1331:G:C2'	2.04	0.70
31:CA:690:G:H2'	31:CA:691:G:O4'	1.91	0.70
1:AA:784:A:C5'	1:AA:785:G:OP1	2.35	0.70
1:AA:602:G:N2	1:AA:655:A:C8	2.59	0.70
52:CB:46:G:O2'	52:CB:47:U:OP1	2.08	0.70
1:DA:2122:U:H2'	1:DA:2123:G:O4'	1.91	0.70
50:CW:8:ARG:HH11	50:CW:8:ARG:CG	2.04	0.70
7:AH:83:TYR:CB	7:AH:135:GLY:H	2.03	0.70
1:AA:1275:A:C4	13:A0:16:HIS:ND1	2.58	0.70
1:AA:1995:U:OP1	56:AA:3557:OHX:N3	2.24	0.70
56:AA:3535:OHX:N1	3:AD:202:LYS:O	2.24	0.70
5:AF:127:GLU:OE2	5:AF:127:GLU:HA	1.90	0.70
1:DA:1126:A:H8	1:DA:1126:A:OP1	1.74	0.70
31:BA:1305:G:N2	31:BA:1331:G:N3	2.39	0.70
1:AA:330:A:HO2'	1:AA:331:A:H8	1.37	0.70
43:BP:23:TYR:HB3	43:BP:67:GLU:HB2	1.72	0.70
50:BW:100:ILE:HG13	50:BW:102:GLY:N	2.02	0.70
50:BW:52:ALA:O	50:BW:54:LYS:N	2.25	0.70
2:DB:111:U:O4	56:DB:213:OHX:N3	2.24	0.70
2:DB:83:G:H1	2:DB:93:C:H42	1.36	0.70
31:CA:1024:G:H2'	31:CA:1025:U:C6	2.26	0.70
31:CA:1300:G:O2'	31:CA:1301:U:O5'	2.09	0.70
49:BV:51:VAL:HG12	49:BV:52:TYR:H	1.55	0.70
1:DA:598:G:H1'	11:DO:12:ALA:HB2	1.73	0.70
1:AA:910:A:H62	12:AP:12:GLN:HA	1.55	0.70
21:DV:28:MET:O	21:DV:34:ASN:HA	1.91	0.70
7:DH:92:ILE:H	7:DH:92:ILE:HD12	1.56	0.70
12:DP:2:LEU:O	12:DP:70:PRO:CG	2.40	0.70
40:CM:30:SER:HB2	40:CM:81:THR:HG22	1.73	0.70
3:DD:68:LYS:HB3	3:DD:70:TRP:CH2	2.27	0.70
47:BT:48:GLU:O	47:BT:50:LYS:N	2.24	0.70
25:AX:8:LEU:HB2	25:AX:28:LEU:HD22	1.73	0.70
41:BN:22:HIS:HB3	41:BN:29:ILE:HG23	1.72	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
17:D2:35:LEU:O	17:D2:37:VAL:HG13	1.91	0.70
11:AO:64:LYS:C	11:AO:66:GLY:N	2.41	0.70
52:CB:37:A:C2	54:C1:20:G:C5	2.79	0.70
1:AA:1065:U:H1'	1:AA:1074:G:N2	2.05	0.70
1:DA:2211:G:O2'	1:DA:2212:A:P	2.49	0.70
12:DP:19:GLY:N	12:DP:98:LYS:HZ3	1.85	0.70
34:BG:108:LEU:HB3	34:BG:110:PHE:HE1	1.54	0.70
1:DA:35:G:C4	1:DA:454:A:C2	2.79	0.70
31:CA:1497:G:H2'	31:CA:1498:U:H5'	1.73	0.70
1:AA:643:A:O2'	1:AA:644:A:H5'	1.90	0.70
37:CJ:143:ARG:NH1	52:CD:43:G:H5'	2.06	0.70
31:CA:266:G:OP1	56:CA:1727:OHX:N2	2.25	0.70
8:DK:76:THR:HG23	8:DK:77:LEU:N	2.06	0.70
4:DE:105:THR:HG21	4:DE:164:ARG:NH1	2.06	0.70
2:DB:63:G:OP1	56:DB:220:OHX:N6	2.24	0.70
1:DA:2736:G:H2'	1:DA:2737:G:H8	1.56	0.70
38:BK:12:ARG:NH1	38:BK:27:PRO:HD2	2.06	0.70
31:CA:1351:U:H4'	37:CJ:33:ASP:HB3	1.74	0.70
1:DA:1460:A:H4'	1:DA:1461:G:OP2	1.91	0.70
27:A5:16:ARG:NH1	27:A5:17:ASP:OD1	2.25	0.70
6:DG:56:ALA:HB2	6:DG:153:ARG:NE	2.06	0.70
4:DE:92:THR:O	4:DE:95:ILE:HG13	1.92	0.70
6:DG:2:PRO:O	6:DG:4:ASP:N	2.25	0.70
34:CG:12:CYS:HB3	34:CG:33:MET:HG2	1.73	0.70
16:D1:65:ILE:HD11	16:D1:96:ALA:CB	2.21	0.70
1:AA:675:A:H4'	5:AF:67:GLN:NE2	2.05	0.70
11:DO:52:GLU:CG	11:DO:57:THR:HA	2.19	0.70
52:CB:52:G:H2'	52:CB:53:A:O4'	1.92	0.70
31:BA:1213:A:N7	31:BA:1215:G:C5	2.59	0.70
1:DA:2157:G:H2'	1:DA:2158:A:H8	1.56	0.70
1:DA:1800:C:OP2	3:DD:183:ARG:NH2	2.23	0.70
1:DA:2657:A:O2'	7:DH:160:LYS:HE3	1.91	0.70
1:AA:240:G:O6	56:AA:3536:OHX:N4	2.23	0.70
9:DM:57:ALA:O	9:DM:58:ASP:CG	2.30	0.70
38:BK:51:VAL:HG21	38:BK:60:ARG:NH1	2.05	0.70
1:DA:2840:C:H5''	13:D0:53:HIS:CD2	2.26	0.70
31:CA:757:U:H2'	31:CA:758:G:O4'	1.90	0.70
1:AA:654(D):G:H1	1:AA:654(Q):C:H42	0.73	0.70
28:D6:25:LYS:CA	30:D8:34:TRP:CZ3	2.75	0.70
37:CJ:113:GLU:CB	37:CJ:119:ARG:HG2	2.19	0.70
31:BA:171:A:H2'	31:BA:172:A:H8	1.56	0.70
31:BA:1145:C:H4'	31:BA:1146:A:H8	1.56	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:2522:U:H2'	1:DA:2523:G:H5''	1.72	0.70
42:CO:55:VAL:HG22	42:CO:56:ALA:N	2.06	0.70
1:DA:2310:A:C5'	1:DA:2311:A:OP2	2.40	0.70
39:CL:53:VAL:C	39:CL:55:ALA:H	1.94	0.70
52:BD:51:C:H2'	52:BD:52:G:O4'	1.90	0.70
1:DA:2872:G:C5	1:DA:2873:A:C2	2.79	0.70
1:DA:1570:A:O4'	3:DD:38:LYS:HE2	1.91	0.70
10:DN:117:LEU:CD1	10:DN:117:LEU:H	2.04	0.70
37:CJ:16:LEU:CD1	39:CL:42:ARG:HA	2.21	0.70
41:CN:20:TYR:HB2	41:CN:31:THR:HG23	1.73	0.70
1:AA:2849:U:H4'	1:AA:2868:A:C2	2.26	0.70
36:BI:67:MET:HB2	36:BI:68:PRO:HD2	1.74	0.70
18:AS:79:GLY:CA	18:AS:100:THR:HG22	2.21	0.70
1:DA:1855:G:N7	56:DA:3248:OHX:N1	2.39	0.70
1:AA:971:C:H2'	1:AA:972:G:H5'	1.74	0.70
39:BL:98:PRO:O	39:BL:100:GLY:N	2.25	0.70
26:D4:18:CYS:SG	26:D4:19:GLY:HA2	2.31	0.70
9:DM:21:LYS:O	9:DM:60:ILE:HG23	1.91	0.70
1:DA:848:G:H2'	1:DA:849:A:H8	1.53	0.70
11:DO:46:LYS:O	11:DO:48:PRO:CB	2.39	0.70
31:CA:1095:U:C4	31:CA:1096:C:C4	2.80	0.70
52:BD:13:G:H2'	52:BD:14:A:C8	2.26	0.70
54:B1:11:U:H1'	54:B1:12:A:OP1	1.91	0.70
16:D1:92:ARG:NH1	17:D2:11:GLN:H	1.89	0.70
1:DA:2480:C:OP2	56:DA:3176:OHX:N4	2.24	0.70
1:DA:2468:G:C5	1:DA:2481:G:C2	2.80	0.70
1:DA:2311:A:C2	6:DG:88:ILE:HD11	2.26	0.70
54:C1:11:U:H2'	54:C1:12:A:C2	2.27	0.70
31:CA:1028:C:N3	31:CA:1034:G:N2	2.40	0.70
32:BE:212:GLN:CD	32:BE:235:SER:HB2	2.12	0.70
9:AM:23:LEU:HG	9:AM:24:GLY:N	2.06	0.70
37:CJ:20:ASP:HB3	37:CJ:23:VAL:HG23	1.72	0.70
47:CT:59:ILE:HG22	47:CT:71:PHE:CD1	2.26	0.70
31:CA:1449:C:O3'	31:CA:1450:U:H4'	1.90	0.70
1:DA:798:G:OP1	56:DF:301:OHX:N6	2.24	0.70
1:AA:1473:G:C2'	1:AA:1474:C:H5'	2.21	0.70
1:AA:1519:G:C2'	1:AA:1520:U:H5'	2.22	0.70
7:AH:105:LEU:H	7:AH:105:LEU:HD23	1.56	0.70
1:AA:1076:C:H2'	1:AA:1077:A:H5''	1.72	0.70
30:D8:30:ARG:HB3	30:D8:31:HIS:HD2	1.55	0.70
1:AA:1079:C:H5'	1:AA:1080:A:OP2	1.92	0.70
33:BF:95:THR:HG22	33:BF:96:GLY:N	2.03	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:A1:75:ASN:HB2	16:A1:78:THR:OG1	1.91	0.70
6:AG:67:LYS:HG3	26:A4:6:HIS:CE1	2.27	0.70
31:BA:515:G:N2	31:BA:537:G:C4	2.60	0.70
34:CG:205:GLU:OE1	35:CH:100:VAL:HG12	1.92	0.70
31:CA:1301:U:O2	31:CA:1301:U:H2'	1.90	0.70
24:AW:42:GLY:C	24:AW:44:LEU:H	1.92	0.70
31:BA:819:A:H4'	31:BA:820:U:OP2	1.91	0.70
1:AA:2392:A:H2	1:AA:2424:C:H42	1.40	0.70
31:CA:1151:A:O2'	40:CM:70:ARG:NH2	2.23	0.70
39:CL:78:LYS:HB2	39:CL:78:LYS:HZ2	1.57	0.70
47:BT:91:ARG:HH11	47:BT:91:ARG:HG2	1.57	0.70
8:DK:79:ILE:O	8:DK:79:ILE:HG22	1.91	0.70
1:AA:1202:C:H2'	1:AA:1203:G:H5'	1.72	0.70
8:AK:104:GLN:O	8:AK:105:HIS:CD2	2.44	0.70
31:CA:606:G:N7	56:CA:1775:OHX:N5	2.38	0.70
11:DO:46:LYS:NZ	11:DO:46:LYS:CB	2.41	0.70
52:CD:18:G:C1'	52:CD:19:C:OP2	2.38	0.70
31:BA:1238:A:N7	31:BA:1301:U:O4	2.25	0.70
15:AR:108:ARG:HA	15:AR:111:ARG:NE	2.06	0.70
1:DA:90:U:O2'	1:DA:91:A:C8	2.43	0.70
24:DW:46:GLN:N	24:DW:49:LYS:HZ2	1.88	0.70
11:DO:104:GLY:O	11:DO:105:LEU:HG	1.91	0.70
31:CA:1256:A:N6	31:CA:1278:U:OP2	2.25	0.70
1:AA:2467:C:C4'	12:AP:123:HIS:ND1	2.52	0.70
44:BQ:4:LYS:O	44:BQ:7:ILE:HG13	1.92	0.70
1:AA:1050:A:C8	1:AA:2751:G:N7	2.60	0.70
12:DP:21:THR:HG22	12:DP:21:THR:O	1.91	0.70
12:DP:19:GLY:HA3	12:DP:98:LYS:HD2	1.74	0.70
1:AA:546:C:H3'	1:AA:547:A:H8	1.56	0.70
1:AA:442:G:O4'	5:AF:46:ARG:HD3	1.91	0.70
31:CA:1153:C:C2	31:CA:1154:G:C8	2.79	0.70
34:BG:163:GLU:C	34:BG:165:MET:H	1.95	0.70
33:CF:46:GLU:O	33:CF:47:LEU:HB2	1.91	0.70
1:AA:833:U:H2'	1:AA:834:C:C6	2.27	0.70
20:AU:91:GLU:HG3	20:AU:92:ASN:OD1	1.92	0.70
31:CA:1361:G:OP1	56:CA:1769:OHX:N3	2.25	0.70
32:CE:21:ARG:HA	32:CE:39:ILE:HA	1.73	0.70
3:AD:228:PRO:HG3	3:AD:234:GLY:O	1.91	0.70
3:AD:35:LYS:HE3	3:AD:64:ILE:C	2.12	0.70
43:CP:73:GLU:O	43:CP:77:ASN:HB2	1.92	0.70
52:CD:12:C:H2'	52:CD:13:G:O4'	1.90	0.70
31:CA:631:G:OP1	31:CA:632:A:N6	2.20	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:869:G:N7	56:BA:1802:OHX:N3	2.39	0.70
1:AA:1441:G:H2'	1:AA:1442:G:H8	1.57	0.70
1:AA:2134:A:H2'	1:AA:2135:A:H8	1.57	0.70
17:A2:35:LEU:O	17:A2:37:VAL:N	2.24	0.70
1:DA:1030:G:H4'	12:DP:123:HIS:HE1	1.56	0.70
31:CA:1250:A:H4'	39:CL:68:GLY:N	2.07	0.70
1:AA:304:G:H2'	1:AA:305:U:H6	1.57	0.70
20:AU:76:CYS:HB3	20:AU:96:ILE:HD13	1.74	0.70
32:CE:73:THR:HG21	32:CE:97:TRP:H	1.55	0.70
1:DA:1444(A):A:H2'	1:DA:1444(A):A:N3	2.06	0.70
1:DA:1238:G:OP1	56:DA:3489:OHX:N6	2.24	0.70
52:BB:3:U:H4'	52:BB:4:G:OP1	1.90	0.70
1:AA:234:C:H2'	1:AA:235:U:H6	1.55	0.70
31:CA:209:U:H1'	31:CA:210:U:OP1	1.91	0.70
33:BF:21:ARG:HD3	33:BF:21:ARG:N	2.07	0.70
1:DA:1418:G:OP1	1:DA:1588:C:O2'	2.09	0.70
12:AP:21:THR:HB	12:AP:99:PRO:O	1.91	0.70
3:DD:35:LYS:HE3	3:DD:64:ILE:N	2.07	0.70
19:DT:12:VAL:HB	19:DT:29:TRP:CE2	2.26	0.70
52:BB:15:G:H1'	52:BB:20:C:H41	1.57	0.70
1:AA:1104:C:H2'	1:AA:1104:C:O2	1.92	0.70
31:CA:827:U:H3	31:CA:872:A:H62	1.37	0.70
1:AA:676:A:H8	1:AA:2069:G:N2	1.86	0.70
12:DP:26:TYR:CD1	12:DP:139:GLU:CG	2.74	0.70
34:BG:11:LEU:C	34:BG:13:ARG:N	2.41	0.70
31:BA:189:U:O2	47:BT:72:ARG:NH1	2.24	0.70
1:AA:2392:A:C8	11:AO:60:MET:HB2	2.26	0.70
13:D0:41:ALA:C	13:D0:43:GLU:H	1.95	0.70
16:D1:112:ARG:HH11	17:D2:47:VAL:CG1	2.05	0.70
1:AA:34:C:O2'	1:AA:35:G:OP2	2.09	0.70
38:BK:129:VAL:HG23	38:BK:130:GLY:H	1.56	0.70
1:AA:1294:U:O2'	13:A0:23:ASN:ND2	2.25	0.70
52:BB:27:A:H5''	52:BB:28:G:C8	2.26	0.70
1:AA:207:A:H2'	1:AA:208:C:O4'	1.92	0.70
1:DA:1913:A:H4'	1:DA:1914:C:H5''	1.74	0.70
20:DU:23:ARG:HG3	20:DU:23:ARG:HH11	1.57	0.70
28:A6:42:TRP:N	28:A6:42:TRP:CD1	2.58	0.70
11:DO:71:VAL:HG13	11:DO:72:PRO:N	2.02	0.69
1:AA:2315:G:H2'	1:AA:2316:C:C6	2.27	0.69
5:AF:66:PRO:O	5:AF:67:GLN:HB3	1.90	0.69
39:CL:112:LYS:HD3	39:CL:112:LYS:C	2.12	0.69
5:DF:46:ARG:HG2	5:DF:46:ARG:NH1	2.02	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:AO:9:ASN:HB3	11:AO:10:PRO:CD	2.22	0.69
1:AA:1899:G:N2	1:AA:1902:C:H41	1.90	0.69
31:CA:991:U:O2	31:CA:993:G:C8	2.45	0.69
1:DA:34:C:OP2	1:DA:34:C:C6	2.45	0.69
1:AA:654(B):C:N4	1:AA:654(S):G:H1	1.90	0.69
41:BN:91:ARG:NH2	48:BU:88:LYS:HE3	2.07	0.69
22:D3:32:ARG:O	22:D3:34:GLY:N	2.25	0.69
6:AG:13:GLU:O	6:AG:14:GLU:CB	2.40	0.69
21:DV:110:GLY:O	21:DV:143:GLY:HA2	1.91	0.69
27:D5:24:ALA:O	56:D5:102:OHX:N5	2.25	0.69
31:BA:226:G:N2	31:BA:227:G:H1'	2.07	0.69
1:AA:1313:U:H2'	1:AA:1610:A:C2	2.27	0.69
31:CA:426:G:OP1	34:CG:38:TYR:OH	2.07	0.69
1:AA:1058:U:H2'	1:AA:1059:G:C8	2.27	0.69
1:AA:1887:C:H2'	1:AA:1888:G:C5'	2.18	0.69
31:BA:266:G:H5''	31:BA:267:C:C5	2.26	0.69
50:BW:47:GLY:C	50:BW:49:ALA:H	1.94	0.69
8:DK:131:LYS:HB3	8:DK:132:PRO:CA	2.21	0.69
15:DR:8:LYS:C	15:DR:10:VAL:H	1.94	0.69
32:BE:111:ARG:NH1	32:BE:111:ARG:HG2	2.04	0.69
6:DG:161:THR:HG22	6:DG:163:ALA:N	2.07	0.69
19:AT:55:ASN:HB2	19:AT:80:ILE:HG13	1.72	0.69
6:DG:63:ILE:CG1	6:DG:63:ILE:O	2.41	0.69
1:DA:2520:C:H6	1:DA:2520:C:OP1	1.75	0.69
17:A2:48:GLY:O	17:A2:49:THR:O	2.10	0.69
24:DW:10:LEU:O	24:DW:14:ARG:HB2	1.92	0.69
22:A3:11:ARG:NH1	22:A3:11:ARG:HB2	2.06	0.69
6:AG:114:ILE:HD11	6:AG:140:ILE:HD12	1.73	0.69
1:AA:2233:U:H2'	1:AA:2234:G:C8	2.27	0.69
24:DW:29:LYS:HE3	24:DW:57:ILE:HG21	1.74	0.69
1:AA:2255:G:H22	12:AP:85:LYS:CE	1.81	0.69
54:C1:21:C:H2'	54:C1:22:A:H8	1.57	0.69
52:BD:18:G:C1'	52:BD:19:C:OP2	2.38	0.69
31:BA:1178:G:O2'	31:BA:1179:A:OP1	2.10	0.69
1:AA:259:G:O2'	1:AA:621:A:O2'	2.08	0.69
11:DO:62:LEU:HD11	30:D8:25:MET:O	1.92	0.69
1:DA:2853:C:O2'	1:DA:2854:G:H5'	1.92	0.69
1:AA:1932:A:H2'	1:AA:1933:G:O4'	1.92	0.69
52:CB:47:U:H2'	52:CB:48:C:H6	1.49	0.69
31:BA:427:U:O4	56:BA:1785:OHX:N6	2.25	0.69
34:BG:11:LEU:C	34:BG:13:ARG:H	1.93	0.69
6:AG:124:SER:HB2	6:AG:131:TYR:CE1	2.26	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:CE:6:THR:O	32:CE:7:VAL:HB	1.93	0.69
21:AV:103:ARG:HG3	21:AV:136:PHE:CD1	2.26	0.69
33:CF:14:ILE:CG1	33:CF:15:THR:H	2.04	0.69
1:DA:2125:G:N1	1:DA:2172:U:OP1	2.22	0.69
1:AA:143:C:H4'	19:AT:38:GLU:OE2	1.92	0.69
12:AP:59:ARG:HD2	12:AP:59:ARG:H	1.57	0.69
1:AA:2168:G:O2'	1:AA:2169:A:H5'	1.91	0.69
2:DB:31:C:H2'	2:DB:32:C:H5'	1.74	0.69
1:AA:588:U:C2	5:AF:90:PHE:CE1	2.79	0.69
5:DF:119:ARG:HH11	5:DF:119:ARG:CB	2.06	0.69
21:DV:48:PHE:CE2	21:DV:52:SER:HA	2.27	0.69
50:BW:26:ASN:HB2	50:BW:71:THR:HG23	1.74	0.69
6:DG:121:ASN:HD22	6:DG:181:ARG:HH21	1.40	0.69
1:DA:2557:G:H2'	1:DA:2558:C:C6	2.27	0.69
7:DH:11:VAL:HB	7:DH:13:LYS:HD2	1.74	0.69
32:CE:200:ILE:HG22	32:CE:202:PRO:HD3	1.74	0.69
1:DA:1420:U:O2'	1:DA:1421:G:P	2.51	0.69
9:DM:71:ILE:O	9:DM:71:ILE:HD12	1.93	0.69
3:DD:186:HIS:HD2	3:DD:188:GLU:H	1.40	0.69
52:CB:77:C:N3	52:CB:78:C:N4	2.40	0.69
8:DK:93:THR:O	8:DK:97:ILE:HG13	1.92	0.69
31:CA:1096:C:H2'	31:CA:1097:C:H6	1.56	0.69
31:BA:1034:G:H2'	31:BA:1035:A:H8	1.56	0.69
31:BA:142:G:N2	31:BA:221:C:N3	2.38	0.69
31:BA:869:G:OP2	56:BA:1802:OHX:N5	2.24	0.69
11:DO:81:GLN:OE1	11:DO:106:LEU:HA	1.91	0.69
21:DV:115:GLY:CA	21:DV:177:PRO:HG2	2.23	0.69
31:CA:509:A:O2'	31:CA:510:A:OP1	2.10	0.69
1:AA:1416:G:O2'	1:AA:1417:C:P	2.51	0.69
8:AK:8:PRO:HD3	8:AK:15:VAL:HG23	1.73	0.69
49:BV:51:VAL:HG12	49:BV:52:TYR:N	2.07	0.69
1:DA:986:C:H2'	1:DA:987:G:H5'	1.72	0.69
35:BH:153:LYS:H	38:BK:64:LYS:HZ1	1.41	0.69
1:DA:1579:A:H2'	1:DA:1580:A:C8	2.26	0.69
1:AA:2094:G:C2'	1:AA:2095:C:H5'	2.22	0.69
6:DG:15:VAL:HG13	6:DG:175:LEU:HB2	1.74	0.69
1:AA:1105:U:H2'	1:AA:1106:G:C8	2.27	0.69
31:BA:1386:G:O2'	31:BA:1387:G:H5'	1.92	0.69
1:DA:1486:A:O2'	1:DA:1487:G:H5'	1.91	0.69
1:DA:634:C:H2'	1:DA:635:C:H6	1.56	0.69
9:AM:4:TYR:OH	9:AM:7:LYS:NZ	2.24	0.69
3:AD:223:GLY:HA3	3:AD:231:HIS:CE1	2.27	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:636:G:OP1	11:AO:132:LYS:HG2	1.91	0.69
1:AA:2401:U:H2'	1:AA:2402:C:O4'	1.91	0.69
3:AD:35:LYS:HA	3:AD:36:PRO:O	1.93	0.69
40:CM:54:PHE:CZ	40:CM:55:LYS:HE2	2.26	0.69
1:AA:882:G:H2'	1:AA:883:G:N7	2.07	0.69
19:DT:12:VAL:HB	19:DT:29:TRP:HE1	1.52	0.69
43:BP:30:ALA:C	43:BP:32:GLU:H	1.95	0.69
1:AA:1952:A:C2	10:AN:22:ILE:HD11	2.27	0.69
31:CA:1126:U:O2'	31:CA:1127:G:P	2.50	0.69
31:BA:659:U:H2'	31:BA:660:G:C8	2.28	0.69
1:DA:2313:C:C5'	6:DG:40:ASN:ND2	2.54	0.69
1:AA:1587:A:H2'	1:AA:1588:C:C6	2.26	0.69
28:A6:17:LYS:O	28:A6:18:ARG:HB2	1.91	0.69
1:AA:654(B):C:N3	1:AA:654(S):G:N2	2.39	0.69
20:AU:81:LYS:HD2	20:AU:96:ILE:HD12	1.75	0.69
1:AA:557:U:H2'	1:AA:558:G:H8	1.57	0.69
1:AA:999:U:H5''	1:AA:1154:G:O6	1.92	0.69
31:BA:966:G:O2'	39:BL:127:LYS:O	2.09	0.69
1:DA:1494:A:H2'	1:DA:1495:A:C8	2.27	0.69
21:DV:80:ARG:O	21:DV:81:ARG:HB3	1.92	0.69
34:CG:73:ARG:O	34:CG:77:ASN:ND2	2.21	0.69
1:DA:2101:G:H2'	1:DA:2102:U:O4'	1.93	0.69
5:AF:57:VAL:HG13	5:AF:58:ALA:N	2.07	0.69
1:AA:518:G:H4'	18:AS:18:ARG:NH1	2.08	0.69
36:BI:12:PRO:HG3	36:BI:57:GLN:O	1.92	0.69
1:AA:2294:C:C4	1:AA:2295:C:C5	2.80	0.69
5:DF:25:PRO:CB	5:DF:27:GLU:H	1.95	0.69
31:BA:1199:U:H4'	40:BM:54:PHE:CE2	2.28	0.69
31:BA:792:A:C2	31:BA:794:A:N6	2.61	0.69
4:AE:38:THR:HG23	4:AE:41:LYS:H	1.57	0.69
36:BI:3:ARG:O	36:BI:93:SER:HB2	1.93	0.69
5:DF:167:ALA:HB1	5:DF:173:VAL:HG11	1.74	0.69
19:DT:8:ILE:N	19:DT:8:ILE:HD12	2.08	0.69
28:A6:44:ARG:HD3	28:A6:44:ARG:H	1.57	0.69
1:AA:2114:A:N3	1:AA:2114:A:H2'	2.07	0.69
31:BA:464:G:O6	31:BA:466:C:H5'	1.93	0.69
1:AA:518:G:H4'	18:AS:18:ARG:HH11	1.57	0.69
1:DA:959:A:N1	1:DA:960:A:C2	2.60	0.69
3:AD:159:ALA:HB1	3:AD:198:ASN:O	1.93	0.69
31:CA:1435:G:H2'	31:CA:1436:U:C6	2.27	0.69
1:AA:581:C:H2'	1:AA:582:G:C8	2.27	0.69
20:AU:5:MET:O	20:AU:6:HIS:HB3	1.92	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
19:DT:67:GLY:O	19:DT:69:TYR:N	2.26	0.69
1:DA:2833:G:OP1	1:DA:2833:G:H8	1.76	0.69
32:CE:172:ILE:HD12	32:CE:172:ILE:H	1.57	0.69
1:DA:2327:A:H2'	1:DA:2328:A:C8	2.27	0.69
35:BH:15:ARG:HD2	35:BH:26:PHE:CD2	2.28	0.69
31:CA:1159:U:H1'	31:CA:1181:G:H1	1.57	0.69
15:AR:105:LEU:HD23	15:AR:106:SER:H	1.56	0.69
30:D8:30:ARG:HB3	30:D8:31:HIS:CD2	2.28	0.69
1:DA:1071:G:H22	1:DA:1090:U:H5	1.38	0.69
1:DA:2681:C:C5	1:DA:2727:G:C2	2.81	0.69
50:CW:100:ILE:CD1	50:CW:100:ILE:H	2.05	0.69
31:CA:1036:G:H5'	31:CA:1037:C:OP2	1.93	0.69
38:BK:87:SER:HA	38:BK:93:VAL:HG23	1.73	0.69
20:AU:78:ALA:HB3	20:AU:81:LYS:HE3	1.75	0.69
21:DV:53:ILE:HG22	21:DV:71:VAL:O	1.93	0.69
1:DA:1495:A:O2'	1:DA:1496:A:H5'	1.93	0.69
1:DA:633:A:H2'	1:DA:634:C:H5'	1.75	0.69
12:DP:132:VAL:HG21	21:DV:81:ARG:HH12	1.57	0.69
33:CF:58:GLU:HB2	33:CF:65:ALA:HB3	1.75	0.69
33:BF:130:VAL:O	33:BF:134:ILE:HG12	1.93	0.69
13:A0:57:ARG:HB3	13:A0:59:ASP:OD2	1.92	0.69
23:AZ:78:LYS:NZ	23:AZ:94:LEU:HD11	2.07	0.69
4:DE:12:THR:O	4:DE:23:VAL:HG22	1.92	0.69
1:DA:645:C:O2	1:DA:645:C:H2'	1.93	0.69
1:AA:2432:A:C4	23:AZ:33:LYS:HG2	2.28	0.69
1:AA:879:G:H1	1:AA:898:C:N4	1.89	0.69
1:AA:330:A:C2	1:AA:1210:A:H2'	2.26	0.69
1:DA:1190:G:H2'	1:DA:1191:G:H8	1.57	0.69
11:DO:100:LEU:HG	11:DO:105:LEU:CD1	2.23	0.69
31:CA:1275:A:H2'	31:CA:1276:G:O4'	1.93	0.69
40:CM:6:ILE:HD11	40:CM:72:VAL:HB	1.75	0.69
27:A5:56:LYS:HD2	27:A5:56:LYS:N	2.03	0.69
44:BQ:4:LYS:O	44:BQ:6:LEU:N	2.26	0.69
1:DA:2751:G:C6	7:DH:2:SER:HB2	2.28	0.69
7:DH:3:ARG:HG3	7:DH:4:ILE:H	1.57	0.69
1:DA:2475:C:H2'	1:DA:2477:C:OP1	1.92	0.69
4:AE:117:MET:CE	4:AE:136:ARG:HA	2.21	0.69
52:BB:17:G:HO2'	52:BB:66:G:H22	1.39	0.69
1:AA:1448:G:O2'	1:AA:1529:A:N1	2.26	0.69
31:CA:1004:A:H2	31:CA:1024:G:C8	2.11	0.69
31:BA:439:A:H2'	31:BA:440:A:C5'	2.23	0.69
31:BA:654:G:H2'	31:BA:655:A:H5'	1.74	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:737:A:O2'	36:CI:73:ASN:ND2	2.26	0.69
38:BK:69:ARG:HD3	38:BK:75:ARG:O	1.92	0.69
31:CA:485:G:HO2'	31:CA:486:U:H6	1.38	0.69
4:AE:131:ALA:HB1	4:AE:135:HIS:CE1	2.28	0.69
1:AA:1324:G:C4	1:AA:1328:G:O6	2.45	0.69
35:CH:33:VAL:HG12	35:CH:34:VAL:H	1.58	0.69
49:CV:18:LYS:O	49:CV:22:LEU:HB2	1.93	0.69
22:A3:11:ARG:CZ	22:A3:11:ARG:HB2	2.22	0.69
31:BA:719:C:O2'	48:BU:49:LYS:HB3	1.93	0.69
16:A1:44:ASN:HD21	17:A2:75:PHE:H	1.40	0.69
26:A4:52:THR:OG1	26:A4:53:GLU:N	2.24	0.69
21:AV:60:GLU:O	21:AV:61:LEU:HB3	1.93	0.69
1:DA:2335:A:HO2'	1:DA:2336:A:P	2.16	0.69
13:D0:55:ALA:C	13:D0:57:ARG:H	1.96	0.69
31:BA:1492:A:OP1	42:BO:47:LYS:N	2.26	0.69
9:AM:15:LEU:HD13	9:AM:16:ILE:N	2.07	0.69
6:AG:64:THR:HG22	6:AG:66:GLN:H	1.58	0.69
3:AD:65:ILE:HD11	3:AD:67:PHE:CE2	2.27	0.69
1:DA:884:C:N4	1:DA:892:G:N1	2.28	0.69
31:CA:1158:C:C2	31:CA:1160:G:N7	2.61	0.69
11:DO:64:LYS:HB2	30:D8:25:MET:HE2	1.75	0.69
31:CA:1346:A:C6	37:CJ:10:ARG:NH1	2.61	0.69
14:DQ:24:LEU:O	14:DQ:85:VAL:HB	1.92	0.69
31:BA:974:A:OP2	44:BQ:29:ARG:NH2	2.25	0.69
53:CC:54:G:H2'	53:CC:55:U:C6	2.28	0.69
1:AA:917:A:H2'	1:AA:918:A:H5'	1.74	0.69
1:AA:164:U:H5''	1:AA:165:U:OP2	1.92	0.69
1:AA:1287:A:N7	13:A0:107:ASP:HB2	2.08	0.69
47:BT:91:ARG:HH12	47:BT:92:ARG:NH2	1.90	0.69
1:DA:910:A:C5	12:DP:13:GLN:HG3	2.27	0.69
50:CW:23:ARG:O	50:CW:27:LYS:HB2	1.93	0.69
52:CD:7:G:N2	52:CD:76:C:O2	2.26	0.69
9:DM:67:LEU:O	9:DM:88:GLU:HG3	1.93	0.69
1:AA:1379:A:H1'	1:AA:1380:G:OP1	1.93	0.69
1:DA:654:A:N3	1:DA:654:A:H2'	2.08	0.69
32:BE:22:LYS:HA	32:BE:22:LYS:NZ	2.07	0.69
8:AK:13:GLY:HA3	8:AK:17:GLN:OE1	1.93	0.69
1:AA:1331:A:O2'	1:AA:1332:G:H8	1.76	0.69
31:CA:426:G:OP1	34:CG:36:ARG:NH2	2.26	0.69
31:BA:1331:G:O2'	31:BA:1332:A:P	2.51	0.69
8:AK:133:HIS:HB2	8:AK:134:PRO:HD2	1.75	0.69
1:DA:2884:U:H2'	1:DA:2885:C:H5'	1.75	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:BB:21:A:H2	52:BB:22:A:H62	1.41	0.69
31:BA:1129:C:H4'	31:BA:1130:A:C5'	2.20	0.69
1:AA:2688:U:C5	1:AA:2720:U:OP2	2.46	0.69
34:BG:76:ARG:HD3	34:BG:207:TYR:HE2	1.58	0.69
19:DT:28:PHE:HZ	19:DT:81:VAL:HG21	1.58	0.69
31:CA:820:U:H4'	31:CA:821:G:OP2	1.91	0.69
1:AA:10:G:H2'	1:AA:11:G:C8	2.28	0.69
1:AA:2808:U:H5	1:AA:2891:G:C5	2.11	0.69
4:DE:169:ASN:OD1	4:DE:203:LYS:HB3	1.93	0.69
31:CA:468:A:H2'	31:CA:474:G:C5'	2.23	0.69
1:DA:2720:U:C2	1:DA:2873:A:C2	2.81	0.69
2:DB:31:C:C2'	2:DB:32:C:H5'	2.22	0.69
1:DA:945:A:N1	1:DA:2448:A:C4	2.61	0.69
8:DK:77:LEU:HA	8:DK:141:LYS:HB3	1.73	0.69
1:DA:2712:U:O2'	1:DA:2712(A):A:P	2.51	0.69
33:CF:29:TYR:OH	44:CQ:54:PRO:HD2	1.93	0.69
1:DA:795:C:O2'	1:DA:796:C:H5'	1.91	0.69
12:AP:35:VAL:CG1	12:AP:130:LYS:HB3	2.22	0.69
1:AA:2331:G:OP2	56:AA:3512:OHX:N4	2.25	0.69
1:DA:2572:A:C8	4:DE:144:ARG:HD2	2.27	0.69
6:DG:111:LEU:HB2	6:DG:112:PRO:HD3	1.74	0.69
1:DA:1733:G:C2'	1:DA:1734:C:H5'	2.23	0.69
47:CT:53:LEU:HD12	47:CT:53:LEU:H	1.56	0.69
1:DA:2061:G:H5''	1:DA:2503:A:C2	2.28	0.69
31:CA:947:G:H2'	31:CA:948:C:C6	2.28	0.68
31:BA:142:G:C2	31:BA:143:A:N7	2.61	0.68
31:BA:999:U:O2'	1:DA:2137:C:H5'	1.93	0.68
1:DA:1111:A:H5'	7:DH:3:ARG:HD3	1.76	0.68
5:DF:132:VAL:HG22	5:DF:133:ASN:N	2.03	0.68
6:DG:135:LEU:O	6:DG:154:GLY:HA3	1.93	0.68
46:BS:28:ARG:HG2	46:BS:29:ASP:OD2	1.93	0.68
52:BB:7:G:H3'	52:BB:58:G:OP2	1.91	0.68
31:BA:751:U:H2'	31:BA:751:U:O2	1.92	0.68
7:AH:135:GLY:HA3	7:AH:141:VAL:HG23	1.75	0.68
14:AQ:88:ASP:O	14:AQ:89:ARG:HB3	1.93	0.68
22:A3:49:LYS:H	22:A3:80:HIS:HB3	1.58	0.68
35:BH:16:THR:OG1	35:BH:17:ALA:N	2.23	0.68
1:DA:654(T):A:H2'	1:DA:654(U):A:O4'	1.93	0.68
39:CL:125:TYR:HD2	39:CL:126:SER:H	1.40	0.68
5:AF:144:LYS:O	5:AF:146:ALA:N	2.26	0.68
1:DA:2225:A:OP1	56:DA:3127:OHX:N1	2.26	0.68
23:DZ:67:ILE:N	23:DZ:68:PRO:HD2	2.08	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:1408:A:N1	57:BA:1715:PAR:H611	2.08	0.68
31:BA:321:A:C2	31:BA:333:G:C2	2.82	0.68
52:BD:1:G:H1	52:BD:81:C:H42	1.40	0.68
27:A5:2:ALA:CA	27:A5:3:LYS:HE2	2.22	0.68
54:C1:21:C:C4	54:C1:22:A:N6	2.61	0.68
5:DF:8:GLN:NE2	5:DF:8:GLN:O	2.27	0.68
1:AA:1069:A:H4'	1:AA:1070:A:C5'	2.23	0.68
34:CG:11:LEU:C	34:CG:13:ARG:N	2.42	0.68
28:D6:25:LYS:HA	30:D8:34:TRP:HZ3	1.57	0.68
50:BW:52:ALA:O	50:BW:55:ILE:N	2.24	0.68
1:AA:1778:U:H2'	1:AA:1784:A:H62	1.57	0.68
1:DA:2468:G:N2	1:DA:2481:G:O2'	2.26	0.68
12:DP:112:GLU:HG2	12:DP:113:GLN:N	2.09	0.68
36:BI:37:VAL:HG12	36:BI:38:GLU:H	1.58	0.68
1:DA:1342:A:C2	1:DA:1397:U:C2	2.82	0.68
1:DA:2747:G:O6	1:DA:2755:C:H5''	1.93	0.68
53:BC:47:G:H5''	53:BC:48:U:OP2	1.93	0.68
9:DM:35:ARG:O	9:DM:37:LYS:N	2.27	0.68
1:AA:1257:C:H4'	5:AF:83:PHE:CD2	2.28	0.68
1:AA:654(S):G:H1'	1:AA:654(T):A:N7	2.08	0.68
31:CA:255:G:O6	31:CA:270:A:N6	2.27	0.68
31:BA:328:C:H4'	31:BA:329:A:H5'	1.76	0.68
14:AQ:58:LEU:H	14:AQ:58:LEU:HD23	1.55	0.68
37:BJ:92:SER:O	37:BJ:95:ARG:N	2.26	0.68
1:DA:1444:G:N2	1:DA:1548:C:C2	2.61	0.68
31:CA:554:C:H2'	31:CA:555:C:H6	1.59	0.68
14:DQ:66:ALA:O	14:DQ:69:VAL:N	2.26	0.68
1:AA:2352:A:C4	1:AA:2366:A:C2	2.81	0.68
1:DA:2849:U:OP1	15:DR:95:ARG:NH1	2.26	0.68
1:DA:216:A:OP2	56:DA:3341:OHX:N1	2.26	0.68
1:AA:125:G:C6	29:A7:10:ARG:HG3	2.29	0.68
4:DE:91:VAL:HB	4:DE:95:ILE:HD11	1.74	0.68
34:CG:4:TYR:HD1	34:CG:5:ILE:H	1.38	0.68
1:DA:2400:G:H2'	1:DA:2401:U:C6	2.28	0.68
11:DO:104:GLY:C	11:DO:105:LEU:HG	2.14	0.68
6:DG:61:ALA:HB2	6:DG:68:PRO:HD3	1.75	0.68
11:AO:47:ASP:OD1	11:AO:50:ARG:NH2	2.27	0.68
34:BG:172:PRO:C	34:BG:174:LEU:H	1.96	0.68
31:BA:652:U:O2'	31:BA:653:A:H5''	1.93	0.68
39:BL:48:GLU:N	39:BL:49:PRO:HD2	2.08	0.68
39:CL:43:ALA:HA	39:CL:74:ILE:HG21	1.75	0.68
1:AA:847:U:O4	1:AA:933:A:N1	2.26	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:BU:53:ARG:O	48:BU:55:ARG:N	2.26	0.68
1:AA:2567:G:H2'	1:AA:2568:C:H6	1.57	0.68
5:DF:4:VAL:HG22	5:DF:19:GLU:OE1	1.93	0.68
33:CF:45:LYS:HG3	33:CF:46:GLU:H	1.58	0.68
12:DP:132:VAL:HG22	12:DP:133:ARG:H	1.59	0.68
11:AO:96:THR:HG22	11:AO:126:VAL:HG21	1.76	0.68
31:BA:376:G:OP1	46:BS:5:ARG:HB2	1.93	0.68
1:DA:2251:G:OP1	12:DP:82:ARG:NH1	2.26	0.68
19:DT:55:ASN:HB2	19:DT:80:ILE:HG12	1.75	0.68
17:D2:1:MET:HA	17:D2:42:GLY:HA3	1.74	0.68
31:CA:1221:G:OP1	31:CA:1321:C:N4	2.26	0.68
31:CA:1363:A:H1'	31:CA:1365:G:N7	2.08	0.68
30:D8:35:GLN:O	30:D8:35:GLN:CD	2.32	0.68
1:DA:2153:G:H2'	1:DA:2154:G:C8	2.28	0.68
31:CA:1126:U:O4	31:CA:1281:U:C6	2.46	0.68
8:AK:64:GLU:O	8:AK:66:GLU:N	2.25	0.68
1:AA:546:C:H5'	1:AA:547:A:OP2	1.93	0.68
35:BH:41:VAL:HG22	35:BH:113:ALA:CB	2.22	0.68
1:DA:2287:A:N6	1:DA:2344:U:N3	2.40	0.68
41:BN:124:LYS:HD2	41:BN:125:PHE:HE2	1.57	0.68
5:AF:144:LYS:C	5:AF:146:ALA:H	1.96	0.68
18:AS:82:LEU:HB2	18:AS:98:LYS:HB2	1.74	0.68
30:A8:52:LYS:N	30:A8:53:PRO:CD	2.56	0.68
1:DA:587:C:O2	11:DO:33:ARG:NH1	2.26	0.68
1:AA:890:A:H5'	1:AA:892:G:OP2	1.94	0.68
31:CA:1179:A:H2'	31:CA:1180:A:O4'	1.94	0.68
1:DA:2306:C:H3'	1:DA:2307:G:C5'	2.14	0.68
31:BA:78:G:N2	31:BA:91:C:N3	2.41	0.68
40:BM:8:LEU:HD12	40:BM:20:ALA:HB2	1.75	0.68
26:A4:12:ALA:HB1	26:A4:29:PRO:HA	1.75	0.68
1:AA:1901:A:OP2	3:AD:255:LYS:HE2	1.93	0.68
34:BG:173:TRP:HZ3	34:BG:193:ASP:HB3	1.57	0.68
2:AB:15:A:C4'	2:AB:15:A:OP1	2.41	0.68
1:AA:1607:C:N3	56:AA:3433:OHX:N5	2.42	0.68
31:BA:501:C:H2'	31:BA:502:G:H8	1.58	0.68
22:A3:23:VAL:HG13	22:A3:38:VAL:HG23	1.76	0.68
1:DA:1535:U:H2'	1:DA:1535:U:O2	1.93	0.68
1:DA:17:G:H2'	1:DA:18:C:C6	2.29	0.68
15:DR:19:LEU:HB3	15:DR:86:ILE:HG21	1.73	0.68
9:DM:90:MET:O	9:DM:95:PRO:HA	1.92	0.68
23:DZ:19:GLN:HB3	23:DZ:35:THR:O	1.93	0.68
1:AA:121:G:N7	56:AA:3481:OHX:N3	2.42	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1131:G:C5	9:AM:75:TYR:HD2	2.12	0.68
31:CA:867:G:O2'	31:CA:868:C:H5'	1.93	0.68
41:BN:21:ILE:HG12	41:BN:30:VAL:HG12	1.76	0.68
12:DP:10:ARG:HE	12:DP:10:ARG:HA	1.59	0.68
1:DA:2887:U:O2'	1:DA:2888:C:H5'	1.94	0.68
14:AQ:20:ARG:O	14:AQ:22:GLY:N	2.27	0.68
1:DA:2808:U:H5'	1:DA:2891:G:O6	1.92	0.68
9:DM:18:ALA:O	9:DM:21:LYS:HG3	1.94	0.68
34:CG:31:CYS:C	34:CG:33:MET:N	2.45	0.68
1:AA:792:G:C3'	1:AA:793:A:H5'	2.23	0.68
11:DO:147:LEU:CD2	11:DO:148:LEU:H	2.07	0.68
1:AA:1434:A:H61	1:AA:1558:A:N6	1.91	0.68
4:DE:111:ARG:HA	13:D0:2:ARG:HH12	1.58	0.68
31:BA:992:U:H4'	31:BA:993:G:O5'	1.92	0.68
33:CF:23:TYR:HD2	33:CF:23:TYR:C	1.97	0.68
1:AA:1871:A:H2'	1:AA:1872:A:H8	1.53	0.68
4:AE:130:GLY:O	4:AE:131:ALA:C	2.31	0.68
31:BA:51:A:OP2	31:BA:52:G:H8	1.76	0.68
8:DK:143:SER:OG	8:DK:144:VAL:N	2.25	0.68
8:AK:21:VAL:HG21	8:AK:25:TYR:HD1	1.58	0.68
42:BO:117:ARG:HB3	42:BO:122:THR:HB	1.74	0.68
31:BA:1245:A:C2	31:BA:1293:G:C2	2.82	0.68
31:BA:387:U:OP1	56:BA:1721:OHX:N1	2.27	0.68
38:BK:10:LEU:HD23	38:BK:10:LEU:H	1.58	0.68
1:DA:1858:G:N7	56:DA:3253:OHX:N4	2.41	0.68
16:D1:52:ARG:HB3	16:D1:52:ARG:HH11	1.59	0.68
1:DA:172:C:H2'	1:DA:173:G:C8	2.29	0.68
31:CA:983:A:H2	31:CA:984:C:C6	2.11	0.68
52:CD:48:C:H42	52:CD:52:G:H1	1.41	0.68
31:BA:1020:U:H2'	31:BA:1021:G:C8	2.29	0.68
31:CA:1352:C:N3	31:CA:1370:G:N2	2.41	0.68
44:BQ:24:CYS:HB3	44:BQ:28:GLY:H	1.58	0.68
33:BF:58:GLU:HB2	33:BF:65:ALA:CB	2.23	0.68
19:DT:63:LYS:HZ2	19:DT:63:LYS:H	1.39	0.68
1:AA:1607:C:C2	56:AA:3433:OHX:N5	2.62	0.68
1:DA:2157:G:C2'	1:DA:2158:A:H8	2.07	0.68
33:CF:32:LEU:O	33:CF:36:ASP:HB2	1.93	0.68
32:BE:220:ASP:O	32:BE:222:ILE:N	2.27	0.68
31:CA:485:G:O2'	31:CA:486:U:O5'	2.12	0.68
31:BA:312:C:H2'	31:BA:313:A:C8	2.28	0.68
31:CA:77:C:H2'	31:CA:78:G:H5'	1.76	0.68
43:CP:62:ASN:O	26:D4:49:PHE:HE2	1.75	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:581:C:H2'	1:AA:582:G:H8	1.59	0.68
1:DA:902:C:O2'	1:DA:903:C:H5'	1.92	0.68
35:CH:28:PHE:O	35:CH:47:LYS:HA	1.94	0.68
43:BP:49:THR:C	43:BP:51:ALA:H	1.95	0.68
18:DS:84:ARG:HB2	18:DS:96:ILE:CD1	2.24	0.68
3:AD:25:THR:O	3:AD:26:LYS:C	2.32	0.68
1:DA:1434:A:H61	1:DA:1558:A:N6	1.92	0.68
19:AT:25:LYS:HE2	19:AT:82:GLN:OE1	1.92	0.68
32:BE:167:PRO:HG3	32:BE:188:ALA:HB2	1.75	0.68
22:D3:55:ARG:O	22:D3:55:ARG:HG2	1.94	0.68
27:A5:4:HIS:HB3	27:A5:5:PRO:HD2	1.67	0.68
3:AD:34:VAL:O	3:AD:34:VAL:HG13	1.92	0.68
31:CA:1095:U:OP1	31:CA:1108:G:N2	2.26	0.68
31:BA:1374:A:C2'	31:BA:1375:A:H5'	2.24	0.68
1:AA:50:U:H3'	1:AA:51:G:H5'	1.76	0.68
52:CB:67:A:H61	52:CB:70:C:H1'	1.57	0.68
1:DA:2469:A:N7	1:DA:2482:G:C8	2.61	0.68
1:DA:1681:G:N2	56:DA:3488:OHX:N5	2.40	0.68
14:AQ:36:TYR:CD1	14:AQ:36:TYR:N	2.58	0.68
1:AA:2807:G:C2'	1:AA:2808:U:H5''	2.24	0.68
2:DB:44:G:H5''	2:DB:45:A:OP1	1.93	0.68
20:DU:43:ASN:HB3	20:DU:64:GLU:HA	1.74	0.68
20:AU:101:LYS:NZ	20:AU:101:LYS:HB3	2.09	0.68
1:AA:273(F):C:H2'	1:AA:273(F):C:O2	1.94	0.68
1:DA:1543:A:C4'	1:DA:1543:A:OP1	2.41	0.68
1:DA:945:A:C2	1:DA:2448:A:C4	2.81	0.68
31:BA:1191:A:H2'	31:BA:1192:C:C6	2.28	0.68
1:DA:1370:C:OP1	56:DA:3419:OHX:N4	2.27	0.68
36:BI:39:LYS:HB3	36:BI:62:TRP:HZ3	1.58	0.68
1:DA:991:C:O2	1:DA:1164:G:C2	2.47	0.68
1:DA:807:U:H2'	1:DA:808:G:H8	1.58	0.68
31:CA:581:G:OP1	45:CR:61:GLY:HA3	1.94	0.68
38:CK:6:ILE:O	38:CK:9:MET:N	2.27	0.68
31:BA:1397:C:H6	31:BA:1397:C:H3'	1.59	0.68
31:CA:1054:C:HO2'	31:CA:1055:A:P	2.15	0.68
11:DO:61:ARG:CB	11:DO:62:LEU:HD22	2.24	0.68
1:DA:90:U:H3'	1:DA:90:U:O2	1.93	0.68
1:AA:309:G:N3	1:AA:329:G:O2'	2.27	0.68
6:DG:47:LYS:HD3	6:DG:81:LYS:CG	2.23	0.68
1:DA:2875:C:O2'	15:DR:5:ALA:HB3	1.94	0.68
1:AA:2811:G:OP1	4:AE:61:ARG:HG2	1.93	0.68
1:AA:475:U:OP1	56:AA:3496:OHX:N4	2.26	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:BE:59:GLU:HB2	32:BE:221:LEU:HD11	1.76	0.68
1:DA:1639:U:H2'	1:DA:1640:C:H5'	1.75	0.68
38:BK:4:ASP:OD1	38:BK:85:ARG:NH1	2.27	0.68
1:AA:1786:A:H2	1:AA:2606:C:H1'	1.58	0.68
31:BA:498:A:H4'	31:BA:500:G:OP1	1.94	0.68
11:DO:58:THR:O	11:DO:58:THR:HG22	1.92	0.68
2:AB:80:U:OP2	56:AB:219:OHX:N4	2.26	0.68
37:CJ:147:ALA:O	37:CJ:149:ARG:N	2.24	0.68
52:BD:38:MIA:H162	52:BD:39:A:N1	2.09	0.68
31:CA:1160:G:H1	31:CA:1177:G:H21	1.40	0.68
1:DA:2798:C:N4	1:DA:2799:A:H62	1.92	0.68
9:AM:57:ALA:O	9:AM:58:ASP:HB3	1.93	0.68
1:DA:1063:G:H2'	1:DA:1064:C:O4'	1.94	0.68
1:DA:1140:C:O4'	1:DA:1143:A:C2	2.47	0.68
31:BA:1348:U:H2'	31:BA:1349:A:H8	1.59	0.68
20:AU:49:VAL:HB	20:AU:50:ARG:NH2	2.09	0.68
1:AA:1014:U:C2'	1:AA:1015:G:H5''	2.22	0.68
1:DA:2480:C:H2'	1:DA:2481:G:H5'	1.76	0.68
1:AA:1689:A:N6	1:AA:1698:A:C2	2.55	0.68
31:BA:652:U:C4	31:BA:752:G:N3	2.62	0.68
31:CA:328:C:H1'	31:CA:329:A:OP2	1.94	0.68
1:DA:2129:C:H2'	1:DA:2130:U:H5'	1.74	0.68
32:BE:11:LEU:HD22	32:BE:217:ARG:HH12	1.59	0.68
11:AO:5:ASP:HA	11:AO:7:ARG:NH2	2.08	0.68
21:AV:120:ILE:O	21:AV:121:HIS:ND1	2.27	0.68
1:DA:534:U:O2'	16:D1:49:HIS:CD2	2.46	0.68
1:DA:1420:U:O2'	1:DA:1421:G:OP1	2.10	0.68
40:CM:84:GLN:O	40:CM:88:LEU:HB2	1.94	0.68
31:CA:1219:U:O2'	49:CV:34:TRP:HB3	1.94	0.68
1:AA:535:C:O3'	16:A1:53:ARG:NH1	2.27	0.68
1:DA:2273:A:H2'	1:DA:2274:A:C8	2.29	0.67
1:AA:897:C:H6	1:AA:897:C:OP1	1.76	0.67
2:AB:73:A:C4	2:AB:104:A:C2	2.81	0.67
21:AV:72:ARG:CG	21:AV:72:ARG:HH11	1.92	0.67
52:BD:13:G:H2'	52:BD:14:A:H8	1.58	0.67
15:AR:107:ASP:O	15:AR:110:ILE:HG22	1.95	0.67
37:CJ:120:ILE:O	37:CJ:124:LEU:HB2	1.94	0.67
1:DA:2311:A:H2	6:DG:88:ILE:HD11	1.58	0.67
11:AO:144:GLU:N	11:AO:144:GLU:OE2	2.26	0.67
31:BA:1194:U:H2'	31:BA:1195:C:C6	2.28	0.67
5:AF:132:VAL:HG23	5:AF:133:ASN:H	1.58	0.67
6:AG:111:LEU:HA	6:AG:114:ILE:HD13	1.76	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:2572:A:N7	4:DE:144:ARG:HD2	2.09	0.67
52:BD:81:C:H5''	52:BD:82:A:OP2	1.94	0.67
31:BA:376:G:H5''	46:BS:5:ARG:HD2	1.76	0.67
4:AE:92:THR:HB	4:AE:94:GLU:HG2	1.76	0.67
6:DG:173:LEU:O	6:DG:178:PHE:HB2	1.93	0.67
31:BA:359:U:H2'	31:BA:360:A:C8	2.29	0.67
1:DA:2820:A:O2'	1:DA:2821:A:OP1	2.11	0.67
31:BA:1234:C:H1'	31:BA:1364:U:O2	1.94	0.67
48:BU:31:LEU:HD23	48:BU:31:LEU:H	1.57	0.67
4:DE:27:LEU:HD23	15:DR:7:ILE:HD11	1.76	0.67
1:AA:1174:A:H2'	1:AA:1176:G:OP1	1.93	0.67
1:AA:2346:A:O3'	28:A6:39:TYR:OH	2.11	0.67
1:DA:2276:G:P	12:DP:84:GLY:HA2	2.34	0.67
31:CA:1053:G:O6	31:CA:1199:U:H2'	1.94	0.67
40:CM:48:THR:HG1	40:CM:62:HIS:HD1	1.38	0.67
34:CG:32:ALA:HA	34:CG:35:ARG:HB3	1.75	0.67
11:DO:61:ARG:C	11:DO:62:LEU:CD2	2.57	0.67
9:DM:40:PRO:HB3	16:D1:68:ALA:HB2	1.76	0.67
6:AG:67:LYS:CE	26:A4:6:HIS:CE1	2.76	0.67
31:BA:390:C:H2'	31:BA:391:G:C8	2.30	0.67
2:DB:45:A:H1'	6:DG:95:ARG:NH2	2.10	0.67
52:BD:50:U:H2'	52:BD:51:C:C6	2.28	0.67
1:DA:2165:G:N7	1:DA:2166:G:N2	2.42	0.67
1:DA:232:G:O6	56:DA:3473:OHX:N3	2.28	0.67
1:AA:1522:G:H5''	1:AA:1523:U:OP2	1.93	0.67
1:AA:1847:A:OP1	1:AA:1847:A:H8	1.77	0.67
9:DM:30:ILE:O	9:DM:34:LEU:HD22	1.93	0.67
12:AP:90:VAL:CG1	12:AP:90:VAL:O	2.42	0.67
12:AP:90:VAL:HG12	12:AP:90:VAL:O	1.93	0.67
1:DA:907:U:H5'	12:DP:23:GLY:O	1.95	0.67
1:DA:2169:A:N3	1:DA:2169:A:H3'	2.10	0.67
52:BD:19:C:C2'	52:BD:20:C:H4'	2.14	0.67
26:A4:16:CYS:HB2	26:A4:36:CYS:H	1.59	0.67
31:CA:575:G:O2'	31:CA:821:G:H5'	1.94	0.67
53:CC:20:G:C2	53:CC:58:A:N3	2.63	0.67
1:DA:917:A:C2'	1:DA:918:A:H5'	2.24	0.67
1:AA:2645:G:C3'	1:AA:2646:C:H5'	2.24	0.67
4:AE:3:GLY:HA3	4:AE:81:ILE:HD12	1.77	0.67
37:BJ:23:VAL:HG12	37:BJ:43:PHE:HE2	1.59	0.67
2:DB:52:A:O2'	2:DB:53:A:C8	2.46	0.67
45:CR:43:LEU:HD11	45:CR:53:HIS:HA	1.77	0.67
31:BA:1190:G:C6	56:BA:1745:OHX:N1	2.62	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:635:C:O2'	1:AA:639:U:OP1	2.12	0.67
1:AA:2378:A:H5''	14:AQ:23:ARG:NH1	2.09	0.67
17:D2:51:VAL:HG12	17:D2:52:VAL:N	2.09	0.67
31:BA:664:G:H22	31:BA:741:G:H1	1.42	0.67
2:DB:89(A):A:C8	2:DB:90:C:H1'	2.30	0.67
31:CA:7:G:H5'	31:CA:298:A:O4'	1.94	0.67
6:DG:83:ARG:O	6:DG:85:GLY:N	2.27	0.67
49:CV:12:ASP:HB3	49:CV:38:SER:HB3	1.75	0.67
31:CA:1374:A:O2'	37:CJ:28:ASN:HB3	1.94	0.67
31:BA:1152:A:O3'	40:BM:13:HIS:HE1	1.77	0.67
1:DA:2468:G:H8	1:DA:2476:A:C6	2.10	0.67
1:AA:2636:U:OP1	4:AE:79:ARG:HA	1.93	0.67
5:DF:53:THR:O	5:DF:56:GLU:N	2.27	0.67
1:AA:2583:G:OP1	56:AA:3516:OHX:N4	2.27	0.67
32:CE:98:LEU:O	32:CE:101:MET:HG2	1.95	0.67
47:BT:91:ARG:NH1	47:BT:92:ARG:HH21	1.93	0.67
21:DV:139:VAL:HG21	21:DV:155:LEU:HD22	1.77	0.67
1:DA:27:G:H1	1:DA:512:G:HO2'	1.40	0.67
1:AA:572:A:H5''	1:AA:573:G:OP2	1.95	0.67
9:DM:57:ALA:C	9:DM:59:LYS:H	1.98	0.67
1:DA:959:A:C6	1:DA:960:A:N1	2.62	0.67
18:DS:92:ARG:NH1	18:DS:94:ASP:OD2	2.28	0.67
1:AA:459:U:O2'	1:AA:460:A:H5'	1.94	0.67
31:CA:197:A:H3'	31:CA:197:A:OP2	1.94	0.67
17:A2:66:ARG:CZ	17:A2:88:ARG:HD3	2.25	0.67
33:BF:191:THR:HG21	33:BF:193:TYR:CZ	2.29	0.67
52:BD:77:C:H2'	52:BD:78:C:C6	2.29	0.67
33:BF:8:ILE:O	33:BF:10:PHE:N	2.28	0.67
1:DA:2610:C:C4'	1:DA:2611:U:OP2	2.35	0.67
3:AD:30:GLU:CG	3:AD:63:ARG:HH21	2.05	0.67
34:CG:8:VAL:C	34:CG:10:ARG:H	1.96	0.67
6:AG:145:THR:O	6:AG:146:TYR:HB3	1.95	0.67
31:BA:1453:G:H22	50:BW:54:LYS:NZ	1.91	0.67
11:DO:57:THR:C	11:DO:59:LEU:H	1.97	0.67
12:AP:55:VAL:HG21	52:BB:64:U:OP1	1.94	0.67
1:AA:1545(A):A:H2'	1:AA:1546:C:C5'	2.25	0.67
14:AQ:34:HIS:CE1	14:AQ:54:LEU:HD23	2.30	0.67
1:DA:140:A:C8	1:DA:1408:C:O2'	2.44	0.67
53:CC:16:C:C5	56:CC:108:OHX:N2	2.62	0.67
9:DM:4:TYR:O	16:D1:64:ARG:NH1	2.25	0.67
32:CE:96:ARG:H	32:CE:96:ARG:HD2	1.59	0.67
33:BF:29:TYR:OH	44:BQ:54:PRO:HD2	1.93	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
21:AV:125:LEU:HG	21:AV:164:ALA:CB	2.24	0.67
1:DA:2338:G:N7	56:DA:3221:OHX:N6	2.42	0.67
6:AG:76:SER:OG	6:AG:83:ARG:HA	1.95	0.67
34:CG:60:GLU:OE2	34:CG:199:ASN:N	2.27	0.67
12:DP:8:LYS:O	12:DP:9:TYR:CD1	2.47	0.67
33:BF:23:TYR:CD2	33:BF:24:ALA:N	2.62	0.67
1:DA:1298:C:H5''	1:DA:1299:G:OP2	1.94	0.67
26:A4:56:VAL:O	26:A4:60:GLN:HG3	1.93	0.67
1:DA:900:A:C4	1:DA:901:A:C8	2.82	0.67
1:AA:2211:G:H4'	1:AA:2212:A:OP2	1.95	0.67
1:DA:1188:U:C2'	1:DA:1189:A:H5'	2.25	0.67
31:CA:1317:C:C2	44:CQ:16:PHE:HE1	2.13	0.67
3:DD:33:LEU:N	3:DD:35:LYS:O	2.28	0.67
24:DW:17:SER:CB	24:DW:18:PRO:HA	2.06	0.67
31:BA:789:U:C4	31:BA:792:A:OP2	2.47	0.67
1:AA:805:G:H4'	11:AO:38:GLN:NE2	2.04	0.67
31:CA:1142:G:H2'	31:CA:1143:G:O4'	1.95	0.67
12:DP:26:TYR:HD1	12:DP:139:GLU:CG	2.07	0.67
12:DP:79:LEU:HD13	12:DP:80:GLU:HB2	1.77	0.67
31:CA:363:A:OP1	42:CO:33:ARG:HG3	1.94	0.67
21:DV:87:ASP:OD2	21:DV:87:ASP:N	2.24	0.67
31:CA:1027:C:C2	31:CA:1035:A:N6	2.62	0.67
31:BA:654:G:C2'	31:BA:655:A:H5'	2.25	0.67
34:CG:14:ARG:HH11	34:CG:14:ARG:CG	2.07	0.67
15:AR:55:ASN:H	15:AR:59:THR:HG22	1.59	0.67
23:DZ:82:LEU:CD2	23:DZ:82:LEU:H	2.06	0.67
43:CP:115:LYS:O	43:CP:117:VAL:N	2.28	0.67
23:AZ:92:LYS:HA	23:AZ:95:LEU:HB2	1.77	0.67
1:DA:288:C:H3'	1:DA:289:A:H8	1.59	0.67
1:AA:2408:U:O5'	1:AA:2408:U:H6	1.77	0.67
3:DD:65:ILE:H	3:DD:65:ILE:HD13	1.60	0.67
22:A3:46:LYS:NZ	22:A3:75:LEU:O	2.27	0.67
12:AP:88:GLY:O	12:AP:89:ASN:HB2	1.95	0.67
1:DA:847:U:O4	1:DA:933:A:C6	2.48	0.67
31:CA:1316:G:H22	31:CA:1319:A:P	2.18	0.67
1:DA:883:G:H2'	1:DA:884:C:C6	2.30	0.67
32:CE:19:HIS:CE1	32:CE:204:ASN:HB3	2.30	0.67
28:D6:10:LEU:CD2	30:D8:34:TRP:CZ2	2.78	0.67
40:BM:4:ILE:HB	40:BM:74:ILE:HG13	1.75	0.67
40:BM:57:LYS:HE2	40:BM:60:ARG:HH12	1.59	0.67
20:AU:49:VAL:HB	20:AU:50:ARG:HH21	1.59	0.67
30:A8:56:GLU:O	30:A8:59:LYS:N	2.23	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1477:A:H2'	1:DA:1478:G:O4'	1.95	0.67
33:CF:23:TYR:CD2	33:CF:24:ALA:N	2.62	0.67
19:DT:51:VAL:H	19:DT:83:VAL:HG23	1.60	0.67
1:DA:1533:C:H3'	1:DA:1534:G:O4'	1.94	0.67
31:BA:129(A):G:C2	31:BA:191(A):G:C8	2.83	0.67
18:DS:17:VAL:C	18:DS:19:LEU:H	1.97	0.67
6:DG:11:TYR:HA	6:DG:15:VAL:HB	1.77	0.67
13:A0:20:LEU:HD21	13:A0:40:LYS:HD3	1.77	0.67
3:DD:121:PRO:HB3	3:DD:135:PHE:CE1	2.30	0.67
1:DA:270(N):G:O2'	1:DA:270(O):U:H5'	1.94	0.67
31:BA:118:U:C5	31:BA:288:A:C6	2.82	0.67
8:AK:74:ASN:O	8:AK:75:LEU:HD12	1.94	0.67
31:CA:576:G:OP1	56:CA:1750:OHX:N4	2.28	0.67
1:DA:2059:A:H5'	1:DA:2060:A:OP2	1.93	0.67
7:DH:123:PHE:CE2	7:DH:133:VAL:HG22	2.30	0.67
3:DD:43:ARG:HD2	3:DD:44:ASN:OD1	1.94	0.67
31:BA:1026:G:O6	31:BA:1035:A:N6	2.16	0.67
31:CA:1177:G:O2'	31:CA:1178:G:N3	2.24	0.67
31:BA:1374:A:O2'	37:BJ:28:ASN:HB3	1.94	0.67
31:BA:57:G:H2'	31:BA:58:C:C6	2.29	0.67
31:BA:991:U:O2'	31:BA:992:U:C5'	2.42	0.67
37:BJ:27:ILE:HG12	37:BJ:43:PHE:HD2	1.60	0.67
1:DA:747:U:C2	27:D5:2:ALA:N	2.63	0.67
32:BE:83:MET:O	32:BE:85:ALA:N	2.27	0.67
27:A5:58:LEU:HD22	27:A5:60:VAL:HG12	1.77	0.67
20:DU:47:LYS:HA	20:DU:60:PHE:HB3	1.76	0.67
1:AA:580:C:H2'	1:AA:581:C:H6	1.58	0.67
13:A0:51:LEU:HD22	13:A0:66:VAL:HG13	1.77	0.67
15:DR:16:ARG:NH2	15:DR:18:ASP:OD2	2.28	0.67
49:BV:15:LEU:HD23	49:BV:15:LEU:H	1.58	0.67
1:AA:270(T):G:OP1	23:AZ:97:LEU:HD22	1.95	0.67
31:CA:56:U:H2'	31:CA:57:G:C8	2.29	0.67
39:BL:8:GLY:HA2	39:BL:79:LEU:HD13	1.76	0.67
31:BA:405:U:H3'	31:BA:406:G:H5'	1.75	0.67
37:BJ:59:LEU:HD23	37:BJ:59:LEU:O	1.94	0.67
21:AV:109:ALA:HB1	21:AV:142:SER:O	1.95	0.67
28:A6:25:LYS:HE2	28:A6:27:LYS:HD3	1.77	0.67
56:CA:1762:OHX:N5	40:CM:59:SER:OG	2.28	0.67
7:AH:151:ILE:O	7:AH:152:ARG:HG2	1.95	0.67
31:BA:1026:G:C5	31:BA:1036:G:N2	2.63	0.67
8:AK:132:PRO:O	8:AK:133:HIS:ND1	2.28	0.67
1:DA:93:C:H5'	1:DA:94:G:OP2	1.95	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:AG:61:ALA:HB2	6:AG:67:LYS:HA	1.77	0.67
29:A7:8:ASN:HD21	29:A7:11:LYS:N	1.83	0.67
52:CB:48:C:H3'	52:CB:49:A:C8	2.30	0.67
5:DF:59:TYR:CD1	5:DF:78:ILE:HG13	2.30	0.67
31:BA:1226:C:N4	43:BP:104:ARG:HG3	2.10	0.67
35:BH:139:LEU:O	35:BH:141:GLN:N	2.28	0.67
33:CF:14:ILE:HG12	33:CF:15:THR:N	2.10	0.67
33:CF:150:LYS:HG3	33:CF:169:ALA:HB2	1.77	0.67
37:BJ:16:LEU:HD12	39:BL:42:ARG:HA	1.77	0.67
6:DG:114:ILE:HG22	6:DG:117:PHE:HB2	1.75	0.67
1:DA:782:A:H5'	1:DA:783:A:C2	2.30	0.67
25:DX:59:VAL:HG12	25:DX:60:GLU:N	2.09	0.67
1:AA:2885:C:OP2	56:AA:3438:OHX:N4	2.28	0.67
17:D2:78:LYS:O	17:D2:79:VAL:CG1	2.43	0.67
43:CP:76:ALA:HA	43:CP:79:LYS:HB2	1.76	0.67
52:CD:51:C:O2'	52:CD:52:G:OP1	2.09	0.67
47:BT:67:LYS:O	47:BT:68:ARG:CB	2.42	0.67
31:CA:1022:G:N3	31:CA:1023:G:H1'	2.10	0.67
51:CX:2:GLY:C	51:CX:4:GLY:H	1.98	0.67
2:DB:40:U:N3	26:D4:1:MET:SD	2.67	0.67
1:AA:1108:U:C4	1:AA:1109:C:N4	2.63	0.67
42:BO:11:VAL:HG13	47:BT:29:HIS:CD2	2.30	0.67
1:AA:2162:G:H2'	1:AA:2163:C:O4'	1.94	0.67
37:CJ:57:GLU:OE1	37:CJ:57:GLU:N	2.16	0.67
47:BT:62:SER:HB3	47:BT:72:ARG:HH21	1.58	0.67
39:BL:111:ARG:HG3	39:BL:112:LYS:N	2.09	0.67
1:DA:1359:A:H2'	1:DA:1360:A:H5'	1.77	0.67
12:DP:2:LEU:O	12:DP:70:PRO:HG2	1.95	0.67
31:CA:798:G:OP1	41:CN:122:LYS:NZ	2.28	0.67
1:AA:338:G:N2	1:AA:339:U:H1'	2.09	0.67
32:CE:62:ALA:C	32:CE:64:ARG:H	1.96	0.67
31:BA:1291:G:H2'	31:BA:1292:U:C6	2.30	0.67
31:CA:1293:G:H2'	31:CA:1294:G:O4'	1.94	0.67
1:DA:2746:U:OP2	56:DA:3430:OHX:N1	2.28	0.67
31:CA:793:U:H5'	31:CA:794:A:O5'	1.95	0.67
49:CV:66:MET:N	49:CV:67:VAL:HB	2.09	0.67
54:C1:21:C:N4	54:C1:22:A:C6	2.63	0.66
31:CA:1190:G:C6	56:CA:1762:OHX:N3	2.62	0.66
43:CP:79:LYS:O	43:CP:82:MET:HB3	1.94	0.66
1:AA:1532:C:H2'	1:AA:1533:C:C6	2.29	0.66
1:DA:2392:A:C8	11:DO:60:MET:CB	2.59	0.66
1:DA:2702:U:H2'	1:DA:2703:C:H5	1.60	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:BD:43:G:O2'	52:BD:44:C:H5'	1.96	0.66
31:BA:1305:G:H22	31:BA:1331:G:C1'	2.08	0.66
11:DO:65:ARG:HH21	30:D8:15:LYS:HB2	1.59	0.66
28:D6:24:GLU:HG3	28:D6:25:LYS:HG2	1.77	0.66
11:AO:114:ILE:O	11:AO:114:ILE:HD12	1.95	0.66
52:CB:83:C:C2'	52:CB:84:C:H5'	2.23	0.66
35:CH:76:ILE:HG23	35:CH:77:PRO:HD2	1.77	0.66
1:AA:1582:C:HO2'	1:AA:1586:A:H8	0.74	0.66
1:AA:320:A:H2'	5:AF:136:THR:CG2	2.24	0.66
8:DK:77:LEU:CD1	8:DK:141:LYS:HD2	2.25	0.66
15:DR:27:THR:HG23	15:DR:89:VAL:HG22	1.77	0.66
34:CG:154:ASN:ND2	34:CG:154:ASN:O	2.28	0.66
33:BF:109:PRO:C	33:BF:111:LEU:H	1.99	0.66
1:DA:953:A:OP2	12:DP:16:ARG:HD3	1.95	0.66
1:DA:2553:G:H3'	1:DA:2554:U:H5''	1.76	0.66
42:BO:45:PRO:HB3	42:BO:92:ASP:HB3	1.78	0.66
9:DM:56:ASN:CA	9:DM:125:GLY:CA	2.69	0.66
5:DF:69:HIS:O	5:DF:70:THR:HG22	1.96	0.66
31:CA:1106:G:H4'	33:CF:171:GLY:O	1.95	0.66
2:AB:71:C:O2	2:AB:71:C:H2'	1.95	0.66
30:D8:49:VAL:HG12	30:D8:50:LEU:N	2.10	0.66
12:DP:11:LYS:HG2	12:DP:75:THR:CG2	2.25	0.66
1:DA:620:G:H5'	1:DA:620:G:N3	2.11	0.66
11:AO:91:PHE:HZ	11:AO:103:ALA:HB2	1.59	0.66
50:CW:71:THR:HG22	50:CW:72:LEU:H	1.59	0.66
1:AA:1925:C:H2'	1:AA:1926:U:H5'	1.76	0.66
37:CJ:40:ALA:HB3	39:CL:41:VAL:HG21	1.76	0.66
21:DV:81:ARG:HG3	21:DV:81:ARG:O	1.94	0.66
32:BE:16:HIS:HB3	32:BE:210:SER:OG	1.95	0.66
14:AQ:111:GLU:O	14:AQ:112:PHE:CD1	2.48	0.66
21:DV:62:PRO:O	21:DV:64:GLY:N	2.28	0.66
1:AA:1396:U:H2'	1:AA:1396:U:O2	1.94	0.66
7:AH:137:ASP:O	7:AH:138:LYS:HB2	1.93	0.66
20:AU:18:GLY:O	20:AU:20:TYR:N	2.28	0.66
18:AS:86:LEU:HD12	18:AS:87:PRO:HD2	1.76	0.66
21:AV:104:PHE:HE1	21:AV:119:GLU:HB3	1.60	0.66
8:AK:11:ASN:O	8:AK:12:LEU:HB2	1.95	0.66
1:AA:389:G:H22	11:AO:72:PRO:HD3	1.59	0.66
30:A8:34:TRP:H	30:A8:35:GLN:CB	2.06	0.66
1:DA:2801:A:H2'	1:DA:2802:G:O4'	1.94	0.66
12:AP:75:THR:HG22	12:AP:89:ASN:H	1.60	0.66
43:BP:88:ARG:HD3	43:BP:98:VAL:CG1	2.26	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:1329:A:P	43:BP:28:ALA:HB3	2.35	0.66
31:BA:924:C:O2'	31:BA:1502:A:N6	2.27	0.66
1:DA:2138:C:N4	1:DA:2153:G:H1	1.93	0.66
16:A1:92:ARG:NH1	17:A2:11:GLN:O	2.28	0.66
34:BG:61:LYS:HD3	34:BG:206:PHE:CE2	2.29	0.66
7:AH:4:ILE:HG21	7:AH:6:ARG:NH1	2.10	0.66
6:DG:38:VAL:HG22	6:DG:93:THR:HG23	1.77	0.66
1:DA:74:A:H5'	1:DA:75:G:O4'	1.96	0.66
4:DE:8:LYS:HB3	4:DE:193:GLY:N	2.09	0.66
37:BJ:23:VAL:CG1	37:BJ:43:PHE:HE2	2.09	0.66
1:AA:2797:U:H2'	1:AA:2797:U:O2	1.94	0.66
43:BP:12:ASN:OD1	43:BP:13:LYS:N	2.29	0.66
15:AR:36:GLU:HG3	15:AR:41:ARG:HD2	1.77	0.66
38:CK:12:ARG:HD3	38:CK:26:VAL:HG12	1.77	0.66
18:AS:12:ILE:HG13	18:AS:42:ARG:NH1	2.09	0.66
6:AG:122:PRO:HG3	6:AG:182:LYS:OXT	1.95	0.66
20:AU:89:PHE:H	20:AU:90:LEU:HD12	1.60	0.66
1:AA:1178:C:O2'	1:AA:1179:C:O5'	2.13	0.66
6:AG:83:ARG:H	6:AG:86:MET:CE	2.08	0.66
6:DG:125:PHE:HB3	6:DG:166:ASP:HB2	1.77	0.66
52:CD:3:U:H2'	52:CD:4:G:C8	2.30	0.66
1:AA:2108:C:H2'	1:AA:2109:U:O4'	1.96	0.66
3:AD:32:SER:O	3:AD:33:LEU:CB	2.43	0.66
31:CA:686:U:O2'	31:CA:687:A:P	2.54	0.66
2:AB:7:G:H1	2:AB:113:C:H42	1.42	0.66
14:DQ:110:LEU:HD23	14:DQ:112:PHE:CE2	2.31	0.66
1:AA:2790:A:H1'	1:AA:2893:G:O2'	1.95	0.66
31:BA:419:C:N4	31:BA:424:G:H1	1.92	0.66
31:CA:1498:U:O2'	31:CA:1499:A:OP2	2.07	0.66
5:AF:178:PRO:HB2	5:AF:201:VAL:HG21	1.77	0.66
32:BE:76:GLN:O	32:BE:211:ILE:HD12	1.96	0.66
19:DT:63:LYS:O	19:DT:63:LYS:HD2	1.94	0.66
31:BA:191:G:C4	50:BW:105:SER:HB2	2.31	0.66
1:AA:273(E):U:C2'	1:AA:273(F):C:H5'	2.26	0.66
31:CA:264:U:OP1	56:CA:1779:OHX:N6	2.28	0.66
1:DA:511:U:H5''	1:DA:512:G:OP2	1.95	0.66
33:BF:109:PRO:O	33:BF:111:LEU:N	2.28	0.66
33:BF:6:HIS:HE2	33:BF:184:TYR:HE2	1.44	0.66
3:AD:70:TRP:C	3:AD:70:TRP:CD1	2.69	0.66
3:DD:130:ALA:C	3:DD:131:LEU:HD12	2.15	0.66
22:D3:12:ASN:HA	22:D3:14:ARG:HH21	1.59	0.66
1:AA:2326:C:OP1	56:BC:106:OHX:N5	2.28	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:DP:68:ILE:HD13	12:DP:103:MET:HG2	1.76	0.66
35:BH:127:ASN:ND2	35:BH:130:ASN:H	1.92	0.66
1:DA:363(E):U:H5'	1:DA:363(F):A:OP2	1.95	0.66
1:DA:228:A:H3'	1:DA:228:A:C8	2.30	0.66
17:D2:76:LYS:HE2	17:D2:81:TYR:CE1	2.30	0.66
40:CM:48:THR:OG1	40:CM:62:HIS:ND1	2.27	0.66
1:DA:2777:G:C5'	1:DA:2778:A:H5'	2.15	0.66
17:A2:15:GLU:HG3	17:A2:16:PRO:CD	2.19	0.66
17:A2:39:LEU:O	17:A2:40:LEU:CD2	2.44	0.66
47:BT:11:VAL:HG12	47:BT:85:VAL:HG13	1.77	0.66
35:CH:101:ILE:HD13	35:CH:101:ILE:H	1.60	0.66
30:A8:16:ILE:CD1	30:A8:57:ARG:HG2	2.24	0.66
17:D2:29:PRO:HA	17:D2:61:VAL:HG11	1.78	0.66
21:AV:134:PRO:C	21:AV:136:PHE:H	1.99	0.66
2:AB:89(A):A:N6	2:AB:90:C:O2	2.28	0.66
7:AH:98:LEU:HD22	7:AH:125:VAL:HG23	1.76	0.66
1:AA:2837:G:H21	13:A0:45:ARG:NH2	1.93	0.66
2:DB:74:U:C2'	2:DB:75:G:H5''	2.25	0.66
34:CG:126:ILE:HG22	34:CG:127:THR:N	2.11	0.66
1:DA:959:A:C6	1:DA:960:A:C2	2.84	0.66
36:BI:42:GLU:O	36:BI:44:GLY:N	2.29	0.66
46:CS:23:ASP:OD1	46:CS:25:ARG:NH1	2.29	0.66
8:AK:78:THR:HG22	8:AK:141:LYS:HB3	1.76	0.66
18:DS:27:LYS:O	18:DS:71:VAL:HG23	1.95	0.66
39:CL:114:TYR:HD2	39:CL:114:TYR:H	1.44	0.66
43:CP:94:ARG:O	43:CP:96:LEU:HG	1.95	0.66
1:AA:1359:A:N1	1:AA:1372:U:C4	2.63	0.66
9:AM:94:HIS:O	9:AM:96:GLU:O	2.12	0.66
11:DO:105:LEU:O	11:DO:106:LEU:HB2	1.96	0.66
11:DO:85:LEU:HB3	11:DO:114:ILE:HD11	1.78	0.66
31:CA:1285:A:H1'	31:CA:1286:A:OP2	1.95	0.66
33:CF:22:TRP:HB3	33:CF:59:ARG:HB2	1.78	0.66
32:CE:224:GLN:HA	32:CE:229:VAL:HG22	1.75	0.66
1:AA:2118:U:H5''	1:AA:2119:A:OP1	1.94	0.66
1:DA:945:A:C4	1:DA:2448:A:C2	2.84	0.66
8:DK:74:ASN:OD1	8:DK:75:LEU:N	2.26	0.66
22:A3:70:GLN:NE2	22:A3:80:HIS:HE2	1.94	0.66
37:BJ:44:TYR:HA	37:BJ:47:CYS:HB2	1.78	0.66
13:A0:87:TYR:HE1	13:A0:117:VAL:HG12	1.58	0.66
11:AO:88:LEU:HD12	11:AO:95:VAL:HG11	1.78	0.66
48:CU:29:PHE:HD1	48:CU:39:VAL:CG1	2.08	0.66
1:AA:1175:U:H2'	1:AA:1175:U:O2	1.96	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:A0:62:ALA:O	13:A0:66:VAL:HG23	1.96	0.66
42:BO:70:ILE:HD11	42:BO:77:LEU:HD12	1.78	0.66
20:DU:93:GLY:O	20:DU:95:LYS:N	2.28	0.66
22:D3:71:ASP:OD1	22:D3:72:ARG:N	2.28	0.66
1:DA:463:G:N2	1:DA:466:A:OP2	2.27	0.66
52:BD:61:G:H1	52:BD:71:C:N4	1.89	0.66
1:DA:2418:A:C5	1:DA:2419:U:C5	2.84	0.66
11:DO:61:ARG:HB2	11:DO:61:ARG:NH2	2.09	0.66
45:BR:70:LEU:HD11	45:BR:77:ARG:HG3	1.78	0.66
31:CA:1129:C:N4	31:CA:1139:G:N2	2.43	0.66
52:CB:46:G:O2'	52:CB:47:U:H5'	1.96	0.66
52:CB:51:C:C6	52:CB:51:C:OP2	2.48	0.66
4:AE:48:GLN:NE2	4:AE:77:ILE:HD12	2.10	0.66
31:CA:987:G:H1	31:CA:1218:C:N4	1.91	0.66
40:CM:99:LYS:HD3	40:CM:100:THR:N	2.11	0.66
31:CA:250:A:H1'	31:CA:251:G:OP2	1.95	0.66
4:AE:51:PHE:HD1	4:AE:52:LEU:HG	1.61	0.66
21:DV:44:PHE:CE1	21:DV:48:PHE:HB2	2.31	0.66
1:DA:443:A:OP2	1:DA:615:G:N2	2.24	0.66
56:AA:3416:OHX:N3	56:AA:3504:OHX:N4	2.44	0.66
48:BU:58:LEU:HB3	48:BU:62:GLU:HB3	1.78	0.66
1:AA:2331:G:H4'	22:A3:43:THR:H	1.59	0.66
32:CE:124:SER:O	32:CE:126:GLU:N	2.27	0.66
2:AB:66:A:N6	2:AB:107:U:H2'	2.11	0.66
18:DS:13:SER:O	18:DS:16:LYS:HB2	1.95	0.66
46:BS:69:THR:OG1	46:BS:69:THR:O	2.14	0.66
1:DA:535:C:O2'	1:DA:536:A:H5'	1.96	0.66
38:CK:51:VAL:HG21	38:CK:60:ARG:HH21	1.60	0.66
34:CG:15:GLU:OE1	34:CG:15:GLU:N	2.29	0.66
18:AS:26:GLY:HA2	18:AS:71:VAL:O	1.95	0.66
8:DK:110:ASP:O	8:DK:111:PRO:O	2.14	0.66
1:AA:1076:C:C2'	1:AA:1077:A:H5''	2.26	0.66
43:BP:20:THR:O	43:BP:22:ILE:N	2.29	0.66
53:CC:18:C:O2'	56:CC:110:OHX:N3	2.29	0.66
31:BA:182:U:H2'	31:BA:182:U:O2	1.94	0.66
1:DA:1022:G:C6	1:DA:1140:C:C4	2.84	0.66
31:BA:1367:C:C5'	40:BM:60:ARG:HH21	2.04	0.66
1:AA:1899:G:H22	1:AA:1902:C:H41	1.41	0.66
1:AA:1263:U:O2'	27:A5:11:THR:HG23	1.96	0.66
1:DA:1340:U:H4'	1:DA:1341:U:OP2	1.95	0.66
1:AA:2723:C:H4'	13:A0:1:MET:HE3	1.77	0.66
5:DF:158:THR:OG1	5:DF:159:GLY:N	2.29	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:BE:5:ILE:HG21	32:BE:221:LEU:HD23	1.78	0.66
1:DA:1538:G:C2'	1:DA:1539:G:H5'	2.26	0.66
41:BN:12:ARG:HG2	41:BN:13:GLN:N	2.10	0.66
5:AF:28:ILE:HA	5:AF:112:MET:CE	2.26	0.66
14:AQ:3:ARG:HG2	14:AQ:4:LEU:H	1.61	0.66
40:CM:78:ASN:ND2	40:CM:81:THR:HG23	2.11	0.66
52:CB:3:U:C4'	52:CB:4:G:OP1	2.44	0.66
3:DD:137:PRO:O	3:DD:140:THR:HG23	1.95	0.66
38:CK:34:GLU:OE1	38:CK:37:ARG:NH1	2.28	0.66
31:CA:1111:A:C8	31:CA:1112:C:C5	2.84	0.66
9:DM:17:ASP:O	9:DM:55:VAL:HG23	1.95	0.66
1:DA:971:C:H2'	1:DA:972:G:C5'	2.25	0.66
31:CA:1190:G:P	33:CF:5:ILE:HG23	2.36	0.66
3:DD:36:PRO:CB	3:DD:61:LEU:HG	2.26	0.66
34:CG:4:TYR:CD1	34:CG:5:ILE:N	2.61	0.66
52:BD:16:C:H41	52:BD:68:A:H2'	1.60	0.66
30:D8:30:ARG:O	30:D8:31:HIS:C	2.34	0.66
30:D8:22:VAL:HG12	30:D8:50:LEU:CD2	2.25	0.66
1:AA:2135:A:N6	1:AA:2156:G:O2'	2.29	0.66
31:CA:992:U:H3	31:CA:1044:A:N6	1.87	0.66
43:BP:84:ILE:HG23	43:BP:86:CYS:H	1.61	0.66
6:DG:67:LYS:H	26:D4:6:HIS:CD2	2.14	0.66
11:AO:100:LEU:HD23	11:AO:112:LEU:HD11	1.76	0.66
5:AF:123:LEU:HD12	5:AF:124:LEU:N	2.10	0.66
49:CV:7:LYS:HE3	49:CV:8:GLY:N	2.10	0.66
19:AT:80:ILE:O	19:AT:80:ILE:HD12	1.96	0.66
1:AA:646:A:C8	1:AA:647:G:H1'	2.30	0.66
34:CG:98:GLU:OE2	34:CG:103:ASN:ND2	2.29	0.66
37:CJ:43:PHE:O	37:CJ:47:CYS:N	2.28	0.66
46:CS:21:VAL:HG22	46:CS:33:ILE:HD12	1.78	0.66
1:AA:573:G:O2'	1:AA:574:C:H3'	1.96	0.66
3:AD:223:GLY:HA3	3:AD:231:HIS:ND1	2.11	0.66
36:BI:42:GLU:C	36:BI:44:GLY:H	1.99	0.66
1:DA:535:C:C2'	1:DA:536:A:H5'	2.26	0.66
31:BA:920:U:O2'	31:BA:921:U:H5'	1.96	0.66
31:BA:177:C:OP2	50:BW:65:LYS:HE2	1.96	0.66
32:CE:137:ARG:HD3	32:CE:137:ARG:O	1.96	0.66
31:CA:1263:C:N3	31:CA:1273:G:N2	2.44	0.66
1:AA:2533:A:OP2	56:AA:3525:OHX:N3	2.28	0.66
31:CA:90:C:H2'	31:CA:91:C:O4'	1.96	0.66
32:CE:179:LYS:HA	38:CK:72:PRO:HG3	1.78	0.66
1:AA:2490:G:N2	56:AA:3330:OHX:N3	2.43	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
10:AN:88:ASN:ND2	10:AN:92:GLU:H	1.94	0.66
5:DF:69:HIS:O	5:DF:70:THR:CG2	2.44	0.66
31:CA:1305:G:H22	31:CA:1331:G:C2'	2.08	0.66
52:CD:23:A:H2'	52:CD:24:G:O4'	1.95	0.66
1:AA:654(D):G:N1	1:AA:654(Q):C:N4	2.24	0.66
6:AG:115:ARG:HH12	43:BP:7:VAL:HB	1.61	0.66
45:BR:82:ILE:HG23	45:BR:87:ILE:HB	1.77	0.66
3:DD:166:GLN:HA	3:DD:166:GLN:NE2	2.07	0.66
4:AE:111:ARG:HB3	13:A0:1:MET:SD	2.36	0.66
12:DP:19:GLY:HA3	12:DP:98:LYS:HZ2	1.60	0.66
15:DR:8:LYS:C	15:DR:10:VAL:N	2.47	0.66
1:DA:1000:A:C6	1:DA:1001:A:C2	2.84	0.66
29:D7:34:ARG:NH1	29:D7:39:ARG:CG	2.59	0.66
32:BE:98:LEU:HB2	32:BE:101:MET:HG3	1.78	0.66
21:DV:30:ASN:ND2	21:DV:90:VAL:O	2.28	0.66
1:AA:524:U:H2'	1:AA:525:U:C6	2.28	0.66
1:AA:299:A:H62	1:AA:300:A:N6	1.93	0.66
31:BA:312:C:H2'	31:BA:313:A:H8	1.59	0.66
31:CA:77:C:C2'	31:CA:78:G:H5'	2.26	0.66
18:DS:26:GLY:H	18:DS:71:VAL:HB	1.61	0.66
31:CA:1513:A:H2'	31:CA:1514:C:C6	2.30	0.66
1:DA:2361:A:OP1	30:D8:27:THR:HG23	1.95	0.66
1:AA:2335:A:C8	1:AA:2337:G:C5	2.84	0.66
7:DH:84:SER:O	7:DH:85:LYS:HB2	1.94	0.66
1:DA:1905:C:OP2	56:DA:3212:OHX:N3	2.29	0.66
42:CO:8:ASN:HD22	47:CT:34:LYS:HE2	1.61	0.66
1:AA:1634:A:OP1	56:AA:3370:OHX:N2	2.29	0.66
1:DA:889:C:H2'	1:DA:890:A:H4'	1.77	0.65
1:AA:1077:A:N3	1:AA:1077:A:H2'	2.10	0.65
52:BD:54:C:H2'	52:BD:55:U:O4'	1.96	0.65
11:DO:86:LYS:HG3	11:DO:87:ASP:N	2.11	0.65
52:CB:16:C:H5'	52:CB:17:G:OP2	1.96	0.65
3:AD:242:ARG:HG2	3:AD:246:PRO:HG3	1.78	0.65
43:CP:7:VAL:HG21	6:DG:115:ARG:NH1	2.11	0.65
1:AA:2723:C:OP1	13:A0:3:HIS:HD2	1.79	0.65
53:CC:54:G:H2'	53:CC:55:U:H6	1.62	0.65
52:BD:48:C:H2'	52:BD:49:A:O4'	1.95	0.65
4:AE:4:ILE:CD1	4:AE:28:ALA:HB1	2.25	0.65
12:AP:92:GLY:C	12:AP:93:TYR:CD1	2.69	0.65
21:AV:128:VAL:HG21	21:AV:134:PRO:HD2	1.77	0.65
1:AA:798:G:OP1	56:AF:303:OHX:N2	2.29	0.65
20:AU:84:ARG:HH11	20:AU:84:ARG:HB2	1.61	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:CD:43:G:O2'	52:CD:44:C:H5'	1.96	0.65
1:AA:571:A:O2'	17:A2:78:LYS:NZ	2.29	0.65
26:A4:13:ARG:O	26:A4:14:ILE:HB	1.96	0.65
40:CM:17:ASP:OD1	40:CM:70:ARG:NH1	2.30	0.65
1:AA:945:A:N3	1:AA:945:A:H2'	2.10	0.65
20:DU:48:ALA:HB3	20:DU:59:GLY:O	1.96	0.65
18:DS:34:ASN:OD1	27:D5:39:MET:HG3	1.95	0.65
31:CA:452:A:O2'	31:CA:453:A:O4'	2.14	0.65
6:AG:172:LEU:O	6:AG:176:LEU:HB2	1.96	0.65
6:AG:107:LEU:HD21	6:AG:178:PHE:CD1	2.31	0.65
1:AA:1164:G:H2'	1:AA:1165:U:H6	1.60	0.65
37:CJ:135:VAL:O	37:CJ:139:GLU:HG3	1.95	0.65
1:DA:566:U:H5''	11:DO:29:LYS:HE3	1.78	0.65
1:DA:2020:A:P	16:D1:27:LEU:HD23	2.36	0.65
31:CA:631:G:H3'	31:CA:632:A:N7	2.10	0.65
45:BR:78:TYR:O	45:BR:80:ALA:N	2.29	0.65
31:CA:1128:C:O2'	31:CA:1129:C:P	2.53	0.65
14:DQ:87:PHE:CE1	14:DQ:102:ALA:HB2	2.32	0.65
31:CA:1004:A:H1'	31:CA:1036:G:C6	2.30	0.65
1:DA:1000:A:C2	1:DA:1155:A:C4	2.84	0.65
1:DA:1514:U:O2'	1:DA:1515:C:H5'	1.96	0.65
28:A6:43:CYS:HB3	28:A6:44:ARG:NH1	2.10	0.65
49:BV:65:ASN:HD22	49:BV:65:ASN:N	1.91	0.65
43:CP:29:ARG:HD3	43:CP:64:TRP:CE3	2.30	0.65
13:A0:91:GLN:H	13:A0:91:GLN:CD	2.00	0.65
1:AA:389:G:H22	11:AO:72:PRO:CD	2.10	0.65
45:CR:8:LYS:O	45:CR:12:ILE:HG13	1.95	0.65
1:DA:527:C:H5	56:DA:3388:OHX:N5	1.94	0.65
33:CF:73:PRO:O	33:CF:76:VAL:HG22	1.96	0.65
37:BJ:50:ILE:O	37:BJ:54:THR:HG23	1.96	0.65
19:DT:11:PRO:HB3	19:DT:92:LEU:HD21	1.77	0.65
31:BA:1497:G:H2'	31:BA:1498:U:H5'	1.77	0.65
32:CE:23:ARG:O	32:CE:23:ARG:NE	2.29	0.65
2:DB:105:G:N7	56:DB:209:OHX:N5	2.44	0.65
1:AA:2016:U:OP1	56:AA:3367:OHX:N5	2.29	0.65
31:CA:982:U:H4'	31:CA:983:A:OP1	1.95	0.65
1:AA:2311:A:O2'	6:AG:88:ILE:HG21	1.96	0.65
3:DD:255:LYS:O	3:DD:255:LYS:HD2	1.97	0.65
52:BD:29:C:C2'	52:BD:30:A:H5'	2.26	0.65
1:AA:1728:G:H5'	1:AA:1729:A:OP2	1.96	0.65
31:CA:829:G:O2'	31:CA:830:G:H5'	1.96	0.65
39:BL:17:VAL:HG11	39:BL:81:ILE:HD13	1.79	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:CE:87:ARG:NH1	32:CE:220:ASP:OD1	2.29	0.65
5:AF:29:ASN:H	5:AF:112:MET:CE	2.08	0.65
38:BK:29:SER:OG	38:BK:32:LYS:HB2	1.95	0.65
21:AV:60:GLU:O	21:AV:61:LEU:HD22	1.95	0.65
31:CA:1517:G:H2'	31:CA:1518:A:H8	1.60	0.65
1:DA:1864:U:O4	56:DA:3454:OHX:N5	2.29	0.65
1:AA:1188:U:O2'	1:AA:1189:A:H5'	1.96	0.65
1:DA:648:G:O2'	1:DA:649:G:H5'	1.95	0.65
40:CM:8:LEU:HD23	40:CM:20:ALA:HB2	1.78	0.65
44:BQ:13:THR:N	44:BQ:14:PRO:HD2	2.12	0.65
37:CJ:69:VAL:HG13	37:CJ:134:ALA:O	1.97	0.65
1:AA:1525:G:H2'	1:AA:1526:G:H8	1.59	0.65
1:AA:1437:C:C2	1:AA:1438:U:C5	2.85	0.65
1:AA:529:A:H8	1:AA:530:G:C6	2.15	0.65
37:CJ:22:LEU:HG	37:CJ:97:GLN:HE22	1.60	0.65
1:DA:880:G:C2	1:DA:898:C:N3	2.65	0.65
39:CL:114:TYR:CD1	40:CM:60:ARG:HG2	2.30	0.65
52:BD:19:C:H2'	52:BD:20:C:C4'	2.18	0.65
30:D8:34:TRP:O	30:D8:36:LYS:N	2.30	0.65
20:DU:61:ILE:CG2	20:DU:62:GLU:H	1.99	0.65
9:AM:96:GLU:C	9:AM:98:VAL:H	2.00	0.65
31:BA:91:C:H2'	31:BA:92:G:O4'	1.96	0.65
17:A2:8:GLY:O	17:A2:10:LYS:HE3	1.97	0.65
22:D3:25:ARG:HG3	22:D3:31:VAL:CG1	2.26	0.65
31:BA:201:C:N4	31:BA:209:U:O2	2.30	0.65
46:CS:17:TYR:HE1	46:CS:41:PRO:HG3	1.60	0.65
31:BA:411:A:H62	31:BA:413:G:H21	1.44	0.65
31:BA:412:A:O2'	31:BA:413:G:OP2	2.13	0.65
5:AF:46:ARG:HH11	5:AF:46:ARG:CG	2.07	0.65
33:CF:36:ASP:HA	33:CF:39:ILE:HD12	1.77	0.65
20:DU:43:ASN:HD22	20:DU:43:ASN:H	1.43	0.65
1:AA:273(E):U:O2'	1:AA:273(F):C:H5'	1.95	0.65
50:CW:70:SER:O	50:CW:73:HIS:HB2	1.96	0.65
31:BA:131:C:O2	31:BA:132:C:C5	2.50	0.65
31:BA:486:U:H2'	31:BA:487:A:H8	1.61	0.65
31:CA:198:G:H2'	31:CA:199:G:H8	1.60	0.65
6:AG:70:VAL:O	6:AG:70:VAL:HG22	1.97	0.65
31:CA:1192:C:C5	31:CA:1193:G:C8	2.85	0.65
4:DE:137:HIS:HD1	4:DE:138:PRO:HD3	1.61	0.65
36:BI:97:PHE:CZ	48:BU:61:LYS:HD3	2.32	0.65
1:DA:1854:A:H62	1:DA:1888:G:H8	1.44	0.65
4:AE:137:HIS:HB3	4:AE:138:PRO:HD2	1.79	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1097:C:H2'	31:CA:1097:C:O2	1.97	0.65
1:AA:1061:U:H4'	1:AA:1070:A:C1'	2.13	0.65
31:CA:1176:A:H2'	31:CA:1177:G:C5'	2.14	0.65
14:DQ:86:ALA:O	14:DQ:87:PHE:HB2	1.96	0.65
1:DA:607:U:H3	1:DA:621:A:H2	1.40	0.65
31:BA:428:G:O6	56:BA:1785:OHX:N1	2.30	0.65
31:CA:407:G:O2'	34:CG:116:GLN:HG3	1.96	0.65
9:DM:42:TRP:O	16:D1:64:ARG:NH2	2.30	0.65
1:AA:1328:G:H2'	1:AA:1330:C:C5	2.32	0.65
33:CF:40:ARG:O	33:CF:44:GLU:HG3	1.95	0.65
31:CA:1337:G:H5''	31:CA:1338:G:OP1	1.96	0.65
2:AB:57:A:C2'	2:AB:58:A:H5'	2.26	0.65
1:AA:491:G:O6	18:AS:49:LYS:NZ	2.21	0.65
1:AA:2477:C:O2	56:AA:3560:OHX:N3	2.30	0.65
21:AV:76:LEU:H	21:AV:76:LEU:HD22	1.62	0.65
2:DB:100:G:H2'	2:DB:101:A:O4'	1.97	0.65
4:DE:37:ARG:HD3	4:DE:44:TYR:CZ	2.32	0.65
3:DD:44:ASN:OD1	3:DD:44:ASN:N	2.29	0.65
1:AA:1061:U:O2'	1:AA:1070:A:O4'	2.10	0.65
1:AA:619:G:H5''	1:AA:620:G:OP2	1.94	0.65
9:AM:133:GLN:NE2	9:AM:133:GLN:H	1.95	0.65
43:BP:20:THR:C	43:BP:22:ILE:H	2.00	0.65
1:AA:2807:G:C3'	1:AA:2808:U:H5''	2.27	0.65
31:BA:952:U:O4	43:BP:104:ARG:HD3	1.97	0.65
5:AF:123:LEU:HD21	5:AF:199:TRP:CZ3	2.32	0.65
1:DA:2873:A:N3	1:DA:2873:A:H2'	2.11	0.65
50:BW:104:LEU:HD12	50:BW:105:SER:N	2.12	0.65
1:AA:1257:C:H4'	5:AF:83:PHE:CE2	2.31	0.65
34:BG:31:CYS:C	34:BG:33:MET:N	2.50	0.65
46:BS:45:THR:HG22	46:BS:47:ASP:H	1.61	0.65
1:DA:1442:G:C2'	1:DA:1443:G:H5''	2.27	0.65
32:CE:178:ARG:HH22	32:CE:196:LEU:HA	1.60	0.65
1:AA:68:G:H2'	1:AA:69:C:C6	2.30	0.65
1:DA:2490:G:N1	56:DA:3344:OHX:N4	2.45	0.65
1:AA:58:G:N2	1:AA:70:G:C4	2.64	0.65
1:AA:1771:C:H1'	1:AA:1786:A:C8	2.32	0.65
33:CF:179:ARG:HG3	33:CF:206:GLU:OE2	1.96	0.65
31:BA:260:G:O6	56:BA:1789:OHX:N5	2.29	0.65
6:AG:33:ARG:HB2	6:AG:162:THR:HG21	1.78	0.65
1:AA:845:G:O2'	1:AA:846:C:C5	2.50	0.65
9:AM:46:VAL:O	9:AM:47:ALA:HB3	1.96	0.65
31:CA:1012:U:H2'	31:CA:1013:G:C8	2.31	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
50:CW:16:HIS:O	50:CW:19:SER:OG	2.10	0.65
31:BA:243:A:H4'	31:BA:244:U:H5''	1.78	0.65
1:AA:2210:G:H3'	1:AA:2211:G:N7	2.09	0.65
2:AB:75:G:H21	21:AV:85:HIS:HE1	1.45	0.65
52:BD:38:MIA:O2'	52:BD:39:A:H5'	1.97	0.65
32:CE:72:GLY:C	32:CE:74:LYS:H	2.00	0.65
12:DP:11:LYS:HG2	12:DP:75:THR:HG21	1.79	0.65
12:DP:88:GLY:O	12:DP:89:ASN:HB2	1.95	0.65
16:D1:92:ARG:CD	16:D1:95:LEU:HD12	2.20	0.65
16:A1:90:VAL:HG12	16:A1:91:ASP:N	2.11	0.65
31:BA:974:A:OP2	44:BQ:41:ARG:NH1	2.30	0.65
23:DZ:87:PRO:C	23:DZ:89:GLU:N	2.50	0.65
1:DA:1341:U:C2'	1:DA:1397:U:O2	2.42	0.65
1:DA:451:C:H41	1:DA:454:A:H5'	1.60	0.65
31:BA:439:A:OP2	31:BA:493:G:N2	2.29	0.65
31:BA:452:A:H2'	31:BA:453:A:H8	1.61	0.65
4:AE:87:GLU:O	4:AE:87:GLU:HG3	1.96	0.65
48:BU:57:GLY:C	48:BU:58:LEU:HD12	2.17	0.65
3:AD:6:PHE:HE1	3:AD:18:VAL:HG23	1.62	0.65
13:D0:57:ARG:HH21	13:D0:62:ALA:HB2	1.60	0.65
1:DA:1557:C:H5''	1:DA:1558:A:OP2	1.97	0.65
1:DA:748:G:C8	18:DS:89:ALA:HB1	2.32	0.65
33:CF:81:GLY:O	33:CF:82:GLU:HB2	1.96	0.65
1:DA:270(L):U:O2'	1:DA:270(M):U:OP1	2.15	0.65
31:CA:116:A:C8	31:CA:116:A:OP2	2.50	0.65
31:BA:192:U:C4'	50:BW:103:GLY:HA2	2.26	0.65
4:DE:61:ARG:C	4:DE:63:LEU:N	2.51	0.65
1:AA:943:U:P	11:AO:36:LYS:CG	2.78	0.65
43:CP:76:ALA:O	43:CP:80:ARG:HG3	1.96	0.65
31:CA:1158:C:N3	31:CA:1160:G:N7	2.45	0.65
11:DO:63:PRO:O	11:DO:64:LYS:C	2.35	0.65
54:B1:11:U:O2'	54:B1:12:A:C2	2.42	0.65
31:CA:1129:C:C4	31:CA:1142:G:O6	2.48	0.65
23:DZ:91:LYS:HG3	23:DZ:92:LYS:H	1.62	0.65
7:AH:4:ILE:O	7:AH:6:ARG:N	2.30	0.65
1:DA:2210:G:H3'	1:DA:2211:G:C4	2.32	0.65
6:DG:34:LEU:O	6:DG:35:GLU:HB3	1.96	0.65
8:AK:7:GLU:O	8:AK:9:LEU:HD13	1.96	0.65
31:BA:7:G:H5'	31:BA:298:A:O4'	1.96	0.65
9:AM:40:PRO:HB3	16:A1:68:ALA:HB2	1.77	0.65
12:AP:12:GLN:HG2	12:AP:73:PRO:HD2	1.78	0.65
6:DG:63:ILE:HD12	6:DG:141:PHE:CD2	2.32	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:AU:96:ILE:HD11	20:AU:98:VAL:HG12	1.79	0.65
1:AA:2168:G:N2	1:AA:2170:A:H62	1.94	0.65
42:BO:90:VAL:O	42:BO:91:LYS:HB3	1.97	0.65
56:AA:3416:OHX:N5	56:AA:3504:OHX:N5	2.45	0.65
45:CR:39:LEU:HD11	45:CR:56:LEU:HB2	1.77	0.65
1:DA:2881:C:O3'	13:D0:96:ARG:HG3	1.97	0.65
1:AA:280:C:N3	1:AA:361:G:C2	2.65	0.65
12:DP:12:GLN:HE21	12:DP:73:PRO:HD2	1.61	0.65
3:DD:68:LYS:HB3	3:DD:70:TRP:CZ3	2.31	0.65
1:AA:218:A:H2	1:AA:235:U:H4'	1.62	0.65
3:AD:231:HIS:CG	3:AD:232:PRO:HD2	2.31	0.65
31:CA:332:G:C2	31:CA:333:G:C8	2.85	0.65
30:A8:29:LYS:HE2	30:A8:44:LYS:CB	2.26	0.65
1:AA:2219:G:H2'	1:AA:2224:G:H5'	1.77	0.65
1:DA:1778:U:H2'	1:DA:1784:A:N6	2.12	0.65
1:DA:2790:A:H4'	1:DA:2791:C:OP2	1.97	0.65
3:AD:35:LYS:HG2	3:AD:64:ILE:CG2	2.27	0.65
43:CP:91:ARG:HB2	43:CP:98:VAL:HG12	1.79	0.65
31:BA:1020:U:H2'	31:BA:1021:G:H8	1.61	0.65
15:AR:102:ILE:HB	15:AR:110:ILE:HD12	1.79	0.65
24:DW:47:ASN:O	24:DW:49:LYS:HE3	1.97	0.65
31:BA:1453:G:H22	50:BW:54:LYS:HZ2	1.44	0.65
52:CB:62:G:H2'	52:CB:63:U:H5'	1.78	0.65
1:DA:2106:G:H2'	1:DA:2107:C:O4'	1.97	0.65
1:DA:2844:G:H5'	1:DA:2844:G:H8	1.62	0.65
31:CA:428:G:O4'	31:CA:430:A:C8	2.50	0.65
33:CF:8:ILE:O	33:CF:10:PHE:N	2.30	0.65
17:D2:64:HIS:HD2	17:D2:92:THR:HG23	1.60	0.65
1:AA:2172:U:O2	1:AA:2172:U:H2'	1.96	0.65
15:AR:41:ARG:HH11	15:AR:41:ARG:CB	2.09	0.65
3:AD:158:ALA:O	3:AD:161:THR:HG23	1.97	0.65
1:AA:2756:U:H4'	1:AA:2757:A:OP1	1.96	0.65
4:AE:120:TRP:CD2	4:AE:155:LYS:HD3	2.32	0.65
31:BA:1434:A:H2'	31:BA:1435:G:O4'	1.96	0.65
53:BC:24:C:H2'	53:BC:25:U:H6	1.61	0.65
32:BE:25:ASN:ND2	32:BE:193:ASP:HB3	2.12	0.65
1:AA:1491:G:N2	1:AA:1500:G:H1'	2.12	0.65
31:BA:773:G:H1	31:BA:806:C:H42	1.44	0.65
9:DM:15:LEU:HD23	9:DM:134:ARG:HG3	1.79	0.65
1:DA:946:G:O2'	1:DA:947:G:C5'	2.30	0.65
1:AA:1292:U:H2'	1:AA:1293:C:C6	2.32	0.65
1:AA:1359:A:C2	1:AA:1372:U:O4	2.50	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:BL:117:HIS:O	39:BL:118:LYS:HG3	1.96	0.65
5:DF:132:VAL:C	5:DF:134:GLY:H	1.99	0.65
1:DA:2468:G:C6	1:DA:2481:G:C6	2.85	0.65
1:AA:2749:A:N1	1:AA:2750:A:N6	2.44	0.65
24:DW:12:GLU:HG3	24:DW:16:LEU:HD21	1.78	0.65
34:BG:79:PHE:HE1	34:BG:204:ILE:HG12	1.62	0.65
12:AP:133:ARG:O	12:AP:134:ARG:CB	2.45	0.65
46:BS:75:ARG:C	46:BS:77:ALA:H	2.00	0.65
47:CT:67:LYS:O	47:CT:68:ARG:CB	2.44	0.65
1:DA:1537:C:H2'	1:DA:1538:G:C8	2.32	0.65
37:BJ:65:ALA:HB1	37:BJ:127:ALA:HB3	1.79	0.65
34:CG:150:GLU:HG2	34:CG:151:LYS:N	2.12	0.65
1:DA:2561:A:C2	10:DN:23:ARG:NH1	2.65	0.65
7:AH:105:LEU:H	7:AH:105:LEU:CD2	2.10	0.65
20:AU:90:LEU:HD12	20:AU:90:LEU:N	2.12	0.65
37:BJ:91:VAL:HG12	37:BJ:95:ARG:HB3	1.78	0.65
1:AA:2378:A:O5'	1:AA:2378:A:H8	1.80	0.65
25:DX:7:LYS:HD2	25:DX:34:GLU:HG2	1.79	0.65
21:DV:107:THR:N	21:DV:108:PRO:HD2	2.11	0.65
1:AA:1488:G:C5	1:AA:1489:U:C5	2.85	0.65
35:BH:83:GLU:HG2	35:BH:88:LYS:HB2	1.78	0.65
12:DP:85:LYS:HB3	22:D3:9:SER:HB3	1.78	0.64
4:DE:66:HIS:NE2	4:DE:73:GLU:OE1	2.30	0.64
1:AA:880:G:O2'	1:AA:881:G:P	2.54	0.64
31:BA:1296:C:H4'	31:BA:1302:U:C5	2.32	0.64
31:BA:78:G:H1	31:BA:91:C:N4	1.90	0.64
11:AO:38:GLN:NE2	11:AO:38:GLN:HA	2.11	0.64
11:DO:107:LYS:O	11:DO:109:GLY:N	2.30	0.64
1:DA:997:G:OP1	16:D1:93:LYS:HD2	1.97	0.64
40:CM:6:ILE:CG2	40:CM:98:ILE:HG23	2.27	0.64
7:DH:7:LEU:N	7:DH:8:PRO:CD	2.60	0.64
21:AV:37:VAL:HG23	21:AV:38:TYR:N	2.11	0.64
31:CA:1298:C:H4'	31:CA:1299:A:C8	2.32	0.64
30:D8:52:LYS:N	30:D8:52:LYS:HD2	2.12	0.64
1:AA:165:U:H2'	1:AA:171:G:O4'	1.98	0.64
31:BA:501:C:H2'	31:BA:502:G:C8	2.32	0.64
31:BA:1086:U:O5'	31:BA:1086:U:H6	1.80	0.64
31:CA:1154:G:C2	31:CA:1155:G:C8	2.84	0.64
15:DR:20:PRO:HD2	15:DR:86:ILE:CG2	2.27	0.64
5:DF:4:VAL:HA	5:DF:19:GLU:CB	2.26	0.64
1:DA:1434:A:H61	1:DA:1558:A:H62	1.44	0.64
31:CA:623:C:C4	31:CA:624:C:C5	2.85	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1024:G:H3'	1:AA:1025:G:H5''	1.78	0.64
31:BA:668:G:O2'	45:BR:46:HIS:HD2	1.78	0.64
1:AA:1593:G:H2'	1:AA:1594:G:C8	2.32	0.64
1:AA:2802:G:OP2	1:AA:2802:G:H8	1.80	0.64
8:DK:58:LEU:O	8:DK:61:ARG:N	2.29	0.64
7:AH:29:PRO:HD2	7:AH:79:VAL:O	1.97	0.64
31:BA:1023:G:H3'	31:BA:1024:G:C5'	2.27	0.64
31:CA:631:G:H3'	31:CA:632:A:C5	2.32	0.64
2:DB:15:A:OP2	2:DB:107:U:O2'	2.15	0.64
19:DT:18:TYR:O	19:DT:21:PHE:N	2.29	0.64
1:DA:1170:G:H2'	1:DA:1170:G:N3	2.11	0.64
31:CA:1300:G:O2'	31:CA:1301:U:P	2.55	0.64
31:CA:1100:C:O2'	31:CA:1102:A:OP1	2.15	0.64
21:AV:30:ASN:OD1	21:AV:90:VAL:HB	1.97	0.64
33:CF:182:ILE:CG2	33:CF:203:PHE:HD1	2.10	0.64
9:DM:57:ALA:O	9:DM:59:LYS:N	2.30	0.64
31:CA:1449:C:O2'	31:CA:1450:U:OP1	2.13	0.64
32:BE:22:LYS:HZ3	32:BE:22:LYS:HA	1.62	0.64
8:DK:58:LEU:O	8:DK:60:GLU:N	2.30	0.64
1:AA:1094:U:O2'	1:AA:1096:A:OP1	2.15	0.64
31:BA:619:U:O2	34:BG:135:LEU:HD22	1.97	0.64
47:BT:76:LEU:HD12	47:BT:77:VAL:H	1.61	0.64
1:DA:271(A):C:O2	1:DA:271(A):C:H2'	1.95	0.64
42:BO:53:ARG:HG3	42:BO:53:ARG:HH11	1.62	0.64
17:A2:24:LYS:HB2	17:A2:92:THR:HG23	1.79	0.64
11:DO:47:ASP:OD2	11:DO:49:ARG:HB2	1.98	0.64
31:CA:1055:A:N7	31:CA:1206:G:C2	2.65	0.64
3:DD:34:VAL:CG1	3:DD:34:VAL:O	2.44	0.64
52:CD:49:A:H2	52:CD:51:C:OP2	1.80	0.64
15:AR:105:LEU:C	15:AR:107:ASP:H	1.97	0.64
2:AB:43:C:P	6:AG:67:LYS:NZ	2.69	0.64
31:BA:1152:A:H5'	40:BM:13:HIS:ND1	2.12	0.64
22:D3:38:VAL:HB	22:D3:59:LEU:HD12	1.78	0.64
12:AP:52:VAL:HA	12:AP:55:VAL:HG13	1.77	0.64
1:DA:2107:C:N4	1:DA:2182:G:N1	2.35	0.64
31:CA:1432:G:OP1	15:DR:107:ASP:HB2	1.98	0.64
1:AA:2439:A:C5'	1:AA:2439:A:C8	2.80	0.64
13:D0:45:ARG:HA	13:D0:95:THR:HG21	1.79	0.64
20:AU:78:ALA:HB3	20:AU:81:LYS:CE	2.27	0.64
7:AH:98:LEU:HD12	7:AH:102:ALA:O	1.96	0.64
32:BE:177:ALA:O	32:BE:180:LEU:N	2.19	0.64
50:CW:72:LEU:HD11	50:CW:80:ARG:HD2	1.80	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:2446:G:H2'	1:DA:2447:G:H5''	1.79	0.64
8:DK:72:LEU:C	8:DK:74:ASN:H	2.01	0.64
1:AA:2712:U:H1'	1:AA:2712(A):A:C8	2.33	0.64
31:BA:976:G:H5'	31:BA:1358:U:O2'	1.97	0.64
21:AV:9:TYR:CE1	21:AV:35:ARG:HD3	2.32	0.64
4:DE:23:VAL:O	4:DE:24:THR:OG1	2.13	0.64
38:BK:4:ASP:HB2	38:BK:89:PRO:HG3	1.79	0.64
13:D0:28:LEU:HD12	13:D0:48:VAL:HG21	1.77	0.64
1:DA:2219:G:H2'	1:DA:2224:G:H5'	1.78	0.64
4:AE:53:PRO:O	4:AE:54:GLN:O	2.15	0.64
49:BV:30:LEU:HD22	49:BV:30:LEU:O	1.97	0.64
31:BA:1333:A:H2'	31:BA:1334:G:O4'	1.97	0.64
28:A6:25:LYS:CE	30:A8:34:TRP:HZ2	2.10	0.64
52:BD:60:A:H2'	52:BD:61:G:O4'	1.97	0.64
1:DA:2776:A:H3'	1:DA:2776:A:OP1	1.97	0.64
1:DA:1070:A:H5'	1:DA:1071:G:C5'	2.27	0.64
31:CA:1132:C:O2'	31:CA:1133:G:H5'	1.98	0.64
1:DA:1048:A:OP2	1:DA:1109:C:N4	2.27	0.64
52:CB:51:C:OP2	52:CB:51:C:H6	1.80	0.64
1:AA:7:G:H2'	1:AA:8:A:O4'	1.98	0.64
31:CA:652:U:OP2	56:CA:1793:OHX:N6	2.29	0.64
2:DB:40:U:C6	26:D4:1:MET:HE2	2.33	0.64
31:CA:413:G:O2'	31:CA:414:A:OP2	2.16	0.64
35:BH:76:ILE:HG13	35:BH:93:PRO:HB3	1.79	0.64
37:BJ:113:GLU:HB2	37:BJ:119:ARG:HG2	1.79	0.64
3:AD:262:ARG:NH1	3:AD:262:ARG:HG3	2.11	0.64
1:AA:654(M):C:H3'	1:AA:654(N):G:H8	1.61	0.64
50:BW:26:ASN:N	50:BW:26:ASN:HD22	1.95	0.64
52:BB:27:A:H5'	52:BB:28:G:OP2	1.97	0.64
41:BN:21:ILE:HG12	41:BN:30:VAL:CG1	2.27	0.64
31:CA:1010:G:H2'	31:CA:1011:G:O4'	1.98	0.64
1:DA:2563:U:O2	1:DA:2565:A:C8	2.51	0.64
5:AF:32:LEU:HD21	5:AF:105:VAL:HG13	1.79	0.64
5:DF:203:GLN:HA	5:DF:203:GLN:HE21	1.62	0.64
11:DO:97:PRO:HG3	11:DO:112:LEU:CG	2.27	0.64
16:A1:105:VAL:O	16:A1:109:LEU:HD12	1.98	0.64
12:AP:77:LYS:O	12:AP:78:PRO:C	2.36	0.64
31:CA:552:U:O2'	42:CO:86:ARG:O	2.11	0.64
3:DD:69:ARG:CD	3:DD:105:ILE:HD11	2.26	0.64
10:DN:66:LYS:NZ	10:DN:80:ASP:O	2.29	0.64
17:A2:89:GLN:HE21	17:A2:89:GLN:CA	2.10	0.64
1:AA:2712:U:C5'	1:AA:2712:U:O2	2.45	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:CL:47:LEU:HB2	39:CL:50:LEU:HD12	1.78	0.64
43:BP:15:VAL:HA	43:BP:18:ALA:HB3	1.79	0.64
1:AA:234:C:H2'	1:AA:235:U:C6	2.31	0.64
38:BK:10:LEU:HD23	38:BK:10:LEU:N	2.13	0.64
10:AN:90:GLN:O	10:AN:91:LEU:HB2	1.97	0.64
31:BA:247:G:O6	31:BA:278:G:C6	2.50	0.64
1:DA:2371:G:O2'	28:D6:46:HIS:HD2	1.79	0.64
7:DH:136:ILE:H	7:DH:136:ILE:HD12	1.62	0.64
34:BG:28:SER:HB2	34:BG:29:PRO:HD2	1.79	0.64
23:DZ:7:ILE:HD12	23:DZ:62:VAL:HG11	1.79	0.64
31:BA:307:C:OP1	56:BA:1733:OHX:N3	2.31	0.64
51:CX:25:LYS:O	51:CX:26:LYS:HB2	1.97	0.64
1:DA:880:G:N2	1:DA:881:G:H1'	2.13	0.64
5:DF:68:LYS:HB3	5:DF:69:HIS:HD2	1.61	0.64
17:D2:77:ALA:O	17:D2:78:LYS:CB	2.44	0.64
31:CA:1205:U:H4'	33:CF:195:VAL:HG22	1.79	0.64
31:CA:1328:C:H2'	31:CA:1329:A:O4'	1.98	0.64
52:BB:56:U:O2	52:BB:56:U:H2'	1.97	0.64
16:A1:92:ARG:HD2	16:A1:95:LEU:HD12	1.79	0.64
1:DA:1899:G:C2'	1:DA:1900:A:OP2	2.45	0.64
45:BR:78:TYR:C	45:BR:80:ALA:H	2.01	0.64
31:BA:1132:C:H2'	31:BA:1133:G:C8	2.33	0.64
1:AA:1018:C:H2'	1:AA:1018:C:O2	1.96	0.64
14:DQ:29:PHE:HD2	14:DQ:29:PHE:C	2.01	0.64
7:AH:4:ILE:CG1	7:AH:6:ARG:CZ	2.74	0.64
1:AA:1480:G:C5	1:AA:1482:U:N3	2.65	0.64
50:CW:33:ILE:HD13	50:CW:63:ILE:HA	1.77	0.64
13:A0:41:ALA:C	13:A0:43:GLU:H	2.00	0.64
40:CM:16:LEU:HB3	40:CM:70:ARG:HD2	1.80	0.64
52:BB:27:A:H5''	52:BB:28:G:H8	1.62	0.64
3:DD:186:HIS:CD2	3:DD:188:GLU:H	2.14	0.64
40:CM:26:ALA:O	40:CM:84:GLN:NE2	2.30	0.64
6:AG:83:ARG:NH2	53:BC:57:C:N3	2.44	0.64
2:DB:89:G:OP2	2:DB:89:G:C8	2.50	0.64
31:BA:890:G:O2'	31:BA:906:G:O6	2.14	0.64
32:CE:103:THR:HA	32:CE:180:LEU:HD11	1.79	0.64
1:DA:1893:C:H2'	1:DA:1894:C:O4'	1.97	0.64
1:DA:2845:G:H5''	15:DR:54:ARG:O	1.98	0.64
1:AA:26:G:OP1	18:AS:80:PRO:HB3	1.96	0.64
3:AD:137:PRO:O	3:AD:140:THR:OG1	2.15	0.64
33:CF:5:ILE:HD13	33:CF:5:ILE:H	1.63	0.64
31:BA:947:G:H2'	31:BA:948:C:O4'	1.97	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:BB:47:U:H2'	52:BB:48:C:O4'	1.97	0.64
1:DA:1088:A:C5'	1:DA:1089:G:H5'	2.22	0.64
31:CA:1129:C:H4'	31:CA:1130:A:O5'	1.96	0.64
1:DA:1332:G:H21	1:DA:1610:A:H8	1.46	0.64
1:DA:1257:C:H4'	5:DF:83:PHE:CD2	2.33	0.64
1:DA:323:G:H5'	5:DF:169:ASN:HD21	1.61	0.64
52:BD:47:U:H2'	52:BD:48:C:H6	1.59	0.64
1:AA:2439:A:O2'	1:AA:2440:C:OP2	2.12	0.64
35:BH:113:ALA:O	35:BH:115:VAL:HG23	1.98	0.64
1:DA:1278:A:O2'	13:D0:34:ILE:HD11	1.98	0.64
20:AU:96:ILE:HG23	20:AU:101:LYS:HG2	1.78	0.64
50:CW:26:ASN:HB2	50:CW:71:THR:HG23	1.80	0.64
47:BT:70:ARG:O	47:BT:71:PHE:HD2	1.80	0.64
32:CE:96:ARG:N	32:CE:96:ARG:HD2	2.13	0.64
6:DG:83:ARG:HB2	6:DG:86:MET:HE2	1.77	0.64
1:AA:1165:U:H2'	1:AA:1166:C:C6	2.32	0.64
1:DA:1014:U:H3	1:DA:1148:A:H61	1.43	0.64
53:BC:54:G:H2'	53:BC:55:U:H6	1.62	0.64
17:A2:4:ILE:HG22	17:A2:4:ILE:O	1.97	0.64
38:CK:31:PHE:HZ	38:CK:134:ILE:HD11	1.62	0.64
20:DU:89:PHE:CE1	20:DU:90:LEU:CB	2.80	0.64
31:CA:1052:U:H5''	31:CA:1053:G:OP2	1.97	0.64
1:AA:899:A:O2'	1:AA:900:A:O4'	2.16	0.64
52:BD:20:C:H5'	52:BD:68:A:H62	1.61	0.64
32:CE:236:TYR:CB	32:CE:239:VAL:HB	2.27	0.64
1:AA:2467:C:H4'	12:AP:123:HIS:CE1	2.33	0.64
1:AA:50:U:H3'	1:AA:51:G:C5'	2.27	0.64
32:BE:20:GLU:HB2	32:BE:190:THR:OG1	1.98	0.64
6:AG:161:THR:HG22	6:AG:163:ALA:N	2.07	0.64
1:AA:10:G:H2'	1:AA:11:G:H8	1.63	0.64
16:D1:28:ARG:HG2	16:D1:38:THR:OG1	1.96	0.64
4:DE:101:ARG:HG3	4:DE:203:LYS:HE3	1.80	0.64
1:DA:329:G:OP2	20:DU:71:LYS:HE3	1.98	0.64
1:DA:1496:A:C8	1:DA:1577:C:O2'	2.45	0.64
21:DV:152:ALA:HB2	21:DV:171:ILE:HD11	1.80	0.64
14:AQ:59:LYS:HG2	14:AQ:60:GLY:N	2.12	0.64
48:CU:29:PHE:HD2	48:CU:29:PHE:H	1.44	0.64
11:AO:113:LYS:HA	11:AO:129:ALA:O	1.97	0.64
11:AO:126:VAL:HG12	11:AO:147:LEU:HD22	1.80	0.64
6:AG:173:LEU:O	6:AG:178:PHE:HB2	1.98	0.64
30:A8:44:LYS:N	30:A8:44:LYS:HD2	2.13	0.64
53:BC:24:C:H2'	53:BC:25:U:C6	2.33	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:BT:76:LEU:HD11	47:BT:79:SER:H	1.63	0.64
1:AA:488:G:OP2	56:AA:3497:OHX:N4	2.31	0.64
31:BA:291:C:O2'	31:BA:292:G:H5'	1.97	0.64
1:DA:270(F):U:O4	56:DA:3457:OHX:N1	2.30	0.64
32:BE:24:TRP:O	32:BE:26:PRO:HD3	1.98	0.64
1:AA:1278:A:OP1	13:A0:36:THR:HG22	1.98	0.64
52:CD:57:C:O2'	52:CD:68:A:H4'	1.98	0.64
1:AA:898:C:H5'	1:AA:899:A:OP2	1.98	0.64
1:AA:908:C:OP1	12:AP:22:LYS:HB3	1.98	0.64
1:AA:607:U:OP1	5:AF:102:PRO:HA	1.98	0.64
3:AD:27:THR:O	3:AD:28:GLU:HB2	1.96	0.64
1:DA:1100:C:H2'	1:DA:1101:U:O4'	1.98	0.64
14:AQ:29:PHE:CD2	14:AQ:30:ARG:N	2.62	0.64
31:BA:973:G:H3'	31:BA:974:A:H5''	1.80	0.64
32:CE:132:LYS:HG3	32:CE:135:GLN:NE2	2.12	0.64
31:BA:530:G:C4'	31:BA:531:U:OP2	2.44	0.64
42:CO:55:VAL:HG22	42:CO:56:ALA:H	1.62	0.64
33:CF:23:TYR:C	33:CF:23:TYR:CD2	2.71	0.64
19:DT:40:LYS:C	19:DT:42:ALA:H	2.01	0.64
31:BA:343:U:H1'	31:BA:347:G:H22	1.61	0.64
1:AA:15:G:O2'	1:AA:16:G:H5'	1.97	0.64
31:BA:353:A:H2'	31:BA:354:G:OP2	1.98	0.64
52:CB:3:U:H4'	52:CB:4:G:OP1	1.98	0.64
1:DA:527:C:OP2	1:DA:2779:U:H5	1.81	0.64
11:AO:11:GLY:C	11:AO:13:ASN:H	1.99	0.64
1:DA:1636:C:H2'	1:DA:1637:A:C8	2.33	0.64
1:AA:2523:G:C2'	1:AA:2524:G:H5'	2.28	0.64
35:CH:72:GLN:O	35:CH:74:GLY:N	2.29	0.64
17:A2:53:GLU:HG2	17:A2:54:GLY:N	2.12	0.64
1:AA:2086:U:H2'	1:AA:2087:G:C8	2.33	0.64
1:AA:1705:G:C6	1:AA:1706:U:C4	2.86	0.64
1:DA:654(D):G:H1	1:DA:654(Q):C:H42	1.44	0.64
1:DA:580:C:H2'	1:DA:581:C:H6	1.62	0.64
31:BA:1342:C:H2'	31:BA:1343:G:H8	1.63	0.64
3:AD:65:ILE:HD11	3:AD:67:PHE:CZ	2.33	0.64
1:AA:878:A:N1	1:AA:879:G:C2	2.66	0.64
31:BA:1028(B):C:C2	31:BA:1032(A):G:N2	2.65	0.64
51:BX:2:GLY:C	51:BX:4:GLY:H	2.00	0.64
31:BA:925:G:N7	56:BA:1811:OHX:N5	2.45	0.64
1:DA:1090:U:O4	1:DA:1101:U:C2	2.51	0.64
31:CA:1128:C:N4	31:CA:1139:G:C2	2.65	0.64
31:CA:1129:C:H5	31:CA:1141:C:H42	1.43	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
19:DT:26:TYR:OH	19:DT:88:LYS:HB2	1.98	0.64
42:CO:100:ILE:CG2	42:CO:101:VAL:H	2.10	0.64
31:CA:1298:C:H5	37:CJ:114:ARG:CD	2.10	0.64
4:AE:102:VAL:HG23	4:AE:199:ARG:O	1.97	0.64
19:DT:36:LYS:HG3	19:DT:56:THR:HG23	1.80	0.64
53:BC:21:U:H4'	53:BC:22:A:OP2	1.96	0.64
1:AA:2373:G:H1	1:AA:2380:C:H42	1.46	0.64
31:CA:447:G:O6	31:CA:485:G:C8	2.51	0.64
1:AA:1327:C:H2'	1:AA:1328:G:O4'	1.98	0.64
13:A0:117:VAL:O	13:A0:118:GLU:HB2	1.97	0.64
21:DV:59:LEU:HD22	21:DV:61:LEU:HG	1.80	0.64
52:BB:3:U:C4'	52:BB:4:G:OP1	2.46	0.64
1:AA:1053:C:H42	1:AA:1106:G:H1	1.46	0.64
35:BH:16:THR:O	35:BH:17:ALA:HB2	1.98	0.64
1:DA:1252:G:N3	16:D1:33:ARG:HD2	2.12	0.64
12:DP:43:THR:HA	12:DP:94:VAL:HG12	1.80	0.64
1:AA:583:G:H5''	16:A1:10:ARG:HH12	1.63	0.64
31:BA:106:C:O2'	31:BA:107:G:H5'	1.98	0.64
1:DA:395:U:H2'	1:DA:396:G:N7	2.13	0.64
35:CH:88:LYS:HE2	35:CH:123:LEU:HD12	1.79	0.64
31:BA:956:U:O4	56:BA:1766:OHX:N4	2.31	0.64
25:AX:39:ASP:OD1	25:AX:44:ARG:NH2	2.31	0.64
30:A8:36:LYS:HG2	30:A8:40:GLU:CD	2.18	0.63
12:AP:23:GLY:HA2	12:AP:25:ASP:CB	2.29	0.63
1:DA:899:A:H5'	1:DA:900:A:OP2	1.98	0.63
3:AD:71:ASP:HB3	3:AD:103:ARG:NH2	2.13	0.63
54:C1:19:U:C2'	54:C1:20:G:C5'	2.73	0.63
52:CD:19:C:H2'	52:CD:20:C:C4'	2.28	0.63
3:AD:27:THR:HG21	3:AD:83:GLU:CB	2.28	0.63
31:BA:1305:G:H5'	51:BX:4:GLY:HA3	1.80	0.63
31:BA:791:G:H2'	31:BA:792:A:C5'	2.21	0.63
31:BA:1346:A:C4	37:BJ:10:ARG:NH1	2.66	0.63
1:AA:1797:C:C2'	1:AA:1798:U:H5'	2.27	0.63
31:BA:81:G:N2	31:BA:88:C:C4	2.65	0.63
15:DR:107:ASP:OD2	15:DR:109:GLU:N	2.28	0.63
53:BC:73:A:C6	53:BC:74:A:C6	2.86	0.63
1:DA:1482:U:H5'	1:DA:1483:G:OP2	1.98	0.63
28:A6:15:GLU:O	28:A6:16:CYS:HB2	1.97	0.63
9:AM:22:THR:HG22	9:AM:23:LEU:H	1.62	0.63
37:CJ:44:TYR:HA	37:CJ:47:CYS:HB3	1.80	0.63
1:DA:654(S):G:C4'	1:DA:654(T):A:OP1	2.45	0.63
31:BA:377:G:OP1	46:BS:3:LYS:HD2	1.97	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:2219:G:C2'	1:AA:2224:G:H5'	2.29	0.63
13:D0:84:ALA:N	13:D0:85:PRO:HD2	2.13	0.63
7:DH:12:PRO:HG2	7:DH:48:GLY:HA2	1.78	0.63
34:BG:30:LYS:C	34:BG:32:ALA:H	1.99	0.63
47:BT:9:VAL:HG11	47:BT:84:LEU:HB2	1.80	0.63
1:DA:1292:U:H2'	1:DA:1293:C:C6	2.32	0.63
10:AN:85:VAL:HG11	10:AN:114:ILE:HD13	1.81	0.63
30:A8:34:TRP:H	30:A8:35:GLN:HB3	1.63	0.63
31:CA:980:C:H3'	31:CA:981:U:C6	2.33	0.63
6:DG:9:ARG:HD3	6:DG:13:GLU:OE1	1.98	0.63
34:CG:11:LEU:O	34:CG:13:ARG:N	2.31	0.63
1:DA:2415:G:H4'	11:DO:67:MET:N	2.12	0.63
1:DA:2391:G:P	30:D8:32:LEU:HD12	2.38	0.63
52:CB:59:A:C2	52:CB:74:C:C2	2.85	0.63
1:DA:322:A:H5'	1:DA:340:A:H1'	1.80	0.63
1:DA:458:G:O2'	29:D7:39:ARG:HD3	1.98	0.63
24:DW:6:VAL:O	24:DW:9:GLN:N	2.31	0.63
21:AV:6:LYS:NZ	21:AV:43:GLU:HG3	2.12	0.63
31:BA:798:G:H2'	31:BA:799:G:O5'	1.98	0.63
1:DA:2516:G:O6	1:DA:2517:C:N4	2.31	0.63
31:BA:1280:A:H3'	31:BA:1281:U:C5'	2.28	0.63
21:AV:140:ASP:CG	21:AV:141:VAL:H	2.02	0.63
1:AA:2129:C:H2'	1:AA:2130:U:H5'	1.79	0.63
38:BK:23:SER:OG	38:BK:61:VAL:O	2.13	0.63
31:BA:590:C:H2'	31:BA:590:C:O2	1.98	0.63
1:AA:1882:C:OP2	56:AA:3554:OHX:N4	2.31	0.63
4:DE:61:ARG:HB3	4:DE:62:PRO:HD3	1.80	0.63
31:CA:1207:G:O2'	31:CA:1208:C:H5'	1.97	0.63
31:CA:977:A:H8	31:CA:982:U:O4	1.82	0.63
39:CL:114:TYR:HD1	40:CM:60:ARG:CG	2.10	0.63
44:CQ:16:PHE:N	44:CQ:16:PHE:CD2	2.66	0.63
44:CQ:27:CYS:SG	44:CQ:27:CYS:O	2.57	0.63
13:A0:24:GLN:HE22	13:A0:36:THR:HG21	1.62	0.63
43:BP:20:THR:HG23	43:BP:26:GLY:HA2	1.80	0.63
31:BA:963:G:H21	40:BM:55:LYS:HE2	1.64	0.63
31:BA:1503:A:O2'	31:BA:1504:G:P	2.56	0.63
11:AO:65:ARG:HH11	11:AO:65:ARG:CG	1.87	0.63
11:DO:107:LYS:HB3	11:DO:110:TYR:HD2	1.64	0.63
2:AB:7:G:O5'	14:AQ:29:PHE:HE1	1.81	0.63
1:DA:2728:U:O2'	1:DA:2729:G:H5'	1.98	0.63
40:BM:39:PRO:HB3	40:BM:70:ARG:NH1	2.12	0.63
1:AA:1015:G:H2'	1:AA:1016:G:H5'	1.80	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:CB:62:G:H4'	12:DP:56:ARG:NH2	2.12	0.63
1:AA:1900:A:C5'	1:AA:1900:A:C8	2.81	0.63
53:CC:16:C:H5	56:CC:108:OHX:N2	1.95	0.63
31:BA:411:A:C4	31:BA:413:G:H1'	2.32	0.63
34:CG:25:ARG:O	34:CG:27:TYR:N	2.30	0.63
1:DA:1007:C:H5''	9:DM:35:ARG:NH1	2.14	0.63
12:AP:111:GLU:OE1	12:AP:133:ARG:NH2	2.32	0.63
32:BE:94:ASN:N	32:BE:94:ASN:HD22	1.97	0.63
32:BE:170:GLU:O	32:BE:174:VAL:HG23	1.98	0.63
31:BA:189:U:C2	47:BT:72:ARG:NH1	2.66	0.63
31:CA:51:A:C6	31:CA:353:A:C2	2.87	0.63
43:CP:39:ILE:HG22	43:CP:40:ASN:H	1.62	0.63
1:AA:1206:G:C6	1:AA:1207:C:C4	2.86	0.63
1:AA:2331:G:O3'	22:A3:43:THR:HG22	1.98	0.63
38:BK:7:ALA:HB2	38:BK:85:ARG:HD2	1.79	0.63
31:CA:585:G:H4'	42:CO:8:ASN:ND2	2.13	0.63
31:CA:191(F):U:O2	50:CW:105:SER:HB2	1.98	0.63
47:CT:94:ASN:O	47:CT:98:LEU:HG	1.98	0.63
1:AA:1280:G:O2'	1:AA:1281:G:H5'	1.98	0.63
1:DA:2191:G:O2'	1:DA:2192:G:OP1	2.15	0.63
31:CA:776:G:O6	56:CA:1751:OHX:N6	2.31	0.63
3:AD:169:GLU:O	3:AD:169:GLU:HG3	1.99	0.63
1:AA:514:A:O2'	1:AA:515:A:H5'	1.97	0.63
1:DA:389:G:N1	11:DO:71:VAL:CG1	2.60	0.63
43:CP:76:ALA:HA	43:CP:79:LYS:HB3	1.80	0.63
44:CQ:24:CYS:HB2	44:CQ:39:LEU:HA	1.81	0.63
31:BA:1004:A:OP1	31:BA:1025:U:C4	2.51	0.63
52:BD:13:G:O5'	52:BD:13:G:H8	1.81	0.63
1:AA:1058:U:H2'	1:AA:1059:G:H8	1.61	0.63
11:DO:52:GLU:HG3	11:DO:57:THR:CA	2.22	0.63
8:AK:140:LEU:HD23	8:AK:140:LEU:N	2.11	0.63
31:CA:1133:G:H2'	31:CA:1134:G:H8	1.64	0.63
31:CA:1015:A:N3	31:CA:1218:C:O2'	2.30	0.63
31:CA:328:C:C2'	31:CA:329:A:OP2	2.45	0.63
21:AV:103:ARG:HG3	21:AV:136:PHE:HD1	1.62	0.63
9:AM:22:THR:CG2	9:AM:23:LEU:N	2.61	0.63
31:CA:750:G:N3	45:CR:23:GLY:HA3	2.14	0.63
1:DA:945:A:C6	1:DA:2448:A:C4	2.87	0.63
31:BA:1251:A:H2'	31:BA:1252:A:H8	1.61	0.63
1:DA:1496:A:H8	1:DA:1577:C:HO2'	1.35	0.63
1:AA:1202:C:C2'	1:AA:1203:G:H5'	2.28	0.63
1:DA:634:C:H2'	1:DA:635:C:C6	2.34	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:AZ:78:LYS:HD2	23:AZ:78:LYS:N	2.14	0.63
31:BA:359:U:H2'	31:BA:360:A:H8	1.62	0.63
1:DA:2279:G:O6	22:D3:14:ARG:HD2	1.98	0.63
21:DV:103:ARG:O	21:DV:104:PHE:HB2	1.98	0.63
1:DA:2046:G:H5'	27:D5:19:ARG:HG3	1.79	0.63
20:AU:35:TYR:CD1	20:AU:69:ALA:HB3	2.32	0.63
32:BE:115:LEU:HD13	32:BE:145:LEU:HB3	1.80	0.63
34:CG:111:ALA:HB2	34:CG:120:LEU:HD11	1.80	0.63
1:AA:1310:G:OP2	29:A7:9:ARG:HD2	1.98	0.63
46:CS:56:ALA:O	46:CS:60:LEU:HG	1.98	0.63
5:AF:152:GLU:OE1	5:AF:191:ARG:HD2	1.97	0.63
1:AA:2291:U:O2'	1:AA:2374:C:H1'	1.98	0.63
12:AP:84:GLY:O	12:AP:85:LYS:HB2	1.98	0.63
31:CA:1206:G:O4'	33:CF:194:GLY:N	2.32	0.63
52:CD:47:U:H2'	52:CD:48:C:H6	1.63	0.63
3:AD:27:THR:CG2	3:AD:28:GLU:N	2.55	0.63
1:AA:654(C):G:H2'	1:AA:654(D):G:O4'	1.98	0.63
31:BA:197:A:N7	31:BA:221:C:H4'	2.13	0.63
1:AA:2391:G:P	30:A8:32:LEU:HD11	2.31	0.63
31:BA:267:C:OP1	47:BT:67:LYS:HD2	1.98	0.63
12:DP:98:LYS:HB3	12:DP:99:PRO:HD2	1.80	0.63
31:CA:182:U:H5	31:CA:183:G:C1'	2.11	0.63
20:AU:97:ARG:HH21	20:AU:98:VAL:CB	2.10	0.63
21:DV:18:LEU:HB3	21:DV:23:LYS:O	1.99	0.63
1:AA:2163:C:H5''	1:AA:2172:U:OP2	1.99	0.63
10:DN:116:SER:HB2	10:DN:117:LEU:HD12	1.79	0.63
1:AA:1858:G:HO2'	1:AA:1884:A:N6	1.96	0.63
17:D2:38:LEU:HD13	17:D2:55:ALA:HB1	1.80	0.63
1:DA:959:A:N6	1:DA:960:A:N1	2.47	0.63
1:DA:1733:G:H2'	1:DA:1734:C:H5'	1.79	0.63
1:DA:864:G:C6	1:DA:865:C:N4	2.67	0.63
33:BF:108:ASN:ND2	33:BF:144:SER:OG	2.29	0.63
31:CA:126:G:O2'	31:CA:634:C:O2'	2.14	0.63
31:BA:417:C:H2'	31:BA:418:C:H6	1.62	0.63
33:BF:56:ASP:O	33:BF:57:ILE:HG13	1.98	0.63
1:AA:2210:G:C3'	1:AA:2211:G:N7	2.62	0.63
31:CA:977:A:H2'	31:CA:978:A:H5'	1.80	0.63
5:DF:36:VAL:O	5:DF:40:GLN:HB2	1.98	0.63
17:D2:21:ARG:HD3	17:D2:91:TYR:HB3	1.81	0.63
8:AK:131:LYS:N	8:AK:131:LYS:HD3	2.14	0.63
9:AM:55:VAL:C	9:AM:57:ALA:H	2.02	0.63
31:CA:1374:A:H2'	31:CA:1375:A:C5'	2.28	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1798:U:H5''	3:AD:259:THR:CG2	2.24	0.63
1:AA:1888:G:H3'	1:AA:1888:G:N3	2.13	0.63
21:DV:115:GLY:HA2	21:DV:177:PRO:HG2	1.81	0.63
5:DF:102:PRO:O	5:DF:105:VAL:N	2.32	0.63
31:CA:1004:A:C2	31:CA:1024:G:C8	2.87	0.63
26:D4:34:GLU:OE1	26:D4:34:GLU:N	2.32	0.63
24:DW:65:ASN:HD22	24:DW:69:ARG:NH2	1.85	0.63
31:BA:448:A:P	31:BA:485:G:H22	2.22	0.63
8:AK:8:PRO:HG3	8:AK:14:ASP:HB2	1.80	0.63
1:DA:2383:G:OP2	30:D8:37:SER:HB2	1.99	0.63
1:DA:2287:A:N6	1:DA:2344:U:H3	1.94	0.63
32:BE:61:LEU:HD23	32:BE:68:ILE:HD11	1.81	0.63
32:BE:7:VAL:HG23	32:BE:8:LYS:HE2	1.80	0.63
1:AA:811:U:OP2	11:AO:21:ARG:O	2.17	0.63
1:DA:654(S):G:H4'	1:DA:654(T):A:OP1	1.97	0.63
31:CA:298:A:H5''	31:CA:299:G:OP2	1.99	0.63
20:AU:42:VAL:HB	20:AU:67:LEU:HD11	1.78	0.63
2:AB:66:A:H61	2:AB:107:U:H2'	1.62	0.63
35:BH:51:VAL:HB	35:BH:52:PRO:HD3	1.81	0.63
1:AA:658:C:H2'	1:AA:659:C:C6	2.33	0.63
1:DA:1766:U:H3	1:DA:1986:A:H61	1.46	0.63
1:AA:1681:G:OP1	56:AA:3479:OHX:N4	2.32	0.63
1:AA:2241:A:O2'	1:AA:2242:G:H5'	1.99	0.63
1:AA:2661:G:O2'	1:AA:2662:A:H5'	1.97	0.63
1:DA:900:A:H2'	1:DA:900:A:N3	2.13	0.63
31:CA:1095:U:O4	31:CA:1096:C:N4	2.31	0.63
31:CA:1305:G:N2	31:CA:1331:G:O2'	2.31	0.63
34:CG:62:GLN:NE2	34:CG:65:ARG:HE	1.96	0.63
6:AG:146:TYR:O	6:AG:149:VAL:HG22	1.98	0.63
1:DA:996:A:C2	1:DA:997:G:C8	2.87	0.63
1:DA:1061:U:O2	1:DA:1061:U:H2'	1.98	0.63
31:CA:870:U:H4'	31:CA:871:U:C5'	2.27	0.63
20:AU:49:VAL:C	20:AU:51:VAL:H	1.98	0.63
13:A0:3:HIS:O	13:A0:5:LYS:N	2.32	0.63
52:BB:75:C:H2'	52:BB:76:C:C6	2.34	0.63
48:CU:53:ARG:HA	48:CU:56:THR:OG1	1.99	0.63
32:BE:8:LYS:H	32:BE:8:LYS:HE2	1.64	0.63
21:AV:44:PHE:CE2	21:AV:86:VAL:HG11	2.33	0.63
7:AH:88:LEU:N	7:AH:88:LEU:HD12	2.14	0.63
31:BA:1073:U:OP2	35:BH:57:LYS:NZ	2.17	0.63
22:A3:49:LYS:NZ	22:A3:68:GLU:OE2	2.24	0.63
22:A3:70:GLN:HE21	22:A3:80:HIS:HE2	1.47	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1164:G:H2'	1:AA:1165:U:C6	2.33	0.63
2:DB:104:A:H2'	2:DB:105:G:O4'	1.99	0.63
18:AS:37:ARG:HD3	18:AS:38:TYR:CE2	2.33	0.63
36:CI:45:LEU:HD21	36:CI:57:GLN:NE2	2.13	0.63
1:DA:397:G:N7	56:DA:3483:OHX:N6	2.47	0.63
26:D4:56:VAL:O	26:D4:57:GLU:HB2	1.99	0.63
2:DB:102:G:N3	21:DV:73:GLN:NE2	2.42	0.63
1:AA:307:G:N7	56:AA:3445:OHX:N2	2.46	0.63
49:BV:33:THR:OG1	49:BV:34:TRP:N	2.29	0.63
31:CA:313:A:H2'	31:CA:314:C:C6	2.33	0.63
1:AA:444:C:H4'	5:AF:49:ALA:HB2	1.79	0.63
11:AO:115:LEU:HA	11:AO:134:ALA:HB2	1.81	0.63
24:DW:37:PHE:O	24:DW:41:ILE:HG12	1.98	0.63
31:CA:971:G:N2	31:CA:1363:A:OP2	2.19	0.63
3:DD:35:LYS:HD3	3:DD:104:TYR:HD1	1.63	0.63
3:DD:63:ARG:H	3:DD:63:ARG:HD3	1.62	0.63
52:CD:22:A:C5	52:CD:57:C:N4	2.66	0.63
31:CA:501:C:H2'	31:CA:502:G:C8	2.33	0.63
52:BD:44:C:H2'	52:BD:45:C:O4'	1.98	0.63
31:BA:1305:G:OP2	31:BA:1305:G:C8	2.50	0.63
11:DO:64:LYS:O	11:DO:65:ARG:C	2.37	0.63
31:BA:78:G:O6	31:BA:90:C:N4	2.31	0.63
52:BB:21:A:C2	52:BB:22:A:N6	2.61	0.63
12:AP:19:GLY:HA3	12:AP:98:LYS:HZ3	1.62	0.63
1:DA:1076:C:H2'	1:DA:1077:A:H5'	1.79	0.63
31:CA:1128:C:O2'	31:CA:1129:C:OP1	2.17	0.63
1:AA:1015:G:C2'	1:AA:1016:G:H5'	2.29	0.63
31:CA:1023:G:C6	31:CA:1024:G:N7	2.67	0.63
12:DP:19:GLY:HA3	12:DP:98:LYS:NZ	2.14	0.63
6:DG:35:GLU:O	6:DG:36:LYS:HB3	1.98	0.63
31:CA:362:G:O6	56:CA:1798:OHX:N1	2.31	0.63
31:BA:509:A:O2'	31:BA:510:A:OP1	2.13	0.63
23:AZ:65:SER:HB2	23:AZ:66:HIS:CD2	2.30	0.63
31:BA:751:U:H5''	31:BA:752:G:OP2	1.97	0.63
49:CV:7:LYS:HG2	49:CV:8:GLY:N	2.11	0.63
1:DA:5:A:N6	1:DA:2898:U:H3	1.96	0.63
12:AP:32:TYR:OH	12:AP:111:GLU:HB2	1.98	0.63
1:DA:1991:U:H2'	1:DA:1992:G:H5''	1.81	0.63
21:DV:29:TYR:HB3	21:DV:34:ASN:ND2	2.14	0.63
5:AF:185:ASP:OD1	5:AF:188:ARG:NH1	2.31	0.63
14:AQ:27:SER:HA	14:AQ:88:ASP:CB	2.29	0.63
31:BA:130:A:OP2	31:BA:189:U:C5	2.51	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:2519:U:H4'	1:DA:2520:C:OP1	1.98	0.63
1:DA:2190:G:C3'	1:DA:2191:G:H5''	2.29	0.63
31:CA:852:G:O2'	31:CA:853:G:H5'	1.99	0.63
31:BA:1429:C:H2'	31:BA:1430:C:C6	2.33	0.63
12:DP:84:GLY:O	12:DP:85:LYS:HB2	1.98	0.63
11:DO:49:ARG:HD2	30:D8:58:ILE:CG2	2.29	0.63
31:CA:980:C:H3'	31:CA:981:U:H6	1.61	0.63
40:CM:47:PHE:HB2	44:CQ:34:TYR:HE2	1.62	0.63
31:BA:1006:C:N4	31:BA:1023:G:H1	1.94	0.63
31:BA:1024:G:H4'	31:BA:1024:G:OP1	1.98	0.63
32:CE:16:HIS:HB3	32:CE:210:SER:HB2	1.80	0.63
1:DA:2401:U:C3'	1:DA:2402:C:H5''	2.28	0.63
45:CR:82:ILE:HD13	45:CR:82:ILE:C	2.20	0.63
43:BP:8:GLU:O	43:BP:10:PRO:HD3	1.99	0.63
31:BA:68:G:N2	31:BA:69:G:H1'	2.14	0.63
49:BV:41:VAL:HB	49:BV:42:PRO:CA	2.23	0.63
1:DA:1078:U:O2	1:DA:1088:A:H2	1.82	0.63
31:BA:859:A:H2'	31:BA:860:A:C8	2.34	0.63
31:BA:872:A:C4	31:BA:874:G:N7	2.67	0.63
1:DA:302:C:H2'	1:DA:303:U:C6	2.34	0.63
31:CA:179:A:H2'	31:CA:180:U:C6	2.30	0.63
9:AM:111:PRO:HA	9:AM:114:ARG:NH1	2.13	0.63
31:CA:260:G:O6	56:CA:1779:OHX:N2	2.31	0.63
31:CA:485:G:O2'	31:CA:486:U:H6	1.81	0.63
1:AA:598:G:H1'	11:AO:12:ALA:CB	2.29	0.63
32:CE:178:ARG:NH2	38:CK:68:ARG:NH2	2.46	0.63
17:D2:33:VAL:HG13	17:D2:35:LEU:HD22	1.79	0.63
1:AA:768:G:O2'	1:AA:1379:A:N6	2.32	0.63
31:BA:956:U:C2'	31:BA:957:U:H5'	2.29	0.63
31:BA:39:G:N7	31:BA:547:A:H8	1.97	0.63
1:DA:1273:U:OP2	56:DA:3377:OHX:N4	2.31	0.63
1:AA:1701:A:OP2	56:AA:3558:OHX:N2	2.32	0.63
37:CJ:81:GLY:O	37:CJ:83:ALA:N	2.32	0.63
1:DA:1955:U:O3'	1:DA:1956:U:H6	1.82	0.63
12:AP:25:ASP:O	12:AP:25:ASP:CG	2.38	0.62
3:DD:36:PRO:HB3	3:DD:61:LEU:HG	1.79	0.62
11:AO:15:ARG:NH1	11:AO:15:ARG:CG	2.39	0.62
31:BA:942:G:C2	31:BA:943:U:C6	2.87	0.62
54:B1:12:A:O2'	54:B1:13:A:O5'	2.16	0.62
52:BB:10:C:N3	52:BB:26:G:N2	2.32	0.62
12:AP:19:GLY:HA3	12:AP:98:LYS:CD	2.29	0.62
1:AA:1086:A:H4'	1:AA:1103:A:C2	2.34	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:6:C:C2'	2:AB:7:G:H5''	2.29	0.62
2:AB:7:G:P	14:AQ:29:PHE:HE1	2.22	0.62
31:BA:368:U:P	8:DK:91:SER:HG	2.22	0.62
31:CA:571:U:H5''	31:CA:572:A:OP2	1.99	0.62
52:BB:59:A:N6	52:BB:73:U:H3	1.93	0.62
1:AA:481:G:H1'	1:AA:507:A:N1	2.14	0.62
5:AF:177:ALA:HB1	5:AF:178:PRO:HD2	1.80	0.62
12:AP:32:TYR:O	12:AP:105:GLU:HA	1.98	0.62
31:BA:129(A):G:N2	31:BA:188:U:O2'	2.32	0.62
1:AA:654(M):C:C5'	1:AA:654(N):G:N7	2.62	0.62
8:DK:75:LEU:HD23	8:DK:76:THR:N	2.14	0.62
1:DA:2712:U:O2'	1:DA:2712(A):A:O5'	2.12	0.62
49:CV:62:ILE:HD12	49:CV:62:ILE:N	2.13	0.62
1:AA:636:G:OP2	11:AO:113:LYS:NZ	2.31	0.62
1:AA:2756:U:H1'	1:AA:2757:A:H5''	1.81	0.62
1:DA:2173:A:N6	1:DA:2174:C:O2	2.32	0.62
41:CN:21:ILE:HG21	41:CN:84:VAL:HG12	1.80	0.62
21:DV:97:GLU:HB2	21:DV:125:LEU:HD11	1.81	0.62
52:CD:9:U:HO2'	52:CD:10:C:H5	1.46	0.62
32:CE:17:PHE:CE2	32:CE:44:LEU:HA	2.34	0.62
1:AA:907:U:O5'	12:AP:23:GLY:O	2.17	0.62
4:DE:81:ILE:O	4:DE:82:ARG:HB3	1.97	0.62
1:DA:2143:C:H42	1:DA:2148:G:H1	0.65	0.62
17:D2:78:LYS:C	17:D2:79:VAL:CG1	2.68	0.62
31:BA:1034:G:H2'	31:BA:1035:A:C8	2.34	0.62
12:AP:54:MET:O	12:AP:57:HIS:N	2.32	0.62
1:DA:1416:G:O2'	1:DA:1417:C:H6	1.74	0.62
31:CA:417:C:O2'	31:CA:418:C:H5'	1.99	0.62
1:AA:1586:A:C2	1:AA:1587:A:C5	2.88	0.62
52:CB:7:G:OP2	56:CB:104:OHX:N1	2.31	0.62
1:DA:469:G:O6	29:D7:37:LYS:HE2	1.98	0.62
31:BA:652:U:H1'	31:BA:653:A:C2	2.34	0.62
31:BA:1213:A:C6	31:BA:1215:G:H1'	2.35	0.62
33:CF:23:TYR:CD1	40:CM:10:GLY:HA2	2.34	0.62
29:A7:43:THR:HG23	29:A7:44:PRO:CD	2.29	0.62
11:DO:11:GLY:C	11:DO:13:ASN:N	2.52	0.62
20:AU:39:VAL:O	20:AU:40:GLU:HG2	1.99	0.62
2:DB:74:U:C3'	2:DB:75:G:H5''	2.29	0.62
33:CF:72:LYS:NZ	33:CF:74:GLY:HA3	2.14	0.62
1:AA:26:G:C6	1:AA:27:G:N1	2.67	0.62
31:BA:1266:G:N2	31:BA:1269:A:OP2	2.27	0.62
3:AD:31:LYS:O	3:AD:31:LYS:HG3	1.99	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:D6:44:ARG:O	28:D6:45:LYS:HB2	1.98	0.62
53:CC:12:G:H1'	1:DA:1923:U:O2'	1.99	0.62
31:CA:1387:G:H2'	31:CA:1388:C:C6	2.34	0.62
37:BJ:155:ARG:HD3	37:BJ:155:ARG:O	1.99	0.62
2:DB:1(M):A:O5'	56:DB:219:OHX:N5	2.31	0.62
1:DA:2143:C:N4	1:DA:2148:G:N1	2.12	0.62
1:DA:971:C:OP1	1:DA:974:G:C8	2.52	0.62
31:BA:1024:G:H2'	31:BA:1025:U:C6	2.34	0.62
1:AA:1061:U:O3'	1:AA:1070:A:H4'	2.00	0.62
39:CL:118:LYS:HB3	39:CL:121:ARG:HB3	1.80	0.62
16:A1:82:GLY:O	16:A1:85:LYS:N	2.32	0.62
31:BA:827:U:C5'	31:BA:828:A:OP2	2.47	0.62
26:D4:34:GLU:HG2	26:D4:35:VAL:N	2.08	0.62
48:CU:56:THR:HB	48:CU:58:LEU:CD1	2.28	0.62
6:DG:128:ARG:NH2	6:DG:128:ARG:HG3	2.09	0.62
34:BG:85:LYS:HG2	34:BG:86:LYS:N	2.11	0.62
1:DA:2688:U:O2	1:DA:2688:U:H3'	1.99	0.62
19:DT:63:LYS:HA	19:DT:72:LYS:HA	1.81	0.62
5:DF:177:ALA:HB1	5:DF:178:PRO:HD2	1.81	0.62
31:CA:1086:U:H6	31:CA:1086:U:O5'	1.82	0.62
1:AA:1551:C:C2'	1:AA:1552:G:H5'	2.30	0.62
1:AA:2428:G:H21	11:AO:60:MET:CE	2.12	0.62
43:CP:40:ASN:OD1	43:CP:41:PRO:HD2	1.99	0.62
34:CG:189:PRO:HB2	34:CG:194:LEU:CD2	2.28	0.62
31:BA:633:G:H5'	31:BA:634:C:OP2	1.97	0.62
40:CM:78:ASN:HD22	40:CM:80:LYS:HB3	1.64	0.62
31:CA:1074:G:O2'	31:CA:1101:A:N1	2.29	0.62
5:AF:128:ALA:O	5:AF:129:PHE:HB2	1.99	0.62
16:D1:110:VAL:O	16:D1:114:LYS:HG2	1.99	0.62
1:DA:1260:G:H2'	1:DA:1261:C:H6	1.64	0.62
1:DA:719:C:C2'	1:DA:720:C:H5'	2.30	0.62
31:CA:923:A:OP1	35:CH:21:ALA:HB2	1.99	0.62
37:BJ:69:VAL:HG22	37:BJ:135:VAL:HG22	1.81	0.62
1:DA:1651:G:H5'	13:D0:39:PRO:HG2	1.80	0.62
31:CA:1320:C:O2	49:CV:72:GLY:HA3	2.00	0.62
34:CG:13:ARG:NH1	34:CG:38:TYR:O	2.32	0.62
52:BD:14:A:H3'	52:BD:15:G:C5'	2.29	0.62
52:BD:41:C:H2'	52:BD:42:U:H6	1.64	0.62
21:DV:132:ASN:ND2	21:DV:160:GLY:H	1.97	0.62
12:DP:87:LYS:O	12:DP:88:GLY:C	2.38	0.62
11:DO:97:PRO:CD	11:DO:112:LEU:HD12	2.29	0.62
1:AA:675:A:OP1	5:AF:63:LYS:HE2	1.98	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1348:U:C5	31:CA:1349:A:N7	2.67	0.62
1:AA:1888:G:OP2	1:AA:1888:G:N2	2.32	0.62
52:CB:62:G:C2'	52:CB:63:U:H5'	2.28	0.62
1:DA:2469:A:C2	1:DA:2470:G:C8	2.88	0.62
41:BN:79:SER:HB2	41:BN:106:LYS:CD	2.28	0.62
1:DA:803:U:C2'	1:DA:804:A:H5'	2.28	0.62
5:DF:167:ALA:O	5:DF:169:ASN:N	2.32	0.62
20:DU:76:CYS:SG	20:DU:77:PRO:HD2	2.40	0.62
32:CE:83:MET:C	32:CE:85:ALA:H	2.03	0.62
33:CF:184:TYR:CD1	33:CF:201:TYR:HE2	2.11	0.62
5:AF:45:ARG:NH1	5:AF:45:ARG:HG2	2.09	0.62
31:BA:49:U:C2	31:BA:361:G:N2	2.68	0.62
13:A0:79:LEU:HA	13:A0:83:ILE:HD12	1.80	0.62
31:CA:457:C:H2'	31:CA:458:C:C6	2.35	0.62
1:DA:1396:U:H2'	1:DA:1396:U:O2	1.98	0.62
31:BA:51:A:OP2	31:BA:52:G:C8	2.52	0.62
1:AA:2862:G:H2'	1:AA:2863:C:H6	1.64	0.62
4:AE:92:THR:HB	4:AE:94:GLU:H	1.63	0.62
31:CA:966:G:O2'	39:CL:127:LYS:O	2.18	0.62
31:BA:939:G:C6	31:BA:940:C:N4	2.68	0.62
18:DS:95:ILE:HD13	18:DS:95:ILE:H	1.63	0.62
31:CA:892:A:O2'	31:CA:1415:G:H4'	1.99	0.62
1:AA:2287:A:H2	1:AA:2346:A:N1	1.98	0.62
27:A5:6:VAL:HG22	27:A5:7:PRO:HD3	1.80	0.62
52:CD:49:A:C2	52:CD:51:C:OP2	2.52	0.62
1:DA:2392:A:H2	1:DA:2424:C:N4	1.95	0.62
16:A1:108:GLU:OE1	16:A1:112:ARG:NH1	2.32	0.62
11:DO:16:ARG:NH1	11:DO:16:ARG:HG3	2.15	0.62
1:DA:1064:C:H42	1:DA:1074:G:H1	1.47	0.62
16:A1:92:ARG:NH2	17:A2:11:GLN:O	2.32	0.62
31:CA:1142:G:H3'	31:CA:1143:G:H8	1.64	0.62
14:DQ:14:VAL:HG21	14:DQ:89:ARG:HD3	1.81	0.62
1:AA:1797:C:H2'	1:AA:1798:U:H5'	1.80	0.62
52:CB:14:A:H61	52:CB:22:A:H1'	1.63	0.62
4:AE:21:VAL:HG23	4:AE:22:PRO:CG	2.29	0.62
4:DE:200:GLU:HG2	4:DE:201:THR:H	1.63	0.62
31:BA:428:G:O4'	31:BA:430:A:C8	2.52	0.62
1:AA:1416:G:H21	1:AA:1586:A:H62	1.45	0.62
1:AA:1416:G:O2'	1:AA:1417:C:C6	2.47	0.62
1:DA:1480:G:H5'	1:DA:1482:U:OP2	1.99	0.62
1:DA:2542:A:N3	1:DA:2542:A:H5''	2.15	0.62
1:DA:1420:U:HO2'	1:DA:1421:G:P	2.21	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1171:G:C6	1:AA:1174:A:N6	2.68	0.62
1:DA:2818:G:O2'	1:DA:2819:G:H5'	1.99	0.62
41:CN:100:ALA:O	41:CN:102:GLY:N	2.32	0.62
31:CA:674:G:OP1	36:CI:87:ARG:NH2	2.32	0.62
22:D3:66:VAL:HG12	22:D3:67:VAL:H	1.64	0.62
1:DA:573:G:O2'	1:DA:574:C:H3'	1.98	0.62
31:CA:556:C:C2'	31:CA:557:G:H5'	2.29	0.62
18:DS:33:ARG:NE	18:DS:52:GLU:OE2	2.32	0.62
37:BJ:26:PHE:CE2	37:BJ:30:ILE:HD11	2.33	0.62
41:BN:17:GLY:HA3	41:BN:77:MET:SD	2.39	0.62
22:A3:41:ARG:HA	22:A3:41:ARG:NE	2.14	0.62
26:A4:45:GLY:O	26:A4:47:GLN:N	2.32	0.62
7:AH:149:ARG:HG3	7:AH:162:ILE:O	1.99	0.62
32:CE:19:HIS:O	32:CE:20:GLU:O	2.16	0.62
31:BA:149:A:C2	31:BA:150:C:N3	2.67	0.62
11:DO:80:TYR:CD1	11:DO:111:ARG:HB3	2.34	0.62
31:BA:1349:A:C2	31:BA:1350:A:H1'	2.34	0.62
39:BL:118:LYS:O	39:BL:119:ALA:HB3	2.00	0.62
3:AD:244:ARG:HB2	3:AD:245:PRO:HD2	1.79	0.62
1:DA:1342:A:N1	1:DA:1397:U:C5	2.68	0.62
1:AA:1026:U:H1'	1:AA:1027:A:C5'	2.29	0.62
1:DA:2123:G:N2	1:DA:2175:C:N3	2.41	0.62
35:CH:100:VAL:HG13	35:CH:100:VAL:O	1.99	0.62
35:CH:76:ILE:CG2	35:CH:77:PRO:HD2	2.29	0.62
43:CP:11:ARG:O	43:CP:13:LYS:N	2.31	0.62
35:BH:101:ILE:HG13	35:BH:119:LEU:HD23	1.81	0.62
1:DA:2872:G:C4	1:DA:2873:A:C2	2.87	0.62
32:BE:8:LYS:H	32:BE:8:LYS:CE	2.12	0.62
9:AM:28:THR:N	9:AM:106:MET:HE1	2.15	0.62
1:AA:274:G:H2'	1:AA:275:G:C1'	2.28	0.62
1:AA:2583:G:N2	52:BB:85:A:C8	2.61	0.62
1:DA:2446:G:C2'	1:DA:2447:G:H5''	2.30	0.62
8:AK:95:LYS:HE3	8:AK:99:GLU:HG3	1.80	0.62
7:DH:92:ILE:N	7:DH:92:ILE:HD12	2.14	0.62
31:CA:1449:C:O2'	31:CA:1450:U:P	2.58	0.62
19:DT:53:LYS:NZ	19:DT:55:ASN:HD21	1.97	0.62
1:DA:1986:A:OP1	56:DA:3061:OHX:N4	2.32	0.62
1:DA:405:U:O2	1:DA:405:U:H3'	1.99	0.62
34:CG:63:LYS:HD2	34:CG:198:VAL:HG12	1.81	0.62
32:BE:229:VAL:HG12	32:BE:230:VAL:H	1.63	0.62
1:AA:219:G:OP2	56:AA:3415:OHX:N2	2.31	0.62
4:AE:32:PRO:O	4:AE:34:VAL:HG12	2.00	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1181:C:O2'	1:AA:1182:A:H5'	2.00	0.62
37:CJ:87:VAL:HG23	37:CJ:88:PRO:HD2	1.81	0.62
10:AN:80:ASP:OD2	15:AR:64:ARG:NH2	2.32	0.62
26:D4:30:GLU:O	26:D4:31:ILE:HG13	1.98	0.62
30:A8:52:LYS:H	30:A8:53:PRO:HD2	1.65	0.62
1:AA:2210:G:H2'	1:AA:2211:G:N7	2.15	0.62
54:C1:20:G:O2'	54:C1:21:C:H5'	1.99	0.62
1:AA:1534:G:N3	1:AA:1534:G:H2'	2.14	0.62
1:AA:880:G:H1	1:AA:897:C:H42	1.35	0.62
31:BA:77:C:C2'	31:BA:78:G:H5''	2.29	0.62
31:BA:1452:C:HO2'	31:BA:1453:G:P	2.19	0.62
12:AP:53:ALA:HB1	12:AP:120:ILE:CG2	2.29	0.62
30:A8:48:PHE:HE2	30:A8:50:LEU:CD1	2.10	0.62
47:CT:63:ARG:HG2	47:CT:64:PRO:CD	2.26	0.62
40:BM:7:LYS:HB3	40:BM:97:GLU:HB2	1.80	0.62
1:DA:1519:G:H2'	1:DA:1520:U:H5'	1.82	0.62
1:AA:1434:A:H61	1:AA:1558:A:H62	1.46	0.62
12:AP:136:ALA:CB	21:AV:52:SER:HB2	2.29	0.62
20:AU:96:ILE:HG22	20:AU:101:LYS:HE2	1.80	0.62
1:AA:280:C:H2'	1:AA:281:G:H5'	1.81	0.62
33:BF:184:TYR:CD1	33:BF:201:TYR:HE2	2.17	0.62
6:DG:172:LEU:HD12	6:DG:172:LEU:O	1.99	0.62
31:CA:711:G:O2'	31:CA:712:A:H5'	1.98	0.62
1:DA:1758:G:C2	1:DA:2696:U:H5'	2.34	0.62
3:DD:125:ILE:HD12	3:DD:136:ILE:HG23	1.81	0.62
7:DH:27:LYS:HD3	7:DH:32:GLU:HB3	1.80	0.62
1:DA:254:G:N7	30:D8:5:LYS:HE2	2.15	0.62
50:BW:13:LEU:HD12	50:BW:13:LEU:C	2.20	0.62
8:DK:31:LEU:HD21	8:DK:38:LEU:CD1	2.29	0.62
1:DA:753:C:O5'	1:DA:753:C:H6	1.83	0.62
1:AA:1992:G:O2'	1:AA:1993:U:OP2	2.12	0.62
6:AG:6:ALA:HB3	6:AG:104:GLU:OE2	1.99	0.62
9:DM:126:PRO:O	9:DM:127:ASP:HB2	2.00	0.62
1:DA:849:A:OP1	56:DA:3465:OHX:N3	2.33	0.62
26:D4:22:ILE:HD13	26:D4:22:ILE:H	1.63	0.62
34:CG:19:LEU:N	34:CG:19:LEU:HD12	2.14	0.62
31:BA:1326:C:H2'	31:BA:1327:C:C6	2.34	0.62
31:BA:68:G:C2	31:BA:69:G:H1'	2.35	0.62
11:DO:82:GLY:HA2	11:DO:113:LYS:O	1.98	0.62
16:D1:91:ASP:C	16:D1:93:LYS:N	2.52	0.62
52:BB:51:C:H3'	52:BB:52:G:C8	2.35	0.62
1:DA:2315:G:H2'	1:DA:2316:C:C6	2.34	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:CO:60:LEU:HB2	42:CO:64:TYR:HB3	1.81	0.62
31:CA:1394:A:OP1	56:CA:1797:OHX:N2	2.32	0.62
1:AA:1045:A:O2'	1:AA:1047:G:C5	2.53	0.62
21:AV:128:VAL:HA	21:AV:161:VAL:HG21	1.81	0.62
1:DA:1007:C:OP1	9:DM:35:ARG:NH1	2.32	0.62
20:DU:42:VAL:O	20:DU:64:GLU:HA	1.99	0.62
39:BL:78:LYS:HE2	39:BL:101:PHE:HE2	1.64	0.62
32:BE:178:ARG:HG3	38:BK:72:PRO:HA	1.81	0.62
5:AF:167:ALA:HB1	5:AF:173:VAL:HG11	1.82	0.62
1:AA:4:C:H2'	1:AA:5:A:H8	1.63	0.62
1:AA:1206:G:C5	1:AA:1207:C:C5	2.88	0.62
31:CA:173:U:H5''	31:CA:197:A:O4'	2.00	0.62
1:AA:1525:G:H2'	1:AA:1526:G:C8	2.34	0.62
31:BA:939:G:H5''	37:BJ:102:ARG:CZ	2.29	0.62
34:BG:52:SER:O	34:BG:55:ALA:HB3	1.99	0.62
34:BG:101:LEU:HD23	34:BG:121:VAL:HG13	1.82	0.62
1:DA:1368:G:O6	56:DA:3487:OHX:N2	2.33	0.62
1:AA:1256:G:O2'	5:AF:82:ILE:HD11	1.99	0.62
38:CK:29:SER:HB3	38:CK:32:LYS:HG3	1.81	0.62
1:DA:2861:G:N7	56:DA:3068:OHX:N6	2.48	0.62
52:CB:55:U:H2'	52:CB:56:U:H6	1.65	0.62
21:AV:63:ASP:N	21:AV:64:GLY:HA2	2.15	0.62
25:AX:6:VAL:HG12	25:AX:56:VAL:HG22	1.81	0.62
3:DD:5:LYS:HB2	3:DD:5:LYS:NZ	2.15	0.62
1:AA:332:A:C2	1:AA:335:C:C5	2.88	0.62
30:A8:34:TRP:C	30:A8:34:TRP:CD1	2.72	0.62
1:DA:2611:U:O2'	27:D5:3:LYS:CG	2.48	0.62
1:DA:907:U:O2'	12:DP:101:ARG:NH2	2.33	0.62
31:CA:1190:G:OP1	33:CF:5:ILE:HG23	1.99	0.62
43:CP:90:LEU:CD2	43:CP:93:ARG:HE	2.13	0.62
1:AA:1278:A:O3'	13:A0:34:ILE:CD1	2.48	0.62
5:DF:21:ALA:C	5:DF:23:ASP:H	2.03	0.62
7:AH:153:LYS:HA	7:AH:153:LYS:NZ	2.15	0.62
31:CA:1184:G:O2'	31:CA:1185:G:H5'	1.99	0.62
31:BA:1330:U:O4	31:BA:1331:G:N1	2.33	0.62
30:D8:33:ASN:CG	30:D8:34:TRP:H	2.01	0.62
26:A4:39:CYS:SG	26:A4:41:PRO:HD3	2.40	0.62
11:DO:19:VAL:HG22	11:DO:20:GLY:N	2.13	0.62
12:DP:75:THR:HG21	12:DP:87:LYS:HE2	1.81	0.62
1:DA:1678:G:H21	1:DA:1989:G:N2	1.91	0.62
1:DA:1061:U:H4'	1:DA:1070:A:H1'	1.80	0.62
1:DA:857:C:H4'	22:D3:23:VAL:HG21	1.82	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:652:U:H1'	31:CA:653:A:C2	2.33	0.62
52:BD:47:U:C4	52:BD:48:C:N4	2.67	0.62
1:AA:2439:A:C5'	1:AA:2439:A:H8	2.13	0.62
54:C1:17:U:O2'	54:C1:18:G:H5'	2.00	0.62
1:DA:483:A:H5''	20:DU:49:VAL:HG13	1.81	0.62
43:CP:30:ALA:C	43:CP:32:GLU:H	2.01	0.62
31:BA:322:C:O2'	50:BW:23:ARG:HD2	1.99	0.62
18:AS:110:LYS:HG3	18:AS:111:HIS:ND1	2.15	0.62
1:AA:1473:G:O2'	1:AA:1474:C:H5'	1.99	0.62
31:BA:388:G:OP1	56:BA:1721:OHX:N6	2.33	0.62
21:DV:104:PHE:O	21:DV:105:VAL:HG12	1.99	0.62
13:D0:38:VAL:O	13:D0:42:LYS:HB2	2.00	0.62
6:AG:77:ILE:O	6:AG:81:LYS:O	2.18	0.62
31:CA:1382:C:H2'	31:CA:1383:C:H6	1.64	0.62
4:AE:177:PRO:HD2	4:AE:178:GLU:OE1	1.99	0.62
21:DV:178:GLU:O	21:DV:179:ASP:HB2	2.00	0.62
1:DA:363(B):G:O2'	1:DA:363(C):G:H5'	2.00	0.62
6:AG:18:GLU:O	6:AG:22:ARG:HG3	1.99	0.62
32:CE:188:ALA:HB1	32:CE:192:SER:HB2	1.81	0.62
15:AR:42:ILE:HD12	15:AR:42:ILE:O	2.00	0.62
31:BA:84:U:O2	31:BA:84:U:H2'	1.98	0.62
27:D5:4:HIS:CB	27:D5:5:PRO:CD	2.29	0.62
1:DA:2275:C:HO2'	12:DP:85:LYS:H	1.47	0.62
16:D1:36:ARG:NH2	17:D2:82:ARG:HH22	1.97	0.62
43:CP:84:ILE:HG23	49:CV:74:PHE:CZ	2.35	0.62
7:AH:153:LYS:HA	7:AH:153:LYS:HZ2	1.65	0.62
52:BD:25:G:H2'	52:BD:26:G:O4'	1.99	0.62
30:D8:33:ASN:O	30:D8:35:GLN:N	2.33	0.62
1:AA:99:U:OP1	1:AA:102:G:H5'	2.00	0.62
1:AA:1210:A:H4'	1:AA:1211:U:O5'	2.00	0.62
11:DO:19:VAL:HG22	11:DO:27:HIS:HB3	1.78	0.62
31:BA:1452:C:O2'	31:BA:1453:G:P	2.57	0.62
17:A2:38:LEU:HD23	17:A2:39:LEU:N	2.15	0.62
31:CA:1133:G:H2'	31:CA:1134:G:C8	2.34	0.62
23:DZ:86:SER:N	23:DZ:87:PRO:CD	2.62	0.62
1:AA:1899:G:N2	1:AA:1902:C:N4	2.46	0.62
1:AA:2789:C:H2'	1:AA:2790:A:H5''	1.80	0.62
42:CO:47:LYS:CB	42:CO:48:PRO:CD	2.76	0.62
20:DU:97:ARG:HH21	20:DU:98:VAL:HB	1.64	0.62
34:BG:4:TYR:CD1	34:BG:5:ILE:N	2.66	0.62
14:AQ:67:ARG:NH1	14:AQ:67:ARG:CB	2.62	0.62
31:CA:222:U:H2'	31:CA:223:U:C6	2.34	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:301:G:H1'	1:AA:302:C:C6	2.35	0.62
1:AA:1047:G:O2'	1:AA:1111:A:N6	2.31	0.62
12:AP:7:MET:HE1	12:AP:93:TYR:HE2	1.65	0.62
50:BW:89:ARG:NH2	50:BW:104:LEU:HD11	2.12	0.62
29:A7:43:THR:HG22	29:A7:44:PRO:O	2.00	0.62
52:CD:41:C:H2'	52:CD:42:U:C6	2.35	0.62
52:CD:43:G:H2'	52:CD:44:C:H6	1.61	0.62
1:AA:2115:G:O6	1:AA:2117:A:H3'	1.99	0.62
1:DA:603:A:H8	1:DA:604:G:H1'	1.64	0.62
33:CF:70:VAL:O	33:CF:106:VAL:HG23	2.00	0.62
2:DB:89(A):A:N7	2:DB:90:C:H1'	2.15	0.62
36:BI:19:LEU:HD21	36:BI:59:TYR:CE2	2.35	0.62
1:AA:2758:A:C4	7:AH:67:LEU:HD21	2.35	0.62
16:D1:14:HIS:HA	16:D1:32:PHE:CD2	2.34	0.62
31:BA:1225:A:OP1	43:BP:102:ARG:HB2	2.00	0.62
1:DA:988:A:C2'	1:DA:989:G:O5'	2.48	0.62
38:CK:14:ARG:O	38:CK:18:ARG:HD3	1.99	0.62
47:CT:12:SER:HB3	47:CT:20:THR:HB	1.82	0.62
1:DA:2262:U:O2'	1:DA:2263:C:H5'	2.00	0.62
1:DA:830:G:H4'	1:DA:831:G:OP2	1.99	0.62
15:AR:93:ARG:HG3	15:AR:93:ARG:HH11	1.63	0.62
30:A8:30:ARG:O	30:A8:31:HIS:HB3	2.00	0.61
3:AD:35:LYS:CB	3:AD:63:ARG:HA	2.29	0.61
31:CA:1207:G:H2'	31:CA:1208:C:H6	1.65	0.61
52:CD:17:G:O2'	52:CD:66:G:N2	2.30	0.61
1:AA:2309:A:C6	1:AA:2310:A:N7	2.68	0.61
1:AA:1496:A:H5'	1:AA:1497:U:OP1	2.00	0.61
31:BA:1024:G:H2'	31:BA:1025:U:C5	2.35	0.61
31:CA:1118:C:H1'	31:CA:1179:A:C4	2.35	0.61
21:DV:157:LEU:HB3	21:DV:161:VAL:HG21	1.82	0.61
9:AM:71:ILE:HD13	9:AM:86:PRO:HA	1.82	0.61
31:BA:792:A:N3	31:BA:794:A:N6	2.47	0.61
11:DO:112:LEU:HB2	11:DO:128:HIS:HD2	1.65	0.61
31:CA:1347:G:C8	39:CL:107:ARG:CB	2.82	0.61
21:AV:28:MET:HB2	21:AV:37:VAL:HG11	1.81	0.61
42:CO:75:HIS:HD2	42:CO:77:LEU:N	1.94	0.61
1:DA:2156:G:C6	1:DA:2157:G:C2	2.88	0.61
1:DA:525:U:O2	1:DA:525:U:H2'	1.98	0.61
9:AM:137:LYS:CE	9:AM:138:LEU:H	2.13	0.61
6:AG:17:PRO:HA	6:AG:20:ILE:HG13	1.82	0.61
43:BP:11:ARG:HG2	43:BP:12:ASN:H	1.63	0.61
17:D2:33:VAL:HG12	17:D2:59:ALA:O	2.00	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:1245:A:H2'	31:BA:1246:C:O4'	2.01	0.61
31:BA:114:U:O2'	31:BA:115:G:H5'	2.00	0.61
31:BA:589:C:C4	31:BA:590:C:H5	2.18	0.61
1:AA:359:A:H2'	1:AA:360:G:H5'	1.81	0.61
1:DA:1226:G:H5'	17:D2:85:LYS:O	2.00	0.61
1:AA:150:C:H2'	1:AA:151:C:C6	2.35	0.61
27:D5:49:CYS:SG	27:D5:50:GLY:N	2.73	0.61
33:CF:134:ILE:O	33:CF:136:GLN:N	2.33	0.61
30:A8:35:GLN:CA	30:A8:35:GLN:OE1	2.42	0.61
1:DA:2275:C:O2	12:DP:85:LYS:HG3	2.00	0.61
31:BA:1005:A:H3'	31:BA:1006:C:C5'	2.28	0.61
52:BD:28:G:H2'	52:BD:29:C:C6	2.35	0.61
40:BM:54:PHE:CZ	40:BM:55:LYS:NZ	2.64	0.61
1:AA:2135:A:HO2'	1:AA:2136:C:P	2.21	0.61
1:AA:2142:C:N3	1:AA:2149:G:N2	2.41	0.61
52:BB:21:A:C8	52:BB:46:G:C8	2.88	0.61
49:BV:44:MET:O	49:BV:47:HIS:HB2	2.00	0.61
1:AA:1081:U:H3'	1:AA:1082:U:C6	2.35	0.61
1:DA:1111:A:H5'	7:DH:3:ARG:HH11	1.64	0.61
25:DX:19:GLN:NE2	25:DX:52:HIS:CE1	2.58	0.61
52:CD:61:G:N2	52:CD:71:C:N3	2.40	0.61
48:CU:22:VAL:O	48:CU:23:LYS:CB	2.47	0.61
1:DA:1000:A:N1	1:DA:1155:A:C4	2.67	0.61
39:CL:5:TYR:HD2	39:CL:18:PHE:CE2	2.18	0.61
21:AV:133:ILE:O	21:AV:135:GLU:N	2.34	0.61
12:AP:66:ILE:HG13	12:AP:67:ARG:N	2.14	0.61
32:BE:224:GLN:O	32:BE:224:GLN:HG2	1.99	0.61
11:AO:138:LEU:CD1	11:AO:144:GLU:HG3	2.29	0.61
28:D6:34:LEU:HA	28:D6:51:GLU:OE1	2.00	0.61
31:CA:797:C:OP1	41:CN:124:LYS:HD3	2.00	0.61
1:AA:1519:G:O2'	1:AA:1520:U:H5'	2.01	0.61
1:AA:125:G:H4'	1:AA:126:A:OP2	2.00	0.61
12:AP:118:LEU:HD12	12:AP:131:ILE:HG23	1.82	0.61
42:BO:64:TYR:O	42:BO:65:GLU:HB2	2.00	0.61
35:BH:37:ARG:HA	35:BH:114:GLY:H	1.64	0.61
31:CA:8:A:N6	34:CG:209:ARG:HB2	2.15	0.61
38:CK:23:SER:HA	38:CK:63:LEU:HD23	1.82	0.61
17:D2:98:GLU:O	17:D2:99:ILE:HG22	2.00	0.61
15:AR:20:PRO:HG2	15:AR:86:ILE:O	2.00	0.61
1:DA:2602:A:H4'	1:DA:2603:G:O5'	2.00	0.61
31:CA:1311:G:N2	31:CA:1327:C:C2	2.68	0.61
12:AP:87:LYS:O	12:AP:88:GLY:C	2.38	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:CB:38:MIA:H2'	52:CB:39:A:O4'	1.99	0.61
11:DO:61:ARG:CA	11:DO:62:LEU:HD22	2.30	0.61
26:A4:37:SER:C	26:A4:39:CYS:H	2.02	0.61
6:AG:40:ASN:HD22	6:AG:91:ARG:HB2	1.66	0.61
31:BA:1348:U:N3	31:BA:1374:A:H2	1.94	0.61
50:CW:46:GLU:O	50:CW:48:LYS:N	2.32	0.61
31:CA:1003:G:C2'	31:CA:1004:A:H5'	2.30	0.61
1:DA:803:U:H2'	1:DA:804:A:H5'	1.81	0.61
5:DF:175:THR:O	5:DF:176:LEU:HB2	1.98	0.61
31:BA:394:G:C4	31:BA:395:C:C5	2.88	0.61
1:DA:329:G:O6	20:DU:19:LYS:HG2	2.00	0.61
38:BK:21:LYS:O	38:BK:65:TYR:OH	2.16	0.61
41:BN:13:GLN:HB3	41:BN:75:TYR:O	2.00	0.61
4:AE:128:SER:O	4:AE:130:GLY:N	2.33	0.61
21:DV:45:ASP:O	21:DV:49:ARG:HG2	2.00	0.61
1:AA:1266:G:O2'	1:AA:2012:G:O6	2.09	0.61
21:AV:98:MET:O	21:AV:125:LEU:HD12	2.00	0.61
17:D2:44:LYS:HG2	17:D2:45:THR:OG1	2.00	0.61
1:DA:962:G:O2'	1:DA:963:U:H5'	2.01	0.61
1:AA:270(B):A:C2'	1:AA:270(C):C:H5'	2.30	0.61
31:BA:1260:C:OP1	31:BA:1284:C:O2'	2.16	0.61
3:AD:270:ILE:HG22	3:AD:271:ILE:N	2.15	0.61
31:CA:1460:A:H2'	31:CA:1461:G:O4'	2.00	0.61
8:AK:72:LEU:HD11	8:AK:107:VAL:HG11	1.81	0.61
31:BA:1116:C:O2'	39:BL:108:VAL:HG11	2.00	0.61
1:DA:7:G:H2'	1:DA:8:A:O4'	2.00	0.61
12:AP:23:GLY:HA2	12:AP:25:ASP:HB2	1.82	0.61
1:AA:2277:G:H2'	1:AA:2278:A:O5'	2.01	0.61
1:DA:2786:U:C5'	4:DE:65:GLY:H	2.14	0.61
7:AH:89:ILE:HD11	7:AH:95:ARG:HA	1.82	0.61
31:CA:542:G:OP1	34:CG:10:ARG:NH2	2.33	0.61
52:BD:69:U:O2'	52:BD:70:C:H5'	2.00	0.61
1:AA:2600:A:H2'	1:AA:2601:C:C6	2.35	0.61
31:BA:1237:C:C5	31:BA:1336:C:C5	2.87	0.61
15:AR:105:LEU:HD23	15:AR:106:SER:N	2.15	0.61
30:D8:33:ASN:CG	30:D8:41:ILE:HD11	2.18	0.61
3:AD:44:ASN:ND2	3:AD:44:ASN:H	1.97	0.61
1:AA:1729:A:H8	1:AA:1730:U:H5	1.47	0.61
1:AA:2133:G:H1'	1:AA:2158:A:H61	1.65	0.61
16:D1:98:LEU:O	16:D1:100:VAL:N	2.33	0.61
52:BB:53:A:H2'	52:BB:54:C:C6	2.35	0.61
11:DO:59:LEU:HD23	11:DO:59:LEU:O	1.99	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:43:C:P	6:AG:67:LYS:HZ2	2.22	0.61
47:BT:67:LYS:O	47:BT:68:ARG:HB3	1.99	0.61
52:CB:8:U:H4'	52:CB:58:G:OP2	1.99	0.61
4:AE:116:VAL:HG13	4:AE:122:PHE:CD2	2.35	0.61
12:AP:53:ALA:HB1	12:AP:120:ILE:HG22	1.82	0.61
1:DA:2212:A:O2'	1:DA:2213:U:O5'	2.19	0.61
15:DR:106:SER:O	15:DR:107:ASP:CB	2.48	0.61
1:DA:34:C:HO2'	1:DA:35:G:P	2.23	0.61
1:DA:2758:A:C2	1:DA:2759:G:H1'	2.35	0.61
1:AA:495:G:H21	18:AS:61:ASN:HD21	1.48	0.61
1:AA:441:U:O2'	5:AF:46:ARG:HD2	2.00	0.61
12:AP:138:ASP:O	12:AP:139:GLU:O	2.17	0.61
21:AV:5:LEU:O	21:AV:6:LYS:HB2	2.01	0.61
20:DU:39:VAL:O	20:DU:40:GLU:CB	2.49	0.61
1:DA:1570:A:C4'	3:DD:38:LYS:HE2	2.30	0.61
31:CA:353:A:H5'	31:CA:353:A:C8	2.32	0.61
46:BS:43:LYS:CG	46:BS:48:TRP:HE3	2.11	0.61
50:BW:23:ARG:HA	50:BW:26:ASN:HD21	1.64	0.61
21:AV:30:ASN:HD22	21:AV:30:ASN:C	2.04	0.61
28:D6:34:LEU:O	28:D6:36:LEU:HG	2.00	0.61
31:BA:606:G:H1'	31:BA:632:A:H61	1.65	0.61
38:BK:25:ASP:OD2	38:BK:60:ARG:HG3	2.00	0.61
37:BJ:91:VAL:HB	37:BJ:96:GLN:HG2	1.81	0.61
1:AA:1171:G:O6	1:AA:1174:A:N6	2.32	0.61
21:DV:62:PRO:C	21:DV:64:GLY:H	2.03	0.61
1:DA:864:G:H1'	1:DA:914:C:H42	1.65	0.61
13:D0:88:ARG:HD2	13:D0:89:ASP:OD2	2.01	0.61
17:A2:18:LEU:HD22	17:A2:19:LYS:N	2.16	0.61
30:A8:6:THR:HG22	30:A8:60:LEU:O	2.00	0.61
2:AB:48:A:H4'	14:AQ:95:HIS:CD2	2.35	0.61
14:DQ:5:THR:OG1	14:DQ:8:GLU:HG3	1.99	0.61
33:BF:164:ARG:NH1	33:BF:166:GLU:OE1	2.34	0.61
1:DA:1658:C:H2'	1:DA:1659:U:C6	2.36	0.61
33:BF:3:ASN:N	33:BF:3:ASN:OD1	2.33	0.61
16:A1:47:TYR:CD2	16:A1:47:TYR:C	2.73	0.61
9:AM:82:LEU:HD12	9:AM:83:LYS:H	1.66	0.61
1:AA:2367:G:H2'	1:AA:2368:C:H6	1.65	0.61
11:AO:19:VAL:HG22	11:AO:20:GLY:H	1.65	0.61
5:DF:69:HIS:CD2	5:DF:69:HIS:N	2.62	0.61
52:CD:24:G:H2'	52:CD:25:G:H8	1.66	0.61
1:AA:1075:C:H2'	1:AA:1076:C:O4'	2.00	0.61
1:DA:2415:G:O3'	11:DO:66:GLY:HA3	2.00	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
9:AM:133:GLN:O	9:AM:134:ARG:HG3	1.99	0.61
31:BA:180:U:H2'	31:BA:181:G:C8	2.36	0.61
1:AA:2134:A:C5	1:AA:2158:A:H2	2.18	0.61
40:CM:6:ILE:O	40:CM:6:ILE:HD12	1.99	0.61
31:BA:1347:G:H22	31:BA:1374:A:P	2.23	0.61
47:BT:65:ILE:HG21	47:BT:69:LYS:HE3	1.80	0.61
4:AE:116:VAL:HG13	4:AE:122:PHE:CG	2.35	0.61
12:AP:78:PRO:O	12:AP:79:LEU:HG	2.00	0.61
5:DF:53:THR:HG22	5:DF:56:GLU:OE2	2.01	0.61
31:BA:439:A:H2'	31:BA:440:A:H5'	1.82	0.61
31:BA:750:G:C2	31:BA:751:U:C6	2.87	0.61
1:AA:142:G:H1'	19:AT:37:THR:CG2	2.30	0.61
22:A3:38:VAL:HB	22:A3:59:LEU:HD12	1.82	0.61
43:CP:14:ARG:NH2	43:CP:16:ASP:OD1	2.33	0.61
31:BA:363:A:OP1	42:BO:33:ARG:HG3	2.01	0.61
18:AS:12:ILE:HD13	18:AS:17:VAL:HB	1.82	0.61
6:AG:64:THR:HG22	6:AG:66:GLN:N	2.16	0.61
47:CT:35:VAL:O	47:CT:35:VAL:HG12	1.99	0.61
5:AF:129:PHE:O	5:AF:130:ALA:HB3	2.01	0.61
1:AA:106:C:H2'	1:AA:107:C:H6	1.65	0.61
31:CA:62:U:HO2'	31:CA:379:C:C2'	2.11	0.61
1:AA:405:U:O2	1:AA:405:U:H2'	2.00	0.61
5:DF:145:GLU:O	5:DF:146:ALA:HB2	2.01	0.61
30:A8:17:THR:O	30:A8:19:SER:N	2.33	0.61
31:CA:1404:C:H2'	31:CA:1405:G:C8	2.35	0.61
21:AV:75:ASN:O	21:AV:84:GLU:HG2	2.01	0.61
1:AA:2035:G:H4'	1:AA:2036:C:OP2	1.99	0.61
31:BA:615:C:C2	31:BA:616:G:C8	2.89	0.61
34:CG:8:VAL:HG21	34:CG:115:ARG:NH2	2.15	0.61
11:AO:38:GLN:O	11:AO:41:ARG:HB2	2.00	0.61
31:CA:1374:A:C2'	31:CA:1375:A:H5'	2.26	0.61
16:A1:69:CYS:SG	16:A1:79:PHE:HD1	2.23	0.61
6:AG:67:LYS:NZ	26:A4:6:HIS:NE2	2.48	0.61
1:AA:2688:U:H1'	1:AA:2721:A:N6	2.15	0.61
1:AA:1803:A:H4'	3:AD:259:THR:CG2	2.29	0.61
50:CW:8:ARG:NH1	50:CW:8:ARG:HG3	2.11	0.61
1:DA:2310:A:N3	1:DA:2310:A:C5'	2.64	0.61
35:BH:45:PHE:CE2	35:BH:47:LYS:HD2	2.36	0.61
1:DA:2170:A:H5''	1:DA:2171:A:OP2	2.00	0.61
1:AA:745:G:OP2	4:AE:133:LYS:HE2	2.00	0.61
31:CA:266:G:H1	31:CA:270:A:N6	1.98	0.61
31:BA:262:A:H5''	31:BA:263:A:OP2	2.00	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
34:CG:121:VAL:O	34:CG:134:ASP:HA	2.00	0.61
32:BE:83:MET:C	32:BE:85:ALA:H	2.03	0.61
1:AA:1163:G:C2	1:AA:1164:G:C8	2.89	0.61
1:AA:1761:C:H5''	1:AA:1762:A:OP2	2.01	0.61
10:DN:14:THR:HG21	10:DN:86:ILE:HD13	1.82	0.61
5:DF:57:VAL:HG12	5:DF:58:ALA:N	2.15	0.61
1:DA:381:G:C4	1:DA:394:A:C2	2.89	0.61
44:BQ:15:LYS:HG2	44:BQ:16:PHE:CE2	2.35	0.61
23:AZ:40:ARG:NH2	23:AZ:42:GLN:HG2	2.15	0.61
31:CA:1320:C:H2'	31:CA:1321:C:C6	2.36	0.61
31:CA:951:G:OP2	43:CP:102:ARG:NH2	2.33	0.61
33:CF:5:ILE:CD1	33:CF:5:ILE:H	2.14	0.61
1:AA:1533:C:H5''	1:AA:1534:G:OP2	2.00	0.61
1:AA:2309:A:H2'	1:AA:2310:A:O4'	1.99	0.61
5:DF:28:ILE:HA	5:DF:112:MET:HE2	1.82	0.61
1:AA:879:G:C8	1:AA:879:G:OP2	2.54	0.61
32:CE:74:LYS:NZ	32:CE:205:ASP:O	2.32	0.61
1:DA:2776:A:H4'	1:DA:2777:G:O5'	2.00	0.61
16:D1:76:TYR:OH	16:D1:93:LYS:HE2	2.01	0.61
1:DA:1159:U:O2'	1:DA:1160:G:H5'	2.00	0.61
12:AP:54:MET:O	12:AP:56:ARG:N	2.32	0.61
31:BA:827:U:C5	31:BA:870:U:C4	2.88	0.61
31:CA:537:G:H5''	42:CO:113:ARG:NH1	2.16	0.61
42:CO:24:VAL:C	42:CO:26:ALA:N	2.53	0.61
1:DA:319:C:O2'	1:DA:320:A:H5'	2.01	0.61
4:AE:60:ASN:OD1	4:AE:62:PRO:HD2	2.00	0.61
1:DA:1483:G:C2	1:DA:1484:G:C8	2.89	0.61
31:BA:438:G:OP1	34:BG:125:HIS:CE1	2.50	0.61
31:BA:611:A:N6	31:BA:629:G:H1	1.96	0.61
49:BV:63:THR:HG23	49:BV:65:ASN:ND2	2.15	0.61
20:DU:17:SER:CB	20:DU:71:LYS:HD2	2.29	0.61
1:DA:2439:A:H5'	1:DA:2439:A:H8	1.66	0.61
50:CW:73:HIS:O	50:CW:74:LYS:HB2	2.01	0.61
1:AA:998:C:H2'	1:AA:999:U:O5'	1.99	0.61
46:BS:43:LYS:HG2	46:BS:48:TRP:CE3	2.35	0.61
46:CS:34:GLU:OE1	46:CS:55:ARG:NH1	2.33	0.61
20:AU:20:TYR:CE1	20:AU:42:VAL:HA	2.36	0.61
1:AA:389:G:H1	11:AO:71:VAL:HG12	1.66	0.61
1:DA:536:A:H2'	1:DA:537:C:O4'	2.00	0.61
31:BA:177:C:P	50:BW:65:LYS:NZ	2.74	0.61
34:BG:25:ARG:O	34:BG:27:TYR:N	2.34	0.61
1:AA:1168:G:C2	1:AA:1182:A:C2	2.89	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1967:C:H2'	1:DA:1968:G:H5'	1.82	0.61
10:DN:20:MET:HE3	10:DN:44:LYS:HE3	1.83	0.61
1:AA:649:G:O6	56:AA:3447:OHX:N1	2.33	0.61
31:CA:1524:C:H2'	31:CA:1525:G:C8	2.35	0.61
1:AA:1299:G:H5''	1:AA:1300:U:OP1	2.00	0.61
1:DA:638:G:C5	1:DA:651:G:C2	2.89	0.61
33:CF:152:ILE:HG22	33:CF:167:TRP:HB2	1.83	0.61
46:BS:6:LEU:N	46:BS:6:LEU:HD12	2.16	0.61
53:CC:33:C:O2	53:CC:33:C:H2'	2.00	0.61
15:DR:78:LEU:HD23	15:DR:79:HIS:CD2	2.36	0.61
1:AA:1259:G:O2'	1:AA:1260:G:H5'	2.01	0.61
40:CM:50:ILE:HG12	44:CQ:41:ARG:HD2	1.83	0.61
43:CP:4:ILE:HG23	43:CP:5:ALA:H	1.66	0.61
40:CM:47:PHE:CZ	44:CQ:37:PHE:CE2	2.86	0.61
3:DD:35:LYS:CE	3:DD:104:TYR:CD1	2.81	0.61
31:BA:1160:G:N1	31:BA:1177:G:C2	2.68	0.61
30:D8:33:ASN:CA	30:D8:36:LYS:HD2	2.25	0.61
9:AM:127:ASP:O	9:AM:128:HIS:HB3	1.99	0.61
11:DO:112:LEU:CB	11:DO:128:HIS:HD2	2.13	0.61
11:DO:80:TYR:CD1	11:DO:111:ARG:CB	2.83	0.61
4:AE:116:VAL:H	4:AE:157:ALA:HB2	1.66	0.61
1:DA:2582:G:H2'	1:DA:2583:G:H5'	1.81	0.61
35:CH:141:GLN:HA	35:CH:143:ARG:HH21	1.64	0.61
39:CL:4:TYR:HB2	39:CL:19:LEU:O	1.99	0.61
20:AU:47:LYS:HG2	20:AU:60:PHE:CE1	2.35	0.61
32:CE:91:PRO:HG2	32:CE:155:LEU:HB2	1.83	0.61
31:CA:1217:C:H2'	31:CA:1218:C:O4'	2.01	0.61
31:CA:1507:A:C2	31:CA:1508:G:C4	2.89	0.61
1:DA:2134:A:C2	1:DA:2159:G:H1'	2.36	0.61
1:AA:286:C:O2	1:AA:356:G:C2	2.53	0.61
1:AA:674:G:H1'	5:AF:74:ARG:HD3	1.82	0.61
42:BO:90:VAL:O	42:BO:91:LYS:CB	2.49	0.61
5:DF:54:ARG:HG3	5:DF:54:ARG:HH11	1.64	0.61
3:AD:25:THR:O	3:AD:26:LYS:O	2.19	0.61
14:AQ:111:GLU:O	14:AQ:112:PHE:HD1	1.83	0.61
31:CA:48:C:OP1	56:CA:1737:OHX:N4	2.33	0.61
31:BA:192:U:O4'	50:BW:103:GLY:HA2	2.00	0.61
4:AE:120:TRP:CD1	4:AE:155:LYS:HB3	2.36	0.61
1:AA:1593:G:H2'	1:AA:1594:G:H8	1.66	0.61
31:BA:960:U:O2	31:BA:1225:A:N7	2.34	0.61
2:AB:48:A:H4'	14:AQ:95:HIS:HD2	1.65	0.61
42:CO:58:VAL:O	42:CO:65:GLU:HA	2.01	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:2694:G:C5	1:AA:2695:C:C5	2.89	0.61
31:BA:1288:A:H2'	31:BA:1289:A:H8	1.65	0.61
1:DA:553:U:O2'	1:DA:554:U:H5'	2.00	0.61
1:AA:919:G:N2	1:AA:2269:A:OP2	2.34	0.61
23:DZ:85:LEU:HD12	23:DZ:85:LEU:O	2.01	0.61
31:BA:601:C:H2'	31:BA:602:A:H8	1.66	0.61
10:AN:101:PRO:HB3	10:AN:122:LEU:HD12	1.81	0.61
14:AQ:24:LEU:HD11	14:AQ:41:ASP:HB2	1.82	0.61
15:DR:134:GLU:O	15:DR:136:GLN:N	2.34	0.61
40:CM:42:THR:HG23	40:CM:67:THR:O	2.01	0.61
1:DA:901:A:H2'	1:DA:901:A:N3	2.16	0.61
31:CA:1190:G:N1	56:CA:1762:OHX:N3	2.48	0.61
31:CA:973:G:H3'	31:CA:974:A:H5''	1.82	0.61
40:CM:54:PHE:CE1	40:CM:55:LYS:NZ	2.64	0.61
30:D8:33:ASN:OD1	30:D8:34:TRP:N	2.30	0.61
16:D1:65:ILE:O	16:D1:68:ALA:N	2.34	0.61
1:AA:676:A:N1	1:AA:802:A:N1	2.48	0.61
15:DR:106:SER:O	15:DR:107:ASP:HB3	2.01	0.61
34:BG:108:LEU:HD11	34:BG:174:LEU:HD22	1.83	0.61
1:AA:540:G:C8	1:AA:540:G:H5'	2.30	0.61
31:CA:540:G:H2'	31:CA:541:G:O4'	2.01	0.61
31:BA:397:A:N6	31:BA:548:G:C5	2.68	0.61
1:AA:654(S):G:H4'	1:AA:654(T):A:OP1	1.99	0.61
5:AF:40:GLN:NE2	5:AF:182:ASN:HB2	2.15	0.61
31:CA:485:G:O2'	31:CA:486:U:P	2.58	0.61
21:AV:69:THR:HG22	21:AV:90:VAL:HA	1.83	0.61
32:CE:172:ILE:HD12	32:CE:172:ILE:N	2.15	0.61
38:BK:10:LEU:HD13	38:BK:83:ILE:HD11	1.83	0.61
31:CA:585:G:O6	56:CA:1741:OHX:N6	2.34	0.61
1:DA:654(D):G:H1	1:DA:654(Q):C:N4	1.99	0.61
1:DA:405:U:H2'	1:DA:406:G:OP1	2.00	0.61
1:AA:1183:G:N7	56:AA:3412:OHX:N6	2.48	0.61
42:CO:51:ALA:O	42:CO:52:LEU:HD23	2.00	0.61
40:CM:79:ARG:O	40:CM:83:GLU:HB2	2.00	0.61
31:CA:67:C:H2'	31:CA:68:G:C8	2.36	0.61
20:AU:34:LYS:HE2	20:AU:34:LYS:O	2.01	0.61
31:CA:1191:A:H8	31:CA:1191:A:OP2	1.84	0.61
31:CA:137:C:H42	31:CA:226:G:H1	1.48	0.61
47:CT:56:VAL:HG21	47:CT:81:ARG:HD3	1.82	0.61
1:DA:1754:C:OP1	15:DR:96:ARG:NH1	2.33	0.61
11:AO:66:GLY:HA2	11:AO:68:GLN:NE2	2.16	0.61
3:AD:35:LYS:CD	3:AD:63:ARG:HB3	2.30	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1162:C:N4	31:CA:1174:G:H1	1.99	0.61
31:BA:942:G:N2	31:BA:943:U:H1'	2.15	0.61
1:AA:654(P):G:H2'	1:AA:654(Q):C:C6	2.36	0.61
37:CJ:115:ARG:HB3	37:CJ:118:VAL:HG13	1.82	0.61
1:AA:1729:A:C8	1:AA:1730:U:H5	2.19	0.61
11:DO:147:LEU:O	11:DO:148:LEU:HD23	2.01	0.61
31:BA:201:C:N4	31:BA:216:G:N1	2.38	0.61
1:DA:205:G:C2'	1:DA:206:U:OP2	2.48	0.61
6:DG:67:LYS:H	26:D4:6:HIS:HD2	1.48	0.61
1:DA:2311:A:C2	6:DG:44:GLY:HA3	2.35	0.61
54:C1:11:U:O2'	54:C1:12:A:C4	2.41	0.61
5:DF:178:PRO:HB3	5:DF:198:ALA:HB1	1.82	0.61
33:CF:181:ASN:ND2	33:CF:204:LEU:HB2	2.16	0.61
35:CH:41:VAL:HG11	35:CH:113:ALA:HB2	1.83	0.61
21:DV:37:VAL:HG23	21:DV:38:TYR:N	2.15	0.61
32:BE:80:ILE:HD11	32:BE:208:ILE:HG12	1.82	0.61
50:CW:71:THR:HG22	50:CW:72:LEU:N	2.16	0.61
1:AA:2729:G:H1'	4:AE:187:ALA:HB2	1.83	0.61
38:BK:63:LEU:HB3	38:BK:65:TYR:CE1	2.36	0.61
1:AA:1430:C:H2'	1:AA:1431:U:H6	1.65	0.61
52:BB:81:C:H6	52:BB:81:C:OP2	1.82	0.61
1:DA:2709:G:O2'	1:DA:2710:C:H5'	2.00	0.61
48:CU:29:PHE:HD1	48:CU:39:VAL:HG12	1.66	0.61
1:AA:2335:A:N7	1:AA:2337:G:C5	2.69	0.61
33:CF:72:LYS:HZ3	33:CF:74:GLY:HA3	1.64	0.61
21:DV:74:VAL:HA	21:DV:86:VAL:HG22	1.83	0.61
32:CE:17:PHE:HE2	32:CE:44:LEU:HA	1.65	0.61
31:CA:545:C:H2'	31:CA:546:G:H5'	1.83	0.61
3:AD:182:LEU:O	3:AD:271:ILE:HG13	2.00	0.61
42:CO:11:VAL:HG11	47:CT:36:ILE:HG21	1.83	0.61
3:DD:9:TYR:CD2	3:DD:10:THR:HG22	2.36	0.61
31:BA:1083:U:H5	31:BA:1084:G:C6	2.19	0.61
13:A0:38:VAL:HB	13:A0:39:PRO:HD3	1.83	0.61
26:A4:50:VAL:O	26:A4:50:VAL:HG12	2.00	0.61
6:AG:108:ASN:HA	26:A4:38:LYS:HB2	1.82	0.61
4:DE:68:ALA:C	4:DE:70:ALA:H	2.04	0.60
31:CA:963:G:N2	40:CM:55:LYS:HG2	2.16	0.60
52:CD:22:A:H2'	52:CD:22:A:N3	2.16	0.60
31:BA:1176:A:H3'	31:BA:1177:G:H5''	1.82	0.60
11:DO:63:PRO:HA	30:D8:13:ARG:HA	1.82	0.60
3:AD:44:ASN:ND2	3:AD:44:ASN:N	2.48	0.60
1:DA:2625:G:H2'	1:DA:2626:C:C6	2.36	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:BB:50:U:H2'	52:BB:51:C:O4'	2.01	0.60
31:CA:827:U:H5''	31:CA:828:A:OP2	2.01	0.60
9:AM:1:MET:HE1	16:A1:95:LEU:CD2	2.31	0.60
22:D3:47:PRO:HG3	22:D3:53:MET:HB2	1.83	0.60
52:CB:17:G:C6	52:CB:67:A:C6	2.89	0.60
1:AA:1049:C:H2'	1:AA:1050:A:H5''	1.82	0.60
21:DV:115:GLY:HA2	21:DV:177:PRO:CG	2.30	0.60
12:DP:78:PRO:HG2	12:DP:81:VAL:HG11	1.82	0.60
50:CW:100:ILE:HD12	50:CW:100:ILE:N	2.15	0.60
5:DF:53:THR:HG22	5:DF:56:GLU:HG3	1.82	0.60
6:DG:44:GLY:O	6:DG:46:ALA:N	2.33	0.60
32:CE:67:THR:HG21	32:CE:155:LEU:HG	1.82	0.60
52:CD:36:U:H2'	52:CD:37:A:O4'	2.00	0.60
1:DA:860:U:C2	1:DA:2268:A:C8	2.88	0.60
49:CV:78:ARG:HD3	49:CV:78:ARG:N	2.15	0.60
1:DA:2329:G:H2'	1:DA:2330:G:C8	2.35	0.60
42:BO:11:VAL:HG13	47:BT:29:HIS:HD2	1.66	0.60
1:DA:2309:A:O5'	1:DA:2309:A:H8	1.83	0.60
50:CW:76:ALA:O	50:CW:80:ARG:HG3	2.01	0.60
10:DN:117:LEU:N	10:DN:117:LEU:CD1	2.63	0.60
27:A5:22:HIS:N	27:A5:22:HIS:CD2	2.68	0.60
44:CQ:45:ARG:O	44:CQ:49:HIS:HD2	1.83	0.60
18:DS:88:ARG:NH1	18:DS:94:ASP:OD1	2.33	0.60
1:DA:1658:C:H2'	1:DA:1659:U:H6	1.65	0.60
16:A1:48:ALA:O	16:A1:52:ARG:HB3	2.00	0.60
1:DA:1085:A:H4'	1:DA:1086:A:OP1	2.01	0.60
1:AA:2061:G:OP2	1:AA:2502:G:H5'	2.01	0.60
1:DA:654(M):C:H3'	1:DA:654(N):G:C8	2.36	0.60
1:AA:2818:G:O2'	1:AA:2819:G:H5'	2.01	0.60
1:DA:2244:U:O2'	1:DA:2245:U:H5'	2.01	0.60
20:DU:89:PHE:CD1	20:DU:90:LEU:HG	2.27	0.60
3:AD:35:LYS:HG2	3:AD:64:ILE:H	1.61	0.60
1:AA:1278:A:O2'	13:A0:34:ILE:HD11	2.01	0.60
1:AA:863:A:O2'	1:AA:864:G:H5'	2.01	0.60
34:CG:4:TYR:HE2	34:CG:11:LEU:HD11	1.65	0.60
34:CG:62:GLN:HE22	34:CG:65:ARG:HE	1.49	0.60
32:CE:74:LYS:HD2	32:CE:166:ASP:HB2	1.83	0.60
14:DQ:14:VAL:O	14:DQ:18:ILE:HG13	2.01	0.60
1:AA:1854:A:H62	1:AA:1888:G:H8	1.47	0.60
42:CO:59:ARG:NH1	42:CO:63:GLY:HA2	2.12	0.60
52:BD:49:A:H2'	52:BD:50:U:O5'	2.01	0.60
8:AK:6:LEU:O	8:AK:7:GLU:HB3	2.02	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1392:G:N2	31:CA:1502:A:C8	2.65	0.60
31:BA:1213:A:C5	31:BA:1215:G:C4	2.89	0.60
1:DA:1210:A:H5''	1:DA:1211:U:H3'	1.83	0.60
1:DA:2320:A:N6	1:DA:2333:A:H2'	2.16	0.60
1:AA:273(F):C:H3'	1:AA:274:G:C5'	2.30	0.60
5:DF:39:TRP:HD1	5:DF:99:TYR:CE2	2.19	0.60
33:BF:109:PRO:HB3	33:BF:115:LEU:HD13	1.83	0.60
12:DP:35:VAL:HG22	12:DP:102:VAL:HG22	1.81	0.60
41:BN:34:ASP:HB2	41:BN:35:PRO:HD2	1.83	0.60
33:CF:152:ILE:HG22	33:CF:167:TRP:HA	1.82	0.60
33:BF:62:ASP:HA	33:BF:97:LYS:HD2	1.82	0.60
31:BA:56:U:OP2	56:BA:1796:OHX:N2	2.34	0.60
1:AA:986:C:C2'	1:AA:987:G:H5'	2.30	0.60
4:DE:89:ASP:O	4:DE:90:THR:HB	2.00	0.60
4:AE:36:ARG:NH1	4:AE:85:ASN:OD1	2.35	0.60
1:AA:1695:G:H2'	1:AA:1696:G:O4'	2.01	0.60
31:BA:1122:U:O4	31:BA:1123:A:N6	2.33	0.60
1:AA:2537:U:H2'	1:AA:2538:C:C6	2.36	0.60
19:AT:49:VAL:HG13	19:AT:50:LYS:N	2.16	0.60
31:BA:927:G:OP2	31:BA:927:G:H4'	2.01	0.60
41:CN:34:ASP:HB2	41:CN:35:PRO:HD2	1.82	0.60
31:CA:491:G:C2'	31:CA:492:G:H5'	2.31	0.60
41:BN:63:LEU:HD12	41:BN:63:LEU:H	1.66	0.60
11:AO:84:ASN:HB3	11:AO:117:GLU:O	2.01	0.60
1:DA:2788:C:O2'	1:DA:2809:A:N3	2.34	0.60
9:DM:127:ASP:O	9:DM:128:HIS:HB3	2.01	0.60
1:AA:883:G:C6	1:AA:884:C:O2	2.54	0.60
52:BD:39:A:H2'	52:BD:40:U:O4'	2.00	0.60
30:D8:33:ASN:HA	30:D8:36:LYS:CE	2.30	0.60
1:DA:2864:G:OP1	15:DR:119:LYS:HD3	2.01	0.60
11:DO:85:LEU:HG	11:DO:120:ALA:HA	1.83	0.60
1:DA:1022:G:H22	1:DA:1142(A):A:H2	1.49	0.60
31:BA:1132:C:H2'	31:BA:1133:G:H8	1.65	0.60
35:BH:126:ARG:NH1	35:BH:126:ARG:HG3	2.17	0.60
31:BA:88:C:O2	31:BA:88:C:H2'	1.99	0.60
52:CB:28:G:H2'	52:CB:29:C:H5'	1.82	0.60
31:CA:362:G:O2'	42:CO:33:ARG:NH2	2.34	0.60
34:BG:8:VAL:HG21	34:BG:115:ARG:CZ	2.31	0.60
52:BD:48:C:OP2	52:BD:48:C:H6	1.85	0.60
31:CA:222:U:H2'	31:CA:223:U:H6	1.66	0.60
32:BE:185:ILE:CG2	32:BE:199:TYR:HB2	2.30	0.60
1:AA:274:G:OP1	1:AA:274:G:C8	2.54	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
26:A4:14:ILE:CG2	26:A4:21:VAL:HB	2.31	0.60
31:BA:983:A:H1'	31:BA:1049:U:O2	2.02	0.60
20:DU:8:LYS:O	20:DU:27:VAL:HG21	2.02	0.60
1:DA:2016:U:H1'	27:D5:6:VAL:CG1	2.31	0.60
5:DF:38:ARG:HD3	5:DF:99:TYR:OH	2.00	0.60
6:DG:145:THR:O	6:DG:146:TYR:HB3	2.01	0.60
18:AS:79:GLY:HA3	18:AS:100:THR:HG22	1.82	0.60
1:AA:1240:U:O2'	1:AA:1241:A:H5'	2.01	0.60
1:AA:1174:A:N7	1:AA:1178:C:N4	2.48	0.60
1:AA:2884:U:H2'	1:AA:2885:C:H5'	1.83	0.60
7:AH:77:LYS:HE2	7:AH:138:LYS:HE3	1.84	0.60
31:BA:1077:G:N2	31:BA:1080:A:OP2	2.33	0.60
1:AA:2523:G:H2'	1:AA:2524:G:H5'	1.83	0.60
1:DA:2191:G:H2'	1:DA:2192:G:O4'	2.01	0.60
1:DA:382:G:N7	56:DA:3255:OHX:N1	2.50	0.60
1:DA:1871:A:H2'	1:DA:1872:A:C8	2.36	0.60
20:DU:30:VAL:HG22	20:DU:37:VAL:HG12	1.84	0.60
1:AA:2870:C:H5''	13:A0:65:LEU:HD21	1.83	0.60
18:AS:92:ARG:NH1	18:AS:94:ASP:OD2	2.33	0.60
39:CL:29:ASN:O	39:CL:29:ASN:ND2	2.33	0.60
39:BL:125:TYR:HD2	39:BL:126:SER:H	1.47	0.60
1:AA:2284:C:H41	28:A6:25:LYS:NZ	2.00	0.60
1:AA:2274:A:C5	1:AA:2276:G:C8	2.90	0.60
31:CA:1330:U:O4	31:CA:1331:G:C2	2.54	0.60
31:CA:977:A:H1'	31:CA:981:U:H3	1.67	0.60
5:DF:25:PRO:HG2	5:DF:26:ALA:H	1.65	0.60
9:AM:133:GLN:N	9:AM:133:GLN:HE21	1.98	0.60
1:AA:1931:U:O2	1:AA:1931:U:O4'	2.18	0.60
34:CG:139:ARG:NH1	34:CG:139:ARG:HG3	1.98	0.60
1:DA:1064:C:C4	1:DA:1065:U:C4	2.90	0.60
16:A1:92:ARG:CZ	17:A2:11:GLN:O	2.49	0.60
6:AG:97:ASP:O	6:AG:101:ILE:HG23	2.02	0.60
1:DA:2468:G:C6	1:DA:2481:G:C2	2.89	0.60
1:DA:2475:C:H5'	1:DA:2476:A:OP2	2.00	0.60
35:CH:139:LEU:O	35:CH:141:GLN:N	2.34	0.60
1:AA:155:C:C5'	1:AA:155:C:H6	2.14	0.60
42:CO:27:LEU:HB2	42:CO:33:ARG:HB2	1.84	0.60
1:DA:2311:A:N1	6:DG:44:GLY:HA3	2.16	0.60
5:DF:80:ALA:O	5:DF:83:PHE:HB2	2.01	0.60
34:BG:8:VAL:HG21	34:BG:115:ARG:NH2	2.16	0.60
52:BB:23:A:C2'	52:BB:24:G:H5''	2.29	0.60
31:CA:244:U:H5'	31:CA:244:U:H6	1.67	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:AP:32:TYR:CE1	12:AP:133:ARG:HG3	2.33	0.60
13:A0:41:ALA:C	13:A0:43:GLU:N	2.55	0.60
37:BJ:27:ILE:HG12	37:BJ:43:PHE:CD2	2.35	0.60
21:AV:30:ASN:ND2	21:AV:33:LEU:H	1.99	0.60
33:CF:47:LEU:HD23	33:CF:52:LEU:HD13	1.83	0.60
33:CF:18:TRP:HE3	33:CF:18:TRP:H	1.49	0.60
12:AP:35:VAL:HG12	12:AP:130:LYS:HB3	1.83	0.60
52:BD:1:G:C2	52:BD:82:A:C2	2.89	0.60
37:BJ:58:PRO:O	37:BJ:60:LYS:N	2.33	0.60
1:DA:1252:G:O4'	16:D1:33:ARG:HD3	2.02	0.60
1:AA:1167:U:H2'	1:AA:1168:G:C8	2.37	0.60
1:DA:1085:A:C4'	1:DA:1086:A:OP1	2.50	0.60
16:A1:28:ARG:HD3	16:A1:38:THR:OG1	2.01	0.60
31:CA:54:C:C4	31:CA:352:C:C5	2.89	0.60
19:DT:30:VAL:HG21	19:DT:39:ILE:HD11	1.83	0.60
32:CE:32:ILE:HD12	32:CE:33:TYR:H	1.66	0.60
32:CE:153:ARG:HG2	32:CE:153:ARG:O	2.02	0.60
1:AA:600:G:N2	1:AA:605:C:O3'	2.35	0.60
16:D1:59:ARG:O	16:D1:63:VAL:HG23	2.01	0.60
31:BA:433:C:H2'	31:BA:434:U:C6	2.36	0.60
9:DM:56:ASN:CB	9:DM:125:GLY:O	2.36	0.60
11:AO:63:PRO:HB3	30:A8:12:LYS:O	2.00	0.60
52:CD:51:C:O5'	52:CD:51:C:H6	1.85	0.60
34:CG:26:CYS:HA	34:CG:31:CYS:HB2	1.84	0.60
52:BD:29:C:H2'	52:BD:30:A:H5'	1.84	0.60
31:BA:1118:C:H1'	31:BA:1179:A:C4	2.37	0.60
1:AA:2600:A:H2'	1:AA:2601:C:H6	1.67	0.60
1:DA:2418:A:H2'	1:DA:2419:U:H6	1.67	0.60
11:DO:86:LYS:HB3	11:DO:117:GLU:O	2.01	0.60
9:DM:39:ARG:C	9:DM:41:ASP:H	2.04	0.60
2:AB:7:G:H8	2:AB:7:G:C5'	2.14	0.60
1:DA:1144:G:C2	1:DA:1145:C:C2	2.89	0.60
7:DH:6:ARG:HB2	7:DH:66:GLY:HA2	1.84	0.60
4:AE:14:ILE:O	4:AE:15:PHE:HB2	2.01	0.60
1:DA:1728:G:H8	1:DA:1731:G:H1	1.46	0.60
42:CO:83:VAL:HG12	42:CO:84:LEU:N	2.10	0.60
2:DB:43:C:OP1	26:D4:6:HIS:CE1	2.43	0.60
52:BD:49:A:H1'	52:BD:52:G:N2	2.15	0.60
24:DW:6:VAL:HG23	24:DW:7:ARG:N	2.16	0.60
1:DA:71:A:C8	1:DA:71:A:H5'	2.37	0.60
21:AV:44:PHE:CZ	21:AV:86:VAL:HG11	2.36	0.60
21:DV:40:ASP:HB3	21:DV:43:GLU:HG3	1.83	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:2308:G:C2'	1:DA:2309:A:OP1	2.49	0.60
1:AA:91:A:C4	1:AA:92:G:C8	2.89	0.60
22:D3:51:VAL:C	22:D3:62:LEU:HD12	2.22	0.60
1:AA:2475:C:H3'	1:AA:2476:A:H5''	1.83	0.60
21:DV:44:PHE:O	21:DV:44:PHE:HD1	1.83	0.60
31:BA:49:U:O2'	31:BA:50:A:H2'	2.02	0.60
47:CT:22:LEU:HD11	47:CT:39:SER:HB2	1.82	0.60
1:AA:517:C:OP1	27:A5:16:ARG:NH2	2.35	0.60
21:AV:4:ARG:HA	21:AV:58:VAL:HG22	1.83	0.60
38:BK:88:LYS:HB3	38:BK:89:PRO:HD2	1.83	0.60
33:BF:8:ILE:C	33:BF:10:PHE:H	2.05	0.60
4:AE:120:TRP:CE3	4:AE:155:LYS:HD3	2.36	0.60
2:AB:25:A:C2'	2:AB:26:A:H5'	2.31	0.60
1:AA:2769:C:O2	1:AA:2769:C:H2'	2.00	0.60
1:AA:469:G:O6	29:A7:37:LYS:HE2	2.01	0.60
17:A2:1:MET:CE	17:A2:43:GLU:HG2	2.31	0.60
38:CK:56:LYS:O	38:CK:58:TYR:HD1	1.84	0.60
2:DB:24:G:OP2	2:DB:24:G:H8	1.84	0.60
1:AA:1880:C:O2'	1:AA:1881:C:H5'	2.01	0.60
14:DQ:94:TYR:O	14:DQ:94:TYR:CD2	2.55	0.60
21:AV:117:LEU:HD22	21:AV:118:GLN:N	2.16	0.60
30:A8:35:GLN:O	30:A8:36:LYS:CB	2.50	0.60
1:DA:2630:G:O4'	1:DA:2630:G:OP1	2.20	0.60
1:DA:2150:U:H2'	1:DA:2151:G:H8	1.64	0.60
1:DA:947:G:O6	56:DA:3399:OHX:N3	2.35	0.60
31:CA:1056:U:H5'	33:CF:163:ALA:CB	2.29	0.60
3:DD:35:LYS:HG2	3:DD:64:ILE:CA	2.31	0.60
3:DD:85:ASP:HB2	3:DD:92:ILE:HD13	1.83	0.60
1:AA:890:A:C8	1:AA:892:G:C8	2.85	0.60
31:CA:631:G:H1'	31:CA:632:A:OP1	2.01	0.60
37:BJ:79:ARG:NH1	37:BJ:80:VAL:O	2.35	0.60
31:CA:1251:A:O2'	31:CA:1252:A:H5'	2.02	0.60
8:AK:131:LYS:HA	8:AK:135:GLU:HB3	1.83	0.60
50:BW:53:LEU:HD12	50:BW:102:GLY:HA3	1.83	0.60
31:BA:1133:G:H2'	31:BA:1134:G:O4'	2.01	0.60
52:CB:17:G:C6	52:CB:67:A:N6	2.70	0.60
52:CB:62:G:H4'	12:DP:56:ARG:HH21	1.66	0.60
1:DA:620:G:H2'	1:DA:620:G:N3	2.16	0.60
31:CA:1024:G:H2'	31:CA:1025:U:H6	1.63	0.60
53:CC:62:C:H2'	53:CC:63:C:C6	2.36	0.60
1:DA:1003:G:N2	1:DA:1153:C:O2	2.35	0.60
1:AA:1509:C:H2'	1:AA:1511:A:C8	2.36	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:439:A:C4	31:BA:496:A:C2	2.89	0.60
52:CD:30:A:H61	52:CD:42:U:H3	1.47	0.60
1:AA:527:C:H4'	1:AA:528:A:H5'	1.82	0.60
1:AA:2168:G:N2	1:AA:2170:A:N6	2.49	0.60
31:CA:1378:C:O2	37:CJ:76:ARG:NH2	2.33	0.60
39:CL:95:LYS:HE2	39:CL:95:LYS:O	2.01	0.60
31:CA:1226:C:H4'	49:CV:80:TYR:OH	2.01	0.60
48:BU:74:ARG:HA	48:BU:79:LEU:O	2.02	0.60
5:DF:3:GLU:O	5:DF:19:GLU:HB2	2.02	0.60
1:AA:1204:A:O2'	56:AA:3409:OHX:N6	2.34	0.60
31:BA:1387:G:H2'	31:BA:1388:C:C6	2.37	0.60
1:DA:2849:U:H4'	1:DA:2868:A:C2	2.37	0.60
19:DT:80:ILE:HG13	19:DT:80:ILE:O	1.99	0.60
31:CA:1111:A:C8	31:CA:1112:C:H5	2.19	0.60
1:AA:270(G):C:H2'	1:AA:270(H):C:O4'	2.01	0.60
47:BT:101:ARG:HB2	47:BT:101:ARG:NH2	2.17	0.60
54:B1:10:G:H2'	54:B1:10:G:N3	2.16	0.60
1:DA:9:U:H3	1:DA:2629:A:N6	1.89	0.60
1:AA:2309:A:C4	1:AA:2310:A:C8	2.89	0.60
31:CA:1157:A:O2'	31:CA:1158:C:P	2.59	0.60
31:CA:1157:A:N6	31:CA:1180:A:C5	2.69	0.60
11:DO:80:TYR:HE1	11:DO:111:ARG:HG2	1.65	0.60
31:CA:828:A:H5''	31:CA:859:A:C2	2.37	0.60
1:DA:2136:C:N4	1:DA:2155:G:H1	1.93	0.60
1:DA:2473:U:O2	1:DA:2473:U:H2'	2.00	0.60
49:CV:23:ASN:HA	49:CV:27:GLU:HG3	1.84	0.60
6:DG:40:ASN:HD22	6:DG:91:ARG:HB2	1.67	0.60
20:DU:76:CYS:HB3	20:DU:96:ILE:HD11	1.84	0.60
31:CA:1237:C:HO2'	31:CA:1300:G:H22	1.48	0.60
1:AA:1417:C:N4	1:AA:1581:G:H1	1.98	0.60
12:AP:65:PHE:O	12:AP:66:ILE:HG12	2.01	0.60
1:AA:1139:G:O2'	1:AA:1143:A:N1	2.32	0.60
1:AA:286:C:H2'	1:AA:287:C:H6	1.66	0.60
7:AH:83:TYR:HB2	7:AH:134:SER:CA	2.31	0.60
39:BL:43:ALA:C	39:BL:45:ALA:H	2.05	0.60
31:CA:1153:C:H2'	31:CA:1154:G:O4'	2.00	0.60
5:AF:28:ILE:HA	5:AF:112:MET:HE3	1.84	0.60
48:BU:53:ARG:HH21	48:BU:60:ALA:N	1.99	0.60
1:AA:2314:C:H5''	6:AG:38:VAL:HG21	1.83	0.60
14:DQ:36:TYR:CD2	14:DQ:52:SER:HB3	2.36	0.60
1:DA:674:G:P	5:DF:54:ARG:HH22	2.23	0.60
41:CN:93:GLN:CA	41:CN:93:GLN:HE21	2.14	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:DW:10:LEU:HD13	24:DW:59:ARG:HD2	1.82	0.60
1:DA:289:A:H5'	1:DA:290:G:OP2	2.01	0.60
33:BF:173:VAL:O	33:BF:175:LEU:HD12	2.01	0.60
36:CI:45:LEU:HD21	36:CI:57:GLN:HB3	1.82	0.60
28:D6:17:LYS:O	28:D6:44:ARG:NH2	2.35	0.60
1:DA:1889:A:H2'	1:DA:1890:A:C8	2.35	0.60
1:DA:1288:U:O4	13:D0:106:GLY:HA3	2.02	0.60
31:CA:338:A:H2	31:CA:351:G:H22	1.50	0.60
12:DP:34:LEU:HB2	12:DP:118:LEU:HD22	1.83	0.60
1:AA:2803:C:H2'	1:AA:2804:C:C6	2.36	0.60
1:DA:1526:G:C6	1:DA:1527:G:C2	2.90	0.60
31:CA:837:G:C2	31:CA:850:U:O2	2.55	0.60
31:CA:201:C:H4'	31:CA:208:U:OP1	2.01	0.60
1:AA:2419:U:P	30:A8:33:ASN:HD22	2.25	0.60
3:AD:35:LYS:CE	3:AD:104:TYR:CD1	2.85	0.60
31:CA:1320:C:H2'	31:CA:1321:C:H6	1.66	0.60
1:AA:1609:A:O2'	1:AA:1610:A:H5'	2.00	0.60
1:AA:1332:G:H21	1:AA:1610:A:H8	1.50	0.60
19:DT:57:LEU:HD23	19:DT:78:LYS:O	2.00	0.60
9:AM:55:VAL:O	9:AM:57:ALA:N	2.35	0.60
6:AG:146:TYR:HD1	43:BP:3:ARG:HH21	1.50	0.60
52:BB:49:A:C2	52:BB:50:U:H5''	2.37	0.60
31:CA:1256:A:N6	31:CA:1277:C:H3'	2.16	0.60
11:DO:57:THR:O	11:DO:59:LEU:N	2.34	0.60
16:A1:92:ARG:HH11	16:A1:95:LEU:HD11	1.67	0.60
1:DA:1899:G:H21	1:DA:1902:C:H5	1.44	0.60
11:AO:9:ASN:O	11:AO:10:PRO:C	2.40	0.60
3:DD:25:THR:HB	3:DD:82:ILE:H	1.65	0.60
1:DA:299:A:N1	1:DA:322:A:O2'	2.23	0.60
52:BB:23:A:C6	52:BB:24:G:N7	2.69	0.60
1:DA:1480:G:C4	1:DA:1482:U:O2	2.55	0.60
32:BE:60:ASP:O	32:BE:64:ARG:NH1	2.35	0.60
1:AA:163:U:C2'	1:AA:164:U:H5'	2.30	0.60
31:BA:1316:G:H22	31:BA:1319:A:P	2.25	0.60
1:DA:329:G:O6	20:DU:19:LYS:CG	2.50	0.60
20:AU:84:ARG:HH12	20:AU:97:ARG:CB	2.15	0.60
52:CD:79:A:O2'	52:CD:80:C:H5'	2.02	0.60
1:DA:2446:G:C3'	1:DA:2447:G:H5''	2.30	0.60
9:AM:137:LYS:HE3	9:AM:138:LEU:N	2.14	0.60
7:AH:19:VAL:HG22	7:AH:43:VAL:HG23	1.84	0.60
13:A0:118:GLU:HA	13:A0:118:GLU:OE1	2.01	0.60
5:DF:4:VAL:HA	5:DF:19:GLU:HB3	1.81	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:833:U:H2'	1:AA:834:C:H6	1.65	0.60
31:CA:554:C:H2'	31:CA:555:C:C6	2.37	0.60
1:AA:1178:C:O2'	1:AA:1179:C:C6	2.53	0.60
1:DA:581:C:OP1	16:D1:31:SER:HB2	2.01	0.60
1:AA:1991:U:H2'	1:AA:1992:G:H5''	1.83	0.60
1:AA:1219:G:OP2	16:A1:19:LYS:NZ	2.34	0.60
1:AA:1754:C:OP1	15:AR:96:ARG:NH1	2.34	0.60
39:BL:9:ARG:HD2	39:BL:14:VAL:HG13	1.83	0.60
1:DA:1026:U:O2	1:DA:1026:U:H3'	2.01	0.60
1:DA:2275:C:HO2'	12:DP:85:LYS:N	1.99	0.60
43:CP:83:ASP:O	43:CP:84:ILE:HB	2.02	0.60
3:DD:85:ASP:HB2	3:DD:92:ILE:CD1	2.31	0.60
1:AA:2308:G:H22	1:AA:2311:A:H2	0.70	0.60
31:BA:942:G:OP2	56:BA:1735:OHX:N3	2.34	0.60
9:DM:94:HIS:HD2	9:DM:97:ARG:CZ	2.14	0.60
43:BP:30:ALA:O	43:BP:32:GLU:N	2.35	0.60
16:D1:91:ASP:O	16:D1:93:LYS:N	2.34	0.60
1:DA:1309:G:H4'	29:D7:7:PRO:HB2	1.84	0.60
39:BL:17:VAL:HA	39:BL:63:ILE:HG12	1.83	0.60
1:AA:2846:G:H2'	1:AA:2847:U:C6	2.37	0.60
14:DQ:18:ILE:O	14:DQ:20:ARG:N	2.34	0.60
23:AZ:76:ARG:HD2	23:AZ:76:ARG:N	2.17	0.60
26:D4:7:PRO:HB3	26:D4:27:THR:HG21	1.83	0.60
39:CL:4:TYR:CZ	39:CL:59:PHE:HE2	2.20	0.60
47:BT:31:LEU:HD23	47:BT:32:TYR:CE1	2.37	0.60
9:DM:137:LYS:HZ3	9:DM:137:LYS:HA	1.67	0.60
1:DA:1493:C:H4'	1:DA:1494:A:OP2	2.02	0.60
1:DA:2816:C:O2	1:DA:2883:A:O2'	2.20	0.60
6:DG:56:ALA:HB2	6:DG:153:ARG:CZ	2.32	0.60
6:DG:56:ALA:HB2	6:DG:153:ARG:HE	1.67	0.60
1:AA:1786:A:C2	1:AA:2606:C:H1'	2.35	0.60
31:BA:115:G:OP2	56:BA:1733:OHX:N1	2.35	0.60
31:CA:1075:C:H5'	32:CE:103:THR:HG21	1.83	0.60
1:AA:511:U:C5	1:AA:512:G:C5	2.90	0.60
33:CF:124:ILE:HD11	33:CF:130:VAL:HG13	1.84	0.60
41:BN:59:TYR:CE2	41:BN:63:LEU:HD11	2.37	0.60
56:BA:1805:OHX:N5	42:BO:116:SER:OG	2.34	0.60
1:DA:729:G:C8	3:DD:208:LYS:HD2	2.37	0.60
4:DE:107:THR:O	4:DE:190:GLY:HA2	2.02	0.60
1:AA:1579:A:H2'	1:AA:1580:A:C8	2.37	0.60
1:AA:2602:A:C6	53:BC:77:A:H4'	2.37	0.60
1:DA:362:U:H5'	1:DA:363:G:OP2	2.02	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BK:102:ARG:HG3	38:BK:105:ARG:HH12	1.65	0.60
1:AA:966:G:H2'	1:AA:967:C:C6	2.37	0.60
7:AH:13:LYS:HA	7:AH:13:LYS:HE2	1.84	0.60
7:DH:128:PRO:O	7:DH:129:THR:OG1	2.16	0.60
2:DB:50:G:OP1	14:DQ:63:THR:HG23	2.02	0.60
1:DA:1593:G:H2'	1:DA:1594:G:C8	2.37	0.60
26:D4:24:THR:O	26:D4:25:TYR:HB2	2.02	0.60
9:DM:56:ASN:HB3	9:DM:126:PRO:CD	2.32	0.60
11:DO:50:ARG:HG2	11:DO:50:ARG:HH11	1.67	0.60
1:DA:670:A:O2'	56:DA:3428:OHX:N1	2.35	0.60
44:CQ:23:ARG:HG3	44:CQ:28:GLY:O	2.02	0.60
52:CD:17:G:H4'	52:CD:18:G:OP1	2.00	0.60
3:AD:236:GLY:O	3:AD:237:GLU:CB	2.31	0.60
30:D8:33:ASN:CG	30:D8:34:TRP:N	2.55	0.60
26:A4:37:SER:O	26:A4:41:PRO:HD2	2.02	0.60
1:AA:1729:A:C8	1:AA:1730:U:C5	2.90	0.60
31:BA:792:A:H2'	31:BA:792:A:N3	2.15	0.60
29:D7:5:TRP:NE1	29:D7:7:PRO:HG3	2.16	0.60
31:BA:1141:C:O2'	31:BA:1142:G:H5'	2.01	0.60
1:AA:2690:C:OP1	13:A0:17:ARG:NH1	2.29	0.60
31:BA:81:G:C2	31:BA:88:C:N3	2.68	0.60
1:DA:2212:A:H1'	1:DA:2215:G:C6	2.36	0.60
4:AE:61:ARG:HB2	4:AE:62:PRO:CD	2.30	0.60
20:DU:52:SER:N	20:DU:53:PRO:HD3	2.16	0.60
31:CA:1240:U:OP2	37:CJ:116:ALA:N	2.33	0.60
32:CE:82:ARG:CZ	32:CE:92:TYR:OH	2.49	0.60
1:AA:2404:C:C2'	1:AA:2405:G:H5'	2.31	0.60
31:BA:439:A:OP2	31:BA:493:G:N1	2.35	0.60
4:DE:111:ARG:HG2	13:D0:2:ARG:HH22	1.66	0.60
16:D1:88:ILE:HG22	17:D2:49:THR:HA	1.83	0.60
1:AA:274:G:OP1	1:AA:274:G:N9	2.35	0.60
1:AA:287:C:H2'	1:AA:288:C:C6	2.33	0.60
11:AO:60:MET:O	11:AO:60:MET:HG3	2.02	0.60
10:DN:98:VAL:CG1	10:DN:117:LEU:HB2	2.32	0.60
31:BA:975:A:C4'	31:BA:976:G:H5''	2.31	0.60
13:A0:12:ARG:CD	13:A0:16:HIS:CD2	2.85	0.60
35:BH:16:THR:O	35:BH:17:ALA:CB	2.49	0.60
7:DH:123:PHE:CD2	7:DH:133:VAL:HG22	2.37	0.60
52:CD:3:U:H2'	52:CD:4:G:H8	1.65	0.60
31:BA:958:A:C6	31:BA:959:A:C6	2.90	0.60
1:AA:2242:G:H2'	1:AA:2243:U:O5'	2.01	0.60
1:DA:2823:A:OP1	4:DE:113:PHE:HB2	2.02	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1302:U:C5	43:CP:17:VAL:HG21	2.37	0.60
53:BC:26:C:H2'	53:BC:27:G:O4'	2.01	0.60
12:AP:43:THR:HG22	12:AP:94:VAL:HG12	1.84	0.60
53:CC:21:U:O2	53:CC:21:U:H2'	2.01	0.60
9:AM:68:GLU:HG2	9:AM:88:GLU:OE1	2.01	0.60
1:DA:9:U:C4	1:DA:2629:A:C6	2.90	0.59
11:AO:19:VAL:HG23	11:AO:27:HIS:CA	2.32	0.59
1:AA:2401:U:O2	1:AA:2402:C:C5	2.54	0.59
54:C1:20:G:H2'	54:C1:21:C:O4'	2.02	0.59
11:AO:16:ARG:HG3	11:AO:16:ARG:NH1	2.15	0.59
2:AB:71:C:N3	2:AB:72:G:C8	2.71	0.59
54:B1:13:A:C2'	54:B1:14:A:OP1	2.49	0.59
49:BV:40:ILE:HG12	49:BV:41:VAL:HG13	1.83	0.59
17:A2:35:LEU:C	17:A2:37:VAL:H	2.03	0.59
31:BA:1346:A:C5'	39:BL:120:ARG:HH12	2.06	0.59
31:CA:1137:C:H5''	31:CA:1138:G:OP1	2.01	0.59
2:DB:40:U:C4	2:DB:43:C:P	2.95	0.59
52:BB:73:U:H2'	52:BB:74:C:H6	1.67	0.59
6:DG:77:ILE:O	6:DG:81:LYS:O	2.20	0.59
34:BG:12:CYS:HA	34:BG:19:LEU:HD21	1.84	0.59
30:D8:37:SER:O	30:D8:39:LYS:O	2.19	0.59
5:AF:195:ASP:O	5:AF:198:ALA:HB3	2.01	0.59
31:BA:1211:U:H4'	31:BA:1212:U:O5'	2.02	0.59
49:CV:7:LYS:C	49:CV:7:LYS:HE3	2.21	0.59
1:AA:2208:U:H4'	3:AD:151:LYS:HG2	1.83	0.59
47:BT:64:PRO:HA	47:BT:70:ARG:HG3	1.83	0.59
1:DA:1442:G:C3'	1:DA:1443:G:H5''	2.32	0.59
34:BG:70:ILE:HG23	34:BG:75:PHE:HB2	1.84	0.59
9:DM:58:ASP:OD1	9:DM:124:ALA:HB1	2.02	0.59
13:D0:59:ASP:O	13:D0:62:ALA:N	2.25	0.59
14:AQ:51:ALA:HB3	14:AQ:73:LEU:HG	1.84	0.59
31:BA:186:C:H2'	31:BA:186(A):C:H6	1.66	0.59
36:CI:35:ALA:HB1	36:CI:65:VAL:HG11	1.83	0.59
1:AA:755:C:H2'	1:AA:756:C:C6	2.37	0.59
31:CA:957:U:H2'	31:CA:959:A:OP2	2.01	0.59
35:CH:78:HIS:HB2	38:CK:104:ARG:HD2	1.83	0.59
8:DK:133:HIS:C	8:DK:133:HIS:CD2	2.75	0.59
1:DA:1039:G:H1	1:DA:1116:C:H42	1.50	0.59
10:DN:34:THR:O	10:DN:37:ASP:HB2	2.02	0.59
1:DA:6:A:N3	9:DM:131:GLN:HG3	2.17	0.59
3:DD:35:LYS:HG2	3:DD:64:ILE:CG2	2.31	0.59
5:DF:112:MET:O	5:DF:115:ALA:HB3	2.01	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:BD:20:C:H3'	52:BD:68:A:H62	1.67	0.59
11:DO:66:GLY:O	11:DO:67:MET:C	2.39	0.59
31:BA:73:G:H2'	31:BA:74:C:O4'	2.02	0.59
5:AF:64:ILE:HG23	5:AF:65:TRP:CD1	2.37	0.59
41:CN:59:TYR:O	41:CN:62:GLN:HB3	2.02	0.59
52:CB:73:U:C2'	52:CB:74:C:H5'	2.31	0.59
1:AA:2469:A:O2'	12:AP:56:ARG:HG2	2.02	0.59
31:CA:1285:A:O2'	31:CA:1286:A:OP2	2.18	0.59
1:AA:7:G:H1	1:AA:2896:C:H42	1.50	0.59
4:AE:66:HIS:O	4:AE:66:HIS:ND1	2.34	0.59
31:BA:543:C:O2'	31:BA:544:G:H5'	2.01	0.59
1:DA:2292:C:OP1	14:DQ:17:ARG:NH2	2.34	0.59
8:AK:33:ARG:HB3	8:AK:35:LEU:HD23	1.83	0.59
1:DA:2157:G:O2'	1:DA:2158:A:O4'	2.15	0.59
20:DU:17:SER:HB2	20:DU:71:LYS:HD2	1.84	0.59
7:AH:83:TYR:N	7:AH:83:TYR:CD2	2.69	0.59
20:AU:46:LYS:HE3	20:AU:63:LYS:HB3	1.84	0.59
43:CP:28:ALA:C	43:CP:30:ALA:N	2.55	0.59
31:BA:977:A:C8	31:BA:1223:C:N3	2.70	0.59
32:CE:73:THR:O	32:CE:73:THR:OG1	2.19	0.59
1:DA:1494:A:H2'	1:DA:1495:A:H8	1.67	0.59
9:DM:51:PHE:CZ	9:DM:119:ARG:HD3	2.37	0.59
27:D5:6:VAL:HG13	27:D5:7:PRO:HD2	1.84	0.59
32:BE:200:ILE:N	32:BE:200:ILE:HD12	2.17	0.59
14:AQ:20:ARG:C	14:AQ:22:GLY:H	2.05	0.59
1:DA:2648:C:H2'	1:DA:2649:U:C6	2.37	0.59
1:DA:2459:A:C4	1:DA:2460:U:C6	2.90	0.59
31:BA:1015:A:H2'	31:BA:1016:A:C8	2.37	0.59
31:BA:776:G:O6	56:BA:1757:OHX:N6	2.36	0.59
1:DA:2184:G:C6	1:DA:2185:C:N4	2.70	0.59
1:DA:2850:A:C2	1:DA:2851:A:C4	2.90	0.59
31:CA:838:G:N2	31:CA:849:C:C2	2.70	0.59
31:CA:398:C:OP2	56:CA:1738:OHX:N1	2.34	0.59
1:DA:155:C:H42	1:DA:171:G:H1	0.62	0.59
31:CA:1357:A:N7	31:CA:1358:U:C5	2.70	0.59
5:DF:23:ASP:O	5:DF:24:LEU:O	2.19	0.59
5:DF:8:GLN:HG2	5:DF:124:LEU:HD11	1.85	0.59
30:D8:34:TRP:O	56:D8:101:OHX:N1	2.35	0.59
1:DA:95:G:O2'	24:DW:46:GLN:O	2.19	0.59
30:D8:49:VAL:CG1	30:D8:50:LEU:N	2.64	0.59
26:A4:37:SER:HB3	26:A4:42:PHE:HD1	1.64	0.59
31:BA:67:C:H2'	31:BA:68:G:C8	2.37	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1022:G:HO2'	1:DA:1023:U:P	2.15	0.59
1:DA:2681:C:H6	1:DA:2683:C:H41	1.48	0.59
1:DA:2726:U:O2'	1:DA:2727:G:H8	1.85	0.59
31:CA:1346:A:C8	31:CA:1348:U:O2	2.55	0.59
23:DZ:87:PRO:O	23:DZ:88:LYS:C	2.40	0.59
1:AA:1900:A:O2'	1:AA:1901:A:OP1	2.17	0.59
1:AA:2481:G:HO2'	1:AA:2482:G:P	2.25	0.59
1:DA:2212:A:H4'	1:DA:2213:U:C5	2.37	0.59
1:AA:1545:A:O2'	1:AA:1545(A):A:H5'	2.01	0.59
31:BA:518:C:O2'	31:BA:530:G:C2	2.48	0.59
1:DA:2303:G:H2'	1:DA:2304:G:H5'	1.84	0.59
2:DB:44:G:C2	2:DB:48:A:C2	2.91	0.59
2:DB:45:A:OP2	6:DG:96:ARG:HD2	2.02	0.59
1:AA:2439:A:H8	1:AA:2439:A:H5'	1.67	0.59
34:BG:88:VAL:O	34:BG:88:VAL:HG12	2.02	0.59
50:CW:73:HIS:ND1	50:CW:74:LYS:N	2.50	0.59
8:AK:96:ASP:O	8:AK:97:ILE:C	2.40	0.59
46:BS:47:ASP:O	46:BS:49:LEU:N	2.35	0.59
48:BU:26:LEU:HB3	48:BU:42:ARG:NH2	2.18	0.59
17:A2:49:THR:O	17:A2:50:PRO:C	2.39	0.59
1:AA:2313:C:H2'	1:AA:2314:C:H6	1.66	0.59
31:CA:56:U:H2'	31:CA:57:G:H8	1.66	0.59
1:AA:1385:G:H4'	1:AA:1386:C:OP1	2.01	0.59
33:BF:184:TYR:HD1	33:BF:201:TYR:HE2	1.49	0.59
7:DH:33:LEU:HD21	7:DH:136:ILE:O	2.03	0.59
31:BA:113:G:H2'	31:BA:114:U:H6	1.67	0.59
1:AA:509:C:OP1	56:AA:3365:OHX:N6	2.35	0.59
50:CW:51:GLU:HA	50:CW:54:LYS:HB3	1.84	0.59
47:BT:13:ASP:H	47:BT:14:LYS:NZ	2.00	0.59
41:CN:79:SER:HB2	41:CN:106:LYS:HD2	1.84	0.59
18:AS:46:PHE:O	18:AS:50:VAL:HG23	2.03	0.59
1:DA:1735:C:C2'	1:DA:1741:C:H5'	2.31	0.59
32:CE:182:ILE:H	32:CE:182:ILE:HD12	1.66	0.59
36:BI:21:LEU:O	36:BI:25:ILE:HG12	2.02	0.59
31:BA:1524:C:OP1	41:BN:120:ARG:NH1	2.33	0.59
1:AA:2286:A:H8	28:A6:37:ARG:HH11	1.49	0.59
1:DA:889:C:C4	1:DA:890:A:H1'	2.38	0.59
1:AA:898:C:OP1	1:AA:898:C:H4'	2.02	0.59
43:BP:89:GLY:O	43:BP:92:HIS:HB2	2.03	0.59
2:AB:71:C:C2	2:AB:72:G:C8	2.90	0.59
52:BD:41:C:H2'	52:BD:42:U:C6	2.37	0.59
11:DO:64:LYS:CG	11:DO:65:ARG:H	2.14	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:A5:40:LYS:CG	27:A5:47:PRO:HD2	2.20	0.59
31:BA:1503:A:N6	54:B1:12:A:C4	2.70	0.59
4:AE:38:THR:OG1	4:AE:39:PRO:HD2	2.02	0.59
1:DA:1091:G:C6	1:DA:1092:C:N4	2.71	0.59
1:DA:2136:C:C4	1:DA:2155:G:N1	2.70	0.59
31:CA:1134:G:H2'	31:CA:1135:U:H5'	1.83	0.59
1:AA:2845:G:O2'	1:AA:2846:G:H5'	2.01	0.59
1:DA:1331:A:O2'	1:DA:1332:G:C8	2.55	0.59
1:DA:2875:C:HO2'	15:DR:5:ALA:HB3	1.68	0.59
53:BC:73:A:N6	53:BC:74:A:C6	2.70	0.59
5:DF:167:ALA:O	5:DF:168:ARG:C	2.40	0.59
1:AA:495:G:C1'	18:AS:57:ASN:OD1	2.50	0.59
21:DV:69:THR:HB	21:DV:88:PHE:HB3	1.84	0.59
38:BK:38:ILE:HD13	38:BK:120:THR:HG22	1.83	0.59
27:D5:41:PRO:HG2	27:D5:44:THR:OG1	2.01	0.59
1:DA:84:A:N6	1:DA:102:G:O2'	2.23	0.59
37:BJ:65:ALA:HB2	37:BJ:128:ALA:HB2	1.83	0.59
25:DX:59:VAL:HG12	25:DX:60:GLU:H	1.67	0.59
21:DV:107:THR:H	21:DV:108:PRO:HD2	1.66	0.59
1:AA:1485:G:H2'	1:AA:1486:A:H8	1.68	0.59
1:DA:2563:U:O2	1:DA:2565:A:H8	1.84	0.59
1:AA:2037:G:H2'	1:AA:2038:G:C8	2.37	0.59
35:CH:152:ARG:NH2	38:CK:107:LEU:O	2.33	0.59
31:BA:814:A:N7	31:BA:816:A:C4	2.70	0.59
2:AB:1:U:H2'	2:AB:2:C:C6	2.37	0.59
32:BE:53:ARG:HA	32:BE:56:ARG:HH11	1.66	0.59
1:DA:744:G:H2'	1:DA:745:G:O5'	2.02	0.59
11:DO:21:ARG:CA	11:DO:21:ARG:HE	2.00	0.59
49:CV:9:VAL:HG13	49:CV:10:PHE:N	2.17	0.59
5:DF:117:ARG:HG2	5:DF:192:LEU:HD12	1.83	0.59
16:D1:50:ARG:NH1	17:D2:72:VAL:HG23	2.14	0.59
1:DA:2425:A:H5''	1:DA:2426:A:H3'	1.84	0.59
9:AM:57:ALA:HB3	9:AM:123:TYR:O	2.03	0.59
1:AA:2138:C:N3	1:AA:2153:G:N2	2.46	0.59
1:AA:1081:U:HO2'	1:AA:1082:U:P	2.21	0.59
1:DA:1060:U:N3	1:DA:1088:A:H8	2.01	0.59
31:CA:1128:C:C2'	31:CA:1129:C:O5'	2.49	0.59
31:BA:250:A:H4'	31:BA:251:G:C5'	2.33	0.59
31:BA:266:G:H5''	31:BA:267:C:H5	1.66	0.59
1:AA:2470:G:H5'	12:AP:56:ARG:NH2	2.17	0.59
1:AA:1264:G:H5'	27:A5:11:THR:CG2	2.32	0.59
35:BH:68:GLU:OE2	35:BH:70:PRO:HG3	2.03	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
15:DR:51:ARG:HB3	15:DR:62:THR:HG23	1.85	0.59
2:DB:39:A:H2'	26:D4:1:MET:HE1	1.83	0.59
6:DG:60:LEU:HD21	6:DG:92:VAL:HG11	1.84	0.59
6:DG:36:LYS:HB2	6:DG:95:ARG:HH11	1.68	0.59
31:CA:577:G:C8	31:CA:816:A:C6	2.90	0.59
27:D5:57:VAL:HG12	27:D5:58:LEU:N	2.15	0.59
1:DA:1278:A:OP1	13:D0:36:THR:HG22	2.03	0.59
38:BK:64:LYS:HG2	38:BK:79:VAL:HG21	1.84	0.59
15:AR:120:ARG:HA	15:AR:123:GLN:HG2	1.85	0.59
8:DK:74:ASN:CG	8:DK:75:LEU:H	2.06	0.59
50:BW:26:ASN:HB2	50:BW:71:THR:CG2	2.32	0.59
18:AS:17:VAL:HG13	18:AS:76:VAL:HG11	1.83	0.59
18:DS:17:VAL:C	18:DS:19:LEU:N	2.54	0.59
16:D1:112:ARG:NH1	17:D2:47:VAL:HG13	2.17	0.59
33:BF:114:PRO:O	33:BF:118:GLN:HG3	2.02	0.59
38:BK:8:ASP:OD2	38:BK:12:ARG:HD2	2.01	0.59
1:AA:637:A:H4'	1:AA:638:G:O5'	2.01	0.59
1:AA:637:A:O5'	11:AO:116:GLY:HA3	2.02	0.59
41:BN:59:TYR:CZ	41:BN:63:LEU:HD11	2.37	0.59
21:AV:158:PRO:HB3	21:AV:159:PRO:HD2	1.83	0.59
33:CF:48:TYR:O	33:CF:51:GLY:N	2.30	0.59
7:AH:106:THR:HG22	7:AH:112:PRO:HB3	1.83	0.59
31:BA:1378:C:O2	31:BA:1379:G:O4'	2.19	0.59
29:A7:6:GLN:HA	29:A7:6:GLN:OE1	2.01	0.59
1:DA:120:U:H4'	1:DA:121:G:H5''	1.85	0.59
19:AT:12:VAL:HG13	19:AT:27:THR:O	2.03	0.59
31:CA:1204:A:OP2	56:CA:1739:OHX:N4	2.36	0.59
1:AA:1534:G:N2	1:AA:1537:C:H42	1.99	0.59
43:BP:90:LEU:HA	43:BP:93:ARG:HD2	1.85	0.59
31:CA:1179:A:N6	31:CA:1180:A:C2	2.71	0.59
39:CL:11:LYS:H	39:CL:104:ARG:HH21	1.47	0.59
16:D1:66:ASN:HB2	16:D1:76:TYR:HB2	1.83	0.59
1:DA:1899:G:H1	1:DA:1902:C:H41	1.50	0.59
2:DB:14:U:H5'	2:DB:71:C:H1'	1.84	0.59
14:DQ:24:LEU:HB2	14:DQ:85:VAL:HG12	1.85	0.59
26:D4:34:GLU:CG	26:D4:35:VAL:N	2.65	0.59
1:DA:2646:C:H2'	1:DA:2647:U:O4'	2.02	0.59
42:CO:46:LYS:HZ2	42:CO:47:LYS:HB2	1.67	0.59
31:BA:544:G:C5	31:BA:545:C:C5	2.90	0.59
31:CA:1237:C:C5	31:CA:1336:C:C4	2.91	0.59
31:CA:1497:G:C2'	31:CA:1498:U:H5'	2.31	0.59
1:AA:1510:A:O2'	1:AA:1511:A:N7	2.33	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:CO:34:ARG:CG	42:CO:35:GLY:N	2.65	0.59
5:AF:135:LYS:O	5:AF:137:LYS:N	2.36	0.59
28:D6:26:ASN:O	28:D6:28:ARG:NH1	2.35	0.59
1:AA:18:C:H2'	1:AA:19:C:C6	2.37	0.59
15:AR:26:ASP:HB2	15:AR:91:ARG:HA	1.83	0.59
1:DA:84:A:H61	1:DA:102:G:C2'	2.14	0.59
31:CA:1151:A:H1'	40:CM:39:PRO:HB2	1.84	0.59
31:BA:49:U:O2'	31:BA:50:A:H3'	2.03	0.59
39:CL:33:PHE:HE2	39:CL:47:LEU:HD23	1.67	0.59
31:CA:200:G:OP1	56:CA:1770:OHX:N4	2.35	0.59
1:DA:2712:U:HO2'	1:DA:2712(A):A:P	2.26	0.59
1:AA:572:A:C2	1:AA:2033:A:C2	2.90	0.59
1:AA:638:G:C5	1:AA:651:G:C2	2.90	0.59
1:DA:289:A:H3'	1:DA:290:G:H8	1.68	0.59
33:BF:184:TYR:HD1	33:BF:201:TYR:CE2	2.21	0.59
7:DH:12:PRO:HD2	7:DH:48:GLY:O	2.03	0.59
41:CN:84:VAL:CG1	41:CN:95:ILE:HD11	2.33	0.59
35:CH:152:ARG:HB3	38:CK:43:GLY:O	2.02	0.59
25:DX:26:LEU:HD21	25:DX:46:ASN:HB2	1.84	0.59
31:CA:781:A:H5'	31:CA:782:A:OP2	2.02	0.59
23:AZ:87:PRO:O	23:AZ:88:LYS:C	2.41	0.59
31:BA:581:G:N1	31:BA:759:A:OP2	2.26	0.59
3:AD:218:ARG:HB3	3:AD:219:PRO:HD2	1.85	0.59
48:CU:70:ILE:HG23	48:CU:79:LEU:HD12	1.85	0.59
1:AA:2347:C:O5'	28:A6:39:TYR:OH	2.16	0.59
3:AD:35:LYS:HG2	3:AD:64:ILE:HG23	1.84	0.59
1:AA:1535:U:C2	1:AA:1536:A:H5''	2.37	0.59
17:D2:87:HIS:CE1	17:D2:89:GLN:CB	2.74	0.59
31:BA:1023:G:C3'	31:BA:1024:G:H5''	2.30	0.59
1:AA:908:C:OP2	12:AP:22:LYS:HD3	2.03	0.59
31:CA:501:C:H2'	31:CA:502:G:H8	1.67	0.59
1:AA:259:G:H21	1:AA:621:A:H8	1.50	0.59
28:D6:25:LYS:HD2	30:D8:35:GLN:OE1	2.01	0.59
30:D8:35:GLN:O	30:D8:35:GLN:NE2	2.36	0.59
31:CA:1446:A:C6	15:DR:118:ARG:NH2	2.70	0.59
1:DA:533:G:H5'	16:D1:24:TYR:CD2	2.37	0.59
11:DO:79:ARG:CB	11:DO:110:TYR:CD1	2.77	0.59
1:DA:1098:A:H2'	1:DA:1099:G:H5'	1.85	0.59
5:DF:31:HIS:HB2	11:DO:9:ASN:HD21	1.63	0.59
1:DA:2472:G:C6	1:DA:2475:C:C5	2.91	0.59
44:CQ:4:LYS:O	44:CQ:7:ILE:N	2.29	0.59
1:DA:1003:G:N2	1:DA:1153:C:C2	2.71	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:DF:161:GLU:HA	5:DF:164:ARG:HH12	1.67	0.59
31:CA:417:C:C2'	31:CA:418:C:H5'	2.32	0.59
42:CO:70:ILE:CD1	42:CO:77:LEU:HD12	2.31	0.59
35:CH:41:VAL:HG13	35:CH:113:ALA:HA	1.84	0.59
38:BK:91:ARG:HH12	47:BT:33:GLY:HA3	1.68	0.59
20:AU:84:ARG:NH1	20:AU:84:ARG:HB2	2.18	0.59
20:AU:97:ARG:NH2	20:AU:98:VAL:HB	2.17	0.59
52:CD:80:C:H2'	52:CD:81:C:C6	2.32	0.59
50:BW:71:THR:HG22	50:BW:72:LEU:N	2.17	0.59
21:AV:167:PRO:O	21:AV:169:GLU:N	2.34	0.59
31:CA:457:C:H2'	31:CA:458:C:H6	1.68	0.59
1:AA:2864:G:H2'	1:AA:2865:U:O4'	2.03	0.59
1:AA:971:C:C2'	1:AA:972:G:H5'	2.31	0.59
19:DT:53:LYS:HZ2	19:DT:55:ASN:HD21	1.50	0.59
1:AA:2335:A:C8	1:AA:2337:G:N7	2.70	0.59
30:A8:29:LYS:HE2	30:A8:44:LYS:HB3	1.84	0.59
1:DA:1620:G:O4'	29:D7:1:MET:N	2.35	0.59
38:CK:33:GLU:HG3	38:CK:59:LEU:HD11	1.85	0.59
31:BA:1169:A:C6	31:BA:1170:A:C2	2.90	0.59
39:BL:3:GLN:HB3	39:BL:20:ARG:NH1	2.16	0.59
1:DA:912:C:H2'	1:DA:912:C:O2	2.01	0.59
9:DM:54:VAL:O	9:DM:54:VAL:HG12	2.02	0.59
38:CK:89:PRO:HA	38:CK:92:ARG:NH1	2.18	0.59
31:CA:1094:G:C2'	31:CA:1095:U:OP2	2.50	0.59
52:CB:37:A:OP2	56:CB:105:OHX:N4	2.36	0.59
52:BD:17:G:C2'	52:BD:66:G:H22	2.16	0.59
31:BA:1336:C:H4'	31:BA:1336:C:OP1	2.02	0.59
1:DA:826:U:H2'	1:DA:828:U:O4'	2.03	0.59
11:DO:15:ARG:O	11:DO:16:ARG:O	2.21	0.59
52:BB:21:A:C2	52:BB:56:U:O2	2.55	0.59
45:BR:78:TYR:CZ	45:BR:82:ILE:HD11	2.38	0.59
14:DQ:10:ARG:HH21	14:DQ:91:PRO:CB	2.12	0.59
14:DQ:110:LEU:HD23	14:DQ:112:PHE:CZ	2.37	0.59
31:CA:1004:A:C5'	31:CA:1025:U:O4	2.50	0.59
12:DP:19:GLY:CA	12:DP:98:LYS:HD2	2.33	0.59
2:DB:40:U:O2'	2:DB:45:A:N6	2.35	0.59
30:A8:56:GLU:O	30:A8:57:ARG:C	2.40	0.59
1:AA:1408:C:C2	1:AA:1595:G:N2	2.71	0.59
14:AQ:67:ARG:HH11	14:AQ:67:ARG:CB	2.16	0.59
1:AA:495:G:H1'	18:AS:57:ASN:OD1	2.03	0.59
1:AA:475:U:C4	1:AA:481:G:O6	2.56	0.59
35:BH:102:ALA:HB1	35:BH:106:PRO:HG2	1.84	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
29:D7:34:ARG:HH12	29:D7:39:ARG:CD	2.15	0.59
12:AP:66:ILE:CG1	12:AP:67:ARG:H	2.14	0.59
32:BE:5:ILE:HG23	32:BE:224:GLN:OE1	2.03	0.59
32:BE:59:GLU:C	32:BE:61:LEU:N	2.55	0.59
1:AA:527:C:O2	56:AA:3399:OHX:N1	2.36	0.59
1:AA:2428:G:N2	11:AO:60:MET:HE1	2.17	0.59
5:DF:119:ARG:HH11	5:DF:119:ARG:HB3	1.68	0.59
5:AF:34:TRP:NE1	11:AO:8:PRO:HD3	2.17	0.59
53:BC:20:G:N2	53:BC:58:A:H1'	2.18	0.59
33:BF:21:ARG:H	33:BF:21:ARG:HD3	1.68	0.59
1:AA:1385:G:O2'	1:AA:1396:U:C6	2.55	0.59
1:AA:2457:U:C2'	1:AA:2458:G:H5'	2.32	0.59
21:AV:19:ARG:NH1	21:AV:84:GLU:O	2.34	0.59
32:CE:32:ILE:HD13	32:CE:40:HIS:HB3	1.85	0.59
31:CA:878:G:H5'	38:CK:89:PRO:HG2	1.84	0.59
1:AA:1228:G:OP2	16:A1:16:LYS:NZ	2.15	0.59
50:BW:45:GLN:HB2	50:BW:91:LEU:HD13	1.83	0.59
1:DA:427:U:OP2	56:DA:3403:OHX:N5	2.36	0.59
21:DV:24:LEU:C	21:DV:24:LEU:HD12	2.23	0.59
31:CA:663:A:H5'	31:CA:836:G:OP1	2.03	0.59
1:DA:214:G:OP1	1:DA:214:G:H4'	2.03	0.59
1:AA:2062:A:N3	1:AA:2062:A:H2'	2.17	0.59
26:D4:9:LEU:O	26:D4:10:VAL:HG12	2.02	0.59
1:AA:534:U:H5'	16:A1:42:ALA:HB1	1.84	0.59
12:AP:109:VAL:HG22	12:AP:110:THR:H	1.67	0.59
28:A6:25:LYS:HE2	28:A6:27:LYS:HE2	1.85	0.59
4:DE:38:THR:C	4:DE:40:GLU:H	2.06	0.59
31:BA:943:U:H2'	31:BA:944:G:H5'	1.85	0.59
3:AD:43:ARG:HD2	3:AD:44:ASN:OD1	2.03	0.59
11:DO:86:LYS:HG3	11:DO:87:ASP:H	1.67	0.59
16:D1:69:CYS:HB3	16:D1:106:PHE:HZ	1.65	0.59
1:DA:2468:G:C6	1:DA:2481:G:N1	2.71	0.59
4:AE:117:MET:O	4:AE:118:LYS:HB2	2.03	0.59
31:BA:827:U:H5'	31:BA:828:A:OP2	2.03	0.59
15:DR:24:PRO:HA	15:DR:49:VAL:CG2	2.29	0.59
1:AA:2875:C:C4'	15:AR:5:ALA:HB2	2.29	0.59
32:CE:54:THR:HG23	32:CE:199:TYR:HB3	1.85	0.59
15:DR:64:ARG:HB2	15:DR:73:GLU:CG	2.27	0.59
1:AA:39:C:O2'	1:AA:40:C:H5'	2.03	0.59
35:BH:110:LEU:CD1	35:BH:118:ILE:HD13	2.31	0.59
7:AH:50:VAL:O	7:AH:50:VAL:HG22	2.03	0.59
1:DA:1786:A:C2	1:DA:2606:C:H1'	2.38	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
19:AT:39:ILE:O	19:AT:43:VAL:HG23	2.03	0.59
1:DA:2166:G:N2	1:DA:2171:A:N7	2.51	0.59
2:AB:88:C:H2'	2:AB:89:G:O4'	2.03	0.59
7:AH:83:TYR:N	7:AH:83:TYR:HD2	1.98	0.59
7:AH:86:GLU:O	7:AH:131:VAL:O	2.20	0.59
35:BH:152:ARG:HA	38:BK:64:LYS:NZ	2.17	0.59
1:AA:932:G:H4'	1:AA:933:A:O5'	2.03	0.59
5:DF:16:GLY:O	5:DF:18:ARG:N	2.36	0.59
8:AK:21:VAL:HG22	8:AK:22:LYS:N	2.17	0.59
16:D1:52:ARG:HB3	16:D1:52:ARG:NH1	2.17	0.59
1:DA:2820:A:O5'	13:D0:4:LEU:HD23	2.03	0.59
31:CA:1069:C:O2'	31:CA:1192:C:H1'	2.02	0.59
1:DA:1196:C:O4'	1:DA:1227:A:C2	2.55	0.59
3:AD:270:ILE:O	3:AD:271:ILE:HG12	2.02	0.59
2:AB:0:A:C2'	2:AB:1:U:H5'	2.32	0.59
1:DA:751:A:H5'	18:DS:90:ARG:HA	1.85	0.59
22:A3:66:VAL:HG23	22:A3:67:VAL:N	2.17	0.59
35:CH:51:VAL:O	35:CH:55:VAL:HG23	2.02	0.59
37:BJ:49:ILE:O	37:BJ:53:LYS:HB2	2.02	0.59
39:BL:50:LEU:HD22	39:BL:55:ALA:HB3	1.84	0.59
1:AA:265:A:H1'	1:AA:266:G:O4'	2.03	0.59
30:A8:22:VAL:HB	30:A8:53:PRO:HB2	1.85	0.59
9:AM:57:ALA:O	9:AM:58:ASP:CB	2.51	0.59
16:A1:90:VAL:CG2	17:A2:39:LEU:HB3	2.33	0.59
27:A5:52:TYR:CD1	27:A5:53:ALA:N	2.70	0.59
31:BA:1129:C:N3	31:BA:1143:G:N2	2.51	0.59
6:AG:96:ARG:O	6:AG:97:ASP:HB2	2.03	0.59
34:BG:207:TYR:C	34:BG:209:ARG:N	2.52	0.59
40:BM:50:ILE:HD13	40:BM:60:ARG:HD3	1.84	0.59
1:DA:2469:A:N7	1:DA:2482:G:N9	2.51	0.59
1:DA:1729:A:C6	1:DA:1731:G:N7	2.70	0.59
2:DB:39:A:C2	26:D4:1:MET:SD	2.96	0.59
31:CA:363:A:C2	42:CO:31:PRO:HG2	2.37	0.59
1:AA:2267:A:OP2	56:AA:3374:OHX:N5	2.36	0.59
31:CA:413:G:C2'	31:CA:428:G:N2	2.66	0.59
31:CA:1503:A:C5	54:C1:13:A:C2	2.91	0.59
5:AF:9:ILE:HD11	5:AF:125:LEU:HG	1.84	0.59
23:AZ:8:SER:OG	23:AZ:10:LYS:HG3	2.03	0.59
4:AE:4:ILE:HD13	4:AE:28:ALA:HB1	1.84	0.59
23:AZ:80:LEU:HB2	23:AZ:82:LEU:HD23	1.84	0.59
8:DK:124:GLY:H	8:DK:142:VAL:CG1	2.14	0.59
1:DA:528:A:H2	1:DA:2043:C:C4'	2.15	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BH:152:ARG:HA	38:BK:64:LYS:HZ1	1.66	0.59
47:BT:70:ARG:O	47:BT:71:PHE:CD2	2.56	0.59
1:AA:588:U:C2	1:AA:589:C:C5	2.91	0.59
1:AA:2428:G:N2	11:AO:60:MET:CE	2.65	0.59
1:AA:2428:G:H21	11:AO:60:MET:HE2	1.67	0.59
5:DF:119:ARG:NH1	5:DF:119:ARG:HB3	2.17	0.59
1:AA:443:A:H1'	1:AA:1201:C:O4'	2.03	0.59
1:DA:1826:G:H4'	3:DD:242:ARG:HE	1.67	0.59
34:BG:196:LEU:C	34:BG:198:VAL:H	2.05	0.59
13:A0:29:LEU:O	13:A0:75:LEU:HD21	2.03	0.59
6:DG:124:SER:HB2	6:DG:131:TYR:CE1	2.38	0.59
31:BA:632:A:C8	31:BA:633:G:C8	2.91	0.59
21:DV:5:LEU:HD23	21:DV:6:LYS:HG2	1.83	0.59
8:DK:79:ILE:O	8:DK:143:SER:HB2	2.03	0.59
38:CK:72:PRO:O	38:CK:73:ASP:HB3	2.02	0.59
31:BA:1269:A:C2	31:BA:1313:U:O4'	2.56	0.59
31:BA:1288:A:H2'	31:BA:1289:A:C8	2.38	0.59
21:AV:117:LEU:HD22	21:AV:118:GLN:H	1.67	0.59
8:AK:2:LYS:HB2	8:AK:39:ALA:HB3	1.85	0.59
8:AK:111:PRO:O	8:AK:112:LYS:C	2.41	0.59
1:DA:312:G:C8	1:DA:312:G:OP2	2.56	0.59
1:DA:2355:C:O3'	22:D3:24:LYS:HE3	2.02	0.59
31:BA:1513:A:H2'	31:BA:1514:C:C6	2.37	0.59
4:DE:38:THR:O	4:DE:40:GLU:N	2.36	0.58
1:DA:932:G:H4'	1:DA:933:A:O5'	2.01	0.58
1:DA:2111:C:H41	1:DA:2147:G:N2	2.01	0.58
3:DD:94:LEU:HG	3:DD:104:TYR:CE2	2.38	0.58
43:BP:5:ALA:HB3	43:BP:66:LEU:HD12	1.84	0.58
31:BA:1199:U:H5''	31:BA:1200:C:OP2	2.03	0.58
31:BA:67:C:H2'	31:BA:68:G:H8	1.67	0.58
1:AA:1441:G:H2'	1:AA:1442:G:C8	2.37	0.58
33:BF:95:THR:CG2	33:BF:96:GLY:H	2.11	0.58
17:A2:35:LEU:HB2	17:A2:37:VAL:CG2	2.33	0.58
31:CA:1142:G:H3'	31:CA:1143:G:C8	2.38	0.58
3:DD:27:THR:OG1	3:DD:81:ALA:HB1	2.03	0.58
1:DA:1666:G:C2'	1:DA:1667:G:H5'	2.32	0.58
1:AA:2629:A:N6	1:AA:2895:U:C2	2.71	0.58
15:DR:99:LEU:H	15:DR:99:LEU:HD12	1.67	0.58
14:AQ:67:ARG:CZ	14:AQ:67:ARG:HB2	2.33	0.58
35:BH:110:LEU:HB3	35:BH:115:VAL:HG11	1.85	0.58
31:BA:1360:A:O2'	31:BA:1361:G:H5'	2.03	0.58
38:BK:64:LYS:C	38:BK:65:TYR:CD1	2.75	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:AH:126:PRO:O	7:AH:127:GLU:CB	2.50	0.58
31:BA:976:G:C8	31:BA:1358:U:O2	2.55	0.58
28:D6:34:LEU:HD23	28:D6:34:LEU:H	1.68	0.58
1:AA:1173:G:C2	1:AA:1175:U:C4	2.91	0.58
9:AM:46:VAL:CG1	9:AM:48:MET:HG3	2.34	0.58
31:CA:115:G:OP2	56:CA:1737:OHX:N5	2.36	0.58
2:DB:88:C:H3'	2:DB:89:G:C8	2.38	0.58
31:BA:960:U:N3	31:BA:1225:A:C4	2.63	0.58
1:DA:869:G:O2'	1:DA:870:A:H5'	2.02	0.58
18:AS:37:ARG:NH1	18:AS:38:TYR:OH	2.36	0.58
7:AH:56:SER:OG	7:AH:57:ASP:N	2.32	0.58
1:DA:2450:A:C2	1:DA:2451:A:C4	2.91	0.58
43:CP:106:ASN:O	43:CP:107:ALA:HB3	2.02	0.58
2:DB:12:C:O2'	22:D3:74:ARG:HG2	2.03	0.58
35:BH:87:SER:HB3	35:BH:125:SER:O	2.03	0.58
1:AA:681:G:N7	56:AA:3351:OHX:N1	2.50	0.58
13:A0:72:ASP:O	13:A0:76:VAL:HG23	2.03	0.58
4:DE:120:TRP:CD2	4:DE:155:LYS:HD3	2.38	0.58
34:CG:146:ILE:HD12	34:CG:146:ILE:N	2.18	0.58
5:DF:9:ILE:HG12	5:DF:13:SER:O	2.02	0.58
1:AA:259:G:N7	56:AA:3506:OHX:N4	2.52	0.58
41:CN:44:SER:HB3	41:CN:47:VAL:HG23	1.83	0.58
31:CA:690:G:H22	41:CN:55:LYS:CE	2.14	0.58
1:DA:2853:C:H2'	1:DA:2854:G:C8	2.37	0.58
1:DA:626:U:H5'	1:DA:627:A:C5'	2.32	0.58
1:DA:2153:G:O2'	1:DA:2154:G:O4'	2.13	0.58
31:BA:1347:G:O2'	31:BA:1373:G:O6	2.17	0.58
31:CA:1124:G:O2'	31:CA:1145:C:C2	2.56	0.58
39:BL:81:ILE:O	39:BL:85:LEU:HG	2.03	0.58
31:CA:522:C:OP2	42:CO:69:TYR:OH	2.21	0.58
31:BA:447:G:H2'	31:BA:485:G:N2	2.18	0.58
1:DA:2875:C:O2'	15:DR:5:ALA:CB	2.51	0.58
1:DA:2766:G:N3	1:DA:2766:G:H2'	2.18	0.58
53:BC:1:C:O2	53:BC:1:C:H2'	2.04	0.58
20:DU:81:LYS:HG2	20:DU:97:ARG:NE	2.19	0.58
31:BA:438:G:N2	31:BA:495:A:C8	2.71	0.58
5:DF:158:THR:HB	5:DF:195:ASP:HB2	1.85	0.58
31:BA:168:G:N2	31:BA:169:C:N3	2.50	0.58
13:A0:100:LEU:HD11	13:A0:113:LEU:CD1	2.33	0.58
13:A0:100:LEU:HD13	13:A0:112:ALA:CA	2.33	0.58
31:BA:1086:U:H3	31:BA:1099:G:N2	1.99	0.58
1:DA:945:A:C6	1:DA:2448:A:C6	2.91	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1227:A:OP2	43:CP:111:LYS:HD3	2.03	0.58
31:BA:342:C:C2	31:BA:348:G:N2	2.71	0.58
22:A3:11:ARG:O	22:A3:14:ARG:NH2	2.36	0.58
1:AA:2294:C:C5	1:AA:2295:C:H5	2.21	0.58
2:AB:57:A:H2'	2:AB:58:A:H5'	1.85	0.58
31:BA:958:A:C8	49:BV:55:LYS:HD2	2.38	0.58
36:CI:15:ASP:OD1	36:CI:18:GLN:N	2.34	0.58
1:DA:752:A:H3'	29:D7:1:MET:SD	2.42	0.58
1:DA:196:A:H2'	1:DA:196:A:N3	2.18	0.58
33:BF:83:ARG:O	33:BF:86:VAL:N	2.28	0.58
43:CP:97:PRO:HA	43:CP:110:ARG:HD3	1.84	0.58
1:AA:2897:U:H2'	1:AA:2898:U:O4'	2.03	0.58
29:D7:12:ARG:NH2	29:D7:44:PRO:HB3	2.19	0.58
36:BI:86:ARG:O	36:BI:87:ARG:HG2	2.02	0.58
25:AX:59:VAL:CG1	25:AX:60:GLU:N	2.66	0.58
1:AA:2347:C:C4'	28:A6:39:TYR:HE2	2.16	0.58
11:AO:61:ARG:HH12	30:A8:14:VAL:HG23	1.68	0.58
31:CA:1189:C:P	40:CM:51:ARG:NH2	2.75	0.58
31:CA:1331:G:OP1	31:CA:1331:G:C4'	2.51	0.58
49:CV:41:VAL:HG13	26:D4:63:TYR:HB3	1.84	0.58
31:BA:1004:A:H5''	31:BA:1025:U:N3	2.17	0.58
31:BA:1034:G:N2	31:BA:1035:A:C6	2.72	0.58
1:DA:997:G:C2'	1:DA:998:C:H5'	2.33	0.58
1:DA:2752:C:O4'	1:DA:2752:C:OP2	2.21	0.58
1:DA:1666:G:H2'	1:DA:1667:G:H5'	1.85	0.58
10:DN:4:PRO:O	10:DN:5:GLN:CB	2.48	0.58
4:DE:101:ARG:O	4:DE:201:THR:OG1	2.20	0.58
1:AA:38:A:H2'	1:AA:39:C:C6	2.37	0.58
1:DA:2133:G:H1'	1:DA:2158:A:N6	2.18	0.58
28:D6:26:ASN:O	28:D6:27:LYS:HB2	2.03	0.58
1:AA:2754:U:OP2	56:AA:3388:OHX:N6	2.36	0.58
1:DA:2239:G:OP2	3:DD:244:ARG:NH2	2.35	0.58
6:AG:83:ARG:H	6:AG:86:MET:HE3	1.68	0.58
1:DA:287:C:N3	1:DA:354:G:O6	2.36	0.58
1:AA:583:G:H5''	16:A1:10:ARG:NH1	2.18	0.58
1:DA:868:U:N3	1:DA:869:G:N7	2.51	0.58
22:A3:54:GLY:O	22:A3:56:ASP:N	2.36	0.58
13:D0:87:TYR:O	13:D0:89:ASP:N	2.35	0.58
18:AS:88:ARG:NH1	18:AS:94:ASP:OD1	2.37	0.58
2:DB:24:G:C8	2:DB:24:G:OP2	2.57	0.58
36:BI:15:ASP:O	36:BI:17:SER:N	2.36	0.58
13:A0:31:HIS:O	13:A0:33:ARG:N	2.36	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:DE:57:LYS:HZ2	4:DE:57:LYS:H	1.51	0.58
5:DF:51:THR:HB	5:DF:88:VAL:HG11	1.85	0.58
31:CA:32:A:C2	31:CA:33:A:C4	2.91	0.58
5:AF:6:VAL:HG21	5:AF:119:ARG:HB2	1.83	0.58
25:DX:12:PRO:HA	25:DX:15:TYR:CD1	2.38	0.58
1:AA:2638:G:P	4:AE:82:ARG:NH2	2.76	0.58
31:BA:1076:C:C2	31:BA:1082:G:N2	2.71	0.58
4:DE:31:CYS:SG	4:DE:51:PHE:HB2	2.44	0.58
52:CD:16:C:H41	52:CD:68:A:H2'	1.67	0.58
11:AO:15:ARG:O	11:AO:16:ARG:O	2.21	0.58
34:CG:11:LEU:O	34:CG:12:CYS:C	2.39	0.58
1:DA:533:G:H5'	16:D1:24:TYR:CE2	2.39	0.58
1:AA:2782:G:O6	56:AA:3350:OHX:N6	2.35	0.58
11:DO:147:LEU:HD22	11:DO:148:LEU:N	2.16	0.58
17:D2:14:VAL:HB	17:D2:96:ILE:HG13	1.85	0.58
1:AA:1090:U:O4	1:AA:1101:U:O2	2.21	0.58
7:DH:6:ARG:HD3	7:DH:6:ARG:N	2.18	0.58
1:DA:2469:A:O5'	1:DA:2476:A:H2	1.86	0.58
31:BA:872:A:C5	31:BA:874:G:C8	2.91	0.58
43:CP:3:ARG:HG2	43:CP:9:ILE:HG12	1.84	0.58
31:CA:537:G:H2'	31:CA:538:G:H8	1.67	0.58
1:DA:1000:A:C6	1:DA:1001:A:N1	2.71	0.58
1:AA:496:G:H1'	18:AS:61:ASN:OD1	2.04	0.58
49:BV:65:ASN:H	49:BV:65:ASN:ND2	1.96	0.58
42:BO:8:ASN:HA	42:BO:11:VAL:HG23	1.84	0.58
21:DV:29:TYR:HB3	21:DV:34:ASN:HD22	1.69	0.58
1:AA:2173:A:N3	1:AA:2173:A:H2'	2.19	0.58
31:CA:266:G:H5'	31:CA:268:C:H41	1.68	0.58
47:BT:70:ARG:C	47:BT:71:PHE:HD2	2.07	0.58
22:D3:32:ARG:HG2	22:D3:33:ALA:N	2.16	0.58
1:DA:2817:G:P	13:D0:99:LYS:HZ1	2.25	0.58
1:DA:27:G:H22	1:DA:512:G:HO2'	1.47	0.58
48:BU:44:LEU:HD11	48:BU:70:ILE:HG21	1.86	0.58
24:AW:46:GLN:O	24:AW:47:ASN:O	2.22	0.58
52:CB:3:U:HO2'	52:CB:4:G:H8	1.52	0.58
1:DA:796:C:H2'	1:DA:797:C:C6	2.38	0.58
6:DG:111:LEU:HB3	6:DG:117:PHE:CE2	2.38	0.58
32:CE:124:SER:C	32:CE:126:GLU:H	2.05	0.58
1:AA:1486:A:H2'	1:AA:1487:G:H8	1.69	0.58
1:DA:2846:G:H2'	1:DA:2847:U:C6	2.39	0.58
34:BG:25:ARG:NH1	34:BG:30:LYS:O	2.37	0.58
28:D6:16:CYS:O	28:D6:17:LYS:HG3	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:2459:A:C5	1:DA:2460:U:C5	2.91	0.58
23:AZ:57:GLU:C	23:AZ:58:ILE:HD12	2.24	0.58
7:DH:107:VAL:HG23	7:DH:109:PHE:CD1	2.37	0.58
19:DT:60:ARG:HG3	19:DT:60:ARG:HH11	1.68	0.58
1:DA:2273:A:H2'	1:DA:2274:A:H8	1.69	0.58
1:DA:2702:U:C2'	1:DA:2703:C:H5	2.16	0.58
52:BD:16:C:N4	52:BD:68:A:C4	2.71	0.58
16:D1:65:ILE:HD11	16:D1:96:ALA:HB3	1.84	0.58
1:DA:2681:C:C2'	1:DA:2681:C:O2	2.47	0.58
31:BA:1128:C:H2'	31:BA:1139:G:C6	2.38	0.58
14:DQ:102:ALA:O	14:DQ:104:GLY:N	2.37	0.58
6:DG:136:ARG:O	6:DG:154:GLY:N	2.36	0.58
14:AQ:101:LEU:HD12	14:AQ:101:LEU:C	2.23	0.58
1:DA:1257:C:H4'	5:DF:83:PHE:CE2	2.37	0.58
3:AD:125:ILE:HG22	3:AD:125:ILE:O	2.02	0.58
43:BP:80:ARG:NH1	49:BV:65:ASN:O	2.36	0.58
1:DA:2130:U:H2'	1:DA:2158:A:N1	2.19	0.58
1:AA:2032:G:H21	4:AE:146:THR:CG2	2.14	0.58
1:AA:2167:U:O2'	1:AA:2168:G:P	2.61	0.58
5:AF:45:ARG:HH11	5:AF:45:ARG:CG	2.15	0.58
46:BS:40:ASP:O	46:BS:42:ARG:N	2.35	0.58
50:BW:79:ARG:NH2	50:BW:80:ARG:HE	2.01	0.58
31:CA:930:C:C4	31:CA:931:C:C5	2.90	0.58
1:DA:1027:A:N6	1:DA:1126:A:C4	2.71	0.58
52:BB:3:U:O2'	52:BB:4:G:H5''	2.03	0.58
8:AK:21:VAL:HG21	8:AK:25:TYR:CD1	2.39	0.58
1:DA:2335:A:C8	1:DA:2337:G:C5	2.92	0.58
4:DE:30:PRO:HD3	4:DE:180:ASN:OD1	2.04	0.58
31:CA:452:A:O2'	31:CA:453:A:O5'	2.21	0.58
49:BV:53:ASN:O	49:BV:77:THR:HG22	2.02	0.58
32:CE:24:TRP:CE3	32:CE:40:HIS:CE1	2.92	0.58
1:DA:696:G:H2'	1:DA:697:C:H6	1.68	0.58
32:CE:58:ILE:O	32:CE:61:LEU:HB3	2.04	0.58
43:CP:57:ARG:O	43:CP:61:GLU:HB2	2.03	0.58
50:CW:90:GLN:O	50:CW:91:LEU:HD23	2.03	0.58
2:AB:63:G:OP1	56:AB:218:OHX:N3	2.36	0.58
8:DK:56:LYS:HG3	8:DK:57:ARG:N	2.19	0.58
21:AV:93:ASP:HA	21:AV:130:PRO:HG2	1.84	0.58
31:CA:232:G:H2'	31:CA:233:C:O4'	2.03	0.58
6:AG:65:GLY:HA2	26:A4:7:PRO:CG	2.34	0.58
1:AA:2287:A:C2	1:AA:2346:A:N1	2.72	0.58
1:AA:2210:G:H5'	1:AA:2211:G:C8	2.38	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:DD:43:ARG:HD2	3:DD:44:ASN:CG	2.23	0.58
52:CD:48:C:C2'	52:CD:49:A:C8	2.87	0.58
31:BA:1028(A):C:N4	31:BA:1028(B):C:H41	2.01	0.58
52:BD:67:A:H4'	52:BD:68:A:OP1	2.03	0.58
1:DA:2798:C:H42	1:DA:2799:A:N6	2.01	0.58
3:AD:44:ASN:HB3	3:AD:49:ILE:HA	1.84	0.58
1:AA:1931:U:H5	1:AA:1969:A:N7	2.01	0.58
1:DA:1005:C:C2	1:DA:1143:A:C5	2.92	0.58
31:CA:1145:C:C4'	31:CA:1146:A:OP1	2.46	0.58
31:BA:1143:G:N1	31:BA:1144:G:N2	2.51	0.58
40:BM:49:VAL:O	40:BM:60:ARG:HB3	2.03	0.58
32:CE:132:LYS:HG3	32:CE:135:GLN:HE21	1.66	0.58
42:CO:32:PHE:HB2	42:CO:84:LEU:CD2	2.33	0.58
32:CE:163:PHE:HD2	32:CE:185:ILE:HG13	1.68	0.58
31:BA:1213:A:N7	31:BA:1215:G:C4	2.71	0.58
31:BA:453:A:C6	31:BA:454:C:C4	2.92	0.58
42:BO:6:THR:OG1	42:BO:9:GLN:HG3	2.04	0.58
1:AA:90:U:H1'	1:AA:91:A:N7	2.19	0.58
47:CT:67:LYS:HA	47:CT:70:ARG:NH1	2.18	0.58
1:AA:1287:A:C5	1:AA:1288:U:C4	2.91	0.58
3:DD:260:ARG:NH1	3:DD:267:SER:OG	2.36	0.58
1:AA:1820:U:C2	3:AD:202:LYS:HB3	2.38	0.58
4:DE:27:LEU:HG	15:DR:1:MET:HE1	1.84	0.58
1:AA:389:G:N1	11:AO:71:VAL:HG12	2.19	0.58
6:AG:173:LEU:HD13	6:AG:178:PHE:CE2	2.39	0.58
4:DE:87:GLU:O	4:DE:89:ASP:N	2.37	0.58
9:AM:32:THR:HG22	9:AM:37:LYS:HB2	1.84	0.58
5:DF:66:PRO:O	5:DF:67:GLN:HB3	2.02	0.58
21:AV:45:ASP:O	21:AV:49:ARG:HG2	2.04	0.58
1:AA:2436:G:C5	1:AA:2437:U:C5	2.91	0.58
1:AA:2685:G:O2'	1:AA:2726:U:H5	1.86	0.58
38:BK:122:ARG:HH11	38:BK:122:ARG:HB2	1.68	0.58
1:AA:184:C:H2'	1:AA:184:C:O2	2.01	0.58
9:DM:56:ASN:CA	9:DM:125:GLY:C	2.72	0.58
52:CB:38:MIA:H163	52:CB:39:A:N1	2.18	0.58
52:CD:24:G:H2'	52:CD:25:G:C8	2.39	0.58
1:AA:888:C:H41	43:BP:93:ARG:HH22	1.52	0.58
52:BD:68:A:H5''	52:BD:69:U:OP2	2.04	0.58
52:BB:48:C:C3'	52:BB:49:A:H8	2.03	0.58
5:AF:63:LYS:NZ	5:AF:67:GLN:HB2	2.18	0.58
1:DA:2138:C:N3	1:DA:2153:G:N2	2.40	0.58
31:BA:1374:A:H2'	31:BA:1375:A:C5'	2.32	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1181:C:O2'	1:DA:1182:A:H5'	2.03	0.58
31:CA:1285:A:H8	31:CA:1285:A:OP1	1.86	0.58
50:CW:49:ALA:HB1	50:CW:100:ILE:HD13	1.85	0.58
1:AA:1464:C:O2'	1:AA:1465:G:H5'	2.03	0.58
52:CB:27:A:H3'	52:CB:28:G:C8	2.39	0.58
11:AO:47:ASP:OD2	11:AO:49:ARG:HG2	2.03	0.58
52:BB:75:C:O2'	52:BB:76:C:P	2.62	0.58
49:CV:28:LYS:HD3	49:CV:29:ARG:N	2.14	0.58
1:DA:660:G:H21	11:DO:12:ALA:HA	1.67	0.58
33:CF:15:THR:HG22	33:CF:16:ARG:N	2.18	0.58
31:CA:136:C:O2'	46:CS:65:GLN:NE2	2.37	0.58
22:A3:70:GLN:NE2	22:A3:80:HIS:NE2	2.52	0.58
1:DA:2520:C:H41	1:DA:2542:A:H62	1.50	0.58
1:DA:960:A:H5''	1:DA:961:C:OP1	2.03	0.58
1:AA:1174:A:N6	1:AA:1175:U:H6	2.01	0.58
6:AG:172:LEU:HD12	6:AG:172:LEU:O	2.04	0.58
4:AE:54:GLN:O	4:AE:55:ASN:HB2	2.03	0.58
13:D0:81:ASP:O	13:D0:82:GLU:CB	2.50	0.58
25:DX:12:PRO:HA	25:DX:15:TYR:HD1	1.69	0.58
31:CA:192:U:H4'	50:CW:103:GLY:HA2	1.86	0.58
19:AT:21:PHE:CD2	19:AT:26:TYR:CD2	2.91	0.58
1:DA:142:G:H1'	19:DT:37:THR:HG22	1.85	0.58
1:DA:1705:G:O6	56:DA:3087:OHX:N5	2.37	0.58
5:DF:101:LEU:O	5:DF:106:ARG:NH1	2.37	0.58
9:DM:87:LEU:C	9:DM:89:LYS:H	2.07	0.58
1:AA:53:A:H61	1:AA:117:G:C2'	2.17	0.58
30:A8:52:LYS:N	30:A8:53:PRO:HD2	2.19	0.58
43:CP:20:THR:C	43:CP:22:ILE:H	2.06	0.58
21:AV:72:ARG:NH1	21:AV:72:ARG:CG	2.59	0.58
31:CA:1118:C:OP1	39:CL:104:ARG:HD2	2.04	0.58
31:BA:149:A:H2'	31:BA:150:C:C6	2.39	0.58
1:AA:1550:C:OP1	1:AA:1727:U:O2'	2.22	0.58
16:A1:91:ASP:O	16:A1:92:ARG:C	2.41	0.58
2:DB:15:A:H1'	2:DB:109:G:C8	2.39	0.58
52:CB:85:A:H8	1:DA:2583:G:H21	1.52	0.58
1:DA:2582:G:C2'	1:DA:2583:G:H5'	2.33	0.58
31:CA:1004:A:OP1	31:CA:1025:U:O4	2.22	0.58
31:BA:415:A:H2'	31:BA:416:G:O4'	2.04	0.58
31:CA:182:U:C5	31:CA:183:G:C1'	2.86	0.58
23:DZ:2:SER:O	23:DZ:4:VAL:HG13	2.04	0.58
1:AA:1516:U:H2'	1:AA:1517:G:H8	1.69	0.58
5:AF:197:ASP:O	5:AF:198:ALA:C	2.41	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1047:G:H2'	1:AA:1110:G:C6	2.39	0.58
7:AH:86:GLU:HG3	7:AH:165:ALA:H	1.67	0.58
1:AA:2126:A:C4	1:AA:2162:G:N2	2.71	0.58
38:BK:65:TYR:CD1	38:BK:65:TYR:N	2.72	0.58
1:AA:2427:C:H5''	1:AA:2428:G:OP1	2.04	0.58
31:CA:940:C:H2'	31:CA:941:G:H8	1.67	0.58
32:CE:142:LEU:O	32:CE:146:GLN:HB2	2.03	0.58
12:DP:2:LEU:O	12:DP:70:PRO:HG3	2.03	0.58
20:DU:46:LYS:O	20:DU:48:ALA:N	2.37	0.58
47:BT:48:GLU:O	47:BT:49:GLU:C	2.42	0.58
14:DQ:66:ALA:O	14:DQ:69:VAL:HG12	2.03	0.58
37:CJ:147:ALA:C	37:CJ:149:ARG:H	2.07	0.58
1:AA:1177:A:H4'	1:AA:1178:C:O5'	2.03	0.58
13:A0:54:LEU:O	13:A0:62:ALA:HB1	2.04	0.58
13:D0:82:GLU:H	13:D0:85:PRO:HG2	1.69	0.58
1:DA:2370:G:H21	28:D6:45:LYS:HE3	1.69	0.58
31:BA:186:C:H2'	31:BA:186(A):C:C6	2.38	0.58
35:CH:11:ILE:HD12	35:CH:31:LEU:HD13	1.86	0.58
31:BA:722:A:H2'	31:BA:724:G:C8	2.39	0.58
1:DA:1149:G:H2'	1:DA:1150:C:C6	2.39	0.58
25:DX:4:LEU:O	25:DX:36:VAL:HA	2.04	0.58
31:CA:719:C:C5	31:CA:720:C:C4	2.91	0.58
31:BA:988:G:C2	31:BA:1218:C:O2	2.57	0.58
1:AA:773:U:OP1	56:AA:3453:OHX:N2	2.37	0.58
1:AA:64:A:H1'	19:AT:66:LEU:HB2	1.85	0.58
35:CH:68:GLU:OE2	35:CH:70:PRO:HG3	2.03	0.58
4:DE:4:ILE:HD12	4:DE:28:ALA:CB	2.32	0.58
1:AA:995:C:O2	9:AM:3:THR:OG1	2.21	0.58
30:A8:34:TRP:CD2	30:A8:35:GLN:CG	2.86	0.58
1:DA:2274:A:N1	1:DA:2276:G:H1'	2.19	0.58
4:DE:37:ARG:CB	4:DE:42:ASP:OD2	2.51	0.58
11:AO:62:LEU:HD11	30:A8:30:ARG:NH1	2.11	0.58
52:CB:37:A:C6	54:C1:20:G:O6	2.57	0.58
31:CA:1358:U:H3'	31:CA:1359:C:C6	2.39	0.58
1:AA:2309:A:C5	1:AA:2310:A:N7	2.72	0.58
5:DF:20:LEU:HD22	5:DF:21:ALA:H	1.69	0.58
5:DF:26:ALA:O	5:DF:27:GLU:HG3	2.04	0.58
19:DT:12:VAL:HB	19:DT:29:TRP:CD1	2.36	0.58
16:D1:50:ARG:NH2	17:D2:72:VAL:CG2	2.53	0.58
52:BD:30:A:H61	52:BD:42:U:H3	1.50	0.58
31:BA:1178:G:HO2'	31:BA:1179:A:P	2.26	0.58
32:CE:19:HIS:CD2	32:CE:205:ASP:H	2.22	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:149:A:C2	31:BA:150:C:C4	2.91	0.58
8:AK:140:LEU:CD2	8:AK:140:LEU:N	2.67	0.58
31:BA:1128:C:C5'	39:BL:16:ARG:HH22	2.17	0.58
26:A4:12:ALA:N	26:A4:24:THR:OG1	2.37	0.58
1:AA:484:C:H2'	1:AA:485:C:C6	2.38	0.58
1:DA:905:U:H2'	1:DA:906:G:H5'	1.86	0.58
1:DA:205:G:O2'	1:DA:206:U:P	2.62	0.58
10:DN:24:VAL:HG23	10:DN:33:ALA:HB2	1.86	0.58
31:BA:1322:C:H5'	43:BP:100:GLY:HA2	1.86	0.58
20:DU:97:ARG:CG	20:DU:97:ARG:HH11	2.16	0.58
31:CA:413:G:C2'	31:CA:414:A:OP2	2.52	0.58
31:CA:1503:A:C4	54:C1:13:A:N1	2.71	0.58
42:CO:90:VAL:HG12	42:CO:90:VAL:O	2.03	0.58
1:DA:72:U:N3	24:DW:62:THR:HG22	2.18	0.58
20:DU:19:LYS:HB2	20:DU:20:TYR:HD1	1.68	0.58
31:CA:266:G:O6	31:CA:270:A:N7	2.37	0.58
42:CO:18:VAL:O	42:CO:19:ARG:CB	2.52	0.58
1:DA:495:G:H1'	18:DS:57:ASN:ND2	2.18	0.58
1:AA:1864:U:O4	56:AA:3502:OHX:N4	2.37	0.58
5:DF:4:VAL:CG1	5:DF:17:ARG:HE	2.17	0.58
21:AV:104:PHE:CE1	21:AV:119:GLU:HB3	2.38	0.58
36:BI:19:LEU:HD23	36:BI:19:LEU:O	2.04	0.58
38:CK:51:VAL:HG21	38:CK:60:ARG:HE	1.67	0.58
21:AV:76:LEU:H	21:AV:76:LEU:CD2	2.16	0.58
31:BA:106:C:C2'	31:BA:107:G:H5'	2.33	0.58
31:BA:960:U:C2'	31:BA:960:U:O2	2.51	0.58
53:CC:23:G:H2'	53:CC:24:C:H6	1.69	0.58
31:BA:1076:C:C2	31:BA:1082:G:C2	2.92	0.58
6:AG:65:GLY:HA2	26:A4:7:PRO:HG3	1.86	0.58
31:CA:601:C:H42	31:CA:637:G:H1	1.51	0.58
1:AA:652:C:N4	1:AA:653:A:N6	2.52	0.58
22:A3:27:GLU:OE2	56:A3:102:OHX:N1	2.37	0.58
1:DA:188:G:OP2	56:DA:3459:OHX:N1	2.37	0.58
31:CA:766:A:H2'	31:CA:767:A:O5'	2.03	0.58
1:DA:1942:C:OP2	1:DA:1943:U:O2'	2.19	0.58
32:CE:28:PHE:CZ	32:CE:189:ASP:HA	2.39	0.58
8:DK:136:VAL:HG13	8:DK:136:VAL:O	2.03	0.58
1:DA:1033:U:H1'	1:DA:2750:A:N1	2.18	0.58
3:DD:45:ASN:CG	3:DD:46:GLN:H	2.05	0.58
8:DK:118:LYS:O	8:DK:119:PRO:O	2.22	0.58
1:DA:948:G:C2	1:DA:970:C:O2	2.57	0.58
1:AA:1358:G:N2	1:AA:1372:U:C5	2.72	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1448:G:N3	1:DA:1529:A:H2	2.02	0.58
37:BJ:79:ARG:HG2	37:BJ:84:ASN:CG	2.24	0.58
1:AA:805:G:OP2	11:AO:41:ARG:HG2	2.04	0.58
1:AA:1019:U:O2	1:AA:1144:G:N2	2.37	0.58
4:AE:48:GLN:O	4:AE:49:LEU:HD12	2.04	0.58
53:CC:16:C:N4	56:CC:108:OHX:N3	2.51	0.58
1:AA:141:A:C8	1:AA:1408:C:H1'	2.39	0.58
1:AA:481:G:C4	1:AA:507:A:C2	2.92	0.58
27:D5:16:ARG:HG3	27:D5:17:ASP:N	2.19	0.58
52:CD:35:G:C2	54:C1:14:A:C2	2.92	0.58
31:CA:1399:C:H4'	31:CA:1400:C:O5'	2.04	0.58
42:CO:92:ASP:O	42:CO:93:LEU:HD23	2.03	0.58
9:AM:42:TRP:O	16:A1:64:ARG:HD2	2.04	0.58
31:BA:156:G:H1	31:BA:165:C:N4	2.02	0.58
21:AV:21:ALA:O	21:AV:23:LYS:N	2.37	0.58
20:AU:63:LYS:HD2	20:AU:64:GLU:N	2.19	0.58
22:D3:51:VAL:CG2	22:D3:81:VAL:HG23	2.34	0.58
31:BA:1073:U:H2'	31:BA:1074:G:C8	2.39	0.58
43:CP:39:ILE:HG22	43:CP:40:ASN:N	2.19	0.58
50:BW:76:ALA:O	50:BW:80:ARG:HG2	2.03	0.58
18:AS:64:MET:O	18:AS:65:LEU:CB	2.51	0.58
26:D4:49:PHE:CE1	26:D4:50:VAL:HG22	2.39	0.58
36:BI:61:LEU:O	36:BI:62:TRP:HB2	2.04	0.58
1:DA:990:A:H5'	1:DA:990:A:H8	1.69	0.58
1:AA:2377:A:H2'	1:AA:2378:A:C8	2.39	0.58
35:CH:83:GLU:HB3	35:CH:88:LYS:HG2	1.85	0.58
31:BA:39:G:N7	31:BA:547:A:C8	2.72	0.58
8:DK:26:ALA:O	8:DK:31:LEU:HD13	2.04	0.58
5:DF:57:VAL:CG1	5:DF:58:ALA:H	2.17	0.58
31:BA:1173:G:H2'	31:BA:1174:G:O4'	2.04	0.58
1:DA:1939:U:OP1	1:DA:2604:U:O2'	2.19	0.58
20:DU:35:TYR:CD1	20:DU:69:ALA:HB3	2.39	0.58
31:CA:1267:C:H2'	31:CA:1267:C:O2	2.02	0.58
1:DA:2233:U:H2'	1:DA:2234:G:C8	2.39	0.58
1:DA:2787:C:H1'	4:DE:62:PRO:HG3	1.84	0.57
11:AO:62:LEU:CD1	30:A8:30:ARG:HH11	1.66	0.57
1:AA:259:G:HO2'	1:AA:621:A:HO2'	1.41	0.57
1:DA:1069:A:C4'	1:DA:1070:A:H5''	2.33	0.57
1:DA:1071:G:P	1:DA:1097:U:H5'	2.44	0.57
31:CA:861:G:C5	31:CA:862:C:C5	2.92	0.57
17:A2:35:LEU:C	17:A2:37:VAL:N	2.58	0.57
31:CA:1126:U:O2'	31:CA:1127:G:OP2	2.21	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:1366:C:H2'	31:BA:1367:C:H6	1.69	0.57
19:DT:18:TYR:HA	19:DT:21:PHE:CE2	2.38	0.57
1:AA:1018:C:H2'	1:AA:1019:U:H5'	1.86	0.57
6:DG:106:LEU:O	6:DG:110:ALA:HB3	2.04	0.57
52:CB:53:A:H2'	52:CB:54:C:O4'	2.04	0.57
1:AA:1049:C:C2'	1:AA:1050:A:C5'	2.82	0.57
46:CS:43:LYS:HG2	46:CS:48:TRP:NE1	2.19	0.57
31:CA:363:A:C6	42:CO:31:PRO:HD2	2.38	0.57
32:BE:84:GLU:HB3	32:BE:219:VAL:HG21	1.86	0.57
15:AR:57:PHE:CD2	15:AR:58:ASN:N	2.70	0.57
1:AA:1138:G:H5''	1:AA:1139:G:OP2	2.04	0.57
15:AR:24:PRO:HD3	15:AR:52:ILE:HD12	1.84	0.57
31:BA:975:A:H5'	31:BA:1363:A:N6	2.19	0.57
15:DR:61:PHE:CE2	15:DR:76:PHE:HB2	2.39	0.57
18:AS:110:LYS:O	18:AS:112:GLY:N	2.37	0.57
31:CA:930:C:C2'	31:CA:931:C:H5'	2.33	0.57
38:BK:51:VAL:HG21	38:BK:60:ARG:HH12	1.69	0.57
7:DH:117:PRO:HB3	7:DH:123:PHE:HZ	1.69	0.57
31:CA:321:A:C2	31:CA:333:G:C2	2.92	0.57
33:CF:134:ILE:O	33:CF:137:ALA:N	2.37	0.57
1:DA:654(M):C:O2'	1:DA:654(N):G:OP1	2.23	0.57
1:DA:2343:C:O2'	1:DA:2373:G:O2'	2.22	0.57
21:DV:116:VAL:C	21:DV:117:LEU:HD22	2.24	0.57
1:DA:1011:G:OP1	16:D1:75:ASN:HB3	2.03	0.57
1:DA:844:C:H42	1:DA:934:G:H1	1.51	0.57
1:AA:1665:A:C2'	1:AA:1666:G:H5'	2.34	0.57
6:DG:7:LEU:O	6:DG:7:LEU:HD23	2.03	0.57
5:DF:79:GLY:HA2	5:DF:86:GLY:HA2	1.86	0.57
32:CE:12:GLU:HB3	32:CE:213:LEU:CD1	2.34	0.57
15:AR:11:GLU:N	15:AR:11:GLU:OE1	2.37	0.57
30:A8:42:ARG:HG2	30:A8:42:ARG:HH11	1.69	0.57
4:DE:67:PHE:CG	4:DE:67:PHE:O	2.57	0.57
21:AV:116:VAL:HG23	21:AV:174:VAL:HG13	1.86	0.57
1:AA:1542:G:O6	1:AA:1543:A:N6	2.36	0.57
31:BA:964:A:N3	31:BA:969:A:O2'	2.35	0.57
21:AV:91:LEU:HD12	21:AV:96:VAL:HG11	1.86	0.57
27:D5:4:HIS:HB3	27:D5:5:PRO:HD2	0.62	0.57
31:CA:1206:G:C6	31:CA:1207:G:C6	2.92	0.57
5:DF:153:SER:HB2	5:DF:190:GLU:H	1.67	0.57
1:AA:1357:U:H2'	1:AA:1358:G:O4'	2.04	0.57
31:BA:1004:A:C5'	31:BA:1025:U:N3	2.66	0.57
31:BA:1027:C:C4'	31:BA:1028:C:OP1	2.52	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:2781:A:OP2	56:AA:3505:OHX:N3	2.37	0.57
52:BB:11:C:H2'	52:BB:12:C:H6	1.69	0.57
31:BA:1129:C:C4	31:BA:1139:G:N1	2.72	0.57
1:AA:2469:A:O2'	12:AP:56:ARG:CG	2.52	0.57
14:AQ:35:ILE:HD11	14:AQ:101:LEU:HD23	1.87	0.57
31:CA:510:A:H5''	31:CA:511:C:OP2	2.04	0.57
52:BB:75:C:H3'	52:BB:76:C:H5	1.69	0.57
31:BA:429:U:H4'	31:BA:430:A:OP1	2.04	0.57
39:BL:43:ALA:HA	39:BL:74:ILE:HD13	1.86	0.57
36:BI:8:ILE:HD11	36:BI:79:LEU:HD13	1.86	0.57
1:AA:2163:C:C2'	1:AA:2164:C:H5'	2.33	0.57
1:AA:2882:A:OP1	13:A0:96:ARG:NH1	2.31	0.57
31:BA:457:C:N4	31:BA:458:C:H41	2.02	0.57
31:BA:468:A:H2'	31:BA:474:G:C5'	2.33	0.57
1:AA:280:C:C2'	1:AA:281:G:H5'	2.34	0.57
21:DV:9:TYR:OH	21:DV:61:LEU:HD13	2.04	0.57
24:DW:32:LEU:HD22	24:DW:57:ILE:CD1	2.34	0.57
46:CS:23:ASP:OD1	46:CS:25:ARG:HG3	2.04	0.57
47:CT:34:LYS:HG2	47:CT:35:VAL:H	1.69	0.57
22:D3:66:VAL:HG12	22:D3:67:VAL:N	2.19	0.57
1:AA:1299:G:H3'	1:AA:1639:U:O4	2.04	0.57
16:A1:28:ARG:CG	16:A1:38:THR:OG1	2.52	0.57
31:CA:350:G:H5'	31:CA:351:G:OP2	2.04	0.57
31:CA:201:C:C4'	31:CA:208:U:OP1	2.52	0.57
50:CW:65:LYS:O	50:CW:68:LYS:HB2	2.04	0.57
29:D7:17:GLY:O	29:D7:20:ALA:N	2.36	0.57
26:D4:61:ARG:HG2	26:D4:62:ARG:NH1	2.19	0.57
34:BG:98:GLU:OE1	34:BG:194:LEU:HD21	2.04	0.57
1:AA:875:G:N2	1:AA:903:C:C2	2.72	0.57
35:CH:131:ILE:O	35:CH:134:ALA:HB3	2.04	0.57
52:CD:18:G:C5	52:CD:66:G:N2	2.73	0.57
5:DF:29:ASN:N	5:DF:112:MET:HE3	2.19	0.57
31:BA:1176:A:C3'	31:BA:1177:G:H5''	2.34	0.57
1:DA:2401:U:H2'	1:DA:2402:C:H5''	1.85	0.57
28:D6:12:GLU:CB	28:D6:23:THR:HG22	2.35	0.57
1:AA:2140:C:C2	1:AA:2151:G:N2	2.72	0.57
40:BM:50:ILE:HB	44:BQ:41:ARG:HE	1.68	0.57
23:DZ:87:PRO:C	23:DZ:89:GLU:H	2.07	0.57
1:DA:2522:U:C2'	1:DA:2523:G:H5''	2.34	0.57
1:AA:138:G:H22	19:AT:44:GLU:CD	2.06	0.57
31:CA:1015:A:N6	31:CA:1016:A:C6	2.72	0.57
31:CA:1503:A:C4	54:C1:13:A:C2	2.92	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:439:G:O2'	1:AA:440:G:H5'	2.04	0.57
1:AA:1479:G:N2	1:AA:1480:G:H1'	2.20	0.57
31:BA:652:U:H1'	31:BA:653:A:H2	1.69	0.57
1:DA:2162:G:H5''	1:DA:2172:U:H5	1.70	0.57
1:DA:310:A:OP1	20:DU:17:SER:O	2.23	0.57
1:DA:2298:A:N3	1:DA:2321:G:C2	2.71	0.57
1:AA:2475:C:N4	1:AA:2529:G:H22	2.02	0.57
21:DV:44:PHE:CD1	21:DV:48:PHE:HB2	2.39	0.57
39:CL:43:ALA:O	39:CL:45:ALA:N	2.31	0.57
28:A6:34:LEU:CB	28:A6:36:LEU:HD22	2.34	0.57
31:CA:956:U:C2	31:CA:1225:A:C2	2.93	0.57
31:CA:1351:U:C4'	37:CJ:33:ASP:HB3	2.33	0.57
1:AA:2458:G:OP2	56:AA:3330:OHX:N4	2.37	0.57
35:BH:80:ILE:HG12	35:BH:81:GLU:H	1.68	0.57
1:DA:1113:U:H2'	1:DA:1114:G:O4'	2.04	0.57
50:BW:73:HIS:HB3	50:BW:74:LYS:HG2	1.86	0.57
31:BA:1087:G:H2'	31:BA:1088:G:C8	2.40	0.57
46:BS:36:ILE:O	46:BS:36:ILE:HG13	2.04	0.57
1:AA:663:G:H2'	1:AA:664:C:O4'	2.05	0.57
1:DA:2690:C:OP2	13:D0:14:SER:HB3	2.05	0.57
1:AA:2556:C:O2	56:AA:3458:OHX:N3	2.37	0.57
1:DA:10:G:C5	1:DA:2629:A:N6	2.72	0.57
1:DA:2635:C:O2'	4:DE:80:GLU:OE2	2.18	0.57
3:AD:35:LYS:HE3	3:AD:63:ARG:C	2.24	0.57
3:AD:64:ILE:O	3:AD:64:ILE:HG12	2.04	0.57
1:AA:879:G:O6	1:AA:898:C:N4	2.30	0.57
1:DA:1162:G:H21	17:D2:89:GLN:HE22	1.50	0.57
31:BA:791:G:C2'	31:BA:792:A:C5'	2.81	0.57
49:BV:40:ILE:O	49:BV:41:VAL:HG22	2.04	0.57
27:A5:45:VAL:HG13	27:A5:50:GLY:HA3	1.86	0.57
14:DQ:74:ALA:HB1	14:DQ:107:GLU:HB3	1.86	0.57
19:DT:50:LYS:HG2	19:DT:84:ALA:HB2	1.86	0.57
52:CB:71:C:H2'	52:CB:71:C:O2	2.04	0.57
4:AE:13:ARG:HD3	4:AE:21:VAL:HG12	1.85	0.57
1:AA:2809:A:N1	1:AA:2892:A:C4	2.73	0.57
53:CC:16:C:H5	56:CC:108:OHX:N5	2.02	0.57
1:DA:593:G:C1'	30:D8:4:MET:HE1	2.30	0.57
1:AA:481:G:H4'	1:AA:482:A:O5'	2.03	0.57
31:CA:1240:U:O3'	37:CJ:38:LEU:HD21	2.05	0.57
33:CF:15:THR:HG21	33:CF:181:ASN:HA	1.87	0.57
1:AA:2147:G:N7	1:AA:2148:G:H1'	2.19	0.57
1:AA:2167:U:HO2'	1:AA:2168:G:P	2.27	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:2500:U:H5''	1:AA:2501:C:OP2	2.04	0.57
53:BC:20:G:H21	53:BC:58:A:H1'	1.68	0.57
48:CU:29:PHE:O	48:CU:29:PHE:CD2	2.58	0.57
40:CM:78:ASN:HD21	40:CM:81:THR:HG23	1.70	0.57
16:D1:48:ALA:O	16:D1:52:ARG:HG3	2.04	0.57
1:DA:875:G:H2'	1:DA:876:C:O4'	2.05	0.57
38:BK:85:ARG:HA	38:BK:135:CYS:HB3	1.87	0.57
1:DA:353:G:C2	1:DA:354:G:C8	2.93	0.57
1:DA:780:G:H21	1:DA:783:A:H62	1.51	0.57
31:BA:939:G:H2'	31:BA:940:C:C6	2.40	0.57
32:CE:28:PHE:HD2	32:CE:194:PRO:HD3	1.69	0.57
1:AA:1929:G:H4'	1:AA:1930:G:OP1	2.04	0.57
38:CK:19:VAL:HG21	38:CK:21:LYS:HE3	1.87	0.57
7:AH:92:ILE:HG22	7:AH:93:GLY:N	2.17	0.57
31:BA:99:C:H2'	31:BA:101:A:C8	2.38	0.57
1:DA:578:A:OP1	1:DA:1255:U:O2'	2.15	0.57
38:BK:110:ALA:HB3	38:BK:121:ASP:HB3	1.85	0.57
48:BU:18:ARG:HD2	48:BU:18:ARG:N	2.18	0.57
32:BE:104:ASN:OD1	32:BE:107:THR:HB	2.03	0.57
1:AA:813:U:H2'	1:AA:814:C:C6	2.39	0.57
30:A8:34:TRP:HB3	30:A8:35:GLN:CG	2.32	0.57
20:DU:89:PHE:CG	20:DU:90:LEU:N	2.73	0.57
1:DA:2275:C:H5'	1:DA:2275:C:C6	2.36	0.57
3:AD:35:LYS:HB3	3:AD:64:ILE:H	1.69	0.57
1:DA:971:C:H2'	1:DA:972:G:H5'	1.85	0.57
52:CB:34:U:H2'	52:CB:36:U:H5	1.68	0.57
37:BJ:79:ARG:HG2	37:BJ:84:ASN:OD1	2.03	0.57
31:CA:1160:G:C6	31:CA:1181:G:O6	2.54	0.57
31:BA:145:G:N7	56:BA:1772:OHX:N1	2.53	0.57
5:AF:65:TRP:CB	5:AF:66:PRO:HD2	2.33	0.57
1:DA:1142(A):A:C8	1:DA:1144:G:N7	2.72	0.57
31:CA:1346:A:C1'	31:CA:1347:G:OP2	2.52	0.57
31:BA:1128:C:H5''	39:BL:16:ARG:HH22	1.68	0.57
52:CB:61:G:H2'	52:CB:62:G:C8	2.39	0.57
1:AA:74:A:H5'	1:AA:75:G:O4'	2.04	0.57
1:DA:1342:A:C6	1:DA:1602:U:N3	2.73	0.57
24:DW:65:ASN:ND2	24:DW:69:ARG:HH21	1.84	0.57
6:DG:61:ALA:HA	6:DG:64:THR:HG22	1.86	0.57
1:AA:482:A:OP2	1:AA:507:A:N6	2.34	0.57
31:CA:266:G:H1'	31:CA:267:C:OP2	2.05	0.57
1:AA:2392:A:H2	1:AA:2424:C:N4	2.01	0.57
18:DS:9:TYR:H	18:DS:102:HIS:HD2	1.47	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:CL:125:TYR:CD2	39:CL:126:SER:N	2.72	0.57
38:BK:6:ILE:HB	38:BK:85:ARG:HH12	1.70	0.57
1:AA:530:G:O4'	1:AA:530:G:N3	2.33	0.57
1:AA:2477:C:H6	1:AA:2477:C:O5'	1.87	0.57
38:CK:137:VAL:O	38:CK:138:TRP:HB3	2.04	0.57
36:BI:14:LEU:HD22	36:BI:18:GLN:NE2	2.20	0.57
23:AZ:87:PRO:O	23:AZ:89:GLU:N	2.37	0.57
1:AA:267:C:O2'	1:AA:268:C:H5'	2.05	0.57
4:DE:128:SER:OG	4:DE:129:HIS:N	2.35	0.57
5:DF:10:PRO:HB3	5:DF:127:GLU:HG2	1.87	0.57
40:BM:78:ASN:O	40:BM:81:THR:OG1	2.19	0.57
31:BA:688:G:H2'	31:BA:689:C:H6	1.69	0.57
15:DR:132:LYS:HB3	15:DR:132:LYS:NZ	2.19	0.57
12:DP:85:LYS:HD3	22:D3:9:SER:CB	2.35	0.57
31:CA:979:C:H3'	31:CA:980:C:H5''	1.86	0.57
1:AA:1332:G:N2	1:AA:1610:A:C8	2.73	0.57
1:AA:881:G:N7	1:AA:882:G:C4	2.72	0.57
21:DV:156:LYS:O	21:DV:157:LEU:HB2	2.04	0.57
9:AM:58:ASP:OD1	9:AM:58:ASP:C	2.42	0.57
16:D1:91:ASP:C	16:D1:93:LYS:H	2.07	0.57
39:CL:113:LYS:N	39:CL:113:LYS:HD2	2.20	0.57
19:DT:65:ARG:CG	19:DT:65:ARG:HH11	2.05	0.57
1:DA:138:G:N2	19:DT:44:GLU:OE2	2.35	0.57
1:AA:1021:A:H3'	1:AA:1021:A:H8	1.70	0.57
1:DA:2182:G:C2	1:DA:2183:C:C4	2.93	0.57
14:AQ:35:ILE:C	14:AQ:36:TYR:HD1	2.07	0.57
11:AO:46:LYS:O	11:AO:47:ASP:CB	2.52	0.57
15:DR:8:LYS:O	15:DR:11:GLU:N	2.38	0.57
31:CA:1241:G:C6	31:CA:1242:C:N4	2.73	0.57
32:CE:92:TYR:HD2	32:CE:151:GLY:HA3	1.67	0.57
30:D8:52:LYS:O	30:D8:54:GLU:N	2.37	0.57
32:BE:211:ILE:O	32:BE:215:LEU:HB2	2.04	0.57
9:DM:42:TRP:HA	9:DM:48:MET:HE1	1.87	0.57
20:AU:78:ALA:HB3	20:AU:81:LYS:NZ	2.18	0.57
41:BN:88:GLY:O	41:BN:91:ARG:HB2	2.04	0.57
1:DA:1203:G:H3'	1:DA:1204:A:H5''	1.85	0.57
1:AA:762:U:O4	56:AA:3361:OHX:N2	2.38	0.57
12:DP:2:LEU:HD11	12:DP:69:PHE:HE1	1.70	0.57
31:CA:956:U:O4	56:CA:1774:OHX:N4	2.38	0.57
17:D2:37:VAL:HG21	17:D2:57:VAL:HG13	1.86	0.57
52:CB:3:U:O2'	52:CB:4:G:H8	1.88	0.57
6:DG:171:ALA:O	6:DG:175:LEU:HG	2.05	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AD:158:ALA:O	3:AD:159:ALA:C	2.42	0.57
12:AP:35:VAL:HG11	12:AP:130:LYS:HD2	1.84	0.57
1:DA:2190:G:H2'	1:DA:2191:G:H5''	1.87	0.57
32:CE:17:PHE:HZ	32:CE:47:THR:HG21	1.67	0.57
31:CA:491:G:O2'	31:CA:492:G:H5'	2.05	0.57
31:CA:1246:C:H2'	31:CA:1247:U:O4'	2.04	0.57
1:AA:2023:G:H5'	1:AA:2617:C:H4'	1.86	0.57
43:CP:46:LYS:HG2	43:CP:47:ASP:N	2.20	0.57
12:DP:92:GLY:O	12:DP:93:TYR:CG	2.57	0.57
33:CF:88:ARG:HG3	33:CF:101:LEU:HD13	1.86	0.57
18:AS:70:TYR:H	18:AS:70:TYR:HD2	1.50	0.57
1:AA:1095:A:H2'	1:AA:1095:A:N3	2.18	0.57
45:BR:6:GLU:OE2	45:BR:6:GLU:N	2.28	0.57
28:A6:11:LEU:HD22	28:A6:26:ASN:HD22	1.69	0.57
1:DA:777:A:O2'	1:DA:778:G:H5'	2.05	0.57
31:CA:973:G:H1'	40:CM:55:LYS:HE3	1.83	0.57
1:DA:2703:C:N3	1:DA:2704:C:C5	2.72	0.57
31:BA:1157:A:N6	31:BA:1180:A:C5	2.73	0.57
31:CA:1441:G:H4'	31:CA:1442:G:C5	2.39	0.57
54:B1:13:A:HO2'	54:B1:14:A:P	2.16	0.57
16:D1:65:ILE:HD11	16:D1:96:ALA:HB1	1.85	0.57
31:CA:827:U:O4	31:CA:870:U:C2	2.57	0.57
1:DA:1135:C:H2'	1:DA:1135:C:O2	2.04	0.57
19:DT:44:GLU:O	19:DT:46:ALA:N	2.33	0.57
1:DA:1053:C:H2'	1:DA:1054:A:O4'	2.04	0.57
31:BA:515:G:C2	31:BA:537:G:C2	2.93	0.57
42:CO:100:ILE:CG2	42:CO:101:VAL:N	2.67	0.57
35:CH:110:LEU:HD21	35:CH:139:LEU:HD21	1.85	0.57
31:CA:362:G:N7	56:CA:1798:OHX:N1	2.53	0.57
1:DA:593:G:H4'	30:D8:61:LEU:HD22	1.85	0.57
1:DA:803:U:O2'	1:DA:804:A:H5'	2.05	0.57
4:DE:102:VAL:HA	4:DE:200:GLU:O	2.05	0.57
1:DA:2723:C:OP1	13:D0:3:HIS:HD2	1.88	0.57
20:AU:97:ARG:HH21	20:AU:98:VAL:CG2	2.17	0.57
53:CC:1:C:O2	53:CC:1:C:C2'	2.52	0.57
1:DA:2318:G:N2	14:DQ:2:ALA:HA	2.17	0.57
38:BK:68:ARG:HD2	38:BK:69:ARG:O	2.03	0.57
1:AA:299:A:N6	1:AA:300:A:N1	2.53	0.57
1:AA:811:U:O5'	11:AO:21:ARG:O	2.23	0.57
31:CA:939:G:C6	31:CA:940:C:N4	2.73	0.57
39:CL:75:ASP:O	39:CL:78:LYS:HB3	2.05	0.57
1:AA:1329:U:H5''	1:AA:1330:C:H5	1.67	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
34:CG:150:GLU:C	34:CG:152:SER:H	2.08	0.57
47:BT:91:ARG:NH1	47:BT:91:ARG:HG2	2.20	0.57
1:DA:1006:C:H1'	9:DM:106:MET:HE3	1.85	0.57
31:CA:931:C:O2'	31:CA:932:C:O5'	2.16	0.57
12:DP:132:VAL:HG21	21:DV:81:ARG:NH1	2.20	0.57
21:AV:58:VAL:O	21:AV:60:GLU:N	2.31	0.57
29:A7:19:ARG:HH11	29:A7:19:ARG:HG2	1.70	0.57
31:BA:1497:G:C2'	31:BA:1498:U:H5'	2.35	0.57
1:DA:1967:C:C2'	1:DA:1968:G:H5'	2.34	0.57
31:BA:1078:U:C5	31:BA:1079:G:C5	2.93	0.57
31:CA:683:G:H2'	31:CA:684:A:C8	2.40	0.57
37:CJ:13:GLN:HG2	37:CJ:14:PRO:HD2	1.87	0.57
1:AA:2545:G:C2'	1:AA:2546:U:H5'	2.35	0.57
31:CA:370:C:O2	31:CA:482:A:O2'	2.22	0.57
1:DA:2869:G:H2'	1:DA:2870:C:O4'	2.04	0.57
11:AO:108:LYS:C	11:AO:110:TYR:H	2.08	0.57
28:A6:38:LYS:HE2	28:A6:46:HIS:HB3	1.86	0.57
42:BO:101:VAL:HG12	42:BO:104:VAL:HG23	1.87	0.57
52:BD:79:A:H2'	52:BD:80:C:O4'	2.04	0.57
1:DA:744:G:C2'	1:DA:745:G:O5'	2.53	0.57
3:AD:35:LYS:HG2	3:AD:64:ILE:CA	2.34	0.57
31:CA:1055:A:N1	33:CF:194:GLY:HA3	2.19	0.57
31:CA:1323:G:H2'	31:CA:1324:A:C8	2.39	0.57
44:CQ:21:TYR:HD2	44:CQ:22:THR:O	1.88	0.57
1:AA:1279:G:H5'	13:A0:34:ILE:CD1	2.35	0.57
19:DT:29:TRP:CH2	19:DT:78:LYS:HE2	2.39	0.57
15:AR:102:ILE:HA	15:AR:105:LEU:HD21	1.87	0.57
9:AM:55:VAL:HG12	9:AM:126:PRO:HA	1.85	0.57
9:AM:93:THR:HG22	9:AM:94:HIS:ND1	2.20	0.57
31:BA:1133:G:C4	31:BA:1134:G:C8	2.93	0.57
1:DA:2295:C:H2'	1:DA:2295:C:O2	2.04	0.57
1:DA:1105:U:H2'	1:DA:1106:G:H8	1.70	0.57
31:BA:368:U:P	8:DK:91:SER:OG	2.63	0.57
12:DP:79:LEU:CD1	12:DP:80:GLU:HB2	2.35	0.57
4:AE:70:ALA:O	4:AE:71:GLY:C	2.42	0.57
31:CA:652:U:O2'	31:CA:653:A:N3	2.33	0.57
1:DA:2067:G:O2'	1:DA:2069:G:H5''	2.05	0.57
31:BA:412:A:OP2	34:BG:35:ARG:NH2	2.38	0.57
6:AG:131:TYR:HB3	6:AG:159:VAL:HG23	1.86	0.57
37:CJ:35:LYS:NZ	37:CJ:38:LEU:HD22	2.20	0.57
32:CE:162:ILE:O	32:CE:185:ILE:HG12	2.05	0.57
2:AB:89(A):A:C5	2:AB:90:C:H1'	2.40	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:308:G:C8	1:DA:501:A:H1'	2.40	0.57
31:CA:135:C:O2'	56:CA:1768:OHX:N4	2.38	0.57
32:BE:177:ALA:O	32:BE:179:LYS:N	2.37	0.57
39:BL:53:VAL:O	39:BL:54:ASP:HB2	2.04	0.57
6:AG:25:TYR:O	6:AG:27:ASN:N	2.38	0.57
8:DK:81:VAL:H	8:DK:143:SER:CB	2.18	0.57
31:BA:328:C:H4'	31:BA:329:A:C5'	2.35	0.57
31:BA:1234:C:O2'	31:BA:1235:U:H5'	2.05	0.57
23:AZ:97:LEU:HD23	23:AZ:98:LEU:H	1.68	0.57
36:BI:19:LEU:CD2	36:BI:23:LYS:HZ3	2.17	0.57
1:DA:405:U:C2'	1:DA:406:G:OP1	2.52	0.57
31:BA:1288:A:H1'	31:BA:1352:C:O2'	2.05	0.57
12:AP:109:VAL:CG1	12:AP:114:ALA:HB2	2.35	0.57
34:BG:77:ASN:O	34:BG:80:GLU:HB2	2.05	0.57
46:BS:4:ILE:HA	46:BS:20:VAL:O	2.05	0.57
6:AG:41:GLN:HG2	6:AG:154:GLY:O	2.04	0.57
1:DA:2494:G:C2'	1:DA:2495:G:H5'	2.34	0.57
51:BX:14:TRP:HE3	51:BX:15:ARG:HG2	1.70	0.57
31:CA:1413:A:H2'	31:CA:1414:U:O4'	2.05	0.57
3:AD:39:LYS:NZ	3:AD:60:ARG:HH11	2.02	0.57
8:DK:5:LEU:HD21	8:DK:12:LEU:HD23	1.86	0.57
1:AA:2284:C:H41	28:A6:25:LYS:HZ1	1.51	0.57
11:AO:19:VAL:HG23	11:AO:27:HIS:HB3	0.72	0.57
4:DE:35:GLN:HG3	4:DE:36:ARG:H	1.68	0.57
31:CA:1357:A:C8	31:CA:1358:U:C5	2.92	0.57
1:AA:888:C:N4	43:BP:93:ARG:HH22	2.02	0.57
52:BD:43:G:H2'	52:BD:44:C:C6	2.40	0.57
39:CL:104:ARG:O	39:CL:105:ASP:HB2	2.05	0.57
1:DA:91:A:C2'	1:DA:92:G:H5'	2.34	0.57
37:CJ:115:ARG:O	37:CJ:118:VAL:HG22	2.04	0.57
31:BA:145:G:C2	31:BA:178:C:O2	2.58	0.57
40:CM:40:LEU:HD13	40:CM:71:LEU:HD22	1.87	0.57
1:DA:2469:A:N3	1:DA:2469:A:H5''	2.18	0.57
1:DA:2210:G:H3'	1:DA:2211:G:C5	2.40	0.57
2:DB:42:C:H4'	6:DG:67:LYS:HD3	1.86	0.57
16:D1:25:TRP:CD1	16:D1:26:GLY:N	2.72	0.57
1:AA:1509:C:H3'	1:AA:1510:A:C5'	2.33	0.57
33:BF:14:ILE:O	33:BF:16:ARG:N	2.34	0.57
1:DA:598:G:H1'	11:DO:12:ALA:CB	2.35	0.57
1:DA:1990:C:H2'	1:DA:1991:U:H6	1.70	0.57
31:CA:386:C:O2'	31:CA:387:U:H5'	2.05	0.57
1:AA:299:A:H62	1:AA:300:A:H61	1.52	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:DD:244:ARG:HB2	3:DD:245:PRO:HD2	1.87	0.57
32:CE:141:GLU:O	32:CE:145:LEU:HB2	2.03	0.57
18:AS:19:LEU:O	27:A5:25:LEU:HD12	2.05	0.57
33:CF:47:LEU:HD21	33:CF:68:VAL:HG11	1.87	0.57
35:BH:26:PHE:N	35:BH:26:PHE:CD1	2.72	0.57
1:DA:875:G:N2	1:DA:903:C:C2	2.73	0.57
2:DB:73:A:C4	2:DB:104:A:C2	2.93	0.57
31:BA:292:G:N7	31:BA:293:G:H1'	2.20	0.57
18:AS:7:ALA:HB2	18:AS:50:VAL:HG22	1.87	0.57
1:AA:1227:A:H5''	1:AA:1228:G:OP2	2.05	0.57
8:AK:94:ALA:HB1	8:AK:111:PRO:HG2	1.87	0.57
1:AA:46:C:OP2	1:AA:215:G:H2'	2.05	0.57
8:AK:37:VAL:HG12	8:AK:38:LEU:H	1.70	0.57
23:AZ:23:LYS:HB3	23:AZ:29:GLY:HA3	1.87	0.57
26:A4:9:LEU:HG	26:A4:26:SER:HA	1.86	0.57
51:BX:5:ASP:O	51:BX:11:GLY:HA3	2.05	0.57
1:AA:1419:A:H4'	1:AA:1420:U:OP1	2.05	0.57
2:DB:116:G:H5'	14:DQ:55:ALA:HB2	1.87	0.57
52:CD:17:G:C4'	52:CD:18:G:OP1	2.53	0.57
21:DV:11:GLU:CG	21:DV:12:GLY:N	2.51	0.57
1:AA:881:G:O6	1:AA:895:U:C2	2.56	0.57
17:D2:71:LEU:O	17:D2:72:VAL:HG12	2.05	0.57
31:BA:1176:A:H2'	31:BA:1177:G:H5''	1.87	0.57
31:BA:96:G:C6	31:BA:97:U:C2	2.93	0.57
50:BW:40:ALA:HB2	50:BW:55:ILE:HG22	1.85	0.57
9:DM:38:HIS:CE1	9:DM:39:ARG:HG3	2.39	0.57
31:CA:827:U:C4	31:CA:870:U:N3	2.73	0.57
31:BA:1154:G:C4	31:BA:1155:G:C8	2.93	0.57
1:DA:1049:C:H2'	1:DA:1050:A:H5'	1.86	0.57
1:AA:2069:G:N2	1:AA:2070:G:H1'	2.19	0.57
52:CB:75:C:O2'	52:CB:76:C:P	2.61	0.57
24:AW:4:SER:CB	24:AW:5:GLU:OE2	2.48	0.57
35:CH:91:LEU:CD1	35:CH:120:THR:HG22	2.31	0.57
53:CC:20:G:C2	53:CC:58:A:C2	2.92	0.57
20:DU:97:ARG:CD	20:DU:97:ARG:H	2.18	0.57
39:CL:5:TYR:CD2	39:CL:18:PHE:CE2	2.92	0.57
9:DM:42:TRP:HA	9:DM:48:MET:CE	2.35	0.57
31:BA:818:G:O2'	31:BA:819:A:H5'	2.05	0.57
47:BT:34:LYS:HD3	47:BT:36:ILE:HG22	1.87	0.57
1:AA:2147:G:H2'	1:AA:2148:G:H4'	1.87	0.57
1:DA:2537:U:C2	1:DA:2538:C:C5	2.93	0.57
31:BA:364:A:O2'	31:BA:365:U:O5'	2.20	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:DF:16:GLY:O	5:DF:17:ARG:C	2.43	0.57
1:DA:65:C:H4'	19:DT:69:TYR:CD1	2.40	0.57
1:DA:720:C:H2'	1:DA:721:C:H6	1.70	0.57
1:AA:2638:G:OP2	4:AE:82:ARG:NH2	2.38	0.57
43:CP:53:VAL:O	43:CP:57:ARG:HB2	2.04	0.57
31:BA:1087:G:H2'	31:BA:1088:G:H8	1.70	0.57
1:AA:2099:U:O4	56:AA:3553:OHX:N2	2.38	0.57
1:AA:1432:C:H2'	1:AA:1433:U:O4'	2.03	0.57
1:AA:474:G:O6	56:AA:3487:OHX:N1	2.38	0.57
1:DA:513:A:C2	1:DA:514:A:C5	2.93	0.57
31:CA:925:G:O6	56:CA:1785:OHX:N3	2.38	0.57
11:DO:124:LYS:HA	11:DO:143:GLY:O	2.04	0.57
31:CA:1478:C:C4	31:CA:1479:C:C5	2.93	0.57
1:DA:40:C:H2'	1:DA:41:C:C6	2.40	0.57
1:DA:2500:U:H5''	1:DA:2501:C:OP2	2.04	0.57
1:DA:69:C:H2'	1:DA:70:G:H8	1.70	0.57
49:CV:10:PHE:O	49:CV:11:VAL:O	2.23	0.56
1:AA:1331:A:O2'	1:AA:1332:G:C8	2.58	0.56
43:BP:87:TYR:C	43:BP:89:GLY:N	2.59	0.56
1:AA:1359:A:H2	1:AA:1372:U:O4	1.87	0.56
17:D2:67:GLY:O	17:D2:88:ARG:CD	2.53	0.56
52:BD:14:A:H5''	56:BD:102:OHX:N3	2.19	0.56
28:D6:25:LYS:HB3	30:D8:34:TRP:CZ3	2.40	0.56
31:BA:789:U:O4	31:BA:792:A:OP2	2.22	0.56
1:DA:833:U:H1'	11:DO:55:ARG:NH1	2.19	0.56
11:DO:55:ARG:O	11:DO:57:THR:N	2.38	0.56
2:AB:43:C:H5'	6:AG:67:LYS:HE3	1.86	0.56
31:BA:1125:U:H2'	31:BA:1125:U:O2	2.04	0.56
31:BA:1130:A:O5'	31:BA:1131:G:P	2.63	0.56
14:DQ:9:ARG:O	14:DQ:12:PHE:N	2.38	0.56
23:AZ:76:ARG:CG	23:AZ:76:ARG:NH1	2.64	0.56
31:CA:1298:C:O2'	31:CA:1299:A:C4	2.56	0.56
31:CA:1401:G:C2	31:CA:1402:C:H1'	2.39	0.56
1:DA:2133:G:H1'	1:DA:2158:A:H62	1.70	0.56
34:BG:114:ARG:O	34:BG:117:ALA:HB3	2.05	0.56
1:DA:1007:C:H5''	9:DM:35:ARG:HH11	1.68	0.56
1:DA:2162:G:O2'	1:DA:2163:C:H5'	2.05	0.56
1:DA:2125:G:N2	1:DA:2172:U:O5'	2.34	0.56
1:AA:2475:C:H3'	1:AA:2476:A:C5'	2.35	0.56
34:CG:98:GLU:HG3	34:CG:194:LEU:HD11	1.86	0.56
1:DA:1166:C:O2	1:DA:1184:G:C2	2.58	0.56
1:DA:2016:U:OP1	56:DA:3362:OHX:N3	2.37	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
17:A2:47:VAL:O	17:A2:48:GLY:O	2.23	0.56
33:CF:71:ALA:HA	33:CF:106:VAL:HB	1.87	0.56
9:AM:15:LEU:HB3	9:AM:136:GLU:HA	1.86	0.56
4:DE:26:ILE:O	4:DE:27:LEU:CB	2.53	0.56
15:DR:16:ARG:HB3	15:DR:18:ASP:OD1	2.04	0.56
31:BA:1080:A:H5''	31:BA:1081:G:OP2	2.04	0.56
32:CE:47:THR:O	32:CE:51:LEU:HB2	2.05	0.56
1:AA:55:G:H2'	1:AA:56:A:H8	1.70	0.56
4:AE:16:ARG:O	4:AE:17:ASP:HB2	2.05	0.56
42:BO:38:THR:O	42:BO:79:GLU:HG2	2.05	0.56
31:CA:35:G:C2	31:CA:550:G:N3	2.73	0.56
12:DP:42:ILE:HD13	12:DP:97:VAL:HG21	1.87	0.56
1:DA:487:C:C2'	1:DA:488:G:H5'	2.35	0.56
31:BA:582:U:H2'	31:BA:583:A:O4'	2.04	0.56
14:AQ:9:ARG:O	14:AQ:11:LYS:N	2.38	0.56
4:AE:143:ASN:HB2	4:AE:147:PRO:HD2	1.87	0.56
1:DA:1188:U:C5'	17:D2:79:VAL:HB	2.34	0.56
3:DD:61:LEU:HB3	3:DD:63:ARG:NH1	2.20	0.56
1:AA:1496:A:C8	1:AA:1577:C:O2'	2.22	0.56
2:AB:70:C:H2'	2:AB:71:C:H6	1.70	0.56
2:AB:73:A:C3'	2:AB:74:U:H5'	2.33	0.56
1:AA:864:G:O2'	1:AA:865:C:H5'	2.06	0.56
34:CG:8:VAL:HG11	34:CG:21:LEU:HB2	1.87	0.56
37:BJ:79:ARG:HH12	37:BJ:82:GLY:H	1.50	0.56
1:DA:2417:C:N4	1:DA:2418:A:H62	2.03	0.56
3:AD:238:GLY:O	3:AD:239:ARG:HB2	2.05	0.56
20:DU:62:GLU:OE1	20:DU:63:LYS:NZ	2.38	0.56
43:BP:4:ILE:HG22	43:BP:5:ALA:N	2.14	0.56
31:BA:963:G:H21	40:BM:55:LYS:CE	2.18	0.56
31:BA:173:U:H4'	31:BA:174:C:OP2	2.04	0.56
17:D2:13:ARG:NH1	17:D2:15:GLU:OE1	2.38	0.56
52:BB:53:A:H2'	52:BB:54:C:H6	1.70	0.56
40:CM:40:LEU:HB3	40:CM:69:ASN:HB3	1.86	0.56
31:BA:1125:U:H3	40:BM:5:ARG:HH21	1.53	0.56
1:AA:1019:U:C5	1:AA:1020:A:N7	2.73	0.56
1:DA:2182:G:H2'	1:DA:2183:C:C6	2.41	0.56
24:AW:59:ARG:O	24:AW:62:THR:HG23	2.05	0.56
31:BA:954:G:C2	31:BA:955:U:C2	2.93	0.56
31:CA:1297:C:C1'	31:CA:1298:C:OP2	2.53	0.56
32:CE:216:SER:C	32:CE:218:ALA:H	2.08	0.56
1:AA:2405:G:P	11:AO:77:ARG:HH21	2.28	0.56
24:DW:6:VAL:HG23	24:DW:7:ARG:H	1.70	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
49:BV:63:THR:CG2	49:BV:65:ASN:HD21	2.17	0.56
35:CH:62:ALA:O	35:CH:64:ARG:N	2.37	0.56
34:BG:31:CYS:HB3	34:BG:33:MET:HB2	1.87	0.56
5:AF:136:THR:HG22	5:AF:166:ALA:O	2.05	0.56
1:AA:2171:A:O2'	1:AA:2172:U:O5'	2.17	0.56
31:CA:259:G:H1	31:CA:267:C:H42	1.53	0.56
7:DH:11:VAL:HB	7:DH:13:LYS:CD	2.35	0.56
23:AZ:78:LYS:HZ3	23:AZ:94:LEU:HD11	1.69	0.56
4:DE:23:VAL:HA	4:DE:184:VAL:O	2.04	0.56
1:AA:1786:A:H1'	1:AA:1938:A:N6	2.21	0.56
11:AO:11:GLY:O	11:AO:13:ASN:N	2.38	0.56
1:DA:753:C:H2'	1:DA:754:C:H6	1.70	0.56
2:AB:44:G:C2	2:AB:48:A:C2	2.93	0.56
14:AQ:41:ASP:OD2	14:AQ:44:LYS:HD2	2.05	0.56
12:DP:97:VAL:HG12	12:DP:97:VAL:O	2.05	0.56
1:AA:2761:G:O6	56:AA:3463:OHX:N2	2.38	0.56
34:CG:191:ARG:NH1	34:CG:200:GLU:OE1	2.37	0.56
50:CW:88:VAL:O	50:CW:92:LEU:HG	2.05	0.56
2:DB:8:U:O2'	14:DQ:40:ILE:HD13	2.05	0.56
1:DA:262:A:H2'	1:DA:263:C:H5'	1.86	0.56
1:AA:1956:U:H2'	1:AA:1957:C:H5'	1.85	0.56
1:DA:1488:G:N1	1:DA:1489:U:O2	2.38	0.56
31:BA:1030:C:H6	31:BA:1030:C:O5'	1.88	0.56
45:BR:73:GLU:HA	45:BR:73:GLU:OE1	2.05	0.56
12:DP:31:ASP:OD1	12:DP:134:ARG:NH2	2.38	0.56
1:DA:228:A:C8	1:DA:228:A:C3'	2.87	0.56
5:DF:69:HIS:C	5:DF:70:THR:HG23	2.26	0.56
13:A0:24:GLN:HE22	13:A0:36:THR:CG2	2.19	0.56
52:CD:13:G:H1'	52:CD:23:A:N6	2.20	0.56
52:CD:46:G:H2'	52:CD:47:U:O4'	2.06	0.56
1:AA:878:A:C6	1:AA:900:A:C8	2.93	0.56
1:AA:1575:C:H2'	1:AA:1576:U:H6	1.70	0.56
2:AB:71:C:C4	2:AB:72:G:N7	2.73	0.56
31:BA:1002:G:N3	31:BA:1003:G:C8	2.73	0.56
31:BA:1157:A:H1'	31:BA:1158:C:C4	2.40	0.56
31:BA:1176:A:N6	31:BA:1177:G:N7	2.53	0.56
31:CA:1116:C:H42	31:CA:1184:G:H1	1.53	0.56
31:BA:1295:G:C6	31:BA:1296:C:C4	2.94	0.56
32:CE:16:HIS:CD2	32:CE:209:ARG:O	2.59	0.56
1:AA:1210:A:H5''	1:AA:1212:G:O4'	2.05	0.56
43:BP:9:ILE:O	43:BP:9:ILE:HG22	2.06	0.56
31:BA:962:C:O2'	56:BA:1806:OHX:N1	2.38	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:789:U:H1'	31:BA:792:A:C2	2.40	0.56
31:BA:1452:C:C2'	31:BA:1453:G:OP2	2.53	0.56
1:AA:805:G:O4'	11:AO:38:GLN:NE2	2.37	0.56
11:DO:84:ASN:C	11:DO:86:LYS:H	2.08	0.56
52:BB:13:G:H5'	52:BB:14:A:OP1	2.04	0.56
1:AA:1952:A:C2	10:AN:22:ILE:CD1	2.88	0.56
7:AH:169:VAL:HG13	7:AH:170:ARG:N	2.20	0.56
31:CA:1128:C:C4	31:CA:1139:G:C2	2.93	0.56
31:BA:1129:C:C4	31:BA:1139:G:C6	2.94	0.56
31:BA:1134:G:H2'	31:BA:1134:G:N3	2.20	0.56
7:DH:7:LEU:N	7:DH:8:PRO:HD2	2.19	0.56
12:DP:52:VAL:HG13	12:DP:56:ARG:HH12	1.70	0.56
52:CB:53:A:C2'	52:CB:54:C:H5'	2.34	0.56
2:DB:93:C:O2'	2:DB:94:C:H5'	2.06	0.56
15:DR:99:LEU:N	15:DR:99:LEU:HD12	2.21	0.56
4:AE:64:LYS:O	4:AE:70:ALA:HB2	2.05	0.56
2:DB:46:A:H2'	2:DB:47:C:H6	1.69	0.56
5:DF:59:TYR:HD1	5:DF:78:ILE:HG13	1.70	0.56
34:BG:110:PHE:CD2	34:BG:148:VAL:HG23	2.40	0.56
1:AA:1364:G:C8	23:AZ:2:SER:HB3	2.40	0.56
17:D2:29:PRO:HA	17:D2:61:VAL:CG1	2.35	0.56
39:CL:4:TYR:CB	39:CL:19:LEU:HB2	2.36	0.56
34:BG:11:LEU:O	34:BG:12:CYS:C	2.43	0.56
34:BG:5:ILE:CG2	34:BG:6:GLY:N	2.66	0.56
1:DA:1470:G:N7	56:DA:3343:OHX:N1	2.53	0.56
35:BH:33:VAL:HG11	35:BH:109:ILE:HG12	1.86	0.56
35:BH:35:GLY:HA3	35:BH:112:LEU:O	2.05	0.56
1:AA:1557:C:H5''	1:AA:1558:A:OP2	2.04	0.56
1:DA:2287:A:H2	1:DA:2346:A:N1	2.03	0.56
39:CL:3:GLN:HE21	39:CL:20:ARG:HH11	1.49	0.56
2:AB:28:C:O2'	2:AB:29:A:H5'	2.05	0.56
1:AA:164:U:O2	1:AA:164:U:H2'	2.03	0.56
31:CA:345:C:HO2'	31:CA:346:G:P	2.28	0.56
9:DM:43:THR:H	9:DM:48:MET:HE3	1.69	0.56
21:DV:168:GLU:O	21:DV:170:THR:N	2.38	0.56
31:CA:179:A:C4	31:CA:180:U:C5	2.92	0.56
16:D1:83:LEU:HD23	16:D1:88:ILE:HG13	1.85	0.56
1:AA:2682:U:C6	4:AE:11:MET:HE2	2.40	0.56
37:BJ:109:ASN:OD1	37:BJ:119:ARG:NH2	2.38	0.56
21:DV:40:ASP:O	21:DV:43:GLU:HB2	2.06	0.56
1:AA:143:C:H5'	19:AT:35:THR:HG21	1.87	0.56
19:DT:49:VAL:HB	19:DT:83:VAL:HG21	1.87	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:CD:41:C:H2'	52:CD:42:U:H6	1.69	0.56
20:AU:43:ASN:CB	20:AU:64:GLU:HA	2.35	0.56
1:AA:528:A:H2	1:AA:2043:C:H5'	1.69	0.56
20:DU:11:ASP:O	20:DU:27:VAL:HG22	2.06	0.56
39:CL:47:LEU:CB	39:CL:50:LEU:HD12	2.35	0.56
39:CL:95:LYS:HZ3	39:CL:96:LEU:HB2	1.69	0.56
7:AH:30:LYS:HE3	7:AH:81:GLU:H	1.70	0.56
26:D4:49:PHE:CD1	26:D4:50:VAL:HG22	2.40	0.56
31:BA:54:C:N4	31:BA:353:A:OP2	2.30	0.56
6:DG:15:VAL:HG13	6:DG:175:LEU:CB	2.35	0.56
9:AM:75:TYR:CD1	9:AM:75:TYR:C	2.78	0.56
32:CE:137:ARG:HD3	32:CE:137:ARG:C	2.25	0.56
1:AA:2801:A:C2'	1:AA:2802:G:O5'	2.52	0.56
21:AV:105:VAL:HG13	21:AV:140:ASP:HA	1.88	0.56
22:A3:56:ASP:O	22:A3:57:PHE:HB2	2.04	0.56
1:AA:107:C:O2	1:AA:107:C:H2'	2.06	0.56
47:CT:78:GLU:OE2	47:CT:81:ARG:HD2	2.05	0.56
39:BL:3:GLN:OE1	39:BL:20:ARG:NH1	2.38	0.56
4:DE:55:ASN:O	4:DE:57:LYS:NZ	2.36	0.56
12:DP:134:ARG:HH11	12:DP:134:ARG:HG2	1.70	0.56
31:BA:1277:C:O2'	31:BA:1279:A:H1'	2.05	0.56
14:DQ:26:LEU:HD12	14:DQ:39:ILE:HD11	1.86	0.56
3:DD:177:LEU:O	3:DD:180:GLY:N	2.24	0.56
33:CF:83:ARG:HG3	33:CF:84:ILE:N	2.19	0.56
51:BX:9:ARG:HH12	51:BX:23:PRO:HD2	1.68	0.56
42:CO:23:LYS:CD	42:CO:23:LYS:H	2.18	0.56
16:A1:97:ASP:O	16:A1:100:VAL:N	2.37	0.56
8:DK:114:LEU:O	8:DK:115:ALA:HB3	2.04	0.56
15:AR:39:ARG:HH22	31:BA:346:G:C1'	2.17	0.56
14:DQ:39:ILE:HG21	14:DQ:82:ILE:HD13	1.86	0.56
14:AQ:74:ALA:HB1	14:AQ:107:GLU:O	2.06	0.56
52:CB:10:C:H2'	52:CB:11:C:C6	2.41	0.56
1:AA:2773:C:OP1	4:AE:166:THR:OG1	2.23	0.56
31:BA:378:G:N2	31:BA:386:C:O2	2.38	0.56
52:BB:41:C:H2'	52:BB:41:C:O2	2.05	0.56
1:AA:214:G:OP1	1:AA:214:G:H4'	2.03	0.56
45:CR:4:THR:HB	45:CR:7:GLU:H	1.70	0.56
52:CD:1:G:C2	52:CD:82:A:C2	2.93	0.56
31:CA:1190:G:O6	56:CA:1762:OHX:N6	2.38	0.56
3:DD:35:LYS:CB	3:DD:64:ILE:HG23	2.35	0.56
3:DD:35:LYS:HE3	3:DD:64:ILE:H	1.70	0.56
31:CA:631:G:H5''	31:CA:632:A:N7	2.19	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:1176:A:H3'	31:BA:1177:G:C5'	2.35	0.56
31:BA:1176:A:N1	31:BA:1177:G:C4	2.74	0.56
30:D8:31:HIS:O	30:D8:32:LEU:C	2.44	0.56
1:DA:2427:C:C5'	1:DA:2428:G:OP1	2.50	0.56
1:DA:91:A:H2'	1:DA:92:G:H5'	1.88	0.56
1:AA:1081:U:C2'	1:AA:1082:U:O4'	2.53	0.56
1:DA:1075:C:H2'	1:DA:1076:C:C6	2.41	0.56
1:AA:1796:U:H2'	1:AA:1797:C:C6	2.39	0.56
31:BA:266:G:C2	31:BA:269:C:C5	2.93	0.56
4:AE:49:LEU:HD21	4:AE:91:VAL:HG21	1.86	0.56
21:DV:175:VAL:HG22	21:DV:176:PRO:HB3	1.88	0.56
31:CA:1003:G:H2'	31:CA:1004:A:H5'	1.86	0.56
2:DB:46:A:H2'	2:DB:47:C:C6	2.40	0.56
6:DG:66:GLN:OE1	6:DG:98:ARG:NH1	2.39	0.56
52:BB:73:U:H2'	52:BB:74:C:C6	2.40	0.56
11:AO:112:LEU:H	11:AO:128:HIS:HD2	1.49	0.56
16:D1:25:TRP:O	16:D1:25:TRP:HD1	1.89	0.56
1:AA:1045:A:H1'	1:AA:1047:G:N3	2.21	0.56
31:CA:281:G:H8	31:CA:281:G:OP2	1.88	0.56
7:AH:83:TYR:CA	7:AH:135:GLY:H	2.18	0.56
1:AA:1551:C:H2'	1:AA:1552:G:C5'	2.32	0.56
8:DK:125:GLU:OE1	8:DK:141:LYS:HA	2.06	0.56
42:CO:117:ARG:NH2	42:CO:124:LYS:HB2	2.21	0.56
31:CA:1227:A:O3'	43:CP:115:LYS:HE2	2.05	0.56
15:AR:132:LYS:O	15:AR:136:GLN:HG2	2.05	0.56
24:AW:32:LEU:HD12	24:AW:57:ILE:HD12	1.87	0.56
3:DD:70:TRP:CZ3	3:DD:146:GLU:OE2	2.58	0.56
39:BL:98:PRO:C	39:BL:100:GLY:H	2.08	0.56
1:AA:34:C:HO2'	1:AA:35:G:P	2.27	0.56
31:BA:599:C:N3	31:BA:600:C:C5	2.73	0.56
6:AG:66:GLN:OE1	6:AG:98:ARG:NH1	2.39	0.56
33:BF:7:PRO:O	33:BF:11:ARG:NH1	2.38	0.56
7:AH:137:ASP:HB3	7:AH:140:LYS:HB3	1.87	0.56
31:CA:584:G:N7	56:CA:1741:OHX:N2	2.54	0.56
1:DA:2191:G:HO2'	1:DA:2192:G:P	2.28	0.56
31:CA:833:U:O2	31:CA:854:G:C2	2.59	0.56
31:BA:1370:G:O2'	31:BA:1371:G:H5'	2.05	0.56
26:A4:49:PHE:O	26:A4:50:VAL:HB	2.05	0.56
39:BL:3:GLN:HB3	39:BL:20:ARG:HH11	1.71	0.56
32:CE:12:GLU:HB3	32:CE:213:LEU:HD13	1.87	0.56
7:AH:55:PRO:HD2	7:AH:61:HIS:ND1	2.20	0.56
47:BT:45:HIS:CD2	47:BT:47:PRO:HG3	2.41	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:A1:115:ALA:O	16:A1:116:ALA:CB	2.54	0.56
34:BG:146:ILE:HD12	34:BG:146:ILE:N	2.20	0.56
37:CJ:53:LYS:HB3	37:CJ:53:LYS:NZ	2.21	0.56
1:DA:743:G:C2'	1:DA:744:G:H5'	2.36	0.56
40:CM:55:LYS:O	40:CM:56:HIS:CG	2.58	0.56
52:CD:11:C:H2'	52:CD:12:C:H5'	1.88	0.56
1:DA:617:G:OP1	5:DF:40:GLN:CG	2.54	0.56
31:BA:1236:A:O2'	31:BA:1304:G:H4'	2.04	0.56
30:D8:33:ASN:HD21	30:D8:41:ILE:HG12	1.69	0.56
27:A5:31:VAL:HG22	27:A5:32:PRO:O	2.05	0.56
1:AA:2886:G:C2	1:AA:2887:U:C6	2.93	0.56
9:AM:96:GLU:H	9:AM:98:VAL:HG12	1.70	0.56
31:BA:1309:G:C5	31:BA:1329:A:C2	2.94	0.56
31:BA:1310:G:O2'	31:BA:1311:G:H5'	2.05	0.56
53:CC:17:C:O2	53:CC:17:C:C2'	2.54	0.56
1:AA:1729:A:C5	1:AA:1731:G:C5	2.93	0.56
49:BV:39:THR:HG22	49:BV:40:ILE:H	1.71	0.56
1:DA:2294:C:H2'	1:DA:2295:C:H6	1.70	0.56
1:DA:2469:A:C5'	1:DA:2469:A:N3	2.68	0.56
12:DP:111:GLU:O	12:DP:115:MET:HG2	2.06	0.56
7:AH:4:ILE:HG13	7:AH:6:ARG:NH2	2.21	0.56
1:DA:2311:A:C2	6:DG:44:GLY:CA	2.88	0.56
1:DA:1257:C:O2'	5:DF:83:PHE:O	2.24	0.56
1:DA:675:A:C4	1:DA:804:A:C2	2.92	0.56
31:BA:750:G:N3	31:BA:751:U:C6	2.73	0.56
1:DA:71:A:H4'	1:DA:72:U:H5''	1.88	0.56
31:BA:575:G:H4'	31:BA:576:G:C5'	2.35	0.56
1:DA:2298:A:H61	1:DA:2318:G:C2'	2.19	0.56
7:AH:83:TYR:HA	7:AH:135:GLY:H	1.70	0.56
1:AA:527:C:H4'	1:AA:528:A:C5'	2.34	0.56
14:AQ:92:TYR:CB	14:AQ:98:VAL:HG11	2.33	0.56
21:DV:75:ASN:O	21:DV:84:GLU:HG3	2.04	0.56
15:DR:55:ASN:H	15:DR:59:THR:HG22	1.70	0.56
33:CF:164:ARG:NH2	54:C1:25:A:O2'	2.34	0.56
1:AA:2572:A:C4	4:AE:144:ARG:NH1	2.74	0.56
21:DV:59:LEU:CD2	21:DV:61:LEU:HG	2.36	0.56
21:DV:59:LEU:O	21:DV:60:GLU:CB	2.52	0.56
32:BE:25:ASN:O	32:BE:27:LYS:N	2.38	0.56
1:AA:404:C:H1'	1:AA:405:U:OP2	2.05	0.56
39:BL:10:ARG:HD3	39:BL:11:LYS:HB2	1.88	0.56
31:BA:1169:A:N6	31:BA:1170:A:N1	2.53	0.56
33:CF:88:ARG:HD3	33:CF:100:ALA:O	2.05	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:2740:A:C6	1:AA:2764:A:C8	2.93	0.56
31:BA:475:G:N7	56:BA:1790:OHX:N3	2.54	0.56
31:CA:166:G:C2'	31:CA:167:G:H5'	2.36	0.56
13:D0:52:ILE:HG21	13:D0:94:TYR:CG	2.40	0.56
1:DA:1567:A:H5'	3:DD:58:HIS:CD2	2.41	0.56
4:DE:61:ARG:HB3	4:DE:62:PRO:CD	2.36	0.56
1:AA:2213:U:O2'	1:AA:2215:G:OP1	2.15	0.56
17:D2:76:LYS:HB2	17:D2:81:TYR:CD1	2.40	0.56
54:C1:19:U:O2'	54:C1:20:G:H5'	2.06	0.56
2:AB:72:G:O2'	2:AB:104:A:N6	2.33	0.56
2:AB:103:U:O3'	21:AV:72:ARG:HD3	2.05	0.56
1:DA:1464:C:O2'	1:DA:1528:A:H8	1.86	0.56
30:D8:33:ASN:HA	30:D8:36:LYS:HE3	1.85	0.56
31:CA:1442:G:C5	31:CA:1446:A:N1	2.74	0.56
1:AA:2133:G:C6	1:AA:2157:G:O6	2.58	0.56
4:AE:38:THR:CG2	4:AE:41:LYS:H	2.19	0.56
31:CA:1348:U:C4	31:CA:1374:A:H2	2.23	0.56
16:A1:92:ARG:CB	17:A2:11:GLN:NE2	2.68	0.56
29:D7:8:ASN:HD22	29:D7:11:LYS:N	1.95	0.56
14:DQ:11:LYS:CG	14:DQ:91:PRO:HD3	2.31	0.56
1:DA:1397:U:O2'	1:DA:1398:C:P	2.64	0.56
1:DA:1331:A:O2'	1:DA:1332:G:H8	1.87	0.56
1:AA:1126:A:H4'	1:AA:1127:A:O5'	2.04	0.56
42:CO:83:VAL:O	42:CO:105:TYR:CD1	2.59	0.56
35:CH:75:THR:HG23	35:CH:76:ILE:N	2.20	0.56
40:CM:9:ARG:NH2	40:CM:95:GLU:HG2	2.13	0.56
20:DU:84:ARG:O	20:DU:85:VAL:HB	2.06	0.56
20:DU:97:ARG:N	20:DU:97:ARG:HD3	2.20	0.56
31:CA:475:G:C2	31:CA:476:G:C8	2.93	0.56
1:AA:861:A:C2	1:AA:917:A:C5	2.94	0.56
31:BA:1240:U:O2'	37:BJ:38:LEU:HG	2.06	0.56
12:AP:4:PRO:HD3	12:AP:70:PRO:O	2.05	0.56
38:CK:77:GLU:HG3	38:CK:78:GLN:H	1.67	0.56
19:DT:47:PHE:O	19:DT:49:VAL:HG13	2.06	0.56
22:D3:51:VAL:CA	22:D3:62:LEU:HD12	2.35	0.56
1:DA:1537:C:H2'	1:DA:1538:G:H8	1.68	0.56
23:DZ:80:LEU:HD12	23:DZ:82:LEU:HD21	1.88	0.56
6:AG:16:ARG:HG3	6:AG:16:ARG:NH1	2.20	0.56
1:DA:1386:C:H2'	1:DA:1387:C:H6	1.70	0.56
1:AA:2580:U:H5''	1:AA:2581:G:OP2	2.06	0.56
33:CF:17:ASP:OD2	33:CF:18:TRP:N	2.38	0.56
31:BA:1293:G:H2'	31:BA:1294:G:O4'	2.06	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AD:25:THR:OG1	3:AD:113:VAL:HG21	2.05	0.56
21:AV:151:HIS:HD2	21:AV:168:GLU:HA	1.71	0.56
13:D0:37:THR:HB	13:D0:39:PRO:HD2	1.88	0.56
31:BA:1285:A:H4'	31:BA:1286:A:O5'	2.04	0.56
21:AV:117:LEU:HD13	21:AV:117:LEU:H	1.70	0.56
1:AA:755:C:H2'	1:AA:756:C:H6	1.69	0.56
31:CA:605:U:O4	56:CA:1809:OHX:N3	2.39	0.56
1:AA:2855:C:H2'	1:AA:2856:C:H6	1.71	0.56
3:DD:96:HIS:CE1	3:DD:102:LYS:HD3	2.40	0.56
36:BI:45:LEU:HD23	36:BI:46:ARG:N	2.20	0.56
9:AM:17:ASP:O	9:AM:18:ALA:HB3	2.06	0.56
1:DA:2180:U:H2'	1:DA:2181:G:O4'	2.05	0.56
1:DA:2095:C:H2'	1:DA:2096:U:O4'	2.06	0.56
1:DA:277:C:O2	1:DA:277:C:H2'	2.06	0.56
1:DA:2513:G:N2	4:DE:143:ASN:HD21	2.02	0.56
31:CA:1480:G:C5	31:CA:1481:U:C5	2.94	0.56
31:BA:200:G:C2	31:BA:218:C:N3	2.73	0.56
6:DG:109:VAL:HG11	6:DG:142:PRO:HB3	1.88	0.56
1:AA:2416:C:O5'	1:AA:2416:C:H6	1.87	0.56
1:DA:929:G:O5'	1:DA:929:G:H8	1.89	0.56
10:AN:113:LYS:HD2	10:AN:117:LEU:HD11	1.87	0.56
5:DF:160:ASN:HB3	5:DF:163:VAL:HB	1.87	0.56
11:DO:46:LYS:HD3	11:DO:51:PHE:CZ	2.41	0.56
3:AD:35:LYS:CG	3:AD:64:ILE:H	2.17	0.56
17:D2:77:ALA:C	17:D2:78:LYS:HG2	2.26	0.56
31:CA:972:C:O3'	40:CM:57:LYS:HG3	2.06	0.56
3:DD:35:LYS:CE	3:DD:64:ILE:H	2.19	0.56
52:BD:30:A:N6	52:BD:42:U:H3	2.04	0.56
15:AR:107:ASP:O	15:AR:108:ARG:C	2.44	0.56
3:AD:43:ARG:HH11	3:AD:44:ASN:CG	2.00	0.56
31:CA:1442:G:HO2'	31:CA:1443:G:P	2.29	0.56
43:BP:6:GLY:O	43:BP:7:VAL:HG23	2.06	0.56
31:BA:198:G:OP1	56:BA:1772:OHX:N2	2.39	0.56
16:D1:29:SER:C	16:D1:30:LYS:HD3	2.24	0.56
31:BA:1450:U:O2	31:BA:1452:C:H5''	2.06	0.56
52:BB:10:C:N4	52:BB:26:G:H1	2.03	0.56
31:CA:861:G:C4	31:CA:862:C:C5	2.94	0.56
39:BL:113:LYS:HD3	39:BL:119:ALA:HA	1.88	0.56
14:DQ:29:PHE:HD2	14:DQ:30:ARG:H	1.50	0.56
1:DA:2467:C:N4	1:DA:2468:G:C2	2.73	0.56
5:DF:102:PRO:HB2	5:DF:105:VAL:HG23	1.86	0.56
31:CA:1002:G:H2'	31:CA:1003:G:C8	2.40	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
34:BG:173:TRP:HA	34:BG:187:ARG:HD3	1.88	0.56
32:CE:92:TYR:CE2	32:CE:151:GLY:HA3	2.40	0.56
31:CA:382:A:H2'	31:CA:383:A:H8	1.68	0.56
1:DA:1786:A:H2	1:DA:2606:C:H1'	1.69	0.56
21:DV:30:ASN:O	21:DV:33:LEU:N	2.27	0.56
32:CE:217:ARG:NH1	32:CE:217:ARG:HB2	2.21	0.56
1:DA:2119:A:N1	1:DA:2170:A:N7	2.52	0.56
15:AR:53:ARG:O	15:AR:59:THR:HB	2.06	0.56
37:BJ:113:GLU:HB3	37:BJ:118:VAL:HG13	1.87	0.56
5:AF:40:GLN:HE22	5:AF:182:ASN:HB2	1.71	0.56
31:CA:273:A:H1'	47:CT:16:GLN:NE2	2.17	0.56
38:BK:20:TYR:HD1	38:BK:65:TYR:CE2	2.23	0.56
31:BA:977:A:H8	31:BA:1223:C:N3	2.02	0.56
1:DA:1404:C:H2'	1:DA:1405:U:H5'	1.86	0.56
40:CM:27:ALA:HA	40:CM:81:THR:HB	1.87	0.56
31:CA:1111:A:H2'	31:CA:1112:C:H6	1.71	0.56
34:BG:134:ASP:HB2	34:BG:135:LEU:HD13	1.87	0.56
21:AV:105:VAL:HG11	21:AV:138:GLU:OE1	2.06	0.56
34:BG:101:LEU:HD23	34:BG:121:VAL:CG1	2.35	0.56
5:DF:57:VAL:CG1	5:DF:58:ALA:N	2.69	0.56
1:DA:729:G:OP2	3:DD:13:ARG:NH1	2.38	0.56
5:AF:119:ARG:HG2	5:AF:119:ARG:O	2.06	0.56
31:BA:721:G:H4'	31:BA:722:A:O4'	2.05	0.56
33:CF:102:ASN:O	33:CF:103:VAL:HG23	2.06	0.56
38:BK:39:LEU:HB3	38:BK:45:ILE:HG12	1.87	0.56
1:DA:1268:A:H2'	1:DA:1269:A:O4'	2.05	0.56
4:AE:105:THR:HB	4:AE:197:ILE:HG12	1.88	0.56
8:AK:86:THR:HA	8:AK:123:LEU:HD13	1.88	0.56
1:AA:2080:G:H5'	23:AZ:19:GLN:HG2	1.88	0.56
46:BS:82:GLN:O	46:BS:83:GLU:HB2	2.05	0.56
1:AA:2396:G:O2'	1:AA:2397:G:H5'	2.06	0.56
4:DE:42:ASP:CB	4:DE:43:GLY:CA	2.36	0.56
3:AD:71:ASP:HB3	3:AD:103:ARG:HH22	1.69	0.56
31:CA:978:A:O2'	31:CA:1322:C:C4	2.58	0.56
1:AA:2307:G:N9	1:AA:2311:A:C2	2.73	0.56
1:DA:617:G:OP1	5:DF:40:GLN:HG3	2.05	0.56
2:AB:75:G:N2	21:AV:85:HIS:CE1	2.73	0.56
31:BA:1176:A:C2'	31:BA:1177:G:H5''	2.36	0.56
1:DA:2402:C:H41	1:DA:2416:C:H1'	1.70	0.56
31:BA:173:U:C4	31:BA:197:A:C2	2.94	0.56
31:BA:181:G:O2'	31:BA:182:U:O5'	2.24	0.56
31:CA:1280:A:O5'	40:CM:40:LEU:HD21	2.06	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
33:BF:19:GLU:HA	33:BF:54:ARG:NH1	2.21	0.56
23:DZ:92:LYS:HB2	23:DZ:93:GLU:OE1	2.06	0.56
1:AA:1142(A):A:C8	1:AA:1144:G:C5	2.93	0.56
31:BA:81:G:C2	31:BA:88:C:C4	2.93	0.56
48:CU:55:ARG:NH1	48:CU:55:ARG:HG3	2.18	0.56
34:BG:8:VAL:HG21	34:BG:115:ARG:NH1	2.20	0.56
31:CA:987:G:N2	31:CA:1218:C:N3	2.47	0.56
1:DA:774:A:H2	1:DA:787:U:O2'	1.86	0.56
31:BA:156:G:H1	31:BA:165:C:H42	1.54	0.56
1:DA:2537:U:O4	56:DA:3439:OHX:N4	2.38	0.56
42:BO:90:VAL:HG12	42:BO:91:LYS:N	2.21	0.56
31:CA:616:G:C2	31:CA:617:G:C8	2.94	0.56
3:DD:267:SER:C	3:DD:269:PHE:H	2.09	0.56
21:AV:30:ASN:HD22	21:AV:33:LEU:H	1.52	0.56
3:DD:271:ILE:O	3:DD:272:ALA:HB2	2.06	0.56
1:AA:16:G:H2'	1:AA:17:G:H8	1.71	0.56
31:BA:353:A:C2'	31:BA:354:G:OP2	2.53	0.56
1:DA:902:C:C2'	1:DA:903:C:H5'	2.36	0.56
1:DA:2051:A:H5'	1:DA:2578:G:O4'	2.06	0.56
1:DA:1015:G:N1	1:DA:1016:G:C5	2.73	0.56
1:DA:863:A:O2'	1:DA:864:G:H5'	2.05	0.56
12:AP:43:THR:HA	12:AP:94:VAL:HG12	1.87	0.56
1:AA:922:U:H2'	1:AA:923:C:C6	2.41	0.56
1:AA:1725:G:OP2	56:AA:3527:OHX:N2	2.39	0.56
35:BH:8:GLU:HG3	35:BH:34:VAL:HG22	1.87	0.56
7:DH:9:ILE:HD12	7:DH:49:VAL:HG12	1.88	0.56
1:DA:266:G:OP1	56:DA:3426:OHX:N5	2.39	0.56
1:AA:2610:C:H4'	1:AA:2611:U:OP2	2.04	0.56
53:BC:41:C:O2'	53:BC:42:C:H5'	2.05	0.56
1:AA:325:G:O2'	1:AA:326:G:H5'	2.06	0.56
1:DA:1926:U:H2'	1:DA:1928:A:OP2	2.06	0.56
1:DA:2689:U:P	1:DA:2719:G:H22	2.29	0.56
31:CA:695:A:OP1	41:CN:52:GLY:HA3	2.05	0.56
31:BA:1468:A:O5'	31:BA:1468:A:H8	1.88	0.56
9:DM:15:LEU:HD22	9:DM:53:VAL:HB	1.88	0.56
31:CA:426:G:H2'	31:CA:427:U:C6	2.41	0.56
30:D8:30:ARG:HD2	30:D8:31:HIS:H	1.71	0.56
31:CA:688:G:H2'	31:CA:689:C:H6	1.71	0.56
1:AA:2887:U:H2'	1:AA:2887:U:O2	2.06	0.56
1:AA:1091:G:C2'	1:AA:1092:C:H5'	2.36	0.56
45:BR:74:ASP:C	45:BR:76:GLU:H	2.09	0.56
14:DQ:27:SER:HA	14:DQ:88:ASP:CB	2.36	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:CB:61:G:H2'	52:CB:62:G:H8	1.71	0.56
1:DA:2469:A:O5'	1:DA:2476:A:C2	2.58	0.56
15:DR:23:ARG:HB2	15:DR:24:PRO:HD2	1.87	0.56
42:CO:83:VAL:CG1	42:CO:100:ILE:HD12	2.33	0.56
35:CH:99:GLY:O	35:CH:117:ASP:HA	2.06	0.56
31:BA:411:A:H62	31:BA:413:G:N2	2.04	0.56
51:CX:15:ARG:HG3	51:CX:15:ARG:O	2.06	0.56
31:CA:1394:A:OP2	56:CA:1797:OHX:N4	2.38	0.56
1:AA:1516:U:H2'	1:AA:1517:G:C8	2.41	0.56
42:CO:90:VAL:C	42:CO:92:ASP:H	2.07	0.56
1:DA:812:C:H5''	1:DA:1250:G:O2'	2.06	0.56
19:DT:31:HIS:ND1	19:DT:32:PRO:HD2	2.19	0.56
8:AK:93:THR:H	8:AK:96:ASP:HB2	1.71	0.56
33:CF:164:ARG:HH12	33:CF:166:GLU:CD	2.09	0.56
1:DA:773:U:C4'	3:DD:47:GLY:HA3	2.36	0.56
9:DM:91:LEU:O	9:DM:95:PRO:HB3	2.06	0.56
21:AV:60:GLU:O	21:AV:61:LEU:CB	2.53	0.56
1:AA:1131:G:C8	9:AM:75:TYR:CD2	2.94	0.56
49:CV:66:MET:CA	49:CV:67:VAL:HB	2.35	0.56
49:CV:66:MET:HA	49:CV:67:VAL:O	2.05	0.56
39:BL:125:TYR:HD2	39:BL:126:SER:N	2.04	0.56
2:DB:8:U:H5''	2:DB:8:U:H6	1.71	0.56
35:BH:43:LEU:HD23	35:BH:133:TYR:CE1	2.41	0.56
1:DA:1244:G:H4'	11:DO:7:ARG:HB2	1.88	0.56
1:DA:1954:G:C2	1:DA:2551:C:H5''	2.40	0.56
1:AA:775:G:C4	1:AA:794:G:C8	2.93	0.56
31:CA:560:U:H5'	31:CA:566:G:N2	2.20	0.56
46:CS:9:PHE:HE2	46:CS:18:ARG:HE	1.52	0.56
25:AX:10:LYS:HD3	25:AX:53:LEU:HD23	1.87	0.56
47:BT:88:TYR:HD2	47:BT:89:LEU:HD23	1.70	0.56
5:DF:197:ASP:OD1	5:DF:197:ASP:C	2.42	0.56
7:DH:103:LEU:HD23	7:DH:103:LEU:N	2.20	0.56
1:DA:958:U:H5''	12:DP:14:ARG:HD3	1.86	0.56
30:A8:52:LYS:CG	30:A8:52:LYS:O	2.51	0.56
17:D2:88:ARG:O	17:D2:89:GLN:C	2.43	0.56
1:DA:2797:U:H2'	1:DA:2798:C:C5'	2.33	0.56
9:AM:55:VAL:C	9:AM:57:ALA:N	2.59	0.56
31:CA:1128:C:C2	31:CA:1139:G:C6	2.94	0.56
40:BM:50:ILE:CD1	40:BM:60:ARG:HH11	2.19	0.56
19:DT:18:TYR:HD1	19:DT:21:PHE:HE2	1.53	0.56
1:DA:2466:C:H2'	1:DA:2467:C:H5'	1.88	0.56
1:DA:2843:G:C3'	1:DA:2844:G:H5''	2.35	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:CH:75:THR:HA	35:CH:115:VAL:HG12	1.88	0.56
35:CH:75:THR:OG1	35:CH:117:ASP:O	2.15	0.56
4:AE:68:ALA:C	4:AE:70:ALA:N	2.52	0.56
12:DP:19:GLY:HA3	12:DP:98:LYS:CD	2.35	0.56
1:AA:851:U:O2'	25:AX:45:GLY:HA3	2.05	0.56
52:BD:48:C:H2'	52:BD:49:A:C8	2.41	0.56
35:BH:9:LYS:O	35:BH:33:VAL:HG23	2.05	0.56
32:BE:100:GLY:O	32:BE:102:LEU:N	2.39	0.56
31:BA:652:U:O2'	31:BA:653:A:C5'	2.54	0.56
1:DA:2720:U:H2'	1:DA:2721:A:O4'	2.06	0.56
12:AP:136:ALA:HB1	21:AV:52:SER:HB2	1.88	0.56
32:CE:7:VAL:O	32:CE:8:LYS:HB2	2.05	0.56
1:AA:528:A:OP2	9:AM:114:ARG:NH1	2.39	0.56
38:BK:20:TYR:HA	38:BK:65:TYR:CE2	2.40	0.56
1:AA:811:U:P	11:AO:21:ARG:O	2.64	0.56
6:DG:29:TRP:O	6:DG:31:VAL:N	2.39	0.56
31:BA:262:A:H2'	31:BA:263:A:C8	2.41	0.56
5:AF:108:LYS:NZ	5:AF:112:MET:SD	2.69	0.56
7:DH:58:GLU:HB2	7:DH:61:HIS:CE1	2.41	0.56
38:BK:8:ASP:O	38:BK:12:ARG:HG3	2.05	0.56
12:DP:102:VAL:HG12	12:DP:102:VAL:O	2.04	0.56
1:DA:1558:A:H4'	1:DA:1559:G:O5'	2.06	0.56
31:BA:595:G:H22	31:BA:643:C:H41	1.53	0.56
31:BA:1291:G:H2'	31:BA:1292:U:H6	1.71	0.56
20:AU:18:GLY:C	20:AU:20:TYR:H	2.08	0.56
7:DH:136:ILE:HD12	7:DH:136:ILE:N	2.21	0.56
1:DA:1260:G:H2'	1:DA:1261:C:C6	2.41	0.56
22:A3:42:GLY:O	22:A3:57:PHE:CD2	2.59	0.56
1:AA:531:C:H4'	1:AA:532:A:H5''	1.88	0.56
1:DA:909:A:C4	1:DA:912:C:C5	2.94	0.56
50:BW:45:GLN:HA	50:BW:91:LEU:HB3	1.86	0.56
1:DA:315:G:H2'	1:DA:316:C:C6	2.41	0.56
50:BW:82:SER:O	50:BW:86:ARG:HB2	2.06	0.56
21:AV:16:SER:O	21:AV:20:ARG:N	2.38	0.56
19:DT:14:SER:O	19:DT:16:LYS:N	2.38	0.56
10:DN:88:ASN:O	10:DN:91:LEU:N	2.28	0.56
1:DA:2591:C:C2'	1:DA:2592:G:H5'	2.36	0.56
2:DB:20:C:C2'	2:DB:21:G:H5'	2.36	0.56
15:DR:57:PHE:O	15:DR:57:PHE:CD2	2.59	0.56
14:DQ:73:LEU:HD13	14:DQ:73:LEU:O	2.05	0.56
3:AD:147:LEU:HD13	3:AD:155:LEU:HD21	1.86	0.56
1:DA:2118:U:H3	1:DA:2147:G:HO2'	1.54	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:DF:68:LYS:O	5:DF:69:HIS:C	2.45	0.55
1:DA:946:G:C2'	1:DA:947:G:C5'	2.84	0.55
31:CA:1362(A):C:H5'	31:CA:1363:A:O5'	2.05	0.55
31:CA:948:C:O2'	31:CA:949:A:H5'	2.06	0.55
40:CM:56:HIS:C	40:CM:58:ASP:H	2.10	0.55
52:BD:17:G:H1'	52:BD:18:G:P	2.46	0.55
52:BD:40:U:C2'	52:BD:41:C:H5'	2.35	0.55
1:DA:2404:C:H1'	11:DO:67:MET:HE1	1.84	0.55
16:D1:92:ARG:CZ	17:D2:11:GLN:H	2.20	0.55
1:DA:1022:G:C2'	1:DA:1023:U:OP2	2.54	0.55
31:BA:552:U:O2'	31:BA:553:A:H5'	2.06	0.55
52:CD:60:A:C2	52:CD:73:U:O2	2.58	0.55
52:BB:75:C:O2'	52:BB:76:C:OP1	2.23	0.55
48:CU:26:LEU:N	48:CU:26:LEU:HD13	2.21	0.55
11:AO:106:LEU:O	11:AO:107:LYS:HB2	2.05	0.55
1:DA:1000:A:N6	1:DA:1001:A:N1	2.54	0.55
1:AA:2303:G:O2'	6:AG:132:ASN:HB2	2.06	0.55
31:CA:1239:A:O2'	31:CA:1298:C:N4	2.34	0.55
1:DA:915:C:H2'	1:DA:916:G:O5'	2.07	0.55
19:DT:63:LYS:HZ3	19:DT:63:LYS:H	1.54	0.55
34:BG:114:ARG:NH1	34:BG:114:ARG:HG3	2.17	0.55
1:DA:2308:G:HO2'	1:DA:2309:A:P	2.29	0.55
52:CD:79:A:H2'	52:CD:80:C:H5'	1.87	0.55
11:DO:121:LYS:O	11:DO:123:LEU:HD23	2.06	0.55
1:AA:2797:U:H5''	1:AA:2798:C:OP2	2.06	0.55
21:DV:48:PHE:CZ	21:DV:52:SER:HB2	2.41	0.55
1:DA:1358:G:N2	1:DA:1372:U:C5	2.74	0.55
31:BA:1191:A:H2'	31:BA:1192:C:H6	1.68	0.55
5:DF:37:VAL:HG13	5:DF:184:TYR:CD1	2.40	0.55
5:DF:17:ARG:HD3	5:DF:17:ARG:O	2.06	0.55
1:AA:2259:G:C2	1:AA:2282:G:C6	2.94	0.55
28:A6:42:TRP:N	28:A6:42:TRP:HD1	2.01	0.55
13:A0:48:VAL:O	13:A0:51:LEU:N	2.39	0.55
1:DA:648:G:C2'	1:DA:649:G:H5'	2.37	0.55
1:AA:658:C:H2'	1:AA:659:C:H6	1.69	0.55
31:CA:1387:G:H2'	31:CA:1388:C:H6	1.70	0.55
16:D1:111:GLU:C	16:D1:113:ALA:H	2.10	0.55
1:DA:574:C:N3	4:DE:145:LYS:NZ	2.46	0.55
1:DA:1286:A:H1'	1:DA:1288:U:OP2	2.05	0.55
7:AH:12:PRO:O	7:AH:13:LYS:HB2	2.06	0.55
29:D7:43:THR:HG22	29:D7:44:PRO:O	2.05	0.55
35:CH:68:GLU:O	35:CH:68:GLU:HG3	2.05	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1079:G:H2'	31:CA:1080:A:C8	2.40	0.55
3:DD:124:PRO:HG2	3:DD:129:ASN:ND2	2.21	0.55
1:AA:1591:G:H2'	1:AA:1592:C:C6	2.41	0.55
1:AA:2102:U:O4	56:AA:3566:OHX:N2	2.39	0.55
1:DA:829:A:N7	1:DA:2247:A:O2'	2.38	0.55
21:AV:111:VAL:HG11	21:AV:146:ILE:HG12	1.86	0.55
1:DA:2275:C:HO2'	1:DA:2276:G:P	2.29	0.55
1:AA:2420:C:H5	30:A8:31:HIS:HA	1.72	0.55
3:AD:33:LEU:HD13	3:AD:34:VAL:N	2.21	0.55
31:CA:1094:G:H2'	31:CA:1095:U:OP2	2.05	0.55
31:CA:1329:A:OP2	51:CX:7:ARG:NH1	2.36	0.55
39:CL:114:TYR:CD2	39:CL:114:TYR:N	2.71	0.55
3:DD:35:LYS:HD3	3:DD:104:TYR:CD1	2.40	0.55
1:AA:890:A:H3'	1:AA:892:G:H8	1.69	0.55
16:D1:44:ASN:OD1	17:D2:74:LYS:CA	2.52	0.55
31:BA:1028(B):C:N3	31:BA:1032(A):G:C2	2.74	0.55
1:AA:2320:A:H2'	1:AA:2320:A:N3	2.21	0.55
8:AK:133:HIS:O	8:AK:134:PRO:C	2.43	0.55
1:AA:2591:C:H2'	1:AA:2592:G:C8	2.42	0.55
1:AA:329:G:H4'	1:AA:330:A:OP2	2.05	0.55
14:DQ:27:SER:HA	14:DQ:88:ASP:HB2	1.86	0.55
7:AH:4:ILE:HG13	7:AH:6:ARG:NE	2.21	0.55
2:DB:83:G:H1	2:DB:93:C:N4	2.04	0.55
4:AE:21:VAL:HB	4:AE:22:PRO:HA	1.87	0.55
31:CA:509:A:C8	31:CA:509:A:H3'	2.41	0.55
31:CA:533:A:O2'	31:CA:534:U:H5'	2.06	0.55
31:BA:1322:C:O2'	31:BA:1323:G:P	2.65	0.55
35:CH:101:ILE:HG12	35:CH:101:ILE:O	2.05	0.55
2:DB:39:A:O2'	2:DB:46:A:N1	2.32	0.55
4:AE:66:HIS:ND1	4:AE:66:HIS:C	2.59	0.55
39:CL:88:TYR:O	39:CL:90:PRO:HD3	2.06	0.55
28:A6:41:PRO:HB2	28:A6:44:ARG:NH1	2.21	0.55
5:AF:59:TYR:CG	5:AF:78:ILE:HD12	2.40	0.55
43:CP:29:ARG:HD3	43:CP:64:TRP:CD2	2.41	0.55
1:DA:2320:A:H61	1:DA:2333:A:H2'	1.71	0.55
1:DA:2439:A:O2'	1:DA:2440:C:OP2	2.24	0.55
5:AF:107:LYS:HE3	5:AF:207:GLY:H	1.71	0.55
31:BA:465:A:N7	31:BA:467:G:N7	2.54	0.55
13:A0:85:PRO:C	13:A0:87:TYR:H	2.09	0.55
1:DA:2398:U:O2'	28:D6:53:LYS:NZ	2.39	0.55
1:AA:1864:U:C2'	1:AA:1869:G:H5''	2.36	0.55
1:AA:1889:A:N1	1:AA:2234:G:H1'	2.21	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:BI:10:LEU:HD22	36:BI:61:LEU:HD11	1.88	0.55
31:CA:452:A:O2'	31:CA:453:A:P	2.64	0.55
15:AR:125:ARG:HH12	31:BA:1446:A:H1'	1.71	0.55
1:AA:1024:G:C3'	1:AA:1025:G:H5''	2.37	0.55
1:DA:813:U:C2	1:DA:1195:G:C2	2.94	0.55
1:DA:1657:C:H2'	1:DA:1658:C:C6	2.41	0.55
10:DN:14:THR:O	10:DN:51:ALA:HB3	2.07	0.55
35:CH:92:LYS:HE2	38:CK:102:ARG:HH21	1.69	0.55
1:AA:64:A:C2	19:AT:66:LEU:HD23	2.41	0.55
1:AA:270(L):U:H3	8:AK:50:ARG:HD2	1.71	0.55
24:DW:40:SER:O	24:DW:42:GLY:N	2.39	0.55
31:CA:13:U:OP2	56:CA:1733:OHX:N3	2.40	0.55
1:AA:550:G:O2'	1:AA:1220:A:N3	2.34	0.55
3:AD:69:ARG:NH2	3:AD:128:GLY:O	2.32	0.55
45:CR:17:ARG:HH11	45:CR:17:ARG:HG3	1.71	0.55
34:CG:105:VAL:O	34:CG:105:VAL:HG12	2.04	0.55
1:DA:2761:G:H1'	7:DH:143:GLN:OE1	2.05	0.55
33:BF:43:LEU:O	33:BF:47:LEU:HB2	2.06	0.55
1:DA:669:G:O2'	1:DA:670:A:P	2.64	0.55
3:DD:30:GLU:OE1	3:DD:63:ARG:NE	2.40	0.55
1:DA:2702:U:OP1	1:DA:2702:U:O4'	2.24	0.55
17:D2:67:GLY:O	17:D2:88:ARG:HD3	2.05	0.55
1:DA:2798:C:N4	1:DA:2799:A:N6	2.54	0.55
1:DA:90:U:H3	20:DU:33:LYS:NZ	2.04	0.55
45:CR:82:ILE:HD11	45:CR:87:ILE:O	2.07	0.55
26:A4:39:CYS:C	26:A4:41:PRO:HD3	2.25	0.55
31:BA:1328:C:OP1	51:BX:20:LYS:HE2	2.06	0.55
31:CA:1343:G:H1'	39:CL:121:ARG:HH11	1.71	0.55
1:AA:2481:G:O2'	1:AA:2482:G:O5'	2.23	0.55
31:BA:10:A:H2'	31:BA:11:G:H8	1.71	0.55
35:BH:90:VAL:HG12	35:BH:121:LYS:H	1.71	0.55
2:DB:40:U:O4	2:DB:43:C:OP1	2.24	0.55
31:BA:1226:C:H5'	49:BV:80:TYR:CE1	2.41	0.55
31:CA:1505:G:H5''	31:CA:1506:U:O5'	2.06	0.55
31:BA:1213:A:C8	31:BA:1215:G:C5	2.95	0.55
1:DA:2131:G:OP1	1:DA:2133:G:H4'	2.06	0.55
7:AH:46:GLU:HB2	7:AH:49:VAL:HG22	1.87	0.55
1:DA:1542:G:H3'	1:DA:1543:A:H5''	1.88	0.55
1:AA:557:U:H2'	1:AA:558:G:C8	2.39	0.55
31:CA:1152:A:H5'	40:CM:13:HIS:HD2	1.68	0.55
1:DA:2218:G:O2'	3:DD:148:GLU:HG2	2.06	0.55
1:DA:2335:A:O2'	1:DA:2336:A:P	2.63	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:1408:A:H61	57:BA:1715:PAR:H11	1.71	0.55
1:DA:975:G:H1'	1:DA:990:A:C2	2.40	0.55
20:AU:42:VAL:HB	20:AU:67:LEU:CD1	2.36	0.55
1:DA:2219:G:C2'	1:DA:2224:G:H5'	2.36	0.55
56:AA:3365:OHX:N5	56:AA:3530:OHX:N2	2.54	0.55
1:DA:870:A:C2	1:DA:908:C:C2	2.95	0.55
37:CJ:81:GLY:C	37:CJ:83:ALA:H	2.08	0.55
1:AA:673:C:H5''	5:AF:81:PRO:HD2	1.89	0.55
1:DA:1056:G:H4'	1:DA:1086:A:H1'	1.88	0.55
31:BA:1379:G:O6	37:BJ:2:ALA:HB3	2.05	0.55
44:CQ:25:VAL:O	44:CQ:26:ARG:HB2	2.06	0.55
1:AA:1643:G:N2	1:AA:1644:C:H1'	2.22	0.55
1:AA:2236:C:H2'	1:AA:2237:G:H5'	1.88	0.55
1:AA:828:U:H2'	1:AA:829:A:C8	2.41	0.55
31:BA:832:C:O2	31:BA:855:G:C2	2.59	0.55
8:AK:69:LYS:HE3	8:AK:73:GLU:OE2	2.07	0.55
38:CK:47:GLY:O	38:CK:48:TYR:HB3	2.06	0.55
52:CD:38:MIA:H152	52:CD:39:A:N1	2.21	0.55
1:DA:2880:C:O3'	13:D0:90:ARG:NH1	2.39	0.55
1:AA:623:G:H2'	1:AA:624:C:C6	2.41	0.55
1:DA:2807:G:C6	1:DA:2808:U:C5	2.95	0.55
30:A8:52:LYS:H	30:A8:53:PRO:CD	2.19	0.55
1:AA:885:C:C2	1:AA:890:A:N6	2.71	0.55
52:BD:17:G:C6	52:BD:67:A:N6	2.75	0.55
31:CA:1178:G:H2'	31:CA:1179:A:O5'	2.07	0.55
1:DA:2401:U:C2'	1:DA:2402:C:H5''	2.37	0.55
26:A4:37:SER:CB	26:A4:42:PHE:CD1	2.88	0.55
31:BA:142:G:H2'	31:BA:143:A:C8	2.36	0.55
1:AA:2699:C:H2'	1:AA:2700:C:O4'	2.06	0.55
52:BB:21:A:H8	52:BB:46:G:C8	2.24	0.55
14:AQ:29:PHE:HD2	14:AQ:29:PHE:C	2.09	0.55
17:A2:35:LEU:HD22	17:A2:35:LEU:N	2.20	0.55
31:BA:1126:U:O4	31:BA:1127:G:C2	2.59	0.55
31:CA:575:G:OP1	31:CA:575:G:H4'	2.07	0.55
1:AA:1027:A:C2	1:AA:2488:A:H5'	2.42	0.55
1:AA:11:G:C2'	1:AA:12:U:H5'	2.36	0.55
52:CB:28:G:C2'	52:CB:29:C:H5'	2.36	0.55
35:CH:91:LEU:HG	35:CH:118:ILE:HD11	1.89	0.55
31:CA:652:U:C4	31:CA:752:G:N3	2.75	0.55
6:DG:60:LEU:HD21	6:DG:92:VAL:CG1	2.37	0.55
1:DA:2755:C:HO2'	1:DA:2756:U:H6	1.55	0.55
31:BA:397:A:N6	31:BA:548:G:C8	2.74	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:BE:6:THR:OG1	32:BE:7:VAL:N	2.40	0.55
32:CE:63:MET:CG	32:CE:225:ALA:HB1	2.35	0.55
26:D4:38:LYS:HA	26:D4:44:THR:HG21	1.88	0.55
38:BK:63:LEU:HB3	38:BK:65:TYR:HE1	1.70	0.55
21:DV:48:PHE:HA	21:DV:51:ALA:HB3	1.89	0.55
3:AD:12:SER:O	3:AD:16:MET:HB2	2.07	0.55
1:DA:107:C:H2'	1:DA:108:U:C6	2.36	0.55
31:CA:1379:G:OP2	37:CJ:6:ARG:HD2	2.07	0.55
1:AA:945:A:C5	1:AA:2448:A:C2	2.94	0.55
33:CF:52:LEU:H	33:CF:52:LEU:HD23	1.70	0.55
18:AS:24:ILE:HG21	18:AS:36:LEU:HD21	1.87	0.55
31:CA:316:G:OP2	31:CA:351:G:O2'	2.24	0.55
31:CA:1266:G:H8	31:CA:1266:G:O5'	1.89	0.55
1:AA:84:A:N1	1:AA:98:G:O2'	2.31	0.55
31:BA:701:C:O2	31:BA:703:G:N1	2.40	0.55
9:DM:17:ASP:CA	9:DM:55:VAL:HG22	2.20	0.55
1:DA:900:A:H3'	1:DA:901:A:C8	2.36	0.55
30:A8:13:ARG:O	30:A8:14:VAL:HG23	2.07	0.55
3:AD:36:PRO:HA	3:AD:62:TYR:O	2.06	0.55
1:DA:819:A:OP2	1:DA:1187:G:N2	2.33	0.55
31:CA:1364:U:O2'	31:CA:1365:G:H5'	2.06	0.55
31:CA:1186:G:N2	44:CQ:61:TRP:OXT	2.29	0.55
52:CD:51:C:H2'	52:CD:52:G:O4'	2.07	0.55
1:AA:2310:A:C5'	1:AA:2311:A:OP2	2.55	0.55
5:DF:32:LEU:O	5:DF:36:VAL:HG23	2.07	0.55
34:CG:30:LYS:HB2	34:CG:35:ARG:HH11	1.71	0.55
1:DA:2259:G:C2	1:DA:2282:G:N1	2.74	0.55
15:DR:122:ASP:O	15:DR:126:ALA:HB3	2.06	0.55
54:B1:11:U:O2'	54:B1:12:A:C4	2.55	0.55
31:BA:1503:A:H2	31:BA:1507:A:OP2	1.89	0.55
11:DO:105:LEU:O	11:DO:106:LEU:CB	2.54	0.55
52:BB:51:C:C2	52:BB:52:G:H1'	2.42	0.55
1:AA:1082:U:O4	1:AA:1083:U:N3	2.39	0.55
9:DM:28:THR:HG22	9:DM:29:LYS:N	2.22	0.55
31:CA:1124:G:O2'	31:CA:1145:C:C4	2.59	0.55
40:BM:4:ILE:HD12	40:BM:77:PRO:HB3	1.89	0.55
6:AG:99:MET:HG3	6:AG:100:TRP:N	2.21	0.55
14:DQ:10:ARG:NH2	14:DQ:91:PRO:HB2	2.16	0.55
1:AA:2512:C:H4'	4:AE:122:PHE:CE2	2.41	0.55
1:AA:1264:G:H5'	27:A5:11:THR:HG21	1.88	0.55
1:DA:1342:A:C8	1:DA:1345:C:C4	2.94	0.55
1:AA:2788:C:O2'	1:AA:2809:A:N3	2.40	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:AE:111:ARG:HA	13:A0:1:MET:SD	2.47	0.55
2:DB:40:U:C2	26:D4:1:MET:SD	3.00	0.55
50:CW:8:ARG:NH1	50:CW:8:ARG:CG	2.66	0.55
52:BB:6:G:C2'	52:BB:7:G:OP1	2.54	0.55
1:DA:2605:U:O4	56:DA:3214:OHX:N6	2.38	0.55
5:AF:123:LEU:HD13	5:AF:192:LEU:HD22	1.88	0.55
1:AA:171:G:O2'	1:AA:172:C:H5'	2.06	0.55
31:BA:628:G:H2'	31:BA:629:G:H8	1.71	0.55
23:AZ:81:LYS:HE2	23:AZ:81:LYS:N	2.22	0.55
1:DA:2330:G:OP1	56:DA:3215:OHX:N4	2.40	0.55
1:AA:2472:G:C4	1:AA:2475:C:N4	2.74	0.55
15:DR:61:PHE:N	15:DR:61:PHE:CD2	2.74	0.55
1:DA:1441:G:H2'	1:DA:1442:G:C8	2.42	0.55
10:DN:102:VAL:HG23	10:DN:121:VAL:HG22	1.88	0.55
21:DV:6:LYS:O	21:DV:7:ALA:HB3	2.07	0.55
18:DS:84:ARG:HB2	18:DS:96:ILE:HD13	1.89	0.55
38:CK:6:ILE:O	38:CK:8:ASP:N	2.40	0.55
37:BJ:50:ILE:HB	37:BJ:58:PRO:HG3	1.89	0.55
44:BQ:11:LYS:O	44:BQ:13:THR:N	2.36	0.55
36:BI:96:PRO:HB3	48:BU:30:ASP:CG	2.27	0.55
31:BA:620:C:C6	34:BG:135:LEU:HD23	2.42	0.55
34:BG:98:GLU:O	34:BG:103:ASN:ND2	2.40	0.55
31:CA:36:C:O2'	31:CA:37:U:H5'	2.06	0.55
6:DG:16:ARG:HB3	6:DG:17:PRO:HD3	1.88	0.55
46:BS:12:LYS:C	46:BS:14:ASN:H	2.09	0.55
1:AA:277:C:H3'	1:AA:278:A:C4'	2.37	0.55
1:AA:2206:C:H2'	1:AA:2207:C:H6	1.71	0.55
31:CA:157:G:C2	31:CA:165:C:C2	2.94	0.55
23:DZ:29:GLY:O	23:DZ:30:VAL:HG22	2.05	0.55
46:BS:1:MET:HG3	46:BS:65:GLN:HG3	1.89	0.55
31:BA:1206:G:C6	31:BA:1207:G:C5	2.95	0.55
17:A2:34:GLU:HB2	17:A2:58:VAL:HG22	1.87	0.55
1:DA:654(B):C:H2'	1:DA:654(C):G:C8	2.41	0.55
31:CA:943:U:H2'	31:CA:944:G:H5'	1.87	0.55
1:DA:246:C:H2'	1:DA:247:G:H5'	1.89	0.55
37:BJ:90:GLU:H	37:BJ:90:GLU:CD	2.09	0.55
1:AA:654(H):G:N3	1:AA:654(H):G:H2'	2.20	0.55
45:CR:48:LYS:NZ	45:CR:48:LYS:HA	2.22	0.55
1:AA:250:G:C6	1:AA:251:A:C6	2.95	0.55
26:A4:62:ARG:O	26:A4:66:SER:HA	2.07	0.55
7:DH:118:PRO:HG2	7:DH:121:ILE:HG13	1.87	0.55
1:DA:1599:C:H5''	19:DT:35:THR:HG22	1.88	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:DE:37:ARG:HD2	4:DE:80:GLU:OE2	2.07	0.55
5:DF:21:ALA:O	5:DF:23:ASP:N	2.34	0.55
30:D8:14:VAL:HG12	30:D8:15:LYS:N	2.21	0.55
30:D8:22:VAL:HG12	30:D8:50:LEU:HD23	1.87	0.55
31:BA:73:G:C6	31:BA:97:U:O2	2.58	0.55
12:AP:19:GLY:CA	12:AP:98:LYS:CD	2.85	0.55
31:CA:1276:G:H2'	31:CA:1277:C:H6	1.72	0.55
11:DO:52:GLU:OE1	11:DO:55:ARG:NE	2.36	0.55
41:CN:54:ARG:O	41:CN:57:THR:OG1	2.24	0.55
45:BR:86:GLY:O	45:BR:87:ILE:HD13	2.07	0.55
31:BA:1126:U:O2'	31:BA:1127:G:OP1	2.21	0.55
26:A4:24:THR:OG1	26:A4:25:TYR:N	2.40	0.55
1:DA:1111:A:H4'	7:DH:3:ARG:HG2	1.89	0.55
1:AA:1678:G:N2	1:AA:1989:G:N2	2.45	0.55
46:CS:8:ARG:HD2	46:CS:17:TYR:CE2	2.42	0.55
53:CC:16:C:O2	53:CC:61:U:H4'	2.06	0.55
10:DN:68:GLU:HB3	10:DN:78:ARG:HH11	1.65	0.55
31:CA:1503:A:C1'	31:CA:1504:G:OP1	2.53	0.55
1:DA:1480:G:C2	1:DA:1482:U:O2	2.60	0.55
1:AA:1509:C:N3	1:AA:1511:A:N6	2.54	0.55
42:CO:92:ASP:C	42:CO:93:LEU:HD23	2.26	0.55
1:AA:2564:A:C2	1:AA:2647:U:H4'	2.42	0.55
1:DA:1241:A:C2'	1:DA:1242:A:O5'	2.55	0.55
31:CA:485:G:N7	56:CA:1734:OHX:N6	2.54	0.55
10:DN:113:LYS:O	10:DN:117:LEU:HD13	2.07	0.55
1:DA:960:A:C8	1:DA:962:G:C8	2.95	0.55
1:AA:580:C:H2'	1:AA:581:C:C6	2.41	0.55
31:CA:6:G:O2'	31:CA:7:G:O5'	2.24	0.55
23:DZ:7:ILE:HD12	23:DZ:62:VAL:CG1	2.36	0.55
31:BA:1104:G:OP1	32:BE:144:ARG:NH2	2.39	0.55
1:DA:868:U:C2	1:DA:869:G:C8	2.95	0.55
25:AX:54:VAL:HG22	25:AX:55:ARG:H	1.71	0.55
1:AA:270(B):A:H2'	1:AA:270(C):C:H5'	1.89	0.55
1:DA:1592:C:H2'	1:DA:1593:G:H8	1.71	0.55
8:DK:52:ARG:O	8:DK:52:ARG:HD2	2.07	0.55
1:DA:246:C:C2'	1:DA:247:G:H5'	2.36	0.55
1:DA:1146:C:O2'	1:DA:1147:C:H5'	2.07	0.55
4:DE:14:ILE:HB	15:DR:14:TYR:CZ	2.42	0.55
8:AK:56:LYS:O	8:AK:58:LEU:N	2.40	0.55
10:AN:3:GLN:HG3	10:AN:4:PRO:HD2	1.88	0.55
31:BA:1485:U:O2'	31:BA:1486:G:H5'	2.07	0.55
3:AD:268:ARG:HG3	3:AD:268:ARG:O	2.05	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
50:BW:10:LEU:O	50:BW:10:LEU:HD23	2.06	0.55
1:DA:2612:C:C5	1:DA:2613:U:H5	2.25	0.55
1:DA:2785:C:H5'	4:DE:41:LYS:HZ1	1.71	0.55
4:DE:81:ILE:HG21	4:DE:84:PHE:CD1	2.42	0.55
1:AA:2402:C:HO2'	1:AA:2403:C:P	2.30	0.55
1:DA:172:C:H2'	1:DA:173:G:H8	1.69	0.55
3:AD:35:LYS:CA	3:AD:64:ILE:HG22	2.37	0.55
1:DA:972:G:OP2	1:DA:973:A:O2'	2.09	0.55
6:DG:4:ASP:OD2	6:DG:9:ARG:NH2	2.40	0.55
31:CA:1182:G:O6	56:CA:1792:OHX:N6	2.40	0.55
24:DW:47:ASN:C	24:DW:49:LYS:N	2.56	0.55
26:A4:42:PHE:CE1	26:A4:43:TYR:HB3	2.42	0.55
52:BB:8:U:O2'	52:BB:22:A:N1	2.36	0.55
31:CA:1366:C:OP1	39:CL:117:HIS:HE1	1.90	0.55
31:BA:1124:G:C8	31:BA:1145:C:C5	2.95	0.55
7:AH:4:ILE:HB	7:AH:6:ARG:HG2	1.89	0.55
31:BA:1272:G:H2'	31:BA:1273:G:O4'	2.07	0.55
30:D8:60:LEU:O	30:D8:61:LEU:HD12	2.07	0.55
5:DF:158:THR:O	5:DF:177:ALA:HA	2.07	0.55
8:DK:124:GLY:N	8:DK:142:VAL:HG12	2.17	0.55
1:DA:1382:G:C2'	1:DA:1383:C:H5'	2.37	0.55
31:BA:575:G:H4'	31:BA:576:G:O5'	2.06	0.55
1:AA:1799:G:H5'	1:AA:1819:A:N6	2.21	0.55
7:AH:86:GLU:O	7:AH:87:LEU:HB2	2.07	0.55
1:AA:298:G:H5''	1:AA:299:A:OP1	2.06	0.55
26:A4:14:ILE:HG22	26:A4:21:VAL:HB	1.88	0.55
1:DA:1582:C:O2'	1:DA:1586:A:H8	1.89	0.55
21:AV:4:ARG:HG2	21:AV:58:VAL:HG21	1.87	0.55
1:DA:795:C:H2'	1:DA:796:C:H6	1.72	0.55
31:BA:407:G:H2'	31:BA:408:A:H8	1.72	0.55
32:CE:62:ALA:O	32:CE:64:ARG:N	2.40	0.55
30:A8:43:GLN:C	30:A8:44:LYS:HD2	2.27	0.55
19:DT:5:TYR:CZ	24:DW:30:ARG:HG3	2.42	0.55
5:AF:129:PHE:O	5:AF:130:ALA:CB	2.55	0.55
39:BL:9:ARG:HB3	39:BL:14:VAL:HG13	1.89	0.55
3:DD:45:ASN:C	3:DD:46:GLN:OE1	2.45	0.55
1:DA:2567:G:H2'	1:DA:2568:C:C6	2.42	0.55
36:CI:53:ALA:O	36:CI:54:LYS:HB2	2.05	0.55
34:CG:119:GLN:O	34:CG:123:HIS:HD2	1.90	0.55
1:DA:1215:G:C2'	1:DA:1216:G:H5'	2.37	0.55
9:AM:120:LEU:HD22	9:AM:120:LEU:C	2.27	0.55
28:A6:25:LYS:HE2	28:A6:27:LYS:CE	2.37	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:DE:31:CYS:HB2	4:DE:91:VAL:HG22	1.89	0.55
31:CA:1357:A:C5	31:CA:1358:U:C4	2.94	0.55
43:CP:4:ILE:HG12	43:CP:5:ALA:N	2.21	0.55
16:D1:50:ARG:HE	17:D2:70:ILE:HG21	1.72	0.55
31:BA:1176:A:H8	31:BA:1176:A:O5'	1.88	0.55
32:CE:208:ILE:HG12	32:CE:211:ILE:HD12	1.89	0.55
1:DA:2418:A:C4	1:DA:2419:U:C5	2.94	0.55
31:BA:149:A:C2	31:BA:150:C:C2	2.94	0.55
11:DO:81:GLN:CD	11:DO:106:LEU:O	2.45	0.55
14:AQ:30:ARG:CG	14:AQ:30:ARG:HH11	2.11	0.55
31:CA:830:G:N2	31:CA:857:C:C2	2.74	0.55
31:CA:1126:U:C4	31:CA:1281:U:C6	2.94	0.55
32:BE:204:ASN:C	32:BE:204:ASN:HD22	2.10	0.55
14:DQ:29:PHE:CD2	14:DQ:29:PHE:C	2.72	0.55
1:DA:1408:C:C2	1:DA:1595:G:N2	2.75	0.55
34:BG:173:TRP:CD1	34:BG:174:LEU:HG	2.42	0.55
1:DA:322:A:H5'	1:DA:340:A:C1'	2.36	0.55
1:AA:508:G:C6	18:AS:9:TYR:CE2	2.94	0.55
1:AA:1478:G:H2'	1:AA:1479:G:H8	1.71	0.55
1:DA:2720:U:C2	1:DA:2721:A:C8	2.95	0.55
31:BA:452:A:HO2'	31:BA:453:A:C5'	2.20	0.55
1:DA:329:G:H4'	1:DA:330:A:OP2	2.06	0.55
6:DG:63:ILE:HD12	6:DG:141:PHE:CG	2.42	0.55
4:AE:167:VAL:HG21	4:AE:187:ALA:CB	2.37	0.55
22:D3:36:ILE:HD13	22:D3:36:ILE:C	2.26	0.55
31:BA:129(A):G:C2	31:BA:188:U:O2'	2.58	0.55
1:AA:2712:U:O2'	1:AA:2712(A):A:P	2.65	0.55
6:AG:16:ARG:N	6:AG:17:PRO:HD2	2.22	0.55
32:BE:82:ARG:O	32:BE:85:ALA:HB3	2.06	0.55
1:DA:1165:U:O2'	1:DA:1166:C:H5'	2.06	0.55
31:BA:1193:G:N2	31:BA:1194:U:C2	2.74	0.55
26:D4:51:ASP:O	26:D4:52:THR:C	2.44	0.55
6:DG:56:ALA:HB2	6:DG:153:ARG:NH2	2.22	0.55
42:CO:8:ASN:HB2	47:CT:34:LYS:NZ	2.22	0.55
1:DA:813:U:H2'	1:DA:814:C:C6	2.42	0.55
1:DA:1327:C:H2'	1:DA:1328:G:O4'	2.07	0.55
3:AD:213:ARG:O	3:AD:216:GLY:N	2.32	0.55
1:AA:1591:G:H2'	1:AA:1592:C:H6	1.72	0.55
31:BA:1356:G:H2'	31:BA:1357:A:C8	2.41	0.55
36:CI:24:GLU:O	36:CI:28:ARG:HB2	2.07	0.55
1:AA:1637:A:H4'	1:AA:2711:A:O2'	2.07	0.55
46:BS:74:LEU:O	46:BS:79:VAL:HB	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:AE:7:VAL:HG21	15:AR:1:MET:CE	2.36	0.55
9:DM:130:HIS:CD2	9:DM:130:HIS:H	2.22	0.55
1:DA:2322:A:H2'	1:DA:2323:G:O4'	2.06	0.55
52:CD:5:G:H1	52:CD:77:C:H42	1.54	0.55
5:AF:114:VAL:HG21	5:AF:202:PHE:CZ	2.42	0.55
8:AK:92:VAL:HG13	8:AK:120:ILE:CG2	2.37	0.55
32:BE:109:SER:O	32:BE:112:VAL:HB	2.06	0.55
31:BA:1071:C:H2'	31:BA:1072:G:H8	1.72	0.55
1:DA:389:G:H22	11:DO:72:PRO:CD	2.20	0.55
17:D2:77:ALA:C	17:D2:78:LYS:CG	2.74	0.55
1:AA:1279:G:N2	1:AA:1292:U:C2	2.75	0.55
1:AA:2307:G:H1'	1:AA:2308:G:N2	2.22	0.55
31:BA:152:A:N6	31:BA:170:U:C2	2.75	0.55
1:DA:2277:G:OP1	12:DP:86:GLY:HA2	2.07	0.55
1:AA:1055:G:N7	1:AA:1056:G:C5	2.74	0.55
31:BA:1346:A:C5	37:BJ:10:ARG:NH1	2.72	0.55
45:BR:78:TYR:CE1	45:BR:82:ILE:HD11	2.42	0.55
11:AO:75:ILE:N	11:AO:75:ILE:HD13	2.07	0.55
31:BA:1124:G:C8	31:BA:1145:C:C6	2.95	0.55
31:BA:559:A:H4'	31:BA:560:U:H3'	1.87	0.55
14:DQ:84:GLN:HB3	14:DQ:109:GLY:HA3	1.88	0.55
14:DQ:86:ALA:O	14:DQ:87:PHE:CB	2.55	0.55
32:BE:206:ASP:O	32:BE:207:ALA:HB3	2.07	0.55
1:AA:1018:C:C2'	1:AA:1019:U:H5'	2.37	0.55
18:DS:65:LEU:CD1	18:DS:68:ARG:HD2	2.35	0.55
6:DG:135:LEU:CD2	6:DG:140:ILE:HD11	2.29	0.55
46:BS:7:ALA:O	46:BS:9:PHE:CD2	2.59	0.55
31:CA:1022:G:C2	31:CA:1023:G:H1'	2.42	0.55
20:DU:77:PRO:O	20:DU:78:ALA:HB2	2.07	0.55
31:CA:1391:U:H2'	31:CA:1392:G:C8	2.42	0.55
1:DA:2286:A:C8	1:DA:2287:A:N6	2.75	0.55
32:BE:165:VAL:HG23	32:BE:166:ASP:N	2.17	0.55
43:CP:29:ARG:HB3	43:CP:64:TRP:CH2	2.42	0.55
1:DA:2439:A:C8	1:DA:2439:A:C5'	2.89	0.55
4:DE:116:VAL:HG13	4:DE:122:PHE:HB2	1.89	0.55
1:DA:559:G:H22	16:D1:49:HIS:CD2	2.25	0.55
33:BF:113:ALA:C	33:BF:115:LEU:H	2.09	0.55
8:AK:102:SER:O	8:AK:104:GLN:N	2.37	0.55
31:BA:719:C:H5	31:BA:720:C:C4	2.23	0.55
21:AV:7:ALA:HB2	21:AV:59:LEU:CD2	2.37	0.55
35:CH:27:ARG:O	35:CH:28:PHE:CD1	2.60	0.55
31:CA:57:G:H2'	31:CA:58:C:C6	2.42	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
33:BF:173:VAL:N	33:BF:174:PRO:HD3	2.21	0.55
31:BA:177:C:OP1	50:BW:65:LYS:NZ	2.33	0.55
31:CA:1263:C:C2	31:CA:1273:G:N2	2.75	0.55
1:AA:2291:U:O2'	1:AA:2374:C:O2	2.25	0.55
26:D4:31:ILE:HG22	26:D4:32:TYR:N	2.22	0.55
14:DQ:39:ILE:HG22	14:DQ:39:ILE:O	2.05	0.55
52:CB:9:U:O2	52:CB:9:U:H2'	2.06	0.55
1:DA:2345:G:OP2	28:D6:39:TYR:HA	2.07	0.55
39:BL:22:GLY:HA3	39:BL:60:ASP:OD2	2.06	0.55
40:BM:15:THR:O	40:BM:19:SER:HB2	2.07	0.55
3:DD:227:ASN:HB3	3:DD:228:PRO:HD2	1.89	0.55
31:BA:577:G:N7	56:BA:1784:OHX:N1	2.55	0.55
1:AA:2345:G:H1'	1:AA:2382:G:H5'	1.88	0.55
53:BC:66:C:O2'	53:BC:67:C:H5'	2.07	0.55
1:DA:2238:G:N3	1:DA:2238:G:H2'	2.22	0.55
17:D2:46:VAL:HG22	17:D2:46:VAL:O	2.07	0.55
16:D1:104:GLN:HE21	16:D1:104:GLN:HA	1.71	0.55
1:AA:2277:G:OP1	12:AP:86:GLY:HA2	2.07	0.55
31:CA:1109:C:OP2	33:CF:176:HIS:ND1	2.28	0.55
31:CA:1050:G:N2	31:CA:1209:C:C2	2.75	0.55
31:CA:1310:G:H5'	43:CP:77:ASN:ND2	2.18	0.55
43:CP:22:ILE:HB	43:CP:25:ILE:HG13	1.89	0.55
5:DF:153:SER:HB2	5:DF:190:GLU:N	2.22	0.55
34:CG:26:CYS:HA	34:CG:31:CYS:CB	2.37	0.55
34:CG:59:ARG:HH22	34:CG:66:ARG:NH1	2.04	0.55
16:A1:112:ARG:CG	16:A1:112:ARG:HH11	1.93	0.55
17:A2:44:LYS:O	17:A2:46:VAL:HG12	2.07	0.55
17:A2:41:GLY:H	17:A2:46:VAL:HG13	1.72	0.55
43:BP:108:ARG:CG	43:BP:108:ARG:HH11	2.04	0.55
33:BF:161:GLU:CD	33:BF:161:GLU:C	2.65	0.55
52:BB:8:U:H3'	52:BB:13:G:O6	2.06	0.55
1:AA:1079:C:N4	1:AA:1080:A:N6	2.55	0.55
40:CM:71:LEU:O	40:CM:72:VAL:HG23	2.06	0.55
17:A2:3:ALA:HB3	17:A2:14:VAL:HG23	1.88	0.55
17:A2:35:LEU:HD22	17:A2:57:VAL:O	2.06	0.55
31:CA:1129:C:C2	31:CA:1132:C:N4	2.74	0.55
31:CA:1126:U:C4	31:CA:1281:U:H6	2.25	0.55
31:BA:1154:G:H2'	31:BA:1155:G:H8	1.72	0.55
1:DA:1043:C:H2'	1:DA:1044:G:H5'	1.88	0.55
2:DB:82:G:C6	2:DB:83:G:C5	2.95	0.55
12:DP:77:LYS:HB3	12:DP:78:PRO:HD2	1.88	0.55
21:DV:93:ASP:HB2	21:DV:131:ARG:HH21	1.71	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:2303:G:O2'	6:DG:132:ASN:HB2	2.07	0.55
20:DU:75:ILE:HG12	20:DU:76:CYS:N	2.22	0.55
29:D7:34:ARG:HH11	29:D7:34:ARG:HG2	1.72	0.55
1:AA:1107:G:H2'	1:AA:1108:U:C6	2.39	0.55
31:CA:243:A:C2	31:CA:245:C:C2	2.94	0.55
33:CF:39:ILE:O	33:CF:43:LEU:HB2	2.06	0.55
21:DV:150:LEU:HD23	21:DV:150:LEU:O	2.07	0.55
41:BN:84:VAL:HG11	41:BN:95:ILE:HD11	1.89	0.55
40:CM:3:LYS:HB2	40:CM:77:PRO:HG3	1.89	0.55
7:AH:135:GLY:HA3	7:AH:141:VAL:CG2	2.37	0.55
43:CP:16:ASP:OD1	43:CP:31:LYS:HE2	2.06	0.55
1:DA:443:A:H1'	1:DA:1201:C:O4'	2.07	0.55
1:DA:2516:G:C6	1:DA:2517:C:C4	2.94	0.55
37:CJ:44:TYR:HA	37:CJ:47:CYS:CB	2.37	0.55
6:AG:111:LEU:HD21	6:AG:120:LEU:HD21	1.89	0.55
1:AA:637:A:P	11:AO:116:GLY:HA3	2.47	0.55
16:A1:44:ASN:HD21	17:A2:75:PHE:N	2.05	0.55
1:DA:991:C:O2'	1:DA:992:C:H5'	2.07	0.55
20:AU:20:TYR:CZ	20:AU:42:VAL:HA	2.41	0.55
31:CA:1112:C:O2	33:CF:179:ARG:HG2	2.06	0.55
53:BC:54:G:H2'	53:BC:55:U:C6	2.40	0.55
35:CH:72:GLN:C	35:CH:74:GLY:H	2.10	0.55
1:AA:444:C:C4'	5:AF:49:ALA:HB2	2.37	0.55
1:DA:2694:G:C5	1:DA:2695:C:C5	2.95	0.55
1:AA:1579:A:OP1	56:AA:3514:OHX:N2	2.40	0.55
1:DA:1735:C:H2'	1:DA:1741:C:H5'	1.88	0.55
2:DB:3:C:C2	2:DB:118:G:C2	2.95	0.55
1:AA:55:G:H2'	1:AA:56:A:C8	2.41	0.55
1:AA:270(J):G:N1	1:AA:270(K):C:O2	2.40	0.55
41:CN:105:VAL:O	41:CN:105:VAL:HG22	2.07	0.55
1:DA:225:A:O2'	1:DA:257:A:H4'	2.08	0.55
31:BA:837:G:C2	31:BA:850:U:O2	2.60	0.55
1:AA:1936:A:C8	1:AA:1940:U:O2	2.60	0.55
31:CA:29:G:C5	31:CA:30:U:C5	2.95	0.55
2:DB:114:G:O2'	14:DQ:50:SER:OG	2.25	0.55
1:DA:370:G:H4'	1:DA:371:A:OP2	2.06	0.55
1:AA:147:U:O4	56:AA:3347:OHX:N4	2.40	0.55
7:AH:158:HIS:N	7:AH:158:HIS:ND1	2.53	0.55
5:AF:48:THR:O	5:AF:48:THR:HG23	2.07	0.55
40:BM:40:LEU:HB2	40:BM:69:ASN:HB2	1.88	0.55
32:BE:108:ILE:O	32:BE:108:ILE:HD13	2.06	0.55
30:A8:34:TRP:CD2	30:A8:35:GLN:HG2	2.32	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:DO:46:LYS:HD3	11:DO:51:PHE:CE1	2.42	0.54
3:AD:35:LYS:CB	3:AD:64:ILE:H	2.20	0.54
31:CA:1095:U:C4	31:CA:1096:C:N4	2.75	0.54
31:CA:1309:G:C6	31:CA:1329:A:C2	2.95	0.54
31:CA:1306:A:N6	31:CA:1331:G:H1'	2.22	0.54
31:CA:973:G:H1'	40:CM:55:LYS:NZ	2.22	0.54
31:BA:1025:U:O2'	31:BA:1026:G:O5'	2.21	0.54
31:BA:1295:G:O3'	43:BP:14:ARG:NH1	2.40	0.54
31:BA:1336:C:O2'	31:BA:1337:G:N3	2.35	0.54
1:DA:91:A:OP1	1:DA:91:A:H4'	2.06	0.54
16:D1:21:ALA:HA	16:D1:24:TYR:CE1	2.42	0.54
11:DO:105:LEU:CD1	11:DO:105:LEU:O	2.49	0.54
1:DA:1946:U:H2'	1:DA:1947:C:C6	2.42	0.54
1:AA:1081:U:O2'	1:AA:1082:U:P	2.64	0.54
1:DA:2728:U:C2'	1:DA:2729:G:H5'	2.37	0.54
16:A1:83:LEU:HG	16:A1:88:ILE:HB	1.88	0.54
1:AA:996:A:C6	1:AA:1160:G:C2	2.94	0.54
27:A5:51:TYR:HD2	27:A5:52:TYR:CZ	2.26	0.54
50:BW:29:LYS:O	50:BW:33:ILE:HG12	2.07	0.54
1:DA:1049:C:H42	7:DH:2:SER:HB2	1.71	0.54
1:AA:1026:U:C1'	1:AA:1027:A:O5'	2.49	0.54
14:AQ:67:ARG:O	14:AQ:71:ARG:HG3	2.06	0.54
24:DW:12:GLU:HG3	24:DW:16:LEU:CD2	2.36	0.54
31:BA:38:G:H22	31:BA:397:A:P	2.28	0.54
12:AP:65:PHE:O	12:AP:67:ARG:N	2.40	0.54
1:AA:2682:U:O2'	15:AR:58:ASN:ND2	2.40	0.54
1:DA:2320:A:C6	1:DA:2333:A:C8	2.96	0.54
1:DA:528:A:H2	1:DA:2043:C:C5'	2.19	0.54
1:AA:2126:A:N6	1:AA:2163:C:O2'	2.40	0.54
31:BA:798:G:C2'	31:BA:799:G:O5'	2.55	0.54
8:DK:78:THR:OG1	8:DK:104:GLN:OE1	2.21	0.54
22:A3:70:GLN:NE2	22:A3:80:HIS:CE1	2.75	0.54
22:A3:49:LYS:HB2	22:A3:80:HIS:HB3	1.89	0.54
1:AA:2712:U:OP1	1:AA:2714:G:H4'	2.07	0.54
7:DH:156:ALA:O	7:DH:158:HIS:N	2.39	0.54
46:BS:49:LEU:HD12	46:BS:50:LYS:N	2.22	0.54
56:AA:3416:OHX:N3	56:AA:3504:OHX:N5	2.55	0.54
31:BA:1192:C:OP2	33:BF:4:LYS:NZ	2.40	0.54
31:CA:953:G:C6	31:CA:954:G:C4	2.95	0.54
3:AD:231:HIS:CD2	3:AD:232:PRO:HD2	2.42	0.54
1:DA:957:A:N6	1:DA:959:A:C2	2.74	0.54
11:AO:96:THR:HG22	11:AO:126:VAL:CG2	2.37	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:2820:A:C6	13:D0:4:LEU:HD11	2.42	0.54
3:DD:131:LEU:N	3:DD:131:LEU:HD12	2.22	0.54
31:CA:1272:G:H2'	31:CA:1273:G:O4'	2.07	0.54
1:AA:2242:G:C2'	1:AA:2243:U:O5'	2.55	0.54
1:AA:427:U:OP2	56:AA:3415:OHX:N1	2.40	0.54
9:AM:68:GLU:HA	9:AM:88:GLU:OE1	2.07	0.54
38:CK:109:ILE:HG23	38:CK:137:VAL:HB	1.89	0.54
1:DA:1115:G:C6	1:DA:1116:C:C4	2.95	0.54
1:AA:1983:C:O2'	1:AA:1984:G:H5'	2.07	0.54
1:AA:732:C:C2'	1:AA:733:G:H5'	2.37	0.54
1:DA:2080:G:H4'	23:DZ:36:GLY:HA3	1.89	0.54
31:BA:295:C:H2'	31:BA:296:U:O4'	2.08	0.54
31:CA:284:G:H2'	31:CA:285:G:H8	1.72	0.54
49:BV:18:LYS:O	49:BV:22:LEU:HD13	2.07	0.54
13:D0:75:LEU:HD13	13:D0:75:LEU:C	2.27	0.54
21:AV:107:THR:HB	21:AV:108:PRO:HD2	1.89	0.54
1:DA:1982:C:O2	1:DA:1982:C:H2'	2.07	0.54
1:AA:1443:G:C2'	1:AA:1444:G:H5'	2.37	0.54
1:AA:2286:A:H4'	1:AA:2287:A:O4'	2.07	0.54
1:DA:2786:U:C4'	4:DE:65:GLY:H	2.20	0.54
1:DA:2141:G:O6	1:DA:2150:U:O2	2.25	0.54
49:CV:69:HIS:HB3	49:CV:73:GLU:OE1	2.08	0.54
7:AH:151:ILE:O	7:AH:153:LYS:CD	2.54	0.54
1:AA:879:G:OP2	1:AA:879:G:H8	1.90	0.54
52:CD:85:A:O2'	1:DA:2394:C:N3	2.36	0.54
54:B1:12:A:O2'	54:B1:13:A:P	2.65	0.54
5:AF:65:TRP:CH2	5:AF:72:ARG:HB3	2.43	0.54
16:A1:69:CYS:HG	16:A1:79:PHE:HD1	1.55	0.54
31:BA:1129:C:N4	31:BA:1139:G:N1	2.55	0.54
52:CB:48:C:H2'	52:CB:49:A:C8	2.41	0.54
52:CB:50:U:C2'	52:CB:51:C:C6	2.83	0.54
50:CW:48:LYS:O	50:CW:50:GLU:N	2.41	0.54
52:CB:29:C:H2'	52:CB:30:A:C8	2.42	0.54
34:CG:176:LEU:HG	34:CG:178:VAL:HG22	1.89	0.54
1:AA:1654:A:OP2	13:A0:2:ARG:HD3	2.08	0.54
38:CK:17:THR:HG22	38:CK:78:GLN:OE1	2.07	0.54
31:BA:575:G:H4'	31:BA:576:G:H5''	1.89	0.54
7:AH:88:LEU:HD11	7:AH:165:ALA:HA	1.88	0.54
52:CD:30:A:N6	52:CD:42:U:H3	2.05	0.54
1:AA:2114:A:C6	1:AA:2115:G:C6	2.95	0.54
37:CJ:58:PRO:O	37:CJ:60:LYS:N	2.40	0.54
31:BA:1363:A:H1'	31:BA:1365:G:N7	2.21	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
10:AN:34:THR:CG2	10:AN:35:VAL:N	2.68	0.54
31:CA:941:G:N2	31:CA:942:G:H1'	2.22	0.54
1:DA:1510:A:OP2	1:DA:1510:A:C8	2.55	0.54
4:AE:67:PHE:HD2	4:AE:69:LYS:NZ	2.04	0.54
21:DV:60:GLU:O	21:DV:61:LEU:HB2	2.07	0.54
1:DA:1420:U:O5'	1:DA:1420:U:O2	2.25	0.54
1:AA:468:G:N7	29:A7:39:ARG:NH2	2.55	0.54
31:CA:89:U:H1'	31:CA:90:C:OP1	2.07	0.54
31:CA:373:A:C2	31:CA:482:A:C6	2.94	0.54
1:AA:2852:G:C2	1:AA:2853:C:C2	2.95	0.54
6:AG:78:SER:O	6:AG:80:PHE:N	2.40	0.54
32:BE:21:ARG:HH11	32:BE:38:GLY:HA3	1.71	0.54
53:BC:52:C:H2'	53:BC:53:G:O4'	2.08	0.54
31:CA:390:C:H2'	31:CA:391:G:C8	2.42	0.54
24:DW:43:GLN:HG2	24:DW:43:GLN:O	2.07	0.54
14:AQ:38:GLN:HG3	14:AQ:47:THR:HG21	1.89	0.54
1:DA:2056:G:C2	1:DA:2057:A:C8	2.95	0.54
31:BA:1047:G:O2'	31:BA:1048:G:H5'	2.07	0.54
31:CA:800:G:O5'	31:CA:800:G:H8	1.90	0.54
1:DA:249:C:H4'	1:DA:250:G:O5'	2.07	0.54
1:AA:2213:U:O4'	23:AZ:52:ARG:NH2	2.40	0.54
31:BA:1161:C:C2	31:BA:1177:G:N2	2.76	0.54
1:DA:2415:G:H4'	11:DO:66:GLY:CA	2.37	0.54
11:DO:65:ARG:CG	11:DO:65:ARG:NH1	2.52	0.54
20:DU:63:LYS:HA	20:DU:63:LYS:NZ	2.22	0.54
11:DO:81:GLN:OE1	11:DO:106:LEU:CA	2.55	0.54
1:DA:1097:U:H2'	1:DA:1098:A:O4'	2.07	0.54
1:DA:1142:U:C2'	1:DA:1142:U:O2	2.55	0.54
1:AA:1161:C:O2'	17:A2:8:GLY:HA2	2.07	0.54
31:BA:1349:A:OP2	39:BL:118:LYS:NZ	2.41	0.54
31:CA:1135:U:H2'	31:CA:1137:C:C2	2.42	0.54
1:DA:2473:U:O2	1:DA:2473:U:C2'	2.54	0.54
52:CB:84:C:H2'	52:CB:85:A:C5	2.43	0.54
31:BA:515:G:N2	31:BA:537:G:C5	2.75	0.54
4:AE:21:VAL:HB	4:AE:22:PRO:CA	2.36	0.54
2:DB:45:A:H1'	6:DG:95:ARG:HH21	1.72	0.54
42:CO:24:VAL:HG12	42:CO:26:ALA:HB2	1.88	0.54
34:BG:4:TYR:CE2	34:BG:11:LEU:HD11	2.36	0.54
6:AG:131:TYR:HE2	6:AG:133:LEU:HD23	1.73	0.54
16:D1:25:TRP:C	16:D1:25:TRP:HD1	2.05	0.54
35:BH:74:GLY:O	35:BH:115:VAL:HA	2.08	0.54
31:BA:750:G:C2	31:BA:751:U:C5	2.95	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:D1:83:LEU:CD2	16:D1:88:ILE:HG13	2.37	0.54
31:BA:1315:U:O2'	31:BA:1360:A:N3	2.32	0.54
42:BO:7:ILE:O	42:BO:7:ILE:HD13	2.06	0.54
31:BA:712:A:H2'	31:BA:713:G:C8	2.42	0.54
31:BA:1113:C:H2'	31:BA:1114:C:C6	2.38	0.54
31:CA:619:U:O2	34:CG:135:LEU:HD22	2.08	0.54
4:AE:67:PHE:HD2	4:AE:69:LYS:HZ1	1.53	0.54
16:D1:11:ARG:CG	16:D1:11:ARG:HH11	2.19	0.54
22:A3:35:ASN:N	22:A3:35:ASN:HD22	2.01	0.54
31:CA:197:A:H1'	31:CA:198:G:OP2	2.07	0.54
1:DA:196:A:O2'	1:DA:805:G:O6	2.09	0.54
43:CP:49:THR:HG22	43:CP:50:GLU:H	1.72	0.54
3:DD:45:ASN:OD1	3:DD:46:GLN:N	2.39	0.54
1:AA:814:C:OP1	17:A2:84:LYS:N	2.34	0.54
52:BD:79:A:C2'	52:BD:80:C:H5'	2.37	0.54
1:DA:487:C:H2'	1:DA:488:G:H5'	1.89	0.54
1:DA:262:A:C2'	1:DA:263:C:H5'	2.36	0.54
8:AK:56:LYS:C	8:AK:58:LEU:H	2.11	0.54
24:DW:24:LEU:O	24:DW:24:LEU:HD23	2.07	0.54
1:DA:547:A:N6	1:DA:548:A:N1	2.55	0.54
53:BC:72:C:H6	53:BC:72:C:O5'	1.91	0.54
31:BA:979:C:C5	31:BA:980:C:C5	2.96	0.54
1:AA:1255:U:O2	56:AA:3367:OHX:N6	2.40	0.54
1:DA:671:C:OP1	11:DO:42:SER:O	2.25	0.54
52:CD:21:A:C4'	52:CD:22:A:O5'	2.54	0.54
1:AA:889:C:C3'	1:AA:890:A:H4'	2.26	0.54
1:AA:900:A:N3	1:AA:900:A:H2'	2.21	0.54
52:BD:30:A:C6	52:BD:43:G:C6	2.95	0.54
31:CA:1163:C:H2'	31:CA:1164:G:H8	1.72	0.54
31:BA:1238:A:H62	31:BA:1301:U:H3	1.54	0.54
30:D8:30:ARG:CD	30:D8:31:HIS:H	2.19	0.54
45:CR:75:PRO:O	45:CR:78:TYR:HB3	2.07	0.54
27:A5:40:LYS:HZ3	27:A5:46:CYS:CB	2.19	0.54
52:BB:48:C:H5''	52:BB:49:A:OP2	2.06	0.54
14:DQ:110:LEU:HB2	14:DQ:112:PHE:CE1	2.42	0.54
44:BQ:43:CYS:HA	44:BQ:46:GLU:HG3	1.89	0.54
7:AH:7:LEU:N	7:AH:8:PRO:CD	2.70	0.54
1:AA:2636:U:OP1	4:AE:79:ARG:HG3	2.08	0.54
21:DV:145:GLU:HA	21:DV:174:VAL:CG1	2.37	0.54
1:DA:1728:G:C5	1:DA:1730:U:OP2	2.60	0.54
42:CO:62:SER:OG	42:CO:62:SER:O	2.22	0.54
21:DV:27:VAL:CG1	21:DV:87:ASP:HB3	2.33	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:439:G:C2'	1:AA:440:G:H5'	2.37	0.54
33:BF:12:LEU:C	33:BF:14:ILE:H	2.11	0.54
33:BF:181:ASN:ND2	33:BF:204:LEU:HB2	2.23	0.54
9:DM:35:ARG:HB3	9:DM:116:LEU:HD13	1.89	0.54
1:DA:13:A:O2'	56:DA:3410:OHX:N6	2.41	0.54
1:AA:958:U:O2	2:AB:89(A):A:H4'	2.07	0.54
31:BA:452:A:O2'	31:BA:453:A:O4'	2.25	0.54
31:BA:880:C:OP1	42:BO:8:ASN:ND2	2.41	0.54
50:CW:70:SER:O	50:CW:71:THR:C	2.46	0.54
15:AR:27:THR:HG23	15:AR:90:GLN:HB3	1.89	0.54
8:AK:96:ASP:O	8:AK:99:GLU:N	2.40	0.54
1:DA:1248:G:OP1	16:D1:2:PRO:HD2	2.08	0.54
15:DR:55:ASN:N	15:DR:59:THR:HG22	2.21	0.54
43:BP:44:ARG:C	43:BP:46:LYS:H	2.10	0.54
28:D6:52:VAL:HG13	28:D6:53:LYS:N	2.23	0.54
1:AA:15:G:H2'	1:AA:16:G:H5'	1.90	0.54
43:BP:47:ASP:O	43:BP:48:LEU:CB	2.56	0.54
47:BT:49:GLU:O	47:BT:49:GLU:HG3	2.07	0.54
34:CG:72:GLU:HA	34:CG:72:GLU:OE1	2.06	0.54
33:BF:133:ALA:O	33:BF:134:ILE:C	2.46	0.54
1:AA:1379:A:C1'	1:AA:1380:G:OP1	2.55	0.54
31:CA:198:G:H2'	31:CA:199:G:C8	2.41	0.54
1:DA:2745:C:H2'	1:DA:2746:U:O4'	2.08	0.54
30:A8:29:LYS:HG2	30:A8:44:LYS:HG2	1.90	0.54
31:BA:1429:C:H2'	31:BA:1430:C:H6	1.72	0.54
1:DA:2818:G:OP2	13:D0:42:LYS:NZ	2.40	0.54
52:CB:55:U:H2'	52:CB:56:U:C6	2.43	0.54
1:AA:1298:C:H5''	1:AA:1299:G:OP2	2.08	0.54
1:AA:1694:C:H4'	1:AA:1695:G:O5'	2.07	0.54
38:CK:33:GLU:HG3	38:CK:59:LEU:CD1	2.37	0.54
19:DT:60:ARG:HG3	19:DT:60:ARG:NH1	2.22	0.54
34:CG:200:GLU:O	34:CG:204:ILE:HG12	2.07	0.54
31:BA:335:C:O2'	31:BA:1433:A:N3	2.39	0.54
1:DA:2591:C:OP1	3:DD:239:ARG:HG3	2.07	0.54
31:CA:723:U:HO2'	31:CA:724:G:P	2.31	0.54
31:CA:640:A:C2'	31:CA:641:U:H5'	2.38	0.54
31:CA:1465:C:H2'	31:CA:1466:C:O4'	2.06	0.54
1:DA:576:U:H2'	1:DA:577:G:C8	2.43	0.54
20:DU:14:LEU:HD12	20:DU:15:VAL:N	2.22	0.54
4:AE:45:THR:O	4:AE:83:ASP:N	2.40	0.54
38:BK:126:LYS:NZ	38:BK:126:LYS:HB3	2.22	0.54
1:AA:2283:C:H2'	1:AA:2284:C:O4'	2.08	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:DF:69:HIS:C	5:DF:70:THR:CG2	2.76	0.54
3:DD:36:PRO:HB3	3:DD:61:LEU:CG	2.37	0.54
52:CD:46:G:C2	52:CD:47:U:C2	2.96	0.54
1:DA:600:G:H5'	5:DF:32:LEU:HD12	1.88	0.54
1:AA:1496:A:H8	1:AA:1577:C:HO2'	0.58	0.54
41:BN:54:ARG:O	41:BN:57:THR:HG22	2.07	0.54
31:CA:1158:C:C4	31:CA:1160:G:N7	2.76	0.54
15:AR:102:ILE:HA	15:AR:105:LEU:HD22	1.90	0.54
53:CC:18:C:O2	53:CC:18:C:C2'	2.55	0.54
1:AA:2151:G:H2'	1:AA:2152:G:H8	1.68	0.54
49:BV:42:PRO:C	49:BV:44:MET:H	2.09	0.54
1:DA:1073:A:H2'	1:DA:1074:G:O4'	2.06	0.54
1:DA:1021:A:H61	1:DA:1142(A):A:H61	1.54	0.54
1:DA:2153:G:H2'	1:DA:2154:G:H8	1.70	0.54
39:CL:119:ALA:O	39:CL:120:ARG:HB2	2.06	0.54
11:DO:9:ASN:CB	11:DO:10:PRO:HD2	2.28	0.54
1:AA:592:G:H21	30:A8:4:MET:HE1	1.71	0.54
14:DQ:23:ARG:NH2	14:DQ:84:GLN:OE1	2.40	0.54
7:DH:6:ARG:HH21	7:DH:54:ARG:NH2	2.02	0.54
47:BT:16:GLN:O	47:BT:17:LYS:HB2	2.07	0.54
1:DA:2469:A:C5'	1:DA:2476:A:H2	2.20	0.54
38:CK:20:TYR:HD1	38:CK:65:TYR:CD2	2.25	0.54
1:AA:1047:G:C8	1:AA:1110:G:O6	2.60	0.54
1:AA:646:A:C2'	1:AA:647:G:O5'	2.56	0.54
50:CW:30:LYS:O	50:CW:32:ALA:N	2.40	0.54
15:AR:90:GLN:OE1	15:AR:121:ILE:HD11	2.07	0.54
15:DR:80:SER:HB3	15:DR:83:ILE:HD12	1.90	0.54
31:BA:323:U:H5'	50:BW:23:ARG:HB2	1.90	0.54
1:DA:296:C:H2'	1:DA:297:C:H6	1.72	0.54
32:BE:83:MET:C	32:BE:85:ALA:N	2.61	0.54
52:BB:1:G:H8	52:BB:1:G:OP2	1.90	0.54
5:DF:125:LEU:O	5:DF:125:LEU:HG	2.08	0.54
38:BK:35:ILE:HG22	38:BK:36:LEU:N	2.22	0.54
12:DP:132:VAL:HG22	12:DP:133:ARG:N	2.20	0.54
33:CF:29:TYR:HD2	33:CF:29:TYR:O	1.91	0.54
1:DA:2865:U:C4	1:DA:2866:U:C4	2.95	0.54
1:AA:1131:G:C8	9:AM:75:TYR:CE2	2.96	0.54
22:D3:72:ARG:HH21	22:D3:75:LEU:CD1	2.21	0.54
10:AN:88:ASN:HD21	10:AN:92:GLU:CG	2.21	0.54
31:BA:244:U:H4'	31:BA:245:C:C5'	2.37	0.54
34:BG:104:VAL:C	34:BG:106:TYR:H	2.10	0.54
38:CK:33:GLU:OE1	38:CK:50:ARG:HD2	2.07	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:1277:C:HO2'	31:BA:1279:A:C1'	2.21	0.54
1:DA:315:G:H2'	1:DA:316:C:H6	1.73	0.54
5:AF:114:VAL:HG21	5:AF:202:PHE:CE1	2.43	0.54
42:CO:111:LYS:O	42:CO:112:ASP:HB2	2.06	0.54
36:BI:100:ASN:HB2	48:BU:28:GLU:HA	1.90	0.54
11:DO:101:VAL:C	11:DO:103:ALA:H	2.10	0.54
5:AF:160:ASN:OD1	5:AF:163:VAL:HG23	2.07	0.54
1:DA:1810:A:H2'	1:DA:1811:G:O4'	2.07	0.54
14:AQ:26:LEU:O	14:AQ:26:LEU:HD23	2.08	0.54
49:BV:7:LYS:HG2	49:BV:7:LYS:O	2.08	0.54
1:AA:613:U:O2	1:AA:613:U:O4'	2.24	0.54
16:A1:5:LYS:HB2	16:A1:5:LYS:NZ	2.23	0.54
1:AA:2559:C:H2'	1:AA:2560:C:H6	1.72	0.54
6:AG:51:ARG:HH11	6:AG:51:ARG:HG2	1.73	0.54
37:CJ:72:ARG:O	37:CJ:91:VAL:HG23	2.07	0.54
1:DA:125:G:C6	29:D7:10:ARG:HG3	2.43	0.54
31:CA:920:U:H2'	31:CA:921:U:C6	2.42	0.54
1:DA:9:U:C2	1:DA:2629:A:N6	2.75	0.54
11:DO:46:LYS:O	11:DO:48:PRO:HA	2.07	0.54
31:CA:1362(A):C:OP1	56:CA:1786:OHX:N3	2.40	0.54
49:CV:73:GLU:O	49:CV:74:PHE:HD2	1.91	0.54
17:D2:69:LYS:HG2	17:D2:88:ARG:HG3	1.88	0.54
31:CA:686:U:HO2'	31:CA:687:A:P	2.27	0.54
9:AM:126:PRO:O	9:AM:127:ASP:HB2	2.06	0.54
52:BB:48:C:C3'	52:BB:49:A:C8	2.82	0.54
1:DA:1071:G:OP2	1:DA:1097:U:H5'	2.08	0.54
39:CL:14:VAL:HB	39:CL:66:ARG:O	2.08	0.54
31:BA:1349:A:P	39:BL:118:LYS:NZ	2.80	0.54
31:BA:1129:C:H42	31:BA:1143:G:H1	1.55	0.54
40:BM:24:VAL:HG23	40:BM:34:VAL:HG11	1.90	0.54
1:AA:1021:A:C8	1:AA:1021:A:H3'	2.42	0.54
31:BA:255:G:H1'	47:BT:16:GLN:NE2	2.23	0.54
31:BA:356:A:C2'	31:BA:357:G:O5'	2.56	0.54
31:BA:515:G:H2'	31:BA:516:U:O4'	2.07	0.54
1:DA:2316:C:O2'	1:DA:2317:C:H5'	2.07	0.54
53:CC:19:G:C4	53:CC:59:A:C2	2.96	0.54
40:BM:61:GLU:OE1	44:BQ:58:LYS:HD2	2.07	0.54
32:CE:79:ASP:O	32:CE:81:VAL:N	2.41	0.54
49:CV:28:LYS:CD	49:CV:29:ARG:H	2.13	0.54
30:D8:37:SER:O	30:D8:38:GLY:C	2.46	0.54
5:DF:89:VAL:O	5:DF:91:GLY:N	2.34	0.54
32:BE:162:ILE:N	32:BE:162:ILE:HD13	2.22	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1072:G:O6	31:CA:1102:A:N6	2.39	0.54
1:AA:857:C:H4'	22:A3:23:VAL:HG21	1.89	0.54
1:AA:62:C:N4	1:AA:92:G:H1	2.03	0.54
37:BJ:20:ASP:O	37:BJ:23:VAL:HG23	2.08	0.54
31:BA:130:A:P	31:BA:189:U:C5	3.01	0.54
32:CE:102:LEU:CD1	32:CE:102:LEU:H	2.20	0.54
1:DA:603:A:C2	1:DA:655:A:C2	2.95	0.54
34:BG:199:ASN:C	34:BG:201:GLN:H	2.10	0.54
45:CR:56:LEU:O	45:CR:56:LEU:HD12	2.08	0.54
35:CH:9:LYS:CB	35:CH:112:LEU:HD11	2.37	0.54
1:AA:2094:G:H2'	1:AA:2095:C:H5'	1.89	0.54
6:DG:15:VAL:HG22	6:DG:175:LEU:O	2.08	0.54
31:CA:1292:U:H2'	31:CA:1293:G:H8	1.72	0.54
22:D3:75:LEU:O	22:D3:78:TYR:HE1	1.90	0.54
6:AG:107:LEU:HD21	6:AG:178:PHE:CE1	2.43	0.54
1:DA:414:C:O2	1:DA:1864:U:O2'	2.26	0.54
4:DE:137:HIS:ND1	4:DE:138:PRO:HD3	2.22	0.54
31:BA:668:G:C5	31:BA:669:U:C5	2.95	0.54
5:AF:191:ARG:HB3	5:AF:191:ARG:NH1	2.21	0.54
1:AA:2695:C:H2'	1:AA:2696:U:C6	2.42	0.54
31:BA:1216:G:O2'	31:BA:1217:C:H5'	2.08	0.54
46:BS:19:ILE:HB	46:BS:36:ILE:O	2.08	0.54
23:AZ:29:GLY:C	23:AZ:31:GLY:H	2.11	0.54
13:D0:52:ILE:HG21	13:D0:94:TYR:CD2	2.42	0.54
34:CG:119:GLN:O	34:CG:123:HIS:CD2	2.61	0.54
28:D6:14:THR:HB	28:D6:21:TYR:CD2	2.43	0.54
31:BA:1229:A:OP1	43:BP:116:THR:HG23	2.07	0.54
1:AA:760:G:H2'	1:AA:761:A:O4'	2.08	0.54
1:AA:1405:U:H2'	1:AA:1406:U:C6	2.43	0.54
1:AA:1406:U:H2'	1:AA:1407:C:C6	2.41	0.54
38:BK:112:LEU:O	38:BK:112:LEU:HG	2.08	0.54
35:CH:13:ILE:HD12	35:CH:13:ILE:N	2.22	0.54
3:DD:71:ASP:N	3:DD:71:ASP:OD2	2.40	0.54
4:DE:170:LEU:HD11	4:DE:185:LYS:O	2.08	0.54
30:A8:34:TRP:CG	30:A8:35:GLN:CB	2.83	0.54
31:CA:1321:C:H4'	43:CP:87:TYR:CZ	2.43	0.54
1:AA:882:G:N2	1:AA:894:C:C2	2.75	0.54
31:BA:1178:G:H3'	31:BA:1178:G:H8	1.72	0.54
31:CA:1182:G:H4'	31:CA:1183:A:H5''	1.89	0.54
1:DA:2418:A:C6	1:DA:2419:U:C4	2.95	0.54
30:D8:30:ARG:C	30:D8:31:HIS:HD2	2.11	0.54
31:BA:1309:G:C6	31:BA:1329:A:C2	2.96	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:93:U:H2'	31:BA:95:G:C4'	2.38	0.54
11:AO:37:GLY:O	11:AO:38:GLN:C	2.44	0.54
5:AF:63:LYS:HZ1	5:AF:67:GLN:HB2	1.70	0.54
2:AB:7:G:O5'	14:AQ:29:PHE:CE1	2.61	0.54
1:DA:2727:G:O2'	10:DN:70:LYS:HE2	2.08	0.54
1:AA:2871:C:H5''	1:AA:2872:G:OP1	2.07	0.54
30:A8:56:GLU:C	30:A8:58:ILE:N	2.61	0.54
31:CA:455:C:H6	31:CA:455:C:O5'	1.91	0.54
32:CE:81:VAL:HG12	32:CE:81:VAL:O	2.07	0.54
31:CA:328:C:C2'	31:CA:328:C:O2	2.55	0.54
1:DA:5:A:C2	1:DA:2899:G:C2	2.96	0.54
1:DA:2318:G:H5'	1:DA:2319:G:OP2	2.08	0.54
31:BA:1250:A:H2'	31:BA:1251:A:C8	2.43	0.54
3:DD:267:SER:O	3:DD:269:PHE:N	2.40	0.54
44:BQ:53:LEU:HB3	44:BQ:56:VAL:HG21	1.88	0.54
1:DA:2836:U:C4	1:DA:2883:A:N6	2.76	0.54
31:CA:458:C:C2	31:CA:464:G:C8	2.95	0.54
49:CV:80:TYR:CE1	49:CV:82:GLY:HA2	2.42	0.54
26:D4:18:CYS:CB	26:D4:19:GLY:HA2	2.37	0.54
43:BP:49:THR:C	43:BP:51:ALA:N	2.61	0.54
25:DX:59:VAL:CG1	25:DX:60:GLU:H	2.20	0.54
1:AA:2086:U:H2'	1:AA:2087:G:H8	1.72	0.54
1:AA:606:U:H4'	1:AA:658:C:H4'	1.90	0.54
36:CI:14:LEU:HB2	36:CI:18:GLN:OE1	2.06	0.54
25:AX:51:ALA:HA	25:AX:54:VAL:HG12	1.90	0.54
31:BA:601:C:H2'	31:BA:602:A:C8	2.42	0.54
1:DA:362:U:H6	1:DA:362:U:H3'	1.73	0.54
1:DA:2185:C:H2'	1:DA:2186:G:H8	1.73	0.54
21:AV:110:GLY:O	21:AV:111:VAL:HG22	2.08	0.54
1:DA:547:A:H3'	1:DA:548:A:C8	2.42	0.54
1:AA:1159:U:P	25:AX:30:ARG:HH12	2.31	0.54
1:AA:1067:A:C8	1:AA:1068:G:C5	2.95	0.54
31:CA:186(F):C:H2'	31:CA:187:C:O4'	2.06	0.54
1:AA:1765:C:H2'	1:AA:1766:U:H6	1.73	0.54
1:AA:1668:A:N6	1:AA:1676:A:H61	2.04	0.54
31:CA:1028(B):C:N3	31:CA:1032(A):G:N2	2.55	0.54
1:DA:184:C:H2'	1:DA:185:U:C6	2.42	0.54
31:CA:128:G:H4'	47:CT:3:LYS:HG2	1.88	0.54
1:AA:1506:C:O2	1:AA:1506:C:H2'	2.07	0.54
1:DA:2031:A:C6	1:DA:2498:C:H1'	2.42	0.54
31:CA:595:G:H22	31:CA:643:C:H41	1.54	0.54
38:CK:38:ILE:HD12	38:CK:118:VAL:HG12	1.90	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:2286:A:OP1	28:A6:28:ARG:HG3	2.08	0.54
1:AA:2287:A:N3	1:AA:2289:G:C8	2.75	0.54
1:DA:2275:C:O2'	12:DP:85:LYS:N	2.40	0.54
52:CB:37:A:C6	54:C1:20:G:C6	2.96	0.54
1:DA:996:A:H61	1:DA:1159:U:H3	1.54	0.54
32:BE:28:PHE:CD1	32:BE:190:THR:HA	2.42	0.54
1:AA:1050:A:C8	1:AA:2751:G:C5	2.96	0.54
31:CA:247:G:O6	31:CA:278:G:C6	2.61	0.54
31:CA:534:U:H5'	31:CA:535:A:OP2	2.07	0.54
31:CA:537:G:H2'	31:CA:538:G:C8	2.43	0.54
52:CD:35:G:H2'	52:CD:36:U:C6	2.43	0.54
35:BH:110:LEU:HD13	35:BH:118:ILE:HG21	1.89	0.54
31:CA:345:C:O2	31:CA:346:G:N2	2.41	0.54
1:DA:2168:G:H2'	1:DA:2168:G:N3	2.23	0.54
32:CE:233:SER:CB	32:CE:234:PRO:CD	2.84	0.54
37:CJ:143:ARG:HH11	52:CD:43:G:H5'	1.73	0.54
39:BL:111:ARG:CG	39:BL:112:LYS:H	2.11	0.54
50:CW:25:ARG:HH11	50:CW:25:ARG:CG	2.20	0.54
39:BL:53:VAL:O	39:BL:54:ASP:CB	2.55	0.54
48:BU:48:GLY:O	48:BU:74:ARG:NH2	2.41	0.54
1:AA:2295:C:H2'	1:AA:2295:C:O2	2.08	0.54
14:DQ:66:ALA:O	14:DQ:68:GLN:N	2.40	0.54
1:AA:1771:C:C1'	1:AA:1786:A:C8	2.91	0.54
1:AA:1771:C:C1'	1:AA:1786:A:H8	2.21	0.54
25:DX:59:VAL:CG1	25:DX:60:GLU:N	2.71	0.54
1:AA:845:G:H8	1:AA:845:G:OP2	1.90	0.54
31:BA:773:G:N1	31:BA:774:G:C5	2.76	0.54
36:CI:45:LEU:HD23	36:CI:46:ARG:N	2.22	0.54
8:DK:31:LEU:HD21	8:DK:38:LEU:HD12	1.90	0.54
1:AA:986:C:H2'	1:AA:987:G:H5'	1.89	0.54
1:AA:2869:G:H2'	1:AA:2870:C:C6	2.43	0.54
25:DX:12:PRO:O	25:DX:15:TYR:N	2.37	0.54
1:AA:1370:C:OP1	56:AA:3453:OHX:N6	2.40	0.54
11:AO:108:LYS:O	11:AO:110:TYR:N	2.36	0.54
4:AE:17:ASP:O	4:AE:19:ARG:N	2.39	0.54
1:DA:1146:C:C2'	1:DA:1147:C:H5'	2.38	0.54
1:AA:848:G:H2'	1:AA:849:A:C8	2.43	0.54
31:CA:648:A:C2	31:CA:649:G:C4	2.95	0.54
31:CA:375:U:OP1	46:CS:69:THR:HG21	2.08	0.54
15:DR:105:LEU:HG	15:DR:105:LEU:O	2.08	0.54
31:CA:97:U:O2'	31:CA:99:C:H5'	2.07	0.54
1:DA:1349:A:N6	1:DA:1598:C:H42	2.06	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:2389:G:OP2	56:AA:3551:OHX:N3	2.41	0.54
4:DE:77:ILE:O	4:DE:78:LEU:O	2.26	0.54
3:AD:62:TYR:CE1	3:AD:64:ILE:HA	2.43	0.54
1:AA:1575:C:H2'	1:AA:1576:U:C6	2.43	0.54
16:D1:47:TYR:HA	16:D1:50:ARG:NH2	2.23	0.54
31:BA:1239:A:H62	31:BA:1299:A:H62	1.55	0.54
43:BP:108:ARG:NH1	43:BP:112:GLY:O	2.40	0.54
31:BA:179:A:C2	31:BA:180:U:C2	2.96	0.54
11:AO:39:LYS:HA	11:AO:45:LEU:HD22	1.88	0.54
1:DA:1962:C:O2'	1:DA:1964:G:OP2	2.22	0.54
45:BR:15:PHE:HE2	45:BR:84:LYS:HD3	1.73	0.54
35:BH:11:ILE:CD1	35:BH:31:LEU:HD13	2.30	0.54
20:DU:52:SER:CB	20:DU:56:PRO:HA	2.38	0.54
4:DE:169:ASN:O	4:DE:169:ASN:ND2	2.40	0.54
1:DA:2748:A:H2'	1:DA:2749:A:C8	2.38	0.54
1:DA:2748:A:C8	1:DA:2754:U:O4	2.61	0.54
31:CA:408:A:H2'	31:CA:409:G:O4'	2.08	0.54
32:BE:212:GLN:CG	32:BE:235:SER:HB2	2.38	0.54
1:DA:2331:G:H4'	22:D3:43:THR:H	1.73	0.54
1:AA:654:A:N3	1:AA:654:A:H2'	2.21	0.54
53:CC:1:C:O2	53:CC:2:G:C8	2.61	0.54
39:BL:78:LYS:HE2	39:BL:101:PHE:CE2	2.42	0.54
1:DA:1204:A:C2	1:DA:1241:A:N1	2.76	0.54
8:DK:76:THR:CG2	8:DK:77:LEU:H	2.20	0.54
14:AQ:42:ASP:O	14:AQ:43:GLU:HB2	2.08	0.54
7:DH:92:ILE:HG22	7:DH:93:GLY:H	1.70	0.54
1:AA:1053:C:N4	1:AA:1106:G:H1	2.05	0.54
36:BI:48:LEU:HG	36:BI:57:GLN:HA	1.89	0.54
45:BR:39:LEU:HD13	45:BR:56:LEU:HB2	1.89	0.54
33:BF:159:GLY:HA2	33:BF:193:TYR:CG	2.42	0.54
31:CA:1512:U:H2'	31:CA:1513:A:H8	1.73	0.54
21:AV:150:LEU:HD21	21:AV:154:ASP:HB2	1.89	0.54
31:BA:1379:G:C6	31:BA:1380:U:O4	2.60	0.54
1:AA:2855:C:H2'	1:AA:2856:C:C6	2.43	0.54
1:DA:2252:G:H2'	1:DA:2253:G:O4'	2.07	0.54
35:CH:48:ALA:HB1	35:CH:49:PRO:HD2	1.90	0.54
24:AW:15:LYS:H	24:AW:67:LYS:HE2	1.72	0.54
37:BJ:156:TRP:HD1	37:BJ:156:TRP:H	1.56	0.54
1:AA:1600:C:O2'	1:AA:1601:G:H5'	2.08	0.54
36:CI:32:ASN:ND2	36:CI:32:ASN:N	2.54	0.54
1:AA:1963:U:O2	1:AA:1963:U:H2'	2.06	0.54
1:DA:270(X):G:OP2	56:DA:3346:OHX:N4	2.40	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:2275:C:O2'	12:DP:84:GLY:C	2.42	0.54
31:CA:1195:C:O2	31:CA:1197:G:H1'	2.08	0.54
31:CA:980:C:O2	44:CQ:21:TYR:HD1	1.91	0.54
1:DA:888:C:H1'	1:DA:889:C:P	2.48	0.54
1:AA:1331:A:HO2'	1:AA:1332:G:H8	1.55	0.54
31:BA:1003:G:N2	31:BA:1004:A:O3'	2.39	0.54
41:BN:57:THR:HG23	41:BN:60:ALA:H	1.73	0.54
3:AD:27:THR:O	3:AD:28:GLU:OE2	2.26	0.54
15:AR:100:TYR:O	15:AR:102:ILE:N	2.41	0.54
31:BA:1431:C:H2'	31:BA:1432:G:O4'	2.08	0.54
26:A4:18:CYS:HB3	26:A4:39:CYS:CB	2.36	0.54
31:BA:148:G:O2'	31:BA:149:A:H5'	2.08	0.54
16:D1:92:ARG:HH22	17:D2:10:LYS:HB3	1.71	0.54
1:DA:1936:A:C8	1:DA:1940:U:O2	2.61	0.54
40:CM:6:ILE:HG22	40:CM:98:ILE:HG23	1.89	0.54
1:DA:825:C:O2	11:DO:55:ARG:NH2	2.41	0.54
27:A5:51:TYR:HD2	27:A5:52:TYR:CE2	2.25	0.54
31:BA:1133:G:H1	31:BA:1141:C:N4	2.02	0.54
1:AA:2689:U:H4'	1:AA:2690:C:C5'	2.26	0.54
31:BA:414:A:OP2	31:BA:428:G:N2	2.39	0.54
31:BA:655:A:C2	31:BA:754:C:C4	2.95	0.54
28:A6:43:CYS:HB3	28:A6:44:ARG:HH11	1.70	0.54
12:AP:7:MET:CE	12:AP:73:PRO:HG3	2.36	0.54
1:AA:2144:U:O2	1:AA:2148:G:C2	2.61	0.54
2:DB:55:U:H1'	6:DG:29:TRP:HE1	1.73	0.54
2:DB:52:A:H62	14:DQ:33:LYS:HG2	1.72	0.54
1:AA:2445:G:OP1	5:AF:74:ARG:NH2	2.40	0.54
13:A0:94:TYR:N	13:A0:94:TYR:HD2	2.02	0.54
31:CA:1227:A:H8	31:CA:1227:A:H3'	1.73	0.54
3:AD:19:ALA:HB3	3:AD:21:PHE:CZ	2.43	0.54
6:AG:38:VAL:CG2	6:AG:93:THR:HG23	2.37	0.54
1:DA:2887:U:C2'	1:DA:2888:C:H5'	2.38	0.54
34:BG:25:ARG:C	34:BG:27:TYR:H	2.09	0.54
1:AA:1281:G:O2'	1:AA:1282:U:H5'	2.08	0.54
24:DW:33:MET:HG3	24:DW:37:PHE:HE1	1.72	0.54
34:CG:64:LEU:HD13	34:CG:198:VAL:HG21	1.89	0.54
31:BA:812:C:H4'	31:BA:813:U:O5'	2.07	0.54
31:BA:726:C:O2'	31:BA:727:G:H5'	2.08	0.54
11:DO:101:VAL:HG21	11:DO:108:LYS:HG2	1.90	0.54
1:AA:1914:C:H2'	1:AA:1915:U:O4'	2.08	0.54
8:DK:82:ARG:NH1	8:DK:146:ALA:O	2.41	0.54
8:AK:144:VAL:CG2	8:AK:145:VAL:N	2.71	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:BO:93:LEU:O	42:BO:94:PRO:C	2.47	0.54
18:DS:40:ASN:O	18:DS:41:LYS:HG2	2.08	0.54
1:AA:2461:C:H2'	1:AA:2462:U:C6	2.43	0.54
45:BR:18:PHE:HB2	45:BR:19:PRO:CD	2.37	0.54
21:AV:143:GLY:HA2	21:AV:144:LEU:CB	2.38	0.54
1:AA:2287:A:N6	1:AA:2344:U:C2	2.75	0.53
31:CA:1316:G:N2	31:CA:1319:A:O5'	2.41	0.53
43:CP:79:LYS:O	43:CP:79:LYS:HD3	2.08	0.53
1:AA:1332:G:N2	1:AA:1610:A:H8	2.06	0.53
1:AA:2306:C:H3'	1:AA:2307:G:C5'	2.38	0.53
52:BD:21:A:C1'	52:BD:22:A:O5'	2.56	0.53
31:BA:1175:G:C2'	31:BA:1176:A:C8	2.78	0.53
1:AA:792:G:C4'	1:AA:793:A:H5'	2.38	0.53
27:A5:31:VAL:HG13	27:A5:40:LYS:O	2.07	0.53
9:DM:38:HIS:ND1	9:DM:39:ARG:HG3	2.23	0.53
4:AE:40:GLU:HA	4:AE:40:GLU:OE1	2.07	0.53
14:DQ:29:PHE:O	14:DQ:35:ILE:HD12	2.08	0.53
31:BA:210:U:C2'	31:BA:216:G:OP2	2.56	0.53
1:AA:1049:C:C2'	1:AA:1050:A:H5''	2.38	0.53
12:AP:54:MET:C	12:AP:56:ARG:N	2.61	0.53
31:CA:1212:U:HO2'	31:CA:1213:A:H8	1.55	0.53
52:CD:59:A:C2	52:CD:74:C:O2	2.61	0.53
3:DD:95:LEU:HD11	3:DD:105:ILE:HD12	1.90	0.53
40:BM:9:ARG:NH2	40:BM:97:GLU:HG3	2.17	0.53
4:DE:203:LYS:O	4:DE:204:ALA:HB2	2.08	0.53
31:CA:986:A:H1'	49:CV:54:GLY:O	2.09	0.53
32:CE:185:ILE:CG2	32:CE:199:TYR:HB2	2.36	0.53
30:D8:51:ALA:CB	30:D8:52:LYS:HD2	2.38	0.53
21:DV:147:GLY:C	21:DV:149:SER:H	2.11	0.53
21:AV:44:PHE:CE1	21:AV:48:PHE:HB2	2.43	0.53
40:CM:4:ILE:HG12	40:CM:100:THR:CG2	2.38	0.53
31:CA:273:A:H2'	31:CA:274:A:H5'	1.90	0.53
38:BK:73:ASP:OD2	38:BK:75:ARG:NE	2.38	0.53
1:AA:558:G:OP1	9:AM:111:PRO:HD2	2.07	0.53
14:AQ:88:ASP:OD2	14:AQ:90:GLY:N	2.42	0.53
1:DA:2699:C:H2'	1:DA:2700:C:O4'	2.08	0.53
31:CA:741:G:H2'	31:CA:742:G:O4'	2.08	0.53
5:AF:132:VAL:CG2	5:AF:133:ASN:N	2.71	0.53
1:DA:481:G:OP2	20:DU:47:LYS:HD3	2.08	0.53
17:D2:37:VAL:HG21	17:D2:57:VAL:H	1.73	0.53
31:BA:920:U:O4'	31:BA:1080:A:C2	2.61	0.53
44:BQ:12:ARG:C	44:BQ:14:PRO:HD2	2.29	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:BR:45:VAL:HG12	45:BR:46:HIS:ND1	2.23	0.53
36:CI:18:GLN:O	36:CI:21:LEU:HB3	2.07	0.53
1:AA:981:A:H5''	1:AA:982:C:OP2	2.08	0.53
31:BA:1286:A:C8	31:BA:1287:A:H4'	2.43	0.53
1:DA:844:C:N4	1:DA:845:G:C2	2.76	0.53
31:BA:475:G:H2'	31:BA:476:G:O4'	2.09	0.53
9:AM:120:LEU:CD2	9:AM:120:LEU:C	2.76	0.53
31:BA:19:C:H2'	31:BA:20:U:H6	1.73	0.53
1:DA:2266:A:H5'	1:DA:2267:A:C5	2.44	0.53
31:BA:811:C:H4'	31:BA:900:A:N6	2.22	0.53
5:DF:34:TRP:NE1	11:DO:8:PRO:HD3	2.23	0.53
32:BE:155:LEU:C	32:BE:157:ARG:H	2.11	0.53
45:BR:29:VAL:HG11	45:BR:81:LEU:HD21	1.90	0.53
1:AA:1411:C:H2'	1:AA:1412:A:O4'	2.09	0.53
1:AA:749:C:C4	1:AA:1618:A:C2	2.96	0.53
37:CJ:109:ASN:H	37:CJ:109:ASN:HD22	1.56	0.53
1:AA:2287:A:C4	1:AA:2289:G:C8	2.96	0.53
1:DA:895:U:O2'	1:DA:896:A:C8	2.56	0.53
1:DA:898:C:N4	1:DA:899:A:C2	2.76	0.53
31:CA:1209:C:O2	31:CA:1209:C:C2'	2.55	0.53
31:CA:1205:U:O2'	33:CF:194:GLY:HA2	2.08	0.53
43:BP:87:TYR:C	43:BP:89:GLY:H	2.12	0.53
51:CX:3:LYS:O	51:CX:14:TRP:CE3	2.61	0.53
1:AA:607:U:N3	1:AA:621:A:C2	2.71	0.53
43:BP:30:ALA:C	43:BP:32:GLU:N	2.61	0.53
52:BB:49:A:H2'	52:BB:49:A:N3	2.23	0.53
1:DA:1024:G:C3'	1:DA:1025:G:H5''	2.35	0.53
11:DO:57:THR:C	11:DO:59:LEU:N	2.62	0.53
1:DA:2136:C:N4	1:DA:2137:C:N3	2.56	0.53
39:CL:119:ALA:O	39:CL:120:ARG:CB	2.56	0.53
45:BR:15:PHE:CE2	45:BR:84:LYS:HD3	2.44	0.53
31:BA:1202:G:C2	44:BQ:42:ILE:HG21	2.43	0.53
14:DQ:30:ARG:CG	14:DQ:35:ILE:HD13	2.38	0.53
12:DP:110:THR:CG2	12:DP:113:GLN:HG3	2.34	0.53
12:AP:81:VAL:HG23	12:AP:82:ARG:N	2.22	0.53
1:AA:1162:G:O4'	17:A2:23:GLU:HG3	2.08	0.53
31:CA:994:A:C2	44:CQ:5:ALA:HB2	2.44	0.53
31:CA:570:G:H2'	31:CA:571:U:C6	2.43	0.53
4:AE:13:ARG:HB2	4:AE:21:VAL:CB	2.38	0.53
35:CH:139:LEU:C	35:CH:141:GLN:H	2.11	0.53
1:DA:449:A:OP1	5:DF:84:VAL:O	2.26	0.53
31:BA:950:U:H2'	31:BA:951:G:C8	2.39	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:419:C:H5'	31:BA:420:U:OP2	2.08	0.53
1:DA:2291:U:H2'	1:DA:2292:C:C6	2.43	0.53
8:AK:35:LEU:O	8:AK:36:ALA:HB2	2.07	0.53
1:DA:2131:G:O4'	1:DA:2158:A:N1	2.41	0.53
33:CF:36:ASP:OD2	33:CF:57:ILE:HD12	2.08	0.53
22:D3:40:GLN:HE22	22:D3:45:PHE:HB2	1.73	0.53
31:BA:575:G:O2'	31:BA:821:G:OP2	2.16	0.53
40:CM:4:ILE:HG12	40:CM:100:THR:HG22	1.89	0.53
1:AA:2583:G:N2	52:BB:85:A:H8	2.03	0.53
1:DA:1204:A:O2'	56:DA:3400:OHX:N5	2.41	0.53
21:DV:44:PHE:HE1	21:DV:48:PHE:CG	2.26	0.53
31:CA:1151:A:N6	31:CA:1152:A:N6	2.56	0.53
31:CA:200:G:H1	31:CA:217:C:N4	2.02	0.53
1:DA:2817:G:OP1	13:D0:99:LYS:NZ	2.40	0.53
18:AS:12:ILE:HG12	18:AS:13:SER:N	2.23	0.53
1:AA:337:C:H2'	1:AA:338:G:O5'	2.08	0.53
1:DA:2191:G:O2'	1:DA:2192:G:P	2.66	0.53
1:AA:978:G:N2	1:AA:986:C:C2	2.76	0.53
16:A1:24:TYR:CD1	16:A1:38:THR:HG21	2.43	0.53
31:BA:1088:G:H1	31:BA:1097:C:H42	1.55	0.53
31:BA:690:G:H2'	31:BA:691:G:O4'	2.08	0.53
4:AE:7:VAL:O	4:AE:8:LYS:C	2.45	0.53
1:DA:237:C:C2'	1:DA:238:C:H5'	2.37	0.53
1:AA:2820:A:O5'	13:A0:4:LEU:HD23	2.09	0.53
18:DS:44:ALA:O	18:DS:45:TYR:C	2.46	0.53
33:BF:107:GLN:H	33:BF:107:GLN:CD	2.09	0.53
1:AA:174:C:H2'	1:AA:175:G:O4'	2.08	0.53
1:DA:1996:C:OP1	10:DN:31:LYS:HE3	2.08	0.53
9:DM:134:ARG:CG	9:DM:134:ARG:O	2.56	0.53
11:DO:46:LYS:O	11:DO:48:PRO:N	2.41	0.53
1:DA:566:U:OP1	11:DO:29:LYS:HD2	2.07	0.53
52:CB:35:G:H8	52:CB:35:G:O5'	1.91	0.53
43:CP:69:GLU:O	43:CP:72:ALA:HB3	2.08	0.53
1:AA:2298:A:H2'	1:AA:2299:G:O4'	2.08	0.53
31:CA:1288:A:H1'	31:CA:1352:C:O2'	2.08	0.53
6:AG:145:THR:O	6:AG:146:TYR:CB	2.56	0.53
43:BP:22:ILE:HD12	43:BP:25:ILE:HD12	1.90	0.53
1:DA:662:G:H5''	11:DO:16:ARG:HG2	1.90	0.53
31:BA:1391:U:H2'	31:BA:1392:G:C8	2.43	0.53
11:DO:107:LYS:C	11:DO:109:GLY:N	2.61	0.53
1:DA:1022:G:O6	9:DM:66:LYS:HE2	2.07	0.53
2:AB:42:C:O3'	6:AG:67:LYS:NZ	2.42	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:BE:187:LEU:HD13	32:BE:187:LEU:O	2.08	0.53
52:CB:50:U:H2'	52:CB:51:C:H6	1.68	0.53
12:AP:50:ALA:O	12:AP:51:ARG:C	2.46	0.53
2:DB:39:A:C4	26:D4:1:MET:HE3	2.44	0.53
2:DB:39:A:H2'	26:D4:1:MET:HE3	1.89	0.53
53:CC:16:C:C5	56:CC:108:OHX:N5	2.76	0.53
39:CL:53:VAL:C	39:CL:55:ALA:N	2.58	0.53
39:CL:4:TYR:OH	39:CL:89:ASN:ND2	2.40	0.53
1:AA:304:G:O2'	1:AA:305:U:H5'	2.09	0.53
21:AV:128:VAL:HA	21:AV:161:VAL:CG2	2.39	0.53
43:BP:94:ARG:O	43:BP:96:LEU:HG	2.08	0.53
1:AA:2146:C:H4'	1:AA:2147:G:N7	2.24	0.53
37:BJ:120:ILE:CG2	37:BJ:124:LEU:HD12	2.39	0.53
49:CV:18:LYS:HG2	49:CV:31:ILE:HD13	1.90	0.53
36:BI:97:PHE:HZ	48:BU:61:LYS:HD3	1.73	0.53
14:DQ:94:TYR:HD2	14:DQ:94:TYR:O	1.90	0.53
4:DE:55:ASN:O	4:DE:57:LYS:N	2.35	0.53
10:AN:113:LYS:O	10:AN:117:LEU:HD12	2.08	0.53
31:CA:943:U:C2'	31:CA:944:G:H5'	2.38	0.53
14:AQ:38:GLN:CG	14:AQ:47:THR:HG21	2.38	0.53
32:BE:233:SER:OG	32:BE:234:PRO:HD2	2.08	0.53
1:DA:43:G:N2	1:DA:438:G:C4	2.76	0.53
1:AA:183:C:H42	1:AA:213:A:H61	1.57	0.53
31:BA:124:G:C6	31:BA:125:U:N3	2.76	0.53
1:DA:1773:A:H2'	1:DA:1774:C:H5'	1.90	0.53
1:AA:2364:C:C2'	1:AA:2365:G:H5'	2.38	0.53
4:DE:39:PRO:CG	4:DE:45:THR:CG2	2.84	0.53
31:CA:1053:G:C2'	31:CA:1054:C:OP2	2.56	0.53
3:DD:35:LYS:HG3	3:DD:64:ILE:HG12	1.88	0.53
1:AA:1536:A:C2	56:AA:3507:OHX:N1	2.76	0.53
16:D1:50:ARG:CZ	17:D2:72:VAL:HG21	2.38	0.53
37:BJ:84:ASN:O	52:BD:38:MIA:H151	2.08	0.53
1:AA:2590:A:C2	1:AA:2605:U:C2	2.97	0.53
30:D8:50:LEU:H	30:D8:50:LEU:CD2	2.16	0.53
31:BA:791:G:C6	31:BA:792:A:N6	2.75	0.53
31:BA:1350:A:C6	31:BA:1351:U:N3	2.77	0.53
12:DP:54:MET:O	12:DP:57:HIS:N	2.40	0.53
1:AA:1264:G:H3'	1:AA:1265:A:H5''	1.91	0.53
31:BA:517:G:N1	31:BA:533:A:OP2	2.39	0.53
1:DA:35:G:C1'	1:DA:454:A:N3	2.72	0.53
1:DA:35:G:H1'	1:DA:454:A:N3	2.24	0.53
31:BA:544:G:C6	31:BA:545:C:C4	2.97	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1239:A:H4'	31:CA:1240:U:H5'	1.90	0.53
1:AA:2405:G:P	11:AO:77:ARG:NH2	2.81	0.53
33:BF:181:ASN:HD21	33:BF:204:LEU:HB2	1.73	0.53
2:DB:79:C:H2'	2:DB:80:U:O4'	2.08	0.53
1:DA:2872:G:N7	1:DA:2873:A:C2	2.77	0.53
32:CE:6:THR:OG1	32:CE:7:VAL:N	2.39	0.53
21:AV:127:LYS:C	21:AV:161:VAL:HG21	2.28	0.53
33:CF:22:TRP:CH2	33:CF:32:LEU:HB2	2.44	0.53
31:BA:1314:C:O2'	31:BA:1315:U:H5'	2.08	0.53
1:DA:324:A:H2'	1:DA:325:G:O4'	2.08	0.53
1:DA:2297:C:C6	1:DA:2333:A:N1	2.76	0.53
7:AH:86:GLU:HG3	7:AH:165:ALA:N	2.23	0.53
31:CA:262:A:C6	31:CA:263:A:C6	2.96	0.53
21:DV:52:SER:C	21:DV:54:HIS:H	2.11	0.53
40:CM:16:LEU:HB3	40:CM:70:ARG:CD	2.38	0.53
6:AG:25:TYR:CD2	6:AG:31:VAL:HB	2.43	0.53
45:CR:39:LEU:CD1	45:CR:56:LEU:HD13	2.38	0.53
48:BU:73:ALA:HB3	48:BU:79:LEU:HD12	1.89	0.53
48:CU:29:PHE:N	48:CU:29:PHE:CD2	2.74	0.53
1:AA:2864:G:OP1	15:AR:119:LYS:HD2	2.08	0.53
32:BE:167:PRO:CG	32:BE:188:ALA:HB2	2.37	0.53
31:BA:1397:C:C6	31:BA:1397:C:H3'	2.40	0.53
1:AA:1470:G:H5''	1:AA:1471:A:OP1	2.08	0.53
18:DS:26:GLY:HA2	18:DS:71:VAL:O	2.09	0.53
7:DH:136:ILE:O	7:DH:136:ILE:HG22	2.08	0.53
31:CA:852:G:C2'	31:CA:853:G:H5'	2.38	0.53
1:AA:672:C:O2'	1:AA:673:C:H5'	2.08	0.53
31:CA:801:U:H2'	31:CA:802:A:H8	1.74	0.53
31:CA:804:U:H5''	31:CA:805:C:OP2	2.08	0.53
31:BA:1218:C:H2'	31:BA:1219:U:C6	2.43	0.53
32:BE:21:ARG:NH1	32:BE:37:ASN:O	2.41	0.53
1:DA:1314:C:C2	1:DA:1339:G:N2	2.77	0.53
1:DA:824:A:H1'	1:DA:2358:G:N7	2.23	0.53
8:AK:40:THR:O	8:AK:44:LEU:HB2	2.09	0.53
5:AF:165:ARG:HA	5:AF:168:ARG:HB2	1.88	0.53
1:DA:275:G:C8	1:DA:275:G:OP2	2.62	0.53
1:AA:1320:C:OP2	56:AA:3375:OHX:N2	2.42	0.53
1:AA:2356:C:H2'	1:AA:2357:U:O4'	2.08	0.53
1:AA:2473:U:O2	1:AA:2473:U:H2'	2.07	0.53
35:CH:40:ARG:HH11	35:CH:40:ARG:HG2	1.74	0.53
9:AM:62:VAL:HG13	9:AM:62:VAL:O	2.08	0.53
31:CA:1269:A:C2	31:CA:1313:U:H1'	2.43	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:2346:A:H5''	1:AA:2383:G:O4'	2.09	0.53
11:DO:50:ARG:HG2	11:DO:50:ARG:NH1	2.23	0.53
1:AA:879:G:H1	1:AA:898:C:H42	1.56	0.53
34:CG:62:GLN:O	34:CG:66:ARG:HD2	2.08	0.53
31:BA:1297:C:H1'	37:BJ:114:ARG:NH1	2.23	0.53
11:DO:61:ARG:HB3	11:DO:62:LEU:HD22	1.91	0.53
31:CA:1149:C:H2'	31:CA:1150:U:O4'	2.08	0.53
39:CL:110:GLU:O	39:CL:111:ARG:O	2.27	0.53
4:AE:15:PHE:HA	4:AE:20:ALA:HA	1.91	0.53
34:CG:178:VAL:CG1	34:CG:179:GLU:H	2.10	0.53
1:DA:1000:A:C2	1:DA:1155:A:C5	2.96	0.53
20:DU:84:ARG:NH2	20:DU:97:ARG:HB2	2.23	0.53
19:AT:65:ARG:HB3	19:AT:65:ARG:NH1	2.24	0.53
16:A1:60:LEU:HD13	16:A1:60:LEU:C	2.29	0.53
32:BE:72:GLY:HA2	32:BE:165:VAL:HG22	1.91	0.53
1:DA:16:G:O6	56:DA:3410:OHX:N2	2.41	0.53
32:CE:233:SER:CB	32:CE:234:PRO:HD2	2.37	0.53
1:DA:17:G:C4	1:DA:18:C:C5	2.96	0.53
31:BA:797:C:OP1	41:BN:124:LYS:HE2	2.08	0.53
31:BA:1073:U:H2'	31:BA:1074:G:H8	1.74	0.53
34:BG:138:TYR:C	34:BG:138:TYR:HD2	2.12	0.53
46:CS:55:ARG:NH2	46:CS:58:TYR:CD1	2.76	0.53
28:D6:36:LEU:CD2	28:D6:50:ARG:HD3	2.39	0.53
31:CA:76:G:C6	31:CA:77:C:C4	2.97	0.53
1:AA:1188:U:C2'	1:AA:1189:A:H5'	2.38	0.53
1:AA:1486:A:H2'	1:AA:1487:G:C8	2.43	0.53
31:CA:622:A:C8	31:CA:623:C:C6	2.96	0.53
1:AA:981:A:N1	1:AA:2027:G:O2'	2.37	0.53
1:AA:978:G:C2	1:AA:986:C:C2	2.97	0.53
1:AA:1614:A:N6	18:AS:88:ARG:H	2.05	0.53
32:CE:32:ILE:HD12	32:CE:33:TYR:N	2.23	0.53
31:BA:816:A:OP1	31:BA:1526:G:O2'	2.19	0.53
31:BA:477:G:N7	56:BA:1813:OHX:N3	2.57	0.53
31:BA:200:G:N2	31:BA:218:C:N3	2.56	0.53
1:AA:2397:G:H5''	23:AZ:28:GLY:HA2	1.91	0.53
1:DA:2057:A:H2'	1:DA:2058:A:O4'	2.09	0.53
1:AA:247:G:H4'	1:AA:386:G:C5	2.44	0.53
9:DM:120:LEU:CD2	9:DM:122:VAL:HG23	2.38	0.53
1:AA:2018:G:H2'	1:AA:2019:A:O4'	2.08	0.53
1:AA:1687:G:O2'	1:AA:1688:U:H5'	2.09	0.53
5:AF:20:LEU:HD12	5:AF:21:ALA:N	2.23	0.53
1:DA:2037:G:H2'	1:DA:2038:G:C8	2.44	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:BJ:148:ASN:HD22	37:BJ:148:ASN:H	1.57	0.53
24:DW:23:LYS:HE2	24:DW:27:GLU:OE2	2.08	0.53
3:AD:136:ILE:O	3:AD:168:ARG:NH2	2.42	0.53
1:DA:1028:A:N6	1:DA:1125:G:H2'	2.24	0.53
3:DD:127:VAL:HA	3:DD:193:VAL:HG23	1.90	0.53
3:DD:35:LYS:CB	3:DD:63:ARG:HA	2.39	0.53
1:AA:1065:U:H6	1:AA:1065:U:OP2	1.91	0.53
1:AA:2698:U:H2'	1:AA:2699:C:C6	2.43	0.53
11:DO:104:GLY:O	11:DO:105:LEU:HB3	2.09	0.53
1:DA:2681:C:H5	1:DA:2727:G:C2	2.26	0.53
1:DA:2378:A:H5''	14:DQ:23:ARG:NH1	2.23	0.53
1:AA:483:A:O2'	20:AU:59:GLY:HA2	2.08	0.53
1:DA:1108:U:C5	1:DA:1109:C:C4	2.96	0.53
31:BA:82:U:O4	31:BA:87:A:N1	2.42	0.53
1:DA:2210:G:H4'	1:DA:2211:G:OP2	2.09	0.53
12:DP:78:PRO:O	12:DP:79:LEU:CG	2.57	0.53
31:CA:1212:U:O2'	31:CA:1213:A:H8	1.91	0.53
5:DF:53:THR:C	5:DF:55:GLY:H	2.11	0.53
10:DN:2:ILE:HD11	10:DN:82:ASN:HB3	1.90	0.53
11:AO:49:ARG:HD2	30:A8:58:ILE:CG2	2.39	0.53
53:BC:73:A:N6	53:BC:74:A:N6	2.56	0.53
48:CU:43:PHE:HD2	48:CU:56:THR:HG22	1.74	0.53
1:AA:303:U:H2'	1:AA:304:G:H8	1.72	0.53
1:AA:1510:A:C2'	1:AA:1510:A:N3	2.69	0.53
1:DA:2286:A:H4'	1:DA:2287:A:O4'	2.08	0.53
5:AF:11:VAL:HB	5:AF:18:ARG:O	2.08	0.53
49:BV:10:PHE:N	49:BV:10:PHE:CD1	2.76	0.53
49:BV:10:PHE:HD1	49:BV:10:PHE:H	1.53	0.53
1:AA:1012:U:O4	9:AM:25:ARG:HA	2.08	0.53
4:AE:101:ARG:NE	4:AE:171:GLU:HB3	2.23	0.53
19:DT:38:GLU:O	19:DT:42:ALA:HB2	2.09	0.53
15:AR:26:ASP:CB	15:AR:91:ARG:HA	2.37	0.53
1:AA:2623:G:N2	27:A5:22:HIS:CE1	2.70	0.53
46:BS:40:ASP:C	46:BS:42:ARG:H	2.10	0.53
6:AG:13:GLU:HG3	6:AG:13:GLU:O	2.09	0.53
13:A0:52:ILE:O	13:A0:55:ALA:N	2.35	0.53
39:CL:99:LEU:HB3	39:CL:101:PHE:CE1	2.44	0.53
31:CA:960:U:N3	31:CA:1225:A:C4	2.72	0.53
5:DF:7:TYR:CD2	5:DF:18:ARG:HB3	2.44	0.53
38:BK:27:PRO:O	38:BK:32:LYS:NZ	2.20	0.53
33:CF:68:VAL:HG12	33:CF:70:VAL:HG23	1.90	0.53
1:AA:188:G:H1	1:AA:208:C:H42	1.56	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:CL:125:TYR:HD2	39:CL:126:SER:N	2.02	0.53
1:AA:1130:U:O2	4:AE:149:ARG:NH2	2.28	0.53
32:CE:137:ARG:CZ	32:CE:140:HIS:HB3	2.38	0.53
1:AA:529:A:C8	1:AA:530:G:O6	2.61	0.53
15:AR:125:ARG:O	15:AR:128:GLU:N	2.36	0.53
31:BA:619:U:H5''	31:BA:620:C:OP2	2.09	0.53
4:DE:120:TRP:CE3	4:DE:155:LYS:HD3	2.43	0.53
7:DH:152:ARG:NE	7:DH:153:LYS:HG3	2.23	0.53
31:CA:192:U:C4'	50:CW:103:GLY:HA2	2.39	0.53
1:AA:1530:G:C5	1:AA:1531:C:C4	2.96	0.53
3:DD:239:ARG:O	3:DD:240:ALA:HB2	2.08	0.53
1:AA:2678:C:H2'	1:AA:2679:A:O4'	2.08	0.53
31:BA:729:A:H2'	31:BA:730:G:O4'	2.08	0.53
1:DA:1998:G:HO2'	1:DA:2724:C:HO2'	1.54	0.53
31:CA:1122:U:O4	31:CA:1123:A:N6	2.41	0.53
10:AN:24:VAL:HA	10:AN:39:ILE:HG22	1.90	0.53
19:AT:29:TRP:CE3	19:AT:78:LYS:HB3	2.44	0.53
5:DF:95:ARG:HG3	5:DF:97:TYR:CE2	2.44	0.53
47:CT:46:ASP:OD1	47:CT:51:TYR:HD1	1.92	0.53
38:BK:94:TYR:HE1	38:BK:132:GLU:HB2	1.73	0.53
1:DA:57:C:H2'	1:DA:58:G:O4'	2.08	0.53
31:BA:158:G:C2'	31:BA:159:G:H5'	2.39	0.53
1:DA:6:A:O2'	9:DM:129:PRO:HB2	2.08	0.53
11:AO:28:GLY:O	11:AO:31:ALA:N	2.29	0.53
1:AA:2421:G:H5''	1:AA:2422:A:OP2	2.09	0.53
1:DA:1187:G:H5'	17:D2:81:TYR:OH	2.09	0.53
1:DA:973:A:H5'	1:DA:1188:U:H1'	1.90	0.53
31:CA:1319:A:P	49:CV:10:PHE:HB3	2.48	0.53
44:CQ:15:LYS:C	44:CQ:16:PHE:HD2	2.12	0.53
52:CD:46:G:H2'	52:CD:47:U:C6	2.44	0.53
7:AH:152:ARG:CG	7:AH:153:LYS:H	2.18	0.53
1:DA:1464:C:O2'	1:DA:1528:A:C8	2.58	0.53
31:BA:947:G:C2	31:BA:948:C:C2	2.96	0.53
31:BA:138:G:H1	31:BA:225:C:H42	1.57	0.53
11:DO:107:LYS:C	11:DO:109:GLY:H	2.11	0.53
11:DO:84:ASN:C	11:DO:86:LYS:N	2.62	0.53
17:D2:15:GLU:HG2	17:D2:16:PRO:HD2	1.90	0.53
1:AA:1071:G:N2	1:AA:1090:U:C5	2.76	0.53
1:DA:1061:U:H4'	1:DA:1070:A:C1'	2.38	0.53
31:CA:861:G:C5	31:CA:862:C:H5	2.27	0.53
1:DA:1022:G:C5	1:DA:1140:C:N4	2.77	0.53
31:BA:1187:G:P	39:BL:113:LYS:NZ	2.82	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:A5:51:TYR:C	27:A5:56:LYS:HE2	2.29	0.53
5:DF:132:VAL:HG13	5:DF:133:ASN:N	2.23	0.53
31:BA:356:A:H1'	31:BA:368:U:O2'	2.09	0.53
46:BS:7:ALA:O	46:BS:9:PHE:HD2	1.91	0.53
42:CO:32:PHE:HB3	42:CO:85:ILE:O	2.07	0.53
2:DB:45:A:C2	2:DB:46:A:C1'	2.91	0.53
1:DA:835:A:H5'	30:D8:52:LYS:HE3	1.90	0.53
21:AV:128:VAL:CA	21:AV:161:VAL:HG21	2.39	0.53
31:CA:526:C:P	42:CO:91:LYS:NZ	2.81	0.53
7:AH:86:GLU:HG3	7:AH:165:ALA:CB	2.39	0.53
48:BU:21:LYS:HE3	48:BU:21:LYS:HA	1.89	0.53
1:DA:1204:A:C8	56:DA:3400:OHX:N2	2.76	0.53
31:BA:976:G:H4'	31:BA:977:A:OP1	2.09	0.53
13:A0:103:ARG:NH1	18:AS:40:ASN:HD22	2.06	0.53
1:DA:827:U:O2	1:DA:2246:G:H4'	2.09	0.53
1:DA:1577:C:H2'	1:DA:1578:U:O4'	2.09	0.53
31:CA:748:C:C1'	31:CA:749:C:OP2	2.56	0.53
12:DP:63:LYS:HG2	12:DP:65:PHE:CE2	2.44	0.53
31:CA:1493:A:H2'	1:DA:1913:A:H61	1.74	0.53
9:DM:71:ILE:C	9:DM:71:ILE:HD12	2.28	0.53
1:DA:2059:A:C5'	1:DA:2060:A:OP2	2.57	0.53
31:CA:1011:G:C5	31:CA:1012:U:C4	2.97	0.53
31:BA:773:G:H1	31:BA:806:C:N4	2.06	0.53
1:DA:2565:A:H5''	1:DA:2566:A:OP2	2.08	0.53
1:DA:579:G:H2'	1:DA:580:C:C6	2.44	0.53
1:DA:864:G:O2'	1:DA:865:C:H5'	2.08	0.53
13:D0:38:VAL:N	13:D0:39:PRO:CD	2.71	0.53
43:CP:54:VAL:O	43:CP:58:GLU:HG2	2.09	0.53
14:AQ:10:ARG:O	14:AQ:14:VAL:HG13	2.09	0.53
1:AA:186:G:N7	56:AA:3371:OHX:N1	2.56	0.53
32:CE:100:GLY:N	32:CE:176:GLU:OE2	2.41	0.53
1:AA:1342:A:N6	1:AA:1397:U:C5	2.77	0.53
9:DM:99:LEU:O	9:DM:103:VAL:HG23	2.09	0.53
3:AD:119:ALA:HA	3:AD:130:ALA:O	2.09	0.53
38:BK:1:MET:O	38:BK:2:LEU:O	2.27	0.53
1:AA:1805:U:O2	3:AD:50:THR:HB	2.09	0.53
7:DH:70:THR:HG22	7:DH:74:ASN:HD21	1.73	0.53
1:AA:1155:A:O2'	1:AA:1156:A:H2'	2.09	0.53
1:DA:2002:G:O6	56:DA:3364:OHX:N4	2.42	0.53
27:A5:2:ALA:C	27:A5:3:LYS:CD	2.78	0.53
1:AA:2394:C:N3	52:BD:85:A:O2'	2.34	0.53
1:DA:2118:U:C4	1:DA:2148:G:H4'	2.43	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
49:CV:9:VAL:HG13	26:D4:63:TYR:OH	2.09	0.53
52:CD:51:C:C5	52:CD:52:G:N3	2.77	0.53
31:CA:503:C:C2'	31:CA:504:C:H5'	2.39	0.53
11:DO:61:ARG:HB3	11:DO:62:LEU:CD2	2.39	0.53
3:AD:238:GLY:O	3:AD:239:ARG:CB	2.57	0.53
1:AA:2131:G:C4	1:AA:2158:A:C8	2.96	0.53
11:DO:80:TYR:HD1	11:DO:111:ARG:HB3	1.72	0.53
1:DA:1078:U:H5''	1:DA:1079:C:OP1	2.09	0.53
31:CA:830:G:N2	31:CA:857:C:O2	2.41	0.53
27:A5:56:LYS:CD	27:A5:56:LYS:N	2.66	0.53
1:AA:270(O):U:H2'	1:AA:270(O):U:O2	2.08	0.53
1:DA:2378:A:C4'	14:DQ:23:ARG:HH11	2.11	0.53
31:CA:1024:G:N3	31:CA:1024:G:H3'	2.23	0.53
31:CA:1003:G:N1	31:CA:1037:C:N4	2.45	0.53
1:AA:2805:G:H2'	1:AA:2807:G:C8	2.44	0.53
1:AA:2809:A:C2	1:AA:2892:A:C2	2.97	0.53
1:DA:1652:A:C2'	1:DA:1653:G:H5'	2.39	0.53
2:DB:40:U:C2	26:D4:1:MET:CE	2.92	0.53
31:BA:411:A:C6	31:BA:429:U:C4	2.97	0.53
1:AA:873:G:N2	1:AA:904:C:N3	2.43	0.53
1:AA:479:A:N3	1:AA:481:G:H5'	2.24	0.53
31:CA:1299:A:C2	31:CA:1301:U:C5	2.96	0.53
31:CA:1014:A:H2'	31:CA:1015:A:C8	2.43	0.53
35:BH:78:HIS:CE1	35:BH:142:LEU:HA	2.43	0.53
5:AF:192:LEU:CD2	5:AF:194:MET:HG3	2.39	0.53
9:AM:35:ARG:O	9:AM:42:TRP:HZ3	1.92	0.53
1:AA:524:U:H4'	1:AA:554:U:H4'	1.91	0.53
38:BK:38:ILE:HD11	38:BK:118:VAL:O	2.08	0.53
32:CE:7:VAL:CG1	32:CE:8:LYS:HD3	2.35	0.53
1:AA:646:A:C8	1:AA:647:G:C1'	2.92	0.53
20:DU:43:ASN:HB3	20:DU:64:GLU:CA	2.39	0.53
1:DA:2298:A:N6	1:DA:2318:G:C2'	2.72	0.53
4:AE:3:GLY:HA3	4:AE:81:ILE:CG2	2.37	0.53
1:DA:1543:A:H1'	1:DA:1545:A:H1'	1.90	0.53
1:AA:1153:C:C5	1:AA:1154:G:C5	2.95	0.53
37:BJ:23:VAL:CG1	37:BJ:43:PHE:CE2	2.92	0.53
31:CA:447:G:C6	31:CA:485:G:C8	2.97	0.53
5:DF:119:ARG:NH1	5:DF:119:ARG:HG2	2.22	0.53
1:DA:2239:G:H5'	3:DD:251:GLY:HA3	1.90	0.53
39:CL:46:ALA:HA	39:CL:78:LYS:NZ	2.24	0.53
15:DR:86:ILE:HG12	15:DR:86:ILE:O	2.08	0.53
1:DA:1588:C:O2	1:DA:1588:C:H2'	2.08	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:638:G:C6	1:AA:651:G:C2	2.97	0.53
20:AU:18:GLY:C	20:AU:20:TYR:N	2.62	0.53
1:AA:2457:U:H2'	1:AA:2458:G:H5'	1.89	0.53
31:CA:583:A:H2'	31:CA:584:G:O4'	2.09	0.53
21:AV:141:VAL:HG21	21:AV:150:LEU:HD12	1.89	0.53
1:DA:2054:A:H5''	1:DA:2055:C:O5'	2.07	0.53
15:DR:134:GLU:O	15:DR:136:GLN:NE2	2.41	0.53
14:AQ:50:SER:O	14:AQ:51:ALA:HB2	2.08	0.53
23:AZ:87:PRO:C	23:AZ:89:GLU:N	2.62	0.53
19:AT:21:PHE:CE2	19:AT:26:TYR:HD2	2.26	0.53
36:BI:100:ASN:HB3	48:BU:28:GLU:HG2	1.89	0.53
1:AA:1504:C:O2'	1:AA:1505:C:H5'	2.08	0.53
1:DA:977:G:O2'	1:DA:978:G:H5'	2.08	0.53
5:AF:95:ARG:HG3	5:AF:97:TYR:CE2	2.43	0.53
31:BA:273:A:H2'	31:BA:274:A:O5'	2.08	0.53
24:DW:67:LYS:O	24:DW:68:ARG:C	2.46	0.53
31:BA:450:G:N7	31:BA:481:G:C6	2.76	0.53
1:DA:2842:G:C4	1:DA:2876:G:N2	2.76	0.53
37:CJ:80:VAL:O	37:CJ:80:VAL:HG13	2.09	0.53
35:BH:20:GLN:NE2	35:BH:22:GLY:H	2.07	0.53
1:DA:2065:C:H2'	1:DA:2066:C:C6	2.44	0.53
1:DA:2276:G:OP2	12:DP:84:GLY:HA2	2.08	0.53
1:AA:1566:A:O2'	1:AA:1567:A:H5'	2.09	0.53
31:CA:1190:G:H8	31:CA:1190:G:H3'	1.74	0.53
31:CA:983:A:C2	31:CA:984:C:C6	2.96	0.53
52:CD:16:C:N4	52:CD:68:A:C8	2.72	0.53
31:BA:1006:C:N3	31:BA:1023:G:N2	2.48	0.53
31:CA:1289:A:P	51:CX:9:ARG:HH22	2.32	0.53
31:BA:1052:U:H2'	31:BA:1055:A:OP1	2.08	0.53
11:DO:127:ALA:O	11:DO:147:LEU:HA	2.09	0.53
17:A2:35:LEU:CB	17:A2:37:VAL:HG22	2.34	0.53
11:DO:9:ASN:CB	11:DO:10:PRO:CD	2.78	0.53
23:DZ:91:LYS:HG3	23:DZ:92:LYS:N	2.23	0.53
31:BA:355:C:C2'	31:BA:356:A:H5'	2.39	0.53
43:CP:3:ARG:HB2	26:D4:34:GLU:HG3	1.90	0.53
52:CB:30:A:H2'	52:CB:31:G:H8	1.69	0.53
1:DA:675:A:N6	1:DA:676:A:N6	2.57	0.53
4:DE:200:GLU:HG2	4:DE:201:THR:N	2.24	0.53
31:CA:1015:A:C5	31:CA:1016:A:C5	2.97	0.53
1:DA:2762:G:H5''	56:DA:3379:OHX:N4	2.24	0.53
5:AF:192:LEU:HD21	5:AF:194:MET:CE	2.39	0.53
36:CI:2:ARG:HG3	36:CI:69:GLU:OE1	2.09	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DZ:23:LYS:HD3	23:DZ:28:GLY:CA	2.36	0.53
7:AH:125:VAL:HG22	7:AH:131:VAL:HG23	1.91	0.53
31:BA:49:U:C4	31:BA:364:A:C6	2.96	0.53
1:DA:2658:C:OP1	7:DH:160:LYS:NZ	2.42	0.53
1:AA:2519:U:H4'	1:AA:2520:C:OP1	2.08	0.53
32:CE:193:ASP:OD2	32:CE:196:LEU:HD11	2.09	0.53
1:DA:479:A:H4'	1:DA:480:A:OP1	2.09	0.53
18:AS:12:ILE:HG12	18:AS:13:SER:H	1.74	0.53
1:AA:971:C:H2'	1:AA:972:G:C5'	2.39	0.53
1:AA:2096:U:H2'	1:AA:2097:C:H6	1.72	0.53
14:DQ:67:ARG:CZ	14:DQ:67:ARG:HB2	2.39	0.53
11:AO:72:PRO:O	56:AO:202:OHX:N2	2.42	0.53
12:DP:43:THR:OG1	12:DP:45:GLN:HG2	2.09	0.53
36:CI:11:ASN:O	36:CI:14:LEU:HD22	2.08	0.53
53:CC:23:G:C2	53:CC:24:C:C5	2.96	0.53
53:CC:24:C:H2'	53:CC:25:U:C6	2.44	0.53
15:AR:93:ARG:NH1	15:AR:93:ARG:HG3	2.24	0.53
41:BN:48:ILE:HG12	41:BN:63:LEU:HB2	1.91	0.53
1:DA:1288:U:C2	1:DA:1327:C:O2	2.62	0.53
23:AZ:83:GLU:O	23:AZ:85:LEU:N	2.42	0.53
40:BM:78:ASN:HB2	40:BM:81:THR:HG23	1.91	0.53
14:AQ:9:ARG:O	14:AQ:10:ARG:C	2.48	0.53
10:DN:88:ASN:O	10:DN:90:GLN:N	2.42	0.53
34:CG:105:VAL:O	34:CG:105:VAL:CG1	2.56	0.53
1:AA:277:C:H3'	1:AA:278:A:H4'	1.91	0.53
31:CA:438:G:H4'	34:CG:123:HIS:HD1	1.73	0.53
36:CI:32:ASN:HD22	36:CI:32:ASN:N	2.06	0.53
31:BA:637:G:O2'	31:BA:638:G:H5'	2.09	0.53
31:CA:677:U:OP1	56:CA:1811:OHX:N3	2.42	0.53
26:D4:53:GLU:OE2	26:D4:58:ARG:HB2	2.09	0.53
10:AN:75:SER:HB2	15:AR:75:ILE:O	2.09	0.53
1:AA:2288:A:C2	1:AA:2325:G:C8	2.97	0.53
3:DD:147:LEU:HD23	3:DD:155:LEU:CD1	2.38	0.53
1:DA:2464:C:C2	1:DA:2487:G:N2	2.77	0.53
1:AA:2652:C:H2'	1:AA:2653:U:O4'	2.09	0.53
31:CA:1418:A:H5''	31:CA:1419:G:OP2	2.09	0.53
9:DM:126:PRO:O	9:DM:127:ASP:CB	2.57	0.53
9:DM:55:VAL:O	9:DM:56:ASN:C	2.47	0.53
1:DA:2151:G:H2'	1:DA:2152:G:H8	1.74	0.53
31:CA:1206:G:H4'	33:CF:192:THR:C	2.28	0.53
31:CA:1317:C:C6	44:CQ:16:PHE:CD1	2.97	0.53
31:CA:976:G:P	44:CQ:32:SER:H	2.32	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:CD:25:G:C2'	52:CD:26:G:H5'	2.38	0.53
16:D1:50:ARG:CZ	17:D2:72:VAL:CG2	2.87	0.53
17:D2:66:ARG:HB2	17:D2:88:ARG:O	2.09	0.53
31:CA:1442:G:O2'	31:CA:1443:G:P	2.67	0.53
1:AA:806:C:OP2	11:AO:41:ARG:HD3	2.09	0.53
11:DO:104:GLY:O	11:DO:105:LEU:HD23	2.08	0.53
44:BQ:21:TYR:HE2	44:BQ:23:ARG:NH1	2.07	0.53
1:DA:857:C:N4	1:DA:858:U:O4	2.42	0.53
31:BA:516:U:OP2	56:BA:1791:OHX:N3	2.42	0.53
2:AB:116:G:H4'	14:AQ:54:LEU:HD13	1.90	0.53
1:DA:1728:G:C6	1:DA:1730:U:OP2	2.62	0.53
52:BD:49:A:H8	52:BD:49:A:O5'	1.91	0.53
31:CA:986:A:H2'	31:CA:987:G:O4'	2.08	0.53
8:AK:7:GLU:HA	8:AK:15:VAL:CG2	2.34	0.53
1:AA:861:A:N3	1:AA:917:A:C6	2.77	0.53
54:C1:13:A:C2'	54:C1:14:A:OP1	2.57	0.53
1:AA:314:A:O2'	1:AA:315:G:H5'	2.08	0.53
31:BA:655:A:H61	31:BA:751:U:H3	1.55	0.53
31:CA:328:C:O2'	31:CA:329:A:P	2.67	0.53
1:DA:2720:U:C4	1:DA:2873:A:N1	2.77	0.53
31:CA:541:G:N7	56:CA:1740:OHX:N4	2.57	0.53
1:DA:2164:C:H2'	1:DA:2165:G:O4'	2.09	0.53
1:DA:71:A:H5"	1:DA:73:A:C8	2.44	0.53
32:BE:68:ILE:HG22	32:BE:70:PHE:CE1	2.44	0.53
31:CA:543:C:C2'	31:CA:544:G:H5'	2.39	0.53
1:AA:1652:A:C2'	1:AA:1653:G:H5'	2.39	0.53
12:DP:2:LEU:CD1	12:DP:69:PHE:HE1	2.22	0.53
49:CV:47:HIS:O	49:CV:62:ILE:HD13	2.08	0.53
31:BA:22:G:H2'	31:BA:23:C:H6	1.71	0.53
24:AW:32:LEU:HD12	24:AW:57:ILE:CD1	2.39	0.53
1:DA:64:A:C4	19:DT:66:LEU:HD12	2.44	0.53
31:BA:1492:A:OP1	42:BO:47:LYS:HB3	2.09	0.53
33:BF:8:ILE:C	33:BF:10:PHE:N	2.60	0.53
1:AA:2181:G:C2	1:AA:2182:G:N7	2.77	0.53
37:CJ:69:VAL:HG12	37:CJ:69:VAL:O	2.09	0.53
1:DA:1651:G:OP2	13:D0:40:LYS:NZ	2.39	0.53
41:BN:34:ASP:HB3	41:BN:40:ILE:HD11	1.91	0.53
1:AA:1923:U:O2'	53:BC:12:G:H1'	2.09	0.53
1:AA:1830:C:C2'	1:AA:1831:G:H5'	2.39	0.53
42:BO:83:VAL:CG1	42:BO:84:LEU:N	2.72	0.53
36:BI:13:ASN:ND2	36:BI:55:ASP:OD2	2.38	0.53
31:CA:521:G:OP1	42:CO:73:GLU:HA	2.09	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:AG:125:PHE:HB3	6:AG:166:ASP:OD2	2.09	0.53
31:BA:562:C:N4	31:BA:884:U:C6	2.78	0.53
31:BA:128:G:H5'	47:BT:2:PRO:O	2.09	0.53
32:BE:32:ILE:HD11	32:BE:40:HIS:HB3	1.91	0.53
19:AT:90:GLU:HA	19:AT:90:GLU:OE1	2.09	0.53
34:BG:141:ARG:HB2	34:BG:141:ARG:CZ	2.38	0.53
33:BF:165:THR:O	33:BF:165:THR:CG2	2.57	0.53
1:AA:346:A:C4	1:AA:347:A:C8	2.97	0.53
18:AS:11:ARG:HH21	18:AS:99:ARG:N	2.05	0.53
31:BA:1523:G:OP1	41:BN:123:LYS:NZ	2.35	0.53
28:A6:25:LYS:HE2	28:A6:27:LYS:CD	2.39	0.52
1:AA:2344:U:O2'	28:A6:37:ARG:HG2	2.09	0.52
11:AO:66:GLY:HA2	11:AO:68:GLN:HE22	1.74	0.52
3:AD:35:LYS:CE	3:AD:104:TYR:HB2	2.38	0.52
31:CA:1356:G:H2'	31:CA:1357:A:C8	2.44	0.52
40:CM:47:PHE:CE2	44:CQ:37:PHE:HE2	2.26	0.52
44:CQ:16:PHE:N	44:CQ:16:PHE:HD2	2.07	0.52
1:AA:879:G:N1	1:AA:898:C:N4	2.55	0.52
11:DO:62:LEU:HD23	11:DO:62:LEU:N	2.19	0.52
8:AK:133:HIS:CB	8:AK:134:PRO:HD2	2.38	0.52
1:AA:780:G:N2	1:AA:783:A:N6	2.39	0.52
31:BA:1198:G:HO2'	40:BM:54:PHE:HD2	1.55	0.52
1:AA:2136:C:N3	1:AA:2155:G:N2	2.44	0.52
31:CA:1276:G:C4	31:CA:1277:C:C5	2.96	0.52
1:DA:2154:G:H2'	1:DA:2155:G:H8	1.74	0.52
41:CN:54:ARG:CB	41:CN:54:ARG:HH11	2.22	0.52
17:A2:35:LEU:O	17:A2:37:VAL:HG22	2.09	0.52
2:AB:42:C:H4'	6:AG:67:LYS:HD3	1.91	0.52
31:BA:1124:G:O2'	40:BM:38:ILE:HD12	2.09	0.52
44:BQ:4:LYS:C	44:BQ:6:LEU:H	2.12	0.52
52:BB:17:G:HO2'	52:BB:66:G:H1	1.57	0.52
31:CA:1008:C:H1'	31:CA:1022:G:N2	2.24	0.52
1:DA:1689:A:N7	1:DA:1698:A:N1	2.57	0.52
52:CD:60:A:H2'	52:CD:61:G:O4'	2.08	0.52
2:DB:42:C:C2	6:DG:91:ARG:NH2	2.78	0.52
1:DA:2766:G:H5''	1:DA:2767:C:OP2	2.09	0.52
10:DN:47:ILE:HG13	10:DN:48:PRO:CD	2.32	0.52
32:CE:163:PHE:HE1	32:CE:215:LEU:HD21	1.74	0.52
35:BH:9:LYS:NZ	35:BH:112:LEU:HD21	2.24	0.52
46:BS:75:ARG:C	46:BS:77:ALA:N	2.61	0.52
7:AH:46:GLU:OE1	7:AH:51:ARG:NH1	2.41	0.52
1:DA:2321:G:N3	1:DA:2321:G:H2'	2.23	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1921:G:C5	56:DA:3064:OHX:N2	2.77	0.52
20:DU:39:VAL:C	20:DU:40:GLU:OE2	2.48	0.52
37:BJ:43:PHE:CD1	37:BJ:43:PHE:C	2.80	0.52
1:AA:2543:G:C8	1:AA:2543:G:H5''	2.41	0.52
7:AH:80:SER:C	7:AH:81:GLU:HG3	2.30	0.52
3:AD:18:VAL:HG12	3:AD:19:ALA:N	2.24	0.52
1:AA:57:C:H2'	1:AA:58:G:O4'	2.09	0.52
33:BF:112:SER:O	33:BF:115:LEU:HB2	2.09	0.52
13:D0:55:ALA:O	13:D0:57:ARG:N	2.39	0.52
3:AD:149:PRO:O	3:AD:150:LYS:HB2	2.08	0.52
1:DA:1292:U:H2'	1:DA:1293:C:H6	1.74	0.52
1:DA:2190:G:C2'	1:DA:2191:G:H5''	2.39	0.52
1:DA:2046:G:N7	56:DA:3411:OHX:N5	2.57	0.52
31:BA:939:G:H5''	37:BJ:102:ARG:NH2	2.24	0.52
1:AA:106:C:H2'	1:AA:107:C:C6	2.45	0.52
15:AR:39:ARG:NH2	31:BA:346:G:O4'	2.42	0.52
28:D6:21:TYR:CD2	28:D6:21:TYR:N	2.76	0.52
31:BA:567:G:H2'	31:BA:568:G:O4'	2.10	0.52
1:AA:271(C):U:C2'	1:AA:271:G:OP1	2.57	0.52
31:BA:757:U:OP2	56:BA:1716:OHX:N3	2.42	0.52
1:AA:471:A:H8	1:AA:471:A:OP2	1.92	0.52
41:BN:66:LEU:HD21	41:BN:97:ALA:HB1	1.90	0.52
1:DA:2099:U:O4	56:DA:3461:OHX:N4	2.42	0.52
48:BU:37:VAL:HG12	48:BU:41:LYS:HD3	1.91	0.52
1:AA:2814:C:O2'	27:A5:29:THR:HG21	2.09	0.52
11:DO:90:ARG:HG3	11:DO:91:PHE:H	1.74	0.52
1:DA:1717:G:C4	1:DA:1743:G:C2	2.97	0.52
32:BE:47:THR:O	32:BE:51:LEU:HD12	2.08	0.52
1:DA:389:G:H22	11:DO:71:VAL:HG12	1.75	0.52
5:DF:68:LYS:O	5:DF:70:THR:CG2	2.32	0.52
31:CA:947:G:H2'	31:CA:948:C:H6	1.74	0.52
33:CF:170:GLN:HG2	33:CF:171:GLY:N	2.23	0.52
31:CA:1330:U:H4'	43:CP:23:TYR:CE2	2.45	0.52
1:AA:883:G:N1	1:AA:893:C:N4	2.21	0.52
1:AA:899:A:OP2	1:AA:899:A:H8	1.92	0.52
31:CA:1177:G:O2'	31:CA:1178:G:C4	2.59	0.52
31:CA:1178:G:C8	31:CA:1180:A:OP2	2.61	0.52
15:AR:108:ARG:NH2	56:BA:1720:OHX:N5	2.56	0.52
30:D8:31:HIS:CD2	30:D8:31:HIS:N	2.77	0.52
1:AA:1210:A:C8	1:AA:1210:A:C5'	2.83	0.52
31:BA:963:G:H21	40:BM:55:LYS:NZ	2.08	0.52
52:BB:51:C:H2'	52:BB:52:G:O4'	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1945:G:P	56:DA:3103:OHX:N6	2.82	0.52
50:BW:25:ARG:HG2	50:BW:29:LYS:HE3	1.91	0.52
1:AA:1677:A:H2'	1:AA:1678:G:C8	2.44	0.52
23:AZ:76:ARG:CD	23:AZ:76:ARG:N	2.72	0.52
1:DA:323:G:C5'	5:DF:169:ASN:HD21	2.22	0.52
1:DA:2749:A:O2'	7:DH:59:ARG:HD3	2.09	0.52
1:AA:494:G:N2	18:AS:57:ASN:HD21	1.97	0.52
8:AK:9:LEU:O	8:AK:10:GLU:O	2.27	0.52
1:AA:860:U:C4	1:AA:917:A:H2	2.27	0.52
31:CA:1099:G:C6	31:CA:1100:C:N3	2.76	0.52
32:CE:87:ARG:NH2	32:CE:233:SER:H	2.08	0.52
1:AA:1005:C:O2'	9:AM:28:THR:HG21	2.08	0.52
52:CD:28:G:H2'	52:CD:29:C:C6	2.44	0.52
1:AA:18:C:H2'	1:AA:19:C:H6	1.74	0.52
48:BU:56:THR:HB	48:BU:58:LEU:HD13	1.91	0.52
1:DA:1006:C:C2	1:DA:1138:G:N2	2.77	0.52
1:AA:2572:A:C8	4:AE:144:ARG:HD2	2.43	0.52
52:CB:78:C:C4'	52:CB:79:A:OP1	2.57	0.52
13:A0:48:VAL:O	13:A0:49:ASP:C	2.47	0.52
3:AD:70:TRP:CH2	3:AD:150:LYS:HA	2.44	0.52
26:A4:50:VAL:CG1	26:A4:50:VAL:O	2.57	0.52
1:DA:1288:U:H4'	1:DA:1289:C:OP2	2.09	0.52
1:DA:361:G:N2	1:DA:362:U:H1'	2.23	0.52
1:AA:2098:U:C4	1:AA:2099:U:C4	2.96	0.52
10:AN:4:PRO:O	10:AN:5:GLN:CB	2.56	0.52
1:DA:185:U:H4'	1:DA:218:A:H4'	1.91	0.52
10:AN:96:THR:O	10:AN:97:ARG:O	2.26	0.52
31:CA:1527:C:O2'	31:CA:1528:U:H5'	2.09	0.52
36:BI:6:VAL:HG22	36:BI:90:VAL:HG22	1.91	0.52
9:DM:76:SER:HB3	9:DM:81:GLY:HA3	1.90	0.52
31:BA:1038:C:C2'	31:BA:1039:C:H5'	2.38	0.52
1:DA:2874:C:H2'	1:DA:2874:C:O2	2.08	0.52
1:AA:988:A:O5'	1:AA:988:A:H8	1.92	0.52
36:CI:96:PRO:HB3	48:CU:30:ASP:OD1	2.09	0.52
31:CA:495:A:H4'	31:CA:496:A:OP1	2.09	0.52
1:AA:349:G:H2'	1:AA:350:U:O4'	2.09	0.52
1:DA:389:G:H22	11:DO:72:PRO:HD3	1.74	0.52
28:A6:25:LYS:HB2	30:A8:34:TRP:HE1	1.74	0.52
1:AA:2210:G:C5'	1:AA:2211:G:N7	2.71	0.52
31:CA:1095:U:P	31:CA:1108:G:H1	2.32	0.52
3:DD:34:VAL:HG22	3:DD:35:LYS:HZ3	1.74	0.52
5:DF:122:LYS:O	5:DF:123:LEU:HB3	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:DF:148:LEU:HD22	5:DF:154:VAL:HG21	1.90	0.52
34:CG:19:LEU:HB2	34:CG:21:LEU:CD1	2.39	0.52
31:BA:942:G:H21	31:BA:943:U:H1'	1.75	0.52
31:BA:1298:C:P	37:BJ:114:ARG:HH22	2.31	0.52
31:CA:690:G:O2'	31:CA:691:G:H5'	2.08	0.52
20:AU:74:PRO:O	20:AU:80:GLY:HA2	2.09	0.52
31:BA:78:G:C6	31:BA:91:C:N4	2.75	0.52
1:AA:1727:U:H2'	1:AA:1728:G:O4'	2.10	0.52
11:DO:113:LYS:HG2	11:DO:115:LEU:HD21	1.91	0.52
6:AG:61:ALA:HB2	6:AG:68:PRO:HD3	1.91	0.52
31:BA:1348:U:N3	31:BA:1374:A:C2	2.66	0.52
52:CB:53:A:O2'	52:CB:54:C:H5'	2.08	0.52
1:AA:1581:G:H2'	1:AA:1582:C:O4'	2.08	0.52
31:CA:1508:G:H2'	31:CA:1509:C:O4'	2.09	0.52
31:BA:1211:U:H1'	31:BA:1213:A:C2	2.45	0.52
1:AA:524:U:H5'	1:AA:540:G:N2	2.24	0.52
31:BA:279:A:H4'	31:BA:280:C:H5''	1.92	0.52
32:BE:77:ALA:HB1	32:BE:165:VAL:HG11	1.90	0.52
1:DA:530:G:O2'	1:DA:532:A:N7	2.37	0.52
31:CA:328:C:C1'	31:CA:329:A:OP2	2.57	0.52
33:CF:23:TYR:CE1	40:CM:10:GLY:HA2	2.44	0.52
37:BJ:121:ALA:O	37:BJ:125:MET:HG3	2.08	0.52
26:D4:39:CYS:O	26:D4:40:HIS:HB2	2.10	0.52
1:DA:99:U:H1'	1:DA:102:G:N3	2.24	0.52
39:CL:37:PHE:HB3	39:CL:43:ALA:CB	2.40	0.52
33:CF:164:ARG:HG2	33:CF:165:THR:N	2.23	0.52
34:CG:126:ILE:CG2	34:CG:127:THR:N	2.72	0.52
11:AO:144:GLU:N	11:AO:144:GLU:CD	2.62	0.52
53:BC:19:G:C6	53:BC:59:A:C6	2.97	0.52
39:CL:95:LYS:HZ3	39:CL:96:LEU:HD13	1.73	0.52
39:CL:99:LEU:HB3	39:CL:101:PHE:HE1	1.74	0.52
17:D2:35:LEU:O	17:D2:37:VAL:HG22	2.09	0.52
8:AK:104:GLN:O	8:AK:105:HIS:HD2	1.91	0.52
6:AG:114:ILE:CD1	6:AG:140:ILE:HD12	2.39	0.52
23:DZ:19:GLN:O	23:DZ:35:THR:O	2.28	0.52
2:DB:89:G:OP2	2:DB:89:G:H8	1.91	0.52
31:CA:314:C:O2'	31:CA:315:A:H5'	2.09	0.52
31:BA:1428:A:H2'	31:BA:1429:C:C6	2.45	0.52
26:D4:29:PRO:O	26:D4:30:GLU:HG3	2.09	0.52
2:AB:1:U:H2'	2:AB:2:C:H6	1.74	0.52
1:AA:267:C:C2'	1:AA:268:C:H5'	2.39	0.52
1:DA:274:G:OP1	1:DA:274:G:C8	2.62	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1687:G:C2'	1:AA:1688:U:H5'	2.39	0.52
41:BN:41:THR:HG21	41:BN:71:LYS:HB3	1.90	0.52
1:DA:2815:C:H5'	27:D5:29:THR:HG21	1.91	0.52
1:DA:2097:C:H2'	1:DA:2098:U:O4'	2.09	0.52
31:CA:900:A:H2'	31:CA:901:A:C8	2.44	0.52
31:CA:186(E):C:C2	31:CA:191(C):G:N2	2.78	0.52
37:CJ:59:LEU:O	37:CJ:59:LEU:HG	2.09	0.52
1:AA:2619:C:O2'	1:AA:2620:C:H5'	2.08	0.52
31:CA:599:C:OP1	56:CK:201:OHX:N4	2.42	0.52
5:AF:42:ALA:C	5:AF:44:ARG:H	2.11	0.52
52:CB:81:C:H2'	52:CB:81:C:O2	2.09	0.52
1:AA:930:U:O5'	1:AA:930:U:O2	2.27	0.52
31:CA:389:A:H2'	31:CA:389:A:N3	2.23	0.52
22:D3:27:GLU:OE1	22:D3:69:PHE:N	2.28	0.52
20:DU:89:PHE:CD1	20:DU:89:PHE:C	2.83	0.52
27:D5:4:HIS:O	27:D5:5:PRO:C	2.47	0.52
4:DE:37:ARG:HB3	4:DE:42:ASP:OD2	2.09	0.52
52:CB:33:C:O2'	52:CB:38:MIA:H152	2.09	0.52
49:CV:12:ASP:O	49:CV:16:LEU:HD13	2.10	0.52
31:BA:1004:A:O4'	31:BA:1036:G:C6	2.62	0.52
41:BN:54:ARG:NH1	52:BD:40:U:O3'	2.39	0.52
1:DA:2391:G:O6	1:DA:2425:A:H8	1.92	0.52
9:AM:96:GLU:C	9:AM:98:VAL:N	2.59	0.52
5:DF:116:ASP:O	5:DF:120:GLU:HG2	2.10	0.52
1:DA:2135:A:O2'	1:DA:2160:G:H4'	2.09	0.52
1:AA:2689:U:H4'	1:AA:2690:C:OP2	2.10	0.52
6:AG:5:VAL:HG12	6:AG:7:LEU:H	1.74	0.52
14:DQ:88:ASP:OD2	14:DQ:89:ARG:N	2.43	0.52
31:BA:1366:C:H2'	31:BA:1367:C:C6	2.44	0.52
1:DA:857:C:C4	1:DA:858:U:O4	2.62	0.52
1:AA:1899:G:N2	1:AA:1901:A:C5	2.77	0.52
1:AA:1900:A:C5'	1:AA:1900:A:H8	2.11	0.52
4:AE:50:GLY:CA	4:AE:77:ILE:HG22	2.38	0.52
1:DA:905:U:C2'	1:DA:906:G:H5'	2.39	0.52
31:BA:298:A:C6	31:BA:299:G:C2	2.97	0.52
35:BH:112:LEU:O	35:BH:113:ALA:HB2	2.08	0.52
28:A6:15:GLU:OE2	28:A6:44:ARG:NH2	2.42	0.52
53:BC:22:A:N6	53:BC:47:G:H2'	2.24	0.52
33:CF:11:ARG:O	33:CF:14:ILE:N	2.21	0.52
32:CE:225:ALA:O	32:CE:226:ARG:HB2	2.09	0.52
34:CG:110:PHE:N	34:CG:110:PHE:CD1	2.76	0.52
8:AK:96:ASP:O	8:AK:98:ALA:N	2.42	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
22:A3:49:LYS:CA	22:A3:80:HIS:HB3	2.39	0.52
1:DA:99:U:H4'	1:DA:102:G:H1'	1.91	0.52
31:BA:1508:G:H2'	31:BA:1509:C:C6	2.45	0.52
1:DA:1247:A:O2'	1:DA:1248:G:H5''	2.10	0.52
31:BA:46:G:O2'	31:BA:365:U:H1'	2.09	0.52
1:AA:945:A:N3	1:AA:945:A:C2'	2.73	0.52
11:AO:140:ALA:O	11:AO:141:ALA:HB2	2.09	0.52
1:DA:795:C:H2'	1:DA:796:C:C6	2.45	0.52
31:CA:89:U:C1'	31:CA:90:C:OP1	2.58	0.52
1:AA:529:A:H8	1:AA:530:G:O6	1.92	0.52
31:BA:192:U:O2'	31:BA:193:C:H5'	2.10	0.52
31:BA:192:U:H4'	50:BW:103:GLY:HA2	1.91	0.52
1:AA:2757:A:H2'	1:AA:2758:A:H5'	1.90	0.52
34:BG:134:ASP:C	34:BG:135:LEU:HD13	2.30	0.52
31:BA:956:U:H2'	31:BA:957:U:H5'	1.91	0.52
21:AV:62:PRO:O	21:AV:63:ASP:CB	2.57	0.52
33:CF:134:ILE:O	33:CF:135:LYS:C	2.48	0.52
1:DA:639:U:H2'	1:DA:640:C:C6	2.43	0.52
1:AA:270(F):U:H2'	1:AA:270(G):C:C6	2.44	0.52
1:AA:1220:A:C3'	1:AA:1221:C:H5'	2.39	0.52
1:DA:2716:U:O2'	1:DA:2717:G:H5'	2.09	0.52
1:DA:311:A:O4'	1:DA:332:A:C8	2.62	0.52
37:CJ:26:PHE:CE2	37:CJ:30:ILE:HD11	2.45	0.52
44:CQ:53:LEU:HD13	44:CQ:56:VAL:HG21	1.91	0.52
1:DA:1449:A:H5'	1:DA:1449(A):G:OP2	2.09	0.52
1:DA:2515:C:O2	1:DA:2570:G:C2	2.63	0.52
1:DA:2113:U:C5	1:DA:2114:A:H1'	2.43	0.52
1:DA:2216:G:O6	56:DA:3340:OHX:N6	2.42	0.52
1:AA:1920:C:O2	1:AA:1920:C:H2'	2.08	0.52
1:DA:588:U:H1'	5:DF:90:PHE:HB3	1.90	0.52
20:DU:92:ASN:OD1	20:DU:92:ASN:N	2.43	0.52
3:DD:49:ILE:HD11	3:DD:52:ARG:HA	1.92	0.52
31:CA:1105:A:H2'	31:CA:1106:G:H8	1.73	0.52
43:CP:8:GLU:OE1	43:CP:22:ILE:HG12	2.10	0.52
49:CV:42:PRO:HA	49:CV:45:VAL:HG13	1.89	0.52
31:CA:1289:A:OP1	51:CX:9:ARG:NH2	2.36	0.52
39:CL:10:ARG:HH21	39:CL:11:LYS:HE2	1.74	0.52
27:A5:42:PRO:O	27:A5:44:THR:N	2.42	0.52
9:AM:96:GLU:N	9:AM:98:VAL:HG12	2.24	0.52
1:AA:120:U:C5	1:AA:149:A:N6	2.78	0.52
1:AA:996:A:H4'	16:A1:92:ARG:HE	1.74	0.52
19:DT:65:ARG:NH1	19:DT:65:ARG:CG	2.69	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1888:G:H5'	1:AA:1888:G:N3	2.24	0.52
19:DT:26:TYR:O	19:DT:28:PHE:HE1	1.88	0.52
6:DG:44:GLY:C	6:DG:46:ALA:H	2.13	0.52
34:BG:49:ARG:O	34:BG:50:ARG:C	2.46	0.52
4:DE:111:ARG:HB2	4:DE:160:TYR:O	2.10	0.52
1:DA:917:A:O2'	1:DA:918:A:H5'	2.09	0.52
28:A6:14:THR:OG1	28:A6:15:GLU:N	2.43	0.52
31:BA:627:G:H2'	31:BA:628:G:H8	1.75	0.52
32:BE:8:LYS:H	32:BE:8:LYS:CD	2.23	0.52
35:CH:59:GLY:O	35:CH:63:ARG:HG2	2.09	0.52
34:BG:31:CYS:SG	34:BG:31:CYS:O	2.67	0.52
1:DA:2334:G:H8	1:DA:2334:G:OP1	1.93	0.52
47:CT:66:SER:O	47:CT:68:ARG:N	2.42	0.52
1:AA:2877:G:O2'	1:AA:2878:U:H5'	2.10	0.52
6:DG:29:TRP:C	6:DG:31:VAL:H	2.13	0.52
37:CJ:40:ALA:O	37:CJ:44:TYR:CD1	2.62	0.52
15:AR:36:GLU:OE1	15:AR:41:ARG:HD2	2.09	0.52
33:CF:9:GLY:N	44:CQ:49:HIS:O	2.42	0.52
48:BU:66:LEU:HD11	48:BU:70:ILE:HD11	1.91	0.52
18:DS:12:ILE:HD13	18:DS:17:VAL:CG2	2.40	0.52
12:DP:29:PHE:CD2	12:DP:65:PHE:CE1	2.97	0.52
40:CM:32:ALA:HB2	40:CM:76:ASN:O	2.08	0.52
1:AA:1131:G:H8	1:AA:2025:C:H4'	1.75	0.52
33:BF:8:ILE:O	33:BF:11:ARG:N	2.25	0.52
50:BW:61:SER:O	50:BW:65:LYS:HB2	2.10	0.52
4:AE:137:HIS:HB3	4:AE:138:PRO:CD	2.39	0.52
1:DA:270(E):G:C6	1:DA:270(V):G:C6	2.97	0.52
1:DA:580:C:H2'	1:DA:581:C:C6	2.44	0.52
36:CI:11:ASN:OD1	36:CI:12:PRO:HD2	2.10	0.52
52:CD:9:U:O2'	52:CD:10:C:H5	1.92	0.52
31:BA:1122:U:O4	31:BA:1123:A:C6	2.62	0.52
1:DA:1525:G:H2'	1:DA:1526:G:O4'	2.10	0.52
8:AK:1:MET:O	8:AK:20:ASP:HA	2.09	0.52
20:DU:35:TYR:CE1	20:DU:69:ALA:HB3	2.45	0.52
1:AA:1420:U:O2'	1:AA:1421:G:OP1	2.24	0.52
1:AA:760:G:C2'	1:AA:761:A:H5'	2.39	0.52
35:BH:20:GLN:HG2	35:BH:21:ALA:H	1.73	0.52
7:DH:159:GLU:O	7:DH:163:TYR:OH	2.22	0.52
6:AG:84:LYS:HG2	6:AG:84:LYS:O	2.09	0.52
1:DA:1131:G:O6	1:DA:2040:C:H1'	2.09	0.52
43:CP:15:VAL:HA	43:CP:18:ALA:HB3	1.92	0.52
1:DA:1239:G:H2'	1:DA:1240:U:O4'	2.08	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:343:C:O2'	1:DA:344:G:H5'	2.10	0.52
1:AA:2563:U:H4'	10:AN:28:SER:HA	1.91	0.52
11:AO:24:GLY:O	11:AO:25:SER:CB	2.58	0.52
31:BA:864:A:H3'	31:BA:865:A:C8	2.44	0.52
1:AA:1236:G:N7	56:AA:3464:OHX:N4	2.57	0.52
18:DS:47:VAL:O	18:DS:48:ALA:C	2.46	0.52
31:CA:927:G:OP2	31:CA:927:G:H4'	2.08	0.52
14:DQ:106:ARG:CZ	14:DQ:106:ARG:O	2.58	0.52
1:DA:2526:G:H2'	1:DA:2527:C:O4'	2.10	0.52
1:AA:2287:A:C2	1:AA:2346:A:C2	2.98	0.52
43:CP:19:LEU:O	43:CP:22:ILE:HG13	2.09	0.52
49:CV:11:VAL:CG2	49:CV:12:ASP:H	2.14	0.52
31:BA:1009:G:C2	31:BA:1010:G:C8	2.97	0.52
52:BD:21:A:C4'	52:BD:22:A:O5'	2.56	0.52
31:BA:942:G:N3	31:BA:943:U:C6	2.77	0.52
27:A5:40:LYS:HZ3	27:A5:46:CYS:C	2.13	0.52
31:BA:222:U:C2	31:BA:223:U:C5	2.97	0.52
31:BA:1349:A:O2'	31:BA:1350:A:O5'	2.27	0.52
31:CA:1124:G:O2'	31:CA:1145:C:N3	2.43	0.52
31:CA:1128:C:C5'	39:CL:16:ARG:HH22	2.22	0.52
31:BA:1133:G:C2	31:BA:1142:G:C5	2.97	0.52
1:AA:1022:G:N2	1:AA:1142(A):A:C2	2.65	0.52
31:BA:255:G:H1'	47:BT:16:GLN:HE21	1.74	0.52
31:BA:210:U:H2'	31:BA:216:G:OP2	2.09	0.52
31:CA:1213:A:C5	31:CA:1215:G:C4	2.98	0.52
46:CS:39:TYR:CD2	46:CS:73:LEU:HD11	2.44	0.52
1:DA:592:G:N3	30:D8:4:MET:HE2	2.25	0.52
39:CL:53:VAL:HG23	39:CL:55:ALA:HB3	1.92	0.52
1:AA:436:C:H2'	1:AA:438:G:C8	2.44	0.52
4:DE:8:LYS:O	4:DE:9:VAL:HG23	2.10	0.52
5:AF:78:ILE:HA	5:AF:83:PHE:CD1	2.44	0.52
1:AA:2114:A:N1	1:AA:2168:G:N2	2.58	0.52
35:BH:148:VAL:HG13	35:BH:152:ARG:NE	2.25	0.52
31:BA:953:G:H5'	31:BA:965:A:H61	1.74	0.52
37:CJ:43:PHE:CD1	37:CJ:43:PHE:C	2.83	0.52
31:BA:632:A:N7	31:BA:633:G:C4	2.77	0.52
21:DV:4:ARG:CZ	21:DV:58:VAL:HG11	2.39	0.52
21:DV:110:GLY:HA2	21:DV:144:LEU:H	1.74	0.52
52:CD:7:G:OP1	56:CD:101:OHX:N2	2.42	0.52
57:BA:1715:PAR:O33	57:BA:1715:PAR:H642	2.10	0.52
36:BI:39:LYS:HB3	36:BI:62:TRP:CZ3	2.42	0.52
2:DB:88:C:H3'	2:DB:89:G:H8	1.75	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1014:U:H3	1:DA:1148:A:N6	2.07	0.52
31:CA:545:C:OP1	34:CG:61:LYS:NZ	2.42	0.52
31:BA:55:A:C4	31:BA:56:U:C6	2.98	0.52
50:BW:69:GLY:O	50:BW:73:HIS:CD2	2.63	0.52
31:CA:914:A:C2'	31:CA:915:A:H5'	2.40	0.52
5:DF:107:LYS:HG3	5:DF:206:ILE:HG22	1.91	0.52
7:AH:16:SER:O	7:AH:17:VAL:HG23	2.10	0.52
13:D0:23:ASN:HD22	13:D0:23:ASN:N	2.07	0.52
21:DV:14:LYS:HZ2	21:DV:14:LYS:H	1.58	0.52
31:CA:946:A:H2'	31:CA:947:G:C8	2.45	0.52
1:AA:1291:C:H2'	1:AA:1292:U:C6	2.44	0.52
39:CL:104:ARG:O	39:CL:105:ASP:CB	2.57	0.52
1:AA:2886:G:O2'	27:A5:31:VAL:HG23	2.09	0.52
1:DA:2627:G:N3	1:DA:2781:A:H2	2.08	0.52
31:BA:197:A:N6	31:BA:221:C:H5'	2.24	0.52
1:AA:1079:C:C4	1:AA:1080:A:C6	2.97	0.52
16:A1:86:ALA:HB3	16:A1:88:ILE:HG12	1.91	0.52
1:AA:2895:U:O5'	1:AA:2895:U:H6	1.92	0.52
1:DA:189:G:H1	1:DA:205:G:HO2'	1.56	0.52
43:BP:81:LEU:O	43:BP:84:ILE:HG22	2.10	0.52
6:DG:64:THR:CG2	6:DG:66:GLN:H	2.22	0.52
20:DU:4:LYS:CE	20:DU:4:LYS:HA	2.26	0.52
31:CA:412:A:HO2'	31:CA:413:G:P	2.27	0.52
31:CA:1298:C:H41	37:CJ:114:ARG:HB3	1.75	0.52
31:CA:1299:A:C6	31:CA:1301:U:C2	2.97	0.52
1:AA:301:G:N2	1:AA:315:G:H22	2.08	0.52
49:BV:51:VAL:O	49:BV:57:HIS:HA	2.10	0.52
22:A3:36:ILE:C	22:A3:36:ILE:HD13	2.30	0.52
32:BE:80:ILE:HD11	32:BE:208:ILE:CG2	2.37	0.52
32:BE:168:THR:O	32:BE:171:ALA:N	2.42	0.52
35:BH:153:LYS:HD3	35:BH:154:GLY:N	2.25	0.52
6:DG:29:TRP:C	6:DG:31:VAL:N	2.63	0.52
31:BA:186(F):C:H2'	31:BA:187:C:O4'	2.10	0.52
31:BA:264:U:O2'	47:BT:63:ARG:HG3	2.09	0.52
3:DD:242:ARG:H	3:DD:242:ARG:HH11	1.57	0.52
46:BS:47:ASP:C	46:BS:49:LEU:H	2.13	0.52
1:DA:2489:G:C2'	1:DA:2490:G:H5'	2.40	0.52
1:DA:645:C:O2	1:DA:645:C:C2'	2.57	0.52
33:CF:18:TRP:NE1	44:CQ:55:GLY:N	2.56	0.52
31:BA:321:A:C2	31:BA:333:G:N2	2.78	0.52
1:DA:1857:G:N1	1:DA:1858:G:C2	2.78	0.52
9:AM:46:VAL:HG12	9:AM:48:MET:HG3	1.90	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
26:D4:15:ILE:O	26:D4:15:ILE:HG22	2.08	0.52
44:BQ:15:LYS:O	44:BQ:16:PHE:O	2.27	0.52
1:AA:2869:G:H2'	1:AA:2870:C:H6	1.73	0.52
1:DA:1324:G:C5	1:DA:1328:G:O6	2.62	0.52
1:AA:1227:A:H5''	16:A1:16:LYS:NZ	2.25	0.52
52:BD:79:A:O2'	52:BD:80:C:H5'	2.10	0.52
1:AA:473:G:O2'	1:AA:474:G:H5'	2.10	0.52
12:DP:134:ARG:NH1	12:DP:134:ARG:HG2	2.25	0.52
21:AV:111:VAL:O	21:AV:111:VAL:HG23	2.10	0.52
7:DH:120:GLY:O	7:DH:121:ILE:HD13	2.10	0.52
36:BI:99:ALA:O	36:BI:100:ASN:HB2	2.10	0.52
36:CI:8:ILE:HG23	36:CI:85:VAL:HG13	1.91	0.52
31:BA:1189:C:P	40:BM:51:ARG:HH22	2.33	0.52
31:BA:594:G:OP2	56:BA:1732:OHX:N1	2.43	0.52
14:DQ:42:ASP:O	14:DQ:43:GLU:HB2	2.10	0.52
2:DB:13:A:H2'	2:DB:70:C:O2'	2.09	0.52
1:DA:817:C:C5	1:DA:818:G:N7	2.78	0.52
34:BG:47:ARG:O	34:BG:47:ARG:HG2	2.09	0.52
1:AA:2745:C:C4	1:AA:2746:U:C4	2.98	0.52
1:DA:128:C:H2'	1:DA:129:C:H6	1.74	0.52
1:AA:2347:C:P	28:A6:39:TYR:HH	2.33	0.52
1:AA:2346:A:N1	1:AA:2383:G:C2	2.78	0.52
1:AA:2058:A:H5''	1:AA:2059:A:OP2	2.10	0.52
43:CP:78:ILE:HG12	43:CP:92:HIS:CD2	2.45	0.52
3:DD:34:VAL:HG12	3:DD:34:VAL:O	2.10	0.52
1:AA:899:A:C8	1:AA:899:A:OP2	2.63	0.52
31:BA:1034:G:N2	31:BA:1035:A:N6	2.57	0.52
31:BA:1301:U:C3'	31:BA:1302:U:H5'	2.30	0.52
9:AM:96:GLU:HG2	9:AM:97:ARG:N	2.23	0.52
31:BA:68:G:O4'	31:BA:171:A:H1'	2.10	0.52
52:BB:53:A:H2'	52:BB:54:C:O4'	2.10	0.52
1:DA:1098:A:C2'	1:DA:1099:G:H5'	2.39	0.52
6:AG:67:LYS:CE	26:A4:6:HIS:NE2	2.73	0.52
31:BA:1349:A:P	39:BL:118:LYS:HZ3	2.33	0.52
1:DA:1050:A:H2'	1:DA:1051:G:O4'	2.10	0.52
7:AH:4:ILE:HB	7:AH:6:ARG:CG	2.39	0.52
31:BA:872:A:C8	31:BA:874:G:C8	2.98	0.52
4:AE:20:ALA:C	4:AE:21:VAL:HG13	2.30	0.52
4:AE:61:ARG:CB	4:AE:62:PRO:HD3	2.33	0.52
4:DE:101:ARG:HD2	4:DE:169:ASN:HD21	1.71	0.52
31:BA:425:G:C6	31:BA:426:G:N7	2.78	0.52
31:CA:1503:A:O2'	31:CA:1504:G:P	2.63	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BK:38:ILE:HG21	38:BK:120:THR:HG22	1.92	0.52
12:AP:7:MET:CE	12:AP:93:TYR:HE2	2.22	0.52
21:AV:127:LYS:O	21:AV:161:VAL:HG11	2.10	0.52
12:AP:64:ILE:HG22	12:AP:65:PHE:N	2.25	0.52
33:CF:117:ALA:O	33:CF:119:ARG:N	2.43	0.52
20:DU:39:VAL:HG23	20:DU:41:GLY:H	1.74	0.52
14:AQ:27:SER:HA	14:AQ:88:ASP:HB3	1.91	0.52
4:AE:127:ASP:O	4:AE:128:SER:HB3	2.09	0.52
1:DA:1495:A:N3	1:DA:1578:U:O2'	2.39	0.52
1:AA:2216:G:C2	1:AA:2217:G:C8	2.98	0.52
31:CA:464:G:C5	31:CA:466:C:OP2	2.62	0.52
24:AW:35:LEU:H	24:AW:35:LEU:HD22	1.74	0.52
1:DA:2218:G:H5'	3:DD:186:HIS:CE1	2.44	0.52
1:DA:960:A:N7	1:DA:962:G:C4	2.78	0.52
32:BE:210:SER:O	32:BE:214:ILE:HG12	2.10	0.52
37:CJ:22:LEU:HG	37:CJ:97:GLN:NE2	2.25	0.52
1:DA:908:C:OP1	12:DP:22:LYS:CB	2.57	0.52
41:CN:21:ILE:CG2	41:CN:84:VAL:HG12	2.40	0.52
18:DS:29:LEU:O	18:DS:33:ARG:HG3	2.10	0.52
1:AA:1169:G:N2	1:AA:1181:C:C2	2.78	0.52
1:DA:2861:G:C2'	1:DA:2862:G:H5'	2.40	0.52
31:CA:802:A:H2'	31:CA:803:G:O4'	2.09	0.52
1:AA:612:G:C6	1:AA:613:U:C4	2.98	0.52
1:AA:1319:G:O2'	1:AA:1320:C:H5'	2.10	0.52
1:DA:311:A:C8	1:DA:332:A:N7	2.78	0.52
31:BA:12:U:O4	56:BA:1717:OHX:N4	2.43	0.52
1:AA:2498:C:O2'	1:AA:2499:C:H5'	2.10	0.52
1:AA:1663:C:O2'	1:AA:2686:G:H4'	2.09	0.52
1:DA:1753:G:N1	1:DA:1756:G:C2	2.78	0.52
31:CA:812:C:H1'	31:CA:813:U:OP2	2.10	0.52
31:CA:728:A:C6	45:CR:54:ARG:HD2	2.44	0.52
1:DA:284:U:O2'	1:DA:285:C:H5'	2.09	0.52
7:DH:102:ALA:HB1	7:DH:115:VAL:O	2.09	0.52
33:BF:48:TYR:HE2	33:BF:122:GLU:OE2	1.93	0.52
31:CA:92:G:C2'	31:CA:93:U:H5'	2.40	0.52
1:AA:725:G:O6	56:AA:3414:OHX:N6	2.42	0.52
1:DA:351:G:N7	56:DA:3374:OHX:N2	2.58	0.52
1:AA:2059:A:OP2	56:AA:3367:OHX:N2	2.43	0.52
43:CP:68:GLY:O	43:CP:72:ALA:HB2	2.10	0.52
52:CD:11:C:H42	52:CD:25:G:H1	1.58	0.52
52:CD:22:A:C8	52:CD:57:C:N4	2.77	0.52
31:BA:1238:A:C8	31:BA:1301:U:O4	2.63	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:2394:C:OP1	11:DO:63:PRO:CD	2.55	0.52
20:AU:17:SER:OG	20:AU:71:LYS:HD3	2.09	0.52
1:AA:2141:G:H2'	1:AA:2142:C:O4'	2.10	0.52
16:D1:95:LEU:C	16:D1:97:ASP:H	2.12	0.52
52:BB:20:C:H5''	52:BB:22:A:H5'	1.91	0.52
31:CA:862:C:C1'	31:CA:874:G:H5''	2.26	0.52
17:A2:35:LEU:HD23	17:A2:35:LEU:O	2.10	0.52
34:BG:76:ARG:CD	34:BG:207:TYR:CE2	2.92	0.52
1:DA:2377:A:H4'	14:DQ:111:GLU:O	2.10	0.52
32:BE:187:LEU:CD1	32:BE:205:ASP:HA	2.40	0.52
1:DA:2105:C:H6	1:DA:2105:C:H3'	1.74	0.52
31:CA:994:A:C6	44:CQ:5:ALA:HB2	2.45	0.52
50:CW:50:GLU:CA	50:CW:100:ILE:HG12	2.40	0.52
31:BA:515:G:H1	31:BA:536:C:H42	1.58	0.52
30:A8:7:HIS:CD2	30:A8:59:LYS:HE3	2.45	0.52
42:CO:27:LEU:HB3	42:CO:33:ARG:HD3	1.92	0.52
33:CF:113:ALA:HB2	33:CF:183:ASP:HB3	1.91	0.52
31:CA:1301:U:O4	31:CA:1303:C:H1'	2.09	0.52
6:AG:37:VAL:O	6:AG:94:LEU:CD2	2.55	0.52
1:AA:547:A:C2'	1:AA:548:A:C8	2.90	0.52
1:AA:303:U:O2'	1:AA:304:G:H5'	2.10	0.52
29:D7:34:ARG:HH12	29:D7:39:ARG:NE	2.08	0.52
32:CE:7:VAL:HG22	32:CE:8:LYS:N	2.19	0.52
1:DA:2298:A:C8	1:DA:2299:G:C8	2.98	0.52
14:AQ:43:GLU:OE1	22:A3:49:LYS:HD3	2.09	0.52
21:DV:44:PHE:CE1	21:DV:48:PHE:CD2	2.91	0.52
31:BA:380:G:N2	31:BA:384:G:C4	2.77	0.52
37:CJ:76:ARG:NH1	37:CJ:76:ARG:HG2	2.23	0.52
1:AA:847:U:C5	1:AA:933:A:N1	2.78	0.52
52:BB:1:G:H1	52:BB:81:C:H42	1.57	0.52
21:AV:30:ASN:O	21:AV:31:ARG:C	2.49	0.52
5:DF:125:LEU:HD12	5:DF:196:LEU:HD22	1.92	0.52
40:CM:27:ALA:O	40:CM:30:SER:N	2.30	0.52
23:AZ:91:LYS:HA	23:AZ:91:LYS:NZ	2.24	0.52
1:AA:1177:A:H5''	1:AA:1178:C:OP1	2.10	0.52
1:DA:287:C:H2'	1:DA:288:C:C6	2.45	0.52
10:AN:120:GLU:HG2	10:AN:122:LEU:HG	1.91	0.52
31:CA:520:A:OP1	42:CO:52:LEU:HB2	2.09	0.52
1:DA:513:A:C2	1:DA:514:A:C4	2.97	0.52
1:DA:184:C:O2	1:DA:213:A:C2	2.63	0.52
22:D3:27:GLU:OE2	56:D3:101:OHX:N3	2.43	0.52
18:DS:36:LEU:HD13	18:DS:48:ALA:N	2.25	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:DB:78:A:C2	2:DB:99:A:C4	2.98	0.52
31:BA:714:G:H2'	31:BA:715:A:C8	2.45	0.52
20:AU:27:VAL:O	20:AU:27:VAL:CG2	2.58	0.52
5:DF:114:VAL:HG21	5:DF:202:PHE:CZ	2.45	0.52
53:BC:44:A:H2'	53:BC:45:A:C8	2.44	0.52
51:BX:12:LYS:HD2	51:BX:17:THR:OG1	2.09	0.52
31:CA:1417:G:C6	31:CA:1482:G:C6	2.97	0.52
46:CS:6:LEU:HD12	46:CS:6:LEU:N	2.24	0.52
33:BF:22:TRP:CE3	33:BF:22:TRP:O	2.63	0.52
1:DA:2274:A:C2	1:DA:2276:G:H1'	2.44	0.52
11:AO:20:GLY:HA2	11:AO:31:ALA:HB2	1.92	0.52
3:AD:32:SER:HA	3:AD:36:PRO:HD2	1.92	0.52
3:AD:35:LYS:HE3	3:AD:65:ILE:N	2.25	0.52
3:AD:35:LYS:CE	3:AD:64:ILE:C	2.78	0.52
1:DA:971:C:C2'	1:DA:972:G:H5'	2.40	0.52
31:CA:1223:C:H3'	31:CA:1224:G:H5''	1.92	0.52
40:CM:49:VAL:HG12	44:CQ:41:ARG:HB2	1.91	0.52
2:AB:74:U:H2'	2:AB:75:G:O4'	2.10	0.52
31:CA:631:G:C2'	31:CA:632:A:OP1	2.58	0.52
31:CA:1161:C:O2'	31:CA:1162:C:H5'	2.09	0.52
16:A1:108:GLU:HG3	17:A2:44:LYS:HE3	1.91	0.52
1:AA:1057:A:H2'	1:AA:1058:U:H6	1.74	0.52
14:DQ:109:GLY:O	14:DQ:110:LEU:HD13	2.10	0.52
44:BQ:26:ARG:HH11	44:BQ:43:CYS:HB3	1.75	0.52
44:BQ:4:LYS:C	44:BQ:6:LEU:N	2.63	0.52
1:DA:2511:U:O4	1:DA:2575:C:N3	2.43	0.52
1:DA:1332:G:C8	1:DA:1332:G:H5'	2.45	0.52
1:DA:620:G:H4'	1:DA:621:A:H5''	1.91	0.52
31:CA:1004:A:H5''	31:CA:1025:U:C4	2.43	0.52
31:BA:8:A:H4'	31:BA:9:G:OP1	2.09	0.52
26:D4:34:GLU:HG2	26:D4:35:VAL:HG23	1.90	0.52
10:DN:24:VAL:CG2	10:DN:33:ALA:HB2	2.39	0.52
1:DA:1416:G:O2'	1:DA:1417:C:P	2.67	0.52
6:DG:61:ALA:HB2	6:DG:67:LYS:HA	1.91	0.52
31:BA:1226:C:OP2	43:BP:103:THR:OG1	2.20	0.52
1:AA:456:C:C5	19:AT:69:TYR:CD1	2.98	0.52
1:AA:372:G:O2'	1:AA:373:U:OP2	2.27	0.52
43:BP:94:ARG:C	43:BP:96:LEU:N	2.64	0.52
1:DA:986:C:O2'	1:DA:987:G:H5'	2.10	0.52
7:AH:86:GLU:OE1	7:AH:86:GLU:N	2.43	0.52
32:CE:63:MET:HG3	32:CE:225:ALA:HB1	1.91	0.52
26:D4:38:LYS:O	26:D4:40:HIS:HD2	1.92	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:2171:A:HO2'	1:AA:2172:U:P	2.33	0.52
31:BA:131:C:O2'	31:BA:262:A:N3	2.43	0.52
50:BW:30:LYS:NZ	50:BW:80:ARG:HH12	2.08	0.52
39:CL:33:PHE:CE1	39:CL:37:PHE:HD1	2.27	0.52
45:CR:39:LEU:HD11	45:CR:56:LEU:CB	2.40	0.52
31:BA:342:C:H2'	31:BA:343:U:O4'	2.10	0.52
18:DS:56:ALA:O	18:DS:57:ASN:C	2.46	0.52
31:CA:930:C:H2'	31:CA:931:C:C5'	2.39	0.52
31:BA:630:G:O3'	31:BA:631:G:H4'	2.09	0.52
8:AK:102:SER:C	8:AK:104:GLN:H	2.13	0.52
8:AK:104:GLN:HG2	8:AK:104:GLN:O	2.09	0.52
1:AA:1188:U:H4'	17:A2:79:VAL:HG22	1.91	0.52
21:DV:100:VAL:O	21:DV:124:ILE:HG22	2.10	0.52
31:BA:55:A:C5	31:BA:56:U:C5	2.98	0.52
5:DF:101:LEU:HD23	5:DF:106:ARG:HG2	1.91	0.52
50:BW:73:HIS:C	50:BW:74:LYS:HG2	2.30	0.52
31:CA:35:G:C2	31:CA:550:G:C2	2.97	0.52
9:AM:120:LEU:CD2	9:AM:122:VAL:HG22	2.40	0.52
8:AK:144:VAL:HG22	8:AK:145:VAL:HG13	1.91	0.52
1:AA:1813:G:H1'	3:AD:50:THR:OG1	2.09	0.52
1:AA:271(C):U:H2'	1:AA:271:G:OP1	2.11	0.52
36:CI:20:ALA:HA	36:CI:23:LYS:HD3	1.91	0.52
23:AZ:73:LEU:HD13	23:AZ:90:ILE:HG22	1.91	0.52
15:AR:94:ALA:O	15:AR:95:ARG:CB	2.57	0.52
21:AV:54:HIS:CE1	21:AV:123:ASP:OD2	2.63	0.52
31:BA:1138:G:N2	31:BA:1140:C:C4	2.78	0.52
1:AA:2285:C:OP1	28:A6:28:ARG:HD3	2.11	0.51
3:AD:35:LYS:N	3:AD:64:ILE:CG2	2.73	0.51
43:CP:84:ILE:C	43:CP:86:CYS:H	2.13	0.51
52:CD:53:A:C2'	52:CD:54:C:H5'	2.40	0.51
1:DA:2704:C:C2	1:DA:2705:A:C8	2.98	0.51
11:DO:64:LYS:O	11:DO:66:GLY:N	2.43	0.51
31:BA:1392:G:O2'	31:BA:1502:A:H5''	2.09	0.51
33:BF:35:GLU:O	33:BF:39:ILE:HG13	2.10	0.51
45:BR:80:ALA:O	45:BR:84:LYS:HB2	2.10	0.51
34:BG:61:LYS:HD2	34:BG:207:TYR:OH	2.11	0.51
34:BG:72:GLU:OE1	34:BG:207:TYR:OH	2.28	0.51
52:CB:70:C:H2'	52:CB:70:C:O2	2.09	0.51
31:BA:87:A:H4'	31:BA:87:A:OP1	2.10	0.51
1:DA:1341:U:OP2	1:DA:1394:U:O2'	2.20	0.51
4:AE:14:ILE:O	4:AE:15:PHE:CB	2.58	0.51
31:CA:516:U:C4	31:CA:517:G:C6	2.99	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:DP:19:GLY:CA	12:DP:98:LYS:CD	2.88	0.51
14:DQ:17:ARG:HH11	14:DQ:17:ARG:HG2	1.69	0.51
8:AK:8:PRO:HD3	8:AK:15:VAL:CG2	2.40	0.51
45:CR:18:PHE:CE1	45:CR:21:ASP:HB2	2.44	0.51
24:DW:16:LEU:CD1	24:DW:16:LEU:O	2.55	0.51
1:DA:915:C:H2'	1:DA:916:G:C5'	2.41	0.51
31:BA:166:G:O2'	31:BA:167:G:H5'	2.10	0.51
31:CA:1125:U:OP2	31:CA:1125:U:H4'	2.10	0.51
17:D2:24:LYS:HA	17:D2:92:THR:OG1	2.10	0.51
1:AA:2779:U:OP1	56:AA:3399:OHX:N5	2.43	0.51
22:D3:49:LYS:HG3	22:D3:80:HIS:HB3	1.92	0.51
31:BA:262:A:H3'	31:BA:263:A:H8	1.75	0.51
1:AA:674:G:C1'	5:AF:74:ARG:HD3	2.40	0.51
28:D6:52:VAL:HG22	28:D6:53:LYS:N	2.23	0.51
31:CA:75:C:H2'	31:CA:76:G:O4'	2.10	0.51
1:DA:495:G:N2	18:DS:61:ASN:HD21	2.08	0.51
1:DA:479:A:N3	1:DA:481:G:H5''	2.25	0.51
1:AA:2865:U:C4	1:AA:2866:U:C4	2.98	0.51
5:AF:32:LEU:CD2	5:AF:105:VAL:HG13	2.40	0.51
16:D1:108:GLU:O	16:D1:111:GLU:HB2	2.10	0.51
13:A0:31:HIS:C	13:A0:33:ARG:H	2.11	0.51
1:DA:844:C:H2'	1:DA:845:G:H5'	1.92	0.51
42:BO:101:VAL:CG1	42:BO:104:VAL:HG23	2.39	0.51
1:DA:68:G:H2'	1:DA:69:C:C6	2.45	0.51
1:DA:130:C:O3'	1:DA:1349:A:H1'	2.10	0.51
5:AF:42:ALA:O	5:AF:44:ARG:N	2.43	0.51
37:CJ:26:PHE:O	37:CJ:30:ILE:HG13	2.10	0.51
31:CA:440:A:N7	31:CA:442:C:C2	2.78	0.51
6:DG:50:ALA:HA	6:DG:53:LEU:HD22	1.91	0.51
6:DG:79:ASN:H	6:DG:79:ASN:ND2	2.07	0.51
41:BN:38:ASN:H	41:BN:38:ASN:HD22	1.57	0.51
3:AD:134:ARG:HG3	3:AD:135:PHE:CD2	2.45	0.51
38:CK:123:GLU:O	38:CK:127:LEU:HD23	2.10	0.51
41:BN:110:ASP:HB3	48:BU:85:LEU:HB3	1.92	0.51
31:CA:1206:G:H2'	31:CA:1207:G:H8	1.75	0.51
40:CM:47:PHE:CB	44:CQ:34:TYR:HE2	2.23	0.51
3:DD:30:GLU:CD	3:DD:63:ARG:NH2	2.63	0.51
16:D1:47:TYR:CE2	17:D2:74:LYS:HD2	2.45	0.51
52:BD:21:A:O4'	52:BD:22:A:O5'	2.29	0.51
31:CA:1163:C:H2'	31:CA:1164:G:C8	2.45	0.51
52:BB:51:C:C5	52:BB:52:G:N3	2.78	0.51
16:A1:88:ILE:C	16:A1:90:VAL:H	2.14	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:CL:16:ARG:O	39:CL:63:ILE:HG23	2.10	0.51
5:DF:46:ARG:CG	5:DF:46:ARG:NH1	2.65	0.51
1:AA:1826:G:H4'	3:AD:242:ARG:NH2	2.25	0.51
31:CA:1004:A:C1'	31:CA:1036:G:C6	2.94	0.51
6:DG:44:GLY:C	6:DG:46:ALA:N	2.63	0.51
20:DU:96:ILE:HG12	20:DU:101:LYS:CD	2.41	0.51
31:CA:1505:G:H4'	54:C1:13:A:H62	1.76	0.51
1:DA:1999:C:H4'	1:DA:2723:C:O2	2.10	0.51
2:AB:89:G:C6	2:AB:89(A):A:C6	2.99	0.51
20:DU:68:HIS:O	20:DU:71:LYS:N	2.38	0.51
8:DK:77:LEU:HD13	8:DK:141:LYS:HB3	1.93	0.51
32:CE:96:ARG:O	32:CE:98:LEU:HD23	2.09	0.51
32:CE:97:TRP:CZ3	32:CE:98:LEU:O	2.63	0.51
3:AD:9:TYR:CD2	3:AD:10:THR:HG22	2.45	0.51
1:DA:445:C:O2'	1:DA:446:G:H5'	2.10	0.51
1:DA:1441:G:H2'	1:DA:1442:G:H8	1.74	0.51
7:AH:30:LYS:CE	7:AH:81:GLU:H	2.23	0.51
41:CN:20:TYR:CZ	41:CN:83:ILE:HD12	2.45	0.51
1:DA:773:U:OP1	56:DA:3419:OHX:N2	2.42	0.51
40:CM:27:ALA:HB1	40:CM:32:ALA:HB3	1.92	0.51
38:BK:26:VAL:O	38:BK:26:VAL:HG22	2.11	0.51
1:AA:30:G:H2'	1:AA:31:C:C6	2.45	0.51
21:DV:110:GLY:HA2	21:DV:144:LEU:N	2.25	0.51
1:AA:1175:U:O3'	1:AA:1176:G:H4'	2.09	0.51
31:BA:620:C:H5''	31:BA:621:A:OP2	2.11	0.51
11:AO:11:GLY:C	11:AO:13:ASN:N	2.64	0.51
1:AA:2661:G:H2'	1:AA:2662:A:C8	2.45	0.51
53:CC:12:G:C6	53:CC:13:C:C4	2.98	0.51
1:DA:2693:A:H2'	1:DA:2694:G:H8	1.75	0.51
1:AA:2038:G:H2'	1:AA:2039:C:H6	1.75	0.51
7:DH:129:THR:HG22	7:DH:130:ARG:N	2.25	0.51
1:DA:2564:A:OP1	1:DA:2648:C:H4'	2.09	0.51
31:BA:1014:A:C2	31:BA:1219:U:H1'	2.45	0.51
34:BG:146:ILE:H	34:BG:146:ILE:HD12	1.75	0.51
1:DA:221:A:C4	1:DA:266:G:N7	2.78	0.51
6:DG:79:ASN:HD22	6:DG:79:ASN:H	1.56	0.51
2:AB:37:C:H2'	2:AB:38:C:H5'	1.92	0.51
1:DA:1668:A:C8	1:DA:1674:G:C6	2.98	0.51
3:AD:206:LEU:O	3:AD:211:ARG:HD3	2.11	0.51
14:DQ:3:ARG:HG3	14:DQ:4:LEU:N	2.26	0.51
31:BA:1414:U:H2'	31:BA:1415:G:H8	1.75	0.51
41:BN:18:ARG:HB3	41:BN:33:THR:OG1	2.10	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:784:C:OP1	56:DA:3111:OHX:N1	2.42	0.51
4:DE:38:THR:HG22	4:DE:41:LYS:HG2	1.92	0.51
52:CD:13:G:H1'	52:CD:23:A:H61	1.74	0.51
7:AH:153:LYS:HB3	7:AH:162:ILE:H	1.74	0.51
31:CA:1368:G:C2'	31:CA:1369:C:H5'	2.40	0.51
31:BA:1336:C:OP1	31:BA:1336:C:C4'	2.58	0.51
1:AA:779:U:OP1	3:AD:49:ILE:HG13	2.10	0.51
20:DU:62:GLU:CD	20:DU:63:LYS:H	2.13	0.51
1:AA:2134:A:C5	1:AA:2158:A:C2	2.98	0.51
1:DA:997:G:H2'	1:DA:998:C:H6	1.74	0.51
40:CM:6:ILE:CD1	40:CM:72:VAL:HB	2.40	0.51
11:DO:9:ASN:N	11:DO:9:ASN:HD22	2.08	0.51
31:CA:1130:A:N6	31:CA:1144:G:H21	2.09	0.51
1:DA:1309:G:P	29:D7:9:ARG:HD3	2.51	0.51
6:AG:101:ILE:O	6:AG:105:LYS:HE2	2.09	0.51
14:DQ:108:GLY:O	14:DQ:110:LEU:HD12	2.10	0.51
1:DA:1047:G:H2'	1:DA:1110:G:H1	1.74	0.51
7:DH:7:LEU:H	7:DH:8:PRO:CD	2.23	0.51
31:CA:1250:A:C2	31:CA:1287:A:C2	2.98	0.51
31:CA:1286:A:H2	51:CX:18:TYR:OH	1.93	0.51
31:BA:518:C:H4'	31:BA:519:C:O5'	2.10	0.51
1:AA:2808:U:C5	1:AA:2891:G:C5	2.95	0.51
1:AA:917:A:H2'	1:AA:918:A:O5'	2.10	0.51
38:BK:87:SER:HA	38:BK:93:VAL:CG2	2.40	0.51
1:DA:860:U:H2'	1:DA:861:A:H8	1.74	0.51
1:DA:917:A:H2'	1:DA:918:A:H5'	1.90	0.51
1:DA:660:G:N2	11:DO:12:ALA:HA	2.26	0.51
31:BA:395:C:N3	31:BA:396:G:N7	2.59	0.51
4:AE:132:HIS:O	4:AE:132:HIS:CG	2.60	0.51
31:CA:135:C:O2	46:CS:1:MET:HB3	2.09	0.51
50:CW:71:THR:CG2	50:CW:72:LEU:H	2.20	0.51
1:AA:2168:G:N3	1:AA:2168:G:H3'	2.25	0.51
31:CA:259:G:C6	31:CA:260:G:C6	2.99	0.51
3:DD:3:VAL:H	3:DD:20:ASP:HB2	1.75	0.51
11:AO:21:ARG:HE	11:AO:21:ARG:HA	1.75	0.51
8:DK:75:LEU:HG	8:DK:139:GLN:OE1	2.10	0.51
31:BA:975:A:H5'	31:BA:1363:A:H62	1.74	0.51
31:BA:123:C:OP1	31:BA:312:C:H5'	2.10	0.51
1:DA:442:G:N2	1:DA:444:C:C2	2.78	0.51
27:D5:6:VAL:CG1	27:D5:7:PRO:HD2	2.41	0.51
1:AA:361:G:OP1	56:AA:3333:OHX:N4	2.44	0.51
44:CQ:18:VAL:C	44:CQ:20:ALA:N	2.61	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
9:DM:19:GLU:HB2	9:DM:59:LYS:HE3	1.91	0.51
20:DU:23:ARG:CG	20:DU:23:ARG:HH11	2.21	0.51
1:DA:783:A:H2'	1:DA:784:A:O3'	2.10	0.51
1:DA:729:G:C5	3:DD:208:LYS:HB2	2.45	0.51
31:CA:766:A:C2'	31:CA:767:A:O5'	2.58	0.51
31:BA:1277:C:O2'	31:BA:1279:A:C1'	2.57	0.51
11:DO:101:VAL:O	11:DO:103:ALA:N	2.43	0.51
1:AA:2356:C:O3'	22:A3:20:ARG:HD3	2.10	0.51
1:AA:385:C:O2	1:AA:390:A:C2	2.63	0.51
3:DD:78:LYS:HA	3:DD:115:GLN:O	2.10	0.51
49:CV:14:HIS:CD2	49:CV:15:LEU:N	2.78	0.51
31:BA:1307:U:OP1	43:BP:101:GLN:OE1	2.29	0.51
17:A2:65:GLY:HA3	17:A2:91:TYR:CZ	2.45	0.51
1:AA:1790:C:H5''	1:AA:1791:A:OP1	2.09	0.51
29:A7:21:ARG:HH11	29:A7:21:ARG:HG2	1.75	0.51
43:BP:45:VAL:O	43:BP:45:VAL:HG22	2.09	0.51
1:DA:52:A:C2'	1:DA:53:A:H5'	2.41	0.51
18:AS:95:ILE:HG13	18:AS:95:ILE:O	2.10	0.51
4:DE:37:ARG:CD	4:DE:44:TYR:OH	2.58	0.51
17:D2:78:LYS:C	17:D2:79:VAL:HG13	2.30	0.51
31:CA:949:A:C2	31:CA:1233:G:N3	2.78	0.51
44:CQ:41:ARG:HG3	44:CQ:42:ILE:HD13	1.92	0.51
52:CD:65:C:C6	1:DA:2169:A:N7	2.78	0.51
1:AA:1498:C:O4'	1:AA:1577:C:H4'	2.10	0.51
31:CA:1175:G:H2'	31:CA:1176:A:C8	2.46	0.51
16:A1:108:GLU:HG3	17:A2:44:LYS:CE	2.41	0.51
31:BA:1449:C:C4	31:BA:1450:U:C5	2.99	0.51
45:BR:62:GLN:O	45:BR:63:ARG:C	2.48	0.51
31:BA:254:G:OP1	47:BT:67:LYS:O	2.28	0.51
52:BB:17:G:O6	52:BB:64:U:H1'	2.11	0.51
52:CB:27:A:H3'	52:CB:28:G:H8	1.73	0.51
31:CA:512:U:O4'	34:CG:43:HIS:HE1	1.93	0.51
31:CA:528:C:H41	42:CO:49:ASN:ND2	2.08	0.51
31:CA:130:A:C8	47:CT:63:ARG:HG3	2.46	0.51
52:BB:70:C:H2'	52:BB:70:C:O2	2.10	0.51
42:CO:46:LYS:NZ	42:CO:47:LYS:HB2	2.26	0.51
52:CB:6:G:HO2'	52:CB:7:G:P	2.32	0.51
33:BF:12:LEU:C	33:BF:14:ILE:N	2.64	0.51
31:BA:437:U:H2'	31:BA:438:G:O4'	2.10	0.51
34:BG:155:LEU:O	34:BG:156:GLU:C	2.47	0.51
9:DM:35:ARG:HB3	9:DM:116:LEU:CD1	2.40	0.51
31:BA:395:C:O2	31:BA:395:C:C2'	2.56	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:397:A:N7	31:BA:548:G:C8	2.78	0.51
31:CA:1072:G:H2'	31:CA:1073:U:O4'	2.10	0.51
20:DU:20:TYR:CD1	20:DU:20:TYR:N	2.78	0.51
7:AH:84:SER:H	7:AH:134:SER:HA	1.75	0.51
1:AA:2507:C:H1'	52:BB:85:A:C8	2.46	0.51
52:CD:42:U:H2'	52:CD:43:G:C8	2.45	0.51
1:AA:2114:A:H2'	1:AA:2168:G:H5''	1.92	0.51
15:AR:26:ASP:OD2	15:AR:120:ARG:NH2	2.39	0.51
44:BQ:37:PHE:CE1	44:BQ:53:LEU:HD13	2.45	0.51
5:DF:4:VAL:HA	5:DF:19:GLU:HB2	1.93	0.51
40:CM:30:SER:CB	40:CM:81:THR:HG22	2.39	0.51
24:DW:14:ARG:HD2	24:DW:66:GLU:OE1	2.11	0.51
9:AM:75:TYR:HD1	9:AM:76:SER:N	2.07	0.51
1:AA:2378:A:H4'	14:AQ:23:ARG:HH11	1.75	0.51
38:CK:51:VAL:HG21	38:CK:60:ARG:NH2	2.24	0.51
31:CA:585:G:H4'	42:CO:8:ASN:HD21	1.74	0.51
35:BH:80:ILE:HG12	35:BH:81:GLU:N	2.25	0.51
21:AV:152:ALA:C	21:AV:154:ASP:H	2.14	0.51
19:DT:5:TYR:HB3	24:DW:33:MET:HB2	1.91	0.51
1:DA:719:C:O2'	1:DA:720:C:H5'	2.10	0.51
1:AA:1167:U:H2'	1:AA:1168:G:H8	1.75	0.51
31:BA:1085:U:C2	31:BA:1094:G:O6	2.63	0.51
31:BA:1378:C:O2	31:BA:1378:C:C2'	2.59	0.51
40:BM:30:SER:OG	40:BM:81:THR:HG22	2.11	0.51
28:A6:40:CYS:SG	28:A6:45:LYS:HD2	2.50	0.51
1:DA:69:C:H2'	1:DA:70:G:C8	2.45	0.51
1:AA:85:G:OP2	20:AU:9:LYS:HB2	2.10	0.51
32:BE:155:LEU:HB3	32:BE:157:ARG:O	2.10	0.51
1:DA:2409:G:H2'	1:DA:2410:G:O4'	2.11	0.51
1:DA:2528:U:O2'	1:DA:2530:A:OP1	2.21	0.51
31:CA:1429:C:O2'	31:CA:1430:C:H5'	2.11	0.51
31:BA:186(B):C:O2'	31:BA:186(C):G:H5'	2.10	0.51
31:CA:715:A:C2'	31:CA:716:A:O5'	2.59	0.51
31:BA:5:U:O2'	31:BA:6:G:C4	2.64	0.51
1:DA:455:C:N3	1:DA:473:G:H5'	2.26	0.51
1:DA:641:C:C2'	1:DA:642:G:H5'	2.40	0.51
35:BH:10:MET:O	35:BH:10:MET:HG3	2.09	0.51
35:CH:26:PHE:N	35:CH:26:PHE:CD1	2.77	0.51
1:AA:711:G:N7	56:AA:3418:OHX:N5	2.58	0.51
31:BA:1060:C:C5	33:BF:2:GLY:HA2	2.44	0.51
1:AA:2848:G:H1'	1:AA:2867:G:N2	2.25	0.51
11:DO:46:LYS:HZ3	11:DO:46:LYS:CB	2.23	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:D1:36:ARG:NH2	17:D2:82:ARG:NH2	2.58	0.51
1:DA:670:A:O3'	56:DA:3428:OHX:N1	2.43	0.51
1:AA:1536:A:H2'	1:AA:1537:C:OP1	2.10	0.51
1:DA:600:G:N2	1:DA:605:C:O3'	2.44	0.51
34:CG:34:GLU:O	34:CG:35:ARG:HB2	2.09	0.51
31:BA:1178:G:H3'	31:BA:1178:G:C8	2.45	0.51
1:AA:2140:C:O2'	1:AA:2141:G:H5'	2.11	0.51
16:D1:66:ASN:CB	16:D1:76:TYR:HB2	2.41	0.51
1:DA:1935:G:H1'	1:DA:1964:G:N2	2.26	0.51
1:AA:1778:U:C2'	1:AA:1784:A:N6	2.62	0.51
31:BA:1348:U:H4'	39:BL:120:ARG:HD2	1.92	0.51
31:CA:1128:C:N3	31:CA:1139:G:N1	2.58	0.51
40:BM:8:LEU:HB3	40:BM:16:LEU:HD21	1.91	0.51
50:BW:31:SER:HA	50:BW:34:LYS:CE	2.27	0.51
14:DQ:102:ALA:C	14:DQ:104:GLY:N	2.64	0.51
12:DP:56:ARG:CB	12:DP:56:ARG:HH11	2.14	0.51
12:DP:54:MET:O	12:DP:56:ARG:N	2.43	0.51
31:CA:1213:A:C6	31:CA:1215:G:H1'	2.46	0.51
1:DA:260:G:O4'	1:DA:621:A:H1'	2.10	0.51
31:BA:513:C:H42	31:BA:538:G:H1	1.59	0.51
1:AA:11:G:H2'	1:AA:12:U:H5'	1.92	0.51
1:DA:803:U:H2'	1:DA:804:A:C5'	2.40	0.51
8:AK:8:PRO:HG3	8:AK:14:ASP:CB	2.41	0.51
45:CR:18:PHE:CD1	45:CR:21:ASP:HB2	2.45	0.51
1:AA:1479:G:N7	1:AA:1510:A:N6	2.58	0.51
31:BA:437:U:O3'	34:BG:125:HIS:NE2	2.42	0.51
33:CF:11:ARG:O	33:CF:13:GLY:N	2.43	0.51
41:BN:108:ILE:HG22	48:BU:88:LYS:HB2	1.91	0.51
1:AA:273(E):U:N3	1:AA:363(B):G:N1	2.59	0.51
34:CG:173:TRP:HB3	34:CG:187:ARG:NH1	2.21	0.51
31:CA:262:A:H5'	50:CW:74:LYS:HG3	1.91	0.51
31:BA:797:C:O2'	31:BA:798:G:H5'	2.11	0.51
31:BA:384:G:H2'	31:BA:385:C:C6	2.45	0.51
11:AO:85:LEU:HA	11:AO:88:LEU:CD2	2.39	0.51
1:DA:26:G:C6	1:DA:27:G:N1	2.78	0.51
1:AA:1043:C:C2'	1:AA:1044:G:H5'	2.40	0.51
1:DA:1385:G:H4'	1:DA:1386:C:OP1	2.09	0.51
6:DG:55:LYS:HZ1	6:DG:148:MET:CE	2.24	0.51
1:DA:910:A:H2	1:DA:2264:C:O2	1.93	0.51
1:AA:2511:U:O4	1:AA:2575:C:N3	2.44	0.51
1:DA:2840:C:O3'	13:D0:53:HIS:NE2	2.44	0.51
1:AA:628:G:C6	1:AA:636:G:C2	2.99	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
21:DV:80:ARG:O	21:DV:81:ARG:CB	2.59	0.51
15:DR:7:ILE:O	15:DR:7:ILE:HG12	2.09	0.51
1:DA:287:C:O2	1:DA:354:G:N1	2.37	0.51
15:DR:15:VAL:CG2	15:DR:16:ARG:N	2.74	0.51
1:DA:2745:C:H4'	7:DH:142:GLY:O	2.10	0.51
49:CV:66:MET:H	49:CV:67:VAL:HB	1.73	0.51
36:BI:19:LEU:HD22	36:BI:23:LYS:HZ3	1.75	0.51
46:CS:25:ARG:HH11	46:CS:25:ARG:CG	2.24	0.51
1:AA:2490:G:N1	56:AA:3330:OHX:N6	2.58	0.51
1:AA:2801:A:H2'	1:AA:2802:G:C4'	2.41	0.51
1:DA:2191:G:C4	1:DA:2192:G:C8	2.98	0.51
1:DA:869:G:C2'	1:DA:870:A:H5'	2.40	0.51
1:DA:720:C:H2'	1:DA:721:C:C6	2.45	0.51
31:BA:1076:C:O2	31:BA:1082:G:C2	2.64	0.51
4:AE:17:ASP:C	4:AE:19:ARG:H	2.14	0.51
46:CS:69:THR:O	46:CS:69:THR:HG22	2.09	0.51
1:DA:2266:A:H5'	1:DA:2267:A:N7	2.26	0.51
1:AA:840:C:H2'	1:AA:841:A:C8	2.45	0.51
29:D7:24:THR:O	29:D7:28:ARG:HG3	2.11	0.51
35:BH:122:GLU:OE1	35:BH:131:ILE:HG13	2.11	0.51
2:AB:61:G:C6	2:AB:62:C:C4	2.98	0.51
1:AA:868:U:C4	1:AA:869:G:N7	2.79	0.51
53:CC:36:A:O2'	53:CC:37:U:H5'	2.11	0.51
21:DV:165:VAL:HG23	21:DV:166:SER:N	2.25	0.51
37:BJ:147:ALA:C	37:BJ:149:ARG:H	2.14	0.51
1:DA:24:G:O2'	18:DS:78:GLU:O	2.28	0.51
38:CK:4:ASP:CG	38:CK:85:ARG:HH21	2.14	0.51
1:AA:2100:G:C5	1:AA:2190:G:C6	2.99	0.51
3:AD:34:VAL:CG1	3:AD:34:VAL:O	2.59	0.51
49:CV:73:GLU:C	49:CV:74:PHE:HD2	2.14	0.51
1:AA:1332:G:N2	1:AA:1609:A:HO2'	2.08	0.51
1:AA:1538:G:H2'	1:AA:1539:G:H8	1.75	0.51
1:AA:1331:A:OP1	56:AA:3507:OHX:N2	2.42	0.51
52:CD:23:A:H2'	52:CD:24:G:C8	2.46	0.51
6:DG:2:PRO:C	6:DG:4:ASP:H	2.14	0.51
1:AA:880:G:O6	1:AA:895:U:N3	2.44	0.51
31:CA:1442:G:C2'	31:CA:1443:G:O5'	2.58	0.51
1:AA:329:G:OP1	20:AU:71:LYS:HE3	2.11	0.51
40:BM:54:PHE:CE1	40:BM:55:LYS:HE3	2.46	0.51
31:BA:857:C:OP2	56:BA:1802:OHX:N1	2.44	0.51
1:DA:1070:A:H5'	1:DA:1071:G:H5''	1.93	0.51
1:DA:1142(A):A:N7	1:DA:1144:G:C5	2.79	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1347:G:N2	31:CA:1373:G:H2'	2.25	0.51
5:DF:31:HIS:O	5:DF:31:HIS:CD2	2.63	0.51
31:CA:1127:G:H1'	31:CA:1147:C:H42	1.76	0.51
31:CA:1131:G:H2'	31:CA:1132:C:C6	2.46	0.51
31:BA:1143:G:N1	31:BA:1144:G:C2	2.79	0.51
31:BA:555:C:H2'	31:BA:556:C:C6	2.45	0.51
50:CW:50:GLU:HA	50:CW:100:ILE:CG2	2.31	0.51
1:AA:2807:G:H3'	1:AA:2808:U:H5''	1.92	0.51
31:BA:1272:G:C2	31:BA:1273:G:H1'	2.45	0.51
2:DB:48:A:H4'	14:DQ:95:HIS:CD2	2.45	0.51
53:CC:19:G:C1'	53:CC:20:G:OP1	2.59	0.51
1:DA:1001:A:C8	1:DA:1002:G:C8	2.98	0.51
1:AA:482:A:H4'	20:AU:47:LYS:HD3	1.92	0.51
49:CV:7:LYS:CG	49:CV:8:GLY:N	2.73	0.51
7:DH:125:VAL:HG23	7:DH:126:PRO:CB	2.37	0.51
23:AZ:82:LEU:N	23:AZ:82:LEU:HD22	2.25	0.51
1:AA:363(A):A:H2'	1:AA:363(B):G:H8	1.74	0.51
50:CW:69:GLY:O	50:CW:73:HIS:HD2	1.94	0.51
1:AA:2111:C:H5	1:AA:2147:G:H22	1.57	0.51
3:DD:106:ILE:HD13	3:DD:157:ARG:HB3	1.93	0.51
1:DA:1496:A:H1'	1:DA:1577:C:O2'	2.10	0.51
1:DA:644:A:C2	1:DA:646:A:C4	2.98	0.51
31:BA:1091:U:H2'	31:BA:1093:A:OP2	2.09	0.51
1:DA:1404:C:O2	1:DA:1404:C:H2'	2.10	0.51
1:AA:16:G:C4	1:AA:17:G:C8	2.98	0.51
25:DX:7:LYS:HA	25:DX:33:GLN:O	2.10	0.51
1:AA:2129:C:C2'	1:AA:2130:U:H5'	2.39	0.51
1:DA:2263:C:N4	22:D3:15:ASP:OD2	2.44	0.51
1:AA:1299:G:H5''	1:AA:1300:U:P	2.51	0.51
1:DA:1328:G:H2'	1:DA:1330:C:C5	2.45	0.51
23:AZ:86:SER:N	23:AZ:87:PRO:CD	2.74	0.51
36:BI:9:VAL:HB	36:BI:87:ARG:HB2	1.92	0.51
1:AA:1530:G:O6	1:AA:1542:G:N2	2.43	0.51
31:BA:325:A:OP2	50:BW:70:SER:HB3	2.10	0.51
31:CA:167:G:O2'	31:CA:168:G:H5'	2.10	0.51
10:AN:7:TYR:HE1	10:AN:20:MET:HE3	1.75	0.51
11:DO:101:VAL:C	11:DO:103:ALA:N	2.64	0.51
1:AA:1668:A:H4'	1:AA:1669:A:O5'	2.10	0.51
40:BM:29:ARG:HH22	40:BM:84:GLN:CD	2.13	0.51
40:BM:6:ILE:HG12	40:BM:72:VAL:O	2.10	0.51
1:AA:1912:A:OP2	56:AA:3422:OHX:N1	2.43	0.51
31:BA:540:G:H2'	31:BA:541:G:O4'	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1002:G:H2'	1:AA:1003:G:O4'	2.11	0.51
50:CW:94:ALA:O	50:CW:95:ALA:HB2	2.10	0.51
31:BA:362:G:N7	56:BA:1770:OHX:N3	2.59	0.51
2:DB:29:A:H2'	2:DB:30:C:C6	2.46	0.51
48:BU:76:LEU:HD12	48:BU:76:LEU:O	2.11	0.51
10:AN:8:LEU:HD23	10:AN:8:LEU:N	2.25	0.51
1:AA:340:A:O2'	1:AA:341:G:H5'	2.11	0.51
1:DA:1763:G:OP1	1:DA:1763:G:C4'	2.58	0.51
15:DR:85:LYS:NZ	15:DR:87:ASP:OD2	2.42	0.51
7:DH:149:ARG:HG3	7:DH:162:ILE:O	2.10	0.51
1:AA:1268:A:H2'	1:AA:1269:A:O5'	2.11	0.51
31:CA:230:G:H2'	31:CA:231:G:O4'	2.10	0.51
1:AA:1635:G:C2	1:AA:1636:C:C2	2.99	0.51
1:AA:2346:A:C2	1:AA:2383:G:C2	2.98	0.51
1:DA:2786:U:H5''	4:DE:65:GLY:H	1.74	0.51
31:CA:1061:G:H2'	31:CA:1062:U:H5'	1.92	0.51
3:DD:35:LYS:HE2	3:DD:104:TYR:CG	2.45	0.51
1:DA:2701:C:C3'	1:DA:2702:U:H5''	2.09	0.51
17:D2:69:LYS:C	17:D2:70:ILE:HG12	2.29	0.51
31:BA:1004:A:H8	31:BA:1036:G:N2	2.09	0.51
31:CA:631:G:C3'	31:CA:632:A:C8	2.88	0.51
31:CA:688:G:OP2	31:CA:688:G:O4'	2.29	0.51
1:AA:1833:U:C4	1:AA:1834:U:C5	2.99	0.51
41:CN:54:ARG:NH1	41:CN:54:ARG:CG	2.53	0.51
31:CA:1138:G:H3'	31:CA:1138:G:N3	2.26	0.51
40:BM:8:LEU:HD21	40:BM:96:ILE:HG22	1.91	0.51
32:BE:204:ASN:HD22	32:BE:205:ASP:N	2.09	0.51
1:AA:676:A:C2	1:AA:802:A:N6	2.74	0.51
19:DT:18:TYR:HD1	19:DT:21:PHE:CE2	2.28	0.51
29:A7:8:ASN:ND2	29:A7:11:LYS:HB3	2.25	0.51
1:DA:2474:C:C2'	1:DA:2474:C:O2	2.56	0.51
1:DA:1397:U:O2'	1:DA:1398:C:OP1	2.29	0.51
1:AA:1547:C:H2'	1:AA:1548:C:C6	2.46	0.51
12:DP:19:GLY:N	12:DP:98:LYS:NZ	2.54	0.51
53:CC:19:G:C4'	53:CC:20:G:OP1	2.59	0.51
1:DA:2645:G:O6	56:DA:3444:OHX:N3	2.44	0.51
1:DA:2755:C:O2'	1:DA:2756:U:H6	1.93	0.51
31:CA:468:A:N7	31:CA:474:G:C8	2.79	0.51
8:AK:9:LEU:HD22	8:AK:9:LEU:N	2.26	0.51
1:DA:2286:A:C8	1:DA:2287:A:C6	2.99	0.51
1:AA:245:G:O6	30:A8:8:LYS:HE2	2.10	0.51
43:CP:30:ALA:C	43:CP:32:GLU:N	2.64	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1537:C:O2'	1:DA:1538:G:O4'	2.26	0.51
31:BA:187:C:O2	31:BA:191(A):G:C6	2.63	0.51
8:DK:72:LEU:O	8:DK:74:ASN:N	2.43	0.51
34:BG:138:TYR:C	34:BG:138:TYR:CD2	2.84	0.51
7:DH:15:VAL:CG1	7:DH:29:PRO:HD2	2.40	0.51
24:AW:50:ILE:HD12	24:AW:51:ARG:H	1.76	0.51
5:AF:133:ASN:HA	5:AF:162:LEU:HD22	1.92	0.51
1:AA:628:G:C5	1:AA:636:G:N2	2.79	0.51
5:AF:57:VAL:HG13	5:AF:58:ALA:H	1.76	0.51
42:BO:117:ARG:NH2	42:BO:124:LYS:HB2	2.26	0.51
1:AA:2832:U:C5	1:AA:2884:U:H5''	2.46	0.51
31:BA:177:C:P	50:BW:65:LYS:HZ3	2.33	0.51
31:CA:1263:C:N3	31:CA:1273:G:C2	2.79	0.51
31:CA:1517:G:H2'	31:CA:1518:A:C8	2.42	0.51
35:BH:80:ILE:HG21	35:BH:138:ALA:O	2.11	0.51
37:BJ:69:VAL:O	37:BJ:69:VAL:HG12	2.10	0.51
1:AA:1167:U:C2	1:AA:1183:G:N2	2.78	0.51
31:BA:1287:A:H2'	31:BA:1288:A:C8	2.46	0.51
31:CA:396:G:O2'	31:CA:398:C:OP1	2.16	0.51
31:BA:1525:G:OP2	41:BN:120:ARG:NH2	2.44	0.51
4:DE:28:ALA:HB3	4:DE:93:VAL:CG2	2.40	0.51
1:DA:2869:G:C6	1:DA:2870:C:N3	2.79	0.51
31:BA:345:C:O2'	31:BA:346:G:C2	2.63	0.51
21:AV:110:GLY:HA3	21:AV:145:GLU:HG2	1.91	0.51
1:AA:1505:C:H2'	1:AA:1506:C:O4'	2.11	0.51
1:DA:1668:A:N3	1:DA:1670:C:C4	2.78	0.51
1:AA:270(M):U:O2'	1:AA:270(N):G:O5'	2.28	0.51
31:BA:316:G:OP2	31:BA:351:G:O2'	2.27	0.51
31:CA:17:U:H2'	31:CA:18:C:C6	2.45	0.51
25:DX:43:ILE:O	25:DX:47:VAL:HG23	2.11	0.51
15:DR:45:PHE:CZ	15:DR:74:ARG:HG3	2.46	0.51
13:A0:56:LYS:NZ	13:A0:90:ARG:O	2.44	0.51
4:AE:203:LYS:HD2	4:AE:203:LYS:O	2.11	0.51
1:DA:1585:C:H3'	1:DA:1585:C:O2	2.11	0.51
40:CM:24:VAL:O	40:CM:24:VAL:HG12	2.10	0.51
34:CG:88:VAL:HG22	35:CH:96:PRO:O	2.10	0.51
12:AP:39:PRO:HA	12:AP:97:VAL:O	2.11	0.51
1:DA:10:G:C6	1:DA:2629:A:C6	2.99	0.51
1:DA:745:G:H2'	1:DA:746:A:H5'	1.93	0.51
11:AO:19:VAL:CG2	11:AO:27:HIS:CB	2.48	0.51
1:DA:251:A:H2'	1:DA:252:G:O4'	2.10	0.51
31:CA:1319:A:OP1	49:CV:70:LYS:NZ	2.40	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1321:C:C3'	31:CA:1322:C:H5''	2.33	0.51
31:CA:949:A:C2	31:CA:1233:G:C4	2.99	0.51
40:CM:46:ARG:HG2	40:CM:47:PHE:N	2.24	0.51
43:CP:22:ILE:HB	43:CP:25:ILE:CG1	2.40	0.51
31:BA:1004:A:C4	31:BA:1025:U:C2	2.99	0.51
31:BA:1005:A:H5''	31:BA:1006:C:C5	2.46	0.51
31:BA:1028:C:C6	31:BA:1034:G:N2	2.79	0.51
1:AA:1062:G:OP1	1:AA:1070:A:H4'	2.11	0.51
31:BA:198:G:C6	31:BA:220:G:C2	2.99	0.51
31:BA:792:A:C2'	31:BA:792:A:N3	2.74	0.51
11:DO:147:LEU:HD22	11:DO:148:LEU:O	2.11	0.51
16:D1:91:ASP:C	16:D1:92:ARG:HG3	2.31	0.51
1:DA:1062:G:C5	1:DA:1063:G:N7	2.79	0.51
31:CA:1349:A:P	39:CL:118:LYS:NZ	2.84	0.51
12:DP:19:GLY:CA	12:DP:98:LYS:NZ	2.74	0.51
53:CC:19:G:H1'	53:CC:20:G:OP1	2.10	0.51
1:DA:298:G:H5''	1:DA:299:A:OP1	2.11	0.51
1:DA:35:G:H1'	1:DA:454:A:C4	2.45	0.51
31:BA:411:A:C5	31:BA:413:G:N3	2.79	0.51
31:BA:411:A:C6	31:BA:429:U:C5	2.99	0.51
23:AZ:8:SER:HB2	23:AZ:66:HIS:CE1	2.46	0.51
19:AT:36:LYS:HE2	19:AT:54:VAL:O	2.11	0.51
1:DA:2166:G:N2	1:DA:2171:A:H62	2.09	0.51
32:BE:11:LEU:CD2	32:BE:217:ARG:HH12	2.23	0.51
4:AE:132:HIS:O	4:AE:133:LYS:CB	2.55	0.51
1:AA:826:U:OP1	1:AA:2428:G:H3'	2.11	0.51
11:AO:144:GLU:H	11:AO:144:GLU:CD	2.15	0.51
20:DU:48:ALA:HB3	20:DU:59:GLY:C	2.31	0.51
1:AA:574:C:N3	4:AE:145:LYS:HE3	2.26	0.51
39:BL:98:PRO:C	39:BL:100:GLY:N	2.62	0.51
36:BI:42:GLU:C	36:BI:44:GLY:N	2.63	0.51
22:D3:70:GLN:OE1	22:D3:72:ARG:HD2	2.11	0.51
31:CA:89:U:HO2'	31:CA:90:C:H6	1.59	0.51
32:CE:180:LEU:O	32:CE:181:PHE:HB2	2.11	0.51
1:AA:1280:G:C2'	1:AA:1281:G:H5'	2.41	0.51
1:AA:2818:G:C2'	1:AA:2819:G:H5'	2.41	0.51
38:CK:56:LYS:O	38:CK:58:TYR:CD1	2.64	0.51
1:AA:270(G):C:C4	1:AA:270(H):C:C5	2.99	0.51
1:DA:1592:C:H2'	1:DA:1593:G:C8	2.46	0.51
1:AA:652:C:H5'	1:AA:653:A:OP2	2.11	0.51
1:AA:2206:C:H2'	1:AA:2207:C:C6	2.45	0.51
31:CA:29:G:C5	31:CA:30:U:H5	2.29	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:BE:36:ARG:C	32:BE:38:GLY:H	2.13	0.51
31:CA:1028(B):C:C2	31:CA:1032(A):G:N2	2.79	0.51
10:AN:24:VAL:CG2	10:AN:33:ALA:HB2	2.41	0.51
34:CG:104:VAL:HG22	34:CG:185:PHE:HE1	1.76	0.51
32:BE:126:GLU:OE1	32:BE:130:ARG:NH2	2.44	0.51
24:DW:51:ARG:HG2	24:DW:52:ASP:N	2.26	0.51
31:CA:635:G:C6	31:CA:636:U:C4	2.98	0.51
33:CF:123:GLN:O	33:CF:128:PHE:HB2	2.10	0.51
3:AD:177:LEU:HD11	3:AD:183:ARG:HB2	1.93	0.51
4:AE:174:ASP:OD2	4:AE:175:VAL:N	2.43	0.51
1:AA:1368:G:N7	56:AA:3545:OHX:N3	2.58	0.51
33:BF:152:ILE:HG22	33:BF:152:ILE:O	2.10	0.51
37:CJ:125:MET:O	37:CJ:126:ASP:C	2.48	0.51
1:AA:2642:G:H5''	9:AM:78:TYR:CD2	2.46	0.51
1:DA:920:G:H2'	1:DA:921:G:H8	1.75	0.51
31:CA:1041:A:N6	31:CA:1042:G:C6	2.79	0.51
39:CL:13:ALA:HA	39:CL:67:GLY:O	2.10	0.51
14:DQ:28:VAL:HG11	14:DQ:98:VAL:HG12	1.93	0.51
1:AA:954:G:O2'	1:AA:2274:A:N1	2.36	0.51
30:A8:23:VAL:CG1	30:A8:46:ARG:HD3	2.41	0.51
3:AD:35:LYS:H	3:AD:64:ILE:CG2	2.24	0.51
31:CA:1206:G:HO2'	33:CF:193:TYR:HA	1.76	0.51
43:CP:79:LYS:C	43:CP:79:LYS:HD3	2.31	0.51
43:CP:90:LEU:HD22	43:CP:93:ARG:HE	1.75	0.51
1:AA:1313:U:H5''	1:AA:1314:C:OP2	2.11	0.51
1:AA:899:A:O2'	1:AA:900:A:H8	1.94	0.51
1:DA:2019:A:O3'	16:D1:27:LEU:HG	2.10	0.51
17:D2:66:ARG:HA	17:D2:90:PRO:HA	1.92	0.51
1:AA:1061:U:HO2'	1:AA:1070:A:C4'	2.22	0.51
52:BD:11:C:H5'	52:BD:12:C:OP2	2.11	0.51
32:CE:75:LYS:HG2	32:CE:78:GLN:OE1	2.11	0.51
1:AA:2593:U:H2'	1:AA:2594:C:C6	2.45	0.51
31:BA:1501:C:OP2	31:BA:1504:G:H2'	2.10	0.51
31:BA:172:A:N3	31:BA:172:A:H2'	2.26	0.51
11:DO:104:GLY:O	11:DO:105:LEU:CD2	2.59	0.51
52:BB:46:G:H4'	52:BB:47:U:OP1	2.11	0.51
12:AP:19:GLY:C	12:AP:98:LYS:HD2	2.31	0.51
4:AE:38:THR:HG23	4:AE:40:GLU:H	1.75	0.51
17:A2:37:VAL:HG23	17:A2:37:VAL:O	2.11	0.51
31:BA:1151:A:N6	31:BA:1152:A:N6	2.59	0.51
1:DA:2378:A:H4'	14:DQ:23:ARG:NH1	2.12	0.51
14:DQ:110:LEU:HD23	14:DQ:112:PHE:CD2	2.45	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
44:BQ:4:LYS:O	44:BQ:7:ILE:N	2.43	0.51
1:DA:1051:G:N3	1:DA:1051:G:H2'	2.26	0.51
1:AA:1021:A:H2'	1:AA:1023:U:H5'	1.93	0.51
1:DA:1053:C:H2'	1:DA:1054:A:C4'	2.41	0.51
42:CO:98:TYR:N	42:CO:98:TYR:CD1	2.79	0.51
1:AA:626:U:O4	11:AO:107:LYS:HD3	2.10	0.51
11:AO:100:LEU:CD2	11:AO:112:LEU:HD11	2.40	0.51
1:DA:1154:G:OP1	16:D1:58:ARG:HD2	2.11	0.51
20:DU:96:ILE:HG12	20:DU:101:LYS:HD3	1.93	0.51
1:AA:315:G:C4	1:AA:316:C:C5	2.99	0.51
1:DA:2872:G:C2	1:DA:2873:A:N6	2.79	0.51
20:DU:40:GLU:N	20:DU:40:GLU:OE2	2.43	0.51
1:AA:2112:G:H8	1:AA:2112:G:P	2.34	0.51
1:DA:99:U:O2	1:DA:102:G:N2	2.44	0.51
1:DA:2817:G:P	13:D0:99:LYS:NZ	2.83	0.51
34:BG:163:GLU:C	34:BG:165:MET:N	2.62	0.51
2:DB:27:C:O5'	14:DQ:54:LEU:HD11	2.11	0.51
12:DP:29:PHE:HB3	12:DP:65:PHE:CE1	2.45	0.51
1:DA:2840:C:H5''	13:D0:53:HIS:HD2	1.72	0.51
6:AG:60:LEU:O	6:AG:64:THR:HB	2.10	0.51
12:AP:37:LEU:HD21	12:AP:130:LYS:HE3	1.92	0.51
49:BV:15:LEU:O	49:BV:19:VAL:N	2.40	0.51
31:CA:1292:U:H2'	31:CA:1293:G:C8	2.46	0.51
31:BA:242:C:H2'	31:BA:243:A:H5'	1.93	0.51
21:DV:107:THR:N	21:DV:108:PRO:CD	2.73	0.51
1:DA:2192:G:C2	1:DA:2193:G:C8	2.99	0.51
1:DA:1225:C:O2'	17:D2:85:LYS:HB3	2.11	0.51
25:AX:59:VAL:HG12	25:AX:60:GLU:N	2.26	0.51
31:CA:1267:C:O2	31:CA:1267:C:C2'	2.59	0.51
4:DE:67:PHE:CD1	4:DE:67:PHE:C	2.85	0.51
1:AA:1420:U:HO2'	1:AA:1421:G:P	2.34	0.51
14:AQ:7:TYR:HD2	14:AQ:10:ARG:HH21	1.59	0.51
9:AM:18:ALA:O	9:AM:19:GLU:C	2.50	0.51
41:CN:99:GLN:HG2	41:CN:105:VAL:HG11	1.93	0.51
35:CH:18:ARG:HH21	35:CH:25:ARG:HB3	1.76	0.51
1:AA:1765:C:H2'	1:AA:1766:U:C6	2.46	0.51
1:AA:1655:A:H3'	1:AA:1656:C:H6	1.76	0.51
37:CJ:73:MET:HG2	37:CJ:90:GLU:HA	1.92	0.51
17:D2:22:VAL:HG22	17:D2:23:GLU:N	2.25	0.51
45:CR:32:LEU:O	45:CR:36:ILE:HG13	2.10	0.51
1:AA:398:G:O2'	1:AA:399:G:H5'	2.10	0.51
8:AK:47:LEU:HD12	8:AK:47:LEU:O	2.10	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:2008:C:H2'	1:DA:2009:G:H8	1.75	0.51
1:AA:128:C:H2'	1:AA:129:C:C6	2.45	0.51
1:DA:726:G:O2'	1:DA:727:A:OP2	2.27	0.51
46:BS:58:TYR:HE1	46:BS:62:VAL:HG21	1.76	0.51
15:DR:47:GLY:HA3	15:DR:63:VAL:HG12	1.92	0.51
5:AF:31:HIS:NE2	5:AF:35:GLU:OE2	2.43	0.51
3:DD:263:ARG:HB2	3:DD:263:ARG:CZ	2.39	0.51
52:CB:82:A:H5'	52:CB:82:A:N3	2.26	0.51
31:BA:45:U:H6	31:BA:45:U:O5'	1.94	0.51
1:DA:733:G:O6	1:DA:761:A:C8	2.64	0.51
3:AD:221:VAL:HG22	3:AD:226:MET:HE1	1.93	0.51
17:A2:60:GLU:HB2	17:A2:97:LYS:HE2	1.92	0.51
11:DO:71:VAL:H	11:DO:72:PRO:CD	2.24	0.51
1:DA:8:A:C5	1:DA:9:U:C5	2.99	0.51
11:DO:49:ARG:CZ	30:D8:59:LYS:HG2	2.40	0.51
54:C1:20:G:H2'	54:C1:21:C:C6	2.46	0.51
31:CA:951:G:C4	31:CA:1231:G:C2	2.99	0.51
40:CM:50:ILE:HD13	40:CM:50:ILE:N	2.26	0.51
43:CP:23:TYR:HB3	43:CP:67:GLU:OE2	2.11	0.51
52:CD:49:A:N3	52:CD:50:U:H5''	2.21	0.51
1:AA:2307:G:C4	1:AA:2311:A:N1	2.79	0.51
5:DF:152:GLU:HA	5:DF:190:GLU:OE2	2.11	0.51
7:AH:150:ALA:C	7:AH:152:ARG:N	2.50	0.51
21:DV:132:ASN:HD21	21:DV:160:GLY:H	1.59	0.51
1:DA:94:G:H2'	1:DA:95:G:O4'	2.11	0.51
9:DM:97:ARG:NH1	9:DM:97:ARG:CG	2.67	0.51
20:DU:61:ILE:CG2	20:DU:62:GLU:N	2.68	0.51
1:DA:2884:U:C2'	1:DA:2885:C:H5'	2.41	0.51
31:BA:1453:G:C8	50:BW:39:LYS:HE2	2.45	0.51
1:AA:2702:U:OP1	1:AA:2702:U:H6	1.93	0.51
52:BB:21:A:C5	52:BB:55:U:O4	2.64	0.51
17:A2:16:PRO:HA	17:A2:96:ILE:HG22	1.92	0.51
14:AQ:29:PHE:C	14:AQ:29:PHE:CD2	2.80	0.51
31:CA:857:C:H2'	31:CA:858:G:O4'	2.10	0.51
31:CA:1349:A:P	39:CL:118:LYS:HZ2	2.34	0.51
39:CL:112:LYS:HD3	39:CL:113:LYS:N	2.25	0.51
31:CA:1281:U:H3'	31:CA:1282:C:C5	2.46	0.51
1:DA:464:U:H4'	29:D7:5:TRP:CZ3	2.46	0.51
1:AA:2872:G:C2	1:AA:2873:A:N6	2.79	0.51
34:BG:76:ARG:HD3	34:BG:207:TYR:CE2	2.42	0.51
1:DA:1155:A:O2'	1:DA:1156:A:H2'	2.11	0.51
34:BG:12:CYS:HA	34:BG:19:LEU:HD22	1.93	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1015:A:C6	31:CA:1016:A:C6	2.99	0.51
31:CA:1016:A:H2'	31:CA:1017:G:O4'	2.10	0.51
31:CA:381:C:N4	31:CA:382:A:C6	2.79	0.51
1:DA:1480:G:C5	1:DA:1482:U:O2	2.64	0.51
31:BA:628:G:H2'	31:BA:629:G:C8	2.46	0.51
21:AV:135:GLU:O	21:AV:136:PHE:HB3	2.11	0.51
13:A0:100:LEU:CD1	13:A0:112:ALA:HA	2.36	0.51
38:BK:91:ARG:NH1	47:BT:32:TYR:O	2.44	0.51
37:BJ:16:LEU:CD1	39:BL:42:ARG:HA	2.41	0.51
47:CT:66:SER:O	47:CT:69:LYS:N	2.36	0.51
1:AA:299:A:C6	1:AA:300:A:N1	2.79	0.51
15:AR:24:PRO:HA	15:AR:49:VAL:HG22	1.93	0.51
32:CE:102:LEU:N	32:CE:102:LEU:HD12	2.21	0.51
31:CA:619:U:H3	34:CG:135:LEU:CD1	2.24	0.51
35:CH:33:VAL:HG12	35:CH:34:VAL:N	2.26	0.51
10:DN:119:PRO:HG2	15:DR:68:TYR:CD2	2.46	0.51
33:CF:70:VAL:HG12	33:CF:71:ALA:N	2.26	0.51
1:AA:1130:U:O2'	1:AA:1131:G:P	2.69	0.51
7:DH:123:PHE:HE2	7:DH:133:VAL:HG22	1.76	0.51
16:D1:111:GLU:C	16:D1:113:ALA:N	2.63	0.51
43:CP:54:VAL:HA	43:CP:57:ARG:HB2	1.93	0.51
43:CP:54:VAL:HA	43:CP:57:ARG:CB	2.41	0.51
50:CW:61:SER:O	50:CW:65:LYS:HG3	2.11	0.51
31:CA:36:C:C2'	31:CA:37:U:H5'	2.41	0.51
12:DP:42:ILE:HD13	12:DP:97:VAL:CG2	2.41	0.51
14:DQ:77:ALA:HB1	14:DQ:82:ILE:HD12	1.93	0.51
16:D1:104:GLN:HA	16:D1:104:GLN:NE2	2.26	0.51
31:CA:284:G:N7	56:CA:1731:OHX:N2	2.58	0.51
1:AA:1913:A:H4'	1:AA:1914:C:H5'	1.92	0.51
36:CI:8:ILE:N	36:CI:8:ILE:HD12	2.25	0.51
42:CO:7:ILE:O	42:CO:10:LEU:HB2	2.11	0.51
1:DA:2461:C:H2'	1:DA:2462:U:C6	2.46	0.51
33:BF:178:LEU:O	33:BF:180:ALA:N	2.40	0.51
31:CA:497:U:H2'	31:CA:497:U:O2	2.10	0.51
2:AB:18:G:C2'	2:AB:19:G:H5'	2.40	0.51
4:DE:76:ARG:O	4:DE:78:LEU:N	2.41	0.50
30:A8:51:ALA:N	30:A8:53:PRO:HD3	2.25	0.50
31:CA:1055:A:C8	31:CA:1206:G:N2	2.79	0.50
31:CA:946:A:C6	31:CA:947:G:C6	2.99	0.50
52:CD:25:G:H2'	52:CD:26:G:O4'	2.11	0.50
6:DG:4:ASP:O	6:DG:5:VAL:CB	2.56	0.50
1:AA:2298:A:N3	1:AA:2321:G:C2	2.79	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:BD:12:C:H2'	52:BD:13:G:C8	2.46	0.50
52:BD:61:G:H2'	52:BD:62:G:O4'	2.11	0.50
31:BA:1301:U:H3'	31:BA:1302:U:C5'	2.29	0.50
52:CD:85:A:O2'	1:DA:2394:C:C2	2.64	0.50
45:CR:82:ILE:CG1	45:CR:87:ILE:HB	2.28	0.50
53:CC:17:C:H2'	53:CC:17:C:O2	2.10	0.50
1:AA:2154:G:H2'	1:AA:2155:G:C8	2.46	0.50
2:AB:7:G:H1	2:AB:113:C:N4	2.09	0.50
41:CN:48:ILE:CG2	41:CN:63:LEU:HD12	2.42	0.50
31:CA:1129:C:N4	31:CA:1139:G:H22	2.08	0.50
1:AA:592:G:N2	30:A8:4:MET:HE1	2.27	0.50
1:DA:1170:G:O6	1:DA:1171:G:N1	2.44	0.50
52:CB:70:C:H5'	52:CB:71:C:OP2	2.11	0.50
4:AE:78:LEU:O	4:AE:79:ARG:CB	2.55	0.50
4:AE:21:VAL:HG23	4:AE:22:PRO:CD	2.41	0.50
1:AA:2895:U:O2'	1:AA:2896:C:H5'	2.11	0.50
11:DO:39:LYS:HB2	11:DO:45:LEU:CD2	2.41	0.50
35:CH:71:LEU:HD22	35:CH:115:VAL:HG13	1.93	0.50
1:DA:1001:A:H2'	1:DA:1002:G:H5'	1.93	0.50
31:BA:509:A:C8	31:BA:509:A:H3'	2.46	0.50
31:CA:1325:C:OP1	51:CX:15:ARG:HD2	2.10	0.50
1:DA:2762:G:H5'	1:DA:2763:G:OP2	2.10	0.50
5:AF:124:LEU:HD12	5:AF:125:LEU:O	2.11	0.50
5:AF:198:ALA:O	5:AF:201:VAL:HG13	2.12	0.50
1:AA:539:G:C2'	1:AA:540:G:H5''	2.42	0.50
1:DA:72:U:H3	24:DW:62:THR:HG22	1.75	0.50
32:CE:87:ARG:O	32:CE:223:ILE:HD11	2.12	0.50
1:AA:558:G:P	9:AM:111:PRO:HD2	2.50	0.50
31:CA:262:A:N6	31:CA:263:A:N6	2.59	0.50
8:DK:76:THR:HG21	8:DK:140:LEU:CD1	2.41	0.50
34:CG:152:SER:O	34:CG:154:ASN:N	2.44	0.50
31:BA:606:G:H1'	31:BA:632:A:N6	2.26	0.50
18:AS:79:GLY:C	18:AS:100:THR:HG22	2.30	0.50
1:AA:2096:U:H2'	1:AA:2097:C:C6	2.46	0.50
45:BR:39:LEU:O	45:BR:42:HIS:N	2.43	0.50
31:BA:405:U:H5''	31:BA:406:G:O4'	2.10	0.50
31:CA:1111:A:H2'	31:CA:1112:C:C6	2.46	0.50
1:DA:1839:G:C8	1:DA:1927:A:H1'	2.46	0.50
1:AA:2345:G:N3	1:AA:2381:C:H2'	2.25	0.50
1:DA:1449:A:N6	1:DA:1449(A):G:C4	2.80	0.50
31:CA:423:G:N2	31:CA:424:G:C8	2.78	0.50
31:BA:1261:A:C6	31:BA:1262:C:C2	2.99	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:CN:67:ASP:OD1	41:CN:71:LYS:NZ	2.32	0.50
31:CA:701:C:O2'	56:CA:1759:OHX:N6	2.44	0.50
1:DA:979:G:N7	1:DA:981:A:OP1	2.43	0.50
31:BA:373:A:C2	31:BA:482:A:C6	2.98	0.50
1:AA:2562:U:H1'	10:AN:23:ARG:HH11	1.75	0.50
1:AA:1955:U:OP2	56:AA:3407:OHX:N1	2.44	0.50
1:AA:391:G:O2'	1:AA:410:G:OP1	2.28	0.50
38:CK:82:HIS:CD2	38:CK:82:HIS:O	2.64	0.50
1:AA:616:A:H8	5:AF:176:LEU:HD11	1.76	0.50
39:BL:7:THR:O	39:BL:7:THR:HG22	2.10	0.50
1:AA:1626:G:H5''	1:AA:1627:G:OP1	2.12	0.50
1:DA:1950:G:C2	1:DA:1951:U:C4	2.99	0.50
1:DA:1686:C:H2'	1:DA:1687:G:O4'	2.11	0.50
27:A5:2:ALA:C	27:A5:3:LYS:HD2	2.25	0.50
1:DA:155:C:H2'	1:DA:155:C:O2	2.10	0.50
31:BA:1004:A:O4'	31:BA:1036:G:O6	2.29	0.50
1:AA:1060:U:C4'	1:AA:1061:U:O5'	2.60	0.50
52:BD:12:C:H6	52:BD:12:C:H5'	1.76	0.50
31:BA:1177:G:OP2	39:BL:97:LYS:NZ	2.45	0.50
31:BA:1237:C:H2'	31:BA:1238:A:OP1	2.11	0.50
31:BA:1242:C:N4	31:BA:1295:G:H1	2.06	0.50
31:BA:1303:C:H2'	31:BA:1304:G:H5'	1.93	0.50
1:AA:2590:A:H5''	3:AD:239:ARG:HG3	1.93	0.50
31:BA:1394:A:C5	31:BA:1501:C:H4'	2.46	0.50
11:AO:65:ARG:NH1	11:AO:65:ARG:CG	2.57	0.50
31:BA:1366:C:O2'	40:BM:60:ARG:NH2	2.43	0.50
44:BQ:23:ARG:O	44:BQ:24:CYS:C	2.50	0.50
22:D3:23:VAL:HG12	22:D3:25:ARG:O	2.11	0.50
1:AA:1050:A:H2'	1:AA:1051:G:O4'	2.11	0.50
1:DA:1342:A:C6	1:DA:1397:U:C4	2.96	0.50
1:DA:259:G:C2'	1:DA:621:A:O2'	2.59	0.50
46:CS:49:LEU:HD12	46:CS:50:LYS:N	2.27	0.50
46:CS:49:LEU:HD22	46:CS:73:LEU:HD22	1.92	0.50
31:CA:1024:G:C4	31:CA:1025:U:H5	2.29	0.50
35:CH:110:LEU:O	35:CH:115:VAL:CG2	2.58	0.50
33:BF:58:GLU:CB	33:BF:65:ALA:HB3	2.33	0.50
31:CA:455:C:H42	31:CA:477:G:H1	1.59	0.50
1:AA:508:G:O6	18:AS:9:TYR:CD2	2.64	0.50
24:DW:15:LYS:O	24:DW:16:LEU:HB3	2.12	0.50
21:AV:40:ASP:O	21:AV:43:GLU:HB2	2.11	0.50
36:CI:63:TYR:CD2	36:CI:63:TYR:N	2.79	0.50
7:AH:98:LEU:HD22	7:AH:125:VAL:CG2	2.41	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:A1:58:ARG:HH21	16:A1:93:LYS:HD2	1.76	0.50
2:DB:54:G:C4	2:DB:55:U:C5	2.99	0.50
1:DA:2014:A:H2'	1:DA:2015:A:C8	2.46	0.50
1:DA:2519:U:OP1	56:DA:3169:OHX:N1	2.44	0.50
6:AG:25:TYR:C	6:AG:27:ASN:H	2.15	0.50
5:AF:57:VAL:CG1	5:AF:58:ALA:N	2.74	0.50
35:BH:15:ARG:NH1	54:B1:25:A:H3'	2.26	0.50
33:BF:130:VAL:CG1	33:BF:134:ILE:HD11	2.41	0.50
9:AM:75:TYR:C	9:AM:75:TYR:HD1	2.14	0.50
1:AA:338:G:O2'	1:AA:339:U:H5'	2.11	0.50
53:CC:14:A:C6	53:CC:23:G:C5	2.99	0.50
15:DR:78:LEU:HD23	15:DR:79:HIS:HD2	1.74	0.50
47:BT:101:ARG:HB2	47:BT:101:ARG:HH21	1.75	0.50
31:CA:719:C:O2'	48:CU:49:LYS:HB3	2.11	0.50
50:BW:70:SER:HA	50:BW:73:HIS:HD2	1.76	0.50
10:AN:98:VAL:HG13	10:AN:117:LEU:HB2	1.93	0.50
3:AD:118:VAL:HG22	3:AD:119:ALA:N	2.26	0.50
47:CT:93:GLN:HG2	47:CT:96:GLU:OE2	2.12	0.50
1:AA:2670:A:O2'	1:AA:2671:A:H5'	2.11	0.50
15:AR:3:ARG:NH1	15:AR:6:LEU:HD23	2.26	0.50
31:BA:1362(A):C:OP1	56:BA:1761:OHX:N4	2.44	0.50
46:CS:14:ASN:N	46:CS:15:PRO:HD3	2.26	0.50
1:DA:2549:G:N2	1:DA:2560:C:C2	2.80	0.50
1:AA:60:G:N7	1:AA:63:U:C6	2.79	0.50
1:AA:2836:U:C4	1:AA:2883:A:N6	2.80	0.50
50:BW:16:HIS:O	50:BW:19:SER:N	2.44	0.50
48:CU:21:LYS:HE2	48:CU:54:ARG:O	2.12	0.50
10:AN:49:ARG:NH2	31:BA:1423:G:OP1	2.45	0.50
10:DN:61:VAL:O	10:DN:61:VAL:HG13	2.10	0.50
1:AA:1252:G:N3	16:A1:33:ARG:HD2	2.25	0.50
5:DF:124:LEU:O	5:DF:124:LEU:HG	2.11	0.50
31:CA:1118:C:OP1	39:CL:104:ARG:NH1	2.41	0.50
9:AM:90:MET:O	9:AM:94:HIS:N	2.36	0.50
31:CA:1127:G:N2	31:CA:1144:G:H22	2.09	0.50
31:CA:86:U:C2'	31:CA:87:A:OP1	2.59	0.50
31:BA:1204:A:C6	31:BA:1205:U:N3	2.79	0.50
52:CB:48:C:H2'	52:CB:49:A:C1'	2.42	0.50
1:AA:2470:G:H5'	12:AP:56:ARG:HH22	1.77	0.50
31:BA:870:U:H4'	31:BA:871:U:H3'	1.92	0.50
52:CB:40:U:C4	52:CB:41:C:C5	3.00	0.50
31:BA:1321:C:H3'	31:BA:1322:C:H5''	1.93	0.50
11:AO:101:VAL:HG12	11:AO:102:ARG:N	2.27	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:BB:62:G:O6	52:BB:70:C:N4	2.32	0.50
1:AA:479:A:H4'	1:AA:480:A:OP1	2.12	0.50
1:AA:1586:A:H3'	1:AA:1587:A:H8	1.76	0.50
20:DU:43:ASN:N	20:DU:43:ASN:ND2	2.58	0.50
31:CA:312:C:H2'	31:CA:312:C:O2	2.11	0.50
36:CI:62:TRP:C	36:CI:63:TYR:CD2	2.85	0.50
20:AU:39:VAL:O	20:AU:40:GLU:CG	2.59	0.50
35:BH:153:LYS:H	38:BK:64:LYS:NZ	2.08	0.50
10:DN:113:LYS:O	10:DN:117:LEU:CD1	2.60	0.50
1:AA:729:G:O2'	1:AA:763:G:H4'	2.11	0.50
34:CG:118:ARG:CA	34:CG:121:VAL:HG23	2.40	0.50
7:AH:43:VAL:HG23	7:AH:43:VAL:O	2.10	0.50
13:A0:92:GLY:N	13:A0:94:TYR:CE2	2.71	0.50
6:DG:55:LYS:NZ	6:DG:58:GLN:HE22	2.08	0.50
41:CN:125:PHE:N	41:CN:125:PHE:CD2	2.76	0.50
17:D2:47:VAL:O	17:D2:47:VAL:HG22	2.11	0.50
42:BO:117:ARG:HH22	42:BO:124:LYS:HB2	1.76	0.50
10:AN:88:ASN:HD22	10:AN:88:ASN:H	1.59	0.50
21:DV:99:TYR:HA	21:DV:124:ILE:O	2.11	0.50
1:DA:2694:G:C4	1:DA:2695:C:C5	2.99	0.50
31:BA:689:C:OP1	41:BN:27:ASN:ND2	2.39	0.50
12:DP:92:GLY:O	12:DP:93:TYR:CD1	2.65	0.50
31:BA:1030:C:H2'	31:BA:1031:G:O4'	2.11	0.50
31:CA:167:G:N1	31:CA:168:G:C6	2.79	0.50
1:DA:278:A:C4'	1:DA:279:C:OP1	2.59	0.50
8:AK:86:THR:O	8:AK:87:LYS:HB2	2.09	0.50
1:DA:981:A:H8	1:DA:982:C:C5	2.28	0.50
1:AA:1910:G:O2'	1:AA:1911:U:H5'	2.10	0.50
1:DA:239:U:H2'	1:DA:240:G:O4'	2.12	0.50
27:D5:45:VAL:HG11	27:D5:56:LYS:HD2	1.93	0.50
31:CA:1243:C:O2	31:CA:1295:G:C2	2.64	0.50
1:DA:925:C:H2'	1:DA:926:A:H5''	1.93	0.50
31:CA:685:G:N7	56:CA:1782:OHX:N6	2.59	0.50
27:D5:4:HIS:O	27:D5:5:PRO:O	2.29	0.50
31:CA:1196:U:O2	54:C1:23:A:N7	2.44	0.50
31:CA:1317:C:N1	44:CQ:16:PHE:HE1	2.09	0.50
49:CV:12:ASP:CB	49:CV:38:SER:HB3	2.40	0.50
1:AA:1535:U:C4	1:AA:1536:A:H3'	2.47	0.50
1:AA:882:G:C2	1:AA:894:C:N3	2.80	0.50
1:AA:901:A:C2'	1:AA:902:C:H5'	2.42	0.50
1:AA:901:A:H2'	1:AA:902:C:H5'	1.93	0.50
19:DT:57:LEU:N	19:DT:57:LEU:HD23	2.27	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:CE:207:ALA:O	32:CE:211:ILE:HG13	2.12	0.50
11:DO:62:LEU:HD21	30:D8:25:MET:O	2.11	0.50
31:BA:925:G:H1'	31:BA:1502:A:C4	2.47	0.50
1:DA:1141:U:C2'	1:DA:1142:U:OP2	2.60	0.50
2:AB:42:C:O2	6:AG:92:VAL:HA	2.12	0.50
14:DQ:11:LYS:HG2	14:DQ:15:ARG:CZ	2.42	0.50
12:AP:120:ILE:H	12:AP:120:ILE:HD13	1.75	0.50
4:AE:78:LEU:O	4:AE:78:LEU:HD23	2.10	0.50
31:CA:1213:A:N6	31:CA:1215:G:N3	2.59	0.50
46:CS:43:LYS:CG	46:CS:48:TRP:CD1	2.94	0.50
11:AO:91:PHE:HZ	11:AO:103:ALA:CB	2.25	0.50
1:DA:2748:A:N7	1:DA:2754:U:C4	2.79	0.50
24:AW:37:PHE:O	24:AW:41:ILE:HG22	2.12	0.50
1:AA:917:A:C2'	1:AA:918:A:H5'	2.42	0.50
31:CA:1433:A:C8	31:CA:1467:G:N2	2.80	0.50
3:AD:125:ILE:CD1	3:AD:131:LEU:HD21	2.35	0.50
1:DA:1475:G:C4	1:DA:1519:G:N2	2.80	0.50
12:AP:26:TYR:C	12:AP:26:TYR:HD2	2.14	0.50
12:AP:33:GLY:HA2	12:AP:105:GLU:HA	1.92	0.50
33:CF:175:LEU:HD21	33:CF:201:TYR:CE1	2.47	0.50
31:BA:575:G:C5	31:BA:881:G:C2	3.00	0.50
34:CG:110:PHE:HD1	34:CG:110:PHE:N	2.09	0.50
1:AA:2623:G:H21	27:A5:22:HIS:CE1	2.30	0.50
1:AA:2623:G:H21	27:A5:22:HIS:HE1	1.55	0.50
48:BU:50:ILE:HD12	48:BU:70:ILE:HD12	1.93	0.50
31:CA:791:G:C5	31:CA:792:A:N7	2.78	0.50
31:BA:604:G:C6	31:BA:605:U:N3	2.80	0.50
1:AA:1204:A:C8	1:AA:1206:G:C6	2.99	0.50
9:DM:65:LYS:O	9:DM:67:LEU:N	2.43	0.50
18:DS:92:ARG:O	18:DS:93:ALA:HB3	2.11	0.50
20:AU:42:VAL:O	20:AU:42:VAL:HG12	2.12	0.50
1:AA:1437:C:H2'	1:AA:1438:U:H6	1.77	0.50
1:AA:220:G:N7	56:AA:3415:OHX:N4	2.59	0.50
42:CO:11:VAL:HG13	47:CT:29:HIS:CD2	2.46	0.50
1:AA:1879:C:N4	1:AA:1880:C:N4	2.59	0.50
31:BA:60:A:OP1	31:BA:111:G:N2	2.45	0.50
15:AR:39:ARG:HH22	31:BA:346:G:H1'	1.76	0.50
31:CA:157:G:C2	31:CA:165:C:O2	2.64	0.50
31:CA:1269:A:H2	31:CA:1312:G:N3	2.09	0.50
2:DB:29:A:H2'	2:DB:30:C:H6	1.75	0.50
1:DA:2740:A:H2'	1:DA:2741:A:C8	2.46	0.50
32:CE:238:LEU:HD12	32:CE:238:LEU:O	2.12	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
10:DN:104:ARG:NH1	15:DR:36:GLU:HB3	2.26	0.50
1:DA:459:U:H5''	29:D7:40:TRP:CD2	2.46	0.50
31:CA:1494:G:N2	1:DA:1912:A:N3	2.59	0.50
12:AP:137:TYR:CE2	21:AV:83:PRO:HG3	2.47	0.50
2:AB:81:G:O6	2:AB:95:U:O2	2.28	0.50
4:DE:63:LEU:O	4:DE:63:LEU:HG	2.12	0.50
31:CA:1207:G:H2'	31:CA:1208:C:C6	2.44	0.50
31:BA:1002:G:C4	31:BA:1003:G:C8	2.99	0.50
37:BJ:79:ARG:NH1	37:BJ:82:GLY:H	2.09	0.50
31:BA:1180:A:OP1	39:BL:103:THR:OG1	2.22	0.50
20:AU:79:CYS:HG	20:AU:80:GLY:N	2.08	0.50
1:AA:2590:A:C2	1:AA:2605:U:O2	2.63	0.50
1:AA:2886:G:N3	1:AA:2887:U:C6	2.79	0.50
1:AA:1731:G:H2'	1:AA:1732:A:H8	1.76	0.50
31:BA:789:U:H5	31:BA:792:A:P	2.33	0.50
1:AA:2137:C:H2'	1:AA:2138:C:H6	1.77	0.50
16:D1:68:ALA:O	16:D1:71:GLN:HB2	2.11	0.50
39:BL:17:VAL:HG13	39:BL:63:ILE:HD11	1.93	0.50
50:BW:25:ARG:HH11	50:BW:25:ARG:CG	2.20	0.50
1:DA:1048:A:H2	1:DA:1112:G:N2	2.02	0.50
33:BF:70:VAL:HG12	33:BF:71:ALA:N	2.26	0.50
31:BA:355:C:H2'	31:BA:356:A:H5'	1.92	0.50
12:DP:78:PRO:O	12:DP:79:LEU:O	2.30	0.50
5:DF:102:PRO:O	5:DF:104:LYS:N	2.44	0.50
31:CA:570:G:H1'	31:CA:820:U:C4	2.46	0.50
31:CA:246:A:C4	31:CA:279:A:N6	2.79	0.50
4:DE:101:ARG:NH1	4:DE:171:GLU:HB2	2.25	0.50
32:BE:97:TRP:CZ3	32:BE:176:GLU:HG3	2.46	0.50
30:D8:16:ILE:HD13	30:D8:57:ARG:HG2	1.94	0.50
19:AT:80:ILE:HD12	19:AT:80:ILE:C	2.31	0.50
23:AZ:56:GLN:HE21	23:AZ:56:GLN:CA	2.19	0.50
1:AA:644:A:C2	1:AA:646:A:C4	3.00	0.50
31:CA:354:G:N3	31:CA:354:G:H2'	2.27	0.50
13:A0:103:ARG:HH11	18:AS:40:ASN:HD22	1.59	0.50
1:AA:945:A:C1'	1:AA:946:G:OP1	2.60	0.50
1:DA:512:G:OP1	1:DA:1234:U:O2'	2.24	0.50
9:DM:57:ALA:C	9:DM:59:LYS:N	2.65	0.50
26:D4:16:CYS:HB3	26:D4:19:GLY:CA	2.42	0.50
8:DK:143:SER:O	8:DK:144:VAL:HB	2.12	0.50
8:DK:144:VAL:O	8:DK:145:VAL:HG22	2.12	0.50
1:AA:634:C:H2'	1:AA:635:C:C6	2.47	0.50
34:CG:72:GLU:OE1	34:CG:72:GLU:CA	2.59	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:57:G:C5	31:CA:58:C:C4	3.00	0.50
21:DV:108:PRO:HB2	21:DV:142:SER:HA	1.93	0.50
15:DR:54:ARG:HG2	15:DR:54:ARG:NH1	2.26	0.50
53:BC:54:G:O2'	53:BC:55:U:H5'	2.12	0.50
13:D0:84:ALA:HB3	13:D0:85:PRO:HD3	1.94	0.50
24:DW:37:PHE:O	24:DW:41:ILE:N	2.35	0.50
1:AA:1181:C:C2'	1:AA:1182:A:H5'	2.41	0.50
34:BG:105:VAL:HG12	34:BG:105:VAL:O	2.11	0.50
1:AA:1298:C:C5'	1:AA:1299:G:OP2	2.60	0.50
32:BE:53:ARG:HA	32:BE:56:ARG:NH1	2.27	0.50
5:DF:72:ARG:O	5:DF:73:ALA:O	2.29	0.50
31:BA:200:G:N2	31:BA:218:C:C2	2.79	0.50
1:AA:84:A:H4'	1:AA:85:G:OP1	2.12	0.50
1:DA:654(B):C:H2'	1:DA:654(C):G:H8	1.76	0.50
32:BE:21:ARG:O	32:BE:23:ARG:HG2	2.11	0.50
1:AA:1668:A:H61	1:AA:1676:A:H61	1.59	0.50
8:AK:144:VAL:O	8:AK:145:VAL:HG22	2.11	0.50
5:DF:34:TRP:CE3	11:DO:8:PRO:HB3	2.46	0.50
21:DV:14:LYS:H	21:DV:14:LYS:NZ	2.10	0.50
14:DQ:28:VAL:HG11	14:DQ:98:VAL:CG1	2.41	0.50
31:CA:1333:A:H2'	31:CA:1334:G:O4'	2.11	0.50
1:AA:1893:C:C5	1:AA:1894:C:C5	3.00	0.50
32:BE:119:GLU:C	32:BE:121:LEU:H	2.15	0.50
31:BA:120:A:C2'	31:BA:121:C:O5'	2.60	0.50
31:BA:771:G:O2'	31:BA:772:U:H5'	2.11	0.50
1:DA:475:U:OP1	56:DA:3443:OHX:N6	2.45	0.50
14:AQ:39:ILE:HG22	14:AQ:39:ILE:O	2.12	0.50
41:BN:83:ILE:HG23	41:BN:109:VAL:HG23	1.93	0.50
1:DA:82:G:N1	1:DA:103:A:OP2	2.41	0.50
30:A8:34:TRP:H	30:A8:35:GLN:CA	2.24	0.50
12:DP:25:ASP:O	12:DP:25:ASP:OD1	2.30	0.50
16:D1:36:ARG:CZ	17:D2:82:ARG:NH2	2.75	0.50
31:CA:1065:U:H6	31:CA:1190:G:H21	1.59	0.50
31:CA:969:A:H2'	31:CA:970:C:O4'	2.12	0.50
33:CF:193:TYR:O	33:CF:193:TYR:CD1	2.65	0.50
1:DA:887:A:N6	1:DA:889:C:C6	2.79	0.50
1:AA:1535:U:C3'	1:AA:1536:A:C5'	2.88	0.50
5:DF:153:SER:H	5:DF:190:GLU:HB2	1.76	0.50
26:D4:22:ILE:H	26:D4:22:ILE:CD1	2.24	0.50
1:AA:2316:C:H2'	1:AA:2317:C:H6	1.76	0.50
1:AA:2321:G:N3	1:AA:2321:G:H2'	2.26	0.50
1:AA:1060:U:H1'	1:AA:1061:U:OP2	2.11	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AD:27:THR:HG21	3:AD:83:GLU:HB3	1.92	0.50
31:BA:945:G:C2	31:BA:946:A:C8	2.99	0.50
3:AD:44:ASN:HB3	3:AD:48:ARG:C	2.32	0.50
31:CA:1446:A:N6	15:DR:118:ARG:HH22	2.09	0.50
1:AA:1833:U:O2'	1:AA:1969:A:N1	2.30	0.50
31:BA:1054:C:H6	31:BA:1196:U:HO2'	1.59	0.50
31:BA:963:G:N2	40:BM:55:LYS:HZ1	2.10	0.50
52:BB:52:G:O2'	52:BB:53:A:O5'	2.20	0.50
31:BA:1351:U:H5'	37:BJ:33:ASP:OD1	2.12	0.50
40:BM:4:ILE:HG12	40:BM:100:THR:HG23	1.93	0.50
1:AA:2001:A:H4'	1:AA:2689:U:H2'	1.93	0.50
14:DQ:12:PHE:O	14:DQ:13:ARG:C	2.50	0.50
36:BI:37:VAL:HG12	36:BI:38:GLU:N	2.26	0.50
1:AA:1026:U:C4'	1:AA:1027:A:OP1	2.54	0.50
1:AA:2810:A:H61	1:AA:2891:G:C2'	2.25	0.50
1:AA:2894:G:H2'	1:AA:2895:U:OP2	2.10	0.50
1:AA:2723:C:OP1	4:AE:109:LYS:HD3	2.12	0.50
11:AO:105:LEU:O	11:AO:106:LEU:CB	2.48	0.50
1:DA:33:U:H4'	1:DA:34:C:OP1	2.11	0.50
4:DE:197:ILE:HD12	4:DE:198:VAL:N	2.26	0.50
1:AA:494:G:H4'	18:AS:6:ILE:HB	1.93	0.50
1:DA:2287:A:C2	1:DA:2346:A:N1	2.79	0.50
34:BG:89:THR:OG1	56:BG:302:OHX:N2	2.44	0.50
12:AP:6:ARG:O	12:AP:7:MET:HB2	2.12	0.50
18:DS:51:LEU:C	18:DS:51:LEU:HD22	2.30	0.50
1:AA:2032:G:N2	4:AE:146:THR:HG23	2.22	0.50
1:AA:2506:U:O2	1:AA:2506:U:C2'	2.57	0.50
1:AA:299:A:N6	1:AA:300:A:C6	2.80	0.50
10:AN:34:THR:HG23	10:AN:35:VAL:H	1.76	0.50
39:BL:53:VAL:HG21	39:BL:92:TYR:CD1	2.46	0.50
31:BA:457:C:N4	31:BA:458:C:N4	2.60	0.50
13:A0:12:ARG:HB3	13:A0:16:HIS:HD2	1.76	0.50
31:CA:953:G:H2'	31:CA:954:G:O4'	2.12	0.50
47:CT:59:ILE:CG2	47:CT:71:PHE:HB3	2.42	0.50
25:AX:28:LEU:HA	25:AX:33:GLN:OE1	2.11	0.50
8:AK:104:GLN:O	8:AK:105:HIS:CB	2.59	0.50
1:DA:286:C:C2'	1:DA:287:C:H5'	2.42	0.50
7:AH:137:ASP:CB	7:AH:140:LYS:HB3	2.41	0.50
31:CA:1272:G:C6	31:CA:1273:G:C5	2.99	0.50
31:CA:622:A:N7	31:CA:623:C:C2	2.80	0.50
1:DA:863:A:H8	1:DA:863:A:O5'	1.94	0.50
37:CJ:79:ARG:HA	37:CJ:84:ASN:HA	1.94	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AD:181:GLU:OE2	3:AD:270:ILE:HD13	2.12	0.50
1:AA:404:C:O2'	1:AA:405:U:OP2	2.25	0.50
18:AS:88:ARG:HB2	18:AS:93:ALA:H	1.76	0.50
36:BI:18:GLN:O	36:BI:21:LEU:N	2.44	0.50
19:AT:21:PHE:CD2	19:AT:26:TYR:HD2	2.30	0.50
1:DA:2689:U:H5''	1:DA:2713:A:H2	1.76	0.50
1:AA:731:C:H2'	1:AA:731:C:O2	2.11	0.50
31:BA:5:U:O2'	31:BA:6:G:N3	2.44	0.50
35:BH:122:GLU:OE1	35:BH:131:ILE:HG21	2.11	0.50
26:D4:43:TYR:CG	26:D4:43:TYR:O	2.65	0.50
33:BF:189:ALA:HB3	33:BF:196:LEU:HB2	1.93	0.50
5:AF:13:SER:C	5:AF:15:SER:H	2.14	0.50
25:AX:43:ILE:HG22	25:AX:43:ILE:O	2.12	0.50
36:BI:78:GLU:HG3	36:BI:78:GLU:O	2.11	0.50
15:AR:29:ARG:HB2	15:AR:46:GLU:HG3	1.93	0.50
31:BA:336:C:O2'	31:BA:337:C:H5'	2.11	0.50
13:D0:70:LEU:O	13:D0:72:ASP:N	2.38	0.50
1:DA:2802:G:H8	1:DA:2802:G:OP2	1.94	0.50
27:A5:4:HIS:CG	27:A5:5:PRO:HD3	2.42	0.50
1:DA:228:A:H2'	1:DA:230:U:O4'	2.10	0.50
1:DA:2271:G:H2'	1:DA:2272:U:O5'	2.12	0.50
1:DA:2151:G:C4	1:DA:2152:G:C8	3.00	0.50
43:CP:20:THR:O	43:CP:22:ILE:N	2.45	0.50
52:CD:20:C:H5'	52:CD:68:A:H62	1.76	0.50
43:BP:88:ARG:HD3	43:BP:98:VAL:HG12	1.94	0.50
31:BA:1028(A):C:N4	31:BA:1028(B):C:N4	2.60	0.50
34:CG:59:ARG:NH2	34:CG:66:ARG:NH1	2.58	0.50
52:BD:22:A:H2'	52:BD:22:A:N3	2.25	0.50
31:BA:943:U:C2'	31:BA:944:G:H5'	2.42	0.50
45:BR:78:TYR:C	45:BR:80:ALA:N	2.60	0.50
2:DB:110:G:H2'	2:DB:111:U:O4'	2.12	0.50
1:AA:1022:G:H4'	1:AA:1023:U:O5'	2.12	0.50
12:AP:51:ARG:CG	12:AP:51:ARG:HH11	2.10	0.50
4:AE:31:CYS:HB2	4:AE:91:VAL:HG23	1.92	0.50
35:CH:110:LEU:HD13	35:CH:118:ILE:HD13	1.92	0.50
53:CC:20:G:N2	53:CC:58:A:N3	2.60	0.50
1:DA:67:U:C2	1:DA:74:A:H2	2.29	0.50
14:DQ:17:ARG:NH1	14:DQ:17:ARG:CG	2.56	0.50
53:BC:48:U:H1'	53:BC:49:C:OP2	2.12	0.50
49:BV:51:VAL:HG11	49:BV:71:LEU:O	2.12	0.50
8:DK:101:LEU:HD23	8:DK:101:LEU:N	2.18	0.50
33:CF:150:LYS:CG	33:CF:169:ALA:HB2	2.39	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:BE:235:SER:OG	32:BE:236:TYR:N	2.40	0.50
35:CH:60:TYR:HA	35:CH:63:ARG:HG3	1.94	0.50
1:AA:274:G:H3'	1:AA:274:G:H8	1.75	0.50
46:CS:1:MET:O	46:CS:1:MET:HG3	2.11	0.50
39:BL:43:ALA:C	39:BL:45:ALA:N	2.65	0.50
52:CD:44:C:H2'	52:CD:45:C:O4'	2.12	0.50
43:BP:44:ARG:C	43:BP:46:LYS:N	2.65	0.50
31:BA:834:C:O2'	31:BA:835:U:H5'	2.12	0.50
53:BC:19:G:C4'	53:BC:20:G:OP1	2.60	0.50
31:BA:1192:C:H5''	31:BA:1193:G:OP2	2.11	0.50
31:CA:791:G:H2'	31:CA:792:A:H5'	1.94	0.50
31:BA:1291:G:H4'	39:BL:38:GLN:O	2.10	0.50
6:DG:123:ASN:C	6:DG:125:PHE:H	2.15	0.50
1:DA:536:A:C2	1:DA:558:G:C2	3.00	0.50
1:AA:1525:G:O2'	1:AA:1526:G:O5'	2.30	0.50
4:DE:134:ILE:HA	4:DE:137:HIS:CD2	2.46	0.50
15:DR:54:ARG:HG2	15:DR:54:ARG:HH11	1.77	0.50
1:AA:1281:G:C5	1:AA:1282:U:C5	3.00	0.50
18:DS:95:ILE:O	18:DS:95:ILE:HG12	2.12	0.50
31:BA:1123:A:O3'	40:BM:36:GLY:HA3	2.11	0.50
2:AB:25:A:H2'	2:AB:26:A:H5'	1.94	0.50
31:CA:720:C:H5'	48:CU:50:ILE:O	2.12	0.50
31:BA:134:A:H61	46:BS:25:ARG:NH1	2.09	0.50
43:CP:46:LYS:HE3	43:CP:47:ASP:OD2	2.11	0.50
1:AA:1956:U:C2'	1:AA:1957:C:H5'	2.41	0.50
35:CH:18:ARG:NH2	35:CH:25:ARG:HB3	2.27	0.50
21:AV:143:GLY:HA2	21:AV:144:LEU:O	2.12	0.50
32:BE:32:ILE:HD13	32:BE:40:HIS:CD2	2.47	0.50
24:DW:51:ARG:CG	24:DW:52:ASP:N	2.75	0.50
40:CM:35:SER:OG	40:CM:73:ASP:HB2	2.11	0.50
7:DH:16:SER:O	7:DH:17:VAL:HG23	2.11	0.50
23:DZ:11:ARG:HB2	23:DZ:12:PRO:HD2	1.94	0.50
1:DA:1600:C:O2'	1:DA:1601:G:H5'	2.11	0.50
3:DD:75:ILE:HD13	3:DD:99:ASP:OD1	2.12	0.50
31:BA:862:C:O2'	31:BA:863:U:H5'	2.11	0.50
1:DA:900:A:C5'	1:DA:901:A:OP2	2.59	0.50
1:AA:1060:U:H4'	1:AA:1061:U:O5'	2.12	0.50
31:BA:1160:G:O6	31:BA:1181:G:C6	2.63	0.50
31:CA:1157:A:N6	31:CA:1181:G:C8	2.79	0.50
31:CA:1182:G:O6	56:CA:1792:OHX:N3	2.44	0.50
32:CE:166:ASP:HB3	32:CE:169:LYS:HB3	1.93	0.50
1:DA:2418:A:H2'	1:DA:2419:U:C6	2.47	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
21:DV:132:ASN:ND2	21:DV:159:PRO:HB2	2.26	0.50
2:AB:42:C:O2'	6:AG:67:LYS:HE3	2.12	0.50
31:BA:531:U:C2	56:BA:1791:OHX:N1	2.79	0.50
15:DR:50:ILE:HD12	15:DR:99:LEU:HB2	1.93	0.50
1:DA:2313:C:H3'	1:DA:2313:C:H6	1.76	0.50
1:DA:2303:G:C2	1:DA:2314:C:N3	2.79	0.50
31:BA:415:A:OP2	56:BA:1785:OHX:N5	2.45	0.50
1:AA:508:G:C5	18:AS:9:TYR:CE2	3.00	0.50
31:BA:280:C:C3'	31:BA:281:G:H5'	2.35	0.50
1:DA:2872:G:C6	1:DA:2873:A:N1	2.79	0.50
21:AV:5:LEU:O	21:AV:6:LYS:CB	2.60	0.50
32:BE:212:GLN:O	32:BE:216:SER:HB2	2.11	0.50
36:CI:60:PHE:O	36:CI:61:LEU:HD12	2.12	0.50
8:DK:77:LEU:HD12	8:DK:78:THR:N	2.27	0.50
15:DR:115:ARG:O	15:DR:116:ALA:HB3	2.12	0.50
1:AA:729:G:OP2	3:AD:13:ARG:NH1	2.45	0.50
46:BS:43:LYS:HA	46:BS:48:TRP:HB2	1.94	0.50
1:DA:2531:A:C4'	7:DH:157:TYR:HE2	2.24	0.50
1:AA:1382:G:OP1	56:AA:3473:OHX:N4	2.45	0.50
21:AV:171:ILE:O	21:AV:171:ILE:HG23	2.12	0.50
7:AH:40:GLU:O	7:AH:41:MET:CB	2.59	0.50
1:DA:1639:U:H4'	1:DA:2699:C:H4'	1.94	0.50
13:A0:78:LYS:O	13:A0:83:ILE:HG13	2.12	0.50
17:A2:49:THR:HB	17:A2:50:PRO:HD2	1.92	0.50
9:DM:57:ALA:O	9:DM:58:ASP:OD1	2.30	0.50
29:A7:10:ARG:O	29:A7:14:LYS:HB2	2.11	0.50
31:CA:1292:U:O2'	31:CA:1293:G:H5'	2.10	0.50
18:AS:86:LEU:HD12	18:AS:87:PRO:CD	2.41	0.50
31:BA:663:A:H5''	48:BU:61:LYS:NZ	2.27	0.50
31:CA:1011:G:C6	31:CA:1012:U:C4	3.00	0.50
31:BA:192:U:O3'	50:BW:57:ARG:HD2	2.12	0.50
1:DA:1015:G:C4	1:DA:1148:A:C2	2.99	0.50
31:BA:1221:G:O3'	49:BV:77:THR:HG21	2.11	0.50
24:DW:33:MET:CG	24:DW:37:PHE:HE1	2.25	0.50
1:AA:311:A:C2	1:AA:328:U:O4	2.64	0.50
9:AM:82:LEU:HD12	9:AM:83:LYS:N	2.26	0.50
1:DA:40:C:H2'	1:DA:41:C:H6	1.77	0.50
8:AK:86:THR:HG22	8:AK:86:THR:O	2.11	0.50
37:CJ:122:HIS:O	37:CJ:126:ASP:N	2.41	0.50
32:BE:139:LYS:O	32:BE:143:GLU:HG3	2.11	0.50
31:BA:15:G:C2	31:BA:16:A:C4	3.00	0.50
34:BG:3:ARG:HG2	34:BG:118:ARG:NH1	2.27	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:2771:C:H2'	1:AA:2772:C:C6	2.47	0.50
1:DA:435:C:H2'	1:DA:436:C:H5'	1.93	0.50
42:CO:82:VAL:HG23	42:CO:106:ASP:OD1	2.11	0.50
1:DA:2094:G:H5'	8:DK:25:TYR:CD2	2.47	0.50
16:A1:111:GLU:O	16:A1:113:ALA:N	2.45	0.50
32:CE:22:LYS:HD2	32:CE:35:GLU:OE1	2.12	0.50
48:CU:25:THR:O	48:CU:25:THR:HG22	2.12	0.50
31:CA:403:C:OP2	34:CG:74:GLN:NE2	2.45	0.50
6:DG:165:THR:OG1	6:DG:168:GLU:HG3	2.12	0.50
40:CM:58:ASP:O	40:CM:59:SER:C	2.50	0.50
44:CQ:44:LEU:HD12	44:CQ:44:LEU:O	2.11	0.50
3:DD:32:SER:HA	3:DD:36:PRO:HD2	1.94	0.50
1:AA:1312:U:C5'	1:AA:1312:U:H6	2.24	0.50
52:CD:14:A:H3'	52:CD:15:G:C5'	2.39	0.50
31:CA:1371:G:OP1	39:CL:11:LYS:HG2	2.12	0.50
50:BW:53:LEU:H	50:BW:53:LEU:CD2	2.24	0.50
11:AO:38:GLN:HG3	11:AO:45:LEU:HD13	1.94	0.50
49:BV:62:ILE:HA	49:BV:66:MET:SD	2.52	0.50
26:A4:12:ALA:C	26:A4:24:THR:HG21	2.33	0.50
1:DA:1105:U:O2'	1:DA:1106:G:H5'	2.12	0.50
1:DA:1761:C:N4	1:DA:1762:A:H62	2.09	0.50
46:CS:50:LYS:O	46:CS:51:VAL:HG23	2.11	0.50
1:AA:2629:A:O2'	1:AA:2630:G:C5'	2.51	0.50
34:CG:163:GLU:C	34:CG:165:MET:H	2.14	0.50
1:AA:960:A:C8	1:AA:962:G:C8	2.99	0.50
53:BC:1:C:N4	53:BC:74:A:C2	2.57	0.50
42:CO:46:LYS:HG2	42:CO:47:LYS:N	2.27	0.50
45:CR:21:ASP:OD1	45:CR:24:SER:OG	2.17	0.50
1:DA:2738:A:C2	1:DA:2739:U:H1'	2.47	0.50
31:CA:1034:G:H8	31:CA:1034:G:O5'	1.95	0.50
30:D8:16:ILE:CD1	30:D8:57:ARG:HG2	2.42	0.50
4:DE:8:LYS:HG2	4:DE:192:ASN:HA	1.94	0.50
1:DA:523:C:C2'	1:DA:524:U:H5'	2.42	0.50
31:CA:386:C:C2'	31:CA:387:U:H5'	2.41	0.50
32:BE:87:ARG:NH1	32:BE:220:ASP:OD1	2.33	0.50
34:CG:173:TRP:CD1	34:CG:174:LEU:HG	2.47	0.50
19:AT:41:ASN:HD22	19:AT:41:ASN:N	2.10	0.50
15:DR:125:ARG:HB3	15:DR:129:ARG:CZ	2.41	0.50
50:BW:26:ASN:H	50:BW:26:ASN:ND2	2.05	0.50
1:AA:1042:G:H2'	1:AA:1043:C:O4'	2.11	0.50
21:DV:5:LEU:O	21:DV:59:LEU:O	2.29	0.50
1:DA:807:U:C2'	1:DA:808:G:O5'	2.60	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:2378:A:C5'	14:AQ:23:ARG:NH1	2.74	0.50
1:AA:2490:G:N2	56:AA:3330:OHX:N6	2.59	0.50
5:AF:191:ARG:HB3	5:AF:191:ARG:HH11	1.77	0.50
5:AF:128:ALA:O	5:AF:129:PHE:CB	2.59	0.50
31:BA:1016:A:H2'	31:BA:1017:G:O4'	2.12	0.50
31:CA:838:G:H2'	31:CA:841:U:H5''	1.93	0.50
1:AA:115:C:C2'	1:AA:116:C:H5'	2.42	0.50
31:BA:1173:G:C5	31:BA:1174:G:C8	2.99	0.50
1:AA:662:G:O2'	1:AA:663:G:H5'	2.11	0.50
31:BA:685:G:O2'	31:BA:686:U:H5'	2.12	0.50
53:CC:43:G:C2	53:CC:44:A:C8	3.00	0.50
31:CA:29:G:O2'	31:CA:30:U:H5'	2.12	0.50
31:CA:374:A:C6	31:CA:375:U:C4	2.99	0.50
1:DA:1948:G:C2'	1:DA:1949:G:H5'	2.42	0.50
1:AA:1468:C:H2'	1:AA:1469:A:C8	2.46	0.50
37:BJ:22:LEU:HG	37:BJ:97:GLN:HE22	1.77	0.50
1:AA:830:G:OP2	56:AA:3556:OHX:N4	2.45	0.50
41:BN:28:THR:OG1	41:BN:90:GLY:HA3	2.11	0.50
3:DD:18:VAL:HG23	3:DD:19:ALA:N	2.27	0.50
1:DA:1783:A:C2	1:DA:2587:A:C5	3.00	0.50
28:A6:25:LYS:CE	28:A6:27:LYS:HD3	2.42	0.49
1:AA:2056:G:N3	1:AA:2056:G:H2'	2.27	0.49
11:AO:35:HIS:O	11:AO:36:LYS:O	2.30	0.49
31:CA:965:A:C2	31:CA:969:A:C2	3.00	0.49
43:CP:93:ARG:HH11	1:DA:887:A:H1'	1.76	0.49
17:D2:88:ARG:O	17:D2:89:GLN:O	2.30	0.49
1:AA:908:C:O2'	1:AA:909:A:H5'	2.12	0.49
31:CA:503:C:O2'	31:CA:504:C:H5'	2.10	0.49
34:CG:62:GLN:HE22	34:CG:65:ARG:HH21	1.60	0.49
52:BD:38:MIA:H111	52:BD:39:A:H1'	1.94	0.49
52:BD:16:C:N4	52:BD:68:A:H2'	2.27	0.49
31:CA:1354:C:O2	31:CA:1369:C:O2	2.30	0.49
31:BA:1336:C:O2	31:BA:1336:C:H2'	2.12	0.49
28:D6:24:GLU:CG	28:D6:25:LYS:H	2.17	0.49
31:CA:1446:A:N6	15:DR:118:ARG:NH2	2.59	0.49
54:B1:11:U:HO2'	54:B1:12:A:N3	1.48	0.49
31:BA:1394:A:H4'	31:BA:1395:C:OP2	2.11	0.49
31:BA:148:G:O6	56:BA:1756:OHX:N2	2.46	0.49
31:BA:179:A:C2'	31:BA:180:U:O5'	2.60	0.49
16:D1:19:LYS:O	16:D1:21:ALA:N	2.45	0.49
1:DA:1678:G:N2	1:DA:1989:G:N2	2.39	0.49
1:AA:1952:A:C6	1:AA:1953:A:C6	2.99	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1060:U:O4'	1:DA:1062:G:H5'	2.12	0.49
1:DA:1005:C:O2	1:DA:1143:A:C6	2.65	0.49
1:DA:1140:C:O3'	9:DM:25:ARG:NH2	2.43	0.49
31:CA:87:A:N1	31:CA:88:C:C5	2.80	0.49
1:AA:676:A:H2	1:AA:802:A:H61	1.55	0.49
1:DA:1168:G:C2	1:DA:1182:A:C2	3.00	0.49
1:DA:2466:C:C2'	1:DA:2467:C:H5'	2.42	0.49
50:CW:50:GLU:N	50:CW:100:ILE:HG12	2.27	0.49
11:DO:39:LYS:HB2	11:DO:45:LEU:HD21	1.94	0.49
13:A0:2:ARG:HG3	13:A0:5:LYS:HZ2	1.75	0.49
6:DG:67:LYS:HD2	26:D4:6:HIS:NE2	2.27	0.49
3:DD:176:ARG:NH1	3:DD:176:ARG:CG	2.65	0.49
1:DA:2749:A:H1'	7:DH:63:SER:OG	2.12	0.49
39:CL:4:TYR:O	39:CL:18:PHE:HA	2.12	0.49
39:CL:5:TYR:CD2	39:CL:18:PHE:HE2	2.29	0.49
31:CA:436:C:O2'	31:CA:437:U:H5'	2.12	0.49
8:AK:35:LEU:O	8:AK:36:ALA:CB	2.59	0.49
1:DA:1475:G:H5'	1:DA:1476:C:OP2	2.12	0.49
1:DA:918:A:H1'	2:DB:80:U:O2'	2.11	0.49
39:CL:97:LYS:N	39:CL:98:PRO:CD	2.75	0.49
1:AA:1109:C:N4	1:AA:1110:G:N2	2.59	0.49
1:AA:654(S):G:H1'	1:AA:654(T):A:C8	2.47	0.49
53:CC:2:G:O6	53:CC:72:C:N3	2.44	0.49
1:DA:2439:A:H8	1:DA:2439:A:C5'	2.23	0.49
1:DA:943:U:OP2	11:DO:36:LYS:HE3	2.12	0.49
3:AD:12:SER:HB2	3:AD:208:LYS:HB3	1.94	0.49
1:DA:84:A:H5''	20:DU:8:LYS:HG2	1.94	0.49
1:DA:747:U:O2	1:DA:2014:A:H1'	2.12	0.49
46:BS:39:TYR:CD1	46:BS:40:ASP:N	2.78	0.49
1:AA:1288:U:H4'	1:AA:1289:C:OP2	2.12	0.49
3:DD:231:HIS:ND1	3:DD:232:PRO:CD	2.73	0.49
37:BJ:15:ASP:OD1	37:BJ:18:TYR:HD1	1.94	0.49
17:D2:35:LEU:H	17:D2:35:LEU:HD23	1.77	0.49
31:CA:756:C:H2'	31:CA:757:U:O4'	2.12	0.49
33:CF:106:VAL:O	33:CF:109:PRO:HD3	2.11	0.49
31:BA:600:C:H2'	31:BA:600:C:O2	2.11	0.49
1:DA:796:C:C2'	1:DA:797:C:O5'	2.60	0.49
1:DA:1858:G:C6	1:DA:1883:G:C6	3.00	0.49
1:AA:2182:G:N2	1:AA:2183:C:O2	2.45	0.49
31:CA:1111:A:N7	31:CA:1112:C:C5	2.80	0.49
1:DA:2371:G:O2'	28:D6:46:HIS:CD2	2.62	0.49
16:D1:110:VAL:HA	16:D1:113:ALA:HB3	1.94	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:754:C:H2'	1:AA:755:C:C6	2.47	0.49
38:CK:109:ILE:HD11	38:CK:111:ILE:HG12	1.94	0.49
31:BA:1379:G:O2'	31:BA:1380:U:H5'	2.12	0.49
40:BM:81:THR:OG1	40:BM:82:ILE:N	2.45	0.49
1:AA:216:A:C4	1:AA:432:A:C2	3.00	0.49
8:AK:86:THR:HA	8:AK:123:LEU:CD1	2.42	0.49
3:AD:145:VAL:HB	3:AD:155:LEU:HB2	1.94	0.49
31:CA:284:G:H2'	31:CA:285:G:C8	2.47	0.49
1:DA:548:A:H2'	1:DA:549:G:O4'	2.12	0.49
31:CA:639:G:N2	31:CA:640:A:C4	2.80	0.49
1:AA:340:A:C2'	1:AA:341:G:H5'	2.42	0.49
1:DA:920:G:O2'	1:DA:921:G:H5'	2.11	0.49
35:BH:59:GLY:O	35:BH:62:ALA:HB3	2.11	0.49
22:A3:25:ARG:HD2	22:A3:29:GLN:NE2	2.26	0.49
11:DO:132:LYS:C	11:DO:134:ALA:H	2.15	0.49
31:CA:43:C:H42	31:CA:399:G:H1	1.59	0.49
36:CI:91:VAL:HG13	48:CU:72:ARG:NH2	2.27	0.49
44:CQ:9:LYS:HA	44:CQ:12:ARG:HD3	1.93	0.49
9:DM:123:TYR:CZ	9:DM:129:PRO:HD3	2.47	0.49
1:AA:578:A:OP1	1:AA:1255:U:O2'	2.20	0.49
1:DA:893:C:C4'	1:DA:894:C:OP1	2.60	0.49
1:DA:2276:G:OP1	12:DP:84:GLY:HA2	2.12	0.49
17:D2:77:ALA:O	17:D2:78:LYS:HG3	2.09	0.49
31:CA:1322:C:O2	31:CA:1322:C:C2'	2.53	0.49
52:CD:11:C:C4	52:CD:12:C:C5	3.00	0.49
8:AK:131:LYS:CB	8:AK:132:PRO:HA	2.23	0.49
53:CC:48:U:C1'	53:CC:49:C:O5'	2.59	0.49
33:BF:92:ALA:HA	33:BF:95:THR:HB	1.94	0.49
17:A2:3:ALA:HA	17:A2:40:LEU:O	2.12	0.49
31:CA:1127:G:C2	31:CA:1145:C:C2	3.00	0.49
40:BM:5:ARG:HB2	40:BM:73:ASP:CG	2.31	0.49
34:BG:76:ARG:CD	34:BG:207:TYR:HE2	2.25	0.49
1:DA:2378:A:H5''	14:DQ:23:ARG:HH12	1.77	0.49
1:DA:1048:A:H5'	1:DA:1049:C:OP2	2.12	0.49
31:BA:266:G:N2	31:BA:269:C:C5	2.80	0.49
31:CA:1024:G:H2'	31:CA:1025:U:C5	2.46	0.49
1:DA:1731:G:H2'	1:DA:1732:A:O4'	2.12	0.49
35:CH:90:VAL:O	35:CH:120:THR:HA	2.11	0.49
42:CO:68:ALA:HA	42:CO:98:TYR:O	2.12	0.49
31:CA:577:G:N7	56:CA:1771:OHX:N2	2.60	0.49
31:CA:814:A:H2'	31:CA:816:A:H5''	1.92	0.49
33:CF:113:ALA:HB3	33:CF:114:PRO:CD	2.34	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:DU:94:LYS:O	20:DU:101:LYS:HB2	2.12	0.49
4:DE:199:ARG:HB3	4:DE:200:GLU:OE1	2.13	0.49
1:AA:1586:A:H3'	1:AA:1587:A:C8	2.47	0.49
1:DA:2287:A:N6	1:DA:2344:U:C2	2.81	0.49
1:DA:2665:A:H2'	1:DA:2666:C:O4'	2.11	0.49
53:BC:48:U:C2'	53:BC:49:C:OP2	2.59	0.49
31:BA:610:G:O2'	31:BA:611:A:H5'	2.12	0.49
1:DA:2688:U:H1'	1:DA:2721:A:N6	2.26	0.49
32:BE:4:GLU:O	32:BE:5:ILE:HG23	2.13	0.49
5:AF:172:TRP:CE3	5:AF:173:VAL:HG23	2.48	0.49
31:BA:129(A):G:N2	31:BA:191(A):G:N7	2.60	0.49
43:CP:40:ASN:HB3	43:CP:43:THR:CG2	2.40	0.49
31:BA:135:C:H2'	31:BA:136:C:C5'	2.40	0.49
1:DA:107:C:C2	1:DA:108:U:C5	3.00	0.49
34:CG:138:TYR:C	34:CG:138:TYR:CD2	2.86	0.49
50:BW:71:THR:HG22	50:BW:72:LEU:H	1.77	0.49
1:DA:1577:C:H2'	1:DA:1578:U:C1'	2.43	0.49
31:BA:723:U:O2	31:BA:723:U:C2'	2.59	0.49
31:CA:956:U:C2	31:CA:1225:A:H2	2.30	0.49
1:DA:1404:C:C2'	1:DA:1405:U:H5'	2.42	0.49
31:BA:51:A:C2	31:BA:353:A:N1	2.80	0.49
31:BA:606:G:H2'	31:BA:606:G:N3	2.27	0.49
1:AA:2248:C:C2'	1:AA:2249:U:H5'	2.42	0.49
12:DP:35:VAL:HG21	21:DV:81:ARG:HH21	1.77	0.49
33:CF:18:TRP:HE1	44:CQ:55:GLY:N	2.11	0.49
5:AF:144:LYS:C	5:AF:146:ALA:N	2.61	0.49
23:DZ:67:ILE:N	23:DZ:68:PRO:CD	2.74	0.49
31:BA:376:G:O3'	46:BS:5:ARG:HD2	2.11	0.49
7:DH:117:PRO:HB3	7:DH:123:PHE:CZ	2.46	0.49
7:DH:141:VAL:HG12	7:DH:142:GLY:N	2.25	0.49
1:AA:2182:G:C2	1:AA:2183:C:C2	3.00	0.49
32:CE:45:GLN:O	32:CE:47:THR:N	2.45	0.49
31:CA:922:G:H4'	35:CH:20:GLN:HA	1.93	0.49
23:AZ:40:ARG:HH21	23:AZ:42:GLN:HG2	1.76	0.49
1:AA:1638:C:H2'	1:AA:1639:U:O4'	2.12	0.49
31:CA:491:G:C4	31:CA:492:G:C8	3.00	0.49
1:DA:2233:U:OP1	56:DA:3258:OHX:N2	2.45	0.49
4:DE:14:ILE:HB	15:DR:14:TYR:CE1	2.47	0.49
1:DA:1349:A:N6	1:DA:1598:C:N4	2.60	0.49
36:CI:8:ILE:H	36:CI:8:ILE:HD12	1.77	0.49
31:CA:784:C:H4'	1:DA:1837:C:OP1	2.12	0.49
1:AA:869:G:H2'	1:AA:870:A:H8	1.77	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1042:G:H2'	31:CA:1043:C:O4'	2.12	0.49
1:DA:733:G:O5'	1:DA:733:G:H8	1.95	0.49
10:AN:49:ARG:HH22	31:BA:1423:G:P	2.35	0.49
1:AA:1373:A:H2'	1:AA:1374:G:O4'	2.11	0.49
31:CA:10:A:H2'	31:CA:11:G:H8	1.77	0.49
18:AS:59:VAL:HG12	18:AS:60:ASN:OD1	2.12	0.49
34:CG:70:ILE:HG23	34:CG:75:PHE:HB2	1.95	0.49
1:DA:1392:A:N6	1:DA:1393:A:N6	2.60	0.49
1:DA:1643:G:H2'	1:DA:1644:C:O5'	2.11	0.49
31:CA:306:G:O5'	31:CA:306:G:H8	1.95	0.49
43:CP:116:THR:O	43:CP:116:THR:HG22	2.13	0.49
31:BA:742:G:O6	56:BA:1792:OHX:N5	2.45	0.49
31:CA:697:U:H2'	31:CA:698:G:H5'	1.93	0.49
9:DM:132:ALA:O	9:DM:133:GLN:C	2.50	0.49
9:DM:56:ASN:HA	9:DM:125:GLY:C	2.33	0.49
27:D5:4:HIS:HB3	27:D5:5:PRO:HD3	1.72	0.49
3:AD:35:LYS:HE2	3:AD:65:ILE:HG22	1.94	0.49
1:DA:779:U:OP1	3:DD:49:ILE:CG2	2.60	0.49
31:CA:1197:G:C2	31:CA:1198:G:C8	3.01	0.49
39:CL:114:TYR:N	39:CL:114:TYR:HD2	2.05	0.49
52:CD:48:C:H2'	52:CD:49:A:C8	2.47	0.49
31:BA:1004:A:C2	31:BA:1005:A:C2	3.00	0.49
31:BA:1340:A:C2	31:BA:1341:U:O2	2.65	0.49
30:D8:34:TRP:C	30:D8:36:LYS:N	2.63	0.49
9:AM:86:PRO:HD2	9:AM:89:LYS:HB3	1.93	0.49
26:A4:36:CYS:C	26:A4:39:CYS:SG	2.90	0.49
31:BA:148:G:C2	31:BA:149:A:C8	3.01	0.49
1:AA:2143:C:N3	1:AA:2149:G:C2	2.80	0.49
31:CA:1278:U:C2'	31:CA:1278:U:O2	2.59	0.49
31:CA:1366:C:OP1	39:CL:117:HIS:CE1	2.65	0.49
16:A1:92:ARG:HB3	17:A2:11:GLN:HE22	1.76	0.49
50:BW:34:LYS:O	50:BW:35:THR:C	2.51	0.49
31:BA:557:G:N1	31:BA:558:G:C2	2.80	0.49
14:DQ:87:PHE:HD1	14:DQ:112:PHE:CE2	2.30	0.49
1:DA:1050:A:C5	1:DA:2751:G:N1	2.81	0.49
1:DA:2468:G:O6	56:DA:3173:OHX:N4	2.45	0.49
1:AA:2481:G:O2'	1:AA:2482:G:P	2.70	0.49
26:D4:34:GLU:CD	26:D4:34:GLU:H	2.15	0.49
31:CA:518:C:H4'	31:CA:519:C:O5'	2.12	0.49
31:CA:363:A:C5	42:CO:31:PRO:HD2	2.47	0.49
1:DA:319:C:C2	1:DA:333:G:N2	2.80	0.49
8:AK:62:LYS:O	8:AK:66:GLU:HG2	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1298:C:OP2	37:CJ:114:ARG:NH2	2.43	0.49
1:DA:2291:U:O2'	1:DA:2374:C:O2	2.28	0.49
33:BF:15:THR:HG21	33:BF:181:ASN:HA	1.93	0.49
31:BA:282:A:H2'	31:BA:282:A:N3	2.26	0.49
6:DG:33:ARG:H	6:DG:162:THR:HG23	1.78	0.49
36:CI:2:ARG:O	36:CI:66:GLU:HA	2.10	0.49
12:AP:26:TYR:O	12:AP:27:VAL:O	2.30	0.49
31:CA:1072:G:C5	31:CA:1073:U:C4	3.01	0.49
1:DA:1545(A):A:N7	1:DA:1546:C:O2	2.45	0.49
1:AA:528:A:C2	1:AA:2043:C:H5'	2.46	0.49
1:AA:945:A:N6	1:AA:2448:A:C5	2.80	0.49
34:CG:127:THR:HG21	34:CG:149:ALA:CB	2.42	0.49
1:AA:2863:C:O2'	1:AA:2864:G:H5'	2.12	0.49
1:AA:1206:G:C4	1:AA:1207:C:C5	3.00	0.49
1:DA:911:A:H2'	12:DP:9:TYR:OH	2.12	0.49
1:DA:1776:G:C2	1:DA:1777:U:C6	3.01	0.49
1:AA:511:U:O4	1:AA:512:G:N1	2.45	0.49
1:AA:1183:G:O6	56:AA:3412:OHX:N6	2.46	0.49
31:CA:491:G:C5	31:CA:492:G:C8	3.00	0.49
31:CA:54:C:C4	31:CA:352:C:H5	2.30	0.49
1:DA:1592:C:O2'	1:DA:1593:G:H5'	2.11	0.49
10:AN:24:VAL:HG23	10:AN:33:ALA:HB2	1.94	0.49
31:BA:1267:C:H5''	31:BA:1268:A:OP2	2.12	0.49
31:BA:1267:C:C5	31:BA:1268:A:N7	2.81	0.49
1:DA:2350:C:H2'	1:DA:2351:G:O4'	2.12	0.49
1:AA:1198:U:O2	1:AA:1249:U:H1'	2.11	0.49
33:CF:66:VAL:HG12	33:CF:67:THR:N	2.25	0.49
31:CA:1087:G:OP2	56:CA:1735:OHX:N3	2.45	0.49
1:DA:270(I):G:H1	1:DA:270(Q):C:H42	1.60	0.49
1:AA:1824:G:OP1	3:AD:52:ARG:HD3	2.11	0.49
52:BB:77:C:H2'	52:BB:78:C:C6	2.46	0.49
44:BQ:44:LEU:HD12	44:BQ:44:LEU:C	2.33	0.49
1:AA:2667:C:H2'	1:AA:2668:G:O4'	2.13	0.49
12:AP:21:THR:OG1	12:AP:101:ARG:N	2.45	0.49
1:AA:2415:G:H4'	11:AO:67:MET:N	2.27	0.49
31:CA:1320:C:C2	49:CV:72:GLY:HA3	2.48	0.49
40:CM:56:HIS:C	40:CM:58:ASP:N	2.66	0.49
1:DA:887:A:N3	1:DA:887:A:H2'	2.27	0.49
3:DD:30:GLU:HG3	3:DD:63:ARG:CZ	2.42	0.49
5:DF:24:LEU:CB	5:DF:25:PRO:CD	2.85	0.49
16:D1:27:LEU:N	16:D1:27:LEU:CD2	2.75	0.49
1:AA:2315:G:C6	1:AA:2316:C:C4	3.01	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:BD:61:G:H2'	52:BD:62:G:C8	2.48	0.49
31:CA:1160:G:H22	31:CA:1177:G:H21	1.61	0.49
31:BA:1305:G:N2	31:BA:1331:G:C4	2.80	0.49
1:AA:1833:U:C2	1:AA:1834:U:C6	3.00	0.49
1:AA:1731:G:C2'	1:AA:1732:A:O5'	2.60	0.49
1:AA:2154:G:H2'	1:AA:2155:G:H8	1.77	0.49
1:AA:1057:A:C8	1:AA:1086:A:C4	3.01	0.49
8:AK:140:LEU:H	8:AK:140:LEU:CD2	2.16	0.49
31:BA:1375:A:C2	31:BA:1376:U:C2	3.01	0.49
31:CA:1129:C:C5	31:CA:1133:G:O6	2.65	0.49
2:DB:15:A:C5'	2:DB:16:G:C8	2.91	0.49
1:AA:592:G:N3	30:A8:4:MET:HE1	2.28	0.49
6:AG:129:GLY:O	6:AG:161:THR:HB	2.12	0.49
1:AA:2809:A:N6	1:AA:2892:A:C8	2.80	0.49
34:CG:159:ARG:O	34:CG:162:LEU:N	2.40	0.49
1:AA:2723:C:O3'	13:A0:1:MET:HE3	2.11	0.49
8:AK:64:GLU:C	8:AK:66:GLU:N	2.61	0.49
38:BK:137:VAL:HG12	38:BK:138:TRP:N	2.27	0.49
1:AA:643:A:HO2'	1:AA:644:A:H5'	1.75	0.49
15:AR:56:GLY:O	15:AR:59:THR:CG2	2.57	0.49
1:DA:2299:G:C6	1:DA:2318:G:C8	3.01	0.49
1:AA:62:C:N3	1:AA:92:G:N2	2.52	0.49
1:AA:2877:G:H2'	1:AA:2878:U:O4'	2.11	0.49
31:BA:191(C):G:C6	31:BA:191(D):U:N3	2.80	0.49
1:DA:945:A:C4	1:DA:2448:A:N3	2.80	0.49
22:A3:49:LYS:H	22:A3:80:HIS:CG	2.30	0.49
31:CA:305:G:O6	56:CA:1810:OHX:N2	2.45	0.49
46:BS:50:LYS:HD3	46:BS:51:VAL:H	1.76	0.49
13:A0:12:ARG:HH11	13:A0:12:ARG:HG3	1.77	0.49
10:DN:119:PRO:HB2	15:DR:68:TYR:CZ	2.48	0.49
1:DA:1387:C:C2	1:DA:1388:G:C8	3.00	0.49
31:CA:742:G:OP2	45:CR:35:ARG:NH2	2.45	0.49
31:CA:931:C:C2'	31:CA:932:C:O5'	2.61	0.49
1:AA:34:C:O4'	1:AA:34:C:OP2	2.30	0.49
31:CA:149:A:C2	31:CA:150:C:C2	3.01	0.49
31:CA:198:G:C2	31:CA:199:G:C4	3.00	0.49
36:BI:23:LYS:NZ	36:BI:42:GLU:OE1	2.38	0.49
31:CA:1009:G:C2	31:CA:1010:G:C8	3.00	0.49
31:BA:1466:C:H2'	31:BA:1467:G:O4'	2.13	0.49
31:BA:890:G:N2	31:BA:906:G:H2'	2.27	0.49
31:BA:589:C:C4	31:BA:590:C:C5	3.00	0.49
37:BJ:26:PHE:CD1	37:BJ:62:PHE:HE1	2.30	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:2038:G:H2'	1:AA:2039:C:C6	2.48	0.49
39:BL:55:ALA:HB1	39:BL:59:PHE:CD1	2.47	0.49
5:DF:65:TRP:HB3	5:DF:66:PRO:HD2	1.94	0.49
42:CO:23:LYS:HD3	42:CO:23:LYS:H	1.76	0.49
31:CA:391:G:C6	31:CA:392:G:C5	3.00	0.49
2:DB:13:A:N1	2:DB:69:G:O2'	2.34	0.49
3:DD:16:MET:HB2	3:DD:207:GLY:HA3	1.94	0.49
32:CE:121:LEU:HD22	32:CE:127:ILE:HD13	1.95	0.49
35:CH:145:LYS:O	35:CH:149:GLU:HG2	2.12	0.49
1:DA:702:G:C2	1:DA:731:C:C2	3.00	0.49
19:AT:5:TYR:CZ	24:AW:30:ARG:HB2	2.47	0.49
18:DS:54:ALA:HB1	18:DS:107:LEU:HD22	1.93	0.49
1:DA:1354:A:H2'	1:DA:1355:G:O4'	2.13	0.49
31:CA:1031:G:O6	31:CA:1032:A:N6	2.44	0.49
15:AR:13:ARG:HG3	15:AR:13:ARG:O	2.11	0.49
32:CE:115:LEU:O	32:CE:115:LEU:HG	2.11	0.49
1:AA:1710:C:O2'	1:AA:1711:C:H5'	2.12	0.49
1:AA:2255:G:H21	12:AP:85:LYS:CE	1.95	0.49
1:DA:2271:G:OP1	22:D3:18:ALA:HB1	2.12	0.49
4:DE:58:ARG:C	4:DE:60:ASN:N	2.63	0.49
11:DO:31:ALA:C	11:DO:33:ARG:H	2.16	0.49
40:CM:50:ILE:HA	40:CM:60:ARG:HB3	1.93	0.49
1:AA:1312:U:H6	1:AA:1312:U:H5'	1.76	0.49
1:AA:2308:G:N3	1:AA:2308:G:H2'	2.27	0.49
1:AA:880:G:N2	1:AA:898:C:C2	2.81	0.49
17:D2:69:LYS:O	17:D2:70:ILE:HG12	2.12	0.49
31:BA:1007:C:H42	31:BA:1022:G:H1	1.59	0.49
30:D8:30:ARG:O	30:D8:31:HIS:O	2.30	0.49
1:AA:2157:G:HO2'	1:AA:2158:A:P	2.36	0.49
1:DA:996:A:N6	1:DA:1160:G:C6	2.80	0.49
52:BB:10:C:H2'	52:BB:11:C:H6	1.74	0.49
1:DA:1025:G:H8	1:DA:1025:G:OP1	1.95	0.49
17:A2:35:LEU:HD21	17:A2:57:VAL:HG13	1.94	0.49
31:BA:1152:A:C6	31:BA:1153:C:C4	3.01	0.49
1:AA:1017:G:C6	1:AA:1018:C:C5	3.00	0.49
52:CB:51:C:H3'	52:CB:52:G:H8	1.66	0.49
31:CA:1047:G:H2'	31:CA:1048:G:H5'	1.93	0.49
35:BH:150:ARG:HB2	35:BH:150:ARG:CZ	2.41	0.49
31:BA:8:A:N6	34:BG:205:GLU:O	2.44	0.49
31:CA:509:A:H5''	34:CG:55:ALA:HB2	1.95	0.49
31:CA:577:G:O2'	31:CA:578:C:H5'	2.12	0.49
48:CU:23:LYS:H	48:CU:26:LEU:HD11	1.77	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:422:C:H2'	31:BA:422:C:O2	2.12	0.49
31:CA:429:U:H1'	31:CA:430:A:H5''	1.94	0.49
31:CA:1394:A:C5	31:CA:1501:C:H4'	2.48	0.49
19:AT:7:VAL:HB	19:AT:8:ILE:HD12	1.93	0.49
1:DA:524:U:H2'	1:DA:525:U:C6	2.33	0.49
35:CH:62:ALA:O	35:CH:63:ARG:C	2.50	0.49
7:DH:20:ALA:HB1	7:DH:21:PRO:HD2	1.94	0.49
7:AH:122:THR:O	7:AH:134:SER:OG	2.31	0.49
34:CG:108:LEU:HD11	34:CG:174:LEU:HB3	1.94	0.49
31:CA:421:U:C2'	31:CA:421:U:O2	2.57	0.49
31:BA:526:C:OP2	42:BO:91:LYS:HE3	2.12	0.49
34:CG:118:ARG:HA	34:CG:121:VAL:CG2	2.39	0.49
1:DA:1359:A:C8	1:DA:1372:U:O4	2.66	0.49
31:CA:467:G:N3	31:CA:467:G:H2'	2.26	0.49
31:CA:960:U:O2	31:CA:960:U:C2'	2.60	0.49
3:DD:70:TRP:CH2	3:DD:150:LYS:HA	2.47	0.49
9:DM:57:ALA:H	9:DM:124:ALA:HA	1.77	0.49
1:AA:2884:U:C2'	1:AA:2885:C:H5'	2.42	0.49
3:AD:68:LYS:HB3	3:AD:70:TRP:CZ3	2.47	0.49
31:BA:956:U:O2'	31:BA:957:U:H5'	2.12	0.49
34:CG:111:ALA:HB2	34:CG:120:LEU:CD1	2.42	0.49
17:D2:99:ILE:O	17:D2:100:ARG:HB3	2.12	0.49
12:DP:34:LEU:HD11	12:DP:129:THR:HB	1.94	0.49
35:CH:80:ILE:HG22	38:CK:104:ARG:NH2	2.28	0.49
5:DF:65:TRP:HB3	5:DF:66:PRO:CD	2.43	0.49
1:DA:1011:G:C6	1:DA:1013:C:N3	2.80	0.49
7:DH:139:GLN:HG3	7:DH:140:LYS:N	2.28	0.49
1:AA:347:A:C2	1:AA:348:G:C5	3.01	0.49
43:CP:15:VAL:HG12	43:CP:45:VAL:HG22	1.93	0.49
1:DA:350:U:OP2	56:DA:3374:OHX:N3	2.45	0.49
1:DA:471:A:OP2	1:DA:471:A:H8	1.94	0.49
1:DA:641:C:H2'	1:DA:642:G:H5'	1.94	0.49
7:DH:149:ARG:HA	7:DH:162:ILE:HG21	1.94	0.49
32:BE:126:GLU:O	32:BE:126:GLU:HG2	2.12	0.49
31:BA:1263:C:O2'	31:BA:1264:C:H5'	2.12	0.49
32:CE:187:LEU:HA	32:CE:201:ILE:HB	1.93	0.49
1:DA:1819:A:H4'	1:DA:1820:U:O5'	2.12	0.49
31:CA:678:U:H2'	31:CA:679:C:C6	2.47	0.49
7:DH:72:ILE:O	7:DH:76:VAL:HG23	2.12	0.49
6:AG:63:ILE:HD12	6:AG:141:PHE:CD2	2.48	0.49
43:CP:84:ILE:HG22	43:CP:86:CYS:HB2	1.95	0.49
1:AA:2298:A:N6	1:AA:2318:G:H1'	2.28	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1253:G:O2'	31:CA:1254:C:H5'	2.12	0.49
1:DA:2418:A:C4	1:DA:2419:U:C6	3.00	0.49
26:A4:42:PHE:CZ	26:A4:43:TYR:HB2	2.47	0.49
31:BA:183:G:H2'	31:BA:184:G:O4'	2.12	0.49
52:BB:52:G:OP2	52:BB:52:G:H8	1.96	0.49
49:BV:41:VAL:HG22	49:BV:67:VAL:O	2.12	0.49
31:CA:1127:G:N2	31:CA:1144:G:N2	2.60	0.49
31:BA:1143:G:H1	31:BA:1144:G:N2	2.10	0.49
39:BL:16:ARG:O	39:BL:63:ILE:HG23	2.13	0.49
1:AA:2846:G:H2'	1:AA:2847:U:H6	1.76	0.49
1:DA:1050:A:C6	1:DA:2751:G:C6	3.01	0.49
5:DF:134:GLY:O	5:DF:166:ALA:HA	2.12	0.49
31:BA:255:G:H2'	31:BA:256:U:C6	2.48	0.49
31:BA:86:U:O3'	31:BA:87:A:H4'	2.13	0.49
1:AA:1545(A):A:C2'	1:AA:1546:C:H5'	2.41	0.49
46:CS:43:LYS:HG2	46:CS:48:TRP:CD1	2.47	0.49
1:DA:322:A:C5	1:DA:340:A:C2	3.00	0.49
20:DU:52:SER:OG	20:DU:56:PRO:HA	2.12	0.49
1:DA:1036:G:OP1	7:DH:59:ARG:N	2.45	0.49
34:CG:24:GLU:O	34:CG:27:TYR:HB3	2.12	0.49
31:CA:987:G:H2'	31:CA:988:G:C8	2.47	0.49
52:CB:6:G:O2'	52:CB:7:G:P	2.71	0.49
20:AU:77:PRO:O	20:AU:78:ALA:CB	2.61	0.49
37:BJ:119:ARG:C	37:BJ:121:ALA:N	2.66	0.49
42:BO:6:THR:N	42:BO:9:GLN:HE21	2.03	0.49
1:AA:90:U:H4'	1:AA:91:A:H8	1.78	0.49
1:AA:566:U:H5	17:A2:78:LYS:HG2	1.77	0.49
1:AA:2840:C:H2'	1:AA:2841:C:C6	2.46	0.49
1:AA:2795:G:H3'	1:AA:2797:U:H5''	1.95	0.49
1:AA:2521:C:H42	1:AA:2544:G:H1	1.61	0.49
1:DA:1688:U:O2	1:DA:1700:A:H5'	2.13	0.49
35:CH:6:PHE:HB2	35:CH:34:VAL:HG22	1.93	0.49
2:DB:5:C:O2'	2:DB:27:C:O2	2.30	0.49
1:AA:16:G:O6	56:AA:3384:OHX:N6	2.46	0.49
1:DA:1913:A:H4'	1:DA:1914:C:C5'	2.43	0.49
31:CA:298:A:H8	31:CA:298:A:O5'	1.95	0.49
33:BF:6:HIS:NE2	33:BF:184:TYR:CE2	2.81	0.49
1:DA:2360:A:H2'	1:DA:2361:A:O4'	2.13	0.49
31:CA:1069:C:H4'	31:CA:1192:C:O2	2.13	0.49
1:DA:2224:G:OP1	3:DD:268:ARG:NH1	2.46	0.49
31:BA:292:G:N2	31:BA:309:G:C4	2.80	0.49
52:CB:55:U:H2'	52:CB:56:U:O4'	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:CJ:79:ARG:HD3	37:CJ:84:ASN:OD1	2.13	0.49
47:CT:81:ARG:HE	47:CT:84:LEU:CD1	2.25	0.49
31:CA:780:A:H2'	31:CA:781:A:OP2	2.12	0.49
19:AT:26:TYR:CD1	19:AT:89:ILE:HD13	2.48	0.49
1:AA:2022:U:O2'	1:AA:2617:C:H5'	2.12	0.49
31:CA:129(A):G:C6	31:CA:188:U:H4'	2.47	0.49
9:DM:120:LEU:HD21	9:DM:122:VAL:HG23	1.93	0.49
31:BA:562:C:O2	42:BO:15:ARG:O	2.31	0.49
1:DA:2527:C:C4	1:DA:2528:U:C5	3.01	0.49
14:DQ:42:ASP:C	14:DQ:44:LYS:H	2.15	0.49
1:AA:1376:C:O2'	1:AA:1377:G:H5'	2.12	0.49
3:AD:52:ARG:HB2	3:AD:53:PHE:CD2	2.48	0.49
31:BA:1263:C:H2'	31:BA:1264:C:C6	2.47	0.49
32:CE:114:ARG:HA	32:CE:117:GLU:HB2	1.95	0.49
31:CA:257:G:H2'	31:CA:258:G:O4'	2.13	0.49
1:AA:205:G:O2'	1:AA:206:U:OP2	2.26	0.49
1:AA:1316:U:H2'	1:AA:1317:A:C8	2.47	0.49
31:CA:613:C:H3'	31:CA:613:C:C6	2.48	0.49
1:AA:654(I):C:H3'	1:AA:654(I):C:O2	2.12	0.49
18:DS:62:HIS:O	18:DS:63:ASP:O	2.30	0.49
47:CT:86:GLU:O	47:CT:90:ILE:HG12	2.13	0.49
9:DM:56:ASN:O	9:DM:56:ASN:OD1	2.31	0.49
1:DA:2255:G:H2'	1:DA:2256:G:H5'	1.94	0.49
1:AA:1567:A:C5'	3:AD:58:HIS:CD2	2.96	0.49
31:CA:1190:G:C8	31:CA:1190:G:H3'	2.47	0.49
31:CA:980:C:H5'	31:CA:981:U:H5	1.77	0.49
32:CE:208:ILE:HA	32:CE:211:ILE:HD12	1.95	0.49
20:DU:61:ILE:CG2	20:DU:62:GLU:OE2	2.61	0.49
31:BA:143:A:N3	31:BA:143:A:H2'	2.28	0.49
31:CA:1346:A:C5	37:CJ:10:ARG:NH1	2.80	0.49
1:DA:1047:G:H2'	1:DA:1110:G:N1	2.28	0.49
1:DA:1169:G:C4	1:DA:1170:G:H1'	2.48	0.49
3:AD:240:ALA:O	3:AD:241:PRO:O	2.30	0.49
1:AA:2468:G:O2'	1:AA:2469:A:H2	1.96	0.49
1:AA:1265:A:H8	1:AA:1265:A:OP1	1.95	0.49
12:AP:77:LYS:O	12:AP:78:PRO:O	2.30	0.49
1:AA:1448:G:H1'	1:AA:1528:A:H62	1.77	0.49
4:DE:203:LYS:O	4:DE:204:ALA:CB	2.60	0.49
42:CO:75:HIS:CD2	42:CO:77:LEU:N	2.75	0.49
4:DE:114:ALA:HB3	4:DE:160:TYR:HB3	1.94	0.49
38:CK:65:TYR:HA	38:CK:79:VAL:HG23	1.95	0.49
21:DV:168:GLU:HG3	21:DV:169:GLU:H	1.78	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:2296:U:H4'	1:DA:2297:C:OP1	2.13	0.49
1:DA:2299:G:N1	1:DA:2318:G:C8	2.80	0.49
31:BA:188:U:O2'	31:BA:189:U:H5'	2.13	0.49
31:BA:1190:G:OP1	33:BF:4:LYS:HA	2.12	0.49
48:BU:73:ALA:CB	48:BU:79:LEU:HD12	2.43	0.49
36:BI:61:LEU:O	36:BI:62:TRP:CB	2.61	0.49
1:AA:1173:G:N1	1:AA:1175:U:O4	2.45	0.49
8:AK:125:GLU:OE1	8:AK:141:LYS:HA	2.12	0.49
1:AA:1492:G:O6	56:AA:3529:OHX:N3	2.45	0.49
31:BA:417:C:H2'	31:BA:418:C:C6	2.45	0.49
31:CA:1382:C:H2'	31:CA:1383:C:C6	2.47	0.49
31:BA:1253:G:H1	31:BA:1284:C:H42	1.61	0.49
21:AV:115:GLY:HA3	21:AV:174:VAL:HG11	1.95	0.49
35:BH:63:ARG:HA	35:BH:66:MET:HE2	1.94	0.49
1:AA:325:G:N2	1:AA:326:G:C4	2.81	0.49
1:AA:2236:C:C2'	1:AA:2237:G:H5'	2.42	0.49
1:DA:247:G:H4'	1:DA:386:G:C5	2.47	0.49
1:DA:1217:C:OP2	16:D1:15:LYS:HE3	2.13	0.49
1:DA:126:A:O5'	29:D7:19:ARG:HG3	2.12	0.49
45:BR:18:PHE:CE1	45:BR:21:ASP:HB2	2.47	0.49
31:BA:158:G:O2'	31:BA:159:G:H5'	2.12	0.49
1:DA:351:G:OP1	56:DA:3486:OHX:N3	2.45	0.49
1:DA:1929:G:OP1	56:DA:3111:OHX:N2	2.45	0.49
1:DA:1779:U:C6	1:DA:1783:A:N7	2.81	0.49
33:BF:116:VAL:HG21	33:BF:202:ILE:HD11	1.93	0.49
31:BA:592:G:C6	31:BA:648:A:C6	3.00	0.49
1:DA:724:U:OP2	56:DA:3401:OHX:N6	2.45	0.49
8:AK:79:ILE:HG22	8:AK:81:VAL:HG13	1.95	0.49
5:DF:204:ASN:OD1	5:DF:204:ASN:N	2.46	0.49
9:DM:127:ASP:O	9:DM:128:HIS:CB	2.60	0.49
1:AA:2255:G:N2	12:AP:85:LYS:NZ	2.58	0.49
1:DA:2272:U:H5''	1:DA:2273:A:OP1	2.13	0.49
1:DA:907:U:C3'	12:DP:101:ARG:HH22	2.24	0.49
4:DE:48:GLN:NE2	4:DE:78:LEU:HD13	2.28	0.49
31:CA:979:C:H5	31:CA:980:C:H6	1.46	0.49
17:D2:71:LEU:O	17:D2:72:VAL:O	2.30	0.49
52:BD:46:G:C2	52:BD:55:U:C4	3.01	0.49
52:BD:71:C:H2'	52:BD:72:U:C6	2.48	0.49
9:AM:128:HIS:NE2	9:AM:134:ARG:HD2	2.27	0.49
6:AG:115:ARG:O	6:AG:116:ASP:CB	2.61	0.49
17:D2:7:THR:OG1	17:D2:8:GLY:N	2.45	0.49
5:AF:65:TRP:HB2	5:AF:66:PRO:HD2	1.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1071:G:C2	1:AA:1091:G:N7	2.80	0.49
47:BT:85:VAL:O	47:BT:85:VAL:HG12	2.12	0.49
52:CB:48:C:C3'	52:CB:49:A:H8	2.24	0.49
4:AE:115:GLY:HA2	4:AE:157:ALA:CB	2.42	0.49
12:AP:120:ILE:N	12:AP:120:ILE:HD13	2.28	0.49
52:BB:17:G:H21	52:BB:66:G:H2'	1.77	0.49
12:DP:26:TYR:HE1	12:DP:139:GLU:HB2	1.77	0.49
1:AA:2723:C:H2'	1:AA:2724:C:O5'	2.11	0.49
11:AO:101:VAL:O	11:AO:103:ALA:N	2.46	0.49
1:DA:2543:G:H2'	1:DA:2544:G:C8	2.48	0.49
1:DA:2756:U:H1'	1:DA:2757:A:H5''	1.95	0.49
6:AG:124:SER:HB3	6:AG:132:ASN:O	2.13	0.49
1:DA:2606:C:H2'	1:DA:2607:G:H5'	1.95	0.49
31:BA:750:G:C4	31:BA:751:U:C5	3.01	0.49
1:AA:171:G:C2'	1:AA:172:C:H5'	2.43	0.49
1:DA:2721:A:H1'	1:DA:2873:A:O2'	2.13	0.49
49:BV:51:VAL:CG1	49:BV:52:TYR:H	2.24	0.49
12:AP:26:TYR:C	12:AP:26:TYR:CD2	2.85	0.49
32:BE:216:SER:C	32:BE:218:ALA:H	2.16	0.49
29:A7:43:THR:CG2	29:A7:44:PRO:N	2.76	0.49
31:CA:1086:U:O4	31:CA:1099:G:N1	2.38	0.49
1:DA:2298:A:N6	1:DA:2318:G:H2'	2.27	0.49
1:AA:2172:U:H5'	1:AA:2173:A:OP2	2.12	0.49
31:CA:1152:A:OP1	40:CM:13:HIS:HB2	2.13	0.49
31:CA:937:A:C2	31:CA:1379:G:O6	2.66	0.49
32:CE:42:ILE:HD13	32:CE:43:ASP:N	2.28	0.49
1:AA:1858:G:N7	56:AA:3569:OHX:N6	2.61	0.49
3:AD:6:PHE:CE1	3:AD:18:VAL:HG23	2.43	0.49
1:DA:2840:C:C5'	13:D0:53:HIS:HD2	2.26	0.49
1:DA:64:A:C6	1:DA:65:C:C4	3.01	0.49
21:AV:4:ARG:HG2	21:AV:58:VAL:CG2	2.43	0.49
31:BA:108:G:C2	31:BA:109:A:C2	3.01	0.49
33:BF:175:LEU:HD21	33:BF:201:TYR:CE1	2.48	0.49
8:AK:78:THR:HG22	8:AK:141:LYS:HD2	1.94	0.49
1:DA:866:A:N6	1:DA:914:C:N3	2.61	0.49
12:AP:110:THR:HG23	12:AP:113:GLN:OE1	2.12	0.49
13:A0:28:LEU:C	13:A0:30:THR:H	2.16	0.49
1:DA:956:G:OP2	12:DP:14:ARG:NH2	2.46	0.49
6:AG:75:LYS:O	6:AG:84:LYS:HA	2.12	0.49
31:BA:5:U:O2'	31:BA:6:G:C2	2.65	0.49
1:AA:1301:A:H4'	1:AA:1302:A:OP1	2.12	0.49
39:CL:23:ASN:H	39:CL:23:ASN:HD22	1.60	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:186:G:N7	56:DA:3382:OHX:N1	2.60	0.49
1:AA:2078:C:H2'	1:AA:2079:U:O4'	2.13	0.49
30:D8:40:GLU:HA	30:D8:43:GLN:HB2	1.94	0.49
30:A8:41:ILE:O	30:A8:41:ILE:HG13	2.11	0.49
6:DG:48:GLU:HG2	6:DG:48:GLU:O	2.12	0.49
11:AO:23:PRO:HG2	11:AO:23:PRO:O	2.13	0.49
31:BA:1424:C:H2'	31:BA:1425:U:O4'	2.12	0.49
31:BA:778:G:H1'	41:BN:119:CYS:HB3	1.95	0.49
1:AA:2363:C:C2'	1:AA:2364:C:H5'	2.41	0.49
1:DA:2271:G:C2'	1:DA:2272:U:O5'	2.61	0.49
30:D8:59:LYS:CB	30:D8:59:LYS:NZ	2.76	0.49
3:AD:33:LEU:N	3:AD:35:LYS:O	2.45	0.49
31:CA:1197:G:N1	31:CA:1198:G:C5	2.81	0.49
52:CD:13:G:H2'	52:CD:14:A:H8	1.77	0.49
7:AH:151:ILE:HG22	7:AH:151:ILE:O	2.13	0.49
2:AB:72:G:N2	2:AB:103:U:C5	2.80	0.49
34:CG:11:LEU:C	34:CG:13:ARG:H	2.15	0.49
31:BA:1160:G:N1	31:BA:1177:G:N2	2.60	0.49
31:CA:1354:C:O2'	31:CA:1355:G:H5'	2.12	0.49
1:DA:1678:G:H2'	1:DA:1679:U:H6	1.78	0.49
7:AH:168:PRO:O	7:AH:169:VAL:HB	2.12	0.49
31:CA:1348:U:H4'	39:CL:120:ARG:HD2	1.94	0.49
1:AA:2690:C:H5''	1:AA:2872:G:H21	1.77	0.49
44:BQ:4:LYS:CD	44:BQ:7:ILE:HD11	2.43	0.49
52:CB:59:A:C6	52:CB:60:A:C5	3.00	0.49
1:DA:1055:G:O6	1:DA:1104:C:N3	2.46	0.49
31:CA:1213:A:N1	31:CA:1215:G:H1'	2.28	0.49
35:CH:100:VAL:HG23	35:CH:118:ILE:CG2	2.42	0.49
42:CO:55:VAL:CG2	42:CO:56:ALA:N	2.74	0.49
1:DA:298:G:OP1	20:DU:84:ARG:O	2.31	0.49
31:CA:418:C:N3	31:CA:425:G:N2	2.51	0.49
34:BG:79:PHE:CE1	34:BG:204:ILE:HG12	2.45	0.49
2:AB:50:G:OP2	14:AQ:62:LYS:HB2	2.13	0.49
30:D8:52:LYS:C	30:D8:54:GLU:H	2.15	0.49
31:BA:38:G:C2	31:BA:397:A:H2	2.29	0.49
1:AA:1652:A:O2'	1:AA:1653:G:H5'	2.12	0.49
4:AE:81:ILE:O	4:AE:81:ILE:HG22	2.12	0.49
10:AN:48:PRO:HB3	31:BA:1422:G:H5''	1.95	0.49
1:AA:2328:A:H2'	1:AA:2329:G:C8	2.47	0.49
50:CW:67:ALA:O	50:CW:73:HIS:CD2	2.66	0.49
35:BH:149:GLU:O	35:BH:153:LYS:HG3	2.13	0.49
31:BA:1098:C:C2	31:BA:1099:G:C8	3.01	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:945:A:N6	1:DA:2448:A:C6	2.81	0.49
1:DA:1511:A:H2'	1:DA:1512:G:C8	2.48	0.49
40:CM:13:HIS:HB3	40:CM:68:HIS:CE1	2.47	0.49
22:D3:32:ARG:CG	22:D3:33:ALA:H	2.21	0.49
5:DF:38:ARG:NH1	5:DF:38:ARG:HG3	2.25	0.49
31:CA:798:G:O6	56:CA:1726:OHX:N5	2.46	0.49
3:DD:70:TRP:HZ3	3:DD:146:GLU:OE2	1.95	0.49
20:AU:5:MET:HG3	20:AU:6:HIS:H	1.76	0.49
52:BD:1:G:N2	52:BD:82:A:C2	2.81	0.49
1:AA:2379:G:H4'	14:AQ:21:THR:HG21	1.95	0.49
2:DB:89(A):A:C8	2:DB:90:C:C1'	2.94	0.49
31:BA:406:G:C2	31:BA:407:G:C5	3.01	0.49
31:BA:523:A:H61	42:BO:92:ASP:HB2	1.78	0.49
34:BG:28:SER:HB2	34:BG:29:PRO:CD	2.42	0.49
31:BA:1317:C:C2	44:BQ:16:PHE:CE1	3.00	0.49
41:BN:48:ILE:CG1	41:BN:63:LEU:HB2	2.43	0.49
1:DA:1466:G:H5'	1:DA:1467:C:OP1	2.12	0.49
1:AA:2638:G:P	4:AE:82:ARG:HH22	2.36	0.49
31:BA:724:G:C2	31:BA:725:G:C8	3.00	0.49
31:CA:719:C:H5	31:CA:720:C:C4	2.30	0.49
35:BH:63:ARG:HA	35:BH:66:MET:CE	2.43	0.49
11:DO:6:LEU:O	11:DO:7:ARG:HG2	2.11	0.49
46:CS:9:PHE:CD2	46:CS:18:ARG:HG3	2.47	0.49
1:AA:1220:A:H3'	1:AA:1221:C:H5'	1.93	0.49
1:DA:1668:A:H1'	1:DA:1670:C:C5	2.47	0.49
1:AA:1001:A:C8	1:AA:1002:G:C8	3.01	0.49
1:DA:1969:A:O2'	1:DA:1972:A:N3	2.39	0.49
13:A0:63:ARG:O	13:A0:67:LEU:HD23	2.13	0.49
31:CA:109:A:C6	31:CA:326:G:C6	3.01	0.49
14:DQ:101:LEU:HD12	14:DQ:101:LEU:O	2.13	0.49
31:CA:145:G:N7	56:CA:1778:OHX:N1	2.60	0.49
28:A6:20:ASN:O	28:A6:21:TYR:HB2	2.13	0.49
1:AA:2283:C:C5	1:AA:2284:C:C5	3.01	0.49
1:DA:2789:C:H3'	1:DA:2790:A:H5''	1.93	0.49
1:AA:2277:G:C2'	1:AA:2278:A:O5'	2.58	0.49
1:DA:847:U:O4	1:DA:933:A:N1	2.45	0.49
3:AD:65:ILE:HD13	3:AD:106:ILE:HG22	1.94	0.49
44:CQ:61:TRP:CD1	44:CQ:61:TRP:O	2.66	0.49
52:CD:25:G:O2'	52:CD:26:G:H5'	2.13	0.49
52:BD:54:C:OP2	52:BD:54:C:H6	1.96	0.49
1:DA:2417:C:N4	1:DA:2418:A:N6	2.61	0.49
30:D8:33:ASN:ND2	30:D8:41:ILE:CD1	2.43	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:1311:G:N2	31:BA:1327:C:C2	2.80	0.49
26:A4:34:GLU:OE2	43:BP:7:VAL:HA	2.13	0.49
1:DA:1158:C:C2'	1:DA:1159:U:H5'	2.43	0.49
49:BV:40:ILE:HD11	49:BV:62:ILE:HD13	1.94	0.49
31:CA:1276:G:C5	31:CA:1277:C:C5	3.01	0.49
31:CA:1279:A:H5''	31:CA:1280:A:OP1	2.13	0.49
1:AA:1021:A:H3'	1:AA:1022:G:H5''	1.93	0.49
52:CB:74:C:N4	52:CB:75:C:C5	2.81	0.49
54:B1:19:U:H2'	54:B1:20:G:H8	1.77	0.49
31:CA:652:U:O4	31:CA:752:G:H1'	2.13	0.49
11:AO:83:VAL:HG12	11:AO:112:LEU:HD21	1.94	0.49
18:AS:57:ASN:O	18:AS:61:ASN:HB2	2.13	0.49
52:BB:24:G:H5'	52:BB:24:G:H8	1.77	0.49
39:CL:20:ARG:N	39:CL:20:ARG:HD3	2.27	0.49
31:BA:1240:U:P	37:BJ:116:ALA:HB2	2.53	0.49
49:BV:51:VAL:CG1	49:BV:52:TYR:N	2.76	0.49
1:DA:2127:G:H3'	1:DA:2128:C:H5''	1.93	0.49
20:AU:77:PRO:O	20:AU:78:ALA:HB2	2.12	0.49
43:CP:29:ARG:HB3	43:CP:64:TRP:CZ2	2.47	0.49
31:BA:130:A:OP2	47:BT:63:ARG:NE	2.42	0.49
1:AA:2712:U:O2'	1:AA:2713:A:H5'	2.13	0.49
32:CE:101:MET:HB2	32:CE:102:LEU:HD12	1.93	0.49
37:CJ:27:ILE:CD1	37:CJ:40:ALA:HA	2.43	0.49
7:AH:41:MET:HE1	7:AH:64:LEU:HB3	1.95	0.49
1:DA:2016:U:O4'	27:D5:6:VAL:HG11	2.13	0.49
33:BF:113:ALA:O	33:BF:115:LEU:N	2.46	0.49
1:AA:2250:G:C2	12:AP:83:MET:HB2	2.48	0.49
20:AU:3:VAL:HG12	20:AU:5:MET:HE2	1.95	0.49
43:BP:49:THR:O	43:BP:51:ALA:N	2.46	0.49
3:AD:79:VAL:HG12	3:AD:113:VAL:HA	1.94	0.49
31:CA:57:G:C6	31:CA:58:C:C4	3.01	0.49
1:AA:1500:G:O2'	3:AD:100:GLY:O	2.24	0.49
32:BE:229:VAL:HG12	32:BE:230:VAL:N	2.28	0.49
50:BW:11:SER:C	50:BW:13:LEU:H	2.16	0.49
38:CK:11:THR:HG22	38:CK:15:ASN:ND2	2.28	0.49
1:AA:986:C:O2'	1:AA:987:G:H5'	2.13	0.49
31:CA:801:U:H2'	31:CA:802:A:C8	2.48	0.49
48:CU:63:GLN:O	48:CU:66:LEU:HB3	2.13	0.49
13:A0:30:THR:HG22	13:A0:31:HIS:CE1	2.48	0.49
52:CB:9:U:O2'	52:CB:10:C:H5	1.95	0.49
52:CB:9:U:H5	52:CB:21:A:C8	2.31	0.49
1:AA:2246:G:H1'	1:AA:2426:A:C2	2.47	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:2064:C:H2'	1:DA:2065:C:C6	2.48	0.49
13:D0:23:ASN:N	13:D0:23:ASN:ND2	2.60	0.49
33:BF:48:TYR:O	33:BF:51:GLY:N	2.30	0.49
1:AA:1388:G:H2'	1:AA:1389:G:H8	1.78	0.49
16:A1:27:LEU:HD13	16:A1:31:SER:HB3	1.94	0.49
1:DA:1615:C:C6	1:DA:1617:C:C5	3.01	0.49
12:DP:55:VAL:HG23	12:DP:64:ILE:HD12	1.95	0.49
3:AD:127:VAL:HA	3:AD:193:VAL:HG23	1.95	0.49
35:CH:135:THR:O	35:CH:138:ALA:HB3	2.13	0.49
31:CA:582:U:C2	31:CA:760:G:C6	3.01	0.49
1:AA:2830:G:H5''	1:AA:2830:G:H8	1.77	0.49
49:CV:61:TYR:CZ	49:CV:63:THR:HA	2.48	0.49
29:A7:15:THR:HG22	29:A7:16:HIS:CE1	2.48	0.49
30:A8:34:TRP:CZ3	30:A8:35:GLN:CD	2.86	0.48
1:DA:2255:G:C2'	1:DA:2256:G:H5'	2.43	0.48
1:DA:2270:G:H2'	1:DA:2271:G:H5'	1.94	0.48
1:AA:2402:C:OP1	1:AA:2402:C:H4'	2.13	0.48
11:AO:61:ARG:CZ	11:AO:61:ARG:CB	2.84	0.48
39:CL:114:TYR:HE1	40:CM:60:ARG:C	2.16	0.48
43:CP:8:GLU:O	43:CP:10:PRO:HD3	2.13	0.48
31:CA:1317:C:N3	49:CV:37:ARG:NH2	2.60	0.48
1:AA:1534:G:N2	1:AA:1537:C:N4	2.61	0.48
6:DG:6:ALA:O	6:DG:9:ARG:N	2.46	0.48
1:DA:2019:A:N6	1:DA:2020:A:C5	2.81	0.48
52:BD:11:C:H2'	52:BD:11:C:O2	2.12	0.48
1:AA:1210:A:O2'	1:AA:1211:U:OP2	2.21	0.48
1:AA:1731:G:O2'	1:AA:1732:A:O5'	2.18	0.48
12:DP:87:LYS:O	12:DP:88:GLY:O	2.30	0.48
52:BB:15:G:N3	52:BB:20:C:H5	2.10	0.48
12:AP:19:GLY:CA	12:AP:98:LYS:HD3	2.43	0.48
1:DA:1945:G:C4	1:DA:1946:U:C5	3.01	0.48
1:AA:1055:G:N2	1:AA:1104:C:C2	2.80	0.48
39:CL:14:VAL:O	39:CL:14:VAL:HG12	2.12	0.48
2:AB:7:G:C8	2:AB:7:G:C5'	2.96	0.48
31:CA:827:U:C4	31:CA:870:U:C2	3.01	0.48
40:BM:57:LYS:HE2	40:BM:60:ARG:NH1	2.26	0.48
18:DS:59:VAL:HA	18:DS:64:MET:H	1.78	0.48
31:BA:266:G:H4'	31:BA:267:C:O5'	2.11	0.48
1:AA:2469:A:H5''	1:AA:2469:A:N3	2.27	0.48
31:BA:57:G:C6	31:BA:356:A:N1	2.81	0.48
1:DA:1342:A:N1	1:DA:1602:U:C2	2.81	0.48
15:DR:51:ARG:HE	15:DR:62:THR:CG2	2.26	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:CO:83:VAL:O	42:CO:105:TYR:HD1	1.96	0.48
52:BB:75:C:H3'	52:BB:76:C:C5	2.48	0.48
31:CA:413:G:H2'	31:CA:428:G:N2	2.28	0.48
31:CA:181:G:N2	31:CA:183:G:N2	2.61	0.48
5:AF:178:PRO:C	5:AF:180:GLY:H	2.16	0.48
31:CA:737:A:C2	31:CA:738:C:C2	3.01	0.48
12:AP:69:PHE:C	12:AP:95:ALA:HB2	2.34	0.48
15:AR:51:ARG:HB2	15:AR:98:LYS:CD	2.39	0.48
32:BE:69:LEU:HD12	32:BE:70:PHE:N	2.27	0.48
1:AA:2119:A:N6	1:AA:2170:A:C6	2.81	0.48
1:AA:997:G:C2'	1:AA:998:C:H5'	2.43	0.48
8:DK:77:LEU:O	8:DK:78:THR:C	2.52	0.48
22:A3:68:GLU:HG3	22:A3:80:HIS:CD2	2.39	0.48
10:DN:98:VAL:HG12	10:DN:117:LEU:CB	2.41	0.48
1:DA:2520:C:C6	1:DA:2520:C:OP1	2.62	0.48
39:CL:43:ALA:HA	39:CL:74:ILE:HD13	1.95	0.48
32:CE:25:ASN:ND2	32:CE:193:ASP:HB3	2.28	0.48
21:DV:152:ALA:HA	21:DV:171:ILE:HG13	1.94	0.48
31:CA:954:G:O6	31:CA:1225:A:N6	2.46	0.48
31:CA:1227:A:H3'	31:CA:1227:A:C8	2.48	0.48
3:DD:236:GLY:O	3:DD:237:GLU:O	2.31	0.48
21:DV:6:LYS:CG	21:DV:7:ALA:H	2.25	0.48
31:BA:599:C:H4'	38:BK:130:GLY:O	2.12	0.48
1:DA:807:U:H2'	1:DA:808:G:C8	2.43	0.48
14:AQ:23:ARG:HH21	14:AQ:84:GLN:NE2	2.11	0.48
3:AD:70:TRP:HZ3	3:AD:146:GLU:OE2	1.96	0.48
25:DX:31:LEU:O	25:DX:33:GLN:N	2.46	0.48
7:DH:12:PRO:CG	7:DH:48:GLY:HA2	2.43	0.48
1:DA:1194:A:H2'	1:DA:1195:G:O5'	2.13	0.48
1:DA:1194:A:C2'	1:DA:1195:G:O5'	2.61	0.48
5:DF:57:VAL:HG12	5:DF:58:ALA:H	1.75	0.48
32:CE:55:PHE:HD1	32:CE:58:ILE:HG13	1.77	0.48
31:CA:1077:G:C6	31:CA:1081:G:C6	3.00	0.48
37:BJ:148:ASN:HD22	37:BJ:148:ASN:N	2.11	0.48
32:BE:47:THR:HG22	32:BE:51:LEU:CD1	2.43	0.48
15:DR:45:PHE:CE1	15:DR:74:ARG:HG3	2.48	0.48
6:AG:59:GLU:O	6:AG:63:ILE:HG23	2.13	0.48
31:BA:698:G:C6	31:BA:699:C:C4	3.01	0.48
31:CA:700:G:O2'	31:CA:704:A:H1'	2.12	0.48
31:BA:31:G:O2'	31:BA:32:A:OP1	2.30	0.48
46:BS:34:GLU:OE2	46:BS:55:ARG:NH2	2.45	0.48
1:DA:1847:A:C3'	1:DA:1848:A:H5'	2.43	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:1396:A:O4'	31:BA:1398:A:H1'	2.13	0.48
2:AB:52:A:N6	14:AQ:33:LYS:HG2	2.27	0.48
4:DE:173:VAL:N	4:DE:183:LEU:O	2.43	0.48
1:AA:1423:G:H2'	1:AA:1424:G:H8	1.77	0.48
1:AA:2388:A:C2'	1:AA:2389:G:H5'	2.43	0.48
9:DM:127:ASP:C	9:DM:128:HIS:ND1	2.67	0.48
1:AA:2210:G:C2'	1:AA:2211:G:N7	2.75	0.48
3:AD:35:LYS:HD3	3:AD:63:ARG:HA	1.95	0.48
3:AD:36:PRO:HB3	3:AD:61:LEU:HD12	1.95	0.48
31:CA:1305:G:O2'	31:CA:1306:A:OP2	2.29	0.48
31:CA:1306:A:H2'	31:CA:1307:U:O4'	2.13	0.48
1:AA:1279:G:H5'	13:A0:34:ILE:HD11	1.95	0.48
1:AA:2309:A:H8	1:AA:2309:A:O5'	1.96	0.48
52:BD:9:U:C2'	52:BD:9:U:O2	2.61	0.48
31:CA:1160:G:H2'	31:CA:1160:G:N3	2.28	0.48
27:A5:42:PRO:CB	27:A5:43:HIS:HD2	2.26	0.48
31:BA:197:A:H4'	31:BA:198:G:O5'	2.13	0.48
11:DO:146:VAL:O	11:DO:147:LEU:O	2.30	0.48
1:DA:1061:U:H5''	1:DA:1062:G:OP2	2.13	0.48
31:CA:828:A:H2'	31:CA:829:G:O5'	2.13	0.48
31:CA:1343:G:H1'	39:CL:121:ARG:NH1	2.28	0.48
1:DA:2751:G:H5'	1:DA:2752:C:OP2	2.13	0.48
1:AA:2636:U:H2'	1:AA:2637:U:C6	2.48	0.48
12:DP:79:LEU:HD13	12:DP:80:GLU:OE2	2.13	0.48
31:CA:1000:A:O2'	31:CA:1001:G:H5'	2.13	0.48
31:BA:1226:C:H4'	49:BV:80:TYR:CZ	2.47	0.48
1:AA:492:A:H2'	1:AA:493:G:O4'	2.13	0.48
1:AA:478:A:C6	1:AA:480:A:C6	3.01	0.48
24:AW:41:ILE:CD1	24:AW:44:LEU:HG	2.43	0.48
35:BH:9:LYS:HB3	35:BH:112:LEU:HD11	1.95	0.48
31:BA:1213:A:N7	31:BA:1215:G:C6	2.81	0.48
2:DB:96:G:C6	2:DB:97:G:N7	2.81	0.48
31:BA:394:G:H2'	31:BA:395:C:H6	1.77	0.48
1:DA:2308:G:O2'	1:DA:2309:A:OP1	2.30	0.48
7:AH:86:GLU:CG	7:AH:165:ALA:HB3	2.41	0.48
1:DA:2447:G:H1'	1:DA:2448:A:OP2	2.13	0.48
21:DV:44:PHE:C	21:DV:44:PHE:HD1	2.16	0.48
31:CA:1155:G:OP2	56:CA:1758:OHX:N6	2.47	0.48
7:AH:19:VAL:HG21	7:AH:43:VAL:O	2.13	0.48
1:AA:1276:A:H1'	13:A0:16:HIS:HE1	1.78	0.48
7:AH:80:SER:O	7:AH:81:GLU:CG	2.58	0.48
48:BU:70:ILE:O	48:BU:74:ARG:HG3	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:2248:C:H2'	1:AA:2249:U:H5'	1.94	0.48
1:DA:1459:G:O2'	1:DA:1460:A:H5'	2.13	0.48
23:AZ:91:LYS:HA	23:AZ:91:LYS:HZ3	1.78	0.48
1:AA:1130:U:O2'	1:AA:1131:G:O5'	2.26	0.48
31:BA:1397:C:C6	31:BA:1397:C:C3'	2.96	0.48
7:DH:122:THR:C	7:DH:123:PHE:CG	2.87	0.48
6:AG:172:LEU:CD1	6:AG:176:LEU:HD12	2.43	0.48
31:CA:622:A:H2'	31:CA:623:C:O4'	2.12	0.48
31:BA:956:U:O2	31:BA:1225:A:C2	2.66	0.48
53:CC:13:C:O2'	53:CC:14:A:H5'	2.13	0.48
1:DA:2694:G:O2'	1:DA:2695:C:H5'	2.13	0.48
37:CJ:79:ARG:HG2	37:CJ:84:ASN:HB3	1.96	0.48
35:BH:71:LEU:C	35:BH:72:GLN:HG2	2.32	0.48
31:CA:1311:G:N2	31:CA:1327:C:O2	2.46	0.48
1:DA:909:A:C5	1:DA:912:C:C5	3.01	0.48
7:DH:151:ILE:O	7:DH:152:ARG:HB2	2.13	0.48
7:DH:109:PHE:CE1	7:DH:152:ARG:HD3	2.48	0.48
8:DK:52:ARG:O	8:DK:56:LYS:HB3	2.13	0.48
14:AQ:9:ARG:C	14:AQ:11:LYS:N	2.66	0.48
2:DB:20:C:H2'	2:DB:21:G:H5'	1.94	0.48
31:BA:273:A:C2'	31:BA:274:A:O5'	2.61	0.48
31:BA:563:A:C8	31:BA:567:G:O4'	2.67	0.48
36:CI:23:LYS:O	36:CI:27:GLN:HB2	2.13	0.48
1:DA:760:G:C2'	1:DA:761:A:H5'	2.43	0.48
1:DA:2435:A:H2'	1:DA:2436:G:O5'	2.13	0.48
42:BO:119:LYS:HB2	42:BO:120:TYR:CD1	2.48	0.48
1:AA:111:A:C2	1:AA:112:U:C2	3.01	0.48
53:CC:67:C:H2'	53:CC:68:C:O4'	2.14	0.48
1:AA:2744:G:H21	7:AH:143:GLN:HE22	1.61	0.48
31:CA:238:G:OP1	47:CT:25:ARG:NH2	2.39	0.48
1:DA:2629:A:H4'	1:DA:2630:G:O5'	2.13	0.48
1:DA:2788:C:H5''	1:DA:2789:C:OP2	2.13	0.48
12:AP:87:LYS:O	12:AP:88:GLY:O	2.30	0.48
1:DA:1568:G:P	3:DD:63:ARG:HH22	2.37	0.48
52:BD:54:C:OP2	52:BD:54:C:C6	2.66	0.48
31:CA:1118:C:H6	31:CA:1118:C:O5'	1.96	0.48
1:AA:2599:G:O2'	1:AA:2600:A:H5'	2.13	0.48
32:CE:16:HIS:O	32:CE:204:ASN:ND2	2.46	0.48
30:D8:23:VAL:CG2	30:D8:47:LYS:HB3	2.44	0.48
30:D8:23:VAL:HG23	30:D8:47:LYS:HB3	1.95	0.48
3:AD:44:ASN:HD22	3:AD:44:ASN:H	1.61	0.48
1:DA:90:U:H3	20:DU:33:LYS:HZ1	1.62	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
26:A4:42:PHE:CE2	26:A4:43:TYR:HB2	2.48	0.48
11:AO:114:ILE:CD1	11:AO:130:PHE:CD1	2.82	0.48
1:AA:1081:U:C2'	1:AA:1082:U:OP1	2.61	0.48
31:CA:1280:A:P	40:CM:40:LEU:HD21	2.54	0.48
11:DO:56:SER:O	11:DO:57:THR:O	2.30	0.48
33:BF:35:GLU:OE1	33:BF:95:THR:HG23	2.13	0.48
6:AG:67:LYS:HE2	26:A4:6:HIS:NE2	2.27	0.48
31:CA:1133:G:C4	31:CA:1134:G:C8	3.01	0.48
1:AA:2721:A:H3'	1:AA:2722:G:H8	1.79	0.48
5:DF:129:PHE:HA	5:DF:142:TRP:NE1	2.28	0.48
32:BE:203:GLY:O	32:BE:204:ASN:C	2.52	0.48
18:DS:65:LEU:HD13	18:DS:68:ARG:CD	2.40	0.48
4:AE:33:VAL:HG12	4:AE:90:THR:H	1.78	0.48
16:A1:46:ALA:O	16:A1:50:ARG:HG3	2.12	0.48
31:CA:991:U:O2'	31:CA:992:U:P	2.65	0.48
1:AA:1528:A:N6	1:AA:1545:A:C2	2.81	0.48
35:CH:81:GLU:HG2	35:CH:90:VAL:HG22	1.94	0.48
1:AA:154:G:C3'	1:AA:155:C:H5''	2.43	0.48
2:DB:45:A:C1'	6:DG:95:ARG:HH21	2.25	0.48
1:AA:850:C:H2'	25:AX:46:ASN:HD21	1.77	0.48
31:BA:412:A:C5	34:BG:35:ARG:NH1	2.81	0.48
34:CG:25:ARG:HB3	34:CG:25:ARG:NH1	2.28	0.48
1:AA:1582:C:O2'	1:AA:1586:A:C8	2.42	0.48
20:AU:52:SER:HB2	20:AU:53:PRO:CD	2.35	0.48
16:D1:25:TRP:CD1	16:D1:26:GLY:HA3	2.47	0.48
36:CI:36:ARG:NH1	36:CI:66:GLU:OE1	2.44	0.48
4:AE:28:ALA:HB3	4:AE:93:VAL:CG2	2.38	0.48
1:AA:1109:C:O2'	1:AA:1110:G:C4'	2.58	0.48
1:DA:2297:C:C2'	1:DA:2297:C:O2	2.56	0.48
39:BL:48:GLU:N	39:BL:49:PRO:CD	2.75	0.48
1:AA:1152:C:C2'	1:AA:1153:C:H5'	2.43	0.48
1:DA:99:U:H1'	1:DA:102:G:C2	2.48	0.48
1:DA:2531:A:C5'	7:DH:157:TYR:HE2	2.27	0.48
32:CE:172:ILE:O	32:CE:172:ILE:HG22	2.13	0.48
4:DE:27:LEU:HG	15:DR:1:MET:CE	2.43	0.48
32:CE:62:ALA:C	32:CE:64:ARG:N	2.62	0.48
28:D6:16:CYS:O	28:D6:17:LYS:CB	2.62	0.48
42:BO:64:TYR:O	42:BO:65:GLU:CB	2.60	0.48
1:AA:2035:G:C4'	1:AA:2036:C:OP2	2.61	0.48
31:CA:491:G:C6	31:CA:492:G:C5	3.01	0.48
38:CK:104:ARG:O	38:CK:104:ARG:HG3	2.13	0.48
1:DA:2649:U:H2'	1:DA:2650:U:C6	2.48	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:AW:17:SER:CB	24:AW:67:LYS:HE3	2.43	0.48
33:BF:107:GLN:N	33:BF:107:GLN:OE1	2.42	0.48
1:DA:1774:C:O5'	1:DA:1774:C:H6	1.96	0.48
1:DA:128:C:C6	1:DA:128:C:H3'	2.48	0.48
20:AU:8:LYS:O	20:AU:27:VAL:HG21	2.14	0.48
1:DA:1338:G:N3	1:DA:1393:A:H2	2.10	0.48
50:BW:75:ASN:O	50:BW:78:ALA:HB3	2.13	0.48
37:CJ:71:PRO:HG3	37:CJ:103:TRP:CH2	2.48	0.48
1:DA:2188:C:H2'	1:DA:2189:U:O4'	2.14	0.48
31:CA:177:C:H2'	31:CA:178:C:H6	1.78	0.48
1:DA:1709:U:O2'	1:DA:2859:G:H1'	2.13	0.48
47:CT:48:GLU:O	47:CT:49:GLU:C	2.51	0.48
1:DA:656:G:H2'	1:DA:657:U:O4'	2.13	0.48
37:CJ:89:MET:HA	37:CJ:89:MET:CE	2.43	0.48
15:DR:135:ALA:O	15:DR:137:LYS:HG2	2.12	0.48
1:DA:973:A:H5'	1:DA:1188:U:C1'	2.43	0.48
52:CB:37:A:C2	54:C1:20:G:C6	3.01	0.48
31:CA:980:C:H5'	31:CA:981:U:C5	2.49	0.48
52:BD:40:U:H2'	52:BD:41:C:H5'	1.96	0.48
52:BD:70:C:O2'	52:BD:71:C:H5'	2.13	0.48
31:BA:1182:G:H4'	31:BA:1183:A:C5'	2.41	0.48
1:AA:620:G:N3	1:AA:620:G:H2'	2.29	0.48
3:AD:27:THR:HG21	3:AD:83:GLU:HB2	1.95	0.48
31:BA:1305:G:C2	31:BA:1331:G:N3	2.81	0.48
31:BA:1305:G:H22	31:BA:1331:G:H2'	1.76	0.48
15:AR:102:ILE:HD12	15:AR:110:ILE:HD11	1.95	0.48
31:BA:1199:U:H5'	40:BM:54:PHE:CE2	2.48	0.48
31:CA:1279:A:H5''	31:CA:1280:A:P	2.53	0.48
11:DO:55:ARG:O	11:DO:56:SER:C	2.51	0.48
17:A2:38:LEU:HD12	17:A2:57:VAL:HG12	1.96	0.48
31:BA:1132:C:C2'	31:BA:1133:G:H5'	2.43	0.48
31:BA:559:A:H4'	31:BA:560:U:C3'	2.43	0.48
30:A8:61:LEU:CD1	30:A8:61:LEU:O	2.56	0.48
1:AA:1899:G:H1	1:AA:1902:C:H41	1.61	0.48
35:BH:144:THR:C	35:BH:146:ALA:N	2.67	0.48
15:DR:99:LEU:C	15:DR:101:PHE:N	2.65	0.48
1:AA:2723:C:O3'	13:A0:1:MET:CE	2.61	0.48
2:DB:39:A:N6	26:D4:1:MET:HB3	2.27	0.48
42:CO:55:VAL:CG2	42:CO:56:ALA:H	2.27	0.48
10:DN:68:GLU:OE2	10:DN:78:ARG:NH1	2.46	0.48
34:BG:110:PHE:CE2	34:BG:148:VAL:HG23	2.48	0.48
1:DA:299:A:O2'	1:DA:319:C:H4'	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:AK:60:GLU:C	8:AK:62:LYS:H	2.15	0.48
1:DA:2374:C:H2'	1:DA:2375:G:H5'	1.93	0.48
3:DD:206:LEU:HD23	3:DD:206:LEU:HA	1.58	0.48
33:CF:15:THR:HG22	33:CF:16:ARG:NH1	2.28	0.48
39:BL:46:ALA:HA	39:BL:78:LYS:HB2	1.94	0.48
22:A3:49:LYS:H	22:A3:80:HIS:CB	2.23	0.48
21:DV:53:ILE:HG13	21:DV:54:HIS:ND1	2.28	0.48
1:AA:945:A:C5	1:AA:2448:A:N3	2.80	0.48
49:CV:49:ILE:HG13	49:CV:62:ILE:CD1	2.41	0.48
1:AA:2294:C:C4	1:AA:2295:C:H5	2.25	0.48
38:BK:10:LEU:CD2	38:BK:10:LEU:N	2.76	0.48
13:A0:20:LEU:O	13:A0:21:TYR:C	2.52	0.48
16:D1:14:HIS:HA	16:D1:32:PHE:CE2	2.47	0.48
31:BA:104:G:C2	31:BA:105:G:C8	3.02	0.48
31:BA:1221:G:N2	31:BA:1222:G:H1'	2.28	0.48
1:DA:2692:C:O2'	1:DA:2693:A:H5'	2.14	0.48
1:DA:814:C:O2'	1:DA:1225:C:O2	2.30	0.48
1:AA:2694:G:C4	1:AA:2695:C:C5	3.01	0.48
16:A1:26:GLY:C	16:A1:28:ARG:H	2.16	0.48
1:DA:426:C:OP1	56:DA:3403:OHX:N1	2.46	0.48
45:CR:11:VAL:O	45:CR:14:GLU:N	2.40	0.48
31:CA:1077:G:N2	31:CA:1080:A:OP2	2.46	0.48
9:AM:120:LEU:HD21	9:AM:122:VAL:HG22	1.95	0.48
53:CC:44:A:O2'	53:CC:45:A:H5'	2.14	0.48
24:AW:17:SER:HB3	24:AW:67:LYS:HE3	1.95	0.48
31:CA:440:A:C8	31:CA:442:C:C6	3.01	0.48
8:AK:77:LEU:HD13	8:AK:77:LEU:O	2.13	0.48
1:AA:984:A:H5''	1:AA:985:C:C5	2.48	0.48
41:CN:22:HIS:HB3	41:CN:29:ILE:HG12	1.95	0.48
1:DA:243:U:OP2	30:D8:8:LYS:HE2	2.13	0.48
3:DD:28:GLU:HB2	3:DD:29:PRO:HD3	1.96	0.48
31:BA:936:C:H2'	31:BA:937:A:O4'	2.13	0.48
49:BV:25:LYS:HG2	49:BV:27:GLU:OE1	2.12	0.48
1:AA:1812:A:O2'	3:AD:45:ASN:HB2	2.14	0.48
1:DA:820:A:H2'	1:DA:821:A:C8	2.48	0.48
36:CI:67:MET:HB2	36:CI:68:PRO:HD2	1.95	0.48
1:DA:6:A:C2'	1:DA:7:G:H5'	2.43	0.48
4:DE:63:LEU:O	4:DE:66:HIS:CD2	2.66	0.48
1:AA:1568:G:H5''	3:AD:61:LEU:CD2	2.44	0.48
11:DO:28:GLY:O	11:DO:31:ALA:N	2.46	0.48
31:CA:1186:G:N7	56:CA:1815:OHX:N1	2.61	0.48
40:CM:46:ARG:CZ	44:CQ:61:TRP:CH2	2.96	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:CM:50:ILE:HA	40:CM:60:ARG:CB	2.44	0.48
3:DD:62:TYR:CE2	3:DD:63:ARG:O	2.67	0.48
24:DW:17:SER:HA	24:DW:20:GLU:HB2	1.96	0.48
1:AA:2315:G:C6	1:AA:2316:C:N4	2.81	0.48
31:BA:1339:A:H2'	31:BA:1340:A:O4'	2.13	0.48
28:D6:23:THR:O	28:D6:24:GLU:HB2	2.14	0.48
1:DA:2259:G:N2	1:DA:2282:G:C2	2.82	0.48
31:CA:1442:G:O2'	31:CA:1443:G:OP1	2.30	0.48
9:AM:133:GLN:HG2	9:AM:134:ARG:H	1.77	0.48
1:DA:2780:G:H3'	1:DA:2781:A:H5'	1.95	0.48
26:A4:36:CYS:O	26:A4:39:CYS:SG	2.72	0.48
11:DO:125:VAL:HG22	11:DO:125:VAL:O	2.13	0.48
31:BA:560:U:H5'	31:BA:566:G:N2	2.29	0.48
6:AG:34:LEU:HD13	6:AG:99:MET:HE1	1.95	0.48
31:BA:256:U:C2'	31:BA:257:G:H5'	2.44	0.48
47:BT:43:LEU:HD12	47:BT:68:ARG:HG2	1.94	0.48
31:CA:365:U:C5'	31:CA:366:C:OP1	2.50	0.48
1:AA:1899:G:H21	1:AA:1902:C:H5	1.57	0.48
31:CA:1216:G:H5''	44:CQ:5:ALA:HB3	1.96	0.48
52:CB:31:G:H2'	52:CB:32:A:C8	2.49	0.48
1:DA:1728:G:C8	1:DA:1731:G:N1	2.74	0.48
1:AA:969:U:H2'	1:AA:970:C:C6	2.48	0.48
53:CC:16:C:O2'	53:CC:62:C:P	2.71	0.48
1:AA:304:G:C4	1:AA:314:A:C2	3.02	0.48
3:DD:17:THR:O	3:DD:211:ARG:NH2	2.47	0.48
1:DA:1484:G:C6	1:DA:1485:G:C5	3.01	0.48
5:AF:51:THR:CG2	5:AF:92:PRO:HD2	2.44	0.48
1:DA:2687:U:C4	1:DA:2688:U:C5	3.02	0.48
33:CF:117:ALA:HB2	33:CF:200:ALA:HB2	1.96	0.48
31:BA:502:G:H2'	31:BA:503:C:H6	1.78	0.48
20:DU:18:GLY:O	20:DU:19:LYS:HG3	2.12	0.48
1:AA:528:A:N1	1:AA:2043:C:O5'	2.46	0.48
1:AA:2113:U:O2	1:AA:2113:U:O4'	2.30	0.48
1:AA:2164:C:C2'	1:AA:2165:G:H5'	2.43	0.48
37:CJ:57:GLU:O	37:CJ:58:PRO:C	2.52	0.48
8:DK:76:THR:CG2	8:DK:140:LEU:HA	2.43	0.48
21:DV:77:ASP:N	21:DV:84:GLU:HG2	2.28	0.48
4:DE:105:THR:OG1	4:DE:166:THR:HG23	2.13	0.48
1:AA:945:A:H1'	1:AA:946:G:OP1	2.13	0.48
3:AD:19:ALA:HB3	3:AD:21:PHE:CE2	2.48	0.48
31:BA:22:G:H4'	31:BA:885:G:C8	2.49	0.48
1:AA:1519:G:H2'	1:AA:1520:U:H5'	1.96	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:64:A:H1'	19:DT:66:LEU:HB2	1.96	0.48
4:DE:11:MET:SD	4:DE:24:THR:HG22	2.54	0.48
14:DQ:67:ARG:NH1	14:DQ:67:ARG:HB2	2.28	0.48
1:DA:1858:G:O2'	1:DA:1884:A:N6	2.46	0.48
38:BK:6:ILE:HG12	38:BK:31:PHE:CE2	2.49	0.48
31:BA:739:C:C4	31:BA:740:U:C5	3.01	0.48
49:BV:15:LEU:HD23	49:BV:15:LEU:N	2.28	0.48
1:AA:2199:A:H3'	1:AA:2205:C:H6	1.79	0.48
21:DV:105:VAL:HG13	21:DV:106:GLY:N	2.27	0.48
31:CA:853:G:C2	31:CA:854:G:C8	3.01	0.48
31:CA:1383:C:H2'	31:CA:1383:C:O2	2.12	0.48
1:DA:1872:A:H5''	1:DA:1878:G:OP2	2.13	0.48
39:BL:125:TYR:CD2	39:BL:126:SER:N	2.80	0.48
33:BF:83:ARG:O	33:BF:86:VAL:HG13	2.13	0.48
13:A0:30:THR:HG22	13:A0:31:HIS:CG	2.48	0.48
1:AA:64:A:C4	19:AT:66:LEU:HD22	2.48	0.48
13:D0:14:SER:HA	13:D0:17:ARG:NH1	2.28	0.48
26:A4:27:THR:O	26:A4:28:LYS:CB	2.60	0.48
31:BA:1206:G:C5	31:BA:1207:G:N7	2.81	0.48
53:CC:29:C:H2'	53:CC:30:G:H8	1.77	0.48
1:AA:1443:G:C2	1:AA:1549:C:C2	3.01	0.48
31:BA:1038:C:C4	31:BA:1039:C:C5	3.01	0.48
31:BA:1061:G:OP2	33:BF:2:GLY:O	2.30	0.48
2:AB:60:C:C2	2:AB:61:G:C8	3.00	0.48
31:BA:119:A:H4'	31:BA:120:A:O5'	2.13	0.48
31:BA:777:A:C2'	31:BA:778:G:O5'	2.61	0.48
1:AA:1850:G:H2'	1:AA:1851:U:H6	1.79	0.48
23:DZ:57:GLU:O	23:DZ:58:ILE:HD13	2.13	0.48
2:AB:78:A:C2	2:AB:99:A:C4	3.01	0.48
31:CA:1484:C:H2'	31:CA:1485:U:O4'	2.14	0.48
31:BA:1108:G:H5'	33:BF:176:HIS:CD2	2.48	0.48
1:AA:2398:U:O2	1:AA:2398:U:H2'	2.13	0.48
18:AS:53:SER:O	18:AS:53:SER:OG	2.31	0.48
15:DR:29:ARG:HD3	15:DR:29:ARG:O	2.14	0.48
8:AK:61:ARG:HA	8:AK:61:ARG:NE	2.28	0.48
1:AA:1449(A):G:C5	1:AA:1450:C:C5	3.01	0.48
1:DA:2786:U:H4'	4:DE:64:LYS:HA	1.95	0.48
1:AA:2399:G:H1	1:AA:2417:C:H42	1.62	0.48
31:CA:1195:C:N3	31:CA:1197:G:C8	2.82	0.48
1:DA:888:C:C1'	1:DA:889:C:P	3.02	0.48
1:AA:2310:A:N3	1:AA:2310:A:H3'	2.28	0.48
2:AB:13:A:H2'	2:AB:70:C:O2'	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:1033:G:H2'	31:BA:1034:G:H5'	1.95	0.48
1:DA:2626:C:O2'	1:DA:2627:G:H5'	2.14	0.48
31:BA:1401:G:C2	31:BA:1402:C:H1'	2.48	0.48
11:DO:19:VAL:O	11:DO:20:GLY:C	2.52	0.48
16:D1:61:TRP:O	16:D1:65:ILE:HD13	2.14	0.48
1:AA:1080:A:H2'	1:AA:1081:U:O4'	2.12	0.48
31:CA:1145:C:H2'	31:CA:1145:C:O2	2.13	0.48
31:CA:1145:C:O2'	31:CA:1146:A:C8	2.54	0.48
23:DZ:92:LYS:O	23:DZ:95:LEU:N	2.46	0.48
5:DF:134:GLY:O	5:DF:135:LYS:C	2.51	0.48
43:CP:3:ARG:HG2	43:CP:9:ILE:HD11	1.95	0.48
42:CO:85:ILE:HG23	42:CO:86:ARG:H	1.78	0.48
6:DG:95:ARG:O	6:DG:99:MET:HG2	2.13	0.48
42:CO:27:LEU:CD2	42:CO:60:LEU:HG	2.35	0.48
17:D2:20:LEU:O	17:D2:93:GLU:HA	2.13	0.48
39:CL:18:PHE:O	39:CL:19:LEU:HD23	2.13	0.48
31:CA:1298:C:O2'	31:CA:1299:A:C2	2.66	0.48
4:AE:102:VAL:HG21	4:AE:198:VAL:HG13	1.95	0.48
31:BA:495:A:H4'	31:BA:496:A:O5'	2.14	0.48
12:AP:136:ALA:HB2	21:AV:52:SER:HB2	1.96	0.48
1:AA:1109:C:H42	1:AA:1110:G:N2	2.11	0.48
31:BA:452:A:H2'	31:BA:453:A:C8	2.44	0.48
50:CW:30:LYS:C	50:CW:32:ALA:N	2.67	0.48
1:DA:1538:G:H2'	1:DA:1539:G:H8	1.79	0.48
6:AG:16:ARG:HH12	6:AG:31:VAL:HG13	1.78	0.48
1:AA:280:C:C2	1:AA:361:G:N2	2.81	0.48
1:AA:1296:G:H2'	1:AA:1297:C:O5'	2.12	0.48
18:DS:15:ARG:O	18:DS:19:LEU:HD13	2.13	0.48
1:DA:952:G:C6	1:DA:966:G:C6	3.01	0.48
1:AA:2862:G:C4	1:AA:2863:C:C5	3.01	0.48
9:AM:7:LYS:O	9:AM:8:GLN:C	2.51	0.48
31:CA:1436:U:H2'	31:CA:1437:C:C6	2.49	0.48
4:DE:27:LEU:HA	4:DE:180:ASN:O	2.13	0.48
16:D1:14:HIS:ND1	16:D1:32:PHE:CG	2.81	0.48
1:AA:311:A:C2	1:AA:328:U:C4	3.02	0.48
1:DA:1465:G:C2	1:DA:1466:G:C4	3.01	0.48
31:CA:781:A:C3'	31:CA:782:A:H5'	2.43	0.48
5:DF:67:GLN:O	5:DF:67:GLN:HG3	2.12	0.48
4:DE:4:ILE:HD12	4:DE:28:ALA:HB1	1.95	0.48
31:BA:688:G:OP2	31:BA:688:G:O4'	2.31	0.48
1:DA:218:A:H2	1:DA:235:U:H4'	1.78	0.48
1:AA:2814:C:C5	1:AA:2815:C:C4	3.02	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AD:134:ARG:HG3	3:AD:135:PHE:CE2	2.48	0.48
41:CN:24:SER:OG	41:CN:27:ASN:N	2.47	0.48
31:CA:1510:U:H2'	31:CA:1511:G:C8	2.48	0.48
1:AA:553:U:O4	56:AA:3423:OHX:N6	2.47	0.48
7:DH:10:PRO:HD2	7:DH:50:VAL:HG13	1.94	0.48
1:AA:1749:A:H2'	1:AA:1750:G:O4'	2.14	0.48
1:AA:374:A:C2	1:AA:401:A:C4	3.02	0.48
31:CA:655:A:C2	31:CA:754:C:N4	2.81	0.48
1:DA:1285:G:O6	56:DA:3368:OHX:N6	2.46	0.48
1:AA:2727:G:O2'	10:AN:70:LYS:HE2	2.13	0.48
13:D0:33:ARG:HB2	13:D0:33:ARG:NH1	2.29	0.48
1:DA:51:G:N3	1:DA:119:A:C2	2.81	0.48
31:BA:1067:A:H4'	31:BA:1068:G:O5'	2.13	0.48
49:BV:78:ARG:O	49:BV:79:THR:OG1	2.30	0.48
25:DX:23:LEU:O	25:DX:24:LYS:C	2.50	0.48
1:AA:451:C:H4'	5:AF:52:LYS:HE2	1.95	0.48
1:DA:152:G:H2'	1:DA:153:C:O4'	2.13	0.48
1:DA:155:C:C4	1:DA:171:G:N1	2.78	0.48
3:AD:35:LYS:CE	3:AD:65:ILE:HG22	2.44	0.48
54:C1:21:C:C4	54:C1:22:A:C5	3.01	0.48
31:CA:1055:A:C8	31:CA:1206:G:C2	3.02	0.48
31:CA:961:U:OP2	31:CA:1223:C:O2'	2.19	0.48
12:AP:17:LEU:HD22	12:AP:96:VAL:CG1	2.37	0.48
31:BA:1158:C:C2'	31:BA:1158:C:O2	2.62	0.48
32:CE:208:ILE:HA	32:CE:211:ILE:CD1	2.44	0.48
15:AR:107:ASP:O	15:AR:109:GLU:N	2.46	0.48
1:DA:2780:G:OP1	9:DM:118:LYS:HE2	2.14	0.48
30:D8:22:VAL:HG12	30:D8:50:LEU:HD21	1.94	0.48
1:AA:1931:U:O2'	1:AA:1932:A:H5'	2.13	0.48
1:AA:1081:U:O2'	1:AA:1082:U:O4'	2.29	0.48
1:DA:1058:U:H5	1:DA:1089:G:O6	1.97	0.48
31:CA:1274:G:O2'	31:CA:1275:A:H5'	2.14	0.48
31:BA:255:G:O6	31:BA:266:G:O6	2.32	0.48
14:DQ:35:ILE:O	14:DQ:35:ILE:HG23	2.13	0.48
1:DA:2469:A:C2	1:DA:2470:G:C5	3.01	0.48
14:AQ:83:LYS:O	14:AQ:109:GLY:CA	2.51	0.48
35:CH:141:GLN:HA	35:CH:143:ARG:NH2	2.28	0.48
13:A0:3:HIS:O	13:A0:5:LYS:HG3	2.14	0.48
31:CA:411:A:C5	31:CA:413:G:H1'	2.49	0.48
35:BH:100:VAL:O	35:BH:107:ARG:NH2	2.46	0.48
1:DA:918:A:H5''	2:DB:97:G:O2'	2.14	0.48
38:BK:109:ILE:HD11	38:BK:120:THR:HB	1.96	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:2873:A:N3	1:DA:2873:A:C2'	2.76	0.48
34:BG:114:ARG:CG	34:BG:114:ARG:NH1	2.76	0.48
1:DA:1990:C:C2'	1:DA:1991:U:O5'	2.62	0.48
7:DH:20:ALA:HB3	7:DH:23:ARG:HG3	1.95	0.48
7:AH:86:GLU:CG	7:AH:165:ALA:H	2.26	0.48
1:AA:2119:A:H62	1:AA:2168:G:H22	1.60	0.48
38:BK:64:LYS:O	38:BK:65:TYR:HD1	1.96	0.48
21:DV:44:PHE:CD1	21:DV:44:PHE:C	2.87	0.48
1:DA:2239:G:P	3:DD:244:ARG:HH22	2.35	0.48
45:CR:53:HIS:O	45:CR:56:LEU:HB3	2.12	0.48
21:AV:120:ILE:HG21	21:AV:170:THR:OG1	2.14	0.48
1:DA:2736:G:H2'	1:DA:2737:G:C8	2.43	0.48
1:DA:1459:G:C2'	1:DA:1460:A:H5'	2.44	0.48
1:AA:633:A:H2'	1:AA:634:C:H5'	1.95	0.48
52:BD:1:G:C2	52:BD:82:A:N1	2.82	0.48
1:DA:2052:G:C8	4:DE:141:ILE:HD11	2.49	0.48
50:CW:53:LEU:HD11	50:CW:104:LEU:HD11	1.96	0.48
19:AT:50:LYS:HB3	19:AT:87:GLN:HE22	1.79	0.48
21:DV:114:GLY:C	21:DV:116:VAL:H	2.17	0.48
34:CG:200:GLU:HG2	34:CG:201:GLN:N	2.28	0.48
1:DA:265:A:H4'	1:DA:266:G:O5'	2.14	0.48
31:BA:703:G:O6	56:BA:1747:OHX:N1	2.46	0.48
49:BV:7:LYS:CG	49:BV:7:LYS:O	2.61	0.48
2:AB:37:C:C2'	2:AB:38:C:H5'	2.44	0.48
1:AA:1267:U:O2'	1:AA:1268:A:H5'	2.14	0.48
3:AD:177:LEU:HD11	3:AD:183:ARG:CB	2.43	0.48
37:CJ:111:ARG:NH2	37:CJ:122:HIS:HB2	2.28	0.48
33:BF:67:THR:HG23	33:BF:102:ASN:HB2	1.96	0.48
1:DA:2533:A:N6	1:DA:2534:A:C2	2.82	0.48
25:DX:35:ARG:HB3	25:DX:37:LEU:HD21	1.96	0.48
7:DH:106:THR:HG22	7:DH:112:PRO:HB3	1.96	0.48
1:DA:2324:C:H5''	1:DA:2325:G:H5'	1.96	0.48
28:A6:27:LYS:HB2	28:A6:27:LYS:HZ2	1.79	0.48
12:AP:11:LYS:HG2	12:AP:87:LYS:HG2	1.95	0.48
4:DE:35:GLN:CG	4:DE:36:ARG:H	2.27	0.48
1:DA:2786:U:H5''	4:DE:65:GLY:HA3	1.95	0.48
17:D2:76:LYS:HB3	17:D2:79:VAL:HG22	1.95	0.48
31:CA:1206:G:C6	31:CA:1207:G:C5	3.01	0.48
31:CA:1306:A:H61	31:CA:1331:G:H1'	1.78	0.48
3:DD:94:LEU:HG	3:DD:104:TYR:HE2	1.79	0.48
1:DA:1448:G:H1'	1:DA:1528:A:H62	1.79	0.48
1:DA:1223:C:OP2	17:D2:88:ARG:NH2	2.46	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1088:A:O2'	56:AA:3531:OHX:N3	2.46	0.48
31:CA:1183:A:O2'	31:CA:1184:G:OP1	2.24	0.48
3:AD:27:THR:O	3:AD:28:GLU:CB	2.60	0.48
52:CD:85:A:O2'	1:DA:2394:C:O2	2.32	0.48
31:BA:1199:U:C4'	40:BM:54:PHE:CE2	2.97	0.48
16:D1:65:ILE:HG22	16:D1:66:ASN:N	2.28	0.48
31:CA:1349:A:C4	31:CA:1374:A:C2	3.02	0.48
31:CA:1146:A:OP1	31:CA:1146:A:H8	1.96	0.48
31:BA:552:U:C2'	31:BA:553:A:H5'	2.44	0.48
23:DZ:87:PRO:O	23:DZ:90:ILE:N	2.46	0.48
23:DZ:91:LYS:O	23:DZ:92:LYS:C	2.52	0.48
1:AA:1142(A):A:N7	1:AA:1144:G:C5	2.81	0.48
31:BA:382:A:O2'	31:BA:383:A:H5'	2.13	0.48
31:CA:1006:C:H2'	31:CA:1007:C:C6	2.49	0.48
31:BA:426:G:H2'	31:BA:427:U:C6	2.49	0.48
6:DG:128:ARG:NH2	6:DG:128:ARG:CG	2.75	0.48
1:AA:39:C:O2	5:AF:46:ARG:NH2	2.42	0.48
29:D7:34:ARG:NH1	29:D7:34:ARG:HG2	2.28	0.48
21:AV:51:ALA:O	21:AV:52:SER:HB3	2.13	0.48
5:DF:178:PRO:C	5:DF:180:GLY:H	2.17	0.48
35:CH:111:GLU:O	35:CH:114:GLY:N	2.45	0.48
35:CH:111:GLU:C	35:CH:113:ALA:H	2.17	0.48
38:BK:91:ARG:HD2	42:BO:7:ILE:HG13	1.96	0.48
21:DV:28:MET:HG3	21:DV:37:VAL:CG1	2.40	0.48
1:AA:998:C:C2'	1:AA:999:U:O5'	2.59	0.48
1:DA:943:U:OP2	11:DO:36:LYS:CE	2.61	0.48
1:AA:2474:C:C2	1:AA:2475:C:H1'	2.49	0.48
8:DK:72:LEU:C	8:DK:74:ASN:N	2.67	0.48
21:DV:84:GLU:O	21:DV:85:HIS:HB2	2.13	0.48
1:AA:2857:G:C6	1:AA:2861:G:O6	2.67	0.48
34:BG:68:TYR:OH	34:BG:196:LEU:HD11	2.13	0.48
31:CA:38:G:C2	31:CA:397:A:C2	3.02	0.48
1:AA:2542:A:H4'	1:AA:2543:G:H5''	1.94	0.48
42:BO:66:VAL:HG22	42:BO:67:THR:N	2.28	0.48
14:DQ:34:HIS:CE1	14:DQ:54:LEU:HD12	2.49	0.48
1:AA:2095:C:H2'	1:AA:2096:U:O4'	2.13	0.48
31:BA:109:A:C4	31:BA:327:A:C2	3.02	0.48
1:AA:1174:A:N6	1:AA:1175:U:C6	2.81	0.48
11:AO:71:VAL:CG1	11:AO:72:PRO:HD3	2.43	0.48
31:CA:89:U:O2'	31:CA:90:C:H5''	2.13	0.48
1:AA:2490:G:C2	56:AA:3330:OHX:N6	2.81	0.48
1:DA:527:C:C5	56:DA:3388:OHX:N5	2.80	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:DE:134:ILE:HD12	4:DE:134:ILE:O	2.14	0.48
33:CF:81:GLY:HA3	33:CF:85:ARG:HH11	1.78	0.48
1:DA:1636:C:H2'	1:DA:1637:A:H8	1.74	0.48
31:BA:939:G:C5'	37:BJ:102:ARG:NH2	2.76	0.48
34:BG:104:VAL:O	34:BG:106:TYR:N	2.47	0.48
7:AH:111:HIS:ND1	7:AH:112:PRO:O	2.33	0.48
1:DA:2869:G:C2	1:DA:2870:C:O2	2.67	0.48
2:DB:116:G:C5'	14:DQ:55:ALA:HB2	2.43	0.48
31:CA:166:G:O2'	31:CA:167:G:H5'	2.14	0.48
1:DA:130:C:H2'	1:DA:131:G:O5'	2.13	0.48
1:AA:1412:A:N6	1:AA:1413:G:C6	2.81	0.48
33:CF:37:GLN:NE2	44:CQ:52:GLN:OE1	2.46	0.48
1:DA:1218:C:H42	1:DA:1231:G:H1	1.62	0.48
31:CA:612:C:O2	31:CA:629:G:N2	2.47	0.48
20:AU:29:GLU:HB3	20:AU:38:ILE:CG2	2.43	0.48
1:DA:484:C:H2'	1:DA:485:C:C6	2.49	0.48
1:DA:939:G:O6	56:DA:3416:OHX:N3	2.47	0.48
22:A3:60:PHE:CD2	22:A3:60:PHE:N	2.81	0.48
1:AA:103:A:O5'	1:AA:103:A:H8	1.97	0.48
39:BL:47:LEU:H	39:BL:47:LEU:HD22	1.79	0.48
33:BF:179:ARG:HG3	33:BF:179:ARG:O	2.14	0.48
1:DA:202:U:H2'	1:DA:203:C:O4'	2.14	0.48
40:BM:32:ALA:CB	40:BM:76:ASN:HB2	2.43	0.48
15:AR:37:GLY:O	15:AR:38:ASN:HB2	2.13	0.48
3:AD:35:LYS:CD	3:AD:104:TYR:HD1	2.11	0.48
1:AA:882:G:C2'	1:AA:883:G:C8	2.93	0.48
1:DA:883:G:C6	1:DA:884:C:N4	2.82	0.48
1:AA:1359:A:H2'	1:AA:1360:A:C5'	2.31	0.48
21:AV:97:GLU:HA	21:AV:126:VAL:O	2.14	0.48
1:AA:1061:U:C4'	1:AA:1070:A:H1'	2.15	0.48
32:CE:75:LYS:CA	32:CE:78:GLN:HB2	2.24	0.48
31:BA:1326:C:H2'	31:BA:1327:C:H6	1.76	0.48
31:BA:1403:C:H1'	31:BA:1500:A:N1	2.29	0.48
1:DA:1679:U:H2'	1:DA:1679:U:O2	2.13	0.48
1:AA:1056:G:N2	1:AA:1103:A:N6	2.42	0.48
39:BL:118:LYS:O	39:BL:119:ALA:CB	2.62	0.48
31:BA:1133:G:N2	31:BA:1141:C:N3	2.57	0.48
31:BA:558:G:C5	31:BA:559:A:C2	3.02	0.48
34:BG:206:PHE:HD2	34:BG:207:TYR:CD1	2.31	0.48
14:DQ:14:VAL:HG21	14:DQ:89:ARG:HH11	1.78	0.48
19:DT:18:TYR:O	19:DT:20:GLY:N	2.47	0.48
6:DG:110:ALA:HA	6:DG:140:ILE:O	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:735:C:O2'	31:BA:736:C:H5'	2.14	0.48
12:DP:116:GLU:O	12:DP:117:ALA:HB2	2.14	0.48
1:AA:1049:C:C2'	1:AA:1050:A:H5'	2.41	0.48
31:CA:1285:A:C2'	31:CA:1286:A:OP2	2.62	0.48
1:DA:1681:G:N1	56:DA:3488:OHX:N2	2.58	0.48
31:BA:624:C:H2'	31:BA:625:G:H8	1.78	0.48
34:CG:24:GLU:OE1	34:CG:112:VAL:HG21	2.14	0.48
32:CE:82:ARG:HD2	32:CE:92:TYR:CE1	2.49	0.48
10:DN:80:ASP:OD1	15:DR:64:ARG:NH2	2.46	0.48
51:CX:12:LYS:HD2	51:CX:17:THR:O	2.14	0.48
21:DV:69:THR:HG22	21:DV:90:VAL:HA	1.96	0.48
16:A1:76:TYR:CD2	16:A1:76:TYR:C	2.86	0.48
1:DA:919:G:N2	1:DA:2269:A:OP2	2.47	0.48
1:AA:1108:U:O4	1:AA:1109:C:N4	2.45	0.48
31:CA:245:C:O2	31:CA:283:C:N3	2.46	0.48
1:AA:1138:G:H21	9:AM:106:MET:HE3	1.77	0.48
34:CG:173:TRP:NE1	34:CG:174:LEU:HG	2.28	0.48
39:BL:53:VAL:HG23	39:BL:95:LYS:CD	2.43	0.48
1:AA:2012:G:OP2	18:AS:16:LYS:NZ	2.47	0.48
33:CF:45:LYS:O	33:CF:47:LEU:N	2.46	0.48
1:AA:2432:A:C5	23:AZ:33:LYS:HG2	2.49	0.48
1:AA:1171:G:N2	1:AA:1179:C:O2	2.46	0.48
1:AA:459:U:OP2	29:A7:39:ARG:NH1	2.46	0.48
1:AA:459:U:C2'	1:AA:460:A:H5'	2.44	0.48
12:DP:36:ALA:HB2	12:DP:103:MET:SD	2.53	0.48
1:AA:529:A:C8	1:AA:530:G:C6	2.99	0.48
1:DA:1784:A:H4'	1:DA:1785:A:C5'	2.44	0.48
16:D1:10:ARG:HG2	16:D1:14:HIS:CD2	2.49	0.48
1:AA:1754:C:H5	15:AR:96:ARG:NH2	2.12	0.48
1:AA:966:G:H2'	1:AA:967:C:H6	1.78	0.48
31:CA:780:A:C2	31:CA:803:G:C6	3.02	0.48
20:DU:6:HIS:HE1	20:DU:69:ALA:O	1.97	0.48
1:DA:28:A:C2	1:DA:513:A:C8	3.02	0.48
1:AA:2619:C:OP1	4:AE:152:LYS:HE3	2.13	0.48
1:DA:52:A:O2'	1:DA:53:A:H5'	2.14	0.48
1:AA:2651:C:C2	1:AA:2670:A:C2	3.01	0.48
1:AA:2092:U:O2	56:AA:3405:OHX:N1	2.47	0.48
18:AS:51:LEU:HD23	18:AS:105:VAL:HG11	1.96	0.48
1:DA:498:G:N7	56:DA:3407:OHX:N1	2.62	0.48
1:AA:2732:G:H3'	1:AA:2733:A:O4'	2.13	0.48
6:AG:43:LEU:HD12	6:AG:45:GLU:CG	2.44	0.48
6:AG:43:LEU:HD12	6:AG:45:GLU:HG3	1.96	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:AO:119:GLU:HA	11:AO:119:GLU:OE2	2.13	0.48
8:DK:71:ILE:HG12	8:DK:71:ILE:O	2.14	0.48
12:AP:116:GLU:OE1	12:AP:116:GLU:HA	2.13	0.48
31:CA:1167:A:O5'	31:CA:1167:A:H8	1.97	0.48
39:CL:109:VAL:O	39:CL:109:VAL:HG12	2.13	0.48
1:DA:1952:A:C5	10:DN:22:ILE:HD12	2.49	0.48
1:AA:2015:A:C4	27:A5:6:VAL:HG23	2.48	0.48
4:DE:73:GLU:O	4:DE:74:PRO:O	2.32	0.48
1:AA:943:U:OP2	11:AO:36:LYS:NZ	2.39	0.48
1:DA:971:C:H2'	1:DA:972:G:O5'	2.14	0.48
31:CA:1206:G:H2'	31:CA:1207:G:C8	2.48	0.48
40:CM:47:PHE:CB	44:CQ:34:TYR:CE2	2.97	0.48
31:CA:1309:G:O2'	43:CP:77:ASN:ND2	2.47	0.48
1:DA:888:C:H1'	1:DA:889:C:OP1	2.14	0.48
1:DA:2392:A:C8	11:DO:60:MET:SD	3.07	0.48
52:BD:57:C:C4'	52:BD:58:G:OP2	2.62	0.48
31:CA:1159:U:H1'	31:CA:1181:G:N1	2.26	0.48
1:DA:2854:G:C2	1:DA:2864:G:C2	3.02	0.48
1:AA:2590:A:P	3:AD:238:GLY:HA2	2.54	0.48
11:DO:97:PRO:O	11:DO:98:GLU:CB	2.61	0.48
16:A1:92:ARG:HH21	17:A2:10:LYS:HB3	1.79	0.48
17:A2:35:LEU:CD2	17:A2:35:LEU:H	2.24	0.48
1:AA:1161:C:H1'	17:A2:8:GLY:O	2.13	0.48
1:DA:2751:G:C5'	1:DA:2752:C:OP2	2.62	0.48
47:BT:11:VAL:HG22	47:BT:20:THR:O	2.14	0.48
31:CA:1286:A:H8	31:CA:1287:A:H4'	1.69	0.48
31:BA:537:G:H2'	31:BA:538:G:C8	2.49	0.48
1:AA:2068:U:N3	1:AA:2430:A:C2	2.52	0.48
4:AE:111:ARG:HG3	4:AE:160:TYR:HD1	1.71	0.48
56:DA:3444:OHX:N1	56:DA:3471:OHX:N5	2.62	0.48
31:BA:955:U:H1'	31:BA:1227:A:H61	1.79	0.48
31:BA:420:U:H2'	31:BA:422:C:C6	2.48	0.48
1:DA:516:C:O2'	1:DA:517:C:H5'	2.14	0.48
1:AA:537:C:H2'	1:AA:539:G:O4'	2.14	0.48
20:AU:95:LYS:HG3	20:AU:95:LYS:O	2.14	0.48
20:AU:97:ARG:C	20:AU:97:ARG:NE	2.62	0.48
1:AA:2500:U:H2'	1:AA:2504:U:H5	1.79	0.48
1:AA:2472:G:H8	1:AA:2472:G:O5'	1.96	0.48
8:DK:75:LEU:HD23	8:DK:76:THR:H	1.78	0.48
1:DA:2015:A:C1'	27:D5:2:ALA:HA	2.41	0.48
6:DG:55:LYS:HD2	6:DG:58:GLN:HE22	1.77	0.48
15:DR:19:LEU:H	15:DR:19:LEU:HD12	1.77	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:AG:119:GLY:CA	6:AG:181:ARG:HB2	2.43	0.48
1:AA:34:C:O2'	1:AA:35:G:P	2.71	0.48
9:AM:75:TYR:O	9:AM:76:SER:O	2.32	0.48
31:CA:1220:G:H5'	49:CV:34:TRP:O	2.14	0.48
1:DA:287:C:H2'	1:DA:288:C:H6	1.78	0.48
1:DA:353:G:H2'	1:DA:354:G:H5'	1.96	0.48
31:BA:919:A:O2'	31:BA:920:U:H5'	2.14	0.48
31:CA:115:G:H4'	31:CA:116:A:O5'	2.12	0.48
31:BA:115:G:O5'	31:BA:115:G:H8	1.97	0.48
1:DA:2190:G:H2'	1:DA:2191:G:O4'	2.13	0.48
11:AO:131:SER:H	11:AO:134:ALA:HB3	1.79	0.48
41:CN:21:ILE:O	41:CN:21:ILE:HG22	2.13	0.48
38:CK:23:SER:HB2	38:CK:61:VAL:O	2.13	0.48
35:CH:51:VAL:CB	35:CH:52:PRO:HD3	2.43	0.48
4:AE:46:ALA:HB2	4:AE:82:ARG:HA	1.96	0.48
31:CA:369:C:O2	31:CA:369:C:H2'	2.13	0.48
1:DA:1954:G:N3	1:DA:2551:C:H5''	2.28	0.48
1:DA:2247:A:O2'	1:DA:2248:C:H5'	2.14	0.48
43:CP:118:ALA:HB3	53:CC:30:G:H5'	1.95	0.48
1:DA:273(F):C:H2'	1:DA:274:G:C8	2.48	0.48
7:DH:70:THR:HG22	7:DH:74:ASN:ND2	2.29	0.48
31:BA:128:G:O2'	47:BT:3:LYS:HE2	2.14	0.48
31:CA:186(E):C:H42	31:CA:191(B):G:H1	1.61	0.48
31:CA:191(C):G:H2'	31:CA:191(D):U:O4'	2.14	0.48
31:CA:93:U:H2'	31:CA:95:G:H5''	1.96	0.48
16:A1:110:VAL:O	16:A1:113:ALA:HB3	2.13	0.48
1:AA:1375:C:H2'	1:AA:1376:C:H6	1.79	0.48
1:AA:1389:G:H2'	1:AA:1390:U:C6	2.48	0.48
1:DA:270(Y):G:OP1	56:DA:3470:OHX:N4	2.47	0.48
31:BA:1095:U:H5''	31:BA:1109:C:O2	2.13	0.48
31:CA:625:G:C6	31:CA:626:U:C4	3.02	0.48
1:DA:2576:G:O2'	1:DA:2579:C:OP2	2.25	0.48
1:DA:1843:C:H5'	3:DD:253:GLN:NE2	2.29	0.48
8:DK:18:VAL:O	8:DK:18:VAL:HG12	2.12	0.48
31:BA:998:G:C6	31:BA:998(A):C:N4	2.81	0.48
1:AA:2393:A:H2'	1:AA:2394:C:O4'	2.14	0.47
1:AA:2212:A:N3	1:AA:2215:G:N1	2.61	0.47
31:CA:1051:C:C4	31:CA:1052:U:C4	3.02	0.47
31:CA:949:A:H2'	31:CA:950:U:O4'	2.14	0.47
40:CM:50:ILE:CD1	40:CM:60:ARG:HH11	2.27	0.47
3:DD:31:LYS:HE3	3:DD:94:LEU:HD11	1.96	0.47
52:CD:20:C:H3'	52:CD:68:A:H62	1.78	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:DG:6:ALA:O	6:DG:8:LYS:N	2.47	0.47
1:AA:899:A:O2'	1:AA:900:A:C8	2.66	0.47
43:BP:87:TYR:O	43:BP:88:ARG:C	2.53	0.47
31:BA:1026:G:C6	31:BA:1036:G:N2	2.82	0.47
31:BA:1027:C:H4'	31:BA:1028:C:OP1	2.13	0.47
26:A4:43:TYR:O	26:A4:46:GLN:HA	2.14	0.47
16:D1:65:ILE:O	16:D1:66:ASN:C	2.52	0.47
52:BB:8:U:C2	52:BB:15:G:O6	2.67	0.47
26:A4:63:TYR:HE2	49:BV:42:PRO:CD	2.19	0.47
40:BM:48:THR:HA	40:BM:62:HIS:CB	2.25	0.47
1:AA:994:C:O2'	1:AA:996:A:OP1	2.15	0.47
1:DA:1048:A:P	1:DA:1109:C:H42	2.36	0.47
52:CB:59:A:N6	52:CB:60:A:C6	2.81	0.47
1:AA:2469:A:HO2'	12:AP:56:ARG:HG2	1.77	0.47
1:DA:2210:G:C4'	1:DA:2211:G:OP2	2.62	0.47
31:BA:827:U:O4'	31:BA:827:U:O2	2.27	0.47
21:DV:129:SER:C	21:DV:131:ARG:H	2.17	0.47
4:AE:13:ARG:HB2	4:AE:21:VAL:HB	1.95	0.47
1:AA:2789:C:C2'	1:AA:2790:A:H5''	2.44	0.47
53:CC:16:C:H4'	53:CC:16:C:OP1	2.14	0.47
31:CA:580:U:P	56:CA:1723:OHX:N5	2.86	0.47
31:BA:422:C:C2'	31:BA:422:C:O2	2.62	0.47
1:AA:508:G:C6	18:AS:9:TYR:CD2	3.02	0.47
31:CA:9:G:C8	35:CH:126:ARG:NH2	2.82	0.47
38:BK:103:VAL:CG1	38:BK:138:TRP:HD1	2.26	0.47
4:DE:119:ARG:CG	4:DE:160:TYR:HB2	2.36	0.47
38:CK:74:PRO:O	38:CK:75:ARG:C	2.52	0.47
1:DA:2720:U:N3	1:DA:2721:A:C5	2.82	0.47
32:BE:162:ILE:O	32:BE:185:ILE:HG12	2.14	0.47
15:AR:56:GLY:C	15:AR:57:PHE:O	2.46	0.47
26:D4:40:HIS:N	26:D4:41:PRO:CD	2.78	0.47
11:AO:29:LYS:CD	11:AO:30:THR:HG22	2.45	0.47
1:AA:323:G:O6	1:AA:333:G:C5	2.67	0.47
41:BN:12:ARG:CG	41:BN:13:GLN:H	2.23	0.47
1:AA:811:U:C4	11:AO:21:ARG:NH2	2.82	0.47
32:BE:74:LYS:O	32:BE:78:GLN:HB2	2.13	0.47
31:BA:1509:C:C2'	31:BA:1510:U:H5'	2.44	0.47
42:CO:18:VAL:HG23	42:CO:19:ARG:H	1.79	0.47
1:DA:1638:C:H1'	1:DA:2698:U:O2'	2.14	0.47
1:AA:2566:A:H1'	1:AA:2567:G:OP2	2.14	0.47
2:DB:27:C:C5	2:DB:28:C:C5	3.02	0.47
1:AA:16:G:N3	1:AA:17:G:C8	2.82	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
33:BF:112:SER:HB3	33:BF:115:LEU:HD12	1.95	0.47
21:AV:7:ALA:HB3	21:AV:61:LEU:CB	2.44	0.47
1:DA:654(A):A:N1	1:DA:654(T):A:N1	2.62	0.47
35:CH:47:LYS:HB2	35:CH:47:LYS:HE2	1.67	0.47
1:AA:2490:G:H2'	1:AA:2490:G:N3	2.27	0.47
6:AG:172:LEU:HD11	6:AG:176:LEU:HD12	1.96	0.47
1:DA:2052:G:OP1	4:DE:140:SER:HB2	2.14	0.47
1:AA:509:C:OP1	56:AA:3365:OHX:N1	2.47	0.47
35:CH:88:LYS:HB2	35:CH:123:LEU:HB2	1.95	0.47
36:CI:21:LEU:HD22	36:CI:21:LEU:O	2.14	0.47
3:AD:31:LYS:HD3	3:AD:94:LEU:HD11	1.96	0.47
25:AX:54:VAL:HG22	25:AX:55:ARG:N	2.28	0.47
1:AA:270(B):A:C3'	1:AA:270(C):C:H5'	2.44	0.47
1:AA:2537:U:H2'	1:AA:2538:C:H6	1.79	0.47
1:DA:1526:G:H2'	1:DA:1527:G:O4'	2.13	0.47
1:AA:2602:A:H4'	1:AA:2603:G:O5'	2.14	0.47
37:BJ:49:ILE:HG22	37:BJ:53:LYS:HD3	1.97	0.47
13:A0:26:LYS:HE2	13:A0:70:LEU:O	2.13	0.47
9:DM:87:LEU:O	9:DM:89:LYS:N	2.47	0.47
31:BA:690:G:O2'	31:BA:691:G:H5'	2.13	0.47
31:CA:438:G:H4'	34:CG:123:HIS:ND1	2.29	0.47
1:DA:1378:A:OP1	29:D7:10:ARG:NH2	2.47	0.47
1:AA:579:G:H5''	1:AA:2018:G:H5''	1.96	0.47
1:DA:332:A:C2	1:DA:335:C:C5	3.02	0.47
14:DQ:25:ARG:CB	14:DQ:25:ARG:HH11	2.27	0.47
31:BA:777:A:H2'	31:BA:778:G:O5'	2.13	0.47
1:DA:2859:G:C8	1:DA:2859:G:H3'	2.48	0.47
40:BM:75:ILE:HG13	40:BM:76:ASN:H	1.79	0.47
1:AA:2731:G:C6	1:AA:2732:G:O6	2.66	0.47
1:DA:2803:C:N4	1:DA:2804:C:N4	2.61	0.47
22:D3:56:ASP:O	22:D3:56:ASP:CG	2.52	0.47
44:CQ:43:CYS:O	44:CQ:46:GLU:HB2	2.13	0.47
1:DA:2772:C:H5'	4:DE:168:MET:CE	2.44	0.47
53:BC:64:G:H2'	53:BC:65:G:H8	1.78	0.47
1:AA:83:G:O6	56:AA:3376:OHX:N5	2.47	0.47
1:AA:2252:G:H2'	1:AA:2253:G:O4'	2.13	0.47
2:AB:82:G:O2'	2:AB:83:G:H5'	2.13	0.47
37:BJ:137:LYS:O	37:BJ:139:GLU:N	2.47	0.47
12:AP:87:LYS:HG3	12:AP:88:GLY:N	2.28	0.47
4:DE:58:ARG:O	4:DE:59:VAL:C	2.51	0.47
11:DO:31:ALA:O	11:DO:33:ARG:N	2.47	0.47
31:CA:1321:C:H4'	43:CP:87:TYR:CE2	2.49	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1537:C:H2'	1:AA:1538:G:O5'	2.13	0.47
52:CD:46:G:N1	52:CD:54:C:O2	2.44	0.47
21:DV:10:ARG:HG2	21:DV:11:GLU:N	2.28	0.47
5:DF:123:LEU:O	5:DF:193:VAL:HA	2.13	0.47
19:DT:57:LEU:HD21	19:DT:78:LYS:HD2	1.96	0.47
31:CA:426:G:P	34:CG:36:ARG:HH21	2.37	0.47
30:D8:34:TRP:C	30:D8:36:LYS:H	2.17	0.47
27:A5:33:CYS:HB3	27:A5:38:ALA:O	2.14	0.47
16:D1:24:TYR:O	16:D1:29:SER:OG	2.27	0.47
1:AA:2140:C:N4	1:AA:2151:G:H1	2.12	0.47
16:A1:79:PHE:C	16:A1:79:PHE:HD2	2.17	0.47
31:BA:1150:U:H5''	31:BA:1151:A:OP2	2.14	0.47
40:BM:96:ILE:N	40:BM:96:ILE:HD13	2.28	0.47
1:DA:1308:A:OP2	56:DA:3389:OHX:N6	2.47	0.47
39:BL:29:ASN:N	39:BL:63:ILE:O	2.38	0.47
44:BQ:29:ARG:HD3	44:BQ:40:CYS:HB2	1.96	0.47
19:DT:44:GLU:C	19:DT:46:ALA:H	2.16	0.47
52:CB:66:G:H2'	52:CB:67:A:H5'	1.96	0.47
1:DA:2467:C:H6	1:DA:2467:C:H3'	1.78	0.47
31:BA:389:A:H2'	31:BA:390:C:H5'	1.96	0.47
31:BA:448:A:OP2	31:BA:485:G:N1	2.47	0.47
12:DP:21:THR:HG23	12:DP:21:THR:O	2.10	0.47
6:DG:61:ALA:O	26:D4:7:PRO:HG2	2.14	0.47
34:BG:108:LEU:HB3	34:BG:110:PHE:CE1	2.42	0.47
34:BG:19:LEU:HG	34:BG:21:LEU:HD21	1.96	0.47
34:BG:11:LEU:HD13	34:BG:66:ARG:HG2	1.94	0.47
31:CA:428:G:H4'	31:CA:429:U:O5'	2.14	0.47
31:CA:410:G:C2	31:CA:429:U:C2	3.02	0.47
31:CA:1503:A:O2'	31:CA:1504:G:C5'	2.62	0.47
1:DA:1771:C:H1'	1:DA:1786:A:C8	2.49	0.47
49:CV:7:LYS:CG	49:CV:8:GLY:H	2.16	0.47
31:BA:1318:A:H1'	49:BV:37:ARG:HH21	1.80	0.47
7:AH:83:TYR:HA	7:AH:135:GLY:O	2.14	0.47
1:AA:2111:C:H5	1:AA:2147:G:N2	2.11	0.47
22:D3:48:GLY:HA3	22:D3:80:HIS:ND1	2.29	0.47
2:DB:74:U:H3'	2:DB:75:G:H5''	1.95	0.47
31:CA:619:U:C2	34:CG:135:LEU:HD22	2.49	0.47
1:AA:1287:A:H8	13:A0:104:ARG:HD3	1.80	0.47
6:DG:121:ASN:ND2	6:DG:122:PRO:HD2	2.29	0.47
53:BC:19:G:C2	53:BC:59:A:C4	3.02	0.47
31:BA:342:C:C2	31:BA:348:G:C2	3.02	0.47
41:CN:124:LYS:HB2	41:CN:125:PHE:CD2	2.49	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
21:DV:5:LEU:HD12	21:DV:47:VAL:HG21	1.96	0.47
8:AK:25:TYR:CE2	8:AK:29:TYR:CD2	3.01	0.47
1:DA:2335:A:N7	1:DA:2337:G:C5	2.82	0.47
1:AA:1171:G:C6	1:AA:1174:A:C6	3.01	0.47
12:DP:103:MET:HE1	12:DP:125:LEU:HD13	1.95	0.47
10:AN:88:ASN:HD21	10:AN:92:GLU:HG3	1.79	0.47
1:AA:2199:A:C4	1:AA:2205:C:C6	3.01	0.47
31:BA:959:A:C2	31:BA:1222:G:O4'	2.67	0.47
31:BA:957:U:H2'	31:BA:959:A:OP2	2.14	0.47
13:D0:84:ALA:N	13:D0:85:PRO:CD	2.77	0.47
35:BH:51:VAL:O	35:BH:55:VAL:HG23	2.13	0.47
1:DA:2818:G:C2'	1:DA:2819:G:H5'	2.44	0.47
38:CK:109:ILE:HG12	38:CK:110:ALA:N	2.28	0.47
1:AA:2435:A:C2'	1:AA:2436:G:O5'	2.62	0.47
1:DA:455:C:N3	1:DA:472:A:H2'	2.29	0.47
1:DA:2087:G:C2'	1:DA:2088:G:H5'	2.44	0.47
31:BA:909:A:H2'	31:BA:910:C:O4'	2.15	0.47
18:AS:5:ALA:CB	18:AS:54:ALA:HB2	2.45	0.47
32:CE:69:LEU:O	32:CE:69:LEU:HD23	2.14	0.47
31:BA:446:G:H1	31:BA:488:C:H42	1.61	0.47
25:AX:7:LYS:HG3	25:AX:34:GLU:HG3	1.94	0.47
1:DA:941:A:H2'	1:DA:942:G:C8	2.49	0.47
31:BA:340:U:H2'	31:BA:341:C:O4'	2.14	0.47
31:CA:951:G:C6	31:CA:1231:G:C6	3.03	0.47
31:CA:1190:G:H5'	33:CF:176:HIS:NE2	2.30	0.47
1:DA:886:C:H2'	1:DA:888:C:N3	2.28	0.47
1:AA:2308:G:C6	1:AA:2311:A:N1	2.77	0.47
11:AO:15:ARG:O	11:AO:16:ARG:C	2.53	0.47
31:BA:1009:G:O2'	31:BA:1010:G:H5'	2.14	0.47
31:BA:1028(B):C:C4	31:BA:1032(A):G:N2	2.80	0.47
31:CA:1161:C:C2	31:CA:1162:C:C5	3.02	0.47
31:CA:690:G:N2	41:CN:55:LYS:NZ	2.62	0.47
1:AA:2592:G:C5	1:AA:2593:U:C5	3.02	0.47
11:DO:15:ARG:O	11:DO:16:ARG:C	2.53	0.47
31:BA:150:C:C5	31:BA:170:U:O4	2.67	0.47
1:AA:2141:G:H2'	1:AA:2142:C:C6	2.49	0.47
31:CA:1129:C:N4	31:CA:1139:G:C2	2.82	0.47
1:DA:1311:G:O6	56:DA:3389:OHX:N5	2.47	0.47
14:DQ:24:LEU:HB2	14:DQ:85:VAL:CG1	2.44	0.47
19:DT:28:PHE:HE1	19:DT:81:VAL:HG22	1.75	0.47
1:DA:2468:G:O6	1:DA:2481:G:C5	2.67	0.47
52:CB:51:C:H2'	52:CB:52:G:O4'	2.13	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:DP:26:TYR:CE1	12:DP:139:GLU:HB2	2.50	0.47
1:AA:1265:A:H3'	27:A5:19:ARG:NH1	2.29	0.47
31:BA:658:G:C6	31:BA:659:U:C4	3.02	0.47
42:CO:83:VAL:CG1	42:CO:84:LEU:H	2.16	0.47
11:AO:50:ARG:CG	11:AO:50:ARG:HH21	2.26	0.47
14:AQ:69:VAL:O	14:AQ:69:VAL:HG22	2.14	0.47
52:BD:49:A:C2'	52:BD:50:U:O5'	2.62	0.47
32:CE:91:PRO:HG3	32:CE:155:LEU:H	1.78	0.47
4:AE:26:ILE:CD1	4:AE:198:VAL:HG21	2.34	0.47
1:DA:2762:G:H3'	1:DA:2763:G:C5'	2.39	0.47
31:BA:153:C:O5'	31:BA:153:C:H6	1.97	0.47
31:BA:191:G:N3	50:BW:105:SER:HB2	2.30	0.47
31:CA:179:A:C5	31:CA:180:U:C5	3.02	0.47
1:AA:654:A:N3	1:AA:654:A:C2'	2.76	0.47
9:AM:103:VAL:O	9:AM:104:LYS:C	2.52	0.47
19:DT:40:LYS:C	19:DT:42:ALA:N	2.65	0.47
50:CW:74:LYS:HA	50:CW:74:LYS:HE3	1.96	0.47
4:AE:29:GLY:N	4:AE:51:PHE:HE2	2.04	0.47
31:BA:1074:G:O2'	31:BA:1101:A:N1	2.45	0.47
15:AR:26:ASP:HB2	15:AR:90:GLN:O	2.14	0.47
39:CL:33:PHE:CE1	39:CL:37:PHE:CD1	3.02	0.47
10:DN:115:VAL:CG1	10:DN:121:VAL:HG21	2.42	0.47
43:CP:115:LYS:C	43:CP:117:VAL:H	2.17	0.47
6:DG:55:LYS:C	6:DG:57:ALA:N	2.68	0.47
32:BE:200:ILE:H	32:BE:200:ILE:HD12	1.76	0.47
1:AA:2572:A:N7	4:AE:145:LYS:HB2	2.29	0.47
1:AA:650:C:H2'	1:AA:651:G:O5'	2.15	0.47
35:BH:17:ALA:HA	35:BH:26:PHE:HA	1.96	0.47
23:AZ:91:LYS:O	23:AZ:93:GLU:N	2.47	0.47
1:DA:2820:A:C5	13:D0:4:LEU:HD11	2.49	0.47
3:DD:123:ALA:HB3	3:DD:131:LEU:HG	1.95	0.47
1:DA:272:G:H2'	1:DA:273:G:O4'	2.14	0.47
21:AV:92:SER:O	21:AV:130:PRO:HG2	2.14	0.47
14:AQ:11:LYS:O	14:AQ:15:ARG:HB2	2.14	0.47
1:DA:125:G:H4'	1:DA:126:A:OP2	2.14	0.47
31:CA:587:G:N2	31:CA:754:C:OP2	2.36	0.47
6:AG:43:LEU:C	6:AG:45:GLU:N	2.68	0.47
45:CR:80:ALA:HA	45:CR:83:GLU:HB3	1.96	0.47
1:AA:1927:A:C2	1:AA:1928:A:C4	3.02	0.47
3:AD:257:LEU:HD22	3:AD:258:LYS:N	2.29	0.47
1:DA:1432:C:H2'	1:DA:1433:U:O4'	2.13	0.47
18:AS:73:ALA:HB3	18:AS:106:ILE:HB	1.96	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:BT:58:GLU:O	47:BT:74:LEU:N	2.35	0.47
1:DA:734:A:O2'	1:DA:1635:G:H5'	2.14	0.47
32:CE:10:LEU:H	32:CE:10:LEU:HD22	1.80	0.47
1:AA:630:G:OP2	30:A8:15:LYS:NZ	2.47	0.47
1:DA:1208:C:H2'	1:DA:1209:G:C5'	2.44	0.47
1:DA:56:A:C2	1:DA:115:C:O2	2.68	0.47
1:AA:409:C:OP2	56:AA:3392:OHX:N1	2.47	0.47
40:CM:61:GLU:OE1	44:CQ:58:LYS:NZ	2.27	0.47
11:DO:71:VAL:H	11:DO:72:PRO:HD2	1.79	0.47
1:AA:2287:A:C2	1:AA:2289:G:C8	3.02	0.47
1:DA:897:C:N4	1:DA:898:C:N4	2.62	0.47
43:CP:98:VAL:HG23	43:CP:99:ARG:HG3	1.97	0.47
49:CV:42:PRO:HD2	26:D4:63:TYR:HB3	1.97	0.47
1:AA:888:C:N4	43:BP:93:ARG:NH2	2.62	0.47
2:AB:71:C:C2'	2:AB:71:C:O2	2.62	0.47
21:DV:157:LEU:HA	21:DV:161:VAL:HG11	1.95	0.47
9:DM:94:HIS:HA	9:DM:96:GLU:OE2	2.14	0.47
39:CL:119:ALA:O	39:CL:120:ARG:HG3	2.14	0.47
31:CA:1128:C:H2'	31:CA:1129:C:O5'	2.14	0.47
31:BA:558:G:C4	31:BA:559:A:C2	3.03	0.47
34:BG:112:VAL:HG12	34:BG:116:GLN:OE1	2.14	0.47
4:AE:33:VAL:HG23	4:AE:47:VAL:HG12	1.97	0.47
1:DA:1681:G:H21	1:DA:1762:A:H3'	1.79	0.47
2:DB:83:G:N2	2:DB:93:C:N3	2.54	0.47
1:AA:1545:A:C2'	1:AA:1545(A):A:H5'	2.44	0.47
31:CA:1023:G:H3'	31:CA:1024:G:C5'	2.39	0.47
35:BH:90:VAL:O	35:BH:120:THR:HA	2.14	0.47
1:DA:2314:C:H5''	6:DG:38:VAL:HG21	1.97	0.47
5:DF:59:TYR:CD2	5:DF:59:TYR:N	2.81	0.47
1:DA:1002:G:H2'	1:DA:1003:G:O4'	2.15	0.47
1:DA:340:A:C2'	1:DA:341:G:H5'	2.44	0.47
31:BA:542:G:O2'	31:BA:543:C:H5'	2.15	0.47
31:CA:436:C:H2'	31:CA:437:U:C6	2.42	0.47
24:AW:43:GLN:C	24:AW:44:LEU:HD23	2.35	0.47
32:CE:54:THR:O	32:CE:57:PHE:HB3	2.14	0.47
34:BG:154:ASN:O	34:BG:155:LEU:C	2.53	0.47
31:BA:167:G:O2'	31:BA:168:G:H5'	2.13	0.47
32:BE:163:PHE:HD2	32:BE:185:ILE:CD1	2.27	0.47
32:BE:8:LYS:HE3	32:BE:11:LEU:HB2	1.96	0.47
1:AA:273(D):C:H2'	1:AA:273(E):U:C6	2.48	0.47
7:AH:88:LEU:H	7:AH:88:LEU:HD12	1.78	0.47
1:AA:1154:G:OP2	16:A1:58:ARG:NH1	2.48	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:300:A:H2'	1:AA:334:C:O2'	2.15	0.47
2:DB:54:G:C2	2:DB:55:U:C6	3.03	0.47
1:DA:945:A:N6	1:DA:2448:A:C5	2.83	0.47
22:A3:48:GLY:HA3	22:A3:80:HIS:ND1	2.28	0.47
21:DV:53:ILE:H	21:DV:71:VAL:CG1	2.27	0.47
1:DA:2520:C:H41	1:DA:2542:A:N6	2.11	0.47
37:CJ:43:PHE:HD1	37:CJ:43:PHE:O	1.98	0.47
50:CW:25:ARG:O	50:CW:29:LYS:HE3	2.15	0.47
12:DP:69:PHE:CD1	12:DP:70:PRO:HD2	2.50	0.47
21:AV:30:ASN:O	21:AV:33:LEU:N	2.47	0.47
1:AA:1042:G:H2'	1:AA:1043:C:C6	2.49	0.47
1:DA:673:C:OP1	5:DF:54:ARG:NH1	2.47	0.47
31:CA:930:C:N4	31:CA:931:C:C4	2.83	0.47
13:D0:55:ALA:C	13:D0:57:ARG:N	2.64	0.47
9:DM:65:LYS:C	9:DM:67:LEU:H	2.18	0.47
31:CA:1291:G:C6	31:CA:1292:U:O4	2.67	0.47
31:CA:1112:C:C2	33:CF:178:LEU:HB2	2.49	0.47
1:AA:2205:C:O2	1:AA:2205:C:H2'	2.13	0.47
49:BV:30:LEU:H	49:BV:30:LEU:CD1	2.28	0.47
13:D0:81:ASP:O	13:D0:82:GLU:HB3	2.14	0.47
31:CA:852:G:C6	31:CA:853:G:N7	2.82	0.47
53:CC:11:A:C6	53:CC:12:G:C6	3.02	0.47
21:AV:62:PRO:O	21:AV:63:ASP:HB2	2.15	0.47
9:AM:73:THR:HB	9:AM:82:LEU:HD11	1.95	0.47
45:CR:48:LYS:HZ2	45:CR:48:LYS:HA	1.79	0.47
13:D0:29:LEU:HB3	13:D0:75:LEU:HD21	1.96	0.47
31:CA:713:G:H2'	31:CA:714:G:C8	2.50	0.47
1:AA:271(B):G:O2'	1:AA:271(C):U:OP2	2.21	0.47
1:DA:818:G:H4'	1:DA:838:C:O3'	2.14	0.47
1:DA:459:U:H4'	29:D7:40:TRP:CZ3	2.49	0.47
1:AA:2771:C:H2'	1:AA:2772:C:H6	1.80	0.47
1:AA:486:C:O2'	18:AS:60:ASN:ND2	2.47	0.47
31:BA:591:U:H2'	31:BA:592:G:H8	1.80	0.47
31:CA:109:A:H2'	31:CA:326:G:N2	2.30	0.47
13:A0:18:LEU:HD11	13:A0:22:ARG:NE	2.29	0.47
1:AA:821:A:H5'	1:AA:822:U:C6	2.49	0.47
23:AZ:67:ILE:HB	23:AZ:68:PRO:HD3	1.97	0.47
1:DA:270(G):C:H2'	1:DA:270(H):C:H6	1.79	0.47
53:BC:2:G:C6	53:BC:3:C:C4	3.03	0.47
51:BX:6:ARG:HG3	51:BX:6:ARG:H	1.49	0.47
1:AA:253:C:C2'	1:AA:254:G:H5'	2.43	0.47
1:AA:1445:C:H2'	1:AA:1446:C:H6	1.79	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:DU:91:GLU:HG3	20:DU:92:ASN:N	2.30	0.47
1:AA:1567:A:O4'	1:AA:1568:G:C2	2.67	0.47
31:CA:1196:U:HO2'	31:CA:1197:G:P	2.38	0.47
52:CD:18:G:C2'	52:CD:19:C:OP2	2.63	0.47
1:DA:1462:C:C5	1:DA:1463:C:C5	3.02	0.47
16:A1:112:ARG:CG	16:A1:112:ARG:NH1	2.60	0.47
17:A2:41:GLY:HA3	17:A2:46:VAL:HG11	1.95	0.47
9:AM:127:ASP:O	9:AM:128:HIS:CB	2.63	0.47
1:AA:1212:G:O2'	1:AA:1213:A:OP2	2.29	0.47
31:BA:963:G:H1	31:BA:972:C:H42	1.63	0.47
1:AA:2137:C:H42	1:AA:2154:G:H1	1.61	0.47
17:D2:7:THR:O	17:D2:9:GLY:N	2.47	0.47
11:AO:114:ILE:HD12	11:AO:114:ILE:C	2.35	0.47
1:DA:2726:U:H6	10:DN:67:LYS:NZ	2.06	0.47
31:CA:86:U:H2'	31:CA:87:A:OP1	2.14	0.47
14:DQ:87:PHE:O	14:DQ:88:ASP:O	2.32	0.47
31:BA:1203:C:H2'	31:BA:1204:A:O4'	2.15	0.47
19:DT:88:LYS:HE2	19:DT:90:GLU:OE2	2.14	0.47
1:DA:2211:G:H3'	1:DA:2212:A:N3	2.29	0.47
1:DA:1331:A:HO2'	1:DA:1332:G:H8	1.59	0.47
1:DA:607:U:OP1	5:DF:102:PRO:HA	2.15	0.47
31:CA:1036:G:C5'	31:CA:1037:C:OP2	2.61	0.47
1:DA:205:G:H1'	1:DA:206:U:OP2	2.14	0.47
34:CG:162:LEU:O	34:CG:165:MET:HB3	2.13	0.47
42:CO:85:ILE:CG2	42:CO:86:ARG:N	2.76	0.47
35:CH:110:LEU:O	35:CH:115:VAL:HG23	2.14	0.47
4:AE:119:ARG:HD3	4:AE:160:TYR:HB2	1.97	0.47
1:DA:2748:A:H62	1:DA:2754:U:H3	1.62	0.47
1:AA:493:G:H2'	1:AA:494:G:O4'	2.14	0.47
32:CE:215:LEU:HA	32:CE:218:ALA:HB3	1.96	0.47
1:DA:1771:C:HO2'	1:DA:1786:A:C1'	2.26	0.47
31:CA:1028:C:C4	31:CA:1034:G:N2	2.83	0.47
36:CI:69:GLU:CD	36:CI:69:GLU:H	2.18	0.47
32:BE:75:LYS:O	32:BE:75:LYS:HE3	2.13	0.47
32:CE:6:THR:O	32:CE:7:VAL:CB	2.61	0.47
1:DA:2115:G:H2'	1:DA:2116:G:N7	2.30	0.47
1:DA:2134:A:H2'	1:DA:2134:A:N3	2.29	0.47
32:BE:7:VAL:HG23	32:BE:8:LYS:CE	2.44	0.47
15:AR:57:PHE:CG	15:AR:58:ASN:N	2.83	0.47
1:AA:363(A):A:H2'	1:AA:363(B):G:C8	2.49	0.47
50:CW:30:LYS:C	50:CW:32:ALA:H	2.18	0.47
1:DA:107:C:C2	1:DA:108:U:C6	3.02	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:A0:107:ASP:OD2	13:A0:109:ALA:N	2.44	0.47
37:CJ:27:ILE:HG12	37:CJ:43:PHE:CD2	2.41	0.47
20:DU:47:LYS:HA	20:DU:60:PHE:CB	2.44	0.47
9:AM:51:PHE:CE1	9:AM:119:ARG:NE	2.82	0.47
17:A2:27:ALA:O	17:A2:61:VAL:HG21	2.14	0.47
6:DG:56:ALA:HA	6:DG:59:GLU:HB3	1.97	0.47
1:AA:1204:A:N1	1:AA:1241:A:C2	2.82	0.47
1:AA:638:G:C5	1:AA:651:G:N2	2.82	0.47
1:AA:639:U:H2'	1:AA:640:C:C6	2.49	0.47
36:BI:62:TRP:C	36:BI:63:TYR:CD2	2.87	0.47
33:BF:7:PRO:O	33:BF:11:ARG:HG2	2.15	0.47
20:DU:95:LYS:NZ	20:DU:95:LYS:HB2	2.28	0.47
1:DA:270(M):U:H3'	1:DA:270(M):U:H6	1.79	0.47
1:DA:2563:U:H4'	10:DN:28:SER:HA	1.96	0.47
34:BG:30:LYS:C	34:BG:32:ALA:N	2.66	0.47
50:CW:104:LEU:O	50:CW:105:SER:HB3	2.14	0.47
52:CB:56:U:O2	52:CB:56:U:H2'	2.14	0.47
31:BA:1084:G:C5	31:BA:1085:U:C4	3.03	0.47
45:BR:6:GLU:CD	45:BR:6:GLU:H	2.12	0.47
31:CA:677:U:H3	31:CA:713:G:H22	1.60	0.47
3:DD:147:LEU:HD23	3:DD:155:LEU:HD13	1.97	0.47
36:CI:70:ASP:OD1	36:CI:71:ARG:HG2	2.15	0.47
13:A0:18:LEU:HD11	13:A0:22:ARG:CZ	2.45	0.47
25:DX:39:ASP:O	25:DX:40:THR:C	2.53	0.47
36:BI:41:GLU:O	36:BI:43:LEU:N	2.43	0.47
31:CA:444:C:O2	31:CA:444:C:H2'	2.15	0.47
43:CP:108:ARG:HD3	43:CP:114:ARG:HG2	1.97	0.47
31:CA:832:C:N3	31:CA:855:G:C6	2.82	0.47
1:DA:2484:G:H1'	12:DP:124:LYS:HD2	1.97	0.47
1:DA:375:C:H6	1:DA:375:C:O5'	1.96	0.47
3:AD:143:HIS:O	3:AD:144:ALA:C	2.52	0.47
28:A6:25:LYS:CG	30:A8:34:TRP:HE1	2.27	0.47
11:AO:19:VAL:HG23	11:AO:27:HIS:CG	2.40	0.47
30:A8:28:GLY:O	30:A8:30:ARG:N	2.47	0.47
16:D1:40:PHE:HZ	17:D2:82:ARG:HE	1.61	0.47
40:CM:54:PHE:C	40:CM:55:LYS:HD2	2.34	0.47
52:CD:16:C:N4	52:CD:68:A:C4	2.82	0.47
5:DF:143:ALA:HB1	5:DF:148:LEU:HB2	1.95	0.47
1:AA:1062:G:P	1:AA:1070:A:H4'	2.55	0.47
31:CA:1251:A:H5''	39:CL:12:GLU:OE1	2.14	0.47
31:BA:1402:C:H2'	31:BA:1403:C:O4'	2.14	0.47
31:BA:1503:A:C2	31:BA:1507:A:OP2	2.67	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:76:G:C6	31:BA:77:C:C2	3.03	0.47
1:DA:2885:C:H6	1:DA:2885:C:H3'	1.80	0.47
39:CL:110:GLU:HG3	39:CL:111:ARG:N	2.30	0.47
31:CA:1127:G:N2	31:CA:1145:C:C2	2.82	0.47
2:DB:15:A:C2'	2:DB:16:G:OP1	2.63	0.47
1:DA:1110:G:O3'	7:DH:3:ARG:NH1	2.48	0.47
4:AE:117:MET:O	4:AE:118:LYS:CB	2.62	0.47
31:CA:1022:G:C5	31:CA:1023:G:C8	3.03	0.47
31:CA:864:A:N1	31:CA:865:A:C2	2.83	0.47
14:AQ:83:LYS:HE3	14:AQ:109:GLY:O	2.15	0.47
31:BA:1271:G:C2'	31:BA:1272:G:C5'	2.81	0.47
1:AA:2723:C:C4'	13:A0:1:MET:HE3	2.44	0.47
21:AV:37:VAL:CG2	21:AV:38:TYR:N	2.77	0.47
1:DA:2342:C:O2'	1:DA:2374:C:H5''	2.15	0.47
31:CA:1399:C:C2	31:CA:1502:A:N6	2.83	0.47
21:DV:67:LEU:HD22	21:DV:90:VAL:HG11	1.97	0.47
23:DZ:27:GLU:O	23:DZ:28:GLY:O	2.33	0.47
1:AA:2555:U:O2	52:BB:83:C:C4	2.67	0.47
31:BA:397:A:N6	31:BA:548:G:N7	2.62	0.47
35:CH:111:GLU:O	35:CH:113:ALA:N	2.47	0.47
1:DA:1382:G:H2'	1:DA:1383:C:H5'	1.95	0.47
11:AO:29:LYS:HD2	11:AO:30:THR:HG22	1.96	0.47
1:DA:2773:C:H2'	1:DA:2774:C:H6	1.80	0.47
1:DA:602:G:OP2	1:DA:602:G:H8	1.98	0.47
1:AA:2216:G:C4	1:AA:2217:G:C8	3.03	0.47
11:AO:85:LEU:N	11:AO:85:LEU:HD12	2.30	0.47
33:BF:113:ALA:HB3	33:BF:114:PRO:HD3	1.95	0.47
1:DA:953:A:H2'	1:DA:954:G:H8	1.79	0.47
1:AA:2862:G:H2'	1:AA:2863:C:C6	2.48	0.47
8:DK:81:VAL:H	8:DK:143:SER:HB2	1.79	0.47
3:AD:231:HIS:CD2	3:AD:249:PRO:HA	2.49	0.47
1:AA:1471:A:C5	1:AA:1522:G:C2	3.03	0.47
42:CO:8:ASN:HB2	47:CT:34:LYS:HZ3	1.78	0.47
36:BI:97:PHE:N	48:BU:30:ASP:OD1	2.48	0.47
31:CA:624:C:H4'	46:CS:10:GLY:HA2	1.96	0.47
1:DA:2261:C:O2'	1:DA:2262:U:H5'	2.14	0.47
39:BL:106:ALA:O	39:BL:108:VAL:HG13	2.14	0.47
23:AZ:86:SER:N	23:AZ:87:PRO:HD2	2.29	0.47
1:DA:1041:C:H42	1:DA:1114:G:H1	1.63	0.47
19:DT:14:SER:C	19:DT:16:LYS:N	2.67	0.47
1:AA:1936:A:H3'	1:AA:1937:A:H5'	1.96	0.47
1:AA:1443:G:N2	1:AA:1549:C:C2	2.82	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:D6:14:THR:OG1	28:D6:15:GLU:N	2.47	0.47
31:CA:595:G:H22	31:CA:643:C:N4	2.13	0.47
14:DQ:3:ARG:HG3	14:DQ:4:LEU:H	1.80	0.47
28:A6:21:TYR:O	28:A6:22:ALA:HB2	2.14	0.47
1:DA:1425:G:N2	1:DA:1573:G:N7	2.62	0.47
31:CA:1084:G:C8	31:CA:1085:U:C6	3.03	0.47
1:DA:637:A:OP1	11:DO:133:SER:HB2	2.14	0.47
1:DA:1832:C:N4	1:DA:1833:U:C4	2.82	0.47
39:BL:65:VAL:O	39:BL:65:VAL:CG1	2.61	0.47
42:CO:42:THR:HG23	42:CO:42:THR:O	2.14	0.47
1:AA:28:A:H2'	1:AA:29:U:H6	1.80	0.47
31:BA:1258:G:O2'	31:BA:1259:C:H5'	2.15	0.47
1:AA:2364:C:H2'	1:AA:2365:G:C5'	2.45	0.47
1:DA:2787:C:H2'	1:DA:2787:C:O2	2.15	0.47
4:DE:35:GLN:CG	4:DE:36:ARG:N	2.77	0.47
4:DE:52:LEU:HA	4:DE:52:LEU:HD23	1.79	0.47
1:AA:2400:G:H2'	1:AA:2401:U:C5	2.50	0.47
1:DA:972:G:C6	1:DA:973:A:C6	3.02	0.47
3:DD:44:ASN:HB2	3:DD:48:ARG:O	2.14	0.47
31:CA:1356:G:O6	56:CA:1777:OHX:N6	2.47	0.47
49:CV:9:VAL:HG13	49:CV:10:PHE:H	1.77	0.47
31:CA:1190:G:H4'	33:CF:176:HIS:CE1	2.50	0.47
5:DF:24:LEU:CD1	5:DF:25:PRO:HD3	2.45	0.47
5:DF:124:LEU:O	5:DF:126:VAL:HG13	2.14	0.47
7:AH:109:PHE:CZ	7:AH:152:ARG:NH1	2.82	0.47
1:AA:892:G:H2'	1:AA:893:C:H6	1.79	0.47
31:BA:1010:G:N2	31:BA:1020:U:H1'	2.29	0.47
1:AA:1060:U:H5'	1:AA:1061:U:H5	1.80	0.47
31:CA:502:G:C2	31:CA:503:C:C2	3.03	0.47
32:CE:209:ARG:HD3	32:CE:240:GLN:OE1	2.15	0.47
21:DV:163:LEU:HD23	21:DV:163:LEU:H	1.80	0.47
1:AA:792:G:H3'	1:AA:793:A:H5'	1.95	0.47
1:DA:2884:U:H2'	1:DA:2885:C:C5'	2.43	0.47
1:DA:626:U:H3	11:DO:105:LEU:HA	1.80	0.47
11:DO:98:GLU:HG3	11:DO:99:LEU:N	2.30	0.47
52:BB:55:U:H2'	52:BB:56:U:O4'	2.15	0.47
1:AA:1093:G:H5'	7:AH:170:ARG:HH21	1.79	0.47
1:AA:1079:C:H3'	1:AA:1080:A:C8	2.50	0.47
1:DA:1099:G:O5'	1:DA:1100:C:OP2	2.32	0.47
16:A1:82:GLY:O	16:A1:84:LYS:N	2.47	0.47
2:AB:42:C:O3'	6:AG:67:LYS:CE	2.62	0.47
31:BA:1126:U:C4	31:BA:1127:G:C2	3.02	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:297:G:H4'	31:BA:557:G:H4'	1.96	0.47
14:DQ:110:LEU:HB2	14:DQ:112:PHE:CZ	2.49	0.47
19:DT:87:GLN:O	19:DT:88:LYS:HB3	2.15	0.47
47:BT:66:SER:O	47:BT:67:LYS:C	2.53	0.47
12:DP:54:MET:HG2	12:DP:117:ALA:O	2.15	0.47
7:AH:4:ILE:HG21	7:AH:6:ARG:HH11	1.77	0.47
1:DA:873:G:N2	1:DA:905:U:C2	2.83	0.47
31:CA:1038:C:O2'	31:CA:1039:C:H5'	2.15	0.47
43:CP:3:ARG:HG2	43:CP:9:ILE:CD1	2.44	0.47
31:BA:1320:C:O2	49:BV:72:GLY:HA3	2.14	0.47
35:BH:31:LEU:HD23	35:BH:31:LEU:HA	1.78	0.47
1:DA:322:A:OP2	5:DF:169:ASN:HB2	2.15	0.47
20:DU:98:VAL:O	20:DU:99:CYS:HB3	2.15	0.47
4:DE:101:ARG:HG3	4:DE:203:LYS:CE	2.43	0.47
34:BG:7:PRO:HB2	34:BG:10:ARG:HD2	1.97	0.47
31:CA:1299:A:C2	31:CA:1301:U:C6	3.03	0.47
14:DQ:17:ARG:NH1	14:DQ:17:ARG:HG3	2.19	0.47
32:CE:68:ILE:N	32:CE:68:ILE:HD12	2.30	0.47
1:DA:1520:U:OP2	56:DA:3343:OHX:N6	2.47	0.47
35:BH:35:GLY:HA2	35:BH:40:ARG:O	2.14	0.47
1:AA:1478:G:N7	56:AA:3441:OHX:N2	2.62	0.47
50:CW:10:LEU:HD22	50:CW:11:SER:H	1.78	0.47
38:BK:38:ILE:CG2	38:BK:120:THR:HG22	2.45	0.47
1:DA:2133:G:H2'	1:DA:2134:A:OP2	2.14	0.47
33:CF:184:TYR:HA	33:CF:200:ALA:O	2.14	0.47
1:DA:2126:A:N6	1:DA:2163:C:O2'	2.48	0.47
31:BA:502:G:H2'	31:BA:503:C:C6	2.50	0.47
35:CH:151:LEU:HD11	38:CK:77:GLU:OE2	2.14	0.47
29:A7:43:THR:CG2	29:A7:44:PRO:CD	2.93	0.47
15:AR:57:PHE:O	15:AR:58:ASN:C	2.52	0.47
20:DU:17:SER:HB2	20:DU:71:LYS:HE2	1.96	0.47
1:DA:329:G:O6	20:DU:19:LYS:CB	2.63	0.47
1:AA:1140:C:OP1	9:AM:23:LEU:HD23	2.15	0.47
37:BJ:111:ARG:CD	37:BJ:123:GLU:HB2	2.41	0.47
1:DA:1542:G:H3'	1:DA:1543:A:C5'	2.44	0.47
52:CD:27:A:H2'	52:CD:28:G:O4'	2.15	0.47
4:DE:116:VAL:HG13	4:DE:122:PHE:CG	2.50	0.47
1:AA:528:A:C2	1:AA:2043:C:C5'	2.97	0.47
1:AA:528:A:C2	1:AA:2043:C:H4'	2.49	0.47
31:BA:711:G:O2'	31:BA:712:A:H5'	2.15	0.47
1:AA:1152:C:O2'	1:AA:1153:C:H5'	2.15	0.47
1:AA:999:U:C5	1:AA:1154:G:C5	3.02	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:323:U:H2'	31:CA:324:G:O4'	2.15	0.47
13:D0:41:ALA:C	13:D0:43:GLU:N	2.57	0.47
16:D1:72:HIS:CE1	16:D1:107:ALA:HA	2.40	0.47
7:DH:92:ILE:HD13	7:DH:160:LYS:HZ3	1.79	0.47
5:AF:28:ILE:HD12	5:AF:28:ILE:O	2.14	0.47
37:BJ:66:VAL:C	37:BJ:68:ASN:H	2.17	0.47
11:AO:85:LEU:C	11:AO:87:ASP:N	2.68	0.47
1:AA:2880:C:H1'	13:A0:92:GLY:O	2.14	0.47
31:CA:464:G:C6	31:CA:466:C:OP2	2.68	0.47
31:CA:1226:C:N4	43:CP:104:ARG:CD	2.76	0.47
1:DA:493:G:C2'	1:DA:494:G:O5'	2.63	0.47
1:DA:1388:G:H2'	1:DA:1389:G:H8	1.80	0.47
5:DF:4:VAL:HG22	5:DF:19:GLU:CD	2.34	0.47
1:DA:337:C:H2'	1:DA:338:G:O5'	2.14	0.47
14:AQ:56:LEU:HB3	14:AQ:58:LEU:HD22	1.96	0.47
37:BJ:92:SER:O	37:BJ:93:PRO:C	2.52	0.47
1:AA:1131:G:C8	1:AA:2025:C:H4'	2.50	0.47
18:DS:88:ARG:HG3	18:DS:89:ALA:H	1.79	0.47
1:AA:338:G:H2'	1:AA:339:U:H6	1.80	0.47
52:CD:3:U:H6	52:CD:3:U:O5'	1.98	0.47
31:CA:1019:C:H2'	31:CA:1020:U:O4'	2.14	0.47
34:BG:134:ASP:CB	34:BG:135:LEU:HD13	2.45	0.47
38:CK:31:PHE:CZ	38:CK:134:ILE:HD11	2.47	0.47
31:BA:1342:C:H2'	31:BA:1343:G:C8	2.45	0.47
31:BA:105:G:H2'	31:BA:106:C:C6	2.49	0.47
34:BG:25:ARG:C	34:BG:27:TYR:N	2.67	0.47
41:CN:84:VAL:HG13	41:CN:95:ILE:HD11	1.96	0.47
53:CC:23:G:C4	53:CC:24:C:C5	3.03	0.47
47:CT:12:SER:HB3	47:CT:20:THR:CB	2.44	0.47
1:DA:813:U:C2	1:DA:1195:G:N2	2.83	0.47
31:CA:137:C:N4	31:CA:226:G:H1	2.13	0.47
47:CT:54:GLY:O	47:CT:80:GLY:O	2.33	0.47
1:AA:2769:C:O2	1:AA:2769:C:C2'	2.60	0.47
31:CA:848:C:H2'	31:CA:849:C:C6	2.49	0.47
2:AB:0:A:H2'	2:AB:1:U:O4'	2.13	0.47
31:BA:1378:C:O2	31:BA:1378:C:H2'	2.15	0.47
19:AT:26:TYR:HE1	19:AT:83:VAL:HG21	1.80	0.47
31:BA:722:A:H2'	31:BA:724:G:H8	1.80	0.47
31:BA:60:A:N6	31:BA:110:C:N3	2.62	0.47
31:BA:102:G:C6	31:BA:103:C:C4	3.03	0.47
26:A4:9:LEU:H	26:A4:27:THR:HG23	1.80	0.47
31:CA:35:G:C6	31:CA:36:C:N4	2.83	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:1031:G:O6	31:BA:1032:A:N6	2.47	0.47
1:DA:958:U:H5''	12:DP:14:ARG:CD	2.45	0.47
21:AV:17:ALA:HA	21:AV:20:ARG:HB2	1.96	0.47
1:AA:549:G:H2'	1:AA:550:G:O4'	2.14	0.47
8:AK:92:VAL:HG13	8:AK:120:ILE:HG23	1.95	0.47
53:CC:28:U:O2	53:CC:45:A:C2	2.67	0.47
41:CN:99:GLN:CG	41:CN:105:VAL:HG11	2.44	0.47
1:AA:1443:G:O2'	1:AA:1444:G:H5'	2.15	0.47
31:CA:638:G:C4	31:CA:639:G:C8	3.03	0.47
1:AA:183:C:N4	1:AA:213:A:H61	2.13	0.47
31:BA:574:A:N3	31:BA:883:C:H1'	2.30	0.47
11:AO:24:GLY:O	11:AO:25:SER:HB3	2.15	0.47
1:DA:351:G:O6	56:DA:3374:OHX:N2	2.48	0.47
1:AA:1790:C:H2'	1:AA:1791:A:C5	2.49	0.47
1:AA:1268:A:C2'	1:AA:1269:A:O5'	2.62	0.47
1:AA:127:A:H5''	1:AA:128:C:C6	2.50	0.47
4:DE:174:ASP:O	4:DE:183:LEU:HB2	2.15	0.47
1:AA:1850:G:O6	56:AA:3524:OHX:N2	2.47	0.47
1:DA:484:C:H2'	1:DA:485:C:H6	1.79	0.47
1:DA:1231:G:H2'	1:DA:1232:G:C8	2.50	0.47
31:BA:807:A:C5	31:BA:808:C:C5	3.03	0.47
16:D1:74:LEU:HD22	16:D1:79:PHE:HA	1.96	0.47
1:DA:1794:U:O2'	1:DA:1795:C:H5'	2.14	0.47
41:CN:80:VAL:HG13	41:CN:103:LEU:HD12	1.97	0.47
53:CC:50:G:C2	53:CC:51:U:C2	3.02	0.47
39:CL:8:GLY:HA3	39:CL:15:ALA:HB3	1.97	0.47
2:AB:98:G:N7	56:AB:209:OHX:N1	2.63	0.47
31:BA:302:G:C6	31:BA:303:A:C5	3.03	0.47
3:AD:215:LEU:HD23	3:AD:215:LEU:HA	1.58	0.47
1:AA:2558:C:H6	1:AA:2558:C:O5'	1.97	0.47
33:CF:127:ARG:HD2	33:CF:127:ARG:N	2.30	0.47
1:DA:2662:A:H8	1:DA:2662:A:O5'	1.98	0.47
45:CR:68:ARG:HG3	45:CR:68:ARG:HH11	1.79	0.47
31:BA:1519:A:H5''	31:BA:1520:G:OP2	2.14	0.47
1:AA:1337:G:H2'	1:AA:1338:G:H8	1.79	0.47
39:CL:83:ARG:O	39:CL:86:VAL:HG12	2.15	0.47
36:CI:22:GLU:O	36:CI:26:ILE:HG13	2.13	0.47
1:AA:596:G:H2'	1:AA:597:U:O4'	2.15	0.47
1:DA:282:A:C5	1:DA:359:A:C2	3.03	0.47
1:DA:561:G:H1'	16:D1:45:TYR:HE2	1.78	0.47
34:BG:15:GLU:OE2	34:BG:59:ARG:NH2	2.36	0.47
5:AF:117:ARG:HA	5:AF:117:ARG:HD2	1.73	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1544:C:H2'	1:DA:1544:C:O2	2.14	0.47
17:A2:6:LYS:HG3	17:A2:6:LYS:O	2.14	0.47
1:DA:763:G:C4	1:DA:765:G:C8	3.03	0.47
1:DA:2237:G:O6	56:DA:3251:OHX:N5	2.48	0.47
1:DA:10:G:C6	1:DA:2629:A:N6	2.83	0.47
1:DA:2801:A:H5''	1:DA:2895:U:H4'	1.97	0.47
1:DA:745:G:H5''	1:DA:746:A:OP2	2.15	0.47
31:CA:1190:G:N1	56:CA:1762:OHX:N6	2.63	0.47
31:CA:973:G:H1'	40:CM:55:LYS:CD	2.44	0.47
43:CP:91:ARG:NH1	43:CP:96:LEU:HD13	2.30	0.47
3:DD:34:VAL:C	3:DD:35:LYS:HG3	2.33	0.47
17:D2:73:SER:HB3	17:D2:83:ARG:O	2.12	0.47
52:BD:12:C:H2'	52:BD:13:G:O4'	2.15	0.47
32:CE:16:HIS:CD2	32:CE:209:ARG:HG2	2.49	0.47
15:AR:107:ASP:HB2	31:BA:1432:G:OP1	2.15	0.47
30:D8:29:LYS:O	30:D8:29:LYS:HE2	2.14	0.47
1:AA:783:A:H2'	1:AA:785:G:OP1	2.15	0.47
1:DA:2884:U:C4	1:DA:2885:C:C2	3.03	0.47
11:DO:85:LEU:HD23	11:DO:86:LYS:N	2.30	0.47
16:D1:92:ARG:C	16:D1:94:ASN:H	2.17	0.47
1:DA:1060:U:C1'	1:DA:1062:G:H5'	2.45	0.47
41:CN:62:GLN:O	41:CN:63:LEU:C	2.52	0.47
31:BA:755:G:OP2	45:BR:65:ARG:HG2	2.15	0.47
31:BA:1128:C:O2'	31:BA:1130:A:C8	2.52	0.47
7:DH:3:ARG:HG3	7:DH:4:ILE:N	2.28	0.47
31:CA:1285:A:C1'	31:CA:1286:A:OP2	2.62	0.47
50:CW:101:GLY:O	50:CW:102:GLY:O	2.32	0.47
1:DA:74:A:H4'	1:DA:75:G:O5'	2.14	0.47
1:DA:193:U:O3'	1:DA:803:U:H4'	2.14	0.47
14:AQ:67:ARG:HB3	14:AQ:67:ARG:HH11	1.79	0.47
6:DG:126:ASP:OD1	6:DG:126:ASP:C	2.53	0.47
1:DA:1520:U:O4	1:DA:1521:G:C2	2.67	0.47
1:DA:2762:G:C3'	1:DA:2763:G:H5''	2.34	0.47
35:BH:78:HIS:HB3	38:BK:107:LEU:HD12	1.96	0.47
31:BA:438:G:H2'	31:BA:494:U:O4	2.15	0.47
5:AF:11:VAL:HG22	5:AF:125:LEU:HB2	1.97	0.47
16:A1:66:ASN:O	16:A1:67:ALA:C	2.51	0.47
33:CF:60:ALA:O	33:CF:61:ALA:HB2	2.14	0.47
1:DA:13:A:H61	1:DA:525:U:H3'	1.79	0.47
19:DT:32:PRO:HA	19:DT:77:LYS:HB2	1.96	0.47
34:BG:150:GLU:O	34:BG:151:LYS:C	2.53	0.47
12:AP:66:ILE:HA	12:AP:104:PHE:HD2	1.79	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
21:AV:44:PHE:CD1	21:AV:44:PHE:C	2.88	0.47
2:AB:89(A):A:H8	2:AB:89(A):A:O5'	1.96	0.47
37:BJ:108:ALA:HB2	37:BJ:123:GLU:HG2	1.97	0.47
36:CI:61:LEU:HB3	36:CI:63:TYR:HE2	1.80	0.47
50:CW:33:ILE:CD1	50:CW:63:ILE:HA	2.44	0.47
1:AA:2119:A:N6	1:AA:2168:G:N2	2.63	0.47
31:CA:266:G:H4'	31:CA:267:C:O5'	2.14	0.47
15:AR:91:ARG:HB2	15:AR:121:ILE:HG13	1.96	0.47
31:BA:983:A:H5''	31:BA:984:C:OP2	2.15	0.47
48:BU:40:LEU:C	48:BU:42:ARG:H	2.18	0.47
31:CA:664:G:P	48:CU:64:ARG:HH21	2.37	0.47
5:DF:18:ARG:C	5:DF:18:ARG:HD3	2.35	0.47
31:CA:152:A:C6	31:CA:170:U:O2	2.67	0.47
45:BR:56:LEU:O	45:BR:60:VAL:HG23	2.15	0.47
7:DH:82:GLY:O	7:DH:83:TYR:O	2.32	0.47
6:AG:178:PHE:HB3	6:AG:180:PHE:CE1	2.49	0.47
1:DA:396:G:O4'	23:DZ:13:ILE:HD11	2.15	0.47
31:BA:1103:C:H2'	31:BA:1104:G:O4'	2.14	0.47
31:BA:417:C:C2	31:BA:418:C:C5	3.03	0.47
31:BA:939:G:H2'	31:BA:940:C:H6	1.80	0.47
34:CG:61:LYS:C	34:CG:63:LYS:H	2.18	0.47
25:AX:6:VAL:HB	25:AX:54:VAL:HG21	1.95	0.47
1:AA:531:C:OP1	1:AA:561:G:N1	2.48	0.47
31:CA:1191:A:C8	31:CA:1191:A:OP2	2.66	0.47
2:DB:24:G:C8	2:DB:56:G:C8	3.02	0.47
39:BL:59:PHE:HZ	39:BL:88:TYR:CE1	2.32	0.47
7:DH:109:PHE:O	7:DH:111:HIS:N	2.48	0.47
1:AA:1665:A:H2'	1:AA:1666:G:O4'	2.14	0.47
36:BI:46:ARG:HG3	36:BI:47:ARG:N	2.29	0.47
1:DA:274:G:H2'	1:DA:275:G:C8	2.50	0.47
1:DA:839:U:H2'	1:DA:840:C:C6	2.50	0.47
5:DF:110:LEU:HD22	5:DF:202:PHE:HE1	1.80	0.47
25:AX:40:THR:OG1	25:AX:41:PRO:N	2.48	0.47
31:BA:698:G:C5	31:BA:699:C:C5	3.02	0.47
1:DA:1208:C:H2'	1:DA:1209:G:O5'	2.15	0.47
1:AA:1336:A:O2'	1:AA:1337:G:H5'	2.15	0.47
1:AA:363(D):G:C2'	1:AA:363(E):U:O5'	2.63	0.47
1:AA:859:G:O6	56:AA:3419:OHX:N1	2.48	0.47
2:AB:24:G:C5	2:AB:56:G:C4	3.02	0.47
38:BK:16:ALA:HB2	38:BK:24:THR:HG21	1.95	0.47
1:AA:1782:C:OP2	56:AA:3335:OHX:N3	2.48	0.47
21:AV:165:VAL:HB	21:AV:166:SER:HB2	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
53:BC:37:U:H2'	53:BC:38:A:O4'	2.15	0.47
36:CI:50:TYR:HB2	36:CI:51:PRO:HD2	1.97	0.47
5:AF:23:ASP:OD1	5:AF:23:ASP:N	2.48	0.47
31:CA:127:G:O3'	47:CT:2:PRO:HD2	2.14	0.47
35:BH:99:GLY:O	35:BH:117:ASP:HA	2.15	0.47
5:DF:155:LEU:HB2	5:DF:189:THR:HG21	1.97	0.47
3:DD:158:ALA:O	3:DD:159:ALA:C	2.52	0.47
1:DA:1963:U:O2	1:DA:1963:U:H2'	2.14	0.47
9:DM:8:GLN:HA	9:DM:8:GLN:OE1	2.15	0.47
7:AH:130:ARG:NH1	7:AH:130:ARG:HB3	2.30	0.47
1:AA:1774:C:H6	1:AA:1774:C:O5'	1.98	0.47
42:BO:105:TYR:C	42:BO:107:ALA:H	2.18	0.47
12:DP:85:LYS:HD3	22:D3:9:SER:OG	2.15	0.47
4:DE:38:THR:C	4:DE:40:GLU:N	2.68	0.47
11:DO:33:ARG:O	11:DO:34:GLY:O	2.32	0.47
31:CA:1222:G:OP1	49:CV:77:THR:OG1	2.27	0.47
43:CP:85:GLY:O	43:CP:86:CYS:C	2.53	0.47
12:AP:17:LEU:HD23	12:AP:96:VAL:HG11	1.93	0.47
7:AH:109:PHE:CE2	7:AH:152:ARG:NH1	2.83	0.47
1:AA:880:G:N1	1:AA:897:C:N4	2.46	0.47
52:BD:21:A:H1'	52:BD:22:A:O5'	2.14	0.47
5:AF:103:LYS:HA	5:AF:106:ARG:HG3	1.96	0.47
32:CE:15:VAL:O	32:CE:209:ARG:NH2	2.48	0.47
9:DM:93:THR:O	9:DM:94:HIS:C	2.53	0.47
9:AM:128:HIS:NE2	9:AM:134:ARG:CD	2.78	0.47
6:AG:146:TYR:HD2	6:AG:146:TYR:O	1.98	0.47
12:DP:87:LYS:HG3	12:DP:88:GLY:N	2.27	0.47
11:DO:81:GLN:OE1	11:DO:106:LEU:C	2.53	0.47
1:DA:1940:U:H5''	1:DA:1965:C:H5	1.80	0.47
31:CA:861:G:H2'	31:CA:862:C:H6	1.79	0.47
11:DO:55:ARG:HG3	11:DO:55:ARG:O	2.13	0.47
41:CN:54:ARG:HG3	41:CN:54:ARG:H	1.53	0.47
33:BF:91:LEU:HB2	33:BF:99:VAL:HG21	1.96	0.47
2:DB:83:G:C5'	25:DX:52:HIS:CD2	2.97	0.47
46:CS:42:ARG:O	46:CS:43:LYS:HB2	2.13	0.47
31:CA:1025:U:O2	31:CA:1025:U:H2'	2.15	0.47
31:BA:518:C:H5''	31:BA:519:C:C6	2.50	0.47
31:BA:533:A:C2	31:BA:536:C:C6	3.02	0.47
34:CG:162:LEU:HD13	34:CG:181:MET:HG2	1.96	0.47
31:CA:528:C:H41	42:CO:49:ASN:HD21	1.63	0.47
31:CA:533:A:C5	31:CA:536:C:C4	3.03	0.47
42:CO:62:SER:O	42:CO:64:TYR:N	2.48	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1416:G:H21	1:AA:1586:A:N6	2.11	0.47
31:CA:1499:A:O2'	31:CA:1500:A:H5'	2.14	0.47
38:BK:104:ARG:O	38:BK:107:LEU:HB2	2.15	0.47
14:AQ:63:THR:HG22	14:AQ:97:ARG:HB3	1.97	0.47
20:DU:19:LYS:HB2	20:DU:20:TYR:H	1.52	0.47
41:BN:87:THR:HG22	41:BN:88:GLY:N	2.22	0.47
1:AA:299:A:C2	1:AA:322:A:C4	3.03	0.47
13:D0:101:ALA:HB2	27:D5:44:THR:HB	1.97	0.47
13:A0:103:ARG:HH11	18:AS:40:ASN:ND2	2.13	0.47
21:DV:4:ARG:NH1	21:DV:60:GLU:OE2	2.48	0.47
9:DM:58:ASP:HB3	9:DM:95:PRO:HB2	1.97	0.47
11:AO:147:LEU:O	11:AO:148:LEU:HG	2.15	0.47
31:CA:451:A:H1'	31:CA:452:A:C8	2.49	0.47
1:AA:1467:C:C2	1:AA:1526:G:N2	2.83	0.47
4:DE:137:HIS:HB3	4:DE:138:PRO:CD	2.45	0.47
1:AA:2243:U:H2'	1:AA:2244:U:C6	2.49	0.47
6:AG:77:ILE:HD12	6:AG:77:ILE:HA	1.77	0.47
23:AZ:86:SER:O	23:AZ:89:GLU:HB2	2.15	0.47
21:DV:24:LEU:HD12	21:DV:25:PRO:O	2.15	0.47
46:BS:20:VAL:HG13	46:BS:32:TYR:CB	2.45	0.47
31:CA:1488:G:H2'	31:CA:1489:G:C8	2.50	0.47
1:DA:69:C:C2'	1:DA:70:G:O5'	2.62	0.47
33:CF:77:ILE:HA	33:CF:84:ILE:HB	1.96	0.47
46:BS:1:MET:O	46:BS:1:MET:HG2	2.14	0.47
31:BA:810:C:C2'	31:BA:811:C:H5'	2.44	0.47
31:CA:92:G:H2'	31:CA:93:U:O4'	2.15	0.47
1:AA:869:G:C4	1:AA:870:A:C8	3.02	0.47
1:DA:1643:G:C2'	1:DA:1644:C:O5'	2.62	0.47
1:DA:270(Y):G:OP1	56:DA:3470:OHX:N6	2.47	0.47
4:AE:103:ASP:OD2	4:AE:168:MET:CE	2.63	0.47
1:DA:519:U:H2'	1:DA:520:G:C8	2.50	0.47
31:CA:300:A:H1'	31:CA:565:U:O2	2.15	0.47
31:CA:1462:G:H2'	31:CA:1463:C:C6	2.49	0.47
16:A1:103:PRO:O	16:A1:106:PHE:HB3	2.15	0.47
1:AA:229:A:C1'	1:AA:230:U:OP2	2.63	0.47
1:AA:2031:A:O2'	1:AA:2454:G:N2	2.48	0.47
37:BJ:136:LYS:HB3	37:BJ:136:LYS:NZ	2.28	0.47
8:DK:41:GLU:N	8:DK:41:GLU:OE2	2.44	0.47
3:DD:6:PHE:N	3:DD:6:PHE:CD1	2.82	0.47
1:AA:1649:G:C6	1:AA:2009:G:C6	3.03	0.47
33:BF:73:PRO:HB3	33:BF:103:VAL:CG1	2.45	0.47
31:BA:1163:C:H2'	31:BA:1164:G:C8	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:AP:10:ARG:O	12:AP:11:LYS:HB2	2.14	0.47
11:AO:19:VAL:CG2	11:AO:27:HIS:CA	2.90	0.47
31:CA:949:A:N1	31:CA:1232:U:O4	2.48	0.47
31:CA:947:G:O3'	43:CP:109:THR:OG1	2.33	0.47
43:CP:82:MET:SD	43:CP:83:ASP:OD2	2.73	0.47
52:BD:21:A:C5	52:BD:46:G:C8	3.03	0.47
26:A4:34:GLU:OE2	43:BP:7:VAL:HG22	2.15	0.47
54:B1:11:U:C1'	54:B1:12:A:OP1	2.60	0.47
16:D1:95:LEU:CD2	17:D2:13:ARG:HB2	2.46	0.47
1:DA:1064:C:N4	1:DA:1074:G:H1	2.13	0.47
23:DZ:90:ILE:HG22	23:DZ:91:LYS:N	2.29	0.47
5:DF:132:VAL:CG2	5:DF:133:ASN:H	2.00	0.47
52:CB:22:A:C8	52:CB:57:C:N4	2.83	0.47
1:AA:1050:A:H1'	1:AA:2751:G:C8	2.49	0.47
1:DA:1761:C:H5''	1:DA:1762:A:O5'	2.15	0.47
1:DA:1397:U:H1'	1:DA:1398:C:OP1	2.15	0.47
31:CA:1211:U:H1'	31:CA:1213:A:C2	2.50	0.47
31:BA:537:G:H2'	31:BA:538:G:H8	1.80	0.47
52:BB:72:U:C2'	52:BB:73:U:H5'	2.45	0.47
1:DA:1607:C:H1'	56:DA:3478:OHX:N5	2.30	0.47
1:AA:1362:C:C2'	1:AA:1363:C:H5'	2.45	0.47
31:BA:413:G:H2'	31:BA:428:G:N2	2.30	0.47
31:BA:510:A:H5''	31:BA:511:C:OP2	2.15	0.47
32:CE:91:PRO:HA	32:CE:151:GLY:O	2.15	0.47
1:AA:540:G:C5	1:AA:541:C:C5	3.03	0.47
31:CA:738:C:H5''	36:CI:69:GLU:HB2	1.97	0.47
13:D0:44:LEU:O	13:D0:45:ARG:C	2.52	0.47
24:DW:4:SER:N	24:DW:6:VAL:HG22	2.30	0.47
1:DA:2119:A:N6	1:DA:2170:A:N7	2.62	0.47
42:CO:91:LYS:HG2	42:CO:91:LYS:O	2.15	0.47
50:CW:26:ASN:CB	50:CW:71:THR:HG23	2.45	0.47
1:AA:2838:G:C6	1:AA:2839:G:C5	3.03	0.47
15:DR:61:PHE:HD2	15:DR:61:PHE:N	2.07	0.47
37:CJ:23:VAL:HG13	37:CJ:43:PHE:CE2	2.50	0.47
3:AD:172:TYR:CD1	3:AD:186:HIS:HA	2.50	0.47
31:BA:468:A:N7	31:BA:474:G:C8	2.82	0.47
1:DA:27:G:C4	1:DA:512:G:C2	3.03	0.47
22:A3:82:ARG:O	22:A3:83:PRO:O	2.33	0.47
53:BC:19:G:H4'	53:BC:20:G:OP1	2.15	0.47
39:CL:95:LYS:NZ	39:CL:96:LEU:HD13	2.30	0.47
26:D4:48:ARG:NH1	26:D4:51:ASP:HA	2.29	0.47
1:DA:674:G:O2'	5:DF:74:ARG:HG3	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1380:G:H2'	1:AA:1380:G:N3	2.30	0.47
52:BD:2:G:N2	52:BD:81:C:O2	2.48	0.47
1:AA:1471:A:N3	1:AA:1471:A:H2'	2.29	0.47
2:AB:65:C:H2'	2:AB:66:A:H5'	1.97	0.47
42:CO:8:ASN:HD22	47:CT:34:LYS:CE	2.26	0.47
6:AG:107:LEU:HD11	6:AG:178:PHE:CD1	2.50	0.47
23:DZ:7:ILE:CD1	23:DZ:70:VAL:HG22	2.44	0.47
31:BA:960:U:N3	31:BA:1225:A:C5	2.79	0.47
1:DA:908:C:OP1	12:DP:22:LYS:HB3	2.15	0.47
37:BJ:26:PHE:HB2	37:BJ:62:PHE:HZ	1.80	0.47
6:AG:77:ILE:HG22	6:AG:82:LEU:HB3	1.97	0.47
31:BA:55:A:C6	8:DK:89:TYR:CD1	3.02	0.47
17:A2:1:MET:HE1	17:A2:43:GLU:HG2	1.97	0.47
31:BA:1169:A:N6	31:BA:1170:A:C2	2.82	0.47
1:AA:1665:A:O2'	1:AA:1666:G:H5'	2.14	0.47
14:AQ:106:ARG:O	14:AQ:107:GLU:HB3	2.15	0.47
1:AA:545:G:N2	1:AA:549:G:C6	2.83	0.47
31:CA:1266:G:H2'	31:CA:1268:A:OP2	2.15	0.47
53:BC:50:G:C2	53:BC:67:C:O2	2.68	0.47
35:CH:13:ILE:HD12	35:CH:13:ILE:H	1.80	0.47
37:CJ:26:PHE:CD2	37:CJ:30:ILE:HD11	2.50	0.47
3:AD:121:PRO:HB3	3:AD:135:PHE:CE1	2.49	0.47
17:A2:91:TYR:C	17:A2:91:TYR:CD1	2.88	0.47
1:AA:1789:A:OP1	3:AD:221:VAL:HA	2.15	0.47
31:CA:42:G:H2'	31:CA:43:C:O4'	2.15	0.47
31:CA:238:G:C5	31:CA:239:U:C5	3.03	0.47
1:DA:1218:C:O2	1:DA:1232:G:C2	2.67	0.47
1:AA:242:G:O5'	30:A8:3:LYS:HD3	2.15	0.47
1:DA:1845:G:C2'	1:DA:1846:G:H5'	2.45	0.47
31:BA:1106:G:C4	31:BA:1107:C:C5	3.03	0.47
10:DN:13:ASN:C	10:DN:15:GLY:N	2.68	0.47
31:BA:28:G:N7	56:BA:1775:OHX:N1	2.62	0.47
1:AA:2553:G:H5''	1:AA:2554:U:OP2	2.15	0.47
38:BK:97:VAL:HG13	38:BK:98:LYS:N	2.29	0.47
1:DA:7:G:H1	1:DA:2896:C:H42	1.63	0.46
12:AP:11:LYS:HE2	12:AP:87:LYS:O	2.15	0.46
1:DA:2270:G:H2'	1:DA:2271:G:C5'	2.46	0.46
33:CF:148:GLY:HA3	33:CF:172:ARG:O	2.15	0.46
17:D2:72:VAL:O	17:D2:73:SER:CB	2.62	0.46
52:BD:38:MIA:C2'	52:BD:39:A:H5'	2.45	0.46
31:BA:1336:C:O2	31:BA:1336:C:C2'	2.63	0.46
31:BA:945:G:N1	31:BA:1337:G:C2	2.83	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
15:AR:105:LEU:O	15:AR:107:ASP:OD1	2.34	0.46
11:DO:62:LEU:HD11	30:D8:26:LYS:C	2.36	0.46
28:D6:25:LYS:CB	30:D8:34:TRP:CZ3	2.97	0.46
11:DO:125:VAL:O	11:DO:144:GLU:HB3	2.16	0.46
34:CG:96:LEU:HD13	34:CG:139:ARG:NH1	2.30	0.46
1:DA:2136:C:N3	1:DA:2155:G:C2	2.83	0.46
37:CJ:12:LEU:HD21	37:CJ:28:ASN:ND2	2.30	0.46
1:AA:996:A:C5	1:AA:1160:G:N2	2.84	0.46
31:CA:1127:G:H1'	31:CA:1147:C:N4	2.31	0.46
1:AA:2845:G:C2'	1:AA:2846:G:H5'	2.45	0.46
5:DF:133:ASN:HA	5:DF:162:LEU:HD23	1.96	0.46
47:BT:20:THR:HG22	47:BT:41:LYS:HG2	1.96	0.46
1:DA:1169:G:H2'	1:DA:1170:G:C1'	2.44	0.46
44:CQ:4:LYS:O	44:CQ:8:GLU:N	2.45	0.46
31:CA:1002:G:H1	31:CA:1038:C:H42	1.63	0.46
35:CH:71:LEU:CD2	35:CH:115:VAL:HG13	2.45	0.46
8:DK:130:TYR:CG	8:DK:131:LYS:N	2.83	0.46
39:CL:59:PHE:N	39:CL:59:PHE:CD1	2.83	0.46
34:BG:10:ARG:NH1	34:BG:10:ARG:HB2	2.29	0.46
31:CA:410:G:N1	31:CA:429:U:C2	2.83	0.46
31:CA:1503:A:N6	54:C1:12:A:N3	2.63	0.46
13:D0:77:ARG:C	13:D0:79:LEU:N	2.68	0.46
2:AB:31:C:H2'	2:AB:32:C:H6	1.80	0.46
50:CW:10:LEU:HD22	50:CW:11:SER:N	2.30	0.46
53:BC:47:G:H4'	53:BC:48:U:OP1	2.15	0.46
33:CF:95:THR:C	33:CF:97:LYS:H	2.09	0.46
33:CF:8:ILE:C	33:CF:10:PHE:H	2.18	0.46
21:AV:44:PHE:HE1	21:AV:48:PHE:CG	2.33	0.46
9:AM:22:THR:O	9:AM:23:LEU:HB2	2.14	0.46
1:AA:1799:G:O2'	1:AA:1800:C:OP2	2.23	0.46
1:AA:1799:G:H5'	1:AA:1819:A:H61	1.79	0.46
31:CA:387:U:OP1	56:CA:1725:OHX:N1	2.48	0.46
40:CM:34:VAL:HG22	40:CM:74:ILE:HG22	1.97	0.46
1:AA:273(F):C:O2	1:AA:273(F):C:C2'	2.62	0.46
1:DA:2439:A:H4'	1:DA:2440:C:O5'	2.15	0.46
7:AH:84:SER:O	7:AH:133:VAL:O	2.33	0.46
26:D4:38:LYS:HB2	26:D4:38:LYS:NZ	2.29	0.46
50:CW:69:GLY:O	50:CW:73:HIS:CD2	2.67	0.46
31:BA:186(F):C:N3	31:BA:191(B):G:C2	2.83	0.46
18:AS:40:ASN:C	18:AS:41:LYS:HG2	2.36	0.46
1:AA:2747:G:N7	56:AA:3388:OHX:N4	2.63	0.46
34:BG:70:ILE:CG2	34:BG:75:PHE:HB2	2.46	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:AO:138:LEU:O	11:AO:140:ALA:N	2.41	0.46
48:BU:54:ARG:HD2	48:BU:55:ARG:HH21	1.80	0.46
28:D6:49:HIS:O	28:D6:50:ARG:HG2	2.14	0.46
31:BA:343:U:O2	31:BA:347:G:C2	2.67	0.46
24:AW:47:ASN:C	24:AW:49:LYS:N	2.61	0.46
49:CV:49:ILE:O	49:CV:60:VAL:HG13	2.15	0.46
31:BA:605:U:C2	31:BA:606:G:H8	2.32	0.46
1:AA:32:C:O2'	1:AA:33:U:H5'	2.15	0.46
14:AQ:20:ARG:C	14:AQ:22:GLY:N	2.66	0.46
1:AA:2378:A:H4'	14:AQ:23:ARG:NH1	2.30	0.46
6:DG:83:ARG:N	6:DG:86:MET:HE3	2.30	0.46
1:DA:287:C:H2'	1:DA:288:C:O4'	2.15	0.46
21:DV:62:PRO:C	21:DV:64:GLY:N	2.69	0.46
11:AO:70:GLN:N	11:AO:70:GLN:CD	2.68	0.46
1:AA:2181:G:H2'	1:AA:2182:G:H8	1.80	0.46
31:CA:1192:C:OP2	33:CF:4:LYS:NZ	2.39	0.46
25:DX:28:LEU:HD23	25:DX:33:GLN:HE21	1.80	0.46
17:A2:64:HIS:CG	17:A2:92:THR:HG22	2.50	0.46
1:DA:580:C:C2	1:DA:581:C:C5	3.03	0.46
31:BA:107:G:O6	50:BW:15:ARG:HG3	2.15	0.46
5:DF:145:GLU:O	5:DF:146:ALA:CB	2.63	0.46
16:A1:28:ARG:CD	16:A1:38:THR:OG1	2.63	0.46
1:DA:729:G:O5'	3:DD:208:LYS:NZ	2.48	0.46
1:DA:2648:C:H2'	1:DA:2649:U:O4'	2.15	0.46
31:CA:600:C:H2'	31:CA:601:C:H6	1.81	0.46
26:A4:27:THR:O	26:A4:28:LYS:HB2	2.14	0.46
1:AA:990:A:OP2	1:AA:991:C:OP2	2.33	0.46
42:BO:82:VAL:HG12	42:BO:83:VAL:N	2.30	0.46
31:BA:865:A:H2	31:BA:918:A:H4'	1.80	0.46
31:CA:728:A:C5	45:CR:54:ARG:HD2	2.50	0.46
31:CA:715:A:H2'	31:CA:716:A:O5'	2.15	0.46
1:AA:1468:C:H2'	1:AA:1469:A:H8	1.78	0.46
34:CG:70:ILE:HD11	34:CG:100:ARG:HH11	1.80	0.46
6:AG:43:LEU:C	6:AG:45:GLU:H	2.19	0.46
1:DA:1711:C:H2'	1:DA:1712:C:C6	2.50	0.46
6:DG:84:LYS:O	6:DG:84:LYS:HD3	2.14	0.46
50:CW:14:LYS:O	50:CW:18:GLN:HG3	2.15	0.46
1:AA:2817:G:OP1	13:A0:99:LYS:NZ	2.38	0.46
13:D0:118:GLU:HA	13:D0:118:GLU:OE1	2.15	0.46
1:DA:389:G:C2	11:DO:71:VAL:HG12	2.49	0.46
1:AA:2400:G:C4	1:AA:2401:U:C5	3.02	0.46
1:AA:2401:U:O2	1:AA:2402:C:C6	2.69	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:975:A:N1	40:CM:48:THR:HG22	2.30	0.46
43:CP:84:ILE:O	43:CP:86:CYS:N	2.47	0.46
52:CD:16:C:H2'	52:CD:17:G:H4'	1.96	0.46
28:D6:25:LYS:CD	30:D8:35:GLN:OE1	2.62	0.46
1:DA:2306:C:C3'	1:DA:2307:G:H5''	2.20	0.46
45:CR:78:TYR:O	45:CR:79:ARG:C	2.54	0.46
16:D1:95:LEU:HD22	17:D2:4:ILE:HG12	1.98	0.46
5:AF:65:TRP:HZ3	5:AF:73:ALA:O	1.98	0.46
20:AU:56:PRO:O	20:AU:57:GLN:HG3	2.15	0.46
31:BA:253:U:H2'	31:BA:254:G:C8	2.50	0.46
12:DP:32:TYR:CE1	12:DP:114:ALA:HB2	2.49	0.46
1:AA:1899:G:H1	1:AA:1902:C:N4	2.14	0.46
31:BA:58:C:C2'	31:BA:59:A:O5'	2.63	0.46
4:AE:20:ALA:C	4:AE:21:VAL:HG22	2.35	0.46
1:DA:1652:A:H2'	1:DA:1653:G:H5'	1.97	0.46
1:DA:2756:U:C4'	1:DA:2757:A:OP1	2.59	0.46
32:CE:68:ILE:O	32:CE:90:MET:HB2	2.15	0.46
15:DR:64:ARG:CB	15:DR:73:GLU:HG2	2.36	0.46
31:CA:1503:A:N3	54:C1:13:A:N1	2.63	0.46
31:BA:652:U:C5	31:BA:752:G:N3	2.84	0.46
1:DA:2872:G:C8	1:DA:2873:A:H2	2.33	0.46
23:AZ:80:LEU:N	23:AZ:80:LEU:HD22	2.31	0.46
1:DA:1992:G:O5'	1:DA:1992:G:C8	2.69	0.46
1:AA:654(A):A:H2	1:AA:654(T):A:N1	2.12	0.46
34:CG:108:LEU:CD1	34:CG:174:LEU:HB3	2.46	0.46
1:AA:2164:C:H2'	1:AA:2165:G:C4'	2.45	0.46
1:AA:997:G:OP1	16:A1:93:LYS:CG	2.59	0.46
1:AA:299:A:N6	1:AA:300:A:N6	2.60	0.46
5:AF:167:ALA:C	5:AF:169:ASN:H	2.18	0.46
1:DA:444:C:OP2	16:D1:2:PRO:HD3	2.14	0.46
1:AA:2486:G:H2'	1:AA:2487:G:H5''	1.97	0.46
10:DN:102:VAL:CG2	10:DN:121:VAL:HG22	2.44	0.46
1:DA:1006:C:O2	9:DM:106:MET:HB3	2.15	0.46
6:DG:145:THR:OG1	6:DG:148:MET:HB2	2.15	0.46
31:BA:631:G:C8	31:BA:632:A:C2	3.03	0.46
1:DA:2736:G:C4	1:DA:2737:G:C8	3.03	0.46
8:DK:79:ILE:CG2	8:DK:79:ILE:O	2.62	0.46
1:AA:1204:A:C8	56:AA:3409:OHX:N2	2.83	0.46
23:AZ:92:LYS:O	23:AZ:93:GLU:C	2.52	0.46
21:AV:7:ALA:O	21:AV:8:TYR:CG	2.68	0.46
1:DA:1883:G:HO2'	1:DA:1884:A:H8	1.60	0.46
6:DG:123:ASN:O	6:DG:125:PHE:N	2.47	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:668:G:C6	31:BA:669:U:C5	3.03	0.46
2:DB:87:G:H3'	2:DB:88:C:C5'	2.44	0.46
2:DB:88:C:OP1	2:DB:89:G:N7	2.48	0.46
31:BA:892:A:H2'	31:BA:893:C:C6	2.50	0.46
1:DA:378:C:H2'	1:DA:379:G:H5'	1.98	0.46
50:BW:13:LEU:O	50:BW:13:LEU:HD12	2.15	0.46
1:DA:752:A:H4'	1:DA:753:C:O5'	2.16	0.46
1:DA:1871:A:H2'	1:DA:1872:A:H8	1.81	0.46
31:BA:765:G:N2	31:BA:813:U:OP2	2.48	0.46
4:DE:154:LYS:O	4:DE:155:LYS:C	2.53	0.46
1:AA:184:C:O2	1:AA:184:C:C2'	2.63	0.46
14:AQ:14:VAL:O	14:AQ:18:ILE:HD12	2.16	0.46
1:DA:315:G:C5	1:DA:316:C:C5	3.03	0.46
21:AV:107:THR:O	21:AV:108:PRO:C	2.54	0.46
1:DA:1773:A:N7	1:DA:1829:A:H1'	2.30	0.46
9:DM:120:LEU:HD21	9:DM:122:VAL:CG2	2.45	0.46
1:AA:471:A:OP2	1:AA:471:A:C8	2.68	0.46
1:DA:838:C:C2'	1:DA:839:U:H5'	2.45	0.46
3:AD:177:LEU:HB3	3:AD:178:PRO:CD	2.45	0.46
1:AA:552:G:C6	1:AA:553:U:C4	3.03	0.46
31:BA:488:C:O2'	31:BA:489:C:H5'	2.15	0.46
1:AA:377:C:H2'	1:AA:378:C:H6	1.80	0.46
52:BB:16:C:H2'	52:BB:18:G:OP2	2.15	0.46
1:AA:195:A:H5''	1:AA:196:A:O5'	2.15	0.46
3:DD:132:PRO:HG3	3:DD:190:TYR:CE1	2.50	0.46
1:DA:709:U:H2'	1:DA:710:G:C8	2.49	0.46
1:DA:1197:G:H2'	1:DA:1198:U:H6	1.81	0.46
37:CJ:138:LYS:O	37:CJ:138:LYS:HG2	2.15	0.46
1:DA:2654:A:H8	1:DA:2654:A:OP1	1.97	0.46
1:DA:1675:C:H2'	1:DA:1676:A:H5'	1.97	0.46
1:AA:466:A:O3'	29:A7:33:ARG:NH1	2.49	0.46
30:A8:36:LYS:O	30:A8:37:SER:C	2.54	0.46
1:AA:2211:G:H1'	1:AA:2212:A:OP1	2.16	0.46
11:DO:28:GLY:O	11:DO:29:LYS:C	2.53	0.46
31:CA:973:G:C4	40:CM:55:LYS:HE3	2.50	0.46
5:DF:36:VAL:HG11	5:DF:183:VAL:HG11	1.96	0.46
31:BA:1301:U:C4	31:BA:1303:C:N1	2.83	0.46
31:CA:689:C:C2'	31:CA:690:G:H5'	2.46	0.46
1:AA:49:A:N7	1:AA:120:U:O4	2.47	0.46
1:AA:2781:A:H5''	1:AA:2782:G:C5'	2.23	0.46
1:DA:1160:G:C5	1:DA:1161:C:C4	3.03	0.46
52:BB:12:C:H2'	52:BB:13:G:O4'	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1945:G:C6	1:DA:1946:U:C4	3.04	0.46
2:AB:7:G:H8	2:AB:7:G:H5'	1.80	0.46
1:DA:1144:G:N2	1:DA:1145:C:O2	2.49	0.46
31:BA:1186:G:O3'	39:BL:113:LYS:NZ	2.40	0.46
31:CA:1127:G:N1	31:CA:1145:C:N3	2.63	0.46
2:DB:10:C:N3	2:DB:11:C:C5	2.83	0.46
44:BQ:23:ARG:NH1	44:BQ:30:ALA:HB2	2.30	0.46
20:AU:57:GLN:O	20:AU:58:GLY:C	2.54	0.46
7:DH:54:ARG:HB2	7:DH:55:PRO:HD2	1.96	0.46
52:CB:49:A:N3	52:CB:49:A:H2'	2.29	0.46
35:BH:144:THR:C	35:BH:146:ALA:H	2.18	0.46
31:BA:24:U:H2'	31:BA:25:C:C6	2.50	0.46
4:AE:21:VAL:HG23	4:AE:22:PRO:CB	2.46	0.46
1:AA:2788:C:H2'	1:AA:2789:C:O4'	2.15	0.46
26:D4:5:ILE:HG22	26:D4:5:ILE:O	2.15	0.46
34:BG:110:PHE:HD2	34:BG:148:VAL:CG2	2.29	0.46
16:D1:58:ARG:HD3	16:D1:62:ILE:HD11	1.96	0.46
4:DE:200:GLU:OE1	4:DE:200:GLU:N	2.48	0.46
34:CG:27:TYR:O	34:CG:28:SER:CB	2.62	0.46
24:AW:42:GLY:C	24:AW:44:LEU:N	2.58	0.46
31:CA:1505:G:C4'	54:C1:13:A:H62	2.28	0.46
1:AA:314:A:H2'	1:AA:315:G:H8	1.80	0.46
1:AA:525:U:H2'	1:AA:525:U:O2	2.14	0.46
1:AA:165:U:O2	1:AA:165:U:C3'	2.61	0.46
31:CA:328:C:H4'	31:CA:328:C:OP1	2.15	0.46
1:AA:372:G:O2'	1:AA:373:U:P	2.73	0.46
33:CF:31:HIS:C	33:CF:33:LEU:H	2.18	0.46
21:AV:39:VAL:CG2	21:AV:44:PHE:HB2	2.38	0.46
4:AE:132:HIS:CD2	4:AE:132:HIS:O	2.68	0.46
31:CA:273:A:C2'	31:CA:274:A:H5'	2.45	0.46
1:DA:2297:C:O2	1:DA:2298:A:C8	2.69	0.46
52:CD:30:A:C6	52:CD:43:G:C6	3.03	0.46
31:BA:191(D):U:H2'	31:BA:191(E):G:C8	2.50	0.46
18:DS:7:ALA:O	18:DS:102:HIS:HA	2.15	0.46
15:DR:88:ILE:HD12	15:DR:88:ILE:C	2.35	0.46
31:CA:942:G:C2	31:CA:1342:C:O2	2.68	0.46
47:BT:91:ARG:HH11	47:BT:91:ARG:CG	2.26	0.46
37:BJ:44:TYR:O	37:BJ:48:LYS:N	2.47	0.46
22:A3:34:GLY:O	22:A3:35:ASN:C	2.54	0.46
41:CN:20:TYR:O	41:CN:30:VAL:HA	2.16	0.46
1:AA:2801:A:H2'	1:AA:2802:G:O4'	2.15	0.46
31:BA:113:G:C4	31:BA:114:U:C5	3.04	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:958:A:C6	31:BA:959:A:N1	2.83	0.46
34:BG:104:VAL:HG12	34:BG:105:VAL:N	2.31	0.46
1:DA:988:A:C2	1:DA:989:G:N2	2.83	0.46
1:DA:638:G:C4	1:DA:651:G:N2	2.82	0.46
1:DA:1011:G:C6	1:DA:1013:C:C4	3.03	0.46
21:AV:91:LEU:CD1	21:AV:96:VAL:HG11	2.46	0.46
41:CN:99:GLN:HA	41:CN:105:VAL:CG1	2.46	0.46
41:CN:99:GLN:HA	41:CN:105:VAL:HG11	1.97	0.46
1:DA:234:C:H2'	1:DA:235:U:H6	1.80	0.46
1:AA:1374:G:C5	1:AA:1375:C:C5	3.04	0.46
8:AK:76:THR:CG2	8:AK:77:LEU:N	2.77	0.46
1:DA:565:C:H4'	1:DA:1253:A:C6	2.50	0.46
1:DA:2584:U:H5'	1:DA:2585:U:OP2	2.15	0.46
31:CA:773:G:H2'	31:CA:774:G:O5'	2.15	0.46
23:AZ:11:ARG:HB2	23:AZ:12:PRO:HD2	1.97	0.46
14:DQ:83:LYS:HE2	14:DQ:83:LYS:HB3	1.71	0.46
1:DA:944:G:H2'	1:DA:944:G:N3	2.30	0.46
1:DA:1067:A:H2'	1:DA:1067:A:N3	2.30	0.46
2:DB:57:A:OP2	2:DB:58:A:OP2	2.33	0.46
1:DA:854:G:H1	1:DA:923:C:H42	1.62	0.46
1:AA:1907:G:C2	1:AA:1924:C:C2	3.03	0.46
1:AA:2347:C:P	28:A6:39:TYR:OH	2.73	0.46
1:DA:2893:G:H8	1:DA:2893:G:OP2	1.98	0.46
1:DA:743:G:H2'	1:DA:744:G:H5'	1.98	0.46
17:D2:76:LYS:HB3	17:D2:79:VAL:CG2	2.45	0.46
5:DF:21:ALA:C	5:DF:23:ASP:N	2.69	0.46
52:BD:18:G:H1	52:BD:65:C:H42	1.61	0.46
31:BA:1160:G:O5'	31:BA:1160:G:H8	1.97	0.46
31:CA:1178:G:C2'	31:CA:1179:A:O5'	2.64	0.46
32:CE:74:LYS:O	32:CE:75:LYS:CB	2.61	0.46
1:AA:783:A:H3'	1:AA:783:A:C8	2.49	0.46
26:A4:37:SER:HB3	26:A4:42:PHE:CE1	2.51	0.46
52:BB:46:G:O2'	52:BB:47:U:OP1	2.28	0.46
1:AA:1091:G:H2'	1:AA:1092:C:H5'	1.98	0.46
1:AA:603:A:N7	1:AA:655:A:C2	2.83	0.46
31:BA:554:C:O2'	31:BA:555:C:H5'	2.15	0.46
40:BM:49:VAL:CG2	44:BQ:41:ARG:HB2	2.45	0.46
31:BA:447:G:O6	31:BA:485:G:O2'	2.17	0.46
1:DA:2312:U:H5	1:DA:2313:C:C4	2.33	0.46
6:DG:96:ARG:CG	6:DG:96:ARG:HH11	2.29	0.46
1:DA:2747:G:N2	1:DA:2748:A:N6	2.63	0.46
1:AA:37:C:O2'	1:AA:38:A:H5'	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:7:G:H4'	31:BA:298:A:OP1	2.16	0.46
31:BA:280:C:H4'	31:BA:281:G:OP2	2.15	0.46
31:BA:246:A:C2	31:BA:282:A:C5	3.03	0.46
19:AT:40:LYS:O	19:AT:42:ALA:N	2.49	0.46
1:DA:2157:G:HO2'	1:DA:2158:A:H8	1.62	0.46
31:BA:452:A:O2'	46:BS:72:ARG:HD2	2.15	0.46
31:BA:35:G:H2'	31:BA:36:C:C6	2.49	0.46
31:BA:502:G:H2'	31:BA:503:C:O4'	2.15	0.46
1:AA:1139:G:O3'	9:AM:24:GLY:HA3	2.16	0.46
20:AU:78:ALA:HB3	20:AU:81:LYS:HZ2	1.80	0.46
1:DA:1543:A:H1'	1:DA:1545:A:C1'	2.45	0.46
1:DA:1542:G:O5'	1:DA:1543:A:H5''	2.16	0.46
1:AA:2111:C:O3'	1:AA:2112:G:C8	2.67	0.46
4:DE:105:THR:HG21	4:DE:164:ARG:HH11	1.79	0.46
21:DV:44:PHE:HE1	21:DV:48:PHE:HB2	1.78	0.46
50:BW:71:THR:CG2	50:BW:72:LEU:N	2.78	0.46
39:CL:70:LYS:O	39:CL:74:ILE:HG13	2.16	0.46
37:CJ:43:PHE:HD1	37:CJ:43:PHE:C	2.17	0.46
1:AA:280:C:C2	1:AA:361:G:C2	3.03	0.46
24:AW:50:ILE:N	24:AW:50:ILE:HD12	2.30	0.46
6:AG:181:ARG:O	6:AG:182:LYS:HB2	2.16	0.46
5:DF:15:SER:OG	5:DF:16:GLY:N	2.48	0.46
1:AA:1520:U:H2'	1:AA:1521:G:O4'	2.15	0.46
2:DB:88:C:H5''	2:DB:89:G:C8	2.49	0.46
31:BA:957:U:H3	31:BA:960:U:H5''	1.81	0.46
1:AA:1309:G:N7	56:AA:3364:OHX:N2	2.62	0.46
5:AF:82:ILE:O	5:AF:82:ILE:CG1	2.64	0.46
1:DA:381:G:C5	1:DA:394:A:C2	3.03	0.46
23:AZ:83:GLU:C	23:AZ:85:LEU:H	2.18	0.46
8:AK:2:LYS:NZ	8:AK:20:ASP:HB3	2.31	0.46
7:DH:109:PHE:CZ	7:DH:152:ARG:HD3	2.51	0.46
29:D7:17:GLY:O	29:D7:18:PHE:C	2.54	0.46
13:D0:14:SER:HA	13:D0:17:ARG:HH12	1.81	0.46
31:BA:837:G:N2	31:BA:850:U:O2	2.48	0.46
1:AA:1830:C:O2'	1:AA:1831:G:H5'	2.14	0.46
14:DQ:25:ARG:NH1	14:DQ:42:ASP:OD2	2.39	0.46
29:A7:21:ARG:NH1	29:A7:21:ARG:HG2	2.31	0.46
1:DA:1680:U:O2'	1:DA:1763:G:N7	2.34	0.46
32:CE:121:LEU:O	32:CE:127:ILE:HD11	2.15	0.46
1:AA:2078:C:H2'	1:AA:2079:U:C6	2.50	0.46
53:BC:2:G:C5	53:BC:3:C:C5	3.04	0.46
31:CA:1462:G:H2'	31:CA:1463:C:H6	1.81	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:CH:39:GLY:HA2	35:CH:69:VAL:HB	1.97	0.46
1:DA:599:G:O6	56:DA:3391:OHX:N1	2.49	0.46
33:CF:111:LEU:HD21	33:CF:146:ALA:HB2	1.97	0.46
42:CO:79:GLU:HG3	42:CO:80:HIS:CD2	2.51	0.46
53:CC:9:G:O2'	53:CC:10:G:N7	2.24	0.46
20:DU:28:LYS:O	20:DU:29:GLU:O	2.33	0.46
1:DA:1313:U:C2'	1:DA:1313:U:O2	2.63	0.46
1:DA:307:G:N2	1:DA:309:G:H3'	2.31	0.46
31:CA:147:G:O2'	31:CA:148:G:H5'	2.16	0.46
1:AA:722:A:H2'	1:AA:723:G:O4'	2.15	0.46
20:DU:91:GLU:CG	20:DU:92:ASN:N	2.78	0.46
1:DA:2630:G:O4'	1:DA:2630:G:P	2.73	0.46
1:AA:2399:G:C2'	1:AA:2400:G:H5'	2.46	0.46
31:CA:1065:U:OP1	31:CA:1065:U:H4'	2.14	0.46
31:CA:1329:A:OP1	43:CP:25:ILE:O	2.33	0.46
3:DD:80:ALA:HB3	3:DD:94:LEU:HB3	1.96	0.46
31:BA:1237:C:C2'	31:BA:1238:A:OP1	2.63	0.46
15:AR:109:GLU:O	15:AR:113:LYS:HB2	2.15	0.46
9:DM:94:HIS:N	9:DM:94:HIS:ND1	2.63	0.46
31:BA:223:U:C4	31:BA:224:C:C5	3.04	0.46
31:BA:79:G:N2	31:BA:90:C:N3	2.63	0.46
1:DA:1069:A:H2	1:DA:1094:U:C2	2.33	0.46
26:A4:12:ALA:CB	26:A4:29:PRO:HA	2.44	0.46
44:BQ:23:ARG:HG3	44:BQ:29:ARG:O	2.15	0.46
1:AA:1019:U:O2'	1:AA:1021:A:C2	2.66	0.46
1:AA:1141:U:H4'	1:AA:1142(A):A:O4'	2.15	0.46
1:DA:2469:A:C2	1:DA:2470:G:N7	2.83	0.46
31:CA:528:C:H4'	31:CA:535:A:C5	2.51	0.46
31:BA:1265:G:C2	31:BA:1271:G:C2	3.03	0.46
6:DG:41:GLN:N	6:DG:90:LEU:O	2.45	0.46
4:AE:57:LYS:HD3	4:AE:59:VAL:HG12	1.98	0.46
1:DA:2342:C:OP2	1:DA:2342:C:H6	1.98	0.46
31:CA:182:U:O4	31:CA:223:U:H1'	2.15	0.46
31:CA:1325:C:C4'	51:CX:17:THR:HG21	2.36	0.46
35:BH:111:GLU:O	35:BH:113:ALA:N	2.38	0.46
16:A1:66:ASN:OD1	16:A1:76:TYR:CB	2.61	0.46
9:AM:42:TRP:CD1	16:A1:63:VAL:HG11	2.51	0.46
31:CA:345:C:O2'	31:CA:346:G:P	2.73	0.46
53:BC:17:C:O2'	53:BC:18:C:C6	2.67	0.46
1:AA:2507:C:C6	1:AA:2583:G:N2	2.83	0.46
14:AQ:92:TYR:HB3	14:AQ:98:VAL:HG21	1.97	0.46
31:BA:131:C:O2	31:BA:131:C:C2'	2.56	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
34:CG:126:ILE:HG22	34:CG:127:THR:H	1.80	0.46
31:BA:1190:G:O6	56:BA:1745:OHX:N1	2.49	0.46
39:CL:48:GLU:N	39:CL:49:PRO:HD2	2.30	0.46
3:AD:6:PHE:N	3:AD:6:PHE:CD1	2.84	0.46
6:AG:181:ARG:HG2	6:AG:181:ARG:O	2.16	0.46
3:DD:70:TRP:CD1	3:DD:70:TRP:C	2.89	0.46
1:DA:327:G:OP1	56:DA:3489:OHX:N5	2.48	0.46
23:AZ:78:LYS:HZ1	23:AZ:94:LEU:HD11	1.77	0.46
22:A3:43:THR:O	22:A3:45:PHE:N	2.49	0.46
42:BO:122:THR:HG22	42:BO:123:LYS:O	2.15	0.46
4:DE:26:ILE:HG22	4:DE:27:LEU:N	2.29	0.46
31:CA:1291:G:C6	31:CA:1292:U:C4	3.04	0.46
31:BA:375:U:OP1	46:BS:69:THR:HG21	2.15	0.46
8:DK:111:PRO:O	8:DK:112:LYS:C	2.53	0.46
36:BI:97:PHE:O	48:BU:30:ASP:HA	2.16	0.46
6:AG:33:ARG:O	6:AG:162:THR:HG23	2.15	0.46
1:AA:2199:A:C5'	1:AA:2205:C:OP2	2.63	0.46
1:DA:2845:G:H2'	1:DA:2846:G:C8	2.51	0.46
1:DA:581:C:O2	1:DA:582:G:C8	2.69	0.46
38:CK:29:SER:HB3	38:CK:32:LYS:CG	2.44	0.46
32:CE:168:THR:CG2	32:CE:192:SER:HA	2.45	0.46
31:BA:1083:U:C5	31:BA:1084:G:C5	3.04	0.46
31:BA:812:C:H2'	31:BA:812:C:H6	1.53	0.46
43:CP:54:VAL:HG12	43:CP:54:VAL:O	2.15	0.46
5:DF:65:TRP:CZ2	5:DF:72:ARG:NH2	2.83	0.46
4:DE:129:HIS:O	4:DE:131:ALA:N	2.47	0.46
18:AS:107:LEU:HD12	18:AS:107:LEU:HA	1.58	0.46
4:AE:5:LEU:N	4:AE:5:LEU:HD23	2.30	0.46
4:AE:7:VAL:HG21	15:AR:1:MET:HE1	1.97	0.46
1:DA:273(E):U:C2'	1:DA:273(F):C:H5'	2.46	0.46
22:D3:54:GLY:O	22:D3:56:ASP:N	2.48	0.46
1:DA:2088:G:H2'	1:DA:2089:U:O4'	2.16	0.46
3:AD:108:PRO:HG3	3:AD:143:HIS:CE1	2.50	0.46
31:BA:404:U:O4	34:BG:2:GLY:N	2.48	0.46
1:AA:928:G:H5''	1:AA:929:G:OP2	2.14	0.46
1:AA:1753:G:N1	1:AA:1756:G:C2	2.84	0.46
8:DK:3:VAL:HG23	8:DK:19:VAL:HG13	1.98	0.46
31:BA:745:C:OP1	31:BA:851:G:O2'	2.34	0.46
31:CA:1104:G:O3'	32:CE:111:ARG:NH2	2.48	0.46
31:BA:127:G:N2	47:BT:61:GLU:OE1	2.42	0.46
35:CH:43:LEU:HD23	35:CH:133:TYR:CE2	2.51	0.46
43:BP:37:THR:O	43:BP:39:ILE:HG13	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:CE:52:GLU:HG2	32:CE:56:ARG:HH22	1.80	0.46
9:DM:15:LEU:HD12	9:DM:55:VAL:CG1	2.37	0.46
4:DE:52:LEU:O	4:DE:74:PRO:HB3	2.15	0.46
1:AA:1567:A:H5'	3:AD:58:HIS:CD2	2.51	0.46
3:AD:34:VAL:C	3:AD:35:LYS:O	2.53	0.46
1:DA:1187:G:C5'	17:D2:81:TYR:OH	2.63	0.46
54:C1:19:U:O2'	54:C1:20:G:C5'	2.64	0.46
31:CA:1065:U:O2'	31:CA:1066:C:OP2	2.33	0.46
31:CA:1207:G:C5	31:CA:1208:C:C5	3.04	0.46
11:AO:15:ARG:NH1	11:AO:15:ARG:CB	2.75	0.46
7:AH:152:ARG:O	7:AH:153:LYS:HB2	2.14	0.46
17:D2:74:LYS:HB3	17:D2:74:LYS:HE2	1.44	0.46
52:BD:9:U:H5	52:BD:21:A:H62	1.63	0.46
31:CA:1178:G:N2	31:CA:1181:G:N7	2.64	0.46
1:AA:607:U:OP1	5:AF:103:LYS:N	2.47	0.46
26:A4:34:GLU:HG3	43:BP:3:ARG:HB2	1.97	0.46
31:BA:95:G:C6	31:BA:96:G:C6	3.03	0.46
1:DA:1070:A:C8	1:DA:1096:A:O2'	2.69	0.46
17:A2:16:PRO:HB3	17:A2:99:ILE:HD11	1.98	0.46
16:A1:79:PHE:CD2	16:A1:79:PHE:C	2.88	0.46
31:CA:1145:C:O2'	31:CA:1146:A:N7	2.43	0.46
50:BW:32:ALA:O	50:BW:33:ILE:C	2.54	0.46
31:BA:555:C:H2'	31:BA:556:C:H6	1.80	0.46
1:AA:483:A:H5''	20:AU:49:VAL:HG22	1.97	0.46
1:DA:1042:G:H2'	1:DA:1043:C:O4'	2.15	0.46
1:DA:2473:U:H3	1:DA:2474:C:H6	1.62	0.46
12:DP:121:ALA:C	12:DP:123:HIS:H	2.19	0.46
46:CS:51:VAL:O	46:CS:53:VAL:N	2.49	0.46
31:BA:447:G:O2'	31:BA:448:A:O4'	2.34	0.46
3:DD:176:ARG:NH1	3:DD:176:ARG:HG2	2.16	0.46
1:DA:35:G:H2'	1:DA:36:G:O4'	2.15	0.46
8:AK:5:LEU:O	8:AK:6:LEU:HD12	2.15	0.46
32:CE:216:SER:O	32:CE:218:ALA:N	2.49	0.46
3:AD:125:ILE:HD13	3:AD:125:ILE:N	2.31	0.46
31:CA:1027:C:O2	31:CA:1027:C:O2'	2.34	0.46
1:DA:1993:U:H2'	1:DA:1994:C:O4'	2.16	0.46
20:DU:43:ASN:CB	20:DU:64:GLU:HA	2.43	0.46
9:AM:25:ARG:O	9:AM:29:LYS:HE2	2.16	0.46
31:CA:386:C:H2'	31:CA:387:U:C5'	2.46	0.46
1:AA:274:G:H2'	1:AA:275:G:H1'	1.96	0.46
39:BL:49:PRO:HA	39:BL:52:ALA:HB3	1.97	0.46
50:CW:26:ASN:HD22	50:CW:26:ASN:C	2.18	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
19:AT:41:ASN:HD22	19:AT:41:ASN:H	1.64	0.46
1:AA:1250:G:OP2	11:AO:21:ARG:NH1	2.48	0.46
1:AA:443:A:N7	5:AF:45:ARG:HG3	2.30	0.46
31:CA:619:U:N3	34:CG:134:ASP:OD2	2.48	0.46
3:AD:77:ALA:HB2	3:AD:97:TYR:CD2	2.50	0.46
1:DA:2882:A:H2'	1:DA:2883:A:O5'	2.15	0.46
13:A0:55:ALA:HB2	13:A0:79:LEU:CD1	2.45	0.46
28:D6:36:LEU:HD23	28:D6:50:ARG:HD3	1.98	0.46
14:DQ:36:TYR:HD2	14:DQ:52:SER:HB3	1.77	0.46
31:BA:22:G:C5	31:BA:23:C:C4	3.04	0.46
6:DG:56:ALA:CB	6:DG:153:ARG:HE	2.27	0.46
1:AA:240:G:O6	56:AA:3536:OHX:N6	2.49	0.46
37:CJ:146:GLU:O	37:CJ:149:ARG:HB2	2.16	0.46
1:DA:231:C:C2'	1:DA:232:G:H5'	2.46	0.46
6:AG:83:ARG:HG3	6:AG:86:MET:HE1	1.97	0.46
1:DA:353:G:C2'	1:DA:354:G:H5'	2.46	0.46
35:BH:71:LEU:CD1	35:BH:114:GLY:HA3	2.45	0.46
31:BA:1288:A:N1	31:BA:1371:G:H1'	2.30	0.46
31:BA:1122:U:C4	31:BA:1123:A:C5	3.04	0.46
31:CA:491:G:H2'	31:CA:492:G:C5'	2.45	0.46
35:CH:51:VAL:HG23	35:CH:52:PRO:HD3	1.98	0.46
25:DX:5:LYS:HA	25:DX:36:VAL:HG12	1.98	0.46
1:AA:64:A:C4	19:AT:66:LEU:CD2	2.99	0.46
18:AS:70:TYR:O	18:AS:107:LEU:HD12	2.16	0.46
1:DA:28:A:C5	1:DA:513:A:N7	2.83	0.46
1:AA:2246:G:H2'	1:AA:2247:A:C8	2.51	0.46
1:AA:984:A:H5''	1:AA:985:C:H5	1.81	0.46
1:DA:2772:C:H5'	4:DE:168:MET:HE1	1.96	0.46
1:DA:2074:U:H2'	1:DA:2075:U:C6	2.50	0.46
1:DA:1796:U:H2'	1:DA:1797:C:C6	2.51	0.46
32:BE:134:GLU:O	32:BE:138:LEU:HG	2.15	0.46
45:BR:8:LYS:O	45:BR:12:ILE:HG13	2.16	0.46
31:BA:1489:G:H2'	31:BA:1490:C:O4'	2.15	0.46
34:CG:82:ALA:O	34:CG:83:SER:C	2.53	0.46
31:CA:563:A:N7	31:CA:567:G:H1'	2.30	0.46
1:AA:416:C:O2'	1:AA:417:C:H5'	2.16	0.46
31:BA:1232:U:H2'	31:BA:1233:G:O5'	2.16	0.46
34:CG:171:GLY:HA2	34:CG:172:PRO:HD3	1.73	0.46
1:AA:2663:G:C2	1:AA:2664:G:H1'	2.50	0.46
1:DA:80:G:C2'	1:DA:81:G:H5'	2.45	0.46
1:AA:705:A:C8	1:AA:727:A:C2	3.03	0.46
4:DE:64:LYS:CB	4:DE:66:HIS:HD2	2.03	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:631:A:OP1	11:AO:64:LYS:HE2	2.16	0.46
1:AA:2421:G:H2'	52:BD:85:A:N6	2.31	0.46
1:DA:670:A:H5''	11:DO:42:SER:O	2.16	0.46
31:CA:945:G:H2'	31:CA:945:G:N3	2.30	0.46
31:CA:1189:C:O2'	33:CF:176:HIS:CD2	2.69	0.46
39:CL:114:TYR:CD1	40:CM:60:ARG:CG	2.94	0.46
1:AA:1291:C:O2'	1:AA:1292:U:H5'	2.16	0.46
52:CD:51:C:H3'	52:CD:52:G:C8	2.50	0.46
52:BD:38:MIA:H162	52:BD:39:A:C2	2.50	0.46
32:CE:75:LYS:HD3	32:CE:75:LYS:O	2.16	0.46
31:BA:948:C:OP2	43:BP:108:ARG:HB2	2.16	0.46
1:DA:2402:C:H5	1:DA:2415:G:H22	1.61	0.46
11:DO:61:ARG:CB	11:DO:62:LEU:CD2	2.93	0.46
8:AK:135:GLU:OE1	8:AK:135:GLU:N	2.38	0.46
1:AA:99:U:C6	1:AA:102:G:C2	3.03	0.46
26:A4:16:CYS:HB2	26:A4:36:CYS:N	2.30	0.46
40:BM:54:PHE:CD1	40:BM:55:LYS:HE3	2.50	0.46
31:BA:1504:G:OP2	31:BA:1504:G:H3'	2.15	0.46
31:BA:221:C:C2'	31:BA:222:U:H5'	2.45	0.46
11:AO:45:LEU:HD13	11:AO:45:LEU:HA	1.76	0.46
11:DO:100:LEU:HG	11:DO:105:LEU:HD11	1.96	0.46
52:BB:15:G:H1'	52:BB:20:C:N4	2.28	0.46
52:BB:47:U:C4	52:BB:48:C:C5	3.04	0.46
5:AF:64:ILE:HD12	5:AF:65:TRP:CD1	2.51	0.46
1:AA:1082:U:C4	1:AA:1083:U:C2	3.03	0.46
1:DA:2135:A:O2'	1:DA:2136:C:OP1	2.22	0.46
39:BL:5:TYR:HA	39:BL:17:VAL:O	2.16	0.46
32:BE:19:HIS:CD2	32:BE:20:GLU:CD	2.89	0.46
19:DT:18:TYR:CD1	19:DT:21:PHE:HE2	2.32	0.46
52:CB:17:G:C5	52:CB:67:A:C6	3.04	0.46
1:AA:2748:A:C6	1:AA:2749:A:C5	3.04	0.46
31:BA:658:G:C2	31:BA:749:C:C4	3.03	0.46
31:CA:991:U:C4	31:CA:1212:U:H1'	2.50	0.46
28:A6:12:GLU:HG3	28:A6:53:LYS:C	2.36	0.46
1:DA:110:G:C2	1:DA:111:A:C8	3.03	0.46
15:DR:91:ARG:HH11	15:DR:124:ASP:CG	2.10	0.46
1:DA:1416:G:O2'	1:DA:1417:C:O4'	2.34	0.46
8:DK:109:ILE:HB	8:DK:130:TYR:CZ	2.51	0.46
1:DA:1153:C:C5	1:DA:1154:G:C5	3.04	0.46
5:DF:172:TRP:CE3	5:DF:173:VAL:HG23	2.50	0.46
20:DU:96:ILE:HD12	20:DU:98:VAL:HG12	1.98	0.46
31:BA:429:U:H1'	31:BA:430:A:H5''	1.98	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:481:G:OP2	20:AU:47:LYS:HD2	2.16	0.46
1:DA:2374:C:C2'	1:DA:2375:G:H5'	2.46	0.46
52:CD:35:G:H2'	52:CD:36:U:H6	1.81	0.46
5:AF:78:ILE:HG13	5:AF:78:ILE:H	1.56	0.46
12:AP:66:ILE:CG1	12:AP:67:ARG:N	2.78	0.46
15:AR:54:ARG:HA	15:AR:59:THR:HB	1.98	0.46
1:DA:329:G:O6	20:DU:19:LYS:HB3	2.15	0.46
4:AE:167:VAL:HG21	4:AE:187:ALA:HB3	1.97	0.46
8:DK:125:GLU:OE1	8:DK:141:LYS:HG3	2.15	0.46
1:DA:1789:A:H2'	1:DA:1790:C:O4'	2.16	0.46
31:CA:618:C:H5'	31:CA:619:U:H5''	1.96	0.46
34:CG:117:ALA:O	34:CG:121:VAL:HG23	2.15	0.46
7:DH:92:ILE:CG2	7:DH:93:GLY:N	2.71	0.46
31:CA:1227:A:OP1	49:CV:80:TYR:OH	2.24	0.46
48:BU:66:LEU:O	48:BU:70:ILE:HG13	2.15	0.46
14:DQ:34:HIS:ND1	14:DQ:54:LEU:HB2	2.31	0.46
1:DA:1126:A:OP1	1:DA:1126:A:C8	2.63	0.46
31:BA:599:C:C2	31:BA:600:C:C6	3.04	0.46
8:AK:29:TYR:O	8:AK:32:PRO:HD2	2.16	0.46
1:AA:1130:U:HO2'	1:AA:1131:G:P	2.39	0.46
18:DS:84:ARG:HB2	18:DS:96:ILE:HD11	1.94	0.46
27:D5:30:LEU:O	27:D5:31:VAL:HG13	2.16	0.46
31:CA:1518:A:C2	31:CA:1519:A:C4	3.04	0.46
1:DA:2173:A:C6	1:DA:2174:C:H1'	2.49	0.46
1:AA:358:U:H2'	1:AA:359:A:C8	2.51	0.46
31:BA:1368:G:C6	31:BA:1369:C:C4	3.04	0.46
1:AA:2537:U:C2	1:AA:2538:C:C5	3.04	0.46
41:CN:34:ASP:HB2	41:CN:35:PRO:CD	2.44	0.46
11:AO:86:LYS:HD2	11:AO:117:GLU:HG3	1.98	0.46
25:DX:4:LEU:HD22	25:DX:56:VAL:HG21	1.97	0.46
31:BA:690:G:C2	31:BA:691:G:C6	3.03	0.46
1:DA:1268:A:C2	1:DA:2013:A:C4	3.03	0.46
31:CA:560:U:H4'	31:CA:561:U:O5'	2.16	0.46
52:CD:38:MIA:H2'	52:CD:39:A:C8	2.50	0.46
1:DA:820:A:H2'	1:DA:821:A:H8	1.81	0.46
22:D3:54:GLY:N	22:D3:58:THR:O	2.45	0.46
3:DD:72:LYS:HE2	3:DD:101:GLU:OE2	2.15	0.46
30:A8:26:LYS:HE2	30:A8:47:LYS:HB3	1.97	0.46
13:A0:32:GLY:HA2	13:A0:116:LEU:HD12	1.96	0.46
1:AA:1783:A:H5'	1:AA:2608:G:H4'	1.98	0.46
15:DR:33:LYS:HD2	15:DR:42:ILE:HD11	1.97	0.46
2:AB:101:A:OP1	56:AB:213:OHX:N1	2.49	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:AG:69:ALA:O	6:AG:90:LEU:HD12	2.16	0.46
1:DA:6:A:O2'	1:DA:7:G:H5'	2.16	0.46
1:AA:1568:G:OP2	3:AD:63:ARG:NH2	2.45	0.46
31:CA:1207:G:C2'	31:CA:1208:C:H5'	2.45	0.46
31:CA:1357:A:N6	31:CA:1358:U:O4	2.49	0.46
31:CA:973:G:N3	40:CM:55:LYS:HE3	2.31	0.46
5:DF:115:ALA:O	5:DF:117:ARG:N	2.49	0.46
17:D2:90:PRO:O	17:D2:91:TYR:CG	2.68	0.46
31:CA:426:G:P	34:CG:36:ARG:NH2	2.89	0.46
32:CE:239:VAL:HG12	32:CE:240:GLN:HG3	1.98	0.46
26:A4:42:PHE:CG	26:A4:43:TYR:N	2.82	0.46
50:BW:99:LEU:O	50:BW:100:ILE:HB	2.16	0.46
16:D1:92:ARG:HD3	16:D1:94:ASN:CB	2.36	0.46
1:DA:1090:U:C4	1:DA:1091:G:C4	3.04	0.46
1:DA:1021:A:C6	1:DA:1023:U:C5	3.04	0.46
1:AA:592:G:N3	30:A8:4:MET:CE	2.79	0.46
1:DA:1049:C:H2'	1:DA:1050:A:C5'	2.46	0.46
6:DG:106:LEU:HA	6:DG:110:ALA:HB3	1.98	0.46
52:CB:52:G:H8	52:CB:52:G:OP2	1.99	0.46
4:AE:116:VAL:CG1	4:AE:122:PHE:CD2	2.98	0.46
31:BA:872:A:C4	31:BA:874:G:C8	3.04	0.46
31:CA:1007:C:C4	31:CA:1008:C:C5	3.03	0.46
2:DB:46:A:C8	2:DB:47:C:C5	3.04	0.46
6:DG:67:LYS:HZ1	26:D4:5:ILE:HB	1.80	0.46
3:DD:176:ARG:NH1	3:DD:176:ARG:HB3	2.31	0.46
1:DA:616:A:C8	5:DF:176:LEU:HD11	2.50	0.46
39:CL:4:TYR:CZ	39:CL:88:TYR:CG	3.04	0.46
1:AA:475:U:C5	1:AA:481:G:O6	2.69	0.46
42:CO:40:VAL:HG21	42:CO:77:LEU:O	2.15	0.46
52:CD:34:U:H2'	52:CD:36:U:OP2	2.15	0.46
5:AF:51:THR:HG21	5:AF:92:PRO:HD2	1.97	0.46
38:CK:75:ARG:HA	38:CK:76:PRO:HD2	1.79	0.46
30:D8:51:ALA:HB1	30:D8:52:LYS:HD2	1.97	0.46
1:DA:859:G:N2	1:DA:917:A:OP2	2.49	0.46
39:CL:102:LEU:O	39:CL:103:THR:OG1	2.31	0.46
19:AT:54:VAL:C	19:AT:55:ASN:HD22	2.20	0.46
21:DV:147:GLY:C	21:DV:149:SER:N	2.68	0.46
43:BP:94:ARG:C	43:BP:96:LEU:H	2.18	0.46
41:BN:95:ILE:HG23	41:BN:108:ILE:HD11	1.98	0.46
37:BJ:113:GLU:CB	37:BJ:118:VAL:HG13	2.46	0.46
3:AD:3:VAL:CG1	3:AD:3:VAL:O	2.63	0.46
1:DA:2308:G:H2'	1:DA:2309:A:OP1	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:273(E):U:H2'	1:AA:273(F):C:C5'	2.46	0.46
1:AA:274:G:H3'	1:AA:274:G:C8	2.50	0.46
1:AA:2145:C:H5''	1:AA:2146:C:OP2	2.16	0.46
15:AR:26:ASP:HB3	15:AR:92:GLY:N	2.22	0.46
1:AA:2475:C:O2	1:AA:2475:C:C2'	2.57	0.46
1:AA:729:G:C5	3:AD:208:LYS:HB2	2.51	0.46
39:CL:34:ASN:N	39:CL:34:ASN:OD1	2.49	0.46
39:CL:33:PHE:HE1	39:CL:37:PHE:CD1	2.33	0.46
5:AF:29:ASN:N	5:AF:112:MET:CE	2.76	0.46
7:AH:41:MET:CE	7:AH:64:LEU:HB3	2.46	0.46
52:BB:2:G:C2	52:BB:81:C:O2	2.69	0.46
31:BA:1064:G:O2'	31:BA:1190:G:N2	2.49	0.46
21:DV:5:LEU:CD2	21:DV:6:LYS:HG2	2.46	0.46
5:DF:7:TYR:CE2	5:DF:16:GLY:HA3	2.51	0.46
1:DA:1459:G:C6	1:DA:1461:G:C5	3.04	0.46
3:AD:228:PRO:CG	3:AD:234:GLY:O	2.60	0.46
3:AD:198:ASN:C	3:AD:198:ASN:ND2	2.67	0.46
31:BA:595:G:N2	31:BA:643:C:N4	2.64	0.46
12:DP:103:MET:CE	12:DP:125:LEU:HD13	2.45	0.46
31:CA:89:U:O2'	31:CA:90:C:C5'	2.64	0.46
1:DA:1766:U:H3	1:DA:1986:A:N6	2.11	0.46
1:DA:2695:C:O2'	1:DA:2696:U:O5'	2.34	0.46
38:CK:104:ARG:NH1	38:CK:138:TRP:CZ2	2.69	0.46
1:DA:2500:U:O2	1:DA:2504:U:C5	2.69	0.46
1:DA:221:A:C8	1:DA:266:G:O6	2.69	0.46
1:DA:1927:A:N1	1:DA:1928:A:C2	2.84	0.46
1:DA:2591:C:H2'	1:DA:2592:G:H5'	1.98	0.46
1:DA:2591:C:OP2	3:DD:238:GLY:O	2.33	0.46
31:CA:187:C:O2	31:CA:191(A):G:C6	2.69	0.46
1:AA:579:G:N7	56:AA:3417:OHX:N5	2.64	0.46
16:A1:27:LEU:HD13	16:A1:31:SER:CB	2.45	0.46
1:AA:1850:G:H2'	1:AA:1851:U:O4'	2.16	0.46
50:CW:56:MET:HG3	50:CW:84:LEU:HD13	1.97	0.46
31:CA:895:G:H2'	31:CA:896:C:C6	2.50	0.46
31:BA:195:A:C5	31:BA:196:A:N1	2.84	0.46
39:BL:26:VAL:O	39:BL:33:PHE:HB2	2.16	0.46
53:CC:22:A:N6	53:CC:47:G:H2'	2.31	0.46
40:BM:80:LYS:HA	40:BM:80:LYS:HZ2	1.81	0.46
1:DA:1491:G:C2'	1:DA:1492:G:H5'	2.46	0.46
1:AA:747:U:O2	1:AA:2014:A:H1'	2.15	0.46
1:DA:2895:U:H2'	1:DA:2896:C:O4'	2.16	0.46
1:AA:2394:C:H2'	1:AA:2395:C:H6	1.81	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1190:G:OP1	33:CF:5:ILE:HD12	2.16	0.46
49:CV:41:VAL:HG22	26:D4:63:TYR:CD2	2.51	0.46
3:DD:39:LYS:HB2	3:DD:62:TYR:HB2	1.98	0.46
3:DD:35:LYS:CG	3:DD:64:ILE:HG12	2.46	0.46
1:AA:1332:G:C8	1:AA:1332:G:H5'	2.50	0.46
5:DF:192:LEU:O	5:DF:193:VAL:CG2	2.61	0.46
7:AH:154:PRO:HG2	7:AH:155:SER:H	1.80	0.46
6:DG:13:GLU:O	6:DG:14:GLU:HB2	2.16	0.46
1:AA:866:A:C6	1:AA:914:C:C5	3.03	0.46
34:CG:12:CYS:HB3	34:CG:33:MET:CG	2.45	0.46
31:CA:1158:C:C4	31:CA:1160:G:C5	3.04	0.46
31:CA:1159:U:C4	31:CA:1182:G:C6	3.04	0.46
3:AD:27:THR:HG22	3:AD:28:GLU:N	2.31	0.46
1:DA:2394:C:H2'	1:DA:2395:C:H6	1.81	0.46
30:D8:33:ASN:C	30:D8:34:TRP:HD1	2.18	0.46
43:BP:19:LEU:HB3	43:BP:25:ILE:HG21	1.97	0.46
43:BP:7:VAL:O	43:BP:8:GLU:C	2.54	0.46
31:BA:963:G:H5'	56:BA:1806:OHX:N1	2.31	0.46
11:DO:80:TYR:CE1	11:DO:111:ARG:CG	2.94	0.46
1:AA:603:A:C5	1:AA:655:A:C2	3.03	0.46
16:A1:74:LEU:N	16:A1:74:LEU:HD12	2.30	0.46
31:CA:82:U:C2	31:CA:87:A:N1	2.83	0.46
50:BW:36:LEU:HD23	50:BW:62:LEU:HD11	1.97	0.46
1:AA:2688:U:O2	1:AA:2688:U:O5'	2.33	0.46
44:BQ:4:LYS:HG3	44:BQ:7:ILE:HD11	1.97	0.46
31:BA:57:G:C5	31:BA:58:C:C4	3.04	0.46
35:CH:118:ILE:HG12	35:CH:119:LEU:N	2.31	0.46
11:AO:49:ARG:HG3	30:A8:59:LYS:CG	2.46	0.46
52:BB:7:G:C2	52:BB:58:G:C5	3.04	0.46
42:CO:27:LEU:HG	42:CO:33:ARG:HB3	1.96	0.46
4:AE:57:LYS:HZ3	4:AE:59:VAL:HG11	1.81	0.46
39:CL:53:VAL:HG23	39:CL:53:VAL:O	2.16	0.46
1:DA:2346:A:H5''	1:DA:2383:G:H1'	1.98	0.46
30:D8:52:LYS:N	30:D8:52:LYS:CD	2.76	0.46
31:CA:244:U:C6	31:CA:894:G:N2	2.84	0.46
31:BA:168:G:C2	31:BA:169:C:N3	2.84	0.46
33:CF:8:ILE:HG23	33:CF:16:ARG:HG2	1.98	0.46
31:BA:394:G:C6	31:BA:395:C:C5	3.03	0.46
34:CG:108:LEU:HD13	34:CG:174:LEU:HD13	1.98	0.46
52:CD:79:A:C6	52:CD:80:C:C4	3.04	0.46
34:CG:114:ARG:O	34:CG:117:ALA:HB3	2.16	0.46
3:AD:170:GLY:C	3:AD:172:TYR:H	2.19	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
15:AR:41:ARG:HH11	15:AR:41:ARG:HB3	1.78	0.46
1:DA:2698:U:H2'	1:DA:2699:C:C6	2.50	0.46
37:BJ:9:VAL:CG1	37:BJ:94:ARG:HE	2.24	0.46
1:DA:1344:G:O2'	1:DA:1385:G:H2'	2.15	0.46
49:CV:51:VAL:HG23	49:CV:60:VAL:CG1	2.46	0.46
21:DV:4:ARG:HG2	21:DV:58:VAL:HB	1.97	0.46
1:AA:1204:A:C2	1:AA:1241:A:N1	2.84	0.46
1:DA:1163:G:C2	1:DA:1164:G:C8	3.04	0.46
22:D3:75:LEU:O	22:D3:78:TYR:CE1	2.68	0.46
9:AM:46:VAL:O	9:AM:47:ALA:CB	2.61	0.46
31:BA:244:U:C6	31:BA:894:G:N2	2.84	0.46
2:DB:88:C:H5''	2:DB:89:G:N7	2.30	0.46
31:BA:1221:G:H4'	49:BV:77:THR:HG22	1.98	0.46
1:AA:2695:C:H2'	1:AA:2696:U:H6	1.79	0.46
38:CK:103:VAL:O	38:CK:104:ARG:HB3	2.15	0.46
1:DA:2850:A:C4	1:DA:2851:A:C8	3.03	0.46
35:CH:51:VAL:HB	35:CH:52:PRO:HD3	1.98	0.46
34:CG:146:ILE:HD12	34:CG:146:ILE:H	1.81	0.46
8:DK:54:GLN:HE21	8:DK:57:ARG:HH22	1.63	0.46
1:DA:844:C:C2'	1:DA:845:G:H5'	2.46	0.46
3:AD:39:LYS:HZ3	3:AD:60:ARG:HH11	1.64	0.46
1:AA:2396:G:N7	56:AA:3565:OHX:N3	2.64	0.46
1:AA:325:G:C2	1:AA:326:G:C4	3.03	0.46
31:BA:767:A:H2'	31:BA:768:A:O4'	2.15	0.46
1:AA:385:C:C2'	1:AA:386:G:OP2	2.64	0.46
1:DA:839:U:OP2	56:DA:3484:OHX:N2	2.49	0.46
10:DN:104:ARG:HH12	15:DR:36:GLU:HB3	1.81	0.46
25:AX:37:LEU:HD12	25:AX:43:ILE:HD13	1.97	0.46
1:DA:1847:A:H3'	1:DA:1848:A:H5'	1.97	0.46
42:BO:120:TYR:O	42:BO:121:GLY:C	2.54	0.46
1:DA:561:G:H1'	16:D1:45:TYR:CE2	2.51	0.46
49:BV:83:HIS:HB3	49:BV:84:GLY:H	1.58	0.46
1:AA:1098:A:H8	1:AA:1098:A:O5'	1.99	0.46
1:DA:667:U:O2	30:D8:2:PRO:HD2	2.15	0.46
1:AA:1742:C:H2'	1:AA:1743:G:O4'	2.16	0.46
1:AA:937:U:H2'	1:AA:938:G:O4'	2.15	0.46
39:BL:24:GLY:O	39:BL:25:LYS:C	2.53	0.46
31:BA:1011:G:O6	56:BA:1799:OHX:N5	2.49	0.46
1:AA:2431:U:O2	1:AA:2433:A:C8	2.69	0.46
1:AA:200:U:OP1	56:AA:3377:OHX:N2	2.49	0.46
1:AA:306:U:O2	1:AA:312:G:N2	2.48	0.46
16:D1:16:LYS:O	16:D1:20:LEU:HD23	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1170:A:O5'	31:CA:1170:A:H8	1.99	0.46
22:A3:19:LYS:HA	22:A3:19:LYS:HD3	1.63	0.46
1:AA:800:A:H4'	1:AA:801:G:O5'	2.15	0.46
1:AA:2272:U:C5'	1:AA:2273:A:OP1	2.64	0.46
13:D0:35:THR:HG23	13:D0:112:ALA:O	2.15	0.46
18:DS:2:GLU:OE2	18:DS:72:LYS:HE3	2.16	0.46
1:DA:389:G:N2	11:DO:71:VAL:HG12	2.30	0.46
28:A6:25:LYS:HE3	30:A8:34:TRP:CZ2	2.36	0.46
4:DE:3:GLY:HA3	4:DE:81:ILE:CD1	2.42	0.46
3:AD:64:ILE:O	3:AD:64:ILE:CG1	2.64	0.46
17:D2:77:ALA:O	17:D2:78:LYS:HB2	2.15	0.46
31:CA:1095:U:C5'	31:CA:1109:C:O2	2.64	0.46
31:CA:1305:G:C8	31:CA:1305:G:OP2	2.69	0.46
31:CA:946:A:N6	31:CA:947:G:O6	2.49	0.46
52:CB:38:MIA:C16	52:CB:39:A:N1	2.79	0.46
31:CA:1317:C:C6	44:CQ:16:PHE:CE1	3.05	0.46
3:DD:35:LYS:HG2	3:DD:64:ILE:CB	2.45	0.46
1:DA:2702:U:O2	1:DA:2702:U:H3'	2.16	0.46
1:AA:1063:G:N2	1:AA:1076:C:H1'	2.31	0.46
31:BA:1394:A:C6	31:BA:1501:C:H4'	2.51	0.46
31:BA:145:G:H2'	31:BA:146:G:H5'	1.98	0.46
31:BA:149:A:C6	31:BA:150:C:N4	2.84	0.46
45:BR:70:LEU:O	45:BR:70:LEU:HD12	2.16	0.46
1:DA:1063:G:C2	1:DA:1064:C:C2	3.04	0.46
1:DA:1097:U:C5	1:DA:1098:A:C5	3.04	0.46
1:DA:2681:C:N4	1:DA:2727:G:N1	2.63	0.46
31:BA:1366:C:O3'	40:BM:60:ARG:NH2	2.49	0.46
7:DH:54:ARG:NH1	7:DH:65:HIS:ND1	2.63	0.46
1:AA:1142(A):A:C8	1:AA:1144:G:N7	2.84	0.46
31:BA:81:G:H2'	31:BA:82:U:C6	2.51	0.46
31:BA:874:G:C6	31:BA:875:C:C4	3.04	0.46
31:BA:382:A:C2	31:BA:383:A:C4	3.04	0.46
1:AA:2791:C:H42	1:AA:2805:G:H1	1.63	0.46
31:BA:1271:G:H2'	31:BA:1272:G:H5'	1.96	0.46
6:DG:132:ASN:OD1	6:DG:158:ALA:HA	2.16	0.46
1:DA:2875:C:HO2'	15:DR:3:ARG:HG3	1.77	0.46
3:AD:205:VAL:HG12	3:AD:205:VAL:O	2.15	0.46
20:DU:75:ILE:O	20:DU:75:ILE:HD13	2.16	0.46
1:AA:2786:U:OP1	4:AE:66:HIS:CD2	2.68	0.46
1:AA:139:G:N2	1:AA:141:A:N1	2.64	0.46
39:CL:21:PRO:HA	39:CL:59:PHE:HA	1.98	0.46
32:CE:66:GLY:O	32:CE:67:THR:OG1	2.31	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1484:G:O2'	1:DA:1485:G:H5'	2.15	0.46
7:AH:10:PRO:HB2	7:AH:11:VAL:H	1.57	0.46
1:DA:2606:C:C2'	1:DA:2607:G:H5'	2.46	0.46
1:AA:2564:A:OP1	1:AA:2648:C:H4'	2.16	0.46
40:CM:4:ILE:HB	40:CM:74:ILE:HD11	1.98	0.46
1:DA:2308:G:O2'	1:DA:2309:A:OP2	2.33	0.46
32:BE:174:VAL:O	32:BE:178:ARG:HB2	2.16	0.46
31:BA:1250:A:H2'	31:BA:1251:A:O4'	2.16	0.46
13:A0:103:ARG:HD2	13:A0:108:GLY:O	2.16	0.46
3:AD:77:ALA:HB1	3:AD:96:HIS:O	2.15	0.46
3:DD:242:ARG:HD3	3:DD:242:ARG:N	2.31	0.46
34:BG:201:GLN:HA	34:BG:201:GLN:NE2	2.31	0.46
39:BL:53:VAL:HG23	39:BL:95:LYS:HD3	1.97	0.46
1:DA:1006:C:H1'	9:DM:106:MET:HB3	1.98	0.46
1:AA:574:C:N3	4:AE:145:LYS:CE	2.79	0.46
9:AM:34:LEU:HA	9:AM:34:LEU:HD12	1.81	0.46
1:AA:2511:U:OP1	56:AA:3557:OHX:N5	2.49	0.46
20:DU:22:GLY:O	20:DU:23:ARG:C	2.53	0.46
1:AA:638:G:H2'	1:AA:639:U:H6	1.80	0.46
1:DA:807:U:H2'	1:DA:808:G:O5'	2.16	0.46
1:AA:1706:U:O2	1:AA:1757:U:H5'	2.15	0.46
10:DN:20:MET:CE	10:DN:44:LYS:HE3	2.44	0.46
20:DU:30:VAL:O	20:DU:36:ALA:O	2.34	0.46
19:AT:26:TYR:HB3	19:AT:92:LEU:HD12	1.97	0.46
9:DM:87:LEU:C	9:DM:89:LYS:N	2.69	0.46
31:CA:369:C:O2	31:CA:370:C:C6	2.69	0.46
28:A6:40:CYS:HB2	28:A6:46:HIS:CE1	2.51	0.46
31:BA:378:G:C2	31:BA:386:C:O2	2.68	0.46
10:AN:4:PRO:O	10:AN:5:GLN:HB2	2.15	0.46
1:AA:611:C:O2'	1:AA:612:G:H5'	2.15	0.46
31:BA:900:A:H2'	31:BA:901:A:C8	2.51	0.46
1:AA:2653:U:C5	1:AA:2654:A:C4	3.04	0.46
22:D3:69:PHE:CE2	22:D3:79:VAL:HG22	2.50	0.46
38:CK:82:HIS:CD2	38:CK:82:HIS:C	2.90	0.46
31:BA:31:G:O2'	31:BA:32:A:H4'	2.16	0.46
31:CA:1083:U:C2'	31:CA:1084:G:H5'	2.46	0.46
6:DG:74:LYS:O	6:DG:84:LYS:HG2	2.16	0.46
25:DX:44:ARG:O	25:DX:48:GLU:HG3	2.16	0.46
1:DA:149:A:H2'	1:DA:150:C:H6	1.81	0.46
41:CN:127:LYS:O	41:CN:128:ALA:HB3	2.16	0.46
29:D7:27:GLY:O	29:D7:30:VAL:HB	2.15	0.46
5:DF:61:GLY:O	5:DF:77:ASP:HB3	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:2387:U:H5''	1:DA:2388:A:OP2	2.16	0.46
33:CF:87:LEU:C	33:CF:89:GLU:H	2.18	0.46
1:DA:2197:U:OP2	56:DA:3336:OHX:N4	2.48	0.46
1:AA:2631:G:C6	1:AA:2632:A:N7	2.84	0.46
4:AE:63:LEU:O	4:AE:63:LEU:HD23	2.16	0.46
10:AN:68:GLU:H	10:AN:68:GLU:CD	2.19	0.46
31:CA:594:G:OP2	56:CA:1760:OHX:N3	2.49	0.46
33:BF:52:LEU:CD2	33:BF:52:LEU:H	2.28	0.46
4:AE:134:ILE:HD12	4:AE:134:ILE:C	2.36	0.46
7:AH:27:LYS:HA	7:AH:31:GLY:O	2.16	0.46
50:CW:39:LYS:O	50:CW:43:LEU:HG	2.15	0.46
1:DA:2809:A:C2	1:DA:2892:A:C2	3.04	0.45
3:DD:35:LYS:CE	3:DD:64:ILE:C	2.82	0.45
1:DA:2702:U:C2'	1:DA:2703:C:C5	2.94	0.45
1:AA:908:C:OP1	12:AP:22:LYS:CB	2.63	0.45
34:CG:7:PRO:HB2	34:CG:10:ARG:HD2	1.99	0.45
31:CA:1368:G:H2'	31:CA:1369:C:H5'	1.97	0.45
5:AF:39:TRP:CD1	5:AF:101:LEU:HB2	2.51	0.45
31:BA:1237:C:C4	31:BA:1336:C:C5	3.04	0.45
15:AR:109:GLU:HA	15:AR:112:ARG:HG2	1.98	0.45
28:D6:25:LYS:HA	30:D8:34:TRP:CH2	2.51	0.45
31:BA:1328:C:H2'	31:BA:1329:A:O4'	2.17	0.45
31:BA:791:G:C6	31:BA:792:A:C6	3.04	0.45
1:DA:1160:G:C6	1:DA:1161:C:C4	3.04	0.45
52:BB:20:C:H4'	52:BB:21:A:OP1	2.15	0.45
31:CA:830:G:C2	31:CA:857:C:O2	2.69	0.45
1:DA:1019:U:OP1	1:DA:1035:U:O2'	2.29	0.45
45:BR:78:TYR:CZ	45:BR:82:ILE:CD1	2.99	0.45
23:DZ:92:LYS:NZ	23:DZ:92:LYS:HB3	2.31	0.45
7:DH:6:ARG:CD	7:DH:6:ARG:N	2.79	0.45
1:AA:2636:U:H4'	4:AE:80:GLU:OE2	2.16	0.45
31:CA:993:G:C6	31:CA:1046:A:C2	3.04	0.45
31:CA:1004:A:H3'	31:CA:1004:A:N3	2.31	0.45
31:CA:570:G:H2'	31:CA:571:U:H6	1.81	0.45
31:BA:1493:A:O2'	54:B1:19:U:H1'	2.16	0.45
42:CO:32:PHE:CB	42:CO:85:ILE:O	2.63	0.45
2:DB:40:U:C4	2:DB:43:C:OP1	2.70	0.45
30:A8:57:ARG:CB	30:A8:57:ARG:HH11	2.29	0.45
31:CA:362:G:C8	56:CA:1798:OHX:N5	2.83	0.45
1:DA:2757:A:N1	7:DH:67:LEU:HD22	2.31	0.45
52:BD:47:U:C2	52:BD:48:C:C5	3.04	0.45
1:DA:1514:U:C2'	1:DA:1515:C:H5'	2.45	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
21:DV:69:THR:CG2	21:DV:90:VAL:HG13	2.47	0.45
1:DA:2115:G:H1'	1:DA:2171:A:N1	2.30	0.45
35:CH:41:VAL:CG1	35:CH:113:ALA:HB2	2.46	0.45
31:BA:502:G:C5	31:BA:503:C:C5	3.04	0.45
1:AA:2583:G:N2	52:BB:85:A:H1'	2.32	0.45
1:AA:92:G:H2'	1:AA:93:C:C6	2.50	0.45
37:BJ:13:GLN:O	37:BJ:24:THR:HG21	2.15	0.45
37:BJ:24:THR:HA	37:BJ:27:ILE:HD12	1.98	0.45
8:AK:95:LYS:O	8:AK:95:LYS:HD2	2.16	0.45
8:DK:76:THR:HG21	8:DK:140:LEU:HD13	1.97	0.45
22:A3:49:LYS:HB2	22:A3:80:HIS:CB	2.45	0.45
42:BO:89:ARG:HD3	42:BO:91:LYS:HA	1.97	0.45
1:DA:603:A:C2	1:DA:655:A:H2	2.34	0.45
3:AD:77:ALA:HB2	3:AD:97:TYR:HA	1.98	0.45
47:BT:91:ARG:HH12	47:BT:92:ARG:HH21	1.50	0.45
1:DA:2836:U:C5	1:DA:2883:A:N6	2.84	0.45
1:AA:1043:C:C4	1:AA:1044:G:N7	2.84	0.45
7:DH:15:VAL:HG12	7:DH:29:PRO:CD	2.42	0.45
1:AA:33:U:H4'	1:AA:34:C:OP1	2.16	0.45
3:DD:134:ARG:HG3	3:DD:135:PHE:CE2	2.50	0.45
44:BQ:8:GLU:OE2	44:BQ:11:LYS:HD2	2.16	0.45
31:BA:244:U:H4'	31:BA:245:C:H5''	1.97	0.45
1:DA:579:G:C8	1:DA:2017:U:C4	3.05	0.45
50:CW:53:LEU:HD11	50:CW:104:LEU:CD1	2.46	0.45
5:AF:129:PHE:HA	5:AF:142:TRP:NE1	2.31	0.45
21:AV:63:ASP:CB	21:AV:64:GLY:CA	2.94	0.45
42:BO:64:TYR:HB3	42:BO:65:GLU:H	1.56	0.45
1:AA:2367:G:H2'	1:AA:2368:C:C6	2.48	0.45
1:AA:2038:G:C5	1:AA:2039:C:C5	3.05	0.45
53:CC:33:C:C2'	53:CC:33:C:O2	2.63	0.45
41:BN:59:TYR:O	41:BN:63:LEU:HD12	2.16	0.45
35:CH:78:HIS:ND1	38:CK:107:LEU:HD12	2.31	0.45
26:D4:10:VAL:HA	26:D4:11:PRO:HD2	1.83	0.45
1:DA:1011:G:N2	1:DA:1151:G:C4	2.84	0.45
33:CF:91:LEU:HD11	33:CF:101:LEU:HD12	1.98	0.45
31:CA:683:G:N2	31:CA:708:C:C2	2.84	0.45
6:DG:17:PRO:C	6:DG:19:LEU:H	2.18	0.45
35:BH:20:GLN:HG2	35:BH:21:ALA:N	2.31	0.45
1:DA:1131:G:N2	1:DA:1132:A:N3	2.64	0.45
1:DA:1687:G:N7	56:DA:3083:OHX:N6	2.63	0.45
1:AA:2831:G:O4'	1:AA:2883:A:C2	2.68	0.45
1:DA:49:A:H5''	1:DA:51:G:O4'	2.15	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:A0:18:LEU:HD13	13:A0:18:LEU:O	2.16	0.45
2:DB:57:A:H8	2:DB:57:A:O5'	1.98	0.45
20:AU:12:THR:OG1	20:AU:26:LYS:HE2	2.15	0.45
1:AA:2639:A:H2'	1:AA:2640:G:H5'	1.99	0.45
31:CA:807:A:OP1	56:CA:1776:OHX:N3	2.49	0.45
1:DA:613:U:O4'	1:DA:613:U:O2	2.33	0.45
33:BF:141:VAL:CG1	33:BF:141:VAL:O	2.64	0.45
36:CI:98:LEU:HD22	48:CU:28:GLU:OE2	2.16	0.45
1:AA:516:C:OP1	27:A5:13:LYS:NZ	2.43	0.45
20:DU:102:CYS:HB3	20:DU:103:GLY:H	1.62	0.45
28:A6:25:LYS:CE	30:A8:34:TRP:CZ2	2.96	0.45
1:DA:587:C:C5	1:DA:671:C:H1'	2.52	0.45
1:AA:1312:U:H4'	1:AA:1313:U:O5'	2.16	0.45
52:CD:21:A:C6	52:CD:55:U:O4	2.69	0.45
2:AB:13:A:O2'	2:AB:14:U:H3'	2.16	0.45
24:DW:17:SER:CB	24:DW:18:PRO:CA	2.75	0.45
1:AA:1069:A:H5''	1:AA:1070:A:O5'	2.16	0.45
52:BD:57:C:H4'	52:BD:58:G:O5'	2.14	0.45
31:BA:942:G:N2	31:BA:943:U:C1'	2.79	0.45
52:CD:85:A:N6	1:DA:2421:G:H2'	2.31	0.45
31:CA:687:A:C1'	31:CA:688:G:OP2	2.62	0.45
1:DA:95:G:O2'	24:DW:48:HIS:ND1	2.40	0.45
1:DA:2854:G:N2	1:DA:2864:G:C4	2.84	0.45
1:AA:1210:A:H8	1:AA:1210:A:C5'	2.03	0.45
31:BA:1500:A:C2'	31:BA:1501:C:H5'	2.45	0.45
1:AA:2157:G:C2'	1:AA:2158:A:OP2	2.64	0.45
52:BB:11:C:N3	52:BB:26:G:C2	2.84	0.45
31:CA:1150:U:H6	31:CA:1150:U:O5'	1.99	0.45
1:DA:2681:C:C5	1:DA:2727:G:N2	2.84	0.45
16:A1:92:ARG:HD2	16:A1:95:LEU:CD1	2.45	0.45
1:AA:996:A:H4'	16:A1:92:ARG:CG	2.46	0.45
31:CA:1126:U:C4	31:CA:1281:U:O4'	2.69	0.45
27:A5:45:VAL:O	27:A5:45:VAL:HG12	2.15	0.45
2:DB:110:G:C5	2:DB:111:U:C5	3.04	0.45
6:AG:34:LEU:HD13	6:AG:99:MET:CE	2.46	0.45
34:BG:23:GLY:HA2	34:BG:112:VAL:HG22	1.98	0.45
33:BF:68:VAL:O	33:BF:68:VAL:HG12	2.16	0.45
52:CB:75:C:HO2'	52:CB:76:C:P	2.34	0.45
1:AA:2481:G:C2'	1:AA:2482:G:OP2	2.64	0.45
1:AA:12:U:H6	1:AA:12:U:O5'	1.99	0.45
1:DA:1731:G:C2'	1:DA:1732:A:H5'	2.46	0.45
15:DR:26:ASP:O	15:DR:49:VAL:HG22	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:1320:C:H2'	31:BA:1321:C:O4'	2.16	0.45
52:CD:62:G:C2	52:CD:71:C:N3	2.84	0.45
4:AE:59:VAL:O	4:AE:60:ASN:O	2.33	0.45
1:DA:2744:G:C8	1:DA:2755:C:C5	3.03	0.45
31:CA:1325:C:O3'	51:CX:17:THR:OG1	2.26	0.45
1:AA:1197:G:C5	56:AA:3538:OHX:N2	2.84	0.45
53:BC:21:U:O2	53:BC:21:U:H2'	2.16	0.45
1:DA:2872:G:N7	1:DA:2873:A:H2	2.13	0.45
1:DA:2156:G:H2'	1:DA:2157:G:O4'	2.17	0.45
41:BN:23:ALA:O	41:BN:87:THR:O	2.35	0.45
1:AA:142:G:O4'	19:AT:37:THR:HG21	2.15	0.45
34:CG:108:LEU:HB3	34:CG:110:PHE:CE1	2.51	0.45
22:A3:53:MET:HA	22:A3:58:THR:O	2.16	0.45
38:BK:20:TYR:CD1	38:BK:65:TYR:CE2	3.04	0.45
1:AA:323:G:C6	1:AA:333:G:C4	3.04	0.45
1:AA:2795:G:H3'	1:AA:2797:U:H5'	1.97	0.45
8:DK:125:GLU:HA	8:DK:125:GLU:OE1	2.14	0.45
1:AA:1296:G:C2'	1:AA:1297:C:O5'	2.64	0.45
33:BF:113:ALA:C	33:BF:115:LEU:N	2.69	0.45
1:AA:34:C:P	1:AA:34:C:O4'	2.74	0.45
52:BB:28:G:N2	52:BB:45:C:H1'	2.30	0.45
1:DA:1434:A:H2'	1:DA:1435:G:O4'	2.17	0.45
33:CF:74:GLY:C	33:CF:76:VAL:H	2.18	0.45
31:BA:115:G:O2'	31:BA:116:A:OP2	2.22	0.45
1:AA:1702:G:N7	56:AA:3558:OHX:N5	2.63	0.45
13:D0:37:THR:CB	13:D0:39:PRO:HD2	2.45	0.45
31:CA:545:C:C2'	31:CA:546:G:H5'	2.45	0.45
34:CG:64:LEU:HB2	34:CG:198:VAL:HG11	1.98	0.45
1:AA:671:C:H2'	1:AA:672:C:C6	2.52	0.45
42:BO:62:SER:C	42:BO:64:TYR:N	2.70	0.45
1:DA:381:G:C2	1:DA:382:G:C4	3.04	0.45
31:CA:958:A:H5''	31:CA:959:A:OP2	2.16	0.45
1:DA:2459:A:C4	1:DA:2460:U:C5	3.03	0.45
25:DX:26:LEU:HD21	25:DX:46:ASN:CB	2.46	0.45
50:BW:69:GLY:O	50:BW:73:HIS:NE2	2.49	0.45
14:AQ:74:ALA:O	14:AQ:77:ALA:N	2.49	0.45
1:DA:2180:U:C4	1:DA:2181:G:C5	3.05	0.45
36:CI:8:ILE:HG13	36:CI:88:VAL:HG22	1.99	0.45
20:AU:8:LYS:O	20:AU:27:VAL:CG2	2.64	0.45
25:AX:38:GLU:O	25:AX:43:ILE:HD12	2.17	0.45
31:CA:627:G:O2'	31:CA:628:G:H5'	2.16	0.45
31:BA:1164:G:H2'	31:BA:1165:C:H6	1.81	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:28:G:C2	31:BA:29:G:C8	3.04	0.45
8:DK:73:GLU:HG2	8:DK:137:PRO:O	2.15	0.45
8:DK:128:LEU:O	8:DK:138:ILE:HG22	2.16	0.45
5:AF:153:SER:OG	5:AF:189:THR:HA	2.15	0.45
52:BB:38:MIA:H163	52:BB:39:A:C2	2.51	0.45
1:AA:500:G:N2	1:AA:502:A:H3'	2.31	0.45
8:AK:128:LEU:O	8:AK:138:ILE:HG22	2.16	0.45
2:AB:1(M):A:N3	2:AB:1(M):A:H2'	2.31	0.45
37:BJ:57:GLU:H	37:BJ:57:GLU:CD	2.17	0.45
31:CA:919:A:H8	31:CA:919:A:O5'	2.00	0.45
13:D0:18:LEU:HD23	13:D0:18:LEU:HA	1.81	0.45
40:CM:63:PHE:HD1	44:CQ:57:ARG:O	1.99	0.45
1:AA:1540:G:C5	1:AA:1541:U:C5	3.03	0.45
28:A6:27:LYS:O	28:A6:28:ARG:HG2	2.16	0.45
1:AA:2287:A:H2	1:AA:2346:A:C2	2.34	0.45
1:AA:2287:A:C4	1:AA:2289:G:N7	2.84	0.45
1:DA:2141:G:O2'	1:DA:2142:C:H5'	2.17	0.45
1:DA:970:C:H1'	1:DA:984:A:O2'	2.17	0.45
31:CA:1309:G:C5	31:CA:1329:A:C2	3.04	0.45
3:DD:30:GLU:CD	3:DD:63:ARG:CZ	2.85	0.45
52:CD:22:A:N3	52:CD:22:A:C2'	2.80	0.45
52:CD:8:U:H1'	52:CD:15:G:H1	1.81	0.45
5:DF:29:ASN:HD21	5:DF:32:LEU:HB2	1.81	0.45
1:AA:2302:G:C6	1:AA:2315:G:C6	3.05	0.45
31:BA:1158:C:N4	31:BA:1160:G:C4	2.84	0.45
31:BA:963:G:H21	40:BM:55:LYS:HZ1	1.64	0.45
31:BA:1399:C:C2	31:BA:1502:A:N6	2.84	0.45
31:BA:173:U:H5''	31:BA:197:A:C4'	2.46	0.45
1:AA:2152:G:H2'	1:AA:2153:G:C8	2.52	0.45
31:BA:1450:U:O2'	31:BA:1451:A:C8	2.69	0.45
1:DA:1023:U:OP2	1:DA:1024:G:N7	2.50	0.45
31:CA:1346:A:C4	31:CA:1348:U:N3	2.83	0.45
33:BF:64:VAL:HG12	33:BF:66:VAL:HG23	1.98	0.45
31:BA:1124:G:O4'	31:BA:1124:G:OP2	2.34	0.45
31:BA:565:U:H3'	31:BA:566:G:H2'	1.97	0.45
31:BA:1202:G:H2'	31:BA:1203:C:O4'	2.17	0.45
32:BE:20:GLU:HG2	32:BE:189:ASP:OD2	2.17	0.45
52:CB:57:C:H4'	52:CB:58:G:O5'	2.16	0.45
31:BA:85:U:O2'	31:BA:86:U:OP2	2.25	0.45
1:AA:1464:C:C2	1:AA:1465:G:C8	3.04	0.45
1:DA:2522:U:H2'	1:DA:2523:G:C5'	2.46	0.45
34:CG:177:ASP:O	34:CG:178:VAL:O	2.33	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:DB:46:A:C5	2:DB:47:C:C5	3.04	0.45
1:DA:192:C:H2'	1:DA:193:U:H5'	1.98	0.45
31:CA:410:G:N1	31:CA:429:U:O2	2.49	0.45
1:AA:507:A:H5''	1:AA:508:G:C5'	2.38	0.45
8:AK:33:ARG:CB	8:AK:35:LEU:HD23	2.46	0.45
19:AT:68:ARG:HD2	19:AT:69:TYR:HE1	1.81	0.45
4:AE:102:VAL:HG21	4:AE:198:VAL:CG1	2.46	0.45
1:AA:861:A:C2	1:AA:917:A:C6	3.04	0.45
38:BK:103:VAL:HG12	38:BK:104:ARG:HG3	1.99	0.45
33:CF:60:ALA:HA	40:CM:93:GLY:HA2	1.98	0.45
1:DA:523:C:O2'	1:DA:524:U:H5'	2.16	0.45
20:AU:101:LYS:HZ3	20:AU:101:LYS:HB3	1.79	0.45
1:DA:444:C:H2'	1:DA:445:C:H6	1.79	0.45
7:AH:58:GLU:C	7:AH:60:ARG:H	2.19	0.45
1:DA:1496:A:H2'	1:DA:1498:C:C5	2.52	0.45
37:CJ:44:TYR:O	37:CJ:48:LYS:N	2.48	0.45
1:DA:2882:A:OP1	13:D0:96:ARG:HD3	2.17	0.45
18:AS:79:GLY:HA3	18:AS:100:THR:CG2	2.46	0.45
1:AA:1889:A:H2'	1:AA:1890:A:C8	2.51	0.45
31:BA:108:G:H5'	31:BA:109:A:H5''	1.98	0.45
1:AA:1471:A:C2	1:AA:1472:A:C4	3.04	0.45
38:CK:51:VAL:HG21	38:CK:60:ARG:NE	2.31	0.45
32:CE:179:LYS:HD3	32:CE:179:LYS:O	2.17	0.45
7:DH:26:VAL:CG1	7:DH:33:LEU:HB2	2.46	0.45
31:BA:113:G:C5	31:BA:114:U:C5	3.04	0.45
1:DA:654(D):G:H2'	1:DA:654(E):C:C6	2.51	0.45
1:DA:1291:C:H2'	1:DA:1292:U:C6	2.51	0.45
1:AA:1681:G:O2'	1:AA:1762:A:O2'	2.32	0.45
14:AQ:93:LYS:HG2	14:AQ:95:HIS:HB3	1.98	0.45
1:AA:458:G:O2'	1:AA:469:G:O6	2.27	0.45
1:DA:1039:G:H1	1:DA:1116:C:N4	2.13	0.45
1:DA:2184:G:H2'	1:DA:2185:C:C6	2.50	0.45
1:AA:624:C:O2	1:AA:657:U:H4'	2.16	0.45
31:CA:390:C:H2'	31:CA:391:G:H8	1.81	0.45
16:A1:5:LYS:H	16:A1:5:LYS:HG3	1.52	0.45
4:DE:170:LEU:HA	4:DE:170:LEU:HD13	1.82	0.45
32:BE:47:THR:HG22	32:BE:51:LEU:HD12	1.98	0.45
1:DA:2112:G:N2	1:DA:2114:A:N1	2.64	0.45
1:DA:1963:U:H5''	1:DA:1963:U:O2	2.16	0.45
31:CA:563:A:C8	31:CA:567:G:C1'	2.99	0.45
31:CA:658:G:C5	31:CA:659:U:C5	3.05	0.45
1:AA:1041:C:O2	1:AA:1115:G:C2	2.70	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:DF:81:PRO:HB3	5:DF:87:GLY:O	2.16	0.45
49:BV:31:ILE:HG23	49:BV:49:ILE:HA	1.98	0.45
1:AA:489:G:H8	1:AA:489:G:OP1	1.99	0.45
7:AH:136:ILE:HD12	7:AH:136:ILE:H	1.81	0.45
1:AA:715:G:H2'	1:AA:716:A:O4'	2.16	0.45
31:BA:781:A:H4'	31:BA:1522:U:O2'	2.15	0.45
31:CA:1057:G:H2'	31:CA:1058:G:C8	2.51	0.45
1:AA:2054:A:H5''	1:AA:2055:C:O5'	2.16	0.45
1:DA:2786:U:C4'	4:DE:65:GLY:N	2.72	0.45
4:DE:73:GLU:HA	4:DE:74:PRO:HD2	1.78	0.45
4:DE:77:ILE:C	4:DE:78:LEU:HG	2.37	0.45
4:DE:47:VAL:HG23	4:DE:84:PHE:O	2.17	0.45
1:AA:2211:G:C4'	1:AA:2212:A:OP2	2.63	0.45
3:DD:44:ASN:CB	3:DD:48:ARG:O	2.64	0.45
40:CM:46:ARG:CG	40:CM:47:PHE:N	2.80	0.45
1:AA:1291:C:H2'	1:AA:1292:U:H6	1.82	0.45
16:D1:47:TYR:CD2	17:D2:74:LYS:HD2	2.52	0.45
31:CA:1158:C:C6	31:CA:1160:G:C8	3.03	0.45
1:DA:2258:C:H4'	1:DA:2259:G:OP2	2.17	0.45
1:AA:329:G:OP1	1:AA:329:G:H8	1.99	0.45
43:BP:5:ALA:O	43:BP:7:VAL:N	2.49	0.45
11:DO:15:ARG:NH1	11:DO:15:ARG:CB	2.75	0.45
11:DO:97:PRO:HD3	11:DO:112:LEU:HD12	1.98	0.45
52:BB:15:G:H21	52:BB:20:C:H6	1.65	0.45
31:CA:828:A:H61	31:CA:858:G:C2'	2.29	0.45
31:CA:829:G:C2'	31:CA:830:G:H5'	2.47	0.45
31:CA:874:G:O2'	31:CA:875:C:H5'	2.15	0.45
1:DA:2685:G:O2'	1:DA:2726:U:H5	2.00	0.45
1:AA:2688:U:H2'	1:AA:2719:G:N2	2.31	0.45
6:DG:135:LEU:N	6:DG:135:LEU:HD12	2.31	0.45
31:BA:254:G:H21	47:BT:16:GLN:HE21	1.63	0.45
1:AA:1826:G:O3'	3:AD:242:ARG:NH2	2.49	0.45
31:BA:625:G:H2'	31:BA:626:U:H6	1.82	0.45
31:CA:1047:G:C2'	31:CA:1048:G:H5'	2.47	0.45
1:AA:962:G:H2'	1:AA:963:U:O4'	2.16	0.45
42:CO:22:SER:C	42:CO:24:VAL:H	2.19	0.45
21:AV:27:VAL:HG22	21:AV:28:MET:N	2.27	0.45
1:DA:1002:G:C6	1:DA:1154:G:N2	2.84	0.45
31:BA:510:A:O2'	31:BA:542:G:H1'	2.16	0.45
31:CA:1503:A:N6	54:C1:12:A:C5	2.84	0.45
31:CA:1498:U:H6	31:CA:1498:U:O5'	2.00	0.45
31:BA:7:G:C5'	31:BA:298:A:O4'	2.64	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:684:G:C2	1:DA:774:A:C2	3.04	0.45
31:BA:191(F):U:C2	50:BW:105:SER:OG	2.67	0.45
43:BP:96:LEU:O	43:BP:110:ARG:NE	2.42	0.45
7:DH:20:ALA:HB1	7:DH:21:PRO:CD	2.46	0.45
1:DA:1210:A:H4'	1:DA:1211:U:O5'	2.17	0.45
40:CM:3:LYS:N	40:CM:74:ILE:O	2.48	0.45
32:BE:220:ASP:C	32:BE:222:ILE:N	2.70	0.45
2:DB:53:A:C2	2:DB:54:G:C8	3.05	0.45
31:CA:1151:A:HO2'	40:CM:70:ARG:NH2	2.15	0.45
52:BB:1:G:O2'	52:BB:2:G:H5'	2.17	0.45
31:CA:1226:C:H4'	31:CA:1227:A:OP1	2.16	0.45
1:AA:1042:G:N2	1:AA:1113:U:O2	2.43	0.45
1:DA:492:A:H2'	1:DA:493:G:C5'	2.42	0.45
33:BF:109:PRO:C	33:BF:111:LEU:N	2.62	0.45
24:AW:31:GLU:O	24:AW:35:LEU:HD22	2.17	0.45
31:BA:1443:G:H3'	31:BA:1443:G:OP2	2.16	0.45
31:BA:1387:G:H2'	31:BA:1388:C:H6	1.80	0.45
1:DA:2062:A:C6	1:DA:2503:A:N6	2.83	0.45
1:DA:2849:U:H1'	1:DA:2866:U:O2	2.17	0.45
1:DA:975:G:C2'	1:DA:976:C:H5'	2.45	0.45
6:AG:83:ARG:HH22	53:BC:57:C:N4	2.15	0.45
1:DA:1297:C:H2'	1:DA:1298:C:H6	1.81	0.45
42:BO:53:ARG:NH1	42:BO:53:ARG:HG3	2.29	0.45
1:DA:867:C:C4	1:DA:868:U:C5	3.04	0.45
1:DA:1944:U:O2	1:DA:1955:U:H5''	2.17	0.45
8:DK:133:HIS:CD2	8:DK:133:HIS:O	2.69	0.45
23:AZ:85:LEU:HA	23:AZ:87:PRO:HD2	1.98	0.45
31:CA:660:G:H1	31:CA:745:C:H42	1.64	0.45
1:DA:1215:G:O2'	1:DA:1216:G:H5'	2.17	0.45
31:BA:577:G:OP1	56:BA:1784:OHX:N6	2.50	0.45
17:A2:65:GLY:HA3	17:A2:91:TYR:CE1	2.52	0.45
16:A1:111:GLU:C	16:A1:113:ALA:N	2.70	0.45
56:DA:3395:OHX:N3	56:DA:3412:OHX:N3	2.64	0.45
1:AA:1392:A:C6	1:AA:1393:A:C6	3.04	0.45
12:DP:59:ARG:C	12:DP:60:ARG:HD2	2.37	0.45
21:DV:92:SER:O	21:DV:94:GLU:N	2.50	0.45
1:AA:1598:C:O2'	1:AA:1599:C:H5'	2.16	0.45
1:DA:372:G:O2'	1:DA:373:U:OP2	2.34	0.45
19:AT:51:VAL:HG13	19:AT:81:VAL:HG23	1.99	0.45
13:D0:107:ASP:OD2	13:D0:107:ASP:C	2.54	0.45
7:DH:105:LEU:N	7:DH:105:LEU:HD23	2.32	0.45
1:DA:2811:G:OP1	4:DE:61:ARG:CB	2.59	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:AO:61:ARG:HH12	30:A8:14:VAL:CG2	2.30	0.45
31:CA:1062:U:H2'	31:CA:1063:C:C6	2.52	0.45
3:DD:61:LEU:HB3	3:DD:63:ARG:HH12	1.79	0.45
1:AA:2307:G:C8	1:AA:2311:A:H2	2.29	0.45
1:AA:1060:U:N3	1:AA:1088:A:C8	2.76	0.45
5:AF:39:TRP:CZ3	5:AF:106:ARG:HD2	2.51	0.45
51:BX:2:GLY:C	51:BX:4:GLY:N	2.65	0.45
31:CA:689:C:OP1	41:CN:44:SER:OG	2.35	0.45
9:DM:97:ARG:O	9:DM:100:GLU:HB2	2.17	0.45
26:A4:37:SER:C	26:A4:39:CYS:N	2.69	0.45
31:BA:142:G:N3	31:BA:143:A:C8	2.85	0.45
1:DA:2277:G:H5''	12:DP:87:LYS:HB3	1.97	0.45
49:BV:42:PRO:O	49:BV:45:VAL:HG22	2.17	0.45
1:DA:1135:C:C2'	1:DA:1135:C:O2	2.64	0.45
31:CA:1346:A:OP2	31:CA:1346:A:H3'	2.17	0.45
31:CA:1147:C:O2	39:CL:16:ARG:CZ	2.65	0.45
39:CL:28:VAL:HA	39:CL:63:ILE:O	2.16	0.45
2:DB:65:C:N4	2:DB:108:C:C2	2.84	0.45
14:DQ:102:ALA:HA	14:DQ:105:ALA:HB3	1.99	0.45
1:DA:2468:G:C6	1:DA:2481:G:C5	3.04	0.45
25:AX:26:LEU:HD21	25:AX:46:ASN:HB2	1.99	0.45
44:BQ:60:SER:O	44:BQ:61:TRP:HB3	2.15	0.45
37:CJ:35:LYS:HZ1	37:CJ:38:LEU:HD22	1.81	0.45
1:AA:860:U:H2'	1:AA:861:A:H8	1.82	0.45
1:AA:546:C:C5	1:AA:547:A:C5	3.05	0.45
31:CA:1504:G:OP1	31:CA:1507:A:H4'	2.17	0.45
31:CA:144:G:C6	31:CA:179:A:C2	3.04	0.45
31:BA:502:G:OP1	42:BO:118:SER:N	2.45	0.45
36:CI:10:LEU:CD1	36:CI:61:LEU:HD13	2.46	0.45
10:AN:48:PRO:CB	31:BA:1422:G:H5''	2.47	0.45
32:BE:177:ALA:O	32:BE:178:ARG:C	2.54	0.45
1:AA:2837:G:C6	1:AA:2838:G:C5	3.04	0.45
1:AA:2841:C:C2	1:AA:2877:G:C2	3.04	0.45
31:CA:937:A:C2	31:CA:1379:G:C6	3.04	0.45
28:A6:33:LYS:NZ	28:A6:33:LYS:HB2	2.31	0.45
34:CG:126:ILE:CG2	34:CG:127:THR:H	2.29	0.45
2:AB:45:A:C2	2:AB:46:A:H1'	2.52	0.45
13:A0:55:ALA:HA	13:A0:80:PHE:CZ	2.51	0.45
17:A2:45:THR:O	17:A2:47:VAL:HG12	2.17	0.45
8:AK:104:GLN:O	8:AK:105:HIS:CG	2.69	0.45
1:DA:327:G:C2	1:DA:328:U:C2	3.05	0.45
1:DA:2092:U:C6	1:DA:2225:A:O2'	2.68	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
10:AN:88:ASN:ND2	10:AN:92:GLU:O	2.49	0.45
37:BJ:50:ILE:O	37:BJ:50:ILE:HG22	2.17	0.45
28:D6:17:LYS:O	28:D6:18:ARG:CB	2.63	0.45
31:CA:556:C:H2'	31:CA:557:G:H5'	1.97	0.45
1:DA:1758:G:H4'	1:DA:1759:A:OP2	2.16	0.45
31:CA:1382:C:H1'	37:CJ:79:ARG:HD2	1.98	0.45
38:CK:11:THR:HG23	38:CK:14:ARG:NH1	2.30	0.45
33:CF:134:ILE:HG22	33:CF:168:ALA:HB3	1.99	0.45
4:AE:35:GLN:CG	4:AE:36:ARG:N	2.79	0.45
47:BT:100:LYS:O	47:BT:101:ARG:HG3	2.16	0.45
31:BA:765:G:H5''	31:BA:766:A:OP1	2.17	0.45
31:BA:1379:G:C6	31:BA:1380:U:C4	3.04	0.45
8:DK:54:GLN:NE2	8:DK:57:ARG:HH22	2.15	0.45
23:AZ:29:GLY:C	23:AZ:31:GLY:N	2.69	0.45
8:DK:114:LEU:O	8:DK:114:LEU:HD13	2.16	0.45
52:CB:9:U:C6	52:CB:21:A:N7	2.84	0.45
1:DA:470:A:H2'	1:DA:471:A:O4'	2.16	0.45
35:BH:131:ILE:HD13	35:BH:131:ILE:HA	1.86	0.45
46:BS:58:TYR:CD1	46:BS:58:TYR:C	2.89	0.45
31:CA:423:G:N2	31:CA:424:G:C5	2.84	0.45
1:AA:2830:G:H8	1:AA:2830:G:C5'	2.29	0.45
31:BA:31:G:H1'	31:BA:32:A:OP1	2.17	0.45
1:AA:552:G:H2'	1:AA:553:U:O4'	2.17	0.45
43:BP:54:VAL:O	43:BP:58:GLU:HG3	2.17	0.45
50:CW:60:GLU:OE1	50:CW:85:MET:HE1	2.16	0.45
1:DA:1973:G:O2'	1:DA:1974:C:H5'	2.15	0.45
47:BT:12:SER:O	47:BT:19:VAL:HB	2.16	0.45
3:AD:14:ARG:HD3	3:AD:15:PHE:CZ	2.52	0.45
21:AV:12:GLY:O	21:AV:13:GLU:HB2	2.17	0.45
1:AA:2452:C:OP1	56:AA:3568:OHX:N4	2.49	0.45
1:AA:2363:C:O2'	1:AA:2364:C:H5'	2.16	0.45
9:DM:56:ASN:CG	9:DM:56:ASN:O	2.55	0.45
3:AD:33:LEU:CD1	3:AD:34:VAL:H	2.30	0.45
31:CA:1190:G:C8	31:CA:1190:G:C3'	2.99	0.45
52:CB:37:A:N1	54:C1:20:G:C6	2.85	0.45
40:CM:48:THR:HG1	40:CM:62:HIS:HB3	1.82	0.45
1:AA:2310:A:H5''	1:AA:2311:A:OP2	2.17	0.45
7:AH:147:ASN:O	7:AH:150:ALA:HB3	2.17	0.45
52:BD:24:G:O2'	52:BD:25:G:H5'	2.16	0.45
31:BA:1158:C:H2'	31:BA:1158:C:O2	2.16	0.45
1:DA:631:A:C6	1:DA:632:A:C2	3.05	0.45
30:D8:30:ARG:HD3	30:D8:30:ARG:HA	1.45	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:1399:C:C2	31:BA:1401:G:C5	3.05	0.45
53:CC:48:U:H1'	53:CC:49:C:P	2.57	0.45
1:DA:1057:A:N1	1:DA:1081:U:C4	2.85	0.45
1:DA:1019:U:O2'	1:DA:1021:A:C2	2.62	0.45
9:DM:22:THR:HB	9:DM:25:ARG:CG	2.47	0.45
10:DN:1:MET:HE2	10:DN:67:LYS:HG2	1.99	0.45
31:CA:1347:G:C5	39:CL:107:ARG:NH2	2.84	0.45
1:AA:593:G:C6	1:AA:594:U:C4	3.05	0.45
1:AA:1142(A):A:N7	1:AA:1144:G:C6	2.85	0.45
31:BA:270:A:C5	31:BA:271:C:C4	3.05	0.45
52:CB:46:G:H2'	52:CB:47:U:C6	2.52	0.45
31:BA:58:C:H2'	31:BA:59:A:H8	1.82	0.45
1:DA:1332:G:H8	1:DA:1332:G:H5'	1.82	0.45
50:CW:100:ILE:O	50:CW:101:GLY:C	2.55	0.45
4:AE:13:ARG:CB	4:AE:21:VAL:HB	2.47	0.45
4:AE:13:ARG:HD3	4:AE:21:VAL:CG1	2.45	0.45
31:CA:512:U:O4'	34:CG:43:HIS:CE1	2.69	0.45
8:DK:130:TYR:CD1	8:DK:131:LYS:N	2.84	0.45
15:DR:6:LEU:C	15:DR:8:LYS:H	2.19	0.45
20:DU:50:ARG:HB3	20:DU:53:PRO:CG	2.37	0.45
31:CA:409:G:H1	31:CA:433:C:H42	1.65	0.45
31:CA:222:U:C2	31:CA:223:U:C5	3.05	0.45
31:CA:1403:C:H1'	31:CA:1500:A:C2	2.50	0.45
1:AA:2404:C:H2'	1:AA:2405:G:H5'	1.97	0.45
1:AA:1509:C:C2	1:AA:1511:A:N7	2.84	0.45
1:DA:38:A:H1'	5:DF:48:THR:HB	1.98	0.45
1:DA:2688:U:O2	1:DA:2688:U:C3'	2.64	0.45
1:DA:2872:G:N9	1:DA:2873:A:C2	2.85	0.45
12:AP:3:MET:HG3	12:AP:4:PRO:O	2.17	0.45
1:DA:2134:A:N6	1:DA:2158:A:C8	2.84	0.45
35:CH:111:GLU:C	35:CH:113:ALA:N	2.69	0.45
9:AM:28:THR:HG22	9:AM:29:LYS:N	2.31	0.45
1:DA:1545:A:N7	1:DA:1545(A):A:C6	2.84	0.45
1:AA:2835:A:C5	1:AA:2878:U:C5	3.04	0.45
3:AD:10:THR:HG23	3:AD:13:ARG:CB	2.43	0.45
9:DM:136:GLU:HG3	9:DM:137:LYS:N	2.32	0.45
1:DA:1578:U:O2	1:DA:1578:U:H2'	2.16	0.45
1:AA:1329:U:H5''	1:AA:1330:C:C5	2.50	0.45
37:CJ:37:ASN:ND2	39:CL:41:VAL:HG23	2.32	0.45
32:CE:118:LEU:CB	32:CE:142:LEU:HD12	2.42	0.45
13:A0:91:GLN:NE2	13:A0:91:GLN:N	2.61	0.45
1:DA:1405:U:H2'	1:DA:1406:U:C6	2.51	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:A5:49:CYS:SG	27:A5:60:VAL:HB	2.56	0.45
1:AA:58:G:N2	1:AA:70:G:C5	2.84	0.45
5:DF:4:VAL:HG13	5:DF:19:GLU:OE2	2.17	0.45
8:AK:21:VAL:CG2	8:AK:22:LYS:N	2.80	0.45
19:AT:25:LYS:HG3	19:AT:82:GLN:OE1	2.17	0.45
2:AB:91:C:OP2	56:AB:219:OHX:N3	2.50	0.45
3:DD:134:ARG:HG3	3:DD:135:PHE:CD2	2.51	0.45
1:AA:1188:U:C5'	17:A2:79:VAL:HG22	2.47	0.45
53:CC:11:A:N6	53:CC:12:G:C6	2.84	0.45
1:AA:359:A:C2'	1:AA:360:G:H5'	2.46	0.45
33:CF:134:ILE:CG2	33:CF:168:ALA:HB3	2.47	0.45
16:A1:47:TYR:CD2	16:A1:47:TYR:O	2.70	0.45
1:AA:2694:G:C6	1:AA:2695:C:C5	3.04	0.45
31:CA:838:G:N1	31:CA:842:C:H1'	2.32	0.45
41:CN:16:SER:HA	41:CN:79:SER:O	2.15	0.45
8:DK:52:ARG:HD2	8:DK:52:ARG:C	2.37	0.45
31:CA:604:G:C5	31:CA:605:U:C5	3.04	0.45
31:CA:29:G:C4	31:CA:30:U:C5	3.05	0.45
1:AA:2461:C:H2'	1:AA:2462:U:H6	1.81	0.45
21:DV:151:HIS:HB3	21:DV:167:PRO:HB3	1.99	0.45
1:DA:2008:C:H2'	1:DA:2009:G:C8	2.52	0.45
1:DA:103:A:O5'	1:DA:103:A:H8	2.00	0.45
52:BB:78:C:H2'	52:BB:79:A:H8	1.82	0.45
1:DA:1971:A:H2'	1:DA:1972:A:OP1	2.16	0.45
2:AB:82:G:C2'	2:AB:83:G:H5'	2.46	0.45
2:AB:84:C:OP1	25:AX:15:TYR:OH	2.32	0.45
37:BJ:141:VAL:HG12	37:BJ:142:GLU:N	2.32	0.45
1:AA:363(E):U:H5''	1:AA:363(F):A:OP2	2.17	0.45
33:BF:73:PRO:HB3	33:BF:103:VAL:HG11	1.98	0.45
1:DA:1499:C:H2'	1:DA:1500:G:C8	2.51	0.45
1:AA:1540:G:C4	1:AA:1541:U:C6	3.04	0.45
10:DN:52:VAL:HG12	10:DN:56:ASP:OD1	2.17	0.45
43:CP:59:TYR:O	43:CP:63:THR:OG1	2.09	0.45
33:BF:121:ALA:HB1	33:BF:188:LEU:O	2.17	0.45
31:CA:1088:G:O2'	31:CA:1089:G:H5'	2.17	0.45
50:CW:97:ALA:HA	50:CW:98:PRO:HD3	1.71	0.45
1:AA:1215:G:C4	1:AA:1216:G:C8	3.04	0.45
50:BW:17:ARG:O	50:BW:20:LEU:HB2	2.17	0.45
11:DO:77:ARG:HB2	11:DO:78:PRO:HD2	1.99	0.45
4:DE:18:ASP:HB3	15:DR:82:LEU:HD11	1.98	0.45
1:DA:2431:U:O4	56:DA:3246:OHX:N1	2.49	0.45
31:BA:229:U:C6	31:BA:229:U:H3'	2.51	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:593:G:N2	31:CA:647:C:H1'	2.32	0.45
26:A4:55:ARG:H	26:A4:55:ARG:HD3	1.81	0.45
1:AA:629:G:O6	56:AA:3540:OHX:N6	2.50	0.45
31:BA:163:C:O2'	31:BA:164:U:H5'	2.15	0.45
27:A5:6:VAL:HG13	27:A5:7:PRO:N	2.31	0.45
30:A8:51:ALA:N	30:A8:53:PRO:CD	2.79	0.45
31:CA:1091:U:C2	31:CA:1095:U:C4	3.04	0.45
52:CB:34:U:C2'	52:CB:36:U:H5	2.28	0.45
49:CV:72:GLY:C	49:CV:74:PHE:H	2.20	0.45
3:DD:63:ARG:HG2	3:DD:92:ILE:HD11	1.98	0.45
1:AA:1578:U:O2	1:AA:1578:U:H2'	2.17	0.45
1:AA:1066:U:H6	1:AA:1069:A:OP2	2.00	0.45
31:CA:1235:U:H2'	31:CA:1236:A:O4'	2.16	0.45
9:AM:127:ASP:C	9:AM:128:HIS:HD1	2.19	0.45
31:BA:76:G:C4	31:BA:95:G:C2	3.04	0.45
11:AO:37:GLY:O	11:AO:41:ARG:N	2.47	0.45
16:D1:65:ILE:CD1	16:D1:65:ILE:N	2.79	0.45
1:DA:1062:G:C4	1:DA:1063:G:C8	3.04	0.45
1:DA:1025:G:C4	1:DA:1135:C:H1'	2.51	0.45
8:AK:126:TYR:CB	8:AK:140:LEU:HD21	2.27	0.45
16:A1:90:VAL:C	16:A1:92:ARG:N	2.69	0.45
1:AA:994:C:O2	17:A2:10:LYS:HE2	2.17	0.45
2:AB:42:C:O2'	6:AG:67:LYS:HD2	2.16	0.45
31:CA:1129:C:C2	31:CA:1139:G:O6	2.69	0.45
31:BA:1145:C:H4'	31:BA:1146:A:N7	2.30	0.45
7:DH:3:ARG:CG	7:DH:4:ILE:H	2.24	0.45
1:AA:1015:G:H8	1:AA:1015:G:C5'	2.29	0.45
1:DA:2469:A:N1	1:DA:2470:G:C4	2.85	0.45
1:AA:2469:A:N3	1:AA:2469:A:C5'	2.79	0.45
31:CA:1004:A:H2'	31:CA:1005:A:O5'	2.17	0.45
31:CA:278:G:N2	47:CT:95:TYR:HB3	2.32	0.45
1:DA:111:A:H4'	24:DW:69:ARG:NH2	2.31	0.45
1:AA:2809:A:C6	1:AA:2892:A:C5	3.04	0.45
4:DE:101:ARG:HB2	4:DE:203:LYS:HE3	1.97	0.45
52:BD:50:U:H6	52:BD:50:U:OP1	2.00	0.45
33:BF:181:ASN:O	33:BF:181:ASN:ND2	2.49	0.45
1:DA:1771:C:C1'	1:DA:1786:A:C8	3.00	0.45
21:DV:30:ASN:CB	21:DV:90:VAL:HG23	2.46	0.45
38:BK:86:ILE:HG13	38:BK:133:LEU:HD22	1.99	0.45
4:DE:119:ARG:HG2	4:DE:160:TYR:CB	2.36	0.45
33:CF:14:ILE:O	33:CF:15:THR:C	2.55	0.45
31:BA:36:C:C4	31:BA:37:U:C4	3.04	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
9:AM:23:LEU:CG	9:AM:24:GLY:N	2.73	0.45
1:DA:1241:A:O2'	1:DA:1242:A:O5'	2.34	0.45
1:DA:851:U:O2	1:DA:928:G:N2	2.50	0.45
34:CG:101:LEU:HD23	34:CG:121:VAL:CG1	2.46	0.45
1:DA:2531:A:C2	1:DA:2659:G:O4'	2.69	0.45
7:DH:156:ALA:O	7:DH:157:TYR:C	2.55	0.45
1:DA:1494:A:C2	1:DA:1495:A:C4	3.05	0.45
32:CE:144:ARG:C	32:CE:146:GLN:H	2.19	0.45
31:BA:674:G:O2'	31:BA:675:A:H5'	2.17	0.45
18:AS:17:VAL:C	18:AS:19:LEU:H	2.20	0.45
31:BA:606:G:C1'	31:BA:632:A:H61	2.30	0.45
1:AA:2191:G:C2'	1:AA:2192:G:H5''	2.44	0.45
21:DV:7:ALA:C	21:DV:8:TYR:CD1	2.90	0.45
40:CM:81:THR:OG1	40:CM:82:ILE:N	2.49	0.45
33:CF:18:TRP:CD1	44:CQ:54:PRO:HA	2.51	0.45
1:DA:1444:G:C2	1:DA:1548:C:N3	2.85	0.45
43:BP:51:ALA:O	43:BP:53:VAL:N	2.49	0.45
18:AS:26:GLY:H	18:AS:71:VAL:HB	1.81	0.45
1:DA:2051:A:OP1	4:DE:137:HIS:ND1	2.50	0.45
1:DA:2578:G:C5	4:DE:140:SER:HB3	2.51	0.45
31:BA:590:C:C2'	31:BA:590:C:O2	2.63	0.45
1:DA:1955:U:H2'	1:DA:1955:U:O2	2.15	0.45
47:BT:13:ASP:H	47:BT:14:LYS:HZ2	1.63	0.45
2:AB:0:A:O2'	2:AB:1:U:H5'	2.17	0.45
21:DV:24:LEU:HD22	21:DV:83:PRO:HB2	1.98	0.45
7:DH:153:LYS:N	7:DH:154:PRO:HD3	2.32	0.45
1:AA:2435:A:H2'	1:AA:2436:G:O5'	2.16	0.45
31:BA:1217:C:C2'	31:BA:1218:C:O5'	2.64	0.45
45:CR:7:GLU:O	45:CR:11:VAL:HG23	2.17	0.45
1:DA:265:A:H1'	1:DA:266:G:O4'	2.17	0.45
1:AA:775:G:C5	1:AA:794:G:C8	3.04	0.45
19:DT:14:SER:C	19:DT:16:LYS:H	2.20	0.45
1:AA:1221:C:H2'	1:AA:1222:C:H6	1.82	0.45
31:CA:638:G:C6	31:CA:639:G:N7	2.84	0.45
45:BR:18:PHE:HB2	45:BR:19:PRO:HD2	1.98	0.45
1:DA:2464:C:C2	1:DA:2487:G:C2	3.05	0.45
5:AF:42:ALA:C	5:AF:44:ARG:N	2.70	0.45
31:BA:350:G:O2'	31:BA:351:G:H5'	2.16	0.45
2:AB:95:U:N3	2:AB:96:G:N7	2.65	0.45
1:DA:2086:U:H2'	1:DA:2087:G:C8	2.52	0.45
7:AH:136:ILE:HD12	7:AH:136:ILE:N	2.31	0.45
31:CA:1067:A:N3	31:CA:1068:G:H1'	2.32	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:44:A:O2'	1:AA:45:G:H5'	2.16	0.45
31:CA:160:A:H1'	31:CA:344:A:C5	2.51	0.45
1:AA:678:C:H2'	1:AA:679:C:C6	2.51	0.45
1:DA:717:G:H2'	1:DA:718:A:O4'	2.17	0.45
1:DA:1179:C:H2'	1:DA:1180:C:C6	2.51	0.45
1:AA:2064:C:H2'	1:AA:2065:C:C6	2.51	0.45
23:DZ:5:CYS:CB	23:DZ:8:SER:HG	2.28	0.45
9:AM:115:ARG:O	9:AM:118:LYS:HB2	2.17	0.45
1:AA:1759:A:H4'	1:AA:2715:C:O4'	2.16	0.45
1:DA:1471:A:C2	1:DA:1472:A:C4	3.04	0.45
2:DB:91:C:H6	2:DB:91:C:O5'	2.00	0.45
52:CB:25:G:H2'	52:CB:25:G:N3	2.32	0.45
12:AP:18:LYS:H	12:AP:18:LYS:HG3	1.56	0.45
6:DG:82:LEU:HA	6:DG:82:LEU:HD23	1.77	0.45
9:AM:13:TRP:O	9:AM:135:PRO:CD	2.65	0.45
31:CA:883:C:C2	31:CA:884:U:C5	3.05	0.45
1:DA:931:G:C6	1:DA:933:A:C2	3.04	0.45
30:D8:59:LYS:NZ	30:D8:59:LYS:HB2	2.32	0.45
1:AA:2420:C:C5	30:A8:31:HIS:HB2	2.51	0.45
31:CA:1306:A:C2	31:CA:1307:U:H1'	2.52	0.45
33:CF:193:TYR:O	33:CF:193:TYR:HD1	2.00	0.45
31:CA:1189:C:H5''	33:CF:5:ILE:HG21	1.97	0.45
6:DG:104:GLU:O	6:DG:108:ASN:HB2	2.17	0.45
1:AA:897:C:H2'	1:AA:898:C:O4'	2.16	0.45
31:CA:502:G:C6	31:CA:503:C:N3	2.84	0.45
31:CA:1162:C:H2'	31:CA:1163:C:O4'	2.16	0.45
1:AA:780:G:C2	1:AA:783:A:N6	2.85	0.45
31:BA:922:G:C6	31:BA:923:A:C6	3.04	0.45
31:BA:197:A:N6	31:BA:221:C:C5'	2.80	0.45
1:AA:1731:G:H2'	1:AA:1732:A:C8	2.52	0.45
11:DO:85:LEU:O	11:DO:88:LEU:HB3	2.17	0.45
1:DA:996:A:C2	1:DA:997:G:N9	2.85	0.45
1:AA:2443:C:O2'	1:AA:2444:G:H5'	2.17	0.45
1:DA:1060:U:H3	1:DA:1088:A:H8	1.60	0.45
23:DZ:86:SER:H	23:DZ:87:PRO:HD2	1.74	0.45
32:BE:189:ASP:OD1	32:BE:191:ASP:HB2	2.17	0.45
32:BE:19:HIS:HD2	32:BE:20:GLU:HG2	1.81	0.45
9:AM:66:LYS:O	9:AM:67:LEU:C	2.53	0.45
31:BA:270:A:H2'	31:BA:271:C:C6	2.51	0.45
52:CB:48:C:C3'	52:CB:49:A:C8	2.97	0.45
46:BS:8:ARG:C	46:BS:9:PHE:HD2	2.21	0.45
31:CA:1004:A:H8	31:CA:1036:G:N2	2.15	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1027:A:N6	1:AA:1126:A:C4	2.84	0.45
15:DR:23:ARG:HD3	15:DR:120:ARG:NH1	2.32	0.45
34:BG:172:PRO:C	34:BG:174:LEU:N	2.63	0.45
5:DF:161:GLU:HA	5:DF:164:ARG:HH11	1.75	0.45
7:DH:67:LEU:O	7:DH:71:LEU:HB2	2.16	0.45
31:BA:510:A:N3	31:BA:543:C:H1'	2.32	0.45
1:AA:2439:A:P	1:AA:2439:A:H3'	2.57	0.45
32:BE:97:TRP:CH2	32:BE:176:GLU:HG3	2.52	0.45
32:CE:217:ARG:CZ	32:CE:217:ARG:HB2	2.47	0.45
1:DA:2130:U:O2'	1:DA:2134:A:C8	2.70	0.45
15:AR:53:ARG:CZ	15:AR:53:ARG:CB	2.90	0.45
9:AM:22:THR:O	9:AM:23:LEU:CB	2.64	0.45
1:DA:1530:G:O6	1:DA:1542:G:N2	2.50	0.45
26:D4:36:CYS:SG	26:D4:37:SER:N	2.90	0.45
43:CP:14:ARG:HA	43:CP:43:THR:O	2.16	0.45
1:AA:660:G:H21	11:AO:12:ALA:HA	1.81	0.45
39:BL:111:ARG:CG	39:BL:112:LYS:N	2.75	0.45
1:DA:1495:A:H2'	1:DA:1496:A:N3	2.32	0.45
1:AA:1427:A:OP2	56:AA:3473:OHX:N6	2.50	0.45
1:DA:1639:U:O2'	1:DA:1640:C:H5'	2.17	0.45
1:DA:1006:C:N3	1:DA:1138:G:C2	2.85	0.45
48:CU:36:ASN:OD1	48:CU:36:ASN:N	2.48	0.45
31:CA:1449:C:C2'	31:CA:1450:U:OP1	2.65	0.45
1:AA:833:U:O2	11:AO:55:ARG:NH1	2.42	0.45
21:DV:81:ARG:CG	21:DV:81:ARG:O	2.63	0.45
52:BD:5:G:C2	52:BD:78:C:O2	2.69	0.45
3:DD:121:PRO:HB3	3:DD:135:PHE:CD1	2.52	0.45
20:AU:20:TYR:CD1	20:AU:42:VAL:HG23	2.51	0.45
2:AB:65:C:C2'	2:AB:66:A:H5'	2.47	0.45
2:AB:41:U:O4	6:AG:70:VAL:O	2.35	0.45
1:AA:2801:A:H2'	1:AA:2802:G:O5'	2.16	0.45
17:A2:53:GLU:CG	17:A2:54:GLY:N	2.78	0.45
53:CC:11:A:N6	53:CC:12:G:O6	2.50	0.45
1:AA:1695:G:N2	1:AA:1696:G:C8	2.85	0.45
32:CE:32:ILE:CD1	32:CE:40:HIS:HB3	2.47	0.45
2:DB:23:G:C2	2:DB:24:G:O6	2.69	0.45
1:DA:729:G:C6	3:DD:208:LYS:HB2	2.52	0.45
35:CH:78:HIS:CD2	35:CH:78:HIS:C	2.90	0.45
39:BL:59:PHE:HZ	39:BL:88:TYR:CD1	2.35	0.45
35:BH:43:LEU:HD23	35:BH:133:TYR:HE1	1.81	0.45
1:AA:731:C:C2	1:AA:732:C:C5	3.05	0.45
18:DS:35:ILE:O	18:DS:39:THR:HB	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:57:C:H2'	1:DA:58:G:O5'	2.17	0.45
14:DQ:25:ARG:HH12	14:DQ:42:ASP:CG	2.19	0.45
1:AA:724:U:H2'	1:AA:725:G:O4'	2.17	0.45
1:DA:470:A:H8	1:DA:470:A:C5'	2.30	0.45
1:AA:1001:A:H2'	1:AA:1002:G:O4'	2.17	0.45
1:AA:128:C:H2'	1:AA:129:C:H6	1.82	0.45
1:AA:1098:A:H2'	1:AA:1099:G:H5'	1.99	0.45
31:CA:12:U:O4	56:CA:1724:OHX:N2	2.50	0.45
9:DM:112:LEU:O	9:DM:115:ARG:N	2.46	0.45
16:D1:80:ILE:O	16:D1:81:HIS:C	2.54	0.45
33:BF:80:GLY:O	33:BF:82:GLU:HG2	2.16	0.45
31:BA:838:G:OP2	31:BA:842:C:N4	2.50	0.45
31:CA:1468:A:H5''	31:CA:1469:G:OP2	2.16	0.45
11:DO:122:PRO:HB3	11:DO:141:ALA:HB1	1.99	0.45
1:AA:355:G:N7	56:AA:3475:OHX:N1	2.65	0.45
18:AS:22:ASP:HA	18:AS:25:ARG:HH12	1.81	0.45
1:DA:2707:G:H2'	1:DA:2708:G:C8	2.51	0.45
1:DA:877:U:H4'	1:DA:878:A:OP2	2.16	0.45
1:DA:880:G:C2	1:DA:898:C:C2	3.05	0.45
1:DA:2270:G:OP2	56:DA:3376:OHX:N4	2.50	0.45
1:DA:2143:C:H2'	1:DA:2144:U:O4'	2.17	0.45
49:CV:9:VAL:HG22	26:D4:63:TYR:CE1	2.52	0.45
31:BA:1005:A:C2	31:BA:1006:C:C2	3.05	0.45
31:BA:1027:C:C2	31:BA:1028:C:C5	3.04	0.45
52:BD:57:C:H4'	52:BD:58:G:OP2	2.15	0.45
31:BA:1158:C:N4	31:BA:1160:G:C5	2.84	0.45
31:CA:1157:A:N6	31:CA:1181:G:H8	2.13	0.45
15:AR:111:ARG:H	15:AR:111:ARG:CD	2.24	0.45
9:AM:58:ASP:CB	9:AM:95:PRO:HB2	2.47	0.45
1:AA:2153:G:O6	1:AA:2154:G:C6	2.70	0.45
1:DA:1191:G:OP2	11:DO:32:THR:HG22	2.16	0.45
33:BF:44:GLU:HG2	33:BF:44:GLU:H	1.65	0.45
17:A2:3:ALA:HB3	17:A2:14:VAL:CG2	2.46	0.45
2:DB:66:A:N6	2:DB:107:U:H2'	2.32	0.45
1:AA:2689:U:P	1:AA:2719:G:H22	2.40	0.45
19:DT:21:PHE:CE1	19:DT:26:TYR:HD2	2.34	0.45
52:CB:49:A:C2	52:CB:50:U:H5''	2.51	0.45
4:AE:115:GLY:HA2	4:AE:157:ALA:HB1	1.98	0.45
12:AP:54:MET:O	12:AP:55:VAL:C	2.54	0.45
31:CA:1285:A:C8	31:CA:1285:A:OP1	2.69	0.45
31:CA:527:G:C2'	31:CA:528:C:H5'	2.47	0.45
31:CA:536:C:H2'	31:CA:537:G:C8	2.52	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:CO:97:ARG:C	42:CO:98:TYR:CD1	2.90	0.45
11:AO:98:GLU:OE1	11:AO:99:LEU:N	2.50	0.45
1:AA:2787:C:O2	1:AA:2787:C:H2'	2.17	0.45
19:DT:8:ILE:H	19:DT:8:ILE:CD1	2.17	0.45
32:BE:100:GLY:O	32:BE:101:MET:C	2.55	0.45
1:AA:539:G:H2'	1:AA:540:G:C5'	2.47	0.45
1:DA:915:C:C2'	1:DA:916:G:O5'	2.64	0.45
1:DA:2133:G:C2'	1:DA:2134:A:OP2	2.64	0.45
1:AA:273(E):U:H2'	1:AA:273(F):C:H5'	1.98	0.45
39:BL:45:ALA:HA	39:BL:48:GLU:HG2	1.99	0.45
13:A0:45:ARG:HA	13:A0:95:THR:HG21	1.98	0.45
38:BK:63:LEU:HD13	38:BK:63:LEU:HA	1.76	0.45
1:DA:768:G:C4	1:DA:769:G:C8	3.05	0.45
31:CA:353:A:H2'	31:CA:354:G:OP2	2.17	0.45
42:BO:89:ARG:HD3	42:BO:91:LYS:CA	2.46	0.45
31:CA:939:G:C6	31:CA:940:C:C4	3.05	0.45
18:AS:64:MET:HG2	18:AS:109:GLU:OE2	2.17	0.45
3:AD:186:HIS:CD2	3:AD:188:GLU:HB2	2.52	0.45
1:DA:2614:A:H4'	1:DA:2615:U:OP1	2.17	0.45
48:BU:43:PHE:O	48:BU:44:LEU:HD12	2.16	0.45
26:D4:48:ARG:HH11	26:D4:51:ASP:HA	1.82	0.45
20:DU:46:LYS:O	20:DU:47:LYS:C	2.54	0.45
1:DA:337:C:C2'	1:DA:338:G:O5'	2.65	0.45
36:BI:63:TYR:CD2	36:BI:63:TYR:N	2.85	0.45
11:DO:58:THR:CG2	11:DO:58:THR:O	2.62	0.45
40:CM:84:GLN:HB3	40:CM:88:LEU:HD22	1.99	0.45
17:D2:51:VAL:CG1	17:D2:52:VAL:N	2.76	0.45
21:AV:76:LEU:N	21:AV:76:LEU:CD2	2.77	0.45
1:DA:2845:G:H2'	1:DA:2846:G:H8	1.82	0.45
1:AA:511:U:H5	1:AA:512:G:C5	2.34	0.45
39:BL:10:ARG:HG3	39:BL:75:ASP:HB3	1.99	0.45
1:AA:754:C:H2'	1:AA:755:C:H6	1.81	0.45
38:CK:102:ARG:O	38:CK:104:ARG:N	2.49	0.45
36:BI:15:ASP:O	36:BI:15:ASP:OD1	2.35	0.45
29:D7:12:ARG:HH21	29:D7:44:PRO:HB3	1.81	0.45
5:DF:63:LYS:HZ3	5:DF:67:GLN:HB2	1.81	0.45
31:BA:102:G:C5	31:BA:103:C:C5	3.05	0.45
31:BA:102:G:C4	31:BA:103:C:C5	3.05	0.45
10:AN:117:LEU:HD12	10:AN:117:LEU:H	1.81	0.45
19:AT:29:TRP:CZ3	19:AT:78:LYS:HB3	2.51	0.45
1:AA:1908:C:O2	53:BC:12:G:H4'	2.17	0.45
1:AA:347:A:H2'	1:AA:348:G:C8	2.51	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:335:C:H4'	20:DU:73:ARG:CZ	2.47	0.45
44:CQ:53:LEU:HA	44:CQ:53:LEU:HD23	1.82	0.45
1:AA:2562:U:H1'	10:AN:23:ARG:HD3	1.99	0.45
1:DA:1643:G:N2	1:DA:1644:C:H1'	2.31	0.45
8:AK:81:VAL:HG21	8:AK:88:ILE:HD13	1.98	0.45
1:AA:1387:C:H2'	1:AA:1388:G:C8	2.52	0.45
25:DX:37:LEU:O	25:DX:38:GLU:O	2.34	0.45
25:AX:19:GLN:HE22	25:AX:52:HIS:HE1	1.65	0.45
1:AA:2663:G:C6	1:AA:2664:G:C4	3.05	0.45
1:DA:1844:C:O3'	3:DD:258:LYS:NZ	2.46	0.45
27:D5:40:LYS:HD3	27:D5:46:CYS:HB2	1.99	0.45
25:DX:54:VAL:HG12	25:DX:55:ARG:N	2.32	0.45
5:AF:156:LEU:HD12	5:AF:158:THR:HG22	1.99	0.45
36:CI:55:ASP:HA	36:CI:56:PRO:HD3	1.81	0.45
1:DA:1270:C:H5''	1:DA:1271:G:O5'	2.17	0.45
1:DA:270(C):C:O2'	1:DA:273(B):C:H5''	2.17	0.45
17:D2:18:LEU:HD23	17:D2:19:LYS:O	2.16	0.45
3:DD:222:ARG:HB2	3:DD:222:ARG:HE	1.59	0.45
4:AE:176:ILE:HG22	4:AE:176:ILE:O	2.17	0.45
1:AA:513:A:P	56:AA:3342:OHX:N4	2.90	0.45
23:AZ:3:LYS:HG3	23:AZ:46:LEU:HD23	1.98	0.45
1:DA:226:G:N2	1:DA:228:A:H62	1.96	0.45
3:AD:35:LYS:HA	3:AD:64:ILE:HG22	1.99	0.45
43:CP:93:ARG:HH11	1:DA:887:A:C1'	2.30	0.45
31:CA:1308:U:OP1	43:CP:98:VAL:HG22	2.17	0.45
52:CD:65:C:N4	52:CD:66:G:C6	2.85	0.45
7:AH:107:VAL:HG11	7:AH:153:LYS:HE3	1.98	0.45
1:AA:1359:A:N6	1:AA:1372:U:C2	2.76	0.45
1:AA:607:U:O2	1:AA:621:A:N1	2.50	0.45
1:AA:654(C):G:C2	1:AA:654(D):G:H1'	2.52	0.45
6:AG:21:ARG:HG2	6:AG:21:ARG:O	2.17	0.45
1:DA:92:G:H2'	1:DA:93:C:C6	2.52	0.45
1:DA:1068:G:HO2'	1:DA:1096:A:HO2'	1.44	0.45
2:AB:6:C:C3'	2:AB:7:G:H5''	2.47	0.45
1:DA:1005:C:O2'	9:DM:28:THR:CG2	2.65	0.45
16:A1:78:THR:O	16:A1:79:PHE:C	2.55	0.45
31:BA:1186:G:N2	31:BA:1187:G:H1'	2.32	0.45
40:BM:10:GLY:O	40:BM:68:HIS:HB2	2.17	0.45
40:BM:5:ARG:HB2	40:BM:73:ASP:OD2	2.16	0.45
50:BW:32:ALA:C	50:BW:34:LYS:N	2.67	0.45
31:BA:973:G:OP1	40:BM:57:LYS:HD3	2.17	0.45
44:BQ:26:ARG:HD2	44:BQ:47:LEU:HD11	2.00	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:AU:57:GLN:HG3	20:AU:58:GLY:H	1.81	0.45
1:DA:1111:A:O3'	1:DA:1112:G:H4'	2.17	0.45
31:BA:256:U:O2'	31:BA:257:G:H5'	2.17	0.45
22:D3:23:VAL:HG13	22:D3:38:VAL:HG22	1.98	0.45
31:CA:1287:A:H2	31:CA:1353:G:N3	2.15	0.45
1:DA:1761:C:H42	1:DA:1762:A:H62	1.65	0.45
1:DA:2211:G:HO2'	1:DA:2212:A:P	2.27	0.45
14:DQ:59:LYS:CD	14:DQ:60:GLY:H	2.30	0.45
44:CQ:7:ILE:O	44:CQ:7:ILE:HG13	2.16	0.45
31:CA:570:G:C4	31:CA:571:U:C5	3.05	0.45
1:DA:2523:G:H8	1:DA:2523:G:C5'	2.16	0.45
2:AB:116:G:H5''	14:AQ:55:ALA:CB	2.32	0.45
43:BP:84:ILE:HG23	43:BP:86:CYS:HB3	1.99	0.45
42:CO:85:ILE:HG23	42:CO:86:ARG:N	2.31	0.45
6:DG:60:LEU:O	6:DG:64:THR:HB	2.17	0.45
1:AA:948:G:OP1	1:AA:962:G:OP1	2.35	0.45
53:CC:60:A:H2'	53:CC:61:U:H5'	1.99	0.45
10:DN:47:ILE:CD1	10:DN:48:PRO:HD2	2.47	0.45
35:BH:78:HIS:CE1	35:BH:142:LEU:HD23	2.52	0.45
24:DW:12:GLU:O	24:DW:16:LEU:HD23	2.17	0.45
31:BA:438:G:O5'	31:BA:438:G:H8	1.99	0.45
34:BG:154:ASN:O	34:BG:155:LEU:O	2.34	0.45
2:AB:29:A:H2'	2:AB:30:C:C6	2.52	0.45
49:BV:50:ALA:HB1	49:BV:57:HIS:HB3	1.98	0.45
21:AV:6:LYS:HZ2	21:AV:43:GLU:HG3	1.81	0.45
1:AA:1652:A:H2'	1:AA:1653:G:H5'	1.98	0.45
41:BN:95:ILE:HD13	41:BN:108:ILE:HD13	2.00	0.45
1:AA:201:C:OP1	23:AZ:37:ILE:HD11	2.16	0.45
14:AQ:89:ARG:O	14:AQ:90:GLY:C	2.56	0.45
1:AA:2881:C:H42	1:AA:2882:A:N6	2.15	0.45
31:BA:131:C:H2'	31:BA:132:C:C6	2.52	0.45
1:AA:2472:G:O6	1:AA:2476:A:H4'	2.16	0.45
31:BA:976:G:OP1	44:BQ:32:SER:N	2.49	0.45
32:CE:95:GLN:O	32:CE:96:ARG:C	2.55	0.45
3:AD:77:ALA:O	3:AD:117:VAL:N	2.46	0.45
18:AS:111:HIS:CD2	18:AS:112:GLY:N	2.81	0.45
13:A0:84:ALA:N	13:A0:85:PRO:CD	2.80	0.45
31:CA:960:U:O2	31:CA:1225:A:C5	2.70	0.45
1:AA:2313:C:N4	1:AA:2314:C:H41	2.15	0.45
1:DA:966:G:H2'	1:DA:967:C:C6	2.52	0.45
33:CF:52:LEU:HD12	33:CF:55:VAL:HG22	1.99	0.45
31:BA:599:C:C4	31:BA:600:C:H5	2.34	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:AG:60:LEU:C	6:AG:62:LEU:H	2.19	0.45
37:BJ:91:VAL:CG1	37:BJ:95:ARG:HB3	2.45	0.45
1:AA:1131:G:N7	9:AM:75:TYR:HD2	2.15	0.45
31:BA:1234:C:H2'	31:BA:1235:U:C6	2.52	0.45
1:AA:1403:C:H5''	1:AA:1471:A:H1'	1.99	0.45
9:DM:34:LEU:O	9:DM:49:GLY:HA3	2.17	0.45
1:AA:2378:A:H2'	14:AQ:21:THR:HG21	1.97	0.45
31:BA:664:G:N2	31:BA:741:G:H1	2.12	0.45
39:BL:79:LEU:O	39:BL:83:ARG:HG3	2.17	0.45
27:D5:31:VAL:O	27:D5:39:MET:HA	2.17	0.45
1:DA:1777:U:C2	1:DA:1778:U:C5	3.05	0.45
31:BA:48:C:OP1	56:BA:1733:OHX:N4	2.50	0.45
35:CH:83:GLU:HA	35:CH:87:SER:O	2.17	0.45
1:DA:908:C:OP1	12:DP:22:LYS:HB2	2.16	0.45
22:D3:28:GLY:HA2	22:D3:66:VAL:CG1	2.47	0.45
13:D0:87:TYR:O	13:D0:88:ARG:C	2.54	0.45
8:DK:69:LYS:HA	8:DK:136:VAL:HG21	1.99	0.45
50:BW:70:SER:HA	50:BW:73:HIS:CD2	2.52	0.45
10:AN:6:THR:CG2	10:AN:7:TYR:N	2.78	0.45
1:AA:699:A:C2'	1:AA:700:G:H5'	2.47	0.45
31:BA:1047:G:C2'	31:BA:1048:G:H5'	2.48	0.45
11:DO:101:VAL:CG1	11:DO:102:ARG:N	2.80	0.45
6:AG:51:ARG:O	6:AG:54:GLU:HG2	2.17	0.45
31:BA:810:C:H2'	31:BA:811:C:H5'	1.98	0.45
5:DF:34:TRP:CD2	11:DO:8:PRO:HB3	2.52	0.45
1:DA:1773:A:C5	1:DA:1829:A:H1'	2.52	0.45
1:DA:2065:C:H2'	1:DA:2066:C:H6	1.80	0.45
14:DQ:41:ASP:OD2	14:DQ:44:LYS:HE3	2.16	0.45
15:AR:2:ASN:O	15:AR:3:ARG:HG2	2.17	0.45
2:AB:94:C:H2'	2:AB:95:U:C6	2.52	0.45
13:D0:26:LYS:HG3	13:D0:70:LEU:CD2	2.47	0.45
1:DA:1711:C:H2'	1:DA:1712:C:H6	1.82	0.45
31:CA:562:C:O4'	31:CA:563:A:C2	2.70	0.45
1:DA:1399:C:O2'	1:DA:1400:G:H5'	2.16	0.45
31:BA:693:G:C6	31:BA:694:A:C6	3.05	0.45
1:AA:244:A:H4'	11:AO:74:GLU:HB2	1.98	0.45
1:DA:1321:A:H2'	1:DA:1322:A:O4'	2.16	0.45
32:CE:112:VAL:HG22	32:CE:149:LEU:HD13	1.98	0.45
31:BA:644:G:H2'	31:BA:645:C:C5'	2.47	0.45
45:CR:49:ASP:OD2	45:CR:52:SER:OG	2.29	0.45
4:AE:6:GLY:HA2	4:AE:27:LEU:O	2.17	0.45
1:AA:974(A):C:H1'	1:AA:975:G:OP2	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1147:C:O2'	1:AA:1148:A:H5'	2.17	0.45
48:BU:68:LYS:HB2	48:BU:68:LYS:HE2	1.79	0.45
33:CF:34:LEU:O	33:CF:34:LEU:HD12	2.17	0.45
34:BG:133:VAL:O	34:BG:133:VAL:HG12	2.17	0.45
47:CT:27:PHE:CD2	47:CT:27:PHE:N	2.85	0.45
1:AA:1817:G:OP1	3:AD:88:ARG:NH2	2.46	0.45
1:AA:1631:A:C2'	1:AA:1632:A:O5'	2.64	0.45
1:AA:1631:A:H2'	1:AA:1632:A:O5'	2.16	0.45
1:DA:746:A:C5	1:DA:2611:U:H5''	2.52	0.44
1:DA:779:U:OP1	3:DD:49:ILE:HG22	2.17	0.44
31:CA:1315:U:C5	31:CA:1316:G:C5	3.05	0.44
31:CA:963:G:H21	40:CM:55:LYS:HG2	1.81	0.44
40:CM:48:THR:HG1	40:CM:62:HIS:CG	2.35	0.44
52:CD:68:A:H5''	52:CD:69:U:OP2	2.16	0.44
1:AA:901:A:C3'	1:AA:902:C:H5'	2.47	0.44
34:CG:31:CYS:O	34:CG:32:ALA:HB3	2.17	0.44
34:CG:57:ARG:O	34:CG:58:LEU:C	2.56	0.44
1:AA:607:U:N3	1:AA:621:A:H2	2.00	0.44
1:DA:2415:G:OP1	56:DA:3257:OHX:N5	2.50	0.44
43:BP:23:TYR:HB3	43:BP:67:GLU:CB	2.43	0.44
31:BA:1399:C:H4'	31:BA:1400:C:O5'	2.17	0.44
1:AA:1442:G:C2	1:AA:1550:C:O2	2.71	0.44
7:AH:170:ARG:HB3	7:AH:171:LEU:H	1.56	0.44
40:CM:37:PRO:HA	40:CM:72:VAL:CG2	2.48	0.44
9:DM:22:THR:HB	9:DM:25:ARG:HG3	1.99	0.44
17:A2:38:LEU:O	17:A2:51:VAL:HG13	2.16	0.44
31:BA:1349:A:C2'	31:BA:1350:A:O5'	2.65	0.44
2:DB:16:G:N1	2:DB:17:C:C4	2.86	0.44
20:AU:49:VAL:O	20:AU:51:VAL:HG12	2.17	0.44
12:DP:57:HIS:CD2	12:DP:116:GLU:O	2.69	0.44
1:AA:2751:G:O2'	1:AA:2752:C:O5'	2.35	0.44
7:AH:4:ILE:C	7:AH:6:ARG:HG2	2.37	0.44
31:BA:9:G:C6	31:BA:26:A:N6	2.85	0.44
5:DF:53:THR:HG22	5:DF:56:GLU:CG	2.46	0.44
50:BW:48:LYS:O	50:BW:51:GLU:HB2	2.16	0.44
15:DR:98:LYS:HB3	15:DR:100:TYR:CE1	2.52	0.44
31:BA:1322:C:HO2'	31:BA:1323:G:P	2.39	0.44
1:AA:2680:C:OP2	4:AE:111:ARG:NH2	2.45	0.44
1:DA:35:G:N9	1:DA:454:A:C2	2.85	0.44
31:CA:1298:C:H6	37:CJ:114:ARG:NH1	2.14	0.44
27:D5:20:ARG:HG2	27:D5:23:HIS:CD2	2.52	0.44
31:BA:991:U:O2	31:BA:993:G:C8	2.70	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:DU:19:LYS:HE3	20:DU:71:LYS:HZ1	1.81	0.44
20:AU:95:LYS:O	20:AU:96:ILE:O	2.35	0.44
1:AA:86:C:O2'	1:AA:87:C:H5'	2.17	0.44
1:AA:2507:C:H1'	52:BB:85:A:H8	1.81	0.44
52:CD:29:C:C2'	52:CD:30:A:H5'	2.47	0.44
1:AA:2113:U:H5	1:AA:2167:U:O2	1.99	0.44
1:AA:2839:G:C5	1:AA:2840:C:C4	3.05	0.44
37:CJ:58:PRO:C	37:CJ:60:LYS:H	2.20	0.44
1:DA:1204:A:H2	1:DA:1241:A:N1	2.13	0.44
34:CG:67:ILE:O	34:CG:114:ARG:HD2	2.17	0.44
36:BI:2:ARG:HD2	36:BI:69:GLU:HB3	1.99	0.44
5:AF:107:LYS:HE2	5:AF:107:LYS:HB3	1.69	0.44
44:BQ:53:LEU:HB3	44:BQ:56:VAL:CG2	2.47	0.44
1:DA:1183:G:C5	56:DA:3427:OHX:N4	2.85	0.44
1:DA:27:G:C4	1:DA:512:G:N2	2.85	0.44
6:DG:55:LYS:O	6:DG:57:ALA:N	2.50	0.44
17:D2:5:VAL:HB	17:D2:37:VAL:CG1	2.47	0.44
1:DA:336:C:O2'	1:DA:337:C:H5'	2.17	0.44
3:DD:186:HIS:CD2	3:DD:187:GLY:N	2.85	0.44
37:BJ:54:THR:C	37:BJ:56:GLN:H	2.20	0.44
31:CA:1518:A:OP1	56:CA:1753:OHX:N2	2.50	0.44
1:AA:1188:U:H4'	17:A2:79:VAL:CG2	2.47	0.44
1:AA:1438:U:O2'	1:AA:1439:A:H5'	2.17	0.44
21:AV:140:ASP:CG	21:AV:141:VAL:N	2.70	0.44
1:DA:2190:G:H3'	1:DA:2191:G:H5''	1.97	0.44
41:BN:76:GLY:O	41:BN:77:MET:C	2.55	0.44
34:BG:101:LEU:O	34:BG:105:VAL:HG23	2.16	0.44
1:DA:1226:G:C6	1:DA:1227:A:N6	2.85	0.44
31:BA:1085:U:O2	56:BA:1763:OHX:N2	2.49	0.44
7:DH:152:ARG:NH2	7:DH:153:LYS:HE3	2.32	0.44
50:CW:87:LYS:HD2	50:CW:87:LYS:HA	1.45	0.44
19:AT:21:PHE:HD2	19:AT:26:TYR:CD2	2.35	0.44
31:CA:600:C:H2'	31:CA:601:C:C6	2.52	0.44
31:CA:604:G:H2'	31:CA:605:U:H6	1.81	0.44
1:DA:1907:G:C2	1:DA:1924:C:O2	2.69	0.44
10:AN:7:TYR:CZ	10:AN:44:LYS:HG3	2.52	0.44
31:BA:1071:C:O2'	31:BA:1072:G:H5'	2.16	0.44
1:DA:1314:C:N3	1:DA:1339:G:N2	2.65	0.44
1:AA:990:A:N6	1:AA:1186:G:H1'	2.31	0.44
37:CJ:122:HIS:O	37:CJ:125:MET:HB2	2.17	0.44
1:DA:921:G:C5	1:DA:922:U:C5	3.05	0.44
1:AA:1649:G:N1	1:AA:2009:G:C6	2.85	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
10:DN:13:ASN:C	10:DN:15:GLY:H	2.19	0.44
31:CA:562:C:H4'	31:CA:563:A:O5'	2.17	0.44
29:A7:1:MET:O	29:A7:2:LYS:C	2.55	0.44
31:CA:1259:C:O2'	31:CA:1284:C:O4'	2.30	0.44
41:BN:98:LEU:O	41:BN:101:SER:OG	2.32	0.44
1:DA:2732:G:H3'	1:DA:2733:A:O4'	2.18	0.44
5:AF:37:VAL:HG12	5:AF:38:ARG:N	2.32	0.44
1:AA:2540:C:N4	1:AA:2541:A:C6	2.85	0.44
47:BT:52:LYS:C	47:BT:52:LYS:HD2	2.37	0.44
29:A7:25:PRO:HB3	29:A7:28:ARG:NH2	2.33	0.44
31:BA:1062:U:H2'	31:BA:1063:C:C6	2.52	0.44
1:DA:7:G:C2'	1:DA:8:A:O4'	2.65	0.44
1:AA:907:U:C5'	12:AP:23:GLY:O	2.65	0.44
12:AP:21:THR:HG23	12:AP:21:THR:O	2.12	0.44
1:DA:566:U:O4	17:D2:78:LYS:HE2	2.16	0.44
52:CB:37:A:N1	54:C1:20:G:C5	2.85	0.44
43:CP:20:THR:C	43:CP:22:ILE:N	2.70	0.44
13:A0:34:ILE:HD12	13:A0:34:ILE:HA	1.60	0.44
52:BD:58:G:C2	52:BD:75:C:C2	3.05	0.44
1:DA:2307:G:O6	6:DG:42:GLY:C	2.56	0.44
1:AA:782:A:H5'	1:AA:783:A:C2	2.53	0.44
5:AF:65:TRP:CB	5:AF:66:PRO:CD	2.95	0.44
31:CA:830:G:C2	31:CA:857:C:C2	3.04	0.44
41:CN:48:ILE:HG21	41:CN:63:LEU:HD12	1.99	0.44
39:BL:118:LYS:HB3	39:BL:118:LYS:NZ	2.32	0.44
31:CA:1130:A:OP2	31:CA:1131:G:OP2	2.36	0.44
31:BA:1133:G:C6	31:BA:1142:G:O6	2.71	0.44
2:DB:109:G:C4	2:DB:110:G:C8	3.06	0.44
31:BA:271:C:O2'	31:BA:272:C:H5'	2.17	0.44
1:DA:2468:G:H3'	1:DA:2476:A:H2	1.73	0.44
25:DX:19:GLN:O	25:DX:22:ALA:HB3	2.17	0.44
46:CS:48:TRP:O	46:CS:49:LEU:HB2	2.18	0.44
31:BA:25:C:O2'	31:BA:26:A:H5'	2.17	0.44
1:DA:139:G:N3	1:DA:141:A:N1	2.65	0.44
31:BA:484:G:C2'	31:BA:485:G:OP2	2.63	0.44
1:DA:2300:G:O2'	1:DA:2301:C:H5'	2.18	0.44
52:BB:6:G:O6	52:BB:76:C:N3	2.51	0.44
48:CU:23:LYS:O	48:CU:26:LEU:HD22	2.17	0.44
1:DA:340:A:H2'	1:DA:341:G:H5'	1.99	0.44
20:DU:77:PRO:O	20:DU:78:ALA:CB	2.64	0.44
31:CA:425:G:O3'	34:CG:45:GLN:NE2	2.51	0.44
1:AA:2304:G:O4'	6:AG:132:ASN:HB3	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:CE:185:ILE:HG22	32:CE:199:TYR:CB	2.42	0.44
35:BH:118:ILE:HG12	35:BH:119:LEU:H	1.80	0.44
31:BA:437:U:H5'	34:BG:155:LEU:HD22	2.00	0.44
12:AP:2:LEU:CD1	12:AP:69:PHE:HE1	2.30	0.44
33:CF:22:TRP:CB	33:CF:59:ARG:HB2	2.45	0.44
3:AD:72:LYS:HZ2	3:AD:75:ILE:HD12	1.81	0.44
32:BE:212:GLN:HG3	32:BE:235:SER:HB2	1.99	0.44
31:BA:1316:G:H4'	44:BQ:18:VAL:HG11	1.99	0.44
38:BK:91:ARG:NH1	38:BK:91:ARG:HG3	2.24	0.44
21:DV:37:VAL:O	21:DV:38:TYR:HB3	2.17	0.44
7:AH:83:TYR:HB3	7:AH:135:GLY:H	1.79	0.44
43:CP:30:ALA:O	43:CP:32:GLU:N	2.50	0.44
1:AA:2172:U:H5'	1:AA:2173:A:P	2.57	0.44
15:AR:26:ASP:O	15:AR:49:VAL:HG12	2.18	0.44
34:CG:3:ARG:NE	34:CG:118:ARG:HD3	2.24	0.44
1:DA:2517:C:C6	1:DA:2542:A:C2	3.05	0.44
52:CB:13:G:H1'	52:CB:24:G:H1	1.82	0.44
1:DA:1443:G:C8	1:DA:1443:G:H5'	2.53	0.44
5:DF:39:TRP:CD1	5:DF:99:TYR:CE2	3.03	0.44
31:CA:791:G:C2'	31:CA:792:A:H5'	2.47	0.44
1:AA:628:G:C6	1:AA:636:G:N2	2.85	0.44
31:BA:377:G:P	46:BS:5:ARG:HH11	2.41	0.44
1:DA:1434:A:O2'	1:DA:1435:G:H5'	2.17	0.44
33:CF:74:GLY:O	33:CF:76:VAL:N	2.49	0.44
21:DV:124:ILE:HD12	21:DV:125:LEU:H	1.82	0.44
39:CL:127:LYS:HB3	39:CL:128:ARG:HH12	1.83	0.44
25:AX:6:VAL:HB	25:AX:54:VAL:CG2	2.47	0.44
1:DA:989:G:OP2	25:DX:11:SER:HB3	2.17	0.44
33:CF:134:ILE:HD11	33:CF:153:VAL:CG2	2.47	0.44
1:DA:638:G:C6	1:DA:639:U:C4	3.04	0.44
23:AZ:85:LEU:N	23:AZ:85:LEU:HD22	2.32	0.44
8:AK:20:ASP:C	8:AK:20:ASP:OD2	2.56	0.44
31:BA:1088:G:H1	31:BA:1097:C:N4	2.15	0.44
51:BX:9:ARG:HH11	51:BX:22:ARG:HG3	1.81	0.44
51:BX:9:ARG:HH12	51:BX:23:PRO:CD	2.31	0.44
47:BT:45:HIS:NE2	47:BT:47:PRO:HG3	2.32	0.44
11:DO:6:LEU:HB3	11:DO:7:ARG:H	1.54	0.44
31:CA:157:G:C6	31:CA:165:C:N3	2.86	0.44
53:BC:66:C:C2'	53:BC:67:C:H5'	2.47	0.44
29:D7:10:ARG:O	29:D7:14:LYS:HB2	2.18	0.44
1:DA:275:G:H8	1:DA:275:G:OP2	2.00	0.44
1:AA:1374:G:C6	1:AA:1375:C:C4	3.05	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:BS:52:ASP:OD2	46:BS:55:ARG:HG2	2.18	0.44
1:AA:1850:G:H2'	1:AA:1851:U:C6	2.52	0.44
1:DA:118:A:OP2	1:DA:119:A:H2'	2.18	0.44
37:BJ:72:ARG:HG3	37:BJ:142:GLU:OE1	2.16	0.44
48:CU:87:ARG:HB3	48:CU:88:LYS:H	1.58	0.44
1:DA:96:G:C5	1:DA:97:C:C5	3.05	0.44
31:CA:448:A:C2	31:CA:449:C:C4	3.05	0.44
1:AA:752:A:O2'	1:AA:753:C:OP2	2.30	0.44
31:BA:41:G:C2	31:BA:402:G:C2	3.04	0.44
1:AA:394:A:C6	1:AA:395:U:N3	2.84	0.44
1:DA:663:G:C5	1:DA:664:C:C5	3.05	0.44
1:DA:714:U:O2	1:DA:716:A:C8	2.70	0.44
1:DA:20:C:C2	1:DA:521:G:N2	2.85	0.44
1:DA:2208:U:O2'	1:DA:2209:C:H5'	2.17	0.44
31:BA:507:C:C5	31:BA:508:C:C6	3.05	0.44
1:AA:886:C:H2'	1:AA:887:A:C1'	2.47	0.44
1:DA:1695:G:N7	3:DD:14:ARG:NH2	2.66	0.44
41:CN:38:ASN:HA	41:CN:39:PRO:HD3	1.86	0.44
28:A6:25:LYS:HB2	30:A8:34:TRP:NE1	2.32	0.44
1:DA:2630:G:H1'	1:DA:2894:G:C8	2.53	0.44
1:DA:2271:G:C6	1:DA:2272:U:C4	3.06	0.44
1:DA:171:G:H2'	1:DA:172:C:C6	2.52	0.44
43:CP:70:LEU:HD22	43:CP:74:VAL:HG23	1.99	0.44
5:DF:123:LEU:O	5:DF:124:LEU:C	2.55	0.44
1:AA:878:A:N6	1:AA:900:A:C8	2.86	0.44
31:BA:1019:C:H2'	31:BA:1020:U:O4'	2.16	0.44
1:AA:1064:C:H42	1:AA:1074:G:H1	1.63	0.44
31:CA:426:G:H2'	31:CA:427:U:H6	1.81	0.44
31:BA:945:G:C2	31:BA:1337:G:C2	3.05	0.44
30:D8:32:LEU:O	30:D8:33:ASN:HB2	2.17	0.44
30:D8:49:VAL:CG1	30:D8:50:LEU:H	2.30	0.44
26:A4:40:HIS:H	26:A4:41:PRO:HD2	1.80	0.44
43:BP:20:THR:C	43:BP:22:ILE:N	2.67	0.44
1:AA:2156:G:C5	1:AA:2157:G:N2	2.85	0.44
1:DA:2885:C:H2'	1:DA:2886:G:O5'	2.18	0.44
1:DA:1142(A):A:N7	1:DA:1144:G:C6	2.86	0.44
39:CL:111:ARG:CB	39:CL:113:LYS:HE2	2.41	0.44
31:BA:1346:A:OP1	39:BL:120:ARG:NH1	2.50	0.44
45:BR:76:GLU:C	45:BR:78:TYR:N	2.71	0.44
31:CA:1134:G:C2'	31:CA:1135:U:H5'	2.48	0.44
31:BA:1119:C:H2'	31:BA:1120:G:O4'	2.18	0.44
31:BA:1151:A:N6	31:BA:1152:A:C6	2.85	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:BE:17:PHE:HA	32:BE:42:ILE:CG2	2.47	0.44
1:AA:1027:A:C6	1:AA:1126:A:C4	3.06	0.44
1:AA:2723:C:C2'	1:AA:2724:C:O5'	2.64	0.44
53:CC:59:A:H4'	53:CC:60:A:OP1	2.16	0.44
42:CO:30:ALA:HB1	42:CO:31:PRO:HD2	1.98	0.44
48:CU:22:VAL:HG12	48:CU:55:ARG:O	2.18	0.44
1:DA:1152:C:O2'	1:DA:1153:C:H5'	2.16	0.44
20:DU:52:SER:N	20:DU:53:PRO:CD	2.80	0.44
20:AU:52:SER:CB	20:AU:53:PRO:HD3	2.37	0.44
11:AO:77:ARG:HB2	11:AO:78:PRO:HD2	1.98	0.44
1:AA:1047:G:C6	1:AA:1110:G:N7	2.84	0.44
1:AA:2373:G:H1	1:AA:2380:C:N4	2.12	0.44
32:BE:5:ILE:HG13	32:BE:6:THR:H	1.82	0.44
1:AA:643:A:C2	1:AA:644:A:C4	3.05	0.44
32:BE:235:SER:C	32:BE:237:ALA:N	2.71	0.44
9:AM:22:THR:O	9:AM:61:ARG:O	2.36	0.44
5:AF:150:GLY:HA2	5:AF:172:TRP:CD2	2.53	0.44
3:DD:3:VAL:HG12	3:DD:3:VAL:O	2.16	0.44
14:AQ:42:ASP:O	14:AQ:43:GLU:CB	2.64	0.44
1:AA:2656:U:O2	1:AA:2656:U:H2'	2.16	0.44
18:DS:7:ALA:HB1	18:DS:10:VAL:HG21	1.98	0.44
47:CT:22:LEU:HD12	47:CT:23:VAL:N	2.32	0.44
46:CS:34:GLU:CD	46:CS:55:ARG:HH11	2.21	0.44
5:AF:28:ILE:HG22	5:AF:112:MET:HB3	1.98	0.44
3:DD:267:SER:C	3:DD:269:PHE:N	2.70	0.44
18:AS:110:LYS:O	18:AS:111:HIS:C	2.55	0.44
7:AH:38:SER:HB2	7:AH:64:LEU:HD13	1.99	0.44
31:BA:458:C:H2'	31:BA:464:G:H8	1.82	0.44
31:CA:889:A:H4'	31:CA:890:G:OP1	2.17	0.44
17:A2:47:VAL:HG22	17:A2:48:GLY:H	1.80	0.44
31:CA:1226:C:OP2	43:CP:103:THR:OG1	2.27	0.44
49:CV:31:ILE:HG23	49:CV:49:ILE:HG23	1.99	0.44
5:DF:54:ARG:HG3	5:DF:54:ARG:NH1	2.32	0.44
15:AR:119:LYS:HB2	31:BA:1443:G:N2	2.33	0.44
1:DA:65:C:H4'	19:DT:69:TYR:HD1	1.81	0.44
1:AA:2330:G:H2'	1:AA:2331:G:O4'	2.17	0.44
1:AA:1771:C:O2'	1:AA:1786:A:H8	2.00	0.44
31:CA:1219:U:OP1	44:CQ:19:ARG:NH1	2.42	0.44
31:CA:56:U:O2'	31:CA:57:G:H5'	2.17	0.44
7:DH:138:LYS:CA	7:DH:141:VAL:HB	2.48	0.44
1:AA:1166:C:O2	1:AA:1184:G:C2	2.71	0.44
31:BA:115:G:H1'	31:BA:116:A:N7	2.33	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
21:AV:150:LEU:HD23	21:AV:151:HIS:N	2.32	0.44
32:BE:141:GLU:O	32:BE:145:LEU:HD23	2.16	0.44
21:DV:97:GLU:HA	21:DV:126:VAL:O	2.17	0.44
1:DA:719:C:H6	1:DA:719:C:O5'	2.00	0.44
26:D4:29:PRO:C	26:D4:30:GLU:HG3	2.37	0.44
33:CF:152:ILE:HG22	33:CF:167:TRP:CB	2.47	0.44
33:CF:152:ILE:HG13	33:CF:199:LYS:HB2	2.00	0.44
1:AA:2536:G:C5	1:AA:2537:U:C4	3.06	0.44
38:BK:102:ARG:H	38:BK:102:ARG:CD	2.31	0.44
38:CK:109:ILE:CG1	38:CK:110:ALA:N	2.80	0.44
21:AV:155:LEU:O	21:AV:157:LEU:N	2.50	0.44
21:AV:158:PRO:CB	21:AV:159:PRO:HD2	2.46	0.44
1:AA:116:C:C2'	1:AA:117:G:O5'	2.65	0.44
1:DA:844:C:N4	1:DA:845:G:N2	2.64	0.44
1:AA:814:C:O2'	1:AA:815:C:H5'	2.17	0.44
1:AA:1419:A:C8	1:AA:1421:G:C6	3.06	0.44
1:AA:1404:C:O2'	1:AA:1405:U:H5'	2.17	0.44
21:DV:165:VAL:HG23	21:DV:166:SER:H	1.82	0.44
31:BA:316:G:C2	31:BA:338:A:C2	3.06	0.44
1:DA:1392:A:C6	1:DA:1393:A:C6	3.06	0.44
31:BA:591:U:C2	31:BA:592:G:C8	3.04	0.44
31:CA:109:A:H5'	31:CA:110:C:C5	2.51	0.44
44:CQ:43:CYS:HA	44:CQ:46:GLU:HB2	1.98	0.44
42:BO:105:TYR:O	42:BO:107:ALA:N	2.50	0.44
23:AZ:46:LEU:HA	23:AZ:46:LEU:HD12	1.80	0.44
31:BA:693:G:H2'	31:BA:694:A:C8	2.52	0.44
1:AA:271(A):C:H1'	1:AA:272:G:H1'	1.98	0.44
31:BA:539:A:OP1	42:BO:114:LYS:HE2	2.16	0.44
1:AA:1939:U:OP1	1:AA:2604:U:O2'	2.32	0.44
22:A3:40:GLN:OE1	22:A3:44:ARG:HB3	2.18	0.44
28:A6:30:THR:HG23	28:A6:30:THR:O	2.18	0.44
1:DA:383:U:O2	1:DA:385:C:N4	2.50	0.44
16:A1:80:ILE:CG2	16:A1:80:ILE:O	2.66	0.44
31:BA:1167:A:OP1	31:BA:1167:A:H8	1.99	0.44
56:DA:3398:OHX:N1	56:DA:3445:OHX:N2	2.65	0.44
31:BA:762:C:H6	31:BA:762:C:O5'	2.00	0.44
1:AA:1651:G:N2	1:AA:2007:C:C2	2.85	0.44
40:CM:64:GLU:HG2	44:CQ:59:ALA:HB2	1.99	0.44
1:DA:2271:G:OP1	22:D3:18:ALA:CB	2.64	0.44
4:DE:60:ASN:O	4:DE:62:PRO:HD2	2.17	0.44
4:DE:68:ALA:C	4:DE:70:ALA:N	2.71	0.44
1:AA:2393:A:C5'	11:AO:62:LEU:HB3	2.41	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:155:C:C2	1:DA:171:G:N2	2.81	0.44
49:CV:41:VAL:O	49:CV:43:GLU:N	2.49	0.44
3:DD:32:SER:O	3:DD:33:LEU:CB	2.62	0.44
31:BA:1007:C:C3'	31:BA:1008:C:H5''	2.48	0.44
31:BA:1025:U:O2'	31:BA:1026:G:O4'	2.35	0.44
52:BD:43:G:C2'	52:BD:44:C:H5'	2.47	0.44
20:AU:17:SER:OG	20:AU:71:LYS:CD	2.65	0.44
31:BA:1327:C:H5''	51:BX:20:LYS:HB3	2.00	0.44
6:AG:91:ARG:HD2	6:AG:92:VAL:N	2.32	0.44
31:BA:1375:A:C4	31:BA:1376:U:C6	3.06	0.44
31:CA:1141:C:C2'	31:CA:1142:G:H5'	2.47	0.44
40:BM:34:VAL:HG13	40:BM:73:ASP:O	2.17	0.44
19:DT:44:GLU:OE1	19:DT:50:LYS:O	2.35	0.44
19:DT:87:GLN:HE21	19:DT:87:GLN:HB3	1.48	0.44
51:CX:18:TYR:CE2	51:CX:22:ARG:HD3	2.52	0.44
1:DA:2211:G:C2'	1:DA:2211:G:N3	2.79	0.44
1:DA:2212:A:H1'	1:DA:2215:G:C4	2.50	0.44
1:DA:2213:U:H6	1:DA:2213:U:H3'	1.81	0.44
31:BA:827:U:C5	31:BA:872:A:N1	2.85	0.44
31:CA:1008:C:N3	31:CA:1021:G:O6	2.51	0.44
31:CA:1004:A:H8	31:CA:1036:G:C2	2.36	0.44
42:CO:24:VAL:CG1	42:CO:26:ALA:HB2	2.47	0.44
5:DF:161:GLU:O	5:DF:165:ARG:HG3	2.17	0.44
31:BA:428:G:C5	31:BA:430:A:C6	3.05	0.44
1:DA:458:G:C8	29:D7:37:LYS:HG2	2.52	0.44
32:CE:195:ASP:O	38:CK:74:PRO:HG3	2.17	0.44
12:AP:104:PHE:O	12:AP:105:GLU:CB	2.63	0.44
32:BE:163:PHE:HD2	32:BE:185:ILE:HG13	1.82	0.44
7:DH:19:VAL:HG12	7:DH:20:ALA:N	2.21	0.44
13:A0:35:THR:OG1	13:A0:113:LEU:HD12	2.17	0.44
38:BK:91:ARG:HB2	42:BO:7:ILE:HG21	1.98	0.44
40:CM:5:ARG:HB3	40:CM:99:LYS:O	2.18	0.44
36:CI:62:TRP:CE2	48:CU:35:ARG:NH2	2.86	0.44
38:BK:74:PRO:O	38:BK:75:ARG:C	2.56	0.44
36:BI:79:LEU:HA	36:BI:79:LEU:HD23	1.68	0.44
37:CJ:144:MET:HE1	52:CD:31:G:H21	1.83	0.44
18:AS:55:ALA:O	18:AS:58:ALA:N	2.49	0.44
34:CG:127:THR:HG21	34:CG:149:ALA:HB2	1.99	0.44
47:BT:90:ILE:O	47:BT:91:ARG:C	2.56	0.44
42:CO:117:ARG:NH2	42:CO:124:LYS:CB	2.80	0.44
31:CA:953:G:N7	31:CA:954:G:N7	2.65	0.44
1:DA:492:A:H2'	1:DA:493:G:O4'	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:DG:55:LYS:C	6:DG:57:ALA:H	2.20	0.44
20:AU:92:ASN:N	20:AU:92:ASN:OD1	2.49	0.44
23:AZ:92:LYS:HA	23:AZ:95:LEU:CB	2.46	0.44
6:DG:83:ARG:H	6:DG:86:MET:HE3	1.83	0.44
1:DA:288:C:H2'	1:DA:289:A:C8	2.53	0.44
11:AO:71:VAL:HG13	11:AO:72:PRO:HD3	1.99	0.44
35:BH:127:ASN:OD1	35:BH:128:PRO:HD2	2.18	0.44
31:CA:1272:G:C2	31:CA:1273:G:C4	3.06	0.44
1:AA:738:G:C6	1:AA:739:G:C2	3.06	0.44
31:BA:243:A:H4'	31:BA:244:U:C5'	2.45	0.44
35:BH:82:VAL:HG12	35:BH:83:GLU:N	2.31	0.44
26:D4:32:TYR:HB3	26:D4:33:VAL:H	1.57	0.44
1:AA:311:A:N1	1:AA:328:U:C4	2.86	0.44
27:D5:36:CYS:HB3	27:D5:37:LYS:H	1.51	0.44
33:CF:130:VAL:O	33:CF:134:ILE:HG12	2.17	0.44
33:BF:62:ASP:N	33:BF:62:ASP:OD1	2.49	0.44
16:A1:28:ARG:HG2	16:A1:38:THR:OG1	2.17	0.44
31:BA:1171:G:O2'	31:BA:1172:C:H5'	2.17	0.44
12:AP:109:VAL:HG22	12:AP:110:THR:N	2.31	0.44
14:AQ:15:ARG:HG3	14:AQ:19:LYS:HD2	2.00	0.44
46:CS:18:ARG:HH11	46:CS:35:LYS:HE3	1.82	0.44
1:AA:1643:G:C2'	1:AA:1644:C:O5'	2.65	0.44
4:AE:7:VAL:HG23	4:AE:7:VAL:O	2.17	0.44
1:DA:1953:A:H2	1:DA:2549:G:H2'	1.83	0.44
1:DA:240:G:C6	1:DA:241:A:C6	3.06	0.44
31:BA:16:A:O2'	31:BA:17:U:H5'	2.17	0.44
1:AA:1389:G:H2'	1:AA:1390:U:H6	1.82	0.44
31:BA:195:A:N7	31:BA:196:A:C6	2.85	0.44
31:CA:807:A:N6	31:CA:808:C:N4	2.65	0.44
50:BW:14:LYS:O	50:BW:18:GLN:HG2	2.16	0.44
31:BA:507:C:C6	31:BA:508:C:C6	3.05	0.44
2:DB:98:G:N7	56:DB:210:OHX:N1	2.64	0.44
31:CA:241:C:O2'	31:CA:242:C:H5'	2.18	0.44
40:BM:90:LEU:N	40:BM:91:PRO:CD	2.81	0.44
40:BM:94:VAL:HG12	40:BM:95:GLU:H	1.83	0.44
31:BA:1254:C:H42	31:BA:1283:G:H1	1.66	0.44
1:DA:2734:A:H2'	1:DA:2735:G:H5'	2.00	0.44
5:AF:7:TYR:HA	5:AF:22:ALA:O	2.18	0.44
31:CA:124:G:H4'	31:CA:291:C:O2'	2.17	0.44
1:AA:690:G:H2'	1:AA:691:C:C6	2.53	0.44
4:AE:107:THR:O	4:AE:190:GLY:CA	2.66	0.44
1:AA:526:A:N6	1:AA:2626:C:H4'	2.33	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:380:U:H4'	23:DZ:16:ASN:O	2.18	0.44
32:CE:198:ASP:OD2	32:CE:198:ASP:N	2.50	0.44
7:AH:139:GLN:OE1	7:AH:139:GLN:O	2.34	0.44
1:AA:2548:G:H2'	1:AA:2549:G:O5'	2.17	0.44
10:AN:107:ARG:O	10:AN:108:GLU:C	2.56	0.44
1:DA:2791:C:C2	1:DA:2893:G:C6	3.05	0.44
1:DA:2271:G:H8	1:DA:2271:G:O5'	1.99	0.44
4:DE:36:ARG:HG2	4:DE:85:ASN:HD21	1.82	0.44
52:CD:14:A:C3'	52:CD:15:G:H5''	2.41	0.44
52:CD:67:A:H4'	52:CD:68:A:OP2	2.14	0.44
1:AA:888:C:H2'	1:AA:889:C:O2	2.17	0.44
1:AA:1061:U:N3	1:AA:1063:G:OP1	2.50	0.44
31:CA:632:A:H4'	31:CA:633:G:O5'	2.18	0.44
31:BA:1092:A:C2	31:BA:1183:A:C2	3.05	0.44
31:CA:1368:G:O2'	31:CA:1369:C:H5'	2.18	0.44
1:DA:2417:C:H2'	1:DA:2418:A:H8	1.83	0.44
30:D8:30:ARG:C	30:D8:31:HIS:CD2	2.91	0.44
43:BP:25:ILE:HD11	43:BP:60:VAL:HG11	1.98	0.44
43:BP:66:LEU:O	43:BP:67:GLU:C	2.54	0.44
31:BA:96:G:N1	31:BA:97:U:O2	2.50	0.44
11:DO:112:LEU:HD13	11:DO:127:ALA:CB	2.48	0.44
1:DA:1160:G:C6	1:DA:1161:C:N4	2.86	0.44
1:DA:994:C:H1'	17:D2:10:LYS:HE2	2.00	0.44
31:CA:827:U:H3	31:CA:872:A:N6	2.11	0.44
1:DA:2681:C:H5	1:DA:2725:A:N6	2.05	0.44
41:CN:54:ARG:HB3	41:CN:54:ARG:NH1	2.32	0.44
31:CA:87:A:C6	31:CA:88:C:C5	3.06	0.44
47:BT:67:LYS:HG2	47:BT:67:LYS:O	2.16	0.44
52:CB:67:A:N6	52:CB:70:C:C1'	2.74	0.44
1:DA:2469:A:OP1	1:DA:2469:A:H4'	2.17	0.44
52:CB:52:G:C2'	52:CB:53:A:O4'	2.64	0.44
1:AA:1902:C:OP1	3:AD:242:ARG:HD3	2.16	0.44
1:DA:1605:C:H5'	1:DA:1610:A:N6	2.32	0.44
35:CH:139:LEU:C	35:CH:141:GLN:N	2.68	0.44
31:CA:652:U:C5	31:CA:752:G:N3	2.84	0.44
30:A8:57:ARG:HB3	30:A8:57:ARG:HH11	1.82	0.44
31:BA:951:G:C6	31:BA:1231:G:C6	3.06	0.44
39:CL:18:PHE:O	39:CL:62:TYR:N	2.47	0.44
31:CA:1399:C:C2	31:CA:1401:G:C5	3.05	0.44
1:DA:861:A:N3	2:DB:79:C:O2'	2.51	0.44
5:DF:180:GLY:O	5:DF:181:LEU:C	2.53	0.44
1:AA:646:A:H2'	1:AA:647:G:O5'	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
17:D2:49:THR:CB	17:D2:50:PRO:CD	2.90	0.44
21:DV:23:LYS:HE2	21:DV:40:ASP:OD2	2.18	0.44
1:AA:274:G:C4	1:AA:274:G:OP1	2.70	0.44
37:BJ:16:LEU:HD11	39:BL:45:ALA:HB2	1.98	0.44
1:AA:2262:U:H4'	1:AA:2328:A:C2	2.53	0.44
1:AA:2840:C:O2'	1:AA:2841:C:H5'	2.18	0.44
9:AM:137:LYS:HD2	9:AM:137:LYS:HA	1.53	0.44
1:DA:1788:C:O2'	1:DA:1789:A:H5'	2.17	0.44
7:AH:58:GLU:C	7:AH:60:ARG:N	2.67	0.44
50:BW:71:THR:CG2	50:BW:72:LEU:H	2.31	0.44
1:AA:1884:A:H2'	1:AA:1885:A:O4'	2.18	0.44
31:BA:467:G:N1	31:BA:468:A:C2	2.86	0.44
1:AA:2584:U:O2	1:AA:2584:U:O4'	2.34	0.44
21:DV:139:VAL:CG2	21:DV:155:LEU:HD22	2.47	0.44
17:A2:47:VAL:HG13	17:A2:48:GLY:H	1.82	0.44
31:CA:210:U:OP1	31:CA:210:U:O4'	2.35	0.44
4:AE:92:THR:C	4:AE:94:GLU:N	2.69	0.44
31:CA:57:G:C5	31:CA:58:C:C5	3.05	0.44
37:BJ:58:PRO:O	37:BJ:61:VAL:N	2.50	0.44
31:BA:773:G:C2	31:BA:774:G:C4	3.06	0.44
7:AH:26:VAL:HG21	7:AH:75:ALA:HB1	1.99	0.44
31:BA:892:A:H61	31:BA:906:G:H1'	1.82	0.44
1:AA:27:G:C4	1:AA:512:G:C2	3.05	0.44
1:DA:1016:G:H2'	1:DA:1017:G:O4'	2.16	0.44
21:DV:73:GLN:O	21:DV:86:VAL:HG13	2.18	0.44
1:DA:712:G:C2	1:DA:720:C:C2	3.06	0.44
31:BA:939:G:C6	31:BA:940:C:C4	3.05	0.44
31:BA:940:C:C2	31:BA:941:G:C8	3.06	0.44
18:DS:29:LEU:HD21	18:DS:33:ARG:NH2	2.32	0.44
6:DG:172:LEU:O	6:DG:176:LEU:HD12	2.18	0.44
23:AZ:58:ILE:HD12	23:AZ:58:ILE:N	2.32	0.44
4:DE:28:ALA:HB3	4:DE:93:VAL:HG23	1.99	0.44
22:A3:27:GLU:OE1	22:A3:69:PHE:N	2.33	0.44
31:BA:60:A:H8	31:BA:60:A:P	2.40	0.44
10:AN:7:TYR:HE1	10:AN:20:MET:CE	2.30	0.44
1:DA:2080:G:O2'	1:DA:2081:C:H5'	2.18	0.44
37:BJ:156:TRP:CD1	37:BJ:156:TRP:N	2.85	0.44
21:AV:54:HIS:O	21:AV:55:HIS:ND1	2.48	0.44
1:AA:2100:G:H2'	1:AA:2100:G:N3	2.32	0.44
31:CA:613:C:C6	31:CA:613:C:C3'	3.01	0.44
31:CA:613:C:H3'	31:CA:613:C:H6	1.82	0.44
1:AA:28:A:C4	1:AA:29:U:C6	3.06	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:D1:74:LEU:HD22	16:D1:79:PHE:CA	2.48	0.44
32:CE:52:GLU:HG2	32:CE:56:ARG:NH2	2.33	0.44
1:AA:2607:G:H2'	1:AA:2608:G:O4'	2.17	0.44
1:AA:1540:G:H2'	1:AA:1541:U:H6	1.83	0.44
2:DB:85:G:C2	2:DB:86:G:C8	3.05	0.44
8:AK:52:ARG:C	8:AK:54:GLN:H	2.21	0.44
2:AB:8:U:O2'	14:AQ:40:ILE:HD12	2.18	0.44
48:BU:34:TYR:HB3	48:BU:69:THR:HG23	1.98	0.44
1:AA:1414:G:O2'	1:AA:1415:U:H5'	2.18	0.44
45:CR:76:GLU:HG3	45:CR:77:ARG:N	2.33	0.44
33:BF:206:GLU:O	33:BF:206:GLU:OE2	2.35	0.44
36:BI:81:ILE:HG22	36:BI:81:ILE:O	2.18	0.44
38:CK:101:PRO:HG2	38:CK:133:LEU:HD11	1.99	0.44
24:DW:35:LEU:HD23	24:DW:53:LEU:HD12	1.98	0.44
20:DU:88:LYS:HA	20:DU:88:LYS:HD3	1.67	0.44
20:DU:88:LYS:O	20:DU:90:LEU:N	2.44	0.44
1:DA:2893:G:OP2	1:DA:2893:G:C8	2.70	0.44
1:AA:2276:G:C2	1:AA:2277:G:C8	3.06	0.44
1:AA:2277:G:OP1	12:AP:86:GLY:C	2.55	0.44
1:DA:846:C:C4	1:DA:847:U:O4	2.71	0.44
31:CA:1054:C:N4	52:CB:35:G:C4	2.86	0.44
49:CV:9:VAL:CG1	49:CV:10:PHE:N	2.80	0.44
3:DD:35:LYS:HB3	3:DD:63:ARG:HA	1.99	0.44
7:AH:152:ARG:C	7:AH:153:LYS:HD2	2.38	0.44
1:AA:880:G:HO2'	1:AA:881:G:P	2.33	0.44
1:AA:1577:C:H2'	1:AA:1578:U:C1'	2.47	0.44
31:BA:1028:C:C2	31:BA:1034:G:N3	2.86	0.44
1:AA:1063:G:H2'	1:AA:1064:C:O4'	2.18	0.44
52:BD:44:C:O2'	52:BD:45:C:H5'	2.18	0.44
31:CA:1176:A:C2'	31:CA:1177:G:C5'	2.87	0.44
30:D8:14:VAL:CG1	30:D8:15:LYS:N	2.80	0.44
21:DV:157:LEU:C	21:DV:161:VAL:HG21	2.38	0.44
1:DA:92:G:C6	1:DA:93:C:C4	3.06	0.44
1:DA:2854:G:C2	1:DA:2864:G:N3	2.86	0.44
45:CR:82:ILE:HD11	45:CR:87:ILE:C	2.38	0.44
1:AA:1833:U:C2	1:AA:1834:U:C5	3.06	0.44
49:BV:40:ILE:HD11	49:BV:62:ILE:HG23	2.00	0.44
1:AA:1081:U:H2'	1:AA:1082:U:C1'	2.47	0.44
31:BA:1154:G:O2'	31:BA:1155:G:H5'	2.18	0.44
2:DB:66:A:C2	2:DB:108:C:C5	3.06	0.44
5:DF:132:VAL:HG13	5:DF:133:ASN:OD1	2.17	0.44
4:AE:116:VAL:HG13	4:AE:122:PHE:HB2	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1286:A:H2	51:CX:18:TYR:HH	1.65	0.44
31:BA:825:G:O2'	31:BA:826:C:H5'	2.18	0.44
44:CQ:4:LYS:C	44:CQ:6:LEU:N	2.71	0.44
31:CA:1023:G:C6	31:CA:1024:G:C8	3.05	0.44
32:CE:130:ARG:HA	32:CE:131:PRO:HD2	1.89	0.44
34:CG:178:VAL:C	34:CG:180:GLY:N	2.71	0.44
1:DA:1731:G:O2'	1:DA:1732:A:H5'	2.17	0.44
35:CH:103:GLY:C	35:CH:106:PRO:HD2	2.38	0.44
31:CA:652:U:C2'	31:CA:653:A:H5''	2.45	0.44
1:DA:2300:G:C2'	1:DA:2301:C:H5'	2.48	0.44
34:BG:148:VAL:HG12	34:BG:149:ALA:N	2.32	0.44
39:CL:4:TYR:HB2	39:CL:19:LEU:HB2	2.00	0.44
14:AQ:66:ALA:CA	14:AQ:69:VAL:HG12	2.35	0.44
1:DA:1475:G:C2	1:DA:1519:G:C2	3.05	0.44
1:AA:304:G:C4	1:AA:305:U:C6	3.06	0.44
1:AA:36:G:C5	1:AA:37:C:C5	3.06	0.44
31:BA:492:G:C5	31:BA:493:G:C8	3.05	0.44
5:AF:192:LEU:HD23	5:AF:193:VAL:N	2.33	0.44
7:AH:25:LYS:HE2	7:AH:34:GLU:OE2	2.18	0.44
31:CA:737:A:C2'	36:CI:73:ASN:HD21	2.30	0.44
1:AA:172:C:H2'	1:AA:173:G:C8	2.52	0.44
40:CM:4:ILE:HG23	40:CM:100:THR:HG22	2.00	0.44
4:AE:188:VAL:HA	4:AE:189:PRO:HD3	1.76	0.44
1:AA:2838:G:C4	1:AA:2839:G:C8	3.06	0.44
1:AA:998:C:H2'	1:AA:999:U:O4'	2.18	0.44
34:CG:101:LEU:HA	34:CG:101:LEU:HD12	1.75	0.44
1:AA:945:A:H4'	1:AA:946:G:OP2	2.13	0.44
33:BF:29:TYR:O	33:BF:30:ARG:C	2.55	0.44
1:DA:2615:U:H2'	1:DA:2616:C:H6	1.83	0.44
3:DD:149:PRO:O	3:DD:150:LYS:HB2	2.18	0.44
1:AA:1825:A:OP1	3:AD:249:PRO:HD3	2.18	0.44
12:DP:132:VAL:CG2	12:DP:133:ARG:H	2.27	0.44
31:BA:719:C:C5	31:BA:720:C:C4	3.04	0.44
3:AD:79:VAL:HG22	3:AD:95:LEU:HB3	1.99	0.44
37:CJ:68:ASN:O	37:CJ:135:VAL:HG22	2.17	0.44
1:AA:973:A:O4'	1:AA:1188:U:C6	2.71	0.44
1:AA:1489:U:H2'	1:AA:1489:U:O2	2.18	0.44
1:DA:270(E):G:O2'	1:DA:270(F):U:H5'	2.17	0.44
1:DA:379:G:C6	1:DA:396:G:C6	3.06	0.44
21:AV:62:PRO:C	21:AV:64:GLY:HA2	2.38	0.44
35:BH:71:LEU:HD11	35:BH:114:GLY:HA3	2.00	0.44
31:BA:988:G:N2	31:BA:1218:C:O2	2.51	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1488:G:C6	1:DA:1489:U:C2	3.05	0.44
1:AA:612:G:H2'	1:AA:613:U:O2	2.18	0.44
31:CA:375:U:OP1	46:CS:69:THR:OG1	2.27	0.44
1:DA:274:G:OP1	1:DA:274:G:O4'	2.35	0.44
1:DA:838:C:O2'	1:DA:839:U:H5'	2.18	0.44
31:CA:145:G:H2'	31:CA:146:G:O4'	2.18	0.44
31:BA:937:A:C5	31:BA:938:A:N7	2.85	0.44
1:AA:229:A:H1'	1:AA:230:U:OP2	2.18	0.44
1:DA:1845:G:H2'	1:DA:1846:G:H5'	2.00	0.44
31:CA:657:G:C2'	31:CA:658:G:H5'	2.47	0.44
31:CA:882:C:O2'	31:CA:883:C:H5'	2.17	0.44
1:AA:2110:G:C2	1:AA:2120:G:H1'	2.53	0.44
8:DK:46:ALA:O	8:DK:49:ALA:HB3	2.17	0.44
50:BW:94:ALA:O	50:BW:95:ALA:HB3	2.17	0.44
5:DF:157:VAL:O	5:DF:194:MET:HA	2.18	0.44
5:DF:96:ASP:OD1	5:DF:98:SER:HB3	2.18	0.44
1:DA:659:C:H4'	5:DF:100:THR:O	2.17	0.44
7:DH:89:ILE:O	7:DH:89:ILE:HG12	2.17	0.44
33:BF:55:VAL:HG12	33:BF:55:VAL:O	2.17	0.44
34:BG:200:GLU:OE1	34:BG:200:GLU:N	2.50	0.44
17:D2:75:PHE:O	17:D2:75:PHE:CD1	2.70	0.44
1:DA:2483:C:O2	1:DA:2483:C:H2'	2.18	0.44
21:AV:1:MET:HE2	21:AV:1:MET:O	2.18	0.44
1:DA:2786:U:H5''	4:DE:65:GLY:N	2.32	0.44
17:D2:76:LYS:HB2	17:D2:81:TYR:HD1	1.83	0.44
31:CA:1049:U:H4'	31:CA:1050:G:H5''	1.95	0.44
31:CA:976:G:N2	31:CA:1362(A):C:OP2	2.43	0.44
43:CP:80:ARG:O	43:CP:83:ASP:O	2.36	0.44
1:AA:2311:A:HO2'	6:AG:88:ILE:HG21	1.81	0.44
5:DF:156:LEU:HD12	5:DF:193:VAL:HG12	1.99	0.44
1:DA:1462:C:H4'	1:DA:2703:C:O4'	2.18	0.44
52:BD:17:G:C1'	52:BD:18:G:P	3.06	0.44
52:BD:59:A:H2'	52:BD:60:A:H8	1.83	0.44
31:BA:1182:G:C4'	31:BA:1183:A:H5''	2.43	0.44
31:CA:1183:A:C2'	31:CA:1184:G:OP1	2.66	0.44
1:DA:2415:G:C4'	11:DO:66:GLY:HA3	2.42	0.44
3:AD:44:ASN:HB3	3:AD:48:ARG:O	2.17	0.44
1:DA:2863:C:O2'	1:DA:2864:G:H5'	2.18	0.44
54:B1:14:A:H2'	54:B1:15:A:C8	2.53	0.44
31:BA:173:U:N3	31:BA:197:A:N1	2.66	0.44
1:AA:1729:A:N6	1:AA:1731:G:C2	2.86	0.44
11:DO:107:LYS:HB3	11:DO:110:TYR:CD2	2.49	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1062:G:C6	1:DA:1063:G:C5	3.06	0.44
31:BA:1372:U:H2'	31:BA:1373:G:O5'	2.18	0.44
31:BA:1373:G:C5'	37:BJ:36:LYS:HB2	2.47	0.44
45:BR:76:GLU:C	45:BR:78:TYR:H	2.21	0.44
50:BW:35:THR:O	50:BW:38:LYS:HB2	2.17	0.44
44:BQ:6:LEU:C	44:BQ:23:ARG:HH21	2.20	0.44
44:BQ:28:GLY:O	44:BQ:29:ARG:O	2.35	0.44
1:DA:2469:A:H8	1:DA:2482:G:C2	2.36	0.44
1:AA:1050:A:C8	1:AA:2751:G:C8	3.06	0.44
12:DP:26:TYR:HD2	12:DP:26:TYR:C	2.21	0.44
31:BA:516:U:C4	31:BA:517:G:C6	3.05	0.44
17:D2:61:VAL:HG12	17:D2:62:LEU:N	2.33	0.44
1:DA:1000:A:C6	1:DA:1155:A:C8	3.06	0.44
31:CA:411:A:N7	31:CA:413:G:N2	2.66	0.44
8:AK:5:LEU:HA	8:AK:36:ALA:HB2	2.00	0.44
19:AT:68:ARG:HD2	19:AT:69:TYR:CE1	2.53	0.44
1:AA:861:A:N3	2:AB:79:C:O2'	2.48	0.44
1:AA:1509:C:H2'	1:AA:1510:A:OP1	2.18	0.44
31:BA:1213:A:N6	31:BA:1215:G:N3	2.66	0.44
1:DA:860:U:N3	1:DA:2268:A:C8	2.86	0.44
31:CA:540:G:C4	31:CA:541:G:C8	3.06	0.44
33:CF:180:ALA:O	33:CF:205:GLY:O	2.35	0.44
31:BA:1318:A:OP1	49:BV:10:PHE:CE2	2.69	0.44
1:AA:1138:G:N2	9:AM:106:MET:HE3	2.33	0.44
1:DA:2507:C:C2	1:DA:2508:G:C8	3.06	0.44
37:CJ:58:PRO:C	37:CJ:60:LYS:N	2.71	0.44
47:BT:63:ARG:HG3	47:BT:64:PRO:HD2	1.99	0.44
31:CA:485:G:C2'	31:CA:486:U:OP2	2.65	0.44
1:DA:945:A:C2	1:DA:2448:A:N9	2.86	0.44
1:DA:2413:G:H21	11:DO:70:GLN:NE2	2.16	0.44
1:DA:30:G:O2'	1:DA:31:C:H5'	2.17	0.44
32:CE:178:ARG:HH12	32:CE:196:LEU:C	2.20	0.44
1:AA:2314:C:H5''	6:AG:38:VAL:HG11	2.00	0.44
1:AA:1864:U:H5''	1:AA:2410:G:O2'	2.18	0.44
2:DB:59:A:C6	2:DB:60:C:C2	3.06	0.44
31:CA:879:C:O2'	31:CA:880:C:H5'	2.18	0.44
21:AV:7:ALA:HB2	21:AV:59:LEU:HD23	2.00	0.44
31:BA:376:G:H5''	46:BS:5:ARG:CD	2.46	0.44
1:DA:875:G:C6	1:DA:876:C:C2	3.05	0.44
1:AA:1175:U:O2	1:AA:1175:U:C2'	2.64	0.44
6:AG:33:ARG:H	6:AG:162:THR:HG23	1.83	0.44
7:DH:26:VAL:O	7:DH:26:VAL:HG22	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:AU:35:TYR:CE1	20:AU:69:ALA:HB3	2.53	0.44
1:DA:2694:G:C6	1:DA:2695:C:C4	3.05	0.44
6:AG:47:LYS:HD2	6:AG:81:LYS:HB2	1.99	0.44
1:AA:648:G:O2'	1:AA:649:G:H5'	2.17	0.44
1:DA:1324:G:C4	1:DA:1328:G:O6	2.71	0.44
26:D4:10:VAL:HG13	26:D4:10:VAL:O	2.18	0.44
31:CA:31:G:H1'	31:CA:32:A:OP1	2.17	0.44
32:CE:189:ASP:O	32:CE:191:ASP:N	2.50	0.44
31:BA:134:A:H1'	31:BA:325:A:C5	2.53	0.44
1:AA:1906:G:C8	1:AA:1929:G:H2'	2.52	0.44
31:CA:35:G:H2'	31:CA:36:C:C6	2.52	0.44
31:BA:199:G:O6	31:BA:218:C:N4	2.51	0.44
31:BA:1071:C:H2'	31:BA:1072:G:C8	2.51	0.44
13:A0:4:LEU:H	13:A0:4:LEU:HD23	1.83	0.44
37:CJ:18:TYR:HB3	37:CJ:59:LEU:HD13	2.00	0.44
18:DS:36:LEU:HD13	18:DS:48:ALA:CA	2.47	0.44
41:BN:38:ASN:HA	41:BN:39:PRO:HD3	1.81	0.44
37:BJ:146:GLU:O	37:BJ:149:ARG:CB	2.66	0.44
2:AB:95:U:C2	2:AB:96:G:C8	3.06	0.44
50:CW:59:ALA:HB3	50:CW:84:LEU:HD11	1.99	0.44
18:DS:86:LEU:HD12	18:DS:87:PRO:HD2	1.99	0.44
1:DA:137(A):G:N3	19:DT:41:ASN:OD1	2.51	0.44
41:CN:82:VAL:HG12	41:CN:108:ILE:HA	2.00	0.44
18:DS:73:ALA:HB3	18:DS:106:ILE:CD1	2.47	0.44
1:DA:741:G:H2'	1:DA:742:G:H8	1.83	0.44
19:DT:70:LEU:N	19:DT:70:LEU:HD12	2.33	0.44
1:AA:1343:G:H2'	1:AA:1384:A:C2	2.52	0.44
34:BG:162:LEU:HD13	34:BG:181:MET:HG2	2.00	0.44
30:A8:34:TRP:N	30:A8:35:GLN:CA	2.81	0.44
1:DA:7:G:H2'	1:DA:8:A:C8	2.53	0.44
1:AA:2615:U:C2	27:A5:7:PRO:HA	2.53	0.44
1:AA:2275:C:O2'	12:AP:84:GLY:CA	2.58	0.44
1:DA:2784:C:H1'	4:DE:37:ARG:HH21	1.81	0.44
4:DE:60:ASN:H	4:DE:60:ASN:ND2	2.15	0.44
1:DA:666:G:H5''	11:DO:47:ASP:O	2.18	0.44
52:CB:38:MIA:S10	54:C1:19:U:C4	3.11	0.44
49:CV:11:VAL:HG22	49:CV:12:ASP:N	2.15	0.44
52:CD:21:A:H4'	52:CD:22:A:OP1	2.17	0.44
1:AA:901:A:H2'	1:AA:901:A:N3	2.32	0.44
1:AA:2318:G:H22	14:AQ:2:ALA:N	2.15	0.44
34:CG:62:GLN:HE22	34:CG:65:ARG:NE	2.14	0.44
37:BJ:78:ARG:HG3	37:BJ:79:ARG:N	2.33	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:1175:G:C6	31:BA:1176:A:N6	2.86	0.44
31:CA:1159:U:O4	31:CA:1174:G:O6	2.36	0.44
32:CE:72:GLY:HA2	32:CE:165:VAL:HG22	1.98	0.44
1:DA:2394:C:H2'	1:DA:2395:C:C6	2.52	0.44
1:DA:631:A:N6	1:DA:632:A:C2	2.86	0.44
1:DA:2389:G:H5''	1:DA:2390:U:C5'	2.33	0.44
21:DV:157:LEU:HG	21:DV:161:VAL:HB	2.00	0.44
31:BA:170:U:H2'	31:BA:171:A:H8	1.82	0.44
31:BA:224:C:H2'	31:BA:225:C:C6	2.52	0.44
1:AA:2133:G:H1'	1:AA:2158:A:N6	2.32	0.44
16:D1:100:VAL:C	16:D1:101:ARG:HG2	2.35	0.44
53:CC:48:U:C2'	53:CC:49:C:OP2	2.64	0.44
1:AA:594:U:H2'	1:AA:595:C:C6	2.53	0.44
32:BE:190:THR:O	32:BE:191:ASP:C	2.56	0.44
7:DH:4:ILE:HB	7:DH:6:ARG:NE	2.31	0.44
34:BG:22:LYS:HB3	34:BG:26:CYS:H	1.81	0.44
1:DA:2467:C:N4	1:DA:2468:G:N2	2.64	0.44
3:AD:242:ARG:H	3:AD:242:ARG:HD2	1.81	0.44
12:DP:26:TYR:C	12:DP:26:TYR:CD2	2.91	0.44
31:CA:1212:U:O2'	31:CA:1213:A:C8	2.69	0.44
10:DN:2:ILE:HD11	10:DN:82:ASN:CB	2.48	0.44
15:DR:23:ARG:HD3	15:DR:120:ARG:CZ	2.48	0.44
2:DB:45:A:C2	2:DB:46:A:H1'	2.53	0.44
34:BG:110:PHE:CD1	34:BG:110:PHE:N	2.86	0.44
39:CL:19:LEU:HA	39:CL:61:ALA:HA	1.99	0.44
39:CL:18:PHE:HD1	39:CL:62:TYR:HD2	1.64	0.44
34:CG:112:VAL:HG12	34:CG:116:GLN:OE1	2.18	0.44
1:AA:1945:G:H2'	1:AA:1946:U:C6	2.53	0.44
34:BG:89:THR:HG22	34:BG:204:ILE:HD11	1.99	0.44
2:AB:29:A:H2'	2:AB:30:C:O4'	2.18	0.44
49:BV:51:VAL:HG23	49:BV:60:VAL:CG1	2.48	0.44
21:DV:149:SER:HA	21:DV:172:ALA:O	2.18	0.44
31:BA:38:G:N2	31:BA:397:A:OP1	2.51	0.44
32:BE:11:LEU:HB3	32:BE:213:LEU:HD11	1.99	0.44
32:BE:7:VAL:HG23	32:BE:8:LYS:HZ1	1.82	0.44
1:DA:1992:G:C2'	1:DA:1993:U:OP2	2.66	0.44
1:DA:2331:G:O3'	22:D3:43:THR:HG22	2.18	0.44
1:AA:1799:G:H3'	1:AA:1799:G:P	2.58	0.44
38:BK:72:PRO:O	38:BK:73:ASP:HB3	2.18	0.44
31:CA:270:A:C6	31:CA:271:C:N3	2.85	0.44
21:DV:19:ARG:HD3	21:DV:84:GLU:HA	2.00	0.44
1:DA:1248:G:C4	16:D1:3:ARG:HB2	2.53	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:2078:C:H1'	1:DA:2434:A:N3	2.32	0.44
31:BA:49:U:O2'	31:BA:50:A:C2'	2.66	0.44
1:DA:2516:G:C5	1:DA:2517:C:C4	3.06	0.44
39:CL:78:LYS:NZ	39:CL:78:LYS:HB2	2.31	0.44
6:AG:9:ARG:O	6:AG:13:GLU:HG2	2.17	0.44
1:DA:1165:U:O4	56:DA:3427:OHX:N1	2.51	0.44
17:A2:49:THR:CB	17:A2:50:PRO:HD2	2.47	0.44
1:DA:1388:G:H2'	1:DA:1389:G:C8	2.53	0.44
6:DG:55:LYS:HZ1	6:DG:148:MET:HE2	1.83	0.44
31:CA:666:G:O6	56:CA:1755:OHX:N3	2.51	0.44
1:DA:481:G:C4	1:DA:507:A:C2	3.06	0.44
1:DA:950:G:H2'	1:DA:951:C:O4'	2.17	0.44
31:BA:719:C:H1'	48:BU:49:LYS:HB3	2.00	0.44
1:DA:2335:A:O2'	1:DA:2336:A:H2'	2.17	0.44
1:AA:2024:G:H2'	1:AA:2025:C:H6	1.82	0.44
1:AA:1177:A:C5'	1:AA:1178:C:OP1	2.66	0.44
13:A0:48:VAL:HG23	13:A0:49:ASP:N	2.33	0.44
1:DA:270:A:N6	1:DA:271(A):C:H41	2.15	0.44
31:BA:960:U:O2	31:BA:960:U:O2'	2.33	0.44
1:DA:572:A:H5''	1:DA:573:G:OP2	2.18	0.44
31:BA:615:C:N3	31:BA:616:G:N7	2.66	0.44
1:DA:552:G:C5	1:DA:553:U:C5	3.06	0.44
47:CT:56:VAL:O	47:CT:77:VAL:HG12	2.17	0.44
1:DA:2850:A:N3	1:DA:2851:A:C8	2.86	0.44
23:AZ:83:GLU:C	23:AZ:85:LEU:N	2.72	0.44
13:A0:25:ALA:O	13:A0:26:LYS:C	2.55	0.44
1:AA:2545:G:H2'	1:AA:2546:U:H5'	2.00	0.44
1:AA:447:A:C4	1:AA:473:G:N7	2.86	0.44
14:AQ:11:LYS:HD2	14:AQ:15:ARG:NH2	2.32	0.44
45:CR:9:GLN:O	45:CR:10:LYS:C	2.55	0.44
4:AE:5:LEU:HD22	4:AE:197:ILE:HG22	2.00	0.44
1:AA:2396:G:C2'	1:AA:2397:G:H5'	2.48	0.44
31:CA:438:G:O6	56:CA:1749:OHX:N4	2.51	0.44
43:CP:118:ALA:HB3	53:CC:30:G:C5'	2.48	0.44
1:AA:1600:C:C2'	1:AA:1601:G:H5'	2.47	0.44
1:AA:2473:U:C2'	1:AA:2473:U:O2	2.65	0.44
1:DA:2038:G:H2'	1:DA:2039:C:O4'	2.17	0.44
1:AA:1157:G:N3	1:AA:1157:G:H2'	2.32	0.44
31:BA:14:U:H2'	31:BA:16:A:OP2	2.18	0.44
1:AA:2732:G:H3'	1:AA:2733:A:C4'	2.48	0.44
1:DA:2087:G:O2'	1:DA:2088:G:H5'	2.17	0.44
18:AS:5:ALA:HB3	18:AS:54:ALA:HB2	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:500:G:N7	56:AA:3468:OHX:N6	2.66	0.44
40:BM:58:ASP:O	40:BM:59:SER:HB3	2.17	0.44
1:AA:2793:G:C6	1:AA:2794:C:C4	3.06	0.44
38:BK:44:PHE:HB3	38:BK:80:ILE:HG23	1.99	0.44
11:AO:51:PHE:CE2	11:AO:53:GLY:HA2	2.53	0.44
7:AH:94:TYR:CE2	7:AH:160:LYS:HG2	2.52	0.44
10:AN:9:GLU:O	10:AN:83:ALA:HA	2.18	0.44
5:AF:8:GLN:H	5:AF:8:GLN:CD	2.21	0.44
27:A5:9:LYS:HD3	27:A5:9:LYS:HA	1.83	0.44
1:DA:1589:C:H2'	1:DA:1590:U:H6	1.82	0.44
31:BA:682:G:C2	31:BA:709:G:C2	3.06	0.44
54:C1:21:C:C5	54:C1:22:A:N6	2.86	0.44
31:CA:1052:U:C5'	31:CA:1053:G:OP2	2.65	0.44
44:CQ:24:CYS:HB3	44:CQ:40:CYS:HB3	2.00	0.44
52:CD:20:C:C3'	52:CD:68:A:N6	2.77	0.44
1:AA:2307:G:C4	1:AA:2311:A:C2	3.05	0.44
5:DF:29:ASN:N	5:DF:112:MET:CE	2.81	0.44
5:DF:29:ASN:HA	5:DF:30:PRO:HD3	1.73	0.44
31:CA:502:G:C2	31:CA:503:C:O2	2.70	0.44
52:BD:18:G:H4'	52:BD:19:C:O5'	2.18	0.44
52:BD:15:G:H1'	52:BD:68:A:H2	1.83	0.44
52:BD:9:U:H2'	52:BD:9:U:O2	2.17	0.44
1:DA:631:A:N6	1:DA:632:A:N1	2.66	0.44
8:AK:130:TYR:O	8:AK:135:GLU:HB3	2.18	0.44
1:DA:90:U:C2'	1:DA:91:A:C5'	2.81	0.44
6:AG:112:PRO:HB3	26:A4:37:SER:OG	2.17	0.44
43:BP:22:ILE:HG22	43:BP:23:TYR:N	2.33	0.44
1:AA:2156:G:C4	1:AA:2157:G:N2	2.86	0.44
11:DO:100:LEU:O	11:DO:105:LEU:CD1	2.66	0.44
16:D1:98:LEU:HD13	16:D1:106:PHE:HB2	2.00	0.44
52:BB:9:U:H4'	52:BB:10:C:OP2	2.18	0.44
1:AA:1101:U:H2'	1:AA:1102:C:O4'	2.17	0.44
1:DA:1090:U:C5	1:DA:1091:G:C5	3.06	0.44
31:CA:1256:A:H61	31:CA:1277:C:H3'	1.80	0.44
31:CA:82:U:N3	31:CA:87:A:N6	2.43	0.44
14:DQ:89:ARG:O	14:DQ:90:GLY:C	2.56	0.44
1:AA:1803:A:H4'	3:AD:259:THR:HG23	1.97	0.44
23:DZ:92:LYS:HB3	23:DZ:93:GLU:H	1.58	0.44
52:CB:8:U:C4'	52:CB:58:G:OP2	2.66	0.44
1:DA:1054:A:N7	1:DA:1055:G:N7	2.66	0.44
52:CB:46:G:H3'	52:CB:47:U:C5	2.53	0.44
1:AA:993:G:C6	1:AA:1162:G:C6	3.06	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:57:G:H2'	31:BA:58:C:H6	1.82	0.44
46:BS:8:ARG:HB3	46:BS:28:ARG:HH12	1.79	0.44
12:DP:78:PRO:O	12:DP:79:LEU:HG	2.18	0.44
21:DV:95:PRO:HA	21:DV:128:VAL:O	2.18	0.44
31:BA:517:G:N7	56:BA:1791:OHX:N1	2.66	0.44
31:BA:515:G:N3	31:BA:537:G:C2	2.85	0.44
1:AA:2723:C:H4'	13:A0:1:MET:CE	2.46	0.44
1:DA:2311:A:C2	6:DG:44:GLY:HA2	2.53	0.44
24:AW:59:ARG:O	24:AW:63:VAL:HG23	2.18	0.44
1:DA:67:U:H1'	1:DA:88:G:N2	2.33	0.44
44:BQ:59:ALA:O	44:BQ:60:SER:CB	2.50	0.44
31:CA:416:G:H2'	31:CA:417:C:H6	1.83	0.44
31:CA:1240:U:H1'	37:CJ:38:LEU:CD2	2.48	0.44
31:CA:1402:C:H2'	31:CA:1403:C:O4'	2.17	0.44
1:DA:1480:G:C5'	1:DA:1482:U:OP2	2.65	0.44
50:BW:89:ARG:CD	50:BW:104:LEU:HD21	2.46	0.44
21:AV:44:PHE:CE1	21:AV:48:PHE:CG	3.06	0.44
1:AA:287:C:C2	1:AA:288:C:C5	3.06	0.44
8:DK:8:PRO:HD3	8:DK:15:VAL:HG23	2.00	0.44
32:BE:175:ARG:HA	32:BE:178:ARG:HB3	1.99	0.44
1:AA:2124:G:H1	1:AA:2174:C:H42	1.66	0.44
47:CT:67:LYS:HD3	47:CT:67:LYS:O	2.18	0.44
1:AA:2504:U:H2'	1:AA:2504:U:O2	2.18	0.44
1:AA:319:C:C6	1:AA:333:G:N2	2.86	0.44
2:DB:53:A:H2'	2:DB:53:A:N3	2.32	0.44
1:DA:1204:A:HO2'	1:DA:1205:U:P	2.36	0.44
1:AA:2623:G:H22	27:A5:22:HIS:HE1	1.61	0.44
1:DA:603:A:C8	1:DA:604:G:H1'	2.49	0.44
37:BJ:66:VAL:C	37:BJ:68:ASN:N	2.71	0.44
11:AO:85:LEU:O	11:AO:87:ASP:N	2.51	0.44
35:CH:6:PHE:HB3	35:CH:35:GLY:C	2.38	0.44
53:BC:56:U:O2	53:BC:58:A:N7	2.51	0.44
33:CF:52:LEU:CD2	33:CF:52:LEU:H	2.30	0.44
1:DA:1419:A:N6	1:DA:1421:G:C2	2.86	0.44
31:BA:108:G:C2	31:BA:109:A:H2	2.36	0.44
1:DA:1558:A:C4'	1:DA:1559:G:O5'	2.66	0.44
36:BI:19:LEU:HD11	36:BI:59:TYR:CE1	2.53	0.44
5:DF:203:GLN:NE2	5:DF:203:GLN:HA	2.30	0.44
21:AV:150:LEU:CD2	21:AV:154:ASP:HB2	2.48	0.44
31:CA:54:C:C5	31:CA:352:C:C5	3.05	0.44
39:BL:11:LYS:H	39:BL:104:ARG:NH2	2.16	0.44
1:DA:806:C:OP2	11:DO:41:ARG:HD3	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:CH:11:ILE:HD12	35:CH:31:LEU:CD1	2.47	0.44
31:BA:102:G:H2'	31:BA:103:C:H6	1.83	0.44
40:BM:81:THR:O	40:BM:85:LEU:HG	2.17	0.44
2:DB:3:C:C2	2:DB:118:G:N2	2.86	0.44
1:AA:1433:U:O2	1:AA:1561:G:C2	2.71	0.44
1:DA:1216:G:C2	1:DA:1217:C:C6	3.06	0.44
31:BA:746:A:C5	31:BA:747:C:C5	3.06	0.44
14:AQ:38:GLN:HG2	14:AQ:47:THR:CG2	2.48	0.44
31:BA:883:C:O2'	31:BA:884:U:H5'	2.18	0.44
31:CA:238:G:P	47:CT:25:ARG:HH22	2.41	0.44
1:DA:2532:G:H2'	1:DA:2533:A:O4'	2.17	0.44
1:DA:854:G:H2'	1:DA:855:G:H8	1.83	0.44
2:AB:8:U:O5'	2:AB:8:U:H6	2.01	0.44
31:BA:284:G:H2'	31:BA:285:G:C8	2.53	0.44
34:CG:54:TYR:CE1	34:CG:206:PHE:HE1	2.36	0.44
1:DA:1265:A:O4'	1:DA:1267:U:C6	2.71	0.44
36:CI:7:ASN:HB2	36:CI:89:MET:O	2.18	0.44
1:DA:1815:A:C5	1:DA:1817:G:C6	3.06	0.44
48:CU:51:LEU:HA	48:CU:52:PRO:HD2	1.90	0.44
26:A4:5:ILE:HG22	26:A4:5:ILE:O	2.18	0.44
17:D2:97:LYS:HA	17:D2:97:LYS:HD2	1.73	0.44
34:CG:79:PHE:CD2	34:CG:79:PHE:C	2.91	0.44
13:D0:54:LEU:HD23	13:D0:66:VAL:HG23	2.00	0.44
39:BL:44:VAL:HG23	39:BL:44:VAL:O	2.17	0.44
2:AB:10:C:N4	2:AB:11:C:N4	2.66	0.44
1:DA:227:A:C2	1:DA:2407:G:H1'	2.52	0.44
1:AA:2364:C:C2'	1:AA:2365:G:C5'	2.95	0.43
1:DA:881:G:O6	1:DA:895:U:O2	2.36	0.43
11:AO:26:GLY:O	11:AO:27:HIS:C	2.56	0.43
30:A8:23:VAL:HG11	30:A8:46:ARG:HD3	2.00	0.43
3:AD:32:SER:HA	3:AD:36:PRO:CD	2.48	0.43
44:CQ:27:CYS:O	44:CQ:28:GLY:C	2.57	0.43
1:AA:1535:U:C2	1:AA:1536:A:H3'	2.52	0.43
52:CD:21:A:H4'	52:CD:22:A:O5'	2.14	0.43
52:CD:49:A:N3	52:CD:49:A:H2'	2.33	0.43
7:AH:153:LYS:CB	7:AH:154:PRO:CD	2.96	0.43
1:AA:883:G:H2'	1:AA:884:C:H4'	1.99	0.43
34:CG:19:LEU:HB2	34:CG:21:LEU:HD11	2.00	0.43
52:BD:22:A:C2'	52:BD:22:A:N3	2.80	0.43
1:AA:607:U:H5	1:AA:619:G:C5	2.36	0.43
32:CE:166:ASP:HA	32:CE:167:PRO:HD3	1.77	0.43
1:DA:828:U:H3'	1:DA:828:U:O2	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:1392:G:C2'	31:BA:1393:U:H5'	2.48	0.43
31:BA:1503:A:C2'	31:BA:1504:G:O5'	2.57	0.43
16:D1:92:ARG:HE	16:D1:92:ARG:HB2	1.41	0.43
12:AP:19:GLY:C	12:AP:98:LYS:CD	2.87	0.43
1:DA:1022:G:N2	1:DA:1142(A):A:C2	2.82	0.43
1:DA:1899:G:H1	1:DA:1902:C:N4	2.16	0.43
1:DA:1899:G:O2'	1:DA:1900:A:H5''	2.18	0.43
31:CA:1128:C:N3	31:CA:1139:G:C6	2.86	0.43
31:BA:557:G:C6	31:BA:558:G:C6	3.06	0.43
1:AA:1019:U:O2	1:AA:1144:G:C2	2.71	0.43
47:BT:20:THR:HG23	47:BT:43:LEU:HD23	1.99	0.43
52:CB:16:C:H5	52:CB:69:U:H3	1.65	0.43
1:DA:1666:G:N2	1:DA:1995:U:C2	2.86	0.43
31:CA:1286:A:H3'	31:CA:1286:A:H8	1.83	0.43
31:BA:829:G:C2'	31:BA:830:G:H5'	2.48	0.43
31:BA:828:A:N7	31:BA:859:A:C8	2.86	0.43
31:CA:993:G:H2'	31:CA:995:C:N4	2.24	0.43
1:DA:620:G:OP2	1:DA:620:G:N2	2.39	0.43
43:CP:3:ARG:NH2	43:CP:7:VAL:HG12	2.33	0.43
15:DR:24:PRO:HB2	15:DR:99:LEU:HD11	1.99	0.43
1:DA:2304:G:N2	1:DA:2312:U:C4	2.79	0.43
31:CA:579:G:C6	31:CA:580:U:C4	3.06	0.43
5:DF:80:ALA:O	5:DF:82:ILE:N	2.51	0.43
4:DE:200:GLU:CD	4:DE:200:GLU:H	2.22	0.43
18:AS:8:ARG:O	18:AS:9:TYR:HB2	2.18	0.43
1:AA:1482:U:O4	1:AA:1510:A:C8	2.70	0.43
2:AB:50:G:P	14:AQ:63:THR:HG23	2.58	0.43
21:AV:52:SER:O	21:AV:53:ILE:HG12	2.18	0.43
5:DF:177:ALA:HB1	5:DF:178:PRO:CD	2.48	0.43
1:DA:2900:A:N6	1:DA:2901:C:C4	2.87	0.43
5:AF:78:ILE:HA	5:AF:83:PHE:CE1	2.53	0.43
31:BA:395:C:O2	31:BA:396:G:C8	2.71	0.43
21:AV:18:LEU:O	21:AV:23:LYS:HB2	2.18	0.43
1:AA:1652:A:N6	13:A0:11:ASN:OD1	2.51	0.43
32:BE:178:ARG:O	38:BK:71:GLY:HA2	2.17	0.43
15:AR:90:GLN:HG3	15:AR:91:ARG:N	2.32	0.43
31:BA:264:U:O2	47:BT:64:PRO:HG2	2.18	0.43
34:BG:198:VAL:CG1	34:BG:199:ASN:N	2.81	0.43
1:AA:1326:U:O2'	1:AA:1327:C:H5'	2.17	0.43
16:D1:11:ARG:CG	16:D1:11:ARG:NH1	2.79	0.43
1:AA:1454:U:OP1	13:A0:77:ARG:HD3	2.18	0.43
28:D6:35:GLU:O	28:D6:36:LEU:HB2	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1386:C:OP2	1:DA:1396:U:H5	2.00	0.43
24:AW:31:GLU:O	24:AW:35:LEU:CD2	2.66	0.43
31:CA:757:U:O2'	31:CA:879:C:H1'	2.18	0.43
20:AU:90:LEU:CD1	20:AU:90:LEU:N	2.81	0.43
32:CE:31:TYR:N	32:CE:31:TYR:CD2	2.84	0.43
19:DT:80:ILE:CG1	19:DT:80:ILE:O	2.64	0.43
1:AA:1131:G:N7	9:AM:75:TYR:CD2	2.86	0.43
1:DA:270(P):C:H6	1:DA:270(P):C:O5'	2.01	0.43
31:CA:1292:U:OP1	37:CJ:41:ARG:NH2	2.51	0.43
22:D3:72:ARG:HH21	22:D3:75:LEU:HD13	1.81	0.43
1:AA:2205:C:H42	1:AA:2219:G:H1	1.66	0.43
34:BG:135:LEU:HD13	34:BG:135:LEU:N	2.33	0.43
1:DA:654(D):G:H2'	1:DA:654(E):C:H6	1.81	0.43
1:DA:1252:G:OP2	16:D1:14:HIS:NE2	2.50	0.43
1:AA:658:C:C2	1:AA:659:C:C5	3.05	0.43
31:CA:852:G:H2'	31:CA:853:G:C5'	2.47	0.43
21:AV:63:ASP:HB2	21:AV:64:GLY:CA	2.48	0.43
21:AV:63:ASP:HB2	21:AV:64:GLY:C	2.39	0.43
1:DA:988:A:H2'	1:DA:989:G:O5'	2.16	0.43
1:AA:1614:A:H61	18:AS:88:ARG:H	1.65	0.43
1:DA:1465:G:C2	1:DA:1466:G:N9	2.86	0.43
35:CH:79:GLU:HG3	35:CH:93:PRO:HD2	2.00	0.43
3:AD:214:TRP:N	3:AD:214:TRP:CD1	2.85	0.43
1:AA:116:C:H2'	1:AA:117:G:O5'	2.18	0.43
31:CA:694:A:H2'	31:CA:695:A:O4'	2.17	0.43
31:BA:686:U:O4	31:BA:703:G:H1'	2.16	0.43
31:CA:157:G:O6	56:CA:1742:OHX:N1	2.50	0.43
8:AK:120:ILE:HA	8:AK:120:ILE:HD12	1.93	0.43
1:AA:185:U:H2'	1:AA:186:G:O4'	2.18	0.43
42:BO:83:VAL:HG13	42:BO:84:LEU:N	2.32	0.43
36:BI:55:ASP:HA	36:BI:56:PRO:HD3	1.83	0.43
3:AD:121:PRO:HD3	3:AD:190:TYR:OH	2.18	0.43
1:DA:921:G:H2'	1:DA:922:U:H6	1.83	0.43
1:AA:399:G:H2'	1:AA:400:G:O5'	2.18	0.43
32:BE:142:LEU:O	32:BE:142:LEU:HD23	2.17	0.43
1:DA:765:G:H2'	1:DA:766:C:C6	2.53	0.43
31:CA:160:A:O5'	31:CA:160:A:H8	2.01	0.43
1:AA:2774:C:H2'	1:AA:2775:A:O4'	2.17	0.43
1:AA:748:G:C8	18:AS:89:ALA:HB1	2.53	0.43
4:DE:108:SER:OG	4:DE:163:GLU:HG3	2.18	0.43
8:AK:115:ALA:C	8:AK:117:GLU:H	2.21	0.43
39:CL:40:LEU:HD12	39:CL:71:SER:OG	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:CE:41:ILE:O	32:CE:41:ILE:HG22	2.17	0.43
32:CE:136:VAL:O	32:CE:136:VAL:HG12	2.18	0.43
37:BJ:67:GLU:O	37:BJ:67:GLU:HG3	2.18	0.43
31:BA:1110:A:H8	31:BA:1110:A:O5'	2.01	0.43
34:BG:38:TYR:HB2	34:BG:39:PRO:HD2	2.00	0.43
31:BA:1248:A:C5	31:BA:1249:C:C5	3.06	0.43
4:DE:42:ASP:HB2	4:DE:43:GLY:HA2	0.62	0.43
31:CA:1065:U:C5	31:CA:1190:G:N3	2.86	0.43
1:AA:1312:U:C6	1:AA:1312:U:H5'	2.53	0.43
6:DG:5:VAL:HG13	26:D4:23:GLU:OE1	2.18	0.43
1:AA:893:C:H2'	1:AA:893:C:O2	2.18	0.43
31:BA:1004:A:OP1	31:BA:1025:U:N3	2.51	0.43
1:AA:864:G:C6	1:AA:865:C:N4	2.86	0.43
31:CA:504:C:C2	31:CA:542:G:C2	3.06	0.43
31:BA:944:G:C6	31:BA:1337:G:H2'	2.53	0.43
1:AA:783:A:H2'	1:AA:784:A:H5'	1.99	0.43
31:BA:1199:U:H4'	40:BM:54:PHE:CD2	2.53	0.43
31:BA:1198:G:O2'	40:BM:54:PHE:HD2	2.01	0.43
31:BA:141:A:C2	31:BA:142:G:C4	3.07	0.43
11:AO:38:GLN:NE2	11:AO:38:GLN:CA	2.78	0.43
16:D1:92:ARG:O	16:D1:94:ASN:N	2.48	0.43
1:AA:1085:A:C4'	1:AA:1086:A:OP1	2.66	0.43
1:AA:1090:U:C4	1:AA:1102:C:O2	2.71	0.43
37:BJ:31:MET:CE	37:BJ:36:LYS:HG2	2.47	0.43
1:AA:2688:U:H3'	1:AA:2688:U:O2	2.18	0.43
1:AA:2689:U:C4'	1:AA:2690:C:OP2	2.66	0.43
14:DQ:109:GLY:C	14:DQ:110:LEU:HD13	2.38	0.43
1:DA:2469:A:N7	1:DA:2482:G:N7	2.66	0.43
12:DP:79:LEU:O	12:DP:81:VAL:HG13	2.18	0.43
1:DA:1417:C:O2'	1:DA:1587:A:N3	2.48	0.43
15:DR:51:ARG:HE	15:DR:62:THR:HG21	1.82	0.43
31:BA:1322:C:H2'	31:BA:1322:C:O2	2.18	0.43
2:DB:46:A:C5	2:DB:47:C:C4	3.06	0.43
31:CA:579:G:C4	31:CA:580:U:C5	3.06	0.43
24:AW:14:ARG:HG3	24:AW:63:VAL:CG1	2.48	0.43
1:DA:34:C:O2	1:DA:35:G:N7	2.51	0.43
31:CA:418:C:H2'	31:CA:419:C:O4'	2.18	0.43
32:CE:79:ASP:C	32:CE:81:VAL:N	2.70	0.43
32:CE:185:ILE:HD13	32:CE:185:ILE:H	1.83	0.43
31:CA:1402:C:N4	54:C1:18:G:OP2	2.49	0.43
31:CA:1394:A:N6	31:CA:1501:C:H5'	2.33	0.43
1:DA:2738:A:OP2	56:DA:3379:OHX:N3	2.50	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:D5:57:VAL:CG1	27:D5:58:LEU:H	2.20	0.43
33:BF:9:GLY:HA2	33:BF:12:LEU:HG	2.00	0.43
33:BF:15:THR:CG2	33:BF:181:ASN:HA	2.47	0.43
12:AP:69:PHE:HA	12:AP:70:PRO:HD2	1.61	0.43
31:BA:167:G:C2'	31:BA:168:G:H5'	2.48	0.43
21:AV:39:VAL:HG23	21:AV:40:ASP:N	2.32	0.43
1:DA:310:A:OP1	20:DU:18:GLY:HA2	2.17	0.43
52:CD:80:C:H4'	1:DA:1851:U:H4'	2.00	0.43
4:DE:116:VAL:HG12	4:DE:116:VAL:O	2.17	0.43
43:CP:32:GLU:C	43:CP:32:GLU:OE2	2.57	0.43
22:D3:51:VAL:N	22:D3:62:LEU:HD12	2.33	0.43
31:BA:262:A:N3	31:BA:262:A:H2'	2.33	0.43
31:CA:51:A:C2	31:CA:353:A:N1	2.86	0.43
47:CT:22:LEU:CD1	47:CT:39:SER:HB2	2.46	0.43
34:BG:199:ASN:C	34:BG:201:GLN:N	2.69	0.43
39:CL:43:ALA:C	39:CL:45:ALA:H	2.18	0.43
53:BC:58:A:H2'	53:BC:59:A:H5'	2.01	0.43
31:CA:953:G:C5	31:CA:954:G:C8	3.07	0.43
31:CA:664:G:H2'	31:CA:666:G:OP1	2.19	0.43
41:CN:93:GLN:NE2	41:CN:93:GLN:HA	2.27	0.43
32:BE:200:ILE:O	32:BE:201:ILE:HD13	2.18	0.43
1:AA:1205:U:H4'	1:AA:1206:G:OP2	2.18	0.43
6:AG:135:LEU:HD23	6:AG:140:ILE:HD11	2.00	0.43
32:CE:172:ILE:H	32:CE:172:ILE:CD1	2.28	0.43
1:AA:1173:G:H4'	1:AA:1174:A:H2	1.83	0.43
1:AA:1173:G:C2	1:AA:1175:U:O4	2.70	0.43
12:DP:103:MET:HG3	12:DP:103:MET:H	1.59	0.43
36:BI:96:PRO:HB3	48:BU:30:ASP:OD1	2.18	0.43
31:CA:115:G:C2	31:CA:289:G:N7	2.86	0.43
31:BA:278:G:N2	47:BT:95:TYR:HB3	2.33	0.43
25:AX:39:ASP:O	25:AX:39:ASP:OD1	2.37	0.43
1:DA:864:G:OP2	12:DP:22:LYS:HE2	2.18	0.43
18:AS:32:ALA:O	18:AS:36:LEU:HG	2.18	0.43
22:A3:41:ARG:O	22:A3:57:PHE:HD2	2.01	0.43
46:BS:6:LEU:CD1	46:BS:6:LEU:N	2.81	0.43
7:DH:128:PRO:C	7:DH:129:THR:HG1	2.17	0.43
1:AA:2436:G:C4	1:AA:2437:U:C5	3.05	0.43
1:DA:142:G:H2'	1:DA:143:C:C6	2.54	0.43
31:CA:167:G:C2	31:CA:168:G:C5	3.06	0.43
31:CA:605:U:H2'	31:CA:605:U:O2	2.18	0.43
1:DA:1925:C:C2'	1:DA:1926:U:H5'	2.48	0.43
31:CA:692:U:O4	41:CN:53:SER:HA	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:1433:A:C4	31:BA:1468:A:C2	3.06	0.43
53:BC:67:C:H6	53:BC:67:C:O5'	2.01	0.43
31:CA:640:A:H2'	31:CA:641:U:H5'	1.99	0.43
43:BP:101:GLN:HE21	43:BP:101:GLN:HB2	1.67	0.43
1:AA:1655:A:H3'	1:AA:1656:C:C6	2.53	0.43
3:AD:221:VAL:HG22	3:AD:226:MET:CE	2.48	0.43
1:DA:2462:U:H2'	1:DA:2463:C:O4'	2.18	0.43
1:AA:60:G:C8	1:AA:63:U:C5	3.07	0.43
1:AA:586:A:C2	1:AA:1254:A:C2	3.06	0.43
1:AA:1388:G:O2'	1:AA:1389:G:H5'	2.18	0.43
1:AA:2830:G:C8	1:AA:2830:G:C5'	3.01	0.43
16:D1:74:LEU:HD22	16:D1:79:PHE:HB2	2.00	0.43
31:CA:658:G:H2'	31:CA:659:U:H6	1.83	0.43
18:DS:4:LYS:CB	18:DS:106:ILE:HG22	2.48	0.43
1:AA:1483:G:H2'	1:AA:1484:G:H8	1.83	0.43
4:DE:13:ARG:HA	4:DE:21:VAL:O	2.19	0.43
31:BA:1416:G:C6	31:BA:1417:G:C5	3.06	0.43
1:AA:144:C:H2'	1:AA:145:G:H8	1.83	0.43
31:BA:248:C:O2	31:BA:248:C:H2'	2.16	0.43
10:DN:32:TYR:CD1	10:DN:32:TYR:N	2.86	0.43
1:DA:1513:C:H2'	1:DA:1513:C:O2	2.18	0.43
1:DA:1985:G:OP2	56:DA:3081:OHX:N2	2.50	0.43
1:AA:2741:A:H2'	1:AA:2742:C:O4'	2.18	0.43
27:A5:54:GLY:O	27:A5:55:ARG:C	2.56	0.43
28:A6:25:LYS:CB	30:A8:34:TRP:HE1	2.31	0.43
1:DA:2807:G:H22	1:DA:2893:G:H1	1.65	0.43
1:AA:2415:G:H4'	11:AO:66:GLY:C	2.38	0.43
44:CQ:24:CYS:SG	44:CQ:24:CYS:O	2.77	0.43
40:CM:46:ARG:NH1	44:CQ:61:TRP:CH2	2.86	0.43
49:CV:41:VAL:C	49:CV:43:GLU:H	2.21	0.43
1:AA:1292:U:H2'	1:AA:1293:C:H6	1.82	0.43
1:AA:1535:U:C3'	1:AA:1536:A:H5''	2.42	0.43
5:DF:148:LEU:HD23	5:DF:191:ARG:NH1	2.33	0.43
1:AA:1060:U:H5'	1:AA:1061:U:C5	2.53	0.43
52:BD:16:C:H41	52:BD:68:A:C2'	2.29	0.43
31:BA:1341:U:H3'	31:BA:1341:U:H6	1.83	0.43
31:CA:1442:G:H2'	31:CA:1443:G:O5'	2.19	0.43
1:DA:2780:G:C3'	1:DA:2781:A:H5'	2.48	0.43
30:D8:49:VAL:CA	30:D8:50:LEU:HD22	2.47	0.43
26:A4:16:CYS:CB	26:A4:36:CYS:H	2.28	0.43
11:DO:83:VAL:O	11:DO:114:ILE:HD12	2.18	0.43
52:BB:21:A:H2	52:BB:56:U:O2	2.01	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1964:G:H4'	1:DA:1965:C:OP2	2.18	0.43
2:AB:112:G:H2'	2:AB:113:C:C6	2.53	0.43
2:AB:7:G:C8	2:AB:7:G:H5'	2.53	0.43
16:A1:92:ARG:CD	16:A1:95:LEU:HD12	2.48	0.43
31:BA:1187:G:P	39:BL:113:LYS:HZ2	2.41	0.43
45:BR:78:TYR:CD2	45:BR:79:ARG:N	2.86	0.43
31:CA:1129:C:C5	31:CA:1141:C:N4	2.85	0.43
31:BA:1153:C:P	40:BM:13:HIS:HE1	2.41	0.43
31:BA:1141:C:C2'	31:BA:1142:G:H5'	2.48	0.43
1:AA:1888:G:C3'	1:AA:1888:G:N3	2.81	0.43
1:AA:1144:G:C5	1:AA:1145:C:C5	3.06	0.43
31:BA:735:C:H1'	48:BU:75:ILE:HD11	1.99	0.43
1:AA:1465:G:H5'	1:AA:1528:A:H1'	2.00	0.43
31:CA:1004:A:H1'	31:CA:1036:G:N1	2.33	0.43
9:DM:10:GLU:CG	9:DM:11:PRO:HD2	2.38	0.43
39:CL:4:TYR:CD2	39:CL:19:LEU:HD12	2.53	0.43
39:CL:53:VAL:HG11	39:CL:92:TYR:CD2	2.53	0.43
31:CA:1239:A:H4'	31:CA:1240:U:C5'	2.48	0.43
48:CU:58:LEU:N	48:CU:58:LEU:HD12	2.19	0.43
4:AE:102:VAL:N	4:AE:170:LEU:O	2.51	0.43
1:AA:303:U:H2'	1:AA:304:G:C8	2.53	0.43
1:AA:36:G:C2'	1:AA:37:C:H5'	2.48	0.43
31:CA:64:G:H3'	31:CA:64:G:OP1	2.18	0.43
13:D0:63:ARG:O	13:D0:67:LEU:HB2	2.18	0.43
49:BV:52:TYR:CE1	49:BV:56:GLN:HA	2.54	0.43
1:DA:2129:C:C4	1:DA:2130:U:C4	3.06	0.43
15:AR:51:ARG:CB	15:AR:98:LYS:HD3	2.42	0.43
32:BE:238:LEU:HD12	32:BE:238:LEU:H	1.83	0.43
1:DA:2298:A:C2	1:DA:2321:G:C4	3.07	0.43
32:BE:223:ILE:C	32:BE:225:ALA:H	2.21	0.43
1:AA:857:C:N4	1:AA:858:U:O4	2.51	0.43
1:AA:2126:A:C5	1:AA:2162:G:N2	2.86	0.43
1:AA:2712:U:O2'	1:AA:2712(A):A:O5'	2.32	0.43
34:CG:101:LEU:HB2	34:CG:138:TYR:HB3	2.00	0.43
15:AR:74:ARG:HD3	15:AR:76:PHE:CE2	2.52	0.43
39:BL:95:LYS:HB2	39:BL:95:LYS:HE2	1.57	0.43
6:AG:28:VAL:O	6:AG:31:VAL:CG1	2.67	0.43
1:DA:2711:A:OP1	1:DA:2712(A):A:OP2	2.36	0.43
1:DA:26:G:OP1	18:DS:80:PRO:HB3	2.19	0.43
31:CA:465:A:N6	31:CA:467:G:C2	2.86	0.43
1:DA:1344:G:H4'	1:DA:1384:A:N7	2.32	0.43
8:DK:97:ILE:O	8:DK:100:ALA:HB3	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:2335:A:C8	1:DA:2337:G:N7	2.86	0.43
14:AQ:58:LEU:N	14:AQ:58:LEU:HD23	2.28	0.43
18:AS:82:LEU:HD12	18:AS:84:ARG:CZ	2.48	0.43
36:BI:62:TRP:C	36:BI:63:TYR:HD2	2.22	0.43
1:DA:1614:A:H61	18:DS:88:ARG:H	1.66	0.43
15:DR:15:VAL:HG23	15:DR:16:ARG:N	2.33	0.43
22:D3:11:ARG:O	22:D3:14:ARG:NH2	2.51	0.43
31:CA:1518:A:H5''	31:CA:1519:A:OP2	2.17	0.43
21:AV:76:LEU:O	21:AV:76:LEU:HD23	2.19	0.43
1:AA:1491:G:H5'	3:AD:99:ASP:OD1	2.18	0.43
31:CA:1074:G:O3'	32:CE:103:THR:CG2	2.66	0.43
31:BA:292:G:C2	31:BA:309:G:N3	2.85	0.43
33:CF:134:ILE:HG23	33:CF:151:VAL:HB	2.00	0.43
1:AA:107:C:C2'	1:AA:107:C:O2	2.63	0.43
1:AA:1298:C:N4	1:AA:1299:G:C6	2.86	0.43
1:DA:552:G:C5	1:DA:553:U:C4	3.06	0.43
7:DH:130:ARG:O	7:DH:131:VAL:HG23	2.18	0.43
36:BI:15:ASP:O	36:BI:18:GLN:N	2.51	0.43
26:D4:10:VAL:CG1	26:D4:10:VAL:O	2.66	0.43
31:BA:101:A:C6	31:BA:102:G:N7	2.86	0.43
31:BA:1031:G:C6	31:BA:1032:A:N6	2.86	0.43
13:D0:29:LEU:HA	13:D0:29:LEU:HD12	1.82	0.43
1:AA:2814:C:C5	1:AA:2815:C:C5	3.06	0.43
46:CS:14:ASN:O	46:CS:16:HIS:ND1	2.51	0.43
16:A1:111:GLU:C	16:A1:113:ALA:H	2.21	0.43
31:CA:145:G:H2'	31:CA:146:G:O5'	2.18	0.43
31:CA:176:C:O2'	31:CA:177:C:H5'	2.18	0.43
23:AZ:67:ILE:N	23:AZ:68:PRO:CD	2.82	0.43
31:BA:1165:C:N4	31:BA:1166:G:C6	2.87	0.43
1:DA:372:G:O2'	1:DA:400:G:O6	2.35	0.43
1:DA:383:U:C2	1:DA:385:C:C4	3.06	0.43
1:DA:1507:A:H5''	1:DA:1508:A:OP2	2.18	0.43
1:DA:1792:G:H5'	3:DD:205:VAL:HG13	2.00	0.43
7:AH:117:PRO:HB3	7:AH:123:PHE:CE1	2.52	0.43
33:BF:59:ARG:HA	33:BF:63:ASN:O	2.18	0.43
7:DH:80:SER:O	7:DH:81:GLU:HB2	2.19	0.43
19:AT:3:THR:HG22	19:AT:6:ASP:OD2	2.19	0.43
38:BK:58:TYR:O	38:BK:59:LEU:HD23	2.18	0.43
5:AF:183:VAL:O	5:AF:187:VAL:HG23	2.18	0.43
40:CM:44:VAL:HG12	40:CM:44:VAL:O	2.18	0.43
18:DS:70:TYR:H	18:DS:70:TYR:HD2	1.65	0.43
6:DG:18:GLU:HG3	6:DG:18:GLU:O	2.17	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:CN:14:VAL:HG12	41:CN:14:VAL:O	2.19	0.43
2:DB:49:C:OP1	14:DQ:97:ARG:HG3	2.18	0.43
18:DS:75:TYR:CZ	18:DS:104:THR:HG21	2.53	0.43
17:A2:62:LEU:CD2	17:A2:95:LEU:HB2	2.49	0.43
9:DM:17:ASP:C	9:DM:55:VAL:CG2	2.83	0.43
4:DE:66:HIS:HB3	4:DE:68:ALA:H	1.82	0.43
3:AD:35:LYS:CG	3:AD:64:ILE:HG23	2.47	0.43
1:DA:587:C:C6	1:DA:671:C:H1'	2.54	0.43
40:CM:46:ARG:NH2	44:CQ:61:TRP:CH2	2.87	0.43
3:DD:33:LEU:CD2	3:DD:34:VAL:N	2.82	0.43
52:CD:48:C:N4	52:CD:52:G:H1	2.11	0.43
1:DA:617:G:H5'	5:DF:40:GLN:NE2	2.33	0.43
1:AA:889:C:H5''	1:AA:890:A:P	2.58	0.43
1:AA:1372:U:O5'	1:AA:1372:U:H6	2.00	0.43
39:CL:10:ARG:HH21	39:CL:11:LYS:CE	2.31	0.43
32:CE:75:LYS:C	32:CE:77:ALA:H	2.22	0.43
15:AR:108:ARG:CA	15:AR:111:ARG:NE	2.80	0.43
31:CA:686:U:O4	31:CA:703:G:H1'	2.18	0.43
1:DA:2627:G:N3	1:DA:2781:A:C2	2.85	0.43
1:DA:1065:U:C2	1:DA:1074:G:N2	2.86	0.43
16:A1:92:ARG:O	16:A1:92:ARG:HD3	2.18	0.43
31:CA:1129:C:N4	31:CA:1141:C:N4	2.62	0.43
2:DB:14:U:O2'	2:DB:107:U:C2'	2.64	0.43
34:BG:206:PHE:HD2	34:BG:207:TYR:CE1	2.36	0.43
14:DQ:84:GLN:CB	14:DQ:110:LEU:H	2.31	0.43
32:BE:20:GLU:HB2	32:BE:190:THR:HG1	1.81	0.43
19:DT:21:PHE:HE1	19:DT:26:TYR:HD2	1.66	0.43
1:AA:1142(A):A:C8	1:AA:1144:G:C6	3.07	0.43
31:BA:253:U:H2'	31:BA:254:G:H8	1.84	0.43
12:DP:32:TYR:O	12:DP:105:GLU:HB3	2.18	0.43
1:AA:1899:G:O2'	1:AA:1900:A:OP2	2.27	0.43
1:DA:1342:A:C5	1:DA:1397:U:C6	3.06	0.43
31:CA:527:G:H2'	31:CA:528:C:H5'	2.00	0.43
15:DR:52:ILE:H	15:DR:98:LYS:HZ2	1.66	0.43
42:CO:26:ALA:HA	42:CO:98:TYR:HE2	1.83	0.43
10:DN:48:PRO:HB2	10:DN:49:ARG:HD3	2.01	0.43
1:AA:2811:G:H2'	1:AA:2812:G:O4'	2.19	0.43
1:AA:2786:U:O2'	4:AE:62:PRO:HA	2.19	0.43
52:BB:23:A:H8	52:BB:23:A:OP2	2.00	0.43
32:BE:88:ALA:HB2	32:BE:219:VAL:CG1	2.36	0.43
31:CA:245:C:H6	31:CA:245:C:O5'	2.02	0.43
33:CF:8:ILE:C	33:CF:10:PHE:N	2.71	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:BE:162:ILE:CG1	32:BE:184:VAL:HG22	2.48	0.43
21:DV:39:VAL:HG23	21:DV:40:ASP:N	2.32	0.43
50:CW:33:ILE:O	50:CW:33:ILE:HG22	2.17	0.43
1:AA:2837:G:C6	1:AA:2838:G:N7	2.87	0.43
35:BH:153:LYS:N	38:BK:64:LYS:HZ1	2.13	0.43
1:DA:1535:U:C2'	1:DA:1535:U:O2	2.65	0.43
31:CA:940:C:H2'	31:CA:941:G:C8	2.51	0.43
31:BA:1508:G:H2'	31:BA:1509:C:H6	1.83	0.43
39:CL:33:PHE:CE2	39:CL:47:LEU:HD23	2.51	0.43
32:CE:141:GLU:C	32:CE:143:GLU:H	2.22	0.43
15:AR:30:VAL:HG11	15:AR:76:PHE:CE1	2.54	0.43
31:CA:465:A:N6	31:CA:467:G:N1	2.67	0.43
1:DA:1386:C:H2'	1:DA:1387:C:C6	2.51	0.43
1:DA:2599:G:H8	3:DD:236:GLY:HA2	1.83	0.43
8:AK:100:ALA:O	8:AK:102:SER:N	2.51	0.43
1:DA:327:G:C2	1:DA:336:C:C2	3.07	0.43
52:BB:44:C:H2'	52:BB:45:C:O4'	2.18	0.43
1:AA:633:A:C8	1:AA:633:A:H3'	2.54	0.43
1:DA:2335:A:O2'	1:DA:2336:A:O5'	2.32	0.43
52:BD:2:G:N2	52:BD:81:C:C2	2.86	0.43
1:AA:1173:G:C6	1:AA:1175:U:O4	2.71	0.43
31:CA:152:A:N6	31:CA:170:U:C2	2.86	0.43
1:DA:288:C:O2	1:DA:288:C:H2'	2.18	0.43
42:BO:44:THR:HA	42:BO:45:PRO:HD3	1.83	0.43
31:BA:106:C:HO2'	31:BA:107:G:H5'	1.82	0.43
52:CD:9:U:O2	52:CD:9:U:C2'	2.65	0.43
27:D5:36:CYS:SG	27:D5:49:CYS:HB3	2.58	0.43
31:CA:491:G:H2'	31:CA:492:G:O4'	2.18	0.43
1:AA:2869:G:C5	1:AA:2870:C:C5	3.06	0.43
2:DB:24:G:H2'	2:DB:24:G:OP2	2.17	0.43
38:CK:103:VAL:HG21	38:CK:110:ALA:HB2	2.00	0.43
31:BA:758:G:H2'	31:BA:759:A:OP2	2.18	0.43
31:CA:745:C:H1'	31:CA:836:G:O2'	2.19	0.43
31:BA:1014:A:H4'	49:BV:14:HIS:CG	2.53	0.43
32:CE:28:PHE:CD1	32:CE:28:PHE:O	2.72	0.43
14:AQ:106:ARG:O	14:AQ:106:ARG:CZ	2.66	0.43
31:CA:692:U:O2	31:CA:695:A:C8	2.72	0.43
31:BA:746:A:H4'	31:BA:837:G:O2'	2.18	0.43
1:AA:699:A:H61	1:AA:733:G:H1'	1.83	0.43
31:CA:799:G:O6	31:CA:800:G:C2	2.70	0.43
37:BJ:147:ALA:O	37:BJ:149:ARG:N	2.51	0.43
33:BF:150:LYS:HE3	33:BF:152:ILE:HD11	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AB:83:G:H4'	25:AX:52:HIS:CG	2.53	0.43
48:CU:87:ARG:O	48:CU:88:LYS:HB2	2.18	0.43
1:AA:1036:G:H2'	1:AA:1037:G:O4'	2.18	0.43
1:DA:1632:A:N6	1:DA:1633:G:N1	2.66	0.43
31:CA:52:G:C6	31:CA:53:A:C5	3.06	0.43
21:AV:101:PRO:O	21:AV:102:LEU:HD23	2.18	0.43
5:DF:93:LYS:HB3	5:DF:94:PRO:HD2	2.00	0.43
31:CA:1474:G:N7	56:CA:1764:OHX:N5	2.66	0.43
23:DZ:81:LYS:O	23:DZ:81:LYS:HG3	2.19	0.43
1:AA:2006:C:H6	1:AA:2006:C:O5'	2.01	0.43
1:DA:790:C:H6	1:DA:790:C:H2'	1.42	0.43
31:CA:1381:U:O2	31:CA:1381:U:C2'	2.66	0.43
1:AA:618:G:N2	1:AA:618(A):C:H1'	2.34	0.43
7:AH:35:VAL:O	7:AH:37:VAL:HG23	2.19	0.43
42:BO:42:THR:O	42:BO:43:VAL:HG13	2.17	0.43
31:CA:887:G:O6	56:CA:1790:OHX:N5	2.51	0.43
31:CA:886:G:N7	56:CA:1790:OHX:N4	2.66	0.43
1:DA:2617:C:C2	1:DA:2618:G:C8	3.06	0.43
4:DE:51:PHE:CE2	4:DE:52:LEU:HG	2.53	0.43
11:AO:62:LEU:HD21	30:A8:25:MET:HB2	1.99	0.43
1:DA:947:G:H2'	1:DA:948:G:C8	2.53	0.43
31:CA:1206:G:H4'	33:CF:193:TYR:N	2.34	0.43
43:CP:82:MET:SD	43:CP:83:ASP:CG	2.97	0.43
3:DD:33:LEU:HD23	3:DD:34:VAL:N	2.34	0.43
1:AA:1536:A:C2'	1:AA:1537:C:OP1	2.67	0.43
6:DG:10:LYS:O	6:DG:14:GLU:HB3	2.17	0.43
1:AA:889:C:H5''	1:AA:890:A:OP2	2.18	0.43
1:AA:1069:A:C6	1:AA:1073:A:N7	2.86	0.43
52:BD:37:A:H2'	52:BD:38:MIA:O4'	2.19	0.43
52:BD:21:A:C6	52:BD:55:U:O4	2.71	0.43
15:AR:107:ASP:C	15:AR:109:GLU:N	2.68	0.43
1:DA:2391:G:O5'	30:D8:32:LEU:HD12	2.17	0.43
26:A4:15:ILE:O	26:A4:33:VAL:HB	2.18	0.43
6:AG:112:PRO:HB3	26:A4:37:SER:CB	2.49	0.43
26:A4:37:SER:OG	26:A4:42:PHE:CD1	2.69	0.43
6:AG:144:ILE:HG22	6:AG:145:THR:N	2.33	0.43
1:AA:1934:C:N4	56:AA:3561:OHX:N5	2.67	0.43
1:DA:994:C:OP1	16:D1:53:ARG:NH2	2.51	0.43
16:A1:92:ARG:HD2	17:A2:11:GLN:HB2	2.00	0.43
52:CB:48:C:H2'	52:CB:49:A:N9	2.33	0.43
3:AD:241:PRO:O	3:AD:242:ARG:C	2.57	0.43
1:DA:872:A:H2'	1:DA:873:G:C8	2.54	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:DP:19:GLY:C	12:DP:98:LYS:HD2	2.39	0.43
1:DA:2312:U:C3'	1:DA:2313:C:H5'	2.48	0.43
2:DB:41:U:OP1	2:DB:42:C:H5	2.01	0.43
1:DA:1002:G:N7	56:DA:3438:OHX:N1	2.66	0.43
8:AK:33:ARG:C	8:AK:35:LEU:N	2.72	0.43
31:CA:1503:A:N6	54:C1:12:A:C2	2.87	0.43
1:AA:40:C:OP1	56:AA:3383:OHX:N5	2.51	0.43
1:DA:2656:U:N3	1:DA:2665:A:H2	2.07	0.43
31:BA:439:A:OP2	31:BA:493:G:C2	2.71	0.43
31:BA:491:G:C4	31:BA:492:G:C8	3.06	0.43
31:BA:992:U:C1'	31:BA:993:G:OP2	2.60	0.43
30:D8:54:GLU:CG	30:D8:57:ARG:HH21	2.32	0.43
6:DG:162:THR:O	6:DG:162:THR:OG1	2.28	0.43
52:BB:83:C:H2'	52:BB:84:C:C5'	2.39	0.43
20:AU:96:ILE:CG2	20:AU:101:LYS:HG2	2.47	0.43
34:CG:108:LEU:HD12	34:CG:108:LEU:HA	1.80	0.43
1:AA:2262:U:H2'	1:AA:2263:C:H6	1.83	0.43
28:D6:27:LYS:NZ	28:D6:27:LYS:HB2	2.33	0.43
31:BA:232:G:H1'	31:BA:262:A:N1	2.33	0.43
15:DR:80:SER:H	15:DR:83:ILE:HD12	1.83	0.43
21:DV:48:PHE:CE1	21:DV:52:SER:HB2	2.52	0.43
31:CA:1153:C:N3	31:CA:1154:G:N7	2.66	0.43
21:AV:169:GLU:O	21:AV:170:THR:HG23	2.18	0.43
6:DG:55:LYS:HZ2	6:DG:58:GLN:HE22	1.66	0.43
18:AS:17:VAL:C	18:AS:19:LEU:N	2.72	0.43
48:CU:29:PHE:HD1	48:CU:39:VAL:HG11	1.82	0.43
52:CB:4:G:C2	52:CB:79:A:C6	3.05	0.43
23:AZ:78:LYS:HD2	23:AZ:78:LYS:H	1.84	0.43
18:AS:82:LEU:HD12	18:AS:84:ARG:NH2	2.34	0.43
38:CK:6:ILE:O	38:CK:7:ALA:C	2.57	0.43
31:BA:595:G:N2	31:BA:643:C:H41	2.16	0.43
31:CA:89:U:O2'	31:CA:90:C:O5'	2.37	0.43
1:AA:1485:G:H2'	1:AA:1486:A:C8	2.50	0.43
10:DN:28:SER:O	10:DN:29:ASN:HB3	2.18	0.43
26:D4:15:ILE:HD12	26:D4:15:ILE:N	2.33	0.43
1:AA:311:A:O4'	1:AA:332:A:C8	2.72	0.43
32:CE:168:THR:HG23	32:CE:192:SER:HA	2.01	0.43
1:AA:2026:C:H2'	1:AA:2027:G:O5'	2.19	0.43
2:DB:33:G:C2	2:DB:50:G:C2	3.07	0.43
31:CA:803:G:C6	31:CA:804:U:N3	2.87	0.43
31:BA:725:G:O2'	31:BA:726:C:H5'	2.18	0.43
1:AA:64:A:C5	19:AT:66:LEU:HD22	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:BS:12:LYS:C	46:BS:14:ASN:N	2.72	0.43
31:CA:591:U:C2	31:CA:649:G:N2	2.86	0.43
46:CS:69:THR:O	46:CS:69:THR:CG2	2.66	0.43
31:BA:901:A:H8	31:BA:901:A:O5'	2.02	0.43
1:DA:128:C:C6	1:DA:128:C:C3'	3.02	0.43
24:DW:51:ARG:HG2	24:DW:52:ASP:H	1.83	0.43
46:BS:58:TYR:C	46:BS:58:TYR:HD1	2.22	0.43
1:DA:1783:A:N1	1:DA:2587:A:C4	2.86	0.43
31:CA:629:G:H2'	31:CA:630:G:C8	2.53	0.43
1:DA:519:U:H2'	1:DA:520:G:H8	1.84	0.43
31:BA:836:G:C6	31:BA:851:G:C6	3.06	0.43
1:DA:1491:G:C6	1:DA:1500:G:C2	3.07	0.43
1:AA:1215:G:C5	1:AA:1216:G:C8	3.06	0.43
1:DA:19:C:O2'	1:DA:20:C:H5'	2.18	0.43
31:CA:123:C:H2'	31:CA:124:G:H8	1.84	0.43
1:DA:1815:A:H8	1:DA:1815:A:OP1	2.01	0.43
1:DA:374:A:C2	1:DA:401:A:C4	3.06	0.43
3:AD:24:ILE:HD11	3:AD:91:ARG:HD3	2.01	0.43
49:CV:32:LYS:NZ	49:CV:57:HIS:HB2	2.33	0.43
47:BT:46:ASP:OD2	47:BT:51:TYR:HD1	2.02	0.43
47:CT:45:HIS:HB3	47:CT:72:ARG:HG3	2.00	0.43
31:CA:1486:G:H2'	31:CA:1487:G:O4'	2.18	0.43
1:DA:563:G:C6	1:DA:564:C:C4	3.07	0.43
34:CG:168:ARG:HA	34:CG:168:ARG:HD3	1.70	0.43
49:BV:43:GLU:CD	49:BV:43:GLU:H	2.21	0.43
1:AA:803:U:C2'	1:AA:804:A:H5'	2.48	0.43
31:CA:1208:C:H2'	31:CA:1209:C:C6	2.54	0.43
31:CA:1357:A:C5	31:CA:1358:U:C5	3.07	0.43
49:CV:41:VAL:C	49:CV:43:GLU:N	2.72	0.43
49:CV:71:LEU:O	49:CV:73:GLU:N	2.51	0.43
1:AA:1535:U:O4	1:AA:1537:C:O4'	2.37	0.43
5:DF:124:LEU:O	5:DF:124:LEU:CG	2.66	0.43
1:AA:609(A):G:N2	1:AA:619:G:H1'	2.33	0.43
31:BA:1305:G:OP1	51:BX:2:GLY:HA3	2.19	0.43
31:BA:79:G:HO2'	31:BA:80:G:P	2.40	0.43
11:DO:128:HIS:HA	11:DO:147:LEU:HB3	1.99	0.43
1:DA:997:G:OP1	16:D1:93:LYS:HB2	2.18	0.43
52:BB:10:C:O2'	52:BB:11:C:H5'	2.18	0.43
53:CC:48:U:O2'	53:CC:49:C:P	2.69	0.43
31:CA:1275:A:C2	31:CA:1276:G:H1'	2.53	0.43
1:DA:1664:A:H1'	1:DA:2726:U:C5	2.54	0.43
41:CN:60:ALA:C	41:CN:62:GLN:N	2.71	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:686:G:N7	29:A7:5:TRP:CH2	2.87	0.43
14:DQ:7:TYR:CZ	14:DQ:91:PRO:HG3	2.53	0.43
44:BQ:40:CYS:O	44:BQ:43:CYS:N	2.51	0.43
23:DZ:91:LYS:HB2	23:DZ:91:LYS:HE2	1.79	0.43
19:DT:28:PHE:H	19:DT:28:PHE:HD1	1.58	0.43
31:BA:533:A:C2	31:BA:536:C:C5	3.07	0.43
31:BA:538:G:OP2	42:BO:115:LYS:HG3	2.18	0.43
1:DA:109:G:C6	1:DA:110:G:N7	2.87	0.43
1:AA:2629:A:N6	1:AA:2895:U:O2	2.51	0.43
1:AA:2895:U:H2'	1:AA:2896:C:O4'	2.18	0.43
1:AA:7:G:H1	1:AA:2896:C:N4	2.15	0.43
34:CG:180:GLY:O	34:CG:181:MET:HB2	2.18	0.43
43:BP:82:MET:C	43:BP:84:ILE:N	2.69	0.43
31:CA:652:U:C5	31:CA:752:G:C4	3.07	0.43
2:DB:42:C:N4	6:DG:91:ARG:HH12	2.15	0.43
11:AO:46:LYS:HB3	11:AO:46:LYS:HE2	1.73	0.43
52:BB:6:G:H2'	52:BB:7:G:OP1	2.16	0.43
1:DA:1607:C:O2	56:DA:3478:OHX:N5	2.51	0.43
3:DD:26:LYS:N	3:DD:26:LYS:HD2	2.16	0.43
35:BH:31:LEU:HD23	35:BH:45:PHE:HD1	1.83	0.43
4:DE:101:ARG:CZ	4:DE:171:GLU:HB2	2.49	0.43
6:AG:133:LEU:C	6:AG:133:LEU:HD12	2.39	0.43
52:BD:51:C:C6	52:BD:52:G:H1'	2.54	0.43
1:DA:1517:G:O2'	1:DA:1518:C:H5'	2.18	0.43
35:BH:36:ASP:OD1	35:BH:36:ASP:C	2.56	0.43
1:DA:2763:G:C5'	1:DA:2763:G:H8	2.31	0.43
33:BF:162:GLN:CG	54:B1:24:A:H1'	2.38	0.43
39:CL:97:LYS:HB3	39:CL:98:PRO:HD3	2.00	0.43
53:BC:47:G:C5'	53:BC:48:U:OP2	2.66	0.43
1:DA:37:C:O2'	1:DA:38:A:H5'	2.19	0.43
50:BW:89:ARG:HB2	50:BW:104:LEU:CD2	2.49	0.43
23:AZ:80:LEU:N	23:AZ:80:LEU:CD2	2.82	0.43
1:AA:241:A:O4'	1:AA:243:U:C6	2.72	0.43
1:AA:300:A:C5	1:AA:334:C:H4'	2.54	0.43
15:AR:23:ARG:O	15:AR:24:PRO:C	2.56	0.43
1:AA:589:C:H2'	1:AA:590:A:C8	2.53	0.43
32:CE:98:LEU:HA	32:CE:98:LEU:HD22	1.82	0.43
50:BW:72:LEU:HD11	50:BW:80:ARG:NH1	2.33	0.43
1:AA:1858:G:C6	56:AA:3569:OHX:N6	2.87	0.43
13:D0:96:ARG:NH1	13:D0:115:GLU:OE1	2.51	0.43
31:BA:468:A:C2'	31:BA:474:G:H5'	2.42	0.43
6:DG:121:ASN:OD1	6:DG:124:SER:N	2.52	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:835:U:P	48:BU:60:ALA:HB3	2.59	0.43
1:AA:1473:G:H2'	1:AA:1474:C:H5'	1.98	0.43
1:AA:1202:C:H2'	1:AA:1203:G:C5'	2.44	0.43
32:CE:31:TYR:CE1	32:CE:200:ILE:HG21	2.54	0.43
1:DA:654:A:H5''	1:DA:654(A):A:OP1	2.19	0.43
1:AA:1786:A:C4	1:AA:1938:A:C6	3.06	0.43
31:CA:197:A:C6	31:CA:221:C:H4'	2.54	0.43
3:AD:70:TRP:CZ3	3:AD:150:LYS:HA	2.53	0.43
8:DK:58:LEU:C	8:DK:60:GLU:N	2.72	0.43
18:AS:37:ARG:HD3	18:AS:38:TYR:HE2	1.79	0.43
25:DX:12:PRO:O	25:DX:14:GLY:N	2.51	0.43
7:DH:109:PHE:CE1	7:DH:152:ARG:NH1	2.87	0.43
19:AT:18:TYR:HD1	19:AT:21:PHE:CE1	2.36	0.43
6:DG:7:LEU:HD22	6:DG:100:TRP:HE3	1.83	0.43
40:BM:31:GLY:HA3	40:BM:78:ASN:OD1	2.19	0.43
24:DW:24:LEU:HD22	24:DW:60:LEU:HD21	2.00	0.43
1:AA:1668:A:N3	1:AA:1670:C:C4	2.87	0.43
15:DR:104:ASN:O	15:DR:105:LEU:HB2	2.19	0.43
1:DA:1912:A:C8	1:DA:1918:A:C2	3.07	0.43
31:CA:697:U:H2'	31:CA:698:G:C5'	2.48	0.43
42:BO:119:LYS:H	42:BO:119:LYS:HG3	1.25	0.43
1:AA:1649:G:C6	1:AA:2009:G:O6	2.71	0.43
31:BA:1106:G:C5	31:BA:1107:C:C5	3.07	0.43
31:CA:172:A:N6	31:CA:174:C:O2	2.51	0.43
1:AA:44:A:C2'	1:AA:45:G:H5'	2.49	0.43
1:AA:354:G:O2'	1:AA:355:G:H5'	2.19	0.43
31:CA:449:C:O4'	31:CA:449:C:O2	2.35	0.43
18:DS:75:TYR:OH	18:DS:104:THR:HG21	2.19	0.43
46:BS:18:ARG:HD3	46:BS:35:LYS:HE3	2.00	0.43
18:AS:29:LEU:HD21	18:AS:33:ARG:NH2	2.34	0.43
45:BR:51:HIS:O	45:BR:54:ARG:HB3	2.19	0.43
1:AA:1775:U:H2'	1:AA:1776:G:O5'	2.18	0.43
35:BH:24:ARG:CG	35:BH:24:ARG:O	2.67	0.43
16:D1:109:LEU:HA	16:D1:109:LEU:HD23	1.88	0.43
15:DR:58:ASN:OD1	15:DR:58:ASN:N	2.51	0.43
1:AA:2184:G:C6	1:AA:2185:C:C4	3.06	0.43
9:DM:17:ASP:O	9:DM:18:ALA:HB3	2.19	0.43
12:AP:11:LYS:HG2	12:AP:87:LYS:CG	2.49	0.43
1:AA:2399:G:O2'	1:AA:2400:G:H5'	2.18	0.43
1:DA:973:A:O4'	1:DA:1188:U:C6	2.72	0.43
52:CB:36:U:H3	54:C1:20:G:H1	1.66	0.43
31:CA:1054:C:N4	52:CB:35:G:N9	2.66	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:2316:C:H1'	6:AG:128:ARG:NH2	2.34	0.43
1:AA:784:A:C5	3:AD:229:VAL:HG21	2.53	0.43
1:AA:1833:U:O2'	1:AA:1834:U:H5'	2.17	0.43
31:BA:1505:G:H4'	54:B1:13:A:N6	2.33	0.43
1:AA:2131:G:H1'	1:AA:2158:A:N7	2.33	0.43
11:DO:19:VAL:HG21	11:DO:32:THR:HG23	2.01	0.43
1:AA:2700:C:O2'	1:AA:2701:C:H5'	2.19	0.43
11:DO:106:LEU:O	11:DO:107:LYS:CB	2.43	0.43
11:DO:138:LEU:HD12	11:DO:144:GLU:HG3	2.00	0.43
1:AA:1104:C:O2	1:AA:1104:C:C2'	2.64	0.43
1:DA:1075:C:C4	1:DA:1076:C:N4	2.87	0.43
31:CA:1148:U:H2'	31:CA:1149:C:O4'	2.19	0.43
1:DA:1142(A):A:C8	1:DA:1144:G:C5	3.06	0.43
16:A1:85:LYS:O	16:A1:86:ALA:C	2.57	0.43
16:A1:92:ARG:CZ	17:A2:11:GLN:H	2.32	0.43
17:A2:35:LEU:N	17:A2:35:LEU:CD2	2.79	0.43
31:CA:1134:G:N3	31:CA:1134:G:H2'	2.32	0.43
1:AA:1016:G:H2'	1:AA:1017:G:O5'	2.19	0.43
1:DA:1169:G:N2	1:DA:1181:C:C2	2.86	0.43
52:CB:17:G:O6	52:CB:67:A:N6	2.52	0.43
52:CB:48:C:C2'	52:CB:49:A:C8	3.01	0.43
36:BI:37:VAL:O	36:BI:38:GLU:HG3	2.18	0.43
3:DD:166:GLN:CA	3:DD:166:GLN:NE2	2.75	0.43
1:AA:1654:A:P	13:A0:2:ARG:HD3	2.58	0.43
1:DA:2312:U:C5	1:DA:2313:C:C4	3.07	0.43
31:BA:1227:A:C8	31:BA:1228:C:O4'	2.71	0.43
31:BA:951:G:C2	31:BA:952:U:C2	3.06	0.43
31:BA:411:A:C2	31:BA:431:A:N6	2.87	0.43
15:AR:5:ALA:HA	15:AR:8:LYS:HG2	2.01	0.43
27:D5:16:ARG:NH1	27:D5:17:ASP:OD1	2.51	0.43
1:DA:1786:A:N9	1:DA:1938:A:N6	2.67	0.43
31:BA:611:A:N6	31:BA:629:G:N1	2.59	0.43
37:BJ:38:LEU:O	37:BJ:42:ILE:HG13	2.19	0.43
21:AV:133:ILE:HA	21:AV:134:PRO:HD2	1.83	0.43
34:BG:150:GLU:C	34:BG:152:SER:N	2.72	0.43
31:BA:1316:G:H4'	44:BQ:18:VAL:CG1	2.49	0.43
7:AH:88:LEU:CD1	7:AH:165:ALA:HA	2.49	0.43
1:AA:2835:A:C2	1:AA:2879:C:N3	2.87	0.43
4:AE:131:ALA:HB1	4:AE:135:HIS:HE1	1.79	0.43
21:DV:121:HIS:HB3	21:DV:123:ASP:O	2.18	0.43
31:BA:1358:U:H5''	44:BQ:33:VAL:O	2.18	0.43
3:DD:245:PRO:HA	3:DD:246:PRO:HD3	1.93	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
21:AV:120:ILE:HB	21:AV:171:ILE:HA	2.01	0.43
31:CA:954:G:O6	43:CP:104:ARG:NH1	2.51	0.43
26:D4:49:PHE:CG	26:D4:50:VAL:N	2.85	0.43
15:AR:136:GLN:HG3	15:AR:137:LYS:N	2.29	0.43
21:DV:4:ARG:NH1	21:DV:58:VAL:HG11	2.33	0.43
17:D2:37:VAL:CG2	17:D2:57:VAL:H	2.30	0.43
8:AK:104:GLN:O	8:AK:105:HIS:HB2	2.18	0.43
33:CF:50:ALA:O	33:CF:70:VAL:HG13	2.19	0.43
1:DA:1421:G:C2	1:DA:1422:G:C8	3.06	0.43
52:CB:79:A:H3'	52:CB:80:C:H5''	2.01	0.43
8:AK:21:VAL:HG22	8:AK:22:LYS:H	1.84	0.43
14:DQ:66:ALA:O	14:DQ:67:ARG:C	2.55	0.43
1:AA:125:G:H3'	29:A7:19:ARG:HD3	2.00	0.43
1:DA:875:G:C2	1:DA:903:C:C2	3.06	0.43
7:AH:77:LYS:HE2	7:AH:138:LYS:CE	2.48	0.43
36:BI:19:LEU:O	36:BI:23:LYS:HB2	2.18	0.43
1:DA:535:C:H2'	1:DA:536:A:H5'	1.99	0.43
31:BA:668:G:O2'	45:BR:46:HIS:CD2	2.65	0.43
31:BA:1343:G:C6	31:BA:1344:C:C4	3.07	0.43
1:AA:1281:G:H2'	1:AA:1282:U:H6	1.84	0.43
32:BE:144:ARG:HG3	32:BE:145:LEU:N	2.34	0.43
31:BA:939:G:H5''	37:BJ:102:ARG:NH1	2.34	0.43
37:BJ:26:PHE:CD1	37:BJ:62:PHE:CE1	3.07	0.43
34:BG:104:VAL:C	34:BG:106:TYR:N	2.72	0.43
25:AX:56:VAL:HG12	25:AX:57:GLU:N	2.34	0.43
1:DA:988:A:O2'	1:DA:989:G:O5'	2.29	0.43
3:AD:270:ILE:CG2	3:AD:271:ILE:N	2.80	0.43
47:CT:80:GLY:O	47:CT:81:ARG:C	2.57	0.43
1:AA:2768:C:C4	1:AA:2769:C:C5	3.06	0.43
22:A3:66:VAL:O	22:A3:81:VAL:HA	2.17	0.43
4:DE:57:LYS:HD3	4:DE:57:LYS:HA	1.83	0.43
8:DK:117:GLU:HB2	8:DK:118:LYS:H	1.68	0.43
1:DA:776:G:H4'	1:DA:777:A:O5'	2.18	0.43
42:CO:23:LYS:HE2	42:CO:23:LYS:N	2.33	0.43
31:BA:903:G:H2'	31:BA:904:C:H6	1.84	0.43
18:DS:39:THR:O	18:DS:39:THR:HG22	2.19	0.43
1:AA:579:G:N2	1:AA:1262:A:C4	2.86	0.43
18:AS:11:ARG:NH2	18:AS:99:ARG:N	2.67	0.43
36:BI:6:VAL:O	36:BI:6:VAL:HG12	2.18	0.43
2:AB:83:G:C6	2:AB:84:C:C5	3.06	0.43
1:DA:1198:U:C2	1:DA:1199:U:C5	3.06	0.43
1:AA:705:A:C2	1:AA:706:A:C4	3.07	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:513:A:OP1	56:AA:3342:OHX:N4	2.52	0.43
8:DK:122:GLU:O	8:DK:126:TYR:OH	2.26	0.43
41:CN:86:GLY:H	41:CN:112:THR:HG1	1.65	0.43
33:BF:123:GLN:O	33:BF:128:PHE:HB2	2.19	0.43
1:DA:842:G:N2	1:DA:937:U:C2	2.86	0.43
1:AA:1839:G:H2'	1:AA:1840:G:H8	1.83	0.43
36:CI:39:LYS:O	36:CI:40:VAL:HB	2.19	0.43
42:BO:30:ALA:HB1	42:BO:31:PRO:HD2	2.01	0.43
1:AA:1603:A:OP1	1:AA:1604:C:OP2	2.37	0.43
1:AA:211:A:H2'	1:AA:212:G:O4'	2.19	0.43
39:CL:54:ASP:O	39:CL:56:LEU:N	2.46	0.43
1:DA:1553:A:N6	1:DA:1555:G:H1'	2.34	0.43
1:DA:1468:C:H2'	1:DA:1469:A:C8	2.54	0.43
1:AA:1972:A:H2'	1:AA:1973:G:H8	1.84	0.43
32:CE:84:GLU:HG2	32:CE:84:GLU:H	1.64	0.43
37:BJ:8:GLU:CD	37:BJ:8:GLU:H	2.21	0.43
1:DA:200:U:H5''	1:DA:201:C:OP2	2.18	0.43
1:DA:745:G:C2'	1:DA:746:A:H5'	2.49	0.43
1:AA:2274:A:N7	1:AA:2276:G:C8	2.87	0.43
1:DA:2786:U:H4'	4:DE:64:LYS:C	2.36	0.43
4:DE:38:THR:N	4:DE:42:ASP:OD2	2.49	0.43
1:DA:2638:G:OP2	4:DE:82:ARG:NH2	2.51	0.43
1:AA:2393:A:C5'	11:AO:62:LEU:CB	2.96	0.43
31:CA:1061:G:C2'	31:CA:1062:U:H5'	2.48	0.43
31:CA:1200:C:O2	31:CA:1200:C:C2'	2.66	0.43
31:CA:1305:G:H22	31:CA:1331:G:H2'	1.81	0.43
6:DG:2:PRO:C	6:DG:4:ASP:N	2.71	0.43
1:AA:880:G:OP1	1:AA:880:G:C4'	2.64	0.43
34:CG:4:TYR:CD1	34:CG:4:TYR:C	2.90	0.43
31:BA:1160:G:C6	31:BA:1177:G:C2	3.06	0.43
31:CA:1369:C:H2'	31:CA:1370:G:O4'	2.19	0.43
32:CE:209:ARG:HG3	32:CE:240:GLN:NE2	2.34	0.43
1:DA:2259:G:H1'	1:DA:2427:C:H2'	2.00	0.43
8:AK:132:PRO:O	8:AK:133:HIS:CG	2.71	0.43
21:DV:157:LEU:HD21	21:DV:163:LEU:HD22	2.01	0.43
37:CJ:115:ARG:O	37:CJ:117:ALA:N	2.51	0.43
1:AA:2135:A:C2'	1:AA:2136:C:OP1	2.67	0.43
6:AG:95:ARG:C	6:AG:99:MET:HG2	2.38	0.43
44:BQ:21:TYR:N	44:BQ:21:TYR:CD1	2.86	0.43
1:AA:1021:A:C8	1:AA:1021:A:C3'	3.01	0.43
31:BA:254:G:H21	47:BT:16:GLN:NE2	2.16	0.43
1:AA:2751:G:N2	7:AH:3:ARG:HB3	2.34	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:871:U:C4'	31:BA:872:A:OP1	2.67	0.43
46:BS:8:ARG:HB3	46:BS:28:ARG:HH11	1.80	0.43
1:DA:1342:A:C6	1:DA:1397:U:C6	3.04	0.43
31:CA:1212:U:H2'	31:CA:1212:U:H6	1.66	0.43
4:AE:21:VAL:CG2	4:AE:22:PRO:HB3	2.49	0.43
1:AA:2789:C:C3'	1:AA:2790:A:H5''	2.49	0.43
12:DP:21:THR:H	12:DP:98:LYS:HB2	1.84	0.43
26:D4:4:GLY:C	26:D4:5:ILE:HD12	2.39	0.43
6:DG:96:ARG:NH1	6:DG:96:ARG:HG2	2.33	0.43
31:CA:49:U:C2	31:CA:361:G:N2	2.87	0.43
42:CO:60:LEU:HD13	42:CO:60:LEU:HA	1.61	0.43
1:AA:851:U:H5'	25:AX:46:ASN:ND2	2.34	0.43
21:AV:28:MET:HB2	21:AV:37:VAL:CG1	2.48	0.43
1:AA:2304:G:C2'	1:AA:2305:A:O5'	2.67	0.43
1:AA:1509:C:C2'	1:AA:1510:A:OP1	2.66	0.43
21:DV:30:ASN:HB2	21:DV:90:VAL:HG23	1.99	0.43
5:AF:123:LEU:CD1	5:AF:192:LEU:HD22	2.48	0.43
2:AB:30:C:H2'	2:AB:31:C:C5'	2.42	0.43
1:DA:1999:C:H1'	1:DA:2687:U:O2'	2.18	0.43
31:BA:1315:U:O2	31:BA:1360:A:H2	2.02	0.43
47:BT:33:GLY:O	47:BT:34:LYS:C	2.57	0.43
52:CD:28:G:H2'	52:CD:29:C:H6	1.84	0.43
1:AA:2127:G:H2'	1:AA:2128:C:O4'	2.19	0.43
4:AE:167:VAL:CG1	4:AE:189:PRO:HD3	2.49	0.43
1:AA:2841:C:O2	1:AA:2877:G:C2	2.72	0.43
48:BU:21:LYS:O	48:BU:22:VAL:CB	2.59	0.43
32:BE:74:LYS:HD2	32:BE:74:LYS:N	2.24	0.43
22:A3:49:LYS:O	22:A3:50:ASN:HB2	2.19	0.43
1:DA:107:C:N3	1:DA:108:U:C5	2.87	0.43
1:DA:444:C:P	16:D1:2:PRO:HD3	2.59	0.43
46:BS:39:TYR:CG	46:BS:40:ASP:N	2.85	0.43
47:BT:91:ARG:NH1	47:BT:92:ARG:NH2	2.55	0.43
13:A0:77:ARG:O	13:A0:78:LYS:C	2.57	0.43
17:D2:43:GLU:C	17:D2:44:LYS:HD3	2.39	0.43
38:BK:25:ASP:C	38:BK:26:VAL:HG12	2.39	0.43
1:AA:1853:A:N6	1:AA:1889:A:C8	2.87	0.43
1:AA:633:A:C8	1:AA:633:A:C3'	3.02	0.43
1:DA:796:C:H2'	1:DA:797:C:H6	1.80	0.43
12:AP:35:VAL:CG1	12:AP:130:LYS:HD2	2.49	0.43
1:DA:1444:G:C2	1:DA:1548:C:C2	3.07	0.43
29:A7:19:ARG:NH1	29:A7:19:ARG:HG2	2.33	0.43
19:DT:53:LYS:HZ2	19:DT:55:ASN:ND2	2.15	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:198:G:C2'	31:CA:199:G:O5'	2.66	0.43
31:BA:408:A:C2	31:BA:409:G:C4	3.07	0.43
1:DA:537:C:H5''	1:DA:537:C:H6	1.84	0.43
1:DA:526:A:H5''	1:DA:527:C:OP1	2.19	0.43
23:DZ:7:ILE:HD13	23:DZ:70:VAL:HG22	2.00	0.43
31:BA:1103:C:C4	31:BA:1104:G:N7	2.86	0.43
31:BA:1266:G:N2	31:BA:1270:C:N3	2.67	0.43
31:BA:1269:A:H5''	31:BA:1270:C:OP2	2.18	0.43
53:CC:14:A:C2	53:CC:23:G:C4	3.07	0.43
1:AA:2537:U:O4	56:AA:3466:OHX:N6	2.52	0.43
1:AA:1579:A:H2'	1:AA:1580:A:H8	1.82	0.43
31:BA:1170:A:H2'	31:BA:1171:G:O4'	2.19	0.43
13:A0:70:LEU:O	13:A0:72:ASP:N	2.42	0.43
19:AT:18:TYR:HA	19:AT:21:PHE:CE1	2.54	0.43
1:DA:2493:U:H2'	1:DA:2494:G:O5'	2.18	0.43
31:CA:166:G:H2'	31:CA:167:G:H5'	1.99	0.43
7:DH:139:GLN:O	7:DH:143:GLN:HB2	2.18	0.43
38:BK:126:LYS:HZ2	38:BK:126:LYS:HB3	1.84	0.43
31:BA:1039:C:C4	31:BA:1040:U:C4	3.07	0.43
31:CA:92:G:O2'	31:CA:93:U:H5'	2.18	0.43
1:DA:471:A:N6	1:DA:472:A:C2	2.86	0.43
2:DB:30:C:O2	2:DB:30:C:H2'	2.19	0.43
33:CF:126:ARG:HB2	33:CF:128:PHE:CD1	2.54	0.43
2:AB:94:C:C4	2:AB:95:U:C5	3.07	0.43
18:AS:59:VAL:HG12	18:AS:60:ASN:N	2.33	0.43
1:AA:979:G:N2	1:AA:985:C:C4	2.87	0.43
1:DA:569:U:H5'	1:DA:821:A:H2	1.84	0.43
1:AA:103:A:C8	1:AA:103:A:O5'	2.72	0.43
1:DA:497:A:H2'	1:DA:498:G:O4'	2.18	0.43
32:CE:10:LEU:O	32:CE:13:ALA:HB3	2.18	0.43
31:CA:1057:G:H2'	31:CA:1058:G:O4'	2.19	0.43
1:AA:2715:C:H2'	1:AA:2716:U:H6	1.84	0.43
18:DS:4:LYS:HB2	18:DS:106:ILE:HG22	2.01	0.43
31:BA:1416:G:C5	31:BA:1417:G:C5	3.07	0.43
49:CV:32:LYS:HZ1	49:CV:57:HIS:HB2	1.84	0.43
45:BR:25:THR:O	45:BR:28:GLN:HB2	2.19	0.43
1:AA:1662:C:O2'	1:AA:2687:U:H5''	2.19	0.43
7:AH:24:VAL:HG11	7:AH:72:ILE:HD11	2.01	0.43
33:CF:115:LEU:O	33:CF:116:VAL:C	2.57	0.43
31:CA:20:U:C2'	31:CA:21:G:H5'	2.49	0.43
33:BF:138:VAL:O	33:BF:142:MET:HG2	2.19	0.43
1:AA:396:G:O3'	23:AZ:44:PRO:HA	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:271(B):G:N7	1:DA:421:U:H2'	2.34	0.43
31:CA:1472:U:H2'	31:CA:1473:A:O4'	2.18	0.43
31:BA:853:G:N7	56:BA:1762:OHX:N1	2.67	0.43
31:CA:5:U:C6	56:CA:1788:OHX:N1	2.87	0.43
52:BB:35:G:H8	52:BB:35:G:O5'	2.02	0.43
1:AA:1435:G:H2'	1:AA:1436:G:O4'	2.18	0.43
33:BF:120:VAL:CG1	33:BF:198:VAL:HG11	2.49	0.43
43:BP:36:LYS:HB3	43:BP:59:TYR:CE1	2.54	0.43
3:AD:85:ASP:HB2	3:AD:92:ILE:HD13	2.01	0.43
9:DM:123:TYR:OH	9:DM:129:PRO:HD3	2.19	0.43
1:DA:893:C:C2	1:DA:894:C:C5	3.07	0.43
1:DA:2271:G:H5''	22:D3:20:ARG:NE	2.34	0.43
11:AO:62:LEU:H	30:A8:13:ARG:HH11	1.67	0.43
11:AO:34:GLY:O	11:AO:35:HIS:C	2.56	0.43
3:AD:61:LEU:O	3:AD:63:ARG:NH1	2.48	0.43
31:CA:1095:U:N3	31:CA:1096:C:N3	2.67	0.43
31:CA:1095:U:H5'	31:CA:1109:C:O2	2.18	0.43
31:CA:1307:U:H2'	31:CA:1308:U:C6	2.53	0.43
1:AA:1535:U:O2	1:AA:1536:A:H5''	2.18	0.43
52:BD:14:A:H3'	52:BD:15:G:H5''	1.99	0.43
52:BD:44:C:C2'	52:BD:45:C:H5'	2.49	0.43
31:BA:1331:G:O2'	31:BA:1332:A:H8	2.02	0.43
1:DA:2418:A:OP2	30:D8:29:LYS:NZ	2.50	0.43
1:AA:1833:U:N3	1:AA:1834:U:C5	2.87	0.43
31:BA:1055:A:H2'	31:BA:1056:U:O5'	2.19	0.43
30:A8:32:LEU:HA	30:A8:32:LEU:HD22	1.76	0.43
1:AA:2157:G:H2'	1:AA:2158:A:OP2	2.19	0.43
1:DA:1190:G:C2	1:DA:1191:G:N7	2.87	0.43
11:DO:146:VAL:HG13	11:DO:147:LEU:HD13	2.00	0.43
1:DA:1144:G:N1	1:DA:1145:C:N3	2.66	0.43
5:DF:31:HIS:O	5:DF:31:HIS:CG	2.71	0.43
31:CA:1128:C:N4	31:CA:1139:G:N3	2.67	0.43
31:CA:1128:C:O2'	31:CA:1129:C:O5'	2.36	0.43
40:BM:39:PRO:HB3	40:BM:70:ARG:HH12	1.81	0.43
1:DA:1310:G:C2'	1:DA:1311:G:H5'	2.49	0.43
31:CA:86:U:O2'	31:CA:87:A:P	2.76	0.43
40:BM:38:ILE:HG23	40:BM:71:LEU:HB3	2.01	0.43
14:DQ:7:TYR:CE2	14:DQ:91:PRO:HG3	2.54	0.43
40:BM:57:LYS:CE	40:BM:60:ARG:HH12	2.28	0.43
44:BQ:47:LEU:C	44:BQ:49:HIS:H	2.22	0.43
44:BQ:4:LYS:HD2	44:BQ:7:ILE:HD11	2.00	0.43
32:BE:19:HIS:HD2	32:BE:20:GLU:CD	2.22	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1050:A:O2'	1:DA:2752:C:H1'	2.18	0.43
33:BF:68:VAL:HG12	33:BF:70:VAL:HG23	2.01	0.43
1:DA:857:C:H1'	22:D3:26:TYR:CE2	2.54	0.43
52:CB:20:C:O2'	52:CB:68:A:C8	2.70	0.43
12:AP:77:LYS:HD2	12:AP:81:VAL:HG21	2.00	0.43
31:CA:994:A:N1	44:CQ:5:ALA:HB2	2.34	0.43
1:DA:1332:G:N2	1:DA:1610:A:C8	2.87	0.43
34:CG:162:LEU:CD1	34:CG:181:MET:HG2	2.49	0.43
23:AZ:76:ARG:HG2	23:AZ:76:ARG:NH1	2.10	0.43
41:BN:104:GLN:O	41:BN:106:LYS:HG3	2.19	0.43
1:DA:2315:G:H2'	1:DA:2316:C:H6	1.83	0.43
11:AO:46:LYS:O	11:AO:47:ASP:HB2	2.18	0.43
11:AO:101:VAL:CG1	11:AO:102:ARG:N	2.82	0.43
31:CA:1422:G:O3'	10:DN:49:ARG:NH1	2.51	0.43
21:AV:28:MET:O	21:AV:34:ASN:HA	2.19	0.43
5:DF:164:ARG:HG3	5:DF:175:THR:OG1	2.19	0.43
4:DE:101:ARG:CG	4:DE:203:LYS:HE3	2.47	0.43
3:DD:206:LEU:HD22	3:DD:211:ARG:CG	2.38	0.43
19:DT:36:LYS:O	19:DT:54:VAL:HG21	2.18	0.43
13:D0:67:LEU:HD12	13:D0:76:VAL:HG11	2.00	0.43
16:A1:60:LEU:CD2	16:A1:64:ARG:HD3	2.49	0.43
13:D0:24:GLN:HE22	13:D0:36:THR:CG2	2.32	0.43
1:AA:371:A:O3'	1:AA:372:G:H4'	2.19	0.43
1:DA:2897:U:H2'	1:DA:2898:U:O4'	2.19	0.43
1:DA:524:U:C2	1:DA:525:U:C5	3.06	0.43
31:BA:36:C:N4	31:BA:37:U:C4	2.87	0.43
20:DU:68:HIS:O	20:DU:70:SER:N	2.51	0.43
36:BI:75:LEU:CD2	36:BI:79:LEU:HG	2.40	0.43
5:AF:135:LYS:O	5:AF:136:THR:C	2.57	0.43
1:AA:2111:C:C2	1:AA:2118:U:H4'	2.53	0.43
1:AA:2729:G:H2'	1:AA:2730:C:O4'	2.19	0.43
1:DA:945:A:C5	1:DA:2448:A:N1	2.87	0.43
22:A3:70:GLN:HG2	22:A3:72:ARG:HG3	2.00	0.43
31:BA:977:A:H1'	31:BA:982:U:O4	2.19	0.43
31:BA:380:G:OP2	56:BA:1773:OHX:N3	2.52	0.43
40:CM:13:HIS:O	40:CM:17:ASP:HB2	2.18	0.43
46:BS:40:ASP:C	46:BS:42:ARG:N	2.72	0.43
3:AD:186:HIS:HD2	3:AD:188:GLU:HB2	1.83	0.43
4:AE:181:LEU:HD21	15:AR:7:ILE:CG2	2.45	0.43
45:CR:43:LEU:HA	45:CR:43:LEU:HD23	1.79	0.43
48:BU:43:PHE:C	48:BU:44:LEU:HD12	2.39	0.43
1:AA:2566:A:H4'	1:AA:2567:G:O5'	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:31:C:O2'	1:AA:32:C:H5'	2.19	0.43
38:BK:116:LYS:HG2	38:BK:129:VAL:HG11	2.01	0.43
1:DA:633:A:H2'	1:DA:634:C:C5'	2.48	0.43
1:DA:2225:A:H4'	1:DA:2226:C:O5'	2.19	0.43
31:BA:321:A:N7	31:BA:328:C:C6	2.87	0.43
1:DA:990:A:OP2	1:DA:991:C:OP2	2.36	0.43
17:D2:51:VAL:HG12	17:D2:52:VAL:H	1.83	0.43
31:CA:1292:U:H5'	39:CL:38:GLN:NE2	2.33	0.43
1:AA:1491:G:O2'	1:AA:1492:G:H5'	2.19	0.43
1:DA:1015:G:C5	1:DA:1148:A:N1	2.87	0.43
31:CA:853:G:N3	31:CA:854:G:C8	2.86	0.43
28:D6:44:ARG:O	28:D6:45:LYS:HD3	2.19	0.43
1:DA:253:C:H2'	1:DA:254:G:O4'	2.19	0.43
38:CK:14:ARG:HG2	38:CK:14:ARG:O	2.19	0.43
31:CA:62:U:O2'	31:CA:379:C:O2'	2.08	0.43
31:BA:1369:C:H2'	31:BA:1370:G:O4'	2.19	0.43
31:CA:491:G:H2'	31:CA:492:G:H5'	1.99	0.43
32:CE:24:TRP:CZ3	32:CE:40:HIS:CE1	3.07	0.43
12:AP:43:THR:HG22	12:AP:94:VAL:CG1	2.47	0.43
31:CA:836:G:C6	31:CA:851:G:C6	3.07	0.43
1:DA:2063:C:O2	1:DA:2450:A:N1	2.52	0.43
8:DK:7:GLU:O	8:DK:9:LEU:HD23	2.18	0.43
46:CS:18:ARG:HD2	46:CS:35:LYS:HD2	2.00	0.43
1:AA:2102:U:H2'	1:AA:2103:C:O4'	2.18	0.43
3:AD:268:ARG:CG	3:AD:268:ARG:O	2.67	0.43
1:DA:218:A:C2	1:DA:235:U:H4'	2.54	0.43
1:DA:1716:U:O2'	1:DA:1717:G:H5'	2.19	0.43
20:AU:8:LYS:HB2	20:AU:8:LYS:HE3	1.75	0.43
31:BA:1362:C:H2'	31:BA:1362(A):C:H5''	2.01	0.43
1:DA:1953:A:C2	1:DA:2549:G:H2'	2.53	0.43
31:CA:1031:G:C6	31:CA:1032:A:N6	2.87	0.43
3:AD:142:VAL:HG23	3:AD:193:VAL:HA	2.01	0.43
41:CN:27:ASN:OD1	41:CN:28:THR:N	2.52	0.43
1:DA:281:G:O2'	1:DA:282:A:O4'	2.36	0.43
1:AA:2587:A:H8	1:AA:2587:A:O5'	2.02	0.43
1:AA:886:C:H2'	1:AA:887:A:O4'	2.19	0.43
34:BG:38:TYR:CZ	34:BG:45:GLN:OE1	2.71	0.43
34:BG:38:TYR:HB2	34:BG:39:PRO:CD	2.48	0.43
36:CI:39:LYS:H	36:CI:64:GLN:HB3	1.84	0.43
9:DM:1:MET:HE2	9:DM:2:LYS:O	2.19	0.43
31:CA:996:A:C2'	31:CA:997:U:H5'	2.49	0.43
1:DA:1932:A:OP2	56:DA:3118:OHX:N4	2.51	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1575:C:H2'	1:DA:1576:U:H6	1.84	0.43
1:DA:1439:A:H2'	1:DA:1440:G:O4'	2.19	0.43
1:AA:1400:G:H2'	1:AA:1401:G:C8	2.53	0.43
7:DH:86:GLU:O	7:DH:87:LEU:HD23	2.17	0.43
1:DA:460:A:H2'	1:DA:461:C:O4'	2.19	0.43
32:BE:169:LYS:HD3	32:BE:169:LYS:O	2.19	0.43
48:BU:47:THR:O	48:BU:83:GLU:HG2	2.19	0.43
31:BA:1069:C:H2'	31:BA:1070:U:O5'	2.18	0.43
13:D0:49:ASP:O	13:D0:50:HIS:C	2.56	0.43
41:BN:111:ASP:OD1	48:BU:84:LYS:NZ	2.38	0.43
30:A8:34:TRP:H	30:A8:35:GLN:C	2.21	0.43
1:DA:2805:G:C2	1:DA:2807:G:C2	3.06	0.43
9:DM:56:ASN:H	9:DM:126:PRO:HA	1.83	0.43
12:DP:23:GLY:HA2	12:DP:24:GLY:HA3	1.75	0.43
4:DE:29:GLY:H	4:DE:51:PHE:HE1	1.67	0.43
11:DO:31:ALA:C	11:DO:33:ARG:N	2.72	0.43
31:CA:1305:G:H8	31:CA:1305:G:OP2	2.02	0.43
33:CF:5:ILE:HD13	33:CF:5:ILE:N	2.28	0.43
40:CM:47:PHE:HB3	44:CQ:34:TYR:CE2	2.54	0.43
49:CV:53:ASN:HA	49:CV:77:THR:HG22	1.99	0.43
7:AH:89:ILE:HG12	7:AH:129:THR:HA	1.99	0.43
1:AA:1576:U:N3	1:AA:1577:C:C5	2.87	0.43
31:BA:1004:A:O5'	31:BA:1036:G:O6	2.36	0.43
31:BA:1178:G:C3'	31:BA:1178:G:C8	3.02	0.43
8:AK:114:LEU:HD13	8:AK:130:TYR:CD1	2.54	0.43
1:DA:91:A:OP1	1:DA:91:A:C4'	2.67	0.43
31:CA:1443:G:N2	15:DR:119:LYS:HB2	2.34	0.43
1:AA:784:A:C8	1:AA:792:G:C5	3.06	0.43
31:BA:93:U:N3	31:BA:95:G:C8	2.87	0.43
31:BA:791:G:N1	31:BA:792:A:N6	2.67	0.43
1:AA:1086:A:H4'	1:AA:1103:A:N1	2.34	0.43
1:DA:1062:G:H1'	1:DA:1088:A:N7	2.34	0.43
31:CA:1126:U:O4	31:CA:1281:U:C1'	2.67	0.43
40:BM:34:VAL:HG22	40:BM:74:ILE:CG2	2.39	0.43
6:AG:95:ARG:O	6:AG:96:ARG:C	2.57	0.43
6:AG:99:MET:HG3	6:AG:100:TRP:H	1.83	0.43
31:BA:1057:G:H2'	31:BA:1058:G:O4'	2.18	0.43
44:BQ:26:ARG:HD3	44:BQ:43:CYS:HB3	2.01	0.43
47:BT:20:THR:CG2	47:BT:41:LYS:HG2	2.48	0.43
1:DA:2477:C:C5	56:DA:3173:OHX:N4	2.86	0.43
21:DV:145:GLU:HA	21:DV:174:VAL:HG11	2.01	0.43
46:CS:43:LYS:HG3	46:CS:48:TRP:CG	2.54	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:1001:G:C6	31:CA:1002:G:C5	3.07	0.43
14:AQ:83:LYS:C	14:AQ:109:GLY:HA2	2.36	0.43
1:AA:2892:A:H2'	1:AA:2893:G:O4'	2.19	0.43
34:CG:162:LEU:HD23	34:CG:162:LEU:HA	1.77	0.43
1:AA:72:U:H1'	24:AW:58:ALA:HB1	2.01	0.43
31:BA:1227:A:OP2	43:BP:111:LYS:HE3	2.17	0.43
39:CL:4:TYR:CE2	39:CL:88:TYR:CB	3.02	0.43
31:BA:412:A:H1'	31:BA:413:G:OP2	2.19	0.43
31:BA:510:A:H5''	31:BA:511:C:P	2.59	0.43
32:CE:91:PRO:CG	32:CE:155:LEU:HB2	2.47	0.43
1:DA:1480:G:N2	1:DA:1514:U:H1'	2.34	0.43
1:DA:2289:G:N3	1:DA:2289:G:H2'	2.34	0.43
16:A1:65:ILE:O	16:A1:66:ASN:C	2.56	0.43
1:DA:860:U:H2'	1:DA:861:A:C8	2.53	0.43
12:AP:3:MET:HB2	12:AP:93:TYR:CD1	2.53	0.43
1:DA:1990:C:H2'	1:DA:1991:U:C6	2.52	0.43
21:AV:48:PHE:CZ	21:AV:74:VAL:HG21	2.54	0.43
35:CH:41:VAL:O	35:CH:66:MET:HA	2.19	0.43
31:CA:543:C:OP1	34:CG:14:ARG:NE	2.51	0.43
1:DA:1382:G:O2'	1:DA:1383:C:H5'	2.18	0.43
20:DU:17:SER:HB3	20:DU:71:LYS:HA	2.01	0.43
32:BE:158:LEU:HD12	32:BE:158:LEU:H	1.84	0.43
7:AH:85:LYS:HA	7:AH:86:GLU:OE1	2.18	0.43
1:AA:557:U:C2	1:AA:558:G:C8	3.07	0.43
31:CA:270:A:C5	31:CA:271:C:C4	3.07	0.43
1:AA:1921:G:C5	56:AA:3391:OHX:N2	2.86	0.43
1:DA:1205:U:H4'	1:DA:1206:G:OP2	2.18	0.43
1:AA:729:G:H5'	1:AA:730:C:H5''	2.00	0.43
1:AA:2665:A:H2'	1:AA:2666:C:C5'	2.49	0.43
31:CA:376:G:H2'	31:CA:377:G:H8	1.84	0.43
1:AA:1324:G:C5	1:AA:1328:G:O6	2.72	0.43
1:DA:2709:G:C2'	1:DA:2710:C:H5'	2.48	0.43
1:DA:2490:G:C2	56:DA:3344:OHX:N4	2.86	0.43
1:DA:499:U:O3'	20:DU:44:ILE:HD11	2.19	0.43
17:D2:45:THR:O	17:D2:47:VAL:HG12	2.18	0.43
1:AA:240:G:O5'	1:AA:240:G:H8	2.02	0.43
8:DK:81:VAL:HG22	8:DK:143:SER:HB2	2.01	0.43
21:AV:7:ALA:HB3	21:AV:61:LEU:HB2	2.01	0.43
9:AM:79:PRO:C	9:AM:81:GLY:H	2.22	0.43
38:BK:6:ILE:HG12	38:BK:31:PHE:HE2	1.84	0.43
1:AA:1173:G:H4'	1:AA:1174:A:C2	2.54	0.43
1:DA:286:C:H2'	1:DA:287:C:H5'	2.01	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:AH:74:ASN:O	7:AH:77:LYS:HG2	2.18	0.43
22:D3:71:ASP:OD1	22:D3:71:ASP:C	2.57	0.43
30:A8:29:LYS:CG	30:A8:44:LYS:HG2	2.49	0.43
1:DA:1775:U:H2'	1:DA:1776:G:O5'	2.19	0.43
35:BH:82:VAL:HG21	35:BH:138:ALA:HA	2.00	0.43
5:AF:32:LEU:O	5:AF:36:VAL:HG23	2.19	0.43
1:AA:511:U:O4	1:AA:512:G:C2	2.72	0.43
1:DA:254:G:O6	30:D8:5:LYS:HG2	2.19	0.43
25:AX:9:VAL:HG21	25:AX:55:ARG:HB2	2.00	0.43
31:CA:1405:G:H1	31:CA:1496:C:H42	1.66	0.43
1:DA:638:G:C8	1:DA:651:G:N2	2.87	0.43
33:CF:152:ILE:HG22	33:CF:167:TRP:CA	2.49	0.43
14:AQ:24:LEU:HD12	14:AQ:24:LEU:HA	1.79	0.43
22:D3:74:ARG:NH1	22:D3:74:ARG:HB2	2.33	0.43
31:CA:601:C:N4	31:CA:637:G:H1	2.14	0.43
6:DG:97:ASP:HA	6:DG:100:TRP:HD1	1.83	0.43
33:CF:91:LEU:CD1	33:CF:101:LEU:HD12	2.49	0.43
1:DA:68:G:O2'	1:DA:69:C:H5'	2.18	0.43
14:AQ:74:ALA:O	14:AQ:75:GLU:C	2.57	0.43
45:CR:4:THR:C	45:CR:6:GLU:H	2.22	0.43
16:A1:115:ALA:O	16:A1:116:ALA:HB3	2.17	0.43
52:CD:5:G:H1	52:CD:77:C:N4	2.16	0.43
53:BC:50:G:N2	53:BC:67:C:C2	2.86	0.43
1:AA:732:C:H2'	1:AA:733:G:H5'	2.00	0.43
1:AA:1412:A:C6	1:AA:1413:G:C6	3.07	0.43
33:BF:107:GLN:N	33:BF:107:GLN:CD	2.71	0.43
1:AA:990:A:H5'	1:AA:1157:G:OP1	2.19	0.43
1:AA:2814:C:O2'	27:A5:29:THR:CG2	2.66	0.43
1:DA:332:A:C4	1:DA:335:C:N4	2.87	0.43
1:DA:588:U:H2'	1:DA:589:C:C6	2.53	0.43
16:D1:41:ALA:HB1	16:D1:45:TYR:CE1	2.54	0.43
1:AA:502:A:O3'	56:AA:3494:OHX:N1	2.52	0.43
31:CA:1259:C:C4	31:CA:1260:C:H1'	2.54	0.43
19:AT:3:THR:HG22	24:AW:29:LYS:NZ	2.33	0.43
31:CA:1166:G:C2	31:CA:1171:G:C6	3.07	0.43
1:DA:244:A:O3'	11:DO:74:GLU:HB3	2.18	0.43
42:CO:95:GLY:O	42:CO:96:VAL:C	2.56	0.43
1:DA:509:C:OP1	56:DA:3418:OHX:N4	2.52	0.43
5:AF:33:LEU:HD23	11:AO:1:MET:HG3	2.00	0.43
1:AA:2082:A:H2'	1:AA:2083:G:O4'	2.19	0.43
4:DE:96:PHE:O	4:DE:175:VAL:HG11	2.19	0.43
1:DA:2142:C:O2'	1:DA:2143:C:H5'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:972:G:H3'	1:DA:973:A:H2'	2.01	0.42
31:CA:972:C:O3'	40:CM:57:LYS:CG	2.66	0.42
40:CM:54:PHE:CE1	40:CM:55:LYS:CE	3.02	0.42
43:CP:65:LYS:HA	43:CP:69:GLU:OE1	2.19	0.42
2:AB:102:G:O2'	2:AB:103:U:H5'	2.18	0.42
1:DA:2704:C:H2'	1:DA:2704:C:O2	2.19	0.42
31:BA:1022:G:H2'	31:BA:1023:G:O4'	2.19	0.42
1:AA:2321:G:C2'	1:AA:2321:G:N3	2.82	0.42
1:AA:1064:C:N4	1:AA:1070:A:OP1	2.39	0.42
31:CA:1179:A:C6	31:CA:1180:A:C2	3.07	0.42
32:CE:77:ALA:CB	32:CE:211:ILE:HD13	2.41	0.42
31:BA:1302:U:OP1	43:BP:21:TYR:OH	2.36	0.42
31:BA:1338:G:C6	31:BA:1339:A:C6	3.07	0.42
21:DV:161:VAL:HG23	21:DV:162:GLU:H	1.83	0.42
31:BA:1329:A:OP1	43:BP:26:GLY:O	2.36	0.42
37:CJ:113:GLU:HB3	37:CJ:118:VAL:HG23	2.00	0.42
31:BA:1053:G:N7	31:BA:1199:U:C6	2.87	0.42
26:A4:63:TYR:OH	49:BV:41:VAL:O	2.34	0.42
1:DA:1069:A:O2'	1:DA:1072:C:OP2	2.31	0.42
1:DA:1021:A:H62	1:DA:1141:U:H3	1.66	0.42
1:DA:1665:A:H1'	10:DN:1:MET:CG	2.49	0.42
33:BF:19:GLU:HA	33:BF:54:ARG:HH12	1.83	0.42
32:BE:19:HIS:O	32:BE:39:ILE:HG23	2.18	0.42
31:BA:250:A:H4'	31:BA:251:G:H5''	1.99	0.42
31:BA:266:G:H5'	31:BA:268:C:H41	1.83	0.42
4:AE:78:LEU:O	4:AE:78:LEU:CG	2.66	0.42
31:CA:1023:G:H2'	31:CA:1023:G:N3	2.34	0.42
21:DV:93:ASP:O	21:DV:131:ARG:NH2	2.52	0.42
31:CA:511:C:H2'	31:CA:534:U:O2	2.18	0.42
8:DK:131:LYS:CD	8:DK:131:LYS:N	2.82	0.42
1:AA:969:U:C4	56:AA:3547:OHX:N1	2.87	0.42
1:AA:959:A:N1	1:AA:960:A:C2	2.87	0.42
53:CC:15:G:OP2	56:CC:108:OHX:N4	2.52	0.42
31:BA:415:A:OP2	56:BA:1785:OHX:N3	2.52	0.42
34:BG:9:CYS:O	34:BG:13:ARG:HG2	2.19	0.42
1:AA:917:A:C2'	1:AA:918:A:O5'	2.67	0.42
35:BH:78:HIS:HE1	35:BH:142:LEU:HA	1.81	0.42
13:D0:63:ARG:HA	13:D0:80:PHE:CZ	2.54	0.42
21:DV:149:SER:CB	21:DV:170:THR:OG1	2.67	0.42
33:CF:119:ARG:HH22	33:CF:140:ARG:CD	2.32	0.42
50:CW:30:LYS:O	50:CW:33:ILE:N	2.48	0.42
31:CA:271:C:H2'	31:CA:272:C:H6	1.84	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:2882:A:P	13:A0:96:ARG:HH11	2.40	0.42
37:CJ:50:ILE:O	37:CJ:50:ILE:HG22	2.18	0.42
28:D6:28:ARG:HD2	28:D6:30:THR:O	2.19	0.42
41:BN:112:THR:HA	41:BN:113:PRO:HD3	1.69	0.42
1:DA:2536:G:C5	1:DA:2537:U:C5	3.07	0.42
31:BA:1074:G:N2	31:BA:1102:A:C4	2.87	0.42
1:AA:1925:C:O2'	1:AA:1926:U:H5'	2.18	0.42
21:DV:54:HIS:CE1	21:DV:123:ASP:OD1	2.72	0.42
9:DM:137:LYS:HA	9:DM:137:LYS:HZ2	1.79	0.42
1:DA:1495:A:H2'	1:DA:1496:A:H5'	1.97	0.42
50:CW:25:ARG:NH1	50:CW:25:ARG:HG3	2.27	0.42
34:BG:138:TYR:HD2	34:BG:139:ARG:N	2.16	0.42
12:DP:4:PRO:CG	12:DP:71:ASP:HA	2.48	0.42
1:DA:1139:G:O5'	9:DM:70:LYS:NZ	2.41	0.42
31:BA:632:A:H8	31:BA:633:G:C8	2.37	0.42
1:AA:2248:C:C5	1:AA:2249:U:C4	3.06	0.42
21:AV:60:GLU:O	21:AV:61:LEU:CD2	2.66	0.42
6:AG:60:LEU:O	6:AG:62:LEU:N	2.42	0.42
38:BK:113:SER:H	38:BK:134:ILE:HG12	1.84	0.42
2:AB:86:G:O6	56:AB:215:OHX:N2	2.52	0.42
18:AS:86:LEU:C	18:AS:86:LEU:HD12	2.40	0.42
2:DB:104:A:OP1	21:DV:72:ARG:NH2	2.52	0.42
44:BQ:8:GLU:O	44:BQ:10:ALA:N	2.52	0.42
31:BA:1465:C:H2'	31:BA:1466:C:O4'	2.18	0.42
1:AA:1489:U:O3'	1:AA:1490:A:H8	2.02	0.42
3:AD:270:ILE:C	3:AD:271:ILE:CG1	2.87	0.42
1:AA:531:C:C5	1:AA:2035:G:C2	3.07	0.42
2:DB:50:G:H8	2:DB:50:G:O5'	2.02	0.42
31:CA:957:U:O2'	31:CA:959:A:N7	2.36	0.42
1:DA:2186:G:C2	1:DA:2187:G:C8	3.07	0.42
21:DV:24:LEU:HA	21:DV:25:PRO:HD3	1.71	0.42
35:CH:51:VAL:O	35:CH:54:ALA:HB3	2.19	0.42
21:DV:116:VAL:O	21:DV:117:LEU:HD13	2.19	0.42
31:BA:689:C:C2'	31:BA:690:G:H5'	2.49	0.42
52:CB:9:U:C5	52:CB:21:A:C8	3.07	0.42
45:CR:9:GLN:O	45:CR:11:VAL:N	2.51	0.42
35:BH:63:ARG:HG2	35:BH:63:ARG:H	1.40	0.42
31:BA:273:A:O2'	31:BA:274:A:H5'	2.19	0.42
31:CA:713:G:N7	56:CA:1805:OHX:N2	2.67	0.42
31:BA:1112:C:N4	33:BF:178:LEU:HD22	2.33	0.42
16:A1:14:HIS:CE1	16:A1:32:PHE:CD2	3.07	0.42
1:AA:1316:U:H2'	1:AA:1317:A:H8	1.83	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1301:A:H2'	1:AA:1301:A:N3	2.34	0.42
1:AA:2744:G:N2	7:AH:143:GLN:HE22	2.17	0.42
22:D3:54:GLY:C	22:D3:56:ASP:H	2.22	0.42
1:AA:752:A:O2'	1:AA:753:C:P	2.77	0.42
2:AB:35:U:H2'	2:AB:36:C:O4'	2.19	0.42
46:BS:67:THR:O	46:BS:68:ASP:C	2.57	0.42
25:AX:22:ALA:O	25:AX:25:ALA:N	2.52	0.42
31:CA:1187:G:H2'	31:CA:1187:G:N3	2.34	0.42
1:DA:1625:C:O2	1:DA:1625:C:H2'	2.18	0.42
31:BA:596:C:O5'	31:BA:596:C:H6	2.01	0.42
40:BM:42:THR:HG22	40:BM:67:THR:O	2.19	0.42
31:CA:309:G:O2'	31:CA:310:G:H5'	2.19	0.42
23:DZ:74:VAL:O	23:DZ:76:ARG:N	2.52	0.42
1:DA:847:U:N3	1:DA:933:A:N6	2.34	0.42
3:AD:34:VAL:O	3:AD:35:LYS:HG3	2.19	0.42
31:CA:1060:C:C2'	31:CA:1061:G:H5'	2.48	0.42
43:CP:87:TYR:CD2	43:CP:87:TYR:C	2.92	0.42
52:CD:46:G:C2	52:CD:54:C:O2	2.72	0.42
2:AB:70:C:C2	2:AB:71:C:C6	3.07	0.42
1:AA:1062:G:H1'	1:AA:1088:A:C5	2.53	0.42
31:CA:1157:A:C6	31:CA:1181:G:C8	3.07	0.42
31:CA:1252:A:H2	31:CA:1355:G:O4'	2.02	0.42
1:AA:2599:G:C2'	1:AA:2600:A:H5'	2.50	0.42
15:AR:106:SER:O	15:AR:111:ARG:NH1	2.52	0.42
1:DA:826:U:OP1	1:DA:2428:G:H3'	2.18	0.42
1:AA:99:U:C6	1:AA:102:G:N1	2.88	0.42
26:A4:33:VAL:O	26:A4:34:GLU:C	2.58	0.42
31:BA:925:G:C6	31:BA:1392:G:C2	3.07	0.42
5:AF:67:GLN:O	5:AF:68:LYS:CB	2.59	0.42
1:AA:1084:A:N7	1:AA:1085:A:N7	2.67	0.42
1:DA:1012:U:C2'	1:DA:1012:U:O2	2.67	0.42
33:BF:101:LEU:HD23	33:BF:101:LEU:C	2.40	0.42
1:DA:1899:G:O2'	1:DA:1900:A:P	2.76	0.42
31:BA:1152:A:O3'	40:BM:13:HIS:CE1	2.65	0.42
44:BQ:47:LEU:O	44:BQ:49:HIS:N	2.52	0.42
20:AU:51:VAL:HA	20:AU:56:PRO:HA	2.00	0.42
3:AD:245:PRO:HA	3:AD:246:PRO:HD3	1.87	0.42
1:AA:2749:A:C4	1:AA:2750:A:N7	2.87	0.42
12:AP:76:LYS:HD3	12:AP:77:LYS:N	2.34	0.42
31:BA:659:U:C2	31:BA:660:G:C8	3.06	0.42
17:A2:22:VAL:CG1	17:A2:23:GLU:N	2.81	0.42
31:BA:368:U:OP1	8:DK:91:SER:OG	2.36	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:620:G:N3	1:DA:620:G:C2'	2.82	0.42
1:DA:1689:A:N6	1:DA:1698:A:C2	2.60	0.42
35:CH:102:ALA:HB1	35:CH:106:PRO:HG2	2.01	0.42
2:DB:40:U:C4	2:DB:43:C:OP2	2.72	0.42
1:DA:2645:G:N2	1:DA:2767:C:OP2	2.52	0.42
31:CA:409:G:C2'	31:CA:410:G:H5'	2.49	0.42
32:CE:92:TYR:C	32:CE:92:TYR:CD2	2.91	0.42
27:D5:20:ARG:C	27:D5:22:HIS:N	2.71	0.42
27:D5:16:ARG:HD2	27:D5:20:ARG:NH1	2.34	0.42
1:AA:316:C:H2'	1:AA:317:G:O5'	2.19	0.42
1:AA:1110:G:H2'	1:AA:1111:A:C8	2.54	0.42
8:DK:124:GLY:N	8:DK:142:VAL:CG1	2.80	0.42
29:A7:43:THR:HG22	29:A7:44:PRO:N	2.34	0.42
1:DA:1530:G:H2'	1:DA:1531:C:C6	2.53	0.42
4:AE:167:VAL:HG21	4:AE:187:ALA:HB1	2.00	0.42
22:D3:51:VAL:HG23	22:D3:81:VAL:HG23	2.00	0.42
28:D6:11:LEU:HG	28:D6:53:LYS:O	2.19	0.42
1:AA:2250:G:N1	12:AP:83:MET:HB2	2.34	0.42
5:DF:4:VAL:HG11	5:DF:17:ARG:NE	2.29	0.42
1:DA:1213:A:N3	1:DA:1238:G:O2'	2.46	0.42
20:DU:23:ARG:CG	20:DU:23:ARG:NH1	2.82	0.42
16:D1:52:ARG:O	16:D1:56:ASP:HB2	2.19	0.42
31:CA:151:A:H2'	31:CA:152:A:O4'	2.19	0.42
52:BD:77:C:C4	52:BD:78:C:N4	2.87	0.42
6:AG:83:ARG:HB2	6:AG:86:MET:CE	2.49	0.42
33:BF:23:TYR:CG	33:BF:24:ALA:N	2.87	0.42
7:DH:138:LYS:O	7:DH:141:VAL:HB	2.19	0.42
25:DX:6:VAL:O	25:DX:34:GLU:HA	2.19	0.42
1:AA:1487:G:C2	1:AA:1488:G:C8	3.07	0.42
38:CK:84:ARG:O	38:CK:135:CYS:HB2	2.19	0.42
1:DA:581:C:H2'	1:DA:582:G:H8	1.84	0.42
12:DP:45:GLN:H	12:DP:45:GLN:HG2	1.65	0.42
10:AN:93:PRO:HG3	10:AN:114:ILE:HG12	2.01	0.42
1:DA:867:C:C5	1:DA:868:U:H5	2.37	0.42
1:AA:1638:C:OP1	1:AA:2710:C:O2'	2.35	0.42
13:A0:61:HIS:CE1	13:A0:65:LEU:HD22	2.54	0.42
25:AX:59:VAL:CG1	25:AX:60:GLU:H	2.31	0.42
8:DK:54:GLN:HE21	8:DK:54:GLN:HB2	1.52	0.42
1:AA:2436:G:C4	1:AA:2437:U:C6	3.07	0.42
2:DB:116:G:H2'	2:DB:117:G:O4'	2.20	0.42
1:DA:28:A:C4	1:DA:513:A:C8	3.07	0.42
1:DA:1924:C:H2'	1:DA:1925:C:O4'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:BE:105:PHE:O	32:BE:108:ILE:HG22	2.19	0.42
14:DQ:44:LYS:HE3	14:DQ:44:LYS:HB2	1.83	0.42
41:BN:33:THR:HB	41:BN:37:GLY:C	2.40	0.42
15:DR:85:LYS:HD2	15:DR:87:ASP:OD2	2.20	0.42
15:AR:38:ASN:HA	15:AR:38:ASN:HD22	1.62	0.42
31:BA:1105:A:C2	31:BA:1106:G:C8	3.07	0.42
1:DA:2707:G:H2'	1:DA:2708:G:H8	1.84	0.42
1:DA:1507:A:C4	1:DA:1508:A:H1'	2.55	0.42
18:DS:75:TYR:HE2	18:DS:104:THR:HG1	1.66	0.42
1:AA:2184:G:C6	1:AA:2185:C:N4	2.87	0.42
8:DK:92:VAL:HB	8:DK:120:ILE:HB	2.01	0.42
1:AA:698:C:O2'	1:AA:734:A:N6	2.52	0.42
1:DA:428:A:H8	1:DA:428:A:OP2	2.01	0.42
35:CH:146:ALA:O	35:CH:147:ASP:C	2.58	0.42
1:DA:431:U:O2'	1:DA:432:A:H5'	2.19	0.42
1:AA:1680:U:O2	1:AA:1763:G:H3'	2.19	0.42
31:CA:45:U:H2'	31:CA:46:G:C8	2.53	0.42
43:CP:81:LEU:HD11	43:CP:88:ARG:NH1	2.33	0.42
49:CV:17:GLU:O	49:CV:21:GLU:HG2	2.19	0.42
49:CV:17:GLU:OE1	56:CV:101:OHX:N3	2.51	0.42
1:AA:876:C:H2'	1:AA:877:U:O4'	2.20	0.42
39:CL:79:LEU:O	39:CL:79:LEU:HD13	2.18	0.42
21:DV:76:LEU:HD23	21:DV:76:LEU:H	1.84	0.42
14:AQ:80:LEU:HA	14:AQ:80:LEU:HD23	1.67	0.42
1:DA:810:U:O5'	1:DA:810:U:H6	2.02	0.42
30:A8:51:ALA:O	30:A8:52:LYS:HB3	2.19	0.42
52:CD:17:G:C6	52:CD:67:A:N6	2.87	0.42
1:AA:2320:A:H8	1:AA:2321:G:O6	2.02	0.42
31:CA:1160:G:H22	31:CA:1177:G:N2	2.17	0.42
28:D6:24:GLU:CG	28:D6:25:LYS:N	2.75	0.42
28:D6:24:GLU:HA	56:D8:101:OHX:N6	2.34	0.42
9:AM:55:VAL:CG1	9:AM:126:PRO:HA	2.48	0.42
31:BA:1325:C:O2'	31:BA:1326:C:H5'	2.20	0.42
31:BA:789:U:O2	31:BA:789:U:H3'	2.19	0.42
11:DO:116:GLY:O	11:DO:117:GLU:C	2.57	0.42
52:BB:12:C:O2	52:BB:13:G:H1'	2.19	0.42
52:BB:51:C:OP2	52:BB:51:C:H6	2.02	0.42
10:AN:22:ILE:HD12	10:AN:22:ILE:O	2.19	0.42
1:DA:1057:A:H2'	1:DA:1058:U:O4'	2.19	0.42
31:BA:1346:A:O4'	31:BA:1348:U:C6	2.72	0.42
14:DQ:9:ARG:O	14:DQ:10:ARG:C	2.56	0.42
1:AA:1019:U:H2'	1:AA:1020:A:H8	1.84	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:2469:A:H2	1:AA:2481:G:H21	1.67	0.42
1:DA:2105:C:H3'	1:DA:2105:C:C6	2.55	0.42
2:DB:83:G:H4'	25:DX:52:HIS:CD2	2.54	0.42
31:BA:530:G:OP1	31:BA:530:G:H3'	2.19	0.42
1:DA:204:A:O2'	1:DA:205:G:OP2	2.25	0.42
15:DR:90:GLN:HG3	15:DR:91:ARG:N	2.34	0.42
6:DG:37:VAL:HG23	6:DG:99:MET:HE3	2.01	0.42
31:BA:413:G:O2'	31:BA:414:A:OP2	2.37	0.42
31:CA:417:C:H2'	31:CA:418:C:H5'	1.99	0.42
31:CA:1033:G:C2'	31:CA:1034:G:O4'	2.64	0.42
31:BA:436:C:H2'	31:BA:437:U:O4'	2.19	0.42
13:D0:77:ARG:O	13:D0:80:PHE:N	2.51	0.42
16:A1:62:ILE:O	16:A1:63:VAL:C	2.56	0.42
9:AM:41:ASP:O	9:AM:42:TRP:C	2.56	0.42
12:AP:136:ALA:HB1	21:AV:52:SER:CB	2.50	0.42
1:DA:2901:C:H2'	1:DA:2902:C:H5'	2.01	0.42
12:AP:92:GLY:C	12:AP:93:TYR:CG	2.92	0.42
16:D1:86:ALA:O	17:D2:49:THR:HG22	2.19	0.42
13:A0:97:VAL:HA	13:A0:113:LEU:O	2.18	0.42
7:AH:86:GLU:O	7:AH:87:LEU:CB	2.67	0.42
37:CJ:143:ARG:HD2	52:CD:42:U:O3'	2.20	0.42
20:AU:46:LYS:HE3	20:AU:63:LYS:CB	2.49	0.42
3:DD:106:ILE:O	3:DD:108:PRO:HD3	2.20	0.42
31:BA:380:G:N1	31:BA:384:G:C6	2.88	0.42
39:BL:112:LYS:HD3	39:BL:112:LYS:C	2.39	0.42
40:BM:47:PHE:CE1	44:BQ:37:PHE:HE2	2.37	0.42
7:AH:52:VAL:HG12	7:AH:65:HIS:CD2	2.54	0.42
11:AO:85:LEU:C	11:AO:87:ASP:H	2.23	0.42
5:DF:38:ARG:NH1	5:DF:38:ARG:CG	2.80	0.42
1:DA:1404:C:N3	1:DA:1405:U:C5	2.88	0.42
24:AW:48:HIS:N	24:AW:50:ILE:HD11	2.33	0.42
49:CV:49:ILE:CG1	49:CV:62:ILE:HD11	2.45	0.42
1:AA:16:G:C2	1:AA:17:G:C8	3.08	0.42
31:CA:797:C:O2'	31:CA:798:G:H5'	2.19	0.42
5:DF:18:ARG:HG2	5:DF:19:GLU:N	2.34	0.42
1:DA:775:G:C5	1:DA:794:G:C8	3.07	0.42
1:DA:783:A:H8	1:DA:784:A:H4'	1.84	0.42
35:BH:127:ASN:HD21	35:BH:130:ASN:H	1.63	0.42
18:DS:34:ASN:HA	18:DS:34:ASN:HD22	1.66	0.42
31:CA:116:A:C5	31:CA:117:G:N7	2.87	0.42
35:CH:72:GLN:C	35:CH:74:GLY:N	2.69	0.42
1:DA:552:G:H2'	1:DA:553:U:H6	1.84	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:1083:U:C5	31:BA:1084:G:C6	3.05	0.42
4:DE:88:GLY:O	4:DE:90:THR:N	2.43	0.42
7:DH:127:GLU:OE2	7:DH:130:ARG:NH2	2.53	0.42
21:DV:24:LEU:HD12	21:DV:25:PRO:N	2.34	0.42
34:BG:102:ASP:OD2	34:BG:103:ASN:N	2.52	0.42
52:BB:40:U:H2'	52:BB:41:C:H6	1.85	0.42
1:AA:828:U:O4	1:AA:2247:A:H1'	2.19	0.42
31:CA:1122:U:C4	31:CA:1123:A:C5	3.07	0.42
31:BA:1189:C:OP1	40:BM:51:ARG:NH2	2.27	0.42
1:AA:1253:A:C3'	1:AA:1254:A:H5'	2.50	0.42
25:AX:40:THR:HG23	25:AX:43:ILE:HG13	2.01	0.42
31:BA:31:G:C2'	31:BA:32:A:OP1	2.67	0.42
1:AA:1423:G:N7	56:AA:3346:OHX:N3	2.68	0.42
1:AA:1424:G:H2'	1:AA:1425:G:O4'	2.18	0.42
1:AA:552:G:C5	1:AA:553:U:C5	3.07	0.42
1:DA:2803:C:C4	1:DA:2804:C:N4	2.87	0.42
32:CE:71:VAL:HG22	32:CE:93:VAL:HB	2.00	0.42
1:AA:363(D):G:H2'	1:AA:363(E):U:C6	2.54	0.42
1:AA:2013:A:C2'	1:AA:2014:A:H5'	2.50	0.42
12:DP:59:ARG:O	12:DP:60:ARG:C	2.57	0.42
18:DS:73:ALA:HB3	18:DS:106:ILE:HG12	2.01	0.42
33:BF:32:LEU:O	33:BF:33:LEU:C	2.57	0.42
11:AO:135:LEU:HA	11:AO:135:LEU:HD23	1.84	0.42
31:BA:186(D):C:N4	31:BA:186(E):C:N4	2.67	0.42
1:AA:1394:U:C4	1:AA:1395:A:C6	3.06	0.42
1:AA:2824:C:H2'	1:AA:2825:C:O4'	2.19	0.42
1:DA:474:G:O6	56:DA:3422:OHX:N5	2.52	0.42
11:AO:42:SER:OG	11:AO:43:GLY:N	2.52	0.42
21:AV:78:LYS:H	21:AV:78:LYS:HG2	1.53	0.42
1:AA:2734:A:H5''	1:AA:2734:A:H8	1.83	0.42
35:BH:13:ILE:HA	35:BH:13:ILE:HD12	1.82	0.42
31:CA:907:A:H2'	31:CA:907:A:N3	2.34	0.42
9:AM:131:GLN:HE21	9:AM:131:GLN:HB3	1.63	0.42
33:CF:125:GLU:HG3	33:CF:189:ALA:HB1	2.01	0.42
9:DM:131:GLN:HB3	9:DM:131:GLN:HE21	1.63	0.42
4:DE:47:VAL:HG21	4:DE:85:ASN:HA	2.01	0.42
3:DD:53:PHE:CD1	3:DD:219:PRO:O	2.73	0.42
31:CA:983:A:H1'	31:CA:1049:U:O2	2.18	0.42
31:CA:1357:A:C8	31:CA:1358:U:H5	2.38	0.42
19:DT:29:TRP:CH2	19:DT:78:LYS:CE	3.01	0.42
31:CA:1118:C:H1'	31:CA:1179:A:C5	2.54	0.42
43:BP:28:ALA:C	43:BP:30:ALA:H	2.22	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:222:U:H2'	31:BA:223:U:C6	2.54	0.42
50:BW:52:ALA:O	50:BW:53:LEU:C	2.58	0.42
11:DO:114:ILE:O	11:DO:115:LEU:HD23	2.19	0.42
1:AA:2443:C:H2'	1:AA:2444:G:H8	1.84	0.42
40:BM:48:THR:HG23	40:BM:62:HIS:CG	2.52	0.42
1:AA:1084:A:N6	1:AA:1085:A:H62	2.18	0.42
1:DA:1087:G:C8	1:DA:1089:G:H1'	2.54	0.42
1:DA:1022:G:N3	1:DA:1024:G:C6	2.87	0.42
1:DA:1024:G:OP2	1:DA:1025:G:H3'	2.19	0.42
31:CA:1129:C:C4	31:CA:1139:G:C2	3.07	0.42
31:BA:1059:C:O2	40:BM:53:PRO:HG3	2.19	0.42
7:DH:2:SER:O	7:DH:3:ARG:C	2.56	0.42
19:DT:84:ALA:O	19:DT:87:GLN:HG3	2.19	0.42
31:BA:277:C:P	47:BT:68:ARG:HH12	2.42	0.42
31:CA:1037:C:O2'	31:CA:1038:C:O4'	2.32	0.42
50:BW:48:LYS:O	50:BW:49:ALA:C	2.58	0.42
1:DA:1416:G:C2'	1:DA:1417:C:C6	3.02	0.42
31:CA:511:C:O3'	34:CG:43:HIS:CE1	2.72	0.42
35:CH:100:VAL:O	35:CH:100:VAL:CG1	2.66	0.42
53:CC:19:G:C6	53:CC:58:A:N6	2.88	0.42
1:DA:592:G:N3	30:D8:4:MET:CE	2.82	0.42
10:DN:47:ILE:O	10:DN:48:PRO:C	2.58	0.42
1:DA:2744:G:H8	1:DA:2755:C:C5	2.37	0.42
46:CS:82:GLN:O	46:CS:83:GLU:HB2	2.20	0.42
34:BG:6:GLY:O	34:BG:7:PRO:C	2.57	0.42
3:AD:125:ILE:HD11	3:AD:131:LEU:CD2	2.36	0.42
34:BG:155:LEU:O	34:BG:157:LEU:N	2.52	0.42
31:BA:611:A:N1	31:BA:629:G:N2	2.62	0.42
31:CA:243:A:C8	31:CA:281:G:N2	2.87	0.42
1:DA:2127:G:H1	1:DA:2161:C:N4	2.17	0.42
31:BA:38:G:N3	31:BA:397:A:C2	2.88	0.42
21:AV:23:LYS:HD3	21:AV:40:ASP:HA	2.01	0.42
33:CF:119:ARG:HH22	33:CF:140:ARG:HD2	1.84	0.42
20:AU:101:LYS:HZ2	20:AU:101:LYS:HB3	1.82	0.42
7:AH:99:VAL:O	7:AH:102:ALA:HB3	2.19	0.42
39:BL:43:ALA:O	39:BL:46:ALA:N	2.47	0.42
22:A3:23:VAL:HG13	22:A3:38:VAL:CG2	2.47	0.42
50:CW:70:SER:O	50:CW:71:THR:O	2.37	0.42
31:CA:422:C:H6	31:CA:422:C:H2'	1.73	0.42
31:CA:484:G:H21	31:CA:485:G:H21	1.67	0.42
1:AA:2474:C:H3'	1:AA:2475:C:C6	2.55	0.42
39:CL:33:PHE:HB3	39:CL:34:ASN:OD1	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1578:U:C2'	1:DA:1579:A:H5'	2.49	0.42
1:AA:1324:G:C2	1:AA:1328:G:C6	3.07	0.42
31:BA:468:A:H8	31:BA:474:G:C8	2.30	0.42
32:CE:178:ARG:HH21	38:CK:68:ARG:NH2	2.17	0.42
1:DA:2016:U:C1'	27:D5:6:VAL:CG1	2.97	0.42
1:DA:1006:C:C2	1:DA:1138:G:C2	3.07	0.42
20:DU:44:ILE:HG12	20:DU:45:VAL:N	2.34	0.42
31:BA:633:G:H5''	31:BA:633:G:H8	1.84	0.42
1:DA:951:C:C2'	1:DA:952:G:H5'	2.50	0.42
1:DA:2102:U:O4	56:DA:3132:OHX:N3	2.53	0.42
1:DA:1163:G:N2	1:DA:1164:G:C4	2.87	0.42
1:AA:1771:C:HO2'	1:AA:1786:A:C1'	2.32	0.42
1:AA:1786:A:H4'	1:AA:1787:A:OP2	2.20	0.42
4:AE:92:THR:CB	4:AE:94:GLU:HG2	2.48	0.42
1:DA:1015:G:H2'	1:DA:1015:G:N3	2.33	0.42
18:AS:36:LEU:O	18:AS:37:ARG:C	2.56	0.42
3:AD:270:ILE:C	3:AD:271:ILE:HG12	2.40	0.42
1:AA:2602:A:N1	53:BC:77:A:H4'	2.32	0.42
1:DA:1149:G:H2'	1:DA:1150:C:O4'	2.20	0.42
33:CF:83:ARG:O	33:CF:86:VAL:HG22	2.19	0.42
31:BA:475:G:C4	31:BA:476:G:C8	3.07	0.42
1:DA:1215:G:H2'	1:DA:1216:G:H5'	2.00	0.42
36:CI:32:ASN:ND2	36:CI:32:ASN:H	2.17	0.42
45:BR:18:PHE:CZ	45:BR:21:ASP:HB2	2.54	0.42
31:BA:902:G:H2'	31:BA:903:G:H8	1.83	0.42
18:DS:39:THR:HG22	18:DS:44:ALA:HB2	2.01	0.42
31:BA:730:G:C5	31:BA:731:G:H1'	2.54	0.42
31:CA:1418:A:H2	1:DA:1948:G:N3	2.17	0.42
6:DG:50:ALA:O	6:DG:53:LEU:HD23	2.20	0.42
31:BA:1267:C:C5	31:BA:1268:A:C5	3.07	0.42
47:CT:83:ASP:O	47:CT:86:GLU:HB2	2.19	0.42
32:CE:69:LEU:HD23	32:CE:71:VAL:HG23	2.02	0.42
31:CA:1084:G:C5	31:CA:1085:U:C5	3.08	0.42
1:AA:1337:G:C4	1:AA:1338:G:C8	3.08	0.42
1:DA:2074:U:H4'	1:DA:2598:A:O4'	2.20	0.42
31:BA:41:G:H2'	31:BA:42:G:C8	2.54	0.42
1:AA:394:A:C6	1:AA:395:U:C4	3.07	0.42
17:A2:62:LEU:HA	17:A2:62:LEU:HD12	1.80	0.42
1:AA:2186:G:H2'	1:AA:2187:G:H8	1.85	0.42
41:CN:112:THR:HA	41:CN:113:PRO:HD2	1.83	0.42
5:AF:33:LEU:HD12	5:AF:33:LEU:HA	1.83	0.42
32:BE:122:PHE:HB3	32:BE:123:ALA:H	1.53	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
22:A3:37:LEU:HD21	22:A3:61:ALA:HB2	2.01	0.42
1:AA:1751:C:H2'	1:AA:1752:C:C6	2.54	0.42
10:DN:110:GLY:O	10:DN:112:MET:N	2.52	0.42
40:CM:23:ILE:C	40:CM:25:GLU:H	2.23	0.42
31:CA:304:U:O5'	31:CA:304:U:H6	2.02	0.42
9:DM:46:VAL:O	9:DM:46:VAL:CG1	2.66	0.42
48:BU:29:PHE:CD2	48:BU:29:PHE:N	2.87	0.42
1:DA:2786:U:H5''	4:DE:65:GLY:CA	2.49	0.42
30:A8:14:VAL:HG13	30:A8:22:VAL:HG13	2.01	0.42
31:CA:1107:C:C4	31:CA:1108:G:C8	3.06	0.42
1:AA:1314:C:C2	1:AA:1315:C:C5	3.07	0.42
5:DF:117:ARG:HD2	5:DF:117:ARG:HA	1.61	0.42
43:BP:87:TYR:HA	43:BP:90:LEU:HG	2.01	0.42
43:BP:90:LEU:CB	43:BP:93:ARG:HD2	2.48	0.42
1:DA:1162:G:N2	17:D2:89:GLN:HE22	2.15	0.42
31:CA:1182:G:H4'	31:CA:1183:A:C5'	2.49	0.42
31:BA:1301:U:C4	31:BA:1303:C:C6	3.07	0.42
1:DA:2400:G:N3	1:DA:2401:U:C6	2.87	0.42
31:CA:690:G:N2	41:CN:55:LYS:CE	2.82	0.42
24:DW:46:GLN:HG2	24:DW:49:LYS:NZ	2.34	0.42
31:CA:1446:A:C2'	31:CA:1447:G:O5'	2.68	0.42
40:BM:54:PHE:CZ	40:BM:55:LYS:CE	3.02	0.42
31:BA:66:G:H4'	31:BA:173:U:C5	2.55	0.42
1:AA:1729:A:C6	1:AA:1731:G:C6	3.08	0.42
16:D1:65:ILE:N	16:D1:65:ILE:HD12	2.35	0.42
52:BB:48:C:C5'	52:BB:49:A:OP2	2.68	0.42
16:A1:88:ILE:HG21	16:A1:109:LEU:CD2	2.50	0.42
1:AA:686:G:O6	29:A7:12:ARG:HG3	2.20	0.42
40:BM:8:LEU:HD12	40:BM:20:ALA:CB	2.47	0.42
1:DA:464:U:H2'	1:DA:465:G:O4'	2.19	0.42
14:DQ:74:ALA:HB1	14:DQ:107:GLU:CB	2.49	0.42
32:BE:187:LEU:HD11	32:BE:204:ASN:O	2.19	0.42
31:CA:994:A:N7	31:CA:1216:G:H4'	2.34	0.42
32:BE:31:TYR:O	32:BE:42:ILE:HG13	2.19	0.42
31:CA:866:C:H6	31:CA:866:C:H3'	1.84	0.42
1:AA:2789:C:OP1	1:AA:2789:C:H4'	2.18	0.42
31:CA:509:A:C8	31:CA:509:A:C3'	3.02	0.42
53:CC:63:C:H2'	53:CC:63:C:O2	2.19	0.42
42:CO:28:LYS:HE3	42:CO:33:ARG:NH1	2.33	0.42
11:AO:100:LEU:HD12	11:AO:100:LEU:HA	1.79	0.42
3:DD:26:LYS:H	3:DD:26:LYS:CD	2.16	0.42
1:DA:2744:G:C8	1:DA:2755:C:C6	3.07	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:475:G:C4	31:CA:476:G:C8	3.07	0.42
31:BA:425:G:C5	31:BA:426:G:C8	3.07	0.42
31:CA:407:G:C2	31:CA:436:C:N3	2.88	0.42
31:CA:409:G:H1	31:CA:433:C:N4	2.16	0.42
31:CA:1298:C:C6	37:CJ:114:ARG:NH1	2.87	0.42
37:CJ:38:LEU:O	37:CJ:42:ILE:HG13	2.19	0.42
52:BD:52:G:H2'	52:BD:53:A:H8	1.79	0.42
35:CH:122:GLU:HB3	35:CH:126:ARG:CG	2.37	0.42
31:BA:1211:U:H1'	31:BA:1213:A:N3	2.34	0.42
31:BA:279:A:C8	47:BT:98:LEU:HD13	2.55	0.42
5:DF:178:PRO:HB3	5:DF:198:ALA:CB	2.48	0.42
1:AA:2339:G:N2	1:AA:2340:G:C4	2.88	0.42
20:AU:95:LYS:O	20:AU:96:ILE:C	2.55	0.42
23:AZ:16:ASN:HB3	23:AZ:37:ILE:HG22	2.01	0.42
52:CD:42:U:H2'	52:CD:43:G:H8	1.83	0.42
1:AA:2111:C:C5	1:AA:2145:C:C4	3.08	0.42
1:DA:1818:U:H2'	3:DD:157:ARG:HG3	2.00	0.42
20:DU:9:LYS:O	20:DU:27:VAL:O	2.38	0.42
31:CA:619:U:H3	34:CG:135:LEU:HD13	1.85	0.42
13:A0:109:ALA:HA	13:A0:110:PRO:HD2	1.75	0.42
32:CE:144:ARG:HG3	32:CE:145:LEU:N	2.34	0.42
31:BA:1090:U:HO2'	31:BA:1091:U:H5'	1.80	0.42
1:DA:296:C:C2'	1:DA:297:C:H5'	2.50	0.42
6:DG:146:TYR:C	6:DG:148:MET:H	2.21	0.42
52:CB:78:C:H4'	52:CB:79:A:OP1	2.19	0.42
1:DA:654(A):A:C2	1:DA:654(U):A:N3	2.88	0.42
1:DA:288:C:O3'	1:DA:289:A:O4'	2.38	0.42
37:CJ:69:VAL:HG11	37:CJ:104:LEU:HD22	2.00	0.42
31:CA:114:U:H2'	31:CA:115:G:C8	2.54	0.42
1:DA:2846:G:H2'	1:DA:2847:U:H6	1.84	0.42
31:BA:958:A:N6	31:BA:959:A:N6	2.68	0.42
52:CD:10:C:C6	52:CD:10:C:H3'	2.54	0.42
1:DA:1260:G:C5	1:DA:1261:C:C5	3.07	0.42
39:BL:9:ARG:O	39:BL:104:ARG:HG3	2.19	0.42
35:CH:79:GLU:OE1	38:CK:104:ARG:HA	2.19	0.42
31:BA:1015:A:H2'	31:BA:1016:A:H8	1.84	0.42
31:BA:580:U:O4	31:BA:581:G:C6	2.73	0.42
1:AA:266:G:O6	1:AA:267:C:C4	2.72	0.42
9:AM:37:LYS:HB3	9:AM:37:LYS:HE2	1.70	0.42
3:DD:45:ASN:CG	3:DD:46:GLN:N	2.72	0.42
8:DK:118:LYS:HB2	8:DK:119:PRO:HD2	2.01	0.42
31:BA:344:A:H4'	31:BA:345:C:OP2	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:854:G:C6	31:BA:855:G:N7	2.87	0.42
31:CA:128:G:O2'	47:CT:3:LYS:HE2	2.20	0.42
31:CA:1269:A:H2	31:CA:1312:G:H21	1.65	0.42
31:BA:273:A:N6	31:BA:274:A:C6	2.88	0.42
31:CA:765:G:O6	31:CA:812:C:C6	2.72	0.42
53:CC:37:U:H2'	53:CC:38:A:O4'	2.19	0.42
1:DA:61:G:OP1	24:DW:51:ARG:NH1	2.53	0.42
8:AK:77:LEU:HD11	8:AK:79:ILE:HD11	2.00	0.42
1:DA:2288:A:C2	1:DA:2325:G:C8	3.08	0.42
31:CA:773:G:C2'	31:CA:774:G:O5'	2.67	0.42
1:DA:1313:U:H2'	1:DA:1313:U:O2	2.18	0.42
31:CA:563:A:C8	31:CA:567:G:O4'	2.72	0.42
1:AA:1783:A:C2	1:AA:2587:A:C5	3.07	0.42
38:CK:86:ILE:HG21	38:CK:133:LEU:HD22	2.00	0.42
41:CN:112:THR:HG22	41:CN:112:THR:O	2.19	0.42
1:DA:842:G:N2	1:DA:937:U:O2	2.52	0.42
9:AM:131:GLN:OE1	9:AM:132:ALA:HB2	2.20	0.42
1:AA:450:G:O6	1:AA:453:C:OP1	2.38	0.42
34:BG:111:ALA:HB2	34:BG:120:LEU:HD12	2.01	0.42
35:CH:7:GLU:OE1	35:CH:37:ARG:NH2	2.53	0.42
31:CA:824:C:H2'	31:CA:825:G:C8	2.54	0.42
1:DA:2852:G:P	13:D0:64:ARG:HH22	2.42	0.42
31:CA:103:C:C4	31:CA:104:G:N7	2.88	0.42
1:AA:2358:G:H2'	1:AA:2359:C:O5'	2.19	0.42
16:A1:98:LEU:HD23	16:A1:98:LEU:C	2.40	0.42
53:CC:46:G:O5'	53:CC:46:G:H8	2.02	0.42
1:AA:807:U:H2'	1:AA:808:G:O4'	2.20	0.42
1:AA:719:C:H2'	1:AA:720:C:H6	1.85	0.42
33:CF:186:PHE:HD1	33:CF:198:VAL:O	2.01	0.42
31:BA:160:A:C6	31:BA:161:A:C4	3.08	0.42
12:AP:24:GLY:CA	12:AP:25:ASP:HB2	2.23	0.42
1:DA:2785:C:C4	1:DA:2786:U:C5	3.07	0.42
4:DE:61:ARG:CB	4:DE:62:PRO:CD	2.97	0.42
43:CP:80:ARG:HB3	43:CP:80:ARG:CZ	2.48	0.42
3:DD:36:PRO:HB3	3:DD:61:LEU:CD1	2.50	0.42
12:AP:17:LEU:HD11	12:AP:41:TRP:CD1	2.54	0.42
52:CD:49:A:C8	52:CD:49:A:O5'	2.72	0.42
3:AD:27:THR:O	3:AD:28:GLU:CD	2.58	0.42
28:D6:25:LYS:CA	30:D8:34:TRP:CH2	3.02	0.42
1:AA:2590:A:OP2	3:AD:238:GLY:HA2	2.19	0.42
31:BA:1329:A:OP1	43:BP:28:ALA:HB3	2.20	0.42
40:BM:54:PHE:CE2	40:BM:55:LYS:CE	3.03	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:2140:C:N3	1:AA:2151:G:N2	2.67	0.42
1:AA:2157:G:O2'	1:AA:2158:A:O5'	2.36	0.42
34:CG:139:ARG:CG	34:CG:139:ARG:NH1	2.67	0.42
1:AA:1082:U:C4	1:AA:1083:U:N3	2.88	0.42
39:CL:117:HIS:O	39:CL:118:LYS:HB2	2.19	0.42
17:A2:37:VAL:CG2	17:A2:37:VAL:O	2.67	0.42
11:DO:9:ASN:N	11:DO:9:ASN:ND2	2.67	0.42
31:BA:1187:G:O5'	39:BL:113:LYS:NZ	2.52	0.42
39:BL:120:ARG:O	39:BL:121:ARG:C	2.57	0.42
31:BA:1133:G:H2'	31:BA:1134:G:H8	1.85	0.42
14:DQ:99:LYS:O	14:DQ:103:GLU:HG2	2.20	0.42
4:AE:117:MET:O	4:AE:117:MET:HG2	2.20	0.42
31:BA:216:G:C2	31:BA:217:C:N3	2.88	0.42
31:BA:390:C:H4'	46:BS:28:ARG:HH21	1.83	0.42
1:DA:620:G:H4'	1:DA:621:A:C5'	2.50	0.42
1:DA:111:A:C2	1:DA:112:U:C2	3.07	0.42
52:CD:59:A:C6	52:CD:60:A:C5	3.07	0.42
1:DA:2301:C:H6	1:DA:2301:C:H3'	1.85	0.42
11:AO:49:ARG:CG	11:AO:49:ARG:HH11	2.33	0.42
31:BA:425:G:C6	31:BA:426:G:C8	3.08	0.42
31:CA:1301:U:O3'	43:CP:21:TYR:OH	2.28	0.42
54:C1:11:U:H2'	54:C1:12:A:N1	2.34	0.42
31:CA:1501:C:N4	31:CA:1504:G:C2	2.87	0.42
42:CO:89:ARG:HG2	42:CO:90:VAL:H	1.84	0.42
1:DA:532:A:C8	1:DA:2021:C:C5	3.08	0.42
1:AA:2564:A:C6	1:AA:2565:A:C6	3.07	0.42
21:AV:53:ILE:O	21:AV:53:ILE:HG13	2.19	0.42
1:DA:2127:G:N2	1:DA:2161:C:N3	2.61	0.42
21:DV:170:THR:OG1	21:DV:170:THR:O	2.31	0.42
21:AV:5:LEU:HD11	21:AV:39:VAL:HB	2.02	0.42
15:AR:55:ASN:N	15:AR:59:THR:HG22	2.31	0.42
20:DU:17:SER:HB3	20:DU:71:LYS:HD2	2.00	0.42
20:AU:63:LYS:NZ	20:AU:64:GLU:HG2	2.35	0.42
1:AA:2168:G:OP1	1:AA:2168:G:H4'	2.19	0.42
13:A0:42:LYS:O	13:A0:45:ARG:HD2	2.20	0.42
1:DA:1570:A:H4'	3:DD:38:LYS:HE2	2.00	0.42
31:CA:323:U:H6	31:CA:323:U:O5'	2.03	0.42
46:BS:38:TYR:HB2	46:BS:39:TYR:H	1.58	0.42
32:CE:42:ILE:HD13	32:CE:42:ILE:C	2.39	0.42
4:AE:86:PRO:HB2	4:AE:87:GLU:H	1.58	0.42
1:DA:26:G:H8	1:DA:26:G:O5'	2.02	0.42
31:CA:952:U:C5	43:CP:104:ARG:NH2	2.75	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
21:AV:98:MET:O	21:AV:125:LEU:HA	2.19	0.42
33:BF:114:PRO:HA	33:BF:185:GLY:HA3	2.02	0.42
9:DM:59:LYS:O	9:DM:61:ARG:NH1	2.53	0.42
1:AA:1203:G:C4	1:AA:1204:A:C2	3.07	0.42
31:BA:387:U:P	56:BA:1721:OHX:N1	2.92	0.42
31:CA:150:C:C5	31:CA:170:U:C4	3.08	0.42
52:BD:5:G:N2	52:BD:78:C:O2	2.53	0.42
31:CA:1517:G:C4	31:CA:1518:A:C8	3.07	0.42
31:CA:1074:G:O3'	32:CE:103:THR:HG22	2.20	0.42
32:BE:141:GLU:O	32:BE:145:LEU:HB2	2.20	0.42
1:AA:1703:G:O2'	31:BA:1429:C:H4'	2.19	0.42
1:AA:2037:G:H2'	1:AA:2038:G:H8	1.81	0.42
13:A0:72:ASP:C	13:A0:72:ASP:OD2	2.58	0.42
31:CA:32:A:C2	31:CA:33:A:C5	3.08	0.42
1:DA:142:G:H1'	19:DT:37:THR:CG2	2.50	0.42
31:CA:1413:A:C2	31:CA:1488:G:C2	3.08	0.42
1:AA:2574:G:O2'	4:AE:143:ASN:HB3	2.20	0.42
8:AK:123:LEU:HA	8:AK:142:VAL:HG21	2.02	0.42
31:CA:723:U:H2'	31:CA:724:G:OP1	2.18	0.42
1:AA:1914:C:O4'	1:AA:1914:C:O2	2.38	0.42
1:DA:816:C:O2'	1:DA:817:C:H5'	2.19	0.42
1:DA:1668:A:N7	1:DA:1674:G:C6	2.87	0.42
8:AK:61:ARG:HE	8:AK:61:ARG:HA	1.84	0.42
1:DA:49:A:C6	1:DA:118:A:C5	3.08	0.42
31:CA:1083:U:C3'	31:CA:1084:G:H5'	2.49	0.42
1:AA:2631:G:C6	1:AA:2632:A:C8	3.08	0.42
50:CW:97:ALA:HB3	50:CW:99:LEU:CD1	2.50	0.42
31:BA:644:G:C2'	31:BA:645:C:H5'	2.50	0.42
1:AA:831:G:N2	11:AO:53:GLY:O	2.53	0.42
1:DA:1815:A:P	3:DD:54:ARG:HH22	2.42	0.42
5:AF:33:LEU:CD2	11:AO:1:MET:HG3	2.49	0.42
4:DE:175:VAL:HG12	4:DE:182:LEU:CD1	2.50	0.42
11:AO:135:LEU:HD13	11:AO:139:LYS:NZ	2.34	0.42
1:DA:2340:G:O2'	1:DA:2341:G:H5'	2.19	0.42
1:AA:1827:C:C2'	1:AA:1828:G:H5'	2.49	0.42
31:CA:1264:C:H2'	31:CA:1265:G:C8	2.55	0.42
14:DQ:46:VAL:HG12	14:DQ:47:THR:O	2.20	0.42
39:BL:36:TYR:CD2	39:BL:37:PHE:CE2	3.08	0.42
1:AA:1919:A:H2'	1:AA:1919:A:N3	2.35	0.42
42:BO:48:PRO:CD	42:BO:49:ASN:N	2.81	0.42
43:BP:16:ASP:HB2	43:BP:31:LYS:HG2	2.02	0.42
1:AA:2393:A:H5'	11:AO:62:LEU:CB	2.41	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:CP:78:ILE:HG23	43:CP:92:HIS:CD2	2.40	0.42
3:DD:94:LEU:HA	3:DD:94:LEU:HD23	1.78	0.42
52:CD:14:A:H2'	52:CD:14:A:N3	2.34	0.42
5:DF:151:SER:C	5:DF:152:GLU:HG3	2.40	0.42
26:D4:22:ILE:HD13	26:D4:22:ILE:N	2.32	0.42
1:AA:1069:A:C5	1:AA:1073:A:N7	2.88	0.42
34:CG:19:LEU:HB2	34:CG:21:LEU:HD12	2.01	0.42
32:CE:208:ILE:HA	32:CE:211:ILE:HG13	2.01	0.42
15:AR:100:TYR:C	15:AR:102:ILE:H	2.23	0.42
1:AA:791:C:H4'	1:AA:792:G:OP1	2.19	0.42
26:A4:39:CYS:O	26:A4:40:HIS:CB	2.32	0.42
16:D1:19:LYS:O	16:D1:22:LYS:N	2.36	0.42
11:DO:107:LYS:O	11:DO:110:TYR:N	2.52	0.42
49:BV:42:PRO:C	49:BV:44:MET:N	2.73	0.42
1:AA:1952:A:C6	1:AA:1953:A:N1	2.88	0.42
4:AE:41:LYS:CE	4:AE:41:LYS:HA	2.22	0.42
31:CA:828:A:C2'	31:CA:829:G:O5'	2.67	0.42
1:DA:2138:C:O2	1:DA:2154:G:N2	2.52	0.42
31:CA:1348:U:H5	31:CA:1349:A:N7	2.15	0.42
31:BA:1375:A:C2'	31:BA:1376:U:H5'	2.49	0.42
50:BW:36:LEU:C	50:BW:38:LYS:N	2.73	0.42
31:BA:553:A:C5	31:BA:554:C:C4	3.07	0.42
14:DQ:102:ALA:O	14:DQ:103:GLU:C	2.58	0.42
52:CB:57:C:C4'	52:CB:58:G:OP2	2.66	0.42
1:AA:2636:U:P	4:AE:79:ARG:HA	2.59	0.42
1:DA:2211:G:H2'	1:DA:2211:G:N3	2.34	0.42
25:DX:52:HIS:CD2	25:DX:52:HIS:H	2.37	0.42
21:DV:93:ASP:N	21:DV:130:PRO:HG2	2.34	0.42
2:DB:38:C:N4	2:DB:39:A:N6	2.67	0.42
10:DN:69:ILE:HD12	10:DN:77:ILE:CG2	2.50	0.42
20:DU:75:ILE:HB	20:DU:80:GLY:H	1.85	0.42
1:DA:2758:A:C5	7:DH:67:LEU:HD21	2.55	0.42
1:AA:2312:U:OP1	6:AG:74:LYS:HB2	2.19	0.42
52:BD:49:A:O5'	52:BD:49:A:C8	2.72	0.42
52:BD:51:C:C2'	52:BD:52:G:O4'	2.64	0.42
1:DA:2292:C:O5'	1:DA:2292:C:H6	2.02	0.42
31:CA:381:C:C4	31:CA:382:A:C5	3.08	0.42
31:CA:1028:C:C2	31:CA:1034:G:N2	2.77	0.42
1:AA:2508:G:H5'	52:BB:83:C:H42	1.84	0.42
32:BE:221:LEU:O	32:BE:221:LEU:HD13	2.20	0.42
5:AF:167:ALA:C	5:AF:169:ASN:N	2.73	0.42
1:DA:2537:U:N3	1:DA:2538:C:C4	2.88	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:AO:21:ARG:HB3	11:AO:22:GLY:H	1.51	0.42
31:BA:187:C:C4	31:BA:188:U:O2	2.73	0.42
31:BA:191(B):G:H2'	31:BA:191(C):G:O4'	2.19	0.42
1:DA:2774:C:N4	1:DA:2775:A:C6	2.87	0.42
10:AN:35:VAL:HG22	10:AN:69:ILE:HG12	2.01	0.42
31:CA:1151:A:C2'	31:CA:1152:A:O5'	2.68	0.42
31:CA:1152:A:C2'	31:CA:1153:C:H5'	2.50	0.42
3:AD:77:ALA:CB	3:AD:97:TYR:HA	2.49	0.42
3:DD:242:ARG:HG3	3:DD:246:PRO:HG3	2.01	0.42
1:AA:1287:A:C6	1:AA:1288:U:C4	3.08	0.42
31:BA:465:A:H2'	31:BA:466:C:O5'	2.19	0.42
37:BJ:15:ASP:OD2	37:BJ:44:TYR:OH	2.38	0.42
11:AO:144:GLU:HA	11:AO:145:PRO:HD3	1.73	0.42
6:DG:131:TYR:O	6:DG:159:VAL:HG23	2.19	0.42
1:AA:2409:G:H2'	1:AA:2410:G:O4'	2.19	0.42
31:BA:51:A:C6	31:BA:353:A:C2	3.08	0.42
1:AA:2249:U:H4'	1:AA:2250:G:OP2	2.18	0.42
1:AA:1474:C:H2'	1:AA:1475:G:H8	1.83	0.42
1:AA:834:C:C2'	1:AA:835:A:H5'	2.50	0.42
31:BA:1387:G:C6	31:BA:1388:C:N4	2.88	0.42
36:BI:11:ASN:OD1	36:BI:12:PRO:HD2	2.20	0.42
2:AB:86:G:C2	2:AB:91:C:C2	3.07	0.42
7:DH:138:LYS:C	7:DH:141:VAL:HB	2.40	0.42
18:DS:24:ILE:HA	18:DS:27:LYS:HG3	2.01	0.42
2:DB:103:U:O2'	21:DV:72:ARG:CG	2.68	0.42
31:CA:1192:C:H6	31:CA:1192:C:H3'	1.84	0.42
1:AA:1488:G:C4	1:AA:1489:U:C6	3.08	0.42
1:DA:2695:C:HO2'	1:DA:2696:U:C5'	2.33	0.42
8:DK:31:LEU:HD21	8:DK:38:LEU:HD11	2.01	0.42
1:AA:1992:G:C2	1:AA:1997:G:C5	3.08	0.42
42:BO:62:SER:C	42:BO:64:TYR:H	2.22	0.42
10:DN:14:THR:O	10:DN:14:THR:CG2	2.67	0.42
10:AN:120:GLU:OE1	15:AR:67:SER:OG	2.36	0.42
38:CK:103:VAL:HG11	38:CK:109:ILE:O	2.20	0.42
7:DH:107:VAL:HG23	7:DH:109:PHE:CE1	2.54	0.42
5:DF:72:ARG:C	5:DF:73:ALA:O	2.57	0.42
5:DF:103:LYS:HG2	5:DF:106:ARG:NH2	2.35	0.42
1:AA:270(J):G:C2	1:AA:270(K):C:O2	2.73	0.42
53:CC:44:A:C2	53:CC:45:A:C5	3.08	0.42
52:CD:77:C:N4	52:CD:78:C:N4	2.67	0.42
8:AK:144:VAL:HG23	8:AK:145:VAL:H	1.83	0.42
18:DS:20:VAL:CG2	18:DS:47:VAL:HG21	2.50	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:593:G:C4	31:BA:594:G:C8	3.08	0.42
31:BA:1307:U:H2'	31:BA:1308:U:O4'	2.20	0.42
1:DA:2548:G:H2'	1:DA:2549:G:O5'	2.20	0.42
13:D0:70:LEU:HA	13:D0:70:LEU:HD23	1.87	0.42
1:DA:2859:G:H4'	1:DA:2860:A:OP1	2.20	0.42
31:CA:628:G:O2'	31:CA:629:G:H5'	2.19	0.42
20:AU:28:LYS:HD2	20:AU:38:ILE:HD11	2.01	0.42
1:AA:416:C:C2'	1:AA:417:C:H5'	2.50	0.42
1:AA:887:A:OP2	1:AA:887:A:O4'	2.38	0.42
5:AF:116:ASP:O	5:AF:120:GLU:HG3	2.19	0.42
31:CA:1261:A:N7	31:CA:1262:C:C5	2.88	0.42
7:DH:36:PRO:O	7:DH:37:VAL:HB	2.20	0.42
1:DA:1445:C:OP2	1:DA:1446:C:OP2	2.38	0.42
1:DA:1821:A:H2'	1:DA:1822:G:C8	2.55	0.42
3:DD:11:PRO:O	3:DD:12:SER:OG	2.31	0.42
40:CM:38:ILE:O	40:CM:38:ILE:HG22	2.19	0.42
39:BL:70:LYS:HD3	39:BL:70:LYS:H	1.83	0.42
1:DA:1970:A:OP1	1:DA:1970:A:H4'	2.19	0.42
20:DU:89:PHE:CE1	20:DU:90:LEU:HB2	2.55	0.42
11:AO:27:HIS:ND1	11:AO:27:HIS:N	2.67	0.42
1:AA:631:A:O2'	11:AO:67:MET:HB3	2.19	0.42
31:CA:1052:U:C4	31:CA:1200:C:N3	2.88	0.42
31:CA:1328:C:O2'	31:CA:1329:A:H5'	2.20	0.42
31:CA:951:G:H2'	31:CA:970:C:O2'	2.19	0.42
1:AA:1278:A:C3'	13:A0:34:ILE:HD11	2.49	0.42
11:AO:16:ARG:NH1	11:AO:16:ARG:CG	2.80	0.42
1:AA:1063:G:C6	1:AA:1064:C:C4	3.07	0.42
31:CA:631:G:H3'	31:CA:632:A:C4	2.54	0.42
52:BD:26:G:C2	52:BD:27:A:C1'	3.03	0.42
31:CA:1160:G:C2	31:CA:1177:G:N2	2.88	0.42
1:DA:2795:G:H2'	1:DA:2798:C:OP2	2.20	0.42
32:CE:75:LYS:C	32:CE:77:ALA:N	2.73	0.42
1:DA:2416:C:O2'	1:DA:2417:C:H5'	2.19	0.42
1:DA:2390:U:O2'	1:DA:2391:G:H5'	2.20	0.42
1:DA:90:U:HO2'	1:DA:91:A:H8	1.57	0.42
37:CJ:113:GLU:HB3	37:CJ:118:VAL:CG2	2.49	0.42
31:BA:150:C:C2	31:BA:151:A:C8	3.08	0.42
1:AA:2391:G:N2	1:AA:2429:G:O4'	2.53	0.42
11:DO:19:VAL:CG2	11:DO:20:GLY:H	2.19	0.42
52:BB:46:G:O2'	52:BB:47:U:P	2.78	0.42
1:AA:1952:A:C4	10:AN:22:ILE:HG13	2.55	0.42
1:DA:1062:G:C6	1:DA:1063:G:C6	3.08	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1069:A:H2	1:DA:1094:U:N3	2.17	0.42
1:DA:1024:G:C6	1:DA:1025:G:C6	3.08	0.42
33:BF:91:LEU:HD11	33:BF:101:LEU:HD12	2.02	0.42
16:A1:86:ALA:CB	16:A1:88:ILE:HG12	2.50	0.42
16:A1:91:ASP:O	16:A1:95:LEU:HB2	2.19	0.42
31:BA:1187:G:H3'	31:BA:1188:A:H8	1.85	0.42
40:BM:5:ARG:HB2	40:BM:73:ASP:OD1	2.20	0.42
26:A4:24:THR:O	26:A4:25:TYR:HB2	2.20	0.42
19:DT:27:THR:C	19:DT:28:PHE:CG	2.93	0.42
12:DP:115:MET:O	12:DP:117:ALA:N	2.50	0.42
31:BA:828:A:H2'	31:BA:829:G:O4'	2.19	0.42
1:AA:2894:G:C2'	1:AA:2895:U:OP2	2.68	0.42
1:DA:1408:C:H2'	1:DA:1409:C:C6	2.55	0.42
42:CO:55:VAL:HG23	42:CO:68:ALA:O	2.20	0.42
4:AE:57:LYS:NZ	4:AE:59:VAL:HG11	2.33	0.42
1:AA:2304:G:N2	6:AG:156:ASP:OD2	2.46	0.42
1:AA:2875:C:O2'	15:AR:5:ALA:HB3	2.19	0.42
1:DA:1478:G:N2	1:DA:1516:U:C2	2.88	0.42
1:AA:1516:U:C2	1:AA:1517:G:C8	3.08	0.42
31:BA:492:G:C5	31:BA:493:G:N7	2.88	0.42
12:AP:32:TYR:CE1	12:AP:133:ARG:CG	3.01	0.42
1:AA:559:G:N2	16:A1:49:HIS:CD2	2.77	0.42
47:BT:31:LEU:HD23	47:BT:32:TYR:CZ	2.55	0.42
20:AU:95:LYS:HA	20:AU:101:LYS:HG3	2.01	0.42
37:BJ:117:ALA:C	37:BJ:119:ARG:H	2.23	0.42
5:AF:184:TYR:O	5:AF:188:ARG:HG3	2.20	0.42
1:DA:528:A:C2'	1:DA:529:A:H5'	2.50	0.42
7:AH:83:TYR:CB	7:AH:135:GLY:N	2.77	0.42
5:AF:135:LYS:O	5:AF:138:GLU:N	2.43	0.42
31:BA:230:G:H2'	31:BA:231:G:O4'	2.19	0.42
1:AA:2797:U:C2'	1:AA:2797:U:O2	2.66	0.42
31:CA:485:G:N7	56:CA:1734:OHX:N1	2.68	0.42
1:AA:2656:U:N3	1:AA:2665:A:H2	2.07	0.42
5:AF:34:TRP:HA	11:AO:6:LEU:HD12	2.02	0.42
34:CG:151:LYS:HE2	34:CG:151:LYS:HB3	1.79	0.42
1:AA:2216:G:N3	1:AA:2217:G:C8	2.87	0.42
38:CK:12:ARG:O	38:CK:24:THR:HG21	2.20	0.42
1:AA:2579:C:O5'	1:AA:2579:C:H6	2.03	0.42
1:DA:480:A:H1'	20:DU:44:ILE:HD13	2.02	0.42
7:AH:105:LEU:N	7:AH:105:LEU:CD2	2.77	0.42
38:BK:116:LYS:CG	38:BK:129:VAL:HG11	2.50	0.42
1:DA:1486:A:C2'	1:DA:1487:G:H5'	2.49	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:2337:G:OP2	56:DA:3221:OHX:N3	2.53	0.42
13:D0:59:ASP:O	13:D0:61:HIS:N	2.52	0.42
45:CR:60:VAL:HG12	45:CR:61:GLY:N	2.34	0.42
33:BF:158:GLY:C	33:BF:160:ALA:H	2.22	0.42
26:A4:58:ARG:C	26:A4:60:GLN:H	2.23	0.42
31:BA:192:U:H2'	31:BA:193:C:C6	2.55	0.42
7:AH:67:LEU:O	7:AH:71:LEU:HB2	2.20	0.42
31:BA:621:A:H2'	31:BA:622:A:O4'	2.19	0.42
1:DA:582:G:H2'	1:DA:583:G:H8	1.85	0.42
21:AV:152:ALA:C	21:AV:154:ASP:N	2.73	0.42
36:CI:12:PRO:HG3	36:CI:57:GLN:O	2.20	0.42
21:DV:100:VAL:N	21:DV:124:ILE:O	2.41	0.42
31:BA:939:G:C4	31:BA:940:C:C5	3.07	0.42
10:DN:44:LYS:O	10:DN:45:GLU:HB3	2.20	0.42
39:BL:4:TYR:CG	39:BL:88:TYR:HB2	2.55	0.42
7:DH:151:ILE:O	7:DH:151:ILE:HG22	2.20	0.42
6:AG:65:GLY:HA2	26:A4:7:PRO:HG2	2.02	0.42
1:DA:1149:G:C2	1:DA:1150:C:C2	3.07	0.42
18:AS:70:TYR:CD2	18:AS:70:TYR:N	2.87	0.42
8:DK:9:LEU:HD11	8:DK:12:LEU:HD22	2.01	0.42
31:CA:925:G:C6	56:CA:1785:OHX:N3	2.88	0.42
31:CA:1480:G:C4	31:CA:1481:U:C6	3.08	0.42
31:CA:1080:A:H4'	35:CH:16:THR:HB	2.01	0.42
1:AA:270(K):C:H5''	1:AA:270(L):U:OP2	2.19	0.42
17:A2:34:GLU:HG3	17:A2:56:SER:OG	2.20	0.42
41:CN:96:ARG:O	41:CN:99:GLN:N	2.52	0.42
31:CA:638:G:C2	31:CA:639:G:C8	3.07	0.42
31:CA:921:U:O2'	35:CH:18:ARG:HG3	2.20	0.42
1:DA:2037:G:H2'	1:DA:2038:G:H8	1.82	0.42
2:DB:29:A:OP2	14:DQ:31:SER:HB2	2.20	0.42
2:AB:94:C:H2'	2:AB:95:U:H6	1.85	0.42
2:AB:95:U:H2'	2:AB:96:G:H8	1.85	0.42
11:AO:23:PRO:O	11:AO:23:PRO:CG	2.67	0.42
15:DR:29:ARG:CG	15:DR:29:ARG:O	2.67	0.42
20:AU:29:GLU:HB3	20:AU:38:ILE:HG23	2.01	0.42
1:AA:2639:A:C2'	1:AA:2640:G:H5'	2.50	0.42
8:DK:127:VAL:HA	8:DK:138:ILE:O	2.19	0.42
31:BA:781:A:C3'	31:BA:782:A:H5'	2.50	0.42
31:BA:229:U:H6	31:BA:229:U:H3'	1.85	0.42
23:AZ:3:LYS:HG3	23:AZ:46:LEU:CD2	2.50	0.42
31:BA:644:G:H2'	31:BA:645:C:O4'	2.20	0.42
2:DB:49:C:OP1	14:DQ:97:ARG:CG	2.67	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:20:U:H2'	31:CA:21:G:H5'	2.00	0.42
1:AA:719:C:O2'	1:AA:720:C:H5'	2.20	0.42
1:AA:1827:C:O2'	1:AA:1828:G:H5'	2.19	0.42
1:AA:1284:A:N6	1:AA:1285:G:C2	2.88	0.42
31:BA:578:C:O2'	31:BA:728:A:N3	2.33	0.42
31:CA:357:G:O2'	31:CA:358:U:H5'	2.19	0.42
40:CM:89:ASP:C	40:CM:91:PRO:HD3	2.40	0.42
27:D5:9:LYS:HA	27:D5:9:LYS:HD3	1.89	0.42
53:CC:35:C:H2'	53:CC:35:C:O2	2.17	0.42
13:D0:103:ARG:HD3	13:D0:109:ALA:C	2.40	0.42
11:DO:46:LYS:HB3	11:DO:46:LYS:HZ3	1.69	0.42
11:AO:62:LEU:HD11	30:A8:30:ARG:HH12	1.71	0.42
3:AD:35:LYS:NZ	3:AD:64:ILE:C	2.72	0.42
43:CP:89:GLY:O	43:CP:92:HIS:HB2	2.20	0.42
43:CP:89:GLY:HA2	43:CP:92:HIS:HB2	2.02	0.42
43:CP:94:ARG:O	43:CP:95:GLY:C	2.57	0.42
3:DD:35:LYS:CE	3:DD:64:ILE:O	2.66	0.42
31:BA:1034:G:C2	31:BA:1035:A:N6	2.88	0.42
31:CA:631:G:C1'	31:CA:632:A:OP1	2.67	0.42
31:BA:1160:G:C2	31:BA:1177:G:N2	2.88	0.42
31:CA:1252:A:H2'	31:CA:1253:G:O4'	2.20	0.42
31:BA:946:A:H2'	31:BA:947:G:C8	2.55	0.42
31:CA:1446:A:O2'	31:CA:1447:G:O5'	2.36	0.42
1:AA:1728:G:N2	1:AA:1730:U:OP2	2.51	0.42
19:DT:65:ARG:O	19:DT:65:ARG:HG3	2.19	0.42
31:BA:1187:G:P	39:BL:113:LYS:HZ1	2.43	0.42
45:BR:62:GLN:O	45:BR:65:ARG:N	2.52	0.42
31:BA:1125:U:C2'	31:BA:1125:U:O2	2.68	0.42
2:DB:17:C:OP2	56:DB:212:OHX:N1	2.53	0.42
31:BA:1202:G:O2'	31:BA:1203:C:H5'	2.20	0.42
31:BA:267:C:OP1	47:BT:67:LYS:CD	2.67	0.42
31:BA:255:G:H5'	47:BT:16:GLN:O	2.20	0.42
1:AA:2751:G:C6	7:AH:2:SER:O	2.73	0.42
31:BA:356:A:H2'	31:BA:357:G:O5'	2.20	0.42
31:BA:448:A:OP2	31:BA:485:G:C2	2.71	0.42
42:CO:27:LEU:HB2	42:CO:33:ARG:CB	2.48	0.42
20:DU:75:ILE:HB	20:DU:80:GLY:N	2.35	0.42
1:DA:447:A:C6	1:DA:454:A:C8	3.07	0.42
31:CA:468:A:C8	31:CA:474:G:C8	3.08	0.42
31:CA:475:G:C2	31:CA:476:G:N9	2.87	0.42
34:BG:9:CYS:HA	34:BG:12:CYS:HB2	2.02	0.42
1:AA:2875:C:H4'	15:AR:5:ALA:CB	2.35	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AD:125:ILE:N	3:AD:125:ILE:CD1	2.79	0.42
13:D0:24:GLN:HE22	13:D0:36:THR:HG21	1.85	0.42
5:DF:158:THR:CB	5:DF:195:ASP:HB2	2.50	0.42
33:CF:33:LEU:O	33:CF:36:ASP:N	2.53	0.42
33:CF:43:LEU:HD22	33:CF:43:LEU:HA	1.93	0.42
31:BA:394:G:C4	31:BA:395:C:C6	3.08	0.42
4:AE:11:MET:HG2	4:AE:24:THR:HA	2.00	0.42
9:AM:21:LYS:O	9:AM:22:THR:C	2.57	0.42
3:AD:263:ARG:O	3:AD:264:LYS:C	2.58	0.42
1:DA:2333:A:C2'	1:DA:2334:G:OP2	2.67	0.42
3:AD:2:ALA:O	3:AD:3:VAL:CB	2.55	0.42
1:AA:274:G:OP1	1:AA:274:G:O4'	2.38	0.42
52:CD:40:U:C2'	52:CD:41:C:H5'	2.50	0.42
1:AA:321:G:OP2	5:AF:135:LYS:HG3	2.20	0.42
5:DF:119:ARG:NH1	5:DF:119:ARG:O	2.53	0.42
1:AA:2712:U:HO2'	1:AA:2712(A):A:P	2.43	0.42
31:BA:976:G:N7	31:BA:1358:U:C2	2.88	0.42
1:DA:1790:C:H2'	1:DA:1791:A:C5	2.54	0.42
7:DH:92:ILE:CD1	7:DH:92:ILE:N	2.83	0.42
1:AA:1288:U:C2	1:AA:1327:C:C2	3.07	0.42
13:D0:96:ARG:NH2	13:D0:117:VAL:HG23	2.35	0.42
1:DA:27:G:N2	1:DA:512:G:O2'	2.38	0.42
7:AH:30:LYS:HZ1	7:AH:81:GLU:HB3	1.85	0.42
1:DA:1138:G:H21	9:DM:106:MET:HE3	1.85	0.42
1:AA:1863:G:C5	1:AA:1864:U:C4	3.08	0.42
1:AA:2572:A:N9	4:AE:144:ARG:NH1	2.68	0.42
1:AA:956:G:H4'	12:AP:83:MET:CE	2.50	0.42
21:DV:5:LEU:O	21:DV:6:LYS:C	2.58	0.42
23:DZ:66:HIS:C	23:DZ:68:PRO:HD2	2.39	0.42
38:BK:4:ASP:HA	38:BK:5:PRO:HD3	1.72	0.42
1:DA:288:C:H3'	1:DA:289:A:C8	2.47	0.42
31:CA:1112:C:N4	33:CF:178:LEU:HD23	2.35	0.42
1:AA:957:A:N1	1:AA:2458:G:H4'	2.34	0.42
17:A2:81:TYR:HE2	17:A2:83:ARG:NH1	2.18	0.42
15:AR:125:ARG:NH1	31:BA:1446:A:O2'	2.52	0.42
31:BA:621:A:O2'	31:BA:622:A:H5'	2.19	0.42
1:AA:27:G:C4	1:AA:512:G:N2	2.88	0.42
1:DA:721:C:O2	1:DA:721:C:H2'	2.19	0.42
41:BN:76:GLY:O	41:BN:77:MET:O	2.38	0.42
31:BA:1285:A:OP1	31:BA:1285:A:C8	2.72	0.42
4:DE:89:ASP:O	4:DE:90:THR:CB	2.65	0.42
1:AA:469:G:O6	29:A7:37:LYS:CE	2.67	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:CI:3:ARG:HA	36:CI:65:VAL:O	2.20	0.42
8:AK:94:ALA:C	8:AK:111:PRO:HG3	2.40	0.42
8:AK:94:ALA:HB1	8:AK:111:PRO:CG	2.49	0.42
43:CP:49:THR:O	43:CP:53:VAL:HG23	2.20	0.42
1:DA:844:C:C5	1:DA:845:G:C6	3.08	0.42
42:CO:23:LYS:HE2	42:CO:23:LYS:H	1.85	0.42
1:AA:699:A:H2'	1:AA:700:G:O4'	2.19	0.42
21:AV:143:GLY:HA2	21:AV:144:LEU:C	2.40	0.42
31:BA:18:C:H2'	31:BA:19:C:O4'	2.19	0.42
2:AB:95:U:H2'	2:AB:96:G:C8	2.54	0.42
7:DH:16:SER:OG	7:DH:17:VAL:N	2.53	0.42
34:CG:70:ILE:CD1	34:CG:100:ARG:HD2	2.50	0.42
1:AA:1711:C:O2'	1:AA:1712:C:H5'	2.20	0.42
39:CL:108:VAL:O	39:CL:109:VAL:C	2.57	0.42
1:AA:1337:G:H2'	1:AA:1338:G:O5'	2.20	0.42
5:AF:24:LEU:N	5:AF:24:LEU:HD12	2.35	0.42
31:CA:127:G:N2	47:CT:61:GLU:OE1	2.46	0.42
31:BA:27:G:C4	31:BA:28:G:C8	3.07	0.42
12:DP:58:PHE:O	12:DP:59:ARG:C	2.58	0.42
10:AN:9:GLU:OE1	10:AN:18:LYS:HE2	2.20	0.42
32:CE:41:ILE:HD12	32:CE:41:ILE:N	2.35	0.42
1:AA:2185:C:H2'	1:AA:2186:G:H8	1.84	0.42
31:CA:5:U:H1'	56:CA:1788:OHX:N1	2.35	0.42
9:DM:1:MET:HB2	9:DM:2:LYS:H	1.66	0.42
1:DA:244:A:C2	1:DA:255:A:C4	3.08	0.42
1:DA:428:A:N6	1:DA:429:A:N1	2.68	0.42
8:DK:94:ALA:O	8:DK:95:LYS:C	2.59	0.42
15:AR:16:ARG:HH21	15:AR:19:LEU:HD21	1.85	0.42
1:AA:665:C:H2'	1:AA:666:G:C8	2.55	0.42
1:DA:2651:C:H42	1:DA:2669:G:H1	1.68	0.42
1:AA:291:C:OP1	56:AA:3362:OHX:N6	2.53	0.42
31:BA:843:U:H2'	31:BA:848:C:OP1	2.19	0.42
1:AA:2528:U:H2'	1:AA:2530:A:O5'	2.20	0.42
9:AM:5:VAL:HA	9:AM:6:PRO:HD3	1.85	0.42
35:CH:140:ARG:HG3	35:CH:140:ARG:O	2.19	0.42
1:AA:2766:G:N3	1:AA:2766:G:H2'	2.34	0.42
21:DV:70:LEU:HD23	21:DV:70:LEU:HA	1.93	0.42
14:DQ:32:LEU:HD23	14:DQ:32:LEU:HA	1.85	0.42
2:AB:115:G:N3	2:AB:115:G:H2'	2.34	0.42
1:DA:636:G:O5'	1:DA:636:G:H8	2.02	0.42
1:AA:2166:G:P	1:AA:2166:G:O4'	2.78	0.42
31:BA:706:A:O2'	41:BN:31:THR:CG2	2.68	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:DO:23:PRO:HB2	11:DO:24:GLY:H	1.70	0.42
1:DA:2808:U:H2'	1:DA:2809:A:H5'	2.02	0.42
1:DA:898:C:O5'	1:DA:899:A:OP2	2.38	0.42
4:DE:41:LYS:HG3	4:DE:42:ASP:N	2.35	0.42
11:AO:66:GLY:O	11:AO:67:MET:CB	2.67	0.42
31:CA:1054:C:OP1	31:CA:1197:G:P	2.78	0.42
31:CA:1056:U:C5	31:CA:1200:C:C5	3.08	0.42
31:CA:985:C:C2	31:CA:1221:G:N2	2.88	0.42
31:CA:1306:A:H1'	31:CA:1332:A:C2	2.54	0.42
43:CP:87:TYR:C	43:CP:89:GLY:H	2.22	0.42
31:CA:1320:C:OP1	49:CV:70:LYS:HD3	2.19	0.42
52:CD:54:C:H2'	52:CD:55:U:O5'	2.20	0.42
52:CD:16:C:N4	52:CD:68:A:N9	2.67	0.42
1:AA:883:G:H2'	1:AA:884:C:C4'	2.50	0.42
1:AA:865:C:H4'	1:AA:866:A:OP1	2.20	0.42
1:DA:2415:G:C4'	11:DO:67:MET:H	2.23	0.42
30:D8:33:ASN:OD1	30:D8:41:ILE:HD11	2.20	0.42
20:AU:13:VAL:HG12	20:AU:74:PRO:HA	2.00	0.42
15:DR:118:ARG:HD3	15:DR:118:ARG:HA	1.85	0.42
45:CR:78:TYR:O	45:CR:82:ILE:HG22	2.19	0.42
9:AM:96:GLU:O	9:AM:97:ARG:CB	2.66	0.42
31:BA:1327:C:O2'	31:BA:1328:C:H5'	2.20	0.42
16:D1:95:LEU:O	16:D1:98:LEU:HG	2.20	0.42
33:BF:39:ILE:O	33:BF:40:ARG:C	2.58	0.42
17:A2:38:LEU:HD23	17:A2:40:LEU:H	1.84	0.42
31:BA:1150:U:O2'	40:BM:39:PRO:O	2.32	0.42
1:AA:50:U:H4'	1:AA:51:G:OP2	2.19	0.42
1:AA:1888:G:N1	56:AA:3567:OHX:N5	2.67	0.42
1:DA:1050:A:C5	1:DA:1051:G:C8	3.08	0.42
34:BG:24:GLU:HG3	34:BG:112:VAL:HG21	2.02	0.42
4:AE:21:VAL:HG23	4:AE:22:PRO:N	2.35	0.42
1:DA:1652:A:O2'	1:DA:1653:G:H5'	2.20	0.42
48:BU:86:VAL:HG12	48:BU:87:ARG:H	1.84	0.42
1:DA:2303:G:N2	1:DA:2314:C:C2	2.88	0.42
11:AO:50:ARG:O	11:AO:57:THR:HG21	2.19	0.42
1:DA:305:U:H2'	1:DA:306:U:C6	2.55	0.42
4:DE:201:THR:C	4:DE:202:LYS:HD2	2.41	0.42
31:CA:418:C:N4	31:CA:425:G:N1	2.59	0.42
15:AR:77:PRO:HG2	15:AR:80:SER:CB	2.39	0.42
31:CA:1394:A:C6	31:CA:1501:C:H4'	2.55	0.42
1:DA:1479:G:C2	1:DA:1480:G:C4	3.08	0.42
1:DA:1515:C:H2'	1:DA:1516:U:C6	2.55	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BK:103:VAL:HG11	38:BK:138:TRP:HD1	1.85	0.42
31:BA:438:G:O2'	31:BA:439:A:H5''	2.20	0.42
16:A1:65:ILE:O	16:A1:68:ALA:N	2.52	0.42
2:AB:49:C:OP1	14:AQ:97:ARG:HG2	2.20	0.42
12:AP:26:TYR:O	12:AP:138:ASP:OD2	2.38	0.42
1:DA:2329:G:H2'	1:DA:2330:G:H8	1.82	0.42
1:AA:571:A:C8	1:AA:2030:A:N6	2.87	0.42
1:AA:528:A:H2	1:AA:2043:C:C5'	2.31	0.42
40:CM:13:HIS:CE1	40:CM:14:LYS:HG3	2.55	0.42
46:CS:21:VAL:O	46:CS:33:ILE:HG13	2.20	0.42
32:CE:144:ARG:C	32:CE:146:GLN:N	2.74	0.42
31:CA:38:G:H4'	31:CA:547:A:N6	2.35	0.42
3:DD:223:GLY:HA2	3:DD:231:HIS:CD2	2.55	0.42
31:BA:457:C:O5'	31:BA:457:C:H6	2.03	0.42
13:A0:81:ASP:O	13:A0:85:PRO:HG2	2.20	0.42
21:DV:152:ALA:CB	21:DV:171:ILE:HD11	2.48	0.42
1:DA:1316:U:H2'	1:DA:1317:A:C8	2.55	0.42
32:BE:54:THR:O	32:BE:57:PHE:N	2.45	0.42
1:DA:773:U:H4'	3:DD:47:GLY:CA	2.46	0.42
1:AA:2281:C:C2'	1:AA:2282:G:H5'	2.49	0.42
40:CM:78:ASN:ND2	40:CM:80:LYS:HB3	2.32	0.42
1:DA:2833:G:C8	1:DA:2833:G:OP1	2.64	0.42
15:DR:4:GLY:O	15:DR:7:ILE:HG22	2.20	0.42
1:DA:231:C:O2'	1:DA:232:G:H5'	2.20	0.42
1:DA:288:C:C3'	1:DA:289:A:H8	2.30	0.42
49:BV:15:LEU:O	49:BV:16:LEU:C	2.59	0.42
1:AA:1386:C:P	1:AA:1396:U:H5	2.43	0.42
31:CA:833:U:H2'	31:CA:834:C:H6	1.84	0.42
31:BA:940:C:H2'	31:BA:941:G:H8	1.85	0.42
1:DA:638:G:C4	1:DA:651:G:C2	3.08	0.42
48:CU:66:LEU:HD11	48:CU:70:ILE:HD11	2.02	0.42
32:CE:213:LEU:O	32:CE:213:LEU:HD23	2.20	0.42
34:BG:98:GLU:C	34:BG:100:ARG:H	2.23	0.42
42:BO:78:GLN:HB3	42:BO:79:GLU:H	1.55	0.42
31:CA:438:G:O2'	31:CA:493:G:C2	2.73	0.42
53:CC:42:C:C4	53:CC:43:G:N7	2.88	0.42
1:DA:2056:G:H2'	1:DA:2056:G:N3	2.35	0.42
44:CQ:52:GLN:O	44:CQ:53:LEU:HD23	2.20	0.42
1:DA:342:G:C2	1:DA:343:C:C6	3.08	0.42
6:DG:179:PRO:HB2	26:D4:43:TYR:HE2	1.84	0.42
31:CA:753:A:H4'	31:CA:754:C:O5'	2.19	0.42
39:BL:33:PHE:O	39:BL:35:GLU:N	2.48	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:881:G:C6	31:CA:882:C:C4	3.08	0.42
40:CM:23:ILE:C	40:CM:25:GLU:N	2.74	0.42
3:AD:260:ARG:HG2	3:AD:261:LYS:O	2.20	0.42
46:BS:57:ARG:HG3	46:BS:57:ARG:HH11	1.85	0.42
6:AG:56:ALA:C	6:AG:58:GLN:H	2.24	0.42
17:D2:81:TYR:HB3	17:D2:82:ARG:H	1.72	0.41
40:CM:50:ILE:HD12	40:CM:60:ARG:HH11	1.85	0.41
12:AP:17:LEU:HD11	12:AP:41:TRP:NE1	2.35	0.41
31:BA:1005:A:H3'	31:BA:1006:C:H5'	2.01	0.41
31:BA:1022:G:C6	31:BA:1023:G:C5	3.08	0.41
31:CA:1159:U:C1'	31:CA:1181:G:H22	2.33	0.41
51:CX:9:ARG:HG3	51:CX:10:ARG:H	1.84	0.41
51:CX:9:ARG:O	51:CX:13:ILE:HG13	2.19	0.41
31:BA:1330:U:O4	31:BA:1331:G:C2	2.73	0.41
31:BA:922:G:H2'	31:BA:923:A:C8	2.54	0.41
31:BA:66:G:C2	31:BA:67:C:C6	3.08	0.41
49:BV:66:MET:O	49:BV:67:VAL:C	2.58	0.41
31:BA:1372:U:C4	31:BA:1373:G:C5	3.08	0.41
31:CA:1128:C:O2'	31:CA:1130:A:C8	2.61	0.41
31:CA:1127:G:H22	31:CA:1144:G:N2	2.17	0.41
31:BA:1129:C:C2	31:BA:1139:G:O6	2.73	0.41
50:BW:25:ARG:CG	50:BW:25:ARG:NH1	2.80	0.41
31:BA:565:U:C6	31:BA:566:G:C8	3.07	0.41
14:DQ:84:GLN:HA	14:DQ:110:LEU:H	1.84	0.41
31:BA:1058:G:C6	31:BA:1059:C:N3	2.88	0.41
39:BL:114:TYR:HD1	40:BM:60:ARG:HG3	1.85	0.41
31:BA:269:C:H2'	31:BA:270:A:C8	2.55	0.41
1:DA:2472:G:C4	1:DA:2475:C:N4	2.88	0.41
7:AH:6:ARG:C	7:AH:8:PRO:HD2	2.40	0.41
12:AP:78:PRO:O	12:AP:79:LEU:CG	2.66	0.41
31:BA:748:C:H1'	31:BA:749:C:OP2	2.20	0.41
31:BA:355:C:H5'	31:BA:389:A:OP2	2.20	0.41
42:CO:83:VAL:O	42:CO:105:TYR:CE1	2.73	0.41
48:BU:86:VAL:O	48:BU:87:ARG:C	2.59	0.41
4:AE:111:ARG:HG2	4:AE:111:ARG:H	1.56	0.41
1:DA:2314:C:H2'	1:DA:2315:G:H8	1.84	0.41
53:CC:60:A:C2'	53:CC:61:U:H5'	2.50	0.41
21:AV:27:VAL:CG1	21:AV:87:ASP:CB	2.95	0.41
31:CA:455:C:O2	31:CA:478:A:C2	2.73	0.41
14:AQ:66:ALA:O	14:AQ:67:ARG:C	2.55	0.41
1:AA:546:C:C5	1:AA:547:A:C6	3.08	0.41
1:DA:1364:G:OP1	23:DZ:3:LYS:HD2	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1510:A:O3'	1:AA:1510:A:OP1	2.38	0.41
1:AA:2355:C:H4'	22:A3:36:ILE:HD11	2.02	0.41
37:BJ:115:ARG:O	37:BJ:118:VAL:HG12	2.19	0.41
21:DV:29:TYR:CB	21:DV:34:ASN:HD22	2.32	0.41
52:CD:44:C:C6	52:CD:44:C:OP2	2.73	0.41
1:AA:90:U:C4'	1:AA:91:A:H8	2.32	0.41
41:BN:125:PHE:CD2	41:BN:125:PHE:N	2.86	0.41
1:DA:2536:G:C5	1:DA:2537:U:C4	3.08	0.41
31:BA:380:G:N2	31:BA:384:G:C5	2.88	0.41
39:CL:42:ARG:O	39:CL:43:ALA:C	2.58	0.41
34:BG:96:LEU:HD13	34:BG:139:ARG:NH1	2.35	0.41
7:AH:43:VAL:CG2	7:AH:43:VAL:O	2.67	0.41
52:BB:81:C:C6	52:BB:81:C:OP2	2.68	0.41
31:CA:1227:A:C3'	31:CA:1227:A:C8	3.03	0.41
31:BA:52:G:H2'	31:BA:53:A:O4'	2.21	0.41
31:CA:880:C:H5	42:CO:9:GLN:HE21	1.68	0.41
3:AD:231:HIS:CD2	3:AD:249:PRO:HG3	2.55	0.41
31:CA:1435:G:H2'	31:CA:1436:U:H6	1.82	0.41
23:AZ:92:LYS:O	23:AZ:94:LEU:N	2.53	0.41
1:DA:794:G:H2'	1:DA:795:C:C6	2.53	0.41
36:BI:39:LYS:O	36:BI:40:VAL:HB	2.19	0.41
6:AG:70:VAL:CG2	6:AG:70:VAL:O	2.67	0.41
1:DA:1784:A:H4'	1:DA:1785:A:O5'	2.20	0.41
17:A2:64:HIS:HA	17:A2:92:THR:HG22	2.02	0.41
1:AA:1761:C:OP1	56:AA:3462:OHX:N1	2.53	0.41
1:DA:362:U:H3'	1:DA:362:U:C6	2.54	0.41
26:D4:24:THR:O	26:D4:25:TYR:CB	2.67	0.41
1:DA:912:C:N3	1:DA:913:U:C5	2.88	0.41
1:DA:696:G:H2'	1:DA:697:C:C6	2.51	0.41
18:AS:70:TYR:CD2	18:AS:70:TYR:C	2.92	0.41
11:AO:108:LYS:C	11:AO:110:TYR:N	2.74	0.41
46:BS:4:ILE:HD11	46:BS:64:ALA:HB1	2.02	0.41
35:BH:34:VAL:HG11	35:BH:63:ARG:HD3	2.02	0.41
1:AA:1983:C:C2'	1:AA:1984:G:H5'	2.50	0.41
5:AF:20:LEU:HD12	5:AF:21:ALA:H	1.83	0.41
31:CA:1121:U:C4	31:CA:1122:U:C5	3.08	0.41
1:DA:2410:G:C2	1:DA:2411:A:H1'	2.55	0.41
1:DA:1449:A:N6	1:DA:1449(A):G:C2	2.88	0.41
33:CF:126:ARG:O	33:CF:128:PHE:N	2.52	0.41
42:CO:7:ILE:HA	42:CO:10:LEU:HD12	2.02	0.41
31:BA:649:G:H2'	31:BA:650:G:H8	1.85	0.41
1:AA:1388:G:H2'	1:AA:1389:G:C8	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:D0:33:ARG:HB2	13:D0:33:ARG:CZ	2.50	0.41
21:AV:165:VAL:HA	21:AV:166:SER:HA	1.74	0.41
5:AF:24:LEU:HA	5:AF:25:PRO:HD2	1.59	0.41
31:BA:1164:G:H2'	31:BA:1165:C:C6	2.55	0.41
31:BA:195:A:C5	31:BA:196:A:C2	3.08	0.41
33:BF:186:PHE:CE2	33:BF:188:LEU:HD23	2.55	0.41
1:AA:1215:G:OP1	56:AA:3373:OHX:N5	2.53	0.41
41:CN:33:THR:HG22	41:CN:39:PRO:N	2.34	0.41
31:CA:241:C:C2'	31:CA:242:C:H5'	2.50	0.41
46:BS:21:VAL:HG11	46:BS:59:TRP:CE2	2.55	0.41
25:DX:42:ALA:O	25:DX:45:GLY:N	2.53	0.41
36:BI:65:VAL:HG23	36:BI:66:GLU:N	2.34	0.41
1:AA:1494:A:C2'	1:AA:1495:A:H5'	2.49	0.41
32:CE:230:VAL:O	32:CE:231:GLU:HG2	2.19	0.41
33:CF:129:ALA:O	33:CF:132:ARG:N	2.53	0.41
1:AA:1426:G:H8	1:AA:1426:G:O5'	2.03	0.41
33:CF:64:VAL:HG12	33:CF:64:VAL:O	2.20	0.41
46:CS:22:THR:HG23	46:CS:22:THR:O	2.20	0.41
9:AM:60:ILE:HG12	9:AM:60:ILE:H	1.44	0.41
18:AS:20:VAL:O	18:AS:23:LEU:HB3	2.20	0.41
1:AA:2383:G:O2'	1:AA:2384:G:H5'	2.20	0.41
20:DU:87:LYS:HB3	20:DU:92:ASN:HA	2.02	0.41
11:AO:62:LEU:HA	11:AO:63:PRO:HD3	1.67	0.41
1:DA:2111:C:C2	1:DA:2118:U:O2'	2.72	0.41
3:AD:32:SER:HA	3:AD:35:LYS:O	2.20	0.41
31:CA:973:G:H1'	40:CM:55:LYS:HZ2	1.84	0.41
31:CA:974:A:P	44:CQ:41:ARG:HH12	2.42	0.41
1:AA:1537:C:H2'	1:AA:1538:G:O4'	2.20	0.41
1:AA:2307:G:H1'	1:AA:2308:G:C2	2.54	0.41
5:DF:30:PRO:O	5:DF:33:LEU:N	2.53	0.41
7:AH:89:ILE:HG22	7:AH:162:ILE:HG12	2.02	0.41
1:AA:883:G:N2	1:AA:894:C:N3	2.69	0.41
43:BP:87:TYR:O	43:BP:90:LEU:N	2.54	0.41
31:BA:1028(B):C:C4	31:BA:1032(A):G:N1	2.82	0.41
52:BD:59:A:C4	52:BD:60:A:N7	2.88	0.41
31:CA:1370:G:O2'	31:CA:1371:G:H5'	2.20	0.41
31:BA:1297:C:O2'	37:BJ:114:ARG:NH1	2.49	0.41
31:BA:1305:G:C5'	51:BX:4:GLY:HA3	2.47	0.41
28:D6:10:LEU:CD2	30:D8:34:TRP:CE2	3.02	0.41
9:AM:89:LYS:O	9:AM:93:THR:HB	2.19	0.41
31:BA:1054:C:H2'	31:BA:1054:C:O2	2.18	0.41
1:AA:2135:A:N3	1:AA:2135:A:H2'	2.35	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1190:G:N3	1:DA:1191:G:C8	2.89	0.41
16:D1:91:ASP:O	16:D1:92:ARG:C	2.58	0.41
16:D1:92:ARG:NH2	17:D2:10:LYS:HA	2.35	0.41
17:D2:2:PHE:CD2	17:D2:13:ARG:NH2	2.88	0.41
39:BL:113:LYS:N	39:BL:113:LYS:CD	2.83	0.41
1:DA:1308:A:H2'	1:DA:1309:G:O4'	2.20	0.41
50:BW:36:LEU:O	50:BW:38:LYS:N	2.54	0.41
2:DB:109:G:C5	2:DB:110:G:N7	2.88	0.41
3:AD:240:ALA:O	3:AD:241:PRO:C	2.59	0.41
4:AE:50:GLY:HA2	4:AE:76:ARG:O	2.20	0.41
1:DA:1681:G:N2	56:DA:3488:OHX:N2	2.67	0.41
31:BA:58:C:H2'	31:BA:59:A:O5'	2.19	0.41
14:AQ:101:LEU:HD12	14:AQ:101:LEU:O	2.19	0.41
1:AA:10:G:C2	1:AA:2629:A:C2	3.08	0.41
52:BB:74:C:H2'	52:BB:75:C:O4'	2.20	0.41
5:DF:164:ARG:HB2	5:DF:164:ARG:HH11	1.85	0.41
31:CA:468:A:O2'	46:CS:82:GLN:HG2	2.19	0.41
31:BA:415:A:N6	31:BA:416:G:C6	2.87	0.41
31:BA:424:G:C2	31:BA:425:G:C8	3.08	0.41
31:BA:431:A:H2'	31:BA:432:A:O4'	2.20	0.41
31:BA:542:G:C2	31:BA:543:C:C5	3.08	0.41
34:CG:20:TYR:CD2	34:CG:27:TYR:HD1	2.38	0.41
42:CO:40:VAL:HG21	42:CO:77:LEU:C	2.41	0.41
35:BH:36:ASP:OD2	35:BH:40:ARG:HG3	2.20	0.41
33:BF:14:ILE:HG13	33:BF:15:THR:N	2.36	0.41
4:DE:8:LYS:CG	4:DE:192:ASN:HA	2.50	0.41
12:AP:70:PRO:N	12:AP:95:ALA:HB2	2.35	0.41
33:CF:95:THR:C	33:CF:97:LYS:N	2.69	0.41
33:CF:59:ARG:O	40:CM:93:GLY:HA2	2.20	0.41
32:BE:4:GLU:HG2	32:BE:5:ILE:HG12	2.02	0.41
1:DA:1991:U:C2'	1:DA:1992:G:H5''	2.50	0.41
1:AA:654(A):A:C2	1:AA:654(T):A:N1	2.88	0.41
5:AF:136:THR:O	5:AF:140:LEU:HB2	2.20	0.41
35:BH:148:VAL:HG13	35:BH:152:ARG:HE	1.85	0.41
8:DK:76:THR:CG2	8:DK:77:LEU:N	2.75	0.41
22:A3:51:VAL:H	22:A3:62:LEU:HD12	1.81	0.41
7:DH:92:ILE:CD1	7:DH:160:LYS:HZ3	2.33	0.41
34:BG:196:LEU:C	34:BG:198:VAL:N	2.72	0.41
50:BW:22:ARG:O	50:BW:26:ASN:ND2	2.54	0.41
46:CS:21:VAL:HG13	46:CS:34:GLU:HB3	2.02	0.41
46:BS:47:ASP:C	46:BS:49:LEU:N	2.73	0.41
21:AV:120:ILE:O	21:AV:121:HIS:CG	2.74	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1884:A:C4	1:AA:1885:A:C8	3.07	0.41
1:DA:1638:C:H4'	1:DA:2710:C:O2	2.19	0.41
27:A5:60:VAL:HG22	27:A5:60:VAL:O	2.20	0.41
41:CN:121:PRO:C	41:CN:122:LYS:O	2.57	0.41
31:BA:604:G:C6	31:BA:605:U:C4	3.08	0.41
1:DA:773:U:H5'	3:DD:47:GLY:HA3	2.03	0.41
12:DP:16:ARG:HB3	12:DP:16:ARG:HE	1.63	0.41
24:AW:53:LEU:O	24:AW:57:ILE:HG13	2.20	0.41
40:CM:82:ILE:HG22	40:CM:82:ILE:O	2.20	0.41
27:A5:16:ARG:HH11	27:A5:16:ARG:HG2	1.86	0.41
1:DA:1213:A:H8	1:DA:1213:A:O5'	2.02	0.41
38:BK:129:VAL:HG23	38:BK:130:GLY:N	2.31	0.41
31:BA:740:U:O2'	31:BA:741:G:H5'	2.20	0.41
31:BA:1290:G:N3	31:BA:1290:G:H2'	2.35	0.41
6:AG:178:PHE:CB	6:AG:180:PHE:HE1	2.33	0.41
1:AA:1184:G:C5	1:AA:1185:C:C5	3.08	0.41
31:BA:1442:G:H8	31:BA:1442:G:H3'	1.85	0.41
31:BA:892:A:N6	31:BA:906:G:H1'	2.35	0.41
1:DA:579:G:H2'	1:DA:580:C:H6	1.82	0.41
26:D4:56:VAL:O	26:D4:57:GLU:CB	2.68	0.41
1:DA:1649:G:OP2	56:DA:3377:OHX:N3	2.53	0.41
26:D4:15:ILE:O	26:D4:33:VAL:HG13	2.20	0.41
1:DA:1657:C:H2'	1:DA:1658:C:H6	1.84	0.41
1:AA:2036:C:H2'	1:AA:2037:G:O5'	2.20	0.41
1:DA:2104:G:N1	1:DA:2186:G:C6	2.89	0.41
31:CA:31:G:C1'	31:CA:32:A:OP1	2.68	0.41
1:DA:220:G:H5''	1:DA:221:A:OP1	2.20	0.41
10:AN:3:GLN:CG	10:AN:4:PRO:HD2	2.51	0.41
1:AA:731:C:C2'	1:AA:731:C:O2	2.68	0.41
1:DA:547:A:C6	1:DA:548:A:C2	3.08	0.41
31:BA:980:C:H2'	31:BA:981:U:O4'	2.20	0.41
1:AA:2019:A:N6	1:AA:2020:A:C5	2.88	0.41
1:DA:2099:U:H2'	1:DA:2099:U:O2	2.19	0.41
31:BA:1061:G:C4	31:BA:1197:G:N2	2.88	0.41
1:AA:1252:G:C2	1:AA:1253:A:C2	3.08	0.41
1:AA:586:A:H5'	5:AF:89:VAL:HG21	2.02	0.41
1:DA:1337:G:H2'	1:DA:1338:G:O4'	2.19	0.41
31:CA:753:A:H4'	31:CA:754:C:C5'	2.49	0.41
30:A8:15:LYS:HE2	30:A8:15:LYS:HB3	1.92	0.41
1:AA:377:C:H2'	1:AA:378:C:C6	2.56	0.41
12:DP:58:PHE:O	12:DP:60:ARG:N	2.53	0.41
1:DA:1814:G:H2'	1:DA:1815:A:C8	2.54	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:DF:93:LYS:HB3	5:DF:94:PRO:CD	2.51	0.41
1:AA:181:A:C2	1:AA:435:C:C5	3.08	0.41
38:BK:11:THR:HG22	38:BK:15:ASN:ND2	2.36	0.41
1:DA:1430:C:H2'	1:DA:1431:U:C6	2.55	0.41
1:DA:1726:G:O2'	1:DA:1727:U:H5'	2.20	0.41
39:BL:39:GLY:O	39:BL:41:VAL:HG22	2.19	0.41
31:CA:933:G:N7	37:CJ:3:ARG:NH2	2.68	0.41
21:DV:133:ILE:N	21:DV:133:ILE:HD12	2.35	0.41
1:AA:228:A:C2'	1:AA:228:A:N3	2.83	0.41
1:AA:2419:U:OP2	30:A8:33:ASN:ND2	2.47	0.41
52:CB:35:G:C2	52:CB:36:U:C2	3.09	0.41
43:CP:67:GLU:HB3	43:CP:68:GLY:H	1.63	0.41
1:DA:885:C:N3	1:DA:890:A:C6	2.85	0.41
3:DD:35:LYS:HB3	3:DD:36:PRO:HA	2.03	0.41
1:AA:885:C:H2'	1:AA:890:A:N6	2.35	0.41
31:BA:1008:C:N3	31:BA:1021:G:N2	2.55	0.41
52:BD:17:G:C4	52:BD:66:G:N1	2.89	0.41
31:BA:1238:A:N3	31:BA:1241:G:O2'	2.48	0.41
11:DO:62:LEU:O	11:DO:62:LEU:HD23	2.20	0.41
1:DA:2777:G:OP2	1:DA:2781:A:O2'	2.31	0.41
37:CJ:119:ARG:O	37:CJ:120:ILE:C	2.59	0.41
31:BA:96:G:C6	31:BA:97:U:O2	2.72	0.41
11:DO:111:ARG:HB3	11:DO:112:LEU:H	1.68	0.41
16:D1:60:LEU:O	16:D1:61:TRP:C	2.57	0.41
49:BV:41:VAL:CB	49:BV:42:PRO:CA	2.89	0.41
1:AA:1059:G:C6	1:AA:1080:A:C2	3.08	0.41
1:AA:1091:G:C2	1:AA:1092:C:C5	3.08	0.41
33:BF:64:VAL:HB	33:BF:99:VAL:HG12	2.03	0.41
16:A1:75:ASN:HB3	16:A1:77:SER:HB3	2.02	0.41
1:AA:1011:G:O5'	16:A1:77:SER:HB2	2.21	0.41
1:AA:1778:U:C4	1:AA:1784:A:C4	3.08	0.41
31:BA:1152:A:OP1	40:BM:68:HIS:CD2	2.74	0.41
1:AA:270(P):C:H2'	1:AA:270(Q):C:C6	2.55	0.41
1:AA:2689:U:C5'	1:AA:2690:C:H5'	2.50	0.41
1:AA:2690:C:H5''	1:AA:2872:G:N2	2.35	0.41
20:AU:57:GLN:O	20:AU:58:GLY:O	2.38	0.41
32:BE:19:HIS:CE1	32:BE:206:ASP:HB2	2.55	0.41
31:BA:252:U:C4	31:BA:253:U:O4	2.73	0.41
52:CB:67:A:O2'	52:CB:68:A:H5''	2.21	0.41
1:DA:2468:G:C5	1:DA:2481:G:N1	2.88	0.41
4:AE:116:VAL:HG13	4:AE:122:PHE:CB	2.50	0.41
46:CS:39:TYR:OH	46:CS:41:PRO:HB3	2.19	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:7:G:C2	1:AA:8:A:C4	3.08	0.41
43:BP:86:CYS:HA	49:BV:73:GLU:O	2.20	0.41
15:DR:100:TYR:O	15:DR:102:ILE:N	2.53	0.41
52:CD:59:A:N6	52:CD:60:A:N6	2.68	0.41
41:BN:106:LYS:O	41:BN:107:SER:OG	2.22	0.41
42:CO:22:SER:C	42:CO:24:VAL:N	2.74	0.41
11:AO:106:LEU:O	11:AO:107:LYS:CB	2.68	0.41
1:DA:2767:C:H2'	1:DA:2768:C:C6	2.56	0.41
1:DA:66:C:C4	1:DA:67:U:C5	3.08	0.41
7:DH:71:LEU:HD12	7:DH:71:LEU:O	2.20	0.41
31:BA:430:A:OP1	34:BG:9:CYS:HB2	2.20	0.41
1:AA:904:C:H5'	1:AA:905:U:OP2	2.20	0.41
31:CA:1299:A:N1	31:CA:1301:U:C2	2.88	0.41
1:DA:1516:U:O2'	1:DA:1517:G:H5'	2.20	0.41
1:DA:2607:G:H2'	1:DA:2608:G:O4'	2.20	0.41
5:AF:198:ALA:O	5:AF:201:VAL:N	2.51	0.41
2:AB:31:C:N4	14:AQ:32:LEU:HD22	2.35	0.41
19:AT:8:ILE:CD1	19:AT:42:ALA:HB1	2.50	0.41
1:AA:1307:A:N6	1:AA:1606:G:H2'	2.34	0.41
1:DA:2899:G:O2'	1:DA:2900:A:H5'	2.20	0.41
32:BE:217:ARG:HE	32:BE:217:ARG:HB2	1.59	0.41
33:CF:150:LYS:HB3	33:CF:201:TYR:HB2	2.02	0.41
32:BE:216:SER:O	32:BE:218:ALA:N	2.53	0.41
31:BA:502:G:OP1	42:BO:118:SER:HB2	2.20	0.41
10:DN:105:GLU:CA	10:DN:108:GLU:HG3	2.42	0.41
7:AH:88:LEU:CD1	7:AH:88:LEU:N	2.81	0.41
13:A0:44:LEU:O	13:A0:45:ARG:C	2.57	0.41
22:D3:36:ILE:CD1	22:D3:36:ILE:H	2.33	0.41
2:DB:54:G:N3	2:DB:55:U:C6	2.88	0.41
21:DV:54:HIS:C	21:DV:55:HIS:HD1	2.23	0.41
18:AS:41:LYS:C	18:AS:43:GLY:N	2.71	0.41
1:AA:795:C:H2'	1:AA:796:C:C6	2.55	0.41
13:A0:85:PRO:C	13:A0:87:TYR:N	2.69	0.41
28:D6:51:GLU:HG2	28:D6:52:VAL:N	2.35	0.41
31:CA:953:G:C2	31:CA:1229:A:C4	3.08	0.41
1:AA:989:G:N7	25:AX:13:ILE:CD1	2.79	0.41
1:AA:35:G:H1'	1:AA:454:A:C4	2.55	0.41
6:AG:106:LEU:HG	6:AG:111:LEU:CD1	2.49	0.41
1:DA:1420:U:O2'	1:DA:1421:G:O5'	2.37	0.41
1:AA:2094:G:OP1	8:AK:22:LYS:HG3	2.20	0.41
1:AA:650:C:C2'	1:AA:651:G:O5'	2.69	0.41
38:CK:6:ILE:C	38:CK:8:ASP:N	2.73	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:2377:A:O2'	1:AA:2378:A:H5'	2.20	0.41
7:AH:137:ASP:HB3	7:AH:138:LYS:H	1.45	0.41
7:AH:77:LYS:NZ	7:AH:82:GLY:O	2.53	0.41
3:AD:68:LYS:HB3	3:AD:70:TRP:CH2	2.55	0.41
2:AB:66:A:C2	2:AB:108:C:C4	3.08	0.41
37:CJ:69:VAL:HG21	37:CJ:104:LEU:HD21	2.01	0.41
1:AA:2199:A:H5'	23:AZ:50:ARG:HH21	1.85	0.41
10:AN:114:ILE:C	10:AN:116:SER:N	2.71	0.41
21:AV:141:VAL:HG21	21:AV:150:LEU:CD1	2.49	0.41
1:DA:2100:G:C6	1:DA:2190:G:C6	3.08	0.41
1:DA:1657:C:O2'	1:DA:1658:C:H5'	2.20	0.41
31:CA:54:C:C5	31:CA:352:C:H5	2.38	0.41
1:DA:1467:C:N3	1:DA:1526:G:N2	2.68	0.41
8:AK:112:LYS:O	8:AK:113:ARG:HB2	2.20	0.41
1:DA:2450:A:O2'	1:DA:2451:A:H5'	2.21	0.41
31:CA:719:C:H5	31:CA:720:C:N4	2.18	0.41
1:AA:1725:G:C2	1:AA:1741:C:C2	3.09	0.41
7:DH:118:PRO:HD2	7:DH:121:ILE:HG13	2.02	0.41
32:BE:36:ARG:HD3	32:BE:36:ARG:HA	1.78	0.41
31:CA:1028(B):C:N4	31:CA:1032(A):G:N1	2.68	0.41
1:AA:384:U:O2'	1:AA:385:C:H5'	2.21	0.41
2:AB:59:A:C5	2:AB:60:C:C5	3.07	0.41
32:BE:139:LYS:O	32:BE:142:LEU:HB3	2.20	0.41
4:AE:103:ASP:OD2	4:AE:168:MET:HE2	2.20	0.41
41:CN:126:ARG:O	41:CN:127:LYS:C	2.59	0.41
33:BF:141:VAL:HG12	33:BF:141:VAL:O	2.19	0.41
1:AA:1349:A:N6	1:AA:1598:C:N4	2.68	0.41
31:CA:193:C:O4'	50:CW:60:GLU:OE2	2.38	0.41
28:A6:30:THR:HA	28:A6:31:PRO:C	2.39	0.41
1:AA:1170:G:N2	1:AA:1180:C:C2	2.88	0.41
1:DA:693:C:H2'	1:DA:694:U:O4'	2.19	0.41
50:BW:42:GLN:O	50:BW:46:GLU:HG2	2.19	0.41
1:AA:533:G:N2	16:A1:45:TYR:CD1	2.80	0.41
7:DH:40:GLU:O	7:DH:41:MET:HB2	2.20	0.41
6:DG:101:ILE:HD12	6:DG:102:PHE:N	2.36	0.41
31:BA:61:G:H2'	31:BA:62:U:O4'	2.21	0.41
4:DE:16:ARG:O	4:DE:17:ASP:HB2	2.20	0.41
31:CA:60:A:H4'	31:CA:61:G:O5'	2.20	0.41
19:DT:45:THR:OG1	19:DT:45:THR:O	2.35	0.41
34:BG:188:LEU:HD23	34:BG:188:LEU:HA	1.83	0.41
15:AR:33:LYS:HG2	15:AR:33:LYS:H	1.68	0.41
50:CW:93:GLU:O	50:CW:93:GLU:HG2	2.19	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1770:G:OP1	56:DA:3062:OHX:N1	2.53	0.41
5:DF:170:LEU:HA	5:DF:171:PRO:HD3	1.85	0.41
1:DA:881:G:O6	1:DA:882:G:N1	2.54	0.41
11:DO:49:ARG:HD2	30:D8:58:ILE:HG23	2.01	0.41
1:AA:2402:C:OP1	1:AA:2402:C:C4'	2.67	0.41
1:DA:171:G:O2'	1:DA:172:C:O5'	2.32	0.41
1:AA:1568:G:H5''	3:AD:61:LEU:HD22	2.02	0.41
31:CA:1200:C:H1'	31:CA:1204:A:N6	2.34	0.41
31:CA:1317:C:C6	44:CQ:16:PHE:HD1	2.36	0.41
31:CA:1330:U:C2'	31:CA:1331:G:OP1	2.69	0.41
44:CQ:33:VAL:HA	44:CQ:39:LEU:O	2.20	0.41
19:DT:29:TRP:CZ3	19:DT:78:LYS:HB2	2.55	0.41
31:BA:1003:G:C3'	31:BA:1004:A:H5'	2.51	0.41
31:BA:1008:C:H5'	31:BA:1008:C:H6	1.85	0.41
31:CA:504:C:O2	31:CA:542:G:C2	2.74	0.41
52:BD:26:G:C5	52:BD:27:A:C8	3.09	0.41
21:DV:157:LEU:CB	21:DV:161:VAL:HG21	2.49	0.41
9:AM:95:PRO:O	9:AM:96:GLU:CB	2.68	0.41
6:AG:146:TYR:C	6:AG:146:TYR:CD2	2.94	0.41
31:BA:923:A:C2	31:BA:924:C:C2	3.08	0.41
11:DO:83:VAL:HG22	11:DO:83:VAL:O	2.20	0.41
34:CG:96:LEU:CD1	34:CG:139:ARG:NH2	2.84	0.41
1:AA:1057:A:H2'	1:AA:1058:U:C5	2.54	0.41
1:DA:1021:A:C2	1:DA:1023:U:C2	3.08	0.41
31:CA:1375:A:C2	31:CA:1376:U:C2	3.09	0.41
29:A7:5:TRP:CE3	29:A7:5:TRP:HA	2.55	0.41
31:CA:1131:G:C8	31:CA:1132:C:C5	3.09	0.41
31:BA:1130:A:P	31:BA:1131:G:OP2	2.79	0.41
31:BA:1133:G:N2	31:BA:1142:G:C8	2.89	0.41
2:DB:66:A:C6	2:DB:108:C:C5	3.09	0.41
2:DB:110:G:C4	2:DB:111:U:C6	3.09	0.41
7:DH:4:ILE:HD11	7:DH:7:LEU:CD2	2.50	0.41
1:DA:2468:G:C8	1:DA:2476:A:N6	2.87	0.41
1:DA:2477:C:O4'	1:DA:2477:C:O2	2.37	0.41
1:DA:1342:A:C2	1:DA:1397:U:N3	2.88	0.41
46:CS:8:ARG:CG	46:CS:8:ARG:NH1	2.57	0.41
52:CD:59:A:N1	52:CD:60:A:C5	2.89	0.41
1:DA:2304:G:N2	1:DA:2312:U:N3	2.52	0.41
6:DG:41:GLN:HE21	6:DG:60:LEU:HD13	1.85	0.41
31:CA:49:U:C5	31:CA:364:A:C6	3.09	0.41
1:AA:1363:C:H2'	1:AA:1364:G:H8	1.84	0.41
31:BA:411:A:N7	31:BA:413:G:H1'	2.32	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:509:A:HO2'	31:BA:510:A:P	2.37	0.41
32:CE:90:MET:HA	32:CE:91:PRO:HD3	1.87	0.41
8:AK:33:ARG:O	8:AK:34:GLY:C	2.57	0.41
19:AT:65:ARG:HG3	19:AT:67:GLY:H	1.84	0.41
35:BH:139:LEU:C	35:BH:141:GLN:N	2.72	0.41
31:BA:491:G:C6	31:BA:492:G:N7	2.88	0.41
5:AF:123:LEU:HD21	5:AF:199:TRP:CH2	2.56	0.41
5:AF:192:LEU:HD21	5:AF:194:MET:HG3	2.00	0.41
2:AB:53:A:C4	2:AB:54:G:C8	3.09	0.41
6:DG:161:THR:HG22	6:DG:162:THR:N	2.35	0.41
1:DA:1174:A:N1	1:DA:1175:U:O2'	2.53	0.41
19:AT:35:THR:HG22	19:AT:35:THR:H	1.62	0.41
1:DA:2439:A:P	1:DA:2439:A:H3'	2.60	0.41
1:AA:857:C:C4	1:AA:858:U:O4	2.73	0.41
38:BK:20:TYR:HA	38:BK:65:TYR:HE2	1.85	0.41
5:AF:170:LEU:HB2	5:AF:173:VAL:HB	2.01	0.41
22:D3:36:ILE:CD1	22:D3:36:ILE:N	2.83	0.41
28:D6:28:ARG:CD	28:D6:31:PRO:HD2	2.45	0.41
1:DA:945:A:C2	1:DA:2448:A:C1'	3.04	0.41
1:DA:2531:A:N3	1:DA:2658:C:O2'	2.41	0.41
48:BU:53:ARG:O	48:BU:56:THR:N	2.48	0.41
48:BU:40:LEU:O	48:BU:42:ARG:N	2.53	0.41
39:CL:96:LEU:HD12	39:CL:96:LEU:HA	1.88	0.41
38:BK:41:ARG:HH11	38:BK:41:ARG:HG3	1.85	0.41
47:CT:59:ILE:HD13	47:CT:73:VAL:HA	2.02	0.41
4:AE:144:ARG:HB3	4:AE:145:LYS:H	1.49	0.41
17:D2:33:VAL:HG13	17:D2:33:VAL:O	2.20	0.41
1:AA:1518:C:C2'	1:AA:1519:G:H5'	2.50	0.41
31:BA:599:C:O2'	31:BA:600:C:H5'	2.20	0.41
31:BA:329:A:C2	31:BA:332:G:N9	2.89	0.41
1:DA:875:G:C6	1:DA:876:C:N3	2.89	0.41
1:AA:1523:U:H2'	1:AA:1524:G:O4'	2.19	0.41
1:DA:780:G:N2	1:DA:783:A:H62	2.18	0.41
49:CV:66:MET:CE	26:D4:59:PHE:HD1	2.33	0.41
7:AH:77:LYS:HE2	7:AH:138:LYS:CD	2.50	0.41
7:DH:33:LEU:HD12	7:DH:75:ALA:O	2.21	0.41
32:CE:48:MET:O	32:CE:51:LEU:N	2.51	0.41
6:DG:32:PRO:HB2	6:DG:172:LEU:HD22	2.03	0.41
50:BW:11:SER:C	50:BW:13:LEU:N	2.74	0.41
31:CA:67:C:H2'	31:CA:68:G:H8	1.85	0.41
38:CK:58:TYR:O	38:CK:59:LEU:HD23	2.19	0.41
12:AP:43:THR:O	12:AP:44:ALA:C	2.59	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
21:AV:157:LEU:O	21:AV:158:PRO:O	2.39	0.41
5:DF:63:LYS:HE3	5:DF:63:LYS:HB3	1.88	0.41
2:DB:3:C:H42	2:DB:117:G:H1	1.69	0.41
1:AA:731:C:N3	1:AA:732:C:C5	2.89	0.41
11:DO:101:VAL:HG13	11:DO:102:ARG:N	2.35	0.41
31:CA:642:A:C2	31:CA:643:C:C2	3.08	0.41
1:DA:1349:A:N3	1:DA:1349:A:H5'	2.35	0.41
35:CH:40:ARG:HG2	35:CH:40:ARG:NH1	2.34	0.41
1:AA:2017:U:H5''	1:AA:2018:G:OP2	2.21	0.41
19:AT:57:LEU:CD1	19:AT:78:LYS:HG2	2.50	0.41
6:DG:78:SER:O	6:DG:79:ASN:C	2.58	0.41
31:BA:373:A:H2'	31:BA:374:A:O4'	2.20	0.41
1:AA:391:G:H2'	1:AA:392:C:C6	2.54	0.41
33:CF:66:VAL:CG1	33:CF:67:THR:N	2.83	0.41
31:CA:325:A:H2'	31:CA:326:G:O4'	2.20	0.41
29:A7:15:THR:HG22	29:A7:16:HIS:ND1	2.35	0.41
3:DD:28:GLU:N	3:DD:29:PRO:HD2	2.35	0.41
16:D1:74:LEU:HD12	16:D1:74:LEU:N	2.36	0.41
3:DD:120:GLY:HA2	3:DD:190:TYR:OH	2.20	0.41
38:BK:119:LEU:HD12	38:BK:124:ALA:HB2	2.02	0.41
41:BN:19:ALA:O	41:BN:82:VAL:HA	2.20	0.41
1:AA:1716:U:H1'	1:AA:1746:G:N2	2.35	0.41
31:BA:403:C:H4'	34:BG:122:ARG:NH1	2.34	0.41
1:DA:2832:U:C2	1:DA:2834:G:N2	2.88	0.41
1:DA:440:G:H2'	1:DA:441:U:C6	2.55	0.41
1:DA:2465:C:O2	1:DA:2486:G:C2	2.74	0.41
1:DA:1192:G:O2'	1:DA:1193:G:H5'	2.20	0.41
2:AB:22:U:H6	2:AB:22:U:O5'	2.03	0.41
45:CR:26:GLU:H	45:CR:26:GLU:HG2	1.70	0.41
41:BN:93:GLN:HA	41:BN:93:GLN:HE21	1.85	0.41
48:BU:38:GLU:OE1	48:BU:38:GLU:HA	2.20	0.41
13:A0:71:GLN:NE2	13:A0:71:GLN:HA	2.35	0.41
45:CR:66:LEU:HA	45:CR:66:LEU:HD12	1.75	0.41
24:AW:6:VAL:H	24:AW:6:VAL:HG23	1.59	0.41
1:DA:2807:G:H2'	1:DA:2808:U:O4'	2.21	0.41
1:DA:2892:A:N6	1:DA:2893:G:N2	2.67	0.41
1:AA:2016:U:O4'	27:A5:6:VAL:HG21	2.20	0.41
1:AA:2212:A:H1'	1:AA:2215:G:C6	2.56	0.41
31:CA:1316:G:H22	31:CA:1318:A:H3'	1.82	0.41
31:CA:1330:U:H2'	31:CA:1331:G:OP1	2.20	0.41
49:CV:11:VAL:HG13	49:CV:12:ASP:N	2.35	0.41
3:DD:34:VAL:O	3:DD:34:VAL:HG13	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:2705:A:H2'	1:DA:2706:G:O4'	2.21	0.41
52:BD:24:G:OP2	52:BD:24:G:H8	2.04	0.41
31:BA:1239:A:C6	31:BA:1298:C:H5	2.37	0.41
1:DA:2418:A:C5	1:DA:2419:U:C4	3.08	0.41
28:D6:24:GLU:OE2	56:D8:101:OHX:N6	2.54	0.41
8:AK:109:ILE:HB	8:AK:130:TYR:CZ	2.55	0.41
21:DV:158:PRO:HD2	21:DV:161:VAL:HG11	2.03	0.41
1:AA:776:G:C8	1:AA:793:A:C2	3.08	0.41
31:BA:926:G:C6	31:BA:1505:G:C5	3.07	0.41
31:BA:792:A:H4'	31:BA:793:U:O5'	2.21	0.41
31:BA:1452:C:H3'	31:BA:1452:C:H6	1.85	0.41
11:DO:97:PRO:HD3	11:DO:126:VAL:O	2.20	0.41
5:AF:64:ILE:O	5:AF:64:ILE:HD12	2.19	0.41
5:AF:70:THR:OG1	5:AF:72:ARG:HB2	2.20	0.41
7:AH:167:GLU:HA	7:AH:168:PRO:HD3	1.48	0.41
40:CM:6:ILE:HG22	40:CM:98:ILE:HA	2.03	0.41
1:DA:1144:G:C6	1:DA:1145:C:N3	2.89	0.41
5:DF:31:HIS:CB	11:DO:9:ASN:ND2	2.74	0.41
31:BA:1148:U:C4	31:BA:1149:C:C2	3.08	0.41
39:BL:16:ARG:HB2	39:BL:64:THR:OG1	2.21	0.41
2:DB:15:A:H2'	2:DB:16:G:OP1	2.21	0.41
1:AA:1141:U:C5	9:AM:64:GLY:HA3	2.55	0.41
4:AE:47:VAL:O	4:AE:80:GLU:HA	2.20	0.41
31:BA:625:G:H2'	31:BA:626:U:C6	2.55	0.41
31:BA:514:C:H42	31:BA:537:G:H1	1.69	0.41
31:CA:518:C:H5''	31:CA:519:C:C6	2.56	0.41
15:DR:24:PRO:HD3	15:DR:52:ILE:HG13	2.03	0.41
6:DG:44:GLY:O	6:DG:47:LYS:N	2.53	0.41
1:DA:1000:A:C5	1:DA:1001:A:C2	3.09	0.41
1:DA:1155:A:C6	1:DA:1157:G:C4	3.09	0.41
8:AK:64:GLU:O	8:AK:67:ARG:N	2.53	0.41
31:CA:1015:A:C6	31:CA:1016:A:C5	3.09	0.41
3:AD:125:ILE:HA	3:AD:125:ILE:HD12	1.78	0.41
31:CA:1403:C:H1'	31:CA:1500:A:N1	2.35	0.41
1:DA:1477:A:C2	1:DA:1517:G:C2	3.09	0.41
1:DA:918:A:C5	1:DA:919:G:H1'	2.55	0.41
53:BC:22:A:H62	53:BC:47:G:H2'	1.85	0.41
33:CF:35:GLU:O	33:CF:39:ILE:HG13	2.20	0.41
22:D3:43:THR:C	22:D3:45:PHE:N	2.72	0.41
38:CK:17:THR:HG22	38:CK:78:GLN:NE2	2.36	0.41
31:CA:311:C:C4	31:CA:312:C:C5	3.09	0.41
50:CW:26:ASN:O	50:CW:30:LYS:HB2	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:982:U:H4'	31:BA:983:A:OP1	2.20	0.41
50:CW:55:ILE:O	50:CW:58:LYS:HB3	2.20	0.41
31:BA:49:U:O2'	31:BA:50:A:C3'	2.68	0.41
7:DH:91:GLY:O	7:DH:92:ILE:C	2.58	0.41
13:A0:107:ASP:OD2	13:A0:109:ALA:CB	2.68	0.41
1:AA:945:A:O4'	1:AA:946:G:OP1	2.38	0.41
15:AR:31:SER:OG	15:AR:85:LYS:NZ	2.52	0.41
1:AA:2849:U:H1'	1:AA:2866:U:O2	2.19	0.41
1:AA:2864:G:C6	1:AA:2865:U:N3	2.89	0.41
1:DA:1213:A:O2'	1:DA:1214:A:H5'	2.19	0.41
3:AD:230:ASP:O	3:AD:231:HIS:HB2	2.20	0.41
9:AM:75:TYR:HA	9:AM:81:GLY:O	2.20	0.41
1:DA:289:A:C5'	1:DA:290:G:OP2	2.67	0.41
1:DA:2012:G:H8	1:DA:2012:G:O5'	2.03	0.41
31:CA:853:G:C4	31:CA:854:G:C8	3.08	0.41
41:BN:40:ILE:HG13	41:BN:77:MET:HE1	2.03	0.41
31:BA:1286:A:H8	31:BA:1286:A:H3'	1.86	0.41
23:DZ:83:GLU:O	23:DZ:85:LEU:N	2.54	0.41
31:BA:1122:U:C5	31:BA:1123:A:N7	2.88	0.41
31:CA:337:C:H2'	31:CA:338:A:C8	2.55	0.41
1:DA:1026:U:C2'	1:DA:1026:U:O2	2.68	0.41
31:CA:803:G:H2'	31:CA:804:U:O4'	2.20	0.41
13:A0:30:THR:HG22	13:A0:31:HIS:ND1	2.35	0.41
19:AT:26:TYR:CE1	19:AT:83:VAL:HG21	2.55	0.41
32:CE:26:PRO:C	32:CE:28:PHE:H	2.22	0.41
31:BA:968:A:H4'	31:BA:969:A:OP2	2.21	0.41
1:DA:263:C:H2'	1:DA:264:C:O4'	2.20	0.41
3:DD:124:PRO:HG2	3:DD:129:ASN:HD21	1.84	0.41
1:AA:1675:C:H2'	1:AA:1676:A:O4'	2.20	0.41
18:DS:35:ILE:HG23	27:D5:28:PRO:HD2	2.01	0.41
1:DA:817:C:O5'	1:DA:817:C:H6	2.02	0.41
53:BC:44:A:H2'	53:BC:45:A:H8	1.86	0.41
1:AA:1788:C:H2'	1:AA:1789:A:O4'	2.19	0.41
32:BE:120:ALA:C	32:BE:121:LEU:HD12	2.41	0.41
1:DA:2435:A:C2'	1:DA:2436:G:O5'	2.68	0.41
31:CA:706:A:C4'	41:CN:29:ILE:HD11	2.51	0.41
37:BJ:139:GLU:C	37:BJ:141:VAL:N	2.74	0.41
13:A0:18:LEU:HD13	13:A0:18:LEU:C	2.41	0.41
33:BF:73:PRO:C	33:BF:75:VAL:H	2.23	0.41
31:BA:28:G:C6	31:BA:29:G:N7	2.88	0.41
1:DA:1675:C:O5'	1:DA:1675:C:H6	2.04	0.41
2:AB:8:U:H2'	2:AB:9:G:O5'	2.19	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1589:C:H2'	1:DA:1590:U:C6	2.56	0.41
4:DE:13:ARG:HD2	4:DE:20:ALA:HB1	2.03	0.41
1:DA:1726:G:C6	1:DA:1727:U:C4	3.07	0.41
1:AA:1916:A:H3'	1:AA:1917:U:H6	1.85	0.41
1:DA:1319:G:N1	1:DA:1320:C:N4	2.69	0.41
31:CA:431:A:H2'	31:CA:432:A:O4'	2.20	0.41
32:BE:147:LYS:HE2	32:BE:148:TYR:HE1	1.86	0.41
3:DD:210:GLY:O	3:DD:213:ARG:HB2	2.20	0.41
32:CE:160:ASP:O	32:CE:161:ALA:HB2	2.20	0.41
3:AD:109:ASP:HB2	3:AD:197:GLY:CA	2.50	0.41
31:CA:307:C:H2'	31:CA:307:C:O2	2.20	0.41
3:AD:217:ARG:H	3:AD:217:ARG:HG2	1.74	0.41
32:BE:149:LEU:HA	32:BE:149:LEU:HD23	1.84	0.41
31:BA:1499:A:H2'	31:BA:1499:A:N3	2.33	0.41
1:AA:2283:C:N3	1:AA:2389:G:C2	2.89	0.41
4:DE:58:ARG:H	4:DE:60:ASN:HD21	1.68	0.41
31:CA:1049:U:H4'	31:CA:1050:G:O5'	2.11	0.41
31:CA:1060:C:O2	31:CA:1198:G:C2	2.74	0.41
43:CP:5:ALA:HB2	43:CP:22:ILE:HD13	2.02	0.41
31:BA:1002:G:C4	31:BA:1003:G:N7	2.89	0.41
1:AA:863:A:H2'	1:AA:864:G:C8	2.56	0.41
31:CA:1116:C:N4	31:CA:1184:G:H1	2.17	0.41
32:CE:16:HIS:HE2	32:CE:209:ARG:CG	2.18	0.41
31:BA:1302:U:C5	43:BP:17:VAL:HG21	2.54	0.41
30:D8:48:PHE:CD1	30:D8:48:PHE:N	2.89	0.41
11:DO:61:ARG:NH2	11:DO:61:ARG:HB3	2.24	0.41
31:CA:702:A:H3'	31:CA:703:G:C5'	2.48	0.41
31:CA:1446:A:OP1	31:CA:1446:A:H4'	2.21	0.41
1:AA:2592:G:C6	1:AA:2593:U:C4	3.09	0.41
27:A5:42:PRO:HB3	27:A5:43:HIS:HD2	1.86	0.41
26:A4:15:ILE:HD11	26:A4:32:TYR:CD1	2.56	0.41
26:A4:42:PHE:CD1	26:A4:42:PHE:C	2.92	0.41
31:BA:142:G:N3	31:BA:143:A:N7	2.68	0.41
31:BA:69:G:N2	31:BA:73:G:C4	2.88	0.41
1:AA:2137:C:H2'	1:AA:2138:C:C6	2.55	0.41
16:D1:65:ILE:CD1	16:D1:65:ILE:H	2.34	0.41
49:BV:40:ILE:HG21	49:BV:66:MET:O	2.20	0.41
1:AA:1057:A:N7	1:AA:1086:A:N3	2.68	0.41
1:DA:1063:G:N2	1:DA:1076:C:C2	2.88	0.41
1:DA:1070:A:C5'	1:DA:1071:G:OP1	2.69	0.41
31:CA:872:A:C4	31:CA:874:G:N7	2.88	0.41
16:A1:90:VAL:HG22	17:A2:39:LEU:CB	2.41	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:BL:116:LYS:HB3	39:BL:121:ARG:O	2.19	0.41
50:BW:32:ALA:O	50:BW:34:LYS:N	2.54	0.41
31:BA:565:U:C5	31:BA:566:G:C4	3.09	0.41
1:AA:484:C:OP1	20:AU:51:VAL:HG11	2.21	0.41
52:CB:60:A:H2'	52:CB:61:G:C8	2.56	0.41
4:AE:114:ALA:O	4:AE:157:ALA:HB1	2.20	0.41
12:AP:52:VAL:O	12:AP:53:ALA:C	2.59	0.41
31:CA:1250:A:H2	31:CA:1353:G:H21	1.68	0.41
31:BA:657:G:C2	31:BA:658:G:C8	3.08	0.41
1:AA:1448:G:N3	1:AA:1529:A:H2	2.18	0.41
4:AE:14:ILE:HD13	4:AE:14:ILE:HA	1.90	0.41
10:DN:2:ILE:HD11	10:DN:82:ASN:ND2	2.35	0.41
1:DA:1416:G:C4	1:DA:1417:C:C5	3.08	0.41
31:CA:578:C:H2'	31:CA:579:G:O4'	2.21	0.41
1:DA:1607:C:C2	56:DA:3406:OHX:N5	2.89	0.41
4:DE:197:ILE:HD11	4:DE:199:ARG:CZ	2.50	0.41
31:BA:542:G:C2'	31:BA:543:C:H5'	2.50	0.41
14:AQ:66:ALA:HA	14:AQ:69:VAL:CG1	2.37	0.41
6:AG:131:TYR:HB3	6:AG:159:VAL:CG2	2.50	0.41
31:CA:1240:U:H3'	31:CA:1241:G:C5'	2.50	0.41
32:BE:97:TRP:CZ2	32:BE:102:LEU:HD13	2.55	0.41
42:CO:93:LEU:O	42:CO:94:PRO:C	2.59	0.41
31:CA:539:A:H2'	31:CA:540:G:C8	2.56	0.41
46:BS:73:LEU:O	46:BS:77:ALA:HB2	2.20	0.41
37:BJ:16:LEU:CD1	39:BL:45:ALA:HB2	2.50	0.41
34:CG:173:TRP:O	34:CG:186:LEU:HB2	2.21	0.41
1:AA:2171:A:O2'	1:AA:2172:U:O4'	2.39	0.41
31:CA:250:A:H4'	31:CA:251:G:O5'	2.21	0.41
5:AF:170:LEU:O	5:AF:172:TRP:N	2.53	0.41
31:BA:132:C:N3	31:BA:231:G:C2	2.88	0.41
8:DK:74:ASN:O	8:DK:139:GLN:NE2	2.54	0.41
31:CA:942:G:H21	39:CL:124:GLN:HE22	1.66	0.41
39:CL:33:PHE:CD1	39:CL:37:PHE:HD1	2.37	0.41
12:DP:2:LEU:HG	12:DP:69:PHE:CE1	2.55	0.41
39:CL:95:LYS:C	39:CL:95:LYS:HE2	2.39	0.41
39:CL:95:LYS:HZ3	39:CL:96:LEU:CB	2.32	0.41
18:DS:12:ILE:HG13	18:DS:42:ARG:NH1	2.35	0.41
31:CA:930:C:N4	31:CA:931:C:C5	2.89	0.41
1:DA:952:G:C6	1:DA:953:A:N7	2.89	0.41
1:DA:1027:A:C6	1:DA:1126:A:C5	3.09	0.41
1:DA:2840:C:C5'	13:D0:53:HIS:CD2	2.98	0.41
34:CG:72:GLU:O	34:CG:73:ARG:C	2.58	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:518:G:C4'	18:AS:18:ARG:NH1	2.82	0.41
1:DA:1434:A:C2'	1:DA:1435:G:H5'	2.50	0.41
31:CA:57:G:C6	31:CA:58:C:N4	2.89	0.41
1:DA:363(F):A:H1'	1:DA:364:C:H5	1.85	0.41
32:CE:124:SER:C	32:CE:126:GLU:N	2.73	0.41
31:CA:451:A:C1'	31:CA:452:A:C8	3.04	0.41
31:BA:663:A:H5''	48:BU:61:LYS:HZ3	1.85	0.41
1:AA:488:G:OP2	56:AA:3497:OHX:N6	2.54	0.41
31:CA:634:C:H6	31:CA:634:C:O5'	2.03	0.41
31:CA:852:G:H2'	31:CA:853:G:H5'	2.02	0.41
52:CD:10:C:C6	52:CD:10:C:C3'	3.03	0.41
53:CC:11:A:C6	53:CC:12:G:C5	3.09	0.41
1:AA:1991:U:C2'	1:AA:1992:G:H5''	2.47	0.41
1:AA:531:C:N3	1:AA:563:G:C8	2.88	0.41
31:BA:1287:A:C2	31:BA:1353:G:H1'	2.56	0.41
1:DA:552:G:H2'	1:DA:553:U:C6	2.55	0.41
3:AD:213:ARG:NH2	3:AD:218:ARG:HD2	2.35	0.41
14:AQ:106:ARG:HH22	14:AQ:107:GLU:HB2	1.85	0.41
2:DB:113:C:H2'	2:DB:114:G:C8	2.56	0.41
38:BK:100:ILE:HA	38:BK:101:PRO:HD3	1.83	0.41
31:CA:187:C:C4	31:CA:188:U:O2	2.73	0.41
1:DA:273(E):U:H2'	1:DA:273(F):C:H5'	2.01	0.41
31:BA:636:U:C5'	47:BT:2:PRO:HG3	2.50	0.41
31:CA:914:A:H2'	31:CA:915:A:H5'	2.02	0.41
31:BA:120:A:H2'	31:BA:121:C:O5'	2.21	0.41
1:AA:205:G:HO2'	1:AA:206:U:P	2.41	0.41
39:CL:23:ASN:ND2	39:CL:25:LYS:H	2.19	0.41
44:CQ:43:CYS:O	44:CQ:46:GLU:N	2.53	0.41
1:DA:1208:C:H2'	1:DA:1209:G:H5'	2.02	0.41
1:DA:55:G:H2'	1:DA:56:A:H8	1.84	0.41
1:DA:763:G:H1'	1:DA:765:G:O4'	2.21	0.41
31:BA:1521:G:H2'	31:BA:1522:U:C6	2.56	0.41
1:DA:1831:G:H1	1:DA:1974:C:H42	1.68	0.41
1:AA:449:A:C4	1:AA:450:G:C8	3.09	0.41
1:DA:409:C:P	56:DA:3385:OHX:N1	2.93	0.41
1:AA:463:G:N1	1:AA:467:G:C6	2.89	0.41
1:DA:2364:C:C2'	1:DA:2365:G:H5'	2.51	0.41
19:AT:47:PHE:O	19:AT:48:LYS:C	2.59	0.41
22:D3:83:PRO:O	22:D3:84:LEU:C	2.59	0.41
31:CA:101:A:H2'	31:CA:102:G:O4'	2.20	0.41
33:BF:28:GLN:O	33:BF:31:HIS:N	2.49	0.41
45:BR:31:LEU:HA	45:BR:31:LEU:HD12	1.95	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:46:C:OP2	1:DA:215:G:H2'	2.20	0.41
1:DA:250:G:C6	1:DA:251:A:C6	3.09	0.41
3:DD:52:ARG:HB2	3:DD:53:PHE:CD2	2.55	0.41
31:CA:1052:U:O5'	31:CA:1052:U:H6	2.03	0.41
31:CA:1064:G:O4'	31:CA:1066:C:C6	2.73	0.41
7:AH:151:ILE:H	7:AH:151:ILE:HG12	1.73	0.41
1:AA:881:G:C3'	1:AA:882:G:O4'	2.62	0.41
17:D2:21:ARG:HG3	17:D2:21:ARG:HH11	1.86	0.41
31:CA:1176:A:N6	31:CA:1177:G:C4	2.89	0.41
31:BA:1298:C:H4'	31:BA:1299:A:O4'	2.20	0.41
31:BA:942:G:C2	31:BA:943:U:N1	2.89	0.41
9:AM:133:GLN:C	9:AM:134:ARG:HG3	2.40	0.41
26:A4:37:SER:HA	26:A4:41:PRO:HD2	2.03	0.41
31:BA:1053:G:C6	31:BA:1199:U:C2	3.09	0.41
12:DP:75:THR:HG22	12:DP:89:ASN:H	1.86	0.41
11:AO:37:GLY:C	11:AO:41:ARG:HD2	2.40	0.41
11:DO:126:VAL:HG22	11:DO:145:PRO:HG2	2.02	0.41
52:BB:11:C:C2	52:BB:26:G:N2	2.89	0.41
1:AA:1092:C:H2'	1:AA:1093:G:H5'	2.03	0.41
1:DA:1080:A:H2'	1:DA:1081:U:C6	2.55	0.41
1:DA:1098:A:C3'	1:DA:1099:G:H5'	2.51	0.41
31:CA:1256:A:H4'	31:CA:1257:U:OP1	2.20	0.41
41:CN:54:ARG:O	41:CN:56:GLY:N	2.54	0.41
31:BA:1350:A:C5	31:BA:1351:U:N3	2.88	0.41
40:BM:96:ILE:H	40:BM:96:ILE:HD13	1.85	0.41
31:BA:556:C:O2'	31:BA:557:G:H5'	2.21	0.41
14:DQ:110:LEU:HD23	14:DQ:112:PHE:CE1	2.56	0.41
14:DQ:85:VAL:HG23	14:DQ:86:ALA:N	2.35	0.41
1:AA:1854:A:H61	1:AA:1888:G:H1'	1.86	0.41
23:DZ:86:SER:O	23:DZ:87:PRO:C	2.59	0.41
52:CB:63:U:H2'	52:CB:64:U:O4'	2.21	0.41
1:DA:2472:G:H3'	1:DA:2473:U:H5''	2.01	0.41
12:DP:32:TYR:CD1	12:DP:114:ALA:HB2	2.56	0.41
31:BA:201:C:C2	31:BA:216:G:N2	2.82	0.41
12:AP:52:VAL:HA	12:AP:55:VAL:CG1	2.46	0.41
31:CA:1286:A:C8	31:CA:1286:A:H3'	2.55	0.41
12:DP:76:LYS:O	12:DP:77:LYS:O	2.39	0.41
31:BA:530:G:H1'	52:BB:36:U:H1'	2.03	0.41
1:DA:592:G:O2'	30:D8:4:MET:HB2	2.20	0.41
39:CL:18:PHE:HD1	39:CL:62:TYR:CD2	2.38	0.41
31:CA:1301:U:C4	31:CA:1303:C:C6	3.09	0.41
15:AR:5:ALA:O	15:AR:8:LYS:HG2	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:CE:67:THR:HA	32:CE:90:MET:HE2	2.02	0.41
31:CA:987:G:H2'	31:CA:988:G:H8	1.86	0.41
35:BH:36:ASP:C	35:BH:38:GLN:H	2.24	0.41
29:D7:34:ARG:HH12	29:D7:39:ARG:CG	2.26	0.41
1:AA:1478:G:N2	1:AA:1516:U:C2	2.89	0.41
1:DA:1771:C:O2'	1:DA:1786:A:C8	2.56	0.41
1:AA:540:G:C4	1:AA:541:C:C6	3.09	0.41
1:DA:915:C:H2'	1:DA:916:G:H5'	2.03	0.41
1:AA:2645:G:C3'	1:AA:2646:C:C5'	2.94	0.41
1:AA:871:U:H4'	12:AP:69:PHE:CE2	2.56	0.41
31:BA:156:G:C2	31:BA:166:G:C2	3.09	0.41
32:BE:163:PHE:CD2	32:BE:185:ILE:HG13	2.54	0.41
1:DA:2330:G:H2'	1:DA:2331:G:O4'	2.21	0.41
7:DH:19:VAL:O	7:DH:20:ALA:HB2	2.21	0.41
32:CE:87:ARG:NH2	32:CE:232:PRO:HA	2.36	0.41
32:CE:87:ARG:HH21	32:CE:233:SER:H	1.68	0.41
21:DV:18:LEU:O	21:DV:23:LYS:N	2.46	0.41
1:AA:2112:G:C8	1:AA:2112:G:P	3.13	0.41
14:AQ:89:ARG:HG3	14:AQ:92:TYR:O	2.21	0.41
31:BA:130:A:H1'	31:BA:263:A:O2'	2.21	0.41
22:A3:49:LYS:CB	22:A3:80:HIS:HB3	2.49	0.41
31:CA:1153:C:N3	31:CA:1154:G:C8	2.88	0.41
31:CA:619:U:C2	34:CG:135:LEU:CD2	3.03	0.41
1:AA:2543:G:H2'	1:AA:2544:G:O4'	2.20	0.41
34:CG:149:ALA:O	34:CG:150:GLU:O	2.38	0.41
31:BA:458:C:H2'	31:BA:464:G:C8	2.55	0.41
31:CA:464:G:N2	31:CA:467:G:C8	2.88	0.41
17:D2:5:VAL:HA	17:D2:38:LEU:H	1.86	0.41
13:D0:57:ARG:NE	13:D0:59:ASP:OD2	2.52	0.41
38:BK:134:ILE:HD13	38:BK:134:ILE:N	2.35	0.41
31:CA:6:G:H4'	31:CA:298:A:H4'	2.01	0.41
1:AA:1385:G:H1'	1:AA:1386:C:C6	2.56	0.41
25:DX:7:LYS:CD	25:DX:34:GLU:HG2	2.46	0.41
31:BA:115:G:H4'	31:BA:116:A:O5'	2.20	0.41
1:AA:27:G:O6	56:AA:3365:OHX:N4	2.53	0.41
1:AA:2523:G:O2'	1:AA:2524:G:H5'	2.20	0.41
1:AA:2661:G:OP2	1:AA:2661:G:H8	2.03	0.41
1:DA:2693:A:H2'	1:DA:2694:G:C8	2.54	0.41
1:AA:673:C:H4'	5:AF:82:ILE:CG2	2.50	0.41
1:DA:382:G:OP1	56:DA:3441:OHX:N5	2.53	0.41
11:AO:86:LYS:HB3	11:AO:118:GLY:CA	2.51	0.41
39:BL:4:TYR:CD2	39:BL:88:TYR:HB2	2.56	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
19:AT:18:TYR:HD1	19:AT:21:PHE:HE1	1.69	0.41
31:BA:110:C:O2'	46:BS:25:ARG:O	2.36	0.41
38:CK:19:VAL:HG23	38:CK:21:LYS:HB2	2.03	0.41
38:BK:39:LEU:HB3	38:BK:45:ILE:CD1	2.50	0.41
1:AA:1643:G:H2'	1:AA:1644:C:O5'	2.20	0.41
3:AD:118:VAL:CG1	3:AD:124:PRO:HD2	2.50	0.41
31:BA:562:C:H4'	31:BA:563:A:O5'	2.21	0.41
1:AA:2049:G:N2	1:AA:2620:C:C2	2.89	0.41
1:DA:839:U:H2'	1:DA:840:C:H6	1.84	0.41
7:DH:146:ALA:O	7:DH:149:ARG:N	2.53	0.41
1:DA:1354:A:C8	1:DA:1355:G:C8	3.08	0.41
1:DA:1819:A:H5''	3:DD:161:THR:HG21	2.03	0.41
1:DA:1711:C:O2'	1:DA:1712:C:H5'	2.21	0.41
52:BB:38:MIA:C4	52:BB:39:A:C8	3.03	0.41
12:DP:59:ARG:O	12:DP:60:ARG:HD2	2.20	0.41
9:AM:13:TRP:O	9:AM:135:PRO:HD2	2.21	0.41
31:BA:507:C:H5	31:BA:508:C:HO2'	1.63	0.41
31:CA:1486:G:H2'	31:CA:1487:G:C1'	2.51	0.41
11:AO:42:SER:O	11:AO:43:GLY:C	2.59	0.41
33:CF:129:ALA:CB	33:CF:132:ARG:CZ	2.99	0.41
7:DH:41:MET:SD	7:DH:41:MET:N	2.94	0.41
1:DA:1540:G:H2'	1:DA:1541:U:O4'	2.20	0.41
1:DA:2364:C:O2'	1:DA:2365:G:H5'	2.19	0.41
7:AH:15:VAL:HG12	7:AH:28:GLY:HA3	2.03	0.41
45:CR:55:GLY:O	45:CR:59:MET:HG3	2.21	0.41
46:CS:45:THR:HB	46:CS:46:PRO:HD2	2.01	0.41
31:BA:1111:A:N1	33:BF:177:THR:HG23	2.35	0.41
36:BI:88:VAL:HG12	36:BI:89:MET:N	2.36	0.41
31:CA:106:C:C2'	31:CA:107:G:H5'	2.51	0.41
1:DA:198:C:O2'	1:DA:199:A:H5'	2.20	0.41
50:BW:37:SER:O	50:BW:41:ILE:HG12	2.21	0.41
1:DA:1749:A:H2'	1:DA:1750:G:O5'	2.21	0.41
31:CA:85:U:O2	31:CA:85:U:O4'	2.38	0.41
36:BI:16:GLN:H	36:BI:16:GLN:CD	2.24	0.41
15:AR:35:LYS:N	15:AR:35:LYS:HD2	2.35	0.41
31:BA:996:A:O5'	31:BA:996:A:H8	2.04	0.41
1:AA:2301:C:C6	1:AA:2301:C:H3'	2.56	0.41
31:CA:162:A:H8	31:CA:162:A:O5'	2.03	0.41
1:DA:339:U:O5'	1:DA:339:U:H6	2.04	0.41
31:BA:1243:C:H2'	31:BA:1244:C:O4'	2.20	0.41
1:AA:2842:G:H2'	1:AA:2843:G:O4'	2.21	0.41
1:AA:1814:G:C6	1:AA:1815:A:C6	3.09	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:2363:C:O2	22:A3:39:ARG:NH2	2.54	0.41
20:DU:90:LEU:HB3	20:DU:91:GLU:H	1.58	0.41
1:DA:2637:U:H2'	1:DA:2638:G:O4'	2.21	0.41
4:DE:80:GLU:O	4:DE:81:ILE:C	2.58	0.41
11:AO:64:LYS:HB2	30:A8:25:MET:HG3	2.02	0.41
44:CQ:22:THR:HB	44:CQ:33:VAL:CG1	2.42	0.41
3:DD:64:ILE:HG21	3:DD:64:ILE:HD13	1.84	0.41
1:AA:1332:G:N2	1:AA:1609:A:C2'	2.83	0.41
52:CD:54:C:H2'	52:CD:55:U:O4'	2.21	0.41
5:DF:122:LYS:O	5:DF:124:LEU:N	2.50	0.41
5:DF:25:PRO:O	5:DF:26:ALA:HB3	2.21	0.41
1:DA:1453:A:C5	1:DA:2702:U:H6	2.39	0.41
31:BA:1175:G:C2	31:BA:1176:A:C6	3.09	0.41
31:BA:948:C:C2'	31:BA:949:A:H5'	2.51	0.41
30:D8:25:MET:O	30:D8:48:PHE:HE1	2.03	0.41
40:BM:54:PHE:CZ	40:BM:55:LYS:HE3	2.55	0.41
31:BA:178:C:C4	31:BA:179:A:N7	2.88	0.41
11:DO:144:GLU:HA	11:DO:145:PRO:HD3	1.83	0.41
1:DA:833:U:H1'	11:DO:55:ARG:HH12	1.86	0.41
41:CN:54:ARG:O	41:CN:57:THR:N	2.54	0.41
45:BR:63:ARG:HG3	45:BR:67:LEU:HD12	2.03	0.41
31:CA:1138:G:C6	31:CA:1140:C:C2	3.09	0.41
31:BA:1129:C:H41	31:BA:1141:C:H41	1.68	0.41
2:DB:11:C:C2	2:DB:15:A:N6	2.89	0.41
2:DB:14:U:H5'	2:DB:71:C:C1'	2.50	0.41
14:DQ:110:LEU:HD22	14:DQ:111:GLU:CA	2.50	0.41
44:BQ:29:ARG:HB3	44:BQ:30:ALA:H	1.41	0.41
7:DH:54:ARG:HD3	7:DH:65:HIS:HB2	2.02	0.41
1:AA:1141:U:P	9:AM:63:THR:HG21	2.59	0.41
1:DA:2472:G:H3'	1:DA:2473:U:C5'	2.51	0.41
36:BI:3:ARG:C	36:BI:93:SER:HB2	2.41	0.41
1:AA:2751:G:C5	7:AH:2:SER:O	2.74	0.41
46:BS:8:ARG:CB	46:BS:28:ARG:NH1	2.79	0.41
31:BA:8:A:H62	34:BG:208:SER:CB	2.16	0.41
15:DR:102:ILE:HB	15:DR:110:ILE:HD11	2.02	0.41
15:DR:50:ILE:CD1	15:DR:99:LEU:HB2	2.50	0.41
1:DA:2304:G:O2'	1:DA:2305:A:O5'	2.39	0.41
52:BB:75:C:H4'	52:BB:75:C:OP1	2.20	0.41
15:DR:3:ARG:CG	15:DR:6:LEU:H	2.27	0.41
20:DU:12:THR:O	20:DU:75:ILE:HG23	2.20	0.41
4:DE:204:ALA:O	4:DE:205:ALA:HB3	2.21	0.41
31:BA:412:A:C2'	31:BA:413:G:OP2	2.68	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:424:G:C2	31:BA:425:G:C5	3.08	0.41
31:CA:1238:A:H62	31:CA:1301:U:H3	1.69	0.41
31:CA:1296:C:H5'	31:CA:1297:C:P	2.61	0.41
32:CE:82:ARG:HD2	32:CE:92:TYR:HE1	1.86	0.41
1:DA:2762:G:N3	1:DA:2762:G:H2'	2.34	0.41
35:BH:78:HIS:CE1	35:BH:143:ARG:N	2.74	0.41
21:DV:67:LEU:HA	21:DV:68:PRO:HD3	1.84	0.41
38:BK:86:ILE:O	38:BK:87:SER:C	2.59	0.41
1:DA:2289:G:H1'	1:DA:2346:A:H2	1.86	0.41
34:BG:119:GLN:HG3	34:BG:123:HIS:HD2	1.86	0.41
34:BG:158:ILE:HG13	34:BG:158:ILE:H	1.64	0.41
1:DA:834:C:O3'	30:D8:52:LYS:HG2	2.21	0.41
1:DA:2168:G:O6	1:DA:2171:A:C6	2.73	0.41
43:BP:94:ARG:O	43:BP:95:GLY:C	2.58	0.41
13:A0:100:LEU:HD12	13:A0:100:LEU:N	2.35	0.41
1:AA:1006:C:O2	9:AM:106:MET:HG3	2.21	0.41
1:DA:528:A:H8	1:DA:528:A:H3'	1.85	0.41
32:BE:80:ILE:CD1	32:BE:208:ILE:HG12	2.50	0.41
3:AD:262:ARG:HH11	3:AD:262:ARG:CG	2.24	0.41
1:AA:297:C:H2'	1:AA:298:G:O4'	2.20	0.41
1:AA:299:A:C6	1:AA:300:A:C6	3.09	0.41
1:DA:1204:A:N1	1:DA:1241:A:C2	2.89	0.41
1:AA:654(M):C:C3'	1:AA:654(N):G:C8	2.99	0.41
1:DA:2432:A:H5''	1:DA:2433:A:OP2	2.21	0.41
43:CP:115:LYS:C	43:CP:117:VAL:N	2.74	0.41
1:AA:1863:G:O6	56:AA:3502:OHX:N5	2.53	0.41
4:AE:1:MET:CB	4:AE:200:GLU:OE1	2.66	0.41
1:AA:1206:G:C4	1:AA:1207:C:C6	3.09	0.41
33:BF:130:VAL:HG12	33:BF:134:ILE:HD11	2.02	0.41
31:BA:327:A:C5	31:BA:329:A:C5	3.09	0.41
31:BA:643:C:H5'	38:BK:31:PHE:CD1	2.56	0.41
1:DA:289:A:C2	1:DA:353:G:C2	3.09	0.41
1:AA:2182:G:N2	1:AA:2183:C:C2	2.88	0.41
1:DA:273(A):G:C2	1:DA:364:C:C2	3.09	0.41
10:AN:88:ASN:HD22	10:AN:92:GLU:H	1.69	0.41
36:BI:94:GLN:O	36:BI:96:PRO:HD3	2.21	0.41
31:CA:1011:G:N2	31:CA:1019:C:C2	2.89	0.41
1:AA:1025:G:C4	1:AA:1135:C:H1'	2.56	0.41
7:AH:26:VAL:HG12	7:AH:79:VAL:HG21	2.03	0.41
7:DH:26:VAL:HG11	7:DH:33:LEU:HB2	2.03	0.41
53:CC:14:A:C4	53:CC:23:G:C2	3.09	0.41
16:D1:114:LYS:HE3	16:D1:114:LYS:HB2	1.77	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:574:C:H1'	1:DA:2055:C:C6	2.56	0.41
31:BA:1275:A:H2'	31:BA:1276:G:O4'	2.21	0.41
1:AA:2694:G:C4	1:AA:2695:C:C6	3.09	0.41
31:BA:601:C:O2'	31:BA:602:A:H5'	2.21	0.41
1:DA:1085:A:H1'	1:DA:1086:A:O5'	2.21	0.41
1:AA:681:G:H2'	1:AA:682:G:O4'	2.21	0.41
29:D7:43:THR:HG23	29:D7:44:PRO:HD2	2.01	0.41
4:DE:57:LYS:HZ2	4:DE:57:LYS:N	2.18	0.41
50:CW:87:LYS:O	50:CW:91:LEU:HG	2.21	0.41
32:CE:190:THR:O	32:CE:191:ASP:CB	2.68	0.41
31:CA:1390:U:O4	56:CA:1785:OHX:N1	2.54	0.41
1:DA:277:C:H5''	1:DA:278:A:N7	2.36	0.41
14:AQ:38:GLN:HG2	14:AQ:47:THR:HG23	2.02	0.41
31:BA:901:A:C5	31:BA:902:G:H1'	2.55	0.41
31:BA:158:G:H2'	31:BA:159:G:H5'	2.01	0.41
31:CA:186(D):C:H2'	31:CA:186(E):C:C6	2.56	0.41
31:BA:1060:C:O2'	31:BA:1061:G:H5'	2.21	0.41
37:BJ:146:GLU:O	37:BJ:149:ARG:HB3	2.20	0.41
1:AA:2816:C:H1'	1:AA:2831:G:N2	2.36	0.41
7:DH:72:ILE:HG13	7:DH:72:ILE:H	1.64	0.41
1:DA:2803:C:N4	1:DA:2804:C:H41	2.18	0.41
31:BA:339:C:H2'	31:BA:340:U:C6	2.55	0.41
53:BC:34:U:N3	53:BC:37:U:OP2	2.51	0.41
1:AA:1540:G:H2'	1:AA:1541:U:O4'	2.21	0.41
17:A2:62:LEU:HD21	17:A2:95:LEU:HB2	2.02	0.41
1:DA:432:A:O2'	1:DA:433:C:H5'	2.20	0.41
48:BU:29:PHE:HD2	48:BU:29:PHE:N	2.19	0.41
1:DA:1504:C:O2'	1:DA:1505:C:H5'	2.21	0.41
31:BA:371:G:H2'	31:BA:372:C:O4'	2.20	0.41
44:CQ:36:PHE:CG	44:CQ:36:PHE:O	2.74	0.41
31:BA:240:C:H2'	31:BA:241:C:C6	2.55	0.41
1:AA:425:G:H2'	1:AA:426:C:H6	1.85	0.41
1:AA:2277:G:OP1	12:AP:86:GLY:CA	2.69	0.41
1:DA:2270:G:C2'	1:DA:2271:G:H5'	2.51	0.41
11:AO:20:GLY:N	11:AO:27:HIS:O	2.48	0.41
4:DE:62:PRO:C	4:DE:64:LYS:H	2.24	0.41
1:DA:847:U:H5'	1:DA:848:G:OP2	2.21	0.41
11:AO:61:ARG:O	11:AO:62:LEU:CD2	2.61	0.41
11:AO:35:HIS:O	11:AO:40:SER:CB	2.69	0.41
3:AD:61:LEU:HA	3:AD:61:LEU:HD13	1.88	0.41
1:DA:971:C:C2'	1:DA:972:G:C5'	2.96	0.41
3:DD:218:ARG:CB	3:DD:219:PRO:HD2	2.45	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:CP:93:ARG:O	43:CP:95:GLY:N	2.53	0.41
44:CQ:37:PHE:O	44:CQ:39:LEU:HG	2.20	0.41
31:CA:971:G:H5''	31:CA:972:C:H5''	2.02	0.41
31:CA:1107:C:OP1	33:CF:172:ARG:HB3	2.21	0.41
44:CQ:24:CYS:SG	44:CQ:29:ARG:CG	3.09	0.41
44:CQ:32:SER:O	44:CQ:40:CYS:HA	2.21	0.41
52:CD:17:G:N2	52:CD:66:G:H2'	2.35	0.41
5:DF:152:GLU:CD	5:DF:191:ARG:HD2	2.41	0.41
31:BA:1008:C:C2	31:BA:1022:G:C2	3.09	0.41
1:AA:260:G:O4'	1:AA:621:A:H1'	2.21	0.41
31:BA:1331:G:HO2'	31:BA:1332:A:P	2.33	0.41
1:DA:2415:G:C6	1:DA:2416:C:N3	2.89	0.41
8:AK:135:GLU:HB2	8:AK:136:VAL:H	1.42	0.41
31:CA:1443:G:H22	15:DR:119:LYS:HB2	1.85	0.41
1:DA:2853:C:H2'	1:DA:2854:G:H8	1.82	0.41
20:DU:63:LYS:HA	20:DU:63:LYS:HZ1	1.85	0.41
27:A5:41:PRO:O	27:A5:42:PRO:O	2.39	0.41
31:BA:76:G:C2	31:BA:95:G:N3	2.89	0.41
31:BA:149:A:N1	31:BA:150:C:C4	2.89	0.41
50:BW:101:GLY:O	50:BW:102:GLY:C	2.59	0.41
11:AO:38:GLN:HE21	11:AO:38:GLN:CA	2.12	0.41
11:DO:147:LEU:C	11:DO:148:LEU:HG	2.40	0.41
16:D1:95:LEU:C	16:D1:97:ASP:N	2.74	0.41
7:AH:166:GLY:O	7:AH:167:GLU:CG	2.69	0.41
1:AA:1071:G:H8	1:AA:1071:G:O5'	2.04	0.41
1:DA:1072:C:H6	1:DA:1072:C:O5'	2.04	0.41
31:CA:1347:G:C6	39:CL:107:ARG:NH2	2.89	0.41
31:BA:1142:G:H2'	31:BA:1143:G:C8	2.56	0.41
6:AG:5:VAL:HG21	6:AG:101:ILE:HG22	2.03	0.41
1:AA:1887:C:C3'	1:AA:1888:G:C5'	2.99	0.41
1:DA:1042:G:H2'	1:DA:1043:C:C6	2.56	0.41
1:DA:1047:G:C5	1:DA:1110:G:O6	2.74	0.41
31:BA:251:G:N2	31:BA:253:U:C5	2.89	0.41
12:DP:111:GLU:O	12:DP:114:ALA:HB3	2.20	0.41
12:DP:115:MET:H	12:DP:115:MET:HG2	1.65	0.41
31:BA:209:U:OP2	31:BA:209:U:O4'	2.38	0.41
3:DD:25:THR:C	3:DD:27:THR:N	2.58	0.41
1:AA:2748:A:O2'	7:AH:66:GLY:HA3	2.20	0.41
7:AH:3:ARG:HH21	7:AH:7:LEU:CD1	2.33	0.41
12:AP:54:MET:C	12:AP:56:ARG:H	2.23	0.41
1:AA:73:A:H2'	1:AA:74:A:OP2	2.20	0.41
31:BA:872:A:C2	31:BA:874:G:C6	3.09	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BH:70:PRO:HB3	35:BH:144:THR:HG23	2.02	0.41
50:CW:44:ALA:C	50:CW:46:GLU:H	2.23	0.41
31:BA:383:A:H8	31:BA:383:A:O5'	2.04	0.41
52:CB:40:U:C4	52:CB:41:C:C4	3.09	0.41
31:CA:527:G:O2'	31:CA:535:A:N1	2.44	0.41
52:CD:62:G:C2	52:CD:63:U:C4	3.09	0.41
31:BA:484:G:HO2'	31:BA:485:G:P	2.30	0.41
24:AW:4:SER:HB2	24:AW:5:GLU:H	1.60	0.41
11:DO:38:GLN:HG2	11:DO:45:LEU:HD13	2.03	0.41
1:DA:2123:G:N2	1:DA:2124:G:H1'	2.36	0.41
35:CH:102:ALA:HB2	35:CH:120:THR:OG1	2.20	0.41
31:BA:1273:G:OP2	56:BA:1794:OHX:N4	2.54	0.41
2:DB:40:U:C5	26:D4:1:MET:HE2	2.56	0.41
6:DG:37:VAL:O	6:DG:94:LEU:CD2	2.68	0.41
52:BB:75:C:HO2'	52:BB:76:C:P	2.37	0.41
31:CA:814:A:N7	31:CA:816:A:C4	2.89	0.41
1:AA:850:C:C2'	25:AX:46:ASN:HD21	2.33	0.41
1:DA:74:A:O5'	1:DA:74:A:C8	2.74	0.41
16:D1:58:ARG:HD3	16:D1:62:ILE:CD1	2.51	0.41
5:DF:168:ARG:HG3	5:DF:175:THR:HG21	2.02	0.41
1:AA:138:G:C2'	1:AA:139:G:H5'	2.51	0.41
39:CL:90:PRO:C	39:CL:92:TYR:H	2.24	0.41
31:CA:413:G:C2'	31:CA:428:G:H21	2.34	0.41
31:CA:415:A:H2'	31:CA:416:G:O4'	2.21	0.41
8:AK:7:GLU:HA	8:AK:8:PRO:HD3	1.92	0.41
3:AD:131:LEU:HD12	3:AD:131:LEU:N	2.35	0.41
49:CV:29:ARG:HG2	49:CV:29:ARG:H	1.75	0.41
51:CX:6:ARG:HG2	51:CX:15:ARG:NH2	2.35	0.41
1:AA:440:G:H2'	1:AA:441:U:C6	2.55	0.41
1:AA:438:G:H2'	1:AA:439:G:H8	1.86	0.41
1:AA:1478:G:O2'	1:AA:1558:A:C2	2.74	0.41
38:BK:87:SER:HB2	38:BK:93:VAL:CB	2.39	0.41
31:BA:438:G:H4'	34:BG:123:HIS:CG	2.56	0.41
31:BA:439:A:H2'	31:BA:440:A:O5'	2.21	0.41
13:D0:79:LEU:HA	13:D0:83:ILE:HD12	2.03	0.41
31:BA:991:U:O2	31:BA:991:U:H2'	2.21	0.41
31:BA:652:U:OP2	56:BA:1807:OHX:N6	2.54	0.41
9:AM:35:ARG:NH2	9:AM:42:TRP:HH2	2.19	0.41
13:D0:34:ILE:HD12	13:D0:34:ILE:HA	1.64	0.41
24:DW:6:VAL:CG2	24:DW:7:ARG:N	2.84	0.41
32:CE:5:ILE:O	32:CE:6:THR:C	2.59	0.41
3:DD:60:ARG:CD	3:DD:86:PRO:HB2	2.41	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
33:CF:62:ASP:O	33:CF:97:LYS:HB3	2.20	0.41
33:CF:11:ARG:HB3	33:CF:15:THR:HB	2.03	0.41
1:DA:71:A:H2	19:DT:31:HIS:CE1	2.38	0.41
32:BE:238:LEU:O	32:BE:239:VAL:C	2.59	0.41
16:D1:83:LEU:HG	16:D1:88:ILE:HD11	2.03	0.41
46:BS:72:ARG:O	46:BS:75:ARG:HB3	2.21	0.41
22:D3:40:GLN:HG3	22:D3:42:GLY:O	2.21	0.41
1:DA:329:G:N7	20:DU:19:LYS:HE2	2.35	0.41
40:CM:5:ARG:O	40:CM:99:LYS:O	2.38	0.41
1:DA:2298:A:C2	1:DA:2321:G:C2	3.09	0.41
12:DP:135:ASP:O	12:DP:136:ALA:C	2.59	0.41
1:AA:274:G:C3'	1:AA:274:G:C8	3.03	0.41
31:CA:656:C:H42	31:CA:750:G:H1	1.69	0.41
1:AA:2327:A:H2'	1:AA:2328:A:H8	1.78	0.41
47:CT:69:LYS:O	47:CT:70:ARG:HD2	2.20	0.41
1:AA:2504:U:H5''	1:AA:2505:G:OP2	2.21	0.41
23:DZ:80:LEU:HD12	23:DZ:82:LEU:CD2	2.51	0.41
31:BA:191(C):G:C2	31:BA:191(D):U:C2	3.09	0.41
1:AA:2428:G:N2	11:AO:60:MET:HE2	2.31	0.41
8:AK:93:THR:O	8:AK:96:ASP:HB2	2.20	0.41
1:AA:762:U:H4'	1:AA:763:G:O5'	2.21	0.41
1:DA:1790:C:O2'	3:DD:209:ALA:HB2	2.21	0.41
31:CA:941:G:H21	31:CA:942:G:H1'	1.86	0.41
31:CA:617:G:C2	31:CA:618:C:C4	3.09	0.41
34:CG:138:TYR:C	34:CG:138:TYR:HD2	2.23	0.41
7:AH:58:GLU:O	7:AH:59:ARG:C	2.59	0.41
1:DA:1495:A:C6	1:DA:1496:A:C6	3.08	0.41
4:AE:181:LEU:HA	4:AE:181:LEU:HD12	1.82	0.41
1:DA:1688:U:H1'	1:DA:1701:A:C6	2.56	0.41
31:BA:458:C:O2'	31:BA:464:G:H5'	2.20	0.41
31:CA:905:U:OP1	56:CA:1756:OHX:N1	2.53	0.41
1:DA:2697:G:H2'	1:DA:2698:U:O4'	2.21	0.41
28:D6:37:ARG:O	28:D6:49:HIS:HB3	2.21	0.41
28:D6:34:LEU:HB2	28:D6:51:GLU:HB3	2.02	0.41
26:D4:49:PHE:C	26:D4:51:ASP:H	2.24	0.41
49:CV:58:VAL:O	49:CV:60:VAL:HG12	2.21	0.41
47:CT:59:ILE:HG23	47:CT:71:PHE:HB3	2.02	0.41
31:BA:605:U:C2	31:BA:606:G:C8	3.09	0.41
31:BA:605:U:C4	31:BA:606:G:N7	2.89	0.41
17:D2:44:LYS:N	17:D2:44:LYS:HD3	2.36	0.41
1:DA:954:G:H4'	12:DP:13:GLN:NE2	2.36	0.41
24:AW:32:LEU:HD11	24:AW:54:LYS:HG3	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1027:A:C6	1:DA:1126:A:C4	3.08	0.41
3:DD:70:TRP:O	3:DD:73:VAL:HG22	2.21	0.41
38:BK:32:LYS:O	38:BK:36:LEU:HD12	2.20	0.41
38:BK:9:MET:CE	38:BK:35:ILE:HG21	2.51	0.41
1:AA:1519:G:P	56:AA:3331:OHX:N2	2.94	0.41
1:AA:834:C:H2'	1:AA:835:A:H5'	2.03	0.41
1:AA:218:A:C2	1:AA:235:U:H4'	2.49	0.41
13:D0:59:ASP:O	13:D0:60:LEU:C	2.58	0.41
46:BS:5:ARG:CZ	46:BS:22:THR:HG21	2.51	0.41
31:CA:867:G:C2'	31:CA:868:C:H5'	2.51	0.41
4:DE:25:VAL:HG12	4:DE:26:ILE:N	2.35	0.41
9:DM:49:GLY:O	9:DM:50:ASP:C	2.59	0.41
1:DA:2554:U:H2'	1:DA:2555:U:C6	2.56	0.41
32:CE:126:GLU:C	32:CE:128:GLU:N	2.73	0.41
31:CA:1110:A:N6	31:CA:1111:A:N1	2.69	0.41
31:CA:1512:U:H2'	31:CA:1513:A:C8	2.54	0.41
48:BU:30:ASP:HB3	48:BU:33:ASP:HB2	2.03	0.41
1:AA:1488:G:C6	1:AA:1489:U:C5	3.09	0.41
31:BA:668:G:C4	31:BA:669:U:C5	3.08	0.41
5:AF:105:VAL:HG12	5:AF:105:VAL:O	2.20	0.41
38:CK:134:ILE:HG22	38:CK:135:CYS:SG	2.61	0.41
35:CH:83:GLU:HB3	35:CH:88:LYS:CG	2.48	0.41
31:BA:956:U:H2'	31:BA:957:U:C5'	2.51	0.41
1:AA:1309:G:P	29:A7:9:ARG:HD3	2.61	0.41
28:D6:44:ARG:O	28:D6:45:LYS:CB	2.67	0.41
26:A4:47:GLN:O	26:A4:48:ARG:C	2.57	0.41
3:AD:182:LEU:HD23	3:AD:182:LEU:HA	1.58	0.41
31:BA:55:A:C4	31:BA:56:U:C5	3.09	0.41
31:BA:55:A:C2	31:BA:56:U:C6	3.09	0.41
31:BA:1017:G:C5	31:BA:1018:C:C4	3.09	0.41
1:DA:2186:G:C2	1:DA:2187:G:N7	2.89	0.41
31:CA:398:C:P	56:CA:1738:OHX:N1	2.94	0.41
31:BA:766:A:C8	31:BA:814:A:C6	3.09	0.41
31:CA:781:A:C5'	31:CA:782:A:OP2	2.69	0.41
21:AV:129:SER:HA	21:AV:130:PRO:HD3	1.78	0.41
31:BA:725:G:C2	31:BA:726:C:C6	3.09	0.41
31:BA:989:C:H42	31:BA:1216:G:H1	1.69	0.41
8:DK:69:LYS:HD3	8:DK:69:LYS:O	2.21	0.41
31:BA:1173:G:C4	31:BA:1174:G:C8	3.08	0.41
1:AA:1530:G:C6	1:AA:1531:C:C4	3.09	0.41
17:A2:71:LEU:HD13	17:A2:84:LYS:HE2	2.03	0.41
1:DA:2493:U:C2'	1:DA:2494:G:O5'	2.69	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
51:BX:9:ARG:HH12	51:BX:22:ARG:HA	1.86	0.41
31:BA:475:G:H2'	31:BA:476:G:H8	1.85	0.41
50:BW:81:LYS:O	50:BW:82:SER:C	2.59	0.41
1:AA:1644:C:C2'	1:AA:1645:G:H5'	2.51	0.41
4:AE:7:VAL:CG2	15:AR:1:MET:HE1	2.51	0.41
1:AA:2852:G:C6	1:AA:2853:C:N3	2.89	0.41
1:DA:2056:G:N2	1:DA:2057:A:C1'	2.83	0.41
1:AA:1067:A:H8	1:AA:1068:G:C5	2.38	0.41
1:AA:1913:A:H4'	1:AA:1914:C:C5'	2.51	0.41
1:AA:247:G:H5''	1:AA:386:G:O2'	2.21	0.41
7:AH:17:VAL:O	7:AH:17:VAL:HG12	2.21	0.41
1:DA:181:A:H1'	1:DA:435:C:H5'	2.02	0.41
28:A6:21:TYR:HB3	28:A6:22:ALA:H	1.73	0.41
25:DX:24:LYS:CE	25:DX:24:LYS:HA	2.50	0.41
13:A0:18:LEU:CD1	13:A0:22:ARG:NE	2.83	0.41
31:CA:444:C:C2	31:CA:445:G:C8	3.09	0.41
1:DA:1710:C:O2'	1:DA:1711:C:H5'	2.20	0.41
53:CC:22:A:N6	53:CC:47:G:C4	2.89	0.41
50:BW:18:GLN:C	50:BW:20:LEU:N	2.73	0.41
31:CA:1381:U:H2'	31:CA:1381:U:O2	2.20	0.41
1:DA:1553:A:C6	1:DA:1555:G:H1'	2.56	0.41
43:BP:27:LYS:HA	43:BP:31:LYS:HE3	2.03	0.41
1:AA:344:G:O6	56:AA:3362:OHX:N5	2.54	0.41
1:DA:1235:G:C6	1:DA:1236:G:N1	2.89	0.41
34:CG:39:PRO:O	34:CG:44:GLY:HA3	2.20	0.41
9:AM:14:VAL:HG23	9:AM:50:ASP:HB3	2.02	0.41
1:DA:1423:G:C4	1:DA:1424:G:C8	3.08	0.41
31:BA:286:G:H2'	31:BA:287:U:H6	1.85	0.41
1:AA:2413:G:H2'	1:AA:2414:G:O4'	2.21	0.41
52:BD:34:U:H2'	52:BD:36:U:OP2	2.21	0.41
1:DA:2671:A:H2'	1:DA:2672:G:O4'	2.20	0.41
33:CF:28:GLN:HE21	33:CF:28:GLN:HB3	1.63	0.41
18:AS:27:LYS:HE2	18:AS:27:LYS:HB3	1.91	0.41
28:D6:20:ASN:O	28:D6:20:ASN:ND2	2.54	0.41
48:BU:25:THR:O	48:BU:25:THR:HG22	2.20	0.41
54:C1:10:G:N3	54:C1:10:G:H2'	2.34	0.41
31:CA:292:G:H8	31:CA:292:G:O5'	2.04	0.41
3:AD:105:ILE:HA	3:AD:105:ILE:HD12	1.59	0.41
45:CR:85:LEU:O	45:CR:86:GLY:O	2.39	0.41
52:BB:31:G:H2'	52:BB:32:A:O4'	2.20	0.41
8:AK:116:LEU:O	8:AK:118:LYS:N	2.54	0.41
31:BA:445:G:C6	31:BA:490:G:N1	2.89	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:A1:34:LYS:HE3	16:A1:34:LYS:HA	2.02	0.41
31:CA:721:G:O5'	31:CA:721:G:H8	2.04	0.41
1:AA:1848:A:C6	31:BA:702:A:C6	3.09	0.41
35:CH:19:MET:CE	35:CH:24:ARG:HB3	2.51	0.41
10:AN:19:ILE:HD11	10:AN:84:ALA:HB3	2.02	0.41
41:BN:114:VAL:HG23	41:BN:115:PRO:HD2	2.03	0.41
1:AA:2056:G:C2	1:AA:2057:A:C8	3.09	0.41
11:AO:19:VAL:HG22	11:AO:20:GLY:N	2.32	0.41
4:DE:44:TYR:O	4:DE:45:THR:O	2.38	0.41
1:DA:669:G:C2'	1:DA:670:A:OP1	2.69	0.41
1:DA:779:U:OP1	3:DD:49:ILE:HG23	2.21	0.41
3:DD:49:ILE:CD1	3:DD:52:ARG:HA	2.51	0.41
31:CA:1049:U:H4'	31:CA:1050:G:H5'	1.96	0.41
31:CA:1329:A:O2'	43:CP:70:LEU:HD11	2.21	0.41
52:CD:51:C:OP2	52:CD:52:G:N1	2.54	0.41
31:BA:1028:C:N4	31:BA:1028(A):C:N4	2.69	0.41
1:AA:864:G:OP2	12:AP:22:LYS:HG2	2.20	0.41
1:AA:259:G:N2	1:AA:621:A:H8	2.17	0.41
1:AA:2599:G:C8	3:AD:236:GLY:O	2.72	0.41
11:DO:62:LEU:CD1	30:D8:26:LYS:O	2.69	0.41
27:A5:40:LYS:NZ	27:A5:46:CYS:CB	2.76	0.41
43:BP:66:LEU:HA	43:BP:66:LEU:HD22	1.67	0.41
31:BA:1199:U:H5''	31:BA:1200:C:P	2.61	0.41
1:AA:2154:G:N1	1:AA:2155:G:O6	2.54	0.41
1:DA:1158:C:O2'	1:DA:1159:U:H5'	2.21	0.41
1:DA:2138:C:C2	1:DA:2154:G:N2	2.88	0.41
16:A1:75:ASN:HB2	16:A1:78:THR:H	1.86	0.41
31:BA:1151:A:C6	31:BA:1152:A:C5	3.09	0.41
31:BA:1124:G:C3'	31:BA:1145:C:H41	2.26	0.41
31:BA:1058:G:N2	31:BA:1203:C:H42	2.19	0.41
1:DA:1053:C:H3'	1:DA:1054:A:H5''	2.02	0.41
1:DA:2105:C:O2'	1:DA:2106:G:H5'	2.21	0.41
31:BA:860:A:H2'	31:BA:861:G:O4'	2.21	0.41
31:BA:871:U:C1'	31:BA:872:A:OP1	2.68	0.41
31:CA:994:A:N3	31:CA:995:C:C6	2.89	0.41
32:BE:18:GLY:H	32:BE:42:ILE:CG2	2.23	0.41
31:CA:1007:C:N4	31:CA:1008:C:C4	2.89	0.41
4:AE:21:VAL:HG23	4:AE:22:PRO:HG3	2.00	0.41
1:AA:2630:G:O4'	1:AA:2894:G:H1'	2.22	0.41
43:BP:84:ILE:CG2	43:BP:86:CYS:HB3	2.51	0.41
1:AA:968:G:O6	56:AA:3547:OHX:N6	2.54	0.41
36:CI:100:ASN:HD22	48:CU:23:LYS:HE3	1.85	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:AO:91:PHE:HE1	11:AO:99:LEU:HG	1.86	0.41
10:DN:35:VAL:HG21	10:DN:69:ILE:HD11	2.02	0.41
31:BA:411:A:C5	31:BA:429:U:C5	3.09	0.41
31:BA:411:A:C8	31:BA:413:G:H1'	2.56	0.41
27:D5:16:ARG:CG	27:D5:16:ARG:HH11	2.34	0.41
1:DA:2287:A:C4	1:DA:2289:G:C8	3.08	0.41
1:DA:2656:U:C4	1:DA:2664:G:N2	2.89	0.41
1:DA:2621:A:P	4:DE:119:ARG:HH22	2.44	0.41
31:BA:153:C:H42	31:BA:168:G:H1	1.69	0.41
31:BA:397:A:H5'	31:BA:398:C:OP1	2.21	0.41
5:AF:185:ASP:HA	5:AF:188:ARG:HD3	2.03	0.41
1:AA:141(A):C:H2'	1:AA:142:G:O4'	2.21	0.41
1:AA:2168:G:H22	1:AA:2170:A:N6	2.17	0.41
1:AA:2881:C:N3	1:AA:2882:A:C5	2.89	0.41
1:AA:1921:G:H2'	1:AA:1922:G:H8	1.86	0.41
31:BA:1099:G:H2'	31:BA:1100:C:O4'	2.21	0.41
31:BA:1100:C:O2'	31:BA:1102:A:OP1	2.37	0.41
2:DB:75:G:N3	21:DV:85:HIS:CE1	2.89	0.41
31:BA:976:G:C8	31:BA:1358:U:C2	3.09	0.41
31:CA:1154:G:N1	31:CA:1155:G:C5	2.89	0.41
31:CA:1378:C:H3'	31:CA:1379:G:H5''	2.02	0.41
31:BA:363:A:O2'	31:BA:364:A:H5'	2.21	0.41
10:DN:111:PHE:O	10:DN:115:VAL:HG23	2.20	0.41
31:BA:604:G:C5	31:BA:605:U:C4	3.09	0.41
21:DV:3:TYR:O	21:DV:58:VAL:HG23	2.21	0.41
5:DF:7:TYR:HA	5:DF:125:LEU:O	2.20	0.41
1:AA:2352:A:C2	22:A3:33:ALA:O	2.74	0.41
36:BI:39:LYS:HB2	36:BI:64:GLN:HB2	2.03	0.41
36:BI:64:GLN:HE21	36:BI:64:GLN:HB3	1.66	0.41
31:BA:739:C:O2'	45:BR:42:HIS:ND1	2.45	0.41
1:AA:459:U:HO2'	1:AA:460:A:H5'	1.85	0.41
1:DA:270(O):U:H2'	1:DA:270(P):C:OP1	2.21	0.41
1:AA:270(E):G:C6	1:AA:270(F):U:N3	2.89	0.41
1:DA:1465:G:N2	1:DA:1466:G:C4	2.89	0.41
1:DA:805:G:O5'	11:DO:41:ARG:HG2	2.20	0.41
31:CA:683:G:C6	31:CA:684:A:C6	3.09	0.41
34:CG:191:ARG:HD2	34:CG:200:GLU:OE1	2.21	0.41
31:BA:378:G:N2	31:BA:386:C:C2	2.89	0.41
31:BA:476:G:N7	56:BA:1813:OHX:N5	2.69	0.41
10:AN:3:GLN:O	10:AN:6:THR:HB	2.21	0.41
31:BA:1355:G:H2'	31:BA:1356:G:C8	2.56	0.41
1:AA:2852:G:C6	1:AA:2853:C:C4	3.09	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BK:100:ILE:HD13	38:BK:112:LEU:HD11	2.02	0.41
45:BR:18:PHE:HD1	45:BR:19:PRO:O	2.03	0.41
1:DA:1314:C:N3	1:DA:1339:G:C2	2.89	0.41
1:AA:471:A:N6	1:AA:472:A:C2	2.89	0.41
1:DA:1131:G:C2	1:DA:1132:A:C4	3.09	0.41
14:DQ:106:ARG:H	14:DQ:106:ARG:HG3	1.53	0.41
21:DV:14:LYS:O	21:DV:14:LYS:HG2	2.20	0.41
34:CG:142:PRO:HA	34:CG:185:PHE:O	2.21	0.41
46:BS:58:TYR:O	46:BS:61:SER:N	2.54	0.41
32:CE:237:ALA:O	32:CE:238:LEU:HB3	2.21	0.41
31:BA:1263:C:HO2'	31:BA:1264:C:H5'	1.85	0.41
1:AA:205:G:O2'	1:AA:206:U:P	2.79	0.41
16:D1:79:PHE:C	16:D1:79:PHE:CD2	2.94	0.41
1:AA:2013:A:H2'	1:AA:2014:A:H5'	2.02	0.41
17:D2:75:PHE:C	17:D2:75:PHE:CD1	2.94	0.41
33:BF:32:LEU:HD13	33:BF:59:ARG:CD	2.51	0.41
1:DA:1821:A:H2'	1:DA:1822:G:H8	1.86	0.41
1:DA:409:C:OP2	56:DA:3385:OHX:N1	2.54	0.41
10:AN:60:ALA:HB1	10:AN:84:ALA:HB1	2.02	0.41
1:DA:300:A:C5	1:DA:334:C:H4'	2.56	0.41
10:AN:118:ALA:HA	10:AN:119:PRO:HD2	1.72	0.41
31:BA:911:U:H2'	31:BA:912:C:C6	2.56	0.41
32:BE:71:VAL:HG23	32:BE:164:VAL:HA	2.02	0.41
1:DA:1450:C:N3	1:DA:1451:C:N4	2.69	0.41
39:CL:58:HIS:ND1	39:CL:58:HIS:N	2.69	0.41
6:AG:46:ALA:HB1	6:AG:49:ASP:O	2.21	0.41
1:AA:2056:G:N2	1:AA:2057:A:H1'	2.36	0.40
4:DE:48:GLN:O	4:DE:49:LEU:O	2.40	0.40
1:DA:195:A:OP1	11:DO:46:LYS:HE2	2.21	0.40
52:BD:85:A:H5'	52:BD:85:A:H8	1.85	0.40
1:AA:2213:U:C1'	23:AZ:52:ARG:NH2	2.84	0.40
3:AD:35:LYS:HZ3	3:AD:104:TYR:HD1	1.67	0.40
31:CA:1093:A:C5	31:CA:1095:U:O4'	2.74	0.40
31:CA:1097:C:C2'	31:CA:1097:C:O2	2.69	0.40
31:CA:1208:C:H2'	31:CA:1209:C:H6	1.86	0.40
31:CA:1224:G:N1	31:CA:1322:C:O2'	2.53	0.40
31:CA:1309:G:N2	31:CA:1329:A:H1'	2.36	0.40
52:CB:34:U:HO2'	52:CB:36:U:H5	1.70	0.40
49:CV:72:GLY:C	49:CV:74:PHE:N	2.74	0.40
3:DD:35:LYS:HD2	3:DD:104:TYR:CD1	2.51	0.40
1:AA:1535:U:H3'	1:AA:1535:U:O2	2.21	0.40
2:AB:104:A:P	21:AV:72:ARG:HD3	2.61	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:1028(B):C:N4	31:BA:1032(A):G:C6	2.84	0.40
31:BA:1004:A:H1'	31:BA:1036:G:N1	2.35	0.40
1:AA:2299:G:O6	56:AA:3550:OHX:N2	2.54	0.40
34:CG:58:LEU:HD22	34:CG:62:GLN:HG3	2.03	0.40
39:BL:97:LYS:HA	39:BL:102:LEU:HD12	2.03	0.40
31:BA:1301:U:O4	31:BA:1303:C:C1'	2.63	0.40
8:AK:131:LYS:N	8:AK:131:LYS:CD	2.81	0.40
1:DA:92:G:H2'	1:DA:93:C:O4'	2.21	0.40
9:AM:95:PRO:O	9:AM:96:GLU:HB3	2.21	0.40
1:AA:330:A:H2	1:AA:1210:A:C2'	2.25	0.40
50:BW:55:ILE:HD13	50:BW:55:ILE:HA	1.91	0.40
9:DM:39:ARG:C	9:DM:41:ASP:N	2.71	0.40
1:DA:1065:U:O4	1:DA:1066:U:C4	2.74	0.40
31:CA:872:A:OP1	56:CA:1773:OHX:N4	2.54	0.40
31:CA:1349:A:H2'	31:CA:1350:A:O4'	2.22	0.40
31:BA:560:U:O5'	31:BA:560:U:H6	2.04	0.40
39:BL:114:TYR:N	39:BL:114:TYR:CD2	2.88	0.40
34:BG:22:LYS:O	34:BG:23:GLY:O	2.39	0.40
12:DP:110:THR:OG1	12:DP:111:GLU:N	2.53	0.40
31:BA:209:U:O2'	31:BA:216:G:C4	2.74	0.40
31:CA:1216:G:H5''	44:CQ:5:ALA:CB	2.51	0.40
46:CS:39:TYR:CZ	46:CS:41:PRO:HB3	2.57	0.40
31:CA:864:A:C6	31:CA:865:A:C2	3.10	0.40
32:CE:130:ARG:O	32:CE:135:GLN:HG3	2.21	0.40
52:BB:36:U:C4	52:BB:37:A:N7	2.89	0.40
14:AQ:34:HIS:CB	14:AQ:36:TYR:HE1	2.34	0.40
52:CD:59:A:H2'	52:CD:60:A:O4'	2.22	0.40
1:DA:2300:G:C2	1:DA:2317:C:O2	2.74	0.40
31:CA:474:G:N1	31:CA:475:G:C5	2.89	0.40
34:BG:19:LEU:HD22	34:BG:19:LEU:H	1.86	0.40
1:AA:301:G:C4	1:AA:302:C:C4	3.09	0.40
1:DA:1786:A:C4	1:DA:1938:A:C6	3.09	0.40
4:DE:111:ARG:HD2	4:DE:160:TYR:CE1	2.55	0.40
32:BE:111:ARG:HH11	32:BE:111:ARG:CG	2.18	0.40
2:AB:31:C:H2'	2:AB:32:C:C6	2.56	0.40
1:AA:1107:G:C4	1:AA:1108:U:C5	3.08	0.40
1:DA:2901:C:C2'	1:DA:2902:C:H5'	2.51	0.40
31:BA:393:A:O2'	31:BA:394:G:H5'	2.21	0.40
47:BT:29:HIS:CE1	47:BT:32:TYR:HD1	2.39	0.40
1:AA:2507:C:O2	1:AA:2507:C:H2'	2.22	0.40
35:CH:50:GLU:HA	35:CH:50:GLU:OE2	2.21	0.40
12:AP:59:ARG:CD	12:AP:59:ARG:H	2.31	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:CA:259:G:C6	31:CA:260:G:C5	3.09	0.40
22:D3:50:ASN:O	22:D3:62:LEU:HB2	2.21	0.40
1:AA:333:G:C5	1:AA:334:C:C5	3.08	0.40
21:DV:48:PHE:O	21:DV:49:ARG:C	2.58	0.40
50:CW:58:LYS:O	50:CW:58:LYS:HD2	2.21	0.40
37:CJ:44:TYR:O	37:CJ:45:ASP:C	2.59	0.40
5:AF:107:LYS:O	5:AF:108:LYS:C	2.60	0.40
39:BL:53:VAL:HG21	39:BL:92:TYR:CD2	2.55	0.40
1:AA:2519:U:C6	1:AA:2542:A:N6	2.89	0.40
11:AO:140:ALA:O	11:AO:141:ALA:CB	2.69	0.40
13:A0:52:ILE:HG21	13:A0:94:TYR:CD1	2.56	0.40
1:DA:1444(A):A:H4'	1:DA:1460:A:H2'	2.03	0.40
1:AA:1203:G:H3'	1:AA:1204:A:H5''	2.04	0.40
20:AU:90:LEU:HB2	20:AU:91:GLU:H	1.49	0.40
31:BA:226:G:C2	31:BA:227:G:H1'	2.55	0.40
1:AA:635:C:H2'	1:AA:636:G:O4'	2.21	0.40
1:AA:639:U:N3	1:AA:640:C:C4	2.89	0.40
1:DA:795:C:C2'	1:DA:796:C:H5'	2.50	0.40
1:DA:2502:G:H5''	1:DA:2503:A:H5''	2.02	0.40
1:AA:1171:G:C2	1:AA:1179:C:O2	2.74	0.40
1:AA:1344:G:C2	1:AA:1385:G:C8	3.10	0.40
1:AA:2109:U:H1'	1:AA:2181:G:N2	2.35	0.40
1:DA:2012:G:OP2	18:DS:16:LYS:NZ	2.54	0.40
7:DH:83:TYR:HB3	7:DH:84:SER:H	1.65	0.40
1:AA:1165:U:C2	1:AA:1166:C:C5	3.10	0.40
17:A2:79:VAL:HG13	17:A2:81:TYR:HB3	2.03	0.40
1:AA:1681:G:HO2'	1:AA:1762:A:HO2'	1.58	0.40
1:AA:444:C:H2'	1:AA:445:C:H6	1.86	0.40
31:CA:922:G:C2	31:CA:923:A:C4	3.09	0.40
25:DX:36:VAL:O	25:DX:36:VAL:HG23	2.21	0.40
1:DA:1011:G:C2	1:DA:1151:G:C2	3.09	0.40
13:D0:94:TYR:CD1	13:D0:94:TYR:N	2.87	0.40
1:DA:273(F):C:H3'	1:DA:274:G:H5''	2.03	0.40
1:AA:2019:A:H2'	1:AA:2020:A:O5'	2.21	0.40
1:AA:1156:A:H4'	1:AA:1157:G:OP2	2.21	0.40
1:DA:2001:A:H2'	1:DA:2002:G:C8	2.55	0.40
5:AF:95:ARG:HH11	5:AF:95:ARG:HD2	1.73	0.40
31:BA:756:C:H2'	31:BA:757:U:O4'	2.20	0.40
31:CA:765:G:O6	31:CA:812:C:C5	2.74	0.40
1:DA:1127:A:N1	1:DA:2463:C:O2'	2.44	0.40
32:BE:119:GLU:OE2	32:BE:142:LEU:HD21	2.21	0.40
37:BJ:137:LYS:C	37:BJ:139:GLU:N	2.74	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:1106:G:C6	31:BA:1107:C:C4	3.08	0.40
1:AA:1097:U:H2'	1:AA:1098:A:H5'	2.03	0.40
31:CA:807:A:C6	31:CA:808:C:C4	3.09	0.40
1:DA:380:U:H5'	23:DZ:18:ILE:HG13	2.03	0.40
18:AS:29:LEU:O	18:AS:29:LEU:HG	2.21	0.40
31:CA:1171:G:H2'	31:CA:1172:C:C6	2.56	0.40
10:AN:119:PRO:HB2	15:AR:68:TYR:CD2	2.56	0.40
8:DK:37:VAL:HB	8:DK:43:ASN:ND2	2.36	0.40
51:CX:5:ASP:O	51:CX:11:GLY:HA3	2.21	0.40
1:DA:424:G:C2	1:DA:425:G:C4	3.09	0.40
31:CA:592:G:N7	56:CA:1730:OHX:N5	2.69	0.40
47:BT:10:VAL:HG23	47:BT:55:ASP:O	2.20	0.40
31:CA:564:C:OP1	42:CO:15:ARG:NE	2.50	0.40
1:AA:1321:A:H2'	1:AA:1322:A:O4'	2.20	0.40
4:DE:165:VAL:HG12	4:DE:165:VAL:O	2.21	0.40
31:BA:233:C:N3	31:BA:234:C:C5	2.90	0.40
39:BL:69:GLY:O	39:BL:73:GLN:HG3	2.21	0.40
9:DM:78:TYR:CD1	9:DM:78:TYR:N	2.89	0.40
1:AA:717:G:H2'	1:AA:718:A:O4'	2.20	0.40
27:A5:6:VAL:CG2	27:A5:7:PRO:CD	2.92	0.40
1:AA:2277:G:OP1	12:AP:87:LYS:N	2.55	0.40
1:DA:2275:C:O2'	1:DA:2276:G:P	2.78	0.40
4:DE:48:GLN:HB3	4:DE:48:GLN:HE21	1.77	0.40
4:DE:64:LYS:C	4:DE:66:HIS:H	2.24	0.40
1:AA:1816:G:H8	3:AD:62:TYR:CZ	2.39	0.40
31:CA:1203:C:C2'	31:CA:1204:A:O4'	2.67	0.40
31:CA:1207:G:C4	31:CA:1208:C:C6	3.09	0.40
31:CA:945:G:C2	31:CA:946:A:C8	3.09	0.40
7:AH:151:ILE:O	7:AH:153:LYS:HD2	2.21	0.40
6:DG:104:GLU:HG2	26:D4:23:GLU:OE2	2.22	0.40
1:DA:1463:C:C4	1:DA:1464:C:C5	3.08	0.40
1:DA:2703:C:C2	1:DA:2704:C:C5	3.09	0.40
1:AA:1060:U:C2	1:AA:1062:G:H5'	2.57	0.40
31:BA:1161:C:C4	31:BA:1162:C:N4	2.90	0.40
31:BA:1296:C:C6	31:BA:1297:C:H5	2.39	0.40
31:BA:944:G:C2	31:BA:1340:A:C6	3.09	0.40
30:D8:33:ASN:O	30:D8:34:TRP:C	2.59	0.40
31:CA:690:G:C2'	31:CA:691:G:H5'	2.51	0.40
53:CC:17:C:C3'	53:CC:18:C:C5'	2.72	0.40
31:BA:181:G:N2	31:BA:183:G:N2	2.70	0.40
1:AA:2157:G:O2'	1:AA:2158:A:P	2.79	0.40
16:D1:90:VAL:O	16:D1:91:ASP:C	2.59	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:D1:61:TRP:CZ2	16:D1:94:ASN:OD1	2.73	0.40
52:BB:46:G:N2	52:BB:55:U:C2	2.89	0.40
1:AA:1102:C:C2'	1:AA:1103:A:H8	2.11	0.40
31:CA:1149:C:O2'	31:CA:1280:A:N1	2.45	0.40
1:DA:1141:U:HO2'	1:DA:1142:U:P	2.34	0.40
31:BA:1375:A:O2'	31:BA:1376:U:H5'	2.21	0.40
40:BM:16:LEU:HD13	40:BM:70:ARG:HB2	2.03	0.40
39:BL:28:VAL:O	39:BL:29:ASN:C	2.59	0.40
40:BM:24:VAL:CG2	40:BM:34:VAL:HG11	2.50	0.40
1:DA:2472:G:H5''	1:DA:2473:U:H5''	2.03	0.40
1:AA:2481:G:H2'	1:AA:2482:G:OP2	2.22	0.40
27:A5:19:ARG:HH11	27:A5:19:ARG:HD2	1.72	0.40
31:CA:1046:A:H2'	31:CA:1047:G:O4'	2.21	0.40
32:BE:33:TYR:HB2	32:BE:43:ASP:HB2	2.02	0.40
43:CP:6:GLY:O	43:CP:7:VAL:HG13	2.21	0.40
34:CG:163:GLU:C	34:CG:165:MET:N	2.74	0.40
31:CA:516:U:O2'	31:CA:519:C:N3	2.48	0.40
52:CD:62:G:C2	52:CD:63:U:C5	3.10	0.40
42:CO:85:ILE:HA	42:CO:85:ILE:HD12	1.65	0.40
1:DA:2304:G:C2'	1:DA:2305:A:O5'	2.69	0.40
15:DR:8:LYS:O	15:DR:9:LEU:C	2.57	0.40
30:D8:60:LEU:C	30:D8:61:LEU:HG	2.39	0.40
1:DA:319:C:C2'	1:DA:320:A:H5'	2.51	0.40
31:BA:543:C:C2'	31:BA:544:G:H5'	2.51	0.40
31:BA:427:U:H5'	34:BG:41:GLY:HA2	2.03	0.40
1:DA:812:C:H5''	1:DA:1250:G:HO2'	1.85	0.40
1:AA:2646:C:H2'	1:AA:2647:U:O4'	2.22	0.40
17:A2:89:GLN:NE2	17:A2:90:PRO:HD2	2.36	0.40
48:BU:88:LYS:HB3	48:BU:88:LYS:NZ	2.37	0.40
47:CT:16:GLN:O	47:CT:17:LYS:HB2	2.21	0.40
1:AA:142:G:H2'	1:AA:143:C:C6	2.57	0.40
50:CW:72:LEU:O	50:CW:73:HIS:CB	2.69	0.40
1:AA:300:A:N3	1:AA:319:C:H1'	2.36	0.40
1:AA:300:A:C5	1:AA:334:C:C4'	3.04	0.40
22:A3:50:ASN:O	22:A3:51:VAL:HG23	2.21	0.40
31:BA:525:C:OP1	42:BO:89:ARG:NH2	2.54	0.40
18:DS:9:TYR:HA	18:DS:100:THR:HG23	2.04	0.40
46:BS:42:ARG:O	46:BS:43:LYS:C	2.60	0.40
1:DA:2542:A:OP1	1:DA:2542:A:H4'	2.21	0.40
22:D3:32:ARG:CG	22:D3:33:ALA:N	2.83	0.40
52:CB:23:A:C2'	52:CB:24:G:H5'	2.44	0.40
1:DA:1443:G:C8	1:DA:1443:G:C5'	3.05	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:A0:12:ARG:HB3	13:A0:16:HIS:CD2	2.55	0.40
1:DA:2016:U:C1'	27:D5:6:VAL:HG11	2.51	0.40
43:CP:62:ASN:O	26:D4:49:PHE:CE2	2.64	0.40
27:A5:48:GLU:O	27:A5:49:CYS:HB2	2.22	0.40
1:AA:572:A:H3'	1:AA:573:G:O4'	2.21	0.40
6:AG:181:ARG:O	6:AG:182:LYS:CB	2.70	0.40
1:AA:1475:G:C4	1:AA:1519:G:N2	2.89	0.40
6:AG:110:ALA:HA	6:AG:140:ILE:O	2.20	0.40
20:AU:6:HIS:ND1	20:AU:7:VAL:HG13	2.36	0.40
1:DA:1558:A:H1'	1:DA:1559:G:OP2	2.21	0.40
38:BK:88:LYS:CB	38:BK:89:PRO:HD2	2.48	0.40
31:CA:198:G:N7	31:CA:220:G:N2	2.68	0.40
33:BF:159:GLY:O	33:BF:160:ALA:C	2.59	0.40
31:BA:1290:G:H3'	31:BA:1291:G:H8	1.86	0.40
1:DA:2553:G:H3'	1:DA:2554:U:C5'	2.49	0.40
1:DA:2553:G:H2'	1:DA:2554:U:O4'	2.21	0.40
31:BA:245:C:O2	31:BA:283:C:N3	2.54	0.40
31:CA:116:A:C6	31:CA:117:G:C5	3.09	0.40
31:CA:333:G:N2	31:CA:334:C:C2	2.90	0.40
31:BA:889:A:H4'	31:BA:890:G:OP1	2.21	0.40
31:BA:1221:G:H4'	49:BV:77:THR:CG2	2.51	0.40
1:DA:908:C:OP2	12:DP:22:LYS:HD3	2.21	0.40
37:CJ:81:GLY:C	37:CJ:83:ALA:N	2.70	0.40
1:DA:1956:U:H2'	1:DA:1957:C:H5'	2.03	0.40
3:DD:5:LYS:HZ3	3:DD:5:LYS:HB2	1.86	0.40
1:DA:988:A:C6	25:DX:13:ILE:HG21	2.56	0.40
1:AA:1259:G:H2'	1:AA:1260:G:H8	1.87	0.40
31:BA:1286:A:C8	31:BA:1286:A:H3'	2.56	0.40
32:CE:32:ILE:HD11	32:CE:34:ALA:O	2.21	0.40
1:DA:2648:C:H2'	1:DA:2649:U:H6	1.84	0.40
21:AV:156:LYS:O	21:AV:157:LEU:C	2.59	0.40
3:AD:213:ARG:O	3:AD:214:TRP:C	2.59	0.40
25:AX:59:VAL:HG13	25:AX:60:GLU:H	1.86	0.40
1:DA:1705:G:C6	1:DA:1706:U:C4	3.09	0.40
31:CA:767:A:OP1	56:CA:1784:OHX:N2	2.54	0.40
1:DA:513:A:N3	1:DA:514:A:C8	2.89	0.40
1:DA:28:A:C4	1:DA:513:A:N7	2.89	0.40
1:DA:2504:U:O2	1:DA:2504:U:H2'	2.21	0.40
42:CO:23:LYS:CE	42:CO:23:LYS:H	2.33	0.40
1:DA:278:A:H1'	1:DA:279:C:P	2.61	0.40
31:CA:375:U:OP1	46:CS:69:THR:CG2	2.68	0.40
45:BR:16:ALA:HB1	45:BR:18:PHE:O	2.22	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:1773:A:H2'	1:DA:1774:C:C5'	2.52	0.40
3:DD:154:LYS:C	3:DD:155:LEU:HD12	2.41	0.40
31:BA:562:C:C4	31:BA:884:U:C5	3.09	0.40
31:CA:885:G:O2'	31:CA:914:A:N1	2.51	0.40
15:AR:3:ARG:HB2	15:AR:6:LEU:HB3	2.03	0.40
31:BA:31:G:C1'	31:BA:32:A:OP1	2.70	0.40
37:CJ:89:MET:HA	37:CJ:89:MET:HE3	2.04	0.40
31:CA:655:A:H2	31:CA:754:C:C4	2.39	0.40
5:DF:155:LEU:HD22	5:DF:185:ASP:C	2.42	0.40
1:DA:21:A:C6	1:DA:520:G:C6	3.10	0.40
30:A8:47:LYS:HG2	30:A8:47:LYS:HZ2	1.67	0.40
1:DA:1490:A:H4'	1:DA:1491:G:OP2	2.20	0.40
1:AA:714:U:O2'	1:AA:716:A:N7	2.48	0.40
31:BA:1254:C:N4	31:BA:1283:G:H1	2.19	0.40
38:CK:100:ILE:HA	38:CK:101:PRO:HD3	1.63	0.40
18:DS:75:TYR:CE2	18:DS:104:THR:HB	2.56	0.40
33:CF:186:PHE:HA	33:CF:198:VAL:O	2.21	0.40
31:CA:159:G:N2	31:CA:163:C:C4	2.89	0.40
5:AF:93:LYS:HB3	5:AF:94:PRO:HD2	2.03	0.40
31:CA:620:C:H2'	31:CA:621:A:O4'	2.22	0.40
45:CR:27:VAL:CG1	45:CR:31:LEU:HD22	2.51	0.40
1:AA:2048:G:H1'	1:AA:2823:A:N6	2.36	0.40
1:DA:14:A:N7	1:DA:15:G:C8	2.90	0.40
1:AA:1116:C:C2	1:AA:1117:G:C8	3.09	0.40
14:DQ:78:LEU:C	14:DQ:80:LEU:H	2.25	0.40
8:DK:1:MET:HB2	8:DK:21:VAL:O	2.21	0.40
19:DT:25:LYS:HG3	19:DT:82:GLN:HG3	2.02	0.40
9:AM:100:GLU:C	9:AM:102:ALA:H	2.24	0.40
31:BA:449:C:O2	31:BA:449:C:O4'	2.38	0.40
35:BH:53:LEU:HD23	35:BH:53:LEU:HA	1.85	0.40
21:DV:111:VAL:HG13	21:DV:111:VAL:O	2.21	0.40
1:DA:1980:G:O5'	1:DA:1980:G:H2'	2.22	0.40
33:BF:139:GLN:OE1	33:BF:139:GLN:HA	2.21	0.40
30:A8:22:VAL:HB	30:A8:53:PRO:CB	2.51	0.40
31:CA:1194:U:H4'	35:CH:22:GLY:O	2.22	0.40
31:CA:979:C:OP1	31:CA:1222:G:O6	2.40	0.40
44:CQ:40:CYS:O	44:CQ:44:LEU:HB3	2.20	0.40
1:AA:888:C:H41	43:BP:93:ARG:HH12	1.69	0.40
19:DT:57:LEU:H	19:DT:57:LEU:HD23	1.86	0.40
31:BA:1021:G:C2	31:BA:1022:G:C8	3.09	0.40
1:AA:2315:G:C5	1:AA:2316:C:C4	3.10	0.40
52:BD:7:G:C6	52:BD:58:G:N7	2.90	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:1236:A:HO2'	31:BA:1304:G:H4'	1.83	0.40
30:D8:34:TRP:O	30:D8:35:GLN:C	2.60	0.40
27:A5:40:LYS:HB3	27:A5:41:PRO:HD2	2.03	0.40
1:AA:1212:G:HO2'	1:AA:1213:A:P	2.44	0.40
31:BA:926:G:C6	31:BA:1505:G:C6	3.09	0.40
31:BA:181:G:N2	31:BA:183:G:H22	2.19	0.40
1:AA:2133:G:C5	1:AA:2157:G:C6	3.10	0.40
11:DO:111:ARG:HG3	11:DO:128:HIS:CG	2.56	0.40
11:DO:84:ASN:O	11:DO:85:LEU:C	2.59	0.40
52:BB:46:G:O2'	52:BB:47:U:C5'	2.64	0.40
1:DA:1005:C:O2'	9:DM:28:THR:HG23	2.22	0.40
1:DA:1025:G:C5	1:DA:1135:C:H1'	2.57	0.40
1:DA:2681:C:N4	1:DA:2727:G:C6	2.85	0.40
11:AO:75:ILE:CD1	11:AO:75:ILE:N	2.75	0.40
31:CA:1144:G:C6	31:CA:1145:C:C5	3.10	0.40
31:BA:1125:U:C2'	31:BA:1126:U:OP2	2.69	0.40
31:BA:1057:G:C4	31:BA:1204:A:C2	3.09	0.40
5:DF:129:PHE:HA	5:DF:142:TRP:HE1	1.87	0.40
12:DP:54:MET:C	12:DP:56:ARG:N	2.74	0.40
52:BB:17:G:H22	52:BB:66:G:H2'	1.83	0.40
1:AA:1547:C:H2'	1:AA:1548:C:H6	1.86	0.40
32:BE:42:ILE:HG13	32:BE:43:ASP:N	2.36	0.40
31:CA:1001:G:H1	31:CA:1039:C:H42	1.70	0.40
52:CB:40:U:O4	52:CB:41:C:N4	2.55	0.40
1:DA:1652:A:H62	13:D0:11:ASN:ND2	1.96	0.40
49:CV:23:ASN:HD22	49:CV:23:ASN:H	1.70	0.40
52:BB:6:G:C6	52:BB:7:G:C6	3.09	0.40
52:BB:72:U:O2'	52:BB:73:U:H5'	2.21	0.40
1:DA:304:G:C4	1:DA:305:U:C5	3.09	0.40
11:AO:83:VAL:CG1	11:AO:112:LEU:HD21	2.50	0.40
31:CA:476:G:O2'	31:CA:477:G:H5'	2.21	0.40
1:DA:684:G:O2'	1:DA:788:A:N7	2.48	0.40
31:BA:246:A:C6	31:BA:279:A:C2	3.09	0.40
32:BE:75:LYS:O	32:BE:77:ALA:N	2.54	0.40
32:CE:5:ILE:O	32:CE:6:THR:O	2.39	0.40
1:AA:910:A:C6	1:AA:911:A:C6	3.09	0.40
1:DA:2128:C:H2'	1:DA:2129:C:C6	2.56	0.40
5:AF:59:TYR:O	56:AF:303:OHX:N5	2.54	0.40
21:AV:44:PHE:CE1	21:AV:48:PHE:CB	3.05	0.40
20:DU:20:TYR:CZ	20:DU:42:VAL:HA	2.57	0.40
1:AA:143:C:H5'	19:AT:35:THR:CG2	2.49	0.40
4:DE:116:VAL:CG1	4:DE:122:PHE:HB2	2.51	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:2119:A:H2	1:AA:2171:A:H1'	1.86	0.40
31:BA:670:G:C4	31:BA:671:G:C8	3.10	0.40
6:AG:25:TYR:C	6:AG:27:ASN:N	2.75	0.40
45:CR:56:LEU:HD12	45:CR:56:LEU:C	2.42	0.40
52:BB:1:G:H2'	52:BB:2:G:C8	2.42	0.40
43:BP:12:ASN:CG	43:BP:13:LYS:H	2.17	0.40
39:CL:96:LEU:O	39:CL:101:PHE:HB2	2.21	0.40
31:CA:465:A:N7	31:CA:467:G:C6	2.90	0.40
5:DF:99:TYR:CD2	5:DF:99:TYR:O	2.74	0.40
1:AA:1869:G:C5'	1:AA:1869:G:H8	2.34	0.40
1:DA:2595:G:N2	1:DA:2599:G:C4	2.89	0.40
14:AQ:81:GLY:O	14:AQ:82:ILE:C	2.60	0.40
1:DA:773:U:C5'	3:DD:47:GLY:HA3	2.51	0.40
1:DA:910:A:N7	12:DP:13:GLN:HG3	2.36	0.40
1:AA:2575:C:H5''	1:AA:2576:G:OP2	2.20	0.40
26:D4:16:CYS:HB3	26:D4:19:GLY:HA2	2.01	0.40
38:BK:134:ILE:O	38:BK:135:CYS:HB3	2.21	0.40
4:DE:30:PRO:O	4:DE:32:PRO:HD3	2.20	0.40
21:AV:104:PHE:HA	21:AV:104:PHE:HD2	1.73	0.40
23:DZ:7:ILE:CD1	23:DZ:62:VAL:HG11	2.49	0.40
31:BA:307:C:H2'	31:BA:308:C:O5'	2.21	0.40
1:AA:27:G:N2	1:AA:512:G:H1'	2.35	0.40
31:BA:960:U:N3	31:BA:1225:A:C8	2.86	0.40
1:AA:2244:U:O2'	1:AA:2245:U:H5'	2.21	0.40
36:CI:45:LEU:HD21	36:CI:57:GLN:CD	2.42	0.40
41:CN:95:ILE:O	41:CN:98:LEU:HB2	2.21	0.40
1:AA:981:A:H4'	1:AA:2037:G:H5'	2.02	0.40
3:AD:213:ARG:HE	3:AD:213:ARG:HB3	1.48	0.40
39:BL:19:LEU:O	39:BL:20:ARG:HD3	2.21	0.40
25:AX:58:VAL:HG12	25:AX:59:VAL:H	1.87	0.40
35:CH:68:GLU:O	35:CH:70:PRO:HD3	2.22	0.40
45:CR:4:THR:C	45:CR:6:GLU:N	2.73	0.40
1:DA:1925:C:O2'	1:DA:1926:U:H5'	2.22	0.40
1:DA:2056:G:N2	1:DA:2057:A:N9	2.69	0.40
1:AA:1686:C:H2'	1:AA:1687:G:O4'	2.21	0.40
1:DA:57:C:C2'	1:DA:58:G:O5'	2.69	0.40
21:DV:166:SER:HA	21:DV:167:PRO:HD3	1.82	0.40
31:CA:423:G:N2	31:CA:424:G:C4	2.89	0.40
44:CQ:12:ARG:H	44:CQ:12:ARG:HG3	1.68	0.40
31:BA:648:A:C6	31:BA:649:G:N7	2.89	0.40
41:CN:22:HIS:O	41:CN:28:THR:HA	2.21	0.40
5:AF:52:LYS:HA	5:AF:56:GLU:OE1	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:CI:19:LEU:O	36:CI:22:GLU:HB2	2.21	0.40
5:AF:23:ASP:O	5:AF:24:LEU:O	2.39	0.40
49:CV:32:LYS:HZ3	49:CV:57:HIS:CG	2.39	0.40
8:DK:88:ILE:HG13	8:DK:122:GLU:N	2.36	0.40
1:AA:449:A:C5	1:AA:450:G:C8	3.09	0.40
34:CG:49:ARG:O	34:CG:50:ARG:C	2.59	0.40
21:AV:172:ALA:O	21:AV:173:ALA:HB2	2.20	0.40
1:DA:1523:U:C2'	1:DA:1524:G:H5'	2.51	0.40
1:DA:2478:A:H2'	1:DA:2479:G:O4'	2.21	0.40
35:BH:132:ALA:O	35:BH:135:THR:N	2.45	0.40
37:CJ:137:LYS:HB3	37:CJ:137:LYS:HE3	1.77	0.40
1:DA:2354:G:N3	1:DA:2354:G:H2'	2.36	0.40
39:BL:23:ASN:H	39:BL:23:ASN:HD22	1.70	0.40
37:CJ:49:ILE:HG22	37:CJ:49:ILE:O	2.21	0.40
40:CM:22:LYS:HD2	40:CM:22:LYS:O	2.21	0.40
8:AK:85:GLU:OE2	8:AK:85:GLU:HA	2.21	0.40
1:DA:2581:G:N2	1:DA:2610:C:H2'	2.37	0.40
1:DA:969:U:H2'	1:DA:970:C:C6	2.57	0.40
1:DA:971:C:O2'	1:DA:972:G:H5'	2.21	0.40
31:CA:1095:U:O2'	31:CA:1096:C:H5'	2.21	0.40
31:CA:951:G:C5	31:CA:1231:G:N1	2.90	0.40
1:AA:1291:C:H5''	1:AA:1536:A:H5'	2.03	0.40
7:AH:153:LYS:N	7:AH:153:LYS:CD	2.80	0.40
1:AA:883:G:H1	1:AA:893:C:H42	0.61	0.40
1:AA:1359:A:H5'	1:AA:1359:A:N3	2.35	0.40
31:BA:1004:A:N1	31:BA:1024:G:O2'	2.39	0.40
31:BA:1005:A:C3'	31:BA:1006:C:H5'	2.51	0.40
31:BA:1157:A:O2'	31:BA:1158:C:H5''	2.21	0.40
31:CA:1236:A:OP1	51:CX:3:LYS:HE3	2.21	0.40
31:BA:1331:G:O2'	31:BA:1332:A:C8	2.73	0.40
31:BA:946:A:C6	31:BA:947:G:C6	3.10	0.40
1:DA:2426:A:H4'	1:DA:2427:C:OP2	2.22	0.40
43:BP:66:LEU:O	43:BP:68:GLY:N	2.54	0.40
1:AA:1934:C:H2'	1:AA:1935:G:O4'	2.22	0.40
31:BA:1450:U:H2'	31:BA:1451:A:O5'	2.21	0.40
31:CA:1148:U:O2'	39:CL:14:VAL:HG21	2.20	0.40
1:DA:2727:G:C2	1:DA:2728:U:C6	3.09	0.40
39:CL:110:GLU:CG	39:CL:111:ARG:N	2.84	0.40
11:DO:9:ASN:O	11:DO:10:PRO:C	2.58	0.40
31:CA:1133:G:C5	31:CA:1134:G:N7	2.89	0.40
31:BA:1153:C:H2'	31:BA:1154:G:O4'	2.21	0.40
1:AA:593:G:H1'	30:A8:4:MET:HE1	2.02	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:BE:204:ASN:ND2	32:BE:206:ASP:N	2.54	0.40
1:DA:1050:A:C5	1:DA:2751:G:C6	3.10	0.40
19:DT:28:PHE:CZ	19:DT:81:VAL:HG21	2.41	0.40
52:CB:51:C:C2'	52:CB:52:G:O5'	2.69	0.40
1:AA:2469:A:H61	1:AA:2481:G:H1'	1.87	0.40
31:BA:88:C:C2'	31:BA:88:C:O2	2.69	0.40
17:A2:22:VAL:HG12	17:A2:23:GLU:O	2.22	0.40
46:BS:9:PHE:HB3	46:BS:10:GLY:H	1.71	0.40
31:BA:10:A:O2'	31:BA:11:G:H5'	2.21	0.40
31:CA:522:C:H42	31:CA:527:G:H1	1.70	0.40
15:DR:24:PRO:HD3	15:DR:52:ILE:CD1	2.52	0.40
14:DQ:95:HIS:CG	14:DQ:96:GLY:N	2.90	0.40
1:DA:303:U:C2	1:DA:304:G:C8	3.09	0.40
11:AO:91:PHE:N	11:AO:91:PHE:CD2	2.90	0.40
1:AA:2787:C:H1'	4:AE:62:PRO:HG3	2.03	0.40
1:AA:2811:G:H8	1:AA:2811:G:OP2	2.04	0.40
31:BA:542:G:H5'	34:BG:41:GLY:HA3	2.02	0.40
1:AA:315:G:C2'	1:AA:316:C:H6	2.21	0.40
31:BA:7:G:H2'	35:BH:119:LEU:HD22	2.03	0.40
1:AA:1517:G:H4'	1:AA:1556:C:O2'	2.22	0.40
31:CA:64:G:H2'	31:CA:64:G:H8	1.79	0.40
38:CK:20:TYR:CE2	38:CK:75:ARG:HB3	2.56	0.40
19:DT:63:LYS:HZ3	19:DT:63:LYS:N	2.16	0.40
19:AT:40:LYS:O	19:AT:43:VAL:N	2.54	0.40
23:DZ:27:GLU:O	23:DZ:28:GLY:C	2.60	0.40
33:CF:35:GLU:OE2	33:CF:95:THR:HG23	2.22	0.40
33:CF:14:ILE:CG1	33:CF:15:THR:N	2.68	0.40
31:BA:397:A:N6	31:BA:548:G:C4	2.90	0.40
1:AA:654:A:O2'	1:AA:654(A):A:C8	2.68	0.40
31:BA:819:A:C4'	31:BA:820:U:OP2	2.65	0.40
31:BA:821:G:C2	31:BA:880:C:C2	3.09	0.40
20:AU:96:ILE:CD1	20:AU:98:VAL:HG12	2.50	0.40
1:DA:1921:G:C6	56:DA:3064:OHX:N2	2.89	0.40
34:CG:173:TRP:CB	34:CG:187:ARG:HH11	2.27	0.40
32:BE:168:THR:O	32:BE:170:GLU:N	2.54	0.40
1:AA:299:A:C5	1:AA:300:A:C6	3.10	0.40
31:BA:129:U:O2	31:BA:131:C:C5	2.75	0.40
1:DA:444:C:O2'	1:DA:445:C:H5'	2.22	0.40
31:CA:1152:A:O2'	31:CA:1153:C:H5'	2.21	0.40
3:DD:246:PRO:C	3:DD:254:THR:HG22	2.41	0.40
44:BQ:53:LEU:HA	44:BQ:54:PRO:HD3	1.82	0.40
43:BP:44:ARG:O	43:BP:46:LYS:N	2.54	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:DF:38:ARG:HH11	5:DF:38:ARG:CG	2.23	0.40
31:CA:1226:C:H4'	49:CV:80:TYR:CZ	2.56	0.40
29:A7:27:GLY:C	29:A7:29:LYS:N	2.74	0.40
24:AW:47:ASN:HB2	24:AW:48:HIS:H	1.49	0.40
38:BK:49:GLU:O	38:BK:51:VAL:HG13	2.21	0.40
33:CF:71:ALA:HB1	33:CF:109:PRO:HB3	2.03	0.40
1:AA:188:G:H1	1:AA:208:C:N4	2.18	0.40
1:DA:653:A:H5''	1:DA:654:A:OP1	2.22	0.40
1:DA:2205:C:O2'	1:DA:2227:A:N1	2.51	0.40
1:AA:2884:U:H2'	1:AA:2885:C:C5'	2.49	0.40
31:BA:1290:G:H5''	31:BA:1291:G:OP2	2.20	0.40
49:CV:66:MET:HA	49:CV:67:VAL:HB	2.03	0.40
1:AA:2376:A:C2	14:AQ:112:PHE:HB2	2.56	0.40
1:AA:389:G:N1	11:AO:70:GLN:HB3	2.36	0.40
17:A2:83:ARG:HA	17:A2:83:ARG:HD3	1.90	0.40
1:DA:271(A):C:H1'	1:DA:272:G:H1'	2.03	0.40
1:DA:1290:C:H2'	1:DA:1291:C:H6	1.87	0.40
34:CG:61:LYS:C	34:CG:63:LYS:N	2.75	0.40
6:AG:44:GLY:O	6:AG:47:LYS:HG3	2.21	0.40
1:DA:1224:G:N2	1:DA:1227:A:OP2	2.44	0.40
1:AA:150:C:H2'	1:AA:151:C:H6	1.83	0.40
3:AD:270:ILE:HG22	3:AD:271:ILE:H	1.83	0.40
47:CT:77:VAL:O	47:CT:78:GLU:HB3	2.21	0.40
31:BA:1084:G:C8	31:BA:1085:U:C5	3.09	0.40
1:AA:2870:C:C5'	13:A0:65:LEU:HD21	2.51	0.40
34:BG:97:LEU:O	34:BG:100:ARG:HG3	2.22	0.40
31:CA:35:G:N2	31:CA:550:G:H1'	2.36	0.40
1:AA:2101:G:H2'	1:AA:2102:U:O4'	2.21	0.40
29:D7:19:ARG:HG2	29:D7:19:ARG:HH11	1.85	0.40
1:AA:1675:C:C4	1:AA:1676:A:C5	3.09	0.40
35:CH:48:ALA:CB	35:CH:49:PRO:HD2	2.50	0.40
1:AA:2017:U:H5''	1:AA:2018:G:P	2.61	0.40
1:AA:2679:A:H4'	4:AE:165:VAL:HG11	2.03	0.40
1:AA:1155:A:C4	1:AA:1157:G:C8	3.09	0.40
8:AK:47:LEU:O	8:AK:51:ILE:HG13	2.22	0.40
1:DA:2859:G:O2'	1:DA:2860:A:C5'	2.70	0.40
36:CI:68:PRO:HG2	36:CI:71:ARG:HG3	2.02	0.40
1:AA:229:A:C4'	1:AA:230:U:OP2	2.70	0.40
14:DQ:97:ARG:O	14:DQ:100:ALA:HB3	2.21	0.40
42:BO:43:VAL:HG22	42:BO:55:VAL:HG22	2.03	0.40
1:AA:1394:U:C4	1:AA:1395:A:C5	3.09	0.40
1:AA:1170:G:C2	1:AA:1180:C:C2	3.10	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BH:56:GLN:C	35:BH:58:ALA:N	2.75	0.40
1:AA:836:G:H5''	1:AA:837:C:OP2	2.21	0.40
45:BR:66:LEU:O	45:BR:69:TYR:HB3	2.21	0.40
31:BA:585:G:O6	56:BA:1734:OHX:N5	2.54	0.40
11:DO:139:LYS:HE2	11:DO:139:LYS:HB3	1.87	0.40
47:CT:50:LYS:O	47:CT:50:LYS:HG3	2.21	0.40
11:DO:50:ARG:CG	11:DO:50:ARG:HH11	2.34	0.40
1:AA:1313:U:H2'	1:AA:1610:A:N1	2.35	0.40
52:CD:18:G:O2'	52:CD:19:C:OP2	2.35	0.40
1:DA:601:C:O2'	1:DA:605:C:H5''	2.20	0.40
1:DA:601:C:O2'	1:DA:605:C:OP1	2.39	0.40
31:BA:1025:U:HO2'	31:BA:1026:G:P	2.42	0.40
52:BD:21:A:H4'	52:BD:22:A:OP1	2.18	0.40
52:BD:58:G:N2	52:BD:75:C:C2	2.90	0.40
52:BD:7:G:C6	52:BD:58:G:C5	3.09	0.40
32:CE:204:ASN:N	32:CE:204:ASN:OD1	2.47	0.40
20:DU:63:LYS:HA	20:DU:63:LYS:CE	2.51	0.40
13:A0:101:ALA:HA	27:A5:44:THR:HG21	2.02	0.40
26:A4:15:ILE:HG13	26:A4:16:CYS:N	2.35	0.40
31:BA:1392:G:O2'	31:BA:1393:U:H5'	2.21	0.40
1:AA:2700:C:C2'	1:AA:2701:C:H5'	2.52	0.40
9:DM:39:ARG:HA	9:DM:40:PRO:HD2	1.82	0.40
1:DA:1074:G:C2	1:DA:1075:C:C2	3.10	0.40
31:CA:1276:G:C6	31:CA:1277:C:N4	2.89	0.40
2:AB:7:G:P	14:AQ:29:PHE:CE1	3.10	0.40
1:DA:2136:C:N4	1:DA:2155:G:C2	2.77	0.40
16:A1:69:CYS:O	16:A1:74:LEU:O	2.39	0.40
27:A5:51:TYR:HB3	27:A5:52:TYR:H	1.41	0.40
31:BA:1126:U:O4	31:BA:1127:G:N2	2.55	0.40
7:DH:53:GLU:HG3	7:DH:54:ARG:N	2.37	0.40
31:BA:737:A:C4	31:BA:738:C:C5	3.09	0.40
47:BT:65:ILE:HG21	47:BT:69:LYS:CE	2.49	0.40
31:BA:81:G:C6	31:BA:88:C:N4	2.90	0.40
31:CA:1000:A:C2'	31:CA:1001:G:H5'	2.52	0.40
31:BA:9:G:OP2	35:BH:121:LYS:HE3	2.21	0.40
31:CA:865:A:C6	31:CA:866:C:N3	2.89	0.40
14:AQ:101:LEU:C	14:AQ:101:LEU:CD1	2.89	0.40
1:DA:109:G:H2'	1:DA:110:G:O4'	2.21	0.40
31:CA:516:U:O4	31:CA:533:A:OP1	2.39	0.40
15:DR:98:LYS:HD3	15:DR:98:LYS:HA	1.89	0.40
1:AA:2723:C:OP1	13:A0:3:HIS:CD2	2.66	0.40
6:DG:92:VAL:HG13	6:DG:92:VAL:O	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:CO:22:SER:O	42:CO:25:PRO:HD3	2.21	0.40
11:AO:101:VAL:C	11:AO:103:ALA:N	2.74	0.40
10:DN:35:VAL:HG21	10:DN:69:ILE:CD1	2.52	0.40
1:DA:66:C:H2'	1:DA:67:U:O4'	2.21	0.40
1:DA:2744:G:N7	1:DA:2755:C:C6	2.90	0.40
31:CA:455:C:N4	31:CA:477:G:H1	2.20	0.40
31:CA:477:G:H2'	31:CA:478:A:O4'	2.22	0.40
31:BA:511:C:O2	31:BA:512:U:C6	2.75	0.40
34:BG:6:GLY:O	34:BG:8:VAL:HG23	2.21	0.40
31:CA:409:G:H2'	31:CA:410:G:O4'	2.21	0.40
34:CG:25:ARG:HB3	34:CG:25:ARG:HH11	1.86	0.40
31:CA:383:A:H8	31:CA:383:A:O5'	2.05	0.40
38:BK:86:ILE:CG2	38:BK:87:SER:H	2.15	0.40
16:A1:66:ASN:HD21	16:A1:70:ARG:HE	1.70	0.40
1:AA:539:G:H2'	1:AA:540:G:H5'	2.04	0.40
19:AT:80:ILE:O	19:AT:80:ILE:CD1	2.67	0.40
1:AA:1047:G:N1	1:AA:1110:G:N7	2.70	0.40
5:DF:178:PRO:C	5:DF:180:GLY:N	2.75	0.40
32:CE:8:LYS:O	32:CE:9:GLU:HB3	2.22	0.40
21:DV:23:LYS:HB3	21:DV:38:TYR:CD1	2.57	0.40
1:DA:528:A:C8	1:DA:528:A:H3'	2.57	0.40
1:AA:322:A:H3'	5:AF:169:ASN:ND2	2.36	0.40
31:BA:671:G:C2	31:BA:672:U:C2	3.09	0.40
1:DA:2537:U:H2'	1:DA:2538:C:H6	1.79	0.40
31:CA:113:G:H1'	31:CA:353:A:O2'	2.20	0.40
1:DA:1510:A:H2'	1:DA:1511:A:O4'	2.21	0.40
1:DA:1638:C:H2'	1:DA:1639:U:O5'	2.22	0.40
2:AB:46:A:C5	2:AB:47:C:C4	3.10	0.40
5:DF:99:TYR:CD2	5:DF:99:TYR:C	2.95	0.40
31:CA:955:U:C4	31:CA:956:U:C5	3.10	0.40
1:DA:1385:G:O2'	1:DA:1396:U:C6	2.71	0.40
1:AA:2581:G:N3	1:AA:2581:G:H2'	2.36	0.40
1:AA:2863:C:O2	1:AA:2863:C:H2'	2.21	0.40
1:AA:2094:G:O2'	1:AA:2095:C:H5'	2.21	0.40
1:DA:2226:C:C5	1:DA:2227:A:N7	2.90	0.40
1:AA:337:C:C2'	1:AA:338:G:O5'	2.68	0.40
31:CA:1012:U:C4	31:CA:1013:G:C6	3.09	0.40
31:BA:1434:A:H61	31:BA:1467:G:H1'	1.85	0.40
1:DA:2846:G:H2'	1:DA:2847:U:O4'	2.22	0.40
1:AA:26:G:N1	1:AA:27:G:C2	2.90	0.40
1:DA:396:G:C8	23:DZ:13:ILE:HD11	2.56	0.40
49:BV:33:THR:OG1	49:BV:35:SER:N	2.43	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:DA:2691:C:H2'	1:DA:2692:C:H6	1.86	0.40
1:DA:381:G:C4	1:DA:394:A:H2	2.34	0.40
1:AA:601:C:O2'	1:AA:605:C:OP1	2.35	0.40
7:AH:111:HIS:HB2	7:AH:112:PRO:HD2	2.03	0.40
30:A8:42:ARG:NH1	30:A8:42:ARG:CG	2.84	0.40
50:BW:86:ARG:O	50:BW:90:GLN:CD	2.60	0.40
1:DA:2592:G:H2'	1:DA:2593:U:O4'	2.22	0.40
10:AN:7:TYR:CD1	10:AN:20:MET:HB2	2.57	0.40
1:DA:1216:G:N3	1:DA:1217:C:C6	2.89	0.40
13:D0:29:LEU:O	13:D0:30:THR:C	2.59	0.40
21:AV:143:GLY:CA	21:AV:144:LEU:CB	2.99	0.40
1:DA:283:A:H4'	1:DA:284:U:OP2	2.22	0.40
1:AA:1252:G:OP2	16:A1:14:HIS:NE2	2.46	0.40
31:BA:771:G:C2'	31:BA:772:U:H5'	2.52	0.40
1:DA:270(G):C:H2'	1:DA:270(H):C:C6	2.56	0.40
31:BA:692:U:O2'	31:BA:694:A:N7	2.46	0.40
1:DA:19:C:H2'	1:DA:20:C:C6	2.56	0.40
43:BP:36:LYS:HA	43:BP:36:LYS:HD3	1.75	0.40
1:AA:2359:C:H2'	1:AA:2360:A:O4'	2.21	0.40
14:AQ:102:ALA:C	14:AQ:104:GLY:H	2.25	0.40
1:DA:699:A:H2'	1:DA:700:G:O4'	2.21	0.40
1:DA:1838:C:C2	1:DA:1898:U:C4	3.09	0.40
2:AB:109:G:C5	2:AB:110:G:N7	2.90	0.40
1:AA:693:C:H2'	1:AA:694:U:H6	1.86	0.40
1:AA:238:C:H2'	1:AA:239:U:O4'	2.21	0.40
49:BV:9:VAL:HG12	49:BV:9:VAL:O	2.22	0.40
39:CL:2:GLU:HG2	39:CL:2:GLU:O	2.21	0.40
1:DA:2006:C:H6	1:DA:2006:C:O5'	2.04	0.40
34:CG:86:LYS:H	34:CG:86:LYS:HG2	1.59	0.40

All (1) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Distance(Å)	Clash(Å)
31:BA:85:U:O2'	7:DH:100:GLY:O[3_555]	1.86	0.34

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	
3	AD	270/276 (98%)	208 (77%)	45 (17%)	17 (6%)	2	20
3	DD	270/276 (98%)	226 (84%)	31 (12%)	13 (5%)	4	30
4	AE	203/206 (98%)	138 (68%)	33 (16%)	32 (16%)	0	1
4	DE	203/206 (98%)	128 (63%)	34 (17%)	41 (20%)	0	1
5	AF	200/210 (95%)	153 (76%)	28 (14%)	19 (10%)	1	9
5	DF	206/210 (98%)	133 (65%)	46 (22%)	27 (13%)	0	3
6	AG	179/182 (98%)	127 (71%)	36 (20%)	16 (9%)	1	10
6	DG	179/182 (98%)	128 (72%)	30 (17%)	21 (12%)	1	5
7	AH	168/180 (93%)	111 (66%)	25 (15%)	32 (19%)	0	1
7	DH	168/180 (93%)	92 (55%)	52 (31%)	24 (14%)	0	2
8	AK	144/148 (97%)	75 (52%)	44 (31%)	25 (17%)	0	1
8	DK	144/148 (97%)	98 (68%)	27 (19%)	19 (13%)	0	3
9	AM	136/140 (97%)	96 (71%)	21 (15%)	19 (14%)	0	2
9	DM	136/140 (97%)	98 (72%)	21 (15%)	17 (12%)	1	4
10	AN	120/122 (98%)	101 (84%)	15 (12%)	4 (3%)	6	43
10	DN	120/122 (98%)	97 (81%)	15 (12%)	8 (7%)	2	18
11	AO	148/150 (99%)	91 (62%)	29 (20%)	28 (19%)	0	1
11	DO	148/150 (99%)	83 (56%)	21 (14%)	44 (30%)	0	0
12	AP	139/141 (99%)	93 (67%)	27 (19%)	19 (14%)	0	2
12	DP	139/141 (99%)	88 (63%)	29 (21%)	22 (16%)	0	1
13	A0	116/118 (98%)	86 (74%)	21 (18%)	9 (8%)	1	14
13	D0	115/118 (98%)	83 (72%)	18 (16%)	14 (12%)	1	4
14	AQ	109/112 (97%)	74 (68%)	26 (24%)	9 (8%)	1	12
14	DQ	109/112 (97%)	60 (55%)	32 (29%)	17 (16%)	0	1
15	AR	135/146 (92%)	101 (75%)	19 (14%)	15 (11%)	1	5
15	DR	135/146 (92%)	101 (75%)	23 (17%)	11 (8%)	1	13
16	A1	115/118 (98%)	82 (71%)	19 (16%)	14 (12%)	1	4
16	D1	115/118 (98%)	73 (64%)	29 (25%)	13 (11%)	1	5
17	A2	99/101 (98%)	81 (82%)	10 (10%)	8 (8%)	1	13

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
17	D2	99/101 (98%)	64 (65%)	19 (19%)	16 (16%)	0	1
18	AS	111/113 (98%)	94 (85%)	13 (12%)	4 (4%)	5	40
18	DS	111/113 (98%)	89 (80%)	13 (12%)	9 (8%)	1	13
19	AT	90/96 (94%)	78 (87%)	8 (9%)	4 (4%)	4	32
19	DT	90/96 (94%)	67 (74%)	15 (17%)	8 (9%)	1	10
20	AU	100/110 (91%)	65 (65%)	18 (18%)	17 (17%)	0	1
20	DU	100/110 (91%)	56 (56%)	18 (18%)	26 (26%)	0	0
21	AV	173/206 (84%)	105 (61%)	42 (24%)	26 (15%)	0	2
21	DV	177/206 (86%)	100 (56%)	35 (20%)	42 (24%)	0	0
22	A3	74/85 (87%)	58 (78%)	11 (15%)	5 (7%)	2	18
22	D3	75/85 (88%)	54 (72%)	15 (20%)	6 (8%)	1	13
23	AZ	95/98 (97%)	75 (79%)	14 (15%)	6 (6%)	2	20
23	DZ	95/98 (97%)	72 (76%)	12 (13%)	11 (12%)	1	5
24	AW	64/72 (89%)	55 (86%)	3 (5%)	6 (9%)	1	9
24	DW	64/72 (89%)	46 (72%)	11 (17%)	7 (11%)	1	6
25	AX	57/60 (95%)	47 (82%)	8 (14%)	2 (4%)	6	41
25	DX	57/60 (95%)	44 (77%)	9 (16%)	4 (7%)	2	17
26	A4	64/71 (90%)	33 (52%)	14 (22%)	17 (27%)	0	0
26	D4	61/71 (86%)	23 (38%)	12 (20%)	26 (43%)	0	0
27	A5	57/60 (95%)	39 (68%)	10 (18%)	8 (14%)	0	2
27	D5	57/60 (95%)	44 (77%)	7 (12%)	6 (10%)	1	6
28	A6	43/54 (80%)	21 (49%)	13 (30%)	9 (21%)	0	1
28	D6	43/54 (80%)	23 (54%)	9 (21%)	11 (26%)	0	0
29	A7	43/49 (88%)	41 (95%)	0	2 (5%)	4	30
29	D7	43/49 (88%)	38 (88%)	3 (7%)	2 (5%)	4	30
30	A8	58/65 (89%)	39 (67%)	11 (19%)	8 (14%)	0	2
30	D8	58/65 (89%)	40 (69%)	8 (14%)	10 (17%)	0	1
32	BE	235/256 (92%)	155 (66%)	44 (19%)	36 (15%)	0	1
32	CE	235/256 (92%)	152 (65%)	49 (21%)	34 (14%)	0	2
33	BF	203/239 (85%)	137 (68%)	47 (23%)	19 (9%)	1	9
33	CF	204/239 (85%)	124 (61%)	55 (27%)	25 (12%)	1	4

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
34	BG	206/208 (99%)	152 (74%)	34 (16%)	20 (10%)	1	8
34	CG	206/208 (99%)	152 (74%)	31 (15%)	23 (11%)	1	5
35	BH	149/162 (92%)	115 (77%)	26 (17%)	8 (5%)	3	26
35	CH	149/162 (92%)	115 (77%)	25 (17%)	9 (6%)	2	22
36	BI	99/101 (98%)	71 (72%)	23 (23%)	5 (5%)	3	28
36	CI	99/101 (98%)	85 (86%)	12 (12%)	2 (2%)	11	58
37	BJ	153/156 (98%)	111 (72%)	32 (21%)	10 (6%)	2	19
37	CJ	153/156 (98%)	118 (77%)	22 (14%)	13 (8%)	1	11
38	BK	136/138 (99%)	105 (77%)	24 (18%)	7 (5%)	3	28
38	CK	136/138 (99%)	100 (74%)	24 (18%)	12 (9%)	1	11
39	BL	125/128 (98%)	89 (71%)	25 (20%)	11 (9%)	1	11
39	CL	125/128 (98%)	80 (64%)	29 (23%)	16 (13%)	0	3
40	BM	97/105 (92%)	76 (78%)	20 (21%)	1 (1%)	22	74
40	CM	97/105 (92%)	73 (75%)	19 (20%)	5 (5%)	3	27
41	BN	117/129 (91%)	85 (73%)	24 (20%)	8 (7%)	2	18
41	CN	117/129 (91%)	93 (80%)	19 (16%)	5 (4%)	4	34
42	BO	123/132 (93%)	93 (76%)	18 (15%)	12 (10%)	1	8
42	CO	123/132 (93%)	79 (64%)	27 (22%)	17 (14%)	0	2
43	BP	114/126 (90%)	69 (60%)	27 (24%)	18 (16%)	0	1
43	CP	115/126 (91%)	71 (62%)	24 (21%)	20 (17%)	0	1
44	BQ	56/61 (92%)	38 (68%)	5 (9%)	13 (23%)	0	0
44	CQ	56/61 (92%)	32 (57%)	13 (23%)	11 (20%)	0	1
45	BR	86/89 (97%)	62 (72%)	19 (22%)	5 (6%)	3	23
45	CR	86/89 (97%)	72 (84%)	11 (13%)	3 (4%)	6	41
46	BS	82/88 (93%)	57 (70%)	15 (18%)	10 (12%)	1	4
46	CS	82/88 (93%)	55 (67%)	21 (26%)	6 (7%)	2	16
47	BT	98/105 (93%)	74 (76%)	17 (17%)	7 (7%)	2	17
47	CT	98/105 (93%)	83 (85%)	9 (9%)	6 (6%)	2	22
48	BU	70/88 (80%)	53 (76%)	11 (16%)	6 (9%)	1	11
48	CU	70/88 (80%)	58 (83%)	10 (14%)	2 (3%)	7	47
49	BV	76/93 (82%)	56 (74%)	13 (17%)	7 (9%)	1	9

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
49	CV	76/93 (82%)	49 (64%)	18 (24%)	9 (12%)	1	4
50	BW	97/106 (92%)	65 (67%)	21 (22%)	11 (11%)	1	5
50	CW	97/106 (92%)	70 (72%)	13 (13%)	14 (14%)	0	2
51	BX	23/27 (85%)	15 (65%)	5 (22%)	3 (13%)	0	3
51	CX	23/27 (85%)	15 (65%)	6 (26%)	2 (9%)	1	11
All	All	11319/12052 (94%)	7969 (70%)	2044 (18%)	1306 (12%)	1	5

All (1306) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	AD	3	VAL
3	AD	28	GLU
3	AD	29	PRO
3	AD	33	LEU
3	AD	37	LEU
3	AD	122	ASP
3	AD	237	GLU
4	AE	2	LYS
4	AE	21	VAL
4	AE	54	GLN
4	AE	60	ASN
4	AE	68	ALA
4	AE	69	LYS
4	AE	72	VAL
4	AE	78	LEU
4	AE	88	GLY
4	AE	118	LYS
4	AE	131	ALA
5	AF	48	THR
5	AF	73	ALA
5	AF	145	GLU
5	AF	168	ARG
5	AF	197	ASP
5	AF	198	ALA
6	AG	14	GLU
6	AG	30	GLU
6	AG	36	LYS
6	AG	79	ASN
6	AG	96	ARG
7	AH	10	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	AH	12	PRO
7	AH	13	LYS
7	AH	59	ARG
7	AH	83	TYR
7	AH	84	SER
7	AH	87	LEU
7	AH	98	LEU
7	AH	138	LYS
7	AH	151	ILE
7	AH	153	LYS
7	AH	155	SER
7	AH	169	VAL
8	AK	10	GLU
8	AK	34	GLY
8	AK	36	ALA
8	AK	57	ARG
8	AK	71	ILE
8	AK	87	LYS
8	AK	97	ILE
8	AK	105	HIS
8	AK	114	LEU
8	AK	134	PRO
8	AK	145	VAL
9	AM	23	LEU
9	AM	56	ASN
9	AM	62	VAL
9	AM	64	GLY
9	AM	76	SER
9	AM	128	HIS
10	AN	97	ARG
11	AO	7	ARG
11	AO	10	PRO
11	AO	16	ARG
11	AO	25	SER
11	AO	27	HIS
11	AO	36	LYS
11	AO	42	SER
11	AO	47	ASP
11	AO	59	LEU
11	AO	67	MET
11	AO	106	LEU
11	AO	141	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	AO	148	LEU
12	AP	2	LEU
12	AP	25	ASP
12	AP	26	TYR
12	AP	60	ARG
12	AP	78	PRO
12	AP	89	ASN
12	AP	139	GLU
13	A0	4	LEU
13	A0	42	LYS
13	A0	86	ARG
14	AQ	4	LEU
14	AQ	21	THR
14	AQ	51	ALA
14	AQ	82	ILE
15	AR	39	ARG
15	AR	106	SER
16	A1	83	LEU
16	A1	91	ASP
16	A1	93	LYS
16	A1	116	ALA
17	A2	45	THR
17	A2	47	VAL
17	A2	49	THR
17	A2	50	PRO
17	A2	78	LYS
18	AS	111	HIS
19	AT	40	LYS
19	AT	68	ARG
20	AU	6	HIS
20	AU	11	ASP
20	AU	40	GLU
20	AU	42	VAL
20	AU	50	ARG
20	AU	57	GLN
20	AU	77	PRO
20	AU	78	ALA
21	AV	6	LYS
21	AV	31	ARG
21	AV	51	ALA
21	AV	63	ASP
21	AV	135	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	AV	161	VAL
21	AV	165	VAL
21	AV	171	ILE
22	A3	44	ARG
22	A3	55	ARG
22	A3	84	LEU
23	AZ	91	LYS
24	AW	16	LEU
24	AW	43	GLN
24	AW	47	ASN
26	A4	14	ILE
26	A4	18	CYS
26	A4	34	GLU
26	A4	40	HIS
26	A4	41	PRO
26	A4	46	GLN
26	A4	53	GLU
27	A5	3	LYS
27	A5	4	HIS
28	A6	16	CYS
28	A6	17	LYS
28	A6	21	TYR
28	A6	22	ALA
30	A8	18	ALA
30	A8	29	LYS
30	A8	31	HIS
30	A8	52	LYS
30	A8	57	ARG
32	BE	26	PRO
32	BE	60	ASP
32	BE	96	ARG
32	BE	101	MET
32	BE	150	SER
32	BE	159	PRO
32	BE	195	ASP
32	BE	216	SER
32	BE	221	LEU
32	BE	236	TYR
32	BE	237	ALA
33	BF	4	LYS
33	BF	110	ASN
33	BF	133	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	BF	134	ILE
34	BG	12	CYS
34	BG	30	LYS
34	BG	89	THR
34	BG	151	LYS
34	BG	155	LEU
34	BG	164	ALA
34	BG	173	TRP
34	BG	200	GLU
35	BH	17	ALA
35	BH	113	ALA
35	BH	140	ARG
35	BH	153	LYS
36	BI	43	LEU
36	BI	62	TRP
37	BJ	5	ARG
37	BJ	7	ALA
37	BJ	58	PRO
38	BK	2	LEU
38	BK	86	ILE
39	BL	44	VAL
39	BL	54	ASP
39	BL	56	LEU
39	BL	111	ARG
39	BL	118	LYS
41	BN	77	MET
41	BN	82	VAL
41	BN	101	SER
42	BO	48	PRO
42	BO	65	GLU
43	BP	12	ASN
43	BP	21	TYR
43	BP	27	LYS
43	BP	31	LYS
43	BP	48	LEU
43	BP	83	ASP
43	BP	88	ARG
43	BP	95	GLY
44	BQ	5	ALA
44	BQ	14	PRO
44	BQ	16	PHE
44	BQ	29	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
44	BQ	41	ARG
44	BQ	60	SER
46	BS	40	ASP
46	BS	76	GLN
47	BT	49	GLU
47	BT	68	ARG
48	BU	22	VAL
48	BU	54	ARG
49	BV	67	VAL
50	BW	48	LYS
50	BW	49	ALA
50	BW	52	ALA
50	BW	53	LEU
50	BW	99	LEU
50	BW	100	ILE
51	BX	3	LYS
32	CE	6	THR
32	CE	7	VAL
32	CE	20	GLU
32	CE	63	MET
32	CE	73	THR
32	CE	83	MET
32	CE	84	GLU
32	CE	101	MET
32	CE	154	LEU
32	CE	191	ASP
32	CE	216	SER
32	CE	232	PRO
32	CE	237	ALA
33	CF	47	LEU
33	CF	127	ARG
34	CG	9	CYS
34	CG	26	CYS
34	CG	28	SER
34	CG	149	ALA
34	CG	150	GLU
34	CG	154	ASN
34	CG	178	VAL
34	CG	179	GLU
35	CH	63	ARG
35	CH	73	ASN
35	CH	140	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
37	CJ	33	ASP
38	CK	2	LEU
38	CK	91	ARG
39	CL	44	VAL
39	CL	54	ASP
39	CL	95	LYS
39	CL	105	ASP
39	CL	108	VAL
39	CL	109	VAL
39	CL	111	ARG
39	CL	118	LYS
40	CM	57	LYS
41	CN	100	ALA
41	CN	101	SER
42	CO	18	VAL
42	CO	19	ARG
42	CO	26	ALA
42	CO	42	THR
42	CO	47	LYS
42	CO	61	THR
42	CO	91	LYS
42	CO	96	VAL
43	CP	4	ILE
43	CP	5	ALA
43	CP	7	VAL
43	CP	12	ASN
43	CP	29	ARG
43	CP	95	GLY
43	CP	106	ASN
43	CP	117	VAL
44	CQ	15	LYS
44	CQ	19	ARG
44	CQ	23	ARG
44	CQ	30	ALA
47	CT	67	LYS
48	CU	23	LYS
49	CV	9	VAL
49	CV	11	VAL
50	CW	47	GLY
50	CW	49	ALA
50	CW	71	THR
50	CW	72	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	CW	95	ALA
50	CW	100	ILE
50	CW	102	GLY
51	CX	3	LYS
3	DD	26	LYS
3	DD	33	LEU
3	DD	237	GLU
3	DD	268	ARG
4	DE	2	LYS
4	DE	25	VAL
4	DE	42	ASP
4	DE	49	LEU
4	DE	51	PHE
4	DE	61	ARG
4	DE	74	PRO
4	DE	77	ILE
4	DE	78	LEU
4	DE	81	ILE
4	DE	87	GLU
4	DE	131	ALA
4	DE	200	GLU
4	DE	204	ALA
5	DF	3	GLU
5	DF	17	ARG
5	DF	21	ALA
5	DF	24	LEU
5	DF	25	PRO
5	DF	54	ARG
5	DF	73	ALA
5	DF	89	VAL
5	DF	133	ASN
5	DF	146	ALA
5	DF	168	ARG
5	DF	193	VAL
6	DG	3	LEU
6	DG	35	GLU
6	DG	45	GLU
6	DG	81	LYS
6	DG	84	LYS
7	DH	3	ARG
7	DH	59	ARG
7	DH	81	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	DH	83	TYR
7	DH	157	TYR
7	DH	167	GLU
7	DH	168	PRO
8	DK	11	ASN
8	DK	59	ALA
8	DK	111	PRO
8	DK	117	GLU
8	DK	119	PRO
8	DK	144	VAL
8	DK	145	VAL
9	DM	36	GLY
9	DM	66	LYS
9	DM	98	VAL
9	DM	128	HIS
10	DN	5	GLN
10	DN	29	ASN
10	DN	48	PRO
11	DO	6	LEU
11	DO	10	PRO
11	DO	12	ALA
11	DO	16	ARG
11	DO	19	VAL
11	DO	34	GLY
11	DO	35	HIS
11	DO	38	GLN
11	DO	47	ASP
11	DO	49	ARG
11	DO	56	SER
11	DO	57	THR
11	DO	58	THR
11	DO	64	LYS
11	DO	65	ARG
11	DO	98	GLU
11	DO	105	LEU
11	DO	106	LEU
11	DO	111	ARG
11	DO	147	LEU
12	DP	25	ASP
12	DP	55	VAL
12	DP	60	ARG
12	DP	79	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	DP	89	ASN
12	DP	110	THR
12	DP	117	ALA
12	DP	136	ALA
13	D0	42	LYS
13	D0	56	LYS
13	D0	88	ARG
14	DQ	4	LEU
14	DQ	42	ASP
14	DQ	57	LYS
14	DQ	61	ASN
14	DQ	87	PHE
14	DQ	88	ASP
14	DQ	89	ARG
14	DQ	110	LEU
14	DQ	111	GLU
15	DR	9	LEU
15	DR	86	ILE
15	DR	107	ASP
15	DR	135	ALA
16	D1	91	ASP
16	D1	92	ARG
16	D1	117	GLN
17	D2	24	LYS
17	D2	44	LYS
17	D2	49	THR
17	D2	72	VAL
17	D2	78	LYS
18	DS	11	ARG
18	DS	63	ASP
19	DT	41	ASN
19	DT	68	ARG
20	DU	3	VAL
20	DU	29	GLU
20	DU	47	LYS
20	DU	57	GLN
20	DU	63	LYS
20	DU	77	PRO
20	DU	78	ALA
20	DU	94	LYS
20	DU	102	CYS
21	DV	6	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	DV	31	ARG
21	DV	51	ALA
21	DV	53	ILE
21	DV	60	GLU
21	DV	65	GLN
21	DV	81	ARG
21	DV	93	ASP
21	DV	105	VAL
21	DV	119	GLU
21	DV	148	ASP
21	DV	158	PRO
21	DV	159	PRO
21	DV	169	GLU
21	DV	175	VAL
22	D3	33	ALA
22	D3	44	ARG
23	DZ	87	PRO
23	DZ	88	LYS
23	DZ	93	GLU
24	DW	16	LEU
24	DW	47	ASN
24	DW	48	HIS
24	DW	67	LYS
25	DX	32	GLN
25	DX	38	GLU
26	D4	5	ILE
26	D4	20	ASN
26	D4	21	VAL
26	D4	29	PRO
26	D4	31	ILE
26	D4	33	VAL
26	D4	36	CYS
26	D4	37	SER
26	D4	40	HIS
26	D4	48	ARG
26	D4	52	THR
26	D4	57	GLU
27	D5	4	HIS
27	D5	5	PRO
27	D5	57	VAL
28	D6	15	GLU
28	D6	17	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	D6	18	ARG
28	D6	24	GLU
28	D6	35	GLU
29	D7	18	PHE
30	D8	31	HIS
30	D8	33	ASN
30	D8	34	TRP
3	AD	26	LYS
3	AD	224	ALA
3	AD	241	PRO
3	AD	271	ILE
4	AE	71	GLY
4	AE	82	ARG
4	AE	90	THR
4	AE	129	HIS
5	AF	24	LEU
5	AF	25	PRO
5	AF	43	LYS
5	AF	47	GLY
5	AF	68	LYS
5	AF	129	PHE
5	AF	136	THR
6	AG	5	VAL
6	AG	24	GLY
6	AG	26	GLN
6	AG	116	ASP
7	AH	3	ARG
7	AH	5	GLY
7	AH	21	PRO
7	AH	81	GLU
7	AH	92	ILE
7	AH	152	ARG
7	AH	159	GLU
7	AH	167	GLU
7	AH	168	PRO
8	AK	9	LEU
8	AK	65	ALA
8	AK	96	ASP
8	AK	103	ARG
8	AK	131	LYS
9	AM	8	GLN
9	AM	58	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	AO	29	LYS
11	AO	38	GLN
11	AO	45	LEU
11	AO	66	GLY
11	AO	93	GLY
11	AO	98	GLU
11	AO	102	ARG
12	AP	7	MET
12	AP	27	VAL
12	AP	55	VAL
12	AP	66	ILE
12	AP	80	GLU
12	AP	88	GLY
12	AP	134	ARG
13	A0	32	GLY
13	A0	45	ARG
13	A0	107	ASP
14	AQ	10	ARG
14	AQ	74	ALA
14	AQ	90	GLY
14	AQ	111	GLU
15	AR	57	PHE
15	AR	58	ASN
16	A1	90	VAL
16	A1	114	LYS
17	A2	4	ILE
17	A2	48	GLY
19	AT	4	ALA
19	AT	41	ASN
20	AU	19	LYS
20	AU	53	PRO
20	AU	58	GLY
20	AU	98	VAL
21	AV	22	GLY
21	AV	52	SER
21	AV	53	ILE
21	AV	60	GLU
21	AV	61	LEU
21	AV	81	ARG
21	AV	109	ALA
21	AV	134	PRO
21	AV	158	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	AV	160	GLY
21	AV	168	GLU
23	AZ	79	GLY
23	AZ	84	GLY
23	AZ	88	LYS
24	AW	15	LYS
24	AW	48	HIS
26	A4	9	LEU
26	A4	30	GLU
26	A4	42	PHE
26	A4	43	TYR
28	A6	18	ARG
28	A6	33	LYS
28	A6	46	HIS
30	A8	35	GLN
32	BE	5	ILE
32	BE	84	GLU
32	BE	131	PRO
32	BE	155	LEU
32	BE	165	VAL
32	BE	178	ARG
32	BE	194	PRO
32	BE	239	VAL
33	BF	9	GLY
33	BF	13	GLY
33	BF	20	SER
33	BF	45	LYS
33	BF	145	GLY
33	BF	162	GLN
33	BF	179	ARG
34	BG	23	GLY
34	BG	26	CYS
34	BG	105	VAL
37	BJ	6	ARG
37	BJ	59	LEU
37	BJ	121	ALA
38	BK	49	GLU
38	BK	87	SER
39	BL	99	LEU
41	BN	87	THR
41	BN	103	LEU
42	BO	16	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	BO	62	SER
42	BO	91	LYS
42	BO	121	GLY
43	BP	6	GLY
43	BP	8	GLU
43	BP	50	GLU
43	BP	52	GLU
44	BQ	15	LYS
44	BQ	23	ARG
44	BQ	30	ALA
45	BR	79	ARG
45	BR	86	GLY
46	BS	43	LYS
46	BS	48	TRP
46	BS	83	GLU
47	BT	53	LEU
47	BT	79	SER
48	BU	87	ARG
49	BV	78	ARG
50	BW	96	GLY
32	CE	8	LYS
32	CE	39	ILE
32	CE	74	LYS
32	CE	75	LYS
32	CE	96	ARG
32	CE	190	THR
32	CE	226	ARG
33	CF	9	GLY
33	CF	12	LEU
33	CF	51	GLY
33	CF	61	ALA
33	CF	74	GLY
33	CF	75	VAL
33	CF	82	GLU
33	CF	96	GLY
33	CF	101	LEU
33	CF	118	GLN
33	CF	128	PHE
33	CF	135	LYS
34	CG	12	CYS
34	CG	27	TYR
34	CG	30	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	CG	35	ARG
34	CG	42	GLN
34	CG	151	LYS
34	CG	153	ARG
34	CG	171	GLY
35	CH	59	GLY
37	CJ	59	LEU
37	CJ	82	GLY
37	CJ	131	LYS
37	CJ	147	ALA
37	CJ	148	ASN
38	CK	7	ALA
38	CK	37	ARG
38	CK	103	VAL
39	CL	117	HIS
39	CL	120	ARG
40	CM	36	GLY
40	CM	59	SER
41	CN	127	LYS
42	CO	63	GLY
42	CO	65	GLU
43	CP	21	TYR
43	CP	46	LYS
43	CP	116	THR
44	CQ	14	PRO
44	CQ	16	PHE
44	CQ	24	CYS
44	CQ	25	VAL
44	CQ	26	ARG
44	CQ	28	GLY
45	CR	86	GLY
47	CT	68	ARG
50	CW	10	LEU
51	CX	25	LYS
3	DD	35	LYS
3	DD	58	HIS
4	DE	45	THR
4	DE	57	LYS
4	DE	59	VAL
4	DE	64	LYS
4	DE	67	PHE
4	DE	71	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	DE	88	GLY
4	DE	117	MET
4	DE	129	HIS
4	DE	130	GLY
4	DE	155	LYS
5	DF	22	ALA
5	DF	27	GLU
5	DF	61	GLY
5	DF	84	VAL
5	DF	103	LYS
5	DF	116	ASP
5	DF	166	ALA
6	DG	5	VAL
6	DG	6	ALA
6	DG	7	LEU
6	DG	14	GLU
6	DG	30	GLU
6	DG	96	ARG
6	DG	97	ASP
6	DG	124	SER
7	DH	92	ILE
7	DH	110	SER
7	DH	118	PRO
7	DH	126	PRO
7	DH	138	LYS
7	DH	169	VAL
8	DK	58	LEU
8	DK	78	THR
8	DK	102	SER
8	DK	143	SER
9	DM	88	GLU
9	DM	92	ALA
9	DM	127	ASP
9	DM	133	GLN
9	DM	136	GLU
11	DO	11	GLY
11	DO	23	PRO
11	DO	66	GLY
11	DO	67	MET
11	DO	85	LEU
11	DO	107	LYS
11	DO	108	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	DO	120	ALA
12	DP	7	MET
12	DP	13	GLN
12	DP	19	GLY
12	DP	27	VAL
12	DP	88	GLY
12	DP	130	LYS
12	DP	134	ARG
13	D0	3	HIS
13	D0	78	LYS
13	D0	82	GLU
13	D0	93	GLY
14	DQ	13	ARG
14	DQ	19	LYS
14	DQ	67	ARG
14	DQ	103	GLU
15	DR	2	ASN
15	DR	13	ARG
15	DR	105	LEU
15	DR	117	ASP
15	DR	131	ALA
16	D1	9	VAL
16	D1	20	LEU
16	D1	65	ILE
16	D1	75	ASN
16	D1	98	LEU
17	D2	8	GLY
17	D2	73	SER
17	D2	79	VAL
17	D2	99	ILE
18	DS	65	LEU
19	DT	15	GLU
19	DT	40	LYS
19	DT	45	THR
20	DU	17	SER
20	DU	40	GLU
20	DU	61	ILE
20	DU	69	ALA
20	DU	85	VAL
20	DU	96	ILE
21	DV	85	HIS
21	DV	108	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	DV	113	ALA
21	DV	114	GLY
21	DV	160	GLY
21	DV	161	VAL
21	DV	165	VAL
22	D3	55	ARG
23	DZ	26	ARG
23	DZ	28	GLY
23	DZ	36	GLY
23	DZ	79	GLY
23	DZ	84	GLY
24	DW	41	ILE
24	DW	68	ARG
25	DX	13	ILE
25	DX	30	ARG
26	D4	9	LEU
26	D4	25	TYR
26	D4	26	SER
26	D4	50	VAL
27	D5	21	SER
28	D6	49	HIS
30	D8	7	HIS
30	D8	35	GLN
4	AE	18	ASP
4	AE	56	PRO
4	AE	62	PRO
4	AE	86	PRO
4	AE	128	SER
4	AE	133	LYS
4	AE	144	ARG
4	AE	174	ASP
5	AF	134	GLY
6	AG	61	ALA
6	AG	74	LYS
7	AH	27	LYS
7	AH	33	LEU
7	AH	85	LYS
7	AH	137	ASP
8	AK	11	ASN
8	AK	101	LEU
8	AK	102	SER
8	AK	118	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	AM	6	PRO
9	AM	19	GLU
9	AM	42	TRP
9	AM	47	ALA
9	AM	104	LYS
9	AM	127	ASP
10	AN	5	GLN
10	AN	91	LEU
11	AO	12	ALA
11	AO	43	GLY
12	AP	6	ARG
13	A0	56	LYS
13	A0	61	HIS
15	AR	3	ARG
15	AR	12	SER
15	AR	101	PHE
15	AR	108	ARG
15	AR	136	GLN
16	A1	79	PHE
16	A1	112	ARG
17	A2	36	PRO
18	AS	65	LEU
21	AV	110	GLY
21	AV	121	HIS
21	AV	152	ALA
21	AV	173	ALA
22	A3	61	ALA
22	A3	83	PRO
23	AZ	40	ARG
26	A4	24	THR
27	A5	42	PRO
27	A5	43	HIS
27	A5	49	CYS
28	A6	15	GLU
29	A7	2	LYS
30	A8	36	LYS
32	BE	6	THR
32	BE	83	MET
32	BE	117	GLU
32	BE	220	ASP
33	BF	12	LEU
33	BF	29	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	BF	33	LEU
33	BF	61	ALA
33	BF	161	GLU
34	BG	28	SER
34	BG	32	ALA
34	BG	172	PRO
35	BH	21	ALA
35	BH	70	PRO
35	BH	112	LEU
36	BI	16	GLN
37	BJ	138	LYS
37	BJ	148	ASN
38	BK	77	GLU
39	BL	25	LYS
39	BL	34	ASN
39	BL	96	LEU
41	BN	91	ARG
42	BO	106	ASP
43	BP	7	VAL
43	BP	67	GLU
44	BQ	9	LYS
44	BQ	12	ARG
44	BQ	36	PHE
44	BQ	48	ALA
45	BR	87	ILE
46	BS	49	LEU
46	BS	58	TYR
47	BT	67	LYS
49	BV	41	VAL
50	BW	102	GLY
51	BX	9	ARG
32	CE	32	ILE
32	CE	45	GLN
32	CE	80	ILE
32	CE	125	PRO
32	CE	128	GLU
32	CE	159	PRO
32	CE	217	ARG
33	CF	8	ILE
33	CF	46	GLU
33	CF	117	ALA
33	CF	134	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	CG	25	ARG
34	CG	73	ARG
35	CH	37	ARG
36	CI	40	VAL
36	CI	42	GLU
37	CJ	116	ALA
38	CK	20	TYR
38	CK	100	ILE
39	CL	40	LEU
39	CL	78	LYS
40	CM	18	ALA
42	CO	105	TYR
43	CP	31	LYS
43	CP	94	ARG
43	CP	104	ARG
45	CR	10	LYS
46	CS	7	ALA
46	CS	11	SER
46	CS	52	ASP
48	CU	87	ARG
49	CV	63	THR
49	CV	72	GLY
50	CW	31	SER
50	CW	74	LYS
3	DD	3	VAL
3	DD	271	ILE
4	DE	9	VAL
4	DE	27	LEU
4	DE	39	PRO
4	DE	55	ASN
4	DE	82	ARG
4	DE	119	ARG
4	DE	132	HIS
4	DE	203	LYS
5	DF	69	HIS
5	DF	70	THR
6	DG	47	LYS
7	DH	5	GLY
7	DH	130	ARG
7	DH	145	ALA
7	DH	160	LYS
8	DK	30	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	DK	73	GLU
8	DK	113	ARG
8	DK	115	ALA
9	DM	23	LEU
9	DM	58	ASP
10	DN	4	PRO
10	DN	12	ASP
10	DN	89	ASN
11	DO	29	LYS
11	DO	102	ARG
11	DO	141	ALA
12	DP	59	ARG
12	DP	114	ALA
13	D0	30	THR
13	D0	45	ARG
13	D0	60	LEU
14	DQ	55	ALA
14	DQ	93	LYS
16	D1	93	LYS
16	D1	99	ALA
16	D1	104	GLN
17	D2	71	LEU
18	DS	18	ARG
18	DS	41	LYS
18	DS	56	ALA
20	DU	99	CYS
21	DV	62	PRO
21	DV	104	PHE
21	DV	116	VAL
21	DV	130	PRO
21	DV	141	VAL
21	DV	162	GLU
21	DV	171	ILE
26	D4	3	GLU
26	D4	32	TYR
26	D4	42	PHE
27	D5	49	CYS
28	D6	16	CYS
28	D6	44	ARG
28	D6	45	LYS
30	D8	32	LEU
3	AD	123	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	AE	22	PRO
4	AE	33	VAL
4	AE	55	ASN
5	AF	152	GLU
6	AG	84	LYS
6	AG	97	ASP
7	AH	86	GLU
7	AH	127	GLU
8	AK	117	GLU
9	AM	22	THR
11	AO	35	HIS
11	AO	62	LEU
11	AO	65	ARG
11	AO	95	VAL
11	AO	139	LYS
13	A0	29	LEU
15	AR	2	ASN
15	AR	36	GLU
15	AR	37	GLY
16	A1	89	GLU
18	AS	49	LYS
20	AU	56	PRO
20	AU	96	ILE
21	AV	13	GLU
21	AV	141	VAL
21	AV	156	LYS
23	AZ	92	LYS
25	AX	40	THR
25	AX	41	PRO
27	A5	36	CYS
32	BE	54	THR
32	BE	153	ARG
32	BE	232	PRO
33	BF	157	ILE
33	BF	181	ASN
34	BG	75	PHE
34	BG	208	SER
38	BK	107	LEU
39	BL	119	ALA
41	BN	104	GLN
42	BO	19	ARG
42	BO	64	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	BO	115	LYS
43	BP	4	ILE
43	BP	87	TYR
45	BR	23	GLY
46	BS	46	PRO
48	BU	41	LYS
48	BU	59	SER
49	BV	43	GLU
50	BW	12	ALA
50	BW	95	ALA
51	BX	7	ARG
34	CG	17	VAL
35	CH	112	LEU
37	CJ	8	GLU
38	CK	6	ILE
38	CK	48	TYR
38	CK	97	VAL
39	CL	55	ALA
42	CO	25	PRO
42	CO	31	PRO
42	CO	79	GLU
43	CP	82	MET
43	CP	85	GLY
46	CS	72	ARG
46	CS	83	GLU
47	CT	49	GLU
47	CT	99	SER
50	CW	73	HIS
50	CW	105	SER
3	DD	45	ASN
3	DD	134	ARG
4	DE	62	PRO
4	DE	86	PRO
4	DE	89	ASP
4	DE	90	THR
5	DF	176	LEU
6	DG	64	THR
6	DG	82	LEU
6	DG	117	PHE
7	DH	37	VAL
7	DH	85	LYS
8	DK	42	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	DM	42	TRP
9	DM	56	ASN
11	DO	70	GLN
11	DO	104	GLY
11	DO	133	SER
11	DO	136	GLU
11	DO	137	LYS
11	DO	148	LEU
14	DQ	107	GLU
17	D2	37	VAL
17	D2	38	LEU
18	DS	48	ALA
19	DT	19	ALA
20	DU	50	ARG
20	DU	90	LEU
21	DV	30	ASN
21	DV	59	LEU
21	DV	63	ASP
21	DV	156	LYS
22	D3	18	ALA
23	DZ	75	GLU
23	DZ	92	LYS
24	DW	17	SER
26	D4	10	VAL
26	D4	23	GLU
26	D4	56	VAL
28	D6	19	ARG
30	D8	13	ARG
30	D8	38	GLY
30	D8	53	PRO
3	AD	35	LYS
3	AD	64	ILE
3	AD	239	ARG
4	AE	52	LEU
5	AF	23	ASP
5	AF	66	PRO
5	AF	130	ALA
6	AG	81	LYS
6	AG	146	TYR
7	AH	80	SER
8	AK	7	GLU
8	AK	13	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	AM	9	VAL
9	AM	18	ALA
9	AM	63	THR
12	AP	90	VAL
14	AQ	57	LYS
15	AR	125	ARG
18	AS	93	ALA
20	AU	3	VAL
20	AU	5	MET
20	AU	69	ALA
26	A4	25	TYR
26	A4	28	LYS
26	A4	59	PHE
27	A5	47	PRO
32	BE	15	VAL
32	BE	59	GLU
32	BE	76	GLN
32	BE	204	ASN
32	BE	217	ARG
32	BE	224	GLN
32	BE	234	PRO
34	BG	150	GLU
34	BG	156	GLU
36	BI	40	VAL
36	BI	42	GLU
37	BJ	140	ASP
39	BL	29	ASN
42	BO	123	LYS
43	BP	5	ALA
49	BV	9	VAL
32	CE	36	ARG
32	CE	44	LEU
32	CE	46	LYS
32	CE	130	ARG
32	CE	204	ASN
33	CF	15	THR
33	CF	16	ARG
33	CF	64	VAL
33	CF	142	MET
34	CG	152	SER
34	CG	160	GLN
37	CJ	29	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
37	CJ	32	ARG
37	CJ	119	ARG
37	CJ	121	ALA
38	CK	73	ASP
39	CL	70	LYS
39	CL	107	ARG
41	CN	55	LYS
41	CN	57	THR
42	CO	6	THR
42	CO	45	PRO
43	CP	57	ARG
44	CQ	52	GLN
47	CT	12	SER
47	CT	98	LEU
49	CV	66	MET
50	CW	90	GLN
3	DD	224	ALA
3	DD	240	ALA
4	DE	154	LYS
5	DF	11	VAL
5	DF	62	ARG
5	DF	132	VAL
6	DG	56	ALA
7	DH	8	PRO
7	DH	20	ALA
8	DK	7	GLU
8	DK	100	ALA
8	DK	123	LEU
9	DM	40	PRO
9	DM	111	PRO
10	DN	42	SER
11	DO	8	PRO
11	DO	71	VAL
11	DO	117	GLU
12	DP	51	ARG
12	DP	90	VAL
12	DP	104	PHE
13	D0	53	HIS
13	D0	107	ASP
15	DR	116	ALA
17	D2	89	GLN
18	DS	93	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
19	DT	51	VAL
20	DU	52	SER
20	DU	60	PHE
22	D3	64	ASP
26	D4	2	LYS
27	D5	42	PRO
28	D6	52	VAL
29	D7	2	LYS
4	AE	4	ILE
4	AE	17	ASP
4	AE	200	GLU
6	AG	117	PHE
7	AH	7	LEU
7	AH	11	VAL
7	AH	50	VAL
8	AK	113	ARG
8	AK	133	HIS
12	AP	11	LYS
15	AR	112	ARG
15	AR	126	ALA
26	A4	50	VAL
28	A6	49	HIS
32	BE	169	LYS
32	BE	208	ILE
33	BF	53	ALA
35	BH	115	VAL
40	BM	36	GLY
41	BN	127	LYS
45	BR	73	GLU
47	BT	34	LYS
49	BV	8	GLY
49	BV	79	THR
50	BW	97	ALA
33	CF	109	PRO
35	CH	49	PRO
37	CJ	141	VAL
38	CK	123	GLU
40	CM	93	GLY
43	CP	36	LYS
43	CP	84	ILE
45	CR	36	ILE
46	CS	66	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
49	CV	30	LEU
49	CV	67	VAL
49	CV	79	THR
4	DE	52	LEU
4	DE	186	GLY
6	DG	118	ARG
7	DH	17	VAL
12	DP	4	PRO
12	DP	77	LYS
15	DR	20	PRO
17	D2	75	PHE
17	D2	100	ARG
20	DU	31	LEU
20	DU	86	ARG
21	DV	128	VAL
21	DV	143	GLY
26	D4	35	VAL
30	D8	41	ILE
12	AP	70	PRO
16	A1	9	VAL
29	A7	17	GLY
34	BG	7	PRO
46	BS	41	PRO
32	CE	233	SER
39	CL	21	PRO
3	DD	127	VAL
7	DH	4	ILE
9	DM	55	VAL
11	DO	20	GLY
11	DO	97	PRO
13	D0	52	ILE
16	D1	90	VAL
17	D2	46	VAL
23	DZ	30	VAL
26	D4	22	ILE
4	AE	61	ARG
9	AM	46	VAL
10	AN	93	PRO
16	A1	88	ILE
24	AW	17	SER
27	A5	34	PRO
34	BG	142	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	CE	230	VAL
33	CF	130	VAL
34	CG	172	PRO
35	CH	13	ILE
43	CP	38	GLY
50	CW	63	ILE
10	DN	27	GLY
11	DO	62	LEU
18	DS	47	VAL
20	DU	41	GLY
22	D3	47	PRO
26	D4	54	GLY
3	AD	125	ILE
5	AF	57	VAL
16	A1	65	ILE
16	A1	82	GLY
26	A4	35	VAL
30	A8	53	PRO
32	BE	14	GLY
46	BS	63	GLY
48	BU	27	GLY
42	CO	14	GLY
49	CV	45	VAL
5	DF	206	ILE
6	DG	63	ILE
6	DG	109	VAL
16	D1	73	GLY
21	DV	95	PRO
4	AE	50	GLY
12	AP	15	GLY
16	A1	80	ILE
37	BJ	81	GLY
42	BO	74	GLY
33	CF	80	GLY
34	CG	105	VAL
35	CH	96	PRO
4	DE	56	PRO
9	DM	94	HIS
13	D0	39	PRO
20	DU	44	ILE
20	DU	53	PRO
20	DU	55	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	DV	47	VAL
21	DV	61	LEU
21	DV	157	LEU
11	AO	109	GLY
38	BK	129	VAL
43	BP	45	VAL
47	BT	77	VAL
5	DF	28	ILE
7	DH	7	LEU
11	DO	24	GLY
14	DQ	82	ILE
19	DT	61	GLY
21	DV	37	VAL
21	DV	177	PRO
3	AD	36	PRO
21	DV	176	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	
3	AD	214/218 (98%)	154 (72%)	60 (28%)	0	2
3	DD	214/218 (98%)	164 (77%)	50 (23%)	1	4
4	AE	165/166 (99%)	131 (79%)	34 (21%)	2	8
4	DE	165/166 (99%)	120 (73%)	45 (27%)	0	2
5	AF	161/166 (97%)	126 (78%)	35 (22%)	1	7
5	DF	165/166 (99%)	130 (79%)	35 (21%)	1	7
6	AG	155/156 (99%)	124 (80%)	31 (20%)	2	9
6	DG	155/156 (99%)	128 (83%)	27 (17%)	3	14
7	AH	142/148 (96%)	112 (79%)	30 (21%)	1	7
7	DH	142/148 (96%)	116 (82%)	26 (18%)	2	12
8	AK	122/124 (98%)	97 (80%)	25 (20%)	2	8
8	DK	122/124 (98%)	100 (82%)	22 (18%)	2	13
9	AM	117/119 (98%)	87 (74%)	30 (26%)	1	3

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
9	DM	117/119 (98%)	82 (70%)	35 (30%)	0	1
10	AN	100/100 (100%)	81 (81%)	19 (19%)	2	11
10	DN	100/100 (100%)	84 (84%)	16 (16%)	3	18
11	AO	116/116 (100%)	81 (70%)	35 (30%)	0	1
11	DO	116/116 (100%)	77 (66%)	39 (34%)	0	1
12	AP	111/111 (100%)	88 (79%)	23 (21%)	2	8
12	DP	111/111 (100%)	79 (71%)	32 (29%)	0	2
13	A0	101/101 (100%)	77 (76%)	24 (24%)	1	4
13	D0	100/101 (99%)	80 (80%)	20 (20%)	2	9
14	AQ	87/88 (99%)	63 (72%)	24 (28%)	0	2
14	DQ	87/88 (99%)	66 (76%)	21 (24%)	1	4
15	AR	120/127 (94%)	97 (81%)	23 (19%)	2	10
15	DR	120/127 (94%)	90 (75%)	30 (25%)	1	3
16	A1	93/94 (99%)	71 (76%)	22 (24%)	1	4
16	D1	93/94 (99%)	77 (83%)	16 (17%)	3	15
17	A2	82/82 (100%)	58 (71%)	24 (29%)	0	2
17	D2	82/82 (100%)	53 (65%)	29 (35%)	0	1
18	AS	92/92 (100%)	69 (75%)	23 (25%)	1	3
18	DS	92/92 (100%)	72 (78%)	20 (22%)	1	7
19	AT	74/78 (95%)	58 (78%)	16 (22%)	1	7
19	DT	74/78 (95%)	56 (76%)	18 (24%)	1	3
20	AU	85/91 (93%)	65 (76%)	20 (24%)	1	4
20	DU	85/91 (93%)	57 (67%)	28 (33%)	0	1
21	AV	154/179 (86%)	126 (82%)	28 (18%)	2	12
21	DV	158/179 (88%)	133 (84%)	25 (16%)	4	18
22	A3	61/67 (91%)	48 (79%)	13 (21%)	1	7
22	D3	62/67 (92%)	55 (89%)	7 (11%)	9	36
23	AZ	82/83 (99%)	64 (78%)	18 (22%)	1	6
23	DZ	82/83 (99%)	64 (78%)	18 (22%)	1	6
24	AW	62/67 (92%)	44 (71%)	18 (29%)	0	2
24	DW	62/67 (92%)	48 (77%)	14 (23%)	1	5

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
25	AX	51/52 (98%)	42 (82%)	9 (18%)	3	13
25	DX	51/52 (98%)	41 (80%)	10 (20%)	2	9
26	A4	59/63 (94%)	49 (83%)	10 (17%)	3	15
26	D4	57/63 (90%)	45 (79%)	12 (21%)	1	7
27	A5	51/52 (98%)	39 (76%)	12 (24%)	1	4
27	D5	51/52 (98%)	43 (84%)	8 (16%)	4	19
28	A6	44/52 (85%)	32 (73%)	12 (27%)	0	2
28	D6	44/52 (85%)	38 (86%)	6 (14%)	5	26
29	A7	38/42 (90%)	32 (84%)	6 (16%)	4	18
29	D7	38/42 (90%)	29 (76%)	9 (24%)	1	4
30	A8	50/55 (91%)	36 (72%)	14 (28%)	0	2
30	D8	50/55 (91%)	35 (70%)	15 (30%)	0	1
32	BE	205/220 (93%)	167 (82%)	38 (18%)	2	11
32	CE	205/220 (93%)	168 (82%)	37 (18%)	2	13
33	BF	159/188 (85%)	127 (80%)	32 (20%)	2	8
33	CF	160/188 (85%)	132 (82%)	28 (18%)	3	14
34	BG	180/180 (100%)	149 (83%)	31 (17%)	3	15
34	CG	180/180 (100%)	143 (79%)	37 (21%)	2	8
35	BH	116/123 (94%)	89 (77%)	27 (23%)	1	5
35	CH	116/123 (94%)	89 (77%)	27 (23%)	1	5
36	BI	90/90 (100%)	80 (89%)	10 (11%)	9	37
36	CI	90/90 (100%)	78 (87%)	12 (13%)	6	27
37	BJ	126/127 (99%)	96 (76%)	30 (24%)	1	4
37	CJ	126/127 (99%)	103 (82%)	23 (18%)	2	12
38	BK	119/119 (100%)	95 (80%)	24 (20%)	2	8
38	CK	119/119 (100%)	101 (85%)	18 (15%)	4	21
39	BL	98/99 (99%)	77 (79%)	21 (21%)	1	7
39	CL	98/99 (99%)	73 (74%)	25 (26%)	1	3
40	BM	89/92 (97%)	73 (82%)	16 (18%)	2	13
40	CM	89/92 (97%)	72 (81%)	17 (19%)	2	10
41	BN	90/99 (91%)	76 (84%)	14 (16%)	4	19

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
41	CN	90/99 (91%)	79 (88%)	11 (12%)	7	32
42	BO	104/109 (95%)	84 (81%)	20 (19%)	2	10
42	CO	104/109 (95%)	80 (77%)	24 (23%)	1	5
43	BP	94/101 (93%)	77 (82%)	17 (18%)	2	12
43	CP	94/101 (93%)	76 (81%)	18 (19%)	2	10
44	BQ	48/50 (96%)	35 (73%)	13 (27%)	1	2
44	CQ	48/50 (96%)	38 (79%)	10 (21%)	2	8
45	BR	79/80 (99%)	69 (87%)	10 (13%)	6	30
45	CR	79/80 (99%)	65 (82%)	14 (18%)	3	13
46	BS	72/74 (97%)	58 (81%)	14 (19%)	2	10
46	CS	72/74 (97%)	60 (83%)	12 (17%)	3	16
47	BT	95/97 (98%)	78 (82%)	17 (18%)	2	13
47	CT	95/97 (98%)	82 (86%)	13 (14%)	5	26
48	BU	63/77 (82%)	53 (84%)	10 (16%)	4	18
48	CU	63/77 (82%)	53 (84%)	10 (16%)	4	18
49	BV	67/80 (84%)	50 (75%)	17 (25%)	1	3
49	CV	67/80 (84%)	47 (70%)	20 (30%)	0	1
50	BW	76/82 (93%)	64 (84%)	12 (16%)	4	18
50	CW	76/82 (93%)	63 (83%)	13 (17%)	3	15
51	BX	20/22 (91%)	20 (100%)	0	100	100
51	CX	20/22 (91%)	18 (90%)	2 (10%)	11	43
All	All	9565/9996 (96%)	7550 (79%)	2015 (21%)	1	7

All (2015) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	AD	3	VAL
3	AD	6	PHE
3	AD	10	THR
3	AD	13	ARG
3	AD	17	THR
3	AD	18	VAL
3	AD	25	THR
3	AD	26	LYS
3	AD	27	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	AD	28	GLU
3	AD	31	LYS
3	AD	35	LYS
3	AD	37	LEU
3	AD	38	LYS
3	AD	43	ARG
3	AD	44	ASN
3	AD	46	GLN
3	AD	52	ARG
3	AD	61	LEU
3	AD	64	ILE
3	AD	65	ILE
3	AD	71	ASP
3	AD	73	VAL
3	AD	91	ARG
3	AD	94	LEU
3	AD	95	LEU
3	AD	103	ARG
3	AD	105	ILE
3	AD	106	ILE
3	AD	112	GLN
3	AD	116	GLN
3	AD	125	ILE
3	AD	136	ILE
3	AD	140	THR
3	AD	141	VAL
3	AD	155	LEU
3	AD	157	ARG
3	AD	162	SER
3	AD	165	ILE
3	AD	166	GLN
3	AD	169	GLU
3	AD	177	LEU
3	AD	192	THR
3	AD	202	LYS
3	AD	208	LYS
3	AD	212	SER
3	AD	213	ARG
3	AD	217	ARG
3	AD	229	VAL
3	AD	230	ASP
3	AD	237	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	AD	242	ARG
3	AD	257	LEU
3	AD	259	THR
3	AD	260	ARG
3	AD	261	LYS
3	AD	262	ARG
3	AD	266	SER
3	AD	268	ARG
3	AD	271	ILE
4	AE	2	LYS
4	AE	12	THR
4	AE	13	ARG
4	AE	16	ARG
4	AE	25	VAL
4	AE	26	ILE
4	AE	33	VAL
4	AE	41	LYS
4	AE	42	ASP
4	AE	47	VAL
4	AE	57	LYS
4	AE	63	LEU
4	AE	66	HIS
4	AE	67	PHE
4	AE	75	VAL
4	AE	79	ARG
4	AE	91	VAL
4	AE	92	THR
4	AE	101	ARG
4	AE	107	THR
4	AE	111	ARG
4	AE	113	PHE
4	AE	116	VAL
4	AE	119	ARG
4	AE	144	ARG
4	AE	146	THR
4	AE	167	VAL
4	AE	171	GLU
4	AE	181	LEU
4	AE	188	VAL
4	AE	199	ARG
4	AE	200	GLU
4	AE	202	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	AE	203	LYS
5	AF	8	GLN
5	AF	9	ILE
5	AF	23	ASP
5	AF	33	LEU
5	AF	37	VAL
5	AF	43	LYS
5	AF	45	ARG
5	AF	46	ARG
5	AF	48	THR
5	AF	50	SER
5	AF	57	VAL
5	AF	64	ILE
5	AF	65	TRP
5	AF	67	GLN
5	AF	70	THR
5	AF	72	ARG
5	AF	78	ILE
5	AF	82	ILE
5	AF	88	VAL
5	AF	100	THR
5	AF	101	LEU
5	AF	108	LYS
5	AF	127	GLU
5	AF	136	THR
5	AF	156	LEU
5	AF	158	THR
5	AF	161	GLU
5	AF	162	LEU
5	AF	170	LEU
5	AF	174	VAL
5	AF	181	LEU
5	AF	183	VAL
5	AF	196	LEU
5	AF	204	ASN
5	AF	206	ILE
6	AG	10	LYS
6	AG	20	ILE
6	AG	21	ARG
6	AG	26	GLN
6	AG	28	VAL
6	AG	31	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	AG	33	ARG
6	AG	34	LEU
6	AG	48	GLU
6	AG	52	ILE
6	AG	67	LYS
6	AG	77	ILE
6	AG	80	PHE
6	AG	82	LEU
6	AG	88	ILE
6	AG	90	LEU
6	AG	93	THR
6	AG	94	LEU
6	AG	101	ILE
6	AG	118	ARG
6	AG	130	ASN
6	AG	139	LEU
6	AG	145	THR
6	AG	146	TYR
6	AG	157	ILE
6	AG	160	VAL
6	AG	162	THR
6	AG	165	THR
6	AG	166	ASP
6	AG	167	GLU
6	AG	176	LEU
7	AH	3	ARG
7	AH	4	ILE
7	AH	7	LEU
7	AH	11	VAL
7	AH	13	LYS
7	AH	18	GLU
7	AH	24	VAL
7	AH	32	GLU
7	AH	33	LEU
7	AH	41	MET
7	AH	50	VAL
7	AH	57	ASP
7	AH	60	ARG
7	AH	83	TYR
7	AH	84	SER
7	AH	88	LEU
7	AH	95	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	AH	105	LEU
7	AH	107	VAL
7	AH	116	GLU
7	AH	122	THR
7	AH	129	THR
7	AH	131	VAL
7	AH	132	ARG
7	AH	137	ASP
7	AH	139	GLN
7	AH	149	ARG
7	AH	153	LYS
7	AH	158	HIS
7	AH	169	VAL
8	AK	2	LYS
8	AK	6	LEU
8	AK	9	LEU
8	AK	11	ASN
8	AK	20	ASP
8	AK	33	ARG
8	AK	35	LEU
8	AK	37	VAL
8	AK	38	LEU
8	AK	41	GLU
8	AK	44	LEU
8	AK	51	ILE
8	AK	57	ARG
8	AK	67	ARG
8	AK	68	LEU
8	AK	77	LEU
8	AK	85	GLU
8	AK	92	VAL
8	AK	95	LYS
8	AK	110	ASP
8	AK	113	ARG
8	AK	131	LYS
8	AK	135	GLU
8	AK	140	LEU
8	AK	144	VAL
9	AM	1	MET
9	AM	2	LYS
9	AM	5	VAL
9	AM	7	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	AM	10	GLU
9	AM	22	THR
9	AM	32	THR
9	AM	34	LEU
9	AM	35	ARG
9	AM	39	ARG
9	AM	43	THR
9	AM	46	VAL
9	AM	48	MET
9	AM	55	VAL
9	AM	58	ASP
9	AM	60	ILE
9	AM	61	ARG
9	AM	67	LEU
9	AM	75	TYR
9	AM	87	LEU
9	AM	90	MET
9	AM	96	GLU
9	AM	97	ARG
9	AM	99	LEU
9	AM	103	VAL
9	AM	106	MET
9	AM	120	LEU
9	AM	131	GLN
9	AM	133	GLN
9	AM	137	LYS
10	AN	8	LEU
10	AN	9	GLU
10	AN	22	ILE
10	AN	23	ARG
10	AN	24	VAL
10	AN	31	LYS
10	AN	32	TYR
10	AN	34	THR
10	AN	35	VAL
10	AN	38	VAL
10	AN	39	ILE
10	AN	52	VAL
10	AN	70	LYS
10	AN	88	ASN
10	AN	91	LEU
10	AN	94	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	AN	109	LYS
10	AN	113	LYS
10	AN	116	SER
11	AO	3	LEU
11	AO	14	LYS
11	AO	15	ARG
11	AO	16	ARG
11	AO	21	ARG
11	AO	30	THR
11	AO	32	THR
11	AO	38	GLN
11	AO	41	ARG
11	AO	45	LEU
11	AO	46	LYS
11	AO	49	ARG
11	AO	50	ARG
11	AO	58	THR
11	AO	59	LEU
11	AO	62	LEU
11	AO	65	ARG
11	AO	67	MET
11	AO	68	GLN
11	AO	75	ILE
11	AO	81	GLN
11	AO	88	LEU
11	AO	90	ARG
11	AO	101	VAL
11	AO	105	LEU
11	AO	106	LEU
11	AO	108	LYS
11	AO	112	LEU
11	AO	121	LYS
11	AO	126	VAL
11	AO	135	LEU
11	AO	138	LEU
11	AO	144	GLU
11	AO	146	VAL
11	AO	147	LEU
12	AP	1	MET
12	AP	2	LEU
12	AP	3	MET
12	AP	10	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	AP	18	LYS
12	AP	21	THR
12	AP	25	ASP
12	AP	26	TYR
12	AP	45	GLN
12	AP	55	VAL
12	AP	67	ARG
12	AP	76	LYS
12	AP	79	LEU
12	AP	82	ARG
12	AP	83	MET
12	AP	87	LYS
12	AP	90	VAL
12	AP	106	VAL
12	AP	110	THR
12	AP	112	GLU
12	AP	120	ILE
12	AP	133	ARG
12	AP	138	ASP
13	A0	1	MET
13	A0	6	SER
13	A0	9	LYS
13	A0	15	SER
13	A0	27	SER
13	A0	28	LEU
13	A0	29	LEU
13	A0	30	THR
13	A0	36	THR
13	A0	40	LYS
13	A0	44	LEU
13	A0	45	ARG
13	A0	59	ASP
13	A0	72	ASP
13	A0	74	LYS
13	A0	75	LEU
13	A0	91	GLN
13	A0	94	TYR
13	A0	105	ARG
13	A0	107	ASP
13	A0	113	LEU
13	A0	114	VAL
13	A0	117	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	A0	118	GLU
14	AQ	5	THR
14	AQ	8	GLU
14	AQ	14	VAL
14	AQ	24	LEU
14	AQ	29	PHE
14	AQ	30	ARG
14	AQ	35	ILE
14	AQ	36	TYR
14	AQ	40	ILE
14	AQ	42	ASP
14	AQ	43	GLU
14	AQ	52	SER
14	AQ	54	LEU
14	AQ	58	LEU
14	AQ	73	LEU
14	AQ	78	LEU
14	AQ	80	LEU
14	AQ	83	LYS
14	AQ	89	ARG
14	AQ	97	ARG
14	AQ	98	VAL
14	AQ	101	LEU
14	AQ	106	ARG
14	AQ	111	GLU
15	AR	11	GLU
15	AR	13	ARG
15	AR	15	VAL
15	AR	16	ARG
15	AR	22	PHE
15	AR	27	THR
15	AR	30	VAL
15	AR	38	ASN
15	AR	39	ARG
15	AR	41	ARG
15	AR	49	VAL
15	AR	50	ILE
15	AR	51	ARG
15	AR	74	ARG
15	AR	86	ILE
15	AR	87	ASP
15	AR	88	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
15	AR	89	VAL
15	AR	99	LEU
15	AR	105	LEU
15	AR	108	ARG
15	AR	111	ARG
15	AR	128	GLU
16	A1	5	LYS
16	A1	20	LEU
16	A1	27	LEU
16	A1	34	LYS
16	A1	47	TYR
16	A1	56	ASP
16	A1	58	ARG
16	A1	59	ARG
16	A1	60	LEU
16	A1	70	ARG
16	A1	74	LEU
16	A1	76	TYR
16	A1	78	THR
16	A1	79	PHE
16	A1	83	LEU
16	A1	92	ARG
16	A1	101	ARG
16	A1	104	GLN
16	A1	108	GLU
16	A1	109	LEU
16	A1	111	GLU
16	A1	112	ARG
17	A2	1	MET
17	A2	6	LYS
17	A2	15	GLU
17	A2	18	LEU
17	A2	21	ARG
17	A2	24	LYS
17	A2	34	GLU
17	A2	35	LEU
17	A2	40	LEU
17	A2	45	THR
17	A2	47	VAL
17	A2	49	THR
17	A2	52	VAL
17	A2	57	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	A2	62	LEU
17	A2	64	HIS
17	A2	69	LYS
17	A2	72	VAL
17	A2	73	SER
17	A2	83	ARG
17	A2	88	ARG
17	A2	89	GLN
17	A2	99	ILE
17	A2	100	ARG
18	AS	1	MET
18	AS	11	ARG
18	AS	28	SER
18	AS	39	THR
18	AS	41	LYS
18	AS	51	LEU
18	AS	57	ASN
18	AS	66	GLU
18	AS	67	ASP
18	AS	68	ARG
18	AS	69	LEU
18	AS	70	TYR
18	AS	76	VAL
18	AS	78	GLU
18	AS	83	LYS
18	AS	84	ARG
18	AS	85	VAL
18	AS	88	ARG
18	AS	92	ARG
18	AS	94	ASP
18	AS	96	ILE
18	AS	100	THR
18	AS	107	LEU
19	AT	7	VAL
19	AT	12	VAL
19	AT	23	GLU
19	AT	30	VAL
19	AT	35	THR
19	AT	37	THR
19	AT	41	ASN
19	AT	45	THR
19	AT	49	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
19	AT	65	ARG
19	AT	69	TYR
19	AT	76	ARG
19	AT	80	ILE
19	AT	81	VAL
19	AT	83	VAL
19	AT	88	LYS
20	AU	6	HIS
20	AU	14	LEU
20	AU	26	LYS
20	AU	27	VAL
20	AU	33	LYS
20	AU	34	LYS
20	AU	38	ILE
20	AU	44	ILE
20	AU	57	GLN
20	AU	61	ILE
20	AU	64	GLU
20	AU	75	ILE
20	AU	76	CYS
20	AU	79	CYS
20	AU	84	ARG
20	AU	86	ARG
20	AU	90	LEU
20	AU	97	ARG
20	AU	98	VAL
20	AU	102	CYS
21	AV	1	MET
21	AV	5	LEU
21	AV	20	ARG
21	AV	30	ASN
21	AV	39	VAL
21	AV	53	ILE
21	AV	59	LEU
21	AV	61	LEU
21	AV	71	VAL
21	AV	72	ARG
21	AV	76	LEU
21	AV	77	ASP
21	AV	78	LYS
21	AV	82	ARG
21	AV	91	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	AV	96	VAL
21	AV	117	LEU
21	AV	118	GLN
21	AV	119	GLU
21	AV	122	ARG
21	AV	132	ASN
21	AV	135	GLU
21	AV	144	LEU
21	AV	148	ASP
21	AV	161	VAL
21	AV	163	LEU
21	AV	169	GLU
21	AV	171	ILE
22	A3	11	ARG
22	A3	19	LYS
22	A3	35	ASN
22	A3	36	ILE
22	A3	40	GLN
22	A3	41	ARG
22	A3	43	THR
22	A3	55	ARG
22	A3	59	LEU
22	A3	64	ASP
22	A3	67	VAL
22	A3	72	ARG
22	A3	80	HIS
23	AZ	2	SER
23	AZ	4	VAL
23	AZ	8	SER
23	AZ	26	ARG
23	AZ	37	ILE
23	AZ	41	ARG
23	AZ	46	LEU
23	AZ	56	GLN
23	AZ	59	THR
23	AZ	62	VAL
23	AZ	65	SER
23	AZ	76	ARG
23	AZ	78	LYS
23	AZ	80	LEU
23	AZ	81	LYS
23	AZ	83	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	AZ	91	LYS
23	AZ	97	LEU
24	AW	5	GLU
24	AW	7	ARG
24	AW	9	GLN
24	AW	16	LEU
24	AW	24	LEU
24	AW	34	GLU
24	AW	35	LEU
24	AW	40	SER
24	AW	41	ILE
24	AW	47	ASN
24	AW	48	HIS
24	AW	50	ILE
24	AW	52	ASP
24	AW	53	LEU
24	AW	61	LEU
24	AW	62	THR
24	AW	64	LEU
24	AW	67	LYS
25	AX	8	LEU
25	AX	9	VAL
25	AX	13	ILE
25	AX	31	LEU
25	AX	32	GLN
25	AX	35	ARG
25	AX	37	LEU
25	AX	38	GLU
25	AX	40	THR
26	A4	15	ILE
26	A4	16	CYS
26	A4	23	GLU
26	A4	27	THR
26	A4	40	HIS
26	A4	42	PHE
26	A4	51	ASP
26	A4	55	ARG
26	A4	61	ARG
26	A4	65	ASP
27	A5	3	LYS
27	A5	4	HIS
27	A5	6	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
27	A5	11	THR
27	A5	22	HIS
27	A5	31	VAL
27	A5	36	CYS
27	A5	39	MET
27	A5	40	LYS
27	A5	44	THR
27	A5	48	GLU
27	A5	56	LYS
28	A6	10	LEU
28	A6	12	GLU
28	A6	17	LYS
28	A6	23	THR
28	A6	26	ASN
28	A6	27	LYS
28	A6	33	LYS
28	A6	36	LEU
28	A6	37	ARG
28	A6	39	TYR
28	A6	42	TRP
28	A6	44	ARG
29	A7	1	MET
29	A7	4	THR
29	A7	8	ASN
29	A7	12	ARG
29	A7	23	ARG
29	A7	42	LEU
30	A8	15	LYS
30	A8	29	LYS
30	A8	31	HIS
30	A8	32	LEU
30	A8	33	ASN
30	A8	34	TRP
30	A8	35	GLN
30	A8	41	ILE
30	A8	44	LYS
30	A8	47	LYS
30	A8	52	LYS
30	A8	57	ARG
30	A8	58	ILE
30	A8	61	LEU
32	BE	8	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	BE	9	GLU
32	BE	15	VAL
32	BE	16	HIS
32	BE	21	ARG
32	BE	22	LYS
32	BE	23	ARG
32	BE	24	TRP
32	BE	32	ILE
32	BE	45	GLN
32	BE	60	ASP
32	BE	69	LEU
32	BE	71	VAL
32	BE	74	LYS
32	BE	75	LYS
32	BE	87	ARG
32	BE	94	ASN
32	BE	96	ARG
32	BE	97	TRP
32	BE	108	ILE
32	BE	111	ARG
32	BE	122	PHE
32	BE	144	ARG
32	BE	145	LEU
32	BE	154	LEU
32	BE	157	ARG
32	BE	158	LEU
32	BE	162	ILE
32	BE	172	ILE
32	BE	178	ARG
32	BE	187	LEU
32	BE	189	ASP
32	BE	191	ASP
32	BE	193	ASP
32	BE	196	LEU
32	BE	200	ILE
32	BE	204	ASN
32	BE	209	ARG
33	BF	3	ASN
33	BF	4	LYS
33	BF	5	ILE
33	BF	6	HIS
33	BF	14	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	BF	17	ASP
33	BF	21	ARG
33	BF	26	LYS
33	BF	27	LYS
33	BF	29	TYR
33	BF	44	GLU
33	BF	52	LEU
33	BF	62	ASP
33	BF	77	ILE
33	BF	86	VAL
33	BF	94	LEU
33	BF	107	GLN
33	BF	120	VAL
33	BF	128	PHE
33	BF	161	GLU
33	BF	165	THR
33	BF	172	ARG
33	BF	177	THR
33	BF	178	LEU
33	BF	184	TYR
33	BF	188	LEU
33	BF	190	ARG
33	BF	191	THR
33	BF	192	THR
33	BF	196	LEU
33	BF	202	ILE
33	BF	206	GLU
34	BG	3	ARG
34	BG	10	ARG
34	BG	12	CYS
34	BG	17	VAL
34	BG	19	LEU
34	BG	26	CYS
34	BG	33	MET
34	BG	45	GLN
34	BG	49	ARG
34	BG	58	LEU
34	BG	59	ARG
34	BG	66	ARG
34	BG	86	LYS
34	BG	104	VAL
34	BG	108	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	BG	110	PHE
34	BG	114	ARG
34	BG	119	GLN
34	BG	122	ARG
34	BG	126	ILE
34	BG	127	THR
34	BG	135	LEU
34	BG	138	TYR
34	BG	141	ARG
34	BG	154	ASN
34	BG	158	ILE
34	BG	177	ASP
34	BG	182	LYS
34	BG	187	ARG
34	BG	194	LEU
34	BG	209	ARG
35	BH	5	ASP
35	BH	8	GLU
35	BH	11	ILE
35	BH	13	ILE
35	BH	18	ARG
35	BH	20	GLN
35	BH	26	PHE
35	BH	31	LEU
35	BH	33	VAL
35	BH	40	ARG
35	BH	41	VAL
35	BH	57	LYS
35	BH	63	ARG
35	BH	67	VAL
35	BH	75	THR
35	BH	81	GLU
35	BH	87	SER
35	BH	90	VAL
35	BH	91	LEU
35	BH	101	ILE
35	BH	105	VAL
35	BH	121	LYS
35	BH	125	SER
35	BH	131	ILE
35	BH	147	ASP
35	BH	152	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	BH	153	LYS
36	BI	17	SER
36	BI	21	LEU
36	BI	23	LYS
36	BI	43	LEU
36	BI	63	TYR
36	BI	64	GLN
36	BI	75	LEU
36	BI	89	MET
36	BI	92	LYS
36	BI	93	SER
37	BJ	6	ARG
37	BJ	8	GLU
37	BJ	10	ARG
37	BJ	12	LEU
37	BJ	22	LEU
37	BJ	36	LYS
37	BJ	37	ASN
37	BJ	38	LEU
37	BJ	43	PHE
37	BJ	45	ASP
37	BJ	47	CYS
37	BJ	48	LYS
37	BJ	54	THR
37	BJ	57	GLU
37	BJ	63	LYS
37	BJ	68	ASN
37	BJ	78	ARG
37	BJ	84	ASN
37	BJ	89	MET
37	BJ	90	GLU
37	BJ	104	LEU
37	BJ	109	ASN
37	BJ	113	GLU
37	BJ	118	VAL
37	BJ	124	LEU
37	BJ	131	LYS
37	BJ	141	VAL
37	BJ	146	GLU
37	BJ	155	ARG
37	BJ	156	TRP
38	BK	10	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	BK	26	VAL
38	BK	35	ILE
38	BK	41	ARG
38	BK	49	GLU
38	BK	50	ARG
38	BK	60	ARG
38	BK	63	LEU
38	BK	65	TYR
38	BK	67	PRO
38	BK	68	ARG
38	BK	75	ARG
38	BK	77	GLU
38	BK	80	ILE
38	BK	82	HIS
38	BK	84	ARG
38	BK	85	ARG
38	BK	91	ARG
38	BK	95	VAL
38	BK	102	ARG
38	BK	105	ARG
38	BK	120	THR
38	BK	122	ARG
38	BK	127	LEU
39	BL	7	THR
39	BL	9	ARG
39	BL	10	ARG
39	BL	23	ASN
39	BL	41	VAL
39	BL	44	VAL
39	BL	47	LEU
39	BL	64	THR
39	BL	65	VAL
39	BL	70	LYS
39	BL	75	ASP
39	BL	79	LEU
39	BL	93	ARG
39	BL	95	LYS
39	BL	99	LEU
39	BL	108	VAL
39	BL	113	LYS
39	BL	114	TYR
39	BL	121	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	BL	125	TYR
39	BL	126	SER
40	BM	5	ARG
40	BM	13	HIS
40	BM	16	LEU
40	BM	17	ASP
40	BM	24	VAL
40	BM	42	THR
40	BM	43	ARG
40	BM	48	THR
40	BM	49	VAL
40	BM	60	ARG
40	BM	62	HIS
40	BM	66	ARG
40	BM	80	LYS
40	BM	92	THR
40	BM	96	ILE
40	BM	100	THR
41	BN	29	ILE
41	BN	30	VAL
41	BN	31	THR
41	BN	48	ILE
41	BN	51	LYS
41	BN	81	ASP
41	BN	84	VAL
41	BN	85	ARG
41	BN	92	GLU
41	BN	93	GLN
41	BN	96	ARG
41	BN	105	VAL
41	BN	114	VAL
41	BN	119	CYS
42	BO	7	ILE
42	BO	18	VAL
42	BO	33	ARG
42	BO	36	VAL
42	BO	41	ARG
42	BO	43	VAL
42	BO	46	LYS
42	BO	52	LEU
42	BO	55	VAL
42	BO	57	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	BO	60	LEU
42	BO	67	THR
42	BO	79	GLU
42	BO	81	SER
42	BO	96	VAL
42	BO	99	HIS
42	BO	102	ARG
42	BO	111	LYS
42	BO	113	ARG
42	BO	117	ARG
43	BP	3	ARG
43	BP	13	LYS
43	BP	20	THR
43	BP	44	ARG
43	BP	48	LEU
43	BP	64	TRP
43	BP	65	LYS
43	BP	66	LEU
43	BP	70	LEU
43	BP	83	ASP
43	BP	86	CYS
43	BP	88	ARG
43	BP	101	GLN
43	BP	105	THR
43	BP	108	ARG
43	BP	110	ARG
43	BP	116	THR
44	BQ	12	ARG
44	BQ	13	THR
44	BQ	18	VAL
44	BQ	23	ARG
44	BQ	24	CYS
44	BQ	27	CYS
44	BQ	29	ARG
44	BQ	32	SER
44	BQ	35	ARG
44	BQ	41	ARG
44	BQ	43	CYS
44	BQ	44	LEU
44	BQ	50	LYS
45	BR	6	GLU
45	BR	26	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
45	BR	35	ARG
45	BR	45	VAL
45	BR	47	LYS
45	BR	56	LEU
45	BR	62	GLN
45	BR	67	LEU
45	BR	76	GLU
45	BR	81	LEU
46	BS	2	VAL
46	BS	8	ARG
46	BS	11	SER
46	BS	32	TYR
46	BS	38	TYR
46	BS	43	LYS
46	BS	48	TRP
46	BS	53	VAL
46	BS	58	TYR
46	BS	61	SER
46	BS	62	VAL
46	BS	67	THR
46	BS	68	ASP
46	BS	69	THR
47	BT	9	VAL
47	BT	14	LYS
47	BT	35	VAL
47	BT	37	LYS
47	BT	38	ARG
47	BT	52	LYS
47	BT	53	LEU
47	BT	68	ARG
47	BT	70	ARG
47	BT	74	LEU
47	BT	79	SER
47	BT	86	GLU
47	BT	89	LEU
47	BT	91	ARG
47	BT	92	ARG
47	BT	97	SER
47	BT	101	ARG
48	BU	18	ARG
48	BU	23	LYS
48	BU	26	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
48	BU	29	PHE
48	BU	31	LEU
48	BU	53	ARG
48	BU	54	ARG
48	BU	76	LEU
48	BU	86	VAL
48	BU	88	LYS
49	BV	7	LYS
49	BV	10	PHE
49	BV	13	ASP
49	BV	27	GLU
49	BV	29	ARG
49	BV	30	LEU
49	BV	37	ARG
49	BV	43	GLU
49	BV	60	VAL
49	BV	61	TYR
49	BV	62	ILE
49	BV	63	THR
49	BV	65	ASN
49	BV	67	VAL
49	BV	77	THR
49	BV	78	ARG
49	BV	83	HIS
50	BW	10	LEU
50	BW	17	ARG
50	BW	21	LYS
50	BW	24	LEU
50	BW	26	ASN
50	BW	36	LEU
50	BW	53	LEU
50	BW	56	MET
50	BW	62	LEU
50	BW	73	HIS
50	BW	93	GLU
50	BW	104	LEU
32	CE	6	THR
32	CE	17	PHE
32	CE	19	HIS
32	CE	21	ARG
32	CE	23	ARG
32	CE	24	TRP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	CE	31	TYR
32	CE	39	ILE
32	CE	42	ILE
32	CE	44	LEU
32	CE	51	LEU
32	CE	56	ARG
32	CE	73	THR
32	CE	90	MET
32	CE	92	TYR
32	CE	98	LEU
32	CE	108	ILE
32	CE	111	ARG
32	CE	113	HIS
32	CE	117	GLU
32	CE	121	LEU
32	CE	137	ARG
32	CE	145	LEU
32	CE	147	LYS
32	CE	153	ARG
32	CE	155	LEU
32	CE	170	GLU
32	CE	185	ILE
32	CE	187	LEU
32	CE	191	ASP
32	CE	196	LEU
32	CE	198	ASP
32	CE	201	ILE
32	CE	204	ASN
32	CE	215	LEU
32	CE	224	GLN
32	CE	238	LEU
33	CF	5	ILE
33	CF	16	ARG
33	CF	21	ARG
33	CF	23	TYR
33	CF	29	TYR
33	CF	34	LEU
33	CF	40	ARG
33	CF	43	LEU
33	CF	52	LEU
33	CF	64	VAL
33	CF	76	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	CF	79	ARG
33	CF	83	ARG
33	CF	89	GLU
33	CF	94	LEU
33	CF	119	ARG
33	CF	131	ARG
33	CF	140	ARG
33	CF	161	GLU
33	CF	165	THR
33	CF	166	GLU
33	CF	167	TRP
33	CF	184	TYR
33	CF	191	THR
33	CF	192	THR
33	CF	195	VAL
33	CF	196	LEU
33	CF	206	GLU
34	CG	4	TYR
34	CG	5	ILE
34	CG	9	CYS
34	CG	14	ARG
34	CG	15	GLU
34	CG	17	VAL
34	CG	19	LEU
34	CG	24	GLU
34	CG	30	LYS
34	CG	36	ARG
34	CG	49	ARG
34	CG	58	LEU
34	CG	59	ARG
34	CG	61	LYS
34	CG	73	ARG
34	CG	76	ARG
34	CG	81	GLU
34	CG	83	SER
34	CG	96	LEU
34	CG	108	LEU
34	CG	121	VAL
34	CG	122	ARG
34	CG	127	THR
34	CG	135	LEU
34	CG	138	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	CG	139	ARG
34	CG	141	ARG
34	CG	150	GLU
34	CG	151	LYS
34	CG	158	ILE
34	CG	159	ARG
34	CG	176	LEU
34	CG	177	ASP
34	CG	187	ARG
34	CG	191	ARG
34	CG	200	GLU
34	CG	202	LEU
35	CH	13	ILE
35	CH	18	ARG
35	CH	19	MET
35	CH	20	GLN
35	CH	25	ARG
35	CH	26	PHE
35	CH	31	LEU
35	CH	34	VAL
35	CH	41	VAL
35	CH	47	LYS
35	CH	51	VAL
35	CH	56	GLN
35	CH	60	TYR
35	CH	61	TYR
35	CH	65	ASN
35	CH	68	GLU
35	CH	72	GLN
35	CH	75	THR
35	CH	78	HIS
35	CH	82	VAL
35	CH	101	ILE
35	CH	115	VAL
35	CH	116	THR
35	CH	117	ASP
35	CH	127	ASN
35	CH	144	THR
35	CH	155	GLU
36	CI	14	LEU
36	CI	16	GLN
36	CI	25	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	CI	28	ARG
36	CI	32	ASN
36	CI	38	GLU
36	CI	54	LYS
36	CI	63	TYR
36	CI	65	VAL
36	CI	72	VAL
36	CI	78	GLU
36	CI	98	LEU
37	CJ	3	ARG
37	CJ	27	ILE
37	CJ	29	LYS
37	CJ	32	ARG
37	CJ	43	PHE
37	CJ	54	THR
37	CJ	57	GLU
37	CJ	59	LEU
37	CJ	60	LYS
37	CJ	63	LYS
37	CJ	66	VAL
37	CJ	75	VAL
37	CJ	78	ARG
37	CJ	84	ASN
37	CJ	89	MET
37	CJ	91	VAL
37	CJ	92	SER
37	CJ	114	ARG
37	CJ	124	LEU
37	CJ	131	LYS
37	CJ	137	LYS
37	CJ	149	ARG
37	CJ	155	ARG
38	CK	1	MET
38	CK	25	ASP
38	CK	39	LEU
38	CK	45	ILE
38	CK	54	ASP
38	CK	63	LEU
38	CK	77	GLU
38	CK	82	HIS
38	CK	84	ARG
38	CK	87	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	CK	91	ARG
38	CK	95	VAL
38	CK	102	ARG
38	CK	104	ARG
38	CK	109	ILE
38	CK	114	THR
38	CK	119	LEU
38	CK	120	THR
39	CL	4	TYR
39	CL	10	ARG
39	CL	14	VAL
39	CL	23	ASN
39	CL	27	THR
39	CL	33	PHE
39	CL	34	ASN
39	CL	54	ASP
39	CL	59	PHE
39	CL	64	THR
39	CL	75	ASP
39	CL	78	LYS
39	CL	79	LEU
39	CL	88	TYR
39	CL	95	LYS
39	CL	97	LYS
39	CL	99	LEU
39	CL	104	ARG
39	CL	111	ARG
39	CL	112	LYS
39	CL	113	LYS
39	CL	114	TYR
39	CL	117	HIS
39	CL	125	TYR
39	CL	128	ARG
40	CM	17	ASP
40	CM	21	GLN
40	CM	22	LYS
40	CM	38	ILE
40	CM	40	LEU
40	CM	44	VAL
40	CM	47	PHE
40	CM	48	THR
40	CM	50	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	CM	62	HIS
40	CM	70	ARG
40	CM	71	LEU
40	CM	79	ARG
40	CM	80	LYS
40	CM	96	ILE
40	CM	98	ILE
40	CM	99	LYS
41	CN	12	ARG
41	CN	18	ARG
41	CN	21	ILE
41	CN	25	TYR
41	CN	26	ASN
41	CN	54	ARG
41	CN	84	VAL
41	CN	87	THR
41	CN	93	GLN
41	CN	105	VAL
41	CN	112	THR
42	CO	6	THR
42	CO	18	VAL
42	CO	23	LYS
42	CO	24	VAL
42	CO	32	PHE
42	CO	33	ARG
42	CO	38	THR
42	CO	41	ARG
42	CO	44	THR
42	CO	46	LYS
42	CO	47	LYS
42	CO	52	LEU
42	CO	54	LYS
42	CO	57	LYS
42	CO	60	LEU
42	CO	64	TYR
42	CO	66	VAL
42	CO	85	ILE
42	CO	92	ASP
42	CO	93	LEU
42	CO	98	TYR
42	CO	104	VAL
42	CO	111	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	CO	118	SER
43	CP	7	VAL
43	CP	32	GLU
43	CP	44	ARG
43	CP	47	ASP
43	CP	50	GLU
43	CP	64	TRP
43	CP	66	LEU
43	CP	67	GLU
43	CP	69	GLU
43	CP	70	LEU
43	CP	82	MET
43	CP	83	ASP
43	CP	93	ARG
43	CP	101	GLN
43	CP	103	THR
43	CP	104	ARG
43	CP	105	THR
43	CP	108	ARG
44	CQ	6	LEU
44	CQ	7	ILE
44	CQ	12	ARG
44	CQ	15	LYS
44	CQ	16	PHE
44	CQ	18	VAL
44	CQ	23	ARG
44	CQ	25	VAL
44	CQ	40	CYS
44	CQ	44	LEU
45	CR	3	ILE
45	CR	4	THR
45	CR	13	GLN
45	CR	18	PHE
45	CR	26	GLU
45	CR	31	LEU
45	CR	38	ARG
45	CR	39	LEU
45	CR	41	GLU
45	CR	60	VAL
45	CR	66	LEU
45	CR	76	GLU
45	CR	82	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
45	CR	88	ARG
46	CS	2	VAL
46	CS	8	ARG
46	CS	16	HIS
46	CS	18	ARG
46	CS	21	VAL
46	CS	25	ARG
46	CS	29	ASP
46	CS	45	THR
46	CS	55	ARG
46	CS	65	GLN
46	CS	67	THR
46	CS	74	LEU
47	CT	10	VAL
47	CT	13	ASP
47	CT	22	LEU
47	CT	49	GLU
47	CT	60	ILE
47	CT	62	SER
47	CT	67	LYS
47	CT	68	ARG
47	CT	72	ARG
47	CT	74	LEU
47	CT	77	VAL
47	CT	79	SER
47	CT	84	LEU
48	CU	26	LEU
48	CU	29	PHE
48	CU	32	ARG
48	CU	36	ASN
48	CU	44	LEU
48	CU	56	THR
48	CU	58	LEU
48	CU	84	LYS
48	CU	86	VAL
48	CU	87	ARG
49	CV	7	LYS
49	CV	9	VAL
49	CV	16	LEU
49	CV	22	LEU
49	CV	23	ASN
49	CV	25	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
49	CV	29	ARG
49	CV	32	LYS
49	CV	33	THR
49	CV	37	ARG
49	CV	38	SER
49	CV	49	ILE
49	CV	60	VAL
49	CV	61	TYR
49	CV	63	THR
49	CV	66	MET
49	CV	70	LYS
49	CV	78	ARG
49	CV	81	ARG
49	CV	83	HIS
50	CW	8	ARG
50	CW	9	ASN
50	CW	13	LEU
50	CW	14	LYS
50	CW	26	ASN
50	CW	45	GLN
50	CW	68	LYS
50	CW	74	LYS
50	CW	84	LEU
50	CW	87	LYS
50	CW	91	LEU
50	CW	93	GLU
50	CW	104	LEU
51	CX	15	ARG
51	CX	25	LYS
3	DD	3	VAL
3	DD	10	THR
3	DD	27	THR
3	DD	31	LYS
3	DD	34	VAL
3	DD	35	LYS
3	DD	40	THR
3	DD	44	ASN
3	DD	46	GLN
3	DD	49	ILE
3	DD	61	LEU
3	DD	63	ARG
3	DD	64	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	DD	65	ILE
3	DD	68	LYS
3	DD	69	ARG
3	DD	71	ASP
3	DD	73	VAL
3	DD	83	GLU
3	DD	89	SER
3	DD	94	LEU
3	DD	98	VAL
3	DD	99	ASP
3	DD	103	ARG
3	DD	105	ILE
3	DD	111	LEU
3	DD	112	GLN
3	DD	116	GLN
3	DD	131	LEU
3	DD	136	ILE
3	DD	138	VAL
3	DD	140	THR
3	DD	147	LEU
3	DD	154	LYS
3	DD	157	ARG
3	DD	166	GLN
3	DD	176	ARG
3	DD	182	LEU
3	DD	192	THR
3	DD	200	ASP
3	DD	204	ILE
3	DD	211	ARG
3	DD	212	SER
3	DD	237	GLU
3	DD	242	ARG
3	DD	244	ARG
3	DD	255	LYS
3	DD	257	LEU
3	DD	268	ARG
3	DD	271	ILE
4	DE	4	ILE
4	DE	7	VAL
4	DE	9	VAL
4	DE	12	THR
4	DE	16	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	DE	27	LEU
4	DE	33	VAL
4	DE	37	ARG
4	DE	48	GLN
4	DE	54	GLN
4	DE	58	ARG
4	DE	60	ASN
4	DE	63	LEU
4	DE	66	HIS
4	DE	67	PHE
4	DE	75	VAL
4	DE	76	ARG
4	DE	78	LEU
4	DE	79	ARG
4	DE	82	ARG
4	DE	90	THR
4	DE	107	THR
4	DE	113	PHE
4	DE	116	VAL
4	DE	119	ARG
4	DE	134	ILE
4	DE	141	ILE
4	DE	144	ARG
4	DE	146	THR
4	DE	149	ARG
4	DE	154	LYS
4	DE	164	ARG
4	DE	169	ASN
4	DE	170	LEU
4	DE	178	GLU
4	DE	179	GLU
4	DE	181	LEU
4	DE	185	LYS
4	DE	188	VAL
4	DE	192	ASN
4	DE	197	ILE
4	DE	199	ARG
4	DE	200	GLU
4	DE	201	THR
4	DE	203	LYS
5	DF	2	LYS
5	DF	7	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	DF	11	VAL
5	DF	17	ARG
5	DF	18	ARG
5	DF	20	LEU
5	DF	24	LEU
5	DF	29	ASN
5	DF	38	ARG
5	DF	46	ARG
5	DF	54	ARG
5	DF	62	ARG
5	DF	67	GLN
5	DF	68	LYS
5	DF	69	HIS
5	DF	74	ARG
5	DF	83	PHE
5	DF	88	VAL
5	DF	98	SER
5	DF	99	TYR
5	DF	100	THR
5	DF	107	LYS
5	DF	117	ARG
5	DF	119	ARG
5	DF	125	LEU
5	DF	153	SER
5	DF	158	THR
5	DF	164	ARG
5	DF	183	VAL
5	DF	192	LEU
5	DF	196	LEU
5	DF	197	ASP
5	DF	201	VAL
5	DF	204	ASN
5	DF	205	ARG
6	DG	16	ARG
6	DG	20	ILE
6	DG	28	VAL
6	DG	33	ARG
6	DG	43	LEU
6	DG	45	GLU
6	DG	52	ILE
6	DG	53	LEU
6	DG	58	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	DG	60	LEU
6	DG	63	ILE
6	DG	64	THR
6	DG	67	LYS
6	DG	74	LYS
6	DG	80	PHE
6	DG	90	LEU
6	DG	91	ARG
6	DG	94	LEU
6	DG	96	ARG
6	DG	126	ASP
6	DG	128	ARG
6	DG	133	LEU
6	DG	137	GLU
6	DG	147	ASP
6	DG	159	VAL
6	DG	162	THR
6	DG	167	GLU
7	DH	2	SER
7	DH	6	ARG
7	DH	7	LEU
7	DH	32	GLU
7	DH	38	SER
7	DH	41	MET
7	DH	42	ARG
7	DH	50	VAL
7	DH	71	LEU
7	DH	72	ILE
7	DH	83	TYR
7	DH	85	LYS
7	DH	86	GLU
7	DH	89	ILE
7	DH	101	ARG
7	DH	103	LEU
7	DH	105	LEU
7	DH	116	GLU
7	DH	123	PHE
7	DH	125	VAL
7	DH	131	VAL
7	DH	139	GLN
7	DH	143	GLN
7	DH	147	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	DH	158	HIS
7	DH	170	ARG
8	DK	6	LEU
8	DK	9	LEU
8	DK	11	ASN
8	DK	37	VAL
8	DK	52	ARG
8	DK	54	GLN
8	DK	56	LYS
8	DK	60	GLU
8	DK	69	LYS
8	DK	77	LEU
8	DK	78	THR
8	DK	82	ARG
8	DK	93	THR
8	DK	101	LEU
8	DK	109	ILE
8	DK	112	LYS
8	DK	117	GLU
8	DK	122	GLU
8	DK	125	GLU
8	DK	129	THR
8	DK	131	LYS
8	DK	133	HIS
9	DM	1	MET
9	DM	5	VAL
9	DM	12	ARG
9	DM	15	LEU
9	DM	22	THR
9	DM	23	LEU
9	DM	29	LYS
9	DM	32	THR
9	DM	33	LEU
9	DM	34	LEU
9	DM	38	HIS
9	DM	41	ASP
9	DM	43	THR
9	DM	45	ASN
9	DM	48	MET
9	DM	50	ASP
9	DM	54	VAL
9	DM	59	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	DM	61	ARG
9	DM	67	LEU
9	DM	69	GLN
9	DM	87	LEU
9	DM	93	THR
9	DM	94	HIS
9	DM	96	GLU
9	DM	97	ARG
9	DM	98	VAL
9	DM	99	LEU
9	DM	106	MET
9	DM	127	ASP
9	DM	130	HIS
9	DM	131	GLN
9	DM	134	ARG
9	DM	136	GLU
9	DM	137	LYS
10	DN	5	GLN
10	DN	9	GLU
10	DN	17	ARG
10	DN	24	VAL
10	DN	32	TYR
10	DN	49	ARG
10	DN	52	VAL
10	DN	53	LYS
10	DN	62	VAL
10	DN	82	ASN
10	DN	87	ILE
10	DN	94	ARG
10	DN	108	GLU
10	DN	113	LYS
10	DN	116	SER
10	DN	117	LEU
11	DO	2	LYS
11	DO	3	LEU
11	DO	6	LEU
11	DO	14	LYS
11	DO	15	ARG
11	DO	16	ARG
11	DO	21	ARG
11	DO	30	THR
11	DO	36	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	DO	41	ARG
11	DO	45	LEU
11	DO	46	LYS
11	DO	61	ARG
11	DO	62	LEU
11	DO	65	ARG
11	DO	68	GLN
11	DO	75	ILE
11	DO	77	ARG
11	DO	83	VAL
11	DO	84	ASN
11	DO	85	LEU
11	DO	86	LYS
11	DO	87	ASP
11	DO	90	ARG
11	DO	96	THR
11	DO	100	LEU
11	DO	102	ARG
11	DO	108	LYS
11	DO	111	ARG
11	DO	112	LEU
11	DO	114	ILE
11	DO	121	LYS
11	DO	125	VAL
11	DO	133	SER
11	DO	138	LEU
11	DO	144	GLU
11	DO	146	VAL
11	DO	147	LEU
11	DO	148	LEU
12	DP	3	MET
12	DP	8	LYS
12	DP	10	ARG
12	DP	18	LYS
12	DP	21	THR
12	DP	25	ASP
12	DP	26	TYR
12	DP	45	GLN
12	DP	56	ARG
12	DP	58	PHE
12	DP	60	ARG
12	DP	63	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	DP	72	LYS
12	DP	76	LYS
12	DP	79	LEU
12	DP	80	GLU
12	DP	82	ARG
12	DP	83	MET
12	DP	87	LYS
12	DP	90	VAL
12	DP	103	MET
12	DP	105	GLU
12	DP	106	VAL
12	DP	109	VAL
12	DP	110	THR
12	DP	111	GLU
12	DP	112	GLU
12	DP	123	HIS
12	DP	129	THR
12	DP	133	ARG
12	DP	135	ASP
12	DP	141	GLN
13	D0	2	ARG
13	D0	3	HIS
13	D0	6	SER
13	D0	16	HIS
13	D0	23	ASN
13	D0	28	LEU
13	D0	29	LEU
13	D0	36	THR
13	D0	42	LYS
13	D0	48	VAL
13	D0	54	LEU
13	D0	57	ARG
13	D0	67	LEU
13	D0	71	GLN
13	D0	75	LEU
13	D0	81	ASP
13	D0	95	THR
13	D0	105	ARG
13	D0	114	VAL
13	D0	117	VAL
14	DQ	4	LEU
14	DQ	17	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
14	DQ	19	LYS
14	DQ	21	THR
14	DQ	25	ARG
14	DQ	29	PHE
14	DQ	36	TYR
14	DQ	39	ILE
14	DQ	42	ASP
14	DQ	50	SER
14	DQ	54	LEU
14	DQ	61	ASN
14	DQ	69	VAL
14	DQ	78	LEU
14	DQ	80	LEU
14	DQ	89	ARG
14	DQ	93	LYS
14	DQ	98	VAL
14	DQ	101	LEU
14	DQ	106	ARG
14	DQ	110	LEU
15	DR	3	ARG
15	DR	7	ILE
15	DR	8	LYS
15	DR	9	LEU
15	DR	15	VAL
15	DR	17	THR
15	DR	19	LEU
15	DR	23	ARG
15	DR	29	ARG
15	DR	30	VAL
15	DR	38	ASN
15	DR	42	ILE
15	DR	48	ILE
15	DR	50	ILE
15	DR	51	ARG
15	DR	57	PHE
15	DR	58	ASN
15	DR	61	PHE
15	DR	62	THR
15	DR	64	ARG
15	DR	88	ILE
15	DR	89	VAL
15	DR	91	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
15	DR	93	ARG
15	DR	96	ARG
15	DR	99	LEU
15	DR	110	ILE
15	DR	119	LYS
15	DR	120	ARG
15	DR	136	GLN
16	D1	3	ARG
16	D1	8	VAL
16	D1	25	TRP
16	D1	27	LEU
16	D1	28	ARG
16	D1	56	ASP
16	D1	58	ARG
16	D1	64	ARG
16	D1	74	LEU
16	D1	80	ILE
16	D1	92	ARG
16	D1	95	LEU
16	D1	97	ASP
16	D1	98	LEU
16	D1	101	ARG
16	D1	105	VAL
17	D2	1	MET
17	D2	7	THR
17	D2	10	LYS
17	D2	15	GLU
17	D2	19	LYS
17	D2	24	LYS
17	D2	38	LEU
17	D2	44	LYS
17	D2	45	THR
17	D2	47	VAL
17	D2	49	THR
17	D2	56	SER
17	D2	57	VAL
17	D2	61	VAL
17	D2	66	ARG
17	D2	70	ILE
17	D2	72	VAL
17	D2	73	SER
17	D2	74	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	D2	76	LYS
17	D2	78	LYS
17	D2	79	VAL
17	D2	81	TYR
17	D2	85	LYS
17	D2	88	ARG
17	D2	89	GLN
17	D2	91	TYR
17	D2	92	THR
17	D2	95	LEU
18	DS	6	ILE
18	DS	11	ARG
18	DS	13	SER
18	DS	15	ARG
18	DS	19	LEU
18	DS	27	LYS
18	DS	34	ASN
18	DS	37	ARG
18	DS	39	THR
18	DS	40	ASN
18	DS	51	LEU
18	DS	59	VAL
18	DS	63	ASP
18	DS	70	TYR
18	DS	76	VAL
18	DS	88	ARG
18	DS	95	ILE
18	DS	96	ILE
18	DS	97	LYS
18	DS	107	LEU
19	DT	8	ILE
19	DT	12	VAL
19	DT	23	GLU
19	DT	28	PHE
19	DT	30	VAL
19	DT	36	LYS
19	DT	37	THR
19	DT	45	THR
19	DT	54	VAL
19	DT	55	ASN
19	DT	60	ARG
19	DT	63	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
19	DT	65	ARG
19	DT	66	LEU
19	DT	69	TYR
19	DT	72	LYS
19	DT	76	ARG
19	DT	80	ILE
20	DU	3	VAL
20	DU	4	LYS
20	DU	8	LYS
20	DU	14	LEU
20	DU	19	LYS
20	DU	38	ILE
20	DU	40	GLU
20	DU	43	ASN
20	DU	45	VAL
20	DU	50	ARG
20	DU	55	TYR
20	DU	57	GLN
20	DU	62	GLU
20	DU	63	LYS
20	DU	64	GLU
20	DU	71	LYS
20	DU	75	ILE
20	DU	76	CYS
20	DU	79	CYS
20	DU	81	LYS
20	DU	84	ARG
20	DU	88	LYS
20	DU	91	GLU
20	DU	92	ASN
20	DU	95	LYS
20	DU	96	ILE
20	DU	97	ARG
20	DU	98	VAL
21	DV	5	LEU
21	DV	14	LYS
21	DV	18	LEU
21	DV	24	LEU
21	DV	30	ASN
21	DV	32	HIS
21	DV	38	TYR
21	DV	44	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	DV	45	ASP
21	DV	50	GLN
21	DV	63	ASP
21	DV	65	GLN
21	DV	71	VAL
21	DV	74	VAL
21	DV	75	ASN
21	DV	84	GLU
21	DV	87	ASP
21	DV	90	VAL
21	DV	94	GLU
21	DV	97	GLU
21	DV	105	VAL
21	DV	119	GLU
21	DV	136	PHE
21	DV	168	GLU
21	DV	175	VAL
22	D3	12	ASN
22	D3	16	SER
22	D3	35	ASN
22	D3	36	ILE
22	D3	43	THR
22	D3	62	LEU
22	D3	74	ARG
23	DZ	3	LYS
23	DZ	4	VAL
23	DZ	6	GLU
23	DZ	13	ILE
23	DZ	17	SER
23	DZ	35	THR
23	DZ	38	SER
23	DZ	40	ARG
23	DZ	46	LEU
23	DZ	56	GLN
23	DZ	61	ARG
23	DZ	76	ARG
23	DZ	78	LYS
23	DZ	80	LEU
23	DZ	82	LEU
23	DZ	83	GLU
23	DZ	90	ILE
23	DZ	91	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	DW	5	GLU
24	DW	9	GLN
24	DW	14	ARG
24	DW	19	VAL
24	DW	25	VAL
24	DW	26	ARG
24	DW	30	ARG
24	DW	34	GLU
24	DW	35	LEU
24	DW	47	ASN
24	DW	48	HIS
24	DW	55	ARG
24	DW	60	LEU
24	DW	64	LEU
25	DX	6	VAL
25	DX	9	VAL
25	DX	17	LYS
25	DX	18	ASP
25	DX	24	LYS
25	DX	32	GLN
25	DX	33	GLN
25	DX	37	LEU
25	DX	40	THR
25	DX	55	ARG
26	D4	1	MET
26	D4	9	LEU
26	D4	10	VAL
26	D4	18	CYS
26	D4	22	ILE
26	D4	24	THR
26	D4	27	THR
26	D4	32	TYR
26	D4	38	LYS
26	D4	46	GLN
26	D4	60	GLN
26	D4	61	ARG
27	D5	3	LYS
27	D5	16	ARG
27	D5	23	HIS
27	D5	29	THR
27	D5	35	GLU
27	D5	51	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
27	D5	52	TYR
27	D5	55	ARG
28	D6	12	GLU
28	D6	14	THR
28	D6	27	LYS
28	D6	37	ARG
28	D6	39	TYR
28	D6	47	THR
29	D7	1	MET
29	D7	4	THR
29	D7	8	ASN
29	D7	10	ARG
29	D7	24	THR
29	D7	33	ARG
29	D7	36	GLN
29	D7	41	ARG
29	D7	43	THR
30	D8	16	ILE
30	D8	22	VAL
30	D8	27	THR
30	D8	29	LYS
30	D8	30	ARG
30	D8	31	HIS
30	D8	34	TRP
30	D8	40	GLU
30	D8	41	ILE
30	D8	48	PHE
30	D8	50	LEU
30	D8	52	LYS
30	D8	58	ILE
30	D8	59	LYS
30	D8	61	LEU

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (288) such sidechains are listed below:

Mol	Chain	Res	Type
3	AD	116	GLN
3	AD	143	HIS
3	AD	166	GLN
3	AD	186	HIS
3	AD	198	ASN
4	AE	48	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	AE	132	HIS
4	AE	135	HIS
4	AE	192	ASN
5	AF	67	GLN
5	AF	169	ASN
6	AG	40	ASN
6	AG	41	GLN
7	AH	139	GLN
7	AH	143	GLN
8	AK	105	HIS
8	AK	139	GLN
9	AM	56	ASN
9	AM	131	GLN
9	AM	133	GLN
10	AN	82	ASN
10	AN	88	ASN
11	AO	9	ASN
11	AO	38	GLN
11	AO	68	GLN
11	AO	81	GLN
11	AO	84	ASN
11	AO	128	HIS
13	A0	3	HIS
13	A0	13	HIS
13	A0	23	ASN
13	A0	24	GLN
13	A0	61	HIS
13	A0	71	GLN
13	A0	91	GLN
14	AQ	68	GLN
14	AQ	84	GLN
15	AR	38	ASN
15	AR	43	GLN
15	AR	58	ASN
15	AR	136	GLN
16	A1	44	ASN
16	A1	49	HIS
16	A1	71	GLN
17	A2	11	GLN
17	A2	89	GLN
18	AS	40	ASN
18	AS	102	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	AS	111	HIS
19	AT	41	ASN
19	AT	55	ASN
19	AT	87	GLN
20	AU	57	GLN
21	AV	30	ASN
21	AV	54	HIS
21	AV	75	ASN
21	AV	85	HIS
21	AV	132	ASN
21	AV	151	HIS
22	A3	17	GLN
22	A3	35	ASN
22	A3	70	GLN
23	AZ	56	GLN
23	AZ	66	HIS
24	AW	56	GLN
25	AX	19	GLN
25	AX	32	GLN
25	AX	46	ASN
25	AX	52	HIS
26	A4	47	GLN
27	A5	4	HIS
27	A5	22	HIS
27	A5	23	HIS
27	A5	43	HIS
28	A6	26	ASN
28	A6	46	HIS
28	A6	49	HIS
29	A7	8	ASN
30	A8	31	HIS
32	BE	19	HIS
32	BE	40	HIS
32	BE	94	ASN
32	BE	95	GLN
32	BE	204	ASN
33	BF	28	GLN
33	BF	102	ASN
33	BF	136	GLN
33	BF	162	GLN
33	BF	170	GLN
33	BF	176	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	BF	181	ASN
34	BG	42	GLN
34	BG	119	GLN
34	BG	125	HIS
34	BG	160	GLN
34	BG	201	GLN
35	BH	20	GLN
35	BH	78	HIS
35	BH	127	ASN
36	BI	7	ASN
36	BI	16	GLN
36	BI	18	GLN
36	BI	27	GLN
36	BI	57	GLN
36	BI	64	GLN
37	BJ	37	ASN
37	BJ	86	GLN
37	BJ	148	ASN
39	BL	23	ASN
39	BL	89	ASN
39	BL	117	HIS
39	BL	124	GLN
40	BM	13	HIS
40	BM	56	HIS
41	BN	26	ASN
41	BN	38	ASN
41	BN	93	GLN
41	BN	117	ASN
42	BO	8	ASN
42	BO	9	GLN
42	BO	49	ASN
42	BO	80	HIS
43	BP	62	ASN
43	BP	77	ASN
43	BP	101	GLN
45	BR	28	GLN
45	BR	37	ASN
45	BR	46	HIS
46	BS	76	GLN
46	BS	82	GLN
47	BT	16	GLN
47	BT	94	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
49	BV	65	ASN
49	BV	83	HIS
50	BW	26	ASN
50	BW	73	HIS
32	CE	37	ASN
32	CE	40	HIS
32	CE	135	GLN
32	CE	140	HIS
33	CF	3	ASN
33	CF	28	GLN
33	CF	123	GLN
33	CF	162	GLN
33	CF	170	GLN
33	CF	181	ASN
34	CG	43	HIS
34	CG	62	GLN
34	CG	123	HIS
35	CH	20	GLN
35	CH	141	GLN
36	CI	27	GLN
36	CI	32	ASN
36	CI	57	GLN
36	CI	73	ASN
36	CI	94	GLN
36	CI	100	ASN
37	CJ	13	GLN
37	CJ	37	ASN
37	CJ	97	GLN
37	CJ	109	ASN
38	CK	82	HIS
39	CL	3	GLN
39	CL	23	ASN
39	CL	89	ASN
39	CL	117	HIS
39	CL	124	GLN
40	CM	13	HIS
40	CM	56	HIS
40	CM	78	ASN
41	CN	26	ASN
41	CN	93	GLN
41	CN	99	GLN
41	CN	117	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	CO	8	ASN
42	CO	9	GLN
42	CO	49	ASN
42	CO	75	HIS
42	CO	99	HIS
43	CP	62	ASN
43	CP	77	ASN
43	CP	92	HIS
44	CQ	49	HIS
45	CR	37	ASN
45	CR	62	GLN
46	CS	65	GLN
46	CS	76	GLN
47	CT	16	GLN
49	CV	14	HIS
49	CV	56	GLN
50	CW	9	ASN
50	CW	26	ASN
3	DD	58	HIS
3	DD	96	HIS
3	DD	112	GLN
3	DD	115	GLN
3	DD	116	GLN
3	DD	126	GLN
3	DD	143	HIS
3	DD	166	GLN
3	DD	186	HIS
3	DD	198	ASN
3	DD	253	GLN
4	DE	48	GLN
4	DE	60	ASN
4	DE	66	HIS
4	DE	132	HIS
4	DE	143	ASN
4	DE	192	ASN
5	DF	29	ASN
5	DF	69	HIS
5	DF	169	ASN
5	DF	203	GLN
6	DG	40	ASN
6	DG	41	GLN
6	DG	58	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	DG	79	ASN
7	DH	74	ASN
8	DK	54	GLN
8	DK	105	HIS
8	DK	133	HIS
9	DM	45	ASN
9	DM	94	HIS
9	DM	101	HIS
9	DM	130	HIS
9	DM	131	GLN
10	DN	89	ASN
11	DO	9	ASN
11	DO	128	HIS
12	DP	12	GLN
12	DP	113	GLN
12	DP	123	HIS
13	D0	3	HIS
13	D0	11	ASN
13	D0	13	HIS
13	D0	16	HIS
13	D0	23	ASN
13	D0	24	GLN
13	D0	61	HIS
13	D0	71	GLN
14	DQ	61	ASN
14	DQ	68	GLN
15	DR	38	ASN
15	DR	136	GLN
16	D1	49	HIS
16	D1	72	HIS
16	D1	75	ASN
16	D1	81	HIS
16	D1	104	GLN
16	D1	117	GLN
17	D2	11	GLN
17	D2	64	HIS
17	D2	87	HIS
17	D2	89	GLN
18	DS	57	ASN
18	DS	61	ASN
18	DS	62	HIS
18	DS	102	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	DS	111	HIS
19	DT	55	ASN
19	DT	87	GLN
20	DU	6	HIS
20	DU	43	ASN
20	DU	57	GLN
21	DV	34	ASN
21	DV	65	GLN
21	DV	132	ASN
22	D3	50	ASN
23	DZ	66	HIS
24	DW	38	GLN
24	DW	56	GLN
24	DW	65	ASN
25	DX	19	GLN
25	DX	33	GLN
25	DX	46	ASN
25	DX	52	HIS
26	D4	6	HIS
26	D4	40	HIS
26	D4	46	GLN
26	D4	47	GLN
26	D4	60	GLN
27	D5	43	HIS
28	D6	20	ASN
28	D6	32	ASN
28	D6	46	HIS
29	D7	8	ASN
29	D7	36	GLN
30	D8	33	ASN

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	2911/2912 (99%)	694 (23%)	62 (2%)
1	DA	2905/2912 (99%)	731 (25%)	60 (2%)
2	AB	121/122 (99%)	23 (19%)	0
2	DB	121/122 (99%)	28 (23%)	1 (0%)
31	BA	1501/1506 (99%)	351 (23%)	39 (2%)
31	CA	1501/1506 (99%)	351 (23%)	49 (3%)
52	BB	83/85 (97%)	45 (54%)	5 (6%)

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
52	BD	83/85 (97%)	38 (45%)	5 (6%)
52	CB	83/85 (97%)	49 (59%)	8 (9%)
52	CD	83/85 (97%)	35 (42%)	6 (7%)
53	BC	76/77 (98%)	17 (22%)	3 (3%)
53	CC	76/77 (98%)	20 (26%)	3 (3%)
54	B1	15/16 (93%)	7 (46%)	2 (13%)
54	C1	15/16 (93%)	8 (53%)	3 (20%)
All	All	9574/9606 (99%)	2397 (25%)	246 (2%)

All (2397) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	9	U
1	AA	17	G
1	AA	23	G
1	AA	34	C
1	AA	35	G
1	AA	37	C
1	AA	46	C
1	AA	51	G
1	AA	56	A
1	AA	63	U
1	AA	70	G
1	AA	71	A
1	AA	74	A
1	AA	75	G
1	AA	85	G
1	AA	92	G
1	AA	95	G
1	AA	116	C
1	AA	117	G
1	AA	118	A
1	AA	119	A
1	AA	120	U
1	AA	125	G
1	AA	131	G
1	AA	135	G
1	AA	153	C
1	AA	155	C
1	AA	163	U
1	AA	164	U
1	AA	181	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	196	A
1	AA	213	A
1	AA	214	G
1	AA	215	G
1	AA	216	A
1	AA	221	A
1	AA	222	A
1	AA	223	A
1	AA	224	G
1	AA	227	A
1	AA	228	A
1	AA	229	A
1	AA	230	U
1	AA	231	C
1	AA	232	G
1	AA	248	G
1	AA	249	C
1	AA	252	G
1	AA	264	C
1	AA	269	U
1	AA	270(C)	C
1	AA	270(K)	C
1	AA	270(L)	U
1	AA	270(M)	U
1	AA	270(N)	G
1	AA	270(P)	C
1	AA	271(C)	U
1	AA	271	G
1	AA	273(E)	U
1	AA	274	G
1	AA	275	G
1	AA	278	A
1	AA	279	C
1	AA	299	A
1	AA	311	A
1	AA	324	A
1	AA	329	G
1	AA	330	A
1	AA	333	G
1	AA	334	C
1	AA	335	C
1	AA	338	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	352	G
1	AA	356	G
1	AA	363	G
1	AA	363(E)	U
1	AA	372	G
1	AA	386	G
1	AA	387	U
1	AA	388	G
1	AA	396	G
1	AA	400	G
1	AA	405	U
1	AA	411	G
1	AA	412	A
1	AA	421	U
1	AA	428	A
1	AA	444	C
1	AA	448	U
1	AA	455	C
1	AA	457	A
1	AA	470	A
1	AA	471	A
1	AA	472	A
1	AA	479	A
1	AA	481	G
1	AA	482	A
1	AA	494	G
1	AA	505	A
1	AA	509	C
1	AA	518	G
1	AA	529	A
1	AA	531	C
1	AA	532	A
1	AA	533	G
1	AA	540	G
1	AA	546	C
1	AA	556	G
1	AA	563	G
1	AA	565	C
1	AA	573	G
1	AA	575	A
1	AA	579	G
1	AA	586	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	587	C
1	AA	588	U
1	AA	593	G
1	AA	603	A
1	AA	607	U
1	AA	609	A
1	AA	613	U
1	AA	614	U
1	AA	617	G
1	AA	618	G
1	AA	622	G
1	AA	627	A
1	AA	629	G
1	AA	632	A
1	AA	637	A
1	AA	646	A
1	AA	647	G
1	AA	653	A
1	AA	654(A)	A
1	AA	654(G)	C
1	AA	654(I)	C
1	AA	654(K)	C
1	AA	654(M)	C
1	AA	654(N)	G
1	AA	654(V)	A
1	AA	664	C
1	AA	665	C
1	AA	686	G
1	AA	701	G
1	AA	717	G
1	AA	730	C
1	AA	731	C
1	AA	739	G
1	AA	740	U
1	AA	745	G
1	AA	752	A
1	AA	753	C
1	AA	758	C
1	AA	765	G
1	AA	775	G
1	AA	776	G
1	AA	782	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	784	A
1	AA	785	G
1	AA	789	A
1	AA	790	C
1	AA	792	G
1	AA	793	A
1	AA	801	G
1	AA	805	G
1	AA	812	C
1	AA	819	A
1	AA	827	U
1	AA	828	U
1	AA	831	G
1	AA	836	G
1	AA	845	G
1	AA	855	G
1	AA	859	G
1	AA	879	G
1	AA	880	G
1	AA	881	G
1	AA	882	G
1	AA	883	G
1	AA	884	C
1	AA	885	C
1	AA	886	C
1	AA	887	A
1	AA	888	C
1	AA	890	A
1	AA	893	C
1	AA	894	C
1	AA	895	U
1	AA	896	A
1	AA	897	C
1	AA	898	C
1	AA	899	A
1	AA	900	A
1	AA	901	A
1	AA	902	C
1	AA	904	C
1	AA	906	G
1	AA	907	U
1	AA	910	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	915	C
1	AA	917	A
1	AA	918	A
1	AA	919	G
1	AA	926	A
1	AA	928	G
1	AA	932	G
1	AA	933	A
1	AA	941	A
1	AA	945	A
1	AA	946	G
1	AA	959	A
1	AA	961	C
1	AA	962	G
1	AA	968	G
1	AA	974	G
1	AA	974(A)	C
1	AA	975	G
1	AA	983	A
1	AA	989	G
1	AA	990	A
1	AA	993	G
1	AA	996	A
1	AA	998	C
1	AA	999	U
1	AA	1003	G
1	AA	1005	C
1	AA	1010	A
1	AA	1011	G
1	AA	1012	U
1	AA	1013	C
1	AA	1015	G
1	AA	1016	G
1	AA	1017	G
1	AA	1020	A
1	AA	1022	G
1	AA	1023	U
1	AA	1025	G
1	AA	1026	U
1	AA	1027	A
1	AA	1033	U
1	AA	1044	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1045	A
1	AA	1046	A
1	AA	1047	G
1	AA	1050	A
1	AA	1054	A
1	AA	1060	U
1	AA	1061	U
1	AA	1062	G
1	AA	1065	U
1	AA	1067	A
1	AA	1068	G
1	AA	1070	A
1	AA	1071	G
1	AA	1072	C
1	AA	1075	C
1	AA	1077	A
1	AA	1078	U
1	AA	1079	C
1	AA	1081	U
1	AA	1082	U
1	AA	1084	A
1	AA	1085	A
1	AA	1086	A
1	AA	1087	G
1	AA	1088	A
1	AA	1089	G
1	AA	1090	U
1	AA	1092	C
1	AA	1093	G
1	AA	1095	A
1	AA	1096	A
1	AA	1097	U
1	AA	1110	G
1	AA	1112	G
1	AA	1117	G
1	AA	1122	G
1	AA	1130	U
1	AA	1131	G
1	AA	1135	C
1	AA	1136	G
1	AA	1138	G
1	AA	1139	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1142	U
1	AA	1142(A)	A
1	AA	1149	G
1	AA	1151	G
1	AA	1153	C
1	AA	1154	G
1	AA	1155	A
1	AA	1156	A
1	AA	1170	G
1	AA	1175	U
1	AA	1176	G
1	AA	1178	C
1	AA	1179	C
1	AA	1182	A
1	AA	1194	A
1	AA	1195	G
1	AA	1204	A
1	AA	1205	U
1	AA	1210	A
1	AA	1211	U
1	AA	1212	G
1	AA	1218	C
1	AA	1220	A
1	AA	1221	C
1	AA	1228	G
1	AA	1229(A)	G
1	AA	1237	A
1	AA	1241	A
1	AA	1242	A
1	AA	1244	G
1	AA	1250	G
1	AA	1253	A
1	AA	1256	G
1	AA	1265	A
1	AA	1267	U
1	AA	1269	A
1	AA	1271	G
1	AA	1272	A
1	AA	1273	U
1	AA	1275	A
1	AA	1298	C
1	AA	1300	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1301	A
1	AA	1302	A
1	AA	1306	C
1	AA	1312	U
1	AA	1313	U
1	AA	1314	C
1	AA	1329	U
1	AA	1332	G
1	AA	1338	G
1	AA	1343	G
1	AA	1344	G
1	AA	1345	C
1	AA	1349	A
1	AA	1352	U
1	AA	1359	A
1	AA	1360	A
1	AA	1365	A
1	AA	1368	G
1	AA	1370	C
1	AA	1380	G
1	AA	1384	A
1	AA	1385	G
1	AA	1386	C
1	AA	1395	A
1	AA	1412	A
1	AA	1416	G
1	AA	1417	C
1	AA	1421	G
1	AA	1428	C
1	AA	1429	G
1	AA	1444(A)	A
1	AA	1449	A
1	AA	1449(A)	G
1	AA	1455	G
1	AA	1458	C
1	AA	1459	G
1	AA	1460	A
1	AA	1461	G
1	AA	1466	G
1	AA	1467	C
1	AA	1470	G
1	AA	1471	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1483	G
1	AA	1493	C
1	AA	1495	A
1	AA	1497	U
1	AA	1508	A
1	AA	1509	C
1	AA	1510	A
1	AA	1523	U
1	AA	1526	G
1	AA	1534	G
1	AA	1535	U
1	AA	1536	A
1	AA	1537	C
1	AA	1538	G
1	AA	1539	G
1	AA	1543	A
1	AA	1545	A
1	AA	1545(A)	A
1	AA	1546	C
1	AA	1547	C
1	AA	1548	C
1	AA	1554	A
1	AA	1558	A
1	AA	1559	G
1	AA	1560	G
1	AA	1569	A
1	AA	1578	U
1	AA	1579	A
1	AA	1585	C
1	AA	1586	A
1	AA	1587	A
1	AA	1606	G
1	AA	1608	A
1	AA	1609	A
1	AA	1610	A
1	AA	1617	C
1	AA	1618	A
1	AA	1625	C
1	AA	1631	A
1	AA	1632	A
1	AA	1639	U
1	AA	1648	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1651	G
1	AA	1654	A
1	AA	1663	C
1	AA	1666	G
1	AA	1674	G
1	AA	1675	C
1	AA	1678	G
1	AA	1688	U
1	AA	1695	G
1	AA	1699	G
1	AA	1728	G
1	AA	1729	A
1	AA	1731	G
1	AA	1732	A
1	AA	1734	C
1	AA	1756	G
1	AA	1761	C
1	AA	1762	A
1	AA	1763	G
1	AA	1764	G
1	AA	1769	G
1	AA	1773	A
1	AA	1774	C
1	AA	1780	A
1	AA	1782	C
1	AA	1787	A
1	AA	1791	A
1	AA	1798	U
1	AA	1799	G
1	AA	1800	C
1	AA	1801	G
1	AA	1802	A
1	AA	1809	A
1	AA	1814	G
1	AA	1816	G
1	AA	1819	A
1	AA	1829	A
1	AA	1835	G
1	AA	1836	C
1	AA	1847	A
1	AA	1858	G
1	AA	1860	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1869	G
1	AA	1870	C
1	AA	1878	G
1	AA	1882	C
1	AA	1883	G
1	AA	1888	G
1	AA	1894	C
1	AA	1896	G
1	AA	1900	A
1	AA	1901	A
1	AA	1902	C
1	AA	1903	G
1	AA	1906	G
1	AA	1914	C
1	AA	1926	U
1	AA	1929	G
1	AA	1930	G
1	AA	1938	A
1	AA	1955	U
1	AA	1956	U
1	AA	1963	U
1	AA	1964	G
1	AA	1967	C
1	AA	1969	A
1	AA	1970	A
1	AA	1971	A
1	AA	1972	A
1	AA	1982	C
1	AA	1985	G
1	AA	1993	U
1	AA	2020	A
1	AA	2023	G
1	AA	2031	A
1	AA	2032	G
1	AA	2033	A
1	AA	2036	C
1	AA	2043	C
1	AA	2049	G
1	AA	2054	A
1	AA	2055	C
1	AA	2056	G
1	AA	2060	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	2061	G
1	AA	2062	A
1	AA	2069	G
1	AA	2070	G
1	AA	2095	C
1	AA	2111	C
1	AA	2112	G
1	AA	2113	U
1	AA	2114	A
1	AA	2115	G
1	AA	2120	G
1	AA	2122	U
1	AA	2126	A
1	AA	2128	C
1	AA	2130	U
1	AA	2132	U
1	AA	2133	G
1	AA	2135	A
1	AA	2136	C
1	AA	2139	C
1	AA	2146	C
1	AA	2147	G
1	AA	2148	G
1	AA	2157	G
1	AA	2158	A
1	AA	2164	C
1	AA	2166	G
1	AA	2167	U
1	AA	2168	G
1	AA	2169	A
1	AA	2171	A
1	AA	2172	U
1	AA	2173	A
1	AA	2181	G
1	AA	2190	G
1	AA	2192	G
1	AA	2194	G
1	AA	2198	A
1	AA	2199	A
1	AA	2205	C
1	AA	2206	C
1	AA	2210	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	2211	G
1	AA	2212	A
1	AA	2215	G
1	AA	2224	G
1	AA	2225	A
1	AA	2226	C
1	AA	2238	G
1	AA	2239	G
1	AA	2240	C
1	AA	2242	G
1	AA	2243	U
1	AA	2267	A
1	AA	2269	A
1	AA	2272	U
1	AA	2273	A
1	AA	2275	C
1	AA	2278	A
1	AA	2283	C
1	AA	2287	A
1	AA	2294	C
1	AA	2307	G
1	AA	2308	G
1	AA	2310	A
1	AA	2314	C
1	AA	2319	G
1	AA	2320	A
1	AA	2325	G
1	AA	2327	A
1	AA	2334	G
1	AA	2336	A
1	AA	2341	G
1	AA	2346	A
1	AA	2347	C
1	AA	2350	C
1	AA	2359	C
1	AA	2364	C
1	AA	2372	G
1	AA	2383	G
1	AA	2385	C
1	AA	2388	A
1	AA	2389	G
1	AA	2392	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	2393	A
1	AA	2394	C
1	AA	2396	G
1	AA	2402	C
1	AA	2403	C
1	AA	2405	G
1	AA	2406	U
1	AA	2410	G
1	AA	2422	A
1	AA	2424	C
1	AA	2425	A
1	AA	2428	G
1	AA	2429	G
1	AA	2430	A
1	AA	2431	U
1	AA	2435	A
1	AA	2439	A
1	AA	2440	C
1	AA	2441	C
1	AA	2445	G
1	AA	2447	G
1	AA	2448	A
1	AA	2469	A
1	AA	2474	C
1	AA	2476	A
1	AA	2478	A
1	AA	2482	G
1	AA	2486	G
1	AA	2487	G
1	AA	2494	G
1	AA	2499	C
1	AA	2500	U
1	AA	2502	G
1	AA	2504	U
1	AA	2505	G
1	AA	2506	U
1	AA	2507	C
1	AA	2518	A
1	AA	2529	G
1	AA	2543	G
1	AA	2549	G
1	AA	2554	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	2566	A
1	AA	2567	G
1	AA	2573	C
1	AA	2574	G
1	AA	2580	U
1	AA	2582	G
1	AA	2601	C
1	AA	2602	A
1	AA	2609	U
1	AA	2610	C
1	AA	2611	U
1	AA	2612	C
1	AA	2613	U
1	AA	2614	A
1	AA	2629	A
1	AA	2630	G
1	AA	2632	A
1	AA	2636	U
1	AA	2646	C
1	AA	2661	G
1	AA	2665	A
1	AA	2673	G
1	AA	2679	A
1	AA	2682	U
1	AA	2683	C
1	AA	2689	U
1	AA	2690	C
1	AA	2691	C
1	AA	2702	U
1	AA	2707	G
1	AA	2712	U
1	AA	2712(A)	A
1	AA	2713	A
1	AA	2714	G
1	AA	2724	C
1	AA	2726	U
1	AA	2733	A
1	AA	2734	A
1	AA	2739	U
1	AA	2748	A
1	AA	2752	C
1	AA	2757	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	2758	A
1	AA	2764	A
1	AA	2765	A
1	AA	2766	G
1	AA	2778	A
1	AA	2779	U
1	AA	2781	A
1	AA	2787	C
1	AA	2789	C
1	AA	2791	C
1	AA	2793	G
1	AA	2794	C
1	AA	2795	G
1	AA	2797	U
1	AA	2798	C
1	AA	2799	A
1	AA	2801	A
1	AA	2807	G
1	AA	2808	U
1	AA	2813	A
1	AA	2818	G
1	AA	2820	A
1	AA	2821	A
1	AA	2830	G
1	AA	2833	G
1	AA	2834	G
1	AA	2835	A
1	AA	2847	U
1	AA	2872	G
1	AA	2873	A
1	AA	2879	C
1	AA	2891	G
1	AA	2892	A
1	AA	2894	G
2	AB	1	U
2	AB	5	C
2	AB	7	G
2	AB	12	C
2	AB	13	A
2	AB	15	A
2	AB	19	G
2	AB	25	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	AB	33	G
2	AB	40	U
2	AB	41	U
2	AB	56	G
2	AB	58	A
2	AB	65	C
2	AB	66	A
2	AB	72	G
2	AB	73	A
2	AB	74	U
2	AB	89	G
2	AB	108	C
2	AB	109	G
2	AB	116	G
2	AB	119	A
31	BA	7	G
31	BA	8	A
31	BA	9	G
31	BA	30	U
31	BA	31	G
31	BA	32	A
31	BA	39	G
31	BA	47	C
31	BA	48	C
31	BA	49	U
31	BA	50	A
31	BA	51	A
31	BA	61	G
31	BA	65	U
31	BA	66	G
31	BA	75	C
31	BA	76	G
31	BA	78	G
31	BA	80	G
31	BA	81	G
31	BA	82	U
31	BA	84	U
31	BA	85	U
31	BA	86	U
31	BA	87	A
31	BA	89	U
31	BA	90	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	BA	91	C
31	BA	95	G
31	BA	101	A
31	BA	115	G
31	BA	116	A
31	BA	119	A
31	BA	120	A
31	BA	121	C
31	BA	131	C
31	BA	144	G
31	BA	157	G
31	BA	161	A
31	BA	163	C
31	BA	171	A
31	BA	172	A
31	BA	173	U
31	BA	174	C
31	BA	180	U
31	BA	182	U
31	BA	183	G
31	BA	189	U
31	BA	190	G
31	BA	191(C)	G
31	BA	195	A
31	BA	197	A
31	BA	201	C
31	BA	208	U
31	BA	209	U
31	BA	210	U
31	BA	216	G
31	BA	217	C
31	BA	220	G
31	BA	222	U
31	BA	231	G
31	BA	245	C
31	BA	247	G
31	BA	251	G
31	BA	257	G
31	BA	262	A
31	BA	266	G
31	BA	267	C
31	BA	271	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	BA	274	A
31	BA	280	C
31	BA	281	G
31	BA	289	G
31	BA	308	C
31	BA	313	A
31	BA	319	G
31	BA	321	A
31	BA	324	G
31	BA	328	C
31	BA	330	C
31	BA	332	G
31	BA	344	A
31	BA	345	C
31	BA	346	G
31	BA	352	C
31	BA	353	A
31	BA	354	G
31	BA	357	G
31	BA	365	U
31	BA	367	U
31	BA	372	C
31	BA	384	G
31	BA	397	A
31	BA	398	C
31	BA	411	A
31	BA	412	A
31	BA	413	G
31	BA	418	C
31	BA	419	C
31	BA	422	C
31	BA	423	G
31	BA	424	G
31	BA	429	U
31	BA	430	A
31	BA	439	A
31	BA	440	A
31	BA	442	C
31	BA	452	A
31	BA	465	A
31	BA	466	C
31	BA	467	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	BA	479	C
31	BA	485	G
31	BA	496	A
31	BA	497	U
31	BA	503	C
31	BA	504	C
31	BA	505	G
31	BA	510	A
31	BA	511	C
31	BA	513	C
31	BA	518	C
31	BA	519	C
31	BA	521	G
31	BA	524	G
31	BA	527	G
31	BA	531	U
31	BA	533	A
31	BA	536	C
31	BA	547	A
31	BA	559	A
31	BA	560	U
31	BA	561	U
31	BA	572	A
31	BA	573	A
31	BA	576	G
31	BA	577	G
31	BA	597	G
31	BA	619	U
31	BA	620	C
31	BA	630	G
31	BA	631	G
31	BA	632	A
31	BA	633	G
31	BA	639	G
31	BA	646	U
31	BA	653	A
31	BA	665	A
31	BA	672	U
31	BA	687	A
31	BA	688	G
31	BA	701	C
31	BA	704	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	BA	723	U
31	BA	724	G
31	BA	748	C
31	BA	749	C
31	BA	752	G
31	BA	755	G
31	BA	759	A
31	BA	774	G
31	BA	778	G
31	BA	792	A
31	BA	793	U
31	BA	794	A
31	BA	796	C
31	BA	799	G
31	BA	812	C
31	BA	813	U
31	BA	815	A
31	BA	817	C
31	BA	818	G
31	BA	820	U
31	BA	821	G
31	BA	827	U
31	BA	828	A
31	BA	841	U
31	BA	843	U
31	BA	848	C
31	BA	859	A
31	BA	872	A
31	BA	873	A
31	BA	876	G
31	BA	877	C
31	BA	889	A
31	BA	902	G
31	BA	914	A
31	BA	922	G
31	BA	925	G
31	BA	926	G
31	BA	927	G
31	BA	934	C
31	BA	935	A
31	BA	948	C
31	BA	949	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	BA	960	U
31	BA	966	G
31	BA	968	A
31	BA	969	A
31	BA	971	G
31	BA	972	C
31	BA	974	A
31	BA	975	A
31	BA	976	G
31	BA	977	A
31	BA	982	U
31	BA	983	A
31	BA	991	U
31	BA	992	U
31	BA	993	G
31	BA	1004	A
31	BA	1006	C
31	BA	1008	C
31	BA	1017	G
31	BA	1021	G
31	BA	1024	G
31	BA	1025	U
31	BA	1026	G
31	BA	1027	C
31	BA	1028	C
31	BA	1029	G
31	BA	1032(A)	G
31	BA	1033	G
31	BA	1034	G
31	BA	1036	G
31	BA	1040	U
31	BA	1042	G
31	BA	1054	C
31	BA	1055	A
31	BA	1056	U
31	BA	1081	G
31	BA	1094	G
31	BA	1095	U
31	BA	1101	A
31	BA	1108	G
31	BA	1124	G
31	BA	1125	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	BA	1126	U
31	BA	1127	G
31	BA	1129	C
31	BA	1131	G
31	BA	1133	G
31	BA	1136	U
31	BA	1137	C
31	BA	1138	G
31	BA	1139	G
31	BA	1140	C
31	BA	1146	A
31	BA	1151	A
31	BA	1157	A
31	BA	1158	C
31	BA	1159	U
31	BA	1160	G
31	BA	1171	G
31	BA	1177	G
31	BA	1178	G
31	BA	1179	A
31	BA	1181	G
31	BA	1182	G
31	BA	1183	A
31	BA	1186	G
31	BA	1187	G
31	BA	1188	A
31	BA	1189	C
31	BA	1193	G
31	BA	1195	C
31	BA	1196	U
31	BA	1197	G
31	BA	1200	C
31	BA	1201	A
31	BA	1202	G
31	BA	1211	U
31	BA	1212	U
31	BA	1225	A
31	BA	1226	C
31	BA	1227	A
31	BA	1228	C
31	BA	1236	A
31	BA	1238	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	BA	1240	U
31	BA	1241	G
31	BA	1253	G
31	BA	1256	A
31	BA	1257	U
31	BA	1258	G
31	BA	1262	C
31	BA	1270	C
31	BA	1272	G
31	BA	1278	U
31	BA	1279	A
31	BA	1280	A
31	BA	1281	U
31	BA	1282	C
31	BA	1286	A
31	BA	1287	A
31	BA	1290	G
31	BA	1291	G
31	BA	1294	G
31	BA	1299	A
31	BA	1300	G
31	BA	1301	U
31	BA	1302	U
31	BA	1303	C
31	BA	1305	G
31	BA	1319	A
31	BA	1320	C
31	BA	1322	C
31	BA	1323	G
31	BA	1326	C
31	BA	1331	G
31	BA	1332	A
31	BA	1335	C
31	BA	1336	C
31	BA	1337	G
31	BA	1344	C
31	BA	1346	A
31	BA	1347	G
31	BA	1350	A
31	BA	1353	G
31	BA	1362(A)	C
31	BA	1363	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	BA	1364	U
31	BA	1365	G
31	BA	1370	G
31	BA	1373	G
31	BA	1393	U
31	BA	1397	C
31	BA	1398	A
31	BA	1399	C
31	BA	1401	G
31	BA	1419	G
31	BA	1439	C
31	BA	1442	G
31	BA	1443	G
31	BA	1446	A
31	BA	1452	C
31	BA	1453	G
31	BA	1487	G
31	BA	1492	A
31	BA	1497	G
31	BA	1499	A
31	BA	1502	A
31	BA	1503	A
31	BA	1504	G
31	BA	1505	G
31	BA	1506	U
31	BA	1517	G
31	BA	1519	A
31	BA	1520	G
31	BA	1528	U
31	BA	1529	G
52	BB	4	G
52	BB	7	G
52	BB	8	U
52	BB	9	U
52	BB	11	C
52	BB	14	A
52	BB	16	C
52	BB	17	G
52	BB	18	G
52	BB	19	C
52	BB	20	C
52	BB	21	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
52	BB	23	A
52	BB	24	G
52	BB	26	G
52	BB	27	A
52	BB	30	A
52	BB	35	G
52	BB	40	U
52	BB	42	U
52	BB	46	G
52	BB	47	U
52	BB	48	C
52	BB	50	U
52	BB	52	G
52	BB	53	A
52	BB	55	U
52	BB	57	C
52	BB	58	G
52	BB	63	U
52	BB	68	A
52	BB	69	U
52	BB	70	C
52	BB	72	U
52	BB	73	U
52	BB	74	C
52	BB	75	C
52	BB	76	C
52	BB	78	C
52	BB	79	A
52	BB	80	C
52	BB	81	C
52	BB	82	A
52	BB	83	C
52	BB	84	C
53	BC	2	G
53	BC	6	G
53	BC	9	G
53	BC	16	C
53	BC	18	C
53	BC	19	G
53	BC	20	G
53	BC	21	U
53	BC	22	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	BC	23	G
53	BC	32	G
53	BC	44	A
53	BC	47	G
53	BC	48	U
53	BC	49	C
53	BC	53	G
53	BC	77	A
52	BD	6	G
52	BD	8	U
52	BD	9	U
52	BD	10	C
52	BD	12	C
52	BD	14	A
52	BD	15	G
52	BD	17	G
52	BD	18	G
52	BD	19	C
52	BD	20	C
52	BD	21	A
52	BD	22	A
52	BD	23	A
52	BD	24	G
52	BD	30	A
52	BD	41	C
52	BD	44	C
52	BD	46	G
52	BD	47	U
52	BD	48	C
52	BD	50	U
52	BD	52	G
52	BD	54	C
52	BD	55	U
52	BD	56	U
52	BD	57	C
52	BD	58	G
52	BD	64	U
52	BD	67	A
52	BD	68	A
52	BD	69	U
52	BD	70	C
52	BD	79	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
52	BD	80	C
52	BD	81	C
52	BD	82	A
52	BD	85	A
54	B1	11	U
54	B1	12	A
54	B1	13	A
54	B1	14	A
54	B1	19	U
54	B1	23	A
54	B1	24	A
31	CA	7	G
31	CA	9	G
31	CA	22	G
31	CA	32	A
31	CA	39	G
31	CA	41	G
31	CA	42	G
31	CA	47	C
31	CA	48	C
31	CA	50	A
31	CA	51	A
31	CA	54	C
31	CA	65	U
31	CA	76	G
31	CA	78	G
31	CA	81	G
31	CA	84	U
31	CA	85	U
31	CA	86	U
31	CA	87	A
31	CA	90	C
31	CA	91	C
31	CA	95	G
31	CA	116	A
31	CA	118	U
31	CA	121	C
31	CA	131	C
31	CA	144	G
31	CA	146	G
31	CA	174	C
31	CA	182	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	CA	185	A
31	CA	188	U
31	CA	189	U
31	CA	190	G
31	CA	191(D)	U
31	CA	195	A
31	CA	197	A
31	CA	198	G
31	CA	199	G
31	CA	208	U
31	CA	209	U
31	CA	210	U
31	CA	216	G
31	CA	231	G
31	CA	244	U
31	CA	247	G
31	CA	250	A
31	CA	251	G
31	CA	266	G
31	CA	267	C
31	CA	281	G
31	CA	289	G
31	CA	298	A
31	CA	319	G
31	CA	321	A
31	CA	328	C
31	CA	329	A
31	CA	332	G
31	CA	345	C
31	CA	346	G
31	CA	347	G
31	CA	350	G
31	CA	351	G
31	CA	352	C
31	CA	353	A
31	CA	354	G
31	CA	355	C
31	CA	356	A
31	CA	363	A
31	CA	366	C
31	CA	367	U
31	CA	372	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	CA	373	A
31	CA	397	A
31	CA	398	C
31	CA	406	G
31	CA	411	A
31	CA	412	A
31	CA	413	G
31	CA	414	A
31	CA	422	C
31	CA	423	G
31	CA	424	G
31	CA	429	U
31	CA	430	A
31	CA	435	C
31	CA	439	A
31	CA	442	C
31	CA	446	G
31	CA	451	A
31	CA	465	A
31	CA	466	C
31	CA	467	G
31	CA	475	G
31	CA	478	A
31	CA	484	G
31	CA	485	G
31	CA	486	U
31	CA	493	G
31	CA	496	A
31	CA	497	U
31	CA	500	G
31	CA	504	C
31	CA	505	G
31	CA	509	A
31	CA	510	A
31	CA	511	C
31	CA	517	G
31	CA	519	C
31	CA	521	G
31	CA	527	G
31	CA	530	G
31	CA	531	U
31	CA	532	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	CA	533	A
31	CA	536	C
31	CA	544	G
31	CA	547	A
31	CA	557	G
31	CA	559	A
31	CA	561	U
31	CA	562	C
31	CA	564	C
31	CA	572	A
31	CA	573	A
31	CA	575	G
31	CA	576	G
31	CA	577	G
31	CA	607	A
31	CA	608	A
31	CA	614	A
31	CA	618	C
31	CA	629	G
31	CA	632	A
31	CA	633	G
31	CA	651	C
31	CA	653	A
31	CA	662	G
31	CA	665	A
31	CA	680	C
31	CA	687	A
31	CA	688	G
31	CA	701	C
31	CA	702	A
31	CA	703	G
31	CA	704	A
31	CA	716	A
31	CA	721	G
31	CA	724	G
31	CA	731	G
31	CA	733	A
31	CA	734	G
31	CA	749	C
31	CA	755	G
31	CA	767	A
31	CA	772	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	CA	776	G
31	CA	777	A
31	CA	782	A
31	CA	792	A
31	CA	794	A
31	CA	802	A
31	CA	812	C
31	CA	813	U
31	CA	816	A
31	CA	817	C
31	CA	821	G
31	CA	827	U
31	CA	828	A
31	CA	841	U
31	CA	842	C
31	CA	843	U
31	CA	848	C
31	CA	855	G
31	CA	859	A
31	CA	867	G
31	CA	871	U
31	CA	873	A
31	CA	874	G
31	CA	885	G
31	CA	894	G
31	CA	913	A
31	CA	914	A
31	CA	926	G
31	CA	927	G
31	CA	934	C
31	CA	935	A
31	CA	958	A
31	CA	960	U
31	CA	961	U
31	CA	966	G
31	CA	968	A
31	CA	969	A
31	CA	974	A
31	CA	975	A
31	CA	976	G
31	CA	977	A
31	CA	978	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	CA	980	C
31	CA	982	U
31	CA	983	A
31	CA	991	U
31	CA	992	U
31	CA	993	G
31	CA	995	C
31	CA	1004	A
31	CA	1006	C
31	CA	1009	G
31	CA	1016	A
31	CA	1020	U
31	CA	1021	G
31	CA	1023	G
31	CA	1024	G
31	CA	1025	U
31	CA	1026	G
31	CA	1027	C
31	CA	1028	C
31	CA	1029	G
31	CA	1030	C
31	CA	1035	A
31	CA	1036	G
31	CA	1037	C
31	CA	1040	U
31	CA	1045	C
31	CA	1050	G
31	CA	1053	G
31	CA	1054	C
31	CA	1055	A
31	CA	1056	U
31	CA	1066	C
31	CA	1067	A
31	CA	1073	U
31	CA	1081	G
31	CA	1082	G
31	CA	1084	G
31	CA	1092	A
31	CA	1094	G
31	CA	1095	U
31	CA	1097	C
31	CA	1101	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	CA	1113	C
31	CA	1117	G
31	CA	1124	G
31	CA	1125	U
31	CA	1127	G
31	CA	1128	C
31	CA	1129	C
31	CA	1130	A
31	CA	1136	U
31	CA	1137	C
31	CA	1138	G
31	CA	1139	G
31	CA	1146	A
31	CA	1151	A
31	CA	1154	G
31	CA	1157	A
31	CA	1158	C
31	CA	1159	U
31	CA	1160	G
31	CA	1171	G
31	CA	1177	G
31	CA	1178	G
31	CA	1179	A
31	CA	1181	G
31	CA	1182	G
31	CA	1183	A
31	CA	1184	G
31	CA	1187	G
31	CA	1190	G
31	CA	1191	A
31	CA	1196	U
31	CA	1197	G
31	CA	1198	G
31	CA	1200	C
31	CA	1201	A
31	CA	1202	G
31	CA	1212	U
31	CA	1213	A
31	CA	1214	C
31	CA	1224	G
31	CA	1225	A
31	CA	1227	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	CA	1235	U
31	CA	1238	A
31	CA	1240	U
31	CA	1241	G
31	CA	1256	A
31	CA	1257	U
31	CA	1258	G
31	CA	1260	C
31	CA	1269	A
31	CA	1270	C
31	CA	1278	U
31	CA	1279	A
31	CA	1280	A
31	CA	1286	A
31	CA	1287	A
31	CA	1288	A
31	CA	1297	C
31	CA	1298	C
31	CA	1299	A
31	CA	1301	U
31	CA	1305	G
31	CA	1317	C
31	CA	1319	A
31	CA	1320	C
31	CA	1322	C
31	CA	1323	G
31	CA	1331	G
31	CA	1335	C
31	CA	1338	G
31	CA	1340	A
31	CA	1346	A
31	CA	1347	G
31	CA	1353	G
31	CA	1363	A
31	CA	1364	U
31	CA	1368	G
31	CA	1370	G
31	CA	1379	G
31	CA	1386	G
31	CA	1397	C
31	CA	1398	A
31	CA	1400	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	CA	1402	C
31	CA	1404	C
31	CA	1405	G
31	CA	1419	G
31	CA	1441	G
31	CA	1442	G
31	CA	1443	G
31	CA	1446	A
31	CA	1447	G
31	CA	1450	U
31	CA	1451	A
31	CA	1452	C
31	CA	1453	G
31	CA	1454	G
31	CA	1492	A
31	CA	1494	G
31	CA	1499	A
31	CA	1502	A
31	CA	1503	A
31	CA	1504	G
31	CA	1506	U
31	CA	1507	A
31	CA	1517	G
31	CA	1518	A
31	CA	1520	G
31	CA	1529	G
52	CB	4	G
52	CB	5	G
52	CB	7	G
52	CB	8	U
52	CB	9	U
52	CB	11	C
52	CB	16	C
52	CB	17	G
52	CB	18	G
52	CB	19	C
52	CB	20	C
52	CB	21	A
52	CB	22	A
52	CB	23	A
52	CB	24	G
52	CB	26	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
52	CB	27	A
52	CB	28	G
52	CB	30	A
52	CB	34	U
52	CB	35	G
52	CB	37	A
52	CB	39	A
52	CB	41	C
52	CB	42	U
52	CB	45	C
52	CB	46	G
52	CB	47	U
52	CB	50	U
52	CB	51	C
52	CB	52	G
52	CB	54	C
52	CB	55	U
52	CB	56	U
52	CB	58	G
52	CB	62	G
52	CB	63	U
52	CB	68	A
52	CB	70	C
52	CB	73	U
52	CB	74	C
52	CB	75	C
52	CB	76	C
52	CB	78	C
52	CB	79	A
52	CB	80	C
52	CB	81	C
52	CB	82	A
52	CB	83	C
53	CC	6	G
53	CC	9	G
53	CC	16	C
53	CC	17	C
53	CC	18	C
53	CC	19	G
53	CC	20	G
53	CC	21	U
53	CC	22	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	CC	23	G
53	CC	38	A
53	CC	43	G
53	CC	47	G
53	CC	48	U
53	CC	49	C
53	CC	50	G
53	CC	51	U
53	CC	66	C
53	CC	68	C
53	CC	77	A
52	CD	5	G
52	CD	6	G
52	CD	8	U
52	CD	9	U
52	CD	10	C
52	CD	13	G
52	CD	14	A
52	CD	15	G
52	CD	17	G
52	CD	18	G
52	CD	19	C
52	CD	20	C
52	CD	21	A
52	CD	22	A
52	CD	23	A
52	CD	25	G
52	CD	30	A
52	CD	32	A
52	CD	44	C
52	CD	45	C
52	CD	46	G
52	CD	49	A
52	CD	50	U
52	CD	52	G
52	CD	53	A
52	CD	54	C
52	CD	55	U
52	CD	56	U
52	CD	58	G
52	CD	64	U
52	CD	67	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
52	CD	68	A
52	CD	69	U
52	CD	70	C
52	CD	85	A
54	C1	11	U
54	C1	12	A
54	C1	13	A
54	C1	14	A
54	C1	19	U
54	C1	20	G
54	C1	22	A
54	C1	23	A
1	DA	3	U
1	DA	5	A
1	DA	6	A
1	DA	10	G
1	DA	34	C
1	DA	36	G
1	DA	46	C
1	DA	47	C
1	DA	49	A
1	DA	50	U
1	DA	51	G
1	DA	53	A
1	DA	55	G
1	DA	58	G
1	DA	60	G
1	DA	61	G
1	DA	70	G
1	DA	71	A
1	DA	72	U
1	DA	74	A
1	DA	75	G
1	DA	78	A
1	DA	84	A
1	DA	90	U
1	DA	91	A
1	DA	93	C
1	DA	94	G
1	DA	95	G
1	DA	99	U
1	DA	102	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	DA	118	A
1	DA	119	A
1	DA	120	U
1	DA	121	G
1	DA	122	G
1	DA	129	C
1	DA	135	G
1	DA	138	G
1	DA	139	G
1	DA	140	A
1	DA	153	C
1	DA	154	G
1	DA	155	C
1	DA	172	C
1	DA	173	G
1	DA	174	C
1	DA	175	G
1	DA	196	A
1	DA	199	A
1	DA	200	U
1	DA	205	G
1	DA	206	U
1	DA	214	G
1	DA	215	G
1	DA	216	A
1	DA	221	A
1	DA	222	A
1	DA	228	A
1	DA	229	A
1	DA	233	A
1	DA	238	C
1	DA	248	G
1	DA	249	C
1	DA	252	G
1	DA	264	C
1	DA	270(K)	C
1	DA	270(L)	U
1	DA	270(M)	U
1	DA	270(O)	U
1	DA	270(Z)	U
1	DA	271(C)	U
1	DA	271	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	DA	273(B)	C
1	DA	273(D)	C
1	DA	274	G
1	DA	275	G
1	DA	276	A
1	DA	278	A
1	DA	279	C
1	DA	283	A
1	DA	287	C
1	DA	289	A
1	DA	298	G
1	DA	303	U
1	DA	311	A
1	DA	312	G
1	DA	324	A
1	DA	329	G
1	DA	330	A
1	DA	331	A
1	DA	342	G
1	DA	352	G
1	DA	354	G
1	DA	356	G
1	DA	357	A
1	DA	362	U
1	DA	363	G
1	DA	363(E)	U
1	DA	363(F)	A
1	DA	364	C
1	DA	372	G
1	DA	386	G
1	DA	395	U
1	DA	396	G
1	DA	405	U
1	DA	406	G
1	DA	411	G
1	DA	414	C
1	DA	427	U
1	DA	428	A
1	DA	443	A
1	DA	444	C
1	DA	448	U
1	DA	454	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	DA	455	C
1	DA	457	A
1	DA	470	A
1	DA	471	A
1	DA	481	G
1	DA	482	A
1	DA	488	G
1	DA	489	G
1	DA	494	G
1	DA	505	A
1	DA	508	G
1	DA	509	C
1	DA	512	G
1	DA	525	U
1	DA	528	A
1	DA	530	G
1	DA	531	C
1	DA	532	A
1	DA	533	G
1	DA	547	A
1	DA	549	G
1	DA	556	G
1	DA	562	U
1	DA	563	G
1	DA	573	G
1	DA	575	A
1	DA	593	G
1	DA	603	A
1	DA	607	U
1	DA	609(A)	G
1	DA	613	U
1	DA	614	U
1	DA	615	G
1	DA	617	G
1	DA	618	G
1	DA	619	G
1	DA	621	A
1	DA	622	G
1	DA	627	A
1	DA	634	C
1	DA	637	A
1	DA	644	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	DA	645	C
1	DA	646	A
1	DA	649	G
1	DA	651	G
1	DA	652	C
1	DA	654	A
1	DA	654(A)	A
1	DA	654(G)	C
1	DA	654(I)	C
1	DA	654(K)	C
1	DA	654(N)	G
1	DA	654(T)	A
1	DA	664	C
1	DA	669	G
1	DA	670	A
1	DA	686	G
1	DA	717	G
1	DA	720	C
1	DA	722	A
1	DA	730	C
1	DA	739	G
1	DA	740	U
1	DA	745	G
1	DA	746	A
1	DA	748	G
1	DA	749	C
1	DA	752	A
1	DA	753	C
1	DA	762	U
1	DA	776	G
1	DA	779	U
1	DA	782	A
1	DA	784	A
1	DA	785	G
1	DA	789	A
1	DA	790	C
1	DA	791	C
1	DA	792	G
1	DA	793	A
1	DA	797	C
1	DA	801	G
1	DA	805	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	DA	808	G
1	DA	812	C
1	DA	819	A
1	DA	827	U
1	DA	832	G
1	DA	846	C
1	DA	852	G
1	DA	856	C
1	DA	859	G
1	DA	870	A
1	DA	871	U
1	DA	878	A
1	DA	880	G
1	DA	882	G
1	DA	885	C
1	DA	886	C
1	DA	887	A
1	DA	888	C
1	DA	889	C
1	DA	890	A
1	DA	894	C
1	DA	896	A
1	DA	897	C
1	DA	898	C
1	DA	899	A
1	DA	900	A
1	DA	901	A
1	DA	902	C
1	DA	903	C
1	DA	904	C
1	DA	910	A
1	DA	915	C
1	DA	916	G
1	DA	917	A
1	DA	926	A
1	DA	932	G
1	DA	933	A
1	DA	934	G
1	DA	935	C
1	DA	941	A
1	DA	945	A
1	DA	946	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	DA	958	U
1	DA	959	A
1	DA	961	C
1	DA	972	G
1	DA	974	G
1	DA	976	C
1	DA	980	A
1	DA	983	A
1	DA	987	G
1	DA	989	G
1	DA	990	A
1	DA	991	C
1	DA	996	A
1	DA	998	C
1	DA	1005	C
1	DA	1012	U
1	DA	1013	C
1	DA	1016	G
1	DA	1022	G
1	DA	1023	U
1	DA	1024	G
1	DA	1025	G
1	DA	1026	U
1	DA	1028	A
1	DA	1029	A
1	DA	1031	G
1	DA	1034	G
1	DA	1044	G
1	DA	1045	A
1	DA	1048	A
1	DA	1050	A
1	DA	1051	G
1	DA	1054	A
1	DA	1059	G
1	DA	1060	U
1	DA	1061	U
1	DA	1065	U
1	DA	1067	A
1	DA	1068	G
1	DA	1070	A
1	DA	1071	G
1	DA	1076	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	DA	1085	A
1	DA	1086	A
1	DA	1087	G
1	DA	1088	A
1	DA	1089	G
1	DA	1090	U
1	DA	1091	G
1	DA	1095	A
1	DA	1096	A
1	DA	1099	G
1	DA	1111	A
1	DA	1112	G
1	DA	1122	G
1	DA	1128	A
1	DA	1129	A
1	DA	1135	C
1	DA	1136	G
1	DA	1137	G
1	DA	1139	G
1	DA	1141	U
1	DA	1142	U
1	DA	1142(A)	A
1	DA	1143	A
1	DA	1149	G
1	DA	1159	U
1	DA	1168	G
1	DA	1170	G
1	DA	1171	G
1	DA	1173	G
1	DA	1174	A
1	DA	1175	U
1	DA	1176	G
1	DA	1177	A
1	DA	1178	C
1	DA	1203	G
1	DA	1204	A
1	DA	1205	U
1	DA	1211	U
1	DA	1219	G
1	DA	1220	A
1	DA	1234	U
1	DA	1237	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	DA	1242	A
1	DA	1244	G
1	DA	1248	G
1	DA	1253	A
1	DA	1254	A
1	DA	1255	U
1	DA	1256	G
1	DA	1271	G
1	DA	1272	A
1	DA	1273	U
1	DA	1298	C
1	DA	1300	U
1	DA	1301	A
1	DA	1302	A
1	DA	1313	U
1	DA	1314	C
1	DA	1319	G
1	DA	1320	C
1	DA	1325	G
1	DA	1329	U
1	DA	1332	G
1	DA	1345	C
1	DA	1349	A
1	DA	1352	U
1	DA	1359	A
1	DA	1360	A
1	DA	1365	A
1	DA	1368	G
1	DA	1370	C
1	DA	1380	G
1	DA	1384	A
1	DA	1385	G
1	DA	1386	C
1	DA	1395	A
1	DA	1398	C
1	DA	1404	C
1	DA	1405	U
1	DA	1407	C
1	DA	1415	U
1	DA	1416	G
1	DA	1417	C
1	DA	1419	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	DA	1420	U
1	DA	1421	G
1	DA	1427	A
1	DA	1428	C
1	DA	1435	G
1	DA	1437	C
1	DA	1443	G
1	DA	1444(A)	A
1	DA	1445	C
1	DA	1449	A
1	DA	1449(A)	G
1	DA	1451	C
1	DA	1458	C
1	DA	1460	A
1	DA	1461	G
1	DA	1467	C
1	DA	1471	A
1	DA	1475	G
1	DA	1478	G
1	DA	1482	U
1	DA	1483	G
1	DA	1490	A
1	DA	1492	G
1	DA	1493	C
1	DA	1496	A
1	DA	1508	A
1	DA	1509	C
1	DA	1510	A
1	DA	1515	C
1	DA	1516	U
1	DA	1520	U
1	DA	1528	A
1	DA	1534	G
1	DA	1535	U
1	DA	1539	G
1	DA	1543	A
1	DA	1546	C
1	DA	1554	A
1	DA	1558	A
1	DA	1559	G
1	DA	1569	A
1	DA	1578	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	DA	1579	A
1	DA	1586	A
1	DA	1588	C
1	DA	1598	C
1	DA	1606	G
1	DA	1607	C
1	DA	1608	A
1	DA	1609	A
1	DA	1610	A
1	DA	1618	A
1	DA	1625	C
1	DA	1635	G
1	DA	1639	U
1	DA	1640	C
1	DA	1644	C
1	DA	1648	C
1	DA	1651	G
1	DA	1654	A
1	DA	1661	G
1	DA	1674	G
1	DA	1675	C
1	DA	1678	G
1	DA	1693	U
1	DA	1695	G
1	DA	1696	G
1	DA	1700	A
1	DA	1701	A
1	DA	1725	G
1	DA	1726	G
1	DA	1728	G
1	DA	1729	A
1	DA	1731	G
1	DA	1734	C
1	DA	1743	G
1	DA	1756	G
1	DA	1758	G
1	DA	1761	C
1	DA	1762	A
1	DA	1763	G
1	DA	1764	G
1	DA	1773	A
1	DA	1780	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	DA	1782	C
1	DA	1791	A
1	DA	1794	U
1	DA	1800	C
1	DA	1801	G
1	DA	1802	A
1	DA	1816	G
1	DA	1820	U
1	DA	1829	A
1	DA	1839	G
1	DA	1847	A
1	DA	1848	A
1	DA	1858	G
1	DA	1860	G
1	DA	1871	A
1	DA	1872	A
1	DA	1878	G
1	DA	1882	C
1	DA	1888	G
1	DA	1889	A
1	DA	1896	G
1	DA	1900	A
1	DA	1902	C
1	DA	1906	G
1	DA	1909	C
1	DA	1913	A
1	DA	1915	U
1	DA	1917	U
1	DA	1918	A
1	DA	1929	G
1	DA	1930	G
1	DA	1936	A
1	DA	1938	A
1	DA	1940	U
1	DA	1949	G
1	DA	1955	U
1	DA	1956	U
1	DA	1961	C
1	DA	1963	U
1	DA	1967	C
1	DA	1970	A
1	DA	1971	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	DA	1972	A
1	DA	1991	U
1	DA	1993	U
1	DA	2007	C
1	DA	2023	G
1	DA	2031	A
1	DA	2032	G
1	DA	2033	A
1	DA	2039	C
1	DA	2043	C
1	DA	2051	A
1	DA	2055	C
1	DA	2056	G
1	DA	2059	A
1	DA	2060	A
1	DA	2061	G
1	DA	2062	A
1	DA	2069	G
1	DA	2082	A
1	DA	2093	G
1	DA	2100	G
1	DA	2107	C
1	DA	2108	C
1	DA	2111	C
1	DA	2113	U
1	DA	2114	A
1	DA	2117	A
1	DA	2120	G
1	DA	2126	A
1	DA	2127	G
1	DA	2128	C
1	DA	2130	U
1	DA	2131	G
1	DA	2132	U
1	DA	2133	G
1	DA	2134	A
1	DA	2136	C
1	DA	2144	U
1	DA	2145	C
1	DA	2146	C
1	DA	2147	G
1	DA	2148	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	DA	2151	G
1	DA	2159	G
1	DA	2164	C
1	DA	2166	G
1	DA	2171	A
1	DA	2172	U
1	DA	2173	A
1	DA	2174	C
1	DA	2191	G
1	DA	2192	G
1	DA	2196	C
1	DA	2198	A
1	DA	2210	G
1	DA	2211	G
1	DA	2212	A
1	DA	2213	U
1	DA	2215	G
1	DA	2225	A
1	DA	2226	C
1	DA	2238	G
1	DA	2239	G
1	DA	2240	C
1	DA	2249	U
1	DA	2252	G
1	DA	2258	C
1	DA	2272	U
1	DA	2273	A
1	DA	2275	C
1	DA	2276	G
1	DA	2280	G
1	DA	2283	C
1	DA	2287	A
1	DA	2288	A
1	DA	2291	U
1	DA	2297	C
1	DA	2303	G
1	DA	2307	G
1	DA	2308	G
1	DA	2309	A
1	DA	2310	A
1	DA	2311	A
1	DA	2312	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	DA	2313	C
1	DA	2319	G
1	DA	2320	A
1	DA	2321	G
1	DA	2324	C
1	DA	2325	G
1	DA	2327	A
1	DA	2333	A
1	DA	2334	G
1	DA	2335	A
1	DA	2343	C
1	DA	2345	G
1	DA	2346	A
1	DA	2347	C
1	DA	2350	C
1	DA	2355	C
1	DA	2383	G
1	DA	2385	C
1	DA	2387	U
1	DA	2388	A
1	DA	2389	G
1	DA	2391	G
1	DA	2392	A
1	DA	2394	C
1	DA	2396	G
1	DA	2397	G
1	DA	2402	C
1	DA	2403	C
1	DA	2406	U
1	DA	2411	A
1	DA	2414	G
1	DA	2422	A
1	DA	2425	A
1	DA	2428	G
1	DA	2429	G
1	DA	2430	A
1	DA	2432	A
1	DA	2434	A
1	DA	2435	A
1	DA	2436	G
1	DA	2439	A
1	DA	2440	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	DA	2441	C
1	DA	2446	G
1	DA	2447	G
1	DA	2448	A
1	DA	2449	U
1	DA	2467	C
1	DA	2468	G
1	DA	2469	A
1	DA	2470	G
1	DA	2472	G
1	DA	2473	U
1	DA	2476	A
1	DA	2478	A
1	DA	2482	G
1	DA	2484	G
1	DA	2492	U
1	DA	2495	G
1	DA	2496	C
1	DA	2497	A
1	DA	2498	C
1	DA	2501	C
1	DA	2502	G
1	DA	2504	U
1	DA	2505	G
1	DA	2506	U
1	DA	2518	A
1	DA	2519	U
1	DA	2520	C
1	DA	2523	G
1	DA	2525	G
1	DA	2526	G
1	DA	2529	G
1	DA	2530	A
1	DA	2542	A
1	DA	2543	G
1	DA	2551	C
1	DA	2554	U
1	DA	2555	U
1	DA	2566	A
1	DA	2567	G
1	DA	2569	G
1	DA	2571	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	DA	2585	U
1	DA	2592	G
1	DA	2602	A
1	DA	2603	G
1	DA	2604	U
1	DA	2608	G
1	DA	2609	U
1	DA	2611	U
1	DA	2612	C
1	DA	2621	A
1	DA	2630	G
1	DA	2636	U
1	DA	2637	U
1	DA	2646	C
1	DA	2654	A
1	DA	2655	G
1	DA	2665	A
1	DA	2669	G
1	DA	2673	G
1	DA	2675	A
1	DA	2679	A
1	DA	2681	C
1	DA	2683	C
1	DA	2684	U
1	DA	2689	U
1	DA	2690	C
1	DA	2691	C
1	DA	2702	U
1	DA	2703	C
1	DA	2707	G
1	DA	2712(A)	A
1	DA	2713	A
1	DA	2714	G
1	DA	2726	U
1	DA	2733	A
1	DA	2744	G
1	DA	2748	A
1	DA	2750	A
1	DA	2751	G
1	DA	2752	C
1	DA	2757	A
1	DA	2758	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	DA	2761	G
1	DA	2762	G
1	DA	2763	G
1	DA	2766	G
1	DA	2777	G
1	DA	2778	A
1	DA	2779	U
1	DA	2780	G
1	DA	2781	A
1	DA	2789	C
1	DA	2791	C
1	DA	2797	U
1	DA	2798	C
1	DA	2801	A
1	DA	2808	U
1	DA	2818	G
1	DA	2820	A
1	DA	2821	A
1	DA	2833	G
1	DA	2834	G
1	DA	2844	G
1	DA	2845	G
1	DA	2860	A
1	DA	2872	G
1	DA	2873	A
1	DA	2893	G
1	DA	2894	G
1	DA	2896	C
1	DA	2897	U
2	DB	0	A
2	DB	8	U
2	DB	13	A
2	DB	15	A
2	DB	16	G
2	DB	24	G
2	DB	25	A
2	DB	30	C
2	DB	31	C
2	DB	32	C
2	DB	40	U
2	DB	41	U
2	DB	42	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	DB	43	C
2	DB	45	A
2	DB	52	A
2	DB	53	A
2	DB	56	G
2	DB	73	A
2	DB	75	G
2	DB	81	G
2	DB	82	G
2	DB	88	C
2	DB	89	G
2	DB	89(A)	A
2	DB	99	A
2	DB	105	G
2	DB	109	G

All (246) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	AA	125	G
1	AA	196	A
1	AA	222	A
1	AA	229	A
1	AA	270(M)	U
1	AA	270(O)	U
1	AA	271(B)	G
1	AA	404	C
1	AA	481	G
1	AA	504	U
1	AA	587	C
1	AA	746	A
1	AA	752	A
1	AA	800	A
1	AA	880	G
1	AA	945	A
1	AA	974	G
1	AA	974(A)	C
1	AA	1022	G
1	AA	1026	U
1	AA	1060	U
1	AA	1081	U
1	AA	1085	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1130	U
1	AA	1177	A
1	AA	1178	C
1	AA	1210	A
1	AA	1312	U
1	AA	1379	A
1	AA	1416	G
1	AA	1420	U
1	AA	1427	A
1	AA	1497	U
1	AA	1546	C
1	AA	1558	A
1	AA	1608	A
1	AA	1609	A
1	AA	1653	G
1	AA	1694	C
1	AA	1698	A
1	AA	1799	G
1	AA	1900	A
1	AA	1955	U
1	AA	1980	G
1	AA	1992	G
1	AA	2060	A
1	AA	2110	G
1	AA	2135	A
1	AA	2157	G
1	AA	2167	U
1	AA	2171	A
1	AA	2211	G
1	AA	2346	A
1	AA	2402	C
1	AA	2439	A
1	AA	2481	G
1	AA	2566	A
1	AA	2610	C
1	AA	2613	U
1	AA	2689	U
1	AA	2751	G
1	AA	2756	U
31	BA	31	G
31	BA	49	U
31	BA	50	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	BA	79	G
31	BA	115	G
31	BA	119	A
31	BA	173	U
31	BA	181	G
31	BA	210	U
31	BA	266	G
31	BA	353	A
31	BA	412	A
31	BA	429	U
31	BA	484	G
31	BA	495	A
31	BA	509	A
31	BA	530	G
31	BA	560	U
31	BA	687	A
31	BA	703	G
31	BA	748	C
31	BA	812	C
31	BA	820	U
31	BA	871	U
31	BA	913	A
31	BA	992	U
31	BA	1025	U
31	BA	1027	C
31	BA	1126	U
31	BA	1178	G
31	BA	1211	U
31	BA	1256	A
31	BA	1285	A
31	BA	1322	C
31	BA	1331	G
31	BA	1452	C
31	BA	1498	U
31	BA	1502	A
31	BA	1504	G
52	BB	3	U
52	BB	18	G
52	BB	19	C
52	BB	46	G
52	BB	75	C
53	BC	19	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	BC	47	G
53	BC	48	U
52	BD	17	G
52	BD	18	G
52	BD	21	A
52	BD	57	C
52	BD	67	A
54	B1	11	U
54	B1	13	A
31	CA	31	G
31	CA	64	G
31	CA	86	U
31	CA	89	U
31	CA	115	G
31	CA	197	A
31	CA	201	C
31	CA	209	U
31	CA	243	A
31	CA	250	A
31	CA	266	G
31	CA	327	A
31	CA	328	C
31	CA	345	C
31	CA	412	A
31	CA	429	U
31	CA	485	G
31	CA	509	A
31	CA	560	U
31	CA	631	G
31	CA	632	A
31	CA	686	U
31	CA	687	A
31	CA	723	U
31	CA	748	C
31	CA	812	C
31	CA	873	A
31	CA	913	A
31	CA	982	U
31	CA	991	U
31	CA	992	U
31	CA	1025	U
31	CA	1049	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	CA	1054	C
31	CA	1126	U
31	CA	1128	C
31	CA	1145	C
31	CA	1157	A
31	CA	1177	G
31	CA	1196	U
31	CA	1285	A
31	CA	1297	C
31	CA	1300	G
31	CA	1346	A
31	CA	1442	G
31	CA	1449	C
31	CA	1453	G
31	CA	1498	U
31	CA	1503	A
52	CB	3	U
52	CB	6	G
52	CB	18	G
52	CB	19	C
52	CB	46	G
52	CB	57	C
52	CB	75	C
52	CB	78	C
53	CC	19	G
53	CC	47	G
53	CC	48	U
52	CD	9	U
52	CD	17	G
52	CD	18	G
52	CD	21	A
52	CD	57	C
52	CD	67	A
54	C1	11	U
54	C1	12	A
54	C1	13	A
1	DA	49	A
1	DA	71	A
1	DA	128	C
1	DA	196	A
1	DA	204	A
1	DA	205	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	DA	278	A
1	DA	310	A
1	DA	654(S)	G
1	DA	669	G
1	DA	686	G
1	DA	752	A
1	DA	790	C
1	DA	800	A
1	DA	827	U
1	DA	877	U
1	DA	888	C
1	DA	893	C
1	DA	932	G
1	DA	1022	G
1	DA	1085	A
1	DA	1089	G
1	DA	1171	G
1	DA	1210	A
1	DA	1379	A
1	DA	1397	U
1	DA	1416	G
1	DA	1420	U
1	DA	1427	A
1	DA	1460	A
1	DA	1558	A
1	DA	1608	A
1	DA	1653	G
1	DA	1819	A
1	DA	1899	G
1	DA	1955	U
1	DA	1980	G
1	DA	1992	G
1	DA	2135	A
1	DA	2191	G
1	DA	2210	G
1	DA	2211	G
1	DA	2225	A
1	DA	2238	G
1	DA	2275	C
1	DA	2308	G
1	DA	2406	U
1	DA	2439	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	DA	2447	G
1	DA	2519	U
1	DA	2602	A
1	DA	2610	C
1	DA	2629	A
1	DA	2689	U
1	DA	2751	G
1	DA	2756	U
1	DA	2776	A
1	DA	2790	A
1	DA	2859	G
1	DA	2893	G
2	DB	88	C

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

4 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$
52	MIA	BB	38	52	29,31,32	1.69	3 (10%)	41,44,47	2.14	12 (29%)
52	MIA	BD	38	52	29,31,32	1.69	3 (10%)	41,44,47	2.61	10 (24%)
52	MIA	CB	38	52	29,31,32	1.85	5 (17%)	41,44,47	2.48	9 (21%)
52	MIA	CD	38	52	29,31,32	1.65	3 (10%)	41,44,47	2.50	10 (24%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
52	MIA	BB	38	52	-	0/16/33/34	0/3/3/3
52	MIA	BD	38	52	-	0/16/33/34	0/3/3/3
52	MIA	CB	38	52	-	0/16/33/34	0/3/3/3

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
52	MIA	CD	38	52	-	0/16/33/34	0/3/3/3

All (14) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
52	CB	38	MIA	C6-N6	7.19	1.47	1.34
52	BB	38	MIA	C6-N6	6.51	1.46	1.34
52	BD	38	MIA	C6-N6	6.46	1.46	1.34
52	CD	38	MIA	C6-N6	6.39	1.46	1.34
52	CB	38	MIA	P-OP1	5.19	1.52	1.46
52	BB	38	MIA	P-OP1	4.72	1.52	1.46
52	CD	38	MIA	P-OP1	4.22	1.51	1.46
52	BD	38	MIA	P-OP1	4.15	1.51	1.46
52	BD	38	MIA	C6-C5	-3.42	1.39	1.44
52	CD	38	MIA	C6-C5	-2.98	1.39	1.44
52	BB	38	MIA	C6-C5	-2.71	1.40	1.44
52	CB	38	MIA	C2-S10	2.26	1.77	1.75
52	CB	38	MIA	C6-C5	-2.02	1.41	1.44
52	CB	38	MIA	C6-N1	2.01	1.35	1.33

All (41) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
52	BD	38	MIA	C11-S10-C2	12.29	111.16	102.23
52	CD	38	MIA	C11-S10-C2	11.06	110.27	102.23
52	CB	38	MIA	C11-S10-C2	10.34	109.75	102.23
52	CB	38	MIA	C5-C4-N3	-6.82	118.22	126.07
52	BD	38	MIA	C5-C4-N3	-6.39	118.71	126.07
52	BB	38	MIA	C5-C4-N3	-6.17	118.96	126.07
52	CD	38	MIA	C5-C4-N3	-5.68	119.52	126.07
52	BB	38	MIA	C12-N6-C6	-5.51	116.15	123.33
52	BB	38	MIA	C11-S10-C2	5.50	106.23	102.23
52	CD	38	MIA	C12-N6-C6	-5.28	116.45	123.33
52	BD	38	MIA	N3-C4-N9	4.54	133.56	126.91
52	CD	38	MIA	N3-C4-N9	3.99	132.76	126.91
52	CB	38	MIA	N3-C4-N9	3.97	132.74	126.91
52	CB	38	MIA	C2-N3-C4	3.77	120.53	115.22
52	CB	38	MIA	C4-C5-N7	-3.71	105.82	109.41
52	BB	38	MIA	C4-C5-N7	-3.55	105.98	109.41
52	BD	38	MIA	C12-N6-C6	-3.49	118.79	123.33
52	BB	38	MIA	N3-C4-N9	3.33	131.79	126.91
52	BB	38	MIA	C2-N3-C4	3.03	119.49	115.22

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
52	BD	38	MIA	C6-C5-C4	2.88	120.75	117.48
52	BB	38	MIA	C5-C6-N6	2.85	125.30	120.40
52	BD	38	MIA	C2-N3-C4	2.83	119.21	115.22
52	CB	38	MIA	C6-C5-C4	2.82	120.69	117.48
52	CB	38	MIA	N3-C2-N1	-2.72	121.97	126.87
52	CD	38	MIA	C4-C5-N7	-2.70	106.80	109.41
52	CD	38	MIA	C2-N1-C6	2.68	121.27	113.31
52	CD	38	MIA	C2-N3-C4	2.55	118.81	115.22
52	CB	38	MIA	C2-N1-C6	2.49	120.70	113.31
52	CD	38	MIA	N3-C2-N1	-2.45	122.45	126.87
52	BB	38	MIA	N3-C2-N1	-2.44	122.46	126.87
52	BB	38	MIA	C2-N1-C6	2.42	120.49	113.31
52	CD	38	MIA	C5-C6-N1	-2.41	117.89	120.46
52	CB	38	MIA	C5-C6-N1	-2.40	117.91	120.46
52	BD	38	MIA	N6-C6-N1	2.38	121.46	118.63
52	BD	38	MIA	C4-C5-N7	-2.31	107.18	109.41
52	CD	38	MIA	C6-C5-C4	2.26	120.04	117.48
52	BD	38	MIA	C2-N1-C6	2.23	119.93	113.31
52	BB	38	MIA	C6-C5-C4	2.21	119.99	117.48
52	BB	38	MIA	C13-C12-N6	2.20	119.52	111.65
52	BD	38	MIA	N3-C2-N1	-2.13	123.03	126.87
52	BB	38	MIA	N6-C6-N1	-2.12	116.10	118.63

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

5.5 Carbohydrates

There are no carbohydrates in this entry.

5.6 Ligand geometry

Of 1619 ligands modelled in this entry, 907 are monoatomic - leaving 712 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	$\# Z > 2$
56	OHX	A1	203	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	A1	204	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	A3	102	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	A6	101	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3326	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3327	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3328	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3329	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3330	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3331	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3332	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3333	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3335	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3336	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3338	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3340	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3341	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3342	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3344	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3345	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3346	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3347	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3348	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3349	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3350	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3351	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3352	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3353	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3354	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3355	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3358	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3359	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3360	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3361	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3362	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3363	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3364	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3365	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3366	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3367	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
56	OHX	AA	3368	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3369	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3370	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3371	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3373	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3374	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3375	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3376	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3377	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3378	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3379	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3380	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3381	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3382	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3383	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3384	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3385	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3386	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3387	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3388	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3389	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3390	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3391	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3392	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3393	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3394	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3395	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3396	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3397	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3398	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3399	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3400	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3401	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3402	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3403	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3404	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3405	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3406	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3407	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3408	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3409	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3410	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3411	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
56	OHX	AA	3412	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3413	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3414	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3415	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3416	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3417	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3418	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3419	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3420	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3421	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3422	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3423	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3424	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3425	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3426	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3427	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3428	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3429	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3430	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3431	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3432	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3433	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3434	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3435	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3436	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3437	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3438	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3439	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3440	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3441	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3442	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3443	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3444	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3445	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3446	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3447	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3448	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3449	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3450	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3451	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3452	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3453	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3454	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
56	OHX	AA	3455	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3456	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3457	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3458	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3459	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3460	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3461	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3462	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3463	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3464	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3465	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3466	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3467	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3468	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3469	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3470	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3471	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3472	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3473	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3474	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3475	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3476	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3477	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3478	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3479	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3480	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3481	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3482	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3483	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3484	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3485	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3486	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3487	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3488	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3489	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3490	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3491	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3492	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3493	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3494	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3495	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3496	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3497	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
56	OHX	AA	3498	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3499	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3500	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3501	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3502	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3503	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3504	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3505	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3506	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3507	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3508	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3509	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3510	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3511	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3512	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3513	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3514	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3515	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3516	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3517	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3518	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3519	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3520	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3521	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3522	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3523	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3524	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3525	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3526	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3527	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3528	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3529	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3530	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3531	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3532	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3533	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3534	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3535	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3536	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3537	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3538	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3539	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3540	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
56	OHX	AA	3541	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3542	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3543	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3544	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3545	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3546	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3547	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3548	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3549	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3550	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3551	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3552	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3553	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3554	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3555	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3556	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3557	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3558	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3559	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3560	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3561	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3562	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3563	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3564	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3565	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3566	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3567	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3568	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AA	3569	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AB	207	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AB	208	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AB	209	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AB	210	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AB	211	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AB	212	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AB	213	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AB	214	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AB	215	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AB	216	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AB	217	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AB	218	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AB	219	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AE	304	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
56	OHX	AF	303	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AO	202	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AO	203	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	AW	101	-	0,6,6	0.00	-	0,15,15	0.00	-
57	PAR	BA	1715	-	45,45,45	0.68	1 (2%)	67,67,67	1.72	13 (19%)
56	OHX	BA	1716	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1717	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1718	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1719	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1720	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1721	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1722	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1723	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1724	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1725	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1726	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1727	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1728	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1729	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1730	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1731	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1732	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1733	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1734	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1735	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1736	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1737	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1738	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1739	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1740	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1741	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1742	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1743	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1744	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1745	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1746	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1747	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1748	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1749	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1750	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1751	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1752	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1753	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
56	OHX	BA	1754	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1755	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1756	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1757	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1758	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1759	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1760	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1761	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1762	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1763	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1764	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1765	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1766	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1767	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1768	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1769	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1770	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1771	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1772	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1773	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1774	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1775	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1776	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1777	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1778	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1779	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1780	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1781	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1782	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1783	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1784	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1785	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1786	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1787	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1788	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1789	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1790	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1791	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1792	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1793	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1794	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1795	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1796	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
56	OHX	BA	1797	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1798	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1799	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1800	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1801	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1802	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1803	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1804	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1805	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1806	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1807	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1808	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1809	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1810	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1811	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1812	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1813	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BA	1814	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BB	114	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BB	115	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BC	105	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BC	106	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BC	107	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BD	102	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BD	103	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BD	104	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BG	302	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BL	201	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	BR	101	-	0,6,6	0.00	-	0,15,15	0.00	-
57	PAR	CA	1722	-	45,45,45	0.68	0	67,67,67	1.82	15 (22%)
56	OHX	CA	1723	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1724	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1725	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1726	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1727	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1728	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1729	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1730	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1731	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1732	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1733	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1734	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1735	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
56	OHX	CA	1736	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1737	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1738	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1739	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1740	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1741	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1742	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1743	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1744	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1745	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1746	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1747	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1748	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1749	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1750	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1751	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1752	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1753	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1754	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1755	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1756	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1757	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1758	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1759	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1760	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1761	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1762	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1763	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1764	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1765	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1766	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1767	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1768	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1769	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1770	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1771	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1772	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1773	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1774	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1775	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1776	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1777	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1778	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
56	OHX	CA	1779	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1780	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1781	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1782	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1783	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1784	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1785	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1786	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1787	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1788	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1789	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1790	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1791	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1792	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1793	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1794	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1795	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1796	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1797	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1798	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1799	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1800	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1801	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1802	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1803	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1804	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1805	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1806	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1807	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1808	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1809	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1810	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1811	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1812	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1813	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1814	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CA	1815	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CB	104	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CB	105	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CB	106	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CC	108	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CC	109	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CC	110	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
56	OHX	CD	101	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CK	201	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CR	101	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	CV	101	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	D1	201	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	D3	101	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	D5	102	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	D8	101	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3061	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3062	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3064	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3065	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3068	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3071	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3073	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3075	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3081	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3082	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3083	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3084	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3087	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3091	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3094	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3099	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3103	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3105	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3109	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3111	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3118	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3124	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3127	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3132	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3134	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3136	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3157	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3159	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3160	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3162	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3163	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3165	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3166	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3168	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3169	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
56	OHX	DA	3170	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3171	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3172	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3173	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3174	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3176	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3212	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3214	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3215	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3217	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3218	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3220	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3221	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3223	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3224	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3226	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3243	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3245	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3246	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3248	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3249	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3251	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3253	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3254	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3255	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3257	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3258	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3335	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3336	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3337	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3338	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3339	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3340	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3341	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3342	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3343	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3344	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3345	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3346	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3347	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3348	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3349	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3350	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
56	OHX	DA	3351	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3352	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3353	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3354	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3355	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3356	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3357	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3358	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3359	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3360	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3361	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3362	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3363	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3364	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3365	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3366	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3367	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3368	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3369	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3370	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3371	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3372	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3373	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3374	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3375	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3376	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3377	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3378	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3379	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3380	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3381	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3382	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3383	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3384	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3385	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3386	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3387	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3388	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3389	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3390	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3391	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3392	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3393	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
56	OHX	DA	3394	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3395	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3396	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3397	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3398	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3399	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3400	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3401	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3402	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3403	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3404	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3405	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3406	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3407	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3408	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3409	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3410	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3411	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3412	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3413	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3414	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3415	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3416	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3417	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3418	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3419	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3420	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3421	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3422	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3423	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3424	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3425	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3426	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3427	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3428	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3429	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3430	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3431	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3432	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3433	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3434	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3435	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3436	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
56	OHX	DA	3437	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3438	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3439	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3440	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3441	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3442	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3443	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3444	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3445	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3446	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3447	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3448	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3449	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3450	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3451	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3452	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3453	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3454	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3455	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3456	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3457	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3458	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3459	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3460	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3461	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3462	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3463	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3464	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3465	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3466	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3467	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3468	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3469	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3470	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3471	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3472	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3473	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3474	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3475	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3476	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3477	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3478	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3479	-	0,6,6	0.00	-	0,15,15	0.00	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
56	OHX	DA	3480	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3481	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3482	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3483	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3484	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3485	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3486	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3487	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3488	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3489	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3490	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DA	3491	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DB	208	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DB	209	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DB	210	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DB	211	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DB	212	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DB	213	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DB	214	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DB	215	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DB	216	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DB	217	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DB	218	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DB	219	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DB	220	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DF	301	-	0,6,6	0.00	-	0,15,15	0.00	-
56	OHX	DO	201	-	0,6,6	0.00	-	0,15,15	0.00	-

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
56	OHX	A1	203	-	-	0/0/0/0	0/0/0/0
56	OHX	A1	204	-	-	0/0/0/0	0/0/0/0
56	OHX	A3	102	-	-	0/0/0/0	0/0/0/0
56	OHX	A6	101	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3326	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3327	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3328	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3329	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3330	-	-	0/0/0/0	0/0/0/0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	OHX	AA	3331	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3332	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3333	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3335	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3336	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3338	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3340	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3341	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3342	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3344	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3345	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3346	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3347	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3348	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3349	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3350	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3351	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3352	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3353	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3354	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3355	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3358	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3359	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3360	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3361	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3362	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3363	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3364	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3365	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3366	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3367	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3368	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3369	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3370	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3371	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3373	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3374	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3375	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3376	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3377	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3378	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3379	-	-	0/0/0/0	0/0/0/0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	OHX	AA	3380	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3381	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3382	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3383	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3384	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3385	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3386	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3387	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3388	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3389	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3390	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3391	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3392	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3393	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3394	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3395	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3396	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3397	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3398	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3399	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3400	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3401	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3402	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3403	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3404	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3405	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3406	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3407	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3408	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3409	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3410	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3411	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3412	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3413	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3414	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3415	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3416	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3417	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3418	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3419	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3420	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3421	-	-	0/0/0/0	0/0/0/0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	OHX	AA	3422	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3423	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3424	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3425	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3426	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3427	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3428	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3429	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3430	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3431	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3432	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3433	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3434	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3435	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3436	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3437	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3438	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3439	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3440	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3441	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3442	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3443	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3444	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3445	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3446	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3447	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3448	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3449	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3450	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3451	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3452	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3453	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3454	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3455	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3456	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3457	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3458	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3459	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3460	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3461	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3462	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3463	-	-	0/0/0/0	0/0/0/0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	OHX	AA	3464	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3465	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3466	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3467	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3468	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3469	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3470	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3471	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3472	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3473	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3474	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3475	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3476	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3477	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3478	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3479	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3480	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3481	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3482	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3483	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3484	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3485	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3486	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3487	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3488	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3489	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3490	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3491	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3492	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3493	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3494	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3495	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3496	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3497	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3498	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3499	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3500	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3501	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3502	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3503	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3504	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3505	-	-	0/0/0/0	0/0/0/0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	OHX	AA	3506	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3507	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3508	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3509	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3510	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3511	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3512	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3513	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3514	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3515	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3516	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3517	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3518	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3519	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3520	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3521	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3522	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3523	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3524	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3525	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3526	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3527	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3528	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3529	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3530	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3531	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3532	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3533	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3534	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3535	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3536	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3537	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3538	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3539	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3540	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3541	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3542	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3543	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3544	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3545	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3546	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3547	-	-	0/0/0/0	0/0/0/0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	OHX	AA	3548	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3549	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3550	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3551	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3552	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3553	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3554	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3555	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3556	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3557	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3558	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3559	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3560	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3561	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3562	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3563	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3564	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3565	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3566	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3567	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3568	-	-	0/0/0/0	0/0/0/0
56	OHX	AA	3569	-	-	0/0/0/0	0/0/0/0
56	OHX	AB	207	-	-	0/0/0/0	0/0/0/0
56	OHX	AB	208	-	-	0/0/0/0	0/0/0/0
56	OHX	AB	209	-	-	0/0/0/0	0/0/0/0
56	OHX	AB	210	-	-	0/0/0/0	0/0/0/0
56	OHX	AB	211	-	-	0/0/0/0	0/0/0/0
56	OHX	AB	212	-	-	0/0/0/0	0/0/0/0
56	OHX	AB	213	-	-	0/0/0/0	0/0/0/0
56	OHX	AB	214	-	-	0/0/0/0	0/0/0/0
56	OHX	AB	215	-	-	0/0/0/0	0/0/0/0
56	OHX	AB	216	-	-	0/0/0/0	0/0/0/0
56	OHX	AB	217	-	-	0/0/0/0	0/0/0/0
56	OHX	AB	218	-	-	0/0/0/0	0/0/0/0
56	OHX	AB	219	-	-	0/0/0/0	0/0/0/0
56	OHX	AE	304	-	-	0/0/0/0	0/0/0/0
56	OHX	AF	303	-	-	0/0/0/0	0/0/0/0
56	OHX	AO	202	-	-	0/0/0/0	0/0/0/0
56	OHX	AO	203	-	-	0/0/0/0	0/0/0/0
56	OHX	AW	101	-	-	0/0/0/0	0/0/0/0
57	PAR	BA	1715	-	-	0/18/94/94	0/4/4/4
56	OHX	BA	1716	-	-	0/0/0/0	0/0/0/0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	OHX	BA	1717	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1718	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1719	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1720	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1721	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1722	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1723	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1724	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1725	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1726	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1727	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1728	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1729	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1730	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1731	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1732	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1733	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1734	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1735	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1736	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1737	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1738	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1739	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1740	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1741	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1742	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1743	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1744	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1745	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1746	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1747	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1748	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1749	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1750	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1751	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1752	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1753	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1754	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1755	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1756	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1757	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1758	-	-	0/0/0/0	0/0/0/0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	OHX	BA	1759	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1760	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1761	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1762	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1763	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1764	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1765	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1766	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1767	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1768	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1769	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1770	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1771	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1772	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1773	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1774	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1775	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1776	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1777	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1778	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1779	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1780	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1781	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1782	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1783	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1784	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1785	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1786	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1787	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1788	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1789	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1790	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1791	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1792	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1793	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1794	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1795	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1796	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1797	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1798	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1799	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1800	-	-	0/0/0/0	0/0/0/0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	OHX	BA	1801	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1802	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1803	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1804	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1805	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1806	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1807	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1808	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1809	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1810	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1811	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1812	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1813	-	-	0/0/0/0	0/0/0/0
56	OHX	BA	1814	-	-	0/0/0/0	0/0/0/0
56	OHX	BB	114	-	-	0/0/0/0	0/0/0/0
56	OHX	BB	115	-	-	0/0/0/0	0/0/0/0
56	OHX	BC	105	-	-	0/0/0/0	0/0/0/0
56	OHX	BC	106	-	-	0/0/0/0	0/0/0/0
56	OHX	BC	107	-	-	0/0/0/0	0/0/0/0
56	OHX	BD	102	-	-	0/0/0/0	0/0/0/0
56	OHX	BD	103	-	-	0/0/0/0	0/0/0/0
56	OHX	BD	104	-	-	0/0/0/0	0/0/0/0
56	OHX	BG	302	-	-	0/0/0/0	0/0/0/0
56	OHX	BL	201	-	-	0/0/0/0	0/0/0/0
56	OHX	BR	101	-	-	0/0/0/0	0/0/0/0
57	PAR	CA	1722	-	-	0/18/94/94	0/4/4/4
56	OHX	CA	1723	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1724	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1725	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1726	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1727	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1728	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1729	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1730	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1731	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1732	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1733	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1734	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1735	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1736	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1737	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1738	-	-	0/0/0/0	0/0/0/0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	OHX	CA	1739	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1740	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1741	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1742	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1743	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1744	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1745	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1746	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1747	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1748	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1749	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1750	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1751	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1752	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1753	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1754	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1755	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1756	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1757	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1758	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1759	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1760	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1761	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1762	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1763	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1764	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1765	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1766	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1767	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1768	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1769	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1770	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1771	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1772	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1773	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1774	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1775	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1776	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1777	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1778	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1779	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1780	-	-	0/0/0/0	0/0/0/0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	OHX	CA	1781	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1782	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1783	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1784	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1785	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1786	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1787	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1788	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1789	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1790	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1791	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1792	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1793	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1794	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1795	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1796	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1797	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1798	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1799	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1800	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1801	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1802	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1803	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1804	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1805	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1806	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1807	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1808	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1809	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1810	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1811	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1812	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1813	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1814	-	-	0/0/0/0	0/0/0/0
56	OHX	CA	1815	-	-	0/0/0/0	0/0/0/0
56	OHX	CB	104	-	-	0/0/0/0	0/0/0/0
56	OHX	CB	105	-	-	0/0/0/0	0/0/0/0
56	OHX	CB	106	-	-	0/0/0/0	0/0/0/0
56	OHX	CC	108	-	-	0/0/0/0	0/0/0/0
56	OHX	CC	109	-	-	0/0/0/0	0/0/0/0
56	OHX	CC	110	-	-	0/0/0/0	0/0/0/0
56	OHX	CD	101	-	-	0/0/0/0	0/0/0/0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	OHX	CK	201	-	-	0/0/0/0	0/0/0/0
56	OHX	CR	101	-	-	0/0/0/0	0/0/0/0
56	OHX	CV	101	-	-	0/0/0/0	0/0/0/0
56	OHX	D1	201	-	-	0/0/0/0	0/0/0/0
56	OHX	D3	101	-	-	0/0/0/0	0/0/0/0
56	OHX	D5	102	-	-	0/0/0/0	0/0/0/0
56	OHX	D8	101	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3061	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3062	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3064	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3065	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3068	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3071	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3073	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3075	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3081	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3082	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3083	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3084	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3087	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3091	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3094	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3099	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3103	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3105	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3109	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3111	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3118	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3124	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3127	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3132	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3134	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3136	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3157	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3159	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3160	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3162	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3163	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3165	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3166	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3168	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3169	-	-	0/0/0/0	0/0/0/0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	OHX	DA	3170	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3171	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3172	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3173	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3174	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3176	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3212	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3214	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3215	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3217	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3218	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3220	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3221	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3223	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3224	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3226	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3243	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3245	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3246	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3248	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3249	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3251	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3253	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3254	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3255	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3257	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3258	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3335	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3336	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3337	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3338	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3339	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3340	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3341	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3342	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3343	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3344	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3345	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3346	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3347	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3348	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3349	-	-	0/0/0/0	0/0/0/0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	OHX	DA	3350	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3351	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3352	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3353	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3354	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3355	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3356	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3357	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3358	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3359	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3360	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3361	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3362	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3363	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3364	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3365	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3366	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3367	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3368	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3369	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3370	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3371	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3372	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3373	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3374	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3375	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3376	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3377	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3378	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3379	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3380	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3381	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3382	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3383	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3384	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3385	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3386	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3387	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3388	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3389	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3390	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3391	-	-	0/0/0/0	0/0/0/0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	OHX	DA	3392	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3393	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3394	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3395	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3396	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3397	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3398	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3399	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3400	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3401	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3402	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3403	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3404	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3405	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3406	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3407	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3408	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3409	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3410	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3411	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3412	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3413	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3414	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3415	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3416	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3417	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3418	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3419	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3420	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3421	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3422	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3423	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3424	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3425	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3426	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3427	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3428	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3429	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3430	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3431	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3432	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3433	-	-	0/0/0/0	0/0/0/0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	OHX	DA	3434	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3435	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3436	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3437	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3438	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3439	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3440	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3441	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3442	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3443	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3444	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3445	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3446	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3447	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3448	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3449	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3450	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3451	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3452	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3453	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3454	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3455	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3456	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3457	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3458	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3459	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3460	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3461	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3462	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3463	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3464	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3465	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3466	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3467	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3468	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3469	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3470	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3471	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3472	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3473	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3474	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3475	-	-	0/0/0/0	0/0/0/0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
56	OHX	DA	3476	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3477	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3478	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3479	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3480	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3481	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3482	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3483	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3484	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3485	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3486	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3487	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3488	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3489	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3490	-	-	0/0/0/0	0/0/0/0
56	OHX	DA	3491	-	-	0/0/0/0	0/0/0/0
56	OHX	DB	208	-	-	0/0/0/0	0/0/0/0
56	OHX	DB	209	-	-	0/0/0/0	0/0/0/0
56	OHX	DB	210	-	-	0/0/0/0	0/0/0/0
56	OHX	DB	211	-	-	0/0/0/0	0/0/0/0
56	OHX	DB	212	-	-	0/0/0/0	0/0/0/0
56	OHX	DB	213	-	-	0/0/0/0	0/0/0/0
56	OHX	DB	214	-	-	0/0/0/0	0/0/0/0
56	OHX	DB	215	-	-	0/0/0/0	0/0/0/0
56	OHX	DB	216	-	-	0/0/0/0	0/0/0/0
56	OHX	DB	217	-	-	0/0/0/0	0/0/0/0
56	OHX	DB	218	-	-	0/0/0/0	0/0/0/0
56	OHX	DB	219	-	-	0/0/0/0	0/0/0/0
56	OHX	DB	220	-	-	0/0/0/0	0/0/0/0
56	OHX	DF	301	-	-	0/0/0/0	0/0/0/0
56	OHX	DO	201	-	-	0/0/0/0	0/0/0/0

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BA	1715	PAR	C21-N21	-2.16	1.43	1.47

All (28) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	CA	1722	PAR	C11-O51-C51	5.09	123.58	113.73
57	CA	1722	PAR	C62-C12-N12	-4.40	102.59	110.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	CA	1722	PAR	C13-O52-C52	-4.34	106.98	118.00
57	BA	1715	PAR	C11-O51-C51	4.32	122.08	113.73
57	CA	1722	PAR	C41-C31-C21	-4.14	104.22	111.39
57	BA	1715	PAR	C44-C34-C24	4.10	118.49	111.39
57	BA	1715	PAR	O54-C54-C64	3.90	113.39	105.97
57	BA	1715	PAR	O34-C34-C24	-3.81	103.53	110.12
57	CA	1722	PAR	O62-C62-C12	-3.78	102.77	109.86
57	CA	1722	PAR	C22-C12-C62	3.55	115.53	110.13
57	CA	1722	PAR	O52-C13-C23	3.52	113.78	107.50
57	BA	1715	PAR	C32-C22-C12	-3.26	104.47	111.59
57	BA	1715	PAR	O51-C51-C41	3.22	115.71	109.73
57	BA	1715	PAR	O52-C13-C23	3.20	113.22	107.50
57	BA	1715	PAR	O52-C13-O43	-3.15	108.53	111.57
57	BA	1715	PAR	C31-C21-N21	-3.00	105.08	111.00
57	CA	1722	PAR	C14-O33-C33	-3.00	110.39	118.00
57	BA	1715	PAR	C14-O54-C54	2.92	119.38	113.73
57	CA	1722	PAR	C62-C52-C42	2.78	117.50	111.43
57	CA	1722	PAR	C44-C34-C24	2.72	116.11	111.39
57	CA	1722	PAR	C14-O54-C54	2.68	118.92	113.73
57	CA	1722	PAR	O51-C51-C41	2.55	114.48	109.73
57	CA	1722	PAR	C52-C62-C12	2.51	116.45	109.53
57	CA	1722	PAR	O62-C62-C52	2.39	115.47	109.86
57	CA	1722	PAR	O54-C54-C64	2.32	110.39	105.97
57	BA	1715	PAR	C13-O52-C52	-2.27	112.24	118.00
57	BA	1715	PAR	C14-C24-C34	2.24	116.34	109.99
57	BA	1715	PAR	O54-C54-C44	-2.07	105.89	109.73

There are no chirality outliers.

There are no torsion outliers.

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	2912/2912 (100%)	-0.48	25 (0%) 81 37	44, 79, 216, 250	0
1	DA	2907/2912 (99%)	-0.42	26 (0%) 81 37	56, 94, 236, 252	0
2	AB	122/122 (100%)	-0.65	1 (0%) 83 39	77, 99, 118, 184	0
2	DB	122/122 (100%)	-0.56	1 (0%) 83 39	98, 129, 153, 204	0
3	AD	272/276 (98%)	-0.00	0 100 100	42, 67, 88, 106	0
3	DD	272/276 (98%)	0.13	1 (0%) 90 57	52, 78, 98, 130	0
4	AE	205/206 (99%)	0.05	3 (1%) 70 24	54, 90, 135, 147	0
4	DE	205/206 (99%)	0.10	2 (0%) 79 33	61, 102, 153, 167	0
5	AF	202/210 (96%)	-0.14	0 100 100	49, 84, 121, 136	0
5	DF	208/210 (99%)	0.22	6 (2%) 49 12	63, 108, 164, 189	0
6	AG	181/182 (99%)	0.24	5 (2%) 50 12	90, 112, 143, 155	0
6	DG	181/182 (99%)	0.48	8 (4%) 33 7	122, 146, 169, 175	0
7	AH	170/180 (94%)	0.04	0 100 100	89, 116, 133, 162	0
7	DH	170/180 (94%)	0.50	6 (3%) 42 10	162, 204, 226, 236	0
8	AK	146/148 (98%)	0.07	0 100 100	79, 134, 153, 155	0
8	DK	146/148 (98%)	0.11	3 (2%) 60 17	88, 135, 157, 163	0
9	AM	138/140 (98%)	0.16	1 (0%) 84 42	68, 92, 129, 141	0
9	DM	138/140 (98%)	-0.03	1 (0%) 84 42	83, 117, 146, 159	0
10	AN	122/122 (100%)	0.22	0 100 100	61, 79, 96, 107	0
10	DN	122/122 (100%)	0.34	0 100 100	75, 97, 114, 124	0
11	AO	150/150 (100%)	0.04	1 (0%) 84 42	46, 93, 120, 166	0
11	DO	150/150 (100%)	0.64	11 (7%) 15 4	45, 106, 147, 183	0
12	AP	141/141 (100%)	0.27	9 (6%) 19 5	58, 86, 108, 136	0
12	DP	141/141 (100%)	0.59	9 (6%) 19 5	58, 111, 143, 164	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	A0	118/118 (100%)	-0.03	0 100 100	57, 86, 110, 118	0
13	D0	117/118 (99%)	-0.18	0 100 100	68, 89, 109, 124	0
14	AQ	111/112 (99%)	-0.15	1 (0%) 81 37	67, 97, 120, 133	0
14	DQ	111/112 (99%)	-0.17	0 100 100	85, 126, 150, 162	0
15	AR	137/146 (93%)	0.15	1 (0%) 84 42	75, 96, 149, 175	0
15	DR	137/146 (93%)	0.57	9 (6%) 18 4	81, 106, 168, 189	0
16	A1	117/118 (99%)	-0.12	1 (0%) 81 37	58, 81, 110, 142	0
16	D1	117/118 (99%)	0.14	1 (0%) 81 37	71, 109, 145, 167	0
17	A2	101/101 (100%)	0.16	3 (2%) 48 11	51, 104, 126, 143	0
17	D2	101/101 (100%)	0.49	6 (5%) 22 5	65, 134, 147, 155	0
18	AS	113/113 (100%)	0.10	1 (0%) 81 37	61, 77, 108, 161	0
18	DS	113/113 (100%)	0.16	2 (1%) 65 20	66, 82, 116, 162	0
19	AT	92/96 (95%)	-0.12	0 100 100	59, 73, 99, 111	0
19	DT	92/96 (95%)	0.12	1 (1%) 77 30	74, 92, 117, 133	0
20	AU	102/110 (92%)	0.43	4 (3%) 37 8	79, 105, 156, 168	0
20	DU	102/110 (92%)	0.55	16 (15%) 3 1	97, 122, 169, 185	0
21	AV	175/206 (84%)	1.20	33 (18%) 2 1	90, 131, 195, 198	0
21	DV	179/206 (86%)	1.40	45 (25%) 1 1	127, 165, 214, 226	0
22	A3	76/85 (89%)	0.09	1 (1%) 74 27	65, 78, 95, 130	0
22	D3	77/85 (90%)	0.28	1 (1%) 74 27	78, 97, 119, 152	0
23	AZ	97/98 (98%)	-0.08	0 100 100	59, 79, 131, 161	0
23	DZ	97/98 (98%)	0.05	1 (1%) 79 33	69, 89, 136, 157	0
24	AW	66/72 (91%)	-0.07	1 (1%) 70 24	63, 87, 103, 128	0
24	DW	66/72 (91%)	0.14	2 (3%) 48 11	88, 112, 132, 142	0
25	AX	59/60 (98%)	-0.27	0 100 100	66, 86, 119, 134	0
25	DX	59/60 (98%)	0.19	1 (1%) 67 21	87, 113, 146, 167	0
26	A4	66/71 (92%)	1.11	12 (18%) 2 1	130, 162, 180, 188	0
26	D4	63/71 (88%)	1.93	28 (44%) 1 0	149, 192, 200, 204	0
27	A5	59/60 (98%)	0.27	5 (8%) 11 3	54, 95, 172, 174	0
27	D5	59/60 (98%)	0.29	5 (8%) 11 3	61, 96, 179, 195	0
28	A6	45/54 (83%)	5.10	45 (100%) 0 0	129, 159, 174, 182	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
28	D6	45/54 (83%)	4.26	38 (84%) 0 0	146, 174, 190, 192	0
29	A7	45/49 (91%)	0.06	0 100 100	46, 55, 72, 78	0
29	D7	45/49 (91%)	0.11	0 100 100	56, 66, 79, 96	0
30	A8	60/65 (92%)	0.30	2 (3%) 44 10	56, 74, 97, 120	0
30	D8	60/65 (92%)	0.82	3 (5%) 28 6	75, 91, 113, 138	0
31	BA	1502/1506 (99%)	-0.63	3 (0%) 93 70	58, 111, 193, 251	0
31	CA	1502/1506 (99%)	-0.64	2 (0%) 93 77	69, 122, 195, 251	0
32	BE	237/256 (92%)	0.25	7 (2%) 48 11	117, 150, 188, 200	0
32	CE	237/256 (92%)	0.57	18 (7%) 14 4	128, 166, 201, 216	0
33	BF	205/239 (85%)	0.31	7 (3%) 43 10	95, 124, 157, 167	0
33	CF	206/239 (86%)	0.58	13 (6%) 19 5	130, 151, 179, 185	0
34	BG	208/208 (100%)	-0.19	0 100 100	95, 119, 141, 152	0
34	CG	208/208 (100%)	-0.01	1 (0%) 88 51	94, 114, 136, 151	0
35	BH	151/162 (93%)	-0.07	1 (0%) 84 42	81, 109, 130, 166	0
35	CH	151/162 (93%)	0.11	1 (0%) 84 42	106, 124, 148, 171	0
36	BI	101/101 (100%)	0.51	4 (3%) 36 8	86, 111, 127, 152	0
36	CI	101/101 (100%)	-0.08	0 100 100	83, 108, 131, 149	0
37	BJ	155/156 (99%)	0.30	9 (5%) 22 5	109, 127, 154, 167	0
37	CJ	155/156 (99%)	0.05	1 (0%) 86 46	120, 136, 159, 167	0
38	BK	138/138 (100%)	-0.25	0 100 100	90, 115, 128, 133	0
38	CK	138/138 (100%)	-0.00	0 100 100	105, 129, 141, 151	0
39	BL	127/128 (99%)	-0.17	0 100 100	98, 148, 166, 173	0
39	CL	127/128 (99%)	-0.13	5 (3%) 37 8	118, 160, 175, 179	0
40	BM	99/105 (94%)	0.34	1 (1%) 79 33	93, 149, 177, 178	0
40	CM	99/105 (94%)	0.11	2 (2%) 62 19	128, 165, 180, 184	0
41	BN	119/129 (92%)	0.53	5 (4%) 35 8	81, 109, 138, 167	0
41	CN	119/129 (92%)	0.94	16 (13%) 4 2	89, 116, 144, 172	0
42	BO	125/132 (94%)	0.24	4 (3%) 45 11	73, 86, 118, 162	0
42	CO	125/132 (94%)	0.41	5 (4%) 36 8	91, 113, 138, 172	0
43	BP	116/126 (92%)	-0.07	1 (0%) 81 37	97, 135, 151, 157	0
43	CP	117/126 (92%)	0.02	2 (1%) 67 21	108, 162, 175, 177	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
44	BQ	58/61 (95%)	-0.14	0 100 100	96, 113, 128, 134	0
44	CQ	58/61 (95%)	0.64	3 (5%) 26 6	132, 145, 162, 167	0
45	BR	88/89 (98%)	0.09	0 100 100	81, 103, 125, 130	0
45	CR	88/89 (98%)	0.20	1 (1%) 77 30	88, 116, 138, 145	0
46	BS	84/88 (95%)	0.28	0 100 100	105, 122, 147, 180	0
46	CS	84/88 (95%)	0.10	0 100 100	96, 108, 131, 164	0
47	BT	100/105 (95%)	0.09	1 (1%) 79 33	95, 114, 128, 135	0
47	CT	100/105 (95%)	0.22	3 (3%) 48 11	96, 117, 138, 149	0
48	BU	72/88 (81%)	0.45	3 (4%) 35 8	94, 111, 147, 169	0
48	CU	72/88 (81%)	0.47	8 (11%) 6 2	98, 120, 160, 178	0
49	BV	78/93 (83%)	-0.03	1 (1%) 74 27	113, 135, 155, 159	0
49	CV	78/93 (83%)	0.25	3 (3%) 38 9	146, 170, 187, 192	0
50	BW	99/106 (93%)	-0.26	0 100 100	113, 129, 159, 167	0
50	CW	99/106 (93%)	0.03	1 (1%) 79 33	100, 122, 157, 170	0
51	BX	25/27 (92%)	-0.29	0 100 100	110, 123, 139, 157	0
51	CX	25/27 (92%)	-0.02	0 100 100	126, 148, 165, 175	0
52	BB	84/85 (98%)	2.06	35 (41%) 1 0	98, 138, 163, 176	0
52	BD	84/85 (98%)	0.28	7 (8%) 11 3	78, 144, 223, 233	0
52	CB	84/85 (98%)	3.57	60 (71%) 0 0	113, 143, 166, 176	0
52	CD	84/85 (98%)	-0.30	0 100 100	86, 144, 222, 230	0
53	BC	77/77 (100%)	-0.30	1 (1%) 74 27	82, 117, 146, 159	0
53	CC	77/77 (100%)	-0.30	1 (1%) 74 27	92, 127, 156, 164	0
54	B1	16/16 (100%)	0.79	2 (12%) 5 2	81, 117, 161, 169	0
54	C1	16/16 (100%)	1.08	3 (18%) 2 1	90, 122, 168, 176	0
All	All	21100/21658 (97%)	-0.06	629 (2%) 48 11	42, 108, 188, 252	0

All (629) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	AA	2901	C	11.6
1	DA	2901	C	11.0
52	CB	52	G	10.6
52	CB	80	C	10.5
28	A6	18	ARG	10.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
28	D6	25	LYS	9.9
52	CB	16	C	9.6
1	AA	1536	A	9.4
5	DF	1	MET	9.3
52	CB	51	C	9.0
52	CB	79	A	8.5
1	AA	2902	C	8.5
28	D6	13	CYS	8.4
28	D6	12	GLU	8.2
52	BB	85	A	8.1
52	CB	18	G	8.0
52	CB	53	A	8.0
28	A6	29	ASN	7.9
1	DA	654(I)	C	7.9
52	BB	16	C	7.9
52	BB	14	A	7.8
52	CB	1	G	7.7
28	A6	43	CYS	7.6
28	A6	21	TYR	7.5
52	CB	17	G	7.4
52	CB	49	A	7.3
42	BO	129	ALA	7.3
1	DA	2902	C	7.2
28	A6	49	HIS	7.0
27	A5	2	ALA	7.0
28	A6	13	CYS	7.0
28	A6	30	THR	7.0
52	CB	50	U	6.9
18	DS	113	LYS	6.9
28	D6	28	ARG	6.9
1	AA	2799	A	6.8
28	A6	31	PRO	6.8
52	CB	78	C	6.7
28	D6	27	LYS	6.7
4	DE	205	ALA	6.7
26	D4	55	ARG	6.7
28	A6	34	LEU	6.7
52	CB	47	U	6.6
28	D6	26	ASN	6.6
28	D6	50	ARG	6.5
52	CB	85	A	6.4
28	D6	16	CYS	6.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
28	A6	19	ARG	6.4
28	A6	45	LYS	6.4
28	D6	21	TYR	6.4
48	CU	88	LYS	6.4
28	D6	22	ALA	6.3
52	CB	15	G	6.2
1	AA	654(J)	A	6.1
28	A6	51	GLU	6.1
1	AA	654(K)	C	6.0
28	A6	22	ALA	5.9
54	B1	25	A	5.9
54	C1	25	A	5.9
28	A6	50	ARG	5.9
52	BB	15	G	5.8
28	D6	9	LEU	5.8
1	AA	2900	A	5.8
21	DV	107	THR	5.8
21	DV	144	LEU	5.8
1	DA	654(K)	C	5.7
48	BU	88	LYS	5.6
28	D6	43	CYS	5.6
1	DA	2	G	5.6
28	D6	51	GLU	5.6
52	CB	46	G	5.6
28	A6	42	TRP	5.6
28	A6	35	GLU	5.5
21	DV	151	HIS	5.5
1	DA	2900	A	5.5
21	DV	146	ILE	5.5
27	D5	58	LEU	5.5
28	D6	30	THR	5.5
11	DO	150	ALA	5.5
28	A6	47	THR	5.4
21	DV	117	LEU	5.4
21	DV	147	GLY	5.4
27	D5	59	GLU	5.4
41	BN	11	LYS	5.4
21	DV	112	ARG	5.3
52	BB	80	C	5.3
52	BB	82	A	5.3
41	BN	12	ARG	5.3
28	A6	28	ARG	5.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
28	A6	25	LYS	5.2
1	DA	654(J)	A	5.2
21	DV	138	GLU	5.1
28	A6	15	GLU	5.1
28	D6	53	LYS	5.1
52	CB	24	G	5.1
28	D6	52	VAL	5.0
52	CB	82	A	5.0
28	D6	42	TRP	5.0
28	D6	31	PRO	5.0
28	A6	46	HIS	5.0
48	CU	87	ARG	5.0
20	DU	50	ARG	5.0
28	A6	40	CYS	5.0
20	AU	102	CYS	4.9
21	DV	121	HIS	4.9
1	AA	4	C	4.9
1	DA	2899	G	4.9
1	AA	2899	G	4.9
26	D4	29	PRO	4.9
11	DO	149	GLU	4.9
52	CB	48	C	4.9
21	AV	1	MET	4.8
20	DU	49	VAL	4.8
52	CB	66	G	4.8
28	D6	23	THR	4.8
28	A6	14	THR	4.8
52	CB	3	U	4.8
1	DA	1	G	4.8
28	A6	33	LYS	4.8
52	BB	78	C	4.7
52	CB	81	C	4.7
28	A6	16	CYS	4.7
28	A6	48	VAL	4.7
21	DV	149	SER	4.7
26	A4	3	GLU	4.7
52	CB	54	C	4.7
24	DW	43	GLN	4.7
28	A6	24	GLU	4.6
28	A6	53	LYS	4.6
52	BB	83	C	4.6
41	CN	12	ARG	4.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
9	DM	1	MET	4.6
28	A6	10	LEU	4.6
21	DV	111	VAL	4.6
53	CC	1	C	4.6
12	AP	141	GLN	4.6
28	A6	44	ARG	4.6
33	BF	79	ARG	4.5
33	CF	53	ALA	4.5
52	CB	2	G	4.5
5	DF	208	GLY	4.5
26	A4	40	HIS	4.5
52	BB	84	C	4.5
21	DV	171	ILE	4.5
7	DH	39	PRO	4.5
6	DG	152	LEU	4.5
27	D5	60	VAL	4.5
52	CB	74	C	4.4
24	AW	43	GLN	4.4
52	BB	79	A	4.4
21	DV	142	SER	4.4
1	AA	1534	G	4.4
42	BO	128	ALA	4.3
52	CB	4	G	4.3
52	CB	19	C	4.3
52	BB	19	C	4.3
28	A6	52	VAL	4.3
28	A6	23	THR	4.3
26	D4	54	GLY	4.3
33	CF	206	GLU	4.2
52	BB	70	C	4.2
28	D6	11	LEU	4.2
26	D4	8	LYS	4.2
21	DV	172	ALA	4.2
26	D4	63	TYR	4.2
42	CO	128	ALA	4.2
7	DH	99	VAL	4.2
28	D6	14	THR	4.1
52	CB	8	U	4.1
52	CB	61	G	4.1
26	D4	28	LYS	4.1
26	D4	58	ARG	4.1
28	A6	20	ASN	4.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
28	D6	10	LEU	4.1
28	D6	29	ASN	4.1
1	AA	2798	C	4.1
5	DF	2	LYS	4.1
37	BJ	83	ALA	4.0
28	A6	17	LYS	4.0
21	AV	163	LEU	4.0
21	DV	150	LEU	4.0
20	DU	88	LYS	4.0
37	BJ	85	TYR	4.0
35	BH	155	GLU	4.0
28	A6	9	LEU	4.0
22	A3	85	ALA	3.9
28	A6	26	ASN	3.9
1	AA	277	C	3.9
52	BB	4	G	3.9
21	DV	108	PRO	3.9
17	D2	36	PRO	3.9
52	CB	5	G	3.9
12	DP	141	GLN	3.9
52	CB	6	G	3.9
28	D6	19	ARG	3.9
28	A6	12	GLU	3.9
21	AV	162	GLU	3.8
26	D4	31	ILE	3.8
47	BT	36	ILE	3.8
20	DU	86	ARG	3.8
11	DO	108	LYS	3.8
1	DA	4	C	3.7
1	AA	2	G	3.7
37	BJ	78	ARG	3.7
21	DV	168	GLU	3.7
28	D6	35	GLU	3.7
28	D6	20	ASN	3.7
26	A4	5	ILE	3.7
28	A6	11	LEU	3.7
33	BF	101	LEU	3.7
52	BB	69	U	3.7
32	CE	136	VAL	3.6
21	DV	154	ASP	3.6
11	DO	79	ARG	3.6
20	DU	89	PHE	3.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
21	DV	148	ASP	3.6
26	D4	25	TYR	3.6
52	BB	23	A	3.6
28	A6	27	LYS	3.6
47	CT	101	ARG	3.6
21	AV	106	GLY	3.6
27	D5	2	ALA	3.6
52	CB	67	A	3.6
52	BB	20	C	3.5
37	BJ	154	TYR	3.5
21	DV	152	ALA	3.5
52	CB	83	C	3.5
1	DA	3	U	3.5
43	CP	4	ILE	3.5
26	D4	56	VAL	3.5
32	CE	116	GLU	3.5
20	DU	79	CYS	3.5
48	CU	46	GLU	3.5
28	D6	49	HIS	3.5
26	D4	9	LEU	3.5
1	AA	2801	A	3.5
28	D6	40	CYS	3.5
20	AU	2	ARG	3.5
20	AU	50	ARG	3.5
26	D4	30	GLU	3.5
26	A4	28	LYS	3.4
42	CO	64	TYR	3.4
28	D6	41	PRO	3.4
41	BN	129	SER	3.4
28	D6	39	TYR	3.4
21	DV	106	GLY	3.4
21	AV	121	HIS	3.4
31	BA	345	C	3.4
32	BE	228	GLY	3.4
6	AG	2	PRO	3.4
28	A6	41	PRO	3.4
6	DG	2	PRO	3.4
21	AV	99	TYR	3.3
21	AV	98	MET	3.3
1	AA	2797	U	3.3
21	DV	141	VAL	3.3
1	DA	654(L)	G	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
28	A6	38	LYS	3.3
15	DR	115	ARG	3.3
52	BB	81	C	3.3
49	CV	78	ARG	3.3
4	AE	204	ALA	3.3
6	AG	75	LYS	3.3
1	AA	3	U	3.3
52	CB	23	A	3.3
52	CB	73	U	3.3
41	CN	13	GLN	3.3
52	BB	47	U	3.3
21	DV	143	GLY	3.2
21	DV	173	ALA	3.2
26	D4	27	THR	3.2
1	AA	1	G	3.2
1	DA	654(O)	G	3.2
21	AV	70	LEU	3.2
52	CB	72	U	3.2
33	CF	54	ARG	3.2
11	DO	61	ARG	3.2
54	B1	23	A	3.2
32	CE	231	GLU	3.2
21	AV	133	ILE	3.2
42	CO	19	ARG	3.2
37	BJ	82	GLY	3.2
2	AB	1(M)	A	3.2
17	D2	91	TYR	3.2
33	CF	104	GLN	3.2
39	CL	127	LYS	3.2
21	AV	79	ARG	3.2
28	D6	46	HIS	3.2
52	CB	76	C	3.2
6	DG	34	LEU	3.1
8	DK	35	LEU	3.1
52	BB	71	C	3.1
1	AA	654(L)	G	3.1
52	CB	55	U	3.1
1	DA	888	C	3.1
21	DV	153	SER	3.1
26	A4	14	ILE	3.1
1	DA	893	C	3.1
52	BB	77	C	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	CE	118	LEU	3.1
41	CN	91	ARG	3.1
31	CA	85	U	3.0
26	D4	57	GLU	3.0
41	CN	11	LYS	3.0
20	DU	59	GLY	3.0
52	BB	67	A	3.0
33	CF	42	LEU	3.0
30	D8	35	GLN	3.0
32	CE	152	PHE	3.0
52	CB	58	G	3.0
1	DA	887	A	3.0
17	D2	12	TYR	3.0
26	D4	12	ALA	3.0
26	D4	62	ARG	3.0
52	CB	10	C	2.9
21	AV	72	ARG	2.9
32	CE	139	LYS	2.9
15	DR	93	ARG	2.9
31	BA	1032	A	2.9
52	CB	75	C	2.9
52	CB	84	C	2.9
12	DP	86	GLY	2.9
53	BC	1	C	2.9
20	DU	90	LEU	2.9
52	CB	27	A	2.9
17	A2	101	GLY	2.9
15	AR	1	MET	2.9
1	DA	877	U	2.9
21	AV	171	ILE	2.9
32	CE	240	GLN	2.9
48	CU	86	VAL	2.9
3	DD	26	LYS	2.9
21	AV	2	GLU	2.9
12	AP	85	LYS	2.9
32	CE	163	PHE	2.8
21	DV	179	ASP	2.8
21	DV	178	GLU	2.8
14	AQ	111	GLU	2.8
52	CB	62	G	2.8
1	DA	1509	C	2.8
12	DP	85	LYS	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
6	DG	142	PRO	2.8
26	D4	40	HIS	2.8
7	DH	27	LYS	2.8
28	D6	37	ARG	2.8
42	BO	127	GLU	2.8
52	CB	13	G	2.8
27	A5	3	LYS	2.8
26	D4	10	VAL	2.8
52	BB	53	A	2.8
54	C1	24	A	2.8
8	DK	146	ALA	2.7
21	AV	117	LEU	2.7
4	AE	205	ALA	2.7
33	CF	52	LEU	2.7
52	BB	55	U	2.7
20	DU	87	LYS	2.7
6	AG	80	PHE	2.7
20	DU	53	PRO	2.7
21	DV	156	LYS	2.7
26	D4	24	THR	2.7
52	BB	59	A	2.7
20	DU	47	LYS	2.7
26	D4	32	TYR	2.7
54	C1	23	A	2.7
33	BF	105	GLU	2.7
28	D6	45	LYS	2.7
26	D4	53	GLU	2.7
52	BB	13	G	2.7
21	AV	173	ALA	2.7
33	BF	72	LYS	2.7
1	AA	278	A	2.7
33	CF	103	VAL	2.6
23	DZ	98	LEU	2.6
28	D6	38	LYS	2.6
52	BD	51	C	2.6
26	A4	31	ILE	2.6
6	AG	135	LEU	2.6
30	D8	12	LYS	2.6
9	AM	134	ARG	2.6
32	CE	123	ALA	2.6
52	CB	69	U	2.6
21	AV	146	ILE	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
28	A6	39	TYR	2.6
41	CN	82	VAL	2.6
16	D1	91	ASP	2.6
41	CN	19	ALA	2.6
42	BO	20	LYS	2.6
50	CW	106	ALA	2.6
41	CN	89	ALA	2.6
21	DV	155	LEU	2.6
39	CL	125	TYR	2.6
36	BI	101	ALA	2.6
52	BB	24	G	2.6
21	AV	105	VAL	2.6
4	DE	204	ALA	2.6
37	CJ	4	ARG	2.6
21	DV	169	GLU	2.6
52	CB	21	A	2.6
1	DA	654(M)	C	2.6
28	D6	34	LEU	2.6
32	CE	122	PHE	2.6
52	BB	3	U	2.6
52	BB	22	A	2.5
21	AV	127	LYS	2.5
32	CE	137	ARG	2.5
11	DO	106	LEU	2.5
40	CM	65	LEU	2.5
52	CB	9	U	2.5
2	DB	1(M)	A	2.5
52	BB	68	A	2.5
1	DA	2139	C	2.5
52	CB	12	C	2.5
1	DA	2156	G	2.5
52	CB	25	G	2.5
32	BE	229	VAL	2.5
21	DV	159	PRO	2.5
26	D4	52	THR	2.5
42	CO	32	PHE	2.5
52	BD	53	A	2.5
21	DV	163	LEU	2.5
1	AA	654(I)	C	2.5
12	DP	38	GLU	2.5
15	DR	1	MET	2.5
34	CG	179	GLU	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
21	AV	53	ILE	2.5
26	A4	8	LYS	2.5
20	DU	46	LYS	2.5
30	A8	36	LYS	2.5
24	DW	41	ILE	2.5
52	CB	45	C	2.5
11	DO	107	LYS	2.5
12	DP	68	ILE	2.5
39	CL	115	GLY	2.5
52	CB	28	G	2.5
12	AP	137	TYR	2.5
26	D4	5	ILE	2.5
11	DO	148	LEU	2.4
21	AV	88	PHE	2.5
15	DR	94	ALA	2.4
32	BE	188	ALA	2.4
52	CB	68	A	2.4
48	CU	19	LYS	2.4
18	DS	112	GLY	2.4
21	DV	24	LEU	2.4
47	CT	92	ARG	2.4
48	CU	18	ARG	2.4
1	DA	889	C	2.4
21	AV	3	TYR	2.4
12	AP	136	ALA	2.4
47	CT	100	LYS	2.4
15	DR	35	LYS	2.4
7	DH	95	ARG	2.4
37	BJ	153	HIS	2.4
22	D3	85	ALA	2.4
31	BA	162	A	2.4
52	CB	77	C	2.4
21	DV	110	GLY	2.4
20	DU	102	CYS	2.4
32	CE	232	PRO	2.4
41	CN	80	VAL	2.4
52	CB	71	C	2.4
28	A6	37	ARG	2.4
28	D6	18	ARG	2.4
21	AV	107	THR	2.4
41	CN	18	ARG	2.4
40	BM	90	LEU	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
52	BD	19	C	2.4
52	BB	17	G	2.4
26	A4	32	TYR	2.4
1	DA	2132	U	2.4
12	AP	140	ALA	2.3
21	AV	80	ARG	2.3
26	D4	13	ARG	2.3
52	BB	18	G	2.3
35	CH	14	ARG	2.3
18	AS	113	LYS	2.3
41	BN	83	ILE	2.3
11	AO	121	LYS	2.3
26	A4	13	ARG	2.3
12	AP	86	GLY	2.3
41	CN	71	LYS	2.3
11	DO	110	TYR	2.3
11	DO	119	GLU	2.3
33	CF	105	GLU	2.3
52	BD	20	C	2.3
21	DV	82	ARG	2.3
32	CE	14	GLY	2.3
6	AG	137	GLU	2.3
15	DR	65	LYS	2.3
37	BJ	86	GLN	2.3
17	A2	36	PRO	2.3
21	DV	55	HIS	2.3
27	A5	59	GLU	2.3
33	BF	78	GLY	2.3
17	D2	82	ARG	2.3
20	AU	86	ARG	2.3
49	CV	52	TYR	2.3
26	A4	29	PRO	2.3
52	BB	12	C	2.3
28	D6	36	LEU	2.3
52	BD	50	U	2.3
11	DO	118	GLY	2.3
21	DV	145	GLU	2.3
52	CB	14	A	2.3
52	CB	60	A	2.3
21	DV	20	ARG	2.3
52	CB	11	C	2.3
36	BI	38	GLU	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
41	CN	129	SER	2.3
42	CO	129	ALA	2.3
6	DG	35	GLU	2.3
20	DU	58	GLY	2.3
41	BN	108	ILE	2.3
37	BJ	79	ARG	2.3
39	CL	116	LYS	2.3
12	DP	33	GLY	2.2
41	CN	81	ASP	2.2
17	D2	45	THR	2.2
20	DU	48	ALA	2.2
33	CF	40	ARG	2.2
48	BU	18	ARG	2.2
48	BU	19	LYS	2.2
25	DX	60	GLU	2.2
44	CQ	58	LYS	2.2
48	CU	17	SER	2.2
1	AA	654(S)	G	2.2
39	CL	128	ARG	2.2
1	AA	163	U	2.2
12	DP	37	LEU	2.2
21	AV	155	LEU	2.2
1	DA	1177	A	2.2
12	AP	19	GLY	2.2
30	D8	34	TRP	2.2
32	CE	135	GLN	2.2
32	BE	15	VAL	2.2
52	CB	20	C	2.2
32	CE	165	VAL	2.2
41	CN	108	ILE	2.2
44	CQ	39	LEU	2.2
21	AV	96	VAL	2.2
48	CU	85	LEU	2.2
28	A6	32	ASN	2.2
20	DU	91	GLU	2.2
49	CV	79	THR	2.2
21	AV	54	HIS	2.2
17	D2	38	LEU	2.2
33	CF	46	GLU	2.2
41	CN	84	VAL	2.2
52	BB	52	G	2.2
52	BB	74	C	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
33	BF	55	VAL	2.2
49	BV	61	TYR	2.2
5	DF	12	LEU	2.2
19	DT	92	LEU	2.2
27	A5	54	GLY	2.2
21	AV	82	ARG	2.2
1	AA	2898	U	2.1
5	DF	27	GLU	2.1
21	AV	164	ALA	2.1
26	D4	7	PRO	2.1
15	DR	50	ILE	2.1
21	AV	59	LEU	2.1
41	CN	83	ILE	2.1
1	DA	876	C	2.1
5	DF	26	ALA	2.1
6	DG	62	LEU	2.1
21	AV	156	LYS	2.1
27	D5	53	ALA	2.1
1	AA	276	A	2.1
12	AP	130	LYS	2.1
21	DV	102	LEU	2.1
28	D6	32	ASN	2.1
45	CR	79	ARG	2.1
7	DH	40	GLU	2.1
27	A5	51	TYR	2.1
43	CP	5	ALA	2.1
32	CE	164	VAL	2.1
12	AP	87	LYS	2.1
8	DK	36	ALA	2.1
32	BE	33	TYR	2.1
21	DV	79	ARG	2.1
21	AV	73	GLN	2.1
28	A6	36	LEU	2.1
33	CF	57	ILE	2.1
15	DR	103	ARG	2.1
15	DR	129	ARG	2.1
6	DG	48	GLU	2.1
31	CA	1450	U	2.1
33	CF	60	ALA	2.1
21	DV	53	ILE	2.1
21	AV	91	LEU	2.1
33	CF	39	ILE	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
44	CQ	52	GLN	2.1
21	DV	54	HIS	2.1
40	CM	47	PHE	2.1
43	BP	6	GLY	2.1
33	BF	89	GLU	2.1
41	CN	21	ILE	2.1
32	CE	115	LEU	2.1
7	DH	25	LYS	2.1
32	BE	36	ARG	2.1
36	BI	57	GLN	2.1
21	DV	170	THR	2.1
52	BD	55	U	2.0
26	A4	52	THR	2.0
26	D4	11	PRO	2.0
26	D4	44	THR	2.0
37	BJ	74	GLU	2.0
4	AE	54	GLN	2.0
26	D4	50	VAL	2.0
26	A4	25	TYR	2.0
1	AA	2140	C	2.0
1	DA	1535	U	2.0
21	DV	1	MET	2.0
36	BI	67	MET	2.0
30	A8	34	TRP	2.0
32	CE	130	ARG	2.0
52	BD	23	A	2.0
12	DP	104	PHE	2.0
21	AV	168	GLU	2.0
21	DV	164	ALA	2.0
12	DP	1	MET	2.0
6	DG	28	VAL	2.0
17	A2	98	GLU	2.0
52	BB	46	G	2.0
52	CB	65	C	2.0
32	BE	187	LEU	2.0
16	A1	117	GLN	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
52	MIA	BD	38	29/30	0.27	-	126,140,181,195	0
52	MIA	CB	38	29/30	0.37	-	99,111,127,136	0
52	MIA	BB	38	29/30	0.22	-	92,99,110,128	0
52	MIA	CD	38	29/30	0.21	-	127,140,183,200	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	OHX	AO	203	7/7	0.16	-	83,92,110,152	1
56	OHX	CA	1785	7/7	0.22	-	125,126,143,155	1
55	MG	AA	3290	1/1	0.31	-	66,66,66,66	0
55	MG	DA	3283	1/1	0.29	-	86,86,86,86	0
56	OHX	AA	3433	7/7	0.14	-	77,91,106,131	2
56	OHX	DA	3372	7/7	0.18	-	90,96,108,138	1
55	MG	AO	201	1/1	0.12	-	66,66,66,66	0
56	OHX	DA	3480	7/7	0.09	-	125,130,144,190	1
56	OHX	AA	3386	7/7	0.16	-	75,83,104,131	1
55	MG	AA	3056	1/1	0.18	-	55,55,55,55	0
56	OHX	BA	1791	7/7	0.14	-	122,123,136,173	1
56	OHX	AA	3407	7/7	0.16	-	53,82,90,103	2
56	OHX	AA	3387	7/7	0.12	-	110,123,134,164	1
55	MG	AA	3032	1/1	0.27	-	37,37,37,37	0
55	MG	CA	1684	1/1	0.46	-	82,82,82,82	0
56	OHX	AA	3416	7/7	0.15	-	108,113,125,155	1
56	OHX	CA	1766	7/7	0.08	-	116,126,135,171	1
55	MG	DA	3063	1/1	0.55	-	59,59,59,59	0
55	MG	AA	3313	1/1	0.41	-	82,82,82,82	0
55	MG	BA	1681	1/1	0.29	-	64,64,64,64	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	OHX	DA	3466	7/7	0.17	-	116,124,134,165	2
56	OHX	AA	3506	7/7	0.14	-	104,115,126,178	1
55	MG	BA	1700	1/1	0.05	-	119,119,119,119	0
55	MG	BA	1661	1/1	0.43	-	61,61,61,61	0
55	MG	DA	3197	1/1	0.27	-	49,49,49,49	0
55	MG	AA	3258	1/1	0.33	-	39,39,39,39	0
55	MG	DA	3164	1/1	0.37	-	63,63,63,63	0
56	OHX	BA	1740	7/7	0.13	-	107,110,122,131	1
55	MG	BB	103	1/1	0.28	-	105,105,105,105	0
55	MG	BC	104	1/1	0.41	-	88,88,88,88	0
56	OHX	CA	1725	7/7	0.10	-	108,111,122,123	1
55	MG	AA	3301	1/1	0.16	-	97,97,97,97	0
55	MG	DA	3315	1/1	0.42	-	78,78,78,78	0
55	MG	CA	1689	1/1	0.17	-	80,80,80,80	0
55	MG	DA	3004	1/1	0.23	-	32,32,32,32	0
56	OHX	CA	1783	7/7	0.21	-	113,117,137,164	1
55	MG	DA	3101	1/1	0.24	-	59,59,59,59	0
55	MG	CA	1675	1/1	0.40	-	94,94,94,94	0
55	MG	DA	3107	1/1	0.24	-	42,42,42,42	0
56	OHX	CA	1781	7/7	0.11	-	153,161,166,239	1
55	MG	CA	1710	1/1	0.13	-	78,78,78,78	0
55	MG	CA	1624	1/1	0.12	-	114,114,114,114	0
55	MG	DA	3312	1/1	0.23	-	81,81,81,81	0
55	MG	DA	3208	1/1	0.46	-	61,61,61,61	0
55	MG	BA	1708	1/1	0.19	-	80,80,80,80	0
55	MG	DA	3032	1/1	0.10	-	38,38,38,38	0
55	MG	DA	3238	1/1	0.35	-	67,67,67,67	0
55	MG	DA	3046	1/1	0.34	-	78,78,78,78	0
55	MG	DA	3332	1/1	0.19	-	78,78,78,78	0
55	MG	AA	3113	1/1	0.22	-	88,88,88,88	0
56	OHX	DA	3446	7/7	0.11	-	118,121,142,162	1
56	OHX	CA	1764	7/7	0.14	-	113,122,135,168	1
55	MG	AA	3026	1/1	0.30	-	43,43,43,43	0
56	OHX	AA	3546	7/7	0.19	-	101,114,120,164	2
56	OHX	DA	3111	7/7	0.21	-	118,129,134,197	1
56	OHX	BA	1754	7/7	0.08	-	136,144,152,183	1
55	MG	AA	3200	1/1	0.32	-	82,82,82,82	0
55	MG	BA	1647	1/1	0.40	-	66,66,66,66	0
55	MG	AA	3037	1/1	0.24	-	55,55,55,55	0
55	MG	CA	1633	1/1	0.55	-	46,46,46,46	0
55	MG	DA	3204	1/1	0.26	-	58,58,58,58	0
56	OHX	DA	3343	7/7	0.16	-	93,113,122,129	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	OHX	CA	1746	7/7	0.08	-	112,115,128,150	1
55	MG	DA	3259	1/1	0.34	-	114,114,114,114	0
55	MG	DA	3133	1/1	0.27	-	51,51,51,51	0
55	MG	AA	3084	1/1	0.28	-	104,104,104,104	0
56	OHX	DA	3449	7/7	0.10	-	147,154,162,185	1
56	OHX	AA	3509	7/7	0.22	-	91,109,142,150	3
55	MG	BA	1690	1/1	0.10	-	81,81,81,81	0
56	OHX	AA	3333	7/7	0.13	-	99,103,122,123	0
56	OHX	DA	3419	7/7	0.14	-	82,93,100,126	2
56	OHX	DA	3258	7/7	0.21	-	103,111,118,148	1
56	OHX	DA	3387	7/7	0.07	-	108,115,125,151	1
56	OHX	DA	3065	7/7	0.17	-	55,92,111,137	1
56	OHX	BA	1765	7/7	0.25	-	91,107,120,150	3
55	MG	DA	3286	1/1	0.14	-	77,77,77,77	0
56	OHX	DA	3393	7/7	0.12	-	133,134,150,191	1
55	MG	DA	3321	1/1	0.20	-	56,56,56,56	0
55	MG	AA	3263	1/1	0.27	-	39,39,39,39	0
55	MG	AA	3171	1/1	0.31	-	59,59,59,59	0
55	MG	CA	1700	1/1	0.14	-	97,97,97,97	0
56	OHX	DA	3132	7/7	0.12	-	185,187,192,225	1
55	MG	DA	3033	1/1	0.26	-	82,82,82,82	0
55	MG	CA	1605	1/1	0.23	-	75,75,75,75	0
55	MG	CA	1655	1/1	0.31	-	70,70,70,70	0
56	OHX	DB	218	7/7	0.36	-	134,141,153,171	1
55	MG	DA	3149	1/1	0.23	-	53,53,53,53	0
55	MG	BA	1634	1/1	0.17	-	73,73,73,73	0
56	OHX	BA	1769	7/7	0.11	-	159,168,172,218	1
56	OHX	AA	3374	7/7	0.19	-	32,70,109,140	3
55	MG	DA	3120	1/1	0.31	-	52,52,52,52	0
56	OHX	AF	303	7/7	0.19	-	46,54,72,103	0
55	MG	AA	3194	1/1	0.40	-	56,56,56,56	0
55	MG	BC	103	1/1	0.44	-	70,70,70,70	0
56	OHX	CA	1723	7/7	0.19	-	84,100,111,141	0
56	OHX	CA	1736	7/7	0.10	-	163,166,178,209	0
56	OHX	AA	3373	7/7	0.10	-	84,96,108,141	1
56	OHX	AA	3500	7/7	0.12	-	118,131,153,193	1
55	MG	AF	302	1/1	0.17	-	83,83,83,83	0
56	OHX	AA	3551	7/7	0.25	-	97,115,123,153	1
56	OHX	CA	1809	7/7	0.07	-	150,160,169,213	1
55	MG	AA	3205	1/1	0.14	-	42,42,42,42	0
55	MG	CA	1602	1/1	0.40	-	58,58,58,58	0
56	OHX	BA	1728	7/7	0.07	-	140,147,157,166	1

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
55	MG	CA	1618	1/1	0.08	-	82,82,82,82	0
55	MG	AA	3252	1/1	0.34	-	52,52,52,52	0
55	MG	DA	3299	1/1	0.20	-	67,67,67,67	0
55	MG	DA	3115	1/1	0.21	-	44,44,44,44	0
55	MG	DA	3152	1/1	0.36	-	57,57,57,57	0
55	MG	AA	3155	1/1	0.11	-	79,79,79,79	0
56	OHX	BA	1716	7/7	0.16	-	73,86,99,116	0
56	OHX	DA	3375	7/7	0.10	-	129,138,149,173	1
56	OHX	DA	3452	7/7	0.17	-	99,118,125,155	1
56	OHX	BA	1768	7/7	0.13	-	87,95,105,130	2
56	OHX	DA	3443	7/7	0.17	-	113,124,137,188	1
56	OHX	BA	1813	7/7	0.17	-	151,161,170,205	1
58	ZN	BQ	101	1/1	0.07	-	135,135,135,135	0
56	OHX	CA	1778	7/7	0.08	-	148,157,164,202	1
55	MG	BA	1608	1/1	0.10	-	89,89,89,89	0
55	MG	DA	3005	1/1	0.25	-	41,41,41,41	0
55	MG	DA	3271	1/1	0.38	-	59,59,59,59	0
55	MG	AA	3186	1/1	0.14	-	57,57,57,57	0
55	MG	AA	3143	1/1	0.35	-	87,87,87,87	0
56	OHX	CA	1786	7/7	0.10	-	163,163,175,198	1
56	OHX	DA	3338	7/7	0.17	-	72,79,93,112	0
55	MG	BA	1649	1/1	0.41	-	92,92,92,92	0
55	MG	AA	3273	1/1	0.40	-	60,60,60,60	0
55	MG	AA	3305	1/1	0.54	-	66,66,66,66	0
55	MG	AA	3281	1/1	0.16	-	93,93,93,93	0
56	OHX	AA	3528	7/7	0.41	-	119,125,142,174	1
56	OHX	AA	3338	7/7	0.12	-	66,87,106,113	2
55	MG	DA	3011	1/1	0.13	-	84,84,84,84	0
55	MG	BA	1629	1/1	0.15	-	79,79,79,79	0
55	MG	CA	1681	1/1	0.27	-	111,111,111,111	0
56	OHX	AA	3405	7/7	0.10	-	100,103,111,158	1
55	MG	CA	1619	1/1	0.23	-	92,92,92,92	0
56	OHX	AA	3404	7/7	0.09	-	108,112,133,175	1
56	OHX	BA	1764	7/7	0.15	-	147,152,158,209	1
56	OHX	DA	3462	7/7	0.12	-	154,157,165,208	1
55	MG	DA	3150	1/1	0.18	-	46,46,46,46	0
56	OHX	CA	1769	7/7	0.10	-	141,144,170,199	1
55	MG	AA	3101	1/1	0.30	-	47,47,47,47	0
55	MG	DA	3139	1/1	0.43	-	54,54,54,54	0
55	MG	DA	3057	1/1	0.32	-	58,58,58,58	0
55	MG	DA	3102	1/1	0.24	-	76,76,76,76	0
55	MG	AA	3125	1/1	0.21	-	63,63,63,63	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
56	OHX	AA	3454	7/7	0.17	-	103,116,132,145	1
56	OHX	BA	1745	7/7	0.12	-	119,123,132,169	1
56	OHX	CA	1803	7/7	0.08	-	137,147,156,198	1
56	OHX	AA	3376	7/7	0.10	-	96,107,117,142	1
56	OHX	DA	3340	7/7	0.13	-	86,102,124,126	1
55	MG	AA	3006	1/1	0.36	-	40,40,40,40	0
56	OHX	BA	1803	7/7	0.08	-	211,214,221,256	1
56	OHX	AA	3326	7/7	0.16	-	75,76,87,119	0
55	MG	AA	3247	1/1	0.47	-	66,66,66,66	0
55	MG	AA	3050	1/1	0.36	-	45,45,45,45	0
56	OHX	BA	1798	7/7	0.10	-	135,136,153,212	1
55	MG	CA	1647	1/1	0.42	-	70,70,70,70	0
55	MG	DA	3240	1/1	0.39	-	64,64,64,64	0
55	MG	BA	1652	1/1	0.38	-	68,68,68,68	0
55	MG	DA	3192	1/1	0.48	-	60,60,60,60	0
55	MG	AA	3178	1/1	0.41	-	76,76,76,76	0
56	OHX	CA	1753	7/7	0.25	-	82,120,146,173	3
55	MG	AA	3097	1/1	0.25	-	50,50,50,50	0
55	MG	DA	3288	1/1	0.26	-	82,82,82,82	0
55	MG	DA	3330	1/1	0.63	-	81,81,81,81	0
56	OHX	DF	301	7/7	0.10	-	53,80,83,83	1
55	MG	AA	3320	1/1	0.19	-	45,45,45,45	0
56	OHX	AA	3515	7/7	0.21	-	93,97,116,159	2
55	MG	AA	3218	1/1	0.34	-	35,35,35,35	0
56	OHX	DA	3103	7/7	0.18	-	94,102,107,128	2
55	MG	AA	3018	1/1	0.24	-	49,49,49,49	0
55	MG	CA	1666	1/1	0.36	-	75,75,75,75	0
55	MG	AA	3081	1/1	0.16	-	81,81,81,81	0
56	OHX	AA	3480	7/7	0.25	-	111,119,135,158	2
55	MG	AA	3238	1/1	0.42	-	47,47,47,47	0
55	MG	CA	1614	1/1	0.20	-	118,118,118,118	0
55	MG	CC	106	1/1	0.54	-	75,75,75,75	0
56	OHX	DA	3455	7/7	0.07	-	139,144,150,194	1
55	MG	CA	1621	1/1	0.34	-	110,110,110,110	0
55	MG	AA	3096	1/1	0.61	-	76,76,76,76	0
55	MG	DA	3135	1/1	0.32	-	42,42,42,42	0
55	MG	AA	3296	1/1	0.41	-	69,69,69,69	0
56	OHX	AA	3561	7/7	0.12	-	86,92,112,144	2
56	OHX	BA	1724	7/7	0.10	-	114,121,136,156	0
55	MG	AA	3288	1/1	0.30	-	55,55,55,55	0
55	MG	BA	1641	1/1	0.24	-	54,54,54,54	0
56	OHX	DA	3447	7/7	0.11	-	122,140,155,176	2

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	OHX	DA	3460	7/7	0.14	-	111,124,134,174	1
55	MG	BA	1713	1/1	0.36	-	81,81,81,81	0
56	OHX	BA	1731	7/7	0.21	-	99,107,129,161	1
56	OHX	DA	3485	7/7	0.13	-	131,137,152,172	1
56	OHX	AA	3335	7/7	0.22	-	62,76,78,127	0
55	MG	DA	3117	1/1	0.28	-	82,82,82,82	0
55	MG	DA	3186	1/1	0.34	-	34,34,34,34	0
55	MG	AA	3245	1/1	0.57	-	70,70,70,70	0
55	MG	BW	201	1/1	0.14	-	92,92,92,92	0
55	MG	DA	3323	1/1	0.52	-	100,100,100,100	0
55	MG	DA	3110	1/1	0.50	-	60,60,60,60	0
56	OHX	CA	1797	7/7	0.46	-	129,132,139,171	1
56	OHX	AA	3516	7/7	0.18	-	90,98,116,166	1
55	MG	DA	3252	1/1	0.57	-	81,81,81,81	0
55	MG	DA	3318	1/1	0.17	-	110,110,110,110	0
56	OHX	DA	3173	7/7	0.11	-	157,163,175,202	1
55	MG	AA	3317	1/1	0.23	-	55,55,55,55	0
55	MG	CA	1664	1/1	0.17	-	57,57,57,57	0
56	OHX	AA	3545	7/7	0.12	-	92,105,127,145	2
55	MG	DA	3195	1/1	0.10	-	46,46,46,46	0
55	MG	AA	3295	1/1	0.40	-	89,89,89,89	0
56	OHX	D1	201	7/7	0.14	-	110,112,135,162	1
56	OHX	AA	3547	7/7	0.12	-	80,87,107,118	1
55	MG	DA	3334	1/1	0.34	-	75,75,75,75	0
56	OHX	DA	3412	7/7	0.10	-	93,110,113,161	1
55	MG	AA	3206	1/1	0.23	-	37,37,37,37	0
56	OHX	AA	3488	7/7	0.13	-	155,156,163,203	1
56	OHX	DA	3392	7/7	0.13	-	115,117,129,183	1
56	OHX	AA	3370	7/7	0.16	-	74,85,99,119	1
55	MG	AA	3265	1/1	0.16	-	62,62,62,62	0
56	OHX	AA	3459	7/7	0.15	-	91,107,133,162	1
56	OHX	DA	3068	7/7	0.13	-	102,127,131,147	0
56	OHX	CA	1758	7/7	0.07	-	150,162,166,191	1
56	OHX	AA	3419	7/7	0.14	-	102,113,133,143	3
56	OHX	AA	3458	7/7	0.17	-	96,103,139,158	1
55	MG	CA	1649	1/1	0.35	-	92,92,92,92	0
56	OHX	BA	1720	7/7	0.12	-	95,108,133,161	2
55	MG	AA	3163	1/1	0.38	-	34,34,34,34	0
56	OHX	DA	3354	7/7	0.14	-	88,99,121,135	1
55	MG	DA	3247	1/1	0.34	-	48,48,48,48	0
55	MG	DA	3202	1/1	0.34	-	65,65,65,65	0
56	OHX	DA	3467	7/7	0.11	-	133,139,156,192	1

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
55	MG	DA	3145	1/1	0.96	-	82,82,82,82	0
55	MG	BA	1701	1/1	0.38	-	68,68,68,68	0
55	MG	BA	1671	1/1	0.47	-	68,68,68,68	0
56	OHX	BA	1767	7/7	0.08	-	151,158,165,212	1
56	OHX	DA	3370	7/7	0.12	-	94,102,123,149	1
55	MG	BA	1673	1/1	0.45	-	75,75,75,75	0
55	MG	DA	3070	1/1	0.19	-	69,69,69,69	0
55	MG	A0	201	1/1	0.15	-	52,52,52,52	0
56	OHX	DA	3224	7/7	0.35	-	104,110,126,166	1
56	OHX	DA	3438	7/7	0.12	-	120,135,146,170	1
55	MG	DA	3189	1/1	0.63	-	56,56,56,56	0
55	MG	DA	3156	1/1	0.24	-	73,73,73,73	0
55	MG	AA	3217	1/1	0.18	-	66,66,66,66	0
55	MG	CA	1670	1/1	0.18	-	95,95,95,95	0
56	OHX	BA	1755	7/7	0.08	-	123,128,136,161	1
56	OHX	CA	1726	7/7	0.14	-	89,98,100,124	1
55	MG	CA	1631	1/1	0.40	-	74,74,74,74	0
56	OHX	CB	104	7/7	0.45	-	175,181,183,194	1
55	MG	AA	3137	1/1	0.32	-	74,74,74,74	0
56	OHX	DA	3363	7/7	0.12	-	95,105,122,123	2
55	MG	AA	3240	1/1	0.47	-	56,56,56,56	0
55	MG	CA	1688	1/1	0.10	-	79,79,79,79	0
56	OHX	DA	3134	7/7	0.12	-	114,120,126,150	1
56	OHX	AA	3400	7/7	0.14	-	64,77,80,123	1
55	MG	CA	1715	1/1	0.27	-	80,80,80,80	0
55	MG	DA	3302	1/1	0.41	-	98,98,98,98	0
56	OHX	AA	3564	7/7	0.18	-	94,114,124,148	1
56	OHX	AA	3456	7/7	0.17	-	111,115,132,161	3
56	OHX	CA	1815	7/7	0.10	-	158,163,177,221	1
56	OHX	BA	1806	7/7	0.17	-	110,117,124,159	1
55	MG	BB	112	1/1	0.13	-	80,80,80,80	0
56	OHX	CA	1744	7/7	0.09	-	128,134,150,164	1
55	MG	AA	3040	1/1	0.31	-	59,59,59,59	0
56	OHX	AA	3350	7/7	0.12	-	95,103,113,148	1
55	MG	DA	3128	1/1	0.42	-	75,75,75,75	0
56	OHX	DA	3356	7/7	0.13	-	85,97,114,129	2
55	MG	AA	3227	1/1	0.40	-	61,61,61,61	0
56	OHX	DA	3245	7/7	0.12	-	95,128,139,165	1
56	OHX	AA	3381	7/7	0.11	-	127,136,147,180	1
55	MG	AA	3002	1/1	0.40	-	34,34,34,34	0
55	MG	AA	3156	1/1	0.29	-	80,80,80,80	0
56	OHX	AA	3486	7/7	0.13	-	95,110,127,153	1

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
55	MG	DA	3326	1/1	0.43	-	90,90,90,90	0
55	MG	BA	1644	1/1	0.33	-	62,62,62,62	0
56	OHX	DA	3437	7/7	0.14	-	113,120,134,160	1
55	MG	AA	3223	1/1	0.32	-	43,43,43,43	0
55	MG	AA	3057	1/1	0.18	-	56,56,56,56	0
55	MG	DA	3056	1/1	0.25	-	48,48,48,48	0
55	MG	AA	3181	1/1	0.47	-	71,71,71,71	0
55	MG	AA	3116	1/1	0.26	-	63,63,63,63	0
55	MG	DA	3244	1/1	0.29	-	82,82,82,82	0
55	MG	AA	3215	1/1	0.39	-	69,69,69,69	0
55	MG	AA	3271	1/1	0.42	-	63,63,63,63	0
55	MG	DA	3025	1/1	0.20	-	59,59,59,59	0
56	OHX	DA	3348	7/7	0.11	-	97,115,128,140	1
56	OHX	DA	3172	7/7	0.31	-	95,104,112,142	1
55	MG	AA	3068	1/1	0.13	-	92,92,92,92	0
55	MG	DA	3114	1/1	0.36	-	37,37,37,37	0
56	OHX	AA	3523	7/7	0.14	-	112,123,137,155	1
55	MG	CA	1615	1/1	0.21	-	109,109,109,109	0
56	OHX	AE	304	7/7	0.10	-	73,87,113,116	2
55	MG	BA	1601	1/1	0.31	-	57,57,57,57	0
55	MG	DA	3154	1/1	0.25	-	60,60,60,60	0
55	MG	DA	3035	1/1	0.31	-	95,95,95,95	0
55	MG	DA	3237	1/1	0.28	-	85,85,85,85	0
56	OHX	DA	3410	7/7	0.12	-	107,112,124,146	1
55	MG	CA	1680	1/1	0.38	-	78,78,78,78	0
55	MG	AA	3337	1/1	0.58	-	73,73,73,73	0
55	MG	DA	3280	1/1	0.45	-	63,63,63,63	0
55	MG	AA	3129	1/1	0.19	-	43,43,43,43	0
55	MG	CA	1627	1/1	0.28	-	126,126,126,126	0
55	MG	A1	202	1/1	0.19	-	75,75,75,75	0
55	MG	DA	3121	1/1	0.42	-	78,78,78,78	0
55	MG	BA	1689	1/1	0.14	-	80,80,80,80	0
55	MG	DA	3078	1/1	0.45	-	42,42,42,42	0
56	OHX	AA	3434	7/7	0.17	-	98,102,107,132	1
55	MG	AA	3062	1/1	0.25	-	97,97,97,97	0
56	OHX	BA	1808	7/7	0.17	-	121,129,141,156	1
55	MG	DA	3016	1/1	0.59	-	51,51,51,51	0
55	MG	AA	3242	1/1	0.34	-	43,43,43,43	0
55	MG	CA	1654	1/1	0.18	-	89,89,89,89	0
55	MG	AA	3191	1/1	0.11	-	39,39,39,39	0
55	MG	AA	3169	1/1	0.50	-	47,47,47,47	0
56	OHX	CC	110	7/7	0.16	-	103,121,132,150	4

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	OHX	DA	3157	7/7	0.14	-	76,87,96,121	1
55	MG	DA	3095	1/1	0.22	-	58,58,58,58	0
55	MG	DA	3194	1/1	0.37	-	48,48,48,48	0
55	MG	CA	1691	1/1	0.19	-	128,128,128,128	0
55	MG	AA	3267	1/1	0.23	-	37,37,37,37	0
56	OHX	DA	3395	7/7	0.12	-	102,109,124,139	1
55	MG	AA	3174	1/1	0.18	-	91,91,91,91	0
55	MG	AA	3134	1/1	0.40	-	48,48,48,48	0
56	OHX	AA	3428	7/7	0.07	-	114,120,124,169	1
55	MG	BA	1625	1/1	0.33	-	66,66,66,66	0
55	MG	DA	3182	1/1	0.23	-	52,52,52,52	0
56	OHX	DA	3486	7/7	0.22	-	123,132,147,175	1
56	OHX	DA	3371	7/7	0.12	-	119,121,131,160	1
55	MG	DA	3036	1/1	0.12	-	47,47,47,47	0
55	MG	DA	3316	1/1	0.23	-	51,51,51,51	0
55	MG	AA	3310	1/1	0.18	-	71,71,71,71	0
55	MG	AA	3034	1/1	0.32	-	50,50,50,50	0
56	OHX	AA	3517	7/7	0.08	-	125,127,137,177	1
55	MG	CA	1669	1/1	0.36	-	48,48,48,48	0
56	OHX	AA	3342	7/7	0.12	-	65,86,103,114	1
56	OHX	DA	3218	7/7	0.39	-	96,106,121,133	1
55	MG	AA	3259	1/1	0.14	-	60,60,60,60	0
56	OHX	BA	1727	7/7	0.12	-	116,137,148,161	1
55	MG	CA	1607	1/1	0.26	-	86,86,86,86	0
56	OHX	DA	3362	7/7	0.20	-	83,98,103,158	1
55	MG	AA	3235	1/1	0.10	-	57,57,57,57	0
55	MG	CA	1634	1/1	0.60	-	64,64,64,64	0
55	MG	CA	1601	1/1	0.39	-	75,75,75,75	0
56	OHX	AA	3447	7/7	0.10	-	110,120,136,163	1
55	MG	AA	3109	1/1	0.36	-	38,38,38,38	0
56	OHX	BA	1796	7/7	0.26	-	119,126,142,152	1
55	MG	AA	3122	1/1	0.26	-	57,57,57,57	0
55	MG	DA	3042	1/1	0.22	-	74,74,74,74	0
56	OHX	CA	1793	7/7	0.08	-	142,146,153,194	1
55	MG	BA	1643	1/1	0.20	-	67,67,67,67	0
56	OHX	DA	3337	7/7	0.21	-	74,80,86,97	1
56	OHX	DB	214	7/7	0.12	-	145,149,169,184	1
55	MG	AA	3257	1/1	0.29	-	64,64,64,64	0
58	ZN	BG	301	1/1	0.29	-	84,84,84,84	0
55	MG	BA	1612	1/1	0.36	-	100,100,100,100	0
55	MG	BA	1622	1/1	0.18	-	92,92,92,92	0
55	MG	AA	3209	1/1	0.32	-	86,86,86,86	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	OHX	BB	114	7/7	0.25	-	176,178,180,206	1
55	MG	DA	3276	1/1	0.40	-	78,78,78,78	0
56	OHX	AA	3513	7/7	0.19	-	120,125,139,159	2
56	OHX	DA	3383	7/7	0.12	-	110,119,138,151	2
55	MG	DA	3006	1/1	0.27	-	63,63,63,63	0
55	MG	DA	3142	1/1	0.42	-	76,76,76,76	0
55	MG	AA	3179	1/1	0.30	-	39,39,39,39	0
55	MG	DA	3113	1/1	0.17	-	73,73,73,73	0
56	OHX	DA	3081	7/7	0.14	-	99,102,113,145	1
55	MG	AA	3297	1/1	0.12	-	80,80,80,80	0
55	MG	AA	3058	1/1	0.11	-	61,61,61,61	0
56	OHX	DA	3350	7/7	0.14	-	90,99,110,132	1
56	OHX	CA	1772	7/7	0.11	-	142,144,153,197	1
55	MG	BA	1679	1/1	0.41	-	60,60,60,60	0
55	MG	DA	3098	1/1	0.19	-	63,63,63,63	0
56	OHX	CA	1773	7/7	0.11	-	123,130,144,181	1
56	OHX	AA	3414	7/7	0.11	-	92,104,120,143	1
55	MG	AA	3300	1/1	0.29	-	81,81,81,81	0
55	MG	B1	101	1/1	0.12	-	96,96,96,96	0
55	MG	CA	1651	1/1	0.18	-	73,73,73,73	0
56	OHX	BA	1802	7/7	0.09	-	100,117,125,149	1
56	OHX	DA	3062	7/7	0.17	-	70,95,103,114	1
55	MG	DA	3143	1/1	0.29	-	38,38,38,38	0
55	MG	AA	3176	1/1	0.42	-	46,46,46,46	0
56	OHX	DA	3349	7/7	0.12	-	103,105,113,143	0
56	OHX	AA	3542	7/7	0.14	-	92,98,124,157	1
55	MG	AA	3028	1/1	0.37	-	35,35,35,35	0
55	MG	BA	1619	1/1	0.39	-	64,64,64,64	0
56	OHX	DA	3405	7/7	0.17	-	129,133,151,175	1
56	OHX	BC	107	7/7	0.12	-	126,137,143,151	1
56	OHX	AA	3382	7/7	0.15	-	65,73,84,93	0
56	OHX	DA	3253	7/7	0.13	-	141,144,160,190	1
55	MG	DA	3076	1/1	0.64	-	54,54,54,54	0
55	MG	CA	1653	1/1	0.23	-	75,75,75,75	0
55	MG	AA	3105	1/1	0.48	-	65,65,65,65	0
56	OHX	DA	3474	7/7	0.22	-	120,126,143,173	1
55	MG	CA	1625	1/1	0.17	-	87,87,87,87	0
55	MG	AA	3276	1/1	0.26	-	76,76,76,76	0
56	OHX	DA	3483	7/7	0.12	-	103,116,126,199	1
55	MG	AA	3131	1/1	0.51	-	62,62,62,62	0
56	OHX	CA	1791	7/7	0.10	-	100,118,129,154	1
55	MG	DA	3317	1/1	0.39	-	85,85,85,85	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
55	MG	BA	1688	1/1	0.19	-	79,79,79,79	0
55	MG	DA	3203	1/1	0.53	-	69,69,69,69	0
56	OHX	AA	3535	7/7	0.18	-	94,101,108,146	1
56	OHX	BA	1718	7/7	0.20	-	68,82,103,130	2
56	OHX	DA	3353	7/7	0.13	-	102,117,129,132	1
55	MG	AA	3001	1/1	0.32	-	32,32,32,32	0
56	OHX	DA	3388	7/7	0.14	-	108,118,139,160	1
56	OHX	AA	3378	7/7	0.16	-	77,88,108,118	1
56	OHX	CA	1768	7/7	0.08	-	123,135,145,174	1
56	OHX	AA	3411	7/7	0.08	-	107,117,135,154	0
55	MG	DA	3053	1/1	0.50	-	116,116,116,116	0
55	MG	DA	3231	1/1	0.36	-	50,50,50,50	0
55	MG	AA	3110	1/1	0.39	-	76,76,76,76	0
56	OHX	DA	3472	7/7	0.10	-	162,171,176,223	1
55	MG	AA	3229	1/1	0.28	-	65,65,65,65	0
56	OHX	AA	3366	7/7	0.15	-	79,94,104,141	1
55	MG	AA	3146	1/1	0.36	-	36,36,36,36	0
56	OHX	DA	3470	7/7	0.14	-	152,169,191,193	1
56	OHX	DA	3359	7/7	0.17	-	99,118,131,143	1
56	OHX	AA	3451	7/7	0.18	-	79,96,106,142	1
56	OHX	AA	3377	7/7	0.18	-	77,87,106,151	2
55	MG	CC	101	1/1	0.43	-	79,79,79,79	0
56	OHX	CA	1796	7/7	0.07	-	150,159,170,195	1
56	OHX	DA	3335	7/7	0.17	-	87,96,112,126	0
56	OHX	AA	3476	7/7	0.20	-	88,98,119,157	1
55	MG	CA	1697	1/1	0.13	-	66,66,66,66	0
55	MG	DA	3273	1/1	0.28	-	41,41,41,41	0
56	OHX	CA	1788	7/7	0.17	-	138,144,149,176	1
55	MG	DA	3180	1/1	0.39	-	45,45,45,45	0
56	OHX	AA	3512	7/7	0.16	-	110,115,138,180	2
55	MG	AA	3041	1/1	0.24	-	59,59,59,59	0
56	OHX	DA	3459	7/7	0.20	-	85,104,120,156	1
56	OHX	AA	3396	7/7	0.09	-	93,107,119,142	1
55	MG	DA	3001	1/1	0.33	-	39,39,39,39	0
55	MG	AA	3260	1/1	0.39	-	53,53,53,53	0
55	MG	BA	1705	1/1	0.09	-	109,109,109,109	0
56	OHX	DA	3423	7/7	0.09	-	127,140,151,201	1
55	MG	AA	3334	1/1	0.19	-	90,90,90,90	0
56	OHX	BA	1810	7/7	0.20	-	138,141,150,186	1
55	MG	DA	3264	1/1	0.16	-	78,78,78,78	0
55	MG	DA	3141	1/1	0.25	-	64,64,64,64	0
55	MG	BA	1624	1/1	0.60	-	79,79,79,79	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
56	OHX	BA	1787	7/7	0.13	-	124,129,137,172	1
55	MG	AA	3115	1/1	0.37	-	57,57,57,57	0
55	MG	DA	3313	1/1	0.35	-	88,88,88,88	0
55	MG	AA	3168	1/1	0.41	-	36,36,36,36	0
56	OHX	AA	3352	7/7	0.16	-	80,86,96,122	1
56	OHX	AA	3439	7/7	0.14	-	114,122,140,194	1
56	OHX	BA	1807	7/7	0.12	-	133,136,150,177	1
55	MG	AA	3079	1/1	0.39	-	67,67,67,67	0
56	OHX	AA	3332	7/7	0.16	-	40,73,95,99	2
55	MG	BA	1663	1/1	0.69	-	80,80,80,80	0
55	MG	CA	1692	1/1	0.18	-	104,104,104,104	0
55	MG	AA	3324	1/1	0.20	-	84,84,84,84	0
56	OHX	DA	3436	7/7	0.12	-	121,133,143,171	1
55	MG	CA	1652	1/1	0.10	-	69,69,69,69	0
55	MG	AA	3093	1/1	0.40	-	35,35,35,35	0
56	OHX	CA	1745	7/7	0.13	-	117,120,127,165	1
56	OHX	AA	3368	7/7	0.07	-	104,115,121,140	1
55	MG	BA	1653	1/1	0.29	-	64,64,64,64	0
55	MG	AA	3322	1/1	0.22	-	81,81,81,81	0
56	OHX	AA	3473	7/7	0.22	-	104,114,132,167	1
56	OHX	AA	3548	7/7	0.15	-	125,128,143,177	1
56	OHX	BA	1776	7/7	0.28	-	119,138,152,176	2
55	MG	AA	3185	1/1	0.36	-	35,35,35,35	0
55	MG	BA	1666	1/1	0.40	-	81,81,81,81	0
55	MG	CA	1632	1/1	0.49	-	56,56,56,56	0
55	MG	BA	1610	1/1	0.10	-	75,75,75,75	0
55	MG	AA	3065	1/1	0.22	-	46,46,46,46	0
55	MG	DA	3291	1/1	0.22	-	66,66,66,66	0
56	OHX	AA	3354	7/7	0.14	-	96,105,128,164	0
56	OHX	DA	3347	7/7	0.12	-	89,99,108,134	0
55	MG	AA	3224	1/1	0.28	-	79,79,79,79	0
56	OHX	CA	1730	7/7	0.12	-	132,134,143,167	0
56	OHX	AA	3345	7/7	0.09	-	87,112,122,135	0
55	MG	BA	1683	1/1	0.30	-	85,85,85,85	0
55	MG	DA	3234	1/1	0.28	-	41,41,41,41	0
55	MG	BD	101	1/1	0.14	-	103,103,103,103	0
55	MG	BB	105	1/1	0.15	-	94,94,94,94	0
56	OHX	CA	1738	7/7	0.09	-	120,123,126,168	1
56	OHX	AA	3568	7/7	0.15	-	101,109,114,153	1
55	MG	DA	3266	1/1	0.46	-	88,88,88,88	0
56	OHX	DA	3136	7/7	0.14	-	95,108,117,144	1
56	OHX	AA	3393	7/7	0.15	-	50,81,89,115	2

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	OHX	DA	3248	7/7	0.12	-	110,118,139,156	1
55	MG	AA	3160	1/1	0.33	-	69,69,69,69	0
55	MG	CA	1638	1/1	0.35	-	59,59,59,59	0
56	OHX	CC	109	7/7	0.21	-	112,114,129,153	3
56	OHX	AA	3432	7/7	0.10	-	129,136,142,160	1
56	OHX	CA	1779	7/7	0.05	-	125,132,137,172	1
56	OHX	DA	3413	7/7	0.28	-	103,122,138,176	1
55	MG	DB	203	1/1	0.12	-	121,121,121,121	0
55	MG	DA	3287	1/1	0.26	-	102,102,102,102	0
56	OHX	AA	3346	7/7	0.17	-	73,81,101,124	2
56	OHX	DA	3071	7/7	0.13	-	107,121,146,184	0
56	OHX	DA	3430	7/7	0.06	-	176,181,185,214	1
56	OHX	CR	101	7/7	0.41	-	143,150,160,179	1
55	MG	AA	3222	1/1	0.39	-	85,85,85,85	0
56	OHX	CA	1811	7/7	0.18	-	126,129,137,159	1
55	MG	AA	3211	1/1	0.21	-	58,58,58,58	0
56	OHX	AA	3455	7/7	0.13	-	173,192,201,215	1
55	MG	BA	1655	1/1	0.32	-	84,84,84,84	0
55	MG	AA	3282	1/1	0.09	-	103,103,103,103	0
56	OHX	DA	3444	7/7	0.12	-	123,132,145,175	1
55	MG	AA	3195	1/1	0.35	-	58,58,58,58	0
55	MG	CA	1660	1/1	0.23	-	97,97,97,97	0
55	MG	BA	1704	1/1	0.11	-	127,127,127,127	0
55	MG	CA	1611	1/1	0.18	-	81,81,81,81	0
55	MG	CA	1616	1/1	0.42	-	100,100,100,100	0
56	OHX	BA	1758	7/7	0.06	-	153,155,160,202	1
56	OHX	AA	3369	7/7	0.11	-	76,100,116,143	1
56	OHX	DA	3366	7/7	0.14	-	87,100,130,154	2
56	OHX	AA	3360	7/7	0.14	-	88,94,111,129	2
55	MG	AA	3048	1/1	0.23	-	91,91,91,91	0
55	MG	AA	3285	1/1	0.27	-	77,77,77,77	0
55	MG	CA	1676	1/1	0.32	-	78,78,78,78	0
55	MG	BA	1656	1/1	0.37	-	73,73,73,73	0
55	MG	AA	3139	1/1	0.24	-	47,47,47,47	0
56	OHX	AA	3330	7/7	0.17	-	81,85,101,147	0
55	MG	AA	3261	1/1	0.21	-	53,53,53,53	0
55	MG	DA	3009	1/1	0.28	-	50,50,50,50	0
56	OHX	DA	3477	7/7	0.07	-	153,157,164,211	1
55	MG	AA	3033	1/1	0.31	-	39,39,39,39	0
55	MG	DA	3086	1/1	0.39	-	51,51,51,51	0
55	MG	DA	3017	1/1	0.48	-	66,66,66,66	0
55	MG	CA	1721	1/1	0.22	-	80,80,80,80	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
55	MG	AA	3108	1/1	0.14	-	54,54,54,54	0
55	MG	DA	3034	1/1	0.19	-	69,69,69,69	0
55	MG	AA	3061	1/1	0.22	-	59,59,59,59	0
56	OHX	AA	3375	7/7	0.11	-	83,101,103,143	1
55	MG	AA	3190	1/1	0.21	-	43,43,43,43	0
55	MG	AA	3237	1/1	0.44	-	62,62,62,62	0
55	MG	AA	3184	1/1	0.34	-	35,35,35,35	0
55	MG	DA	3020	1/1	0.60	-	60,60,60,60	0
56	OHX	AA	3507	7/7	0.48	-	120,135,161,172	2
55	MG	AA	3080	1/1	0.18	-	63,63,63,63	0
56	OHX	DA	3246	7/7	0.14	-	89,97,107,138	1
55	MG	CA	1711	1/1	0.39	-	57,57,57,57	0
56	OHX	AA	3471	7/7	0.13	-	80,105,117,155	1
55	MG	AA	3039	1/1	0.38	-	50,50,50,50	0
55	MG	DB	206	1/1	0.48	-	81,81,81,81	0
55	MG	BA	1682	1/1	0.10	-	68,68,68,68	0
56	OHX	AA	3562	7/7	0.14	-	100,110,119,157	1
55	MG	AB	202	1/1	0.22	-	80,80,80,80	0
56	OHX	AA	3364	7/7	0.15	-	72,81,97,125	1
56	OHX	AA	3477	7/7	0.13	-	81,92,107,133	2
56	OHX	CA	1780	7/7	0.09	-	138,146,156,182	1
56	OHX	DA	3358	7/7	0.10	-	107,117,135,165	2
55	MG	AA	3094	1/1	0.53	-	48,48,48,48	0
55	MG	DA	3274	1/1	0.37	-	69,69,69,69	0
55	MG	DA	3167	1/1	0.25	-	61,61,61,61	0
55	MG	DA	3089	1/1	0.41	-	54,54,54,54	0
56	OHX	CA	1790	7/7	0.18	-	99,111,123,147	2
55	MG	AA	3214	1/1	0.35	-	41,41,41,41	0
56	OHX	AA	3491	7/7	0.15	-	96,99,117,169	1
56	OHX	DA	3243	7/7	0.19	-	74,100,112,145	2
55	MG	AA	3154	1/1	0.22	-	52,52,52,52	0
56	OHX	AA	3539	7/7	0.09	-	130,133,143,179	1
55	MG	DA	3052	1/1	0.44	-	42,42,42,42	0
56	OHX	AB	213	7/7	0.15	-	88,108,129,159	3
55	MG	BA	1630	1/1	0.21	-	109,109,109,109	0
55	MG	DA	3201	1/1	0.39	-	86,86,86,86	0
55	MG	BA	1697	1/1	0.43	-	74,74,74,74	0
56	OHX	AA	3449	7/7	0.14	-	102,118,124,165	1
55	MG	DA	3281	1/1	0.22	-	65,65,65,65	0
56	OHX	BA	1809	7/7	0.07	-	159,162,164,206	1
55	MG	DA	3055	1/1	0.40	-	54,54,54,54	0
55	MG	AA	3339	1/1	0.52	-	58,58,58,58	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
55	MG	DA	3275	1/1	0.46	-	53,53,53,53	0
55	MG	AA	3280	1/1	0.37	-	61,61,61,61	0
56	OHX	DA	3406	7/7	0.12	-	88,107,111,147	3
56	OHX	AA	3371	7/7	0.17	-	65,79,88,136	2
55	MG	DA	3161	1/1	0.35	-	41,41,41,41	0
56	OHX	DA	3379	7/7	0.13	-	116,134,147,164	1
55	MG	AA	3232	1/1	0.10	-	62,62,62,62	0
55	MG	DA	3069	1/1	0.11	-	63,63,63,63	0
55	MG	DA	3210	1/1	0.74	-	73,73,73,73	0
55	MG	CA	1623	1/1	0.24	-	96,96,96,96	0
56	OHX	DA	3427	7/7	0.12	-	134,147,151,184	1
56	OHX	DA	3163	7/7	0.18	-	124,127,154,166	1
56	OHX	DA	3386	7/7	0.11	-	108,110,132,139	1
55	MG	AA	3162	1/1	0.23	-	48,48,48,48	0
55	MG	AA	3036	1/1	0.44	-	48,48,48,48	0
55	MG	DA	3175	1/1	0.41	-	53,53,53,53	0
56	OHX	AA	3424	7/7	0.16	-	84,93,116,147	1
56	OHX	DB	211	7/7	0.12	-	105,121,145,156	2
56	OHX	DA	3440	7/7	0.15	-	142,144,161,189	1
55	MG	BA	1707	1/1	0.10	-	63,63,63,63	0
55	MG	DA	3104	1/1	0.35	-	64,64,64,64	0
55	MG	DA	3072	1/1	0.08	-	93,93,93,93	0
56	OHX	DA	3257	7/7	0.22	-	107,112,124,148	1
55	MG	DA	3181	1/1	0.31	-	98,98,98,98	0
56	OHX	CA	1732	7/7	0.12	-	112,117,126,152	1
55	MG	DB	204	1/1	0.24	-	76,76,76,76	0
55	MG	BS	101	1/1	0.27	-	81,81,81,81	0
55	MG	DA	3040	1/1	0.21	-	66,66,66,66	0
55	MG	AA	3298	1/1	0.24	-	45,45,45,45	0
55	MG	DA	3012	1/1	0.30	-	44,44,44,44	0
55	MG	AA	3007	1/1	0.36	-	43,43,43,43	0
56	OHX	AA	3421	7/7	0.13	-	78,84,91,130	1
56	OHX	AA	3327	7/7	0.21	-	38,70,106,113	0
55	MG	BA	1631	1/1	0.09	-	85,85,85,85	0
55	MG	CA	1620	1/1	0.22	-	63,63,63,63	0
56	OHX	CA	1739	7/7	0.09	-	140,150,165,188	1
56	OHX	AA	3426	7/7	0.11	-	104,117,127,168	3
56	OHX	DA	3445	7/7	0.10	-	121,130,142,174	1
55	MG	AA	3219	1/1	0.27	-	65,65,65,65	0
55	MG	CA	1613	1/1	0.26	-	73,73,73,73	0
56	OHX	DB	209	7/7	0.15	-	130,143,158,186	1
56	OHX	AA	3418	7/7	0.15	-	96,110,119,135	1

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
55	MG	BA	1621	1/1	0.26	-	77,77,77,77	0
55	MG	CA	1686	1/1	0.57	-	110,110,110,110	0
55	MG	AA	3270	1/1	0.35	-	90,90,90,90	0
56	OHX	AA	3556	7/7	0.12	-	82,96,111,154	1
55	MG	AA	3319	1/1	0.09	-	63,63,63,63	0
55	MG	AA	3226	1/1	0.51	-	68,68,68,68	0
55	MG	BA	1677	1/1	0.42	-	101,101,101,101	0
56	OHX	BB	115	7/7	0.20	-	90,109,116,116	3
55	MG	BA	1620	1/1	0.24	-	73,73,73,73	0
56	OHX	CA	1760	7/7	0.07	-	145,148,151,188	1
55	MG	AA	3220	1/1	0.25	-	38,38,38,38	0
56	OHX	CA	1728	7/7	0.14	-	104,119,138,150	2
56	OHX	BA	1719	7/7	0.14	-	85,102,114,124	1
56	OHX	AA	3384	7/7	0.10	-	96,100,107,136	1
55	MG	DB	202	1/1	0.17	-	98,98,98,98	0
56	OHX	CA	1787	7/7	0.16	-	117,122,135,155	1
55	MG	CC	107	1/1	0.26	-	80,80,80,80	0
56	OHX	AA	3529	7/7	0.17	-	114,130,134,179	1
56	OHX	DB	220	7/7	0.20	-	159,162,171,208	1
55	MG	DA	3282	1/1	0.35	-	69,69,69,69	0
55	MG	DA	3200	1/1	1.01	-	86,86,86,86	0
56	OHX	CA	1749	7/7	0.14	-	124,137,161,188	2
56	OHX	AA	3482	7/7	0.21	-	85,96,105,135	1
55	MG	DA	3298	1/1	0.30	-	102,102,102,102	0
55	MG	CA	1718	1/1	0.30	-	84,84,84,84	0
56	OHX	AA	3569	7/7	0.11	-	134,142,144,168	1
55	MG	DA	3206	1/1	0.12	-	52,52,52,52	0
56	OHX	BA	1743	7/7	0.20	-	79,96,129,159	2
55	MG	BA	1698	1/1	0.37	-	54,54,54,54	0
56	OHX	AA	3438	7/7	0.10	-	113,130,139,188	1
55	MG	AA	3277	1/1	0.48	-	94,94,94,94	0
56	OHX	DA	3415	7/7	0.16	-	128,140,160,189	1
56	OHX	DA	3357	7/7	0.12	-	100,118,130,150	1
56	OHX	BA	1733	7/7	0.09	-	98,108,118,146	1
56	OHX	AA	3425	7/7	0.09	-	158,168,177,207	1
56	OHX	AA	3420	7/7	0.21	-	112,125,135,178	2
58	ZN	CQ	101	1/1	0.12	-	120,120,120,120	0
55	MG	DA	3043	1/1	0.42	-	73,73,73,73	0
56	OHX	BA	1811	7/7	0.13	-	110,118,135,147	1
55	MG	DA	3153	1/1	0.42	-	69,69,69,69	0
56	OHX	AA	3445	7/7	0.12	-	118,124,140,177	1
56	OHX	AA	3464	7/7	0.12	-	105,115,140,175	1

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	OHX	D5	102	7/7	0.32	-	114,129,141,158	1
55	MG	AA	3182	1/1	0.37	-	66,66,66,66	0
56	OHX	DA	3465	7/7	0.13	-	123,136,143,165	1
56	OHX	AA	3501	7/7	0.10	-	104,117,124,169	1
56	OHX	BA	1752	7/7	0.07	-	168,174,177,207	1
56	OHX	BD	103	7/7	0.14	-	108,110,116,155	1
56	OHX	CA	1724	7/7	0.11	-	88,111,121,131	0
56	OHX	DA	3401	7/7	0.11	-	108,115,120,150	1
56	OHX	DA	3364	7/7	0.13	-	75,93,104,118	1
55	MG	DA	3039	1/1	0.20	-	102,102,102,102	0
55	MG	AA	3017	1/1	0.37	-	26,26,26,26	0
56	OHX	AA	3525	7/7	0.11	-	118,124,140,179	1
55	MG	AA	3144	1/1	0.34	-	43,43,43,43	0
56	OHX	AA	3446	7/7	0.15	-	148,150,154,190	1
55	MG	AB	206	1/1	0.48	-	77,77,77,77	0
55	MG	AA	3239	1/1	0.52	-	52,52,52,52	0
56	OHX	CA	1814	7/7	0.07	-	149,152,161,212	1
55	MG	AA	3201	1/1	0.41	-	35,35,35,35	0
55	MG	DA	3268	1/1	0.32	-	44,44,44,44	0
56	OHX	AA	3388	7/7	0.11	-	106,112,125,156	1
55	MG	BB	111	1/1	0.23	-	80,80,80,80	0
56	OHX	CA	1759	7/7	0.16	-	125,133,140,148	1
56	OHX	AA	3550	7/7	0.10	-	118,128,136,169	1
56	OHX	AA	3481	7/7	0.14	-	88,92,119,127	2
56	OHX	AA	3533	7/7	0.09	-	79,94,100,134	1
56	OHX	AA	3340	7/7	0.14	-	84,93,95,126	0
56	OHX	BG	302	7/7	0.10	-	138,141,145,177	1
56	OHX	CA	1808	7/7	0.15	-	163,164,177,210	1
55	MG	DA	3002	1/1	0.51	-	46,46,46,46	0
56	OHX	CA	1751	7/7	0.18	-	102,126,129,174	1
56	OHX	DA	3342	7/7	0.13	-	79,85,102,102	2
55	MG	AA	3051	1/1	0.40	-	69,69,69,69	0
55	MG	DA	3228	1/1	0.40	-	58,58,58,58	0
55	MG	AA	3372	1/1	0.27	-	80,80,80,80	0
56	OHX	AA	3494	7/7	0.12	-	112,122,130,153	1
56	OHX	AA	3450	7/7	0.11	-	97,112,128,161	2
56	OHX	AA	3379	7/7	0.23	-	20,47,62,138	0
55	MG	CB	103	1/1	0.13	-	80,80,80,80	0
56	OHX	CA	1799	7/7	0.38	-	142,145,160,170	1
56	OHX	CA	1776	7/7	0.16	-	112,115,132,151	1
55	MG	CA	1637	1/1	0.49	-	69,69,69,69	0
55	MG	AA	3119	1/1	0.24	-	86,86,86,86	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
55	MG	DA	3305	1/1	0.22	-	48,48,48,48	0
56	OHX	DA	3376	7/7	0.18	-	38,106,133,165	3
56	OHX	AA	3497	7/7	0.25	-	105,127,139,145	1
55	MG	BA	1626	1/1	0.54	-	47,47,47,47	0
55	MG	AA	3262	1/1	0.28	-	62,62,62,62	0
55	MG	BA	1602	1/1	0.23	-	66,66,66,66	0
56	OHX	AA	3415	7/7	0.07	-	90,93,100,146	1
55	MG	AA	3005	1/1	0.36	-	48,48,48,48	0
56	OHX	CD	101	7/7	0.09	-	166,174,199,220	1
55	MG	BA	1703	1/1	0.19	-	90,90,90,90	0
55	MG	DA	3285	1/1	0.40	-	57,57,57,57	0
56	OHX	AB	218	7/7	0.13	-	138,141,157,181	1
55	MG	AA	3308	1/1	0.34	-	63,63,63,63	0
56	OHX	AB	211	7/7	0.11	-	124,127,142,178	1
56	OHX	CA	1767	7/7	0.28	-	110,139,162,203	1
56	OHX	DB	212	7/7	0.11	-	144,152,161,194	1
55	MG	DA	3147	1/1	0.30	-	55,55,55,55	0
56	OHX	DA	3491	7/7	0.09	-	104,107,129,176	1
56	OHX	BC	106	7/7	0.15	-	119,120,134,160	1
55	MG	CA	1719	1/1	0.32	-	94,94,94,94	0
55	MG	DA	3290	1/1	0.15	-	37,37,37,37	0
56	OHX	DA	3385	7/7	0.15	-	78,128,134,201	1
55	MG	BA	1609	1/1	0.26	-	65,65,65,65	0
55	MG	C1	101	1/1	0.28	-	102,102,102,102	0
55	MG	AA	3221	1/1	0.30	-	41,41,41,41	0
55	MG	AA	3145	1/1	0.31	-	27,27,27,27	0
55	MG	CA	1702	1/1	0.45	-	59,59,59,59	0
56	OHX	BA	1762	7/7	0.17	-	121,131,144,180	1
55	MG	BA	1712	1/1	0.06	-	74,74,74,74	0
56	OHX	BA	1814	7/7	0.10	-	88,100,109,173	0
56	OHX	AA	3417	7/7	0.21	-	90,102,131,147	3
56	OHX	AA	3328	7/7	0.17	-	67,76,86,89	1
55	MG	DA	3331	1/1	0.37	-	69,69,69,69	0
55	MG	DA	3227	1/1	0.27	-	44,44,44,44	0
55	MG	DA	3193	1/1	0.31	-	43,43,43,43	0
55	MG	AA	3047	1/1	0.31	-	65,65,65,65	0
55	MG	DA	3050	1/1	0.79	-	74,74,74,74	0
56	OHX	CB	105	7/7	0.33	-	139,142,156,183	2
56	OHX	AA	3444	7/7	0.13	-	79,89,101,122	2
56	OHX	CA	1741	7/7	0.11	-	101,122,129,156	2
56	OHX	DA	3367	7/7	0.20	-	100,113,133,149	1
55	MG	CA	1671	1/1	0.30	-	78,78,78,78	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
56	OHX	AB	215	7/7	0.17	-	110,123,130,165	1
56	OHX	AA	3385	7/7	0.16	-	73,87,109,139	2
55	MG	BA	1618	1/1	0.25	-	71,71,71,71	0
55	MG	AA	3316	1/1	0.18	-	79,79,79,79	0
56	OHX	CA	1782	7/7	0.19	-	134,137,147,160	1
56	OHX	BA	1794	7/7	0.10	-	156,163,165,204	1
55	MG	CA	1622	1/1	0.43	-	89,89,89,89	0
55	MG	DA	3225	1/1	0.40	-	55,55,55,55	0
56	OHX	AA	3508	7/7	0.11	-	192,206,214,236	1
55	MG	CA	1612	1/1	0.22	-	95,95,95,95	0
55	MG	DA	3037	1/1	0.43	-	73,73,73,73	0
56	OHX	DA	3424	7/7	0.21	-	124,129,137,157	2
56	OHX	DA	3162	7/7	0.18	-	128,132,141,207	0
55	MG	AA	3027	1/1	0.26	-	35,35,35,35	0
55	MG	CA	1645	1/1	0.49	-	58,58,58,58	0
55	MG	DA	3077	1/1	0.54	-	52,52,52,52	0
55	MG	AA	3099	1/1	0.34	-	60,60,60,60	0
55	MG	BA	1710	1/1	0.29	-	113,113,113,113	0
55	MG	AA	3090	1/1	0.34	-	78,78,78,78	0
56	OHX	DA	3373	7/7	0.17	-	93,104,119,171	1
55	MG	CA	1643	1/1	0.47	-	68,68,68,68	0
55	MG	AA	3266	1/1	0.41	-	62,62,62,62	0
55	MG	AA	3189	1/1	0.31	-	63,63,63,63	0
55	MG	DA	3019	1/1	0.28	-	41,41,41,41	0
55	MG	DA	3049	1/1	0.42	-	104,104,104,104	0
55	MG	DA	3205	1/1	0.13	-	106,106,106,106	0
55	MG	CA	1635	1/1	0.34	-	51,51,51,51	0
56	OHX	DA	3254	7/7	0.27	-	126,129,138,165	1
55	MG	DA	3191	1/1	0.40	-	66,66,66,66	0
55	MG	CC	105	1/1	0.49	-	66,66,66,66	0
55	MG	DA	3322	1/1	0.16	-	152,152,152,152	0
56	OHX	AA	3353	7/7	0.18	-	71,99,117,132	1
55	MG	DA	3293	1/1	0.45	-	88,88,88,88	0
55	MG	BA	1623	1/1	0.42	-	39,39,39,39	0
55	MG	AF	301	1/1	0.07	-	74,74,74,74	0
55	MG	AA	3066	1/1	0.24	-	62,62,62,62	0
56	OHX	AA	3403	7/7	0.16	-	59,89,94,139	1
55	MG	DA	3138	1/1	0.35	-	43,43,43,43	0
56	OHX	BR	101	7/7	0.17	-	132,137,152,164	1
55	MG	DA	3328	1/1	0.25	-	99,99,99,99	0
55	MG	AA	3314	1/1	0.14	-	63,63,63,63	0
55	MG	DA	3230	1/1	0.19	-	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
55	MG	AA	3136	1/1	0.21	-	42,42,42,42	0
55	MG	AA	3077	1/1	0.40	-	39,39,39,39	0
55	MG	AA	3241	1/1	0.29	-	52,52,52,52	0
55	MG	DA	3088	1/1	0.28	-	47,47,47,47	0
55	MG	AA	3183	1/1	0.27	-	59,59,59,59	0
55	MG	DA	3284	1/1	0.26	-	89,89,89,89	0
56	OHX	AA	3527	7/7	0.09	-	147,148,161,187	1
56	OHX	AA	3349	7/7	0.09	-	94,104,124,143	0
56	OHX	AA	3347	7/7	0.15	-	74,77,98,102	2
55	MG	BA	1611	1/1	0.32	-	47,47,47,47	0
56	OHX	AA	3469	7/7	0.08	-	103,113,128,153	1
56	OHX	AA	3503	7/7	0.25	-	99,108,119,150	1
56	OHX	A1	204	7/7	0.15	-	107,117,147,182	3
55	MG	AA	3188	1/1	0.15	-	29,29,29,29	0
55	MG	BA	1659	1/1	0.48	-	43,43,43,43	0
55	MG	AA	3167	1/1	0.17	-	51,51,51,51	0
55	MG	AA	3069	1/1	0.17	-	54,54,54,54	0
56	OHX	BA	1742	7/7	0.12	-	149,155,172,201	1
55	MG	AA	3251	1/1	0.57	-	75,75,75,75	0
56	OHX	D8	101	7/7	0.20	-	140,149,164,175	1
56	OHX	DA	3464	7/7	0.26	-	117,129,143,171	1
56	OHX	AA	3442	7/7	0.13	-	97,106,127,148	1
55	MG	AA	3157	1/1	0.40	-	86,86,86,86	0
55	MG	AA	3126	1/1	0.29	-	54,54,54,54	0
56	OHX	BA	1774	7/7	0.12	-	104,121,130,163	1
56	OHX	AA	3406	7/7	0.11	-	93,96,102,133	1
55	MG	AA	3228	1/1	0.40	-	53,53,53,53	0
56	OHX	DA	3170	7/7	0.13	-	114,125,135,172	1
55	MG	DB	205	1/1	0.19	-	64,64,64,64	0
55	MG	BB	102	1/1	0.32	-	92,92,92,92	0
56	OHX	AA	3530	7/7	0.28	-	117,123,125,163	1
55	MG	DA	3309	1/1	0.17	-	68,68,68,68	0
55	MG	DA	3030	1/1	0.24	-	94,94,94,94	0
56	OHX	DA	3365	7/7	0.11	-	100,119,136,159	2
56	OHX	DA	3360	7/7	0.14	-	72,81,91,113	1
56	OHX	BA	1789	7/7	0.05	-	132,137,146,191	1
56	OHX	BA	1732	7/7	0.11	-	128,131,145,175	2
55	MG	CA	1699	1/1	0.44	-	86,86,86,86	0
55	MG	A3	101	1/1	0.39	-	71,71,71,71	0
55	MG	CA	1674	1/1	0.60	-	97,97,97,97	0
56	OHX	DA	3479	7/7	0.12	-	150,159,164,201	1
56	OHX	BA	1726	7/7	0.08	-	134,139,145,195	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
55	MG	CA	1644	1/1	0.34	-	89,89,89,89	0
56	OHX	AB	214	7/7	0.14	-	125,133,135,173	1
56	OHX	CA	1774	7/7	0.20	-	137,150,161,190	1
55	MG	AA	3289	1/1	0.39	-	61,61,61,61	0
56	OHX	BA	1766	7/7	0.19	-	108,139,151,181	2
56	OHX	DA	3442	7/7	0.11	-	135,142,161,190	1
55	MG	CB	102	1/1	0.40	-	80,80,80,80	0
55	MG	AA	3161	1/1	0.21	-	57,57,57,57	0
55	MG	AA	3045	1/1	0.17	-	33,33,33,33	0
55	MG	AA	3063	1/1	0.33	-	45,45,45,45	0
55	MG	AA	3074	1/1	0.13	-	90,90,90,90	0
57	PAR	BA	1715	42/42	0.17	-	61,73,83,89	0
55	MG	DA	3119	1/1	0.31	-	38,38,38,38	0
55	MG	AA	3130	1/1	0.34	-	43,43,43,43	0
55	MG	AA	3284	1/1	0.31	-	68,68,68,68	0
55	MG	AA	3038	1/1	0.41	-	68,68,68,68	0
55	MG	AA	3311	1/1	0.32	-	90,90,90,90	0
55	MG	DA	3270	1/1	0.63	-	73,73,73,73	0
56	OHX	CA	1748	7/7	0.08	-	137,145,152,186	1
56	OHX	AA	3478	7/7	0.17	-	147,161,167,217	1
56	OHX	DA	3428	7/7	0.15	-	93,108,120,163	1
55	MG	AA	3086	1/1	0.34	-	73,73,73,73	0
55	MG	CA	1716	1/1	0.34	-	79,79,79,79	0
55	MG	AA	3246	1/1	0.29	-	44,44,44,44	0
55	MG	BA	1670	1/1	0.33	-	100,100,100,100	0
56	OHX	AA	3409	7/7	0.13	-	99,110,115,152	1
56	OHX	AA	3492	7/7	0.10	-	139,142,151,196	1
55	MG	DB	201	1/1	0.12	-	95,95,95,95	0
56	OHX	AA	3466	7/7	0.10	-	98,120,132,157	1
55	MG	DA	3314	1/1	0.18	-	70,70,70,70	0
55	MG	AA	3216	1/1	0.45	-	33,33,33,33	0
55	MG	DA	3261	1/1	0.38	-	53,53,53,53	0
55	MG	AA	3304	1/1	0.15	-	55,55,55,55	0
56	OHX	AA	3392	7/7	0.18	-	81,92,124,181	2
55	MG	DA	3125	1/1	0.27	-	54,54,54,54	0
55	MG	AA	3302	1/1	0.42	-	72,72,72,72	0
55	MG	DA	3080	1/1	0.34	-	43,43,43,43	0
55	MG	DA	3051	1/1	0.46	-	39,39,39,39	0
56	OHX	CA	1794	7/7	0.17	-	102,115,122,149	1
55	MG	DA	3048	1/1	0.47	-	93,93,93,93	0
55	MG	AA	3278	1/1	0.51	-	73,73,73,73	0
56	OHX	A6	101	7/7	0.14	-	112,127,141,158	2

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
55	MG	CA	1682	1/1	0.25	-	107,107,107,107	0
56	OHX	AA	3398	7/7	0.14	-	90,95,125,158	1
55	MG	AA	3078	1/1	0.24	-	97,97,97,97	0
55	MG	BA	1667	1/1	0.51	-	73,73,73,73	0
55	MG	AA	3111	1/1	0.33	-	69,69,69,69	0
56	OHX	BA	1785	7/7	0.12	-	117,124,136,144	2
55	MG	CA	1657	1/1	0.16	-	81,81,81,81	0
55	MG	BA	1638	1/1	0.29	-	104,104,104,104	0
56	OHX	DA	3369	7/7	0.13	-	89,100,105,125	1
55	MG	DA	3233	1/1	0.27	-	65,65,65,65	0
55	MG	AA	3147	1/1	0.37	-	49,49,49,49	0
56	OHX	DB	215	7/7	0.16	-	147,149,158,191	1
55	MG	AA	3272	1/1	0.38	-	29,29,29,29	0
56	OHX	DA	3124	7/7	0.16	-	144,164,170,220	1
56	OHX	BA	1790	7/7	0.08	-	163,166,178,211	1
55	MG	CA	1694	1/1	0.29	-	89,89,89,89	0
55	MG	CA	1608	1/1	0.27	-	76,76,76,76	0
55	MG	AA	3274	1/1	0.10	-	36,36,36,36	0
56	OHX	DA	3422	7/7	0.13	-	92,100,111,154	1
56	OHX	DA	3489	7/7	0.13	-	117,121,134,153	1
56	OHX	AA	3410	7/7	0.13	-	91,99,106,125	1
56	OHX	AA	3563	7/7	0.13	-	128,136,143,179	1
56	OHX	AA	3522	7/7	0.21	-	74,93,104,150	2
55	MG	CA	1646	1/1	0.17	-	79,79,79,79	0
55	MG	CA	1714	1/1	0.38	-	84,84,84,84	0
55	MG	DA	3100	1/1	0.32	-	87,87,87,87	0
56	OHX	AA	3359	7/7	0.12	-	91,110,118,137	1
56	OHX	DA	3215	7/7	0.14	-	97,115,127,150	3
55	MG	BC	101	1/1	0.32	-	62,62,62,62	0
56	OHX	DA	3469	7/7	0.17	-	116,119,133,163	1
55	MG	AA	3132	1/1	0.49	-	48,48,48,48	0
55	MG	AA	3098	1/1	0.28	-	29,29,29,29	0
55	MG	AA	3072	1/1	0.37	-	73,73,73,73	0
55	MG	DA	3207	1/1	0.25	-	37,37,37,37	0
55	MG	DA	3303	1/1	0.21	-	97,97,97,97	0
55	MG	AA	3202	1/1	0.20	-	30,30,30,30	0
55	MG	DA	3028	1/1	0.44	-	44,44,44,44	0
56	OHX	DB	216	7/7	0.12	-	123,138,155,204	1
55	MG	CA	1713	1/1	0.20	-	114,114,114,114	0
56	OHX	DA	3109	7/7	0.33	-	99,116,138,153	1
55	MG	AA	3035	1/1	0.18	-	38,38,38,38	0
55	MG	CA	1663	1/1	0.17	-	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	OHX	DA	3176	7/7	0.22	-	162,165,176,192	1
56	OHX	DA	3091	7/7	0.15	-	103,121,134,170	1
56	OHX	AA	3431	7/7	0.11	-	101,115,120,168	1
56	OHX	AA	3544	7/7	0.21	-	118,127,137,169	1
56	OHX	AA	3541	7/7	0.39	-	131,134,141,173	1
55	MG	BA	1603	1/1	0.17	-	40,40,40,40	0
56	OHX	DA	3463	7/7	0.18	-	142,149,156,188	1
55	MG	AA	3253	1/1	0.35	-	49,49,49,49	0
56	OHX	BA	1792	7/7	0.14	-	118,131,146,181	1
55	MG	AA	3128	1/1	0.30	-	53,53,53,53	0
55	MG	AE	301	1/1	0.32	-	51,51,51,51	0
55	MG	AA	3192	1/1	0.37	-	34,34,34,34	0
56	OHX	CK	201	7/7	0.28	-	143,148,155,179	1
56	OHX	DA	3439	7/7	0.13	-	127,146,152,174	1
56	OHX	BA	1759	7/7	0.07	-	173,177,187,214	1
55	MG	BA	1672	1/1	0.24	-	82,82,82,82	0
56	OHX	CA	1761	7/7	0.08	-	133,143,154,174	1
56	OHX	AA	3566	7/7	0.14	-	171,177,185,204	1
56	OHX	AA	3422	7/7	0.20	-	63,104,126,147	2
55	MG	AA	3357	1/1	0.24	-	69,69,69,69	0
55	MG	DA	3044	1/1	0.32	-	100,100,100,100	0
55	MG	AA	3089	1/1	0.26	-	130,130,130,130	0
56	OHX	AA	3531	7/7	0.12	-	225,229,234,256	1
56	OHX	CA	1740	7/7	0.08	-	125,134,139,166	1
56	OHX	AA	3430	7/7	0.08	-	119,125,132,176	1
55	MG	BA	1635	1/1	0.08	-	86,86,86,86	0
55	MG	CA	1658	1/1	0.31	-	65,65,65,65	0
55	MG	BA	1645	1/1	0.12	-	76,76,76,76	0
56	OHX	AA	3460	7/7	0.10	-	131,133,148,193	1
56	OHX	CA	1731	7/7	0.17	-	90,118,129,156	1
55	MG	DA	3300	1/1	0.25	-	63,63,63,63	0
55	MG	A1	201	1/1	0.32	-	62,62,62,62	0
55	MG	DA	3294	1/1	0.15	-	74,74,74,74	0
55	MG	AA	3318	1/1	0.23	-	75,75,75,75	0
55	MG	DA	3059	1/1	0.27	-	40,40,40,40	0
55	MG	CA	1661	1/1	0.48	-	83,83,83,83	0
55	MG	C1	102	1/1	0.42	-	104,104,104,104	0
55	MG	BA	1640	1/1	0.19	-	71,71,71,71	0
56	OHX	CA	1754	7/7	0.15	-	116,125,134,168	1
56	OHX	AA	3429	7/7	0.14	-	84,97,102,156	1
56	OHX	BA	1730	7/7	0.12	-	106,118,135,150	1
56	OHX	DA	3425	7/7	0.09	-	125,134,139,188	1

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	OHX	DA	3118	7/7	0.18	-	99,101,123,146	3
56	OHX	DA	3249	7/7	0.12	-	93,103,118,149	1
55	MG	DA	3184	1/1	0.51	-	37,37,37,37	0
56	OHX	AA	3520	7/7	0.24	-	88,95,98,151	2
56	OHX	AW	101	7/7	0.16	-	112,118,129,149	1
56	OHX	AA	3329	7/7	0.16	-	73,97,104,113	0
55	MG	DA	3140	1/1	0.39	-	55,55,55,55	0
55	MG	BA	1616	1/1	0.07	-	101,101,101,101	0
56	OHX	DA	3471	7/7	0.12	-	112,124,129,160	1
56	OHX	DA	3434	7/7	0.12	-	127,134,154,190	1
56	OHX	CA	1743	7/7	0.10	-	101,120,132,162	1
56	OHX	CA	1777	7/7	0.08	-	157,162,168,202	1
55	MG	CA	1673	1/1	0.35	-	76,76,76,76	0
56	OHX	DA	3451	7/7	0.11	-	103,107,114,153	1
56	OHX	AA	3558	7/7	0.14	-	92,100,110,168	1
55	MG	AA	3015	1/1	0.29	-	44,44,44,44	0
56	OHX	BA	1723	7/7	0.15	-	93,106,124,143	1
55	MG	BA	1650	1/1	0.20	-	85,85,85,85	0
55	MG	DA	3031	1/1	0.20	-	77,77,77,77	0
56	OHX	DA	3351	7/7	0.12	-	87,96,108,109	1
55	MG	AA	3165	1/1	0.54	-	79,79,79,79	0
56	OHX	AA	3391	7/7	0.14	-	69,80,102,109	3
56	OHX	AA	3462	7/7	0.17	-	105,108,119,142	2
56	OHX	BA	1783	7/7	0.09	-	121,130,148,178	1
55	MG	BA	1695	1/1	0.16	-	132,132,132,132	0
56	OHX	D3	101	7/7	0.13	-	129,139,156,171	2
55	MG	BA	1664	1/1	0.27	-	54,54,54,54	0
55	MG	AA	3071	1/1	0.42	-	84,84,84,84	0
56	OHX	A1	203	7/7	0.16	-	97,103,123,154	1
56	OHX	AA	3505	7/7	0.14	-	143,150,161,212	1
55	MG	DA	3013	1/1	0.37	-	40,40,40,40	0
55	MG	BA	1692	1/1	0.12	-	73,73,73,73	0
56	OHX	AA	3489	7/7	0.10	-	136,140,156,178	1
55	MG	BA	1709	1/1	0.16	-	68,68,68,68	0
55	MG	CA	1617	1/1	0.13	-	126,126,126,126	0
55	MG	AA	3049	1/1	0.17	-	66,66,66,66	0
55	MG	BA	1627	1/1	0.16	-	58,58,58,58	0
55	MG	CA	1656	1/1	0.29	-	94,94,94,94	0
56	OHX	AA	3380	7/7	0.14	-	86,90,110,143	1
55	MG	BA	1693	1/1	0.14	-	68,68,68,68	0
55	MG	BA	1702	1/1	0.38	-	84,84,84,84	0
56	OHX	AA	3521	7/7	0.12	-	103,107,119,167	2

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
55	MG	AA	3197	1/1	0.27	-	57,57,57,57	0
56	OHX	AA	3412	7/7	0.13	-	119,122,141,174	1
55	MG	CA	1707	1/1	0.17	-	97,97,97,97	0
55	MG	AA	3234	1/1	0.13	-	68,68,68,68	0
56	OHX	AA	3554	7/7	0.18	-	138,143,153,173	1
56	OHX	DA	3377	7/7	0.14	-	91,105,111,146	2
55	MG	CA	1672	1/1	0.80	-	125,125,125,125	0
55	MG	AA	3060	1/1	0.21	-	89,89,89,89	0
55	MG	AE	303	1/1	0.19	-	36,36,36,36	0
56	OHX	BA	1747	7/7	0.21	-	117,129,140,148	1
56	OHX	AA	3331	7/7	0.17	-	93,94,108,145	0
56	OHX	AA	3470	7/7	0.08	-	116,126,152,171	1
56	OHX	AA	3567	7/7	0.13	-	125,135,148,181	2
56	OHX	BA	1770	7/7	0.10	-	114,115,121,163	1
55	MG	AA	3307	1/1	0.31	-	72,72,72,72	0
55	MG	CA	1705	1/1	0.40	-	73,73,73,73	0
55	MG	BA	1606	1/1	0.20	-	70,70,70,70	0
55	MG	AA	3022	1/1	0.34	-	28,28,28,28	0
56	OHX	AB	208	7/7	0.14	-	95,117,137,155	2
56	OHX	BA	1756	7/7	0.08	-	153,171,174,206	1
55	MG	AA	3100	1/1	0.33	-	58,58,58,58	0
55	MG	AA	3207	1/1	0.50	-	44,44,44,44	0
56	OHX	AA	3463	7/7	0.13	-	94,102,127,154	1
55	MG	AA	3203	1/1	0.40	-	72,72,72,72	0
55	MG	DA	3054	1/1	0.15	-	56,56,56,56	0
56	OHX	DA	3390	7/7	0.08	-	117,127,135,170	1
55	MG	BB	109	1/1	0.19	-	80,80,80,80	0
56	OHX	BA	1750	7/7	0.15	-	112,129,139,168	1
56	OHX	AA	3514	7/7	0.12	-	126,137,144,183	1
55	MG	DA	3301	1/1	0.34	-	60,60,60,60	0
55	MG	BA	1657	1/1	0.34	-	87,87,87,87	0
55	MG	AA	3042	1/1	0.23	-	42,42,42,42	0
55	MG	CA	1695	1/1	0.12	-	94,94,94,94	0
55	MG	AA	3210	1/1	0.53	-	43,43,43,43	0
55	MG	DA	3296	1/1	0.43	-	103,103,103,103	0
55	MG	DA	3155	1/1	0.34	-	58,58,58,58	0
56	OHX	AA	3537	7/7	0.08	-	164,173,184,214	1
55	MG	DA	3232	1/1	0.59	-	63,63,63,63	0
56	OHX	DA	3171	7/7	0.18	-	95,116,127,171	1
56	OHX	BA	1793	7/7	0.18	-	129,132,141,164	1
56	OHX	AA	3351	7/7	0.13	-	60,68,78,99	3
56	OHX	BA	1784	7/7	0.14	-	94,101,111,137	1

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
55	MG	DA	3216	1/1	0.36	-	71,71,71,71	0
55	MG	DA	3211	1/1	0.40	-	57,57,57,57	0
55	MG	BA	1696	1/1	0.28	-	94,94,94,94	0
56	OHX	CA	1795	7/7	0.11	-	115,125,132,165	1
56	OHX	AA	3510	7/7	0.12	-	98,106,123,159	1
56	OHX	DA	3426	7/7	0.07	-	118,125,141,168	1
55	MG	AA	3254	1/1	0.32	-	43,43,43,43	0
56	OHX	BA	1722	7/7	0.07	-	114,116,123,159	0
55	MG	AA	3198	1/1	0.27	-	34,34,34,34	0
56	OHX	AA	3511	7/7	0.14	-	133,137,167,178	2
56	OHX	BA	1757	7/7	0.18	-	86,113,131,156	4
55	MG	DA	3003	1/1	0.25	-	43,43,43,43	0
55	MG	DA	3239	1/1	0.19	-	79,79,79,79	0
55	MG	AB	204	1/1	0.44	-	80,80,80,80	0
55	MG	DA	3269	1/1	0.41	-	52,52,52,52	0
55	MG	AA	3008	1/1	0.37	-	32,32,32,32	0
55	MG	AA	3029	1/1	0.29	-	59,59,59,59	0
56	OHX	BA	1797	7/7	0.15	-	117,130,138,173	1
56	OHX	AA	3361	7/7	0.12	-	76,81,111,125	3
55	MG	AA	3199	1/1	0.51	-	75,75,75,75	0
55	MG	DA	3060	1/1	0.46	-	77,77,77,77	0
56	OHX	CA	1765	7/7	0.07	-	169,177,182,233	1
56	OHX	DA	3407	7/7	0.14	-	124,134,145,191	1
56	OHX	DA	3476	7/7	0.12	-	126,136,143,174	1
56	OHX	AA	3461	7/7	0.12	-	102,110,120,148	1
56	OHX	CA	1762	7/7	0.08	-	148,151,154,182	1
55	MG	CA	1693	1/1	0.13	-	55,55,55,55	0
55	MG	AA	3152	1/1	0.39	-	50,50,50,50	0
55	MG	DA	3179	1/1	0.37	-	46,46,46,46	0
55	MG	AA	3043	1/1	0.38	-	75,75,75,75	0
55	MG	AA	3293	1/1	0.23	-	72,72,72,72	0
55	MG	CA	1639	1/1	0.41	-	69,69,69,69	0
55	MG	BC	102	1/1	0.35	-	65,65,65,65	0
55	MG	DA	3137	1/1	0.40	-	51,51,51,51	0
55	MG	CA	1667	1/1	0.46	-	78,78,78,78	0
55	MG	CA	1704	1/1	0.08	-	135,135,135,135	0
55	MG	DA	3038	1/1	0.25	-	77,77,77,77	0
55	MG	BB	106	1/1	0.59	-	102,102,102,102	0
56	OHX	DA	3456	7/7	0.11	-	133,142,150,207	1
55	MG	DA	3235	1/1	0.42	-	66,66,66,66	0
55	MG	AA	3212	1/1	0.38	-	33,33,33,33	0
55	MG	AA	3088	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
55	MG	DA	3026	1/1	0.27	-	55,55,55,55	0
55	MG	CA	1698	1/1	0.68	-	86,86,86,86	0
56	OHX	BA	1801	7/7	0.08	-	129,138,143,174	1
55	MG	DA	3015	1/1	0.21	-	56,56,56,56	0
56	OHX	DA	3217	7/7	0.09	-	144,149,153,189	1
56	OHX	DA	3450	7/7	0.14	-	133,139,150,199	1
55	MG	DA	3092	1/1	0.23	-	74,74,74,74	0
55	MG	DA	3190	1/1	0.61	-	44,44,44,44	0
55	MG	DA	3108	1/1	0.48	-	56,56,56,56	0
56	OHX	AA	3485	7/7	0.17	-	103,114,131,163	1
56	OHX	AA	3390	7/7	0.16	-	48,74,93,125	2
55	MG	DA	3090	1/1	0.30	-	54,54,54,54	0
56	OHX	BC	105	7/7	0.12	-	129,141,151,159	1
56	OHX	CA	1789	7/7	0.11	-	152,164,170,204	1
55	MG	AA	3127	1/1	0.34	-	45,45,45,45	0
56	OHX	AA	3483	7/7	0.16	-	106,109,118,158	2
56	OHX	CA	1784	7/7	0.17	-	127,135,151,190	1
56	OHX	BA	1771	7/7	0.18	-	101,104,120,152	2
55	MG	DA	3022	1/1	0.69	-	63,63,63,63	0
55	MG	BA	1662	1/1	0.25	-	56,56,56,56	0
55	MG	AA	3055	1/1	0.31	-	88,88,88,88	0
55	MG	CA	1641	1/1	0.41	-	85,85,85,85	0
55	MG	AA	3287	1/1	0.29	-	66,66,66,66	0
56	OHX	BA	1738	7/7	0.17	-	112,124,136,189	1
55	MG	DA	3122	1/1	0.34	-	30,30,30,30	0
55	MG	DA	3008	1/1	0.18	-	43,43,43,43	0
55	MG	AA	3135	1/1	0.39	-	66,66,66,66	0
56	OHX	DA	3166	7/7	0.10	-	159,166,176,197	1
56	OHX	DA	3408	7/7	0.14	-	122,131,146,182	1
55	MG	AA	3044	1/1	0.45	-	42,42,42,42	0
56	OHX	AA	3413	7/7	0.12	-	94,104,121,143	1
56	OHX	DA	3382	7/7	0.15	-	67,85,95,136	2
56	OHX	AA	3437	7/7	0.18	-	76,82,94,136	1
55	MG	AA	3208	1/1	0.37	-	62,62,62,62	0
55	MG	DA	3066	1/1	0.32	-	77,77,77,77	0
56	OHX	BA	1746	7/7	0.12	-	95,103,110,146	1
56	OHX	BA	1782	7/7	0.10	-	137,145,154,180	1
55	MG	AA	3149	1/1	0.34	-	58,58,58,58	0
55	MG	BA	1680	1/1	0.15	-	64,64,64,64	0
55	MG	DA	3324	1/1	0.49	-	66,66,66,66	0
56	OHX	AA	3399	7/7	0.14	-	97,111,117,147	1
55	MG	CA	1665	1/1	0.33	-	114,114,114,114	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	OHX	DA	3398	7/7	0.11	-	119,127,142,162	1
55	MG	AA	3046	1/1	0.31	-	50,50,50,50	0
56	OHX	DA	3169	7/7	0.18	-	110,124,136,172	1
56	OHX	AA	3465	7/7	0.19	-	82,99,109,148	1
56	OHX	CA	1798	7/7	0.11	-	116,126,129,163	1
55	MG	AA	3075	1/1	0.22	-	78,78,78,78	0
56	OHX	AA	3484	7/7	0.13	-	123,137,150,203	1
56	OHX	DB	210	7/7	0.11	-	119,127,150,173	2
55	MG	AA	3303	1/1	0.16	-	77,77,77,77	0
55	MG	CA	1687	1/1	0.32	-	104,104,104,104	0
55	MG	DA	3018	1/1	0.33	-	47,47,47,47	0
56	OHX	DA	3478	7/7	0.17	-	106,110,128,170	1
56	OHX	CA	1747	7/7	0.17	-	129,134,147,212	1
55	MG	DA	3085	1/1	0.37	-	53,53,53,53	0
55	MG	DA	3260	1/1	0.29	-	68,68,68,68	0
56	OHX	CA	1792	7/7	0.07	-	189,191,192,232	1
56	OHX	BA	1739	7/7	0.09	-	109,119,131,155	1
55	MG	AA	3279	1/1	0.50	-	90,90,90,90	0
56	OHX	BA	1773	7/7	0.08	-	135,139,146,167	1
56	OHX	DA	3061	7/7	0.12	-	81,86,92,106	0
56	OHX	CV	101	7/7	0.10	-	174,182,196,223	1
56	OHX	BA	1734	7/7	0.15	-	92,99,114,146	1
56	OHX	DA	3220	7/7	0.11	-	141,154,156,201	1
56	OHX	CA	1802	7/7	0.09	-	130,138,148,200	1
56	OHX	AA	3457	7/7	0.10	-	86,94,124,185	1
56	OHX	AA	3504	7/7	0.17	-	101,103,116,145	2
56	OHX	DA	3458	7/7	0.08	-	173,175,178,215	1
56	OHX	DA	3417	7/7	0.07	-	145,152,156,188	1
55	MG	DA	3158	1/1	0.62	-	88,88,88,88	0
55	MG	AA	3173	1/1	0.44	-	65,65,65,65	0
56	OHX	BA	1751	7/7	0.15	-	101,112,132,168	2
55	MG	AA	3275	1/1	0.57	-	71,71,71,71	0
56	OHX	AA	3402	7/7	0.10	-	73,86,98,123	1
55	MG	AA	3153	1/1	0.41	-	40,40,40,40	0
55	MG	DA	3116	1/1	0.20	-	62,62,62,62	0
55	MG	BA	1714	1/1	0.58	-	83,83,83,83	0
56	OHX	AA	3524	7/7	0.13	-	115,120,140,187	1
55	MG	CA	1640	1/1	0.27	-	77,77,77,77	0
56	OHX	DA	3075	7/7	0.15	-	89,91,114,123	1
55	MG	AA	3193	1/1	0.34	-	86,86,86,86	0
56	OHX	AA	3336	7/7	0.18	-	67,91,105,145	0
56	OHX	DA	3394	7/7	0.12	-	127,139,150,223	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
56	OHX	AA	3440	7/7	0.10	-	83,91,111,141	1
55	MG	DA	3262	1/1	0.24	-	59,59,59,59	0
56	OHX	DA	3411	7/7	0.13	-	104,112,132,163	1
56	OHX	AA	3532	7/7	0.14	-	136,144,160,202	1
56	OHX	CA	1756	7/7	0.11	-	99,109,123,147	2
56	OHX	AA	3540	7/7	0.22	-	104,109,137,150	2
55	MG	CA	1668	1/1	0.35	-	80,80,80,80	0
55	MG	AA	3269	1/1	0.33	-	59,59,59,59	0
55	MG	DA	3263	1/1	0.27	-	55,55,55,55	0
55	MG	DA	3308	1/1	0.22	-	60,60,60,60	0
56	OHX	AA	3560	7/7	0.17	-	132,136,153,192	1
56	OHX	BA	1781	7/7	0.16	-	115,133,141,174	1
55	MG	AA	3249	1/1	0.25	-	81,81,81,81	0
56	OHX	BA	1780	7/7	0.21	-	115,123,136,153	1
55	MG	AA	3054	1/1	0.24	-	83,83,83,83	0
56	OHX	DA	3346	7/7	0.10	-	107,113,126,132	0
55	MG	AA	3070	1/1	0.12	-	56,56,56,56	0
56	OHX	DA	3084	7/7	0.13	-	132,139,149,176	1
56	OHX	DA	3473	7/7	0.10	-	138,151,163,196	1
56	OHX	DA	3461	7/7	0.10	-	171,173,180,211	1
55	MG	CA	1708	1/1	0.12	-	95,95,95,95	0
55	MG	AA	3148	1/1	0.24	-	69,69,69,69	0
56	OHX	AA	3394	7/7	0.14	-	113,123,125,181	1
55	MG	A5	101	1/1	0.31	-	43,43,43,43	0
55	MG	A7	101	1/1	0.36	-	56,56,56,56	0
56	OHX	CA	1775	7/7	0.12	-	139,154,159,200	1
55	MG	CA	1685	1/1	0.43	-	104,104,104,104	0
56	OHX	AA	3362	7/7	0.14	-	104,116,120,168	1
55	MG	DE	301	1/1	0.33	-	52,52,52,52	0
55	MG	DA	3177	1/1	0.46	-	61,61,61,61	0
55	MG	DA	3250	1/1	0.34	-	64,64,64,64	0
56	OHX	AA	3452	7/7	0.10	-	92,103,111,136	1
55	MG	DA	3229	1/1	0.41	-	45,45,45,45	0
55	MG	BA	1614	1/1	0.11	-	73,73,73,73	0
55	MG	AB	201	1/1	0.28	-	85,85,85,85	0
55	MG	BA	1660	1/1	0.52	-	52,52,52,52	0
56	OHX	CC	108	7/7	0.16	-	130,137,148,169	1
55	MG	DA	3265	1/1	0.14	-	73,73,73,73	0
56	OHX	DA	3099	7/7	0.24	-	104,109,114,163	1
56	OHX	CA	1801	7/7	0.10	-	137,140,148,200	1
55	MG	CC	104	1/1	0.46	-	89,89,89,89	0
55	MG	AA	3175	1/1	0.23	-	46,46,46,46	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
56	OHX	AA	3443	7/7	0.13	-	110,114,126,149	2
56	OHX	BA	1800	7/7	0.08	-	127,133,145,177	1
55	MG	AA	3248	1/1	0.31	-	28,28,28,28	0
55	MG	AA	3016	1/1	0.35	-	29,29,29,29	0
56	OHX	BA	1735	7/7	0.09	-	120,129,137,168	1
56	OHX	DA	3159	7/7	0.16	-	75,86,105,131	3
55	MG	BA	1675	1/1	0.46	-	87,87,87,87	0
55	MG	BA	1632	1/1	0.19	-	73,73,73,73	0
55	MG	AA	3166	1/1	0.33	-	41,41,41,41	0
56	OHX	DA	3073	7/7	0.17	-	89,101,109,132	1
55	MG	DA	3198	1/1	0.38	-	44,44,44,44	0
55	MG	AE	302	1/1	0.23	-	74,74,74,74	0
56	OHX	DA	3399	7/7	0.21	-	104,107,123,144	2
56	OHX	CA	1755	7/7	0.11	-	119,128,149,178	1
56	OHX	DA	3453	7/7	0.18	-	145,153,160,191	1
56	OHX	CA	1729	7/7	0.14	-	104,115,126,154	1
56	OHX	DA	3396	7/7	0.17	-	96,99,105,140	1
55	MG	DA	3010	1/1	0.34	-	47,47,47,47	0
55	MG	DA	3096	1/1	0.20	-	85,85,85,85	0
56	OHX	AA	3395	7/7	0.18	-	100,109,130,162	1
56	OHX	DA	3420	7/7	0.10	-	116,120,125,152	1
55	MG	AA	3140	1/1	0.34	-	70,70,70,70	0
55	MG	AA	3117	1/1	0.21	-	90,90,90,90	0
55	MG	DA	3093	1/1	0.15	-	46,46,46,46	0
56	OHX	DB	219	7/7	0.16	-	147,161,178,209	1
56	OHX	DB	217	7/7	0.16	-	135,139,157,196	1
56	OHX	DA	3160	7/7	0.17	-	79,114,122,124	0
55	MG	DA	3222	1/1	0.27	-	83,83,83,83	0
55	MG	AA	3323	1/1	0.26	-	58,58,58,58	0
55	MG	AA	3233	1/1	0.28	-	82,82,82,82	0
56	OHX	BA	1795	7/7	0.12	-	152,159,163,204	1
55	MG	BB	107	1/1	0.16	-	80,80,80,80	0
56	OHX	AA	3363	7/7	0.12	-	89,101,119,137	1
56	OHX	DA	3127	7/7	0.25	-	118,132,150,170	2
56	OHX	AA	3341	7/7	0.18	-	77,80,88,124	1
55	MG	AA	3196	1/1	0.34	-	43,43,43,43	0
55	MG	BA	1637	1/1	0.22	-	99,99,99,99	0
55	MG	AA	3325	1/1	0.37	-	75,75,75,75	0
56	OHX	AA	3553	7/7	0.12	-	160,165,172,209	1
55	MG	BA	1711	1/1	0.28	-	90,90,90,90	0
55	MG	DA	3267	1/1	0.31	-	82,82,82,82	0
55	MG	AA	3124	1/1	0.34	-	88,88,88,88	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	OHX	AA	3487	7/7	0.11	-	73,82,95,140	2
56	OHX	CA	1733	7/7	0.13	-	109,120,127,147	1
56	OHX	AA	3367	7/7	0.24	-	69,72,90,147	3
56	OHX	DA	3389	7/7	0.10	-	82,85,99,113	1
55	MG	AA	3092	1/1	0.19	-	92,92,92,92	0
55	MG	AA	3114	1/1	0.35	-	62,62,62,62	0
55	MG	BA	1617	1/1	0.47	-	60,60,60,60	0
55	MG	AA	3291	1/1	0.41	-	99,99,99,99	0
55	MG	BB	110	1/1	0.24	-	80,80,80,80	0
56	OHX	AA	3518	7/7	0.09	-	106,114,121,148	1
56	OHX	AB	210	7/7	0.10	-	101,108,128,154	1
55	MG	AB	203	1/1	0.23	-	58,58,58,58	0
55	MG	BB	108	1/1	0.26	-	80,80,80,80	0
55	MG	AA	3112	1/1	0.21	-	87,87,87,87	0
55	MG	D5	101	1/1	0.18	-	43,43,43,43	0
56	OHX	DA	3391	7/7	0.10	-	117,125,144,183	1
55	MG	AA	3025	1/1	0.33	-	37,37,37,37	0
55	MG	BA	1706	1/1	0.36	-	111,111,111,111	0
56	OHX	DA	3384	7/7	0.13	-	89,92,105,143	2
56	OHX	AA	3397	7/7	0.11	-	96,102,109,143	1
56	OHX	CA	1763	7/7	0.07	-	142,143,157,189	1
56	OHX	DA	3421	7/7	0.16	-	96,112,124,166	1
55	MG	BA	1678	1/1	0.28	-	44,44,44,44	0
55	MG	BA	1615	1/1	0.45	-	78,78,78,78	0
56	OHX	DA	3168	7/7	0.16	-	129,143,154,181	1
55	MG	AA	3023	1/1	0.29	-	35,35,35,35	0
56	OHX	DA	3212	7/7	0.14	-	64,77,91,94	1
56	OHX	BD	104	7/7	0.33	-	94,101,103,107	3
55	MG	DA	3027	1/1	0.12	-	78,78,78,78	0
55	MG	AA	3003	1/1	0.31	-	39,39,39,39	0
55	MG	CA	1677	1/1	0.45	-	73,73,73,73	0
56	OHX	DA	3368	7/7	0.10	-	86,101,103,132	2
55	MG	AA	3170	1/1	0.60	-	69,69,69,69	0
55	MG	AA	3141	1/1	0.34	-	80,80,80,80	0
55	MG	BA	1685	1/1	0.17	-	93,93,93,93	0
56	OHX	DA	3418	7/7	0.10	-	87,98,117,139	3
55	MG	BA	1691	1/1	0.17	-	87,87,87,87	0
56	OHX	AA	3555	7/7	0.17	-	82,85,105,128	1
56	OHX	AA	3358	7/7	0.10	-	79,81,92,113	1
56	OHX	BA	1778	7/7	0.22	-	125,131,152,191	1
55	MG	AB	205	1/1	0.27	-	68,68,68,68	0
56	OHX	DA	3361	7/7	0.13	-	68,94,122,134	3

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
56	OHX	DA	3339	7/7	0.14	-	91,96,120,132	0
55	MG	CA	1659	1/1	0.07	-	116,116,116,116	0
55	MG	DA	3236	1/1	0.38	-	62,62,62,62	0
56	OHX	BA	1775	7/7	0.15	-	113,130,145,176	1
56	OHX	DA	3409	7/7	0.16	-	103,117,129,162	1
55	MG	DA	3306	1/1	0.47	-	86,86,86,86	0
55	MG	BA	1699	1/1	0.52	-	84,84,84,84	0
55	MG	AA	3138	1/1	0.20	-	78,78,78,78	0
55	MG	DA	3144	1/1	0.49	-	44,44,44,44	0
55	MG	AA	3085	1/1	0.28	-	74,74,74,74	0
55	MG	DA	3126	1/1	0.41	-	63,63,63,63	0
55	MG	AA	3255	1/1	0.23	-	47,47,47,47	0
56	OHX	BA	1725	7/7	0.14	-	95,114,126,182	1
55	MG	CA	1610	1/1	0.38	-	87,87,87,87	0
55	MG	DA	3130	1/1	0.16	-	48,48,48,48	0
55	MG	AA	3264	1/1	0.23	-	51,51,51,51	0
56	OHX	DA	3374	7/7	0.09	-	127,131,139,156	1
56	OHX	AA	3453	7/7	0.13	-	72,88,95,134	2
56	OHX	DA	3345	7/7	0.12	-	89,96,107,130	0
55	MG	AA	3011	1/1	0.26	-	44,44,44,44	0
55	MG	BA	1684	1/1	0.19	-	67,67,67,67	0
55	MG	CA	1628	1/1	0.23	-	137,137,137,137	0
55	MG	BF	301	1/1	0.19	-	79,79,79,79	0
56	OHX	AA	3552	7/7	0.17	-	96,106,128,164	1
55	MG	D7	101	1/1	0.44	-	69,69,69,69	0
56	OHX	AA	3348	7/7	0.13	-	75,81,98,100	3
55	MG	CA	1720	1/1	0.86	-	110,110,110,110	0
56	OHX	AA	3543	7/7	0.09	-	145,150,162,204	1
55	MG	AA	3087	1/1	0.26	-	82,82,82,82	0
56	OHX	DA	3255	7/7	0.19	-	93,104,107,143	1
55	MG	AA	3107	1/1	0.42	-	51,51,51,51	0
55	MG	AA	3102	1/1	0.35	-	52,52,52,52	0
56	OHX	DA	3490	7/7	0.14	-	103,106,122,159	3
55	MG	DA	3297	1/1	0.35	-	70,70,70,70	0
55	MG	DA	3242	1/1	0.45	-	99,99,99,99	0
56	OHX	BA	1812	7/7	0.06	-	170,174,180,213	1
56	OHX	CA	1727	7/7	0.09	-	114,118,131,143	0
55	MG	CC	102	1/1	0.77	-	69,69,69,69	0
55	MG	BA	1694	1/1	0.25	-	60,60,60,60	0
56	OHX	DA	3484	7/7	0.14	-	109,123,139,168	1
56	OHX	DA	3481	7/7	0.12	-	136,140,149,177	1
56	OHX	DA	3226	7/7	0.15	-	120,131,144,175	1

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
55	MG	BA	1648	1/1	0.41	-	86,86,86,86	0
55	MG	DA	3188	1/1	0.35	-	38,38,38,38	0
55	MG	DA	3131	1/1	0.34	-	72,72,72,72	0
55	MG	AA	3159	1/1	0.39	-	81,81,81,81	0
55	MG	AA	3052	1/1	0.27	-	71,71,71,71	0
55	MG	CA	1701	1/1	0.27	-	109,109,109,109	0
55	MG	DA	3292	1/1	0.22	-	51,51,51,51	0
56	OHX	DA	3468	7/7	0.17	-	143,146,150,189	1
55	MG	DA	3067	1/1	0.12	-	82,82,82,82	0
56	OHX	AA	3549	7/7	0.32	-	96,102,109,128	2
56	OHX	AB	209	7/7	0.13	-	98,103,137,147	3
55	MG	AA	3150	1/1	0.23	-	53,53,53,53	0
55	MG	AA	3010	1/1	0.25	-	39,39,39,39	0
55	MG	DA	3151	1/1	0.28	-	62,62,62,62	0
55	MG	CA	1629	1/1	0.41	-	166,166,166,166	0
56	OHX	AA	3559	7/7	0.15	-	123,137,143,179	1
56	OHX	DA	3378	7/7	0.10	-	153,156,169,185	0
55	MG	DA	3241	1/1	0.13	-	47,47,47,47	0
55	MG	AA	3312	1/1	0.20	-	71,71,71,71	0
56	OHX	AA	3557	7/7	0.22	-	89,102,113,146	1
58	ZN	CG	301	1/1	0.27	-	116,116,116,116	0
55	MG	DA	3311	1/1	0.39	-	63,63,63,63	0
55	MG	AA	3243	1/1	0.40	-	62,62,62,62	0
55	MG	AA	3321	1/1	0.32	-	41,41,41,41	0
55	MG	AA	3013	1/1	0.32	-	27,27,27,27	0
56	OHX	DA	3174	7/7	0.16	-	100,112,120,180	1
57	PAR	CA	1722	42/42	0.15	-	72,88,95,97	0
55	MG	CA	1604	1/1	0.16	-	72,72,72,72	0
55	MG	DA	3007	1/1	0.27	-	43,43,43,43	0
55	MG	AA	3067	1/1	0.13	-	50,50,50,50	0
55	MG	DA	3029	1/1	0.34	-	70,70,70,70	0
56	OHX	BA	1779	7/7	0.14	-	129,134,141,170	1
55	MG	AA	3091	1/1	0.45	-	85,85,85,85	0
56	OHX	AA	3536	7/7	0.14	-	99,110,129,173	2
56	OHX	BA	1737	7/7	0.12	-	120,131,149,172	1
55	MG	AA	3024	1/1	0.39	-	45,45,45,45	0
56	OHX	DA	3064	7/7	0.15	-	87,100,123,131	3
56	OHX	DA	3432	7/7	0.09	-	116,131,140,173	1
55	MG	AA	3053	1/1	0.26	-	77,77,77,77	0
55	MG	AA	3250	1/1	0.38	-	55,55,55,55	0
56	OHX	AA	3423	7/7	0.10	-	100,115,121,157	1
55	MG	BB	113	1/1	0.23	-	80,80,80,80	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
55	MG	BA	1633	1/1	0.25	-	77,77,77,77	0
55	MG	DA	3112	1/1	0.52	-	85,85,85,85	0
56	OHX	DA	3414	7/7	0.14	-	126,128,140,174	1
56	OHX	CB	106	7/7	0.31	-	97,107,117,126	6
56	OHX	AA	3468	7/7	0.09	-	110,120,137,165	1
56	OHX	AA	3436	7/7	0.17	-	90,93,119,164	1
55	MG	BA	1658	1/1	0.40	-	47,47,47,47	0
56	OHX	BA	1772	7/7	0.10	-	165,176,177,219	1
55	MG	AA	3059	1/1	0.34	-	77,77,77,77	0
55	MG	DA	3219	1/1	0.15	-	62,62,62,62	0
55	MG	BA	1604	1/1	0.19	-	69,69,69,69	0
56	OHX	DA	3355	7/7	0.11	-	109,111,119,148	2
55	MG	BA	1639	1/1	0.20	-	101,101,101,101	0
55	MG	DA	3074	1/1	0.43	-	40,40,40,40	0
55	MG	DA	3327	1/1	0.22	-	73,73,73,73	0
56	OHX	AA	3479	7/7	0.15	-	94,103,125,176	3
56	OHX	DA	3105	7/7	0.18	-	134,136,144,206	1
56	OHX	DA	3352	7/7	0.11	-	105,120,129,149	0
55	MG	AA	3315	1/1	0.12	-	50,50,50,50	0
56	OHX	CA	1813	7/7	0.28	-	138,144,151,179	1
56	OHX	DA	3381	7/7	0.13	-	111,118,134,167	1
56	OHX	AA	3565	7/7	0.11	-	97,104,114,159	1
56	OHX	DA	3397	7/7	0.08	-	104,119,125,149	1
55	MG	AA	3299	1/1	0.30	-	41,41,41,41	0
55	MG	AA	3082	1/1	0.27	-	57,57,57,57	0
56	OHX	AA	3502	7/7	0.11	-	128,135,148,184	1
56	OHX	DA	3433	7/7	0.20	-	104,114,132,147	1
55	MG	CA	1703	1/1	0.55	-	84,84,84,84	0
55	MG	CA	1679	1/1	0.11	-	87,87,87,87	0
56	OHX	AA	3427	7/7	0.12	-	131,132,136,155	1
55	MG	BA	1665	1/1	0.23	-	53,53,53,53	0
56	OHX	CA	1742	7/7	0.12	-	153,166,169,174	1
56	OHX	BA	1777	7/7	0.07	-	176,178,192,246	1
56	OHX	DA	3441	7/7	0.11	-	114,122,135,176	1
55	MG	AA	3356	1/1	0.51	-	70,70,70,70	0
56	OHX	BD	102	7/7	0.07	-	170,180,207,224	1
55	MG	AA	3158	1/1	0.42	-	49,49,49,49	0
55	MG	AA	3118	1/1	0.22	-	69,69,69,69	0
56	OHX	BL	201	7/7	0.09	-	145,153,159,202	1
56	OHX	DO	201	7/7	0.16	-	112,117,125,146	1
56	OHX	DA	3083	7/7	0.11	-	104,111,120,146	1
55	MG	CA	1696	1/1	0.58	-	74,74,74,74	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	OHX	AA	3495	7/7	0.18	-	106,114,133,188	1
56	OHX	AA	3498	7/7	0.28	-	120,126,136,160	2
56	OHX	DA	3403	7/7	0.11	-	99,105,122,140	1
55	MG	AA	3283	1/1	0.10	-	21,21,21,21	0
55	MG	DA	3045	1/1	0.16	-	61,61,61,61	0
55	MG	DA	3307	1/1	0.50	-	119,119,119,119	0
56	OHX	AA	3496	7/7	0.11	-	107,119,130,176	1
55	MG	CA	1606	1/1	0.15	-	70,70,70,70	0
56	OHX	AA	3493	7/7	0.11	-	102,115,123,140	1
56	OHX	CA	1770	7/7	0.08	-	143,153,167,200	1
55	MG	AA	3294	1/1	0.31	-	36,36,36,36	0
55	MG	DA	3289	1/1	0.21	-	84,84,84,84	0
55	MG	BA	1674	1/1	0.22	-	67,67,67,67	0
56	OHX	DA	3404	7/7	0.11	-	107,121,131,166	1
56	OHX	DA	3416	7/7	0.14	-	112,112,142,167	1
55	MG	CA	1690	1/1	0.11	-	93,93,93,93	0
56	OHX	DA	3402	7/7	0.11	-	122,136,148,204	1
56	OHX	CA	1812	7/7	0.12	-	134,141,149,203	1
55	MG	AA	3009	1/1	0.23	-	29,29,29,29	0
56	OHX	BA	1788	7/7	0.26	-	123,136,147,176	1
55	MG	DA	3310	1/1	0.20	-	73,73,73,73	0
55	MG	DA	3021	1/1	0.28	-	62,62,62,62	0
55	MG	CA	1683	1/1	0.34	-	79,79,79,79	0
56	OHX	DA	3165	7/7	0.18	-	123,135,143,168	1
55	MG	DA	3047	1/1	0.14	-	79,79,79,79	0
56	OHX	AA	3474	7/7	0.12	-	113,120,132,160	1
56	OHX	AA	3475	7/7	0.08	-	132,134,145,192	1
55	MG	BA	1687	1/1	0.23	-	96,96,96,96	0
55	MG	CA	1642	1/1	0.60	-	69,69,69,69	0
55	MG	AA	3225	1/1	0.50	-	52,52,52,52	0
56	OHX	AA	3534	7/7	0.10	-	103,124,138,161	2
56	OHX	AA	3435	7/7	0.14	-	83,103,126,156	2
56	OHX	BA	1805	7/7	0.18	-	98,103,107,150	1
56	OHX	BA	1717	7/7	0.16	-	81,90,105,119	0
55	MG	DA	3329	1/1	0.39	-	60,60,60,60	0
56	OHX	AB	212	7/7	0.11	-	91,105,122,151	3
56	OHX	DA	3488	7/7	0.27	-	87,112,131,159	1
55	MG	AA	3019	1/1	0.30	-	42,42,42,42	0
56	OHX	BA	1761	7/7	0.08	-	136,147,154,197	1
55	MG	AA	3256	1/1	0.41	-	52,52,52,52	0
56	OHX	AA	3408	7/7	0.14	-	107,111,135,163	1
56	OHX	AA	3526	7/7	0.23	-	87,90,101,128	1

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
55	MG	CA	1609	1/1	0.37	-	112,112,112,112	0
55	MG	AA	3123	1/1	0.20	-	65,65,65,65	0
56	OHX	DA	3214	7/7	0.20	-	82,92,98,133	2
55	MG	AA	3103	1/1	0.32	-	50,50,50,50	0
56	OHX	AB	216	7/7	0.19	-	106,124,147,185	1
56	OHX	DA	3380	7/7	0.08	-	108,123,139,150	1
55	MG	CA	1712	1/1	0.20	-	83,83,83,83	0
56	OHX	BA	1748	7/7	0.13	-	124,127,141,171	1
56	OHX	AB	217	7/7	0.23	-	100,108,115,151	1
55	MG	AA	3268	1/1	0.15	-	38,38,38,38	0
56	OHX	DA	3487	7/7	0.16	-	106,108,129,150	1
56	OHX	CA	1807	7/7	0.24	-	109,119,124,150	1
56	OHX	DA	3482	7/7	0.15	-	128,142,154,190	1
56	OHX	DA	3448	7/7	0.12	-	134,147,163,206	1
55	MG	D0	201	1/1	0.13	-	51,51,51,51	0
56	OHX	AA	3389	7/7	0.18	-	80,93,103,143	0
55	MG	DA	3106	1/1	0.22	-	80,80,80,80	0
56	OHX	BA	1729	7/7	0.11	-	110,115,135,137	1
55	MG	DA	3278	1/1	0.40	-	84,84,84,84	0
56	OHX	AA	3365	7/7	0.11	-	86,102,111,118	3
55	MG	DA	3304	1/1	0.17	-	89,89,89,89	0
56	OHX	AA	3448	7/7	0.12	-	141,143,155,200	1
55	MG	AA	3076	1/1	0.22	-	81,81,81,81	0
56	OHX	CA	1752	7/7	0.16	-	139,147,150,191	1
56	OHX	BA	1749	7/7	0.16	-	112,116,136,168	1
55	MG	CA	1626	1/1	0.35	-	124,124,124,124	0
55	MG	AA	3073	1/1	0.32	-	68,68,68,68	0
55	MG	CA	1603	1/1	0.31	-	62,62,62,62	0
56	OHX	DA	3223	7/7	0.20	-	126,133,144,169	1
55	MG	DA	3277	1/1	0.09	-	89,89,89,89	0
55	MG	AA	3172	1/1	0.55	-	71,71,71,71	0
55	MG	DA	3146	1/1	0.23	-	33,33,33,33	0
55	MG	AA	3286	1/1	0.34	-	83,83,83,83	0
55	MG	AA	3012	1/1	0.29	-	45,45,45,45	0
55	MG	CA	1650	1/1	0.27	-	66,66,66,66	0
55	MG	BA	1646	1/1	0.28	-	48,48,48,48	0
56	OHX	DA	3431	7/7	0.17	-	139,144,155,180	1
55	MG	AA	3031	1/1	0.32	-	40,40,40,40	0
56	OHX	DA	3344	7/7	0.15	-	93,104,111,114	1
56	OHX	AB	219	7/7	0.47	-	112,116,126,139	1
55	MG	AA	3306	1/1	0.44	-	100,100,100,100	0
55	MG	DA	3058	1/1	0.34	-	70,70,70,70	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	OHX	AA	3401	7/7	0.13	-	101,105,125,153	1
55	MG	DA	3272	1/1	0.09	-	57,57,57,57	0
55	MG	CA	1662	1/1	0.37	-	92,92,92,92	0
55	MG	DA	3199	1/1	0.44	-	77,77,77,77	0
56	OHX	DA	3475	7/7	0.17	-	126,139,148,175	1
56	OHX	CA	1805	7/7	0.14	-	128,130,148,187	1
55	MG	DA	3079	1/1	0.24	-	49,49,49,49	0
55	MG	AA	3020	1/1	0.39	-	42,42,42,42	0
55	MG	AA	3231	1/1	0.42	-	57,57,57,57	0
55	MG	DA	3097	1/1	0.42	-	67,67,67,67	0
55	MG	BA	1642	1/1	0.41	-	69,69,69,69	0
56	OHX	BA	1763	7/7	0.13	-	123,136,140,184	1
55	MG	AA	3151	1/1	0.30	-	46,46,46,46	0
55	MG	DA	3024	1/1	0.27	-	63,63,63,63	0
55	MG	DA	3213	1/1	0.35	-	57,57,57,57	0
55	MG	BA	1669	1/1	0.30	-	68,68,68,68	0
56	OHX	AA	3538	7/7	0.20	-	95,101,128,162	1
55	MG	AA	3004	1/1	0.34	-	32,32,32,32	0
56	OHX	DA	3457	7/7	0.08	-	149,156,166,200	1
55	MG	BA	1636	1/1	0.15	-	111,111,111,111	0
56	OHX	DA	3082	7/7	0.13	-	92,102,108,132	1
55	MG	CA	1648	1/1	0.40	-	70,70,70,70	0
55	MG	CA	1678	1/1	0.09	-	97,97,97,97	0
56	OHX	DA	3435	7/7	0.21	-	86,99,124,155	1
56	OHX	CA	1771	7/7	0.13	-	105,107,134,145	1
55	MG	AA	3142	1/1	0.47	-	75,75,75,75	0
56	OHX	DB	208	7/7	0.10	-	120,124,144,144	2
56	OHX	CA	1737	7/7	0.08	-	103,118,125,148	1
55	MG	DA	3129	1/1	0.30	-	68,68,68,68	0
56	OHX	AA	3441	7/7	0.15	-	113,135,152,175	1
55	MG	DA	3333	1/1	0.31	-	84,84,84,84	0
55	MG	AA	3343	1/1	0.27	-	92,92,92,92	0
56	OHX	DA	3221	7/7	0.10	-	120,130,140,174	1
55	MG	DB	207	1/1	0.17	-	70,70,70,70	0
56	OHX	BA	1786	7/7	0.20	-	133,136,154,188	1
55	MG	BA	1654	1/1	0.26	-	64,64,64,64	0
55	MG	DA	3183	1/1	0.29	-	99,99,99,99	0
55	MG	AA	3292	1/1	0.42	-	62,62,62,62	0
55	MG	DA	3187	1/1	0.28	-	55,55,55,55	0
55	MG	AA	3187	1/1	0.24	-	40,40,40,40	0
56	OHX	AA	3490	7/7	0.10	-	85,93,105,125	1
55	MG	BA	1651	1/1	0.40	-	76,76,76,76	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
56	OHX	AA	3499	7/7	0.15	-	107,112,120,152	1
55	MG	CA	1709	1/1	0.22	-	76,76,76,76	0
55	MG	BA	1628	1/1	0.28	-	95,95,95,95	0
55	MG	AA	3120	1/1	0.49	-	74,74,74,74	0
56	OHX	AA	3519	7/7	0.20	-	103,114,126,154	1
55	MG	DA	3014	1/1	0.28	-	55,55,55,55	0
55	MG	DA	3279	1/1	0.33	-	68,68,68,68	0
56	OHX	BA	1760	7/7	0.12	-	109,109,121,147	1
55	MG	AA	3213	1/1	0.18	-	60,60,60,60	0
55	MG	CA	1717	1/1	0.28	-	64,64,64,64	0
56	OHX	CA	1810	7/7	0.11	-	113,132,142,167	1
56	OHX	DB	213	7/7	0.15	-	125,144,157,169	2
56	OHX	BA	1741	7/7	0.12	-	95,110,126,148	1
56	OHX	BA	1744	7/7	0.12	-	134,144,157,183	1
55	MG	BA	1613	1/1	0.14	-	116,116,116,116	0
55	MG	AA	3121	1/1	0.35	-	65,65,65,65	0
55	MG	AA	3104	1/1	0.23	-	62,62,62,62	0
55	MG	CB	101	1/1	0.40	-	105,105,105,105	0
56	OHX	DA	3087	7/7	0.14	-	102,119,134,177	1
55	MG	AA	3083	1/1	0.37	-	94,94,94,94	0
55	MG	BA	1668	1/1	0.30	-	64,64,64,64	0
55	MG	DA	3256	1/1	0.30	-	89,89,89,89	0
56	OHX	DA	3429	7/7	0.10	-	118,130,143,180	1
55	MG	AA	3309	1/1	0.34	-	77,77,77,77	0
56	OHX	DA	3094	7/7	0.17	-	110,121,124,149	1
55	MG	AA	3014	1/1	0.34	-	33,33,33,33	0
55	MG	CA	1630	1/1	0.45	-	86,86,86,86	0
55	MG	AA	3064	1/1	0.23	-	52,52,52,52	0
55	MG	AA	3244	1/1	0.31	-	41,41,41,41	0
55	MG	AA	3204	1/1	0.38	-	45,45,45,45	0
55	MG	AA	3177	1/1	0.28	-	46,46,46,46	0
55	MG	AA	3236	1/1	0.47	-	66,66,66,66	0
55	MG	AA	3021	1/1	0.28	-	35,35,35,35	0
55	MG	DA	3023	1/1	0.56	-	70,70,70,70	0
55	MG	CA	1706	1/1	0.62	-	85,85,85,85	0
55	MG	BA	1686	1/1	0.11	-	100,100,100,100	0
56	OHX	CA	1800	7/7	0.07	-	165,167,172,220	1
56	OHX	AA	3344	7/7	0.10	-	86,92,112,118	1
56	OHX	A3	102	7/7	0.20	-	106,109,134,147	2
56	OHX	DA	3454	7/7	0.17	-	136,143,163,191	1
56	OHX	CA	1806	7/7	0.10	-	138,150,153,181	1
56	OHX	AA	3383	7/7	0.12	-	91,96,109,133	1

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
56	OHX	CA	1735	7/7	0.10	-	146,153,168,212	0
56	OHX	CA	1757	7/7	0.14	-	117,123,150,175	1
55	MG	AA	3180	1/1	0.45	-	42,42,42,42	0
55	MG	DA	3196	1/1	0.40	-	54,54,54,54	0
55	MG	CC	103	1/1	0.73	-	97,97,97,97	0
56	OHX	DA	3400	7/7	0.13	-	113,116,126,149	1
56	OHX	BA	1721	7/7	0.10	-	109,115,141,157	1
56	OHX	BA	1804	7/7	0.15	-	147,154,164,208	1
56	OHX	AO	202	7/7	0.11	-	93,104,115,140	1
55	MG	DA	3295	1/1	0.42	-	77,77,77,77	0
55	MG	DA	3325	1/1	0.45	-	91,91,91,91	0
55	MG	BB	104	1/1	0.81	-	100,100,100,100	0
55	MG	AA	3030	1/1	0.34	-	36,36,36,36	0
56	OHX	BA	1799	7/7	0.08	-	170,176,182,227	1
56	OHX	AA	3467	7/7	0.12	-	72,88,95,139	1
55	MG	BA	1607	1/1	0.11	-	102,102,102,102	0
56	OHX	DA	3341	7/7	0.15	-	87,105,126,140	0
55	MG	DA	3148	1/1	0.41	-	50,50,50,50	0
55	MG	DA	3319	1/1	0.47	-	69,69,69,69	0
56	OHX	BA	1736	7/7	0.12	-	112,121,128,152	1
55	MG	AA	3230	1/1	0.47	-	72,72,72,72	0
56	OHX	AA	3472	7/7	0.21	-	95,115,124,169	1
56	OHX	CA	1734	7/7	0.09	-	145,147,151,167	1
56	OHX	BA	1753	7/7	0.16	-	103,110,125,169	1
56	OHX	CA	1804	7/7	0.23	-	145,149,162,192	1
55	MG	CN	201	1/1	0.12	-	79,79,79,79	0
55	MG	DA	3320	1/1	0.50	-	132,132,132,132	0
55	MG	DA	3123	1/1	0.29	-	38,38,38,38	0
56	OHX	DA	3251	7/7	0.25	-	102,112,141,176	3
55	MG	CA	1636	1/1	0.19	-	82,82,82,82	0
56	OHX	AB	207	7/7	0.11	-	89,93,105,113	1
55	MG	AA	3106	1/1	0.25	-	72,72,72,72	0
55	MG	DA	3209	1/1	0.30	-	64,64,64,64	0
55	MG	DA	3178	1/1	0.56	-	58,58,58,58	0
55	MG	BA	1605	1/1	0.11	-	81,81,81,81	0
55	MG	BA	1676	1/1	0.41	-	78,78,78,78	0
55	MG	BB	101	1/1	0.12	-	95,95,95,95	0
55	MG	AA	3133	1/1	0.32	-	45,45,45,45	0
55	MG	AA	3095	1/1	0.34	-	42,42,42,42	0
56	OHX	DA	3336	7/7	0.18	-	86,95,105,106	0
55	MG	DA	3041	1/1	0.34	-	79,79,79,79	0
56	OHX	AA	3355	7/7	0.15	-	88,95,127,131	3

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
55	MG	DA	3185	1/1	0.40	-	49,49,49,49	0
55	MG	AA	3164	1/1	0.30	-	45,45,45,45	0
56	OHX	CA	1750	7/7	0.14	-	110,113,130,151	1

6.5 Other polymers ⓘ

There are no such residues in this entry.